# Enviro Data Quick Start Guide Enviro Enviro GETTING Data® GETTING Started Started

problems anywhere along the way, please contact Geotech by email at <a href="mailto:support@geotech.com">support@geotech.com</a> or by phone at 303-740-1999.

# Installing Enviro Data

Install the Enviro Data program by running the **EnviroData8Setup.exe** that you obtained from Geotech. If you do not have a software key, clicking OK will provide you with a 7day trial. For a more complete evaluation you can contact Geotech for a code to extend your evaluation from 7 to 30 days for no charge. Once downloaded, you may need Administrator privileges to run the Setup program.

Geotech recommends using Microsoft (Office) 365, either 32 or 64-bit running in Windows 10 or Windows 11. However, Enviro Data will run on older unsupported versions of either.



Once downloaded, you may need Administrator privileges to run the Setup program.

Also, when you start to install a new program in Windows, Microsoft Defender may check to see if the program is a recognized app. Since Enviro Data and some other programs from smaller software publishers like Geotech are not frequently seen, it may pop up a warning that reads "Windows has protected your PC." Since you know the source of Enviro Data, simply click on the text (below this warning) that reads "More info." This will pop up a second window with two buttons. When you click on the <u>Run anyway</u> button, the Enviro Data install program will run. Finally, if you already have Enviro Data on your computer, and if asked, make sure you choose <u>Repair Install</u> and Enviro Data will complete the installation. The installation will place shortcut icons on your desktop for both the **EDITOR** and **VIEWER**. If the icons are generic, press F5 on you keyboard to refresh them.

Once Enviro Data completes its install, GeoObjects will also install. On some computers the GeoObjects install progress window remains on the screen after completion. If this happens, after a minute or so simply click on Cancel, then Exit Setup.

There are some additional issues that will need to be addressed after the installation such as setting <u>*Trusted*</u> <u>*Folders*</u> and <u>*Read/Write access*</u>. You can find this information at <u>https://geotech.com/resources/faq/getting-started/enviro-data-installation</u>.

During the install, an example database called **EnvDData8.mdb** is copied into the program folder. Enviro Data connects to this database by default when it is first opened, if you have accepted the default program paths during installation. If you have installed the program and sample database in a different folder, you will need to locate the settings file and the database file. Contact Geotech if you have any trouble with this.

For help getting started see the <u>Learn</u> section on both the Editor and Viewer main screens. Learning About Enviro Data

Geotech Computer Systems offers and strongly recommends training for Enviro Data Users and Data Administrators. Time spent on this training will be more than repaid by your time saved, avoiding problems, and knowing how to use the features of the software. If you are evaluating the software, Geotech would be glad to provide a complimentary web-based presentation to familiarize you with the software before you try to use it. Contact Geotech for information on a web presentation or training.

It is recommended that you familiarize yourself with the major features of Enviro Data and how the software works using steps described in the following sections.

### Using Microsoft Access

Access is made up of tables, queries, forms, reports, macros and modules. The tables contain the actual records while the queries pull out the data in the format you use for the reports and other output. While Enviro Data uses all of these, you interface with the forms and output data to reports. It is helpful to know how some of these things work in Access. (Note that forms are sometimes also called "screens" but that term generally will not be used here.)

Like other programs in the Microsoft Office Suite, Access had a Menu along the top and a Ribbon that in Enviro Data is hidden until you click on one of the Menu items and this it opens displaying icons representing specific functions relating to the Menu item click on. There is also a hidden Navigation Pane where you can access the tables, queries, etc. The Navigation Pane is kept hidden along the left side of Access Window and generally should only be used by advanced users and at the direction of Geotech Support.

The various forms in Enviro Data can be used to access other parts of the program, display data and controls that allow various choices. For those not familiar with Microsoft Access the forms that have multiple parts or pages generally have controls to help you navigate these. The first are Tabs that can be found near the top of many forms as shown below.

| Display O    | ptions   | Graphing Options | Report Graph Options | Custom Queries |
|--------------|----------|------------------|----------------------|----------------|
| Display Set: | Standard |                  | New Display          | Set            |

Figure 1 - Tabs on the Display/Graphing Options form

On the forms, there may also be various radio buttons, check boxes, drop down controls and other buttons. Checkboxes and radio buttons are elements for making selections. Checkboxes allow the user to choose items from a fixed number of alternatives, while radio buttons allow the user to choose exactly one item from a list of several predefined alternatives. Drop downs present lists of items where only one can be chosen. Buttons generally initiate an action like taking you to a new form or, make a change on the current form. In many cases, like on the Display/Graphing Options form, once you make your selections, they remain until you change them. On other forms like the Select Data form, you need to make new selections each time the form is opened.

Another type of control is the Access Record selector found at the bottom-left of forms with multiple pages and shown below. You can use this control to advance through records on a form or pages in a report. The options are First record, Back one record, the current and total pages, Next, Last, and add a New record. You can see the page count when the form first opens, the current page or, see the page total by clicking on Last button.

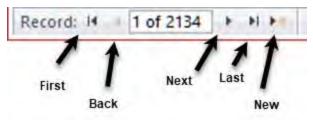


Figure 2 - Access Record Selector

# Viewing the Tour

Before starting to work with your own data, it is strongly recommended that you take a time to run through the software Tour that appears on the screen when you open the program. Example import files are provided to highlight some of the common problems that you are likely to encounter when you import real data. If you close the <u>**TOUR**</u> form with the <u>Suspend Tour</u> button it will come back the next time you start the program. If you close it with the <u>Tour Completed</u> button, it will not reappear. There are separate Tours for both the Editor and Viewer. Each Tour takes about 90 minutes to complete.

# Frequently Asked Questions

The Geotech website offers a long list of answers to the most Frequently Asked Questions that come up in our support tickets. You can find these by clicking on the button on the main screen of both the EDITOR and VIEWER or by going to <u>https://geotech.com/resources/faq</u>.

### Create a New Database

After you have gone through the <u>TOUR</u> and the Error! Reference source not found. in this document and in the User Documentation, the next step is creating your own new Access database in the Enviro Data format.

If you wish to start with our example database, all the lookup tables except for **Sites**, **Station**, **Samples** and **Analyses** will be populated. However, your project manager is still responsible for reviewing and determining that the values in each lookup table are following your project's and regulatory agency's requirements. All lookups can be reviewed using the <u>Lookups Report</u> found under <u>Reporting</u> in <u>MAINTAIN DATABASE</u> form in the Editor. The <u>MANAGE LOOKUPS</u> form was provided so that the project manager could set up each project to meet the needs of that project. The project manager is also responsible for making sure all the lookups used in new data being imported are present in the lookup tables.

For the example below, we will start with the example database, EnvDData8.mdb.

1. Open the Enviro Data EDITOR program using the icon on your desktop. Check the banner on the lower edge of the EDITOR MENU and verify that the EDITOR program is attached to the example

database (EnvDData8.mdb). If the example database is not attached, use the Attach Database button to locate and attach it. The example database is in the folder C:\Enviro\Edata8\.

| Envi                  | o Data 8            | B Edito            | r                  |
|-----------------------|---------------------|--------------------|--------------------|
| Learn                 | Setup               | Import / Edit      | Review             |
| Getting Started       | Create New Database | Sample Planning    | Remove Dup Station |
| Documentation         | Attach Dalabase     | Sites              | Remove Dup Param   |
| Lab File Format       | Manage Lookups      | Stations           | Validate Data      |
| Email for Help        | Regulatory Limits   | Samplas            | Delivery Groups    |
| Freq. Asked Questions | Maintain Database   | Analyses           | Disposal Data      |
| On-Screen Tour        | Database List       | Import Data        |                    |
|                       | Projects            | Manual Data Entry  |                    |
|                       | Lab MSAs            | Manage Bulk Data   | -                  |
|                       |                     | Manage Permit Data | View Data          |

Figure 3 - Enviro Data 8 EDITOR Menu

- Check the banner on the lower edge of the <u>EDITOR MENU</u> and verify that the EDITOR program is attached to the example database (EnvDData8.mdb). The example database is in the folder C:\Enviro\Edata8\.
- 3. Click <u>Create New Database</u> at the top of the <u>Setup</u> group of the <u>EDITOR MENU</u>. Navigate to the folder where you want to save your database and enter a file name in the *File name* dropdown at the bottom of the <u>OPEN FILE DIALOG</u>. It must have an extension of .mdb or leave the extension blank. Click <u>Save</u>. The recommended folder for databases in a single-user installation is C:\Enviro\EData8\Databases\.

| File Save  |   |                   |          | ×           |
|--|---|-------------------|----------|-------------|
| <del>&lt;</del>  | Tr 📒 « Enviro » Edata8 » Databases      | ✓ Ů Search Databe | ises ,P  |             |
| Organize 🖛   | New folder                              |                   | (iii • ( |             |
| <ul> <li>&gt; Docu</li> <li>Envir</li> <li>Eda</li> <li>Dr.</li> <li>Eda</li> <li>Dr.</li> <li>Eda</li> <li>Dr.</li> <li>Dr.</li> <li>Eda</li> <li>Dr.</li> <li>Dr.&lt;</li></ul> | tað<br>tabaser<br>ports<br>Box<br>utBox | Date modified Ty  | pe 5     | àire<br>>   |
|  | name: MyNewDatabase                     |                   |          | 2           |
| Save a   | type: All Files (*,*)                   |                   |          | ~           |
| A Hide Folde   | 5                                       | Tools - Save      | Cancel   | 1           |
|  | Figure 4 - <b>FIL</b>                   | E SAVE dialog     |          |             |
| ion 8D   | Pa                                      | ge 4              |          | August 2023 |

Because of a limitation in Microsoft Access, you can only create a database in a folder that has no spaces in the path, and the filename cannot have spaces either. Once the database has been created, the file can be named any valid filename, and placed and used anywhere you wish, so you cannot CREATE it with a name like *My Database*, or in a folder like *My Documents*.

When creating a new database from our example database, *EnvDData8.mdb*, answer *N* when asked if you want to export **Regulatory Limits** (because these limits are only sample limits). If you are creating a new database from a production database with valid limits, then answer *Yes* if you wish to use the same limits. Next, respond with Yes when asked if you want to attach to the new database.

|                 | Microsoft Access  |
|-----------------|---|
|                 | C:\Databases\MyNewDatabase_2012.mdb<br>attached successfully. |
| Editor Database | C:\Enviro\Edata8\Databases\MyNewDatabase.mdb                  |

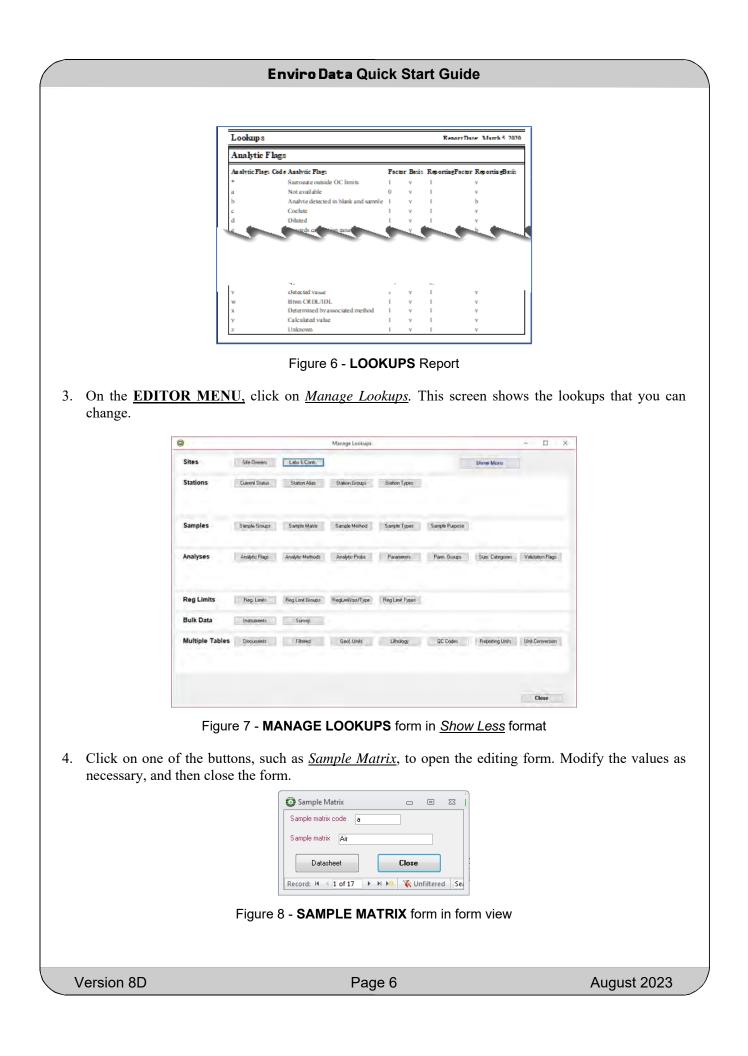
Figure 5 - Database attached dialog and window showing the attached database.

- 4. This new database file now contains blank tables for **Sites**, **Station**, **Samples** and **Analyses**, for your data imports and a full set of the lookup tables.
- 5. Success!

# Modify the Lookups

You might want to modify the contents of the lookup tables, also called valid value lists, to suit your project. You can view the existing values and modify them as necessary. When you create a new database, the lookup tables are brought into the new database from the database you were attached to when you created the new one. For your first database, the lookup tables will be from the sample database provided with the software (**EnvDData8.mdb**). As you create more databases for different types of projects, these lookup tables can evolve. For each new database, you should attach to an existing database that will have the most similar lookup table content and use that to create the new one.

- 1. Click <u>Maintain Database</u> in the <u>Setup</u> section of the <u>EDITOR MENU</u>.
- 2. Click on *Lookups Rep.* This opens a report of all the lookup tables in your database. You can print it if you wish but be aware it is very long, over 100 pages. If you do print it, it is recommended you use the printer driver *Microsoft Print to PDF*. Then close the report, and the **MAINTAIN DATABASE** form.



| 0            | Sample Matrix                           | - 0 2         | 3 |  |  |  |  |
|--------------|---|---------------|---|--|--|--|--|
| $\mathbb{Z}$ | Sample matrix code 🐱                    | Sample matrix |   |  |  |  |  |
|              | a                                       | Air           |   |  |  |  |  |
|              | b                                       | Surface Water |   |  |  |  |  |
|              | d                                       | DNAPL         |   |  |  |  |  |
|              | g                                       | Gas           |   |  |  |  |  |
|              | 1                                       | Leachate      |   |  |  |  |  |
|              | m                                       | Sediment      |   |  |  |  |  |
| Re           | Record: I4 4 1 of 17 + H + K Unfiltered |               |   |  |  |  |  |

Figure 9 - SAMPLE MATRIX form in datasheet view

Note: You can switch to datasheet view to see multiple records, and then click on the gray box to the left of a record to go back to form view for that record.

5. Close the MANAGE LOOKUPS form.

# Set Up a Site

The data hierarchy in Enviro Data has four major tables, **Sites** (projects or facilities), **Stations** (locations of samples or observations, such as soil borings or monitoring wells), **Samples**, and **Analyses**. Enviro Data uses a database feature called Referential Integrity to protect your data, and that means that the hierarchy is strictly enforced. To add Stations, Samples, and Analyses, you will need to have at least one Site. Here's how to do that.

On the EDITOR MENU, under Import/Edit click on Sites.

Enter a *Site Name* and *State* at the top of the <u>SITES</u> form. Required fields are in red. All other fields are optional. Click <u>Done</u> on the upper right of the screen when finished.

| Site name My New Si | te City State NY           |       |
|---------------------|----------------------------|-------|
| Site Data           | Link Labs & Contractors    |       |
| County              | Country                    |       |
| Site Type           | Regulatory ID Program Code |       |
| Site Owner          |                            |       |
| Description of site |                            |       |
| Address 1           | Address 2 Zip Code:        |       |
| Contact Name        | Contact eMail:             | <br>  |
| Contact Phone       | Alt. Phone                 |       |
| Contact Fax         |                            |       |
| Min. X-coord        | Max. X-coord Map Scales    |       |
| Min. Y-coord        | Max. Y-coord Initial       |       |
| Min. Z-coord        | Max. Z-coord Detail        |       |
| Base Map            | Select File                |       |
| Base Image          | Select File                |       |
| Undete Constituete  | se Coordinate system:      |       |
| Update Coordinate   |                            |       |
|                     | Datasheet                  | Close |
|                     | Datasheet                  | close |

Figure 10 - SITES form

# **Automated Import**

Enviro Data does not have an automated import routine that import for Sites since each project database generally only contains one or two sites. However, there is an automated import for both stations and samples/result data that is received in one of the Data Transfer Standard (DTS) formats, or other supported or user-defined formats. Data received in these formats can be imported into the database through the **IMPORT WIZARD** form. This feature checks the import file for correct formatting and consistency with site, station, and lookup table information. The program informs the person importing the data if problems have been found, and presents options to fix data errors interactively, edit the import table and resume the import, or end the process if additional research on the data problems is required.

Once the data has been checked by the automated routines, you can choose to place the data in the main tables, or optionally in a validation table, where additional data review and validation can be performed before the data is imported into the database.

The following sections will cover importing Stations, Samples and Results.

### **Importing Stations**

The next data element to enter is Stations. You can type them in, as you did with Sites, using the <u>Sites</u> button in the <u>Import/Edit</u> section, but often it's easier to import them, especially if you already have them in digital form.

Using **ImportStation8.xls** as a template, create an Excel sheet with your station information. **ImportStationExample8.xls** is an example of a completed station's import file. These files are in the **Enviro\Edata8** folder generally on the C:\ drive. You can also create your own Stations import format, extract Stations from your lab files or, add them during a data import.

| A           | В             | С         | D       | E           | F           | G               | Н              |       | J         | K          | L               | М                |
|-------------|---------------|-----------|---------|-------------|-------------|-----------------|----------------|-------|-----------|------------|-----------------|------------------|
| StationName | SiteName      | ShortName | OldName | Location_CX | Location_CY | GroundElevation | DatumElevation | Depth | ScreenTop | ScreenBase | StationTypeCode | StationTypeCode2 |
| MW-100      | Refining Inc. | 100       |         |             |             |                 |                |       |           |            | mw              | z                |
| MW-101      | Refining Inc. | 101       |         |             |             |                 |                |       |           |            | mw              | Z                |
| MW-102      | Refining Inc. | 102       |         |             |             |                 |                |       |           |            | mw              | z                |

### Figure 11 – ImportStationExample8.xls file

Notes:

- All columns with red captions must be populated.
- You may use "z" as a default code for all lookups (StationTypeCode, StationTypeCode2, etc.) where you do not have the data.
- You must enter a Station *ShortName* or use the *SiteName* that you entered above.
- 1. The <u>MANAGE LOOKUPS</u> form described above has buttons that display the various lookup codes. The lookup codes with red labels in the import file are used by the **Stations** table. Be sure any of the values in the required fields have an entry in the appropriate lookup table.
- 2. When your stations import Excel sheet is completed, click on *Import Data* in the <u>Import/Edit</u> section on the **EDITOR MENU**.
- 3. Select Stations Excel 8 for *File Type and Format*.

|                      |   |   | for Import |        |
|----------------------|---|---|------------|--------|
|                      | ou through selecting, checking, cleaning up, ar<br>acessary. To begin, choose a file type and for |   |            |        |
| File Type and Format | Stations Excel 8  | v |            |        |
| ile Path and Name    | C:\Enviro\Edata8\importStation8.xis   |   |            | Select |
|                      |   |   |            |        |
| Delivery Group Proje | ect Validation Data   |   |            |        |

Figure 12 - Import Wizard - Select File and Format for Import form

- 4. Click <u>Select</u> at the right of the *File Path and Name* text box to navigate to the station import file you made and click <u>Open</u>.
- 5. Click *Finish*.

You should get a popup stating how many stations were imported. Click OK to close this. Import Results (Samples and Analyses)

### **Importing Samples and Analyses**

The last two data levels in Enviro Data are Samples and Analyses, and they generally are imported together.

As with the stations, Enviro Data contains an automated import routine that imports sample and result data using DTS (Data Transfer Standard) files or other formats. Analytical laboratories performing analyses can be provided with instructions and copies of the DTS. They are encouraged to deliver data in this format and this document can be downloaded using the <u>Lab File Format</u> button under the <u>Learn</u> section of both the Editor or Viewer. Using one of the DTS format files, such as **DTSFormat8.xls** as a template, create an Excel sheet with your samples and results information. **SuccessfulImport8.xls** is an example that you can consult when populating your own import files. These files are in the **Enviro\Edata8** folder generally found on the C: drive.

Notes: All lookup code columns with **red** captions must be populated.

You may use "z" as a default code for lookups (SampleTypeCode, etc.)

*SampleTop, SampleBottom, DuplicateSample* and *Superseded* can be left blank or defaulted to 0 (zero).

If you have digital data in a columnar format, but different from one of the Enviro Data DTS formats, you can use the <u>User-Defined Import</u> options in the Import Wizard. Contact Geotech if you need help with that.

| A             | В           | С              | D              | E            | F         | G            | H          |
|---------------|-------------|----------------|----------------|--------------|-----------|--------------|------------|
| SiteName      | StationName | SampleDate_D   | SampleTypeCode | SampleMatrix | SampleTop | SampleBottom | DepthUnits |
| Refining Inc. | MW-14       | 6/16/1999 0:00 | z              | Water        | 0         | 0            | ft         |
| Refining Inc. | MW-14       | 6/16/1999 0:00 | z              | Water        | 0         | 0            | ft         |
| Refining Inc. | MW-14       | 6/16/1999 0:00 | z              | Water        | 0         | 0            | ft         |
| Refining Inc. | MW-14       | 6/16/1999 0:00 | z              | Water        | 0         | 0            | ft         |
| Refining Inc. | MW-14       | 6/16/1999 0:00 | z              | Water        | 0         | 0            | ft         |
| Refining Inc. | MW-14       | 6/16/1999 0:00 | Z              | Water        | 0         | 0            | ft         |

Figure 13 - DTS format file

- After constructing your import file, click on <u>Import Data</u> in the <u>Import/Edit</u> section on the <u>EDITOR</u> <u>MENU</u>.
- 2. Select the *File Type and Format* that matches your import file format.
- 3. Click <u>Select</u> at the right of the *File Path and Name* text box. Navigate to the file you made and click <u>Open</u>.
- 4. Click *Finish*.
- The <u>HELP MATCH STATIONS</u> form may open if there's a discrepancy in spelling Station names. You can use the dropdown on the right to find the correct station, or click <u>Add Station</u> to add a new station, if needed. After matching stations, it will continue the import.

| This screen will help you match s with those in the database. | tation names in the import file | Add All Stations Add Alias   |  |  |
|---|---------------------------------|--|--|--|
| Site in Import File   | Station in Import File          | Change To  |  |  |
| Refining Inc.   | MW14                            | MW-14  |  |  |
|   |                                 | EFK 6.3<br>EFK 13.8<br>EFK 18.2<br>EFK 23.4<br>EFK 24.2<br>K720SLOUGH<br>KAP 0.2<br>KBP 0.1<br>MIK 0.2 | Refining Inc.<br>Refining Inc.<br>Refining Inc.<br>Refining Inc.<br>Refining Inc.<br>Refining Inc.<br>Refining Inc.<br>Refining Inc. |  |
| Record: H 1 of 1 H  | C. No Filter Search             | MW-14<br>MW-15<br>MW-16<br>PCK 1.6<br>WCK 2.3<br>WCK 2.9<br>WCK 3.9                                    | Refining Inc.<br>Refining Inc.<br>Refining Inc.<br>Refining Inc.<br>Refining Inc.<br>Refining Inc.<br>Refining Inc.                  |  |

### Figure 14 - Import Wizard - Match Station Names form

6. Another helper screen for matching or adding new parameters may appear.

| Enviro D                      | ata Quick Start             | Guide                 |  |
|-------------------------------|-----------------------------|-----------------------|--|
|                               |                             |                       |  |
|                               |                             |                       |  |
| r                             |                             | 1                     |  |
| Import Wizard - Match Para    | ameter Names                |                       |  |
|                               |                             |                       |  |
|                               |                             |                       |  |
|                               | atch parameter names in the | Add <u>P</u> arameter |  |
| import file with those in the | database.                   | Add <u>A</u> lias     |  |
|                               |                             |                       |  |
| Old Parameter Name            | Change To                   |                       |  |
| ▶ ph-f                        | Field pH                    | ×                     |  |
|                               | Famphur                     | <u>~</u>              |  |
|                               | Field Conductivity          |                       |  |
|                               | Field pH                    |                       |  |
|                               | Field turbidity             |                       |  |
|                               | Floaters                    |                       |  |
|                               | Fluoranthene                |                       |  |
|                               | Fluorene<br>Fluoride        |                       |  |
|                               | Fluorobenzene               |                       |  |
|                               | Gamma-BHC                   |                       |  |
|                               | Gamma-Chlordane             |                       |  |
|                               | gamma-HCH                   |                       |  |
| Record: I                     | GRO (C6-C10)                |                       |  |
| ,                             | Gross Alpha                 |                       |  |
|                               | Cross Rota                  |                       |  |
| <u>C</u> ancel < <u>B</u> ac  | Gross weight (wet)          | ×                     |  |
| 1                             |                             |                       |  |

Figure 15 – Import Wizard - Match Parameter Names form

7. And one for matching reporting units, and perhaps others.

| Import Wizard - Match<br>This screen will h<br>with those in the | elp you match reporting unit names in | the import file |
|--|---------------------------------------|-----------------|
| Old Name   | Change To                             |                 |
| ▶ ml   | mg/l                                  | ×               |
|  | Confirm Change                        |                 |
| Proved 14 / 1  |                                       | Careeb.         |
| Record: H 1  | of 1 → N→B 🕅 No Filter                | Search          |
| <u>C</u> ancel <   | Back                                  | <u>F</u> inish  |

Figure 16 - Import Wizard - Match Reporting Units screen

8. When all is correct the import will run to completion. You will see a dialog box showing the result, and perhaps a form showing the imported data.

| Import Review      |               |               |              | Successful                           | Import            |                      |               |       |
|--------------------|---------------|---------------|--------------|--------------------------------------|-------------------|----------------------|---------------|-------|
| DeleteRecord -     | StationName - | ImportProblem |              | LongName 🚽                           | CasNumbe -        | ReportingUnitsCode - | SiteName 🗸    | Value |
|                    | MW-16         | Imported      |              | Anthracene                           | 120-12-7          | ml                   | Refining Inc. | 57    |
|                    | MW-15         | Imported      |              | Anthracene                           | 120-12-7          | ml                   | Refining Inc. | 57    |
|                    | MW-14         | Imported      |              | Anthracene                           | 120-12-7          | ml                   | Refining Inc. | 740   |
|                    | MW-16         | Imported      |              | Benzene                              | 71-43-2           | ml                   | Refining Inc. | 62    |
|                    | MW-14         | Imported      |              | Benzene                              | 71-43-2           | ml                   | Refining Inc. | 62    |
|                    | MW-15         | Imported      |              | Benzene                              | 71-43-2           | ml                   | Refining Inc. | 75    |
|                    | MW-15         | Imported      | Imp          | ort Results                          |                   | X                    | Refining Inc. | 7.6   |
|                    | MW-15         | Imported      | milye        | ont Results                          |                   |                      | Refining Inc. | 7.2   |
|                    | MW-14         | Imported      | All          | of your data was h                   | andled successful | ly.                  | Refining Inc. | 7.3   |
|                    | MW-16         | Imported      |              | ortFile records:                     | 10                |                      | Refining Inc. | 7.5   |
|                    | MW-15         | Imported      |              | eted records:                        | 18<br>0           |                      | Refining Inc. | 7.1   |
|                    | MW-16         | Imported      |              |                                      | -                 |                      | Refining Inc. | 7.2   |
|                    | MW-14         | Imported      |              | orted records:<br>orted to Samples t | able oply: 0      |                      | Refining Inc. | 7.3   |
|                    | MW-15         | Imported      |              |                                      | able only. o      |                      | Refining Inc. | 7.4   |
|                    | MW-14         | Imported      |              | hest duplicate:                      | 1                 |                      | Refining Inc. | 7     |
|                    | MW-16         | Imported      | Hig          | hest superseded:                     | 3                 |                      | Refining Inc. | 7.1   |
|                    | MW-14         | Imported      |              | ОК                                   |                   |                      | Refining Inc. | 7.1   |
|                    | MW-16         | Imported      |              |                                      |                   |                      | Refining Inc. | 7.4   |
| ecord: ⊮ → 1 of 18 |               | r Search      | <b>∢</b> (m) |                                      |                   |                      | Print         |       |



# Validation

One of the options in the Import Wizard is to import the data either into just the main tables or into the main tables and the Validation Module. If you import the data into the main tables, you can later move it to the Validation Module using the <u>SELECT DATA</u> form. The Validation Module can be used for a variety of data checking activities ranging from "eyeball" checking all the way up to a full CLP Level 3 type validation. The system contains tables and forms for data validation activities. Many of these features are also useful to users who are not planning to perform strict data validation. Information can be stored regarding project required detection limits, spike amounts and target recoveries, QC sample and analysis frequencies, and holding times. The Validation Module also contains some statistics capabilities and many specialized reports.

# Selecting and Displaying Data

Now that you have imported data, you will want to retrieve and display it. Enviro Data provides a variety of ways to easily do this. The next sections will provide a brief overview of how to do this.

Retrieving data in Enviro Data has three parts: Data Selection, Display Options, and Output Type. Start with selecting data. In the Data Selection step, you determine which results you want to display, such as which locations, dates, depths, parameters, and so on.

1. Open the **Enviro Data VIEWER** program using the <u>View Data</u> button on the **EDITOR** menu or the icon on your desktop.

|  | En  | viro Data Quick Start G  | Guide   |
|--|---|--|---|
| D Enviro Data Viewe  |   |  |   |
|  |   |  |   |
| $\bigcirc$   | Enviro  | Data 8 Vi  | ewer  |
|  | Learn   | Select and Display   | Other Actions   |
|  |   | Enviro Data will help you retrieve your data.<br>This involves three components:   |   |
|  | Getting Started   | 1. Data Selection  | Tree View   |
|  | Documentation   | 2. Display Options<br>3. Output Type   | View Bulk Data  |
|  | Lab File Format   | Select Data  | Attach Database   |
|  | Email for Help  | Display Options  | Database List   |
| Fre  | eq. Asked Questions   | Retrieval Wizard   | Maintain Database   |
|  | On-Screen Tour  | Retrieval Sets   |   |
|  |   | Custom Query   | Edit Data   |
|  |   |  |   |
| Viewer Database  | G. Enviro/Edata8/EnvDData   | 8 mdb  | Close   |
|  |   |  |   |
|  | Figu  | re 18 - Enviro Data <b>VIEWEI</b>  | R Menu  |
| N1. 1 1 0 1  |   | 4 VIEWED MENT T  |   |
|  |   | the <u>VIEWER MENU</u> . Th  | <b>NOTE:</b> There is a limit   |
|  |   | form. Most data retrieval  | 1000-characters for each  |
| ctivities are tied   | to this form, lett  | ing you display or export th   | the <i><u>Filter Criteria Boxes</u></i> in t  |
| elected data for   | further analysis.   | Click the <u>Analyses</u> radio  | SELECT DATA form.   |
| utton near the to  | op right side of th   | e form to activate the form,   |   |
| s shown below.   |   |  |   |
|  |   |  |   |
| Select Data  |   |  | – 🗆 ×   |
| Analytic Flame Hale  |   |  |   |
|  | Dup/Sup Defaults Display 0  |  | Back Refresh Selected Data Beset Qear   |
| Analytic Hags Help     O Sites     Name  |   | Samples  | Analyses  |
| O Sites  |   | Samples<br>note Group  | Analyses     General Additional Data * Display All Results *  |
| Sites Name State Type Gwner  |   | Samples<br>note Group  | Analyses     General Additional Data * Display All Results *  |
| O Sites Name State Type  |   | Samples<br>note Group  | Additional Data * Display All Results*      Parameter     Additional Data * Display All Results*      Parameter     At Param 0     Parameter     Lab      |
| Sites Name State Type Owner      Stations General Location (r/o. Regul Staten Group  | Altory Info.  | Samples<br>note Group  | Additional Data * Display All Results*      Parameter     Additional Data * Display All Results*      Parameter     At Param 0     Parameter     Lab      |
| Sites  State Type Owner OStations General Location Info. Regul Station Group Name Type Vame  | 4000 Info.  | Samples  | Additional Data * Display All Results*      Parameter     Additional Data * Display All Results*      Parameter     At Param 0     Parameter     Lab      |
| Sites Name State Type Owner Stations General Location Info Station Group Name Type Type2 Coelogic Unt  | Image: Second  | Samples           mple Group         V           mple Event         V           be         D           popertin         V           se Depth         V           poper         V           prove         V           end         V           object Unit         V           object Unit         V           object Unit         V   | Additional Data * Display All Results*      Parameter     Additional Data * Display All Results*      Parameter     At Parameto     Parametry     Lab     |
| Sites Name State Type Owner OStations General Location (n/o. Regul Staten Group Name Type Crope Coologic Unt Station Status OC Type  |   | Samples           mple Group         V           mple Event         V           be         D           popertin         V           se Depth         V           poper         V           prove         V           end         V           object Unit         V           object Unit         V           object Unit         V   | Additional Data * Display All Results*      Parameter     Additional Data * Display All Results*      Parameter     At Parameto     Parametry     Lab     |
| Sites     Name     State     Type     Owner     OStations     General Location Info     Regul     Station Status     Type2     Ceeboge Une     Station Status     OC Type     Evvice     Status  | Image: state of the s | Samples           mple Group         V           mple Event         V           be         D           popertin         V           se Depth         V           poper         V           prove         V           end         V           object Unit         V           object Unit         V           object Unit         V   | Additional Data * Display All Results*      Parameter     Additional Data * Display All Results*      Parameter     At Param 0     Parameter     Lab      |
| Sites     Name     State     Type     Owner     Ostations     General Location (n/o. Regul     Station Group     Name     Type     Type2     Ceologic Unt     Station Status     OCT voe     PBP     Enviro. Status     Land Use   | V         -         Sa           V         -         Ba           V         -         Ca           V         -         Ta           Ga         -  | Samples           mple Group         V           mple Event         V           be         D           popertin         V           se Depth         V           poper         V           prove         V           end         V           object Unit         V           object Unit         V           object Unit         V   | Additional Data * Display All Results*      Parameter     Additional Data * Display All Results*      Parameter     At Param 0     Parameter     Lab      |
| Sites     Name     State     Type     Owner     OStations     General Location Info     Regul     Station Status     Type2     Ceeboge Une     Station Status     OC Type     Evvice     Status  |   | Samples           noe.Group         V         V           mple Event         V         V           te         Dopth         V         V           se Depth         V         V         V           pe         V         V         V           posse         V         V         V           ered         V         V         V           oblogic Unit         V         V         V           pleate         V         V         V           it IO         V         V         V           sk Number         V         V         V           sk Number         V         V         V           st auge         V         V         V   | Additional Data * Display All Results*      Parameter     Additional Data * Display All Results*      Parameter     At Param 0     Parameter     Lab      |
| Sites     Name     State     Type     Owner     Ostations     General Location (n/o. Regul     Station Group     Name     Type     Type2     Ceologic Unt     Station Status     OCT voe     PBP     Enviro. Status     Land Use   | Image: Second  | Samples           mple Group         v   | Additional Data * Display All Results*      Parameter     Additional Data * Display All Results*      Parameter     At Param 0     Parameter     Lab      |
| Sites     Name     State     Type     Owner     Ostations     General Location (n/o. Regul     Station Group     Name     Type     Type2     Ceologic Unt     Station Status     OCT voe     PBP     Enviro. Status     Land Use   | Image: Second  | Samples           note Group         V         V           mple Event         V         V           te         0         V         V           se Depth         V         V         V           se Depth         V         V         V           pbe         V         V         V           pose         V         V         V           red         V         V         V           obgic Unit         V         V         V           pleate         0         V         V           sk Number         V         V         V           sk Number         V         V         V           st Agency         V         V         V           sk Number         V         V         V           stage         V         V         V           mpt Method         V         V         V   | Analyses      General Additional Data * Display All Results*      Parameter     Additional Data * Display All Results*      Parameter     AR Param D     Parameter     AR Param D     Parameter     AR Param D     Parameter     Additional Data     Value     Parameter     Param Type     Value     Parameter     Value     Value     Parameter     Value     Value     Parameter     Value     Val |
| Sites           Name         State           Type         Owner           O Stations         General Location Info         Regul           Silion Group         Name         Type2         Oeologic Unt           Station Status         OC Type         Type2         Geologic Unt           Station Status         OC Type         Enviro. Status         Land Use           Water Use         Water Use         Water Use         Water Use | V         -         Sa           V         -         Sa           V         -         Ba           V         -         Ba           V         -         Fa           V         -<  | Samples           noe.Group         V           nple Event         V           p Depth         V           se Depth         V           pbe         V           pose         V           prose         V           objection         V           pose         V           sk Number         V           oonomy         V           sueType         V           pose         V           pose         V           pose         V  | Analyses      General Additional Data * Display All Results *      Parameter     Additional Data * Display All Results *      Parameter     Additional Data     * *      Parameter     * *      Parameter     Additional Data     * *      Parameter     * *      * *      Parameter     * *      * *      Parameter     * *      * *      * *      Parameter     * *       |
| Sites Name State Type Owner OStations General Location Info Regul State Type Type2 Geologic Unt Station Status OCT type PRP Enviro. Status Land Use Water Use State: State:  | V         -         Sa           V         -         Sa           V         -         Sa           V         -         Ba           V         -         Fa           Sa         -  | Samples  pele Group mple Event le Depth pe pe pe pose trik compose tri | Analyses      General Additional Data * Display All Results*      Parameter     Additional Data * Display All Results*      Parameter     AR Param 0     Parameter     AR Param 0     Parameter     Additional Data     Value     Param Type     Value     Pags     Problema     Value     Code     Flored     Method     Value     Flored     Method     Value     Reportable?     Valuation Cd     Value     Sum Category     Analysis Group     Definered?     Value   |
| Sites           Name         State           Type         Owner           O Stations         General Location Info         Regul           Silion Group         Name         Type2         Oeologic Unt           Station Status         OC Type         Type2         Geologic Unt           Station Status         OC Type         Enviro. Status         Land Use           Water Use         Water Use         Water Use         Water Use | V         -         Sa           V         -         Sa           V         -         Ba           V         -         Ba           V         -         Fa           V         -<  | Samples           noe.Group         V           nple Event         V           p Depth         V           se Depth         V           pbe         V           pose         V           prose         V           objection         V           pose         V           sk Number         V           oonomy         V           sueType         V           pose         V           pose         V           pose         V  | Analyses      General Additional Data * Display All Results *      Parameter     Additional Data  * Display All Results *      Parameter     Additional Data  * Display All Results *      Parameter     Additional Data  * Display All Results *      Parameter     Additional Data  * Display All Results *      Parameter     Additional Data  * Display All Results *      Parameter     Additional Data  * Display All Results *      Parameter     Additional Data  * Display All Results *      Parameter     Additional Data  * Display All Results *      Parameter     Additional Data  * Display All Results *      Parameter     Additional Data  * Display All Results *      Parameter     Additional Data  * Display All Results *      Parameter     Additional Data  * Display All Results *      Parameter     Additional Data  * Display All Results *      Parameter     Additional Data  * Display All Results *      Parameter     Additional Data  * Display All Results *      Parameter     Additional Data  * Display All Results *      Parameter     Additional Data  * Display All Results *      Parameter     Additional Data  * Display All Results *      Parameter     Additional Data  * Display All Results *      Analysis Group     Display All Results *      Parameter     Analysis Group     Display All Results  * Display All Results |
| Sites Name State Type Owner Owner Stations General Location Info Regul Station Status Oct Type Ceebogic Unit Station Status Oct Type PRP Envire. Status Land Use Water Use State: Output   | estoy Info.   | Samples  | Analyses      General Additional Data * Display All Results *      Parameter     Additional Data * Display All Results *      Parameter     Additional Data     *      Parameter     *      *      Parameter     *      *      Parameter     *      *      Parameter     *   |
| Sites Name State Type Owner OStations General Location Info Regul Station Type Type Ceologic Unit Station Status GC Type Enviro, Status Land Use Water Use State: Output   | estoy Info.   | Samples  | Analyses      General Additional Data * Display All Results*      Parameter     Additional Data * Display All Results*      Parameter     Additional Data * Display All Results*      Parameter     At Param 0     Value      |
| Sites Name State Type Owner Ostations General Location Info Regul Station Group Name Type Ceologic Unit Station Status Cologic Unit Station Status Land Use Water Use Start: Dudput  | estoy Info.   | Samples  | Analyses      General Additional Data * Display All Results *      Parameter Group      Parameter      At Param 0      Parameter      Attacked      A |
| Sites       Name       State       Type       O Stations       General Location Info. Regul       Station Group       Name       Type2       Geologic Unt       Station Status       QC Type       PRP       Enviro Status       Land Use       Water Use  | estoy Info.   | Samples  | Charlyses     General Additional Data *Display All Results*      Parameter     Additional Data *Display All Results*      Parameter     Additional Data     *     *     Parameter     Parameter     Additional Data     *     *     Parameter     Parameter     Additional Data     *     *     Parameter     *     Parameter     *     Parameter     *     *     *     Parameter     *     |

3. Enter selection parameters as you wish, and then create reports, graphs, maps, and exports. Selection Sets can be saved with names using the <u>Save/Load</u> tab.

# Save/Load

Sometimes when you make selections on the <u>SELECT DATA</u> form, you may want to use the same or similar selections later. The save/load feature in Enviro Data allows you to save those selections under a name you select, and then call them back up later.

| Output      | Save/Load  | Modify |      |      |        |
|-------------|--|--------|------|------|--------|
| Saved Query | 1 Well<br>3 Stations & Multi Parameters /page 0<br>4 Stations & Multi Parameters /page 0<br>4 Stations & Parameters Graph<br>7 Wells<br>9 Graphs |        | Load | Save | Delete |

# **Display/Graphing Options**

Display/Graphing Options determine how the individual results are presented. These options let you configure graphing and reporting options, including, for example, designating whether regulatory limits are displayed, and whether results should be automatically converted to consistent measurement units before output. In many cases, the default options work just fine. Remember, when the display options are changed, Enviro Data retains these changes and continues to use them until they are modified, or until another display set is selected. Note that <u>Display Options</u> are available from buttons on both the <u>VIEWER</u> and <u>SELECT</u> <u>DATA</u> forms but for now, you will open it from <u>SELECT DATA</u>.

If you do want to change the Display Options, click on the <u>Display Options</u> button on the <u>SELECT DATA</u> form. This brings up the <u>DISPLAY OPTIONS</u> form. Display Option sets can be saved with names for later use.

|                   | ay Set: Stand   |                 | tic Dans Ta |               | to Validation D                                   |      | lew Displa | it Analytic Fla        |                   |                |           |                           |             |        |     |
|-------------------|---|-----------------|-------------|---------------|---|------|------------|------------------------|-------------------|----------------|-----------|---------------------------|-------------|--------|-----|
| Detect            | ted value opcon:  |                 |             |               | lytic Flag O                                      |      | 1.000      |                        | ags               | Edit Validatio | on Flags  |                           |             |        |     |
| Non-de            | letect Options  | Same as Dete    | cted Values | O % Va        | lue 🔾 Disp  | ay O | O De       | tection Limit          | 0%                | Detection Li   | imit Det  | lect Type                 | Detect      | Y      |     |
| N                 | All Dilutions in Sa<br>Add delimiters to<br>Un-Alias Parame | large numbers   |             | Separator     | Point 🔍   |      | Append     |                        | Value<br>od to Pa |                | 001<br>ne |                           | Custom Fu   | 12     | 1   |
|                   | Un-Alias Parame<br>Un-Alias Stations                        |                 | Type        |               | ~   |      |            | Dilution to P          |                   |                |           |                           | ay Categor  |        | sul |
|                   | ber of Decimals   |                 |             | Extr<br>Ø.Ask | a Zeros Conver<br>Max # Decimal<br>Unit Conversio | 5    | s          | Date Opti<br>Date Date |                   | ) Date & Tin   | ne        |                           |             |        |     |
|                   |   | Display Limits? |             | Q No          | () Ask  |      |            | Enviro Sp              |                   | ) Parameter    |           | <ul> <li>Multi</li> </ul> | Reg Limit ( | Colors |     |
| the second second | ected Limit Grour   |                 | andards     |               |   | 2    |            |                        |                   | Offset Type    | Callout   | H 🔍                       | 1           |        |     |
| Record: M         | lated Parameters  | Calculate F     |             | _             |   |      |            |                        |                   |                |           |                           |             |        |     |
|                   |   |                 |             |               |   |      |            |                        |                   |                |           |                           | Clos        | e      |     |
| 10                |   |                 |             |               |   |      |            |                        |                   |                |           |                           |             |        |     |
|                   |   | Fig             | ure 2'      | 1 – <u>D</u>  | isplay/   | Gra  | phin       | ig Op                  | tior              | <u>ıs</u> forr | n         |                           |             |        |     |

Figure 20 – <u>Save/Load</u> section of <u>SELECT DATA</u> form showing how to select a <u>Saved Query</u>.

# Output Type

Output Type determines the physical configuration of the output, such as a report for printing, a graph, a map, or an export. Which output option to choose depends on the needs of your project. Some examples are shown in the next section.

# Listing of Data

There are two different options to list your data from the Select Data form. These are <u>List</u> and <u>Quick List</u>. Select the data using the <u>SELECT DATA</u> form, and then click on <u>Quick List</u> or <u>List</u> to bring up an Access list window showing your data where you can view it, print it, or select all or part of it to copy to the clipboard. The difference between the two lists is that <u>Quick List</u> displays all the fields in the **SelectedData** table while <u>List</u> provides a set of selected fields. *List* also allows you to select which fields are displayed. The order of the fields can be rearranged in both list windows. <u>List</u> also provides a view the higher levels of the data (sites, stations, etc.), and easily export the contents of the window to Excel by clicking on the <u>Export to Excel</u> button. Both listings can be used to view your data and capture it in the clipboard for further use. Quick List, on the other hand, is much faster, especially for large data retrievals.

### Report

This option is for preparing formatted reports for printing. Enviro Data comes with several dozen report formats, and you can modify the existing reports, or create your own, and then print them for project staff, clients, and regulators. Report formats include line-by-line, crosstab with samples across or down, and various graph formats. Specialized reports can compare to multiple regulatory limits or display groundwater and NAPL data.

### Graph

Enviro Data makes it easy for you to create time-sequence graphs of your data. You can graph multiple parameters for one station or multiple stations for one parameter. You can display a regulatory limit on the graph, and specify whether you want the points labeled, or a connecting line between the points.

### Export

Enviro Data allows you to export data in a variety of formats, and new formats are being added on a regular basis. Export formats are included for various programs that let you display and analyze your data, including two-dimensional contouring, three-dimensional modeling and display, and boring log software. Other formats are provided to satisfy various regulatory requirements, and for import into other data management programs. Another set of exports creates simplified files in Access or Excel for further analysis and formatting. Note that the exports that show in the form are determined by your project manager.

### **Crosstab Wizard**

One of the most used and powerful export features is the Crosstab Wizard, which lets you create crosstab tables with nearly complete control of what data elements are included in the output. It is accessed from the by clicking Export on the <u>Select Data</u> form which brings up the **Select Export Format** form. Select the <u>Crosstab Wizard</u> option and click <u>Next</u>.

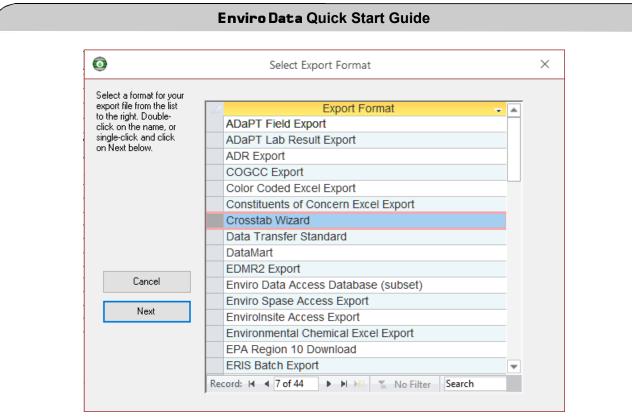


Figure 22 - The Select Export Format form with Crosstab Wizard selected.

This option creates an Excel file with the data in a crosstab table, but with much more flexibility than the canned reports. It makes a table with column headers across the top, and row headers down the side. Then the results are shown in the middle. You can have as many crosstab layouts as you need. The software comes with several layouts.

| Go to a Crosstab Form  | hat  |                              | ×                     | # Sites                        | 1            | Stations    | 9        |        |   |
|--|--|------------------------------|-----------------------|--------------------------------|--------------|-------------|----------|--------|---|
| Crosstab Format Name   | e Stations Across -  | Parameters Down              |                       | Sample                         | 146          | Analyses    | 1305     |        |   |
| Crosstab Data Group  | ping / Formatting Sta  | atistics Instructions        |                       |                                |              |             |          |        |   |
|  |  | Column Fields                |                       |                                |              |             |          |        |   |
|  |  |                              | olumn - Display Colum | Name , Order ,                 |              |             |          |        |   |
|  |  | StationName                  | Station Name          | 1                              |              |             |          |        |   |
|  |  | SampleDate_D                 | Sample Date           | 2                              |              |             |          |        |   |
|  |  | -                            |                       | 0                              |              |             |          |        |   |
|  | 100  |                              |                       | I Gente                        | _            |             |          |        |   |
| Value F  |  | Record: M = 1                | of 2 + H += \S        | Ve Felier Search               |              |             |          |        |   |
|  | viro Data Column + Dis;  |                              | * Save New            | File / Append to an E          | cisting File |             |          |        |   |
| - Val  | ueAndFlag 🗸 Resi   | uit 0.<br>0                  | Save New              | File                           | 4            |             |          |        |   |
|  |  |                              |                       |                                |              | C/U         | est File |        |   |
|  |  |                              | Append to             | file:<br>data8\Exports\test.xl | a.           |             |          |        |   |
| Record   | H + 1 of 1 + H   | Ma Star Search               | U. LINITOL            | demonstration of the           |              |             |          | 1      |   |
| Row Fields   |  |                              | Worksheet Fields      | s Enable g                     | rouping da   | ta by works | heet     |        |   |
| Enviro Data Col  | umn 🖌 Display Column   | Name . Order .               | Enviro D              | ata Column -                   | Order -      |             |          |        |   |
|  | Parameter  |                              |                       | 2                              | 0            |             |          |        |   |
| LongName   |  | 1                            | StationName           | 1×1                            |              |             |          |        |   |
| ReportingUnits   | Units  | 3                            | *                     | 1×1                            | 0            |             |          |        |   |
|  |  |                              | *                     | N.                             |              |             |          |        |   |
| ReportingUnës<br>#   | Units  | 0                            | *                     |                                | 0            | Cauch       | _        | 1      |   |
| RéportingUnës  |  | 0                            | * Record: H = 1 of    |                                | 0            | Search      |          | 1      |   |
| ReportingUnës<br>#   | Units  | 0                            | *                     |                                | 0            | Search      |          | 1      |   |
| ReportingUnës<br>#   | Units<br>12 + H + 5610   | 0                            | *                     |                                | 0            | Search      |          | Finist | h   |
| ReportingUnits   | Unts   | 0<br>Fini   Search           | *                     | n 1888-18                      | 0            | Search      |          | Finish | and the second se |
| ReportingUnits<br>Record: 14 1 of<br>Report Title Monitoring F<br>Delete Edit Avail              | Unts<br>12 + H + Solo<br>Results<br>Itable Clone               | 0 Search                     | *<br>Record: H = 1 of | Progress                       | 0            |             |          |        | and the second se |
| ReportingUnits<br>Record: 14 1 of<br>Report Title Monitoring F<br>Delete Edit Avail              | Unts<br>12 + + + + Site  | 0 Search                     | *<br>Record: H = 1 of | Progress                       | 0            |             |          |        | and the second se |
| Report Title Monitoring I<br>Report Title Monitoring f<br>Delete Edit Avail<br>Record: 14 1 of 4 | Unts<br>12 + H + Sch<br>Results<br>Iable Clone<br>H + Schulten | 0 Search<br>Refresh Selected | * Record: H 1 of      | Progress<br>End                | 0            | lapsed      |          |        | and the second se |
| Report Title Monitoring I<br>Report Title Monitoring f<br>Delete Edit Avail<br>Record: 14 1 of 4 | Unts<br>12 + H + Sch<br>Results<br>Iable Clone<br>H + Schulten | 0 Search                     | * Record: H 1 of      | Progress<br>End                | 0            | lapsed      |          |        | and the second se |
| Report Title Monitoring I<br>Report Title Monitoring f<br>Delete Edit Avail<br>Record: 14 1 of 4 | Unts<br>12 + H + Sch<br>Results<br>Iable Clone<br>H + Schulten | 0 Search<br>Refresh Selected | * Record: H 1 of      | Progress<br>End                | 0            | lapsed      |          |        | and the second se |
| Report Title Monitoring f<br>Delete Edit Avail<br>Record: 14 1 of 4                              | Unts<br>12 + H + Sch<br>Results<br>Iable Clone<br>H + Schulten | Refresh Selected             | * Record: H 1 of      | Progress<br>End                | 0            | lapsed      |          | Exit   | and the second se |

| Enviro Data | Quick | Start | Guide |
|-------------|-------|-------|-------|
|-------------|-------|-------|-------|

| Go to a Crosstab Forma<br>Crosstab Format Name  | A COMPANY OF THE OWNER OF THE OWNER.                       | Samples 146 Analyses 1305  |   |
|---|--|--|---|
| Crosstab Data Groupi  | g / Formatting Statistics Instructions                     |  |   |
|   | olay "NM" for "Not Measured" Gray Background 1st Column (k | Raw data (no formatting) Cell Borders Standard Multiple Column Selections)     Gray Text Non-Detect cxcel Header Header and Footer   | s |
| Group Data<br>Select columns for y<br>Enviro Dat<br>SumCategory<br>#<br>Record: 14 1 of 1 | 0  | <ul> <li>Display Reg Limits</li> <li>Highlight Non-Detect Exceedences</li> <li>Display Reg Limit Exceedences Only</li> <li>Display Superscripts</li> <li>Bold Detects that don't exceed the Reg Limit</li> <li>Gray Background Non-Detect Exceedences</li> <li>Use Color of Lowest limit exceeded v</li> <li>Print Reg Limit Legend</li> </ul> | 4 |
|   | emplate Standard Template                                  |  | 7 |

Figure 24- Grouping/Formatting tab on the Export Crosstab form

Note the Select Export Template section in the lower part of the window (above the buttons at the bottom) as a Template MUST be selected to create a crosstab export. The template, not shown, places custom headers and footers above and below the data section.

The crosstab in Figure 25 displays sample information across, parameter information down, and the combined value and flag in the value area.

|    | A                      | В      | С                   | D       | E                             | F                           | G         | н         |           | J         | K         | L         | M         | N          | 0         |     |
|----|------------------------|--------|---------------------|---------|-------------------------------|-----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------|-----|
| 1  | Monitoring Well SV     | OCs    |                     |         |                               |                             |           |           |           |           |           |           |           |            |           | 1   |
| 2  | Station Name           | Units  | Federal MCL         | Primary | Safe Drinking Water Standards | State Drinking Water Levels | MW-1       | MW-1      | П   |
| 3  | Sample Date            |        |                     |         |                               |                             | 2/26/1981 | 4/20/1981 | 6/19/1981 | 10/1/1981 | 1/27/1982 | 4/27/1982 | 7/20/1982 | 10/13/1982 | 1/18/1983 | 4   |
| 4  |                        |        |                     |         |                               |                             |           |           |           |           |           |           |           |            |           | П   |
| 5  | Metals                 |        |                     |         |                               |                             |           |           |           |           |           |           |           |            |           |     |
| 6  | Calcium                | mg/l   |                     |         |                               |                             | 200.44    | 180       | 190       | 200       | 210       | 200       | 200       | 200        | 210       |     |
| 7  | Iron (Ferrous)         | mg/l   |                     | 0.1     |                               |                             | 0.35      |           | 1.7       | 0.76      | 0.5       | 0.58      | 0.49      | 0.6        | 0.72      |     |
| 8  | Potassium              | mg/l   |                     |         |                               |                             | 6.90      | 6.60 B,J  | 6.80      | 48        | 6.40      | 7.30      | 6.80      | 6.20       | 6.20      |     |
| 9  | Sodium                 | mg/l   |                     |         |                               |                             | 510       | 530       | 540       | 450       | 550       | 530       | 510       | 500        | 500       |     |
| 10 | Other                  |        |                     |         |                               |                             |           |           |           |           |           |           |           |            |           |     |
| 11 | Total Dissolved Solids | mg/l   |                     |         |                               |                             | 2744      | 2751      | 2813      | 2640      | 2705      | 2720      | 2730      | 2490       | 2670      |     |
| 12 | Inorganics             |        |                     |         |                               |                             |           |           |           |           |           |           |           |            |           |     |
| 13 | Chloride               | mg/l   | 250                 |         |                               |                             | 290       | 380       | 270       | 280       | 270       | 290       | 250       | 240        | 280       |     |
| 14 | Nitrate                | mg/l   | 10                  | 2       |                               |                             | 1.70      | <1.00     | <1.00     | 1.00      | <1.00     | 1.00      | <1.00     | <1.00      | 6         |     |
| 15 | Sulfate                | mg/l   | 725                 | 800     | 350                           | 1000                        | 1255      | 1400      | 1290      | 1320      | 1320      | 1280      | 1240      | 1100       | 1180      |     |
| 16 | Field Param            |        |                     |         |                               |                             | _         |           | _         |           |           | _         | _         | _          |           |     |
| 17 | Field pH               | s.u.   |                     |         |                               | 7.1-8.4                     | 7.80      | 7.90      | 7.30      | 7.50      | 7.50      | 7.50      | 7.60      | 7.90       | 7.60      | 1   |
| 18 |                        |        |                     |         |                               |                             |           |           |           |           |           |           |           |            |           |     |
| 19 |                        |        |                     |         |                               |                             |           |           |           |           |           |           |           |            |           |     |
| 20 |                        |        |                     |         |                               |                             |           |           |           |           |           |           |           |            |           |     |
| 21 |                        |        |                     |         |                               |                             |           |           |           |           |           |           |           |            |           |     |
| 22 | Analyte concentration  | exceed | ls the standard for |         |                               | Source:                     |           |           |           |           |           |           |           |            |           |     |
| 23 |                        | Feder  | al MCL              |         |                               |                             |           |           |           |           |           |           |           |            |           |     |
| 24 |                        | Prima  | ry                  |         |                               |                             |           |           |           |           |           |           |           |            |           |     |
| 25 |                        | Safe D | rinking Water Sta   | ndards  |                               |                             |           |           |           |           |           |           |           |            |           |     |
| 26 |                        | State  | Drinking Water Le   | vels    |                               |                             |           |           |           |           |           |           |           |            |           |     |
| 27 |                        |        |                     |         |                               |                             |           |           |           |           |           |           |           |            |           | - 1 |

Figure 25 - An example of a Crosstab report showing four levels of exceedances in color.

The Crosstab also can display a set of summary statistics that can be selected from the Export Crosstab form shown below. These are placed to the right of the data columns.

|   | lo a Crosstab  |               |  |   |           |   |   | 2  | # Site   |  | Stations   | .9  |   |
|---|--|---------------|--|---|-----------|---|---|--|--|--|--|---|---|
|   | sstab Format   |               | ions Across - Pa   |   |           |   |   |  | Sampl  | es 146   | Analyses   | 1305  |   |
| Cre   | osstab Data  | Grouping / Fo | rmatting State   | sucs inst   | ructions  |   |   |  |  |  |  |   |   |
|   |  | 1.1           |  |   |           |   |   |  |  |  |  |   |   |
|   |  |               | Display Summa<br>(by Parameter)  |   | s [       | Export Statist  | tics Only   |  |  |  |  |   |   |
|   |  | SI            | atistic  | _   | Detects   | Non-Detects   | Rejected  |  |  |  |  |   |   |
|   |  | 0             | ount   |   |           |   |   |  |  |  |  |   |   |
|   |  | м             | aximum   |   |           |   |   |  |  |  |  |   |   |
|   |  | м             | inimum   |   |           |   |   |  |  |  |  |   |   |
|   |  | 1.1           | ithmatic Mean  |   | N         |   |   |  |  |  |  |   |   |
|   |  |               | edian<br>eometric Mean   |   |           |   |   |  |  |  |  |   |   |
|   |  |               | d. Deviation   | n   |           |   |   |  |  |  |  |   |   |
|   |  |               |  | -   |           |   |   |  |  |  |  |   |   |
|   |  | õ             | Set Non-Detect   | Values to   | 0.5 * Re  | porting Limit   | N   | lumber Dec   | imals 2  |  |  |   |   |
|   |  |               | Statistics = 0 if  | all Results   | are Nor   | -Detects  |   |  | the second second  |  |  |   |   |
|   |  |               |  |   |           |   |   |  |  |  |  |   |   |
|   |  |               |  |   |           |   |   |  |  |  |  |   |   |
|   |  |               |  |   |           |   |   |  |  |  |  |   |   |
|   |  |               |  |   |           |   |   |  |  |  |  |   |   |
|   | C. manual  |               |  |   |           |   |   | 10   | Distance I   |  |  | 110   | Finish  |
| Report'   | Title Monits   | ring Results  |  |   |           |   |   |  | Progress   |  |  |   |   |
| Report Delet  |  | ring Results  | Clone  | Refres  | h Selecte | a Show  | V SQL CH  | _  | Progress   |  | Isnead   |   |   |
| Dele  | te Ed  | t Available   | Clone  | Partone   | h Selecte | d Shov  | v SQL SU  | _  | End  | E  | Elapsed  |   | Exit  |
| Dele  |  |               | ( International and  | Partone   | h Selecte | d Show  | v SQL St  | _  |  | E  | Elapsed  |   |   |
| Dele  | te Ed  | t Available   | Refer Factor Sea   | arch  |           |   |   | iit  | End  |  | addar -  |   |   |
| Dele  | te Ed  | t Available   | ( International and  | arch  |           |   |   | iit  | End  |  | addar -  |   |   |
| Delet<br>Record:  | te Ed  | Figure        | 26 - The   | e Stat  |           | s tab of  | the E   | XPOR   | End T CROS   | STAB   | form   |   | Exit  |
| Dele  | te Ed  | t Available   | Refer Factor Sea   | arch  |           |   | the E   | XPOR   | End  |  | form   |   |   |
| Delet<br>Record:<br>BF  | te Ed<br>14 1 of 4<br>BG   | Figure        | 26 - The   | e Stat  |           | s tab of  | the E   | XPOR   | End T CROS   | STAB   | form   |   | Exit  |
| Delet<br>Record:<br>BF  | te Ed<br>14 1 of 4<br>BG   | Figure<br>BH  | e 26 - The<br>Bl   | e Stat  | istic     | s tab of<br>Bł  | the E   |  | End T CROS   | BM   | form   | E   | Exit<br>3N  |
| Delet<br>Record:<br>BF  | te Ed<br>14 1 of 4<br>BG   | Figure<br>BH  | 26 - The   | e Stat  | istic     | s tab of<br>Bł  | the E   |  | End T CROS   | BM   | form   | E   | Exit<br>3N  |
| Delet<br>Record:<br>BF  | BG<br>MW-1   | Figure<br>BH  | e 26 - The<br>Bl   | e Stat  | istic     | s tab of<br>Bł  | the E   |  | End T CROS   | BM   | form   | E   | Exit<br>3N  |
| Delet<br>Record:<br>BF  | BG<br>MW-1   | Figure<br>BH  | e 26 - The<br>Bl   | e Stat  | istic     | s tab of<br>Bł  | the E   |  | End T CROS   | BM   | form   | E   | Exit<br>3N  |
| BF<br>//W-1<br>//22/94  | te Ed<br>H 1 of 4<br>BG<br>MW-1<br>05/18/94  | Figure<br>BH  | BI<br>Count Count  | BJ  | istic     | s tab of<br>Bł<br>Maximum   | the E   | amary St   | End  | BM<br>Mean(de  | form<br>tects) Ste   | E   | Exit<br>3N<br>tion(det  |
| Delet<br>Record:<br>BF<br>4W-1<br>2/22/94<br>131                                    | te Ed<br>H 1 of 4<br>BG<br>MW-1<br>05/18/94  | Figure<br>BH  | 26 - The<br>BI<br>Count Count<br>52  | BJ<br>tt(non-d  | istic     | s tab of<br>Bi<br>Maximum<br>210.0  | the E<br>(<br>Sun<br>(detects   | AMARY St   | End  | BM<br>Mean(de<br>148.0   | form tects) Ste  | E<br>d Deviat   | Exit<br>3N<br>tion(det  |
| Delet<br>Record:<br>BF<br>4W-1<br>2/22/94<br>131<br>0.50                            | te Ed<br>H 1 of 4<br>BG<br>MW-1<br>05/18/94<br>121<br>0.36                               | Figure<br>BH  | 26 - The<br>BI<br>Count Count<br>52<br>52  | BJ<br>tt(non-d  | istic     | s tab of<br>Bł<br>Maximum<br>210.0<br>5.50  | the E.<br>(<br>(detects<br>)000<br>)00  | amary St<br>Minimu<br>10<br>0  | End  | BM<br>BM<br>Mean(de<br>148.0<br>2.04   | tects) Sta   | E<br>d Deviat   | Exit<br>3N<br>tion(deto<br>.244<br>805                                |
| Delet<br>Record:<br>BF<br>4W-1<br>2/22/94<br>131<br>0.50                            | te Ed<br>H 1 of 4<br>BG<br>MW-1<br>05/18/94  | Figure<br>BH  | E 26 - The<br>BI   | BJ<br>tt(non-d  | istic     | s tab of<br>Bi<br>Maximum<br>210.0  | the E.<br>(<br>(detects<br>)000<br>)00  | amary St<br>Minimu<br>10<br>0  | End  | BM<br>Mean(de<br>148.0   | tects) Sta   | E<br>d Deviat<br>33<br>1.<br>6.                                   | Exit 3N 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5                         |
| Delet<br>Record:<br>BF<br>4W-1<br>2/22/94<br>131<br>0.50                            | te Ed<br>H 1 of 4<br>BG<br>MW-1<br>05/18/94<br>121<br>0.36                               | Figure<br>BH  | 26 - The<br>BI<br>Count Count<br>52<br>52  | BJ<br>tt(non-d  | istic     | s tab of<br>Bł<br>Maximum<br>210.0<br>5.50  | the E.<br>(<br>(detects<br>)00<br>)00<br>)00  | amary St<br>Minimu<br>10<br>0  | End  | BM<br>BM<br>Mean(de<br>148.0<br>2.04   | s form tects) Sta 08 5 8   | E<br>d Deviat<br>33<br>1.<br>6.                                   | Exit<br>3N<br>tion(deto<br>.244<br>805                                |
| Detel<br>Record:<br>BF<br>/(W-1<br>/22/94<br>131<br>0.50<br>4.03                    | te Ed<br>H 1 of 4<br>BG<br>MW-1<br>05/18/94<br>121<br>0.36<br>3.46                       | Figure<br>BH  | 26 - The<br>BI<br>52<br>52<br>53   | BJ<br>BJ<br>tt(non-d  | istic     | s tab of<br>Bł<br>Maximum<br>210.0<br>5.50<br>48.0                                    | the E.<br>(<br>(detects<br>)00<br>)00<br>)00  | amary St<br>Minimu<br>10<br>0  | End<br>T CROS<br>BL<br>tatistics<br>tatistics<br>tatistics<br>5.000<br>0.042<br>.100 | BM<br>BM<br>Mean(de<br>148.0<br>2.04<br>6.20                                     | s form tects) Sta 08 5 8   | E<br>d Deviat<br>33<br>1.<br>6.                                   | Exit 3N 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5                         |
| Detet<br>Record<br>BF<br>4W-1<br>131<br>0.50<br>4.03<br>100                         | te Ed<br>H 1 of 4<br>BG<br>MW-1<br>05/18/94<br>121<br>0.36<br>3.46<br>96.6               | Figure<br>BH  | 52<br>53<br>53<br>53   | BJ<br>tt(non-d  | istic     | 210.0<br>550.0  | the E<br>(<br>(detects<br>)00<br>)0<br>)0<br>)00<br>)00<br>)00<br>)00                       | Amary St<br>Minimu<br>10<br>0<br>1                                   | End  | BM<br>BM<br>Mean(de<br>148.0<br>2.04<br>6.20<br>289.6                            | 6 form<br>tects) Str<br>08<br>5<br>8<br>72   | E<br>d Devia<br>333<br>1.<br>6.<br>164                            | Exit<br>3N<br>244<br>805<br>329<br>4.317                              |
| Detet<br>Record<br>BF<br>4W-1<br>131<br>0.50<br>4.03<br>100                         | te Ed<br>H 1 of 4<br>BG<br>MW-1<br>05/18/94<br>121<br>0.36<br>3.46                       | Figure<br>BH  | 26 - The<br>BI<br>52<br>52<br>53   | BJ<br>BJ<br>tt(non-d  | istic     | s tab of<br>Bł<br>Maximum<br>210.0<br>5.50<br>48.0                                    | the E<br>(<br>(detects<br>)00<br>)0<br>)0<br>)00<br>)00<br>)00<br>)00                       | Amary St<br>Minimu<br>10<br>0<br>1                                   | End<br>T CROS<br>BL<br>tatistics<br>tatistics<br>tatistics<br>5.000<br>0.042<br>.100 | BM<br>BM<br>Mean(de<br>148.0<br>2.04<br>6.20                                     | 6 form<br>tects) Str<br>08<br>5<br>8<br>72   | E<br>d Devia<br>333<br>1.<br>6.<br>164                            | Exit 3N 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5                         |
| Detel<br>Record:<br>BF<br>//W-1<br>//22/94<br>131<br>0.50<br>4.03<br>100<br>881     | te Ed<br>H 1 of 4<br>BG<br>MW-1<br>05/18/94<br>121<br>0.36<br>3.46<br>96.6<br>850        | Figure<br>BH  | 26 - The<br>BI<br>Count Count<br>52<br>53<br>53<br>53  | e Stat<br>BJ<br>tt(non-d<br>0<br>0<br>0<br>0<br>0                           | istic     | 210.0<br>550.0<br>2813.   | the E<br>(<br>(detects<br>)00<br>)00<br>)00<br>)00<br>)00<br>)00<br>)00<br>)00<br>)00<br>)0 | Amary St<br>Minimu<br>10<br>0<br>1<br>94                             | End  | BM<br>BM<br>Mean(de<br>148.0<br>2.04<br>6.20<br>289.6<br>1658.7                  | 6 form<br>1 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1   | E<br>d Deviat<br>333<br>1.<br>6.<br>164<br>714                    | Exit<br>3N<br>.244<br>805<br>329<br>4.317<br>4.667                    |
| Detet<br>Record<br>AW-1<br>131<br>0.50<br>4.03<br>100                               | te Ed<br>H 1 of 4<br>BG<br>MW-1<br>05/18/94<br>121<br>0.36<br>3.46<br>96.6               | Figure<br>BH  | 52<br>53<br>53<br>53   | e Stat<br>BJ<br>tt(non-d<br>0<br>0<br>0<br>0<br>0<br>0<br>0                 | istic     | s tab of<br>Bi<br>Maximum<br>210.0<br>5.50<br>48.0<br>550.0<br>2813.<br>380.0         | the E<br>(<br>(detects<br>)000<br>)00<br>)00<br>)00<br>)00<br>)00<br>)00                    | Amary St<br>Minimu<br>10<br>0<br>11<br>94<br>85                      | End  | BM<br>Mean(de<br>148.0<br>2.04<br>6.20<br>289.6<br>1658.7<br>190.4               | i         i            | E<br>d Deviat<br>333<br>1.<br>6.<br>164<br>714<br>60              | Exit<br>3N<br>244<br>805<br>329<br>4.317<br>4.667<br>589              |
| Detel<br>Record:<br>BF<br>//W-1<br>2/22/94<br>131<br>0.50<br>4.03<br>100<br>881     | te Ed<br>H 1 of 4<br>BG<br>MW-1<br>05/18/94<br>121<br>0.36<br>3.46<br>96.6<br>850        | Figure<br>BH  | 26 - The<br>BI<br>Count Count<br>52<br>53<br>53<br>53  | e Stat<br>BJ<br>tt(non-d<br>0<br>0<br>0<br>0<br>0                           | istic     | 210.0<br>550.0<br>2813.   | the E<br>(<br>(detects<br>)000<br>)00<br>)00<br>)00<br>)00<br>)00<br>)00                    | Amary St<br>Minimu<br>10<br>0<br>11<br>94<br>85                      | End  | BM<br>BM<br>Mean(de<br>148.0<br>2.04<br>6.20<br>289.6<br>1658.7                  | i         i            | E<br>d Deviat<br>333<br>1.<br>6.<br>164<br>714<br>60              | Exit<br>3N<br>.244<br>805<br>329<br>4.317<br>4.667                    |
| Detet<br>Record<br>AW-1<br>/22/94<br>131<br>0.50<br>4.03<br>100<br>881<br>140       | te Ed<br>H 1 of 4<br>BG<br>MW-1<br>05/18/94<br>121<br>0.36<br>3.46<br>96.6<br>850        | Figure<br>BH  | See         See           26 - The         BI           Count Count         52           52         53           53         53           53         53 | e Stat<br>BJ<br>tt(non-d<br>0<br>0<br>0<br>0<br>0<br>0<br>0                 | istic     | s tab of<br>Bi<br>Maximum<br>210.0<br>5.50<br>48.0<br>550.0<br>2813.<br>380.0         | the E<br>(<br>(detects<br>)00<br>)00<br>)00<br>)00<br>)00<br>)00<br>)00<br>)00<br>)00<br>)0 | Amary St<br>Amary St<br>Minimu<br>10<br>0<br>1<br>9<br>4<br>85       | End  | BM<br>Mean(de<br>148.0<br>2.04<br>6.20<br>289.6<br>1658.7<br>190.4               | i         i            | E<br>d Deviat<br>333<br>1.<br>6.<br>164<br>714<br>60<br>1.        | Exit<br>3N<br>244<br>805<br>329<br>4.317<br>4.667<br>589              |
| Detel<br>Record:<br>BF<br>V/W-1<br>2/22/94<br>131<br>0,722/94<br>4.03<br>100<br>881 | te Ed<br>H 1 of 4<br>BG<br>MW-1<br>05/18/94<br>121<br>0.36<br>3.46<br>96.6<br>850<br>145 | Figure<br>BH  | See         See           26 - The         BI           Count         Count           52         53           53         53           50         53    | e Stat<br>BJ<br>tt(non-d<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>24 | istic     | s tab of<br>Bł<br>Maximum<br>210.0<br>5.50<br>48.0<br>550.0<br>2813.<br>380.0<br>10.0 | the E<br>(<br>(detects<br>)00<br>)00<br>)00<br>)00<br>)00<br>)00<br>)00<br>)00<br>)00<br>)0 | Amary St<br>Amary St<br>Minimu<br>10<br>0<br>1<br>9<br>4<br>85       | End  | BM<br>BM<br>Mean(de<br>148.0<br>2.04<br>6.20<br>289.6<br>1658.7<br>190.4<br>1.70 | i         i            | E<br>d Deviat<br>333<br>1.<br>6.<br>164<br>714<br>60<br>1.        | Exit<br>3N<br>tion(det<br>2244<br>805<br>329<br>4.317<br>4.667<br>552 |
| Detet<br>Record<br>BF<br>4W-1<br>131<br>0.50<br>4.03<br>100<br>881<br>140           | te Ed<br>H 1 of 4<br>BG<br>MW-1<br>05/18/94<br>121<br>0.36<br>3.46<br>96.6<br>850<br>145 | Figure<br>BH  | See         See           26 - The         BI           Count         Count           52         53           53         53           50         53    | e Stat<br>BJ<br>tt(non-d<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>24 | istic     | s tab of<br>Bł<br>Maximum<br>210.0<br>5.50<br>48.0<br>550.0<br>2813.<br>380.0<br>10.0 | the E<br>(<br>(detects<br>)00<br>)00<br>)00<br>)00<br>)00<br>)00<br>)00<br>)0               | amary Sr<br>Minimu<br>10<br>0<br>1<br>1<br>94<br>85<br>12<br>0<br>19 | End  | BM<br>BM<br>Mean(de<br>148.0<br>2.04<br>6.20<br>289.6<br>1658.7<br>190.4<br>1.70 | Image: state | E<br>d Deviat<br>333<br>1.<br>6.<br>164<br>714<br>60<br>1.<br>410 | Exit<br>3N<br>tion(det<br>2244<br>805<br>329<br>4.317<br>4.667<br>552 |

The Crosstab Wizard is discussed in greater depth in both the *Tutorial* and *Basics* sections of this main documentation.

# Conclusion

Thank you for using Enviro Data. If you have problems anywhere along the way, please contact Geotech by email at <a href="mailto:support@geotech.com">support@geotech.com</a> or by phone at 303-740-1999. You can also check out the Geotech website which offers a long list of answers to the most <a href="mailto:Frequently Asked Questions">Frequently Asked Questions</a> that come up in our support tickets. You can find these by clicking on the button on the main screen of both the EDITOR and VIEWER or by going to <a href="https://geotech.com/resources/faq">https://geotech.com/resources/faq</a>.