

GWELLS DATA ENTRY GUIDELINES

January 2021



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Purpose of Guidelines

This document is meant as a reference guide for registered drillers, pump installers, and professionals with a competency in hydrogeology who are entering well records into the Ministry of Environment and Climate Change Strategy's (Ministry) online well record data entry application Groundwater Wells and Aquifers (GWELLS).

The objective of the GWELLS Data Entry Guidelines is to ensure data quality and integrity in the application by providing standards for well record entry. The guidelines will be regularly updated as changes arise in data collection and reporting requirements.

The GWELLS Data Entry Guidelines provide information on how to enter water well information from current Ministry well record forms.

GWELLS Access

GWELLS access can be obtained by:

- Visiting the GWELLS [BCeID registration page](#) to obtain either a Basic BCeID account or Business BCeID account. (Note, if you already have a Basic or Business BCeID account, you do not need to create a new one to access GWELLS)
- After obtaining your BCeID, open [GWELLS](#) and select the login button (top right of the application screen).
- Once you have logged in, email gwells@gov.bc.ca to request access for your BCeID user account.

Once access has been granted, you will be able to enter and submit groundwater well reports through GWELLS.

With these permission levels GWELLS users will see "Submit Report" on the GWELLS home screen once they have logged in. Users do not have the ability to edit submitted reports in GWELLS, for well report corrections and edits please contact groundwater@gov.bc.ca and/or the groundwater data specialist.

General Guidelines

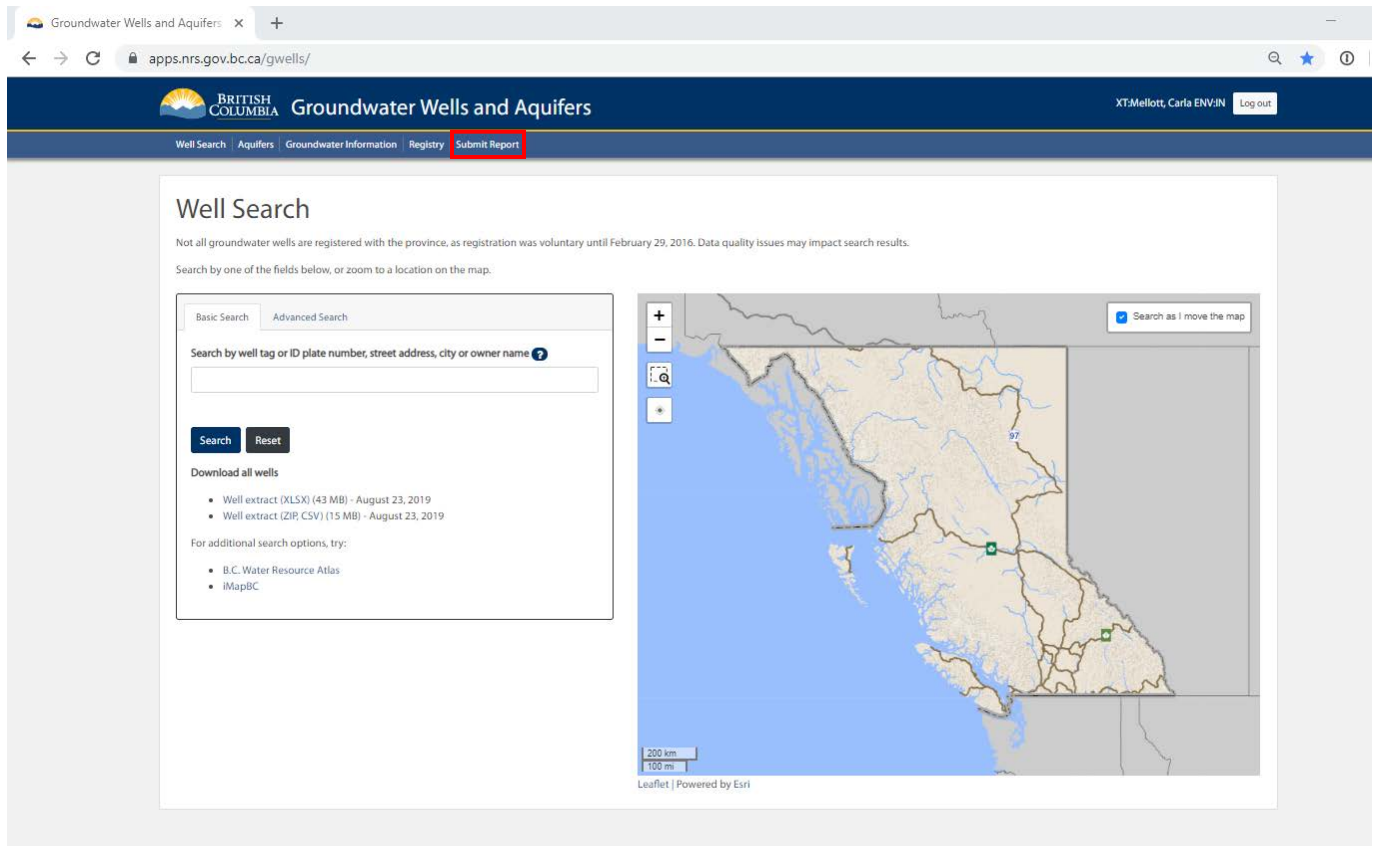
- GWELLS can be accessed at: <https://apps.nrs.gov.bc.ca/gwells/>
- Asterisk (*) fields are mandatory and need to be completed, if they are not included an error message will appear when trying to submit. Mandatory fields are:
 - Type of Work (page 1),
 - Start Date of Work & End Date of Work (page 2),
 - Well Owner City (page 3), and
 - Well Location (page 15).
- Do not abbreviate any words or use shorthand in fields (e.g. type ROAD not RD), except when space is limited to fit all information
- Do not add symbology (e.g. FEET (')), INCHES (")) – except in the "Comments" field.

- Do not use punctuation such as commas or periods, unless used as a decimal point or in the “Comments” field.
- Correct obvious spelling errors.
- If the data does not correspond with one of the options in a drop-down menu, select ‘Other’ and add the full data for that field in the comments field.

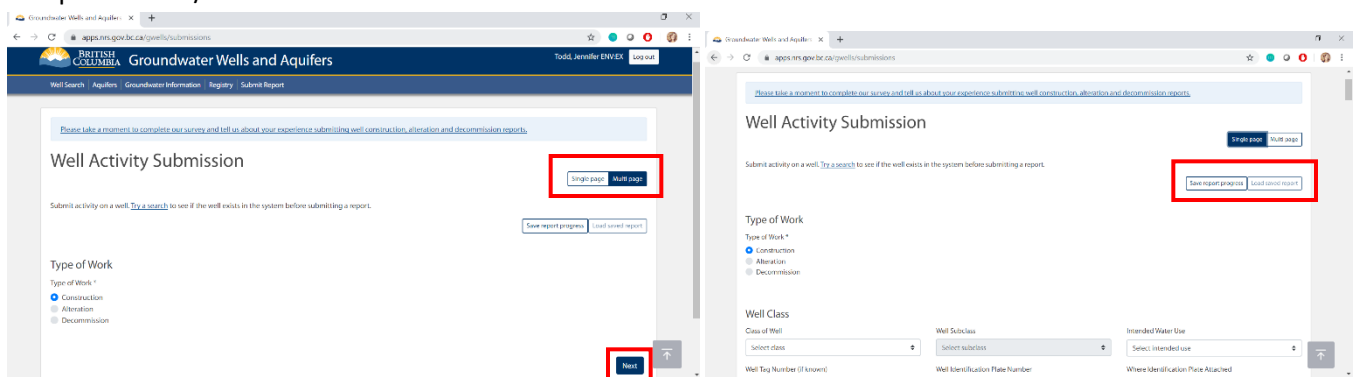
Measurement (ft and inches)

Application does not accept metres or centimetres. Feet and inches are used for depths, thickness, diameter and lengths. If measurements provided are less than 1, add a leading ‘0’ before the decimal (i.e. 0.25, 0.5).

Submit Report



Once in “Submit Report” data can be entered on a single page or multi page (default). For single page entries, navigate through data entry by using the next button. Data entry can be saved and loaded at a later date for completion and/or submission.



Type of Work

Please take a moment to complete our survey and tell us about your experience submitting well construction, alteration and decommission reports.

Well Activity Submission

Submit activity on a well. [Try a search](#) to see if the well exists in the system before submitting a report.

Type of Work

Type of Work *

- ☒ Construction
- ☐ Alteration
- ☐ Decommission

[Single page](#) [Multi page](#)

[Save report progress](#) [Load saved report](#)

[Next](#)

Field Name in GWELLS	Drillers Well Record	Instructions/Measurement Units/Examples
Type of Work*	Check boxes, top of form	<p>Radio button choices are: <i>Construction, Alteration, Decommission</i>.</p> <ul style="list-style-type: none"> Select <i>Alteration</i> if <i>Deepened</i> or <i>Reconditioned</i> wells are indicated on the record. Select <i>Construction</i> if <i>Well Construction Report</i> checked on the form, or if nothing is indicated.

Well Class

The screenshot shows the 'Well Activity Submission' form on the British Columbia Groundwater Wells and Aquifers portal. The form is titled 'Well Activity Submission' and includes a 'Single page' button. Below the title, there is a link to 'Try a search' and buttons for 'Save report progress' and 'Load saved report'. The form fields are organized into three columns:

- Well Class:** Includes a 'Class of Well' dropdown menu (with a 'Select class' placeholder), a 'Well Subclass' dropdown menu (with a 'Select subclass' placeholder), and an 'Intended Water Use' dropdown menu (with a 'Select intended use' placeholder).
- Well Tag Number (if known):** A text input field with a dropdown arrow.
- Well Identification Plate Number:** A text input field.
- Where Identification Plate Attached:** A text input field.
- Start Date of Work *:** A date input field with a placeholder 'yyyy-mm-dd'.
- End Date of Work *:** A date input field with a placeholder 'yyyy-mm-dd'.

At the bottom of the form, there are 'Back' and 'Next' buttons. A note at the bottom left states: '*displays a maximum of 50 results'.

Field Name in GWELLS	GWPR Records	Instructions/Measurement Units/Examples
Class of Well	Class of Well Choices on form: <i>Water Supply, Monitoring, Recharge, Injection, Dewatering, Drainage, Remediation, Geotechnical, Closed Loop Geo</i>	Drop down menu choices: <i>Water Supply, Monitoring, Injection, Geotechnical, Dewatering, Recharge, Remediation, Closed Loop Geo, Drainage, Unknown</i> . If not provided, select <i>Unknown</i> .
Well Subclass	Sub-class of well	Drop down menu choices: <i>Temporary, Permanent (Monitoring, Injection, Dewatering, Remediation, Drainage), Borehole, or Test pit</i> .

Field Name in GWELLS	GWPR Records	Instructions/Measurement Units/Examples
Intended Water Use	Water supply wells: indicate intended water use	<p>Select from drop down menu: <i>Commercial and industrial, irrigation, observation well, Open LP Geoexchange, other, private domestic, test, unknown water use, water supply system</i>.</p> <p>Only if the well is for a <u>water utility</u>, is <i>water supply system</i> selected.</p> <p>If unsure select “other” and specify in the comment section what the intended well use is.</p> <p>If not provided, select “unknown”.</p> <p>If more than one water use provided, choose the main water use and add the remaining uses to the “comments” field (e.g. if the well is used for irrigation and commercial, select <i>commercial and industrial</i> from the drop down menu and add the following wording to the comments field “other waster use = irrigation”)</p>
Well Tag Number (if known)	None	<p>The well tag number (WTN) cannot be entered in this field unless <i>Alteration</i> or <i>Decommissioned</i> is selected. Please verify the WTN and Well ID Plate Number (if available) prior to entering the WTN to ensure the correct wells are associated in GWELLS.</p> <p>If a WTN is provided for a record where the Status of Work is <i>New</i>, this is an error. A WTN would only be provided if the well record was already entered into the system. The number provided on the record is likely the Well ID Plate Number. Enter the number in the Well ID Plate Number field. Contact the Groundwater Data Specialist with the discrepancy so they can investigate record.</p>
Well Identification Plate Number	Ministry Well ID Plate Number	<p>Enter number if provided (e.g. 10111, 5-digit number).</p> <p>A Well ID Plate Number is a unique number. If the Well ID Plate Number is already in use, an error message: “Value must be a unique number” will be displayed. If this occurs, please contact the Groundwater Data Specialist with the discrepancy so they can investigate.</p> <p>Note: <i>The Well ID Plate Number is often confused with the WTN. Well ID Plate Numbers (GWPR issued plates) range from 10000+, whereas WTNs range from 0 to 108000+. A new record for a well not previously in the database should not already have a WTN. This number will be generated after the record is submitted to the system</i></p>
Where Identification Plate is Attached	Where ID Plate is Attached	<p>Enter where ID plate is attached to the well, (e.g. top of casing, casing, pump house door).</p> <p>If nothing provided, leave blank.</p>

Field Name in GWELLS	GWPR Records	Instructions/Measurement Units/Examples
Start Date of Work*	Date of work, Started (bottom right)	Enter the start date of construction/drilling. Format YYYY/MM/DD. If only one date is provided on the well record enter in both the Start Date of Work and End Date of Work. If only the year of construction is provided, enter the year followed by 01/01 for the month and day, e.g. 2004/01/01.
End Date of Work*	Date of work, Completed (bottom right)	Enter the end date of construction/drilling, if provided. Format YYYY/MM/DD. If only one date is provided on the well record enter in Date Started and Date Completed fields. If only the year of construction is provided, enter the year followed by 01/01 for the month and day, e.g. 2004/01/01.

Well Owner

Groundwater Wells and Aquifers x +

apps.nrs.gov.bc.ca/gwells/submissions

BRITISH COLUMBIA Groundwater Wells and Aquifers

XT:Mellott, Carla ENV&N Log out

Well Search | Aquifers | Groundwater Information | Registry | Submit Report

Please take a moment to complete our survey and tell us about your experience submitting well construction, alteration and decommission reports.

Well Activity Submission

Submit activity on a well. [Try a search](#) to see if the well exists in the system before submitting a report.

Single page Multi page

Save report progress Load saved report

Well Owner

Well Owner Name

Owner Mailing Address

City*

Province

Postal Code

Back Next

Field Name in GWELLS	GWPR Records	Instructions/Masurement Units/Examples
Well Owner Name	Owner name	Enter the owner's first and last name (e.g. Tanya Singh); OR If well is owned by a company or business, enter company/business name in full (e.g. Barney's Egg Farm) If the owner is a business, enter the name of the contact person (e.g. Contact: Kwadwo Kyeremanteng) If there are 2 or more owners with different last names use an '&' between the names (e.g. Tanya Singh and John Fraietta).
Owner Mailing Address	Mailing Address	Enter mailing address for OWNER if provided. Enter the full name of the type of road, no abbreviations (e.g. 18 Saint Charles Way); st = street, rd = road, and ave = avenue.
City*	Town	Enter city/town name or general area (e.g. Oliver, or South end of Green Lake or Gabriola Island).
Province/State	Prov.	Enter if provided. Drop down menu choices: <i>All Canadian Provinces and Territories, Washington State, Other</i>
Postal Code	Postal Code	Enter if provided. Postal code format: V9K 2L9. Zip code format: 98660.

Person Responsible for the Work

Groundwater Wells and Aquifers x +

apps.nrs.gov.bc.ca/gwells/submissions

BRITISH COLUMBIA Groundwater Wells and Aquifers XT-Mellott, Carla ENV-IN Log out

Well Search | Aquifers | Groundwater Information | Registry | Submit Report

Please take a moment to complete our survey and tell us about your experience submitting well construction, alteration and decommission reports.

Well Activity Submission

Submit activity on a well. [Try a search](#) to see if the well exists in the system before submitting a report.

Single page Multi page

Save report progress Load saved report

Person Responsible for Work

☐ Person Responsible is the same as the Person Who Completed the Work

Person Responsible for Work

*displays a maximum of 50 results

Person Who Completed the Work

Company of person Responsible for Drilling

*displays a maximum of 50 results

Consultant Name

Consultant Company

Back Next

Field Name in GWELLS	GWPR Records	Instructions/Measurement Units/Examples
Person Responsible for Work	Well Driller, First and Last Name	Choose a name and registration from the drop down menu. If unknown use the drillers name provided. If the same as the driller, there is a check box that can indicate that.
Person Who Completed the Work	Well Driller, First and Last Name	Choose a name and registration from the drop down menu. If unknown use the driller's name provided. Enter name of well driller (First Last).
Company of person Responsible for Drilling	Top of form	Select from drop down menu.
Consultant Name	Consultant	Enter name of consultant (First Last) if provided.
Consultant Company	Consultant	Enter name of company, if provided (e.g. Engineering Limited).

Well Location

Groundwater Wells and Aquifers x +

apps.nrs.gov.bc.ca/gwells/submissions

Submit activity on a well. [Try a search](#) to see if the well exists in the system before submitting a report.

Save report progress Load saved report

Well Location

Please provide as much information as possible. A minimum of one type of well location information is required below:

1) Well location address

☐ Same as owner address

Street address

City

OR

2) Legal description

Lot Plan District Lot Block

Section Township Range Land District

Select district

OR

3) Parcel Identifier

*Input a 9 digit number (including leading zeroes, if necessary)

Description of Well Location

Back Next

For “Well Location” a minimum of one type of well location information is required; well location address, legal description, or parcel identifier.

Field Name in GWELLS	GWPR Records	Instructions/Measurement Units/Examples
Address for Well Location*		
Street Address	Street no./ Street name	Enter Street Number and Street Name if provided (e.g. 2437 Barry Road).
City	Town	Enter city/town name or general area (e.g. Oliver).
Legal Description*		
Lot	Legal Description, Lot	Enter, if provided (e.g. 5 or A) Do not include the abbreviation (e.g. L) for Lot. Additional legal description information that does not fit in these fields should go in the “comments” section.

Field Name in GWELLS	GWPR Records	Instructions/Measurement Units/Examples
Plan	Legal Description, Plan	Enter as provided (e.g. KAP 6643, 19487, VIS 91279). Spaces permitted. Enter with Land District prefix if known (e.g. VIP 8657).
District Lot	Legal Description, D.L.	Enter, if known (e.g. 5). Do not include the abbreviation (e.g. DL) for District Lot.
Block	Legal Description, Block	Enter, if known (e.g. 11). Do not include the abbreviation (e.g. BL or BK) for Block.
Section	Legal Description, Sec.	Enter, if known (e.g. 21). Do not include the abbreviation (e.g. Sec or S) for Section.
Township	Legal Description, Twp.	Enter, if known (e.g. 17). Do not include the abbreviation (e.g. Twp, TP) for Township.
Range	Legal Description: Rg.	Enter, if known (e.g. 3). Do not include the abbreviation (e.g. Rg or R) for Range.
Land District	Legal Description: Land District	Select from drop down menu (e.g. Oyster).
Parcel Identifier*		
PID	PID	Enter, if known (e.g. 000979091). Do not add dashes (-) or spaces. This is a unique 9 digit number assigned to each lot.
Description of Well Location		
Description of Well Location	Descriptive Location	Informal description of well location (e.g. Behind the shed, 50 m to right of house) If sketch is provided, describe the details in the sketch. Enter any other legal information that does not fit into the above legal description section, (e.g. when three portions of a plan are provided, part of KAP12211 and KAP12322). If no information provided, then leave this space blank. Abbreviations and shorthand can be used if space does not permit the full description.

Geographic Coordinates*

Groundwater Wells and Aquifers x +

apps.nrs.gov.bc.ca/gwells/submissions

Submit activity on a well. [Try a search](#) to see if the well exists in the system before submitting a report.

Save report progress Load saved report

Geographic Coordinates

To determine coordinates using a Global Positioning System (GPS), set the datum to North America Datum of 1983 (NAD 83), the current ministry standard for mapping.

After the GPS coordinates are entered, the map pin can be moved by clicking and dragging it on the map. The GPS coordinates will be updated automatically.

Latitude

Decimal degrees

Longitude

Decimal degrees

OR

Latitude

Degrees Minutes Seconds

Longitude


Degrees Minutes Seconds

OR

Zone
Select zone

UTM Easting

UTM Northing



Back Next

“Geographic Coordinates” can be entered as either Latitude and Longitude (decimal degrees or degree, minute, seconds) or UTM. After coordinates are entered, a map pin should appear and can be moved by clicking and dragging it on the map. The GPS coordinates will be updated automatically.

Latitude and Longitude: Decimal Degrees		
Field Name in GWELLS	GWPR Records	Instructions/Masurement Units/Examples
Latitude – Decimal Degrees	Latitude	Accepts up to 4 decimal places (e.g. 49.2415).
Longitude – Decimal Degrees	Longitude	Accepts up to 4 decimal places (e.g. 119.2415).

Latitude and Longitude: Degrees, Minutes, Seconds		
Degrees	Latitude / Longitude	Format: 2 digits (e.g. 49). Longitude: do not enter a negative sign (-) if provided (e.g. -130, enter 130).
Minutes	Latitude / Longitude	Number is greater or equal to 0 and less than 60 (e.g. 2, 28).
Seconds	Latitude / Longitude	Number is greater or equal to 0 and less than 60. Format: 2 digits with up to 4 decimal places (e.g. 15.1140).
UTM		
UTM Zone	UTM Zone	Drop down menu choices: 8, 9, 10, 11.
UTM Northing	UTM Northing	UTM Northing is 7 digits (e.g. 5977385).
UTM Easting	UTM Easting	UTM Easting is 6 digits (e.g. 434935). Often Easting coordinates are written with a preceding zero (e.g. 0434935) – do not include the zero.

Method of Drilling

The screenshot shows a web browser window with the URL `apps.nrs.gov.bc.ca/gwells/submissions`. The page title is "Groundwater Wells and Aquifers" and it includes a user profile for "XT:Mellott, Carla ENVJIN" with a "Log out" button. The main navigation bar contains links for "Well Search", "Aquifers", "Groundwater Information", "Registry", and "Submit Report".

The "Well Activity Submission" form is displayed. It includes a header with a link to a survey and a "Multi page" button. Below the header, there is a note about submitting activity and a "Save report progress" button. The form is divided into several sections:

- Ground Elevation:** A text input field labeled "ft (asl)".
- Method for Determining Ground Elevation:** A dropdown menu with the option "Select Method".
- Drilling Method(s):** A multi-select dropdown menu with options: "Air Rotary", "Auger", "Cable Tool", and "Driving". A note below states: "Select one or more drilling methods. Hold the Ctrl (PC) or Command (Mac) key to select more than one option."
- Orientation of Well:** A dropdown menu with the option "Select Orientation".

At the bottom of the form, there are "Back" and "Next" buttons.

Field Name in GWELLS	GWPR Records	Instructions/Measurement Units/Examples
Ground Elevation (ft (asl))	Ground Elevation	Enter if provided (e.g. 1250). Number must be in Feet; do not enter units.
Method for Determining Ground Elevation	Method	Drop down menu choices: <i>1:5,000, 1:10,000, 1:20,000, 1:50,000, Altimeter, Differential GPS, GPS, Level.</i> Currently GWELLS requires a method for determining ground elevation must be chosen, if unknown choose GPS and make a note in the "internal comments" section.
Drilling Method(s)	Method of Drilling	Drop down menu choices: <i>Air Rotary, Dual Rotary, Mud Rotary, Cable Tool, Auger, Driving, Jetting, Excavating, Other.</i> If method used is not in drop down menu, select <i>Other</i> and add to comments field. Select one or more drilling methods. Hold the Ctrl (PC) or Command (Mac) key to select more than one option.
Orientation of well	Orientation of well	Drop down menu choices: <i>Vertical, Horizontal.</i> Assume vertical unless specified that the well is horizontal.

Casing Details

Please take a moment to complete our survey and tell us about your experience submitting well construction, alteration and decommission reports.

Well Activity Submission

Submit activity on a well. [Try a search](#) to see if the well exists in the system before submitting a report.

[Save report progress](#) [Load saved report](#)

Casing Details

From ft (bgl)	To ft (bgl)	Casing Type	Casing Material	Diameter (in)	Wall Thickness (in)	Drive Shoe	
<input type="text"/>	<input type="text"/>	Select a type	Select a material	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Remove"/>
<input type="text"/>	<input type="text"/>	Select a type	Select a material	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Remove"/>
<input type="text"/>	<input type="text"/>	Select a type	Select a material	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Remove"/>

Field Name in GWELLS	GWPR Records	Instructions/Masurement Units/Examples
From (ft bgl)	Casing Details, From ft (bgl)	Number must be greater than or equal to 0. If value indicated includes the stick up (e.g. +2) enter as inches in the Final Stick Up field and subtract the stick-up from the casing bgl depth.
To (ft bgl)	Casing Details, To ft (bgl)	'To' has to be greater than 'From'. Open hole 'To' to be included in casing details.
Casing Type	Not on the form. Entered based on the casing material	Drop down menu choices: <i>Surface Casing, Production Casing, Open Hole, Screen Removal</i> . Enter if provided or known.
Casing Material	Casing Detail, Casing Material /Open Hole	Drop down menu choices: <i>Cement, Open Hole, Other, Plastic, Steel, Steel Pulled Out</i> . Select <i>Other</i> if description is not listed or an exact match – enter material used in comment section. <i>Open hole</i> is used if the well is drilled into bedrock and no casing is used.
Diameter (in)	Casing Details, Dia in	Enter if provided. Open hole information to be included in casing details.

Field Name in GWELLS	GWPR Records	Instructions/Measurement Units/Examples
Wall Thickness (in)	Wall Thickness in	Thickness of casing wall (e.g. 0.219 or 0.188). If 219 is written on well construction report, enter as 0.219. Precede decimal with a 0.
Drive Shoe	Drive Shoe	Select <i>Installed</i> from drop down menu if indicated by a 'Yes', 'Y,' check mark, or 'Barber'. Barber is a type of drive shoe. Open Hole: select <i>Not Installed</i> for drive shoe, unless otherwise stated.

Surface Seal & Backfill Information

Groundwater Wells and Aquifers

apps.nrs.gov.bc.ca/gwells/submissions

XT:Mellott, Carla ENV\INLog out

[Well Search](#) | [Aquifers](#) | [Groundwater Information](#) | [Registry](#) | [Submit Report](#)

Please take a moment to complete our survey and tell us about your experience submitting well construction, alteration and decommission reports.

Well Activity Submission

Single pageMulti page

Submit activity on a well. [Try a search](#) to see if the well exists in the system before submitting a report.

Save report progressLoad saved report

Surface Seal and Backfill Information

Surface Seal Material

Select material

Surface Seal Depth (ft)

Surface Seal Thickness (in)

Surface Seal Method of Installation

Select method

Backfill Information

Backfill Material Above Surface Seal

Backfill Depth (ft)

Back

Next

Field Name in GWELLS	GWPR Records	Instructions/Measurement Units/Examples
Surface Seal Material	Surface Seal, Type	<p>Select from drop down menu.</p> <p>The following list provides answers for some surface seal descriptions. If one of the following bolded choices are provided, choose the corresponding drop-down menu choice.</p> <p>Chips–Grout = neat cement grout and bentonite mix</p> <p>Clay = bentonite clay</p> <p>Coated Pellets = bentonite clay</p> <p>Benseal = bentonite clay</p> <p>Bentonite = bentonite clay</p> <p>Bentonite Chips = bentonite clay</p> <p>Bent Chips = bentonite clay</p> <p>Bentonite & Benseal = bentonite clay</p> <p>Bentonite Grout = bentonite clay and cement mixture</p> <p>Fine bentonite = bentonite clay</p> <p>Granular Bentonite = bentonite clay</p> <p>Grout = concrete grout</p> <p>Select 'other if choice is not provided in the drop-down menu – enter answer into comments field.</p>
Surface Seal Depth (ft)	Surface Seal, Depth ft	<p>Enter depth of surface seal.</p> <p>If a range for the depth is provided (e.g. 0-15 ft), enter the deepest value (e.g. 15).</p>
Surface Seal Thickness (in)		Enter surface seal thickness enter in inches
Surface Seal Method of Installation		Drop down menu options include: <i>pumped, poured, other</i>
Backfill Type	Backfill, Type	Enter if known.
Backfill Depth (ft)	Backfill, Depth ft	Enter if known.

Lithology

Groundwater Wells and Aquifers x +

apps.nrs.gov.bc.ca/gwells/submissions

Single page Multi page

Submit activity on a well. [Try a search](#) to see if the well exists in the system before submitting a report.

Save report progress Load saved report

Lithology

From ft (bgl)	To ft (bgl)	Soil or Bedrock Description	Materials	Descriptor	Moisture	Colour	Hardness	Water Bearing Flow Estimate (USGPM)	Observations	
<input type="text"/>	<input type="text"/>	<input type="text"/>		Select descrip ▾	Select moist ▾	Select colour ▾	Select hardne ▾	<input type="text"/>	<input type="text"/>	<input type="button" value="Remove"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>		Select descrip ▾	Select moist ▾	Select colour ▾	Select hardne ▾	<input type="text"/>	<input type="text"/>	<input type="button" value="Remove"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>		Select descrip ▾	Select moist ▾	Select colour ▾	Select hardne ▾	<input type="text"/>	<input type="text"/>	<input type="button" value="Remove"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>		Select descrip ▾	Select moist ▾	Select colour ▾	Select hardne ▾	<input type="text"/>	<input type="text"/>	<input type="button" value="Remove"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>		Select descrip ▾	Select moist ▾	Select colour ▾	Select hardne ▾	<input type="text"/>	<input type="text"/>	<input type="button" value="Remove"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>		Select descrip ▾	Select moist ▾	Select colour ▾	Select hardne ▾	<input type="text"/>	<input type="text"/>	<input type="button" value="Remove"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>		Select descrip ▾	Select moist ▾	Select colour ▾	Select hardne ▾	<input type="text"/>	<input type="text"/>	<input type="button" value="Remove"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>		Select descrip ▾	Select moist ▾	Select colour ▾	Select hardne ▾	<input type="text"/>	<input type="text"/>	<input type="button" value="Remove"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>		Select descrip ▾	Select moist ▾	Select colour ▾	Select hardne ▾	<input type="text"/>	<input type="text"/>	<input type="button" value="Remove"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>		Select descrip ▾	Select moist ▾	Select colour ▾	Select hardne ▾	<input type="text"/>	<input type="text"/>	<input type="button" value="Remove"/>

Each line of lithology is entered individually.


Field Name in GWELLS	GWPR Records	Instructions/Masurement Units/Examples
From (ft bgl)	Lithologic Description, From ft (bgl)	Enter depth where lithology type starts. Data should start from 0.
To (ft bgl)	Lithologic Description To ft (bgl)	Enter depth where lithology type ends (furthest from ground level), (e.g. 100). Number must be greater than that entered in From.
Soil or Bedrock Description	Material Description	Enter description as provided (e.g. fill, sandy clay, rock, siltstone with shale layers) If flow measurement is available (e.g. 10 gpm) do not add to this field. Enter flow in Water Bearing Est. Flow (USgpm) field. This will autofill the adjacent column "materials".

Field Name in GWELLS	GWPR Records	Instructions/Measurement Units/Examples
Descriptor	Material Description	Drop down menu choices: <i>Cemented, Clean, Coarse grained, Crystalline, Dense, Dirty, Fine grained, Fossiliferous (shelly), Fractured, Hard, Layered (streaked), Light coloured, Loose, Medium grained, Packed, Porous, Sharp, Soft, Thick, thin, Water bearing, Weathered, tight</i> Select 'OTHER' if choice is not provided in the drop-down menu – enter other material description into comments field.
Moisture		Drop down menu choices: <i>Dry, Damp, Moist, Wet</i>
Colour	Colour	Drop down menu choices: <i>Black, Blue, Brown, Dark, Grey, Green, Light, Purple, Red, Rust-coloured, Salt & pepper, Speckled, Tan, Vari-colour, White, Yellow</i>
Hardness	Relative Hardness	Drop down menu choices: <i>Dense, Hard, Loose, Medium, Soft, Stiff, Very hard, Very soft</i> Tight = Hard
Water Bearing Estimate	Water-bearing Estimated Flow (USgpm)	Enter number, if provided (e.g. 15).
Observations	Observations	Any description that does not pertain to the lithology, is entered in this field (e.g. multiple fractures, w.b., water bearing, washed, damp). If water flow is given (e.g. 10 gpm) in the Observation field, put into Water Bearing Est. Flow, specify units.

Liner Information

Groundwater Wells and Aquifers

apps.nrs.gov.bc.ca/gwells/submissions

Groundwater Wells and Aquifers

XT-Mellott, Carla ENV-INLog out

Well SearchAquifersGroundwater InformationRegistrySubmit Report

Please take a moment to complete our survey and tell us about your experience submitting well construction, alteration and decommission reports.

Well Activity Submission

Single pageMulti page

Submit activity on a well. [Try a search](#) to see if the well exists in the system before submitting a report.

Save report progressLoad saved report

Liner Information

Liner Material

Liner Diameter

inches

Liner From

ft (bgl)

Liner Perforations

Perforated From ft (bgl)

Perforated To ft (bgl)

Add row

Liner Thickness

inches

Liner To

ft (bgl)

Back

Next

Field Name in GWELLS	GWPR Records	Instructions/Masurement Units/Examples
Liner Material	Liner	Drop down menu choices: <i>PVC, Other</i> .
Liner Diameter (in)	Liner Diameter in	Enter if known. Caution when entering Liner Thickness and Diameter. The order of these 2 fields is switched on the paper copy of old form.
Thickness (in)	Liner Thickness in	Enter if known. Caution when entering Liner Thickness and Diameter. The order of these 2 fields is switched on the paper copy of the GWPR form.
Liner From (ft bgl)	Liner From ft (bgl)	Enter depth where liner starts (closest to ground level).
Liner To (ft bgl)	Liner To ft (bgl)	Enter depth where liner terminates (furthest from ground level).

Field Name in GWELLS	GWPR Records	Instructions/Measurement Units/Examples
Liner Perforation From (ft bgl)	Perforated From ft (bgl)	Enter depth where perforation starts (closest to ground level).
Liner Perforation To (ft bgl)	Perforated To ft (bgl)	Enter depth where perforation ends (furthest from ground level).

Screen Information

Groundwater Wells and Aquifers x +

apps.nrs.gov.bc.ca/gwells/submissions

Please take a moment to complete our survey and tell us about your experience submitting well construction, alteration and decommission reports.

Well Activity Submission

Submit activity on a well. [Try a search](#) to see if the well exists in the system before submitting a report.

Single page Multi page

Save report progress Load saved report

Screen Information

Intake
Select intake

Screen Type
Select type

Screen Material
Select material

Specify Other Screen Material

Screen Opening
Select opening

Screen Bottom
Select bottom

Screen Information

Screen Details

From ft (bgl)	To ft (bgl)	Diameter (in)	Screen Assembly Type	Slot Size	
			Select type		Remove
			Select type		Remove
			Select type		Remove

Add row

Back Next

Field Name in GWELLS	GWPR Records	Instructions/Masurement Units/Examples
Intake	Screen Intake	Drop down menu choices: <i>Open Bottom, Screen, Uncased Hole</i> .
Screen Type	Screen Type	Drop down menu choices: <i>Telescope, Pipe Size</i> . Nominal screen = Telescope. Louvre screen = leave blank and write in comments field.
Screen Material	Screen Material	Drop down menu choices: <i>Other, Plastic, Stainless Steel</i> .
Specify Other Screen Material	Screen Material	If option is not available select <i>Other</i> from dropdown and specify material here.
Screen Opening	Screen Opening	Drop down menu choices: <i>Continuous Slot, Slotted, Perforated Pipe</i> .

Field Name in GWELLS	GWPR Records	Instructions/Measurement Units/Examples
Screen Bottom	Screen Bottom	Drop down menu choices: <i>Bail, Other, Plate, Plug</i> . If option is not available select <i>Other</i> (and write in comments).
Screen Information		
Screen From (ft bgl)	Screen Details, From ft (bgl)	Enter the depth below ground level where the screen begins (closest to ground level). Convert inches to feet (e.g. 68' 2" = 68.16')
Screen To (ft bgl)	Screen Details, To ft (bgl)	Enter the depth below ground level where the screen ends (furthest from ground level). Convert inches to feet.
Diameter (in)	Diameter (inches)	Enter if known.
Screen Assembly Type	Screen Details, Type	Drop down menu choices: <i>K-Packer, Riser Pipe, Screen, Screen Blank, Tail Pipe</i> . If no match in drop down menu, select 'screen': random saw slots = <i>screen</i> stainless steel or ss = <i>screen</i> Johnson = <i>screen</i> Slotted PVC = <i>screen</i>
Slot Size (10, 20, 40, 80)	Screen Details, Slot Size	Enter slot size as a whole number. Common whole numbers you will see include 15, 30, 40, and 50. Risers and blanks do not have slot size details. If it is written as a decimal (i.e. 0.015) multiply by 1000. For example, 0.030, multiply number by 1000, and enter 30 in slot screen size.

Filter Pack

Groundwater Wells and Aquifers

apps.nrs.gov.bc.ca/gwells/submissions

BRITISH COLUMBIA Groundwater Wells and Aquifers

XT:Mellott, Carla ENVJN Log out

Well Search | Aquifers | Groundwater Information | Registry | Submit Report

Please take a moment to complete our survey and tell us about your experience submitting well construction, alteration and decommission reports.

Well Activity Submission

Submit activity on a well. [Try a search](#) to see if the well exists in the system before submitting a report.

Single page Multi page

Save report progress Load saved report

Filter Pack

Filter Pack From ft

Filter Pack To ft

Filter Pack Thickness inches

Filter Pack Material

Filter Pack Material Size

Back Next

Field Name in GWELLS	GWPR Records	Instructions/Masurement Units/Examples
Filter Pack: From (ft)	Filter Pack: From	Enter depth where gravel/filter pack starts (close to or at ground level).
Filter Pack: To (ft)	Filter Pack: To	Enter depth where gravel/filter pack ends (furthest from ground level).
Filter Pack: Thickness (in)	Filter Pack: Thickness	Enter number, if known.
Filter Pack: Type of Material	Type and Size of Material	Drop down menu choices: <i>Fine gravel</i> , <i>Very coarse sand</i> , <i>Very fine gravel</i> . If no match to drop down, leave blank and write in Comments field.
Filter Pack: Size of Material	Type and Size of Material	Drop down menu choices: <i>1020 sand</i> , <i>2040 sand</i> , <i>1.0–2.0 mm</i> , <i>2.0–4.0 mm</i> , <i>4.0–8.0 mm</i> , <i>Other</i> , <i>Pea Gravel</i> . If option is not available select <i>Other</i> . Cobbles, boulders = blank Gravel, sand = other Natural = blank

Well Development

Groundwater Wells and Aquifers x +

apps.nrs.gov.bc.ca/gwells/submissions

Well Development

Development Method

Jetting
Pumping
Surging
Other

Select one or more methods. Hold the Ctrl (PC) or Command (Mac) key to select more than one option.

Development Hours

Development Notes

Field Name in GWELLS	GWPR Records	Instructions/Masurement Units/Examples
Method	Developed By	Drop down menu choices: <i>Air Lifting, Surging, Jetting, Pumping, Bailing, Other</i> . If option is not available select <i>Other</i> . Multiple development methods can be chosen. Use the Ctrl key to select multiple characteristics.
Duration (hrs)	Developed By, Total Duration	Enter hours if provided. Do not include the units (e.g. hrs.) in the field.
Notes	Developed By, Notes	If the well was developed by more than one method, indicate both methods under Development Notes (e.g. well developed by pumping and surging). Enter any additional notes related to development. Include title and units in description (e.g. Drawdown 2 mins).

Yield

Groundwater Wells and Aquifers x +

apps.nrs.gov.bc.ca/gwells/submissions

BRITISH COLUMBIA Groundwater Wells and Aquifers

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Well Search Aquifers Groundwater Information Registry Submit Report

Please take a moment to complete our survey and tell us about your experience submitting well construction, alteration and decommission reports.

Well Activity Submission

Submit activity on a well. [Try a search](#) to see if the well exists in the system before submitting a report.

Single page Multi page

Save report progress Load saved report

Yield

Yield Estimation Method
Select method

Yield Estimation Rate
USgpm

Yield Estimation Duration
Hours

SWL Before Test
ft (btoc)

Drawdown
ft (btoc)

Hydro-fracturing Performed
☒ No ☐ Yes

Increase in Well Yield Due to Hydro-fracturing
USgpm

Back Next

Field Name in GWELLS	GWPR Records	Instructions/Masurement Units/Examples
Yield Estimation Method	Well Yield Estimated By	Drop down menu choices: <i>Air lifting, Bailing, Other, Pumping.</i>
Yield Estimation Rate (USgpm)	Rate	Enter if known. If range is provided (e.g. 10-20), enter the lowest rate (e.g. 10).
SWL before test ft (btoc)	Final well completion data, SWL ft (btoc)	Enter if known. If range is provided (5-7 USgpm), enter the lower value.
Hydro-Fracturing Performed	-	Radio button Would be a comment and/or note on the GWPR form, enter if known.
Increased Well Yield Due to Hydro-Fracturing (US gpm)	-	Would be a comment and/or note on the GWPR form, enter if known.

Field Name in GWELLS	GWPR Records	Instructions/Masurement Units/Examples
Yield Estimation Duration (hrs)	Well Yield Estimated By, Duration	Enter the length of time (in hours) to develop the well. Do not include the units (e.g. hrs.) in the field. If portion is less than one hour, enter as a decimal value (e.g. 0.25 hr, 1.5 hr, 6.75 hr).

Water Quality

Groundwater Wells and Aquifers x +

apps.nrs.gov.bc.ca/gwells/submissions

BRITISH COLUMBIA Groundwater Wells and Aquifers

XTJ:Mellott, Carla ENV:IN Log out

Well Search Aquifers Groundwater Information Registry Submit Report

Please take a moment to complete our survey and tell us about your experience submitting well construction, alteration and decommission reports.

Well Activity Submission

Submit activity on a well. [Try a search](#) to see if the well exists in the system before submitting a report.

Single page Multi page

Save report progress Load saved report

Water Quality

Characteristics

Clear
Cloudy
Fresh
Gas

Select one or more characteristics. Hold the Ctrl (PC) or Command (Mac) key to select more than one option.

Water Quality Colour

Select colour

Water Quality Odour

Environmental Monitoring System (EMS) ID

Back Next

Field Name in GWELLS	GWPR Records	Instructions/Masurement Units/Examples
Characteristics	Characteristics	Select appropriate water quality characteristics from the menu: <i>Clear, Cloudy, Fresh, Gas, Salty, Sediment</i> . Use the Ctrl key to select multiple characteristics.
Water Quality Colour	Colour/ odour	Drop down menu options: <i>black, black flecks, brown, clear/ none, grey, slight colour / milky, orange, other</i> .
Water Quality Odour	Colour/ odour	Enter if known (e.g. smelly, sulphur).
Environmental Monitoring system (EMS) ID	Not on form	Enter if known

Well Completion Data

Groundwater Wells and Aquifers x +

apps.nrs.gov.bc.ca/gwells/submissions

BRITISH COLUMBIA Groundwater Wells and Aquifers

XTJ Mellott, Carla ENV-IN Log out

Well Search Aquifers Groundwater Information Registry Submit Report

Please take a moment to complete our survey and tell us about your experience submitting well construction, alteration and decommission reports.

Well Activity Submission

Submit activity on a well. [Try a search](#) to see if the well exists in the system before submitting a report.

Single page Multi page

Save report progress Load saved report

Well Completion Data

Total Depth Drilled <input type="text"/> ft	Finished Well Depth <input type="text"/> ft (bgl)
Final Casing Stick Up <input type="text"/> in	Depth to Bedrock <input type="text"/> ft (bgl)
Static Water Level <input type="text"/> ft (bwc)	Estimated Well Yield <input type="text"/> USgpm
Artesian Flow <input type="text"/> USgpm	Artesian Pressure <input type="text"/> ft
Well Cap Type <input type="text"/>	Well Disinfected Status <input type="text"/>

Back Next

Field Name in GWELLS	GWPR Records	Instructions/Masurement Units/Examples
Total Depth Drilled (ft)	Total Depth Drilled	Enter deepest depth that the well was drilled to. Total depth drilled can be determined from the last entry in the Well Log Description table.
Finished Well Depth (ft bgl)	Finished Well Depth	Enter the finished well depth, not the total depth drilled. Finished well depth may be equal to or shallower than total depth drilled (not deeper).
Final Stick Up (in)	Final Stick Up	Enter if known (e.g. 12, 24). Often this value can be found in "casing details" (e.g. +2 ft. which means 24 inches stick up) If value is given in feet, convert to inches.
Depth to Bedrock (ft bgl)	Depth to Bedrock	Enter the depth that bedrock first occurs below ground level. Often found in the lithology section. If no bedrock is found, leave blank.

Field Name in GWELLS	GWPR Records	Instructions/Measurement Units/Examples
SWL (ft (btoc))	SWL	Enter if known (e.g. 40 ft). If range is provided (5-7 USgpm), enter the lower value.
Estimated Well Yield (US gpm)	Estimate well yield	Enter if known.
Artesian Flow	Artesian Flow	Enter if known (e.g. 300).
Artesian Pressure (ft)	Artesian Pressure	Enter number (e.g. 7) if provided. Units specified on form are feet.
Well Cap Type	Type of Well Cap	Enter if known (e.g. capped, welded). GWPR required for new and altered wells, although not always provided on well form. If none provided, enter "Not Provided".
Well Disinfected Status	Well Disinfected	Drop down menu choices: Yes, No.

Comments

Groundwater Wells and Aquifers

apps.nrs.gov.bc.ca/gwells/submissions

XT:Mellott, Carla ENV:IN

Log out

Well Search

Aquifers

Groundwater Information

Registry

Submit Report

Please take a moment to complete our survey and tell us about your experience submitting well construction, alteration and decommission reports.

Well Activity Submission

Single pageMulti page

Submit activity on a well. [Try a search](#) to see if the well exists in the system before submitting a report.

Save report progressLoad saved report

Comments

Comments:

Internal Office Comments

Alternative specs submitted

☒ No ☐ Yes

BackNext

Field Name in GWELLS	GWPR Records	Instructions/Measurement Units/Examples
Comments	Comments	Enter any information on the record that was not captured by any other fields. (e.g. pumping level, recommended pumping level)

Attachments

The screenshot shows a web browser window with the URL `apps.nrs.gov.bc.ca/gwells/submissions`. The page header includes the British Columbia logo and the title 'Groundwater Wells and Aquifers'. A navigation bar contains links for 'Well Search', 'Aquifers', 'Groundwater Information', 'Registry', and 'Submit Report'. The user is logged in as 'XT:Mellott, Carla ENV:IN' with a 'Log out' button.

The main content area is titled 'Well Activity Submission'. It includes a link to a survey: 'Please take a moment to complete our survey and tell us about your experience submitting well construction, alteration and decommission reports.' Below this is a 'Single page' / 'Multi page' toggle set to 'Multi page'. A note states: 'Submit activity on a well. [Try a search](#) to see if the well exists in the system before submitting a report.' There are buttons for 'Save report progress' and 'Load saved report'.

The 'Attachments' section contains a 'Choose Files' button, the text 'No file chosen', and a checkbox labeled 'Are these documents private?'. At the bottom of the form are 'Back' and 'Preview & Submit' buttons.

Attach any available alteration/ construction/ decommission reports. If additional relevant documents are available (i.e. drill receipts, pumping tests, maps) please attach them to the well submission report. The original well log is valuable and one of the most commonly downloaded pieces of information in GWELLS, they are often used by many people for additional groundwater studies.

Preview and Submit

The Preview and Submit page allows you to review the data entered.

The screenshot shows a web browser window with the URL `apps.nrs.gov.bc.ca/gwells/submissions`. The page content includes a section for "Alternative specs submitted" with radio buttons for "No" (selected) and "Yes". Below this is an "Attachments" section with a "Choose Files" button, the text "No file chosen", and a checkbox labeled "Are these documents private?". A blue button labeled "Preview & Submit" is highlighted with a red rectangle in the bottom right corner of the form area. A scroll-up arrow is visible in the bottom right corner of the page.

PLEASE REVIEW DATA ENTRY BEFORE SUBMISSION.

The screenshot shows the "Well Activity Submission Preview" page. The header includes the British Columbia logo, the title "Groundwater Wells and Aquifers", and the user name "Todd, Jennifer ENV:EX" with a "Log out" button. A navigation bar contains links for "Well Search", "Aquifers", "Groundwater Information", "Registry", and "Submit Report". The main content area has the heading "Well Activity Submission Preview" and a blue button labeled "Back to Edit" highlighted with a red rectangle. Below the heading is a section titled "Type of Work and Well Class" containing the following fields: "Report Type: Construction report", "Class of Well:", "Subclass:", "Intended Water Use:", "Well Tag Number:", "Well Identification Plate Number:", and "Where Plate Attached:".

← → ↻ apps.nrs.gov.bc.ca/gwells/submissions ☆

General Disclaimer

This information is collected by the Ministry of Environment and Climate Change Strategy under section 26 (c) of the Freedom of Information and Protection of Privacy Act.

Information, including personal information, will be used to determine well location and confirm that the construction, alteration, or decommission of a well has been done in accordance with the Water Sustainability Act (WSA) and Groundwater Protection Regulation (GWPR). Well reports submitted to the Comptroller, or retained by the person responsible, as required under Sec 57 the WSA and Part 10 of the GWPR, shall be considered part of the Provincial Government records. Documents or images uploaded as part of submission and that contain personal information not covered under this legislation will be deleted.

Should you have any questions about the collection or use of this information, please contact the Groundwater Data Specialist:
 phone: 778-698-4867
 email: groundwater@gov.bc.ca

[Back to Edit](#) [Submit](#) ↗

Once submitted you should see the final entered Submission. If there are any concerns with the entry (i.e. corrections or edits) please contact groundwater@gov.bc.ca and/or the groundwater data specialist.

← → ↻ apps.nrs.gov.bc.ca/gwells/submissions ☆

Well Activity Submission

[Submit New Report](#)

Type of Work and Well Class

Report Type: Construction report	Subclass: Domestic	Intended Water Use: Private Domestic
Class of Well: Water Supply	Well Identification Plate Number: 54097	Where Plate Attached: SIDE
Well Tag Number: 122335	Work End Date: 2021-01-11	
Work Start Date: 2021-01-07		

Person Responsible for Work

Person Responsible for Work: Kurt J. Vichek	Person Who Performed Work: Kurt J. Vichek	Company of Person Responsible for Work: Cariboo Water Wells Ltd. (Prince George, BC)
Consultant Name:	Consultant Company:	

Well Owner

Name: RICK ZEMLAK	City: PRINCE GEORGE	Province: BC	Postal Code:
Mailing address: 18120 EENA LAKE ROAD			

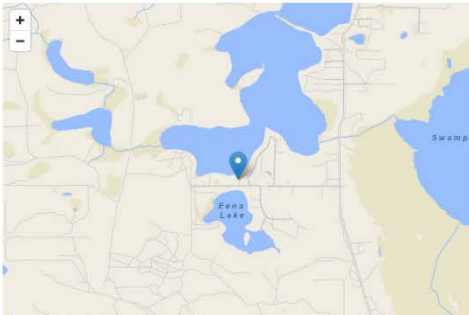
Location Information

Street Address: 18120 EENA LAKE ROAD	
Town/City: PRINCE GEORGE	

Legal Description:

Lot	6
Plan	
District Lot	2211
Block	
Section	
Township	
Range	
Land District	05
Property Identification Description (PID)	008466025

Description of Well Location:



↗