




# Student Exercise 1.3

## Day 1 – Browsing Data in AQS

Goal: To look at the various types of data available in AQS.

“Browse” is for those times when you don’t want to have to run a report. Perhaps you are just looking at a few sample measurements, or you want to see some reference information in AQS. To browse, you start on a blank screen. If the screen is not blank, use the icon for “Enter Query” . Add filters (i.e., State Code, County Code, Site Id, Parameter Code, Date Range) to limit the results. Then “Execute Query” using the icon . When the “Cancel Query” icon is active  use it to cancel a query or leave “query” mode. If you are in your Screening Group, then “Browse” is a prelude to actually querying in data, and “Cancel Query” puts you in a update mode.

### **Part 1**

**Step 1.** Start AQS & Logon using your training user id and password. Select “Read-only” access.

**Step 2.** From the menus select Retrieval → Browse Annual Summary.

**Step 3.** You should see an empty form .

**Step 4.** Enter the following Query selections:

- State = North Carolina (State “37”)
- Parameter = Ozone (“44201”)
- Year = 2004

**Step 5.** Click on the “Execute Query” icon.

Questions:

1. How many records are returned by the query outlined in “Part 1”?
2. How many records are returned for NC county 063 with a POC 1 ozone monitor? (Hint: Rerun the query using 37-063-0013-44201-1 and year 2004)
3. What is the 4<sup>th</sup> Highest 8-hour Running Average (Duration = W) Value for site 37-063-0013-44201-1 for 2004 with an Observation Percent = 98?
4. In question 2, two Annual Summary records appear for Duration code “W” (8-hour running average.) Why?

### **Part 2**

**Step 1.** Select Maintenance → Site from the menu.

**Step 2.** You should see an empty form.

**Step 3.** Enter the following Query selections:

- State = Georgia (State “13”)
- County = DeKalb (“089”)

**Step 4.** Click on the “Execute Query” icon.

Questions:

1. What is the total number of Sites registered in DeKalb County?
2. What is meant by the “Vertical Measure” field?
3. What is the Supporting Agency code associated with Site 13-089-0003?

## **Part 3**

Step 1. Select Maintenance → Sample Value → Raw Data

Step 2. You should see an empty form

Step 3. Enter the following Query selections:

- State = Pennsylvania (State “42”)
- County = Allegheny (County “003”)
- Parameter = Ozone (“44201”)
- Begin Date = 20040101
- End Date = 20041231

Step 4. “Execute Query”

Questions:

1. How many blocks are on the Raw Data form?
2. Can you tell how the data is sorted? Describe:
3. What method code is associated with the first record that you can find?
4. **\*\*BONUS\*\***: What does this method code mean / where would you go to find information out about this method? (Hint: See Part 4.)

## **Part 4**

Step 1. Select Retrieval → Browse Sample Methodologies

Step 2. You should see an empty form. Use the scroll bar to move screen left.

Step 3. Enter the following Query selections:

- Method code = Method code you see in Step 3, Question 3

Step 4. “Execute Query”

Three ways to see sampling methodologies (or “method codes”) including the federal MDL values:

1. AQS → Retrievals → “Browse Sample Methodologies”
2. AQS website → “AQS Codes” (Excel files)  
<http://www.epa.gov/ttn/airs/airsaqs/manuals/codedescs.htm> - follow the “All Pollutants” link
3. AQS Discoverer → “Method info per parameter” query  
(method, federal MDL, absolute min & absolute max values accepted, summary scale, and standard units)

Method code - combination of how a sample was collected + how a sample was analyzed.

Parameter/pollutant + a method code is a unique combination.

When you submit sample measurements to AQS, you must specify how that data was collected and how that data was analyzed, so each sample measurement must have a method code. You must find the method code that matches your field setup.

For criteria pollutants, all federal reference methods are documented on the EPA AMTIC website and available in AQS. See the “List of Designated Reference and Equivalent Methods.”

If you do not see what you need, send a request to [AQSTeam@epa.gov](mailto:AQSTeam@epa.gov). We either haven’t created it yet, or our monitoring colleagues don’t believe it is a valid combination. Either way, doesn’t hurt to ask.