



Mines Act Permit Application iMapBC Maps and Data Creation Reference Guide

Ministry of Mining and Critical Minerals
April 2020

Last Updated: 04 May 2025

Contents

1. Introduction	3
1.1 Objective	3
1.2 Mapping standards and requirements	3
1.3 iMapBC web mapping platform	4
2. How to get started	5
2.1 Download the Mines Act Permit Application - iMapBC Project File Template	5
2.2 Open iMapBC	6
2.3 Load the template project file	7
2.4 Navigate the map view to the mine site location	9
3. Create a location map	11
3.1 Map content required on a Mines Act Permit location map	11
3.2 Choose a basemap	12
3.3 Create or load spatial data	13
3.3.1 Add a mine location point and label	13
3.3.2 Add a proposed or permitted mine area polygon	16
OPTION 1: Upload existing spatial data	17
OPTION 2: Create spatial data	22
3.3.3 Add an access route	26
OPTION 1: Upload existing spatial data	26
OPTION 2: Create spatial data	27
3.3.4 Add a Label for Nearest Community	29
3.4 Save markup to shapefile	30
3.5 Export the location map to PDF	31
3.6 Save the iMapBC session	35
4. Title (Tenure) map	37
5. Land Title (or Licence of Occupation) map	39
6. Proposed and/or permitted mine area map	42
7. Overview map(s)	46
8. Geospatial data submission standards	46
8.1 Geospatial data to submit with your notice of work application	46
8.2 Geospatial file types	47
Appendix 1: Layers needed for maps	49
Appendix 2: Data dictionaries for Notice of Work spatial data submissions	52
Appendix 3: iMapBC advanced instructions	60
Load the BCGW layer to your map	60
Select a feature from a dataset to extract	61

Find by Point	61
Find by Line, Polygon or Rectangle.....	62
Find by Select by Query	66
Export provincial layer download	68
Save markup as shapefile – Individual boundary	69
Save markup as shapefile – Outline boundary.....	71
Rename the downloaded information to submit with your NoW application.....	73
Change projection of a file.....	73

1. Introduction

1.1 Objective

To guide Notice of Work (NoW) mining applicants with their Mines Act applications. This guide shows the user how to create maps and data using iMapBC. iMapBC is a publicly accessible government web mapping application.

This guide is intended to be used in conjunction with the [Mineral and Coal Exploration Notice of Work Application Companion guidance document \(PDF, 14.2MB\)](#). This reference guide specifically relates to Section 1.4 Mapping Requirements and Tools from pages 19 to 30.

Notice of Work application mapping requirements website:

<https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/exploration-in-bc/now-application-mapping-requirements>

1.2 Mapping standards and requirements

Why were mapping and data standards developed for the application package?

- To standardise mapping and data requirements, eliminate variability between the application and reporting, allow map generation through publicly available mapping platforms, and to compile a provincial permitting geospatial dataset
 - The ministry has provided an iMapBC project template and map templates
- Standardised maps and data allow increased efficiency for ministry staff to process permit applications
 - Faster approval of permits with a clear understanding of exactly where and how mining activity will take place
 - Improved data management and ability for effective regulation
- It will help government:
 - Qualify, quantify and analyse mining data
 - Visualise mining activity and reclamation
 - Supplement decision making
 - Build robust and accurate databases
 - Make efficiencies in the permitting process

- Supply more direction on the ministry's expectations

Required mapping and geospatial files for your Notice of Work application

NoW applications must be submitted with the required maps and geospatial data that meet the standards. The following map headings link to detailed instructions on how to create your maps in iMapBC:

- [Location Map](#)
- [Title \(Tenure\) Map](#) - For mineral and coal exploration, industrial mineral quarries, and placer applications
- [Land Title \(or Licence of Occupation\) Map](#) - For sand and gravel applications
- [Proposed and/or Permitted Mine Area Map](#) - For mineral and coal exploration, and placer applications
- [Proposed and/or Permitted Mine Area Map](#) - For sand and gravel, and industrial mineral quarry applications
- [Overview Map\(s\)](#) (if required)

See [Appendix 1](#) for a list of layers needed on each map

Geospatial data submission requirements

<https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/exploration-in-bc/now-application-mapping-requirements#datarequirements>

1.3 iMapBC web mapping platform

What is iMapBC and why do we recommend using it?

- Is a publicly available government web mapping platform to “view and analyze hundreds of map data layers compiled from across the B.C. Government and other public sector agencies”
- Is a platform for users to create data and maps to meet the ministry standards
- Meets the required map template elements and map content elements:
 - Computer generated
 - Digital file size (under 100mb)
 - Page size it was created on
 - Clear and legible
 - Coordinate system
 - Graticule or grid
 - Metric units
 - North arrow
 - Scale bar and scale ratio
 - Map title and map metadata

- Map legend
- Base mapping
- Imagery capture date or source
- Labels for surrounding landmarks
- Additional labels needed
- Mapping symbology
- Have consistent mapping information and content

iMapBC homepage:

<https://www2.gov.bc.ca/gov/content/data/geographic-data-services/web-based-mapping/imapbc>

iMapBC Training Manual:

https://www2.gov.bc.ca/assets/gov/data/geographic/web-based-mapping/imapbc/imapbc_user_manual_2023.pdf

2. How to get started

The ministry has created an iMapBC project template file and printable map templates.

The map templates have pre-defined symbology (color, size, symbols). When adding spatial data, the user must select the exact symbology described for the map features to match the legend symbology.

How to access iMapBC and load a template project file:

- 2.1 [Download the Mines Act Permit Application - iMapBC Project File Template](#)
- 2.2 [Open iMapBC](#)
- 2.3 [Load the template project file](#)

2.1 Download the Mines Act Permit Application - iMapBC Project File Template

An iMapBC project file (or saved session) allows the user to save work completed in a current mapping session. This saved session can be opened later or emailed as an attachment for someone else to open.

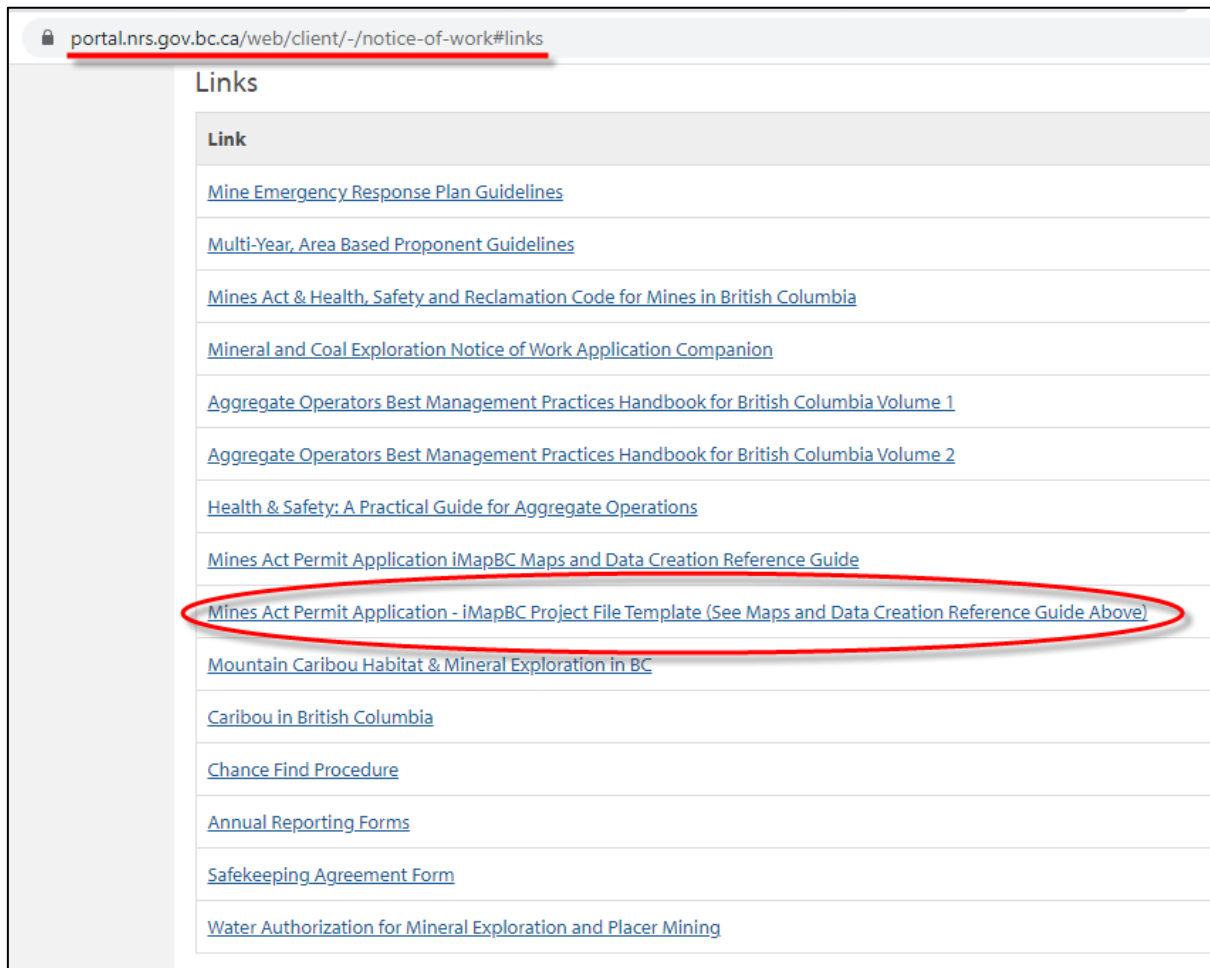
A mining-specific project template file called “Mines Act Permit Application - iMapBC Project File Template” (.gvhp) is available for download. The ministry created the template for Mines Act permit applicants. Open the template in iMapBC to edit and create maps.

The template project file contains pre-loaded spatial layers found under **My Layers** for reference while creating application-related data.

1. Download the template project file to your local drive from the Natural Resource Online Services Notice of Work web page:

<https://portalext.nrs.gov.bc.ca/web/client/-/notice-of-work.html#links>

Note: this file automatically downloads to your local system downloads folder

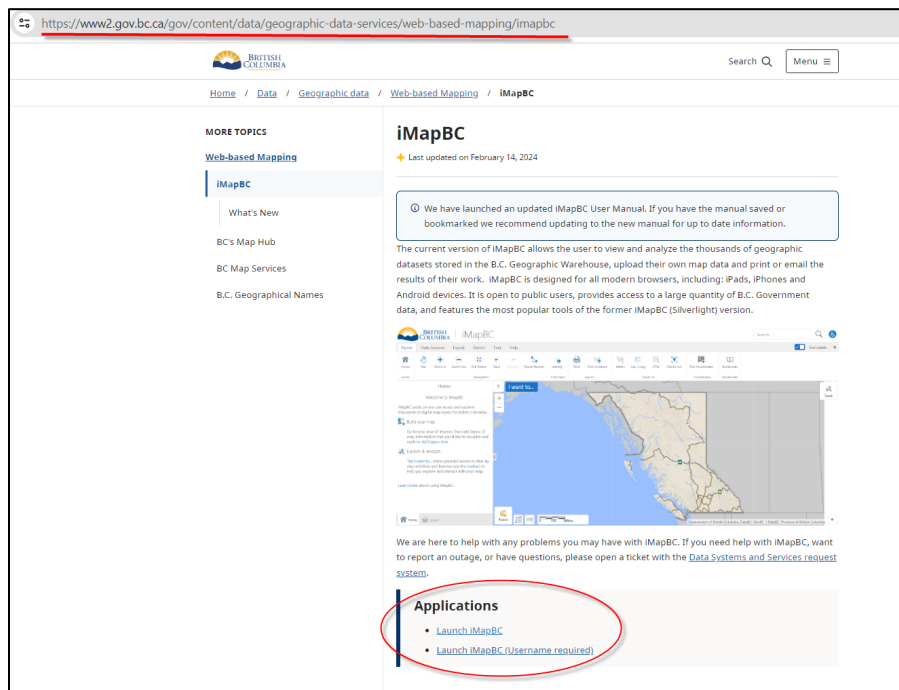


2.2 Open iMapBC

Load the webpage in your browser and launch the application.

iMapBC home page URL: <https://www2.gov.bc.ca/gov/content/data/geographic-data-services/web-based-mapping/imapbc>

- Select **Launch iMapBC** to access the publicly accessible iMapBC application (<http://maps.gov.bc.ca/ess/hm/imap4m/>);
- Or select **Launch iMapBC (username required)** if you have a BCeID or BC government IDIR account.

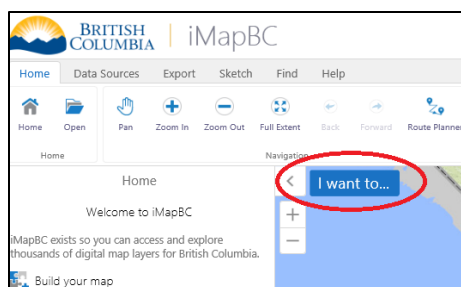


2.3 Load the template project file

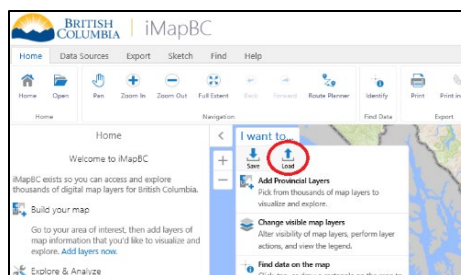
Tip: Clear your browser history and cache before loading the project file to ensure all the layer symbologies are set to their default.

Open the template project file iMapBC

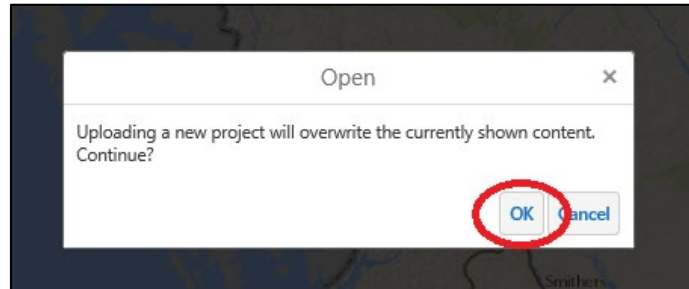
1. Click the **I want to...** menu button located in the upper left side of the map.



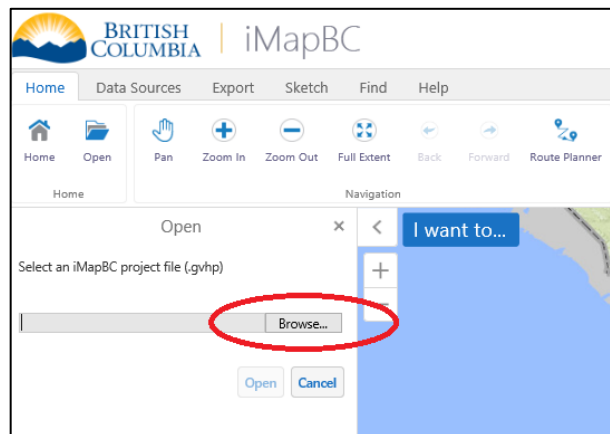
2. Click **Open** or **Load** button at the top of the list.



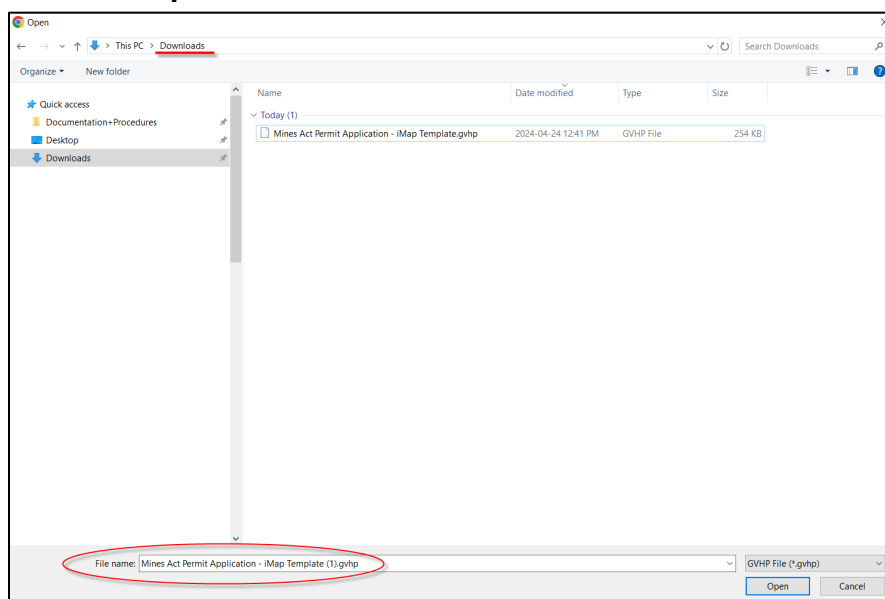
3. Select **OK** to open the project template. Note: this will overwrite existing work in the current session.



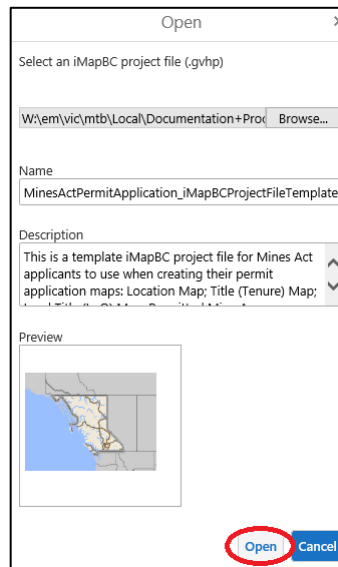
4. Click the **Browse/Choose file** button to locate the template you downloaded from the NROS website. **Note:** this is likely in your downloads folder on your computer



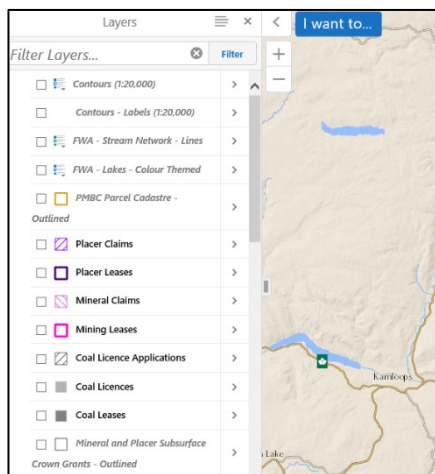
5. Select this file, click **Open**.



6. Review the **Name** and **Description** and click **Open**.



7. Your session with the uploaded template now loads with the layers list populated.

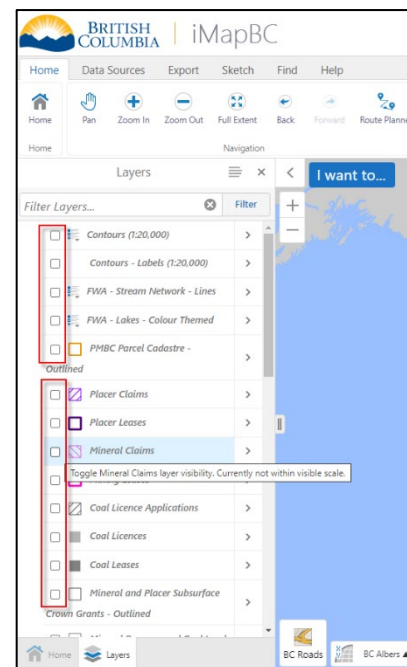


As you zoom in and out in the map view, layer names change from *greyed out italic* text to **bold regular** text.

Bolded regular text means those layers are visible at the current scale.

The layers list loads with all layers turned off by default.

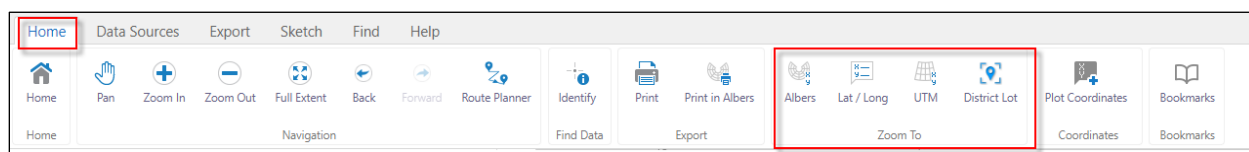
Click the box to the left of the layer name to turn the layer on and off.



2.4 Navigate the map view to the mine site location

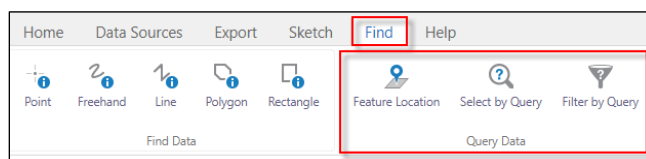
Use the **zoom to** or **query data** tools to help find your mine location.

1. **Zoom To** toolbar on the **Home** toolbar tab



The map view will zoom in and centre on coordinates entered in the **Zoom To** tools. The map can also zoom into a specific District Lot if the PIN number, location information, Parcel Short Description or other search keywords are entered in the **District Lot** tool.

2. Query Data toolbar in the Find toolbar tab



Once layers are loaded, the tools in the **Query Data** sub-menu can be used to navigate the map view to searched locations. The query you enter will search for the feature within the layer specified, much like you're searching in a database search engine.

For example, use the **Select by Query** option to search for your mineral title.

- Select Mineral Claims for the **Data Source**
- Select Title Number ID from the field list
- Enter the title number after the equals = operator.
- Click **Search**
- Click the claim name to zoom to the area of interest.

3. Create a location map

This section provides step-by-step instructions to create a location map through:

[3.1 Map content required on a Location Map](#)

[3.2 Choose a Basemap](#)

[3.3 Create or Load Spatial Data](#)

[3.3.1 Add a Mine Location Point and Label](#)

[3.3.2 Add a Proposed or Permitted Mine Area Polygon](#)

- [Upload Existing Spatial Data](#)
- [Create Spatial Data](#)

[3.3.3 Add an Access Route](#)

[3.3.4 Add a Label for the Nearest Community](#)

[3.4 Save Markup to Shapefile](#)

[3.5 Export the Location Map to PDF](#)

[3.6 Save this iMapBC Session](#)

3.1 Map content required on a Mines Act Permit location map

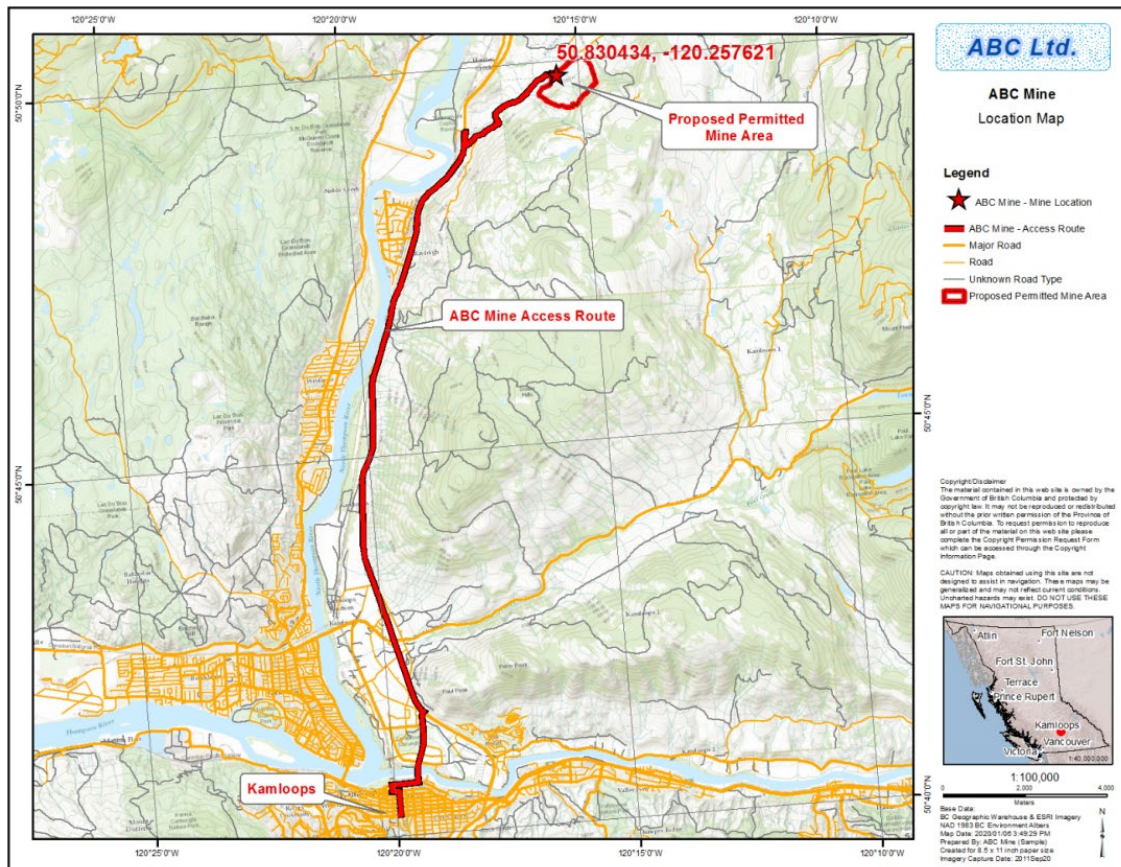
The Location Map requires:

- An appropriate basemap for understanding where the general location of the mine is in relation to communities/highways/landmarks
- A labelled point location of the mine with its coordinates (same as the Geographic Coordinates of mine latitude and longitude in the application form)
- A labelled polygon representing the proposed or permitted mine area
- A labelled access route highlighting the exact directions to the site
- The nearest service community (with hospital) labelled with name

Geospatial data submission requirements

<https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/exploration-in-bc/now-application-mapping-requirements#datarequirements>

Figure 1. Sample Location Map

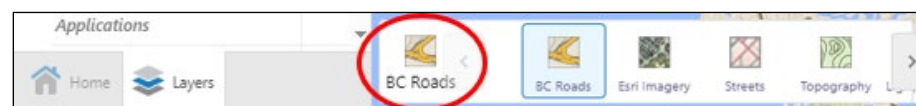


3.2 Choose a basemap

1. On the bottom left of the map view, locate the basemap selection box and select the **BC Roads** basemap, if not already selected. The roads basemap is required on the location map submission to highlight the access route to the site. If the map scale allows adequate representation of the road network and access route with a different basemap, that is acceptable too.

Note: you may need to switch between the different basemaps throughout the map/data creation process.

2. Click on the basemap selector and a horizontal pop-up will appear. Scroll over and select **BC Roads**.



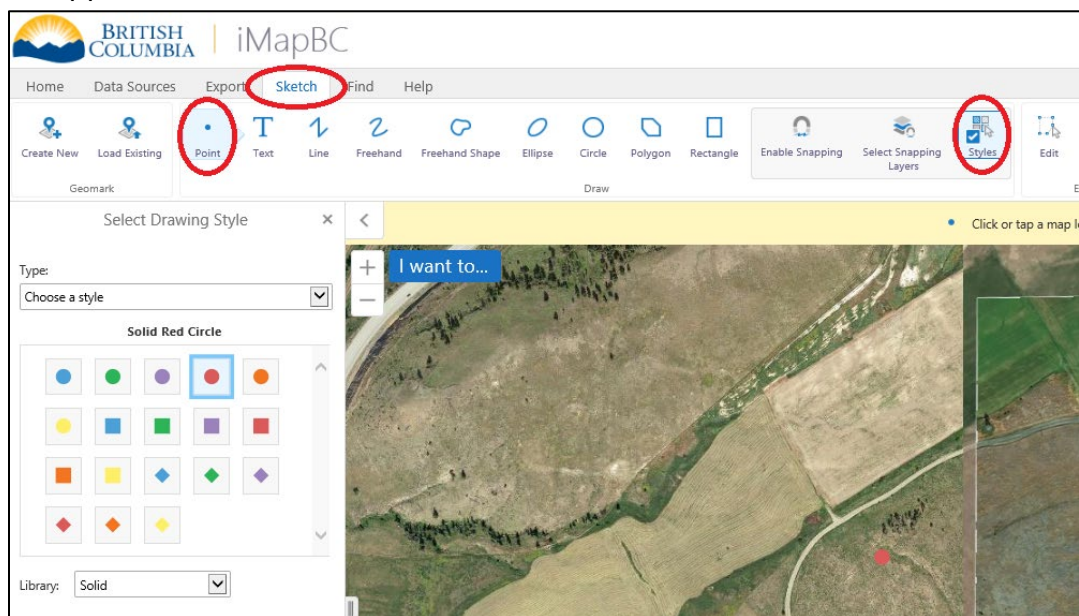
3.3 Create or load spatial data

This section guides the reader in creating or loading existing data to show the location of mining activity.

3.3.1 Add a mine location point and label

The location map requires a point location labelled with coordinates of where mining will take place. A markup point can be created with the sketch tool and labelled with its coordinates. Preferably, the placement of the point will identify either the site office, administration building, or mine site entrance.

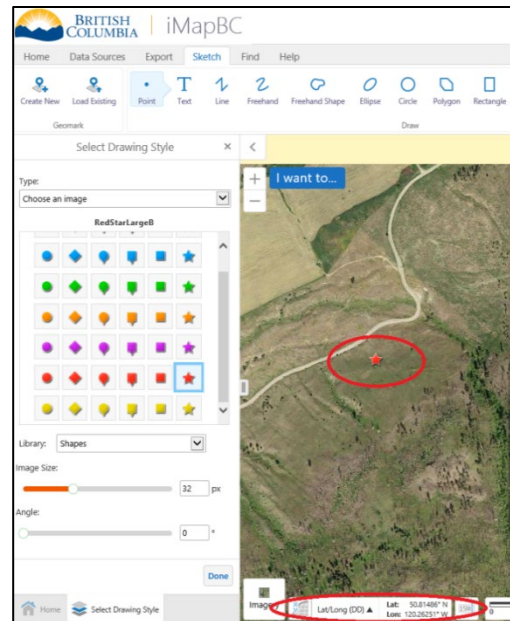
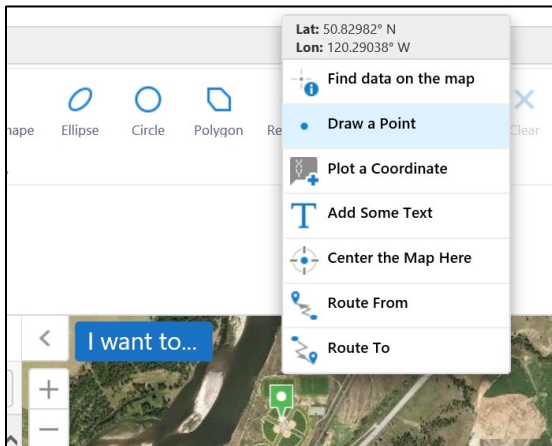
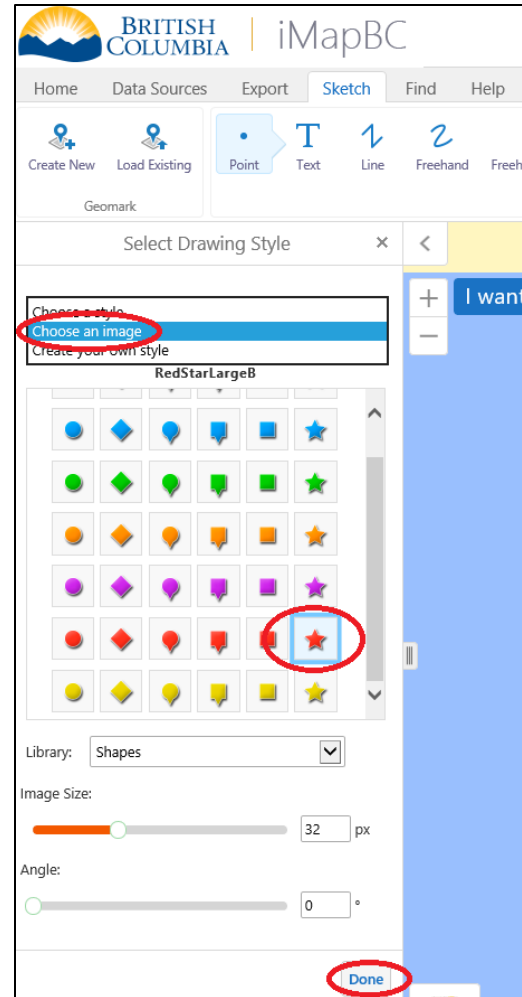
1. Select the **Sketch** toolbar tab.
2. Choose **Point** from the **Draw** toolbar, and then click **Styles** to have the drawing style panel appear.



3. The map template provided has the legend already defined. Select the symbology outlined in this guide.
For the mine location point, select the **red star** image for the symbol before placing the point on the map.

- From the Type drop-down menu, select **Choose an image**
- Scroll and select the **Red Star**, leave other options as default
- Click **Done**

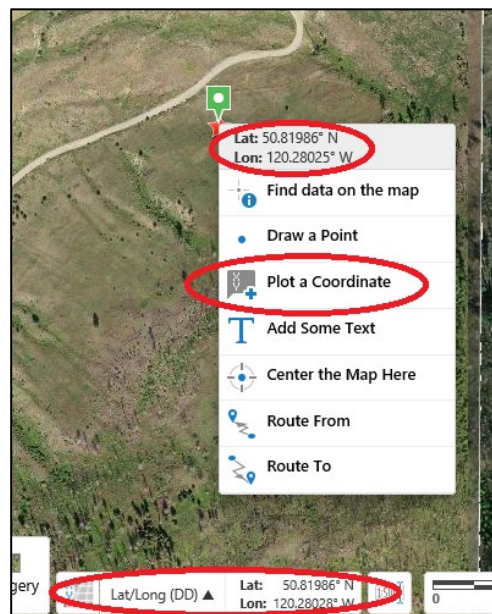
- Locate the site office, administration building, or exact mine location on the map and **right-click**. A green flag will temporarily be placed in that location. Select **Draw a Point** from the pop-up menu. This places the red star on the exact location.



5. Next, add the coordinate label.

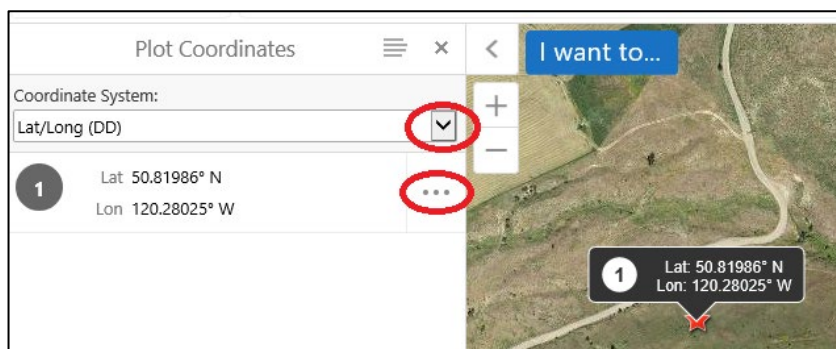
a. Review the coordinate system displayed on the bottom of the map screen. Keep it as either a **Lat/Long (DD)** format (shown as decimal degrees) or choose the **BC Albers** for BC Albers X/Y grid coordinates. Please note down these coordinates for future reference. These coordinates should match the Latitude and Longitude in the Notice of Work application.

b. Right-click directly over the red star point you just placed. On the pop-up, select **Plot a Coordinate**.

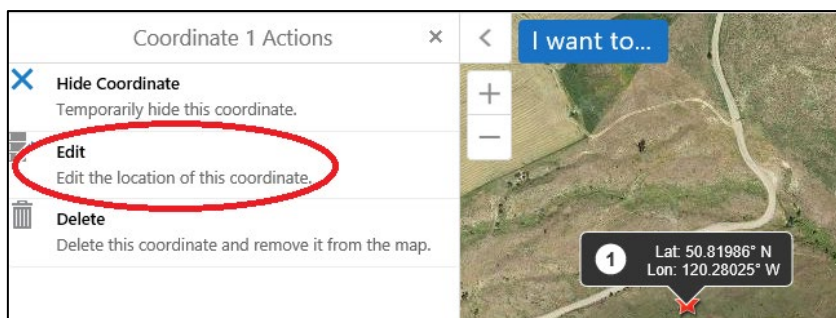


Note the **Plot Coordinates** panel that appeared on the left-hand side of the map window.

- Change the coordinate system of all labels by clicking on the **Coordinate System** drop down menu and select a different option. All coordinate labels will be changed to the selected coordinate system.



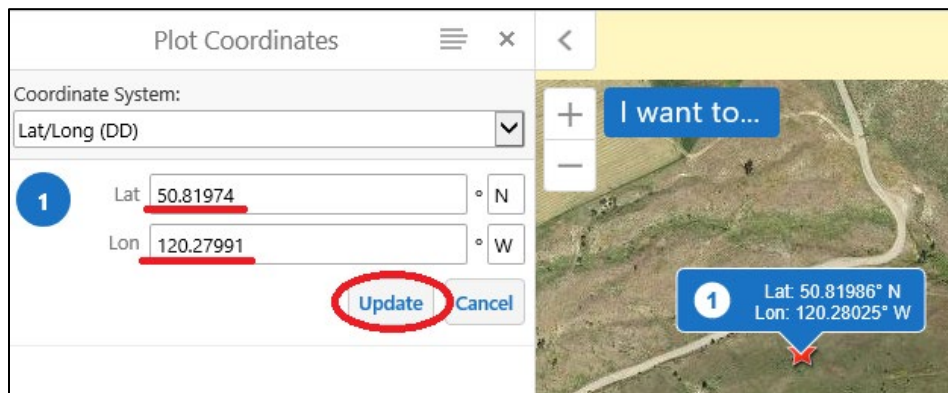
- Click on the ellipsis (...), and then **Edit** to change the location of the coordinate label or update the coordinate system.



- The coordinate label can cover other information. Some options are to:
 - Hide or remove it and add it back afterwards

- Use a text label containing the coordinates instead of the plot a coordinate label feature
- With the plot coordinates window still open, you can update the location of the label (the label changes from black to blue to show edit mode):
 - click the correct location of the map
 - Type the coordinates into the text boxes
- Change the coordinate system:
 - select from the drop-down menu
- Click **Update** once complete

Note: anytime you change the coordinate system reference on the bottom of the screen, text labels will automatically update the information to this coordinate system.



Note: Printing to PDF will adjust your current extent and scale. Place your labels with enough space between them and close to the features on the map, as the extent will shift and your labels may fall off the page or overlap each other.

3.3.2 Add a proposed or permitted mine area polygon

There are two methods to represent the permitted mine area (proposed/existing) on the map.

1. Upload existing spatial data
2. Digitise the polygon shape using the **Sketch** tools available in iMapBC

Geospatial data submission requirements

<https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/exploration-in-bc/now-application-mapping-requirements#datarequirements>

Reproject existing data

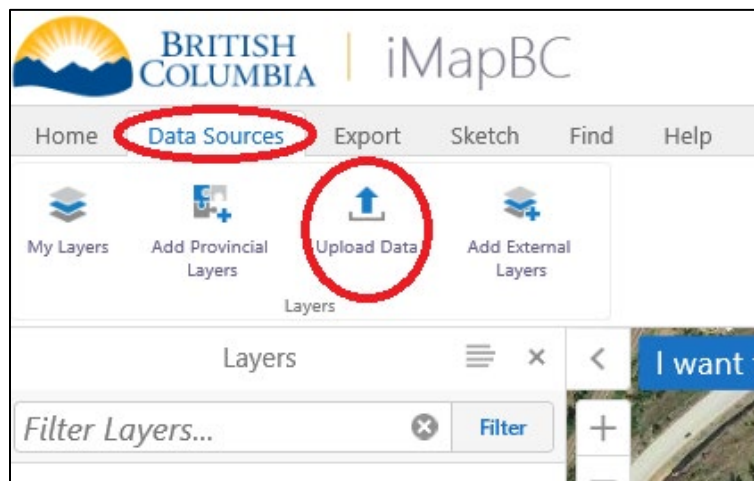
[See Appendix 3 – iMapBC advanced instructions](#)

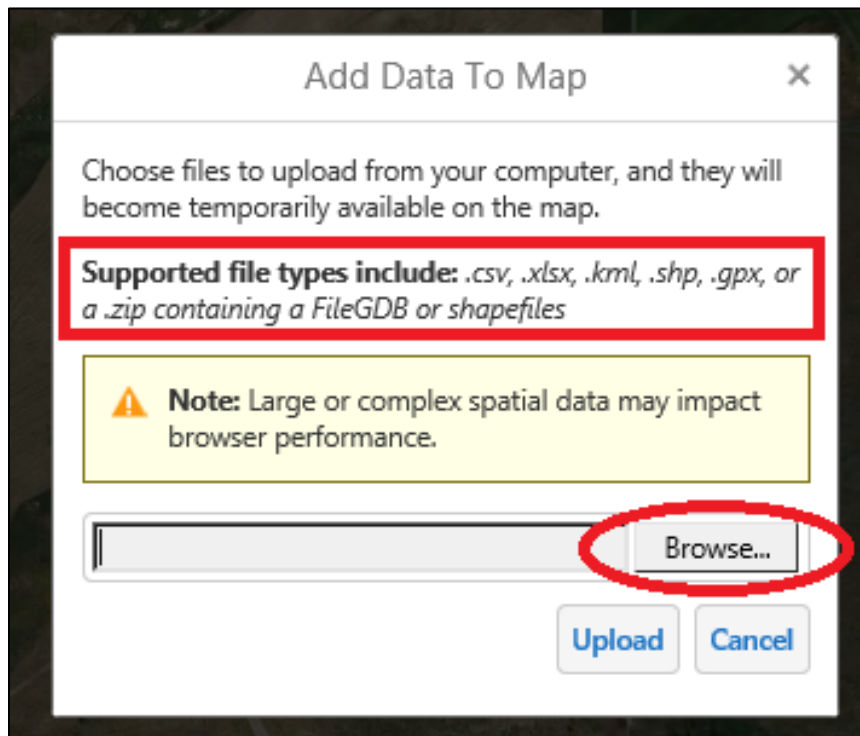
OPTION 1: Upload existing spatial data

1. To load your own data:

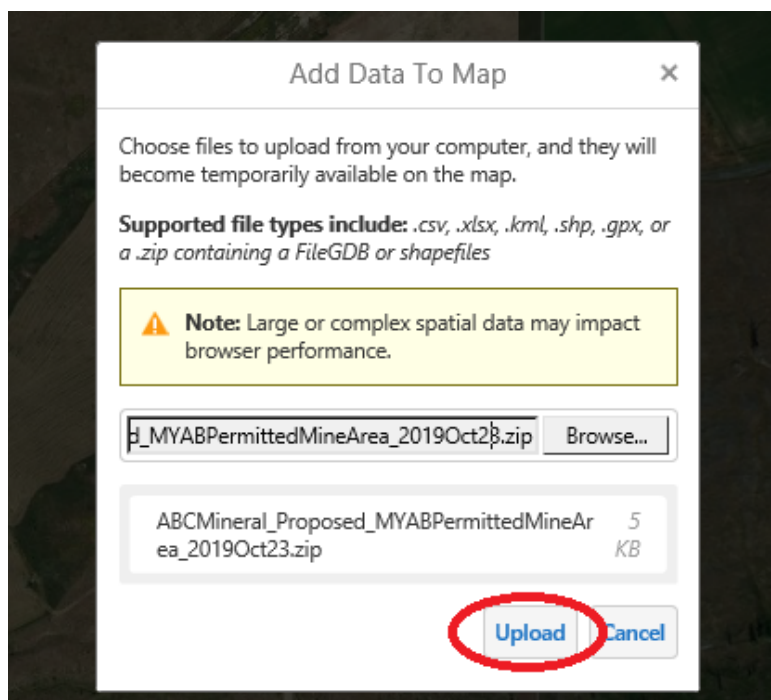
- Click the **Data Sources** toolbar tab
- Click the **Upload Data** tool
- Click **Browse/Choose Files**
- **Locate** your spatial files

Note: shapefiles can be zipped into a single file or select all components of the shapefile. Shapefiles must contain, at minimum, the following file components (i.e., file extensions) to work in iMapBC: .shp, .shx, .dbf





2. Click the **Upload** button.



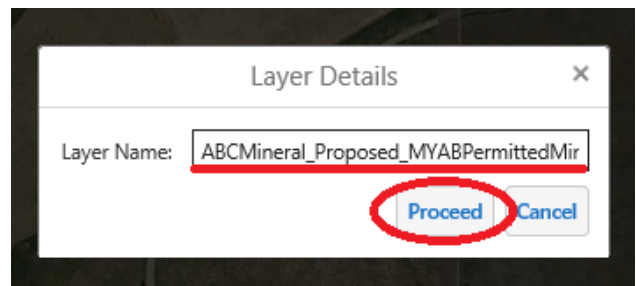
Review Appendix 3 for advanced instructions in iMapBC

- Extract features from a dataset
- Save features as a shapefile to submit as part of your geospatial data with your NoW application, and to use on your maps
 - Rename saved shapefiles prior to submission
- Reproject existing shapefiles

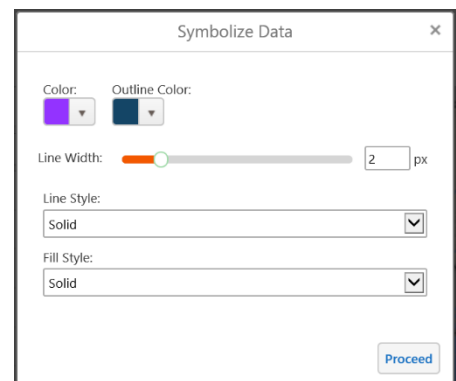
[Appendix 3 – iMapBC advanced instructions](#)

3. Name your layer appropriately. This layer name will appear in the **Layers** panel. This layer name will not be displayed on the map. Map templates have a pre-defined legend.

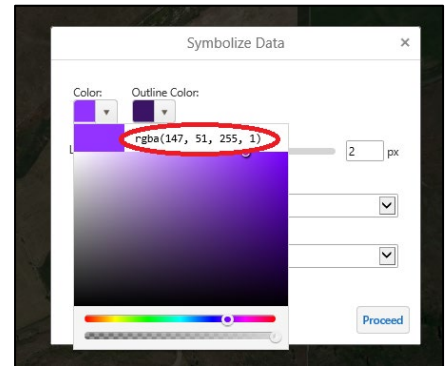
4. Click **Proceed** once the Layer Name is updated.



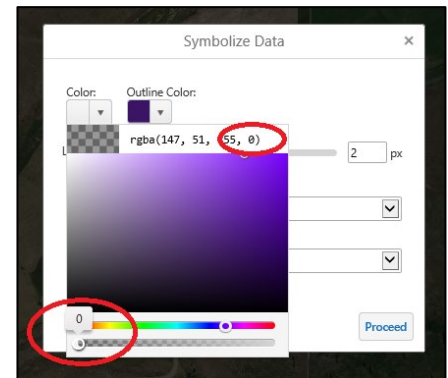
5. The symbolize data pop-up appears with random colors and line widths. Match the Proposed/Approved Permitted Mine Area as a red outline to the pre-set legend in the template.



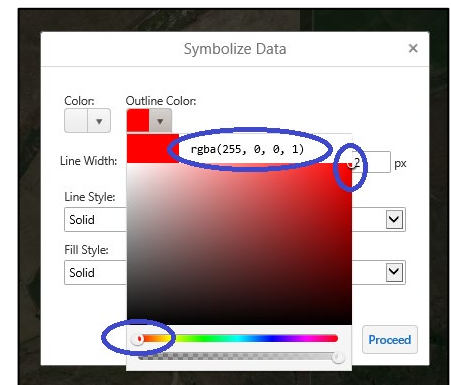
- Change the color (fill) to no color.
 - i. Click the **down arrow** next to the (fill) color
 - ii. Note the values rgba. The “a” in rgba is the alpha parameter for opacity.
 1. 0.0 value is fully transparent
 2. 1.0 is fully opaque



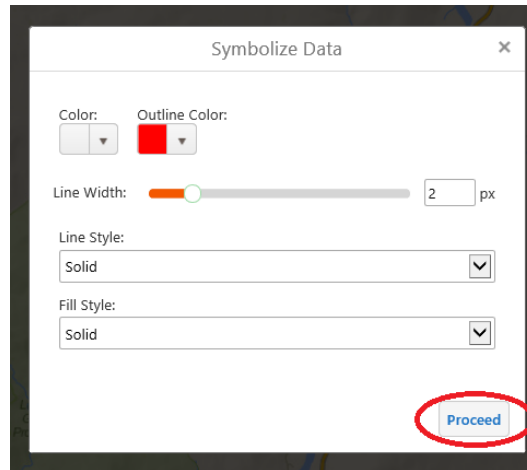
- Make the color (fill) transparent. Change the last value to **0** by either typing it or sliding the lower ramp to the left.



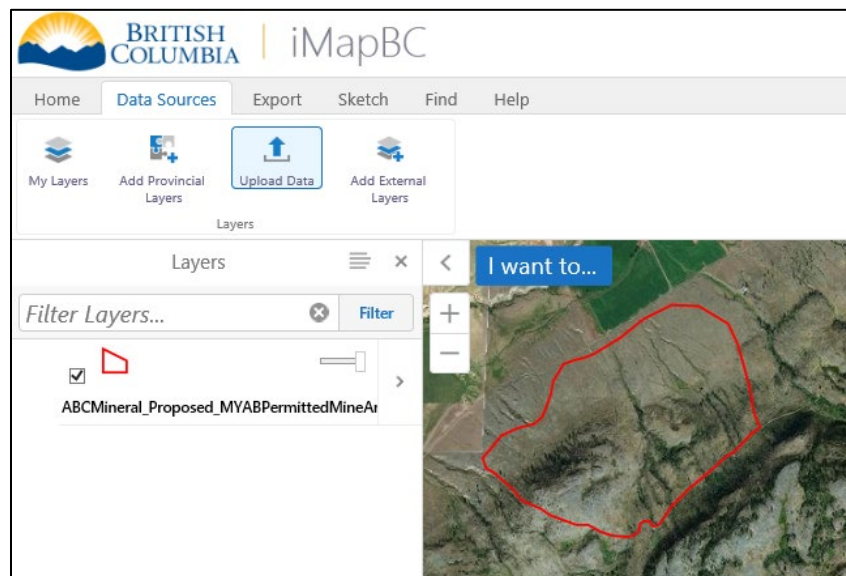
- Change the outline colour to red.
 - i. Click the **down arrow** under **Outline Colour**
 - ii. Drag the colour ramp to the very left.
 - iii. Drag the colour selector to the top-right corner. Or, change the values by typing 255, 0, 0, 1.



- Leave the **Line Width** at a minimum of 2 points, larger widths are accepted if preferred by the user.
- Click **Proceed** and the layer will now be included in the layer list.

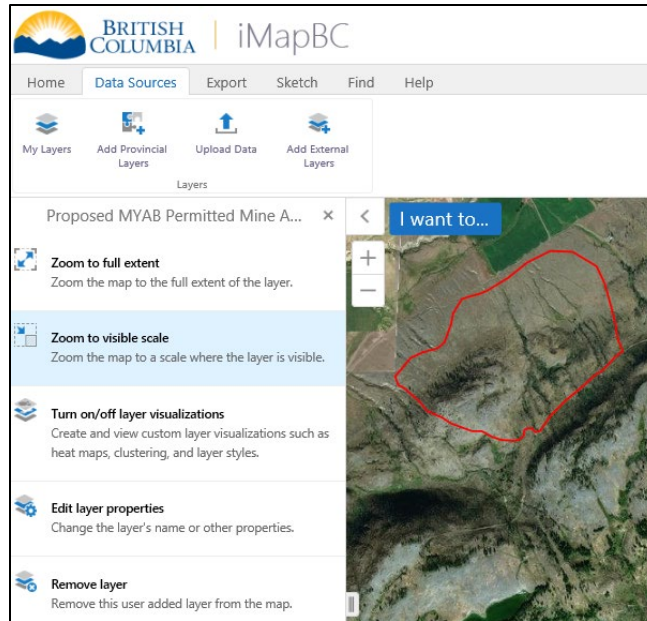


- The symbology for your permitted mine area should look like this:



- To edit the layer name, symbology, or zoom to the layer, click the layer actions icon (➤) to the right of the layer name. Select one of the options:
 - Zoom to full extent
 - Zoom to visible scale
 - Turn on/off layer visualizations
 - Edit layer properties – change the layer name here
 - Remove layer

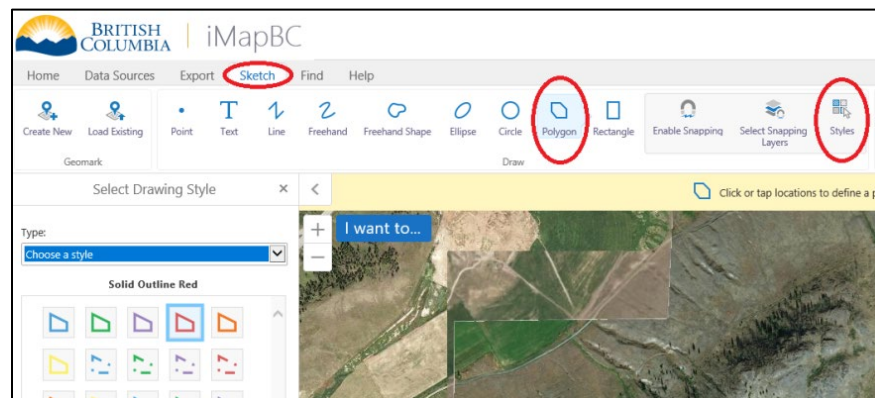
Note: Template map files have a pre-defined legend. The name of the layer is for user reference only and will not show up in the map export.



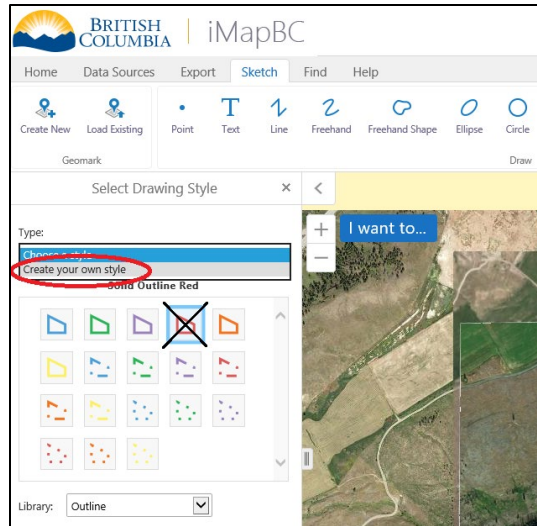
OPTION 2: Create spatial data

Draw your polygon with the sketch tools available.

1. From the **Sketch** toolbar tab, select **Polygon** in the **Draw** toolbar, and then select **Styles**.

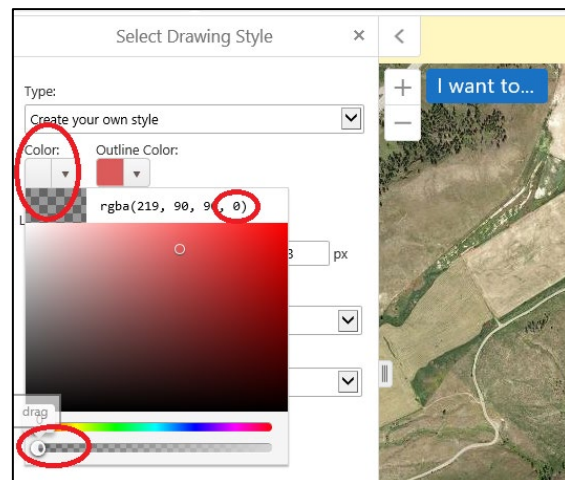


2. In the **Select Drawing Style** panel select **Create your own style** from the dropdown menu.

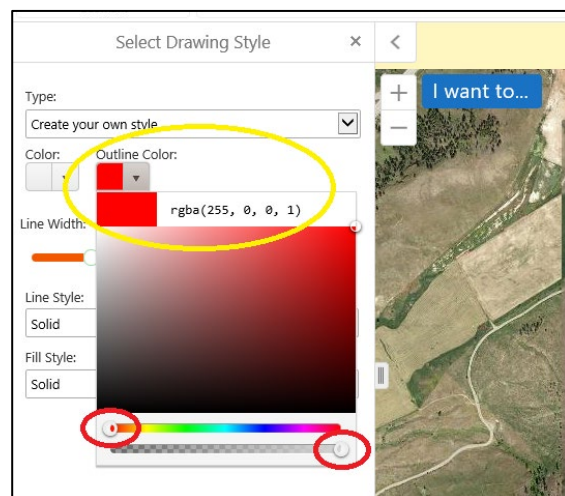


a. Use the method of selecting the red outline symbology outlined in the screenshots below.

- Color (fill) – rgba value set transparency to 0

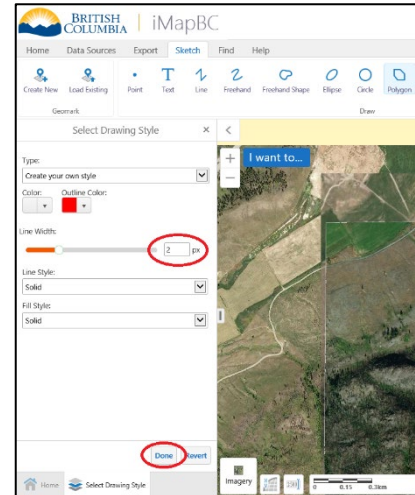


- Outline color – set rgba value to (255, 0, 0, 1)

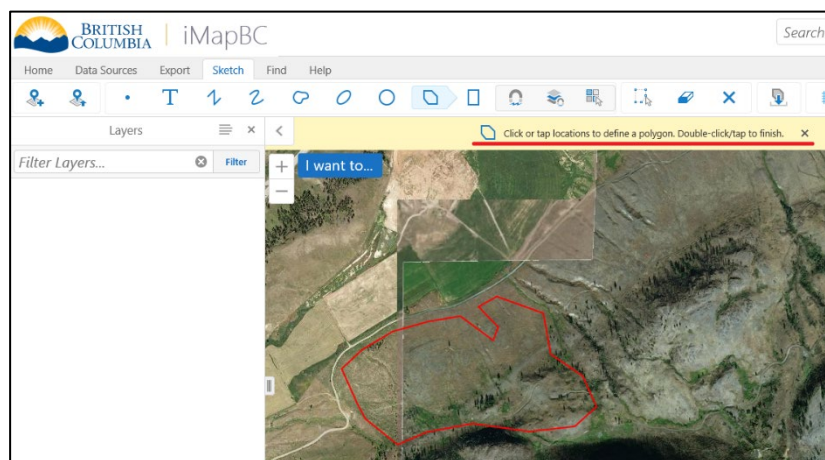


- Set line width to 2 px (pixels)

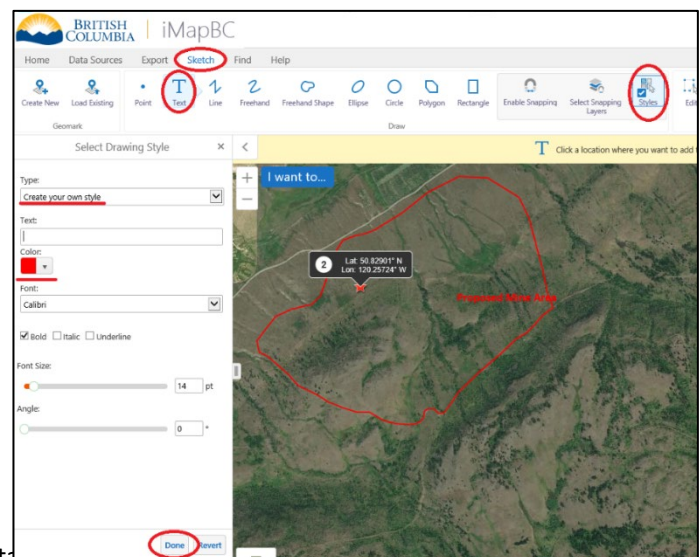
- Click **Done**



3. Draw your boundary. On the map, draw your shape by clicking the mouse to draw the outline of the shape, double-click to finish.

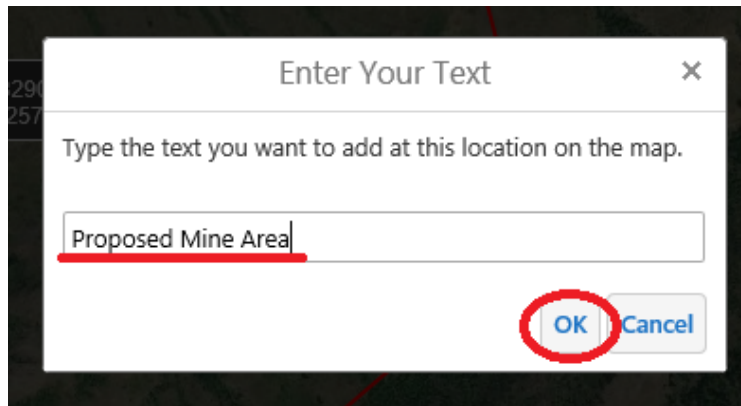


4. Add the label to identify the proposed or approved permitted mine area.
 - a) In the **Sketch** toolbar tab, select **Text** mark up tool, select **Styles** and select a red colour from the **Create your own style** type. Click **Done**.
 - b) Next, click a location on the map where the label will clearly identify the mine location, without



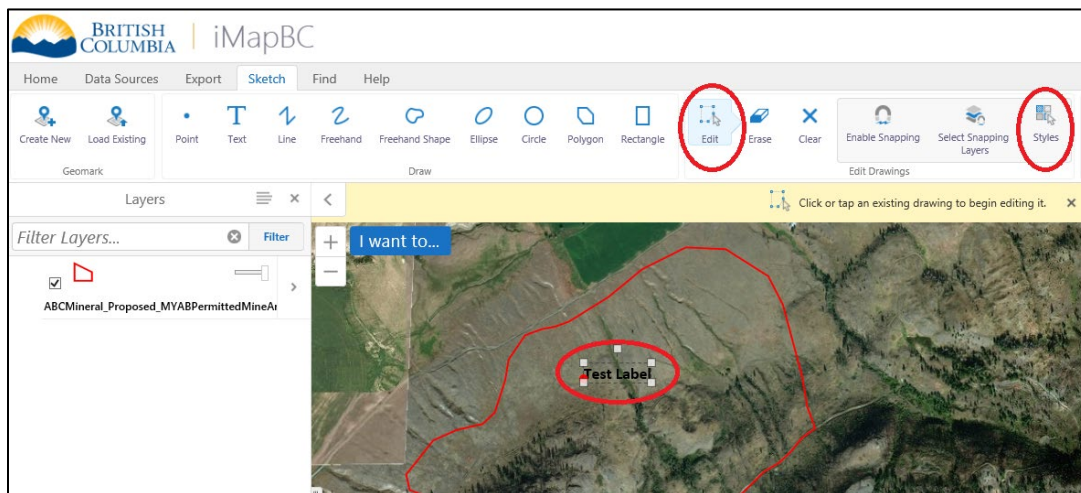
overlapping any important information already visible.

- c) Enter the name of the mine or the text “Permitted Mine Area” or “Mine Location” in the pop-up and select **OK**.

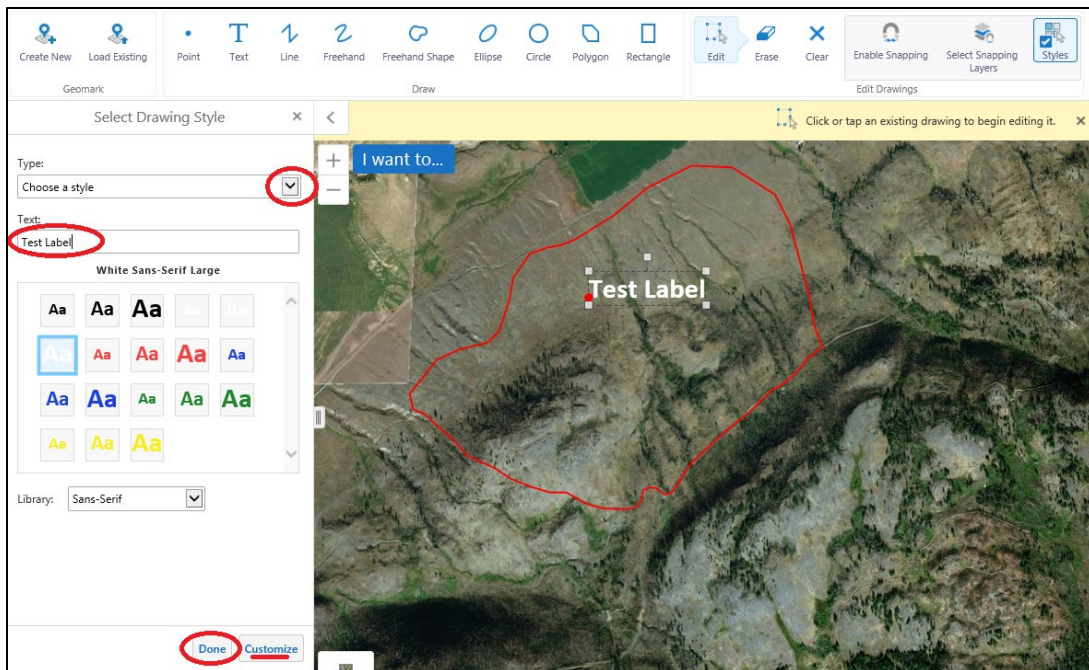


The label text, as well as the text colour, typeface/font, size, and angle can all be changed from the **Styles** toolbar tab.

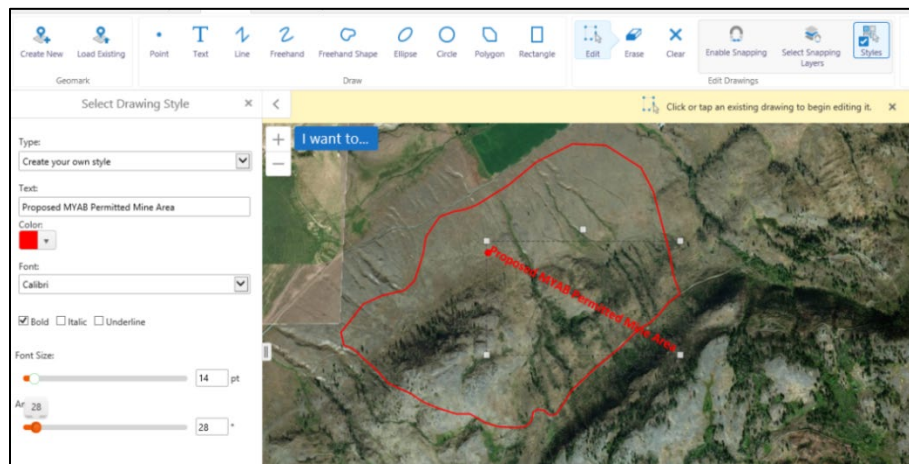
- d) Click the **Edit** tool in the **Edit Drawing** toolbar
e) Click on the label, and then click the **Styles** tool.



- Users can choose a serif or sans serif style with basic color and size options



- Or, users can create their own style (color, font, angle, underline, italic)



3.3.3 Add an access route

There are two methods to represent the access route on the map.

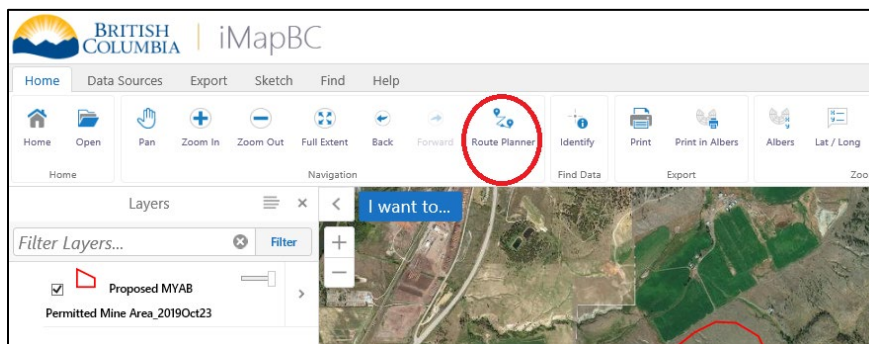
1. Upload existing spatial data – name the layer **Access Route**
2. Use the **Route Planner Tool** available in iMapBC

OPTION 1: Upload existing spatial data

Follow the instructions in section [3.3.2](#)

OPTION 2: Create spatial data

The **Route Planner Tool** requires two known addresses in BC as your start and end points. If you need to find an address, use Google Maps. Enter the address into the tool.

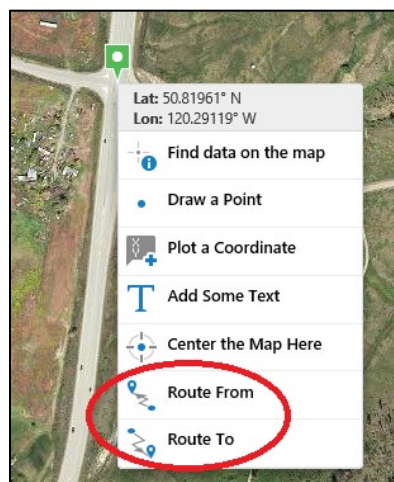
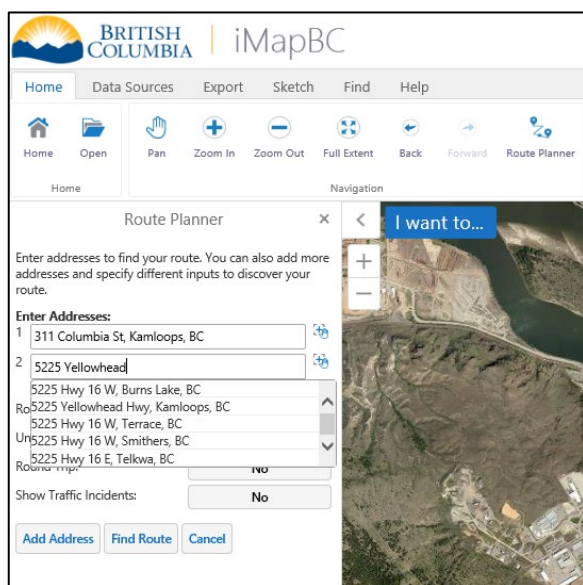


The mine site will likely not have a known address. Using the **Sketch** tool draw a line following existing or proposed roads.

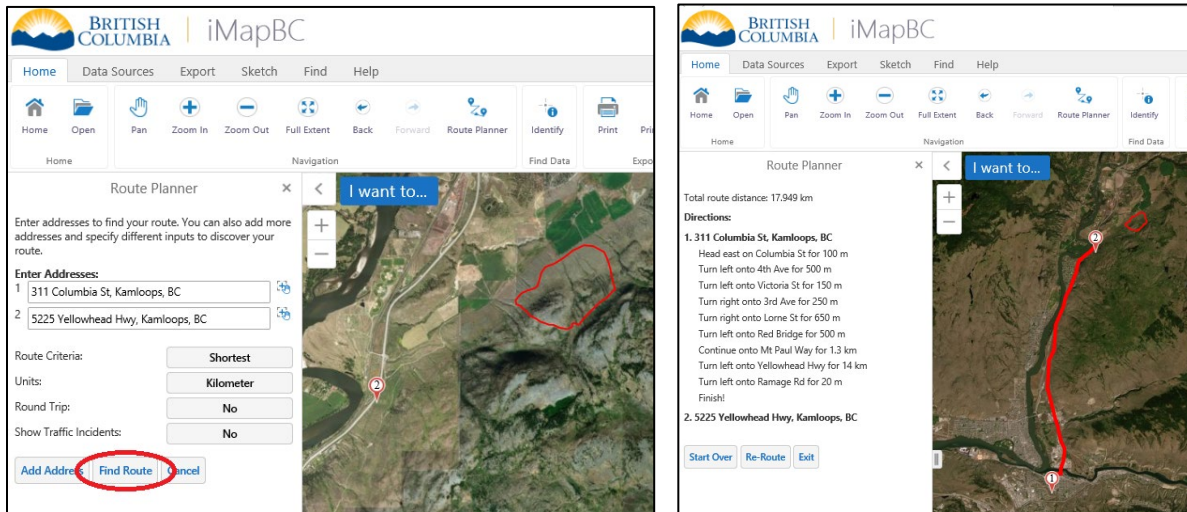
Note: Copy the route directions found by the Route Planner to use in the access description in the application.

1. Using the **Route Planner** tool in the **Navigation** toolbar of the **Home** tab, enter the address of the start location in box #1 and enter the end location address in box #2.

This can also be completed by right clicking on the location and selecting **Route From** or **Route To** as long as the system recognises the location as a known address.



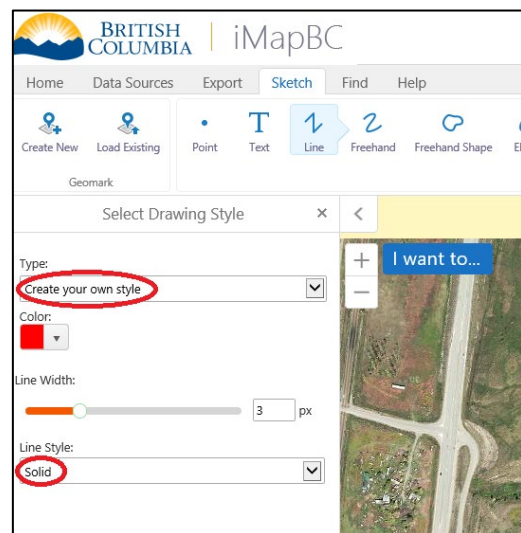
2. Adjust the route criteria, units, round trip option and traffic incidents option, as needed and click the **Find Route** button
- iMapBC will display the route on the map and the driving instructions in the left-hand window.



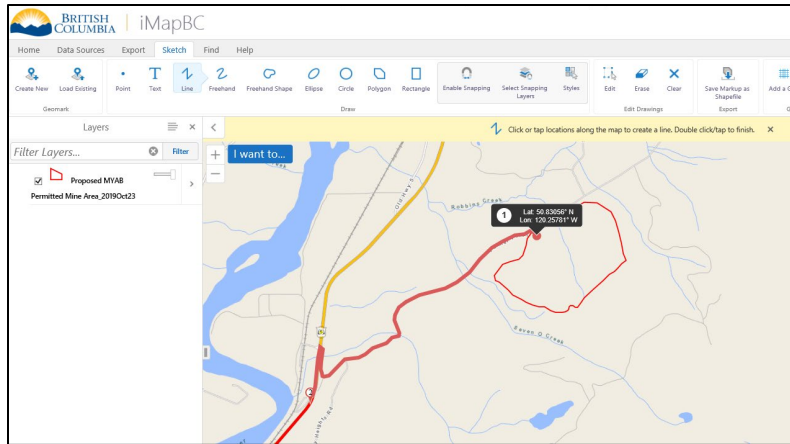
- Although, the Route Planner panel may be closed using the “X”, to keep the route highlighted on the map, do not click **Exit**.
3. To create a complete access route to the mine site, click the **Sketch** toolbar tab and the **Line** tool to start creating a line.

- The colour of this line **must** match the route planner (red – rgba 255,0,0, 1). Be sure change the symbology before you draw your line.

4. Click **Styles** and choose **Create your own style** to choose the red used previously.



5. On the map, draw the line by single clicking along an existing or proposed road. Double click to end the line. Notice the sketch line is black until you’ve finished the sketch. Adjust the basemap as needed to accurately draw the line along existing roads or where proposed roads will be.

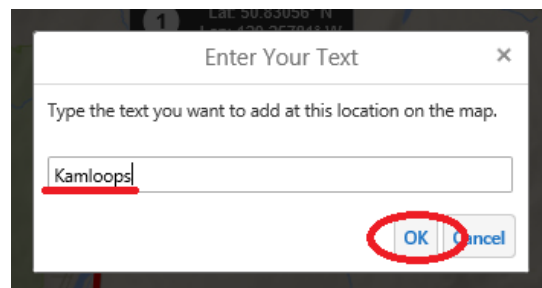


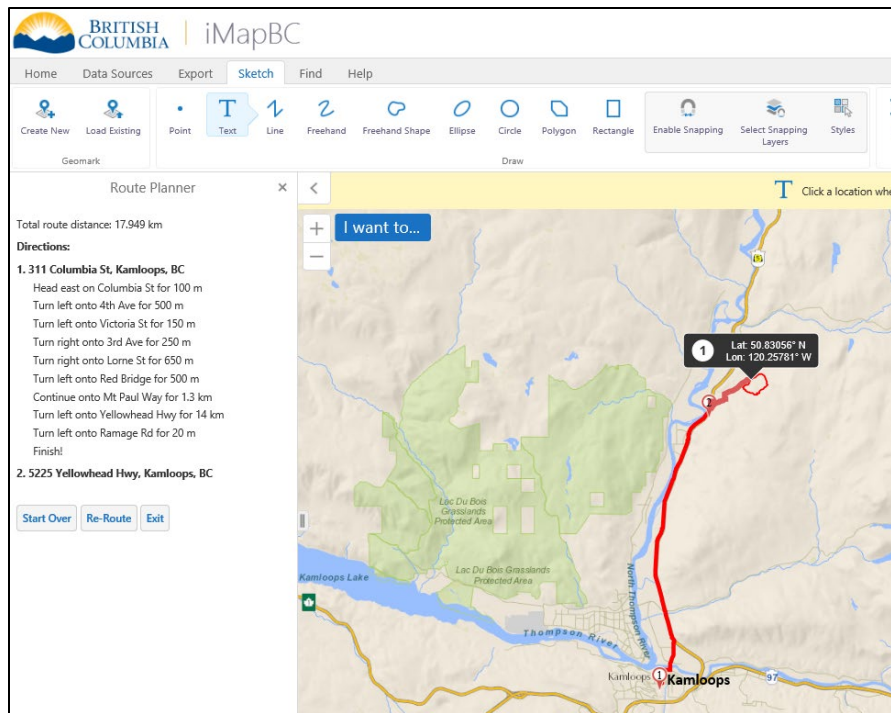
6. Add an “Access Route” label to the line.

3.3.4 Add a Label for Nearest Community

Label the nearest community if the basemap label isn't visible.

1. On the **Sketch** toolbar tab, select the **Text** mark up tool.
2. Click a location on the map where the label will clearly identify the community. Avoid overlapping important information already visible.
3. Enter the name of the community in the pop-up and select **OK**. To edit the label, click the **Edit** tool and then click the **Styles** tool and make your edits in the **Select Drawing Style** panel.





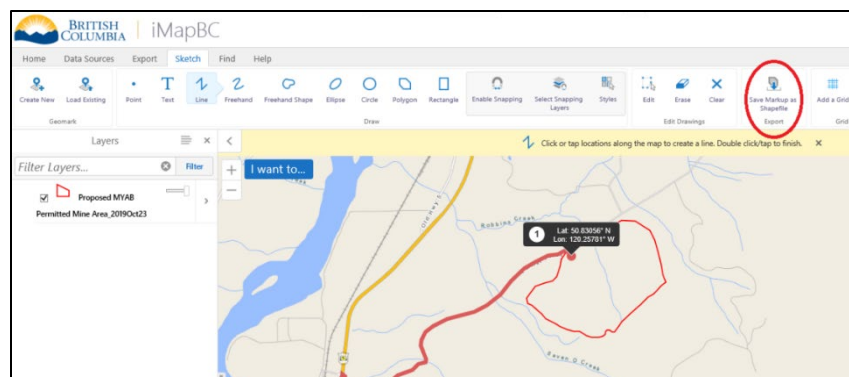
3.4 Save markup to shapefile

To retain your markup for future mapping and sharing, save your markup as a shapefile.

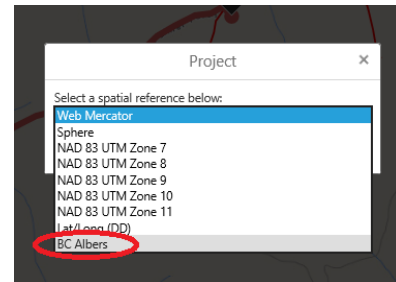
Any markup created in the current session will not appear in the **Layers** panel until it is saved as a shapefile. Markup will be lost if the session is closed without saving the project file (.gvhp).

To see the markup in the **Layers** panel, save the markup as a shapefile, then import the data using the **Upload Data** tool in the **Data Sources** toolbar tab. This will then be visible in the **Layers** panel as its own layer.

1. In the **Sketch** toolbar tab click the **Save Markup as Shapefile** tool in the **Export** toolbar.

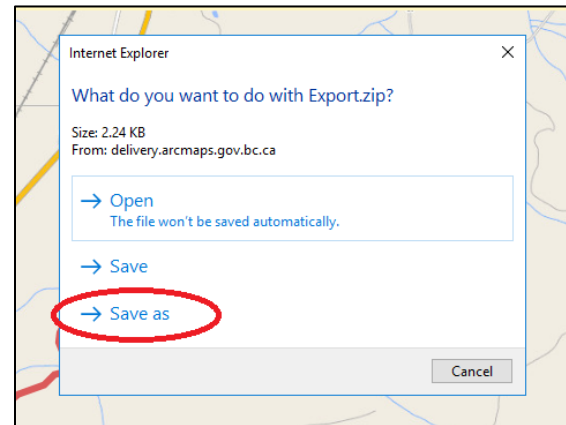
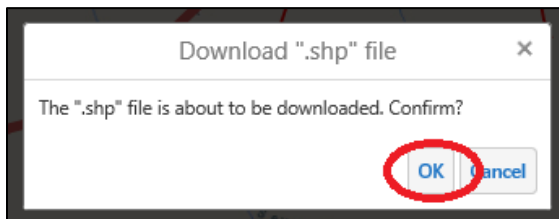


2. From the **Project** pop-up, select the appropriate spatial reference. The ministry suggests you choose the **BC Albers** projection.



3. Click **Save**.

4. Click **OK** and, if prompted, choose a location where you would like to save the downloaded the file. Check your downloads folder for files automatically downloaded.



Rename the data by following the [file naming standards](#) (see [section 8](#)).

For a proposed permitted mine area shapefile, use the following format:

**MineName_MineNumber_YearOfApplication_Proposed_PermittedMineArea_DateY
YYMonDD.shp.**

This shapefile would be useful to ministry staff when reviewing the permit application. Please send all markup shapefiles created for the maps along with your application package.

3.5 Export the location map to PDF

This section explains how to export maps to PDF using the “Mines – Location Map - 8.5x11” print template.

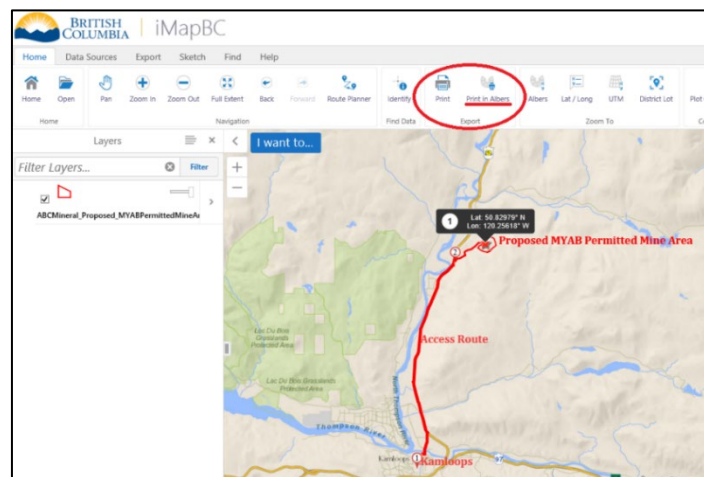
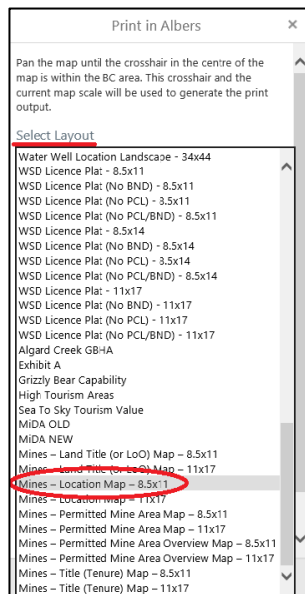
Double-check your map content before exporting your map:

- a. An appropriate **basemap** to clearly show the access route to the site
- b. A **mine point** (red star) with a **coordinate label**
- c. Your proposed or existing **permitted mine area** (red polygon) with a **label** indicating it is the mine site area

- d. An **access route** (red line) from the nearest service community directly to the mine site and a **label** indicating it as an access route
- e. A label for the **nearest community** and any other important landmark areas within the map extent

Note: A static legend has been implemented for the mining-related map layout templates. Any additional mark-up/hand-drawn information included in your map will not be included on the legend, please be sure to label any extra information in the map itself.

1. Select the **Print in Albers** tool from the **Home** toolbar tab in the **Export** toolbar.



2. Scroll down to the bottom to select the **Mines - Location Map - 8.5x11** from the **Select Layout** dropdown menu.
3. Fill in all the fields referenced below.

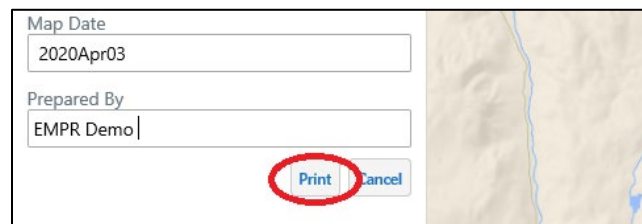
- **Output Format:** Use PDF for Mines Act application maps. There is less distortion in the projection and scale in a PDF than a PNG or TIFF.
- **Resolution:** Select high

Pdf
Resolution
High
Grid
Latitude / Longitude
Map Scale
1:250,000
Company Name
ABC Minerals
Mine Name
ABC Mine - Kamloops
Map Date
2020Apr03
Prepared By
EMPR - Demo

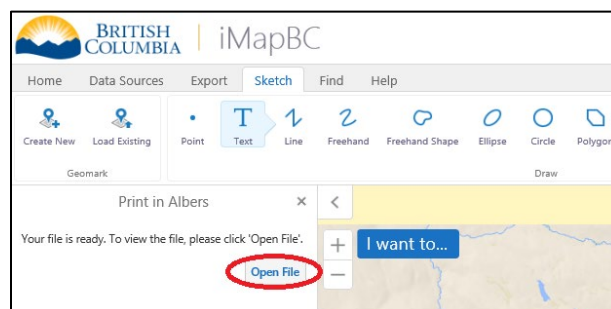
Print Cancel

- **Grid:** Choose the Latitude/Longitude grid option from the drop down. This feature is important for georeferencing purposes.
- **Map Scale:** Choose a map scale to encompass the entire area.
Current scale will provide a map with a specific ratio. This may provide insight to make a rounded scale selection from the menu.
Note: If measurements are calculated using the map later, an even, rounded number scale is more efficient than using the current scale option.
- **Company Name, Mine Name, Map Date, and Prepared by:** This information will show up in the title and text areas on the right side of the map.
Current date (formatted as YYYYMMDD, i.e., 2020May11).

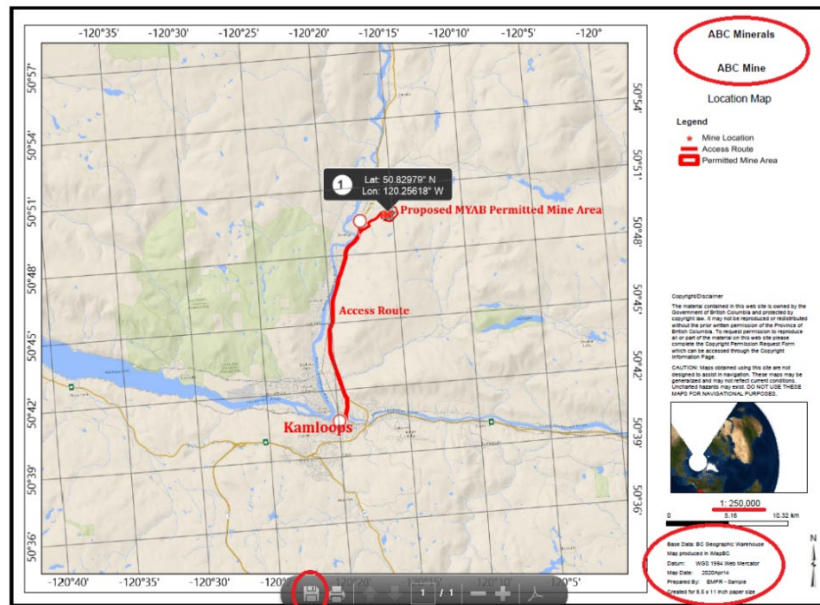
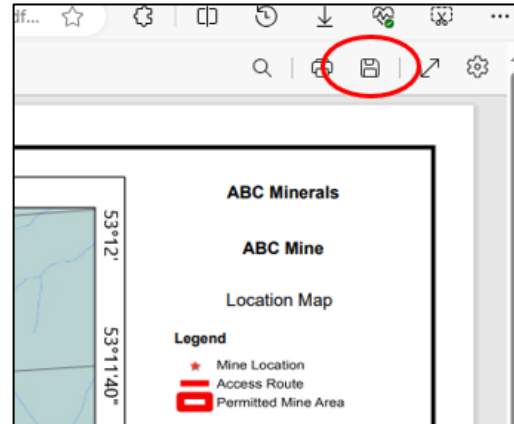
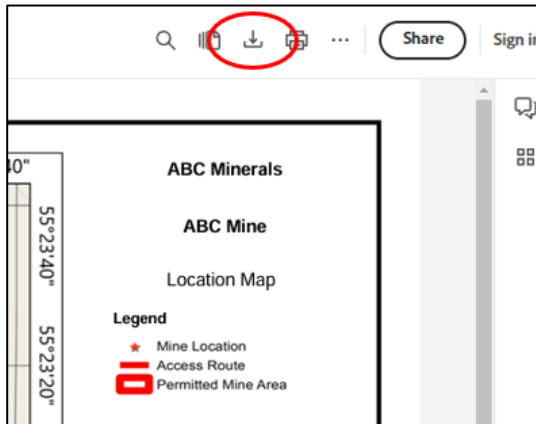
4. Click **Print** and wait for the tool to run. The run time of the tool varies depending on the detail included on the map and the scale it is being drawn at.



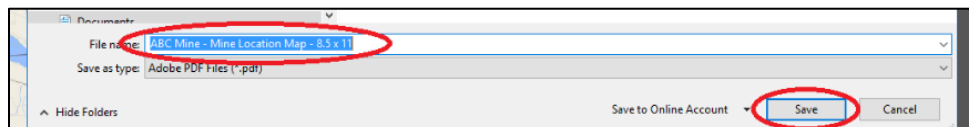
5. Once the tool has finished running, click the **Open File** button.



6. The map will open in a new tab. Review your map for edits required. Re-run the tool as many times as needed.
7. Save the PDF map to your computer and attach it to your application submission package. Click the download or save button to save the PDF.



- Enter a filename and select Save, or rename the downloaded PDF through your File Explorer.



Note: In addition to a PDF, export the map as a georeferenced geoTIFF for use on mobile GIS applications. Mines inspectors find this useful during the permit review process. PDF maps created in iMapBC do not include georeferencing metadata for loading onto mobile devices automatically.

Use the **Export** toolbar tab, **GeoTIFF URL** on the **Export** toolbar.

3.6 Save the iMapBC session

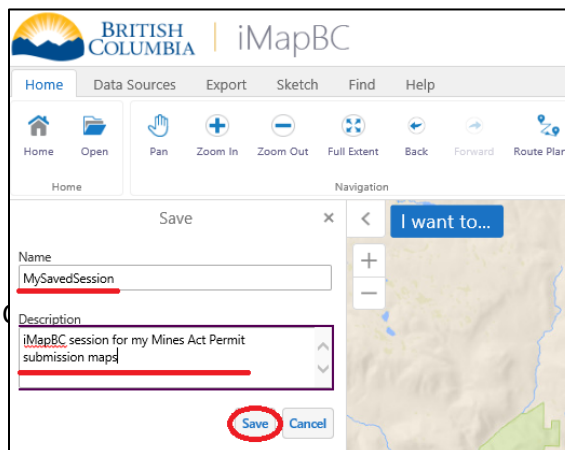
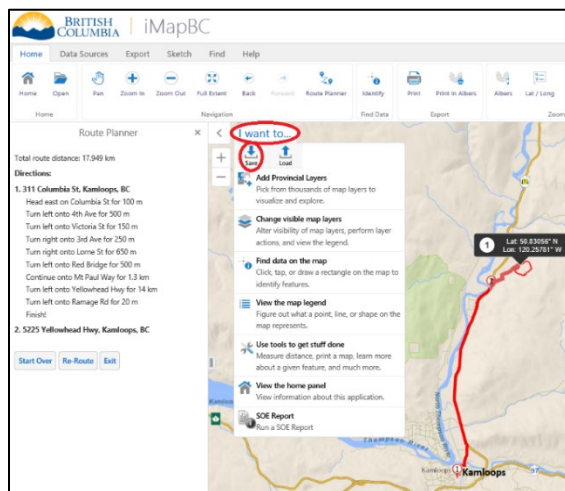
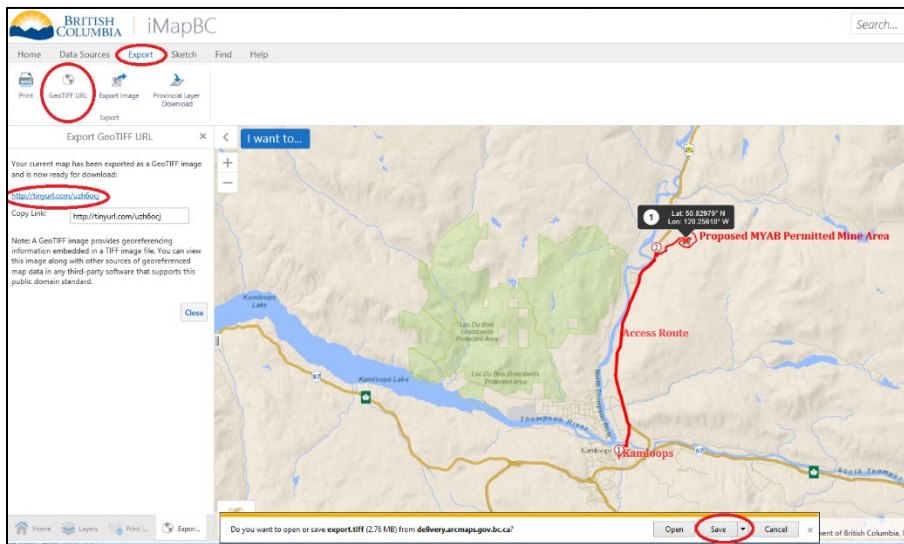
It is recommended to save the iMapBC session for future reference. Users can attach their session files along with their application package to the ministry. It is advised to save your session after exporting your maps and saving your markup as shapefiles.

1. On the map, click the **I want to...** menu.

2. Select **Save** from the top of the menu.

3. Enter a **Name** for your map session and provide a **description**, as needed.

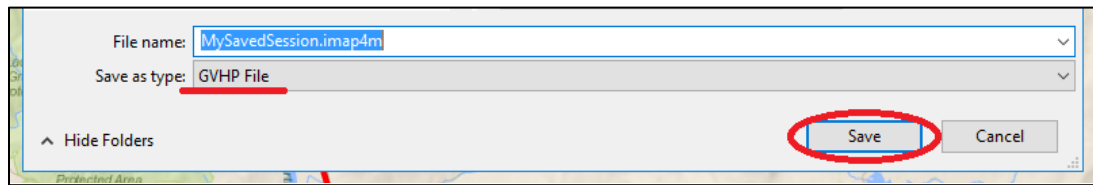
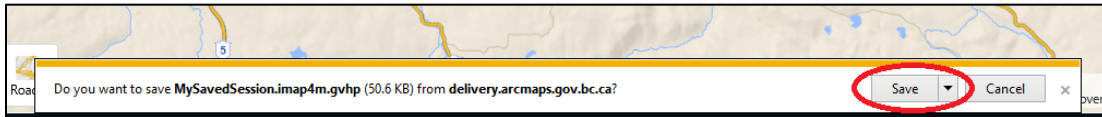
4. Click **Save**.



5. Your browser will save the session to the downloads folder on your computer as a GVHP file.

Your default location may be similar to this: C:\Users\username\Downloads\
MySavedSession.imap4m.gvhp

Choose a different location and file name if you wish



4. Title (Tenure) map

For mineral and coal exploration, industrial mineral quarries, and placer applications

To create a Title (Tenure) Map in iMapBC, please follow the instructions in the previous sections on how to download and open the Mines Act Permit Application - iMapBC Project File Template (Section 2), and how to load or create your map content required in your map (Section 3.2 to 3.5).

Map Content required on your Title (Tenure) Map:

- Mineral, placer, or coal title(s), including crown grant(s), and indicate ownership
- Proposed and/or existing permitted mine area
- Geographic coordinates of mine

Note: Please ensure all these map contents are clearly labelled.

Turn on the following layers from the **Layers** panel:

- Mineral, Placer, and Coal Titles
- Mineral and Placer Subsurface Crown Grants

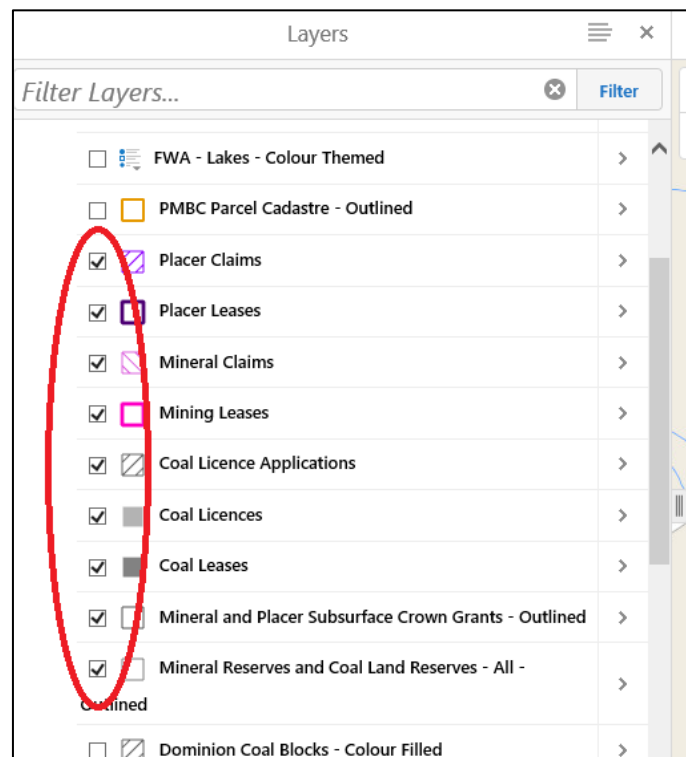
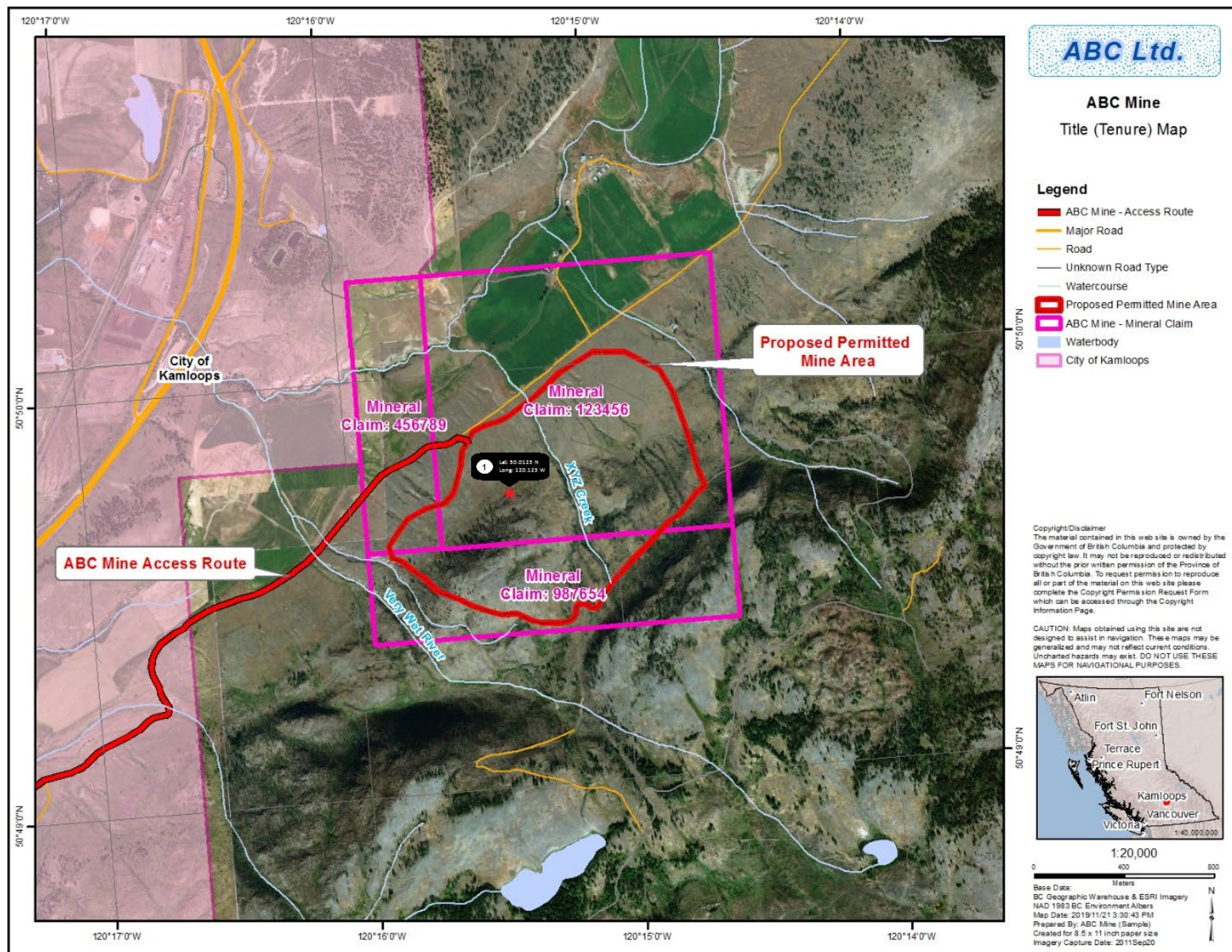


Figure 2. Sample Title (Tenure) Map



5. Land Title (or Licence of Occupation) map

For sand and gravel applications

To create a Land Title (or Licence of Occupation) map in iMapBC, please follow the instructions in the previous sections on how to download and open the Mines Act Permit Application - iMapBC Project File Template (Section 2), and how to load or create your map content required in your map (Section 3.2 to 3.5).

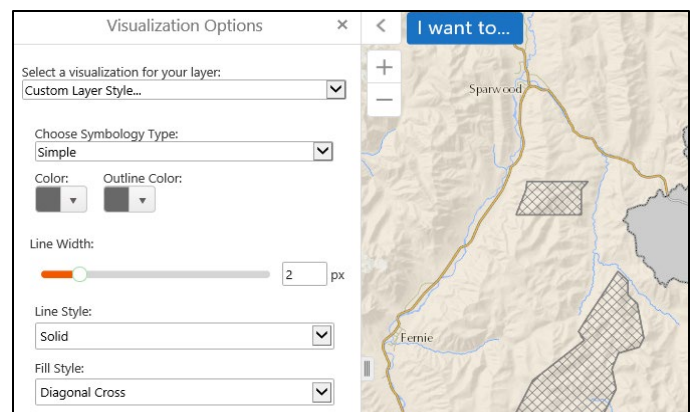
Map Content required on your Land Title (or Licence of Occupation) map:

- Proposed and/or existing permitted mine area
- Geographic coordinates of mine
- All land title(s) and/or licence(s) of occupation in and surrounding the site, and indicate ownership
- Additional map feature layers, (e.g., wells, land uses)

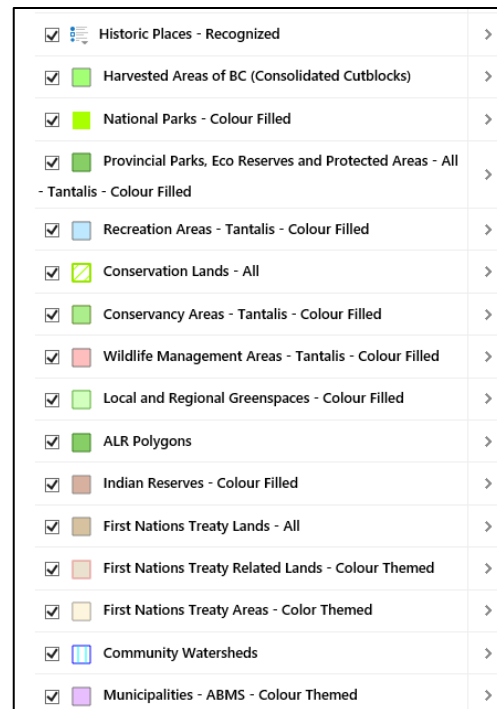
Note: Please ensure all these map contents are clearly labelled.

Turn on the following layers from the **Layers** panel:

- Mineral, Placer, and Coal Titles
- Mineral and Placer Subsurface Crown Grants
- Mineral Reserve Sites
- Parcel Map BC (PMBC) Parcel Cadastre
- Dominion Coal Blocks: If your mine site is within the vicinity of the Dominion Coal Blocks (between Fernie, Sparwood and the BC/Alberta border), please change the symbology of the layer in iMapBC to a diagonal cross hatch in grey (rgba values: 104, 104, 104, 1).
- Federal Transfer Lands
- Historic Places – Recognized
- Harvested Areas of BC (Consolidated Cutblocks)
- National Parks
- Provincial Parks, Ecological Reserves and Protected Areas
- Recreation Areas
- Conservation Lands



- Conservancy Areas
- Wildlife Management Areas
- Local and Regional Greenspaces
- Agricultural Land Reserve (ALR) Polygons
- Indian Reserves
- First Nations Treaty Lands
- First Nations Treaty Related Lands
- First Nations Treaty Areas
- Community Watersheds
- Municipalities



If you know of other information not included in the template project file then please add layers and clearly label the features.

1. From the **Data Sources** toolbar tab, select **Add Provincial Layers**



2. Search for the layers of interest. Click the checkbox to the left of the layer name and click **OK** to add it to the map and Layer panel.

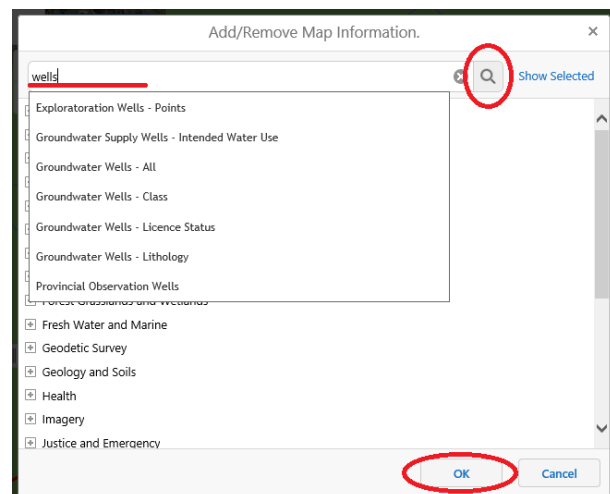
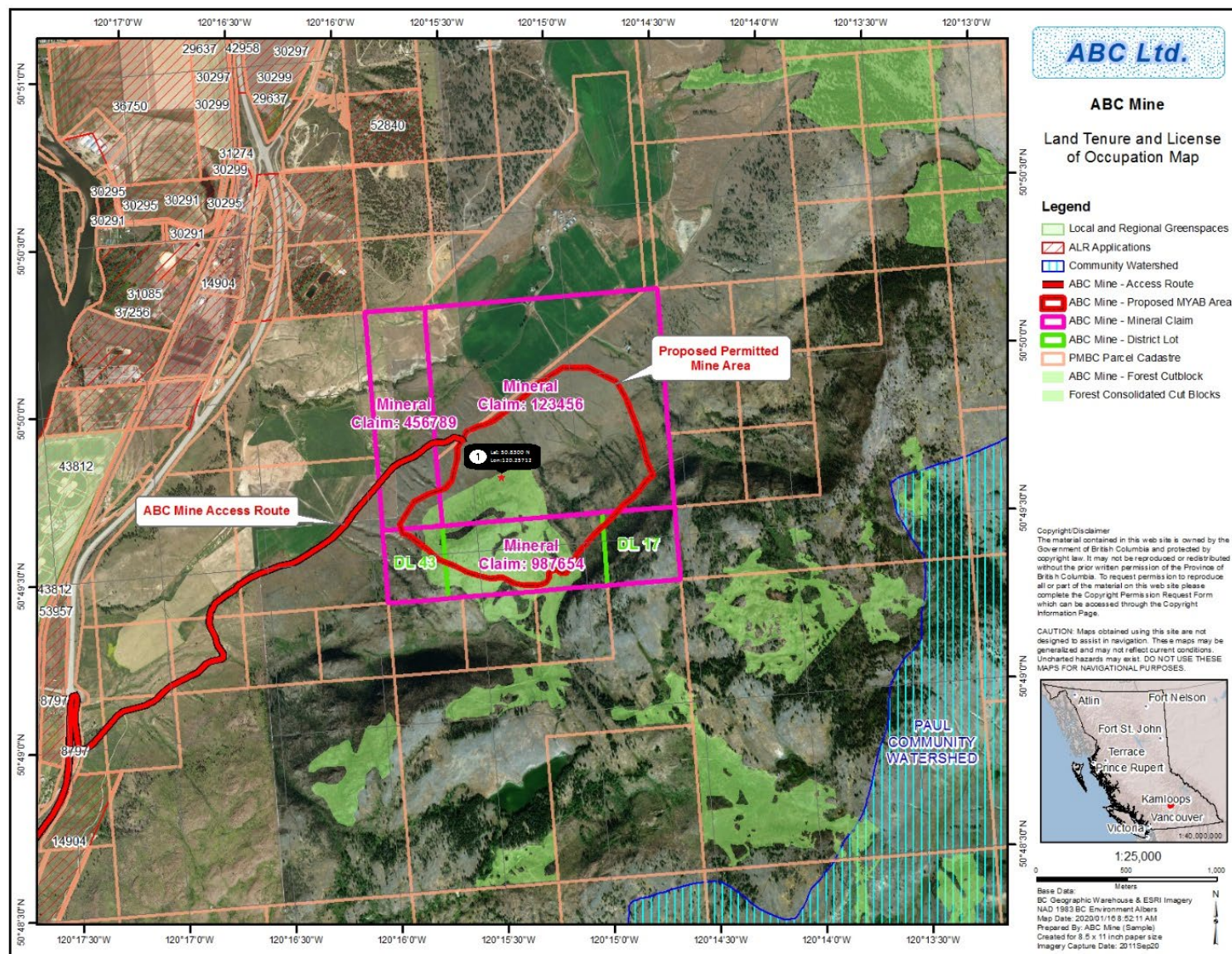


Figure 3. Sample Land Title and Licence of Occupation Map



6. Proposed and/or permitted mine area map

6.1 For mineral and coal exploration, and placer applications

To create a proposed and/or permitted mine area map in iMapBC, please follow the instructions in the previous sections on how to download and open the Mines Act Permit Application - iMapBC Project File Template (Section 2), and how to load or create your map content required in your map (Section 3.2 to 3.5).

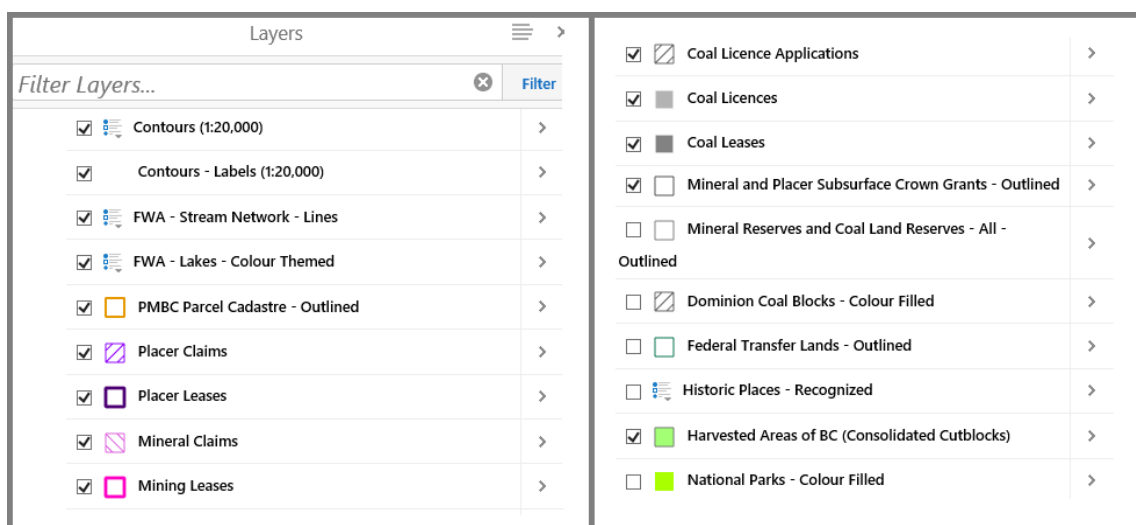
Map content required on your Proposed and/or Permitted Mine Area Map for Mineral and Coal Exploration, and Placer:

- Proposed and/or existing permitted mine area, same as proposed and/or existing MYAB area(s)
- Site specific proposed disturbance and reclamation activities, separate map needed for MYAB Year 1 program
- Existing disturbance and reclamation activities
- Elevation contours in metres

Note: Please ensure all these map contents are clearly labelled.

Turn on the following layers from the **Layers** panel:

- Contours
- Fresh Water Atlas (FWA) – Stream Network
- Fresh Water Atlas (FWA) – Lakes
- Parcel Map BC (PMBC) Parcel Cadastre
- Mineral, Placer, and Coal Titles
- Mineral and Placer Subsurface Crown Grants
- Harvested Areas of BC (Consolidated Cutblocks)



6.2 For Sand and gravel, and industrial mineral quarry applications

To create a Proposed and/or Permitted Mine Area Map in iMapBC, please follow the instructions in the previous sections on how to download and open the Mines Act Permit Application - iMapBC Project File Template (Section 2), and how to load or create your map content required in your map (Section 3.2 to 3.5).

Map Content required on your Proposed and/or Permitted Mine Area Map for Sand and Gravel and Industrial Mineral Quarries:

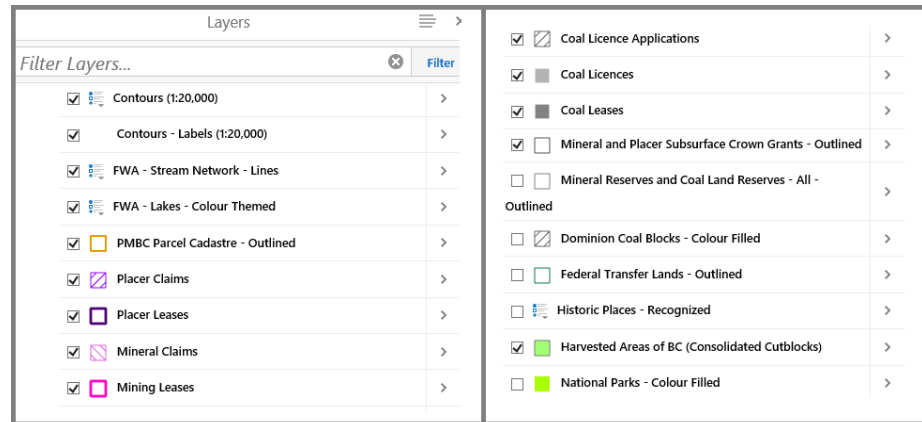
- Proposed or existing permitted mine area
- Site specific proposed disturbance and reclamation activities, including phased mining activities and progressive reclamation
- Existing disturbance and reclamation activities
- Elevation contours in metres
- Excavation setbacks as per [HSRC 10.5.8 or 10.5.11](#)
- Cross and long section traces

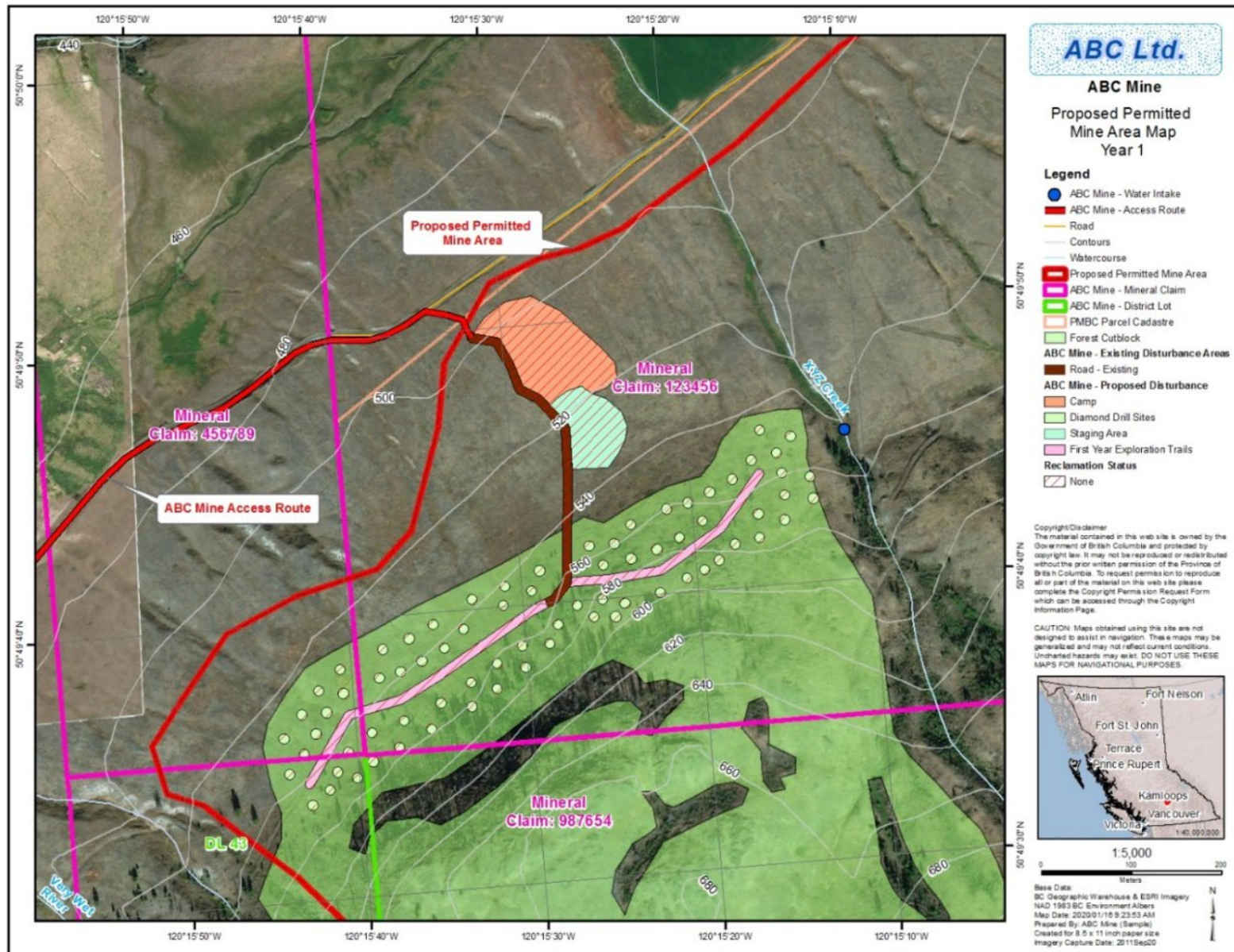
Note: Please ensure all these map contents are clearly labelled.

Turn on the following layers from the **Layers** panel:

- Contours
- Fresh Water Atlas (FWA) – Stream Network
- Fresh Water Atlas (FWA) – Lakes
- Parcel Map BC (PMBC) Parcel Cadastre
- Mineral, Placer, and Coal Titles
- Mineral and Placer Subsurface Crown Grants
- Harvested Areas of BC (Consolidated Cutblocks)

Figure 4. Sample Proposed Permitted Mine Area Map





7. Overview map(s)

It may be necessary to create one or more overview maps in situations where your mine site is very remote and/or too small/large to visibly see enough detail on the required maps.

Highlight your map extent(s) in relation to the nearest community. Follow the instructions in the previous sections on how to download and open Mines Act Permit Application - iMapBC Project File Template (Section 2), and how to load or create your map content required in your map (Section 3.2 to 3.5).

Map Content required on your Overview Map(s):

- Basemap features
- Map dependent elements
- Location and extent of the larger scale maps included in the map submission

8. Geospatial data submission standards

All geospatial data must be created as polygons and be identical in geographical shape, size and location to the features on maps.

Notice of Work application mapping requirements website:

<https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/permitting/mine-exploration/now-application-mapping-requirements>

8.1 Geospatial data to submit with your notice of work application

1. Permitted Mine Area (PMA) - required
 - The permitted mine area is the footprint/boundary of the entire work program. The boundary needs to include all disturbance and mine infrastructure
2. Disturbance areas - optional; required once spatial data standards are established

- All mining activities proposed/existing including access roads and trails (existing, modified, and new), trenches and stockpiles, drill pads/laydowns, and heli pads etc.
3. Reclamation areas - optional; required once spatial data standards are established
- All reclamation activities such as revegetation to reclaim areas affected by mining

Spatial file elements:

- Must be a polygon
- Follow naming standards
- PMA area: one polygon in a single geospatial file

See [Appendix 2](#) for the data dictionaries and type codes for regional mines.

8.2 Geospatial file types

Acceptable geospatial filetypes to accompany your NoW submission: (see section 8.3 File naming standards)

- Shapefiles: must include the following (4) files:
 - [your_filename].shp
 - [your_filename].shx
 - [your_filename].dbf
 - [your_filename].prj
- Google Earth: [your_filename].kml or [your_filename].kmz
- [Geomark](#): URL

8.3 File naming standards

The following naming standard is preferred to allow for consistency and increase efficiencies in the permitting process.

MineName_MineNumber/PermitNumber_Year_Existing/Proposed_Featuretype_Date(YYYY MonDD).File_extension

Examples

1. Permitted mine area file naming using a shapefile:
 - ABCMine_1234567_2022_Proposed_PermittedMineArea_2021Oct31.shp

File Naming Standards

ABCMine_1234567_2022_Proposed_PermittedMineArea_2021Oct31.shp

↓
Mine name

↓
**Mine
number
or
Permit number**
(if applicable)

↓
Year

↓
**Existing
or
Proposed**

↓
Feature type
e.g. Permitted Mine Area

↓
Date

↓
File type
e.g. shapefile

2. Disturbance type file naming example using a shapefile:

- ABCMine_1234567_2022_Proposed_ExplorationTrails_2021Oct31.shp

File Naming Standards

ABCMine_1234567_2022_Proposed_ExplorationTrails_2021Oct31.shp

↓
Mine name

↓
**Mine
number
or
Permit number**
(if applicable)

↓
Year

↓
**Existing
or
Proposed**

↓
Feature type
(e.g. Disturbance type, see
Disturbance Type Codes*)
*More information coming soon

↓
Date

↓
File type
e.g. shapefile

Appendix 1: Layers needed for maps

Mapping features must be consistent across all maps within an application or report. For example, the same polygon must be used for the MYAB area on every map that it is displayed on. The topography, roads, streams, etc. must be consistent across all maps (i.e. from the same base data source, in the same units, and in the same geographic location).

The [BC Geographic Warehouse](#) contains data and metadata for many publicly available datasets. The following layers are suggested for consistency between map submissions:

All Maps:

Layer name	BCGW layer and metadata
Major Cities	WHSE BASEMAPPING.BC MAJOR CITIES POINTS 500M
Digital Road Atlas	WHSE BASEMAPPING.DRA DGTL ROAD ATLAS MPAR SP
Municipalities	WHSE LEGAL ADMIN BOUNDARIES.ABMS MUNICIPALITIES SP

Title (Tenure) Map:

Layer name	BCGW layer and metadata
Mineral, Placer and Coal Titles	WHSE MINERAL TENURE.MTA ACQUIRED TENURE SVW
Mineral and Placer Subsurface Crown Grants	WHSE MINERAL TENURE.MTA CROWN GRANT MIN CLAIM SVW

Land Title Map:

Layer name	BCGW layer and metadata
Mineral, Placer, and Coal Titles	WHSE MINERAL TENURE.MTA ACQUIRED TENURE SVW
Mineral and Placer Subsurface Crown Grants	WHSE MINERAL TENURE.MTA CROWN GRANT MIN CLAIM SVW
Mineral Reserve Sites	WHSE MINERAL TENURE.MTA SITE SP
Parcel Map BC (PMBC) Parcel Cadastre	WHSE CADASTRE.PMBC PARCEL FABRIC POLY SVW
Dominion Coal Blocks	WHSE CADASTRE.PMBC PARCEL FABRIC POLY SVW

	<p>For Dominion Coal Blocks: This is the definition query to identify the dominion coal blocks in the PMBC dataset if viewing in other GIS software: PID IN ('014832020', '014832038')</p> <p>If your mine site is within the vicinity of the Dominion Coal Blocks (between Fernie, Sparwood and the BC/Alberta border) , please change the symbology of the layer in iMapBC to a diagonal cross hatch in grey (rgba values: 104, 104, 104, 1):</p>
Federal Transfer Lands	WHSE MINERAL TENURE.MTA FEDERAL TRANSFER LANDS SV W
Historic Places – Recognized	WHSE HUMAN CULTURAL ECONOMIC.HIST HISTORIC ENVIRONMENTS PA SV
Harvested Areas of BC (Consolidated Cutblocks	WHSE FOREST VEGETATION.VEG CONSOLIDATED CUT BLOCKS SP
National Parks	WHSE ADMIN BOUNDARIES.CLAB NATIONAL PARKS
Provincial Parks, Ecological Reserves and Protected Areas	WHSE TANTALIS.TA PARK ECORES PA SVW
Conservation Lands	WHSE LEGAL ADMIN BOUNDARIES.WCL CONSERVATION LANDS SP
Conservancy Areas	WHSE TANTALIS.TA CONSERVANCY AREAS SVW
Wildlife Management Areas	WHSE TANTALIS.TA WILDLIFE MGMT AREAS SVW
Local and Regional Greenspaces	WHSE BASEMAPPING.GBA LOCAL REG GREENSPACES SP
Agricultural Land Reserve (ALR) Polygons	WHSE LEGAL ADMIN BOUNDARIES.OATS ALR POLYS
Indian Reserves	WHSE ADMIN BOUNDARIES.CLAB INDIAN RESERVES
First Nations Treaty Lands	WHSE LEGAL ADMIN BOUNDARIES.FNT TREATY LAND SP
First Nations Treaty Related Lands	WHSE LEGAL ADMIN BOUNDARIES.FNT TREATY RELATED LAND SP
First Nations Treaty	WHSE LEGAL ADMIN BOUNDARIES.FNT TREATY AREA SP

Areas	
Community Watersheds	WHSE_WATER_MANAGEMENT.WLS_COMMUNITY_WS_PUB_SVW
Municipalities	WHSE_LEGAL_ADMIN_BOUNDARIES.ABMS_MUNICIPALITIES_SP

Proposed Permitted Mine Area Map:

Layer name	BCGW layer and metadata
Contours	WHSE_BASEMAPPING.TRIM_CONTOUR_LINES
Fresh Water Atlas – Stream Network	WHSE_BASEMAPPING.FWA_STREAM_NETWORKS_SP
Fresh Water Atlas – Lakes	WHSE_BASEMAPPING.FWA_LAKES_POLY
Parcel Map BC Parcel Cadastre	WHSE_CADASTRE.PMBC_PARCEL_FABRIC_POLY_SVW
Mineral, Placer, and Coal Titles	WHSE_MINERAL_TENURE.MTA_ACQUIRED_TENURE_SVW
Forest Harvest Areas	WHSE_FOREST_VEGETATION.VEG_CONSOLIDATED_CUT_BLOCKS_SP
Mineral and Placer Subsurface Crown Grants	WHSE_MINERAL_TENURE.MTA_CROWN_GRANT_MIN_CLAIM_SVW

Appendix 2: Data dictionaries for Notice of Work spatial data submissions

Data dictionaries and codes for Notice of Work Application and Annual Summary spatial data submissions. The following table structures are used specifically for shapefiles created in a mapping platform (like ArcGIS or QGIS) that allows attributes to be included within the shapefile itself. Use the following fields and codes to represent each of the features within the shapefile. These attributes may be used with a permitted mine area shapefile, disturbance specific shapefile (containing features for all mining activities proposed and/or existing), and a reclamation specific shapefile (containing all the reclamation existing or planned).

***More information coming soon**

Permitted mine area (current or proposed) data dictionary

Shapefile Field Description	Shapefile Field Name	Data Type	Example	Example Explanation	Domain
Mine Number	MINE_NO	Text – 10	000001	(Include if applicable)	
Mine Permit	PERMIT_NO	Text – 10	CX-1-1	(Include if applicable)	
Mine Name	MINE_NM	Text – 50	Gold Creek		
Mine Type	MINE_TYP	Text – 6	MX	Mineral Exploration	See table Mine Type Codes
Submission Year	YEAR_	Short Integer – 4	2019	The year the data/ application is submitted	

Disturbance Area Data Dictionary

Shapefile Field Description	Shapefile Field Name	Data Type	Example	Example Explanation	Domain
Mine Number	MINE_NO	Text – 10	000001	(Include if applicable)	
Mine Permit	PERMIT_NO	Text – 10	CX-1-1	(Include if applicable)	
Submission Year	YEAR_	Short Integer – 4	2019	The year the data/ application is submitted	
Disturbance Identifier	DSTB_ID	Text – 6	1	Unique numerical ID number for each feature within the shapefile	
Disturbance Type	DSTB_TYPE	Text – 6	TRAIL_EXP	What disturbance does this feature represent	See table <i>Disturbance Type Codes</i>
Disturbance Year	DSTB_YEAR	Short Integer - 4	2014	The year this disturbance occurred or will occur	
Comments	COMMENTS	Text – 255	3.5m wide first year exploration trail	General comments to describe this activity	

Reclamation area data dictionary

Shapefile Field Description	Shapefile Field Name	Data Type	Example	Example Explanation	Domain
Mine Number	MINE_NO	Text – 10	000001	(Include if applicable)	
Mine Permit	PERMIT_NO	Text – 10	CX-1-1	(Include if applicable)	
Submission Year	YEAR_	Short Integer – 4	2019	The year the data/ application is submitted	
Disturbance Identifier	DSTB_ID	Text – 6	1	Unique numerical ID number for each feature within the shapefile	
Reclamation Area Identifier	RECL_ID	Text - 6	1	Unique numerical ID within the disturbance feature this reclamation feature is associated to	
Reclamation Activity Status	RECL_ACT	Text - 6	Ongoing	Reclamation activities are ongoing for this feature	See table Reclamation Activity Codes
Disturbance Type	DSTB_TYPE	Text – 6	TRAIL_EXP	What disturbance does this feature	See table Disturbance Type Codes

Shapefile Field Description	Shapefile Field Name	Data Type	Example	Example Explanation	Domain
				represent	
Reclamation Year	RECL_YEAR	Short Integer - 4	2016	Most recent reclamation activity conducted in 2016	
Comments	COMMENTS	Text - 255	3.5m wide first year exploration trail	General comments to describe this activity	

Mine type codes

Code	Description
MX	Mineral Exploration
CX	Coal Exploration
P	Placer Operations
SG	Sand and Gravel
Q	Industrial Mineral Quarries

Reclamation activity codes

Code	Description	Shapefile Naming Element
R	Revegetated or returned to end land use	RevegetatedReclamation
O	Ongoing Reclamation	OngoingReclamation

E	Currently exempt from reclamation	ReclamationExempt
N	No reclamation started	ReclamationNone

Disturbance Type Codes

Activity Grouping	Code	Description	Shapefile Naming Element ("ABCMine_1234567_2020_Proposed_ExplorationTrail_2019Oct31.shp")
Access Road, Trail, Heli Pad, Boat Launch & Air Strip	TRAIL_EXP	Exploration Trail	ExplorationTrail
	TRAIL_EXC	Excavated Trail	ExcavatedTrail
	TEMP_RD	Temporary Road	TemporaryRoad
	ACCM	Existing Access Modification	AccessModification
	ACC	Access	Access
	HP	Heli Pad	HeliPad
	BL	Boat Launch	BoatLaunch
	TEMP_AS	Temporary Air Strip	TempAirStrip
Blasting	EX_STOR	Explosives Storage	ExplosivesStorage
Camps, Building & Staging Areas	CAMP	Camp area	Camp
	ADMIN	Building	Building
	STAGE	Staging Area	StagingArea
Cut Lines	GRID_EXP	Exploration Grid	ExplorationGrid
Exploration Surface	DDS	Diamond Drill Site – Surface	DrillSite

Activity Grouping	Code	Description	Shapefile Naming Element ("ABCMine_1234567_2020_Proposed_ExplorationTrail_2019Oct31.shp")
Drilling	DDU	Diamond Drilling Site – Underground	DrillSite
	GEOTECH	Geotechnical Drill Site	DrillSite
	REV_CIRC	Reverse Circulation Drill Site	DrillSite
	PERC	Percussion Drill Site	DrillSite
	BECK	Becker Drill Site	DrillSite
	SONIC	Sonic Drill Site	DrillSite
	AUGER	Auger Drill Site	DrillSite
Mechanical Trenching/Test Pits	TRENCH	Trenching	Trench
	TESTPIT	Test Pits	TestPit
	SP	Stockpile	Stockpile
Placer Mining Operations	TRENCH	Trenching	Trench
	TESTPIT	Test Pits	TestPit
	CAMP	Campsites	Camp
	POND	Settling Pond	SettlingPond
	MA	Mining Areas	MineArea
	TAIL	Coarse Tailings Pile	TailingsPile
	WASH	Wash Plant	WashPlant
	ACC	Access	Access

Activity Grouping	Code	Description	Shapefile Naming Element ("ABCMine_1234567_2020_Proposed_ExplorationTrail_2019Oct31.shp")
	SNIP	Enhanced Sniping	EnhancedSniping
	O	Other	Other
Sand and Gravel, and Quarry Operations	PR	Excavation of Pit Run	PitRun
	CRUSH	Crushing	Crushing
	SCREEN	Mechanical Screening	MechanicalScreening
	WASH	Washing (instead of Wash Plant)	WashPlant
Settling Ponds	POND	Settling Pond	SettlingPond
Surface Bulk Sample	BULK	Bulk Sample	BulkSample
	SP	Overburden	Overburden
	TOPSOIL	Topsoil	Topsoil
	WD	Waste Dump	WasteDump
	SHOP	Equipment and Service Facility	Building
	PROCESS	Processing Facility	Building
Underground Exploration	PORTAL	Portal Site/Entry	UndergroundWorkings
	DRIFT	Drift	UndergroundWorkings
	RAISE	Raise	UndergroundWorkings
	RAMP	Ramp	UndergroundWorkings
	STP	Stope	UndergroundWorkings

Activity Grouping	Code	Description	Shapefile Naming Element ("ABCMine_1234567_2020_Proposed_ExplorationTrail_2019Oct31.shp")
	SFT	Shaft	UndergroundWorkings
	DEPIL	De-Pillar	UndergroundWorkings
	OD	Ore Dump	OreDump
	WD	Waste Dump	WasteDump
	SP	Soil/Overburden	Overburden
	SED	Sedimentation	Sedimentation
	ADMIN	Office/Dry/ Shop	Building
	LD	Equipment Lay-down area	StagingArea
	FSTORE	Fuel Storage	FuelStorage
	O	Other	Other
Water Supply/Use	SCS	Sediment Control Structure	
	WI	Water Intake	WaterIntake
Prior Existing Disturbance	OED	Other Existing Disturbance	

Appendix 3: iMapBC advanced instructions

The information below provides step-by-step instructions to:

- [Extract features from a dataset](#)
- Save features as a shapefile to submit as part of your geospatial data with your NoW application, and to use on your maps
 - Rename saved shapefiles prior to submission
- Reproject existing shapefiles

Use a new [iMapBC](#) session only loading the information needed to perform the tasks.

There are many variations to follow in iMapBC depending on the end goal. The information below tries to address the variations clients may need for their desired result.

The examples below will use the [mineral claims dataset](#) from the BC Geographic Warehouse (BCGW). The process can be applied to any dataset and users can select and save a single feature or multiple features from the dataset.

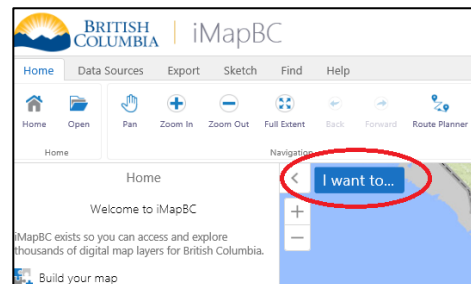
Determining the end-result. Do you want to...

- Maintain individual boundaries of each input feature selected and the attribute information? **Export provincial layer download**
- Do you want individual boundaries of each input features selected with no attribute information? **Save markup as shapefile – individual boundaries**
- Do you want a single boundary around all input features selected with no attribute information? **Save markup as shapefile – outline boundary**
- Do you have your own geospatial file that you need to reproject into BC Albers (the preferred projection)? **Change projection**

Load the BCGW layer to your map

Click the **I want to...** menu button located in the upper left side of the map.

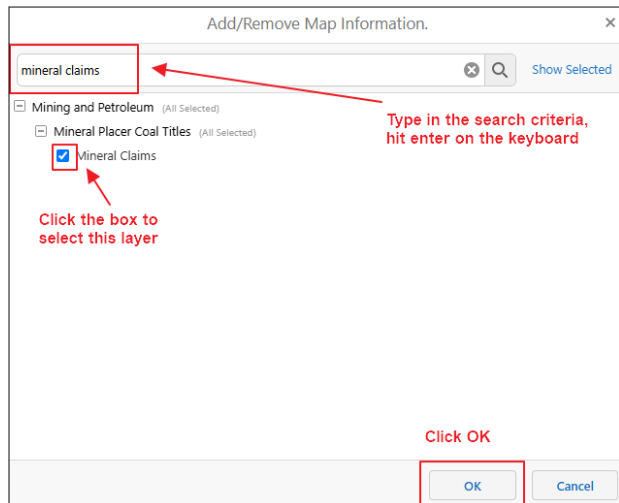
On the sub-menu, click **Add Provincial Layers**



Search for the BCGW layer to add to the map, i.e. Mineral Claims

Click the selection **box**, then click **OK**

Zoom to your area of interest.



If you have a custom layer to load, click the **Data Sources** tab, then **Upload Data**. Locate your geospatial data and click **Upload**.

Select a feature from a dataset to extract

For example, you would like your mineral title(s) to be the boundary of your permitted mine area (PMA)

There are multiple methods to select features, choose the option that might work best for your needs.

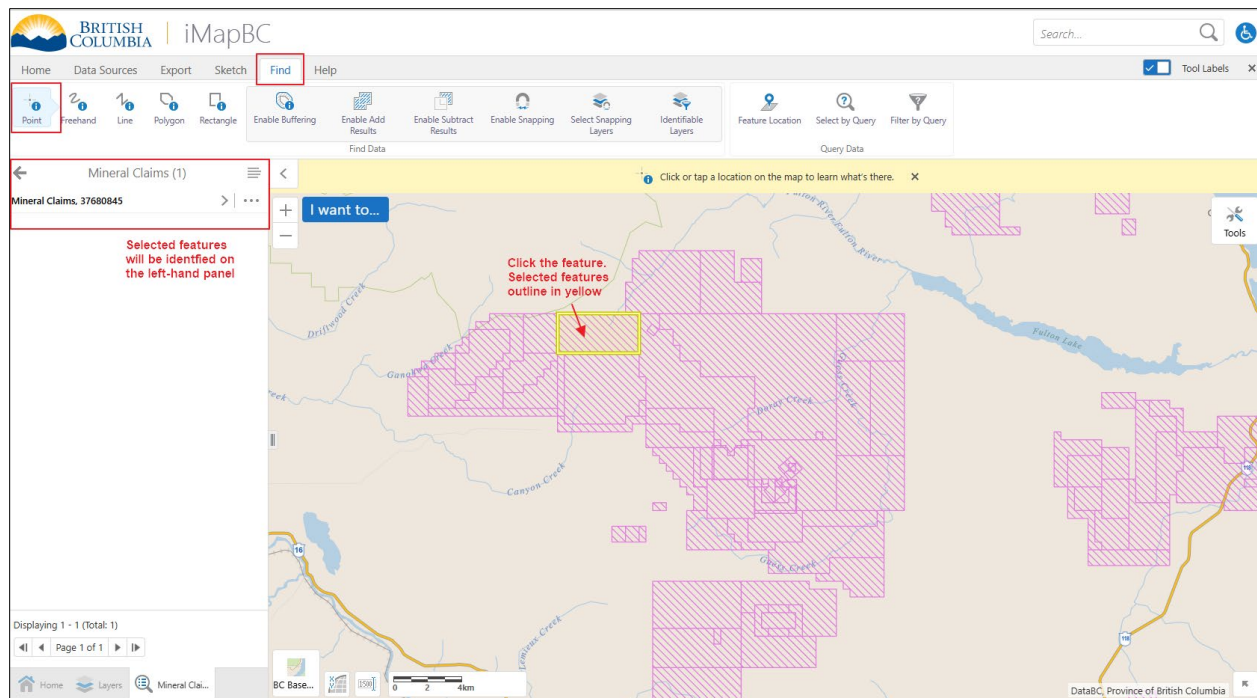
On the **Find** menu item,

- choose [Point](#) to choose a single feature
- choose [Line, Polygon or Rectangle](#) to select multiple features
- choose [Select by Query](#) to select features matching specific criteria

Find by Point

Using find by point, only selects a single feature.

Click the feature of interest. The selected feature will highlight with a yellow boundary.



Now decide on the end-result of your shapefile

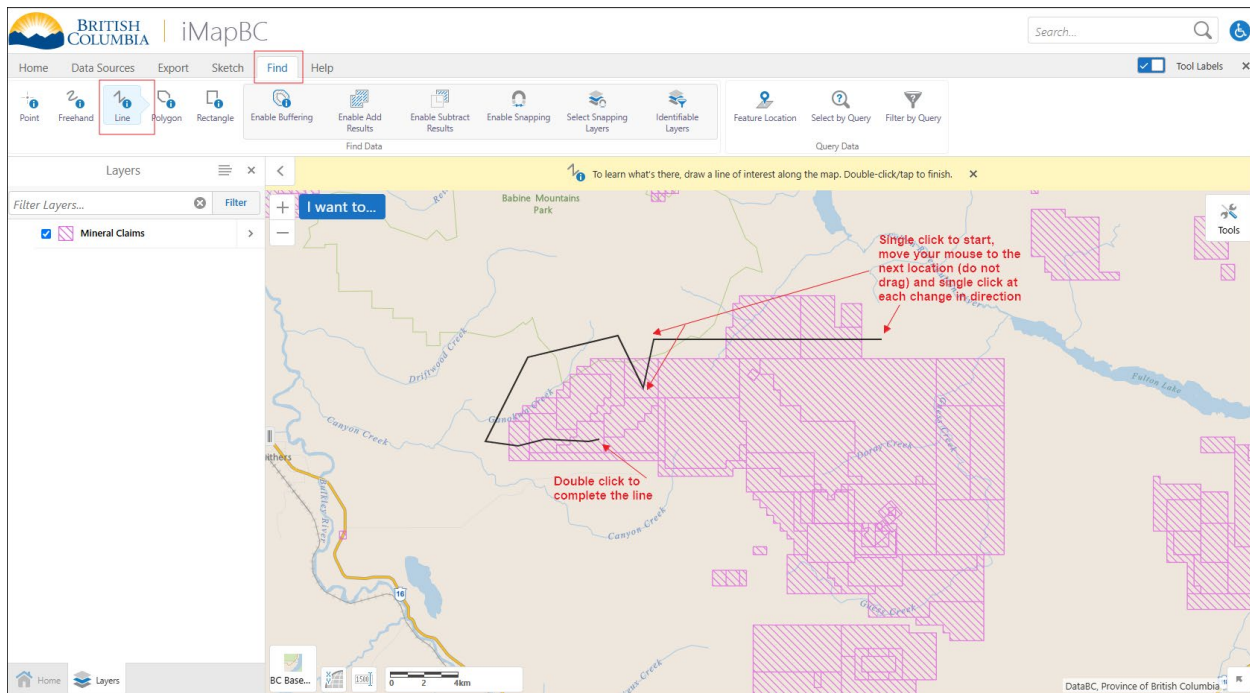
- **Export provincial layer download:** Maintain the information (attributes) and individual boundaries of each input feature selected?
- **Save markup as shapefile – individual boundaries:** Do you want individual boundaries of each input features selected with no attribute information?

Find by Line, Polygon or Rectangle

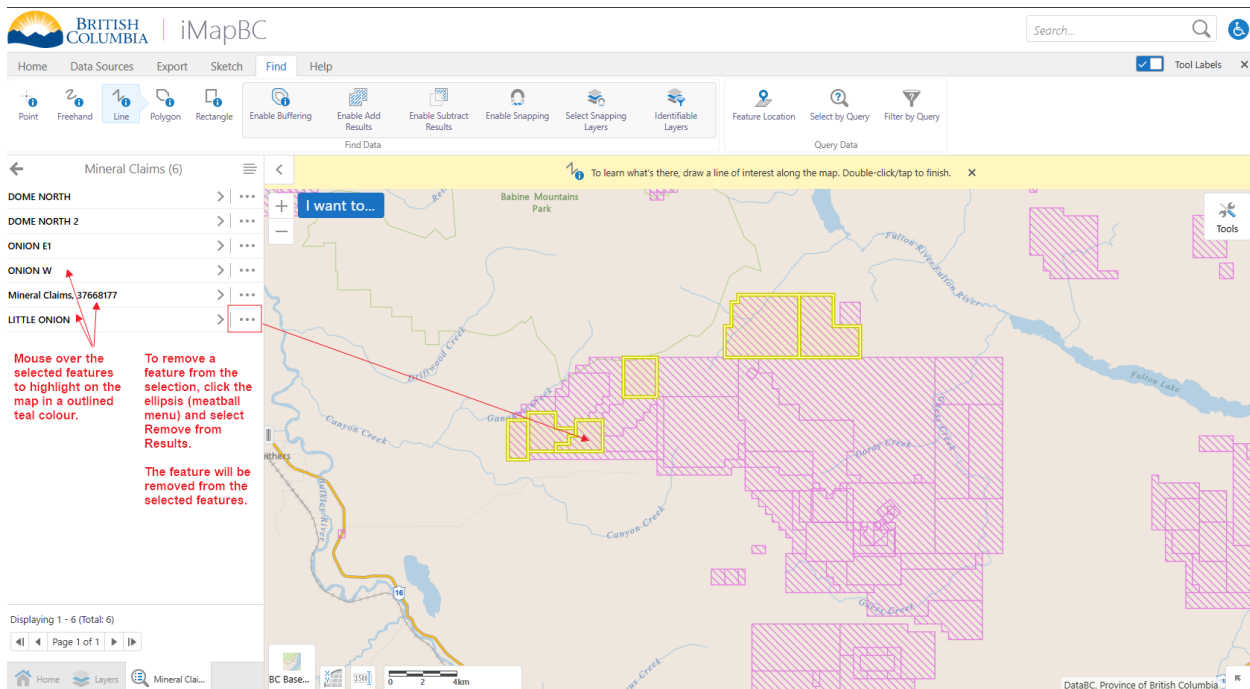
If you use Line, Polygon or Rectangle, you can only select multiple features. Line allows you to select non-adjacent features.

Line

Click once on the map and over the features you want to select, draw a line. Avoid features you do not want selected. Double-click to complete the selection



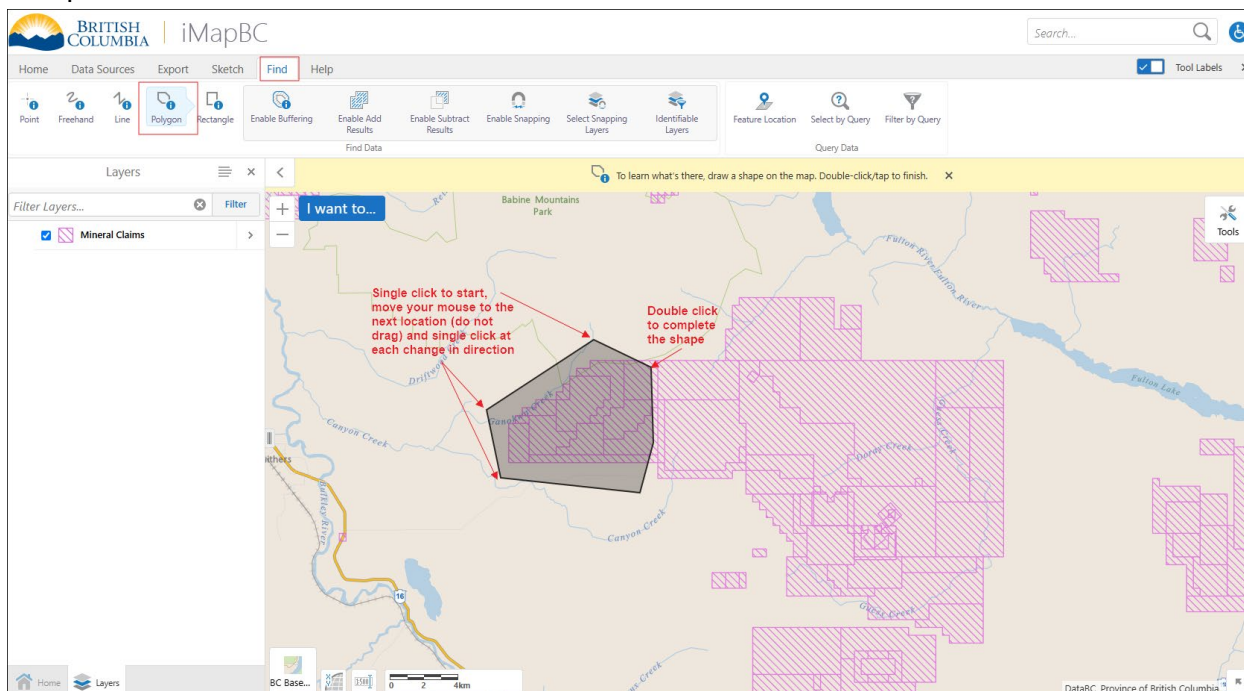
The selected features highlight with a yellow outline. A list of the selected features appears on the left-hand side.



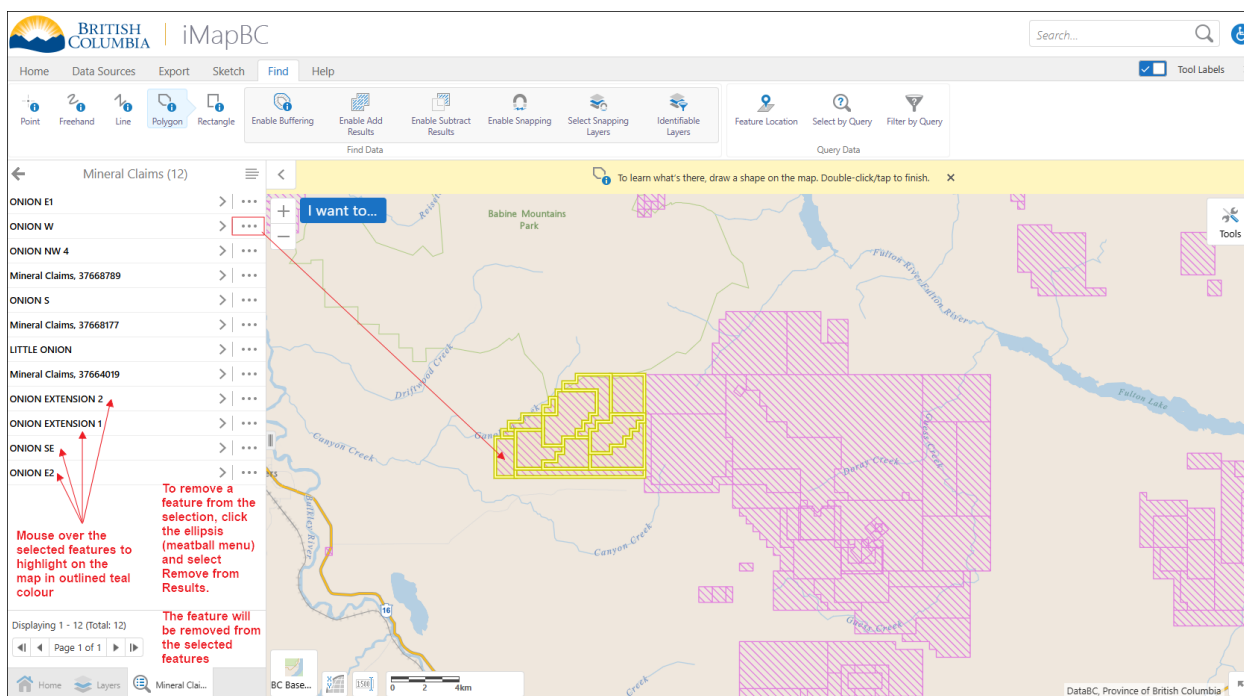
[Now decide on the end-result of your shapefile.](#)

Polygon

Click once on the map and over the features you want to select, draw a line, click on the map where you want a corner/change in direction until you make a shape. Double-click to complete the selection



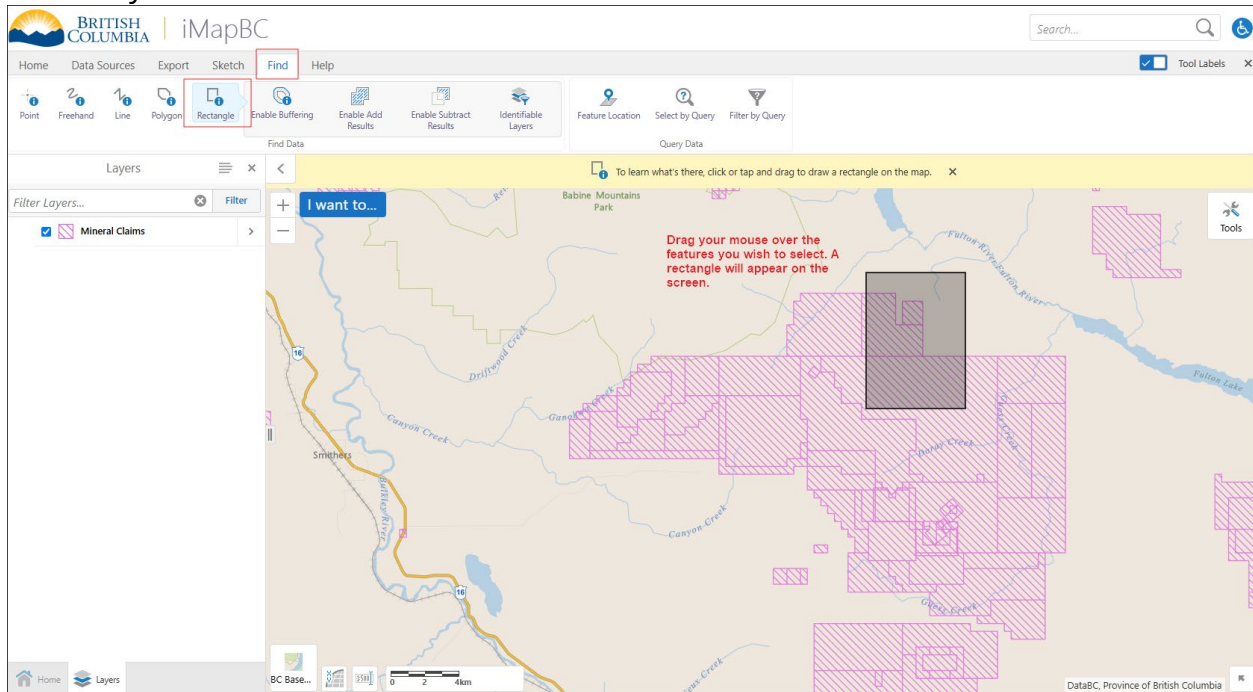
The selected features highlight with a yellow outline. A list of the selected features appears on the left-hand side.



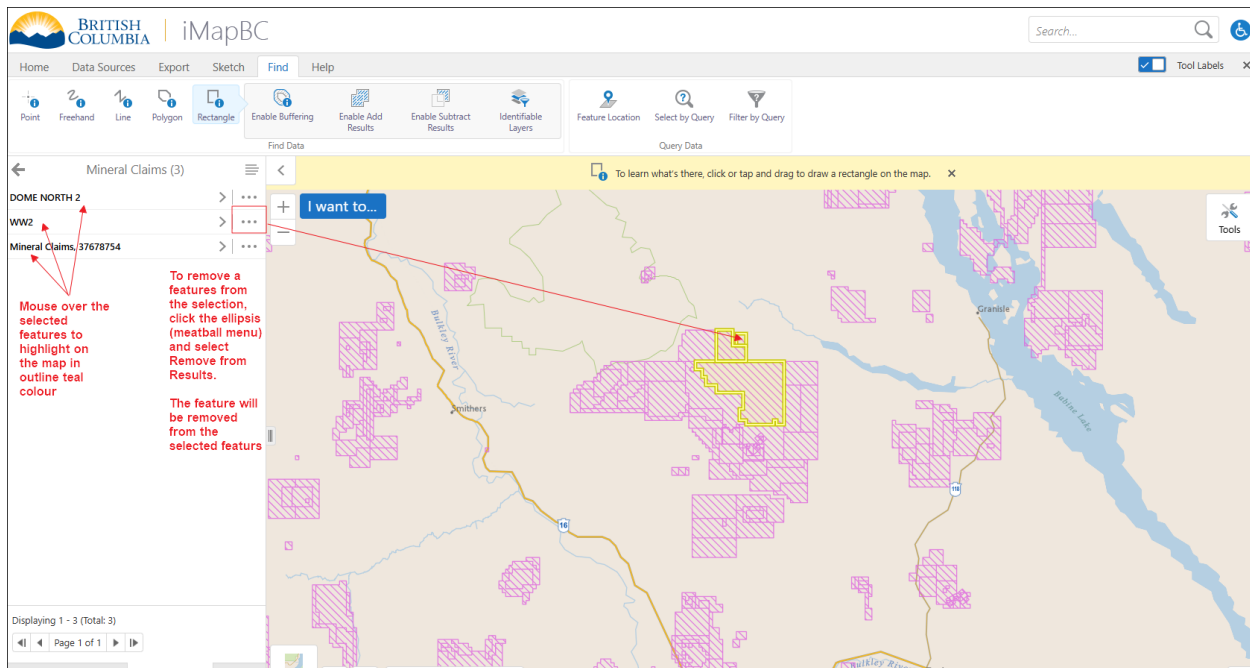
[Now decide on the end-result of your shapefile.](#)

Rectangle

Click and drag your mouse over the features you wish to select. A black rectangle will appear on the screen. Release the mouse button once your rectangle size covers the features you wish to select.



The selected features highlight with a yellow outline. A list of the selected features appears on the left-hand side.

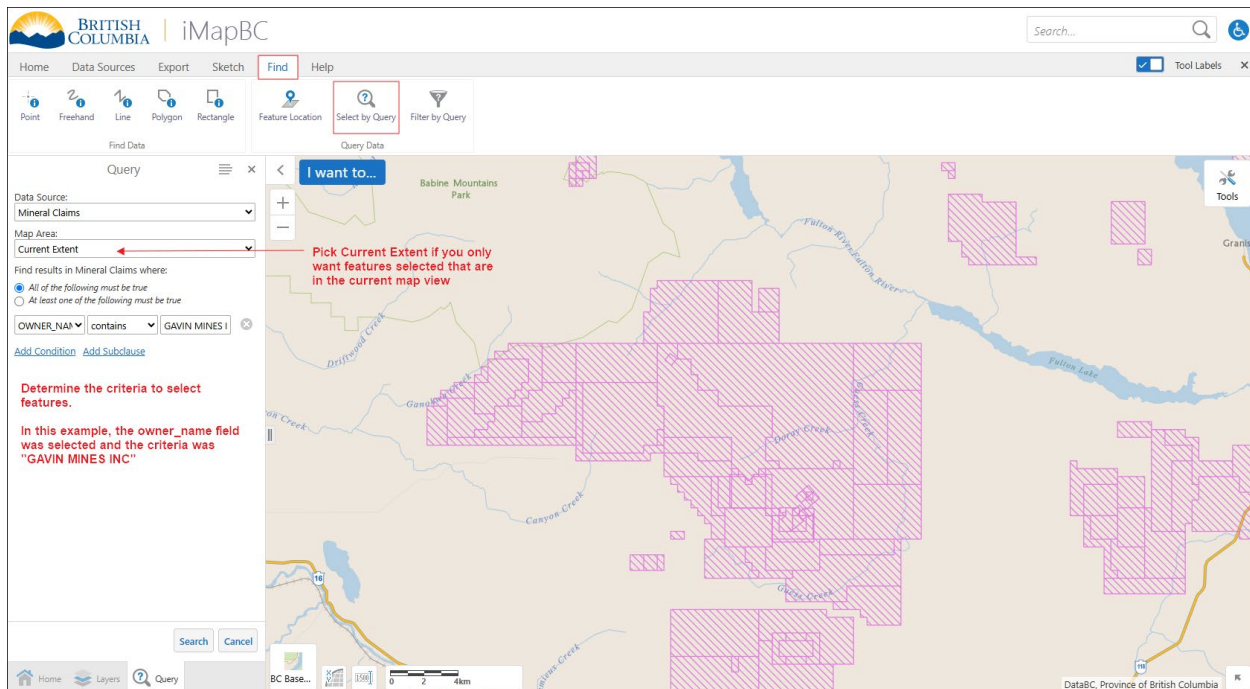


[Now decide on the end-result of your shapefile.](#)

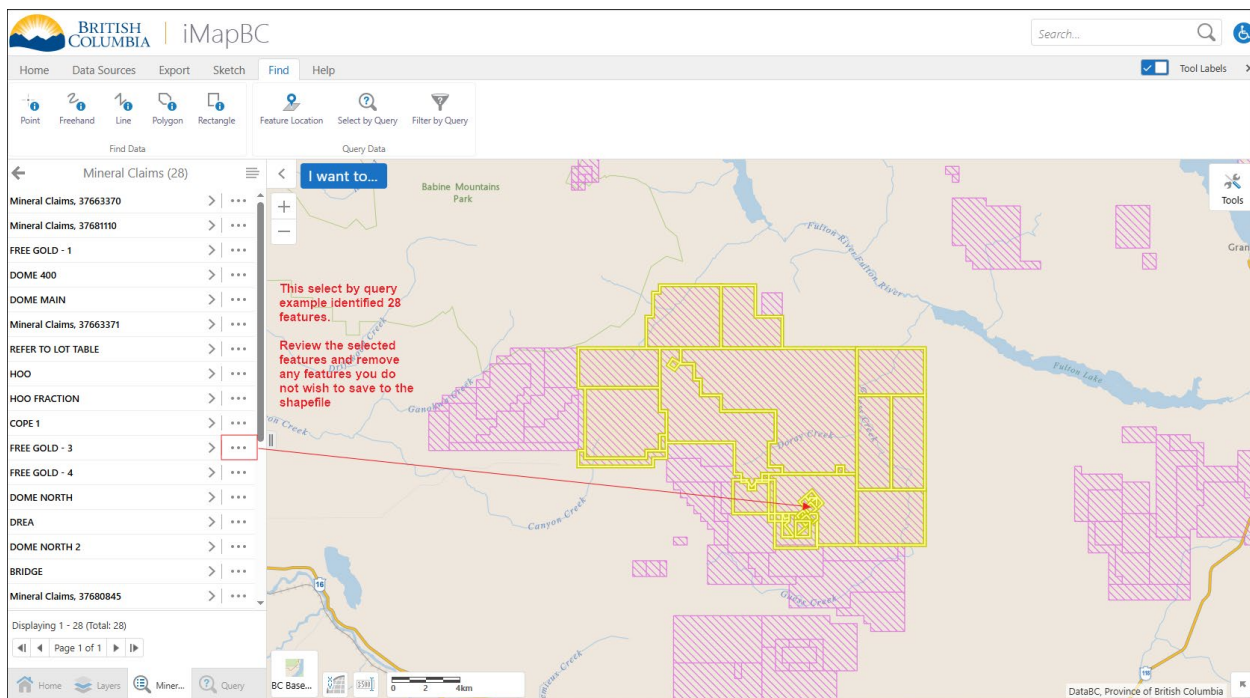
Find by Select by Query

This option queries the attribute information for specific criteria. The example selects a specific owner from all the mineral claims viewable on the current screen. Select the field to be queried and the operator then add the criteria to search.

Example, OWNER_NAME contains GAVIN MINES



The selected features highlight with a yellow outline. A list of the selected features appears on the left-hand side.



Now decide on the end-result of your shapefile.

- [Export provincial layer download:](#) Maintain the information (attributes) and

- individual boundaries of each input feature selected?
- [Save markup as shapefile – individual boundaries](#): Do you want individual boundaries of each input features selected with no attribute information?
- [Save markup as shapefile – outline boundary](#): Do you want a single boundary around all input features selected with no attribute information?

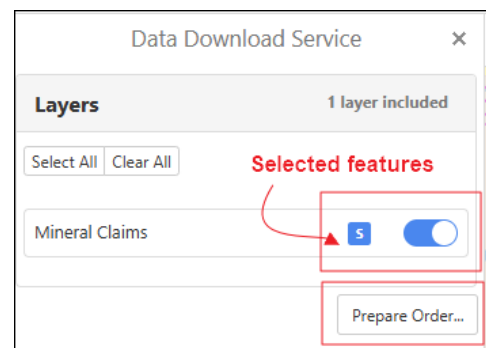
Export provincial layer download

Exporting selected features from the layer uses the data distribution service and creates a shapefile package that keeps all the attribute information from the selected features. Features will maintain their individual boundaries, if more than one feature is selected.

Select the **Export** menu item, click **Provincial Layer Download**

Notice the Data Download Service menu on the left-hand side of the screen.

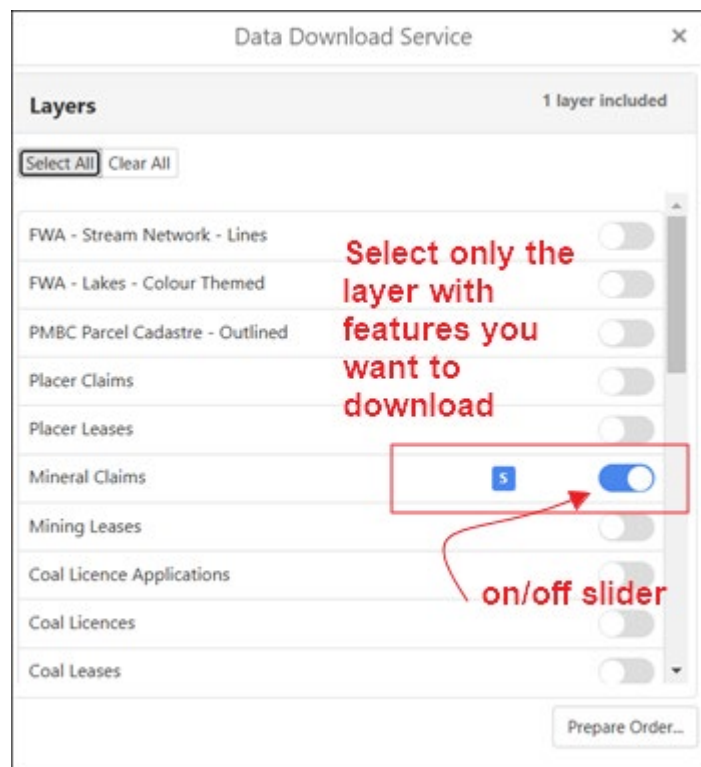
If you only have a single layer (e.g. Mineral Claims) loaded and features selected, click **Prepare Order**.



If you have multiple layers loaded and only want to download the selected features, click **Clear All**, then find your layer and click the slider 'on'.

Notice the 'S' in the blue box. This indicates the selected feature(s) will be downloaded.

Click **Prepare order**



Determine the coordinate system, format and area of interest, provide your email address and agree to the terms and conditions. Click **Submit Order**.

Read the **Downloading data guide** on how to use the distribution service.
<https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/mineral-titles/data-gis/dataset-descriptions-download#downloadaddata>

You will receive 2 emails from nrm enquiries@gov.bc.ca to the email address entered in the steps above.

1. Your order 5555555 has been submitted
2. Your order 5555555 has been assembled

Open the email stating your order has been assembled and download the data from the link provided.

Data is automatically downloaded the downloads folder on your computer. The zip file will look something like this filename, starting with BCGW_

- BCGW_02001F02_1741972451292_26796.zip

Locate the downloaded file and [rename the shapefile to submit with your NoW application](#).

[Go to the top of Appendix 3](#)

Save markup as shapefile – Individual boundary

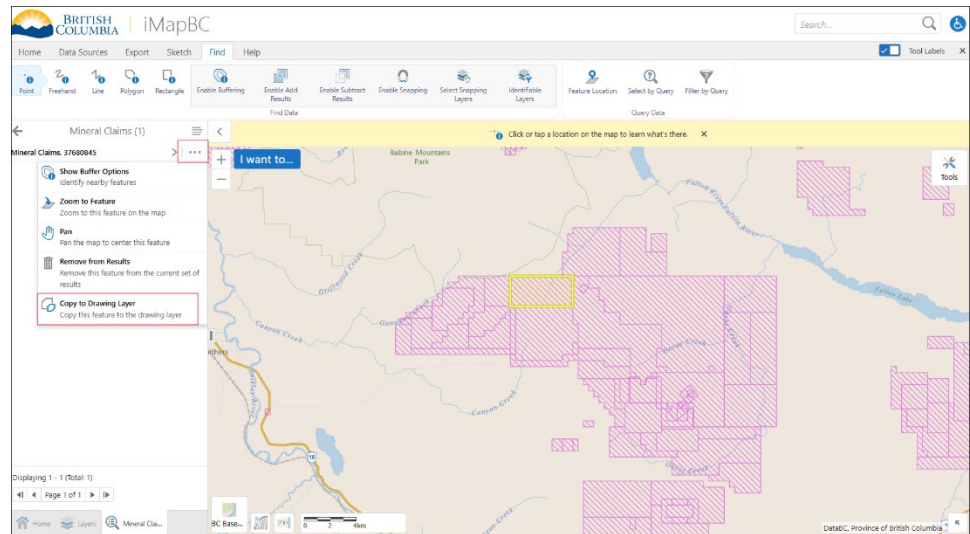
Note: if you are using this method for multiple selected features you will need to repeat the Copy to Drawing Layer for each feature.

Once you've selected your feature, click the **ellipsis** (3 dots, meatball menu) beside the selected feature.

From the sub-menu, click **Copy to Drawing Layer**

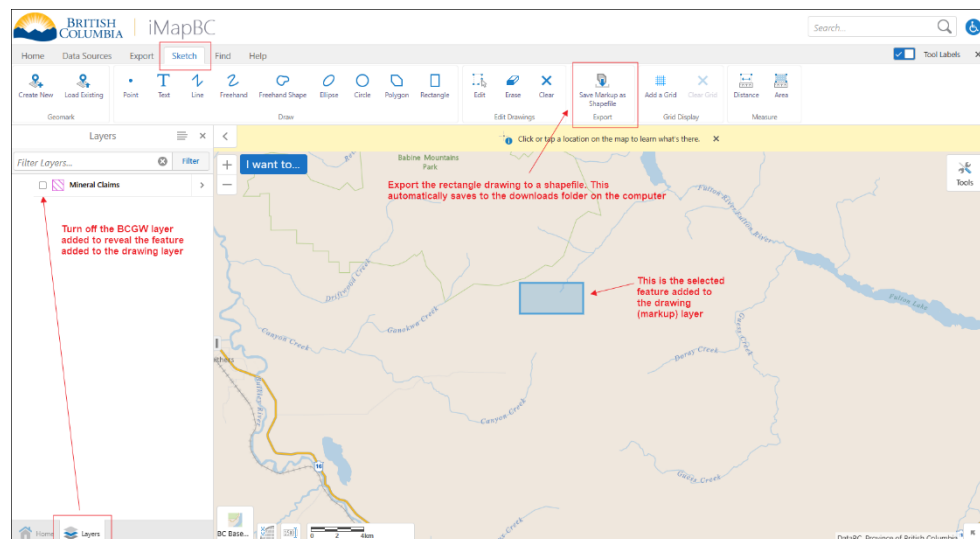
Notice a new colored shape over top of the BCGW layer.

If you go back to the Layers menu and turn off the BCGW layer added, you will see the shape added to the drawing layer.



Click on the **Sketch** tab

Click **Save Markup as Shapefile**



The Project menu will appear. Choose the spatial reference for your shapefile from the dropdown menu.

Select **BC Albers** ([suggested by the ministry](#))

Click **Save**

Click **OK** on the warning message "The .shp file is to be downloaded. Confirm?"

Locate the downloaded file and [rename the shapefile to submit with your NoW application](#).

[Go to the top of Appendix 3](#)

Save markup as shapefile – Outline boundary

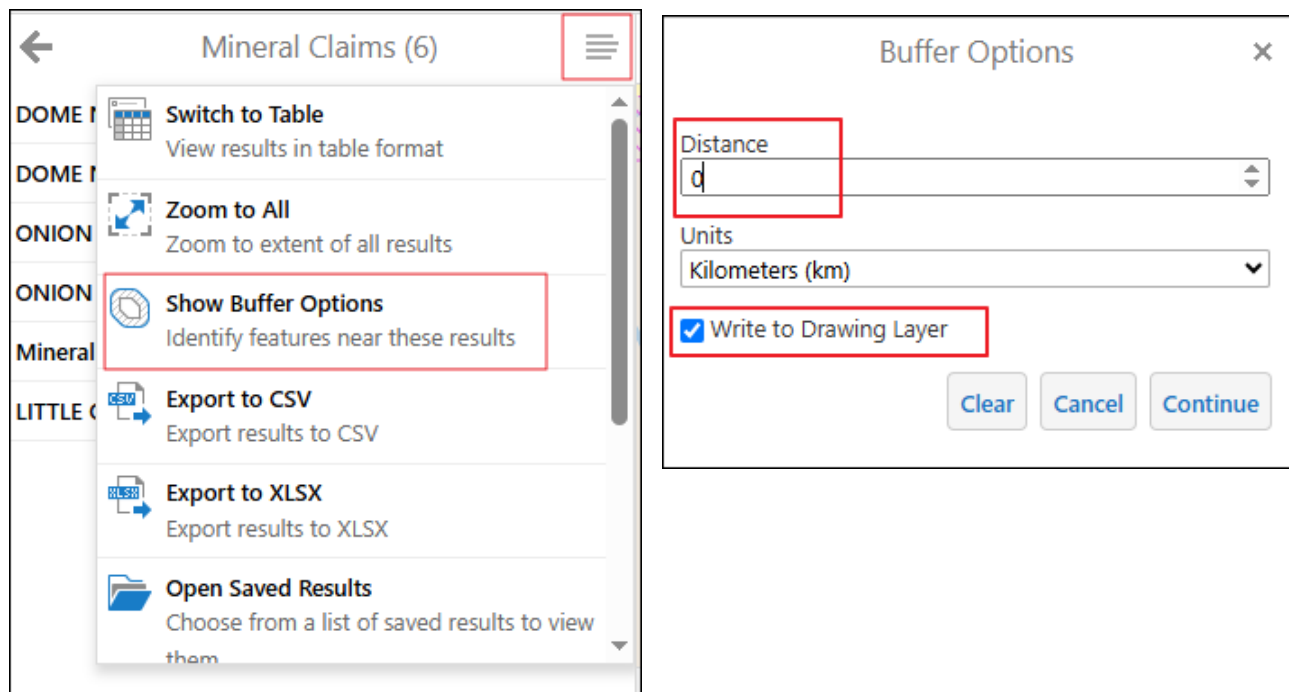
Click the **hamburger menu** from the title header of the selected features.

Click **Show Buffer Options**

Enter a distance of **0**

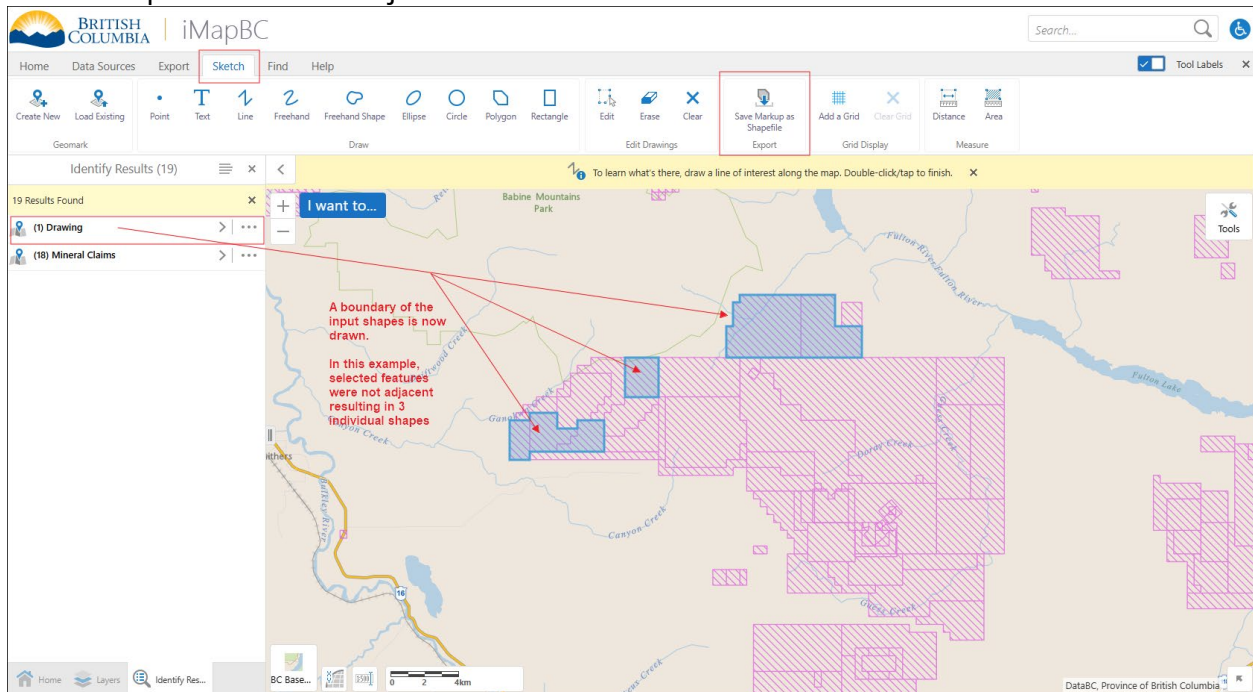
Click the **Write to Drawing Layer** box so it is check marked

Click **Continue**

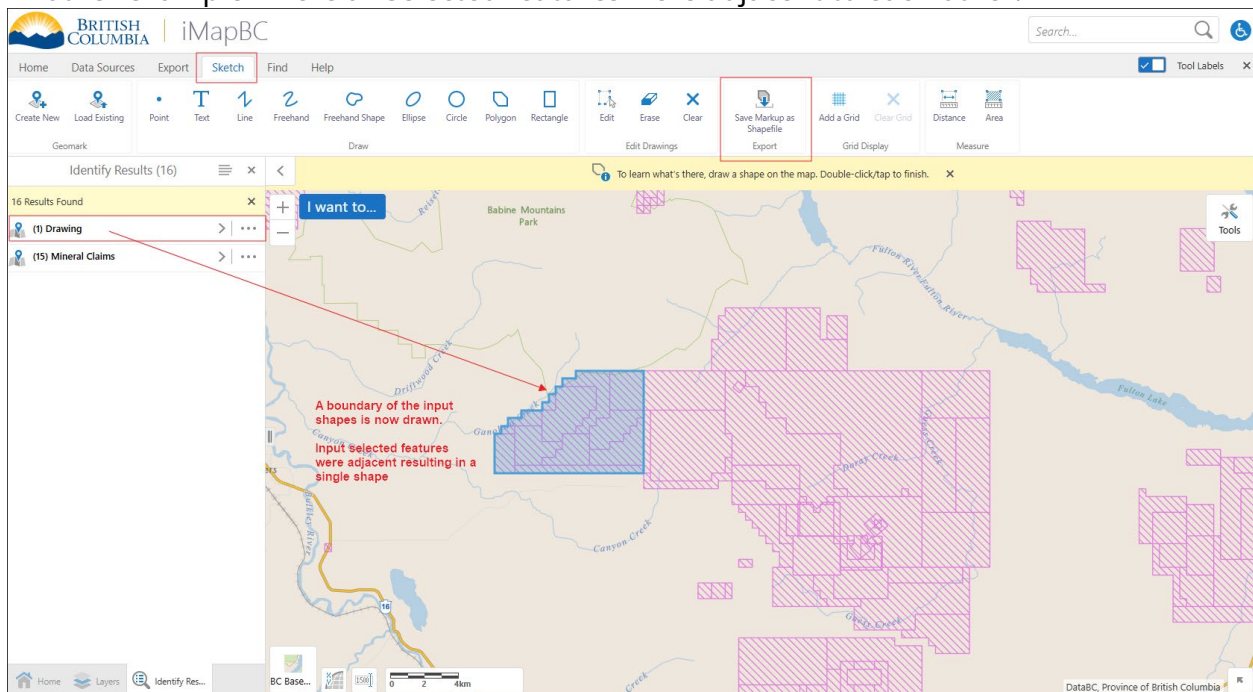


The results display on the left-hand menu. The drawing layer is what you are interested in.

This example shows non-adjacent features.



Another example where all selected features were adjacent to each other.



From the **Sketch** menu, Click **Save Markup as Shapefile**

The Project menu will appear. Choose the spatial reference for your shapefile from the dropdown menu.

Select **BC Albers** ([suggested by the ministry](#))

Click **Save**

Click **OK** on the warning message “The .shp file is to be downloaded. Confirm?”

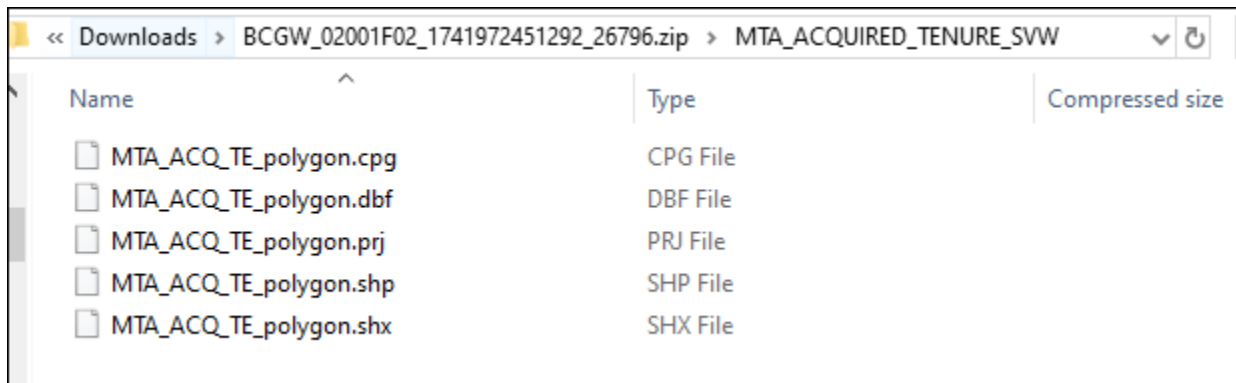
Locate the downloaded file and [rename the shapefile to submit with your NoW application](#).

Rename the downloaded information to submit with your NoW application

Open the zipfile and data folder containing the shapefile to rename the files following the [file naming standards](#) for NoW application submission.

All 4 or 5 files that make up a [shapefile must have the same name](#). Downloads from the BCGW will contain 5 files.

In the example of downloading selected mineral claims, the shapefile downloaded might look like:



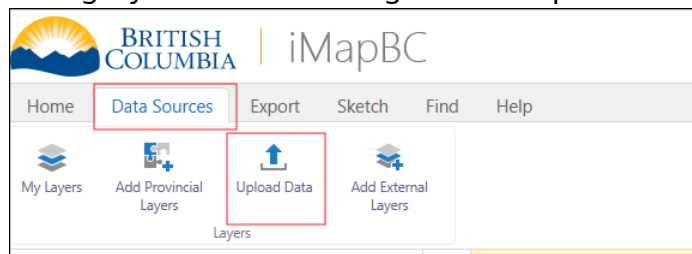
Name	Type	Compressed size
MTA_ACQ_TE_polygon.cpg	CPG File	
MTA_ACQ_TE_polygon.dbf	DBF File	
MTA_ACQ_TE_polygon.prj	PRJ File	
MTA_ACQ_TE_polygon.shp	SHP File	
MTA_ACQ_TE_polygon.shx	SHX File	

All 5 of the files must have the same filename. The extension (.cpg, .dbf, .prj, .shp, .shx) must be maintained.

Change projection of a file

If you have a geospatial and want to reproject it into BC Albers you can do this by loading the data to the webmap, creating a drawing layer and then saving the markup as a shapefile. When you save the markup as a shapefile you can select the spatial reference information.

Click the **Data Sources** tab

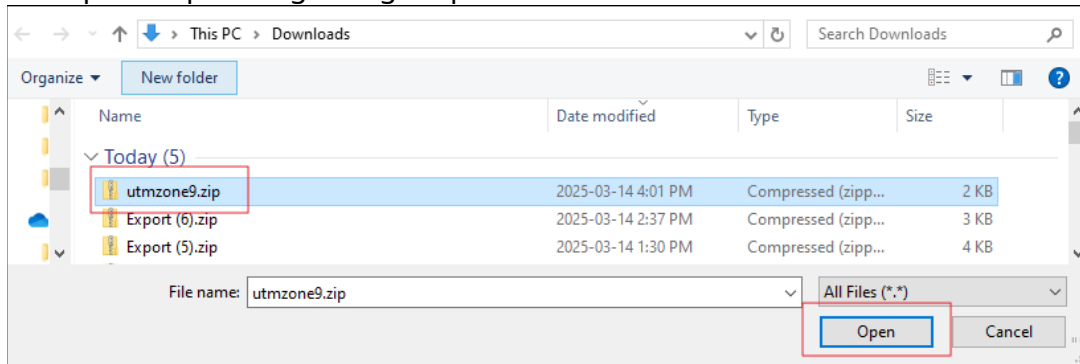


Select **Upload Data**

Navigate to the location of the files to upload.

Shapefiles can be uploaded by having all the components in a single zip file or by selecting each of the components that make up a shapefile.

Example of uploading a single zip file



Select the single zip file or all the component files that make up a shapefile.

Click **Open**.

Review the Add data to Map pop-up, click **Upload**.

When you select individual components of the shapefile, verify all components are selected before clicking upload.

Follow the series of prompts to change the Layer name, click **Proceed**.

Adjust the symbology color, line style, click **Proceed**.

Follow the instructions to:

- [Find by Point](#), then
- [Save markup as shapefile – individual boundaries](#)

