Importing Digital Spatial Data into OneStop Well Licences

» Intended User: Well licence applicants

Overview

This quick reference guide (QRG) describes how to upload as a shapefile, the location of a proposed or existing well site in OneStop. Shapefiles are required for new well licence applications, certain amendment types, re-entry applications, and surface information submissions for OneStop issued licences.

Important:

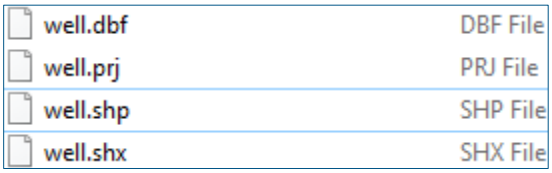
Depending on surface rights, one or two zip files will need to be submitted for a well licence application:

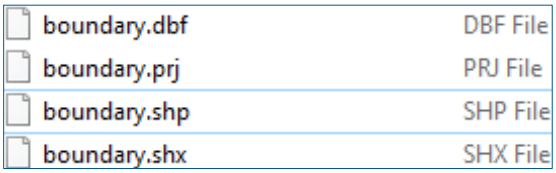
- Wells on public lands: Provide the surface hole (point) location in a **well.zip** file.
- Wells on Freehold lands: Provide the surface hole (point) location in a well.zip file and the lease boundary (polygon) in a **boundary.zip** file.

All shapefile templates are available for download within OneStop and on the OneStop Home page.

Digital Spatial Data

Digital spatial data is uploaded as a shapefile. This file contains spatial location data and consists of several files collectively uploaded as a zip file, as shown below. Shapefiles must be named correctly (shown below) for the system to accept them. The name of the zip file containing the shapefiles may contain discretionary details up to a maximum of 40 characters.

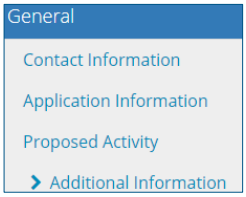




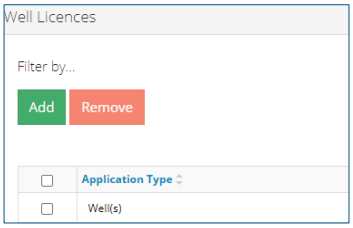
Start a New Well Licence Application

1. Log in to OneStop.
2. Click **Initiate** in the top navigation bar. Select **New Application**.

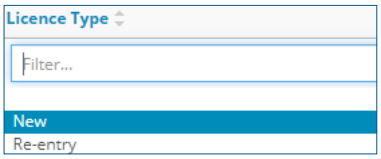
3. Complete the following general screens: **Contact Information, Application Information, Proposed Activity,** and **Additional Information**.



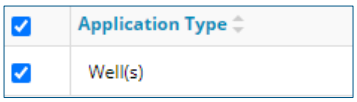
4. Click **Add** in the Well Licences pane, General – Activity Details screen.



5. Select **New** from the Licence Type drop-down menu.



6. Check the box beside the application type you wish to add.



Important:

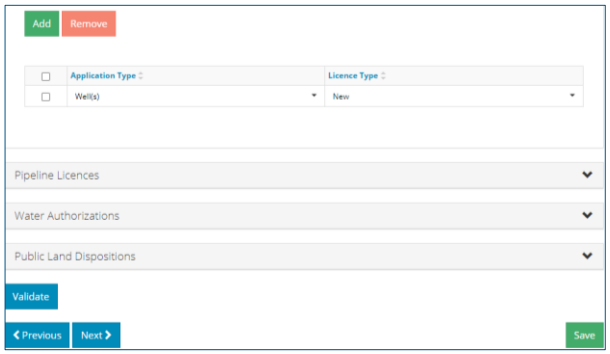
- **New Well Licence Applications:** Multiple wells, up to a maximum of 20, may be applied for with one shapefile in one application. These wells can either be on the same well pad or part of an oil sands exploration (OSE) program.

  The surface hole location is used to generate an activity ID for each well. Each surface hole location represented in the shapefile will generate a well licence.

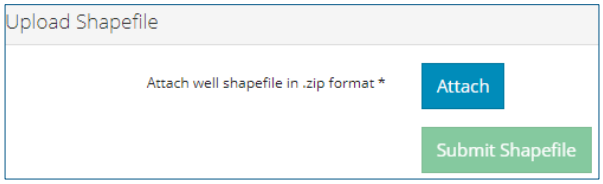
- **Amendment and Re-Entry Applications:** Where a shapefile is required, include only one well point in the shapefile.

- **Information Submissions (post-rig release):** Where a shapefile is required, include only one well point in the shapefile.

7. Click **Next** at the bottom left of the screen. Next ❯



8. The Wells Overview screen opens. Click **Attach** in the Upload Shapefile pane.



   a) For a domestic water well, click **Domestic Well**, and continue with the application.

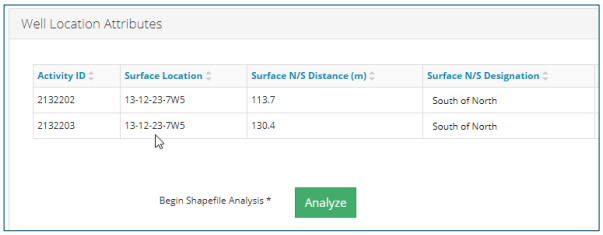
   Domestic Well

9. Navigate to the stored location of the required file. Double-click to select and upload the file.

10. Click **Submit Shapefile**. Submit Shapefile

    OneStop processes the file. This takes up to 30 seconds, depending on file size.

11. The well location attributes populate the table that appears on the screen.



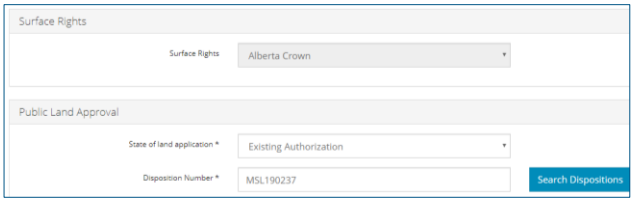
12. Click **Analyze.** Analysis may take up to 30 seconds to run.

    Analyze

    A message appears once analysis is complete.

    As part of the analysis, OneStop determines the surface rights, Crown, or Freehold, and populates the screen.

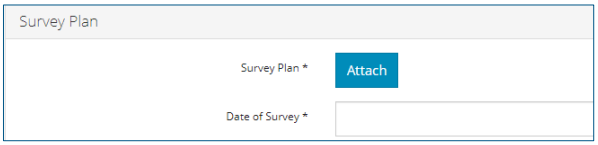
    For wells on Crown land, the related public land authorization or application number will populate in the Public Land Approval pane.



    For Freehold lands, see **Upload Lease Boundary Shapefile – Freehold Lands** in this QRG.

13. Click **Next** to continue with the application. Next ❯

    a) Attach the survey plan if it was not uploaded during shapefile analysis.

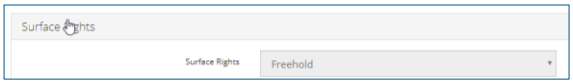


Upload Lease Boundary Shapefile – Freehold Lands

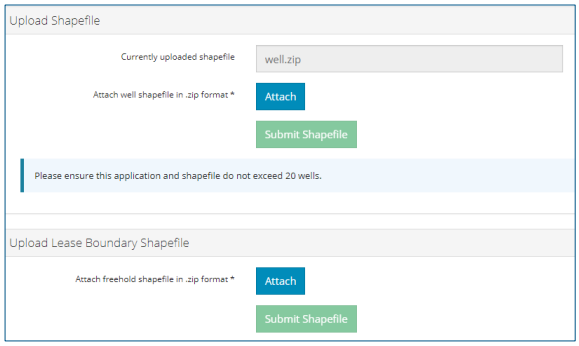
For well licence applications on Freehold land, a lease boundary (polygon) shapefile must be submitted in addition to the surface location (point) shapefile.

1. Repeat **steps 1** to **13** above.

   When the analysis of the well point shapefile is complete, OneStop will recognize that the well location is on Freehold land and the Surface Rights pane will be populated.

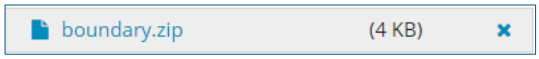


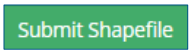
The Upload Lease Boundary Shapefile pane appears below the Upload Shapefile pane.



2. Click **Attach**. 

3. Navigate to the stored location of the required file. Double-click to select and upload the file.



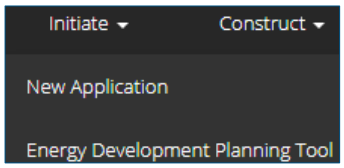
4. Click **Submit Shapefile**. 

OneStop will analyze the shapefile. Once the analysis is complete, continue with the application.

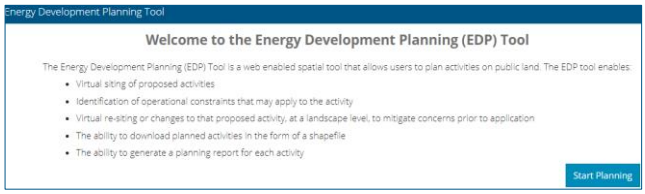
Use the EDP Tool Split Multiwell (Point) Shapefiles

Use the Energy Development Planning (EDP) Tool to separate (split) a shapefile, containing multiple wells (no maximum limit), into new point shapefiles for use in a new well licence applications for either Crown and Freehold lands.

1. Log in to OneStop.
2. Click **Initiate** in the top navigation bar. Select **Energy Development Planning Tool**.



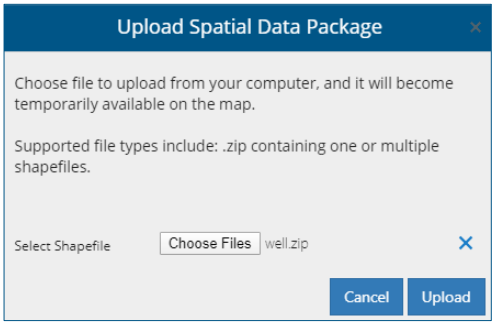
3. Click **Start Planning** in the Energy Development Planning Tool pane.



4. The tool opens. Click **Directive 56 Wells**. 

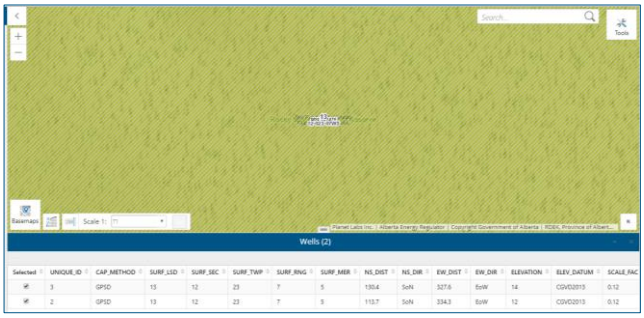
5. Click **Upload Wells Spatial Data Package**.

6. Click **Choose Files**.

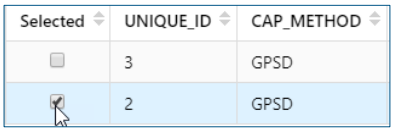


7. Select a multiwell shapefile (.zip) to split. Click **Upload**. The original shapefile will not be altered in any way.

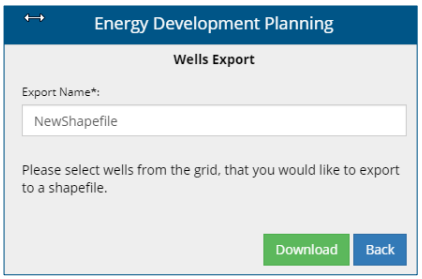
   All well points in the uploaded shapefile will populate a table.



8. Check the box(es) beside the well(s) you want included in the shapefile.

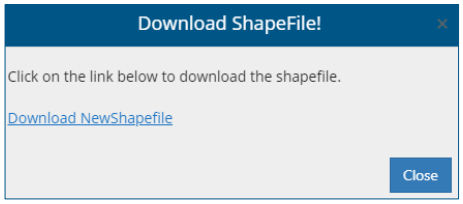


9. Enter a name for the new shapefile.



10. Click **Download**.
11. Click **Download NewShapfile** to save the new shapefile to your computer, or upload it into OneStop.

    Complete this step or to avoid losing your file when you exit OneStop.



12. Click **Close** to create more shapefiles, or create a new application by repeating **steps 2** to **13** in **Start a New Application** above.

OneStop Automated Shapefile Validations

OneStop automatically checks shapefiles containing the surface hole locations to confirm that the following items are correct and provides an error message when they are not:

- the shapefile features fall within the geographic extents of the Province of Alberta;
- all attributes described in this QRG, including the order of the attribute fields, are included in the shapefile submission;
- all mandatory fields**,** as described in this QRG, are included in the shapefile submission and contains the correct data type; and
- the shapefile coordinate system has the same parameters as described later in this QRG.

OneStop Spatial Data

The AER requires that all spatial data submissions be submitted in compliance with the ESRI shapefile standards. The Government of Alberta's *Digital Plan Submission Standards and Procedures* also applies to the creation of shapefiles for dispositions. All spatial data submissions need to be referenced to the NAD83 datum and projected to the following:

NAD 1983 10TM AEP Forest	**NAD 1983 CSRS 10TM AEP Forest**
NAD_1983_10TM_AEP_Forest	NAD_1983_CSRS_10TM_AEP_Forest
WKID: 3400 Authority: EPSG	WKID: 3402 Authority: EPSG
Projection: Transverse Mercator	Projection: Transverse Mercator
False Easting: 500000.0	False Easting: 500000.0
False Northing: 0.0	False Northing: 0.0
Central Meridian: −115.0	Central Meridian: −115.0
Scale Factor: 0.9992	Scale Factor: 0.9992
Latitude of Origin: 0.0	Latitude of Origin: 0.0
Linear Unit: Meter (1.0)	Linear Unit: Meter (1.0)
Geographic Coordinate System: GCS_North_American_1983	Geographic Coordinate System: GCS_North_American_1983_CSRS
Angular Unit: Degree (0.0174532925199433)	Angular Unit: Degree (0.0174532925199433)
Prime Meridian: Greenwich (0.0)	Prime Meridian: Greenwich (0.0)
Datum: D_North_American_1983	Datum: D_North_American_1983_CSRS
Spheroid: GRS_1980	Spheroid: GRS_1980
Semi-major Axis: 6378137.0	Semi-major Axis: 6378137.0
Semi-minor Axis: 6356752.314140356	Semi-minor Axis: 6356752.314140356
Inverse Flattening: 298.257222101	Inverse Flattening: 298.257222101

Surface Location Attributes for Wells

Feature name: Well (surface hole)

Description: The surface location of the well. If measured using GNSS, then the GNSS-derived location would be represented in the geometry.

Geometry: Point

Well (surface hole) attributes

Field name	Type	Allowable values	Definition
Unique_ID	Numeric	Positive numeric values that are greater than 1.	Unique identifier
Surf_TWP	Numeric	DLS location must exist.	Surface location – Township
Surf_SEC	Numeric	DLS location must exist.	Surface location – Section
Surf_RNG	Numeric	DLS location must exist.	Surface location – Range
Surf_MER	Numeric	DLS location must exist.	Surface location – Meridian
Surf_LSD	Numeric	DLS location must exist.	Surface location – Legal Subdivision
Scale_Fac	Numeric	Numeric value to 6 decimal places.	Scale factor
NS_Dist	Numeric	Positive number	Surface location – NS distance
NS_Dir		NoS, SoN, SoS	Surface location – NS direction code NoS (North of South) SoN (South of North) SoS (South of South)
EW_Dist	Numeric	Positive number	Surface location – EW distance
EW_Dir		EoW, WoE, WoW	Surface location – EW direction code EoW (East of West) WoE (West of East) WoW (West of West)
Elevation	Numeric		Ground elevation
Elev_Datum		CGVD28, CGVD2013	Ground elevation datum
Cap_Method	Text	CGWC, GNSS, GNSSD, ORTHO, SNK, NAD83 GNSS, NAD83 CSRS GNSS, ASCM NAD83, ASCM NAD83 CSRS,V4_1 ATS 2005 file	Data capture method CGWC (coordinate geometry with control) GNSS (GNSS non-differential) GNSSD (GNSS differential) ORTHO (orthophoto) SNK (source not known) NAD83 (original) using GNSS NAD83 (CSRS) using GNSS ASCM based on NAD83 (original) ASCM based on NAD83 (CSRS) V4.1 March 2005, ATS coordinate file

Lease Boundary Attributes for Wells

Feature name: Well boundary

Description: The boundary of the well lease. If measured using GNSS, then the GNSS-derived location would be represented in the geometry.

Geometry: Polygon

Well boundary attributes

Field name	Type	Allowable values	Definition
Unique_ID	Numeric	Values greater than 1.	Unique identifier
Scale_Fac	Numeric	Numeric value to 6 decimal places.	Scale factor
Cap_Method	Text	CGWC, GNSS, GNSSD, ORTHO, SNK, NAD83 GNSS, NAD83 CSRS GNSS, ASCM NAD83, ASCM NAD83 CSRS, V4_1 ATS 2005 file	Data capture method CGWC (coordinate geometry with control) GNSS (GNSS non-differential) GNSSD (GNSS differential) ORTHO (orthophoto) SNK (source not known) NAD83 (original) using GNSS NAD83 (CSRS) using GNSS ASCM based on NAD83 (original) ASCM based on NAD83 (CSRS) V4.1 March 2005, ATS coordinate file
Bound_Type	Text	Lease Access Road	Boundary type