

## DIVER Explorer – Using Spatial Filters to Limit a Query

This document provides an introduction to limiting queries using a shape or polygon in DIVER Explorer.

Limiting by shape allows users to take the results from a completed **Guided Query** or **Custom Query**, and apply an additional filter in order to return only results that fall within that area. A user can alternatively draw a shape (by clicking the “Query by Shape” button on the map) and then run a query.

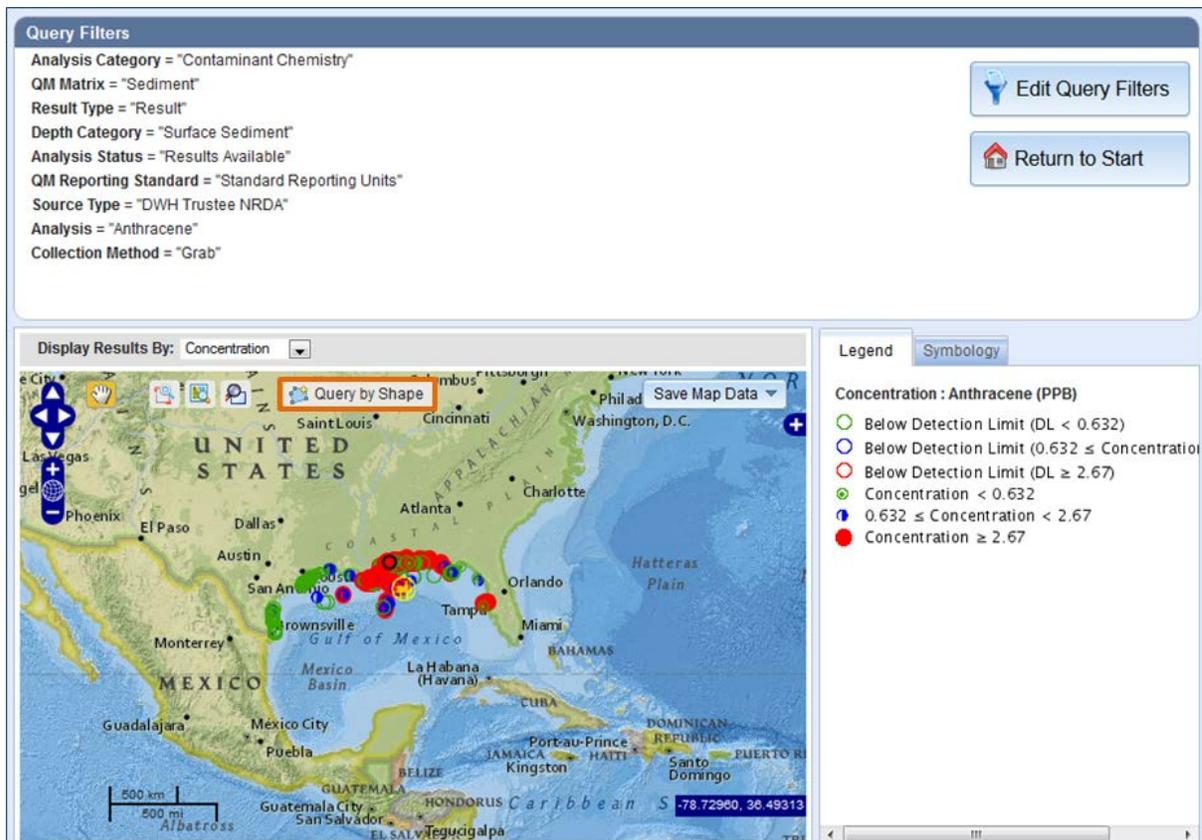
### Scenario

An initial query was run accessing all Anthracene results from sediment grab samples collected across the incident (see the Guided Queries reference document for detailed instructions). The user would like to re-run this query to limit to results from around the Pass A Loutre State Wildlife Management Area, located on a peninsula southeast of New Orleans.

### Procedure

1. Access the **Query Shapes** menu.

To begin the process of limiting your query by area, click the **Query by Shape** button on the map.



2. Add a **shape filter** and re-run the query.

DIVER Explorer allows users to draw a shape around an area and then re-run the query to return only the data that lies within the geographic boundary. Note that there are also pre-defined shapes based on boundaries of state and federal waters that may be selected from the **Load and Manage Shapes** tab. In this example, a custom shape is desired, because the area of interest is more specific than the pre-defined shapes.

To draw a custom shape, first use the mouse or navigation buttons in the top left corner of the screen to zoom to the Pass A Loutre State Wildlife Management Area, located at the tip of the peninsula between New Orleans and the MC 252 wellhead .

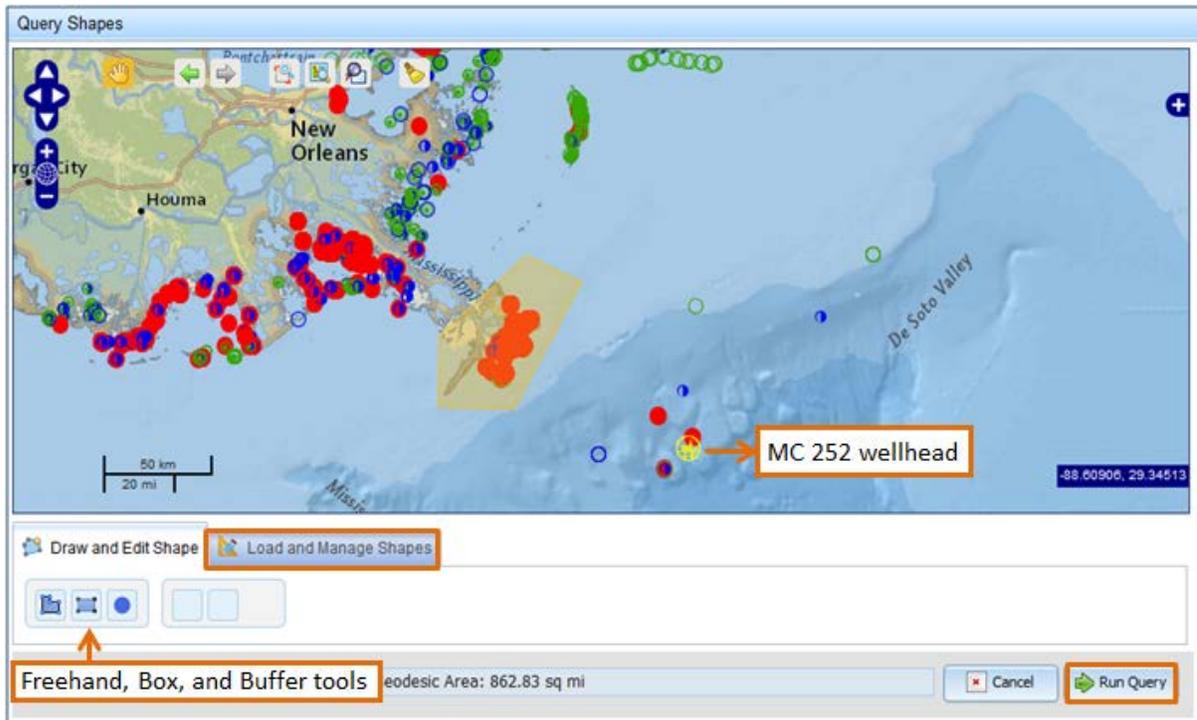
There are three drawing tools: free-hand, box, and buffer.

With the free-hand tool selected, click once on the map to generate the first vertex of the shape. Then move the pointer and click another location to create the next vertex, generating the first side of the shape. Keep creating sides until the desired area is enclosed, and then double-click on the final vertex to complete the shape.

Note that shapes created using all three drawing tools can be edited by either clicking inside of the shape, or clicking on the edit tool .

If necessary, any user generated shape can be removed and re-drawn by clicking the trash can icon  or by drawing another shape.

Click **Run Query** to re-run the original query, returning records contained only within the shape.



3. View the results of the refined search.

Once the query has re-run, a new notification appears indicating the revised number of records returned and there is an updated Query Summary below the map.

For more information on querying, interacting with results, and downloading data refer to the additional reference materials.

The screenshot displays the DIVER Explorer interface. At the top, the 'Query Filters' section lists: Analysis Category - "Contaminant Chemistry", QM Matrix - "Sediment", Result Type - "Result", Depth Category - "Surface Sediment", Analysis Status - "Results Available", QM Reporting Standard - "Standard Reporting Units", Source Type - "DWH Trustee NRDA", and Analysis - "Anthracene". A yellow notification bar states "Query successful : 295 records returned." Below this, the 'Display Results By' dropdown is set to 'Concentration'. The map shows a coastal area with a yellow polygon highlighting a specific region. A legend on the right indicates concentration ranges for Anthracene (PPB): Below Detection Limit (DL < 6.53), Below Detection Limit (DL ≥ 12.2), Concentration < 6.53, 6.53 ≤ Concentration < 12.2, and Concentration ≥ 12.2. At the bottom, a table shows the first 10 rows of the 295 results.

#	Workgroup	Workplan Topic Area	Collection Workplan	Collection Study Name	QM Study ID	QM
1	Chemistry	Contaminants/Oil	Forensic Oil	Chem-Forensic Oil Sampling 04 2010	Fd	SO
2	Chemistry	Contaminants/Oil	Forensic Oil	Chem-Forensic Oil Sampling 04 2010	Fd	SO
3	Fish	Contaminants/Oil	Submerged Oil Characterization Plan 2010	Fish-Preassessment-Submerged Oil Cha-2010	Gf	SO
4	Fish	Contaminants/Oil	Submerged Oil Characterization Plan 2010	Fish-Preassessment-Submerged Oil Cha-2010	Gf	SO
5	Fish	Contaminants/Oil	Submerged Oil Characterization Plan 2010	Fish-Preassessment-Submerged Oil Cha-2010	Gf	SO
6	Fish	Contaminants/Oil	Submerged Oil Characterization Plan 2010	Fish-Preassessment-Submerged Oil Cha-2010	Gf	SO
7	Fish	Contaminants/Oil	Submerged Oil Characterization Plan 2010	Fish-Preassessment-Submerged Oil Cha-2010	Gf	SO
8	Fish	Contaminants/Oil	Submerged Oil Characterization Plan 2010	Fish-Preassessment-Submerged Oil Cha-2010	Gf	SO
9	Fish	Contaminants/Oil	Submerged Oil Characterization Plan 2010	Fish-Preassessment-Submerged Oil Cha-2010	Gf	SO
10	Fish	Contaminants/Oil	Submerged Oil Characterization Plan 2010	Fish-Preassessment-Submerged Oil Cha-2010	Gf	SO