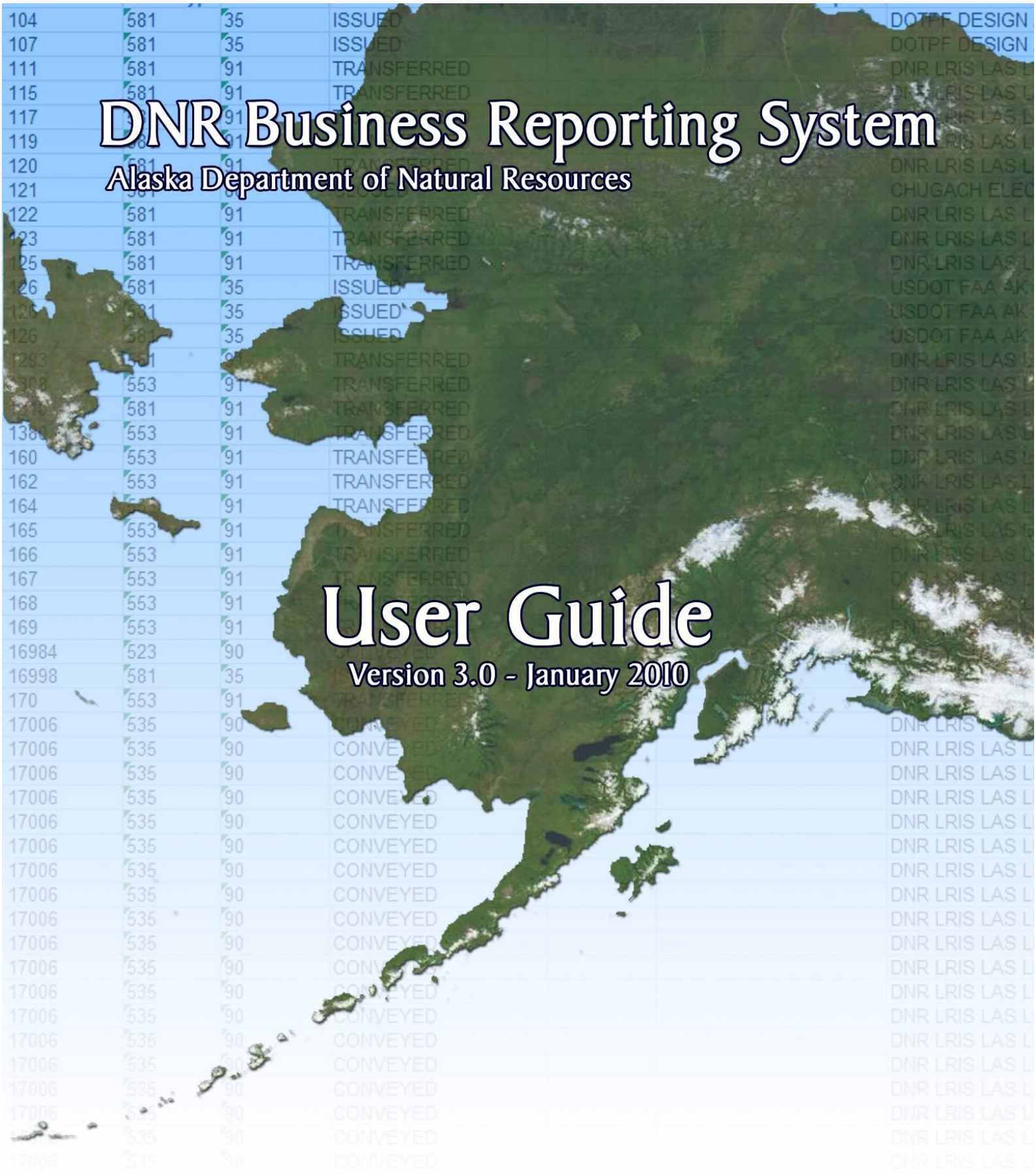

DNR Business Reporting System

Alaska Department of Natural Resources

User Guide

Version 3.0 - January 2010

Contents

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Introduction

What is DBRS?

The Alaska Department of Natural Resources (DNR) Business Reporting System (DBRS) is a web-based application that creates reports from databases maintained by the Information Resource Management Section and other divisions within the DNR. DBRS's versatile user interface allows you to create precise queries and then flexibly navigate and sort the results. If desired, the results can be exported to a Microsoft Excel spreadsheet, saved as an Adobe PDF document or printed to a specified printer.

DBRS output can also be generated utilizing spatial techniques. Through integration with the "Alaska QuickMap" system, you can navigate to an area of interest and perform spatial queries using a mapping interface. After you have selected map features using "Alaska QuickMap", you can then view the selected items in the map screen in the "Result Set" section.

After generating a report, you can take advantage of interactive report features to obtain additional information about particular items returned by your query. For example, whenever a case-file number appears in a report, it will provide a hyperlink to the appropriate case-file abstract found in the Land Administration System (LAS). Reports also provide hyperlinks to the Alaska Land Records website anytime an MTRS designation is included in a report so that you can search land records associated with that area.

About This User Guide

This user guide serves as a reference to the features and functions of the DBRS.

What's New in DBRS

DBRS version 3.0 includes the following enhancements:

- Available Reports screen view contains two panes side by side; the left side conveniently shows all main report categories and subcategories together in a hierarchical list that can be collapsed and expanded and the right side pane shows corresponding reports and map data (signified by an Alaska map icon). See "Available Reports Page" on page 14 for details.
- Report detail screen contains three panels on one screen; two are side by side (left and right of the screen), and one is along the bottom of the screen spanning the width of the two panels. See "New Design Features" on page 6 for details.
    - The left side displays "Query Parameters" for the selected report and are presented in collapsible and expandable accordion style windows. Running queries with an "Alaska QuickMap" interface will refresh the map view to show all data associated with the criteria queried.
    - The right side displays the "Alaska QuickMap", an image of state of Alaska with selectable features on the map as it pertains to the report. The default map display shows all data associated with the report without any query parameters entered.
    - The reported data is shown in a third section, the "Result Set", that spans the bottom of the screen. The data is displayed in a column format which can be sorted in ascending or descending order.
- Resize the "Alaska QuickMap" screen to move beyond default docking position and make larger. See "Manipulate Alaska QuickMap Screen" on page 39 for details.

- Drill down data available in report result sets and ability to resize and move their windows. See "Smart Links" on page 44 for details.
- Results screen can be manipulated to show a defined number of rows per page, there is a "Go to Page" function which will allow for easier browsing of the data as well as **Previous** and **Next** buttons to scroll through the report pages more easily.
- Improved mapping functional tools based on modern widgets and specialized functions.
- Interchangeable base map interfaces to allow a different base map view against features being researched. Alternate base maps are utilized from the University of Alaska's Geographic Information Network of Alaska (GINA) and other Alaska imagery like the Statewide Data Mapping Initiative Best Data Layer (SDMI BDL).
- Result sets can be saved and exported to MS Excel or Adobe PDF. Additionally, a printer-friendly format is provided that sends the report to a specified printer. Last, the Information icon, allows the user to view information about the result set.
- XY (latitude/longitude) coordinates always display in the "Alaska QuickMap" header.
- Panning and zooming within a map is more intuitive and efficient.
- The zoom tool is remodeled to choose pre-selected zooms (e.g. on a slider scale).
- "Result Set" will provide a means to zoom to features at the mapping interface in "Alaska QuickMap" from selected records in the "Result Set" section.
- Hover over hyperlinked text and information "i" icons,  , for tips on every data entry or data selectable item.

Query and Report Interface (DBRS)

The services (location component) provide a good handshake with the DBRS Query Engine (Reports) and vice versa, and all effort will be made to address smooth communication between these two software models.

New Design Features

The project has taken a step forward in developing a flexible map interface to accommodate a user-friendly design and provide needed spatial services to identified users, and the public in general. The interface is thin-client web driven and facilitates spatial queries and improved user-friendly access to the spatially-driven datasets.

An integral piece of the new DBRS was to introduce a single webpage screen from which to query and obtain results. Once a report is selected, all queries, map views, and drill down data from and to the map view are available on one screen. All navigation within the screen is dynamic, refreshing the map as new results are compiled. The three sections on the screen that make this possible are described below:

1. "Query Parameters" is the left section of the screen that displays the various criteria available for the selected report. Criteria can be selected and created to narrow down the "Result Set" and to focus on specific data being requested. This cuts down on the time spent searching for information needed on various screens.
2. The "Alaska QuickMap" is the right section of the screen that extends the functionality of the "Query Parameters" section by displaying the state of Alaska as an interactive map interface. The map tools allow the user to manipulate data displayed on the map and allows user to conduct more advanced searches based on the map view. Both the "Query Parameters" and "Alaska QuickMap" section

functionality can be combined to create a powerful and dynamic tool for retrieving and analyzing data.

3. The "Results Set" spans the bottom of the left and right sections to display data in a tabular format based on the selections made in the "Query Parameters" and "Alaska QuickMap" sections. The "Result Set" can be exported, saved, and printed in a variety of file formats (Excel, Adobe PDF, and HTML). Each item in the "Result Set" may contain drill down data; accessible through hyperlinks. Additionally, the "Result Set" and "Alaska QuickMap" are closely integrated so that map views can be keyed off of "Result Set" items. These "Result Set" items are attributes (drill down data) of the features (criteria filters) selected in the "Query Parameters" and "Alaska QuickMap" sections.

These three sections make the DBRS a powerful tool with full functionality available with the click of a mouse on one screen.

The primary beneficiaries will be DNR staff; the secondary beneficiaries are the public. The broad service functions include:

1. Use of a visual map interface
2. Attribute and spatial queries that run off the Oracle and Oracle Spatial databases respectively
3. Use of Web Map and Web Feature Services to integrate reports and mapping components onto one interface

Desired raster layers (e.g. satellite imagery and NOAA nautical charts) are available as a background layer and this raster concept should not be confused with vector layers. Vector layers need a lot of computational manipulation before they can deliver spatial results and when a layer is large it can complicate the processing time involved for editing purposes. A raster map coastline serving as a background layer will have no problems.

System Requirements

Supported Browsers

DBRS is compatible with Internet Explorer versions 5.5.x, 6.x and 7.x.

Recommendations for Best Performance

For best performance, we recommend that your system have the following:

- Screen resolution of at least 1024 x 768 pixels,
- Ability to display at least 24-bit color video, and
- Adobe Acrobat Reader browser plug-in.

Getting Started

Accessing DBRS

To access DBRS, direct your Web browser to http://reports.dnr.alaska.gov/DBRS.

You may then select one of the following options:

- **Enter Public Site** – The public account is not yet available. At a future date, this account will provide access to reports that have been made available to the general public.
- **Log in as State Employee** – Registered user accounts are available only to employees of the State of Alaska. All state employees automatically have a registered user account. The user ID and password are the same as those for your e-mail account. If you are unable to log in, contact your local computer support personnel or the Department of Administration. The DNR is considering a policy that will permit non-state employees to have registered user accounts.

Logging Out

When finished with the application, you should log out by clicking the **Log Out** link found in the upper-left portion of the page. Logging out closes the current session and helps eliminate the chance of someone tampering with your account. DBRS will disable your session after 45 minutes of inactivity. You will have to login again.

Getting Help

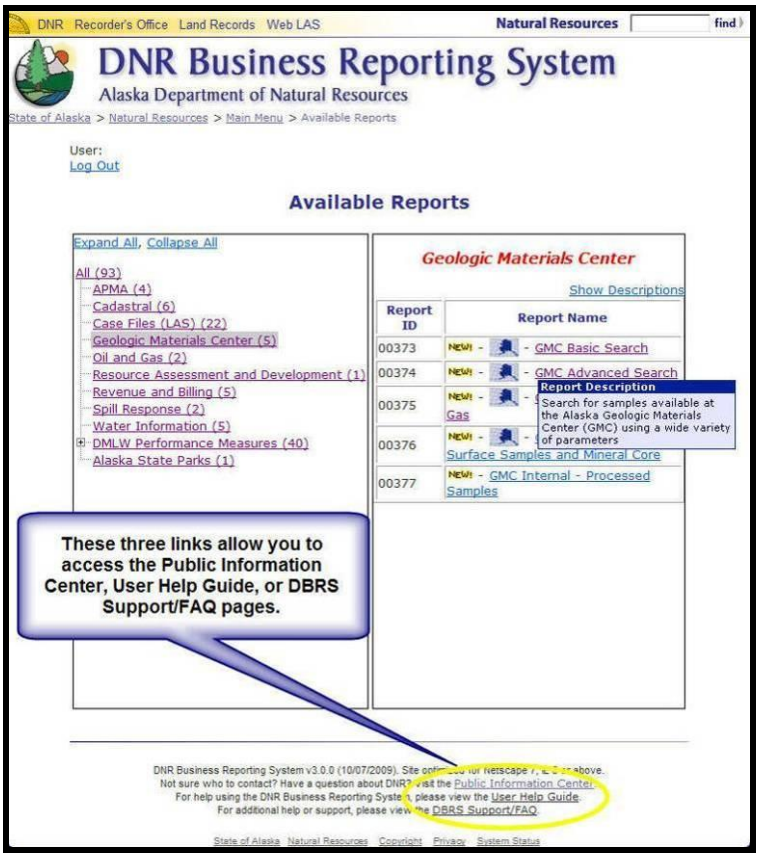
There are various ways you can get help with using DBRS:

- On the Available Reports page, you can hover your pointer over the report names to view tool tips that define the reports fields. See Figure 1.
- On the "Query Parameters" section, you'll find on-screen instructions for running a report.
- Click the Help icon next to the report title to view the DNR Business Reporting System Help Form. This page explains how to enter and select information to generate a query that returns report data.
- Click on the information icon next to a data entry field on the Report Search Page to view explanations and tips for entering report criteria in fields such as text boxes, list boxes and date fields.

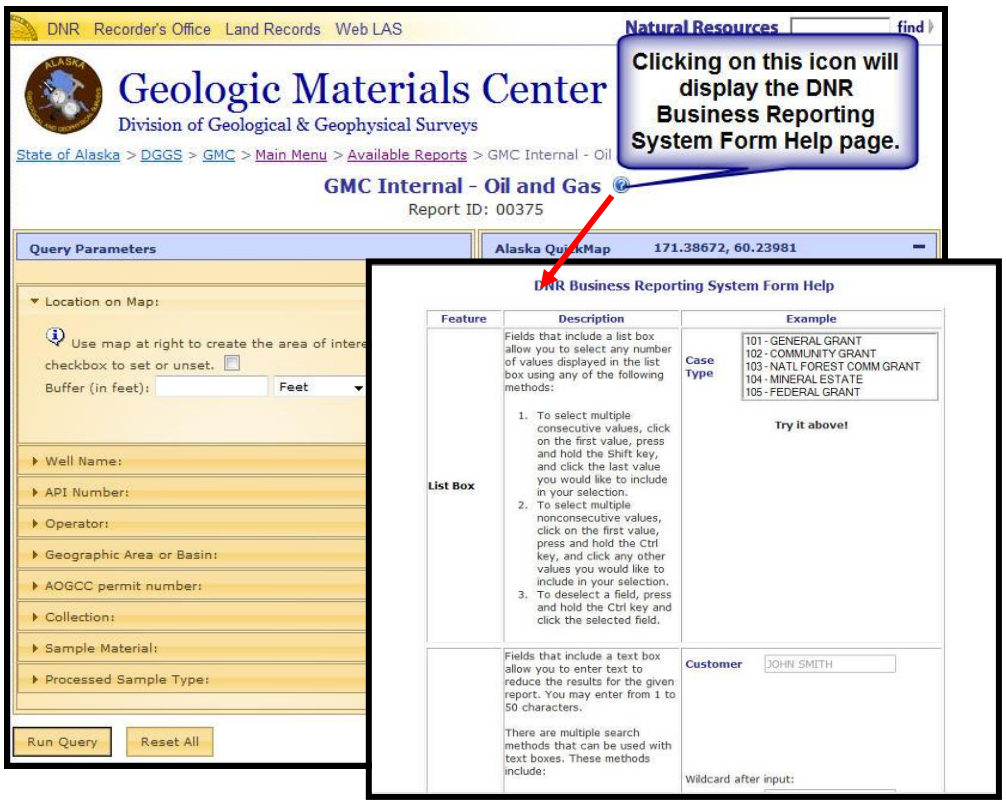
Additional help is provided through three important links located at the bottom of DBRS pages. These links are to the **Public Information Center**, the **User Help Guide** and **DBRS Support/FAQ**. At the Public Information Center link you can find answers to general questions related to DNR. The **User Help Guide** link offers this guide in PDF format. The **DBRS Support/FAQ** page contains answers to frequently asked questions and provides a link that allows you to submit a request for help. If your issue concerns a particular report, please include the report ID and report name in your message.

Figure 1 illustrates the ways you can obtain help on the Available Reports page.

Figure 1 – Getting Help



DBRS Form Help Page



Quick Start Guide to Generating a Report

Following is a high-level overview of what it takes to run a report in DBRS. For more specific information, refer to the sections that are referenced within these steps.

To run a report:

1. From the Available Reports page, select the category to which the report belongs from the left column. All reports belonging to that category display in the right column. See "Available Reports Page" on page 14 for more information.
2. Click the name of the report you wish to run. The "Query Parameters" section displays. For more information about this page, see "Interactive Screen" on page 17.
3. From the "Query Parameters" section, fine tune the report by specifying selection criteria. Each report has its own set of criteria. For tips on entering data in these fields, see "Tips on Entering Criteria" on page 22.

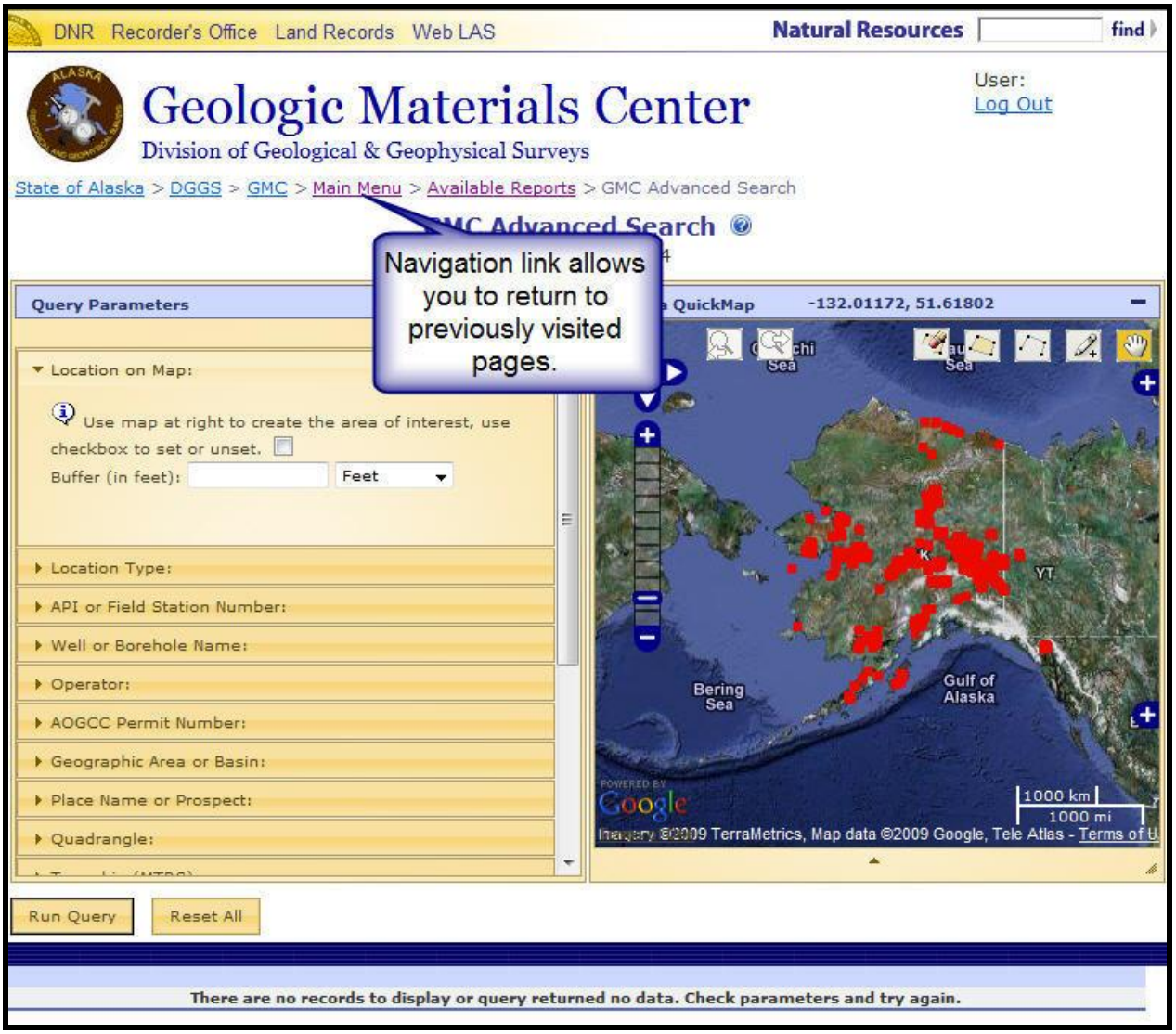
   Note: A spatial query can be done for reports with map icons. More information about this feature can be found in "Spatial Queries" on page 28.
4. Click **Run Query**. The system generates the report using the specified criteria and displays it on the bottom of the same page. More information about this feature can be found in "Report Display Page" on page 42.
5. From the Report Display, organize the report by sorting the columns as you see fit. See "Sorting the Report" on page 43 for instructions.
6. If desired, export the report to an Excel spreadsheet, PDF file or print to specified printer. See "Exporting the Report" on page 43.

DBRS Basics

Navigation Links

Throughout the report generation process, DBRS provides navigation links (Figure 2), often called "breadcrumbs", that allow you to quickly return to previously visited pages. These links show a history of the pages that were visited prior to the current page. To return to a previously visited page, click the appropriate link in the breadcrumb trail.

Figure 2 – Navigation Links

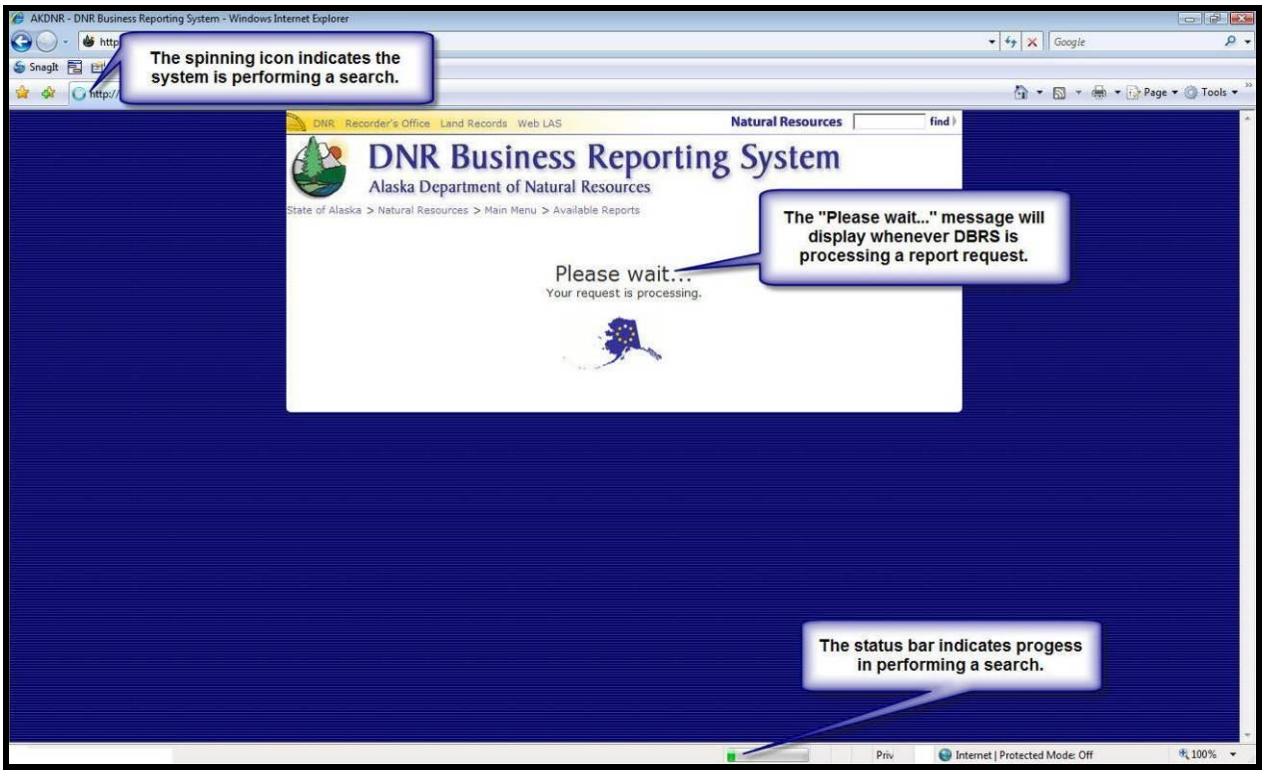


Note: For best performance, use these navigation links instead of your browser's **Back** button.

Processing Requests

Whenever DBRS is processing a request, you will see the message in Figure 3.

Figure 3 – Processing Request Page



When you see this page, please be patient, as some reports may take some time to load.

Along with the Processing Request page, your browser will display a spinning icon to indicate that a request is processing. Additionally, relative progress is indicated via the Status Bar at the bottom of the browser window. If it seems your request is not being processed, please check for these features. Depending on the current system load, DBRS may take a bit of time to process a request. If you do not see the spinning icon or status bar indicators, try submitting the request again at another time; if the problem persists, please submit a help request.

Note: The spinning icon and status bar may differ slightly among different browser versions.

Huge Dataset Return Warning

Whenever a report query has returned more than 10,000 records, you will see the warning in an error message as seen in Figure 4. The query will not run if the returned dataset has more than 25,000 records.

Figure 4 – Huge Dataset Return Warning

This message cautions you to refine your search in order to receive a smaller, more manageable dataset. You can make the "Result Set" more manageable by selecting additional criteria or narrowing the range of your search.

You have two options when a search returns such a large number of records:

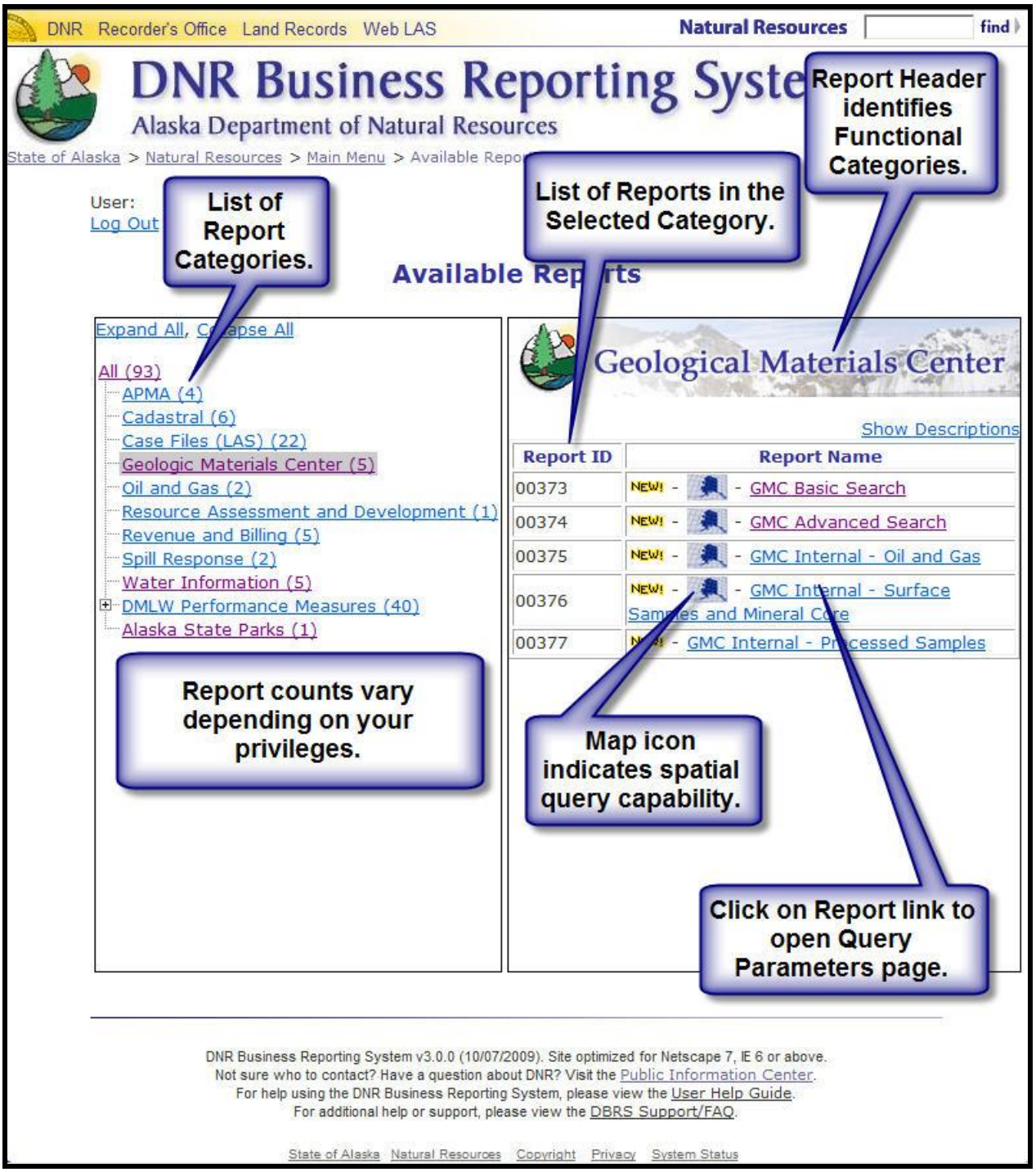
- To return to the "Query Parameters" section, click **Cancel**.
- To run the report anyway, click **OK**.

Note: If you choose to continue, you may experience long wait times for the report to run.

Available Reports Page

The Available Reports page provides a categorized list of all available reports based on their functional use within DNR summarizes the features explained in the following sections.

Figure 5 – Available Reports



Reports List

The list of reports displays two columns, **Report ID** and **Report Name**. Report names are displayed as hyperlinks. Clicking a report name will open the "Query Parameters" section, which is used to fine-tune the selection criteria that will be used to generate the report. For more information, see "Interactive Screen" on page 17.

Tip: Expand the **Show Descriptions** hyperlink above the report names to display a report description.

Map Icon

An Alaska map icon  next to a report name signifies that the report offers spatial query capability. For details on this function, see "Spatial Queries" on page 28.

New Report Icon

The  icon highlights reports added to the system within the last 60 days.

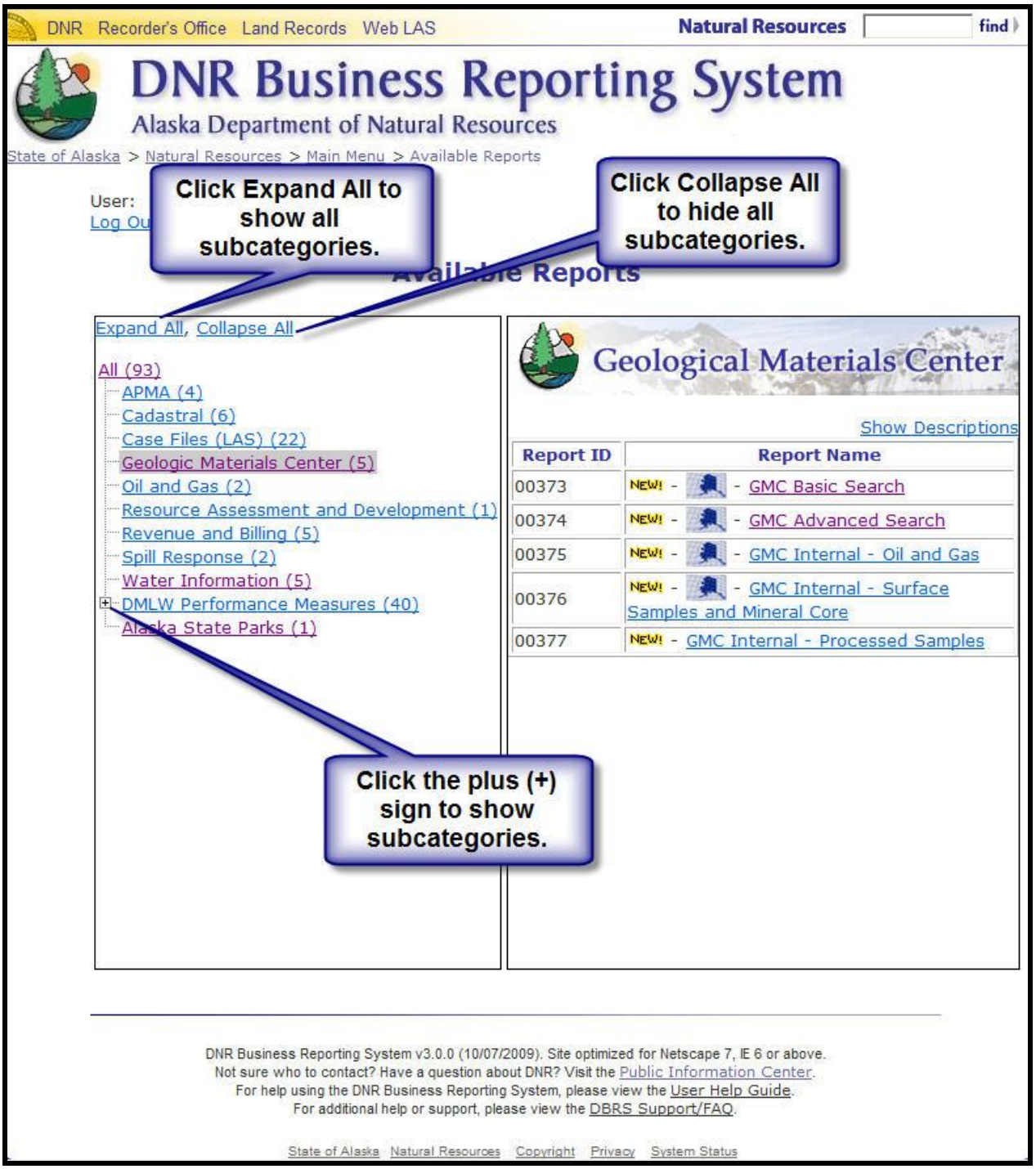
Viewing Report Functional Categories and Subcategories

In the left column of the Available Reports page, you see a list of all categories to which you have access. Following are some tips on using this list:

- Some categories may be further divided into subcategories, which you can view by clicking the plus sign (+) to the left of the category name to *expand* the list.
- When a category is expanded, a minus sign (-) will appear next to its name. To hide the subcategories again, click the minus sign (-) to *collapse* the list.
- Click **Expand All** to show all report subcategories.
- Click **Collapse All** to collapse all nodes on the list.

Figure 6 illustrates these options.

Figure 6 – Viewing Report Functional Categories and Subcategories



Interactive Screen

The Interactive Screen displays the fields that are used to create the report and allows you to specify criteria that narrow down the report results. It consists of three sections. See Figure 7 on the next page.

Query Parameters Section

The left panel is also known as the "Query Parameters" section. This section of the screen allows users to input search criteria (aka query parameters) by entering and selecting text. See Query Parameters on page 19 for details on how to manipulate the "Query Parameters" section.

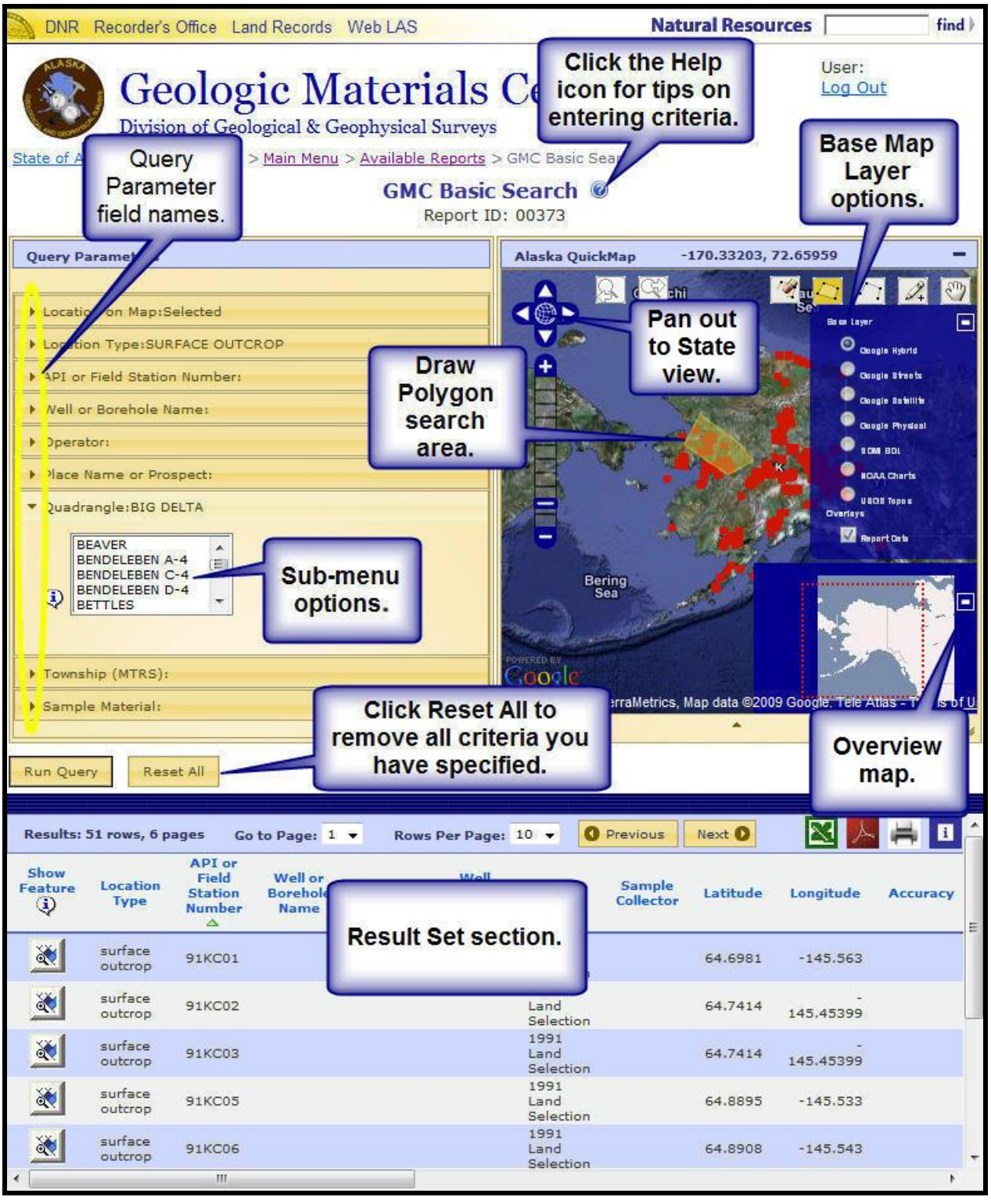
Alaska QuickMap Section

The right panel is also known as the "Alaska QuickMap" section. This section of the screen allows the user to input query parameters by using the interactive map tools. See Spatial Queries on page 28 for details on how to manipulate the "Alaska QuickMap" section.

Result Set Section

The bottom panel is also known as the "Result Set" section. This section of the screen displays the results from the queries run. See Result Set on page 20 for details on how to manipulate the "Result Set" section.

Figure 7 – Interactive Screen



Query Parameters

The "Query Parameters" section provides the user with the ability to enter and select criteria to refine the "Result Set". The layout of the Query Parameter section varies among the different reports, as each report has its own requirements.

Note: Some reports do not require you to enter criteria query parameter to refine search results. Whenever you select one of these reports from the list, the "Query Parameter" page will not display. Instead, you will be taken directly to the report results.

Required Fields

A red asterisk (*) beside a field name indicates that the field is required. You cannot run the report unless information is entered in this field.

Selecting Query Parameters

The "Query Parameters" for a report allow the user to target report results to specific criteria. Each of the headers under the "Query Parameters" section is expandable by clicking on the header menu bar to reveal available data that can be selected to narrow down search results. Once the criteria are identified the **Run Query** button will return the "Result Set" matching the criteria entered and the "Alaska QuickMap" view will update to include the criteria selected under the "Query Parameters" section.

Note: As selections are made in the "Query Parameters" section the items selected will appear next to the header bar for each query parameter. For example, by selecting "OIL AND GAS WELL" from the "Location Type" header bar the following displays.

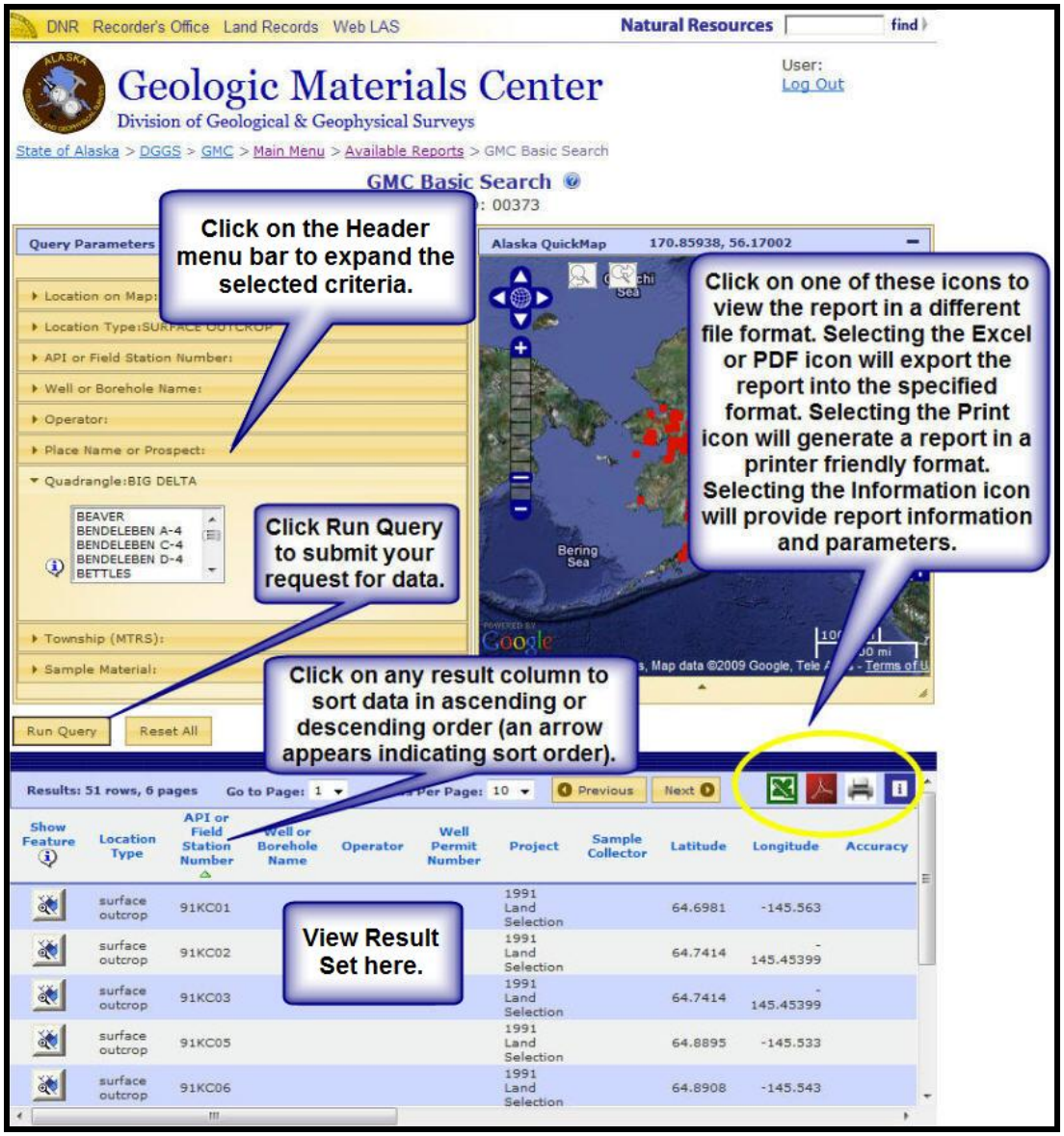
Figure 8 – Query Parameters Header Bar

Result Set

After the query is run the bottom of the screen will display the "Result Set" of the query in tabular format. Within the "Result Set" each column heading is able to be sorted in ascending or descending order. A corresponding arrow (up and down) indicates whether the column is sorted in ascending or descending order. Additionally, the "Result Set" can be exported in Microsoft Excel or Adobe Acrobat (PDF). Each of the exports will open in a pop-up window as a file download allowing the user to open it in a separate screen or save the result as the respective file type. Selecting the Print icon will generate a report in a printer friendly format. Selecting the Information icon will provide report information, parameters, and the SQL statement used to execute the "Result Set". See Figure 9 to view the various actions and results when running a query using the "Query Parameters."

Note: If there is not an arrow under the column heading in the "Result Set" then the column is not sorted.

Figure 9 – Getting the Results Set



Running the Report

Once you have entered the report criteria and selected the desired field names, click **Run Query** to submit your query. DBRS searches for matches to the requested information and displays the results. Please be patient, as it may take some time to retrieve the results.

Note: If more than 10,000 records are returned by your query, DBRS will warn you that the query may take a long time to complete and give you the option to either continue or cancel the query.

Resetting the Form

The **Reset All** button returns the page to its default display. All information entered or selected in the fields is erased.

Note: The **Reset All** button clears all selections in "Query Parameters", "Alaska QuickMap", and "Navigate To".

Tips on Entering Criteria

The fields that you use to specify criteria on the "Query Parameters" section come in a variety of types. The following sections describe those field types and offer tips on how to use them.

Text Boxes

Fields that include a text box allow you to enter text to narrow down the report results. You may enter up to 50 characters in a text box. Text searches are not case sensitive. If you enter "JOHN" in a text field and there is a record "JOHN" for that field, this record will turn up in the report results.

You can either enter the exact text for which you are searching or use wildcards to broaden your search. Wildcards are explained in the following section.

Figure 10 – Example of a Text Box

Wild Card Search

The most important aspect of the text search method is the use of the wildcard percent character (%). This method of search can be highly effective if used properly. If you do not use a wildcard in your search text, only the records that are exact matches with your input text will be returned. However, the percent sign allows you to search for records that contain your input text at the beginning, end or anywhere else within the record.

If you place the percent sign after the input, the query will search the beginning of each record for your text. If you place the percent sign before the input, the query will search the end of the record for the text. If you place percent signs before and after the input text, the query will return records that contain the text anywhere within the field.

The following table illustrates how a wildcard search works:

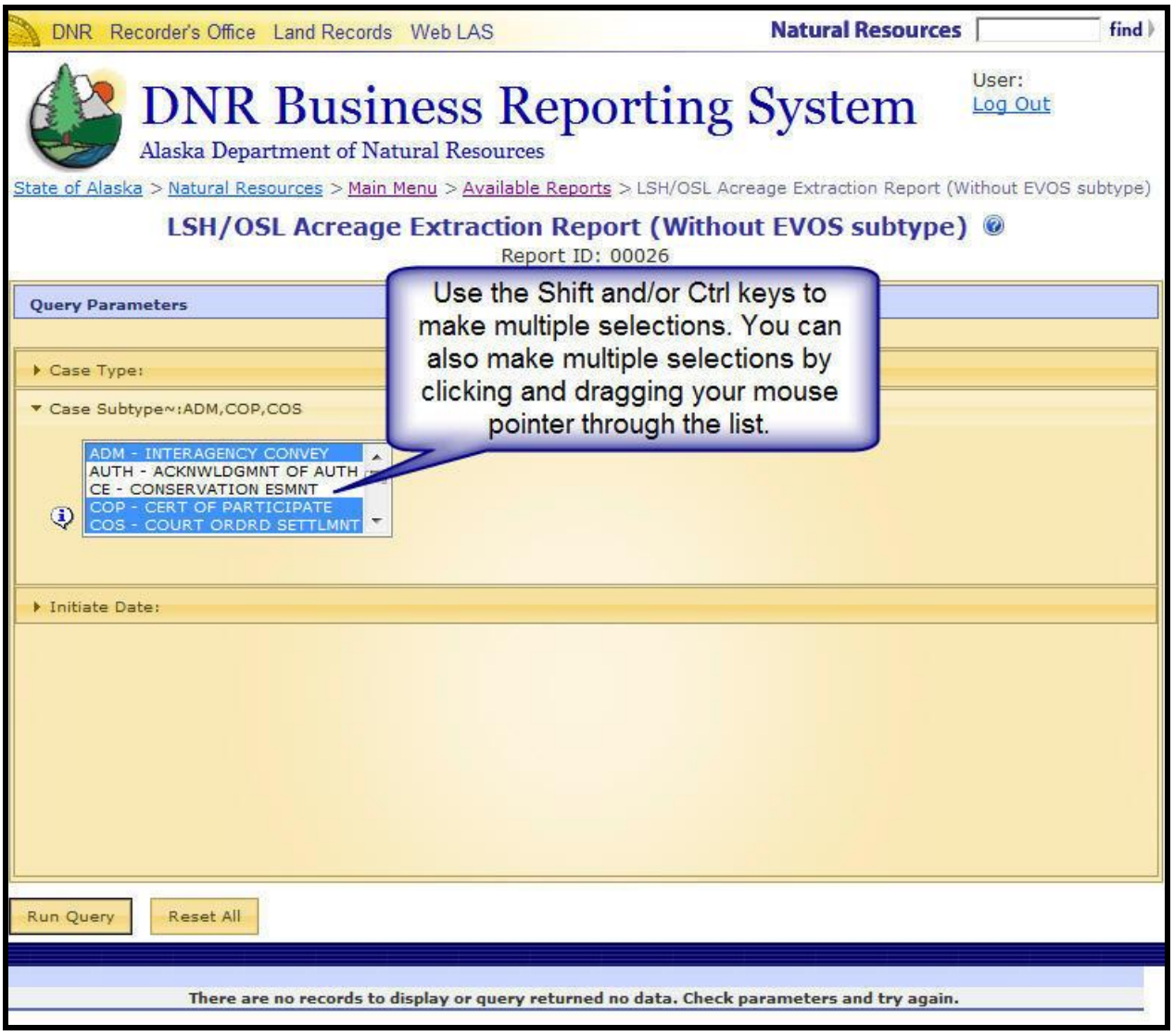
Query Text	Result
• JOHN (no wildcard)	• Search for records that contain *only* the word "JOHN". For example, the record "JOHNS" would not be returned.
• %JOHN	• Search for every record that *ends* with "JOHN".
• JOHN%	• Search for every record that *begins* with "JOHN".
• %JOHN%	• Search for every record that *contains* "JOHN". For example, "JOHN SMITH" and "MARK JOHN WALTERS" would be returned.
• JOHN%SMITH%	• Search for every record that *begins* with "JOHN" and *contains* "SMITH". For example, "JOHN DAVID SMITH" and "JOHN SMITH DAVID" would be returned, but "DAVID JOHN SMITH" would not.

Query Text	Result
• %JOHN%SMITH%	• Search for every record that *contains* both "JOHN" and "SMITH" in that order. For example, "JOHN DAVID SMITH" and "DAVID JOHN SMITH" would be returned, but "SMITH JOHN" would not.

List Boxes

List box fields allow you to search for one or more values by selecting them from a list of values.

Figure 11 – Example of a List Box



Following are some tips on selecting values from a list box:

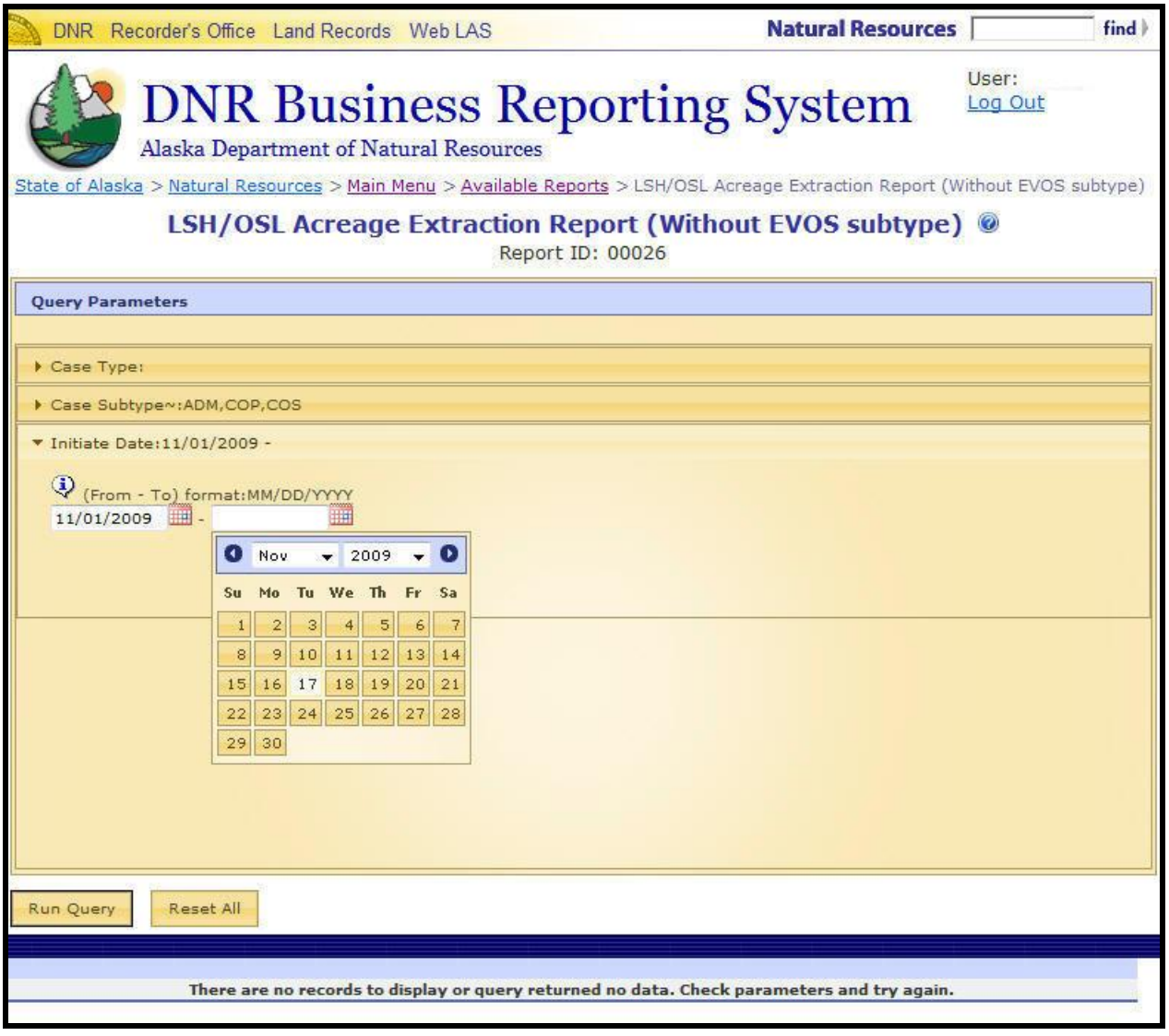
- To select multiple consecutive values, click on the first value, press and hold the **Shift** key and click the last value you would like to include in your selection.

- To select multiple consecutive values, click on a value and drag the mouse pointer through the list.
- To select multiple nonconsecutive values, click on the first value, press and hold the **Ctrl** key and click any other values you would like to include in your selection.
- To deselect a field, press and hold the **Ctrl** key and click the selected field.

Note: To see which value is currently selected hover the pointer over the icon at the bottom right of the list box.

Date Ranges

Figure 12 – Examples of a Date Range Field and Calendar



Fields that include a date range allow you to specify a range of dates using a pop-up calendar, which will display when you click in one of these fields.

To select a date for the **From** or **To** field, click inside the calendar icon next to the date entry field and select the desired date from the calendar. Use the left (<) and right (>) arrows at the top of the calendar to navigate through months and years.

You can also change the year on the calendar using your keyboard. To do so, enter a date in the date entry field in MM/DD/YYYY format and hit the **Enter** or **Return** key. Selecting the **Run Query** button generates data in the "Result Set" section.

Following are some tips on entering dates:

- If you enter a date only in the **From** field on the left, the system returns results from that date to any date beyond (depending on how far the data extends in time).
- If you enter a date only in the **To** field on the right, the system returns results before that date.
- Enter the same date in both fields to return results only for that given day.
- If a date range is a required field, you must enter a date in both the **From** box and **To** box.

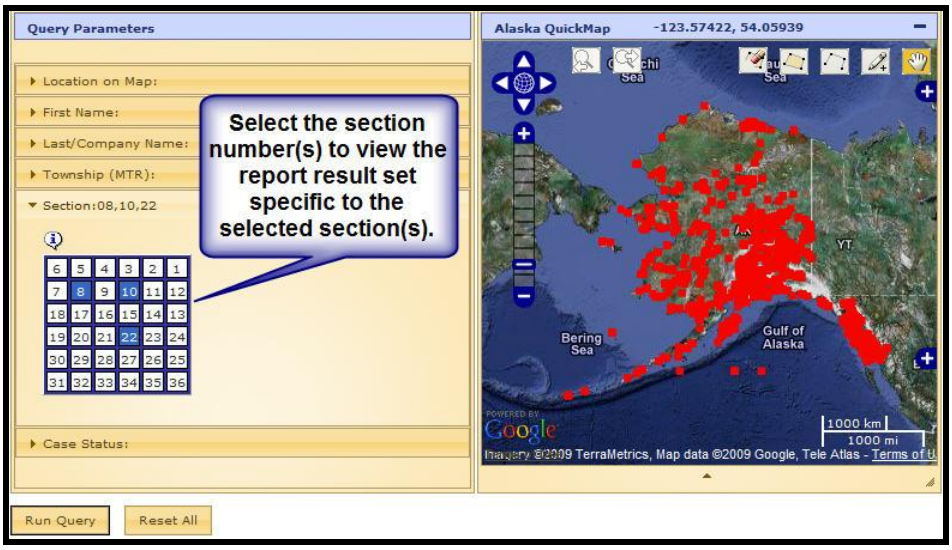
MTR (Meridian, Township, Range)

Townships (abbreviated as "MTR", which is short for "meridian/township/range") are 6x6-mile sections of land defined by DNR to identify exact plots of land at specific locations. The **Township (MTR)** field and the **Section** (MTRS) field should be considered a single unit of information. The section should be selected only if necessary. The township (MTR) designation has a standard format and works best if entered correctly at the outset. Note that DBRS can recognize slight deviations from the standard MTR format and translate them into the standard format. The list of acceptable patterns is described below:

Pattern	Description
• F003N003W	• Standard MTR format
• Foo3Noo3W	• Each letter "o" will get converted to a zero.
• F3N3W	• Numbers will get padded to 3 decimal places (3 becomes 003).
• F0030N0020W	• Numbers will be truncated to 3 digits (0030 becomes 030).
• F10030N10020W	• Numbers will be truncated to 3 digits (10030 becomes 030).

Figure 13 – Examples of a Township Text Box and Section List Box

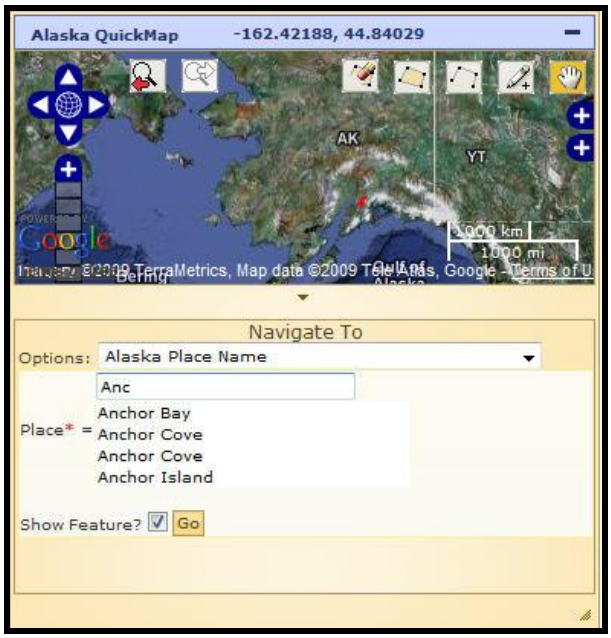
Example of a Section List Box



Navigate To Auto-Fill

When using the "Navigate To" functionality the DBRS will display a distinct set of criteria for each area of interest. These criteria are a searchable component for each area of interest. The selection criteria will consist of drop down boxes and data entry fields. Some data entry fields provide an auto-fill function that is initiated by the first three characters you type in (for example, you will see this functionality when you "Navigate To" the "Alaska Place Names" drop down item). If you are interested in Anchorage you can type in the first three letters (Anc) and the DBRS will match the letters entered to provide a pick list to choose from. The more letters you enter in the more exact the matches become, see Figure 14.

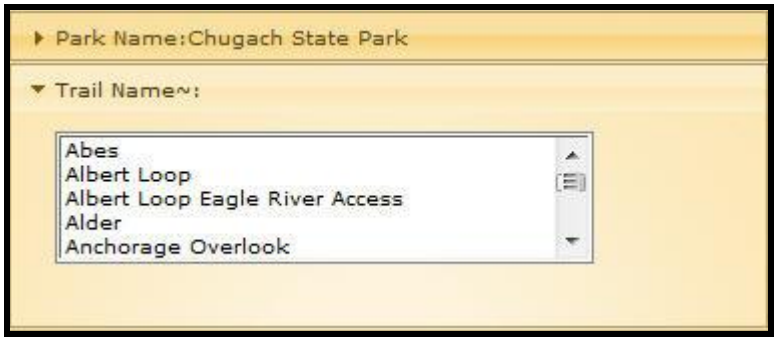
Figure 14 – Navigate To Auto-Fill Functionality



Dependencies

Some reports have "Query Parameters" that are dependent on one another. The "Query Parameter" that is the dependent is signified by a "~" next to the query parameter header title. The query parameter header bar directly above the dependent is the parent of the criteria. For example, when a Park Name has been chosen the trails in the list box will change corresponding to the trails that are within the chosen park.

Figure 15 – Query Parameter Dependency



Spatial Queries

About the Integration of DBRS and Alaska QuickMap

DBRS's integration with "Alaska QuickMap" allows you to execute a spatial query—a search of data that is organized according to its geographic location—using this powerful GIS interface presented in DBRS.

When you select a report category that contains an Alaska map  icon in the Available Reports screen in DBRS, "Alaska QuickMap" will load and display the map that is appropriate for the type of report you have selected.

Note: When viewing map data with extensive data points the default map view will not show any feature points; this is so the map face is not congested visually. The features will display at a higher zoom level (use the zoom slider bar to zoom in).

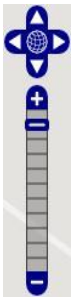
The "Alaska QuickMap" interface acts as the right side section of the screen while the "Query Parameters" and "Result Set" are, respectively, the left section and bottom section. See the section titled "Interactive Screen" on page 17 for more information about the single screen interface for DBRS.

Using the "Alaska QuickMap" map tools, you can make selections (based on the type of map tool you are using) to interact with and manipulate data directly on the map. All manipulation on the map can be used in conjunction with the "Query Parameters" section to narrow down your report "Result Set". This connectivity with the DBRS and "Alaska QuickMap" is to enhance the user experience and interface so that dynamic spatial and tabular interactivity can take place on the map.

An Overview of Querying in Alaska QuickMap

The "Alaska QuickMap" interface provides several tools to manipulate and query the data on the map interface. The following table describes the "Alaska QuickMap" tools and what they do.

Icon	Name	Description
	Previous View	Goes to the previous or last map extent viewed.
	Next View	Goes to the subsequent map extent viewed if viewing the previous map extent.
	Clear Features	Removes all visually drawn spatial features from the map.
	Draw Polygon	Creates a many-sided area (feature), selecting all the points inside it. Double-click the left mouse button to stop drawing.
	Draw Line	Creates one or more lines (feature), selecting all the points within range of the line(s). Double-click the left mouse button to stop drawing. Takes a few seconds to show the area.

Icon	Name	Description
	Draw Point	Creates a point (feature), selecting all the points within range of the point. Takes a few seconds to show the area.
	Pan	Lets you click on the map and drag it around, altering the part of the map that is viewed.
	View Tools	These buttons alter how the map is viewed. Arrow buttons move the map in that direction. The circle in the middle of the arrows returns the map to the default view. The plus button zooms in, the minus button zooms out and the blue marker between the plus and minus buttons shows the level of zoom currently at and can be clicked and dragged to zoom in or out.
 - click to expand; expanded view shown below: 	Map View (top right) – Base Layer	This tab button exposes or hides the base map layer. Click the minus (-) button to collapse the screen.
 - click to expand; expanded view shown below: 	Map View (lower right) – Overview Map	This tab button exposes or hides a map overview. Moving the rectangle changes the area displayed on the base map. Click the minus (-) button to collapse the screen.
	Show Feature	This button is shown in the "Result Set" section and when selected, the map will zoom to that specific feature.
	Reset	The Minimize button in the upper right corner

Icon	Name	Description
	Window	of the map window will return the map to its default size and place.
	Navigate To	• The up arrow at the bottom of the map hides more tools and selectors. • The arrow pointing down and to the side allows the user to expand the map view to be larger or smaller.
	Alaska QuickMap header bar	• The numbers at the top of the map are the latitude/longitude. • The map window can be made bigger, like any other window, and can be dragged to another spot on the screen.

Map Drawing Tools

The map tools can be used in collaboration with the "Query Parameter" selections; using both provides a robust environment from which to work in.

How to select map tools is described below.

- In order to use the **Draw Point**, **Draw Line**, **Draw Polygon**, and **Clear Feature** map tools there must be a feature available to select on the map. A feature will show up on the map as a red dot and is initiated by running queries with the "Query Parameters" section. If no features are on the map the following pop-up message will appear.

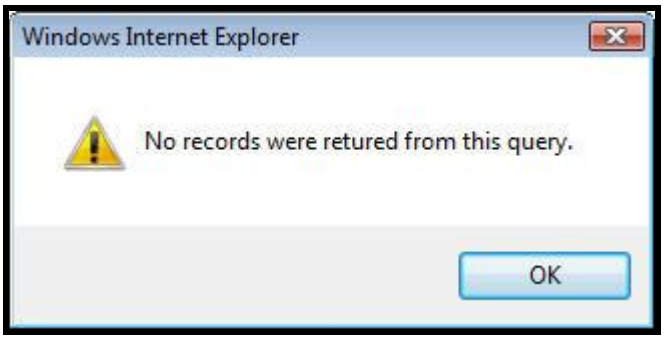
Figure 16 – Error Displaying Results

- Once a map tool is selected it will highlight in orange.
    - This is how the pan map tool looks when it is not selected  .
    - This is how the pan map tool looks when it is selected  .
- As each map tool is selected the mouse pointer does not change to look like the icon in the map tool. The mouse pointer mimics the functionality of the map tool selected.
- The map tools; **Draw Polygon**, **Draw Line**, and **Draw Point** are interactive tools to select features. As feature becomes selected it has two actions: (1) the action is blue

while the selection is being made, and; (2) the action turns orange when the selection is completed. Double-clicking with the left mouse button ends the action.

- Only one map tool can be used at a time.
- When the map tools: **Draw Polygon**, **Draw Line**, and **Draw Point** are initiated the "Location on Map:Selected" automatically enters a 100 foot buffer. This is described more in "Location on the Map/Buffer Map Tool" on page 35.
- Select the **Run Query** button to view the "Result Set" of the map tool selections. If no selections are made and the **Run Query** button is clicked the following pop-up will appear.

Figure 17 – No Features Were Selected



Pan Map Tool

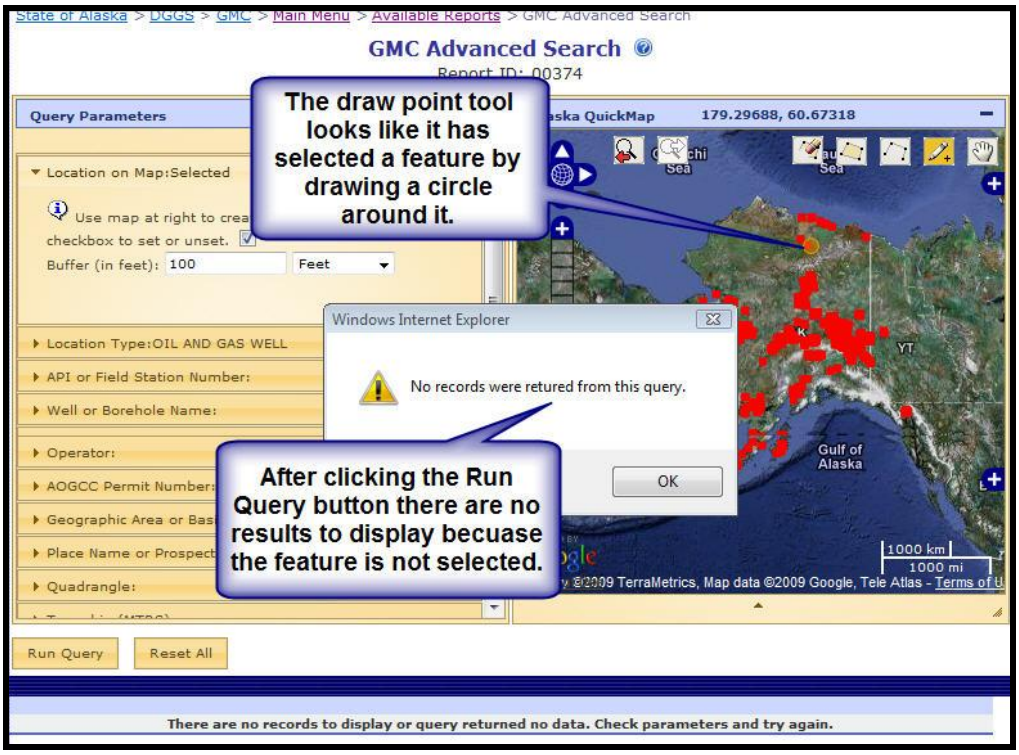
The pan map tool is used to move the map around. In addition to using the mouse pointer to move the map, the mouse scroll bar can be used to zoom in and out of the map view. Scrolling up with the mouse scroll bar will zoom the map into a closer view and the view tools slider bar will correspond with the appropriate level of zoom that was created with the mouse scroll bar.

Note: The faster you scroll the faster the map will zoom in or out. Additionally, the previous zoom and next zoom tools will remember the last level zoomed into.

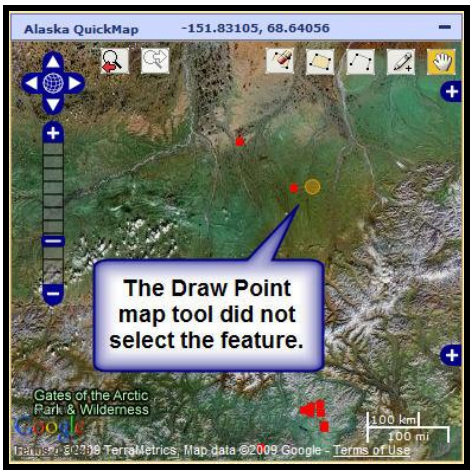
Draw Point Map Tool

The **Draw Point** map tool is used to select a single feature on the map. When using the **Draw Point** map tool do not initiate the action from a zoomed out view. It will look like you have selected a feature but upon zooming in the **Draw Point** map tool will be off the mark. Figure 18 illustrates this on the next page.

Figure 18 – Draw Point Map Tool Zoomed Out Selection



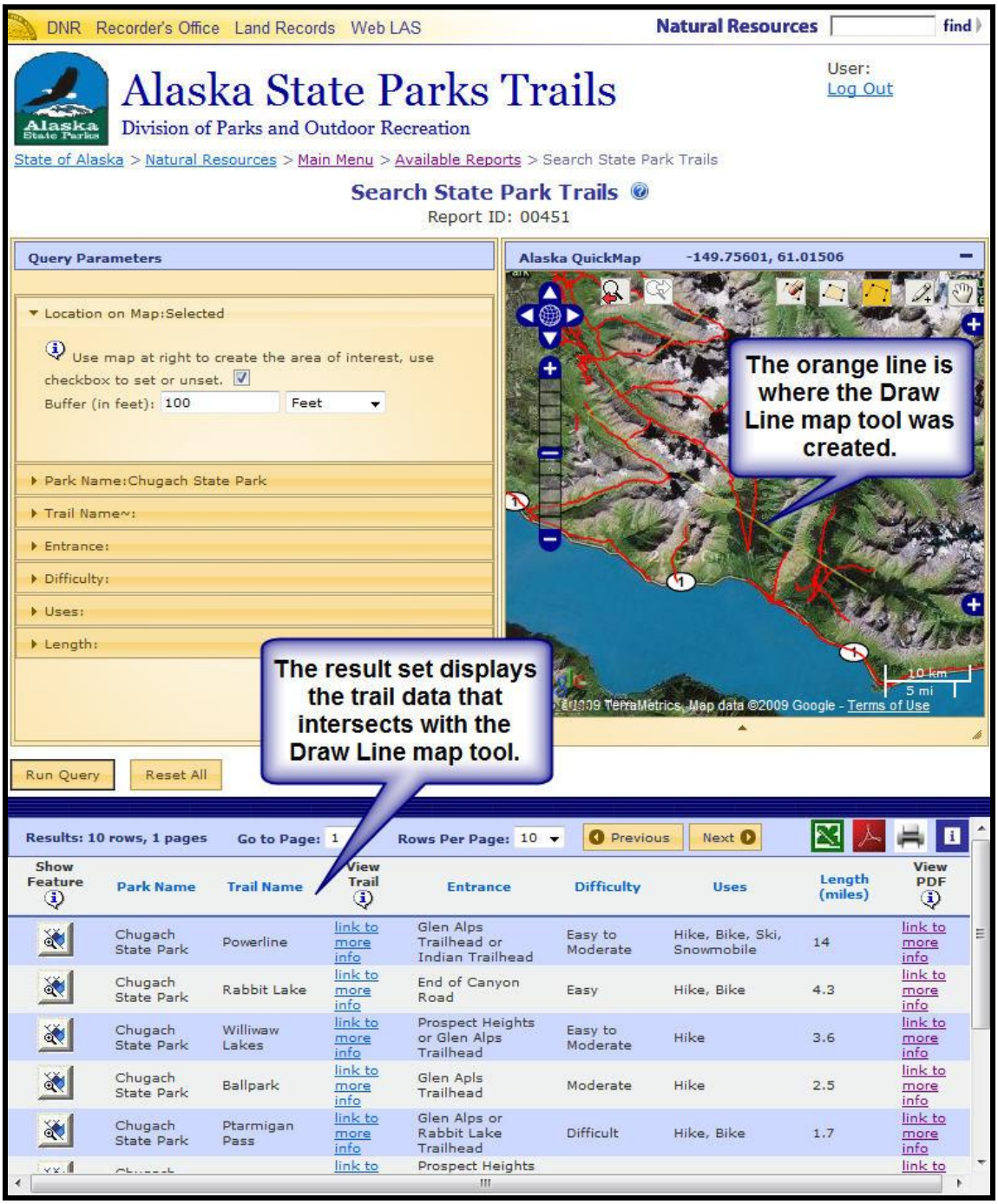
Example of the Image Zoomed In



Draw Line Map Tool

The **Draw Line** map tool is used to select features on a map that are in a line. The action to draw a line is initiated by clicking on the map; corners are created by clicking the left mouse button once, and when the line is drawn double click the left mouse button to complete the action.

Figure 19 – Draw Line Map Tool



It is difficult to see in the above figure but the orange line has a blue dotted line around it and is the default buffer.

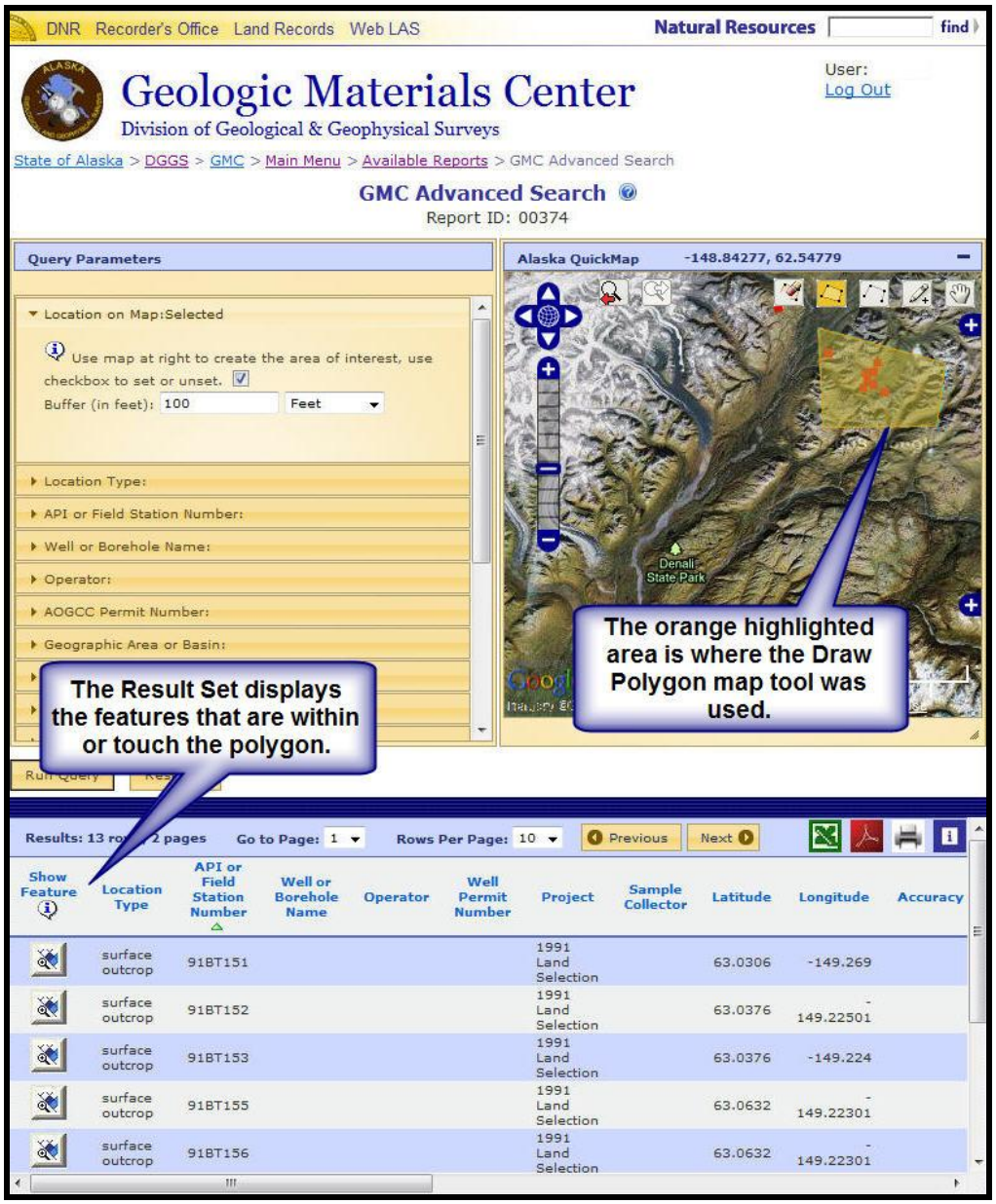
Draw Polygon Map Tool

The **Draw Polygon** map tool is used to create an area from which multiple features are selected. The action to draw a polygon is initiated by clicking on the map. The area is drawn

like a rubber band snapping to the perimeter points by clicking with the left mouse button once, and when the polygon is drawn double click the left mouse button to complete the action.

Note: Using the **Draw Polygon** map tool from a zoomed out view may capture too many features to return a "Result Set" on. To avoid this zoom in closer on the map view.

Figure 20 – Draw Polygon Map Tool



Clear Feature Map Tool

The **Clear Feature** map tool clears the map tool selections. It clears only the map tool selections and not the "Query Parameters" selections. It also deletes the buffer since the buffer is used when the **Draw Point**, **Draw Line**, or **Draw Polygon** map tools are used.

Location on the Map/Buffer Map Tool

The map tools: **Draw Point**, **Draw Line**, **Draw Polygon** automatically get a buffer added around them. The buffer appears as a blue dotted line and is viewable depending on the size of the buffer and the extent of the map view. The closer the zoom level the clearer the view of the buffer.

The buffer can be increased to capture features around it. Using the same point in Figure 18, the zoomed in view, the buffer increased to capture the feature next to it.

Note: The buffer only appears when a feature is selected with the map drawing tools.

To manipulate the buffer:

1. Enter a numerical value in the date field next to "Buffer (in feet):"

   Note: You can also use the "mile" unit of measure from the drop down options. Use caution when executing a buffer in miles. It can return a very large result set which may slow down the performance of the report.

2. Press **Tab** on your keyboard so that the units of measure drop down box is highlighted in blue. This is to initiate the extent of the buffer

3. Press **Enter (or Return)** on your keyboard to redraw the buffer to the number entered.

4. Click on the **Run Query** button to view the "Result Set" from the selection. Figure 21 shows the results of this step.

Figure 21 – Manipulate the Buffer Map Tool

Navigate To an Area of Interest

The "Navigate To" section appears on reports with a map interface. The "Navigate To" section is a way to quickly navigate to an area of interest on the map interface. When entering search criteria in the "Navigate To" section you are able to extend the search capabilities by utilizing the criteria identified under "Query Parameters" and combining those search results with the criteria selected (or entered) in the "Navigate To" section.

Clicking on the arrow at the bottom of the "Alaska QuickMap" screen will expand the "Navigate To" section with several drop down selections (see Figure 22). Selecting a drop down item will direct you to data entry parameters that pertain to that selection (similar to entering criteria for "Query Parameters"). Once an area of interest and its criteria are selected, clicking the **Run Query** button will refresh the "Alaska QuickMap" to display the area of interest with all of the criteria entered under the "Navigate To" and "Query Parameters" sections. See "Spatial Queries" on page 28 for additional instructions.

Figure 22 – Navigate To Section

The **"Navigate To"** section in "Alaska QuickMap" is the same as locating an area of interest on the map. Popular areas of interest are:

- **Alaska Place Names** – Select this option from the "Navigate To" drop down list, enter a place name (e.g., "Juneau", "Kenai River" or "Knik Glacier") and

click the **Go** button to navigate to the location entered. See "Navigate To Auto-Fill" on page 26 for a tip on entering data.

- **DNR Case (File Type and Number)** – Select this option from the "Navigate To" drop down list, select a file type and enter a file number and click the **Go** button to navigate directly to the case on the map.
- **DOT Centerline Milepost** – Select this option from the "Navigate To" drop down list, a route name and milepost number and click the **Go** button to navigate directly to that milepost.
- **Latitude and Longitude Decimal (WGS84)** – Select this option from the "Navigate To" drop down list, enter a latitude and longitude and click the **Go** button to navigate directly to those specific map coordinates.

Note: Latitude and Longitude accept up to five decimal places. Additionally, longitude accepts negative numbers.

- **Meridian, Township, Range, and Section (MTRS)** – Select this value from the "Navigate To" drop down list, enter an MTRS designation, select a section number and click **Go** button to navigate directly to a township.

Note: The **Address Geocoding (2004 TIGER/Line)** data is in progress of being updated. Currently it is utilizing data from 2004.

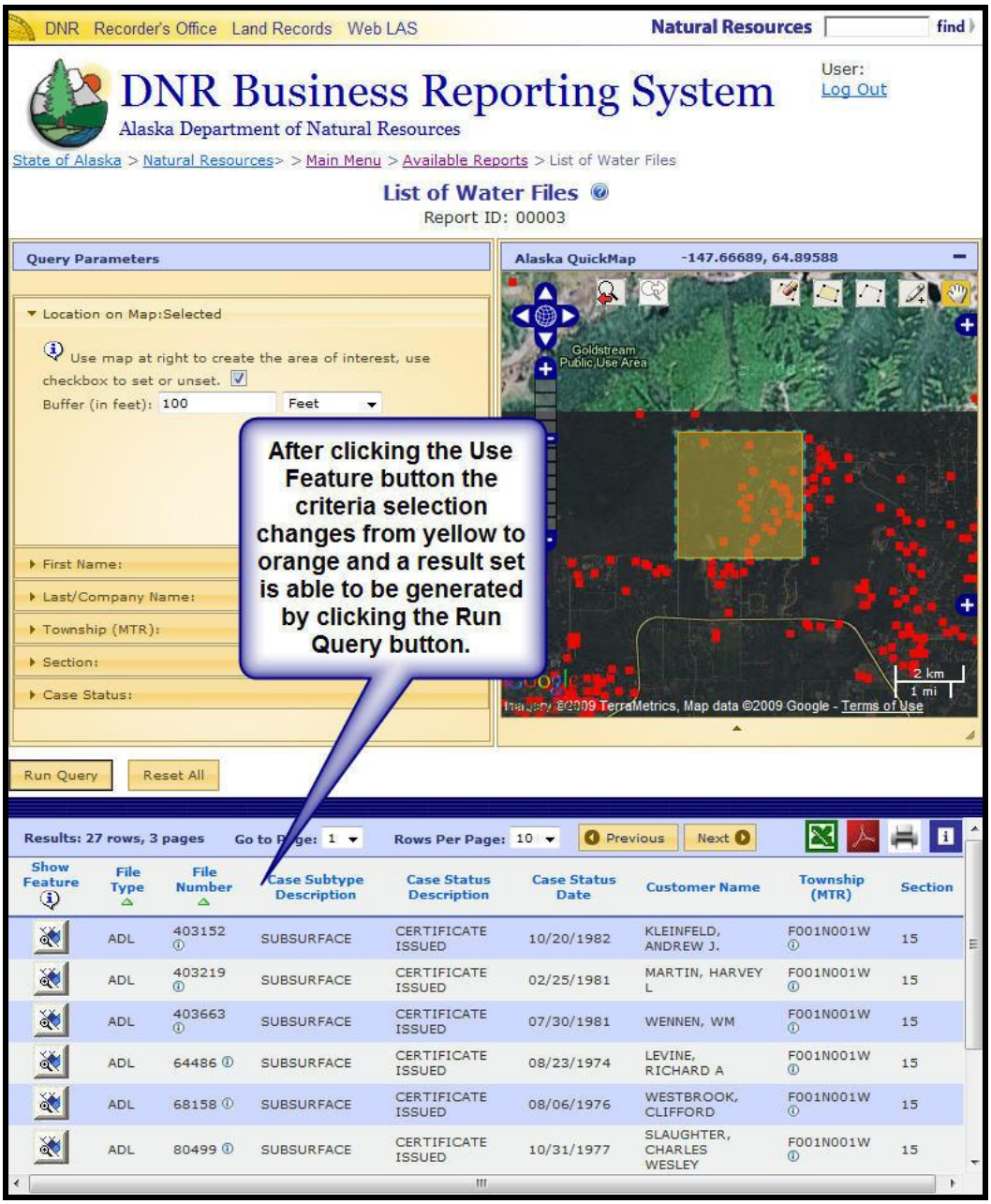
The "Navigate To" functionality is extended by highlighting the features that are found within the criteria entered for the area of interest.

- The "Show Feature" checkbox indicates whether or not the "Navigate To" criteria are highlighted. If the checkbox is checked the criteria will be highlighted in a yellow. Figure 23 shows an example of this.
- Clicking the **Go** button refreshes the map to display the criteria selected.
- After the map is redrawn select the "Navigate To" arrow to expand the criteria entered and select the features within or touching the criteria selected (appears when the "Show Feature" checkbox is checked as shown in Figure 23.
- Click on the **Use Feature** button to use the selected criteria identified in the **"Navigate To"** section (highlighted in yellow) in order to run a query against it. See Figure 23 for an example.
    - Once the **Use Feature** button is selected the criteria will change from yellow to orange and a "Result Set" will be able to be generated from it by clicking on the **Run Query** button.

Note: Clicking the **Use Feature** button turns the action into a **Draw Polygon** map tool and a default buffer is set.

Figure 23 – Navigate To Selection

Figure 24 – Navigate To Use Feature Button



Manipulate Alaska QuickMap Screen

The "Alaska QuickMap" section is by default docked to the right hand panel of the screen.

To Manipulate the Alaska QuickMap Screen:

1. Click on the "Alaska QuickMap" header bar and move the "Alaska QuickMap" section wherever desired.

2. Hover the mouse pointer over the arrow pointing down and to the side, , in the bottom right corner of the "Alaska QuickMap" section (next to the **"Navigate To"** arrow). The mouse pointer will turn into a double pointed arrow which can be used to expand and contract the "Alaska QuickMap" section.

3. To re-dock the "Alaska QuickMap" section, select the minimize button in the top right of the "Alaska QuickMap" header bar,  .

For more information on how the spatial query retrieves data from features, see Appendix B .

Map Views

The base map can be changed by selecting the plus signs,  , to the right of the Alaska QuickMap interface. To minimize the screens select the minimize button. See "An Overview of Querying in Alaska QuickMap" on page 28 for screenshots.

Base Layer

There are seven different base maps that can be used interchangeably on the "Alaska QuickMap" screen as shown below. Select the top right plus sign to see the different base layer options. Deselecting the **Report Data** overlay checkbox removes the features from the map display but they are still selectable if a query is run. You cannot see them on the map but the data still exists.

Note: Some base maps may be limited on how far it can zoom in and when they reach their limit the base map images do not display. However, the features are still selectable and able to be queried.

Base Layer Options	Description	Data feeds provided by
Google Hybrid	A hybrid of the satellite and roadmap image, showing a transparent layer of major streets and place names on the satellite image.	Google
Google Streets	A standard roadmap image, as is normally shown on the Google Maps website	Google
Google Satellite	A satellite image.	Google
Google Physical	A physical relief image, showing terrain and vegetation.	Google
SDMI BDL	Alaska Statewide Digital Mapping Initiative (SDMI) Best Data Layer (BDL) provides the best available imagery base layer that covers the entire state of Alaska.	GINA
NOAA Charts	National Oceanic and Atmospheric Administration (NOAA) nautical charts that cover the coastal waters of Alaska.	GINA
USGS Topos	U.S. Geological Survey (USGS) topographic maps that show and name prominent natural and cultural features, with contours to show the shape and elevation of the terrain.	GINA

Overview Map

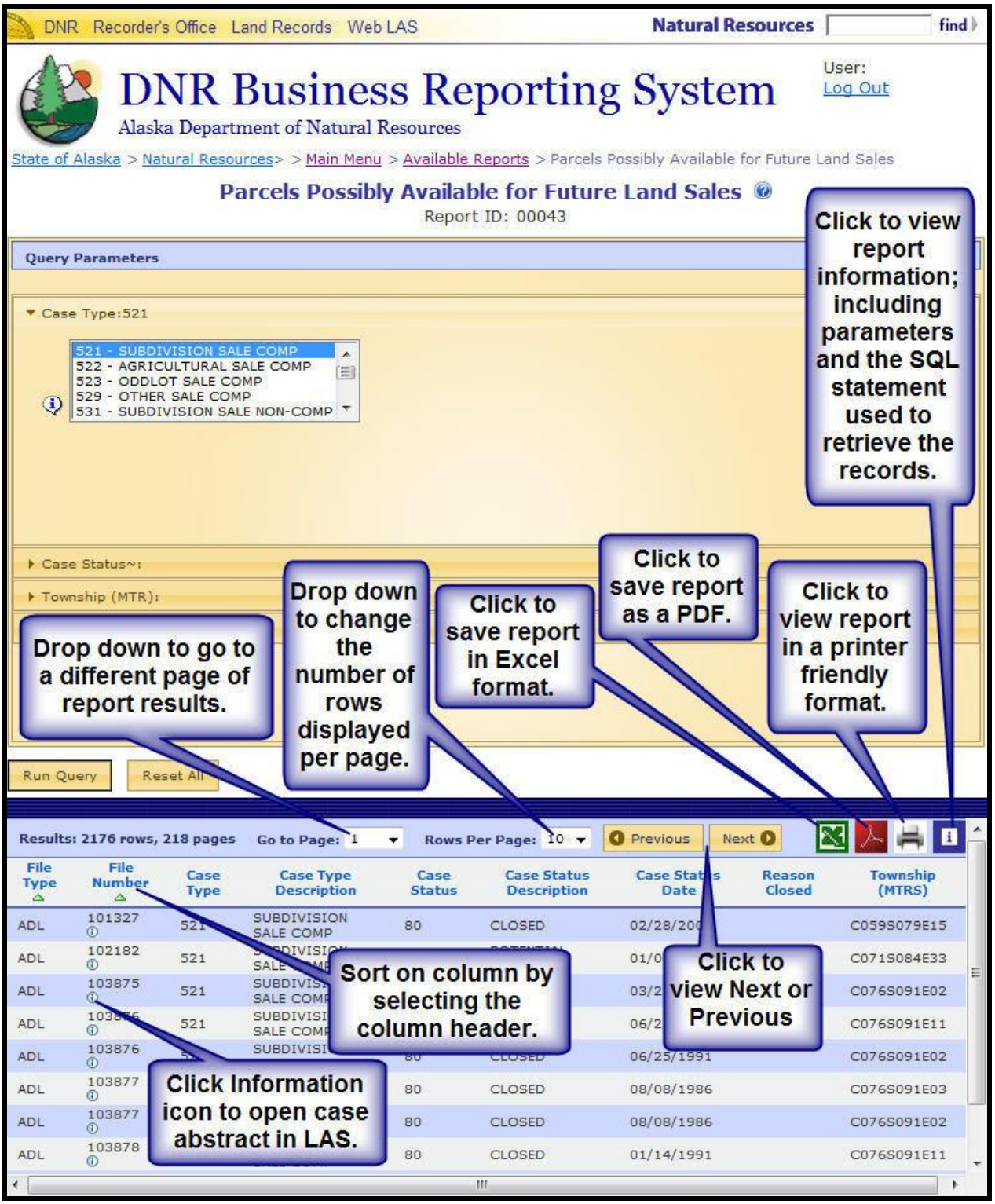
Selecting the bottom plus sign to the right of the "Alaska QuickMap" interface displays the overview map. Moving the rectangle with the mouse pointer changes the area displayed on the "Alaska QuickMap" screen.

To minimize the screens select the minimize button.

Report Display Page

The Report Display page displays the results of your query.

Figure 25 – Report Display Page



Paging Options

Rows Per Page

The **Rows Per Page** selector allows you to limit the number of rows that will display on each page of the report. To change this number, click the **Rows Per Page** dropdown and select a value.

Moving from Page to Page

If there is more than one page of results, you can step back and forth through the pages one by one using the **Next Page** and **Previous Page** buttons. You can also navigate directly to a specific page by clicking the **Go to Page** selector and choosing the page that interests you.

Sorting the Report

To sort the results by a particular column, click that column's header. For example, to sort the report by status date, you would click the **Status Date** column header, and the results would be sorted in ascending order (as indicated by a green triangle under the column header). Clicking the column header a second time would result in a descending sort order (indicated by an upside-down green triangle). Clicking the header a third time would remove the sorting (no triangle).

You may specify up to three levels of sorting. For example, the report in Figure 25 is sorted by the **File Type** and **File Number** columns, both in ascending order. Because **File Type** is to the left of **File Number**, the primary sort is applied to **File Type**, and the secondary sort is applied to **File Number**. This means that the report is first sorted by **File Type**, and then the rows that fall under each unique file type are then sorted by **File Number**.

Clicking the **Case Type** header would apply a third, or tertiary, ascending sort to that column as well. When you use multiple sort levels, the sort order of the columns is always from left to right. That is, the report is sorted by the leftmost sort column first, followed by the next sort column found to the right of the first, followed by the next sort column found to the right of the second.

Exporting the Report

Save to Excel

The **Save to Excel** button is used to open and save the report in a Microsoft Excel spreadsheet format. This spreadsheet can be edited as you see fit. If the search results include more than 25,000 records, an alert pop-up will appear saying that the report size needs to be smaller. However, the report will still export; it will take several minutes (maybe longer) to export. The pop-up exists to avoid performance problems.

Save to PDF

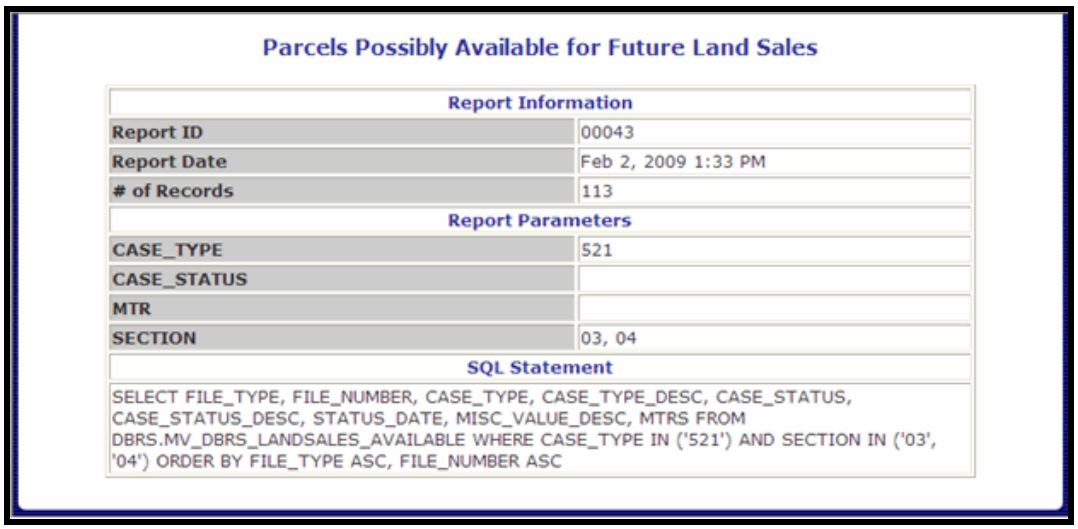
The **Save to PDF** button is used to open and save the report in a PDF format (this format may take longer than the others). If you have the appropriate Adobe software, this document can be edited as you see fit. If the search results include more than 25,000 records, an alert pop-up will appear saying that the report size needs to be smaller. However, the report will still export; it will take several minutes (maybe longer) to export. The pop-up exists to avoid performance problems.

Report Information

When you click the **Report Information** button, a new window will display information about the parameters you chose on the "Query Parameters" section. This can serve as a

useful record of how the report was generated. It can also assist technical support staff in solving any data problems you may experience.

Figure 26 – Report Information Window



Parcels Possibly Available for Future Land Sales

Report Information	
Report ID	00043
Report Date	Feb 2, 2009 1:33 PM
# of Records	113
Report Parameters	
CASE_TYPE	521
CASE_STATUS	
MTR	
SECTION	03, 04
SQL Statement	

```
SELECT FILE_TYPE, FILE_NUMBER, CASE_TYPE, CASE_TYPE_DESC, CASE_STATUS,
CASE_STATUS_DESC, STATUS_DATE, MISC_VALUE_DESC, MTRS FROM
DBRS.MV_DBRS_LANDSALES_AVAILABLE WHERE CASE_TYPE IN ('521') AND SECTION IN ('03',
'04') ORDER BY FILE_TYPE ASC, FILE_NUMBER ASC
```

Special Links

The values in certain columns of the report results will sometimes display as hyperlinks and smart links that, when clicked, display useful information or connect you to other DNR systems.

Hyperlinks

Following are some examples of the hyperlinks:

Column	Result of Clicking a Value in the Column
• **File Number**	• You will be directed to the Land Administration System (LAS), which will display the case abstract that applies to that particular file number.
• **MTRS**	• You will be directed to the Alaska Land Records website, where you can search state and federal land records related to that township designation.
• **Case Type**	• A window will display a definition of that particular case type.
• **Case Subtype**	• A window will display a definition of that particular case subtype.
• **View Trail**	• A window will display information about that particular trail.
• **View PDF**	• A window will display information about that particular trail in PDF format.

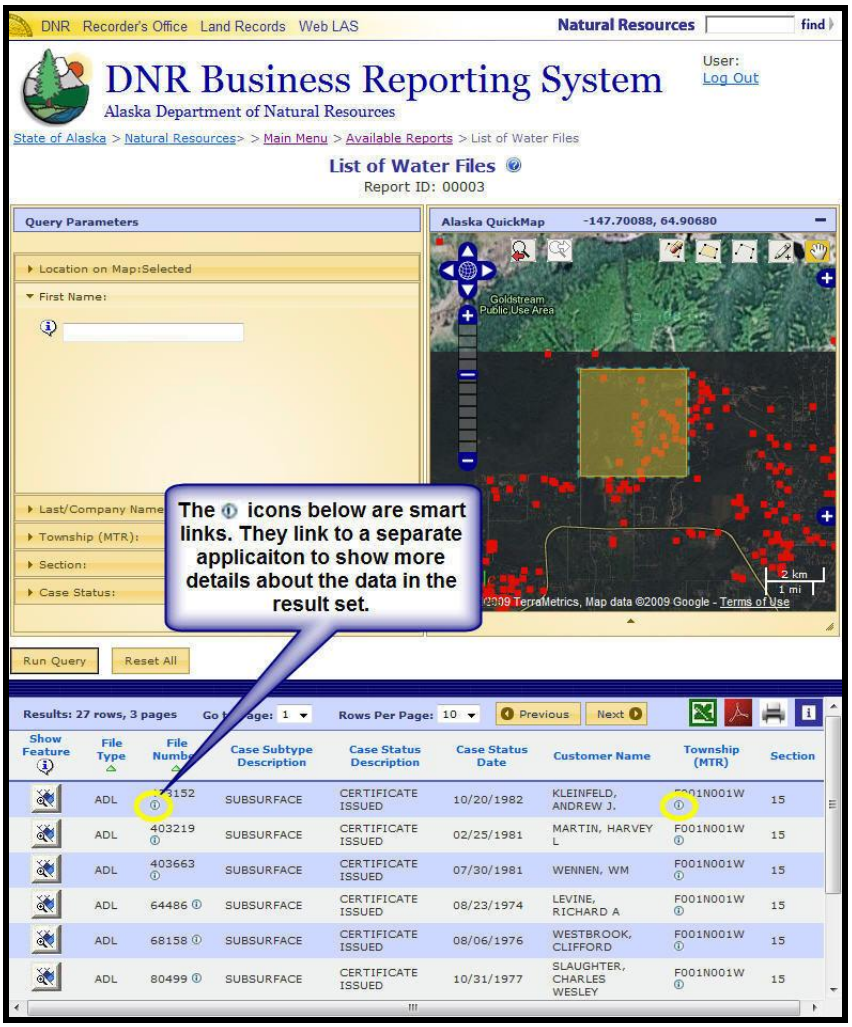
Smart Links

There are two icons that look alike. One of them is the information icon,  and the other is the smart link icon,  . Unlike the information icon the smart link icon does not have a tail

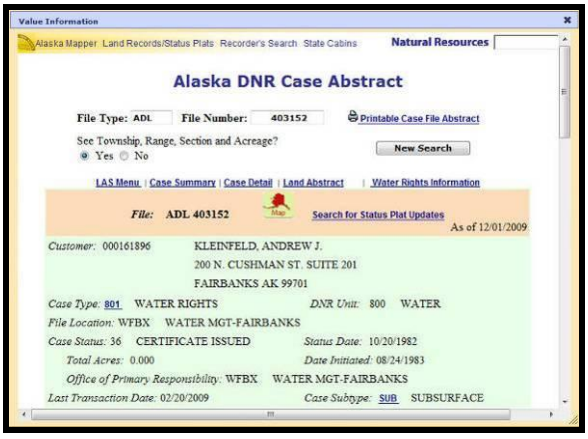
on the bubble around the "i". Additionally, the smart link icon opens a different application from which more information is displayed or more searches can be conducted. Figure 27 shows an example of clicking on the smart link icon from the "Result Set" section.

Note: The smart link only appears in the "Result Set" section.

Figure 27 – Smart Link



Example of Separate Application

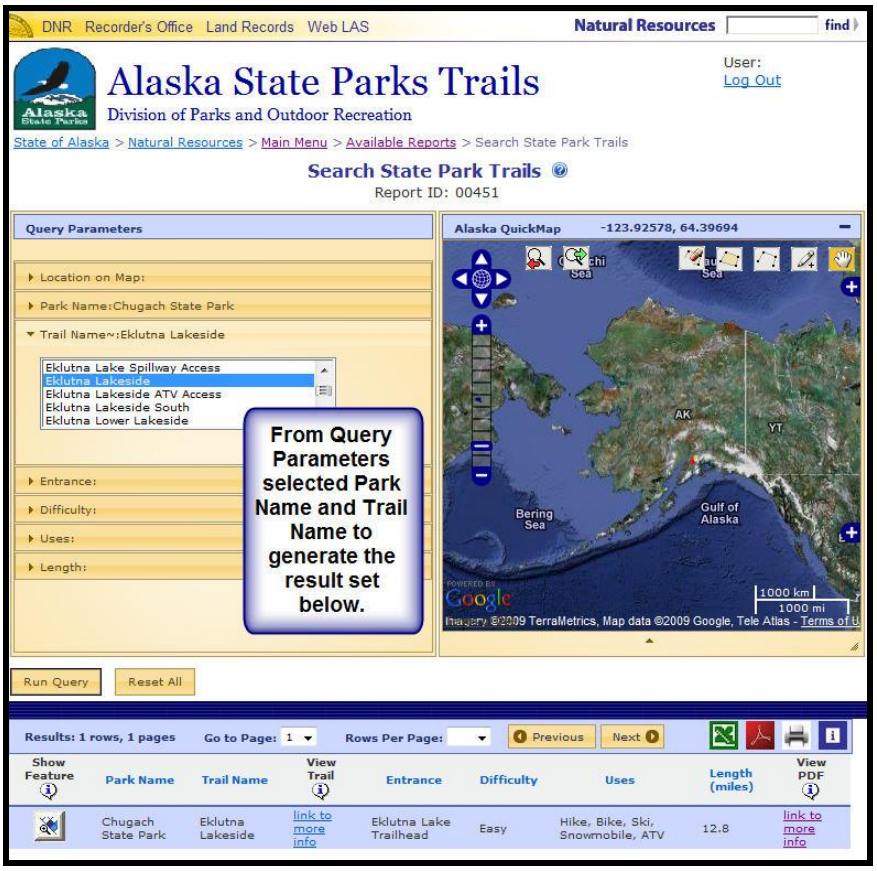


Note: Smart link windows can be resized and moved around in the same manner as the "Alaska QuickMap" section explained on page 39.

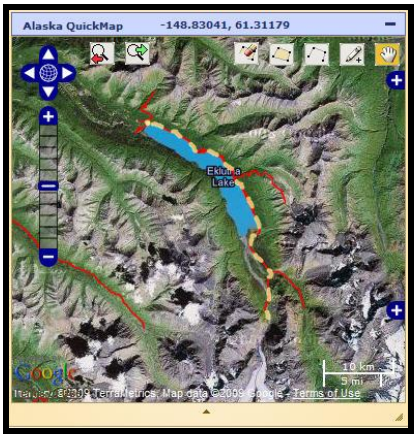
Viewing Features

Reports that have an "Alaska QuickMap" interface generate a "Result Set" that includes a column called **Show Feature**,  . Clicking on the **Show Feature** button will zoom the map view in and highlight the exact spot of the selected feature as show in Figure 28.

Figure 28 – Show Feature



Example When Click on Show Feature

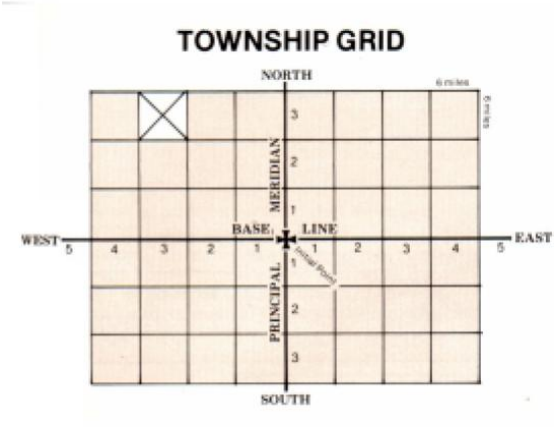


Appendix A About Townships and Sections

In land-description nomenclature, the word "township", also know as an MTR, is used both to describe a unit of land and as a guide to the location of a specific piece of land.

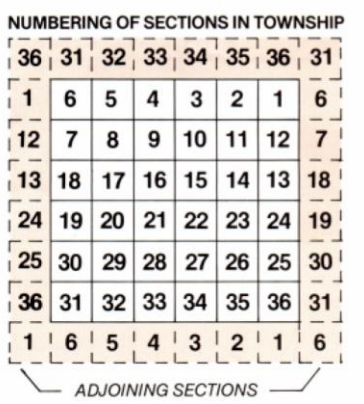
The descriptors "township" and "range" indicate the horizontal and vertical coordinates of a township unit. Townships, are north and south of the base line, ranges are east and west of the meridian line. For example, Township 3 North, Range 3 West, Fairbanks Meridian (usually written T.3N, R.3W, F.M.) will be the third township north of the initial point and in the third range west of the same point in the Fairbanks Meridian. For use in DBRS the township will be written as F003N003W.

The X on the township grid pictured here shows the location of the township described above, and would be in the identical position in any of the meridians.



A township measures six miles by six miles and therefore contains 36 square miles. Each square mile is known as a section (640 acres), with numbers from 1 to 36 to designate the location of each section in the township.

The sections are numbered 1 – 36 in sequence beginning at the northeast corner of the township and moving to the left across the top tier of that township; then dropping to the tier below with section 7 directly south of section 6; then moving to the right. This method is shown in the picture below.



If this township were the township F003N003W, it would be the non-colored numbers. The colored numbers surrounding the township are the sections of the adjacent townships.

Appendix B Tips for Selecting Features within Alaska QuickMap

This list of tips should not be used to substitute functionality described in the body of the DBRS User Guide but rather provide a quick reference guide when selecting features on "Alaska QuickMap". There are additional tips and notes throughout the body of the document, with a section dedicated to "Tips on Entering Criteria" on page 22.

Why can't I see any features on the map?

When viewing map data with extensive data points the default map view will not show any features; this is so the map face is not congested visually.

The fix is to zoom in on the map.

How do the features become selected allowing results to populate in the "Result Set" section?

"Alaska QuickMap" offers three search types that govern how features are selected when you set the query boundary. You can select the search type from the list box next to the **Query Active Layers** label in the menu frame.

Tip: For best performance, try to limit your selection to fewer than 200 features.

Following are descriptions of the search types:

Search Type	Description
• **Point**	• When you are using the **Draw Point** map tool, the point must be fully contained in the feature for the feature to be selected.
• **Line**	• When you are using the **Draw Line** map tool, the line must touch or cross the feature for it to be selected.
• **Polygon**	• When you are using the **Draw Polygon** map tool or buffer in the "Query Parameters" section, a feature must be fully contained within the query boundary to be included in the search results.

"Alaska QuickMap" conducts searches based on the features selected on the map. The searches on "Alaska QuickMap" should be used to further refine search criteria when running queries. The more criteria provided the more focused the "Result Set" will become. As searches are completed the map display will refresh to update with the criteria selection. Please refer to Section "Spatial Queries" to learn more about conducting spatial queries with the "Alaska QuickMap" interface.

How do I resize and move the "Alaska QuickMap" screen?

By default the "Alaska QuickMap" screen is docked to the right of the DBRS screen. To resize and move it select the "Alaska QuickMap" header bar so that the mouse pointer shows four points (pointed North, East, South, and West). You can move the screen when the four points are showing. To make the "Alaska QuickMap" screen larger and smaller select the arrow pointing down and to the side,  , in the bottom right corner of the "Alaska QuickMap" section (next to the **"Navigate To"** arrow). The mouse pointer will turn into a double pointed arrow which can be used to expand and contract the "Alaska QuickMap" section. To re-dock the "Alaska QuickMap" screen, select the minimize button in the top right of the "Alaska QuickMap" header bar. This is described more in the "Manipulate Alaska QuickMap Screen" on page 39.

How do I zoom to a feature on the map from the "Result Set"?

Within the "Result Set" section is a *Show Feature* column heading. By clicking the **Show Feature** icon for in the "Result Set" the map will refresh to show a focused view on the feature selected from the "Result Set". It is only available on reports that have an "Alaska QuickMap" interface.

Why can't I use 2 map tools at the same time?

Only one map tool can be used at a time.

How does the buffer get drawn?

The buffer is drawn when the map tools: **Draw Polygon**, **Draw Line**, and **Draw Point** are activated. The "Location on Map:Selected" automatically enters a 100 foot buffer. This is described more in "Location on the Map/Buffer Map Tool" on page 35.

Can I zoom in and out of the map with my mouse scroll bar?

Yes. With the **Pan** tool selected you can use the mouse scroll bar to act as the zoom in and zoom out buttons on the zoom slider bar. The faster you scroll the faster the map will zoom in or out. Additionally, the previous zoom and next zoom tools will remember the last level zoomed into. The section "Pan Map Tool" on page 31 describes this functionality.

*Why didn't the **Draw Point** map tool return data in the "Result Set" section?*

The **Draw Point** map tool is used to select a single feature on the map. When using the **Draw Point** map tool do not initiate the action from a zoomed out view. It will look like you have selected a feature but upon zooming in the **Draw Point** map tool will be off the mark. See Figure 18 for an example of this.

To avoid this you can use the **Draw Polygon** map tool to capture multiple points. See Figure 20 for a screenshot of this functionality.

*Can I use the **Draw Line** map tool to return results on multiple map features?*

Yes. The **Draw Line** map tool can be used to intersect with existing features. A common way to use it is to intersect with multiple lines which will return results on all of the lines the **Draw Line** map tool touches. This functionality is illustrated in Figure 19.

*Can I use the **Draw Polygon** map tool to return results on multiple map features?*

Yes. This is the recommended method for returning results on different features (points and lines). As long as the polygon touches or encompasses the feature it will return data about it. However, using the **Draw Polygon** map tool from a zoomed out view may capture too many features to return a "Result Set" on. To avoid this zoom in closer on the map view.

*How do I use the **Show Feature** checkbox and the **Use Feature** button in the "Navigate To" section?*

The **Show Feature** checkbox and **Use Feature** button are part of the "Navigate To" functionality and are used to run queries in the "Navigate To" section. The **Show Feature** checkbox should not be confused with the **Show Feature** icon in the "Result Set" – they have difference purposes.

The "Navigate To" functionality is extended by highlighting the features that are found within the criteria entered for the area of interest.

- The "Show Feature" checkbox indicates whether or not the "Navigate To" criteria are highlighted. If the checkbox is checked the criteria will be highlighted in a yellow. Figure 23 shows an example of this.
- Clicking the **Go** button refreshes the map to display the criteria selected.

- After the map is redrawn select the "Navigate To" arrow to expand the criteria entered and select the features within or touching the criteria selected (appears when the "Show Feature" checkbox is checked as shown in Figure 23.
- Click on the **Use Feature** button to use the selected criteria identified in the **"Navigate To"** section (highlighted in yellow) in order to run a query against it. See Figure 23 for an example (no results will be returned until the features are selected with the **Use Feature** button).
    - Once the **Use Feature** button is selected the criteria will change from yellow to orange and a "Result Set" will be able to be generated from it by clicking on the **Run Query** button.

  Note: Clicking the **Use Feature** button turns the action into a **Draw Polygon** map tool and a default buffer is set.