

Reconnaissance Offshore Sand Search

Online Database Query Builder

Building a Custom Query

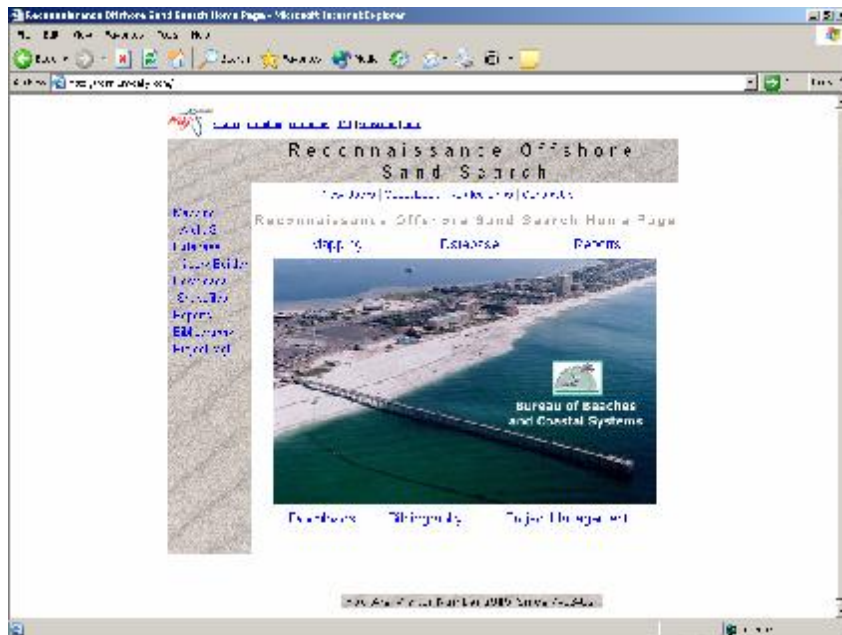
Introduction:

The query builder works by allowing you to create a "where" clause that is added to an SQL (Structured Query Language) selection statement. This selection statement tells the database to retrieve rows where the conditions you have set are true.

The query is made against one of two database views that join together data from several different database tables. Because of the structure of the database, you must specify whether the query should be run against the samples or core view. The sample view includes all data in the samples data, plus related data in the core table. The core view includes all data in the core table plus related data in the samples table. They appear to be very similar, but they are different representations of the data.

Creating a custom query

First you need to get to the Query Builder page.

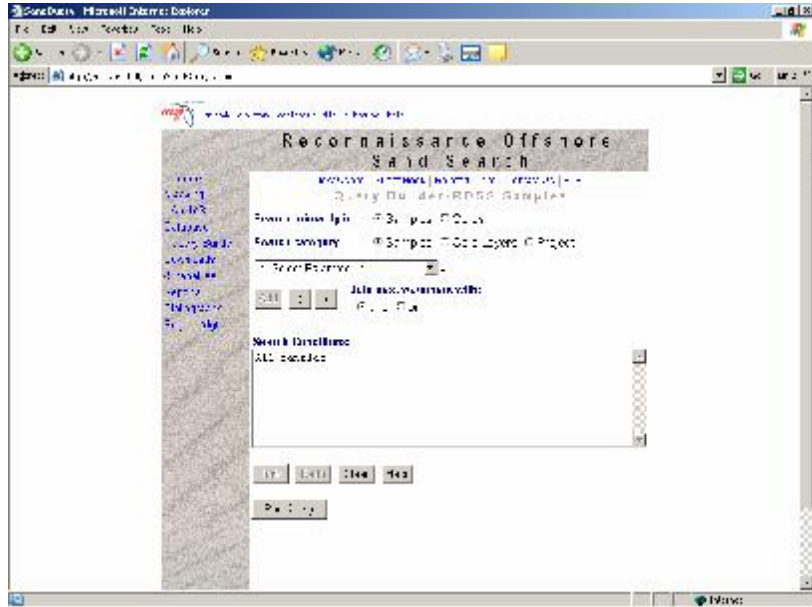


Click on the link titled 'Query Builder' on the ROSS Main page.

You should now see the Online Query Builder page. From this page you can select the query criteria you want to use to filter the data.

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The query parameters are categorized into three different groups. The Sample group, which provides parameters associated with the samples table. The Cores group, which provides parameters associated with the cores and core layers tables, and the Project group, which provides parameters associated with the project table.



Depending on which parameter you choose, the screen will change to allow you to enter an appropriate value.

If you choose a numeric or date parameter (such as Mean Grain Size, or Sample Date), the screen will change to show you a drop-down list of relational operators ("=", ">", "<", etc.) and a text box into which you can enter a number or date, as appropriate.

If you choose a text parameter, the screen will change to show you a different set of relational operators ("=", "<>", "like" and "not like"). The first two operators allow you to search for a specific text value, while the latter two operators allow you to search using a wildcard character ("*") to represent any text. The following examples demonstrate the difference between the relational operators:

For example, searching for a sample record that contains the word "island" in the project location field yields the following results based on the relational operator

- The “=” operator requires an EXACT match to return any results
- The “like” and “not like” require the use of the ‘wildcard character’ (“*”, an asterisk) placed in the appropriate location within the search criteria for example
 - Choose “like” then enter “*island*” this will return ANY Project location that has the word island anywhere in the location
 - Captiva Island

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- Sanibel and Captiva **Islands**
- Captiva **Island**, Lee County, Florida
- Choose “like” then enter “*island” this will return results where the word “island” is at the end of the project location.
 - Captiva **Island**
- Choose “like” then enter “island*” this will return results where the word “island” is at the beginning of the project location.
 - Currently there are no Project Locations that begin with the word “island”

There are several parameters (such as Layer Structure) you can use that provide you with a lookup list. If you choose one of these parameters, a drop-down list containing the acceptable values will appear.

There are other parameters that provide an even more customized query interface. These include Munsell color, named descriptive color, and core layer qualifiers. These screens are described in more detail below.

Search by range of dates or numbers

If you choose one of the numeric or date parameters, you will see the "between" relational operator appear in the drop-down list. This allows you to enter two values in the textbox and return records whose values fall between the two numbers (or dates). For example, to search for samples with a mean grain size greater or equal to -1 and less than or equal to 2, you would select the "between" relational operator and enter "-1 and 2" in the textbox.

Acceptable date formats

The query builder allows you to enter a date in a variety of formats, including:

Format	Example
mm/dd/yyyy	12/31/2003
mm dd yyyy	12 31 2003
mm-dd-yyyy	12-31-2003
mm.dd.yyyy	12/31/2003
mm/dd/yyyy	12/31/2003
dd month yyyy	3 May 2004
month dd yyyy	May 3 2004
dd mon yyyy	3 Jan 2006
mon dd yyyy	Jan 3 2006

If you leave the year off, it will assume you mean the current year. Enter the date in whatever format you are most comfortable with, and the query builder will reformat the date into a standard MM/DD/YYYY format for you.

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Searching by Munsell color

If you choose the Munsell color parameter, the screen will change to show a drop-down list and two textboxes. To enter a Munsell color, select the hue from the drop-down list, and enter numbers in the value and chroma text boxes.

Munsell Color =

Hue	Value	Chroma
2.5YR	4 and 6	5

Dry Wet Washed Unknown

You can also search by a range of Munsell values or chromas. To do this, enter the lower and upper limits of the range you wish to search in the value or chroma textboxes. For example, to search for Munsell colors with a range of values between 2 and 5, enter "2 and 5" in the value textbox.

Searching by named color

If you choose Named Color as the parameter, the screen will display three drop-down lists. These allow you to enter a descriptive color name.

Named Color =

Named Color: DARK GREENISH GRAY

Undo and Redo

If you make a mistake and enter a query condition accidentally, you can "undo" the mistake simply by clicking the Undo button. You can undo as many changes as you like. If you undo one too many changes, hit the Redo button to reapply the last change.

Joining Query Conditions

The conditions you enter must be joined together by a combinatorial operator, either "and" or "or". "And" signifies that all conditions must be true to return a record, while "or" signifies that only one must be true. You can group conditions together to clarify how the "or" operator is to be applied. For example, to search for samples with a mean grain size of -1 phi with a color of 2.5yr 5/6 or 5yr 5/6, you should group the color conditions together within parentheses. To do this:

1. Enter the grain size condition
2. Change the join operator to "and"
3. Click the "(" button
4. Enter the first color
5. Change the join operator to "or"
6. Enter the second color
7. Click the ")"

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Example

Now that you know how to provide the information to the Query Builder, its time to put that knowledge to the test and create a query. Let's say that you want to run a query for All Samples in the 1994 Panama City Beach Renourishment Program that contain at least 80% Fine Sand (as determined by the Unified Soils Classification) that are found within 2 feet of the bottom*. You would open the Query Builder page and select the following:

Part 1: Add project condition

1. Select the Project search category.
2. Select the Project Name parameter.
3. Select 1994 Panama City Beach Renourishment Program from the drop-down list that appears after you select the project name.
4. Click the Add button.

Search primarily in Samples Cores
Search category Samples Core Layers Project

Project Name = 1994 Panama City Beach Renourishment Program

 Join next statement with:
 and or

You will see the first query condition appear in the Search Conditions textbox.

Search Conditions:

```
Search samples where Project Name = 1994 Panama City  
Beach Renourishment Program
```

Part 2: Add the USCS Find Sand condition

1. Select the Samples search category
2. Select the % USCS Fine Sand parameter
3. Change the relational operator to ">="
4. Enter 80 in the text box.
5. Click the Add button.

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Search category Samples Core Layers Project

% USCS Fine Sand >= 80

Add () **Join next statement with:**
 and or

Search Conditions:

```
Search samples where Project Name = 1994 Panama City  
Beach Renourishment Program and % USCS Fine Sand >= 80
```

Part 3: Add the depth condition

1. Select the Top of Sample Interval parameter
2. Enter 2 in the text box.
3. Click the Add button.

Top of Sample Interval <= 2

Add () **Join next statement with:**
 and or

Search Conditions:

```
Search samples where Project Name = 1994 Panama City  
Beach Renourishment Program and % USCS Fine Sand >= 80  
and Top of Sample Interval <= 2
```

Now that you have entered all of the search conditions, click the Run Query button.

Query Results

The next screen that appears shows you a table of the results of your query.

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Sand Sample Query Results

Project Name = 1994 Panama City Beach Renourishment Program and %
USCS Fine Sand >= 80 and Top of Sample Interval <= 2

Project Name	Project Date	Project Location	Agency Managing	Agency I
1994 Panama City B	01/01/1994	Panama City Florida	Army Corp of Engine	Army
1994 Panama City B	01/01/1994	Panama City Florida	Army Corp of Engine	Army
1994 Panama City B	01/01/1994	Panama City Florida	Army Corp of Engine	Army
1994 Panama City B	01/01/1994	Panama City Florida	Army Corp of Engine	Army
1994 Panama City B	01/01/1994	Panama City Florida	Army Corp of Engine	Army
1994 Panama City B	01/01/1994	Panama City Florida	Army Corp of Engine	Army
1994 Panama City B	01/01/1994	Panama City Florida	Army Corp of Engine	Army
1994 Panama City B	01/01/1994	Panama City Florida	Army Corp of Engine	Army
1994 Panama City B	01/01/1994	Panama City Florida	Army Corp of Engine	Army
1994 Panama City B	01/01/1994	Panama City Florida	Army Corp of Engine	Army
1994 Panama City B	01/01/1994	Panama City Florida	Army Corp of Engine	Army
1994 Panama City B	01/01/1994	Panama City Florida	Army Corp of Engine	Army
1994 Panama City B	01/01/1994	Panama City Florida	Army Corp of Engine	Army
1994 Panama City B	01/01/1994	Panama City Florida	Army Corp of Engine	Army
1994 Panama City B	01/01/1994	Panama City Florida	Army Corp of Engine	Army
1994 Panama City B	01/01/1994	Panama City Florida	Army Corp of Engine	Army
1994 Panama City B	01/01/1994	Panama City Florida	Army Corp of Engine	Army
1994 Panama City B	01/01/1994	Panama City Florida	Army Corp of Engine	Army
64/64				

[Download](#) [View Map](#) [Query Builder](#)

Sorting Query Results

You can sort the results that appear in this table by clicking on one of the column headings. Click the column heading again to reverse the sort order.

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ate	Range Monument	Collection Method	Core ID	Core Identifier	Core
		Vibracore	170	S-2-94	
		Vibracore	173	S-37-94	
		Vibracore	174	S-39-94	
		Vibracore	174	S-39-94	
		Vibracore	176	S-52-94	
		Vibracore	177	S-7-94	
		Vibracore	179	V-10-94	
		Vibracore	179	V-10-94	
		Vibracore	181	V-13-94	
		Vibracore	181	V-13-94	
		Vibracore	181	V-13-94	
		Vibracore	182	V-14-94	
		Vibracore	183	V-16-94	
		Vibracore	183	V-16-94	
		Vibracore	183	V-16-94	
		Vibracore	184	V-17-94	
		Vibracore	184	V-17-94	

Filtering Query Results

You can further narrow the results of your search by either clicking the Query Builder button to go back to the query builder, or you can filter the results on the fly using the filter bar.

ent	Collection Method	Core ID	Core Identifier	Core Top Elevation	Co
	Vibracore	183	V-16-94	-39.90	11
	Vibracore	183	V-16-94	-39.90	11
	Vibracore	183	V-16-94	-39.90	11

		V-16	

To query using the filter bar, simply start typing a pattern in the column of data you want to filter. In this example, only samples from cores with a core identifier like "V-16" are

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shown. It's important to note that the filter bar does not query the database, so you cannot use it to add results to your output.

Downloading Query Results

To export the filtered data from the table into a tab-delimited format suitable for import into a spreadsheet program, click the Download button. This will open up a new browser window.

Most browsers, however, will show the data as text in the window. Simply select all of the text and copy and paste it into a blank spreadsheet page. (Hit Ctrl-A, Ctrl-C, switch to your spreadsheet program and hit Ctrl-V).



On some browsers you will be prompted to save the data, or it may open up directly in your spreadsheet program. You may see a window that looks like the one to the left. Select 'Save this file to disk' and click 'OK'

You should see a window that looks like the one to the right. Select the location where you wish to save the file. Rename the file if you wish. Now click 'Save' and the download will begin.

