User's Manual for the National Water Information System of the U.S. Geological Survey: Water-Quality System, Version 5.0

By David H. Dupré, Jonathon C. Scott, Melanie L. Clark, Michael G. Canova, and Yvonne E. Stoker

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Water-Quality System

Version 5.0

By David H. Dupré, Jonathon C. Scott, Melanie L. Clark, Michael G. Canova, and Yvonne E. Stoker

1 INTRODUCTION

This user documentation is designed to be a reference for the quality of water (QW) programs within the National Water Information System (NWIS). If you are a new user, the "Introduction" and "Getting Started" sections may be the right place for you to start. If you are an experienced user, you may want to go straight to the details provided in the "Program" section (section 3). Code lists and some miscellaneous reference materials are provided in the Appendices. The last section, "Tip Sheets," is a collection of suggestions for accomplishing selected tasks, some of which are basic and some are advanced. These tip sheets are referenced in the main text of the documentation where appropriate.

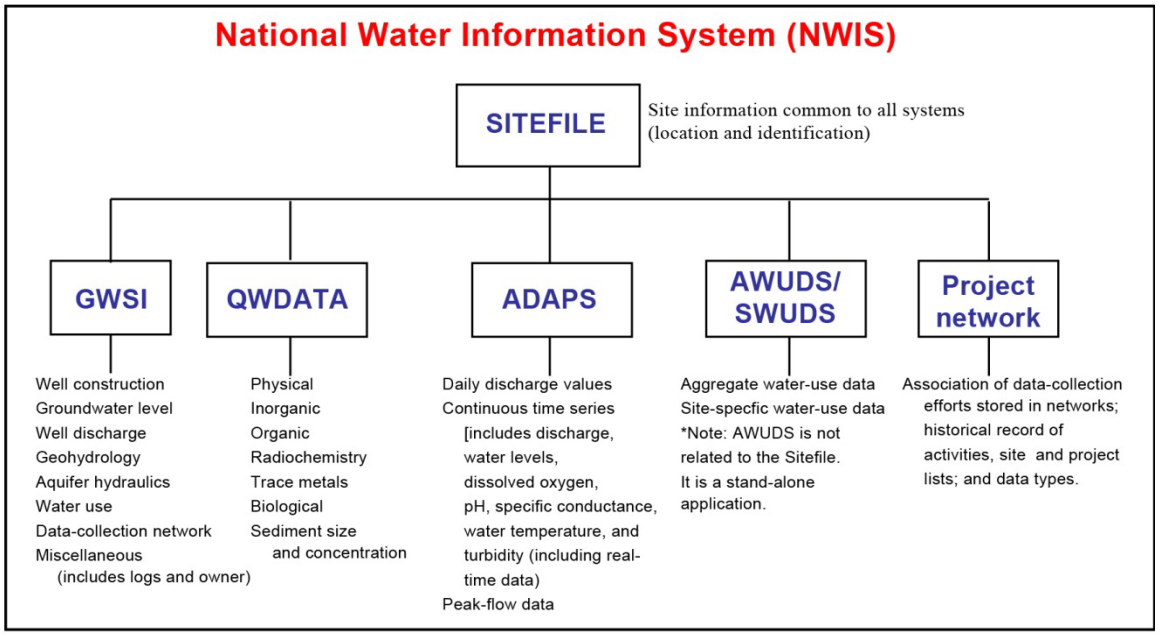
1.1 NWIS Description

As part of the U.S. Geological Survey (USGS) program of disseminating water data to the public, the Water Resources Discipline (WRD) maintains a distributed network of computers and fileservers for the storage and retrieval of water data collected through its activities at approximately 1.5 million sites. This system is called the National Water Information System (NWIS).

The NWIS is a distributed database in which data can be processed over a network of workstations and fileservers at USGS offices throughout the United States. The system is composed of four subsystems: the Ground-Water Site-Inventory System (GWSI), the Water-Quality System (QWDATA), the Automated Data Processing System (ADAPS), and the Water-Use Data System, which is composed of the Aggregate Water-Use Data System (AWUDS) and the Site-Specific Water-Use Data System (SWUDS).

- Many types of data are stored in the NWIS distributed and local databases, including:
- site information,
- time-series (flow, stage, precipitation, chemical),
- peak flow,
- groundwater,
- water quality, and
- water use.

The NWIS structure and the types of data available in its subsystems are shown in the figure below.



NWIS structure and types of stored hydrologic data.

1.2 QWDATA System Description

NWIS provides for the use of one or more logical water-quality databases within one database, all accessed using one copy of the NWIS software. A logical water-quality database consists of a water-quality file (QWFILE), a station file (SITEFILE), and shared reference files. The QWFILE is a keyed-indexed file of database tables managed by a UNIX-based software system. This system allows records to be retrieved efficiently based on the values of selected data defined as KEY elements: agency code, site ID, begin date, begin time, end date, end time, and medium code. The SITEFILE is accessed for selecting water-quality records by SITEFILE data elements, such as site ID, site type, and location. Reference files, such as the parameter code file and the geologic-unit code file, are implemented as database tables and are used for checking the validity of data entry values.

Each water-quality record to be stored is initialized by "logging in" the data, and this is typically done when field data are available. When a sample is logged in, a record number that is unique within each logical water-quality database is automatically assigned to each analysis. The record number may be used later to access the analysis for updating or viewing. Personnel who have access rights for entering data may log in analyses.

1.3 User Access and Setup

User access is controlled internally by USGS policies and procedures.

1.4 Acknowledgements

Acknowledgement is given to the many people who contributed to the preparation, review, and testing of this documentation. This group includes:

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2 GETTING STARTED

2.1 Terminology

2.1.1 Sample

An environmental sample is the portion of a media such as water, sediment, tissue, etc. collected from a site during a specific date and time or a range of dates for analysis. A sample in the database is uniquely identified by the key variables pertaining to sample collection: agency code, station number, begin date, begin time, end date, end time, and medium code. The results of the chemical analyses and physical determinations for an environmental sample are generally stored as one sample. The key variables are sometimes adjusted to separate samples that are hydrologically related but that cannot be stored as one sample. For example, quality-control (QC) samples are stored as separate samples using one of the designated QC medium codes. Samples from different depths or cross sections may use time to "off-set" samples that were collected at the same site on the same date.

2.1.2 Result

Values derived from chemical analyses or physical determinations of a sample are stored in the database as results. Results are uniquely identified for each sample by a parameter code that defines the property or constituent measured.

2.1.3 Parameter Code

Parameter codes are five-digit codes used to identify the constituent or property measured in a sample and the units of measurement. Some parameter code definitions include information about the methods used to measure the constituent or property, but this level of information is not currently consistent in the naming system.

2.1.4 Record

A record is equivalent in a numbered database to a single, uniquely identified sample.

2.1.5 Record Number

A record number is an eight-digit number that is automatically assigned to a sample when the sample is logged into the database. The number is composed of a three-digit water year that omits the millennium, followed by a 5-digit sequential number; for example, 00200075 is the 75th sample entered in water year 2002. The record number is equivalent to the key variables that uniquely identify a sample and can be used instead of the key variables in most of the NWIS QW programs. These numbers are unique only within a database and must be used cautiously in an NWIS installation of multiple databases. When retrieving data from multiple databases within an NWIS installation, the table-retrieval program will accept a file that consists of rows listing the eight-digit record number followed by a two-digit database number. The two-digit database number will be used only by the table output and retrieval programs in QWDATA.

2.1.6 Site

A site is the physical location where a sample is collected or a measurement is made. Information about a site must be stored in the NWIS SITEFILE before any other data can be stored for that site. Equivalent terms: station.

2.1.7 Station Number

A station number is typically an 8- to 15-digit number assigned to a sampling site when it is established in the NWIS system (Novak, 1985). The eight-digit numbers are generally downstream order numbers that increase in the downstream direction and are used for surface-water locations on streams or rivers. Additional digits can be added to the eight-digit downstream order station numbers (up to a maximum of 15-digits) to achieve some sequencing. The 15-digit numbers are generally a combination of the latitude, longitude, and sequence number of the location. A sequence number is used to separate locations that are very close to each other. Equivalent terms: site ID or station ID.

2.1.8 WATLIST

WATLIST is an output file produced by batch input programs that contain (1) a listing of the records that were updated; (2) a cation-anion balance table, if the balance can be computed; (3) a listing of any generated error messages; and (4) a listing of chemical verification messages.

2.1.9 Time Definitions

QWDATA requires the entry of a time datum during login of a sample. To simplify the discussion within this documentation and between sub-systems of NWIS, the following definitions have been established.

Time zone—a geographic polygon where time is observed using a particular offset (in hours) from Coordinated Universal Time (UTC).

Time datum—a variable that combines the time zone and the daylight-saving time usage associated with a time measurement.

Watch time—the time-of-day used by the person making and recording a measurement or setting up an instrument to record measurements. The time-of-day recorded on field notes is converted to and from UTC within the database by using a watch-time datum.

Site-default time datum—the time datum normally used by a USGS office when recording time at a data-collection site. The date of the time measurement must be taken into account to determine the site-default time datum, since daylight-saving time is (typically) only in effect during the summer. **Note: the time-zone component of the site-default time datum may, or may not, be the same as the time zone in which the data-collection site is physically located. Similarly, the daylight-saving-time component of the site-default time datum may not agree with the daylight-saving policy of the region surrounding the site.**

Locally observed time datum—the time datum that is commonly used by the populace near a data-collection site. (One might conceptualize this as the time datum used in the local television listings.) Conversion of a time measurement (in UTC) by using the locally observed time datum generates a measurement time-of-day that would be readily intelligible to a non-technical reader near the data-collection site.

An example is included to clarify the distinction between the site-default and the locally observed time datums. An office in the Eastern Time zone chooses to operate all gages in standard time year-round, even though the State where the office is located employs daylight-saving time. The site-default time datum in this case is EST, and the locally observed time datum is EDT for summer time dates.

2.2 Using the Interactive Programs

All interactive programs can be accessed from the main QWDATA menu. To start QWDATA type **"qwdata"** at the UNIX prompt, and then the main menu will appear. Detailed information about each of the menu options within QWDATA is available in *Section 3* of this documentation.

2.2.1 Answering Prompts

When YES/NO questions are asked throughout the programs, an answer of "**Y**," "**y**," "**YES**," "**yes**," "**N**," "**n**," "**NO**," "**no**," or a blank will be accepted; any other answer should receive an error prompt and a repeat of the question. Similarly, where you may answer a prompt with "**QUIT**," "**Q**," "**q**," or "**quit**" also will be accepted. Several programs request a numeric response to select an Option (1, 2, or 3). When numeric data are requested, it is not necessary to enter final decimal points; however, embedded decimal points must be entered.

2.2.2 Cursor Control

Cursor control screen movement allows you to navigate from item to item, screen to screen, and to other parameters in the interactive programs. The valid cursor control characters and options are:

Enter	Action
^D	(Ctrl-D) Skip to next block
#	Delete (clear) value
/	Move back one field
/x	Continue at item number x
/+x	Move forward (x) items, default x is 1
/-x	Move back (x) items, default x is 1
/@	Continue at item with string @ in label
/p	Back up to previous page (screen)
/n	Advance to next page (screen)
/d	Delete current parameter
/a	Insert new parameter
/c	Cancel editing of current record
/q	Skip remaining items

To exit from the QWDATA system and discard the work of the current menu option, you can use Control-C. This will result in a query to be sure that you want to exit the software.

2.2.3 Default Values

You can use a carriage return to accept a default answer to a query in the interactive programs. The default answer is identified by "<CR> =" in angle brackets at the end of the query. Default values for data entry are shown in the entry forms and will be used if you do not change them.

2.2.4 Mandatory Fields

Information that is required to store or retrieve data from the database is highlighted in the interactive screens.

2.2.5 Help with Valid Codes

You may enter a "**?**" in a field to obtain help on the information expected for that field. Where help is not available, a message stating that help is not available will appear.

2.2.6 Boolean Logic

In programs where criteria can be set to select sites, samples, or results, the default logic is for multiple criteria to all be "true" for a site, sample, or result to be selected. In some programs an option is provided for you to specify that if any of the criteria are "true," then you should select the site, sample, or result. In these programs you select either "**AND**" or "**OR**" as the logic. "AND" Boolean logic expects all criteria to be true. "OR" Boolean logic expects any criteria to be true. When you enter more than two Boolean conditions, the software combines the third (and subsequent) condition by enclosing the previously entered logical expression within parentheses. For example, "A or B and C" is evaluated to mean "(A or B) and C."

2.2.7 Command Line Processing

You can enter UNIX commands from the NWIS QW menu screen (but not while running menu-option programs). You cannot use the UNIX commands while you are accessing a data entry field in the software. **Note: Some optional settings may not work when used from within QWDATA. An example is the "rm" command. If this command requires a confirmation of the action outside of QWDATA, it will not require one from within QWDATA. Shell redirection and pipe commands do not work with the UNIX commands entered from the QWDATA menu screens.**

2.3 Site-Level Information

Site-level information includes data associated with the site being sampled. Most information for a site is stored in the NWIS SITEFILE, which can be accessed from the Ground-Water Site-Inventory (GWSI) System of NWIS. All documentation for GWSI is available at *http://pubs.usgs.gov/of/2005/1251/*.

A site must be established in the SITEFILE before any water-quality information can be added. A site is established by using the GWSI entry programs as discussed in the GWSI user documentation. Review *Section 3.7.2* of this user guide for additional details.

Basic site-level information can be retrieved from the SITEFILE through two QWDATA output programs. For example, if parameter codes 81024 (drainage area), 72000 (land surface altitude), or 72008 (well depth) are requested in output and the values are not stored with the water-quality record, the software will retrieve the stored results for these parameter codes from the SITEFILE. This is only possible with the "Water Quality Table by Sample" or "Flat File by Sample" options. Also, some alphabetic parameter codes are available for retrieving site-level information from the SITEFILE through QWDATA. Alphabetic parameter codes are listed in *Appendix A, Table 13*.

2.4 Sample-Level Information

A sample in the database is uniquely identified by the key variables pertaining to sample collection: agency code, site identifier code, begin date, begin time, end date, end time, and medium code. The automatically generated sample information, the mandatory sample information that must be entered, and the optional sample information that may be entered are described below.

2.4.1 Record Number (Automatic)

Record Number is an eight-digit number assigned to a sample when it is logged into the database. The number is composed of a three-digit water year followed by a five-digit sequential number; for example, 00200075 is the 75th sample entered in water year 2002. The record number is equivalent to the key variables that uniquely identify a sample and can be used instead of the key variables in most of the NWIS QW programs. These numbers are unique only within a database and must be used cautiously in an NWIS installation of multiple databases.

2.4.2 Agency Code (Mandatory, Key Variable)

Agency Code is a five-character code that defines the agency responsible for the data stored for a sample. The default value is USGS_ (where "_" is a blank). The other options for agency code are on your local NWIS installation in the file /usr/local/nwis/support/aanwdx.all.agency.

2.4.3 Station Number (Mandatory, Key Variable)

Station Number is typically an 8- to 15-digit number assigned to a sampling site when it is established in the NWIS system. The eight-digit numbers are used for surface-water locations on streams or rivers and are generally downstream order numbers that increase in the direction of the drainage basin outlet. The 15-digit numbers are generally a combination of the latitude, longitude, and sequence number of the location. A sequence number is used to separate locations that are very close to each other.

2.4.4 Begin Date (Mandatory, Key Variable) and Begin Time (Optional, Key Variable)

Begin Date is the date the sample was collected (or the first date for a sample that is collected over multiple days). The format is YYYYMMDD.

Begin Time is the time the sample was collected (or the first time for a sample that is collected over a date or time range). The format is HHMM. Although this is an optional entry, it is one of the key variables used to identify a sample. If the field is not populated, then a null will be used on retrieval.

2.4.5 End Date (Optional, Key Variable) and End Time (Optional, Key Variable)

End Date is the last date of a sample that is collected over multiple days. The format is YYYYMMDD.

The End Time is the last time of a sample that is collected over a date or time range. The format is HHMM.

2.4.6 Time Datum

Time Datum *(see Section 2.1.9)* is a required code that represents the time zone and daylight-saving time indicators that define the times entered in the begin date and end date fields. This field will be populated with the site-default time datum from the SITEFILE for the sampling site entered, but the field can be changed to any valid time datum. A complete list of valid time datum codes is available in *Appendix J – Table 1*.

2.4.7 Time-Datum Reliability Code

Time-Datum Reliability code is a required code that represents the reliability of the time datum entered for a sample. This field will be populated with "K" (Known), but it can be changed to "E" (Estimated) if desired. Descriptions of valid time-datum reliability codes are available in *Appendix J – Table 2.*

The time-datum reliability code is used by QWDATA to determine when the time datum appears on some output formats. If the code is set to "K," the time datum will appear on all output formats. If the code is set to "T" or "E," the time datum will not appear automatically. Review *Section 3.4.3.4* for additional details.

2.4.8 Medium Code (Mandatory, Key Variable)

Medium Code is the medium from which the sample was collected (i.e., surface water, groundwater, sediment, tissue, etc.). The medium code is a three-character code that contains a "super" medium, a submedium, and an indicator whether the sample is an environmental or QC sample. A complete list of the valid medium codes is in *Appendix A, Table 1.*

2.4.9 Sample Type (Mandatory)

Sample Type is the type of sample collected (i.e., regular, replicate, blank, or spike). The default value for this code is "**9**" (Regular). The sample type codes are in *Appendix A, Table 4.*

2.4.10 Analysis Status (Mandatory)

Analysis Status specifies the level of security of the sample (i.e., unrestricted, internal use only, and proprietary). The default value for this code is "U" (Unrestricted) for regular samples and "I" (Internal use only) for quality-control samples. Proprietary samples should be coded with a value of "P" (*Section 2.14)*. Samples coded with "U" will be released to the public. The analysis status codes are in *Appendix A, Table 5*.

2.4.11 Hydrologic Condition (Mandatory)

Hydrologic Condition is the hydrologic stage that is represented by the sample collected (some examples are: normal, falling, rising and peak). The default value for this code is determined from the sample medium. The hydrologic condition codes are in *Appendix A, Table 2*.

2.4.12 Hydrologic Event (Mandatory)

A Hydrologic Event is a natural or human-related occurrence that is represented by the sample collected, for example, storm, drought, snowmelt, or other choices. The default value for this code is determined from the sample medium. The hydrologic event codes are in *Appendix A, Table 3.*

2.4.13 Geologic Unit Code (Optional)

A Geologic Unit Code is interchangeably referred to as the "aquifer code" and is an eight-character code that designates the aquifer associated with groundwater samples. The codes are defined in the "Catalog of Aquifer Names and Geologic Unit Codes." Use Option 4 of the Support Files submenu to help find the appropriate code. Entries of geologic unit codes will default to capital letters if lowercase letters are input.

2.4.14 Lab Number (Optional)

Lab Number is the analytical laboratory identification number given to a group of bottles from one field sample that are received together in a shipment.

2.4.15 Project Number (Optional)

Project Number is the nine-character project code associated with the sample.

2.4.16 Organism Code (Mandatory only for plant or animal tissue media)

Organism Code is a numerical code identifying the source organism of a tissue sample. The organism codes that can be used in the NWIS are a subset of the Integrated Taxonomic Information System (ITIS) described at *http://www.itis.gov/*.

2.4.17 Body Part Code (Mandatory only for plant or animal tissue media)

Body-Part Code is a numeric code used to further qualify the tissue analyzed for a tissue sample. The body part codes are in *Appendix A, Table 14*.

2.4.18 Sample Field Comment (Optional)

Sample Field Comment is a text field to hold information from the field about a sample that cannot be defined by the coded information in the system.

2.4.19 Sample Lab Comment (Optional)

Sample Lab Comment is a text field to hold information from the lab about a sample that cannot be defined by the coded information in the system.

2.4.20 Sample Collecting Agency (Optional)

The sample Collecting Agency is an alphabetic code identifying the agency primarily responsible for collecting the sample. Valid collecting agency codes are in *Appendix K*, Protocol Organization Codes. A default value for this field can be set in this file on your NWIS system: /usr/local/nwis/data/auxdata/qw.conf. For details about how to use the qw.conf file, see *Section 3.8.*

2.4.21 Sample Customer Code (Not stored)

Each sample is associated with a "Customer code" (also known as a "user code"), which consists of two or three letters or digits. The customer code is not stored in the database, but it may be used in batch-file versions of sample data to indicate which office should receive the sample and result data after analysis by the laboratory. The list of valid customer codes is maintained by the USGS National Water-Quality Laboratory (NWQL) in Denver, and it USGS users on the internal network can retrieve it from the Water-Quality Data Transfer System (QWDX) by selecting the "Retrieve limited QWDX Reports" option, and then selecting on the "QWDX Customers (WSC, etc) Report" option.

2.5 Result-Level Information

2.5.1 Remark Code

Remark codes provide additional information about the magnitude (or absence) of a value. View the remark code with the value to avoid misinterpreting the value. The remark codes are in *Appendix A, Table 6.*

2.5.2 Value Qualifier Code

Value qualifier codes provide information about the process used to determine an analytical value and, often, the remark code associated with the value. Up to three value qualifiers can be stored with any single result. The value qualifier codes are in *Appendix A, Table 11.*

2.5.3 Data Quality Indicator Code

Data quality indicator codes indicate the review status of a result, control the ability of a batch input program to overwrite a value, and affect the inclusion of a result in output. The data quality indicator codes are in *Appendix A, Table 9.*

2.5.4 Null Value Qualifier Code

Null value qualifier codes identify a failed measurement due to a field, lab, or shipment problem. The null value qualifier codes are in *Appendix A, Table 10.*

2.5.5 Laboratory Standard Deviation

Laboratory standard deviations are usually determined by the laboratory as an explanation of the uncertainty associated with a result value. The laboratory standard deviation field (LSDEV) provides the ability to round values on output by using this information. For radiochemical data, the LSDEV field is used to store the 1-sigma uncertainty for the value, as described in the *Office of Water Quality Technical Memo 2008.06*.

2.5.6 Method Code

Method codes composed of five alphanumeric characters identify the analytical method used to determine a value. You can display method codes can by using the Support menu Option 8, Display the Parameter Method Table, which is described in more detail in *Section 3.6.8.*

2.5.7 Preparatory and Analysis Dates

Preparatory and analysis dates are two fields used to identify the dates (YYYYMMDD) of the preparatory step and analysis at the laboratory.

2.5.8 Preparatory and Analysis Set Identifiers

Preparatory and analysis set identifiers are two fields used to store the set identification code (up to 12 characters) of the preparatory set and analysis set at the laboratory.

2.5.9 Report Level and Report Level Type Code

The report level is the numeric value associated with the analytical method when the result is determined. The report level type is a code used to identify the type of report level used for the method. The report level type codes are in *Appendix A, Table 12.*

2.5.10 Analyzing Entity

The agency, organization, group, or company that analyzes the result is known as the analyzing entity. An eight-character code is used to identify the entity that analyzed the listed result.

Analyzing entities can be displayed by using the Support menu Option 9, Display Analyzing Entity and Collecting Agency Codes, which is described in more detail in *Section 3.6.9.*

2.6 Parameter Codes

The parameter codes are five-digit codes used to identify the type of result stored. The codes are documented in the "*NWIS Parameter Code Dictionary*" *(PCD)*. You can search the PCD or list parameter codes from Options 2 and 3 in the Support Files submenu of the QWDATA menu. Selecting the appropriate parameter code may require some verification with the laboratory. The schedules run by the NWQL will contain the parameter code for the data that will be generated; therefore, it may be useful to check the NWQL catalog of schedules for help identifying the parameter code(s) needed. Only numeric parameter codes can be used to enter results into the NWIS system.

2.6.1 Calculated Value Parameter Codes

Results may be determined during output for selected parameters by using algorithms stored in a reference table. The parameter codes for these calculated values are user-specified during retrieval. For the calculation to succeed, the parameter codes needed for calculation must be stored. Most calculated parameter codes available in an analysis can be retrieved using the alpha code – CALCV. Algorithms for the calculated parameter codes can be viewed or output in QWDATA through Option 7 in the *Support Files* menu. Any of these parameter codes may also be used to store values in the database, if desired. See *Section 3.6.7* for more details.

2.6.2 Water Science Center-Specific Parameter Codes

Twenty-six parameter codes (99900–99925) are available in the PCD for use by individual Water Science Centers (WSCs). A WSC-specific code is used to store results for constituents that do not have a valid parameter code. Storing results in QWDATA allows them to be stored, tabled, graphed, or exported for use in statistical programs. The first five codes (99900–99904) have default rounding codes of 2, the second five (99905–99909) have default rounding codes of 3, and the remaining codes (99910–99925) have default rounding codes of 5. For more information about rounding codes, refer to *Sections 2.7.1* and *3.6.8*. If WSC-specific parameter codes are included in a publication-style table, the heading for each parameter contains seven characters per line and seven lines of text. The heading may be modified by using an editor to accurately describe the constituent. Exceptions apply to a table produced as described in *Section 3.4.7.* An example of a WSC-specific code table output is below.

```
WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

                                        9990001  9990201
                SPE-                    9990002  9990202
                CIFIC                   9990003  9990203
                CON-      TEMPER-       9990004  9990204
                DUCT-      ATURE        9990005  9990205
  DATE          ANCE       WATER        9990006  9990206
                (US/CM)   (DEG C)       9990007  9990207
                (00095)   (00010)       (99900)  (99902)
   SEP
   11...          109      10.5          70          .01
```

Because the definitions for these parameter codes are WSC specific and they are not stored in QWDATA, it is recommended that the database manager keep a log of the definitions applied to these codes. New parameter codes can be requested instead of using these codes.

2.6.3 Fixed Value Codes

QWDATA contains many parameter codes for which the result is not the outcome of an environmental measurement but rather a qualitative scientific observation or description. These types of parameter codes are referred to as "Fixed Value Codes," and they have a small number of valid results that are related to a description. For example, parameter code 01035 (the severity of detergent suds) has the following valid results.

0	none
1	mild
2	moderate
3	serious
4	extreme

In other cases the result is not the outcome of an environmental observation, but instead further defines the sample. For example, Parameter code 99111 (quality assurance data type associated with sample) has the following valid results.

1	no associated quality assurance data
10	blank
20	blind sample
30	replicate sample
40	spike sample
100	more than one type of quality assurance sample
110	cross-section information stored
200	other

A complete list of parameter codes that have fixed values and the corresponding valid results is in *Appendix B.*

2.6.4 Alpha Parameter Codes

Alpha parameter codes, which may include both alpha and numeric characters, are used in QWDATA to retrieve sample and result-level descriptions as well as groupings of other codes. The descriptions include information stored with the sample such as date, time, and sample record number. An example of an alpha parameter code that represents a grouping of parameter codes is "ADDPC," which adds all numeric codes to a retrieval. Another example of an alpha parameter code that represents a grouping of parameter codes is "CALCV," which adds all calculated parameter codes to a retrieval. A complete list of alpha codes is in Table 13 of *Appendix A.*

For output in a by-result format, only alpha parameter codes may be used to define the columns in the output. For more information on this type of retrieval refer to *Section 3.4.4*.

2.7 Numeric Information

Values in QWDATA are stored in the database by using double-precision floating-point representation, which yields 15–17 decimal digits of precision. Data stored with the result value allows the software to reproduce the precision of the input data when the double-precision stored value is retrieved as unrounded from QWDATA. The retrieval programs available through the QWDATA menus provide more limited precision. Precision of results produced through QWDATA is limited by the internally defined width of the output field, the rounding method, and rounding criteria selected. Even when unrounded results are requested, precision is limited. In general, no more than 8 digits are provided with the retrieval programs in QWDATA. Results used in calculations, or retrieved through other interfaces (such as SQL or ODBC), will be double precision.

2.7.1 Rounding

Water-quality values from NWIS may be output as rounded or unrounded. The unrounded choice will output the values as they were received from the lab and stored in the database. There are two choices for rounding values: (1) allow the software to determine how to round the result by using an existing *laboratory standard deviation (Section 2.5.5)* stored with the result or the value in the rounding array for the specific parameter and method, or (2) use a rounding code stored with each value. See *Section 3.6.8* and *Tip Sheet 5.19* for details about rounding codes.

You can select only one of the two rounding options above per retrieval for "*Data Output"* Options 3, 4, 5, or 6 (see Section 3.4.7). Option 7 for "Data Output," however, allows multiple rounding options (*Section 3.4.7*).

The first one is called "default rounding" and the second one is called "user-defined rounding." Some user-defined rounding codes have been set to odd values, sometimes by input from the lab, and they may produce unexpected results. The most conservative and consistent option for rounding values at present is default rounding.

User-defined rounding can be used if a rounding code is stored with the result. If a rounding code is not stored with a result, the software will use the value from the parameter-method reference table. To add a rounding code, you can use *"Modify Samples or Results"* from the main QWDATA menu. Rounding codes can be added on a large scale by using batch files.

Uncensored, non-zero concentration values that round to zero are, in general, converted to a null value on output, with the remark set to "M" (constituent identified in sample, but not quantified).

Many uncensored measurements, however, may be reported as zero, and those values will remain zero in the output. An example of an acceptable rounded-to-zero result is water temperature. Censored, non-zero concentration values that round to zero are reported with the same number of significant figures that were originally entered with the value.

A rounding code of zero is not accepted by the system. New interactive entries with rounding codes of zero (usually generated by the software) require you to select a different rounding code

before the value will be stored. New batch entries with rounding codes of zero will replace the zero with the appropriate rounding code for that parameter and method.

Programs within QWDATA present result values using the various rounding options. The table below summarizes the rounding options used by the various QWDATA programs.

QWDATA main menu option (option number)	Submenu option (option number)	Rounding behavior
Login Sample (1)	---	Result.
Modify Samples or Results (2)	Enter Field Results (1)	Result.
	Enter Laboratory Results (2)	Result.
	Edit Sample or Results (3)	Result.
Data Review (3)	List Samples and Results (3)	Unrounded.
	Sample List and/or Cation-Anion Balance (4)	Unrounded.
	Chemical Validation Checks (5)	Unrounded.
Data Output (4)	Water-Quality Table by Sample (Publication Format) (3)	Choice.
	Water-Quality Table by Result (4)	Choice.
	Flat File by Sample (5)	Choice.
	Flat File by Result (6)	Choice.
	Flat File with TAB delimiter (Publication Export) (7)	Multiple choices.
	Make a P-STAT Data Set (8)	Choice.
Applications (5)	Summary statistics table (6)	Choice.
	Detection Limits Table (7)	Choice.
Batch Processing (8)	Enter batch-file data for logged-in samples (qwcardsin) (1)	Unrounded.
	Enter batch-file data for all samples (qwenter) (2)	Unrounded.
	Reload batch-file data, overriding DQI (qwcardsinxdqi) (3)	Unrounded.
	Enter batch-file data with user-specified behavior (4)	Unrounded.
	Review tab-delimited batch files (5)	Unrounded.
	Edit tab-delimited batch files (6)	Unrounded.
	Produce tab-delimited batch files (7)	Unrounded.

[Rounding behavior: **result**, user-rounding based on rounding code stored with the result; **unrounded**, the value displayed is the stored value in the database; **default**, rounding is based on laboratory standard deviation or on the rounding array stored in the parameter-method table; **choice**, user can choose what type of rounding will be applied.]

2.7.2 Scientific Notation

During input, the field for entering values in QWDATA is limited to 8 digits and a decimal place. Scientific notation can be used to store values that will not fit in the field because they are very small or very big numbers. The format for storing scientific notation is the mantissa number, "E," and the exponential power-of-ten value. For example, .000000000023 would be stored as 2.3E-11, and 48,900,000,000 would be stored as 4.89E10. In some cases, the PCD rounding specifications cannot accommodate very small and very large numbers on output. In those cases, user-defined rounding can be selected for output.

2.7.3 Negative Values

Negative values may be stored in QWDATA for selected parameters. The types of parameters that can have negative values generally are field constituents or properties (for example, air temperature, in degrees Celsius, parameter code 00020) and chemical constituents that are isotopes (for example, radium 226 dissolved, in picocuries per liter, parameter code 09503). Some of the WSC-specific codes (99900–99909) also will allow negative values to be stored.

A complete listing of the parameters that allow negative values is in *Appendix H.*

2.7.4 Zero Values

Zero values in the database are processed in different ways. The software accepts zeros during processing for all parameters; however, a zero may or may not be a valid value from a scientific point of view. For example, zero for a temperature is a valid measurement. Laboratory methods for measuring chemical constituents, however, do not actually measure zero, but instead censor values that are less than some laboratory reporting level.

For some chemical constituents, zero may have been incorrectly stored for historical data values. You may censor these zero values on output. If you select "User Specified" for "Censoring of Zero Values" in the tabling options menu, a zero value will be converted to a null value and a remark code of U (material analyzed for, but not detected) will be reported. *Section 3.4.3.4* describes the tabling options in further detail. A reference list of parameters that are known to have zeros reported for some historical data is in *Appendix I.*

In some cases, the rounding specifications for a parameter in the PCD do not go to a decadal unit that is small enough for some result values and may result in the value rounding to zero. This is because laboratory methods are not accurate to that level, even though a laboratory measurement was made and reported. In this case, during output processing a small number would incorrectly round to zero, even though a number may be stored. Values that belong to constituents that have reporting units that are used to quantify the abundance of an analytical constituent within some unit of area, volume, mass, or weight cannot be zero. Where the rounding procedures cause a non-zero value to round to zero, an "M" (presence of material verified, but not quantified) will be displayed on output for parameters with the units contained in the table below. The majority of parameters where a value that is rounded-to-zero is replaced by an "M" are measured with the units shown in the table below.

PG/KG	MG/ML	G/SQ M
PG/ML	MG/L	G/ SQ M
NANOGRAMS/LITER	MG/SQ M	G/KG
NG/G	MG / SQ M	UEQ/L
NG/L	MG/M2	MEQ/100 G
MICROGRAMS/LITER	MG/G	MEQ/L
UG/L	MG/KG	ML/L
UG/G	G/M2	
UG/KG	G/CU CM	
UG/M2	G/CU M	
MILLIGRAMS/LITER	G/SQ METER	

Reporting units where zero values are unacceptable.

2.8 Text Fields for Comments

Text comments can be included within QW records at the sample level and at the result level. Each of these two levels has two categories of comments, those from the laboratory and those from the field. In general, messages from the laboratory are sent directly from the laboratory and should not be edited or altered, although there are circumstances where this might be necessary. Messages from the field can be used to include information relative to the entire sample or to a specific result that cannot be characterized in another field. The recommended maximum length of these comment fields is 300 characters.

NOTE: Output from QWDATA in flat files or other tabular form generally is limited to displaying approximately 50 characters of these text fields. If your comment is longer than 50 characters, you will not retrieve the complete comment in output. (The WATLIST and publication-export outputs include the entire text field contents.)

To retrieve these text fields, the following alpha parameter codes can be used when retrieving records.

Code	Meaning
SCMLB	Sample-level comment from lab
SCMFL	Sample-level comment from field
RCMLB	Result-level comment from lab
RCMFL	Result-level comment from field

2.9 Validation

Chemical and data validation checks are performed by the data entry programs and the data review and batch processing programs.

2.9.1 Data Entry Validation

Data validation checks are performed in the login samples program (Option 1, described in *Section 3.1*), modify sample and results program (Option 2, described in *Section 3.2*), and batch processing programs (Option 8, described in *Section 3.8*).

Data validations are performed for the following sample header items (items with an "*" are validated against the NWIS reference lists).

- Station number (exists in the Site file)
- Sample has been logged into the database (date, time, medium code)
- Sample collection start and end date and times (before current time)
- Time datum appropriate for location of sample
- Medium code*
- Sample type code*
- Analysis status code*
- Hydrologic condition code*
- Hydrologic event code*
- Geologic unit code*
- Organism code*
- Body part code*
- Sample collection agency code*

Data validations are performed for the following result items (items with an "*" are validated against the NWIS reference lists).

- Parameter and method codes*
- Result value (if fixed-value code*)
- Rounding (the entry must be in the following set: 1,2,3,4,5,6,7,8,9, ':' , ';' , '<' , '=' , '>' , '?' , or '@')
- Remark code*
- Data-quality indicator code*
- Value-qualifier code*
- Null-value qualifier code*

- Reporting-level value (must be > 0)
- Reporting-level type code*
- Analyzing entity code*
- Preparation and analysis date

2.9.2 Chemical Validation

Chemical validation checks are performed in the data review programs (Option 3, described in *Section 3.3*) and the batch processing programs (Option 8, described in *Section 3.8*) and the results are printed in the WATLIST. The chemical validation checks are available in the sample list and/or cation-anion balance (Option 4, described in *Section 3.3.4*), chemical validation checks (Option 5, described in *Section 3.3.5*), and create or modify ion balance specification options (Option 6, described in *Section 3.3.6*).

A detailed listing of the chemical validation checks in QWDATA is listed in *Appendix M.* In general these checks include the following items.

- Field measurement results against general guidelines
- Chemical logic
- Bacterial logic
- Comparisons between stored calculated parameters and current calculated values
- Comparisons between related constituents
- Comparisons between unfiltered and filtered constituents
- Comparisons between selected constituents and individual parameters that make up the sum of parts
- Comparisons of constituents to alert limits in *Appendix E*
- Comparisons of constituents to custom, user-specified alert limits that are described in more detail in *Section 3.3.5*.
- Calculation of a standard or customized cation/anion balance
    - The custom balance option is described in more detail in *Section 3.3.6.*

2.9.2.1 User-Specified Alert Limit Forms

The data review and batch-processing programs automatically compare selected constituent values to U.S. Environmental Protection Agency (EPA) Drinking Water Maximum Contaminant Levels and Secondary Maximum Contaminant Levels. Users also may need to compare results to other Federal, State, and local regulatory standards for waters used for specific purposes. User-specified alert limit forms are used by data review and batch-processing programs in QWDATA to provide users with the option to compare results to these other Federal, State, and local regulatory standards.

2.9.2.1.1 List of User-Specified Alert Limit Forms Available

You can view a list of available user-specified alert limit forms by going to the following directory: ***/usr/local/nwis/data/auxdata/qw_alert_limits.*** In this directory are several files with the format ***alert.limitnn***. The "nn" represents a two-digit number that identifies the form (e.g., alert.limit01). Use any UNIX editor to view the contents of these ASCII files.

2.9.2.1.2 Adding a New User-Specified Alert Limit Form

You can add new user-specified alert limit forms for use in QWDATA by creating a form using a specific format and storing it in the ***/usr/local/nwis/data/auxdata/qw_alert_limits*** directory. Create new user-specified alert limit forms if none of the available forms fit the data to be entered. Review the available user-specified alert limit forms prior to creating a new form to avoid duplicating forms.

To make a new user-specified alert limit form, change directories to ***/usr/local/nwis/data/auxdata/qw_alert_limits***. Choose the user-specified alert limit form number to be used for the new form by listing the alert limit forms in the directory. Alert limit form names are in the format ***alert.limitnn*** where "nn" is the two-digit number that identifies the form. Choose a form number that is not already in use. Use any UNIX editor that produces an ASCII output file to create or edit an alert limit form file. Use the first line of the form to document the purpose of the form by placing a "#" character in the first column. Use additional lines for comments as long as a "#" character is in the first column of the line. Each alert limit line contains (1) parameter code, (2) logical operator for limit, (3) alert limit value, and (4) alert limit name. These values are separated by a <tab> character. An example of a user-specified alert limit form is shown *Appendix G.*

2.10 Field Forms

Field forms are used by interactive entry of data and edit programs in QWDATA to provide a list of parameters that are routinely collected for a particular project, field trip, WSC water-quality field sheet, or data from a non-USGS laboratory. Field forms are a list of parameter codes and associated information that are accessed by various programs so that a user can enter efficiently field or laboratory data. Each field form is identified by a unique number that is part of the field form name. Entry programs for field and laboratory data are discussed in *Sections 3.2.1 – Enter Field Results, 3.2.2 – Enter Laboratory Results,* and *Tip Sheet 5.2.*

2.10.1 List of Field Forms Available

You can view a list of available field forms either by going to the directory where the forms reside or by listing them within QWDATA. To view the available forms in the directory where they reside, change directories to ***/usr/local/nwis/data/auxdata/qw_field_forms/***. In this directory there are several files with the format ***field.parmsnn.*** The "**nn**" represents a two-digit number that identifies the form (e.g., field.parms01). Use any UNIX editor to view the contents of these ASCII files.

Another way to list the available field forms is within QWDATA during data entry. The prompt shown below appears during data entry after the login of a sample and when *Enter Field Results* or *Enter Laboratory Results* has been selected.

```
Enter field form nn, ?nn for detail of form nn, ? for list of forms available:
```

At this prompt, you can enter a "**?**" and a list of available field forms will appear that includes the form number followed by either a form title or a list of parameter codes in that field form. To view the details of a specific form, enter a "**?nn**" at the prompt above, where "nn" is the field form number of interest. A list of parameter codes and associated information will be displayed for that field form.

2.10.2 Adding a New Field Form

You can add new field forms can be added to be used in QWDATA by creating a form using a specific format and storing it in the ***/usr/local/nwis/data/auxdata/qw_field_forms*** directory. Create new field forms if none of the available field forms fit the data to be entered. Review the available field forms prior to creating a new field form to avoid duplicating field forms.

To make a new field form, change directories to ***/usr/local/nwis/data/auxdata/qw_field_forms.*** Choose the field form number you are going to use for the new form by listing the field forms in the directory. Field form names are in the format ***field.parmsnn*** where "nn" is the two-digit number that identifies the form. Choose a field form number that is not already used. Use any UNIX editor that produces an ASCII output file to create or edit a field form file. Use the first line of the form to document the purpose, by placing the "***#***" character in the first column. Use additional lines for comments as long as "#" is in the first column of the line. The format and an example of a field form are shown in *Appendix G.*

You can enter any numeric parameter into a field form. Alpha parameters (such as GUNIT for geologic unit code) cannot be used in the form. Be sure that the final line of the form ends with a carriage return. If you do not include a carriage return, the last parameter will not be included during data entry. A maximum of 100 parameters can be included in any field form.

As part of creating new field forms, you can create descriptions for the parameter codes listed. Be careful not to create descriptions that could cause confusion when compared to the definitions in the PCD. For example, a parameter described as “chloride, dissolved” in the field form and defined as “chloride, total” in the PCD could cause incorrect data storage and interpretation, as well as significant future confusion. Creating a new field form is discussed in *Tip Sheet 5.3.*

2.11 Multiple Databases

Users have access to multiple water-quality databases where each database file is associated with a generic filename and a database number. A database number is a two-digit number, ranging from 01 to 99. Regardless of the number databases that are implemented on each system, any user who has not been assigned an alternate database number in the database selection table will be associated with database number 01. Additional information and instructions for implementing and using multiple databases are in the manual for the nwdb command.

2.11.1 When to Use an Alternate Database

Within NWIS, users have the option to create and use multiple water-quality databases. The decision to create and maintain an alternate database is one that should be carefully considered to ensure that the needs being met by an alternate database are sufficient to outweigh the problems associated with maintaining two or more databases.

Some of the issues involved with having more than one database are:

- duplicate data stored in multiple databases require that updates be applied to more than one database to maintain data integrity;
- only data from database 01 will be displayed on NWISWeb;
- an alternate database that is created for a specific project might be abandoned if the project chief leaves;
- alternate databases require increased data management responsibilities;
- interactive and batch entry results require setting the proper database number prior to NWIS use; and
- automated loading of NWQL results require setup and use of a separate NWQL user code.

Prior to the release of NWIS 4.1, one of the major reasons for the creation of alternate databases was to prevent the release of data for which there should be no public access; for example, proprietary data (either permanent or temporary), cooperator data, and QA/QC data. With the release of the 4.1 revisions of QWDATA, codes are available for restricting access within the same database; however, sample coding must be rigorously correct if proprietary and publicly-accessible data are stored in the same database. If proprietary data are segregated into an alternate database, these data can be excluded safely and easily from unauthorized users, including NWISWeb.

Other reasons for having an alternate database include testing, training, and organization. For example, much NAWQA data is kept in an alternate database, because NAWQA study units generally are not aligned with WSC boundaries, and the primary responsibility for serving data to the public lies with the WSC that has jurisdictional responsibility for the site where the data were collected.

The NWIS Program office recommends that an alternate QW database be used for storage of QA/QC and proprietary data to protect these data from accidental release to unauthorized sources in response to a public inquiry, or the inadvertent inclusion of the data in a report or on NWISWeb.

WSCs should avoid the situation where multiple copies of the same sample data are stored in separate databases on the same NWIS installation, because keeping the multiple copies consistently up-to-date is difficult.

2.11.2 How to Set Up an Alternate Database

If you determine that an alternate database is needed, the directions are located on the NWIS internal website. They are not duplicated here because of changes that might be required as the NWIS software changes.

2.11.3 What Software Works with Multiple Databases

Multiple databases can be accessed when retrieving records and when creating output tables. You can access these options through Options *3 – "Data Review"* or *4 – "Data Output"* from the main QWDATA menu (see *Section 3.3.2).*

2.12 Quality-Control Samples

The recommended procedures for storing quality-control (QC) samples in NWIS are described in this section. QC data provide information about the bias and variability in the environmental data; therefore, the QC samples need to be identified in a manner that relates them to corresponding environmental samples. In addition, the QC samples need to be stored separately from the environmental samples to prevent any unintentional retrieval of these types of data. The recommended procedures address both of these requirements.

2.12.1 Definitions of Quality-Control Samples

Blank samples are taken to ensure that environmental samples have not been contaminated by the data collection process. Any measured value/signal in a blank sample for an analyte (a specific component measured in a chemical analysis) that was absent in the blank solution is believed to be due to contamination. Many types of blank samples are possible, each designed to segregate a different part of the overall data-collection process including sampling, filtering, preserving, storing, transporting, and analyzing.

Blank solution — Solution that is free of the analyte(s) of interest. Such a solution would be used to develop specific types of blank samples as described below.

Shelf (or hold) blank — A blank solution put in the same type of bottle used for an environmental sample and stored adjacent to an environmental sample in a storage area.

Refrigerator blank — A blank solution put in the same type of bottle used for an environmental sample and stored adjacent to an environmental sample in a refrigerated storage area.

Trip blank — A blank solution put in the same type of bottle used for an environmental sample and kept with the set of sample bottles both before and after sample collection.

Sampler blank — A blank solution poured or pumped through the same field sampler used for the collection of an environmental sample.

Filter blank — A blank solution filtered in the same manner and through the same filter apparatus used for an environmental sample.

Splitter blank — A blank solution mixed and separated using a field splitter in the same manner and through the same apparatus used for an environmental sample.

Preservation blank — S blank solution treated with the same preservatives used for an environmental sample.

Field blank — A blank solution subjected to the same aspects of sample collection, field processing, preservation, transportation, and laboratory handling as an environmental sample.

Equipment blank — A blank solution processed through all equipment used for collecting and processing an environmental sample (similar to a field blank, but normally done in the more controlled conditions of the office and not transported to the field).

Ambient blank — A blank solution put in the same type of bottle used for an environmental sample, kept with the set of sample bottles before sample collection, and opened at the site and exposed to the ambient conditions.

Source solution blank — A blank solution sent to a laboratory to confirm that it is free of the analyte of interest.

Lab blank — a blank solution prepared in the laboratory and analyzed the same as an environmental sample.

Blind sample — A sample submitted for analysis whose composition is known to the submitter but unknown to the analyst. A double-blind sample is one of known composition that is submitted to the analyst in such a manner that neither its composition nor its identification as a check sample is known to the analyst. A blind sample is one way to test the proficiency of a measurement process. Blind samples can be used to monitor the performance of an analytical system, check the analytical results of more than one laboratory, more than one analytical method, or the consistency of the same laboratory and method. Every blind sample analyzed should have an associated reference to the source and the possible dilution. Blind samples may be prepared from a reference material, as defined below.

Reference material — A material or substance, one or more properties of which are sufficiently well established, to be used for the assessment of a measurement method or for assigning values to materials.

Replicate (Duplicate) samples — a group of samples, collected so that they are intended to be essentially identical in composition. Replicate is the general case, for which duplicates are the special case and consist of two samples. Many types of replicate samples are possible, each of which may yield slightly different results in a dynamic hydrologic setting, such as a flowing stream. The types of replicate samples are:

Concurrent samples — samples collected by two or more people collecting samples simultaneously or by one person alternating sub-samples between two or more collection bottles;

Sequential samples — a type of replicate sample in which the samples are collected one after the other, typically over a short time; and

Split samples — a type of replicate sample in which a sample is split into subsamples contemporaneous in time and space.

Spike sample — A sample to which known concentrations of specific analytes have been added in a manner that minimizes the change in the matrix of the original sample. Every spiked sample analyzed should have an associated reference to the spike solution and the volume added.

Spike solution — A solution with one or more well-established analyte concentrations that are added in known quantities to an environmental sample to form a spike sample.

2.12.2 Identification of Quality-Control Samples in NWIS

A system for identifying quality-assurance samples and maintaining the relationship with corresponding environmental samples has been established. The MEDIUM CODE, DATE, TIME, and SAMPLE TYPE are used in the following manner to clearly identify all QA data.

Blank

- Use the actual STATION NUMBER, DATE, and TIME for blanks associated with a specific site and environmental sample. Use a laboratory STATION NUMBER, DATE, and TIME for blanks that are associated with many sites and/or environmental samples. If more than one blank is analyzed, increment the TIME by 1 minute for each blank.
- Use a MEDIUM CODE of OAQ.
- Use a SAMPLE TYPE of 2.
- You may wish to use HYDROLOGIC EVENT and HYDROLOGIC CONDITION of X.
- Use 991xx parameter codes listed below to designate the type of blank solution, the source of the blank solution, and the type of blank sample. Use 992xx codes listed below to record a solution lot number.
- If more than one blank is collected, use parameter codes 82073 and 82074 to enter the same STARTING TIME and ENDING TIME for each blank. Parameters 99109 and 99110 can be used to enter the SAMPLE SET START DATE and SAMPLE SET END DATE for a blank associated with environmental samples collected on more than 1 day.

Blind

- Use the actual STATION NUMBER, DATE, and TIME for blinds associated with a specific site and environmental sample. Use a laboratory STATION NUMBER, DATE, and TIME for blinds associated with many sites and/or environmental samples. If more than one blind is analyzed, increment the TIME by 1 minute for each blind.
- Use a QC MEDIUM CODE.
- Use a SAMPLE TYPE of 4.
- Use 991xx parameter codes listed below to designate the source of the reference material and the source code number.
- If more than one blind is collected or if a blind is related to more than one environmental sample, use parameter codes 82073 and 82074 to enter the same STARTING TIME and ENDING TIME for each blind. Parameters 99109 and 99110 can be used to enter the SAMPLE SET START DATE and SAMPLE SET END DATE for blind samples that are associated with environmental samples collected on more than 1 day.

Reference Material

- Assign a laboratory STATION NUMBER.
- Use the DATE and TIME that material was created or received.
- Select a QC MEDIUM CODE.
- Use a SAMPLE TYPE of 6.
- Use 991xx parameter codes listed below to designate the source of the reference material and the source code number.

Replicate

- Use the actual STATION NUMBER.
- Use the actual DATE and TIME for the first sample, and increment TIME by 1 minute (or actual times if greater than 1 minute) for each additional sample.
- Select an environmental MEDIUM CODE for the first replicate and a QC MEDIUM CODE for the second and subsequent replicates.
- Use a SAMPLE TYPE of 7 for every sample, including the first one. A SAMPLE TYPE of 5 (duplicate) has been used in the past for the special case of replicates consisting of only two samples. The SAMPLE TYPE of 7 should be used for all samples that fit the definition of replicate included in this documentation.
- Use the 991xx parameter code listed below for replicates to designate which of the methods was used to create the replicates.
- Use the same STARTING TIME and ENDING TIME (parameters 82073 and 82074) for all samples.
- If the replicate samples will be stored in the regular database, use normal MEDIUM CODES (i.e., WG or WS) and a sample type of 7.

Spike

- Use the actual STATION NUMBER, DATE, and TIME for spikes associated with a specific site and environmental sample. If more than one spike is analyzed, increment the TIME by 1 minute for each spike.
- Select a QC MEDIUM CODE.
- Use a SAMPLE TYPE of 1.
- Use the 991xx parameter codes listed below to designate the source code number of the spike solution, the spike type, and the volume of the spike. Use an existing code (32000) to designate the sample volume.
- If more than one spike is collected, use parameters 82073 and 82074 to enter the same STARTING TIME and ENDING TIME for each spike. Parameters 99109 and 99110 can be used to enter the SAMPLE SET START DATE and SAMPLE SET END DATE for

blind samples that are associated with environmental samples collected on more than 1 day.

Spike Solution

- Assign a laboratory STATION NUMBER.
- Use the DATE and TIME that source was created or received.
- Use a MEDIUM CODE of OAQ.
- Use a SAMPLE TYPE of 8.
- Use the 991xx parameter codes listed below to designate the source of the spike solution and the source code number of the spike solution.

Assign an ANALYSIS STATUS code of "I" (Internal-use only) to each QC sample to prevent the data from being inadvertently released to the public. The following remark codes have been added to the system to allow further identification of some types of QA data:

A Average value, and
S Most probable value.

Parameter code 99111, quality-assurance data indicator, can be stored with environmental samples to indicate that there are associated quality-assurance samples. The fixed values for 99111 indicate the type of quality-assurance samples associated with the environmental samples.

Several existing parameter codes in addition to 82073 and 82074 are mentioned in the identification of samples above that would clarify the nature of the sample (both environmental and QA samples). A list is provided below to encourage the use of these parameters. The definitions for the fixed-value parameters are in *Appendix B.*

00115 Sample Treatment

71999 Sample Purpose — fixed value

72005 Sample Source — fixed value

74200 Sample Preservation Method — fixed value

82075 Amount of rinse, in liters

82398 Sampling Method — fixed value

84164 Sampler Type — fixed value

The parameter codes referenced in the sample identification are defined below.

99100 Blank, Type of Solution (fixed value)

99101 Blank, Source of Solution (fixed value)

99102 Blank, Type of Sample (fixed value)

99103 Reference Material, Source (fixed value)

99104 Reference Material or Spike Lot Number

99105 Replicate, Type (fixed value)

99106 Spike, Type (fixed value)

99107 Spike, Source (fixed value)

99108 Spike Volume, in mL

99109 Starting Date for a Set of Samples (YMDD)

99110 Ending Date for a Set of Samples (YMDD)

99111 Quality Assurance Data Type Associated with Sample (fixed value):

- **1. No Associated QA Data**
- **10. Blank**
- **20. Blind Sample**
- **30. Replicate sample**
- **40. Spike sample**
- **100. More than one type of QA sample**
- **110. Cross-section information stored**
- **120. Well-purge information stored**
- **200. Other**

99150 Reference material or spike number 2 lot number

99200 Lot number, first, inorganic-grade water, number

99201 Lot number, second, inorganic-grade water, number

99202 Lot number, first, organic-grade water, number

99203 Lot number, second, organic-grade water, number

99204 Lot number, first, VOC-free water, number

99205 Lot number, second, VOC-free water, number

99206 Lot number, Capsule Filter

2.13 Tissue Samples (Will be available soon)

2.14 Proprietary Data

Proprietary data consist of information obtained by the USGS for which the Bureau's rights of ownership are restricted in a manner that limits our ability to freely distribute the data. Proprietary data restrictions may include copyright protection, homeland security issues, or specific agreements with cooperators. Internal-use data include analyses for quality-control samples, and are generally not available to the public. However, the majority of data are without distribution limitations.

Within QWDATA, the analysis status code (ASTAT) can be used to identify the distribution limitations of the sample and all associated results. The data quality indicator code (DQI) can be used to specify review status and control distribution of individual results within a sample. Three optional codes for ASTAT (*Section 2.4.10*) can be set by editing the existing record (described in *Section 3.2.3*) or setting ASTAT for multiple records at one time (described in *Section 3.7.5*). The DQI code is introduced in *Section 2.5.3*. Proprietary samples should be set with an ASTAT of "P." Proprietary samples will not leave the WSC database.

Details about the data flow related to proprietary data are available at *http://water.usgs.gov/admin/memo/QW/qw07.04.html*, and *http://water.usgs.gov/admin/memo/QW/qw07.03.html*.

2.15 Data Entry Options

Two methods are available for entering data using QWDATA—interactive data entry and batch data entry. Interactive data entry is entering data using queries and entry screens within the software. Batch data entry is using files as input to put data into the database. Both methods can be used to enter or modify data in the water-quality database if you have the required security access. In general, use interactive data entry to enter sample information (record creation), enter field data, and modify existing records for relatively small changes. Batch data entry is generally used for entering or modifying large amounts of data, for example, the input of results from laboratories. You can use either method to remove data from the water-quality database.

2.15.1 Interactive Programs

Use Option 1 on the QWDATA main menu to interactively log samples into the database. This option can be used to enter sample information and field data. A *record number (see Section 2.1.5)* is generated after the sample information has been entered. For specific information about using this program see *Section 3.1, Option 1 – Login Samples*.

Option 2 on the QWDATA main menu contains options for entering field data and laboratory results and editing samples or results. Option 2.1, "Enter Field Data," allows you to add field water-quality data to existing records in the QWDATA database. Option 2.2, "Enter Laboratory Results," allows you to add laboratory data to existing records in the QWDATA database. This option was primarily designed for entering data from non-USGS laboratories; field data also can be entered using this program. Option 2.3, "Edit Samples or Results," allows you to edit and delete sample and result information for samples that exist in the QWDATA database. For more information on any of these options see *Section 3.2, Option 2 – Modify Samples or Results.*

Entering field or laboratory results by using any of the above interactive programs is done by using field forms. You can customize these forms to provide parameters of interest for particular data entry needs. More information about field forms is in *Section 2.10* and *Tip Sheet 5.3*.

2.15.2 Batch Programs

Option 8 on the QWDATA main menu contains options for entering data by using batch programs. The programs available from this menu work with files of water-quality data and are used for a variety of data needs. The most common application is entering data from laboratories, most typically the USGS National Water Quality Laboratory (NWQL). Other uses of the batch programs and files are outputting entire records or groups of records by specifying the record information and making large scale changes to water-quality data in the QWDATA database.

The batch file format is a tab-delimited format. This tab-delimited format uses a pair of files, one for sample information and one for result information. This format was designed to accommodate new fields introduced in NWIS 4.1 and is expandable for fields introduced in future versions of the software. The file format is discussed in *Section 3.8* and example batch files are shown in *Appendix F*. In previous versions of NWIS (release 4.7 and earlier), a fixed format, known as the "1 and *(or star)" card format, was also accepted. Specifically, that single-file format was designed for use with NWIS versions prior to version 4.1. Usage of the 1 and * format was discontinued at NWIS 4.8.

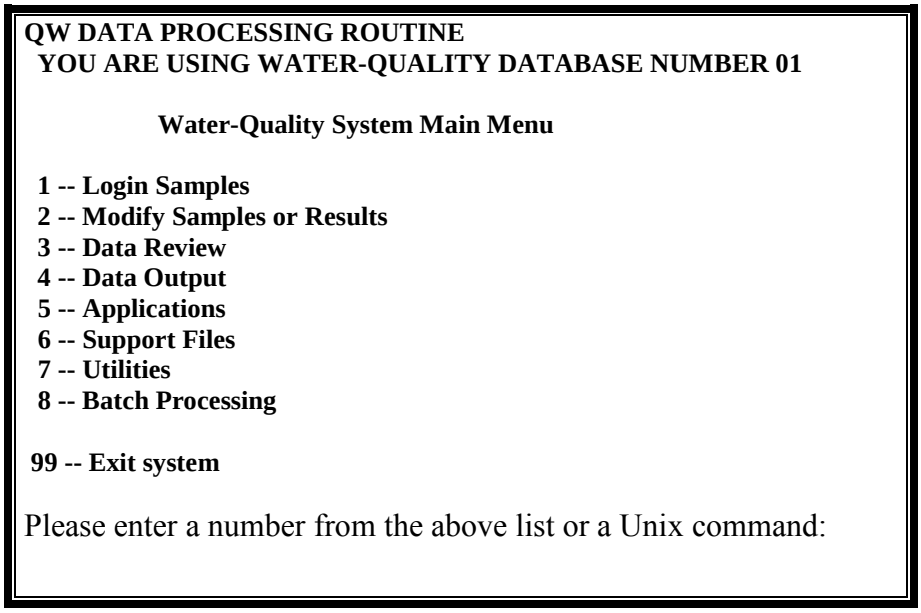
The programs available when using Option 8 can process data into the database for existing and new records, including USGS Laboratory data retrieved from the QWDX, produce batch output in the tab-delimited format, and review or edit a set of tab-delimited batch files. Detailed explanation of these programs is included in *Section 3.8*.

3 PROGRAMS

The data entry, editing, review, retrieval, support, and utility programs in **QWDATA** are initiated by selecting a program through a series of menus. Section 3 of this user documentation describes the various programs available in QWDATA. To display the main **QWDATA** menu, type:

qwdata

on the command line, and add a two-digit number if a database other than the default database 01 is desired (for example, "*qwdata 02"*). In response to the "qwdata" command, the menu below will appear and show the version of the software currently installed and the database number used.



Main QWDATA window.

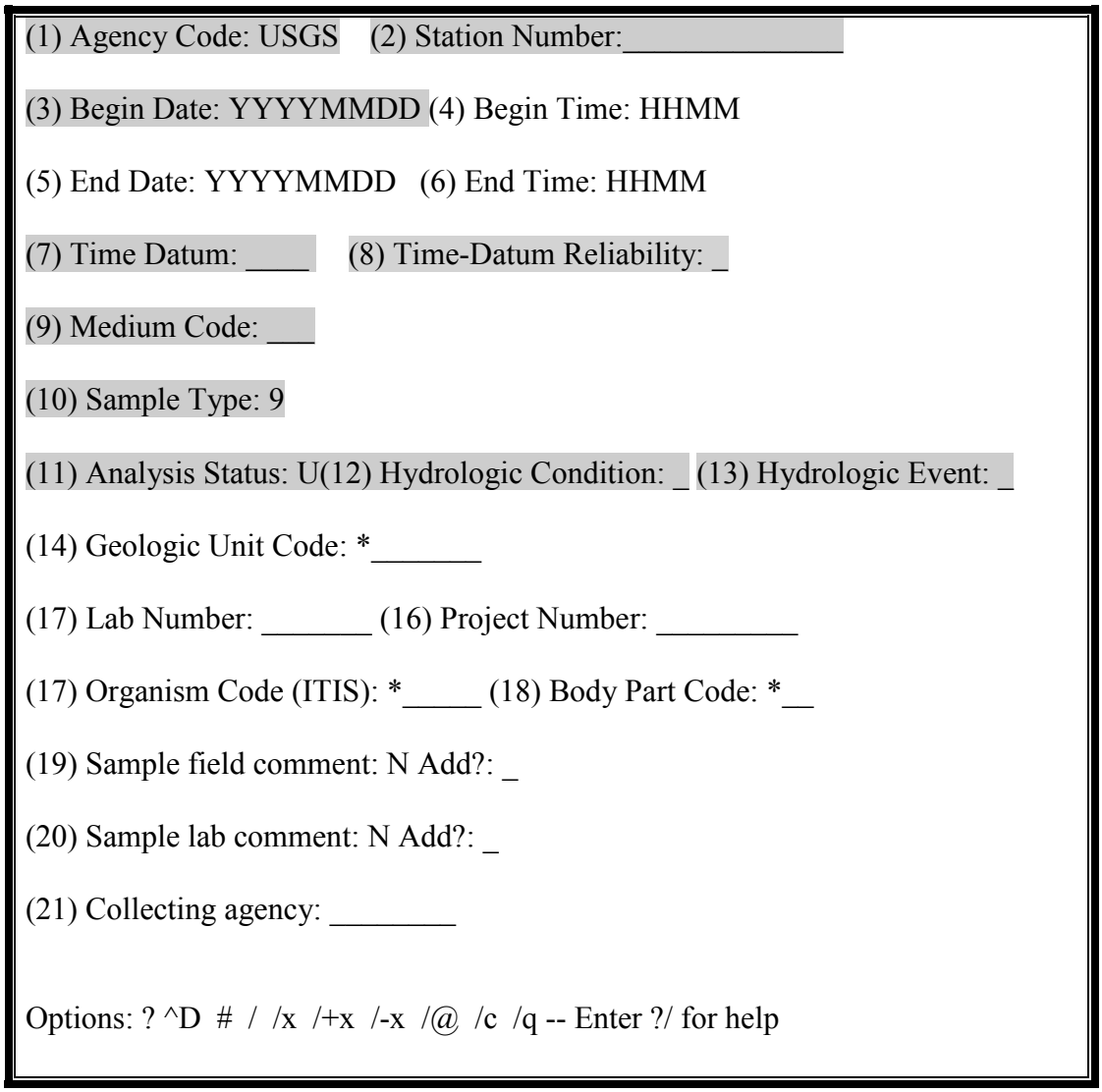
This menu displays the eight main options available in QWDATA and lists the various program functions. You can select one of the eight option numbers or type a UNIX command after the prompt at the bottom of the page.

Enter UNIX commands such as "*more"* or "*ls"* to look at filenames or list a file from menu screens. At the conclusion of each program, the main QWDATA menu is redisplayed until you select"**99 – Exit system**" to exit and return to the UNIX prompt. The individual functions and options available in QWDATA are described on the following pages of this section.

3.1 Option 1 – Login Samples

The "Login Samples" program can be used to enter sample information and field data. Start it by selecting Option 1 on the main QWDATA menu. A *record number* is generated after you enter the sample information. Multiple samples for a site can be logged in with this program, as well as samples for multiple sites. The login sample form is shown below.

Note: The site must exist in the NWIS SITEFILE before samples can be logged in or water-quality data can be entered. The program for adding a new site to the NWIS database is described in the Option 7--Utilities section, *3.7.2 Option 2--Add new site or modify site information*. Access to this program may be restricted to more experienced database users.



Login sample form. (Shaded text indicates mandatory items. Fields containing an asterisk (*) are not available for entry unless the appropriate medium code is entered. See additional information for geologic unit, organism, and body part codes.).

The options at the bottom of the screen allow you to move from item to item, screen to screen, and to other parameters. The valid cursor control characters and options are shown at the bottom of the screen and are described in *Section 2.2.2, Cursor control* and *Tip Sheet 5.1*. The items on the "Login Sample" screen are described below and on *Tip Sheet 5.2.*

(1) The cursor is initially positioned at the "U" in "USGS." If this agency code is correct, accept it by entering a carriage return; if not, enter any valid agency code (for example, "USEPA"), followed by a carriage return. A list of valid codes is available in documentation for the *Groundwater Site Inventory System*.

(2) Next, position the cursor to the first blank following "Station Number:" and the program waits for input. Enter the station number, followed by a carriage return. At this point the program checks to determine if the agency code and station number (also referred to as "station identification," "site identification," "or site id") are in the SITEFILE. If the agency code and station identification are found in the SITEFILE, the station name is displayed and the cursor moves to the next item. If the agency code and station identification are not found in the SITEFILE, an error message is displayed and the cursor returns to the first blank following "Agency Code."

(3) When a station number has been accepted, the cursor is moved to the first "**Y**" following "Begin Date." The begin date is a required item and must be entered in the correct format (YYYYMMDD). The date is checked for validity, including if the date is less than or equal to the current date; future dates are invalid. If the begin date is more than 1 year prior to the current date, a message is displayed and you can reenter the date.

Note: For sample composites, the full end date (year, month, and day as YYYYMMDD) must be entered. There are no restrictions on composites that span the end of the month. The only checks made on end date are to ensure that the date is valid and the end date is not earlier than the begin date. (If a composite spans more than 31 days, a warning message is displayed and you can change the end date).

(4–6) The next three items ("Begin Time," "End Date," and "End Time") are optional and may be skipped by entering carriage returns.

(7) The "Time Datum" is a required item and is checked against a list of valid codes. This field will be automatically populated from the SITEFILE settings for the site entered. Type a "**?**" to display a list of valid time data on the screen. Additional information for the time datum is available in *Sections 2.1.9 and 2.4.6*, and a list of valid time datum codes is available in *Appendix J, Table 1.*

If a time datum that does not match the SITEFILE setting for the site is entered, the following warning will appear at the bottom of the screen.

Warning! Time zone does not match site file settings. Re-enter (Y/N)?

This is only a warning, because the time datum entered is unexpected, and you are given the chance to change it. There may be a valid reason for the time datum to be different, and the software will store the time datum entered.

When a daylight saving time datum for a sample date that is not during the daylight saving time period is entered, the following warning will appear at the bottom of the screen.

Warning! Daylight saving time not normally used on this date. Re-enter (Y/N)?

This is an unusual circumstance and most likely is a mistake; therefore, you are given an opportunity to change the daylight saving time datum.

For composite samples that contain a time period that straddles the daylight saving time date change, the standard time datum is recommended. For example, if the begin date is April 1, 2002, and the end date is April 30, 2002, the standard time datum should be used.

Eastern Standard Time (EST) should be used in the Eastern Time zone. If a daylight saving time datum is used, the following warning will appear at the bottom of the screen.

Use standard time datum if Start/End date is standard time. Re-enter (Y/N)?

This gives you the opportunity to change the value entered.

(8) The "Time-Datum Reliability" code is a required item and is checked against a list of valid codes. This field will be automatically populated as "**K**" (known). You can change the value to any valid code. If the code entered is other than "**K**," the time datum stored with the sample will not appear in all output formats. You can display a list of valid reliability codes on the screen by typing a "**?**". Additional information for this field is available in *Section 2.4.7*, and a list of valid time datum codes is available in *Appendix J, Table 2*.

(9) The Medium Code is a required item and is checked against a list of valid medium codes. Type a "**?**" to display a list of medium codes on the screen. The cursor is repositioned in the space following the medium code after the list is displayed. Medium codes are described in *Section 2.4.8* and a list is available in *Appendix A, Table 1*.

(10–13) Default values are included in the Sample Type and Analysis Status fields after the medium code is entered. The default values are listed in *Appendix A, Table 1*. You can replace the default values by entering the desired value. Entering a "**?**" for any of the items displays a list of valid codes on the screen. Valid codes for sample type, analysis status, hydrologic condition, and hydrologic event are available in *Appendix A, Tables 2, 3, 4, and 5*.

(14) If the medium code is anything other than **WG**--Groundwater or **WGQ**--QA sample - Groundwater, the Geologic Unit Code item is skipped. Display a valid list of geologic unit codes by typing a "**?**" and at least two characters of the geologic unit code or name. You can view valid codes by using the check support files, Option 6, described in *Section 3.6.4*. A complete list of valid geologic unit codes is in the file /usr/local/nwis/support/aageol.states.all.

(15) The Lab Number item refers to the lab identification number, which is established when the sample is received at the USGS National Water Quality Laboratory. Normally, you would not know the lab number when you login the sample, and leave this item blank by entering a carriage return. If you enter a value is during initial login, then that value will not be updated by subsequent lab-data input programs.

(16) The Project Number allows you to enter a project identifier.

(17) Samples with the medium codes **BA**--animal tissue, **BP**--plant tissue, **BAQ**--quality assurance sample-animal tissue, or **BPQ**--quality assurance sample-plant tissue automatically convert Organism Code to a required item. To search for valid organism codes, type a "**?**" and at least two characters that appear in the organism name, followed by a carriage return. To improve the results of the search, enter as many characters as are known; shorter entries could result in a long list of results. The organism codes can also be found in the Integrated Taxonomic Information System at *http://www.itis.gov/*.

(18) Login of samples with medium codes of **BA**, **BP**, **BAQ**, *or* **BPQ** automatically converts Body Part Code to a required item. Display v*alid* body part codes by typing a "**?**" followed by a carriage return; see *Appendix A, Table 14*.

(19–20) If a sample comment (either Field or Lab) item has not been entered, an "**N**" appears between the ":" and the "**Add?**" query. If you enter a "**Y**" and a carriage return after the "**Add?"** query, a separate editor will appear where you can enter the sample comment. The editor will be sized to the width of the screen. A carriage return will not result in a new line in the editor. A count of the characters available in the field is displayed in the upper right corner. The position of the cursor is displayed in the lower right corner. After entering the sample comment, type "**CTRL-e**" to save and exit the editor. If a sample comment item has already been entered, a "**Y**" appears after the "**:**" and the "**Add?**" query will appear as "**Edit?**". If you choose to edit the existing comment by putting a "**Y**" after the "**Edit?"** query, then the comment is displayed in a separate editor and options are presented for edit, delete, retain, or cancel. **Note: You may not enter comments directly in the login screen. If you enter anything other than a "Y" or "y" after the "Add?" or "Edit?" queries, the entry will not be accepted, and no change will be made to the comment field.**

(21) The Collecting Agency is a field used to identify the code for the agency that collected the sample. You can display valid collecting agency codes by typing a "**?**" followed by a carriage return. **Note: the result will be a long list of collecting agency codes and agency names, listed alphabetically by the code. To reduce the list, you can type in a question mark "?" followed by a partial name or a complete name, and all matches based on the short collecting agency code or agency name would be shown on the screen.** For example, if you type **"?WRD**" then any collecting agency with the word "WRD" in the collecting agency code or name would appear in the list shown on the screen. For this example, this entry would appear, "USGS-WRD – U.S. Geological Survey, Water Resources Discipline

A default value for the collection agency field can be set in the /usr/local/nwis/data/auxdata/qw.conf file. For details about how to use the qw.conf file, see *Section 3.8*. Valid collecting agency codes are in *Appendix K,* "Protocol Organization Codes." Some protocol organization codes cannot be used for new data entry; the program will notify you if the selected code is not valid for new data entry and a different code is needed.

After completing entry of the collecting agency code, you are prompted with an option to make changes to any of the previously entered items on the login sample screen. If any of the valid item numbers are entered, the cursor is repositioned at the selected item. Changes made to any entry are subject to the same edit criteria as during initial entry. A carriage return after the last item or a "**/q**" allows you to complete the login sample form.

Following completion of the sample-header information, the database is searched to ensure that the header information is new. The header information is a combination of the agency code, station number, medium code, dates, and times. If a record with the same header information is found, the entry is rejected with the following error message.

- That RECORD already EXISTS – RECORD NUMBER ########
- Re-enter(Y/N)?

On completion of the login form, the next screen asks:

- Do you want to enter any data for this record (Y/N)?

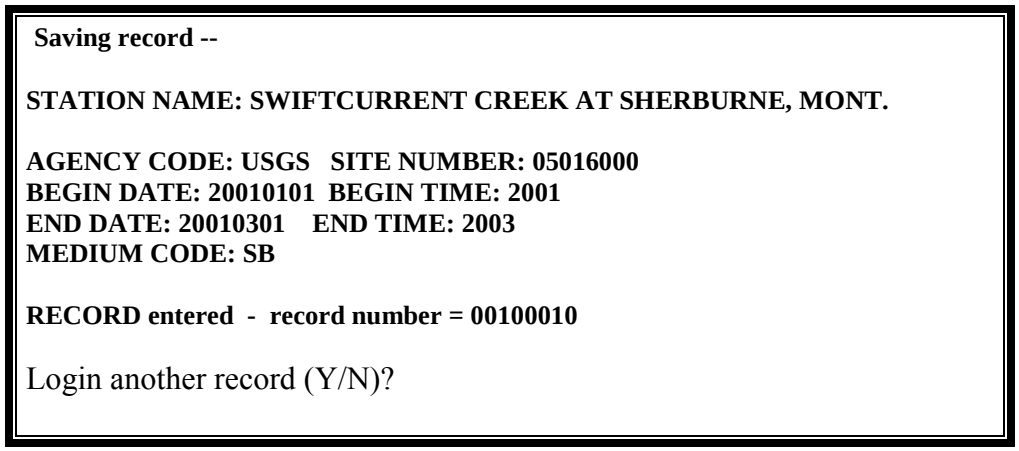
If you respond with an "**N**" this step is skipped. If you respond with a "**Y**," the following query appears.

- Are you entering lab (L) or field (F) data? (L or F, <CR>=F):

If you choose "**F"** the field data entry screen is the same as described in *Section 3.2.1.*

If you choose "**L**" the laboratory data entry screen is the same as described in *Section 3.2.2.*

After entering or not entering data, a record is created and the assigned *record number* is displayed. Many users write the record number on the National Water Quality Laboratory Analytical Services Request Form or water-quality field notes.



Screen displaying the creation of a record number for the sample.

Next, you will be asked if you wish to:

Login another record (Y/N)?

An "**N**" ends the program, whereas a "**Y**" produces the prompt:

Do you wish to edit the same header (Y/N)?

and allows you to edit the header information. If you chose to edit the record header of the previous sample and entered a comment for the sample, then you are given an opportunity to retain or edit the sample comment on the next screen, where the previous sample information is redisplayed with prompts for the item numbers you wish to change.

The ability to edit the previous sample information allows for the rapid login (data entry) of samples with mostly repetitious information (e.g., samples at the same site that differ only by time, such as vertical measurements in a lake). An "**N**" causes a new input form to be displayed (without the previously entered values). The dialog proceeds as before, with the cursor positioned at the "U" in "USGS" of the agency code. A maximum of 500 parameters can be stored in a single QWDATA file record.

3.2 Option 2 – Modify Samples or Results

Option 2 of the main QWDATA menu has three options that can be used to modify samples or results through the submenus. The first option, "Enter Field Results," is a program used to add field water-quality data to existing records in the QWDATA database. The second option, "Enter Laboratory Results," can be used to add laboratory data to QWDATA. The third option, "Edit Samples or Results," can be used to edit existing header information or results.

Note: A record must exist in the database before any of these programs can be used. The record number or agency, site number, date, time, and medium code must be known before any of these programs can be used. The program for logging in a sample is described in Section 3.1.

```
QW DATA PROCESSING ROUTINE
   YOU ARE USING WATER-QUALITY DATABASE NUMBER 01

                  Modify Samples or Results

 1 -- Enter Field Results
 2 -- Enter Laboratory Results
 3 -- Edit Samples or Results

98 -- Exit menu
99 -- Exit system
Please enter a number from the above list or a Unix command:
```

Modify Samples or Results submenu options.

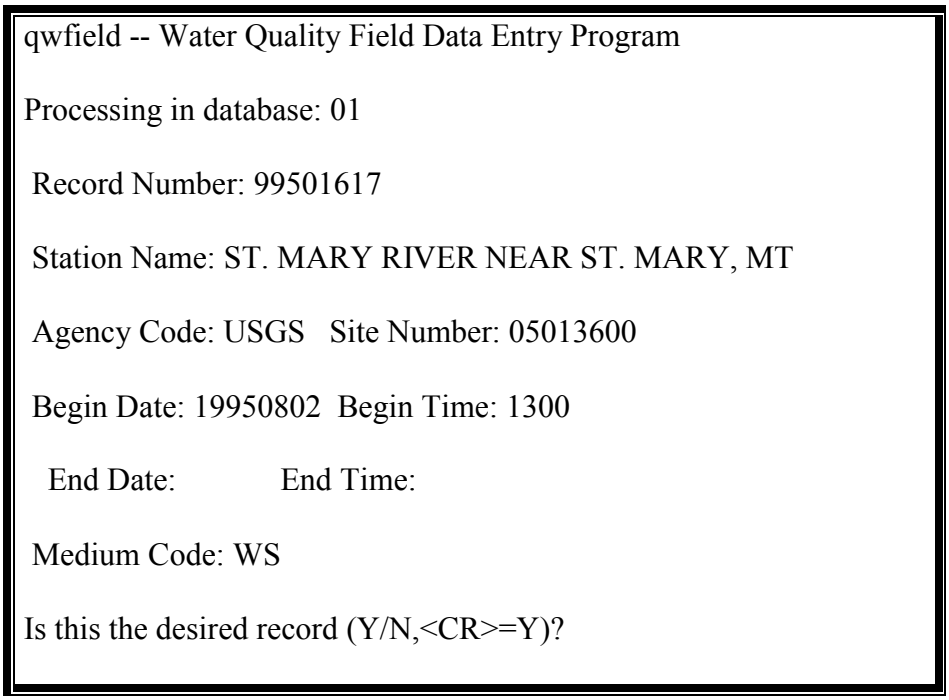
3.2.1 Option 1 –- Enter Field Results

Field data results can be entered into QWDATA with this program as well as in the "Login Sample" program described in *Section 3.1*, and the "Enter Laboratory Results" program described in *Section 3.2.2.*

The "Enter Field Results" program uses a field form, which is a list of parameter codes and associated information in a file named ***field.parmsnn***, stored in the directory ***/usr/opt/nwis/data/auxdata/qw_field_forms***, where "***nn***" represents the two-digit form number (e.g., field.parms01). Examples of the format needed for a field form are shown in *Appendix G*.

Additional information about field forms is available in *Section 2.10* and *Tip Sheet 5.3.*

After selecting Option 1, you are prompted to enter the record number for the sample or a carriage return to identify a sample by agency code, station number, start date, start time, end date, end time, and medium code. The record number and sample information are displayed and you are asked if this is the desired record.



Screen displaying the sample information and asking if this is the desired record.

If you do not want this record, or the record is not found in the database, the you are given another opportunity to enter a record number or agency code, station number, dates, times, and medium code. To quit from this application, enter a "**Q**" in place of the record number. After the desired sample is displayed and you accept it by typing a "**Y**" or a carriage return, you are prompted to enter a field form number.

List available field forms to the screen by typing a "**?**" and a carriage return. You can display detailed contents of the field form by entering "**?#**" where "**#**" is the number of the field form. After the number of the desired field form has been identified and entered, followed by a carriage return, the program displays the parameter codes and names from the requested field form, with spaces for entering values and attributes. The cursor is positioned in the method "**Meth**" field of the first parameter.

```
 (1) 00010 Temperature, water
Meth: _____  V:    13    Rd: 3    13.0  Rmk: _ QA: I  DQI: S
Null Qual: _
Val Qual Codes: _ _ _   Anl Ent: USGS-WRD
Result field comment: N Add?: _

(2) 00020 Temperature, air
Meth: ____  V:   11.5   Rd: 3    11.5  Rmk: _ QA: I  DQI: S
Null Qual: _
Val Qual Codes: _ _ _   Anl Ent: USGS-WRD
Result field comment: N Add?: _

(3)  00061 Discharge, inst.
Meth: _____  V:   605    Rd: 3     605  Rmk: _ QA: I  DQI: S
Null Qual: _
Val Qual Codes: _ _ _   Anl Ent: USGS-WRD
Result field comment: N Add?: _

(4) 39086 Alk inc trit
Meth: TT013_ V:   306    Rd: 3     306  Rmk: _ QA: I  DQI: S
Null Qual: _
Val Qual Codes: _ _ _   Anl Ent: USGS-WRD
Result field comment: N Add?: _

Options: ? ^D # / /x /+x /-x /@ /n /d /a /c /q -- Enter ?/ for help
```

Example of the field-results data entry format (shaded values are mandatory).

The program begins at the first parameter with the cursor at the method "**Meth"** field. The options for moving around the screen from parameter to parameter and screen to screen are displayed at the bottom of the screen. They are also described in *Section 2.2.2* and can be listed on the screen by typing the options "**?/**". A description of each item in the field-data entry form follows.

Meth: The method code is not a mandatory field for the result value, but the method code is validated when entered or edited. General information on the method code is in *Section 2.5.6*, and you can list method codes for a parameter on the screen by typing a "**?**" in the "**Meth**" field. Some method codes are not valid for new data entry, and a warning message will be displayed onscreen if one is chosen.

In QWDATA 4.6, analysis method codes were expanded from a one-character to a five-character alphanumeric code. Method codes can be displayed using the Support Files menu Option 8--Display the Parameter Method Table, (see *Section 3.6.8*). If the method code is changed for a result, the following message will appear on the screen.

```
You have changed the method code for an existing record.

Your options are:

  1: Replace result_rd with selection from PMT

  2: Enter a new rounding code

  3: Keep the existing result_rd



Enter 1, 2, or 3 (<CR>=1):
```

This message is related to the link between the method code and the rounding behavior for that result. **Option 1** (default) will change the rounding code for that result to the value derived from the parameter-method table. **Option 2** allows you to enter any rounding code for that result. **Option 3** will result in the rounding code remaining the same as it was prior to changing the method code.

V: The value for the individual parameter. A decimal point at the end of the value is assumed for values entered without a decimal point. You must enter the decimal point for values that are not whole numbers. A carriage return with no data is interpreted as no data, and that parameter is not stored. Entering a "**#**" signifies a null value, and you are required to qualify the null value with a null-value remark code or null-value qualifier code. If a value exists for a parameter in the field form, entering a carriage return retains the existing value, entering a new value replaces the existing value, and entering "**/d**" causes the parameter to be deleted from the record. The "V" field can accommodate scientific notation.

Rd: The rounding precision is used to display the data. Rounding is described in *Section 2.7.1*.

*Note**: Due to a nine-character field width restriction, the program is unable to display values with nine or more digits.***

Rmk: Remark codes are used to qualify data values, as well as null values. Remark codes are listed in *Appendix A, Table 6,* described in *Section 2.5.1*, and can be listed on the screen by typing a "**?**" after the "Rmk" prompt.

DQI: The data quality indicator code is a mandatory entry for the result that indicates the review status of the result, controls whether the batch-update programs can overwrite the result, and affects whether the result will be included in retrievals. Valid DQI codes and meanings are listed in *Appendix A, Table 9*, described in *Section 2.5.3*, and can be listed on the screen by typing a "**?**" after the DQI prompt.

Null Qual: If the parameter value is entered as a null value, a null-value remark or a null-value qualifier is required. The valid null-value remarks and null-value qualifier codes are listed in *Appendix A, Table 10* and described in *Section 2.5.4*.

Val Qual Codes: The value qualifiers provide additional information about the result values, which may be used for interpretation and archival of the results. QWDATA can store as many as three value qualifiers for each result from the valid codes listed in *Appendix A, Table 11*, described in *Section 2.5.2*, and can be listed on the screen by typing a "**?**" after the Val Qual Codes prompt.

Anl Ent: The analyzing entity is an optional field that identifies the agency, organization, group or company that analyzes the result, which can be added, changed, or deleted. You can display all analyzing entity codes by typing a "**?**," followed by a carriage return. **Note: the result will be a long list of analyzing entity codes and names, listed alphabetically by the code.** To reduce the list, type in a question mark and a partial name or a complete name as input, and all matches based on the short analyzing entity code or name will be shown on the screen. For example, if you type "?**NWQL**," then any analyzing entity with the word "NWQL" in analyzing entity code or name would appear in the list shown on the screen. For this example, this entry would appear "USGSNWQL – U.S. Geological Survey, National Water-Quality Laboratory, Denver, Colorado." All analyzing entity codes can be found in *Appendix K*, "Protocol Organization Codes," and they are described in *Section 2.5.10*. Some protocol organization codes cannot be used for new data entry; the program will notify the user if the selected code is not valid for new data entry and a different code is needed.

Result field comment: Result comments are used to describe any information that the user might want to associate with the result value. For example, if the pH meter could not be calibrated with buffer solutions and the pH value was suspect, that information could be stored with the pH value and other parameters, such as alkalinity and bicarbonate, which were measured using the same pH meter. A description of comment fields is included in *Section 2.8*.

If you have not entered a result comment, an "**N**" appears after the "**Add?**" field. If you enter a "**Y**" and a carriage return, a separate editor will appear. The editor will be sized according to the width of the screen. A carriage return will not result in a new line in the editor. A count of the characters available in the field is displayed in the upper right corner. The position of the cursor is displayed in the lower right corner. Control "**c**" cancels the comment entry and control "**e**" saves the comment and exits. You then receive the following prompt.

Do you want to apply the comment to other parameters (Y/N)?

If there is an existing comment, this result field comment will be appended to it.

If you answer "**Y**," a new screen is displayed with four options.

1. Enter additional parameter codes at the terminal, where you enter the parameter codes one at a time and use a carriage return to end the program. This brings you back to the field data entry form. The comment can be applied to as many as 500 parameter codes.

2. Apply the comment to parameters contained in a file; enter the pathname of the file at the prompt.
3. Update all parameters in a sample with the comment.
4. Update all the parameters in the sample but confirm each before updating.

If a result field comment exists, then a new screen with three options is displayed for editing an existing comment.

1. Edit the comment,
2. Delete the comment.
3. Cancel the editing process.

If the comment is edited, the four options (listed above) to apply it to other parameters are made available.

When data entry is complete, you can exit the program by either using "**/q**" or inserting a carriage return after the last parameter in the form. The program provides an opportunity to modify the data by displaying the prompt:

Changes? Enter item number to change or <CR> to continue.

You can add additional parameters may to the sample without having to add them to the ***field.parmsnn*** file by entering "**/a**" at any time. A screen prompt will ask for numeric entry of the desired five-digit parameter code, which will be checked against the parameter entry flag in the Parameter Method Table (*Section 3.6.8*) to determine if the parameter is valid for entry. Some parameters are no longer valid for new data. If it is valid, the parameter appears at the next line, and the cursor is positioned to accept a value.

As you enter each value, the following checks are made.

1. If the value is negative, the parameter code is checked against a list of codes for which negative values are permitted.
2. If the entry is invalid, a message is displayed and the value is rejected. Negative Values are described in Section 2.7.3 and listed in Appendix H.
3. If the value is for a parameter that should contain fixed values, the fixed values file list is checked; if the value is invalid for that parameter, a message is displayed and the value is rejected. Fixed values are listed in Appendix B and described in Section 2.6.3.
4. If the value for pH (parameter code 00400) is greater than 14, a message is displayed and the value is rejected. If the value for pH is outside the range of 4.5 to 9.0, a message will be displayed during data entry, but the value will be retained.

When data entry is complete, the record is stored and the dialog restarted with the request for a record number or "**Q***"* to end. You will need to run the Chemical Validation Checks program described in *Section 3.3.5* to validate updates. General information about chemical validation checks is described in *Section 2.9.2*.

3.2.2 Option 2 – Enter Laboratory Results

The "Enter Laboratory Results" program is used to interactively enter and edit data from cooperator laboratories or USGS laboratory data that are not loaded into QWDATA from other programs. (The batch loading program for QWDATA is described in *Section 3.8*). Laboratory data values can be entered into QWDATA with this program as well as in the "Login Sample" program described in *Section 3.1*, and the "Enter Field Results" program described in *Section 3.2.1*.

The "Enter Laboratory Results" program uses a field form, which is a list of parameter codes and associated information in a file named ***field.parmsnn*** , stored in the directory ***/usr/local/nwis/data/auxdata/qw_field_forms/*** , where "**nn**" represents the two-digit form number. Information about adding and designing a field form is available in *Section 2.10* and *Tip Sheet 5.3*.

After selecting Option 2, you are prompted to enter the record number for the sample or a carriage return to identify a sample by agency code, station number, start date, start time, end date, end time, and medium code. The record number and sample information are displayed and you are asked if this is the desired record.

If this is not the desired record, or the record is not found in the database, you are given another opportunity to enter a record number or agency code, station number, dates, times, and medium code. To quit from this application, enter a "**Q**" in place of the record number. After the desired sample is displayed and accepted by typing a "**Y**" or a carriage return, you are prompted to enter a field form number.

List available field forms to the screen by typing a "**?**" and carriage return. You can display detailed contents of the field form by entering "**?#**", where "**#**" is the number of the field form. After the number of the desired field form has been identified and entered, followed by a carriage return, the program displays the parameter codes and names from the requested field form, with spaces for the entry of values and attributes. If the sample already contains data for any of the specified parameters, the stored values are displayed as shown below.

```
00010 Temperature, water
  Meth: _____  V:      6.5   Rd: 2      6.5
    Lab Std Dev: #         Rmk: _  DQI: S  Null Qual: _
    Val Qual Codes: _ _ _  Rpt Lev: _________  Rpt Lev Cd: *_____
    Prep Set No: _____________  Anl Set No: _____________
    Prep Dt: YYYYMMDD  Anl Dt: YYYYMMDD  Anl Ent:  USGS-WRD
    Result field comment: N   Add?: _
    Result lab comment: N   Add?: _

00020 Temperature, air
  Meth: _____  V:      16  Rd: 3       16.0
    Lab Std Dev: #         Rmk: _  DQI: S  Null Qual: _
    Val Qual Codes: _ _ _  Rpt Lev: _________  Rpt Lev Cd: *_____
    Prep Set No: _____________  Anl Set No: _____________
    Prep Dt: YYYYMMDD  Anl Dt: YYYYMMDD  Anl Ent:  USGS-WRD
    Result field comment: N   Add?: _
    Result lab comment: N   Add?: _

39086  Alk inc trit
  Meth: TT013  V:     306  Rd: 3     306
    Lab Std Dev: #         Rmk: _  DQI: S  Null Qual: _
    Val Qual Codes: _ _ _  Rpt Lev: _________  Rpt Lev Cd: *_____
    Prep Set No: _____________  Anl Set No: _____________
    Prep Dt: YYYYMMDD  Anl Dt: YYYYMMDD  Anl Ent:  USGS-WRD
    Result field comment: N   Add?: _
    Result lab comment: N   Add?: _


Options: ? ^D  #  /  /x  /+x  /-x  /@  /n  /d  /a  /c  /q -- Enter ?/ for help
```

Screen showing an example of the laboratory results data entry format (shaded values are mandatory).

The program begins at the first parameter with the cursor at the method "Meth" field. The options for moving around the screen from parameter to parameter and screen to screen are displayed at the bottom of the screen. They are also described in *Section 2.2.2* and can be listed on the screen by typing a "**?**". Display a list of acceptable codes for some fields on the screen by typing a "**?**" in the field. A description of each item in the field-data entry form follows.

Meth: The method code is not a mandatory field for the result value, but the method code is validated when entered or edited. General information on the method code is in *Section 2.5.6*, and you can list valid method codes for a parameter on the screen by typing a "**?**" in the "**Meth**" field. Some method codes are not valid for new data entry, and a warning message will be displayed onscreen if one is chosen.

In QWDATA version 4.6, analysis method codes were expanded from a one-character to a five-character alphanumeric code. Display method codes by using the Support Files menu Option 8--Display the Parameter Method Table (see *Section 3.6.8*). If the method code is changed for a result, the message on the following page will appear on the screen.

```
You have changed the method code for an existing record.

Your options are:

  1: Replace result_rd with selection from PMT

  2: Enter a new rounding code

  3: Keep the existing result_rd


Enter 1, 2, or 3 (<CR>=1):
```

This message is related to the link between the method code and the rounding behavior for that result. **Option 1** (default) will change the rounding code for that result to the value derived from the parameter-method table. **Option 2** allows you to enter any rounding code for that result. **Option 3** will result in the rounding code remaining the same as it was prior to changing the method code.

V: The value for the individual parameter. A decimal point at the end of the value is assumed for values entered without a decimal point. You must enter the decimal point for values that are not whole numbers. A carriage return with no data is interpreted as no data, and that parameter is not stored. Entering a "**#**" signifies a null value, and you are required to qualify the null value with a null-value remark code or null-value qualifier code. If a value exists for a parameter in the field form, entering a carriage return retains the existing value, entering a new value replaces the existing value, and entering "**/d**" causes the parameter to be deleted from the record. The "V" field can accommodate scientific notation.

Rd: The rounding precision that is used to display the data. Rounding is described in *Section 2.7.1*.

Lab Std Dev: The laboratory standard deviation will be used to round the result value if default rounding is selected and a value for laboratory standard deviation is present. The laboratory standard deviation is discussed in *Section 2.5.5*.

Rmk: Remark codes are used to qualify data values, as well as null values. Remark codes are listed in *Appendix A, Table 6* and described in *Section 2.5.1*.

DQI: The data quality indicator code is a mandatory entry for the result that indicates the review status of the result, controls whether the batch-update programs can overwrite the result, and affects whether the result will be included in retrievals. Valid DQI codes and definitions are listed in *Appendix A, Table 9* and described in *Section 2.5.3*.

Null Qual: If the parameter value is entered as a null value, a null-value remark or a null-value qualifier is required. The valid null-value qualifier codes are listed in *Appendix A, Table 10*, and described in *Section 2.5.4*.

Val Qual Codes: The value qualifiers provide additional information about result values, which may be used for interpretation and archival of results. QWDATA can store as many as three value qualifiers for each result from the valid codes listed in *Appendix A, Table 11* and described in *Section 2.5.2*.

Rpt Lev: The reporting level value field contains the reporting level in use for censoring values for the laboratory, constituent, method, and instrument at the time of analysis. Laboratory information is described in *Section 2.5.10*.

Rpt Lev Cd: The report level code describes the type of analytical reporting level in use for censoring data values by the laboratory at the time of analysis. Valid report level codes are listed in *Appendix A, Table 12*. Laboratory information is described in *Section 2.5.10*.

Prep Set No: The preparatory set number is a laboratory identifier used for a group of field-submitted samples and laboratory-supplied quality control blank and spike samples. These samples are prepared for analytical processing at the same time and by using the same method and reagents. Laboratory information is described in *Section 2.5.9*.

Anl Set No: The analytical set number is a laboratory identifier used for a group of field and laboratory samples, analyzed together by the same analyst, using the same equipment, at the same time. Laboratory information is described in *Section 2.5.9*.

Prep Dt: The preparation date is supplied by the laboratory and represents the date that sample extraction or preparation began. The format for entering this date is YYYMMDD.

Anl Dt: The analysis date is supplied by the laboratory and represents the date that analysis began. The format for entering this date is YYYMMDD.

Anl Ent: The analyzing entity is an optional field that identifies the agency, organization, group, or company that analyzes the result, which can be added, changed, or deleted. All analyzing entity codes can be displayed by typing a "**?**" followed by a carriage return. **Note: the result will be a long list of analyzing entity codes and names, listed alphabetically by the code.** To reduce the list, type in a question mark and partial name or complete name as input, and then all matches based on the short analyzing entity code or name will be shown on the screen. For

example, if you type "**?NWQL,**" then any analyzing entity with the word "NWQL" in the analyzing entity code or name would appear in the list shown on the screen. For this example, the entry would appear, "USGSNWQL – U.S. Geological Survey, National Water-Quality Laboratory, Denver, Colorado." All analyzing entity codes can be found in *Appendix K*, "Protocol Organization Codes" and are described in *Section 2.5.10*. Some protocol organization codes cannot be used for new data entry; the program will notify you if the selected code is not valid for new data entry and a different code is needed.

Result field comment: Result field comments are used to describe any field information that you might want to associate with the result value. For example, if the pH meter could not be calibrated with buffer solutions and the pH value was suspect, that information could be stored with the pH value and other parameters, such as alkalinity and bicarbonate, which were measured using the same pH meter. Description of comment fields is in *Section 2.8*.

If you have not entered a result comment, an "**N**" appears after the "**Add?"** field. If you enter a "**Y**" and a carriage return, a separate editor will appear. The editor will be sized to the width of the screen. A carriage return will not result in a new line in the editor. A count of the characters available in the field is displayed in the upper right corner. The position of the cursor is displayed in the lower right corner. Control "**C**" cancels the comment entry and control "**E**" saves the comment, exits, and then prompts:

Do you want to apply the comment to other parameters (Y/N)?

If you answer "**Y,**" a new screen is displayed with four options.

1. Enter additional parameter codes at the terminal, and type in the parameter codes one at a time. A carriage return ends the program, bringing you back to the field data entry form. You can apply the comment to as many as 500 parameter codes.
2. Apply the comment to parameters contained in a file; the pathname of the file is entered at the prompt.
3. Update all parameters in a sample with the comment.
4. Update all the parameters in the sample, but confirm each before updating.

If a result filed comment exists, then a new screen with three options is displayed for editing an existing comment.

1. Edit the comment.
2. Delete the comment.
3. Cancel the editing process.

Result lab comment: Result lab comments are used to describe any laboratory information that might be associated with the value. The prompts and screens are the same as the "Results field comment," which is described above. Text fields for comments are described in *Section 2.8*.

When data entry is completed, you can exit the program by either using "**/q**" or inserting a carriage return after the last parameter in the form. The program provides an opportunity to modify the data by displaying the prompt:

Changes? Enter item number to change or <CR> to continue:

You can add additional parameters to the sample without having to add them to the ***field.parmsnn*** file by entering "**/a**" at any time. A screen-prompt will ask for numeric entry of the desired five-digit parameter code, which will be checked against the parameter entry flag in the Parameter Method Table (*Section 3.6.8*) to determine if the parameter is valid for entry. Some parameters are no longer valid for new data. If it is valid, the parameter appears at the next line, and the cursor is positioned to accept a value.

As each value is entered, the following checks are made:

1. If the value is negative, the parameter code is checked against a list of codes for which negative values are permitted; if the entry is invalid, a message is displayed and the value is rejected. Negative Values are described in *Section 2.7.3* and listed in *Appendix H.*
2. If the value is for a parameter that should contain *fixed values*, the fixed values file list is checked; if the value is invalid for that parameter, a message is displayed and the value is rejected. Fixed values are listed in *Appendix B* and described in *Section 2.6.3*.
3. If the value for pH (parameter code 00400) is greater than 14, a message is displayed and the value is rejected. If the value for pH is outside the range of 4.5 to 9.0, a message will be displayed during data entry, but the value will be retained.

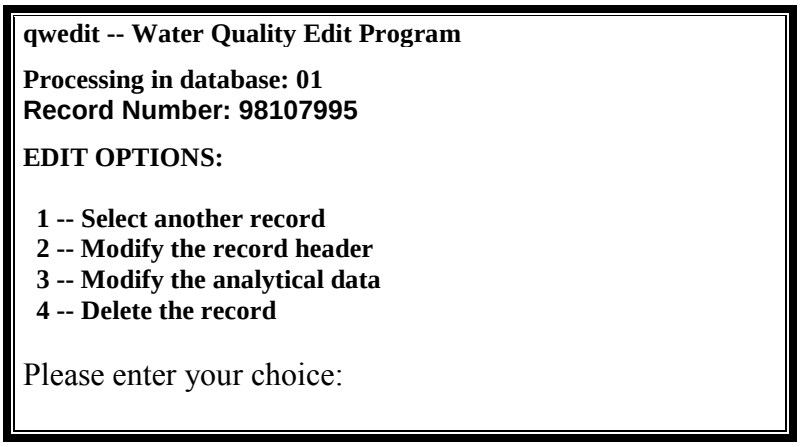
When data entry is complete, the record is stored and the dialog restarted with the request for a record number or "**Q**" to end. You will need to run the Chemical Validation Checks program described in *Section 3.3.5 (Option 5 of Function 3, Data Review*) to validate updates. General information about chemical validation checks is described in *Section 2.9.2*.

3.2.3 Option 3 – Edit Samples or Results

The "Edit Samples or Results" program is used to modify the record header information for a sample, to modify the analytical results for a sample by adding, changing, or deleting parameter values or attributes, or to delete a sample record.

After selecting Option 3, you are prompted to enter the record number for the sample, or a carriage return to identify a sample by agency code, station number, start date, start time, end date, end time, and medium code. The record number and sample information are displayed, and you are asked if this is the desired record.

If this is not the desired record, or if the record is not found in the database, you are given another opportunity to enter either a record number or the agency code, station number, dates, times, and medium code. To quit from this application, enter a "**Q"** in place of the record number. After the desired sample is displayed and accepted by typing a "**Y**" or a carriage return, the following screen is displayed:



Screen showing the edit samples and results options and record number of the sample.

When a record has been retrieved, you are given four options: select another record, modify the record header, modify the analytical data, or delete the record. If you choose **Option 1** -- "**Select another record,**" you are prompted and taken back to the previous screen to enter a record number or sample information. **Option 2** -- "**Modify the record header**" allows you to change the sample header information and is the same program as described in the *Section 3.1"Login Sample Program (Section 3.1)*. **Option 3--Modify the analytical data**, allows you to add, change, or delete parameter values or attributes with the sample program as described in the *Enter Laboratory Results Program (Section 3.2.2).* **Option 4--Delete the record**, allows you to completely remove all parameter values and attributes as well as the sample header information. As a precaution, the program verifies the delete request by prompting:

Are you sure you want to DELETE that record? (Must answer YES)

You must reply by typing all of the letters in the word "**YES***"* in capital letters before the record will be deleted. If the record is deleted, a line of text flashes across the bottom of the screen.

RECORD nnnnnnnn DELETED

Where" "nnnnnnnn" is the sample record number. If the response to the prompt was something other than "**YES,***"* the line

RECORD nnnnnnnn NOT DELETED

flashes across the bottom of the screen.

NOTE: Deleted records or values are removed immediately and cannot be recovered except by reentering.

Exit this program by choosing **Option 1**-- "**Select another record**," and then typing in a "**Q***"* at the record number prompt or by entering "**/q***"* in the data editing screen, then entering a "**Q***"* at the record number prompt.

An alternative for deleting a record is to place the word "**DELETE**" in the "Aquifer Code" field —the 10th field in a tab-delimited sample-level batch file. This is explained in *Section 3.8*.

It is recommended to run the "Data Verification" program located in the Data Review submenu described in *Section 3.3.5*. Chemical Logic, Drinking Water Limits, and Data Validation checking routines can be selected to run simultaneously or independently.

3.3 Option 3 – Data Review Options

Data review functions include options to provide an inventory of records that have been logged into the database, view data stored in a sample record, produce standard and custom ion balance tables, provide chemical validations of sample analyses, and create or modify ion balance specifications. Option 3 of the main menu invokes the following Data Review options submenu.

```
  QW DATA PROCESSING ROUTINE

 YOU ARE USING WATER-QUALITY DATABASE NUMBER 01

        Data Review

 1 -- Select Sites or Samples
 2 -- Select Sites or Samples from Multiple Data Bases
 3 -- Produce Inventory of Samples
 4 -- List Samples and Results
 5 -- Sample List, Ion Balance, Data Verification and Validation
 6 -- Create or Modify Ion Balance Specification Options

 98 -- Exit menu
 99 -- Exit system

Please enter a number from the above list or a Unix command:
```

Data Review options menu

3.3.1 Option 1 – Select Sites or Samples

This option is used to create three types of files; (1) lists of sites that meet user-specified site selection criteria, (2) lists of sites that have water-quality data that meet user-specified site selection and sample selection criteria, and (3) lists of record numbers for water-quality data that meet user-specified sample selection criteria. These files may be used as input to other options in the NWIS-QWDATA system. The record number list file is required for *Generating Output to Files (Section 3.4 – "Data Output*").

Sample selection is a two-step process. First, site numbers are specified using one of the first three options on the **Select Sites or Samples** submenu. By using Option 4, site selection is skipped—effectively selecting all sites in the database.

```
qwsiterec -- locate record numbers for use by QW application programs
QW database(s): 01

You may locate records for specific sites.

If you wish to locate records for specific sites the options are:
  1 -- You have a file containing agency codes and station ID's
  2 -- You will enter site numbers at terminal
  3 -- You wish to locate sites based upon selection criteria

If you don't care which sites the option is:
  4 -- Locate QW records without regard to site
Please enter option (1-4, Q to quit):
```

Site Specification menu within the "Select Sites or Samples" option.

In the second step, sample records are selected for the designated list of sites based on user-specified criteria.

3.3.1.1 Site Selection

Station numbers may be provided to the software in three ways: (1) specified in a file that you provide, (2) from interactive entry, or (3) selected based on user-specified criteria. You also may choose not to specify station numbers (4).

1. If the station numbers are to be read from an input file, you will be queried for the file pathname. Station numbers must be listed using the fixed-column format shown in Appendix G. An output file from a previous site selection process is also an acceptable format for input (Appendix C).
2. If the station numbers will be entered interactively, you will be queried for agency code and station number. A null entry ends interactive station number entry.
3. If station numbers are to be selected from user-provided criteria, a list of available criteria for site selection is displayed as shown below.

```
qwsiterec -- Locate sites

Enter an X to choose an item for limiting retrieval,
Enter a # to remove an item.

(1) AGENCY CODE: _  (2) STATE CODE: _  (3) COUNTY CODE: _
(4) HYDROLOGIC UNIT:_ (5) DRAINAGE BASIN:_ (6) POLYGON: _
(7) RANGE OF STATION NUMBERS: _  (8) SITE TYPE: _  (9) SITE CHARACTERISTICS: __

 Options: ? ^D  # /  /x  /+x  /-x  /@  /c  /q -- Enter ?/ for help
```

Menu for choosing the site selection criteria within the Select Sites or Samples submenu.

The available selection criteria, which may be used in combination, and the specifications for each are shown below.

	Site selection criteria	Specifications	Source
(1)	**Agency code**	**-- up to 10 agency codes**	http://pubs.er.usgs.gov/publication/ofr20051251
(2)	**State code**	**-- up to 10 State codes**	***FIPS code dictionary – See Sect. 3.6.5***
(3)	**County code**	**-- up to 40 county codes**	*FIPS code dictionary – See Sect. 3.6.5*
(4)	**Hydrologic unit code**	**-- up to 10 hydrologic unit codes**	http://pubs.er.usgs.gov/publication/ofr20051251
(5)	**Drainage basin code**	**-- up to 10 drainage basin codes**	http://pubs.er.usgs.gov/publication/ofr20051251
(6)	**Polygon**	**-- up to 50 vertices**	user specified
(7)	**Range of station numbers**	**-- only 1 range**	user specified
(8)	**Site Type**	**-- up to 10 station types**	**http://pubs.er.usgs.gov/publication/ofr20051251**
(9)	**Site Characteristics**	**See below for specifics**	

Enter a nonblank character (other than *"/")* to choose a field for limiting retrieval, or enter a "**#**" to remove a field. You may invoke the options for screen navigation during selection of retrieval criteria.

(1) and (7) If you select BOTH agency code and range of station numbers for site retrieval, only the first agency code entered is used in the search.

(2) If you select a State code for site retrieval, an additional query is included to ask for a country code:

To select by state need to specify country.

Enter 2-character country code (<CR>=US):

(3) For information on county codes, please refer to *http://pubs.er.usgs.gov/publication/ofr20051251.*

(6) If records are to be retrieved by polygons, you will be queried for a file containing the vertices in fixed format. You may specidy up to 50. The vertices should be stored in the format shown below.

Column	Format	Description
1–7	dddmmss	Latitude (right-justified in column 7)
9–16	dddmmss	Longitude (right-justified in column 16)

File format for entering polygon vertices.

Vertices also may be entered or selected interactively. You will first be asked if vertices are to be stored into a file. If "**YES**," you will be queried for a filename. Next, you may choose to retrieve latitude-longitude values from the FIPSFILE— the 2-digit State code and the 3-digit county code are requested. A county code of 000 will retrieve the State record values. Optionally, you may choose to enter latitude-longitude pairs interactively from the terminal.

(8) If records are to be qualified by Site Type, you may request a maximum of 10 site type codes by entering primary or primary plus secondary site type codes. Enter a "**?**" to request a list of current codes. You may use a wildcard of an asterisk (*****) during the entry of site types.

(9) If records are to be qualified by Site Characteristics, select any one or more of the additional selection options shown below.

Selection criterion	Specification	Reference source
Primary geologic unit	**-- up to 20 geologic unit codes**	**Section 3.6.4**
Use of site	**-- up to 10 use-of-site codes**	**Appendix A**
Use of water	**-- up to 10 use-of-water codes**	**Appendix A**
Well depth (range)	**-- only 1 range**	**user supplied**
Project ID	**-- up to 10 project ID's**	**user supplied**
Drainage area (range)	**-- only 1 range**	**user supplied**

To be selected, a site record must satisfy all the selected criteria.

NOTE: These selection criteria are optional fields in the SITEFILE record. If the selected field has not been populated in a site record, that site will fail the selection criterion.

The speed of the SITEFILE retrieval will vary depending upon the amount of qualification by the selected criteria that you supplied. You will be given a warning and an opportunity to abort the SITEFILE search if the criteria are too general. If no site selection criteria are specified, the default condition is invoked and the selection criterion used is **Agency code = USGS.**

```
qwsiterec – locate sites

Beginning search for sites in database 01 ...
(No selection made -- will search for ALL station types)

This may take a long time as the entire site file must be read

Do you wish to continue (Y/N,<CR>=Y)?
```

Warning message when searching the entire SITEFILE.

After the SITEFILE has been queried for sites that satisfy the user selection criteria, you will be asked if selected sites should be sorted. A response of "**YES"** invokes a prompt to select sorting options. All of the desired sort codes must be entered on one line without spaces. The first field will be the primary sort, the next will be the secondary sort, and so forth. In the example below, sites are sorted according to agency code, site type, and station number.

```
qwsiterec -- total number sites located:  1050

Do you wish to sort the located sites (Y/N)? Y

You may sort on any combination of the following fields:

   A -- Agency code          G -- Hydrologic unit
   B -- Station number       H -- Drainage basin
   C -- Station name         I -- Site type
   D -- Latitude-longitude   J -- Use of water
   E -- State                K -- Geologic unit
   F -- County               L -- Project

The first field will be the primary sort
the next will be the secondary sort 1, ...
Please enter the sort codes on one line with no embedded spaces


Enter sort code(s):  AIB
```

User is given the option to sort retrieved sites.

When the sort is complete or if the sort option is skipped, you will be prompted to enter a filename to hold the retrieved site numbers. The site numbers and associated location and other site information are saved in a file using a fixed-column format shown in *Appendix C*.

If you choose not to specify site numbers in the Select Sites or Samples submenu, the program moves to the option to select water-quality records.

3.3.1.2 Selecting Water-Quality Records

After sites are selected, you may select water-quality records for the specified sites or you may return to the Data Review menu. To select water-quality records, a screen is displayed to specify selection criteria. If no water-quality record selection criteria are specified, by entering a **<CR>** in the **(1) DATE** field, the program will use a default date range from 1776 to present—in effect, selecting all records in the database and a default sample analysis status code setting.

The default analysis status code (*Appendix A*) setting is determined by the types of databases included in the retrieval. The default for an environmental database is to include all unrestricted samples; the default for quality-control databases is to include all unrestricted and internal-use samples. If a retrieval from multiple databases is made that includes both environmental and quality-control databases, then the default is all unrestricted and internal-use samples.

Locate QW records

Enter an X to choose an item for limiting retrieval.

Enter a # to remove an item.

(1) DATE: _ (2) MEDIUM CODE: _ (3) ANALYSIS-LEVEL CODES: _
(4) PROJECT ID: _ (5) GEOLOGIC UNIT: _ (6) PARAMETER VALUES AND CODES: _
(7) PARAMETER GROUPS:_ (8) DATA QUALITY INDICATOR CODES: _

Options: ? ^D # / /x /+x /-x /@ /c /q -- Enter ?/ for help

Selection options for locating water-quality records.

Select water-quality records by using any combination of eight selection criteria as shown below.

	Selection criterion	Specification	Reference source
(1)	**DATE (range)**	**-- 1 date range**	**user supplied**
(2)	**MEDIUM CODE**	**-- up to 43 medium codes**	*Appendix A*
(3)	**ANALYSIS-LEVEL CODES**		
	Hydrologic condition code	**-- up to 6 hydrologic condition codes**	*Appendix A*
	Sample type code	**--up to 6 sample type codes**	*Appendix A*
	Hydrologic event code	**-- up to 10 hydrologic event codes**	*Appendix A*
	Collecting agency code	**--up to 20 collecting agency codes**	*Appendix K*
	Analysis status code	**--up to 3 analysis status codes**	*Appendix A*
(4)	**PROJECT ID**	**-- up to 10 project ID's**	**user supplied**
(5)	**GEOLOGIC UNIT**	**-- up to 10 geologic unit codes**	*Section 3.6.4*
(6)	**PARAMETER VALUES AND CODES**		
	Parameter codes	**-- up to 50 parameter codes**	*Section 3.6.3*
	Parameter values	**-- up to 50 parameter value minimums and/or maximums**	**user supplied**
	Remark codes	**-- up to 5 remark codes per parameter**	*Appendix A*
	Method codes	**-- up to 5 method codes per parameter**	*Section 3.6.8*
	Prep set number	**-- one prep set number per parameter**	**user supplied**
	Analysis set number	**-- one analysis set number per parameter**	**user supplied**
	Value qualifier code	**-- up to 5 value qualifier codes per parameter**	*Appendix A*
	Analyzing entity	**-- one analyzing entity code per parameter**	*Appendix K*
(7)	**PARAMETER GROUPS**	**-- up to 15 parameter group codes**	*Appendix N*
(8)	**DATA QUALITY INDICATOR CODES**	**-- up to 9 DQI codes**	*Appendix A*

Record selection criteria, specifications, and reference source.

You can get all stored records for a site if **(1) DATE** is used for the selection of records and you enter a **<CR>** for both the begin date and end date. In any release after NWIS 4.2, the storage of times in the Coordinated Universal Time (UTC) System may result in small numbers of samples not being included in retrievals limited by date. The retrieval program will use the time variable set for the UNIX environment on the local computer system. To avoid missing samples in a date range, you could include an extra day on either end of the desired date range. The examples below demonstrate this behavior.

A. Sample in Arizona database from Navajo reservation (the Navajo reservation observes daylight saving time, but the rest of the State does not)

1. UNIX time variable is US/Arizona
2. Sample begin date/time logged in as: 10-01-02 @ 0030 MDT
3. Sample begin date/time stored in UTC as: 10-01-02 @ 0630 UTC
4. Retrieval of all records in a water year as entered on the screen:
   Begin date: 10-01-02
   End date: 09-30-03
5. Retrieval date range converted to:
   Begin date: 10-01-02 @ 07:00:00 UTC
   End date: 10-01-03 @ 06:59:59 UTC

Due to the conversion to UTC for retrieval, this sample is *not* included in the retrieval even though it was collected in the date range selected.

B. Sample from Indiana in a county near Chicago, Illinois

1. UNIX time variable is US/East-Indiana
2. Sample begin date/time logged in as: 09-30-02 @ 2345 CST
3. Sample begin date/time stored in UTC as: 10-01-02 @ 0545 UTC
4. Retrieval of all records in a water year as entered on the screen:
   Begin date: 10-01-02
   End date: 09-30-03
5. Retrieval date range converted to:
   Begin date: 10-01-02 @ 05:00:00 UTC
   End date: 10-01-03 @ 04:59:59 UTC

Due to the conversion to UTC for retrieval, this sample is included in the retrieval even though it was not collected in the date range selected.

C. Sample from the East Coast of the United States

1. UNIX time variable is US/Eastern
2. Sample begin date/time logged in as: 09-30-02 @ 2300 EST
3. Sample begin date/time stored in UTC as: 10-01-02 @ 0400 UTC
4. Retrieval of all records in a water year as entered on the screen:
   Begin date: 10-01-02
   End date: 09-30-03
5. Retrieval date range converted to:
   Begin date: 10-01-02 @ 04:00:00 UTC
   End date: 10-01-03 @ 03:59:59 UTC

Due to the conversion to UTC for retrieval, this sample is included in the retrieval although it was not collected in the date range selected.

D. Sample from the East Coast of the United States

1. UNIX time variable is US/Eastern
2. Sample begin date/time logged in as: 09-30-03 @ 2330 EST
3. Sample begin date/time stored in UTC as: 10-01-03 @ 0430 UTC
4. Retrieval of all records in a water year as entered on the screen:
   Begin date: 10-01-02
   End date: 09-30-03
5. Retrieval date range converted to:
   Begin date: 10-01-02 @ 04:00:00 UTC
   End date: 10-01-03 @ 03:59:59 UTC

Due to the conversion to UTC for retrieval, this sample is *not* included in the retrieval although it was collected in the date range selected.

If you specify a selection based on **(2) MEDIUM CODE**, the following menu appears on the screen.

Enter medium code:

(Use a "*" for a wildcard search. For example. "W*" selects all "Water" media; "*Q" selects all QC media)

(1) MEDIUM CODE: ___

Selection of criteria based on ***(*3) ANALYSIS-LEVEL CODES** or **(6) PARAMETER VALUES AND CODES** each invoke another menu described below.

If you specify a selection based on **(3) ANALYSIS-LEVEL CODES**, the following menu is invoked. You may select one or more of the selection criteria.

Locate QW records

Enter an X to choose an item for limiting retrieval,
Enter a # to remove an item.

(1) HYDROLOGIC CONDITION: _ (2) SAMPLE TYPE: _ (3) HYDROLOGIC EVENT: _
(4) COLLECTING AGENCY: _ (5) ANALYSIS STATUS: _

Options: ? ^D # / /x /+x /-x /@ /c /q -- Enter ?/ for help

Options for selecting water-quality records based on analysis-level codes.

If you specify a selection based on **(5) ANALYSIS STATUS,** the following menu is invoked. Valid codes are "U," "'I," and "P." General information about analysis status codes is available in *Section 2.4.10*. Additional information about coding the analysis status for any sample is available in *Section 3.7.5.*

```
Enter up to 3 Analysis Status codes:
(1) Analysis Status Code: _

Options: ? ^D  #  /  /x  /+x  /-x  /@  /c  /q -- Enter ?/ for help
```

Screen for selecting water-quality records based on analysis status codes.

The default behavior is important to note for records retrieval. When querying QWDATA from an environmental database (typically numbered "01"), the program will include only records where analysis status is set to "U – unrestricted." If you are searching for records from a QC database, the program will search for records of analysis status of either "U" or "I –internal-use only." The only means of searching for proprietary samples from this menu option is to include records where analysis status = "P." The default behavior will be followed unless you select different options at this menu.

You will be notified that the database search has begun. After water-quality records are retrieved (and if the number of records retrieved are greater than zero), the number of records and the number of sites are displayed on the screen. Note the message line that indicates which analysis-status codes are being excluded:

```
qwsiterec -- locating QW records
Beginning search for QW records in database 01 ...
Search excludes internal-use and proprietary samples (default)
... end of search.  12227 records (   212 sites) located in database 01

Do you wish to save a list of sites that have QW data (Y/N)? Y

Enter pathname of file to hold list of sites with QW data for database 01 --
:
```

The user is notified of the number of water-quality records retrieved, which analysis status code types are excluded, and the number of sites for those records. The user is given the option to save a list of sites for which water-quality records were selected.

Users with read-only access to the database table being queried will not be able to locate records with an analysis status = "I"' or "P."

If you specified a selection based on ***(4)* PROJECT ID**, then you will have an opportunity to enter up to 10 project-ID searches. The search text may use an asterisk ("*") as a wildcard for matching multiple project identifiers. For example, the search text "4630148*" will retrieve any sample where the stored project identifier begins with these seven digits. Any lower-case letters in the search text are automatically converted to upper case before the search begins. Thus, this search criterion will not find samples with project identifiers stored with lower-case letters.

If you specify a selection based on **(6) PARAMETER VALUES AND CODES,** the following series of menus is invoked. On the first menu, you have the option of restricting parameter selection by selecting "**NOT**." Use this option to select records for which parameter(s) identified in the next step do not exist. For example, if you select the "**NOT"** option and parameter code 00010, only records without parameter code 00010 (water temperature) will be retrieved.

Next, you will be asked to specify the first parameter code for selection. You may also specify minimum and maximum values for that parameter code as well as other result level codes listed in the screen below. You can retrieve null values by inserting a "." in the "**MIN**" field.

```
Parameter code/value tests

NOT: _  (X qualifies records if specified parameters do not exist)
Enter up to 50 tests--
 (1)       PARM: 00010  MIN: 15       MAX: 30       RMK: _ _ _ _ _
    METH: _____ _____ _____ _____ _____ PREP SET NUMBER:  _____________
    ANL SET NUMBER: _____________      VAL QUAL CODE: _ _ _ _ _
    ANL ENTITY: ________
 (2) A/O: O  PARM: 00300  MIN: 4       MAX: _________  RMK: _ _ _ _ _
    METH: _____ _____ _____ _____ _____      PREP SET NUMBER: _____________
    ANL SET NUMBER: _____________      VAL QUAL CODE: _ _ _ _ _
    ANL ENTITY: ________
 (3) A/O: _  PARM: _____  MIN: _________  MAX: _________  RMK: _ _ _ _ _
    METH: _____ _____ _____ _____ _____      PREP SET NUMBER: _____________
    ANL SET NUMBER: _____________      VAL QUAL CODE: _ _ _ _ _
    ANL ENTITY: ________

Options: ? ^D  #  /  /x  /+x  /-x  /@  /c  /q -- Enter ?/ for help
```

Screen for selecting water-quality records based on parameter codes.

You may select more than one parameter code. Selection by parameter codes and values is the only selection that does not require that the specified criteria must be satisfied to qualify a water-quality record for selection. If you specify more than one parameter code, then for *each parameter after the first*, you will be asked whether the relation to the previous parameter is "**AND"** or "**OR**." The "**AND"** or "**OR"** option in combination with the "**NOT"** option results in specific actions based on the rules of Boolean logic *(Section 2.2.6 – Getting Started)*. Examples are shown in the table below.

First specification	Second specification (P1=parameter code 1, etc.)	Action selects records that...
NOT	**P1, *AND* P2**	**do not contain values for both P1 and P2**
NOT	**P1, *OR* P2**	**do not contain values for either P1 or P2**
--	**P1, *AND* P2**	**contain values for both P1 and P2**
--	**P1, *OR* P2**	**contain values for either P1 or P2**
--	**P1, *OR* P2, *AND* P3**	**contain values for either P1 or both P2 and P3**
NOT	**P1, *OR* P2, *AND* P3**	**do not contain values for either P1 or both P2 and P3**

Actions of NOT, AND, and OR specifications for record selection based on result-level codes.

If you specify a selection based on **(7) PARAMETER GROUP CODE**, the following menu appears on the following screen.

```
Enter up to 15 parameter group codes:
(1)           PARAMETER GROUP CODE: INF
(2) A/O: A  PARAMETER GROUP CODE: PHY
(3) A/O: O  PARAMETER GROUP CODE: INN
(4) A/O: _   PARAMETER GROUP CODE: ___
Options: ? ^D # / /x /+x /-x /@ /c /q – Enter ?/ for help
```

Screen for selecting water-quality records based on parameter group codes.

You may select up to 15 parameter group codes. If you specify more than one parameter group code, then for *each parameter group code after the first*, you will be asked whether the relation to the previous parameter is "**AND"** or "**OR**." The "**AND"** or "**OR"** option results in specific actions based on the rules of *Boolean logic* (*Section 2.2.6 – "Getting Started"*).

If you choose to retrieve based on **(8) DQI CODES**, the results available are based on your access level. If you have read-only access, you will be able to retrieve only records with DQI codes of "A," "S," or "R." If you have read and write access, you will be able to retrieve records with any DQI code.

You will be asked if the list of sites with water-quality data should be saved. If you respond "**YES**," you will be prompted to enter the pathname for the file. Next, you will be asked if the water-quality record numbers should be sorted. If not sorted, the file will list records in record number order. The retrieved record numbers may be sorted on any combination of the following fields.

```
qwsiterec -- Total number QW records located: 12227

Do you wish to sort the located QW records (Y/N)? Y

You may sort on any combination of the following fields:

A -- Agency code              F  -- Geologic unit code
B -- Station number           G -- County code
C -- Dates and times          H -- Station name
D -- Medium code              I  -- Site type
E -- Project ID
The first field will be the primary sort
the next will be the secondary sort 1, ...
Please enter the sort codes on one line with no embedded spaces

Enter sort code(s):
```

User is notified of the number of water-quality records retrieved and given the option to sort the record numbers.

All of the desired sort codes must be entered on one line without spaces. The first field will be the primary sort, the next will be the secondary sort, and so forth. When the sort is complete or if the sort option is skipped, you will be prompted to enter a filename to hold the retrieved list of record numbers. An example of output of record numbers from this program is shown in *Appendix C*.

3.3.2 Option 2 – Select Sites and Samples from Multiple Databases

Water-quality data from as many as five databases may be retrieved, as shown on the following screen. The multiple database retrieval option is most often used when data must be retrieved from the environmental database and the quality-assurance database. You may enter database numbers in any order. After the desired database numbers are entered, the user input is the same as that described in *Section 3.3.1*. The output to the screen informs you of the results of selections for each database that you had specified.

```
qwmdb_loc -- locate site numbers/qw records for multiple databases
Enter up to  5 database numbers --

(1) DATABASE NUMBER: __
Options: ? ^D  #  /  /x  /+x  /-x  /@  /c  /q -- Enter ?/ for help
```

User is prompted to enter database numbers when multiple databasesneed to be accessed.

If selection criteria are used to retrieve a site list (Option 3, below), a single set of criteria is used for all databases. After the sites are retrieved, you will be prompted to sort the list of sites and to save a file for the list of sites from each database.

```
You may locate records for specific sites.

If you wish to locate records for specific sites the options are:
1 -- You have a file containing site numbers
2 -- You will enter site numbers for each database at terminal
3 -- You wish to locate sites based upon selection criteria

If you don't care which sites the option is:
4 -- Locate QW records without regard to site

Please enter option (1-4,Q to quit):
```

User may enter site numbers from a file, from the terminal, based on selection criteria, or may locate records without specifying site numbers.

If water-quality records are retrieved, one file that contains the record numbers from all databases is output, and a database number is attached to each record number to identify the location of the data (*Appendix G*). You will be prompted to save a list of sites that have water-quality data for each database.

3.3.3 Option 3 – Produce Inventory of Samples

This option is used to produce a table of information for records that have been logged into the database for samples collected within a specific water year. This program has historically been identified as the "loglist" program. The table may be limited to a user-supplied list of up to 50 station numbers, or a range of dates within the specified water year, or both. An example of the output from this program is included in *Appendix C*. This tabular output is written to a file, which you may print. Included in this output is information on the total number of parameters and the number of analyses in each parameter-sequence group. The parameter-sequence group codes, short names, and descriptions are listed in *Appendix N*. The number of parameters in each group includes only stored parameters. Calculated parameters or those accessed from the SITEFILE, ADAPS, or GWSI are not included in the parameter count.

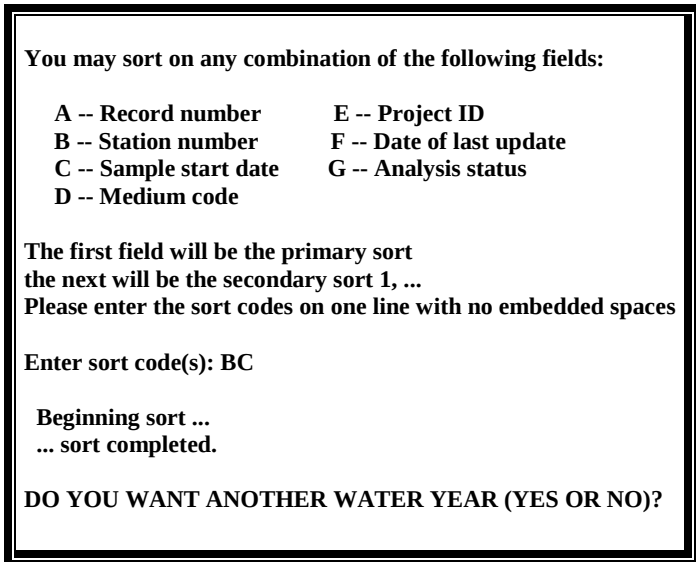
You will first be queried for the name of a file to hold the output. The filename may include the pathname if you do not wish to save the file in the current directory. If the specified file already exists, it may be either appended or overwritten, according to your response. Enter the water year next. Within the selected water year, the table may be restricted to specific station numbers and a range of dates. Station numbers may be entered interactively or from a *fixed-column format file.* Station numbers also are accepted in the format used to output stations under *menu Option 3.3.1.* Sites also may be input interactively without an agency code.

```
QW LOGLIST PROGRAM

    THU, MAR 22 2001

PLEASE ENTER NAME OF FILE TO HOLD THE OUTPUT: loglist

  PLEASE ENTER THE WATER YEAR (4 DIGITS)

1973

 DO YOU WANT INFORMATION FOR SPECIFIC STATIONS (YES OR NO) ?

N

 DO YOU WANT INFORMATION FOR A RANGE OF DATES (YES OR NO) ?

N
Searching ...
    1715 RECORDS RETRIEVED
 RECORDS ARE ORDERED BY RECORD NUMBER
  DO YOU WANT THEM SORTED ON SOME OTHER FIELD (YES OR NO)?
```

Screen queries for producing an inventory of samples in the water-quality database.

When the selected records have been retrieved, they are ordered by record number. You will be given the option to sort the records by up to seven sort fields [record number, station number, sample start date, medium code, project ID, date of last update, and analysis status code (*Appendix A*)]. Enter sort selections on one line without embedded spaces. The first sort option

entered is the primary sort, the second sort option entered is the secondary sort, the third sort option entered is the tertiary sort, and so forth.



Screen queries for sorting the sample inventory file.

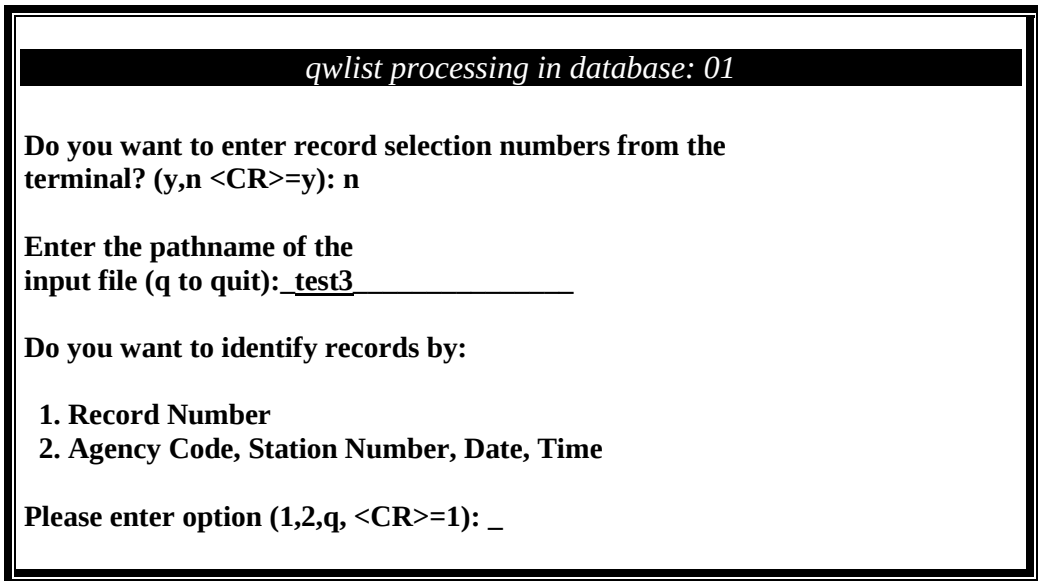
When the sort request is complete, you will be asked if data for another water year are to be retrieved. If you respond "**YES,"** the queries described above are repeated beginning with entry of station numbers, or date range, or both. If you respond "**NO**," you will be returned to the Data Review menu.

3.3.4 Option 4 – List Samples and Results

Sample information and analytical results for requested records can be displayed to the screen or a file. Records may be identified by record number or by agency, station number, date, time, and medium code. You will first be given the option to enter record selection information interactively or to input this information using an existing file. **Note: The minimum identifying information needed to uniquely identify a sample is agency code, station number, date, and medium code.**

To retrieve a record using sample identification information, all information that has been entered for a particular sample must be specified. The fields that could be completed are agency, station number, date, medium code, time, end date, and end time. For example, if all of these fields were populated for a particular sample, then all of the fields must be used to identify and retrieve the sample. Typically, samples are uniquely identified with agency code, station number, date, time, and medium code.

If the list of records is to be entered from a file, you will be prompted for the filename and input format of either **1 for Record Number,** *or* **2 for Agency Code, Station Number, Date, Time,** and **Medium Code**.



Entering a file to retrieve a list of sample information.

If the records are to be identified by record number, the format of the file is one record number per line, with the 8-digit record number beginning in column 1 of each line as shown in *Appendix G*.

Additional information may be included beyond column 8 so that output from other options (such as the record file output from the *Select Sites and/or Samples* option shown in *Appendix C*) may be used.

Input files containing records identified by agency, station number, date, time, and medium code must follow the format shown in *Appendix G*.

The next query gives you the option to print the output to the screen or to a file. You will be queried for an output filename if the file output option is selected. You will next be given the choice between two report formats, the short form or the long form, which is about 161-characters wide. These two options are also available for display to the screen, shown in *Appendix C*. The output is sorted in the same order as the input records. **Note: The analytical results are displayed using unrounded values from the database.**

```
qwlist processing in database: 01

Do you want the report to be printed to the screen? (y,n, <CR>=y): _
Select report:
  1 -- short form
  2 -- long form

Please enter selected report (1,2,q, <CR>=1): 2
```

Output option queries for List Samples and Results. This example specifies output to the terminal (screen) using the long form.

If you chose to input record information interactively from the terminal, the next screen allows you to enter record numbers or agency code, station number, date, time, and medium code.

```
qwlist processing in database: 01
Do you want to enter record selection numbers from the
terminal? (y,n <CR>=y):

Enter record numbers, ("A" to select by agency-site-date-time-medium
or , <CR>  to quit
1: 00200111
2: _________
```

Interactive record input screen for producing output from the List Samples and Results option.

The requested record information will be listed on the screen or to a file in the specified format until you enter a carriage return for record number to end the program.

```
qwlist processing in database: 01

(1) Agency Code: USGS   (2) Site Number: _________________
(3) Begin Date: YYYYMMDD  (4) Begin Time: HHMM
(5)   End Date: YYYYMMDD  (6)   End Time: HHMM
(7) Medium Code: _ _ _
Options: ? ^D  # /  /x  /+x  /-x  /@  /c  /q -- Enter ?/ for help
```

Screen for entering agency, site number, date, time, medium code for producing output from the List Samples and Results option (shaded text indicates mandatory items).

Note: Begin time, end time, and end date are not required fields on input. If these fields have been populated in a sample record, however, they must be entered here to retrieve the record.

3.3.5 Option 5 – Sample List, Ion Balance, Data Verification and Validation

From this option, output is produced that includes: (1) a list of parameters and their values, (2) a cation-anion balance table, (3) data verification and validation check results, or (4) all for specific samples. You may choose to calculate the ion balance table using the standard calculation method or may supply a file that specifies the information needed to produce a customized ion balance calculation, as described in *Section 3.3.6.2*. You can specify samples by record number or by sample key information (agency code, site number, date, time, and medium code); you may enter this information from the terminal or a file. If sample identifiers are entered from a file, you will be queried for the name of a file (full pathname allowed, up to 32 characters) that contains either record numbers or agency code, station number, date, time, and medium code in the format shown above. If you enter record numbers from the terminal, the program queries you for another record number after each sample is processed. Enter **<CR>** in the record number field to terminate processing.

Do you want to enter record selection numbers from the terminal? (y,n, <CR>=y): _

Enter record numbers ("A" to select by agency-site-date-time-medium
or <CR> to quit
1: 00100234
2: _____

Queries for record selection.

The sequence of samples in the output listing can be in the same order as the specified records, or the samples may be sorted by the stored project number (*Section 2.4.16*).

Do you want the output sorted by:

1. the order in the supplied record number list
2. project number

Please enter option (1,2,q, <CR>=1): _

You may select from six data verification options. Next, you will be queried for the name of a file to hold the output. The file is saved with Fortran page-control characters. To print the file, the following UNIX command usually works.

asa filename |lp -ylandscape –dprintername

Data Verification Options:		
1. List All Parameters and Results:	**_X_Yes**	**___No**
2. Create Cation/Anion Balance Table:	**___Yes**	**_X_No**
3. Perform Chemical Logic Checks:	**_X_Yes**	**___No**
4. List Results that Exceed USEPA Drinking Water Limits:	**_X_Yes**	**___No**
5. List Results that Exceed User-Specified Limits:	**___Yes**	**_X_No**
6. Perform Data Validation Checks:	**_X_Yes**	**___No**
Changes? Enter item number to change or <CR> to continue:		

Data verification output options.

The following describes the actions taken and the output for each **Data Verification** menu option. Example output files are shown in *Appendix C*.

1. List All Parameters and Results: If you choose to output all parameters and results, all results for the sample are written in the same format as the WATLIST report as shown in *Appendix C*.

2. Create Cation/Anion Balance Table: If you choose to output a cation-anion balance table, there will be an option to create an output file containing the ion balance results. If you request such an output file, a tab-delimited "rdb" style file is created. An example output file is shown in *Appendix C*. A reference table defines the parameter codes that are used in all programs that produce an ion balance table (WATLIST, qwvalid, qwbal). This reference table includes: the parameter code; a flag indicating if the parameter is calculated; a multiplication factor to convert the result units to milliequivalents per liter units; the ion type (cation or anion); the group that the parameter belongs to (e.g., alkalinity, nitrogen species); a flag indicating if the parameter is a major ion, the hierarchy of similar parameters within a group (e.g., if multiple alkalinity parameters are present, which is used in the calculation); and the order of the ions in the table output. This table may be updated quarterly. A listing of these parameters is shown in *Appendix L*.

You may request a customized ion balance calculation by specifying a user-specified table and by supplying a custom ion balance specifications file. This is the only program in QWDATA that allows users to customize the ion balance. This file gives the software explicit instructions on how to calculate the table, which parameters are considered cations or anions, what multiplication factor should be used, what order the parameters are to be included in the output, and the hierarchy of parameters within the same group. The format for this file is shown in *Appendix C*. You may create your own file or may modify the standard ion balance specifications file produced in "Data Review" Option 6 described in *Section 3.3.6*.

```
Do you want a cation-anion balance table? (y,n,q, <CR>=y):_
Do you want to create a tab-delimited output file of
ion balance results? (y,n,q, <CR>=n): _

Enter name for tab-delimited output file (q to quit): _____
```

```
Do you want the standard cation-anion
balance table? (y,n, <CR>=y; n=user-specified table): n
Enter custom cation-anion balance specifications
    file name (q to quit): ion.bal.spec.file
```

Queries for type of ion balance table and specifications filename.

The output file containing parameters, or ion balance tables, or both is saved with Fortran page-control characters, and it should be printed using these page-control characters. The following UNIX command usually works.

```
asa filename |lp -ylandscape -dprintername
```

An example of output from this program is shown in *Appendix C*. Analytical results are included in this output and are unrounded. Cation and anion values are shown unrounded for the original parameter units; values calculated as milliequivalents per liter are rounded to 3 digits after the decimal in the output table and tab-delimited output files. Calculations of cation sum, anion sum, and percent difference are made using unrounded results. Results that have remark codes may be included in the cation-anion balance table and these codes may affect how the ion balance is computed, as shown in the following table.

Remark code	Description	How handled in Ion Balance Calculation
E	Estimated Value	• Result used in calculation. • Remark code "E" will be shown next to result.
<	Less than	• Results for major and minor ions will be used in the calculation. • Remark code "<" will be shown before the parameter result. • The ion balance will be calculated using the minimum possible value (=0) and the maximum possible value below the censored value. • Result in the ion balance table will be shown as a **range** of possible cation totals, in milliequivalents per liter, anion totals in milliequivalents per liter, and balance in percent difference. • Result in the tab-delimited output file will be the average of the range.
>	Greater than	• Results for major and minor ions will be used in the calculation. • Remark code ">" will be shown next to the parameter result. • The ion balance will be calculated using the result value, ignoring the ">" remark.
M	Presence verified, not quantified	• Null result will be treated as missing result and will be ignored in calculation. • Program will search for next parameter in hierarchy. • If no other parameter in hierarchy group is available, remark code "M" shown as result in ion balance table. • Last parameter code in the hierarchy will be listed.
N	Presumptive evidence of presence	• Null result will be treated as missing result and will be ignored in calculation. • Program will search for next parameter in hierarchy. • If no other parameter in hierarchy group is available, remark code "N" shown as result in ion balance table. • Last parameter code in the hierarchy will be listed.
U	Analyzed for, not detected	• Null result will be treated as missing result and will be ignored in calculation. • Program will search for next parameter in hierarchy. • If no other parameter in hierarchy group is available, remark code "U" shown as result in ion balance table. • Last parameter code in the hierarchy will be listed.
A	Average value	• Result used in calculation. • Remark code "A" shown next to result.
V	Value affected by contamination	• Result used in calculation. • Remark code "V" shown next to result.
S	Most probable value	• Result used in calculation. • Remark code "S" shown next to result.

Table showing how results with remark codes are used in the ion balance calculation.

3. Perform Chemical Logic Checks: Chemical logic checks are performed for specific samples when this option is selected. The chemical logic checks include the checks performed when

batch processing programs are used and the results are printed in the WATLIST file (example in *Appendix C*). A detailed listing of the chemical validation checks in QWDATA is listed in *Appendix M*. In general these checks include:

- Field measurement results against general guidelines;
- Chemical logic;
- Bacterial logic;
- Comparisons between stored calculated parameters and current calculated values;
- Both values are first rounded using default rounding as described in *Section 3.4.3.4*;
- Comparisons between related constituents;
- Comparisons between unfiltered and filtered constituents,
- Comparisons between selected constituents and individual parameters that make up the sum of parts;
- Comparisons of constituents to alert limits in *Appendix E*; and
- Calculation of a cation/anion balance.
    - In NWIS 4.6, an option to specify the parameters used in calculating the cation/anion balance was added. This option is described in more detail in *Section 3.3.6*.

4. List Results that Exceed EPA Drinking Water Limits: Results for specific samples are compared automatically to the U.S. Environmental Protection Agency (EPA) Primary Drinking Water Maximum Contaminant Levels and Secondary Maximum Contaminant Levels when this option is selected. Results with remark codes of "**E**," "**A**," "**S**," "**V**," or ">" are allowed. The EPA Drinking Water Limits are listed in *Appendix E*. A warning message, which includes the parameter code, parameter short name, remark code, result, units, and alert limit is written for results that exceed the limit (example in *Appendix C*). The comparisons include the comparisons performed when batch processing programs are used and the results are printed in the **WATLIST** file (example in *Appendix C*).

5. List Results that Exceed User-Specified Limits: The data review and batch-processing programs automatically compare selected result values to the U.S. Environmental Protection Agency (EPA) Primary Drinking Water Maximum Contaminant levels and Secondary Maximum Contaminant Levels; however, users also may have the need to compare results to other Federal, State, and local regulatory standards for waters used for specific purposes. User-specified alert limit forms are used by data review and batch-processing programs in QWDATA to provide the user with the option to compare results to these other Federal, State, and local regulatory standards.

You may add new user-specified alert limit forms to be used in QWDATA by creating a form using a specific format and storing it in the /usr/opt/nwis/data/auxdata/qw_alert_limits directory. Alert limit form names are in the format alert.limitnn where "nn" is the 2-digit number that

identifies the form. Instructions for creating the user-specified alert limit form are found in *Section 2.9.2.1.1*, and an example of the form is shown in *Appendix G*. You should create new user-specified alert limit forms if none of the available alert limit forms fit the data to be entered. Review available user-specified alert limit forms prior to creating a new form so that duplication of user-specified alert limit forms is avoided.

Selected result values are compared to the user-specified alert limits when you select this option. You have the option to select one or more user-specified alert limit file number(s), or you may specify "all" to use all available files.

Enter alert limit file number(s), comma separated, or "all" to use all available files: (q to quit, ? to search, <CR>=none)

A warning message, which includes the parameter code, parameter short name, remark code, result, units, and alert limit, is written for results that exceed the user-specified limit (example in *Appendix C*).

6. Perform Data Validation Checks: Data validation checks are performed for specific samples when this option is selected. The data validation checks include the checks performed when batch processing programs are used, and the results are printed in the WATLIST file (example in *Appendix C*). A detailed listing of the data validation checks in QWDATA is given in *Appendix M*. In general, these checks include:

- Station number does not exist in the SITEFILE,
- Invalid geologic-unit code,
- Invalid sample type, analysis status, hydrologic condition, or hydrologic event codes,
- Sample-preparation or sample-analysis date prior to sample-end date,
- Fixed-value parameter is incompatible with measurement-parameter attributes, such as remark code,
- Invalid fixed-value parameter value.
- A null-value remark code accompanies a non-null result value, and
- Invalid method code.

3.3.6 Create or Modify Ion Balance Specification Options

You may output the specifications file that defines how the standard ion balance is calculated. Sample output from this program is in *Appendix C*.

```
        Create or Modify Ion Balance Specification Options

  1 -- Dump standard ion balance specification file
  2 -- Create or edit custom ion balance specification file

 98 -- Exit menu

 99 -- Exit system

 Please enter a number from the above list or a Unix command:
```

Queries for creating an ion balance specification file.

3.3.6.1 Dump Standard Ion Balance Specification File

This option will provide a standard ion balance specifications file that you can be modify to create a custom ion balance specifications file, because both types of files use the identical format. It can also serve as a reference for the ion balance calculations within QWDATA. You may use the first line of the specifications file for a user-specified title for the output. You may also insert comments into any part of the file by entering a "#" in column 1 of the comment line. You have full control over how the custom ion balance table is calculated, including the precedence order in which parameters are used in the calculation. For example, if multiple parameter codes for chloride are included in the file, you must specify which codes should be used. A detailed description of the specifications file is in *Appendix C*.

3.3.6.2 Create or Edit Custom Ion Balance Specification File

This option will allow you to create a new Ion Balance Specification File or edit an existing file.

Do you wish to:

1. Create new file
2. Edit an existing file

Please enter selection (1,2,q, <CR>=2): _

To create a new file, the following screen will appear.

qwioneditspec
Custom Ion Balance Specifications

Page 1 of 1

	PCode	Ion	Group	MEQ Factor	Calc Flag	Major ION	Row No	Cation /Anion
1:	_____	_____	_____	_____	_	_	__	_

Options: # / /x /+x /-x /p /n /d /a /c /q

To begin, enter "**/a**" to add the first ion. For specific details about each of the columns in this screen, review the Ion Balance Specifications File (tab-delimited) output in *Appendix C*. To add more ions/lines to any screen, move the cursor to an existing line and use the "**/a**" option to add another line. If a parameter code is entered for an ion that is used in the standard ion balance table, then the program will automatically provide the "Ion," "MEQ Factor," "Calc Flag," "Major ION," "Row No," and "Cation/Anion" codes. These values may be accepted or changed. To edit an existing ion balance specification file, use Option 2 "Edit an existing file" and provide a filename. The contents of the ion balance specifications file will be displayed to the screen—first the ions may be edited and then the title may be edited. Ion entries can be inserted, modified, or deleted.

3.4 Option 4 – Data Output

Option 4 of the main menu accesses a submenu with options to output data (1) in tables for publication in reports, (2) in files that can be loaded into other applications, and (3) in files that can be used for the P-STAT statistical package. Tables for publication and files that can be loaded into other applications can be retrieved in two formats: by sample or by result. Additional information about tabling options can be found in Section 2 –Getting Started. To retrieve any of these output formats, a file of record numbers is required, and it can be produced using Option 1 or 2 from the Data Output menu.

```
 QW DATA PROCESSING ROUTINE   REV NWIS_5.0.0-xx
 YOU ARE USING WATER-QUALITY DATABASE NUMBER 01

Data Output
  1 -- Select Sites or Samples
  2 -- Select Sites or Samples from Multiple Databases
  3 -- Water-Quality Table by Sample (Publication Format)
  4 -- Water Quality Table by Result
  5 -- Flat File by Sample
  6 -- Flat File by Result
  7 -- Flat File with TAB delimiter (Publication Export)
  8 -- Make a P-STAT Data Set
 98 -- Exit menu
 99 -- Exit system
Please enter a number from the above list or a Unix command:
```

Data Output Options

3.4.1 Option 1 – Select Sites or Samples

See description in Section 3.3.1.

3.4.2 Option 2 – Select Sites or Samples from Multiple Databases

See description in Section 3.3.2.

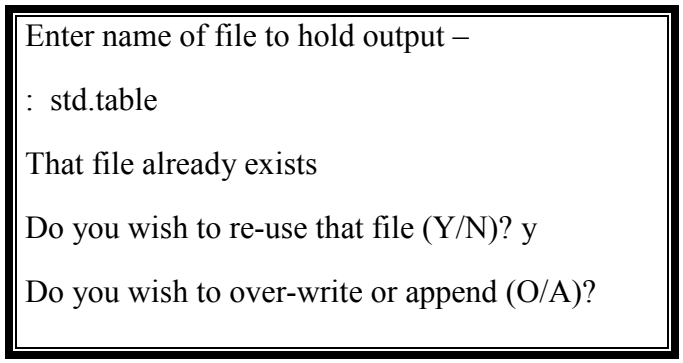
3.4.3 Option 3 – Water-Quality Table by Sample (Publication Format)

This option was used to prepare tables of water-quality data in the historical format required by the USGS for publication in the Water Science Center (WSC) Annual Data Report (ADR). Output for the ADR is now produced using Option 7 –Flat File with TAB delimiter (Publication Export), *Section 3.4.7*. The four table types described below are available with Option 3 as well as with Option 4 – "Water Quality Table by Result."

1. **Single-station format:** Data for each station are tabled separately so that each new station starts at the top of a page. Currently this is the only format for surface water-quality data published with streamflow gage record in the WSC ADR.
2. **Miscellaneous-station format:** Data for all stations are tabled together. Each new set of parameters begins at the top of a page. Station numbers, names, and latitude/longitude are printed on a single line that precedes the data for that station. This is the most commonly used format for publishing miscellaneous records of surface-water quality.
3. **Multiple-station format:** Data for all stations are tabled together in sequence just as for the miscellaneous-station format. Station numbers and dates, if requested, are printed in the first columns of the table. This is the most commonly used format for miscellaneous groundwater data.
4. **Biologic data format:** Data for each station are tabled separately so that each new station starts at the top of a page. For each sample, the output tabulates the taxonomic biological identification, counts, and percentage of population. This format was developed for and used to display data produced during the 1970s and early 1980s by the biologic section of the Atlanta Central Laboratory.

3.4.3.1 Specify the Sample Records for Tabling

After selecting Option 3, you will be asked to provide the name of the file that contains the list of record numbers to be tabled. This list is usually generated by the "Select Sites or Samples" (*Section 3.3.1)* option or the "Select Sites or Samples from multiple databases" (*Section 3.4.2*) option. A list also may be created by using an editor; the format for this type of input file is shown in *Appendix G*. Beginning in column 1, enter each eight-digit record number on a separate line. If the records are from multiple databases, the database number is a two-digit number in columns 9–10. After identifying and opening the input file, provide the name of a file that will contain the output table. If the specified output file already exists, you may replace the data in the file (overwrite), leave the file intact and add the new table to the end of the file (append), or type in a new filename.



You will be prompted to provide the name of a file that will contain the output table.

3.4.3.2 Specify the Table Definition

Assemble a "table definition" by selecting a table type and specifying output options. The table definition sets up the specification parameters that determine the table format. Enter the table definition either from an existing table definition file or by answering several queries. If you enter "**Yes,**" you are prompted to enter the file pathname. If the specified table definition file exists, the table definition is retrieved and displayed. You will be asked if this is the desired definition and, if so, if are changes to be made to the definition.

If no existing definition is to be used, the following screen is displayed:

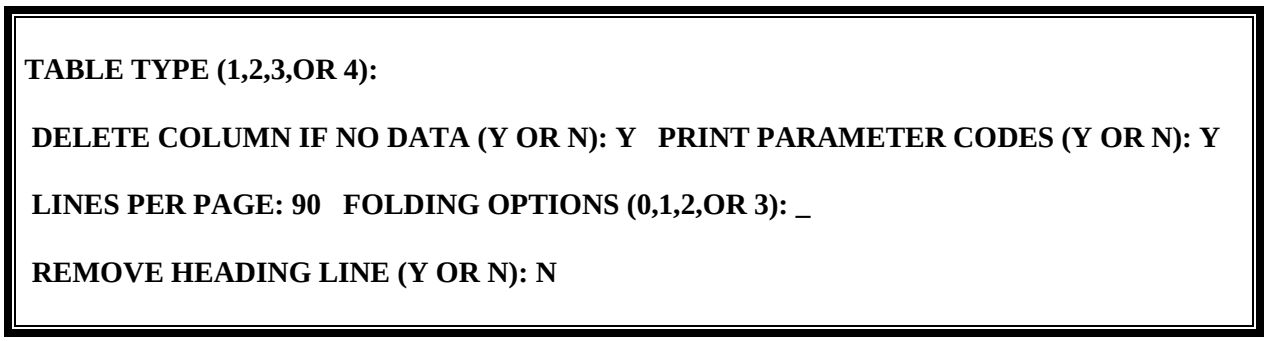


Table definition screen allows you to select from formatting options for tables output in publication format.

If you are uncertain about the meaning of a field on the screen, entering a question mark (**?**) will produce an explanation of the field and the effect of each option to be displayed; the cursor then returns to the same field for entry of the option value.

TABLE FORMAT (MANDATORY):
OPTIONS:
1 -- Single Station.
2 -- Miscellaneous Station.
3 -- Multiple-Station.
4 -- Biologic Data.

PLEASE ENTER 1, 2, 3, OR 4:

When a "?" is entered in the table type field, a list of field options is displayed to the screen.

After you enter the table type code, default options are placed after the colon **(:)** in each succeeding field. Enter a carriage return to accept the default value.

- **TABLE TYPE (1,2,3, OR 4) :** Examples of each table type are found in *Appendix C*.
- **DELETE COLUMN IF NO DATA (Y OR N): Y** If none of the selected samples contain a result for one of the requested parameters, the columns associated with that parameter will be removed entirely unless you enter an "**N**" here. In that case, the column headings will be retained and the no-value indicator of "—"will be printed for each analysis.
- **PRINT PARAMETER CODES (Y OR N): Y** Parameter codes will be included with the parameter name in the column headings unless you enter an "**N.**"
- **LINES PER PAGE: 90** This determines the number of lines printed per page of output. The default page length of 90 lines produces a page with the proper proportions for reduction to the standard WSC ADR page size. To modify the 90 lines per page, enter the appropriate number of lines, left justified.
- **FOLDING OPTIONS (0,1,2,OR 3)**

  0 No folding, applicable to all table types

  1 Horizontal folding, 24–100 parameters per page, applicable to type 1 tables only

  2 Horizontal folding (obsolete, same as Option 1)

  3 Vertical folding, maximum of five parameters (including date), applicable to type 1 and type 2 tables only
- **REMOVE HEADING LINE (Y or N): N** The top line of the table will include a heading line with the WSC code, "**United States Department of Interior - Geological Survey,"** and processing date unless a "**Y**" is entered here.

Each table type results in a different list of formatting options. Additional fields may appear as options, depending on the table type selected.

If you select table type 1 (single-station format), two additional fields, **REPORTING YEAR** and **TABLE TITLE** are added to the screen.

- REPORTING YEAR (W=WATER,C=CALENDAR,BLANK=NO BREAK): Allows you to specify if pages should break with new headings or be suppressed at changes in the water year or calendar year. A <CR> enters the default (blank) and suppresses a page break.
- TABLE TITLE: Allows you to select any of the following 13 standard titles to be placed on each page of the table.

Table Title Selections	Title Text
0	**WATER-QUALITY DATA**
1	**CHEMICAL ANALYSES**
2	**PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT**
3	**PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL**
4	**SUSPENDED SEDIMENT DISCHARGE**
5	**SPECTROGRAPHIC ANALYSES**
6	**RADIOCHEMICAL ANALYSES**
7	**PESTICIDE ANALYSES**
8	**WATER LEVEL, IN FEET, BELOW LAND-SURFACE DATUM**
9	**ELEVATION IN FEET, NGVD**
A	**WATER LEVEL, IN FEET ABOVE OR BELOW LAND-SURFACE DATUM**
X	**CROSS SECTION ANALYSES**
Z	**ENTER YOUR OWN HEADING (80 CHARACTERS MAXIMUM)**

Table titles that may be selected for publication-style tables.

Selection "**Z**" allows you to supply any title text up to 80 characters. When you select "**Z**", "**TITLE:**" is displayed, and you can enter the desired text.

After the table definition has been defined for table type 1, processing passes to the next step—storing the table definition.

When you select table type 2 (miscellaneous-station format), available fields are the same as for a type 1 table, and processing passes to the next step of storing the table definition.

When you select table type 3 (multiple-station format), seven additional fields are added to the table definition screen shown for a type 1 and type 2 table.

- **COUNTY SKIP OPTION:**

  0 No skip; table is not sorted by county (default).

  L Sort by county; place three blank lines between counties; do not print county name.

  P Sort by county; place a page break between counties; do not print county name.

  Q Sort by county; place three blank lines between counties; print county name.

  R Sort by county; place a page break between counties; print county name.

NOTE: The alpha parameter code "CNTYC" must be included in the parameter list to use this option. If CNTYC is the last parameter in the list, county codes are used but not included in the table. If one of the skip options is invoked and CNTYC is not in the parameter list, it is added as the last parameter in the parameter code list.

- **LEFT-ADJUST LOCAL ID (Y OR N): N** This is applicable only if you include the alpha parameter LOCAL in the parameter list; the local identifier (usually the well number) may be left justified under the column heading **(Y)** or printed verbatim with any blanks that may be included in the SITEFILE retained **(N)**.
- **PRINT DATES (Y OR N): Y** A column containing sample dates is printed unless you enter "**N.**" If the alpha parameter DATES is not included in the parameter list, it is added automatically after the last alpha parameter. If you select Option 1 for "Data for continuing pages," this setting will be ignored.
- **CENTER STATION ID (Y OR N): N** This option affects the alpha parameters STAID (station identification number) and "SNAME" (station name). These values may be centered under their column headings **(Y)** or printed exactly as they are found in the SITEFILE, retaining any blanks **(N).**
- **REPEAT DUPLICATE ID'S (Y OR N): N** Values for sample identifiers STAID (station identification number), LOCAL (local station identifier), and/or LATLG (latitude-longitude) are printed for only the first line in a group of samples with the same ID. Samples must be sorted on one of these fields. These values may be printed for every sample by entering "**Y**."
- **SKIP A LINE ON CHANGE OF STATION (Y OR N): N** A blank line is inserted between every five analyses, regardless of station number. Enter "**Y**" to also insert a blank line between each new station number. This option is valid only if the record numbers are sorted by the alpha parameter STAID (station identification number).

- **DATA FOR CONTINUING PAGES: 1** When the number of parameters selected for tabling requires more than one page per sample, you can specify which identifier will be used on the continuation pages. The nine available options are shown below.

Selection	Description
1	**Date (default)** **Note: If this is chosen, the option for "Print Dates" is overridden**
2	**Station number**
3	**Station name**
4	**Local well number**
5	**Latitude and longitude**
6	**Station number and date**
7	**Local well number and date**
8	**Database number**
9	**Medium code**

Available selections for identifying samples on continuation pages in multiple-station format tables.

After the table definition has been constructed for table type 3, processing passes to the next step of storing the table definition.

When table type 4 is selected, four changes are made to the *basic menu*.

- DELETE LINE replaces DELETE COLUMN.
- PRINT PARAMETER CODES (Y OR N): Y You do not have the option of making a selection.
- FOLDING OPTIONS (0,1,2, OR 3) You do not have the option of making a selection.
- TABLE TITLE: 0 You may select one of the four table title selections shown below. Selecting "Z" allows you to supply any title text up to 80 characters. When you select "Z", "**TITLE:**" is displayed, and you can enter the desired text.

Table Title Selection	Title Text
B	**BENTHIC INVERTEBRATE ANALYSES**
C	**PHYTOPLANKTON ANALYSES**
D	**PERIPHYTON ANALYSES**
Z	**Enter the heading text (80 characters maximum)**

Table titles that may be specified for biologic-style tables.

After the table definition for table type 1, 2, 3, or 4 is completed, you may make changes to the definition. To do so, position the cursor on the first field after "TABLE TYPE." You may enter a <**CR**> in fields that do not need to be changed and may retype the entry for fields that do need to be changed. This loop is continued until you are satisfied with the table definition and respond with a "**No**" or "**N**" when prompted to change the table definition. You may save the table definition for reuse on another table retrieval.

3.4.3.3 Specify Parameter Codes for Tabling

Parameter codes for output may be input from a file of parameter codes in a specific format *Appendix G*, or may be entered interactively. A maximum of 1,000 parameters may be included in a table. The number of requested parameters may need to be reduced slightly when required parameters are automatically included by the tabling software and the 1,000 parameter code limit is exceeded. For single-station format only, composites that span the end of a month are permitted and are printed with the proper dates.

Next you are prompted to enter parameter codes for tabling.

```
Select one of the following options to identify the columns in the
table (parameter codes are used to identify columns):
  1 -- Enter parameter codes at the terminal
  2 -- Enter a filename that contains a list of parameter codes
Enter option desired (1-2, or Q to quit):
```

If parameter codes are entered from the terminal, the following prompt appears.

```
Enter up to 1000 parameter codes:
(1) P:  00400
(2) P:  _________
Options: ? ^D  #  /  /x  /+x  /-x  /@  /c  /q -- Enter ?/ for help
```

The next prompt is given the sequence number 2 and so forth until interactive entry is ended. End interactive parameter code entry by entering a carriage return **<CR>** for a parameter code. When interactive entry of parameter codes is completed, you are given the opportunity to make changes to any entry by entering the sequence number of the parameter code to be changed. Parameter codes are checked against the parameter code dictionary so that invalid parameter codes are rejected upon entry. If parameter codes ***81024 (drainage area), 72000 (datum), or 72008 (well depth)*** are included in the list of parameters and are not present in the water-quality record, they will be retrieved from the SITEFILE record. All numeric parameters contained in the parameter code dictionary are supported. Alpha parameter codes also may be tabled. A complete list of alpha parameter codes is available in *Appendix A*.

During interactive session, a question mark entered for a parameter code allows you to display and search among all parameter codes with the same initial two digits, or to display the alpha parameter codes. If you enter a question mark, the software displays the following message.

```
Need to qualify.  Enter at least 2 lead chars of code (A for alpha parms):
```

Below are characteristics to remember about parameters used in publication table format.

- Parameters are placed in the table in publication order unless you choose to place them in the order they are supplied. If you select only one parameter to be included in the table, there is no option to place the parameters in publication order.
- When the alpha parameter CALCV (include all possible calculated parameters) is specified in a by-sample format, all calculated parameters whose Group code identifies this subset (*Section 3.6.7.2*) are inserted at the point where the CALCV parameter was listed in ascending numeric order.
- When the alpha parameter ADDPC is specified, all *numeric* parameters (including calculated parameters that have stored values) are printed in ascending numeric order.
- When the alpha parameter ALPHA is specified, all possible *alphabetic* parameters are inserted at the point where indicated, and sorted alphabetically. See *Appendix A* for the few parameters not included; among them are ADDPC and CALCV.

- A maximum of 1,000 parameters may be included in a single table; the number of parameters may be reduced slightly when required parameters are automatically included by the tabling software.
- If an invalid numeric parameter is requested, an error message is written and the requested parameter is ignored.
- Date printing may be suppressed *only* for type 3 tables. If the alpha parameter DATES is not in the parameter list, it is automatically inserted as the first parameter.
- The vertical folding option is limited to five parameters (including DATES). If more than five parameters are listed when the vertical folding option has been specified, you will receive an error message and a parameter count. Parameters must be reentered from the terminal or reread from a file.
- Multiple occurrences of the same parameter are not permitted. If a parameter is entered more than once, the first occurrence is retained and the others are deleted from the list.
- When tabling records from multiple databases, the parameters MEDIM and DBNUM will be appended if not requested, for Output tables 3 and 4, Publication Styles only.
- Parameters other than *biological (taxonomic)* parameters, and medium codes other than **BH, BY, BE, BI,** and **BD** will be omitted by the program for table type 4.

3.4.3.4 Water Quality Table Options

Several options are available for formatting standard water-quality tables, and they can be specified from the following menu.

```
( 1) Limit Results by DQI Code:     X_Public accessible [ASR] __User Specified
( 2) Parameter Order:               X_Publication Order __As Supplied
( 3) Rounding of Result Values:     __None  __User  X_Default
( 4) Censoring of Zero Values:      X_None  __User Specified
( 5) Recensoring of Values:         X_None  __User Specified
( 6) Qualifiers in Output:          __Yes  X_No
( 7) Footnotes:                     __None  X_Remarks __Qualifiers
( 8) Create Parnames File:          __Yes  X_No
( 9) Time Datum:                    X_Watch __User Specified
(10) Restrict parameters:           __None  X_Public
(11) Display text for fixed values: __Yes  X_No
(12) Calculated-value precedence:   X_Stored, calculated __User Specified

Enter item to change (1-12) or <CR> to continue:
```

Screen with default specifications for specifying how parameter results will be printed in a table.

The default specifications are marked with an X as shown on the above screen. You can accept the default specifications by entering a **<CR>**. You can change each option by entering numbers 1–12 to access one of the submenus described below.

1. **Limit Results by DQI Code:**

   This allows you to specify results that will be tabled according to the data quality indicator (DQI) associated with each result. By default, only results that are publicly accessible, or marked as historical, presumed satisfactory, or reviewed and accepted [DQI codes A, S, or R] will be tabled. By changing the default option, you may choose to include data that are in review, are reviewed and rejected, are from an unapproved laboratory or method, or are proprietary. Data that are marked proprietary shall not be published or made available to the public. If rejected results (DQI = Q or X) are included in water-quality table output, a "#" symbol will be included after (or behind) the value to indicate that the result has been rejected.

   NOTE: If calculated values are included in the output, the DQI associated with the calculated value will be determined by the DQI's of the parameters used in the calculation (Appendix D). The DQI for the calculated value will be applied from left to right in the following list:

   X P O U Q I S A R

   For example, if the parameters used in the calculated value had DQIs of P, S, and R, the calculated value would have a DQI of P applied at output.

NOTE: If results have DQI codes that indicate they are proprietary (P, O, X) or that they are awaiting review or from unapproved methods (I or U), the results may not be available for retrieval by all users. Only users with certain access will be able to retrieve results with these DQI codes.

qwtable -- select result inclusion by DQI

The following categories are available:

A – Historical

S -- Presumed satisfactory

R -- Reviewed and accepted

Q -- Reviewed and rejected

I -- In review

U -- Unapproved method

P -- Proprietary, unreviewed

O -- Proprietary and approved

X -- Proprietary and rejected

Enter 'all' or letters for categories desired, no space between:

2. Parameter Order:

Allows you to specify if data will be tabled in approved USGS publication order or in the order specified by the user on input.

qwtable -- select constituent ordering

Do you want numeric parameters in "publication" order (Y/N,

<CR>=Y)?

NOTE: If alpha parameter codes are included in the list of parameters to be included in the output and publication ordering is selected, the parameters will not be included in publication order. To include alpha parameter codes with publication ordering, include the alpha parameter codes at the beginning of the parameter list.

3. Rounding of Result Values:

```
qwtable -- select  rounding
You have 3 options for rounding of parameter values--
D --Default, use default rounding
U --User, use rounding stored with parameter
N -- None, output analysis value as stored
Enter option desired (<CR>=D):
```

Default rounding (D) produces tables with each parameter value rounded using the rounding instructions array in the parameter-method table. A discussion of the rounding is included in the *"Programs" section, "Support Files" (Section 3.6.8)* and in *Tip Sheet 5.19, "How can I round my results in QWDATA output."* The precision of results is based on an analysis of the variability of replicate measurements. Lacking such an analysis, you should select the "**Default**" rounding when preparing tables of water-quality data for publication. The "**Default**" rounding is based on laboratory analysis of the most precise method currently available and uses precision data stored in the parameter-method table.

User-defined rounding (U) produces tables with each parameter value rounded using the rounding instruction stored with the analysis at the result level. If this option is selected, and the rounding code is not stored with a sample, the software will use the rounding code stored in the parameter-method table.

No rounding (N) produces tables in which each parameter is written as entered in the database. Calculated results (*Section 2.6.1*) are written with one more significant digit than would be produced if the result were rounded.

Note: Due to a nine-character field width restriction, the program is unable to display values with nine or more digits.

4. Censoring of Zero Values:

Selecting to censor zero values makes available three other options. **Option 1** is the default— zero values are not censored. **Option 2** allows you to censor stored zero-value measurements based on a reference list (Appendix I); zero values will be converted to a null value and the remark code will be changed to **U** (Analyzed for, but not detected) for parameters in this list. **Option 3** allows you to enter parameter codes and values interactively, so that each parameter code and value pair can be set individually. **Option 4** allows you to enter a file that contains individual parameter code and value pairs; the file must be in fixed-column format (*Appendix G*).

The reference list (*Appendix I*) will also be applied to censor parameters not entered interactively or from a file. **Note: this option does not apply to fixed-value parameter codes, where an integer is coded in place of a text explanation.**

qwtable -- set up user censoring of stored zero values
You have 4 options:

1 -- no censoring of zero values

2 -- censor by reference list only

3 -- specify parameter code & value for selected parameters at the terminal

4 -- load a set of parameter codes with value from a file

Enter option desired (1-4, <CR>=1):

5. Recensoring of Values:

By selecting Option 5, six options are available for censoring data at a new censoring level (recensoring). Recensoring does not change anything stored in the database. In output tables, however, any stored values less than the recensoring value are displayed as recensored values and qualified with a "<" (less than) remark code. Recensoring may be useful for focusing the data user's attention on the higher data values and away from visual differences that are not relevant to understanding environmental processes. **Note: this option does not apply to fixed-value parameter codes, where an integer is coded in place of a text explanation.**

qwtable -- set up user re-censoring
You have 6 options for recensoring of constituents:

1 -- No recensoring

2 -- Recensor all constituents to a specified value

3 -- Recensor each constituent to the highest associated reporting level stored for the constituent-method

4 -- Recensor values for specified parameters and methods

5 -- Recensor each value that is below the associated reporting level

6 -- Recensor each constituent to the highest censored level

Enter recensor option desired (1-6, <CR>=1):

Option 1 (**default selection**) includes results in output as they are stored in the database. Results in the database are censored by the laboratory at a specified reporting level. This reporting level varies depending on the constituent and the analytical method. In addition, the reporting level can change over time due to the conditions under which the sample is analyzed or the chemical characteristics of the sample.

Option 2 allows you to recensor all constituents in the data output to user-specified value. The output will display all results that are below the selected recensoring level as less than the recensored value chosen. This option would most likely be used for comparisons among constituents, methods, and (or) laboratories.

In the example below, the user has chosen a recensoring level = 10. The values in bold have been recensored for output.

Parameter code	Stored value	Output
01020	2	<10
01046	3	<10
00915	10	10
00930	15	15
00940	22	22

In the example below, the user has chosen a recensoring level = 0.1. The values in bold have been recensored for output.

Parameter code	Stored value	Output
46342	**<0.05**	**<0.1**
77825	<0.1	<0.1
46342	**0.1**	**0.1**

Option 3 allows you to recensor all constituents to the highest stored associated reporting level for each unique constituent-method combination. This option references only those results in the selected records. If none of the measurements for a constituent-method combination are associated with a stored reporting level (e.g., data stored prior to NWIS 4_1 or transmitted by a laboratory with no reporting level), then no recensoring is performed on those results.

In the example below, parameter codes 01046(G0052), 46342(GC058), 77825(GC098), and 46342(GC065) have stored reporting levels, and the highest for each constituent-method combination is used to censor results in the output. The values in bold have been recensored for output.

Parameter code	Method code	Reporting level	Stored value	Output
01046	G0052	5	**2**	**<5**
01046	G0052	4	**3**	**<5**
01046	G0052		22	22
01046	G0051		3	3
01046	G0051		10	10
01046			15	15
46342	GC058	0.05	<0.05	<0.05
46342	GC058	0.05	E0.06	E0.06
46342	GC058	0.05	0.19	0.19
46342	GC065	0.06	<0.08	<0.08
46342	GC065	0.06	E0.05	**<0.06**
46342	GC065	0.06	0.21	0.21
77825	GC098	0.1	<0.1	<0.1
77825	GC098	0.1	V0.15	V0.15
77825	GC098	0.1	0.2	0.2

Option 4 allows you to specify a new censoring level for each constituent-method combination. You may do this interactively by entering the parameter code, method code, and recensoring value at the terminal or by using an input file. The input file must use the fixed-column format shown in *Appendix G*. This technique would most likely be used for spatial or trend analysis without regarding effects from compound interferences or changes in laboratory performance. This option provides the maximum amount of control over recensoring. Constituents not specifically identified in the user-specified recensoring limits will not be recensored.

In the example below, the user has entered the following measurement-specific recensoring levels: 01046(G0051) = 5; 46342(GC058) = none; 77825(GC098) = 0.2; 46342(GC065) = 0.15. The values in bold have been recensored for output.

Parameter code	Method code	Stored value	Output
01046	G0052	2	2
01046	G0052	3	3
01046	G0052	22	22
01046	G0051	3	**<5**
01046	G0051	10	10
01046		15	15
46342	GC058	<0.05	<0.05
46342	GC058	E0.06	E0.06
46342	GC058	0.19	0.19
77825	GC098	<0.1	**<0.2**
77825	GC098	V0.15	**V0.2**
77825	GC098	0.2	0.2
46342	GC065	<0.08	**<0.15**
46342	GC065	E0.05	**<0.15**
46342	GC065	0.21	0.21

Option 5 allows you to censor each result that is below the associated reporting level for that result. The most common application of this option is to remove the results coded with an "E" remark code that identifies results below the reporting level. This technique would be used to reduce the probability of false positive detections in the data reporting. If no reporting level is stored with the result, then no recensoring is performed on the value.

In the example below, reporting levels for 01046(G0052) and 46342(GC065) affect the output of result values. The values in bold have been recensored for output.

Parameter code	Method code	Reporting level	Stored value	Output
01046	G0052	5	2	**<5**
01046	G0052	4	3	**<4**
01046	G0051		3	3
01046	G0051		10	10
01046			15	15
01046	G0052		22	22
46342	GC058	0.05	<0.05	<0.05
46342	GC058	0.05	E0.06	E0.06
46342	GC058	0.05	0.19	0.19
77825	GC098	0.1	<0.1	<0.1
77825	GC098	0.1	V0.15	V0.15
77825	GC098	0.1	0.2	0.2
46342	GC065	0.06	<0.08	<0.08
46342	GC065	0.06	E0.05	**<0.06**
46342	GC065	0.06	0.21	0.21

Option 6 allows you to recensor by using the highest censored value for each constituent. This option references only those results in the selected record. The associated method code is not considered.

Parameter code	Method code	Stored value	Output
34653		<0.021	**<0.03**
34653		E0.003	**<0.03**
34653	GC065	E0.021	**<0.03**
34653	GC065	0.4	0.4
34653		<0.03	<0.03
34653	GC066	0.05	0.05
46342	GC058	<0.05	**<0.08**
46342	G0052	E0.06	**<0.08**
46342	G0052	0.19	0.19
46342	GC065	<0.08	<0.08
46342	GC065	E0.05	**<0.08**
46342	GC065	0.21	0.21
77825	GC098	<0.1	<0.1
77825	GC098	V0.15	V0.15
77825	GC098	0.2	0.2

6. Qualifiers in Output:

```
qwtable -- select value qualifier inclusion
Do you want to include value qualifiers (Y/N, <CR>=Y)?
```

Value qualifiers are codes used to provide additional information about the value reported by the laboratory. You may select to add or remove footnotes for remark codes and value qualifier codes with this option. The default for this option does not include value qualifiers in the table; however, they may be included if you specify them here.

7. **Footnotes:**

```
qwtable – select footnote inclusion
Do you want to create footnotes for remark codes (Y/N, <CR>=Y)?
Do you want to create footnotes for value qualifiers (Y/N, <CR>=Y)?
```

The default option will include only footnotes that define any remark codes that appear in the table.

8. **Create a Parnames File:**

```
qwtable – select parnames file creation
Do you want to create a parnames file (Y/N, <CR>=Y)?
```

A parnames file contains a listing of the parameter codes and names included in the output for the current retrieval. The name of the file will be the output file name.*parnames.* This file can be used as input for parameter names for another retrieval.

9. **Time Datum:**

```
qwtable -- select output time datum

Such as:

GMT  AST  EST  CST  MST  PST  AKST  HST
BST  ADT  EDT  CDT  MDT  PDT  AKDT  HDT

Enter the acronym of the time-datum desired
(<CR>=watch time):
```

This option allows for times in the output file to appear in any time datum chosen. The default option is to display the times using the watch time (Section 2.1.9), which is equivalent to the time datum entered during login of the sample.

NOTE: Time datum will appear in output for a sample if the time-datum reliability code is "K"; otherwise it will be blank in output unless the alpha parameter for time datum is specifically requested in the list of parameters.

10. Restrict parameters:

```
qwtable -- select publicly accessible parms
Do you want to limit parameters to publicly accessible
(Y/N,<CR>=Y)?
```

The default option will include only parameters accessible to the public (public retrieval flag = "**Y**"). If you select "**None**," the retrieval will include parameters that are not accessible to the public (public retrieval flag = "**N**").

11. Display text for fixed values:

```
qwtable -- select fixed value display
Do you want to display text for fixed values (Y/N, <CR>=Y)?
```

If you select the default option, text will not be included in the table for fixed values.

12. Calculated-value precedence:

The following options will enable you to output values from the set of calculated parameters (*Section 3.6.7*, *Appendix D*) that may have stored values in the database or would have been computed by an algorithm. Remember that including the parameter CALCV in the by-sample layout will also impact this option. An example would be requesting CALCV with Option 3 below. That specific combination would be a "shortcut" to output all stored values from the algorithm list, without also including all numeric parameters with ADDPC.

```
qwtable -- select precedence for calculated parameters
The following precedences are available:

1 -- stored if available, otherwise calculated

2 -- Calculated if possible, otherwise stored

3 -- Only stored, never calculated

4 -- Only calculated, never stored

Enter option desired (1-4,<CR>=1):
```

3.4.3.5 Table Processing

After you are satisfied with the selections for tabling, enter a **<CR>** to process the table. A list of the requested parameter codes, the total number of parameter codes, the database being accessed, and the number of records retrieved are displayed.

```
Checking (037)  01090 …
Checking (038)  38260 …
Checking (039)  80154 …
Checking (040)  00063 …
Checking (041)  50280 …
Checking (042)  72104 …
Checking (043)  72105 …
Checking (044)  71999 …
Checking (045)  84164 …
Checking (046)  82398 …

  46 parameters loaded.

Output specifications complete, retrieving data …
Retrieving from database 01 …
    17 records retrieved
Retrieval completed, formatting output…

Output is in the file: output

Do you wish to run again (Y/N, <CR>=N)?
```

Table processing display screen

When processing has completed, the output filename is displayed, and you may repeat the steps described above for developing a *Water-Quality Table by Sample* table or return to the *Option 4 –Data Output* menu. A user's access rights may influence which sites, samples, or results are able to be output into a table, even if identified during input with proper record numbers. Some of the onscreen system messages may display information about excluded results that will not pertain; for example, to a read-only user.

3.4.4 Option 4 – Water Quality Table by Result

This option produces a table of result-level data in columnar format. Each water-quality parameter for a particular sample is listed on a separate row, and result-level codes are listed in columns across the row. *Appendix C* has an example of this output.

Upon invoking this option, you will be prompted to enter the name of the file containing record numbers and the name of an output file to which the table will be written. After entering these filenames, enter the table definition. These queries are described in detail in *Section 3.4.3.1* and *Section 3.4.3.2*. **Note: This option cannot be used to make a type 4 – Biological table.**

3.4.4.1 Specifying the Result-Level Parameter Codes

Next enter alpha (sample and result-level) parameter codes, which will comprise the table columns. You may enter these codes interactively from the terminal or from an existing file that contains parameter codes in fixed-column format. All valid sample and result-level alpha codes (*Appendix A*) and the code ALPHA, which brings in nearly all alpha codes, are acceptable entries. If you do not enter ALPHA, you must enter the alpha code PCODE so that parameter codes are printed. The parameter code REMRK is not normally included in the parameter code list. Remark codes will be automatically embedded in the output with the VALUE column. If the parameter code long name PLNAM is included in the list for output, the field will be restricted to 54 characters in the table.

```
Select one of the following options to identify the columns in the table
(alpha codes are used to identify columns):
1 -- Enter alpha codes at the terminal
2 -- Enter a filename that contains a list of alpha codes
Enter option desired (1-2, or Q to quit): 1
```

```
Enter alpha parameter codes (include "PCODE" for parameter numbers):


(1) P:  PCODE
(2) P:  VALUE
(3) P:  DQIND
(4) P:  _________
```

After you have entered the parameter codes, they are checked against the parameter code dictionary to make sure that they are valid codes. During interactive input, parameter codes are checked before the next entry, and invalid entries must be reentered.

3.4.4.2 Specify Table Options

After you have designated the record numbers, output filename, and result-level parameter codes, a tabling specification screen appears:

```
( 1) Limit results by DQI Codes:     X_Public accessible [ASR]  __User Specified
( 2) Rounding of Result Values:      __None  __User  X_Default
( 3) Censoring of Zero Values:       X_None  __User Specified
( 4) Recensoring of Values:          X_None  __User Specified
( 5) Qualifiers in Output:           __Yes  X_No
( 6) Footnotes:                      __None  X_Remarks  __Qualifiers
( 7) Select Parameters in Table:     X_All  __User Specified
( 8) Create Parnames File:           __Yes  X_No
( 9) Time Datum:                     X_Watch  __User Specified
(10) Restrict parameters:            __None  X_Public
(11) Display text for fixed values:  __Yes  X_No
(12) Calculated-value precedence:    X_Stored, calculated __User Specified

Enter item to change (1-12) or <CR> to continue:
```

Table options available with default settings for a result-level table.

Options 1 and 8–12 are identical to those described in *Section 3.4.3.4*. Options 2–6 on this screen correspond directly to the aforementioned section's Options 3–7. Option 7 invokes the following submenu, which allows you to limit the by-result output. Option 1, the default, results in all parameters to be included in the output. Option 2 allows you to enter a list of the parameters from the terminal to be included in the output. Option 3 allows you to enter a filename that contains the parameter codes to be included.

```
qwtable -- set up to select the parameters in the table

Select one of the following options to identify the parameters in
the table (numeric parameters are used to identify rows):

1 -- Accept all parameters available in a sample

2 -- Enter parameter codes at the terminal

3 -- Enter a filename that contains a list of parameter codes

Enter option desired (1-3,<CR>=1):
```

3.4.4.3 Table Processing

After you are satisfied with the selections for tabling, enter a **<CR>** and the table will be processed. A list of the requested alpha parameter codes, the database number accessed, and the number of records retrieved is displayed to the screen. Numeric parameter codes are not displayed if they were specified in the output options (*Section 3.4.4.2*).

```
Loading selected parameters…
Checking (001)  PCODE   …
Checking (002)  VALUE   …
Checking (003)  REMRK   …
Checking (004)  ADATE   …
Checking (005)  DQIND   …
Checking (006)  DSTAT   …
Checking (007)  LABNO   …
Checking (008)  METHD   …
Checking (009)  NULLQ   …
Checking (010)  PDATE   …
Checking (011)  PRPNO   …
Checking (012)  QUAL1   …
Checking (013)  QUAL2   …
Checking (014)  QUAL3   …
Checking (015)  RCMFL   …
Checking (016)  RCMLB   …
Checking (017)  RNDCD   …
Checking (018)  RLTYP   …
Checking (019)  RPLEV   …
          19 Parameters loaded
Output specifications complete, retrieving data…
Retrieving from database 01 …
                1 records retrieved
Retrieval completed, formatting output…
Output is in the file:  table
```

Table processing display screen

When processing is complete, the output filename is displayed, and you may repeat the steps described above for developing a "*Water-Quality Table by Result." (Section 3.4.4)* table or return to the *Option 4 -- Data Output (Section 3.4)* menu.

3.4.5 Option 5 – Flat File by Sample

If you select this option, you can output data to an ASCII file (flat file) that may be used to enter data to another application, such as a statistics or graphics application. This option is similar to the **Water-Quality Tables by Sample (Publication Format)** option (see *Section 3.4.3*), except that output is in ASCII file format rather than in table format. Examples of this type of output are in *Appendix C.*

3.4.5.1 Selecting the Output Format

Six format options are available for selecting the output format: fixed-column flat files with and without method codes, tab-delimited RDB files with and without method codes, or flat files with user-specified delimiters with and without method codes.

qwtable -- Flat file (by sample)

You have 6 options for flatfile output:

1 -- Fixed column flat file (qwflatout)

2 -- Flat file with TAB delimiter (RDB format)

3 -- Flat file with user-specified delimiter

(Following options include method code in output)

4 -- Fixed column flat file (qwflatoutm)

5 -- Flat file with TAB delimiter (RDB format)

6 -- Flat file with user-specified delimiter

Enter option desired (1-6, <CR>=1):

If you select a fixed-column format (Option 1 or 4), data are output to equally spaced columns (*Appendix C*). If you choose a fixed-column format with method code included (Option 4), the method code is included adjacent to the remark code. For example, "<GC058 10." indicates a less-than 10 value using method "GC058." If you select delimited files (Options 2, 3, 5, or 6), you will be asked if the value and associated remark codes should be delimited**. (Note: If you select "No," the remark code will appear as the first column in the value field (for example <0.05). For most applications, this will cause the value to be read as a character rather than as a number.)** If you select user-specified delimiter (Option 3 or 6), you will be prompted to enter the character that will be used to delimit the data. If no delimiter is entered, the default delimiter is a space.

```
qwtable --Flat file (by sample)

You have 6 options for flatfile output:
1 -- Fixed column flat file (qwflatout)
2 -- Flat file with TAB delimiter (RDB format)
3 -- Flat file with user-specified delimiter

(Following options include method code in output)
4 -- Fixed column flat file (qwflatoutm)
5 -- Flat file with TAB delimiter (RDB format)
6 -- Flat file with user-specified delimiter

Enter option desired (1-6, <CR>=1):  6
Enter column separator char or TAB for tab char:
Do you want remarks and values to be delimited (Y/N, <CR>=Y)?  Y
```

3.4.5.2 Specifying the Retrieval Criteria

After you have selected the desired output format, you will be prompted for the pathname of the file containing the record numbers, a filename for the output file, and for parameter codes. Parameter codes may be entered interactively or from a fixed-column file. These queries are described in detail in *Section 3.4.3.1* through *Section 3.4.3.3.*

3.4.5.3 Specify Output Options

After the parameter codes have been entered, a screen for selecting output specifications is displayed.

```
( 1) Limit results by DQI Codes:     X_Public accessible [ASR]  __User Specified
( 2) Parameter Order:                X_Publication Order  __As Supplied
( 3) Rounding of Result Values:      __None  __User  X_Default
( 4) Censoring of Zero Values:       X_None  __User Specified
( 5) Recensoring of Values:          X_None  __User Specified
( 6) Create Parnames File:           __Yes  X_No
( 7) Time Datum:                     X_Watch  __User Specified
( 8) Restrict parameters:            __None  X_Public
( 9) Display text for fixed values:  __Yes  X_No
(10) Calculated-value precedence:    X_Stored, calculated __User Specified
Enter item to change (1-10) or <CR> to continue:
```

Options 1–5 are identical to Options 1–5 described in *Section 3.4.3.4*, and Options 6–10 are identical to Options 8–12 described in *Section 3.4.3.4.* These output options are the same as those for tabling data by sample and are described in detail in *Section 3.4.3.4*.

3.4.5.4 Output Processing

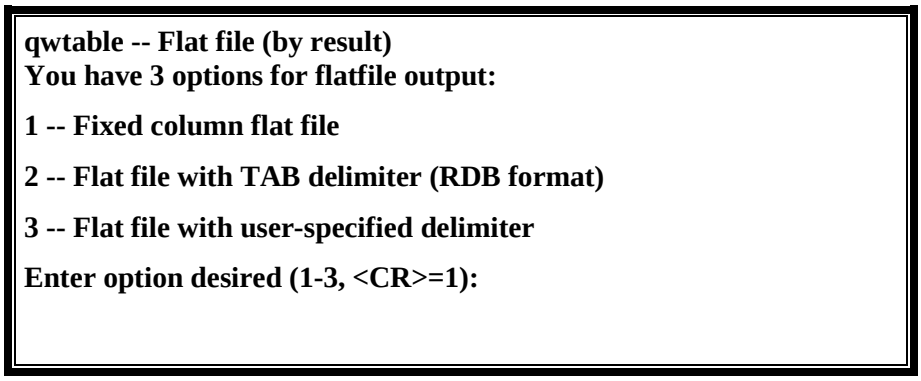
When specifications are complete, processing begins. The screen displays the parameter codes being retrieved, the number of parameter codes loaded, the database number being accessed, and the number of records retrieved. When processing has been completed, the output filename is displayed, and you may repeat the steps described above for developing a *Flat File by Sample* or return to the *Option 4 – Data Output* menu.

3.4.6 Option 6 – Flat File by Result

If you select this option, you will be able to output data to an ASCII file (flat file) in a columnar format that uses one row (line) for each parameter. This format may be used to enter data to another application. This option is similar to *Option 4 – "Water Quality Table by Result" (see Section 3.4.4)*, except that output is in ASCII format rather than in table format. The flat-file-by-result format is intended to be used as input into other computer programs; therefore, remark codes are not embedded within the VALUE column, as is done for the publication in a by-result layout. Therefore, you should normally request both columns, REMRK and VALUE, when preparing a flat file by result.

3.4.6.1 Selecting the Output Format

Three formats are available for output to an ASCII file. Output may be written in fixed-column format, tab-delimited format, or with a user-specified delimiter.



If you select a fixed-column format, data are output to equally spaced columns (*Appendix C*). If you select a user-specified delimiter (Option 3), you will be prompted to enter the character that will be used to delimit the data. If you do not enter a delimiter is entered, the default delimiter is a space.

3.4.6.2 Specifying the Retrieval Criteria

After you have selected the desired output format you will be prompted for the pathname of the file containing the record numbers and for a filename of the output file. These queries are described in detail in *Section 3.4.3.1.* Next you will be queried for alpha (result-level) parameter codes. Parameter codes may be entered interactively or from a file. These queries are described in detail in *Section 3.4.4.1.*

3.4.6.3 Specify Output Options

When the result-level alpha parameter codes have been entered, a screen for selecting output specifications is displayed:

```
 ( 1) Limit results by DQI Codes:     X_Public accessible [ASR]  __User
Specified
( 2) Rounding of Result Values:      __None  __User  X_Default
( 3) Censoring of Zero Values:       X_None  __User Specified
( 4) Recensoring of Values:          X_None  __User Specified
( 5) Select Parameters in Table:     X_All  __User Specified
( 6) Create Parnames File:           __Yes  X_No
( 7) Time Datum:                     X_Watch  __User Specified
( 8) Restrict parameters:            __None  X_Public
( 9) Display text for fixed values:  __Yes  X_No
(10) Calculated-value precedence:    X_Stored, calculated __User Specified

Enter item to change (1-10) or <CR> to continue:
```

These 10 output specifications are identical to Options 1–4 and 7–12 for tabling result-level data and are described in detail in *Section 3.4.4.2*. **Note: Options 5 and 6, in the corresponding menu in the tabling options, are not included on this menu.**

3.4.6.4 Output Processing

After you are satisfied with the selections for tabling, enter a **<CR >**, and the table will be processed. A list of the requested alpha parameter codes, the number of alpha parameter codes, the database number accessed, and the number of records retrieved is displayed on the screen. If numeric parameter codes were specified in the output options (*Section 3.4.6.3*), they are not displayed.

Output Processing Screen

```
Loading selected parameters…
Checking (001)  PCODE   …
Checking (002)  VALUE   …
Checking (003)  REMRK   …
Checking (004)  ADATE   …
Checking (005)  DQIND   …
Checking (006)  DSTAT   …
Checking (007)  LABNO   …
Checking (008)  METHD   …
Checking (009)  NULLQ   …
Checking (010)  PDATE   …
Checking (011)  PRPNO   …
Checking (012)  QUAL1   …
Checking (013)  QUAL2   …
Checking (014)  QUAL3   …
Checking (015)  RCMFL   …
Checking (016)  RCMLB   …
Checking (017)  RNDCD   …
Checking (018)  RLTYP   …
Checking (019)  RPLEV   …
          19 Parameters loaded.

Output specifications complete, retrieving data…
Retrieving from database 01 …
                1 records retrieved

Retrieval completed, formatting output…
Output is in the file:  table
```

Output processing display screen

When processing has completed, the output filename is displayed and you may repeat the steps described above for developing a "*Flat File by Result" – Section 3.4.6* or return to the *Option 4 – Data Output (Section 3.4)* menu.

3.4.7 Option 7 – Flat File with TAB delimiter (Publication Export)

This option allows you to output data to an ASCII file with the TAB-character delimiting fields, which may then be used to prepare tables of water-quality data by using publication software. This option has similar features as the publication by sample (*Section 3.4.3*) and flat-file-by-sample (*Section 3.4.5*) options, but it allows further customization of column headings, page columns, and rows. The intended usage of this output format is to help meet the prepublication formatting needs.

3.4.7.1 Selecting the Output Format

Because this type of table output is specific, the user has already chosen the formatting when choosing this option from the Data Output menu. This output format features RDB-style tab-delimited output. Within the results, for example, the remark code is always included with the value and is separated from the value by one space (e.g. < 0.05) (*Appendix C*).

3.4.7.2 Specifying the Retrieval Criteria

Users will be prompted to identify samples. You may enter record numbers interactively or from a file. If the records are to be identified by record number, the format of the file is one record number per line, with the eight-digit record number beginning in column 1 of each line as shown in *Appendix G*. If samples are to be pulled from multiple databases, such as the QC database, 10-digit record numbers can be used, where the 2-digit database number is appended to the 8-digit record number in the record number file. If record numbers are not used, the samples may be identified by logical keys (*Appendix G, Section 2.1.1*).

3.4.7.3 Specify Output Options

Parameter codes for output may be input from a file of parameter codes in a specific format (*Appendix G*), or may be entered interactively. When the parameter codes have been entered, a screen for selecting output specifications is displayed.

```
Publication Export Options:

1.  Limit results by DQI Codes:  X_ Public Accessible [ASR] __ User Specified

2.  Parameter Order:             X_ Publication Order __ As Supplied
3.  Rounding of Result Values:   __ None  __ User X_ Default __ Custom (file)
4.  Censoring of Zero Values:    X_ None  __ User Specified
5.  Recensoring of Values:       X_ None  __ User Specified
6.  Qualifiers in Output:        __ Yes   X_ No __ User Specified
7.  Create Parameter File:       __ Yes   X_ No
8.  Time Datum:                  X_ Watch __ User Specified
9.  Restrict parameters:         __ None  X_ Public
10. Display fixed values text:   X_ Yes   __ No
11. Calculated-value precedence: X_ Stored, calculated __ User Specified
12. Include parameter codes:     X_ Yes   __ No
13. Delete column if no data:    X_ Yes   __ No
14. Column Headings:             X_ Parameter Long Name __ Custom (file)
15. Date format: __ MM DD YYYY X_ MM-DD-YYYY __ MM/DD/YYYY __ text dates
16. Title: ____________________________________________________________________



Changes? Enter item number to change or <CR> to continue:
```

The default specifications are marked with an **X** as shown on the above screen. You may accept the default specifications by entering a **<CR>**. Options 1–11 are generally identical to options described in *Section 3.4.3.4*, and 3 and 6 have additional features. Each option can be changed by entering numbers 1–16 to access one of the submenus described below.

1. Limit Results by DQI Code:

Described in Section 3.4.3.4.

2. Parameter Order:

Described in Section 3.4.3.4.

3. Rounding of Result Values:

The "None," "User," and "Default" options are described in *Section 3.4.3.4*. Selecting "Custom" allows you to specify a filename that defines one of these three rounding options for specific parameter and method code pairs. The file includes parameter code, method code (optional) and a rounding code of "**N**" (none), "**U**" (user) or "**D**" (default). Parameters and methods without specific rounding instructions will be rounded using default rounding. The format for this file is described in *Appendix G.*

4. Censoring of Zero Values:

Described in Section 3.4.3.4.

5. Recensoring of values:

Described in Section 3.4.3.4.

6. Qualifiers in Output:

You may request that all value qualifier codes are included in the output ("**Yes"**), no value qualifiers are included ("**No"**), or selected value qualifiers are included ("user specified"). If you select "**user specified,**" selection may be interactive or by providing a file. The input file format is described in *Appendix G*. The onscreen dialogue will appear like this.

```
Do you want to enter value qualifiers from the terminal? (y,n, <CR>=y): y
Publication Export Options:

Enter Qualifier Codes:

(1): k
```

7. Create Parameter File:

A parameter file contains a listing of the parameter codes and parameter long names included in the output for the current retrieval. This file can be used as a parameter input file, but not for the parameter column headings.

8. Time Datum:

Described in Section 3.4.3.4.

9. Restrict Parameters:

Described in Section 3.4.3.4.

10. Display Text for Fixed Values:

Described in Section 3.4.3.4.

11. Calculated-value precedence:

Described in Section 3.4.3.4.

12. Include Parameter Codes:

If selected, a row will be inserted into the output file that includes the parameter code enclosed in parenthesis after the parameter name (for example "(00010)").

13. Delete Column if No Data:

If none of the selected samples contain a result for one of the requested parameters, the column associated with that parameter will be removed entirely if you select "**Yes.**" If you select "**No,**" the column heading will be retained and the no-value indicator of "—" will be printed for each analysis.

14. Column headings:

For numeric parameters, the default selection will be the parameter long name. For alphabetic parameters, the parameter short name will be used; however, if you wish to customize any column headings, you must format an input file with parameter code and customized text, along with any defined terms or symbols for a table headnote. The format of the custom input file is a tab-delimited, three-column file that includes:

- parameter code (length = 5),
- parameter column heading text (maximum length = 170), and
- headnote definition (maximum length = 150).

If you include a numeric or an alphabetic parameter code in the retrieval, but the code does not have a defined name in the custom name file, then the default parameter name will be used in the column heading. Also see *Appendix G*.

15. Date Format:

There are four options for displaying the sample dates, as shown in the menu. Three of the options list the month (MM), day (DD), and year (YYYY) in a numeric format, and one option spells out the month. For example, here are the four variations of the same date:

02 28 2010, or

02-28-2010, or

02/28/2010, or

February 28, 2010.

16. Title:

You may enter a title for the publication export file that will appear on a single row in the file. The title text may be up to 500 characters in length.

3.4.8 Option 8 – Make a P-STAT Data Set

When you choose this option, selected data from specified records may be written to a sequential file that may be read by the standard P-STAT input routines. When you choose this option, you should select "**no rounding**." If you do not select "**no rounding**," the data output file will contain blanks and the P-STAT software will not be able to read the file. Examples of this type of output are available in *Appendix C*.

3.4.8.1 Specifying the Retrieval and Output Criteria

You will first be queried for the pathname of a file containing record numbers and the pathname of an output file. These queries are the same as those for the other options in "Data Output" and are described in detail in *Section 3.4.3.1*.

After you have specified these files, you will be prompted to enter an output format option. Three options are available for handling values that include remark codes.

```
qwtable -- P-stat format

p-stat output format

You have 3 options for handling remarks codes
1 -- Remarks (<, ND, etc.) included with the data
2 -- Remarks deleted but values retained (a remark code
of "ND" or "M" will yield a value of "-", a missing value
of the first kind
3 -- Values with remarks codes set to "--", a missing value
of the second kind

A count of the remarked values will be provided

Enter your choice ( 1-3):
```

1. **Option 1** - Remark codes may be included with the associated values in the output file. **Note**: **This format is invalid for input to P-STAT because P-STAT cannot handle remarks in this manner; it is provided for data verification only.**
2. **Option 2** - Remark codes may be suppressed and only the associated values are included in the output file. For a remark code of "ND" (not detected) there is no associated value; the output file will contain "--" (defined in P-STAT as a missing value of the first kind).
3. **Option 3** - All values associated with remark codes may be replaced with "--" (defined in P-STAT as a missing value of the second kind).

Regardless of which option you choose, a summary list of remarked values is produced in a separate output file.

Next, you will be queried for a list of parameter codes either entered interactively or from a file that contains a list of parameters (*Appendix G*). If the parameter list is not in a file, enter each parameter from the terminal; enter a null entry (<CR>) to end the list. Only numeric parameters and the three *alpha parameters (Appendix A)* ADDPC, CALCV, and SAMPL are valid. A maximum of 1,000 parameters may be included. These queries are described in detail in *Section 3.4.3.3.*

3.4.8.2 Specify Output Options

After you have entered the parameter codes, a screen for specifying output options is displayed.

```
 ( 1) Limit results by DQI Codes:     X_Public accessible [ASR]  __User
Specified
( 2) Parameter Order:                X_Publication Order  __As Supplied
( 3) Rounding of Result Values:      __None  __User  X_Default
( 4) Censoring of Zero Values:       X_None  __User Specified
( 5) Recensoring of Values:          X_None  __User Specified
( 6) Create Parnames File:           __Yes  X_No
( 7) Time Datum:                     X_Watch  __User Specified
( 8) Restrict parameters:            __None  X_Public
( 9) Display text for fixed values:  __Yes  X_No
(10) Calculated-value precedence:    X_Stored, calculated __User Specified

Enter item to change (1-10) or <CR> to continue:
```

These output options are the same as those for creating a flat-file by-sample table and are described in detail in *Section 3.4.5.3.*

3.4.8.3 Output Processing

After specifications are complete, processing begins. The screen displays the parameter codes being retrieved, the number of parameter codes loaded, the database number being accessed, and the number of records retrieved.

```
Checking  (038)  38260 …
Checking  (039)  80154 …
Checking  (040)  00063 …
Checking  (041)  50280 …
Checking  (042)  72104 …
Checking  (043)  72105 …
Checking  (044)  71999 …
Checking  (045)  84164 …
Checking  (046)  82398 …

    46 parameters loaded.

Output specifications complete,  retrieving data …

Retrieving from database 01 …
          17 records retrieved

Retrieval completed, formatting output…

Your summary of parameters with remarks is in output.stats

Output is in the file:  output

Do you wish to run again (Y/N, <CR>=N)?
```

Three output files are created. The first file contains data retrieved for each record number requested and is given the user-specified name. Each record has at least two 80-character lines. The first line for each record contains the station number, begin date, begin time, end date, and end time. If date or times are missing, as they may be for some historic samples, they are represented by "-" (defined by P-STAT as a missing value of the first kind). Each remaining line for each analysis contains a maximum of eight data values. Each value occupies nine spaces and is preceded by a blank. If there is no value for a requested parameter, the value is represented by "-" (defined by P-STAT as a missing value of the first kind). *See Section 2.7.1* for information on rounding.

A second output file is named by adding "**.CMND**" to the user-supplied filename. This file contains the P-STAT commands that are needed to identify the variables and the commands to read the data into P-STAT.

The third output file is named by adding "**.STATS**" to the user-supplied filename, and it contains a summary of all values that have remark codes. The list includes (for each parameter code)

every unique combination of remark code and value found, and a count of occurrences of that combination.

When processing is complete, the name of the file containing the data is displayed, and you may repeat the steps described above for developing a P-STAT file *(see Section 3.4.8),* or return to the Option 4 -- Data Output *(see Section 3.4)* menu.

3.5 Option 5 – Applications

System Command qwapplications

The programs in the **QWAPPLICATIONS** menu may be invoked either by entering the command:

qwapplications

or by using Option 5 – Applications, from the main QWDATA menu. The following routines are displayed.

```
QW DATA PROCESSING ROUTINE   REV NWIS-5.0.0-22
YOU ARE USING WATER-QUALITY DATA BASE NUMBER 01

                Applications

1 --  X,Y Plot
2 --  Boxplots
3 --  Stiff Diagrams
4 --  Piper Diagrams
5 --  Regression Plots
6 --  Summary Statistics Table
7 --  Detection Limits Table
8 -- Discharge Report for QW Samples

98 -- -Exit Menu

99 -- - Exit System

Please enter a number from the above list or a Unix command:
```

Applications menu

When in the QWAPPLICATIONS menu, you can use UNIX commands such as "**ls**" or "**more**" to list a directory or examine the contents of a file. When the selected program has completed, you will be returned to the QWAPPLICATIONS menu shown above. Use Option 99--Exit System to exit the software and Option 98--Exit Menu to return to the previous menu.

Options 1 and 5, qwplot and qwregress, require that a UNIX environment variable called DISPLAY be set to allow the program to plot in a separate window on your screen. The variable must be set from outside of QWAPPLICATIONS. The first message after invoking either of these programs is a message asking you to confirm that the variable DISPLAY has been set correctly.

The use of Ctrl-C to break out of any of these programs should be used with caution. Various results can occur if "**no**" is the response, including a hung cursor or using the "**no**" response for

another question in the queries. It is best to break out using the "**yes**" response to the quit and start over in the program of your choice.

Input and Output Files for QWAPPLICATIONS

All programs in the QWAPPLICATIONS menu require an input file—either record numbers or data—to operate and an output file. Options 1–5 require an input file containing record numbers from the QW database, and this file has the format of one record number per line in columns 1–8 and can be generated through QWDATA (*see Section 3.3.1*) or created by using an editor. Examples of this input file are shown in *Appendix G*.

Applications Output

Options 1–5 generate graphics that require you to specify the output format. Options 1 and 5 use TKG2 to produce the plots, and the other options use S-PLUS.

From the TKG2 window, you can print the plot, save it as a TKG2 or G2 file, or export it into a FrameMaker Interchange Format (*mif), Portable Document Format (.pdf), Portable Network Graphics (.png), or a Postscript file (.ps).

If you save plot as a FrameMaker Interchange Format (*mif), you will need to complete some editing of the graph, so that the entire plot can be seen on the page. To do this, open the *mif file in FrameMaker; use "Select All on Page" from the Edit pulldown menu; then choose "Group" from the Graphics pulldown menu; finally choose "Scale" from the Graphics menu, and make the scale factor 80 percent. You can move the entire plot to center it on the page after it has been scaled down in size.

When you save a plot in TKG2 format, you can edit it using TKG2. Open the plot in TKG2, and double click on the axis you would like to edit, or double click on the explanation to edit the data points in the plot. Use the editing windows that are displayed to change the appearance. To continue with the plotting program, exit from the TKG2 window.

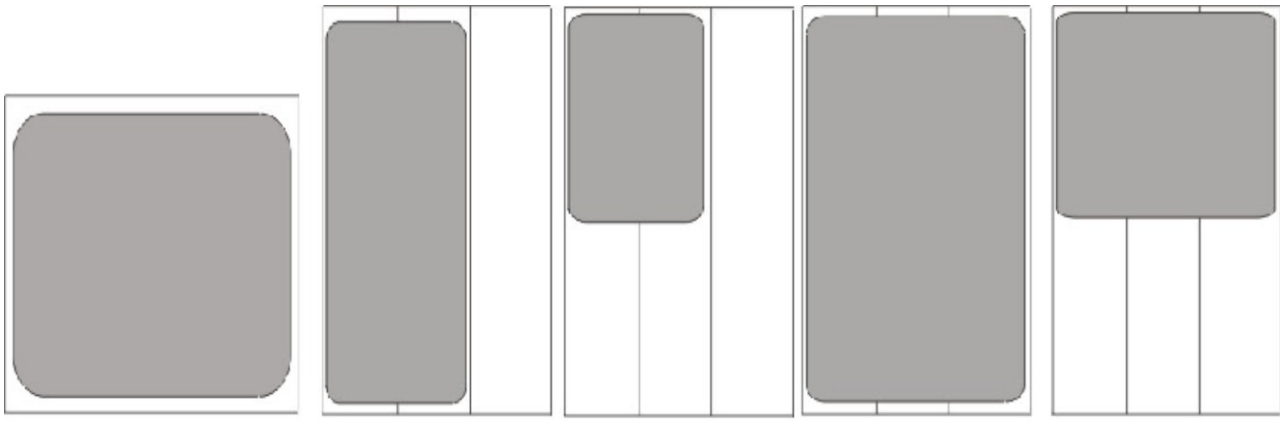
When you use the programs that invoke S-Plus, a directory named NWIS_Swork is created in your home directory. This directory will contain any files that are made while using the S-Plus graphics programs. When the graphics that invoke S-Plus are selected, the following list of device types is displayed.

Enter the number of the device wanted
1 motif (X-window) graphics
2 pdf file
4 HP Laser Jet file
5 PostScript file
7 Tektronix 4010 window (from X-term or TerraPro)
9 EPS file

If you select Option 1, a separate S-Plus window appears that includes the plot. To exit cleanly from this window, you should include all responses in the UNIX window, not in the S-Plus window. If you select Option 2, a PDF file is generated after you enter a filename. Known bugs exist for diagrams generated in a PDF format from the S-Plus window. For boxplots (Option 2 from the main QWAPPLICATIONS menu), the y-axis label is missing. If you select Option 4, a plot file in HP Laser Jet format is produced that you can print on printers that accept HP formatted graphics. If you select Option 5, a Postscript file is produced that you can print on printers that accept Postscript format. If you select Option 7, the plot will appear on a Tektronix 4010 window. To use a Tektronix 4010 window, you must be using an xterm window. When you select Option 7, a message appears in the UNIX window: "Enable Tek window output now." While you are still in the UNIX window, press CTRL and the middle mouse button at the same time, and then activate the Tektronix window by selecting "Switch to Tek mode." To view each plot, hit "enter" in the Tektronix window after each plot. To return to the UNIX window, desect "Switch to Tek mode," press CTRL and the middle mouse button at the same time, and deselect "Show Tek mode. If you select Option 9, you can choose the size of the plot you want and then print the file on printers that accept Encapsulated Postscript (EPS) format. You can choose five different sizes of output graphics; the list of options is displayed when you choose Option 9.

```
Enter the number of the plotsize wanted
      full page    1/2 page
3-column formats
2 wide   21          22
3 wide   31          32
full page landscape: 10
```

The different options in the menu above are shown in example layouts below.



NOTE: EPS files must contain only a single plot. This option will create multiple files. The filename format is basename_##.eps.

3.5.1 Option 1 – X,Y Plot

The qwplot program (Option 1) creates an X,Y plot in three stages: (1) by retrieving data from the QW database that are written to an ASCII file, (2) by using data in the ASCII file to create the plot in a separate graphics (TKG2) window, and (3) from the TKG2 window, the plot can be printed or saved to a file. All data are used in the plot, including remarked (i.e., less or greater than) results. Plots created with QWPLOT are limited to 5,000 data points.

The three stages used to complete the plot are described, and the software requests the name of the file containing the record numbers. The next prompt asks for the name of the output filename.

Three options exist for plotting the data: (1) from one to seven parameters by one parameter, (2) from one to seven parameters by sample date, and (3) from one to seven multiple stations by sample date for one parameter. All three options will handle data from multiple stations; however, only Option 3 will identify the individual stations on the plot.

If you choose Option 1, you must enter a five-digit parameter code for the x-axis followed by as many as seven parameters that will be plotted on the y-axis. If you choose Option 2, the x-axis parameter is sample data, and you can enter as many as seven parameters to be plotted on the y-axis. If you choose Option 3, the program reminds you that the file containing the record numbers must be sorted by station ID, date, and time. The x-axis parameter is sample data, and one y-axis parameter can be entered.

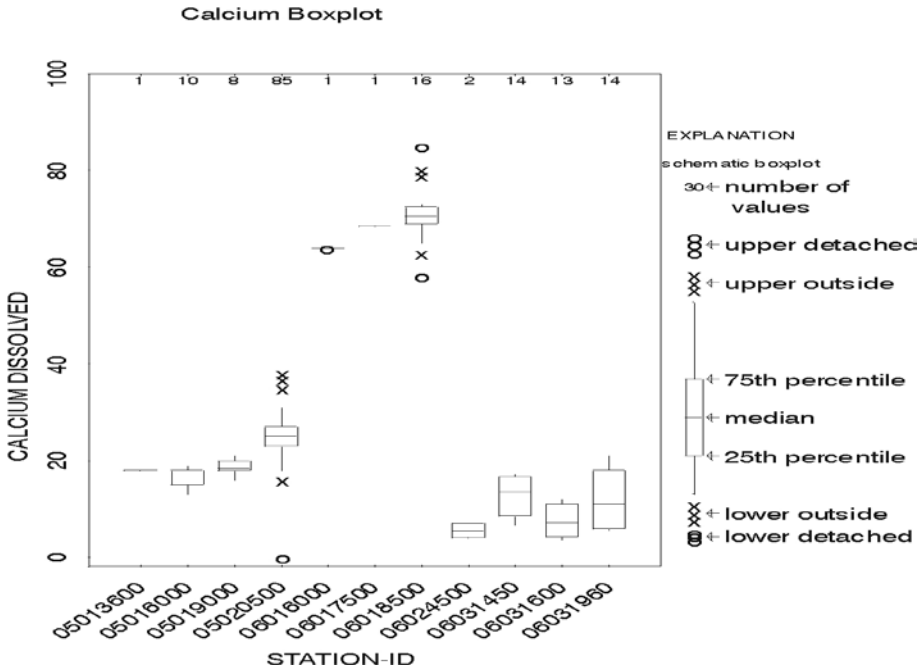
After you choose the plot type, the data are retrieved, some basic statistics (e.g., n, minimum, and maximum) are displayed on the screen, and you are asked if the data are to be listed to the screen. These data are the same data included in the ASCII output file and in the plot. You can then enter a title for the plot, and you can edit the x-axis and y-axis labels if the default choices are not acceptable. Although there is no limit on the length of the plot title or axis labels that can be entered, there is a practical limit because all text entered may not be visible on the plot. You may need to edit the font size in another application to see the entire title or label. You then can

choose whether the plot points will be connected with lines. Several seconds after this response, a separate TKG2 window will appear that contains the plot you requested.

3.5.2 Option 2 – Boxplots

The qwboxplot program (Option 2) creates boxplots in two stages: (1) by retrieving data from the QW database that are written to an ASCII file and (2) by using data in the ASCII file to create the plot in a separate graphics (S-Plus) window and write the output to a file. A boxplot is a simple graphic means of displaying statistics for the distribution of reported concentrations for a constituent. This program can generate several types of boxplots. The ends of the box (hinges) define the range of the middle 50

percent of the data, which is that part of the data between the 25th and 75th percentiles (the interquartile range). The median value of the data, the 50th percentile, is defined by a line across the box. The lines beyond each end of the box are called "whiskers," and, in a schematic boxplot, they extend to the last value within 1.5 times the interquartile range beyond the ends of the box. Data points beyond the whiskers are called "outliers," because their values differ greatly from the rest of the data. Outliers that extend from 1.5 to 3 times the range of the 25th and 75th percentiles are plotted as an "x," and outliers that extend more than 3 times are plotted as an "o." In a truncated boxplot, the whiskers extend to the 10th and 90th percentiles.



The qwboxplot program requires the standard input file of record numbers and an output file. The output file documents the retrieved data and is used as input to the plotting routine. The program then asks if you want to make a boxplot by using one station with one or more parameters, multiple stations with one parameter, or multiple stations treated as one station.

```
-------------------------------------------------------------
Data-retrieval options                          Code
-------------------------------------------------------------
One station with one or more parameters         1
Multiple stations with one parameter            2
Multiple stations treated as one                3
-------------------------------------------------------------
  Enter code for option                         >
```

For any of the three options, the next request is for parameter codes that will be included in the boxplot. If you select Option 1 or 3, you can enter as many as 15 different parameter codes. The data values for each parameter code will be used to complete a boxplot for that parameter. If you select Option 1 and if the record number file includes data for more than one station, only the first station listed in the record number file will be used. If you select Option 2, one parameter code is entered, and the data values for each station will be used to complete a boxplot. If more than 15 stations are included in the record number file for Option 2, 16 stations will be shown on the x-axis, but only 15 boxplots will be drawn. Boxplots drawn for groups with less than 10 data values may not be complete. For example, if only one data value is available, only the median line is displayed. If plots for less than 10 data values are used for other than exploratory data analysis, groups with less than five data values should be displayed using the individual points. The data are retrieved, and summary statistics are displayed on the screen like those displayed below.

```
RETRIEVAL OPTION 3:  2 PARAMETERS FOR A GROUP OF STATIONS

-----------------------------------------------------------

GROUPS RETRIEVED   2     MIN VALUE   -10.000

GROUPS WITH DATA   2     MAX VALUE   758.000

-----------------------------------------------------------


SUMMARY OF VALUES BY GROUP:

-------------------------------------------------------------------------------------------------

GROUP          NUM OF                      25TH                    75TH

IDENTIFIER     VALUES   MINIMUM    PCTILE     MEDIAN     PCTILE    MAXIMUM

-------------------------------------------------------------------------------------------------

00010            165      -10.000       2.500       6.500      12.000      20.500

00095            154       36.000     132.000     178.000     213.000     758.000

-------------------------------------------------------------------------------------------------
```

If any censored values are found in the retrieved data, the software asks you if they should be estimated and what method should be used.

```
RETRIEVING DATA ... RETRIEVAL COMPLETED
 Censored values found in the data set.
 Estimate censored values?  Ans: y / n, <cr> = n >
Censored values can be estimated by either of two methods
 Select the method you want:
  1 - LOG-PROBABILITY REGRESSION
  2 - ADJUSTED LOGNORMAL MAXIMUM LIKELIHOOD (default)
```

For more information on these two methods see “Statistical Methods in Water Resources,” by D.R. Helsel and R.M. Hirsch, 1992.

The next queries ask whether you want the data to be listed to the screen and whether you want to plot the data. If you want to plot the data, then the options for the types of boxplots are displayed (schematic or truncated). After you select the type of boxplot, you can supply the title of the plot, the y-axis label (if you want it changed), and the x-axis label (if you want it changed). The S-Plus list of devices is displayed and you must select an output option as described above.

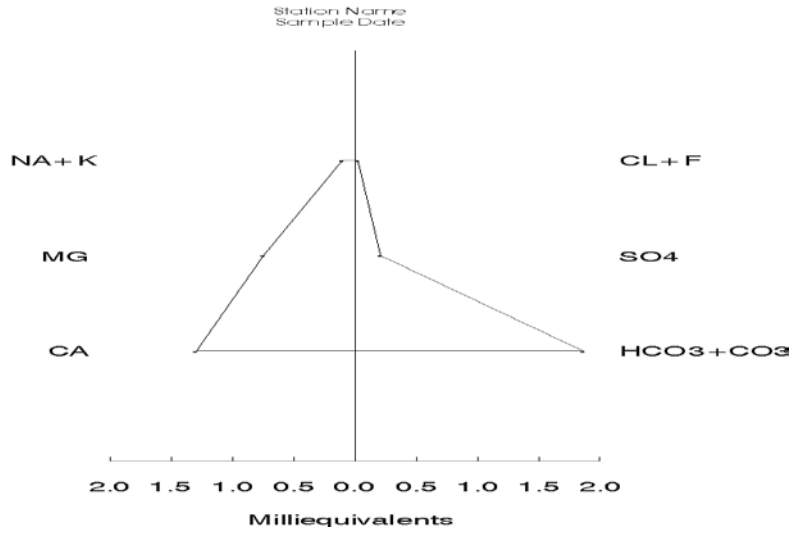
The data for the most recent boxplot are saved in the NWIS_Swork directory as an S-plus dataset called spgu.boxplt. These data can be used in any S-Plus analysis. There is a *USGS library for S-plus* that facilitates hydrologic analyses.

3.5.3 Option 3 – Stiff Diagrams

The qwstiff program (Option 3) creates Stiff diagrams (Stiff, 1951) in two stages: (1) by retrieving data from the QW database that are written to an ASCII file and (2) by using data in the ASCII file to create the plot in a separate graphics (S-Plus) window and write the output to a file. By using S-Plus, Stiff diagrams are plotted in a separate window by using an input file of record numbers.

The Stiff diagram is a graphical representation of the cations and anions of an analysis in milliequivalents per liter. The Stiff plotting technique uses parallel horizontal axes extending on each side of a vertical zero axis (Hem, 1985, p. 175). Concentrations of the cations are plotted to the left of the vertical axis and anions to the right. The points are then connected, and an irregular pattern results. Thus, the patterns can be compared among analyses as well as among sites to illustrate similarities and differences.

The NWIS software plots the cations calcium and magnesium alone, and it combines the cations sodium and potassium. The anions, bicarbonate and carbonate, are combined, chloride and fluoride are combined, and sulfate is plotted alone. Each plot represents one analysis. All data are used in the plot including remarked (i.e., less or greater than) results. The software will not plot a Stiff diagram if any of the parameters are missing. Below is an example of a Stiff diagram produced from the software.



When the program is invoked, a query appears and asks if you want to plot the station name (local well number) instead of the station number. The program then requests the input filename of record numbers and the output filename (the output file is referred to as the "Sample Printout File"). The S-Plus list of devices is displayed, and you must select an output option as described above.

The output file (ASCII) contains the station number, date, and time for each record and a list of cations and anions. A missing value is represented by "-1." An asterisk (*) indicates that the bicarbonate value was computed from alkalinity, and a message is included at the end of the cation and anion list.

3.5.4 Option 4 – Piper Diagrams

The qwpiper program (Option 4) creates Piper diagrams (Piper, 1983). Piper diagrams can be used to show the chemical character of water. In a Piper diagram, selected cations (positively charged ions—calcium, magnesium, and sodium plus potassium) and anions (negatively charged ions—bicarbonate plus carbonate, sulfate, and chloride) for each analysis are shown as a percentage of the total cations and anions, in milliequivalents per liter. The cations are plotted as single points in the triangle on the left side and anions in the triangle on the right side. Cation and anion plots for each sample then are projected into the central diamond field. A water type can be described depending on the location of the projected point in the central diamond. The Piper diagram can be used to determine whether a particular water is (1) chemically similar to some other water or (2) a simple mixture of two chemically different water types (Hem, 1985, p. 177–179).

A water type in which one cation and one anion dominate (each amounts to 50 percent or more of the cations or anions, respectively) is designated by the names of the dominant cation and anion. A water type in which no cation or anion dominates is designated a mixed-cation or mixed-anion type (Piper and others, 1953, p. 26).

When the qwpiper program is invoked, the program asks for the file containing the record numbers (same format as Option 1), and then for the output filename. This output file is the ASCII file created for use with the plotting routine. If the filename exists in the working directory, the program asks if you want to overwrite the current file. Up to 2,000 points can be plotted using qwpiper. The program then displays the following options.

```
YOU HAVE THE FOLLOWING SYMBOL OPTIONS

  FOR STATIONS:

 ************************************************

    1. USE ONE SYMBOL, ONE COLOR

    2. USE A DIFFERENT SYMBOL, ONE COLOR

    3. USE ONE SYMBOL, DIFFERENT COLORS

    4. USE DIFFERENT SYMBOL, DIFFERENT COLORS

 ************************************************

    ENTER YOUR CHOICE:
```

NOTE: Too many symbols may clutter a piper diagram, so that you cannot adequately view differences between symbols. Consider selecting a different option from the menu above to reduce the number of different symbols on your plot.

If you select Option 1 or 3, you are prompted for a symbol (marker) number from 0 to 18 that corresponds to symbols listed in table 10. If you enter a carriage return, the default is 0, a square symbol. If you select Option 4, the program displays the following two options that allow you to choose when the symbols change.

```
CHANGE SYMBOLS ON:

*****************************************

 1. EACH SITE (STATION)

 2. EACH SAMPLE, REGARDLESS OF SITE

   (COLOR CHANGES ON EACH SITE ONLY)

*****************************************
```

0	Square	10	Circle with + inside
1	Circle	11	Four small triangles joined
2	Triangle	12	Square with + inside
3	Plus symbol	13	Circle with X inside
4	X symbol	14	Square with a triangle inside
5	Diamond	15	Filled-in square
6	Upside-down triangle	16	Filled-in circle
7	Square with X inside	17	Filled-in triangle
8	Asterisk	18	Filled-in diamond
9	Diamond with + inside		

Table 10. Symbols used for data values in Piper diagrams

When you select symbol Options 2 or 4, symbols can be changed for each site or each sample. A choice of two symbol sets is available with Options 2 and 4. One set of symbols is the S-Plus symbol set, shown in table 10; the second set of symbols contains small and capitalized letters of the alphabet (52 different symbols). When you choose symbol Options 3 or 4, different colors are used to show a change of station (or, possibly, samples when Option 4 is used). The colors in the order they will be displayed are black, red, green, blue, yellow, cyan, and magenta. For Option 3, you choose a symbol, and a different color is used for each station in the plot. If more than 7 stations are plotted, the colors start over, so that the first and eighth stations will be black. The following table shows the colors that will be shown given the number of stations plotted (the station order is the same as in the record number file).

Station order number	Color used
1, 8, 15…	Black
2, 9, 16…	Red
3, 10, 17…	Green
4, 11, 18…	Blue
5, 12, 19…	Yellow
6, 13, 20…	Cyan
7, 14, 21…	Magenta

For Option 4, the colors are used in the same order and the symbols are used in the order shown in *Table 10*. The colors and symbols are repeated when all have been used. The following example shows the colors and symbols that would be plotted if Option 1 –"CHANGE SYMBOLS ON: Each site" is chosen and 10 stations are plotted (the station order is the same as in the record number file).

Station order number	Color/Symbol used
1	Black/Square
2	Red/Circle
3	Green/Triangle
4	Blue/Plus symbol
5	Yellow/X
6	Cyan/Diamond
7	Magenta/Upside down triangle
8	Black/Square with X inside
9	Red/Asterisk
10	Green/Diamond with + inside

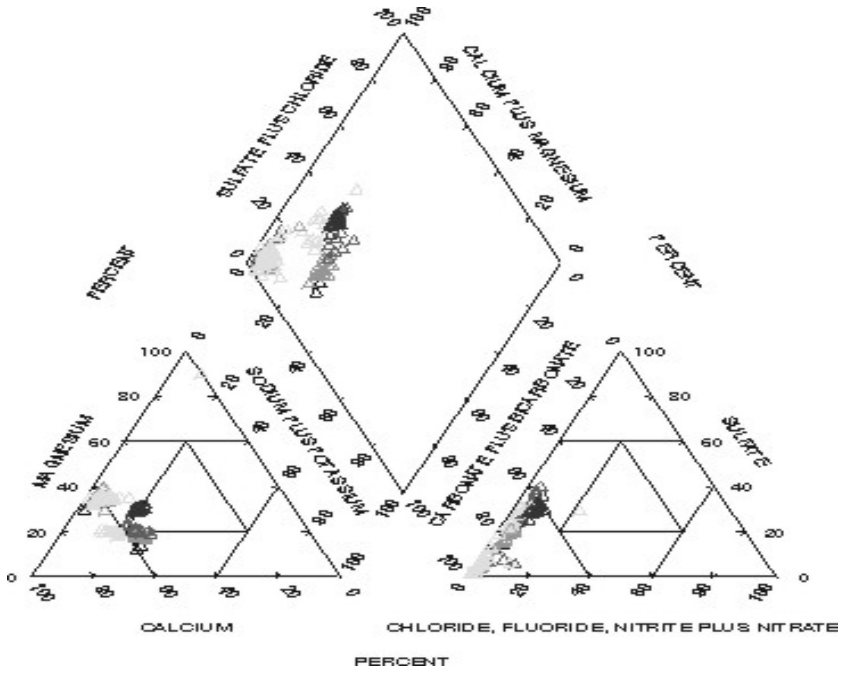
The final option is the size of the symbol to be plotted.

After you have entered the options for the plot, the S-Plus list of devices is displayed, and you must choose an output option as described above.

After you enter an output option are entered, an output file and plot are produced. The output file contains a list of cations and anions, the station number, date, and time for each record. A missing value is represented by "-1." An asterisk (*) signifies that the bicarbonate value was computed from alkalinity.

The data for the most recent plot are saved in the NWIS_Swork directory as an S-Plus dataset called spgu.piper. These data can be used in any S-Plus analysis.

The figure below is an example of a Piper diagram produced from this program.



3.5.5 Option 5 – Regression Plots

The qwregress program (Option 6) creates an X,Y plot that can include a line calculated from a linear regression computation to fit a line through a set of results. The linear regression is performed by the IMSL subroutine RLONE and is described in the "IMSL Reference Manual," v.4 (IMSL, Inc., 1982). The confidence interval for the coefficient and for the intercept is 95 percent. In the output file, the results of the regression computation are included with the data used in the computation.

The regression plot and output file are created in three stages: (1) by retrieving data from the QW database that are written to an ASCII file and the linear regression is computed, (2) by using data in the ASCII file to create the plot in a separate graphics (TKG2) window, and (3) from the TKG2 window, the plot can be printed or saved to a file. All data are used in the plot, including remarked (i.e., less or greater than) results. Plots created with qwregress are limited to 9,999 data points. You must have at least three values for the program to work. After describing the three stages used to complete the plot, the software requests the name of the input file of record numbers. The next prompt asks for the name of the output data file, which is an ASCII file that contains the data and results from the regression computation.

You must enter a code that describes whether one plot should be made for all stations or if one plot should be made for each station in the record number file. After you enter the code, you have the option to include the regression line on the plot. Enter one parameter code for the x-axis and one for the y-axis. After entering each parameter code, you can enter a multiplier that will be used on the values for that parameter. The next prompt asks whether log transformations should be performed on the values for the x and y axes. A summary of the variables to be used in the

regression computation and plot is shown on the screen. You can use this summary to determine if the choices are correct. If the choices are not correct, you can reenter the information.

Several seconds after answering "**Yes"** to whether or not the regression variables are correct, a separate TKG2 window appears that contains the plot you requested. To continue with the plotting program, exit the TKG2 window. After the TKG2 window is closed, you are asked if you would like another set of parameters processed. If "**Yes**," the program asks for the x-axis parameter code and follows the steps described above; if "**No**," the program ends.

3.5.6 Option 6 – Summary Statistics Table

This option runs a program that reads data and parameter-name files created by using Option 5 (flat file by sample) from the Data Output menu. To create these files, select a fixed-column flat file from the output format selection (*see Section 3.4.5.1, Selecting the Output Format*). These output files are used to produce a table of summary statistics. The heading on the summary table requires information from the SITEFILE that is obtained by using the following alpha codes as the first three codes in the parameter list used to make a flat file by sample.

AGNCY, STAID, DATES

The above three codes must be present in the parameter list. The following code also may be present.

> **81024 (DRAINAGE AREA)** may be included and will be used as the drainage area in place of the contributing drainage area.

The program asks for the name of the fixed column, space-delimited file. The program then asks for the parameter-list filename. This file is created by a run of qwflatout, or you may create your own file by using the format described in *Section 3.4.5.1*. The names need to be in the same order as the input data. The program then prompts for the output filename and asks if you wish to report estimated percentiles for censored parameters.

At this point, the interactive portion of the qwprcntl program is finished. This program may run for a long time, depending on the number of parameters that are to be processed and the number of records.

Parameters in the output from the program are listed in publication order. The order in the input files is ignored. A log-probability regression procedure is used to estimate the mean (and the percentiles, if requested) of censored parameters. This procedure handles multiple-detection limits. The methods used are as listed below.

Uncensored parameters:

1. The data are ranked in ascending order, and positions for the percentiles are found using the following formula:

   K = Pct * (N + 1)/100 ,

   where K is the expected position, Pct is the integer percentile (e.g., for the 5th percentile, Pct = 5; for the 25th percentile, Pct = 25) and N is the number of observations.

   If the position K is a whole number, then the value in that position in the rank-ordered data is the value used for the percentile. If K is not a whole number, then the following interpolation is used:

   P(Pct) = X(trunc(K)) + (K-trunc(K)) * (X(trunc(K)+1) - X(trunc(K)))

   where P(Pct) is the desired percentile, X() is the rank order data set, trunc(K) is the truncated value of K, and Pct is as above.

2. If the number of observations is greater than 1 and less than or equal to 5, only the maximum and minimum are reported.
3. If the number of observations is equal to 1, only the maximum is reported.
4. If the maximum is equal to 0.0, only the maximum is reported, regardless of the number of observations.
5. All values in uncensored parameters are treated the same regardless of any codes associated with those values.

Censored parameters:

1. If the percentage of values flagged with "<" or "U" is greater than 5 percent of the total number of data values for the parameter, the parameter is considered censored.
2. The mean of censored parameters is estimated with a log-probability regression procedure. The method estimates the values below a detection limit and uses these values and the detected values of a parameter to estimate the mean. The FORTRAN implementation of this method was done by the former Systems Analysis Group, WRD, and USGS. This method was chosen as the best way to handle the problems presented by multiple-detection limits in water-quality data. The estimated mean is flagged with an "*" and explained in a footnote on the statistical summary table. If the number of censored parameters included in the computation is 95 percent or more of the total number of values to be used, the mean will be reported as "**********" in the output table.
3. If estimated percentiles are requested, the same procedure that is used to estimate data below the detection limit for the calculation of the mean is used to estimate the data below the detection limit and to calculate the percentiles. The percentile values are calculated using the same method as described in Part 1 of the previously mentioned

uncensored methods. These values also are flagged with an "*" to indicate that they are based on an estimated data set, and the "*" is explained in a footnote.

4. If nonestimated percentiles are requested, only actual values are used for the percentile values in the statistical table. The percentiles retain a "<" flag if one is associated with the value originally and no interpolation between values is used. To establish the set of sorted data that the percentiles are selected from, all values flagged with "<" or "U" are assumed to be less than any value without a flag. For example, the following values are shown in the ascending order that would be used.

   <0.1 <1 <20 .01 17 500

   a. Only "<" and "U" remark codes are used to distinguish censored from uncensored parameters, and subsequently values flagged with these remark codes are established as less-than values in the statistical procedures. Other remark codes are processed as follows:

      E, A, S, V, and R — treated as a detected value;
      > — values dropped from statistical procedures if a censored value is also present in the sample set;
      M — values dropped from statistical procedures; and
      N — values dropped from statistical procedures.

   b. If the average of two values must be taken to obtain the value for a percentile, the remark code of the greater value is associated with the percentile.

   c. Any values equal to 0 in a censored parameter are replaced with the value of the nearest less-than value (in time-order) and the remark code is set to "<."

   d. If the number of observations above the detection limit is less than 5, the estimated values are considered unreliable and are not reported.

   e. If the total number of observations (above and below the detection limit) is greater than 1 and less than or equal to 5, only the maximum and minimum are reported.

   f. If the total number of observations is equal to 1, only the maximum is reported.

Effective limits of the program:

1. The maximum number of parameters (header and water quality) cannot exceed 1,000.
2. The maximum number of values per parameter per station is set to 5,000.

3.5.7 Option 7 –Detection-Limits Table

The qwdetlims program (Option 7) reads the data and parameter-name file created by a run of qwflatout (*Section 3.4.5.1*) and produces a table of detection limits. The heading on the table requires information from the QW database that is obtained by using DATES in the parameter list passed to qwflatout.

The qwdetlims program produces a table of detection limits encountered in the input data file for each parameter in the parameter list file, excluding the alpha parameter codes and the numeric codes for mean discharge, instantaneous discharge, and drainage area (00060, 00061, and 81024,

respectively). A maximum of 350 valid numeric parameter codes can be handled by the program, and a maximum of 19 years can be processed for each run.

The program asks for the input data filename created by qwflatout. The program then asks for the parameter list filename; this file is created by qwflatout, or you may create your own file by using the format described in *Section 3.4.5.1*. The names need to be in the same order as the input data.

The program then asks for the output filename and asks if you want to specify the period of record to be used (19 years, maximum) or to use the dates from the input data file (only the last 19 years will be counted). If you specify the period of record, you are then asked for the beginning year and the ending year.

At this point, the interactive portion of the qwdetlims program is finished. This program may run for a long time, depending on the number of parameters that are to be processed and the number of records.

The output table is headed by the name of the parameter from the parameter-list file, the corresponding parameter code, and the total of the nonmissing values encountered for that parameter. The table consists of a column of detection limits encountered (a data value with a remark code of "<" or "U"), columns of counts of detection limits encountered for each selected year (up to a maximum of 19 years), a summary column (the total of the counts for that detection limit), and a final column giving the percentage of the total, nonmissing values represented by that detection limit. The rows are in the order of detection limits as they are encountered in the input data.

The input data file is considered as a whole. By selecting appropriate record numbers to be used by qwflatout, qwdetlims can be used to show detection limits encountered for a single station, a single county, a specific project, a single year, or any period of years up to 19. If the output from qwflatout had 50 years of data, it could be processed by qwdetlims in three runs.

One use of the detection limits table is for locating probable order-of-magnitude data errors. For example, if a parameter has a detection limit of <0.5 for a period of years and a single (or few) detection limit(s) of <50, the single-data value probably should be reviewed. Another use is for evaluating the data before or as they are used in statistical analyses.

3.5.8 Option 8 – Discharge Report for QW Samples

This option is used to produce a file that contains suggested water-discharge results for surface-water-quality samples. The program will select the samples from input of record numbers or agency code, station ID, date, time, and medium code to generate the output file. You may enter this information from the terminal or from an existing file. The format of this file is described in *Appendix G*. The format of the optional input files is described in *Appendix G*. If you choose to enter the record numbers interactively, use the process used described in *Section 3.3.4*. Records can be retrieved from multiple databases during a single retrieval, if the database ("db") numbers are appended to the record numbers as in the format ########db.

After the desired samples are specified, you will be prompted to enter a filename for the output report (or "**q**" to quit). Next, the format of the output report is specified. As shown below, there are two choices.

Which format do you desire:

1. RDB (tab-separated)

2. Print-ready

Please enter option (1,2,q, <CR>=1): _

See *Appendix C* for examples of the output. See *Tip Sheet 5.21,* "How do I rapidly determine discharge for surface-water-quality samples?" for additional information.

References Cited

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Piper, A.M., 1983, A graphic procedure in the geochemical interpretation of water analyses: U.S. Geological Survey Ground-Water Note 12, 14 p.

Piper, A.M., Garrett, A.A., and others, 1953, Native and contaminated ground waters in the Long Beach-Santa Ana area, California: U.S. Geological Survey Water-Supply Paper 1136, 320 p.

Stiff, H.A., Jr., 1951, Technical Note 84 – The interpretation of water-quality data programmed for the digital computer: Kansas Geological Survey Spec. Distrib. Pub. 43, 27 p.

3.6 Option 6 – Support Files

Options in the Support Files menu include access to files that a user may need to reference while using QWDATA.

```
          QW DATA PROCESSING ROUTINE   REV NWIS-5.0.0-xx
 YOU ARE USING WATER-QUALITY DATABASE NUMBER 01

       Support Files

 1 -- List Site Records
 2 -- Scan for and display parameter codes & definitions
 3 -- Write parameter report to a file
 4 -- Check Geologic Unit Code File
 5 -- Check Federal Information Processing Standards (FIPS) Code
 6 -- List State/County Data
 7 -- Display algorithm in reverse polish notation (RPN)
 8 -- Display the Parameter Method Table
 9 -- Display Analyzing Entity and Collecting Agency Codes

 98 -- Exit menu

 99 -- Exit system

Please enter a number from the above list or a Unix command:
```

Support Files menu options.

3.6.1 Option 1 – List Site Records

Option 1, List Site Records, produces a list of the contents of the site information for selected sites from the SITEFILE. If the output is directed to a file, the program asks for the output filename; if you do not enter a filename, the output will be put into a file named SITE_LIST. The output can also be directed to the screen. You are then asked if station numbers will be entered from the terminal. A maximum of 400 station numbers are accepted; if more than 400 are submitted, only the first 400 will be used. If you enter the station numbers from the terminal, a blank line is displayed. Enter the five-character agency code (a blank space will follow if a four-character agency code is entered) and the station number. Depending on the agency code and length of station number, the input would look like the following example.

```
USGS 01123456
USEPA01123457
USGS 390000110300001
```

If you enter "**NO**," you are prompted for the name of a file that contains a list of station numbers. The input file should be in the following format.

```
Agency code -- 5 characters (left-justified)
Station number -- 15 characters (left-justified)
```

The output file includes carriage-control characters and should be printed with the "asa" U command. Example output is included in *Appendix C*.

3.6.2 Option 2 – Scan for and Display Parameter Codes and Definitions

Option 2, Scan for and display parameter codes & definitions, retrieves records from the parameter code dictionary and displays the parameter code and descriptive name on the screen. *Parameter codes (see Section 2.1.3)* are five-digit numbers used to identify water-quality constituents and properties. Two types of retrievals are available: by parameter name or by parameter code. See *Tip Sheet 5.8* for a more detailed discussion.

NOTE: This program displays parameters that are currently valid for data entry and public display. Parameters that do not fit into these categories will not be displayed but can be retrieved using Option 3, described below.

After starting the ***qwpcdpeek*** routine, you must decide if the records will be retrieved by parameter name or parameter code from the following menu.

```
Only parameters that are displayed to the public
and can be entered into NWIS are retrieved by this
program
Do you want to identify parameters by:
    1. code
    2. name
Please enter option (1,2,q): _
```

Screen to check the Parameter Code Dictionary.

If you select Option 1, parameters are retrieved when valid input codes are entered. Valid input consists of a single 5-integer string, a range of parameter codes separated by a hyphen, or use of the Boolean expressions "<," " >," " =<," or " =>" with a parameter code. Input may be from a file or from the screen. Output will be directed to the screen.

Choosing Option 1 results in the following system prompt.

```
Do you want to enter parameters from the terminal? (y,n, <CR>=y): _
```

Choosing entry from the terminal (default choice) results in the next prompt.

```
Enter parameter codes (<CR> to quit)
(To retrieve a range, enter PCODE-PCODE; <PCODE; >PCODE; <=PCODE; >=PCODE)

  1: _____
```

At this point, you may enter a five-digit parameter code, a range of codes with a hyphen in the middle, or use the greater-than or less-than operators to search. The parameter code(s) and parameter name(s) will be shown on the screen.

If you answered "**n**" to the previous prompt to enter parameters at the terminal, the next prompt will look like this.

```
Enter the pathname of the
input file (q to quit): _____________________________________
```

The program requires a simple text-file formatted with integers in the first 5 columns, followed by a carriage return or a space. It does not read anything after the space to the right. It will also accept a range of parameters separated by a hyphen or use of the "=," "<," or ">."

If you select Option 2, a list of parameters containing the input "name" character string is retrieved. The program will search all parameters for any part of the string anywhere in either the parameter short -name or parameter long name fields. Note that parameter short names may use different expressions than the "official" parameter long name uses and that differing search results may be obtained. Input may be from a file or from the screen. Output will be directed to the screen. After choosing Option 2, identify parameters by name results in the following system prompt.

```
Do you want to enter parameter names from the terminal? (y,n,q, <CR>=y): _
```

Choosing entry from the terminal results in the next prompt.

```
Enter parameter names (<CR> to quit)
  1: _____________________________________
```

At this point, you may enter a parameter name, partial name, or string of characters. All parameter codes and names that contain the character string anywhere in the parameter long name or short name will be displayed to the terminal.

If you answered "**n**" to the prompt to enter parameter names at the terminal, the next prompt will look like this.

```
Enter the pathname of the
input file (q to quit): _____________________________________
```

The input file should have a format as described above for terminal entry. Place separate name searches on their own lines in the text file.

To exit this program, enter "**q**" and you will return to the Support Files menu.

3.6.3 Option 3 – Write Parameter Report to a File

Option 3, Write parameter report to a file, allows you to search or dump table-selected column subsets of, or the entire, parameter code dictionary to a file, based on interactively-entered search criteria. The basic steps are: (1) select parameters, (2) optionally sort the rows, (3) select an output format, and (4) select the output columns. This program routine is ***qwpcdtable***. Example output is included in *Appendix C*.

The parameter code dictionary contains a mix of codes used by the USGS and historical parameters used by the EPA. This latter group of parameter codes disallows new data entry. These codes are easily distinguished by parameter names and column headings appearing in all upper-case letters.

If you would like to retrieve the Parameter Code Dictionary with method-information and/or precision-arrays, see *3.6.8 Option 8* below.

3.6.3.1 Selection Criteria

When the program is initiated, you will be prompted for an output filename. A box will next appear to help limit the retrieval selection criteria. The retrieval choices are shown in 11 fields, which reference similar columns in the parameter code dictionary.

qwpcdtable

Enter file to hold output: examplefile_____

[Selection Criteria]

Enter a Y to choose an item for limiting retrieval,
Enter a # to remove an item,
Enter ?/ for help

1) Pcode: _ 2) Group: _ 3) Long Name: _ 4) Adaps Name: _ 5) EPA-SRS Name: _ 6) Units: _ 7) CASRN: _
8) Medium: _ 9) Fraction: _ 10) Time-series flag: _ 11) Public flag: _

Cursor controls (?/ for help)

Entry of a "**y**" at any of the 11 criterion will enable a submenu specific to that item. Entry of "**y**" in more than one of the Selection Criteria fields has the effect of the Boolean term "AND" in a search and, possibly, further shrinking of output. To dump the entire parameter code dictionary, do not select any of the 11 criteria, and you will be directed to the sorting options menu described in *Section 3.6.3.2* below.

When text strings are entered to restrict the search for parameters by: Long Name, Adaps Name, EPA-SRS Name, units, CASRN, or fraction the text strings are used as a case-insenstive text fragment to match the target. For example, entering "arsenic" for the EPA-SRS name will match both "Arsensic" and "Arsenic acid".

Limiting by **1) Pcode** will have the same functionality as described in *Section 3.6.2 –Scan for and display parameter codes & definitions*, Option 1 above. A list or range of parameters can be entered from a file or interactively at the screen.

2) Group will prompt a submenu. Each parameter is associated with one group. Users may be familiar with these current groups from the use of NWISWeb. This functionality would enable you to retrieve a file of parameter codes to use later for quicker Data Output (*Section 3.4*) of common data groupings shown below.

[Parameter Group Selection Criteria]

Enter a Y to choose an item for limiting retrieval,
Enter a # to remove an item,
Enter ?/ for help

1) Information: _ 2) Physical: _ 3) Inorganics, Major, Metals: _ 4) Inorganics, Major, Non-metals: _ 5) Nutrient: _
6) Microbiological: _ 7) Biological: _ 8) Inorganics, Minor, metals: _ 9) Inorganics, Minor, Non-metals: _
10) Organics, pesticide: _ 11) Organics, PCBs: _ 12) Organics, other: _ 13) Radiochemical: _ 14) Stable Isotopes: _
15) Sediment: _ 16) Population/Community: _ 17) Habitat: _ 18) Toxicity: _ 19) Other: _

Cursor controls (?/ for help)

3) Long Name will prompt for a list of "names" or character strings.

4) ADAPS Name will prompt for a character-string input. Only a few parameters are annotated with ADAPS names.

5) EPA-SRS Name will prompt for a character-string input from the screen and will search parameters populated from the EPA-Substance Registry System.

6) Units will prompt for a character-string input from the screen and will search the reporting units (parm_units_tx) field. The search is not case sensitive; for example, "mg/kg" is acceptable. Short text expressions for units of measure were coordinated with the EPA. The collaborative list of units can be found at: *http://qwwebservices.usgs.gov/service-domains.html*.

7) CASRN will prompt for a character-string input from the screen and will search the name field associated with the Chemical Abstract Service reference number for each parameter.

8) Medium will prompt a submenu. Your choices include: Air, Water, Biological Tissue, Other, Sediment, and Soil.

9) Fraction will prompt for a character-string input from the screen. Your choices include: Acid Soluble, Bedload, Bed Sediment, Comb Available, Dissolved, Free Available, Non-filterable, Non-settleable, Non-volatile, Recoverable, Settleable, Suspended, Total, Total Residual, Vapor, and Volatile.

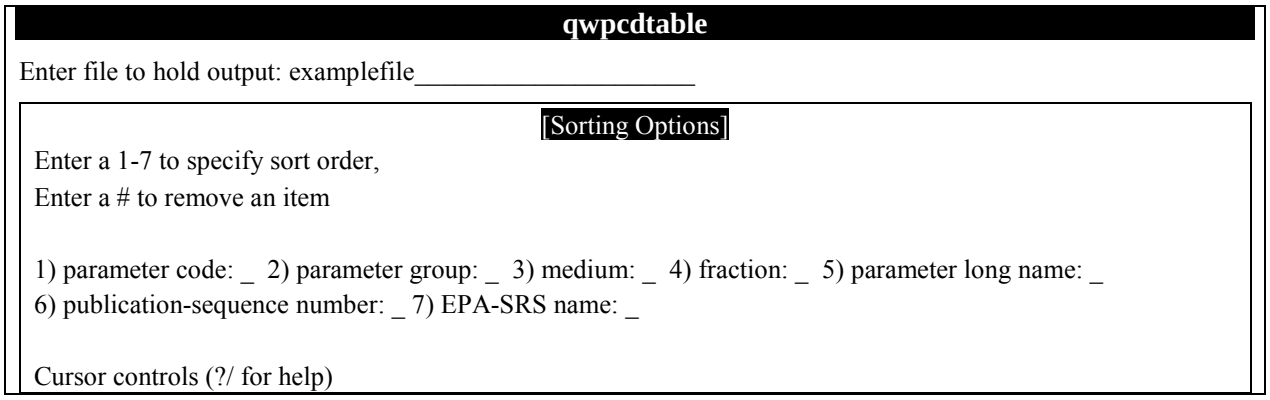
10) Time-series flag will only search parameters that have the flag set in the parameter code dictionary (parm_ts_fg) for use in time-series (ADAPS). If you enter a blank or an "**N**" is entered into this field, then this flag is not considered during the selection. If you enter a "**Y**" into this field, then this flag is considered during the selection.

11) Public flag will only search parameters when this entry is set to "**Y**" or "**N**." An entry in this field is required if the public parameter status (parm_public_fg) is to be considered during selection. If you enter an "**N**" into this field, then parameters not available to the public are considered during the selection. If you enter a "**Y**" into this field, then parameters available to the public are considered during the selection. If you leave this field blank, then all parameters are considered during the selection.

Output will include parameters that are not available for new data entry, as well as parameters not publicly displayed on NWISWeb.

3.6.3.2 Sorting Options

You will be given the option to sort your retrieved results by up to seven fields. This step is optional. Enter an integer at each prompt in your desired order of precedence. The screen will look like the following example screen.



After the "Search Criteria" and "Sorting Options" are populated, the parameter code dictionary will be searched, and if successful, you will be prompted to select an output format (see next section. 3.6.3.3). If no parameters are found, you will be given the option of trying again or quitting back to the Support Files menu. **Note: If an unsuccessful search returns zero parameters and you "try again," the system retains your earlier selections. You will have to move the cursor to each item to edit or deselect it.**

3.6.3.3 Specify the Output Format

These options provide user flexibility with the resulting output formats. The first choice is well suited for other QWDATA retrievals that utilize a file of parameter codes, the second choice can be used for printing the results, and the third option gives the results in an RDB-file for usage outside of QWDATA.

qwpcdtable

Enter file to hold output: examplefile_____

Specify the output format:
1. Parameter-file for use in retrievals (Pcode + Long Name)
2. Print formatted text report
3. RDB-file report
Please enter option (1,2,3,q): _

If you choose Option 1, no further dialogue takes place, and the output file is written. The format places the parameter code in columns 1–5 and the long name in columns 7–176, with one parameter per line.

If you choose Option 2, you will be prompted to format or customize the output contents. You will select at least one line of output that will contain the parameter code and one type of name. The second and third output lines are optional with five choices. Examples of dialogue boxes follow.

qwpcdtable

Enter file to hold output: examplefile_____

Specifying the contents of the parameter print-format report.

The parameter code will appear on line 1 of the output report.
You may select one of the following names to also appear on line 1:

1. Long name
2. Short name and units
3. ADAPS name

Please enter option (1,2,3,q): 3_

qwpcdtable

Enter file to hold output: examplefile_____

Specifying the contents of the parameter print-format report.
Parameter code and ADAPS name has been selected for line 1.

For line 2 of the output report you may select:
1. No more report lines
2. Long name
3. Short name, units, entry, and public flags
4. ADAPS name
5. EPA-SRS Name
6. Order, CAS registry number, Medium, and Fraction
Please enter option (1,2,3,4,5,6,q): 6

qwpcdtable

Enter file to hold output: examplefile_____

Specifying the contents of the parameter print-format report.

Parameter code and ADAPS name has been selected for line 1.
Order, CAS registry number, Medium, and Fraction has been selected for line 2.

For line 3 of the output report you may select:
1. No more report lines
2. Long name
3. Short name, units, entry, and public flags
4. ADAPS name
5. EPA-SRS Name
6. Order, CAS registry number, Medium, and Fraction
Please enter option (1,2,3,4,5,6,q): 1

If you choose Option 3, you will be prompted with a dialogue box to indicate which fields should be added to the output. Parameter code will always be in the first field even if no other choices are made. The RDB-fields are listed below.

- PCODE: 5s
- Long_Name: 170s
- Short_Name: 29s
- ADAPS_Name: 112s
- EPA-SRS_Name: 75s
- Units: 10s
- CASRN: 15s

- Pub Order: 5n
- Medium: 30s
- Fraction: 24s
- Entry: 1s
- Public: 1s
- Group: 1s
- USGS EPA equiv: 26s

qwpcdtable

Enter file to hold output: examplefile_____

[RDB Columns]

Enter a Y to include the column in the retrieval,
Enter a # to remove an item,
Enter ?/ for help

1) Long Name: _ 2) Short Name: _ 3) ADAPS Name: _ 4) EPA-SRS Name: _ 5) Units: _
6) CAS RN: _ 7) Pub Order: _ 8) Medium: _ 9) Fraction: _ 10) Entry: _ 11) Public: _
12) Group: _ 13) USGS EPA equiv: _

Cursor controls (?/ for help)

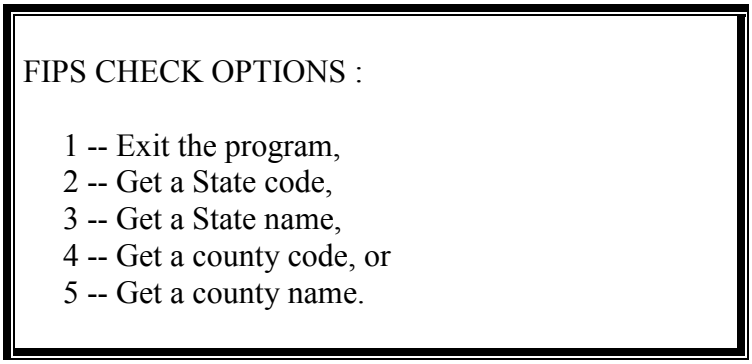
3.6.4 Option 4 – Check Geologic Unit Code File

Option 4, Check Geologic Unit Code File, retrieves geologic unit codes and formation names and displays them at the terminal. The program asks for a geologic unit code and retrieves the associated name.

You can provide the entire geologic unit code (for example, 111ALVM) and, if that code exists, get back the formation name (Holocene alluvium) or a partial geologic unit code from one to eight characters. An entry of the partial geologic unit code (12) results in retrieval by partial key search of all geologic unit codes and associated formation names between 120xxxxx and 129xxxxx. A blank geologic unit code terminates the program. The file of valid geologic unit codes is located at: /usr/local/nwis/support/aageol.all.states.

3.6.5 Option 5 – Check Federal Information Processing Standards (FIPS) Code

Option 5, Check FIPS Code, is used to browse the FIPS Code file and retrieve a State code given a State name, a State name given a State code, a county code given a State-county name, and a county name given a State-county code. The following options are displayed on the screen.



Screen to browse FIPS Code file.

After you make a choice from the menu, the program requires you to enter the required information from the terminal. All responses from the program are output only to the screen.

3.6.6 Option 6 –-- List State/County Data

Option 6, List State/County Data, interacts with the FIPS file and is used to retrieve a tabular list of State names, State abbreviations, State codes, minimum and maximum latitudes, and minimum and maximum longitudes. You also may retrieve county names, county codes, minimum and maximum latitudes, or minimum and maximum longitudes for a single State. A third option allows you to retrieve all states and counties with abbreviations, codes, and maximum and minimum latitudes and longitudes. The output can be to the terminal or to a file. Example output is included in *Appendix C*.

3.6.7 Option 7 – Display algorithm in reverse Polish notation (RPN)

Option 7, Display algorithm in reverse polish notation, retrieves and lists any or all of the algorithms used for calculating specific parameters. Reverse Polish notation is a computational technique that may be visually easier to digest than a simple algebraic expression of the same algorithm. The output format is seven columns in width, with a variable number of rows. Each row represents an operational sequence step in the overall calculation; therefore, the number of rows will vary by computational complexity of the algorithm. You may record a trace of the computational steps performed by each algorithm to reach, or fail to reach, a final value. Additional information and discussion about this capability is included in *Appendix D*.

3.6.7.1 Specifying the Algorithm Output

A series of three prompts will allow you to output a report listing the desired algorithms. You are first prompted to choose "**all**" or specific "**selected**" algorithm equations to retrieve. The default option is "selected" algorithms, and it is chosen with a **<CR>** or the enter key.

```
                    Display Contents of Algorithm File


Do you want to retrieve all or selected codes?(enter "all" or <CR> for selected;
q=quit): ___
```

Screen to specify algorithm(s).

The second prompt asks you for the source of the calculated-parameter code(s) desired. An answer of no "**n**" at this prompt implies that a file of parameter codes is available. You will be asked for the path to that file (see *Section 3.4.3.3* for the file format).

```
                    Display Contents of Algorithm File


Do you want to enter codes from the terminal? (y,n,q, <CR>=y): _

Enter Algorithm Parameter codes (<CR> to quit)

   1: 00301___
   2: 80155___
   3: _________
```

Screen to specify source of parameter code(s).

The final prompt asks if you would like to print the output either to the screen or to a file. The default option is to the screen.

```
                    Display Contents of Algorithm File

Do you want the report to be printed to the screen? (y,n,q, <CR>=y): _
```

Screen to specify output destination.

3.6.7.2 Algorithm Display Output

When output to the screen, column headings are presented above the algorithm's sequence rows. Following is an example of the report output to the screen for parameter code 80155.

Parm Code	Grp	Seq	Opcode	Operand	Stk	Comment
80155	2	1	ReqPush	80154	1	Load: Suspnd sedmnt conc, Exit i
80155	2	2	ReqPush	00061	2	Load: Discharge, instant.
80155	2	3	*		1	Multiply
80155	2	4	ConstPush	0.002700000	2	Constant
80155	2	5	*		1	Multiply

Page 1 (<CR> to continue, Q to quit):

Example output to the screen.

The columns in the output consist of the following information.

- Parm Code: Five-digit parameter code representing the compound to be calculated.
- Grp: A grouping of which additional programs, if any, calculate this parameter; has one of the following four conditions:
  - "0" Output algorithm result only if requested by PCODE, or
  - "1" Output algorithm result if requested by CALCV (Appendix A) or PCODE, or
  - "2" Output algorithm result if requested by CALCV and QWRELOADOUT (Section 3.9.6) or PCODE, or
  - "3" Output algorithm result in WATLIST (Section 3.8) and if requested by CALCV and QWRELOADOUT or PCODE.

- Seq: Sequential operational step number.
- Opcode: Operation code for the data-retrieval or computational operation to perform. See Appendix D.
- Operand: A reference to a Constant, a result stored in a Parameter Code, or another algorithm calculated by Parameter Code.
- Stk: The number of discrete values on the RPN stack after the operation completes.
- Comment: Text description of the operand, including chemical-logic reasons why this operation is performed.

Requesting output to a file will write an ASCII file, delimited with the TAB character, and require input of a filename. The columns in the tab-delimited file are the same as screen output.

3.6.8 Option 8 – Display the Parameter Method Table

Option 8, Display the Parameter Method Table, allows you to list the contents of the method-related reference tables. The information available for output from this menu option includes: parameter code, parameter name (long and short names), historical method code (prior to NWIS 4.6), method code, rounding (precision) array, method name, method description, method number, citation for the method, and long citation description for the method. You may select all parameter-method pairs in the output or specific parameters or may specify specific parameters and methods. Sample output can be found in *Appendix C.*

Note: You may only retrieve historical parameter information (those disabled for new data-entry) by retrieval of "all" or specific parameters.

For each parameter-method code pair in the parameter-method table, a rounding array is stored for a range of expected values. This rounding array is used when default rounding is selected for output (see *Section 3.4* for more information on output from QWDATA). More information about the parameter-method table is available in *Section 2.5.6*. The parameter-method table contains one 10-element integer array (PROUND) that contains the default rounding codes for each parameter-method pair. The magnitude of the greatest significant figure in a result determines which PROUND element (1–9) is used to round the result. The tenth element of the array (MAXDEC) indicates the maximum number of decimal places that may be used to display a value for the parameter-method combination. The elements of the PROUND array have definitions as shown the example below for parameter code 00010/method THM01, water temperature, with PROUND array: 0012333331.

PROUND element number	For values in the range	Display number of significant digits
1	<0.01	0 (values this small not expected)
2	>=0.01 - <0.1	0 (values this small not expected)
3	>=0.1 - <1.0	1
4	>=1.0 - <10.0	2
5	>=10.0 - <100.0	3
6	>=100.0 - <1000.0	3
7	>=1000.0 - <10000.0	3
8	>=10000.0 - <100000.0	3
9	>=100000.000	3
10	Max Decimal Places	1

For more information on rounding codes, see *Section 2.7.1 – Rounding* and *Tip Sheet 5.19: How can I round my results in QWDATA output?*

When you select Option 8, the menu on the following screen is displayed.

```
    1. Output parameter-method information (RDB delimited)

    2. Output parameter-method codes, precision array, and parameter
       long name

    3. Output parameter-method codes, precision array, and parameter
       short name

    4. Output parameter-method codes, precision array, parameter short
       name, and method name

Please enter (1,2,3,4, or Q to quit):
```

All four output options include a column named “newentry” that indicates if a parameter and method pair is disabled for new data entry. This column will be blank if the parameter-method pair may be used for data entry or “disabled” if forbidden. Sometimes, no data entry is allowed for a particular parameter, regardless of method; in this instance all method rows for the parameter will show the text “disabled” in the “newentry” column.

If you select Option 1, the output will include all of the available information for the parameter-method pairs selected in a tab-delimited output file. The output includes: parameter code, newentry column, parameter short name, parameter long name, a five-character method code, a historical one-character method code, method name, method description, a short citation for the method, a citation description, method source and number, the method precision array, and the method precision array owner. This type of output can be very difficult to read on the screen, so you might consider directing the output to a file for review in another program, such as Excel, when the program queries you for an output destination.

If you select Option 2, 3, or 4, you will receive the information listed in the menu item for your desired parameter-method pairs. You can direct the output to the screen or to a file that you can name for any of these three options.

You can enter the requested parameter-method pairs interactively or by using an input file. The format of the input file is described in *Appendix G*. Below are the queries when the parameter-method combinations are to be displayed on the screen and are entered interactively.

Please enter (1,2,3,4, or Q to quit): 1

Do you want the output to go to the terminal? (y,n, <CR>=y): y

Do you want to retrieve all or selected parameter-method pairs?
(enter "all" or <CR> for selected):

Do you want to enter parameter method pairs from the terminal? (y,n, <CR>=y): y

Enter parameter code-method code combinations (<CR> to quit):

Method code entry is optional. If method code is not included,
all method codes will be retrieved for that parameter. e.g.
00926
00930 PLA11

To retrieve a range of parameter codes, enter the following:
PCODE - PCODE on one line below. e.g. 00925-00935
1: 00915 _
2: 01040 – 01088
3: 00940 PLM58

When you enter selected parameters either from a file or interactively, the following tips might be helpful.

1. If the method code is not included, all method codes for the valid parameter code are included in the output.
2. There must be a space between the parameter and method code. If no space is included, an error message will appear that the input data are not in a valid format.

3. If a **range** of parameters is entered, invalid parameter codes may be used in the range and will be ignored. All valid codes within the range specified will be retrieved. Example:

   00025 – 01070

4. Parameters will be listed in numeric order in the output and are not determined by the order in the input file or the order when entered interactively.

3.6.9 Option 9 – Display Analyzing Entity and Collecting Agency Codes

Option 9, Display Analyzing Entity and Collecting Agency Codes, allows you to list the contents of the Protocol Organization Table. The same codes are used for either analyzing entities or collecting agencies. The information available for output from this menu item include: Analyzing Entity and Collecting Agency code, name, and historical fixed value code (prior to NWIS 4.6). A complete listing of this table is available in *Appendix K*.

When Option 9 is selected, the following menu is displayed.

```
 Display Analyzing Entity and Collecting Agency Codes

Do you want to retrieve all or selected codes?
(enter "all" or <CR> for selected; q=quit): ___
```

If you choose to retrieve selected codes, you can enter them interactively or by using an input file. The format of the input file should have one code in each row of the input file. The program will only find those codes that have an exact match in the reference table.

3.7 Option 7 – Utilities

The Utilities menu is used to complete several tasks that are not generally part of the common uses of QWDATA.

```
          QW DATA PROCESSING ROUTINE
YOU ARE USING WATER-QUALITY DATABASE NUMBER 01

        Utilities

 1 -- Change Data-Base Number
 2 -- Add new site or modify site information
 3 -- Station Change: Inventory, Change, or Delete
 4 -- Count Water Quality Records
 5 -- Set Analysis Status Flag
 6 -- Set Data Quality Indicator (DQI) Code
 7 -- Inventory DQI Codes
 8 -- Run qworphan program

98 -- Exit menu

99 -- Exit system

Please enter a number from the above list or a Unix command:
```

Utilities menu options.

3.7.1 Option 1 – Change Database Number

The Change Default Database Number utility allows the user to change the default number for water-quality databases.

3.7.2 Option 2 – Add New Site or Modify Site Information

Option 2 is used to add a new site to the NWIS SITEFILE database or to modify the site header information for an existing site. When you select Option 2, you are prompted by software described in Chapter 5 at *http://pubs.usgs.gov/of/2005/1251/.*

Any information you enter is entered into the NWIS SITEFILE database. The output from this entry is collected in a file named "HDRsIN"' and is available in your working directory. This input file is also described in Chapter 5 at *http://pubs.usgs.gov/of/2005/1251/.*

3.7.3 Option 3 – Station Change: Inventory, Change, or Delete

Instructions for using this program are located in Chapter 12 at *http://pubs.usgs.gov/of/2005/1251/.*

The station change program allows a user with proper access to inventory, delete, or change a station number. The agency code and station number are the primary keys used for identifying locations approved for WRD data collection. An entry in the SITEFILE is required for data stored in the NWIS databases. Updates that affect a station number are applied not only to the SITEFILE, but also to associated databases (QW, GW, ADAPS, and/or Water Use) where data for the site exist. If the program is used to delete a station number in the SITEFILE, the NWIS databases are searched, and data are located in the NWIS that are identified as having been collected at that site will be deleted. The delete transaction in the NWIS is an immediate delete. The only way to recover deleted records is by reentering them. An update to a station number is also performed in the SITEFILE and the associated databases. Updates should be closely coordinated and monitored within your Water Science Center, due to the possibility of affecting data in the NWIS and the national database.

3.7.4 Option 4 – Count Water Quality Records

Option 4 is used to count the number of records in the Water-Quality file for selected stations and optionally displays a list of the parameters present in all the analyses. When Option 4 is selected, the following prompts are displayed.

```
THIS PROGRAM LISTS THE COUNT OF QW RECORDS FOR A STATION

 DO YOU WANT A LIST OF PARAMETERS (USING ADDPC) ?

 DO YOU WANT TO ENTER SITE ID'S FROM THE TERMINAL (YES OR NO) ?

 DO YOU WANT THE OUTPUT

 TO YOUR TERMINAL(T) OR TO A FILE(F)?

PLEASE ENTER   T -- FOR TERMINAL
               OR  F -- FOR FILE.
```

Program to count Water-Quality records.

A list of parameters can be included in the output if desired. If you enter the station numbers from the terminal, then you must enter the agency code and station number for each site of interest. If the station numbers are entered from a file, the file format needed is described in *Appendix G.* If the output is directed to a file, provide a filename.

3.7.5 Option 5 – Set Analysis Status Flag

Option 5 is used by the person(s) responsible for water-quality data management to set Analysis Status for samples. Valid Analysis Status codes are described in *Appendix A, Table 5*. After selecting Option 5, the following submenu is displayed.

```
qwflag processing in database: 01

  Do you want to set the analysis-status code to:
     1. Unrestricted (U)
     2. Internal-use only (I)
     3. Proprietary (P)
Please enter (1,2,3,q): _
```

Program to set analysis status flag.

Usually, the flag is set to "**U**" to indicate that the sample is unrestricted. Analyses of local interest that are limited to internal uses may have the flag set to "**I**" to indicate that the sample is complete, but is not to be released to the public. After a selection is made from the submenu above, the program requires entry of record numbers either from the terminal or a file. The records can be identified by record number, or by station number, date, time, medium code, and agency code. If a file is used, the format should be the same as shown in *Appendix G*.

After successful completion, a message similar to the following will display briefly at the bottom of the screen.

Summary:
Number of records updated: 2
Number of records not changed due to matching analysis-status code: 0
Number of records skipped due to errors: 0

3.7.6 Option 6 – Set Data Quality Indicator (DQI) Code

Option 6 is used by the person(s) responsible for water-quality data management to set the DQI code. Valid DQI codes are listed in *Appendix A; Table 9.* The DQI code of "**S**" is the default setting. After selecting Option 6, the following submenu is displayed.

```
This program will set the DQI code for a given set of:
  station selection
  date selection
  measurement selection
  DQI remapping scenarios

Do you wish to identify samples by record_number (Y/N):
```

Program for water-quality data management to set the DQI code.

A "**No**" response will prompt you for station numbers. You can enter record and station numbers on the screen or from a file. The format for input files of station numbers or record numbers is in *Appendix G.* After station numbers have been entered, you are queried for a range of dates. The date prompts are:

```
Enter begin sample date/time (time is optional): (yyyymmddhhmm) 20000101
Enter end sample date/time (time is optional): (yyyymmddhhmm) 200101011200
```

Time is **optional** when providing the date range; if no time is entered, the software will include all results for the dates entered. If a begin date is entered without an end date, no records will be located. After the sample date range is entered, enter a measurement selection from the following list.

```
qwdqiflag -- enter measurement selection

You have 3 options:
  1 -- accept all parameters and method codes
  2 -- enter parameters, optionally with method at terminal
  3 -- load parameters, optionally with method from a file

Enter option desired (1-3,<CR>=1):
```

Program to enter measurement selection.

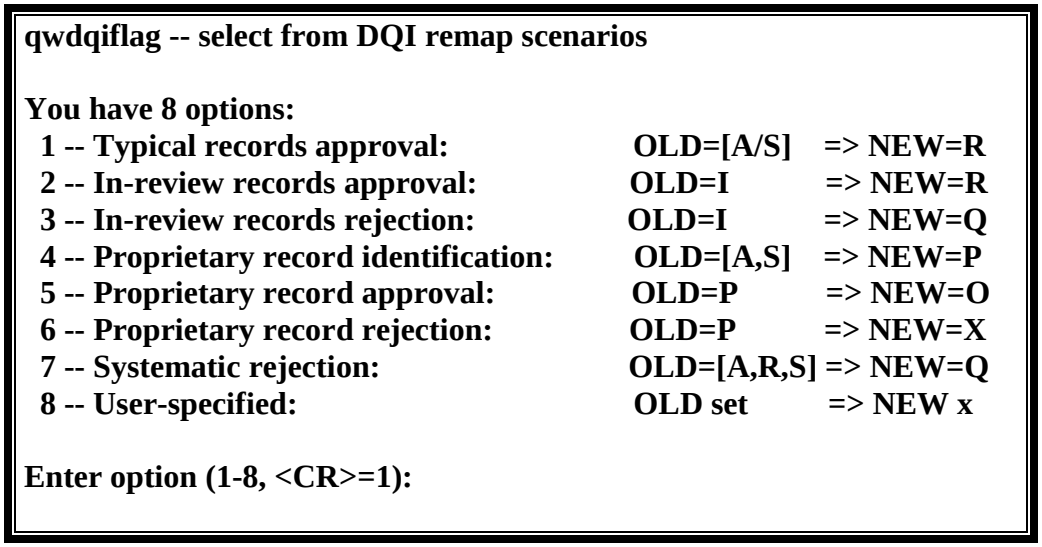
If you select **Option 1--accept all parameters and method codes--** as the measurement method, you will then enter a selection from the eight options listed below. After entering a selection, you must enter a filename for the report that contains the listing of the DQI remappings that will occur. In addition to this output file, a short report of the changes to be made to DQI codes is printed to the terminal. Before any changes are made to any DQI codes, you must verify that the

changes are listed in the output file. Review the report that describes the changes to be made before verifying the remappings.

If you select **Option 2--enter parameters**, **optionally with method codes--** as the measurement method, the program queries for individual parameter codes and associated method codes. Entering a specific method code is optional. If you do not enter a method code, then all method codes will be included for that parameter. After entering the parameter and method codes, you must make a selection from the eight options listed below. The report that contains the listing of the DQI remappings and updating of DQI codes is the same as described for Option 1.

If you select **Option 3--load parameters, optionally with method from a file--** from the menu above, the program queries for an input file that uses a format described in *Appendix G*. After entering the filename is entered, you must make a selection from the eight options listed below. The report that contains the listing of the DQI remappings and updating of DQI codes is the same as described for Option 1.

For each of these three options, eight options for DQI remapping scenarios are available as displayed on the following screen.



DQI remapping scenarios.

A report containing the selections for changing the DQI codes is prepared for you to review prior to applying the changes. An example of this report is included in *Appendix C*. It is recommended that you review this report before applying the changes to the DQI values. You can review the report by printing the file or viewing it in a separate window.

qwdqiflag specifications are complete.

A report will be generated listing the remappings that will occur.
You will be given an opportunity to review that report before the changes are made.

Enter name of file to hold report --
: dqi_report

The QW tables have been scanned.
Number of DQI codes to be changed: 341
Number of QW records: 50

A detailed report of DQI changes is available in the file--
dqi_report

Do you want the file spooled (Y/N,<CR>=N)?

NOTE! Please review the report before responding to the next query...

Do you want to update (Y) or cancel (N) (Y/N,<CR>=N)?

3.7.7 Option 7 – Inventory DQI Codes

Option 7 is used by the person(s) responsible for water-quality data management to check or inventory DQI codes. Valid DQI codes are included in *Appendix A; Table 9*. When this option is selected, the following queries are presented.

qwckdqi processing in database: 01

Do you want the report to be printed to the screen? (y,n, <CR>=y): n

Enter file to hold output: dqi_rpt.out_____

Enter water year? (q to quit, <CR>=all): 1970

Would you like to restrict your inventory by DQI? (y,n): _

If you want to restrict the inventory to specific DQI codes the following queries are presented.

Do you want to enter DQI codes from the terminal? (y,n, <CR>=y): _

Enter DQI codes (<CR> to quit)

1: Q
2: _

Would you like to receive a record number file of the DQI codes you selected? (y,n): _

Enter file to hold record numbers:
(<CR>=dqi_rpt.out.recno): _____

Enter file to hold the parameter names:
(<CR>=dqi_rpt.out.parnames): _____

A "**?**" entered in the DQI field results in a list of DQI codes and definitions. A <CR> returns you to the screen above.

DQI codes

A -- Historical data
S -- Presumed satisfactory
I -- Awaiting review
R -- Reviewed and accepted
Q -- Reviewed and rejected
P -- Proprietary, not reviewed
O -- Proprietary, reviewed and accepted
X -- Proprietary, reviewed and rejected
U -- Research or unapproved method/laboratory

The inventory is completed based on your input for the database number that you are using. An example of the report output is available in *Appendix C*. The parameter names file will include the following alpha codes in addition to the parameter codes that are part of your inventory request: SAMPL, DBNUM, STAID, DATES, TIMES, and MEDIM.

3.7.8 Option 8 – Run qworphan Program

Data relations exist in QWDATA where a record in one table may relate to one or many records in another table. These relations are described as being parent/child relations. When a "parent record" is deleted (or modified, as in the case of station change) from the database, the corresponding "child record(s)" should also be deleted (or modified). When the parent record is deleted, but the corresponding child records are not correctly deleted because of software bugs or improper use of SQL, "orphan records" are created.

The qworphan program allows the NWIS Database Administrator (DBA) to remove orphaned records that no longer belong in the database. The program may be run from a menu, or options may be specified on the command line. This interface gives you the flexibility to monitor qworphan's activity or to run it in an automated fashion, such as a cron job.

The qworphan program has two options. Option 1 deletes orphaned QW records that can be verified from a previously deleted site. Option 1 also provides a report summarizing any other orphaned QW records. Option 2 deletes all orphaned QW records.

The qworphan program operates on your currently selected numbered database.

Choosing Option 8 from the QWDATA utilities menu opens the following menu.

```
QW data found.
  qworphan
  This program removes Water Quality orphans from the database.
  Choose from the following options:
  1 -- Delete orphan records for deleted stations. This option provides
       a report for orphan records with modified or missing site
       information. It is recommended that you run this option first.
  2 -- Delete all orphan records regardless of site information.
       Warning: there is no way to review your changes or un-do them
       with this option.
  3 -- Quit qworphan.
      Please enter 1, 2, or 3:
```

3.7.8.1 Option 1 -- Delete Orphan Records for Deleted Stations

If you select Option 1, qworphan writes a message on the screen that it is deleting orphans of deleted sites. Both orphaned sample records and orphaned result records are deleted for sites that have been deleted.

After the orphaned records are removed, qworphan determines how many orphans of remaining sites it found and displays this information. The orphaned records of the remaining sites are not removed from the database using Option 1. The filenames of the output reports are displayed on the screen.

Output Reports:

Qworphan produces two reports: the first contains information related to a site's modification and the second contains information pertaining to the records for a particular site. Both reports contain the time they were generated, the user who ran qworphan, and the database number on which it was executed.

The file containing the site modification history is called *qworphan.stnchange.*<*date/time*>. It contains the station change log information for each station change log entry associated with samples in qworphan. Multiple orphaned records for a site result in one entry for this site in the station history report.

Like the station history program, this report shows both modern and legacy information from the station change log if such legacy information exists on your system. Because of the two different formats, some information will be missing from the older format and this is indicated by dashes.

The file containing a list of sample records is called *qworphan.recno.*<*date/time*>. This report contains one row for each sample that doesn't match an existing site. The report contains the following information:

- record number + database number (no spaces between),
- database number,
- station number,
- sample begin date/time,
- sample end date/time, and
- medium code.

When viewing this report, please note that the date displayed here is not in the same format displayed by the station change log report. The times are rounded to the nearest minute and converted from UTC to the local time for that sample. The format of the date/time for sample start and end dates is four-digit year, two-digit month, two-digit date, two digit hour, and two-digit minute. For example, a sample with a date of 01-Jan-2004 14:00:00, at a place in Mountain Standard Time zone, shows up as "200401010700." The sample output reports are shown in *Appendix C*.

If errors occur when the qworphan program is run, these errors will be included in either report. The errors relate to something that was wrong with the database while qworphan tried to write data to the report. Errors that occur while writing the station history information appear in the *qworphan.stnchange.*<*date/time*> report. Errors that occur while writing the QW sample information will appear in the *qworphan.recno.*<*date/time*> report. Errors that are serious or that occurred before generating the report are displayed on screen or arrive in email if qworphan was executed as a cron job.

3.7.8.2 Option 2 -- Delete All Orphan Records

This option removes all orphaned records from the database. After these records are deleted, the data cannot be recovered. It is highly recommended that you run Option 1 first and inspect the output reports before running Option 2.

Unlike Option 1, Option 2 does not give you any feedback on what during the process. All samples that are no longer associated with a site, including those where the site was modified, are removed from the database. There is nothing indicating how many orphans exist or how many were removed.

Option 2 produces one output file that contains the processing date, the name of the user running the program, and the database number. No other information is shown in this report. The name of this file is *qworphan.delete.errors.<date/time>*. After writing the qworphan delete report, the program displays the name of the delete report and returns to the qworphan menu. As with Option 1, error messages may appear on screen or in email if qworphan was run as a cron job.

3.7.8.3 Running qworphan by Using the Command Line

qworphan has a number of command line arguments that can be used to automatically cleanup the database.

- **--db_no <db_no>**

  <db_no> is a number from 01 to 99. qworphan can work on only one numbered database at a time. The --db_no <db_no> option is recommended when running qworphan interactively.

- **qworphan -1**

  This option runs qworphan as if you had selected Option 1, delete orphan records for deleted stations. Its behavior and messages are exactly the same as those of Option 1.

- **qworphan -2**

  This option runs qworphan as if you had specified Option 2, delete all orphan records. Its messages and behavior are the same as those of Option 2. The program will not allow you to choose both Option 1 and Option 2 at the same time.

- **--help**

  This option tells you how to run qworphan from the command line by showing you this list of options.

Examples:

Execute qworphan Option 1, database 01:

nwis qworphan --db_no 01 -1

Execute qworphan Option 2, database 05:

nwis qworphan --db_no 05 -2

Execute qworphan Option 2, database 02:

nwis qworphan -2 --db_no 02

Execute qworphan Option 1, using default database number:

nwis qworphan -1

If qworphan is run from a cron job, email is sent every time qworphan runs from this job. This email tells you that qworphan ran, how many orphans it found if the cron ran qworphan with the -1 option, the names of the qworphan reports, the locations of the qworphan reports, and any serious errors that may have occurred during the cron job. These are the messages that normally appear on screen when you run qworphan interactively.

3.8 Option 8 – Batch Processing

```
YOU ARE USING WATER-QUALITY DATABASE NUMBER 01

        Batch Processing

 1 – Enter batch-file data for logged-in samples (qwcardsin)
 2 – Enter batch-file data for all samples (qwenter)
 3 – Reload batch-file data, overriding DQI (qwcardsinxdqi)
 4 – Enter batch-file data with user-specified behavior (user-specified modes)
 5 – Review tab-delimited batch files
 6 – Edit tab-delimited batch files
 7 – Produce tab-delimited batch files

 98 -- Exit menu

 99 -- Exit system

Please enter a number from the above list or a Unix command:
```

Batch Processing menu.

The options in this menu work with batch files of water-quality data. Batch files are used for many purposes, such as entering data from the National Water-Quality Laboratory (NWQL) and other laboratories, entering data from another Water Science Center or agency, entering data from a field computer, entering data previously rejected by the batch-loading software, and making large-scale revisions to water-quality data. The most common application is entering data from laboratories.

Water Quality Data Transfer System

The QW Data Transfer System (QWDX) facilitates the transfer of analytical data from various USGS laboratories to the respective USGS customers or Water Science Centers (WSCs). A laboratory can upload all customers' data to a single spot (the QWDX). A WSC can obtain data from all its laboratories from a single spot (the QWDX), and the data will be in files formatted for batch entry to the QWDATA system. A database administrator should contact the QWDX Administrator to request access (email: GS-W QWDX Admin).

After laboratory data are retrieved from the QWDX server, the files can be batch loaded into QWDATA using one of the programs described below. Automatic retrieval and processing of data from the QWDX server can also be set up on a user-specified schedule (cron job). Further details and instructions are available from within the QWDX system.

Batch File Format

Pairs of tab-delimited files (typically named ***qwsample*** and ***qwresult***) are used for sample and result information. The pair of batch files contains all of the fields used for database storage of sample-level and result-level data. The related data in the file pair are connected by a "sample integer" generated when the two files are created. Although the sample integer does not have any meaning beyond the batch-file pair, it is critical to keeping the sample and result information properly connected. The sample and result file formats are defined in *Appendix F*.

The default behavior for the batch input programs is to look for batch files named ***qwsample*** and ***qwresult*** in the directory where the program is initiated. Options 2–4 of the Batch Processing Menu will only use the tab-delimited batch files named ***qwsample*** and ***qwresult*** in the directory where the program is initiated.

Environmental and Quality-Assurance Databases

Environmental and quality-control (QC) data are entered with the batch-entry programs available in the menu shown above. The batch programs will load the data into the appropriate database based on the sample medium code and the user-selected database. The user-selected database will control which environmental and quality-assurance databases are used during batch processing. A separate internal table named *env_qa* controls the link between databases designed to contain only environmental or only QC data. This internal table should be set up for use by your local database administrator. If you need help with *env_qa*, please send email to GS-W Help qwdata. Multiple databases used by NWIS are discussed in *Section 2.11*.

Data Entry Behavior

The behavior of the batch-input processes for the tab-delimited files (**Batch Processing menu Options 1–4**) are designed to be used for various tasks. The allowed sample transactions, protected result-level data, and the data types (laboratory and field) that can be updated for Options 1–4 are summarized in the following table.

Menu option	Modes			
	Allowed sample transactions	Results protected from overwrite by DQI	Data that can be updated	Produce ionic balance
1 Enter data for logged-in samples (qwcardsin)	Update only	Protected	Lab	Yes
2 Enter data for all samples (qwenter)	Any	Protected	Lab	Yes
3 Reload data overriding DQI (qwcardsinxdqi)	Update only	Unprotected	Lab	Yes
4 Enter data with user-specified behavior *Default modes shown may be changed by the user*	Any	Protected	Lab and field	Yes

Batch modes for different batch-menu options.

Most of the entries allowed in the batch-file fields are self explanatory or defined in the domain lists for the coded fields. They are also described in *Section 3.8.4* below.

The default setting for allowed sample transactions during specific batch processes is controlled for each NWIS installation by the "qw.conf" file. This file is consulted *only* when the UNIX command line is used with no behavior options specified or when the user-specified behavior (*Section 3.8.4*) is used. This file is located at /usr/opt/nwis/data/auxdata/qw.conf and can only be updated by user *nwis*. You may have to contact your local NWIS DBA to update this file. A master version of this file is available at /usr/opt/nwis/data/auxdata/qw.conf.master. To set the default for allowed sample transactions in the "qw.conf" file, add a noncomment line that begins with the text "transaction_type:," followed by one or more space characters, then one of the following options.

Option	Mnemonic	Behavior
update_only	QWCARDSIN	Only modification of existing sample records is allowed (including modification and addition of results).
add_only	- -	Only addition of new samples records is allowed.
any	QWENTER	Addition, deletion, and modification of sample and/or result records is allowed.
verify_only	- -	No database updates are allowed.

If the qw.conf file is incorrectly formatted or an invalid option is specified, then the default option is "update_only."

Batch file programs can also be invoked from the UNIX command line (or cron job). When this approach is used, the behavior options specified on the command line are used. If invoked from the UNIX command line and no behavior options are specified on the command line, then the file named "qw.conf" is consulted to determine the appropriate behavior.

Some "tricks" for using the batch programs might be useful.

1. Set a remark code to "X" to delete a result and all of the associated attributes.
2. To delete value qualifier code(s), set the value qualifier code to "#" in the batch file. For example, to delete value qualifier codes of "aim," the value qualifier code should be "#" in the batch file. A "#" in the value qualifier field will delete all laboratory value qualifier codes but will NOT delete field value qualifier codes (f, e, &, g, j, and k) unless you choose the "field+lab" option in the user-specified batch behavior mode.
3. To delete an entire sample, enter "DELETE" in the aquifer-code field (GUNIT).
4. If a time datum is included in a batch file, the time datum will be updated in the database, but the UTC sample time will not be changed. The result may not be desired, so consider carefully before including a time datum in a batch file. If you want to change the stored time, consider changing the time using *Modify Sample or Results (Section 3.2).*
5. When including values that require scientific notation, the following format must be used: ##E## for positive exponents and ##E-## for negative exponents.

Record of Actions Taken (WATLIST)

A record of the actions taken when a batch file is processed with a batch-file program is written to the file named ***watlist.yyyymmdd.hhmmss***. The records created, modified, or deleted, the cation/anion balance (if it can be computed), and any error information generated for samples and results are recorded in these files.

The first page of every WATLIST file lists the names of the input batch files, the names of the batch files after processing, the date and time the files were processed, the userid of the person who processed the batch files, any error messages resulting from checksums or file concatenation, the environmental and QA database numbers used during batch processed, the batch modes used during processing, and whether or not an ionic balance was enabled.

The WATLIST for a sample has four main sections and information about a sample is listed in the following order.

1. Sample header information (always printed)
2. Errors, messages, and reports (printed when needed)
    - Sample-level critical failures (rejected samples)
    - Result-level critical failures (rejected results)
    - Sample-level errors
    - Result-level errors
    - Sample-level updates
    - Quality-assurance report
        a. Chemical verification checks

            Results for parameters that are greater than defined USEPA drinking-water alert limits in *Appendix E* will be listed here. As of NWIS 4.8, a result with any remark code other than a less-than symbol (<), M, N, or U will be compared to the list of defined limits. If the result is greater than or equal to the defined limit, an error message will appear.

            - A complete list of which verifications and validations are performed is available in Appendix M.

        b. Cation/anion balance (printed only if the ionic-balance mode is enabled and at least one cation and one anion constituents are present.) *Appendix L* lists parameters used in the ion-balance table.

3. Table of results (always printed)

Attribute	Column heading
Result status	*
Parameter code	PCODE
Method code	MET
Parameter short name	PARAMETER NAME
Parameter units	UNITS
Result value	VALUE
Remark code	REM
Value-qualifier codes (3)	QUAL CODES 1 2 3
Null-value qualifier code	NVQ
Data quality indicator code	DQI
Rounding code	RND
Analyzing entity	ANL-ENT
Laboratory standard deviation	LSDEV
Reporting level	RPLV
Reporting-level type code	RLCOD
Laboratory preparatory date	PRP DATE
Laboratory preparatory set number	PREP-SET NO
Laboratory analysis date	ANL DATE
Laboratory analysis set number	ANL-SET NO

4. Footnotes that define some of the codes (remark, DQI codes, reporting-level codes, value-qualifier codes, method codes, and analyzing-entity codes) used in the table of results.

The first column in the table of results indicates the status of the result and has a column header of "*." This one-letter code indicates what happened to that result during the batch processing. For result data that contain updated information, two rows will appear in this section. The first row contains the updated information and prints the entire row as the data are stored in the database with a status of "U." Immediately following the updated row is a row with status of "P."

Code	Definition
N	New result
U	Updated result
D	Deleted result
P	Previously stored result (before update)
X	Result transaction failed due to error in input data
C	Calculated result
blank	Result already stored and no update was made

Samples that are not processed are shown in the WATLIST file and are differentiated from processed samples by a blank record number field and an error message stating why the sample was not processed. The text "Unstored" will be printed where the record number normally appears if the batch verification mode is in effect (*Section 3.8.4*). The text "Deleted" will be printed where the record number normally appears if the entire sample is deleted. The WATLIST is automatically sorted by project code. Examples of the WATLIST output can be found in *Appendix C*.

Rejected Samples and Results

Samples will be rejected for the following reasons: (a) invalid format, (b) invalid agency code, site ID, dates, times, or medium code, (c) illogical combinations of begin and end dates and times, or (d) results for samples that do not already exist in the water-quality file (except menu options 2 and 4), and the transaction mode selected from the menu does not allow addition of samples. For each sample rejected due to a failure of the input data at the sample level, all results for the sample also are rejected. The sample and result records for the rejected samples are written to batch-format files identical in format to the input file.

Result transactions will be rejected for the following reasons: (a) improper format, (b) invalid code for any of these attributes: parameter code, remark code, method code, or null-value qualifier code, (c) update for a DQI-protected result was not enabled by the batch mode selected, (d) addition of the result would cause more than 500 results for the sample, (e) the value is non-numeric, (f) a null value is not accompanied by a null-value remark or null-value qualifier, (g) a non-null value is accompanied by a null-value remark or null-value qualifier, (h) a negative value for the supplied parameter code is disallowed, (i) an invalid fixed value is supplied for a fixed-value parameter (see *Appendix B*), or (j) inappropriate attributes (such as a remark code) are supplied with a fixed-value parameter.

If a single result fails, other results for the same sample will be processed. For each result rejected due to a failure of the input data at the result level, the parent sample record is written along with the rejected result to batch-format files identical in format to the input file.

If no transactions (sample or result) are rejected, no additional batch files are created. The rejected sample and result files can be reprocessed by initiating one of the batch input programs after the files have been corrected.

The files ***rejected.sample.yyyymmdd.hhmmss*** and ***rejected.result.yyyymmdd.hhmmss*** are created when samples are rejected from a ***qwsample/qwresult*** batch-file pair.

A "#" followed by a sample integer is used to insert error messages in the rejected sample and result files. The error message is included before the record causing the error. The format of the error messages in the sample file is:

#SINT<tab>error message

The format of the error messages in the result file is:

#SINT<tab>Result Rejected<tab>Parameter code error message

These error messages are treated as comments and ignored by the batch input programs. Menu Option 5 to review or Option 6 to edit the tab-delimited batch files will not show the error messages either.

Command Line Options

qwbatchinteractive, qwbatchload, qwcardsin, qwcardsinxdqi, or qwenter

Allows you to choose what processing program defaults will be used. Note**: If any of the options below are used in conjunction with a program name, the options will overrule the defaults for that program.**

-data_to_update lab, field, or any

Allows you to select the type of data that can be updated during batch processing. Choices are update lab-only fields ("lab") or field and lab fields ("field"), or any fields ("any"). "Any" might be used if you wanted the incoming batch file to update any field and not just lab-allowed fields and implies field and lab fields.

-database NWIS database name

Allows you to select which NWIS database will be the target of the batch-entered data. This option will likely not be used in a typical NWIS installation.

-db_no database number

Allows you to specify a database number (the default setting is the user's default database or database 01 if the user doesn't have a default database). This might be useful for entering data into an alternate database.

-dqi_protection yes or no

Allows you to knowingly protect or allow updates to results. If the entry is "yes" then results will not be overwritten if the DQI code is ARQOX. Otherwise, the results will be updated.

-ionic_balance_rpt yes or no

Allows you to suppress the ion balance report in the watlist file.

-custom_alerts xx, yy, all

Allows you to specify a list of custom alert limit files to validate the data against. The list can be the single word "all" to use all files or a comma separated list of file numbers. The custom alert limit files are located at /usr/opt/nwis/data/auxdata/qw_alert_limits.

-tab_delimited_files filename(s)

The list of delimited files containing data to load. Only the sample filenames are to be listed. They must contain "sample" in their filename, as "sample" will be replaced in the search with "result" to locate the corresponding results file. The text "sample" and "result" in the pair of filenames must be in either all upper-case or all lower-case letters.

-transaction_type update_only, add_only, any, verify_only, none

Allows you to set the batch mode to update only to existing records, add only new records to the database, complete any transaction, or only verify the batch file being processed. Using the none option will copy the files and rename them "qwsample" and "qwresult."

-help Display a help screen and quit.

3.8.1 Option 1 – Enter Batch-File Data for Logged-in Samples

This option runs ***qwcardsin***, a program that *updates* sample records with sample and result information from tab-delimited batch-file pairs. Thus, an entry for each sample (environmental and QA) must already exist in NWIS.

Generally, ***qwcardsin*** is used to enter the NWQL or other laboratories' transferred data into NWIS. The user will "point" to the appropriate environmental database number. QC data will be separated and written to an associated QA database.

3.8.2 Option 2 – Enter Batch-File Data for all Samples

This option runs ***qwenter***, a program that *enters* or *updates* analytical data into NWIS from tab-delimited batch-file pairs. This program is different from ***qwcardsin*** in that a record for a sample does not have to be in the database for the data to be successfully processed.

This program may be used to update existing records with USGS laboratory analytical data, create new records, add analytical data from non-USGS sources, and perform limited editing functions. Use of ***qwenter*** to create records has the potential to create unintended records instead of updating the intended records if there is an error in the key identification fields (site ID, date, time, and medium code). These erroneous records are sometimes difficult to detect and can be time consuming to repair. The appropriate time to use ***qwenter*** is when field crews have been shipping samples from the field without the opportunity to login the samples into NWIS, and a WATLIST is needed to review the laboratory results during the period of time when reruns are still possible. Situations where only new records are intended, such as loading data from another agency, are best handled using the user-specified batch behavior menu option using the setting "Transactions allowed: Only additions of new samples" as discussed in section 3.8.4.

To appropriately use ***qwenter***, the user will "point" to the appropriate environmental database number. QC data will be separated and written to an associated QA database.

3.8.3 Option 3 – Reload Batch-File Data, Overriding DQI

This option runs ***qwcardsinxdqi***, a program that updates sample records with sample and result information from batch files and overrides any DQI values (*Appendix A, Table 9*) that would have protected existing values from update. This program is a modification of the ***qwcardsin*** program, so an entry for each sample (environmental and QA) must already exist in NWIS. The result DQI codes will default to S except for results transmitted with any other DQI code.

Generally, this program will be used to enter reloaded data from the laboratory or other large-scale changes to the water-quality data. The user will "point" to the appropriate environmental database number. QC data will be separated and written to an associated QA database.

3.8.4 Option 4 – Enter Batch-File Data with User-Specified Behavior

This option provides an interactive, screen-oriented, batch-precursor program for the expert user to set batch modes. The following screen is displayed when the Batch Processing, Option 4, "Enter batch-file data with user-specified behavior" option, is selected.

Processing batch updates into environmental database 01, QC database 02
Optional Batch-behavior Modes

1.	**Filename:**	**qwsample**
2.	**Transactions allowed:**	**_ Only updates to samples (QWCARDSIN)** **_ Only additions of new samples** **X Any transaction (QWENTER)** **_ Verification only, no transactions stored**
3.	**Results protected by DQI:**	**X Yes** **_ No**
4.	**Data that can be updated:**	**_ Lab only** **X Lab+Field**
5.	**Prepare ionic balance:**	**X Yes** **_ No**
6.	**Include user-specified alert limits:**	**_ Yes** **X No**

Select mode to change or <CR> to continue, or 'Q' to quit:

The screen displays the environmental and QC database numbers that will be used. The default modes are indicated with an "X" in the menu shown above. You have the option to change the default behavior modes, continue, or exit the program. You can change behavior modes for: the filename, the transactions allowed, whether or not the results are protected by DQI codes, the type of data that can be updated (lab only or lab + field), whether or not an ionic balance is prepared, and whether to compare the results to customized user alert limits. The filename entered must contain the word "sample."

Some sample and result-level fields are considered "lab" fields. When "Data that can be updated: Lab only" is selected, data that originate with the field office cannot be updated. The following sample-level fields cannot be updated when "Lab only" is selected.

Column name	Description
agency_cd	Agency code
site_no	Station identification number
sample_start_dt	Sample start date
sample_end_dt	Sample end date
medium_cd	Medium code
project_cd	Project code
aqfr_cd	Aquifer code
samp_type_cd	Sample type
anl_stat_cd	Analysis status
hyd_cond_cd	Hydrologic condition
hyd_event_cd	Hydrologic event
tissue_id	Tissue sample identifier
body_part_cd	Body part code
field_sample_cm_tx	Field sample comment
tz_cd	Sample time datum
tm_datum_rlblty_cd	Time datum reliability code
coll_ent_cd	Collecting agency code

The following result-level field cannot be updated when "Data that can be updated: Lab only" is selected.

field_result_cm_tx	Field result comment

Additionally, some value-qualifier codes cannot be updated in "Lab only" mode, because they are reserved for use by the WSC's. Finally, only results having DQI codes of S, I, P, or U are allowed to be updated or written in "Lab only" mode. For more information on value-qualifier and DQI codes, see *Appendix A*.

The four types of transactions below are allowed.

1. Only updates to samples (qwcardsin). This is the same mode as when the Batch Processing, Option 1, "Enter batch-file data for logged-in samples" option is selected.
2. Only addition of new samples. This is the mode used for the addition of new samples to the database. This option cannot be used for updating existing samples.
3. Any transaction (qwenter). This is the same mode as when the Batch Processing, Option 2, "Enter batch-file data for all samples" option is selected.
4. Verification only, no transactions stored. This capability provides for a "dry run" of the batch program. This mode can be useful for checking data from an external source or for cleaning up data prior to an attempt at storage in the database. The WATLIST created when the program is run with verification mode has the following characteristics.
   - Diagnostic messages generated from the input transactions are printed as usual, with the following exceptions.
   - The sample record number is reported as "Unstored."
   - When the sample from the batch file is not currently stored: the "Number of parameters" stored is reported as zero and the following message is printed above the listing of results.

```
==================================================================
VERIFICATION MODE:  NO NEW RECORD CREATED.
==================================================================
```

When the samples from the batch file is already stored, the "Number of parameters" printed is the number currently stored. The "Database Number" indicates where the matched stored sample was found, and the following message is printed above the listing of results.

```
==================================================================
VERIFICATION MODE:  NO UPDATES STORED FOR RECORD NUMBER xxxxxxxx
==================================================================
```

Rejected sample and result files are created in verification mode, but these files contain only those records that would have been rejected if the user had attempted to store the data.

To compare the results to one or more user-specified alert limits, set option 6 to "Yes." The following dialogue will appear:

```
Enter alert limit file number(s), comma separated, or "all" to use
all available files (? to search, <CR>=none): _____________________________
```

If "all" is selected, all valid alert limit files will be used. A list of file numbers selected is echoed to the screen but this list is truncated to eight file numbers. A detailed description of how to use the user-specified alert limit option is in *Section 3.3.5.*

3.8.5 Option 5 – Review Tab-Delimited Batch Files

Option 5, Review tab-delimited batch files, is used to review tab-delimited batch input files. The default filenames are ***qwsample*** and ***qwresult,*** but any appropriate filenames may be entered.

The sample and result data are combined and displayed to the terminal screen (T) or saved to a file after the names of the sample-level and result-level tab-delimited batch files are entered. If the files are displayed to the screen, you can set the number of lines displayed at one time. The default number of lines displayed on the screen is 24.

qwlistbatch – review TAB-delimited batch input files

Enter pathname of input sample file (<CR>=qwsample, q to quit):

Enter pathname of input result file (<CR>=qwresult, q to quit):

Do you want [132 chars] to terminal (T) or to a file (F) <<CR>=T)
Enter number lines available on screen (<CR>=24):

Move through the records on the screen with carriage returns, and enter a "Q" to quit the review.

The combined sample and result data also can be saved to a file (F), and you are prompted for the name of a file to store the formatted sample and result data. The output file format contains the same information as the screen display, the names of the tab-delimited batch files used, and the date the output file was created. The heading information shown below is present at the top of the file output.

```
1Batch Transaction Files -- Processed: 20040520 134647
  Sample: qwsample
  Result: qwresult
```

Note: If you enter a "result" filename that contains none or some, but not all of the corresponding results for the "sample" file, then only the matching sample and results data will be displayed. For example, you might try to open an edited result-level file and a nonedited sample-level file. A message such as this is displayed, "One or more result records with no sample record preceding sample: 886918."

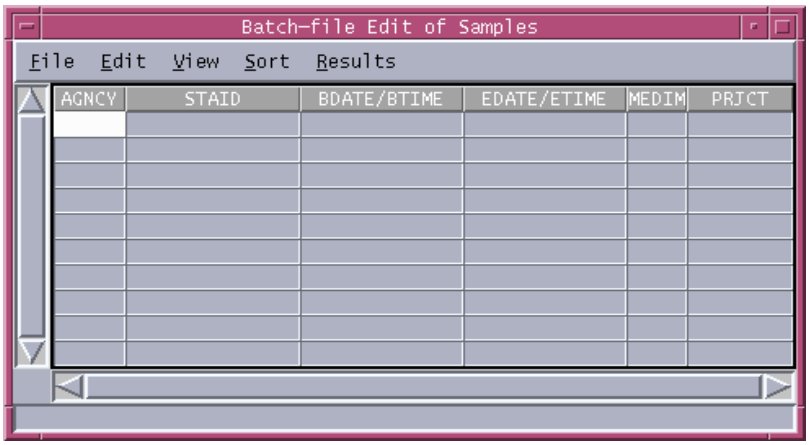
An example output file is shown on the following page.

```
TRAN NO:    1
                          USER  AGCY                TIME                                                                  GEOLOGIC                BODY
                                                                                                                                                PART  COLLT
 SINT                     CODE  CODE  SITE NUMBER    DATUM  START DATE   END DATE     MED LAB NO  PROJECT      UNIT    CODES  TU ID ID   AGNCY     SAMPLE IDENTIFIER
 ---------------------------------------------------------------------------------------------------------------------------------------------------------------------
 20060427154519000001    MT   USGS  06305700              200402031645              SB  0400023 8620DIR05           U999            USGS-WRD
 Sample Field Comment -- Kinsey,Morgan
 Sample Lab Comment   -- 0400023 recvd 2-07-04

                          M                                                  D  N
 PARM                     E      R            VAL   RPT LEV        RPT      Q  V
 CODE   VALUE        RMK  T      D   LSDEV    QUAL    VALUE       LEV CD    I  Q  ANL-ENT   PREP SET #    ANL SET #    ANL DATE  PREP DT
 ---------------------------------------------------------------------------------------------------------------------------------------------
 00025  665                      3                                          S     USGS-WRD
 00300  15.6              LUMIN  3                                          S     USGS-WRD
 00400  7.96              PROBE  2                                          S     USGS-WRD
 00403  8.18              EL006  2                    0.1          MRL      S     USGSNWQL                PCA04041A    20040210
 90095  633.3             WHT01  3                    2.6          MRL      S     USGSNWQL                PCA04041A    20040210
 00095  643                      3                                          S     USGS-WRD
 00020  -2                       2                                          S     USGS-WRD
 00010  0                        1                                          S     USGS-WRD
 00915  63.4000           IP105  3                    0.01         IRL      S     USGSNWQL                ICPOE04043A  20040212
 00925  37.9000           IP105  3                    0.008        IRL      S     USGSNWQL                ICPOE04043A  20040212


Enter Q to quit, <CR> to continue:
```

Example of Review Tab-Delimited Batch Files Output.

3.8.6 Option 6 – Edit Tab-Delimited Batch Files

Option 6, Edit tab-delimited batch input files, will bring up a separate window to let the user edit the sample and result data with a spreadsheet-like tool similar to commercial-off-the-shelf spreadsheet applications, including the ability to resize and move windows. The initial batch-editing window is shown in the following image.



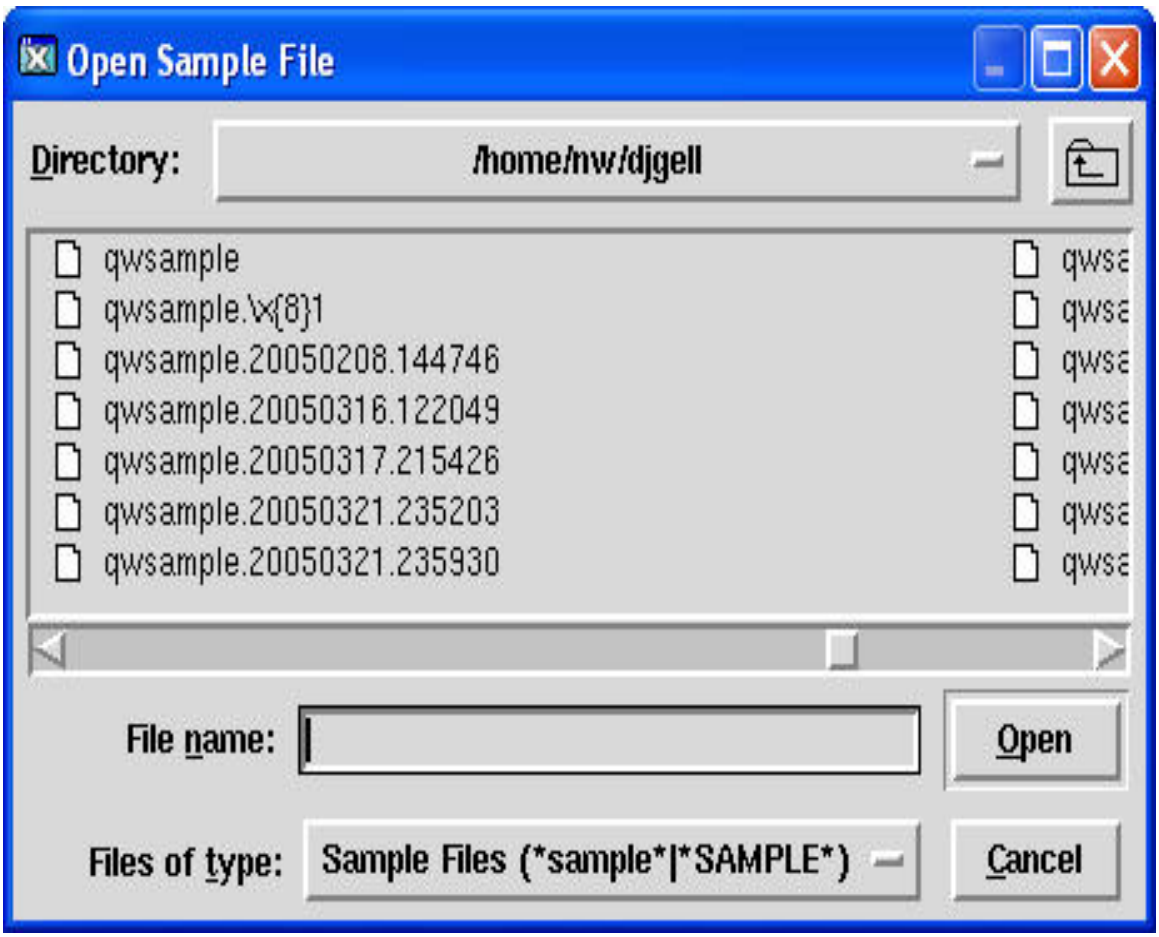
Drop-down menus are available for File, Edit, View, and Sort functions, and displaying the contents in the Results file related to the sample file. **Note: If you experience problems with viewing the drop-down menus near the bottom of your screen, you may have to change your UNIX environment variables.** Submenus for each of these are shown below.

- File
  - o New
  - o Open
  - o Save Samples and Result
  - o Save Samples and Results As…
  - o Exit
- Edit
  - o Undo
  - o Redo
  - o Find/Replace
  - o Cut
  - o Copy
  - o Paste
  - o Insert Row(s)
  - o Delete Row(s)

- View
    - o A list of all of the column headings is presented for selection
- Sort
    - o A list of all of the column headings is presented for selection
- Results
    - o For Selected Sample
    - o All Results

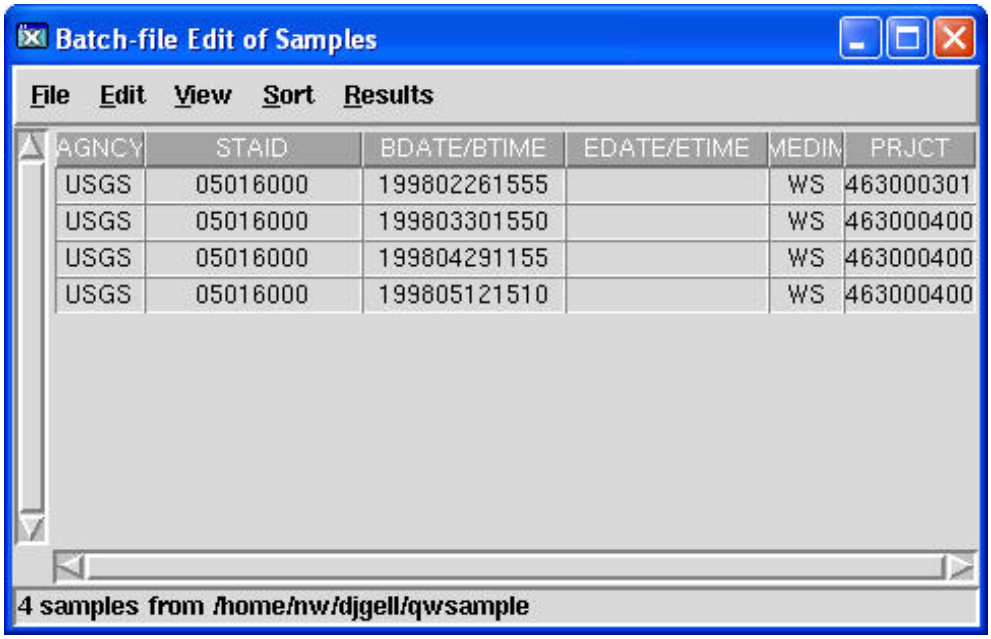
The program automatically recognizes similarly named, linked pairs of files with names containing the text "**sample**" and "**result**," although files with other names also can be opened.

Refer to the image below. The button for "Files of type" controls whether only filenames containing the text "**sample**" are displayed or if all filenames are displayed. In the former case, when a sample filename is entered or selected, the program automatically finds and opens a similarly named result file (by looking for similarly named file, swapping the text "**result**" for "**sample**"). In the latter case, the user manually identifies the filename containing the corresponding results. The user may change to a different directory using either of the two buttons adjacent to the word "Directory" at the top of the window.

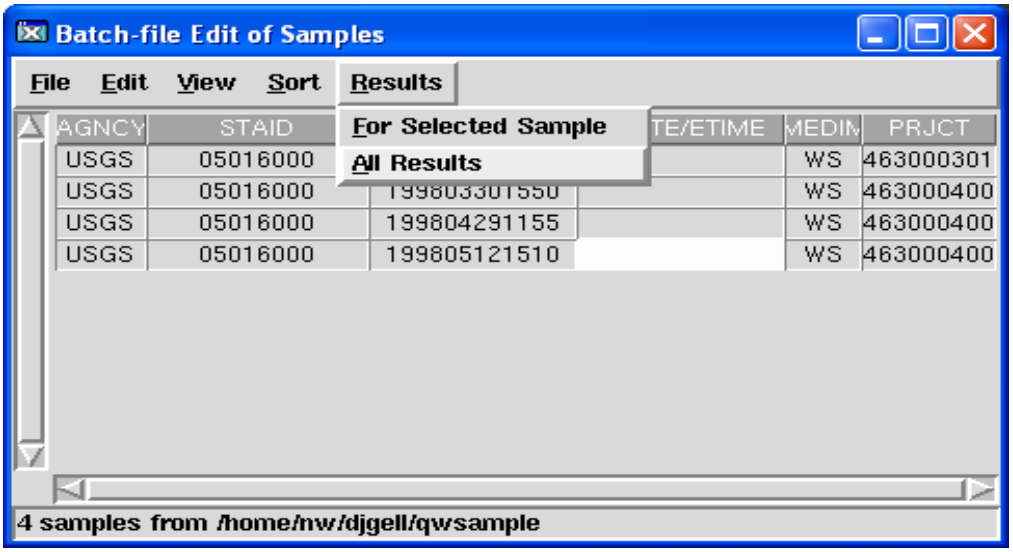


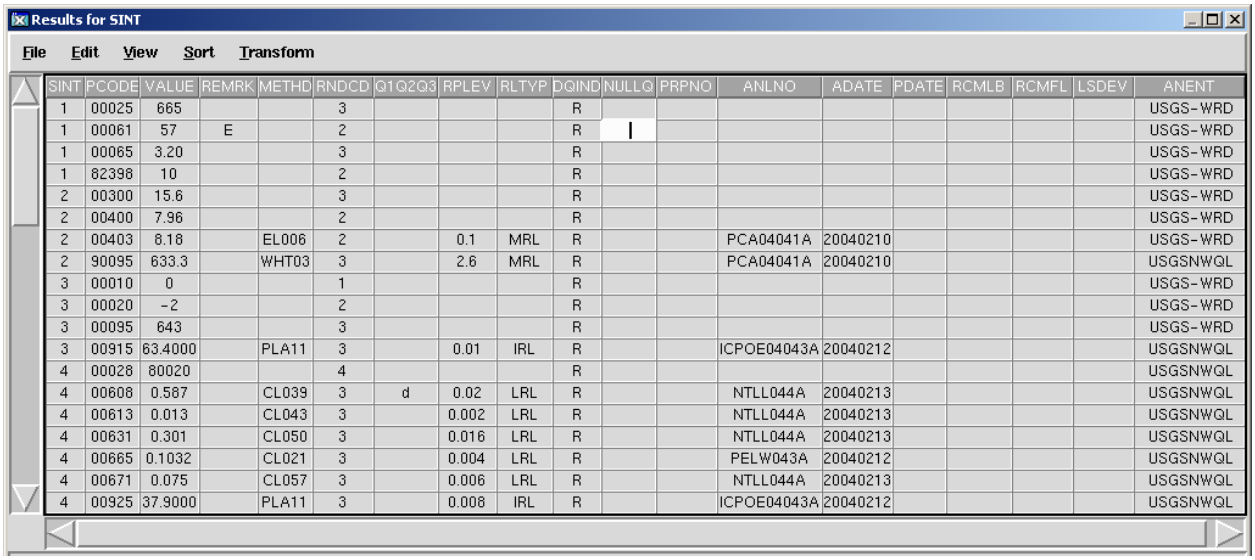
Note: The program has no way to identify any particular file as containing valid batch-format samples or results. The user must ensure that the appropriate filename is supplied. Using an incorrect filename or supplying the filenames in the wrong order can cause the batch editor to behave in a peculiar manner.

Once a file has been selected, the spreadsheet cells are populated, as shown in the following image.



One or more samples can be selected by "clicking" on the sample integer (SINT) cell of the desired sample or samples, which highlights the cell. Results for all or selected samples can be chosen, and the results can be displayed in a separate window as shown below.

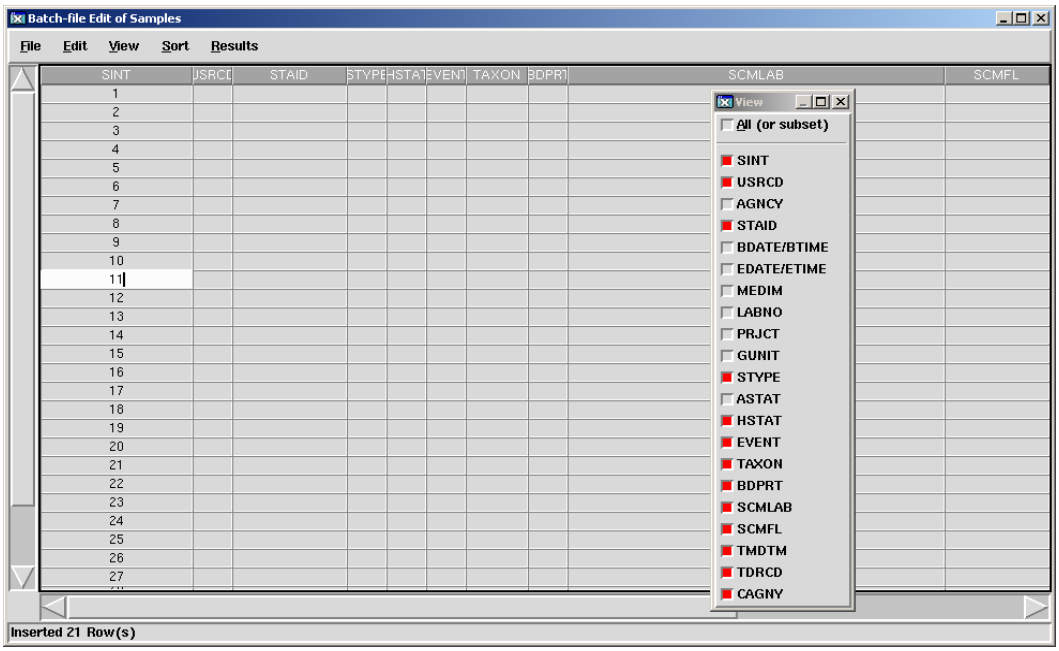




SINT	PCODE	VALUE	REMRK	METHD	RNDCD	Q1Q2Q3	RPLEV	RLTYP	DQIND	NULLQ	PRPNO	ANLNO	ADATE	PDATE	RCMLB	RCMFL	LSDEV	ANENT
1	00025	665			3				R									USGS-WRD
1	00061	57	E		2				R									USGS-WRD
1	00065	3.20			3				R									USGS-WRD
1	82398	10			2				R									USGS-WRD
2	00300	15.6			3				R									USGS-WRD
2	00400	7.96			2				R									USGS-WRD
2	00403	8.18		EL006	2		0.1	MRL	R			PCA04041A	20040210					USGS-WRD
2	90095	633.3		WHT03	3		2.6	MRL	R			PCA04041A	20040210					USGSNWQL
3	00010	0			1				R									USGS-WRD
3	00020	-2			2				R									USGS-WRD
3	00095	643			3				R									USGS-WRD
3	00915	63.4000		PLA11	3		0.01	IRL	R			ICPOE04043A	20040212					USGSNWQL
4	00028	80020			4				R									USGSNWQL
4	00608	0.587		CL039	3	d	0.02	LRL	R			NTLL044A	20040213					USGSNWQL
4	00613	0.013		CL043	3		0.002	LRL	R			NTLL044A	20040213					USGSNWQL
4	00631	0.301		CL050	3		0.016	LRL	R			NTLL044A	20040213					USGSNWQL
4	00665	0.1032		CL021	3		0.004	LRL	R			PELW043A	20040212					USGSNWQL
4	00671	0.075		CL057	3		0.006	LRL	R			NTLL044A	20040213					USGSNWQL
4	00925	37.9000		PLA11	3		0.008	IRL	R			ICPOE04043A	20040212					USGSNWQL

Note: If a new result is added to the results file BEFORE a corresponding sample row is entered, the result row will not be saved. *Always* create the new sample row, before creating new result rows.

Visibility of specific columns in either the sample or results window may be adjusted by selecting the "View" menu. A "tear-away" version of the "View" menu is available by clicking on the dashed line near the top of the expanded "View" menu. This will allow you to keep the column options visible on top of the sample or results windows. Show or hide columns by selecting the box adjacent to the column name. Selections marked with a red square are visible in the active window.



To use the "Find and Replace All" function in either the sample or result window, click "Edit" then "Find/Replace." Next fill in the find and replace boxes with your desired changes. Select the column to search and replace by clicking on the column heading. Then click "replace all."

In the Results window the additional pull-down menu for "Transform" is available and contains the following options:

- Transform
    - o Add,
    - o Subtract,
    - o Multiply,
    - o Divide.

At least one cell must be selected in the Results window to select a transform option. In addition to selecting a transform, you must enter a "Numerical Factor," which is the number you would like to add to, subtract from, multiply by, or use to divide the value in the cell you selected. For example, if you want to add 10 to a result value, you would select the cell, then select "Add," enter "10" in the "Numerical Factor" field, and select "OK."

In summary, batch-file editing options in the spreadsheet include:

- Using the mouse cursor to "Point and click" to select rows, columns, or cells;
- Navigation from one cell to the next using the tab or arrow keys;
- Sort columns while still retaining the matching sample integer (SINT);
- Shortcuts are available for use within the batch editor including:
    - Ctrl-c to copy the contents of rows or cells
    - Ctrl-a to select the entire contents of a cell
    - Ctrl-v to paste
    - Ctrl-left (or right) arrow to move within a cell
    - Ctrl-y to repeat the previous action
    - Ctrl-x to cut the contents of cells or rows
    - Ctrl-z to undo the previous action
    - Ctrl-y to redo the previous action
- Search for a string of characters or numbers in the spreadsheet;
- Insert or delete rows in the sample or the results spreadsheet. If a sample row is deleted, the corresponding rows in the results spreadsheet are also deleted.
- Perform simple math calculations on any cell in the results table (add, subtract, multiply, divide) using the "Transform" pull-down menu;
- Files are saved from the sample-level window. If the associated result-level file is open, it should be closed prior to attempting to save the sample-level file.

- Files can be saved after editing or files can be "Saved As" to give files different names. It is important to remember to use a naming convention of "*qwsample*._____" because the corresponding result-level file will automatically be saved with the same extension; and
- The "Exit" command can be used to exit out of spreadsheets without saving.

3.8.7 Option 7 – Produce Tab-Delimited Batch Files

This option is used to produce ***qwsample*** and ***qwresult*** files from the database. The format of these files is described in *Appendix F*. The program will use record numbers or agency code, station ID, date, time and medium code to generate the output file. This information can be entered from the terminal or from an existing file. The format of the optional input files is described in *Appendix G*. If you enter the record numbers interactively, the behavior used is described in *Section 3.3.4*. Records cannot be retrieved from multiple databases during a single retrieval. If record numbers are in the format ########db, where "db" is the database number, then only records from the selected database will be retrieved. You might not retrieve the records you expect. The output files can be specifically named or defaulted to ***qwsample*** and ***qwresult***.

The local "*User Code*" (*Section 2.4.21*) that is included in the ***qwsample*** file also may be specified in the qw.conf file. On a separate line, enter the key word "customer-code," followed by one or more spaces, and then enter the default User Code. Set the User Code to the appropriate alphanumeric code for your Water Science Center. For example, an entry for Montana would look like "customer-code: MT." If a default is not specified in the qw.conf file, then *UNSPECIFIED* is inserted in the User Code field.

3.9 Miscellaneous Programs

Some programs that can be used with QWDATA are available as command line prompts, but the programs are not available from within the QWDATA menus. The programs discussed in this section can be used to manipulate tab-delimited batch files and, by using a batch process, can be used to convert RDB files to Microsoft Excel format and adjust the date-time for stored sample records.

3.9.1 Program to Concatenate Tab-Delimited Batch Files (qwcat)

Initiate the program to concatenate multiple pairs of "qwsample" and "qwresult" files into a single file pair by typing the following at the command line prompt:

qwcat [-q] file1 [file2 .. fileN] .

Where:

"-q" is an optional argument that causes suppression of some of the messages written by the program, and

"file1 file2 fileN" is a mandatory list of filenames for NWIS-QW tab-delimited sample files or a shell-interpreted wildcard string. The list might contain only one filename, which is useful for validating the contents of the batch. The program will determine the filename of each matching NWIS-QW result file by replacing the text "sample" in the sample filename with the text "result."

An example of this command is:

qwcat rejected.sample* ,

where "rejected.sample*" is a shell-interpreted wild-card string that matches all files in the current directory that begin with the text: "rejected.sample."

Output is written to the current directory in files named "qwsample.cat" and "qwresult.cat." Any existing files of these names are renamed using a current date-time suffix. The qwsample.cat/qwresult.cat files will have sample integers renumbered to 1, 2, 3, etc. The qwresult.cat file will include the results ordered by the parameter code within each sample. The following errors can cause the program to stop.

- No write access to the current directory.
- Inability to rename preexisting output files: "qwsample.cat" and "qwresult.cat."
- Inability to open files in temporary directory (/tmp or $TMPDIR).
- Invalid optional argument.
- No valid qwsample filename specified.

The following errors can cause the program to stop processing the batch files.

- qwsample filename does not contain the text “sample.”
- qwsample or qwresult files do not exist in current directory.
- qwsample or qwresult files are not readable by current userid.
- qwsample or qwresult files do not contain text in first 10 bytes.
- qwsample records with duplicative sample integers.
- qwresult records with duplicative combination of sample integer and pcode.
- qwresult record with sample integer not present in qwsample file.

The following can cause unexpected and undesirable behavior.

- Duplicative command-line specification of the same qwsample filename (eg. with wildcards) is silently reduced to one inclusion.
- Batch-file pairs may not be processed in the order entered; they are processed in ASCII sort order by qwsample filenames.
- qwsample records are not sorted within each file; they are added in order of the qwsample file.
- qwresult records are primarily processed in the same order as the qwsample records and secondarily sorted using ASCII sort order by parameter code.
- qwsample and qwresult zero-length records are silently ignored.
- If records exist in qwsample or qwresult files without tab delimiters, they are counted, but ignored. The count of these records is printed.
- qwsample record with sample integer not matching qwresult records is included. The count of such records is printed.
- qwsample and qwresult records with too few tabs are padded (to the right) with empty fields delimited with tabs. The count of such records is printed.
- Program does not track orphaned sample/result messages and they are ignored.
- Including input files that contain “*.cat” in the filename.

3.9.2 Program to Subset Tab-Delimited Batch Files (qwsplit)

You can initiate the program to subset one or more tab-delimited batch-file pairs using project code and (or) station-identification number by using the following:

```
qwsplit [-p fileP] [-s fileS] file1 [ file2 .. fileN ]  .
```

Where:

" -p fileP" specifies an optional filename that provides data on how to split the data by project,

"-s fileS specifies" an optional filename that provide data on how to split the data by station, and

"file1 file2 .. fileN" is a mandatory list of one or more tab-delimited batch filenames of sample data. The matching result filenames are assumed to be the same, except the filename text "sample"" is altered to "result."

An example of this command is:

```
qwsplit rejected.sample .
```

If neither a "-p file" nor an "-s file" is supplied, then the program will use all of the project codes found in the qwsample files to subset the data. One pair of subset-data files will be created for each unique project code found in the data. Output files will be named according to the pattern "qwsample.PROJECT" and "qwresult.PROJECT," where "PROJECT" is a project code found in the data. Data found in the input file(s) without a project code will be associated automatically with the project code "misc," and thus will be written to files named "qwsample.misc" and "qwresult.misc."

You can obtain more control over how the data are split by using one or both of the optional split-specification files. Project-split specifications may be supplied in a file named after "-p" on the command line, as in:

```
qwsplit -p qwsplit.projects rejected.sample .
```

Likewise, station-split specifications may be supplied in a file named after "-s" on the command line. Both the "-p" and "-s" command-line options may be used; however, the project-split specifications have precedence over the station-split specifications when both apply to the same sample.

The split-specification files consist of records of which projects or stations belong in separate output files and how those files should be named. In a project-split file, a project-identification number is specified, followed by one or more blank (or whitespace) characters, followed by a filename component. Additional projects may be specified on subsequent lines in the file. The same project should not be specified more than once in the file; however, multiple projects may be assigned to the same filename component. Filename components should not contain blanks (or shell metacharacters, such as "*" or "?").

The following is an example project-split file.

404000300	**bds**
00300	**bds**
404039000	**jim**
39000	**jim**

This file would split any "qwsample" records with project code of "404000300" or project code "00300" into a file named "qwsample.bds." New data will be concatenated onto the end of an existing file. Similarly, "qwresult" records associated with either of these project codes will be concatenated to the end of a file named "qwresult.bds." All sample and result records with a project code not identified in the project-split file are appended to the files named "qwsample.misc" and "qwresult.misc."

The station-split file is prepared in the same manner, except that station-identification numbers are presented where project codes appear in the above example.

The following errors can cause the program to stop.

- No write access to the current directory.
- No filename specified afterwards when "-p" or "-s" are on the command line.
- An invalid (unknown) command-line option.
- No qwsample filename is given on the command line.
- Station-split or project-split file specified cannot be opened.
- Inability to concatenate data to a temporary qwsample or qwresult file.

The following errors can cause the program to stop processing the batch files.

- qwsample filename does not contain the text "sample."
- qwsample or qwresult files do not exist in current directory.
- qwsample or qwresult files are not readable by current userid.
- qwsample or qwresult files do not contain text in first10 bytes.
- qwsample records with duplicative sample integer exist.
- qwresult records with duplicative combination of sample integer and pcode.
- qwresult record with sample integer not present in qwsample file.

The following can cause unexpected and undesirable behavior.

- Duplicative command-line specification of the same qwsample filename (e.g. with wildcards) is silently reduced to one inclusion.
- Warning printed if station-split or project-split file contains records where split data are duplicative or incomplete.
- Zero-length qwsample, qwresult, or split-file records are silently ignored.
- Warning printed of the count of ignored untabbed sample and result records.
- All blanks are removed from project and station-id found in sample records prior to applying subsetting rules.
- Because the program qwcat is used by qwsplit, errors that may cause qwcat to operate incorrectly also apply to qwsplit.

3.9.3 Program to Convert 1-and-* Card Batch Files to Tab-Delimited Batch Files (star2pair)

This program is not part of a usual NWIS installation, and this documentation is included for users' convenience. The program is available by request.

This program will convert a 1-and-* card batch file to tab-delimited batch files when the following command is entered:

```
star2pair < input file ,
```

where ***input file*** is the name of the 1-and-* card batch file to convert.

The program creates tab-delimited files named "qwsample" and "qwresult." If these files exist in the working directory, they are overwritten. **Note: All 1-and-* card batch files must be converted to tab-delimited batch files beginning with release NWIS 4.8, because the option to process 1-and-* batch files has been removed.**

Some things you should know about this program are:

- the program does ***not verify*** the input data;
- the program does syntactically verify the *-record and the X-record;
- when a syntax failure occurs, the program prints an error message, the line number, and contents of the offensive input record and then continues;
- provides date conversion, case translation, and blank removal;
- provides syntactical conversion of result deletions and null-value qualifiers; and
- provides special handling for the nonstandard syntax used by the NWQL for end-of-file and sample laboratory-identification number (such as P99998).

3.9.4 Program to Convert RDB Output Files to Excel Files (rdb2excel)

This package of program and documentation are available by request.

This program is helpful for preparing data retrievals for internal or external users. The program will convert an RDB file to an Excel -workbook file (see version compatibility below) when the following command is entered:

```
rdb2excel rdb_file_name excel_file_name ,
```

where "**rdb_file_name**" is the input file and "**excel_file_name"** is the output file.

The functions of this program are:

- include RDB comments (in blue) above the column headings;,
- include column names (in red) above the first line of data;
- convert RDB dates to Excel dates, inferred from column-definition specification of [Dd] and actual field length of 10 or less;
- convert RDB date-time to Excel date-time, inferred from column-definition specification of [Dd] and actual field length greater than 10;
- convert RDB text fields to Excel text, inferred from column-definition of [Ss] or "" (null);,
- convert RDB numeric fields to Excel numeric data, inferred from column-definition specification of [Nn];
- convert RDB missing values to Excel missing values and note that one or more blanks is -not- missing;,
- set column widths using either the wider of column-definition specification or the column-name length;
- enforce the Excel limits on the number of rows/sheet, columns/sheet, and characters/cell;
- name the worksheet within the workbook with the basename of the input RDB file; and
- create an output binary file that when run under UNIX is compatible with Excel versions 5, 95, 97, 2000, and 2003.

Functions intentionally not included in this program are:

- convert the RDB data type of Month ("M") to anything other than text,
- ensure that a consistent number of fields is present on each line,
- include the column-definition row in the output,
- read/write STDIN/STDOUT (though STDERR is used),
- append to an existing Excel file,
- write Excel formulae,

- convert an Excel file to an RDB file, and
- automatically append an ".xls" suffix to the output filename.

The following conditions will cause errors when running this program:

- failure to specify exactly two command-line arguments,
- too many rows or columns for Excel,
- any RDB column definition other than: [dmns], and
- output file size exceeding 7-MB.

3.9.5 Programs for Managing the Display of Water-Quality Data on NWISWeb

Water-quality data can be updated on NWISWeb *(http://waterdata.usgs.gov/nwis*) by using one of two processes: interactive updates or automated processes to upload data on a regular schedule. With either process, you have the option to push a full copy of the NWIS data to NWISWeb, push only the most recent updates, or push all data for one or more sites. Regardless of the method chosen by your WSC, it is advised that you periodically run the **preparation steps outlined below** to help ensure that internal-use-only samples, such as quality-control samples, are not included on NWISWeb and that all NWQL corrections have been applied.

In NWIS, settings at the site, sample, and result levels can be used to prevent certain water-quality data from being displayed on NWISWeb. Data managers can use these settings to indicate that data are either internal-use only or proprietary. At the site level, the site Web code can be used to suppress all data for a site from being displayed on NWISWeb. Details are in the Ground-Water Site Inventory documentation (*Chapter 2; Section 1.39)*.

The analysis status code in QWDATA can be used to suppress a specific sample from being displayed on NWISWeb. Details about how to change this field are in *Chapter 3.2.3* and *Chapter 3.7.5*. To suppress specific results from being displayed on NWISWeb, use the Data Quality Indicator (DQI) code. Details about how to change this field are in *Chapter 3.2.3* and *Chapter 3.7.6*.

Preparation Steps

- Please ensure the NWIS reference lists are up to date.
- Complete all National Water Quality Lab (NWQL) data reloads before proceeding. Load all NWQL reloads in the WSC NWIS database before making the NWISWeb retrievals.

- **Optional Data Check**

  A program called ***qwwebreport*** (*Section 3.9.5.1*) has been developed to report which samples and results will be excluded from the NWISWeb retrieval. This program is designed to help the QW Specialist determine if currently excluded data are properly coded in NWIS. Also, this report can be used to screen for data that would be erroneously excluded, enabling corrections to be made prior to the retrieval program execution. This program should be run *before* the NWISWeb retrievals are made.

Retrieval Steps

The program ***qwreloadout*** retrieves water-quality data from QWDATA and refers to transaction logs to incrementally update data on NWISWeb. The commands described in the **retrieval options** invoke this program and send the output to the NWISWeb databases. The process of retrieving a full copy of the NWIS water-quality database by using *qwreloadout* requires little personnel time, but it may require several hours of machine time to complete, so you may want to make the retrieval at the end of the day. An NWISWeb program called *retrieve_qw_data* uses the output from *qwreloadout* to transfer the retrieved water-quality data from the NWIS host to the NWISWeb databases.

The retrieval commands retrieve water-quality data from NWIS and use these records to update the water-quality data in the internal aggregated NWISWeb database and the public NWISWeb database. All data in the NWIS databases will be retrieved up to and including the current day. You may choose to update the entire database or update only selected sites.

The following water-quality records will not be displayed on NWISWeb.

- Water-quality data not stored in NWIS database 01
- Samples for sites where the site-web flag is not “Y”
- Samples where the analysis-status code is “I” or “P”
- Samples without a corresponding SITEFILE entry (orphaned records)
- Results with a DQI of {I,O,P,Q,U,X}
- Null results with null-value qualifiers; however, null results with remarks of U,M or N are displayed on NWISWeb
- Parameter code in (71995–-71998) and result_va = 4941
- Parameter code = 72005 and result_va in (44,46,69,70)
- Parameter codes where the parm_public_fg = N

- **Retrieve the entire QW database**

  As user nwisweb, perform a full retrieval of all the water-quality data in your NWIS database. This process can run for many hours depending upon the size of your WSC's NWIS QW databases.

  ```
  /usr/opt/nwisweb/sutil/retrieve_qw_data --
  retrieve --full
  --db_no all --quiet &
  ```

- **Retrieve all records for a single site**

  As user nwisweb, run this command for the desired site number and database number:

  ```
  /usr/opt/nwisweb/sutil/retrieve_qw_data --db_no xx --
  site_no USGS 12345678 --retrieve --full ,.
  ```

where site "**USGS 12345678**" is the agency code and station identification number and "***xx***" is the database number.

- Retrieve all records for a list of sites

  As nwisweb, run this command for the desired site number and database number:

  /usr/opt/nwisweb/sutil/retrieve_qw_data --db_no *xx*
  --site_list (complete path to filename) --retrieve –full ,

Where "***xx***" is the database number and the file looks like this:

```
USGS    11507501
USGS    421209121463000
USGS    420853121505500
USGS    420615121533600
USGS    11509370
USGS    421015121471800
USGS    420451121510000
USGS    421257121463600
USGS    421148121461600
USGS    420715121541000
```

3.9.5.1 *qwwebreport*

The program *qwwebreport* lists the record number of all samples or samples that have results that will be excluded from the file created by the program *qwreloadout*. Specific conditions that result in exclusion of a sample or result within a sample are described in *Section 3.9.5*. To determine if the samples or results excluded from the NWISWeb dataset are coded properly, review the output from *qwwebreport* before running *retrieve_qw_data* . Guidance for reviewing the output is below.

To execute the program, type:

```
qwwebreport > output.filename .
```

The file “output.filename” is your choice of a filename, and this file will contain a report of samples and results that will not be included in the output from the program *qwreloadout*. **Note: The qwwebreport program is executed using the user's current NWIS data base setting.** To create a report for another database, select the desired database number before executing the software again. The database number can be specified as described in *Section 3.7.1* of QWDATA documentation. An example of the output from this program is in *Appendix C*.

4 APPENDICES

4.1 Appendix A. Codes Used in Water-Quality System

Tables in Appendix A	Description
1	Medium codes (sample level)
2	Hydrologic condition codes (sample level)
3	Hydrologic event codes (sample level)
4	Sample type codes (sample level)
5	Analysis status codes (sample level)
6	Remark codes (result level)
7	Primary use of site codes (site level)
8	Primary use of water codes (site level)
9	Data Quality Indicator codes (result level)
10	Null value qualifiers (result level)
11	Value qualifier codes (result level
12	Report level type codes (result level)
13	Alpha parameter codes (NWIS level)
14	Body part codes (sample level)

Table 1. Medium codes.

[Note: Each environmental medium code has an associated quality-control medium code that is assigned as *XX*Q, where *XX* is the environmental medium code]

Medium Codes		Description	Definition	Historic Medium Codes		Default Hydrologic Condition Code	Default Hydrologic Event Code
Environ-mental	Quality control			Environ-mental	Quality control		
OA	OAQ	Artificial	Any substance that is not part of an aquatic environment and cannot be described by the Sample Medium Codes.	A	Q	X	X
ON	ONQ	Not determined	Not determined.	0	--	A	X
OB	OBQ	Bulk deposition	A mixture of undesignated proportions of wet and dry deposition sampled by a continuously open container.	8	U	X	9
Water (W)							
WS	WSQ	Surface water	Water on the surface of the Earth stored or transported in rivers, streams, estuaries, lakes, ponds, swamps, glaciers, or other aquatic areas. It also may refer to water in urban drains and storm-sewer systems.	9	R	9	9
WG	WGQ	Groundwater	Water below the surface of the Earth contained in the saturated zone. It does not include soil moisture or interstitial water.	6	S	X	X
WW	WWQ	Wet deposition	Water reaching the Earth's surface through precipitation as rain, snow, sleet, hail, or condensation of fog and dew. The water may contain undissolved particulate and gaseous materials acquired from the atmosphere during precipitation.	7	T	X	9

Medium Codes		Description	Definition	Historic Medium Codes		Default Hydrologic Condition Code	Default Hydrologic Event Code
Environ-mental	Quality control			Environ-mental	Quality control		
WI	WIQ	Interstitial water	Water occurring in the small openings, spaces, pores, and voids between particles of unconsolidated materials. Includes water found in the interstices of shallow sediments of a lake, wetland, reservoir, or stream, and in the vadose zone between the root zone and the water table. The water is held in place by entrapment, ionic attraction, and capillary or adhesive forces, rather than from pressure components of saturation.	F	Z	X	X
WA	WAQ	Air moisture	Water present in air in a gaseous form. Air moisture plays a significant role in weather when it changes from one state to another. These changes include condensation (cloud, fog, dew, and frost) and precipitation (rainfall and snowfall).	N/A	--	X	9
WM	WMQ	Soil moisture	Water occupying voids between loose soil particles within the aerated root zone. The water is held in place by surface tension, capillary and hydroscopic forces in opposition to the pull of gravitational forces.	K	--	X	9
WL	WLQ	Leachate	A solution obtained by passing a liquid (usually aqueous) through an unconsolidated solid medium, thereby dissolving materials (from the solid medium) that become a part of the solution. It also contains those precipitates that are the result of the solution process and subsequent chemical or biological reactions.	2	=	X	9
WF	WFQ	Landfill effluent	A liquid material (usually water) that is drained or pumped from a landfill. It usually is a liquid that has percolated through solid landfill material to become a transport medium for materials dissolved from the landfill.	4	--	X	9

Medium Codes		Description	Definition	Historic Medium Codes		Default Hydrologic Condition Code	Default Hydrologic Event Code
Environ-mental	Quality control			Environ-mental	Quality control		
WU	WUQ	Elutriation	A process by which a mixture of an unconsolidated solid medium (usually soil) and a liquid medium (usually water) has been agitated for a given period of time to dissolve materials from the solid. The solid/liquid mixture is finally separated and the resulting solution is analyzed for materials dissolved during the elutriation process.	5	--	X	X
WE	WEQ	Effluent	Treated or untreated wastewater after use at a facility or wastewater treatment plant, or from combined sources, such as combined-sewer overflows or tile drainage systems.	%	}	X	9
WT	WTQ	Treated water supply	Water after being processed for some particular use(s).	$	{	X	9
WB	WBQ	Untreated water supply	Untreated water supply from a blend of surface and ground waters or from unknown sources.	N/A	--	X	X
WH	WHQ	Hyporheic zone	Near-stream subsurface environment where mixing occurs between subsurface water and surface water. Water flows not only in the open stream channel, but also through the interstices of stream-channel and bank sediments, thus creating a mixing zone with subsurface water. There is not a precise separation between groundwater and surface water, thus the hyporheic zone is not precisely defined.	~	>	X	9
WC	WCQ	Canopy water	Water dripping off tree leaf canopies or running down the trunks of trees.	\	--	X	9
Solids (S)							
SS	SSQ	Suspended sediment	Sediment carried in suspension by the turbulent components of the fluid or by the Brownian movement (a law of physics).	1	V	9	9
SB	SBQ	Bottom material	A mixture of mineral and organic matter that compose the top bed deposits (usually the first few inches) underlying a body of water.	H	W	9	9

Medium Codes		Description	Definition	Historic Medium Codes		Default Hydrologic Condition Code	Default Hydrologic Event Code
Environ-mental	Quality control			Environ-mental	Quality control		
ST	STQ	Solids	Unconsolidated materials that may be soils, cores, borehole cuttings, sediments, matter suspended in water or wastewater, street sweepings, other particulate matter, or the total array of materials that are collected as part of a "clean sweep."	B	--	X	X
SC	SCQ	Core material	Consolidated or unconsolidated material removed from a pipe or casing during a drilling (coring) operation.	E	@	X	X
SU	SUQ	Borehole cuttings	Unconsolidated material removed from a pipe or casing during a drilling (coring) operation.	N/A	--	X	X
SO	SOQ	Soil	A wet or dry substance composed of unconsolidated fine grain rock fragments (minerals) and organic material that has been modified sufficiently by physical, chemical, or biological processes to support terrestrial plant growth.	G	<	X	X
SL	SLQ	Sludge	An unconsolidated material, from an anthropogenic source, covering the ground or the bed of a water body, usually originating as a result of processes such as domestic or industrial waste treatment.	J	(	X	X
SD	SDQ	Dry deposition	Solid, aerosol or gaseous materials deposited from the atmosphere during dry weather periods.	3	--	X	9
Biological (B)							
BA	BAQ	Animal tissue	Any type of tissue that comprises either whole or parts of insects, fish, or other organisms living in an aquatic environment, or animals that may or may not have been collected from a water body.	C	X	X	X
BP	BPQ	Plant tissue	Any type of nonanimal tissue that comprises either whole or parts of plants, aquatic or non-aquatic.	D	Y	X	X

Medium Codes		Description	Definition	Historic Medium Codes		Default Hydrologic Condition Code	Default Hydrologic Event Code
Environ-mental	Quality control			Environ-mental	Quality control		
BH	BHQ	Phytoplankton (quantitative)	Phytoplanktonic species composition and enumeration (quantitative).	L	--	9	9
BY	BYQ	Phytoplankton (qualitative)	Phytoplanktonic species composition (qualitative).	M	--	9	9
BE	BEQ	Periphyton (qualitative)	Periphyton species composition (qualitative).	N	--	9	9
BI	BIQ	Benthic invertebrates	Benthic invertebrate species composition and enumeration (quantitative).	O	--	9	9
BD	BDQ	Periphyton (quantitative)	Periphyton species composition and enumeration (quantitative).	P	--	9	9
Air (A)							
AA	AAQ	Air	Sample of atmospheric gases.	*	[	X	9
AS	ASQ	Soil gas	Gases occurring in the small openings, spaces, and voids between articles of unconsolidated materials in that portion of the vadose water zone between the root zone and the water table.	&	]	X	9

Table 2. Hydrologic condition codes (sample level).

Code	Description
A	Not determined
4	Stable, low stage
5	Falling stage
6	Stable, high stage
7	Peak stage
8	Rising stage
9	Stable, normal stage
X	Not applicable

Table 3. Hydrologic event codes (sample level).

Code	Description
1	Drought
2	Spill
3	Regulated flow
4	Snowmelt
5	Earthquake
6	Hurricane
7	Flood
8	Volcanic action
9	Routine sample
A	Spring breakup
B	Under ice cover
C	Glacial lake outbreak
D	Mudflow
E	Tidal action
F	Drainage basin for sample was affected by fire prior to sampling
H	Dambreak
J	Storm
K	Backwater
X	Not applicable
Z	Not determined (for historical data only; not valid during sample login)

Table 4. Sample type codes (sample level).

Code	Name	Description
A	Not determined	The sample type was not recorded.
B	Other QA	Other quality-assurance samples collected for specific purposes other than regular samples.
H	Composite (time)	Composite analyses represent samples collected over a period of time. Compositing minimizes sampling variability or analytical costs for sample group. Concentration and constituent load are assumed relatively constant over the composited time period. Or, concentrations are known to be changing and the composite sample is intended to characterize the event.
1	Spike	A sample to which known quantities of specific (often organic) analytes have been added. Spiked samples are used to monitor the stability of the analytes from the time of the spike to the time of the analysis and to determine the potential bias introduced by the sample matrix. The measured and known concentrations are used to compute percent recovery for each analyte. Recovery rates are compared to potential factors, especially constituent concentrations, to discover causes of variability and (or) bias.
2	Blank	A blank sample is prepared from a reference material where none of the analytes of interest are present in detectable quantities. Blank samples are used to determine if environmental samples have been contaminated during the data-collection process. Detection of an analyte in a blank sample that is absent in the blank-source sample indicates bias due to contamination.
3	Reference	Reference samples are prepared from an aliquot of reference material. Reference samples are introduced into the data-collection process at various measurement stages to determine bias and variability of the measurement system. Individual sample results are compared to most probable values. Reference-sample results can be used to determine if an analytical process is within expected control limits and whether a project's data-quality objectives are met.
4	Blind	A sample submitted for analysis whose known composition is unknown to the analyst. A blind sample is prepared from a reference material. A blind sample is a particular instance of the reference sample where the identity of the sample is not revealed to the analyzing entity. Blind samples are used to measure the performance of an analytical system, results of more than one laboratory, more than one analytical method, or the consistency of the same laboratory and method over time.
5	Duplicate	A two-sample instance of a replicate group. The preferred terminology for this type of sample is replicate. One sample is an environmental sample. The companion sample is a quality-control sample.

Code	Name	Description
6	Reference material	Reference material is a general term for a homogenous substance generally prepared by laboratories or chemical suppliers where the concentration of one or more constituents is known. Reference-material samples provide the baseline analytical results for comparison to reference samples. The reference-material sample results are the generally accepted analytical most probable values (MPV). Field users will normally submit reference samples, not reference material samples.
7	Replicate	A member of group of samples collected in a manner such that the samples are thought to be essentially identical. Samples where some part of the measurement process was altered (such as analysis by different laboratories or methods) are termed irreplicates. Irreplicates should not be identified as replicates. One group member is an environmental sample and the remaining group members are quality-control samples. Replicate samples are used to describe the variability measurement.
8	Spike solution	A solution with one or more well established analyte concentrations. A spike solution is a specific type of a liquid reference material that is added in known quantities to a known volume of another sample to form a spiked sample. Results for spike-solution samples are stored to describe the known concentrations of the analytes in the spiking solution lot. Spike-solution results are interpreted in conjunction with spiked sample results during the computation of the percent recovery.
9	Regular	Sample taken from the environment collected to represent the conditions at a particular place and time.

Table 5. Analysis status codes (sample level).

Code	Description
U	Unrestricted
I	Internal use only
P	Proprietary data

Table 6. Remark codes (result level).

Code	Name	Description
<	less than	Actual value is known to be less than the value shown
>	greater than	Actual value is known to be greater than the value shown
E	estimated	Value is estimated
A	average	Value is an average
V	value affected by contamination	Analyte was detected in both the environmental sample and the associated blanks. (see Office of Water Quality Memorandum 97.8)
S	most probable value	Most probable value
R	radchem non-detect, below ssLc	Radiochemistry non-detect, result below sample specific critical level
Null value remark codes		
M	presence verified but not quantified	Presence of material verified but not quantified.
N	presumptive evidence of presence	Presumptive evidence of presence of material.
U	analyzed for but not detected	Material specifically analyzed for but not detected.

Table 7. Primary use of site codes (site level).

Code	Description	Definition
A	Anode	Anode is a hole used as an electrical anode. Include in this category wells used solely to ground pipelines or electronic relays and other installations.
C	Standby emergency supply	Standby emergency supply refers to a water-supply source that is used only when the principal supplier of water is unavailable.
D	Drain	Drainage refers to the drainage of surface water underground.
E	Geothermal	Geothermal well is a hole drilled for geothermal energy development. Use this category for "dry" geothermal wells or wells into which water is injected for heating. For "wet" geothermal wells, through which water is withdrawn, use "W - withdrawal of water" for the use of site, and "E - power generation" for the primary use of water.
G	Seismic	Seismic hole is one drilled for seismic exploration. If it has been converted to water supply, use "W – Withdrawal of water" for the use of site.
H	Heat	Heat reservoir refers to a well in which a fluid is circulated in a closed system. Water is neither added to, nor removed from, the aquifer.
M	Mine	Mine includes any tunnel, shaft, or other excavation constructed for the extraction of minerals.
O	Observation	Observation well is a cased test-hole or well, drilled for either water-level or water-quality observations. Do not use this category for an oil test hole or water-supply well used only incidentally as an observation well.
P	Oil or gas well	Oil or gas well is any well or hole drilled in search of, or for production of, petroleum or gas. It includes any oil or gas production well, dry hole, core hole, injection well drilled for secondary recovery of oil, etc. An oil test hole converted to a water-supply well should be classified as withdrawal (W).
R	Recharge	Recharge site is a site constructed or converted for use in replenishing the aquifer. An irrigation well used to return water to the aquifer during nonpumping periods is a well for withdrawing water, not a drainage or recharge well. Use this category for wells that are used to return water to the aquifer after use, such as those for returning air conditioning water.
S	Repressurize	Repressurize refers to pumping water into an aquifer in order to increase the pressure in the aquifer for a specific purpose; for example, water flood purposes in oil fields.

Code	Description	Definition
T	Test	Test hole is an uncased hole (or one cased only temporarily) that was drilled for water or for geologic or hydrogeologic testing. It may be equipped temporarily with a pump in order to make a pumping test, but if the well is destroyed after testing is completed, it is still a test hole. A core hole drilled as a part of mining or quarrying exploration work should be in this class.
U	Unused	An unused site is an abandoned water-supply site or one for which no use is contemplated. At an abandoned farmstead, a well originally used for domestic purposes may be classed as unused, even though it is equipped with a pump. Similarly, a stock well with a pump may become unused when a pasture or corral is put into cultivation. An irrigation well that is not equipped with a pump, nor used because the yield is too low or the water is too mineralized, belongs in this class.
V	Withdrawal/Return	Groundwater sites that are used to both withdraw and inject water to a well, such as an irrigation well used to return water to the aquifer during nonpumping periods.
W	Withdrawal of water	Withdrawal of water refers to a site that supplies water for one of the purposes shown under use of water. It includes a dewatering well, if the dewatering is accomplished by pumping groundwater.
X	Waste disposal	A waste-disposal site is one used to convey industrial waste, domestic sewage, oil field brine, mine drainage, radioactive waste, or other waste fluid into an underground zone. An oil test or deepwater well converted to waste disposal should be in this category.
Z	Destroyed	A destroyed site is one that is no longer in existence. The casing of most destroyed wells will be pulled, but some may be plugged or filled. Do not use this category for an abandoned site that merely is not in use.

Table 8. Primary use of water codes (site level).

Code	Description	Definition
B	Bottling	Bottling refers to the storage of water in bottles and use of the water for potable purposes (see Medicinal).
C	Commercial	Commercial use refers to use by a business establishment that does not fabricate or produce a product. Filling stations and motels are examples of commercial establishments. If some product is manufactured, assembled, remodeled, or otherwise fabricated, use of water for that plant should be considered industrial, even though the water is not used directly in the product or in the manufacturing of the product.
D	Dewater	Dewatering means the water is pumped for dewatering a construction or mining site or to lower the water table for agricultural purposes. In this respect, it differs from a drainage well that is used to drain surface water underground. If the main purpose for which the water is withdrawn is to provide drainage, dewatering should be indicated even though the water may be discharged into an irrigation ditch and subsequently used to irrigate land.
E	Power	Power generation refers to use of water for generation of any type of power.
F	Fire	Fire protection refers to the principal use of the water and should be indicated if the site was constructed principally for this purpose, even though the water may be used at times to supplement an industrial or defense supply, to irrigate a golf course, fill a swimming pool, or for other use.
H	Domestic	Domestic use is water used to supply household needs, principally for drinking, cooking, washing, and sanitary purposes, but including watering a lawn and caring for a few pets. Most domestic wells will be at suburban or farm homes, but wells supplying small quantities of water for domestic purposes for one-classroom schools, turnpike gates, and similar installations, should be in the domestic category.
I	Irrigation	Irrigation refers to the use of water to irrigate cultivated plants. Most irrigation sites will supply water for farm crops, but the category should include wells used to water the grounds of schools, industrial plants, or cemeteries, if more than a small amount of water is pumped and that is the sole use of the water.
J	Industrial (cooling)	Industrial cooling refers to a water supply used solely for industrial cooling.
K	Mining	Mining refers to a water supply used solely for mining purposes.
M	Medicinal	Medicinal refers to water purported to have therapeutic value. Water may be used for bathing and (or) drinking. If use of water is mainly because of its claimed therapeutic value, use this category even though the water is bottled.

Code	Description	Definition
N	Industrial	Industrial use is within a plant that manufactures or fabricates a product. The water may or may not be incorporated into the product being manufactured. Industrial water may be used to cool machinery, to provide sanitary facilities for employees, to air condition the plant, and to irrigate the ground at the plant.
P	Public supply	Public Supply use is water that is pumped and distributed to several homes. Such supplies may be owned by a municipality or community, a water district, or a private concern. In most States, public supplies are regulated by departments of health that enforce minimum safety and sanitary requirements. If the system supplies five or more homes, it should be considered a public supply; if four or less, classify use as domestic. Water supplies for trailer or summer camps with five or more living units should be in this category, but motels and hotels are classified as commercial. Most public supply systems also furnish water for a variety of other uses, such as industrial, institutional, and commercial.
Q	Aquaculture	Aquaculture refers to a water supply used solely for aquaculture, such as fish farms.
R	Recreation	Recreation refers to water discharged into pools (or channels which are dammed downstream to form pools), for swimming, boating, fishing, ice rinks, and other recreational uses.
S	Stock	Stock Supply refers to the watering of livestock.
T	Institutional	Institutional refers to water used in the maintenance and operation of institutions such as large schools, universities, hospitals, rest homes, or similar installations. Owners of institutions may be individuals, corporations, churches, or governmental units.
U	Unused	Unused means water is not being removed from the site for one of the purposes described above. A test hole, oil or gas well, recharge, drainage, observation, or waste disposal well will be in this category. Do not u“off season” or temporary periods of nonuse. The use of water from a newly constructed site should be considered as the use for which it is intended even though it may not yet be in use when inventoried.
Y	Desalination	Desalination refers to water used in a desalting process whereby dissolved solids are removed to make water potable or suitable for other uses. Enter the type of use of the desalinated water in the next column, “Secondary Water Use.”
Z	Other (explain in remarks)	Other refers to miscellaneous uses not included in the listed categories.

Table 9. Data Quality Indicator (DQI) codes (result level).

DQI code	Description	Batch overwrite allowed[1]	Default public release
A[2]	Historical data	No	Yes
S	Presumed satisfactory	Yes	Yes
I	Awaiting Review	Yes	No
R	Reviewed and accepted	No	Yes
Q	Reviewed and rejected	No	No
P	Proprietary, not reviewed	Yes	No
O	Proprietary, reviewed and accepted	No	No
X	Proprietary, reviewed and rejected	No	No
U	Research or unapproved method or laboratory	Yes	No

[1] Any DQI-protected value may be overwritten using the following batch processing menu options:
4 -- Reload batch-file data, overriding DQI
5 – Enter batch-file data with user-specified behavior
[2] Used for nonproprietary data in the database at the time of DQI implementation (NWIS 4_1). Newly entered pre-NWIS 4_1 data should be entered into the database with a DQI code of R or S.

Table 10. Null-value qualifiers (result level).

Null-value qualifiers	Description
a	Planned measurement was not made.
b	Sample broken/spilled in shipment.
c	Sample lost in lab.
e	Required equipment not functional or available.
f	Sample discarded: improper filter used.
i	Required sample type not received.
l	Analysis discarded: Lab QC failure.
m	Results sent by separate memo.
n	Non-performing compound, reasons unknown.
o	Insufficient amount of water.
p	Sample discarded: improper preservation.
q	Sample discarded: holding time exceeded.
r	Sample ruined in preparation.
u	Unable to determine – matrix interference.
w	Sample discarded: warm when received.
x	Result failed quality assurance review.

Table 11. Value qualifier codes (result level).

Value-qualifier codes	Field or lab code	Definition	Description
Raised reporting level			
d	lab	diluted sample: method hi range exceeded	Diluted sample: method high range exceeded.
q	lab	insufficient sample received	Insufficient sample received.
s	lab	instrument sensitivity problem	
x	lab	interference from sample matrix	Analyte interference from environmental sample matrix.
Method problems			
a	lab	value was extrapolated at high end	Value was extrapolated above highest calibration standard, method range, or instrument linear range.
b	lab	value was extrapolated at low end	Value was extrapolated below lowest calibration standard, method range, or instrument linear range.
f	field	sample field preparation problem	Sample field preparation problem. Problem described in result comment.
i	lab	result may be affected by interference	Result may be affected by interference(s).
l	lab	sample lab preparation problem	Sample lab preparation problem. Problem described in result comment.
m	lab	value is highly variable by this method	Highly variable compound using this method, questionable precision and (or) accuracy. Citation of OFR or NWQL Technical Memo in result comment.
n	lab	below the LRL and above the LT-MDL	Below the laboratory reporting level and above the long-term method detection level.
o	lab	result determined by alternate method	Result determined by alternate method. Reason described in result comment.
t	lab	below the long-term MDL	Below the long-term method detection level
w	lab	high variability: questionable precision and accuracy	High variability: questionable precision and (or) accuracy. Cause explained in result comment.
Rerun			
h	lab	compound identified, verified by 2nd method	Compound identification verified by rerun using a different method; alternate method identified in result comments.

Value-qualifier codes	Field or lab code	Definition	Description
p	lab	value reported is preferred	Value reported is preferred; explanation in result comments.
r	lab	value verified by rerun, same method	Quantification verified by rerun using the same method.
u	lab	value reported not confirmable, interf	Value reported not confirmable due to interference.
y	lab	sample variability described in comment	Sample variability described in result comment.
z	lab	value verified by rerun, 2nd method	Quantification verified by rerun using a different method.
Other			
+	lab	improper preservation	Improper preservation.
@	lab	holding-time violation	Holding-time violation.
*	lab	warm when received	Warm when received.
c	lab	see result laboratory comment	See laboratory comments for this result.
e	field	see result field comment	See field comments for this result.
v	lab	analyte detected in laboratory blank	Analyte detected in laboratory blank.
$	lab	Used incorrect bottle type as requested	Used incorrect bottle type as requested.
Biological			
&	field	biological organism est as dominant	Biological organism estimated as dominant.
g	field	count < 0.5 percent	Biological organism count less than 0.5 percent; may be only observed.
j	field	count >= 15 percent (dominant)	Biological organism count greater than or equal to 15 percent (dominant).
k	field	counts outside the acceptable range	Results based upon colony counts outside the acceptable range.
Radiochemical			
(	lab	blank greater than the sample-specific Critical Level	Blank greater than the sample-specific Critical Level.
)	lab	sample specific MDC (ssMDC) above contractual MDC	Sample specific Minimum Detectable Concentration (ssMDC) above contractual MDC.
~	lab	duplicates do not check (not within the acceptance limits)	Duplicates do not check (not within the contractual acceptance limits).

Value-qualifier codes	Field or lab code	Definition	Description
\	lab	laboratory Control Sample (LCS) recovery outside of acceptable range	Laboratory Control Sample (LCS) recovery outside of contractual acceptable range.
/	lab	matrix Spike (MS) recovery outside of acceptable range	Matrix Spike (MS) recovery outside of contractual acceptable range.
^	lab	yield outside of contractual acceptable range	Yield outside of contractual acceptable range.
=	lab	negative result may indicate potential negative bias	Negative result may indicate potential negative bias.

Table 12. Report level type codes (result level).

Report level code	Definition	Description
MRL	Minimum Reporting Level	Smallest measured concentration of a constituent that can be reliably measured using a given analytical method (Timme, 1995).
MDL	Method Detection Limit	Minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero. It is determined from the analysis of a sample in a given matrix containing the analyte (U.S. Environmental Protection Agency, 1997).
LT-MDL	Long-Term Method Detection Limit	A detection level derived by determining the standard deviation of a minimum of 24 MDL spike sample measurements over an extended period of time. LT-MDL data are collected on a continuous basis to assess year-to-year variations in the LT-MDL.
LRL	Laboratory Reporting Level	Equal to twice the yearly-determined LT-MDL. At the LRL, the probability of a false negative is less than or equal to 1 percent. The reporting level is set equivalent to the LRL when an analyte is not detected in a sample. (Formerly referred to as Non-Detection Value (NDV)).
IRL	Interim Reporting Level	A temporary reporting level used for new or custom schedules when LT-MDL data are unavailable and a LRL has not yet been established.
SSMDC	Sample-Specific Minimum Detectable Concentration	A reporting level that varies for each sample; primarily used in radiochemical analyses. Radiochemical measurements are not typically censored by the laboratory.
SSLC	Sample-Specific Critical Level	The ssLc is the calculated and reported value below which the rad result is considered a non-detect (see *Office of Water Quality Technical Memorandum 2008.06)*.
Blank	---	A blank report level code should only be stored when no report level is stored. If a report level value is entered, a report level code must also be stored.

Table 13. Alpha parameter codes used in QWDATA.

[n/a, not applicable; dashes indicate that no information is needed]

Alpha parameter code	Source	Length	Limitations	Description
ANULL	n/a	**8**	---	NULL column.
AGNCY	site	**5**	---	Agency code.
Sample level codes				
ASTAT	sample	**1**	---	Analysis status code.
BDATE	sample	**8**	---	Sample begin date – same value as DATES with different column heading.
BTIME	sample	**6**	---	Sample begin time – same value as TIMES with different column heading.
BDPNM	sample	**32**	---	Body part name.
BDPRT	sample	**3**	---	Body part code.
CAGNM	sample	**59**	---	Collecting agency name.
CAGNY	sample	**8**	---	Collecting agency code.
CNTYC	site	**3**	---	County code.
CTBDA	site	**8**	---	Contributing drainage area.
DATES	sample	**9**	---	Sampling date -- same value as BDATE with different column heading.
DATTD	sample	**18**	---	Sample-start date, time, and time datum **NOTE: This will appear in output if the time-datum reliability code is "K"; otherwise it will be blank in output.**
DATTM	sample	**12**	---	Sample date-time (see also DATES & TIMES).
DBNUM	NWIS	**2**	---	Database number.
DISTR	site	**3**	---	District code.
EDATE	sample	**8**	---	Sample end date.
EDATM	sample	**12**	---	Sample end date-time.
ETIME	sample	**4**	---	Sample end time.
EVENT	sample	**1**	---	Hydrologic event code.
GUERA	GUNIT	**11**	---	Geologic era name.
GUNIT	site and (or) sample	**8**	---	Geologic unit code.
GUNNM	GUNIT	**50**	---	Geologic unit name.
GUSER	GUNIT	**14**	---	Geologic series name.
GUSYS	GUNIT	**14**	---	Geologic system name.

Alpha parameter code	Source	Length	Limitations	Description
HDATM	site	**10**	---	Horizontal datum (of LATLG).
HSTAT	sample	**1**	---	Hydrologic condition code.
HSTNM	NWIS	**10**	---	NWIS hostname of machine.
HUNIT	site	**8**	---	Hydrologic unit code.
LABNO	sample	**7**	---	Laboratory identification number.
LATDD	site	**13**	---	Latitude NAD83 (decimal degrees).
LATLG	site	**24**	---	Two columns for latitude and longitude (in DMS). In publication formats named "Latitude" and "Longitude." Example: `48 59 44 N 115 10 43 W` In flat-file formats named "LAT" and "LONG." Example: **`485944 1151043`**
LNGDD	site	**14**	---	Longitude NAD83 (decimal degrees).
LOCAL	site	**26**	---	Local identifier (see also SNAME).
M1LAB	sample	**300**	---	Laboratory-supplied sample comment (same as SCMLB).
M2LAB	sample	**300**	---	Field-supplied sample comment (same as SCMFL).
MEDHS	sample	**1**	---	Historic medium code.
MEDIM	sample	**3**	---	Medium code.
MEDNM	sample	**32**	---	Medium name.
NAQFR	site	**8**	---	National Aquifer Code.
PRIME	NWIS	**10**	---	NWIS Hostname of processing machine (same as HSTNM).
PRJCT	sample	**9**	---	Project code.
SALTD	site	**8**	---	Altitude of land surface.
SAMPL	NWIS	**8**	---	NWIS QWFILE record number.
SCDAT	sample	**8**	---	Sample creation date.
SCMFL	sample	**300**	---	Field sample comment (same as M2LAB).
SCMLB	sample	**300**	---	Lab sample comment (same as M1LAB).
SCUSR	sample	**8**	---	Sample creation userid.
SITEC	site	**7**	---	Primary and secondary site type code.
SITEN	site	**40**	---	Site type long name.
SITES	site	**10**	---	Site type short name.
SMDAT	sample	**8**	---	Sample modification date.
SMUSR	sample	**8**	---	Sample modification userid.
SNAME	site	**50**	---	Station name.

Alpha parameter code	Source	Length	Limitations	Description
STAID	sample	**15**	---	Station identification number.
STATE	site	**2**	---	State code.
STPNM	sample	**20**	---	Sample type name.
STRMK	site	**50**	---	Site remark.
STYPE	sample	**1**	---	Sample-type code.
TAXNM	sample	**40**	---	ITIS taxonomic name.
TAXON	sample	**9**	---	ITIS taxonomic unit code.
TDRCD	sample	**1**	---	Time-datum reliability code.
TIMED	sample	**10**	---	Sample-start time and time datum. **NOTE: This will appear in output if the time-datum reliability code is "K"; otherwise it will be blank in output.**
TIMES	sample	**4**	---	Sample start time as HHMM -- same value as BTIME with different column heading.
TMDTM	sample	**6**	---	Time datum.
VDATM	site	**10**	---	Vertical altitude datum.
Result level codes				
ACPCT	calculation	**9**	by-sample or by-result	Anion/Cation percent difference. **NOTE: this does not appear when using either ALPHA or CALCV.**
ADATE	result	**8**	by-result only	Result analysis date.
ADDPC	result	**---**	by-sample only	Adds all available numeric parameters.
ALPHA	n/a	**---**	by-sample or by-result	Adds all alphabetic parameters available, in order from A to Z.
ANENM	result	**55**	by-result only	Analyzing entity name.
ANENT	result	**8**	by-result only	Analyzing entity code.
ANION	calculation	**9**	by-sample or by-result	Anion sum in meq/L. **NOTE: this does not appear when using either ALPHA or CALCV.**
ANLNO	result	**12**	by-result only	Laboratory analysis-set number.
ASCRO	calculation	**9**	by-sample or by-result	Anion/Specific conductance ratio. **NOTE: this does not appear when using either ALPHA or CALCV.**
CALCV	n/a	**---**	by-sample only	Adds numeric calculated-value parameters, but not alpha calculated parameters.
CASRN	parameter-alias table	**12**	by-result only	Chemical Abstract Service registry number.
CSCRO	calculation	**9**	by-sample or by-result	Cation/Specific conductance ratio. **NOTE: this does not appear when using either ALPHA or CALCV.**

Alpha parameter code	Source	Length	Limitations	Description
CTION	calculation	**9**	by-sample or by-result	Cation Sum in meq/L. **NOTE: this does not appear when using either ALPHA or CALCV.**
DQIND	result	**1**	by-result only	Data-quality indicator code.
LSDEV	result	**8**	by-result only	Laboratory standard deviation.
METHC	citation table	**500 per citation**	by-result only	Full method citation. (Specific information on displaying the parameter method tables is in *Section 3.6.8*.)
METHD	result	**5**	by-result only	Method code.
METHH	parameter-method table	**1**	by-result only	Historic one-character method code (standard entry prior to NWIS 4.6.).
METHL	method table	**256**	by-result only	Method description.
METHN	method table	**29**	by-result only	Method source and number.
METHO	method table	**8**	by-result only	Method rounding owner.
METHR	citation table	**50 per citation**	by-result only	Abbreviated method citation.
METHS	method table	**32**	by-result only	Method name.
METSO	method table	**8**	by-result only	Method source.
NULLQ	result	**1**	by-result only	NULL-result qualifier code.
PCODE	result	**5**	by-result only	Parameter code.
PDATE	result	**8**	by-result only	Result preparation date.
PLNAM	parameter-code dictionary	**54**	by-result only	Parameter long name.
PRPNO	result	**12**	by-result only	Laboratory preparation-set number.
PMRND	parameter-method table	**10**	by-result only	Parameter rounding array. (Specific information is in *Section 3.6.8*.)
PSNAM	parameter-code dictionary	**20**	by-result only	Parameter short name.
QUAL1	result	**1**	by-result only	Value-qualifier code 1.
QUAL2	result	**1**	by-result only	Value-qualifier code 2.
QUAL3	result	**1**	by-result only	Value-qualifier code 3.

Alpha parameter code	Source	Length	Limitations	Description
RCDAT	result	**8**	by-result only	Result creation date.
RCMFL	result	**300**	by-result only	Field result comment.
RCMLB	result	**300**	by-result only	Lab result comment.
RCUSR	result	**8**	by-result only	Result creation userid.
REMRK	result	**1**	by-result only	Remark code.
RLTYP	result	**6**	by-result only	Reporting-level type.
RMDAT	result	**8**	by-result only	Result modification date.
RMUSR	result	**8**	by-result only	Result modification userid.
RNDCD	result	**1**	by-result only	Rounding code.
RPLEV	result	**9**	by-result only	Reporting level.
UNITS	parameter-code dictionary	**16**	by-result only	Reporting units.
VALUE	result	**9**	by-result only	Parameter value.

Table 14. Body part codes (sample level).

Fixed value	Parameter name
1	Alimentary
2	Mouth
3	Teeth
4	Esophagus
5	Stomach
6	Liver
7	Intestine
8	Bladder, gall
9	Anus
10	Cardiovascular
11	Heart
12	Heart/ventricle
13	Heart/bulb art
14	Heart/auricle
15	Heart/conus art.
16	Arteries
17	Veins
18	Endocrine
19	Cyclic change
20	Pituitary
21	Renal body
22	Adrenal
23	Suprarenal
25	Ultimabran body
26	Pseudobranch
27	Corp of stan.
28	Thyroid
29	Pancreas
30	Sac vascule
31	Excretory
32	Kidney
33	Kidney/glom.
34	Kidney/aglom.
35	Kidney/urin tub.
36	Kidney/coll tub.

Fixed value	Parameter name
37	Bladder
38	Ureters
39	Urinary pore
40	Hemopoietic
41	Head kidney
42	Thymus
43	Spleen
44	Lymphocytes
45	Nucleated rbs's
46	Thrombocytes
47	Eosinophiles
48	Heterophiles
49	Granulocytes
50	Musco-skel
51	Muscle/somatic
52	Muscle/visceral
53	Bone/cellular
54	Bone/acellular
55	Cartilage
56	Conn tissue
57	Scale
58	Skin
59	Organism, whole
60	Nervous
61	Brain
62	Spinal cord
63	Ganglions
64	Neurons
65	Nerve fibers
66	Reproductive
67	Repro cyc chan.
68	Male
69	Female
70	Ovary
71	Respiratory
72	Gills
73	Resp epithelium

Fixed value	Parameter name
74	Cells, chloride
75	Cells, secretory
76	Gill rakers
77	Sensory
78	Lateral line
79	Nasal passages
80	Tentacles
81	Eyes
82	Ears
83	Neuroepithelium
84	Bladder, swim
85	System, lymph
86	Fillet
87	Edible portion
88	Headless whole fish
89	Organism, whole, eviscerated
90	Viscera
91	Lipid tissue
92	Fry
93	Eggs
94	Unknown
95	Organism minus head and viscera
96	Body minus skin, head and viscera
97	Exoskeleton
98	Lips
99	Pharynx
100	Caeca
101	Capillaries
102	System, central nervous
103	Testes
104	Gill lamellae
105	Gill filaments
106	Neuromasts
107	Pit organ
108	Taste buds
109	Hypophysis
110	Saccus vasculosus

Fixed value	Parameter name
111	Urophysis
112	Pineal gland
113	Choroid gland
114	Plasma
115	Larvae
116	Carcass
117	Fillet with skin
118	Fillet dorsal piece
119	Whole body minus shell/carapace
120	Fillet muscle plug, skin on
121	Fillet muscle plug, skin off
130	Plant stem

4.2 Appendix B. Fixed Value Codes

00028 – ANALYZING AGENCY

The use of the fixed-value code 00028 is not recommended after NWIS 4.5. Instead, please populate the Analyzing Entity field for each result. A detailed description for the use of this code is in *Sections 2.5.10 and 3.2*. Please see the *Protocol Organization Table* for the 8-character alpha codes that can be entered for the Analyzing Entity.

Value	Short name	Description
00028 – ANALYZING AGENCY		
300	NADP-NTN	NAPD/NTN - Nat.Atmos.Deposition Program/Nat.Trends Network
500	USDA	Department of Agriculture
504	USARS	Agricultural Research Service
520	USSCS	Soil Conservation Service
596	USFS	Forest Service
600	USDOC	Department of Commerce
642	USNIPCC	National Industrial Pollution Control Council
648	NOAA	National Oceanic and Atmospheric Administration
655	USNBS	National Bureau of Standards
701	USAF	Air Force
702	USARMY	Army
703	USMC	Marines
704	USNAVY	Navy
800	USDODCIV	Department of Defense - Civil
810	USCOE	Corps of Engineers
900	USDOHEW	Department of Health, Education and Welfare
910	USFDA	Food and Drug Administration
915	EHS	Environmental Health Service
920	USFWS	Fish & Wildlife Service
930	USNIH	National Institutes of Health
1000	USDOI	Department of the Interior
1004	USBLM	Bureau of Land Management
1008	USBIA	Bureau of Indian Affairs
1016	USBOOR	Bureau of Outdoor Recreation
1028	USGS-WRD	U.S. Geological Survey
1032	USBM	Bureau of Mines
1050	USBSFW	Bureau of Sport Fisheries and Wildlife
1053	USNPS	National Park Service
1060	USBR	Bureau of Reclamation
1064	USBPA	Bonneville Power Administration

Value	Short name	Description
00028 – ANALYZING AGENCY		
1068	SEPA	Southeastern Power Administration
1072	SWPA	Southwestern Power Administration
1076	US-OSW	Office of Saline Water
1800	USAEC	Atomic Energy Commission
2000	USEPA	U.S. Environmental Protection Agency
2010	USEPA-R1	USEPA, Reg. 1, New England Regional Laboratory, Lexington
2020	USEPA-R2	USEPA, Region 2, Edison, N.J.
2100	USDOT	Department of Transportation
2300	US-GSA	General Services Administration
2500	USHUD	Department of Housing and Urban Development
2555	USPHSDIH	U.S. Public Health Service, Division of Indian Health
2700	USNASA	National Aeronautics and Space Administration
3315	TN-TVA	Tennessee Valley Authority
6001	CA-ABAG	Association of Bay Area Governments, California.
6003	CA-ACFC	Alameda Co. Flood Control and Water Conservation Dist., California.
6005	CA-EBRPD	East Bay Regional Park District, California.
6006	CA-EBMUD	East Bay Municipal Utility District, Oakland, Calif.
6010	CARWQBNC	Calif. Regional Water Quality Control Board North Coast Region
6015	CA-UWCD	United Water Conservation District, Santa Paula, Calif.
6020	CA-SCVWD	Santa Clara Valley Water District, California
6021	CA-LAETL	LA County Ag. Comm. Weights & Meas. Dept. Env. Toxicology L
6022	CA-AVEKW	Antelope Valley East Kern Water Agency Laboratory
6040	CA-QUANT	Quanterra Environmental Services, West Sacramento, Calif.
8001	CO-CAI	Chadwick and Associates, Inc., Littleton, Colo.
97xx		State health laboratory (xx = STATE CODE)
9701	AL-HDL	Alabama
9702	AK-HDL	Alaska
9704	AZ-HDL	Arizona
9705	AR-HDL	Arkansas
9706	CA-HDL	California
9708	CO-HDL	Colorado
9709	CT-HDL	Connecticut
9710	DE-HDL	Delaware
9711	DC-HDL	District of Columbia
9712	FL-HDL	Florida
9713	GA-HDL	Georgia
9715	HI-HDL	Hawaii
9716	ID-HDL	Idaho
9717	IL-HDL	Illinois
9718	IN-HDL	Indiana
9719	IA-HDL	Iowa

Value	Short name	Description
00028 – ANALYZING AGENCY		
9720	KS-HDL	Kansas
9721	KY-HDL	Kentucky
9722	LA-HDL	Louisiana
9723	ME-HDL	Maine
9724	MD-HDL	Maryland
9725	MA-HDL	Massachusetts
9726	MI-HDL	Michigan
9727	MN-PCHDL	Minnesota Pollution Control Council
9728	MS-HDL	Mississippi
9729	MO-HDL	Missouri
9730	MT-HDL	Montana
9731	NE-HDL	Nebraska
9732	NV-HDL	Nevada
9733	NH-HDL	New Hampshire
9734	NJ Env&Chem Lab	NJ Dpt Hlth&Senior Svcs-Div Pub Hlth&Env Labs-Env&Chem Lab
9735	NM-HDL	New Mexico
9736	NY-HDL	New York
9737	NC-HDL	North Carolina
9738	ND-HDL	North Dakota
9739	OH-HDL	Ohio
9740	OK-HDL	Oklahoma
9741	OR-HDL	Oregon
9742	PA-HDL	Pennsylvania
9744	RI-HDL	Rhode Island
9745	SC-HDL	South Carolina
9746	S.Dakota Hlth Dept	South Dakota
9747	TN-HDL	Tennessee
9748	TX-HDL	Texas
9749	UT-HDL	Utah
9750	VT-HDL	Vermont
9751	VA-HDL	Virginia
9753	WA-HDL	Washington
9754	WV-HDL	West Virginia
9755	WI-HDL	Wisconsin
9756	WY-SHD	Wyoming
9760	AS-HDL	American Samoa
9761	CZ-HDL	Canal Zone
9762	CEI-HDL	Canton and Enderbury Islands
9766	GU-HDL	Guam
9767	JA-HDL	Johnston Atoll
9771	MIDISHDL	Midway Islands

Value	Short name	Description
00028 – ANALYZING AGENCY		
9772	PR-HDL	Puerto Rico
9773	RYI-SHDL	Ryukyu Islands, Southern
9775	TTPI-HD	Trust Territories of the Pacific Islands
9777	USPI-HDL	U.S. Miscellaneous Pacific Islands
9778	VI-HDL	Virgin Islands
9779	WK-HDL	Wake Island
9780	MEX-HDL	Mexico
9781	MEX-THDL	Tamaulipas
9782	MEX-NHDL	Nuevo Leon
9783	MEXCOHDL	Coahuila
9784	MEXCHHDL	Chihuahua
9785	MEX-SHDL	Sonora
9786	MEX-BCHD	Baja California Norte
9790	CANNBHDL	New Brunswick
9791	CAN-QHDL	Quebec
9792	CAN-OHDL	Ontario
9793	CANMBHDL	Manitoba
9794	CAN-SHDL	Saskatchewan
9795	CAN-AHDL	Alberta
9796	CANBCHDL	British Columbia
9797	CAN-YHDL	Yukon
9801	PRIVLAB	Private Laboratory
9802	AZ-SRVUA	Salt River Valley Users Association
9803	CA-MWDSC	Metropolitan Water District of Southern California
9804	FL-PC	Florida Department of Pollution Control
9805	FL-CSFCD	Central and Southern Florida Flood Control District
9806	FL-GFWFC	Florida Game and Fresh Water Fish Commission
9807	FL-HRS	Florida Department of Health and Rehabilitative Services
9808	FL-SWWMD	Southwest Florida Water Management District
9809	FL-JACKS	City of Jacksonville, Fla.
9810	FL-RCID	Reedy Creek Improvement District, Florida.
9811	FL-OCPCD	Orange County Pollution Control Department, Florida
9812	FL-BCPCD	Brevard County Pollution Control Department, Florida
9813	PA-DER	Pennsylvania Department of Environmental Resources
9814	AK-DFG	Alaska Department of Fish and Game
9815	AK-DEC	Alaska Department of Environmental Conservation
9816	CA-DWR	California Department of Water Resources
9817	CA-OCWD	Orange County Water District, California.
9818	FL-HCEPC	Hillsborough County Environmental Protection Comm., Florida
9819	NY-NCDH	Nassau County Department of Health, New York
9820	NY-SCDH	Suffolk County Department of Health, New York

Value	Short name	Description
00028 – ANALYZING AGENCY		
9821	NY-SCDEC	Suffolk County Department of Envir. Control, New York
9822	NY-SCWA	Suffolk County Water Authority, New York
9823	CA-ACWD	Alameda County Water District, California
9824	CA-ACFC7	Alameda Co. Flood Control & Water Conser. Dist, Zone 7, California
9825	CA-VCSD	Valley Community Services District (Livermore), California
9826	CA-LWTP	City of Livermore Waste Treatment Plant, California
9827	AR-DPCE	Arkansas Department of Pollution Control and Ecology
9828	AR-GFC	Arkansas Game and Fish Commission
9829	NY-NCPW	Nassau County Department of Public Works, New York
9830	NYIWWTPL	City of Ithaca Wastewater Treatment Plant Laboratory, New York
9831	IA-UISHL	University of Iowa, State Hygienic Laboratory
9902	AZ-UA	University of Arizona
9903	FL-UF	University of Florida
9904	FL-FSU	Florida State University
9905	FL-UCF	University of Central Florida
9906	AK-UA	University of Alaska
10001	DE-UDMS	University of Delaware, College of Marine Studies, Lewes, Del.
10003	DE-DNREC	Del. Dept. Natural Resources and Envir. Control, Dover, Del.
12001	FL-TAMPA	City of Tampa, Fla.
12002	FL-VEROB	City of Vero Beach, Fla.
12005	FL-TALLA	City of Tallahassee, Fla.
12007	FL-ITTCD	ITT Community Development Corporation, Florida
12010	FL-PBCE	Palm Beach County Engineer
12020	FL-PBCHD	Palm Beach County Health Dept.
12030	FL-DCERM	Dade County Dept. of Env. Resources Man.
12040	FL-UMH3L	University of Miami, Tritium Laboratory, Miami, Fla.
12050	FL-QUANT	Quanterra Environmental Services, Tampa, Fla.
16001	ID-DWR	Idaho Department of Water Resources
16002	ID-DHW	Idaho Department of Health and Welfare
17001	IL-MSDGC	Metropolitan Sanitary Dist. of Greater Chicago (MSD)
17002	IL-EPA	Illinois Environmental Protection Agency (IEPA)
17003	IL-SWS	Illinois State Water Survey (ISWS)
18001	IN-DEMGW	Indiana Dept. Env. Mgmt., Drinking Water Branch, GW Section
18002	IN-DEM	Indiana Department of Environmental Management (IDEM)
18003	IN-GS	Indiana Geological Survey (IGS)
18004	IN-DNR	Indiana Department of Natural Resources (IDNR)
18005	IN-DPW	Indianapolis Department of Public Works, Indiana (IDPW)
18006	IN-PUL	Purdue University, Lafayette, Ind.
18007	IN-IUB	Indiana University, Bloomington, Ind.
18008	IN-BSU	Ball State University, Muncie, Ind.
18009	IN-SJRBC	St. Joseph River Basin Commission, Indiana

Value	Short name	Description
00028 – ANALYZING AGENCY		
20001	KS-GS	Kansas State Geological Survey
20003	KS-TWWL	City of Topeka, Kansas Wastewater Laboratory
20005	KS-WWWL	City of Wichita, Kansas Water and Wastewater Laboratory
21001	KY-GS	Geological Survey of Kentucky
25001	MA-BCHDL	Barnstable County Health Department, Massachusetts
25005	MA-WHOIB	Biology Department, Woods Hole Oceanographic Inst., Massachusetts
25007	MA-WRASD	Mass. WRA, Sewerage Division Central Lab., Winthrop, Mass.
25009	MA-AAL	Alpha Analytical Labs, Westborough, Mass.
26001	MI-PTSJ	PhycoTech, St Joseph, Mich.
27001	MN-DNR	Minn. Department of Natural Resources (DNR), St. Paul, Minn.
27002	MN-DNRWD	Minn. DNR, Waters Division, St. Paul, Minn.
27003	MN-DNRFW	Minn. DNR, Fish and Wildlife Division, St. Paul, Minn.
27004	MN-DNRFD	Minn. DNR, Forestry Division, St. Paul, Minn.
27005	MN-DNRMD	Minn. DNR, Minerals Division, St. Paul, Minn.
27010	MN-PCA	Minn. Pollution Control Agency (PCA), St. Paul, Minn.
27011	MN-PCAWQ	Minn. PCA, Water Quality Division, St. Paul, Minn.
27012	MN-PCAHW	Minn. PCA, Solid/Hazardous Waste Division, St. Paul, Minn.
27013	MN-PCAAQ	Minn. PCA, Air Quality Division, St. Paul, Minn.
27020	MN-DOH	Minn. Department of Health, Minneapolis, Minn.
27030	MN-GS	Minn. Geological Survey, St. Paul, Minn.
27035	MN-UM	Univ. of Minnesota, Minneapolis-St. Paul, Minn.
27036	MN-UMGG	Univ. of Minn., Geology and Geophysics, Minneapolis, Minn.
27037	MN-UMRAL	Univ. of Minn., Research Analytical Lab, St. Paul, Minn.
27038	MN-UMGFB	Univ. of Minn., Gray Freshwater Bio. Inst., Navarre, Minn.
27039	MN-UMSS	Univ. of Minn., Soil Science St. Paul, Minn.
27040	MN-UMAE	Univ. of Minn., Agricultural Engineering, St. Paul, Minn.
27041	MN-UMEEB	Univ. of Minn., Ecol., Evol., and Behavior, St. Paul, Minn.
27050	MN-MWCC	Metropolitan Waste Control Commission, St. Paul, Minn.
28001	MS-OPC	Office of Pollution Control, Mississippi
28002	MS-OG	Office of Geology, Mississippi
28003	MS-OLWR	Office of Land and Water Resources, Mississippi
28004	MS-MSUCL	Mississippi State Chemical Laboratory, Miss. State Univ.
29001	MO-DNREQ	Missouri Dept of Natural Resources, Div of Envir. Quality
30010	MT-BMG	Montana Bureau of Mines and Geology
30020	MT-FWP	Montana Dept. of Fish Wildlife and Parks
30030	MT-HESWQ	Montana Dept. of Health/Env. Sciences, Water Quality Bureau
30040	MT-ARC	Montana Agricultural Research Center
30050	MT-TMI	Montana Tunnels Mining, Inc., Wickes, Mont.
30060	MT-WCI	Water Consulting, Inc., Hamilton, Mont.
31001	NE-DEQL	Nebraska Department of Environmental Control Laboratory
32001	NV-DEP	Nevada Division of Environmental Protection

Value	Short name	Description
00028 – ANALYZING AGENCY		
32003	NV-DWR	Nevada Division of Water Resources
32005	NV-UNRNR	Univ. of Nev., Div. of Renew. Nat. Resources
32006	NV-BEH	Nevada Bureau of Environmental Health
32007	NV-BMG	Nevada Bureau of Mines and Geology
32009	NV-DFG	Nevada Department of Fish and Game
32010	NV-DF	Nevada Division of Forestry
32011	NV-DP	Nevada Division of Parks
32012	NV-CHPS	Nevada Consumer Health Protection Service
32013	NV-UNDRI	Univ. of Nevada, Desert Research Institute
32014	NV-UNCA	Univ. of Nevada., College of Agriculture
32015	NV-CCDHD	Clark County District Health Department, Nevada
32016	NV-WCDHD	Washoe County District Health Department, Nevada
32017	NV-LVVWD	Las Vegas Valley Water District, Nevada
32018	NV-SPPC	Sierra Pacific Power Co., Nevada
32019	NV-BLR	Nevada Bureau of Laboratories and Research
32020	NV-WCU	Washoe County Utilities, Reno, Nev.
32021	NV-CCPW	Carson City Public Works, Carson City, Nev.
32022	NV-TMWRF	Truckee Meadows Water Reclamation Facility, Reno, Nev.
32091	NV-WCCOG	Washoe County COG, Nevada
32092	NV-CCCOG	Clark County COG, Nevada
32093	NV-MWC	Municipal Water Company, Nevada.
34001	NJ-DEP	New Jersey Department of Environmental Protection
34002	PA-RFWI	Roy F. Weston Inc., West Chester, Pa.
34003	PA-BGBI	Booth, Garrett, and Blair Inc., Ambler, Pa.
34004	NJ-CMCDH	Cape May County, N.J., Department of Health
34005	NJ-CMCPB	Cape May County, N.J., Planning Board
34006	NJ-QUANT	Quanterra Environmental Services, Summerset, N.J.
34007	NJ-ACCUL	Accutest Laboratories, Dayton, N.J.
34008	NJ-AI	Analab Inc, Edison, N.J.
34010	NJ-DEPML	New Jersey, DEP, Bureau of Marine Water Monitoring Lab
36010	NY-DOH	New York Department of Health
36012	NY-ECALB	New York Dept. of Environmental Conservation, Albany, N.Y.
36015	NY-EAITH	Environmental Associates, Ithaca, N.Y.
36020	Nassau Co DOPW	Nassau County, Department of Public Works
38001	ND-GS	North Dakota Geological Survey
38002	ND-WC	North Dakota State Water Commission
38003	N.Dakota Hlth Dept	North Dakota State Health Department
38004	SLT-ND	Spirit Lake Tribe, North Dakota
39001	OH-HCQWL	Heidelberg College QW Lab, Tiffin, Ohio
39002	OHNEORSD	Northeastern Ohio Regional Sewer District, Ohio
39003	OH-LCGDH	Lake County General Health District, Ohio

Value	Short name	Description
00028 – ANALYZING AGENCY		
39004	OH-CCBH	Cuyahoga County Board of Health, Ohio
40810	USCOETUL	Corps of Engineers, Tulsa District
41000	OR-PBWW	City of Portland, Bureau of Water Works
42010	PA-PHIL	City of Philadelphia, Pa.
42011	SRBC	Susquehanna River Basin Commission
42015	PA-ANSP	The Academy of Natural Sciences of Philadelphia, Pa.
42016	PA-PSH	Penn State Harrisburg, Middletown, Pa.
42020	PA-QUANT	Quanterra Environmental Services, Pittsburgh, Pa.
44001	RI-PHWPP	Philip J. Holton Water Purification Plant, Scituate, R.I.
46001	SD-SDSSL	South Dakota State University Soils Laboratory
46002	SD-WRI	South Dakota Water Resources Institute
46003	SD-AES	South Dakota Agricultural Experiment Station
46004	SD-CHEM	South Dakota State Chemist
46005	SD-SMT	South Dakota School of Mines and Technology
46006	SD-SDSSB	South Dakota State University, Dept. Station Biochemistry
46007	SD-DWR	South Dakota Division of Water Rights
46008	SD-GS	South Dakota Geological Survey, Vermillion, S. Dak.
46009	SD-HDL	South Dakota Department of Health
47001	TN-UTK	University of Tennessee at Knoxville
48001	TX-AMTEL	Texas A&M U., Trace Element Research Lab., College Sta., Tex.
49001	UT-KEL	Kennecott Environmental Lab, Salt Lake City, Utah
51001	VA-HRSD	Hampton Roads Sanitation Dist, Cent Envir Lab, Virg Bch, Va.
51003	VA-GMU	George Mason University, Fairfax, Va.
51005	VA-VTOWL	Virginia Tech., Occoquan Watershed Monitoring Laboratory
55555	INDIVID	Individual
66666	DRILLER	Driller
80000	QAPROJCT	USGS-Branch of Quality Systems
80003	GER-IKTU	Inst. Kernphysik, Tech Univ, Darmstadt, Germany
80010	USGS-GAL	Atlanta Central Laboratory, Georgia
80020	USGSNWQL	USGS-National Water Quality Lab, Denver, Colo.
80030	USGS NY Albany Lab	Albany Central Laboratory, New York
80040	USGSBGGD	USGS Geologic Division, Branch of Geochemistry, Arvada, Colo.
80042	USGSWHMA	USGS, Biology Dept., Woods Hole Oceanographic Ins, Mass.
80045	USGSRLGD	USGS-Geologic Division Radionuclide Lab, Denver, Colo.
80055	AUS-IAEA	IEAE, Vienna, Austria
80088	SWE-RDL	Radioactive Dating Lab, Geol. Survey, Sweden-Frescati
80090	USGSNRVA	USGS-National Research Program Lab, Reston, Va.
80093	USGSNRCO	USGS-National Research Program Lab, Denver/Boulder, Colo.
80095	USGSNRCA	USGS-National Research Program Lab, Menlo Park, Calif.
80096	USGSSMRL	USGS Solids/Organic Matter Research Lab, Denver, Colo.
80097	USGSCRCO	USGS Carbon Research Lab, Boulder, Colo

Value	Short name	Description
00028 – ANALYZING AGENCY		
80098	USGSISCA	USGS Isotope Research Lab, Menlo Park, Calif.
80110	AL-STLMB	Severn-Trent Laboratory - Mobile: Mobile, Ala
80113	USGS-ALL	District Water-Quality Lab, Tuscaloosa, Ala.
80141	AL-GS	Geological Survey of Alabama
80201	AK-DGGS	Alaska Division of Geologic and Geophysical Surveys (DGGS)
80203	AK-CGL	Chemical and Geological Laboratories of Alaska
80205	AK-NTL	Northern Test Lab (Soldotna, Alaska)
80213	USGS-AKL	District Water-Quality Lab, Anchorage, Alaska
80410	AZ-TUCSN	City of Tucson, Ariz.
80413	USGS-AZL	District Water-Quality Lab, Yuma, Ariz.
80415	AZ-DEQ	Ariz. Dept. of Environmental Quality
80417	AZ-DWR	Ariz. Dept. of Water Resources
80501	AR-OBU	Ouachita Baptist University, Arkadelphia, Ark.
80503	AR-UARE	University of Arkansas, Dept. of Engineering, Fayetteville
80505	AR-UARG	University of Arkansas, Dept. of Geology, Fayetteville
80513	USGS-ARL	District Water-Quality Lab, Little Rock, Ark.
80515	AR-GC	Arkansas Geological Commission
80601	USHHSICA	Health and Human Services Indian Health Services, California
80613	USGSCAL1	District Water-Quality Lab, Sacramento, Calif.
80615	USGSSDCA	Sediment Analysis Lab, USGS, Marina, Calif.
80618	USGSCAL2	District Water-Quality Lab, San Diego, Calif.
80620	CA-STLSC	Severn-Trent Laboratory - Sacramento: West Sacramento, Calif.
80623	CA-SDL	City of San Diego Lab, California
80630	CA-STLSA	Severn-Trent Laboratory - Los Angeles: Santa Ana, Calif.
80640	CA-MWHL	Montgomery-Watson-Harza Laboratories, Monrovia, Calif.
80641	CA-LLNL	Lawrence Livermore Lab, California
80642	CA-GGC	Global Geochemistry Corporation, Canoga Park, Calif.
80643	CA-EBERL	Eberline Services, Richmond, Calif.
80645	Mont Watson Lab, CA	Montgomery Watson Laboratories, Monrovia, Calif.
80647	CA-HSL	High Sierra Lab, Truckee, Calif.
80650	CA-UCB	University of California, Berkeley
80670	CA-UCD	University of California, Davis
80671	CA-UCSD	University of California, San Diego, La Jolla
80672	CA-UCLA	University of California, Los Angeles
80801	COARVADA	City of Arvada, Colo.
80810	CO-DOW	Colorado Division of Wildlife
80820	CO-PRWSG	Pine River Watershed Stakeholders Group, Colo.
80839	CO-CSUVS	Env.Health Div. Vet.Science College, CSU, Fort Collins, Colo.
80841	CO-DAVIS	Davis Laboratories, Colorado
80843	CO-DRCOG	Denver Regional Council Of Government
80845	CO-MDSL1	Metropolitan Denver Sewage Disposal District Lab. No. 1

Value	Short name	Description
00028 – ANALYZING AGENCY		
80847	COCSUSTL	Soils Testing Laboratory, Colo State Univ, Ft. Collins, Colo.
80849	CO-RMAL	Rocky Mountain Analytical Laboratory (Arvada, Colo.)
80851	CO-UCCAG	Upper Clear Creek Advisory Group, Idaho Springs, Colo.
80853	CO-CSEQL	City of Colorado Springs, Environmental Quality Lab
80855	CO-STLDN	Severn-Trent Laboratory, Denver, Colo.
80857	COFTCOLN	City of Fort Collins, Colo.
80859	CO-ACCUL	Acculabs, Inc., Golden, Colo.
81210	FL-SJWMD	St. Johns Water Management District, Fla.
81213	USGSOCFL	District Water-Quality Lab, Ocala, Fla.
81220	FL-STLPC	Severn-Trent Laboratory - Pensacola: Pensacola, Fla.
81222	FL-STLTH	Severn-Trent Laboratory - Tallahassee: Tallahassee, Fla.
81223	FL-UMSMS	University of Miami-School of Marine Science, Miami, Fla.
81227	FL-VCEC	Volusia County Environmental Control, Florida
81229	FL-UMIAM	University of Miami, Miami, Fla.
81232	FL-SFWMD	South Florida Water Management District, West Palm Beach, Fla.
81233	FL-FIU	Florida International University, Miami, Fla.
81320	GA-STLSV	Severn-Trent Laboratory - Savannah: Savannah, Ga.
81330	GA-UGAEL	University of Georgia, Ag and Env Services Laboratory
81341	GS-NRD	Georgia State Natural Resources Department
81345	USGSWEBB	USGS, Panola Mountain Research (WEBB) Lab, Georgia
81350	USGSSDGA	USGS, Sediment-partitioning Research Lab, Georgia
81513	USGS-HIL	District Water-Quality Lab, Honolulu, Hawaii
81601	ID-RESL	Radiological & Env. Sciences Lab, DOE, INEL, Idaho Falls, Idaho
81603	ID-ECL	Environmental Chemistry Lab, E.G.&G., INEL, Idaho Falls, Idaho
81605	ID-RML	Radiation Measurements Lab, E.G.&G., INEL, Idaho Falls, Idaho
81607	ID-EAG	Environmental Analysis Group, WINCO, INEL, Idaho Falls, Idaho
81641	ID-DHWBL	Idaho Dept. of Health and Welfare, Bureau of Laboratories
81700	USGSILWC	USGS - Illinois District
81720	IL-STLCH	Severn-Trent Laboratory - Chicago: Chicago, Ill.
81741	IL-BNSD	Bloomington Normal Sanitary District, Illinois
81777	IL-UC	University of Chicago, Illinois
81804	IN-STLVP	Severn-Trent Laboratory - Valparaiso: Valparaiso, Ind.
81941	IA-HL	Iowa State Hygienic Laboratory
81951	IA-DEQ	Iowa Department of Environmental Quality
81960	USGSSDIA	USGS-Iowa District Sediment Lab, Iowa City, Iowa
82013	USGSOGKS	District Research Water-Quality Lab, Lawrence, Kans.
82041	KS-DHE	Kansas State Department of Health and Environment
82043	KS-JCEL	Johnson County Environmental Laboratory, Lenexa, Kans.
82101	KY-CHR	Kentucky Cabinet of Human Resources
82103	KY-BEL	Beckmar Environmental Laboratory, Ky.
82105	USGSSDKY	USGS-Kentucky District Sediment Lab, Louisville, Ky.

Value	Short name	Description
00028 – ANALYZING AGENCY		
82213	USGS-LAL	District Water-Quality Lab, Baton Rouge, La.
82215	USGSSDLA	Sediment Analysis Lab, USGS, Baton Rouge, La.
82241	LA-GSRI	Louisiana, Gulf South Research Institute
82301	ME-UMEL	University of Maine Laboratory, Orono, Maine
82303	HBMI-ME	Houlton Band of Maliseet Indians, Maine
82341	ME-DEP	Maine, Dept. of Environmental Protection
82440	USGS-MDL	District Water-Quality Lab, Baltimore, Maryland
82520	MA-STLWF	Severn-Trent Laboratory - On-Site Technology: Westfield, Mass.
82522	MA-STLW2	Severn-Trent Laboratory - Westfield: Westfield, Mass.
82524	MA-STLBI	Severn-Trent Laboratory - Billerica: Billerica, Mass.
82641	MI-WCHD	Washtenaw County Health Department, Michigan
82810	MS-USM	University of Southern Mississippi
82901	MO-UMETS	Univ. of Missouri Environmental Trace Substances Lab
82902	MO-STLSL	Severn-Trent Laboratory - St. Louis: Earth City, Mo.
82913	USGS-MOL	District Water-Quality Lab, Rolla, Mo.
82915	USGSSDMO	Sediment Analysis Lab, USGS, Rolla, Mo.
83003	USHHSIMT	Billings Area Indian Health Service - Billings, Mont.
83005	MT-UMTCL	Env Bio-Geo Chem Lab, Dept of Geol, U of MT, Missoula, Mont.
83011	MT-DEQ	MT Department of Environmental Quality
83015	USGSSDMT	Sediment Analysis Lab, USGS, Helena, Mont.
83101	NE-HL	Harris Laboratories, Lincoln, Neb.
83105	NE-OALI	Olsen's Agricultrual Laboratory, Inc., McCook, Neb.
83107	NE-UNLL	University of Nebraska, Limnology Laboratory, Lincoln, Neb.
83109	NE-UNWSL	Univ of Nebraska, Water Sciences Lab, Lincoln, Neb.
83113	USGS-NEL	District Water-Quality Lab, Lincoln, Neb.
83241	NV-SEMS	Sierra Environmental Monitoring Service, Nevada
83341	NH-WSPCL	Water Supply & Pollution Control Comm. Lab., New Hampshire
83401	NJ-TII	Teledyne Isotopes, Inc., New Jersey
83405	NJ-SCHD	Sussex County Health Department, New Jersey
83410	NJ-RUSIL	Rutgers University, Geology Dept, Stable Isotope Lab, New Jersey
83413	USGS-NJL	USGS New Jersey Water Science Center Laboratory
83441	NJ-HDL	NJ Dpt Hlth&Senior Svcs-Div Pub Hlth&Env Labs-Env&Chem Lab
83481	NJ-EMSL	EMSL Analytical Services, Westmont, N.J.
83513	USGS-NML	District Water-Quality Lab, Albuquerque, N.M.
83514	USGSSDNM	USGS District Sediment Laboratory, Albuquerque, N,M.
83523	NM-NMT	New Mexico Institute of Mining and Technology - Socorro
83541	NM-UNM	University of New Mexico
83542	NM-SWMTL	USBIA Soil, Water, & Material Testing Lab., New Mexico
83611	NY-MCHD	Monroe County Health Department, New York
83613	USGS-NYL	New York WSC Low Ionic Strength Lab, Troy (formerly Albany)
83620	NY-UFI	Upstate Freshwater Institute, New York

Value	Short name	Description
00028 – ANALYZING AGENCY		
83621	NY-OG	O'Brien and Gere, New York
83622	NY-DFWI	Darrin Fresh Water Institute, Bolton Landing, N.Y.
83630	NY-SUCE	Syracuse University, Dept. of Civil Engineering
83631	NY-ML	Metropolitan Laboratory, New York
83640	NY-IWWTP	City of Ithaca Waste Water Treatment Plant, Ithaca, N.Y.
83641	NY-IWFP	City of Ithaca Water Filtration Plant, Ithaca, N.Y.
83650	NY-ECL	Erie County Laboratory, New York
83652	NY-LDEO	Lamont-Doherty Earth Observatory, Palisades, N.Y.
83655	NY-STLNB	Severn-Trent Laboratory - Newburgh, N.Y.
83656	NY-STLBF	Severn-Trent Laboratory - Buffalo: Amherst, N.Y.
83660	NY-SUNYC	State University of New York at Cortland, N.Y.
83671	NY-CU	Columbia University, New York
83713	USGS-NCL	District Water-Quality Lab, Raleigh, N.C.
83741	NC-DNER	North Carolina Dept. of Natural and Economic Resources
83742	NCENRSRL	North Carolina DENR - Shellfish & Sanitation Rec WQ Sxn Lab
83751	NCMCDEHL	Mecklenburg Co. Dept. of Environmental Health Lab, North Carolina
83841	ND-SLAB	North Dakota State Laboratory
83901	OH-NTLWC	National Testing Laboratory, Water Check Division, Ohio
83905	OH-EPA	Ohio Environmental Protection Agency, Columbus, Ohio
83913	USGS-OHL	District Water-Quality Lab, Columbus, Ohio
83914	USGSOHML	District Microbiological Laboratory, Columbus, Ohio
83915	OH-CWQAL	City of Columbus, Water Quality Assurance Laboratory, Ohio
83920	OH-STLCN	Severn-Trent Laboratory - North Canton: North Canton, Ohio
84001	OK-WRB	Oklahoma Water Resources Board
84003	OK-OSU	Oklahoma State University
84005	OK-HDRL	Oklahoma State Health Department Radiochemistry Laboratory
84007	OK-DA	Oklahoma State Department of Agriculture
84009	OK-ACOG	Association of Central Oklahoma Governments
84011	OK-CORPC	Oklahoma Corporation Commission
84013	USGS-OKL	District Water-Quality Lab, Oklahoma City, Okla.
84015	OK-CCOKC	Oklahoma Conservation Commission, Oklahoma City, Okla.
84017	OK-DEQ	Oklahoma Department of Environmental Quality (ODEQ)
84041	OK-GS	Oklahoma Geological Survey
84042	OK State Hlth Dept	Oklahoma State Health Department
84101	OR-OGI	Oregon Graduate Institute, Beaverton, Ore.
84113	USGS-ORL	District Water-Quality Lab, Portland, Ore.
84210	PA-DOAL	Pennsylvania Department of Agriculture Laboratory
84213	USGS-PAL	District Water-Quality Lab, Harrisburg, Pa.
84215	PA-CCHDL	Chester County Health Department Lab, Pennsylvania
84217	PA-ACHDL	Allegheny County Health Dept Laboratory, Pittsburgh, Pa.
84218	PA-ECHDL	Erie County Health Department, Erie, Pa.

Value	Short name	Description
00028 – ANALYZING AGENCY		
84220	PA-STLPT	Severn-Trent Laboratory - Pittsburgh: Pittsburgh, Pa.
84240	PA-PHILU	City of Philadelphia, Pa. and USGS
84250	PA-LL	Lancaster Laboratories, Lancaster, Pa.
84540	SC-WRC	South Carolina Water Resources Commission
84541	SC-SRL	Savannah River Lab, South Carolina
84610	TN-UREPL	URE Project Laboratory, Oak Ridge, Tenn.
84642	MI-UMML	Michigan State University Microbiology Lab, East Lansing, Mich.
84699	PUBLIC	Public Entity
84710	TN-STLKX	Severn-Trent Laboratory - Knoxville: Knoxville, Tenn.
84813	USGSTXAL	District Water-Quality Lab, Austin, Tex.
84820	TX-STLAS	Severn-Trent Laboratory - Austin: Austin, Tex.
84821	TX-STLCC	Severn-Trent Laboratory - Corpus Christi: Corpus Christi, Tex.
84823	IBWC	International Boundary Water Commission
84833	TX-GBRA	Guadalupe-Blanco River Authority
84913	USGS-UTL	District Water-Quality Lab, Salt Lake City, Utah
85020	VT-STLBL	Severn-Trent Laboratory - Burlington: Colchester, Vt.
85113	USGSH3VA	Headquarters Tritium Lab, Reston, Va.
85114	USGS-VAL	District Water-Quality Lab, Charlottesville, Va.
85115	VA-UVESL	Univ. of Virginia Dept. of Environmental Sciences Lab
85116	VA-CLS	Virginia Division of Consolidated Laboratory Services
85301	WA-STLRL	Severn-Trent Laboratory - Richland: Richland, Wash.
85313	USGS-WAL	District Water-Quality Lab, Tacoma, Wash.
85315	USGS-CVO	Cascades Volcano Obs Sediment Analysis Lab, Vancouver, Wash
85341	WA-AMTI	AM Test Inc., Washington
85342	WA-MMS	Municipality of Metropolitan Seattle, Wash.
85343	WA-DE	Washington State Dept. of Ecology
85344	WA-SHS	Washington State Dept. of Social and Health Services
85345	WA-ARI	Analytical Resources Incorporated (Seattle, Wash.)
85346	WA-EEI	Ecology and Environment Inc. (Seattle, Wash.)
85347	WA-ITC	International Technology Corporation, Richland, Wash.
85348	WA-EAI	Edge Analytical (MTC), Inc. Burlington, Wash.
85349	WA-SASI	Sound Analytical Services, Inc. Fife, Wash.
85350	WA-IELI	Inland Environmental Laboratory, Inc. Spokane, Wash.
85351	WA-FG	Frontier Geosciences, Seattle, Wash.
85411	USGS-WVL	District Water-Quality Lab, Charleston, W.Va.
85540	WI-RLA	Robert E. Lee and Assoc. Green Bay, Wis.
85541	WI-MAYO	Mayo Clinic, University of Wisconsin
85542	WI-UWE	University of Wisconsin Extension
85543	WI-SLH	State Laboratory of Hygiene, Wisconsin
85544	WI-HLA	Hazelton Laboratories America (Madison, Wis.)
85547	WI-MMSD	Milwaukee Metropolitan Sewerage District, Milwaukee, Wis.

Value	Short name	Description
00028 – ANALYZING AGENCY		
85548	WI-DPH	Madison Department of Public Health, Madison, Wis.
85550	USGSWIML	USGS-Wisconsin District Mercury Lab, Madison, Wis.
85551	WI-UWLRS	University of Wisconsin at Lacrosse, River Studies Ctr
85613	USGS-WYL	District Water-Quality Lab, Cheyenne, Wyo.
85614	KY-LJCMS	Louisville & Jefferson County Metro Sewer District Lab
85641	WY-DA	Wyoming Department of Agriculture
87213	USGS-PRL	District Water-Quality Lab, San Juan, P. R.
89201	CANECWQB	Environment Canada, Qater Quality Br., Burlington, Ontario
89202	CAN-XRAL	XRAL Laboratory Services, Don Mills, Ontario, Canada
89203	CAN-ONAL	Activation Labs, Ltd, Ancaster, Ontario, Canada
89213	CAN-CRNL	Chalk River Nuclear Laboratories, Chalk River, Canada
89301	CANMBEWS	Manitoba Environment, Water Standards Sec., Winnipeg, Man.
89401	CAN-SEWQ	Saskatchewan Environment, Water Quality Br., Regina, Sask.
92001	CAN-UWIL	Univ. of Waterloo, Isotope Lab,Waterloo, Ontario, Canada
99001	CONTRACT	Private contractor
99999	OTHER	Other

This table continues on the next page.

Value	Short name	Description
00041 WEATHER, WMO CODE		
0	Cloudless	Cloudless
1	Partly cloudy	Partly cloudy
2	Cloudy	Cloudy
3	Overcast	Overcast
10	Precip within sight	Precipitation within sight
13	Ugly threatening sky	Ugly, threatening sky
40	Fog	Fog
50	Drizzle	Drizzle
51	Slt drizzle inr	Slight drizzle, intermittent
52	Slt drizzle cont	Slight drizzle, continuous
53	Mod drizzle inr	Moderate drizzle, intermittent
54	Mod drizzle cont	Moderate drizzle, continuous
55	Thick drizzle inr	Thick drizzle, intermittent
56	Thick drizzle cont	Thick drizzle, continuous
57	Drizzle and fog	Drizzle and fog
58	Slt or md drizl rain	Slight or moderate drizzle and rain
59	Thick drizzle & rain	Thick drizzle and rain
60	Rain	Rain
61	Slt rain inr	Slight rain, intermittent
62	Slt rain cont	Slight rain, continuous
63	Moderate rain inr	Moderate rain, intermittent
64	Moderate rain cont	Moderate rain, continuous
65	Hvy rain inr	Heavy rain, intermittent
66	Hvy rain cont	Heavy rain, continuous
67	Rain and fog	Rain and fog
68	Slt mod mxd rain snw	Slight or moderate mixed rain and snow
69	Hvy rain & snow	Heavy mixed rain and snow
70	Snow or sleet	Snow or sleet
71	Slt snow flakes inr	Slight snow in flakes, intermittent
72	Slt snow flakes cont	Slight snow in flakes, continuous
73	Mod snow flakes inr	Moderate snow in flakes, intermittent
74	Mod snow flakes cont	Moderate snow in flakes, continuous
75	Hvy snow flakes inr	Heavy snow in flakes, intermittent
76	Hvy snow flakes cont	Heavy snow in flakes, continuous
77	Snow and fog	Snow and fog
78	Granular snow (FD)	Granular snow (frozen drizzle)
79	Ice crystals	Ice crystals
80	Shower(s)	Shower(s)
81	Slt or mod rain shwr	Slight or moderate rain shower(s)
82	Heavy rain shower(s)	Heavy rain shower(s)
83	Slt or mod snow shwr	Slight or moderate snow shower(s)

Value	Short name	Description
00067 -- TIDE STAGE		
84	Heavy snow shower(s)	Heavy snow shower(s)
85	Slt or mod rain snw	Slight or moderate rain and snow shower(s)
86	Hvy rain & snow shwr	Heavy rain and snow shower(s)
87	Granular snow shwr	Granular snow shower(s)
88	Slt or md hail rain	Slight or moderate hail or rain and hail shower(s)
89	Hvy hail rain & hail	Heavy hail or rain and hail shower(s)
90	Thunderstorm	Thunderstorm
93	Slt tstorm rain snow	Slight thunderstorm with rain or snow
94	Slt tstorm with hail	Slight thunderstorm with hail
95	Mod tstorm rain snow	Moderate thunderstorm with rain or snow
96	Mod tstorm with hail	Moderate thunderstorm with hail
97	Hvy Tstorm rn or snw	Heavy thunderstorm with rain or snow
99	Hvy Tstorm w hail	Heavy thunderstorm with hail
1000	HWS 3h	High water slack; wi 3 hrs
1001	HWS 3h MEC	High water slack; wi 3 hrs; Max ebb current
1002	HWS 3h MFC	High water slack; wi 3 hrs; Max flood current
1010	HWS 3h C&GS	High water slack; wi 3 hrs; C&GS table
1011	HWS 3h C&GS MEC	High water slack; wi 3 hrs; C&GS table; Max ebb current
1012	HWS 3h C&GS MFC	High water slack; wi 3 hrs; C&GS table; Max flood current
1020	HWS 3h meas	High water slack; wi 3 hrs; measured
1021	HWS 3h meas MEC	High water slack; wi 3 hrs; measured; Max ebb current
1022	HWS 3h meas MFC	High water slack; wi 3 hrs; measured; Max flood current
1100	HWS 2h	High water slack; wi 2 hrs
1101	HWS 2h MEC	High water slack; wi 2 hrs; Max ebb current
1102	HWS 2h MFC	High water slack; wi 2 hrs; Max flood current
1110	HWS 2h C&GS	High water slack; wi 2 hrs; C&GS table
1111	HWS 2h C&GS MEC	High water slack; wi 2 hrs; C&GS table; Max ebb current
1112	HWS 2h C&GS MFC	High water slack; wi 2 hrs; C&GS table; Max flood current
1120	HWS 2h meas	High water slack; wi 2 hrs; measured
1121	HWS 2h meas MEC	High water slack; wi 2 hrs; measured; Max ebb current
1122	HWS 2h meas MFC	High water slack; wi 2 hrs; measured; Max flood current
1200	HWS 1h	High water slack; wi 1 hr
1201	HWS 1h MEC	High water slack; wi 1 hr; Max ebb current
1202	HWS 1h MFC	High water slack; wi 1 hr; Max flood current
1210	HWS 1h C&GS	High water slack; wi 1 hr; C&GS table
1211	HWS 1h C&GS MEC	High water slack; wi 1 hr; C&GS table; Max ebb current
1212	HWS 1h C&GS MFC	High water slack; wi 1 hr; C&GS table; Max flood current
1220	HWS 1h meas	High water slack; wi 1 hr; measured
1221	HWS 1h meas MEC	High water slack; wi 1 hr; measured; Max ebb current
1222	HWS 1h meas MFC	High water slack; wi 1 hr; measured; Max flood current
1300	HWS 40m	High water slack; wi 40 min

Value	Short name	Description
00067 -- TIDE STAGE		
1301	HWS 40m MEC	High water slack; wi 40 min; Max ebb current
1302	HWS 40m MFC	High water slack; wi 40 min; Max flood current
1310	HWS 40m C&GS	High water slack; wi 40 min; C&GS table
1311	HWS 40m C&GS MEC	High water slack; wi 40 min; C&GS table; Max ebb current
1312	HWS 40m C&GS MFC	High water slack; wi 40 min; C&GS table; Max flood current
1320	HWS 40m meas	High water slack; wi 40 min; measured
1321	HWS 40m meas MEC	High water slack; wi 40 min; measured; Max ebb current
1322	HWS 40m meas MFC	High water slack; wi 40 min; measured; Max flood current
1400	HWS 20m	High water slack; wi 20 min
1401	HWS 20m MEC	High water slack; wi 20 min; Max ebb current
1402	HWS 20m MFC	High water slack; wi 20 min; Max flood current
1410	HWS 20m C&GS	High water slack; wi 20 min; C&GS table
1411	HWS 20m C&GS MEC	High water slack; wi 20 min; C&GS table; Max ebb current
1412	HWS 20m C&GS MFC	High water slack; wi 20 min; C&GS table; Max flood current
1420	HWS 20m meas	High water slack; wi 20 min; measured
1421	HWS 20m meas MEC	High water slack; wi 20 min; measured; Max ebb current
1422	HWS 20m meas MFC	High water slack; wi 20 min; measured; Max flood current
1500	HWS 10m	High water slack; wi 10 min
1501	HWS 10m MEC	High water slack; wi 10 min; Max ebb current
1502	HWS 10m MFC	High water slack; wi 10 min; Max flood current
1510	HWS 10m C&GS	High water slack; wi 10 min; C&GS table
1511	HWS 10m C&GS MEC	High water slack; wi 10 min; C&GS table; Max ebb current
1512	HWS 10m C&GS MFC	High water slack; wi 10 min; C&GS table; Max flood current
1520	HWS 10m meas	High water slack; wi 10 min; measured
1521	HWS 10m meas MEC	High water slack; wi 10 min; measured; Max ebb current
1522	HWS 10m meas MFC	High water slack; wi 10 min; measured; Max flood current
1600	HWS 5m	High water slack; wi 5 min
1601	HWS 5m MEC	High water slack; wi 5 min; Max ebb current
1602	HWS 5m MFC	High water slack; wi 5 min; Max flood current
1610	HWS 5m C&GS	High water slack; wi 5 min; C&GS table
1611	HWS 5m C&GS MEC	High water slack; wi 5 min; C&GS table; Max ebb current
1612	HWS 5m C&GS MFC	High water slack; wi 5 min; C&GS table; Max flood current
1620	HWS 5m meas	High water slack; wi 5 min; measured
1621	HWS 5m meas MEC	High water slack; wi 5 min; measured; Max ebb current
1622	HWS 5m meas MFC	High water slack; wi 5 min; measured; Max flood current
2000	Ebb cur 3 hrs	Ebb current; wi 3 hrs
2001	Ebb cur 3h MEC	Ebb current; wi 3 hrs; Max ebb current
2002	Ebb cur 3h MFC	Ebb current; wi 3 hrs; Max flood current
2010	Ebb cur 3h C&GS	Ebb current; wi 3 hrs; C&GS table
2011	Ebb cur 3h C&GS MEC	Ebb current; wi 3 hrs; C&GS table; Max ebb current
2012	Ebb cur 3h C&GS MFC	Ebb current; wi 3 hrs; C&GS table; Max flood current

Value	Short name	Description
00067 -- TIDE STAGE		
2020	Ebb cur 3h measured	Ebb current; wi 3 hrs; measured
2021	Ebb cur 3h meas MEC	Ebb current; wi 3 hrs; measured; Max ebb current
2022	Ebb cur 3h meas MFC	Ebb current; wi 3 hrs; measured; Max flood current
2100	Ebb cur 2 hrs	Ebb current; wi 2 hrs
2101	Ebb cur 2h MEC	Ebb current; wi 2 hrs; Max ebb current
2102	Ebb cur 2h MFC	Ebb current; wi 2 hrs; Max flood current
2110	Ebb cur 2h C&GS	Ebb current; wi 2 hrs; C&GS table
2111	Ebb cur 2h C&GS MEC	Ebb current; wi 2 hrs; C&GS table; Max ebb current
2112	Ebb cur 2h C&GS MFC	Ebb current; wi 2 hrs; C&GS table; Max flood current
2120	Ebb cur 2h measured	Ebb current; wi 2 hrs; measured
2121	Ebb cur 2h meas MEC	Ebb current; wi 2 hrs; measured; Max ebb current
2122	Ebb cur 2h meas MFC	Ebb current; wi 2 hrs; measured; Max flood current
2200	Ebb current wi 1 hr	Ebb current; wi 1 hr
2201	Ebb cur 1h MEC	Ebb current; wi 1 hr; Max ebb current
2202	Ebb cur 1h MFC	Ebb current; wi 1 hr; Max flood current
2210	Ebb cur 1h C&GS	Ebb current; wi 1 hr; C&GS table
2211	Ebb cur 1h C&GS MEC	Ebb current; wi 1 hr; C&GS table; Max ebb current
2212	Ebb cur 1h C&GS MFC	Ebb current; wi 1 hr; C&GS table; Max flood current
2220	Ebb cur 1h measured	Ebb current; wi 1 hr; measured
2221	Ebb cur 1h meas MEC	Ebb current; wi 1 hr; measured; Max ebb current
2222	Ebb cur 1h meas MFC	Ebb current; wi 1 hr; measured; Max flood current
2300	Ebb cur 40 min	Ebb current; wi 40 min
2400	Ebb cur 20 min	Ebb current; wi 20 min
2301	Ebb cur 40m MEC	Ebb current; wi 40 min; Max ebb current
2302	Ebb cur 40m MFC	Ebb current; wi 40 min; Max flood current
2310	Ebb cur 40m C&GS	Ebb current; wi 40 min; C&GS table
2311	Ebb cur 40m C&GS MEC	Ebb current; wi 40 min; C&GS table; Max ebb current
2312	Ebb cur 40m C&GS MFC	Ebb current; wi 40 min; C&GS table; Max flood current
2320	Ebb cur 40m meas	Ebb current; wi 40 min; measured
2321	Ebb cur 40m meas MEC	Ebb current; wi 40 min; measured; Max ebb current
2322	Ebb cur 40m meas MFC	Ebb current; wi 40 min; measured; Max flood current
2400	Ebb cur 20 min	Ebb current; wi 20 min
2401	Ebb cur 20m MEC	Ebb current; wi 20 min; Max ebb current
2402	Ebb cur 20m MFC	Ebb current; wi 20 min; Max flood current
2410	Ebb cur 20m C&GS	Ebb current; wi 20 min; C&GS table
2411	Ebb cur 20m C&GS MEC	Ebb current; wi 20 min; C&GS table; Max ebb current
2412	Ebb cur 20m C&GS MFC	Ebb current; wi 20 min; C&GS table; Max flood current
2420	Ebb cur 20m meas	Ebb current; wi 20 min; measured
2421	Ebb cur 20m meas MEC	Ebb current; wi 20 min; measured; Max ebb current
2422	Ebb cur 20m meas MFC	Ebb current; wi 20 min; measured; Max flood current
2500	Ebb cur 10 min	Ebb current; wi 10 min

Value	Short name	Description
00067 -- TIDE STAGE		
2501	Ebb cur 10m MEC	Ebb current; wi 10 min; Max ebb current
2502	Ebb cur 10m MFC	Ebb current; wi 10 min; Max flood current
2510	Ebb cur 10m C&GS	Ebb current; wi 10 min; C&GS table
2511	Ebb cur 10m C&GS MEC	Ebb current; wi 10 min; C&GS table; Max ebb current
2512	Ebb cur 10m C&GS MFC	Ebb current; wi 10 min; C&GS table; Max flood current
2520	Ebb cur 10m meas	Ebb current; wi 10 min; measured
2521	Ebb cur 10m meas MEC	Ebb current; wi 10 min; measured; Max ebb current
2522	Ebb cur 10m meas MFC	Ebb current; wi 10 min; measured; Max flood current
2600	Ebb cur 5 min	Ebb current; wi 5 min
2601	Ebb cur 5m MEC	Ebb current; wi 5 min; Max ebb current
2602	Ebb cur 5m MFC	Ebb current; wi 5 min; Max flood current
2610	Ebb cur 5m C&GS	Ebb current; wi 5 min; C&GS table
2611	Ebb cur 5m C&GS MEC	Ebb current; wi 5 min; C&GS table; Max ebb current
2612	Ebb cur 5m C&GS MFC	Ebb current; wi 5 min; C&GS table; Max flood current
2620	Ebb cur 5m measured	Ebb current; wi 5 min; measured
2621	Ebb cur 5m meas MEC	Ebb current; wi 5 min; measured; Max ebb current
2622	Ebb cur 5m meas MFC	Ebb current; wi 5 min; measured; Max flood current
3000	Low wtr slack 3 hrs	Low water slack; wi 3 hrs
3001	LWS 3h MEC	Low water slack; wi 3 hrs; Max ebb current
3002	LWS 3h MFC	Low water slack; wi 3 hrs; Max flood current
3010	LWS 3h C&GS	Low water slack; wi 3 hrs; C&GS table
3011	LWS 3h C&GS MEC	Low water slack; wi 3 hrs; C&GS table; Max ebb current
3012	LWS 3h C&GS MFC	Low water slack; wi 3 hrs; C&GS table; Max flood current
3020	LWS 3h meas	Low water slack; wi 3 hrs; measured
3021	LWS 3h meas MEC	Low water slack; wi 3 hrs; measured; Max ebb current
3022	LWS 3h meas MFC	Low water slack; wi 3 hrs; measured; Max flood current
3100	Low wtr slack 2 hrs	Low water slack; wi 2 hrs
3101	LWS 2h MEC	Low water slack; wi 2 hrs; Max ebb current
3102	LWS 2h MFC	Low water slack; wi 2 hrs; Max flood current
3110	LWS 2h C&GS	Low water slack; wi 2 hrs; C&GS table
3111	LWS 2h C&GS MEC	Low water slack; wi 2 hrs; C&GS table; Max ebb current
3112	LWS 2h C&GS MFC	Low water slack; wi 2 hrs; C&GS table; Max flood current
3120	LWS 2h meas	Low water slack; wi 2 hrs; measured
3121	LWS 2h meas MEC	Low water slack; wi 2 hrs; measured; Max ebb current
3122	LWS 2h meas MFC	Low water slack; wi 2 hrs; measured; Max flood current
3200	Low wtr slack 1 hr	Low water slack; wi 1 hr
3201	LWS 1h MEC	Low water slack; wi 1 hr; Max ebb current
3202	LWS 1h MFC	Low water slack; wi 1 hr; Max flood current
3210	LWS 1h C&GS	Low water slack; wi 1 hr; C&GS table
3211	LWS 1h C&GS MEC	Low water slack; wi 1 hr; C&GS table; Max ebb current

Value	Short name	Description
00067 -- TIDE STAGE		
3212	LWS 1h C&GS MFC	Low water slack; wi 1 hr; C&GS table; Max flood current
3220	LWS 1h mea	Low water slack; wi 1 hr; measured
3221	LWS 1h meas MEC	Low water slack; wi 1 hr; measured; Max ebb current
3222	LWS 1h meas MFC	Low water slack; wi 1 hr; measured; Max flood current
3300	LWS 40m	Low water slack; wi 40 min
3301	LWS 40m MEC	Low water slack; wi 40 min; Max ebb current
3302	LWS 40m MFC	Low water slack; wi 40 min; Max flood current
3310	LWS 40m C&GS	Low water slack; wi 40 min; C&GS table
3311	LWS 40m C&GS MEC	Low water slack; wi 40 min; C&GS table; Max ebb current
3312	LWS 40m C&GS MFC	Low water slack; wi 40 min; C&GS table; Max flood current
3320	LWS 40m meas	Low water slack; wi 40 min; measured
3321	LWS 40m meas MEC	Low water slack; wi 40 min; measured; Max ebb current
3322	LWS 40m meas MFC	Low water slack; wi 40 min; measured; Max flood current
3400	LWS 20m	Low water slack; wi 20 min
3401	LWS 20m MEC	Low water slack; wi 20 min; Max ebb current
3402	LWS 20m MFC	Low water slack; wi 20 min; Max flood current
3410	LWS 20m C&GS	Low water slack; wi 20 min; C&GS table
3411	LWS 20m C&GS MEC	Low water slack; wi 20 min; C&GS table; Max ebb current
3412	LWS 20m C&GS MFC	Low water slack; wi 20 min; C&GS table; Max flood current
3420	LWS 20m meas	Low water slack; wi 20 min; measured
3421	LWS 20m meas MEC	Low water slack; wi 20 min; measured; Max ebb current
3422	LWS 20m meas MFC	Low water slack; wi 20 min; measured; Max flood current
3500	LWS 10m	Low water slack; wi 10 min
3501	LWS 10m MEC	Low water slack; wi 10 min; Max ebb current
3502	LWS 10m MFC	Low water slack; wi 10 min; Max flood current
3510	LWS 10m C&GS	Low water slack; wi 10 min; C&GS table
3511	LWS 10m C&GS MEC	Low water slack; wi 10 min; C&GS table; Max ebb current
3512	LWS 10m C&GS MFC	Low water slack; wi 10 min; C&GS table; Max flood current
3520	LWS 10m meas	Low water slack; wi 10 min; measured
3521	LWS 10m meas MEC	Low water slack; wi 10 min; measured; Max ebb current
3522	LWS 10m meas MFC	Low water slack; wi 10 min; measured; Max flood current
3600	Low wtr slack 5 min	Low water slack; wi 5 min
3601	LWS 5m MEC	Low water slack; wi 5 min; Max ebb current
3602	LWS 5m MFC	Low water slack; wi 5 min; Max flood current
3610	LWS 5m C&GS	Low water slack; wi 5 min; C&GS table
3611	LWS 5m C&GS MEC	Low water slack; wi 5 min; C&GS table; Max ebb current
3612	LWS 5m C&GS MFC	Low water slack; wi 5 min; C&GS table; Max flood current
3620	LWS 5m meas	Low water slack; wi 5 min; measured
3621	LWS 5m meas MEC	Low water slack; wi 5 min; measured; Max ebb current
3622	LWS 5m meas MFC	Low water slack; wi 5 min; measured; Max flood current

Value	Short name	Description
00067 -- TIDE STAGE		
4000	Fld crntwi 3 hrs	Flood current; wi 3 hrs
4001	Fld cur 3h MEC	Flood current; wi 3 hrs; Max ebb current
4002	Fld cur 3h MFC	Flood current; wi 3 hrs; Max flood current
4010	Fld cur 3h C&GS	Flood current; wi 3 hrs; C&GS table
4011	Fld cur 3h C&GS MEC	Flood current; wi 3 hrs; C&GS table; Max ebb current
4012	Fld cur 3h C&GS MFC	Flood current; wi 3 hrs; C&GS table; Max flood current
4020	Fld cur 3h meas	Flood current; wi 3 hrs; measured
4021	Fld cur 3h meas MEC	Flood current; wi 3 hrs; measured; Max ebb current
4022	Fld cur 3h meas MFC	Flood current; wi 3 hrs; measured; Max flood current
4100	Fld crntwi 2 hrs	Flood current; wi 2 hrs
4101	Fld cur 2h MEC	Flood current; wi 2 hrs; Max ebb current
4102	Fld cur 2h MFC	Flood current; wi 2 hrs; Max flood current
4110	Fld cur 2h C&GS	Flood current; wi 2 hrs; C&GS table
4111	Fld cur 2h C&GS MEC	Flood current; wi 2 hrs; C&GS table; Max ebb current
4112	Fld cur 2h C&GS MFC	Flood current; wi 2 hrs; C&GS table; Max flood current
4120	Fld cur 2h meas	Flood current; wi 2 hrs; measured
4121	Fld cur 2h meas MEC	Flood current; wi 2 hrs; measured; Max ebb current
4122	Fld cur 2h meas MFC	Flood current; wi 2 hrs; measured; Max flood current
4200	Fld crnt wi 1 hr	Flood current; wi 1 hr
4201	Fld cur 1h MEC	Flood current; wi 1 hr; Max ebb current
4202	Fld cur 1h MFC	Flood current; wi 1 hr; Max flood current
4210	Fld cur 1h C&GS	Flood current; wi 1 hr; C&GS table
4211	Fld cur 1h C&GS ME	Flood current; wi 1 hr; C&GS table; Max ebb current
4212	Fld cur 1h C&GS MFC	Flood current; wi 1 hr; C&GS table; Max flood current
4220	Fld cur 1h meas	Flood current; wi 1 hr; measured
4221	Fld cur 1h meas MEC	Flood current; wi 1 hr; measured; Max ebb current
4222	Fld cur 1h meas MFC	Flood current; wi 1 hr; measured; Max flood current
4300	Fld crntwi 40 min	Flood current; wi 40 min
4301	Fld cur 40m MEC	Flood current; wi 40 min; Max ebb current
4302	Fld cur 40m MFC	Flood current; wi 40 min; Max flood current
4310	Fld cur 40m C&GS	Flood current; wi 40 min; C&GS table
4311	Fld cur 40m C&GS MEC	Flood current; wi 40 min; C&GS table; Max ebb current
4312	Fld cur 40m C&GS MFC	Flood current; wi 40 min; C&GS table; Max flood current
4320	Fld cur 40m meas	Flood current; wi 40 min; measured
4321	Fld cur 40m meas MEC	Flood current; wi 40 min; measured; Max ebb current
4322	Fld cur 40m meas MFC	Flood current; wi 40 min; measured; Max flood current
4400	Fld crntwi 20 min	Flood current; wi 20 min
4401	Fld cur 20m MEC	Flood current; wi 20 min; Max ebb current
4402	Fld cur 20m MFC	Flood current; wi 20 min; Max flood current
4410	Fld cur 20m C&GS	Flood current; wi 20 min; C&GS table
4411	Fld cur 20m C&GS MEC	Flood current; wi 20 min; C&GS table; Max ebb current

Value	Short name	Description
00067 -- TIDE STAGE		
4412	Fld cur 20m C&GS MFC	Flood current; wi 20 min; C&GS table; Max flood current
4420	Fld cur 20m meas	Flood current; wi 20 min; measured
4421	Fld cur 20m meas MEC	Flood current; wi 20 min; measured; Max ebb current
4422	Fld cur 20m meas MFC	Flood current; wi 20 min; measured; Max flood current
4500	Fld crntwi 10 min	Flood current; wi 10 min
4501	Fld cur 10m MEC	Flood current; wi 10 min; Max ebb current
4502	Fld cur 10m MFC	Flood current; wi 10 min; Max flood current
4510	Fld cur 10m C&GS	Flood current; wi 10 min; C&GS table
4511	Fld cur 10m C&GS MEC	Flood current; wi 10 min; C&GS table; Max ebb current
4512	Fld cur 10m C&GS MFC	Flood current; wi 10 min; C&GS table; Max flood current
4520	Fld cur 10m meas	Flood current; wi 10 min; measured
4521	Fld cur 10m meas MEC	Flood current; wi 10 min; measured; Max ebb current
4522	Fld cur 10m meas MFC	Flood current; wi 10 min; measured; Max flood current
4600	Fld crntwi 5 min	Flood current; wi 5 min
4601	Fld cur 5m MEC	Flood current; wi 5 min; Max ebb current
4602	Fld cur 5m MFC	Flood current; wi 5 min; Max flood current
4610	Fld cur 5m C&GS	Flood current; wi 5 min; C&GS table
4611	Fld cur 5m C&GS MEC	Flood current; wi 5 min; C&GS table; Max ebb current
4612	Fld cur 5m C&GS MFC	Flood current; wi 5 min; C&GS table; Max flood current
4620	Fld cur 5m meas	Flood current; wi 5 min; measured
4621	Fld cur 5m meas MEC	Flood current; wi 5 min; measured; Max ebb current
4622	Fld cur 5m meas MFC	Flood current; wi 5 min; measured; Max flood current
5000	MTL 3h	Mean tide level; wi 3 hrs
5001	MTL 3h MEC	Mean tide level; wi 3 hrs; Max ebb current
5002	MTL 3h MFC	Mean tide level; wi 3 hrs; Max flood current
5010	MTL 3h C&GS	Mean tide level; wi 3 hrs; C&GS table
5011	MTL 3h C&GS MEC	Mean tide level; wi 3 hrs; C&GS table; Max ebb current
5012	MTL 3h C&GS MFC	Mean tide level; wi 3 hrs; C&GS table; Max flood current
5020	MTL 3h meas	Mean tide level; wi 3 hrs; measured
5021	MTL 3h meas MEC	Mean tide level; wi 3 hrs; measured; Max ebb current
5022	MTL 3h meas MFC	Mean tide level; wi 3 hrs; measured; Max flood current
5100	MTL 2h	Mean tide level; wi 2 hrs
5101	MTL 2h MEC	Mean tide level; wi 2 hrs; Max ebb current
5102	MTL 2h MFC	Mean tide level; wi 2 hrs; Max flood current
5110	MTL 2h C&GS	Mean tide level; wi 2 hrs; C&GS table
5111	MTL 2h C&GS MEC	Mean tide level; wi 2 hrs; C&GS table; Max ebb current
5112	MTL 2h C&GS MFC	Mean tide level; wi 2 hrs; C&GS table; Max flood current
5120	MTL 2h meas	Mean tide level; wi 2 hrs; measured
5121	MTL 2h meas MEC	Mean tide level; wi 2 hrs; measured; Max ebb current
5122	MTL 2h meas MFC	Mean tide level; wi 2 hrs; measured; Max flood current
5200	MTL 1h	Mean tide level; wi 1 hr

Value	Short name	Description
00067 -- TIDE STAGE		
5201	MTL 1h MEC	Mean tide level; wi 1 hr; Max ebb current
5202	MTL 1h MFC	Mean tide level; wi 1 hr; Max flood current
5210	MTL 1h C&GS	Mean tide level; wi 1 hr; C&GS table
5211	MTL 1h C&GS MEC	Mean tide level; wi 1 hr; C&GS table; Max ebb current
5212	MTL 1h C&GS MFC	Mean tide level; wi 1 hr; C&GS table; Max flood current
5220	MTL 1h meas	Mean tide level; wi 1 hr; measured
5221	MTL 1h meas MEC	Mean tide level; wi 1 hr; measured; Max ebb current
5222	MTL 1h meas MFC	Mean tide level; wi 1 hr; measured; Max flood current
5300	MTL 40m	Mean tide level; wi 40 min
5301	MTL 40m MEC	Mean tide level; wi 40 min; Max ebb current
5302	MTL 40m MFC	Mean tide level; wi 40 min; Max flood current
5310	MTL 40m C&GS	Mean tide level; wi 40 min; C&GS table
5311	MTL 40m C&GS MEC	Mean tide level; wi 40 min; C&GS table; Max ebb current
5312	MTL 40m C&GS MFC	Mean tide level; wi 40 min; C&GS table; Max flood current
5320	MTL 40m meas	Mean tide level; wi 40 min; measured
5321	MTL 40m meas MEC	Mean tide level; wi 40 min; measured; Max ebb current
5322	MTL 40m meas MFC	Mean tide level; wi 40 min; measured; Max flood current
5400	MTL 20m	Mean tide level; wi 20 min
5401	MTL 20m MEC	Mean tide level; wi 20 min; Max ebb current
5402	MTL 20m MFC	Mean tide level; wi 20 min; Max flood current
5410	MTL 20m C&GS	Mean tide level; wi 20 min; C&GS table
5411	MTL 20m C&GS MEC	Mean tide level; wi 20 min; C&GS table; Max ebb current
5412	MTL 20m C&GS MFC	Mean tide level; wi 20 min; C&GS table; Max flood current
5420	MTL 20m meas	Mean tide level; wi 20 min; measured
5421	MTL 20m meas MEC	Mean tide level; wi 20 min; measured; Max ebb current
5422	MTL 20m meas MFC	Mean tide level; wi 20 min; measured; Max flood current
5500	MTL 10m	Mean tide level; wi 10 min
5501	MTL 10m MEC	Mean tide level; wi 10 min; Max ebb current
5502	MTL 10m MFC	Mean tide level; wi 10 min; Max flood current
5510	MTL 10m C&GS	Mean tide level; wi 10 min; C&GS table
5511	MTL 10m C&GS MEC	Mean tide level; wi 10 min; C&GS table; Max ebb current
5512	MTL 10m C&GS MFC	Mean tide level; wi 10 min; C&GS table; Max flood current
5520	MTL 10m meas	Mean tide level; wi 10 min; measured
5521	MTL 10m meas MEC	Mean tide level; wi 10 min; measured; Max ebb current
5522	MTL 10m meas MFC	Mean tide level; wi 10 min; measured; Max flood current
5600	MTL 5m	Mean tide level; wi 5 min
5601	MTL 5m MEC	Mean tide level; wi 5 min; Max ebb current
5602	MTL 5m MFC	Mean tide level; wi 5 min; Max flood current
5610	MTL 5m C&GS	Mean tide level; wi 5 min; C&GS table
5611	MTL 5m C&GS MEC	Mean tide level; wi 5 min; C&GS table; Max ebb current
5612	MTL 5m C&GS MFC	Mean tide level; wi 5 min; C&GS table; Max flood current

Value	Short name	Description
00067 -- TIDE STAGE		
5620	MTL 5m meas	Mean tide level; wi 5 min; measured
5621	MTL 5m meas MEC	Mean tide level; wi 5 min; measured; Max ebb current
5622	MTL 5m meas MFC	Mean tide level; wi 5 min; measured; Max flood current

This table continues on the next page.

Value	Short name	Description
00115 – SAMPLE TREATMENT		
1	Raw	Raw
2	Treated	Treated
3	Wastewater	Wastewater
4	Drinking Water	Drinking Water
01300 – OIL & GREASE (SEVERITY)		
0	None	None
1	Mild	Mild
2	Moderate	Moderate
3	Serious	Serious
4	Extreme	Extreme
01305 – SUDS (SEVERITY)		
0	None	None
1	Mild	Mild
2	Moderate	Moderate
3	Serious	Serious
4	Extreme	Extreme
01310 – GAS BUBBLES (SEVERITY)		
0	None	None
1	Mild	Mild
2	Moderate	Moderate
3	Serious	Serious
4	Extreme	Extreme
01315 – SLUDGE, FLOATING (SEVERITY)		
0	None	None
1	Mild	Mild
2	Moderate	Moderate
3	Serious	Serious
4	Extreme	Extreme
01320 – GARBAGE, FLOATING (SEVERITY)		
0	None	None
1	Mild	Mild
2	Moderate	Moderate
3	Serious	Serious
4	Extreme	Extreme
01325 – ALGAE, FLOATING MATS (SEVERITY)		
0	None	None
1	Mild	Mild
2	Moderate	Moderate
3	Serious	Serious
4	Extreme	Extreme

Value	Short name	Description
01330 – ODOR, ATMOSPHERIC (SEVERITY)		
0	None	None
1	Mild	Mild
2	Moderate	Moderate
3	Serious	Serious
01335 – SEWAGE SOLIDS (SEVERITY)		
0	None	None
1	Mild	Mild
2	Moderate	Moderate
3	Serious	Serious
4	Extreme	Extreme
01340 – DEAD FISH (SEVERITY)		
0	None	None
1	Mild	Mild
2	Moderate	Moderate
3	Serious	Serious
4	Extreme	Extreme
01345 – DEBRIS, FLOATING (SEVERITY)		
0	None	None
0	None	None
1	Mild	Mild
2	Moderate	Moderate
3	Serious	Serious
4	Extreme	Extreme
01350 – TURBIDITY (SEVERITY)		
0	None	None
1	Mild	Mild
2	Moderate	Moderate
3	Serious	Serious
4	Extreme	Extreme
01351 –STREAMFLOW (SEVERITY)		
1	Dry	Dry
2	Low	Low
3	Normal	Normal
4	Flood	Flood
5	Above normal	Above normal
01355 – ICE COVER (SEVERITY)		
0	None	None
1	Mild	Mild
2	Moderate	Moderate
3	Serious	Serious
4	Extreme	Extreme

Value	Short name	Description
04117 TETHER LINE USED FOR COLLECTING SAMPLE		
0	No	No
1	Yes	Yes
31678 – STREPTOCOCCI, FECAL, TUBE CONFIGURATION		
1	Five 10-mL tubes	Five 10-mL tubes
2	5 EA 10 1 0.1 mL tbs	Five 10-mL, five 1-mL and five 0.1-mL tubes
3	5 10mL 1(1mL 0.1mL)t	Five 10-mL, one 1-mL and one 0.1-mL tubes
4	1 50mL 5 10mL tubes	One 50-mL and five 10-mL tubes
5	1 50mL 5(10mL 1mL) t	One 50-mL, five 10-mL and five 1-mL tubes
6	5 EA 50 10 1 mL tbs	Five 50-mL, five 10-mL and five 1-mL tubes
7	3 EA 10 1 0.1-mL tbs	Three 10-mL, three 1-mL and three 0.1-mL tubes
8	5 EA 100 10 1 mL tbs	Five 100-mL, five 10-mL and five 1-mL tubes
31696 – IRON-RELATED BACTERIA REACTION PATTERN SIGNATURE, BIOTESTER, WATER, UNFILTERED, CODE		
0000	No reaction	No reaction
2180	BG-BC-RC	Brown Gel, Brown Cloudy, Red Cloudy
4000	BR	Brown Ring
4100	BR-BC	Brown Ring, Brown Cloudy
4160	BR-BC-FO	Brown Ring, Brown Cloudy, Foam
4200	BR-BG	Brown Ring, Brown Gel
4600	BR-FO	Brown Ring, Foam
4610	BR-FO-BC	Brown Ring, Foam, Brown Cloudy
4627	BR-FO-BG-GC	Brown Ring, Foam, Brown Gel, Green Cloudy
4730	BR-GC-BL	Brown Ring, Green Cloudy, Blackened Liquid
5100	CL-BC	Cloudy Growth, Brown Cloudy
5140	CL-BC-BR	Cloudy Growth, Brown Cloudy, Brown Ring
5199	CL-BC-other	Cloudy Growth, Brown Cloudy, other
5200	CL-BG	Cloudy Growth, Brown Gel
5299	CL-BG-other	Cloudy Growth, Brown Gel, other
5300	CL-BL	Cloudy Growth, Blackened Liquid
5400	CL-BR	Cloudy Growth, Brown Ring
5499	CL-BR-other	Cloudy Growth, Brown Ring, other
5600	CL-FO	Cloudy Growth, Foam
5699	CL-FO-other	Cloudy Growth, Foam, other
5700	CL-GC	Cloudy Growth, Green Cloudy
5800	CL-RC	Cloudy Growth, Red Cloudy
6000	FO	Foam
6100	FO-BC	Foam, Brown Cloudy
6120	FO-BC-BG	Foam, Brown Cloudy, Brown Gel
6124	FO-BC-BG-BR	Foam, Brown Cloudy, Brown Gel, Brown Ring
6130	FO-BC-BL	Foam, Brown Cloudy, Blackened Liquid
6140	FO-BC-BR	Foam, Brown Cloudy, Brown Ring

Value	Short name	Description
31696 – IRON-RELATED BACTERIA REACTION PATTERN SIGNATURE, BIOTESTER, WATER, UNFILTERED, CODE		
6142	FO-BC-BR-BG	Foam, Brown Cloudy, Brown Ring, Brown Gel
6143	FO-BC-BR-BL	Foam, Brown Cloudy, Brown Ring, Blackened Liquid
6147	FO-BC-BR-GC	Foam, Brown Cloudy, Brown Ring, Green Cloudy
6173	FO-BC-GC-BL	Foam, Brown Cloudy, Green Cloudy, Blackened Liquid
6183	FO-BC-RC-BL	Foam, Brown Cloudy, Red Cloudy, Blackened Liquid
6184	FO-BC-RC-BR	Foam, Brown Cloudy, Red Cloudy, Brown Ring
6199	FO-BC-other	Foam, Brown Cloudy, other
6200	FO-BG	Foam, Brown Gel
6214	FO-BG-BC-BR	Foam, Brown Gel, Brown Cloudy, Brown Ring
6217	FO-BG-BC-GC	Foam, Brown Gel, Brown Cloudy, Green Cloudy
6234	FO-BG-BL-BR	Foam, Brown Gel, Blackened Liquid, Brown Ring
6240	FO-BG-BR	Foam, Brown Gel, Brown Ring
6241	FO-BG-BR-BC	Foam, Brown Gel, Brown Ring, Brown Cloudy
6243	FO-BG-BR-BL	Foam, Brown Gel, Brown Ring, Blackened Liquid
6247	FO-BG-BR-GC	Foam, Brown Gel, Brown Ring, Green Cloudy
6270	FO-BG-GC	Foam, Brown Gel, Green Cloudy
6283	FO-BG-RC-BL	Foam, Brown Gel, Red Cloudy, Blackened Liquid
6299	FO-BG-other	Foam, Brown Gel, other
6300	FO-BL	Foam, Blackened Liquid
6340	FO-BL-BR	Foam, Blackened Liquid, Brown Ring
6370	FO-BL-GC	Foam, Blackened Liquid, Green Cloudy
6400	FO-BR	Foam, Brown Ring
6410	FO-BR-BC	Foam, Brown Ring, Brown Cloudy
6412	FO-BR-BC-BG	Foam, Brown Ring, Brown Cloudy, Brown Gel
6413	FO-BR-BC-BL	Foam, Brown Ring, Brown Cloudy, Blackened Liquid
6417	FO-BR-BC-GC	Foam, Brown Ring, Brown Cloudy, Green Cloudy
6418	FO-BR-BC-RC	Foam, Brown Ring, Brown Cloudy, Red Cloudy
6420	FO-BR-BG	Foam, Brown Ring, Brown Gel
6421	FO-BR-BG-BC	Foam, Brown Ring, Brown Gel, Brown Cloudy
6423	FO-BR-BG-BL	Foam, Brown Ring, Brown Gel, Blackened Liquid
6427	FO-BR-BG-GC	Foam, Brown Ring, Brown Gel, Green Cloudy
6430	FO-BR-BL	Foam, Brown Ring, Blackened Liquid
6470	FO-BR-GC	Foam, Brown Ring, Green Cloudy
6473	FO-BR-GC-BL	Foam, Brown Ring, Green Cloudy, Blackened Liquid
6480	FO-BR-RC	Foam, Brown Ring, Red Cloudy
6483	FO-BR-RC-BL	Foam, Brown Ring, Red Cloudy, Blackened Liquid
6499	FO-BR-other	Foam, Grown Ring, other
6500	FO-CL	Foam, Cloudy Growth
6599	FO-CL-other	Foam, Cloudy Growth, other
6700	FO-GC	Foam, Green Cloudy

Value	Short name	Description
31696 – IRON-RELATED BACTERIA REACTION PATTERN SIGNATURE, BIOTESTER, WATER, UNFILTERED, CODE		
6720	FO-GC-BG	Foam, Green Cloudy, Brown Gel
6723	FO-GC-BG-BL	Foam, Green Cloudy, Brown Gel, Blackened Liquid
6730	FO-GC-BL	Foam, Green Cloudy, Blackened Liquid
6740	FO-GC-BR	Foam, Green Cloudy, Brown Ring
6741	FO-GC-BR-BC	Foam, Green Cloudy, Brown Ring, Brown Cloudy
6743	FO-GC-BR-BL	Foam, Green Cloudy, Brown Ring, Blackened Liquid
6780	FO-GC-RC	Foam, Green Cloudy, Red Cloudy
6799	FO-GC-other	Foam, Green Cloudy, other
6800	FO-RC	Foam, Red Cloudy
6830	FO-RC-BL	Foam, Red Cloudy, Blackened Liquid
6840	FO-RC-BR	Foam, Red Cloudy, Brown Ring
6843	FO-RC-BR-BL	Foam, Red Cloudy, Brown Ring, Blackened Liquid
7000	GC	Green Cloudy
7300	GC-BL	Green Cloudy, Blackened Liquid
7400	GC-BR	Green Cloudy, Brown Ring
7600	GC_FO	Green Cloudy, Foam
7999	GC-other	Green Cloudy, other
8000	RC	Red Cloudy
8300	RC-BL	Red Cloudy, Blackened Liquid
8400	RC-BR	Red Cloudy, Brown Ring
8600	RC-FO	Red Cloudy, Foam
8999	RC-other	Red Cloudy, other
9999	other	Other
31698 – SULFATE-REDUCING BACTERIA REACTION PATTERN SIGNATURE, WATER, UNFILTERED, BIOTESTER, CODE		
0000	No reaction	No reaction
1000	BA	Black Base and Top
2000	BB	Blackened Base
2100	BB-BA	Blackened Base then All Black
3000	BT	Blackened Top
3100	BT-BA	Blackened Top then All Black
4000	CG	Cloudy Growth Only

Value	Short name	Description
31699 – SLIME-FORMING BACTERIA REACTION PATTERN SIGNATURE, WATER, UNFILTERED, BIOTESTER, CODE		
0000	No reaction	No reaction
2100	CL-BL	Cloudy Growth, Blackened Liquid
2340	CL-CP-DS	Cloudy Growth, Cloudy Plates Layering, Dense Slime
2400	CL-DS	Cloudy Growth, Dense Slime
2500	CL-GY	Cloudy Growth, Greenish-Yellow Glow in UV
2600	CL-PB	Cloudy Growth, Pale Blue Glow in UV Light
2700	CL-SR	Cloudy Growth, Slime Ring around Ball
2740	CL-SR-DS	Cloudy Growth, Slime Ring Around Ball, Dense Slime
2874	CL-TH-SR-DS	Cloudy Growth, Thread-like strands, Slime Ring Around Ball, Dense Slime
3200	CP-CL	Cloudy Plates Layering, Cloudy Growth
4000	DS	Dense Slime
4300	DS-CP	Dense Slime, Cloudy Plates Layering
4200	DS-CL	Dense Slime, Cloudy Growth
4210	DS-CL-BL	Dense Slime, Cloudy Growth Blackened Liquid
7200	SR-CL	Slime Ring around Ball, Cloudy Growth
8200	TH-CL	Thread-Like Strands, Cloudy Growth
9999	Other	Other
49986 – DEGREE OF DECOMPOSITION, SOIL		
1	Fibrix	Fibrix
2	Hemic	Hemic
3	Sapric	Sapric
50276 – FILTER TYPE		
10	Gelman cap 0.45um	Gelman capsule, 0.45um
20	Membrane0.45um 142mm	Membrane, 0.45 um, 142mm
30	Membrane 0.45um 47mm	Membrane, 0.45 um, 47mm
40	Membrane 0.22um 47mm	Membrane, 0.22 um, 47mm
50	Membrane 0.1um 47mm	Membrane, 0.1 um, 47mm
60	Membrane 0.1um 142mm	Membrane, 0.1 um, 142mm
70	Membrane srn 0.45um	Membrane, syringe-type, 0.45um
80	Membrane srn 0.22um	Membrane, syringe-type, 0.22um
90	Ag mem 0.45um 47mm	Silver membrane, 0.45um, 47mm
100	GFF 0.7um 142mm	Glass fiber, 0.7um, 142mm
110	GFF bkd 0.7um 142mm	Glass fiber, baked, 0.7um, 142mm
120	GFF 0.7um 47mm	Glass fiber, 0.7um, 47mm
130	GFF bkd 0.7um 47mm	Glass fiber, baked, 0.7um, 47mm
200	Other	Other

Value	Short name	Description
50280 – PURPOSE, SITE VISIT, CODE		
1001	Fixed frequency SW	Fixed frequency, surface water
1002	Storm hydrograph SW	Storm hydrograph, surface water
1003	Extreme high flow SW	Extreme high flow, surface water
1004	Extreme low flow SW	Extreme low flow, surface water
1005	Diurnal surface-wtr	Diurnal, surface water
1006	Synoptic SW	Synoptic, surface water
1007	Oil spill response	Oil spill response
1098	SW quality control	Surface-water quality control
1099	Other surface-water	Other, surface water
1501	Synoptic HZ	Synoptic, hyporheic zone
1502	Low flow HZ	Low flow, hyporheic zone
1503	High flow HZ	High flow, hyporheic zone
2001	Primary groundwtr	Primary, groundwater
2002	Supplemental GW	Supplemental, groundwater
2003	Temporal char GW	Temporal characterization, groundwater
2004	Resample groundwtr	Resample, groundwater
2098	GW quality control	Groundwater quality control
2099	Other groundwater	Other, groundwater
3001	Occ Srvy BS tissue	Occurrence Survey, bed sediment or tissue
3002	Sptl distr srvy BS T	Spatial distribution survey, bed sediment or tissue
3003	Synoptic BS tissue	Synoptic study, bed sediment or tissue
3098	Bed sed or tissue QA	Bed sediment or tissue quality control
3099	Other bed sed tissue	Other, bed sediment or tissue
4001	Rcn trnds sed core	Reconstructive trends from sediment core
5051	Site instal any med	Sample collected during site installation, any media
5052	EB rnff/rcrg any med	Event-based (runoff or recharge conditions), any media
5053	FF non EB any media	Fixed frequency (nonevent-based), any media
5054	Synoptic any media	Synoptic study, any media
5098	QA/QC uncommon media	QA/QC, media other than SW, GW, or BS&T
5099	OTH purp any media	Other purpose, any media
62955 – SAMPLE MATRIX, CODE		
70	Soil	Soil
80	Borehole core	Borehole core
90	Borehole cuttings	Borehole cuttings

Value	Short name	Description
71995 – WATER USE, PRIMARY		
111	cash grains	cash grains
131	Field crops ECG	Field crops - except cash grains
161	Vegetables & melons	Vegetables and melons
171	Fruits and tree nuts	Fruits and tree nuts
181	Horticultural spec	Horticultural specialties
191	General farm crops	General farm crops
211	Livestock	Livestock
251	Poultry and eggs	Poultry and eggs
271	Animal specialties	Animal specialties
291	Farm pri livestock	General farms - primarily livestock
711	soil prep crp plntng	Agricultural services - soil prep, crop plantings, etc.
741	Veterinary services	Veterinary services
761	Anml srv farm labr m	Animal services, farm labor and management
811	Forestry	Forestry
912	FW farming	Fish and wildlife farming
1011	Metal mining	Metal mining
1111	Anthracite mining	Anthracite mining
1211	Soft coal mining	Bituminous coal and lignite mining
1311	Oil gas extraction	Oil and gas extraction
1411	Mining nonmtlc min	Mining and quarrying of nonmetalic minerals, -nonfuel
1521	Building cons	Building construction
1611	Const non-building	Construction - other than building
1711	Special trade	Special trade (plumbing, heat, air, elec., masonry, etc.)
2011	Manu meat products	Manufacturing - meat products
2016	Poultry & egg plants	Poultry and egg plants
2021	Dairy products	Dairy products
2032	Preserves	Canned and preserved fruits and vegetables
2041	Grain mill products	Grain mill products
2051	Bakery products	Bakery products
2061	Sugar & cnfctn prod	Sugar and confectionery products
2074	Fats and oils	Fats and oils
2084	Beverages	Beverages - alcoholic and soft drinks, syrups and extracts
2091	Mscfood preparations	Miscellaneous food preparations
2111	Tobacco MFG	Tobacco manufacturers
2211	Textile mill prod	Textile mill products
2311	Apparel from fabrics	Apparel - products from fabrics
2411	Wood prod exc furn	Lumber & wood products except furniture
2511	Furniture & fixtures	Furniture and fixtures
2611	Paper & allied prod	Paper and allied products
2711	Printing publishing	Printing, publishing, & allied industries
2821	Chem allied prdcts	Chemicals and allied products

Value	Short name	Description
71995 – WATER USE, PRIMARY		
2911	Petroleum refining	Petroleum refining and related products
3011	Rubber plastic prod	Rubber and miscellaneous plastic products
3111	Leather	Leather and leather products
3211	Stone clay glass	Stone, clay, glass, and concrete products
3281	Stone products	Cut stone and stone products
3291	Abrsv asbs msc nmtlc	Abrasive, asbestos, and miscellaneous nonmetalic products
3312	Steel works	Blast furnaces, steel works, and rolling and finishing mills
3411	Metal prod no mchnry	Metal products and trans. equipment (no machinery)
3511	Machinery exc elec	Machinery, except electrical
3612	EEM equip & supply	Electrical and electronic machinery, equipment and supplies
3711	Trans equip rep prts	Transportation equipment repairing and parts
3811	Meas anal ctrl inst	Measuring, analyzing, and controlling instruments
3911	Msc manu industries	Miscellaneous manufacturing industries
4011	Trans train taxi air	Transportation - trains, taxicabs, aircraft
4212	Transp & warehousing	Motor freight transportation and warehousing
4311	U.S. postal service	U.S. Postal Service
4411	Water transportation	Water transportation
4423	Wtr recreation	Water recreation on bays, lakes, rivers, & canals
4511	Trans air	Transportation by air
4612	Pipeline exp nat gas	Pipelines - except natural gas
4811	Communications	Communications
4922	Gas prod and dist	Gas production and distribution; elec. and gas service
4941	Water supply	Water supply
4952	Sewerage systems	Sewerage systems
4961	Public steam supply	Public steam supply
4971	Irrigation systems	Irrigation systems
5012	Wholesale durable	Wholesale trade - durable goods
5111	Wholesale nondurable	Wholesale trade - nondurable goods
5211	Home garden supply	Building materials, hardware, garden supply
5311	Gen mrchndise stores	General merchandise stores
5411	Food stores	Food stores
5511	Auto dlrs & gas sta	Auto dealers and gasoline service stations
5611	Apparel acsry stores	Apparel and accessory stores
5712	Home stores	Furniture, home furnishing, and equipment stores
5812	Restaurants	Eating and drinking places
5912	Msc retail	Miscellaneous retail - drug, liquor, book, camera, etc.
6011	Banking	Banking
6112	Credit agencies	Credit agencies
6212	Brokers dealer srvcs	Security and commodity brokers, dealers, and services
6311	Insurance	Insurance
6512	Real estate	Real estate

Value	Short name	Description
71995 – WATER USE, PRIMARY		
6711	Holding Inv offices	Holding and other investment offices
7011	Hotels motels courts	Hotels, motels, tourist courts
7021	Boarding houses	Rooming and boarding houses
7032	Transient rentals	Camps, transient trailer parks, and campsites
7041	Membership lodging	Organization hotels and membership lodging houses
7211	Garment services	Laundry, cleaning, and garment services
7221	Shops	Shops - photo, beauty, barber, shoe, funeral services
7311	Advertising services	Advertising services
7321	Credit & collection	Consumer credit and collection
7331	Mail cpy c art photo	Mailing, reproduction, commercial art and photography
7341	Service to dwellings	Service to dwellings and other buildings
7351	News syndicates	News syndicates
7361	Employment services	Employment services
7372	Data processing	Computer and data processing
7391	Msc business svcs	Miscellaneous business services
7512	Auto rent lease WOD	Automotive and truck rental leasing without driver
7523	Automobile parking	Automobile parking
7531	Auto repair shops	Automotive repair shops
7542	Car washes	Car washes
7549	Auto svcs exc repair	Automotive services - except repair
7622	Msc repair services	Miscellaneous repair services
7813	TV Movies EXC drv-in	Motion picture-TV services, theaters, except drive-ins
7911	Recreation svcs	Recreation services, except theaters and public golf
7992	Public golf courses	Public golf courses
7993	Coin-op amusmnt dvcs	Coin operated amusement devices
7996	Amsmnt parks rec clb	Amusement parks, sports and recreation clubs, etc.
8011	Hlth svcs (offices)	Health services (offices)
8051	Nursing and care fac	Nursing and personal care facilities
8062	Hospitals	Hospitals
8071	Medical dental lab	Medical and dental laboratories
8081	Outpatient care fac	Outpatient care fac
8091	Hlth svcs NEC	Health & allies services, not elsewhere classified
8111	Legal services	Legal services
8211	ED libs & info cntrs	Educational services, libraries and information centers
8231	Scl svcs rehab cent	Social services and rehabilitation centers
8411	Museums gardens	Museums, art galleries, zoological and botanical gardens
8611	Membership orgs	Membership organizations
8811	Private housing	Private houses, condos, municipalities, and trailer parks
8911	Msc services	Miscellaneous services (eng.,ed., r&d, accounting, etc.)
9111	Gov legislative misc	Gov., legislative, justice, public order & safety misc.
9411	Human resources prog	Administration of human resources programs

Value	Short name	Description
71995 – WATER USE, PRIMARY		
9511	Waste management	Air & water resource, and solid waste management
9512	NRC by public admin	Natural resource conservation by public administration
9531	Hsng ecnmc intl afrs	Admin. of housing and economic programs & internat'l affairs
9999	Water compacts	Water compacts, agreements and legislative actions
14911	Pwr plant fossil	Commercial electric energy establishments - fossil
24911	Pwr plant geothermal	Commercial electric energy establishments - geothermal
34911	Pwr plant hydroelec	Commercial electric energy establishments - hydroelectric
44911	Pwr plant nuclear	Commercial electric energy establishments - nuclear
71996 – WATER USE, SECONDARY		
111	Cash grains	Cash grains
131	Field crops ECG	Field crops - except cash grains
161	Vegetables & melons	Vegetables and melons
171	Fruits and tree nuts	Fruits and tree nuts
181	Horticultural spec	Horticultural specialties
191	General farm crops	General farm crops
211	Livestock	Livestock
251	Poultry and eggs	Poultry and eggs
271	Animal specialties	Animal specialties
291	Farm pri livestock	General farms - primarily livestock
711	Soil prep crp plntng	Agricultural services - soil prep, crop plantings, etc.
741	Veterinary services	Veterinary services
761	Anml srv farm labr m	Animal services, farm labor and management
811	Forestry	Forestry
912	FW farming	Fish and wildlife farming
1011	Metal mining	Metal mining
1111	Anthracite mining	Anthracite mining
1211	Soft coal mining	Bituminous coal and lignite mining
1311	Oil gas extraction	Oil and gas extraction
1411	Mining nonmtlc min	Mining and quarrying of nonmetalic minerals, - nonfuel
1521	Building cons	Building construction
1611	Const non-building	Construction - other than building
1711	Special trade	Special trade (plumbing, heat, air, elec., masonry, etc.)
2011	Manu meat products	Manufacturing - meat products
2016	Poultry & egg plants	Poultry and egg plants
2021	Dairy products	Dairy products
2032	Preserves	Canned & preserved fruits and vegetables
2041	Grain mill products	Grain mill products
2051	Bakery products	Bakery products
2061	Sugar & cnfctn prod	Sugar and confectionery products
2074	Fats and oils	Fats and oils
2084	Beverages	Beverages - alcoholic and soft drinks, syrups and extracts

Value	Short name	Description
71996 – WATER USE, SECONDARY		
2091	Msc food prep	Miscellaneous food preparations
2111	Tobacco MFG	Tobacco manufacturers
2211	Textile mill prod	Textile mill products
2311	Apparel from fabrics	Apparel - products from fabrics
2411	Wood prod exc furn	Lumber and wood products except furniture
2511	Furniture & fixtures	Furniture and fixtures
2611	Paper & allied prod	Paper and allied products
2711	Printing publishing	Printing, publishing, and allied industries
2821	Chem allied prdcts	Chemicals and allied products
2911	Petroleum refining	Petroleum refining and related products
3011	Rubber plastic prod	Rubber and miscellaneous plastic products
3111	Leather	Leather and leather products
3211	Stone clay glass	Stone, clay, glass, and concrete products
3281	Stone products	Cut stone and stone products
3291	Abrsv asbs msc nmtlc	Abrasive, asbestos, and miscellaneous nonmetalic products
3312	Steel works	Blast furnaces, steel works, and rolling and finishing mills
3411	Metal prod no mchnry	Metal products and trans. equipment (no machinery)
3511	Machinery exc elec	Machinery, except electrical
3612	EEM equip & supply	Electrical and electronic machinery, equipment and supplies
3711	Trans equip rep prts	Transportation equipment repairing and parts
3811	Meas anal ctrl inst	Measuring, analyzing, and controlling instruments
3911	Msc manu industries	Miscellaneous manufacturing industries
4011	Trans train taxi air	Transportation - trains, taxicabs, aircraft
4212	Transp & warehousing	Motor freight transportation and warehousing
4311	U.S. postal service	U.S. Postal Service
4411	Water transportation	Water transportation
4423	Wtr recreation	Water recreation on bays, lakes, rivers, and canals
4511	Trans air	Transportation by air
4612	Pipeline exp nat gas	Pipelines - except natural gas
4811	Communications	Communications
4922	Gas prod and dist	Gas production and distribution; elec. and gas service
4941	Water supply	Water supply
4952	Sewerage systems	Sewerage systems
4961	Public steam supply	Public steam supply
4971	Irrigation systems	Irrigation systems
5012	Wholesale durable	Wholesale trade - durable goods
5111	Wholesale nondurable	Wholesale trade - nondurable goods
5211	Home garden supply	Building materials, hardware, garden supply
5311	Gen mrchndise stores	General merchandise stores
5411	Food stores	Food stores
5511	Auto dlrs & gas sta	Auto dealers and gasoline service stations

Value	Short name	Description
71996 – WATER USE, SECONDARY		
5611	Apparel acsry stores	Apparel and accessory stores
5712	Home stores	Furniture, home furnishing, and equipment stores
5812	Restaurants	Eating and drinking places
5912	Msc retail	Miscellaneous retail - drug, liquor, book, camera, etc.
6011	Banking	Banking
6112	Credit agencies	Credit agencies
6212	Brokers dealer srvcs	Security and commodity brokers, dealers, and services
6311	Insurance	Insurance
6512	Real estate	Real estate
6711	Holding Inv offices	Holding and other investment offices
7011	Hotels motels courts	Hotels, motels, tourist courts
7021	Boarding houses	Rooming and boarding houses
7032	Transient rentals	Camps, transient trailer parks, and campsites
7041	Membership lodging	Organization hotels and membership lodging houses
7211	Garment services	Laundry, cleaning, and garment services
7221	Shops	Shops - photo, beauty, barber, shoe, funeral services
7311	Advertising services	Advertising services
7321	Credit & collection	Consumer credit and collection
7331	Mail cpy c art photo	Mailing, reproduction, commercial art and photography
7341	Service to dwellings	Service to dwellings and other buildings
7351	News syndicates	News syndicates
7361	Employment services	Employment services
7372	Data processing	Computer and data processing
7391	Mscbusiness services	Miscellaneous business services
7512	Auto rent lease WOD	Automotive and truck rental leasing without driver
7523	Automobile parking	Automobile parking
7531	Auto repair shops	Automotive repair shops
7542	Car washes	Car washes
7549	Auto svcs exc repair	Automotive services - except repair
7622	Msc repair services	Miscellaneous repair services
7813	TV Movies EXC drv-in	Motion picture-TV services, theaters, except drive-ins
7911	Recreation svcs	Recreation services, except theaters and public golf
7992	Public golf courses	Public golf courses
7993	Coin-op amusmnt dvcs	Coin operated amusement devices
7996	Amsmnt parks rec clb	Amusement parks, sports and recreation clubs, etc.
8011	Hlth svcs (offices)	Health services (offices)
8051	Nursing and care fac	Nursing and personal care facilities
8062	Hospitals	Hospitals
8071	Medical dental lab	Medical and dental laboratories
8081	Outpatient care fac	Outpatient care facilities
8091	Hlth svcs NEC	Health and allies services, not elsewhere classified

Value	Short name	Description
71996 – WATER USE, SECONDARY		
8111	Legal services	Legal services
8211	ED libs & info cntrs	Educational services, libraries and information centers
8231	Scl svcs rehab cent	Social services and rehabilitation centers
8411	Museums gardens	Museums, art galleries, zoological and botanical gardens
8611	Membership orgs	Membership organizations
8811	Private housing	Private houses, condos, municipalities, and trailer parks
8911	Msc services	Miscellaneous services (eng.,ed., r&d, accounting, etc.)
9111	Gov legislative misc	Gov., legislative, justice, public order and safety misc.
9411	Human resources prog	Administration of human resources programs
9511	Waste management	Air and water resource, and solid waste management
9512	NRC by public admin	Natural resource conservation by public administration
9531	Hsng ecnmc intl afrs	Admin. of housing and economic programs and internat'l affairs
9999	Water compacts	Water compacts, agreements and legislative actions
14911	Pwr plant - fossil	Commercial electric energy establishments - fossil
24911	Pwr plant geothermal	Commercial electric energy establishments - geothermal
34911	Pwr plant hydroelec	Commercial electric energy establishments - hydroelectric
44911	Pwr plant nuclear	Commercial electric energy establishments - nuclear
71997 – WATER USE, TERTIARY		
111	Cash grains	Cash grains
131	Field crops ECG	Field crops - except cash grains
161	Vegetables & melons	Vegetables and melons
171	Fruits and tree nuts	Fruits and tree nuts
181	Horticultural spec	Horticultural specialties
191	General farm crops	General farm crops
211	Livestock	Livestock
251	Poultry and eggs	Poultry and eggs
271	Animal specialties	Animal specialties
291	Farm pri livestock	General farms - primarily livestock
711	soil prep crp plntng	Agricultural services - soil prep, crop plantings, etc.
741	Veterinary services	Veterinary services
761	Anml srv farm labr m	Animal services, farm labor and management
811	Forestry	Forestry
912	FW farming	Fish and wildlife farming
1011	Metal mining	Metal mining
1111	Anthracite mining	Anthracite mining
1211	Soft coal mining	Bituminous coal and lignite mining
1311	Oil gas extraction	Oil and gas extraction
1411	Mining nonmtlc min	Mining and quarrying of nonmetalic minerals, - nonfuel
1521	Building cons	Building construction
1611	Const non-building	Construction - other than building
1711	Special trade	Special trade (plumbing, heat, air, elec., masonry, etc.)

Value	Short name	Description
71997 – WATER USE, TERTIARY		
2011	Manu meat products	Manufacturing - meat products
2016	Poultry & egg plants	Poultry and egg plants
2021	Dairy products	Dairy products
2032	Preserves	Canned and preserved fruits and vegetables
2041	Grain mill products	Grain mill products
2051	Bakery products	Bakery products
2061	Sugar & cnfctn prod	Sugar and confectionery products
2074	Fats and oils	Fats and oils
2084	Beverages	Beverages - alcoholic and soft drinks, syrups and extracts
2091	Mscfood preparations	Miscellaneous food preparations
2111	Tobacco MFG	Tobacco manufacturers
2211	Textile mill prod	Textile mill products
2311	Apparel from fabrics	Apparel - products from fabrics
2411	Wood prod exc furn	Lumber and wood products except furniture
2511	Furniture & fixtures	Furniture and fixtures
2611	Paper & allied prod	Paper and allied products
2711	Printing publishing	Printing, publishing, and allied industries
2821	Chem allied prdcts	Chemicals and allied products
2911	Petroleum refining	Petroleum refining and related products
3011	Rubber plastic prod	Rubber and miscellaneous plastic products
3111	Leather	Leather and leather products
3211	Stone clay glass	Stone, clay, glass, and concrete products
3281	Stone products	Cut stone and stone products
3291	Abrsv asbs msc nmtlc	Abrasive, asbestos, and miscellaneous nonmetalic products
3312	Steel works	Blast furnaces, steel works, and rolling and finishing mills
3411	Metal prod no mchnry	Metal products and trans. equipment (no machinery)
3511	Machinery exc elec	Machinery, except electrical
3612	EEM equip & supply	Electrical and electronic machinery, equipment and supplies
3711	Trans equip rep prts	Transportation equipment repairing and parts
3811	Meas anal ctrl inst	Measuring, analyzing, and controlling instruments
3911	Msc manu industries	Miscellaneous manufacturing industries
4011	Trans train taxi air	Transportation - trains, taxicabs, aircraft
4212	Transp & warehousing	Motor freight transportation and warehousing
4311	U.S. postal service	U.S. Postal Service
4411	Water transportation	Water transportation
4423	Wtr recreation	Water recreation on bays, lakes, rivers, and canals
4511	Trans air	Transportation by air
4612	Pipeline exp nat gas	Pipelines - except natural gas
4811	Communications	Communications
4922	Gas prod and dist	Gas production and distribution; elec. and gas service
4941	Water supply	Water supply

Value	Short name	Description
71997 – WATER USE, TERTIARY		
4952	Sewerage systems	Sewerage systems
4961	Public steam supply	Public steam supply
4971	Irrigation systems	Irrigation systems
5012	Wholesale durable	Wholesale trade - durable goods
5111	Wholesale nondurable	Wholesale trade - nondurable goods
5211	Home garden supply	Building materials, hardware, garden supply
5311	Gen mrchndise stores	General merchandise stores
5411	Food stores	Food stores
5511	Auto dlrs & gas sta	Auto dealers and gasoline service stations
5611	Apparel acsry stores	Apparel and accessory stores
5712	Home stores	Furniture, home furnishing, and equipment stores
5812	Restaurants	Eating and drinking places
5912	Msc retail	Miscellaneous retail - drug, liquor, book, camera, etc.
6011	Banking	Banking
6112	Credit agencies	Credit agencies
6212	Brokers dealer srvcs	Security and commodity brokers, dealers, and services
6311	Insurance	Insurance
6512	Real estate	Real estate
6711	Holding Inv offices	Holding and other investment offices
7011	Hotels motels courts	Hotels, motels, tourist courts
7021	Boarding houses	Rooming and boarding houses
7032	Transient rentals	Camps, transient trailer parks, and campsites
7041	Membership lodging	Organization hotels and membership lodging houses
7211	Garment services	Laundry, cleaning, and garment services
7221	Shops	Shops - photo, beauty, barber, shoe, funeral services
7311	Advertising services	Advertising services
7321	Credit & collection	Consumer credit and collection
7331	Mail cpy c art photo	Mailing, reproduction, commercial art and photography
7341	Service to dwellings	Service to dwellings and other buildings
7351	News syndicates	News syndicates
7361	Employment services	Employment services
7372	Data processing	Computer and data processing
7391	Mscbusiness services	Miscellaneous business services
7512	Auto rent lease WOD	Automotive and truck rental leasing without driver
7523	Automobile parking	Automobile parking
7531	Auto repair shops	Automotive repair shops
7542	Car washes	Car washes
7549	Auto svcs exc repair	Automotive services - except repair
7622	Msc repair services	Miscellaneous repair services
7813	TV Movies EXC drv-in	Motion picture-TV services, theaters, except drive-ins
7911	Recreation svcs	Recreation services, except theaters and public golf

Value	Short name	Description
71997 – WATER USE, TERTIARY		
7992	Public golf courses	Public golf courses
7993	Coin-op amusmnt dvcs	Coin operated amusement devices
7996	Amsmnt parks rec clb	Amusement parks, sports and recreation clubs, etc.
8011	Hlth svcs (offices)	Health services (offices)
8051	Nursing and care fac	Nursing and personal care facilities
8062	Hospitals	Hospitals
8071	Medical dental lab	Medical and dental laboratories
8081	Outpatient care fac	Outpatient care fac
8091	Hlth svcs NEC	Health and allies services, not elsewhere classified
8111	Legal services	Legal services
8211	ED libs & info cntrs	Educational services, libraries and information centers
8231	Scl svcs rehab cent	Social services and rehabilitation centers
8411	Museums gardens	Museums, art galleries, zoological and botanical gardens
8611	Membership orgs	Membership organizations
8811	Private housing	Private houses, condos, municipalities, and trailer parks
8911	Msc services	Miscellaneous services (eng.,ed., r&d, accounting, etc.)
9111	Gov legislative misc	Gov., legislative, justice, public order, and safety misc.
9411	Human resources prog	Administration of human resources programs
9511	Waste management	Air and water resource, and solid waste management
9512	NRC by public admin	Natural resource conservation by public administration
9531	Hsng ecnmc intl afrs	Admin. of housing and economic programs and internat'l affairs
9999	Water compacts	Water compacts, agreements and legislative actions
14911	Pwr plant - fossil	Commercial electric energy establishments - fossil
24911	Pwr plant geothermal	Commercial electric energy establishments - geothermal
34911	Pwr plant hydroelec	Commercial electric energy establishments - hydroelectric
44911	Pwr plant nuclear	Commercial electric energy establishments - nuclear
71998 – WATER USE, QUATERNARY		
111	Cash grains	Cash grains
131	Field crops ECG	Field crops - except cash grains
161	Vegetables & melons	Vegetables and melons
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211	Livestock	Livestock
251	Poultry and eggs	Poultry and eggs
271	Animal specialties	Animal specialties
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711	Soil prep crp plntng	Agricultural services - soil prep, crop plantings, etc.
741	Veterinary services	Veterinary services
761	Anml srv farm labr m	Animal services, farm labor and management
811	Forestry	Forestry

Value	Short name	Description
71998 – WATER USE, QUATERNARY		
912	FW farming	Fish and wildlife farming
1011	Metal mining	Metal mining
1111	Anthracite mining	Anthracite mining
1211	Soft coal mining	Bituminous coal and lignite mining
1311	Oil gas extraction	Oil and gas extraction
1411	Mining nonmtlc min	Mining and quarrying of nonmetalic minerals, - nonfuel
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2311	Apparel from fabrics	Apparel - products from fabrics
2411	Wood prod exc furn	Lumber and wood products except furniture
2511	Furniture & fixtures	Furniture and fixtures
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3011	Rubber plastic prod	Rubber and miscellaneous plastic products
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3411	Metal prod no mchnry	Metal products and trans. equipment (no machinery)
3511	Machinery exc elec	Machinery, except electrical
3612	EEM equip & supply	Electrical and electronic machinery, equipment and supplies
3711	Trans equip rep prts	Transportation equipment repairing and parts
3811	Meas anal ctrl inst	Measuring, analyzing, and controlling instruments
3911	Msc manu industries	Miscellaneous manufacturing industries
4011	Trans train taxi air	Transportation - trains, taxicabs, aircraft

Value	Short name	Description
71998 – WATER USE, QUATERNARY		
4212	Transp & warehousing	Motor freight transportation and warehousing
4311	U.S. postal service	U.S. Postal Service
4411	Water transportation	Water transportation
4423	Wtr recreation	Water recreation on bays, lakes, rivers, and canals
4511	Trans air	Transportation by air
4612	Pipeline exp nat gas	Pipelines - except natural gas
4811	Communications	Communications
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4941	Water supply	Water supply
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6112	Credit agencies	Credit agencies
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7341	Service to dwellings	Service to dwellings and other buildings
7351	News syndicates	News syndicates
7361	Employment services	Employment services
7372	Data processing	Computer and data processing

Value	Short name	Description
71998 – WATER USE, QUATERNARY		
7391	Mscbusiness services	Miscellaneous business services
7512	Auto rent lease WOD	Automotive and truck rental leasing without driver
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7531	Auto repair shops	Automotive repair shops
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8811	Private housing	Private houses, condos, municipalities, and trailer parks
8911	Msc services	Miscellaneous services (eng.,ed., r&d, accounting, etc.)
9111	Gov legislative misc	Gov., legislative, justice, public order, and safety misc.
9411	Human resources prog	Administration of human resources programs
9511	Waste management	Air and water resource, and solid waste management
9512	NRC by public admin	Natural resource conservation by public administration
9531	Hsng ecnmc intl afrs	Admin. of housing and economic programs and internat'l affairs
9999	Water compacts	Water compacts, agreements and legislative actions
14911	Pwr plant - fossil	Commercial electric energy establishments - fossil
24911	Pwr plant geothermal	Commercial electric energy establishments - geothermal
34911	Pwr plant hydroelec	Commercial electric energy establishments - hydroelectric
44911	Pwr plant nuclear	Commercial electric energy establishments - nuclear

Value	Short name	Description
71999 – SAMPLE PURPOSE		
10	Routine	Routine
15	NAWQA	NAWQA - National Water-Quality Assessment
20	NASQAN	NASQAN - National Stream Quality Accounting Network
25	NMN	NMN - National Monitoring Network
30	Benchmark	Benchmark
35	RASA	RASA - Regional Aquifer Systems Analysis
40	SW Network	SW Network
50	GW Network	GW Network
60	Lowflow Network	Lowflow Network
70	Highflow Network	Highflow Network
80	Acid rain	Acid rain
80.01	BU bulk undefined	Bulk or undefined (bu)
80.02	Sample rel prob (ns)	Sample related problem (ns)
80.03	Dry wet-side samp	Dry wet-side sample (na)
80.04	UN Completely msng	Completely missing samples (un)
80.05	LD Long dur samp	Long duration sample (ld)
80.06	Sampling protocol	Sampling protocol (time) (sp)
80.07	Sampler malfunction	Sampler malfunction (s)
90	Snow survey	Snow survey
100	Mt. St. Helens	Mt. St. Helens
110	Seepage study	Seepage study
120	Irrigation effects	Irrigation effects
130	Recharge	Recharge
140	Injection	Injection
145	Tracer Test	Tracer Test
150	Bank erodibility	Bank erodibility
160	Natl blank/spike prg	National blank and spike program
170	Quality assurance	Quality assurance
180	X-sec variation	Cross-section variation
190	GW/SW Intrction Stdy	Groundwater/Surface-water Interaction Study
200	Oil spill response	Oil spill response
210	NCS	National Children’s Study
72005 – SAMPLE SOURCE		
220	GLRI	Great Lakes Restoration Initiative
0.01	Airline measurement	Airline measurement
0.02	Analog graphic rcrdr	Analog or graphic recorder
0.03	Calibrated airline	Calibrated airline measurement
0.04	Estimated	Estimated
0.05	Pressure-gage meas	Pressure-gage measurement
0.06	Calibrated PG	Calibrated pressure-gage measurement
0.07	Interp geophys logs	Interpreted from geophysical logs

Value	Short name	Description
72005 – SAMPLE SOURCE		
0.08	Manometer	Manometer measurement
0.09	Nonrecording gage	Nonrecording gage
0.1	Reported	Reported, method not known
0.11	Steel-tape meas	Steel-tape measurement
0.12	ET measurement	Electric-tape measurement
0.13	Calibrated ET	Calibrated electric-tape measurement
0.14	Other	Other
1	Well head	Well head
2	Drill stem test	Drill stem test
3	Separator	Separator
4	Boiler	Boiler
5	Flow line	Flow line
6	Battery	Battery
7	Undesignated	Undesignated
8	Tank	Tank
9	Production test	Production test
10	Heater treater	Heater treater
11	Gun barrel	Gun barrel
12	Swab	Swab
13	Pit	Pit
14	Manifold test	Manifold test
15	Gas line drip	Gas line drip
16	Casing leak	Casing leak
17	Wire line test	Wire line test
18	Header	Header
19	Filter	Filter
20	Test tool	Test tool
21	Ltx unit	Ltx unit
22	Knockout	Knockout
23	Well bleeder	Well bleeder
24	Fracture test	Fracture test
25	Test wagon	Test wagon
26	Pump	Pump
27	Tap near well	Tap near well
28	Tap away from well	Tap away from well
29	Bucket	Bucket
30	Pressure tank	Pressure tank
31	Discharge pipe	Discharge pipe
32	Foerst sampler	Foerst sampler
33	Bailer	Bailer
34	Drain line	Drain line

Value	Short name	Description
72005 – SAMPLE SOURCE		
35	Injection pump	Injection pump
36	Spot spl fluid col	Spot sample in fluid column
37	Tank btry inc gn brl	Tank battery including gun barrel
38	Windmill	Windmill
39	Water siphon	Water siphon
40	Special	Special
41	Mun and dom waste	Municipal and domestic waste
42	Industrial waste	Industrial waste
43	Strm wtr pte nat chn	Stormwater (prior to entering natural channels)
44	Pub sup treated	Public water supplies (treated water)
45	Mine water	Mine water
46	Pub sup untreated	Public water supplies (untreated water)
47	Water well	Water well
48	Multiple water wells	Multiple water wells
49	Oil well	Oil well
50	Multi-oil well	Multi-oil well
51	Gas well	Gas well
52	Multi-gas well	Multi-gas well
53	Oil and gas well	Oil and gas well
54	Multi-oil & gas well	Multi-oil and gas well
55	Drld abandoned well	Drilled and abandoned well
56	Plugged abandoned	Plugged and abandoned well
57	Junked aband well	Junked and abandoned well
58	Temp abandoned well	Temporarily abandoned well
59	Abandoned oil well	Abandoned oil well
60	Abandoned gas well	Abandoned gas well
61	Salt-wtr supply well	Saltwater supply well
62	Salt wtr dspsl well	Saltwater disposal well
63	Injection well	Injection well
64	Service well	Service well
65	Wetland ecosystem	Wetland ecosystem
66	Dredge wake	Dredge wake
67	Mainstream	Mainstream
68	Overbank	Overbank
69	Comp pub wtr untreat	Composited public water supply(untreated water)
70	Comp pub wtr treated	Composited public water supply(treated water)
72	Interstitial water	Interstitial water
74	Lysimeter	Lysimeter
76	Oil/gas conversion	Oil or gas test well converted to water well
77	Surficial bank	Surficial bank
78	Interior bank	Interior bank

Value	Short name	Description
72005 – SAMPLE SOURCE		
79	Before pressure tank	Before pressure tank
80	After pressure tank	After pressure tank
86	Hyporheic zone	Hyporheic zone
88	Seepage Meter	Seepage Meter
100	Dom supply-untreated	Domestic supply-untreated
110	Dom supply-treated	Domestic supply-treated
1001	Wet deposition	Wet deposition
1002	Dustfall	Dustfall
1003	Landfill	Landfill
1004	Cast overburden	Cast overburden
1005	Street sweeping	Street sweeping
1006	Landfill seep	Landfill seep
72006 – SAMPLING CONDITION		
0.01	Dry no WL recorded	The site was dry (no water level is recorded)
0.02	Flowing recently	The site had been flowing recently
0.03	Flowing no meas	The site was flowing, head could not be measured
0.04	Nrby flwng st tps aq	A nearby site that taps the aquifer was flowing
0.05	Nrby site flowing	Nearby site tapping same aquifer had been flowing recently
0.06	Injector site	Injector site
0.07	Injector site mon	Injector site monitor
0.08	Meas discontinued	Measurement discontinued
0.09	Obstruction abv wtr	Obstruction encountered in well above water surface
0.1	Pumping	The site was being pumped
0.11	Pumped recently	The site had been pumped recently
0.12	Nrby site pumping	Nearby site tapping the same aquifer was being pumped
0.13	Nrby site pumped rec	Nearby site tapping the same aquifer was pumped recently
0.14	Foreign substance	Foreign substance present on the surface of the water
0.15	Well destroyed	Well destroyed
0.16	LW aff by stage nrby	Water level affected by stage in nearby site
0.17	Other	Other conditions affecting the measured water level
1	Testing	Testing
2	Undesignated	Undesignated
3	Swabbing	Swabbing
4	Flowing	Flowing
5	Reversing out	Reversing out
6	Flowing on gas lift	Flowing on gas lift
7	After acidizing	After acidizing
8	Pumping	Pumping
9	Millipore filter	Millipore filter
10	Open hole	Open hole
11	F on drill stem test	Flowing on drill stem test

Value	Short name	Description
72006 – SAMPLING CONDITION		
12	Aftr drill stem test	After drill stem test
15	Bailing	Bailing
16	After perforation	After perforation
17	Tubing flow	Tubing flow
18	Producing	Producing
19	Circulating	Circulating
20	F on production test	Flowing on production test
21	F on potential test	Flowing on potential test
22	Lifting	Lifting
23	Flowing to pit	Flowing to pit
24	Water flooding	Water flooding
25	Jetting	Jetting
26	Prod & dev test	Production and development test
27	Prod by unknown meth	Production by unknown method
30	Seeping	Seeping
31	Nearby well pumping	Nearby well pumping
32	Nby well taking wtr	Nearby well taking water
33	Well taking water	Well taking water
72219 – SAMPLER NOZZLE MATERIAL, CODE		
1	Brass	Brass
2	Plastic	Plastic
3	TFE	Tetrafluoroethylene
72220 – SAMPLER NOZZLE DIAMETER, CODE		
3	3/16 inch	Three-sixteenths of an inch
4	1/4 inch	One-fourth of an inch
5	5/16 inch	Five-sixteenths of an inch
74200 – SAMPLE PRESERVATION METHOD		
1	FA	FA, Polyethylene bottle, 250 mL, acid rinsed
3	FAB	FAB, Teflon bottle, 250 mL, acid rinsed
5	FAR	FAR, Polyethylene bottle, 1L, acid rinsed
7	FC	FC, Brown polyethylene bottle, size dependent on lab sched
9	FU poly btl fld rnsd	FU, poly bottle, field rinsed
11	RA	RA, Polyethylene bottle, acid-rinsed, 250 mL
13	RAB	RAB, Teflon bottle, acid rinsed, 250 mL
15	RAE	RAE, Polyethylene bottle, acid-rinsed, 250 mL
17	RAH	RAH, Polyethylene bottle, acid-rinsed, 250 mL
19	RC	RC, brown poly bottle, field rinsed, 250 mL
21	RU poly size dep	RU, Polyethylene bottle, size dependent on lab sched
23	RUR	RUR, Polyethylene bottle, polyseal cap, 250 or 500 mL, or1L
25	LC0023 RCN Ply 250mL	LC0023 or RCN, Polyethylene bottle, 250 mL
27	LC0076 COD 125mL bkd	LC0076 or COD, Glass bottle, 125 mL, baked at 450 deg C

Value	Short name	Description
74200 – SAMPLE PRESERVATION METHOD		
29	LC0089 Ply 250mL	LC0089, Polyethylene bottle, 250 mL
31	LC0239 Poly AR 1 L	LC0239, Poly Bottle, Acid Rinsed, 1 L
33	Contact NWQL	Contact NWQL
35	LC0300 G FR 250mL	LC0300, glass bottle, field rinsed, 250 mL
39	LC0439 steel barrel	LC0439, steel barrel
41	LC0440 G nrw PSC 1L	LC0440, Glass bottle, narrow-neck, polyethylene seal cap,1L
43	LC0452 Ply PSC 125mL	LC0452, Polyethylene bottle, polyethylene seal cap, 125 mL
45	LC0489 G/Ply 125mL	LC0489, Glass or polyethylene bottle, 125 mL
47	LC0490 Contact NWQL	LC0490, Contact NWQL
49	LC0491 Contact NWQL	LC0491, Contact NWQL
51	LC0880 FCN Ply 250mL	LC0880 or FCN, Polyethylene bottle, 250 mL
53	LC0995 Contact NWQL	LC0995, Contact NWQL
55	LC0996 Glass FR	LC0996, Glass bottle, field rinsed
57	LC0997 Contact NWQL	LC0997, Contact NWQL
59	CL septum 40 mL	CL, septum bottle, 40 mL
61	GCC	GCC, Amber glass bottle, baked at 450 degrees C, 1L
63	GCV	GCV, Amber glass septum vial, 40 mL
65	RCB	RCB, Polyethylene bottle, 250 mL (Same as fixed value 79)
67	LC0052 PHE GB 500mL	LC0052 or PHE, Glass bottle, baked, 500 mL
69	LC0113 DOC AGB 125mL	LC0113 or DOC, Amber glass bottle, baked at 450 deg C,125mL
71	LC0114 TOC AGB 125mL	LC0114 or TOC, Amber glass bottle, baked at 450 deg C,125mL
73	LC0127 AGB OG 125mL	LC0127, Amber oil & grease bottle, baked @450deg C, 125 mL
75	LC0305 SOC 0.45 AG d	LC0305 or SOC, 0.45 um silver filter in a petri dish
77	FU poly sz dep sched	FU, Polyethylene bottle, size dependent on laboratory sched
79	RCB	RCB, Polyethylene bottle, 250 mL (Same as fixed value 65)
81	RU poly 500 mL	RU, poly bottle, field rinsed, 500 mL
83	LC0050 TBY Ply 125mL	LC0050 or TBY, Polyethylene bottle, 125 mL
85	LC0169 SUSO Ply 500	LC0169 or SUSO, Polyethylene bottle, 500 mL
87	CC p frzr ctn 1pt	CC, plastic freezer carton, 1 pt
89	CU p frzr ctn 1pt	CU, plastic freezer carton, 1 pt
91	BGC	BGC, wide mouth glass bottle, 1 L
95	PP Contact NWQL	PP, Contact NWQL
97	SIZE untreated	SIZE, untreated
99	BEN	BEN, poly bottle, wide mouth
101	CHE	CHE, glass jar, wide mouth
103	CHY glass vial	CHY, glass vial
105	USGS-GAL	DIA, contact Atlanta Central Laboratory
107	PER contact USGS-GAL	PER, contact Atlanta Central Laboratory
109	SHY poly bottle	SHY, poly bottle
111	ST poly bottle	ST, poly bottle

Value	Short name	Description
74200 – SAMPLE PRESERVATION METHOD		
113	ZOO contact USGS-GAL	ZOO, contact Atlanta Central Laboratory
115	LC0055 poly bottle	LC0055, poly bottle
117	LC0438 Contact NWQL	LC0438, Contact NWQL
119	LC0616 glass vial	LC0616, glass vial
121	LC1049 WM G 1 L	LC1049, wide mouth glass bottle, 1 L
123	FAM	FAM, Glass bottle, acid rinsed, 250 mL
125	FCU	FCU, brown poly bottle, field rinsed, 250 mL
127	RAM	RAM, Glass bottle, acid rinsed, 250 mL
129	LCO460 Ply FR 500mL	LCO460, poly bottle, field rinsed, 500 mL
131	LCO881 Ply FR 125mL	LCO881, poly bottle, field rinsed, 125 mL
133	LC1043 G HD PSC 1L	LC1043, Glass or high-density poly bottle & seal cap, 1L
135	LC1199 Contact NWQL	LC1199, Contact NWQL
137	LC0019 AGB 125mL	LC0019, Amber glass bottle, baked at 450 deg C, 125 mL
139	LC0306 G 125mL	LC0306, glass bottle, 125 mL
141	LC1038 p frzr ctn1pt	LC1038, plastic freezer carton, 1 pt
143	LC0961 Contact NWQL	LC0961, Contact NWQL
145	ALF Aluminum foil	ALF, Aluminum foil
147	C18 C-18 SPE Cart	C18, C-18 SPE Cartridge
149	CC poly WM 500mL	CC, Polyethylene bottle, wide-mouthed, 500 mL
151	CRB Carbopak-B crt	CRB, Carbopak-B cartridge
153	CUR	CUR, Polyethylene bottle, wide-mouth, 500 mL
155	EAM Amb glass 250 mL	EAM, Amber glass bottle, 250 mL
157	EBC	EBC, Amber glass bottle, teflon cap liner, 1L
159	ECC	ECC, Amber glass bottle, teflon cap liner, 1L
161	EDV	EDV, Amber glass screw-cap vials, teflon-faced septa, 40mL
163	ELV	ELV, Glass screw-cap vials, teflon-faced septa, 60mL
165	EOV	EOV, Amber glass screw-cap val, teflon-faced septa, 40 mL
167	EPC	EPC, High-density poly-vinyl chloride bottle, 1L
169	ERA	ERA, Polyethylene bottle, 500 mL
171	ERC	ERC, Amber polyethylene bottle, 125 mL
173	ERU	ERU, polyethylene bottle, 250 mL
175	FCA	FCA, Brown polyethylene bottle, 125 mL
177	FCC	FCC, Brown polyethylene bottle, 125 mL
179	FUS	FUS, Filtered untreated stable isotopes
181	IQE QMH Elitriate	IQE, Invertebrate QMH Elitriate: NWQL Tech Memo 98-09
183	IQL QMH Large Rare	IQL, Invertebrate QMH Large Rare: NWQL Tech Memo 98-09
185	IQM QMH Main Body	IQM, Invertebrate QMH Main Body, NWQL Tech Memo 98-09
187	IRE RTH Elutriate	IRE, Invertebrate RTH Elutriate; NWQL Tech Memo 98-09
189	IRL RTH Large Rare	IRL, Invertebrate RTH Large Rare: NWQL Tech Memo 98-09
191	IRM RTH Main Body	IRM, Invertebrate RTH Main Body: NWQL Tech Memo 98-09
193	LC0460 Ply PSC 250mL	LC0460, Polyethylene bottle, polyethylene seal cap, 250mL

Value	Short name	Description
74200 – SAMPLE PRESERVATION METHOD		
195	LC0624 Ply PSC 500mL	LC0624, Polyethylene bottle, polyethylene seal cap, 500 mL
197	LC1565 G/HDP PSC 1L	LC1565, Glass /high-density poly bottle, poly seal cap, 1L
199	LC1567 Ply PSC 125mL	LC1567, Polyethylene bottle, polyethylene seal cap, 125 mL
201	LC1574 G/HDP PSC 125	LC1574, Glass/high-density poly bottle, poly seal cap,125mL
203	LC1717 AG/HDP PSC 1L	LC1717, Amber glass/high-dens poly bottle, poly seal cap,1L
205	LC1949 Ty Coplen	LC1949, Contact Ty Coplen (703-648-5862)
207	LC1951 G/UHDP PSC 1L	LC1951, Glass/untrtd high-dens poly bottle,poly seal cap,1L
209	MBAS poly 250mL	MBAS, Polyethylene bottle, 250 mL
211	PIC Glass fiber fltr	PIC, Glass fiber filter
213	RAR	RAR, Polyethylene bottle, acid rinsed, 1L
215	RCA	RCA, Brown polyethylene bottle, 125 mL
217	RCC	RCC, Brown polyethylene bottle, 125 mL
219	RURCT	RURCT, Copper tube, 1L: NWQL Tech Memo 97.04 & 97.04S
221	RURCV	RURCV, Glass vial, 20 mL
223	RUS	RUS, Polyethylene bottle, 250mL, 500mL, or 1L
225	SC1379 AGB 125 mL	SC1379, Amber glass bottle, baked @ 450 deg C, 125 mL
227	SUR Petri or vial	SUR, Petri dish or vial
229	TBI	TBI, Ziplock-type bag, glass or poly wide-mouth jar
231	TPCN GF filter 25mm	TPCN, Glass fiber filter, 25 mm
233	UAS	UAS, Supor/glass fiber filter &amber glass septum vial,40mL
235	WCA	WCA, Polyethylene bottle, 125 mL
237	LC1648 Ply 250mL	LC1648, Polyethylene bottle, 250 mL
239	LC1718 AG/HDP PSC 1L	LC1718, Amber glass/high-dens poly bottle, poly seal cap,1L
82309 – CONTAMINATION SOURCE, POSSIBLE		
1	Oil spill	Oil spill
3	Gas spill	Gas spill
5	Organic	Organic
7	Pesticide	Pesticide
9	Herbicide	Herbicide
11	Insecticide	Insecticide
13	Feedlot runoff	Feedlot runoff
15	Salt water	Salt water
17	Injection well	Injection well
19	Sewage RX plant	Sewage treatment plant
21	Land spreading	Land spreading
23	Landfill	Landfill
25	Sludge dump	Sludge dump
27	Waste lagoon	Waste lagoon
29	Urban runoff	Urban runoff
31	Mine drainage	Mine drainage
33	Const drainage	Construction drainage

Value	Short name	Description
82309 – CONTAMINATION SOURCE, POSSIBLE		
35	Pulp mill outfall	Pulp mill outfall
37	Textile mill outfall	Textile mill outfall
39	Irrigation runoff	Irrigation runoff
41	Fertilizer	Fertilizer
43	Dairy operation	Dairy operation
82398 – SAMPLING METHOD		
10	EWI	Equal width increment (ewi)
15	EWI non-isokinetic	Equal width increment, non-isokinetic
20	EDI	Equal discharge increment (edi)
25	Timed smpling intrvl	Timed sampling interval
30	Single vertical	Single vertical
40	Multiple verticals	Multiple verticals
50	Point sample	Point sample
55	Composite multi pnt	Composite - Multiple point samples
60	Weighted bottle	Weighted bottle
70	Grab sample(dip)	Grab sample (dip)
80	Q integrated (ETR)	Discharge integrated, equal transit rate (etr)
90	Q integrated centrd	Discharge integrated, centroid
100	Van Dorn sampler	Van Dorn sampler
110	Sewage sampler	Sewage sampler
120	Velocity integrated	Velocity integrated
130	Seepage Meter	Seepage Meter
140	Passive dfsn, OBW	Passive diffusion, organic-free deionized water
141	Passive dfsn, air	Passive diffusion, ambient air
200	Zooplankton-net	Zooplankton-net
210	Bnth invrt mech grab	Benthic invertebrate-mechanical grab
220	Bnth invrt mech drdg	Benthic invertebrate-mechanical dredge
230	Bnth invrt art sub	Benthic invertebrate-artificial substrate
240	Bnth invrt nat sub	Benthic invertebrate-natural substrate
250	Bnth invrt net	Benthic invertebrate-net
260	Phytoplankton-net	Phytoplankton-net
270	Phyto wtr bottle	Phytoplankton-water bottle
280	Periphyton nat sub	Periphyton-natural substrate
281	Periphyton NS DTH	Periphyton-Natural Substrate, Depositional Targeted Habitat
282	Periphyton NS RTH	Periphyton-Natural Substrate, Richest Targeted Habitat
290	Periphyton art sub	Periphyton-artificial substrate
300	Tissue taken with BP	Tissue taken with biopsy plug
900	SS Pumping	SuspSed; Pumping - stream sample using a pumping mechanism
910	SS SS NFS psv fill	SuspSed;Single-stage,nozzle at fixed stage,passively fillng
920	SS BSV DI att strctr	SuspSed; Box-single ver, depth-int, attached to structure
930	SS PD DI single vert	SuspSed;Partial Depth,depth integrated,part of single vert.

Value	Short name	Description
82398 – SAMPLING METHOD		
940	SS PW DI/WI pt x-sec	SuspSed; Partial Width - dep/width int, part of x-section
1000	Bedload (SEWI)	Bedload, single equal width increment (SEWI)
1010	Bedload (MEWI)	Bedload, multiple equal width increment (MEWI)
1020	Bedload (UWI)	Bedload, unequal width increment (UWI)
4010	Thief sample	Thief sample
4020	Open-top bailer	Open-top bailer
4025	Double-valve bailer	Double-valve bailer
4030	Suction pump	Suction pump
4031	SL centrifugal pump	Suction lift centrifugal pump
4032	SL jet pump	Suction lift jet pump
4033	SL peristaltic pump	Suction lift peristaltic pump
4040	Submersible pump	Submersible pump
4041	Sbmrsbl bladder pmp	Submersible bladder pump
4042	Sbmrsbl gas recip	Submersible gas reciprocating pump
4043	Sbmrsbl gas lift pmp	Submersible gas lift pump
4044	Submersible jet pump	Submersible jet pump
4045	Sbmrsbl multi impllr	Submersible multiple impeller (turbine) pump
4046	Sbmrsbl helical rtr	Submersible helical rotor pump
4047	Sbmrsbl gear pump	Submersible gear pump
4048	Sbmrsbl gas dsplcmnt	Submersible gas-displacement pump
4050	Squeeze pump	Squeeze pump
4060	Gas recip pump	Gas reciprocating pump
4070	Gas lift	Gas lift
4080	Peristaltic pump	Peristaltic pump
4090	Jet pump	Jet pump
4100	Flowing well	Flowing well
4110	Resin trap collector	Resin trap collector
5010	Sediment core	Sediment core
8010	Other	Other
8020	Syringe sample	Syringe sample
8030	Grab smp tap wat sup	Grab sample at water-supply tap
8040	Spigot	Spigot
8050	Grab smp tap dam	Grab sample at Tap(s) on a Dam

Value	Short name	Description
82923 – ATMOSPHERIC DEPOSITION TYPE, WET		
1	Snow	Snow
2	Hail	Hail
3	Mix rain snow hail	Mixture (rain, snow, and or hail)
4	Rain	Rain
5	Throughfall	Throughfall, rain dripping from a vegetative canopy
6	Stemflow	Stemflow, rain flowing along tree branches and trunk
9.99	Unknown	Unknown
1	Snow	Snow
2	Hail	Hail
3	Mix rain snow hail	Mixture (rain, snow, and or hail)
83205 – ATMOSPHERIC DEPOSITION TYPE, BULK		
4	Rain	Rain
9.99	Unknown	Unknown
84060 – TOPOGRAPHY, PHYSIOGRAPHIC SETTING		
10	Alluvial fan	Alluvial fan
20	Playa	Playa
30	Stream channel	Stream channel
40	Local depression	Local depression
50	Dunes	Dunes
60	Flat surface	Flat surface
70	Flood plain	Flood plain
80	Hilltop	Hilltop
90	Sinkhole	Sinkhole
100	Lake swamp or marsh	Lake, swamp, or marsh
110	Mangrove swamp	Mangrove swamp
120	Offshore (estuary)	Offshore (estuary)
130	Pediment	Pediment
140	Hillside (slope)	Hillside (slope)
150	Terrace aluvl marine	Terrace, alluvial or marine
160	Undulating	Undulating
170	Valley flat	Valley flat
180	Upland draw	Upland draw

This table continues on the next page.

Value	Short name	Description
84143 – WELL PURGING CONDITION		
100	Purged stable pH	Well purged to stable pH
110	Purged stable tmp	Well purged to stable temperature
120	Purged stable SC	Well purged to stable specific conductance
130	Purged stable pH tmp	Well purged to stable pH and temperature
140	Purged stable pH SC	Well purged to stable pH and specific conductance
150	Purged stable tmp SC	Well purged to stable temperature and specific conductance
160	Prgd stbl pH tmp SC	Well purged to stable pH, temp. and specific conductance
170	Purged 3 well vol	Well purged, at least three well volumes
500	WNP in csng lt 6 h	Well not purged, water in casing less than 6 hours
510	WNP in csng 6-12 h	Well not purged, water in casing 6–12 hours
520	WNP in csng 12-24 h	Well not purged, water in casing 12–24 hours
84144 – WELL SELECTION CRITERIA		
100	In/nr loc prob area	Site selected because it is near/within local problem area
200	Dsrgrd loc prob area	Site selected without regard to local problem area
84145 – PROJECT COMPONENT		
100	Regional sampling	Regional sampling
200	TS Ag area	Targeted sampling (agricultural area)
300	TS urban or sub area	Targeted sampling (urban or suburban area)
400	TS natural sub	Targeted sampling (naturally occurring substances)
500	TS local-scale ntwrk	Targeted sampling (local-scale network)
600	TS other	Targeted sampling (other)
700	Geochem invstgtn	Geochemical investigation
800	Targeted avian use	Targeted sampling (avian use area)
900	QC sample group	Quality control statistical sample group
84146 – LAND USE, PREDOMINANT, WITHIN 100 FT OF WELL		
110	Residential	Residential
120	Comm and services	Commercial and services
130	Industrial	Industrial
170	OTH urb blt-up land	Other urban or built-up land
211	Nonirr cropland	Nonirrigated cropland
212	Irrigated cropland	Irrigated cropland
213	Pasture	Pasture
220	Orch grv vin nursery	Orchards, groves, vineyards, nurseries
230	Confined AFO	Confined feeding operations
240	Other Ag land	Other agricultural land
300	Rangeland	Rangeland
400	Forestland	Forestland
500	Water	Water
84147 – LAND USE, PREDOMINANT WITHIN ¼ MILE RADIUS OF WELL		
110	Residential	Residential
130	Industrial	Industrial

Value	Short name	Description
84147 – LAND USE, PREDOMINANT WITHIN ¼ MILE RADIUS OF WELL		
170	OTH urb blt-up land	Other urban or built-up land
211	Nonirr cropland	Nonirrigated cropland
212	Irrigated cropland	Irrigated cropland
213	Pasture	Pasture
220	Orch grv vin nursery	Orchards, groves, vineyards, nurseries
230	Confined AFO	Confined feeding operations
240	Other Ag land	Other agricultural land
300	Rangeland	Rangeland
400	Forestland	Forestland
500	Water	Water
600	Wetland	Wetland
700	Barren land	Barren land
25	Less than 25 percent	Less than 25 percent
50	26 to 50 prcnt	From 26 percent to 50 percent
75	51 to 75 prcnt	From 51 percent to 75 percent
100	76 to 100 prcnt	From 76 percent to 100 percent
84149 – LAND USE CHANGES W/I LAST 10 YRS, WITHIN ¼ MILE RADIUS OF WELL		
100	Yes	Yes
200	Probably	Probably
300	Probably not	Probably not
400	No	No
84164 – SAMPLER TYPE		
100	Van Dorn sampler	Van Dorn sampler
110	Sewage sample	Sewage sample
120	Vel integrated	Velocity integrated sample
125	Kemmerer bottle	Kemmerer bottle
130	Drum Seepage Meter	Drum Seepage Meter (Lee, 1977)
200	Zooplankton net	Zooplankton net
210	Bnth invrt mech grab	Benthic invertebrate-mechanical, grab
220	Bnth invrt mech drdg	Benthic invertebrate-mechancial, dredge
230	Bnth invrt art sub	Benthic invertebrate-artificial substrate
240	Bnth invrt nat sub	Benthic invertebrate-natural substrate
250	Bnth invrt net	Benthic invertebrate-net
260	Phytoplankton net	Phytoplankton net
270	Phyto wtr bottle	Phytoplankton-water bottle
280	Periphyton nat sub	Periphyton-natural substrate
290	Periphyton art sub	Periphyton-artificial substrate
1000	Bedload-HS 3x3 3.22	Bedload-Helley-Smith, 3 x 3, area ratio 3.22
1010	Bedload-HS 6x6 3.22	Bedload-Helley-Smith, 6 x 6, area ratio 3.22
1020	Bedload-HS 3x3 1.4	Bedload-Helley-Smith, 3 x 3, area ratio 1.40
1030	Bedload-HS 6x6 1.4	Bedload-Helley-Smith, 6 x 6, area ratio 1.40

Value	Short name	Description
84164 – SAMPLER TYPE		
1040	Bedload-HS 6x12 1.4	Bedload-Helley-Smith, 6 x 12, area ratio 1.40
1050	BL6X12 ToutleR2 Cab	BL-6X12 in, Toutle R. Type 2, Exp. Ratio 1.40, Cable Susp
1055	BL6X12 ToutleR2 Wadg	BL-6X12 in, Toutle R. Type 2, Exp. Ratio 1.40, Wading
1060	BL-3X3 BL-84, Cable	BL-3X3 in, BL-84, Exp. Ratio 1.40, Cable Susp
1070	Bedload-TR1 6x6 3.22	Bedload-Toutle River type 1, 6 x 6, area ratio 3.22
1080	Bedload-H-5 6x12 1.4	Bedload-Hubble #5, 6 x 12, area ratio, 1.40
1090	FIASP 3x3 1.40	FIASP, 3 x 3, area ratio 1.40
1100	BL3X3 H-S 50-100 Cab	BL-3X3 in, H-S, 50-100 lb, Exp. Ratio 3.22, Cable Susp
1110	BL3X3 H-S 100-200Cab	BL-3X3 in, H-S, 100-200 lb, Exp. Ratio 3.22, Cable Susp
1120	BL3X3 H-S Wading	BL-3X3 in, H-S, 1/4-in thick nozzle, Exp. Ratio 3.22, Wading
1130	HS SM nzl wdng	3x3 inch H-S, sheet metal nozzle, wading
1140	FIASP 1/4in nzl cbl	3x3 inch FIASP, 1/4-in thick nozzle, 50-100lbs, cable susp
1150	BL3X3 BLH-84	BL-3X3 in, BLH-84, 1/4-in thick nozzle, Exp. Ratio 1.4, Wading
1160	FIASP SM nzl wdng	3x3 inch FIASP, sheet metal nozzle, wading
1170	BL6X6 H-S 150-200Cab	BL-6X6 in H-S, 1/4-in nozzle, 150-200 lb, Exp. Ratio 3.22, Cable Susp
1180	BL-4X8 Elwha Wading	BL-4X8 in, Elwha R., Exp. Ratio 1.40, Wading
1190	BL-4X8 Elwha Cable	BL-4X8 in, Elwha R., Exp. Ratio 1.40, Cable Susp
1200	BL-Net-Frame Trap	BL-Net-Frame Trap
3001	Sampler US DH-48	Sampler, US DH-48
3002	Sampler US DH-59	Sampler, US DH-59
3003	Sampler US DH-75P	Sampler, US DH-75P
3004	Sampler US DH-75Q	Sampler, US DH-75Q
3005	Sampler US DH-76	Sampler, US DH-76
3006	Sampler US D-43	Sampler, US D-43
3007	Sampler US D-49	Sampler, US D-49
3008	Sampler US D-49AL	Sampler, US D-49AL
3009	Sampler US D-74	Sampler, US D-74
3010	Sampler US D-74AL	Sampler, US D-74AL
3011	Sampler US D-77	Sampler, US D-77
3012	Sampler US P-46	Sampler, US P-46
3013	Sampler US P-50	Sampler, US P-50
3014	Sampler US P-61-A1	Sampler, US P-61-A1
3015	Sampler US P-63	Sampler, US P-63
3016	Sampler US P-72	Sampler, US P-72
3017	Sampler US U-59	Sampler, US U-59
3018	Sampler US U-73	Sampler, US U-73
3019	Sampler US PS-69	Sampler, US PS-69
3020	Sampler US PS-69TM	Sampler, US PS-69TM
3021	Sampler US CS-77	Sampler, US CS-77
3022	Sampler US PS-82	Sampler, US PS-82
3023	Sampler US BMH-53	Sampler, US BMH-53

Value	Short name	Description
84164 – SAMPLER TYPE		
3024	Sampler US BMH-53TM	Sampler, US BMH-53TM
3025	Sampler US BM-54	Sampler, US BM-54
3026	Sampler US BM-54TM	Sampler, US BM-54TM
3027	Sampler US BMH-60	Sampler, US BMH-60
3028	Sampler US BMH-60TM	Sampler, US BMH-60TM
3029	Sampler US RBM-80	Sampler, US RBM-80
3030	US DH-48 TM	US DH-48 TM
3031	US DH-48 TM Teflon	US DH-48 TM with Teflon gasket and nozzle
3032	US DH-59 TM	US DH-59 TM
3033	US DH-59 TM Teflon	US DH-59 TM with Teflon gasket and nozzle
3034	US DH-76 TM	US DH-76 TM
3035	US DH-76 TM Teflon	US DH-76 TM with Teflon gasket and nozzle
3036	US D-74 TM	US D-74 TM
3037	US D-74 AL-TM	US D-74 AL-TM
3038	US D-74 AL-TM Teflon	US D-74 AL-TM with Teflon gasket and nozzle
3039	US D-77 TM	US D-77 TM
3040	US D-77 TM Teflon bg	US D-77 TM modified Teflon bag sampler
3041	US P-61 AL-TM	US P-61 AL-TM
3042	US P-61	US P-61
3043	US P-61 TM	US P-61 TM
3044	US DH-81	US DH-81
3045	US DH-81 Teflon	US DH-81 with Teflon cap and nozzle
3046	D-77 TM Oven Bag	Sampler, D-77 TM, with Reynolds Oven Collapsible Bag
3047	Smplr FT P Oven Bag	Sampler, frame-type, plastic bottle with Reynolds Oven Bag
3048	Smplr FT TB	Sampler, frame-type, Teflon bottle
3049	Smplr FT PB	Sampler, frame-type, plastic bottle
3050	Smplr FT P w/T bag	Sampler, frame-type, plastic bottle w/Teflon collaps. bag
3051	US DH-95 Teflon	US DH-95 Teflon bottle
3052	US DH-95 plastic	US DH-95 plastic bottle
3053	US D-95 Teflon	US D-95 Teflon bottle
3054	US D-95 plastic	US D-95 plastic bottle
3055	US D-96 bag sampler	US D-96 bag sampler
3056	US D-96-A1 Bag	US D-96-A1 Bag Sampler
3057	US D-99 Bag Sampler	US D-99 Bag Sampler
3058	US DH-2 Bag Sampler	US DH-2 Bag Sampler
3060	Weighted-bottle	Weighted-bottle sampler
3061	US WBH-96	US WBH-96 weighted-bottle sampler
3070	Grab sample	Grab sample
3071	Open-Mouth Bottle	Open-Mouth Bottle
3080	VOC hand sampler	VOC hand sampler
3090	Passive diffusion	Passive diffusion sampler

Value	Short name	Description
84164 – SAMPLER TYPE		
3099	Omaha Sed. Sampler	US War Dept., Engineer District, Omaha, Neb. Time-Integrating Sediment Sampler
4010	Thief sampler	Thief sampler
4020	Open-top bailer	Open-top bailer
4025	Double-valve bailer	Double-valve bailer
4030	Suction pump	Suction pump
4035	Sbmrsbl centrifugal	Submersible centrifugal pump
4040	Sbmrsbl pos pressure	Submersible positive-pressure pump
4041	Sbmrsbl helical rtr	Submersible helical rotor pump
4045	Sbmrsbl gear pump	Submersible gear pump
4050	Bladder pump	Bladder pump
4055	Inertial Pump	Inertial Pump
4060	Gas recip pump	Gas reciprocating pump
4070	Gas lift	Gas lift
4075	Sbmrsbl piston	Submersible piston pump
4080	Peristaltic pump	Peristaltic pump
4090	Jet pump	Jet pump
4095	Line-shaft turbine p	Line-shaft turbine pump
4100	Flowing well	Flowing well
4110	Resin trap collector	Resin trap collector
4115	Sampler point auto	Sampler, point, automatic
5010	Box core long	Box core, long
5020	Box core short	Box core, short
5030	Gravity core	Gravity core
5040	Piston core	Piston core
5050	Push core	Push core
6000	Bed mat-scoop shovel	Bed Material -- Scoop Shovel
6010	Bed mat-scoop TM	Bed Material -- Scoop TM (Epoxy coated metal sampler)
6020	Bed mat-Scoop Teflon	Bed Material -- Scoop Teflon
6030	Bed mat-Scoop	Bed Material -- Pipe Dredge
6040	Bed mat-Dredge-Coopr	Bed Material -- Dredge-Cooper Scooper
6050	Bed mat-Ponar Grab	Bed Material -- Ponar Grab
6060	Bed mat-Ekman Grab	Bed Material -- Ekman Grab
6070	Bed mat-Box Core Grb	Bed Material -- Box Core Grab
6080	Bed mat-Peterson Grb	Bed Material -- Peterson Grab
6090	Bed mat-Van Veen	Bed Material -- Van Veen Grab
8000	None	None
8010	Other	Other
8020	Mult. samplers used	Mulitple samplers used

Value	Short name	Description
84171 – SAMPLE SPLITTER TYPE, FIELD CODE		
10	CS p 8L cooler spgt	Churn splitter, plastic, 8 liter, cooler-type spigot
20	CS p 14L cooler spgt	Churn splitter, plastic, 14 liter, cooler-type spigot
30	CS p 8L cubtnr spgt	Churn splitter, plastic, 8 liter, cubitainer-type spigot
40	CS p 14L cubtnr spgt	Churn splitter, plastic, 14 liter, cubitainer-type spigot
50	CS FP 8L	CS FP 8L Churn splitter, fluoropolymer, 8 liter
60	CS FP 14L US SS-1	Churn splitter, fluoropolymer, 14 liter, US SS-1
70	Cone spltr plastic	Cone splitter, plastic
80	Cone spltr fluoropol	Cone splitter, fluoropolymer
90	Sieve wet	Sieve, wet
100	Sieve dry	Sieve, dry
110	Riffle splitter	Riffle splitter (Jones)
200	Other	Other
84172 – AIR SAMPLER FILTER TYPE		
10	GFF	GFF, Glass fiber filter
20	QFF	QFF, Quartz fiber filter
30	TF Teflon filter	TF, Teflon filter
84173 – AIR SAMPLE TRAP SORBENT TYPE		
40	Other	Other
10	PUF	PUF, Polyurethane foam
20	PUF/XAD	PUF/XAD, polyurethane foam plug/XAD resin/PUF plug sandwich
30	XAD XAD resin	XAD, XAD resin
40	Tenax GC resin	Tenax, Tenax GC resin
50	Oasis HLB resin	Oasis, Hydrophilic-Lipophilic Balance Sorbent (HLB) resin
60	Other	Other
84174 – POCIS SORBENT TYPE		
10	Oasis HLB resin	Oasis, Hydrophilic-Lipophilic Balance Sorbent (HLB) resin
20	Biobeads	80% Isolute ENV+ and 20% Ambersorb Carbon on Biobeads
84175 – LAKE THERMAL LAYER WHERE MEASUREMENT WAS MADE		
10	Epilimnion	Epilimnion – Upper thermal lake layer
20	Metalimnion	Metalimnion – Middle thermal lake layer
30	Hypolimnion	Hypolimnion – Lower thermal lake layer
84176 – OIL SLICK ON WATER, SEVERITY, CODE		
0	None	None
1	Light Sheen	Light Sheen
2	Heavy Sheen	Heavy Sheen
3	Light Slick	Light Slick
4	Heavy Slick	Heavy Slick

Value	Short name	Description
84177 - OIL SLICK COVERAGE (SEVERITY) ON SHORE WITHIN 25 FT OF BED SEDIMENT SAMPLE COLLECTION, CODE		
0	None	None
1	Mild	Mild
2	Moderate	Moderate
3	Serious	Serious
4	Extreme	Extreme
84178 – FLOATING VEGETATION, SEVERITY, CODE		
0	None	None
1	Mild	Mild
2	Moderate	Moderate
3	Serious	Serious
4	Extreme	Extreme
84180 – SOIL HORIZON (U.S. Dept. of Agriculture Soil Conservation Service, Soil Survey Manual, 1993), CODE		
1000	O horizon	O horizon
1100	Oa horizon	Oa horizon
1200	Oe horizon	Oe horizon
1300	Oi horizon	Oi horizon
2000	A horizon	A horizon
3000	E horizon	E horizon
4000	B horizon	B horizon
4010	Upper B horizon	Upper B horizon
4020	Mid B horizon	Mid B horizon
4030	Lower B horizon	Extreme
4100	Bc horizon	Bc horizon
4200	Bh horizon	Bh horizon
4250	Bhs horizon	Bhs horizon
4251	Bhs1 horizon	Bhs1 horizon
4252	Bhs2 horizon	Bhs2 horizon
4300	BI horizon	BI horizon
4400	Bs horizon	Bs horizon
4410	Bs1(1) horizon	Bs1(1) horizon
4500	Bu horizon	Bu horizon
4600	Bw horizon	Bw horizon
4610	Bw1 horizon	Bw1 horizon
4620	Bw1(2) horizon	Bw1(2) horizon
4630	Bw2(1) horizon	Bw2(1) horizon
4640	Bw2(2) horizon	Bw2(2) horizon
4990	BC horizon	BC horizon
5000	C horizon	C horizon
5200	Cd horizon	Cd horizon
5700	Cu horizon	Cu horizon

Value	Short name	Description
84180 – SOIL HORIZON (U.S. Dept. of Agriculture Soil Conservation Service, Soil Survey Manual, 1993), CODE		
6000	R horizon	R horizon
91112 – LATITUDE/LONGITUDE HORIZONTAL DATUM		
27	NAD27	North American Datum of 1927 (NAD27)
83	NAD83	North American Datum of 1983 (NAD83)
100	OLDAK	Old Alaska (Mainland) and Aleutian Islands Datum (OLDAK)
110	Old Hawaii (OLDHI)	Old Hawaii (OLDHI)
120	OLDPR	Old Puerto Rico and Virgin Islands Datum - (OLDPR)
130	OLDSAMOA	Old American Samoa Datum (OLDSAMOA)
140	OLDGUAM	Old Guam Datum (OLDGUAM)
91113 – LATITUDE/LONGITUDE MEASUREMENT METHOD		
10	C Calc fr land net	Calculated from land net (C)
20	D DGPS	Differentially corrected Global Positioning Sys (GPS) (D)
30	G GPS uncorr SPS PPS	Global positioning system, uncorrected SPS and PPS (G)
40	L Long-range nav sys	Long-range navigation system (L)
50	M Interp fr map	Interpolated from map (M)
60	N Interp digital map	Interpolated from digital map (N)
70	R Reported	Reported (R)
80	S Transit OTH meth	Transit, theodolite, or other surveying method (S)
99	U Unknown	Unknown (U)
91114 – LATITUDE/LONGITUDE COORDINATE ACCURACY		
1	S Acc to +/- 1 sec	Accurate to +/- 1 second (S)
3	R Acc to +/- 3 sec	Accurate to +/- 3 seconds (Std positioning svc SPS GPS) (R)
5	F Acc to +/- 5 sec	Accurate to +/- 5 seconds (F)
10	T Acc to +/-10 sec	Accurate to +/-10 seconds (T)
60	M Acc to +/- 1 min	Accurate to +/- 1 minute (M)
99	U Unknown	Unknown (U)
99100 – BLANK, TYPE OF SOLUTION		
10	Inorganic-free water	Inorganic-free water
20	Std reference sample	Standard reference water sample
30	Matched matrix	Matched matrix
40	Organic-free water	Organic-free water
50	VOC-free wtr NP OFW	VOC-free water (nitrogen-purged organic-free water)
60	Ster saline buf wtr	Sterile saline buffered water
70	Strl buf w PO4/MgCl2	Sterile buffered water PO4/MgCl2
80	UBW disc 06/01/06	Universal Blank Water (discontinued June 1, 2006)
100	IFW and OFW	Inorganic-free water + organic-free water
110	IFW NP OFW VOC free	Inorganic-free+nitrogen-purged organic-free water(voc-free)
120	OFW NP voc-free	Organic-free+nitrogen-purged organic-free water(voc-free)
130	IFW OFW NP OFW VOC F	Inorganic-free+org-free+nit-purged org-free water(voc-free)
200	Other	Other

Value	Short name	Description
99101 – BLANK, SOURCE OF SOLUTION		
10	USGSNWQL	National water quality lab (USGS)
20	USEPA	U.S. Environmental Protection Agency
30	SRW Sample (USGS)	Standard Reference Water Sample (USGS)
35	Mix of std ref wtr	Mix of standard reference water samples
40	NIST (formerly NBS)	NIST (formerly NBS)
50	Canadian Inlnd Water	Canadian Inland Waters
55	USGSWIML	USGS Mercury Research lab (Wisconsin district)
60	District lab	District lab
61	Subdistrict #1 lab	Subdistrict #1 lab
62	Subdistrict #2 lab	Subdistrict #2 lab
63	Subdistrict #3 lab	Subdistrict #3 lab
64	Subdistrict #4 lab	Subdistrict #4 lab
70	Natural sample	Natural sample
71	Field office #1 lab	Field office #1 lab
72	Field office #2 lab	Field office #2 lab
73	Field office #3 lab	Field office #3 lab
74	Field office #4 lab	Field office #4 lab
80	Ocala lab (USGS)	Ocala lab (USGS)
99.99	Unknown	Unknown
100	Chemical supplier	Chemical supplier
110	Burdick and Jackson	Burdick and Jackson
120	J.T. Baker	J.T. Baker
130	EM Science	EM Science
140	EMD Chem Omnisolve	EMD Chemicals, Inc/Omnisolve
150	Ricca Chem Co	Ricca Chemical Company
200	Other	Other

This table continues on the next page.

Value	Short name	Description
99102 – BLANK, TYPE OF SAMPLE		
1	Source solution	Source solution
10	Shelf (hold)	Shelf (hold)
20	Refrigerator	Refrigerator
30	Trip	Trip
40	Sampler	Sampler
50	Splitter	Splitter
60	Filter	Filter
70	Preservation	Preservation
80	Equipment	Equipment
90	Ambient	Ambient
100	Field	Field
150	lab blank	lab blank
200	Other	Other
99103 – REFERENCE MATERIAL, SOURCE		
10	USGSNWQL	National water quality lab (USGS)
15	USGSKOGRL	Kansas Organic Geochemistry Research lab (USGS)
20	USEPA	U.S. Environmental Protection Agency
30	SRW Sample (USGS)	Standard Reference Water Sample (USGS)
35	Mix of std ref wtr	Mix of standard reference water samples
40	NIST (formerly NBS)	NIST (formerly NBS)
50	Canadian Inlnd Water	Canadian Inland Waters
60	District lab	District lab
70	Natural sample	Natural sample
80	Ocala lab (USGS)	Ocala lab (USGS)
99.99	Unknown	Unknown
100	Chemical supplier	Chemical supplier
200	Other	Other
99105 – TYPE OF REPLICATE		
10	Concurrent	Concurrent
20	Sequential	Sequential
30	Split	Split
40	Split-concurrent	Split-concurrent
50	Split-sequential	Split-sequential
200	Other	Other
99106 – TYPE OF SPIKE		
10	Field	Field
20	Laboratory	Laboratory
30	Surrogate	Surrogate
40	Internal standards	Internal standards
200	Other	Other

Value	Short name	Description
99107 – SPIKE SOURCE		
10	USGSNWQL	National Water Quality Lab (USGS)
15	USGSKOGRL	Kansas Organic Geochemistry Research Lab (USGS)
20	USEPA	U.S. Environmental Protection Agency
25	USGSOWML	Ohio Water Microbiology Lab (USGS)
30	SRW Sample (USGS)	Standard Reference Water Sample (USGS)
35	Mix of std ref wtr	Mix of standard reference water samples
40	NIST (formerly NBS)	NIST (formerly NBS)
50	Canadian Inlnd Water	Canadian Inland Waters
60	District lab	District lab
70	Natural sample	Natural sample
80	Ocala Lab (USGS)	Ocala Lab (USGS)
99.99	Unknown	Unknown
100	Chemical supplier	Chemical supplier
120	Protocol Analyt Sup	Protocol Analytical Supplies, Inc.
200	Other	Other
99111 – QUALITY-ASSURANCE DATA TYPE ASSOCIATED WITH SAMPLE		
1	No assoc QA data	No associated QA data
10	Blank	Blank
20	Blind sample	Blind sample
30	Replicate sample	Replicate sample
40	Spike sample	Spike sample
100	More than one type	More than one type of qa sample
110	X-sec info stored	Cross-section information stored
120	Well purge info strd	Well purge information stored
200	Other	Other
99112 – PURPOSE, TOPICAL QUALITY-CONTROL DATA, CODE		
1	R QC non-topical	Routine QC (non-topical)
10	TQC hi bias contam	Topical QC for high bias (contamination)
20	TQC low bias recovry	Topical QC for low bias (recovery)
100	TQC field equip	Topical QC for variability due to field equipment
110	TQC field col proc	Topical QC for variability due to field collection proc.
120	TQC field personnel	Topical QC for variability due to field personnel
130	TQC field processing	Topical QC for variability due to field processing proc.
140	TQC ship & handling	Topical QC for variability due to ship. and handling proc.
200	TQC laboratory	Topical QC for variability due to laboratory
900	OTH topical qc purp	Other topical qc purpose

4.3 Appendix C. Output Examples

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****Note: Some tables wrap due to margin limitations.****

Site Listing from Site Retrieval to Locate Records

[Explanation of columns: agency code (1-5), station number (6-20), station name (21-70), latitude (71-81), longitude (82-93), state code (94-95), county code (96-98), altitude (99-106), hydrologic unit code (107-122), basin code (123-124) station type code (125-131), drainage area (132-139), aquifer code (140-147), project number (148-159), primary water use code (160), current database (161-162)]

```
USGS 06130000       Flatwillow Creek near Mosby MT                    465540     1075600    30069        10040203          ST      1855.00                    01
USGS 06130500       Musselshell River at Mosby MT                     465941     1075318    30069  2493.910040205          ST         7846                    01
USGS 06130600       Cat Creek near Cat Creek MT                       470300     1080100    30069    265010040205          ST         36.5                    01
USGS 06130630       Crooked Creek Tributary nr Roy, MT                472502     1084503    30027    298010040205          ST                                 01
USGS 06130700       Sand Creek near Jordan MT                         471508.79  1065056.41 30033 2586.2810040105          ST          317                    01
USGS 06130800       Second Creek Tributary near Jordan MT             471200     1064800    30033    275010040105          ST         0.52                    01
USGS 463722111590201l0N03W16DBAD01                                    463722     1115902    30049 3756.1510030101          GW             100CNZC 06800       U01
USGS 463723111560001l0N03W13CBBD01                                    463723     1115600    30049    378010030101          GW             110ALVM 00208       H01
USGS 463724104164701l0N59E15ABD 01                                    463724     1041647    30025    2765                  GW                     067         01
USGS 463724112053401l0N04W15DBBB01                                    463724     1120534    30049 3942.8010030101          GW             110ALVM 06800       U01
USGS 463726112003401Lateral 20.7 at Helena Valley Cn nr Helena, MT    463726     1120034    30049        10030101          ST                                 01
USGS 463726112025501l0N04W13ACCD01                                    463726     1120255    30049 3831.0410030101          GW             110ALVM 12700       U01
USGS 463729112405901l0N09W13BBCC01                                    463729     1124059    30077    521017010201          GW             200MSZC 463012800   H01
USGS 463729114012301l0N19W17BCCC01                                    463729     1140123    30081  3371.217010205          GW             100CNZC 463015700   H01
USGS 463731104332501l0N57E16BA  01                                    463731     1043325    30025    268510100004          GW             125LDLW             01
USGS 395243074381773Treatment WW Treatment Plant T                    391119     1065035    08097    600014010004          FA-WWTP                            01
USGS 9080060036     Treatment WW Treatment Plant F                    391119     1065035    08097    600014010004          FA-WWTP                            01
USGS 9080061487     Flathead Lake 17010208Sewered                                           30097        17010208          FA-WWTP                            I01
USEPA9080061840     ST-Wastewater-treatment plant                     451409     1123736    30029                          FA-WWTP                            01
```

Record Number Listing from Retrieval to Locate Records

```
9640017501   06130000            19640428    19640502         WS
9640017601   06130000            19640503    19640509         WS
9640017701   06130000            196405061130                 WS
9640017801   06130000            19640510    19640521         WS
9640018101   06130000            19640612    19640621         WS
9640018301   06130000            19640622    19640630         WS
9640018401   06130000            196406301330                 WS
9640018501   06130000            19640701    19640710         WS
9750016201   06130500            197502271430                 BH
9750016301   06130500            197502271430                 WS
9750016401   06130500            197503191300                 BH
9750016501   06130500            197503191300                 WS
9750016601   06130500            197504151400                 WS
9750016701   06130500            197504241130                 BH
9750016801   06130500            197504241130                 WS
```

Output from Inventory of Samples

[Explanation of codes: MED, Medium code; ANL CODES, Analysis codes are listed in the following order - analysis status, hydrologic condition, sample type, and hydrologic event codes; NO OF PARMS, number of parameters in the record]

```
                                        DATA IN WATER-QUALITY FILE -- DB01
                                              WED, JUL 01 2009

RECORD                          BEGIN DATE       ANL            LAST   NO OF -------------------------PARAMETER GROUP SUMMARY-------------------------
NUMBER   STATION NUMBER         END DATE     MED CODES PROJECT   UPDATE PARMS INF PHY INM INN NUT MBI BIO IMM IMN OPE OPC OOT RAD ISO SED POP HAB TOX OTH AGNCY

00600055 12334800           MST 200511011040 WS  U999  862000300 051116   31    3   9   2   1   6  --  --   7   1  --  --  --  --  --   2  --  --  --  --  USGS
00600161 460720111255101    MST 200601130930 SB  UA99  862000300 060510    8    1  --  --   2  --  --  --   1  --  --  --   2  --  --   2  --  --  --  --  USGS
00600289 450007106495201    MDT 200604201730 WE  UA99  8620BE201 060817   16    1   6   4   5  --  --  --  --  --  --  --  --  --  --  --  --  --  --  --  USGS
00600662 453707106312201    MDT 200608211505 WG  UA99  8620C7800 061108   19    2   4   4   5  --  --  --   2  --  --  --  --   2  --  --  --  --  --  --  USGS
00600665 453705106295801    MDT 200608211735 WG  UA99  8620C7800 061206   17    2   4   4   5  --  --  --   2  --  --  --  --  --  --  --  --  --  --  --  USGS

00600677 453833106303601    MDT 200608250915 WG  UA99  8620C7800 061122   17    2   4   4   5  --  --  --   2  --  --  --  --  --  --  --  --  --  --  --  USGS

                    CODE   MEDIUM NAME                          SAMPLES

                     WS    Surface water                             1
                     SB    Bottom material                           1
                     WE    Effluent                                  1
                     WG    Ground water                              3

                                                        TOTAL        6

                     PROJECT     COUNT

                    862000300      2
                    8620BE201      1
                    8620C7800      3

Parameter group codes used in this report:

 INF:Information
 PHY:Physical
 INM:Inorganics, Major, Metals
 INN:Inorganics, Major, Non-metals
 NUT:Nutrient
 MBI:Microbiological
 BIO:Biological
 IMM:Inorganics, Minor, metals
 IMN:Inorganics, Minor, Non-metals
 OPE:Organics, Pesticide
 OPC:Organics, PCBs
 OOT:Organics, Other
 RAD:Radiochemical
 ISO:Stable Isotopes
 SED:Sediment
 POP:Population/Community
 HAB:Habitat
 TOX:Toxicity
 OTH:Other
```

Listing of Samples and Results (Two Formats)

[Explanation of codes: PCODE, parameter code; METHD, method code; VALUE, result value; REM, remark code; QUAL CODES 1, 2, and 3, value qualifier codes; NVQ, null-value qualifier code; DQI, data quality indicator code; RND, precision code; ANL-ENT, analyzing entity code; LSDEV, laboratory standard deviation; RPLV, report level; RLCOD, report level code, PRP DATE, analysis preparatory date; PREP-SET NO, analysis preparatory set number; ANL DATE, analysis date; ANL-SET NO, analysis set number; MOD_DATE, last date record was modified; MOD_BY, user who modified the record last]

1. Format used for "long form"

```
   --qwlist program processed: 05-06-2008 17:39
Record Number: 00400125       Database Number: 01       Sample ID:
Agency and Site ID: USGS 12331500              Site Name: Flint Creek near Drummond MT
Begin Date and Time: 2003-11-18 0910  End Date and Time:                  Time Datum: MST     Time Datum Reliability: K
Medium: WS        Sample Type: 9       Country: US       State: 30       County: 039       Geologic Unit:
Project: 862014804       Lab ID: 3300012
Analysis Status: U       Hydrologic Condition: 9       Hydrologic Event: 9
Organism(ITIS):                Body Part:           Number of Parameters: 29
Sample Field Comment--
Sample Lab Comment--A-3300012 attention glenda brown- clark fork project,mt
Collecting Agency: USGS-WRD, U.S. Geological Survey-Water Resources Discipline
Modify Date: 20041217    Modified By: pladd
                          R  QUAL   N  D  R
                          E  CODES  V  Q  N
* PCODE METHD --VALUE---  M  1 2 3  Q  I  D   ANL-ENT   LSDEV    RPLV   RLCOD  PRP DATE   PREP-SET NO  ANL DATE    ANL-SET NO  MOD_DATE    MOD_BY
  00010              2.5               R  2                                                                                  20060626  pladd
  00020              7.5               R  2                                                                                  20060626  pladd
  00028            80020               R  4                                                                                  20060626  pladd
  00061              111               R  3                                                                                  20060626  pladd
  00065             2.26               R  3                                                                                  20060626  pladd
  00095              345               R  3                                                                                  20060626  pladd
  00400              8.4               R  2                                                                                  20060626  pladd
  00403 EL006       7.95               R  2                       0.1     MRL                          20031201  PCA03335A     20060626  pladd
  00915 PLA11    44.1408               R  3                      0.01     IRL                          20040108  ICPOE04007A   20060626  pladd
  00925 PLA11    13.2486               R  3                     0.008     IRL                          20040108  ICPOE04007A   20060626  pladd
  01000 PLM40      6.183               R  2                       0.2     LRL                          20040109  ICMS04009A    20060626  pladd
  01002 GF096  7.0303400               R  1                       1.9     LRL                          20031210  SEAT03343A    20060626  pladd
  01025 PLM43       0.04  <            R  2                      0.04     LRL                          20040109  ICMS04009A    20060626  pladd
  01027 PLM47      0.031  E  n         R  2                      0.04     LRL                          20040129  WMS04028A     20060626  pladd
  01040 PLM43      0.653               R  1                       0.4     LRL                          20040109  ICMS04009A    20060626  pladd
  01042 PLM48      1.922               R  3                       0.6     LRL                          20040107  WMS04007A     20060626  pladd
  01045 PLA15      183.6               R  3                         9     IRL                          20031230  ICPOE03364A   20060626  pladd
  01046 PLA11     6.1271  E  n         R  2                       6.4     IRL                          20040108  ICPOE04007A   20060626  pladd
  01049 PLM43      0.054  E  n         R  2                      0.08     LRL                          20040109  ICMS04009A    20060626  pladd
  01051 PLM48      2.557               R  3                      0.06     LRL                          20040129  WMS04028A     20060626  pladd
  01055 PLM48     63.996               R  3                       0.2     LRL                          20040107  WMS04007A     20060626  pladd
  01056 PLM43     22.200               R  3                       0.2     LRL                          20040109  ICMS04009A    20060626  pladd
  01090 PLM43      1.281               R  2                       0.6     LRL                          20040109  ICMS04009A    20060626  pladd
  01092 PLM48      7.545               R  2                         2     LRL                          20040107  WMS04007A     20060626  pladd
  70331             93.2               R  2                                                                                  20060626  pladd
  80154                8               R  1                                                                                  20060626  pladd
  82398               10               R  2                                                                                  20060626  pladd
  84164             3044               R  4                                                                                  20060626  pladd
  90095 WHT03      345.4               R  3                       2.6     MRL                          20031201  PCA03335A     20060626  pladd
```

Listing of Samples and Results (Two Formats)

2. Format used for “short form”

```
   --qwlist program processed: 05-06-2008 17:41

Record Number: 00400125       Database Number: 01       Sample ID:
Agency and Site ID: USGS 12331500
Site Name: Flint Creek near Drummond MT
Begin Date and Time: 2003-11-18 0910  End Date and Time:
Time Datum: MST     Time Datum Reliability: K
Medium: WS        Sample Type: 9       Country: US       State: 30
County: 039       Geologic Unit:
Project: 862014804       Lab ID: 3300012
Analysis Status: U       Hydrologic Condition: 9    Hydrologic Event: 9
Organism(ITIS):               Body Part:          Number of Parameters: 29
Sample Field Comment--
Sample Lab Comment--A-3300012 attention glenda brown- clark fork project,mt
Collecting Agency: USGS-WRD, U.S. Geological Survey-Water Resources Discipline
Modify Date: 20041217    Modified By: pladd

      R            QUAL N D       R            R            QUAL N D       R
      E            CODE V Q       N            E            CODE V Q       N
PCODE M      VALUE 123  Q I METHD D      PCODE M      VALUE 123  Q I METHD D

00010          2.5        R       2      00020          7.5        R       2
00028        80020        R       4      00061          111        R       3
00065         2.26        R       3      00095          345        R       3
00400          8.4        R       2      00403         7.95        R EL006 2
00915      44.1408        R PLA11 3      00925      13.2486        R PLA11 3
01000        6.183        R PLM40 2      01002    7.0303400        R GF096 1
01025 <       0.04        R PLM43 2      01027 E      0.031 n      R PLM47 2
01040        0.653        R PLM43 1      01042        1.922        R PLM48 3
01045        183.6        R PLA15 3      01046 E     6.1271 n      R PLA11 2
01049 E      0.054 n      R PLM43 2      01051         2.557        R PLM48 3
01055       63.996        R PLM48 3      01056       22.200        R PLM43 3
01090        1.281        R PLM43 2      01092         7.545        R PLM48 2
70331         93.2        R       2      80154             8        R       1
82398           10        R       2      84164          3044        R       4
90095        345.4        R WHT03 3
```

Cation-Anion Balance and (or) Data Verification and Validation Listing

```
SINT:                     Process date: 05-06-2008 17:55  --  Transaction number:    0

 Record Number: 00502518       Database Number: 01       Sample ID:
 Agency and Site ID: USGS 12373000              Site Name: Little Bitterroot River near Marion MT
 Begin Date and Time: 2004-10-11 0819  End Date and Time:                  Time Datum: MDT     Time Datum Reliability: K
 Medium: WS        Sample Type: 9       Country: US       State: 30       County: 029       Geologic Unit:
 Project:                 Lab ID:
 Analysis Status: U       Hydrologic Condition: 9       Hydrologic Event: 9
 Organism(ITIS):                Body Part:           Number of Parameters: 12
 Sample Field Comment--
 Sample Lab Comment--
 Collecting Agency: USGS-WRD, U.S. Geological Survey-Water Resources Discipline

        *** QUALITY-ASSURANCE REPORT ***

        *** Chemical verification checks ***
  pH (00400) falls outside of range 4.5 to 9.0

        *** NWIS alert limits ***
 Sulfate, wf (00945) is 3140 mg/l, greater than or equals Sulfate SDWR, 250.0 mg/l
 Manganese, wf (01056) is 80 ug/l, greater than or equals Manganese SDWR, 50.0 ug/l

        *** Custom alert limits ***
 Dissolved oxygen (00300) is 3.04 mg/l, less than or equals Dissolved oxygen MTDEQ Aquatic Life, 4.00 mg/l

        *** The cation/anion balance ***
       CATIONS                            VALUE   UNITS       DQI       (MEQ/L)        ANIONS                            VALUE   UNITS       DQI       (MEQ/L)
 00915 Calcium, wf                       170.51   mg/l         S         8.508   00940 Chloride, wf                 <     13.02   mg/l         S    0 to 0.366
 00925 Magnesium, wf                     430.49   mg/l         S        35.425   00945 Sulfate, wf                     3140.79   mg/l         S        65.391
 00930 Sodium, wf                        865.69   mg/l         S        37.658   00950 Fluoride, wf                      0.836   mg/l         S         0.044
 00935 Potassium, wf                      18.85   mg/l         S         0.482   39086 Alkalinity, wf,incrm,field        635.26   mg/l CaCO3   S        12.692
 01046 Iron, wf                              10   ug/l         S        <0.001   00631 NO3+NO2, wf                       0.022   mg/l as N    S         0.002
 01056 Manganese, wf                          5   ug/l         S        <0.001
 00191 Hydrogen ion, wf, calculated       0.000   mg/l         S        <0.001
                                                                 --------------                                                                  --------------
                                                          TOTAL        82.076                                                                TOTAL  78.129 to 78.496
                                                          PERCENT DIFFERENCE = 2.23 to 2.46
                                                                  R  QUAL   N  D  R
                                                                  E  CODES  V  Q  N
 * PCODE METHD PARAMETER NAME------          --UNITS--- --VALUE---  M  1 2 3  Q  I  D ANL-ENT  LSDEV   RPLV  RLCOD  PRP DATE PREP-SET NO  ANL DATE ANL-SET NO

   00300       Dissolved oxygen              mg/l             3.04              S  2
   00400       pH                            std units        9.15              S  2
 C 00900       Hardness, water               mg/l CaCO3      2200               S
   00915       Calcium, wf                   mg/l           170.51              S  3
   00925       Magnesium, wf                 mg/l           430.49              S  3
   00935       Potassium, wf                 mg/l            18.85              S  3
 C 00931       Sodium Adsrptn Ratio          None             8.03              S
 C 00932       Sodium fraction of cations    %                45.9              S
   00930       Sodium, wf                    mg/l           865.69              S  3
   39086       Alkalinity, wf,incrm,field    mg/l CaCO3     635.26              S  3
   00940       Chloride, wf                  mg/l            13.02  <            S  3
   00950       Fluoride, wf                  mg/l            0.836              S  2
   00945       Sulfate, wf                   mg/l          3140.79              S  3
   00631       NO3+NO2, wf                   mg/l as N       0.022              S  3
 C 00191       Hydrogen ion, wf, calculated  mg/l            0.000              S
   01046       Iron, wf                      ug/l               10              S  1
   01056       Manganese, wf                 ug/l                81.6           S  2
        *** DEFINITION OF CODES ***
        Remarks--<,Less than.;
        Data Quality Indicator codes--S,Presumed satisfactory;
```

Tab-delimited Ion Balance Output

Columns 1–8

SAMPLE	AGNCY	STAID	DATES	TIMES	EDATE	ETIME	MEDIUM
8S	5S	15S	8D	4S	8D	4S	1S
96400170	USGS	06130000	19640311		19640322		9

Columns 9–16

H_ion	Ca	Mg	Na	K	Fe	Mn	Cation_sum
10N	10N	10N	10N	10N	10N	10N	10N
0.001	12.226	15.141	25.665	0.159			53.191

Columns 17–28

Alk	Hydrox	Bicarb	Carb	NO2 NO3	NO2	NO3	Cl	SO4	F	Anion_sum	Pct_ Diff
10N	10N	10N	10N	10N	10N	10N	10N	10N	10N	10N	10N
		3.819	0.001			0.001	1.128	47.053	0.026	52.029	1.10

Ion Balance Specifications File (Tab Delimited)

File Format

Line 1: Table Title. This line will begin with "**Title:**". This title will be used if a custom ion balance file is used to generate an ion balance in output.

Optional lines: Comment lines can be optionally added to the file and are designated by a "#" in column 1. Comment lines can be anywhere in the file and will be ignored by the program.

Subsequent lines: Fields are separated by a "tab" character as shown below.

Parameter code <*tab*> **Calculated parm flag** <*tab*>**MEQ factor**<*tab*>**Ion type code** <*tab*>**Ion Code** <*tab*> **Group code** <*tab*> **Ion Row number** <*tab*> **Ion preference number** <*tab*> **Group preference number**<*tab*> **Major ion flag**

Example file

Title:

91051	N	4.99E-5	c	Ca	1	1	Y
00915	N	4.99E-2	c	Ca	1	2	Y
91052	N	8.229E-5	c	Mg	2	1	Y
00925	N	8.229E-2	c	Mg	2	2	Y
91053	N	4.350E-5	c	Na	3	1	Y
00930	N	4.350E-2	c	Na	3	2	Y
91054	N	2.558E-5	c	K	4	1	Y
00935	N	2.558E-2	c	K	4	2	Y
00937	N	2.558E-2	c	K	4	3	Y
00939	N	2.558E-2	c	K	4	4	Y
01047	N	3.581E-5	c	Fe	5	1	N
01046	N	3.581E-5	c	Fe	5	2	N
01048	N	3.581E-5	c	Fe	5	3	N
04097	N	3.581E-5	c	Fe	5	4	N
62982	N	3.581E-5	c	Fe	5	5	N
99114	N	3.581E-2	c	Fe	5	6	N
99115	N	3.581E-2	c	Fe	5	7	N
01056	N	3.640E-5	c	Mn	6	1	N
62990	N	3.640E-5	c	Mn	6	2	N
00191	Y	0.99212	c	H_ion	7	1	N
91001	N	2.821E-5	a	Cl	1	1	Y
00940	N	2.821E-2	a	Cl	1	2	Y
99117	N	2.821E-2	a	Cl	1	3	Y

Example file—Continued

99220	N	2.821E-2	a	Cl		1	4	Y
00945	N	2.082E-2	a	SO4		2	1	Y
00946	N	2.082E-2	a	SO4		2	2	Y
91005	N	2.082E-5	a	SO4		2	3	Y
99113	N	2.082E-2	a	SO4		2	4	Y
99890	N	2.082E-2	a	SO4		2	5	Y
91002	N	5.264E-5	a	F		3	1	Y
00950	N	5.264E-2	a	F		3	2	Y
39086	N	1.998E-2	a	Alk		4	1	Y
29802	N	1.998E-2	a	Alk		4	2	Y
99431	N	1.000E-3	a	Alk		4	3	Y
39036	N	1.998E-2	a	Alk		4	4	Y
00418	N	1.998E-2	a	Alk		4	5	Y
39087	N	1.998E-2	a	Alk		4	6	Y
29803	N	1.998E-2	a	Alk		4	7	Y
29801	N	1.998E-2	a	Alk		4	8	Y
00421	N	1.998E-2	a	Alk		4	9	Y
00419	N	1.998E-2	a	Alk		4	10	Y
29813	N	1.998E-2	a	Alk		4	11	Y
00410	N	1.998E-2	a	Alk		4	12	Y
00416	N	1.998E-2	a	Alk		4	13	Y
00409	N	1.000E-3	a	Alk		4	14	Y
00413	N	1.998E-2	a	Alk		4	15	Y
90410	N	1.998E-2	a	Alk		4	16	Y
00417	N	1.998E-2	a	Alk		4	17	Y
95410	N	1.998E-2	a	Alk		4	18	Y
00431	N	1.998E-2	a	Alk		4	19	Y
00411	N	1.998E-2	a	Alk		4	20	Y
00453	N	1.639E-2	a	Alk	Bicarb	4	21	1 Y
00450	N	1.639E-2	a	Alk	Bicarb	4	21	2 Y
99440	N	1.639E-2	a	Alk	Bicarb	4	21	3 Y
29804	N	1.639E-2	a	Alk	Bicarb	4	21	4 Y
00440	N	1.639E-2	a	Alk	Bicarb	4	21	5 Y
29806	N	1.639E-2	a	Alk	Bicarb	4	21	6 Y
00449	N	1.639E-2	a	Alk	Bicarb	4	21	7 Y
90440	N	1.639E-2	a	Alk	Bicarb	4	21	8 Y
29805	N	1.639E-2	a	Alk	Bicarb	4	21	9 Y
00451	N	1.639E-2	a	Alk	Bicarb	4	21	10 Y
95440	N	1.639E-2	a	Alk	Bicarb	4	21	11 Y
00425	N	1.639E-2	a	Alk	Bicarb	4	21	12 Y
00452	N	3.333E-2	a	Alk	Carb	5	21	1 Y
00447	N	3.333E-2	a	Alk	Carb	5	21	2 Y

99445	N	3.333E-2	a	Alk	Carb	5	21	3	Y
99430	N	1.998E-2	a	Alk	Carb	5	21	4	Y
29807	N	3.333E-2	a	Alk	Carb	5	21	5	Y
00445	N	3.333E-2	a	Alk	Carb	5	21	6	Y
29809	N	3.333E-2	a	Alk	Carb	5	21	7	Y
00446	N	3.333E-2	a	Alk	Carb	5	21	8	Y
90445	N	3.333E-2	a	Alk	Carb	5	21	9	Y
90430	N	1.998E-2	a	Alk	Carb	5	21	10	Y
29808	N	3.333E-2	a	Alk	Carb	5	21	11	Y
00448	N	3.333E-2	a	Alk	Carb	5	21	12	Y
95445	N	3.333E-2	a	Alk	Carb	5	21	13	Y
95430	N	1.998E-2	a	Alk	Carb	5	21	14	Y
00430	N	1.998E-2	a	Alk	Carb	5	21	15	Y
71834	N	5.880E-2	a	Alk	Hydrox	6	21	1	N
71832	N	5.880E-2	a	Alk	Hydrox	6	21	2	N
99830	N	5.880E-2	a	Alk	Hydrox	6	21	3	N
29810	N	5.880E-2	a	Alk	Hydrox	6	21	4	N
71830	N	5.880E-2	a	Alk	Hydrox	6	21	5	N

Example file—Continued

29812	N	5.880E-2	a	Alk	Hydrox	6	21	6	N
71831	N	5.880E-2	a	Alk	Hydrox	6	21	7	N
90830	N	5.880E-2	a	Alk	Hydrox	6	21	8	N
29811	N	5.880E-2	a	Alk	Hydrox	6	21	9	N
71833	N	5.880E-2	a	Alk	Hydrox	6	21	10	N
95830	N	5.880E-2	a	Alk	Hydrox	6	21	11	N
00420	N	5.880E-2	a	Alk	Hydrox	6	21	12	N
00631	N	7.140E-2	a	NO2NO3		7	1		N
99889	N	7.140E-2	a	NO2NO3		7	2		N
00613	N	7.140E-2	a	NO2NO3	NO2	7	3	1	N
71856	N	2.174E-2	a	NO2NO3	NO2	7	3	2	N
99116	N	7.140E-2	a	NO2NO3	NO2	7	3	3	N
00618	N	7.140E-2	a	NO2NO3	NO3	8	3	1	N
71851	N	1.613E-2	a	NO2NO3	NO3	8	3	2	N
64832	N	7.140E-5	a	NO2NO3	NO3	8	3	3	N
91003	N	1.613E-5	a	NO2NO3	NO3	8	3	4	N

Explanation of fields in file

Parameter code: five-digit parameter_cd
Calculated parm flag: Y/N flag to indicate if this is a calculated parameter code
MEQ factor: multiplication factor to convert parameter value to milliequivalents per liter
Ion type code: A one-character code that indicates the type of ion; "c" indicates a cation and "a" indicates an anion.
Ion code: These are the commonly used ions in the ion balance. Upper and/or lower case is acceptable.

Cation codes (and definition)

Ca (calcium)
Mg (magnesium)
Na (sodium)
K (potassium)
Fe (iron)
Mn (manganese)
H_ion (hydrogen ion)

Anion codes (and definition)

Cl (chloride)
SO4 (sulfate)
F (fluoride)
ALK (alkalinity; includes acid neutralizing capacity (ANC))
NOx (includes nitrate, nitrite, nitrite plus nitrate)

Group code: For alkalinity (ALK) codes and nitrogen (NOx) codes, the group code will be used to define the hierarchy within that ion code. The group codes are:

ALK codes:
Bicarb (bicarbonate)
Carb (carbonate)
Hydrox (hydroxide)

NOx codes:
NO2 (nitrite)
NO3 (nitrate)
NO2+NO3 (nitrite plus nitrate)
For nonstandard ion codes that are not listed above, the user supplies an ion code up to 5 characters long and a group up to 10 characters long

Ion Row number: Indicates the order of the row in which this ion appears in the ion balance table, if present.

Ion Preference number: Indicates the hierarchy of the ion (lower numbers for the same ion code are preferentially selected).

Group Preference number: Indicates the hierarchy of the ions within a group (lower numbers for the same ion code and ion-group code are preferentially selected).

Major Ion Flag: Indicates if this parameter code is to be considered a major ion; values are “Y” for major ion, “N” for minor ion.

Publication Tables (By-sample Format; Four Table Types)

Table type 1 (single station)

Requested parameters TIMES, MEDIM, ADDPC. User has selected option to ***Display text for fixed values***; default settings accepted for all other options.

DISTRICT CODE 30 UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 5-04-09

12331500 -- Flint Creek near Drummond MT

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Medium code	Agency analyzing sample, code (00028)	Altitude of land surface feet (72000)	Gage height, feet (00065)	Instantaneous discharge, ft3/s (00061)	Drainage area, mi2 (81024)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conduc-tance, wat unf lab, uS/cm 25 degC (90095)	Specif-ic conduc-tance, wat unf uS/cm 25 degC (00095)
OCT											
17...	1110	WS	USGS-WRD	4017	2.71	93	490	--	--	--	394
NOV											
21...	1110	WS	USGS-WRD	4017	2.78	125	490	--	--	--	359
JAN											
08...	1627	WS	USGS-WRD	4017	4.00	103	490	--	--	--	342
10...	1219	WS	USGS-WRD	4017	3.11	35	490	--	--	--	391
AUG											
06...	1555	WS	USGS-WRD	4017	1.24	8.0	490	--	--	--	467
07...	1405	WS	USGS-WRD	4017	1.21	6.8	490	--	--	--	510
26...	0855	WS	USGSNWQL	4017	1.59	26	490	8.3	8.1	481	529
SEP											
09...	0934	WS	USGS-WRD	4017	1.57	25	490	--	--	--	517
22...	1110	WS	USGSNWQL	4017	1.83	46	490	8.5	8.2	448	484

Publication Tables (By-sample Format; Four Table Types)

Table type 1 (single station)—Continued

DISTRICT CODE 30 UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 5-04-09
12331500 -- Flint Creek near Drummond MT
WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Temper-ature, air, deg C (00020)	Temper-ature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Arsenic water, fltrd, ug/L (01000)	Arsenic water, unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)
OCT													
17...	5.5	4.5	--	--	--	--	--	--	--	--	--	--	--
NOV													
21...	4.0	5.0	--	--	--	--	--	--	--	--	--	--	--
JAN													
08...	3.5	.0	--	--	--	--	--	--	--	--	--	--	--
10...	12.5	.0	--	--	--	--	--	--	--	--	--	--	--
AUG													
06...	28.0	22.0	--	--	--	--	--	--	--	--	--	--	--
07...	28.0	22.5	--	--	--	--	--	--	--	--	--	--	--
26...	15.0	12.5	70.0	19.0	11.3	13	<.04	<.04	1.3	2.1	18	87	.09
SEP													
09...	11.5	10.5	--	--	--	--	--	--	--	--	--	--	--
22...	14.0	9.5	62.3	17.7	8.5	10	E.02	E.02	1.1	2.1	9	83	E.06

Table type 1 (single station)—Continued

DISTRICT CODE 30 UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 5-04-09
12331500 -- Flint Creek near Drummond MT
WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Lead, water, unfltrd recover -able, ug/L (01051)	Mangan- ese, water, fltrd, ug/L (01056)	Mangan- ese, water, unfltrd recover -able, ug/L (01055)	Zinc, water, fltrd, ug/L (01090)	Suspnd. Zinc, water, unfltrd recover -able, ug/L (01092)	Sus- sedi- ment, sieve diametr percent <62.5um (70331)	Julian pended sedi- ment concen- tration mg/L (80154)	date, in- bottle diges- tion, ddd (99870)	Sampler type, code (84164)	Sam- pling method, code (82398)
OCT										
17...	--	--	--	--	--	--	--	--	--	--
NOV										
21...	--	--	--	--	--	--	--	--	--	--
JAN										
08...	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--
AUG										
06...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
26...	.65	89.9	120	1.4	3	50	10	259	US DH-81	EWI
SEP										
09...	--	--	--	--	--	--	--	--	--	--
22...	.75	50.7	74.9	1.2	3	94	3	2.00E+08	US DH-81	EWI

Remark codes used in this table: < -- Less than. E -- Estimated.

Table Type 2 (Miscellaneous Station)

Requested parameters TIMES, MEDIM, ADDPC. Default settings accepted for all options.

1

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY — PROCESS DATE 5-04-09
MISCELLANEOUS STATION ANALYSES

Date	Time	Medium code	Agency analyzing sample, code (00028)	Altitude of land surface feet (72000)	Gage height, feet (00065)	Instantaneous discharge, ft3/s (00061)	Drainage area, mi2 (81024)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conduct-ance, wat unf lab, uS/cm 25 degC (90095)	Specific conduct-ance, wat unf uS/cm 25 degC (00095)	Temper-ature, air, deg C (00020)	Temper-ature, water, deg C (00010)
12331500 Flint Creek near Drummond MT (LAT 46 37 44N LONG 113 09 02W)													
OCT 2002													
17...	1110	WS	1028	4017	2.71	93	490	--	--	--	394	5.5	4.5
NOV													
21...	1110	WS	1028	4017	2.78	125	490	--	--	--	359	4.0	5.0
08...	1627	WS	1028	4017	4.00	103	490	--	--	--	342	3.5	.0
JAN 2003													
10...	1219	WS	1028	4017	3.11	35	490	--	--	--	391	12.5	.0
AUG													
06...	1555	WS	1028	4017	1.24	8.0	490	--	--	--	467	28.0	22.0
07...	1405	WS	1028	4017	1.21	6.8	490	--	--	--	510	28.0	22.5
26...	0855	WS	80020	4017	1.59	26	490	8.3	8.1	481	529	15.0	12.5
SEP													
09...	0934	WS	1028	4017	1.57	25	490	--	--	--	517	11.5	10.5
22...	1110	WS	80020	4017	1.83	46	490	8.5	8.2	448	484	14.0	9.5

Date	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Arsenic water, fltrd, ug/L (01000)	Arsenic water, unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover-able, ug/L (01051)	Sam-pling method, code (82398)
12331500 Flint Creek near Drummond MT (LAT 46 37 44N LONG 113 09 02W)													
OCT 2002													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--

Table Type 2 (Miscellaneous Station)—Continued

```
 JAN 2003
   08...       --       --       --       --       --       --       --       --       --       --       --       --       --
   10...       --       --       --       --       --       --       --       --       --       --       --       --       --
 AUG
   06...       --       --       --       --       --       --       --       --       --       --       --       --       --
   07...       --       --       --       --       --       --       --       --       --       --       --       --       --
   26...     70.0     19.0     11.3       13      <.04     <.04      1.3      2.1       18       87      .09      .65       10
 SEP
   09...       --       --       --       --       --       --       --       --       --       --       --       --       --
   22...     62.3     17.7      8.5       10     E.02     E.02      1.1      2.1        9       83     E.06      .75       10
0Remark codes used in this table:
   < -- Less than.
   E -- Estimated.
```

Table Type 3 (Multiple Station)

1

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 5-05-08
MULTIPLE STATION ANALYSES

Station number	Date	Time	Medium code	Agency analyzing sample, code (00028)	Altitude of land surface feet (72000)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Drainage area, mi2 (81024)	Sampling method, code (82398)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)
06032300	07-24-00	2300	WS	80020	5130	--	.19	8.86	8010	8.4	333	--
	07-24-00	2302	WS	80020	5130	--	.19	8.86	8010	7.9	324	--
12331500	05-09-00	1625	WS	80020	4017	.87	2.8	490	30	8.8	406	12.0
	05-22-00	1800	WS	80020	4017	1.36	16	490	10	8.7	275	26.0
	06-05-00	0945	WS	80020	4017	1.44	21	490	10	8.4	417	19.5
	07-27-00	1030	WS	80020	4017	1.20	8.0	490	10	8.3	512	23.0
06130000	03-03-02	1203	WS	--	--	--	--	1855	--	--	--	--
	03-03-02	1209	WS	--	--	--	--	1855	--	--	--	--
	03-04-02	1201	WS	--	--	--	--	1855	--	--	--	--
	03-04-02	1209	WS	--	--	--	--	1855	--	--	--	--

Table Type 3 (Multiple Station)—Continued

1

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 5-05-08

Date	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Arsenic water, fltrd, ug/L (01000)	Arsenic water, unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recoverable, ug/L (01042)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recoverable, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recoverable, ug/L (01051)
07-24-00	14.2	--	--	42.8	--	2.5	--	3.8	--	--	--	--	--
07-24-00	14.1	--	--	41.6	--	3.0	--	3.9	--	--	--	--	--
05-09-00	13.0	49.0	14.5	11.0	11	<.1	<.1	E1.1	2.1	<10	69	M	<1.00
05-22-00	18.5	36.1	9.97	9.9	12	<.1	<.1	1.7	2.3	E6	210	<1	3.24
06-05-00	12.5	53.3	14.7	12.1	11	<.1	<.1	1.4	3.0	13	86	<1	1.26
07-27-00	16.0	67.9	18.8	11.4	13	<.1	<.1	E1.0	1.7	E9	72	<1	<1.00
03-03-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-03-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-04-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-04-02	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recoverable, ug/L (01055)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recoverable, ug/L (01092)	Tritium water, unfltrd pCi/L (07000)	Uranium natural water, fltrd, ug/L (22703)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Filter pore size, um (81352)	Julian date, in-bottle digestion, ddd (99870)	Sampler type, code (84164)
07-24-00	47.7	--	490	--	--	--	--	--	.10	--	8010
07-24-00	49.8	--	532	--	--	--	--	--	.10	--	8010
05-09-00	38.1	50.6	2.9	7	--	--	79	3	--	138	3044
05-22-00	40.4	118	2.5	10	--	--	92	13	--	153	3044
06-05-00	78.0	99.8	3.6	3	--	--	89	4	--	166	3044
07-27-00	90.4	110	1.3	4	--	--	70	13	--	215	3044
03-03-02	--	--	--	--	-2	--	--	--	--	--	--
03-03-02	--	--	--	--	-9	--	--	--	--	--	--
03-04-02	--	--	--	--	--	1.2	--	--	--	--	--
03-04-02	--	--	--	--	--	9.0	--	--	--	--	--

0Remark codes used in this table:
< -- Less than.
E -- Estimated.
M -- Presence verified but not quantified.
M -- Presence verified, not quantified

Table Type 4 (Biological)

1

DISTRICT CODE 30 UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 5-18-05
06214500 -- Yellowstone River at Billings MT

WATER-QUALITY DATA

DATE	DEC 26, 74	JAN 24, 75	FEB 26, 75	MAR 24, 75	APR 21, 75	SET: 1
TIME	1040	1445	1430	1415	1000	PAGE: 1
TOTAL CELLS/ML	1700	1400	690	4700	10000	

	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA) (GREEN ALGAE										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...OOCYSTACEAE										
....ANKISTRODESMUS	--		--		--		--		250	3
....CHLORELLA	--		--		--		110	2	--	
CHRYSOPHYTA) (YELLOW-GREEN ALGAE										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	--		--		16	2	--		--	
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	33	2	28	2	32	5	210	4	760	8
....COCCONEIS	33	2	28	2	16	2	--		250	3
....RHOICOSPHENIA	--		--		--		53	1	--	
...CYMBELLACEAE										
....CYMBELLA	33	2	56	4	96	14	580	12	1500	15
....EPITHEMIA	--		85	6	--		--		760	8
...DIATOMACEAE										
....DIATOMA	540	32	170	12	64	9	320	7	1000	10
...FRAGILARIACEAE										
....FRAGILARIA	--		110	8	--		110	2	--	
....HANNAEA	33	2	--		--		--		--	
....SYNEDRA	130	8	28	2	32	5	210	4	250	3
...GOMPHONEMATACEAE										
....GOMPHONEMA	640	38	200	14	96	14	740	16	2000	20
...MERIDIONACEAE										
....MERIDION	--		--		16	2	--		--	
...NAVICULACEAE										
....NAVICULA	270	16	450	32	140	20	110	2	1300	13
....PINNULARIA	--		--		--		53	1	--	
...NITZSCHIACEAE										
....NITZSCHIA	--		140	10	160	23	480	10	2000	20

Table Type 4 (Biological)—Continued

1

DISTRICT CODE 30 UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 5-18-05
06214500 -- Yellowstone River at Billings MT

WATER-QUALITY DATA

DATE	DEC 26, 74	JAN 24, 75	FEB 26, 75	MAR 24, 75	APR 21, 75	SET: 1
TIME	1040	1445	1430	1415	1000	PAGE: 1
TOTAL CELLS/ML	1700	1400	690	4700	10000	

	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
...SURIRELLACEAE										
....SURIRELLA	--		56	4	16	2	53	1	--	
CYANOPHYTA) (BLUE-GREEN ALGAE										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....AGMENELLUM	--		--		--		1200	26	--	
..OSCILLATORIALES										
...NOSTOCACEAE										
....ANABAENA	--		--		--		480	10	--	

Publication Tables (By-result Format; Three Table Types)

Table Type 1 (Single Station)

Requested parameters TIMES, PCODE, VALUE; default settings accepted for all other options
1

DISTRICT CODE 30 UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 5-18-05
12331500 -- Flint Creek near Drummond MT
WATER-QUALITY DATA

Date	Time	Parameter code	Value
OCT 2002			
17...	1110	00010	4.5
17...	1110	00020	5.5
17...	1110	00028	1028
17...	1110	00061	93
17...	1110	00065	2.71
17...	1110	00095	394

Table Type 1 (Single Station)—Continued

Requested parameters TIMES, PCODE, VALUE; default settings accepted for all other options
1

DISTRICT CODE 30 UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 5-18-05
12331500 -- Flint Creek near Drummond MT
WATER-QUALITY DATA

Date	Time	Parameter code	Value
NOV			
21...	1110	00010	5.0
21...	1110	00020	4.0
21...	1110	00028	1028
21...	1110	00061	125
21...	1110	00065	2.78
21...	1110	00095	359

Table Type 2 (Miscellaneous Station)

Requested parameters STAID, TIMES, PCODE, VALUE; default settings accepted for all other options

```
1
   UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY  PROCESS DATE  5-18-05
             MISCELLANEOUS STATION ANALYSES

                                      Param-
                                        eter
    Date    Station  number     Time     code    Value

 12331500  Flint Creek near Drummond MT  (LAT 46 37 44N LONG 113 09 00W)

 OCT 2002
   17...    12331500            1110    00010       4.5
   17...    12331500            1110    00020       5.5
   17...    12331500            1110    00028      1028
   17...    12331500            1110    00061        93
   17...    12331500            1110    00065      2.71
   17...    12331500            1110    00095       394
```

Table Type 2 (Miscellaneous Station)—Continued

Requested parameters STAID, TIMES, PCODE, VALUE; default settings accepted for all other options

```
1
   UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY  PROCESS DATE  5-18-05
             MISCELLANEOUS STATION ANALYSES

                                      Param-
                                        eter
    Date    Station  number     Time     code    Value

 12331500  Flint Creek near Drummond MT  (LAT 46 37 44N LONG 113 09 00W)

NOV
   21...    12331500            1110    00010       5.0
   21...    12331500            1110    00020       4.0
   21...    12331500            1110    00028      1028
   21...    12331500            1110    00061       125
   21...    12331500            1110    00065      2.78
   21...    12331500            1110    00095       359
```

Table Type 3 (Multiple Station)

Requested parameters TIMES, PCODE, VALUE; default settings accepted for all other options

```
1

   UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY  PROCESS DATE  5-18-05
               MULTIPLE STATION ANALYSES
                                        Param-
                                        eter
   Station  number    Date      Time     code    Value
       12331500     10-17-02    1110    00010       4.5
                    10-17-02    1110    00020       5.5
                    10-17-02    1110    00028      1028
                    10-17-02    1110    00061        93

                    10-17-02    1110    00065      2.71
                    10-17-02    1110    00095       394
                    11-21-02    1110    00010       5.0
                    11-21-02    1110    00020       4.0

                    11-21-02    1110    00028      1028
                    11-21-02    1110    00061       125
                    11-21-02    1110    00065      2.78
                    11-21-02    1110    00095       359
                    01-08-03    1627    00010        .0
       06130950     06-14-77    1230    00010      26.0
                    06-14-77    1230    00020      30.0
                    06-14-77    1230    00041         1
                    06-14-77    1230    00061       .12
                    06-14-77    1230    00070        45
                    06-14-77    1230    00095      3400
                    06-14-77    1230    00300       8.4
                    06-14-77    1230    00301       114
                    06-14-77    1230    00400       8.8
                    06-14-77    1230    00405       1.6
                    06-14-77    1230    00410       510
                    06-14-77    1230    00440       560
                    06-14-77    1230    00445        31
                    06-14-77    1230    00600       .88
                    06-14-77    1230    00605       .87
                    06-14-77    1230    00610      .010
                    06-14-77    1230    00625       .88
                    06-14-77    1230    00630     <.100
                    06-14-77    1230    01010 M

0Remark codes used in this table:
   < -- Less than
   M -- Presence verified, not quantified
```

Flat File (By Sample, Fixed-Column Format)

Requested parameters STAID, DATES, TIMES, 00400, 00095, 00020, 00010; default settings accepted for all other options

```
  12331500            20021017    1110    -999999       394       5.5       4.5
  12331500            20021121    1110    -999999       359       4.0       5.0
  12331500            20030108    1627    -999999       342       3.5        .0
  12331500            20030110    1219    -999999       391      12.5        .0
  12331500            20030806    1555    -999999       467      28.0      22.0
  12331500            20030807    1405    -999999       510      28.0      22.5
  06130950            19770614    1230        8.8      3400      30.0      26.0
  06130950            19770714    1430        8.8      1650      30.0      29.0
  06130950            19770908    1630        8.0       860      14.5      13.5
```

Flat File (By Sample, Tab-Delimited RDB Format)

Requested parameters STAID, DATES, TIMES, 00400, 00095, 00020, 00010; default settings accepted for all other options

```
# RDB file created by NWIS qwflatout program on nwisvatest1 at 04/27/2007 05:15:53
#
# STAID  Station number
# DATES  Date as yyyymmdd
# TIMES  Sample start time
# P00400 pH, water, unfiltered, field, standard units
# P00095 Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius
# P00020 Temperature, air, degrees Celsius
# P00010 Temperature, water, degrees Celsius
#
STAID   DATES   TIMES   R00400  P00400  R00095  P00095  R00020  P00020  R00010  P00010
20S     10D     10S     6S      9N      6S      9N      6S      9N      6S      9N
12331500        20021017        1110                            394             5.5             4.5
12331500        20021121        1110                            359             4.0             5.0
12331500        20030108        1627                            342             3.5             .0
12331500        20030110        1219                            391             12.5            .0
12331500        20030806        1555                            467             28.0            22.0
12331500        20030807        1405                            510             28.0            22.5
06130950        19770614        1230            8.8             3400            30.0            26.0
06130950        19770714        1430            8.8             1650            30.0            29.0
06130950        19770908        1630            8.0             860             14.5            13.5
```

Flat File (By Result, Fixed-Column Format)

Requested parameters STAID, DATES, TIMES, PCODE, VALUE; default settings accepted for all other options

```
  12331500            20021017    1110     00010         4.5
  12331500            20021017    1110     00020         5.5
  12331500            20021017    1110     00028        1028
  12331500            20021017    1110     00061          93
  12331500            20021017    1110     00065        2.71
  12331500            20021017    1110     00095         394
  06130950            19770614    1230     00010        26.0
  06130950            19770614    1230     00020        30.0
  06130950            19770614    1230     00041           1
  06130950            19770614    1230     00061         .12
  06130950            19770614    1230     00070          45
  06130950            19770614    1230     00095        3400
  06130950            19770614    1230     00300         8.4
  06130950            19770614    1230     00301         114
  06130950            19770614    1230     00400         8.8
  06130950            19770614    1230     00405         1.6
  06130950            19770614    1230     00410         510
```

Flat File with TAB Delimiter (Publication Export)

```
# Customized table title with any text: recensoring table, default none
#[WG, Groundwater; <, Less than.; E, Estimated;]
Station number  Begin date      Sample start time       Medium code     Record number   Fluoride, water, filtered, milligrams per
liter Barium, water, filtered, micrograms per liter      Iron, water, filtered, micrograms per liter
15S     18S     4S      3S      8S      18S     18S     18S
                                        (00950) (01005) (01046)
462143111280501 10-19-1992      1130    WG      99300028        < .40   E 141   < 3
462114111340801 03-22-1993      1200    WG      99300280        .4      21.0    < 3
464642105223801 03-30-1993      0930    WG      99300347        2.9     < 100   410
480746105080103 08-17-1993      1220    WG      99301351        .5      < 100   < 10
481019105074301 07-24-1993      1630    WG      99301740        E .6    E 100   E 10
```

P-Stat Output (Three File Types)

[Note: The *.stats file is produced when values with remark codes are included in the dataset]

Option 1 Data file

```
06130950         19770614  1230      -       -
      --         --        --       2340      --        .12   1224.00        45
      1.6        8.4       114       8.8      3400      30.0      26.0       250
       .0       30.0      42.0      9.90        21       760        86       510
      560         31       8.0        .40      2.10      1300      2460      3.35
      .80        .88      .010     <.100       .87      .080       .88       3.9
       20         --       1.0       --   M              --       360      U--
      --        U--        --   M               --        30        --   M
      --          60       --         <10       --       <.50       --          3
      --   M              --          <1       --         .0      U--         --
      129        .04         1
```

Option 2 Data file

```
 06130950         19770614  1230      -       -
      -          -         -        2340      -         .12   1224.00        45
      1.6        8.4       114       8.8      3400      30.0      26.0       250
       .0       30.0      42.0      9.90        21       760        86       510
      560         31       8.0        .40      2.10      1300      2460      3.35
      .80        .88      .010       .100       .87      .080       .88       3.9
       20         -        1.0       -                   -         360       -
      -          -         -                   -          30       -
      -           60       -          10       -         .50       -          3
      -                    -           1       -          .0       -         -
      129        .04         1
```

Option 3 Data file

```
06130950         19770614  1230      -       -
      --         --        --       2340      --        .12   1224.00        45
      1.6        8.4       114       8.8      3400      30.0      26.0       250
       .0       30.0      42.0      9.90        21       760        86       510
      560         31       8.0        .40      2.10      1300      2460      3.35
      .80        .88      .010       .100       .87      .080       .88       3.9
       20         --       1.0       --                  --         360       --
      --         --        --                  --          30       --
      --          60       --          10       --        .50       --          3
      --                   --           1       --         .0       --         --
      129        .04         1
```

Command file (*.cmnd)

```
BUILD pstat1.txt.P, FILE pstat1.txt;
VARS  STATION.NUMBER:C DATE:C TIME:C END.DATE:C END.TIME:C
 P00028 P72008 P72000 P00065 P00061 P81024 P00070 P00405 P00300 P00301
 P00400 P00095 P00020 P00010 P00900 P00902 P00915 P00925 P00935 P00931 P00930
 P00932 P00410 P00440 P00445 P00940 P00950 P00955 P00945 P70301 P70303 P70302
 P00625 P00610 P00630 P00605 P00665 P00600 P71887 P01106 P01105 P01000 P01002
 P01010 P01012 P01020 P01025 P01027 P01030 P01034 P01040 P01042 P01046 P01045
 P01049 P01051 P01130 P01132 P01056 P01055 P71890 P71900 P01060 P01062 P01065
 P01067 P01145 P01147 P01085 P01090 P01092 P80154 P80155 P00041
 $
```

Statistics file (*.stats)

```
          LIST OF PARAMETERS WITH REMARK CODES

     PARAMETER 00630        VALUE     COUNT

                                         0
                                         0
                       <    .100         1

     PARAMETER 01010        VALUE     COUNT

                                         0
                                         0
                       M                 2

     PARAMETER 01025        VALUE     COUNT

                                         0
                                         0
                       ND                2

     PARAMETER 01049        VALUE     COUNT

                                         0
                                         0
                                         0
                                         0
                       M                 1
                       <       2         1
```

Listing of Site Information

```
   SHOWSITE                ACCESSING SITEFILE FOR DATABASE 01             Tue,  6 May 2008 @ 18:18:12
-----------------------------------------------------------------------------------------------------------

              STATION NAME:  26N23E14DDD 01                                        STATION NUMBER:  480008108424800
                   COUNTRY:  US                                 STATE: 30              COUNTY:  005
               LAT. / LONG. :   480008    / 1084248          LAT/LONG METHOD: M            DISTRICT:  30
          LAT/LONG ACCURACY: S                                 LAT/LONG DATUM: NAD27      ALTITUDE DATUM:  NGVD29
             RECORD CREATED:  19750719             ALTITUDE OF LAND SURFACE:     3430          UPDATED:  20071127232923
              SITE USE CODE:  ACTIVE                          HYDROLOGIC UNIT: 10050009       BASIN CODE:
          LAND NET LOCATION:                                  ALTITUDE METHOD: M          ALTITUDE ACCURACY:  5.
       NAME OF LOCATION MAP:                                        MAP SCALE: 1:            SOURCE AGENCY:  USGS
              SITE WEB FLAG:  Y                             TIME ZONE CODE: MST     DAYLIGHT SAVINGS TIME:  Y
  DATE SITE ESTAB. OR INVENT.:                                     REMARKS:


            PROJECT NUMBER:                            NATIONAL WATER USE:  DO
          NATIONAL AQUIFER: N100ALLUVL                    PRIMARY AQUIFER: 111ALVM          AQUIFER TYPE:
               WELL DEPTH:  32.0                        DATA RELIABILITY:  C
               HOLE DEPTH:                              WELL CONSTRUCTED: 1961            TOPO SETTING:  V
         PRIMARY WATER USE:  H                          PRIMARY SITE USE: W
       SECONDARY WATER USE:                            SECONDARY SITE USE:              SOURCE OF DEPTH:
        TERTIARY WATER USE:                             TERTIARY SITE USE:
   TYPE OF SITE                          TYPE OF DATA COLLECTED AT SITE: STATUS      INSTRUMENTATION AT SITE: STATUS
   ------------                          ---------------------------------------     ------------------------------
Well
```

Scan for and display parameter codes & definitions

qwpcdpeek:

```
PARM
CODE  Parameter Name
----- -------------------------------------------------------------------------
00530 Residue, total nonfilterable, milligrams per liter
00608 Ammonia, water, filtered, milligrams per liter as nitrogen
01010 Beryllium, water, filtered, micrograms per liter
01040 Copper, water, filtered, micrograms per liter
39632 Atrazine, water, filtered, recoverable, micrograms per liter
80154 Suspended sediment concentration, milligrams per liter
Page 1 (<CR> to continue, Q to quit):
```

Write parameter report to a file
gwpcdtable:

Output format 1: Parameter-file for use in retrievals (Pcode + Long Name)

```
00530 Residue, total nonfilterable, milligrams per liter
00945 Sulfate, water, filtered, milligrams per liter
01010 Beryllium, water, filtered, micrograms per liter
80154 Suspended sediment concentration, milligrams per liter
```

Output format 2: Print formatted text report

```
# CAS Registry Number is a Registered Trademark of the American Chemical Society. CAS recommends the
verification of the CASRNs through CAS Client ServicesSM.
Pcode Name                          Units
Order CASRN           Medium                          Fraction
EPA-SRS Name
00530 Residue,total nonflt          mg/l
855                   Water                           Non-filterable
Total suspended solids
39632 Atrazine, wf                  ug/l
3397  1912-24-9       Water                           Dissolved
Atrazine
80154 Suspnd sedmnt conc            mg/l
10314                 Water                           Suspended
Sediment
```

Output format 3: RDB-file report

```
# CAS Registry Number is a Registered Trademark of the American Chemical Society. CAS recommends the verification of the CASRNs
through CAS Client ServicesSM.
PCODE   Long_Name       SRS_Name        Units   CASRN   Medium  Fraction
5s      170s    75s     10s     15s     30s     24s
00631   Nitrate plus nitrite, water, filtered, milligrams per liter as nitrogen Nitrate-nitrite mg/l as N            Water  Dissolved
00940   Chloride, water, filtered, milligrams per liter Chloride        mg/l    16887-00-6      Water   Dissolved
39632   Atrazine, water, filtered, recoverable, micrograms per liter    Atrazine        ug/l    1912-24-9       Water   Dissolved
```

Listing of Federal Information Processing (FIPS) Code for State and County Information

Option 2 to a file:

```
1
  STATE NAME: ALABAMA                          MIN LAT:  301136
  STATE ABBR: AL                               MAX LAT:  350045   MIN ALT: 00000
  STATE CODE: 01                              MIN LONG:  0845319  MAX ALT: 02407
  LAST UPDAT:                                 MAX LONG:  0882824
1
  STATE NAME: ALASKA                           MIN LAT:  511231
  STATE ABBR: AK                               MAX LAT:  712500   MIN ALT: 00000
  STATE CODE: 02                              MIN LONG:  1295916  MAX ALT: 20320
  LAST UPDAT:                                 MAX LONG: -1722655
1
  STATE NAME: ARIZONA                          MIN LAT:  312000
  STATE ABBR: AZ                               MAX LAT:  370014   MIN ALT: 00000
  STATE CODE: 04                              MIN LONG:  1090229  MAX ALT: 12633
  LAST UPDAT:                                 MAX LONG:  1144849
1
  STATE NAME: ARKANSAS                         MIN LAT:  330011
  STATE ABBR: AR                               MAX LAT:  363036   MIN ALT: 00055
  STATE CODE: 05                              MIN LONG:  0893859  MAX ALT: 02753
  LAST UPDAT:                                 MAX LONG:  0943724
```

Listing of Federal Information Processing (FIPS) Code for State and County Information—Continued

Option 2 to a file:

```
1
  STATE NAME: CALIFORNIA                    MIN LAT:  323235
  STATE ABBR: CA                            MAX LAT:  420122   MIN ALT:  -282
  STATE CODE: 06                           MIN LONG:  1140751  MAX ALT: 14494
  LAST UPDAT:                              MAX LONG:  1242255
1
  STATE NAME: COLORADO                      MIN LAT:  365901
  STATE ABBR: CO                            MAX LAT:  410059   MIN ALT: 03350
  STATE CODE: 08                           MIN LONG:  1020244  MAX ALT: 14433
  LAST UPDAT:                              MAX LONG:  1090344
1
  STATE NAME: CONNECTICUT                   MIN LAT:  405850
  STATE ABBR: CT                            MAX LAT:  420302   MIN ALT: 00000
  STATE CODE: 09                           MIN LONG:  0714702  MAX ALT: 02380
  LAST UPDAT:                              MAX LONG:  0734312
```

Listing of Output from the Parameter-method Reference Table

Option 1:

[PCODE: Parameter code; NEWENTRY: Flag to indicate if parameter/method is allowed for new data entry; PSNAM: Parameter short name; PLNAM: Parameter long name; METHD: Method code; METHH: Historical method code; PMRND: Rounding array; METHS: Method short name; METHL: Method long name; METHR: Method reference; METHC: Method citation; METHN; Method number; METHO: Method owner]

PCODE	NEW ENTRY	PSNAM	PLNAM	METHD	METHH	PMRND	METHS	METHL	METHR	METHC	METHN	METHO
00608		Ammonia, wf	Ammonia, water, filtered, milligrams per liter as nitrogen			3333333333						
00608		Ammonia, wf	Ammonia, water, filtered, milligrams per liter as nitrogen	00042	D	0223333332	Ammonia, wf	N, NH4 as N, FIL				USGSNWQL
00608		Ammonia, wf	Ammonia, water, filtered, milligrams per liter as nitrogen	00043	E	3333333333	Ammonia, LL, wf	N, NH4 as N, FIL low-level				USGSNWQL
00608		Ammonia, wf	Ammonia, water, filtered, milligrams per liter as nitrogen	00048	J	3333333333	New Instrument - SOP change	New Instrument - SOP change (Eff 10/1/05?) Patton				USGSNWQL
00608		Ammonia, wf	Ammonia, water, filtered, milligrams per liter as nitrogen	CL003	C	3333333333	Ammonia, LL, wf, ASF colorimetry	Colorimetry, ASF, Salycilate-hypochlorite, N, Ammonia as N, low-level, unpreserved, FIL				USGSNWQL
00608		Ammonia, wf	Ammonia, water, filtered, milligrams per liter as nitrogen	CL015	R	0322222223	Ammonia, wf, phenate colorimetry	Ammonia in filtered water by automated phenate colorimetry			350.1:USEPA	USGSDDEC
00608		Ammonia, wf	Ammonia, water, filtered, milligrams per liter as nitrogen	CL035	B	3333333333	Ammonia,ASF salicylate-hypochlor	Ammonia in filtered water, by ASF salicylate-hypochlorite colorimetry	USGS OF 93-125, p 125	Fishman, M.J., ed., 1993, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory--Determination of inorganic and organic constituents in water and fluvial sediments: U.S. Geological Survey Open-File Report 93-125, p. 125-132.	I-2522-90:USGS	USGSNWQL

Listing of Output from the Parameter-method Reference Table (Option 1)—Continued

PCODE	NEW ENTRY	PSNAM	PLNAM	METHD	METH	PMRND	METHS	METHL	METHR	METHC	METHN	METHO
00608		Ammonia, wf	Ammonia, water, filtered, milligrams per liter as nitrogen	CL036	G	3333333333	Nutrients, acidified, color	Nutrients, filtered water, acidified, salicylate-hypochlorite, colorimetric	USGS OF 93-125, p 125	Fishman, M.J., ed., 1993, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory--Determination of inorganic and organic constituents in water and fluvial sediments: U.S. Geological Survey Open-File Report 93-125, p. 125-132.	I-2522-90:USGS	USGSNWQL
00608		Ammonia, wf	Ammonia, water, filtered, milligrams per liter as nitrogen	CL037	F	0223333332	Nutrients, salic/hypo, color	Nutrients, filtered water, salicylate-hypochlorite, colorimetric	USGS OF 93-125, p 125	Fishman, M.J., ed., 1993, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory--Determination of inorganic and organic constituents in water and fluvial sediments: U.S. Geological Survey Open-File Report 93-125, p. 125-132.	I-2522-90:USGS	USGSNWQL
00608		Ammonia, wf	Ammonia, water, filtered, milligrams per liter as nitrogen	CL038	A	3333333333	Ammonia, LIS,ASF salicylate-hypo	Ammonia in low ionic strength water, by ASF salicylate-hypochlorite colorimetry	USGS OF 93-125, p 119	Fishman, M.J., ed., 1993, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory--Determination of inorganic and organic constituents in water and fluvial sediments: U.S. Geological Survey Open-File Report 93-125, p. 119-124.	I-2525-89:USGS	USGSNWQL
00608		Ammonia, wf	Ammonia, water, filtered, milligrams per liter as nitrogen	CL039	H	3333333333	Nutrients, LL, wf, color	Nutrients, low level, filtered water, salicylate-hypochlorite, colorimetric	USGS OF 93-125, p 119	Fishman, M.J., ed., 1993, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory--Determination of inorganic and organic constituents in water and fluvial sediments: U.S. Geological Survey Open-File Report 93-125, p. 119-124.	I-2525-89:USGS	USGSNWQL
00608		Ammonia, wf	Ammonia, water, filtered, milligrams per liter as nitrogen	CL101	Q	5322222225	Ammonia, LL, wf, auto phenate	Ammonia, low level, in filtered water by automated phenate colorimetry	EPA/600/4-79/020	U.S. Environmental Protection Agency, 1983, Methods for chemical analysis of water and wastes: EPA/600/4-79/020, 552 p.	350.1:USEPA	USGSDDEC
00608	disabled	Ammonia, wf	Ammonia, water, filtered, milligrams per liter as nitrogen	S0095	I	0012333331	No information exists for method					USGSNWQL

Listing of Output from the Parameter-method Reference Table—Continued

Option 2:

[PCODE: Parameter code; NEWENTRY: Flag to indicate if parameter/method is allowed for new data entry; METHD: Method code; PMRND: Rounding array; PLNAM: Parameter long name]

```
PCODE NEWENTRY METHD PMRND      PLNAM
00608                3333333333 Ammonia, water, filtered, milligrams per liter as nitrogen
00608          00042 0223333332 Ammonia, water, filtered, milligrams per liter as nitrogen
00608          00043 3333333333 Ammonia, water, filtered, milligrams per liter as nitrogen
00608          00048 3333333333 Ammonia, water, filtered, milligrams per liter as nitrogen
00608          CL003 3333333333 Ammonia, water, filtered, milligrams per liter as nitrogen
00608          CL015 0322222223 Ammonia, water, filtered, milligrams per liter as nitrogen
00608          CL035 3333333333 Ammonia, water, filtered, milligrams per liter as nitrogen
```

Option 3:

[PCODE: Parameter code; NEWENTRY: Flag to indicate if parameter/method is allowed for new data entry; METHD: Method code; PSNAM: Parameter short name]

```
PCODE NEWENTRY METHD PMRND      PSNAM
00608                3333333333 Ammonia, wf
00608          00042 0223333332 Ammonia, wf
00608          00043 3333333333 Ammonia, wf
00608          00048 3333333333 Ammonia, wf
00608          CL003 3333333333 Ammonia, wf
00608          CL015 0322222223 Ammonia, wf
00608          CL035 3333333333 Ammonia, wf
00608          CL036 3333333333 Ammonia, wf
00608          CL037 0223333332 Ammonia, wf
```

Option 4:

[PCODE: Parameter code; NEWENTRY: Flag to indicate if parameter/method is allowed for new data entry; METHD: Method code; PMRND: Rounding array; PSNAM: Parameter short name; METHS: Method short name]

```
PCODE NEWENTRY METHD PMRND      PSNAM                          METHS
00608                3333333333 Ammonia, wf
00608          00042 0223333332 Ammonia, wf                    Ammonia, wf
00608          00043 3333333333 Ammonia, wf                    Ammonia, LL, wf
00608          00048 3333333333 Ammonia, wf                    Nutrients, wf, color, DA
00608          CL003 3333333333 Ammonia, wf                    Ammonia, LL, wf, ASF colorimetry
00608          CL015 0322222223 Ammonia, wf                    Ammonia, wf, phenate colorimetry
00608          CL035 3333333333 Ammonia, wf                    Ammonia,ASF salicylate-hypochlor
00608          CL036 3333333333 Ammonia, wf                    Nutrients, acidified, color
00608          CL037 0223333332 Ammonia, wf                    Nutrients, salic/hypo, color
```

DQI Remapping Report

[Explanation of codes: RECORD-NO, record number; PARM, parameter code; DQI, data quality indicator code]

1qwdqiflag -- DQI codes changed to: R 05-01-2008 16:52

SITE	NUMBER	RECORD-NO	PARM	METHOD	VALUE	DQI	
USGS	12045500	98605939	00010		3.2	A	
USGS	12045500	98605939	00025		766	A	
USGS	12045500	98605939	00028		80020	A	
USGS	12045500	98605939	00061		906	A	
USGS	12045500	98605939	00076	TBD01	3.8	A	
USGS	12045500	98605939	00095		80	A	
USGS	12045500	98605939	00300		13.2	A	
USGS	12045500	98605939	00400	EL003	7.6	A	
USGS	12045500	98605939	00403	EL006	8	A	
USGS	12045500	98605939	00410	TT008	36	A	
USGS	12045500	98605939	00419	TT001	35	A	
USGS	12045500	98605939	00447	B	.0	A	Skipping due to invalid method code
USGS	12045500	98605939	00450	TT002	42	A	
USGS	12045500	98605939	00608	CL035	.02	A	
USGS	12045500	98605939	00610	CL075	.03	A	

DQI Inventory Report

[Selections made: Water year=2005; Inventory for all DQI codes; Record numbers for DQI=Q]

```
================================================================================
   DQI Distribution for QW Database: 01 for water year 2005

 -------------
 DQI  Count
 -------------
 Q    19
 R    27128
 S    7988
 U    4
```

DQI Inventory Report—Continued

```
--------------------------------------------------------------------------------
  Distribution for DQI code: Q
 --------------------------------------------------------------------------------
      Count  Parameter                                    Begin        End
 --------------------------------------------------------------------------------
          1  (00095) Specific cond at 25C                2005-08-04  2005-08-04
          1  (00955) Silica, wf                          2005-04-06  2005-04-06
          3  (01040) Copper, wf                          2004-10-13  2005-09-19
          3  (01049) Lead, wf                            2004-10-13  2005-09-19
          4  (01065) Nickel, wf                          2005-04-05  2005-04-06
          6  (01090) Zinc, wf                            2005-04-05  2005-09-19
          1  (01106) Aluminum, wf                        2005-04-13  2005-04-13
```

Output file examples from qworphan program

Example contents of *qworphan.recno.<date/time>*

```
processed on: 03-23-2005 15:28
 Processed by: smcmahon
 Database:   01
9860620901   4740181155302       198605271500                WS
9860621001   4740181155302       198606171730                WS
9860620801   4740181155302       198605130830                WS
9870652101   472915105234600     198705060720                WS
9870652201   472915105234600     198704150745                WS
9870651701   472915105234600     198708251240                WS
9870651601   472915105234600     198709211145                WS
9850586601   472915105234600     198508061615                WS
9850586501   472915105234600     198507231230                WS
0030312501   462450111531703     200304221945                WS
0030312701   462450111531703     200307161000                WS
0030312901   462450111531703     200309040730                WS
9860619101   462450111531703     198604101000                WS
9860619201   462450111531703     198605201715                WS
0030312601   462450111531703     200306041230                WS
0030313001   462450111531703     200309241600                WS
0030312801   462450111531703     200308131510                WS
```

Example contents of *qworphan.recno.<date/time>* —Continued

```
9850586401   462450111531703     198508061800                WS
9870651501   12236241            198709240940                WS
9870651201   12236241            198705201540                WS
9870651001   12236241            198704090930                WS
9880534401   12236241            198710300835                WS
9860618901                       198511141645                WS
```

Example contents of *qworphan.delete.errors.<date/time>*

```
 processed on: 02-08-2005 18:41
 Processed by: smcmahon
 Database:   02
```

Example contents of *qworphan.stnchange.<date/time>*

```
 processed on: 03-23-2005 15:27
 Processed by: smcmahon
 Database:   01
  10-dec-2002 20:14:06
01 USGS    462450111531703   U   USGS     462450111531701   tcleasby
incorrect sequence number

  07-jan-2003 15:07:24
01 USGS    472915105234600   U   USGS     472915105234601   jothamke
more accurate sequence number

  04-dec-2000 15:18:03
-- USGS    4739501155209     U   USGS     473925115530200    ddutton
   original lat/long wrong

  04-dec-2000 15:19:05
-- USGS    4740181155302     U   USGS     474206115513400    ddutton
   original lat/long wrong
```

WATLIST File

[Note: Due to margin limits in the User Documentation, some lines wrap to the next line in this **WATLIST** example. Explanation of codes: C, calculated result; N, new result; P, previous result (before updated); U, updated result; X, result transaction failed; PCODE, parameter code; MET, method code; RPLV, report level; RLCOD, reporting level code; REM, remark code; QUAL CODES, value qualifier codes; NVQ, null value qualifier codes; DQI, data quality indicator code; RND, rounding code; LSDEV, laboratory standard deviation; RPLV, report level; RLCOD, report level code; PRP-DATE, analysis preparatory date; PREP-SET NO, laboratory preparation-set number, ANL-DATE, laboratory analysis date; ANL-SET NO, laboratory analysis-set number; MDT, Mountain Daylight Time; the time datum for the sample, which will only appear if the time-datum reliability code is stored as "'K" for the sample]

```
Water Quality Batch Options
Files to be processed:
 qwsample.edit

 Processing date: 05-06-2008 13:47
 Processed by: djgell
 Environmental Database: 01
 QA Database: 02
 Transaction allowed: Only updates to samples (QWCARDSIN)
 Results protected by DQI: Yes
 Data that can be updated: Lab only
 Prepare ionic balance: Yes
 User-Specified alert limit file:
        alert.limit51 File title goes here

 Renamed ./qwsample.edit to ./qwsample.edit.20080506.134728
 Renamed ./qwresult.edit to ./qwresult.edit.20080506.134728
1
 SINT: 20080506130258000001  Process date: 05-06-2008 13:47  --  Transaction number:    1

 Record Number: 97001450       Database Number: 01        Sample ID:
 Agency and Site ID: USGS 11447650              Site Name: SACRAMENTO R A FREEPORT CA
 Begin Date and Time: 1970-08-05 1040  End Date and Time:                  Time Datum: PDT     Time Datum Reliability: K
 Medium: WS        Sample Type: WS       Country: US       State: 06       County: 067       Geologic Unit:
 Project:                 Lab ID:
 Analysis Status: U       Hydrologic Condition: A       Hydrologic Event: 9
 Organism(ITIS):               Body Part:           Number of Parameters: 28
 Sample Field Comment--
 Sample Lab Comment--
 Collecting Agency: USGS-WRD, U.S. Geological Survey-Water Resources Discipline

        *** SAMPLE-LEVEL ERRORS ***
 SINT 20080506130258000001 Batch mode does not allow modification of time-datum reliability code to T

        *** QUALITY-ASSURANCE REPORT ***
```

WATLIST File—Continued

```
        *** Chemical verification checks ***
 Cation/specific conductance ratio is 0.90 -- outside limits of 0.92 to 1.24
 Anion/specific conductance ratio is 0.89 -- outside limits of 0.92 to 1.24
 Stored Residue, dissolved (70302) is  3320 and does not agree with computed value ( 3310)
 Stored Sodium fraction of cations (00932) is  28 and does not agree with computed value ( 27)
        *** NWIS alert limits ***
 Manganese, wf (01056) is 81.6 ug/l, greater than or equals Manganese SDWR, 50.0 ug/l
        *** Custom alert limits ***
 Dissolved oxygen (00300) is 3.04 mg/l, less than or equals Dissolved oxygen CADWR, 4.00 mg/l

     *** The cation/anion balance ***
       CATIONS                              VALUE   UNITS       DQI       (MEQ/L)        ANIONS                              VALUE   UNITS       DQI       (MEQ/L)
 00915 Calcium, wf                             10   mg/l         S         0.499   00940 Chloride, wf                        6.4   mg/l         S         0.181
 00925 Magnesium, wf                            6   mg/l         S         0.494   00945 Sulfate, wf                           7   mg/l         S         0.146
 00930 Sodium, wf                               9   mg/l         S         0.391   00950 Fluoride, wf                        0.0   mg/l         S        <0.001
 00935 Potassium, wf                          1.9   mg/l         S         0.049   00410 ANC, wu,fxdEP,fld                    54   mg/l CaCO3   S         1.079
 01046 Iron, wf                                10   ug/l         S        <0.001   71851 Nitrate, wf                           1   mg/l         S         0.016
 00191 Hydrogen ion, wf, calculated         0.000   mg/l         S        <0.001
                                                                          ---------                                                                    ---------
                                                                TOTAL         1.435                                                                TOTAL         1.422
                                                                PERCENT DIFFERENCE = 0.44

                                                                       R  QUAL   N  D  R
                                                                       E  CODES  V  Q  N
 * PCODE METHD PARAMETER NAME------          --UNITS--- --VALUE---  M  1 2 3  Q  I  D ANL-ENT  LSDEV   RPLV  RLCOD  PRP DATE PREP-SET NO  ANL DATE ANL-SET NO

   00060       Discharge                     cfs             13500              S  3
   00070       Turbidity                     JTU                 6              S  1
   00300       Dissolved oxygen              mg/l             3.04              S  2
   00400       pH                            std units         7.5              S  2
 U 00095       Specific cond at 25C          uS/cm @25C        160              S  3
 P 00095       Specific cond at 25C          uS/cm @25C        142              S  3
   00900       Hardness, water               mg/l CaCO3         50              S  2
   00902       Noncarbonate hardness, wu,fld mg/l CaCO3        0.0              S  1
   00915       Calcium, wf                   mg/l               10              S  2
   00925       Magnesium, wf                 mg/l                6              S  2
 U 00935       Potassium, wf                 mg/l              1.9              S  1
 P 00935       Potassium, wf                 mg/l              0.9              S  1
   00931       Sodium Adsrptn Ratio          None              0.6              S  1
   00932       Sodium fraction of cations    %                  28              S  2
   00930       Sodium, wf                    mg/l                9              S  2
   00410       ANC, wu,fxdEP,fld             mg/l CaCO3         54              S  2
   00440       Bicarbonate, wu,fx,f          mg/l               66              S  2
   00445       Carbonate, wu,fixedEP,field   mg/l              0.0              S  1
   00940       Chloride, wf                  mg/l              6.4              S  2
   00950       Fluoride, wf                  mg/l              0.0              S  1
   00955       Silica, wf                    mg/l               18              S  2
   00945       Sulfate, wf                   mg/l                7              S  2
   70301       Residue, wf, sum              mg/l               91              S  2
   70303       Residue, wf                   tons/ac ft       0.12              S  2
 N 70302       Residue, dissolved            tons/day         3320              S  3
```

WATLIST File—Continued

```
   Record number: 97001450   Database number:  01   SINT: 20080506130258000001   Process date: 05-06-2008 13:47   Transaction number:    1
N 71851       Nitrate, wf                   mg/l              1              S  2
N 00650       Phosphate, wu                 mg/l           0.61              S  2
C 00191       Hydrogen ion, wf, calculated  mg/l          0.000              S
N 01020       Boron, wf                     ug/l            0.0              S  1
N 01046       Iron, wf                      ug/l             10              S  2
N 01130       Lithium, wf                   ug/l             10              S  2
N 01056       Manganese, wf                 ug/l           81.6              S  2
N 01080       Strontium, wf                 ug/l            100              S  2
        *** DEFINITION OF CODES ***
        Data Quality Indicator codes--S,Presumed satisfactory;
```

Rejected Files fromTab-delimited Batch Processing

[The lines in the rejected files that begin with a "#" are errors found during batch processing. The error message is included before the record creating the problem. See *Section 3.8* for more information. Some lines in the **Rejected.sample file** are shown as wrapped below]

Rejected.sample file

```
#SINT 200505181346000001 Sample Rejected.  sample-start date 20051226 1040 after current date-time
#SINT 200505181346000001 Invalid time-datum reliability code: T; defaults to K
200505181346000001  30     USGS   06214500     200512261040        OAQ                        2      I      9      A      9
                           MST    T
#SINT 200505181346000002 Sample Rejected.  Station USGS 06214510 does not exist in the sitefile.
#SINT 200505181346000002 Sample Rejected.  Unable to validate time datum due to null or invalid station ID or sample-start date
#SINT 200505181346000002 Invalid time-datum reliability code: T; defaults to K
200505181346000002  30     USGS   06214510     200502241445        WS                         9      U      9      A      9
                           MST    T
```

Rejected.result file

```
#SINT 200505181346000001 Parameter 00028; Invalid DQI code: A; for laboratory update; defaults to S
200505181346000001    00028         1028           A             4                            A
#SINT 200505181346000001 Parameter 82398; Invalid DQI code: A; for laboratory update; defaults to S
200505181346000001    82398   B0093  8010           A             3                            A
#SINT 200505181346000001 Parameter 95100; Invalid DQI code: A; for laboratory update; defaults to S
200505181346000001    95100       33.442           A             3                            A     USGSNWQL
#SINT 200505181346000001 Parameter 95200; Invalid DQI code: A; for laboratory update; defaults to S
200505181346000001    95200         1700           A             5                            A     USGSNWQL
#SINT 200505181346000001 Parameter 96759; Invalid DQI code: A; for laboratory update; defaults to S
200505181346000001    96759          535           A             2      j                     A     USGSNWQL
#SINT 200505181346000001 Parameter 96765; Invalid DQI code: A; for laboratory update; defaults to S
200505181346000001    96765          134           A             2                            A     USGSNWQL
```

Output File Example from qwwebreport

State Code	District Code	Agency Code	Site no	Record Number	MEDIUM	-Smpl Exclus.-------		----------Result Exclusions ----------			
						Web-flag	ASTAT	PARM	DQI	Null-Qual	Homeland Security
-----	--------	------	----------	--------	------	--------	-----	----	---	---------	----------
30	30	USEPA	443711112351441	99003957	WS	X					
30	30	USEPA	443711112351442	99003958	WS	X					
30	30	USEPA	443711112351443	99003959	WS	X					
30	30	USGS	05014300	00104290	WS				X		
30	30	USGS	05014300	00104291	WS				X		
30	30	USGS	05014300	00104292	WS				X		
30	30	USGS	05014300	00104295	WS				X		
30	30	USGS	05014300	00104296	WS				X		
30	30	USGS	05014300	00104297	WS				X		
30	30	USGS	05014300	00104298	WS				X		
30	30	USGS	05014300	00104299	WS				X		
30	30	USGS	05014300	00104300	WS				X		
30	30	USGS	05014300	00403320	WS				X		
30	30	USGS	05014300	00403324	WS				X		
30	30	USGS	06032300	99900376	WS					X	
30	30	USGS	06032300	99901329	WS		P		X		
30	30	USGS	06032300	99901330	WS		I		X		
30	30	USGS	06032300	99901331	WS		I		X		
30	30	USGS	06032300	99901332	WS		I		X		
30	30	USGS	06178000	00700724	WS				X		
30	30	USGS	06185500	00200324	WS					X	
30	30	USGS	06290500	97000732	WS				X	X	
30	56	USGS	06291200	98301233	WS	X					
30	56	USGS	06291200	98301234	WS	X					
30	56	USGS	06291200	98301235	WS	X					
30	56	USGS	06291200	98301236	WS	X					
56	56	USGS	06306250	98500494	WS	X					
56	56	USGS	06306250	98500495	WS	X					
30	30	USGS	06306300	00500169	WS				X		
30	30	USGS	06306300	00800231	WS					X	
30	30	USGS	06306300	00800312	WS				X		
06	06	USGS	11303500	99303129	WS				X		
06	06	USGS	11303500	99303146	WSQ		I		X		
06	06	USGS	11303500	99303152	WS				X		

Output File Example from qwwebreport —Continued

Items under “Smpl Exclus” are **sample** exclusions and show either an “X” for Web-flag exclusion or lists of the values of specific fields that will result in exclusion of the entire sample. An explanation of these is shown below.

Column heading	Description	Screening
MEDIUM	Medium code	Screening by medium code is not automatic. Rather, all screening by medium code is done by coding the Analysis Status Code to "I" (Internal-use only).
Web-flag	Site web flag	All but "Y" are excluded ; "X" indicates sample excluded because of web flag
ASTAT	analysis status code	All codes = "I" or "P" are excluded.

Items under “Result Exclusions” show an “X” in the column if a **result** is excluded because of parameter code, remark code, data quality indicator (DQI) code, null value qualifier, or Homeland Security screening. Only the screened result is excluded from the sample, unless an item under “Sample Exclusions” is also coded with an excluded code.

Column heading	Description	Screening
PARM	Parameter code	All valid codes are included except those screened for Homeland Security and those flagged for non-public display only.
DQI	Data Quality Indicator code	Results with values = A, R, or S are included

Items under “Result Exclusions” show an “X” in the column if a **result** is excluded because of parameter code, remark code, data quality indicator (DQI) code, null value qualifier, or Homeland Security screening. Only the screened result is excluded from the sample, unless an item under “Sample Exclusions” is also coded with an excluded code.

Column heading	Description	Screening
Null-Qual	Null value qualifier code	Null results that are qualified with null value qualifiers are excluded. (a,b,c,e,f,i,l,m,n,o,p,q,r,u,w,x)

Output File Example from qwwebreport —Continued

Column heading	Description	Screening
Homeland Security		The following fixed-value parameter codes result in the exclusion of the result if the fixed value indicates a public water supply: **P72005 Sample Source, Code** 44 PUBLIC WATER SUPPLIES (TREATED WATER) 46 PUBLIC WATER SUPPLIES (UNTREATED WATER) 69 COMPOSITED PUBLIC WATER SUPPLY (UNTREATED WATER) 70 COMPOSITED PUBLIC WATER SUPPLY (TREATED WATER) **P71995 - 71998 Water Use (Primary to Quaternary), Code** 4941 - WATER SUPPLY

QWDATA and ADAPS Reports (Two Options)

1) Print-format report

QWDATA & ADAPS REPORT
Thu, Jan 27 2011

DATA IN WATER-QUALITY FILE						SUGGESTED				DATA FROM ADAPS					
RECORD NUMBER	DB	STATION NUMBER	BEGIN DATE END DATE	TZ	MED	PCODE	RMK	VALUE	DQI	DATE	UV TIME	UV TZ	UV VALUE	DV REMARK	AGING STATUS
01000095	01	06306300	200912020815	MST	WS	00060	E	190	S	20091202			190	e	W
01000096	01	06324500	200912011430	MST	WS	00061		282	S	20091201	1430	MST	282		W
01001810	01	12340500	201007211332	MDT	WS	00061		2320	S	20100721	1330	MDT	2320		W
01001815	01	06306300	201007271400 201007271500	MDT	WS										
Failed. End date is populated (implies Composited Sample); cannot find an appropriate discharge value															
01001817	01	06307616	201007271045	MDT	WS	00061		413	S	20100727	1045	MDT	413		W
01001818	01	06324500	201007281115	MDT	WS	00061		174	S	20100728	1115	MDT	174		W

1) Print-format report—Continued

QWDATA & ADAPS REPORT
Thu, Jan 27 2011

DATA IN WATER-QUALITY FILE						SUGGESTED				DATA FROM ADAPS					
RECORD NUMBER	DB	STATION NUMBER	BEGIN DATE END DATE	TZ	MED	PCODE	RMK	VALUE	DQI	DATE	UV TIME	UV TZ	UV VALUE	DV REMARK	AGING STATUS
01001819	01	06325500	201007281415	MDT	WS										
Failed. DV not present, No UV present for this sample within 30 minutes															
01001820	01	06326500	201007290830	MDT	WS	00061		223	S	20100729	0830	MDT	223		W
01001827	01	06032400	201007201330	MDT	WS										
No Primary DD present for this station															

2) RDB-format report

Column name	Column contents
record_no	Sample record number (eight digits). Database number (two digits) is appended in RDB format, or shown as a separate column in print format.
agency_cd	Agency code associated with the site (five chars). Not shown in print format.
site_no	Site-identification number (15 chars)
sample_start_dttm	Beginning date-time associated with the sample (12 chars). In print format, the end date and time of a composite sample is shown on the line below.
sample_start_tz_cd	Time datum associated with the sample (six chars)
medium_cd	Medium code associated with the sample (three chars)

2) RDB-format report—Continued

Column name	Column contents
error_cd	Any or none of the following messages may be presented: Failed. DV not present, No UV present for this sample within 30 minutes Failed. Due to Remark, Daily Value is of questionable quality. Inspect manually Failed. End date is populated (implies Composited Sample); cannot find an appropriate discharge value Failed. Imprecise Sample time: DV missing day of month, or UV missing time Warning. 2 UVs present at an equal time-interval from sample No Primary DD present for this station WARNING: Daily value was computed for the day in XXXX.
discharge_dt	Date of recommended discharge (eight chars)
discharge_tm	Time of the recommended discharge (six chars)
discharge_tz_cd	Time datum of the recommended discharge (six chars)
data_aging_cd	Data-aging code of the recommended discharge (two chars)
value	The recommended discharge value for the sample (cubic feet per second)
remark_cd	The remark code of the recommended discharge (two chars)
suggest_parameter_cd	The recommended QW parameter code for the discharge (five chars). If an instantaneous value is selected, then the suggested parameter code will be “00061”, otherwise parameter code “00060” will be suggested for a daily discharge value.
suggest_remark_cd	The recommended QW remark code for the discharge (one char). If a daily discharge is suggested, and that daily discharge is remarked as “Estimated”, then a QW remark code of “E” (estimated) is suggested.
suggest_dqi_cd	The recommended QW data-quality indicator code for the discharge (1 char). If the discharge data-aging status is approved (“A”), then the suggested DQI code is “R” (reviewed and approved). Otherwise, the suggested DQI code is “S” (presumed satisfactory).

4.4 Appendix D. Calculated Parameters

The NWIS QWDATA system will produce calculated results during output (qwdata-4) for by-sample-layout retrievals when a calculated parameter or "CALCV" is specified or for by-result-layout retrievals, unless specifically excluded by the user's retrieval options. These calculated results are computed using system-defined algorithms that use the stored results for related parameters. Some algorithms perform simple unit conversions, others compute sums or differences among related constituents, and a few perform complicated chemical logic computations.

The operational steps of the algorithms are stored in an NWIS reference table and are updated periodically. The contents of the reference table can be listed using a "Support Files" menu option (qwdata-6-7). The following UNIX command may be used to list the parameters with algorithms (substitute the appropriate database name for *nwisdb*).

```
tsql nwisdb "select distinct a.parm_cd, parm_ds from parm a, alg b
where a.parm_cd = b.parm_cd"
```

Many of the algorithms optionally can employ one of several candidate parameters within the calculation. The plethora of different pathways through the algorithms makes documentation of each algorithm complex, and sometimes makes it difficult to understand how a particular calculated result was determined.

The QWDATA system provides a capability to produce a "trace" of all the algorithm computational steps that were performed during a retrieval. The trace output can be used to ascertain how the software produced each calculated result.

The QWDATA algorithm-processing software performs computations using a "stack" of results. This technique, often referred to as "Reverse Polish Notation" (RPN), is a mechanism for stacking up intermediate results so they can be used in subsequent computations. When results are entered or computed, the size of the stack of intermediate results stays the same, grows by one, or shrinks by one, as required by the operations being performed. Each step will involve one or two of the most recently processed results. The QWDATA algorithm stack includes a remark code, value, and data-quality indicator (DQI) code for each entry.

Procedure to Trace Algorithms

1. **Set environment variable**: At the UNIX "shell" command prompt, set the environment variable named **QWTRACEALG** to the name of the file to contain the trace output. The syntax for setting an environment variable depends on the UNIX shell. If you do not know which shell you are using, type the following:

```
echo $SHELL    .
```

Table 1.--Syntax for setting and clearing the algorithm-trace environment variable for various UNIX shells.

[Do **NOT** put these commands into UNIX login scripts.]

<table>
<tr><th>UNIX shell</th><th>Setting environment</th><th>Clearing environment</th></tr>
<tr><td>sh (Bourne)</td><td>QWTRACEALG=filename.gz
export QWTRACEALG</td><td rowspan="4">unset QWTRACEALG</td></tr>
<tr><td>ksh (Korn-shell)</td><td rowspan="2">export
QWTRACEALG=filename.gz</td></tr>
<tr><td>bash (bash-shell)</td></tr>
<tr><td>csh (C-shell)</td><td rowspan="2">setenv QWTRACEALG
filename.gz</td><td rowspan="2">unsetenv
QWTRACEALG</td></tr>
<tr><td>tcsh (TENEX C-shell)</td></tr>
</table>

Run retrieval: Use one of the tabling options in Output menus (qwdata-4) to produce the desired retrieval. In addition to the output file generated by the retrieval, a compressed text file with a trace of all the computations performed will be written to the pathname specified by the trace environment variable. (The batch-entry and data-verification menu options can also produce trace output that shows the computational steps for the calculated parameters that appear on the WATLIST report.)

2. **Clear environment variable**: Use an appropriate “clearing environment” command (table 1) to stop generating trace output during subsequent QWDATA retrievals.
3. **Interpret trace output**: Uncompress and inspect the contents of the algorithm-trace file. The following UNIX commands in a pipeline will display the trace-file contents to the screen page-by-page.

```
gzcat filename.gz | more
```

The trace output consists of a header that identifies the QWDATA program and run date. Each computation is identified with a record number, database number, and the computed parameter. Then, the computational steps are listed in the order executed. Each step shows the algorithm operator (table 2), and (depending on the operator) an operand and textual comment, along with the stack contents after the step was performed.

Table 2.--Algorithm operators.

Operator code	Description	Effect on stack	Operand
	Arithmetic operators		
+	Addition of upper- and lower-stack results.	-1	none
-	Subtract lower- from upper-stack result.	-1	none
*****	Multiply upper- and lower-stack results.	-1	none
/	Division of upper- by lower-stack result.	-1	none
******	Exponentiate: Raise upper- to the power of lower-stack result.	-1	none
ln	Natural log of lower-stack result.	0	none
max	Use maximum of upper- and lower-stack results. The remark and DQI codes of the selected entry are output.	-1	none
zero<0	Censor lower-stack result to zero when negative. If remark is “>” and value < 0: set to “>0.” If remark is not “>” and value <=0: set to “e0.” DQI code is unchanged.	0	none
Stack operators			
Push	Put a stored parameter result onto the stack. If the result is not found, DQI is Q or X, or value is null: a missing result is placed on the stack.	+1	result parm_cd
ReqPush	Put a stored parameter result onto the stack. If the result is not found, DQI is Q or X, or value is null: abort the computation.	+1	result parm_cd
PushUncens	Get an uncensored stored parameter result. If the result is not found, DQI is Q or X, or value is null: a missing result is placed on the stack. If the remark is “<”:the result is set to an unremarked zero. Otherwise, the stored result is placed on the stack.	+1	result parm_cd
ConstPush	Put a constant value onto the stack. (Constants are assigned a special DQI code of “#” to distinguish them from measured values.)	+1	float

Operator code	Description	Effect on stack	Operand
GetMEQ	Put the milliequivalent (MEQ) factor for the specified parameter code from ion_bal reference table.	+1	ion_bal parm_cd
Calc	Put the result for another calculated parameter onto the stack. The user-specified output-precedence rules govern whether this result is stored or calculated.	+1	algorithm parm_cd
select	Retain either the lower- or upper-stack entry, and remove the other one. If lower entry is null or missing: output the upper entry. If both entries are null or missing: output missing. If one entry is a constant and the other entry measured: used the measured result. If both entries are non-null and non-missing: select based on remark hierarchy—*blank*, S, A, E, R, <, >, V. If both entries are non-null and nonmissing and tied remark hierarchy: select based on DQI hierarchy. Measured values are always preferred versus constant values, which are preferred only to missing values. If both entries are non-null and nonmissing and tied remark and DQI hierarchy: select the non-zero entry. Otherwise: select the upper-stack entry.	-1	none
Missing value operators			
!	Abort computation if both upper- and lower-stack results are missing.	0	none
missing<0	Reset negative lower-stack result to missing.	0	none
missing=	Replace missing lower-stack result with the specified operand, with DQI=R and no remark.	0	float
<	Set lower-stack result to missing if less than upper result.	-1	none

(The “lower-stack result” refers to the result most recently placed on the stack. The “upper-stack result” refers to the result placed on the stack prior to the lower-stack result. Any result with a DQI of “Q” or “X” (reviewed and rejected) is treated as missing. Any operation that generates an overflow, an underflow, or an undefined result places a missing value on the stack. If the operator requires one operand (eg. ln) and the operand is a missing result or a null-valued result, then the output of the operation is a “missing” result. If an operator requires two operands to

complete the operation, but either operand is missing or null-valued, the result from that operator is a "missing" result. "Effect on Stack" indicates the addition(+1) or removal(-1) of a value on the stack.)

Footnotes: Operations that involve a result(s) with a less-than or greater-than remark code(s) ("<" or ">") follow rules that govern inequalities. Operations involving two results not qualified with inequality-remark codes yield a result with the remark code that is first in the hierarchy: (V, R, E, A, S, or *blank)*. Operations involving two results yield the DQI code that is first in the hierarchy: (X, P, O, U, Q, I, S, A, R, or #), except as noted above.

Example Trace of a Sodium Adsorption Ratio Computation

The equation for the sodium adsorption ratio is below.

$$SAR = \frac{(Na * 0.0435)}{SQRT\ [\ \{\ (Ca * 0.0499) + (Mg * 0.08229)\ \}\ /\ 2\ ]}$$

An example trace of the computation is below, with annotations in blue.

```
Program: qwtable                                  Date: 03-10-2010 09:31
================================================================================
Record number: 99503349                           DB_no: 01

Parameter code: 00931  Sodium Adsrptn Ratio  Parameter being calculated

Step: 1  Operation:  ReqPush           Operand: 00930  Sodium, wf, mg/l
           Load: Sodium, wf, Exit if missing
           ------ RPN stack ------
           RMK        Value    DQI
            <     0.200000000   A      Sodium is censored

Step: 2  Operation:  GetMEQ            Operand: 00930  Sodium, wf, mg/l
           Load Na meq
           ------ RPN stack ------
           RMK        Value    DQI
            <     0.200000000   A
                  0.043500000   #

Step: 3  Operation:  *                 Operand:
           Multiply
           ------ RPN stack ------
           RMK        Value    DQI
            <     0.008700000   A      Sodium in milliequivalents/liter



Step: 4  Operation:  ReqPush           Operand: 00915  Calcium, wf, mg/l
           Load: Calcium, wf, Exit if missing
           ------ RPN stack ------
           RMK        Value    DQI
            <     0.008700000   A
                  2.400000000   A
```

```
Step: 5  Operation:  GetMEQ            Operand: 00915  Calcium, wf, mg/l
           Load Ca meq
           ------ RPN stack ------
           RMK        Value    DQI
            <     0.008700000   A      Sodium in milliequivalents/liter
                  2.400000000   A      Calcium in milligrams/liter
                  0.049900000   #

Step: 6  Operation:  *                 Operand:
           Multiply
           ------ RPN stack ------
           RMK        Value    DQI
            <     0.008700000   A      Sodium in milliequivalents/liter
                  0.119760000   A      Calcium in milliequivalents/liter

Step: 7  Operation:  ReqPush           Operand: 00925 Magnesium, wf, mgl
           Load: Magnesium, wf, Exit if missing
           ------ RPN stack ------
           RMK        Value    DQI
            <     0.008700000   A      Sodium in milliequivalents/liter
                  0.119760000   A      Calcium in milliequivalents/liter
                  0.210000000   A

Step: 8  Operation:  GetMEQ            Operand: 00925 Magnesium, wf, mgl
           Load Mg meq
           ------ RPN stack ------
           RMK        Value    DQI
            <     0.008700000   A      Sodium in milliequivalents/liter
                  0.119760000   A      Calcium in milliequivalents/liter
                  0.210000000   A      Magnesium in milligrams/liter
                  0.082290000   #

Step: 9  Operation:  *                 Operand:
           Multiply
           ------ RPN stack ------
           RMK        Value    DQI
            <     0.008700000   A      Sodium in milliequivalents/liter
                  0.119760000   A      Calcium in milliequivalents/liter
                  0.017280900   A      Magnesium in milliequivalents/L

Step: 10  Operation:  +                Operand:
           Add
           ------ RPN stack ------
           RMK        Value    DQI
            <     0.008700000   A      Sodium in milliequivalents/liter
                  0.137040900   A      Calcium+Magnesium in
                                       milliequivalents/liter


Step: 11  Operation:  ConstPush         Operand:  2.000000000
           Constant
           ------ RPN stack ------
           RMK        Value    DQI
            <     0.008700000   A       Sodium in milliequivalents/liter
                  0.137040900   A       Calcium+Magnesium in
```

```
                                        milliequivalents/liter
                  2.000000000   #

Step: 12  Operation:  /                 Operand:
           Divide
           ------ RPN stack ------
           RMK        Value    DQI
            <     0.008700000   A       Sodium in milliequivalents/liter
                  0.068520450   A       Calcium+Magnesium in
                                        milliequivalents/(2 * liter)

Step: 13  Operation:  ConstPush         Operand:  0.500000000
           Constant
           ------ RPN stack ------
           RMK        Value    DQI
            <     0.008700000   A       Sodium in milliequivalents/liter
                  0.068520450   A       Calcium+Magnesium in
                                        milliequivalents /(2 * liter)
                  0.500000000   #

Step: 14  Operation:  **                Operand:
           Exponentiate
           ------ RPN stack ------
           RMK        Value    DQI
            <     0.008700000   A       Sodium in milliequivalents/liter
                  0.261764111   A       Denominator

Step: 15  Operation:  /                 Operand:
           Divide
           ------ RPN stack ------
           RMK        Value    DQI
            <     0.033236031   A       Sodium adsorption ratio

Step: 16  Operation:  missing<0         Operand:
           Set to missing if result < 0
           ------ RPN stack ------
           RMK        Value    DQI
            <     0.033236031   A
```

4.5 Appendix E. EPA Drinking-Water Alert Limits

Parameter codes that are allowed for new data entry are compared to the EPA primary and secondary drinking water standards. Parameter codes that match any of the EPA regulated constituents are listed in this table and are included in the NWIS alert limit file. Exceptions are parameters with names that indicate the results are calculated, estimated by regression parameters, or are constituent loads.

In some cases, a parameter may represent one or more alert limits (e.g. nitrate + nitrite) or may represent one constituent in an EPA standard that has multiple constituents (e.g. chloroform, which is a component of the EPA's total trihalomethane standard). The NWIS alert in these cases is the greater of the applicable EPA standards.

[MCL, maximum contaminant level; MRDL, maximum residual disinfectant levels; TT, treatment technique; SDWR, secondary drinking water regulations]

Parameter code	Parameter name	Alert limit (concentration in mg/L, unless otherwise noted)	Alert limit type (MCL, unless otherwise noted)
National primary drinking water standards			
01095 01096 01097 90932 91019 99897	Antimony	0.006	
00978 01000 01001 01002 62984 99033 99034	Arsenic	0.010	
01005 01006 01007 01009 62985 90934 91020	Barium	2	

Parameter code	Parameter name	Alert limit (concentration in mg/L, unless otherwise noted)	Alert limit type (MCL, unless otherwise noted)
00998 01010 01011 01012 90935 91021	Beryllium	0.004	
01025 01026 01027 01113 62986 90938 91024	Cadmium	0.005	
50060 50064 50066 99301	Chlorine	4.0	MRDL
01030 01031 01032 01033 01034 01118 62988 78247 80357 90942 91026	Chromium	0.1	
01040 01041 01042 01119 62989 90944 91028	Copper	1.3	TT

Parameter code	Parameter name	Alert limit (concentration in mg/L, unless otherwise noted)	Alert limit type (MCL, unless otherwise noted)
00717 00718 00720 00722 00723 34325 66703 66704 66705 66706 67315 67316 99896	Cyanide	0.2	
00950 00951 82299 91002	Fluoride	4	
01049 01050 01051 01114 62993 90958 91032	Lead	0.015	TT
50286 50287 62976 71890 71895 71900 71901 90963	Mercury	0.002	
00628 00630 00631 99889	Nitrogen, nitrite + nitrate as N	10	
71850 71851	Nitrogen, nitrate as NO_3	44.268	
99130 99136	Nitrogen, nitrate as NO_3	713.942 µmol/L	

Parameter code	Parameter name	Alert limit (concentration in mg/L, unless otherwise noted)	Alert limit type (MCL, unless otherwise noted)
00618 00620 64832 76008 91003 99121 99124 99137	Nitrogen, nitrate as N	10	
00613 00615 76009 99116 99125	Nitrogen, nitrite as N	1.0	
71855 71856	Nitrogen, nitrite as NO_2	3.2845	
01145 01146 01147	Selenium	0.05	
01057 01058 01059 01128	Thallium	0.002	
46342 61619 63410 65064 77825 82695	Alachlor	0.002	
39630 39632 50290 63411 63524 65065 65150 99775	Atrazine	0.003	
34030 34235 34236	Benzene	0.005	

Parameter code	Parameter name	Alert limit (concentration in mg/L, unless otherwise noted)	Alert limit type (MCL, unless otherwise noted)
34247 34248 34249 62111	Benzo(a)pyrene	0.0002	
49309 63418 65070 81405 82615 82674 82692	Carbofuran	0.04	
32102 34297 34298	Carbon tetrachloride (tetrachloromethane)	0.005	
39062 39065 39348 39350 39352 39810 62665 62786 62956 62957 63144 65156 65164	Chlordane	0.002	
34301 34302 34303	Chlorobenzene	0.1	
39730 39732 39733 68500 82697	2,4-D	0.07	
30200 50321	Dalapon	0.2	
30203 77651	1,2-Dibromoethane (Ethylene dibromide; EDB)	0.00005	

Parameter code	Parameter name	Alert limit (concentration in mg/L, unless otherwise noted)	Alert limit type (MCL, unless otherwise noted)
38760 82625	1,2-Dibromo-3-chloropropane	0.0002	
34536 34537 34538	1,2-Dichlorobenzene (o-Dichlorobenzene)	0.6	
34571 34572 34573 62094	1,4-Dichlorobenzene (p-Dichlorobenzene)	0.075	
32103 34531 34532 34533	1,2-Dichloroethane	0.005	
34501 34502 34503	1,1-Dichloroethylene (1,1-Dichloroethene)	0.007	
77093	cis-1,2-Dichloroethene (1,2-dichloroethylene)	0.07	
34546 34547 34548 45617	trans-1,2-Dichloroethene (1,2-Dichloroethylene)	0.1	
34423 34424 34425	Dichloromethane	0.005	
34541 34542 34543	1,2-Dichloropropane	0.005	
77903	Di(2-ethylhexyl) adipate [bis(2-ethylhexyl) adipate]	0.4	
39100 39103 39104	Bis(2-ethylhexyl) phthalate	0.006	
30191 49301 82226	Dinoseb	0.007	

Parameter code	Parameter name	Alert limit (concentration in mg/L, unless otherwise noted)	Alert limit type (MCL, unless otherwise noted)
34675 34676 34677 62176 62192 62200 62217	Dioxin (2,3,7,8-Tetrachlorodibenzo-p-dioxin)	30×10^{-9}	
04443 50323	Diquat	0.02	
38926 65215	Endothal	0.1	
39390 39391 39392	Endrin	0.002	
34371 34372 34373	Ethylbenzene	0.7	
39941 62722 68415 99960	Glyphosate	0.7	
82728 82733 99309 99310 99311 99312	Haloacetic acids (HAA5)	0.06	
39410 39411 39412	Heptachlor	0.0004	
39420 39421 39422 62729	Heptachlor epoxide	0.0002	
34401 34402 39700 65158 82621	Hexachlorobenzene	0.001	

Parameter code	Parameter name	Alert limit (concentration in mg/L, unless otherwise noted)	Alert limit type (MCL, unless otherwise noted)
34386 34387 34388	Hexachlorocyclopentadiene	0.05	
39340 39341 39342 39782 62737 65159 68778	Lindane	0.0002	
39480 62745 82350 82351	Methoxychlor	0.04	
38865 38866 68664 82613	Oxamyl	0.2	
04114 30335 39516 39517 39518 62959 75983 75984 76011 76012	Polychlorinated biphenyls (PCBs)	0.0005	
34459 34460 39032 62144	Pentachlorophenol	0.001	
39720 49291	Picloram	0.5	
04035 39025 39055 63489 65105 65152	Simazine	0.004	

Parameter code	Parameter name	Alert limit (concentration in mg/L, unless otherwise noted)	Alert limit type (MCL, unless otherwise noted)
77128	Styrene	0.1	
34475 34476 34477 62150	Tetrachloroethene	0.005	
34010 34481 34482	Toluene	1	
39400 39401 39402 65166	Toxaphene	0.003	
39760 39762 39763	Silvex	0.05	
34551 34552 34553	1,2,4-Trichlorobenzene	0.07	
34506 34507 34508	1,1,1-Trichloroethane	0.2	
34511 34512 34513	1,1,2-Trichloroethane	0.005	
34485 34486 39180	Trichloroethylene	0.005	

Parameter code	Parameter name	Alert limit (concentration in mg/L, unless otherwise noted)	Alert limit type (MCL, unless otherwise noted)
32101 32104 32105 32106 34288 34289 34307 34308 34328 34329 62116 82080 90851 90867 99305 99306 99307	Total Trihalomethanes (TTHM)	0.08	
34493 34494 39175	Vinyl Chloride	0.002	
77133 77134 77135 78132 80353 81551 81710 81711 85795	Xylenes (total)	10	

Parameter code	Parameter name	Alert limit (concentration in mg/L, unless otherwise noted)	Alert limit type (MCL, unless otherwise noted)
01501 01503 01505 01515 01516 01519 04126 04127 49290 49470 62636 62639 63014 63016 63018	Alpha particles	15 picocuries per liter (pCi/L)	
09501 09503 09505 09511 11501 50837 50838 50839 81366 81368	Radium 226 and Radium 228	5 pCi/L	
22703 22704 22705 22706 28011 63032 80020 90994	Uranium	0.030	

National secondary drinking water regulations			
01104 01105 01106 01107 04096 62983 90931 91018	Aluminum	0.05 - 0.2 (alert limit used in QWDATA = 0.2)	SDWR
00940 91001 99117 99220	Chloride	250	SDWR
00080 00081	Color	15 color units	SDWR
01040 01041 01042 01119 62989 91028	Copper	1.0	SDWR
00950 00951 82299 91002	Fluoride	2.0	SDWR
01044 01045 01046 01047 01048 04097 46568 61940 62982 63673 67314 71885 90956 91031 99032 99114 99115 99128 99129	Iron	0.3	SDWR

01054 01055 01056 01123 62990 71883 90962 91035	Manganese	0.05	SDWR
00085 00086	Odor	3 Threshold odor number	SDWR
01075 01076 01077 01079 90982 91039 99895	Silver	0.1	SDWR
00945 00946 91005 99113 99127 99890	Sulfate	250	SDWR
70300	Total dissolved solids (residue)	500	SDWR
01090 01091 01092 01094 62995 90998 91045	Zinc	5	SDWR

4.6 Appendix F. Format for Batch Input of Data

The batch-file format for input of data into the water-quality system was established in NWIS 4.1. The previous format used "1 and * card" images (See *Open-File Report 89-617*, p. 4–7 to 4–9, for a description). The format uses two tab-delimited files. One file contains sample-level information including a sample integer **(SINT)** that is used only to link file records between the two files. The second file contains the results and all of the result-level attributes. In the case of null values, the tabs must be provided **(i.e., <TAB><TAB>)**. For all fields except value qualifiers and null-value qualifiers, entries will be changed to uppercase during the batch entry process. Examples are included in this appendix as a reference for those users who will be entering data by batch.

Sample-level information batch-file format

Column order	Column name	Description	NWIS format	Mandatory field?	Null-value behavior
1	Sample Integer	Integer used only to link sample and result information between the two batch files	Not stored in NWIS	Y	--
2	User Code	Code used by laboratories to identify sample customer NWIS host	Not stored in NWIS	N	--
3	Agency_cd	Agency code	Char (5)	Y	Set to default (USGS).
4	Site_no	Station identification number	Char (15)	Y	Not allowed.
5	Sample_start_dt	Sample start date	Date yyyymmddhhmm	Y	Not allowed.
6	Sample_end_dt	Sample end date	Date yyyymmddhhmm	N	Set to blank.
7	Medium_cd	Medium code	Char (3)	Y	Not allowed.
8	Lab_id	Lab identification number	Char (7)	N	---
9	Project_cd	Project code	Char (9)	N	---
10	Aqfr_cd	Aquifer code	Char (8)	N	---
11	Samp_type_cd	Sample type	Char (1)	Y	Set to default (9).
12	Anl_stat_cd	Analysis status	Char (1)	Y	Set to default (U) for environmental database; set to default (I) for quality-assurance database.

Sample-level information batch-file format					
Column order	**Column name**	**Description**	**NWIS format**	**Mandatory field?**	**Null-value behavior**
13	Blank column Not used, but must be present	---	Char (1)	N	---
14	Hyd_cond_cd	Hydrologic condition	Char (1)	Y	If medium code = WS(Q), SS(Q), SB(Q), BH(Q), BY(Q), BE(Q), BI(Q), or BD(Q), set to default (9); else set to X.
15	Hyd_event_cd	Hydrologic event	Char (1)	Y	Set to default (9); if medium code = OA(Q), WG(Q), BA(Q), BP(Q), WI(Q), ST(Q), SC(Q), SO(Q), SL(Q), or WU(Q), set to X.
16	Tu_id	Tissue sample identifier	Integer	Y/N	Ignored if medium is not BA, BAQ, BP, or BPQ.
17	Body_part_id	Body part code	Integer	Y/N	Ignored if medium is not BA, BAQ, BP, or BPQ.
18	Lab_smp_com	Lab sample comment	Varchar (300)	N	---
19	Field_smp_com	Field sample comment	Varchar (300)	N	---
20	Sample_tz_cd	Sample time datum	Char (6)	N	Populated with SITEFILE setting
21	Tm_datum_rlblty_cd	Time-datum reliability code	Char (1)	N	Set to default “K.”
22	Coll_ent_cd	Collecting agency code	Char (8)	N	Set to default if set in qw.conf file.
23	Reserved for sample_id	---	Bigint	N	---
24	Reserved for sidno_party_cd	---	Char (3)	N	---

Result-level information batch-file format					
Column order	**Column name**	**Description**	**NWIS format**	**Mandatory field?**	**Null-value behavior**
1	Sample Integer	Integer used only to link sample and result information between the two batch files	Not stored in NWIS	Y	---
2	Parameter_cd	Parameter code	Char (5)	Y	---
3	Result_va	Result value	Float	N	"#" can be used to set a result to null as long as a null remark or null qualifier is present.
4	Remark_cd	Remark code	Char (1)	N	---
5	Blank column Not used, but must be present	---	Char (1)	N	---
6	Meth_cd	Method code	Char (5)	N	---
7	Result_rd	Rounding code	Char (1)	N	---
8	Val_qual_cd	Value qualifiers*	Char (3)	N	---
9	Rpt_lev_va	Report level	Float	N	---
10	Rpt_lev_cd	Report level type	Varchar (6)	N	---
11	Dqi_cd	Data quality indicator	Char (1)	Y	Set to default (S)
12	Null_val_qual_cd	Null-value qualifier	Char (1)	N	---
13	Prep_set_no	Preparation set number	Char (12)	N	---
14	Anl_set_no	Analytical set number	Char (12)	N	---
15	Anl_dt	Analysis date	Date yyyymmdd	N	---
16	Prep_dt	Preparation date	Date yyyymmdd	N	---
17	Lab_result_com	Laboratory result comment	Varchar (300)	N	---
18	Field_result_com	Field result comment	Varchar (300)	N	---
19	Lab_std_dev	Laboratory standard deviation	Float	N	---
20	Anl_ent_cd	Analyzing entity code	Char (8)	N	---

* -- Laboratory value-qualifier codes can be overwritten during batch. Field value-qualifier codes (f, e, &, g, j, and k) cannot be overwritten during batch unless the “field+lab” option in the user-specified batch behavior mode is chosen.

Tab-delimited batch-file pairs (qwsample and qwresult), are difficult to review on the screen without using the batch review or batch editor programs. To view an example of the batch-file pair see the rejected.* files displayed in *Appendix C*. The examples below are a batch-file pair that has been reformatted for this document.

Sample-level batch file format example

SINT	User code	Agency code	Site number	Sample start date	Sample end date	Medium code	Laboratory ID	Project code	Aquifer code	Sample type code	Analysis status code	*blank column*	Hydrologic condition code	Hydrologic event code	Tissue ID	Body part code	Lab sample comment	Field sample comment	Time datum	Time-datum reliability	Collecting agency	*blank column*	*blank column*
1	MT	USGS	462448104303901	20010521		WG	0640017	460800100	211FHHC	9	U		X	X			comments	comments	CST	E	USGS-WRD		
2	MT	USGS	06334630	200106041200	200106220345	WS	0640024	nasqan		H	U		9	9					CDT	K	USGS-WRD		
3	MT	USGS	06334630	200106041200		BA	0640024	460800100		9	U		9	9	80904	018							

Result-level batch file format example

SINT	Parameter code	Result value	Remark code	*blank column*	Method code	Rounding code	Value qualifiers	Report level	Report level code	DQI code	Null value qualifier code	Preparation set number	Analytical set number	Analysis date	Preparation date	Lab result comment	Field result comment	Lab Standard Deviation	Analyzing entity
1	00940	18			IC022	2		0.08	mrl	S		200114801	AKTO01150A	20010530	20010528	result comment	result comment	0.1	USGSNWQL
1	00945	170				2		0.11	mrl	S		200114801	AKTO01150A	20010530	20010528			0.2	USEPA
1	01020	400			IP107	2		13	mrl	S		200114801	AKTO01150A	20010530	20010528			0.1	
2	00631	0.020			COL41	3		0.005	mrl	S		200115903	1200101162A	20010611	20010608				
2	00666	0.06	<		KJ005	2	s	0.06	mrl	S		200115903	1200101162A	20010611	20010608			0.2	
2	00677	0.03	E		PHM04	2		0.01	mrl	S		200115903	1200101162A	20010611	20010608			0.2	USGSNWQL
3	49258	#				2		0.10	mrl	S	r	200115903	GCMS162A	20010611	20010608				
3	39350	0.1	<		GC096	2	xiz	0.10	mrl	S		200115903	GCMS162A	20010611	20010608			0.1	
3	39371	0.08			GC054	2		0.01	mrl	S		200115903	GCMS162A	20010611	20010608				USEPA

4.7 Appendix G. Format for Input Files

Section	Description
3.2.1	Format required for field forms
3.3.1.1, 3.7.6	Station identification numbers for retrieval
3.3.4, 3.4.3, 3.4.7, 3.7.6	Record number file for retrieval
3.3.4, 3.4.7	Station identification number, sample date, sample time, and sample medium code for retrieval
3.3.5	Format required for user-specified alert limit files
3.4.3.3, 3.6.7, 3.7.6	Parameter code file
3.4.3.4	Censoring of zero values
3.4.3.4	Recensoring of stored values
3.4.7	Custom output-rounding file
3.4.7	Custom output-column-heading file
3.6.8	Parameter codes for parameter-method table retrieval

Format Required for Field Forms

[Lines that begin with a "'#" are comment lines that can be inserted at the beginning of the field form. The first line with a "#" will be the name of the field form shown when field forms are listed to the screen. These comment lines are optional]

1–5	Parameter code
6–10	Method code (optional–five characters)
12–36	Parameter names or descriptions
40	"Y" indicates that parameter is mandatory
42-49	Analyzing entity code (eight-character code; see Appendix K for allowed entries)

List of Station Identification Numbers for Retrieval

[Station number must be left justified]

Column	Description
1–5	Agency code
6–-20	Station number

Record Number File Format for Retrievals

Column	Description
1–8	Record number
9–10	Database number (if multiple databases are being used)

List of Station Identification Number, Sample Date, Sample Time, and Sample Medium Code

[Station number must be left justified]

Column	Description
1–5	Agency code
6–7	[not used]
8–22	Station number
23–46	Sample date
23–26	Begin year (YYYY)
27–28	Begin month (MM)
29–30	Begin day (DD)
31–34	Begin time (2400 hour system)
35–38	End year (YYYY)
39–40	End month (MM)
41–42	End day (DD)
43–46	End time (2400 hour system)
47–49	Medium code

Format Required for User-Specified Alert Limit Files

[The fields in this file must be separated with a tab character. Lines that begin with a"'#" are comment lines that can be inserted at the beginning of the user-specified alert limit file. The first line of the alert limit form should be used to document the purpose of the alert limit form by placing a "#" in the first column. Additional lines can be used for comments if a "#" is in the first column.]

Description	Column-width
Parameter code	5
Comparison operator (one of: GT, GE, LT, LE)	2
Numeric comparison	No limit
Text description	No limit

Example

```
#Title: Florida Department of Environmental Regulation Class III Waters
00950 <tab> GE <tab> 2.0 <tab> Fluoride FLDEP Aquatic Life
00300 <tab> LE <tab> 4.0 <tab> Dissolved Oxygen FLDEP Aquatic Life
34513 <tab> GT <tab> 5.0 <tab> 1,1,2-Trichloroethane NAWQA HBSL
```

Parameter Code File

Column	Description
1–5	Parameter code
6	(Not used)
7–11	Method code (if needed)
12–80	Parameter name (if desired)

Format of File for Censoring of Zero Values:

Column	Description
1–5	Parameter code
6–14	Recensoring value

Format of File for Recensoring Information:

Column	Description
1–5	Parameter code
6–10	Method code (if needed)
11–19	Recensoring value

Format of Custom Output-Rounding File:

Column	Description
1–5	Parameter code
6	(Not used)
7–11	Method code (optional)
12	(Not used)
13	Rounding code (one of: D, U, or N to indicate Default, User-defined, or None)

Format of Custom Output-Column-Heading File:

Column	Description
1–5	Parameter code
6–175	Parameter column heading text
176–325	Table headnote definition

Parameter Codes for Parameter-Method Table Retrieval:

Column	Description
1–5	Parameter code
6	(Not used)
7–11	Method code (optional)
12	(Not used)
13	Dash (optional—required if retrieving a range of parameter codes)
14	(Not used)
15–19	Parameter code (optional—required if retrieving a range of parameter codes)
20	(Not used)
21–25	Method code (optional)

4.8 Appendix H. Parameters that Allow Negative Values

Parameter code	Parameter name
00001	Location in cross section, distance from right bank looking upstream, feet
00002	Location in cross section, distance from right bank looking upstream, percent
00009	Location in cross section, distance from left bank looking downstream, feet
00010	Temperature, water, degrees Celsius
00011	Temperature, water, degrees Fahrenheit
00012	Evaporation temperature, 48 inch pan, degrees Celsius
00013	Evaporation temperature, 24 inch pan, degrees Celsius
00014	Wet bulb temperature, degrees Celsius
00020	Temperature, air, degrees Celsius
00021	Temperature, air, degrees Fahrenheit
00042	Altitude, feet above mean sea level
00055	Stream velocity, feet per second
00056	Flow rate of well, gallons per day
00058	Flow rate of well, gallons per minute
00059	Flow rate, instantaneous, gallons per minute
00060	Discharge, cubic feet per second
00061	Discharge, instantaneous, cubic feet per second
00062	Elevation of reservoir water surface above datum, feet
00065	Gage height, feet
00072	Stream stage, meters
00090	Oxidation reduction potential, reference electrode not specified, millivolts
00149	Alpha-emitting isotopes of radium, water, filtered, picocuries per liter
00400	pH, water, unfiltered, field, standard units
00401	Cations minus anions, water, milliequivalents
00403	pH, water, unfiltered, laboratory, standard units
00409	Acid neutralizing capacity, water, unfiltered, Gran titration, microequivalents per liter
00410	Acid neutralizing capacity, water, unfiltered, fixed endpoint (pH 4.5) titration, field, milligrams per liter as calcium carbonate
00411	Acid neutralizing capacity, water, unfiltered, methyl orange endpoint (pH 3.1-4.4) titration, milligrams per liter as calcium carbonate
00413	Acid neutralizing capacity, water, unfiltered, Gran titration, milligrams per liter as calcium carbonate
00415	Acid neutralizing capacity, water, unfiltered, phenolphthalein endpoint (pH 8.5-9.0) titration, milligrams per liter as calcium carbonate
00416	Acid neutralizing capacity, water, unfiltered, incremental titration, laboratory, milligrams per liter as calcium carbonate
00417	Acid neutralizing capacity, water, unfiltered, fixed endpoint (pH 4.5) titration, laboratory, milligrams per liter as calcium carbonate
00418	Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, field, milligrams per liter as calcium carbonate
00419	Acid neutralizing capacity, water, unfiltered, incremental titration, field, milligrams per liter as calcium carbonate
00421	Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, laboratory, milligrams per liter as calcium carbonate

Parameter code	Parameter name
00431	Acid neutralizing capacity, water, unfiltered, milligrams per liter as calcium carbonate
00435	Acidity, water, unfiltered, milligrams per liter as calcium carbonate
00436	Mineral acidity, water, unfiltered, methyl orange endpoint (pH 3.1-4.4) titration, milligrams per liter as calcium carbonate
00437	Carbon dioxide acidity, water, unfiltered, phenolphthalein endpoint (pH 8.5-9.0) titration, milligrams per liter as calcium carbonate
01501	Alpha radioactivity, water, unfiltered, picocuries per liter
01503	Alpha radioactivity, water, filtered, picocuries per liter
01505	Alpha radioactivity, suspended sediment, picocuries per liter
01515	Gross alpha radioactivity, water, filtered, natural uranium curve, picocuries per liter
01516	Gross alpha radioactivity, suspended sediment, natural uranium curve, picocuries per liter
01519	Gross alpha radioactivity, water, unfiltered, picocuries per liter
03501	Beta radioactivity, water, unfiltered, picocuries per liter
03503	Beta radioactivity, water, filtered, picocuries per liter
03505	Beta radioactivity, suspended sediment, picocuries per liter
03515	Gross beta radioactivity, water, filtered, Cs-137 curve, picocuries per liter
03516	Gross beta radioactivity, suspended sediment, Cs-137 curve, picocuries per liter
03519	Gross beta radioactivity, water, unfiltered, Cs-137 curve, picocuries per liter
03521	Carbon-13/Carbon-12 ratio in organic fraction, soil or rock, per mil
03522	Sulfur-34/Sulfur-32 ratio in sulfide, water, filtered, per mil
03523	Sulfur-34/Sulfur-32 ratio in sulfide, bed sediment, per mil
04102	Beta radioactivity, bed sediment, Sr-90/Y-90 curve, dry weight, picocuries per gram
04115	PCBs, water, dissolved, recoverable, grams per day
04116	PCBs, water, unfiltered, recoverable, grams per day
04125	Alpha radioactivity, bed sediment, Th-230 curve, dry weight, picocuries per gram
04126	Alpha radioactivity, water, filtered, Th-230 curve, picocuries per liter
04127	Alpha radioactivity, suspended sediment, Th-230 curve, picocuries per liter
00431	Acid neutralizing capacity, water, unfiltered, milligrams per liter as calcium carbonate
00435	Acidity, water, unfiltered, milligrams per liter as calcium carbonate
00436	Mineral acidity, water, unfiltered, methyl orange endpoint (pH 3.1-4.4) titration, milligrams per liter as calcium carbonate
00437	Carbon dioxide acidity, water, unfiltered, phenolphthalein endpoint (pH 8.5-9.0) titration, milligrams per liter as calcium carbonate
01501	Alpha radioactivity, water, unfiltered, picocuries per liter
01503	Alpha radioactivity, water, filtered, picocuries per liter
01505	Alpha radioactivity, suspended sediment, picocuries per liter
01515	Gross alpha radioactivity, water, filtered, natural uranium curve, picocuries per liter
01516	Gross alpha radioactivity, suspended sediment, natural uranium curve, picocuries per liter
01519	Gross alpha radioactivity, water, unfiltered, picocuries per liter
03501	Beta radioactivity, water, unfiltered, picocuries per liter
03503	Beta radioactivity, water, filtered, picocuries per liter
03505	Beta radioactivity, suspended sediment, picocuries per liter
03515	Gross beta radioactivity, water, filtered, Cs-137 curve, picocuries per liter
03516	Gross beta radioactivity, suspended sediment, Cs-137 curve, picocuries per liter
03519	Gross beta radioactivity, water, unfiltered, Cs-137 curve, picocuries per liter

Parameter code	Parameter name
03521	Carbon-13/Carbon-12 ratio in organic fraction, soil or rock, per mil
03522	Sulfur-34/Sulfur-32 ratio in sulfide, water, filtered, per mil
03523	Sulfur-34/Sulfur-32 ratio in sulfide, bed sediment, per mil
04102	Beta radioactivity, bed sediment, Sr-90/Y-90 curve, dry weight, picocuries per gram
04115	PCBs, water, dissolved, recoverable, grams per day
04116	PCBs, water, unfiltered, recoverable, grams per day
04125	Alpha radioactivity, bed sediment, Th-230 curve, dry weight, picocuries per gram
04126	Alpha radioactivity, water, filtered, Th-230 curve, picocuries per liter
04127	Alpha radioactivity, suspended sediment, Th-230 curve, picocuries per liter
07000	Tritium, water, unfiltered, picocuries per liter
07005	Tritium, water, filtered, picocuries per liter
07010	Tritium, suspended sediment, picocuries per liter
07012	Tritium in water molecules, tritium units
07050	Calcium-45, water, filtered, picocuries per liter
07052	Calcium-45, suspended sediment, picocuries per liter
07054	Calcium-45, water, unfiltered, picocuries per liter
07060	Iron-59, water, filtered, picocuries per liter
07062	Iron-59, suspended sediment, picocuries per liter
07064	Iron-59, water, unfiltered, picocuries per liter
07100	Selenium-75, water, filtered, picocuries per liter
07102	Selenium-75, suspended sediment, picocuries per liter
07104	Selenium-75, water, unfiltered, picocuries per liter
07120	Silver-110, water, filtered, picocuries per liter
07122	Silver-110, suspended sediment, picocuries per liter
07124	Silver-110, water, unfiltered, picocuries per liter
07140	Sulfur-35, water, filtered, picocuries per liter
07000	Tritium, water, unfiltered, picocuries per liter
07005	Tritium, water, filtered, picocuries per liter
07010	Tritium, suspended sediment, picocuries per liter
07012	Tritium in water molecules, tritium units
07050	Calcium-45, water, filtered, picocuries per liter
07052	Calcium-45, suspended sediment, picocuries per liter
07054	Calcium-45, water, unfiltered, picocuries per liter
07060	Iron-59, water, filtered, picocuries per liter
07062	Iron-59, suspended sediment, picocuries per liter
07064	Iron-59, water, unfiltered, picocuries per liter
07100	Selenium-75, water, filtered, picocuries per liter
07102	Selenium-75, suspended sediment, picocuries per liter
07104	Selenium-75, water, unfiltered, picocuries per liter
07120	Silver-110, water, filtered, picocuries per liter
07122	Silver-110, suspended sediment, picocuries per liter
07124	Silver-110, water, unfiltered, picocuries per liter
07140	Sulfur-35, water, filtered, picocuries per liter
07142	Sulfur-35, suspended sediment, picocuries per liter
07144	Sulfur-35, water, unfiltered, picocuries per liter
09501	Radium-226, water, unfiltered, picocuries per liter
09503	Radium-226, water, filtered, picocuries per liter
09505	Radium-226, suspended sediment, picocuries per liter

Parameter code	Parameter name
09507	Radium-226, bed sediment, dry weight, picocuries per gram
09510	Alpha-emitting isotopes of radium, water, filtered, planchet count, picocuries per liter
09511	Radium-226, water, filtered, radon method, picocuries per liter
11501	Radium-228, water, unfiltered, picocuries per liter
11506	Radium-224, bed sediment, dry weight, picocuries per gram
13501	Strontium-90, water, unfiltered, picocuries per liter
13503	Strontium-90, water, filtered, picocuries per liter
13505	Strontium-90, suspended sediment, picocuries per liter
15501	Strontium-89, water, unfiltered, picocuries per liter
15504	Strontium-89, water, filtered, picocuries per liter
15507	Strontium-90, bed sediment, dry weight, picocuries per gram
17501	Lead-210, water, unfiltered, picocuries per liter
17503	Lead-210, water, filtered, picocuries per liter
17505	Lead-210, suspended sediment, picocuries per liter
17507	Lead-210, bed sediment, dry weight, picocuries per gram
17517	Lead-212, water, unfiltered, picocuries per liter
17519	Lead-214, water, unfiltered, picocuries per liter
18501	Iodine-129, water, unfiltered, picocuries per liter
19501	Polonium-210, water, unfiltered, picocuries per liter
19503	Polonium-210, water, filtered, picocuries per liter
19505	Polonium-210, suspended sediment, picocuries per liter
19507	Polonium-210, bed sediment, dry weight, picocuries per gram
22001	Plutonium-238, water, filtered, picocuries per liter
22010	Plutonium-239, water, filtered, picocuries per liter
22012	Plutonium-238, water, unfiltered, picocuries per liter
22014	Plutonium-239, water, unfiltered, picocuries per liter
22016	Plutonium-238, bed sediment, picocuries per gram
22383	Bismuth-214, water, unfiltered, picocuries per liter
22450	Americium-241, bed sediment, dry weight, picocuries per gram
22501	Thorium-232, water, unfiltered, picocuries per liter
22503	Thorium/uranium isotope ratio, water, unfiltered, number
22505	Thorium-228, water, unfiltered, picocuries per liter
22601	Uranium-238, water, unfiltered, picocuries per liter
22603	Uranium-238, water, filtered, picocuries per liter
22606	Uranium-234, water, unfiltered, picocuries per liter
22610	Uranium-234, water, filtered, picocuries per liter
22612	Uranium-235, bed sediment, dry weight, picocuries per gram
22620	Uranium-235, water, filtered, picocuries per liter
22622	Uranium-235, water, unfiltered, picocuries per liter
22703	Uranium (natural), water, filtered, micrograms per liter
24501	Radium-224, water, unfiltered, picocuries per liter
26501	Thorium-230, water, unfiltered, picocuries per liter
26503	Thorium-230, water, filtered, picocuries per liter
26505	Thorium-230, suspended sediment, picocuries per liter
26507	Thorium-230, bed sediment, dry weight, picocuries per gram
26629	Thorium-228, bed sediment, dry weight, picocuries per gram
26631	Thorium-232, bed sediment, dry weight, picocuries per gram
27801	Niobium-95, water, unfiltered, picocuries per liter

Parameter code	Parameter name
27901	Ruthenium-103, water, unfiltered, picocuries per liter
28001	Ruthenium-106, water, unfiltered, picocuries per liter
28004	Apparent age, water, filtered, carbon-14, years before present
28005	Radiocesium, water, filtered, Cs-137 curve, picocuries per liter
28006	Radiocesium, suspended sediment, Cs-137 curve, picocuries per liter
28007	Radiocesium, water, unfiltered, Cs-137 curve, picocuries per liter
28008	Radioruthenium, water, filtered, Ru-106 curve, picocuries per liter
28009	Radioruthenium, suspended sediment, Ru-106 curve, picocuries per liter
28010	Radioruthenium, water, unfiltered, Ru-106 curve, picocuries per liter
28011	Uranium (natural), water, unfiltered, micrograms per liter
28012	Uranium (natural), water, unfiltered, picocuries per liter
28013	Uranium-234/uranium-238 ratio, water, filtered, number
28014	Uranium-234, bed sediment, dry weight, picocuries per gram
28016	Uranium-238, bed sediment, dry weight, picocuries per gram
28301	Iodine-131, water, unfiltered, picocuries per liter
28401	Cesium-137, water, unfiltered, picocuries per liter
28403	Cesium-137, water, filtered, picocuries per liter
28404	Cesium-137, suspended sediment, picocuries per liter
28410	Cesium-134, water, filtered, picocuries per liter
28412	Cesium-134, suspended sediment, picocuries per liter
28414	Cesium-134, water, unfiltered, picocuries per liter
28601	Barium-140, water, unfiltered, picocuries per liter
28701	Lanthanum-140, water, unfiltered, picocuries per liter
28801	Cerium-141, water, unfiltered, picocuries per liter
28901	Cerium-144, water, unfiltered, picocuries per liter
29301	Zinc-65, water, unfiltered, picocuries per liter
29501	Manganese-54, water, unfiltered, picocuries per liter
29601	Cobalt-60, water, unfiltered, picocuries per liter
29631	Scandium-46, water, filtered, picocuries per liter
29633	Scandium-46, suspended sediment, picocuries per liter
29635	Scandium-46, water, unfiltered, picocuries per liter
29801	Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, laboratory, milligrams per liter as calcium carbonate
29802	Alkalinity, water, filtered, Gran titration, field, milligrams per liter as calcium carbonate
29803	Alkalinity, water, filtered, Gran titration, laboratory, milligrams per liter as calcium carbonate
29813	Acid neutralizing capacity, water, unfiltered, Gran titration, field, milligrams per liter as calcium carbonate
29857	Actinium-228, water, unfiltered, picocuries per liter
29859	Actinium-228, water, filtered, picocuries per liter
29861	Silver-108, water, unfiltered, picocuries per liter
29863	Silver-108, water, filtered, picocuries per liter
29865	Americium-241, water, unfiltered, picocuries per liter
29867	Americium-241, water, filtered, picocuries per liter
29869	Barium-140, water, filtered, picocuries per liter
29871	Beryllium-7, water, unfiltered, picocuries per liter

Parameter code	Parameter name
29873	Beryllium-7, water, filtered, picocuries per liter
29875	Bismuth-214, water, filtered, picocuries per liter
29877	Cerium-141, water, filtered, picocuries per liter
29879	Curium-242, water, unfiltered, picocuries per liter
29881	Curium-242, water, filtered, picocuries per liter
29883	Curium-244, water, unfiltered, picocuries per liter
29885	Curium-244, water, filtered, picocuries per liter
29887	Cobalt-57, water, unfiltered, picocuries per liter
29889	Cobalt-57, water, filtered, picocuries per liter
29891	Cobalt-58, water, unfiltered, picocuries per liter
29893	Cobalt-58, water, filtered, picocuries per liter
29895	Chromium-51, water, filtered, picocuries per liter
29897	Cesium-144, water, unfiltered, picocuries per liter
29899	Cesium-144, water, filtered, picocuries per liter
29901	Europium-155, water, unfiltered, picocuries per liter
29903	Europium-155, water, filtered, picocuries per liter
29905	Hafnium-175, water, unfiltered, picocuries per liter
29907	Hafnium-175, water, filtered, picocuries per liter
29909	Hafnium-181, water, unfiltered, picocuries per liter
29911	Hafnium-181, water, filtered, picocuries per liter
29913	Iodine-129, water, filtered, picocuries per liter
29915	Iodine-131, water, filtered, picocuries per liter
29917	Iodine-133, water, unfiltered, picocuries per liter
29919	Iodine-133, water, filtered, picocuries per liter
29921	Lanthanum-140, water, filtered, picocuries per liter
29923	Molybdenum-95, water, unfiltered, picocuries per liter
29925	Molybdenum-95, water, filtered, picocuries per liter
29927	Molybdenum-99, water, unfiltered, picocuries per liter
29929	Molybdenum-99, water, filtered, picocuries per liter
29931	Sodium-24, water, unfiltered, picocuries per liter
29933	Sodium-24, water, filtered, picocuries per liter
29935	Niobium-95, water, filtered, picocuries per liter
29937	Neodymium-147, water, unfiltered, picocuries per liter
29939	Neodymium-147, water, filtered, picocuries per liter
29941	Neptunium-239, water, unfiltered, picocuries per liter
29943	Neptunium-239, water, filtered, picocuries per liter
29945	Lead-212, water, filtered, picocuries per liter
29947	Lead-214, water, filtered, picocuries per liter
29953	Ruthenium-103, water, filtered, picocuries per liter
29955	Antimony-124, water, unfiltered, picocuries per liter
29957	Antimony-124, water, filtered, picocuries per liter
29959	Antimony-125, water, unfiltered, picocuries per liter
29961	Antimony-125, water, filtered, picocuries per liter
29963	Strontium-91, water, unfiltered, picocuries per liter
29965	Strontium-91, water, filtered, picocuries per liter
29967	Technetium-99 (metastable), water, unfiltered, picocuries per liter
29969	Technetium-99 (metastable), water, filtered, picocuries per liter
29971	Tellurium-128, water, unfiltered, picocuries per liter

Parameter code	Parameter name
29973	Tellurium-128, water, filtered, picocuries per liter
29975	Tellurium-132, water, unfiltered, picocuries per liter
29977	Tellurium-132, water, filtered, picocuries per liter
29979	Thallium-208, water, unfiltered, picocuries per liter
29981	Thallium-208, water, filtered, picocuries per liter
29983	Xenon-135, water, unfiltered, picocuries per liter
29985	Xenon-135, water, filtered, picocuries per liter
29987	Yttrium-91 (metastable), water, unfiltered, picocuries per liter
29989	Yttrium-91 (metastable), water, filtered, picocuries per liter
29991	Zirconium-95, water, filtered, picocuries per liter
30207	Gage height, above datum, meters
30208	Discharge, cubic meters per second
30209	Discharge, instantaneous, cubic meters per second
30210	Depth to water level, below land surface datum (LSD), meters
30211	Elevation above NGVD 1929, meters
30320	Uranium, bed sediment, dry weight, micrograms per gram
39036	Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, field, milligrams per liter as calcium carbonate
39086	Alkalinity, water, filtered, incremental titration, field, milligrams per liter as calcium carbonate
39087	Alkalinity, water, filtered, incremental titration, laboratory, milligrams per liter as calcium carbonate
46005	Acid neutralizing capacity, water, unfiltered, bromthymol blue endpoint (pH 6.0-7.6) titration, milliequivalents per liter
46253	pH, 1 to 1 soil/water mixture, standard units
46516	Solar radiation, net, calories per square centimeter per minute
46569	Iron (biologically reactive), water, unfiltered, tons per day
49470	Gross alpha radioactivity, water, unfiltered, Pu-239 curve, picocuries per liter
49472	Bismuth-212, water, unfiltered, picocuries per liter
49475	Plutonium-239 plus plutonium-240, water, unfiltered, picocuries per liter
49476	Europium-152, water, unfiltered, picocuries per liter
49478	Plutonium-239 plus plutonium-240, water, filtered, picocuries per liter
49480	Nickel-63, water, unfiltered, picocuries per liter
49482	Chlorine-36, water, unfiltered, picocuries per liter
49902	Sulfur-34/Sulfur-32 ratio in sulfide, water, filtered, per mil
49926	Carbon-13/Carbon-12 ratio in carbon dioxide, per mil
49927	Carbon-13/Carbon-12 ratio, rock, per mil
49928	Sulfur-34/Sulfur-32 ratio in sulfate, rock, per mil
49929	Sulfur-34/Sulfur-32 ratio in sulfide, rock, per mil
49930	Sulfur-34/Sulfur-32 ratio in disulfide, rock, per mil
49931	Sulfur-34/Sulfur-32 ratio in monosulfide, rock, per mil
49932	Sulfur-34/Sulfur-32 ratio in sulfate, water, filtered, per mil
49938	Gamma radioactivity scan, water, filtered, picocuries per liter
49940	Plutonium-239 plus plutonium-240, water, filtered, picocuries per liter
49944	Gross alpha radioactivity, bed sediment, natural uranium curve, dry weight, micrograms per gram
49946	Gross alpha radioactivity, suspended sediment, natural uranium curve, dry weight, micrograms per gram

Parameter code	Parameter name
49960	Gross alpha radioactivity, suspended sediment, Th-230 curve, dry weight, picocuries per gram
49962	Gross beta radioactivity, bed sediment, Cs-137 curve, dry weight, picocuries per gram
49964	Gross beta radioactivity, suspended sediment, Cs-137 curve, dry weight, picocuries per gram
49966	Gross beta radioactivity, suspended sediment, Sr-89/90 curve, dry weight, picocuries per gram
49972	Radium-226, bed sediment, dry weight, picocuries per gram
49974	Plutonium-238, suspended sediment, dry weight, picocuries per gram
49976	Plutonium-239 plus plutonium-240, suspended sediment, dry weight, picocuries per gram
49978	Cesium-137, bed sediment, dry weight, picocuries per gram
49980	Americium-241, suspended sediment, dry weight, picocuries per gram
50006	Metolachlor, water, dissolved, recoverable, grams per day
50007	Atrazine, water, dissolved, recoverable, grams per day
50047	Flow, maximum during 24 hour period, million gallons per day
50048	Flow, minimum during 24 hour period, million gallons per day
50050	Flow, in conduit or through a treatment plant, million gallons per day
50051	Flow rate, instantaneous, million gallons per day
50052	Flow total during composite period, thousands of gallons
50420	Plutonium-239 plus plutonium-240, bed sediment, dry weight, picocuries per gram
50423	Plutonium-238, bed sediment, dry weight, picocuries per gram
50833	Radium-224, water, filtered, picocuries per liter
50835	Radium-224, water, unfiltered, picocuries per liter
50838	Radium-226, water, unfiltered, gamma count, picocuries per liter
61036	Delta helium-3, water, unfiltered, ingrowth method, percent
61053	Uranium, bed sediment smaller than 2 millimeters, total digestion, dry weight, micrograms per gram
61738	Thorium-228, water, filtered, picocuries per liter
62164	Gross gamma radioactivity, water, unfiltered, picocuries per liter
62636	Alpha radioactivity, 72-hour count, water, filtered, Th-230 curve, picocuries per liter
62639	Alpha radioactivity, 30-day count, water, filtered, Th-230 curve, picocuries per liter
62642	Beta radioactivity, 72-hour count, water, filtered, Cs-137 curve, picocuries per liter
62645	Beta radioactivity, 30-day count, water, filtered, Cs-137 curve, picocuries per liter
62648	Boron-11/Boron-10 ratio, water, filtered, per mil
63001	Oxidation reduction potential, raw emf, reference electrode not specified, millivolts
63002	Oxidation reduction potential, relative to the standard hydrogen electrode (SHE), millivolts
63014	Gross alpha radioactivity, 72 hour count, water, unfiltered, Th-230 curve, picocuries per liter
63015	Gross beta radioactivity, 72 hour count, water, unfiltered, Cs-137 curve, picocuries per liter
63016	Gross alpha radioactivity, 30 day recount, water, unfiltered, Th-230 curve, picocuries per liter
63017	Gross beta radioactivity, 30 day recount, water, unfiltered, Cs-137 curve, picocuries per liter
63018	Gross alpha radioactivity, water, unfiltered, Th-230 curve, picocuries per liter

Parameter code	Parameter name
63019	Plutonium-241, water, filtered, picocuries per liter
63020	Plutonium-241, water, unfiltered, picocuries per liter
63021	Plutonium-241, suspended sediment, dry weight, picocuries per gram
63022	Plutonium-241, bed sediment, dry weight, picocuries per gram
63023	Radium-224, suspended sediment, dry weight, picocuries per gram
63024	Thorium-228, suspended sediment, picocuries per liter
63025	Alpha-emitting isotopes of radium, water, unfiltered, picocuries per liter
63026	Alpha-emitting isotopes of radium, suspended sediment, dry weight, picocuries per gram
63027	Alpha-emitting isotopes of radium, bed sediment, dry weight, picocuries per gram
63028	Total radioactive strontium, water, filtered, picocuries per liter
63029	Total radioactive strontium, water, unfiltered, picocuries per liter
63030	Total radioactive strontium, suspended sediment, dry weight, picocuries per gram
63031	Total radioactive strontium, bed sediment, dry weight, picocuries per gram
63032	Uranium, water, unfiltered, micrograms per liter
63033	Uranium, suspended sediment, dry weight, micrograms per gram
63034	Uranium, bed sediment, dry weight, picocuries per gram
63035	Nitrogen-15/Nitrogen-14 ratio in total nitrogen fraction, solids, per mil
63036	Nitrogen-15/Nitrogen-14 ratio in nitrate fraction, solids, per mil
63037	Nitrogen-15/Nitrogen-14 ratio in exchangeable ammonium fraction, solids, per mil
63038	Carbon-13/Carbon-12 ratio in total carbon fraction, solids, per mil
63040	Oxygen-18/Oxygen-16 ratio in nitrate fraction, solids, per mil
63041	Oxygen-18/Oxygen-16 ratio in nitrate fraction, water, filtered, per mil
63150	Nitrogen-15/Nitrogen-14 ratio, dissolved gas, per mil
63511	Carbon-13/Carbon-12 ratio in organic carbon, biota, tissue, per mil
63512	Nitrogen-15/Nitrogen-14 ratio in organic nitrogen, biota, tissue, per mil
63513	Carbon-13/Carbon-12 ratio in organic carbon, suspended sediment, per mil
63514	Nitrogen-15/Nitrogen-14 ratio in organic nitrogen, suspended sediment, per mil
63515	Carbon-13/Carbon-12 ratio in organic carbon, bed sediment, per mil
63516	Nitrogen-15/Nitrogen-14 ratio in organic nitrogen, bed sediment, per mil
70290	Chloride, water, dissolved, tons per day
70291	Sulfate, water, dissolved, tons per day
70302	Residue, water, dissolved, tons per day
70310	pH, bed sediment, standard units
70508	Acidity, water, unfiltered, heated, milligrams per liter as calcium carbonate
70959	Productivity, primary, gross, milligrams oxygen per cubic meter per day
70963	Productivity, primary, net, milligrams oxygen per cubic meter per day
70967	Respiration, milligrams oxygen per cubic meter per day
71825	Acidity, water, unfiltered, heated, milligrams per liter as hydrogen ion
72000	Altitude of land surface, feet
72012	Temperature, specific gravity measurement, degrees Celsius
72014	Temperature, resistivity measurement, degrees Celsius
72019	Depth to water level, feet below land surface
72020	Elevation above NGVD 1929, feet
72040	Drawdown observed, feet
72103	Sample location, relative to right bank, looking downstream, feet
72104	Sample location, distance downstream, feet
72105	Sample location, distance upstream, feet

Parameter code	Parameter name
72106	Elevation of sample, feet
72136	Hydrostatic head difference, ground water minus surface water, millimeters
74082	Streamflow, daily, acre-feet
75032	Zirconium, niobium-95, water, unfiltered, picocuries per liter
75038	Potassium-40, water, unfiltered, picocuries per liter
75935	PCBs, suspended sediment, recoverable, grams per day
75937	Radium-228, suspended sediment, dry weight, picocuries per gram
75938	Polonium-210, suspended sediment, dry weight, picocuries per gram
75939	Thorium-230, suspended sediment, dry weight, picocuries per gram
75940	Uranium-238, suspended sediment, dry weight, picocuries per gram
75942	Uranium-234, suspended sediment, dry weight, picocuries per gram
75944	Radium-226, suspended sediment, dry weight, picocuries per gram
75946	Lead-210, suspended sediment, dry weight, picocuries per gram
75953	Thorium-232, suspended sediment, dry weight, picocuries per gram
75975	Uranium-235, suspended sediment, dry weight, picocuries per gram
75976	Thorium-232, water, filtered, picocuries per liter
75977	Radium-228, bed sediment, dry weight, picocuries per gram
75978	Strontium-87/Strontium-86 ratio, water, filtered, per mil
78890	Sampling depth, feet below mean sea level
78891	Sampling depth, meters below mean sea level
80015	Uranium, water, filtered, extraction fluorometric method, picocuries per liter
80029	Gross alpha radioactivity, water, unfiltered, natural uranium curve, micrograms per liter
80030	Gross alpha radioactivity, water, filtered, natural uranium curve, micrograms per liter
80040	Gross alpha radioactivity, suspended sediment, natural uranium curve, micrograms per liter
80049	Gross beta radioactivity, water, unfiltered, Sr-90/Y-90 curve, picocuries per liter
80050	Gross beta radioactivity, water, filtered, Sr-90/Y-90 curve, picocuries per liter
80060	Gross beta radioactivity, suspended sediment, Sr-90/Y-90 curve, picocuries per liter
80155	Suspended sediment discharge, tons per day
80156	Total sediment discharge, tons per day
80221	Suspended sediment load larger than 0.0625 millimeters, sieve diameter, tons per day
80223	Suspended sediment load smaller than 0.0625 millimeters, sieve diameter, tons per day
80225	Bedload sediment discharge, tons per day
81027	Temperature, soil, degrees Celsius
81029	Temperature, snow, degrees Celsius
81200	Silica, water, dissolved, tons per day
81201	Calcium, water, dissolved, tons per day
81202	Magnesium, water, dissolved, tons per day
81203	Sodium, water, dissolved, tons per day
81204	Potassium, water, dissolved, tons per day
81205	Bicarbonate, water, dissolved, tons per day
81366	Radium-228, water, filtered, picocuries per liter
81380	Discharge velocity, meters per second
81903	Depth to bottom at sample location, feet
81904	Velocity at point in stream, feet per second

Parameter code	Parameter name
81907	Well recovery, feet
81908	Recovery fraction ratio
81917	Temperature at bottom of hole, degrees Fahrenheit
82068	Potassium-40, water, filtered, picocuries per liter
82070	Potassium-40, suspended sediment, picocuries per liter
82072	Dial reading, number
82081	Carbon-13/Carbon-12 ratio, water, unfiltered, per mil
82082	Deuterium/Protium ratio, water, unfiltered, per mil
82083	Lithium-7/Lithium-6 ratio, water, unfiltered, per mil
82084	Nitrogen-15/Nitrogen-14 ratio, water, unfiltered, per mil
82085	Oxygen-18/Oxygen-16 ratio, water, unfiltered, per mil
82086	Sulfur-34/Sulfur-32 ratio, water, unfiltered, per mil
82087	Uranium-238/Uranium-234 ratio, water, unfiltered, per mil
82303	Radon-222, water, unfiltered, picocuries per liter
82305	Radon-222, water, dissolved, picocuries per liter
82307	Cobalt-60, water, filtered, picocuries per liter
82336	Sulfur-34/Sulfur-32 ratio, bed sediment, per mil
82337	Oxygen-18/Oxygen-16 ratio, bed sediment, per mil
82338	Nitrogen-15/Nitrogen-14 ratio, bed sediment, per mil
82339	Carbon-13/Carbon-12 ratio, bed sediment, per mil
82341	Nitrogen-15/Nitrogen-14 ratio in organic fraction, soil or rock, per mil
82362	Radon-222, water, dissolved, picocuries per liter
82583	pH, soil, standard units
82688	Nitrogen-15/Nitrogen-14 ratio in nitrate fraction, soil, per mil
82689	Nitrogen-15/Nitrogen-14 ratio in ammonia fraction, soil, per mil
82690	Nitrogen-15/Nitrogen-14 ratio in nitrate fraction, water, filtered, per mil
82691	Nitrogen-15/Nitrogen-14 ratio in ammonia fraction, water, filtered, per mil
82698	Nitrogen-15/nitrogen-14 ratio in nitrogen gas fraction, water, unfiltered, per mil
82699	Oxygen-18/Oxygen-16 ratio in dissolved oxygen, water, unfiltered, per mil
82700	Carbon-13/Carbon-12 ratio in carbonate fraction, solids, per mil
82701	Chromium-53/Chromium-52 isotope ratio, water, filtered, per mil
82702	Boron-11/Boron-10 ratio, water, unfiltered, per mil
82725	Chlorine-37/Chlorine-35 ratio, water, filtered, per mil
82726	Bromine-81/Bromine-79 ratio, water, filtered, per mil
82727	Oxygen-18/Oxygen-16 ratio in sulfate, water, filtered, per mil
82904	Acid neutralizing capacity, wet atmospheric deposition, unfiltered, field, milligrams per liter as calcium carbonate
82905	Acid neutralizing capacity, wet atmospheric deposition, unfiltered, field, microequivalents per liter
82906	Acid neutralizing capacity, wet atmospheric deposition, unfiltered, laboratory, milligrams per liter as calcium carbonate
82907	Acid neutralizing capacity, wet atmospheric deposition, unfiltered, laboratory, microequivalents per liter
83104	pH, wet atmospheric deposition, unfiltered, calculated, standard units
83106	pH, wet atmospheric deposition, unfiltered, field, standard units
83107	pH, wet atmospheric deposition, unfiltered, lab, standard units
83186	Acid neutralizing capacity, bulk atmospheric deposition, unfiltered, field, milligrams per liter as calcium carbonate

Parameter code	Parameter name
83187	Acid neutralizing capacity, bulk atmospheric deposition, unfiltered, field, microequivalents per liter
83188	Acid neutralizing capacity, bulk atmospheric deposition, unfiltered, laboratory, milligrams per liter as calcium carbonate
83189	Acid neutralizing capacity, bulk atmospheric deposition, unfiltered, laboratory, microequivalents per liter
83386	pH, bulk atmospheric deposition, unfiltered, calculated, standard units
83388	pH, bulk atmospheric deposition, unfiltered, field, standard units
83389	pH, bulk atmospheric deposition, unfiltered, laboratory, standard units
85557	Temperature, low saturation, degrees Celsius
85558	Temperature, high saturation, degrees Celsius
85817	Gross beta radioactivity, water, unfiltered, picocuries per liter
90010	Temperature, area-weighted-average, degrees Celsius
90400	pH, water, area weighted average, standard units
90410	Acid neutralizing capacity, water, unfiltered, fixed endpoint (pH 4.5) titration, laboratory, milligrams per liter as calcium carbonate
91006	Nitrate, water, dissolved, tons per day
91007	Phosphorus, water, unfiltered, tons per day
91008	Phosphorus, water, dissolved, tons per day
91009	Iron, water, unfiltered, tons per day
91010	Iron, water, dissolved, tons per day
91012	Nitrite, water, dissolved, tons of nitrogen per day
91014	Ammonia, water, dissolved, tons of nitrogen per day
91015	Ammonia, water, unfiltered, tons of nitrogen per day
91016 91016	Biochemical oxygen demand, water, unfiltered, 5 days at 20 degrees Celsius, tons per day
91017	Suspended solids, dried at 110 degrees Celsius, water, unfiltered, tons per day
91047	Organic nitrogen, water, unfiltered, pounds of nitrogen per day
91048	Ammonia, water, unfiltered, pounds of nitrogen per day
91050	Phosphorus, water, unfiltered, pounds per day
91055	Suspended solids, dried at 105 degrees Celsius, water, unfiltered, tons per day
91056	Loss on ignition, from suspended solids, water, unfiltered, tons per day
91058	Total nitrogen, water, unfiltered, pounds per day
91059	Orthophosphate, water, unfiltered, pounds per day
91060	Orthophosphate, water, dissolved, pounds per day
95100	Conversion factor, number
95410	Acid neutralizing capacity, water, unfiltered, fixed endpoint (pH 4.5) titration, laboratory, milligrams per liter as calcium carbonate
99019	Water level, depth below land surface, meters
99020	Elevation above NGVD 1929, meters
99060	Discharge, cubic meters per second
99061	Discharge, instantaneous, cubic meters per second
99065	Gage height, above datum, meters
99066	Hyporheic flux of water from ground water to surface water, milliliters per square centimeter per day
99225	Datum offset, elevation of station's Aquatrak leveling point in reference to established datum, meters
99226	Sensor offset, Aquatrak sensor, meters
99227	Primary water level, Aquatrak, distance from measuring point to water surface,

Parameter code	Parameter name
	meters
99229	Temperature #1, Aquatrak, air temperature of the upper sounding well, degrees Celsius
99230	Temperature #2, Aquatrak, air temperature of the bottom sounding well, degrees Celsius
99400	Acid neutralizing capacity, water, unfiltered, estimated by regression equation, milligrams per liter as calcium carbonate
99417	Acid neutralizing capacity, water, unfiltered, pounds per day
99420	Dissolved oxygen, water, unfiltered, pounds per day
99421	Chlorophyll, total, estimated load, fluorometric probe method, water, calculated, pounds per day
99422	Atrazine, water, dissolved, pounds per day
99430	Carbonate, water, unfiltered, incremental titration, field, milligrams per liter as calcium carbonate
99431	Alkalinity, water, filtered, Gran titration, field, microequivalents per liter
99900	USGS Water Science Center special 99900
99901	USGS Water Science Center special 99901
99902	USGS Water Science Center special 99902
99903	USGS Water Science Center special 99903
99904	USGS Water Science Center special 99904
99905	USGS Water Science Center special 99905
99906	USGS Water Science Center special 99906
99907	USGS Water Science Center special 99907
99908	USGS Water Science Center special 99908
99909	USGS Water Science Center special 99909
99975	pH, 1 meter below water surface, standard units
99979	pH, water, 1 meter above bottom, standard units
99983	pH, water, mid-depth, standard units

4.9 Appendix I. Parameters that are Not Output as Zero and Can Be Entered into QWDATA

Parameter code	Parameter name
00191	Hydrogen ion, water, unfiltered, calculated, milligrams per liter
00294	Chemical oxygen demand, soluble, dry atmospheric deposition, milligrams per kilogram
00296	Chemical oxygen demand, insoluble, dry atmospheric deposition, milligrams per kilogram
00297	Chemical oxygen demand, total, dry atmospheric deposition, milligrams per kilogram
00300	Dissolved oxygen, water, unfiltered, milligrams per liter
00302	Immediate oxygen demand, water, unfiltered, 20 degrees Celsius, milligrams per liter
00310	Biochemical oxygen demand, water, unfiltered, 5 days at 20 degrees Celsius, milligrams per liter
00315	Biochemical oxygen demand, water, unfiltered, 7 days at 20 degrees Celsius, milligrams per liter
00319	Ultimate biochemical oxygen demand, water, unfiltered, 20 degrees Celsius, milligrams per liter
00320	Ultimate carbonaceous biochemical oxygen demand, water, unfiltered, 20 degrees Celsius, milligrams per liter
00321	Ultimate nitrogenous biochemical oxygen demand, water, unfiltered, milligrams per liter
00324	Biochemical oxygen demand, water, unfiltered, 20 days at 20 degrees Celsius, milligrams per liter
00335	Chemical oxygen demand, low level, water, unfiltered, milligrams per liter
00339	Chemical oxygen demand, bed sediment, total, dry weight, milligrams per kilogram
00340	Chemical oxygen demand, high level, water, unfiltered, milligrams per liter
00349	Biochemical oxygen demand, water, unfiltered, 30 days at 20 degrees Celsius, milligrams per liter
00359	Biochemical oxygen demand, water, filtered, 5 days at 20 degrees Celsius, milligrams per liter
00405	Carbon dioxide, water, unfiltered, milligrams per liter
00408	pH, water, filtered, laboratory, standard units
00420	Hydroxide, water, unfiltered, milligrams per liter
00435	Acidity, water, unfiltered, milligrams per liter as calcium carbonate
00436	Mineral acidity, water, unfiltered, methyl orange endpoint (pH 3.1-4.4) titration, milligrams per liter as calcium carbonate
00437	Carbon dioxide acidity, water, unfiltered, phenolphthalein endpoint (pH 8.5-9.0) titration, milligrams per liter as calcium carbonate
00440	Bicarbonate, water, unfiltered, fixed endpoint (pH 4.5) titration, field, milligrams per liter
00449	Bicarbonate, water, unfiltered, inflection-point titration method (incremental titration method), laboratory, milligrams per liter
00450	Bicarbonate, water, unfiltered, inflection-point titration method (incremental titration method), field, milligrams per liter
00451	Bicarbonate, water, unfiltered, fixed endpoint (pH 4.5) titration, laboratory, milligrams per liter
00453	Bicarbonate, water, filtered, inflection-point titration method (incremental titration method), field, milligrams per liter
00496	Loss on ignition, bed sediment, dry weight, milligrams per kilogram
00500	Total solids dried at 105 degrees Celsius, water, unfiltered, milligrams per liter
00505	Loss on ignition of total solids, water, unfiltered, milligrams per liter

Parameter code	Parameter name
00510	Total solids remaining after ignition, water, unfiltered, milligrams per liter
00515	Dissolved solids dried at 105 degrees Celsius, water, filtered, milligrams per liter
00520	Loss on ignition of dissolved solids, water, filtered, milligrams per liter
00525	Dissolved solids remaining after ignition, water, filtered, milligrams per liter
00530	Suspended solids, water, unfiltered, milligrams per liter
00535	Loss on ignition of suspended solids, water, unfiltered, milligrams per liter
00540	Suspended solids remaining after ignition, water, unfiltered, milligrams per liter
00545	Settleable solids, water, unfiltered, milligrams per liter
00548	Non-settleable solids remaining after ignition, milligrams per liter
00549	Loss on ignition of non-settleable solids, milligrams per liter
00550	Oil and grease, water, unfiltered, recoverable, milligrams per liter
00551	Petroleum hydrocarbons, water, unfiltered, CCl4 extraction, infrared chromatography, recoverable, milligrams per liter
00552	Oil and grease, water, unfiltered, hexane extraction, recoverable, milligrams per liter
00553	Oil and grease, bed sediment, hexane extraction, recoverable, dry weight, milligrams per kilogram
00556	Oil and grease, water, unfiltered, freon extraction, gravimetric, recoverable, milligrams per liter
00557	Oil and grease, bed sediment, freon extraction, gravimetric, recoverable, dry weight, milligrams per kilogram
00560	Oil and grease, water, unfiltered, freon extraction, electrometric infrared, recoverable, milligrams per liter
00561	Oil and grease, bed sediment, freon extraction, electrometric infrared, recoverable, dry weight, milligrams per kilogram
00572	Biomass, periphyton, ash weight, grams per square meter
00573	Biomass, periphyton, dry weight, grams per square meter
00597	Dissolved nitrogen gas, water, unfiltered, milligrams per liter
00600	Total nitrogen, water, unfiltered, milligrams per liter
00601	Total nitrogen, suspended sediment, total, milligrams per liter
00602	Total nitrogen, water, filtered, milligrams per liter
00603	Total nitrogen, bed sediment, total, dry weight, milligrams per kilogram
00605	Organic nitrogen, water, unfiltered, milligrams per liter
00606	Organic nitrogen, suspended sediment, total, milligrams per liter
00607	Organic nitrogen, water, filtered, milligrams per liter
00608	Ammonia, water, filtered, milligrams per liter as nitrogen
00610	Ammonia, water, unfiltered, milligrams per liter as nitrogen
00611	Ammonia, bed sediment, total, dry weight, milligrams per kilogram as nitrogen
00613	Nitrite, water, filtered, milligrams per liter as nitrogen
00615	Nitrite, water, unfiltered, milligrams per liter as nitrogen
00616	Nitrite, bed sediment, total, dry weight, milligrams per kilogram as nitrogen
00618	Nitrate, water, filtered, milligrams per liter as nitrogen
00619	Ammonia (un-ionized), water, unfiltered, calculated, milligrams per liter as nitrogen

Parameter code	Parameter name
00620	Nitrate, water, unfiltered, milligrams per liter as nitrogen
00621	Nitrate, bed sediment, total, dry weight, milligrams per kilogram as nitrogen
00623	Ammonia plus organic nitrogen, water, filtered, milligrams per liter as nitrogen
00624	Ammonia plus organic nitrogen, suspended sediment, total, milligrams per liter as nitrogen
00625	Ammonia plus organic nitrogen, water, unfiltered, milligrams per liter as nitrogen
00626	Ammonia plus organic nitrogen, bed sediment, total, dry weight, milligrams per kilogram as nitrogen
00630	Nitrate plus nitrite, water, unfiltered, milligrams per liter as nitrogen
00631	Nitrate plus nitrite, water, filtered, milligrams per liter as nitrogen
00633	Nitrate plus nitrite, bed sediment, total, dry weight, milligrams per kilogram as nitrogen
00635	Ammonia plus organic nitrogen, water, unfiltered, milligrams per liter as nitrogen
00636	Ammonia plus organic nitrogen, water, filtered, milligrams per liter as nitrogen
00639	Albuminoid nitrogen, water, unfiltered, milligrams per liter
00650	Phosphate, water, unfiltered, milligrams per liter
00653	Phosphate, water, filtered, milligrams per liter
00660	Orthophosphate, water, filtered, milligrams per liter
00665	Phosphorus, water, unfiltered, milligrams per liter as phosphorus
00666	Phosphorus, water, filtered, milligrams per liter as phosphorus
00667	Phosphorus, suspended sediment, total, milligrams per liter as phosphorus
00668	Phosphorus, bed sediment, total, dry weight, milligrams per kilogram as phosphorus
00669	Hydrolyzable phosphorus, water, unfiltered, milligrams per liter as phosphorus
00670	Organic phosphorus, water, unfiltered, milligrams per liter as phosphorus
00671	Orthophosphate, water, filtered, milligrams per liter as phosphorus
00672	Hydrolyzable phosphorus, water, filtered, milligrams per liter as phosphorus
00673	Organic phosphorus, water, filtered, milligrams per liter as phosphorus
00675	Hydrolyzable phosphorus, suspended sediment, total, milligrams per liter as phosphorus
00676	Organic phosphorus, suspended sediment, total, milligrams per liter as phosphorus
00677	Hydrolyzable phosphorus plus orthophosphate, water, filtered, milligrams per liter as phosphorus
00678	Hydrolyzable phosphorus plus orthophosphate, water, unfiltered, milligrams per liter as phosphorus
00680	Organic carbon, water, unfiltered, milligrams per liter
00681	Organic carbon, water, filtered, milligrams per liter
00682	Carbon (inorganic plus organic), water, filtered, milligrams per liter
00683	Organic carbon, suspended sediment, dry weight, milligrams per kilogram
00685	Inorganic carbon, water, unfiltered, milligrams per liter
00686	Inorganic carbon, bed sediment, total, dry weight, grams per kilogram
00687	Organic carbon, bed sediment, total, dry weight, grams per kilogram
00688	Inorganic carbon, suspended sediment, total, milligrams per liter
00689	Organic carbon, suspended sediment, total, milligrams per liter
00690	Carbon (inorganic plus organic), water, unfiltered, milligrams per liter
00691	Inorganic carbon, water, filtered, milligrams per liter

Parameter code	Parameter name
00692	Immiscible organic carbon, water, unfiltered, milligrams per liter
00693	Carbon (inorganic plus organic), bed sediment, total, dry weight, grams per kilogram
00694	Carbon (inorganic plus organic), suspended sediment, total, milligrams per liter
00697	Acetic acid, water, unfiltered, recoverable, milligrams per liter
00717	Cyanide, weak acid, dissociable, water, filtered, micrograms per liter
00718	Cyanide, weak acid, dissociable, water, unfiltered, micrograms per liter
00720	Cyanide, water, unfiltered, milligrams per liter
00721	Cyanide, bed sediment, total, dry weight, micrograms per gram
00722	Cyanide, free, amenable to chlorination, water, unfiltered, milligrams per liter
00723	Cyanide, water, filtered, milligrams per liter
00730	Thiocyanate, water, unfiltered, milligrams per liter
00731	Thiocyanate, water, filtered, milligrams per liter
00737	Thiosulfate, water, filtered, milligrams per liter
00738	Tetrathionate, water, filtered, milligrams per liter
00739	Tetrathionate, water, unfiltered, milligrams per liter
00740	Sulfite, water, unfiltered, milligrams per liter
00745	Sulfide, water, unfiltered, milligrams per liter
00746	Sulfide, water, filtered, milligrams per liter
00900	Hardness, water, milligrams per liter as calcium carbonate
00910	Calcium, water, unfiltered, milligrams per liter as calcium carbonate
00915	Calcium, water, filtered, milligrams per liter
00916	Calcium, water, unfiltered, recoverable, milligrams per liter
00917	Calcium, bed sediment, recoverable, dry weight, milligrams per kilogram
00918	Calcium, water, unfiltered, recoverable, milligrams per liter
00921	Magnesium, water, unfiltered, recoverable, milligrams per liter
00923	Sodium, water, unfiltered, recoverable, milligrams per liter
00924	Magnesium, bed sediment, recoverable, dry weight, milligrams per kilogram
00925	Magnesium, water, filtered, milligrams per liter
00926	Magnesium, suspended sediment, total, milligrams per liter
00927	Magnesium, water, unfiltered, recoverable, milligrams per liter
00929	Sodium, water, unfiltered, recoverable, milligrams per liter
00930	Sodium, water, filtered, milligrams per liter
00933	Sodium plus potassium, water, filtered, milligrams per liter as sodium
00934	Sodium, bed sediment, recoverable, dry weight, milligrams per kilogram
00935	Potassium, water, filtered, milligrams per liter
00937	Potassium, water, unfiltered, recoverable, milligrams per liter
00938	Potassium, bed sediment, recoverable, dry weight, milligrams per kilogram
00939	Potassium, water, unfiltered, recoverable, milligrams per liter
00940	Chloride, water, filtered, milligrams per liter
00945	Sulfate, water, filtered, milligrams per liter

Parameter code	Parameter name
00946	Sulfate, water, unfiltered, milligrams per liter
00950	Fluoride, water, filtered, milligrams per liter
00951	Fluoride, water, unfiltered, milligrams per liter
00953	Fluorine, water, unfiltered, micrograms per liter
00954	Silica, water, unfiltered, recoverable, micrograms per liter as SiO2
00955	Silica, water, filtered, milligrams per liter as SiO2
00956	Silica, water, unfiltered, milligrams per liter as SiO2
00978	Arsenic, water, unfiltered, recoverable, micrograms per liter
00985	Vanadium, water, unfiltered, recoverable, micrograms per liter
00998	Beryllium, water, unfiltered, recoverable, micrograms per liter
00999	Boron, water, unfiltered, recoverable, micrograms per liter
01000	Arsenic, water, filtered, micrograms per liter
01001	Arsenic, suspended sediment, total, micrograms per liter
01002	Arsenic, water, unfiltered, micrograms per liter
01003	Arsenic, bed sediment, total digestion, dry weight, micrograms per gram
01005	Barium, water, filtered, micrograms per liter
01006	Barium, suspended sediment, recoverable, micrograms per liter
01007	Barium, water, unfiltered, recoverable, micrograms per liter
01008	Barium, bed sediment, recoverable, dry weight, micrograms per gram
01009	Barium, water, unfiltered, recoverable, micrograms per liter
01010	Beryllium, water, filtered, micrograms per liter
01011	Beryllium, suspended sediment, recoverable, micrograms per liter
01012	Beryllium, water, unfiltered, recoverable, micrograms per liter
01013	Beryllium, bed sediment, recoverable, dry weight, micrograms per gram
01015	Bismuth, water, filtered, micrograms per liter
01016	Bismuth, suspended sediment, micrograms per liter
01017	Bismuth, water, unfiltered, micrograms per liter
01020	Boron, water, filtered, micrograms per liter
01021	Boron, suspended sediment, recoverable, micrograms per liter
01022	Boron, water, unfiltered, recoverable, micrograms per liter
01023	Boron, bed sediment, recoverable, dry weight, micrograms per gram
01025	Cadmium, water, filtered, micrograms per liter
01026	Cadmium, suspended sediment, recoverable, micrograms per liter
01027	Cadmium, water, unfiltered, micrograms per liter
01028	Cadmium, bed sediment, recoverable, dry weight, micrograms per gram
01029	Chromium, bed sediment, recoverable, dry weight, micrograms per gram
01030	Chromium, water, filtered, micrograms per liter
01031	Chromium, suspended sediment, recoverable, micrograms per liter
01032	Chromium(VI), water, filtered, micrograms per liter
01033	Chromium(III), water, unfiltered, micrograms per liter

Parameter code	Parameter name
01034	Chromium, water, unfiltered, recoverable, micrograms per liter
01035	Cobalt, water, filtered, micrograms per liter
01036	Cobalt, suspended sediment, recoverable, micrograms per liter
01037	Cobalt, water, unfiltered, recoverable, micrograms per liter
01038	Cobalt, bed sediment, recoverable, dry weight, micrograms per gram
01040	Copper, water, filtered, micrograms per liter
01041	Copper, suspended sediment, recoverable, micrograms per liter
01042	Copper, water, unfiltered, recoverable, micrograms per liter
01043	Copper, bed sediment, recoverable, dry weight, micrograms per gram
01044	Iron, suspended sediment, recoverable, micrograms per liter
01045	Iron, water, unfiltered, recoverable, micrograms per liter
01046	Iron, water, filtered, micrograms per liter
01047	Iron(II), water, filtered, micrograms per liter
01048	Iron(II) plus Iron(III), water, filtered, micrograms per liter
01049	Lead, water, filtered, micrograms per liter
01050	Lead, suspended sediment, recoverable, micrograms per liter
01051	Lead, water, unfiltered, recoverable, micrograms per liter
01052	Lead, bed sediment, recoverable, dry weight, micrograms per gram
01053	Manganese, bed sediment, recoverable, dry weight, micrograms per gram
01054	Manganese, suspended sediment, recoverable, micrograms per liter
01055	Manganese, water, unfiltered, recoverable, micrograms per liter
01056	Manganese, water, filtered, micrograms per liter
01057	Thallium, water, filtered, micrograms per liter
01058	Thallium, suspended sediment, recoverable, micrograms per liter
01059	Thallium, water, unfiltered, micrograms per liter
01060	Molybdenum, water, filtered, micrograms per liter
01061	Molybdenum, suspended sediment, recoverable, micrograms per liter
01062	Molybdenum, water, unfiltered, recoverable, micrograms per liter
01063	Molybdenum, bed sediment, recoverable, dry weight, micrograms per gram
01064	Tellurium, water, unfiltered, micrograms per liter
01065	Nickel, water, filtered, micrograms per liter
01066	Nickel, suspended sediment, recoverable, micrograms per liter
01067	Nickel, water, unfiltered, recoverable, micrograms per liter
01068	Nickel, bed sediment, recoverable, dry weight, micrograms per gram
01074	Nickel, water, unfiltered, recoverable, micrograms per liter
01075	Silver, water, filtered, micrograms per liter
01076	Silver, suspended sediment, recoverable, micrograms per liter
01077	Silver, water, unfiltered, recoverable, micrograms per liter
01078	Silver, bed sediment, recoverable, dry weight, micrograms per gram
01079	Silver, water, unfiltered, recoverable, micrograms per liter

Parameter code	Parameter name
01080	Strontium, water, filtered, micrograms per liter
01081	Strontium, suspended sediment, recoverable, micrograms per liter
01082	Strontium, water, unfiltered, recoverable, micrograms per liter
01083	Strontium, bed sediment, recoverable, dry weight, micrograms per gram
01084	Strontium, water, unfiltered, recoverable, micrograms per liter
01085	Vanadium, water, filtered, micrograms per liter
01086	Vanadium, suspended sediment, total, micrograms per liter
01087	Vanadium, water, unfiltered, micrograms per liter
01088	Vanadium, bed sediment, total digestion, dry weight, micrograms per gram
01090	Zinc, water, filtered, micrograms per liter
01091	Zinc, suspended sediment, recoverable, micrograms per liter
01092	Zinc, water, unfiltered, recoverable, micrograms per liter
01093	Zinc, bed sediment, recoverable, dry weight, micrograms per gram
01094	Zinc, water, unfiltered, recoverable, micrograms per liter
01095	Antimony, water, filtered, micrograms per liter
01096	Antimony, suspended sediment, total, micrograms per liter
01097	Antimony, water, unfiltered, micrograms per liter
01098	Antimony, bed sediment, total digestion, dry weight, micrograms per gram
01100	Tin, water, filtered, micrograms per liter
01101	Tin, suspended sediment, recoverable, micrograms per liter
01102	Tin, water, unfiltered, recoverable, micrograms per liter
01103	Tin, bed sediment, recoverable, dry weight, micrograms per kilogram
01104	Aluminum, water, unfiltered, recoverable, micrograms per liter
01105	Aluminum, water, unfiltered, recoverable, micrograms per liter
01106	Aluminum, water, filtered, micrograms per liter
01107	Aluminum, suspended sediment, recoverable, micrograms per liter
01108	Aluminum, bed sediment, recoverable, dry weight, micrograms per gram
01110	Cerium, water, filtered, micrograms per liter
01112	Cerium, water, unfiltered, micrograms per liter
01113	Cadmium, water, unfiltered, recoverable, micrograms per liter
01114	Lead, water, unfiltered, recoverable, micrograms per liter
01115	Cesium, water, filtered, micrograms per liter
01116	Cesium, suspended sediment, total, micrograms per liter
01117	Cesium, water, unfiltered, micrograms per liter
01118	Chromium, water, unfiltered, recoverable, micrograms per liter
01119	Copper, water, unfiltered, recoverable, micrograms per liter
01120	Gallium, water, filtered, micrograms per liter
01121	Gallium, suspended sediment, total, micrograms per liter
01122	Gallium, water, unfiltered, micrograms per liter
01123	Manganese, water, unfiltered, recoverable, micrograms per liter

Parameter code	Parameter name
01125	Germanium, water, filtered, micrograms per liter
01126	Germanium, suspended sediment, total, micrograms per liter
01127	Germanium, water, unfiltered, micrograms per liter
01128	Thallium, water, unfiltered, recoverable, micrograms per liter
01129	Molybdenum, water, unfiltered, recoverable, micrograms per liter
01130	Lithium, water, filtered, micrograms per liter
01131	Lithium, suspended sediment, recoverable, micrograms per liter
01132	Lithium, water, unfiltered, recoverable, micrograms per liter
01133	Lithium, bed sediment, dry weight, milligrams per kilogram
01134	Lithium, water, unfiltered, recoverable, micrograms per liter
01135	Rubidium, water, filtered, micrograms per liter
01136	Rubidium, suspended sediment, total, micrograms per liter
01137	Rubidium, water, unfiltered, micrograms per liter
01140	Silicon, water, filtered, micrograms per liter
01142	Silicon, water, unfiltered, micrograms per liter
01145	Selenium, water, filtered, micrograms per liter
01146	Selenium, suspended sediment, total, micrograms per liter
01147	Selenium, water, unfiltered, micrograms per liter
01148	Selenium, bed sediment, total digestion, dry weight, micrograms per gram
01150	Titanium, water, filtered, micrograms per liter
01151	Titanium, suspended sediment, total, micrograms per liter
01152	Titanium, water, unfiltered, micrograms per liter
01153	Titanium, bed sediment, total digestion, dry weight, micrograms per gram
01154	Tungsten, water, unfiltered, micrograms per liter
01155	Tungsten, water, filtered, micrograms per liter
01156	Tungsten, suspended sediment, micrograms per liter
01160	Zirconium, water, filtered, micrograms per liter
01161	Zirconium, suspended sediment, total, micrograms per liter
01162	Zirconium, water, unfiltered, micrograms per liter
01168	Indium, water, unfiltered, micrograms per liter
01170	Iron, bed sediment, total digestion, dry weight, micrograms per gram
01171	Platinum, water, unfiltered, micrograms per liter
01172	Platinum, water, filtered, micrograms per liter
01180	Lanthanum, water, filtered, micrograms per liter
01182	Lanthanum, water, unfiltered, micrograms per liter
01187	Scandium, water, filtered, micrograms per liter
01188	Scandium, suspended sediment, micrograms per liter
01189	Scandium, water, unfiltered, micrograms per liter
01194	Ytterbium, water, filtered, micrograms per liter
01195	Ytterbium, suspended sediment, micrograms per liter

Parameter code	Parameter name
01196	Ytterbium, water, unfiltered, micrograms per liter
01201	Yttrium, water, filtered, micrograms per liter
01203	Yttrium, water, unfiltered, micrograms per liter
01204	Molybdenum, dry atmospheric deposition, recoverable, micrograms per kilogram
01205	Molybdenum, insoluble, dry atmospheric deposition, micrograms per kilogram
01206	Molybdenum, soluble, dry atmospheric deposition, micrograms per kilogram
01207	Fluoride, total, dry atmospheric deposition, milligrams per kilogram
01210	Palladium, water, unfiltered, micrograms per liter
01212	Aluminum, soluble, dry atmospheric deposition, micrograms per kilogram
01213	Aluminum, insoluble, dry atmospheric deposition, micrograms per kilogram
01214	Aluminum, total, dry atmospheric deposition, micrograms per kilogram
01215	Barium, soluble, dry atmospheric deposition, micrograms per kilogram
01216	Barium, insoluble, dry atmospheric deposition, micrograms per kilogram
01217	Barium, total, dry atmospheric deposition, micrograms per kilogram
01218	Terbium, water, unfiltered, micrograms per liter
01219	Gadolinium, water, unfiltered, micrograms per liter
01221	Mercury, soluble, dry atmospheric deposition, micrograms per kilogram
01222	Mercury, insoluble, dry atmospheric deposition, micrograms per kilogram
01223	Mercury, total, dry atmospheric deposition, micrograms per kilogram
01224	Nickel, soluble, dry atmospheric deposition, micrograms per kilogram
01225	Nickel, insoluble, dry atmospheric deposition, micrograms per kilogram
01226	Nickel, total, dry atmospheric deposition, micrograms per kilogram
01227	Selenium, soluble, dry atmospheric deposition, micrograms per kilogram
01228	Selenium, insoluble, dry atmospheric deposition, micrograms per kilogram
01229	Selenium, total, dry atmospheric deposition, micrograms per kilogram
01230	Silver, soluble, dry atmospheric deposition, micrograms per kilogram
01231	Silver, insoluble, dry atmospheric deposition, micrograms per kilogram
01232	Silver, total, dry atmospheric deposition, micrograms per kilogram
01233	Vanadium, soluble, dry atmospheric deposition, micrograms per kilogram
01234	Vanadium, insoluble, dry atmospheric deposition, micrograms per kilogram
01235	Vanadium, total, dry atmospheric deposition, micrograms per kilogram
01236	Europium, water, unfiltered, micrograms per liter
01237	Neodymium, water, unfiltered, micrograms per liter
01238	Praseodymium, water, unfiltered, micrograms per liter
01239	Niobium, water, unfiltered, micrograms per liter
01240	Iridium, water, unfiltered, micrograms per liter
01241	Osmium, water, unfiltered, micrograms per liter
01242	Rhenium, water, unfiltered, micrograms per liter
01243	Hafnium, water, unfiltered, micrograms per liter
01244	Lutetium, water, unfiltered, micrograms per liter

Parameter code	Parameter name
01245	Thulium, water, unfiltered, micrograms per liter
01246	Erbium, water, unfiltered, micrograms per liter
01247	Holmium, water, unfiltered, micrograms per liter
01248	Manganese, soluble, dry atmospheric deposition, micrograms per kilogram
01249	Manganese, insoluble, dry atmospheric deposition, micrograms per kilogram
01250	Manganese, total, dry atmospheric deposition, micrograms per kilogram
01375	Aluminum, bed sediment, total digestion, dry weight, micrograms per gram
01376	Barium, bed sediment, total digestion, dry weight, micrograms per gram
01377	Beryllium, bed sediment, total digestion, dry weight, micrograms per gram
01378	Cadmium, bed sediment, total digestion, dry weight, micrograms per gram
01379	Chromium, bed sediment, total digestion, dry weight, micrograms per gram
01380	Cobalt, bed sediment, total digestion, dry weight, micrograms per gram
01381	Copper, bed sediment, total digestion, dry weight, micrograms per gram
01382	Lead, bed sediment, total digestion, dry weight, micrograms per gram
01383	Lithium, bed sediment, total digestion, dry weight, micrograms per gram
01384	Manganese, bed sediment, total digestion, dry weight, micrograms per gram
01385	Mercury, bed sediment, total digestion, dry weight, micrograms per gram
01386	Molybdenum, bed sediment, total digestion, dry weight, micrograms per gram
01387	Nickel, bed sediment, total digestion, dry weight, micrograms per gram
01388	Phosphorus, bed sediment, total digestion, dry weight, micrograms per gram
01389	Silver, bed sediment, total digestion, dry weight, micrograms per gram
01390	Strontium, bed sediment, total digestion, dry weight, micrograms per gram
01391	Tin, bed sediment, total digestion, dry weight, micrograms per gram
01392	Uranium, bed sediment, total digestion, dry weight, micrograms per gram
01393	Zinc, bed sediment, total digestion, dry weight, micrograms per gram
01394	Carbon (inorganic plus organic), bed sediment, total, dry weight, percent
01395	Organic carbon, bed sediment, total, dry weight, percent
01396	Aluminum, bed sediment, total digestion, dry weight, percent
01397	Total nitrogen, bed sediment, total digestion, dry weight, percent
01398	Sulfur, bed sediment, total digestion, dry weight, percent
01399	Antimony, soil, total digestion, dry weight, micrograms per gram
01400	Arsenic, soil, total digestion, dry weight, micrograms per gram
01401	Barium, soil, total digestion, dry weight, micrograms per gram
01402	Beryllium, soil, total digestion, dry weight, micrograms per gram
01403	Cadmium, soil, total digestion, dry weight, micrograms per gram
01404	Chromium, soil, total digestion, dry weight, micrograms per gram
01405	Cobalt, soil, total digestion, dry weight, micrograms per gram
01406	Copper, soil, total digestion, dry weight, micrograms per gram
01407	Lead, soil, total digestion, dry weight, micrograms per gram
01408	Lithium, soil, total digestion, dry weight, micrograms per gram

Parameter code	Parameter name
01409	Manganese, soil, total digestion, dry weight, micrograms per gram
01410	Mercury, soil, total digestion, dry weight, micrograms per gram
01411	Molybdenum, soil, total digestion, dry weight, micrograms per gram
01412	Nickel, soil, total digestion, dry weight, micrograms per gram
01413	Phosphorus, soil, total digestion, dry weight, micrograms per gram
01414	Selenium, soil, total digestion, dry weight, micrograms per gram
01415	Silver, soil, total digestion, dry weight, micrograms per gram
01416	Strontium, soil, total digestion, dry weight, micrograms per gram
01417	Thallium, soil, total digestion, dry weight, micrograms per gram
01418	Tin, soil, total digestion, dry weight, micrograms per gram
01419	Uranium, soil, total digestion, dry weight, micrograms per gram
01420	Vanadium, soil, total digestion, dry weight, micrograms per gram
01421	Zinc, soil, total digestion, dry weight, micrograms per gram
01422	Aluminum, soil, total digestion, dry weight, percent
01423	Organic carbon, soil, total, dry weight, percent
01424	Iron, soil, total digestion, dry weight, percent
01425	Total nitrogen, soil, total digestion, milligrams per liter
01426	Sulfur, soil, total digestion, dry weight, percent
01427	Titanium, soil, total digestion, dry weight, percent
01428	Thallium, suspended sediment, total digestion, dry weight, micrograms per gram
01429	Aluminum, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
01430	Calcium, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
01431	Cesium, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
01432	Iron, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
01433	Magnesium, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
01434	Phosphorus, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
01435	Potassium, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
01436	Rubidium, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
01437	Sodium, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
01438	Titanium, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
01439	Antimony, biota, tissue, total digestion, dry weight, micrograms per gram
01440	Arsenic, biota, tissue, total digestion, dry weight, micrograms per gram

Parameter code	Parameter name
01441	Barium, biota, tissue, total digestion, dry weight, micrograms per gram
01442	Beryllium, biota, tissue, total digestion, dry weight, micrograms per gram
01443	Cadmium, biota, tissue, total digestion, dry weight, micrograms per gram
01444	Chromium, biota, tissue, total digestion, dry weight, micrograms per gram
01445	Cobalt, biota, tissue, total digestion, dry weight, micrograms per gram
01446	Copper, biota, tissue, total digestion, dry weight, micrograms per gram
01447	Lead, biota, tissue, total digestion, dry weight, micrograms per gram
01448	Lithium, biota, tissue, total digestion, dry weight, micrograms per gram
01449	Manganese, biota, tissue, total digestion, dry weight, micrograms per gram
01450	Mercury, biota, tissue, total digestion, dry weight, micrograms per gram
01451	Molybdenum, biota, tissue, total digestion, dry weight, micrograms per gram
01452	Nickel, biota, tissue, total digestion, dry weight, micrograms per gram
01453	Phosphorus, biota, tissue, total digestion, dry weight, percent
01454	Selenium, biota, tissue, total digestion, dry weight, micrograms per gram
01455	Silver, biota, tissue, total digestion, dry weight, micrograms per gram
01456	Strontium, biota, tissue, total digestion, dry weight, micrograms per gram
01457	Thallium, biota, tissue, total digestion, dry weight, micrograms per gram
01458	Tin, biota, tissue, total digestion, dry weight, micrograms per gram
01459	Uranium, biota, tissue, total digestion, dry weight, micrograms per gram
01460	Vanadium, biota, tissue, total digestion, dry weight, micrograms per gram
01461	Zinc, biota, tissue, total digestion, dry weight, micrograms per gram
01462	Aluminum, biota, tissue, total digestion, dry weight, micrograms per gram
01463	Carbon (inorganic plus organic), biota, tissue, total, dry weight, percent
01464	Iron, biota, tissue, total digestion, dry weight, micrograms per gram
01465	Total nitrogen, biota, tissue, total, milligrams per liter
01466	Sulfur, biota, tissue, total digestion, dry weight, percent
01467	Titanium, biota, tissue, total digestion, dry weight, micrograms per gram
01468	Iron, bed sediment, total digestion, dry weight, percent
01469	Titanium, bed sediment, total digestion, dry weight, percent
01470	Total nitrogen, suspended sediment, total, dry weight, percent
01471	Total nitrogen, soil, total, dry weight, percent
01472	Total nitrogen, biota, tissue, total, dry weight, percent
01473	Phosphorus, suspended sediment, total digestion, dry weight, micrograms per gram
01474	Sodium, bed sediment, total digestion, dry weight, percent
01475	Potassium, bed sediment, total digestion, dry weight, percent
01476	Calcium, bed sediment, total digestion, dry weight, percent
01477	Magnesium, bed sediment, total digestion, dry weight, percent
01502	Alpha radioactivity counting error, water, unfiltered, picocuries per liter
01504	Alpha radioactivity counting error, water, filtered, picocuries per liter
01506	Alpha radioactivity counting error, suspended sediment, picocuries per liter

Parameter code	Parameter name
01508	Gross alpha radioactivity counting error, bed sediment, dry weight, picocuries per gram
01524	Gross alpha radioactivity counting error, water, filtered, micrograms per liter
01525	Gross alpha radioactivity counting error, suspended sediment, micrograms per liter
01526	Gross alpha radioactivity counting error, water, unfiltered, Th-230 curve, picocuries per liter
03502	Beta radioactivity counting error, water, unfiltered, picocuries per liter
03504	Beta radioactivity counting error, water, filtered, picocuries per liter
03506	Beta radioactivity counting error, suspended sediment, picocuries per liter
03508	Gross beta radioactivity counting error, bed sediment, dry weight, picocuries per gram
03526	Gross beta radioactivity counting error, water, filtered, Cs-137 curve, picocuries per liter
03527	Gross beta radioactivity counting error, suspended sediment, Cs-137 curve, picocuries per liter
03528	Gross beta radioactivity counting error, water, filtered, Sr-90/Y-90 curve, picocuries per liter
03529	Gross beta radioactivity counting error, suspended sediment, Sr-90/Y-90 curve, picocuries per liter
03801	Ioxynil, water, unfiltered, recoverable, micrograms per liter
04000	Metribuzin, bed sediment, recoverable, dry weight, micrograms per kilogram
04001	2-Chloro-6-ethylamino-4-amino-s-triazine, bed sediment, recoverable, dry weight, micrograms per kilogram
04002	Chlorodiamino-s-triazine, bed sediment, recoverable, dry weight, micrograms per kilogram
04003	2-Chloro-4-isopropylamino-6-amino-s-triazine, bed sediment, recoverable, dry weight, micrograms per kilogram
04004	Cyanazine, bed sediment, recoverable, dry weight, micrograms per kilogram
04005	Metolachlor, bed sediment, recoverable, dry weight, micrograms per kilogram
04006	Alachlor, bed sediment, recoverable, dry weight, micrograms per kilogram
04007	Simetryn, suspended sediment, recoverable, dry weight, micrograms per kilogram
04008	Simazine, suspended sediment, recoverable, dry weight, micrograms per kilogram
04009	Propazine, suspended sediment, recoverable, dry weight, micrograms per kilogram
04010	Prometryn, suspended sediment, recoverable, dry weight, micrograms per kilogram
04011	Prometon, suspended sediment, recoverable, dry weight, micrograms per kilogram
04012	Metribuzin, suspended sediment, recoverable, dry weight, micrograms per kilogram
04013	2-Chloro-6-ethylamino-4-amino-s-triazine, suspended sediment, recoverable, dry weight, micrograms per kilogram
04014	Chlorodiamino-s-triazine, suspended sediment, recoverable, dry weight, micrograms per kilogram
04015	2-Chloro-4-isopropylamino-6-amino-s-triazine, suspended sediment, recoverable, dry weight, micrograms per kilogram
04016	Cyanazine, suspended sediment, recoverable, dry weight, micrograms per kilogram
04017	Atrazine, suspended sediment, recoverable, dry weight, micrograms per kilogram
04018	Ametryn, suspended sediment, recoverable, dry weight, micrograms per kilogram
04019	Trifluralin, suspended sediment, recoverable, dry weight, micrograms per kilogram
04020	Metolachlor, suspended sediment, recoverable, dry weight, micrograms per kilogram
04021	Alachlor, suspended sediment, recoverable, dry weight, micrograms per kilogram
04022	Terbuthylazine, water, filtered, recoverable, micrograms per liter

Parameter code	Parameter name
04023	Trifluralin, water, filtered, recoverable, micrograms per liter
04024	Propachlor, water, filtered, recoverable, micrograms per liter
04025	Hexazinone, water, filtered, recoverable, micrograms per liter
04026	Butachlor, water, filtered, recoverable, micrograms per liter
04027	Carboxin, water, filtered, recoverable, micrograms per liter
04028	Butylate, water, filtered, recoverable, micrograms per liter
04029	Bromacil, water, filtered, recoverable, micrograms per liter
04030	Simetryn, water, filtered, recoverable, micrograms per liter
04031	Cycloate, water, filtered, recoverable, micrograms per liter
04032	Terbacil, water, filtered, recoverable, micrograms per liter
04033	Diphenamid, water, filtered, recoverable, micrograms per liter
04034	Vernolate, water, filtered, recoverable, micrograms per liter
04035	Simazine, water, filtered, recoverable, micrograms per liter
04036	Prometryn, water, filtered, recoverable, micrograms per liter
04037	Prometon, water, filtered, recoverable, micrograms per liter
04038	2-Chloro-6-ethylamino-4-amino-s-triazine, water, filtered, recoverable, micrograms per liter
04039	Chlorodiamino-s-triazine, water, filtered, recoverable, micrograms per liter
04040	2-Chloro-4-isopropylamino-6-amino-s-triazine, water, filtered, recoverable, micrograms per liter
04041	Cyanazine, water, filtered, recoverable, micrograms per liter
04043	Antimony, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
04044	Arsenic, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
04045	Barium, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
04046	Beryllium, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
04047	Bismuth, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
04048	Boron, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
04049	Cadmium, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
04051	Cerium, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
04052	Chromium, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
04053	Cobalt, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
04054	Copper, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
04055	Europium, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram

Parameter code	Parameter name
04056	Gallium, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
04057	Germanium, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
04058	Gold, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
04059	Holmium, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
04060	Thallium, bed sediment smaller than 62.5 microns, wet sieved (native water), total digestion, dry weight, micrograms per gram
04061	Thallium, bed sediment smaller than 177 microns, wet sieved (native water), total digestion, dry weight, micrograms per gram
04062	Thallium, suspended sediment larger than 62.5 microns, wet sieved (native water), total digestion, dry weight, micrograms per gram
04063	Thallium, suspended sediment smaller than 62.5 microns, wet sieved (native water), total digestion, dry weight, micrograms per gram
04064	Thallium, bed sediment smaller than 62.5 microns, dry sieved, total digestion, dry weight, micrograms per gram
04066	Inorganic carbon, bed sediment smaller than 62.5 microns, wet sieved (native water), total, dry weight, micrograms per gram
04067	Inorganic carbon, bed sediment smaller than 177 microns, wet sieved (native water), total, dry weight, micrograms per gram
04068	Inorganic carbon, bed sediment smaller than 62.5 microns, dry sieved, total, dry weight, micrograms per gram
04069	Inorganic carbon, suspended sediment smaller than 62.5 microns, wet sieved (native water), total, dry weight, micrograms per gram
04070	Inorganic carbon, suspended sediment larger than 62.5 microns, wet sieved (native water), total, dry weight, micrograms per gram
04071	Organic carbon, bed sediment smaller than 62.5 microns, wet sieved (native water), total, dry weight, micrograms per gram
04072	Organic carbon, bed sediment smaller than 177 microns, wet sieved (native water), total, dry weight, micrograms per gram
04073	Organic carbon, bed sediment smaller than 62.5 microns, dry sieved, total, dry weight, micrograms per gram
04074	Organic carbon, suspended sediment smaller than 62.5 microns, wet sieved (native water), total, dry weight, micrograms per gram
04075	Organic carbon, suspended sediment larger than 62.5 microns, wet sieved (native water), total, dry weight, micrograms per gram
04076	Carbon (inorganic plus organic), bed sediment smaller than 62.5 microns, wet sieved (native water), total, dry weight, micrograms per gram
04077	Carbon (inorganic plus organic), bed sediment smaller than 177 microns, wet sieved (native water), total, dry weight, micrograms per gram
04078	Carbon (inorganic plus organic), bed sediment smaller than 62.5 microns, dry sieved, total, dry weight, micrograms per gram
04079	Carbon (inorganic plus organic), suspended sediment smaller than 62.5 microns, wet sieved (native water), total, dry weight, micrograms per gram

Parameter code	Parameter name
04080	Carbon (inorganic plus organic), suspended sediment larger than 62.5 microns, wet sieved (native water), total, dry weight, micrograms per gram
04081	Thiodiglycol, water, unfiltered, recoverable, micrograms per liter
04082	1,2,4,5-Tetrazine, water, unfiltered, recoverable, micrograms per liter
04083	Chlorfenvinphos, water, unfiltered, recoverable, micrograms per liter
04084	Dimethyl methylphosphonate, water, unfiltered, recoverable, micrograms per liter
04085	1,2-Dichlorobenzene plus 1,4-dichlorobenzene, water, unfiltered, recoverable, micrograms per liter
04086	Etrimfos, water, unfiltered, recoverable, micrograms per liter
04088	Bromophos-ethyl, water, unfiltered, recoverable, micrograms per liter
04089	Bromophos-methyl, water, unfiltered, recoverable, micrograms per liter
04091	Clopyralid, water, unfiltered, recoverable, micrograms per liter
04092	Triclopyr, water, unfiltered, recoverable, micrograms per liter
04093	3,5-Dichlorobenzoic acid, water, unfiltered, recoverable, micrograms per liter
04094	5-Hydroxydicamba, water, unfiltered, recoverable, micrograms per liter
04095	Fonofos, water, filtered, recoverable, micrograms per liter
04096	Aluminum, water, filtered (0.1 micron filter), micrograms per liter
04097	Iron, water, filtered (0.1 micron filter), micrograms per liter
04098	MGK-264, water, unfiltered, recoverable, micrograms per liter
04099	Methyl paraoxon, water, unfiltered, recoverable, micrograms per liter
04100	Fluridone, water, unfiltered, recoverable, micrograms per liter
04101	Fenarimol, water, unfiltered, recoverable, micrograms per liter
04103	Cesium-137 2-sigma combined uncertainty, soil, dry weight, picocuries per gram
04104	Lead-210 2-sigma combined uncertainty, bed sediment, dry weight, picocuries per gram
04105	Polonium-210 2-sigma combined uncertainty, bed sediment, dry weight, picocuries per gram
04106	Radium-228 2-sigma combined uncertainty, bed sediment, dry weight, picocuries per gram
04107	Radium-226 2-sigma combined uncertainty, bed sediment, dry weight, picocuries per gram
04108	Thorium-230 2-sigma combined uncertainty, bed sediment, dry weight, picocuries per gram
04109	Thorium-232 2-sigma combined uncertainty, water, filtered, picocuries per liter
04110	Thorium-232 2-sigma combined uncertainty, bed sediment, dry weight, picocuries per gram
04111	Uranium-234 2-sigma combined uncertainty, bed sediment, dry weight, picocuries per gram
04112	Uranium-235 2-sigma combined uncertainty, bed sediment, dry weight, picocuries per gram
04113	Uranium-238 2-sigma combined uncertainty, suspended sediment, dry weight, picocuries per gram
04114	PCBs, suspended sediment, recoverable, nanograms per liter
04123	Tritium counting error, water, unfiltered, picocuries per milliliter
04128	Organic carbon, bed sediment smaller than 2 millimeters, dry weight, micrograms per gram
04129	Silver, bed sediment smaller than 2 millimeters, total digestion, dry weight, micrograms per gram
04130	Lead, bed sediment smaller than 2 millimeters, total digestion, dry weight, micrograms per gram
04131	Zinc, bed sediment smaller than 2 millimeters, total digestion, dry weight, micrograms per gram

Parameter code	Parameter name
04132	Nickel, bed sediment smaller than 2 millimeters, total digestion, dry weight, micrograms per gram
04133	Mercury, bed sediment smaller than 2 millimeters, total digestion, dry weight, micrograms per gram
04136	Manganese, bed sediment smaller than 2 millimeters, total digestion, dry weight, micrograms per gram
04184	Triallate, water, unfiltered, recoverable, micrograms per liter
04254	Metalaxyl, water, unfiltered, recoverable, micrograms per liter
04443	Diquat, water, unfiltered, recoverable, micrograms per liter
04444	PCB congener 128, water, filtered, recoverable, micrograms per liter
04452	PCB congener 18, water, filtered, recoverable, micrograms per liter
04462	PCB congener 52, water, filtered, recoverable, micrograms per liter
04463	PCB congener 49, water, filtered, recoverable, micrograms per liter
04465	PCB congener 44, water, filtered, recoverable, micrograms per liter
04475	PCB congener 101, water, filtered, recoverable, micrograms per liter
04478	PCB congener 87, water, filtered, recoverable, micrograms per liter
04487	PCB congener 118, water, filtered, recoverable, micrograms per liter
04495	PCB congener 183, water, filtered, recoverable, micrograms per liter
04512	PCB congener 180, water, filtered, recoverable, micrograms per liter
04519	PCB congener 206, water, filtered, recoverable, micrograms per liter
04585	Diesel range organic compounds, water, unfiltered, recoverable, micrograms per liter
04607	PCB congener 8, water, unfiltered, recoverable, micrograms per liter
04608	PCB congener 18, water, unfiltered, recoverable, micrograms per liter
04609	PCB congener 28, water, unfiltered, recoverable, micrograms per liter
04610	PCB congener 44, water, unfiltered, recoverable, micrograms per liter
04611	PCB congener 49, water, unfiltered, recoverable, micrograms per liter
04612	PCB congener 52, water, unfiltered, recoverable, micrograms per liter
04613	PCB congener 66, water, unfiltered, recoverable, micrograms per liter
04614	PCB congener 77, water, unfiltered, recoverable, micrograms per liter
04615	PCB congener 87, water, unfiltered, recoverable, micrograms per liter
04616	PCB congener 101, water, unfiltered, recoverable, micrograms per liter
04617	PCB congener 105, water, unfiltered, recoverable, micrograms per liter
04618	PCB congener 118, water, unfiltered, recoverable, micrograms per liter
04619	PCB congener 126, water, unfiltered, recoverable, micrograms per liter
04620	PCB congener 128, water, unfiltered, recoverable, micrograms per liter
04621	PCB congener 138, water, unfiltered, recoverable, micrograms per liter
04622	PCB congener 153, water, unfiltered, recoverable, micrograms per liter
04623	PCB congener 169, water, unfiltered, recoverable, micrograms per liter
04624	PCB congener 170, water, unfiltered, recoverable, micrograms per liter
04625	PCB congener 180, water, unfiltered, recoverable, micrograms per liter
04626	PCB congener 183, water, unfiltered, recoverable, micrograms per liter

Parameter code	Parameter name
04627	PCB congener 184, water, unfiltered, recoverable, micrograms per liter
04628	PCB congener 187, water, unfiltered, recoverable, micrograms per liter
04629	PCB congener 195, water, unfiltered, recoverable, micrograms per liter
04630	PCB congener 206, water, unfiltered, recoverable, micrograms per liter
04631	PCB congener 209, water, unfiltered, recoverable, micrograms per liter
04632	PCB congener 8, water, filtered, recoverable, micrograms per liter
04633	PCB congener 28, water, filtered, recoverable, micrograms per liter
04634	PCB congener 66, water, filtered, recoverable, micrograms per liter
04635	PCB congener 77, water, filtered, recoverable, micrograms per liter
04636	PCB congener 105, water, filtered, recoverable, micrograms per liter
04637	PCB congener 126, water, filtered, recoverable, micrograms per liter
04638	PCB congener 138, water, filtered, recoverable, micrograms per liter
04639	PCB congener 153, water, filtered, recoverable, micrograms per liter
04640	PCB congener 169, water, filtered, recoverable, micrograms per liter
04641	PCB congener 170, water, filtered, recoverable, micrograms per liter
04642	PCB congener 184, water, filtered, recoverable, micrograms per liter
04643	PCB congener 187, water, filtered, recoverable, micrograms per liter
04644	PCB congener 195, water, filtered, recoverable, micrograms per liter
04645	PCB congener 209, water, filtered, recoverable, micrograms per liter
04646	PCB congener 66, solids, recoverable, dry weight, micrograms per kilogram
04647	PCB congener 77, solids, recoverable, dry weight, micrograms per kilogram
04648	PCB congener 87, solids, recoverable, dry weight, micrograms per kilogram
04649	PCB congener 105, solids, recoverable, dry weight, micrograms per kilogram
04650	PCB congener 126, solids, recoverable, dry weight, micrograms per kilogram
04651	PCB congener 128, solids, recoverable, dry weight, micrograms per kilogram
04652	PCB congener 153, solids, recoverable, dry weight, micrograms per kilogram
04653	PCB congener 169, solids, recoverable, dry weight, micrograms per kilogram
04654	PCB congener 184, solids, recoverable, dry weight, micrograms per kilogram
04655	PCB congener 195, solids, recoverable, dry weight, micrograms per kilogram
04656	PCB congener 209, solids, recoverable, dry weight, micrograms per kilogram
04657	PCB congener 8, biota, tissue, recoverable, wet weight, micrograms per kilogram
04658	PCB congener 28, biota, tissue, recoverable, wet weight, micrograms per kilogram
04659	PCB congener 66, biota, tissue, recoverable, wet weight, micrograms per kilogram
04660	PCB congener 77, biota, tissue, recoverable, wet weight, micrograms per kilogram
04661	PCB congener 128, biota, tissue, recoverable, wet weight, micrograms per kilogram
04662	PCB congener 153, biota, tissue, recoverable, wet weight, micrograms per kilogram
04663	PCB congener 184, biota, tissue, recoverable, wet weight, micrograms per kilogram
04664	PCB congener 195, biota, tissue, recoverable, wet weight, micrograms per kilogram
04665	PCB congener 209, biota, tissue, recoverable, wet weight, micrograms per kilogram
05504	Gross gamma radioactivity scan counting error, water, filtered, picocuries per liter

Parameter code	Parameter name
05515	Gross gamma radioactivity scan counting error, bed sediment, dry weight, picocuries per gram
05516	Gross gamma radioactivity scan counting error, suspended sediment, picocuries per liter
07001	Tritium counting error, water, unfiltered, picocuries per liter
07006	Tritium counting error, water, filtered, picocuries per liter
07011	Tritium counting error, suspended sediment, picocuries per liter
07013	Tritium in water molecules counting error, tritium units
07014	Tritium counting error, suspended sediment, tritium units
07015	Tritium counting error, water, filtered, tritium units
07019	Tritium counting error, water, unfiltered, tritium units
07051	Calcium-45 counting error, water, filtered, picocuries per liter
07053	Calcium-45 counting error, suspended sediment, picocuries per liter
07055	Calcium-45 counting error, water, unfiltered, picocuries per liter
07061	Iron-59 counting error, water, filtered, picocuries per liter
07063	Iron-59 counting error, suspended sediment, picocuries per liter
07065	Iron-59 counting error, water, unfiltered, picocuries per liter
07080	Rhodamine WT, water, filtered, recoverable, micrograms per liter
07082	Rhodamine WT, suspended sediment, recoverable, micrograms per liter
07084	Rhodamine WT, water, unfiltered, recoverable, micrograms per liter
07101	Selenium-75 counting error, water, filtered, picocuries per liter
07103	Selenium-75 counting error, suspended sediment, picocuries per liter
07105	Selenium-75 counting error, water, unfiltered, picocuries per liter
07121	Silver-110 counting error, water, filtered, picocuries per liter
07123	Silver-110 counting error, suspended sediment, picocuries per liter
07125	Silver-110 counting error, water, unfiltered, picocuries per liter
07141	Sulfur-35 counting error, water, filtered, picocuries per liter
07143	Sulfur-35 counting error, suspended sediment, picocuries per liter
07145	Sulfur-35 counting error, water, unfiltered, picocuries per liter
09504	Radium-226 counting error, water, filtered, picocuries per liter
09506	Radium-226 counting error, suspended sediment, picocuries per liter
09508	Radium-226 counting error, bed sediment, dry weight, picocuries per gram
11502	Radium-228 counting error, water, unfiltered, picocuries per liter
13502	Strontium-90 counting error, water, unfiltered, picocuries per liter
13504	Strontium-90 counting error, water, filtered, picocuries per liter
13506	Strontium-90 counting error, suspended sediment, picocuries per liter
13507	Strontium-90 counting error, water, filtered, picocuries per liter
15502	Strontium-89 counting error, water, unfiltered, picocuries per liter
15503	Strontium-89 counting error, water, filtered, picocuries per liter
17502	Lead-210 counting error, water, unfiltered, picocuries per liter
17504	Lead-210 counting error, water, filtered, picocuries per liter
17506	Lead-210 counting error, suspended sediment, picocuries per liter

Parameter code	Parameter name
17508	Lead-210, counting error, bed sediment, dry weight, picocuries per gram
17518	Lead-212 counting error, water, unfiltered, picocuries per liter
17520	Lead-214 counting error, water, unfiltered, picocuries per liter
18502	Iodine-129 counting error, water, unfiltered, picocuries per liter
19002	PCB congener 7, water, filtered, recoverable, nanograms per liter
19003	PCB congener 6, water, filtered, recoverable, nanograms per liter
19004	PCB congeners 5 plus 8, water, filtered, recoverable, nanograms per liter
19005	PCB congener 19, water, filtered, recoverable, nanograms per liter
19006	PCB congener 18, water, filtered, recoverable, nanograms per liter
19007	PCB congener 17, water, filtered, recoverable, nanograms per liter
19008	PCB congeners 24 plus 27, water, filtered, recoverable, nanograms per liter
19009	PCB congeners 16 plus 32, water, filtered, recoverable, nanograms per liter
19010	PCB congener 26, water, filtered, recoverable, nanograms per liter
19011	PCB congeners 28 plus 31, water, filtered, recoverable, nanograms per liter
19012	PCB congener 33, water, filtered, recoverable, nanograms per liter
19013	PCB congener 22, water, filtered, recoverable, nanograms per liter
19014	PCB congener 45, water, filtered, recoverable, nanograms per liter
19015	PCB congener 46, water, filtered, recoverable, nanograms per liter
19016	PCB congener 52, water, filtered, recoverable, nanograms per liter
19017	PCB congener 49, water, filtered, recoverable, nanograms per liter
19018	PCB congeners 47 plus 48, water, filtered, recoverable, nanograms per liter
19019	PCB congener 44, water, filtered, recoverable, nanograms per liter
19020	PCB congeners 37 plus 42, water, filtered, recoverable, nanograms per liter
19021	PCB congeners 41 plus 64 plus 71, water, filtered, recoverable, nanograms per liter
19022	PCB congener 40, water, filtered, recoverable, nanograms per liter
19023	PCB congener 74, water, filtered, recoverable, nanograms per liter
19024	PCB congeners 70 plus 76, water, filtered, recoverable, nanograms per liter
19025	PCB congeners 66 plus 95, water, filtered, recoverable, nanograms per liter
19026	PCB congener 91, water, filtered, recoverable, nanograms per liter
19027	PCB congeners 56 plus 60, water, filtered, recoverable, nanograms per liter
19028	PCB congeners 84 plus 92, water, filtered, recoverable, nanograms per liter
19029	PCB congener 101, water, filtered, recoverable, nanograms per liter
19030	PCB congener 99, water, filtered, recoverable, nanograms per liter
19031	PCB congener 97, water, filtered, recoverable, nanograms per liter
19032	PCB congener 87, water, filtered, recoverable, nanograms per liter
19033	PCB congener 85, water, filtered, recoverable, nanograms per liter
19034	PCB congener 136, water, filtered, recoverable, nanograms per liter
19035	PCB congeners 77 plus 110, water, filtered, recoverable, nanograms per liter
19036	PCB congener 82, water, filtered, recoverable, nanograms per liter
19037	PCB congener 151, water, filtered, recoverable, nanograms per liter

Parameter code	Parameter name
19038	PCB congeners 135 plus 144, water, filtered, recoverable, nanograms per liter
19039	PCB congener 149, water, filtered, recoverable, nanograms per liter
19040	PCB congener 118, water, filtered, recoverable, nanograms per liter
19041	PCB congener 146, water, filtered, recoverable, nanograms per liter
19042	PCB congeners 132 plus 153, water, filtered, recoverable, nanograms per liter
19043	PCB congener 141, water, filtered, recoverable, nanograms per liter
19044	PCB congeners 137 plus 176, water, filtered, recoverable, nanograms per liter
19045	PCB congeners 138 plus 163, water, filtered, recoverable, nanograms per liter
19046	PCB congener 178, water, filtered, recoverable, nanograms per liter
19047	PCB congeners 182 plus 187, water, filtered, recoverable, nanograms per liter
19048	PCB congener 183, water, filtered, recoverable, nanograms per liter
19049	PCB congener 185, water, filtered, recoverable, nanograms per liter
19050	PCB congener 174, water, filtered, recoverable, nanograms per liter
19051	PCB congener 177, water, filtered, recoverable, nanograms per liter
19052	PCB congeners 171 plus 202, water, filtered, recoverable, nanograms per liter
19053	PCB congeners 172 plus 197, water, filtered, recoverable, nanograms per liter
19054	PCB congener 180, water, filtered, recoverable, nanograms per liter
19055	PCB congener 199, water, filtered, recoverable, nanograms per liter
19056	PCB congeners 170 plus 190, water, filtered, recoverable, nanograms per liter
19057	PCB congener 201, water, filtered, recoverable, nanograms per liter
19058	PCB congeners 196 plus 203, water, filtered, recoverable, nanograms per liter
19059	PCB congeners 195 plus 208, water, filtered, recoverable, nanograms per liter
19060	PCB congener 194, water, filtered, recoverable, nanograms per liter
19061	PCB congener 206, water, filtered, recoverable, nanograms per liter
19065	PCB congener 7, suspended sediment, recoverable, nanograms per liter
19066	PCB congener 6, suspended sediment, recoverable, nanograms per liter
19067	PCB congeners 5 plus 8, suspended sediment, recoverable, nanograms per liter
19068	PCB congener 19, suspended sediment, recoverable, nanograms per liter
19069	PCB congener 18, suspended sediment, recoverable, nanograms per liter
19070	PCB congener 17, suspended sediment, recoverable, nanograms per liter
19071	PCB congeners 24 plus 27, suspended sediment, recoverable, nanograms per liter
19072	PCB congeners 16 plus 32, suspended sediment, recoverable, nanograms per liter
19073	PCB congener 26, suspended sediment, recoverable, nanograms per liter
19074	PCB congeners 28 plus 31, suspended sediment, recoverable, nanograms per liter
19075	PCB congener 33, suspended sediment, recoverable, nanograms per liter
19076	PCB congener 22, suspended sediment, recoverable, nanograms per liter
19077	PCB congener 45, suspended sediment, recoverable, nanograms per liter
19078	PCB congener 46, suspended sediment, recoverable, nanograms per liter
19079	PCB congener 52, suspended sediment, recoverable, nanograms per liter
19080	PCB congener 49, suspended sediment, recoverable, nanograms per liter

Parameter code	Parameter name
19081	PCB congeners 47 plus 48, suspended sediment, recoverable, nanograms per liter
19082	PCB congener 44, suspended sediment, recoverable, nanograms per liter
19083	PCB congeners 37 plus 42, suspended sediment, recoverable, nanograms per liter
19084	PCB congeners 41 plus 64 plus 71, suspended sediment, recoverable, nanograms per liter
19085	PCB congener 40, suspended sediment, recoverable, nanograms per liter
19086	PCB congener 74, suspended sediment, recoverable, nanograms per liter
19087	PCB congeners 70 plus 76, suspended sediment, recoverable, nanograms per liter
19088	PCB congeners 66 plus 95, suspended sediment, recoverable, nanograms per liter
19089	PCB congener 91, suspended sediment, recoverable, nanograms per liter
19090	PCB congeners 56 plus 60, suspended sediment, recoverable, nanograms per liter
19091	PCB congeners 84 plus 92, suspended sediment, recoverable, nanograms per liter
19092	PCB congener 101, suspended sediment, recoverable, nanograms per liter
19093	PCB congener 99, suspended sediment, recoverable, nanograms per liter
19094	PCB congener 97, suspended sediment, recoverable, nanograms per liter
19095	PCB congener 87, suspended sediment, recoverable, nanograms per liter
19096	PCB congener 85, suspended sediment, recoverable, nanograms per liter
19097	PCB congener 136, suspended sediment, recoverable, nanograms per liter
19098	PCB congeners 77 plus 110, suspended sediment, recoverable, nanograms per liter
19099	PCB congener 82, suspended sediment, recoverable, nanograms per liter
19100	PCB congener 151, suspended sediment, recoverable, nanograms per liter
19101	PCB congeners 135 plus 144, suspended sediment, recoverable, nanograms per liter
19102	PCB congener 149, suspended sediment, recoverable, nanograms per liter
19103	PCB congener 118, suspended sediment, recoverable, nanograms per liter
19104	PCB congener 146, suspended sediment, recoverable, nanograms per liter
19105	PCB congeners 132 plus 153, suspended sediment, recoverable, nanograms per liter
19106	PCB congener 141, suspended sediment, recoverable, nanograms per liter
19107	PCB congeners 137 plus 176, suspended sediment, recoverable, nanograms per liter
19108	PCB congeners 138 plus 163, suspended sediment, recoverable, nanograms per liter
19109	PCB congener 178, suspended sediment, recoverable, nanograms per liter
19110	PCB congeners 182 plus 187, suspended sediment, recoverable, nanograms per liter
19111	PCB congener 183, suspended sediment, recoverable, nanograms per liter
19112	PCB congener 185, suspended sediment, recoverable, nanograms per liter
19113	PCB congener 174, suspended sediment, recoverable, nanograms per liter
19114	PCB congener 177, suspended sediment, recoverable, nanograms per liter
19115	PCB congeners 171 plus 202, suspended sediment, recoverable, nanograms per liter
19116	PCB congeners 172 plus 197, suspended sediment, recoverable, nanograms per liter
19117	PCB congener 180, suspended sediment, recoverable, nanograms per liter
19118	PCB congener 199, suspended sediment, recoverable, nanograms per liter
19119	PCB congeners 170 plus 190, suspended sediment, recoverable, nanograms per liter
19120	PCB congener 201, suspended sediment, recoverable, nanograms per liter

Parameter code	Parameter name
19121	PCB congeners 196 plus 203, suspended sediment, recoverable, nanograms per liter
19122	PCB congeners 195 plus 208, suspended sediment, recoverable, nanograms per liter
19123	PCB congener 194, suspended sediment, recoverable, nanograms per liter
19124	PCB congener 206, suspended sediment, recoverable, nanograms per liter
19157	PCB congener 87, biota, tissue, recoverable, wet weight, micrograms per kilogram
19253	PCB congener 18, biota, tissue, recoverable, wet weight, micrograms per kilogram
19504	Polonium-210 counting error, water, filtered, picocuries per liter
19506	Polonium-210 counting error, suspended sediment, picocuries per liter
22002	Plutonium-238 counting error, water, filtered, picocuries per liter
22011	Plutonium-239 counting error, water, filtered, picocuries per liter
22013	Plutonium-238 counting error, water, unfiltered, picocuries per liter
22015	Plutonium-239 counting error, water, unfiltered, picocuries per liter
22020	Beryllium-7, bed sediment smaller than 62.5 microns, dry weight, disintegrations per minute per gram
22021	Cesium-137, bed sediment smaller than 62.5 microns, dry weight, picocuries per gram
22022	Lead-210, bed sediment smaller than 62.5 microns, dry weight, disintegrations per minute per gram
22023	Radium-226, bed sediment smaller than 62.5 microns, dry weight, disintegrations per minute per gram
22024	Beryllium-7, suspended sediment smaller than 62.5 microns, dry weight, disintegrations per minute per gram
22025	Cesium-137, suspended sediment smaller than 62.5 microns, dry weight, picocuries per gram
22026	Lead-210, suspended sediment smaller than 62.5 microns, dry weight, disintegrations per minute per gram
22027	Radium-226, suspended sediment smaller than 62.5 microns, dry weight, disintegrations per minute per gram
22032	Polonium-210 2-sigma combined uncertainty, water, unfiltered, picocuries per liter
22384	Bismuth-214 counting error, water, unfiltered, picocuries per liter
22502	Thorium-232 counting error, water, unfiltered, picocuries per liter
22602	Uranium-238 counting error, water, unfiltered, picocuries per liter
22604	Uranium-238 counting error, water, filtered, picocuries per liter
22607	Uranium-234 counting error, water, unfiltered, picocuries per liter
22611	Uranium-234 counting error, water, filtered, picocuries per liter
22623	Uranium counting error, water, filtered, micrograms per liter
22624	Uranium counting error, water, unfiltered, micrograms per liter
22704	Uranium, water, unfiltered, recoverable, micrograms per liter
26504	Thorium-230 counting error, water, filtered, picocuries per liter
26506	Thorium-230 counting error, suspended sediment, picocuries per liter
27702	Zirconium-95 counting error, water, unfiltered, picocuries per liter
27802	Niobium-95 counting error, water, unfiltered, picocuries per liter
27902	Ruthenium-103 counting error, water, unfiltered, picocuries per liter
28002	Ruthenium-106 counting error, water, unfiltered, picocuries per liter

Parameter code	Parameter name
28302	Iodine-131 counting error, water, unfiltered, picocuries per liter
28402	Cesium-137 counting error, water, unfiltered, picocuries per liter
28405	Cesium-137 counting error, suspended sediment, picocuries per liter
28406	Cesium-137 counting error, water, filtered, picocuries per liter
28411	Cesium-134 counting error, water, filtered, picocuries per liter
28413	Cesium-134 counting error, suspended sediment, picocuries per liter
28415	Cesium-134 counting error, water, unfiltered, picocuries per liter
28602	Barium-140 counting error, water, unfiltered, picocuries per liter
28702	Lanthanum-140 counting error, water, unfiltered, picocuries per liter
28802	Cerium-141 counting error, water, unfiltered, picocuries per liter
28902	Cerium-144 counting error, water, unfiltered, picocuries per liter
29302	Zinc-65 counting error, water, unfiltered, picocuries per liter
29402	Chromium-51 counting error, water, unfiltered, picocuries per liter
29502	Manganese-54 counting error, water, unfiltered, picocuries per liter
29602	Cobalt-60 counting error, water, unfiltered, picocuries per liter
29632	Scandium-46 counting error, water, filtered, picocuries per liter
29634	Scandium-46 counting error, suspended sediment, picocuries per liter
29636	Scandium-46 counting error, water, unfiltered, picocuries per liter
29797	Bicarbonate, water, unfiltered, Gran titration, field, milligrams per liter
29798	Carbonate, water, unfiltered, Gran titration, field, milligrams per liter
29799	Hydroxide, water, unfiltered, Gran titration, field, milligrams per liter
29800	Hydroxide, water, filtered, Gran titration, field, milligrams per liter
29804	Bicarbonate, water, filtered, fixed endpoint (pH 4.5) titration, field, milligrams per liter
29805	Bicarbonate, water, filtered, fixed endpoint (pH 4.5) titration, laboratory, milligrams per liter
29806	Bicarbonate, water, filtered, inflection-point titration method (incremental titration method), laboratory, milligrams per liter
29810	Hydroxide, water, filtered, fixed endpoint (pH 10.4) titration, field, milligrams per liter
29811	Hydroxide, water, filtered, fixed endpoint (pH 10.4) titration, laboratory, milligrams per liter
29812	Hydroxide, water, filtered, inflection-point titration method (incremental titration method), laboratory, milligrams per liter
29814	Aluminum, suspended sediment, total digestion, dry weight, micrograms per gram
29815	Aluminum, soil, recoverable, dry weight, micrograms per gram
29816	Antimony, suspended sediment, total digestion, dry weight, micrograms per gram
29817	Antimony, soil, recoverable, dry weight, micrograms per gram
29818	Arsenic, suspended sediment, total digestion, dry weight, micrograms per gram
29819	Arsenic, soil, recoverable, dry weight, micrograms per gram
29820	Barium, suspended sediment, total digestion, dry weight, micrograms per gram
29821	Barium, soil, recoverable, dry weight, micrograms per gram
29822	Beryllium, suspended sediment, total digestion, dry weight, micrograms per gram
29823	Beryllium, soil, recoverable, dry weight, micrograms per gram
29824	Boron, suspended sediment, total digestion, dry weight, micrograms per gram

Parameter code	Parameter name
29825	Boron, soil, recoverable, dry weight, micrograms per gram
29826	Cadmium, suspended sediment, total digestion, dry weight, micrograms per gram
29827	Cadmium, soil, recoverable, dry weight, micrograms per gram
29828	Calcium, soil, recoverable, dry weight, milligrams per kilogram
29829	Chromium, suspended sediment, total digestion, dry weight, micrograms per gram
29830	Chromium, soil, recoverable, dry weight, micrograms per gram
29831	Cobalt, soil, recoverable, dry weight, micrograms per gram
29832	Copper, suspended sediment, total digestion, dry weight, micrograms per gram
29833	Copper, soil, recoverable, dry weight, micrograms per gram
29834	Iron, suspended sediment, total digestion, dry weight, micrograms per gram
29835	Iron, soil, recoverable, dry weight, micrograms per gram
29836	Lead, suspended sediment, total digestion, dry weight, micrograms per gram
29837	Lead, soil, recoverable, dry weight, micrograms per gram
29838	Magnesium, soil, recoverable, dry weight, milligrams per kilogram
29839	Manganese, suspended sediment, total digestion, dry weight, micrograms per gram
29840	Manganese, soil, recoverable, dry weight, micrograms per gram
29841	Mercury, suspended sediment, total digestion, dry weight, micrograms per gram
29842	Mercury, soil, recoverable, dry weight, micrograms per gram
29843	Molybdenum, suspended sediment, total digestion, dry weight, micrograms per gram
29844	Molybdenum, soil, recoverable, dry weight, micrograms per gram
29845	Nickel, suspended sediment, total digestion, dry weight, micrograms per gram
29846	Nickel, soil, recoverable, dry weight, micrograms per gram
29847	Selenium, suspended sediment, total digestion, dry weight, micrograms per gram
29848	Selenium, soil, recoverable, dry weight, micrograms per gram
29849	Silicon, soil, recoverable, dry weight, milligrams per kilogram
29850	Silver, suspended sediment, total digestion, dry weight, micrograms per gram
29851	Sodium, soil, recoverable, dry weight, micrograms per gram
29852	Thallium, soil, recoverable, dry weight, micrograms per gram
29853	Vanadium, suspended sediment, total digestion, dry weight, micrograms per gram
29854	Vanadium, soil, recoverable, dry weight, micrograms per gram
29855	Zinc, suspended sediment, total digestion, dry weight, micrograms per gram
29856	Zinc, soil, recoverable, dry weight, micrograms per gram
29858	Actinium-228 counting error, water, unfiltered, picocuries per liter
29860	Actinium-228 counting error, water, filtered, picocuries per liter
29862	Silver-108 counting error, water, unfiltered, picocuries per liter
29864	Silver-108 counting error, water, filtered, picocuries per liter
29866	Americium-241 counting error, water, unfiltered, picocuries per liter
29868	Americium-241 counting error, water, filtered, picocuries per liter
29870	Barium-140 counting error, water, filtered, picocuries per liter
29872	Beryllium-7 counting error, water, unfiltered, picocuries per liter

Parameter code	Parameter name
29874	Beryllium-7 counting error, water, filtered, picocuries per liter
29876	Bismuth-214 counting error, water, filtered, picocuries per liter
29878	Cerium-141 counting error, water, filtered, picocuries per liter
29880	Curium-242 counting error, water, unfiltered, picocuries per liter
29882	Curium-242 counting error, water, filtered, picocuries per liter
29884	Curium-244 counting error, water, unfiltered, picocuries per liter
29886	Curium-244 counting error, water, filtered, picocuries per liter
29888	Cobalt-57 counting error, water, unfiltered, picocuries per liter
29890	Cobalt-57 counting error, water, filtered, picocuries per liter
29892	Cobalt-58 counting error, water, unfiltered, picocuries per liter
29894	Cobalt-58 counting error, water, filtered, picocuries per liter
29896	Chromium-51 counting error, water, filtered, picocuries per liter
29898	Cesium-144 counting error, water, unfiltered, picocuries per liter
29900	Cesium-144 counting error, water, filtered, picocuries per liter
29902	Europium-155 counting error, water, unfiltered, picocuries per liter
29904	Europium-155 counting error, water, filtered, picocuries per liter
29906	Hafnium-175 counting error, water, unfiltered, picocuries per liter
29908	Hafnium-175 counting error, water, filtered, picocuries per liter
29910	Hafnium-181 counting error, water, unfiltered, picocuries per liter
29912	Hafnium-181 counting error, water, filtered, picocuries per liter
29914	Iodine-129 counting error, water, filtered, picocuries per liter
29916	Iodine-131 counting error, water, filtered, picocuries per liter
29918	Iodine-133 counting error, water, unfiltered, picocuries per liter
29920	Iodine-133 counting error, water, filtered, picocuries per liter
29922	Lanthanum-140 counting error, water, filtered, picocuries per liter
29924	Molybdenum-95 counting error, water, unfiltered, picocuries per liter
29926	Molybdenum-95 counting error, water, filtered, picocuries per liter
29928	Molybdenum-99 counting error, water, unfiltered, picocuries per liter
29930	Molybdenum-99 counting error, water, filtered, picocuries per liter
29932	Sodium-24 counting error, water, unfiltered, picocuries per liter
29934	Sodium-24 counting error, water, filtered, picocuries per liter
29936	Niobium-95 counting error, water, filtered, picocuries per liter
29938	Neodymium-147 counting error, water, unfiltered, picocuries per liter
29940	Neodymium-147 counting error, water, filtered, picocuries per liter
29942	Neptunium-239 counting error, water, unfiltered, picocuries per liter
29944	Neptunium-239 counting error, water, filtered, picocuries per liter
29946	Lead-212 counting error, water, filtered, picocuries per liter
29948	Lead-214 counting error, water, filtered, picocuries per liter
29950	Plutonium-239/Plutonium-240 counting error, water, unfiltered, activity ratio
29952	Plutonium-239/Plutonium-240 counting error, water, filtered, activity ratio

Parameter code	Parameter name
29954	Ruthenium-103 counting error, water, filtered, picocuries per liter
29956	Antimony-124 counting error, water, unfiltered, picocuries per liter
29958	Antimony-124 counting error, water, filtered, picocuries per liter
29960	Antimony-125 counting error, water, unfiltered, picocuries per liter
29962	Antimony-125 counting error, water, filtered, picocuries per liter
29964	Strontium-91 counting error, water, unfiltered, picocuries per liter
29966	Strontium-91 counting error, water, filtered, picocuries per liter
29968	Technetium-99 (metastable) counting error, water, unfiltered, picocuries per liter
29970	Technetium-99 (metastable) counting error, water, filtered, picocuries per liter
29972	Tellurium-128 counting error, water, unfiltered, picocuries per liter
29974	Tellurium-128 counting error, water, filtered, picocuries per liter
29976	Tellurium-132 counting error, water, unfiltered, picocuries per liter
29978	Tellurium-132 counting error, water, filtered, picocuries per liter
29980	Thallium-208 counting error, water, unfiltered, picocuries per liter
29982	Thallium-208 counting error, water, filtered, picocuries per liter
29984	Xenon-135 counting error, water, unfiltered, picocuries per liter
29986	Xenon-135 counting error, water, filtered, picocuries per liter
29988	Yttrium-91 (metastable) counting error, water, unfiltered, picocuries per liter
29990	Yttrium-91 (metastable) counting error, water, filtered, picocuries per liter
29992	Zirconium-95 counting error, water, filtered, picocuries per liter
29993	Azinphos-methyl, soil, recoverable, dry weight, milligrams per kilogram
29994	Sulprofos, soil, recoverable, dry weight, milligrams per kilogram
29995	Chlorpyrifos, soil, recoverable, dry weight, milligrams per kilogram
29996	Coumaphos, soil, recoverable, dry weight, milligrams per kilogram
29997	Demeton, soil, recoverable, dry weight, milligrams per kilogram
29998	Diazinon, soil, recoverable, dry weight, milligrams per kilogram
29999	Dichlorvos, soil, recoverable, dry weight, milligrams per kilogram
30000	Dimethoate, soil, recoverable, dry weight, milligrams per kilogram
30001	Disulfoton, soil, recoverable, dry weight, milligrams per kilogram
30002	EPN, soil, recoverable, dry weight, milligrams per kilogram
30003	Ethoprop, soil, recoverable, dry weight, milligrams per kilogram
30004	Fensulfothion, water, unfiltered, recoverable, micrograms per liter
30005	Fensulfothion, soil, recoverable, dry weight, milligrams per kilogram
30006	Fenthion, water, unfiltered, recoverable, micrograms per liter
30007	Fenthion, soil, recoverable, dry weight, milligrams per kilogram
30008	Malathion, soil, recoverable, dry weight, milligrams per kilogram
30009	Merphos, water, unfiltered, recoverable, micrograms per liter
30010	Merphos, soil, recoverable, dry weight, milligrams per kilogram
30011	Mevinphos, soil, recoverable, dry weight, milligrams per kilogram
30012	Monocrotophos, soil, recoverable, dry weight, milligrams per kilogram

Parameter code	Parameter name
30013	Naled, soil, recoverable, dry weight, milligrams per kilogram
30014	Methyl parathion, soil, recoverable, dry weight, milligrams per kilogram
30015	Parathion, soil, recoverable, dry weight, milligrams per kilogram
30016	Phorate, soil, recoverable, dry weight, milligrams per kilogram
30017	Ronnel, soil, recoverable, dry weight, milligrams per kilogram
30018	Stirophos, soil, recoverable, dry weight, milligrams per kilogram
30019	Sulfotepp, soil, recoverable, dry weight, milligrams per kilogram
30020	TEPP, soil, recoverable, dry weight, milligrams per kilogram
30021	Tokuthion, soil, recoverable, dry weight, milligrams per kilogram
30022	Trichloronate, soil, recoverable, dry weight, milligrams per kilogram
30023	2,4-D, soil, recoverable, dry weight, milligrams per kilogram
30024	2,4-DB, soil, recoverable, dry weight, milligrams per kilogram
30025	2,4,5-T, soil, recoverable, dry weight, milligrams per kilogram
30026	Silvex, soil, recoverable, dry weight, milligrams per kilogram
30027	Dalapon, soil, recoverable, dry weight, milligrams per kilogram
30028	Dicamba, soil, recoverable, dry weight, milligrams per kilogram
30029	Dichlorprop, soil, recoverable, dry weight, milligrams per kilogram
30030	Dinoseb, soil, recoverable, dry weight, milligrams per kilogram
30031	MCPA, soil, recoverable, dry weight, milligrams per kilogram
30032	Mecoprop, soil, recoverable, dry weight, milligrams per kilogram
30033	Petroleum hydrocarbons, soil, recoverable, dry weight, milligrams per kilogram
30034	1,2-Dibromoethane, soil, recoverable, dry weight, milligrams per kilogram
30035	1,2-Dibromo-3-chloropropane, soil, recoverable, dry weight, milligrams per kilogram
30038	2-Chlorophenol, soil, recoverable, dry weight, milligrams per kilogram
30039	4-Chloro-3-methylphenol, soil, recoverable, dry weight, milligrams per kilogram
30040	Cresols (all isomers), soil, recoverable, dry weight, milligrams per kilogram
30041	2-Cyclohexyl-4,6-dinitrophenol, soil, recoverable, dry weight, milligrams per kilogram
30042	2,4-Dichlorophenol, soil, recoverable, dry weight, milligrams per kilogram
30043	2,6-Dichlorophenol, soil, recoverable, dry weight, milligrams per kilogram
30044	2,4-Dimethylphenol, soil, recoverable, dry weight, milligrams per kilogram
30045	2-Methyl-4,6-dinitrophenol, soil, recoverable, dry weight, milligrams per kilogram
30046	2,4-Dinitrophenol, soil, recoverable, dry weight, milligrams per kilogram
30047	2-Methyl-4,6-dinitrophenol, soil, recoverable, dry weight, milligrams per kilogram
30048	2-Nitrophenol, soil, recoverable, dry weight, milligrams per kilogram
30049	4-Nitrophenol, soil, recoverable, dry weight, milligrams per kilogram
30050	Pentachlorophenol, soil, recoverable, dry weight, milligrams per kilogram
30051	Phenol, soil, recoverable, dry weight, milligrams per kilogram
30052	Trichlorophenols (all isomers), soil, recoverable, dry weight, milligrams per kilogram
30053	Tetrachlorophenols (all isomers), soil, recoverable, dry weight, milligrams per kilogram
30054	2,4,6-Trichlorophenol, soil, recoverable, dry weight, milligrams per kilogram

Parameter code	Parameter name
30056	Benzyl chloride, soil, recoverable, dry weight, milligrams per kilogram
30057	Bis(2-chloroethoxy)methane, soil, recoverable, dry weight, milligrams per kilogram
30058	Bis(2-chloroisopropyl) ether, soil, recoverable, dry weight, milligrams per kilogram
30059	Bromobenzene, soil, recoverable, dry weight, milligrams per kilogram
30060	Bromodichloromethane, soil, recoverable, dry weight, milligrams per kilogram
30061	Tribromomethane, soil, recoverable, dry weight, milligrams per kilogram
30062	Bromomethane, soil, recoverable, dry weight, milligrams per kilogram
30063	Tetrachloromethane, soil, recoverable, dry weight, milligrams per kilogram
30064	Chloroacetaldehyde, soil, recoverable, dry weight, milligrams per kilogram
30065	Trichloroacetaldehyde, soil, recoverable, dry weight, milligrams per kilogram
30067	Chloroethane, soil, recoverable, dry weight, milligrams per kilogram
30068	Trichloromethane, soil, recoverable, dry weight, milligrams per kilogram
30069	1-Chlorohexane, soil, recoverable, dry weight, milligrams per kilogram
30070	2-Chloroethyl vinyl ether, soil, recoverable, dry weight, milligrams per kilogram
30071	Chloromethane, soil, recoverable, dry weight, milligrams per kilogram
30072	Chloromethyl methyl ether, soil, recoverable, dry weight, milligrams per kilogram
30073	2-Chlorotoluene, soil, recoverable, dry weight, milligrams per kilogram
30074	Dibromochloromethane, soil, recoverable, dry weight, milligrams per kilogram
30075	Dibromomethane, soil, recoverable, dry weight, milligrams per kilogram
30076	1,2-Dichlorobenzene, soil, recoverable, dry weight, milligrams per kilogram
30077	1,3-Dichlorobenzene, soil, recoverable, dry weight, milligrams per kilogram
30078	1,4-Dichlorobenzene, soil, recoverable, dry weight, milligrams per kilogram
30079	Dichlorodifluoromethane, soil, recoverable, dry weight, milligrams per kilogram
30080	1,1-Dichloroethane, soil, recoverable, dry weight, milligrams per kilogram
30081	1,2-Dichloroethane, soil, recoverable, dry weight, milligrams per kilogram
30082	1,1-Dichloroethene, soil, recoverable, dry weight, milligrams per kilogram
30083	trans-1,2-Dichloroethene, soil, recoverable, dry weight, milligrams per kilogram
30084	Dichloromethane, soil, recoverable, dry weight, milligrams per kilogram
30085	1,2-Dichloropropane, soil, recoverable, dry weight, milligrams per kilogram
30086	trans-1,3-Dichloropropene, soil, recoverable, dry weight, milligrams per kilogram
30087	cis-1,3-Dichloropropene, soil, recoverable, dry weight, milligrams per kilogram
30088	1,1,2,2-Tetrachloroethane, soil, recoverable, dry weight, milligrams per kilogram
30089	1,1,1,2-Tetrachloroethane, soil, recoverable, dry weight, milligrams per kilogram
30090	Tetrachloroethene, soil, recoverable, dry weight, milligrams per kilogram
30091	1,1,1-Trichloroethane, soil, recoverable, dry weight, milligrams per kilogram
30092	1,1,2-Trichloroethane, soil, recoverable, dry weight, milligrams per kilogram
30093	Trichlorofluoromethane, soil, recoverable, dry weight, milligrams per kilogram
30094	1,2,3-Trichloropropane, soil, recoverable, dry weight, milligrams per kilogram
30095	Vinyl chloride, soil, recoverable, dry weight, milligrams per kilogram
30096	Benzene, soil, recoverable, dry weight, milligrams per kilogram

Parameter code	Parameter name
30097	Chlorobenzene, soil, recoverable, dry weight, milligrams per kilogram
30098	Ethylbenzene, soil, recoverable, dry weight, milligrams per kilogram
30099	Toluene, soil, recoverable, dry weight, milligrams per kilogram
30100	m-Xylene, soil, recoverable, dry weight, milligrams per kilogram
30101	o-Xylene plus p-xylene, soil, recoverable, dry weight, milligrams per kilogram
30102	Aldrin, soil, recoverable, dry weight, milligrams per kilogram
30103	Aroclor 1016, soil, recoverable, dry weight, milligrams per kilogram
30104	Aroclor 1221, soil, recoverable, dry weight, milligrams per kilogram
30105	Aroclor 1232, soil, recoverable, dry weight, milligrams per kilogram
30106	Aroclor 1242, soil, recoverable, dry weight, milligrams per kilogram
30107	Aroclor 1248, soil, recoverable, dry weight, milligrams per kilogram
30108	Aroclor 1254, soil, recoverable, dry weight, milligrams per kilogram
30109	Aroclor 1260, soil, recoverable, dry weight, milligrams per kilogram
30110	alpha-HCH, soil, recoverable, dry weight, milligrams per kilogram
30111	beta-HCH, soil, recoverable, dry weight, milligrams per kilogram
30112	delta-HCH, soil, recoverable, dry weight, milligrams per kilogram
30113	Lindane, soil, recoverable, dry weight, milligrams per kilogram
30115	Chlordecone, soil, recoverable, dry weight, milligrams per kilogram
30116	p,p'-Methoxychlor, soil, recoverable, dry weight, milligrams per kilogram
30117	p,p'-DDD, soil, recoverable, dry weight, milligrams per kilogram
30118	p,p'-DDE, soil, recoverable, dry weight, milligrams per kilogram
30119	p,p'-DDT, soil, recoverable, dry weight, milligrams per kilogram
30120	Dieldrin, soil, recoverable, dry weight, milligrams per kilogram
30121	alpha-Endosulfan, soil, recoverable, dry weight, milligrams per kilogram
30122	beta-Endosulfan, soil, recoverable, dry weight, milligrams per kilogram
30123	Endosulfan sulfate, soil, recoverable, dry weight, milligrams per kilogram
30124	Endrin, soil, recoverable, dry weight, milligrams per kilogram
30125	Endrin aldehyde, soil, recoverable, dry weight, milligrams per kilogram
30126	Heptachlor, soil, recoverable, dry weight, milligrams per kilogram
30127	Heptachlor epoxide, soil, recoverable, dry weight, milligrams per kilogram
30128	Toxaphene, soil, recoverable, dry weight, milligrams per kilogram
30129	1,2-Dichloroethane, soil, recoverable, dry weight, milligrams per kilogram
30130	1,3-Dichloropropane, soil, recoverable, dry weight, milligrams per kilogram
30131	1,3-Dichloropropane, soil, recoverable, dry weight, milligrams per kilogram
30132	Trichloroethene, soil, recoverable, dry weight, milligrams per kilogram
30133	Acetone, soil, recoverable, dry weight, milligrams per kilogram
30134	Carbon disulfide, soil, recoverable, dry weight, milligrams per kilogram
30135	Ethyl methyl ketone, soil, recoverable, dry weight, milligrams per kilogram
30136	Vinyl acetate, soil, recoverable, dry weight, milligrams per kilogram
30137	Isobutyl methyl ketone, soil, recoverable, dry weight, milligrams per kilogram

Parameter code	Parameter name
30138	n-Butyl methyl ketone, soil, recoverable, dry weight, milligrams per kilogram
30139	Styrene, soil, recoverable, dry weight, milligrams per kilogram
30140	Xylene (all isomers), soil, recoverable, dry weight, milligrams per kilogram
30141	Acenaphthene, soil, recoverable, dry weight, milligrams per kilogram
30142	Anthracene, soil, recoverable, dry weight, milligrams per kilogram
30143	Benzo[a]anthracene, soil, recoverable, dry weight, milligrams per kilogram
30144	Benzo[b]fluoranthene, soil, recoverable, dry weight, milligrams per kilogram
30145	Benzo[k]fluoranthene, soil, recoverable, dry weight, milligrams per kilogram
30146	Benzo[ghi]perylene, soil, recoverable, dry weight, milligrams per kilogram
30147	Benzo[a]pyrene, soil, recoverable, dry weight, milligrams per kilogram
30148	Benzyl n-butyl phthalate, soil, recoverable, dry weight, milligrams per kilogram
30149	4-Bromophenyl phenyl ether, soil, recoverable, dry weight, milligrams per kilogram
30150	Bis(2-chloroethyl) ether, soil, recoverable, dry weight, milligrams per kilogram
30151	2-Chloronaphthalene, soil, recoverable, dry weight, milligrams per kilogram
30152	4-Chlorophenyl phenyl ether, soil, recoverable, dry weight, milligrams per kilogram
30153	Chrysene, soil, recoverable, dry weight, milligrams per kilogram
30154	Dibenzo[a,h]anthracene, soil, recoverable, dry weight, milligrams per kilogram
30155	3,3'-Dichlorobenzidine, soil, recoverable, dry weight, milligrams per kilogram
30156	Diethyl phthalate, soil, recoverable, dry weight, milligrams per kilogram
30157	Dimethyl phthalate, soil, recoverable, dry weight, milligrams per kilogram
30158	Di-n-butyl phthalate, soil, recoverable, dry weight, milligrams per kilogram
30159	2,4-Dinitrotoluene, soil, recoverable, dry weight, milligrams per kilogram
30160	2,6-Dinitrotoluene, soil, recoverable, dry weight, milligrams per kilogram
30161	Di-n-octyl phthalate, soil, recoverable, dry weight, milligrams per kilogram
30162	Bis(2-ethylhexyl) phthalate, soil, recoverable, dry weight, milligrams per kilogram
30163	Fluoranthene, soil, recoverable, dry weight, milligrams per kilogram
30164	9H-Fluorene, soil, recoverable, dry weight, milligrams per kilogram
30165	Hexachlorobenzene, soil, recoverable, dry weight, milligrams per kilogram
30166	Hexachlorobutadiene, soil, recoverable, dry weight, milligrams per kilogram
30167	Hexachlorocyclopentadiene, soil, recoverable, dry weight, milligrams per kilogram
30168	Hexachloroethane, soil, recoverable, dry weight, milligrams per kilogram
30169	Indeno[1,2,3-cd]pyrene, soil, recoverable, dry weight, milligrams per kilogram
30170	Isophorone, soil, recoverable, dry weight, milligrams per kilogram
30171	Naphthalene, soil, recoverable, dry weight, milligrams per kilogram
30172	Nitrobenzene, soil, recoverable, dry weight, milligrams per kilogram
30173	N-Nitrosodimethylamine, soil, recoverable, dry weight, milligrams per kilogram
30174	N-Nitrosodi-n-propylamine, soil, recoverable, dry weight, milligrams per kilogram
30175	N-Nitrosodiphenylamine, soil, recoverable, dry weight, milligrams per kilogram
30176	Phenanthrene, soil, recoverable, dry weight, milligrams per kilogram
30177	Pyrene, soil, recoverable, dry weight, milligrams per kilogram

Parameter code	Parameter name
30178	1,2,4-Trichlorobenzene, soil, recoverable, dry weight, milligrams per kilogram
30179	Benzidine, soil, recoverable, dry weight, milligrams per kilogram
30180	Benzyl alcohol, soil, recoverable, dry weight, milligrams per kilogram
30181	o-Cresol, soil, recoverable, dry weight, milligrams per kilogram
30182	p-Cresol, soil, recoverable, dry weight, milligrams per kilogram
30183	Benzoic acid, soil, recoverable, dry weight, milligrams per kilogram
30184	2-Methylnaphthalene, soil, recoverable, dry weight, milligrams per kilogram
30185	2,4,5-Trichlorophenol, soil, recoverable, dry weight, milligrams per kilogram
30186	2-Nitroaniline, soil, recoverable, dry weight, milligrams per kilogram
30187	3-Nitroaniline, soil, recoverable, dry weight, milligrams per kilogram
30188	Dibenzofuran, soil, recoverable, dry weight, milligrams per kilogram
30189	4-Nitroaniline, soil, recoverable, dry weight, milligrams per kilogram
30190	Dichlorprop, water, unfiltered, recoverable, micrograms per liter
30191	Dinoseb, water, unfiltered, recoverable, micrograms per liter
30192	MCPA, water, unfiltered, recoverable, micrograms per liter
30193	Mecoprop, water, unfiltered, recoverable, micrograms per liter
30194	2-Methylnaphthalene, water, unfiltered, recoverable, micrograms per liter
30195	2-Nitroaniline, water, unfiltered, recoverable, micrograms per liter
30196	4-Nitroaniline, water, unfiltered, recoverable, micrograms per liter
30197	2-Chloroethyl vinyl ether, water, unfiltered, recoverable, micrograms per liter
30198	1,3-Dichloropropane, water, unfiltered, recoverable, micrograms per liter
30199	1,3-Dichloropropane, water, unfiltered, recoverable, micrograms per liter
30200	Dalapon, water, unfiltered, recoverable, micrograms per liter
30201	Chloromethane, water, unfiltered, recoverable, micrograms per liter
30202	Bromomethane, water, unfiltered, recoverable, micrograms per liter
30203	1,2-Dibromoethane, water, unfiltered, recoverable, micrograms per liter
30204	2-Methyl-4,6-dinitrophenol, water, unfiltered, recoverable, micrograms per liter
30217	Dibromomethane, water, unfiltered, recoverable, micrograms per liter
30218	Dichlorvos, water, unfiltered, recoverable, micrograms per liter
30219	2,4-DB, water, unfiltered, recoverable, micrograms per liter
30234	Bromacil, water, unfiltered, recoverable, micrograms per liter
30235	Butachlor, water, unfiltered, recoverable, micrograms per liter
30236	Butylate, water, unfiltered, recoverable, micrograms per liter
30245	Carboxin, water, unfiltered, recoverable, micrograms per liter
30254	Cycloate, water, unfiltered, recoverable, micrograms per liter
30255	Diphenamid, water, unfiltered, recoverable, micrograms per liter
30264	Hexazinone, water, unfiltered, recoverable, micrograms per liter
30272	Lead, bed sediment, dry weight, micrograms per gram
30274	Lithium, bed sediment, dry weight, micrograms per gram
30275	Lithium, suspended sediment, total digestion, dry weight, micrograms per gram

Parameter code	Parameter name
30278	Manganese, bed sediment, dry weight, micrograms per gram
30279	Manganese, suspended sediment, total digestion, dry weight, micrograms per gram
30280	Mercury, bed sediment, dry weight, micrograms per gram
30281	Mercury, suspended sediment, total digestion, dry weight, micrograms per gram
30282	Methiocarb, water, unfiltered, recoverable, micrograms per liter
30283	Molybdenum, bed sediment, dry weight, micrograms per gram
30284	Molybdenum, suspended sediment, total digestion, dry weight, micrograms per gram
30285	Neodymium, bed sediment, dry weight, micrograms per gram
30286	Neodymium, suspended sediment, total digestion, dry weight, micrograms per gram
30287	Nickel, bed sediment, dry weight, micrograms per gram
30288	Nickel, suspended sediment, total digestion, dry weight, micrograms per gram
30289	Niobium, bed sediment, dry weight, micrograms per gram
30290	Niobium, suspended sediment, total digestion, dry weight, micrograms per gram
30295	Propachlor, water, unfiltered, recoverable, micrograms per liter
30296	Propoxur, water, unfiltered, recoverable, micrograms per liter
30297	Scandium, bed sediment, dry weight, micrograms per gram
30298	Scandium, suspended sediment, total digestion, dry weight, micrograms per gram
30299	Selenium, bed sediment, dry weight, micrograms per gram
30300	Selenium, suspended sediment, total digestion, dry weight, micrograms per gram
30301	Silver, bed sediment, dry weight, micrograms per gram
30302	Silver, suspended sediment, total digestion, dry weight, micrograms per gram
30305	Strontium, bed sediment, dry weight, micrograms per gram
30306	Strontium, suspended sediment, total digestion, dry weight, micrograms per gram
30309	Tantalum, bed sediment, dry weight, micrograms per gram
30310	Tantalum, suspended sediment, total digestion, dry weight, micrograms per gram
30311	Terbacil, water, unfiltered, recoverable, micrograms per liter
30312	Thorium, bed sediment, dry weight, micrograms per gram
30313	Thorium, suspended sediment, total digestion, dry weight, micrograms per gram
30314	Tin, bed sediment, dry weight, micrograms per gram
30315	Tin, suspended sediment, total digestion, dry weight, micrograms per gram
30318	Tungsten, bed sediment, dry weight, micrograms per gram
30319	Tungsten, suspended sediment, total digestion, dry weight, micrograms per gram
30322	Vanadium, bed sediment, dry weight, micrograms per gram
30324	Vernolate, water, unfiltered, recoverable, micrograms per liter
30325	Ytterbium, bed sediment, dry weight, micrograms per gram
30326	Ytterbium, suspended sediment, total digestion, dry weight, micrograms per gram
30327	Yttrium, bed sediment, dry weight, micrograms per gram
30328	Yttrium, suspended sediment, total digestion, dry weight, micrograms per gram
30329	Zinc, bed sediment, dry weight, micrograms per gram
30330	Zinc, suspended sediment, total digestion, dry weight, micrograms per gram

Parameter code	Parameter name
30331	Zirconium, bed sediment, dry weight, micrograms per gram
30332	Zirconium, suspended sediment, total digestion, dry weight, micrograms per gram
30335	PCBs, water, filtered, recoverable, nanograms per liter
30341	4-Isopropyltoluene, water, unfiltered, recoverable, micrograms per liter
30342	4-Nitroaniline, water, unfiltered, recoverable, micrograms per liter
30343	4-Chloroaniline, water, unfiltered, recoverable, micrograms per liter
31664	Diclofop-methyl, water, unfiltered, recoverable, micrograms per liter
31692	Heterotrophic plate count, water, colony forming units per milliliter
31696	Iron-related bacteria reaction pattern signature, BART(TM) method, code
31698	Sulfate-reducing bacteria reaction pattern signature, BART(TM) method, code
32003	Organic compounds, water, unfiltered, chloroform & alcohol extraction, recoverable, micrograms per liter
32004	Organic compounds, water, unfiltered, alcohol extraction, recoverable, micrograms per liter
32005	Organic compounds, water, unfiltered, chloroform extraction, recoverable, micrograms per liter
32101	Bromodichloromethane, water, unfiltered, recoverable, micrograms per liter
32102	Tetrachloromethane, water, unfiltered, recoverable, micrograms per liter
32103	1,2-Dichloroethane, water, unfiltered, recoverable, micrograms per liter
32104	Tribromomethane, water, unfiltered, recoverable, micrograms per liter
32105	Dibromochloromethane, water, unfiltered, recoverable, micrograms per liter
32106	Trichloromethane, water, unfiltered, recoverable, micrograms per liter
32209	Chlorophyll *a*, water, fluorometric method, corrected, micrograms per liter
32210	Chlorophyll *a*, water, trichromatic method, uncorrected, micrograms per liter
32211	Chlorophyll *a*, phytoplankton, spectrophotometric acid method, micrograms per liter
32213	Pheophytin *a*, fluorometric method, micrograms per liter
32217	Chlorophyll *a*, fluorometric method, uncorrected, micrograms per liter
32218	Pheophytin *a*, phytoplankton, spectrophotometric acid method, micrograms per liter
32223	Chlorophyll *a*, periphyton, spectrophotometric method, corrected, milligrams per square meter
32224	Pheophytin *a*, periphyton, spectrophotometric acid method, corrected, milligrams per square meter
32225	Chlorophylls, periphyton, spectrophotometric method, uncorrected, milligrams per square meter
32226	Chlorophyll *b*, periphyton, spectrophotometric method, uncorrected, milligrams per square meter
32227	Chlorophyll *c*, periphyton, spectrophotometric method, uncorrected, milligrams per square meter
32228	Chlorophyll *a*, periphyton, spectrophotometric method, uncorrected, milligrams per square meter
32230	Chlorophyll *a*, phytoplankton, spectrophotometric method, uncorrected, micrograms per liter
32231	Chlorophyll *b*, phytoplankton, spectrophotometric method, micrograms per liter
32232	Chlorophyll *c*, phytoplankton, spectrophotometric method, micrograms per liter
32234	Chlorophylls, phytoplankton, spectrophotometric method, uncorrected, micrograms per liter
32240	Tannin and lignin, water, unfiltered, recoverable, milligrams per liter
32241	Chlorophylls, periphyton, fluorometric method, uncorrected, milligrams per square meter
32242	Chlorophyll *a*, periphyton, fluorometric method, corrected, milligrams per square meter
32243	Pheophytin *a*, periphyton, fluorometric method, milligrams per square meter

Parameter code	Parameter name
32271	Chlorophylls less than 35 microns, 35-um sieve prefilter, phytoplankton, fluorometric method, micrograms per liter
32272	Chlorophyll *a* less than 35 microns, 35-um sieve prefilter, phytoplankton, fluorometric method, corrected, micrograms per liter
32273	Pheophytin *a* less than 35 microns, 35-um sieve prefilter, phytoplankton, fluorometric method, micrograms per liter
32274	Chlorophylls less than 11 microns, 11-um sieve prefilter, phytoplankton, fluorometric method, micrograms per liter
32275	Chlorophyll *a* less than 11 microns, 11-um sieve prefilter, phytoplankton, fluorometric method, corrected, micrograms per liter
32276	Pheophytin *a* less than 11 microns, 11-um sieve prefilter, phytoplankton, fluorometric method, micrograms per liter
32277	Chlorophylls greater than 35 microns, calculated as Chlorophylls (P32217) less Chlorophylls < 35 um (P32271), micrograms per liter
32278	Chlorophyll *a* greater than 35 microns, calculated as Chlorophyll *a* (P32209) less Chloro*phyll a* < 35 um (P32272), micrograms per liter
32279	Pheophytin *a* greater than 35 microns, calculated as Pheophytin *a* (P32213) less Pheophytin *a* < 35 um (P32273), micrograms per liter
32280	Chlorophylls greater than 11 microns, calculated as Chlorophylls (P32217) less Chlorophylls < 11 um (P32274), micrograms per liter
32281	Chlorophyll *a* greater than 11 microns, calculated as Chlorophyll *a* (P32209) less Chlorophyll *a* < 11 um (P32275), micrograms per liter
32282	Pheophytin *a* greater than 11 microns, calculated as Pheophytin *a* (P32213) less Pheophytin *a* < 11 um (P32276), micrograms per liter
32283	Chlorophyll, total, water, in situ, fluorometric, 650-700 nanometers, relative fluorescence units (RFU)
32730	Phenolic compounds, water, unfiltered, recoverable, micrograms per liter
32731	Phenolic compounds, bed sediment, recoverable, dry weight, micrograms per kilogram
32732	Phenolic compounds, water, filtered, recoverable, micrograms per liter
32733	Phenolic compounds, suspended sediment, recoverable, micrograms per liter
34010	Toluene, water, unfiltered, recoverable, micrograms per liter
34030	Benzene, water, unfiltered, recoverable, micrograms per liter
34200	Acenaphthylene, water, unfiltered, recoverable, micrograms per liter
34201	Acenaphthylene, water, filtered, recoverable, micrograms per liter
34202	Acenaphthylene, suspended sediment, recoverable, micrograms per liter
34203	Acenaphthylene, bed sediment, recoverable, dry weight, micrograms per kilogram
34205	Acenaphthene, water, unfiltered, recoverable, micrograms per liter
34206	Acenaphthene, water, filtered, recoverable, micrograms per liter
34207	Acenaphthene, suspended sediment, recoverable, micrograms per liter
34208	Acenaphthene, bed sediment, recoverable, dry weight, micrograms per kilogram
34210	Acrolein, water, unfiltered, recoverable, micrograms per liter
34211	Acrolein, water, filtered, recoverable, micrograms per liter
34212	Acrolein, suspended sediment, recoverable, micrograms per liter

Parameter code	Parameter name
34213	Acrolein, bed sediment, recoverable, dry weight, micrograms per kilogram
34215	Acrylonitrile, water, unfiltered, recoverable, micrograms per liter
34216	Acrylonitrile, water, filtered, recoverable, micrograms per liter
34217	Acrylonitrile, suspended sediment, recoverable, micrograms per liter
34218	Acrylonitrile, bed sediment, recoverable, dry weight, micrograms per kilogram
34220	Anthracene, water, unfiltered, recoverable, micrograms per liter
34221	Anthracene, water, filtered, recoverable, micrograms per liter
34222	Anthracene, suspended sediment, recoverable, micrograms per liter
34223	Anthracene, bed sediment, recoverable, dry weight, micrograms per kilogram
34225	Asbestos (fibrous), water, unfiltered, micrograms per liter
34226	Asbestos (fibrous), water, filtered, micrograms per liter
34227	Asbestos (fibrous), suspended sediment, micrograms per liter
34228	Asbestos (fibrous), bed sediment, dry weight, micrograms per kilogram
34230	Benzo[b]fluoranthene, water, unfiltered, recoverable, micrograms per liter
34231	Benzo[b]fluoranthene, water, filtered, recoverable, micrograms per liter
34232	Benzo[b]fluoranthene, suspended sediment, recoverable, micrograms per liter
34233	Benzo[b]fluoranthene, bed sediment, recoverable, dry weight, micrograms per kilogram
34235	Benzene, water, filtered, recoverable, micrograms per liter
34236	Benzene, suspended sediment, recoverable, micrograms per liter
34237	Benzene, bed sediment, recoverable, dry weight, micrograms per kilogram
34239	Benzidine, water, filtered, recoverable, micrograms per liter
34240	Benzidine, suspended sediment, recoverable, micrograms per liter
34242	Benzo[k]fluoranthene, water, unfiltered, recoverable, micrograms per liter
34243	Benzo[k]fluoranthene, water, filtered, recoverable, micrograms per liter
34244	Benzo[k]fluoranthene, suspended sediment, recoverable, micrograms per liter
34245	Benzo[k]fluoranthene, bed sediment, recoverable, dry weight, micrograms per kilogram
34247	Benzo[a]pyrene, water, unfiltered, recoverable, micrograms per liter
34248	Benzo[a]pyrene, water, filtered, recoverable, micrograms per liter
34249	Benzo[a]pyrene, suspended sediment, recoverable, micrograms per liter
34250	Benzo[a]pyrene, bed sediment, recoverable, dry weight, micrograms per kilogram
34253	alpha-HCH, water, filtered, recoverable, micrograms per liter
34254	alpha-HCH, suspended sediment, recoverable, micrograms per liter
34255	beta-HCH, water, filtered, recoverable, micrograms per liter
34256	beta-HCH, suspended sediment, recoverable, micrograms per liter
34257	beta-HCH, bed sediment, recoverable, dry weight, micrograms per kilogram
34259	delta-HCH, water, unfiltered, recoverable, micrograms per liter
34260	delta-HCH, water, filtered, recoverable, micrograms per liter
34261	delta-HCH, suspended sediment, recoverable, micrograms per liter
34262	delta-HCH, bed sediment, recoverable, dry weight, micrograms per kilogram
34268	Bis(chloromethyl) ether, water, unfiltered, recoverable, micrograms per liter

Parameter code	Parameter name
34269	Bis(chloromethyl) ether, water, filtered, micrograms per liter
34270	Bis(chloromethyl) ether, suspended sediment, recoverable, micrograms per liter
34271	Bis(chloromethyl) ether, bed sediment, recoverable, dry weight, micrograms per kilogram
34273	Bis(2-chloroethyl) ether, water, unfiltered, recoverable, micrograms per liter
34274	Bis(2-chloroethyl) ether, water, filtered, recoverable, micrograms per liter
34275	Bis(2-chloroethyl) ether, suspended sediment, recoverable, micrograms per liter
34276	Bis(2-chloroethyl) ether, bed sediment, recoverable, dry weight, micrograms per kilogram
34278	Bis(2-chloroethoxy)methane, water, unfiltered, recoverable, micrograms per liter
34279	Bis(2-chloroethoxy)methane, water, filtered, recoverable, micrograms per liter
34280	Bis(2-chloroethoxy)methane, suspended sediment, recoverable, micrograms per liter
34281	Bis(2-chloroethoxy)methane, bed sediment, recoverable, dry weight, micrograms per kilogram
34283	Bis(2-chloroisopropyl) ether, water, unfiltered, recoverable, micrograms per liter
34284	Bis(2-chloroisopropyl) ether, water, filtered, recoverable, micrograms per liter
34285	Bis(2-chloroisopropyl) ether, suspended sediment, recoverable, micrograms per liter
34286	Bis(2-chloroisopropyl) ether, bed sediment, recoverable, dry weight, micrograms per kilogram
34288	Tribromomethane, water, filtered, recoverable, micrograms per liter
34289	Tribromomethane, suspended sediment, recoverable, micrograms per liter
34290	Tribromomethane, bed sediment, recoverable, dry weight, micrograms per kilogram
34292	Benzyl n-butyl phthalate, water, unfiltered, recoverable, micrograms per liter
34293	Benzyl n-butyl phthalate, water, filtered, recoverable, micrograms per liter
34294	Benzyl n-butyl phthalate, suspended sediment, recoverable, micrograms per liter
34295	Benzyl n-butyl phthalate, bed sediment, recoverable, dry weight, micrograms per kilogram
34297	Tetrachloromethane, water, filtered, recoverable, micrograms per liter
34298	Tetrachloromethane, suspended sediment, recoverable, micrograms per liter
34299	Tetrachloromethane, bed sediment, recoverable, dry weight, micrograms per kilogram
34301	Chlorobenzene, water, unfiltered, recoverable, micrograms per liter
34302	Chlorobenzene, water, filtered, recoverable, micrograms per liter
34303	Chlorobenzene, suspended sediment, recoverable, micrograms per liter
34304	Chlorobenzene, bed sediment, recoverable, dry weight, micrograms per kilogram
34307	Dibromochloromethane, water, filtered, recoverable, micrograms per liter
34308	Dibromochloromethane, suspended sediment, recoverable, micrograms per liter
34309	Dibromochloromethane, bed sediment, recoverable, dry weight, micrograms per kilogram
34311	Chloroethane, water, unfiltered, recoverable, micrograms per liter
34312	Chloroethane, water, filtered, recoverable, micrograms per liter
34313	Chloroethane, suspended sediment, recoverable, micrograms per liter
34314	Chloroethane, bed sediment, recoverable, dry weight, micrograms per kilogram
34316	Trichloromethane, water, filtered, recoverable, micrograms per liter
34317	Trichloromethane, suspended sediment, recoverable, micrograms per liter
34318	Trichloromethane, bed sediment, recoverable, dry weight, micrograms per kilogram
34320	Chrysene, water, unfiltered, recoverable, micrograms per liter

Parameter code	Parameter name
34321	Chrysene, water, filtered, recoverable, micrograms per liter
34322	Chrysene, suspended sediment, recoverable, micrograms per liter
34323	Chrysene, bed sediment, recoverable, dry weight, micrograms per kilogram
34325	Cyanide, suspended sediment, micrograms per liter
34327	Di-n-butyl phthalate, water, filtered, recoverable, micrograms per liter
34328	Bromodichloromethane, water, filtered, recoverable, micrograms per liter
34329	Bromodichloromethane, suspended sediment, recoverable, micrograms per liter
34330	Bromodichloromethane, bed sediment, recoverable, dry weight, micrograms per kilogram
34332	Dichlorodifluoromethane, water, filtered, recoverable, micrograms per liter
34333	Dichlorodifluoromethane, suspended sediment, recoverable, micrograms per liter
34334	Dichlorodifluoromethane, bed sediment, recoverable, dry weight, micrograms per kilogram
34336	Diethyl phthalate, water, unfiltered, recoverable, micrograms per liter
34337	Diethyl phthalate, water, filtered, recoverable, micrograms per liter
34338	Diethyl phthalate, suspended sediment, recoverable, micrograms per liter
34339	Diethyl phthalate, bed sediment, recoverable, dry weight, micrograms per kilogram
34341	Dimethyl phthalate, water, unfiltered, recoverable, micrograms per liter
34342	Dimethyl phthalate, water, filtered, recoverable, micrograms per liter
34343	Dimethyl phthalate, suspended sediment, recoverable, micrograms per liter
34344	Dimethyl phthalate, bed sediment, recoverable, dry weight, micrograms per kilogram
34346	1,2-Diphenylhydrazine, water, unfiltered, recoverable, micrograms per liter
34347	1,2-Diphenylhydrazine, water, filtered, recoverable, micrograms per liter
34348	1,2-Diphenylhydrazine, suspended sediment, recoverable, micrograms per liter
34349	1,2-Diphenylhydrazine, bed sediment, recoverable, dry weight, micrograms per kilogram
34351	Endosulfan sulfate, water, unfiltered, recoverable, micrograms per liter
34352	Endosulfan sulfate, water, filtered, recoverable, micrograms per liter
34353	Endosulfan sulfate, suspended sediment, recoverable, micrograms per liter
34354	Endosulfan sulfate, bed sediment, recoverable, dry weight, micrograms per kilogram
34356	beta-Endosulfan, water, unfiltered, recoverable, micrograms per liter
34357	beta-Endosulfan, water, filtered, recoverable, micrograms per liter
34358	beta-Endosulfan, suspended sediment, recoverable, micrograms per liter
34359	beta-Endosulfan, bed sediment, recoverable, dry weight, micrograms per kilogram
34361	alpha-Endosulfan, water, unfiltered, recoverable, micrograms per liter
34362	alpha-Endosulfan, water, filtered, recoverable, micrograms per liter
34363	alpha-Endosulfan, suspended sediment, recoverable, micrograms per liter
34364	alpha-Endosulfan, bed sediment, recoverable, dry weight, micrograms per kilogram
34366	Endrin aldehyde, water, unfiltered, recoverable, micrograms per liter
34367	Endrin aldehyde, water, filtered, recoverable, micrograms per liter
34368	Endrin aldehyde, suspended sediment, recoverable, micrograms per liter
34369	Endrin aldehyde, bed sediment, recoverable, dry weight, micrograms per kilogram
34371	Ethylbenzene, water, unfiltered, recoverable, micrograms per liter

Parameter code	Parameter name
34372	Ethylbenzene, water, filtered, recoverable, micrograms per liter
34373	Ethylbenzene, suspended sediment, recoverable, micrograms per liter
34374	Ethylbenzene, bed sediment, recoverable, dry weight, micrograms per kilogram
34376	Fluoranthene, water, unfiltered, recoverable, micrograms per liter
34377	Fluoranthene, water, filtered, recoverable, micrograms per liter
34378	Fluoranthene, suspended sediment, recoverable, micrograms per liter
34379	Fluoranthene, bed sediment, recoverable, dry weight, micrograms per kilogram
34381	9H-Fluorene, water, unfiltered, recoverable, micrograms per liter
34382	9H-Fluorene, water, filtered, recoverable, micrograms per liter
34383	9H-Fluorene, suspended sediment, recoverable, micrograms per liter
34384	9H-Fluorene, bed sediment, recoverable, dry weight, micrograms per kilogram
34386	Hexachlorocyclopentadiene, water, unfiltered, recoverable, micrograms per liter
34387	Hexachlorocyclopentadiene, water, filtered, recoverable, micrograms per liter
34388	Hexachlorocyclopentadiene, suspended sediment, recoverable, micrograms per liter
34389	Hexachlorocyclopentadiene, bed sediment, recoverable, dry weight, micrograms per kilogram
34391	Hexachlorobutadiene, water, unfiltered, recoverable, micrograms per liter
34392	Hexachlorobutadiene, water, filtered, recoverable, micrograms per liter
34393	Hexachlorobutadiene, suspended sediment, recoverable, micrograms per liter
34396	Hexachloroethane, water, unfiltered, recoverable, micrograms per liter
34397	Hexachloroethane, water, filtered, recoverable, micrograms per liter
34398	Hexachloroethane, suspended sediment, recoverable, micrograms per liter
34399	Hexachloroethane, bed sediment, recoverable, dry weight, micrograms per kilogram
34401	Hexachlorobenzene, water, filtered, recoverable, micrograms per liter
34402	Hexachlorobenzene, suspended sediment, recoverable, micrograms per liter
34403	Indeno[1,2,3-cd]pyrene, water, unfiltered, recoverable, micrograms per liter
34404	Indeno[1,2,3-cd]pyrene, water, filtered, recoverable, micrograms per liter
34405	Indeno[1,2,3-cd]pyrene, suspended sediment, recoverable, micrograms per liter
34406	Indeno[1,2,3-cd]pyrene, bed sediment, recoverable, dry weight, micrograms per kilogram
34408	Isophorone, water, unfiltered, recoverable, micrograms per liter
34409	Isophorone, water, filtered, recoverable, micrograms per liter
34410	Isophorone, suspended sediment, recoverable, micrograms per liter
34411	Isophorone, bed sediment, recoverable, dry weight, micrograms per kilogram
34413	Bromomethane, water, unfiltered, recoverable, micrograms per liter
34414	Bromomethane, water, filtered, recoverable, micrograms per liter
34415	Bromomethane, suspended sediment, recoverable, micrograms per liter
34416	Bromomethane, bed sediment, recoverable, dry weight, micrograms per kilogram
34418	Chloromethane, water, unfiltered, recoverable, micrograms per liter
34419	Chloromethane, water, filtered, recoverable, micrograms per liter
34420	Chloromethane, suspended sediment, recoverable, micrograms per liter
34421	Chloromethane, bed sediment, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
34423	Dichloromethane, water, unfiltered, recoverable, micrograms per liter
34424	Dichloromethane, water, filtered, recoverable, micrograms per liter
34425	Dichloromethane, suspended sediment, recoverable, micrograms per liter
34426	Dichloromethane, bed sediment, recoverable, dry weight, micrograms per kilogram
34428	N-Nitrosodi-n-propylamine, water, unfiltered, recoverable, micrograms per liter
34429	N-Nitrosodi-n-propylamine, water, filtered, recoverable, micrograms per liter
34430	N-Nitrosodi-n-propylamine, suspended sediment, recoverable, micrograms per liter
34431	N-Nitrosodi-n-propylamine, bed sediment, recoverable, dry weight, micrograms per kilogram
34433	N-Nitrosodiphenylamine, water, unfiltered, recoverable, micrograms per liter
34434	N-Nitrosodiphenylamine, water, filtered, recoverable, micrograms per liter
34435	N-Nitrosodiphenylamine, suspended sediment, recoverable, micrograms per liter
34436	N-Nitrosodiphenylamine, bed sediment, recoverable, dry weight, micrograms per kilogram
34438	N-Nitrosodimethylamine, water, unfiltered, recoverable, micrograms per liter
34439	N-Nitrosodimethylamine, water, filtered, recoverable, micrograms per liter
34440	N-Nitrosodimethylamine, suspended sediment, recoverable, micrograms per liter
34441	N-Nitrosodimethylamine, bed sediment, recoverable, dry weight, micrograms per kilogram
34443	Naphthalene, water, filtered, recoverable, micrograms per liter
34444	Naphthalene, suspended sediment, recoverable, micrograms per liter
34445	Naphthalene, bed sediment, recoverable, dry weight, micrograms per kilogram
34447	Nitrobenzene, water, unfiltered, recoverable, micrograms per liter
34448	Nitrobenzene, water, filtered, recoverable, micrograms per liter
34449	Nitrobenzene, suspended sediment, recoverable, micrograms per liter
34450	Nitrobenzene, bed sediment, recoverable, dry weight, micrograms per kilogram
34452	4-Chloro-3-methylphenol, water, unfiltered, recoverable, micrograms per liter
34453	4-Chloro-3-methylphenol, water, filtered, recoverable, micrograms per liter
34454	4-Chloro-3-methylphenol, suspended sediment, recoverable, micrograms per liter
34455	4-Chloro-3-methylphenol, bed sediment, recoverable, dry weight, micrograms per kilogram
34457	Aroclor 1242, water, filtered, recoverable, micrograms per liter
34458	Aroclor 1242, suspended sediment, recoverable, micrograms per liter
34459	Pentachlorophenol, water, filtered, recoverable, micrograms per liter
34460	Pentachlorophenol, suspended sediment, recoverable, micrograms per liter
34461	Phenanthrene, water, unfiltered, recoverable, micrograms per liter
34462	Phenanthrene, water, filtered, recoverable, micrograms per liter
34463	Phenanthrene, suspended sediment, recoverable, micrograms per liter
34464	Phenanthrene, bed sediment, recoverable, dry weight, micrograms per kilogram
34466	Phenol, water, filtered, recoverable, micrograms per liter
34467	Phenol, suspended sediment, recoverable, micrograms per liter
34469	Pyrene, water, unfiltered, recoverable, micrograms per liter
34470	Pyrene, water, filtered, recoverable, micrograms per liter
34471	Pyrene, suspended sediment, recoverable, micrograms per liter

Parameter code	Parameter name
34472	Pyrene, bed sediment, recoverable, dry weight, micrograms per kilogram
34475	Tetrachloroethene, water, unfiltered, recoverable, micrograms per liter
34476	Tetrachloroethene, water, filtered, recoverable, micrograms per liter
34477	Tetrachloroethene, suspended sediment, recoverable, micrograms per liter
34478	Tetrachloroethene, bed sediment, recoverable, dry weight, micrograms per kilogram
34480	Thallium, bed sediment, total digestion, dry weight, micrograms per gram
34481	Toluene, water, filtered, recoverable, micrograms per liter
34482	Toluene, suspended sediment, recoverable, micrograms per liter
34483	Toluene, bed sediment, recoverable, dry weight, micrograms per kilogram
34485	Trichloroethene, water, filtered, recoverable, micrograms per liter
34486	Trichloroethene, suspended sediment, recoverable, micrograms per liter
34487	Trichloroethene, bed sediment, recoverable, dry weight, micrograms per kilogram
34488	Trichlorofluoromethane, water, unfiltered, recoverable, micrograms per liter
34489	Trichlorofluoromethane, water, filtered, recoverable, micrograms per liter
34490	Trichlorofluoromethane, suspended sediment, recoverable, micrograms per liter
34491	Trichlorofluoromethane, bed sediment, recoverable, dry weight, micrograms per kilogram
34493	Vinyl chloride, water, filtered, recoverable, micrograms per liter
34494	Vinyl chloride, suspended sediment, recoverable, micrograms per liter
34495	Vinyl chloride, bed sediment, recoverable, dry weight, micrograms per kilogram
34496	1,1-Dichloroethane, water, unfiltered, recoverable, micrograms per liter
34497	1,1-Dichloroethane, water, filtered, recoverable, micrograms per liter
34498	1,1-Dichloroethane, suspended sediment, recoverable, micrograms per liter
34499	1,1-Dichloroethane, bed sediment, recoverable, dry weight, micrograms per kilogram
34501	1,1-Dichloroethene, water, unfiltered, recoverable, micrograms per liter
34502	1,1-Dichloroethene, water, filtered, recoverable, micrograms per liter
34503	1,1-Dichloroethene, suspended sediment, recoverable, micrograms per liter
34504	1,1-Dichloroethene, bed sediment, recoverable, dry weight, micrograms per kilogram
34506	1,1,1-Trichloroethane, water, unfiltered, recoverable, micrograms per liter
34507	1,1,1-Trichloroethane, water, filtered, recoverable, micrograms per liter
34508	1,1,1-Trichloroethane, suspended sediment, recoverable, micrograms per liter
34509	1,1,1-Trichloroethane, bed sediment, recoverable, dry weight, micrograms per kilogram
34511	1,1,2-Trichloroethane, water, unfiltered, recoverable, micrograms per liter
34512	1,1,2-Trichloroethane, water, filtered, recoverable, micrograms per liter
34513	1,1,2-Trichloroethane, suspended sediment, recoverable, micrograms per liter
34514	1,1,2-Trichloroethane, bed sediment, recoverable, dry weight, micrograms per kilogram
34516	1,1,2,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter
34517	1,1,2,2-Tetrachloroethane, water, filtered, recoverable, micrograms per liter
34518	1,1,2,2-Tetrachloroethane, suspended sediment, recoverable, micrograms per liter
34519	1,1,2,2-Tetrachloroethane, bed sediment, recoverable, dry weight, micrograms per kilogram
34521	Benzo[ghi]perylene, water, unfiltered, recoverable, micrograms per liter

Parameter code	Parameter name
34522	Benzo[ghi]perylene, water, filtered, recoverable, micrograms per liter
34523	Benzo[ghi]perylene, suspended sediment, recoverable, micrograms per liter
34524	Benzo[ghi]perylene, bed sediment, recoverable, dry weight, micrograms per kilogram
34526	Benzo[a]anthracene, water, unfiltered, recoverable, micrograms per liter
34527	Benzo[a]anthracene, water, filtered, recoverable, micrograms per liter
34528	Benzo[a]anthracene, suspended sediment, recoverable, micrograms per liter
34529	Benzo[a]anthracene, bed sediment, recoverable, dry weight, micrograms per kilogram
34531	1,2-Dichloroethane, water, unfiltered, recoverable, micrograms per liter
34532	1,2-Dichloroethane, water, filtered, recoverable, micrograms per liter
34533	1,2-Dichloroethane, suspended sediment, recoverable, micrograms per liter
34534	1,2-Dichloroethane, bed sediment, recoverable, dry weight, micrograms per kilogram
34536	1,2-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter
34537	1,2-Dichlorobenzene, water, filtered, recoverable, micrograms per liter
34538	1,2-Dichlorobenzene, suspended sediment, recoverable, micrograms per liter
34539	1,2-Dichlorobenzene, bed sediment, recoverable, dry weight, micrograms per kilogram
34541	1,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter
34542	1,2-Dichloropropane, water, filtered, recoverable, micrograms per liter
34543	1,2-Dichloropropane, suspended sediment, recoverable, micrograms per liter
34544	1,2-Dichloropropane, bed sediment, recoverable, dry weight, micrograms per kilogram
34546	trans-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter
34547	trans-1,2-Dichloroethene, water, filtered, recoverable, micrograms per liter
34548	trans-1,2-Dichloroethene, suspended sediment, recoverable, micrograms per liter
34549	trans-1,2-Dichloroethene, bed sediment, recoverable, dry weight, micrograms per kilogram
34551	1,2,4-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter
34552	1,2,4-Trichlorobenzene, water, filtered, recoverable, micrograms per liter
34553	1,2,4-Trichlorobenzene, suspended sediment, recoverable, micrograms per liter
34554	1,2,4-Trichlorobenzene, bed sediment, recoverable, dry weight, micrograms per kilogram
34556	Dibenzo[a,h]anthracene, water, unfiltered, recoverable, micrograms per liter
34557	Dibenzo[a,h]anthracene, water, filtered, recoverable, micrograms per liter
34558	Dibenzo[a,h]anthracene, suspended sediment, recoverable, micrograms per liter
34559	Dibenzo[a,h]anthracene, bed sediment, recoverable, dry weight, micrograms per kilogram
34561	1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter
34566	1,3-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter
34567	1,3-Dichlorobenzene, water, filtered, recoverable, micrograms per liter
34568	1,3-Dichlorobenzene, suspended sediment, recoverable, micrograms per liter
34569	1,3-Dichlorobenzene, bed sediment, recoverable, dry weight, micrograms per kilogram
34571	1,4-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter
34572	1,4-Dichlorobenzene, water, filtered, recoverable, micrograms per liter
34573	1,4-Dichlorobenzene, suspended sediment, recoverable, micrograms per liter
34574	1,4-Dichlorobenzene, bed sediment, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
34576	2-Chloroethyl vinyl ether, water, unfiltered, recoverable, micrograms per liter
34577	2-Chloroethyl vinyl ether, water, filtered, recoverable, micrograms per liter
34578	2-Chloroethyl vinyl ether, suspended sediment, recoverable, micrograms per liter
34579	2-Chloroethyl vinyl ether, bed sediment, recoverable, dry weight, micrograms per kilogram
34581	2-Chloronaphthalene, water, unfiltered, recoverable, micrograms per liter
34582	2-Chloronaphthalene, water, filtered, recoverable, micrograms per liter
34583	2-Chloronaphthalene, suspended sediment, recoverable, micrograms per liter
34584	2-Chloronaphthalene, bed sediment, recoverable, dry weight, micrograms per kilogram
34586	2-Chlorophenol, water, unfiltered, recoverable, micrograms per liter
34587	2-Chlorophenol, water, filtered, recoverable, micrograms per liter
34588	2-Chlorophenol, suspended sediment, recoverable, micrograms per liter
34589	2-Chlorophenol, bed sediment, recoverable, dry weight, micrograms per kilogram
34591	2-Nitrophenol, water, unfiltered, recoverable, micrograms per liter
34592	2-Nitrophenol, water, filtered, recoverable, micrograms per liter
34593	2-Nitrophenol, suspended sediment, recoverable, micrograms per liter
34594	2-Nitrophenol, bed sediment, recoverable, dry weight, micrograms per kilogram
34596	Di-n-octyl phthalate, water, unfiltered, recoverable, micrograms per liter
34597	Di-n-octyl phthalate, water, filtered, recoverable, micrograms per liter
34598	Di-n-octyl phthalate, suspended sediment, recoverable, micrograms per liter
34599	Di-n-octyl phthalate, bed sediment, recoverable, dry weight, micrograms per kilogram
34601	2,4-Dichlorophenol, water, unfiltered, recoverable, micrograms per liter
34602	2,4-Dichlorophenol, water, filtered, recoverable, micrograms per liter
34603	2,4-Dichlorophenol, suspended sediment, recoverable, micrograms per liter
34604	2,4-Dichlorophenol, bed sediment, recoverable, dry weight, micrograms per kilogram
34606	2,4-Dimethylphenol, water, unfiltered, recoverable, micrograms per liter
34607	2,4-Dimethylphenol, water, filtered, recoverable, micrograms per liter
34608	2,4-Dimethylphenol, suspended sediment, recoverable, micrograms per liter
34609	2,4-Dimethylphenol, bed sediment, recoverable, dry weight, micrograms per kilogram
34611	2,4-Dinitrotoluene, water, unfiltered, recoverable, micrograms per liter
34612	2,4-Dinitrotoluene, water, filtered, recoverable, micrograms per liter
34613	2,4-Dinitrotoluene, suspended sediment, recoverable, micrograms per liter
34614	2,4-Dinitrotoluene, bed sediment, recoverable, dry weight, micrograms per kilogram
34616	2,4-Dinitrophenol, water, unfiltered, recoverable, micrograms per liter
34617	2,4-Dinitrophenol, water, filtered, recoverable, micrograms per liter
34618	2,4-Dinitrophenol, suspended sediment, recoverable, micrograms per liter
34619	2,4-Dinitrophenol, bed sediment, recoverable, dry weight, micrograms per kilogram
34621	2,4,6-Trichlorophenol, water, unfiltered, recoverable, micrograms per liter
34622	2,4,6-Trichlorophenol, water, filtered, recoverable, micrograms per liter
34623	2,4,6-Trichlorophenol, suspended sediment, recoverable, micrograms per liter
34624	2,4,6-Trichlorophenol, bed sediment, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
34626	2,6-Dinitrotoluene, water, unfiltered, recoverable, micrograms per liter
34627	2,6-Dinitrotoluene, water, filtered, recoverable, micrograms per liter
34628	2,6-Dinitrotoluene, suspended sediment, recoverable, micrograms per liter
34629	2,6-Dinitrotoluene, bed sediment, recoverable, dry weight, micrograms per kilogram
34631	3,3'-Dichlorobenzidine, water, unfiltered, recoverable, micrograms per liter
34632	3,3'-Dichlorobenzidine, water, filtered, recoverable, micrograms per liter
34633	3,3'-Dichlorobenzidine, suspended sediment, recoverable, micrograms per liter
34634	3,3'-Dichlorobenzidine, bed sediment, recoverable, dry weight, micrograms per kilogram
34636	4-Bromophenyl phenyl ether, water, unfiltered, recoverable, micrograms per liter
34637	4-Bromophenyl phenyl ether, water, filtered, recoverable, micrograms per liter
34638	4-Bromophenyl phenyl ether, suspended sediment, recoverable, micrograms per liter
34639	4-Bromophenyl phenyl ether, bed sediment, recoverable, dry weight, micrograms per kilogram
34641	4-Chlorophenyl phenyl ether, water, unfiltered, recoverable, micrograms per liter
34642	4-Chlorophenyl phenyl ether, water, filtered, recoverable, micrograms per liter
34643	4-Chlorophenyl phenyl ether, suspended sediment, recoverable, micrograms per liter
34644	4-Chlorophenyl phenyl ether, bed sediment, recoverable, dry weight, micrograms per kilogram
34646	4-Nitrophenol, water, unfiltered, recoverable, micrograms per liter
34647	4-Nitrophenol, water, filtered, recoverable, micrograms per liter
34648	4-Nitrophenol, suspended sediment, recoverable, micrograms per liter
34649	4-Nitrophenol, bed sediment, recoverable, dry weight, micrograms per kilogram
34651	p,p'-DDD, water, filtered, recoverable, micrograms per liter
34652	p,p'-DDD, suspended sediment, recoverable, micrograms per liter
34653	p,p'-DDE, water, filtered, recoverable, micrograms per liter
34654	p,p'-DDE, suspended sediment, recoverable, micrograms per liter
34655	p,p'-DDT, water, filtered, recoverable, micrograms per liter
34656	p,p'-DDT, suspended sediment, recoverable, micrograms per liter
34657	2-Methyl-4,6-dinitrophenol, water, unfiltered, recoverable, micrograms per liter
34658	2-Methyl-4,6-dinitrophenol, water, filtered, recoverable, micrograms per liter
34659	2-Methyl-4,6-dinitrophenol, suspended sediment, recoverable, micrograms per liter
34660	2-Methyl-4,6-dinitrophenol, bed sediment, recoverable, dry weight, micrograms per kilogram
34662	Aroclor 1221, water, filtered, recoverable, micrograms per liter
34663	Aroclor 1221, suspended sediment, recoverable, micrograms per liter
34665	Aroclor 1232, water, filtered, recoverable, micrograms per liter
34666	Aroclor 1232, suspended sediment, recoverable, micrograms per liter
34668	Dichlorodifluoromethane, water, unfiltered, recoverable, micrograms per liter
34671	Aroclor 1016, water, unfiltered, recoverable, micrograms per liter
34672	Aroclor 1016, water, filtered, recoverable, micrograms per liter
34673	Aroclor 1016, suspended sediment, recoverable, micrograms per liter
34675	2,3,7,8-Tetrachlorodibenzo-p-dioxin, water, unfiltered, recoverable, micrograms per liter
34676	2,3,7,8-Tetrachlorodibenzo-p-dioxin, water, filtered, recoverable, micrograms per liter

Parameter code	Parameter name
34677	2,3,7,8-Tetrachlorodibenzo-p-dioxin, suspended sediment, recoverable, micrograms per liter
34678	2,3,7,8-Tetrachlorodibenzo-p-dioxin, bed sediment, recoverable, dry weight, micrograms per kilogram
34694	Phenol, water, unfiltered, recoverable, micrograms per liter
34695	Phenol, bed sediment, recoverable, dry weight, micrograms per kilogram
34696	Naphthalene, water, unfiltered, recoverable, micrograms per liter
34697	trans-1,3-Dichloropropene, bed sediment, recoverable, dry weight, micrograms per kilogram
34699	trans-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter
34700	trans-1,3-Dichloropropene, water, filtered, recoverable, micrograms per liter
34701	trans-1,3-Dichloropropene, suspended sediment, recoverable, micrograms per liter
34702	cis-1,3-Dichloropropene, bed sediment, recoverable, dry weight, micrograms per kilogram
34704	cis-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter
34705	cis-1,3-Dichloropropene, water, filtered, recoverable, micrograms per liter
34706	cis-1,3-Dichloropropene, suspended sediment, recoverable, micrograms per liter
34750	2,3,7,8-Tetrachlorodibenzofuran, water, unfiltered, recoverable, nanograms per liter
34756	Triazine screen, water, filtered, enzyme link immuno sorbent assay, recoverable, micrograms per liter as atrazine
34757	Triazine screen, water, unfiltered, enzyme link immuno sorbent assay, recoverable, micrograms per liter as atrazine
34758	Triazine screen, bed sediment, enzyme link immuno sorbent assay, recoverable, dry weight, micrograms per kilogram as atrazine
34759	Triazine screen, suspended sediment, enzyme link immuno sorbent assay, recoverable, dry weight, micrograms per kilogram as atrazine
34760	Terbutryn, bed sediment, recoverable, dry weight, micrograms per kilogram
34761	2-Hydroxy-4-isopropylamino-6-ethylamino-s-triazine, water, filtered, recoverable, micrograms per liter
34762	2-Hydroxy-4-isopropylamino-6-ethylamino-s-triazine, bed sediment, recoverable, dry weight, micrograms per kilogram
34763	2-Hydroxy-4-isopropylamino-6-ethylamino-s-triazine, suspended sediment, recoverable, dry weight, micrograms per kilogram
34795	Antimony, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34796	Antimony, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34797	Antimony, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34798	Antimony, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34799	Antimony, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
34800	Arsenic, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34801	Arsenic, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram

Parameter code	Parameter name
34802	Arsenic, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34803	Arsenic, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34804	Arsenic, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
34805	Barium, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34806	Barium, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34807	Barium, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34808	Barium, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34809	Barium, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
34810	Beryllium, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34811	Beryllium, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34812	Beryllium, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34813	Beryllium, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34814	Beryllium, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
34815	Bismuth, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34816	Bismuth, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34817	Bismuth, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34818	Bismuth, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34819	Bismuth, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
34820	Boron, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34821	Boron, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34822	Boron, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34823	Boron, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34824	Boron, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram

Parameter code	Parameter name
34825	Cadmium, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34826	Cadmium, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34827	Cadmium, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34828	Cadmium, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34829	Cadmium, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
34835	Cerium, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34836	Cerium, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34837	Cerium, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34838	Cerium, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34839	Cerium, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
34840	Chromium, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34841	Chromium, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34842	Chromium, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34843	Chromium, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34844	Chromium, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
34845	Cobalt, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34846	Cobalt, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34847	Cobalt, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34848	Cobalt, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34849	Cobalt, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
34850	Copper, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34851	Copper, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34852	Copper, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram

Parameter code	Parameter name
34853	Copper, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34854	Copper, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
34855	Europium, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34856	Europium, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34857	Europium, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34858	Europium, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34859	Europium, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
34860	Gallium, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34861	Gallium, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34862	Gallium, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34863	Gallium, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34864	Gallium, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
34865	Germanium, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34866	Germanium, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34867	Germanium, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34868	Germanium, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34869	Germanium, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
34870	Gold, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34871	Gold, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34872	Gold, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34873	Gold, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34874	Gold, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
34875	Holmium, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram

Parameter code	Parameter name
34876	Holmium, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34877	Holmium, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34878	Holmium, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34879	Holmium, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
34885	Lanthanum, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34886	Lanthanum, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34887	Lanthanum, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34888	Lanthanum, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34889	Lanthanum, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
34890	Lead, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34891	Lead, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34892	Lead, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34893	Lead, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34894	Lead, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
34895	Lithium, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34896	Lithium, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34897	Lithium, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34898	Lithium, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34899	Lithium, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
34905	Manganese, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34906	Manganese, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34907	Manganese, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34908	Manganese, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram

Parameter code	Parameter name
34909	Manganese, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
34910	Mercury, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34911	Mercury, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34912	Mercury, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34913	Mercury, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34914	Mercury, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
34915	Molybdenum, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34916	Molybdenum, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34917	Molybdenum, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34918	Molybdenum, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34919	Molybdenum, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
34920	Neodymium, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34921	Neodymium, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34922	Neodymium, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34923	Neodymium, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34924	Neodymium, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
34925	Nickel, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34926	Nickel, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34927	Nickel, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34928	Nickel, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34929	Nickel, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
34930	Niobium, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34931	Niobium, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram

Parameter code	Parameter name
34932	Niobium, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34933	Niobium, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34934	Niobium, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
34945	Scandium, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34946	Scandium, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34947	Scandium, bed sediment smaller 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34948	Scandium, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34949	Scandium, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
34950	Selenium, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34951	Selenium, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34952	Selenium, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34953	Selenium, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34954	Selenium, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
34955	Silver, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34956	Silver, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34957	Silver, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34958	Silver, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34959	Silver, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
34965	Strontium, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34966	Strontium, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34967	Strontium, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34968	Strontium, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34969	Strontium, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram

Parameter code	Parameter name
34971	Sulfur, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34973	Sulfur, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34974	Sulfur, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
34975	Tantalum, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34976	Tantalum, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34977	Tantalum, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34978	Tantalum, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34979	Tantalum, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
34980	Thorium, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34981	Thorium, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34982	Thorium, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34983	Thorium, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34984	Thorium, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
34985	Tin, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34986	Tin, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34987	Tin, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34988	Tin, suspended sediment smaller than 62.5 microns, wet sieved (native water), field, total digestion, dry weight, micrograms per gram
34995	Tungsten, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34996	Tungsten, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
34997	Tungsten, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
34998	Tungsten, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
34999	Tungsten, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
35005	Vanadium, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram

Parameter code	Parameter name
35006	Vanadium, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
35007	Vanadium, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
35008	Vanadium, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
35009	Vanadium, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
35010	Yttrium, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
35011	Yttrium, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
35012	Yttrium, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
35013	Yttrium, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
35014	Yttrium, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
35015	Ytterbium, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
35016	Ytterbium, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
35017	Ytterbium, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
35018	Ytterbium, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
35019	Ytterbium, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
35020	Zinc, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
35021	Zinc, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
35022	Zinc, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
35023	Zinc, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram
35024	Zinc, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
35025	Zirconium, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
35026	Zirconium, bed sediment smaller than 177 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
35027	Zirconium, bed sediment smaller than 62.5 microns, dry sieved, laboratory, total digestion, dry weight, micrograms per gram
35028	Zirconium, suspended sediment smaller than 62.5 microns, total digestion, dry weight, micrograms per gram

Parameter code	Parameter name
35029	Zirconium, suspended sediment larger than 62.5 microns, total digestion, dry weight, micrograms per gram
35030	Bismuth, suspended sediment, total digestion, dry weight, micrograms per gram
35031	Cobalt, suspended sediment, total digestion, dry weight, micrograms per gram
35032	Europium, suspended sediment, total digestion, dry weight, micrograms per gram
35033	Gallium, suspended sediment, total digestion, dry weight, micrograms per gram
35034	Germanium, suspended sediment, total digestion, dry weight, micrograms per gram
35035	Holmium, suspended sediment, total digestion, dry weight, micrograms per gram
35036	Lanthanum, suspended sediment, total digestion, dry weight, micrograms per gram
35037	Neodymium, suspended sediment, total digestion, dry weight, micrograms per gram
35038	Niobium, suspended sediment, total digestion, dry weight, micrograms per gram
35039	Scandium, suspended sediment, total digestion, dry weight, micrograms per gram
35040	Strontium, suspended sediment, total digestion, dry weight, micrograms per gram
35041	Sulfur, suspended sediment, total digestion, dry weight, micrograms per gram
35042	Tantalum, suspended sediment, total digestion, dry weight, micrograms per gram
35043	Thorium, suspended sediment, total digestion, dry weight, micrograms per gram
35044	Tin, suspended sediment, total digestion, dry weight, micrograms per gram
35045	Tungsten, suspended sediment, total digestion, dry weight, micrograms per gram
35047	Yttrium, suspended sediment, total digestion, dry weight, micrograms per gram
35048	Ytterbium, suspended sediment, total digestion, dry weight, micrograms per gram
35049	Zirconium, suspended sediment, total digestion, dry weight, micrograms per gram
35050	Lithium, suspended sediment, total digestion, dry weight, micrograms per gram
35051	Cerium, suspended sediment, total digestion, dry weight, micrograms per gram
35055	Phosphorus, bed sediment smaller than 62.5 micrometers, dry sieved, laboratory, total digestion, dry weight, milligrams per kilogram
38260	Methylene blue active substances, water, unfiltered, recoverable, milligrams per liter
38401	Ametryn, water, filtered, recoverable, micrograms per liter
38418	Barban, water, unfiltered, recoverable, micrograms per liter
38423	Chloroneb, water, unfiltered, recoverable, micrograms per liter
38442	Dicamba, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
38451	Dichlorprop, suspended sediment, recoverable, micrograms per liter
38452	Dichlorprop, bed sediment, recoverable, dry weight, micrograms per kilogram
38454	Dicrotophos, water, filtered, recoverable, micrograms per liter
38455	Dicrotophos, suspended sediment, recoverable, micrograms per liter
38459	Dimethoate, suspended sediment, recoverable, micrograms per liter
38462	Famphur, water, unfiltered, recoverable, micrograms per liter
38477	Linuron, water, unfiltered, recoverable, micrograms per liter
38478	Linuron, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
38479	Linuron, suspended sediment, recoverable, micrograms per liter
38482	MCPA, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
38486	MCPB, water, unfiltered, recoverable, micrograms per liter

Parameter code	Parameter name
38487	MCPB, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
38501	Methiocarb, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
38521	Neburon, water, unfiltered, recoverable, micrograms per liter
38534	Propachlor, suspended sediment, recoverable, micrograms per liter
38535	Propazine, water, filtered, recoverable, micrograms per liter
38538	Propoxur, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
38542	Secbumeton, water, unfiltered, recoverable, micrograms per liter
38548	Siduron, water, filtered, recoverable, micrograms per liter
38554	Swep, water, unfiltered, recoverable, micrograms per liter
38561	Terbuthylazine, suspended sediment, recoverable, micrograms per liter
38564	Tokuthion, water, unfiltered, recoverable, micrograms per liter
38574	Trifluralin, water, filtered, recoverable, micrograms per liter
38575	Trifluralin, suspended sediment, recoverable, micrograms per liter
38576	Acrylamide, water, unfiltered, recoverable, micrograms per liter
38688	2-Picoline, water, unfiltered, recoverable, micrograms per liter
38710	Bentazon, water, unfiltered, recoverable, micrograms per liter
38711	Bentazon, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
38715	Sulprofos, water, unfiltered, recoverable, micrograms per liter
38716	Sulprofos, water, filtered, recoverable, micrograms per liter
38740	Chlorpyrifos-methyl, water, unfiltered, recoverable, micrograms per liter
38746	2,4-DB, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
38760	1,2-Dibromo-3-chloropropane, water, unfiltered, recoverable, micrograms per liter
38775	Dichlorvos, water, filtered, recoverable, micrograms per liter
38787	Ethalfluralin, water, unfiltered, recoverable, micrograms per liter
38789	Ethalfluralin, suspended sediment, recoverable, micrograms per liter
38792	Etridiazole, water, unfiltered, recoverable, micrograms per liter
38801	Fenthion, water, filtered, recoverable, micrograms per liter
38802	Fenthion, suspended sediment, recoverable, micrograms per liter
38810	Fluometuron, water, unfiltered, recoverable, micrograms per liter
38811	Fluometuron, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
38817	Hexazinone, suspended sediment, recoverable, micrograms per liter
38855	Naled, water, unfiltered, recoverable, micrograms per liter
38856	Naled, water, filtered, recoverable, micrograms per liter
38857	Naled, suspended sediment, recoverable, micrograms per liter
38865	Oxamyl, water, unfiltered, recoverable, micrograms per liter
38866	Oxamyl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
38871	Phorate, suspended sediment, recoverable, micrograms per liter
38872	Profluralin, water, unfiltered, recoverable, micrograms per liter
38877	Stirophos, water, unfiltered, recoverable, micrograms per liter
38884	Terbacil, suspended sediment, recoverable, micrograms per liter

Parameter code	Parameter name
38887	Terbutryn, water, unfiltered, recoverable, micrograms per liter
38888	Terbutryn, water, filtered, recoverable, micrograms per liter
38890	Terbutryn, bed sediment, recoverable, dry weight, micrograms per kilogram
38892	Triadimefon, water, unfiltered, recoverable, micrograms per liter
38897	Trichloronate, water, unfiltered, recoverable, micrograms per liter
38902	Tricyclazole, water, unfiltered, recoverable, micrograms per liter
38926	Endothal, water, unfiltered, recoverable, micrograms per liter
38928	Ethylene thiourea, water, unfiltered, recoverable, micrograms per liter
38929	Fenamiphos, water, unfiltered, recoverable, micrograms per liter
38930	Picloram, bed sediment, recoverable, dry weight, micrograms per kilogram
38931	Dicamba, bed sediment, recoverable, dry weight, micrograms per kilogram
38932	Chlorpyrifos, water, unfiltered, recoverable, micrograms per liter
38933	Chlorpyrifos, water, filtered, recoverable, micrograms per liter
38934	Chlorpyrifos, bed sediment, recoverable, dry weight, micrograms per kilogram
39005	Coumaphos, water, unfiltered, recoverable, micrograms per liter
39009	Dimethoate, water, unfiltered, recoverable, micrograms per liter
39011	Disulfoton, water, unfiltered, recoverable, micrograms per liter
39023	Phorate, water, unfiltered, recoverable, micrograms per liter
39024	Propazine, water, unfiltered, recoverable, micrograms per liter
39025	Simazine, water, unfiltered, coulson conductivity, recoverable, micrograms per liter
39030	Trifluralin, water, unfiltered, recoverable, micrograms per liter
39032	Pentachlorophenol, water, unfiltered, recoverable, micrograms per liter
39034	p,p'-Ethyl-DDD, water, unfiltered, recoverable, micrograms per liter
39040	Tribuphos, water, unfiltered, recoverable, micrograms per liter
39046	Simazine, bed sediment, recoverable, dry weight, micrograms per kilogram
39050	Tribuphos, bed sediment, recoverable, dry weight, micrograms per kilogram
39051	Methomyl, water, unfiltered, recoverable, micrograms per liter
39052	Propham, water, unfiltered, recoverable, micrograms per liter
39053	Aldicarb, water, unfiltered, recoverable, micrograms per liter
39054	Simetryn, water, unfiltered, recoverable, micrograms per liter
39055	Simazine, water, unfiltered, recoverable, micrograms per liter
39056	Prometon, water, unfiltered, recoverable, micrograms per liter
39057	Prometryn, water, unfiltered, recoverable, micrograms per liter
39061	Pentachlorophenol, bed sediment, recoverable, dry weight, micrograms per kilogram
39062	cis-Chlordane, water, unfiltered, recoverable, micrograms per liter
39065	trans-Chlordane, water, unfiltered, recoverable, micrograms per liter
39068	cis-Nonachlor, water, unfiltered, recoverable, micrograms per liter
39071	trans-Nonachlor, water, unfiltered, recoverable, micrograms per liter
39076	alpha-HCH, bed sediment, recoverable, dry weight, micrograms per kilogram
39080	Propyzamide, water, unfiltered, recoverable, micrograms per liter

Parameter code	Parameter name
39082	1,2-Dibromoethene, water, unfiltered, recoverable, micrograms per liter
39100	Bis(2-ethylhexyl) phthalate, water, unfiltered, recoverable, micrograms per liter
39102	Bis(2-ethylhexyl) phthalate, bed sediment, recoverable, dry weight, micrograms per kilogram
39103	Bis(2-ethylhexyl) phthalate, water, filtered, recoverable, micrograms per liter
39104	Bis(2-ethylhexyl) phthalate, suspended sediment, recoverable, micrograms per liter
39110	Di-n-butyl phthalate, water, unfiltered, recoverable, micrograms per liter
39112	Di-n-butyl phthalate, bed sediment, recoverable, dry weight, micrograms per kilogram
39114	Di-n-butyl phthalate, suspended sediment, recoverable, micrograms per liter
39120	Benzidine, water, unfiltered, recoverable, micrograms per liter
39121	Benzidine, bed sediment, recoverable, dry weight, micrograms per kilogram
39175	Vinyl chloride, water, unfiltered, recoverable, micrograms per liter
39180	Trichloroethene, water, unfiltered, recoverable, micrograms per liter
39250	Polychlorinated naphthalenes, water, unfiltered, recoverable, micrograms per liter
39251	Polychlorinated naphthalenes, bed sediment, recoverable, dry weight, micrograms per kilogram
39300	p,p'-DDT, water, unfiltered, recoverable, micrograms per liter
39301	p,p'-DDT, bed sediment, recoverable, dry weight, micrograms per kilogram
39305	o,p'-DDT, water, unfiltered, recoverable, micrograms per liter
39306	o,p'-DDT, bed sediment, recoverable, dry weight, micrograms per kilogram
39310	p,p'-DDD, water, unfiltered, recoverable, micrograms per liter
39311	p,p'-DDD, bed sediment, recoverable, dry weight, micrograms per kilogram
39315	o,p'-DDD, water, unfiltered, recoverable, micrograms per liter
39316	o,p'-DDD, bed sediment, recoverable, dry weight, micrograms per kilogram
39320	p,p'-DDE, water, unfiltered, recoverable, micrograms per liter
39321	p,p'-DDE, bed sediment, recoverable, dry weight, micrograms per kilogram
39327	o,p'-DDE, water, unfiltered, recoverable, micrograms per liter
39328	o,p'-DDE, bed sediment, recoverable, dry weight, micrograms per kilogram
39330	Aldrin, water, unfiltered, recoverable, micrograms per liter
39331	Aldrin, water, filtered, recoverable, micrograms per liter
39332	Aldrin, suspended sediment, recoverable, micrograms per liter
39333	Aldrin, bed sediment, recoverable, dry weight, micrograms per kilogram
39337	alpha-HCH, water, unfiltered, recoverable, micrograms per liter
39338	beta-HCH, water, unfiltered, recoverable, micrograms per liter
39340	Lindane, water, unfiltered, recoverable, micrograms per liter
39341	Lindane, water, filtered, recoverable, micrograms per liter
39342	Lindane, suspended sediment, recoverable, micrograms per liter
39343	Lindane, bed sediment, recoverable, dry weight, micrograms per kilogram
39348	cis-Chlordane, water, unfiltered, recoverable, micrograms per liter
39350	Chlordane (technical), water, unfiltered, recoverable, micrograms per liter
39351	Chlordane (technical), bed sediment, recoverable, dry weight, micrograms per kilogram
39352	Chlordane (technical), water, filtered, recoverable, micrograms per liter

Parameter code	Parameter name
39356	Metolachlor, water, unfiltered, recoverable, micrograms per liter
39357	Ronnel, water, unfiltered, recoverable, micrograms per liter
39360	p,p'-DDD, water, unfiltered, recoverable, micrograms per liter
39361	p,p'-DDD, water, filtered, recoverable, micrograms per liter
39362	p,p'-DDD, suspended sediment, recoverable, micrograms per liter
39363	p,p'-DDD, bed sediment, recoverable, dry weight, micrograms per kilogram
39365	p,p'-DDE, water, unfiltered, recoverable, micrograms per liter
39366	p,p'-DDE, water, filtered, recoverable, micrograms per liter
39367	p,p'-DDE, suspended sediment, recoverable, micrograms per liter
39368	p,p'-DDE, bed sediment, recoverable, dry weight, micrograms per kilogram
39370	p,p'-DDT, water, unfiltered, recoverable, micrograms per liter
39371	p,p'-DDT, water, filtered, recoverable, micrograms per liter
39372	p,p'-DDT, suspended sediment, recoverable, micrograms per liter
39373	p,p'-DDT, bed sediment, recoverable, dry weight, micrograms per kilogram
39380	Dieldrin, water, unfiltered, recoverable, micrograms per liter
39381	Dieldrin, water, filtered, recoverable, micrograms per liter
39382	Dieldrin, suspended sediment, recoverable, micrograms per liter
39383	Dieldrin, bed sediment, recoverable, dry weight, micrograms per kilogram
39388	alpha-Endosulfan, water, unfiltered, recoverable, micrograms per liter
39389	alpha-Endosulfan, bed sediment, recoverable, dry weight, micrograms per kilogram
39390	Endrin, water, unfiltered, recoverable, micrograms per liter
39391	Endrin, water, filtered, recoverable, micrograms per liter
39392	Endrin, suspended sediment, recoverable, micrograms per liter
39393	Endrin, bed sediment, recoverable, dry weight, micrograms per kilogram
39398	Ethion, water, unfiltered, recoverable, micrograms per liter
39399	Ethion, bed sediment, recoverable, dry weight, micrograms per kilogram
39400	Toxaphene, water, unfiltered, recoverable, micrograms per liter
39401	Toxaphene, water, filtered, recoverable, micrograms per liter
39402	Toxaphene, suspended sediment, recoverable, micrograms per liter
39403	Toxaphene, bed sediment, recoverable, dry weight, micrograms per kilogram
39410	Heptachlor, water, unfiltered, recoverable, micrograms per liter
39411	Heptachlor, water, filtered, recoverable, micrograms per liter
39412	Heptachlor, suspended sediment, recoverable, micrograms per liter
39413	Heptachlor, bed sediment, recoverable, dry weight, micrograms per kilogram
39415	Metolachlor, water, filtered, recoverable, micrograms per liter
39420	Heptachlor epoxide, water, unfiltered, recoverable, micrograms per liter
39421	Heptachlor epoxide, water, filtered, recoverable, micrograms per liter
39422	Heptachlor epoxide, suspended sediment, recoverable, micrograms per liter
39423	Heptachlor epoxide, bed sediment, recoverable, dry weight, micrograms per kilogram
39430	Isodrin, water, unfiltered, recoverable, micrograms per liter

Parameter code	Parameter name
39431	Isodrin, water, filtered, recoverable, micrograms per liter
39432	Isodrin, suspended sediment, recoverable, micrograms per liter
39433	Isodrin, bed sediment, recoverable, dry weight, micrograms per kilogram
39460	Chlorobenzilate, water, unfiltered, recoverable, micrograms per liter
39461	Chlorobenzilate, bed sediment, dry weight, recoverable, micrograms per kilogram
39470	Dilan, water, unfiltered, recoverable, micrograms per liter
39480	p,p'-Methoxychlor, water, unfiltered, recoverable, micrograms per liter
39481	p,p'-Methoxychlor, bed sediment, recoverable, dry weight, micrograms per kilogram
39488	Aroclor 1221, water, unfiltered, recoverable, micrograms per liter
39491	Aroclor 1221, bed sediment, recoverable, dry weight, micrograms per kilogram
39492	Aroclor 1232, water, unfiltered, recoverable, micrograms per liter
39495	Aroclor 1232, bed sediment, recoverable, dry weight, micrograms per kilogram
39496	Aroclor 1242, water, unfiltered, recoverable, micrograms per liter
39499	Aroclor 1242, bed sediment, recoverable, dry weight, micrograms per kilogram
39500	Aroclor 1248, water, unfiltered, recoverable, micrograms per liter
39501	Aroclor 1248, water, filtered, recoverable, micrograms per liter
39502	Aroclor 1248, suspended sediment, recoverable, micrograms per liter
39503	Aroclor 1248, bed sediment, recoverable, dry weight, micrograms per kilogram
39504	Aroclor 1254, water, unfiltered, recoverable, micrograms per liter
39505	Aroclor 1254, water, filtered, recoverable, micrograms per liter
39506	Aroclor 1254, suspended sediment, recoverable, micrograms per liter
39507	Aroclor 1254, bed sediment, recoverable, dry weight, micrograms per kilogram
39508	Aroclor 1260, water, unfiltered, recoverable, micrograms per liter
39509	Aroclor 1260, water, filtered, recoverable, micrograms per liter
39510	Aroclor 1260, suspended sediment, recoverable, micrograms per liter
39511	Aroclor 1260, bed sediment, recoverable, dry weight, micrograms per kilogram
39514	Aroclor 1016, bed sediment, recoverable, dry weight, micrograms per kilogram
39516	PCBs, water, unfiltered, recoverable, micrograms per liter
39517	PCBs, water, filtered, recoverable, micrograms per liter
39518	PCBs, suspended sediment, recoverable, micrograms per liter
39519	PCBs, bed sediment, recoverable, dry weight, micrograms per kilogram
39530	Malathion, water, unfiltered, recoverable, micrograms per liter
39531	Malathion, bed sediment, recoverable, dry weight, micrograms per kilogram
39532	Malathion, water, filtered, recoverable, micrograms per liter
39533	Malathion, suspended sediment, recoverable, micrograms per liter
39540	Parathion, water, unfiltered, recoverable, micrograms per liter
39541	Parathion, bed sediment, recoverable, dry weight, micrograms per kilogram
39542	Parathion, water, filtered, recoverable, micrograms per liter
39543	Parathion, suspended sediment, recoverable, micrograms per liter
39550	Chlorothion, water, unfiltered, recoverable, micrograms per liter

Parameter code	Parameter name
39560	Demeton, water, unfiltered, recoverable, micrograms per liter
39570	Diazinon, water, unfiltered, recoverable, micrograms per liter
39571	Diazinon, bed sediment, recoverable, dry weight, micrograms per kilogram
39572	Diazinon, water, filtered, recoverable, micrograms per liter
39573	Diazinon, suspended sediment, recoverable, micrograms per liter
39580	Azinphos-methyl, water, unfiltered, recoverable, micrograms per liter
39600	Methyl parathion, water, unfiltered, recoverable, micrograms per liter
39601	Methyl parathion, bed sediment, recoverable, dry weight, micrograms per kilogram
39602	Methyl parathion, water, filtered, recoverable, micrograms per liter
39603	Methyl parathion, suspended sediment, recoverable, micrograms per liter
39610	Mevinphos, water, unfiltered, recoverable, micrograms per liter
39620	TEPP, water, unfiltered, recoverable, micrograms per liter
39630	Atrazine, water, unfiltered, recoverable, micrograms per liter
39631	Atrazine, bed sediment, recoverable, dry weight, micrograms per kilogram
39632	Atrazine, water, filtered, recoverable, micrograms per liter
39640	Captan, water, unfiltered, recoverable, micrograms per liter
39650	Diuron, water, unfiltered, recoverable, micrograms per liter
39700	Hexachlorobenzene, water, unfiltered, recoverable, micrograms per liter
39701	Hexachlorobenzene, bed sediment, recoverable, dry weight, micrograms per kilogram
39702	Hexachlorobutadiene, water, unfiltered, recoverable, micrograms per liter
39705	Hexachlorobutadiene, bed sediment, recoverable, dry weight, micrograms per kilogram
39720	Picloram, water, unfiltered, recoverable, micrograms per liter
39730	2,4-D, water, unfiltered, recoverable, micrograms per liter
39731	2,4-D, bed sediment, recoverable, dry weight, micrograms per kilogram
39732	2,4-D, water, filtered, recoverable, micrograms per liter
39733	2,4-D, suspended sediment, recoverable, micrograms per liter
39740	2,4,5-T, water, unfiltered, recoverable, micrograms per liter
39741	2,4,5-T, bed sediment, recoverable, dry weight, micrograms per kilogram
39742	2,4,5-T, water, filtered, recoverable, micrograms per liter
39743	2,4,5-T, suspended sediment, recoverable, micrograms per liter
39750	Carbaryl, water, unfiltered, recoverable, micrograms per liter
39755	Mirex, water, unfiltered, recoverable, micrograms per liter
39756	Mirex, water, filtered, recoverable, micrograms per liter
39757	Mirex, suspended sediment, recoverable, micrograms per liter
39758	Mirex, bed sediment, recoverable, dry weight, micrograms per kilogram
39760	Silvex, water, unfiltered, recoverable, micrograms per liter
39761	Silvex, bed sediment, recoverable, dry weight, micrograms per kilogram
39762	Silvex, water, filtered, recoverable, micrograms per liter
39763	Silvex, suspended sediment, recoverable, micrograms per liter
39770	DCPA, water, unfiltered, recoverable, micrograms per liter

Parameter code	Parameter name
39771	DCPA, water, filtered, recoverable, micrograms per liter
39780	Dicofol, water, unfiltered, recoverable, micrograms per liter
39782	Lindane, water, unfiltered, recoverable, micrograms per liter
39786	Carbophenothion, water, unfiltered, recoverable, micrograms per liter
39787	Carbophenothion, bed sediment, recoverable, dry weight, micrograms per kilogram
39790	Methyl trithion, water, unfiltered, recoverable, micrograms per liter
39791	Methyl trithion, bed sediment, dry weight, recoverable, dry weight, micrograms per kilogram
39800	Phosmet, water, unfiltered, recoverable, micrograms per liter
39810	gamma-Chlordane, water, unfiltered, recoverable, micrograms per liter
39811	gamma-Chlordane, bed sediment, recoverable, dry weight, micrograms per kilogram
39900	Allethrin, water, unfiltered, recoverable, micrograms per liter
39910	Cinerin I, water, unfiltered, recoverable, micrograms per liter
39920	2-Methyl-4,6-dinitrophenol, water, unfiltered, recoverable, micrograms per liter
39930	Pyrethrin, water, unfiltered, recoverable, micrograms per liter
39941	Glyphosate, water, unfiltered, recoverable, micrograms per liter
41403	Pebulate, water, unfiltered, recoverable, micrograms per liter
45013	Isopropyl acetate, water, unfiltered, recoverable, micrograms per liter
45028	Chlorodifluoromethane, water, unfiltered, recoverable, micrograms per liter
45130	Alkylbenzene sulfonate, water, unfiltered, recoverable, milligrams per liter
45501	Petroleum hydrocarbons, water, unfiltered, freon extraction, infrared chromatography, recoverable, milligrams per liter
45607	Tebuthiuron, water, unfiltered, recoverable, micrograms per liter
45617	1,2-Dichloroethene (cis & trans), water, unfiltered, recoverable, micrograms per liter
45622	1,3-Dinitrobenzene, water, unfiltered, recoverable, micrograms per liter
46002	Phenols, water, unfiltered, direct photometric, recoverable, micrograms per liter
46247	Carbon (inorganic plus organic), soil, total, dry weight, percent
46341	3-Nitrotoluene, water, unfiltered, recoverable, micrograms per liter
46342	Alachlor, water, filtered, recoverable, micrograms per liter
46343	Aroclor 1016 plus Aroclor 1242, bed sediment, recoverable, dry weight, micrograms per kilogram
46461	Dioxathion, water, unfiltered, recoverable, micrograms per liter
46568	Iron (biologically reactive), water, unfiltered, micrograms per liter
49025	Aluminum, biota, tissue, recoverable, wet weight, micrograms per gram
49027	Calcium, biota, tissue, recoverable, wet weight, micrograms per gram
49029	Iron, biota, tissue, recoverable, wet weight, micrograms per gram
49030	Magnesium, biota, tissue, recoverable, wet weight, micrograms per gram
49173	Demeton-O, water, unfiltered, recoverable, micrograms per liter
49174	Demeton-S, water, unfiltered, recoverable, micrograms per liter
49206	Pentachloronitrobenzene, water, unfiltered, recoverable, micrograms per liter
49221	3-Nitrotoluene, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49222	4-Nitrotoluene, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter

Parameter code	Parameter name
49223	2-Nitrotoluene, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49224	4-Amino-2,6-dinitrotoluene, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49225	2-Amino-4,6-dinitrotoluene, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49226	TNT, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49227	2,6-Dinitrotoluene, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49228	2,4-Dinitrotoluene, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49229	Nitrobenzene, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49230	1,3-Dinitrobenzene, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49231	3,5-Dinitroaniline, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49232	1,3,5-Trinitrobenzene, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49233	RDX, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49234	HMX, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49235	Triclopyr, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49236	Propham, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49237	Aluminum, biota, tissue, recoverable, dry weight, micrograms per gram
49238	Barium, biota, tissue, recoverable, dry weight, micrograms per gram
49239	Boron, biota, tissue, recoverable, dry weight, micrograms per gram
49240	Chromium, biota, tissue, recoverable, dry weight, micrograms per gram
49241	Copper, biota, tissue, recoverable, dry weight, micrograms per gram
49242	Iron, biota, tissue, recoverable, dry weight, micrograms per gram
49243	Manganese, biota, tissue, recoverable, dry weight, micrograms per gram
49244	Strontium, biota, tissue, recoverable, dry weight, micrograms per gram
49245	Zinc, biota, tissue, recoverable, dry weight, micrograms per gram
49246	Antimony, biota, tissue, recoverable, dry weight, micrograms per gram
49247	Arsenic, biota, tissue, recoverable, dry weight, micrograms per gram
49248	Beryllium, biota, tissue, recoverable, dry weight, micrograms per gram
49249	Cadmium, biota, tissue, recoverable, dry weight, micrograms per gram
49250	Cobalt, biota, tissue, recoverable, dry weight, micrograms per gram
49251	Lead, biota, tissue, recoverable, dry weight, micrograms per gram
49252	Molybdenum, biota, tissue, recoverable, dry weight, micrograms per gram
49253	Nickel, biota, tissue, recoverable, dry weight, micrograms per gram
49254	Selenium, biota, tissue, recoverable, dry weight, micrograms per gram
49255	Silver, biota, tissue, recoverable, dry weight, micrograms per gram
49256	Thorium, biota, tissue, recoverable, dry weight, micrograms per gram
49258	Mercury, biota, tissue, recoverable, dry weight, micrograms per gram
49259	Acetochlor, water, unfiltered, recoverable, micrograms per liter

Parameter code	Parameter name
49260	Acetochlor, water, filtered, recoverable, micrograms per liter
49262	Iodomethane, water, unfiltered, recoverable, micrograms per liter
49263	trans-1,4-Dichloro-2-butene, water, unfiltered, recoverable, micrograms per liter
49270	Inorganic carbon, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, grams per kilogram
49271	Organic carbon, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, grams per kilogram
49272	Carbon (inorganic plus organic), bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, grams per kilogram
49287	Monomeric aluminum, water, unfiltered, micrograms per liter
49288	Organic monomeric aluminum, water, unfiltered, micrograms per liter
49291	Picloram, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49292	Oryzalin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49293	Norflurazon, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49294	Neburon, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49295	1-Naphthol, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49296	Methomyl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49297	Fenuron, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49298	Esfenvalerate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49299	2-Methyl-4,6-dinitrophenol, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49300	Diuron, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49301	Dinoseb, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49302	Dichlorprop, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49303	Dichlobenil, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49304	Dacthal monoacid, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49305	Clopyralid, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49306	Chlorothalonil, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49308	3-Hydroxy carbofuran, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49309	Carbofuran, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49310	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49311	Bromoxynil, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49312	Aldicarb, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49313	Aldicarb sulfone, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49314	Aldicarb sulfoxide, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49315	Acifluorfen, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
49316	cis-Nonachlor, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49317	trans-Nonachlor, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
49318	Oxychlordane, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49319	Aldrin, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49320	cis-Chlordane, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49321	trans-Chlordane, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49322	Chloroneb, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49323	Chlorothalonil, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49324	DCPA, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49325	o,p'-DDD, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49326	p,p'-DDD, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49327	o,p'-DDE, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49328	p,p'-DDE, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49329	o,p'-DDT, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49330	p,p'-DDT, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49331	Dieldrin, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49332	alpha-Endosulfan, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49333	beta-Endosulfan, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49334	Endosulfan sulfate, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49335	Endrin, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49336	Endrin aldehyde, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49337	Endrin ketone, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49338	alpha-HCH, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49339	beta-HCH, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49340	delta-HCH, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
49341	Heptachlor, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49342	Heptachlor epoxide, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49343	Hexachlorobenzene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49344	Isodrin, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49345	Lindane, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49346	p,p'-Methoxychlor, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49347	o,p'-Methoxychlor, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49348	Mirex, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49349	cis-Permethrin, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49350	trans-Permethrin, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49351	Toxaphene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49352	Hexachlorobutadiene, biota, whole organism, recoverable, wet weight, micrograms per kilogram
49353	Aldrin, biota, whole organism, recoverable, wet weight, micrograms per kilogram
49354	PCBs, biota, whole organism, recoverable, wet weight, micrograms per kilogram
49355	Toxaphene, biota, whole organism, recoverable, wet weight, micrograms per kilogram
49356	Pentachloroanisole, biota, whole organism, recoverable, wet weight, micrograms per kilogram
49357	Oxychlordane, biota, whole organism, recoverable, wet weight, micrograms per kilogram
49358	trans-Nonachlor, biota, whole organism, recoverable, wet weight, micrograms per kilogram
49359	cis-Nonachlor, biota, whole organism, recoverable, wet weight, micrograms per kilogram
49360	Mirex, biota, whole organism, recoverable, wet weight, micrograms per kilogram
49361	p,p'-Methoxychlor, biota, whole organism, recoverable, wet weight, micrograms per kilogram
49362	o,p'-Methoxychlor, biota, whole organism, recoverable, wet weight, micrograms per kilogram
49363	Lindane, biota, whole organism, recoverable, wet weight, micrograms per kilogram
49364	delta-HCH, biota, whole organism, recoverable, wet weight, micrograms per kilogram
49365	beta-HCH, biota, whole organism, recoverable, wet weight, micrograms per kilogram
49366	alpha-HCH, biota, whole organism, recoverable, wet weight, micrograms per kilogram
49367	Hexachlorobenzene, biota, whole organism, recoverable, wet weight, micrograms per kilogram
49368	Heptachlor epoxide, biota, whole organism, recoverable, wet weight, micrograms per kilogram
49369	Heptachlor, biota, whole organism, recoverable, wet weight, micrograms per kilogram
49370	Endrin, biota, whole organism, recoverable, wet weight, micrograms per kilogram
49371	Dieldrin, biota, whole organism, recoverable, wet weight, micrograms per kilogram
49372	p,p'-DDE, biota, whole organism, recoverable, wet weight, micrograms per kilogram

Parameter code	Parameter name
49373	o,p'-DDE, biota, whole organism, recoverable, wet weight, micrograms per kilogram
49374	o,p'-DDD, biota, whole organism, recoverable, wet weight, micrograms per kilogram
49375	p,p'-DDD, biota, whole organism, recoverable, wet weight, micrograms per kilogram
49376	p,p'-DDT, biota, whole organism, recoverable, wet weight, micrograms per kilogram
49377	o,p'-DDT, biota, whole organism, recoverable, wet weight, micrograms per kilogram
49378	DCPA, biota, whole organism, recoverable, wet weight, micrograms per kilogram
49379	trans-Chlordane, biota, whole organism, recoverable, wet weight, micrograms per kilogram
49380	cis-Chlordane, biota, whole organism, recoverable, wet weight, micrograms per kilogram
49381	Di-n-butyl phthalate, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49382	Di-n-octyl phthalate, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49383	Diethyl phthalate, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49384	Dimethyl phthalate, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49385	Phytane, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49386	Pristane, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49387	Pyrene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49388	1-Methylpyrene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49389	Benzo[a]pyrene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49390	Indeno[1,2,3-cd]pyrene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49391	2,2'-Biquinoline, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49392	Quinoline, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49393	Phenanthridine, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49394	Isoquinoline, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49395	2,4-Dinitrotoluene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49396	2,6-Dinitrotoluene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49397	Benzo[k]fluoranthene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49398	1-Methyl-9H-fluorene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
49399	9H-Fluorene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49400	Isophorone, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49401	Bis(2-chloroethoxy)methane, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49402	Naphthalene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49403	1,2-Dimethylnaphthalene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49404	1,6-Dimethylnaphthalene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49405	2,3,6-Trimethylnaphthalene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49406	2,6-Dimethylnaphthalene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49407	2-Chloronaphthalene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49408	Benzo[ghi]perylene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49409	Phenanthrene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49410	1-Methylphenanthrene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49411	4H-Cyclopenta[def]phenanthrene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49413	Phenol, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49414	2,3,5,6-Tetramethylphenol, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49415	2,4,6-Trichlorophenol, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49416	2,4,6-Trimethylphenol, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49417	2,4-Dichlorophenol, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49418	2,4-Dinitrophenol, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49419	2-Methyl-4,6-dinitrophenol, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49420	2-Nitrophenol, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49421	3,5-Dimethylphenol, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49422	4-Chloro-3-methylphenol, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
49423	3-Nitrophenol, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49424	C8-Alkylphenol, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49425	Pentachlorophenol, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49426	Bis(2-ethylhexyl) phthalate, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49427	Benzyl n-butyl phthalate, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49428	Acenaphthylene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49429	Acenaphthene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49430	Acridine, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49431	N-Nitrosodi-n-propylamine, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49432	N-Nitrosodimethylamine, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49433	N-Nitrosodiphenylamine, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49434	Anthracene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49435	2-Methylanthracene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49436	Benzo[a]anthracene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49437	9,10-Anthraquinone, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49438	1,2,4-Trichlorobenzene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49439	1,2-Dichlorobenzene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49440	1,3,5-Trichlorobenzene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49441	1,3-Dichlorobenzene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49442	1,4-Dichlorobenzene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49443	Azobenzene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49444	Nitrobenzene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49445	Pentachlorobenzene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
49446	Pentachloronitrobenzene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49447	PCB congener 1, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49448	Hexachlorobutadiene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49449	Carbazole, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49450	Chrysene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49451	p-Cresol, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49452	Dibenzothiophene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49453	Hexachloroethane, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49454	4-Bromophenyl phenyl ether, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49455	4-Chlorophenyl phenyl ether, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49456	Bis(2-chloroethyl) ether, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49457	Bis(2-chloroisopropyl) ether, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49458	Benzo[b]fluoranthene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49459	PCBs, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49460	Pentachloroanisole, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49461	Dibenzo[a,h]anthracene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49465	Vanadium, biota, tissue, recoverable, dry weight, micrograms per gram
49466	Fluoranthene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49467	2-Chlorophenol, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49468	Benzo[c]cinnoline, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49469	Gross beta radioactivity counting error, water, unfiltered, Cs-137 curve, picocuries per liter
49471	Gross alpha radioactivity counting error, water, unfiltered, Pu-239 curve, picocuries per liter
49473	Bismuth-212 counting error, water, unfiltered, picocuries per liter
49474	Plutonium-239 plus plutonium-240 counting error, water, unfiltered, picocuries per liter
49477	Europium-152 counting error, water, unfiltered, picocuries per liter
49479	Plutonium-239 plus plutonium-240 counting error, water, filtered, picocuries per liter

Parameter code	Parameter name
49481	Nickel-63 counting error, water, unfiltered, picocuries per liter
49483	Chlorine-36 counting error, water, unfiltered, picocuries per liter
49484	Plutonium-239 plus plutonium-240 counting error, suspended sediment, picocuries per liter
49486	Plutonium-238 counting error, suspended sediment, picocuries per liter
49488	2-Methyl-4,6-dinitrophenol, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49489	Hexachlorocyclopentadiene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49538	1,1-Difluoroethane, water, unfiltered, recoverable, micrograms per liter
49541	Chloropentafluoroethane, water, unfiltered, recoverable, micrograms per liter
49570	Particulate nitrogen, suspended in water, milligrams per liter
49688	cis-Nonachlor, suspended sediment, recoverable, micrograms per liter
49816	PCB congener 3, water, filtered, recoverable, nanograms per liter
49817	PCB congeners 4+10, water, filtered, recoverable, nanograms per liter
49820	PCB congener 25, water, filtered, recoverable, nanograms per liter
49821	PCB congener 53, water, filtered, recoverable, nanograms per liter
49822	PCB congener 51, water, filtered, recoverable, nanograms per liter
49823	PCB congener 63, water, filtered, recoverable, nanograms per liter
49824	PCB congener 66, water, filtered, recoverable, nanograms per liter
49825	PCB congener 95, water, filtered, recoverable, nanograms per liter
49826	PCB congener 89, water, filtered, recoverable, nanograms per liter
49827	PCB congener 83, water, filtered, recoverable, nanograms per liter
49830	PCB congener 158, water, filtered, recoverable, nanograms per liter
49832	PCB congener 193, water, filtered, recoverable, nanograms per liter
49833	PCB congener 198, water, filtered, recoverable, nanograms per liter
49834	PCB congener 207, water, filtered, recoverable, nanograms per liter
49835	PCB congener 3, suspended sediment, recoverable, nanograms per liter
49836	PCB congeners 4+10, suspended sediment, recoverable, nanograms per liter
49839	PCB congener 25, suspended sediment, recoverable, nanograms per liter
49840	PCB congener 53, suspended sediment, recoverable, nanograms per liter
49841	PCB congener 51, suspended sediment, recoverable, nanograms per liter
49842	PCB congener 63, suspended sediment, recoverable, nanograms per liter
49843	PCB congener 66, suspended sediment, recoverable, nanograms per liter
49844	PCB congener 95, suspended sediment, recoverable, nanograms per liter
49845	PCB congener 89, suspended sediment, recoverable, nanograms per liter
49846	PCB congener 83, suspended sediment, recoverable, nanograms per liter
49850	PCB congener 158, suspended sediment, recoverable, nanograms per liter
49852	PCB congener 193, suspended sediment, recoverable, nanograms per liter
49853	PCB congener 198, suspended sediment, recoverable, nanograms per liter
49854	PCB congener 207, suspended sediment, recoverable, nanograms per liter
49855	PCB congener 126, biota, tissue, recoverable, wet weight, micrograms per kilogram

Parameter code	Parameter name
49856	PCB congener 105, biota, tissue, recoverable, wet weight, micrograms per kilogram
49858	PCB congener 169, biota, tissue, recoverable, wet weight, micrograms per kilogram
49892	Gasoline range organic compounds, water, unfiltered, recoverable, micrograms per liter
49934	Carbon-14 counting error, water, filtered, percent modern
49935	Carbon-14 counting error, rock, percent modern
49937	Gamma radioactivity scan 2-sigma combined uncertainty, water, filtered, picocuries per liter
49939	Plutonium-238 2-sigma combined uncertainty, water, filtered, picocuries per liter
49941	Plutonium-239 plus plutonium-240 2-sigma combined uncertainty, water, filtered, picocuries per liter
49942	Americium-241 2-sigma combined uncertainty, water, filtered, picocuries per liter
49943	Tritium 2-sigma combined uncertainty, water, unfiltered, picocuries per liter
49945	Gross alpha radioactivity 2-sigma combined uncertainty, bed sediment, natural uranium curve, dry weight, micrograms per gram
49947	Gross alpha radioactivity 2-sigma combined uncertainty, suspended sediment, natural uranium curve, dry weight, micrograms per gram
49948	2-Ethylnaphthalene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
49949	17-beta-Estradiol, biota, fish, blood plasma, wet weight, recoverable, picograms per milliliter
49950	Testosterone, biota, fish, blood plasma, wet weight, recoverable, picograms per milliliter
49951	Vitellogenin, biota, fish, blood plasma, recoverable, wet weight, nanograms per gram
49952	11-Ketotestosterone, biota, fish, blood plasma, recoverable, wet weight, nanograms per gram
49953	Biomass, phytoplankton, ash free dry mass, milligrams per liter
49954	Biomass, periphyton, ash free dry mass, grams per square meter
49955	Thallium, suspended sediment, dry weight, micrograms per gram
49961	Gross alpha radioactivity 2-sigma combined uncertainty, suspended sediment, Th-230 curve, dry weight, picocuries per gram
49963	Gross beta radioactivity 2-sigma combined uncertainty, bed sediment, Cs-137 curve, dry weight, picocuries per gram
49965	Gross beta radioactivity 2-sigma combined uncertainty, suspended sediment, Cs-137 curve, dry weight, picocuries per gram
49967	Gross beta radioactivity 2-sigma combined uncertainty, suspended sediment, Sr-89/90 curve, dry weight, picocuries per gram
49968	Gamma radioactivity scan 2-sigma combined uncertainty, bed sediment, dry weight, picocuries per gram
49971	Gamma radioactivity scan 2-sigma combined uncertainty, suspended sediment, dry weight, picocuries per gram
49973	Radium-226 2-sigma combined uncertainty, bed sediment, dry weight, picocuries per gram
49975	Plutonium-238 2-sigma combined uncertainty, suspended sediment, dry weight, picocuries per gram
49977	Plutonium-239 plus plutonium-240 2-sigma combined uncertainty, suspended sediment, dry weight, picocuries per gram
49979	Cesium-137 2-sigma combined uncertainty, bed sediment, dry weight, picocuries per gram

Parameter code	Parameter name
49981	Americium-241 2-sigma combined uncertainty, suspended sediment, dry weight, picocuries per gram
49982	Bulk density, soil, dry, grams per cubic centimeter
49983	Mineral density, soil, grams per cubic centimeter
49987	2-Methoxy-2-methylpropanal, water, unfiltered, recoverable, micrograms per liter
49988	2-Ethoxy-2-methylpropanal, water, unfiltered, recoverable, micrograms per liter
49989	Ethoxyacetaldehyde, water, unfiltered, recoverable, micrograms per liter
49990	tert-Butoxyacetaldehyde, water, unfiltered, recoverable, micrograms per liter
49991	Methyl acrylate, water, unfiltered, recoverable, micrograms per liter
49992	tert-Butyl formate, water, unfiltered, recoverable, micrograms per liter
49993	Ethyl formate, water, unfiltered, recoverable, micrograms per liter
49994	tert-Amyl ethyl ether, water, unfiltered, recoverable, micrograms per liter
49995	2-Methyl-2-butene, water, unfiltered, recoverable, micrograms per liter
49996	2,3,3-Trimethylpentane, water, unfiltered, recoverable, micrograms per liter
49997	2,3,4-Trimethylpentane, water, unfiltered, recoverable, micrograms per liter
49998	2,3-Dimethylbutane, water, unfiltered, recoverable, micrograms per liter
49999	1,2,3,4-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter
50000	1,2,3,5-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter
50001	1,2,4,5-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter
50002	Bromoethene, water, unfiltered, recoverable, micrograms per liter
50003	Chloroacetonitrile, water, unfiltered, recoverable, micrograms per liter
50004	tert-Butyl ethyl ether, water, unfiltered, recoverable, micrograms per liter
50005	Methyl tert-pentyl ether, water, unfiltered, recoverable, micrograms per liter
50008	Priority pollutants, effluent, unfiltered, recoverable, milligrams per liter
50009	Alachlor ethanesulfonic acid, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
50010	Cyanazine amide, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
50018	2,4-Di-tert-pentylphenol, water, unfiltered, recoverable, micrograms per liter
50019	Butylamine, water, unfiltered, recoverable, micrograms per liter
50060	Chlorine (total residual), water, unfiltered, milligrams per liter
50064	Chlorine (free available), water, unfiltered, milligrams per liter
50066	Chlorine (combined available), water, unfiltered, milligrams per liter
50086	Settleable solids, water, unfiltered, milliliters per liter per hour
50266	2,6-Dichlorobenzamide, water, unfiltered, recoverable, micrograms per liter
50279	Suspended sediment concentration, flow-through centrifuge, milligrams per liter
50281	Trichlorofluoromethane, for age dating, water, unfiltered, recoverable, picograms per kilogram
50282	Dichlorodifluoromethane, for age dating, water, unfiltered, recoverable, picograms per kilogram
50283	1,1,2-Trichloro-1,2,2-trifluoroethane, for age dating, water, unfiltered, recoverable, picograms per kilogram
50284	Methylmercury, water, unfiltered, recoverable, nanograms per liter
50285	Methylmercury, water, filtered, recoverable, nanograms per liter

Parameter code	Parameter name
50286	Mercury, water, unfiltered, nanograms per liter
50287	Mercury, water, filtered, nanograms per liter
50288	Metolachlor, water, filtered (1.5 micron filter), recoverable, micrograms per liter
50290	Atrazine, water, filtered (1.5 micron filter), recoverable, micrograms per liter
50295	3-Ketocarbofuran, water, filtered, recoverable, micrograms per liter
50296	Aminocarb, water, filtered, recoverable, micrograms per liter
50297	Asulam, water, filtered, recoverable, micrograms per liter
50298	Barban, water, filtered, recoverable, micrograms per liter
50299	Bendiocarb, water, filtered, recoverable, micrograms per liter
50300	Benomyl, water, filtered, recoverable, micrograms per liter
50301	Bufencarb, water, filtered, recoverable, micrograms per liter
50302	Butacarb, water, filtered, recoverable, micrograms per liter
50303	Butocarboxim, water, filtered, recoverable, micrograms per liter
50304	Butoxycarboxim, water, filtered, recoverable, micrograms per liter
50305	Caffeine, water, filtered, recoverable, micrograms per liter
50306	Chlorimuron-ethyl, water, filtered, recoverable, micrograms per liter
50307	3-(Trifluoromethyl)aniline, water, filtered, recoverable, micrograms per liter
50308	2,6-Difluorobenzoic acid, water, filtered, recoverable, micrograms per liter
50309	3,4-Dichloroaniline, water, filtered, recoverable, micrograms per liter
50310	3,5-Dichlorobenzoic acid, water, filtered, recoverable, micrograms per liter
50311	4-Chloro-2-methylphenol, water, filtered, recoverable, micrograms per liter
50312	4-Chloroaniline, water, filtered, recoverable, micrograms per liter
50313	4-Chlorophenylurea, water, filtered, recoverable, micrograms per liter
50314	5-Hydroxydicamba, water, filtered, recoverable, micrograms per liter
50315	Aniline, water, filtered, recoverable, micrograms per liter
50316	Arsenic acid, water, filtered, micrograms per liter
50317	Dimethylarsinate ((CH3)2HAsO2), water, filtered, recoverable, micrograms per liter
50318	Captan, water, filtered, recoverable, micrograms per liter
50319	Chloropicrin, water, filtered, recoverable, micrograms per liter
50320	Chloroxuron, water, filtered, recoverable, micrograms per liter
50321	Dalapon, water, filtered, recoverable, micrograms per liter
50322	Diflubenzuron, water, filtered, recoverable, micrograms per liter
50323	Diquat, water, filtered, recoverable, micrograms per liter
50324	Ethion, water, filtered, recoverable, micrograms per liter
50325	Mancozeb, water, filtered, recoverable, micrograms per liter
50326	Maneb, water, filtered, recoverable, micrograms per liter
50327	Mecoprop, water, filtered, recoverable, micrograms per liter
50328	Metham sodium, water, filtered, recoverable, micrograms per liter
50329	Methomyl, water, filtered, recoverable, micrograms per liter
50330	Monuron, water, filtered, recoverable, micrograms per liter

Parameter code	Parameter name
50331	MSMA, water, filtered, recoverable, micrograms per liter
50332	Norflurazon, water, filtered, recoverable, micrograms per liter
50333	Paraquat, water, filtered, recoverable, micrograms per liter
50334	Phenylurea, water, filtered, recoverable, micrograms per liter
50335	Primisulfuron-methyl, water, filtered, recoverable, micrograms per liter
50336	Profenofos, water, filtered, recoverable, micrograms per liter
50337	Sulfometuron-methyl, water, filtered, recoverable, micrograms per liter
50338	Tetraethyllead, water, filtered, recoverable, micrograms per liter
50339	Thiophanate methyl, water, filtered, recoverable, micrograms per liter
50340	Tribuphos, water, filtered, recoverable, micrograms per liter
50341	Trimethacarb, water, filtered, recoverable, micrograms per liter
50342	Ziram, water, filtered, recoverable, micrograms per liter
50343	Chlorpropham, water, filtered, recoverable, micrograms per liter
50344	Clomazone, water, filtered, recoverable, micrograms per liter
50345	N-Methyl 2-chlorophenyl carbamate, water, filtered, recoverable, micrograms per liter
50346	Desmedipham, water, filtered, recoverable, micrograms per liter
50347	Diallate, water, filtered, recoverable, micrograms per liter
50348	2-Chloro-6-ethylamino-4-amino-s-triazine, water, filtered, recoverable, micrograms per liter
50349	Dioxacarb, water, filtered, recoverable, micrograms per liter
50350	Diphenamid, water, filtered, recoverable, micrograms per liter
50351	Ethiofencarb, water, filtered, recoverable, micrograms per liter
50352	Fenobucarb, water, filtered, recoverable, micrograms per liter
50353	Formetanate, water, filtered, recoverable, micrograms per liter
50354	Thifensulfuron, water, filtered, recoverable, micrograms per liter
50355	2-Hydroxy-4-isopropylamino-6-ethylamino-s-triazine, water, filtered, recoverable, micrograms per liter
50356	Imazaquin, water, filtered, recoverable, micrograms per liter
50357	Imazapyr, water, filtered, recoverable, micrograms per liter
50358	Isoprocarb, water, filtered, recoverable, micrograms per liter
50359	Metalaxyl, water, filtered, recoverable, micrograms per liter
50360	Mexacarbate, water, filtered, recoverable, micrograms per liter
50361	Mobam, water, filtered, recoverable, micrograms per liter
50362	Xylylcarb, water, filtered, recoverable, micrograms per liter
50363	MTMC, water, filtered, recoverable, micrograms per liter
50364	Nicosulfuron, water, filtered, recoverable, micrograms per liter
50365	Nicotine, water, filtered, recoverable, micrograms per liter
50366	Phenmedipham, water, filtered, recoverable, micrograms per liter
50367	Promecarb, water, filtered, recoverable, micrograms per liter
50368	Terbutol, water, filtered, recoverable, micrograms per liter
50369	Thidiazuron, water, filtered, recoverable, micrograms per liter

Parameter code	Parameter name
50370	Thiofanox, water, filtered, recoverable, micrograms per liter
50371	XMC, water, filtered, recoverable, micrograms per liter
50372	4-Chlorophenoxyaniline, water, filtered, recoverable, micrograms per liter
50373	2,4,5-Trichlorophenol, water, filtered, recoverable, micrograms per liter
50374	Diuron, water, filtered, recoverable, micrograms per liter
50375	Molinate, water, filtered, recoverable, micrograms per liter
50376	Pendimethalin, water, filtered, recoverable, micrograms per liter
50377	Propanil, water, filtered, recoverable, micrograms per liter
50378	Deisopropylprometryn, water, filtered, recoverable, micrograms per liter
50379	Demethyl fluometuron, water, filtered, recoverable, micrograms per liter
50380	Demethyl norflurazon, water, filtered, recoverable, micrograms per liter
50381	Butocarboxim sulfoxide, water, filtered, recoverable, micrograms per liter
50382	Butoxycarboxim, water, filtered, recoverable, micrograms per liter
50383	4-Chloro-2-hydroxyaniline, water, filtered, recoverable, micrograms per liter
50384	3,4-Dichlorophenylurea, water, filtered, recoverable, micrograms per liter
50385	3,5,6-Trichloro-2-methoxypyridine, water, filtered, recoverable, micrograms per liter
50386	3,5,6-Trichloro-2-pyridinol, water, filtered, recoverable, micrograms per liter
50387	Tri-n-butyltin acetate, water, filtered, recoverable, micrograms per liter
50388	Trimethylethyllead, water, filtered, recoverable, micrograms per liter
50389	(4-Chloro-2-hydroxyphenyl)urea, water, filtered, recoverable, micrograms per liter
50390	4-Amino-5,6-dichloro-3-hydroxy-2-picolinic acid, water, filtered, recoverable, micrograms per liter
50391	4-Chloro-3-hydroxyaniline, water, filtered, recoverable, micrograms per liter
50392	(4-Chloro-3-hydroxyphenyl)urea, water, filtered, recoverable, micrograms per liter
50393	4,5-Dichloro-2-hydroxyaniline, water, filtered, recoverable, micrograms per liter
50394	Dibutyltin, water, filtered, recoverable, micrograms per liter
50395	Dibutyltin diacetate, water, filtered, recoverable, micrograms per liter
50396	Diethyldimethyllead, water, filtered, recoverable, micrograms per liter
50397	Methyltriethyllead, water, filtered, recoverable, micrograms per liter
50398	Monobutyltin, water, filtered, recoverable, micrograms per liter
50399	Tetra-n-butyltin, water, filtered, recoverable, micrograms per liter
50400	Tetramethyllead, water, filtered, recoverable, micrograms per liter
50401	Tetramethyltin, water, filtered, recoverable, micrograms per liter
50402	Tetraphenyltin, water, filtered, recoverable, micrograms per liter
50403	Thiodicarb, water, filtered, recoverable, micrograms per liter
50404	Ethidimuron, water, filtered, recoverable, micrograms per liter
50405	Ethiofencarb sulfone, water, filtered, recoverable, micrograms per liter
50406	Ethiofencarb sulfoxide, water, filtered, recoverable, micrograms per liter
50407	Imazethapyr, water, filtered, recoverable, micrograms per liter
50408	Methiocarb sulfone, water, filtered, recoverable, micrograms per liter

Parameter code	Parameter name
50409	Methiocarb sulfoxide, water, filtered, recoverable, micrograms per liter
50410	Oxamyl oxime, water, filtered, recoverable, micrograms per liter
50411	Thiofanox sulfone, water, filtered, recoverable, micrograms per liter
50412	Thiofanox sulfoxide, water, filtered, recoverable, micrograms per liter
50413	2,4-Dichlorophenol, water, filtered, recoverable, micrograms per liter
50421	Plutonium-239 plus plutonium-240 2-sigma combined uncertainty, bed sediment, dry weight, picocuries per gram
50422	Plutonium-238 2-sigma combined uncertainty, bed sediment, dry weight, picocuries per gram
50464	Aminomethylphosphonic acid, water, unfiltered, recoverable, micrograms per liter
50470	2,4-D methyl ester, water, filtered, recoverable, micrograms per liter
50471	Propiconazole, water, filtered, recoverable, micrograms per liter
50473	3-(Trifluoromethyl)phenylurea, water, unfiltered, recoverable, micrograms per liter
50573	Erbium, water, filtered, micrograms per liter
50574	Europium, water, filtered, micrograms per liter
50575	Gadolinium, water, filtered, micrograms per liter
50576	Hafnium, water, filtered, micrograms per liter
50577	Holmium, water, filtered, micrograms per liter
50578	Iridium, water, filtered, micrograms per liter
50579	Neodymium, water, filtered, micrograms per liter
50580	Niobium, water, filtered, micrograms per liter
50581	Osmium, water, filtered, micrograms per liter
50582	Praseodymium, water, filtered, micrograms per liter
50583	Rhenium, water, filtered, micrograms per liter
50584	Rhodium, water, filtered, micrograms per liter
50585	Tellurium, water, filtered, micrograms per liter
50586	Terbium, water, filtered, micrograms per liter
50587	Thulium, water, filtered, micrograms per liter
50798	cis-1,4-Dichloro-2-butene, water, unfiltered, recoverable, micrograms per liter
50834	Radium-224 2-sigma combined uncertainty, water, filtered, picocuries per liter
50836	Radium-224 2-sigma combined uncertainty, water, unfiltered, picocuries per liter
50840	Radium-228 2-sigma combined uncertainty, water, unfiltered, gamma count, picocuries per liter
50911	Radium-226 2-sigma combined uncertainty, water, filtered, gamma count, picocuries per liter
50912	Radium-226 2-sigma combined uncertainty, water, unfiltered, gamma count, picocuries per liter
50973	Oxadiazon, water, unfiltered, recoverable, micrograms per liter
50975	Oxyfluorfen, water, unfiltered, recoverable, micrograms per liter
50976	Benfluralin, water, unfiltered, recoverable, micrograms per liter
54073	3-(Trifluoromethyl)phenylurea, water, unfiltered, recoverable, micrograms per liter
61029	Acetochlor ethanesulfonic acid, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
61030	Acetochlor oxanilic acid, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter

Parameter code	Parameter name
61031	Alachlor oxanilic acid, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
61032	Carbonaceous biochemical oxygen demand, water, filtered, nitrogen inhibited, 20 days at 20 degrees Celsius, milligrams per liter
61041	Lithium, bed sediment smaller than 2 millimeters, total digestion, dry weight, micrograms per gram
61042	Methane, water, filtered, recoverable, micrograms per liter
61043	Metolachlor ethanesulfonic acid, water, filtered (0.7 micron glass fiber filter), micrograms per liter
61044	Metolachlor oxanilic acid, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
61045	Molybdenum, bed sediment smaller than 2 millimeters, total digestion, dry weight, micrograms per gram
61050	Selenium, bed sediment smaller than 2 millimeters, total digestion, dry weight, micrograms per gram
61051	Strontium, bed sediment smaller than 2 millimeters, total digestion, dry weight, micrograms per gram
61052	Thallium, bed sediment smaller than 2 millimeters, total digestion, dry weight, micrograms per gram
61054	Vanadium, bed sediment smaller than 2 millimeters, total digestion, dry weight, micrograms per gram
61157	Chlorotoluron, water, filtered, recoverable, micrograms per liter
61158	Monolinuron, water, filtered, recoverable, micrograms per liter
61159	Tribenuron-methyl, water, filtered, recoverable, micrograms per liter
61168	Carbonaceous biochemical oxygen demand, water, unfiltered, nitrogen inhibited, 20 days at 20 degrees Celsius, milligrams per liter
61188	Chloramben methyl ester, water, filtered, recoverable, micrograms per liter
61209	Perchlorate, water, unfiltered, micrograms per liter
61220	Gross beta radioactivity counting error, water, unfiltered, Sr-90/Y-90 curve, picocuries per liter
61225	3-Methylcholanthrene, water, unfiltered, recoverable, micrograms per liter
61226	Diallate, water, unfiltered, recoverable, micrograms per liter
61579	Acephate, water, filtered, recoverable, micrograms per liter
61580	Bifenthrin, water, filtered, recoverable, micrograms per liter
61581	Cadusaphos, water, filtered, recoverable, micrograms per liter
61582	Captan, water, filtered, recoverable, micrograms per liter
61583	Chlorethoxyfos, water, filtered, recoverable, micrograms per liter
61584	Chloropicrin, water, filtered, recoverable, micrograms per liter
61585	Cyfluthrin, water, filtered, recoverable, micrograms per liter
61586	Cypermethrin, water, filtered, recoverable, micrograms per liter
61587	Dicofol, water, filtered, recoverable, micrograms per liter
61588	Dimethenamid, water, filtered, recoverable, micrograms per liter
61589	Dimethomorph, water, filtered, recoverable, micrograms per liter
61590	Endosulfan sulfate, water, filtered, recoverable, micrograms per liter

Parameter code	Parameter name
61591	Fenamiphos, water, filtered, recoverable, micrograms per liter
61592	Flumetralin, water, filtered, recoverable, micrograms per liter
61593	Iprodione, water, filtered, recoverable, micrograms per liter
61594	Isofenphos, water, filtered, recoverable, micrograms per liter
61595	lambda-Cyhalothrin, water, filtered, recoverable, micrograms per liter
61596	Metalaxyl, water, filtered, recoverable, micrograms per liter
61597	Methamidophos, water, filtered, recoverable, micrograms per liter
61598	Methidathion, water, filtered, recoverable, micrograms per liter
61599	Myclobutanil, water, filtered, recoverable, micrograms per liter
61600	Oxyfluorfen, water, filtered, recoverable, micrograms per liter
61601	Phosmet, water, filtered, recoverable, micrograms per liter
61602	Phostebupirim, water, filtered, recoverable, micrograms per liter
61603	Profenofos, water, filtered, recoverable, micrograms per liter
61604	Propetamphos, water, filtered, recoverable, micrograms per liter
61605	Sulfotepp, water, filtered, recoverable, micrograms per liter
61606	Tefluthrin, water, filtered, recoverable, micrograms per liter
61607	Temephos, water, filtered, recoverable, micrograms per liter
61608	Thiodicarb, water, filtered, recoverable, micrograms per liter
61609	Tralomethrin, water, filtered, recoverable, micrograms per liter
61610	Tribuphos, water, filtered, recoverable, micrograms per liter
61611	1,4-Naphthoquinone, water, filtered, recoverable, micrograms per liter
61612	2,3,3-Trichloro-2-propene-1-sulfonic acid (sodium salt), water, filtered, recoverable, micrograms per liter
61613	2,4'-Dicofol, water, filtered, recoverable, micrograms per liter
61614	2,5-Dichloroaniline, water, filtered, recoverable, micrograms per liter
61615	2-[(2-Ethyl-6-methylphenyl)-amino]-1-propanol, water, filtered, recoverable, micrograms per liter
61616	2-Aminobenzimidazole, water, filtered, recoverable, micrograms per liter
61617	2-Amino-N-isopropylbenzamide, water, filtered, recoverable, micrograms per liter
61618	2-Chloro-2',6'-diethylacetanilide, water, filtered, recoverable, micrograms per liter
61619	Alachlor, water, filtered, recoverable, micrograms per liter
61620	2-Ethyl-6-methylaniline, water, filtered, recoverable, micrograms per liter
61621	2-Isopropyl-6-methyl-4-pyrimidinol, water, filtered, recoverable, micrograms per liter
61622	3-(2,2-Dichlorovinyl)-2,2-dimethylcyclopropane-1-carboxylic acid, water, filtered, recoverable, micrograms per liter
61624	3-(3,5-Dichlorophenyl)-2,4-dioxo-1-imidazolidinecarboximide, water, filtered, recoverable, micrograms per liter
61625	3,4-Dichloroaniline, water, filtered, recoverable, micrograms per liter
61626	3,5,6-Trichloro-2-pyridinol, water, filtered, recoverable, micrograms per liter
61627	3,5-Dichloroaniline, water, filtered, recoverable, micrograms per liter
61628	3-Phenoxybenzoic acid, water, filtered, recoverable, micrograms per liter

Parameter code	Parameter name
61629	3-Phenoxybenzyl alcohol, water, filtered, recoverable, micrograms per liter
61630	3-(Trifluoromethyl)aniline, water, filtered, recoverable, micrograms per liter
61631	4,4'-Dichlorobenzophenone, water, filtered, recoverable, micrograms per liter
61632	4-Bromo-2-chlorophenol, water, filtered, recoverable, micrograms per liter
61633	4-Chloro-2-methylphenol, water, filtered, recoverable, micrograms per liter
61634	4-Chlorophenyl methyl sulfone, water, filtered, recoverable, micrograms per liter
61635	Azinphos-methyl oxygen analog, water, filtered, recoverable, micrograms per liter
61636	Chlorpyrifos oxygen analog, water, filtered, recoverable, micrograms per liter
61637	2-(4-tert-Butylphenoxy)-cyclohexanol, water, filtered, recoverable, micrograms per liter
61638	Diazoxon, water, filtered, recoverable, micrograms per liter
61639	Omethoate, water, filtered, recoverable, micrograms per liter
61640	Disulfoton sulfone, water, filtered, recoverable, micrograms per liter
61641	Disulfoton sulfoxide, water, filtered, recoverable, micrograms per liter
61642	Endosulfan ether, water, filtered, recoverable, micrograms per liter
61643	Ethion dioxon, water, filtered, recoverable, micrograms per liter
61644	Ethion monoxon, water, filtered, recoverable, micrograms per liter
61645	Fenamiphos sulfone, water, filtered, recoverable, micrograms per liter
61646	Fenamiphos sulfoxide, water, filtered, recoverable, micrograms per liter
61647	Fenthion sulfoxide, water, filtered, recoverable, micrograms per liter
61648	Fenthion sulfone, water, filtered, recoverable, micrograms per liter
61649	Fonofos oxygen analog, water, filtered, recoverable, micrograms per liter
61650	Des-N-isopropyl isofenphos, water, filtered, recoverable, micrograms per liter
61651	Des-N-isopropyl isofenphos oxygen analog, water, filtered, recoverable, micrograms per liter
61652	Malaoxon, water, filtered, recoverable, micrograms per liter
61653	Malathion monocarboxylic acid, water, filtered, recoverable, micrograms per liter
61654	Methamidophos, water, filtered, recoverable, micrograms per liter
61655	Methomyl oxime, water, filtered, recoverable, micrograms per liter
61656	Methyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropane-1-carboxylate, water, filtered, recoverable, micrograms per liter
61657	Desamino metribuzin, water, filtered, recoverable, micrograms per liter
61658	Desamino-diketo metribuzin, water, filtered, recoverable, micrograms per liter
61659	N-Ethylcyclohexylamine, water, filtered, recoverable, micrograms per liter
61660	O-Ethyl-O-methyl-S-propylphosphorothioate, water, filtered, recoverable, micrograms per liter
61661	O-Ethyl-S-propylphosphorothioate, water, filtered, recoverable, micrograms per liter
61662	Omethoate, water, filtered, recoverable, micrograms per liter
61663	Paraoxon, water, filtered, recoverable, micrograms per liter
61664	Methyl paraoxon, water, filtered, recoverable, micrograms per liter
61665	4-(Hydroxymethyl) pendimethalin, water, filtered, recoverable, micrograms per liter
61666	Phorate oxygen analog, water, filtered, recoverable, micrograms per liter
61667	Phorate sulfone, water, filtered, recoverable, micrograms per liter

Parameter code	Parameter name
61668	Phosmet oxygen analog, water, filtered, recoverable, micrograms per liter
61669	Tebupirimphos oxygen analog, water, filtered, recoverable, micrograms per liter
61670	Trichloropropene sulfonic acid ethyl ester, water, filtered, recoverable, micrograms per liter
61671	Tefluthrin metabolite [R 119364], water, filtered, recoverable, micrograms per liter
61672	Tefluthrin metabolite [R 152912], water, filtered, recoverable, micrograms per liter
61673	Temephos sulfoxide, water, filtered, recoverable, micrograms per liter
61674	Terbufos oxygen analog sulfone, water, filtered, recoverable, micrograms per liter
61675	Terbufos sulfoxide, water, filtered, recoverable, micrograms per liter
61676	Bensulfuron-methyl, water, filtered, recoverable, nanograms per liter
61677	Chlorimuron, water, filtered, recoverable, nanograms per liter
61678	Chlorsulfuron, water, filtered, recoverable, nanograms per liter
61679	Flumetsulam, water, filtered, recoverable, nanograms per liter
61680	Halosulfuron methyl, water, filtered, recoverable, nanograms per liter
61681	Imazapyr, water, filtered, recoverable, nanograms per liter
61682	Imazaquin, water, filtered, recoverable, nanograms per liter
61683	Imazethapyr, water, filtered, recoverable, nanograms per liter
61684	Metsulfuron, water, filtered, recoverable, nanograms per liter
61685	Nicosulfuron, water, filtered, recoverable, nanograms per liter
61686	Primisulfuron-methyl, water, filtered, recoverable, nanograms per liter
61687	Prosulfuron, water, filtered, recoverable, nanograms per liter
61688	Sulfometuron, water, filtered, recoverable, nanograms per liter
61689	Thifensulfuron, water, filtered, recoverable, nanograms per liter
61690	Triasulfuron, water, filtered, recoverable, nanograms per liter
61691	Triflusulfuron methyl, water, filtered, recoverable, nanograms per liter
61692	N-(4-Chlorophenyl)-N'-methylurea, water, filtered, recoverable, micrograms per liter
61693	Bensulfuron-methyl, water, filtered, recoverable, micrograms per liter
61694	Flumetsulam, water, filtered, recoverable, micrograms per liter
61695	Imidacloprid, water, filtered, recoverable, micrograms per liter
61696	Methomyl oxime, water, filtered, recoverable, micrograms per liter
61697	Metsulfuron-methyl, water, filtered, recoverable, micrograms per liter
61698	2,6-Di-tert-butyl-4-methylphenol, water, unfiltered, recoverable, micrograms per liter
61699	Codeine, water, unfiltered, recoverable, micrograms per liter
61700	2-(2-Butoxyethoxy)ethyl acetate, water, unfiltered, recoverable, micrograms per liter
61701	2,6-Di-tert-butylphenol, water, unfiltered, recoverable, micrograms per liter
61702	3-tert-Butyl-4-hydroxyanisole, water, unfiltered, recoverable, micrograms per liter
61703	4-Nonylphenol diethoxylate (sum of all isomers), water, unfiltered, recoverable, micrograms per liter
61704	4-Nonylphenol monoethoxylate (sum of all isomers), water, unfiltered, recoverable, micrograms per liter
61705	4-tert-Octylphenol diethoxylate, water, filtered, recoverable, micrograms per liter
61706	4-tert-Octylphenol monoethoxylate, water, filtered, recoverable, micrograms per liter

Parameter code	Parameter name
61707	Tris(dichloroisopropyl) phosphate, water, unfiltered, recoverable, micrograms per liter
61708	Triclosan, water, unfiltered, recoverable, micrograms per liter
61709	Cyanazine amide, water, filtered, recoverable, micrograms per liter
61710	Fluometuron, water, filtered, recoverable, micrograms per liter
61711	Linuron, water, filtered, recoverable, micrograms per liter
61712	Chloramben methyl ester, water, filtered, recoverable, micrograms per liter
61714	Lanthanum, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
61716	Neodymium, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
61717	Niobium, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
61719	Scandium, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
61721	Tantalum, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
61722	Thorium, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
61723	Tin, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
61724	Ytterbium, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
61725	Yttrium, bed sediment smaller than 2 millimeters, wet sieved (native water), total digestion, dry weight, micrograms per gram
61739	Thorium-228 2-sigma combined uncertainty, water, filtered, picocuries per liter
61741	3-(Trifluoromethyl)phenylurea, water, filtered, recoverable, micrograms per liter
61742	3-(Trifluoromethyl)aniline, water, filtered, recoverable, micrograms per liter
61743	Amoxicillin, water, filtered, recoverable, micrograms per liter
61744	Chlorotetracycline, water, filtered, recoverable, micrograms per liter
61745	Cyanazine acid, water, filtered, recoverable, micrograms per liter
61746	lambda-Cyhalothrin, water, unfiltered, recoverable, micrograms per liter
61747	N-(3,4-Dichlorophenyl)-N'-methylurea, water, filtered, recoverable, micrograms per liter
61748	3,4-Dichlorophenylurea, water, filtered, recoverable, micrograms per liter
61749	Deethyl cyanazine, water, filtered, recoverable, micrograms per liter
61750	Deethyl cyanazine acid, water, filtered, recoverable, micrograms per liter
61751	Deethyl cyanazine amide, water, filtered, recoverable, micrograms per liter
61752	Deisopropyl prometryn, water, filtered, recoverable, micrograms per liter
61753	Demethyl fluometuron, water, filtered, recoverable, micrograms per liter
61754	Demethyl norflurazon, water, filtered, recoverable, micrograms per liter
61755	Demethyl fluometuron, water, filtered, recoverable, micrograms per liter
61756	Isoxaflutole, water, filtered, recoverable, micrograms per liter
61757	Methoprene, water, filtered, recoverable, micrograms per liter

Parameter code	Parameter name
61758	Retinoic acid, water, filtered, recoverable, micrograms per liter
61759	Oxytetracycline, water, filtered, recoverable, micrograms per liter
61760	Penicillin G, water, filtered, recoverable, micrograms per liter
61761	Permethrin, water, filtered, recoverable, micrograms per liter
61762	Sulfamethazine, water, filtered, recoverable, micrograms per liter
61763	3-(Trifluoromethyl)aniline, water, filtered, recoverable, micrograms per liter
61764	3-(Trifluoromethyl)phenylurea, water, filtered, recoverable, micrograms per liter
61936	Rubidium, bed sediment, total, dry weight, micrograms per gram
61940	Iron(III), water, filtered, micrograms per liter
61944	5-Methyl-1H-benzotriazole, water, unfiltered, recoverable, micrograms per liter
61945	Cotinine, water, unfiltered, recoverable, micrograms per liter
61946	17-beta-Estradiol, water, unfiltered, recoverable, micrograms per liter
61947	DEET, water, unfiltered, recoverable, micrograms per liter
61948	beta-Stigmastanol, water, unfiltered, recoverable, micrograms per liter
61949	Plutonium-238 2-sigma combined uncertainty, water, unfiltered, picocuries per liter
61950	Plutonium-239 plus plutonium-240 2-sigma combined uncertainty, water, unfiltered, picocuries per liter
61951	Dimethenamid ethanesulfonic acid, water, filtered, recoverable, micrograms per liter
61952	Flufenacet ethanesulfonic acid, water, filtered, recoverable, micrograms per liter
62000	Acetaminophen, water, filtered, recoverable, micrograms per liter
62001	Amoxicillin, water, filtered, recoverable, micrograms per liter
62002	Cimetidine, water, filtered, recoverable, micrograms per liter
62003	Codeine, water, filtered, recoverable, micrograms per liter
62004	Dehydronifedipine, water, filtered, recoverable, micrograms per liter
62005	Cotinine, water, filtered, recoverable, micrograms per liter
62006	Digoxin, water, filtered, recoverable, micrograms per liter
62007	Digoxigenin, water, filtered, recoverable, micrograms per liter
62008	Diltiazem, water, filtered, recoverable, micrograms per liter
62009	Enalaprilat, water, filtered, recoverable, micrograms per liter
62010	Ethyl nicotinate, water, filtered, recoverable, micrograms per liter
62011	Fluoxetine, water, filtered, recoverable, micrograms per liter
62012	Furosemide, water, filtered, recoverable, micrograms per liter
62013	Gemfibrozil, water, filtered, recoverable, micrograms per liter
62014	Ibuprofen, water, filtered, recoverable, micrograms per liter
62015	Lisinopril, water, filtered, recoverable, micrograms per liter
62016	Metformin, water, filtered, recoverable, micrograms per liter
62017	Paroxetine, water, filtered, recoverable, micrograms per liter
62018	Phenacetin, water, filtered, recoverable, micrograms per liter
62019	Ranitidine, water, filtered, recoverable, micrograms per liter
62020	Albuterol, water, filtered, recoverable, micrograms per liter

Parameter code	Parameter name
62021	Sulfamethoxazole, water, filtered, recoverable, micrograms per liter
62022	Theophylline, water, filtered, recoverable, micrograms per liter
62023	Trimethoprim, water, filtered, recoverable, micrograms per liter
62024	Warfarin, water, filtered, recoverable, micrograms per liter
62025	O-Ethyl-O-methyl-S-propylphosphorothioate, water, filtered, recoverable, micrograms per liter
62026	O-Ethyl-O-methyl-S-propylphosphorothioate, water, unfiltered, recoverable, micrograms per liter
62027	Phorate oxygen analog sulfone, water, filtered, recoverable, micrograms per liter
62028	Phorate oxygen analog, water, unfiltered, recoverable, micrograms per liter
62029	Fenthion, water, filtered, recoverable, micrograms per liter
62030	1,7-Dimethylxanthine, water, filtered, recoverable, micrograms per liter
62031	Fonofos oxygen analog, water, unfiltered, recoverable, micrograms per liter
62032	Propetamphos, water, unfiltered, recoverable, micrograms per liter
62033	Methidathion, water, unfiltered, recoverable, micrograms per liter
62034	Disulfoton sulfone, water, unfiltered, recoverable, micrograms per liter
62035	Profenofos, water, unfiltered, recoverable, micrograms per liter
62036	Ethion monoxon, water, unfiltered, recoverable, micrograms per liter
62037	Sulprofos, water, unfiltered, recoverable, micrograms per liter
62038	O-Ethyl-O-methyl-S-propylphosphorothioate, bed sediment, recoverable, dry weight, micrograms per kilogram
62039	Phorate oxygen analog, bed sediment, recoverable, dry weight, micrograms per kilogram
62040	Ethoprop, bed sediment, recoverable, dry weight, micrograms per kilogram
62041	Sulfotepp, bed sediment, recoverable, dry weight, micrograms per kilogram
62042	Fonofos oxygen analog, bed sediment, recoverable, dry weight, micrograms per kilogram
62043	Dimethoate, bed sediment, recoverable, dry weight, micrograms per kilogram
62044	Terbufos, bed sediment, recoverable, dry weight, micrograms per kilogram
62045	Propetamphos, bed sediment, recoverable, dry weight, micrograms per kilogram
62046	Fenthion, bed sediment, recoverable, dry weight, micrograms per kilogram
62047	Methidathion, bed sediment, recoverable, dry weight, micrograms per kilogram
62048	Disulfoton sulfone, bed sediment, recoverable, dry weight, micrograms per kilogram
62049	Profenofos, bed sediment, recoverable, dry weight, micrograms per kilogram
62050	Ethion monoxon, bed sediment, recoverable, dry weight, micrograms per kilogram
62051	Sulprofos, bed sediment, recoverable, dry weight, micrograms per kilogram
62052	17-alpha-Ethynyl estradiol, water, filtered, recoverable, micrograms per liter
62053	17-beta-Estradiol, water, filtered, recoverable, micrograms per liter
62054	1-Methylnaphthalene, water, filtered, recoverable, micrograms per liter
62055	2,6-Dimethylnaphthalene, water, filtered, recoverable, micrograms per liter
62056	2-Methylnaphthalene, water, filtered, recoverable, micrograms per liter
62057	3-beta-Coprostanol, water, filtered, recoverable, micrograms per liter
62058	3-Methyl-1H-indole, water, filtered, recoverable, micrograms per liter
62059	3-tert-Butyl-4-hydroxyanisole, water, filtered, recoverable, micrograms per liter

Parameter code	Parameter name
62060	4-Cumylphenol, water, filtered, recoverable, micrograms per liter
62061	4-n-Octylphenol, water, filtered, recoverable, micrograms per liter
62062	4-tert-Octylphenol, water, filtered, recoverable, micrograms per liter
62063	5-Methyl-1H-benzotriazole, water, filtered, recoverable, micrograms per liter
62064	Acetophenone, water, filtered, recoverable, micrograms per liter
62065	Acetyl hexamethyl tetrahydro naphthalene, water, filtered, recoverable, micrograms per liter
62066	9,10-Anthraquinone, water, filtered, recoverable, micrograms per liter
62067	Benzophenone, water, filtered, recoverable, micrograms per liter
62068	beta-Sitosterol, water, filtered, recoverable, micrograms per liter
62069	Bisphenol A, water, filtered, recoverable, micrograms per liter
62070	Camphor, water, filtered, recoverable, micrograms per liter
62071	Carbazole, water, filtered, recoverable, micrograms per liter
62072	Cholesterol, water, filtered, recoverable, micrograms per liter
62073	D-Limonene, water, filtered, recoverable, micrograms per liter
62074	Equilenin, water, filtered, recoverable, micrograms per liter
62075	Hexahydrohexamethyl cyclopentabenzopyran, water, filtered, recoverable, micrograms per liter
62076	Indole, water, filtered, recoverable, micrograms per liter
62077	Isoborneol, water, filtered, recoverable, micrograms per liter
62078	Isopropylbenzene, water, filtered, recoverable, micrograms per liter
62079	Isoquinoline, water, filtered, recoverable, micrograms per liter
62080	Menthol, water, filtered, recoverable, micrograms per liter
62081	Methyl salicylate, water, filtered, recoverable, micrograms per liter
62082	DEET, water, filtered, recoverable, micrograms per liter
62083	4-Nonylphenol diethoxylate (sum of all isomers), water, filtered, recoverable, micrograms per liter
62084	p-Cresol, water, filtered, recoverable, micrograms per liter
62085	4-Nonylphenol (sum of all isomers), water, filtered, recoverable, micrograms per liter
62086	beta-Stigmastanol, water, filtered, recoverable, micrograms per liter
62087	Tris(2-chloroethyl) phosphate, water, filtered, recoverable, micrograms per liter
62088	Tris(dichloroisopropyl) phosphate, water, filtered, recoverable, micrograms per liter
62089	Tributyl phosphate, water, filtered, recoverable, micrograms per liter
62090	Triclosan, water, filtered, recoverable, micrograms per liter
62091	Triethyl citrate, water, filtered, recoverable, micrograms per liter
62092	Triphenyl phosphate, water, filtered, recoverable, micrograms per liter
62093	Tris(2-butoxyethyl) phosphate, water, filtered, recoverable, micrograms per liter
62094	1,4-Dichlorobenzene, suspended sediment, recoverable, micrograms per liter
62095	17-alpha-Ethynyl estradiol, suspended sediment, recoverable, micrograms per liter
62096	17-beta-Estradiol, suspended sediment, recoverable, micrograms per liter
62097	1-Methylnaphthalene, suspended sediment, recoverable, micrograms per liter
62098	2,6-Dimethylnaphthalene, suspended sediment, recoverable, micrograms per liter

Parameter code	Parameter name
62099	2-Methylnaphthalene, suspended sediment, recoverable, micrograms per liter
62100	3-beta-Coprostanol, suspended sediment, recoverable, micrograms per liter
62101	3-Methyl-1H-indole, suspended sediment, recoverable, micrograms per liter
62102	3-tert-Butyl-4-hydroxyanisole, suspended sediment, recoverable, micrograms per liter
62103	4-Cumylphenol, suspended sediment, recoverable, micrograms per liter
62104	4-n-Octylphenol, suspended sediment, recoverable, micrograms per liter
62105	4-tert-Octylphenol, suspended sediment, recoverable, micrograms per liter
62106	5-Methyl-1H-benzotriazole, suspended sediment, recoverable, micrograms per liter
62107	Acetophenone, suspended sediment, recoverable, micrograms per liter
62108	Acetyl hexamethyl tetrahydro naphthalene, suspended sediment, recoverable, micrograms per liter
62109	Anthracene, suspended sediment, recoverable, micrograms per liter
62110	9,10-Anthraquinone, suspended sediment, recoverable, micrograms per liter
62111	Benzo[a]pyrene, suspended sediment, recoverable, micrograms per liter
62112	Benzophenone, suspended sediment, recoverable, micrograms per liter
62113	beta-Sitosterol, suspended sediment, recoverable, micrograms per liter
62114	Bisphenol A, suspended sediment, recoverable, micrograms per liter
62115	Bromacil, suspended sediment, recoverable, micrograms per liter
62116	Tribromomethane, suspended sediment, recoverable, micrograms per liter
62117	Caffeine, suspended sediment, recoverable, micrograms per liter
62118	Camphor, suspended sediment, recoverable, micrograms per liter
62119	Carbaryl, suspended sediment, recoverable, micrograms per liter
62120	Carbazole, suspended sediment, recoverable, micrograms per liter
62121	Chlorpyrifos, suspended sediment, recoverable, micrograms per liter
62122	Cholesterol, suspended sediment, recoverable, micrograms per liter
62123	Cotinine, suspended sediment, recoverable, micrograms per liter
62124	Diazinon, suspended sediment, recoverable, micrograms per liter
62125	Dichlorvos, suspended sediment, recoverable, micrograms per liter
62126	D-Limonene, suspended sediment, recoverable, micrograms per liter
62127	Equilenin, suspended sediment, recoverable, micrograms per liter
62128	Fluoranthene, suspended sediment, recoverable, micrograms per liter
62129	Hexahydrohexamethyl cyclopentabenzopyran, suspended sediment, recoverable, micrograms per liter
62130	Indole, suspended sediment, recoverable, micrograms per liter
62131	Isoborneol, suspended sediment, recoverable, micrograms per liter
62132	Isophorone, suspended sediment, recoverable, micrograms per liter
62133	Isopropylbenzene, suspended sediment, recoverable, micrograms per liter
62134	Isoquinoline, suspended sediment, recoverable, micrograms per liter
62135	Menthol, suspended sediment, recoverable, micrograms per liter
62136	Metalaxyl, suspended sediment, recoverable, micrograms per liter
62137	Methyl salicylate, suspended sediment, recoverable, micrograms per liter

Parameter code	Parameter name
62138	Metolachlor, suspended sediment, recoverable, micrograms per liter
62139	DEET, suspended sediment, recoverable, micrograms per liter
62140	Naphthalene, suspended sediment, recoverable, micrograms per liter
62141	4-Nonylphenol diethoxylate (sum of all isomers), suspended sediment, recoverable, micrograms per liter
62142	p-Cresol, suspended sediment, recoverable, micrograms per liter
62143	4-Nonylphenol (sum of all isomers), suspended sediment, recoverable, micrograms per liter
62144	Pentachlorophenol, suspended sediment, recoverable, micrograms per liter
62145	Phenanthrene, suspended sediment, recoverable, micrograms per liter
62146	Phenol, suspended sediment, recoverable, micrograms per liter
62147	Prometon, suspended sediment, recoverable, micrograms per liter
62148	Pyrene, suspended sediment, recoverable, micrograms per liter
62149	beta-Stigmastanol, suspended sediment, recoverable, micrograms per liter
62150	Tetrachloroethene, suspended sediment, recoverable, micrograms per liter
62151	Tris(2-chloroethyl) phosphate, suspended sediment, recoverable, micrograms per liter
62152	Tris(dichloroisopropyl) phosphate, suspended sediment, recoverable, micrograms per liter
62153	Tributyl phosphate, suspended sediment, recoverable, micrograms per liter
62154	Triclosan, suspended sediment, recoverable, micrograms per liter
62155	Triethyl citrate, suspended sediment, recoverable, micrograms per liter
62156	Triphenyl phosphate, suspended sediment, recoverable, micrograms per liter
62157	Tris(2-butoxyethyl) phosphate, suspended sediment, recoverable, micrograms per liter
62158	(-)-trans-4-(4-Fluorophenyl)-3-(4-hydroxy-3-methoxyphenoxymethyl)piperidine, water, filtered, recoverable, micrograms per liter
62159	Americium-241 2-sigma combined uncertainty, water, unfiltered, picocuries per liter
62160	Lead-210 2-sigma combined uncertainty, water, unfiltered, picocuries per liter
62161	Radium-226 2-sigma combined uncertainty, water, unfiltered, picocuries per liter
62162	Radium-228 2-sigma combined uncertainty, water, unfiltered, picocuries per liter
62163	Strontium-90 2-sigma combined uncertainty, water, unfiltered, picocuries per liter
62165	Gross gamma radioactivity 2-sigma combined uncertainty, water, unfiltered, picocuries per liter
62166	Fipronil, water, filtered, recoverable, micrograms per liter
62167	Fipronil sulfide, water, filtered, recoverable, micrograms per liter
62168	Fipronil sulfone, water, filtered, recoverable, micrograms per liter
62169	Desulfinylfipronil amide, water, filtered, recoverable, micrograms per liter
62170	Desulfinylfipronil, water, filtered, recoverable, micrograms per liter
62171	Perchlorate, water, unfiltered, recoverable, milligrams per liter
62172	Petroleum hydrocarbons, water, unfiltered, silica gel treated-hexane extractable, recoverable, milligrams per liter
62173	1,2-Dichloro-1,1,2-trifluoroethane, water, unfiltered, recoverable, micrograms per liter
62174	2,2-Dichloro-1,1,1-trifluoroethane, water, unfiltered, recoverable, micrograms per liter
62175	Tetrachlorvinphos, water, unfiltered, recoverable, micrograms per liter
62176	2,3,7,8-Tetrachlorodibenzo-p-dioxin, water, unfiltered, recoverable, nanograms per liter

Parameter code	Parameter name
62177	1,2,3,7,8-Pentachlorodibenzo-p-dioxin, water, unfiltered, recoverable, nanograms per liter
62178	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin, water, unfiltered, recoverable, nanograms per liter
62179	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin, water, unfiltered, recoverable, nanograms per liter
62180	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin, water, unfiltered, recoverable, nanograms per liter
62181	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin, water, unfiltered, recoverable, nanograms per liter
62182	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin, water, unfiltered, recoverable, nanograms per liter
62183	1,2,3,7,8-Pentachlorodibenzofuran, water, unfiltered, recoverable, nanograms per liter
62184	2,3,4,7,8-Pentachlorodibenzofuran, water, unfiltered, recoverable, nanograms per liter
62185	1,2,3,4,7,8-Hexachlorodibenzofuran, water, unfiltered, recoverable, nanograms per liter
62186	1,2,3,6,7,8-Hexachlorodibenzofuran, water, unfiltered, recoverable, nanograms per liter
62187	1,2,3,7,8,9-Hexachlorodibenzofuran, water, unfiltered, recoverable, nanograms per liter
62188	2,3,4,6,7,8-Hexachlorodibenzofuran, water, unfiltered, recoverable, nanograms per liter
62189	1,2,3,4,6,7,8-Heptachlorodibenzofuran, water, unfiltered, recoverable, nanograms per liter
62190	1,2,3,4,7,8,9-Heptachlorodibenzofuran, water, unfiltered, recoverable, nanograms per liter
62191	1,2,3,4,6,7,8,9-Octachlorodibenzofuran, water, unfiltered, recoverable, nanograms per liter
62192	Tetrachlorodibenzo-p-dioxins (all isomers), water, unfiltered, recoverable, nanograms per liter
62193	Pentachlorodibenzo-p-dioxins (all isomers), water, unfiltered, recoverable, nanograms per liter
62194	Hexachlorodibenzo-p-dioxins (all isomers), water, unfiltered, recoverable, nanograms per liter
62195	Heptachlorodibenzo-p-dioxins (all isomers), water, unfiltered, recoverable, nanograms per liter
62196	Tetrachlorodibenzofurans (all isomers), water, unfiltered, recoverable, nanograms per liter
62197	Pentachlorodibenzofurans (all isomers), water, unfiltered, recoverable, nanograms per liter
62198	Hexachlorodibenzofurans (all isomers), water, unfiltered, recoverable, nanograms per liter
62199	Heptachlorodibenzofurans (all isomers), water, unfiltered, recoverable, nanograms per liter
62200	2,3,7,8-Tetrachlorodibenzo-p-dioxin, water, unfiltered, recoverable, picograms per liter
62201	1,2,3,7,8-Pentachlorodibenzo-p-dioxin, water, unfiltered, recoverable, picograms per liter
62202	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin, water, unfiltered, recoverable, picograms per liter
62203	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin, water, unfiltered, recoverable, picograms per liter
62204	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin, water, unfiltered, recoverable, picograms per liter
62205	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin, water, unfiltered, recoverable, picograms per liter
62206	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin, water, unfiltered, recoverable, picograms per liter
62207	2,3,7,8-Tetrachlorodibenzofuran, water, unfiltered, recoverable, picograms per liter
62208	1,2,3,7,8-Pentachlorodibenzofuran, water, unfiltered, recoverable, picograms per liter
62209	2,3,4,7,8-Pentachlorodibenzofuran, water, unfiltered, recoverable, picograms per liter
62210	1,2,3,4,7,8-Hexachlorodibenzofuran, water, unfiltered, recoverable, picograms per liter
62211	1,2,3,6,7,8-Hexachlorodibenzofuran, water, unfiltered, recoverable, picograms per liter
62212	1,2,3,7,8,9-Hexachlorodibenzofuran, water, unfiltered, recoverable, picograms per liter
62213	2,3,4,6,7,8-Hexachlorodibenzofuran, water, unfiltered, recoverable, picograms per liter
62214	1,2,3,4,6,7,8-Heptachlorodibenzofuran, water, unfiltered, recoverable, picograms per liter
62215	1,2,3,4,7,8,9-Heptachlorodibenzofuran, water, unfiltered, recoverable, picograms per liter
62216	1,2,3,4,6,7,8,9-Octachlorodibenzofuran, water, unfiltered, recoverable, picograms per liter

Parameter code	Parameter name
62217	Tetrachlorodibenzo-p-dioxins (all isomers), water, unfiltered, recoverable, picograms per liter
62218	Pentachlorodibenzo-p-dioxins (all isomers), water, unfiltered, recoverable, picograms per liter
62219	Hexachlorodibenzo-p-dioxins (all isomers), water, unfiltered, recoverable, picograms per liter
62220	Heptachlorodibenzo-p-dioxins (all isomers), water, unfiltered, recoverable, picograms per liter
62221	Tetrachlorodibenzofurans (all isomers), water, unfiltered, recoverable, picograms per liter
62222	Pentachlorodibenzofurans (all isomers), water, unfiltered, recoverable, picograms per liter
62223	Hexachlorodibenzofurans (all isomers), water, unfiltered, recoverable, picograms per liter
62224	Heptachlorodibenzofurans (all isomers), water, unfiltered, recoverable, picograms per liter
62225	Pentaerythritol tetranitrate, water, unfiltered, recoverable, micrograms per liter
62226	Tetryl, water, unfiltered, recoverable, micrograms per liter
62227	Diesel range organic compounds, soil, recoverable, dry weight, milligrams per kilogram
62228	Gasoline range organic compounds, soil, recoverable, dry weight, milligrams per kilogram
62229	Xylene (all isomers), soil, recoverable, dry weight, micrograms per kilogram
62230	Methyl tert-butyl ether, soil, recoverable, dry weight, micrograms per kilogram
62231	cis-Chlordane, soil, recoverable, dry weight, micrograms per kilogram
62232	Chlorobenzilate, soil, recoverable, dry weight, micrograms per kilogram
62233	Endrin ketone, soil, recoverable, dry weight, micrograms per kilogram
62234	gamma-Chlordane, soil, recoverable, dry weight, micrograms per kilogram
62235	1,1,1,2-Tetrachloroethane, soil, recoverable, dry weight, micrograms per kilogram
62236	1,2-Dibromo-3-chloropropane, soil, recoverable, dry weight, micrograms per kilogram
62237	1,2-Dibromoethane, soil, recoverable, dry weight, micrograms per kilogram
62238	1,2,3-Trichloropropane, soil, recoverable, dry weight, micrograms per kilogram
62239	1,2-Dichloroethene, soil, recoverable, dry weight, micrograms per kilogram
62240	1,2,3-Trichloropropane, soil, recoverable, dry weight, micrograms per kilogram
62241	1,4-Dioxane, soil, recoverable, dry weight, micrograms per kilogram
62242	Ethyl methyl ketone, soil, recoverable, dry weight, micrograms per kilogram
62243	n-Butyl methyl ketone, soil, recoverable, dry weight, micrograms per kilogram
62244	Isobutyl methyl ketone, soil, recoverable, dry weight, micrograms per kilogram
62245	Acetone, soil, recoverable, dry weight, micrograms per kilogram
62246	Acetonitrile, soil, recoverable, dry weight, micrograms per kilogram
62247	3-Chloropropene, soil, recoverable, dry weight, micrograms per kilogram
62248	Bromomethane, soil, recoverable, dry weight, micrograms per kilogram
62249	Carbon disulfide, soil, recoverable, dry weight, micrograms per kilogram
62250	Chloromethane, soil, recoverable, dry weight, micrograms per kilogram
62251	Chloroprene, soil, recoverable, dry weight, micrograms per kilogram
62252	cis-1,2-Dichloroethene, soil, recoverable, dry weight, micrograms per kilogram
62253	Dibromochloromethane, soil, recoverable, dry weight, micrograms per kilogram
62254	Dibromomethane, soil, recoverable, dry weight, micrograms per kilogram
62255	Ethyl methacrylate, soil, recoverable, dry weight, micrograms per kilogram
62256	Iodomethane, soil, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
62257	Isobutyl alcohol, soil, recoverable, dry weight, micrograms per kilogram
62258	Methyl acrylonitrile, soil, recoverable, dry weight, micrograms per kilogram
62259	Methyl methacrylate, soil, recoverable, dry weight, micrograms per kilogram
62260	Propionitrile, soil, recoverable, dry weight, micrograms per kilogram
62261	Styrene, soil, recoverable, dry weight, micrograms per kilogram
62262	trans-1,4-Dichloro-2-butene, soil, recoverable, dry weight, micrograms per kilogram
62263	Vinyl acetate, soil, recoverable, dry weight, micrograms per kilogram
62264	Xylene (all isomers), soil, recoverable, dry weight, micrograms per kilogram
62265	1-Methylnaphthalene, soil, recoverable, dry weight, micrograms per kilogram
62266	2,4,5-Trichlorophenol, soil, recoverable, dry weight, micrograms per kilogram
62267	2,4-Dimethylphenol, soil, recoverable, dry weight, micrograms per kilogram
62268	o-Cresol, soil, recoverable, dry weight, micrograms per kilogram
62269	2-Nitroaniline, soil, recoverable, dry weight, micrograms per kilogram
62270	3-Nitroaniline, soil, recoverable, dry weight, micrograms per kilogram
62271	4-Chloroaniline, soil, recoverable, dry weight, micrograms per kilogram
62272	p-Cresol, soil, recoverable, dry weight, micrograms per kilogram
62273	4-Nitroaniline, soil, recoverable, dry weight, micrograms per kilogram
62274	Carbazole, soil, recoverable, dry weight, micrograms per kilogram
62275	Dibenzofuran, soil, recoverable, dry weight, micrograms per kilogram
62276	1,3,5-Trinitrobenzene, soil, recoverable, dry weight, micrograms per kilogram
62277	1,3-Dinitrobenzene, soil, recoverable, dry weight, micrograms per kilogram
62278	TNT, soil, recoverable, dry weight, micrograms per kilogram
62279	2-Amino-4,6-dinitrotoluene, soil, recoverable, dry weight, micrograms per kilogram
62280	2-Nitrotoluene, soil, recoverable, dry weight, micrograms per kilogram
62281	3-Nitrotoluene, soil, recoverable, dry weight, micrograms per kilogram
62282	4-Amino-2,6-dinitrotoluene, soil, recoverable, dry weight, micrograms per kilogram
62283	4-Nitrotoluene, soil, recoverable, dry weight, micrograms per kilogram
62284	HMX, soil, recoverable, dry weight, micrograms per kilogram
62285	Nitroglycerin, soil, recoverable, dry weight, micrograms per kilogram
62286	Pentaerythritol tetranitrate, soil, recoverable, dry weight, micrograms per kilogram
62287	RDX, soil, recoverable, dry weight, micrograms per kilogram
62288	Tetryl, soil, recoverable, dry weight, micrograms per kilogram
62289	Organic carbon, soil, total, dry weight, milligrams per kilogram
62290	2,3,7,8-Tetrachlorodibenzo-p-dioxin, soil, recoverable, dry weight, nanograms per gram
62291	1,2,3,7,8-Pentachlorodibenzo-p-dioxin, soil, recoverable, dry weight, nanograms per gram
62292	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin, soil, recoverable, dry weight, nanograms per gram
62293	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin, soil, recoverable, dry weight, nanograms per gram
62294	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin, soil, recoverable, dry weight, nanograms per gram
62295	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin, soil, recoverable, dry weight, nanograms per gram
62296	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin, soil, recoverable, dry weight, nanograms per gram

Parameter code	Parameter name
62297	2,3,7,8-Tetrachlorodibenzofuran, soil, recoverable, dry weight, nanograms per gram
62298	1,2,3,7,8-Pentachlorodibenzofuran, soil, recoverable, dry weight, nanograms per gram
62299	2,3,4,7,8-Pentachlorodibenzofuran, soil, recoverable, dry weight, nanograms per gram
62300	1,2,3,4,7,8-Hexachlorodibenzofuran, soil, recoverable, dry weight, nanograms per gram
62301	1,2,3,6,7,8-Hexachlorodibenzofuran, soil, recoverable, dry weight, nanograms per gram
62302	1,2,3,7,8,9-Hexachlorodibenzofuran, soil, recoverable, dry weight, nanograms per gram
62303	2,3,4,6,7,8-Hexachlorodibenzofuran, soil, recoverable, dry weight, nanograms per gram
62304	1,2,3,4,6,7,8-Heptachlorodibenzofuran, soil, recoverable, dry weight, nanograms per gram
62305	1,2,3,4,7,8,9-Heptachlorodibenzofuran, soil, recoverable, dry weight, nanograms per gram
62306	1,2,3,4,6,7,8,9-Octachlorodibenzofuran, soil, recoverable, dry weight, nanograms per gram
62307	Tetrachlorodibenzo-p-dioxins (all isomers), soil, recoverable, dry weight, nanograms per gram
62308	Pentachlorodibenzo-p-dioxins (all isomers), soil, recoverable, dry weight, nanograms per gram
62309	Hexachlorodibenzo-p-dioxins (all isomers), soil, recoverable, dry weight, nanograms per gram
62310	Heptachlorodibenzo-p-dioxins (all isomers), soil, recoverable, dry weight, nanograms per gram
62311	Tetrachlorodibenzofurans (all isomers), soil, recoverable, dry weight, nanograms per gram
62312	Pentachlorodibenzofurans (all isomers), soil, recoverable, dry weight, nanograms per gram
62313	Hexachlorodibenzofurans (all isomers), soil, recoverable, dry weight, nanograms per gram
62314	Heptachlorodibenzofurans (all isomers), soil, recoverable, dry weight, nanograms per gram
62315	2,3,7,8-Tetrachlorodibenzo-p-dioxin, soil, recoverable, dry weight, picograms per gram
62316	1,2,3,7,8-Pentachlorodibenzo-p-dioxin, soil, recoverable, dry weight, picograms per gram
62317	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin, soil, recoverable, dry weight, picograms per gram
62318	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin, soil, recoverable, dry weight, picograms per gram
62319	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin, soil, recoverable, dry weight, picograms per gram
62320	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin, soil, recoverable, dry weight, picograms per gram
62321	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin, soil, recoverable, dry weight, picograms per gram
62322	2,3,7,8-Tetrachlorodibenzofuran, soil, recoverable, dry weight, picograms per gram
62323	1,2,3,7,8-Pentachlorodibenzofuran, soil, recoverable, dry weight, picograms per gram
62324	2,3,4,7,8-Pentachlorodibenzofuran, soil, recoverable, dry weight, picograms per gram
62325	1,2,3,4,7,8-Hexachlorodibenzofuran, soil, recoverable, dry weight, picograms per gram
62326	1,2,3,6,7,8-Hexachlorodibenzofuran, soil, recoverable, dry weight, picograms per gram
62327	1,2,3,7,8,9-Hexachlorodibenzofuran, soil, recoverable, dry weight, picograms per gram
62328	2,3,4,6,7,8-Hexachlorodibenzofuran, soil, recoverable, dry weight, picograms per gram
62329	1,2,3,4,6,7,8-Heptachlorodibenzofuran, soil, recoverable, dry weight, picograms per gram
62330	1,2,3,4,7,8,9-Heptachlorodibenzofuran, soil, recoverable, dry weight, picograms per gram
62331	1,2,3,4,6,7,8,9-Octachlorodibenzofuran, soil, recoverable, dry weight, picograms per gram
62332	Tetrachlorodibenzo-p-dioxins (all isomers), soil, recoverable, dry weight, picograms per gram
62333	Pentachlorodibenzo-p-dioxins (all isomers), soil, recoverable, dry weight, picograms per gram
62334	Hexachlorodibenzo-p-dioxins (all isomers), soil, recoverable, dry weight, picograms per gram
62335	Heptachlorodibenzo-p-dioxins (all isomers), soil, recoverable, dry weight, picograms per gram
62336	Tetrachlorodibenzofurans (all isomers), soil, recoverable, dry weight, picograms per gram

Parameter code	Parameter name
62337	Pentachlorodibenzofurans (all isomers), soil, recoverable, dry weight, picograms per gram
62338	Hexachlorodibenzofurans (all isomers), soil, recoverable, dry weight, picograms per gram
62339	Heptachlorodibenzofurans (all isomers), soil, recoverable, dry weight, picograms per gram
62359	Pheophytin *a*, periphyton, milligrams per square meter
62360	Pheophytin *a*, phytoplankton, micrograms per liter
62361	Chlorophyll, total, water, fluorometric, 650-700 nanometers, in situ sensor, micrograms per liter
62370	PCB congener 3, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62371	PCB congeners 4 plus 10, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62372	PCB congener 6, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62373	PCB congeners 7 plus 9, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62374	PCB congeners 8 plus 5, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62375	PCB congeners 15 plus 17, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62376	PCB congener 18, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62377	PCB congener 19, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62378	PCB congeners 24 plus 27, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62379	PCB congeners 16 plus 32, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62380	PCB congener 22, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62381	PCB congener 25, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62382	PCB congener 26, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62383	PCB congeners 28 plus 31, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62384	PCB congener 33, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62385	PCB congener 40, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62386	PCB congeners 41 plus 64 plus 71, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62387	PCB congeners 37 plus 42, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62388	PCB congener 44, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62389	PCB congener 45, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram

Parameter code	Parameter name
62390	PCB congener 46, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62391	PCB congeners 47 plus 48, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62392	PCB congener 49, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62393	PCB congener 51, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62394	PCB congener 52, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62395	PCB congener 53, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62396	PCB congeners 56 plus 60, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62397	PCB congener 63, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62398	PCB congener 66, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62399	PCB congeners 70 plus 76, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62400	PCB congener 74, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62401	PCB congener 77, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62402	PCB congeners 77 plus 110, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62403	PCB congener 82, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62404	PCB congener 83, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62405	PCB congener 85, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62406	PCB congener 87, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62407	PCB congener 89, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62408	PCB congener 91, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62409	PCB congeners 92 plus 84, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62410	PCB congener 95, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62411	PCB congener 97, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62412	PCB congener 99, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram

Parameter code	Parameter name
62413	PCB congener 101, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62414	PCB congener 105, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62415	PCB congener 118, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62416	PCB congener 123, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62417	PCB congeners 123 plus 149, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62418	PCB congener 126, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62419	PCB congener 128, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62420	PCB congeners 132 plus 153 plus 105, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62421	PCB congeners 135 plus 144, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62422	PCB congener 136, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62423	PCB congeners 137 plus 176, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62424	PCB congener 141, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62425	PCB congener 146, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62426	PCB congener 151, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62427	PCB congener 156, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62428	PCB congener 157, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62429	PCB congener 158, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62430	PCB congeners 163 plus 138, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62431	PCB congener 167, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62432	PCB congener 169, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62433	PCB congeners 170 plus 190, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62434	PCB congener 172, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62435	PCB congener 174, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram

Parameter code	Parameter name
62436	PCB congener 177, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62437	PCB congener 178, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62438	PCB congener 180, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62439	PCB congener 183, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62440	PCB congener 185, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62441	PCB congeners 187 plus 182, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62442	PCB congener 193, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62443	PCB congener 194, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62444	PCB congener 198, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62445	PCB congener 199, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62446	PCB congener 201, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62447	PCB congeners 202 plus 171, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62448	PCB congeners 203 plus 196, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62449	PCB congener 206, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62450	PCB congener 207, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62451	PCB congeners 208 plus 195, bed sediment smaller than 2 mm, recoverable, dry weight, nanograms per gram
62452	Arsenite (H3AsO3), water, filtered, micrograms per liter as arsenic
62456	Calcium, bed sediment, dry weight, micrograms per gram
62457	Potassium, bed sediment, dry weight, micrograms per gram
62458	Magnesium, bed sediment, dry weight, micrograms per gram
62459	Sodium, bed sediment, dry weight, micrograms per gram
62460	Silica, bed sediment, dry weight, micrograms per gram
62465	Bismuth, bed sediment, dry weight, micrograms per gram
62466	Cerium, bed sediment, dry weight, micrograms per gram
62467	Europium, bed sediment, dry weight, micrograms per gram
62468	Gallium, bed sediment, dry weight, micrograms per gram
62469	Holmium, bed sediment, dry weight, micrograms per gram
62470	Lanthanum, bed sediment, dry weight, micrograms per gram

Parameter code	Parameter name
62471	Thulium, bed sediment, dry weight, micrograms per gram
62472	Erbium, bed sediment, dry weight, micrograms per gram
62473	Dysprosium, bed sediment, dry weight, micrograms per gram
62474	Gadolinium, bed sediment, dry weight, micrograms per gram
62475	Rubidium, bed sediment, dry weight, micrograms per gram
62476	Gold, bed sediment, dry weight, micrograms per gram
62477	Cesium, bed sediment, dry weight, micrograms per gram
62478	Praseodymium, bed sediment, dry weight, micrograms per gram
62479	Samarium, bed sediment, dry weight, micrograms per gram
62480	Terbium, bed sediment, dry weight, micrograms per gram
62481	Flufenacet, water, filtered, recoverable, micrograms per liter
62482	Dimethenamid oxanilic acid, water, filtered, recoverable, micrograms per liter
62483	Flufenacet oxanilic acid, water, filtered, recoverable, micrograms per liter
62484	Estrone, water, filtered, recoverable, micrograms per liter
62485	4-tert-Octylphenol monoethoxylate, water, unfiltered, recoverable, micrograms per liter
62486	4-tert-Octylphenol diethoxylate, water, unfiltered, recoverable, micrograms per liter
62488	Lead-210 1-sigma precision estimate, sediment, dry weight, becquerels per gram
62490	Lead-210 1-sigma precision estimate, soil, dry weight, becquerels per gram
62492	Cesium-137 1-sigma precision estimate, sediment, dry weight, becquerels per gram
62494	Cesium-137 1-sigma precision estimate, soil, dry weight, becquerels per gram
62496	Beryllium-7 1-sigma precision estimate, sediment, dry weight, becquerels per gram
62498	Beryllium-7 1-sigma precision estimate, soil, dry weight, becquerels per gram
62500	Radium-226 1-sigma precision estimate, sediment, dry weight, becquerels per gram
62502	Radium-226 1-sigma precision estimate, soil, dry weight, becquerels per gram
62504	Potassium-40 1-sigma precision estimate, sediment, dry weight, becquerels per gram
62506	Potassium-40 1-sigma precision estimate, soil, dry weight, becquerels per gram
62507	17a(H)-22,29,30-Trisnorhopane, bed sediment, recoverable, dry weight, micrograms per kilogram
62508	17a(H),21b-Hopane, bed sediment, recoverable, dry weight, micrograms per kilogram
62509	17b(H),21a-Hopane, bed sediment, recoverable, dry weight, micrograms per kilogram
62510	17b(H),21b(H)-Hopane, bed sediment, recoverable, dry weight, micrograms per kilogram
62511	17b(H),21a(H)-30-Norhopane, bed sediment, recoverable, dry weight, micrograms per kilogram
62512	4a-Methyl sterane series, bed sediment, recoverable, dry weight, micrograms per kilogram
62513	4a-Methyl-24R-ethyl 5A(H),14A(H),17A(H)-cholestane (C30), bed sediment, recoverable, dry weight, micrograms per kilogram
62514	4a-Methyl-5a(H),14a(H),17a(H)-cholestane (C28), bed sediment, recoverable, dry weight, micrograms per kilogram
62515	5b(H)-Cholane, bed sediment, recoverable, dry weight, micrograms per kilogram
62516	Cholestane plus coprostane, bed sediment, recoverable, dry weight, micrograms per kilogram
62517	Cholestane series, bed sediment, recoverable, dry weight, micrograms per kilogram
62518	n-Hexatriacontane (C36), bed sediment, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
62519	Hopane triterpenoid series, bed sediment, recoverable, dry weight, micrograms per kilogram
62520	n-Decane (C10), bed sediment, recoverable, dry weight, micrograms per kilogram
62521	n-Docosane (C22), bed sediment, recoverable, dry weight, micrograms per kilogram
62522	n-Dodecane (C12), bed sediment, recoverable, dry weight, micrograms per kilogram
62523	n-Eicosane (C20), bed sediment, recoverable, dry weight, micrograms per kilogram
62524	n-Hexacosane (C26), bed sediment, recoverable, dry weight, micrograms per kilogram
62525	n-Hexadecane (C16), bed sediment, recoverable, dry weight, micrograms per kilogram
62526	n-Nonadecane (C19), bed sediment, recoverable, dry weight, micrograms per kilogram
62527	n-Nonane (C9), bed sediment, recoverable, dry weight, micrograms per kilogram
62528	n-Octacosane (C28), bed sediment, recoverable, dry weight, micrograms per kilogram
62529	n-Octadecane (C18), bed sediment, recoverable, dry weight, micrograms per kilogram
62530	n-Tetracosane (C24), bed sediment, recoverable, dry weight, micrograms per kilogram
62531	n-Tetradecane (C14), bed sediment, recoverable, dry weight, micrograms per kilogram
62532	Phytane, bed sediment, recoverable, dry weight, micrograms per kilogram
62533	Pristane, bed sediment, recoverable, dry weight, micrograms per kilogram
62534	n-Triacontane (C30), bed sediment, recoverable, dry weight, micrograms per kilogram
62538	1,2-Dimethylnaphthalene, bed sediment, recoverable, dry weight, micrograms per kilogram
62539	1,6-Dimethylnaphthalene, bed sediment, recoverable, dry weight, micrograms per kilogram
62540	1-Methyl-9H-fluorene, bed sediment, recoverable, dry weight, micrograms per kilogram
62541	1-Methylphenanthrene, bed sediment, recoverable, dry weight, micrograms per kilogram
62542	1-Methylpyrene, bed sediment, recoverable, dry weight, micrograms per kilogram
62543	2,3,6-Trimethylnaphthalene, bed sediment, recoverable, dry weight, micrograms per kilogram
62544	2,6-Dimethylnaphthalene, bed sediment, recoverable, dry weight, micrograms per kilogram
62545	2-Ethylnaphthalene, bed sediment, recoverable, dry weight, micrograms per kilogram
62546	2-Methylanthracene, bed sediment, recoverable, dry weight, micrograms per kilogram
62547	4H-Cyclopenta[def]phenanthrene, bed sediment, recoverable, dry weight, micrograms per kilogram
62548	9H-Fluorene, bed sediment, recoverable, dry weight, micrograms per kilogram
62549	Acenaphthene, bed sediment, recoverable, dry weight, micrograms per kilogram
62550	Acenaphthylene, bed sediment, recoverable, dry weight, micrograms per kilogram
62551	Anthracene, bed sediment, recoverable, dry weight, micrograms per kilogram
62552	Benzo[a]anthracene, bed sediment, recoverable, dry weight, micrograms per kilogram
62553	Benzo[a]pyrene, bed sediment, recoverable, dry weight, micrograms per kilogram
62554	Benzo[b]fluoranthene, bed sediment, recoverable, dry weight, micrograms per kilogram
62555	Benzo[e]pyrene, bed sediment, recoverable, dry weight, micrograms per kilogram
62556	Benzo[ghi]perylene, bed sediment, recoverable, dry weight, micrograms per kilogram
62557	Benzo[k]fluoranthene, bed sediment, recoverable, dry weight, micrograms per kilogram
62558	Chrysene, bed sediment, recoverable, dry weight, micrograms per kilogram
62559	Coronene, bed sediment, recoverable, dry weight, micrograms per kilogram
62560	Dibenzo[a,h]anthracene, bed sediment, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
62561	Fluoranthene, bed sediment, recoverable, dry weight, micrograms per kilogram
62562	Indeno[1,2,3-cd]pyrene, bed sediment, recoverable, dry weight, micrograms per kilogram
62563	Naphthalene, bed sediment, recoverable, dry weight, micrograms per kilogram
62564	p-Cresol, bed sediment, recoverable, dry weight, micrograms per kilogram
62565	Perylene, bed sediment, recoverable, dry weight, micrograms per kilogram
62566	Phenanthrene, bed sediment, recoverable, dry weight, micrograms per kilogram
62567	Phenol, bed sediment, recoverable, dry weight, micrograms per kilogram
62568	Pyrene, bed sediment, recoverable, dry weight, micrograms per kilogram
62569	C1-128 Isomers, 2 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, naphthalene, bed sediment, recoverable, dry weight, micrograms per kilogram
62570	C1-178 Isomers, 3 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, phenanthrene/anthracene, bed sediment, recoverable, dry weight, micrograms per kilogram
62571	C1-202 Isomers, condensed 4 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, fluoranthene/pyrene, bed sediment, recoverable, dry weight, micrograms per kilogram
62572	C1-228 Isomers, extended 4 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, benzo[a]anthracene/chrysene, bed sediment, recoverable, dry weight, micrograms per kg
62573	C1-252 Isomers, 5 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, perylene isomers, bed sediment, recoverable, dry weight, micrograms per kilogram
62574	C2-128 Isomers, 2 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, naphthalene, bed sediment, recoverable, dry weight, micrograms per kilogram
62575	C2-178 Isomers, 3 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, phenanthrene/anthracene, bed sediment, recoverable, dry weight, micrograms per kilogram
62576	C2-202 Isomers, condensed 4 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, fluoranthene/pyrene, bed sediment, recoverable, dry weight, micrograms per kilogram
62577	C2-228 Isomers, extended 4 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, benzo[a]anthracene/chrysene, bed sediment, recoverable, dry weight, micrograms per kg
62578	C2-252 Isomers, 5 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, perylene isomers, bed sediment, recoverable, dry weight, micrograms per kilogram
62579	C3-128 Isomers, 2 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, naphthalene, bed sediment, recoverable, dry weight, micrograms per kilogram
62580	C3-178 Isomers, 3 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, phenanthrene/anthracene, bed sediment, recoverable, dry weight, micrograms per kilogram
62581	C3-202 Isomers, condensed 4 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, fluoranthene/pyrene, bed sediment, recoverable, dry weight, micrograms per kilogram
62582	C3-228 Isomers, extended 4 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, benzo[a]anthracene/chrysene, bed sediment, recoverable, dry weight, micrograms per kg
62583	C3-252 Isomers, 5 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, perylene isomers, bed sediment, recoverable, dry weight, micrograms per kilogram
62584	C4-128 Isomers, 2 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, naphthalene, bed sediment, recoverable, dry weight, micrograms per kilogram
62585	C4-178 Isomers, 3 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, phenanthrene/anthracene, bed sediment, recoverable, dry weight, micrograms per kilogram
62586	C4-202 Isomers, condensed 4 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, fluoranthene/pyrene, bed sediment, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
62587	C4-228 Isomers, extended 4 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, benzo[a]anthracene/chrysene, bed sediment, recoverable, dry weight, micrograms per kg
62588	C4-252 Isomers, 5 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, perylene isomers, bed sediment, recoverable, dry weight, micrograms per kilogram
62589	C5-128 Isomers, 2 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, naphthalene, bed sediment, recoverable, dry weight, micrograms per kilogram
62590	C5-178 Isomers, 3 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, phenanthrene/anthracene, bed sediment, recoverable, dry weight, micrograms per kilogram
62591	C5-202 Isomers, condensed 4 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, fluoranthene/pyrene, bed sediment, recoverable, dry weight, micrograms per kilogram
62592	C5-228 Isomers, extended 4 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, benzo[a]anthracene/chrysene, bed sediment, recoverable, dry weight, micrograms per kg
62593	C5-252 Isomers, 5 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, perylene isomers, bed sediment, recoverable, dry weight, micrograms per kilogram
62626	Americium-241 2-sigma combined uncertainty, bed sediment, dry weight, picocuries per gram
62627	Gross alpha radioactivity 2-sigma combined uncertainty, water, unfiltered, picocuries per liter
62628	Gross beta radioactivity 2-sigma combined uncertainty, water, unfiltered, picocuries per liter
62629	Strontium-90 2-sigma combined uncertainty, bed sediment, dry weight, picocuries per gram
62630	Thorium-228 2-sigma combined uncertainty, water, unfiltered, picocuries per liter
62631	Thorium-230 2-sigma combined uncertainty, water, unfiltered, picocuries per liter
62632	Thorium-232 2-sigma combined uncertainty, water, unfiltered, picocuries per liter
62633	Uranium-234 2-sigma combined uncertainty, water, unfiltered, picocuries per liter
62634	Uranium-235 2-sigma combined uncertainty, water, unfiltered, picocuries per liter
62635	Uranium-238 2-sigma combined uncertainty, water, unfiltered, picocuries per liter
62637	Alpha radioactivity 2-sigma combined uncertainty, 72 hour count, water, filtered, Th-230 curve, picocuries per liter
62638	Alpha radioactivity minimum detectable concentration, 72 hour count, water, filtered, Th-230 curve, picocuries per liter
62640	Alpha radioactivity 2-sigma combined uncertainty, 30 day count, water, filtered, Th-230 curve, picocuries per liter
62641	Alpha radioactivity minimum detectable concentration, 30 day count, water, filtered, Th-230 curve, picocuries per liter
62643	Beta radioactivity 2-sigma combined uncertainty, 72 hour count, water, filtered, Cs-137 curve, picocuries per liter
62644	Beta radioactivity minimum detectable concentration, 72 hour count, water, filtered, Cs-137 curve, picocuries per liter
62646	Beta radioactivity 2-sigma combined uncertainty, 30 day count, water, filtered, Cs-137 curve, picocuries per liter
62647	Beta radioactivity minimum detectable concentration, 30 day count, water, filtered, Cs-137 curve, picocuries per liter
62649	Aminomethylphosphonic acid, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62650	Anhydrochlortetracycline, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter

Parameter code	Parameter name
62651	Anhydrotetracycline, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62652	Aspon, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62653	Aspon, soil, recoverable, dry weight, micrograms per kilogram
62654	Azinphos-ethyl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62655	Azinphos-ethyl, soil, recoverable, dry weight, micrograms per kilogram
62656	Benzoic acid, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62657	Benzoic acid, soil, recoverable, dry weight, micrograms per kilogram
62658	Carbadox, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62659	Carbophenothion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62660	Carbophenothion, soil, recoverable, dry weight, micrograms per kilogram
62661	Chlorfenvinphos, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62662	Chlorfenvinphos, soil, recoverable, dry weight, micrograms per kilogram
62663	Chlorpyrifos-methyl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62664	Chlorpyrifos-methyl, soil, recoverable, dry weight, micrograms per kilogram
62665	cis-Chlordane, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62666	Coumaphos, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62667	Coumaphos, soil, recoverable, dry weight, micrograms per kilogram
62668	p,p'-DDD, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62669	p,p'-DDD, soil, recoverable, dry weight, micrograms per kilogram
62670	p,p'-DDE, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62671	p,p'-DDE, soil, recoverable, dry weight, micrograms per kilogram
62672	p,p'-DDT, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62673	p,p'-DDT, soil, recoverable, dry weight, micrograms per kilogram
62674	Chlorodiamino-s-triazine, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62675	Chlorodiamino-s-triazine, soil, recoverable, dry weight, micrograms per kilogram
62676	2-Hydroxy-4-isopropylamino-6-amino-s-triazine, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62677	2-Hydroxy-4-isopropylamino-6-amino-s-triazine, soil, recoverable, dry weight, micrograms per kilogram
62678	2-Hydroxy-6-ethylamino-4-amino-s-triazine, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62679	2-Hydroxy-6-ethylamino-4-amino-s-triazine, soil, recoverable, dry weight, micrograms per kilogram
62680	Demeclocycline, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62681	Demeclocycline, soil, recoverable, dry weight, micrograms per kilogram
62682	Diazinon, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62683	Diazinon, soil, recoverable, dry weight, micrograms per kilogram
62684	Diazoxon, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62685	Diazoxon, soil, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
62686	Dichlorofenthion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62687	Dichlorofenthion, soil, recoverable, dry weight, micrograms per kilogram
62688	Dichlorvos, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62689	Dichlorvos, soil, recoverable, dry weight, micrograms per kilogram
62690	Dimethoate, soil, recoverable, dry weight, micrograms per kilogram
62691	Dioxathion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62692	Dioxathion, soil, recoverable, dry weight, micrograms per kilogram
62693	Disulfoton, soil, recoverable, dry weight, micrograms per kilogram
62694	Doxycycline, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62695	Doxycycline, soil, recoverable, dry weight, micrograms per kilogram
62696	beta-Endosulfan, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62697	beta-Endosulfan, soil, recoverable, dry weight, micrograms per kilogram
62698	Endosulfan sulfate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62699	Endosulfan sulfate, soil, recoverable, dry weight, micrograms per kilogram
62700	Endrin aldehyde, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62701	Endrin aldehyde, soil, recoverable, dry weight, micrograms per kilogram
62702	Endrin ketone, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62703	EPN, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62704	EPN, soil, recoverable, dry weight, micrograms per kilogram
62705	Ethion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62706	Ethion, soil, recoverable, dry weight, micrograms per kilogram
62707	Ethoprop, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62708	Ethoprop, soil, recoverable, dry weight, micrograms per kilogram
62709	Famphur, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62710	Famphur, soil, recoverable, dry weight, micrograms per kilogram
62711	Fenitrothion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62712	Fenitrothion, soil, recoverable, dry weight, micrograms per kilogram
62713	Fensulfothion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62714	Fensulfothion, soil, recoverable, dry weight, micrograms per kilogram
62715	Fenthion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62716	Fenthion, soil, recoverable, dry weight, micrograms per kilogram
62717	Flumequine, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62718	Flumequine, soil, recoverable, dry weight, micrograms per kilogram
62719	Geosmin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62720	Geosmin, soil, recoverable, dry weight, micrograms per kilogram
62721	Glufosinate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62722	Glyphosate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62723	alpha-HCH, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62724	alpha-HCH, soil, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
62725	beta-HCH, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62726	beta-HCH, soil, recoverable, dry weight, micrograms per kilogram
62727	delta-HCH, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62728	delta-HCH, soil, recoverable, dry weight, micrograms per kilogram
62729	Heptachlor epoxide, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62730	Heptachlor epoxide, soil, recoverable, dry weight, micrograms per kilogram
62731	2-Hydroxy-4-isopropylamino-6-ethylamino-s-triazine, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62732	2-Hydroxy-4-isopropylamino-6-ethylamino-s-triazine, soil, recoverable, dry weight, micrograms per kilogram
62733	Isoxaflutole, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62734	Isoxaflutole, soil, recoverable, dry weight, micrograms per kilogram
62735	Leptophos, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62736	Leptophos, soil, recoverable, dry weight, micrograms per kilogram
62737	Lindane, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62738	Lindane, soil, recoverable, dry weight, micrograms per kilogram
62739	Malathion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62740	Malathion, soil, recoverable, dry weight, micrograms per kilogram
62741	Merphos, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62742	Merphos, soil, recoverable, dry weight, micrograms per kilogram
62743	Methidathion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62744	Methidathion, soil, recoverable, dry weight, micrograms per kilogram
62745	p,p'-Methoxychlor, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62746	p,p'-Methoxychlor, soil, recoverable, dry weight, micrograms per kilogram
62747	Mevinphos, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62748	Mevinphos, soil, recoverable, dry weight, micrograms per kilogram
62749	2-Methylisoborneol, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62750	2-Methylisoborneol, soil, recoverable, dry weight, micrograms per kilogram
62751	Minocycline, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62752	Minocycline, soil, recoverable, dry weight, micrograms per kilogram
62753	Monocrotophos, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62754	Monocrotophos, soil, recoverable, dry weight, micrograms per kilogram
62755	Methoprene, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62756	Methoprene, soil, recoverable, dry weight, micrograms per kilogram
62757	Norfloxacin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62758	Norfloxacin, soil, recoverable, dry weight, micrograms per kilogram
62759	Oxolinic acid, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62760	Oxolinic acid, soil, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
62761	Parathion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62762	Parathion, soil, recoverable, dry weight, micrograms per kilogram
62763	Phenothrin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62764	Phorate, soil, recoverable, dry weight, micrograms per kilogram
62765	Piperonyl butoxide, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62766	Propachlor ethanesulfonic acid, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62767	Propachlor oxanilic acid, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62768	Resmethrin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62769	Ronnel, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62770	Ronnel, soil, recoverable, dry weight, micrograms per kilogram
62771	Sarafloxacin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62772	Stirophos, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62773	Stirophos, soil, recoverable, dry weight, micrograms per kilogram
62774	Sulfachlorpyridazine, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62775	Sulfamethoxazole, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62776	Sulfadimethoxine, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62777	Sulfamerazine, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62778	Sulfathiazole, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62779	Sulfotepp, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62780	Sulfotepp, soil, recoverable, dry weight, micrograms per kilogram
62781	Tetracycline, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62782	Thionazin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62783	Thionazin, soil, recoverable, dry weight, micrograms per kilogram
62784	Tokuthion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62785	Tokuthion, soil, recoverable, dry weight, micrograms per kilogram
62786	trans-Chlordane, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62787	trans-Chlordane, soil, recoverable, dry weight, micrograms per kilogram
62788	Trichloronate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62789	Trichloronate, soil, recoverable, dry weight, micrograms per kilogram
62790	Triphenyl phosphate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
62791	Triphenyl phosphate, soil, recoverable, dry weight, micrograms per kilogram
62792	Azithromycin, water, filtered, recoverable, micrograms per liter
62793	Carbamazepine, water, filtered, recoverable, micrograms per liter
62794	Clarithromycin, water, filtered, recoverable, micrograms per liter
62795	Diclofenac, water, filtered, recoverable, micrograms per liter
62796	Diphenhydramine, water, filtered, recoverable, micrograms per liter

Parameter code	Parameter name
62797	Erythromycin, water, filtered, recoverable, micrograms per liter
62798	Ketoprofen, water, filtered, recoverable, micrograms per liter
62799	Miconazole, water, filtered, recoverable, micrograms per liter
62800	Naproxen, water, filtered, recoverable, micrograms per liter
62801	Thiabendazole, water, filtered, recoverable, micrograms per liter
62802	cis-Chlordane, bed sediment, recoverable, dry weight, micrograms per kilogram
62803	trans-Chlordane, bed sediment, recoverable, dry weight, micrograms per kilogram
62804	trans-Nonachlor, bed sediment, recoverable, dry weight, micrograms per kilogram
62805	2,6-Dimethylnaphthalene, water, unfiltered, recoverable, micrograms per liter
62806	3-beta-Coprostanol, water, unfiltered, recoverable, micrograms per liter
62807	3-Methyl-1H-indole, water, unfiltered, recoverable, micrograms per liter
62808	4-Cumylphenol, water, unfiltered, recoverable, micrograms per liter
62809	4-n-Octylphenol, water, unfiltered, recoverable, micrograms per liter
62810	4-tert-Octylphenol, water, unfiltered, recoverable, micrograms per liter
62811	Acetophenone, water, unfiltered, recoverable, micrograms per liter
62812	Acetyl hexamethyl tetrahydro naphthalene, water, unfiltered, recoverable, micrograms per liter
62813	9,10-Anthraquinone, water, unfiltered, recoverable, micrograms per liter
62814	Benzophenone, water, unfiltered, recoverable, micrograms per liter
62815	beta-Sitosterol, water, unfiltered, recoverable, micrograms per liter
62816	Bisphenol A, water, unfiltered, recoverable, micrograms per liter
62817	Camphor, water, unfiltered, recoverable, micrograms per liter
62818	Cholesterol, water, unfiltered, recoverable, micrograms per liter
62819	D-Limonene, water, unfiltered, recoverable, micrograms per liter
62820	Equilenin, water, unfiltered, recoverable, micrograms per liter
62821	Estrone, water, unfiltered, recoverable, micrograms per liter
62822	17-alpha-Ethynyl estradiol, water, unfiltered, recoverable, micrograms per liter
62823	Hexahydrohexamethyl cyclopentabenzopyran, water, unfiltered, recoverable, micrograms per liter
62824	Indole, water, unfiltered, recoverable, micrograms per liter
62825	Isoborneol, water, unfiltered, recoverable, micrograms per liter
62826	Isoquinoline, water, unfiltered, recoverable, micrograms per liter
62827	Menthol, water, unfiltered, recoverable, micrograms per liter
62828	Methyl salicylate, water, unfiltered, recoverable, micrograms per liter
62829	4-Nonylphenol (sum of all isomers), water, unfiltered, recoverable, micrograms per liter
62830	Tris(2-butoxyethyl) phosphate, water, unfiltered, recoverable, micrograms per liter
62831	Tris(2-chloroethyl) phosphate, water, unfiltered, recoverable, micrograms per liter
62832	Tributyl phosphate, water, unfiltered, recoverable, micrograms per liter
62833	Triethyl citrate, water, unfiltered, recoverable, micrograms per liter
62834	Triphenyl phosphate, water, unfiltered, recoverable, micrograms per liter
62843	Indium, water, filtered, micrograms per liter

Parameter code	Parameter name
62844	Lutetium, water, filtered, micrograms per liter
62847	Acetochlor sulfynilacetic acid, water, filtered, micrograms per liter
62848	Alachlor sulfynilacetic acid, water, filtered, micrograms per liter
62849	Alachlor ethanesulfonic acid secondary amide, water, filtered, micrograms per liter
62850	2-[(2-Ethyl-6-methylphenyl)amino]-2-oxoethanesulfonic acid, water, filtered, micrograms per liter
62851	Fenthion sulfone oxygen analog, water, filtered, recoverable, micrograms per liter
62852	Tebuconazole, water, filtered, recoverable, micrograms per liter
62853	Tetrahydrophthalimide, water, filtered, recoverable, micrograms per liter
62854	Total nitrogen (nitrate + nitrite + ammonia + organic-N), water, filtered, analytically determined, milligrams per liter
62855	Total nitrogen (nitrate + nitrite + ammonia + organic-N), water, unfiltered, analytically determined, milligrams per liter
62857	Acetochlor, soil, recoverable, dry weight, micrograms per kilogram
62858	Alachlor, soil, recoverable, dry weight, micrograms per kilogram
62859	Ametryn, soil, recoverable, dry weight, micrograms per kilogram
62860	Atrazine, soil, recoverable, dry weight, micrograms per kilogram
62861	Cyanazine, soil, recoverable, dry weight, micrograms per kilogram
62862	Cyanazine amide, soil, recoverable, dry weight, micrograms per kilogram
62863	2-Chloro-4-isopropylamino-6-amino-s-triazine, soil, recoverable, dry weight, micrograms per kilogram
62864	2-Chloro-6-ethylamino-4-amino-s-triazine, soil, recoverable, dry weight, micrograms per kilogram
62865	Deisopropyl prometryn, soil, recoverable, dry weight, micrograms per kilogram
62866	Demethyl fluometuron, soil, recoverable, dry weight, micrograms per kilogram
62867	Demethyl norflurazon, soil, recoverable, dry weight, micrograms per kilogram
62868	Dimethenamid, soil, recoverable, dry weight, micrograms per kilogram
62869	Flufenacet, soil, recoverable, dry weight, micrograms per kilogram
62870	Fluometuron, soil, recoverable, dry weight, micrograms per kilogram
62871	Metolachlor, soil, recoverable, dry weight, micrograms per kilogram
62872	Metribuzin, soil, recoverable, dry weight, micrograms per kilogram
62873	Molinate, soil, recoverable, dry weight, micrograms per kilogram
62874	Norflurazon, soil, recoverable, dry weight, micrograms per kilogram
62875	Pendimethalin, soil, recoverable, dry weight, micrograms per kilogram
62876	Prometon, soil, recoverable, dry weight, micrograms per kilogram
62877	Prometryn, soil, recoverable, dry weight, micrograms per kilogram
62878	Propachlor, soil, recoverable, dry weight, micrograms per kilogram
62879	Propanil, soil, recoverable, dry weight, micrograms per kilogram
62880	Propazine, soil, recoverable, dry weight, micrograms per kilogram
62881	Simazine, soil, recoverable, dry weight, micrograms per kilogram
62882	Terbutryn, soil, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
62883	3-(Trifluoromethyl)aniline, soil, recoverable, dry weight, micrograms per kilogram
62884	3-(Trifluoromethyl)phenylurea, soil, recoverable, dry weight, micrograms per kilogram
62885	Trifluralin, soil, recoverable, dry weight, micrograms per kilogram
62889	Ampicillin, water, filtered, recoverable, micrograms per liter
62890	Cefotaxime, water, filtered, recoverable, micrograms per liter
62891	Cloxacillin, water, filtered, recoverable, micrograms per liter
62892	Oxacillin, water, filtered, recoverable, micrograms per liter
62893	Penicillin V, water, filtered, recoverable, micrograms per liter
62894	Lincomycin, water, filtered, recoverable, micrograms per liter
62895	Roxithromycin, water, filtered, recoverable, micrograms per liter
62896	Tylosin, water, filtered, recoverable, micrograms per liter
62897	Virginiamycin, water, filtered, recoverable, micrograms per liter
62898	Ciprofloxacin, water, filtered, recoverable, micrograms per liter
62899	Ofloxacin, water, filtered, recoverable, micrograms per liter
62900	Lomefloxacin, water, filtered, recoverable, micrograms per liter
62901	Clinafloxacin, water, filtered, recoverable, micrograms per liter
62902	Trifluralin, bed sediment, recoverable, dry weight, micrograms per kilogram
62903	Chloroneb, bed sediment, recoverable, dry weight, micrograms per kilogram
62904	Chlorothalonil, bed sediment, recoverable, dry weight, micrograms per kilogram
62905	DCPA, bed sediment, recoverable, dry weight, micrograms per kilogram
62906	Endrin ketone, bed sediment, recoverable, dry weight, micrograms per kilogram
62907	Etridiazole, bed sediment, recoverable, dry weight, micrograms per kilogram
62908	cis-Permethrin, bed sediment, recoverable, dry weight, micrograms per kilogram
62909	Propachlor, bed sediment, recoverable, dry weight, micrograms per kilogram
62910	Rubidium, bed sediment smaller than 177 microns, wet sieved, total digestion, dry weight, micrograms per gram
62911	Indium, bed sediment smaller than 177 microns, wet sieved, total digestion, dry weight, micrograms per gram
62912	Tellurium, bed sediment smaller than 177 microns, wet sieved, total digestion, dry weight, micrograms per gram
62913	Cesium, bed sediment smaller than 177 microns, wet sieved, total digestion, dry weight, micrograms per gram
62914	Praseodymium, bed sediment smaller than 177 microns, wet sieved, total digestion, dry weight, micrograms per gram
62915	Gadolinium, bed sediment smaller than 177 microns, wet sieved, total digestion, dry weight, micrograms per gram
62916	Terbium, bed sediment smaller than 177 microns, wet sieved, total digestion, dry weight, micrograms per gram
62917	Dysprosium, bed sediment smaller than 177 microns, wet sieved, total digestion, dry weight, micrograms per gram
62918	Erbium, bed sediment smaller than 177 microns, wet sieved, total digestion, dry weight, micrograms per gram

Parameter code	Parameter name
62919	Thulium, bed sediment smaller than 177 microns, wet sieved, total digestion, dry weight, micrograms per gram
62920	Rhenium, bed sediment smaller than 177 microns, wet sieved, total digestion, dry weight, micrograms per gram
62921	Calcium, suspended sediment, recoverable, dry weight, micrograms per gram
62922	Magnesium, suspended sediment, recoverable, dry weight, micrograms per gram
62947	Bulk density, solids, grams per cubic centimeter
62950	Total nitrogen, solids, dry weight, micrograms per gram
62951	Chloride, solids, dry weight, micrograms per gram
62952	Sulfate, solids, dry weight, micrograms per gram
62956	cis-Chlordane, suspended sediment, recoverable, micrograms per liter
62957	trans-Chlordane, suspended sediment, recoverable, micrograms per liter
62958	trans-Nonachlor, suspended sediment, recoverable, micrograms per liter
62959	Aroclor 1016 plus Aroclor 1242, suspended sediment, recoverable, micrograms per liter
62960	3,4-Dichlorophenyl isocyanate, water, filtered, recoverable, micrograms per liter
62962	Ormetoprim, water, filtered, recoverable, micrograms per liter
62963	Sulfadiazine, water, filtered, recoverable, micrograms per liter
62964	Oleandomycin, water, filtered, recoverable, micrograms per liter
62965	Samarium, bed sediment smaller than 177 microns, wet sieved, total digestion, dry weight, micrograms per gram
62971	Dissolved oxygen, water, unfiltered, lab, milligrams per liter
62972	PCB congener 128, water, filtered, recoverable, nanograms per liter
62973	PCB congener 167, water, filtered, recoverable, nanograms per liter
62974	PCB congener 128, suspended sediment, recoverable, nanograms per liter
62975	PCB congener 167, suspended sediment, recoverable, nanograms per liter
62976	Mercury, suspended sediment, total, nanograms per liter
62977	Methylmercury, suspended sediment, total, nanograms per liter
62978	Mercury, solids, total, dry weight, nanograms per gram
62979	Methylmercury, solids, total, dry weight, nanograms per gram
62981	Silica, water, filtered (ultrafiltration, 10,000 Dalton molecular weight membrane), milligrams per liter
62982	Iron, water, filtered (ultrafiltration, 10,000 Dalton molecular weight membrane), micrograms per liter
62983	Aluminum, water, filtered (ultrafiltration, 10,000 Dalton molecular weight membrane), micrograms per liter
62984	Arsenic, water, filtered (ultrafiltration, 10,000 Dalton molecular weight membrane), micrograms per liter
62985	Barium, water, filtered (ultrafiltration, 10,000 Daltons molecular weight membrane), micrograms per liter
62986	Cadmium, water, filtered (ultrafiltration, 10,000 Daltons molecular weight membrane), micrograms per liter
62987	Cobalt, water, filtered (ultrafiltration, 10,000 Daltons molecular weight membrane), micrograms per liter

Parameter code	Parameter name
62988	Chromium, water, filtered (ultrafiltration, 10,000 Daltons molecular weight membrane), micrograms per liter
62989	Copper, water, filtered (ultrafiltration, 10,000 Daltons molecular weight membrane), micrograms per liter
62990	Manganese, water, filtered (ultrafiltration, 10,000 Daltons molecular weight membrane), micrograms per liter
62991	Molybdenum, water, filtered (ultrafiltration, 10,000 Daltons molecular weight membrane), micrograms per liter
62992	Nickel, water, filtered (ultrafiltration, 10,000 Daltons molecular weight membrane), micrograms per liter
62993	Lead, water, filtered (ultrafiltration, 10,000 Daltons molecular weight membrane), micrograms per liter
62994	Strontium, water, filtered (ultrafiltration, 10,000 Daltons molecular weight membrane), micrograms per liter
62995	Zinc, water, filtered (ultrafiltration, 10,000 Daltons molecular weight membrane), micrograms per liter
62996	2,4-Dimethylphenol, suspended sediment, recoverable, micrograms per liter
62997	2,4-Dimethylphenol, bed sediment, recoverable, dry weight, micrograms per kilogram
63003	Chlorothalonil, water, filtered, recoverable, micrograms per liter
63004	2,4,5,6-Tetrachloroisophthalamide, water, filtered, recoverable, micrograms per liter
63005	2,4,5-Trichloro-6-hydroxy-isophthalonitrile, water, filtered, recoverable, micrograms per liter
63006	2,3,6-Trichloro-5-cyano-4-hydroxybenzamide, water, filtered, recoverable, micrograms per liter
63007	3,4,6-Trichloro-5-cyano-2-hydroxybenzamide, water, filtered, recoverable, micrograms per liter
63008	2,4,5-Trichloro-6-hydoxybenzene-1,3-dicarboxamide, water, filtered, recoverable, micrograms per liter
63009	Dichlobenil, water, filtered, recoverable, micrograms per liter
63010	2,6-Dichlorobenzamide, water, filtered, recoverable, micrograms per liter
63011	2-Cyclopropylcarbonyl-3-(2-methylsulfonyl-4-trifluoromethylphenyl)-3-oxopropanenitrile, water, filtered, recoverable, micrograms per liter
63039	Carbon (total), solids, dry weight, milligrams per kilogram
63042	4-Nonylphenol (sum of all isomers), water, filtered, recoverable, nanograms per liter
63043	Nonylphenol, monoethoxylate, water, filtered, recoverable, nanograms per liter
63044	Nonylphenol, diethoxylate, water, filtered, recoverable, nanograms per liter
63045	Nonylphenol, triethoxylate, water, filtered, recoverable, nanograms per liter
63046	Nonylphenol, tetraethoxylate, water, filtered, recoverable, nanograms per liter
63047	Nonylphenol, pentaethoxylate, water, filtered, recoverable, nanograms per liter
63048	Nonylphenol, hexaethoxylate, water, filtered, recoverable, nanograms per liter
63049	Nonylphenol, heptaethoxylate, water, filtered, recoverable, nanograms per liter
63050	Nonylphenol, octaethoxylate, water, filtered, recoverable, nanograms per liter
63051	Nonylphenol, nonaethoxylate, water, filtered, recoverable, nanograms per liter
63052	Nonylphenol, decaethoxylate, water, filtered, recoverable, nanograms per liter
63053	Nonylphenol, undecaethoxylate, water, filtered, recoverable, nanograms per liter
63054	Nonylphenol, dodecaethoxylate, water, filtered, recoverable, nanograms per liter

Parameter code	Parameter name
63055	Nonylphenol, tridecaethoxylate, water, filtered, recoverable, nanograms per liter
63056	Nonylphenol, tetradecaethoxylate, water, filtered, recoverable, nanograms per liter
63057	Nonylphenol, pentadecaethoxylate, water, filtered, recoverable, nanograms per liter
63058	Nonylphenol, hexadecaethoxylate, water, filtered, recoverable, nanograms per liter
63059	Nonylphenol, heptadecaethoxylate, water, filtered, recoverable, nanograms per liter
63060	4-n-Octylphenol, water, filtered, recoverable, nanograms per liter
63061	Octylphenol, monoethoxylate, water, filtered, recoverable, nanograms per liter
63062	Octylphenol, diethoxylate, water, filtered, recoverable, nanograms per liter
63063	Octylphenol, triethoxylate, water, filtered, recoverable, nanograms per liter
63064	Octylphenol, tetraethoxylate, water, filtered, recoverable, nanograms per liter
63065	Octylphenol, pentaethoxylate, water, filtered, recoverable, nanograms per liter
63066	Octylphenol, hexaethoxylate, water, filtered, recoverable, nanograms per liter
63067	Octylphenol, heptaethoxylate, water, filtered, recoverable, nanograms per liter
63068	Octylphenol, octaethoxylate, water, filtered, recoverable, nanograms per liter
63069	Octylphenol, nonaethoxylate, water, filtered, recoverable, nanograms per liter
63070	Octylphenol, decaethoxylate, water, filtered, recoverable, nanograms per liter
63071	Octylphenol, undecaethoxylate, water, filtered, recoverable, nanograms per liter
63072	Octylphenol, dodecaethoxylate, water, filtered, recoverable, nanograms per liter
63073	Octylphenol, tridecaethoxylate, water, filtered, recoverable, nanograms per liter
63074	Octylphenol, tetradecaethoxylate, water, filtered, recoverable, nanograms per liter
63075	Octylphenol, pentadecaethoxylate, water, filtered, recoverable, nanograms per liter
63076	Octylphenol, hexadecaethoxylate, water, filtered, recoverable, nanograms per liter
63077	Octylphenol, heptadecaethoxylate, water, filtered, recoverable, nanograms per liter
63078	4-Nonylphenol (sum of all isomers), suspended sediment, recoverable, dry weight, nanograms per gram
63079	Nonylphenol, monoethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63080	Nonylphenol, diethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63081	Nonylphenol, triethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63082	Nonylphenol, tetraethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63083	Nonylphenol, pentaethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63084	Nonylphenol, hexaethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63085	Nonylphenol, heptaethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63086	Nonylphenol, octaethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63087	Nonylphenol, nonaethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63088	Nonylphenol, decaethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63089	Nonylphenol, undecaethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63090	Nonylphenol, dodecaethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram

Parameter code	Parameter name
63091	Nonylphenol, tridecaethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63092	Nonylphenol, tetradecaethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63093	Nonylphenol, pentadecaethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63094	Nonylphenol, hexadecaethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63095	Nonylphenol, heptadecaethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63096	4-n-Octylphenol, suspended sediment, recoverable, dry weight, nanograms per gram
63097	Octylphenol, monoethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63098	Octylphenol, diethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63099	Octylphenol, triethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63100	Octylphenol, tetraethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63101	Octylphenol, pentaethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63102	Octylphenol, hexaethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63103	Octylphenol, heptaethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63104	Octylphenol, octaethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63105	Octylphenol, nonaethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63106	Octylphenol, decaethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63107	Octylphenol, undecaethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63108	Octylphenol, dodecaethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63109	Octylphenol, tridecaethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63110	Octylphenol, tetradecaethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63111	Octylphenol, pentadecaethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63112	Octylphenol, hexadecaethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63113	Octylphenol, heptadecaethoxylate, suspended sediment, recoverable, dry weight, nanograms per gram
63114	Nonylphenoxyacetic acid, water, filtered, recoverable, nanograms per liter
63115	Nonylphenoxyethoxyacetic acid, water, filtered, recoverable, nanograms per liter
63116	Octalphenoxyacetic acid, water, filtered, recoverable, nanograms per liter
63117	Nonylphenoxyacetic acid, suspended sediment, recoverable, dry weight, nanograms per gram
63118	Nonylphenoxyethoxyacetic acid, suspended sediment, recoverable, dry weight, nanograms per gram
63119	Octalphenoxyacetic acid, suspended sediment, recoverable, dry weight, nanograms per gram
63120	4-Methyl-1H-benzotriazole, water, unfiltered, recoverable, micrograms per liter

Parameter code	Parameter name
63121	Aldrin, suspended sediment, recoverable, dry weight, micrograms per kilogram
63122	cis-Chlordane, suspended sediment, recoverable, dry weight, micrograms per kilogram
63123	trans-Chlordane, suspended sediment, recoverable, dry weight, micrograms per kilogram
63124	p,p'-DDD, suspended sediment, recoverable, dry weight, micrograms per kilogram
63125	p,p'-DDE, suspended sediment, recoverable, dry weight, micrograms per kilogram
63126	p,p'-DDT, suspended sediment, recoverable, dry weight, micrograms per kilogram
63127	Dieldrin, suspended sediment, recoverable, dry weight, micrograms per kilogram
63128	alpha-Endosulfan, suspended sediment, recoverable, dry weight, micrograms per kilogram
63129	Endrin, suspended sediment, recoverable, dry weight, micrograms per kilogram
63130	Heptachlor, suspended sediment, recoverable, dry weight, micrograms per kilogram
63131	Heptachlor epoxide, suspended sediment, recoverable, dry weight, micrograms per kilogram
63132	Hexachlorobenzene, suspended sediment, recoverable, dry weight, micrograms per kilogram
63133	alpha-HCH, suspended sediment, recoverable, dry weight, micrograms per kilogram
63134	beta-HCH, suspended sediment, recoverable, dry weight, micrograms per kilogram
63135	Lindane, suspended sediment, recoverable, dry weight, micrograms per kilogram
63136	p,p'-Methoxychlor, suspended sediment, recoverable, dry weight, micrograms per kilogram
63137	Mirex, suspended sediment, recoverable, dry weight, micrograms per kilogram
63138	trans-Nonachlor, suspended sediment, recoverable, dry weight, micrograms per kilogram
63139	Aroclor 1016 plus Aroclor 1242, suspended sediment, recoverable, dry weight, micrograms per kilogram
63140	Aroclor 1254, suspended sediment, recoverable, dry weight, micrograms per kilogram
63141	Aroclor 1260, suspended sediment, recoverable, dry weight, micrograms per kilogram
63142	Chlordane (technical), suspended sediment, recoverable, dry weight, micrograms per kilogram
63143	Toxaphene, suspended sediment, recoverable, dry weight, micrograms per kilogram
63144	Chlordane (technical), suspended sediment, recoverable, dry weight, micrograms per liter
63145	3,4-Dichlorophenyl isocyanate, water, unfiltered, recoverable, micrograms per liter
63146	BDE congener 47, water, filtered, recoverable, micrograms per liter
63147	BDE congener 47, water, unfiltered, recoverable, micrograms per liter
63148	4-Nonylphenol monoethoxylate (sum of all isomers), water, filtered, recoverable, micrograms per liter
63151	Iron(II), solids, dry weight, micrograms per gram
63152	Iron(III), solids, dry weight, micrograms per gram
63153	Sulfide, solids, dry weight, micrograms per gram
63154	Hydroxysimazine, water, filtered, recoverable, micrograms per liter
63155	2,4-DB, water, filtered, recoverable, micrograms per liter
63163	1,4-Dichlorobenzene, solids, recoverable, dry weight, micrograms per kilogram
63164	17-beta-Estradiol, solids, recoverable, dry weight, micrograms per kilogram
63165	1-Methylnaphthalene, solids, recoverable, dry weight, micrograms per kilogram
63166	BDE congener 47, solids, recoverable, dry weight, micrograms per kilogram
63167	2,6-Dimethylnaphthalene, solids, recoverable, dry weight, micrograms per kilogram
63168	2-Methylnaphthalene, solids, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
63169	3,4-Dichlorophenyl isocyanate, solids, recoverable, dry weight, micrograms per kilogram
63170	3-beta-Coprostanol, solids, recoverable, dry weight, micrograms per kilogram
63171	3-Methyl-1H-indole, solids, recoverable, dry weight, micrograms per kilogram
63172	3-tert-Butyl-4-hydroxyanisole, solids, recoverable, dry weight, micrograms per kilogram
63173	4-Cumylphenol, solids, recoverable, dry weight, micrograms per kilogram
63174	4-n-Octylphenol, solids, recoverable, dry weight, micrograms per kilogram
63175	4-Nonylphenol (sum of all isomers), solids, recoverable, dry weight, micrograms per kilogram
63176	4-tert-Octylphenol, solids, recoverable, dry weight, micrograms per kilogram
63177	5-Methyl-1H-benzotriazole, solids, recoverable, dry weight, micrograms per kilogram
63178	Acetophenone, solids, recoverable, dry weight, micrograms per kilogram
63179	Acetyl hexamethyl tetrahydro naphthalene, solids, recoverable, dry weight, micrograms per kilogram
63180	Anthracene, solids, recoverable, dry weight, micrograms per kilogram
63181	9,10-Anthraquinone, solids, recoverable, dry weight, micrograms per kilogram
63182	Atrazine, solids, recoverable, dry weight, micrograms per kilogram
63183	Benzo[a]pyrene, solids, recoverable, dry weight, micrograms per kilogram
63184	Benzophenone, solids, recoverable, dry weight, micrograms per kilogram
63185	beta-Sitosterol, solids, recoverable, dry weight, micrograms per kilogram
63186	beta-Stigmastanol, solids, recoverable, dry weight, micrograms per kilogram
63187	Bis(2-ethylhexyl) phthalate, solids, recoverable, dry weight, micrograms per kilogram
63188	Bisphenol A, solids, recoverable, dry weight, micrograms per kilogram
63189	Bromacil, solids, recoverable, dry weight, micrograms per kilogram
63190	Bromoform, solids, recoverable, dry weight, micrograms per kilogram
63191	Caffeine, solids, recoverable, dry weight, micrograms per kilogram
63192	Camphor, solids, recoverable, dry weight, micrograms per kilogram
63193	Carbaryl, solids, recoverable, dry weight, micrograms per kilogram
63194	Carbazole, solids, recoverable, dry weight, micrograms per kilogram
63195	Chlorpyrifos, solids, recoverable, dry weight, micrograms per kilogram
63196	Cholesterol, solids, recoverable, dry weight, micrograms per kilogram
63197	Cotinine, solids, recoverable, dry weight, micrograms per kilogram
63198	Diazinon, solids, recoverable, dry weight, micrograms per kilogram
63199	Dichlorvos, solids, recoverable, dry weight, micrograms per kilogram
63200	4-Nonylphenol diethoxylate (sum of all isomers), solids, recoverable, dry weight, micrograms per kilogram
63201	4-tert-Octylphenol diethoxylate, solids, recoverable, dry weight, micrograms per kilogram
63202	Diethyl phthalate, solids, recoverable, dry weight, micrograms per kilogram
63203	D-Limonene, solids, recoverable, dry weight, micrograms per kilogram
63204	Equilenin, solids, recoverable, dry weight, micrograms per kilogram
63205	Estrone, solids, recoverable, dry weight, micrograms per kilogram
63206	4-tert-Octylphenol monoethoxylate, solids, recoverable, dry weight, micrograms per kilogram
63207	17-alpha-Ethynyl estradiol, solids, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
63208	Fluoranthene, solids, recoverable, dry weight, micrograms per kilogram
63209	Hexahydrohexamethyl cyclopentabenzopyran, solids, recoverable, dry weight, micrograms per kilogram
63210	Indole, solids, recoverable, dry weight, micrograms per kilogram
63211	Isoborneol, solids, recoverable, dry weight, micrograms per kilogram
63212	Isophorone, solids, recoverable, dry weight, micrograms per kilogram
63213	Isopropylbenzene, solids, recoverable, dry weight, micrograms per kilogram
63214	Isoquinoline, solids, recoverable, dry weight, micrograms per kilogram
63215	Menthol, solids, recoverable, dry weight, micrograms per kilogram
63216	Metalaxyl, solids, recoverable, dry weight, micrograms per kilogram
63217	Methyl salicylate, solids, recoverable, dry weight, micrograms per kilogram
63218	Metolachlor, solids, recoverable, dry weight, micrograms per kilogram
63219	DEET, solids, recoverable, dry weight, micrograms per kilogram
63220	Naphthalene, solids, recoverable, dry weight, micrograms per kilogram
63221	4-Nonylphenol monoethoxylate (sum of all isomers), solids, recoverable, dry weight, micrograms per kilogram
63222	p-Cresol, solids, recoverable, dry weight, micrograms per kilogram
63223	Pentachlorophenol, solids, recoverable, dry weight, micrograms per kilogram
63224	Phenanthrene, solids, recoverable, dry weight, micrograms per kilogram
63225	Phenol, solids, recoverable, dry weight, micrograms per kilogram
63226	Prometon, solids, recoverable, dry weight, micrograms per kilogram
63227	Pyrene, solids, recoverable, dry weight, micrograms per kilogram
63228	Tetrachloroethene, solids, recoverable, dry weight, micrograms per kilogram
63229	Tris(2-butoxyethyl) phosphate, solids, recoverable, dry weight, micrograms per kilogram
63230	Tris(2-chloroethyl) phosphate, solids, recoverable, dry weight, micrograms per kilogram
63231	Tributyl phosphate, solids, recoverable, dry weight, micrograms per kilogram
63232	Triclosan, solids, recoverable, dry weight, micrograms per kilogram
63233	Triethyl citrate, solids, recoverable, dry weight, micrograms per kilogram
63234	Triphenyl phosphate, solids, recoverable, dry weight, micrograms per kilogram
63235	Tris(dichloroisopropyl) phosphate, solids, recoverable, dry weight, micrograms per kilogram
63236	Estrone, suspended sediment, recoverable, micrograms per liter
63237	4-tert-Octylphenol diethoxylate, suspended sediment, recoverable, micrograms per liter
63238	4-tert-Octylphenol monoethoxylate, suspended sediment, recoverable, micrograms per liter
63239	1,4-Naphthoquinone, solids, recoverable, dry weight, micrograms per kilogram
63240	1-Naphthol, solids, recoverable, dry weight, micrograms per kilogram
63241	2-(4-tert-Butylphenoxy)-cyclohexanol, solids, recoverable, dry weight, micrograms per kilogram
63242	2,5-Dichloroaniline, solids, recoverable, dry weight, micrograms per kilogram
63243	2,6-Diethylaniline, solids, recoverable, dry weight, micrograms per kilogram
63244	2-[(2-Ethyl-6-methylphenyl)amino]-1-propanol, solids, recoverable, dry weight, micrograms per kilogram
63245	2-Amino-N-isopropylbenzamide, solids, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
63246	2-Chloro-2',6'-diethylacetanilide, solids, recoverable, dry weight, micrograms per kilogram
63247	2-Ethyl-6-methylaniline, solids, recoverable, dry weight, micrograms per kilogram
63248	3,4-Dichloroaniline, solids, recoverable, dry weight, micrograms per kilogram
63249	3,4-Dichlorophenyl isocyanate, solids, recoverable, dry weight, micrograms per kilogram
63250	3,5-Dichloroaniline, solids, recoverable, dry weight, micrograms per kilogram
63251	3-Phenoxybenzyl alcohol, solids, recoverable, dry weight, micrograms per kilogram
63252	3-Trifluoromethylaniline, solids, recoverable, dry weight, micrograms per kilogram
63253	4-(Hydroxymethyl)pendimethalin, solids, recoverable, dry weight, micrograms per kilogram
63254	4,4'-Dichlorobenzophenone, solids, recoverable, dry weight, micrograms per kilogram
63255	4-Chloro-2-methylphenol, solids, recoverable, dry weight, micrograms per kilogram
63256	4-Chlorophenyl methyl sulfone, solids, recoverable, dry weight, micrograms per kilogram
63257	Acetochlor, solids, recoverable, dry weight, micrograms per kilogram
63258	Alachlor, solids, recoverable, dry weight, micrograms per kilogram
63259	alpha-Endosulfan, solids, recoverable, dry weight, micrograms per kilogram
63260	beta-Endosulfan, solids, recoverable, dry weight, micrograms per kilogram
63261	alpha-HCH, solids, recoverable, dry weight, micrograms per kilogram
63262	Atrazine, solids, recoverable, dry weight, micrograms per kilogram
63263	Azinphos-methyl, solids, recoverable, dry weight, micrograms per kilogram
63264	Azinphos-methyl oxygen analog, solids, recoverable, dry weight, micrograms per kilogram
63265	Benfluralin, solids, recoverable, dry weight, micrograms per kilogram
63266	Bifenthrin, solids, recoverable, dry weight, micrograms per kilogram
63267	Butylate, solids, recoverable, dry weight, micrograms per kilogram
63268	Captan, solids, recoverable, dry weight, micrograms per kilogram
63269	Carbaryl, solids, recoverable, dry weight, micrograms per kilogram
63270	Carbofuran, solids, recoverable, dry weight, micrograms per kilogram
63271	cis-Chlordane, solids, recoverable, dry weight, micrograms per kilogram
63272	trans-Chlordane, solids, recoverable, dry weight, micrograms per kilogram
63273	Chlorpyrifos, solids, recoverable, dry weight, micrograms per kilogram
63274	Chlorpyrifos oxygen analog, solids, recoverable, dry weight, micrograms per kilogram
63275	Methyl cis-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropane-1-carboxylate, solids, recoverable, dry weight, micrograms per kilogram
63276	Methyl trans-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropane-1-carboxylate, solids, recoverable, dry weight, micrograms per kilogram
63277	Cyanazine, solids, recoverable, dry weight, micrograms per kilogram
63278	Cycloate, solids, recoverable, dry weight, micrograms per kilogram
63279	Cyfluthrin, solids, recoverable, dry weight, micrograms per kilogram
63280	lambda-Cyhalothrin, solids, recoverable, dry weight, micrograms per kilogram
63281	Cypermethrin, solids, recoverable, dry weight, micrograms per kilogram
63282	DCPA, solids, recoverable, dry weight, micrograms per kilogram
63283	2-Chloro-4-isopropylamino-6-amino-s-triazine, solids, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
63284	Diazinon, solids, recoverable, dry weight, micrograms per kilogram
63285	Diazoxon, solids, recoverable, dry weight, micrograms per kilogram
63286	Dichlorvos, solids, recoverable, dry weight, micrograms per kilogram
63287	Dicofol, solids, recoverable, dry weight, micrograms per kilogram
63288	Dicrotophos, solids, recoverable, dry weight, micrograms per kilogram
63289	Dieldrin, solids, recoverable, dry weight, micrograms per kilogram
63290	Dimethenamid, solids, recoverable, dry weight, micrograms per kilogram
63291	Dimethoate, solids, recoverable, dry weight, micrograms per kilogram
63292	Disulfoton, solids, recoverable, dry weight, micrograms per kilogram
63293	Disulfoton sulfone, solids, recoverable, dry weight, micrograms per kilogram
63294	Disulfoton sulfoxide, solids, recoverable, dry weight, micrograms per kilogram
63295	(E)-Dimethomorph, solids, recoverable, dry weight, micrograms per kilogram
63296	(Z)-Dimethomorph, solids, recoverable, dry weight, micrograms per kilogram
63297	Endosulfan ether, solids, recoverable, dry weight, micrograms per kilogram
63298	Endosulfan sulfate, solids, recoverable, dry weight, micrograms per kilogram
63299	EPTC, solids, recoverable, dry weight, micrograms per kilogram
63300	Esfenvalerate, solids, recoverable, dry weight, micrograms per kilogram
63301	Ethalfluralin, solids, recoverable, dry weight, micrograms per kilogram
63302	Ethion, solids, recoverable, dry weight, micrograms per kilogram
63303	Ethion monoxon, solids, recoverable, dry weight, micrograms per kilogram
63304	Ethoprophos, solids, recoverable, dry weight, micrograms per kilogram
63305	Fenamiphos, solids, recoverable, dry weight, micrograms per kilogram
63306	Fenamiphos sulfone, solids, recoverable, dry weight, micrograms per kilogram
63307	Fenamiphos sulfoxide, solids, recoverable, dry weight, micrograms per kilogram
63308	Sum of fenamiphos + fenamiphos sulfoxide + fenamiphos sulfone, solids, recoverable, dry weight, micrograms per kilogram
63309	Fenthion, solids, recoverable, dry weight, micrograms per kilogram
63310	Fenthion sulfone, solids, recoverable, dry weight, micrograms per kilogram
63311	Fenthion sulfone oxygen analog, solids, recoverable, dry weight, micrograms per kilogram
63312	Fenthion sulfoxide, solids, recoverable, dry weight, micrograms per kilogram
63313	Fipronil, solids, recoverable, dry weight, micrograms per kilogram
63314	Fipronil sulfide, solids, recoverable, dry weight, micrograms per kilogram
63315	Fipronil sulfone, solids, recoverable, dry weight, micrograms per kilogram
63316	Desulfinylfipronil, solids, recoverable, dry weight, micrograms per kilogram
63317	Desulfinylfipronil amide, solids, recoverable, dry weight, micrograms per kilogram
63318	Flumetralin, solids, recoverable, dry weight, micrograms per kilogram
63319	Fonofos, solids, recoverable, dry weight, micrograms per kilogram
63320	Fonofos oxygen analog, solids, recoverable, dry weight, micrograms per kilogram
63321	Hexazinone, solids, recoverable, dry weight, micrograms per kilogram
63322	Iprodione, solids, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
63323	Isofenphos, solids, recoverable, dry weight, micrograms per kilogram
63324	Lindane, solids, recoverable, dry weight, micrograms per kilogram
63325	Linuron, solids, recoverable, dry weight, micrograms per kilogram
63326	Malaoxon, solids, recoverable, dry weight, micrograms per kilogram
63327	Malathion, solids, recoverable, dry weight, micrograms per kilogram
63328	Metalaxyl, solids, recoverable, dry weight, micrograms per kilogram
63329	Methidathion, solids, recoverable, dry weight, micrograms per kilogram
63330	Methomyl, solids, recoverable, dry weight, micrograms per kilogram
63331	Methomyl-oxime, solids, recoverable, dry weight, micrograms per kilogram
63332	Metolachlor, solids, recoverable, dry weight, micrograms per kilogram
63333	Metribuzin, solids, recoverable, dry weight, micrograms per kilogram
63334	Molinate, solids, recoverable, dry weight, micrograms per kilogram
63335	Myclobutanil, solids, recoverable, dry weight, micrograms per kilogram
63336	Naled, solids, recoverable, dry weight, micrograms per kilogram
63337	Napropamide, solids, recoverable, dry weight, micrograms per kilogram
63338	cis-Nonachlor, solids, recoverable, dry weight, micrograms per kilogram
63339	trans-Nonachlor, solids, recoverable, dry weight, micrograms per kilogram
63340	O-Ethyl-O-methyl-S-propylphosphorothioate, solids, recoverable, dry weight, micrograms per kilogram
63341	Oxyfluorfen, solids, recoverable, dry weight, micrograms per kilogram
63342	o,p'-DDT, solids, recoverable, dry weight, micrograms per kilogram
63343	o,p'-DDD, solids, recoverable, dry weight, micrograms per kilogram
63344	o,p'-DDE, solids, recoverable, dry weight, micrograms per kilogram
63345	p,p'-DDT, solids, recoverable, dry weight, micrograms per kilogram
63346	p,p'-DDD, solids, recoverable, dry weight, micrograms per kilogram
63347	p,p'-DDE, solids, recoverable, dry weight, micrograms per kilogram
63348	Paraoxon, solids, recoverable, dry weight, micrograms per kilogram
63349	Methyl paraoxon, solids, recoverable, dry weight, micrograms per kilogram
63350	Parathion, solids, recoverable, dry weight, micrograms per kilogram
63351	Methyl parathion, solids, recoverable, dry weight, micrograms per kilogram
63352	Pebulate, solids, recoverable, dry weight, micrograms per kilogram
63353	Pendimethalin, solids, recoverable, dry weight, micrograms per kilogram
63354	Phorate, solids, recoverable, dry weight, micrograms per kilogram
63355	Phorate oxygen analog, solids, recoverable, dry weight, micrograms per kilogram
63356	Phosmet, solids, recoverable, dry weight, micrograms per kilogram
63357	Phosmet oxygen analog, solids, recoverable, dry weight, micrograms per kilogram
63358	Profenofos, solids, recoverable, dry weight, micrograms per kilogram
63359	Prometon, solids, recoverable, dry weight, micrograms per kilogram
63360	Prometryn, solids, recoverable, dry weight, micrograms per kilogram
63361	Propachlor, solids, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
63362	Propanil, solids, recoverable, dry weight, micrograms per kilogram
63363	Propargite, solids, recoverable, dry weight, micrograms per kilogram
63364	Propetamphos, solids, recoverable, dry weight, micrograms per kilogram
63365	cis-Permethrin, solids, recoverable, dry weight, micrograms per kilogram
63366	trans-Permethrin, solids, recoverable, dry weight, micrograms per kilogram
63367	cis-Propiconazole, solids, recoverable, dry weight, micrograms per kilogram
63368	trans-Propiconazole, solids, recoverable, dry weight, micrograms per kilogram
63369	Propyzamide, solids, recoverable, dry weight, micrograms per kilogram
63370	Simazine, solids, recoverable, dry weight, micrograms per kilogram
63371	Sulfotepp, solids, recoverable, dry weight, micrograms per kilogram
63372	Sulprofos, solids, recoverable, dry weight, micrograms per kilogram
63373	Tebuconazole, solids, recoverable, dry weight, micrograms per kilogram
63374	Tebupirimphos, solids, recoverable, dry weight, micrograms per kilogram
63375	Tebupirimphos oxygen analog, solids, recoverable, dry weight, micrograms per kilogram
63376	Tebuthiuron, solids, recoverable, dry weight, micrograms per kilogram
63377	Tefluthrin, solids, recoverable, dry weight, micrograms per kilogram
63378	Temephos, solids, recoverable, dry weight, micrograms per kilogram
63379	Terbacil, solids, recoverable, dry weight, micrograms per kilogram
63380	Terbufos, solids, recoverable, dry weight, micrograms per kilogram
63381	Terbufos sulfone, solids, recoverable, dry weight, micrograms per kilogram
63382	Terbufos sulfoxide, solids, recoverable, dry weight, micrograms per kilogram
63383	Terbufos oxygen analog sulfone, solids, recoverable, dry weight, micrograms per kilogram
63384	Terbuthylazine, solids, recoverable, dry weight, micrograms per kilogram
63385	Tetrahydrophthalimide, solids, recoverable, dry weight, micrograms per kilogram
63386	Thiobencarb, solids, recoverable, dry weight, micrograms per kilogram
63387	Tralomethrin, solids, recoverable, dry weight, micrograms per kilogram
63388	Triallate, solids, recoverable, dry weight, micrograms per kilogram
63389	Tribuphos, solids, recoverable, dry weight, micrograms per kilogram
63390	Trifluralin, solids, recoverable, dry weight, micrograms per kilogram
63391	1,4-Naphthoquinone, suspended sediment, recoverable, micrograms per liter
63392	1-Naphthol, suspended sediment, recoverable, micrograms per liter
63393	2-(4-tert-Butylphenoxy)-cyclohexanol, suspended sediment, recoverable, micrograms per liter
63394	2,5-Dichloroaniline, suspended sediment, recoverable, micrograms per liter
63395	2,6-Diethylaniline, suspended sediment, recoverable, micrograms per liter
63396	2-[(2-Ethyl-6-methylphenyl)amino]-1-propanol, suspended sediment, recoverable, micrograms per liter
63397	2-Amino-N-isopropylbenzamide, suspended sediment, recoverable, micrograms per liter
63398	2-Chloro-2',6'-diethylacetanilide, suspended sediment, recoverable, micrograms per liter
63399	2-Ethyl-6-methylaniline, suspended sediment, recoverable, micrograms per liter
63400	3,4-Dichloroaniline, suspended sediment, recoverable, micrograms per liter

Parameter code	Parameter name
63401	3,4-Dichlorophenyl isocyanate, suspended sediment, recoverable, micrograms per liter
63402	3,5-Dichloroaniline, suspended sediment, recoverable, micrograms per liter
63403	3-Phenoxybenzyl alcohol, suspended sediment, recoverable, micrograms per liter
63404	3-Trifluoromethylaniline, suspended sediment, recoverable, micrograms per liter
63405	4-(Hydroxymethyl)pendimethalin, suspended sediment, recoverable, micrograms per liter
63406	4,4'-Dichlorobenzophenone, suspended sediment, recoverable, micrograms per liter
63407	4-Chloro-2-methylphenol, suspended sediment, recoverable, micrograms per liter
63408	4-Chlorophenyl methyl sulfone, suspended sediment, recoverable, micrograms per liter
63409	Acetochlor, suspended sediment, recoverable, micrograms per liter
63410	Alachlor, suspended sediment, recoverable, micrograms per liter
63411	Atrazine, suspended sediment, recoverable, micrograms per liter
63412	Azinphos-methyl, suspended sediment, recoverable, micrograms per liter
63413	Azinphos-methyl oxygen analog, suspended sediment, recoverable, micrograms per liter
63414	Benfluralin, suspended sediment, recoverable, micrograms per liter
63415	Bifenthrin, suspended sediment, recoverable, micrograms per liter
63416	Butylate, suspended sediment, recoverable, micrograms per liter
63417	Captan, suspended sediment, recoverable, micrograms per liter
63418	Carbofuran, suspended sediment, recoverable, micrograms per liter
63419	Chlorpyrifos oxygen analog, suspended sediment, recoverable, micrograms per liter
63420	Methyl cis-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropane-1-carboxylate, suspended sediment, recoverable, micrograms per liter
63421	Methyl trans-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropane-1-carboxylate, suspended sediment, recoverable, micrograms per liter
63422	Cyanazine, suspended sediment, recoverable, micrograms per liter
63423	Cycloate, suspended sediment, recoverable, micrograms per liter
63424	Cyfluthrin, suspended sediment, recoverable, micrograms per liter
63425	lambda-Cyhalothrin, suspended sediment, recoverable, micrograms per liter
63426	Cypermethrin, suspended sediment, recoverable, micrograms per liter
63427	DCPA, suspended sediment, recoverable, micrograms per liter
63428	2-Chloro-4-isopropylamino-6-amino-s-triazine, suspended sediment, recoverable, micrograms per liter
63429	Diazoxon, suspended sediment, recoverable, micrograms per liter
63430	Dicofol, suspended sediment, recoverable, micrograms per liter
63431	Dimethenamid, suspended sediment, recoverable, micrograms per liter
63432	Disulfoton, suspended sediment, recoverable, micrograms per liter
63433	Disulfoton sulfone, suspended sediment, recoverable, micrograms per liter
63434	Disulfoton sulfoxide, suspended sediment, recoverable, micrograms per liter
63435	(E)-Dimethomorph, suspended sediment, recoverable, micrograms per liter
63436	(Z)-Dimethomorph, suspended sediment, recoverable, micrograms per liter
63437	Endosulfan ether, suspended sediment, recoverable, micrograms per liter
63438	EPTC, suspended sediment, recoverable, micrograms per liter

Parameter code	Parameter name
63439	Esfenvalerate, suspended sediment, recoverable, micrograms per liter
63440	Ethion monoxon, suspended sediment, recoverable, micrograms per liter
63441	Ethoprophos, suspended sediment, recoverable, micrograms per liter
63442	Fenamiphos, suspended sediment, recoverable, micrograms per liter
63443	Fenamiphos sulfone, suspended sediment, recoverable, micrograms per liter
63444	Fenamiphos sulfoxide, suspended sediment, recoverable, micrograms per liter
63445	Sum of fenamiphos + fenamiphos sulfoxide + fenamiphos sulfone, suspended sediment, recoverable, micrograms per liter
63446	Fenthion sulfone, suspended sediment, recoverable, micrograms per liter
63447	Fenthion sulfone oxygen analog, suspended sediment, recoverable, micrograms per liter
63448	Fenthion sulfoxide, suspended sediment, recoverable, micrograms per liter
63449	Fipronil, suspended sediment, recoverable, micrograms per liter
63450	Fipronil sulfide, suspended sediment, recoverable, micrograms per liter
63451	Fipronil sulfone, suspended sediment, recoverable, micrograms per liter
63452	Desulfinylfipronil, suspended sediment, recoverable, micrograms per liter
63453	Desulfinylfipronil amide, suspended sediment, recoverable, micrograms per liter
63454	Flumetralin, suspended sediment, recoverable, micrograms per liter
63455	Fonofos, suspended sediment, recoverable, micrograms per liter
63456	Fonofos oxygen analog, suspended sediment, recoverable, micrograms per liter
63457	Iprodione, suspended sediment, recoverable, micrograms per liter
63458	Isofenphos, suspended sediment, recoverable, micrograms per liter
63459	Malaoxon, suspended sediment, recoverable, micrograms per liter
63460	Methidathion, suspended sediment, recoverable, micrograms per liter
63461	Methomyl, suspended sediment, recoverable, micrograms per liter
63462	Methomyl-oxime, suspended sediment, recoverable, micrograms per liter
63463	Metribuzin, suspended sediment, recoverable, micrograms per liter
63464	Molinate, suspended sediment, recoverable, micrograms per liter
63465	Myclobutanil, suspended sediment, recoverable, micrograms per liter
63466	Napropamide, suspended sediment, recoverable, micrograms per liter
63467	O-Ethyl-O-methyl-S-propylphosphorothioate, suspended sediment, recoverable, micrograms per liter
63468	Oxyfluorfen, suspended sediment, recoverable, micrograms per liter
63469	o,p'-DDT, suspended sediment, recoverable, micrograms per liter
63470	o,p'-DDD, suspended sediment, recoverable, micrograms per liter
63471	o,p'-DDE, suspended sediment, recoverable, micrograms per liter
63472	Paraoxon, suspended sediment, recoverable, micrograms per liter
63473	Methyl paraoxon, suspended sediment, recoverable, micrograms per liter
63474	Pebulate, suspended sediment, recoverable, micrograms per liter
63475	Pendimethalin, suspended sediment, recoverable, micrograms per liter
63476	Phorate oxygen analog, suspended sediment, recoverable, micrograms per liter
63477	Phosmet, suspended sediment, recoverable, micrograms per liter

Parameter code	Parameter name
63478	Phosmet oxygen analog, suspended sediment, recoverable, micrograms per liter
63479	Profenofos, suspended sediment, recoverable, micrograms per liter
63480	Prometryn, suspended sediment, recoverable, micrograms per liter
63481	Propanil, suspended sediment, recoverable, micrograms per liter
63482	Propargite, suspended sediment, recoverable, micrograms per liter
63483	Propetamphos, suspended sediment, recoverable, micrograms per liter
63484	cis-Permethrin, suspended sediment, recoverable, micrograms per liter
63485	trans-Permethrin, suspended sediment, recoverable, micrograms per liter
63486	cis-Propiconazole, suspended sediment, recoverable, micrograms per liter
63487	trans-Propiconazole, suspended sediment, recoverable, micrograms per liter
63488	Propyzamide, suspended sediment, recoverable, micrograms per liter
63489	Simazine, suspended sediment, recoverable, micrograms per liter
63490	Sulfotepp, suspended sediment, recoverable, micrograms per liter
63491	Sulprofos, suspended sediment, recoverable, micrograms per liter
63492	Tebuconazole, suspended sediment, recoverable, micrograms per liter
63493	Tebupirimfos, suspended sediment, recoverable, micrograms per liter
63494	Tebupirimfos oxygen analog, suspended sediment, recoverable, micrograms per liter
63495	Tebuthiuron, suspended sediment, recoverable, micrograms per liter
63496	Tefluthrin, suspended sediment, recoverable, micrograms per liter
63497	Temephos, suspended sediment, recoverable, micrograms per liter
63498	Terbufos, suspended sediment, recoverable, micrograms per liter
63499	Terbufos sulfone, suspended sediment, recoverable, micrograms per liter
63500	Terbufos sulfoxide, suspended sediment, recoverable, micrograms per liter
63501	Terbufos oxygen analog sulfone, suspended sediment, recoverable, micrograms per liter
63502	Tetrahydrophthalimide, suspended sediment, recoverable, micrograms per liter
63503	Thiobencarb, suspended sediment, recoverable, micrograms per liter
63504	Tralomethrin, suspended sediment, recoverable, micrograms per liter
63505	Triallate, suspended sediment, recoverable, micrograms per liter
63506	Tribuphos, suspended sediment, recoverable, micrograms per liter
63518	Acifluorfen, water, filtered, recoverable, micrograms per liter
63519	Halofenozide, water, filtered, recoverable, micrograms per liter
63520	Thiacloprid, water, filtered, recoverable, micrograms per liter
63521	Thiazopyr, water, filtered, recoverable, micrograms per liter
63522	BDE congener 47, suspended sediment, recoverable, micrograms per liter
63523	3,4-Dichlorophenyl isocyanate, suspended sediment, recoverable, micrograms per liter
63524	Atrazine, suspended sediment, recoverable, micrograms per liter
63525	4-Nonylphenol monoethoxylate (sum of all isomers), suspended sediment, recoverable, micrograms per liter
63526	Aldrin, biota, tissue, recoverable, wet weight, micrograms per kilogram
63527	Chlorpyrifos, biota, tissue, recoverable, wet weight, micrograms per kilogram

Parameter code	Parameter name
63528	Chlorothalonil, biota, tissue, recoverable, wet weight, micrograms per kilogram
63529	cis-Chlordane, biota, tissue, recoverable, wet weight, micrograms per kilogram
63530	trans-Chlordane, biota, tissue, recoverable, wet weight, micrograms per kilogram
63531	DCPA, biota, tissue, recoverable, wet weight, micrograms per kilogram
63532	o,p'-DDE, biota, tissue, recoverable, wet weight, micrograms per kilogram
63533	p,p'-DDE, biota, tissue, recoverable, wet weight, micrograms per kilogram
63534	o,p'-DDD, biota, tissue, recoverable, wet weight, micrograms per kilogram
63535	p,p'-DDD, biota, tissue, recoverable, wet weight, micrograms per kilogram
63536	o,p'-DDT, biota, tissue, recoverable, wet weight, micrograms per kilogram
63537	p,p'-DDT, biota, tissue, recoverable, wet weight, micrograms per kilogram
63538	Dieldrin, biota, tissue, recoverable, wet weight, micrograms per kilogram
63539	Desulfinylfipronil, biota, tissue, recoverable, wet weight, micrograms per kilogram
63540	Desulfinylfipronil amide, biota, tissue, recoverable, wet weight, micrograms per kilogram
63541	Endrin, biota, tissue, recoverable, wet weight, micrograms per kilogram
63542	Endrin aldehyde, biota, tissue, recoverable, wet weight, micrograms per kilogram
63543	Endrin ketone, biota, tissue, recoverable, wet weight, micrograms per kilogram
63544	alpha-Endosulfan, biota, tissue, recoverable, wet weight, micrograms per kilogram
63545	beta-Endosulfan, biota, tissue, recoverable, wet weight, micrograms per kilogram
63546	Endosulfan sulfate, biota, tissue, recoverable, wet weight, micrograms per kilogram
63547	Fipronil, biota, tissue, recoverable, wet weight, micrograms per kilogram
63548	Fipronil sulfide, biota, tissue, recoverable, wet weight, micrograms per kilogram
63549	Fipronil sulfone, biota, tissue, recoverable, wet weight, micrograms per kilogram
63550	alpha-HCH, biota, tissue, recoverable, wet weight, micrograms per kilogram
63551	beta-HCH, biota, tissue, recoverable, wet weight, micrograms per kilogram
63552	Lindane, biota, tissue, recoverable, wet weight, micrograms per kilogram
63553	delta-HCH, biota, tissue, recoverable, wet weight, micrograms per kilogram
63554	Heptachlor, biota, tissue, recoverable, wet weight, micrograms per kilogram
63555	Heptachlor epoxide, biota, tissue, recoverable, wet weight, micrograms per kilogram
63556	Hexachlorobenzene, biota, tissue, recoverable, wet weight, micrograms per kilogram
63557	Hexachlorocyclopentadiene, biota, tissue, recoverable, wet weight, micrograms per kilogram
63558	cis-Nonachlor, biota, tissue, recoverable, wet weight, micrograms per kilogram
63559	trans-Nonachlor, biota, tissue, recoverable, wet weight, micrograms per kilogram
63560	3-Chloromethoxy triclosan, biota, tissue, recoverable, wet weight, micrograms per kilogram
63561	5-Chloromethoxy triclosan, biota, tissue, recoverable, wet weight, micrograms per kilogram
63562	3,5-Dichloromethoxy triclosan, biota, tissue, recoverable, wet weight, micrograms per kilogram
63563	Mirex, biota, tissue, recoverable, wet weight, micrograms per kilogram
63564	Octachlorostyrene, biota, tissue, recoverable, wet weight, micrograms per kilogram
63565	Oxychlordane, biota, tissue, recoverable, wet weight, micrograms per kilogram
63566	Pentachloroanisole, biota, tissue, recoverable, wet weight, micrograms per kilogram
63567	Trifluralin, biota, tissue, recoverable, wet weight, micrograms per kilogram

Parameter code	Parameter name
63568	PCB congener 44, biota, tissue, recoverable, wet weight, micrograms per kilogram
63569	PCB congener 49, biota, tissue, recoverable, wet weight, micrograms per kilogram
63570	PCB congener 52, biota, tissue, recoverable, wet weight, micrograms per kilogram
63571	PCB congener 70, biota, tissue, recoverable, wet weight, micrograms per kilogram
63572	PCB congener 95, biota, tissue, recoverable, wet weight, micrograms per kilogram
63573	PCB congener 101, biota, tissue, recoverable, wet weight, micrograms per kilogram
63574	PCB congener 110, biota, tissue, recoverable, wet weight, micrograms per kilogram
63575	PCB congener 118, biota, tissue, recoverable, wet weight, micrograms per kilogram
63576	PCB congener 138, biota, tissue, recoverable, wet weight, micrograms per kilogram
63577	PCB congener 146, biota, tissue, recoverable, wet weight, micrograms per kilogram
63578	PCB congener 149, biota, tissue, recoverable, wet weight, micrograms per kilogram
63579	PCB congener 151, biota, tissue, recoverable, wet weight, micrograms per kilogram
63580	PCB congener 170, biota, tissue, recoverable, wet weight, micrograms per kilogram
63581	PCB congener 174, biota, tissue, recoverable, wet weight, micrograms per kilogram
63582	PCB congener 177, biota, tissue, recoverable, wet weight, micrograms per kilogram
63583	PCB congener 180, biota, tissue, recoverable, wet weight, micrograms per kilogram
63584	PCB congener 183, biota, tissue, recoverable, wet weight, micrograms per kilogram
63585	PCB congener 187, biota, tissue, recoverable, wet weight, micrograms per kilogram
63586	PCB congener 194, biota, tissue, recoverable, wet weight, micrograms per kilogram
63587	PCB congener 206, biota, tissue, recoverable, wet weight, micrograms per kilogram
63588	BDE congener 47, biota, tissue, recoverable, wet weight, micrograms per kilogram
63589	BDE congener 99, biota, tissue, recoverable, wet weight, micrograms per kilogram
63590	BDE congener 100, biota, tissue, recoverable, wet weight, micrograms per kilogram
63591	BDE congener 153, biota, tissue, recoverable, wet weight, micrograms per kilogram
63592	BDE congener 154, biota, tissue, recoverable, wet weight, micrograms per kilogram
63593	PCBs, biota, tissue, recoverable, wet weight, micrograms per kilogram
63594	Toxaphene, biota, tissue, recoverable, wet weight, micrograms per kilogram
63596	2,4-D, solids, recoverable, dry weight, micrograms per kilogram
63597	2,4-D methyl ester, solids, recoverable, dry weight, micrograms per kilogram
63598	2,4-Dichlorophenol, solids, recoverable, dry weight, micrograms per kilogram
63599	2,6-Dinitrotoluene, solids, recoverable, dry weight, micrograms per kilogram
63600	24-Ethyl-cholesterol, solids, recoverable, dry weight, micrograms per kilogram
63601	24-Ethyl-coprostanol, solids, recoverable, dry weight, micrograms per kilogram
63602	2-Amino-9H-pyrido[2,3-b]indole, solids, recoverable, dry weight, micrograms per kilogram
63603	4-Hydroxy methyl benzoate, solids, recoverable, dry weight, micrograms per kilogram
63606	alpha-Amyrin, solids, recoverable, dry weight, micrograms per kilogram
63607	cis-Androsterone, solids, recoverable, dry weight, micrograms per kilogram
63608	Avobenzone, solids, recoverable, dry weight, micrograms per kilogram
63609	Benfluralin, solids, recoverable, dry weight, micrograms per kilogram
63610	Benzo[a]anthracene, solids, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
63611	Carbamazepine, solids, recoverable, dry weight, micrograms per kilogram
63613	gamma-Chlordane, solids, recoverable, dry weight, micrograms per kilogram
63614	Chlorothalonil, solids, recoverable, dry weight, micrograms per kilogram
63615	Chlorphenamine, solids, recoverable, dry weight, micrograms per kilogram
63616	DCPA, solids, recoverable, dry weight, micrograms per kilogram
63618	Dextromethorphan, solids, recoverable, dry weight, micrograms per kilogram
63620	trans-Diethylstilbestrol, solids, recoverable, dry weight, micrograms per kilogram
63621	Dihydrocodeine, solids, recoverable, dry weight, micrograms per kilogram
63622	Diphenamid, solids, recoverable, dry weight, micrograms per kilogram
63623	Diphenyl sulfone, solids, recoverable, dry weight, micrograms per kilogram
63624	Distearyldimonium, solids, recoverable, dry weight, micrograms per kilogram
63625	Ergosterol, solids, recoverable, dry weight, micrograms per kilogram
63626	Eugenol, solids, recoverable, dry weight, micrograms per kilogram
63629	Hexahydrohexamethyl cyclopentabenzopyran, solids, recoverable, dry weight, micrograms per kilogram
63630	Heptadecanoic acid, solids, recoverable, dry weight, micrograms per kilogram
63631	Hexachlorobenzene, solids, recoverable, dry weight, micrograms per kilogram
63632	Homosalate, solids, recoverable, dry weight, micrograms per kilogram
63633	Indigo, solids, recoverable, dry weight, micrograms per kilogram
63634	Iso-eugenol, solids, recoverable, dry weight, micrograms per kilogram
63635	Isopropyl myristate, solids, recoverable, dry weight, micrograms per kilogram
63637	Mecoprop, solids, recoverable, dry weight, micrograms per kilogram
63638	Mestranol, solids, recoverable, dry weight, micrograms per kilogram
63639	Methoxy triclosan, solids, recoverable, dry weight, micrograms per kilogram
63640	Methyl paraben, solids, recoverable, dry weight, micrograms per kilogram
63641	alpha-Methyl styrene, solids, recoverable, dry weight, micrograms per kilogram
63642	Nitrapyrin, solids, recoverable, dry weight, micrograms per kilogram
63643	Norflurazon, solids, recoverable, dry weight, micrograms per kilogram
63644	Norethindrone, solids, recoverable, dry weight, micrograms per kilogram
63645	Octyl methoxycinnamate, solids, recoverable, dry weight, micrograms per kilogram
63646	Ocytyl salicylate, solids, recoverable, dry weight, micrograms per kilogram
63648	Palmitic acid, solids, recoverable, dry weight, micrograms per kilogram
63650	Pentachloronitrobenzene, solids, recoverable, dry weight, micrograms per kilogram
63651	Perfluorooctanoic acid, solids, recoverable, dry weight, micrograms per kilogram
63655	Phytane, solids, recoverable, dry weight, micrograms per kilogram
63656	Pristane, solids, recoverable, dry weight, micrograms per kilogram
63657	Progesterone, solids, recoverable, dry weight, micrograms per kilogram
63658	Propyl paraben, solids, recoverable, dry weight, micrograms per kilogram
63660	Stearic acid, solids, recoverable, dry weight, micrograms per kilogram
63661	Stigmast-4-en-3-one, solids, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
63662	trans-Stilbene, solids, recoverable, dry weight, micrograms per kilogram
63664	Tetrabromobisphenol A, solids, recoverable, dry weight, micrograms per kilogram
63665	Tetradifon, solids, recoverable, dry weight, micrograms per kilogram
63667	Vanillin, solids, recoverable, dry weight, micrograms per kilogram
63668	Vitamin A, Retinol, solids, recoverable, dry weight, micrograms per kilogram
63669	Vitamin B12, solids, recoverable, dry weight, micrograms per kilogram
63670	Vitamin D, solids, recoverable, dry weight, micrograms per kilogram
63671	Vitamin D3, solids, recoverable, dry weight, micrograms per kilogram
63672	Vitamin E, solids, recoverable, dry weight, micrograms per kilogram
63673	Iron (biologically reactive) water, filtered, micrograms per liter
63674	Anhydroerthromycin, water, filtered, recoverable, micrograms per liter
63685	Microcystin LR, water, filtered, recoverable, micrograms per liter
63686	Microcystin LR, water, unfiltered, recoverable, micrograms per liter
63687	Microcystin LR, algae, recoverable, micrograms per milligram
63689	Bromide, water, unfiltered, milligrams per liter
63690	Thionazin, water, unfiltered, recoverable, micrograms per liter
63691	Total Aroclors, water, unfiltered, recoverable, micrograms per liter
63692	Perchlorate, solids, recoverable, dry weight, micrograms per kilogram
63693	Titanium, solids, recoverable, dry weight, milligrams per kilogram
63694	Aroclor 1262, solids, recoverable, dry weight, micrograms per kilogram
63695	Aroclor 1268, solids, recoverable, dry weight, micrograms per kilogram
63696	Total Aroclors, solids, recoverable, dry weight, micrograms per kilogram
63697	Dalapon, solids, recoverable, dry weight, micrograms per kilogram
63698	2,4-DB, solids, recoverable, dry weight, micrograms per kilogram
63699	Dinoseb, solids, recoverable, dry weight, micrograms per kilogram
63700	Bromochloromethane, solids, recoverable, dry weight, micrograms per kilogram
63701	n-Butylbenzene, solids, recoverable, dry weight, micrograms per kilogram
63702	sec-Butylbenzene, solids, recoverable, dry weight, micrograms per kilogram
63703	tert-Butylbenzene, solids, recoverable, dry weight, micrograms per kilogram
63704	4-Chlorotoluene, solids, recoverable, dry weight, micrograms per kilogram
63705	2,2-Dichloropropane, solids, recoverable, dry weight, micrograms per kilogram
63706	1,1-Dichloropropene, solids, recoverable, dry weight, micrograms per kilogram
63707	4-Isopropyltoluene, solids, recoverable, dry weight, micrograms per kilogram
63708	Methyl acrylonitrile, solids, recoverable, dry weight, micrograms per kilogram
63709	n-Propylbenzene, solids, recoverable, dry weight, micrograms per kilogram
63710	1,2,3-Trichlorobenzene, solids, recoverable, dry weight, micrograms per kilogram
63711	1,2,4-Trimethylbenzene, solids, recoverable, dry weight, micrograms per kilogram
63712	1,3,5-Trimethylbenzene, solids, recoverable, dry weight, micrograms per kilogram
63713	Bromide, solids, recoverable, dry weight, micrograms per gram
63714	Fluoride, solids, recoverable, dry weight, micrograms per gram

Parameter code	Parameter name
63715	Orthophosphate, solids, recoverable, dry weight, micrograms per gram
63716	Oil and grease, solids, hexane extraction, recoverable, dry weight, milligrams per kilogram
63717	Petroleum hydrocarbons, solids, silica-gel treated hexane extraction, recoverable, dry weight, milligrams per kilogram
63718	3-Nitro-4-hydroxyphenylarsonic acid, water, filtered, micrograms per liter as arsenic
63719	Sulfur, water, filtered, micrograms per liter
63720	2,4,5-Trichlorophenoxybutyric acid, water, unfiltered, recoverable, micrograms per liter
63721	Fenitrothion, water, unfiltered, recoverable, micrograms per liter
63722	Sodium acifluorfen, water, unfiltered, recoverable, micrograms per liter
63723	1-Chloro-2,2-bis(4-chlorophenyl)ethene, water, unfiltered, recoverable, micrograms per liter
63724	Dichlobenil, water, unfiltered, recoverable, micrograms per liter
63725	Captafol, water, unfiltered, recoverable, micrograms per liter
63726	Temephos, water, unfiltered, recoverable, micrograms per liter
63727	4-Epitetracycline hydrochloride, water, filtered, recoverable, micrograms per liter
63728	4-Epianhydrochlortetracycline hydrochloride, water, filtered, recoverable, micrograms per liter
63729	4-Epioxytetracycline, water, filtered, recoverable, micrograms per liter
63730	4-Epianhydrotetracycline hydrochloride, water, filtered, recoverable, micrograms per liter
63731	4-Epichlortetracycline hydrochloride, water, filtered, recoverable, micrograms per liter
63732	Isochlortetracycline, water, filtered, recoverable, micrograms per liter
63733	Anhydrochlortetracycline hydrochloride, water, filtered, recoverable, micrograms per liter
63734	Anhydrotetracycline hydrochloride, water, filtered, recoverable, micrograms per liter
63735	Propargite, water, unfiltered, recoverable, micrograms per liter
63736	Phosphamidon, water, filtered, recoverable, micrograms per liter
63741	Methylmercury, biota, tissue, recoverable, dry weight, nanograms per gram
63745	Mercury, biota, tissue, recoverable, dry weight, nanograms per gram
63746	Diesel range organic compounds (extended carbon range C10-C36), water, unfiltered, recoverable, milligrams per liter
63747	Diesel range organic compounds (extended carbon range C10-C36), solids, recoverable, dry weight, milligrams per kilogram
63748	1,1,2-Trichloro-1,2,2-trifluoroethane, solids, recoverable, dry weight, micrograms per kilogram
63749	Cyclohexane, solids, recoverable, dry weight, micrograms per kilogram
63750	Methyl acetate, solids, recoverable, dry weight, micrograms per kilogram
63751	Methylcyclohexane, solids, recoverable, dry weight, micrograms per kilogram
63752	Biphenyl, solids, recoverable, dry weight, micrograms per kilogram
63753	Caprolactam, solids, recoverable, dry weight, micrograms per kilogram
63754	Aroclor 1016, biota, tissue, recoverable, wet weight, micrograms per kilogram
63755	Aroclor 1221, biota, tissue, recoverable, wet weight, micrograms per kilogram
63756	Aroclor 1232, biota, tissue, recoverable, wet weight, micrograms per kilogram
63757	Aroclor 1242, biota, tissue, recoverable, wet weight, micrograms per kilogram
63758	Aroclor 1248, biota, tissue, recoverable, wet weight, micrograms per kilogram
63759	Aroclor 1254, biota, tissue, recoverable, wet weight, micrograms per kilogram

Parameter code	Parameter name
63760	Aroclor 1260, biota, tissue, recoverable, wet weight, micrograms per kilogram
63761	Aroclor 1262, biota, tissue, recoverable, wet weight, micrograms per kilogram
63762	Aroclor 1268, biota, tissue, recoverable, wet weight, micrograms per kilogram
63763	Chlorophyll *a*, periphyton, depositional-targeted habitat (DTH), chromatographic-fluorometric method, milligrams per square meter
63764	Pheophytin *a*, periphyton, depositional-targeted habitat (DTH), chromatographic-fluorometric method, milligrams per square meter
63768	Butalbital, water, filtered, recoverable, micrograms per liter
63769	Chlorpheniramine, water, filtered, recoverable, micrograms per liter
63770	Diazepam, water, filtered, recoverable, micrograms per liter
63771	Hydrocodone, water, filtered, recoverable, micrograms per liter
63772	Metaxalone, water, filtered, recoverable, micrograms per liter
63773	Terbufos sulfone, water, filtered, recoverable, micrograms per liter
63774	Methadone, water, filtered, recoverable, micrograms per liter
63775	Oxycodone, water, filtered, recoverable, micrograms per liter
63776	Phendimetrazine, water, filtered, recoverable, micrograms per liter
63777	Dechloroalachlor, water, filtered, recoverable, micrograms per liter
63778	Dechloroacetochlor, water, filtered, recoverable, micrograms per liter
63779	Dechlorodimethenamid, water, filtered, recoverable, micrograms per liter
63780	Dechlorometolachlor, water, filtered, recoverable, micrograms per liter
63781	2-Chloro-N-(2,6-diethylphenyl)acetamide, water, filtered, recoverable, micrograms per liter
63782	2-Chloro-N-(2-ethyl-6-methylphenyl)acetamide, water, filtered, recoverable, micrograms per liter
63783	Hydroxyalachlor, water, filtered, recoverable, micrograms per liter
63784	Hydroxyacetochlor, water, filtered, recoverable, micrograms per liter
63785	Hydroxymetolachlor, water, filtered, recoverable, micrograms per liter
63786	Bicarbonate, water, filtered, Gran titration, field, milligrams per liter
63787	Bicarbonate, water, filtered, Gran titration, lab, milligrams per liter
63788	Carbonate, water, filtered, Gran titration, field, milligrams per liter
63789	Carbonate, water, filtered, Gran titration, lab, milligrams per liter
63790	Perchlorate, water, filtered, micrograms per liter
63791	Perchlorate, biota, tissue, recoverable, dry weight, micrograms per kilogram
63792	Mercury, biota, tissue, recoverable, wet weight, micrograms per gram
63793	Antimony, biota, tissue, recoverable, wet weight, micrograms per gram
63794	Arsenic, biota, tissue, recoverable, wet weight, micrograms per gram
63795	Barium, biota, tissue, recoverable, wet weight, micrograms per gram
63796	Cadmium, biota, tissue, recoverable, wet weight, micrograms per gram
63797	Chromium, biota, tissue, recoverable, wet weight, micrograms per gram
63798	Cobalt, biota, tissue, recoverable, wet weight, micrograms per gram
63799	Copper, biota, tissue, recoverable, wet weight, micrograms per gram
63800	Lead, biota, tissue, recoverable, wet weight, micrograms per gram

Parameter code	Parameter name
63801	Manganese, biota, tissue, recoverable, wet weight, micrograms per gram
63802	Molybdenum, biota, tissue, recoverable, wet weight, micrograms per gram
63803	Nickel, biota, tissue, recoverable, wet weight, micrograms per gram
63804	Selenium, biota, tissue, recoverable, wet weight, micrograms per gram
63805	Silver, biota, tissue, recoverable, wet weight, micrograms per gram
63806	Thallium, biota, tissue, recoverable, wet weight, micrograms per gram
63808	Vanadium, biota, tissue, recoverable, wet weight, micrograms per gram
63809	Zinc, biota, tissue, recoverable, wet weight, micrograms per gram
63810	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin, biota, tissue, recoverable, wet weight, picograms per gram
63811	1,2,3,4,6,7,8-Heptachlorodibenzofuran, biota, tissue, recoverable, wet weight, picograms per gram
63812	1,2,3,4,7,8,9-Heptachlorodibenzofuran, biota, tissue, recoverable, wet weight, picograms per gram
63813	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin, biota, tissue, recoverable, wet weight, picograms per gram
63814	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin, biota, tissue, recoverable, wet weight, picograms per gram
63815	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin, biota, tissue, recoverable, wet weight, picograms per gram
63816	1,2,3,4,7,8-Hexachlorodibenzofuran, biota, tissue, recoverable, wet weight, picograms per gram
63817	1,2,3,6,7,8-Hexachlorodibenzofuran, biota, tissue, recoverable, wet weight, picograms per gram
63818	1,2,3,7,8,9-Hexachlorodibenzofuran, biota, tissue, recoverable, wet weight, picograms per gram
63819	2,3,4,6,7,8-Hexachlorodibenzofuran, biota, tissue, recoverable, wet weight, picograms per gram
63820	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin, biota, tissue, recoverable, wet weight, picograms per gram
63821	1,2,3,4,6,7,8,9-Octachlorodibenzofuran, biota, tissue, recoverable, wet weight, picograms per gram
63822	1,2,3,7,8-Pentachlorodibenzo-p-dioxin, biota, tissue, recoverable, wet weight, picograms per gram
63823	1,2,3,7,8-Pentachlorodibenzofuran, biota, tissue, recoverable, wet weight, picograms per gram
63824	2,3,4,7,8-Pentachlorodibenzofuran, biota, tissue, recoverable, wet weight, picograms per gram
63825	2,3,7,8-Tetrachlorodibenzo-p-dioxin, biota, tissue, recoverable, wet weight, picograms per gram
63826	2,3,7,8-Tetrachlorodibenzofuran, biota, tissue, recoverable, wet weight, picograms per gram
63827	Heptachlorodibenzo-p-dioxins (all isomers), biota, tissue, recoverable, wet weight, picograms per gram
63828	Heptachlorodibenzofurans (all isomers), biota, tissue, recoverable, wet weight, picograms per gram
63829	Hexachlorodibenzo-p-dioxins (all isomers), biota, tissue, recoverable, wet weight, picograms per gram
63830	Hexachlorodibenzofurans (all isomers), biota, tissue, recoverable, wet weight, picograms per gram
63831	Pentachlorodibenzo-p-dioxins (all isomers), biota, tissue, recoverable, wet weight, picograms per gram

Parameter code	Parameter name
63832	Pentachlorodibenzofurans (all isomers), biota, tissue, recoverable, wet weight, picograms per gram
63833	Tetrachlorodibenzo-p-dioxins (all isomers), biota, tissue, recoverable, wet weight, picograms per gram
63834	Tetrachlorodibenzofurans (all isomers), biota, tissue, recoverable, wet weight, picograms per gram
63835	PCB congener 1, water, filtered, recoverable, picograms per liter
63836	PCB congener 2, water, filtered, recoverable, picograms per liter
63837	PCB congener 3, water, filtered, recoverable, picograms per liter
63838	PCB congener 4, water, filtered, recoverable, picograms per liter
63839	PCB congener 5, water, filtered, recoverable, picograms per liter
63840	PCB congener 6, water, filtered, recoverable, picograms per liter
63841	PCB congener 7, water, filtered, recoverable, picograms per liter
63842	PCB congener 8, water, filtered, recoverable, picograms per liter
63843	PCB congener 9, water, filtered, recoverable, picograms per liter
63844	PCB congener 10, water, filtered, recoverable, picograms per liter
63845	PCB congener 11, water, filtered, recoverable, picograms per liter
63846	PCB congener 12, water, filtered, recoverable, picograms per liter
63847	PCB congener 13, water, filtered, recoverable, picograms per liter
63848	PCB congener 14, water, filtered, recoverable, picograms per liter
63849	PCB congener 15, water, filtered, recoverable, picograms per liter
63850	PCB congener 16, water, filtered, recoverable, picograms per liter
63851	PCB congener 17, water, filtered, recoverable, picograms per liter
63852	PCB congener 18, water, filtered, recoverable, picograms per liter
63853	PCB congener 19, water, filtered, recoverable, picograms per liter
63854	PCB congener 20, water, filtered, recoverable, picograms per liter
63855	PCB congener 21, water, filtered, recoverable, picograms per liter
63856	PCB congener 22, water, filtered, recoverable, picograms per liter
63857	PCB congener 23, water, filtered, recoverable, picograms per liter
63858	PCB congener 24, water, filtered, recoverable, picograms per liter
63859	PCB congener 25, water, filtered, recoverable, picograms per liter
63860	PCB congener 26, water, filtered, recoverable, picograms per liter
63861	PCB congener 27, water, filtered, recoverable, picograms per liter
63862	PCB congener 28, water, filtered, recoverable, picograms per liter
63863	PCB congener 29, water, filtered, recoverable, picograms per liter
63864	PCB congener 30, water, filtered, recoverable, picograms per liter
63865	PCB congener 31, water, filtered, recoverable, picograms per liter
63866	PCB congener 32, water, filtered, recoverable, picograms per liter
63867	PCB congener 33, water, filtered, recoverable, picograms per liter
63868	PCB congener 34, water, filtered, recoverable, picograms per liter
63869	PCB congener 35, water, filtered, recoverable, picograms per liter

Parameter code	Parameter name
63870	PCB congener 36, water, filtered, recoverable, picograms per liter
63871	PCB congener 37, water, filtered, recoverable, picograms per liter
63872	PCB congener 38, water, filtered, recoverable, picograms per liter
63873	PCB congener 39, water, filtered, recoverable, picograms per liter
63874	PCB congener 40, water, filtered, recoverable, picograms per liter
63875	PCB congener 41, water, filtered, recoverable, picograms per liter
63876	PCB congener 42, water, filtered, recoverable, picograms per liter
63877	PCB congener 43, water, filtered, recoverable, picograms per liter
63878	PCB congener 44, water, filtered, recoverable, picograms per liter
63879	PCB congener 45, water, filtered, recoverable, picograms per liter
63880	PCB congener 46, water, filtered, recoverable, picograms per liter
63881	PCB congener 47, water, filtered, recoverable, picograms per liter
63882	PCB congener 48, water, filtered, recoverable, picograms per liter
63883	PCB congener 49, water, filtered, recoverable, picograms per liter
63884	PCB congener 50, water, filtered, recoverable, picograms per liter
63885	PCB congener 51, water, filtered, recoverable, picograms per liter
63886	PCB congener 52, water, filtered, recoverable, picograms per liter
63887	PCB congener 53, water, filtered, recoverable, picograms per liter
63888	PCB congener 54, water, filtered, recoverable, picograms per liter
63889	PCB congener 55, water, filtered, recoverable, picograms per liter
63890	PCB congener 56, water, filtered, recoverable, picograms per liter
63891	PCB congener 57, water, filtered, recoverable, picograms per liter
63892	PCB congener 58, water, filtered, recoverable, picograms per liter
63893	PCB congener 59, water, filtered, recoverable, picograms per liter
63894	PCB congener 60, water, filtered, recoverable, picograms per liter
63895	PCB congener 61, water, filtered, recoverable, picograms per liter
63896	PCB congener 62, water, filtered, recoverable, picograms per liter
63897	PCB congener 63, water, filtered, recoverable, picograms per liter
63898	PCB congener 64, water, filtered, recoverable, picograms per liter
63899	PCB congener 65, water, filtered, recoverable, picograms per liter
63900	PCB congener 66, water, filtered, recoverable, picograms per liter
63901	PCB congener 67, water, filtered, recoverable, picograms per liter
63902	PCB congener 68, water, filtered, recoverable, picograms per liter
63903	PCB congener 69, water, filtered, recoverable, picograms per liter
63904	PCB congener 70, water, filtered, recoverable, picograms per liter
63905	PCB congener 71, water, filtered, recoverable, picograms per liter
63906	PCB congener 72, water, filtered, recoverable, picograms per liter
63907	PCB congener 73, water, filtered, recoverable, picograms per liter
63908	PCB congener 74, water, filtered, recoverable, picograms per liter
63909	PCB congener 75, water, filtered, recoverable, picograms per liter

Parameter code	Parameter name
63910	PCB congener 76, water, filtered, recoverable, picograms per liter
63911	PCB congener 77, water, filtered, recoverable, picograms per liter
63912	PCB congener 78, water, filtered, recoverable, picograms per liter
63913	PCB congener 79, water, filtered, recoverable, picograms per liter
63914	PCB congener 80, water, filtered, recoverable, picograms per liter
63915	PCB congener 81, water, filtered, recoverable, picograms per liter
63916	PCB congener 82, water, filtered, recoverable, picograms per liter
63917	PCB congener 83, water, filtered, recoverable, picograms per liter
63918	PCB congener 84, water, filtered, recoverable, picograms per liter
63919	PCB congener 85, water, filtered, recoverable, picograms per liter
63920	PCB congener 86, water, filtered, recoverable, picograms per liter
63921	PCB congener 87, water, filtered, recoverable, picograms per liter
63922	PCB congener 88, water, filtered, recoverable, picograms per liter
63923	PCB congener 89, water, filtered, recoverable, picograms per liter
63924	PCB congener 90, water, filtered, recoverable, picograms per liter
63925	PCB congener 91, water, filtered, recoverable, picograms per liter
63926	PCB congener 92, water, filtered, recoverable, picograms per liter
63927	PCB congener 93, water, filtered, recoverable, picograms per liter
63928	PCB congener 94, water, filtered, recoverable, picograms per liter
63929	PCB congener 95, water, filtered, recoverable, picograms per liter
63930	PCB congener 96, water, filtered, recoverable, picograms per liter
63931	PCB congener 97, water, filtered, recoverable, picograms per liter
63932	PCB congener 98, water, filtered, recoverable, picograms per liter
63933	PCB congener 99, water, filtered, recoverable, picograms per liter
63934	PCB congener 100, water, filtered, recoverable, picograms per liter
63935	PCB congener 101, water, filtered, recoverable, picograms per liter
63936	PCB congener 102, water, filtered, recoverable, picograms per liter
63937	PCB congener 103, water, filtered, recoverable, picograms per liter
63938	PCB congener 104, water, filtered, recoverable, picograms per liter
63939	PCB congener 105, water, filtered, recoverable, picograms per liter
63940	PCB congener 106, water, filtered, recoverable, picograms per liter
63941	PCB congener 107, water, filtered, recoverable, picograms per liter
63942	PCB congener 108, water, filtered, recoverable, picograms per liter
63943	PCB congener 109, water, filtered, recoverable, picograms per liter
63944	PCB congener 110, water, filtered, recoverable, picograms per liter
63945	PCB congener 111, water, filtered, recoverable, picograms per liter
63946	PCB congener 112, water, filtered, recoverable, picograms per liter
63947	PCB congener 113, water, filtered, recoverable, picograms per liter
63948	PCB congener 114, water, filtered, recoverable, picograms per liter
63949	PCB congener 115, water, filtered, recoverable, picograms per liter

Parameter code	Parameter name
63950	PCB congener 116, water, filtered, recoverable, picograms per liter
63951	PCB congener 117, water, filtered, recoverable, picograms per liter
63952	PCB congener 118, water, filtered, recoverable, picograms per liter
63953	PCB congener 119, water, filtered, recoverable, picograms per liter
63954	PCB congener 120, water, filtered, recoverable, picograms per liter
63955	PCB congener 121, water, filtered, recoverable, picograms per liter
63956	PCB congener 122, water, filtered, recoverable, picograms per liter
63957	PCB congener 123, water, filtered, recoverable, picograms per liter
63958	PCB congener 124, water, filtered, recoverable, picograms per liter
63959	PCB congener 125, water, filtered, recoverable, picograms per liter
63960	PCB congener 126, water, filtered, recoverable, picograms per liter
63961	PCB congener 127, water, filtered, recoverable, picograms per liter
63962	PCB congener 128, water, filtered, recoverable, picograms per liter
63963	PCB congener 129, water, filtered, recoverable, picograms per liter
63964	PCB congener 130, water, filtered, recoverable, picograms per liter
63965	PCB congener 131, water, filtered, recoverable, picograms per liter
63966	PCB congener 132, water, filtered, recoverable, picograms per liter
63967	PCB congener 133, water, filtered, recoverable, picograms per liter
63968	PCB congener 134, water, filtered, recoverable, picograms per liter
63969	PCB congener 135, water, filtered, recoverable, picograms per liter
63970	PCB congener 136, water, filtered, recoverable, picograms per liter
63971	PCB congener 137, water, filtered, recoverable, picograms per liter
63972	PCB congener 138, water, filtered, recoverable, picograms per liter
63973	PCB congener 139, water, filtered, recoverable, picograms per liter
63974	PCB congener 140, water, filtered, recoverable, picograms per liter
63975	PCB congener 141, water, filtered, recoverable, picograms per liter
63976	PCB congener 142, water, filtered, recoverable, picograms per liter
63977	PCB congener 143, water, filtered, recoverable, picograms per liter
63978	PCB congener 144, water, filtered, recoverable, picograms per liter
63979	PCB congener 145, water, filtered, recoverable, picograms per liter
63980	PCB congener 146, water, filtered, recoverable, picograms per liter
63981	PCB congener 147, water, filtered, recoverable, picograms per liter
63982	PCB congener 148, water, filtered, recoverable, picograms per liter
63983	PCB congener 149, water, filtered, recoverable, picograms per liter
63984	PCB congener 150, water, filtered, recoverable, picograms per liter
63985	PCB congener 151, water, filtered, recoverable, picograms per liter
63986	PCB congener 152, water, filtered, recoverable, picograms per liter
63987	PCB congener 153, water, filtered, recoverable, picograms per liter
63988	PCB congener 154, water, filtered, recoverable, picograms per liter
63989	PCB congener 155, water, filtered, recoverable, picograms per liter

Parameter code	Parameter name
63990	PCB congener 156, water, filtered, recoverable, picograms per liter
63991	PCB congener 157, water, filtered, recoverable, picograms per liter
63992	PCB congener 158, water, filtered, recoverable, picograms per liter
63993	PCB congener 159, water, filtered, recoverable, picograms per liter
63994	PCB congener 160, water, filtered, recoverable, picograms per liter
63995	PCB congener 161, water, filtered, recoverable, picograms per liter
63996	PCB congener 162, water, filtered, recoverable, picograms per liter
63997	PCB congener 163, water, filtered, recoverable, picograms per liter
63998	PCB congener 164, water, filtered, recoverable, picograms per liter
63999	PCB congener 165, water, filtered, recoverable, picograms per liter
64000	PCB congener 166, water, filtered, recoverable, picograms per liter
64001	PCB congener 167, water, filtered, recoverable, picograms per liter
64002	PCB congener 168, water, filtered, recoverable, picograms per liter
64003	PCB congener 169, water, filtered, recoverable, picograms per liter
64004	PCB congener 170, water, filtered, recoverable, picograms per liter
64005	PCB congener 171, water, filtered, recoverable, picograms per liter
64006	PCB congener 172, water, filtered, recoverable, picograms per liter
64007	PCB congener 173, water, filtered, recoverable, picograms per liter
64008	PCB congener 174, water, filtered, recoverable, picograms per liter
64009	PCB congener 175, water, filtered, recoverable, picograms per liter
64010	PCB congener 176, water, filtered, recoverable, picograms per liter
64011	PCB congener 177, water, filtered, recoverable, picograms per liter
64012	PCB congener 178, water, filtered, recoverable, picograms per liter
64013	PCB congener 179, water, filtered, recoverable, picograms per liter
64014	PCB congener 180, water, filtered, recoverable, picograms per liter
64015	PCB congener 181, water, filtered, recoverable, picograms per liter
64016	PCB congener 182, water, filtered, recoverable, picograms per liter
64017	PCB congener 183, water, filtered, recoverable, picograms per liter
64018	PCB congener 184, water, filtered, recoverable, picograms per liter
64019	PCB congener 185, water, filtered, recoverable, picograms per liter
64020	PCB congener 186, water, filtered, recoverable, picograms per liter
64021	PCB congener 187, water, filtered, recoverable, picograms per liter
64022	PCB congener 188, water, filtered, recoverable, picograms per liter
64023	PCB congener 189, water, filtered, recoverable, picograms per liter
64024	PCB congener 190, water, filtered, recoverable, picograms per liter
64025	PCB congener 191, water, filtered, recoverable, picograms per liter
64026	PCB congener 192, water, filtered, recoverable, picograms per liter
64027	PCB congener 193, water, filtered, recoverable, picograms per liter
64028	PCB congener 194, water, filtered, recoverable, picograms per liter
64029	PCB congener 195, water, filtered, recoverable, picograms per liter

Parameter code	Parameter name
64030	PCB congener 196, water, filtered, recoverable, picograms per liter
64031	PCB congener 197, water, filtered, recoverable, picograms per liter
64032	PCB congener 198, water, filtered, recoverable, picograms per liter
64033	PCB congener 199, water, filtered, recoverable, picograms per liter
64034	PCB congener 200, water, filtered, recoverable, picograms per liter
64035	PCB congener 201, water, filtered, recoverable, picograms per liter
64036	PCB congener 202, water, filtered, recoverable, picograms per liter
64037	PCB congener 203, water, filtered, recoverable, picograms per liter
64038	PCB congener 204, water, filtered, recoverable, picograms per liter
64039	PCB congener 205, water, filtered, recoverable, picograms per liter
64040	PCB congener 206, water, filtered, recoverable, picograms per liter
64041	PCB congener 207, water, filtered, recoverable, picograms per liter
64042	PCB congener 208, water, filtered, recoverable, picograms per liter
64043	PCB congener 209, water, filtered, recoverable, picograms per liter
64044	Fenpropathrin, water, filtered, recoverable, micrograms per liter
64045	Hydroxydimethenamid, water, filtered, recoverable, micrograms per liter
64046	Carbadox, water, filtered, recoverable, micrograms per liter
64047	Isoepichlorotetracycline, water, filtered, recoverable, micrograms per liter
64048	Microcystin RR, water, filtered, recoverable, micrograms per liter
64049	Bromobenzene, solids, recoverable, dry weight, micrograms per kilogram
64050	1-Chlorohexane, solids, recoverable, dry weight, micrograms per kilogram
64051	2-Chlorotoluene, solids, recoverable, dry weight, micrograms per kilogram
64052	1,3-Dichloropropane, solids, recoverable, dry weight, micrograms per kilogram
64053	MCPA, solids, recoverable, dry weight, micrograms per kilogram
64054	1,2,4,5-Tetrachlorobenzene, solids, recoverable, dry weight, micrograms per kilogram
64055	2,3,4,6-Tetrachlorophenol, solids, recoverable, dry weight, micrograms per kilogram
64056	2,6-Dichlorophenol, solids, recoverable, dry weight, micrograms per kilogram
64057	2-Acetylaminofluorene, solids, recoverable, dry weight, micrograms per kilogram
64058	2-Naphthylamine, solids, recoverable, dry weight, micrograms per kilogram
64059	2-Picoline, solids, recoverable, dry weight, micrograms per kilogram
64060	3-Methylcholanthrene, solids, recoverable, dry weight, micrograms per kilogram
64061	m-Cresol plus p-cresol, solids, recoverable, dry weight, micrograms per kilogram
64062	4-Aminobiphenyl, solids, recoverable, dry weight, micrograms per kilogram
64063	5-Nitro-o-toluidine, solids, recoverable, dry weight, micrograms per kilogram
64064	7,12-Dimethylbenzo[a]anthracene, solids, recoverable, dry weight, micrograms per kilogram
64065	alpha,alpha-Dimethylphenethylamine, solids, recoverable, dry weight, micrograms per kilogram
64066	Aniline, solids, recoverable, dry weight, micrograms per kilogram
64067	Benzyl alcohol, solids, recoverable, dry weight, micrograms per kilogram
64068	Diallate, solids, recoverable, dry weight, micrograms per kilogram
64069	Ethyl methanesulfonate, solids, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
64070	Hexachloropropene, solids, recoverable, dry weight, micrograms per kilogram
64071	Isodrin, solids, recoverable, dry weight, micrograms per kilogram
64072	Methapyrilene, solids, recoverable, dry weight, micrograms per kilogram
64073	Methyl methanesulfonate, solids, recoverable, dry weight, micrograms per kilogram
64074	N-Nitrosodi-n-butylamine, solids, recoverable, dry weight, micrograms per kilogram
64075	N-Nitrosodiethylamine, solids, recoverable, dry weight, micrograms per kilogram
64076	N-Nitrosomethylethylamine, solids, recoverable, dry weight, micrograms per kilogram
64077	N-Nitrosopiperidine, solids, recoverable, dry weight, micrograms per kilogram
64078	N-Nitrosopyrrolidine, solids, recoverable, dry weight, micrograms per kilogram
64079	Nitroquinoline-1-oxide, solids, recoverable, dry weight, micrograms per kilogram
64080	O,O,O-Triethyl phosphorothioate, solids, recoverable, dry weight, micrograms per kilogram
64081	o-Toluidine, solids, recoverable, dry weight, micrograms per kilogram
64082	Pentachlorobenzene, solids, recoverable, dry weight, micrograms per kilogram
64083	Phenacetin, solids, recoverable, dry weight, micrograms per kilogram
64084	Safrole, solids, recoverable, dry weight, micrograms per kilogram
64085	Tris(2,3-dibromopropyl) phosphate, solids, recoverable, dry weight, micrograms per kilogram
64086	Methyl tert-butyl ether, solids, recoverable, dry weight, milligrams per kilogram
64087	Gasoline range organic compounds, solids, recoverable, dry weight, micrograms per kilogram
64088	Benzene, solids, recoverable, dry weight, micrograms per kilogram
64089	Ethylbenzene, solids, recoverable, dry weight, micrograms per kilogram
64090	Toluene, solids, recoverable, dry weight, micrograms per kilogram
64091	m-Xylene plus p-xylene, solids, recoverable, dry weight, micrograms per kilogram
64092	o-Xylene, solids, recoverable, dry weight, micrograms per kilogram
64093	Phorate sulfoxide, water, filtered, recoverable, micrograms per liter
64095	1,2,4-Trichlorobenzene, solids, recoverable, dry weight, micrograms per kilogram
64096	1,2-Dichlorobenzene, solids, recoverable, dry weight, micrograms per kilogram
64097	1,2-Dimethylnaphthalene, solids, recoverable, dry weight, micrograms per kilogram
64098	1,3-Dichlorobenzene, solids, recoverable, dry weight, micrograms per kilogram
64099	1,6-Dimethylnaphthalene, solids, recoverable, dry weight, micrograms per kilogram
64100	1-Methyl-9H-fluorene, solids, recoverable, dry weight, micrograms per kilogram
64101	1-Methylphenanthrene, solids, recoverable, dry weight, micrograms per kilogram
64102	1-Methylpyrene, solids, recoverable, dry weight, micrograms per kilogram
64103	2,3,6-Trimethylnaphthalene, solids, recoverable, dry weight, micrograms per kilogram
64104	2-Ethylnaphthalene, solids, recoverable, dry weight, micrograms per kilogram
64105	2-Methylanthracene, solids, recoverable, dry weight, micrograms per kilogram
64106	4H-Cyclopenta[def]phenanthrene, solids, recoverable, dry weight, micrograms per kilogram
64107	9H-Fluorene, solids, recoverable, dry weight, micrograms per kilogram
64108	Acenaphthene, solids, recoverable, dry weight, micrograms per kilogram
64109	Acenaphthylene, solids, recoverable, dry weight, micrograms per kilogram
64110	Acridine, solids, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
64111	Benzo[b]fluoranthene, solids, recoverable, dry weight, micrograms per kilogram
64112	Benzo[e]pyrene, solids, recoverable, dry weight, micrograms per kilogram
64113	Benzo[ghi]perylene, solids, recoverable, dry weight, micrograms per kilogram
64114	Benzo[k]fluoranthene, solids, recoverable, dry weight, micrograms per kilogram
64115	Chrysene, solids, recoverable, dry weight, micrograms per kilogram
64116	Dibenzo[a,h]anthracene, solids, recoverable, dry weight, micrograms per kilogram
64117	Dibenzothiophene, solids, recoverable, dry weight, micrograms per kilogram
64118	Indeno[1,2,3-cd]pyrene, solids, recoverable, dry weight, micrograms per kilogram
64119	Pentachloroanisole, solids, recoverable, dry weight, micrograms per kilogram
64120	Perylene, solids, recoverable, dry weight, micrograms per kilogram
64121	Phenanthridine, solids, recoverable, dry weight, micrograms per kilogram
64122	C1-128 Isomers, 2 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, naphthalene, solids, recoverable, dry weight, micrograms per kilogram
64123	C2-128 Isomers, 2 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, naphthalene, solids, recoverable, dry weight, micrograms per kilogram
64124	C3-128 Isomers, 2 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, naphthalene, solids, recoverable, dry weight, micrograms per kilogram
64125	C4-128 Isomers, 2 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, naphthalene, solids, recoverable, dry weight, micrograms per kilogram
64126	C5-128 Isomers, 2 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, naphthalene, solids, recoverable, dry weight, micrograms per kilogram
64127	C1-178 Isomers, 3 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, phenanthrene/anthracene, solids, recoverable, dry weight, micrograms per kilogram
64128	C2-178 Isomers, 3 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, phenanthrene/anthracene, solids, recoverable, dry weight, micrograms per kilogram
64129	C3-178 Isomers, 3 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, phenanthrene/anthracene, solids, recoverable, dry weight, micrograms per kilogram
64130	C4-178 Isomers, 3 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, phenanthrene/anthracene, solids, recoverable, dry weight, micrograms per kilogram
64131	C5-178 Isomers, 3 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, phenanthrene/anthracene, solids, recoverable, dry weight, micrograms per kilogram
64132	C1-202 Isomers, condensed 4 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, fluoranthene/pyrene, solids, recoverable, dry weight, micrograms per kilogram
64133	C2-202 Isomers, condensed 4 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, fluoranthene/pyrene, solids, recoverable, dry weight, micrograms per kilogram
64134	C3-202 Isomers, condensed 4 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, fluoranthene/pyrene, solids, recoverable, dry weight, micrograms per kilogram
64135	C4-202 Isomers, condensed 4 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, fluoranthene/pyrene, solids, recoverable, dry weight, micrograms per kilogram
64136	C5-202 Isomers, condensed 4 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, fluoranthene/pyrene, solids, recoverable, dry weight, micrograms per kilogram
64137	C1-228 Isomers, extended 4 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, benzo[a]anthracene/chrysene, solids, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
64138	C2-228 Isomers, extended 4 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, benzo[a]anthracene/chrysene, solids, recoverable, dry weight, micrograms per kilogram
64139	C3-228 Isomers, extended 4 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, benzo[a]anthracene/chrysene, solids, recoverable, dry weight, micrograms per kilogram
64140	C4-228 Isomers, extended 4 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, benzo[a]anthracene/chrysene, solids, recoverable, dry weight, micrograms per kilogram
64141	C5-228 Isomers, extended 4 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, benzo[a]anthracene/chrysene, solids, recoverable, dry weight, micrograms per kilogram
64142	C1-252 Isomers, 5 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, perylene isomers, solids, recoverable, dry weight, micrograms per kilogram
64143	C2-252 Isomers, 5 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, perylene isomers, solids, recoverable, dry weight, micrograms per kilogram
64144	C3-252 Isomers, 5 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, perylene isomers, solids, recoverable, dry weight, micrograms per kilogram
64145	C4-252 Isomers, 5 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, perylene isomers, solids, recoverable, dry weight, micrograms per kilogram
64146	C5-252 Isomers, 5 ring Polycyclic Aromatic Hydrocarbons (PAH), alkylated, perylene isomers, solids, recoverable, dry weight, micrograms per kilogram
64147	Diethatyl-ethyl, water, filtered, recoverable, micrograms per liter
64148	Permethrin, suspended sediment, recoverable, micrograms per liter
64149	Piperonyl butoxide, suspended sediment, recoverable, micrograms per liter
64150	Azinphos-methyl, bed sediment, recoverable, dry weight, micrograms per kilogram
64151	Bifenthrin, bed sediment, recoverable, dry weight, micrograms per kilogram
64152	Butylate, bed sediment, recoverable, dry weight, micrograms per kilogram
64153	Carbaryl, bed sediment, recoverable, dry weight, micrograms per kilogram
64154	Carbofuran, bed sediment, recoverable, dry weight, micrograms per kilogram
64155	Cycloate, bed sediment, recoverable, dry weight, micrograms per kilogram
64156	Cypermethrin, bed sediment, recoverable, dry weight, micrograms per kilogram
64157	Diethatyl-ethyl, bed sediment, recoverable, dry weight, micrograms per kilogram
64158	EPTC, bed sediment, recoverable, dry weight, micrograms per kilogram
64159	Esfenvalerate, bed sediment, recoverable, dry weight, micrograms per kilogram
64160	Ethalfluralin, bed sediment, recoverable, dry weight, micrograms per kilogram
64161	Hexazinone, bed sediment, recoverable, dry weight, micrograms per kilogram
64162	lambda-Cyhalothrin, bed sediment, recoverable, dry weight, micrograms per kilogram
64163	Molinate, bed sediment, recoverable, dry weight, micrograms per kilogram
64164	Napropamide, bed sediment, recoverable, dry weight, micrograms per kilogram
64165	Oxyfluorfen, bed sediment, recoverable, dry weight, micrograms per kilogram
64166	Pebulate, bed sediment, recoverable, dry weight, micrograms per kilogram
64167	Pendimethalin, bed sediment, recoverable, dry weight, micrograms per kilogram
64168	Permethrin, bed sediment, recoverable, dry weight, micrograms per kilogram
64169	Phosmet, bed sediment, recoverable, dry weight, micrograms per kilogram
64170	Piperonyl butoxide, bed sediment, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
64171	Thiobencarb, bed sediment, recoverable, dry weight, micrograms per kilogram
64172	Biphenyl, water, unfiltered, recoverable, micrograms per liter
64173	Caprolactam, water, unfiltered, recoverable, micrograms per liter
64174	Diesel range organic compounds, water, unfiltered, recoverable, milligrams per liter
64175	Isochlortetracycline, water, filtered, recoverable, micrograms per liter
64176	N-Nitrosodimethylamine, water, unfiltered, recoverable, nanograms per liter
64179	p,p'-Methoxychlor, biota, tissue, wet weight, micrograms per kilogram
64180	Zinc, solids, dry weight, recoverable, milligrams per kilogram
64181	Lead, solids, dry weight, recoverable, milligrams per kilogram
64182	Vanadium, solids, dry weight, recoverable, milligrams per kilogram
64184	Helium, water, unfiltered, nanomoles per liter
64185	Hydrogen, water, unfiltered, nanomoles per liter
64186	Neon, water, unfiltered, nanomoles per liter
64187	1,2-Dimethylnaphthalene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64188	1,4-Dichlorobenzene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64189	1,4-Naphthoquinone, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64190	1,6-Dimethylnaphthalene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64191	1-Methyl-9H-fluorene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64192	1-Methylnaphthalene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64193	1-Methylphenanthrene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64194	1-Methylpyrene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64195	1-Naphthol, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64196	2-(4-tert-Butylphenoxy)-cyclohexanol, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64197	2,3,6-Trimethylnaphthalene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64198	2,5-Dichloroaniline, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64199	2,6-Diethylaniline, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64200	2,6-Dimethylnaphthalene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64201	2-Amino-N-isopropylbenzamide, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter

Parameter code	Parameter name
64202	2-Chloro-2',6'-diethylacetanilide, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64203	2-Chloro-4-isopropylamino-6-amino-s-triazine, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64204	2-Ethyl-6-methylaniline, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64205	2-Ethylnaphthalene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64206	2-Methylanthracene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64207	2-Methylnaphthalene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64208	3,4-Dichloroaniline, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64209	3,5-Dichloroaniline, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64210	3-beta-Coprostanol, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64211	3-Methyl-1H-indole, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64212	3-tert-Butyl-4-hydroxyanisole, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64213	3-Trifluoromethylaniline, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64214	4,4'-Dichlorobenzophenone, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64215	4-Chloro-2-methylphenol, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64216	4-Chlorobenzylmethylsulfone, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64217	4-Cumylphenol, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64218	4H-Cyclopenta[def]phenanthrene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64219	4-n-Octylphenol, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64220	4-tert-Octylphenol, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64221	5-Methyl-1H-benzotriazole, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64222	9H-Fluorene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64223	Acenaphthene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64224	Acenaphthylene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter

Parameter code	Parameter name
64225	Acetochlor, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64226	Acetophenone, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64227	Acetylhexamethyltetrahydronaphthalene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64228	Alachlor, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64229	Aldrin, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64230	alpha-HCH, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64231	Anthracene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64232	9,10-Anthraquinone, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64233	Atrazine, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64234	Azinphos-methyl, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64235	Azinphos-methyl oxygen analog, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64236	Benfluralin, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64237	Benzo[a]anthracene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64238	Benzo[a]pyrene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64239	Benzo[b]fluoranthene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64240	Benzo[e]pyrene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64241	Benzo[ghi]perylene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64242	Benzo[k]fluoranthene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64243	Benzophenone, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64244	beta-HCH, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64245	beta-Sitosterol, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64246	beta-Stigmastanol, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64247	Bifenthrin, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter

Parameter code	Parameter name
64248	Bisphenol A, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64249	Bromacil, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64250	Bromoform, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64251	Butylate, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64252	C1-128 Isomers, methylated naphthalenes, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64253	C1-178 Isomers, methylated phenanthrene/anthracenes, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64254	C1-202 Isomers, methylated fluoranthene/pyrenes, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64255	C1-228 Isomers, methylated benzo[a]anthracene/chrysenes, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64256	C1-252 Isomers, C1-methylated benzopyrene/perylenes, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64257	C2-128 Isomers, C2-alkylated naphthalenes, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64258	C2-178 Isomers, C2-alkylated phenanthrene/anthracenes, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64259	C2-202 Isomers, C2-alkylated fluoranthene/pyrenes, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64260	C2-228 Isomers, C2-alkylated benzo[a]anthracene/chrysenes, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64261	C2-252 Isomers, C2-alkylated benzopyrene/perylenes, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64262	C3-128 Isomers, C3-alkylated naphthalenes, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64263	C3-178 Isomers, C3-alkylated phenanthrene/anthracenes, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64264	C3-202 Isomers, C3-alkylated fluoranthene/pyrenes, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64265	C3-228 Isomers, C3-alkylated benzo[a]anthracene/chrysenes, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64266	C3-252 Isomers, C3-alkylated benzopyrene/perylenes, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64267	C4-128 Isomers, C4-alkylated naphthalenes, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64268	C4-178 Isomers, C4-alkylated phenanthrene/anthracenes, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64269	C4-202 Isomers, C4-alkylated fluoranthene/pyrenes, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64270	C4-228 Isomers, C4-alkylated benzo[a]anthracene/chrysenes, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter

Parameter code	Parameter name
64271	C4-252 Isomers, C4-alkylated benzopyrene/perylenes, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64272	C5-128 Isomers, C5-alkylated naphthalenes, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64273	C5-178 Isomers, C5-alkylated phenanthrene/anthracenes, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64274	C5-202 Isomers, C5-alkylated fluoranthene/pyrenes, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64275	C5-228 Isomers, C5-alkylated benzo[a]anthracene/chrysenes, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64276	C5-252 Isomers, C5-alkylated benzopyrene/perylenes, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64277	Caffeine, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64278	Camphor, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64279	Carbaryl, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64280	Carbazole, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64281	Carbofuran, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64282	Chlorpyrifos, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64283	Chlorpyrifos oxygen analog, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64284	Cholesterol, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64285	Chrysene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64286	cis-Chlordane, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64287	cis-Nonachlor, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64288	cis-Permethrin, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64289	cis-Propiconazole, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64290	Coronene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64291	Cotinine, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64292	Cyanazine, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64293	Cycloate, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter

Parameter code	Parameter name
64294	Cyfluthrin, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64295	Cypermethrin, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64296	DCPA, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64297	delta-HCH, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64298	Desulfinylfipronil, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64299	Desulfinylfipronil amide, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64300	Diazinon, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64301	Diazoxon, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64302	Dibenzo[a,h]anthracene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64303	Dichlorvos, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64304	Dicrotophos, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64305	Dieldrin, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64306	Dimethoate, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64307	(E)-Dimethomorph, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64308	(Z)-Dimethomorph, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64309	Disulfoton, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64310	Disulfoton sulfone, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64311	Disulfoton sulfoxide, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64312	D-Limonene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64313	Endosulfan ether, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64314	alpha-Endosulfan, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64315	beta-Endosulfan, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64316	Endosulfan sulfate, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter

Parameter code	Parameter name
64317	Endrin, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64318	Endrin aldehyde, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64319	Endrin ketone, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64320	EPTC, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64321	Ethalfluralin, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64322	Ethion, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64323	Ethion monoxon, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64324	Ethoprophos, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64325	Fenamiphos, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64326	Fenamiphos sulfone, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64327	Fenamiphos sulfoxide, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64328	Sum of fenamiphos + fenamiphos sulfoxide + fenamiphos sulfone, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64329	Fenthion, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64330	Fenthion sulfoxide, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64331	Fipronil, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64332	Fipronil sulfide, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64333	Fipronil sulfone, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64334	Flumetralin, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64335	Fluoranthene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64336	Fonofos, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64337	Fonofos oxygen analog, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64338	Heptachlor, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64339	Heptachlor epoxide, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter

Parameter code	Parameter name
64340	Hexachlorobenzene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64341	Hexahydrohexamethyl cyclopentabenzopyran, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64342	Hexazinone, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64343	Indeno[1,2,3-cd]pyrene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64344	Indole, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64345	Iprodione, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64346	Isoborneol, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64347	Isodrin, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64348	Isofenphos, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64349	Isophorone, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64350	Isopropylbenzene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64351	Isoquinoline, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64352	lambda-Cyhalothrin, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64353	Lindane, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64354	Linuron, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64355	Malaoxon, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64356	Malathion, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64357	Menthol, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64358	Metalaxyl, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64359	Methidathion, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64360	Methylsalicylate, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64361	Metolachlor, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64362	Metribuzin, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter

Parameter code	Parameter name
64363	Mirex, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64364	Molinate, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64365	Myclobutanil, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64366	DEET, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64367	Naphthalene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64368	Napropamide, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64369	4-Nonylphenol diethoxylate (sum of all isomers), air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64370	o,p'-DDD, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64371	o,p'-DDE, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64372	o,p'-DDT, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64373	Octachlorostyrene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64374	4-Octylphenol diethoxylate (sum of all isomers), air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64375	4-Octylphenol monoethoxylate (sum of all isomers), air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64376	O-Ethyl-O-methyl-S-propylphosphorothioate, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64377	Oxychlordane, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64378	Oxyfluorfen, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64379	p,p'-DDD, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64380	p,p'-DDE, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64381	p,p'-DDT, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64382	4-Nonylphenol (sum of all isomers), air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64383	Paraoxon, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64384	Methyl paraoxon, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64385	Parathion, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter

Parameter code	Parameter name
64386	Methyl parathion, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64387	BDE congener 28, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64388	BDE congener 47, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64389	BDE congener 66, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64390	BDE congener 71, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64391	BDE congener 85, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64392	BDE congener 99, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64393	BDE congener 100, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64394	BDE congener 138, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64395	BDE congener 153, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64396	BDE congener 154, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64397	BDE congener 183, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64398	BDE congener 190, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64399	BDE congener 209, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64400	PCB congener 70, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64401	PCB congener 101, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64402	PCB congener 110, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64403	PCB congener 118, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64404	PCB congener 138, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64405	PCB congener 146, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64406	PCB congener 149, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64407	PCB congener 151, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64408	PCB congener 170, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter

Parameter code	Parameter name
64409	PCB congener 174, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64410	PCB congener 177, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64411	PCB congener 180, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64412	PCB congener 183, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64413	PCB congener 187, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64414	PCB congener 194, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64415	PCB congener 206, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64416	p-Cresol, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64417	Pebulate, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64418	Pendimethalin, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64419	Pentachloroanisole, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64420	Pentachlorophenol, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64421	Perylene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64422	Phenanthrene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64423	Phenol, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64424	Phorate, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64425	Phorate oxygen analog, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64426	Phosmet, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64427	Phosmet oxygen analog, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64428	PCBs, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64429	Profenofos, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64430	Prometon, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64431	Prometryn, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter

Parameter code	Parameter name
64432	Propachlor, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64433	Propanil, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64434	Propargite, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64435	Propetamphos, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64436	Propyzamide, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64437	Pyrene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64438	Simazine, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64439	Sulfotepp, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64440	Sulprofos, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64441	Tebupirimphos, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64442	Tebupirimphos oxygen analog, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64443	Tebuthiuron, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64444	Tefluthrin, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64445	Temephos, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64446	Terbacil, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64447	Terbufos, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64448	Terbufos oxygen analog sulfone, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64449	Terbuthylazine, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64450	Tetrachloroethene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64451	Thiobencarb, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64452	Toxaphene, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64453	trans-Chlordane, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64454	trans-Nonachlor, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter

Parameter code	Parameter name
64455	trans-Propiconazole, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64456	Triallate, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64457	Tribufos, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64458	Tributyl phosphate, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64459	Triclosan, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64460	Triethylcitrate, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64461	Trifluralin, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64462	Triphenyl phosphate, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64463	Tris(2-butoxyethyl) phosphate, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64464	Tris(2-chloroethyl) phosphate, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64465	Tris(dichloroisopropyl) phosphate, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64467	11-Ketotestosterone, solids, recoverable, micrograms per kilogram
64468	17-alpha-Estradiol, solids, recoverable, micrograms per kilogram
64473	4-Androstene-3,17-dione, solids, recoverable, micrograms per kilogram
64477	Epitestosterone, solids, recoverable, micrograms per kilogram
64479	Equilin, solids, recoverable, micrograms per kilogram
64480	Estriol, solids, recoverable, micrograms per kilogram
64484	Dihydrotestosterone, solids, recoverable, micrograms per kilogram
64485	Testosterone, solids, recoverable, micrograms per kilogram
64486	Trenbolone, solids, recoverable, micrograms per kilogram
64487	11-Ketotestosterone, suspended sediment, recoverable, nanograms per liter
64488	17-alpha-Estradiol, suspended sediment, recoverable, nanograms per liter
64489	17-alpha-Ethynyl estradiol, suspended sediment, recoverable, nanograms per liter
64490	17-beta-Estradiol, suspended sediment, recoverable, nanograms per liter
64491	Norethindrone, suspended sediment, recoverable, nanograms per liter
64492	3-beta-Coprostanol, suspended sediment, recoverable, nanograms per liter
64493	4-Androstene-3,17-dione, suspended sediment, recoverable, nanograms per liter
64494	Cholesterol, suspended sediment, recoverable, nanograms per liter
64495	cis-Androsterone, suspended sediment, recoverable, nanograms per liter
64496	trans-Diethylstilbestrol, suspended sediment, recoverable, nanograms per liter
64497	Epitestosterone, suspended sediment, recoverable, nanograms per liter
64498	Equilenin, suspended sediment, recoverable, nanograms per liter

Parameter code	Parameter name
64499	Equilin, suspended sediment, recoverable, nanograms per liter
64500	Estriol, suspended sediment, recoverable, nanograms per liter
64501	Estrone, suspended sediment, recoverable, nanograms per liter
64502	Mestranol, suspended sediment, recoverable, nanograms per liter
64503	Progesterone, suspended sediment, recoverable, nanograms per liter
64504	Dihydrotestosterone, suspended sediment, recoverable, nanograms per liter
64505	Testosterone, suspended sediment, recoverable, nanograms per liter
64506	Trenbolone, suspended sediment, recoverable, nanograms per liter
64507	11-Ketotestosterone, water, filtered, recoverable, nanograms per liter
64508	17-alpha-Estradiol, water, filtered, recoverable, nanograms per liter
64509	17-alpha-Ethynyl estradiol, water, filtered, recoverable, nanograms per liter
64510	17-beta-Estradiol, water, filtered, recoverable, nanograms per liter
64511	Norethindrone, water, filtered, recoverable, nanograms per liter
64512	3-beta-Coprostanol, water, filtered, recoverable, nanograms per liter
64513	4-Androstene-3,17-dione, water, filtered, recoverable, nanograms per liter
64514	Cholesterol, water, filtered, recoverable, nanograms per liter
64515	cis-Androsterone, water, filtered, recoverable, nanograms per liter
64516	trans-Diethylstilbestrol, water, filtered, recoverable, nanograms per liter
64517	Epitestosterone, water, filtered, recoverable, nanograms per liter
64518	Equilenin, water, filtered, recoverable, nanograms per liter
64519	Equilin, water, filtered, recoverable, nanograms per liter
64520	Estriol, water, filtered, recoverable, nanograms per liter
64521	Estrone, water, filtered, recoverable, nanograms per liter
64522	Mestranol, water, filtered, recoverable, nanograms per liter
64523	Progesterone, water, filtered, recoverable, nanograms per liter
64524	Dihydrotestosterone, water, filtered, recoverable, nanograms per liter
64525	Testosterone, water, filtered, recoverable, nanograms per liter
64526	Trenbolone, water, filtered, recoverable, nanograms per liter
64527	11-Ketotestosterone, water, unfiltered, recoverable, nanograms per liter
64528	17-alpha-Estradiol, water, unfiltered, recoverable, nanograms per liter
64529	17-alpha-Ethynyl estradiol, water, unfiltered, recoverable, nanograms per liter
64530	17-beta-Estradiol, water, unfiltered, recoverable, nanograms per liter
64531	Norethindrone, water, unfiltered, recoverable, nanograms per liter
64532	3-beta-Coprostanol, water, unfiltered, recoverable, nanograms per liter
64533	4-Androstene-3,17-dione, water, unfiltered, recoverable, nanograms per liter
64534	Cholesterol, water, unfiltered, recoverable, nanograms per liter
64535	cis-Androsterone, water, unfiltered, recoverable, nanograms per liter
64536	trans-Diethylstilbestrol, water, unfiltered, recoverable, nanograms per liter
64537	Epitestosterone, water, unfiltered, recoverable, nanograms per liter
64538	Equilenin, water, unfiltered, recoverable, nanograms per liter

Parameter code	Parameter name
64539	Equilin, water, unfiltered, recoverable, nanograms per liter
64540	Estriol, water, unfiltered, recoverable, nanograms per liter
64541	Estrone, water, unfiltered, recoverable, nanograms per liter
64542	Mestranol, water, unfiltered, recoverable, nanograms per liter
64543	Progesterone, water, unfiltered, recoverable, nanograms per liter
64544	Dihydrotestosterone, water, unfiltered, recoverable, nanograms per liter
64545	Testosterone, water, unfiltered, recoverable, nanograms per liter
64546	Trenbolone, water, unfiltered, recoverable, nanograms per liter
64547	11-Ketotestosterone, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64548	17-alpha-Estradiol, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64549	17-alpha-Ethynyl estradiol, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64550	17-beta-Estradiol, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64552	3-beta-Coprostanol, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64553	4-Androstene-3,17-dione, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64554	Cholesterol, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64555	cis-Androsterone, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64557	Epitestosterone, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64558	Equilenin, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64559	Equilin, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64560	Estriol, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64561	Estrone, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64562	Mestranol, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64563	Progesterone, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64565	Testosterone, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64566	Trenbolone, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
64567	BDE congener 28, water, unfiltered, recoverable, nanograms per liter
64568	BDE congener 47, water, unfiltered, recoverable, nanograms per liter

Parameter code	Parameter name
64569	BDE congener 66, water, unfiltered, recoverable, nanograms per liter
64570	BDE congener 71, water, unfiltered, recoverable, nanograms per liter
64571	BDE congener 85, water, unfiltered, recoverable, nanograms per liter
64572	BDE congener 99, water, unfiltered, recoverable, nanograms per liter
64573	BDE congener 100, water, unfiltered, recoverable, nanograms per liter
64574	BDE congener 138, water, unfiltered, recoverable, nanograms per liter
64575	BDE congener 153, water, unfiltered, recoverable, nanograms per liter
64576	BDE congener 154, water, unfiltered, recoverable, nanograms per liter
64577	BDE congener 183, water, unfiltered, recoverable, nanograms per liter
64578	BDE congener 190, water, unfiltered, recoverable, nanograms per liter
64579	BDE congener 209, water, unfiltered, recoverable, nanograms per nanograms per liter
64580	BDE congener 28, water, filtered, recoverable, nanograms per liter
64581	BDE congener 47, water, filtered, recoverable, nanograms per liter
64582	BDE congener 66, water, filtered, recoverable, nanograms per liter
64583	BDE congener 85, water, filtered, recoverable, nanograms per liter
64584	BDE congener 99, water, filtered, recoverable, nanograms per liter
64585	BDE congener 100, water, filtered, recoverable, nanograms per liter
64586	BDE congener 138, water, filtered, recoverable, nanograms per liter
64587	BDE congener 153, water, filtered, recoverable, nanograms per liter
64588	BDE congener 154, water, filtered, recoverable, nanograms per liter
64589	BDE congener 209, water, filtered, recoverable, nanograms per nanograms per liter
64590	BDE congener 183, water, filtered, recoverable, nanograms per liter
64591	BDE congener 71, water, filtered, recoverable, nanograms per liter
64592	BDE congener 190, water, filtered, recoverable, nanograms per liter
64593	1,7-Dimethylxanthine, water, unfiltered, recoverable, nanograms per liter
64594	Acetaminophen, water, unfiltered, recoverable, nanograms per liter
64595	Alprazolam, water, unfiltered, recoverable, micrograms per liter
64596	Aspirin, water, unfiltered, recoverable, nanograms per liter
64597	Atenolol, water, unfiltered, recoverable, micrograms per liter
64598	Azithromycin, water, unfiltered, recoverable, nanograms per liter
64599	Carbamazepine, water, unfiltered, recoverable, nanograms per liter
64600	Cimetidine, water, unfiltered, recoverable, nanograms per liter
64601	Clofibric acid, water, unfiltered, recoverable, nanograms per liter
64602	Dehydronifedipine, water, unfiltered, recoverable, nanograms per liter
64603	Norsertraline, water, unfiltered, recoverable, micrograms per liter
64604	Diclofenac, water, unfiltered, recoverable, nanograms per liter
64605	Digoxigenin, water, unfiltered, recoverable, micrograms per liter
64606	Diltiazem, water, unfiltered, recoverable, nanograms per liter
64607	Diphenhydramine, water, unfiltered, recoverable, nanograms per liter
64608	Dipyrone, water, unfiltered, recoverable, micrograms per liter

Parameter code	Parameter name
64609	Erythromycin, water, unfiltered, recoverable, nanograms per liter
64610	Fluoxetine, water, unfiltered, recoverable, nanograms per liter
64611	Furosemide, water, unfiltered, recoverable, nanograms per liter
64612	Gemfibrozil, water, unfiltered, recoverable, nanograms per liter
64613	Hydrochlorothiazide, water, unfiltered, recoverable, nanograms per liter
64614	Ibuprofen, water, unfiltered, recoverable, nanograms per liter
64615	Ketoprofen, water, unfiltered, recoverable, nanograms per liter
64616	Levothyroxin, water, unfiltered, recoverable, micrograms per liter
64617	Metformin, water, unfiltered, recoverable, micrograms per liter
64618	Miconazole, water, unfiltered, recoverable, nanograms per liter
64619	Naproxen, water, unfiltered, recoverable, nanograms per liter
64620	o-Hydroxyhippuric acid, water, unfiltered, recoverable, micrograms per liter
64621	Ranitidine, water, unfiltered, recoverable, micrograms per liter
64622	Albuterol, water, unfiltered, recoverable, nanograms per liter
64623	Sertraline, water, unfiltered, recoverable, nanograms per liter
64624	Simvastatin, water, unfiltered, recoverable, nanograms per liter
64625	Sulfamethoxazole, water, unfiltered, recoverable, nanograms per liter
64626	Thiabendazole, water, unfiltered, recoverable, nanograms per liter
64627	Trimethoprim, water, unfiltered, recoverable, nanograms per liter
64628	Valproic acid, water, unfiltered, recoverable, micrograms per liter
64629	Warfarin, water, unfiltered, recoverable, nanograms per liter
64630	Alprazolam, water, filtered, recoverable, micrograms per liter
64631	Aspirin, water, filtered, recoverable, micrograms per liter
64632	Atenolol, water, filtered, recoverable, micrograms per liter
64633	Clofibric acid, water, filtered, recoverable, micrograms per liter
64634	Norsertraline, water, filtered, recoverable, micrograms per liter
64635	Dipyrone, water, filtered, recoverable, micrograms per liter
64636	Hydrochlorothiazide, water, filtered, recoverable, micrograms per liter
64637	Levothyroxin, water, filtered, recoverable, micrograms per liter
64638	o-Hydroxyhippuric acid, water, filtered, recoverable, micrograms per liter
64639	Sertraline, water, filtered, recoverable, micrograms per liter
64640	Simvastatin, water, filtered, recoverable, micrograms per liter
64641	Valproic acid, water, filtered, recoverable, micrograms per liter
64642	1,7-Dimethylxanthine, solids, recoverable, micrograms per kilogram
64643	Acetaminophen, solids, recoverable, micrograms per kilogram
64644	Alprazolam, solids, recoverable, micrograms per kilogram
64645	Aspirin, solids, recoverable, micrograms per kilogram
64646	Atenolol, solids, recoverable, micrograms per kilogram
64647	Azithromycin, solids, recoverable, micrograms per kilogram
64648	Cimetidine, solids, recoverable, micrograms per kilogram

Parameter code	Parameter name
64649	Clofibric acid, solids, recoverable, micrograms per kilogram
64650	Codeine, solids, recoverable, micrograms per kilogram
64651	Dehydronifedipine, solids, recoverable, micrograms per kilogram
64652	Norsertraline, solids, recoverable, micrograms per kilogram
64653	Diclofenac, solids, recoverable, micrograms per kilogram
64654	Digoxigenin, solids, recoverable, micrograms per kilogram
64655	Diltiazem, solids, recoverable, micrograms per kilogram
64656	Diphenhydramine, solids, recoverable, micrograms per kilogram
64657	Dipyrone, solids, recoverable, micrograms per kilogram
64658	Erythromycin, solids, recoverable, micrograms per kilogram
64659	Fluoxetine, solids, recoverable, micrograms per kilogram
64660	Furosemide, solids, recoverable, micrograms per kilogram
64661	Gemfibrozil, solids, recoverable, micrograms per kilogram
64662	Hydrochlorothiazide, solids, recoverable, micrograms per kilogram
64663	Ibuprofen, solids, recoverable, micrograms per kilogram
64664	Ketoprofen, solids, recoverable, micrograms per kilogram
64665	Levothyroxin, solids, recoverable, micrograms per kilogram
64666	Metformin, solids, recoverable, micrograms per kilogram
64667	Miconazole, solids, recoverable, micrograms per kilogram
64668	Naproxen, solids, recoverable, micrograms per kilogram
64669	o-Hydroxyhippuric acid, solids, recoverable, micrograms per kilogram
64670	Ranitidine, solids, recoverable, micrograms per kilogram
64671	Albuterol, solids, recoverable, micrograms per kilogram
64672	Sertraline, solids, recoverable, micrograms per kilogram
64673	Simvastatin, solids, recoverable, micrograms per kilogram
64674	Sulfamethoxazole, solids, recoverable, micrograms per kilogram
64675	Thiabendazole, solids, recoverable, micrograms per kilogram
64676	Trimethoprim, solids, recoverable, micrograms per kilogram
64677	Valproic acid, solids, recoverable, micrograms per kilogram
64678	Warfarin, solids, recoverable, micrograms per kilogram
64679	1,7-Dimethylxanthine, suspended sediment, recoverable, nanograms per liter
64680	Acetaminophen, suspended sediment, recoverable, nanograms per liter
64681	Alprazolam, suspended sediment, recoverable, micrograms per liter
64682	Aspirin, suspended sediment, recoverable, nanograms per liter
64683	Atenolol, suspended sediment, recoverable, micrograms per liter
64684	Azithromycin, suspended sediment, recoverable, nanograms per liter
64685	Carbamazepine, suspended sediment, recoverable, nanograms per liter
64686	Cimetidine, suspended sediment, recoverable, nanograms per liter
64687	Clofibric acid, suspended sediment, recoverable, nanograms per liter
64688	Codeine, suspended sediment, recoverable, nanograms per liter

Parameter code	Parameter name
64689	Dehydronifedipine, suspended sediment, recoverable, nanograms per liter
64690	Norsertraline, suspended sediment, recoverable, micrograms per liter
64691	Diclofenac, suspended sediment, recoverable, nanograms per liter
64692	Digoxigenin, suspended sediment, recoverable, micrograms per liter
64693	Diltiazem, suspended sediment, recoverable, nanograms per liter
64694	Diphenhydramine, suspended sediment, recoverable, nanograms per liter
64695	Dipyrone, suspended sediment, recoverable, micrograms per liter
64696	Erythromycin, suspended sediment, recoverable, nanograms per liter
64697	Fluoxetine, suspended sediment, recoverable, nanograms per liter
64698	Furosemide, suspended sediment, recoverable, nanograms per liter
64699	Gemfibrozil, suspended sediment, recoverable, nanograms per liter
64700	Hydrochlorothiazide, suspended sediment, recoverable, nanograms per liter
64701	Ibuprofen, suspended sediment, recoverable, nanograms per liter
64702	Ketoprofen, suspended sediment, recoverable, nanograms per liter
64703	Levothyroxin, suspended sediment, recoverable, micrograms per liter
64704	Metformin, suspended sediment, recoverable, micrograms per liter
64705	Miconazole, suspended sediment, recoverable, nanograms per liter
64706	Naproxen, suspended sediment, recoverable, nanograms per liter
64707	o-Hydroxyhippuric acid, suspended sediment, recoverable, micrograms per liter
64708	Ranitidine, suspended sediment, recoverable, micrograms per liter
64709	Albuterol, suspended sediment, recoverable, nanograms per liter
64710	Sertraline, suspended sediment, recoverable, nanograms per liter
64711	Simvastatin, suspended sediment, recoverable, nanograms per liter
64712	Sulfamethoxazole, suspended sediment, recoverable, nanograms per liter
64713	Thiabendazole, suspended sediment, recoverable, nanograms per liter
64714	Trimethoprim, suspended sediment, recoverable, nanograms per liter
64715	Valproic acid, suspended sediment, recoverable, micrograms per liter
64716	Warfarin, suspended sediment, recoverable, nanograms per liter
64717	PCB congener 8, solids, recoverable, dry weight, micrograms per kilogram
64718	PCB congener 18, solids, recoverable, dry weight, micrograms per kilogram
64719	PCB congener 22, solids, recoverable, dry weight, micrograms per kilogram
64720	PCB congener 26, solids, recoverable, dry weight, micrograms per kilogram
64721	PCB congener 28, solids, recoverable, dry weight, micrograms per kilogram
64722	PCB congener 31, solids, recoverable, dry weight, micrograms per kilogram
64723	PCB congener 33, solids, recoverable, dry weight, micrograms per kilogram
64724	PCB congener 44, solids, recoverable, dry weight, micrograms per kilogram
64725	PCB congener 49, solids, recoverable, dry weight, micrograms per kilogram
64726	PCB congener 52, solids, recoverable, dry weight, micrograms per kilogram
64727	PCB congener 70, solids, recoverable, dry weight, micrograms per kilogram
64728	PCB congener 95, solids, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
64729	PCB congener 101, solids, recoverable, dry weight, micrograms per kilogram
64730	PCB congener 110, solids, recoverable, dry weight, micrograms per kilogram
64731	PCB congener 118, solids, recoverable, dry weight, micrograms per kilogram
64732	PCB congener 138, solids, recoverable, dry weight, micrograms per kilogram
64733	PCB congener 146, solids, recoverable, dry weight, micrograms per kilogram
64734	PCB congener 149, solids, recoverable, dry weight, micrograms per kilogram
64735	PCB congener 151, solids, recoverable, dry weight, micrograms per kilogram
64736	PCB congener 170, solids, recoverable, dry weight, micrograms per kilogram
64737	PCB congener 174, solids, recoverable, dry weight, micrograms per kilogram
64738	PCB congener 177, solids, recoverable, dry weight, micrograms per kilogram
64739	PCB congener 180, solids, recoverable, dry weight, micrograms per kilogram
64740	PCB congener 183, solids, recoverable, dry weight, micrograms per kilogram
64741	PCB congener 187, solids, recoverable, dry weight, micrograms per kilogram
64742	PCB congener 194, solids, recoverable, dry weight, micrograms per kilogram
64743	PCB congener 206, solids, recoverable, dry weight, micrograms per kilogram
64744	2-Ketomolinate, water, filtered, recoverable, micrograms per liter
64745	4-Ketomolinate, water, filtered, recoverable, micrograms per liter
64746	Diethatyl ethyl, suspended sediment, recoverable, micrograms per liter
64747	Mercury, wet atmospheric deposition, unfiltered, nanograms per liter
64748	Methylmercury, wet atmospheric deposition, unfiltered, nanograms per liter
64751	Reactive gaseous mercury, air, picograms per cubic meter
64753	Particulate-bound mercury, air, picograms per cubic meter
64755	Elemental mercury, air, picograms per cubic meter
64757	PCB congener 3, water, unfiltered, recoverable, nanograms per liter
64758	PCB congeners 4 plus 10, water, unfiltered, recoverable, nanograms per liter
64759	PCB congeners 5 plus 8, water, unfiltered, recoverable, nanograms per liter
64760	PCB congener 6, water, unfiltered, recoverable, nanograms per liter
64761	PCB congeners 7 plus 9, water, unfiltered, recoverable, nanograms per liter
64762	PCB congeners 15 plus 17, water, unfiltered, recoverable, nanograms per liter
64763	PCB congeners 16 plus 32, water, unfiltered, recoverable, nanograms per liter
64764	PCB congener 18, water, unfiltered, recoverable, nanograms per liter
64765	PCB congener 19, water, unfiltered, recoverable, nanograms per liter
64766	PCB congener 22, water, unfiltered, recoverable, nanograms per liter
64767	PCB congeners 24 plus 27, water, unfiltered, recoverable, nanograms per liter
64768	PCB congener 25, water, unfiltered, recoverable, nanograms per liter
64769	PCB congener 26, water, unfiltered, recoverable, nanograms per liter
64770	PCB congeners 28 plus 31, water, unfiltered, recoverable, nanograms per liter
64771	PCB congener 33, water, unfiltered, recoverable, nanograms per liter
64772	PCB congeners 37 plus 42, water, unfiltered, recoverable, nanograms per liter
64773	PCB congener 40, water, unfiltered, recoverable, nanograms per liter

Parameter code	Parameter name
64774	PCB congeners 41 plus 64 plus 71, water, unfiltered, recoverable, nanograms per liter
64775	PCB congener 44, water, unfiltered, recoverable, nanograms per liter
64776	PCB congener 45, water, unfiltered, recoverable, nanograms per liter
64777	PCB congener 46, water, unfiltered, recoverable, nanograms per liter
64778	PCB congeners 47 plus 48, water, unfiltered, recoverable, nanograms per liter
64779	PCB congener 49, water, unfiltered, recoverable, nanograms per liter
64780	PCB congener 51, water, unfiltered, recoverable, nanograms per liter
64781	PCB congener 52, water, unfiltered, recoverable, nanograms per liter
64782	PCB congener 53, water, unfiltered, recoverable, nanograms per liter
64783	PCB congeners 56 plus 60, water, unfiltered, recoverable, nanograms per liter
64784	PCB congener 63, water, unfiltered, recoverable, nanograms per liter
64785	PCB congener 66, water, unfiltered, recoverable, nanograms per liter
64786	PCB congeners 70 plus 76, water, unfiltered, recoverable, nanograms per liter
64787	PCB congener 74, water, unfiltered, recoverable, nanograms per liter
64788	PCB congeners 77 plus 110, water, unfiltered, recoverable, nanograms per liter
64789	PCB congener 82, water, unfiltered, recoverable, nanograms per liter
64790	PCB congener 83, water, unfiltered, recoverable, nanograms per liter
64791	PCB congeners 84 plus 92, water, unfiltered, recoverable, nanograms per liter
64792	PCB congener 85, water, unfiltered, recoverable, nanograms per liter
64793	PCB congener 87, water, unfiltered, recoverable, nanograms per liter
64794	PCB congener 89, water, unfiltered, recoverable, nanograms per liter
64795	PCB congener 91, water, unfiltered, recoverable, nanograms per liter
64796	PCB congener 95, water, unfiltered, recoverable, nanograms per liter
64797	PCB congener 97, water, unfiltered, recoverable, nanograms per liter
64798	PCB congener 99, water, unfiltered, recoverable, nanograms per liter
64799	PCB congener 101, water, unfiltered, recoverable, nanograms per liter
64800	PCB congeners 105 plus 132 plus 153, water, unfiltered, recoverable, nanograms per liter
64801	PCB congener 118, water, unfiltered, recoverable, nanograms per liter
64802	PCB congeners 123 plus 149, water, unfiltered, recoverable, nanograms per liter
64803	PCB congener 128, water, unfiltered, recoverable, nanograms per liter
64804	PCB congeners 135 plus 144, water, unfiltered, recoverable, nanograms per liter
64805	PCB congener 136, water, unfiltered, recoverable, nanograms per liter
64806	PCB congeners 137 plus 176, water, unfiltered, recoverable, nanograms per liter
64807	PCB congeners 138 plus 163, water, unfiltered, recoverable, nanograms per liter
64808	PCB congener 141, water, unfiltered, recoverable, nanograms per liter
64809	PCB congener 146, water, unfiltered, recoverable, nanograms per liter
64810	PCB congener 151, water, unfiltered, recoverable, nanograms per liter
64811	PCB congener 158, water, unfiltered, recoverable, nanograms per liter
64812	PCB congener 167, water, unfiltered, recoverable, nanograms per liter
64813	PCB congeners 170 plus 190, water, unfiltered, recoverable, nanograms per liter

Parameter code	Parameter name
64814	PCB congeners 171 plus 202, water, unfiltered, recoverable, nanograms per liter
64815	PCB congener 172, water, unfiltered, recoverable, nanograms per liter
64816	PCB congener 174, water, unfiltered, recoverable, nanograms per liter
64817	PCB congener 177, water, unfiltered, recoverable, nanograms per liter
64818	PCB congener 178, water, unfiltered, recoverable, nanograms per liter
64819	PCB congener 180, water, unfiltered, recoverable, nanograms per liter
64820	PCB congener 183, water, unfiltered, recoverable, nanograms per liter
64821	PCB congener 185, water, unfiltered, recoverable, nanograms per liter
64822	PCB congeners 182 plus 187, water, unfiltered, recoverable, nanograms per liter
64823	PCB congener 193, water, unfiltered, recoverable, nanograms per liter
64824	PCB congener 194, water, unfiltered, recoverable, nanograms per liter
64825	PCB congeners 195 plus 208, water, unfiltered, recoverable, nanograms per liter
64826	PCB congeners 196 plus 203, water, unfiltered, recoverable, nanograms per liter
64827	PCB congener 198, water, unfiltered, recoverable, nanograms per liter
64828	PCB congener 199, water, unfiltered, recoverable, nanograms per liter
64829	PCB congener 201, water, unfiltered, recoverable, nanograms per liter
64830	PCB congener 206, water, unfiltered, recoverable, nanograms per liter
64831	PCB congener 207, water, unfiltered, recoverable, nanograms per liter
64832	Nitrate, water, filtered, micrograms per liter as nitrogen
64833	Cadmium, solids, extracted by 6N hydrochloric acid, recoverable, dry weight, milligrams per kilogram
64835	Butyric acid, water, unfiltered, recoverable, milligrams per liter
64836	Formic acid, water, unfiltered, recoverable, milligrams per liter
64837	Lactic acid, water, unfiltered, recoverable, milligrams per liter
64838	Propionic acid, water, unfiltered, recoverable, milligrams per liter
64839	Pyruvic acid, water, unfiltered, recoverable, milligrams per liter
64840	Beryllium, biota, tissue, recoverable, wet weight, micrograms per gram
64841	Lithium, biota, tissue, recoverable, wet weight, micrograms per gram
64842	Calcium, biota, tissue, recoverable, dry weight, micrograms per gram
64843	Lithium, biota, tissue, recoverable, dry weight, micrograms per gram
64844	Magnesium, biota, tissue, recoverable, dry weight, micrograms per gram
64845	Potassium, biota, tissue, recoverable, dry weight, micrograms per gram
64846	Sodium, biota, tissue, recoverable, dry weight, micrograms per gram
64847	Arsenic, bed sediment, recoverable, dry weight, micrograms per gram
64848	Selenium, bed sediment, recoverable, dry weight, micrograms per gram
64849	Vanadium, bed sediment, recoverable, dry weight, micrograms per gram
64850	4,4'-Dibromooctafluorobiphenyl, solids, recoverable, dry weight, micrograms per kilogram
64851	Aldrin, solids, recoverable, dry weight, micrograms per kilogram
64852	BDE congener 66, solids, recoverable, dry weight, micrograms per kilogram
64853	BDE congener 71, solids, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
64854	BDE congener 85, solids, recoverable, dry weight, micrograms per kilogram
64855	BDE congener 99, solids, recoverable, dry weight, micrograms per kilogram
64856	BDE congener 100, solids, recoverable, dry weight, micrograms per kilogram
64857	BDE congener 138, solids, recoverable, dry weight, micrograms per kilogram
64858	BDE congener 153, solids, recoverable, dry weight, micrograms per kilogram
64859	BDE congener 154, solids, recoverable, dry weight, micrograms per kilogram
64860	BDE congener 183, solids, recoverable, dry weight, micrograms per kilogram
64861	BDE congener 209, solids, recoverable, dry weight, micrograms per kilogram
64862	Chloridazon, solids, recoverable, dry weight, micrograms per kilogram
64863	Hexabromocyclododecane, solids, recoverable, dry weight, micrograms per kilogram
64864	Nonachlorobiphenyl, solids, recoverable, dry weight, micrograms per kilogram
64865	Octachlorobiphenyl, solids, recoverable, dry weight, micrograms per kilogram
64866	Oxychlordane, solids, recoverable, dry weight, micrograms per kilogram
64867	Pentabromotoluene, solids, recoverable, dry weight, micrograms per kilogram
64868	1,2-Bis(2,4,6-tribromophenoxy)ethane, solids, recoverable, dry weight, micrograms per kilogram
64869	Toxaphene, solids, recoverable, dry weight, micrograms per kilogram
64870	2-(Methylthio)benzothiazole, solids, recoverable, dry weight, micrograms per kilogram
64871	2,4-Dihydroxybenzophenone, solids, recoverable, dry weight, micrograms per kilogram
64872	2-Hydroxy-4-methoxybenzophenone, solids, recoverable, dry weight, micrograms per kilogram
64873	2-Hydroxy-4-n-octyloxybenzophenone, solids, recoverable, dry weight, micrograms per kilogram
64874	Acetyl cedrene, solids, recoverable, dry weight, micrograms per kilogram
64875	alpha-Isomethyl ionone, solids, recoverable, dry weight, micrograms per kilogram
64876	alpha-Pinene, solids, recoverable, dry weight, micrograms per kilogram
64877	alpha-Terpineol, solids, recoverable, dry weight, micrograms per kilogram
64878	Amyl cinnamal, solids, recoverable, dry weight, micrograms per kilogram
64879	Benzyl benzoate, solids, recoverable, dry weight, micrograms per kilogram
64880	Benzyl cinnamate, solids, recoverable, dry weight, micrograms per kilogram
64881	Benzyl salicylate, solids, recoverable, dry weight, micrograms per kilogram
64882	Camphene, solids, recoverable, dry weight, micrograms per kilogram
64883	Celestolide, solids, recoverable, dry weight, micrograms per kilogram
64884	Chlorophene, solids, recoverable, dry weight, micrograms per kilogram
64885	Cinnamal, solids, recoverable, dry weight, micrograms per kilogram
64886	Citral, solids, recoverable, dry weight, micrograms per kilogram
64887	Citronellol, solids, recoverable, dry weight, micrograms per kilogram
64888	Coumaran, solids, recoverable, dry weight, micrograms per kilogram
64889	Coumarin, solids, recoverable, dry weight, micrograms per kilogram
64890	Farnesol, solids, recoverable, dry weight, micrograms per kilogram
64891	trans-Geraniol, solids, recoverable, dry weight, micrograms per kilogram
64892	Isophytol, solids, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
64893	Lanolin, solids, recoverable, dry weight, micrograms per kilogram
64894	Linalool, solids, recoverable, dry weight, micrograms per kilogram
64895	Octyl methoxycinnamate, solids, recoverable, dry weight, micrograms per kilogram
64896	1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone, solids, recoverable, dry weight, micrograms per kilogram
64897	Panthenol, solids, recoverable, dry weight, micrograms per kilogram
64898	Permethrin, solids, recoverable, dry weight, micrograms per kilogram
64899	Phantolide, solids, recoverable, dry weight, micrograms per kilogram
64900	Phytol, solids, recoverable, dry weight, micrograms per kilogram
64901	Tetrabromophthalic anhydride, solids, recoverable, dry weight, micrograms per kilogram
64902	Vitamin E acetate, solids, recoverable, dry weight, micrograms per kilogram
64903	Iodide, water, unfiltered, milligrams per liter
64904	Mercury, solids, recoverable, dry weight, micrograms per gram
64905	Triclocarban, water, filtered, recoverable, micrograms per liter
64906	Iron, bed sediment, recoverable, dry weight, micrograms per gram
64907	N-Cyclopropyl-N'-(1,1-dimethylethyl)-6-(methylthio)-1,3,5-triazine-2,4-diamine, solids, recoverable, dry weight, micrograms per kilogram
64908	1,2,4-Trichlorobenzene, water, recoverable, nanograms per semipermeable membrane device
64909	1,2-Dichlorobenzene, water, recoverable, nanograms per semipermeable membrane device
64910	1,2-Dimethylnaphthalene, water, recoverable, nanograms per semipermeable membrane device
64911	1,3-Dichlorobenzene, water, recoverable, nanograms per semipermeable membrane device
64912	1,4-Dichlorobenzene, water, recoverable, nanograms per semipermeable membrane device
64913	1,6-Dimethylnaphthalene, water, recoverable, nanograms per semipermeable membrane device
64914	1-Methyl-9H-fluorene, water, recoverable, nanograms per semipermeable membrane device
64915	1-Methylphenanthrene, water, recoverable, nanograms per semipermeable membrane device
64916	1-Methylpyrene, water, recoverable, nanograms per semipermeable membrane device
64917	2,2'-Biquinoline, water, recoverable, nanograms per semipermeable membrane device
64918	2,3,5,6-Tetramethylphenol, water, recoverable, nanograms per semipermeable membrane device
64919	2,3,6-Trimethylnaphthalene, water, recoverable, nanograms per semipermeable membrane device
64920	2,4,6-Trichlorophenol, water, recoverable, nanograms per semipermeable membrane device
64921	2,4,6-Trimethylphenol, water, recoverable, nanograms per semipermeable membrane device
64922	2,4-Dichlorophenol, water, recoverable, nanograms per semipermeable membrane device
64923	2,4-Dinitrophenol, water, recoverable, nanograms per semipermeable membrane device
64924	2,4-Dinitrotoluene, water, recoverable, nanograms per semipermeable membrane device
64925	2,6-Diethylaniline, water, recoverable, nanograms per semipermeable membrane device
64926	2,6-Dimethylnaphthalene, water, recoverable, nanograms per semipermeable membrane device
64927	2,6-Dinitrotoluene, water, recoverable, nanograms per semipermeable membrane device
64928	2-Chloro-4-isopropylamino-6-amino-s-triazine, water, recoverable, nanograms per semipermeable membrane device
64929	2-Chloronaphthalene, water, recoverable, nanograms per semipermeable membrane device
64930	2-Chlorophenol, water, recoverable, nanograms per semipermeable membrane device

Parameter code	Parameter name
64931	2-Ethylnaphthalene, water, recoverable, nanograms per semipermeable membrane device
64932	2-Methylanthracene, water, recoverable, nanograms per semipermeable membrane device
64933	2-Nitrophenol, water, recoverable, nanograms per semipermeable membrane device
64934	3,5-Dimethylphenol, water, recoverable, nanograms per semipermeable membrane device
64935	4,6-Dinitro-2-methylphenol, water, recoverable, nanograms per semipermeable membrane device
64936	4-Bromophenyl phenyl ether, water, recoverable, nanograms per semipermeable membrane device
64937	4-Chloro-3-methylphenol, water, recoverable, nanograms per semipermeable membrane device
64938	4-Chlorophenyl phenyl ether, water, recoverable, nanograms per semipermeable membrane device
64939	4H-Cyclopenta[def]phenanthrene, water, recoverable, nanograms per semipermeable membrane device
64940	4-Nitrophenol, water, recoverable, nanograms per semipermeable membrane device
64941	Acenaphthene, water, recoverable, nanograms per semipermeable membrane device
64942	Acenaphthylene, water, recoverable, nanograms per semipermeable membrane device
64943	Acetochlor, water, recoverable, nanograms per semipermeable membrane device
64944	Acridine, water, recoverable, nanograms per semipermeable membrane device
64945	Alachlor, water, recoverable, nanograms per semipermeable membrane device
64946	Aldrin, water, recoverable, nanograms per semipermeable membrane device
64947	alpha-HCH, water, recoverable, nanograms per semipermeable membrane device
64948	Anthracene, water, recoverable, nanograms per semipermeable membrane device
64949	9,10-Anthraquinone, water, recoverable, nanograms per semipermeable membrane device
64950	Atrazine, water, recoverable, nanograms per semipermeable membrane device
64951	Azinphos-methyl, water, recoverable, nanograms per semipermeable membrane device
64952	Azobenzene, water, recoverable, nanograms per semipermeable membrane device
64953	Benfluralin, water, recoverable, nanograms per semipermeable membrane device
64954	Benzo[a]anthracene, water, recoverable, nanograms per semipermeable membrane device
64955	Benzo[a]pyrene, water, recoverable, nanograms per semipermeable membrane device
64956	Benzo[b]fluoranthene, water, recoverable, nanograms per semipermeable membrane device
64957	Benzo[c]cinnoline, water, recoverable, nanograms per semipermeable membrane device
64958	Benzo[ghi]perylene, water, recoverable, nanograms per semipermeable membrane device
64959	Benzo[k]fluoranthene, water, recoverable, nanograms per semipermeable membrane device
64960	beta-HCH, water, recoverable, nanograms per semipermeable membrane device
64961	Bis(2-chloroethoxy)methane, water, recoverable, nanograms per semipermeable membrane device
64962	Bis(2-chloroethyl) ether, water, recoverable, nanograms per semipermeable membrane device
64963	Bis(2-chloroisopropyl) ether, water, recoverable, nanograms per semipermeable membrane device
64964	Bis(2-ethylhexyl) phthalate, water, recoverable, nanograms per semipermeable membrane device
64965	Butylate, water, recoverable, nanograms per semipermeable membrane device
64966	Butylbenzyl phthalate, water, recoverable, nanograms per semipermeable membrane device

Parameter code	Parameter name
64967	C8-Alkylphenol, water, recoverable, nanograms per semipermeable membrane device
64968	Carbaryl, water, recoverable, nanograms per semipermeable membrane device
64969	Carbazole, water, recoverable, nanograms per semipermeable membrane device
64970	Carbofuran, water, recoverable, nanograms per semipermeable membrane device
64971	Chlorpyrifos, water, recoverable, nanograms per semipermeable membrane device
64972	Chrysene, water, recoverable, nanograms per semipermeable membrane device
64973	cis-Chlordane, water, recoverable, nanograms per semipermeable membrane device
64974	cis-Nonachlor, water, recoverable, nanograms per semipermeable membrane device
64975	cis-Permethrin, water, recoverable, nanograms per semipermeable membrane device
64976	Cyanazine, water, recoverable, nanograms per semipermeable membrane device
64977	DCPA, water, recoverable, nanograms per semipermeable membrane device
64978	delta-HCH, water, recoverable, nanograms per semipermeable membrane device
64979	Desulfinylfipronil, water, recoverable, nanograms per semipermeable membrane device
64980	Desulfinylfipronil amide, water, recoverable, nanograms per semipermeable membrane device
64981	Diazinon, water, recoverable, nanograms per semipermeable membrane device
64982	Dibenzo[a,h]anthracene, water, recoverable, nanograms per semipermeable membrane device
64983	Dibenzothiophene, water, recoverable, nanograms per semipermeable membrane device
64984	Dieldrin, water, recoverable, nanograms per semipermeable membrane device
64985	Diethyl phthalate, water, recoverable, nanograms per semipermeable membrane device
64986	Dimethyl phthalate, water, recoverable, nanograms per semipermeable membrane device
64987	Di-n-butyl phthalate, water, recoverable, nanograms per semipermeable membrane device
64988	Di-n-octyl phthalate, water, recoverable, nanograms per semipermeable membrane device
64989	Disulfoton, water, recoverable, nanograms per semipermeable membrane device
64990	Endrin, water, recoverable, nanograms per semipermeable membrane device
64991	EPTC, water, recoverable, nanograms per semipermeable membrane device
64992	Ethalfluralin, water, recoverable, nanograms per semipermeable membrane device
64993	Ethoprophos, water, recoverable, nanograms per semipermeable membrane device
64994	Fipronil, water, recoverable, nanograms per semipermeable membrane device
64995	Fipronil sulfide, water, recoverable, nanograms per semipermeable membrane device
64996	Fipronil sulfone, water, recoverable, nanograms per semipermeable membrane device
64997	Fluoranthene, water, recoverable, nanograms per semipermeable membrane device
64998	Fluorene, water, recoverable, nanograms per semipermeable membrane device
64999	Fonofos, water, recoverable, nanograms per semipermeable membrane device
65000	Heptachlor, water, recoverable, nanograms per semipermeable membrane device
65001	Heptachlor epoxide, water, recoverable, nanograms per semipermeable membrane device
65002	Hexachlorobenzene, water, recoverable, nanograms per semipermeable membrane device
65003	Hexachlorobutadiene, water, recoverable, nanograms per semipermeable membrane device
65004	Hexachlorocyclopentadiene, water, recoverable, nanograms per semipermeable membrane device
65005	Hexachloroethane, water, recoverable, nanograms per semipermeable membrane device
65006	Indeno[1,2,3-cd]pyrene, water, recoverable, nanograms per semipermeable membrane device

Parameter code	Parameter name
65007	Isophorone, water, recoverable, nanograms per semipermeable membrane device
65008	Isoquinoline, water, recoverable, nanograms per semipermeable membrane device
65009	Lindane, water, recoverable, nanograms per semipermeable membrane device
65011	Linuron, water, recoverable, nanograms per semipermeable membrane device
65012	Malathion, water, recoverable, nanograms per semipermeable membrane device
65013	Metolachlor, water, recoverable, nanograms per semipermeable membrane device
65014	Metribuzin, water, recoverable, nanograms per semipermeable membrane device
65015	Mirex, water, recoverable, nanograms per semipermeable membrane device
65016	Molinate, water, recoverable, nanograms per semipermeable membrane device
65017	Naphthalene, water, recoverable, nanograms per semipermeable membrane device
65018	Napropamide, water, recoverable, nanograms per semipermeable membrane device
65019	Nitrobenzene, water, recoverable, nanograms per semipermeable membrane device
65020	N-Nitrosodi-n-propylamine, water, recoverable, nanograms per semipermeable membrane device
65021	N-Nitrosodiphenylamine, water, recoverable, nanograms per semipermeable membrane device
65022	o,p'-DDD, water, recoverable, nanograms per semipermeable membrane device
65023	o,p'-DDE, water, recoverable, nanograms per semipermeable membrane device
65024	o,p'-DDT, water, recoverable, nanograms per semipermeable membrane device
65025	o,p'-Methoxychlor, water, recoverable, nanograms per semipermeable membrane device
65026	Oxychlordane, water, recoverable, nanograms per semipermeable membrane device
65027	p,p'-DDD, water, recoverable, nanograms per semipermeable membrane device
65028	p,p'-DDE, water, recoverable, nanograms per semipermeable membrane device
65029	p,p'-DDT, water, recoverable, nanograms per semipermeable membrane device
65030	p,p'-Methoxychlor, water, recoverable, nanograms per semipermeable membrane device
65031	Parathion, water, recoverable, nanograms per semipermeable membrane device
65032	Methyl parathion, water, recoverable, nanograms per semipermeable membrane device
65033	p-Cresol, water, recoverable, nanograms per semipermeable membrane device
65034	Pebulate, water, recoverable, nanograms per semipermeable membrane device
65035	Pendimethalin, water, recoverable, nanograms per semipermeable membrane device
65036	Pentachloroanisole, water, recoverable, nanograms per semipermeable membrane device
65037	Pentachloronitrobenzene, water, recoverable, nanograms per semipermeable membrane device
65038	Pentachlorophenol, water, recoverable, nanograms per semipermeable membrane device
65039	Phenanthrene, water, recoverable, nanograms per semipermeable membrane device
65040	Phenanthridine, water, recoverable, nanograms per semipermeable membrane device
65041	Phenol, water, recoverable, nanograms per semipermeable membrane device
65042	Phorate, water, recoverable, nanograms per semipermeable membrane device
65043	PCBs, water, recoverable, nanograms per semipermeable membrane device
65044	Prometon, water, recoverable, nanograms per semipermeable membrane device
65045	Propachlor, water, recoverable, nanograms per semipermeable membrane device
65046	Propanil, water, recoverable, nanograms per semipermeable membrane device
65047	Propargite, water, recoverable, nanograms per semipermeable membrane device

Parameter code	Parameter name
65048	Propyzamide, water, recoverable, nanograms per semipermeable membrane device
65049	Pyrene, water, recoverable, nanograms per semipermeable membrane device
65050	Quinoline, water, recoverable, nanograms per semipermeable membrane device
65051	Simazine, water, recoverable, nanograms per semipermeable membrane device
65052	Tebuthiuron, water, recoverable, nanograms per semipermeable membrane device
65053	Terbacil, water, recoverable, nanograms per semipermeable membrane device
65054	Terbufos, water, recoverable, nanograms per semipermeable membrane device
65055	Thiobencarb, water, recoverable, nanograms per semipermeable membrane device
65056	Toxaphene, water, recoverable, nanograms per semipermeable membrane device
65057	trans-Chlordane, water, recoverable, nanograms per semipermeable membrane device
65058	trans-Nonachlor, water, recoverable, nanograms per semipermeable membrane device
65059	Triallate, water, recoverable, nanograms per semipermeable membrane device
65060	Trifluralin, water, recoverable, nanograms per semipermeable membrane device
65061	1-Nitroso-3,5-dinitro-1,3,5-triazacyclohexane, water, unfiltered, recoverable, micrograms per liter
65062	1,3-Dinitroso-5-nitro-1,3,5-triazacyclohexane, water, unfiltered, recoverable, micrograms per liter
65063	1,3,5-Trinitroso-1,3,5-triazacyclohexane, water, unfiltered, recoverable, micrograms per liter
65064	Alachlor, water, filtered, recoverable, nanograms per liter
65065	Atrazine, water, filtered, recoverable, nanograms per liter
65066	Azinphos-methyl, water, filtered, recoverable, nanograms per liter
65067	Bifenthrin, water, filtered, recoverable, nanograms per liter
65068	Butylate, water, filtered, recoverable, nanograms per liter
65069	Carbaryl, water, filtered, recoverable, nanograms per liter
65070	Carbofuran, water, filtered, recoverable, nanograms per liter
65071	Chlorothalonil, water, filtered, recoverable, nanograms per liter
65072	Chlorpyrifos, water, filtered, recoverable, nanograms per liter
65073	Cycloate, water, filtered, recoverable, nanograms per liter
65074	Cyfluthrin, water, filtered, recoverable, nanograms per liter
65075	Cypermethrin, water, filtered, recoverable, nanograms per liter
65076	DCPA, water, filtered, recoverable, nanograms per liter
65077	Deltamethrin, water, filtered, recoverable, nanograms per liter
65078	Diazinon, water, filtered, recoverable, nanograms per liter
65079	Diethatyl-ethyl, water, filtered, recoverable, nanograms per liter
65080	EPTC, water, filtered, recoverable, nanograms per liter
65081	Esfenvalerate, water, filtered, recoverable, nanograms per liter
65082	Ethalfluralin, water, filtered, recoverable, nanograms per liter
65083	Fenpropathrin, water, filtered, recoverable, nanograms per liter
65084	Fonofos, water, filtered, recoverable, nanograms per liter
65085	Hexazinone, water, filtered, recoverable, nanograms per liter
65086	lambda-Cyhalothrin, water, filtered, recoverable, nanograms per liter

Parameter code	Parameter name
65087	Malathion, water, filtered, recoverable, nanograms per liter
65088	Methidathion, water, filtered, recoverable, nanograms per liter
65089	Methyl parathion, water, filtered, recoverable, nanograms per liter
65090	Metolachlor, water, filtered, recoverable, nanograms per liter
65091	Molinate, water, filtered, recoverable, nanograms per liter
65092	Napropamide, water, filtered, recoverable, nanograms per liter
65093	Oxyfluorfen, water, filtered, recoverable, nanograms per liter
65094	p,p'-DDD, water, filtered, recoverable, nanograms per liter
65095	p,p'-DDE, water, filtered, recoverable, nanograms per liter
65096	p,p'-DDT, water, filtered, recoverable, nanograms per liter
65097	Pebulate, water, filtered, recoverable, nanograms per liter
65098	Pendimethalin, water, filtered, recoverable, nanograms per liter
65099	Permethrin, water, filtered, recoverable, nanograms per liter
65100	Phenothrin, water, filtered, recoverable, nanograms per liter
65101	Phosmet, water, filtered, recoverable, nanograms per liter
65102	Piperonyl butoxide, water, filtered, recoverable, nanograms per liter
65103	Prometryn, water, filtered, recoverable, nanograms per liter
65104	Resmethrin, water, filtered, recoverable, nanograms per liter
65105	Simazine, water, filtered, recoverable, nanograms per liter
65106	tau-Fluvalinate, water, filtered, recoverable, nanograms per liter
65107	Thiobencarb, water, filtered, recoverable, nanograms per liter
65108	Trifluralin, water, filtered, recoverable, nanograms per liter
65109	Cyfluthrin, bed sediment, recoverable, dry weight, micrograms per kilogram
65110	Deltamethrin, bed sediment, recoverable, dry weight, micrograms per kilogram
65111	Fenpropathrin, bed sediment, recoverable, dry weight, micrograms per kilogram
65112	Phenothrin, bed sediment, recoverable, dry weight, micrograms per kilogram
65113	Resmethrin, bed sediment, recoverable, dry weight, micrograms per kilogram
65114	tau-Fluvalinate, bed sediment, recoverable, dry weight, micrograms per kilogram
65115	Azinphos-methyl, suspended sediment, recoverable, dry weight, micrograms per kilogram
65116	Butylate, suspended sediment, recoverable, dry weight, micrograms per kilogram
65117	Carbaryl, suspended sediment, recoverable, dry weight, micrograms per kilogram
65118	Carbofuran, suspended sediment, recoverable, dry weight, micrograms per kilogram
65119	Chlorothalonil, suspended sediment, recoverable, dry weight, micrograms per kilogram
65120	Chlorpyrifos, suspended sediment, recoverable, dry weight, micrograms per kilogram
65121	Cycloate, suspended sediment, recoverable, dry weight, micrograms per kilogram
65122	Cyfluthrin, suspended sediment, recoverable, dry weight, micrograms per kilogram
65123	Cypermethrin, suspended sediment, recoverable, dry weight, micrograms per kilogram
65124	DCPA, suspended sediment, recoverable, dry weight, micrograms per kilogram
65125	Deltamethrin, suspended sediment, recoverable, dry weight, micrograms per kilogram
65126	Diazinon, suspended sediment, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
65127	Diethatyl-ethyl, suspended sediment, recoverable, dry weight, micrograms per kilogram
65128	EPTC, suspended sediment, recoverable, dry weight, micrograms per kilogram
65129	Esfenvalerate, suspended sediment, recoverable, dry weight, micrograms per kilogram
65130	Ethalfluralin, suspended sediment, recoverable, dry weight, micrograms per kilogram
65131	Fenpropathrin, suspended sediment, recoverable, dry weight, micrograms per kilogram
65132	Fonofos, suspended sediment, recoverable, dry weight, micrograms per kilogram
65133	Hexazinone, suspended sediment, recoverable, dry weight, micrograms per kilogram
65134	lambda-Cyhalothrin, suspended sediment, recoverable, dry weight, micrograms per kilogram
65135	Malathion, suspended sediment, recoverable, dry weight, micrograms per kilogram
65136	Methidathion, suspended sediment, recoverable, dry weight, micrograms per kilogram
65137	Methyl parathion, suspended sediment, recoverable, dry weight, micrograms per kilogram
65138	Molinate, suspended sediment, recoverable, dry weight, micrograms per kilogram
65139	Napropamide, suspended sediment, recoverable, dry weight, micrograms per kilogram
65140	Oxyfluorfen, suspended sediment, recoverable, dry weight, micrograms per kilogram
65141	Pebulate, suspended sediment, recoverable, dry weight, micrograms per kilogram
65142	Pendimethalin, suspended sediment, recoverable, dry weight, micrograms per kilogram
65143	Permethrin, suspended sediment, recoverable, dry weight, micrograms per kilogram
65144	Phenothrin, suspended sediment, recoverable, dry weight, micrograms per kilogram
65145	Phosmet, suspended sediment, recoverable, dry weight, micrograms per kilogram
65146	Piperonyl butoxide, suspended sediment, recoverable, dry weight, micrograms per kilogram
65147	Resmethrin, suspended sediment, recoverable, dry weight, micrograms per kilogram
65148	tau-Fluvalinate, suspended sediment, recoverable, dry weight, micrograms per kilogram
65149	Thiobencarb, suspended sediment, recoverable, dry weight, micrograms per kilogram
65150	Atrazine, water, unfiltered, immunoassay, micrograms per liter
65151	Metolachlor, water, unfiltered, immunoassay, micrograms per liter
65152	Simazine, water, unfiltered, immunoassay, micrograms per liter
65153	Diazinon, water, unfiltered, immunoassay, micrograms per liter
65154	Chlorpyrifos, water, unfiltered, immunoassay, micrograms per liter
65155	alpha-HCH, water, unfiltered, recoverable, nanograms per liter
65156	cis-Chlordane, water, unfiltered, recoverable, nanograms per liter
65157	cis-Nonachlor, water, unfiltered, recoverable, nanograms per liter
65158	Hexachlorobenzene, water, unfiltered, recoverable, nanograms per liter
65159	Lindane, water, unfiltered, recoverable, nanograms per liter
65160	Oxychlordane, water, unfiltered, recoverable, nanograms per liter
65161	p,p'-DDD, water, unfiltered, recoverable, nanograms per liter
65162	p,p'-DDE, water, unfiltered, recoverable, nanograms per liter
65163	p,p'-DDT, water, unfiltered, recoverable, nanograms per liter
65164	trans-Chlordane, water, unfiltered, recoverable, nanograms per liter
65165	trans-Nonachlor, water, unfiltered, recoverable, nanograms per liter
65166	Toxaphene, water, unfiltered, recoverable, nanograms per liter

Parameter code	Parameter name
65167	alpha-Apo-oxytetracycline, water, filtered, recoverable, micrograms per liter
65168	beta-Apo-oxytetracycline, water, filtered, recoverable, micrograms per liter
65169	Methylene blue active substances, water, filtered, recoverable, milligrams per liter
65170	Aluminum, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
65171	Calcium, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
65172	Cesium, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
65173	Iron, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
65174	Magnesium, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
65175	Phosphorus, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
65176	Potassium, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
65177	Rubidium, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
65178	Sodium, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
65179	Titanium, bed sediment smaller than 62.5 microns, wet sieved, field, total digestion, dry weight, micrograms per gram
65180	Carisoprodol, water, filtered, recoverable, micrograms per liter
65181	Carisoprodol, water, unfiltered, recoverable, micrograms per liter
65182	Carisoprodol, solids, recoverable, dry weight, micrograms per kilogram
65183	Methocarbamol, water, filtered, recoverable, micrograms per liter
65184	Methocarbamol, solids, recoverable, dry weight, micrograms per kilogram
65185	Microcystin LW, water, filtered, recoverable, micrograms per liter
65186	Microcystin LF, water, filtered, recoverable, micrograms per liter
65187	Microcystin YR, water, filtered, recoverable, micrograms per liter
65188	Microcystin LA, water, filtered, recoverable, micrograms per liter
65189	Nodularin, water, filtered, recoverable, micrograms per liter
65190	Cylindrospermopsin, water, filtered, recoverable, micrograms per liter
65191	Anatoxin-a, water, filtered, recoverable, micrograms per liter
65192	beta-N-Methylamino alanine, water, filtered, recoverable, micrograms per liter
65193	Domoic acid, water, filtered, recoverable, micrograms per liter
65194	Chloramphenicol, water, filtered, recoverable, micrograms per liter
65195	m-Cresol plus p-Cresol, water, unfiltered, recoverable, micrograms per liter
65196	Aluminum, solids, recoverable, dry weight, micrograms per gram
65197	Lithium, solids, recoverable, dry weight, micrograms per gram
65198	Potassium, solids, recoverable, dry weight, micrograms per gram
65199	Silver, solids, recoverable, dry weight, micrograms per gram

Parameter code	Parameter name
65200	Strontium, solids, recoverable, dry weight, micrograms per gram
65201	Tin, solids, recoverable, dry weight, micrograms per gram
65202	Aroclor 1016, solids, recoverable, dry weight, micrograms per kilogram
65203	Aroclor 1221, solids, recoverable, dry weight, micrograms per kilogram
65204	Aroclor 1232, solids, recoverable, dry weight, micrograms per kilogram
65205	Aroclor 1242, solids, recoverable, dry weight, micrograms per kilogram
65206	Aroclor 1248, solids, recoverable, dry weight, micrograms per kilogram
65207	Aroclor 1254, solids, recoverable, dry weight, micrograms per kilogram
65208	Aroclor 1260, solids, recoverable, dry weight, micrograms per kilogram
65209	Environmental (cells not digested) microcystin, unfiltered water, unextracted, ADDA specific ELISA, micrograms per liter
65210	Total microcystin, unfiltered water, freeze/thaw extraction, ADDA specific ELISA, micrograms per liter
65211	Dissolved microcystin, filtered water, ADDA specific ELISA, micrograms per liter
65212	Antimony, bed sediment, recoverable, dry weight, micrograms per gram
65213	Thallium, bed sediment, recoverable, dry weight, micrograms per gram
65214	Tungsten, bed sediment, recoverable, dry weight, micrograms per gram
65215	Endothal, water, filtered, recoverable, micrograms per liter
65216	Fluridone, water, filtered, recoverable, micrograms per liter
65217	Octachlorostyrene, solids, recoverable, dry weight, micrograms per kilogram
65218	Tetrachloro- through octachloro- polychlorinated napthalenes (mixture), solids, recoverable, dry weight, micrograms per kilogram
65219	2,6-Dichloro-4-nitroaniline (dicloran), solids, recoverable, dry weight, micrograms per kilogram
65220	Bis(hexachlorocyclopentadieno) cyclooctane, solids, recoverable, dry weight, micrograms per kilogram
65222	Carbon-14 in organic carbon 1-sigma uncertainty, water, filtered, percent modern
65224	Carbon-13/Carbon-12 ratio in organic carbon 1-sigma uncertainty, water, filtered, per mil
65226	Perfluorooctane sulfonate, water, unfiltered, recoverable, nanograms per liter
65227	Perfluorooctanoic acid, water, unfiltered, recoverable, nanograms per liter
65228	Chlorophyll b, water, unfiltered, trichromatic method, uncorrected, micrograms per liter
65229	Chlorophyll c, water, unfiltered, trichromatic method, uncorrected, micrograms per liter
65231	Chlorophyll *a*, water, in situ, in vivo fluorescence, micrograms per liter
65232	Tin, bed sediment, recoverable, dry weight, micrograms per gram
65233	Terbuthylazine, water, recoverable, nanograms per semipermeable membrane device
65234	2,7-Dimethylnaphthalene, bed sediment, recoverable, dry weight, micrograms per kilogram
65235	1-Methylnaphthalene, bed sediment, recoverable, dry weight, micrograms per kilogram
65236	2-Methylnaphthalene, bed sediment, recoverable, dry weight, micrograms per kilogram
65238	Sulfur, bed sediment, total digestion, dry weight, milligrams per kilogram
65239	Formate, water, filtered (0.2 micron filter), recoverable, milligrams per liter
65240	Acetate, water, filtered (0.2 micron filter), recoverable, milligrams per liter
65246	Azoxystrobin, water, filtered, recoverable, micrograms per liter

Parameter code	Parameter name
65247	Boscalid, water, filtered, recoverable, micrograms per liter
65248	Cyproconazole, water, filtered, recoverable, micrograms per liter
65249	Metconazole, water, filtered, recoverable, micrograms per liter
65250	Pyraclostrobin, water, filtered, recoverable, micrograms per liter
65251	Tetraconazole, water, filtered, recoverable, micrograms per liter
65252	Trifloxystrobin, water, filtered, recoverable, micrograms per liter
65253	Perylene, water, unfiltered, recoverable, micrograms per liter
65254	2,4-Dinitrotoluene, solids, recoverable, dry weight, micrograms per kilogram
65255	11-Ketotestosterone, biota, tissue, recoverable, wet weight, micrograms per kilogram
65256	17-alpha-Estradiol, biota, tissue, recoverable, wet weight, micrograms per kilogram
65257	17-alpha-Ethynyl estradiol, biota, tissue, recoverable, wet weight, micrograms per kilogram
65258	17-beta-Estradiol, biota, tissue, recoverable, wet weight, micrograms per kilogram
65259	Norethindrone, biota, tissue, recoverable, wet weight, micrograms per kilogram
65260	3-beta-Coprostanol, biota, tissue, recoverable, wet weight, micrograms per kilogram
65261	4-Androstene-3,17-dione, biota, tissue, recoverable, wet weight, micrograms per kilogram
65262	Cholesterol, biota, tissue, recoverable, wet weight, micrograms per kilogram
65263	cis-Androsterone, biota, tissue, recoverable, wet weight, micrograms per kilogram
65264	trans-Diethylstilbestrol, biota, tissue, recoverable, wet weight, micrograms per kilogram
65265	Epitestosterone, biota, tissue, recoverable, wet weight, micrograms per kilogram
65266	Equilenin, biota, tissue, recoverable, wet weight, micrograms per kilogram
65267	Equilin, biota, tissue, recoverable, wet weight, micrograms per kilogram
65268	Estriol, biota, tissue, recoverable, wet weight, micrograms per kilogram
65269	Estrone, biota, tissue, recoverable, wet weight, micrograms per kilogram
65270	Mestranol, biota, tissue, recoverable, wet weight, micrograms per kilogram
65271	Progesterone, biota, tissue, recoverable, wet weight, micrograms per kilogram
65272	Dihydrotestosterone, biota, tissue, recoverable, wet weight, micrograms per kilogram
65273	Testosterone, biota, tissue, recoverable, wet weight, micrograms per kilogram
65274	Trenbolone, biota, tissue, recoverable, wet weight, micrograms per kilogram
65275	11-Ketotestosterone, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
65276	17-alpha-Estradiol, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
65277	17-alpha-Ethynyl estradiol, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
65278	17-beta-Estradiol, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
65279	Norethindrone, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
65280	3-beta-Coprostanol, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
65281	4-Androstene-3,17-dione, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)

Parameter code	Parameter name
65282	Cholesterol, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
65283	cis-Androsterone, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
65284	trans-Diethylstilbestrol, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
65285	Epitestosterone, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
65286	Equilenin, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
65287	Equilin, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
65288	Estriol, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
65289	Estrone, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
65290	Mestranol, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
65291	Progesterone, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
65292	Dihydrotestosterone, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
65293	Testosterone, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
65294	Trenbolone, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
65295	1,2-Dimethylnaphthalene, air, particulate filter, recoverable, nanograms per cubic meter
65296	1,6-Dimethylnaphthalene, air, particulate filter, recoverable, nanograms per cubic meter
65297	1-Methyl-9H-fluorene, air, particulate filter, recoverable, nanograms per cubic meter
65298	1-Methylphenanthrene, air, particulate filter, recoverable, nanograms per cubic meter
65299	1-Methylpyrene, air, particulate filter, recoverable, nanograms per cubic meter
65300	2,3,6-Trimethylnaphthalene, air, particulate filter, recoverable, nanograms per cubic meter
65301	2,6-Dimethylnaphthalene, air, particulate filter, recoverable, nanograms per cubic meter
65302	2-Ethylnaphthalene, air, particulate filter, recoverable, nanograms per cubic meter
65303	2-Methylanthracene, air, particulate filter, recoverable, nanograms per cubic meter
65304	4H-Cyclopenta[def]phenanthrene, air, particulate filter, recoverable, nanograms per cubic meter
65305	9H-Fluorene, air, particulate filter, recoverable, nanograms per cubic meter
65306	Acenaphthene, air, particulate filter, recoverable, nanograms per cubic meter
65307	Acenaphthylene, air, particulate filter, recoverable, nanograms per cubic meter
65308	Anthracene, air, particulate filter, recoverable, nanograms per cubic meter
65309	Benzo[a]anthracene, air, particulate filter, recoverable, nanograms per cubic meter
65310	Benzo[a]pyrene, air, particulate filter, recoverable, nanograms per cubic meter
65311	Benzo[b]fluoranthene, air, particulate filter, recoverable, nanograms per cubic meter
65312	Benzo[e]pyrene, air, particulate filter, recoverable, nanograms per cubic meter
65313	Benzo[ghi]perylene, air, particulate filter, recoverable, nanograms per cubic meter
65314	Benzo[k]fluoranthene, air, particulate filter, recoverable, nanograms per cubic meter

Parameter code	Parameter name
65315	Chrysene, air, particulate filter, recoverable, nanograms per cubic meter
65316	Coronene, air, particulate filter, recoverable, nanograms per cubic meter
65317	Dibenzo[a,h]anthracene, air, particulate filter, recoverable, nanograms per cubic meter
65318	Fluoranthene, air, particulate filter, recoverable, nanograms per cubic meter
65319	Indeno[1,2,3-cd]pyrene, air, particulate filter, recoverable, nanograms per cubic meter
65320	Naphthalene, air, particulate filter, recoverable, nanograms per cubic meter
65321	Perylene, air, particulate filter, recoverable, nanograms per cubic meter
65322	Phenanthrene, air, particulate filter, recoverable, nanograms per cubic meter
65323	Pyrene, air, particulate filter, recoverable, nanograms per cubic meter
65324	C1-128 Isomers, methylated naphthalenes, air, particulate filter, recoverable, nanograms per cubic meter
65325	C1-178 Isomers, methylated phenanthrenes/anthracenes, air, particulate filter, recoverable, nanograms per cubic meter
65326	C1-202 Isomers, methylated fluoranthenes/pyrenes, air, particulate filter, recoverable, nanograms per cubic meter
65327	C1-228 Isomers, methylated benzo[a]anthracenes/chrysenes, air, particulate filter, recoverable, nanograms per cubic meter
65328	C1-252 Isomers, C1-methylated benzopyrenes/perylenes, air, particulate filter, recoverable, nanograms per cubic meter
65329	C2-128 Isomers, C2-alkylated naphthalenes, air, particulate filter, recoverable, nanograms per cubic meter
65330	C2-178 Isomers, C2-alkylated phenanthrenes/anthracenes, air, particulate filter, recoverable, nanograms per cubic meter
65331	C2-202 Isomers, C2-alkylated fluoranthenes/pyrenes, air, particulate filter, recoverable, nanograms per cubic meter
65332	C2-228 Isomers, C2-alkylated benzo[a]anthracenes/chrysenes, air, particulate filter, recoverable, nanograms per cubic meter
65333	C2-252 Isomers, C2-alkylated benzopyrenes/perylenes, air, particulate filter, recoverable, nanograms per cubic meter
65334	C3-128 Isomers, C3-alkylated naphthalenes, air, particulate filter, recoverable, nanograms per cubic meter
65335	C3-178 Isomers, C3-alkylated phenanthrenes/anthracenes, air, particulate filter, recoverable, nanograms per cubic meter
65336	C3-202 Isomers, C3-alkylated fluoranthenes/pyrenes, air, particulate filter, recoverable, nanograms per cubic meter
65337	C3-228 Isomers, C3-alkylated benzo[a]anthracenes/chrysenes, air, particulate filter, recoverable, nanograms per cubic meter
65338	C3-252 Isomers, C3-alkylated benzopyrenes/perylenes, air, particulate filter, recoverable, nanograms per cubic meter
65339	C4-128 Isomers, C4-alkylated naphthalenes, air, particulate filter, recoverable, nanograms per cubic meter
65340	C4-178 Isomers, C4-alkylated phenanthrenes/anthracenes, air, particulate filter, recoverable, nanograms per cubic meter

Parameter code	Parameter name
65341	C4-202 Isomers, C4-alkylated fluoranthenes/pyrenes, air, particulate filter, recoverable, nanograms per cubic meter
65342	C4-228 Isomers, C4-alkylated benzo[a]anthracenes/chrysenes, air, particulate filter, recoverable, nanograms per cubic meter
65343	C4-252 Isomers, C4-alkylated benzopyrenes/perylenes, air, particulate filter, recoverable, nanograms per cubic meter
65344	C5-128 Isomers, C5-alkylated naphthalenes, air, particulate filter, recoverable, nanograms per cubic meter
65345	C5-178 Isomers, C5-alkylated phenanthrenes/anthracenes, air, particulate filter, recoverable, nanograms per cubic meter
65346	C5-202 Isomers, C5-alkylated fluoranthenes/pyrenes, air, particulate filter, recoverable, nanograms per cubic meter
65347	C5-228 Isomers, C5-alkylated benzo[a]anthracenes/chrysenes, air, particulate filter, recoverable, nanograms per cubic meter
65348	C5-252 Isomers, C5-alkylated benzopyrenes/perylenes, air, particulate filter, recoverable, nanograms per cubic meter
65349	1,2-Dimethylnaphthalene, air, top sorbent trap, recoverable, nanograms per cubic meter
65350	1,6-Dimethylnaphthalene, air, top sorbent trap, recoverable, nanograms per cubic meter
65351	1-Methyl-9H-fluorene, air, top sorbent trap, recoverable, nanograms per cubic meter
65352	1-Methylphenanthrene, air, top sorbent trap, recoverable, nanograms per cubic meter
65353	1-Methylpyrene, air, top sorbent trap, recoverable, nanograms per cubic meter
65354	2,3,6-Trimethylnaphthalene, air, top sorbent trap, recoverable, nanograms per cubic meter
65355	2,6-Dimethylnaphthalene, air, top sorbent trap, recoverable, nanograms per cubic meter
65356	2-Ethylnaphthalene, air, top sorbent trap, recoverable, nanograms per cubic meter
65357	2-Methylanthracene, air, top sorbent trap, recoverable, nanograms per cubic meter
65358	4H-Cyclopenta[def]phenanthrene, air, top sorbent trap, recoverable, nanograms per cubic meter
65359	9H-Fluorene, air, top sorbent trap, recoverable, nanograms per cubic meter
65360	Acenaphthene, air, top sorbent trap, recoverable, nanograms per cubic meter
65361	Acenaphthylene, air, top sorbent trap, recoverable, nanograms per cubic meter
65362	Anthracene, air, top sorbent trap, recoverable, nanograms per cubic meter
65363	Benzo[a]anthracene, air, top sorbent trap, recoverable, nanograms per cubic meter
65364	Benzo[a]pyrene, air, top sorbent trap, recoverable, nanograms per cubic meter
65365	Benzo[b]fluoranthene, air, top sorbent trap, recoverable, nanograms per cubic meter
65366	Benzo[e]pyrene, air, top sorbent trap, recoverable, nanograms per cubic meter
65367	Benzo[ghi]perylene, air, top sorbent trap, recoverable, nanograms per cubic meter
65368	Benzo[k]fluoranthene, air, top sorbent trap, recoverable, nanograms per cubic meter
65369	Chrysene, air, top sorbent trap, recoverable, nanograms per cubic meter
65370	Coronene, air, top sorbent trap, recoverable, nanograms per cubic meter
65371	Dibenzo[a,h]anthracene, air, top sorbent trap, recoverable, nanograms per cubic meter
65372	Fluoranthene, air, top sorbent trap, recoverable, nanograms per cubic meter
65373	Indeno[1,2,3-cd]pyrene, air, top sorbent trap, recoverable, nanograms per cubic meter
65374	Naphthalene, air, top sorbent trap, recoverable, nanograms per cubic meter

Parameter code	Parameter name
65375	Perylene, air, top sorbent trap, recoverable, nanograms per cubic meter
65376	Phenanthrene, air, top sorbent trap, recoverable, nanograms per cubic meter
65377	Pyrene, air, top sorbent trap, recoverable, nanograms per cubic meter
65378	C1-128 Isomers, methylated naphthalenes, air, top sorbent trap, recoverable, nanograms per cubic meter
65379	C1-178 Isomers, methylated phenanthrenes/anthracenes, air, top sorbent trap, recoverable, nanograms per cubic meter
65380	C1-202 Isomers, methylated fluoranthenes/pyrenes, air, top sorbent trap, recoverable, nanograms per cubic meter
65381	C1-228 Isomers, methylated benzo[a]anthracenes/chrysenes, air, top sorbent trap, recoverable, nanograms per cubic meter
65382	C1-252 Isomers, C1-methylated benzopyrenes/perylenes, air, top sorbent trap, recoverable, nanograms per cubic meter
65383	C2-128 Isomers, C2-alkylated naphthalenes, air, top sorbent trap, recoverable, nanograms per cubic meter
65384	C2-178 Isomers, C2-alkylated phenanthrenes/anthracenes, air, top sorbent trap, recoverable, nanograms per cubic meter
65385	C2-202 Isomers, C2-alkylated fluoranthenes/pyrenes, air, top sorbent trap, recoverable, nanograms per cubic meter
65386	C2-228 Isomers, C2-alkylated benzo[a]anthracenes/chrysenes, air, top sorbent trap, recoverable, nanograms per cubic meter
65387	C2-252 Isomers, C2-alkylated benzopyrenes/perylenes, air, top sorbent trap, recoverable, nanograms per cubic meter
65388	C3-128 Isomers, C3-alkylated naphthalenes, air, top sorbent trap, recoverable, nanograms per cubic meter
65389	C3-178 Isomers, C3-alkylated phenanthrenes/anthracenes, air, top sorbent trap, recoverable, nanograms per cubic meter
65390	C3-202 Isomers, C3-alkylated fluoranthenes/pyrenes, air, top sorbent trap, recoverable, nanograms per cubic meter
65391	C3-228 Isomers, C3-alkylated benzo[a]anthracenes/chrysenes, air, top sorbent trap, recoverable, nanograms per cubic meter
65392	C3-252 Isomers, C3-alkylated benzopyrenes/perylenes, air, top sorbent trap, recoverable, nanograms per cubic meter
65393	C4-128 Isomers, C4-alkylated naphthalenes, air, top sorbent trap, recoverable, nanograms per cubic meter
65394	C4-178 Isomers, C4-alkylated phenanthrenes/anthracenes, air, top sorbent trap, recoverable, nanograms per cubic meter
65395	C4-202 Isomers, C4-alkylated fluoranthenes/pyrenes, air, top sorbent trap, recoverable, nanograms per cubic meter
65396	C4-228 Isomers, C4-alkylated benzo[a]anthracenes/chrysenes, air, top sorbent trap, recoverable, nanograms per cubic meter
65397	C4-252 Isomers, C4-alkylated benzopyrenes/perylenes, air, top sorbent trap, recoverable, nanograms per cubic meter
65398	C5-128 Isomers, C5-alkylated naphthalenes, air, top sorbent trap, recoverable, nanograms per cubic meter

Parameter code	Parameter name
65399	C5-178 Isomers, C5-alkylated phenanthrenes/anthracenes, air, top sorbent trap, recoverable, nanograms per cubic meter
65400	C5-202 Isomers, C5-alkylated fluoranthenes/pyrenes, air, top sorbent trap, recoverable, nanograms per cubic meter
65401	C5-228 Isomers, C5-alkylated benzo[a]anthracenes/chrysenes, air, top sorbent trap, recoverable, nanograms per cubic meter
65402	C5-252 Isomers, C5-alkylated benzopyrenes/perylenes, air, top sorbent trap, recoverable, nanograms per cubic meter
65403	1,2-Dimethylnaphthalene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65404	1,6-Dimethylnaphthalene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65405	1-Methyl-9H-fluorene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65406	1-Methylphenanthrene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65407	1-Methylpyrene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65408	2,3,6-Trimethylnaphthalene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65409	2,6-Dimethylnaphthalene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65410	2-Ethylnaphthalene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65411	2-Methylanthracene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65412	4H-Cyclopenta[def]phenanthrene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65413	9H-Fluorene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65414	Acenaphthene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65415	Acenaphthylene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65416	Anthracene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65417	Benzo[a]anthracene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65418	Benzo[a]pyrene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65419	Benzo[b]fluoranthene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65420	Benzo[e]pyrene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65421	Benzo[ghi]perylene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65422	Benzo[k]fluoranthene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65423	Chrysene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65424	Coronene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65425	Dibenzo[a,h]anthracene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65426	Fluoranthene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65427	Indeno[1,2,3-cd]pyrene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65428	Naphthalene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65429	Perylene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65430	Phenanthrene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65431	Pyrene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65432	C1-128 Isomers, methylated naphthalenes, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65433	C1-178 Isomers, methylated phenanthrenes/anthracenes, air, bottom sorbent trap, recoverable, nanograms per cubic meter

Parameter code	Parameter name
65434	C1-202 Isomers, methylated fluoranthenes/pyrenes, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65435	C1-228 Isomers, methylated benzo[a]anthracenes/chrysenes, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65436	C1-252 Isomers, C1-methylated benzopyrenes/perylenes, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65437	C2-128 Isomers, C2-alkylated naphthalenes, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65438	C2-178 Isomers, C2-alkylated phenanthrenes/anthracenes, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65439	C2-202 Isomers, C2-alkylated fluoranthenes/pyrenes, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65440	C2-228 Isomers, C2-alkylated benzo[a]anthracenes/chrysenes, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65441	C2-252 Isomers, C2-alkylated benzopyrenes/perylenes, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65442	C3-128 Isomers, C3-alkylated naphthalenes, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65443	C3-178 Isomers, C3-alkylated phenanthrenes/anthracenes, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65444	C3-202 Isomers, C3-alkylated fluoranthenes/pyrenes, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65445	C3-228 Isomers, C3-alkylated benzo[a]anthracenes/chrysenes, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65446	C3-252 Isomers, C3-alkylated benzopyrenes/perylenes, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65447	C4-128 Isomers, C4-alkylated naphthalenes, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65448	C4-178 Isomers, C4-alkylated phenanthrenes/anthracenes, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65449	C4-202 Isomers, C4-alkylated fluoranthenes/pyrenes, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65450	C4-228 Isomers, C4-alkylated benzo[a]anthracenes/chrysenes, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65451	C4-252 Isomers, C4-alkylated benzopyrenes/perylenes, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65452	C5-128 Isomers, C5-alkylated naphthalenes, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65453	C5-178 Isomers, C5-alkylated phenanthrenes/anthracenes, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65454	C5-202 Isomers, C5-alkylated fluoranthenes/pyrenes, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65455	C5-228 Isomers, C5-alkylated benzo[a]anthracenes/chrysenes, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65456	C5-252 Isomers, C5-alkylated benzopyrenes/perylenes, air, bottom sorbent trap, recoverable, nanograms per cubic meter

Parameter code	Parameter name
65457	1,2-Dimethylnaphthalene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65458	1,6-Dimethylnaphthalene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65459	1-Methyl-9H-fluorene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65460	1-Methylphenanthrene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65461	1-Methylpyrene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65462	2,3,6-Trimethylnaphthalene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65463	2,6-Dimethylnaphthalene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65464	2-Ethylnaphthalene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65465	2-Methylanthracene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65466	4H-Cyclopenta[def]phenanthrene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65467	9H-Fluorene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65468	Acenaphthene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65469	Acenaphthylene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65470	Anthracene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65471	Benzo[a]anthracene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65472	Benzo[a]pyrene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65473	Benzo[b]fluoranthene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65474	Benzo[e]pyrene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65475	Benzo[ghi]perylene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65476	Benzo[k]fluoranthene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65477	Chrysene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65478	Coronene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65479	Dibenzo[a,h]anthracene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65480	Fluoranthene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65481	Indeno[1,2,3-cd]pyrene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65482	Naphthalene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65483	Perylene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65484	Phenanthrene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65485	Pyrene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65486	C1-128 Isomers, methylated naphthalenes, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65487	C1-178 Isomers, methylated phenanthrenes/anthracenes, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65488	C1-202 Isomers, methylated fluoranthenes/pyrenes, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter

Parameter code	Parameter name
65489	C1-228 Isomers, methylated benzo[a]anthracenes/chrysenes, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65490	C1-252 Isomers, C1-methylated benzopyrenes/perylenes, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65491	C2-128 Isomers, C2-alkylated naphthalenes, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65492	C2-178 Isomers, C2-alkylated phenanthrenes/anthracenes, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65493	C2-202 Isomers, C2-alkylated fluoranthenes/pyrenes, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65494	C2-228 Isomers, C2-alkylated benzo[a]anthracenes/chrysenes, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65495	C2-252 Isomers, C2-alkylated benzopyrenes/perylenes, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65496	C3-128 Isomers, C3-alkylated naphthalenes, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65497	C3-178 Isomers, C3-alkylated phenanthrenes/anthracenes, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65498	C3-202 Isomers, C3-alkylated fluoranthenes/pyrenes, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65499	C3-228 Isomers, C3-alkylated benzo[a]anthracenes/chrysenes, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65500	C3-252 Isomers, C3-alkylated benzopyrenes/perylenes, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65501	C4-128 Isomers, C4-alkylated naphthalenes, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65502	C4-178 Isomers, C4-alkylated phenanthrenes/anthracenes, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65503	C4-202 Isomers, C4-alkylated fluoranthenes/pyrenes, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65504	C4-228 Isomers, C4-alkylated benzo[a]anthracenes/chrysenes, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65505	C4-252 Isomers, C4-alkylated benzopyrenes/perylenes, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65506	C5-128 Isomers, C5-alkylated naphthalenes, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65507	C5-178 Isomers, C5-alkylated phenanthrenes/anthracenes, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65508	C5-202 Isomers, C5-alkylated fluoranthenes/pyrenes, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65509	C5-228 Isomers, C5-alkylated benzo[a]anthracenes/chrysenes, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65510	C5-252 Isomers, C5-alkylated benzopyrenes/perylenes, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65511	1,4-Naphthoquinone, air, particulate filter, recoverable, nanograms per cubic meter

Parameter code	Parameter name
65512	1-Naphthol, air, particulate filter, recoverable, nanograms per cubic meter
65513	2-(4-tert-Butylphenoxy)-cyclohexanol, air, particulate filter, recoverable, nanograms per cubic meter
65514	2,5-Dichloroaniline, air, particulate filter, recoverable, nanograms per cubic meter
65515	2,6-Diethylaniline, air, particulate filter, recoverable, nanograms per cubic meter
65516	2-Amino-N-isopropylbenzamide, air, particulate filter, recoverable, nanograms per cubic meter
65517	2-Chloro-2',6'-diethylacetanilide, air, particulate filter, recoverable, nanograms per cubic meter
65518	2-Chloro-4-isopropylamino-6-amino-s-triazine, air, particulate filter, recoverable, nanograms per cubic meter
65519	2-Ethyl-6-methylaniline, air, particulate filter, recoverable, nanograms per cubic meter
65520	3,4-Dichloroaniline, air, particulate filter, recoverable, nanograms per cubic meter
65521	3,5-Dichloroaniline, air, particulate filter, recoverable, nanograms per cubic meter
65522	3-Trifluoromethylaniline, air, particulate filter, recoverable, nanograms per cubic meter
65523	4,4'-Dichlorobenzophenone, air, particulate filter, recoverable, nanograms per cubic meter
65524	4-Chloro-2-methylphenol, air, particulate filter, recoverable, nanograms per cubic meter
65525	4-Chlorobenzylmethylsulfone, air, particulate filter, recoverable, nanograms per cubic meter
65526	Acetochlor, air, particulate filter, recoverable, nanograms per cubic meter
65527	Alachlor, air, particulate filter, recoverable, nanograms per cubic meter
65528	alpha-HCH, air, particulate filter, recoverable, nanograms per cubic meter
65529	Atrazine, air, particulate filter, recoverable, nanograms per cubic meter
65530	Azinphos-methyl, air, particulate filter, recoverable, nanograms per cubic meter
65531	Azinphos-methyl oxygen analog, air, particulate filter, recoverable, nanograms per cubic meter
65532	Benfluralin, air, particulate filter, recoverable, nanograms per cubic meter
65533	Bifenthrin, air, particulate filter, recoverable, nanograms per cubic meter
65534	Butylate, air, particulate filter, recoverable, nanograms per cubic meter
65535	Carbaryl, air, particulate filter, recoverable, nanograms per cubic meter
65536	Carbofuran, air, particulate filter, recoverable, nanograms per cubic meter
65537	Chlorpyrifos, air, particulate filter, recoverable, nanograms per cubic meter
65538	Chlorpyrifos oxygen analog, air, particulate filter, recoverable, nanograms per cubic meter
65539	cis-Permethrin, air, particulate filter, recoverable, nanograms per cubic meter
65540	cis-Propiconazole, air, particulate filter, recoverable, nanograms per cubic meter
65541	Cyanazine, air, particulate filter, recoverable, nanograms per cubic meter
65542	Cycloate, air, particulate filter, recoverable, nanograms per cubic meter
65543	Cyfluthrin, air, particulate filter, recoverable, nanograms per cubic meter
65544	Cypermethrin, air, particulate filter, recoverable, nanograms per cubic meter
65545	DCPA, air, particulate filter, recoverable, nanograms per cubic meter
65546	Desulfinylfipronil, air, particulate filter, recoverable, nanograms per cubic meter
65547	Desulfinylfipronil amide, air, particulate filter, recoverable, nanograms per cubic meter
65548	Diazinon, air, particulate filter, recoverable, nanograms per cubic meter
65549	Diazoxon, air, particulate filter, recoverable, nanograms per cubic meter
65550	Dichlorvos, air, particulate filter, recoverable, nanograms per cubic meter

Parameter code	Parameter name
65551	Dicrotophos, air, particulate filter, recoverable, nanograms per cubic meter
65552	Dieldrin, air, particulate filter, recoverable, nanograms per cubic meter
65553	Dimethoate, air, particulate filter, recoverable, nanograms per cubic meter
65554	(E)-Dimethomorph, air, particulate filter, recoverable, nanograms per cubic meter
65555	(Z)-Dimethomorph, air, particulate filter, recoverable, nanograms per cubic meter
65556	Disulfoton, air, particulate filter, recoverable, nanograms per cubic meter
65557	Disulfoton sulfone, air, particulate filter, recoverable, nanograms per cubic meter
65558	Disulfoton sulfoxide, air, particulate filter, recoverable, nanograms per cubic meter
65559	Endosulfan ether, air, particulate filter, recoverable, nanograms per cubic meter
65560	alpha-Endosulfan, air, particulate filter, recoverable, nanograms per cubic meter
65561	beta-Endosulfan, air, particulate filter, recoverable, nanograms per cubic meter
65562	Endosulfan sulfate, air, particulate filter, recoverable, nanograms per cubic meter
65563	EPTC, air, particulate filter, recoverable, nanograms per cubic meter
65564	Ethalfluralin, air, particulate filter, recoverable, nanograms per cubic meter
65565	Ethion, air, particulate filter, recoverable, nanograms per cubic meter
65566	Ethion monoxon, air, particulate filter, recoverable, nanograms per cubic meter
65567	Ethoprophos, air, particulate filter, recoverable, nanograms per cubic meter
65568	Fenamiphos, air, particulate filter, recoverable, nanograms per cubic meter
65569	Fenamiphos sulfone, air, particulate filter, recoverable, nanograms per cubic meter
65570	Fenamiphos sulfoxide, air, particulate filter, recoverable, nanograms per cubic meter
65571	Fenthion, air, particulate filter, recoverable, nanograms per cubic meter
65572	Fenthion sulfoxide, air, particulate filter, recoverable, nanograms per cubic meter
65573	Fipronil, air, particulate filter, recoverable, nanograms per cubic meter
65574	Fipronil sulfide, air, particulate filter, recoverable, nanograms per cubic meter
65575	Fipronil sulfone, air, particulate filter, recoverable, nanograms per cubic meter
65576	Flumetralin, air, particulate filter, recoverable, nanograms per cubic meter
65577	Fonofos, air, particulate filter, recoverable, nanograms per cubic meter
65578	Fonofos oxygen analog, air, particulate filter, recoverable, nanograms per cubic meter
65579	Hexazinone, air, particulate filter, recoverable, nanograms per cubic meter
65580	Iprodione, air, particulate filter, recoverable, nanograms per cubic meter
65581	Isofenphos, air, particulate filter, recoverable, nanograms per cubic meter
65582	lambda-Cyhalothrin, air, particulate filter, recoverable, nanograms per cubic meter
65583	Lindane, air, particulate filter, recoverable, nanograms per cubic meter
65584	Linuron, air, particulate filter, recoverable, nanograms per cubic meter
65585	Malaoxon, air, particulate filter, recoverable, nanograms per cubic meter
65586	Malathion, air, particulate filter, recoverable, nanograms per cubic meter
65587	Metalaxyl, air, particulate filter, recoverable, nanograms per cubic meter
65588	Methidathion, air, particulate filter, recoverable, nanograms per cubic meter
65589	Metolachlor, air, particulate filter, recoverable, nanograms per cubic meter
65590	Metribuzin, air, particulate filter, recoverable, nanograms per cubic meter

Parameter code	Parameter name
65591	Molinate, air, particulate filter, recoverable, nanograms per cubic meter
65592	Myclobutanil, air, particulate filter, recoverable, nanograms per cubic meter
65593	Napropamide, air, particulate filter, recoverable, nanograms per cubic meter
65594	O-Ethyl-O-methyl-S-propylphosphorothioate, air, particulate filter, recoverable, nanograms per cubic meter
65595	Oxyfluorfen, air, particulate filter, recoverable, nanograms per cubic meter
65596	p,p'-DDE, air, particulate filter, recoverable, nanograms per cubic meter
65597	Paraoxon, air, particulate filter, recoverable, nanograms per cubic meter
65598	Methyl paraoxon, air, particulate filter, recoverable, nanograms per cubic meter
65599	Parathion, air, particulate filter, recoverable, nanograms per cubic meter
65600	Methyl parathion, air, particulate filter, recoverable, nanograms per cubic meter
65601	Pebulate, air, particulate filter, recoverable, nanograms per cubic meter
65602	Pendimethalin, air, particulate filter, recoverable, nanograms per cubic meter
65603	Phorate, air, particulate filter, recoverable, nanograms per cubic meter
65604	Phorate oxygen analog, air, particulate filter, recoverable, nanograms per cubic meter
65605	Phosmet, air, particulate filter, recoverable, nanograms per cubic meter
65606	Phosmet oxygen analog, air, particulate filter, recoverable, nanograms per cubic meter
65607	Profenofos, air, particulate filter, recoverable, nanograms per cubic meter
65608	Prometon, air, particulate filter, recoverable, nanograms per cubic meter
65609	Prometryn, air, particulate filter, recoverable, nanograms per cubic meter
65610	Propachlor, air, particulate filter, recoverable, nanograms per cubic meter
65611	Propanil, air, particulate filter, recoverable, nanograms per cubic meter
65612	Propargite, air, particulate filter, recoverable, nanograms per cubic meter
65613	Propetamphos, air, particulate filter, recoverable, nanograms per cubic meter
65614	Propyzamide, air, particulate filter, recoverable, nanograms per cubic meter
65615	Simazine, air, particulate filter, recoverable, nanograms per cubic meter
65616	Sulfotepp, air, particulate filter, recoverable, nanograms per cubic meter
65617	Sulprofos, air, particulate filter, recoverable, nanograms per cubic meter
65618	Tebupirimphos, air, particulate filter, recoverable, nanograms per cubic meter
65619	Tebupirimphos oxygen analog, air, particulate filter, recoverable, nanograms per cubic meter
65620	Tebuthiuron, air, particulate filter, recoverable, nanograms per cubic meter
65621	Tefluthrin, air, particulate filter, recoverable, nanograms per cubic meter
65622	Temephos, air, particulate filter, recoverable, nanograms per cubic meter
65623	Terbacil, air, particulate filter, recoverable, nanograms per cubic meter
65624	Terbufos, air, particulate filter, recoverable, nanograms per cubic meter
65625	Terbufos oxygen analog sulfone, air, particulate filter, recoverable, nanograms per cubic meter
65626	Terbuthylazine, air, particulate filter, recoverable, nanograms per cubic meter
65627	Thiobencarb, air, particulate filter, recoverable, nanograms per cubic meter
65628	trans-Propiconazole, air, particulate filter, recoverable, nanograms per cubic meter
65629	Triallate, air, particulate filter, recoverable, nanograms per cubic meter

Parameter code	Parameter name
65630	Tribufos, air, particulate filter, recoverable, nanograms per cubic meter
65631	Trifluralin, air, particulate filter, recoverable, nanograms per cubic meter
65632	1,4-Naphthoquinone, air, top sorbent trap, recoverable, nanograms per cubic meter
65633	1-Naphthol, air, top sorbent trap, recoverable, nanograms per cubic meter
65634	2-(4-tert-Butylphenoxy)-cyclohexanol, air, top sorbent trap, recoverable, nanograms per cubic meter
65635	2,5-Dichloroaniline, air, top sorbent trap, recoverable, nanograms per cubic meter
65636	2,6-Diethylaniline, air, top sorbent trap, recoverable, nanograms per cubic meter
65637	2-Amino-N-isopropylbenzamide, air, top sorbent trap, recoverable, nanograms per cubic meter
65638	2-Chloro-2',6'-diethylacetanilide, air, top sorbent trap, recoverable, nanograms per cubic meter
65639	2-Chloro-4-isopropylamino-6-amino-s-triazine, air, top sorbent trap, recoverable, nanograms per cubic meter
65640	2-Ethyl-6-methylaniline, air, top sorbent trap, recoverable, nanograms per cubic meter
65641	3,4-Dichloroaniline, air, top sorbent trap, recoverable, nanograms per cubic meter
65642	3,5-Dichloroaniline, air, top sorbent trap, recoverable, nanograms per cubic meter
65643	3-Trifluoromethylaniline, air, top sorbent trap, recoverable, nanograms per cubic meter
65644	4,4'-Dichlorobenzophenone, air, top sorbent trap, recoverable, nanograms per cubic meter
65645	4-Chloro-2-methylphenol, air, top sorbent trap, recoverable, nanograms per cubic meter
65646	4-Chlorobenzylmethylsulfone, air, top sorbent trap, recoverable, nanograms per cubic meter
65647	Acetochlor, air, top sorbent trap, recoverable, nanograms per cubic meter
65648	Alachlor, air, top sorbent trap, recoverable, nanograms per cubic meter
65649	alpha-HCH, air, top sorbent trap, recoverable, nanograms per cubic meter
65650	Atrazine, air, top sorbent trap, recoverable, nanograms per cubic meter
65651	Azinphos-methyl, air, top sorbent trap, recoverable, nanograms per cubic meter
65652	Azinphos-methyl oxygen analog, air, top sorbent trap, recoverable, nanograms per cubic meter
65653	Benfluralin, air, top sorbent trap, recoverable, nanograms per cubic meter
65654	Bifenthrin, air, top sorbent trap, recoverable, nanograms per cubic meter
65655	Butylate, air, top sorbent trap, recoverable, nanograms per cubic meter
65656	Carbaryl, air, top sorbent trap, recoverable, nanograms per cubic meter
65657	Carbofuran, air, top sorbent trap, recoverable, nanograms per cubic meter
65658	Chlorpyrifos, air, top sorbent trap, recoverable, nanograms per cubic meter
65659	Chlorpyrifos oxygen analog, air, top sorbent trap, recoverable, nanograms per cubic meter
65660	cis-Permethrin, air, top sorbent trap, recoverable, nanograms per cubic meter
65661	cis-Propiconazole, air, top sorbent trap, recoverable, nanograms per cubic meter
65662	Cyanazine, air, top sorbent trap, recoverable, nanograms per cubic meter
65663	Cycloate, air, top sorbent trap, recoverable, nanograms per cubic meter
65664	Cyfluthrin, air, top sorbent trap, recoverable, nanograms per cubic meter
65665	Cypermethrin, air, top sorbent trap, recoverable, nanograms per cubic meter
65666	DCPA, air, top sorbent trap, recoverable, nanograms per cubic meter
65667	Desulfinylfipronil, air, top sorbent trap, recoverable, nanograms per cubic meter
65668	Desulfinylfipronil amide, air, top sorbent trap, recoverable, nanograms per cubic meter

Parameter code	Parameter name
65669	Diazinon, air, top sorbent trap, recoverable, nanograms per cubic meter
65670	Diazoxon, air, top sorbent trap, recoverable, nanograms per cubic meter
65671	Dichlorvos, air, top sorbent trap, recoverable, nanograms per cubic meter
65672	Dicrotophos, air, top sorbent trap, recoverable, nanograms per cubic meter
65673	Dieldrin, air, top sorbent trap, recoverable, nanograms per cubic meter
65674	Dimethoate, air, top sorbent trap, recoverable, nanograms per cubic meter
65675	(E)-Dimethomorph, air, top sorbent trap, recoverable, nanograms per cubic meter
65676	(Z)-Dimethomorph, air, top sorbent trap, recoverable, nanograms per cubic meter
65677	Disulfoton, air, top sorbent trap, recoverable, nanograms per cubic meter
65678	Disulfoton sulfone, air, top sorbent trap, recoverable, nanograms per cubic meter
65679	Disulfoton sulfoxide, air, top sorbent trap, recoverable, nanograms per cubic meter
65680	Endosulfan ether, air, top sorbent trap, recoverable, nanograms per cubic meter
65681	alpha-Endosulfan, air, top sorbent trap, recoverable, nanograms per cubic meter
65682	beta-Endosulfan, air, top sorbent trap, recoverable, nanograms per cubic meter
65683	Endosulfan sulfate, air, top sorbent trap, recoverable, nanograms per cubic meter
65684	EPTC, air, top sorbent trap, recoverable, nanograms per cubic meter
65685	Ethalfluralin, air, top sorbent trap, recoverable, nanograms per cubic meter
65686	Ethion, air, top sorbent trap, recoverable, nanograms per cubic meter
65687	Ethion monoxon, air, top sorbent trap, recoverable, nanograms per cubic meter
65688	Ethoprophos, air, top sorbent trap, recoverable, nanograms per cubic meter
65689	Fenamiphos, air, top sorbent trap, recoverable, nanograms per cubic meter
65690	Fenamiphos sulfone, air, top sorbent trap, recoverable, nanograms per cubic meter
65691	Fenamiphos sulfoxide, air, top sorbent trap, recoverable, nanograms per cubic meter
65692	Fenthion, air, top sorbent trap, recoverable, nanograms per cubic meter
65693	Fenthion sulfoxide, air, top sorbent trap, recoverable, nanograms per cubic meter
65694	Fipronil, air, top sorbent trap, recoverable, nanograms per cubic meter
65695	Fipronil sulfide, air, top sorbent trap, recoverable, nanograms per cubic meter
65696	Fipronil sulfone, air, top sorbent trap, recoverable, nanograms per cubic meter
65697	Flumetralin, air, top sorbent trap, recoverable, nanograms per cubic meter
65698	Fonofos, air, top sorbent trap, recoverable, nanograms per cubic meter
65699	Fonofos oxygen analog, air, top sorbent trap, recoverable, nanograms per cubic meter
65700	Hexazinone, air, top sorbent trap, recoverable, nanograms per cubic meter
65701	Iprodione, air, top sorbent trap, recoverable, nanograms per cubic meter
65702	Isofenphos, air, top sorbent trap, recoverable, nanograms per cubic meter
65703	lambda-Cyhalothrin, air, top sorbent trap, recoverable, nanograms per cubic meter
65704	Lindane, air, top sorbent trap, recoverable, nanograms per cubic meter
65705	Linuron, air, top sorbent trap, recoverable, nanograms per cubic meter
65706	Malaoxon, air, top sorbent trap, recoverable, nanograms per cubic meter
65707	Malathion, air, top sorbent trap, recoverable, nanograms per cubic meter
65708	Metalaxyl, air, top sorbent trap, recoverable, nanograms per cubic meter

Parameter code	Parameter name
65709	Methidathion, air, top sorbent trap, recoverable, nanograms per cubic meter
65710	Metolachlor, air, top sorbent trap, recoverable, nanograms per cubic meter
65711	Metribuzin, air, top sorbent trap, recoverable, nanograms per cubic meter
65712	Molinate, air, top sorbent trap, recoverable, nanograms per cubic meter
65713	Myclobutanil, air, top sorbent trap, recoverable, nanograms per cubic meter
65714	Napropamide, air, top sorbent trap, recoverable, nanograms per cubic meter
65715	O-Ethyl-O-methyl-S-propylphosphorothioate, air, top sorbent trap, recoverable, nanograms per cubic meter
65716	Oxyfluorfen, air, top sorbent trap, recoverable, nanograms per cubic meter
65717	p,p'-DDE, air, top sorbent trap, recoverable, nanograms per cubic meter
65718	Paraoxon, air, top sorbent trap, recoverable, nanograms per cubic meter
65719	Methyl paraoxon, air, top sorbent trap, recoverable, nanograms per cubic meter
65720	Parathion, air, top sorbent trap, recoverable, nanograms per cubic meter
65721	Methyl parathion, air, top sorbent trap, recoverable, nanograms per cubic meter
65722	Pebulate, air, top sorbent trap, recoverable, nanograms per cubic meter
65723	Pendimethalin, air, top sorbent trap, recoverable, nanograms per cubic meter
65724	Phorate, air, top sorbent trap, recoverable, nanograms per cubic meter
65725	Phorate oxygen analog, air, top sorbent trap, recoverable, nanograms per cubic meter
65726	Phosmet, air, top sorbent trap, recoverable, nanograms per cubic meter
65727	Phosmet oxygen analog, air, top sorbent trap, recoverable, nanograms per cubic meter
65728	Profenofos, air, top sorbent trap, recoverable, nanograms per cubic meter
65729	Prometon, air, top sorbent trap, recoverable, nanograms per cubic meter
65730	Prometryn, air, top sorbent trap, recoverable, nanograms per cubic meter
65731	Propachlor, air, top sorbent trap, recoverable, nanograms per cubic meter
65732	Propanil, air, top sorbent trap, recoverable, nanograms per cubic meter
65733	Propargite, air, top sorbent trap, recoverable, nanograms per cubic meter
65734	Propetamphos, air, top sorbent trap, recoverable, nanograms per cubic meter
65735	Propyzamide, air, top sorbent trap, recoverable, nanograms per cubic meter
65736	Simazine, air, top sorbent trap, recoverable, nanograms per cubic meter
65737	Sulfotepp, air, top sorbent trap, recoverable, nanograms per cubic meter
65738	Sulprofos, air, top sorbent trap, recoverable, nanograms per cubic meter
65739	Tebupirimphos, air, top sorbent trap, recoverable, nanograms per cubic meter
65740	Tebupirimphos oxygen analog, air, top sorbent trap, recoverable, nanograms per cubic meter
65741	Tebuthiuron, air, top sorbent trap, recoverable, nanograms per cubic meter
65742	Tefluthrin, air, top sorbent trap, recoverable, nanograms per cubic meter
65743	Temephos, air, top sorbent trap, recoverable, nanograms per cubic meter
65744	Terbacil, air, top sorbent trap, recoverable, nanograms per cubic meter
65745	Terbufos, air, top sorbent trap, recoverable, nanograms per cubic meter
65746	Terbufos oxygen analog sulfone, air, top sorbent trap, recoverable, nanograms per cubic meter
65747	Terbuthylazine, air, top sorbent trap, recoverable, nanograms per cubic meter

Parameter code	Parameter name
65748	Thiobencarb, air, top sorbent trap, recoverable, nanograms per cubic meter
65749	trans-Propiconazole, air, top sorbent trap, recoverable, nanograms per cubic meter
65750	Triallate, air, top sorbent trap, recoverable, nanograms per cubic meter
65751	Tribufos, air, top sorbent trap, recoverable, nanograms per cubic meter
65752	Trifluralin, air, top sorbent trap, recoverable, nanograms per cubic meter
65753	1,4-Naphthoquinone, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65754	1-Naphthol, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65755	2-(4-tert-Butylphenoxy)-cyclohexanol, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65756	2,5-Dichloroaniline, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65757	2,6-Diethylaniline, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65758	2-Amino-N-isopropylbenzamide, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65759	2-Chloro-2',6'-diethylacetanilide, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65760	2-Chloro-4-isopropylamino-6-amino-s-triazine, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65761	2-Ethyl-6-methylaniline, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65762	3,4-Dichloroaniline, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65763	3,5-Dichloroaniline, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65764	3-Trifluoromethylaniline, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65765	4,4'-Dichlorobenzophenone, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65766	4-Chloro-2-methylphenol, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65767	4-Chlorobenzylmethylsulfone, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65768	Acetochlor, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65769	Alachlor, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65770	alpha-HCH, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65771	Atrazine, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65772	Azinphos-methyl, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65773	Azinphos-methyl oxygen analog, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65774	Benfluralin, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65775	Bifenthrin, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65776	Butylate, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65777	Carbaryl, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65778	Carbofuran, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65779	Chlorpyrifos, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65780	Chlorpyrifos oxygen analog, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65781	cis-Permethrin, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65782	cis-Propiconazole, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65783	Cyanazine, air, bottom sorbent trap, recoverable, nanograms per cubic meter

Parameter code	Parameter name
65784	Cycloate, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65785	Cyfluthrin, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65786	Cypermethrin, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65787	DCPA, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65788	Desulfinylfipronil, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65789	Desulfinylfipronil amide, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65790	Diazinon, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65791	Diazoxon, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65792	Dichlorvos, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65793	Dicrotophos, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65794	Dieldrin, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65795	Dimethoate, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65796	(E)-Dimethomorph, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65797	(Z)-Dimethomorph, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65798	Disulfoton, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65799	Disulfoton sulfone, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65800	Disulfoton sulfoxide, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65801	Endosulfan ether, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65802	alpha-Endosulfan, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65803	beta-Endosulfan, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65804	Endosulfan sulfate, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65805	EPTC, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65806	Ethalfluralin, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65807	Ethion, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65808	Ethion monoxon, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65809	Ethoprophos, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65810	Fenamiphos, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65811	Fenamiphos sulfone, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65812	Fenamiphos sulfoxide, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65813	Fenthion, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65814	Fenthion sulfoxide, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65815	Fipronil, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65816	Fipronil sulfide, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65817	Fipronil sulfone, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65818	Flumetralin, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65819	Fonofos, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65820	Fonofos oxygen analog, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65821	Hexazinone, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65822	Iprodione, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65823	Isofenphos, air, bottom sorbent trap, recoverable, nanograms per cubic meter

Parameter code	Parameter name
65824	lambda-Cyhalothrin, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65825	Lindane, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65826	Linuron, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65827	Malaoxon, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65828	Malathion, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65829	Metalaxyl, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65830	Methidathion, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65831	Metolachlor, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65832	Metribuzin, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65833	Molinate, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65834	Myclobutanil, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65835	Napropamide, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65836	O-Ethyl-O-methyl-S-propylphosphorothioate, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65837	Oxyfluorfen, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65838	p,p'-DDE, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65839	Paraoxon, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65840	Methyl paraoxon, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65841	Parathion, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65842	Methyl parathion, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65843	Pebulate, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65844	Pendimethalin, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65845	Phorate, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65846	Phorate oxygen analog, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65847	Phosmet, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65848	Phosmet oxygen analog, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65849	Profenofos, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65850	Prometon, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65851	Prometryn, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65852	Propachlor, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65853	Propanil, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65854	Propargite, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65855	Propetamphos, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65856	Propyzamide, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65857	Simazine, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65858	Sulfotepp, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65859	Sulprofos, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65860	Tebupirimphos, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65861	Tebupirimphos oxygen analog, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65862	Tebuthiuron, air, bottom sorbent trap, recoverable, nanograms per cubic meter

Parameter code	Parameter name
65863	Tefluthrin, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65864	Temephos, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65865	Terbacil, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65866	Terbufos, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65867	Terbufos oxygen analog sulfone, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65868	Terbuthylazine, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65869	Thiobencarb, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65870	trans-Propiconazole, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65871	Triallate, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65872	Tribufos, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65873	Trifluralin, air, bottom sorbent trap, recoverable, nanograms per cubic meter
65874	1,4-Naphthoquinone, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65875	1-Naphthol, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65876	2-(4-tert-Butylphenoxy)-cyclohexanol, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65877	2,5-Dichloroaniline, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65878	2,6-Diethylaniline, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65879	2-Amino-N-isopropylbenzamide, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65880	2-Chloro-2',6'-diethylacetanilide, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65881	2-Chloro-4-isopropylamino-6-amino-s-triazine, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65882	2-Ethyl-6-methylaniline, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65883	3,4-Dichloroaniline, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65884	3,5-Dichloroaniline, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65885	3-Trifluoromethylaniline, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65886	4,4'-Dichlorobenzophenone, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65887	4-Chloro-2-methylphenol, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65888	4-Chlorobenzylmethylsulfone, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65889	Acetochlor, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65890	Alachlor, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65891	alpha-HCH, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65892	Atrazine, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65893	Azinphos-methyl, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65894	Azinphos-methyl oxygen analog, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter

Parameter code	Parameter name
65895	Benfluralin, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65896	Bifenthrin, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65897	Butylate, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65898	Carbaryl, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65899	Carbofuran, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65900	Chlorpyrifos, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65901	Chlorpyrifos oxygen analog, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65902	cis-Permethrin, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65903	cis-Propiconazole, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65904	Cyanazine, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65905	Cycloate, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65906	Cyfluthrin, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65907	Cypermethrin, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65908	DCPA, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65909	Desulfinylfipronil, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65910	Desulfinylfipronil amide, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65911	Diazinon, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65912	Diazoxon, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65913	Dichlorvos, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65914	Dicrotophos, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65915	Dieldrin, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65916	Dimethoate, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65917	(E)-Dimethomorph, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65918	(Z)-Dimethomorph, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65919	Disulfoton, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65920	Disulfoton sulfone, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65921	Disulfoton sulfoxide, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65922	Endosulfan ether, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65923	alpha-Endosulfan, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65924	beta-Endosulfan, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65925	Endosulfan sulfate, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65926	EPTC, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65927	Ethalfluralin, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65928	Ethion, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65929	Ethion monoxon, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65930	Ethoprophos, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65931	Fenamiphos, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65932	Fenamiphos sulfone, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65933	Fenamiphos sulfoxide, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter

Parameter code	Parameter name
65934	Fenthion, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65935	Fenthion sulfoxide, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65936	Fipronil, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65937	Fipronil sulfide, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65938	Fipronil sulfone, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65939	Flumetralin, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65940	Fonofos, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65941	Fonofos oxygen analog, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65942	Hexazinone, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65943	Iprodione, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65944	Isofenphos, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65945	lambda-Cyhalothrin, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65946	Lindane, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65947	Linuron, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65948	Malaoxon, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65949	Malathion, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65950	Metalaxyl, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65951	Methidathion, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65952	Metolachlor, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65953	Metribuzin, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65954	Molinate, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65955	Myclobutanil, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65956	Napropamide, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65957	O-Ethyl-O-methyl-S-propylphosphorothioate, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65958	Oxyfluorfen, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65959	p,p'-DDE, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65960	Paraoxon, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65961	Methyl paraoxon, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65962	Parathion, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65963	Methyl parathion, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65964	Pebulate, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65965	Pendimethalin, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65966	Phorate, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65967	Phorate oxygen analog, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65968	Phosmet, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65969	Phosmet oxygen analog, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65970	Profenofos, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65971	Prometon, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter

Parameter code	Parameter name
65972	Prometryn, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65973	Propachlor, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65974	Propanil, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65975	Propargite, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65976	Propetamphos, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65977	Propyzamide, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65978	Simazine, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65979	Sulfotepp, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65980	Sulprofos, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65981	Tebupirimphos, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65982	Tebupirimphos oxygen analog, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65983	Tebuthiuron, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65984	Tefluthrin, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65985	Temephos, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65986	Terbacil, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65987	Terbufos, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65988	Terbufos oxygen analog sulfone, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65989	Terbuthylazine, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65990	Thiobencarb, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65991	trans-Propiconazole, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65992	Triallate, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65993	Tribufos, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65994	Trifluralin, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
65995	1,4-Dichlorobenzene, air, particulate filter, recoverable, nanograms per cubic meter
65996	1-Methylnaphthalene, air, particulate filter, recoverable, nanograms per cubic meter
65997	2-Methylnaphthalene, air, particulate filter, recoverable, nanograms per cubic meter
65998	3-beta-Coprostanol, air, particulate filter, Wastewater Method, recoverable, nanograms per cubic meter
65999	3-Methyl-1H-indole, air, particulate filter, recoverable, nanograms per cubic meter
66000	3-tert-Butyl-4-hydroxyanisole, air, particulate filter, recoverable, nanograms per cubic meter
66001	4-Cumylphenol, air, particulate filter, recoverable, nanograms per cubic meter
66002	4-n-Octylphenol, air, particulate filter, recoverable, nanograms per cubic meter
66003	4-tert-Octylphenol, air, particulate filter, recoverable, nanograms per cubic meter
66004	5-Methyl-1H-benzotriazole, air, particulate filter, recoverable, nanograms per cubic meter
66005	Acetophenone, air, particulate filter, recoverable, nanograms per cubic meter
66006	Acetylhexamethyltetrahydronaphthalene, air, particulate filter, recoverable, nanograms per cubic meter
66007	9,10-Anthraquinone, air, particulate filter, recoverable, nanograms per cubic meter
66008	Benzophenone, air, particulate filter, recoverable, nanograms per cubic meter

Parameter code	Parameter name
66009	beta-Sitosterol, air, particulate filter, recoverable, nanograms per cubic meter
66010	beta-Stigmastanol, air, particulate filter, recoverable, nanograms per cubic meter
66011	Bisphenol A, air, particulate filter, recoverable, nanograms per cubic meter
66012	Bromacil, air, particulate filter, recoverable, nanograms per cubic meter
66013	Bromoform, air, particulate filter, recoverable, nanograms per cubic meter
66014	Caffeine, air, particulate filter, recoverable, nanograms per cubic meter
66015	Camphor, air, particulate filter, recoverable, nanograms per cubic meter
66016	Carbazole, air, particulate filter, recoverable, nanograms per cubic meter
66017	Cholesterol, air, particulate filter, Wastewater Method, recoverable, nanograms per cubic meter
66018	Cotinine, air, particulate filter, recoverable, nanograms per cubic meter
66019	D-Limonene, air, particulate filter, recoverable, nanograms per cubic meter
66020	Hexahydrohexamethyl cyclopentabenzopyran, air, particulate filter, recoverable, nanograms per cubic meter
66021	Indole, air, particulate filter, recoverable, nanograms per cubic meter
66022	Isoborneol, air, particulate filter, recoverable, nanograms per cubic meter
66023	Isophorone, air, particulate filter, recoverable, nanograms per cubic meter
66024	Isopropylbenzene, air, particulate filter, recoverable, nanograms per cubic meter
66025	Isoquinoline, air, particulate filter, recoverable, nanograms per cubic meter
66026	Menthol, air, particulate filter, recoverable, nanograms per cubic meter
66027	Methylsalicylate, air, particulate filter, recoverable, nanograms per cubic meter
66028	DEET, air, particulate filter, recoverable, nanograms per cubic meter
66029	4-Nonylphenol diethoxylate (sum of all isomers), air, particulate filter, recoverable, nanograms per cubic meter
66030	4-tert-Octylphenol diethoxylate, air, particulate filter, recoverable, nanograms per cubic meter
66031	4-tert-Octylphenol monoethoxylate, air, particulate filter, recoverable, nanograms per cubic meter
66032	4-Nonylphenol (sum of all isomers), air, particulate filter, recoverable, nanograms per cubic meter
66033	p-Cresol, air, particulate filter, recoverable, nanograms per cubic meter
66034	Pentachlorophenol, air, particulate filter, recoverable, nanograms per cubic meter
66035	Phenol, air, particulate filter, recoverable, nanograms per cubic meter
66036	Tetrachloroethene, air, particulate filter, recoverable, nanograms per cubic meter
66037	Tributylphosphate, air, particulate filter, recoverable, nanograms per cubic meter
66038	Triclosan, air, particulate filter, recoverable, nanograms per cubic meter
66039	Triethylcitrate, air, particulate filter, recoverable, nanograms per cubic meter
66040	Triphenyl phosphate, air, particulate filter, recoverable, nanograms per cubic meter
66041	Tris(2-butoxyethyl) phosphate, air, particulate filter, recoverable, nanograms per cubic meter
66042	Tris(2-chloroethyl) phosphate, air, particulate filter, recoverable, nanograms per cubic meter
66043	Tris(dichloroisopropyl) phosphate, air, particulate filter, recoverable, nanograms per cubic meter
66044	1,4-Dichlorobenzene, air, top sorbent trap, recoverable, nanograms per cubic meter
66045	1-Methylnaphthalene, air, top sorbent trap, recoverable, nanograms per cubic meter
66046	2-Methylnaphthalene, air, top sorbent trap, recoverable, nanograms per cubic meter

Parameter code	Parameter name
66047	3-beta-Coprostanol, air, top sorbent trap, Wastewater Method, recoverable, nanograms per cubic meter
66048	3-Methyl-1H-indole, air, top sorbent trap, recoverable, nanograms per cubic meter
66049	3-tert-Butyl-4-hydroxyanisole, air, top sorbent trap, recoverable, nanograms per cubic meter
66050	4-Cumylphenol, air, top sorbent trap, recoverable, nanograms per cubic meter
66051	4-n-Octylphenol, air, top sorbent trap, recoverable, nanograms per cubic meter
66052	4-tert-Octylphenol, air, top sorbent trap, recoverable, nanograms per cubic meter
66053	5-Methyl-1H-benzotriazole, air, top sorbent trap, recoverable, nanograms per cubic meter
66054	Acetophenone, air, top sorbent trap, recoverable, nanograms per cubic meter
66055	Acetylhexamethyltetrahydronaphthalene, air, top sorbent trap, recoverable, nanograms per cubic meter
66056	9,10-Anthraquinone, air, top sorbent trap, recoverable, nanograms per cubic meter
66057	Benzophenone, air, top sorbent trap, recoverable, nanograms per cubic meter
66058	beta-Sitosterol, air, top sorbent trap, recoverable, nanograms per cubic meter
66059	beta-Stigmastanol, air, top sorbent trap, recoverable, nanograms per cubic meter
66060	Bisphenol A, air, top sorbent trap, recoverable, nanograms per cubic meter
66061	Bromacil, air, top sorbent trap, recoverable, nanograms per cubic meter
66062	Bromoform, air, top sorbent trap, recoverable, nanograms per cubic meter
66063	Caffeine, air, top sorbent trap, recoverable, nanograms per cubic meter
66064	Camphor, air, top sorbent trap, recoverable, nanograms per cubic meter
66065	Carbazole, air, top sorbent trap, recoverable, nanograms per cubic meter
66066	Cholesterol, air, top sorbent trap, Wastewater Method, recoverable, nanograms per cubic meter
66067	Cotinine, air, top sorbent trap, recoverable, nanograms per cubic meter
66068	D-Limonene, air, top sorbent trap, recoverable, nanograms per cubic meter
66069	Hexahydrohexamethyl cyclopentabenzopyran, air, top sorbent trap, recoverable, nanograms per cubic meter
66070	Indole, air, top sorbent trap, recoverable, nanograms per cubic meter
66071	Isoborneol, air, top sorbent trap, recoverable, nanograms per cubic meter
66072	Isophorone, air, top sorbent trap, recoverable, nanograms per cubic meter
66073	Isopropylbenzene, air, top sorbent trap, recoverable, nanograms per cubic meter
66074	Isoquinoline, air, top sorbent trap, recoverable, nanograms per cubic meter
66075	Menthol, air, top sorbent trap, recoverable, nanograms per cubic meter
66076	Methylsalicylate, air, top sorbent trap, recoverable, nanograms per cubic meter
66077	DEET, air, top sorbent trap, recoverable, nanograms per cubic meter
66078	4-Nonylphenol diethoxylate (sum of all isomers), air, top sorbent trap, recoverable, nanograms per cubic meter
66079	4-tert-Octylphenol diethoxylate, air, top sorbent trap, recoverable, nanograms per cubic meter
66080	4-tert-Octylphenol monoethoxylate, air, top sorbent trap, recoverable, nanograms per cubic meter
66081	4-Nonylphenol (sum of all isomers), air, top sorbent trap, recoverable, nanograms per cubic meter
66082	p-Cresol, air, top sorbent trap, recoverable, nanograms per cubic meter

Parameter code	Parameter name
66083	Pentachlorophenol, air, top sorbent trap, recoverable, nanograms per cubic meter
66084	Phenol, air, top sorbent trap, recoverable, nanograms per cubic meter
66085	Tetrachloroethene, air, top sorbent trap, recoverable, nanograms per cubic meter
66086	Tributylphosphate, air, top sorbent trap, recoverable, nanograms per cubic meter
66087	Triclosan, air, top sorbent trap, recoverable, nanograms per cubic meter
66088	Triethylcitrate, air, top sorbent trap, recoverable, nanograms per cubic meter
66089	Triphenyl phosphate, air, top sorbent trap, recoverable, nanograms per cubic meter
66090	Tris(2-butoxyethyl) phosphate, air, top sorbent trap, recoverable, nanograms per cubic meter
66091	Tris(2-chloroethyl) phosphate, air, top sorbent trap, recoverable, nanograms per cubic meter
66092	Tris(dichloroisopropyl) phosphate, air, top sorbent trap, recoverable, nanograms per cubic meter
66093	1,4-Dichlorobenzene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66094	1-Methylnaphthalene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66095	2-Methylnaphthalene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66096	3-beta-Coprostanol, air, bottom sorbent trap, Wastewater Method, recoverable, nanograms per cubic meter
66097	3-Methyl-1H-indole, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66098	3-tert-Butyl-4-hydroxyanisole, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66099	4-Cumylphenol, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66100	4-n-Octylphenol, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66101	4-tert-Octylphenol, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66102	5-Methyl-1H-benzotriazole, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66103	Acetophenone, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66104	Acetylhexamethyltetrahydronaphthalene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66105	9,10-Anthraquinone, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66106	Benzophenone, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66107	beta-Sitosterol, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66108	beta-Stigmastanol, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66109	Bisphenol A, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66110	Bromacil, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66111	Bromoform, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66112	Caffeine, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66113	Camphor, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66114	Carbazole, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66115	Cholesterol, air, bottom sorbent trap, Wastewater Method, recoverable, nanograms per cubic meter
66116	Cotinine, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66117	D-Limonene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66118	Hexahydrohexamethyl cyclopentabenzopyran, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66119	Indole, air, bottom sorbent trap, recoverable, nanograms per cubic meter

Parameter code	Parameter name
66120	Isoborneol, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66121	Isophorone, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66122	Isopropylbenzene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66123	Isoquinoline, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66124	Menthol, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66125	Methylsalicylate, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66126	DEET, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66127	4-Nonylphenol diethoxylate (sum of all isomers), air, bottom sorbent trap, recoverable, nanograms per cubic meter
66128	4-tert-Octylphenol diethoxylate, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66129	4-tert-Octylphenol monoethoxylate, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66130	4-Nonylphenol (sum of all isomers), air, bottom sorbent trap, recoverable, nanograms per cubic meter
66131	p-Cresol, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66132	Pentachlorophenol, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66133	Phenol, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66134	Tetrachloroethene, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66135	Tributylphosphate, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66136	Triclosan, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66137	Triethylcitrate, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66138	Triphenyl phosphate, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66139	Tris(2-butoxyethyl) phosphate, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66140	Tris(2-chloroethyl) phosphate, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66141	Tris(dichloroisopropyl) phosphate, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66142	1,4-Dichlorobenzene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66143	1-Methylnaphthalene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66144	2-Methylnaphthalene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66145	3-beta-Coprostanol, air, top plus bottom sorbent trap, Wastewater Method, recoverable, nanograms per cubic meter
66146	3-Methyl-1H-indole, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66147	3-tert-Butyl-4-hydroxyanisole, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66148	4-Cumylphenol, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66149	4-n-Octylphenol, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66150	4-tert-Octylphenol, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66151	5-Methyl-1H-benzotriazole, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66152	Acetophenone, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66153	Acetylhexamethyltetrahydronaphthalene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter

Parameter code	Parameter name
66154	9,10-Anthraquinone, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66155	Benzophenone, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66156	beta-Sitosterol, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66157	beta-Stigmastanol, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66158	Bisphenol A, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66159	Bromacil, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66160	Bromoform, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66161	Caffeine, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66162	Camphor, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66163	Carbazole, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66164	Cholesterol, air, top plus bottom sorbent trap, Wastewater Method, recoverable, nanograms per cubic meter
66165	Cotinine, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66166	D-Limonene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66167	Hexahydrohexamethyl cyclopentabenzopyran, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66168	Indole, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66169	Isoborneol, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66170	Isophorone, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66171	Isopropylbenzene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66172	Isoquinoline, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66173	Menthol, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66174	Methylsalicylate, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66175	DEET, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66176	4-Nonylphenol diethoxylate (sum of all isomers), air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66177	4-tert-Octylphenol diethoxylate, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66178	4-tert-Octylphenol monoethoxylate, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66179	4-Nonylphenol (sum of all isomers), air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66180	p-Cresol, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66181	Pentachlorophenol, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66182	Phenol, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66183	Tetrachloroethene, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66184	Tributylphosphate, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66185	Triclosan, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66186	Triethylcitrate, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66187	Triphenyl phosphate, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66188	Tris(2-butoxyethyl) phosphate, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter

Parameter code	Parameter name
66189	Tris(2-chloroethyl) phosphate, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66190	Tris(dichloroisopropyl) phosphate, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66191	Aldrin, air, particulate filter, recoverable, nanograms per cubic meter
66192	beta-HCH, air, particulate filter, recoverable, nanograms per cubic meter
66193	cis-Chlordane, air, particulate filter, recoverable, nanograms per cubic meter
66194	cis-Nonachlor, air, particulate filter, recoverable, nanograms per cubic meter
66195	delta-HCH, air, particulate filter, recoverable, nanograms per cubic meter
66196	Endrin, air, particulate filter, recoverable, nanograms per cubic meter
66197	Endrin aldehyde, air, particulate filter, recoverable, nanograms per cubic meter
66198	Endrin ketone, air, particulate filter, recoverable, nanograms per cubic meter
66199	Heptachlor, air, particulate filter, recoverable, nanograms per cubic meter
66200	Heptachlor epoxide, air, particulate filter, recoverable, nanograms per cubic meter
66201	Hexachlorobenzene, air, particulate filter, recoverable, nanograms per cubic meter
66202	Isodrin, air, particulate filter, recoverable, nanograms per cubic meter
66203	Mirex, air, particulate filter, recoverable, nanograms per cubic meter
66204	o,p'-DDD, air, particulate filter, recoverable, nanograms per cubic meter
66205	o,p'-DDE, air, particulate filter, recoverable, nanograms per cubic meter
66206	o,p'-DDT, air, particulate filter, recoverable, nanograms per cubic meter
66207	Octachlorostyrene, air, particulate filter, recoverable, nanograms per cubic meter
66208	Oxychlordane, air, particulate filter, recoverable, nanograms per cubic meter
66209	p,p'-DDD, air, particulate filter, recoverable, nanograms per cubic meter
66210	p,p'-DDT, air, particulate filter, recoverable, nanograms per cubic meter
66211	BDE congener 28, air, particulate filter, recoverable, nanograms per cubic meter
66212	BDE congener 47, air, particulate filter, recoverable, nanograms per cubic meter
66213	BDE congener 66, air, particulate filter, recoverable, nanograms per cubic meter
66214	BDE congener 85, air, particulate filter, recoverable, nanograms per cubic meter
66215	BDE congener 99, air, particulate filter, recoverable, nanograms per cubic meter
66216	BDE congener 100, air, particulate filter, recoverable, nanograms per cubic meter
66217	BDE congener 138, air, particulate filter, recoverable, nanograms per cubic meter
66218	BDE congener 153, air, particulate filter, recoverable, nanograms per cubic meter
66219	BDE congener 154, air, particulate filter, recoverable, nanograms per cubic meter
66220	BDE congener 209, air, particulate filter, recoverable, nanograms per cubic meter
66221	PCB congener 70, air, particulate filter, recoverable, nanograms per cubic meter
66222	PCB congener 101, air, particulate filter, recoverable, nanograms per cubic meter
66223	PCB congener 110, air, particulate filter, recoverable, nanograms per cubic meter
66224	PCB congener 118, air, particulate filter, recoverable, nanograms per cubic meter
66225	PCB congener 138, air, particulate filter, recoverable, nanograms per cubic meter
66226	PCB congener 146, air, particulate filter, recoverable, nanograms per cubic meter
66227	PCB congener 149, air, particulate filter, recoverable, nanograms per cubic meter

Parameter code	Parameter name
66228	PCB congener 151, air, particulate filter, recoverable, nanograms per cubic meter
66229	PCB congener 170, air, particulate filter, recoverable, nanograms per cubic meter
66230	PCB congener 174, air, particulate filter, recoverable, nanograms per cubic meter
66231	PCB congener 177, air, particulate filter, recoverable, nanograms per cubic meter
66232	PCB congener 180, air, particulate filter, recoverable, nanograms per cubic meter
66233	PCB congener 183, air, particulate filter, recoverable, nanograms per cubic meter
66234	PCB congener 187, air, particulate filter, recoverable, nanograms per cubic meter
66235	PCB congener 194, air, particulate filter, recoverable, nanograms per cubic meter
66236	PCB congener 206, air, particulate filter, recoverable, nanograms per cubic meter
66237	Pentachloroanisole, air, particulate filter, recoverable, nanograms per cubic meter
66238	PCBs, air, particulate filter, recoverable, nanograms per cubic meter
66239	Toxaphene, air, particulate filter, recoverable, nanograms per cubic meter
66240	trans-Chlordane, air, particulate filter, recoverable, nanograms per cubic meter
66241	trans-Nonachlor, air, particulate filter, recoverable, nanograms per cubic meter
66242	Aldrin, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66243	beta-HCH, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66244	cis-Chlordane, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66245	cis-Nonachlor, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66246	delta-HCH, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66247	Endrin, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66248	Endrin aldehyde, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66249	Endrin ketone, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66250	Heptachlor, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66251	Heptachlor epoxide, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66252	Hexachlorobenzene, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66253	Isodrin, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66254	Mirex, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66255	o,p'-DDD, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66256	o,p'-DDE, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66257	o,p'-DDT, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66258	Octachlorostyrene, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66259	Oxychlordane, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66260	p,p'-DDD, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66261	p,p'-DDT, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66262	BDE congener 28, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66263	BDE congener 47, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66264	BDE congener 66, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66265	BDE congener 85, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66266	BDE congener 99, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66267	BDE congener 100, air, top sorbent trap, filter, recoverable, nanograms per cubic meter

Parameter code	Parameter name
66268	BDE congener 138, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66269	BDE congener 153, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66270	BDE congener 154, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66271	BDE congener 209, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66272	PCB congener 70, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66273	PCB congener 101, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66274	PCB congener 110, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66275	PCB congener 118, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66276	PCB congener 138, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66277	PCB congener 146, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66278	PCB congener 149, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66279	PCB congener 151, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66280	PCB congener 170, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66281	PCB congener 174, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66282	PCB congener 177, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66283	PCB congener 180, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66284	PCB congener 183, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66285	PCB congener 187, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66286	PCB congener 194, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66287	PCB congener 206, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66288	Pentachloroanisole, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66289	PCBs, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66290	Toxaphene, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66291	trans-Chlordane, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66292	trans-Nonachlor, air, top sorbent trap, filter, recoverable, nanograms per cubic meter
66293	Aldrin, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66294	beta-HCH, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66295	cis-Chlordane, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66296	cis-Nonachlor, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66297	delta-HCH, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66298	Endrin, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66299	Endrin aldehyde, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66300	Endrin ketone, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66301	Heptachlor, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66302	Heptachlor epoxide, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66303	Hexachlorobenzene, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66304	Isodrin, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66305	Mirex, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66306	o,p'-DDD, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66307	o,p'-DDE, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter

Parameter code	Parameter name
66308	o,p'-DDT, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66309	Octachlorostyrene, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66310	Oxychlordane, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66311	p,p'-DDD, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66312	p,p'-DDT, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66313	BDE congener 28, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66314	BDE congener 47, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66315	BDE congener 66, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66316	BDE congener 85, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66317	BDE congener 99, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66318	BDE congener 100, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66319	BDE congener 138, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66320	BDE congener 153, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66321	BDE congener 154, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66322	BDE congener 209, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66323	PCB congener 70, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66324	PCB congener 101, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66325	PCB congener 110, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66326	PCB congener 118, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66327	PCB congener 138, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66328	PCB congener 146, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66329	PCB congener 149, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66330	PCB congener 151, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66331	PCB congener 170, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66332	PCB congener 174, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66333	PCB congener 177, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66334	PCB congener 180, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66335	PCB congener 183, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66336	PCB congener 187, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66337	PCB congener 194, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66338	PCB congener 206, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66339	Pentachloroanisole, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66340	PCBs, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66341	Toxaphene, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66342	trans-Chlordane, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66343	trans-Nonachlor, air, bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66344	Aldrin, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66345	beta-HCH, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66346	cis-Chlordane, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66347	cis-Nonachlor, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter

Parameter code	Parameter name
66348	delta-HCH, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66349	Endrin, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66350	Endrin aldehyde, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66351	Endrin ketone, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66352	Heptachlor, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66353	Heptachlor epoxide, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66354	Hexachlorobenzene, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66355	Isodrin, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66356	Mirex, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66357	o,p'-DDD, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66358	o,p'-DDE, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66359	o,p'-DDT, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66360	Octachlorostyrene, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66361	Oxychlordane, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66362	p,p'-DDD, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66363	p,p'-DDT, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66364	BDE congener 28, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66365	BDE congener 47, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66366	BDE congener 66, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66367	BDE congener 85, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66368	BDE congener 99, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66369	BDE congener 100, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66370	BDE congener 138, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66371	BDE congener 153, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66372	BDE congener 154, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66373	BDE congener 209, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66374	PCB congener 70, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66375	PCB congener 101, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter

Parameter code	Parameter name
66376	PCB congener 110, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66377	PCB congener 118, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66378	PCB congener 138, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66379	PCB congener 146, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66380	PCB congener 149, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66381	PCB congener 151, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66382	PCB congener 170, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66383	PCB congener 174, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66384	PCB congener 177, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66385	PCB congener 180, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66386	PCB congener 183, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66387	PCB congener 187, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66388	PCB congener 194, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66389	PCB congener 206, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66390	Pentachloroanisole, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66391	PCBs, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66392	Toxaphene, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66393	trans-Chlordane, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66394	trans-Nonachlor, air, top plus bottom sorbent trap, filter, recoverable, nanograms per cubic meter
66395	11-Ketotestosterone, air, particulate filter, recoverable, nanograms per cubic meter
66396	17-alpha-Estradiol, air, particulate filter, recoverable, nanograms per cubic meter
66397	17-alpha-Ethynyl estradiol, air, particulate filter, recoverable, nanograms per cubic meter
66398	17-beta-Estradiol, air, particulate filter, recoverable, nanograms per cubic meter
66399	Norethindrone, air, particulate filter, recoverable, nanograms per cubic meter
66400	4-Androstene-3,17-dione, air, particulate filter, recoverable, nanograms per cubic meter
66401	cis-Androsterone, air, particulate filter, recoverable, nanograms per cubic meter
66402	trans-Diethylstilbestrol, air, particulate filter, recoverable, nanograms per cubic meter
66403	Epitestosterone, air, particulate filter, recoverable, nanograms per cubic meter
66404	Equilenin, air, particulate filter, recoverable, nanograms per cubic meter

Parameter code	Parameter name
66405	Equilin, air, particulate filter, recoverable, nanograms per cubic meter
66406	Estriol, air, particulate filter, recoverable, nanograms per cubic meter
66407	Estrone, air, particulate filter, recoverable, nanograms per cubic meter
66408	Mestranol, air, particulate filter, recoverable, nanograms per cubic meter
66409	Progesterone, air, particulate filter, recoverable, nanograms per cubic meter
66410	Dihydrotestosterone, air, particulate filter, recoverable, nanograms per cubic meter
66411	Testosterone, air, particulate filter, recoverable, nanograms per cubic meter
66412	Trenbolone, air, particulate filter, recoverable, nanograms per cubic meter
66413	11-Ketotestosterone, air, top sorbent trap, recoverable, nanograms per cubic meter
66414	17-alpha-Estradiol, air, top sorbent trap, recoverable, nanograms per cubic meter
66415	17-alpha-Ethynyl estradiol, air, top sorbent trap, recoverable, nanograms per cubic meter
66416	17-beta-Estradiol, air, top sorbent trap, recoverable, nanograms per cubic meter
66417	Norethindrone, air, top sorbent trap, recoverable, nanograms per cubic meter
66418	4-Androstene-3,17-dione, air, top sorbent trap, recoverable, nanograms per cubic meter
66419	cis-Androsterone, air, top sorbent trap, recoverable, nanograms per cubic meter
66420	trans-Diethylstilbestrol, air, top sorbent trap, recoverable, nanograms per cubic meter
66421	Epitestosterone, air, top sorbent trap, recoverable, nanograms per cubic meter
66422	Equilenin, air, top sorbent trap, recoverable, nanograms per cubic meter
66423	Equilin, air, top sorbent trap, recoverable, nanograms per cubic meter
66424	Estriol, air, top sorbent trap, recoverable, nanograms per cubic meter
66425	Estrone, air, top sorbent trap, recoverable, nanograms per cubic meter
66426	Mestranol, air, top sorbent trap, recoverable, nanograms per cubic meter
66427	Progesterone, air, top sorbent trap, recoverable, nanograms per cubic meter
66428	Dihydrotestosterone, air, top sorbent trap, recoverable, nanograms per cubic meter
66429	Testosterone, air, top sorbent trap, recoverable, nanograms per cubic meter
66430	Trenbolone, air, top sorbent trap, recoverable, nanograms per cubic meter
66431	11-Ketotestosterone, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66432	17-alpha-Estradiol, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66433	17-alpha-Ethynyl estradiol, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66434	17-beta-Estradiol, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66435	Norethindrone, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66436	4-Androstene-3,17-dione, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66437	cis-Androsterone, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66438	trans-Diethylstilbestrol, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66439	Epitestosterone, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66440	Equilenin, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66441	Equilin, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66442	Estriol, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66443	Estrone, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66444	Mestranol, air, bottom sorbent trap, recoverable, nanograms per cubic meter

Parameter code	Parameter name
66445	Progesterone, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66446	Dihydrotestosterone, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66447	Testosterone, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66448	Trenbolone, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66449	11-Ketotestosterone, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66450	17-alpha-Estradiol, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66451	17-alpha-Ethynyl estradiol, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66452	17-beta-Estradiol, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66453	Norethindrone, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66454	4-Androstene-3,17-dione, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66455	cis-Androsterone, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66456	trans-Diethylstilbestrol, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66457	Epitestosterone, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66458	Equilenin, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66459	Equilin, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66460	Estriol, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66461	Estrone, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66462	Mestranol, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66463	Progesterone, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66464	Dihydrotestosterone, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66465	Testosterone, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66466	Trenbolone, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66467	11-Ketotestosterone, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
66468	17-alpha-Estradiol, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
66469	17-alpha-Ethynyl estradiol, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
66470	17-beta-Estradiol, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
66471	Norethindrone, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
66472	3-beta-Coprostanol, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
66473	4-Androstene-3,17-dione, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
66474	Cholesterol, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
66475	cis-Androsterone, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter

Parameter code	Parameter name
66476	trans-Diethylstilbestrol, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
66477	Epitestosterone, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
66478	Equilenin, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
66479	Equilin, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
66480	Estriol, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
66481	Estrone, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
66482	Mestranol, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
66483	Progesterone, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
66484	Dihydrotestosterone, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
66485	Testosterone, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
66486	Trenbolone, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
66487	Cholesterol, air, particulate filter, Hormone Method, recoverable, nanograms per cubic meter
66488	Cholesterol, air, top sorbent trap, Hormone Method, recoverable, nanograms per cubic meter
66489	Cholesterol, air, bottom sorbent trap, Hormone Method, recoverable, nanograms per cubic meter
66490	Cholesterol, air, top plus bottom sorbent trap, Hormone Method, recoverable, nanograms per cubic meter
66491	3-beta-Coprostanol, air, particulate filter, Hormone Method, recoverable, nanograms per cubic meter
66492	3-beta-Coprostanol, air, top sorbent trap, Hormone Method, recoverable, nanograms per cubic meter
66493	3-beta-Coprostanol, air, bottom sorbent trap, Hormone Method, recoverable, nanograms per cubic meter
66494	3-beta-Coprostanol, air, top plus bottom sorbent trap, Hormone Method, recoverable, nanograms per cubic meter
66495	Enrofloxacin, water, filtered, recoverable, micrograms per liter
66496	2,4-D plus 2,4-D methyl ester, sum on a molar basis, micrograms per liter as 2,4-D
66497	Halosulfuron-methyl, water, filtered, recoverable, micrograms per liter
66498	1,2-Bis(2,4,6-tribromophenoxy)ethane, biota, tissue, recoverable, wet weight, micrograms per kilogram
66499	2,4-Dinitrotoluene, biota, tissue, recoverable, wet weight, micrograms per kilogram
66500	BDE congener 66, biota, tissue, recoverable, wet weight, micrograms per kilogram
66501	BDE congener 71, biota, tissue, recoverable, wet weight, micrograms per kilogram
66502	BDE congener 85, biota, tissue, recoverable, wet weight, micrograms per kilogram

Parameter code	Parameter name
66503	BDE congener 138, biota, tissue, recoverable, wet weight, micrograms per kilogram
66504	BDE congener 183, biota, tissue, recoverable, wet weight, micrograms per kilogram
66505	Benfluralin, biota, tissue, recoverable, wet weight, micrograms per kilogram
66506	Chloridazon, biota, tissue, recoverable, wet weight, micrograms per kilogram
66507	Cyfluthrin, biota, tissue, recoverable, wet weight, micrograms per kilogram
66508	lambda-Cyhalothrin, biota, tissue, recoverable, wet weight, micrograms per kilogram
66509	Oxyfluorfen, biota, tissue, recoverable, wet weight, micrograms per kilogram
66510	Pendimethalin, biota, tissue, recoverable, wet weight, micrograms per kilogram
66511	Pentabromotoluene, biota, tissue, recoverable, wet weight, micrograms per kilogram
66512	Tefluthrin, biota, tissue, recoverable, wet weight, micrograms per kilogram
66513	Tetradifon, biota, tissue, recoverable, wet weight, micrograms per kilogram
66514	Triclosan, biota, tissue, recoverable, wet weight, micrograms per kilogram
66515	Methoxy triclosan, biota, tissue, recoverable, wet weight, micrograms per kilogram
66516	1,4-Dichlorobenzene, biota, tissue, recoverable, wet weight, micrograms per kilogram
66517	1-Methylnaphthalene, biota, tissue, recoverable, wet weight, micrograms per kilogram
66518	2,6-Dimethylnaphthalene, biota, tissue, recoverable, wet weight, micrograms per kilogram
66519	2-Methylnaphthalene, biota, tissue, recoverable, wet weight, micrograms per kilogram
66520	3,4-Dichlorophenyl isocyanate, biota, tissue, recoverable, wet weight, micrograms per kilogram
66521	3-Methyl-1H-indole, biota, tissue, recoverable, wet weight, micrograms per kilogram
66522	3-tert-Butyl-4-hydroxyanisole, biota, tissue, recoverable, wet weight, micrograms per kilogram
66523	4-Cumylphenol, biota, tissue, recoverable, wet weight, micrograms per kilogram
66524	4-n-Octylphenol, biota, tissue, recoverable, wet weight, micrograms per kilogram
66525	4-tert-Octylphenol, biota, tissue, recoverable, wet weight, micrograms per kilogram
66526	Acetophenone, biota, tissue, recoverable, wet weight, micrograms per kilogram
66527	Acetyl-hexamethyl-tetrahydro-naphthalene, biota, tissue, recoverable, wet weight, micrograms per kilogram
66528	Anthracene, biota, tissue, recoverable, wet weight, micrograms per kilogram
66529	9,10-Anthraquinone, biota, tissue, recoverable, wet weight, micrograms per kilogram
66530	Atrazine, biota, tissue, recoverable, wet weight, micrograms per kilogram
66531	Benzo[a]pyrene, biota, tissue, recoverable, wet weight, micrograms per kilogram
66532	Benzophenone, biota, tissue, recoverable, wet weight, micrograms per kilogram
66533	beta-Sitosterol, biota, tissue, recoverable, wet weight, micrograms per kilogram
66534	beta-Stigmastanol, biota, tissue, recoverable, wet weight, micrograms per kilogram
66535	Bisphenol A, biota, tissue, recoverable, wet weight, micrograms per kilogram
66536	Bromacil, biota, tissue, recoverable, wet weight, micrograms per kilogram
66537	Camphor, biota, tissue, recoverable, wet weight, micrograms per kilogram
66538	Carbazole, biota, tissue, recoverable, wet weight, micrograms per kilogram
66539	Diazinon, biota, tissue, recoverable, wet weight, micrograms per kilogram
66540	Diethyl phthalate, biota, tissue, recoverable, wet weight, micrograms per kilogram
66541	Bis(2-ethylhexyl) phthalate, biota, tissue, recoverable, wet weight, micrograms per kilogram

Parameter code	Parameter name
66542	D-Limonene, biota, tissue, recoverable, wet weight, micrograms per kilogram
66543	Fluoranthene, biota, tissue, recoverable, wet weight, micrograms per kilogram
66544	Hexahydrohexamethyl cyclopentabenzopyran, biota, tissue, recoverable, wet weight, micrograms per kilogram
66545	Indole, biota, tissue, recoverable, wet weight, micrograms per kilogram
66546	Isoborneol, biota, tissue, recoverable, wet weight, micrograms per kilogram
66547	Isophorone, biota, tissue, recoverable, wet weight, micrograms per kilogram
66548	Isopropylbenzene, biota, tissue, recoverable, wet weight, micrograms per kilogram
66549	Isoquinoline, biota, tissue, recoverable, wet weight, micrograms per kilogram
66550	Menthol, biota, tissue, recoverable, wet weight, micrograms per kilogram
66551	Metalaxyl, biota, tissue, recoverable, wet weight, micrograms per kilogram
66552	Methyl salicylate, biota, tissue, recoverable, wet weight, micrograms per kilogram
66553	Metolachlor, biota, tissue, recoverable, wet weight, micrograms per kilogram
66554	DEET, biota, tissue, recoverable, wet weight, micrograms per kilogram
66555	Naphthalene, biota, tissue, recoverable, wet weight, micrograms per kilogram
66556	4-Nonylphenol diethoxylate (sum of all isomers), biota, tissue, recoverable, wet weight, micrograms per kilogram
66557	4-Nonylphenol monoethoxylate (sum of all isomers), biota, tissue, recoverable, wet weight, micrograms per kilogram
66558	4-tert-Octylphenol diethoxylate, biota, tissue, recoverable, wet weight, micrograms per kilogram
66559	4-tert-Octylphenol monoethoxylate, biota, tissue, recoverable, wet weight, micrograms per kilogram
66560	para-Cresol, biota, tissue, recoverable, wet weight, micrograms per kilogram
66561	para-Nonylphenol (all isomers), biota, tissue, recoverable, wet weight, micrograms per kilogram
66562	Pentachlorophenol, biota, tissue, recoverable, wet weight, micrograms per kilogram
66563	Phenanthrene, biota, tissue, recoverable, wet weight, micrograms per kilogram
66564	Phenol, biota, tissue, recoverable, wet weight, micrograms per kilogram
66565	Prometon, biota, tissue, recoverable, wet weight, micrograms per kilogram
66566	Pyrene, biota, tissue, recoverable, wet weight, micrograms per kilogram
66567	Tris(2-butoxyethyl) phosphate, biota, tissue, recoverable, wet weight, micrograms per kilogram
66568	Tris(2-chloroethyl) phosphate, biota, tissue, recoverable, wet weight, micrograms per kilogram
66569	Tris(dichloroisopropyl) phosphate, biota, tissue, recoverable, wet weight, micrograms per kilogram
66570	Tributyl phosphate, biota, tissue, recoverable, wet weight, micrograms per kilogram
66571	Triphenyl phosphate, biota, tissue, recoverable, wet weight, micrograms per kilogram
66572	Decafluorobiphenyl, biota, tissue, recoverable, wet weight, micrograms per kilogram
66573	Pentachloronitrobenzene, biota, tissue, recoverable, wet weight, micrograms per kilogram
66574	Chloroxylenol, water, filtered, recoverable, micrograms per liter
66575	Butalbital, water, unfiltered, recoverable, micrograms per liter
66576	Chloroxylenol, water, unfiltered, recoverable, micrograms per liter
66577	Chlorpheniramine, water, unfiltered, recoverable, micrograms per liter

Parameter code	Parameter name
66578	Diazepam, water, unfiltered, recoverable, micrograms per liter
66579	Hydrocodone, water, unfiltered, recoverable, micrograms per liter
66580	Metaxalone, water, unfiltered, recoverable, micrograms per liter
66581	Methadone, water, unfiltered, recoverable, micrograms per liter
66582	Oxycodone, water, unfiltered, recoverable, micrograms per liter
66583	Phendimetrazine, water, unfiltered, recoverable, micrograms per liter
66584	3,4-Dichloroaniline, water, filtered, recoverable, nanograms per liter
66585	3,4-Dichloroaniline, bed sediment, recoverable, dry weight, micrograms per kilogram
66586	Allethrin, water, filtered, recoverable, nanograms per liter
66587	Allethrin, suspended sediment, recoverable, dry weight, micrograms per kilogram
66588	Allethrin, bed sediment, recoverable, dry weight, micrograms per kilogram
66589	Azoxystrobin, water, filtered, recoverable, nanograms per liter
66590	Azoxystrobin, suspended sediment, recoverable, dry weight, micrograms per kilogram
66591	Azoxystrobin, bed sediment, recoverable, dry weight, micrograms per kilogram
66592	Cyanazine, water, filtered, recoverable, nanograms per liter
66593	Cyproconazole, water, filtered, recoverable, nanograms per liter
66594	Cyproconazole, suspended sediment, recoverable, dry weight, micrograms per kilogram
66595	Cyproconazole, bed sediment, recoverable, dry weight, micrograms per kilogram
66596	Dimethoate, water, filtered, recoverable, nanograms per liter
66597	Dimethoate, suspended sediment, recoverable, dry weight, micrograms per kilogram
66598	Diuron, water, filtered, recoverable, nanograms per liter
66599	Diuron, suspended sediment, recoverable, dry weight, micrograms per kilogram
66600	Diuron, bed sediment, recoverable, dry weight, micrograms per kilogram
66601	beta-Endosulfan, suspended sediment, recoverable, dry weight, micrograms per kilogram
66602	Endosulfan sulfate, suspended sediment, recoverable, dry weight, micrograms per kilogram
66603	Endrin aldehyde, suspended sediment, recoverable, dry weight, micrograms per kilogram
66604	Fipronil, water, filtered, recoverable, nanograms per liter
66605	Fipronil, suspended sediment, recoverable, dry weight, micrograms per kilogram
66606	Fipronil, bed sediment, recoverable, dry weight, micrograms per kilogram
66607	Desulfinylfipronil, water, filtered, recoverable, nanograms per liter
66608	Desulfinylfipronil, suspended sediment, recoverable, dry weight, micrograms per kilogram
66609	Desulfinylfipronil, bed sediment, recoverable, dry weight, micrograms per kilogram
66610	Fipronil sulfide, water, filtered, recoverable, nanograms per liter
66611	Fipronil sulfide, suspended sediment, recoverable, dry weight, micrograms per kilogram
66612	Fipronil sulfide, bed sediment, recoverable, dry weight, micrograms per kilogram
66613	Fipronil sulfone, water, filtered, recoverable, nanograms per liter
66614	Fipronil sulfone, suspended sediment, recoverable, dry weight, micrograms per kilogram
66615	Fipronil sulfone, bed sediment, recoverable, dry weight, micrograms per kilogram
66616	delta-HCH, suspended sediment, recoverable, dry weight, micrograms per kilogram
66617	Iprodione, water, filtered, recoverable, nanograms per liter

Parameter code	Parameter name
66618	Iprodione, bed sediment, recoverable, dry weight, micrograms per kilogram
66619	Isodrin, suspended sediment, recoverable, dry weight, micrograms per kilogram
66620	Metconazole, water, filtered, recoverable, nanograms per liter
66621	Metconazole, suspended sediment, recoverable, dry weight, micrograms per kilogram
66622	Metconazole, bed sediment, recoverable, dry weight, micrograms per kilogram
66623	Methoprene, water, filtered, recoverable, nanograms per liter
66624	Methoprene, suspended sediment, recoverable, dry weight, micrograms per kilogram
66625	Methoprene, bed sediment, recoverable, dry weight, micrograms per kilogram
66626	2-Ketomolinate, water, filtered, recoverable, nanograms per liter
66627	2-Ketomolinate, suspended sediment, recoverable, dry weight, micrograms per kilogram
66628	2-Ketomolinate, bed sediment, recoverable, dry weight, micrograms per kilogram
66629	4-Ketomolinate, water, filtered, recoverable, nanograms per liter
66630	4-Ketomolinate, suspended sediment, recoverable, dry weight, micrograms per kilogram
66631	4-Ketomolinate, bed sediment, recoverable, dry weight, micrograms per kilogram
66632	Myclobutanil, water, filtered, recoverable, nanograms per liter
66633	Myclobutanil, suspended sediment, recoverable, dry weight, micrograms per kilogram
66634	Myclobutanil, bed sediment, recoverable, dry weight, micrograms per kilogram
66635	cis-Nonachlor, suspended sediment, recoverable, dry weight, micrograms per kilogram
66636	Oxychlordane, suspended sediment, recoverable, dry weight, micrograms per kilogram
66637	Pentachloroanisole, water, filtered, recoverable, nanograms per liter
66638	Pentachloroanisole, suspended sediment, recoverable, dry weight, micrograms per kilogram
66639	Pentachloronitrobenzene, water, filtered, recoverable, nanograms per liter
66640	Pentachloronitrobenzene, suspended sediment, recoverable, dry weight, micrograms per kilogram
66641	Propanil, water, filtered, recoverable, nanograms per liter
66642	Propanil, bed sediment, recoverable, dry weight, micrograms per kilogram
66643	Propiconazole, water, filtered, recoverable, nanograms per liter
66644	Propiconazole, suspended sediment, recoverable, dry weight, micrograms per kilogram
66645	Propiconazole, bed sediment, recoverable, dry weight, micrograms per kilogram
66646	Pyraclostrobin, water, filtered, recoverable, nanograms per liter
66647	Pyraclostrobin, suspended sediment, recoverable, dry weight, micrograms per kilogram
66648	Pyraclostrobin, bed sediment, recoverable, dry weight, micrograms per kilogram
66649	Tebuconazole, water, filtered, recoverable, nanograms per liter
66650	Tebuconazole, bed sediment, recoverable, dry weight, micrograms per kilogram
66651	Terbuthylazine, water, filtered, recoverable, nanograms per liter
66652	Terbuthylazine, suspended sediment, recoverable, dry weight, micrograms per kilogram
66653	Terbuthylazine, bed sediment, recoverable, dry weight, micrograms per kilogram
66654	Tetraconazole, water, filtered, recoverable, nanograms per liter
66655	Tetraconazole, suspended sediment, recoverable, dry weight, micrograms per kilogram
66656	Tetraconazole, bed sediment, recoverable, dry weight, micrograms per kilogram
66657	Tetramethrin, water, filtered, recoverable, nanograms per liter

Parameter code	Parameter name
66658	Tetramethrin, suspended sediment, recoverable, dry weight, micrograms per kilogram
66659	Tetramethrin, bed sediment, recoverable, dry weight, micrograms per kilogram
66660	Trifloxystrobin, water, filtered, recoverable, nanograms per liter
66661	Trifloxystrobin, suspended sediment, recoverable, dry weight, micrograms per kilogram
66662	Trifloxystrobin, bed sediment, recoverable, dry weight, micrograms per kilogram
66663	RDX, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
66664	HMX, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
66665	1,3,5-Trinitrobenzene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
66666	1,3-Dinitrobenzene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
66667	TNT, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
66668	2-Nitrotoluene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
66669	3-Nitrotoluene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
66670	4-Nitrotoluene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
66671	Nitroglycerin, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
66672	Pentaerythritol tetranitrate, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
66673	1,1'-Biphenyl, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
66674	2,4,5-Trichlorophenol, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
66675	2,4-Dimethylphenol, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
66676	2-Methylnaphthalene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
66677	3,3'-Dichlorobenzidine, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
66678	4-Chloroaniline, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
66679	4-Nitrophenol, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
66680	alpha-Terpineol, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
66681	Atrazine, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
66682	Benzaldehyde, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
66683	Dibenzofuran, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
66684	Diphenylamine, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
66685	m-Cresol plus p-Cresol, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
66686	3-Nitroaniline, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
66687	o-Cresol, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
66688	2-Nitroaniline, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
66689	4-Nitroaniline, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
66690	2-Amino-4,6-dinitrotoluene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
66691	4-Amino-2,6-dinitrotoluene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
66693	Tetryl, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
66694	Perchlorate, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram
66695	Tebuconazole, air, bottom sorbent trap, recoverable, nanograms per cubic meter
66696	Tebuconazole, air, particulate filter, recoverable, nanograms per cubic meter
66697	Tebuconazole, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
66698	Tebuconazole, air, top plus bottom sorbent trap, recoverable, nanograms per cubic meter
66699	Tebuconazole, air, top sorbent trap, recoverable, nanograms per cubic meter
66700	Absorbance, UV, organic constituents, 412 nm, 1 cm pathlength, water, filtered, units per centimeter
66701	Bis(hexachlorocyclopentadieno) cyclooctane, biota, tissue, recoverable, wet weight, micrograms per kilogram
66702	Chemical oxygen demand, solids, total, dry weight, milligrams per liter
66703	Cyanide, free, water, unfiltered, milligrams per liter
66704	Cyanide, free, water, filtered, milligrams per liter
66705	Cyanide, amenable to chlorination, water, unfiltered, milligrams per liter
66706	Cyanide, amenable to chlorination, water, filtered, milligrams per liter
66707	PCB congener 1, water, unfiltered, recoverable, picograms per liter
66708	PCB congener 2, water, unfiltered, recoverable, picograms per liter
66709	PCB congener 3, water, unfiltered, recoverable, picograms per liter
66710	PCB congener 4, water, unfiltered, recoverable, picograms per liter
66711	PCB congener 5, water, unfiltered, recoverable, picograms per liter
66712	PCB congener 6, water, unfiltered, recoverable, picograms per liter
66713	PCB congener 7, water, unfiltered, recoverable, picograms per liter

Parameter code	Parameter name
66714	PCB congener 8, water, unfiltered, recoverable, picograms per liter
66715	PCB congener 9, water, unfiltered, recoverable, picograms per liter
66716	PCB congener 10, water, unfiltered, recoverable, picograms per liter
66717	PCB congener 11, water, unfiltered, recoverable, picograms per liter
66718	PCB congener 12, water, unfiltered, recoverable, picograms per liter
66719	PCB congener 13, water, unfiltered, recoverable, picograms per liter
66720	PCB congener 14, water, unfiltered, recoverable, picograms per liter
66721	PCB congener 15, water, unfiltered, recoverable, picograms per liter
66722	PCB congener 16, water, unfiltered, recoverable, picograms per liter
66723	PCB congener 17, water, unfiltered, recoverable, picograms per liter
66724	PCB congener 18, water, unfiltered, recoverable, picograms per liter
66725	PCB congener 19, water, unfiltered, recoverable, picograms per liter
66726	PCB congener 20, water, unfiltered, recoverable, picograms per liter
66727	PCB congener 21, water, unfiltered, recoverable, picograms per liter
66728	PCB congener 22, water, unfiltered, recoverable, picograms per liter
66729	PCB congener 23, water, unfiltered, recoverable, picograms per liter
66730	PCB congener 24, water, unfiltered, recoverable, picograms per liter
66731	PCB congener 25, water, unfiltered, recoverable, picograms per liter
66732	PCB congener 26, water, unfiltered, recoverable, picograms per liter
66733	PCB congener 27, water, unfiltered, recoverable, picograms per liter
66734	PCB congener 28, water, unfiltered, recoverable, picograms per liter
66735	PCB congener 29, water, unfiltered, recoverable, picograms per liter
66736	PCB congener 30, water, unfiltered, recoverable, picograms per liter
66737	PCB congener 31, water, unfiltered, recoverable, picograms per liter
66738	PCB congener 32, water, unfiltered, recoverable, picograms per liter
66739	PCB congener 33, water, unfiltered, recoverable, picograms per liter
66740	PCB congener 34, water, unfiltered, recoverable, picograms per liter
66741	PCB congener 35, water, unfiltered, recoverable, picograms per liter
66742	PCB congener 36, water, unfiltered, recoverable, picograms per liter
66743	PCB congener 37, water, unfiltered, recoverable, picograms per liter
66744	PCB congener 38, water, unfiltered, recoverable, picograms per liter
66745	PCB congener 39, water, unfiltered, recoverable, picograms per liter
66746	PCB congener 40, water, unfiltered, recoverable, picograms per liter
66747	PCB congener 41, water, unfiltered, recoverable, picograms per liter
66748	PCB congener 42, water, unfiltered, recoverable, picograms per liter
66749	PCB congener 43, water, unfiltered, recoverable, picograms per liter
66750	PCB congener 44, water, unfiltered, recoverable, picograms per liter
66751	PCB congener 45, water, unfiltered, recoverable, picograms per liter
66752	PCB congener 46, water, unfiltered, recoverable, picograms per liter
66753	PCB congener 47, water, unfiltered, recoverable, picograms per liter

Parameter code	Parameter name
66754	PCB congener 48, water, unfiltered, recoverable, picograms per liter
66755	PCB congener 49, water, unfiltered, recoverable, picograms per liter
66756	PCB congener 50, water, unfiltered, recoverable, picograms per liter
66757	PCB congener 51, water, unfiltered, recoverable, picograms per liter
66758	PCB congener 52, water, unfiltered, recoverable, picograms per liter
66759	PCB congener 53, water, unfiltered, recoverable, picograms per liter
66760	PCB congener 54, water, unfiltered, recoverable, picograms per liter
66761	PCB congener 55, water, unfiltered, recoverable, picograms per liter
66762	PCB congener 56, water, unfiltered, recoverable, picograms per liter
66763	PCB congener 57, water, unfiltered, recoverable, picograms per liter
66764	PCB congener 58, water, unfiltered, recoverable, picograms per liter
66765	PCB congener 59, water, unfiltered, recoverable, picograms per liter
66766	PCB congener 60, water, unfiltered, recoverable, picograms per liter
66767	PCB congener 61, water, unfiltered, recoverable, picograms per liter
66768	PCB congener 62, water, unfiltered, recoverable, picograms per liter
66769	PCB congener 63, water, unfiltered, recoverable, picograms per liter
66770	PCB congener 64, water, unfiltered, recoverable, picograms per liter
66771	PCB congener 65, water, unfiltered, recoverable, picograms per liter
66772	PCB congener 66, water, unfiltered, recoverable, picograms per liter
66773	PCB congener 67, water, unfiltered, recoverable, picograms per liter
66774	PCB congener 68, water, unfiltered, recoverable, picograms per liter
66775	PCB congener 69, water, unfiltered, recoverable, picograms per liter
66776	PCB congener 70, water, unfiltered, recoverable, picograms per liter
66777	PCB congener 71, water, unfiltered, recoverable, picograms per liter
66778	PCB congener 72, water, unfiltered, recoverable, picograms per liter
66779	PCB congener 73, water, unfiltered, recoverable, picograms per liter
66780	PCB congener 74, water, unfiltered, recoverable, picograms per liter
66781	PCB congener 75, water, unfiltered, recoverable, picograms per liter
66782	PCB congener 76, water, unfiltered, recoverable, picograms per liter
66783	PCB congener 77, water, unfiltered, recoverable, picograms per liter
66784	PCB congener 78, water, unfiltered, recoverable, picograms per liter
66785	PCB congener 79, water, unfiltered, recoverable, picograms per liter
66786	PCB congener 80, water, unfiltered, recoverable, picograms per liter
66787	PCB congener 81, water, unfiltered, recoverable, picograms per liter
66788	PCB congener 82, water, unfiltered, recoverable, picograms per liter
66789	PCB congener 83, water, unfiltered, recoverable, picograms per liter
66790	PCB congener 84, water, unfiltered, recoverable, picograms per liter
66791	PCB congener 85, water, unfiltered, recoverable, picograms per liter
66792	PCB congener 86, water, unfiltered, recoverable, picograms per liter
66793	PCB congener 87, water, unfiltered, recoverable, picograms per liter

Parameter code	Parameter name
66794	PCB congener 88, water, unfiltered, recoverable, picograms per liter
66795	PCB congener 89, water, unfiltered, recoverable, picograms per liter
66796	PCB congener 90, water, unfiltered, recoverable, picograms per liter
66797	PCB congener 91, water, unfiltered, recoverable, picograms per liter
66798	PCB congener 92, water, unfiltered, recoverable, picograms per liter
66799	PCB congener 93, water, unfiltered, recoverable, picograms per liter
66800	PCB congener 94, water, unfiltered, recoverable, picograms per liter
66801	PCB congener 95, water, unfiltered, recoverable, picograms per liter
66802	PCB congener 96, water, unfiltered, recoverable, picograms per liter
66803	PCB congener 97, water, unfiltered, recoverable, picograms per liter
66804	PCB congener 98, water, unfiltered, recoverable, picograms per liter
66805	PCB congener 99, water, unfiltered, recoverable, picograms per liter
66806	PCB congener 100, water, unfiltered, recoverable, picograms per liter
66807	PCB congener 101, water, unfiltered, recoverable, picograms per liter
66808	PCB congener 102, water, unfiltered, recoverable, picograms per liter
66809	PCB congener 103, water, unfiltered, recoverable, picograms per liter
66810	PCB congener 104, water, unfiltered, recoverable, picograms per liter
66811	PCB congener 105, water, unfiltered, recoverable, picograms per liter
66812	PCB congener 106, water, unfiltered, recoverable, picograms per liter
66813	PCB congener 107, water, unfiltered, recoverable, picograms per liter
66814	PCB congener 108, water, unfiltered, recoverable, picograms per liter
66815	PCB congener 109, water, unfiltered, recoverable, picograms per liter
66816	PCB congener 110, water, unfiltered, recoverable, picograms per liter
66817	PCB congener 111, water, unfiltered, recoverable, picograms per liter
66818	PCB congener 112, water, unfiltered, recoverable, picograms per liter
66819	PCB congener 113, water, unfiltered, recoverable, picograms per liter
66820	PCB congener 114, water, unfiltered, recoverable, picograms per liter
66821	PCB congener 115, water, unfiltered, recoverable, picograms per liter
66822	PCB congener 116, water, unfiltered, recoverable, picograms per liter
66823	PCB congener 117, water, unfiltered, recoverable, picograms per liter
66824	PCB congener 118, water, unfiltered, recoverable, picograms per liter
66825	PCB congener 119, water, unfiltered, recoverable, picograms per liter
66826	PCB congener 120, water, unfiltered, recoverable, picograms per liter
66827	PCB congener 121, water, unfiltered, recoverable, picograms per liter
66828	PCB congener 122, water, unfiltered, recoverable, picograms per liter
66829	PCB congener 123, water, unfiltered, recoverable, picograms per liter
66830	PCB congener 124, water, unfiltered, recoverable, picograms per liter
66831	PCB congener 125, water, unfiltered, recoverable, picograms per liter
66832	PCB congener 126, water, unfiltered, recoverable, picograms per liter
66833	PCB congener 127, water, unfiltered, recoverable, picograms per liter

Parameter code	Parameter name
66834	PCB congener 128, water, unfiltered, recoverable, picograms per liter
66835	PCB congener 129, water, unfiltered, recoverable, picograms per liter
66836	PCB congener 130, water, unfiltered, recoverable, picograms per liter
66837	PCB congener 131, water, unfiltered, recoverable, picograms per liter
66838	PCB congener 132, water, unfiltered, recoverable, picograms per liter
66839	PCB congener 133, water, unfiltered, recoverable, picograms per liter
66840	PCB congener 134, water, unfiltered, recoverable, picograms per liter
66841	PCB congener 135, water, unfiltered, recoverable, picograms per liter
66842	PCB congener 136, water, unfiltered, recoverable, picograms per liter
66843	PCB congener 137, water, unfiltered, recoverable, picograms per liter
66844	PCB congener 138, water, unfiltered, recoverable, picograms per liter
66845	PCB congener 139, water, unfiltered, recoverable, picograms per liter
66846	PCB congener 140, water, unfiltered, recoverable, picograms per liter
66847	PCB congener 141, water, unfiltered, recoverable, picograms per liter
66848	PCB congener 142, water, unfiltered, recoverable, picograms per liter
66849	PCB congener 143, water, unfiltered, recoverable, picograms per liter
66850	PCB congener 144, water, unfiltered, recoverable, picograms per liter
66851	PCB congener 145, water, unfiltered, recoverable, picograms per liter
66852	PCB congener 146, water, unfiltered, recoverable, picograms per liter
66853	PCB congener 147, water, unfiltered, recoverable, picograms per liter
66854	PCB congener 148, water, unfiltered, recoverable, picograms per liter
66855	PCB congener 149, water, unfiltered, recoverable, picograms per liter
66856	PCB congener 150, water, unfiltered, recoverable, picograms per liter
66857	PCB congener 151, water, unfiltered, recoverable, picograms per liter
66858	PCB congener 152, water, unfiltered, recoverable, picograms per liter
66859	PCB congener 153, water, unfiltered, recoverable, picograms per liter
66860	PCB congener 154, water, unfiltered, recoverable, picograms per liter
66861	PCB congener 155, water, unfiltered, recoverable, picograms per liter
66862	PCB congener 156, water, unfiltered, recoverable, picograms per liter
66863	PCB congener 157, water, unfiltered, recoverable, picograms per liter
66864	PCB congener 158, water, unfiltered, recoverable, picograms per liter
66865	PCB congener 159, water, unfiltered, recoverable, picograms per liter
66866	PCB congener 160, water, unfiltered, recoverable, picograms per liter
66867	PCB congener 161, water, unfiltered, recoverable, picograms per liter
66868	PCB congener 162, water, unfiltered, recoverable, picograms per liter
66869	PCB congener 163, water, unfiltered, recoverable, picograms per liter
66870	PCB congener 164, water, unfiltered, recoverable, picograms per liter
66871	PCB congener 165, water, unfiltered, recoverable, picograms per liter
66872	PCB congener 166, water, unfiltered, recoverable, picograms per liter
66873	PCB congener 167, water, unfiltered, recoverable, picograms per liter

Parameter code	Parameter name
66874	PCB congener 168, water, unfiltered, recoverable, picograms per liter
66875	PCB congener 169, water, unfiltered, recoverable, picograms per liter
66876	PCB congener 170, water, unfiltered, recoverable, picograms per liter
66877	PCB congener 171, water, unfiltered, recoverable, picograms per liter
66878	PCB congener 172, water, unfiltered, recoverable, picograms per liter
66879	PCB congener 173, water, unfiltered, recoverable, picograms per liter
66880	PCB congener 174, water, unfiltered, recoverable, picograms per liter
66881	PCB congener 175, water, unfiltered, recoverable, picograms per liter
66882	PCB congener 176, water, unfiltered, recoverable, picograms per liter
66883	PCB congener 177, water, unfiltered, recoverable, picograms per liter
66884	PCB congener 178, water, unfiltered, recoverable, picograms per liter
66885	PCB congener 179, water, unfiltered, recoverable, picograms per liter
66886	PCB congener 180, water, unfiltered, recoverable, picograms per liter
66887	PCB congener 181, water, unfiltered, recoverable, picograms per liter
66888	PCB congener 182, water, unfiltered, recoverable, picograms per liter
66889	PCB congener 183, water, unfiltered, recoverable, picograms per liter
66890	PCB congener 184, water, unfiltered, recoverable, picograms per liter
66891	PCB congener 185, water, unfiltered, recoverable, picograms per liter
66892	PCB congener 186, water, unfiltered, recoverable, picograms per liter
66893	PCB congener 187, water, unfiltered, recoverable, picograms per liter
66894	PCB congener 188, water, unfiltered, recoverable, picograms per liter
66895	PCB congener 189, water, unfiltered, recoverable, picograms per liter
66896	PCB congener 190, water, unfiltered, recoverable, picograms per liter
66897	PCB congener 191, water, unfiltered, recoverable, picograms per liter
66898	PCB congener 192, water, unfiltered, recoverable, picograms per liter
66899	PCB congener 193, water, unfiltered, recoverable, picograms per liter
66900	PCB congener 194, water, unfiltered, recoverable, picograms per liter
66901	PCB congener 195, water, unfiltered, recoverable, picograms per liter
66902	PCB congener 196, water, unfiltered, recoverable, picograms per liter
66903	PCB congener 197, water, unfiltered, recoverable, picograms per liter
66904	PCB congener 198, water, unfiltered, recoverable, picograms per liter
66905	PCB congener 199, water, unfiltered, recoverable, picograms per liter
66906	PCB congener 200, water, unfiltered, recoverable, picograms per liter
66907	PCB congener 201, water, unfiltered, recoverable, picograms per liter
66908	PCB congener 202, water, unfiltered, recoverable, picograms per liter
66909	PCB congener 203, water, unfiltered, recoverable, picograms per liter
66910	PCB congener 204, water, unfiltered, recoverable, picograms per liter
66911	PCB congener 205, water, unfiltered, recoverable, picograms per liter
66912	PCB congener 206, water, unfiltered, recoverable, picograms per liter
66913	PCB congener 207, water, unfiltered, recoverable, picograms per liter

Parameter code	Parameter name
66914	PCB congener 208, water, unfiltered, recoverable, picograms per liter
66915	PCB congener 209, water, unfiltered, recoverable, picograms per liter
66916	PCB congener 1, solids, recoverable, dry weight, picograms per gram
66917	PCB congener 2, solids, recoverable, dry weight, picograms per gram
66918	PCB congener 3, solids, recoverable, dry weight, picograms per gram
66919	PCB congener 4, solids, recoverable, dry weight, picograms per gram
66920	PCB congener 5, solids, recoverable, dry weight, picograms per gram
66921	PCB congener 6, solids, recoverable, dry weight, picograms per gram
66922	PCB congener 7, solids, recoverable, dry weight, picograms per gram
66923	PCB congener 8, solids, recoverable, dry weight, picograms per gram
66924	PCB congener 9, solids, recoverable, dry weight, picograms per gram
66925	PCB congener 10, solids, recoverable, dry weight, picograms per gram
66926	PCB congener 11, solids, recoverable, dry weight, picograms per gram
66927	PCB congener 12, solids, recoverable, dry weight, picograms per gram
66928	PCB congener 13, solids, recoverable, dry weight, picograms per gram
66929	PCB congener 14, solids, recoverable, dry weight, picograms per gram
66930	PCB congener 15, solids, recoverable, dry weight, picograms per gram
66931	PCB congener 16, solids, recoverable, dry weight, picograms per gram
66932	PCB congener 17, solids, recoverable, dry weight, picograms per gram
66933	PCB congener 18, solids, recoverable, dry weight, picograms per gram
66934	PCB congener 19, solids, recoverable, dry weight, picograms per gram
66935	PCB congener 20, solids, recoverable, dry weight, picograms per gram
66936	PCB congener 21, solids, recoverable, dry weight, picograms per gram
66937	PCB congener 22, solids, recoverable, dry weight, picograms per gram
66938	PCB congener 23, solids, recoverable, dry weight, picograms per gram
66939	PCB congener 24, solids, recoverable, dry weight, picograms per gram
66940	PCB congener 25, solids, recoverable, dry weight, picograms per gram
66941	PCB congener 26, solids, recoverable, dry weight, picograms per gram
66942	PCB congener 27, solids, recoverable, dry weight, picograms per gram
66943	PCB congener 28, solids, recoverable, dry weight, picograms per gram
66944	PCB congener 29, solids, recoverable, dry weight, picograms per gram
66945	PCB congener 30, solids, recoverable, dry weight, picograms per gram
66946	PCB congener 31, solids, recoverable, dry weight, picograms per gram
66947	PCB congener 32, solids, recoverable, dry weight, picograms per gram
66948	PCB congener 33, solids, recoverable, dry weight, picograms per gram
66949	PCB congener 34, solids, recoverable, dry weight, picograms per gram
66950	PCB congener 35, solids, recoverable, dry weight, picograms per gram
66951	PCB congener 36, solids, recoverable, dry weight, picograms per gram
66952	PCB congener 37, solids, recoverable, dry weight, picograms per gram
66953	PCB congener 38, solids, recoverable, dry weight, picograms per gram

Parameter code	Parameter name
66954	PCB congener 39, solids, recoverable, dry weight, picograms per gram
66955	PCB congener 40, solids, recoverable, dry weight, picograms per gram
66956	PCB congener 41, solids, recoverable, dry weight, picograms per gram
66957	PCB congener 42, solids, recoverable, dry weight, picograms per gram
66958	PCB congener 43, solids, recoverable, dry weight, picograms per gram
66959	PCB congener 44, solids, recoverable, dry weight, picograms per gram
66960	PCB congener 45, solids, recoverable, dry weight, picograms per gram
66961	PCB congener 46, solids, recoverable, dry weight, picograms per gram
66962	PCB congener 47, solids, recoverable, dry weight, picograms per gram
66963	PCB congener 48, solids, recoverable, dry weight, picograms per gram
66964	PCB congener 49, solids, recoverable, dry weight, picograms per gram
66965	PCB congener 50, solids, recoverable, dry weight, picograms per gram
66966	PCB congener 51, solids, recoverable, dry weight, picograms per gram
66967	PCB congener 52, solids, recoverable, dry weight, picograms per gram
66968	PCB congener 53, solids, recoverable, dry weight, picograms per gram
66969	PCB congener 54, solids, recoverable, dry weight, picograms per gram
66970	PCB congener 55, solids, recoverable, dry weight, picograms per gram
66971	PCB congener 56, solids, recoverable, dry weight, picograms per gram
66972	PCB congener 57, solids, recoverable, dry weight, picograms per gram
66973	PCB congener 58, solids, recoverable, dry weight, picograms per gram
66974	PCB congener 59, solids, recoverable, dry weight, picograms per gram
66975	PCB congener 60, solids, recoverable, dry weight, picograms per gram
66976	PCB congener 61, solids, recoverable, dry weight, picograms per gram
66977	PCB congener 62, solids, recoverable, dry weight, picograms per gram
66978	PCB congener 63, solids, recoverable, dry weight, picograms per gram
66979	PCB congener 64, solids, recoverable, dry weight, picograms per gram
66980	PCB congener 65, solids, recoverable, dry weight, picograms per gram
66981	PCB congener 66, solids, recoverable, dry weight, picograms per gram
66982	PCB congener 67, solids, recoverable, dry weight, picograms per gram
66983	PCB congener 68, solids, recoverable, dry weight, picograms per gram
66984	PCB congener 69, solids, recoverable, dry weight, picograms per gram
66985	PCB congener 70, solids, recoverable, dry weight, picograms per gram
66986	PCB congener 71, solids, recoverable, dry weight, picograms per gram
66987	PCB congener 72, solids, recoverable, dry weight, picograms per gram
66988	PCB congener 73, solids, recoverable, dry weight, picograms per gram
66989	PCB congener 74, solids, recoverable, dry weight, picograms per gram
66990	PCB congener 75, solids, recoverable, dry weight, picograms per gram
66991	PCB congener 76, solids, recoverable, dry weight, picograms per gram
66992	PCB congener 77, solids, recoverable, dry weight, picograms per gram
66993	PCB congener 78, solids, recoverable, dry weight, picograms per gram

Parameter code	Parameter name
66994	PCB congener 79, solids, recoverable, dry weight, picograms per gram
66995	PCB congener 80, solids, recoverable, dry weight, picograms per gram
66996	PCB congener 81, solids, recoverable, dry weight, picograms per gram
66997	PCB congener 82, solids, recoverable, dry weight, picograms per gram
66998	PCB congener 83, solids, recoverable, dry weight, picograms per gram
66999	PCB congener 84, solids, recoverable, dry weight, picograms per gram
67000	PCB congener 85, solids, recoverable, dry weight, picograms per gram
67001	PCB congener 86, solids, recoverable, dry weight, picograms per gram
67002	PCB congener 87, solids, recoverable, dry weight, picograms per gram
67003	PCB congener 88, solids, recoverable, dry weight, picograms per gram
67004	PCB congener 89, solids, recoverable, dry weight, picograms per gram
67005	PCB congener 90, solids, recoverable, dry weight, picograms per gram
67006	PCB congener 91, solids, recoverable, dry weight, picograms per gram
67007	PCB congener 92, solids, recoverable, dry weight, picograms per gram
67008	PCB congener 93, solids, recoverable, dry weight, picograms per gram
67009	PCB congener 94, solids, recoverable, dry weight, picograms per gram
67010	PCB congener 95, solids, recoverable, dry weight, picograms per gram
67011	PCB congener 96, solids, recoverable, dry weight, picograms per gram
67012	PCB congener 97, solids, recoverable, dry weight, picograms per gram
67013	PCB congener 98, solids, recoverable, dry weight, picograms per gram
67014	PCB congener 99, solids, recoverable, dry weight, picograms per gram
67015	PCB congener 100, solids, recoverable, dry weight, picograms per gram
67016	PCB congener 101, solids, recoverable, dry weight, picograms per gram
67017	PCB congener 102, solids, recoverable, dry weight, picograms per gram
67018	PCB congener 103, solids, recoverable, dry weight, picograms per gram
67019	PCB congener 104, solids, recoverable, dry weight, picograms per gram
67020	PCB congener 105, solids, recoverable, dry weight, picograms per gram
67021	PCB congener 106, solids, recoverable, dry weight, picograms per gram
67022	PCB congener 107, solids, recoverable, dry weight, picograms per gram
67023	PCB congener 108, solids, recoverable, dry weight, picograms per gram
67024	PCB congener 109, solids, recoverable, dry weight, picograms per gram
67025	PCB congener 110, solids, recoverable, dry weight, picograms per gram
67026	PCB congener 111, solids, recoverable, dry weight, picograms per gram
67027	PCB congener 112, solids, recoverable, dry weight, picograms per gram
67028	PCB congener 113, solids, recoverable, dry weight, picograms per gram
67029	PCB congener 114, solids, recoverable, dry weight, picograms per gram
67030	PCB congener 115, solids, recoverable, dry weight, picograms per gram
67031	PCB congener 116, solids, recoverable, dry weight, picograms per gram
67032	PCB congener 117, solids, recoverable, dry weight, picograms per gram
67033	PCB congener 118, solids, recoverable, dry weight, picograms per gram

Parameter code	Parameter name
67034	PCB congener 119, solids, recoverable, dry weight, picograms per gram
67035	PCB congener 120, solids, recoverable, dry weight, picograms per gram
67036	PCB congener 121, solids, recoverable, dry weight, picograms per gram
67037	PCB congener 122, solids, recoverable, dry weight, picograms per gram
67038	PCB congener 123, solids, recoverable, dry weight, picograms per gram
67039	PCB congener 124, solids, recoverable, dry weight, picograms per gram
67040	PCB congener 125, solids, recoverable, dry weight, picograms per gram
67041	PCB congener 126, solids, recoverable, dry weight, picograms per gram
67042	PCB congener 127, solids, recoverable, dry weight, picograms per gram
67043	PCB congener 128, solids, recoverable, dry weight, picograms per gram
67044	PCB congener 129, solids, recoverable, dry weight, picograms per gram
67045	PCB congener 130, solids, recoverable, dry weight, picograms per gram
67046	PCB congener 131, solids, recoverable, dry weight, picograms per gram
67047	PCB congener 132, solids, recoverable, dry weight, picograms per gram
67048	PCB congener 133, solids, recoverable, dry weight, picograms per gram
67049	PCB congener 134, solids, recoverable, dry weight, picograms per gram
67050	PCB congener 135, solids, recoverable, dry weight, picograms per gram
67051	PCB congener 136, solids, recoverable, dry weight, picograms per gram
67052	PCB congener 137, solids, recoverable, dry weight, picograms per gram
67053	PCB congener 138, solids, recoverable, dry weight, picograms per gram
67054	PCB congener 139, solids, recoverable, dry weight, picograms per gram
67055	PCB congener 140, solids, recoverable, dry weight, picograms per gram
67056	PCB congener 141, solids, recoverable, dry weight, picograms per gram
67057	PCB congener 142, solids, recoverable, dry weight, picograms per gram
67058	PCB congener 143, solids, recoverable, dry weight, picograms per gram
67059	PCB congener 144, solids, recoverable, dry weight, picograms per gram
67060	PCB congener 145, solids, recoverable, dry weight, picograms per gram
67061	PCB congener 146, solids, recoverable, dry weight, picograms per gram
67062	PCB congener 147, solids, recoverable, dry weight, picograms per gram
67063	PCB congener 148, solids, recoverable, dry weight, picograms per gram
67064	PCB congener 149, solids, recoverable, dry weight, picograms per gram
67065	PCB congener 150, solids, recoverable, dry weight, picograms per gram
67066	PCB congener 151, solids, recoverable, dry weight, picograms per gram
67067	PCB congener 152, solids, recoverable, dry weight, picograms per gram
67068	PCB congener 153, solids, recoverable, dry weight, picograms per gram
67069	PCB congener 154, solids, recoverable, dry weight, picograms per gram
67070	PCB congener 155, solids, recoverable, dry weight, picograms per gram
67071	PCB congener 156, solids, recoverable, dry weight, picograms per gram
67072	PCB congener 157, solids, recoverable, dry weight, picograms per gram
67073	PCB congener 158, solids, recoverable, dry weight, picograms per gram

Parameter code	Parameter name
67074	PCB congener 159, solids, recoverable, dry weight, picograms per gram
67075	PCB congener 160, solids, recoverable, dry weight, picograms per gram
67076	PCB congener 161, solids, recoverable, dry weight, picograms per gram
67077	PCB congener 162, solids, recoverable, dry weight, picograms per gram
67078	PCB congener 163, solids, recoverable, dry weight, picograms per gram
67079	PCB congener 164, solids, recoverable, dry weight, picograms per gram
67080	PCB congener 165, solids, recoverable, dry weight, picograms per gram
67081	PCB congener 166, solids, recoverable, dry weight, picograms per gram
67082	PCB congener 167, solids, recoverable, dry weight, picograms per gram
67083	PCB congener 168, solids, recoverable, dry weight, picograms per gram
67084	PCB congener 169, solids, recoverable, dry weight, picograms per gram
67085	PCB congener 170, solids, recoverable, dry weight, picograms per gram
67086	PCB congener 171, solids, recoverable, dry weight, picograms per gram
67087	PCB congener 172, solids, recoverable, dry weight, picograms per gram
67088	PCB congener 173, solids, recoverable, dry weight, picograms per gram
67089	PCB congener 174, solids, recoverable, dry weight, picograms per gram
67090	PCB congener 175, solids, recoverable, dry weight, picograms per gram
67091	PCB congener 176, solids, recoverable, dry weight, picograms per gram
67092	PCB congener 177, solids, recoverable, dry weight, picograms per gram
67093	PCB congener 178, solids, recoverable, dry weight, picograms per gram
67094	PCB congener 179, solids, recoverable, dry weight, picograms per gram
67095	PCB congener 180, solids, recoverable, dry weight, picograms per gram
67096	PCB congener 181, solids, recoverable, dry weight, picograms per gram
67097	PCB congener 182, solids, recoverable, dry weight, picograms per gram
67098	PCB congener 183, solids, recoverable, dry weight, picograms per gram
67099	PCB congener 184, solids, recoverable, dry weight, picograms per gram
67100	PCB congener 185, solids, recoverable, dry weight, picograms per gram
67101	PCB congener 186, solids, recoverable, dry weight, picograms per gram
67102	PCB congener 187, solids, recoverable, dry weight, picograms per gram
67103	PCB congener 188, solids, recoverable, dry weight, picograms per gram
67104	PCB congener 189, solids, recoverable, dry weight, picograms per gram
67105	PCB congener 190, solids, recoverable, dry weight, picograms per gram
67106	PCB congener 191, solids, recoverable, dry weight, picograms per gram
67107	PCB congener 192, solids, recoverable, dry weight, picograms per gram
67108	PCB congener 193, solids, recoverable, dry weight, picograms per gram
67109	PCB congener 194, solids, recoverable, dry weight, picograms per gram
67110	PCB congener 195, solids, recoverable, dry weight, picograms per gram
67111	PCB congener 196, solids, recoverable, dry weight, picograms per gram
67112	PCB congener 197, solids, recoverable, dry weight, picograms per gram
67113	PCB congener 198, solids, recoverable, dry weight, picograms per gram

Parameter code	Parameter name
67114	PCB congener 199, solids, recoverable, dry weight, picograms per gram
67115	PCB congener 200, solids, recoverable, dry weight, picograms per gram
67116	PCB congener 201, solids, recoverable, dry weight, picograms per gram
67117	PCB congener 202, solids, recoverable, dry weight, picograms per gram
67118	PCB congener 203, solids, recoverable, dry weight, picograms per gram
67119	PCB congener 204, solids, recoverable, dry weight, picograms per gram
67120	PCB congener 205, solids, recoverable, dry weight, picograms per gram
67121	PCB congener 206, solids, recoverable, dry weight, picograms per gram
67122	PCB congener 207, solids, recoverable, dry weight, picograms per gram
67123	PCB congener 208, solids, recoverable, dry weight, picograms per gram
67124	PCB congener 209, solids, recoverable, dry weight, picograms per gram
67125	Acetaminophen, water, filtered, recoverable, nanograms per liter
67126	Albuterol, water, filtered, recoverable, nanograms per liter
67127	Aspirin, water, filtered, recoverable, nanograms per liter
67128	Azithromycin, water, filtered, recoverable, nanograms per liter
67129	Bupropion, water, filtered, recoverable, nanograms per liter
67130	Caffeine, water, filtered, recoverable, nanograms per liter
67131	Carbamazepine, water, filtered, recoverable, nanograms per liter
67132	Cimetidine, water, filtered, recoverable, nanograms per liter
67133	Citalopram, water, filtered, recoverable, nanograms per liter
67134	Clofibric acid, water, filtered, recoverable, nanograms per liter
67135	Codeine, water, filtered, recoverable, nanograms per liter
67136	Cotinine, water, filtered, recoverable, nanograms per liter
67137	Dehydronifedipine, water, filtered, recoverable, nanograms per liter
67138	Diclofenac, water, filtered, recoverable, nanograms per liter
67139	Diltiazem, water, filtered, recoverable, nanograms per liter
67140	1,7-Dimethylxanthine, water, filtered, recoverable, nanograms per liter
67141	Diphenhydramine, water, filtered, recoverable, nanograms per liter
67142	Duloxetine, water, filtered, recoverable, nanograms per liter
67143	Enalaprilat, water, filtered, recoverable, nanograms per liter
67144	Erythromycin, water, filtered, recoverable, nanograms per liter
67145	Fluoxetine, water, filtered, recoverable, nanograms per liter
67146	Fluvoxamine, water, filtered, recoverable, nanograms per liter
67147	Furosemide, water, filtered, recoverable, nanograms per liter
67148	Gemfibrozil, water, filtered, recoverable, nanograms per liter
67149	Hydrochlorothiazide, water, filtered, recoverable, nanograms per liter
67150	Ibuprofen, water, filtered, recoverable, nanograms per liter
67151	Ketoprofen, water, filtered, recoverable, nanograms per liter
67152	Miconazole, water, filtered, recoverable, nanograms per liter
67153	Naproxen, water, filtered, recoverable, nanograms per liter

Parameter code	Parameter name
67154	Norfluoxetine, water, filtered, recoverable, nanograms per liter
67155	Norsertraline, water, filtered, recoverable, nanograms per liter
67156	Paroxetine, water, filtered, recoverable, nanograms per liter
67157	Ranitidine, water, filtered, recoverable, nanograms per liter
67158	Sertraline, water, filtered, recoverable, nanograms per liter
67159	Simvastatin, water, filtered, recoverable, nanograms per liter
67160	Sulfamethoxazole, water, filtered, recoverable, nanograms per liter
67161	Thiabendazole, water, filtered, recoverable, nanograms per liter
67162	Triclocarban, water, filtered, recoverable, nanograms per liter
67163	Triclosan, water, filtered, recoverable, nanograms per liter
67164	Trimethoprim, water, filtered, recoverable, nanograms per liter
67165	Venlafaxine, water, filtered, recoverable, nanograms per liter
67166	Warfarin, water, filtered, recoverable, nanograms per liter
67167	Bupropion, water, unfiltered, recoverable, nanograms per liter
67168	Caffeine, water, unfiltered, recoverable, nanograms per liter
67169	Citalopram, water, unfiltered, recoverable, nanograms per liter
67170	Codeine, water, unfiltered, recoverable, nanograms per liter
67171	Cotinine, water, unfiltered, recoverable, nanograms per liter
67172	Duloxetine, water, unfiltered, recoverable, nanograms per liter
67173	Enalaprilat, water, unfiltered, recoverable, nanograms per liter
67174	Fluvoxamine, water, unfiltered, recoverable, nanograms per liter
67175	Norfluoxetine, water, unfiltered, recoverable, nanograms per liter
67176	Norsertraline, water, unfiltered, recoverable, nanograms per liter
67177	Paroxetine, water, unfiltered, recoverable, nanograms per liter
67178	Ranitidine, water, unfiltered, recoverable, nanograms per liter
67179	Triclocarban, water, unfiltered, recoverable, nanograms per liter
67180	Triclosan, water, unfiltered, recoverable, nanograms per liter
67181	Venlafaxine, water, unfiltered, recoverable, nanograms per liter
67182	Acetaminophen, biota, tissue, recoverable, wet weight, micrograms per kilogram
67183	Albuterol, biota, tissue, recoverable, wet weight, micrograms per kilogram
67184	Aspirin, biota, tissue, recoverable, wet weight, micrograms per kilogram
67185	Azithromycin, biota, tissue, recoverable, wet weight, micrograms per kilogram
67186	Bupropion, biota, tissue, recoverable, wet weight, micrograms per kilogram
67187	Caffeine, biota, tissue, recoverable, wet weight, micrograms per kilogram
67188	Carbamazepine, biota, tissue, recoverable, wet weight, micrograms per kilogram
67189	Cimetidine, biota, tissue, recoverable, wet weight, micrograms per kilogram
67190	Citalopram, biota, tissue, recoverable, wet weight, micrograms per kilogram
67191	Clofibric acid, biota, tissue, recoverable, wet weight, micrograms per kilogram
67192	Codeine, biota, tissue, recoverable, wet weight, micrograms per kilogram
67193	Cotinine, biota, tissue, recoverable, wet weight, micrograms per kilogram

Parameter code	Parameter name
67194	Dehydronifedipine, biota, tissue, recoverable, wet weight, micrograms per kilogram
67195	Diclofenac, biota, tissue, recoverable, wet weight, micrograms per kilogram
67196	Diltiazem, biota, tissue, recoverable, wet weight, micrograms per kilogram
67197	1,7-Dimethylxanthine, biota, tissue, recoverable, wet weight, micrograms per kilogram
67198	Diphenhydramine, biota, tissue, recoverable, wet weight, micrograms per kilogram
67199	Duloxetine, biota, tissue, recoverable, wet weight, micrograms per kilogram
67200	Enalaprilat, biota, tissue, recoverable, wet weight, micrograms per kilogram
67201	Erythromycin, biota, tissue, recoverable, wet weight, micrograms per kilogram
67202	Fluoxetine, biota, tissue, recoverable, wet weight, micrograms per kilogram
67203	Fluvoxamine, biota, tissue, recoverable, wet weight, micrograms per kilogram
67204	Furosemide, biota, tissue, recoverable, wet weight, micrograms per kilogram
67205	Gemfibrozil, biota, tissue, recoverable, wet weight, micrograms per kilogram
67206	Hydrochlorothiazide, biota, tissue, recoverable, wet weight, micrograms per kilogram
67207	Ibuprofen, biota, tissue, recoverable, wet weight, micrograms per kilogram
67208	Ketoprofen, biota, tissue, recoverable, wet weight, micrograms per kilogram
67209	Miconazole, biota, tissue, recoverable, wet weight, micrograms per kilogram
67210	Naproxen, biota, tissue, recoverable, wet weight, micrograms per kilogram
67211	Norfluoxetine, biota, tissue, recoverable, wet weight, micrograms per kilogram
67212	Norsertraline, biota, tissue, recoverable, wet weight, micrograms per kilogram
67213	Paroxetine, biota, tissue, recoverable, wet weight, micrograms per kilogram
67214	Ranitidine, biota, tissue, recoverable, wet weight, micrograms per kilogram
67215	Sertraline, biota, tissue, recoverable, wet weight, micrograms per kilogram
67216	Simvastatin, biota, tissue, recoverable, wet weight, micrograms per kilogram
67217	Sulfamethoxazole, biota, tissue, recoverable, wet weight, micrograms per kilogram
67218	Thiabendazole, biota, tissue, recoverable, wet weight, micrograms per kilogram
67219	Triclocarban, biota, tissue, recoverable, wet weight, micrograms per kilogram
67220	Trimethoprim, biota, tissue, recoverable, wet weight, micrograms per kilogram
67221	Venlafaxine, biota, tissue, recoverable, wet weight, micrograms per kilogram
67222	Warfarin, biota, tissue, recoverable, wet weight, micrograms per kilogram
67223	Bupropion, suspended sediment, recoverable, nanograms per liter
67224	Caffeine, suspended sediment, recoverable, nanograms per liter
67225	Citalopram, suspended sediment, recoverable, nanograms per liter
67226	Cotinine, suspended sediment, recoverable, nanograms per liter
67227	Duloxetine, suspended sediment, recoverable, nanograms per liter
67228	Enalaprilat, suspended sediment, recoverable, nanograms per liter
67229	Fluvoxamine, suspended sediment, recoverable, nanograms per liter
67230	Norfluoxetine, suspended sediment, recoverable, nanograms per liter
67231	Norsertraline, suspended sediment, recoverable, nanograms per liter
67232	Paroxetine, suspended sediment, recoverable, nanograms per liter
67233	Ranitidine, suspended sediment, recoverable, nanograms per liter

Parameter code	Parameter name
67234	Triclocarban, suspended sediment, recoverable, nanograms per liter
67235	Triclosan, suspended sediment, recoverable, nanograms per liter
67236	Venlafaxine, suspended sediment, recoverable, nanograms per liter
67237	Acetaminophen, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67238	Albuterol, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67239	Aspirin, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67240	Azithromycin, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67241	Bupropion, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67242	Caffeine, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67243	Carbamazepine, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67244	Cimetidine, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67245	Citalopram, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67246	Clofibric acid, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67247	Codeine, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67248	Cotinine, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67249	Dehydronifedipine, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67250	Diclofenac, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67251	Diltiazem, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67252	1,7-Dimethylxanthine, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67253	Diphenhydramine, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67254	Duloxetine, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67255	Enalaprilat, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67256	Erythromycin, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67257	Fluoxetine, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67258	Fluvoxamine, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67259	Furosemide, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)

Parameter code	Parameter name
67260	Gemfibrozil, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67261	Hydrochlorothiazide, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67262	Ibuprofen, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67263	Ketoprofen, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67264	Miconazole, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67265	Naproxen, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67266	Norfluoxetine, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67267	Norsertraline, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67268	Paroxetine, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67269	Ranitidine, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67270	Sertraline, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67271	Simvastatin, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67272	Sulfamethoxazole, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67273	Thiabendazole, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67274	Triclocarban, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67275	Triclosan, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67276	Trimethoprim, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67277	Venlafaxine, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67278	Warfarin, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67279	Bupropion, solids, recoverable, dry weight, micrograms per kilogram
67280	Citalopram, solids, recoverable, dry weight, micrograms per kilogram
67281	Duloxetine, solids, recoverable, dry weight, micrograms per kilogram
67282	Fluvoxamine, solids, recoverable, dry weight, micrograms per kilogram
67283	Norfluoxetine, solids, recoverable, dry weight, micrograms per kilogram
67284	Norsertraline, solids, recoverable, dry weight, micrograms per kilogram
67285	Paroxetine, solids, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
67286	Venlafaxine, solids, recoverable, dry weight, micrograms per kilogram
67287	Enalaprilat, solids, recoverable, dry weight, micrograms per kilogram
67288	Triclocarban, solids, recoverable, dry weight, micrograms per kilogram
67289	Glyphosate, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
67290	Glyphosate, air, top plus bottom sorbent traps, recoverable, nanograms per cubic meter
67291	Glyphosate, air, particulate filter, recoverable, nanograms per cubic meter
67292	Glyphosate, air, top sorbent trap, recoverable, nanograms per cubic meter
67293	Glyphosate, air, bottom sorbent trap, recoverable, nanograms per cubic meter
67294	Glufosinate, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
67295	Glufosinate, air, top plus bottom sorbent traps, recoverable, nanograms per cubic meter
67296	Glufosinate, air, particulate filter, recoverable, nanograms per cubic meter
67297	Glufosinate, air, top sorbent trap, recoverable, nanograms per cubic meter
67298	Glufosinate, air, bottom sorbent trap, recoverable, nanograms per cubic meter
67299	Aminomethylphosphonic acid, air, sum of particulate filter plus top and bottom sorbent traps, recoverable, nanograms per cubic meter
67300	Aminomethylphosphonic acid, air, top plus bottom sorbent traps, recoverable, nanograms per cubic meter
67301	Aminomethylphosphonic acid, air, particulate filter, recoverable, nanograms per cubic meter
67302	Aminomethylphosphonic acid, air, top sorbent trap, recoverable, nanograms per cubic meter
67303	Aminomethylphosphonic acid, air, bottom sorbent trap, recoverable, nanograms per cubic meter
67304	Bisphenol A, water, filtered, recoverable, nanograms per liter
67305	Bisphenol A, water, unfiltered, recoverable, nanograms per liter
67307	Bisphenol A, water, recoverable, nanograms per polar organic chemical integrative sampler (POCIS)
67308	Bisphenol A-d16, isotope dilution standard, water, filtered, percent recovery
67309	Bisphenol A-d16, isotope dilution standard, water, unfiltered, percent recovery
67310	Bisphenol A-d16, isotope dilution standard, solids, percent recovery
67311	Bisphenol A-d16, isotope dilution standard, suspended sediment, percent recovery
67312	Bisphenol A-d16, isotope dilution standard, biota, tissue, percent recovery
67313	Bisphenol A-d16, isotope dilution standard, polar organic chemical integrative sampler (POCIS), percent recovery
67314	Iron(III), water, unfiltered, total, micrograms per liter
67315	Cyanide, available, water, unfiltered, milligrams per liter
67316	Cyanide, available, water, filtered, milligrams per liter
67317	4-Methyl-1H-benzotriazole, water, filtered, recoverable, micrograms per liter
67318	Chloroxylenol, solids, recoverable, dry weight, micrograms per kilogram
67319	Phenobarbital, water, filtered, recoverable, micrograms per liter
67320	Phenobarbital, water, unfiltered, recoverable, micrograms per liter
67321	Phenobarbital, solids, recoverable, dry weight, micrograms per kilogram
67322	Butalbital, solids, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
67323	Oxycodone, solids, recoverable, dry weight, micrograms per kilogram
67324	Bisphenol A, suspended sediment, recoverable, nanograms per liter
67325	Selenate, water, filtered, micrograms per liter as selenium
67326	Selenite, water, filtered, micrograms per liter as selenium
67327	Salicylic acid, water, filtered, recoverable, nanograms per liter
67328	Pentobarbital, water, filtered, recoverable, nanograms per liter
67329	Topiramate, water, filtered, recoverable, nanograms per liter
67330	Chloroxylenol, water, filtered, recoverable, nanograms per liter
67331	Ciprofloxacin, water, filtered, recoverable, nanograms per liter
67332	Ofloxacin, water, filtered, recoverable, nanograms per liter
67333	Phenobarbital, water, filtered, recoverable, nanograms per liter
67334	Butalbital, water, filtered, recoverable, nanograms per liter
67335	Ibandronate, water, filtered, recoverable, nanograms per liter
67336	Atorvastatin, water, filtered, recoverable, nanograms per liter
67337	Montelukast, water, filtered, recoverable, nanograms per liter
67338	Lincomycin, water, filtered, recoverable, nanograms per liter
67339	Ceterizine, water, filtered, recoverable, nanograms per liter
67340	Lisinopril, water, filtered, recoverable, nanograms per liter
67341	Morphine, water, filtered, recoverable, nanograms per liter
67342	Hydrocortisone, water, filtered, recoverable, nanograms per liter
67343	Pseudoephedrine, water, filtered, recoverable, nanograms per liter
67344	Amphetamine, water, filtered, recoverable, nanograms per liter
67345	Lidocaine, water, filtered, recoverable, nanograms per liter
67346	Buspirone, water, filtered, recoverable, nanograms per liter
67347	Meprobamate, water, filtered, recoverable, nanograms per liter
67348	Cocaine, water, filtered, recoverable, nanograms per liter
67349	Phenytoin, water, filtered, recoverable, nanograms per liter
67350	Prednisone, water, filtered, recoverable, nanograms per liter
67351	Dextromethorphan, water, filtered, recoverable, nanograms per liter
67352	Oxazepam, water, filtered, recoverable, nanograms per liter
67353	Lorazepam, water, filtered, recoverable, nanograms per liter
67354	Temazepam, water, filtered, recoverable, nanograms per liter
67355	Verapamil, water, filtered, recoverable, nanograms per liter
67356	Valsartan, water, filtered, recoverable, nanograms per liter
67357	DELTA9-Tetrahydrocannabinol, water, filtered, recoverable, nanograms per liter
67358	Triamterene, water, filtered, recoverable, nanograms per liter
67359	Sulfamethizole, water, filtered, recoverable, nanograms per liter
67360	Fluconazole, water, filtered, recoverable, nanograms per liter
67361	Nizatidine, water, filtered, recoverable, nanograms per liter
67362	Pentoxifylline, water, filtered, recoverable, nanograms per liter

Parameter code	Parameter name
67363	Iminostilbene, water, filtered, recoverable, nanograms per liter
67364	Oxcarbazepine, water, filtered, recoverable, nanograms per liter
67365	Prednisolone, water, filtered, recoverable, nanograms per liter
67366	Acyclovir, water, filtered, recoverable, nanograms per liter
67367	Betamethasone, water, filtered, recoverable, nanograms per liter
67368	Amlodipine, water, filtered, recoverable, nanograms per liter
67369	Ezetimibe, water, filtered, recoverable, nanograms per liter
67370	Loratadine, water, filtered, recoverable, nanograms per liter
67371	Fenofibrate, water, filtered, recoverable, nanograms per liter
67372	Orlistat, water, filtered, recoverable, nanograms per liter
67373	5-Fluorouracil, water, filtered, recoverable, nanograms per liter
67374	Metformin, water, filtered, recoverable, nanograms per liter
67375	Nicotine, water, filtered, recoverable, nanograms per liter
67376	Theophylline, water, filtered, recoverable, nanograms per liter
67377	Oxycodone, water, filtered, recoverable, nanograms per liter
67378	Phendimetrazine, water, filtered, recoverable, nanograms per liter
67379	Chlorpheniramine, water, filtered, recoverable, nanograms per liter
67380	Carisoprodol, water, filtered, recoverable, nanograms per liter
67381	Diazepam, water, filtered, recoverable, nanograms per liter
67382	Methadone, water, filtered, recoverable, nanograms per liter
67383	Methocarbamol, water, filtered, recoverable, nanograms per liter
67384	Atenolol, water, filtered, recoverable, nanograms per liter
67385	Sulfadimethoxine, water, filtered, recoverable, nanograms per liter
67386	Metaxalone, water, filtered, recoverable, nanograms per liter
67387	Hydrocodone, water, filtered, recoverable, nanograms per liter
67389	Valacyclovir, water, filtered, recoverable, nanograms per liter
67390	Tiotropium, water, filtered, recoverable, nanograms per liter
67391	Levofloxacin, water, filtered, recoverable, nanograms per liter
67392	Fexofenadine, water, filtered, recoverable, nanograms per liter
67393	Oseltamivir, water, filtered, recoverable, nanograms per liter
67394	Omeprazole, water, filtered, recoverable, nanograms per liter
67395	Methyl-1H-benzotriazole, water, filtered, recoverable, nanograms per liter
67396	Loperamide, water, filtered, recoverable, nanograms per liter
67397	Propranolol, water, filtered, recoverable, nanograms per liter
67398	Tramadol, water, filtered, recoverable, nanograms per liter
67399	Clonidine, water, filtered, recoverable, nanograms per liter
67400	Thyroxine, water, filtered, recoverable, nanograms per liter
67401	Amitriptyline, water, filtered, recoverable, nanograms per liter
67402	Metoprolol, water, filtered, recoverable, nanograms per liter
67403	Promethazine, water, filtered, recoverable, nanograms per liter

Parameter code	Parameter name
67404	Methotrexate, water, filtered, recoverable, nanograms per liter
67405	Cyclophosphamide, water, filtered, recoverable, nanograms per liter
67406	Fluticasone, water, filtered, recoverable, nanograms per liter
67407	Raloxifene, water, filtered, recoverable, nanograms per liter
67408	Sitagliptin, water, filtered, recoverable, nanograms per liter
67409	Norsertraline, water, filtered, recoverable, nanograms per liter
67410	Guaiacol glycerol ether, water, filtered, recoverable, nanograms per liter
67411	Antipyrine, water, filtered, recoverable, nanograms per liter
67412	Clofibric acid, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67413	Diclofenac, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67414	Furosemide, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67415	Gemfibrozil, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67416	Hydrochlorothiazide, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67417	Ibuprofen, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67418	Naproxen, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67419	Salicylic acid, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67420	Pentobarbital, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67421	Topiramate, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67422	Chloroxylenol, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67423	Ciprofloxacin, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67424	Ofloxacin, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67425	Phenobarbital, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67426	Butalbital, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67427	Atorvastatin, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67428	Ibandronate, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67429	Montelukast, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67430	Lincomycin, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67431	Ceterizine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67432	Lisinopril, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67433	17-alpha-Ethynyl estradiol, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67434	Norethindrone, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67435	Piperonyl butoxide, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67436	Acetaminophen, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67437	Albuterol, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67438	Azithromycin, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67439	Bupropion, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67440	Caffeine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67441	Carbamazepine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67442	Cimetidine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67443	Codeine, water, filtered (0.2 micron filter), recoverable, nanograms per liter

Parameter code	Parameter name
67444	Cotinine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67445	Dehydronifedipine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67446	1,7-Dimethylxanthine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67447	Diphenhydramine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67448	Duloxetine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67449	Erythromycin, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67450	Fluoxetine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67451	Norfluoxetine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67452	Ranitidine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67453	Simvastatin, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67454	Sulfamethoxazole, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67455	Thiabendazole, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67456	Trimethoprim, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67457	Warfarin, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67458	Morphine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67459	Hydrocortisone, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67460	Pseudoephedrine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67461	Amphetamine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67462	Lidocaine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67463	Buspirone, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67464	Meprobamate, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67465	Cocaine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67466	Phenytoin, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67467	Prednisone, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67468	Dextromethorphan, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67469	Oxazepam, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67470	Lorazepam, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67471	Temazepam, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67472	Verapamil, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67473	Valsartan, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67474	DELTA9-Tetrahydrocannabinol, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67475	Triamterene, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67476	Sulfamethizole, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67477	Antipyrine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67478	Fluconazole, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67479	Nizatidine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67480	Pentoxifylline, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67481	Iminostilbene, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67482	Oxcarbazepine, water, filtered (0.2 micron filter), recoverable, nanograms per liter

Parameter code	Parameter name
67483	Prednisolone, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67484	Acyclovir, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67485	Betamethasone, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67486	Amlodipine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67487	Ezetimibe, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67488	Loratadine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67489	Fenofibrate, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67490	Orlistat, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67491	5-Fluorouracil, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67492	Metformin, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67493	Nicotine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67494	Theophylline, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67495	Oxycodone, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67496	Phendimetrazine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67497	Chlorpheniramine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67498	Carisoprodol, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67499	Diazepam, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67500	Methadone, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67501	Methocarbamol, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67502	Atenolol, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67503	Sulfadimethoxine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67504	Metaxalone, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67505	Citalopram, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67506	Hydrocodone, water,filtered (0.2 micron filter0, recoverable, nanograms per liter
67507	Valacyclovir, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67508	Tiotropium, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67509	Levofloxacin, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67510	Fexofenadine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67511	Oseltamivir, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67512	Omeprazole, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67513	Miconazole, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67514	Methyl-1H-benzotriazole, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67515	Loperamide, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67516	Propranolol, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67517	Tramadol, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67518	Clonidine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67519	Diltiazem, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67520	Thyroxine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67521	Fluvoxamine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67522	Amitriptyline, water, filtered (0.2 micron filter), recoverable, nanograms per liter

Parameter code	Parameter name
67523	Metoprolol, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67524	Promethazine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67525	Methotrexate, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67526	Cyclophosphamide, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67527	Paroxetine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67528	Sertraline, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67529	Fluticasone, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67530	Raloxifene, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67531	Sitagliptin, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67532	Norsertraline, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67533	Guaiacol glycerol ether, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67534	Venlafaxine, water, filtered (0.2 micron filter), recoverable, nanograms per liter
67535	3,4-Dichloroaniline, soil, recoverable, dry weight, micrograms per kilogram
67536	3,5-Dichloroaniline, water, filtered, recoverable, nanograms per liter
67537	3,5-Dichloroaniline, suspended sediment, recoverable, dry weight, micrograms per kilogram
67538	3,5-Dichloroaniline, bed sediment, recoverable, dry weight, micrograms per kilogram
67539	3,5-Dichloroaniline, soil, recoverable, dry weight, micrograms per kilogram
67540	Alachlor, biota, tissue, recoverable, wet weight, micrograms per kilogram
67541	Allethrin, soil, recoverable, dry weight, micrograms per kilogram
67542	Azoxystrobin, biota, tissue, recoverable, wet weight, micrograms per kilogram
67543	Azoxystrobin, soil, recoverable, dry weight, micrograms per kilogram
67544	Bifenthrin, biota, tissue, recoverable, wet weight, micrograms per kilogram
67545	Bifenthrin, soil, recoverable, dry weight, micrograms per kilogram
67546	Bispyribac sodium, water, filtered, recoverable, nanograms per liter
67547	Bispyribac sodium, suspended sediment, recoverable, dry weight, micrograms per kilogram
67548	Bispyribac sodium, bed sediment, recoverable, dry weight, micrograms per kilogram
67549	Bispyribac sodium, soil, recoverable, dry weight, micrograms per kilogram
67550	Boscalid, water, filtered, recoverable, nanograms per liter
67551	Boscalid, suspended sediment, recoverable, dry weight, micrograms per kilogram
67552	Boscalid, bed sediment, recoverable, dry weight, micrograms per kilogram
67553	Boscalid, biota, tissue, recoverable, wet weight, micrograms per kilogram
67554	Boscalid, soil, recoverable, dry weight, micrograms per kilogram
67555	Butylate, biota, tissue, recoverable, wet weight, micrograms per kilogram
67556	Butylate, soil, recoverable, dry weight, micrograms per kilogram
67557	Carbaryl, biota, tissue, recoverable, wet weight, micrograms per kilogram
67558	Carbaryl, soil, recoverable, dry weight, micrograms per kilogram
67559	Carbofuran, biota, tissue, recoverable, wet weight, micrograms per kilogram
67560	Carbofuran, soil, recoverable, dry weight, micrograms per kilogram
67561	Chlorothalonil, soil, recoverable, dry weight, micrograms per kilogram
67562	Clomazone, water, filtered, recoverable, nanograms per liter

Parameter code	Parameter name
67563	Clomazone, suspended sediment, recoverable, dry weight, micrograms per kilogram
67564	Clomazone, bed sediment, recoverable, dry weight, micrograms per kilogram
67565	Clomazone, biota, tissue, recoverable, wet weight, micrograms per kilogram
67566	Clomazone, soil, recoverable, dry weight, micrograms per kilogram
67567	Cycloate, biota, tissue, recoverable, wet weight, micrograms per kilogram
67568	Cycloate, soil, recoverable, dry weight, micrograms per kilogram
67569	Cyfluthrin, soil, recoverable, dry weight, micrograms per kilogram
67570	Cypermethrin, biota, tissue, recoverable, wet weight, micrograms per kilogram
67571	Cypermethrin, soil, recoverable, dry weight, micrograms per kilogram
67572	Cyproconazole, biota, tissue, recoverable, wet weight, micrograms per kilogram
67573	Cyproconazole, soil, recoverable, dry weight, micrograms per kilogram
67574	Cyprodinil, water, filtered, recoverable, nanograms per liter
67575	Cyprodinil, suspended sediment, recoverable, dry weight, micrograms per kilogram
67576	Cyprodinil, bed sediment, recoverable, dry weight, micrograms per kilogram
67577	Cyprodinil, biota, tissue, recoverable, wet weight, micrograms per kilogram
67578	Cyprodinil, soil, recoverable, dry weight, micrograms per kilogram
67579	DCPA, soil, recoverable, dry weight, micrograms per kilogram
67580	Deltamethrin, biota, tissue, recoverable, wet weight, micrograms per kilogram
67581	Deltamethrin, soil, recoverable, dry weight, micrograms per kilogram
67582	Difenoconazole, water, filtered, recoverable, nanograms per liter
67583	Difenoconazole, suspended sediment, recoverable, dry weight, micrograms per kilogram
67584	Difenoconazole, bed sediment, recoverable, dry weight, micrograms per kilogram
67585	Difenoconazole, biota, tissue, recoverable, wet weight, micrograms per kilogram
67586	Difenoconazole, soil, recoverable, dry weight, micrograms per kilogram
67587	(E)-Dimethomorph, water, filtered, recoverable, nanograms per liter
67588	(E)-Dimethomorph, suspended sediment, recoverable, dry weight, micrograms per kilogram
67589	(E)-Dimethomorph, bed sediment, recoverable, dry weight, micrograms per kilogram
67590	(E)-Dimethomorph, soil, recoverable, dry weight, micrograms per kilogram
67591	(Z)-Dimethomorph, water, filtered, recoverable, nanograms per liter
67592	(Z)-Dimethomorph, suspended sediment, recoverable, dry weight, micrograms per kilogram
67593	(Z)-Dimethomorph, bed sediment, recoverable, dry weight, micrograms per kilogram
67594	(Z)-Dimethomorph, soil, recoverable, dry weight, micrograms per kilogram
67595	Disulfoton, water, filtered, recoverable, nanograms per liter
67596	Disulfoton, suspended sediment, recoverable, dry weight, micrograms per kilogram
67597	Disulfoton, biota, tissue, recoverable, wet weight, micrograms per kilogram
67598	EPTC, biota, tissue, recoverable, wet weight, micrograms per kilogram
67599	EPTC, soil, recoverable, dry weight, micrograms per kilogram
67600	Esfenvalerate, biota, tissue, recoverable, wet weight, micrograms per kilogram
67601	Esfenvalerate, soil, recoverable, dry weight, micrograms per kilogram
67602	Ethalfluralin, biota, tissue, recoverable, wet weight, micrograms per kilogram

Parameter code	Parameter name
67603	Ethalfluralin, soil, recoverable, dry weight, micrograms per kilogram
67604	Etofenprox, water, filtered, recoverable, nanograms per liter
67605	Etofenprox, suspended sediment, recoverable, dry weight, micrograms per kilogram
67606	Etofenprox, bed sediment, recoverable, dry weight, micrograms per kilogram
67607	Etofenprox, biota, tissue, recoverable, wet weight, micrograms per kilogram
67608	Etofenprox, soil, recoverable, dry weight, micrograms per kilogram
67609	Famoxadone, water, filtered, recoverable, nanograms per liter
67610	Famoxadone, suspended sediment, recoverable, dry weight, micrograms per kilogram
67611	Famoxadone, bed sediment, recoverable, dry weight, micrograms per kilogram
67612	Famoxadone, soil, recoverable, dry weight, micrograms per kilogram
67613	Fenarimol, water, filtered, recoverable, nanograms per liter
67614	Fenarimol, suspended sediment, recoverable, dry weight, micrograms per kilogram
67615	Fenarimol, bed sediment, recoverable, dry weight, micrograms per kilogram
67616	Fenarimol, biota, tissue, recoverable, wet weight, micrograms per kilogram
67617	Fenarimol, soil, recoverable, dry weight, micrograms per kilogram
67618	Fenbuconazole, water, filtered, recoverable, nanograms per liter
67619	Fenbuconazole, suspended sediment, recoverable, dry weight, micrograms per kilogram
67620	Fenbuconazole, bed sediment, recoverable, dry weight, micrograms per kilogram
67621	Fenbuconazole, soil, recoverable, dry weight, micrograms per kilogram
67622	Fenhexamid, water, filtered, recoverable, nanograms per liter
67623	Fenhexamid, suspended sediment, recoverable, dry weight, micrograms per kilogram
67624	Fenhexamid, bed sediment, recoverable, dry weight, micrograms per kilogram
67625	Fenhexamid, soil, recoverable, dry weight, micrograms per kilogram
67626	Fenoxaprop-P-ethyl, water, filtered, recoverable, nanograms per liter
67627	Fenoxaprop-P-ethyl, suspended sediment, recoverable, dry weight, micrograms per kilogram
67628	Fenoxaprop-P-ethyl, bed sediment, recoverable, dry weight, micrograms per kilogram
67629	Fenoxaprop-P-ethyl, soil, recoverable, dry weight, micrograms per kilogram
67630	Fenpropathrin, biota, tissue, recoverable, wet weight, micrograms per kilogram
67631	Fenpropathrin, soil, recoverable, dry weight, micrograms per kilogram
67632	Fipronil, soil, recoverable, dry weight, micrograms per kilogram
67633	Desulfinylfipronil, soil, recoverable, dry weight, micrograms per kilogram
67634	Fipronil sulfide, soil, recoverable, dry weight, micrograms per kilogram
67635	Fipronil sulfone, soil, recoverable, dry weight, micrograms per kilogram
67636	Fluazinam, water, filtered, recoverable, nanograms per liter
67637	Fluazinam, suspended sediment, recoverable, dry weight, micrograms per kilogram
67638	Fluazinam, bed sediment, recoverable, dry weight, micrograms per kilogram
67639	Fluazinam, soil, recoverable, dry weight, micrograms per kilogram
67640	Fludioxonil, water, filtered, recoverable, nanograms per liter
67641	Fludioxonil, suspended sediment, recoverable, dry weight, micrograms per kilogram
67642	Fludioxonil, bed sediment, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
67643	Fludioxonil, biota, tissue, recoverable, wet weight, micrograms per kilogram
67644	Fludioxonil, soil, recoverable, dry weight, micrograms per kilogram
67645	Fluoxastrobin, water, filtered, recoverable, nanograms per liter
67646	Fluoxastrobin, suspended sediment, recoverable, dry weight, micrograms per kilogram
67647	Fluoxastrobin, bed sediment, recoverable, dry weight, micrograms per kilogram
67648	Fluoxastrobin, soil, recoverable, dry weight, micrograms per kilogram
67649	Flusilazole, water, filtered, recoverable, nanograms per liter
67650	Flusilazole, suspended sediment, recoverable, dry weight, micrograms per kilogram
67651	Flusilazole, bed sediment, recoverable, dry weight, micrograms per kilogram
67652	Flusilazole, soil, recoverable, dry weight, micrograms per kilogram
67653	Flutriafol, water, filtered, recoverable, nanograms per liter
67654	Flutriafol, suspended sediment, recoverable, dry weight, micrograms per kilogram
67655	Flutriafol, bed sediment, recoverable, dry weight, micrograms per kilogram
67656	Flutriafol, soil, recoverable, dry weight, micrograms per kilogram
67657	Fonofos, soil, recoverable, dry weight, micrograms per kilogram
67658	Halosulfuron-methyl, suspended sediment, recoverable, dry weight, micrograms per kilogram
67659	Halosulfuron-methyl, bed sediment, recoverable, dry weight, micrograms per kilogram
67660	Halosulfuron-methyl, soil, recoverable, dry weight, micrograms per kilogram
67661	Hexazinone, soil, recoverable, dry weight, micrograms per kilogram
67662	Imazalil, water, filtered, recoverable, nanograms per liter
67663	Imazalil, suspended sediment, recoverable, dry weight, micrograms per kilogram
67664	Imazalil, bed sediment, recoverable, dry weight, micrograms per kilogram
67665	Imazalil, soil, recoverable, dry weight, micrograms per kilogram
67666	Iprodione, biota, tissue, recoverable, wet weight, micrograms per kilogram
67667	Iprodione, soil, recoverable, dry weight, micrograms per kilogram
67668	Isodrin, biota, tissue, recoverable, wet weight, micrograms per kilogram
67669	Isodrin, soil, recoverable, dry weight, micrograms per kilogram
67670	Kresoxim-methyl, water, filtered, recoverable, nanograms per liter
67671	Kresoxim-methyl, suspended sediment, recoverable, dry weight, micrograms per kilogram
67672	Kresoxim-methyl, bed sediment, recoverable, dry weight, micrograms per kilogram
67673	Kresoxim-methyl, soil, recoverable, dry weight, micrograms per kilogram
67674	lambda-Cyhalothrin, soil, recoverable, dry weight, micrograms per kilogram
67675	Malathion, biota, tissue, recoverable, wet weight, micrograms per kilogram
67676	Metconazole, biota, tissue, recoverable, wet weight, micrograms per kilogram
67677	Metconazole, soil, recoverable, dry weight, micrograms per kilogram
67678	Methidathion, biota, tissue, recoverable, wet weight, micrograms per kilogram
67679	Methoprene, biota, tissue, recoverable, wet weight, micrograms per kilogram
67680	Molinate, biota, tissue, recoverable, wet weight, micrograms per kilogram
67681	Myclobutanil, biota, tissue, recoverable, wet weight, micrograms per kilogram
67682	Myclobutanil, soil, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
67683	Napropamide, biota, tissue, recoverable, wet weight, micrograms per kilogram
67684	Napropamide, soil, recoverable, dry weight, micrograms per kilogram
67685	Norflurazon, water, filtered, recoverable, nanograms per liter
67686	Norflurazon, suspended sediment, recoverable, dry weight, micrograms per kilogram
67687	Norflurazon, bed sediment, recoverable, dry weight, micrograms per kilogram
67688	Norflurazon, biota, tissue, recoverable, wet weight, micrograms per kilogram
67689	Oxyfluorfen, soil, recoverable, dry weight, micrograms per kilogram
67690	Pebulate, soil, recoverable, dry weight, micrograms per kilogram
67691	Pentachloroanisole, soil, recoverable, dry weight, micrograms per kilogram
67692	Pentachloronitrobenzene, biota, tissue, recoverable, wet weight, micrograms per kilogram
67693	Pentachloronitrobenzene, soil, recoverable, dry weight, micrograms per kilogram
67694	Permethrin, biota, tissue, recoverable, wet weight, micrograms per kilogram
67695	Permethrin, soil, recoverable, dry weight, micrograms per kilogram
67696	Phenothrin, biota, tissue, recoverable, wet weight, micrograms per kilogram
67697	Phenothrin, soil, recoverable, dry weight, micrograms per kilogram
67698	Phosmet, biota, tissue, recoverable, wet weight, micrograms per kilogram
67699	Phosmet, soil, recoverable, dry weight, micrograms per kilogram
67700	Piperonyl butoxide, biota, tissue, recoverable, wet weight, micrograms per kilogram
67701	Piperonyl butoxide, soil, recoverable, dry weight, micrograms per kilogram
67702	Prometon, water, filtered, recoverable, nanograms per liter
67703	Prometryn, biota, tissue, recoverable, wet weight, micrograms per kilogram
67704	Propiconazole, biota, tissue, recoverable, wet weight, micrograms per kilogram
67705	Propiconazole, soil, recoverable, dry weight, micrograms per kilogram
67706	Propyzamide, water, filtered, recoverable, nanograms per liter
67707	Propyzamide, suspended sediment, recoverable, dry weight, micrograms per kilogram
67708	Propyzamide, bed sediment, recoverable, dry weight, micrograms per kilogram
67709	Propyzamide, biota, tissue, recoverable, wet weight, micrograms per kilogram
67710	Propyzamide, soil, recoverable, dry weight, micrograms per kilogram
67711	Prothioconazole, water, filtered, recoverable, nanograms per liter
67712	Prothioconazole, suspended sediment, recoverable, dry weight, micrograms per kilogram
67713	Prothioconazole, bed sediment, recoverable, dry weight, micrograms per kilogram
67714	Prothioconazole, soil, recoverable, dry weight, micrograms per kilogram
67715	Pyraclostrobin, biota, tissue, recoverable, wet weight, micrograms per kilogram
67716	Pyraclostrobin, soil, recoverable, dry weight, micrograms per kilogram
67717	Pyrimethanil, water, filtered, recoverable, nanograms per liter
67718	Pyrimethanil, suspended sediment, recoverable, dry weight, micrograms per kilogram
67719	Pyrimethanil, bed sediment, recoverable, dry weight, micrograms per kilogram
67720	Pyrimethanil, biota, tissue, recoverable, wet weight, micrograms per kilogram
67721	Pyrimethanil, soil, recoverable, dry weight, micrograms per kilogram
67722	Resmethrin, biota, tissue, recoverable, wet weight, micrograms per kilogram

Parameter code	Parameter name
67723	Resmethrin, soil, recoverable, dry weight, micrograms per kilogram
67724	Sulfotep, water, filtered, recoverable, nanograms per liter
67725	Sulfotep, suspended sediment, recoverable, dry weight, micrograms per kilogram
67726	tau-Fluvalinate, biota, tissue, recoverable, wet weight, micrograms per kilogram
67727	tau-Fluvalinate, soil, recoverable, dry weight, micrograms per kilogram
67728	Tebuconazole, suspended sediment, recoverable, dry weight, micrograms per kilogram
67729	Tebuconazole, biota, tissue, recoverable, wet weight, micrograms per kilogram
67730	Tebuconazole, soil, recoverable, dry weight, micrograms per kilogram
67731	Tefluthrin, water, filtered, recoverable, nanograms per liter
67732	Tefluthrin, suspended sediment, recoverable, dry weight, micrograms per kilogram
67733	Tefluthrin, bed sediment, recoverable, dry weight, micrograms per kilogram
67734	Tefluthrin, soil, recoverable, dry weight, micrograms per kilogram
67735	Tetraconazole, biota, tissue, recoverable, wet weight, micrograms per kilogram
67736	Tetraconazole, soil, recoverable, dry weight, micrograms per kilogram
67737	Tetramethrin, biota, tissue, recoverable, wet weight, micrograms per kilogram
67738	Tetramethrin, soil, recoverable, dry weight, micrograms per kilogram
67739	Thiobencarb, biota, tissue, recoverable, wet weight, micrograms per kilogram
67740	Thiobencarb, soil, recoverable, dry weight, micrograms per kilogram
67741	Triadimefon, water, filtered, recoverable, nanograms per liter
67742	Triadimefon, suspended sediment, recoverable, dry weight, micrograms per kilogram
67743	Triadimefon, bed sediment, recoverable, dry weight, micrograms per kilogram
67744	Triadimefon, biota, tissue, recoverable, wet weight, micrograms per kilogram
67745	Triadimefon, soil, recoverable, dry weight, micrograms per kilogram
67746	Triadimenol, water, filtered, recoverable, nanograms per liter
67747	Triadimenol, suspended sediment, recoverable, dry weight, micrograms per kilogram
67748	Triadimenol, bed sediment, recoverable, dry weight, micrograms per kilogram
67749	Triadimenol, biota, tissue, recoverable, wet weight, micrograms per kilogram
67750	Triadimenol, soil, recoverable, dry weight, micrograms per kilogram
67751	Trifloxystrobin, biota, tissue, recoverable, wet weight, micrograms per kilogram
67752	Trifloxystrobin, soil, recoverable, dry weight, micrograms per kilogram
67753	Triflumizole, water, filtered, recoverable, nanograms per liter
67754	Triflumizole, suspended sediment, recoverable, dry weight, micrograms per kilogram
67755	Triflumizole, bed sediment, recoverable, dry weight, micrograms per kilogram
67756	Triflumizole, biota, tissue, recoverable, wet weight, micrograms per kilogram
67757	Triflumizole, soil, recoverable, dry weight, micrograms per kilogram
67758	Triticonazole, water, filtered, recoverable, nanograms per liter
67759	Triticonazole, suspended sediment, recoverable, dry weight, micrograms per kilogram
67760	Triticonazole, bed sediment, recoverable, dry weight, micrograms per kilogram
67761	Triticonazole, biota, tissue, recoverable, wet weight, micrograms per kilogram
67762	Triticonazole, soil, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
67763	Vinclozolin, water, filtered, recoverable, nanograms per liter
67764	Vinclozolin, suspended sediment, recoverable, dry weight, micrograms per kilogram
67765	Vinclozolin, bed sediment, recoverable, dry weight, micrograms per kilogram
67766	Vinclozolin, biota, tissue, recoverable, wet weight, micrograms per kilogram
67767	Vinclozolin, soil, recoverable, dry weight, micrograms per kilogram
67768	Zoxamide, water, filtered, recoverable, nanograms per liter
67769	Zoxamide, suspended sediment, recoverable, dry weight, micrograms per kilogram
67770	Zoxamide, bed sediment, recoverable, dry weight, micrograms per kilogram
67771	Zoxamide, biota, tissue, recoverable, wet weight, micrograms per kilogram
67772	Zoxamide, soil, recoverable, dry weight, micrograms per kilogram
67773	1,3-Propanediol, water, filtered (0.2 micron filter), recoverable, milligrams per liter
67774	1,2-Bis(2,4,6-tribromophenoxy)ethane, water, unfiltered, recoverable, nanograms per liter
67775	Benfluralin, water, unfiltered, recoverable, nanograms per liter
67776	Chlorpyrifos, water, unfiltered, recoverable, nanograms per liter
67777	Cyfluthrin, water, unfiltered, recoverable, nanograms per liter
67778	lambda-Cyhalothrin, water, unfiltered, recoverable, nanograms per liter
67779	DCPA, water, unfiltered, recoverable, nanograms per liter
67780	Bis(hexachlorocyclopentadieno) cyclooctane, water, unfiltered, recoverable, nanograms per liter
67781	Desulfinylfipronil, water, unfiltered, recoverable, nanograms per liter
67782	Dieldrin, water, unfiltered, recoverable, nanograms per liter
67783	alpha-Endosulfan, water, unfiltered, recoverable, nanograms per liter
67784	Fipronil, water, unfiltered, recoverable, nanograms per liter
67785	Fipronil sulfide, water, unfiltered, recoverable, nanograms per liter
67786	Octachlorostyrene, water, unfiltered, recoverable, nanograms per liter
67787	Oxyfluorfen, water, unfiltered, recoverable, nanograms per liter
67788	Pentabromotoluene, water, unfiltered, recoverable, nanograms per liter
67789	Pentachloroanisole, water, unfiltered, recoverable, nanograms per liter
67790	Pentachloronitrobenzene, water, unfiltered, recoverable, nanograms per liter
67791	PCB congener 110, water, unfiltered, recoverable, nanograms per liter
67792	PCB congener 138, water, unfiltered, recoverable, nanograms per liter
67793	PCB congener 149, water, unfiltered, recoverable, nanograms per liter
67794	PCB congener 170, water, unfiltered, recoverable, nanograms per liter
67795	PCB congener 187, water, unfiltered, recoverable, nanograms per liter
67796	Tefluthrin, water, unfiltered, recoverable, nanograms per liter
67797	Tetradifon, water, unfiltered, recoverable, nanograms per liter
67798	Methoxy triclosan, water, unfiltered, recoverable, nanograms per liter
67799	Trifluralin, water, unfiltered, recoverable, nanograms per liter
67800	Pendimethalin, water, unfiltered, recoverable, nanograms per liter
67801	PCB congener 70, water, unfiltered, recoverable, nanograms per liter
67802	4-Chlorobenzyl methyl sulfone, water, filtered, recoverable, nanograms per liter

Parameter code	Parameter name
67803	Musk xylene, water, filtered, recoverable, micrograms per liter
67804	2-Ethyl-2-phenylmalonamide, water, filtered, recoverable, micrograms per liter
67805	Antipyrine, water, filtered, recoverable, micrograms per liter
67806	Celecoxib, water, filtered, recoverable, micrograms per liter
67807	Citalopram, water, filtered, recoverable, micrograms per liter
67808	Desmethyltramadol, water, filtered, recoverable, micrograms per liter
67809	Dextromethorphan, water, filtered, recoverable, micrograms per liter
67810	Dihydrocodeine, water, filtered, recoverable, micrograms per liter
67811	Efavirenz, water, filtered, recoverable, micrograms per liter
67812	Fluconazole, water, filtered, recoverable, micrograms per liter
67813	Griseofulvin, water, filtered, recoverable, micrograms per liter
67814	Guaiacol glycerol ether, water, filtered, recoverable, micrograms per liter
67815	Iminostilbene, water, filtered, recoverable, micrograms per liter
67816	Lidocaine, water, filtered, recoverable, micrograms per liter
67817	Lorazepam, water, filtered, recoverable, micrograms per liter
67818	Meperidine, water, filtered, recoverable, micrograms per liter
67819	Meprobamate, water, filtered, recoverable, micrograms per liter
67820	Methylphenidate, water, filtered, recoverable, micrograms per liter
67821	Norpropoxyphene, water, filtered, recoverable, micrograms per liter
67822	Oxcarbazepine, water, filtered, recoverable, micrograms per liter
67823	Pentobarbital, water, filtered, recoverable, micrograms per liter
67824	Pentoxifylline, water, filtered, recoverable, micrograms per liter
67825	Phenytoin, water, filtered, recoverable, micrograms per liter
67826	Piperonyl butoxide, water, filtered, recoverable, micrograms per liter
67827	Primidone, water, filtered, recoverable, micrograms per liter
67828	Propofol, water, filtered, recoverable, micrograms per liter
67829	Rizatriptan, water, filtered, recoverable, micrograms per liter
67830	Temazepam, water, filtered, recoverable, micrograms per liter
67831	Ticlopidine, water, filtered, recoverable, micrograms per liter
67832	Tramadol, water, filtered, recoverable, micrograms per liter
67833	Venlafaxine, water, filtered, recoverable, micrograms per liter
67834	Verapamil, water, filtered, recoverable, micrograms per liter
67835	2-Ethyl-2-phenylmalonamide, water, unfiltered, recoverable, micrograms per liter
67836	Acetaminophen, water, unfiltered, recoverable, micrograms per liter
67837	Antipyrine, water, unfiltered, recoverable, micrograms per liter
67838	Carbamazepine, water, unfiltered, recoverable, micrograms per liter
67839	Celecoxib, water, unfiltered, recoverable, micrograms per liter
67840	Citalopram, water, unfiltered, recoverable, micrograms per liter
67841	Desmethyltramadol, water, unfiltered, recoverable, micrograms per liter
67842	Dextromethorphan, water, unfiltered, recoverable, micrograms per liter

Parameter code	Parameter name
67843	Dihydrocodeine, water, unfiltered, recoverable, micrograms per liter
67844	Diltiazem, water, unfiltered, recoverable, micrograms per liter
67845	Diphenhydramine, water, unfiltered, recoverable, micrograms per liter
67846	Efavirenz, water, unfiltered, recoverable, micrograms per liter
67847	Fluconazole, water, unfiltered, recoverable, micrograms per liter
67848	Fluoxetine, water, unfiltered, recoverable, micrograms per liter
67849	Gemfibrozil, water, unfiltered, recoverable, micrograms per liter
67850	Griseofulvin, water, unfiltered, recoverable, micrograms per liter
67851	Guaiacol glycerol ether, water, unfiltered, recoverable, micrograms per liter
67852	Ibuprofen, water, unfiltered, recoverable, micrograms per liter
67853	Iminostilbene, water, unfiltered, recoverable, micrograms per liter
67854	Lidocaine, water, unfiltered, recoverable, micrograms per liter
67855	Lorazepam, water, unfiltered, recoverable, micrograms per liter
67856	Meperidine, water, unfiltered, recoverable, micrograms per liter
67857	Meprobamate, water, unfiltered, recoverable, micrograms per liter
67858	Methylphenidate, water, unfiltered, recoverable, micrograms per liter
67859	Nicotine, water, unfiltered, recoverable, micrograms per liter
67860	Norpropoxyphene, water, unfiltered, recoverable, micrograms per liter
67861	Oxcarbazepine, water, unfiltered, recoverable, micrograms per liter
67862	Pentobarbital, water, unfiltered, recoverable, micrograms per liter
67863	Pentoxifylline, water, unfiltered, recoverable, micrograms per liter
67864	Phenytoin, water, unfiltered, recoverable, micrograms per liter
67865	Piperonyl butoxide, water, unfiltered, recoverable, micrograms per liter
67866	Primidone, water, unfiltered, recoverable, micrograms per liter
67867	Propofol, water, unfiltered, recoverable, micrograms per liter
67868	Rizatriptan, water, unfiltered, recoverable, micrograms per liter
67869	Temazepam, water, unfiltered, recoverable, micrograms per liter
67870	Ticlopidine, water, unfiltered, recoverable, micrograms per liter
67871	Tramadol, water, unfiltered, recoverable, micrograms per liter
67872	Venlafaxine, water, unfiltered, recoverable, micrograms per liter
67873	Verapamil, water, unfiltered, recoverable, micrograms per liter
67874	Aluminum, solids, recoverable, dry weight, percent
67875	Antimony, solids, recoverable, dry weight, milligrams per kilogram
67876	Arsenic, solids, recoverable, dry weight, milligrams per kilogram
67877	Barium, solids, recoverable, dry weight, milligrams per kilogram
67878	Beryllium, solids, recoverable, dry weight, milligrams per kilogram
67879	Bismuth, solids, recoverable, dry weight, milligrams per kilogram
67880	Cadmium, solids, recoverable, dry weight, milligrams per kilogram
67881	Calcium, solids, recoverable, dry weight, percent
67882	Chromium, solids, recoverable, dry weight, milligrams per kilogram

Parameter code	Parameter name
67883	Cobalt, solids, recoverable, dry weight, milligrams per kilogram
67884	Copper, solids, recoverable, dry weight, milligrams per kilogram
67885	Iron, solids, recoverable, dry weight, percent
67886	Lanthanum, solids, recoverable, dry weight, milligrams per kilogram
67887	Magnesium, solids, recoverable, dry weight, percent
67888	Manganese, solids, recoverable, dry weight, milligrams per kilogram
67889	Molybdenum, solids, recoverable, dry weight, milligrams per kilogram
67890	Nickel, solids, recoverable, dry weight, milligrams per kilogram
67891	Phosphorus, solids, recoverable, dry weight, percent
67892	Potassium, solids, recoverable, dry weight, percent
67893	Scandium, solids, recoverable, dry weight, milligrams per kilogram
67894	Sodium, solids, recoverable, dry weight, percent
67895	Titanium, solids, recoverable, dry weight, percent
67896	Tungsten, solids, recoverable, dry weight, milligrams per kilogram
67897	Yttrium, solids, recoverable, dry weight, milligrams per kilogram
67898	Zirconium, solids, recoverable, dry weight, milligrams per kilogram
67899	Aluminum, solids, total digestion, dry weight, percent
67900	Antimony, solids, total digestion, dry weight, milligrams per kilogram
67901	Arsenic, solids, total digestion, dry weight, milligrams per kilogram
67902	Barium, solids, total digestion, dry weight, milligrams per kilogram
67903	Beryllium, solids, total digestion, dry weight, milligrams per kilogram
67904	Bismuth, solids, total digestion, dry weight, milligrams per kilogram
67905	Cadmium, solids, total digestion, dry weight, milligrams per kilogram
67906	Calcium, solids, total digestion, dry weight, percent
67907	Chromium, solids, total digestion, dry weight, milligrams per kilogram
67908	Cobalt, solids, total digestion, dry weight, milligrams per kilogram
67909	Copper, solids, total digestion, dry weight, milligrams per kilogram
67910	Iron, solids, total digestion, dry weight, percent
67911	Lanthanum, solids, total digestion, dry weight, milligrams per kilogram
67912	Lead, solids, total digestion, dry weight, milligrams per kilogram
67913	Lithium, solids, total digestion, dry weight, milligrams per kilogram
67914	Magnesium, solids, total digestion, dry weight, percent
67915	Manganese, solids, total digestion, dry weight, milligrams per kilogram
67916	Molybdenum, solids, total digestion, dry weight, milligrams per kilogram
67917	Nickel, solids, total digestion, dry weight, milligrams per kilogram
67918	Phosphorus, solids, total digestion, dry weight, percent
67919	Potassium, solids, total digestion, dry weight, percent
67920	Scandium, solids, total digestion, dry weight, milligrams per kilogram
67921	Silver, solids, total digestion, dry weight, milligrams per kilogram
67922	Sodium, solids, total digestion, dry weight, percent

Parameter code	Parameter name
67923	Strontium, solids, total digestion, dry weight, milligrams per kilogram
67924	Tin, solids, total digestion, dry weight, milligrams per kilogram
67925	Titanium, solids, total digestion, dry weight, percent
67926	Tungsten, solids, total digestion, dry weight, milligrams per kilogram
67927	Vanadium, solids, total digestion, dry weight, milligrams per kilogram
67928	Yttrium, solids, total digestion, dry weight, milligrams per kilogram
67929	Zinc, solids, total digestion, dry weight, milligrams per kilogram
67930	Zirconium, solids, total digestion, dry weight, milligrams per kilogram
67945	1,2-Dichloro-1,1,2,2-tetrafluoroethane, water, filtered, recoverable, micrograms per liter
67946	2,2'-Oxybisbutane, water, filtered, recoverable, micrograms per liter
67947	1-Methoxy-4-(2-propenyl)benzene, water, filtered, recoverable, micrograms per liter
67958	1,2-Dimethoxyethane, water, filtered, recoverable, micrograms per liter
67959	3-Pentanone, water, filtered, recoverable, micrograms per liter
67960	Chirald, water, filtered, recoverable, micrograms per liter
67961	Chirald, water, unfiltered, recoverable, micrograms per liter
67962	Amitriptyline, water, filtered, recoverable, micrograms per liter
67963	Amitriptyline, water, unfiltered, recoverable, micrograms per liter
67964	Perfluorobutanoic acid, water, unfiltered, recoverable, nanograms per liter
67965	Perfluoropentanoic acid, water, unfiltered, recoverable, nanograms per liter
67966	Perfluorohexanoic acid, water, unfiltered, recoverable, nanograms per liter
67967	Perfluoroheptanoic acid, water, unfiltered, recoverable, nanograms per liter
67968	Perfluorononanoic acid, water, unfiltered, recoverable, nanograms per liter
67969	Perfluorodecanoic acid, water, unfiltered, recoverable, nanograms per liter
67970	Perfluorododecanoic acid, water, unfiltered, recoverable, nanograms per liter
67971	Perfluorotridecanoic acid, water, unfiltered, recoverable, nanograms per liter
67972	Perfluorotetradecanoic acid, water, unfiltered, recoverable, nanograms per liter
67973	Perfluorobutane sulfonate, water, unfiltered, recoverable, nanograms per liter
67974	Perfluorohexane sulfonate, water, unfiltered, recoverable, nanograms per liter
67975	Perfluorodecane sulfonate, water, unfiltered, recoverable, nanograms per liter
67976	Perfluorooctanesulfonamide, water, unfiltered, recoverable, nanograms per liter
67977	1-Naphthylamine, solids, recoverable, dry weight, micrograms per kilogram
67978	3,3'-Dimethylbenzidine, solids, recoverable, dry weight, micrograms per kilogram
67979	3-Methylphenol, solids, recoverable, dry weight, micrograms per kilogram
67980	4-Dimethylaminoazobenzene, solids, recoverable, dry weight, micrograms per kilogram
67981	4-Phenylenediamine, solids, recoverable, dry weight, micrograms per kilogram
67982	Aramite, solids, recoverable, dry weight, micrograms per kilogram
67983	Diphenylamine, solids, recoverable, dry weight, micrograms per kilogram
67984	Hexachlorophene, solids, recoverable, dry weight, micrograms per kilogram
67985	Isosafrole, solids, recoverable, dry weight, micrograms per kilogram
67986	N-Nitrosomorpholine, solids, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
67987	Pentachloroethane, solids, recoverable, dry weight, micrograms per kilogram
67988	Pyridine, solids, recoverable, dry weight, micrograms per kilogram
67989	Thionazin, solids, recoverable, dry weight, micrograms per kilogram
67990	Gasoline range organics (C6-C10) Q1650, water, unfiltered, recoverable, micrograms per liter
67991	Gasoline range organics Q796, water, unfiltered, recoverable, milligrams per liter
67992	Gasoline range organic compounds WTPH-G Q852, solids, recoverable, dry weight, millgrams per kilogram
69579	Suspended sediment concentration, greater than 0.50 millimeters, milligrams per liter
69580	Suspended sediment concentration, between 0.25 and 0.50 millimeters, milligrams per liter
69581	Suspended sediment concentration, between 0.125 and 0.25 millimeters, milligrams per liter
69582	Suspended sediment concentration, between 0.063 and 0.125 millimeters, milligrams per liter
69583	Suspended sediment concentration, between 0.032 and 0.063 millimeters, milligrams per liter
69584	Suspended sediment concentration, between 0.014 and 0.032 millimeters, milligrams per liter
69585	Suspended sediment concentration, between 0.008 and 0.014 millimeters, milligrams per liter
69586	Suspended sediment concentration, between 0.005 and 0.008 millimeters, milligrams per liter
69587	Suspended sediment concentration, between 0.005 and 0.002 millimeters, milligrams per liter
69588	Suspended sediment concentration, smaller than 0.002 millimeters, milligrams per liter
69597	Suspended sediment concentration, greater than 0.0004 millimeters, milligrams per liter
69598	Bed sediment, wet sieved (native water), field, percent smaller than .004 millimeters
69599	Bed sediment, wet sieved (native water), field, percent smaller than .05 millimeters
69600	Bed sediment, wet sieved (native water), field, percent smaller than .0625 millimeters
69601	Bed sediment, wet sieved (native water), field, percent smaller than .1 millimeters
69602	Bed sediment, wet sieved (native water), field, percent smaller than .125 millimeters
69603	Bed sediment, wet sieved (native water), field, percent smaller than .25 millimeters
69604	Bed sediment, wet sieved (native water), field, percent smaller than .5 millimeters
69605	Bed sediment, wet sieved (native water), field, percent smaller than 1 millimeters
69606	Bed sediment, wet sieved (native water), field, percent smaller than 2 millimeters
69607	Bed sediment, wet sieved (native water), field, percent smaller than 4 millimeters
69608	Bed sediment, wet sieved (native water), field, percent smaller than 8 millimeters
69609	Bed sediment, wet sieved (native water), field, percent smaller than 16 millimeters
69610	Bed sediment, wet sieved (native water), field, percent smaller than 32 millimeters
69611	Bed sediment, wet sieved (native water), field, percent smaller than 64 millimeters
69612	Bed sediment, wet sieved (native water), field, percent smaller than 128 millimeters
70007	Methocarbamol, water, unfiltered, recoverable, micrograms per liter
70292	Suspended solids, evaporation by vacuum desiccation at room temperature, water, milligrams per liter
70293	Suspended solids, dried at 105 degrees Celsius, water, milligrams per liter
70299	Suspended solids dried at 110 degrees Celsius, water, unfiltered, milligrams per liter
70300	Dissolved solids dried at 180 degrees Celsius, water, filtered, milligrams per liter
70301	Dissolved solids, water, filtered, sum of constituents, milligrams per liter
70314	Chlorothalonil, water, unfiltered, recoverable, micrograms per liter

Parameter code	Parameter name
70348	Settleable solids, water, unfiltered, milliliters per liter
70349	Non-settleable solids, water, unfiltered, milliliters per liter
70507	Orthophosphate, water, unfiltered, milligrams per liter as phosphorus
70508	Acidity, water, unfiltered, heated, milligrams per liter as calcium carbonate
70940	Invertebrates, benthic, wet weight, grams per square meter
70941	Invertebrates, benthic, dry weight, grams per square meter
70942	Invertebrates, benthic, ash weight, grams per square meter
70947	Zooplankton, dry weight, grams per cubic meter
70948	Zooplankton, ash weight, grams per cubic meter
70951	Chlorophyll *a*, phytoplankton, chromatographic-spectrophotometric method, micrograms per liter
70952	Chlorophyll *b*, phytoplankton, chromatographic-spectrophotometric method, micrograms per liter
70953	Chlorophyll *a*, phytoplankton, chromatographic-fluorometric method, micrograms per liter
70954	Chlorophyll *b*, phytoplankton, chromatographic-fluorometric method, micrograms per liter
70955	Chlorophyll *a*, periphyton, chromatographic-spectrophotometric method, milligrams per square meter
70956	Chlorophyll *b*, periphyton, chromatographic-spectrophotometric method, milligrams per square meter
70957	Chlorophyll *a*, periphyton, chromatographic-fluorometric method, milligrams per square meter
70958	Chlorophyll *b*, periphyton, chromatographic-fluorometric method, milligrams per square meter
70979	Bromoxynil, water, unfiltered, recoverable, micrograms per liter
70988	Algal growth potential, milligrams per liter
70998	Adenosine triphosphate, water, unfiltered, recoverable, micrograms per liter
71100	Seston, water, unfiltered, total, milligrams per liter
71101	Seston, water, unfiltered, ash weight, milligrams per liter
71825	Acidity, water, unfiltered, heated, milligrams per liter as hydrogen ion
71830	Hydroxide, water, unfiltered, fixed endpoint (pH 10.4) titration, field, milligrams per liter
71831	Hydroxide, water, unfiltered, inflection-point titration method (incremental titration method), laboratory, milligrams per liter
71832	Hydroxide, water, unfiltered, inflection-point titration method (incremental titration method), field, milligrams per liter
71833	Hydroxide, water, unfiltered, fixed endpoint (pH 10.4) titration, laboratory, milligrams per liter
71834	Hydroxide, water, filtered, inflection-point titration method (incremental titration method), field, milligrams per liter
71835	Oxygen consumed, water, filtered, milligrams per liter
71840	Oxygen consumed, water, unfiltered, milligrams per liter
71845	Ammonia, water, unfiltered, milligrams per liter as NH4
71846	Ammonia, water, filtered, milligrams per liter as NH4
71850	Nitrate, water, unfiltered, milligrams per liter
71851	Nitrate, water, filtered, milligrams per liter
71855	Nitrite, water, unfiltered, milligrams per liter
71856	Nitrite, water, filtered, milligrams per liter

Parameter code	Parameter name
71860	Sodium carbonate, residual, water, unfiltered, milligrams per liter as calcium carbonate
71865	Iodide, water, filtered, milligrams per liter
71866	Iodine, water, unfiltered, milligrams per liter
71870	Bromide, water, filtered, milligrams per liter
71871	Bromine, water, unfiltered, milligrams per liter
71875	Hydrogen sulfide, water, unfiltered, milligrams per liter
71876	Resin acid soap, water, unfiltered, recoverable, milligrams per liter
71880	Formaldehyde, water, unfiltered, recoverable, milligrams per liter
71883	Manganese, water, unfiltered, micrograms per liter
71885	Iron, water, unfiltered, micrograms per liter
71886	Phosphorus, water, unfiltered, milligrams per liter as phosphate
71887	Total nitrogen, water, unfiltered, milligrams per liter as nitrate
71888	Phosphorus, water, filtered, milligrams per liter as phosphate
71890	Mercury, water, filtered, micrograms per liter
71895	Mercury, suspended sediment, recoverable, micrograms per liter
71900	Mercury, water, unfiltered, recoverable, micrograms per liter
71901	Mercury, water, unfiltered, recoverable, micrograms per liter
71910	Gold, water, unfiltered, micrograms per liter
71921	Mercury, bed sediment, recoverable, dry weight, micrograms per gram
71933	Mercury, fish, tissue, recoverable, dry weight, milligrams per kilogram
72142	Weight of organism, minimum in composite sample, grams
72146	Length of organism, minimum in composite sample, centimeters
72161	Evapotranspiration method, measured (1) or modeled (0), code
72164	Barometric pressure, uncorrected, feet of water
72182	Atmospheric water vapor density, grams per cubic meter
72184	Visible radiation (average flux density), microeinsteins per second per square meter
72185	Shortwave radiation, upward intensity, watts per square meter
72186	Shortwave radiation, downward intensity, watts per square meter
72187	Transparency, water, in situ, Secchi disc observed with viewscope, inches
72188	Turbidity, water, unfiltered, field, broad band light source (400-680 nm), detectors at multiple angles including 90 +/-30 degrees, ratiometric correction, nephelometric
72189	Snow depth, meters
72195	Depth to compute isokinetic transit rate, feet
72196	Velocity to compute isokinetic transit rate, feet per second
72197	Specific weight, dry, pounds per cubic foot
73085	Bromochloromethane, water, unfiltered, recoverable, micrograms per liter
73510	Aramite, water, unfiltered, recoverable, micrograms per liter
73522	Bis(2-chloroisopropyl) ether, water, unfiltered, recoverable, micrograms per liter
73530	Chloromethyl methyl ether, water, unfiltered, recoverable, micrograms per liter
73547	trans-1,4-Dichloro-2-butene, water, unfiltered, recoverable, micrograms per liter

Parameter code	Parameter name
73558	4-Dimethylaminoazobenzene, water, unfiltered, recoverable, micrograms per liter
73559	7,12-Dimethylbenzo[a]anthracene, water, unfiltered, recoverable, micrograms per liter
73560	3,3'-Dimethylbenzidine, water, unfiltered, recoverable, micrograms per liter
73564	alpha,alpha-Dimethylphenethylamine, water, unfiltered, recoverable, micrograms per liter
73570	Ethyl methacrylate, water, unfiltered, recoverable, micrograms per liter
73571	Ethyl methanesulfonate, water, unfiltered, recoverable, micrograms per liter
73576	Hexachloropropene, water, unfiltered, recoverable, micrograms per liter
73582	Isosafrole, water, unfiltered, recoverable, micrograms per liter
73589	Methapyrilene, water, unfiltered, recoverable, micrograms per liter
73595	Methyl methanesulfonate, water, unfiltered, recoverable, micrograms per liter
73598	Bis(2-chloroethyl) sulfide, water, unfiltered, recoverable, micrograms per liter
73599	1,4-Naphthoquinone, water, unfiltered, recoverable, micrograms per liter
73600	1-Naphthylamine, water, unfiltered, recoverable, micrograms per liter
73613	N-Nitrosomethylethylamine, water, unfiltered, recoverable, micrograms per liter
73617	N-Nitrosomorpholine, water, unfiltered, recoverable, micrograms per liter
73619	N-Nitrosopiperidine, water, unfiltered, recoverable, micrograms per liter
73622	5-Nitro-o-toluidine, water, unfiltered, recoverable, micrograms per liter
73626	Phenacetin, water, unfiltered, recoverable, micrograms per liter
73652	O,O,O-Triethyl phosphorothioate, water, unfiltered, recoverable, micrograms per liter
73653	1,3,5-Trinitrobenzene, water, unfiltered, recoverable, micrograms per liter
75031	Zirconium, niobium-95, counting error, water, unfiltered, picocuries per liter
75037	Potassium-40 counting error, water, unfiltered, picocuries per liter
75936	Thorium-232 2-sigma combined uncertainty, suspended sediment, dry weight, picocuries per gram
75941	Uranium-234 2-sigma combined uncertainty, suspended sediment, dry weight, picocuries per gram
75943	Radium-226 2-sigma combined uncertainty, suspended sediment, dry weight, picocuries per gram
75945	Polonium-210 2-sigma combined uncertainty, suspended sediment, dry weight, picocuries per gram
75947	Uranium-235 2-sigma combined uncertainty, suspended sediment, dry weight, picocuries per gram
75948	Radium-228 2-sigma combined uncertainty, suspended sediment, dry weight, picocuries per gram
75949	Lead-210 2-sigma combined uncertainty, suspended sediment, dry weight, picocuries per gram
75952	Thorium-230 2-sigma combined uncertainty, suspended sediment, dry weight, picocuries per gram
75955	Alpha radioactivity 2-sigma combined uncertainty, bed sediment, Th-230 curve, dry weight, picocuries per gram
75960	Cesium-137 2-sigma combined uncertainty, bed sediment, dry weight, picocuries per gram
75962	Uranium-238 2-sigma combined uncertainty, bed sediment, dry weight, picocuries per gram

Parameter code	Parameter name
75965	Alpha radioactivity 2-sigma combined uncertainty, bed sediment, natural uranium curve, dry weight, micrograms per gram
75966	Beta radioactivity 2-sigma combined uncertainty, bed sediment, Sr-90/Y-90 curve, dry weight, picocuries per gram
75968	Lead-210 2-sigma combined uncertainty, soil, dry weight, picocuries per gram
75979	Chlorodiamino-s-triazine, water, unfiltered, recoverable, micrograms per liter
75980	2-Chloro-6-ethylamino-4-amino-s-triazine, water, unfiltered, recoverable, micrograms per liter
75981	2-Chloro-4-isopropylamino-6-amino-s-triazine, water, unfiltered, recoverable, micrograms per liter
75982	2-Hydroxy-4-isopropylamino-6-ethylamino-s-triazine, water, unfiltered, recoverable, micrograms per liter
75983	PCBs, water, filtered, recoverable, nanograms per liter
75984	PCBs, water, unfiltered, recoverable, nanograms per liter
75985	Tritium 2-sigma combined uncertainty, water, unfiltered, picocuries per liter
75986	Alpha radioactivity 2-sigma combined uncertainty, water, filtered, natural uranium curve, micrograms per liter
75987	Alpha radioactivity 2-sigma combined uncertainty, water, filtered, Th-230 curve, picocuries per liter
75988	Beta radioactivity 2-sigma combined uncertainty, water, filtered, Sr-90/Y-90 curve, picocuries per liter
75989	Beta radioactivity 2-sigma combined uncertainty, water, filtered, Cs-137 curve, picocuries per liter
75990	Uranium (natural) 2-sigma combined uncertainty, water, filtered, micrograms per liter
75991	Uranium-238 2-sigma combined uncertainty, water, filtered, picocuries per liter
75992	Uranium-234 2-sigma combined uncertainty, water, filtered, picocuries per liter
75993	Uranium (natural) 2-sigma combined uncertainty, water, unfiltered, micrograms per liter
75994	Uranium-235 2-sigma combined uncertainty, water, filtered, picocuries per liter
75995	Lead-210 2-sigma combined uncertainty, water, filtered, picocuries per liter
75997	Thorium-230 2-sigma combined uncertainty, water, filtered, picocuries per liter
75998	Polonium-210 2-sigma combined uncertainty, water, filtered, picocuries per liter
75999	Thorium-232 2-sigma combined uncertainty, water, filtered, picocuries per liter
76000	Radium-228 2-sigma combined uncertainty, water, filtered, picocuries per liter
76001	Radium-226 2-sigma combined uncertainty, water, filtered, picocuries per liter
76002	Radon-222 2-sigma combined uncertainty, water, unfiltered, picocuries per liter
76003	Strontium-90 2-sigma combined uncertainty, water, filtered, picocuries per liter
76004	Alpha radioactivity 2-sigma combined uncertainty, suspended sediment, Th-230 curve, picocuries per liter
76005	Beta radioactivity 2-sigma combined uncertainty, suspended sediment, Cs-137 curve, picocuries per liter
76011	PCBs, suspended sediment, recoverable, nanograms per liter
76012	PCBs, water, unfiltered, recoverable, nanograms per liter
76983	Nitromethane, water, filtered, recoverable, milligrams per liter
76984	2,4-Dimethylpentane, bed sediment, recoverable, dry weight, micrograms per kilogram

Parameter code	Parameter name
76985	2,5-Dimethylnonane, bed sediment, recoverable, dry weight, micrograms per kilogram
76986	2-Chloroaniline, bed sediment, recoverable, dry weight, micrograms per kilogram
76987	4-Amino-2,6-dinitrotoluene, water, unfiltered, recoverable, micrograms per liter
76988	2-Amino-4,6-dinitrotoluene, water, unfiltered, recoverable, micrograms per liter
76989	2,4-Dimethylpentane, water, unfiltered, recoverable, micrograms per liter
76990	2,5-Dimethylnonane, water, unfiltered, recoverable, micrograms per liter
76991	2-Chloroaniline, water, unfiltered, recoverable, micrograms per liter
76992	8-Methyldecanoic acid, water, unfiltered, recoverable, micrograms per liter
76994	Methane, water, unfiltered, recoverable, micrograms per liter
76995	Formaldehyde, water, unfiltered, recoverable, micrograms per liter
76997	Acetonitrile, water, unfiltered, recoverable, micrograms per liter
77001	Acetaldehyde, water, unfiltered, recoverable, micrograms per liter
77004	Ethyl alcohol, water, unfiltered, recoverable, micrograms per liter
77005	Dimethyl ether, water, unfiltered, recoverable, micrograms per liter
77007	Propionitrile, water, unfiltered, recoverable, micrograms per liter
77010	Isobutene, water, unfiltered, recoverable, micrograms per liter
77011	1,2-Epoxypropane, water, unfiltered, recoverable, micrograms per liter
77016	Methyl formate, water, unfiltered, recoverable, micrograms per liter
77023	Ethylene glycol, water, unfiltered, recoverable, micrograms per liter
77032	Methyl acetate, water, unfiltered, recoverable, micrograms per liter
77033	Isobutyl alcohol, water, unfiltered, recoverable, micrograms per liter
77035	tert-Butyl alcohol, water, unfiltered, recoverable, micrograms per liter
77041	Carbon disulfide, water, unfiltered, micrograms per liter
77045	Pyridine, water, unfiltered, recoverable, micrograms per liter
77055	3-Methylpentane, water, unfiltered, recoverable, micrograms per liter
77057	Vinyl acetate, water, unfiltered, recoverable, micrograms per liter
77061	n-Pentanal, water, unfiltered, recoverable, micrograms per liter
77073	tert-Amyl alcohol, water, unfiltered, recoverable, micrograms per liter
77076	2-Nitropropane, water, unfiltered, recoverable, micrograms per liter
77089	Aniline, water, unfiltered, recoverable, micrograms per liter
77093	cis-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter
77100	Methylcyclohexane, water, unfiltered, recoverable, micrograms per liter
77103	n-Butyl methyl ketone, water, unfiltered, recoverable, micrograms per liter
77113	4-Methyl-2-pentanol, water, unfiltered, recoverable, micrograms per liter
77119	Dichlorofluoromethane, water, unfiltered, recoverable, micrograms per liter
77128	Styrene, water, unfiltered, recoverable, micrograms per liter
77133	p-Xylene, water, unfiltered, recoverable, micrograms per liter
77134	m-Xylene, water, unfiltered, recoverable, micrograms per liter
77135	o-Xylene, water, unfiltered, recoverable, micrograms per liter
77142	o-Toluidine, water, unfiltered, recoverable, micrograms per liter

Parameter code	Parameter name
77146	p-Cresol, water, unfiltered, recoverable, micrograms per liter
77147	Benzyl alcohol, water, unfiltered, recoverable, micrograms per liter
77151	m-Cresol, water, unfiltered, recoverable, micrograms per liter
77152	o-Cresol, water, unfiltered, recoverable, micrograms per liter
77166	2,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter
77168	1,1-Dichloropropene, water, unfiltered, recoverable, micrograms per liter
77170	2,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter
77173	1,3-Dichloropropane, water, unfiltered, recoverable, micrograms per liter
77179	5-Methyl-2-hexanone, water, unfiltered, recoverable, micrograms per liter
77188	tert-Butyl acetate, water, unfiltered, recoverable, micrograms per liter
77201	Isobutyl acetate, water, unfiltered, recoverable, micrograms per liter
77219	1-Methyl-3-ethylbenzene, water, unfiltered, recoverable, micrograms per liter
77220	2-Ethyltoluene, water, unfiltered, recoverable, micrograms per liter
77221	1,2,3-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter
77222	1,2,4-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter
77223	Isopropylbenzene, water, unfiltered, recoverable, micrograms per liter
77224	n-Propylbenzene, water, unfiltered, recoverable, micrograms per liter
77225	1-Methyl-4-ethylbenzene, water, unfiltered, recoverable, micrograms per liter
77226	1,3,5-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter
77242	3-Ethylphenol, water, unfiltered, recoverable, micrograms per liter
77247	Benzoic acid, water, unfiltered, recoverable, micrograms per liter
77272	3-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter
77275	2-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter
77277	4-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter
77297	Bromochloromethane, water, unfiltered, recoverable, micrograms per liter
77310	1-Octanol, water, unfiltered, recoverable, micrograms per liter
77323	1,2,3,4-Tetrahydronaphthalene, water, unfiltered, recoverable, micrograms per liter
77337	1,2,4,5-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter
77340	1,2-Diethylbenzene, water, unfiltered, recoverable, micrograms per liter
77342	n-Butylbenzene, water, unfiltered, recoverable, micrograms per liter
77345	1,4-Diethylbenzene, water, unfiltered, recoverable, micrograms per liter
77348	1,3-Diethylbenzene, water, unfiltered, recoverable, micrograms per liter
77350	sec-Butylbenzene, water, unfiltered, recoverable, micrograms per liter
77353	tert-Butylbenzene, water, unfiltered, recoverable, micrograms per liter
77356	4-Isopropyltoluene, water, unfiltered, recoverable, micrograms per liter
77394	2-Nitrotoluene, water, unfiltered, recoverable, micrograms per liter
77395	4-Nitrotoluene, water, unfiltered, recoverable, micrograms per liter
77419	2,6-Dimethyl-4-heptanone, water, unfiltered, recoverable, micrograms per liter
77424	Iodomethane, water, unfiltered, recoverable, micrograms per liter
77441	1-Naphthol, water, unfiltered, recoverable, micrograms per liter

Parameter code	Parameter name
77443	1,2,3-Trichloropropane, water, unfiltered, recoverable, micrograms per liter
77451	1-Methoxy-4-(1-propenyl)benzene, water, unfiltered, recoverable, micrograms per liter
77494	Linalool, water, unfiltered, recoverable, micrograms per liter
77538	1,3,5-Triethylbenzene, water, unfiltered, recoverable, micrograms per liter
77541	2,6-Dichlorophenol, water, unfiltered, recoverable, micrograms per liter
77544	1,2,4-Triethylbenzene, water, unfiltered, recoverable, micrograms per liter
77545	Safrole, water, unfiltered, recoverable, micrograms per liter
77562	1,1,1,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter
77571	Carbazole, water, unfiltered, recoverable, micrograms per liter
77579	Diphenylamine, water, unfiltered, recoverable, micrograms per liter
77581	4-Aminobiphenyl, water, unfiltered, recoverable, micrograms per liter
77596	Dibromomethane, water, unfiltered, recoverable, micrograms per liter
77613	1,2,3-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter
77625	Azobenzene, water, unfiltered, recoverable, micrograms per liter
77647	1,1,1-Trichloro-2,2,2-trifluoroethane, water, unfiltered, recoverable, micrograms per liter
77651	1,2-Dibromoethane, water, unfiltered, recoverable, micrograms per liter
77652	1,1,2-Trichloro-1,2,2-trifluoroethane, water, unfiltered, recoverable, micrograms per liter
77687	2,4,5-Trichlorophenol, water, unfiltered, recoverable, micrograms per liter
77729	Propachlor, water, unfiltered, recoverable, micrograms per liter
77734	1,2,4,5-Tetrachlorobenzene, water, unfiltered, recoverable, micrograms per liter
77758	Nitroglycerin, water, unfiltered, recoverable, micrograms per liter
77767	2,3,4,5-Tetrachlorophenol, water, unfiltered, recoverable, micrograms per liter
77770	2,3,4,6-Tetrachlorophenol, water, unfiltered, recoverable, micrograms per liter
77793	Pentachlorobenzene, water, unfiltered, recoverable, micrograms per liter
77802	Benzo[e]pyrene, water, unfiltered, recoverable, micrograms per liter
77825	Alachlor, water, unfiltered, recoverable, micrograms per liter
77835	Hexachlorocyclohexane (all isomers), water, unfiltered, recoverable, micrograms per liter
77852	Undecanoic acid, water, unfiltered, recoverable, micrograms per liter
77885	Methyl alcohol, water, unfiltered, recoverable, micrograms per liter
77902	Dicofol, water, unfiltered, recoverable, micrograms per liter
77903	Bis(2-ethylhexyl) adipate, water, unfiltered, recoverable, micrograms per liter
77923	1-Chlorobutane, water, unfiltered, recoverable, micrograms per liter
77924	2-Methylpentane, water, unfiltered, recoverable, micrograms per liter
77936	1-Bromo-2-chloroethane, water, unfiltered, recoverable, micrograms per liter
77951	Alpha chlordene, water, unfiltered, recoverable, micrograms per liter
77952	Gamma chlordene, water, unfiltered, recoverable, micrograms per liter
78008	Endrin ketone, water, unfiltered, recoverable, micrograms per liter
78032	Methyl tert-butyl ether, water, unfiltered, recoverable, micrograms per liter
78048	2-Methylbutane, water, unfiltered, recoverable, micrograms per liter
78064	Norflurazon, water, unfiltered, recoverable, micrograms per liter

Parameter code	Parameter name
78098	3-(Trifluoromethyl)aniline, water, unfiltered, recoverable, micrograms per liter
78109	3-Chloropropene, water, unfiltered, recoverable, micrograms per liter
78118	2-Naphthylamine, water, unfiltered, recoverable, micrograms per liter
78132	p-Xylene, water, unfiltered, recoverable, micrograms per liter
78133	Isobutyl methyl ketone, water, unfiltered, recoverable, micrograms per liter
78170	Trichlorobenzenes (all isomers), water, unfiltered, recoverable, micrograms per liter
78200	N-Nitrosodiethylamine, water, unfiltered, recoverable, micrograms per liter
78206	N-Nitrosopyrrolidine, water, unfiltered, recoverable, micrograms per liter
78207	N-Nitrosodi-n-butylamine, water, unfiltered, recoverable, micrograms per liter
78247	Chromium(VI), water, unfiltered, recoverable, micrograms per liter
78300	3-Nitroaniline, water, unfiltered, recoverable, micrograms per liter
78505	Ametryn, bed sediment, recoverable, dry weight, micrograms per kilogram
78688	Prometryn, bed sediment, recoverable, dry weight, micrograms per kilogram
78694	Simetryn, bed sediment, recoverable, dry weight, micrograms per kilogram
78881	Phosphamidon, water, unfiltered, recoverable, micrograms per liter
78942	2-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter
79190	Pendimethalin, water, unfiltered, recoverable, micrograms per liter
79193	Acifluorfen, water, unfiltered, recoverable, micrograms per liter
79194	Fluchloralin, water, unfiltered, recoverable, micrograms per liter
79195	Napropamide, water, unfiltered, recoverable, micrograms per liter
79729	Mercury, waste/reagent water mixture, unfiltered, EPA toxicity test (SW-1310), micrograms per liter
79733	Barium, waste/reagent water mixture, unfiltered, EPA toxicity test (SW-1310), micrograms per liter
79734	Cadmium, waste/reagent water mixture, unfiltered, EPA toxicity test (SW-1310), micrograms per liter
79735	Chromium, waste/reagent water mixture, unfiltered, EPA toxicity test (SW-1310), micrograms per liter
79736	Lead, waste/reagent water mixture, unfiltered, EPA toxicity test (SW-1310), micrograms per liter
79737	Selenium, waste/reagent water mixture, unfiltered, EPA toxicity test (SW-1310), micrograms per liter
79738	Silver, waste/reagent water mixture, unfiltered, EPA toxicity test (SW-1310), micrograms per liter
79741	Arsenic, waste/reagent water mixture, unfiltered, EPA toxicity test (SW-1310), micrograms per liter
79755	Oxychlordane, water, unfiltered, recoverable, micrograms per liter
79842	Methyl cis-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropane-1-carboxylate, water, filtered, recoverable, micrograms per liter
79843	Methyl trans-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropane-1-carboxylate, water, filtered, recoverable, micrograms per liter
79844	(E)-Dimethomorph, water, filtered, recoverable, micrograms per liter
79845	(Z)-Dimethomorph, water, filtered, recoverable, micrograms per liter

Parameter code	Parameter name
79846	cis-Propiconazole, water, filtered, recoverable, micrograms per liter
79847	trans-Propiconazole, water, filtered, recoverable, micrograms per liter
80082	Carbonaceous biochemical oxygen demand, water, unfiltered, 5 days at 20 degrees Celsius, milligrams per liter
80083	Carbonaceous biochemical oxygen demand, water, unfiltered, 7 days at 20 degrees Celsius, milligrams per liter
80087	Carbonaceous biochemical oxygen demand, water, unfiltered, 20 days at 20 degrees Celsius, milligrams per liter
80107	Sulfur, water, unfiltered, milligrams per liter
80111	Total nitrogen, solids, dry weight, milligrams per kilogram
80154	Suspended sediment concentration, milligrams per liter
80180	Total sediment concentration, milligrams per liter
80220	Suspended sediment concentration larger than 62.5 microns, sieve diameter, milligrams per liter
80222	Suspended sediment concentration smaller than 62.5 microns, sieve diameter, milligrams per liter
80295	Suspended sediment load, water, unfiltered, estimated by regression equation, pounds per second
80296	Suspended sediment load, water, unfiltered, estimated by regression equation, tons per second
80336	1,1-Dichloro-2-propanone, water, unfiltered, recoverable, micrograms per liter
80353	o-Xylene plus p-xylene, water, unfiltered, recoverable, micrograms per liter
80357	Chromium(III), water, filtered, micrograms per liter
81281	Chlordecone, water, unfiltered, recoverable, micrograms per liter
81290	EPN, water, unfiltered, recoverable, micrograms per liter
81292	Azinphos-ethyl, water, unfiltered, recoverable, micrograms per liter
81294	Fonofos, water, unfiltered, recoverable, micrograms per liter
81302	Dibenzofuran, water, unfiltered, recoverable, micrograms per liter
81307	TNT, water, unfiltered, recoverable, micrograms per liter
81317	Thiosulfate, water, unfiltered, milligrams per liter
81322	Chlorpropham, water, unfiltered, recoverable, micrograms per liter
81345	Chloroprene, water, unfiltered, recoverable, micrograms per liter
81353	Biomass, plankton, ash weight, milligrams per liter
81354	Biomass, plankton, dry weight, milligrams per liter
81356	Cation exchange capacity, milliequivalents per 100 grams
81357	Calcium, suspended sediment, milligrams per liter
81358	TNT, water, filtered, recoverable, micrograms per liter
81359	TNT, suspended sediment, recoverable, micrograms per liter
81360	TNT, water, unfiltered, recoverable, micrograms per liter
81361	TNT, bed sediment, recoverable, dry weight, micrograms per kilogram
81362	RDX, water, filtered, recoverable, micrograms per liter
81363	RDX, suspended sediment, recoverable, micrograms per liter
81364	RDX, water, unfiltered, recoverable, micrograms per liter
81365	RDX, bed sediment, recoverable, dry weight, micrograms per kilogram
81367	Radium-228 counting error, water, filtered, picocuries per liter

Parameter code	Parameter name
81369	Radium-228 counting error, suspended sediment, picocuries per liter
81403	Chlorpyrifos, water, unfiltered, recoverable, micrograms per liter
81404	Chlorpyrifos, bed sediment, recoverable, dry weight, micrograms per kilogram
81405	Carbofuran, water, unfiltered, recoverable, micrograms per liter
81408	Metribuzin, water, unfiltered, recoverable, micrograms per liter
81412	Phorate, bed sediment, recoverable, dry weight, micrograms per kilogram
81436	Caffeine, water, unfiltered, recoverable, micrograms per liter
81501	Pentachloroethane, water, unfiltered, recoverable, micrograms per liter
81551	Xylene (all isomers), water, unfiltered, recoverable, micrograms per liter
81552	Acetone, water, unfiltered, recoverable, micrograms per liter
81554	Benzaldehyde, water, unfiltered, recoverable, micrograms per liter
81555	Bromobenzene, water, unfiltered, recoverable, micrograms per liter
81563	Butane, water, unfiltered, recoverable, micrograms per liter
81568	1-Bromo-2-chloroethane, water, unfiltered, recoverable, micrograms per liter
81569	2-Bromo-1-chloropropane, water, unfiltered, recoverable, micrograms per liter
81570	Cyclohexane, water, unfiltered, recoverable, micrograms per liter
81576	Diethyl ether, water, unfiltered, recoverable, micrograms per liter
81577	Diisopropyl ether, water, unfiltered, recoverable, micrograms per liter
81578	Dimethoxymethane, water, unfiltered, recoverable, micrograms per liter
81582	1,4-Dioxane, water, unfiltered, recoverable, micrograms per liter
81583	Dioxolane, water, unfiltered, recoverable, micrograms per liter
81585	Ethyl acetate, water, unfiltered, recoverable, micrograms per liter
81590	Hexane, water, unfiltered, recoverable, micrograms per liter
81593	Methyl acrylonitrile, water, unfiltered, recoverable, micrograms per liter
81595	Ethyl methyl ketone, water, unfiltered, recoverable, micrograms per liter
81597	Methyl methacrylate, water, unfiltered, recoverable, micrograms per liter
81604	n-Pentane, water, unfiltered, recoverable, micrograms per liter
81607	Tetrahydrofuran, water, unfiltered, recoverable, micrograms per liter
81610	1,2,3-Trichloropropane, water, unfiltered, recoverable, micrograms per liter
81612	Sulfate, bed sediment, dry weight, milligrams per gram
81646	Linear alkylbenzene sulfonate, water, unfiltered, recoverable, milligrams per liter
81648	Aroclor 1016 plus Aroclor 1242, water, unfiltered, recoverable, micrograms per liter
81649	Aroclor 1262, water, unfiltered, recoverable, micrograms per liter
81650	Aroclor 1268, water, unfiltered, recoverable, micrograms per liter
81696	1-Methylnaphthalene, water, unfiltered, recoverable, micrograms per liter
81710	m-Xylene, water, unfiltered, recoverable, milligrams per liter
81711	o-Xylene, water, unfiltered, recoverable, milligrams per liter
81757	Cyanazine, water, unfiltered, recoverable, micrograms per liter
81758	Ethoprop, water, unfiltered, recoverable, micrograms per liter
81815	Acephate, water, unfiltered, recoverable, micrograms per liter

Parameter code	Parameter name
81857	Chlordecone, bed sediment, recoverable, dry weight, micrograms per kilogram
81867	Pentachloroanisole, water, unfiltered, recoverable, micrograms per liter
81886	p,p'-Ethyl-DDD, bed sediment, recoverable, dry weight, micrograms per kilogram
81887	Disulfoton, bed sediment, recoverable, dry weight, micrograms per kilogram
81894	EPTC, water, unfiltered, recoverable, micrograms per liter
81950	Strontium, biota, tissue, recoverable, wet weight, micrograms per gram
82030	Coal, suspended sediment, dry weight, grams per kilogram
82031	Coal, bed sediment, dry weight, grams per kilogram
82040	Palladium, water, filtered, micrograms per liter
82041	Helium, water, unfiltered, micrograms per liter
82042	Hydrogen, water, unfiltered, micrograms per liter
82043	Argon, water, unfiltered, milligrams per liter
82044	Ethene, water, unfiltered, recoverable, micrograms per liter
82045	Ethane, water, unfiltered, recoverable, micrograms per liter
82046	Nitrous oxide, water, unfiltered, micrograms per liter
82051	Chloramben, water, unfiltered, recoverable, micrograms per liter
82052	Dicamba, water, unfiltered, recoverable, micrograms per liter
82067	Rhodium, water, unfiltered, micrograms per liter
82069	Potassium-40 counting error, water, filtered, picocuries per liter
82071	Potassium-40 counting error, suspended sediment, picocuries per liter
82080	Trihalomethanes, water, unfiltered, recoverable, by summation, micrograms per liter
82088	Terbufos, water, unfiltered, recoverable, micrograms per liter
82170	Gold, suspended sediment, total digestion, dry weight, micrograms per gram
82183	Dichlorprop, water, unfiltered, recoverable, micrograms per liter
82184	Ametryn, water, unfiltered, recoverable, micrograms per liter
82185	Atraton, water, unfiltered, recoverable, micrograms per liter
82186	Monocrotophos, water, unfiltered, recoverable, micrograms per liter
82187	Cyprazine, water, unfiltered, recoverable, micrograms per liter
82188	Simetone, water, unfiltered, recoverable, micrograms per liter
82198	Bromacil, water, unfiltered, recoverable, micrograms per liter
82199	Molinate, water, unfiltered, recoverable, micrograms per liter
82201	Sulfotepp, water, unfiltered, recoverable, micrograms per liter
82203	HMX, water, unfiltered, recoverable, micrograms per liter
82204	2-Acetylaminofluorene, water, unfiltered, recoverable, micrograms per liter
82226	Dinoseb, water, unfiltered, recoverable, micrograms per liter
82267	Phosphorus, street debris smaller than 0.031 millimeters, dry weight, micrograms per gram
82268	Phosphorus, street debris smaller than 0.0625 millimeters, dry weight, micrograms per gram
82269	Phosphorus, street debris smaller than 0.125 millimeters, dry weight, micrograms per gram
82270	Phosphorus, street debris smaller than 0.25 millimeters, dry weight, micrograms per gram
82271	Phosphorus, street debris smaller than 0.5 millimeters, dry weight, micrograms per gram

Parameter code	Parameter name
82272	Phosphorus, street debris smaller than 1.0 millimeters, dry weight, micrograms per gram
82273	Phosphorus, street debris smaller than 2 millimeters, dry weight, micrograms per gram
82274	Phosphorus, street debris smaller than 4 millimeters, dry weight, micrograms per gram
82275	Lead, street debris smaller than 0.031 millimeters, dry weight, micrograms per gram
82276	Lead, street debris smaller than 0.0625 millimeters, dry weight, micrograms per gram
82277	Lead, street debris smaller than 0.125 millimeters, dry weight, micrograms per gram
82278	Lead, street debris smaller than 0.25 millimeters, dry weight, micrograms per gram
82279	Lead, street debris smaller than 0.5 millimeters, dry weight, micrograms per gram
82280	Lead, street debris smaller than 1 millimeters, dry weight, micrograms per gram
82281	Lead, street debris smaller than 2 millimeters, dry weight, micrograms per gram
82282	Lead, street debris smaller than 4 millimeters, dry weight, micrograms per gram
82286	Solids in rainfall, dry weight, milligrams per liter
82299	Fluoride, suspended sediment, milligrams per liter
82302	Radon-222 counting error, water, unfiltered, picocuries per liter
82304	Radon-222 counting error, water, dissolved, picocuries per liter
82306	Cobalt-60 counting error, water, filtered, picocuries per liter
82311	Ytterbium, bed sediment, dry weight, micrograms per kilogram
82312	Tungsten, bed sediment, dry weight, micrograms per kilogram
82313	Thorium, bed sediment, dry weight, micrograms per kilogram
82314	Helium, bed sediment, dry weight, micrograms per kilogram
82315	Helium, suspended sediment, dry weight, micrograms per kilogram
82316	Helium, water, unfiltered, dry weight, micrograms per kilogram
82317	Scandium, bed sediment, dry weight, micrograms per kilogram
82318	Tantalum, water, unfiltered, micrograms per liter
82319	Tantalum, water, filtered, micrograms per liter
82320	Tantalum, suspended sediment, micrograms per liter
82321	Tantalum, bed sediment, dry weight, micrograms per kilogram
82322	Samarium, water, unfiltered, micrograms per liter
82323	Samarium, water, filtered, micrograms per liter
82324	Samarium, suspended sediment, micrograms per liter
82325	Samarium, bed sediment, dry weight, micrograms per kilogram
82326	Ruthenium, water, unfiltered, micrograms per liter
82327	Ruthenium, water, filtered, micrograms per liter
82328	Ruthenium, suspended sediment, micrograms per liter
82329	Ruthenium, bed sediment, dry weight, micrograms per kilogram
82330	Dysprosium, water, unfiltered, micrograms per liter
82331	Dysprosium, water, filtered, micrograms per liter
82332	Dysprosium, suspended sediment, micrograms per liter
82333	Dysprosium, bed sediment, dry weight, micrograms per kilogram
82334	Gold, water, filtered, micrograms per liter

Parameter code	Parameter name
82335	Gold, suspended sediment, micrograms per liter
82340	Picric acid, water, unfiltered, recoverable, micrograms per liter
82342	Carbophenothion, water, filtered, recoverable, micrograms per liter
82343	Carbophenothion, suspended sediment, recoverable, micrograms per liter
82344	Methyl trithion, water, filtered, recoverable, micrograms per liter
82345	Methyl trithion, suspended sediment, recoverable, micrograms per liter
82346	Ethion, water, filtered, recoverable, micrograms per liter
82347	Ethion, suspended sediment, recoverable, micrograms per liter
82348	p,p'-Ethyl-DDD, water, filtered, recoverable, micrograms per liter
82349	p,p'-Ethyl-DDD, suspended sediment, recoverable, micrograms per liter
82350	p,p'-Methoxychlor, water, filtered, recoverable, micrograms per liter
82351	p,p'-Methoxychlor, suspended sediment, recoverable, micrograms per liter
82352	Chlordecone, water, filtered, recoverable, micrograms per liter
82353	Chlordecone, suspended sediment, recoverable, micrograms per liter
82354	alpha-Endosulfan, water, filtered, recoverable, micrograms per liter
82355	Endosulfan, suspended sediment, recoverable, micrograms per liter
82356	Dichlorprop, water, filtered, recoverable, micrograms per liter
82357	Ethene, water, unfiltered, recoverable, micrograms per liter
82358	Propane, water, unfiltered, recoverable, micrograms per liter
82359	Propane, water, dissolved, recoverable, micrograms per liter
82360	Polychlorinated naphthalenes, water, filtered, recoverable, micrograms per liter
82361	Polychlorinated naphthalenes, suspended sediment, recoverable, micrograms per liter
82363	Dry deposition, milligrams per square meter
82364	Thorium, water, unfiltered, micrograms per liter
82365	Thorium, water, filtered, micrograms per liter
82366	Thorium, suspended sediment, micrograms per liter
82402	Prometon, bed sediment, recoverable, dry weight, micrograms per kilogram
82408	Fonofos, bed sediment, recoverable, dry weight, micrograms per kilogram
82418	cis-Permethrin, water, unfiltered, recoverable, micrograms per liter
82420	trans-Permethrin, water, unfiltered, recoverable, micrograms per liter
82425	Potassium, dry atmospheric deposition, recoverable, milligrams per kilogram
82426	Potassium, insoluble, dry atmospheric deposition, milligrams per kilogram
82427	Potassium, soluble, dry atmospheric deposition, milligrams per kilogram
82428	Sodium, dry atmospheric deposition, recoverable, milligrams per kilogram
82429	Sodium, insoluble, dry atmospheric deposition, milligrams per kilogram
82430	Sodium, soluble, dry atmospheric deposition, milligrams per kilogram
82438	Phosphorus, dry atmospheric deposition, total, milligrams per kilogram
82440	Phosphorus, insoluble, dry atmospheric deposition, milligrams per kilogram
82442	Phosphorus, soluble, dry atmospheric deposition, milligrams per kilogram
82443	Total nitrogen, total, dry atmospheric deposition, milligrams per kilogram

Parameter code	Parameter name
82444	Total nitrogen, insoluble, dry atmospheric deposition, milligrams per kilogram
82445	Total nitrogen, soluble, dry atmospheric deposition, milligrams per kilogram
82446	Organic nitrogen, total, dry atmospheric deposition, milligrams per kilogram
82447	Organic nitrogen, insoluble, dry atmospheric deposition, milligrams per kilogram
82448	Organic nitrogen, soluble, dry atmospheric deposition, milligrams per kilogram
82453	Ammonia, total, dry atmospheric deposition, milligrams per kilogram as nitrogen
82459	Nitrite, soluble, dry atmospheric deposition, milligrams per kilogram
82461	Nitrate, soluble, dry atmospheric deposition, milligrams per kilogram
82463	Total solids dried at 105 degrees Celsius, dry atmospheric deposition, milligrams per kilogram
82464	Insoluble solids dried at 105 degrees Celsius, dry atmospheric deposition, milligrams per kilogram
82465	Soluble solids dried at 105 degrees Celsius, dry atmospheric deposition, milligrams per kilogram
82466	Total solids, dry atmospheric deposition, sum of constituents, milligrams per kilogram
82467	Insoluble solids, dry atmospheric deposition, sum of constituents, milligrams per kilogram
82468	Soluble solids, dry atmospheric deposition, sum of constituents, milligrams per kilogram
82470	Calcium, dry atmospheric deposition, recoverable, milligrams per kilogram
82471	Calcium, insoluble, dry atmospheric deposition, milligrams per kilogram
82472	Calcium, soluble, dry atmospheric deposition, milligrams per kilogram
82473	Magnesium, soluble, dry atmospheric deposition, milligrams per kilogram
82474	Magnesium, insoluble, dry atmospheric deposition, milligrams per kilogram
82475	Magnesium, dry atmospheric deposition, recoverable, milligrams per kilogram
82476	Chloride, soluble, dry atmospheric deposition, milligrams per kilogram
82477	Sulfate, soluble, dry atmospheric deposition, milligrams per kilogram
82480	Inorganic carbon, soluble, dry atmospheric deposition, milligrams per kilogram
82481	Inorganic carbon, insoluble, dry atmospheric deposition, milligrams per kilogram
82482	Inorganic carbon, total, dry atmospheric deposition, milligrams per kilogram
82483	Organic carbon, total, dry atmospheric deposition, milligrams per kilogram
82484	Organic carbon, soluble, dry atmospheric deposition, milligrams per kilogram
82485	Organic carbon, insoluble, dry atmospheric deposition, milligrams per kilogram
82486	Lead, soluble, dry atmospheric deposition, micrograms per kilogram
82487	Lead, insoluble, dry atmospheric deposition, micrograms per kilogram
82488	Lead, dry atmospheric deposition, recoverable, micrograms per kilogram
82489	Cadmium, soluble, dry atmospheric deposition, micrograms per kilogram
82490	Cadmium, insoluble, dry atmospheric deposition, micrograms per kilogram
82491	Cadmium, dry atmospheric deposition, recoverable, micrograms per kilogram
82492	Copper, soluble, dry atmospheric deposition, micrograms per kilogram
82493	Copper, insoluble, dry atmospheric deposition, milligrams per kilogram
82494	Copper, dry atmospheric deposition, recoverable, micrograms per kilogram
82495	Zinc, soluble, dry atmospheric deposition, micrograms per kilogram
82496	Zinc, insoluble, dry atmospheric deposition, micrograms per kilogram

Parameter code	Parameter name
82497	Zinc, dry atmospheric deposition, recoverable, micrograms per kilogram
82498	Chromium, soluble, dry atmospheric deposition, micrograms per kilogram
82499	Chromium, insoluble, dry atmospheric deposition, micrograms per kilogram
82500	Chromium, dry atmospheric deposition, recoverable, micrograms per kilogram
82501	Iron, soluble, dry atmospheric deposition, micrograms per kilogram
82502	Iron, insoluble, dry atmospheric deposition, micrograms per kilogram
82503	Iron, dry atmospheric deposition, recoverable, micrograms per kilogram
82504	Arsenic, soluble, dry atmospheric deposition, micrograms per kilogram
82505	Arsenic, insoluble, dry atmospheric deposition, micrograms per kilogram
82506	Arsenic, total, dry atmospheric deposition, micrograms per kilogram
82534	Propazine, bed sediment, recoverable, dry weight, micrograms per kilogram
82584	3-Hydroxy carbofuran, water, unfiltered, recoverable, micrograms per liter
82585	Aldicarb oxime, water, unfiltered, recoverable, micrograms per liter
82586	Aldicarb sulfoxide, water, unfiltered, recoverable, micrograms per liter
82587	Aldicarb sulfone, water, unfiltered, recoverable, micrograms per liter
82588	Aldicarb nitrile, water, unfiltered, recoverable, micrograms per liter
82610	1,2-Dichloropropene, water, unfiltered, recoverable, micrograms per liter
82611	Metribuzin, water, unfiltered, recoverable, micrograms per liter
82612	Metolachlor, water, unfiltered, recoverable, micrograms per liter
82613	Oxamyl, water, unfiltered, recoverable, micrograms per liter
82614	Fonofos, water, unfiltered, recoverable, micrograms per liter
82615	Carbofuran, water, unfiltered, recoverable, micrograms per liter
82616	Azinphos-methyl, water, unfiltered, recoverable, micrograms per liter
82617	Disulfoton, water, unfiltered, recoverable, micrograms per liter
82618	Carbaryl, water, unfiltered, recoverable, micrograms per liter
82619	Aldicarb, water, unfiltered, recoverable, micrograms per liter
82620	Propham, water, unfiltered, recoverable, micrograms per liter
82621	Hexachlorobenzene, water, unfiltered, recoverable, micrograms per liter
82622	Endrin aldehyde, water, unfiltered, recoverable, micrograms per liter
82623	Endosulfan sulfate, water, unfiltered, recoverable, micrograms per liter
82624	beta-Endosulfan, water, unfiltered, recoverable, micrograms per liter
82625	1,2-Dibromo-3-chloropropane, water, unfiltered, recoverable, micrograms per liter
82626	1,2-Diphenylhydrazine, water, unfiltered, recoverable, micrograms per liter
82627	4-Chloro-3-methylphenol, water, unfiltered, recoverable, micrograms per liter
82628	Octachlorostyrene, water, unfiltered, recoverable, micrograms per liter
82630	Metribuzin, water, filtered, recoverable, micrograms per liter
82631	o,p'-DDT, water, filtered, recoverable, micrograms per liter
82660	2,6-Diethylaniline, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
82661	Trifluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
82662	Dimethoate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter

Parameter code	Parameter name
82663	Ethalfluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
82664	Phorate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
82665	Terbacil, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
82666	Linuron, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
82667	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
82668	EPTC, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
82669	Pebulate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
82670	Tebuthiuron, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
82671	Molinate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
82672	Ethoprop, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
82673	Benfluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
82674	Carbofuran, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
82675	Terbufos, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
82676	Propyzamide, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
82677	Disulfoton, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
82678	Triallate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
82679	Propanil, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
82680	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
82681	Thiobencarb, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
82682	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
82683	Pendimethalin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
82684	Napropamide, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
82685	Propargite, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
82686	Azinphos-methyl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
82687	cis-Permethrin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter
82692	Carbofuran, water, filtered (0.7 micron glass fiber filter), enzyme-linked immunosorbent assay, recoverable, micrograms per liter
82694	Metolachlor, water, filtered (0.7 micron glass fiber filter), enzyme-linked immunosorbent assay, recoverable, micrograms per liter
82695	Alachlor, water, filtered (0.7 micron glass fiber filter), enzyme-linked immunosorbent assay, recoverable, micrograms per liter
82696	Cyanazine, water, filtered (0.7 micron glass fiber filter), enzyme-linked immunosorbent assay, recoverable, micrograms per liter
82697	2,4-D, water, filtered (0.7 micron glass fiber filter), enzyme-linked immunosorbent assay, recoverable, micrograms per liter
82728	Bromoacetic acid, water, unfiltered, recoverable, micrograms per liter
82729	Chloroacetic acid, water, unfiltered, recoverable, micrograms per liter
82730	Bromodichloroacetic acid, water, unfiltered, recoverable, micrograms per liter
82731	Dibromochloroacetic acid, water, unfiltered, recoverable, micrograms per liter
82732	Tribromoacetic acid, water, unfiltered, recoverable, micrograms per liter
82733	Haloacetic acids, water, unfiltered, recoverable, micrograms per liter

Parameter code	Parameter name
82908	Aluminum, wet atmospheric deposition, filtered, microequivalents per liter
82909	Aluminum, wet atmospheric deposition, filtered, micrograms per square meter
82910	Aluminum, wet atmospheric deposition, suspended, micrograms per liter
82911	Aluminum, wet atmospheric deposition, suspended, micrograms per square meter
82912	Aluminum, wet atmospheric deposition, unfiltered, recoverable, micrograms per liter
82913	Aluminum, wet atmospheric deposition, unfiltered, recoverable, micrograms per square meter
82914	Aluminum, wet atmospheric deposition, unfiltered, micrograms per liter
82915	Aluminum, wet atmospheric deposition, unfiltered, micrograms per square meter
82917	Arsenic, wet atmospheric deposition, filtered, micrograms per liter
82918	Arsenic, wet atmospheric deposition, filtered, micrograms per square meter
82919	Arsenic, wet atmospheric deposition, suspended, micrograms per liter
82920	Arsenic, wet atmospheric deposition, suspended, micrograms per square meter
82921	Arsenic, wet atmospheric deposition, unfiltered, micrograms per liter
82922	Arsenic, wet atmospheric deposition, unfiltered, micrograms per square meter
82924	Cadmium, wet atmospheric deposition, filtered, micrograms per liter
82925	Cadmium, wet atmospheric deposition, filtered, micrograms per square meter
82926	Cadmium, wet atmospheric deposition, suspended, micrograms per liter
82927	Cadmium, wet atmospheric deposition, suspended, micrograms per square meter
82928	Cadmium, wet atmospheric deposition, unfiltered, recoverable, micrograms per liter
82929	Cadmium, wet atmospheric deposition, unfiltered, recoverable, micrograms per square meter
82930	Cadmium, wet atmospheric deposition, unfiltered, micrograms per liter
82931	Cadmium, wet atmospheric deposition, unfiltered, micrograms per square meter
82932	Calcium, wet atmospheric deposition, filtered, milligrams per liter
82933	Calcium, wet atmospheric deposition, filtered, milligrams per square meter
82935	Calcium, wet atmospheric deposition, suspended, milligrams per liter
82936	Calcium, wet atmospheric deposition, suspended, milligrams per square meter
82938	Calcium, wet atmospheric deposition, unfiltered, recoverable, milligrams per liter
82939	Calcium, wet atmospheric deposition, unfiltered, recoverable, milligrams per square meter
82940	Calcium, wet atmospheric deposition, unfiltered, recoverable, microequivalents per liter
82941	Calcium, wet atmospheric deposition, unfiltered, milligrams per liter
82942	Calcium, wet atmospheric deposition, unfiltered, milligrams per square meter
82944	Chloride, wet atmospheric deposition, filtered, milligrams per liter
82945	Chloride, wet atmospheric deposition, filtered, milligrams per square meter
82946	Chloride, wet atmospheric deposition, filtered, microequivalents per liter
82947	Chloride, wet atmospheric deposition, unfiltered, milligrams per liter
82948	Chloride, wet atmospheric deposition, unfiltered, milligrams per square meter
82949	Chloride, wet atmospheric deposition, unfiltered, microequivalents per liter
82950	Chromium, wet atmospheric deposition, filtered, micrograms per liter
82951	Chromium, wet atmospheric deposition, filtered, micrograms per square meter
82952	Chromium, wet atmospheric deposition, suspended, micrograms per liter

Parameter code	Parameter name
82953	Chromium, wet atmospheric deposition, suspended, micrograms per square meter
82954	Chromium, wet atmospheric deposition, unfiltered, recoverable, micrograms per liter
82955	Chromium, wet atmospheric deposition, unfiltered, recoverable, micrograms per square meter
82956	Chromium, wet atmospheric deposition, unfiltered, micrograms per liter
82957	Chromium, wet atmospheric deposition, unfiltered, micrograms per square meter
82958	Cobalt, wet atmospheric deposition, filtered, micrograms per liter
82959	Cobalt, wet atmospheric deposition, filtered, micrograms per square meter
82960	Cobalt, wet atmospheric deposition, suspended, micrograms per liter
82961	Cobalt, wet atmospheric deposition, suspended, micrograms per square meter
82962	Cobalt, wet atmospheric deposition, unfiltered, recoverable, micrograms per liter
82963	Cobalt, wet atmospheric deposition, unfiltered, recoverable, micrograms per square meter
82964	Cobalt, wet atmospheric deposition, unfiltered, micrograms per liter
82965	Cobalt, wet atmospheric deposition, unfiltered, micrograms per square meter
82966	Copper, wet atmospheric deposition, filtered, micrograms per liter
82967	Copper, wet atmospheric deposition, filtered, micrograms per square meter
82968	Copper, wet atmospheric deposition, suspended, micrograms per liter
82969	Copper, wet atmospheric deposition, suspended, micrograms per square meter
82970	Copper, wet atmospheric deposition, unfiltered, recoverable, micrograms per liter
82971	Copper, wet atmospheric deposition, unfiltered, recoverable, micrograms per square meter
82972	Copper, wet atmospheric deposition, unfiltered, micrograms per liter
82973	Copper, wet atmospheric deposition, unfiltered, micrograms per square meter
82974	Hydrogen ion, wet atmospheric deposition, filtered, milligrams per liter
82975	Hydrogen ion, wet atmospheric deposition, filtered, milligrams per square meter
82976	Hydrogen ion, wet atmospheric deposition, filtered, microequivalents per liter
82977	Hydrogen ion, wet atmospheric deposition, unfiltered, milligrams per liter
82978	Hydrogen ion, wet atmospheric deposition, unfiltered, milligrams per square meter
82979	Hydrogen ion, wet atmospheric deposition, unfiltered, microequivalents per liter
82980	Hydrogen ion, wet atmospheric deposition, filtered, calculated, milligrams per liter
82981	Hydrogen ion, wet atmospheric deposition, filtered, calculated, milligrams per square meter
82982	Hydrogen ion, wet atmospheric deposition, filtered, calculated, microequivalents per liter
82983	Hydrogen ion, wet atmospheric deposition, unfiltered, calculated, milligrams per liter
82984	Hydrogen ion, wet atmospheric deposition, unfiltered, calculated, milligrams per square meter
82985	Hydrogen ion, wet atmospheric deposition, unfiltered, calculated, microequivalents per liter
82986	Iron, wet atmospheric deposition, filtered, micrograms per liter
82987	Iron, wet atmospheric deposition, filtered, micrograms per square meter
82988	Iron, wet atmospheric deposition, suspended, micrograms per liter
82989	Iron, wet atmospheric deposition, suspended, micrograms per square meter
82990	Iron, wet atmospheric deposition, unfiltered, recoverable, micrograms per liter
82991	Iron, wet atmospheric deposition, unfiltered, recoverable, micrograms per square meter
82992	Iron, wet atmospheric deposition, unfiltered, micrograms per liter

Parameter code	Parameter name
82993	Iron, wet atmospheric deposition, unfiltered, micrograms per square meter
82994	Lead, wet atmospheric deposition, filtered, micrograms per liter
82995	Lead, wet atmospheric deposition, filtered, micrograms per square meter
82996	Lead, wet atmospheric deposition, suspended, micrograms per liter
82997	Lead, wet atmospheric deposition, suspended, micrograms per square meter
82998	Lead, wet atmospheric deposition, unfiltered, recoverable, micrograms per liter
82999	Lead, wet atmospheric deposition, unfiltered, recoverable, micrograms per square meter
83000	Lead, wet atmospheric deposition, unfiltered, micrograms per liter
83001	Lead, wet atmospheric deposition, unfiltered, micrograms per square meter
83002	Magnesium, wet atmospheric deposition, filtered, milligrams per liter
83003	Magnesium, wet atmospheric deposition, filtered, milligrams per square meter
83004	Magnesium, wet atmospheric deposition, filtered, microequivalents per liter
83005	Magnesium, wet atmospheric deposition, suspended, milligrams per liter
83006	Magnesium, wet atmospheric deposition, suspended, milligrams per square meter
83007	Magnesium, wet atmospheric deposition, suspended, microequivalents per liter
83008	Magnesium, wet atmospheric deposition, unfiltered, recoverable, milligrams per liter
83009	Magnesium, wet atmospheric deposition, unfiltered, recoverable, milligrams per square meter
83010	Magnesium, wet atmospheric deposition, unfiltered, recoverable, microequivalents per liter
83011	Magnesium, wet atmospheric deposition, unfiltered, milligrams per liter
83012	Magnesium, wet atmospheric deposition, unfiltered, milligrams per square meter
83013	Magnesium, wet atmospheric deposition, unfiltered, microequivalents per liter
83014	Manganese, wet atmospheric deposition, filtered, micrograms per liter
83015	Manganese, wet atmospheric deposition, filtered, micrograms per square meter
83016	Manganese, wet atmospheric deposition, suspended, micrograms per liter
83017	Manganese, wet atmospheric deposition, suspended, micrograms per square meter
83018	Manganese, wet atmospheric deposition, unfiltered, recoverable, micrograms per liter
83019	Manganese, wet atmospheric deposition, unfiltered, recoverable, micrograms per square meter
83020	Manganese, wet atmospheric deposition, unfiltered, micrograms per liter
83021	Manganese, wet atmospheric deposition, unfiltered, micrograms per square meter
83022	Mercury, wet atmospheric deposition, filtered, micrograms per liter
83023	Mercury, wet atmospheric deposition, filtered, micrograms per square meter
83024	Mercury, wet atmospheric deposition, suspended, micrograms per liter
83025	Mercury, wet atmospheric deposition, suspended, micrograms per square meter
83026	Mercury, wet atmospheric deposition, unfiltered, micrograms per liter
83027	Mercury, wet atmospheric deposition, unfiltered, micrograms per square meter
83028	Molybdenum, wet atmospheric deposition, filtered, micrograms per liter
83029	Molybdenum, wet atmospheric deposition, filtered, micrograms per square meter
83030	Molybdenum, wet atmospheric deposition, suspended, micrograms per liter
83031	Molybdenum, wet atmospheric deposition, suspended, micrograms per square meter
83032	Molybdenum, wet atmospheric deposition, unfiltered, recoverable, micrograms per liter

Parameter code	Parameter name
83033	Molybdenum, wet atmospheric deposition, unfiltered, recoverable, micrograms per square meter
83034	Molybdenum, wet atmospheric deposition, unfiltered, micrograms per liter
83035	Molybdenum, wet atmospheric deposition, unfiltered, micrograms per square meter
83036	Nickel, wet atmospheric deposition, filtered, micrograms per liter
83037	Nickel, wet atmospheric deposition, filtered, micrograms per square meter
83038	Nickel, wet atmospheric deposition, suspended, micrograms per liter
83039	Nickel, wet atmospheric deposition, suspended, micrograms per square meter
83040	Nickel, wet atmospheric deposition, unfiltered, recoverable, micrograms per liter
83041	Nickel, wet atmospheric deposition, unfiltered, recoverable, micrograms per square meter
83042	Nickel, wet atmospheric deposition, unfiltered, micrograms per liter
83043	Nickel, wet atmospheric deposition, unfiltered, micrograms per square meter
83046	Ammonia, wet atmospheric deposition, filtered, microequivalents per liter
83049	Ammonia, wet atmospheric deposition, filtered, microequivalents per liter
83052	Ammonia, wet atmospheric deposition, suspended, microequivalents per liter
83055	Ammonia, wet atmospheric deposition, suspended, microequivalents per liter
83058	Ammonia, wet atmospheric deposition, unfiltered, recoverable, microequivalents per liter
83061	Ammonia, wet atmospheric deposition, unfiltered, recoverable, microequivalents per liter
83064	Ammonia, wet atmospheric deposition, unfiltered, microequivalents per liter
83067	Ammonia, wet atmospheric deposition, unfiltered, microequivalents per liter
83069	Nitrate, wet atmospheric deposition, filtered, milligrams per square meter as nitrogen
83070	Nitrate, wet atmospheric deposition, filtered, microequivalents per liter
83071	Nitrate, wet atmospheric deposition, filtered, milligrams per liter
83072	Nitrate, wet atmospheric deposition, filtered, milligrams per square meter
83073	Nitrate, wet atmospheric deposition, filtered, microequivalents per liter
83076	Nitrate, wet atmospheric deposition, unfiltered, microequivalents per liter
83077	Nitrate, wet atmospheric deposition, unfiltered, milligrams per liter
83078	Nitrate, wet atmospheric deposition, unfiltered, milligrams per square meter
83079	Nitrate, wet atmospheric deposition, unfiltered, microequivalents per liter
83082	Nitrate plus nitrite, wet atmospheric deposition, filtered, microequivalents per liter
83085	Nitrate plus nitrite, wet atmospheric deposition, filtered, microequivalents per liter
83088	Nitrate plus nitrite, wet atmospheric deposition, unfiltered, microequivalents per liter
83091	Nitrate plus nitrite, wet atmospheric deposition, unfiltered, microequivalents per liter
83094	Nitrite, wet atmospheric deposition, filtered, microequivalents per liter
83095	Nitrite, wet atmospheric deposition, filtered, milligrams per liter
83096	Nitrite, wet atmospheric deposition, filtered, milligrams per square meter
83097	Nitrite, wet atmospheric deposition, filtered, microequivalents per liter
83100	Nitrite, wet atmospheric deposition, unfiltered, microequivalents per liter
83101	Nitrite, wet atmospheric deposition, unfiltered, milligrams per liter
83102	Nitrite, wet atmospheric deposition, unfiltered, milligrams per square meter
83103	Nitrite, wet atmospheric deposition, unfiltered, microequivalents per liter

Parameter code	Parameter name
83108	Orthophosphate, wet atmospheric deposition, filtered, milligrams per liter as phosphorus
83109	Orthophosphate, wet atmospheric deposition, filtered, milligrams per square meter as phosphorus
83110	Orthophosphate, wet atmospheric deposition, filtered, microequivalents per liter
83111	Orthophosphate, wet atmospheric deposition, filtered, milligrams per liter
83112	Orthophosphate, wet atmospheric deposition, filtered, milligrams per square meter
83113	Orthophosphate, wet atmospheric deposition, filtered, microequivalents per liter
83116	Orthophosphate, wet atmospheric deposition, unfiltered, microequivalents per liter
83117	Orthophosphate, wet atmospheric deposition, unfiltered, milligrams per liter
83118	Orthophosphate, wet atmospheric deposition, unfiltered, milligrams per square meter
83119	Orthophosphate, wet atmospheric deposition, unfiltered, microequivalents per liter
83120	Potassium, wet atmospheric deposition, filtered, milligrams per liter
83121	Potassium, wet atmospheric deposition, filtered, milligrams per square meter
83122	Potassium, wet atmospheric deposition, filtered, microequivalents per liter
83123	Potassium, wet atmospheric deposition, suspended, milligrams per liter
83124	Potassium, wet atmospheric deposition, suspended, milligrams per square meter
83125	Potassium, wet atmospheric deposition, suspended, microequivalents per liter
83126	Potassium, wet atmospheric deposition, unfiltered, recoverable, milligrams per liter
83127	Potassium, wet atmospheric deposition, unfiltered, recoverable, milligrams per square meter
83128	Potassium, wet atmospheric deposition, unfiltered, recoverable, microequivalents per liter
83129	Potassium, wet atmospheric deposition, unfiltered, milligrams per liter
83130	Potassium, wet atmospheric deposition, unfiltered, milligrams per square meter
83131	Potassium, wet atmospheric deposition, unfiltered, microequivalents per liter
83132	Selenium, wet atmospheric deposition, filtered, micrograms per liter
83133	Selenium, wet atmospheric deposition, filtered, micrograms per square meter
83134	Selenium, wet atmospheric deposition, suspended, micrograms per liter
83135	Selenium, wet atmospheric deposition, suspended, micrograms per square meter
83136	Selenium, wet atmospheric deposition, unfiltered, micrograms per liter
83137	Selenium, wet atmospheric deposition, unfiltered, micrograms per square meter
83138	Sodium, wet atmospheric deposition, filtered, milligrams per liter
83139	Sodium, wet atmospheric deposition, filtered, milligrams per square meter
83140	Sodium, wet atmospheric deposition, filtered, microequivalents per liter
83141	Sodium, wet atmospheric deposition, suspended, milligrams per liter
83142	Sodium, wet atmospheric deposition, suspended, milligrams per square meter
83143	Sodium, wet atmospheric deposition, suspended, microequivalents per liter
83144	Sodium, wet atmospheric deposition, unfiltered, recoverable, milligrams per liter
83145	Sodium, wet atmospheric deposition, unfiltered, recoverable, milligrams per square meter
83146	Sodium, wet atmospheric deposition, unfiltered, recoverable, microequivalents per liter
83147	Sodium, wet atmospheric deposition, unfiltered, milligrams per liter
83148	Sodium, wet atmospheric deposition, unfiltered, milligrams per square meter
83149	Sodium, wet atmospheric deposition, unfiltered, microequivalents per liter

Parameter code	Parameter name
83159	Sulfate, wet atmospheric deposition, filtered, microequivalents per liter
83160	Sulfate, wet atmospheric deposition, filtered, milligrams per liter
83161	Sulfate, wet atmospheric deposition, filtered, milligrams per square meter
83162	Sulfate, wet atmospheric deposition, filtered, microequivalents per liter
83165	Sulfate, wet atmospheric deposition, unfiltered, microequivalents per liter
83166	Sulfate, wet atmospheric deposition, unfiltered, milligrams per liter
83167	Sulfate, wet atmospheric deposition, unfiltered, milligrams per square meter
83168	Sulfate, wet atmospheric deposition, unfiltered, microequivalents per liter
83169	Vanadium, wet atmospheric deposition, filtered, micrograms per liter
83170	Vanadium, wet atmospheric deposition, filtered, micrograms per square meter
83171	Vanadium, wet atmospheric deposition, suspended, micrograms per liter
83172	Vanadium, wet atmospheric deposition, suspended, micrograms per square meter
83173	Vanadium, wet atmospheric deposition, unfiltered, recoverable, micrograms per liter
83174	Vanadium, wet atmospheric deposition, unfiltered, recoverable, micrograms per square meter
83175	Vanadium, wet atmospheric deposition, unfiltered, micrograms per liter
83176	Vanadium, wet atmospheric deposition, unfiltered, micrograms per square meter
83178	Zinc, wet atmospheric deposition, filtered, micrograms per liter
83179	Zinc, wet atmospheric deposition, filtered, micrograms per square meter
83180	Zinc, wet atmospheric deposition, suspended, micrograms per liter
83181	Zinc, wet atmospheric deposition, suspended, micrograms per square meter
83182	Zinc, wet atmospheric deposition, unfiltered, recoverable, micrograms per liter
83183	Zinc, wet atmospheric deposition, unfiltered, recoverable, micrograms per square meter
83184	Zinc, wet atmospheric deposition, unfiltered, micrograms per liter
83185	Zinc, wet atmospheric deposition, unfiltered, micrograms per square meter
83190	Aluminum, bulk atmospheric deposition, filtered, micrograms per liter
83191	Aluminum, bulk atmospheric deposition, filtered, micrograms per square meter
83192	Aluminum, bulk atmospheric deposition, suspended, micrograms per liter
83193	Aluminum, bulk atmospheric deposition, suspended, micrograms per square meter
83194	Aluminum, bulk atmospheric deposition, unfiltered, recoverable, micrograms per liter
83195	Aluminum, bulk atmospheric deposition, unfiltered, recoverable, micrograms per square meter
83196	Aluminum, bulk atmospheric deposition, unfiltered, micrograms per liter
83197	Aluminum, bulk atmospheric deposition, unfiltered, micrograms per square meter
83199	Arsenic, bulk atmospheric deposition, filtered, micrograms per liter
83200	Arsenic, bulk atmospheric deposition, filtered, micrograms per square meter
83201	Arsenic, bulk atmospheric deposition, suspended, micrograms per liter
83202	Arsenic, bulk atmospheric deposition, suspended, micrograms per square meter
83203	Arsenic, bulk atmospheric deposition, unfiltered, micrograms per liter
83204	Arsenic, bulk atmospheric deposition, unfiltered, micrograms per square meter
83206	Cadmium, bulk atmospheric deposition, filtered, micrograms per liter
83207	Cadmium, bulk atmospheric deposition, filtered, micrograms per square meter

Parameter code	Parameter name
83208	Cadmium, bulk atmospheric deposition, suspended, micrograms per liter
83209	Cadmium, bulk atmospheric deposition, suspended, micrograms per square meter
83210	Cadmium, bulk atmospheric deposition, unfiltered, recoverable, micrograms per liter
83211	Cadmium, bulk atmospheric deposition, unfiltered, recoverable, micrograms per square meter
83212	Cadmium, bulk atmospheric deposition, unfiltered, micrograms per liter
83213	Cadmium, bulk atmospheric deposition, unfiltered, micrograms per square meter
83214	Calcium, bulk atmospheric deposition, filtered, milligrams per liter
83215	Calcium, bulk atmospheric deposition, filtered, milligrams per square meter
83216	Calcium, bulk atmospheric deposition, filtered, microequivalents per liter
83217	Calcium, bulk atmospheric deposition, suspended, milligrams per liter
83218	Calcium, bulk atmospheric deposition, suspended, milligrams per square meter
83219	Calcium, bulk atmospheric deposition, suspended, microequivalents per liter
83220	Calcium, bulk atmospheric deposition, unfiltered, recoverable, milligrams per liter
83221	Calcium, bulk atmospheric deposition, unfiltered, recoverable, milligrams per square meter
83222	Calcium, bulk atmospheric deposition, unfiltered, recoverable, microequivalents per liter
83223	Calcium, bulk atmospheric deposition, unfiltered, milligrams per liter
83224	Calcium, bulk atmospheric deposition, unfiltered, milligrams per square meter
83225	Calcium, bulk atmospheric deposition, unfiltered, microequivalents per liter
83226	Chloride, bulk atmospheric deposition, filtered, milligrams per liter
83227	Chloride, bulk atmospheric deposition, filtered, milligrams per square meter
83228	Chloride, bulk atmospheric deposition, filtered, microequivalents per liter
83229	Chloride, bulk atmospheric deposition, unfiltered, milligrams per liter
83230	Chloride, bulk atmospheric deposition, unfiltered, milligrams per square meter
83231	Chloride, bulk atmospheric deposition, unfiltered, microequivalents per liter
83232	Chromium, bulk atmospheric deposition, filtered, micrograms per liter
83233	Chromium, bulk atmospheric deposition, filtered, micrograms per square meter
83234	Chromium, bulk atmospheric deposition, suspended, micrograms per liter
83235	Chromium, bulk atmospheric deposition, suspended, micrograms per square meter
83236	Chromium, bulk atmospheric deposition, unfiltered, recoverable, micrograms per liter
83237	Chromium, bulk atmospheric deposition, unfiltered, recoverable, micrograms per square meter
83238	Chromium, bulk atmospheric deposition, unfiltered, micrograms per liter
83239	Chromium, bulk atmospheric deposition, unfiltered, micrograms per square meter
83240	Cobalt, bulk atmospheric deposition, filtered, micrograms per liter
83241	Cobalt, bulk atmospheric deposition, filtered, micrograms per square meter
83242	Cobalt, bulk atmospheric deposition, suspended, micrograms per liter
83243	Cobalt, bulk atmospheric deposition, suspended, micrograms per square meter
83244	Cobalt, bulk atmospheric deposition, unfiltered, recoverable, micrograms per liter
83245	Cobalt, bulk atmospheric deposition, unfiltered, recoverable, micrograms per square meter
83246	Cobalt, bulk atmospheric deposition, unfiltered, micrograms per liter
83247	Cobalt, bulk atmospheric deposition, unfiltered, micrograms per square meter

Parameter code	Parameter name
83248	Copper, bulk atmospheric deposition, filtered, micrograms per liter
83249	Copper, bulk atmospheric deposition, filtered, micrograms per square meter
83250	Copper, bulk atmospheric deposition, suspended, micrograms per liter
83251	Copper, bulk atmospheric deposition, suspended, micrograms per square meter
83252	Copper, bulk atmospheric deposition, unfiltered, recoverable, micrograms per liter
83253	Copper, bulk atmospheric deposition, unfiltered, recoverable, micrograms per square meter
83254	Copper, bulk atmospheric deposition, unfiltered, micrograms per liter
83255	Copper, bulk atmospheric deposition, unfiltered, micrograms per square meter
83256	Hydrogen ion, bulk atmospheric deposition, filtered, milligrams per liter
83257	Hydrogen ion, bulk atmospheric deposition, filtered, milligrams per square meter
83258	Hydrogen ion, bulk atmospheric deposition, filtered, microequivalents per liter
83259	Hydrogen ion, bulk atmospheric deposition, unfiltered, milligrams per liter
83260	Hydrogen ion, bulk atmospheric deposition, unfiltered, milligrams per square meter
83261	Hydrogen ion, bulk atmospheric deposition, unfiltered, microequivalents per liter
83262	Hydrogen ion, bulk atmospheric deposition, filtered, calculated, milligrams per liter
83263	Hydrogen ion, bulk atmospheric deposition, filtered, calculated, milligrams per square meter
83264	Hydrogen ion, bulk atmospheric deposition, filtered, calculated, microequivalents per liter
83265	Hydrogen ion, bulk atmospheric deposition, unfiltered, calculated, milligrams per liter
83266	Hydrogen ion, bulk atmospheric deposition, unfiltered, calculated, milligrams per square meter
83267	Hydrogen ion, bulk atmospheric deposition, unfiltered, calculated, microequivalents per liter
83268	Iron, bulk atmospheric deposition, filtered, micrograms per liter
83269	Iron, bulk atmospheric deposition, filtered, micrograms per square meter
83270	Iron, bulk atmospheric deposition, suspended, micrograms per liter
83271	Iron, bulk atmospheric deposition, suspended, micrograms per square meter
83272	Iron, bulk atmospheric deposition, unfiltered, recoverable, micrograms per liter
83273	Iron, bulk atmospheric deposition, unfiltered, recoverable, micrograms per square meter
83274	Iron, bulk atmospheric deposition, unfiltered, micrograms per liter
83275	Iron, bulk atmospheric deposition, unfiltered, micrograms per square meter
83276	Lead, bulk atmospheric deposition, filtered, micrograms per liter
83277	Lead, bulk atmospheric deposition, filtered, micrograms per square meter
83278	Lead, bulk atmospheric deposition, suspended, micrograms per liter
83279	Lead, bulk atmospheric deposition, suspended, micrograms per square meter
83280	Lead, bulk atmospheric deposition, unfiltered, recoverable, micrograms per liter
83281	Lead, bulk atmospheric deposition, unfiltered, recoverable, micrograms per square meter
83282	Lead, bulk atmospheric deposition, unfiltered, micrograms per liter
83283	Lead, bulk atmospheric deposition, unfiltered, micrograms per square meter
83284	Magnesium, bulk atmospheric deposition, filtered, milligrams per liter
83285	Magnesium, bulk atmospheric deposition, filtered, milligrams per square meter
83286	Magnesium, bulk atmospheric deposition, filtered, microequivalents per liter
83287	Magnesium, bulk atmospheric deposition, suspended, milligrams per liter

Parameter code	Parameter name
83288	Magnesium, bulk atmospheric deposition, suspended, milligrams per square meter
83289	Magnesium, bulk atmospheric deposition, suspended, microequivalents per liter
83290	Magnesium, bulk atmospheric deposition, unfiltered, recoverable, milligrams per liter
83291	Magnesium, bulk atmospheric deposition, unfiltered, recoverable, milligrams per square meter
83292	Magnesium, bulk atmospheric deposition, unfiltered, recoverable, microequivalents per liter
83293	Magnesium, bulk atmospheric deposition, unfiltered, milligrams per liter
83294	Magnesium, bulk atmospheric deposition, unfiltered, milligrams per square meter
83295	Magnesium, bulk atmospheric deposition, unfiltered, microequivalents per liter
83296	Manganese, bulk atmospheric deposition, filtered, micrograms per liter
83297	Manganese, bulk atmospheric deposition, filtered, micrograms per square meter
83298	Manganese, bulk atmospheric deposition, suspended, micrograms per liter
83299	Manganese, bulk atmospheric deposition, suspended, micrograms per square meter
83300	Manganese, bulk atmospheric deposition, unfiltered, recoverable, micrograms per liter
83301	Manganese, bulk atmospheric deposition, unfiltered, recoverable, micrograms per square meter
83302	Manganese, bulk atmospheric deposition, unfiltered, micrograms per liter
83303	Manganese, bulk atmospheric deposition, unfiltered, micrograms per square meter
83304	Mercury, bulk atmospheric deposition, filtered, micrograms per liter
83305	Mercury, bulk atmospheric deposition, filtered, micrograms per square meter
83306	Mercury, bulk atmospheric deposition, suspended, micrograms per liter
83307	Mercury, bulk atmospheric deposition, suspended, micrograms per square meter
83308	Mercury, bulk atmospheric deposition, unfiltered, micrograms per liter
83309	Mercury, bulk atmospheric deposition, unfiltered, micrograms per square meter
83310	Molybdenum, bulk atmospheric deposition, filtered, micrograms per liter
83311	Molybdenum, bulk atmospheric deposition, filtered, micrograms per square meter
83312	Molybdenum, bulk atmospheric deposition, suspended, micrograms per liter
83313	Molybdenum, bulk atmospheric deposition, suspended, micrograms per square meter
83314	Molybdenum, bulk atmospheric deposition, unfiltered, recoverable, micrograms per liter
83315	Molybdenum, bulk atmospheric deposition, unfiltered, recoverable, micrograms per square meter
83316	Molybdenum, bulk atmospheric deposition, unfiltered, micrograms per liter
83317	Molybdenum, bulk atmospheric deposition, unfiltered, micrograms per square meter
83318	Nickel, bulk atmospheric deposition, filtered, micrograms per liter
83319	Nickel, bulk atmospheric deposition, filtered, micrograms per square meter
83320	Nickel, bulk atmospheric deposition, suspended, micrograms per liter
83321	Nickel, bulk atmospheric deposition, suspended, micrograms per square meter
83322	Nickel, bulk atmospheric deposition, unfiltered, recoverable, micrograms per liter
83323	Nickel, bulk atmospheric deposition, unfiltered, recoverable, micrograms per square meter
83324	Nickel, bulk atmospheric deposition, unfiltered, micrograms per liter
83325	Nickel, bulk atmospheric deposition, unfiltered, micrograms per square meter
83328	Ammonia, bulk atmospheric deposition, filtered, microequivalents per liter
83331	Ammonia, bulk atmospheric deposition, filtered, microequivalents per liter

Parameter code	Parameter name
83334	Ammonia, bulk atmospheric deposition, suspended, microequivalents per liter
83337	Ammonia, bulk atmospheric deposition, suspended, microequivalents per liter
83340	Ammonia, bulk atmospheric deposition, unfiltered, recoverable, microequivalents per liter
83343	Ammonia, bulk atmospheric deposition, unfiltered, recoverable, microequivalents per liter
83346	Ammonia, bulk atmospheric deposition, unfiltered, microequivalents per liter
83349	Ammonia, bulk atmospheric deposition, unfiltered, microequivalents per liter
83352	Nitrate, bulk atmospheric deposition, filtered, microequivalents per liter
83353	Nitrate, bulk atmospheric deposition, filtered, milligrams per liter
83354	Nitrate, bulk atmospheric deposition, filtered, milligrams per square meter
83355	Nitrate, bulk atmospheric deposition, filtered, microequivalents per liter
83358	Nitrate, bulk atmospheric deposition, unfiltered, microequivalents per liter
83359	Nitrate, bulk atmospheric deposition, unfiltered, milligrams per liter
83360	Nitrate, bulk atmospheric deposition, unfiltered, milligrams per square meter
83361	Nitrate, bulk atmospheric deposition, unfiltered, microequivalents per liter
83364	Nitrate plus nitrite, bulk atmospheric deposition, filtered, microequivalents per liter
83367	Nitrate plus nitrite, bulk atmospheric deposition, filtered, microequivalents per liter
83370	Nitrate plus nitrite, bulk atmospheric deposition, unfiltered, microequivalents per liter
83373	Nitrate plus nitrite, bulk atmospheric deposition, unfiltered, microequivalents per liter
83376	Nitrite, bulk atmospheric deposition, filtered, microequivalents per liter
83377	Nitrite, bulk atmospheric deposition, filtered, milligrams per liter
83378	Nitrite, bulk atmospheric deposition, filtered, milligrams per square meter
83379	Nitrite, bulk atmospheric deposition, filtered, microequivalents per liter
83382	Nitrite, bulk atmospheric deposition, unfiltered, microequivalents per liter
83383	Nitrite, bulk atmospheric deposition, unfiltered, milligrams per liter
83384	Nitrite, bulk atmospheric deposition, unfiltered, milligrams per square meter
83385	Nitrite, bulk atmospheric deposition, unfiltered, microequivalents per liter
83392	Orthophosphate, bulk atmospheric deposition, filtered, microequivalents per liter
83393	Orthophosphate, bulk atmospheric deposition, filtered, milligrams per liter
83394	Orthophosphate, bulk atmospheric deposition, filtered, milligrams per square meter
83395	Orthophosphate, bulk atmospheric deposition, filtered, microequivalents per liter
83398	Orthophosphate, bulk atmospheric deposition, unfiltered, microequivalents per liter
83399	Orthophosphate, bulk atmospheric deposition, unfiltered, milligrams per liter
83400	Orthophosphate, bulk atmospheric deposition, unfiltered, milligrams per square meter
83401	Orthophosphate, bulk atmospheric deposition, unfiltered, microequivalents per liter
83402	Potassium, bulk atmospheric deposition, filtered, milligrams per liter
83403	Potassium, bulk atmospheric deposition, filtered, milligrams per square meter
83404	Potassium, bulk atmospheric deposition, filtered, microequivalents per liter
83405	Potassium, bulk atmospheric deposition, suspended, milligrams per liter
83406	Potassium, bulk atmospheric deposition, suspended, milligrams per square meter
83407	Potassium, bulk atmospheric deposition, suspended, microequivalents per liter

Parameter code	Parameter name
83408	Potassium, bulk atmospheric deposition, unfiltered, recoverable, milligrams per liter
83409	Potassium, bulk atmospheric deposition, unfiltered, recoverable, milligrams per square meter
83410	Potassium, bulk atmospheric deposition, unfiltered, recoverable, microequivalents per liter
83411	Potassium, bulk atmospheric deposition, unfiltered, milligrams per liter
83412	Potassium, bulk atmospheric deposition, unfiltered, milligrams per square meter
83413	Potassium, bulk atmospheric deposition, unfiltered, microequivalents per liter
83414	Selenium, bulk atmospheric deposition, filtered, micrograms per liter
83415	Selenium, bulk atmospheric deposition, filtered, micrograms per square meter
83416	Selenium, bulk atmospheric deposition, suspended, micrograms per liter
83417	Selenium, bulk atmospheric deposition, suspended, micrograms per square meter
83418	Selenium, bulk atmospheric deposition, unfiltered, micrograms per liter
83419	Selenium, bulk atmospheric deposition, unfiltered, micrograms per square meter
83420	Sodium, bulk atmospheric deposition, filtered, milligrams per liter
83421	Sodium, bulk atmospheric deposition, filtered, milligrams per square meter
83422	Sodium, bulk atmospheric deposition, filtered, microequivalents per liter
83423	Sodium, bulk atmospheric deposition, suspended, milligrams per liter
83424	Sodium, bulk atmospheric deposition, suspended, milligrams per square meter
83425	Sodium, bulk atmospheric deposition, suspended, microequivalents per liter
83426	Sodium, bulk atmospheric deposition, unfiltered, recoverable, milligrams per liter
83427	Sodium, bulk atmospheric deposition, unfiltered, recoverable, milligrams per square meter
83428	Sodium, bulk atmospheric deposition, unfiltered, recoverable, microequivalents per liter
83429	Sodium, bulk atmospheric deposition, unfiltered, milligrams per liter
83430	Sodium, bulk atmospheric deposition, unfiltered, milligrams per square meter
83431	Sodium, bulk atmospheric deposition, unfiltered, microequivalents per liter
83441	Sulfate, bulk atmospheric deposition, filtered, microequivalents per liter
83442	Sulfate, bulk atmospheric deposition, filtered, milligrams per liter
83443	Sulfate, bulk atmospheric deposition, filtered, milligrams per square meter
83444	Sulfate, bulk atmospheric deposition, filtered, microequivalents per liter
83447	Sulfate, bulk atmospheric deposition, unfiltered, microequivalents per liter
83448	Sulfate, bulk atmospheric deposition, unfiltered, milligrams per liter
83449	Sulfate, bulk atmospheric deposition, unfiltered, milligrams per square meter
83450	Sulfate, bulk atmospheric deposition, unfiltered, microequivalents per liter
83451	Vanadium, bulk atmospheric deposition, filtered, micrograms per liter
83452	Vanadium, bulk atmospheric deposition, filtered, micrograms per square meter
83453	Vanadium, bulk atmospheric deposition, suspended, micrograms per liter
83454	Vanadium, bulk atmospheric deposition, suspended, micrograms per square meter
83455	Vanadium, bulk atmospheric deposition, unfiltered, recoverable, micrograms per liter
83456	Vanadium, bulk atmospheric deposition, unfiltered, recoverable, micrograms per square meter
83457	Vanadium, bulk atmospheric deposition, unfiltered, micrograms per liter
83458	Vanadium, bulk atmospheric deposition, unfiltered, micrograms per square meter

Parameter code	Parameter name
83460	Zinc, bulk atmospheric deposition, filtered, micrograms per liter
83461	Zinc, bulk atmospheric deposition, filtered, micrograms per square meter
83462	Zinc, bulk atmospheric deposition, suspended, micrograms per liter
83463	Zinc, bulk atmospheric deposition, suspended, micrograms per square meter
83464	Zinc, bulk atmospheric deposition, unfiltered, recoverable, micrograms per liter
83465	Zinc, bulk atmospheric deposition, unfiltered, recoverable, micrograms per square meter
83466	Zinc, bulk atmospheric deposition, unfiltered, micrograms per liter
83467	Zinc, bulk atmospheric deposition, unfiltered, micrograms per square meter
85209	Algal growth potential, USGS modified bottle test, water, filtered, milligrams per liter
85556	Organic acids, water, unfiltered, recoverable, milligrams per liter as propionic acid
85561	Helium-4, water, unfiltered, cubic centimeters per gram at standard temperature and pressure
85562	Helium-4 error, water, unfiltered, cubic centimeters per gram at standard temperature and pressure
85563	Argon, water, unfiltered, cubic centimeters per gram at standard temperature and pressure
85564	Argon error, water, unfiltered, cubic centimeters per gram at standard temperature and pressure
85565	Krypton, water, unfiltered, cubic centimeters per gram at standard temperature and pressure
85566	Krypton error, water, unfiltered, cubic centimeters per gram at standard temperature and pressure
85567	Xenon, water, unfiltered, cubic centimeters per gram at standard temperature and pressure
85568	Xenon error, water, unfiltered, cubic centimeters per gram at standard temperature and pressure
85569	Helium-3/helium-4 error, water, unfiltered, ratio
85570	Nitrogen, water, unfiltered, cubic centimeters per gram at standard temperature and pressure
85571	Carbon dioxide, water, unfiltered, cubic centimeters per gram at standard temperature and pressure
85572	Methane, water, unfiltered, cubic centimeters per gram at standard temperature and pressure
85573	Dissolved oxygen, water, unfiltered, cubic centimeters per gram at standard temperature and pressure
85574	Methane, water, unfiltered, recoverable, milligrams per liter
85668	1-Chloro-1,1-difluoroethane, water, unfiltered, recoverable, micrograms per liter
85769	Sodium, biota, tissue, recoverable, wet weight, micrograms per gram
85770	Potassium, biota, tissue, recoverable, wet weight, micrograms per gram
85795	m-Xylene plus p-xylene, water, unfiltered, recoverable, micrograms per liter
89000	Diazinon, water, filtered, immunoassay, recoverable, field, micrograms per liter
89001	Triclosan, water, unfiltered, immunoassay, recoverable, micrograms per liter
89002	17-beta-Estradiol, water, filtered, recoverable, immunoassay, nanograms per liter
90096	Specific conductance, water, filtered, laboratory, microsiemens per centimeter at 25 degrees Celsius
90300	Dissolved oxygen, water, unfiltered, area weighted average, milligrams per liter
90440	Bicarbonate, water, unfiltered, inflection-point titration method (incremental titration method), laboratory, milligrams per liter
90830	Hydroxide, water, unfiltered, inflection-point titration method (incremental titration method), laboratory, milligrams per liter
90851	Trihalomethanes, water, unfiltered, calculated, micrograms per liter

Parameter code	Parameter name
90852	DDT plus degradates, bed sediment smaller than 2 millimeters, wet sieved (native water), recoverable, calculated, dry weight, micrograms per kilogram
90853	Chlordane plus degradates, bed sediment, recoverable, calculated, dry weight, micrograms per kilogram
90854	DDT plus degradates, biota, whole organism, calculated, wet weight, micrograms per kilogram
90855	Chlordane plus degradates, biota, whole organism, calculated, wet weight, micrograms per kilogram
90859	Nitrate plus nitrite, water, unfiltered, calculated, milligrams per liter as nitrogen
90861	Ratio of particulate nitrogen to particulate organic carbon, number
90862	Salinity, water, unfiltered, Practical Salinity Scale
90931	Aluminum, water, recoverable, semi-quantitative, micrograms per liter
90932	Antimony, water, recoverable, semi-quantitative, micrograms per liter
90933	Arsenic, water, recoverable, semi-quantitative, micrograms per liter
90934	Barium, water, recoverable, semi-quantitative, micrograms per liter
90935	Beryllium, water, recoverable, semi-quantitative, micrograms per liter
90936	Boron, water, recoverable, semi-quantitative, micrograms per liter
90937	Bromine, water, recoverable, semi-quantitative, milligrams per liter
90938	Cadmium, water, recoverable, semi-quantitative, micrograms per liter
90939	Calcium, water, recoverable, semi-quantitative, milligrams per liter
90940	Carbon, water, recoverable, semi-quantitative, milligrams per liter
90941	Cesium, water, recoverable, semi-quantitative, micrograms per liter
90942	Chromium, water, recoverable, semi-quantitative, micrograms per liter
90943	Cobalt, water, recoverable, semi-quantitative, micrograms per liter
90944	Copper, water, recoverable, semi-quantitative, micrograms per liter
90945	Dysprosium, water, recoverable, semi-quantitative, micrograms per liter
90946	Erbium, water, recoverable, semi-quantitative, micrograms per liter
90947	Europium, water, recoverable, semi-quantitative, micrograms per liter
90948	Gadolinium, water, recoverable, semi-quantitative, micrograms per liter
90949	Gallium, water, recoverable, semi-quantitative, micrograms per liter
90950	Gold, water, recoverable, semi-quantitative, micrograms per liter
90951	Hafnium, water, recoverable, semi-quantitative, micrograms per liter
90952	Holmium, water, recoverable, semi-quantitative, micrograms per liter
90953	Indium, water, recoverable, semi-quantitative, micrograms per liter
90954	Iodine, water, recoverable, semi-quantitative, milligrams per liter
90955	Iridium, water, recoverable, semi-quantitative, micrograms per liter
90956	Iron, water, recoverable, semi-quantitative, micrograms per liter
90957	Lanthanum, water, recoverable, semi-quantitative, micrograms per liter
90958	Lead, water, recoverable, semi-quantitative, micrograms per liter
90959	Lithium, water, recoverable, semi-quantitative, micrograms per liter
90960	Lutetium, water, recoverable, semi-quantitative, micrograms per liter
90961	Magnesium, water, recoverable, semi-quantitative, milligrams per liter

Parameter code	Parameter name
90962	Manganese, water, recoverable, semi-quantitative, micrograms per liter
90963	Mercury, water, recoverable, semi-quantitative, micrograms per liter
90964	Molybdenum, water, recoverable, semi-quantitative, micrograms per liter
90965	Neodymium, water, recoverable, semi-quantitative, micrograms per liter
90966	Nickel, water, recoverable, semi-quantitative, micrograms per liter
90967	Niobium, water, recoverable, semi-quantitative, micrograms per liter
90968	Osmium, water, recoverable, semi-quantitative, micrograms per liter
90969	Palladium, water, recoverable, semi-quantitative, micrograms per liter
90970	Phosphorus, water, recoverable, semi-quantitative, milligrams per liter
90971	Platinum, water, recoverable, semi-quantitative, micrograms per liter
90972	Potassium, water, recoverable, semi-quantitative, milligrams per liter
90973	Praseodymium, water, recoverable, semi-quantitative, micrograms per liter
90974	Rhenium, water, recoverable, semi-quantitative, micrograms per liter
90975	Rhodium, water, recoverable, semi-quantitative, micrograms per liter
90976	Rubidium, water, recoverable, semi-quantitative, micrograms per liter
90977	Ruthenium, water, recoverable, semi-quantitative, micrograms per liter
90978	Samarium, water, recoverable, semi-quantitative, micrograms per liter
90979	Scandium, water, recoverable, semi-quantitative, micrograms per liter
90980	Selenium, water, recoverable, semi-quantitative, micrograms per liter
90981	Silicon, water, recoverable, semi-quantitative, milligrams per liter
90982	Silver, water, recoverable, semi-quantitative, micrograms per liter
90983	Sodium, water, recoverable, semi-quantitative, milligrams per liter
90984	Strontium, water, recoverable, semi-quantitative, micrograms per liter
90985	Sulfur, water, recoverable, semi-quantitative, milligrams per liter
90986	Tantalum, water, recoverable, semi-quantitative, micrograms per liter
90987	Tellurium, water, recoverable, semi-quantitative, micrograms per liter
90988	Terbium, water, recoverable, semi-quantitative, micrograms per liter
90989	Thallium, water, recoverable, semi-quantitative, micrograms per liter
90990	Thulium, water, recoverable, semi-quantitative, micrograms per liter
90991	Tin, water, recoverable, semi-quantitative, micrograms per liter
90992	Titanium, water, recoverable, semi-quantitative, micrograms per liter
90993	Tungsten, water, recoverable, semi-quantitative, micrograms per liter
90994	Uranium, water, recoverable, semi-quantitative, micrograms per liter
90995	Vanadium, water, recoverable, semi-quantitative, micrograms per liter
90996	Ytterbium, water, recoverable, semi-quantitative, micrograms per liter
90997	Yttrium, water, recoverable, semi-quantitative, micrograms per liter
90998	Zinc, water, recoverable, semi-quantitative, micrograms per liter
90999	Zirconium, water, recoverable, semi-quantitative, micrograms per liter
91000	Bromide, water, filtered, micrograms per liter
91001	Chloride, water, filtered, micrograms per liter

Parameter code	Parameter name
91002	Fluoride, water, filtered, micrograms per liter
91003	Nitrate, water, filtered, micrograms per liter
91004	Orthophosphate, water, filtered, micrograms per liter as phosphorus
91005	Sulfate, water, filtered, micrograms per liter
91011	Solids settleable in 15 minutes, water, unfiltered, milliliters per liter
91018	Aluminum, water, filtered, semi-quantitative, micrograms per liter
91019	Antimony, water, filtered, semi-quantitative, micrograms per liter
91020	Barium, water, filtered, semi-quantitative, micrograms per liter
91021	Beryllium, water, filtered, semi-quantitative, micrograms per liter
91022	Bismuth, water, filtered, semi-quantitative, micrograms per liter
91023	Boron, water, filtered, semi-quantitative, micrograms per liter
91024	Cadmium, water, filtered, semi-quantitative, micrograms per liter
91025	Calcium, water, filtered, semi-quantitative, micrograms per liter
91026	Chromium, water, filtered, semi-quantitative, micrograms per liter
91027	Cobalt, water, filtered, semi-quantitative, micrograms per liter
91028	Copper, water, filtered, semi-quantitative, micrograms per liter
91029	Gallium, water, filtered, semi-quantitative, micrograms per liter
91030	Germanium, water, filtered, semi-quantitative, micrograms per liter
91031	Iron, water, filtered, semi-quantitative, micrograms per liter
91032	Lead, water, filtered, semi-quantitative, micrograms per liter
91033	Lithium, water, filtered, semi-quantitative, micrograms per liter
91034	Magnesium, water, filtered, semi-quantitative, micrograms per liter
91035	Manganese, water, filtered, semi-quantitative, micrograms per liter
91036	Molybdenum, water, filtered, semi-quantitative, micrograms per liter
91037	Nickel, water, filtered, semi-quantitative, micrograms per liter
91038	Silica, water, filtered, semi-quantitative, micrograms per liter
91039	Silver, water, filtered, semi-quantitative, micrograms per liter
91040	Sodium, water, filtered, semi-quantitative, micrograms per liter
91041	Strontium, water, filtered, semi-quantitative, micrograms per liter
91042	Tin, water, filtered, semi-quantitative, micrograms per liter
91043	Titanium, water, filtered, semi-quantitative, micrograms per liter
91044	Vanadium, water, filtered, semi-quantitative, micrograms per liter
91045	Zinc, water, filtered, semi-quantitative, micrograms per liter
91046	Zirconium, water, filtered, semi-quantitative, micrograms per liter
91051	Calcium, water, filtered, micrograms per liter
91052	Magnesium, water, filtered, micrograms per liter
91053	Sodium, water, filtered, micrograms per liter
91054	Potassium, water, filtered, micrograms per liter
91075	Ethylene glycol, water, unfiltered, recoverable, milligrams per liter

Parameter code	Parameter name
91076	Silver, waste/reagent water mixture leachate, EPA Toxicity Characteristic Leaching Procedure (1311), micrograms per liter
91077	Mercury, waste/reagent water mixture leachate, EPA Toxicity Characteristic Leaching Procedure (1311), micrograms per liter
91078	1,4-Dichlorobenzene, waste/reagent water mixture leachate, EPA Toxicity Characteristic Leaching Procedure (1311), milligrams per liter
91080	1,2-Propanediol, water, unfiltered, recoverable, milligrams per liter
91084	Benzene, waste/reagent water mixture leachate, EPA Toxicity Characteristic Leaching Procedure (1311), milligrams per liter
91085	Ethyl methyl ketone, waste/reagent water mixture leachate, EPA Toxicity Characteristic Leaching Procedure (1311), milligrams per liter
91086	Tetrachloromethane, waste/reagent water mixture leachate, EPA Toxicity Characteristic Leaching Procedure (1311), milligrams per liter
91087	Chlorobenzene, waste/reagent water mixture leachate, EPA Toxicity Characteristic Leaching Procedure (1311), milligrams per liter
91088	Trichloromethane, waste/reagent water mixture leachate, EPA Toxicity Characteristic Leaching Procedure (1311), milligrams per liter
91089	1,2-Dichloroethane, waste/reagent water mixture leachate, EPA Toxicity Characteristic Leaching Procedure (1311), milligrams per liter
91090	1,1-Dichloroethene, waste/reagent water mixture leachate, EPA Toxicity Characteristic Leaching Procedure (1311), milligrams per liter
91091	Tetrachloroethene, waste/reagent water mixture leachate, EPA Toxicity Characteristic Leaching Procedure (1311), milligrams per liter
91092	Trichloroethene, waste/reagent water mixture leachate, EPA Toxicity Characteristic Leaching Procedure (1311), milligrams per liter
91093	Vinyl chloride, waste/reagent water mixture leachate, EPA Toxicity Characteristic Leaching Procedure (1311), milligrams per liter
91094	Arsenic, waste/reagent water mixture leachate, EPA Toxicity Characteristic Leaching Procedure (1311), micrograms per liter
91095	Barium, waste/reagent water mixture leachate, EPA Toxicity Characteristic Leaching Procedure (1311), micrograms per liter
91096	Cadmium, waste/reagent water mixture leachate, EPA Toxicity Characteristic Leaching Procedure (1311), micrograms per liter
91097	Chromium, waste/reagent water mixture leachate, EPA Toxicity Characteristic Leaching Procedure (1311), micrograms per liter
91098	Lead, waste/reagent water mixture leachate, EPA Toxicity Characteristic Leaching Procedure (1311), micrograms per liter
91099	Selenium, waste/reagent water mixture leachate, EPA Toxicity Characteristic Leaching Procedure (1311), micrograms per liter
91107	Sample weight, PAH method, solids, grams
91108	Sample volume, custom method 9010, milliliters
91109	Sample weight, total PCBs method, bed sediment, grams
91115	Sample volume, air, cubic meters
91116	Sample weight, solids sample for hormone schedule, dry weight, grams
91117	Sample volume, suspended sediment for hormone schedule, milliliters

Parameter code	Parameter name
91118	Sample volume, water, filtered, hormone schedule, milliliters
91119	Sample volume, water, unfiltered, hormone schedule, milliliters
91120	Sample volume, air, hormone schedule, cubic meters
91121	Sample volume, water, unfiltered, milliliters
91122	Sample volume, water, filtered, milliliters
91123	Sample volume, pharmaceutical method, water, unfiltered, milliliters
91124	Sample weight, pharmaceutical method, solids, grams
91125	Sample volume, pharmaceutical method, suspended sediment, milliliters
91126	Sample weight, PCB congeners, solids, grams
91127	Sample weight, solids, dry weight, grams
91128	Sample weight, FF&UV method, solids, dry weight, grams
91129	Sample volume, Fungicide method, milliliters
91130	Sample weight, biota, tissue, for hormone schedule, wet weight, grams
91131	Weight of sorbent per polar organic chemical integrative sampler (POCIS), grams
91133	Sample weight, biota, tissue, halogenated compounds schedule, wet weight, grams
91134	Sample weight, biota, tissue, wastewater compounds schedule, wet weight, grams
91700	Arsenic, solids, 10% nitric acid extracted, recoverable, dry weight, milligrams per kilogram
91701	Cadmium, solids, 10% nitric acid extracted, recoverable, dry weight, milligrams per kilogram
91702	Lead, solids, 10% nitric acid extracted, recoverable, dry weight, milligrams per kilogram
91703	Uranium, solids, 10% nitric acid extracted, recoverable, dry weight, milligrams per kilogram
91704	Aluminum, solids, 10% nitric acid extracted, recoverable, dry weight, milligrams per kilogram
91705	Chromium, solids, 10% nitric acid extracted, recoverable, dry weight, milligrams per kilogram
91706	Copper, solids, 10% nitric acid extracted, recoverable, dry weight, milligrams per kilogram
91707	Iron, solids, 10% nitric acid extracted, recoverable, dry weight, milligrams per kilogram
91708	Manganese, solids, 10% nitric acid extracted, recoverable, dry weight, milligrams per kilogram
91709	Nickel, solids, 10% nitric acid extracted, recoverable, dry weight, milligrams per kilogram
91710	Vanadium, solids, 10% nitric acid extracted, recoverable, dry weight, milligrams per kilogram
91711	Zinc, solids, 10% nitric acid extracted, recoverable, dry weight, milligrams per kilogram
91712	Iron, solids, 6N hydrochloric acid extracted, recoverable, dry weight, milligrams per kilogram
91713	Manganese, solids, 6N hydrochloric acid extracted, recoverable, dry weight, milligrams per kilogram
91714	Aluminum, solids, 6N hydrochloric acid extracted, recoverable, dry weight, milligrams per kilogram
91715	Potassium, solids, 6N hydrochloric acid extracted, recoverable, dry weight, milligrams per kilogram
91716	Sodium, solids, 6N hydrochloric acid extracted, recoverable, dry weight, milligrams per kilogram
91717	Magnesium, solids, 6N hydrochloric acid extracted, recoverable, dry weight, milligrams per kilogram
91718	Calcium, solids, 6N hydrochloric acid extracted, recoverable, dry weight, milligrams per kilogram
91719	Chromium, solids, 6N hydrochloric acid extracted, recoverable, dry weight, milligrams per kilogram

Parameter code	Parameter name
91720	Nickel, solids, 6N hydrochloric acid extracted, recoverable, dry weight, milligrams per kilogram
91721	Copper, solids, 6N hydrochloric acid extracted, recoverable, dry weight, milligrams per kilogram
91722	Zinc, solids, 6N hydrochloric acid extracted, recoverable, dry weight, milligrams per kilogram
91723	Lead, solids, 6N hydrochloric acid extracted, recoverable, dry weight, milligrams per kilogram
91724	Vanadium, solids, 6N hydrochloric acid extracted, recoverable, dry weight, milligrams per kilogram
91725	Uranium, solids, 6N hydrochloric acid extracted, recoverable, dry weight, milligrams per kilogram
91750	Sertraline-d3, surrogate, water, filtered, percent recovery
91751	Sertraline-d3, surrogate, water, unfiltered, percent recovery
91752	Fluoxetine-d6, surrogate, water, unfiltered, percent recovery
91753	17-beta-Estradiol-13,14,15,16,17,18-13C6, isotope dilution standard, water, filtered, percent recovery
91754	Estrone-13,14,15,16,17,18-13C6, isotope dilution standard, water, filtered, percent recovery
91755	17-beta-Estradiol-13,14,15,16,17,18-13C6, isotope dilution standard, water, unfiltered, percent recovery
91756	Estrone-13,14,15,16,17,18-13C6, isotope dilution standard, water, unfiltered, percent recovery
91757	17-beta-Estradiol-13,14,15,16,17,18-13C6, isotope dilution standard, solids, percent recovery
91758	Estrone-13,14,15,16,17,18-13C6, isotope dilution standard, solids, percent recovery
91759	17-beta-Estradiol-13,14,15,16,17,18-13C6, isotope dilution standard, suspended sediment, percent recovery
91760	Estrone-13,14,15,16,17,18-13C6, isotope dilution standard, suspended sediment, percent recovery
91761	17-beta-Estradiol-13,14,15,16,17,18-13C6, isotope dilution standard, polar organic chemical integrative sampler (POCIS), percent recovery
91762	Estrone-13,14,15,16,17,18-13C6, isotope dilution standard, polar organic chemical integrative sampler (POCIS), percent recovery
91763	17-beta-Estradiol-13,14,15,16,17,18-13C6, isotope dilution standard, biota, tissue, percent recovery
91764	Estrone-13,14,15,16,17,18-13C6, isotope dilution standard, biota, tissue, percent recovery
91765	PCB congener 202-13C12, surrogate, Halogenated method, water, unfiltered, percent recovery
91766	p,p'-DDT-d8, surrogate, Halogenated method, water, unfiltered, percent recovery
91767	4,4'-Dibromooctafluorobiphenyl, internal standard/surrogate, water, unfiltered, percent recovery
91768	Sample volume, Halogenated method, water, unfiltered, milliliters
91769	Thiabendazole-d4, surrogate, water, filtered (0.2 micron filter), percent recovery
91770	Azithromycin-d3, surrogate, water, filtered (0.2 micron filter), percent recovery
91771	Simvastatin-d6, surrogate, water, filtered (0.2 micron filter), percent recovery
91772	Albuterol-d9, surrogate, water, filtered (0.2 micron filter), percent recovery
91773	Diltiazem-d3, surrogate, water, filtered (0.2 micron filter), percent recovery
91774	Trimethoprim-d9, surrogate, water, filtered (0.2 micron filter), percent recovery
91775	Acetaminophen-d3, surrogate, water, filtered (0.2 micron filter), percent recovery
91776	Norfluoxetine-d6, surrogate, water, filtered (0.2 micron filter), percent recovery

Parameter code	Parameter name
91777	Methadone-d9, surrogate, water, filtered (0.2 micron filter), percent recovery
91778	Oxycodone-d3, surrogate, water, filtered (0.2 micron filter), percent recovery
91779	Hydrocodone-d3, surrogate, water, filtered (0.2 micron filter), percent recovery
91780	Temazepam-d5, surrogate, water, filtered (0.2 micron filter), percent recovery
91781	Caffeine-(trimethyl-13C3), surrogate, water, filtered (0.2 micron filter), percent recovery
91782	Sulfamethoxazole-(phenyl-13C6), surrogate, water, filtered (0.2 micron filter), percent recovery
91783	Cotinine-d3, surrogate, water, filtered (0.2 micron filter), percent recovery
91784	Amphetamine-d6, surrogate, water, filtered (0.2 micron filter), percent recovery
91785	4,4'-Dibromooctafluorobiphenyl, internal standard/surrogate, solids, percent recovery
91786	Codeine-d6, surrogate, water, filtered (0.2 micron filter), percent recovery
91787	Pseudoephedrine-d3, surrogate, water, filtered (0.2 micron filter), percent recovery
91788	Diphenhydramine-d3, surrogate, water, filtered (0.2 micron filter), percent recovery
91789	Fluoxetine-d6, surrogate, water, filtered (0.2 micron filter), percent recovery
91790	Diazepam-d5, surrogate, water, filtered (0.2 micron filter), percent recovery
91791	Butalbital-d5, surrogate, water, filtered (0.2 micron filter), percent recovery
91792	Pentobarbital-d5, surrogate, water, filtered (0.2 micron filter), percent recovery
91793	Codeine-d6, surrogate, water, filtered, percent recovery
91794	Pseudoephedrine-d3, surrogate, water, filtered, percent recovery
91795	Diphenhydramine-d3, surrogate, water, filtered, percent recovery
91796	Fluoxetine-d6, surrogate, water, filtered, percent recovery
91797	Diazepam-d5, surrogate, water, filtered, percent recovery
91798	Pentobarbital-d5, surrogate, water, filtered, percent recovery
91799	Butalbital-d5, surrogate, water, filtered, percent recovery
91984	Caffeine-13C, surrogate, biota, tissue, recoverable, wet weight, micrograms per kilogram
91985	Bisphenol A-d3, surrogate, biota, tissue, recoverable, wet weight, micrograms per kilogram
91986	2,4-D-d3, surrogate, water, filtered, percent recovery
91987	2,4-D methyl ester-d3, surrogate, water, filtered, percent recovery
91988	17-beta-Estradiol-2,4,16,16-d4, isotope dilution standard, polar organic chemical integrative sampler (POCIS), percent recovery
91998	2,3-Dibromopropionic acid, surrogate, water, unfiltered, percent recovery
91999	1,4-Dioxane-d8, surrogate, water, unfiltered, recoverable, percent
92209	Chlorophyll *a*, fluorometric method, corrected, area weighted average, micrograms per liter
92213	Pheophytin *a*, fluorometric method, area weighted average, micrograms per liter
92217	Chlorophyll *a*, fluorometric method, uncorrected, area weighted average, micrograms per liter
95203	Cyanobacteria (blue-green algae), Turner Designs SCUFA in vivo fluorescence of phycocyanin, excitation - 595 nm, emission - 670 nm, micrograms per liter
95440	Bicarbonate, water, unfiltered, fixed endpoint (pH 4.5) titration, laboratory, milligrams per liter
95830	Hydroxide, water, unfiltered, fixed endpoint (pH 10.4), laboratory, milligrams per liter
99032	Iron(II), water, unfiltered, micrograms per liter
99033	Inorganic arsenic, water, filtered (0.45 micron filter), micrograms per liter
99034	Inorganic arsenic(III), water, filtered (0.45 micron filter), micrograms per liter

Parameter code	Parameter name
99113	Sulfate, water, filtered, field, milligrams per liter
99114	Iron(II), water, filtered, field, milligrams per liter
99115	Iron, water, filtered, field, milligrams per liter
99117	Chloride, water, filtered, field, milligrams per liter
99118	Sulfide, water, filtered, field, milligrams per liter
99119	Sulfide, water, unfiltered, field, milligrams per liter
99120	Ammonia, water, filtered, field, milligrams per liter as nitrogen
99121	Nitrate, water, filtered, field, milligrams per liter as nitrogen
99122	Orthophosphate, water, filtered, field, milligrams per liter
99123	Ammonia, water, unfiltered, field, milligrams per liter as nitrogen
99124	Nitrate, water, unfiltered, field, milligrams per liter as nitrogen
99125	Nitrite, water, unfiltered, field, milligrams per liter as nitrogen
99126	Orthophosphate, water, unfiltered, field, milligrams per liter
99127	Sulfate, water, unfiltered, field, milligrams per liter
99128	Iron(II), water, unfiltered, field, milligrams per liter
99129	Iron, water, unfiltered, recoverable, field, milligrams per liter
99130	Nitrate, water, unfiltered, field, micromoles per liter
99131	Silica, water, unfiltered, field, milligrams per liter
99132	Rhodamine WT, water, unfiltered, field, recoverable, milligram per liter
99133	Nitrate plus nitrite, water, in situ, milligrams per liter as nitrogen
99134	Dissolved organic carbon, water, in situ, estimated, milligrams per liter
99135	Total organic carbon, water, in situ, estimated, milligrams per liter
99220	Chloride, water, unfiltered, milligrams per liter
99282	Dibromochloromethane formation potential, water, filtered, micrograms per liter
99283	Bromodichloroacetic acid formation potential, water, filtered, micrograms per liter
99284	Dibromochloroacetic acid formation potential, water, filtered, micrograms per liter
99285	Tribromoacetic acid formation potential, water, filtered, micrograms per liter
99286	Trichloroacetic acid formation potential, water, filtered, micrograms per liter
99287	Bromochloroacetic acid formation potential, water, filtered, micrograms per liter
99288	Dibromoacetic acid formation potential, water, filtered, micrograms per liter
99289	Bromoacetic acid formation potential, water, filtered, micrograms per liter
99290	Dichloroacetic acid formation potential, water, filtered, micrograms per liter
99291	2-Bromopropionic acid formation potential, water, filtered, micrograms per liter
99292	Chloroacetic acid formation potential, water, filtered, micrograms per liter
99293	2-Bromo-1-chloropropane formation potential, water, filtered, micrograms per liter
99294	Haloacetic acids formation potential, water, filtered, micrograms per liter
99295	Trichloromethane formation potential, water, filtered, micrograms per liter
99296	Trihalomethane formation potential, water, filtered, micrograms per liter
99297	Bromodichloromethane formation potential, water, filtered, micrograms per liter
99298	Dibromodichloromethane formation potential, water, filtered, micrograms per liter

Parameter code	Parameter name
99299	Tribromomethane formation potential, water, filtered, micrograms per liter
99300	Chlorine dose, disinfection byproduct, water, unfiltered, milligrams per liter
99301	Chlorine residual, disinfection byproduct, water, unfiltered, milligrams per liter
99302	Chlorine demand, disinfection byproduct, water, unfiltered, milligrams per liter
99304	Trichloromethane, disinfection byproduct, water, unfiltered, EPA method 524.2, micrograms per liter
99305	Bromodichloromethane, disinfection byproduct, water, unfiltered, EPA method 524.2, micrograms per liter
99306	Dibromochloromethane, disinfection byproduct, water, unfiltered, EPA method 524.2, micrograms per liter
99307	Tribromomethane, disinfection byproduct, water, unfiltered, EPA method 524.2, micrograms per liter
99308	Chloroacetic acid, disinfection byproduct, water, unfiltered, EPA method 552.2, micrograms per liter
99309	Dichloroacetic acid, disinfection byproduct, water, unfiltered, EPA method 552.2, micrograms per liter
99310	Trichloroacetic acid, disinfection byproduct, water, unfiltered, EPA method 552.2, micrograms per liter
99311	Bromoacetic acid, disinfection byproduct, water, unfiltered, EPA method 552.2, micrograms per liter
99312	Dibromoacetic acid, disinfection byproduct, water, unfiltered, EPA method 552.2, micrograms per liter
99313	Trichloroacetonitrile, disinfection byproduct, water, unfiltered, EPA method 551.1, micrograms per liter
99314	Dichloroacetonitrile, disinfection byproduct, water, unfiltered, EPA method 551.1, micrograms per liter
99315	Bromochloroacetonitrile, disinfection byproduct, water, unfiltered, EPA method 551.1, micrograms per liter
99316	Dibromoacetonitrile, disinfection byproduct, water, unfiltered, EPA method 551.1, micrograms per liter
99317	1,1,1-Trichloro-2-propanone, disinfection byproduct, water, unfiltered, EPA method 551.1, micrograms per liter
99318	1,1-Dichloro-2-propanone, disinfection byproduct, water, unfiltered, EPA method 551.1, micrograms per liter
99319	Chloropicrin, disinfection byproduct, water, unfiltered, EPA method 551.1, micrograms per liter
99320	Chlorate, disinfection byproduct, water, unfiltered, EPA method 300.0, micrograms per liter
99321	Chloral hydrate, disinfection byproduct, water, unfiltered, EPA method 551.1, micrograms per liter
99322	Bromochloroacetic acid, disinfection byproduct, water, unfiltered, EPA method 552.2, micrograms per liter
99323	Gross beta radioactivity sample-specific minimum detectable concentration, water, filtered, picocuries per liter
99324	Radium-224 sample-specific minimum detectable concentration, water, filtered, picocuries per liter

Parameter code	Parameter name
99325	Radium-226 sample-specific minimum detectable concentration, water, filtered, picocuries per liter
99326	Radium-228 sample-specific minimum detectable concentration, water, filtered, picocuries per liter
99327	Radon-222 sample-specific minimum detectable concentration, water, unfiltered, picocuries per liter
99337	Gross alpha radioactivity 2X critical level (sample-specific minimum detectable concentration), water, filtered, picocuries per liter
99401	Dissolved solids, water, filtered, estimated by regression equation, milligrams per liter
99402	Suspended solids, water, unfiltered, estimated by regression equation, milligrams per liter
99403	Total solids, water, unfiltered, estimated by regression equation, milligrams per liter
99404	Chloride, water, filtered, estimated by regression equation, milligrams per liter
99405	Sulfate, water, filtered, estimated by regression equation, milligrams per liter
99408	Atrazine, water, filtered, estimated by regression equation, micrograms per liter
99409	Suspended sediment concentration, water, unfiltered, estimated by regression equation, milligrams per liter
99410	Total nitrogen, water, filtered, estimated by regression equation, milligrams per liter
99416	Phosphorus, water, unfiltered, estimated by regression equation, milligrams per liter
99440	Bicarbonate, water, unfiltered, inflection-point titration method (incremental titration method), field, milligrams per liter
99773	Fluometuron, water, filtered, immunoassay, unadjusted, recoverable, micrograms per liter
99774	Metribuzin, water, filtered, immunoassay, unadjusted, recoverable, micrograms per liter
99775	Atrazine, water, filtered, immunoassay, unadjusted, recoverable, micrograms per liter
99782	Boron, water, filtered, unpreserved, recoverable, micrograms per liter
99783	N-Nitrosodimethylamine, expected spike concentration, water, micrograms per liter
99784	1,2,3-Trichloropropane, expected spike concentration, water, micrograms per liter
99785	1,4-Dioxane, expected spike concentration, water, micrograms per liter
99786	Perchlorate, expected spike concentration, water, micrograms per liter
99830	Hydroxide, water, unfiltered, inflection-point titration method (incremental titration method), field, milligrams per liter
99841	Sample weight, semipermeable membrane device, grams
99889	Nitrate plus nitrite, water, filtered, field, milligrams per liter as nitrogen
99890	Sulfate, water, filtered, uncorrected, milligrams per liter
99891	Phosphorus, water, unfiltered, modified jirka method, milligrams per liter
99893	Phosphorus, water, filtered, modified jirka method, milligrams per liter
99895	Silver, water, unfiltered, EPA contract, recoverable, micrograms per liter
99896	Cyanide, water, unfiltered, EPA contract, recoverable, milligrams per liter
99897	Antimony, water, unfiltered, EPA contract, recoverable, micrograms per liter
99960	Glyphosate, water, filtered, immunoassay, unadjusted, recoverable, micrograms per liter
99977	Dissolved oxygen, water, unfiltered, 1 meter below surface, milligrams per liter
99981	Dissolved oxygen, water, unfiltered, 1 meter above bottom, milligrams per liter
99985	Dissolved oxygen, water, unfiltered, mid-depth, milligrams per liter

4.10 Appendix J. Time-Related Codes

Table 1. Time datum codes.

Time datum code	Time datum name	Offset from UTC (hours)
	Commonly used time datums	
ADT	Atlantic daylight time	-03:00
AKDT	Alaska daylight time	-08:00
AKST	Alaska standard time	-09:00
AST	Atlantic standard time (Canada)	-04:00
CDT	Central daylight time	-05:00
CST	Central standard time	-06:00
EDT	Eastern daylight time	-04:00
EST	Eastern standard time	-05:00
GMT	Greenwich mean time	00:00
HDT	Hawaii daylight time	-09:00
HST	Hawaii standard time	-10:00
MDT	Mountain daylight time	-06:00
MST	Mountain standard time	-07:00
PDT	Pacific daylight time	-07:00
PST	Pacific standard time	-08:00
UTC	Coordinated universal time	00:00
ZP11	GMT +11 hours	+11:00
ZP-11	GMT -11 hours	-11:00
ZP-2	GMT -2 hours	-02:00
ZP-3	GMT -3 hours	-03:00
ZP4	GMT +4 hours	+04:00
ZP5	GMT +5 hours	+05:00
ZP6	GMT +6 hours	+06:00
	Other time datums available	
ACSST	Central Australia summer time	+10:30
ACST	Central Australia standard time	+09:30
AESST	Australia Eastern summer time	+11:00
AEST	Australia Eastern standard time	+10:00
AWSST	Australia Western summer time	+09:00
AWST	Australia Western standard time	+08:00

BST	British summer time	+01:00
BT	Baghdad time	+03:00
CADT	Central Australia daylight time	+10:30
CAST	Central Australia standard time	+09:30
CCT	China Coastal Time	+08:00
CET	Central European time	+01:00
CETDST	Central European daylight time	+02:00
DNT	Dansk normal time	+01:00
DST	Dansk summer time	+01:00
EASST	East Australian summer time	+11:00
EAST	East Australian standard time	+10:00
EET	Eastern Europe, Russia Zone 1	+02:00
EETDST	Eastern Europe daylight time	+03:00
FST	French summer time	+01:00
FWT	French winter time	+02:00
GST	Guam standard time, Russia Zone 9	+10:00
IDLE	International Date Line, East	+12:00
IDLW	International Date Line, West	-12:00
IST	Israel standard time	+02:00
IT	Iran time	+03:30
JST	Japan standard time, Russia Zone 8	+09:00
JT	Java time	+07:30
KST	Korea standard time	+09:00
LIGT	Melbourne, Australia	+10:00
MEST	Middle Europe summer time	+02:00
MET	Middle Europe time	+01:00
METDST	Middle Europe daylight time	+02:00
MEWT	Middle Europe Winter Time	+01:00
MEZ	Middle Europe Zone	+01:00
MT	Moluccas time	+08:30
NDT	Newfoundland daylight time	-02:30
NFT	Newfoundland standard time	-03:30
NOR	Norway standard time	+01:00
NST	Newfoundland standard time	-03:30
NZDT	New Zealand daylight time	+13:00

NZST	New Zealand standard time	+12:00
NZT	New Zealand time	+12:00
SADT	South Australian daylight time	+10:30
SAT	South Australian standard time	+09:30
SET	Seychelles time	+01:00
SST	Swedish summer time	+02:00
SWT	Swedish Winter time	+01:00
WADT	West Australian daylight time	+08:00
WAST	West Australian standard time	+07:00
WAT	West Africa time	-01:00
WDT	West Australian daylight time	+09:00
WET	Western Europe	00:00
WETDST	Western Europe daylight time	+01:00
WST	West Australian standard time	+08:00

Table 2. Time datum reliability codes.

Time datum reliability code	Description
E	**Estimated (assumed) time datum. This code would be an option during interactive or batch sample input.** ***If this code is used the associated time datum will not appear for the sample on several output reports unless the time datum is requested specifically***
K	**Known time datum. This code would be the default during either interactive or batch sample login.**
T	**Time datum assumed during data transfer. This should only be set during data transfer** ***If this code is used the associated time datum will not appear for the sample on several output reports unless the time datum is requested specifically***

4.11 Appendix K. Protocol Organization Codes

[Note: Can be entered for analyzing entity (result level) or collecting agency (sample level) fields. If code appears in italics in the table, it is not allowed for new data entry]

Protocol organization code	Protocol organization name	Historical fixed value code
AK-CGL	Chemical and Geological Laboratories of Alaska	80203
AK-DEC	Alaska Department of Environmental Conservation	9815
AK-DFG	Alaska Department of Fish and Game	9814
AK-DGGS	Alaska Division of Geologic and Geophysical Surveys (DGGS)	80201
AK-HDL	Alaska State Health Department Laboratory	9702
AK-NTL	Northern Test Lab (Soldotna, Alaska)	80205
AK-PA	Alaska Power Administration	1062
AK-UA	University of Alaska	9906
AL-GS	Geological Survey of Aabama	80141
AL-HDL	Alabama State Health Department Laboratory	9701
AL-STLMB	Severn-Trent Laboratory - Mobile: Mobile, Ala.	80110
AL-TALMB	TestAmerica Labs - Mobile: Mobile, Ala.	N/A
AR-DPCE	Arkansas Department of Pollution Control and Ecology	9827
AR-GC	Arkansas Geological Commission	80515
AR-GFC	Arkansas Game and Fish Commission	9828
AR-HDL	Arkansas State Health Department Laboratory	9705
AR-OBU	Ouachita Baptist University, Arkadelphia, Ark.	80501
AR-UARE	University of Arkansas, Dept. of Engineering, Fayetteville	80503
AR-UARG	University of Arkansas, Dept. of Geology, Fayetteville	80505
AS-HDL	American Samoa Health Department Laboratory	9760
ASTM	American Society for Testing and Materials International	N/A
AUS-IAEA	Intl Atomic Energy Agy, Isotope Hyd Sxn, Vienna, Austria	80055
AZ-CAS	Columbia Analytical Services Inc, Phoenix, Ariz.	N/A
AZ-DEQ	Arizona Dept. of Environmental Quality	80415
AZ-DWR	Arizona Dept. of Water Resources	80417
AZGCMRSL	Grand Canyon Monitrg&Res Ctr-Sed lab-USGS-BRD Flagstaff, Ariz.	N/A
AZ-HDL	Arizona State Health Department Laboratory	9704
AZ-SRVUA	Salt River Valley Users Association	9802
AZTALPHX	TestAmerica Labs - Phoenix: Phoenix, Ariz.	N/A
AZTLITUC	Turner laboratories, Inc, Tucson, Ariz.	N/A
AZ-TUCSN	City of Tucson, Ariz.	80410
AZ-UA	University of Arizona	9902

Protocol organization code	Protocol organization name	Historical fixed value code
AZ-UAMSL	University of Arizona Physics Dept. Accelerator Mass Spectroscopy Lab	N/A
CA-2NAT	2nd Nature, Inc, Santa Cruz, Calif.	80649
CA-ABAG	Association of Bay Area Governments, California	6001
CA-ACFC	Alameda Co. Flood Control and Water Conservation Dist., California	6003
CA-ACFC7	Alameda Co. Flood Control & Water Conser. Dist, Zone 7, California	9824
CA-ACWD	Alameda County Water District, California	9823
CA-AVEKW	Antelope Valley East Kern Water Agency Laboratory	6022
CA-DFG	California Department of Fish and Game	N/A
CA-DFGL	California Department of Fish and Game Laboratory	N/A
CA-GMGPL	Graham Matthews & Assoc, Granite Peak Lab, Weaverville, Calif.	N/A
CA-GMCSL	Graham Matthews & Assoc, Coarse Sediment Lab, Arcata, Calif.	N/A
CA-DWR	California Department of Water Resources	9816
CA-EBERL	Eberline Services, Richmond, Calif.	80643
CA-EBMUD	East Bay Municipal Utility District, Oakland, Calif.	6006
CA-EBRPD	East Bay Regional Park District, California	6005
CA-GGC	Global Geochemistry Corporation, Canoga Park, Calif.	80642
CA-GM	Graham Matthews & Associates	N/A
CA-HDL	California State Health Department Laboratory	9706
CA-HSL	High Sierra Lab, Truckee, Calif.	80647
CA-LAETL	LA Cty Ag Comsr/Weights & Meas; Envl Toxicology Lab Svcs	6021
CA-LLNL	Lawrence Livermore Lab, California	80641
CA-LWTP	City of Livermore Waste Treatment Plant, California	9826
CA-MOJWA	Mojave Water Agency, Apple Valley, Colo.	N/A
CA-MWDSC	Metropolitan Water District of Southern California	9803
CA-MWHL	Montgomery-Watson-Harza Laboratories, Monrovia, Calif.	80640 80645
CA-OCWD	Orange County Water District, California	9817
CA-OCWDL	Orange County Water District Lab, Fountain Valley, Calif.	N/A
CA-QUANT	Quanterra Environmental Services, West Sacramento, Calif.	6040
CA-SBL	City of Santa Barbara Laboratory, California	N/A
CA-SCVWD	Santa Clara Valley Water District, California	6020
CA-SDL	City of San Diego Lab, California	80623
CA-SSWD	Sacramento Suburban Water District, Sacramento, Calif.	N/A

Protocol organization code	Protocol organization name	Historical fixed value code
CA-STLSA	Severn-Trent Laboratory - Los Angeles: Santa Ana, Calif.	80630
CA-STLSC	Severn-Trent Laboratory - Sacramento: West Sacramento, Calif.	80620
CA-TALIR	TestAmerica Labs - Irvine: Irvine, Calif.	N/A
CA-TALSA	TestAmerica Labs - Los Angeles: Santa Ana, Calif.	N/A
CA-TALSC	TestAmerica Labs - Sacramento: West Sacramento, Calif.	N/A
CA-TATC	TestAmerica Analytical Testing Corporation, Colton, Calif.	N/A
CA-UCB	University of California, Berkeley	80650
CA-UCD	University of California, Davis	80670
CAUCDBGL	Univ. of Calif., Davis-Biogeochemistry Laboratory	N/A
CAUCDLAW	Univ. of Calif., Davis-Dept. of Land, Air, and Water Resources	N/A
CA-UCDIC	Univ. of Calif., Davis-IC for Plasma Mass Spectrometry	N/A
CAUCDSIL	Univ. of Calif., Davis-Stable Isotope Laboratory	N/A
CA-UCDTH	Univ. of Calif., Davis, Tahoe Env Research Ctr, Incline, Nev.	N/A
CA-UCLA	University of California, Los Angeles	80672
CA-UCSD	University of California, San Diego, La Jolla	80671
CA-URS	URS Corporation - Sacramento, Calif.	N/A
CA-UWCD	United Water Conservation District, Santa Paula Calif.	6015
CA-VCSD	Valley Community Services District (Livermore), California	9825
CA-WECK	Weck Laboratories, Inc, City of Industry, Calif.	N/A
CA-WRDSC	Water Replenishment Dist. of So. California, Lakewood	N/A
CAN-AHDL	Alberta Health Department Laboratory	9795
CAN-CRNL	Chalk River Nuclear Laboratories, Chalk River, Canada	89213
CAN-OHDL	Ontario Health Department Laboratory	9792
CAN-ONAL	Activation Labs, Ltd, Ancaster, Ontario, Canada	89203
CAN-QHDL	Quebec Health Department Laboratory	9791
CAN-SEWQ	Saskatchewan Environment, Water Quality Br., Regina, Sask.	89401
CAN-SHDL	Saskatchewan Health Department Laboratory	9794
CAN-UWIL	Univ. of Waterloo, Isotope Lab,Waterloo, Ontario, Canada	92001
CAN-XRAL	XRAL Laboratory Services, Don Mills, Ontario, Canada	89202
CAN-YHDL	Yukon Health Department Laboratory	9797
CANBCHDL	British Columbia Health Department Laboratory	9796
CANBLC	Bio-limno Research and Consulting,Inc,Halifax, Nova Scotia	N/A
CANECWQB	Environment Canada, Water Quality Br., Burlington, Ontario	89201
CAN-ILUT	Isotrace Laboratory-University of Toronto	N/A
CANMBEWS	Manitoba Environment, Water Standards Sxn., Winnipeg, Man.	89301
CANMBHDL	Manitoba Health Department Laboratory	9793

Protocol organization code	Protocol organization name	Historical fixed value code
CANNBHDL	New Brunswick Health Department Laboratory	9790
CARWQBNC	California Regional Water Quality Control Board North Coast Region	6010
CEI-HDL	Canton and Enderbury Islands Health Department Laboratory	9762
CO-ACCUL	Acculabs, Inc., Golden, Colo.	80859
CO-ALMSW	Accutest Laboratories, Mountain States; Wheat Ridge, Colo.	N/A
CO-CAI	Chadwick and Associates, Inc., Littleton, Colo.	8001
CO-CSEQL	City of Colorado Springs, Environmental Quality Lab	80853
CO-CSUVS	Env.Health Div. Vet.Science College, CSU, Fort Collins, Colo.	80839
CO-DAVIS	Davis Laboratories, Colorado	80841
CO-DOW	Colorado Division of Wildlife	80810
CO-DRCOG	Denver Regional Council of Government, Colorado	80843
CO-HFMAN	Huffman Laboratories, Golden, Colo.	N/A
CO-HDL	Colorado State Health Department Laboratory	9708
CO-MDSL1	Metropolitan Denver Sewage Disposal District Lab. No. 1	80845
CO-MNTLB	Monfort Lab, Monfort Cattle Co., Greeley, Colo.	N/A
CO-PRWSG	Pine River Watershed Stakeholders Group, Colorado	80820
CO-QI	Quanterra Environmental Services, Arvada, Colo.	N/A
CO-RMAL	Rocky Mountain Analytical Laboratory (Arvada, Colorado)	80849
CO-STLDN	Severn-Trent Laboratory, Denver, Colo.	80855
CO-TALDN	TestAmerica Labs - Denver, Arvada, Colo.	N/A
CO-TATC	TestAmerica Analytical Testing Corporation, Arvada, Colo.	N/A
CO-UCCAG	Upper Clear Creek Advisory Group, Idaho Springs, Colo.	80851
COARVADA	City of Arvada, Colorado	80801
COCSMDCG	Colorado School of Mines, Dept. of Chem and Geochem, Golden, Colo.	N/A
COCSUNRE	Natural Resource Ecology Lab, CSU, Fort Collins, Colo.	N/A
COCSUSTL	Soils Testing Laboratory, CSU, Fort Collins, Colo.	80847
COFTCOLN	City of Fort Collins, Colo.	80857
CONTRACT	Private contractor	99001
CT-HDL	Connecticut State Health Department Laboratory	9709
CZ-HDL	Canal Zone Health Department Laboratory	9761
DC-HDL	District of Columbia State Health Department Laboratory	9711
DE-DNREC	Delaware Dept. Natural Resources and Envl Control, Dover, Del.	10003
DE-HDL	Delaware State Health Department Laboratory	9710
DE-UDMS	Univ. of Delaware, College of Marine Studies, Lewes, Del.	10001

Protocol organization code	Protocol organization name	Historical fixed value code
DRILLER	Driller	66666
EHS	Environmental Health Service	915
FBLSCIWI	Lac du Flambeau Band of Lake Superior Chippewa Indians	85546
FLFSUSIL	Florida State University - Stable Isotope Laboratory, Tallahassee, Fla.	N/A
FL-ASI	Analytical Services, Inc. - Niceville, Fla.	N/A
FL-BCPCD	Brevard County Pollution Control Department, Florida	9812
FL-CSFCD	Central and Southern Florida Flood Control District	9805
FL-DCERM	Dade County Dept. of Envl Resources Management	12030
FL-EPSL	Engineering Performance Solutions Labs, Gainsville, Fla.	N/A
FL-FIU	Florida International University, Miami, Fla.	81233
FL-FSU	Florida State University	9904
FL-GFWFC	Florida Game and Fresh Water Fish Commission	9806
FL-GWCLP	GreenWater Laboratory/Cyano Lab, Palakta, Fla.	N/A
FL-HCEPC	Hillsborough County Environmental Protection Commission, Flforida	9818
FL-HDL	Florida State Health Department Laboratory	9712
FL-HRS	Florida Department of Health and Rehabilitative Services	9807
FL-ITTCD	ITT Community Development Corporation, Florida	12007
FL-JACKS	City of Jacksonville, Florida	9809
FL-NWMD	Northwest Florida Water Management District, Quincy, Fla.	81231
FL-OCPCD	Orange County Pollution Control Department, Florida	9811
FL-PBCE	Palm Beach County Engineer, Florida	12010
FL-PBCHD	Palm Beach County Health Dept., Florida	12020
FL-PC	Florida Department of Pollution Control	9804
FL-QUANT	Quanterra Environmental Services, Tampa, Fla.	12050
FL-RCID	Reedy Creek Improvement District, Florida	9810
FL-SFWMD	South Florida Water Management District, West Palm Beach, Fla.	81232
FL-SJWMD	St. Johns Water Management District, Florida	81210
FL-SRWMD	Suwannee River Water Management District, Live Oak, Fla.	81230
FL-STLPC	Severn-Trent Laboratory - Pensacola: Pensacola, Fla.	81220
FL-STLTH	Severn-Trent Laboratory - Tallahassee: Tallahassee, Fla.	81222
FL-SWWMD	Southwest Florida Water Management District	9808
FL-TALLA	City of Tallahassee, Florida	12005
FL-TALPC	TestAmerica Labs - Pensacola: Pensacola, Fla.	N/A
FL-TALTH	TestAmerica Labs - Tallahassee: Tallahassee, Fla.	N/A

Protocol organization code	Protocol organization name	Historical fixed value code
FL-TAMPA	City of Tampa, Florida	12001
FL-UCF	University of Central Florida	9905
FL-UF	University of Florida	9903
FL-UMH3L	University of Miami, Tritium Laboratory, Miami, Fla.	12040
FL-UMIAM	University of Miami, Miami, Fla.	81229
FL-UMSMS	University of Miami-School of Marine Science, Miami, Fla.	81223
FL-VCEC	Volusia County Environmental Control, Fla.	81227
FL-VEROB	City of Vero Beach, Florida	12002
GA-HDL	Georgia State Health Department Laboratory	9713
GA-STLSV	Severn-Trent Laboratory - Savannah: Savannah, Ga.	81320
GA-TALSV	TestAmerica Labs - Savannah: Savannah, Ga.	N/A
GA-UGAEL	University of Georgia, Ag and Envl Services Laboratory	81330
GER-IKTU	Inst. Kernphysik, Tech Univ, Darmstadt, Germany	80003
GS-NRD	Georgia State Natural Resources Department	81341
GU-HDL	Guam Health Department Laboratory	9766
HACH	Hach, Inc., Loveland, Colo.	N/A
HBMI-ME	Houlton Band of Maliseet Indians, Maine	82303
HI-AECOS	AECOS, Inc Laboratory - Kane'ohe, Hawaii	N/A
HI-DOH	Hawaii Department of Health	N/A
HI-FWT	Hawaii Food & Water Testing, Honolulu, Hawaii	N/A
HI-HDL	Hawaii State Health Department Laboratory	9715
HIUHOEST	Univ. of Hawaii-School of Ocean and Earth Science and Technology	N/A
HUAL-AZ	Hualapai Tribe, Peach Springs, Ariz.	N/A
IA-DEQ	Iowa Department of Environmental Quality	81951
IA-HDL	Iowa State Health Department Laboratory	9719
IA-HL	Iowa State Hygienic Laboratory	81941
IA-UISHL	University of Iowa, State Hygienic Laboratory	9831
IBWC	International Boundary Water Commission	84823
ID-DHW	Idaho Department of Health and Welfare	16002
ID-DHWBL	Idaho Dept. of Health and Welfare, Bureau of Laboratories	81641
ID-DWR	Idaho Department of Water Resources	16001
ID-EAG	Environmental Analysis Group, WINCO, INEL, Idaho Falls, Idaho	81607
ID-ECL	Environmental Chemistry Lab, E.G.&G., INEL, Idaho Falls, Idaho	81603
ID-HDL	Idaho State Health Department Laboratory	9716
ID-RESL	Radiological & Env. Sciences Lab, DOE, INEL, Idaho Falls, Idaho	81601
ID-RML	Radiation Measurements Lab, E.G.&G., INEL, Idaho Falls, Idaho	81605

Protocol organization code	Protocol organization name	Historical fixed value code
ID-UIASL	Univ. of Idaho Analytical Sciences Lab, Moscow, Idaho	N/A
IL-BNSD	Bloomington Normal Sanitary District, Illinois	81741
IL-CPDGI	Chicago Park District, Office of Green Initiatives	N/A
IL-EHD	City of Evanston, Health Department, Illinois	N/A
IL-EPA	Illinois Environmental Protection Agency (IEPA)	17002
IL-HDL	Illinois State Health Department Laboratory	9717
IL-ISOTL	ISOTL Isotech Laboratories, Inc, Champaign, Illinois	N/A
IL-MSDGC	*Metropolitan Sanitary Dist. of Greater Chicago(MSD)*	*17001*
ILMWRDGC	Metropolitan Water Reclamation District of Greater Chicago	N/A
IL-STATL	STAT Analysis Corporation Laboratory, Chicago, Ill.	N/A
IL-STLCH	Severn-Trent Laboratory - Chicago: Chicago, Ill.	81720
IL-SWS	Illinois State Water Survey (ISWS)	17003
IL-TALCH	TestAmerica Labs - Chicago: University Park, Ill.	N/A
IL-UC	University of Chicago, Illinois	81777
ILUICSIL	Univ. of Illinois at Chicago, Env. Isotope Geochemistry Lab	N/A
IN-BSU	Ball State University, Muncie, Ind.	18008
IN-DEM	Indiana Department of Environmental Management (IDEM)	18002
IN-DEMGW	Indiana Dept. Env. Mgmt., Drinking Water Branch, GW Section	18001
IN-DNR	Indiana Department of Natural Resources (IDNR)	18004
IN-DPW	Indianapolis Department of Public Works, Indiana (IDPW)	18005
IN-ECHDI	East Chicago Health Dept, Inspection Div., East Chicago, Ind.	N/A
IN-GS	Indiana Geological Survey (IGS)	18003
IN-HDL	Indiana State Health Department Laboratory	9718
IN-IUB	Indiana University, Bloomington, Ind.	18007
IN-IUPUI	Indiana Univ.- Purdue Univ. at Indianapolis, Ind.	N/A
IN-PUL	Purdue University, Lafayette, Ind.	18006
IN-SJRBC	St. Joseph River Basin Commission, Ind.	18009
IN-STLVP	Severn-Trent Laboratory - Valparaiso: Valparaiso, Ind.	81804
INDIVID	Individual	55555
IN-TALVP	TestAmerica Labs - Valparaiso: Valparaiso, Ind.	N/A
IN-ULSB	Underwriters Laboratories, Inc - South Bend, Ind.	N/A
ISO	International Organization for Standardization	N/A
JA-HDL	Johnston Atoll Health Department Laboratory	9767
KS-DHE	Kansas State Department of Health and Environment	82041
KS-GS	Kansas State Geological Survey	20001
KS-HDL	Kansas State Health Department Laboratory	9720

Protocol organization code	Protocol organization name	Historical fixed value code
KS-JCEL	Johnson County Environmental Laboratory, Lenexa, Kans.	82043
KS-KBS	Kansas State Biological Survey, Lawrence, Kans.	N/A
KS-TWWL	City of Topeka, Kansas Wastewater Laboratory	20003
KS-WWWL	City of Wichita, Kansas Water and Wastewater Laboratory	20005
KY-BEL	Beckmar Environmental Laboratory, Kentucky	82103
KY-CHR	Kentucky Cabinet of Human Resources	82101
KY-GS	Geological Survey of Kentucky	21001
KY-HDL	Kentucky State Health Department Laboratory	9721
KY-LJCMS	Louisville & Jefferson County Metro Sewer District Lab, Kentucky	85614
LA-GSRI	Louisiana, Gulf South Research Institute	82241
LA-HDL	Louisiana State Health Department Laboratory	9722
MA-AAL	Alpha Analytical Labs, Westborough, Mass.	25009
MA-BCHDL	Barnstable County Health Department, Mass.	25001
MA-HDL	Massachusetts State Health Department Laboratory	9725
MA-STLBI	Severn-Trent Laboratory - Billerica: Billerica, Mass.	82524
MA-STLW2	Severn-Trent Laboratory - Westfield: Westfield, Mass.	82522
MA-STLWF	Severn-Trent Laboratory - On-Site Technology: Westfield, Mass.	82520
MA-TALWF	TestAmerica Labs - Westfield: Westfield, Mass.	N/A
MA-WHAMS	Natl Ocean Sciences AMS Facility (NOSAMS), Woods Hole, Mass.	N/A
MA-WHNAF	Woods Hole Oceanographic Institute, Nutrient Analytical Facility	N/A
MA-WHOIB	Biology Department, Woods Hole Oceanographic Inst., Massachusetts	25005
MA-WRASD	Massachusetts WRA, Sewerage Division Central Lab., Winthrop, Mass.	25007
MD-DNR	Maryland Department of Natural Resources	82430
MD-DOE	Maryland Department of the Environment	82410
MD-GS	Maryland Geologic Survey	82420
MD-HDL	Maryland State Health Department Laboratory	9724
MDUMDCBL	Univ. of Maryland, Ctr for Env Sci, Chesapeake Biological Lab	N/A
MDUMDHPL	Univ. of Maryland, Ctr for Env Sci, Horn Point Lab, Cambridge, Md.	N/A
MD-WSSCL	Wshngtn Suburban Sanitary Com Lab, Silver Spring, Md.	N/A
ME-DEP	Maine, Dept. of Environmental Protection	82341
ME-DOC	Maine Department of Conservation	82340
ME-HDL	Maine State Health Department Laboratory	9723
ME-UMEL	University of Maine Laboratory, Orono, Maine	82301

Protocol organization code	Protocol organization name	Historical fixed value code
MEX-BCHD	Baja California Norte Health Department Laboratory	9786
MEX-HDL	Mexico Health Department Laboratory	9780
MEX-NHDL	Nuevo Leon Health Department Laboratory	9782
MEX-SHDL	Sonora Health Department Laboratory	9785
MEX-THDL	Tamaulipas Health Department Laboratory	9781
MEXCHHDL	Chihuahua Health Department Laboratory	9784
MEXCOHDL	Coahuila Health Department Laboratory	9783
MI-DEQ	Michigan Department of Environmental Quality (MDEQ)	N/A
MI-HDL	Michigan State Health Department Laboratory	9726
MI-MCHD	Macomb County Health Department, Michigan	N/A
MI-PTSJ	PhycoTech, St Joseph, Mich.	26001
MI-TMTX	Trimatrix Laboratories, Inc, Grand Rapids, Mich.	N/A
MI-UMML	Michigan State University Microbiology Lab, East Lansing, Mich.	84642
MI-WCHD	Washtenaw County Health Department, Michigan	82641
MIDISHDL	Midway Islands Health Department Laboratory	9771
MN-DAKCO	Dakota County, Minnesota	N/A
MN-DNR	Minnesota Department of Natural Resources (DNR), St. Paul, Minn.	27001
MN-DNRFD	Minnesota DNR, Forestry Division, St. Paul, Minn.	27004
MN-DNRFW	Minnesota DNR, Fish and Wildlife Division, St. Paul, Minn.	27003
MN-DNRMD	Minnesota DNR, Minerals Division, St. Paul, Minn.	27005
MN-DNRWD	Minnesota DNR, Waters Division, St. Paul, Minn.	27002
MN-DOH	Minnesota Department of Health, Minneapolis, Minn.	27020
MN-GS	Minnesota Geological Survey, St. Paul, Minn.	27030
MN-LLLA	Long Lost Lake Association, Minnesota	N/A
MN-MVTL	Minnesota Valley Testing Laboratory, New Ulm, Minn.	N/A
MN-MWCC	Metropolitan Waste Control Commission, St. Paul, Minn.	27050
MN-NRRI	Natural Resources Research Institute, Duluth, Minn.	N/A
MN-PCA	Minnesota Pollution Control Agency (PCA), St. Paul, Minn.	27010
MN-PCAAQ	Minnesota Poll Control Agency (PCA), Air Qual Div, St. Paul, Minn.	27013
MN-PCAHW	Minnesota Poll Cntrl Agcy (PCA), Solid/Haz Waste Div, St. Paul, Minn.	27012
MN-PCAWQ	Minnesota Poll Cntrl Agcy (PCA), Water Quality Div, St. Paul, Minn.	27011
MN-PCHDL	Minnesota Pollution Control Council State Health Department Lab	9727
MN-UM	Univ. of Minnesota, Minneapolis-St. Paul, Minn.	27035

Protocol organization code	Protocol organization name	Historical fixed value code
MN-UMAE	Univ. of Minnesota, Agricultural Engineering, St. Paul, Minn.	27040
MN-UMEEB	Univ. of Minnesota, Ecol., Evol., and Behavior, St. Paul, Minn.	27041
MN-UMGFB	Univ. of Minnesota, Gray Freshwater Bio. Inst., Navarre, Minn.	27038
MN-UMGG	Univ. of Minnesota, Geology and Geophysics, Minneapolis, Minn.	27036
MN-UMRAL	Univ. of Minnesota, Research Analytical Lab, St. Paul, Minn.	27037
MN-UMSS	Univ. of Minnesota,, Soil Science, St. Paul, Minn.	27039
MO-DNREQ	Missouri Dept. of Natural Resources, Div of Envir. Quality	29001
MO-HDL	Missouri State Health Department Laboratory	9729
MO-STLSL	Severn-Trent Laboratory - St. Louis: Earth City, Mo.	82902
MO-TALSL	TestAmerica Labs - St. Louis: Earth City, Mo.	N/A
MO-UMETS	Univ. of Missouri Environmental Trace Substances Lab	82901
MO-UMLL	Univ. of Missouri Limnology Laboratory, Columbia, Mo.	N/A
MS-HDL	Mississippi State Health Department Laboratory	9728
MS-MSUCL	Mississippi State Chemical Laboratory, Mississippi State Univ.	28004
MS-OG	Office of Geology, Mississippi	28002
MS-OLWR	Office of Land and Water Resources, Mississippi	28003
MS-OPC	Office of Pollution Control, Mississippi	28001
MS-USM	University of Southern Mississippi	82810
MT-ARC	Montana Agricultural Research Center	30040
MT-BMG	Montana Bureau of Mines and Geology	30010
MT-DEQ	Montana Department of Environmental Quality	83011
MT-ELHLN	Energy Laboratories, Inc., Helena, Mont.	N/A
MT-FWP	Montana Dept. of Fish Wildlife and Parks	30020
MT-HDL	Montana State Health Department Laboratory	9730
MT-HESWQ	Montana Dept. of Health/Env. Sciences, Water Quality Bureau	30030
MT-PAL	Pace Analytical Services, Billings, Mont.	N/A
MT-TMI	Montana Tunnels Mining, Inc., Wickes, Mont.	30050
MT-UMTCL	Env Bio-Geo Chem Lab, Dept. of Geol, U of Montana, Missoula, Mont.	83005
MT-WCI	Water Consulting, Inc., Hamilton, Mont.	30060
NADP-NTN	NAPD/NTN - Nat.Atmos.Deposition Program/Nat.Trends Network	300
NC-DNER	*North Carolina Dept. of Natural and Economic Resources*	*83741*
NC-DWQCL	North Carolina Div of Water Quality Central Lab, Raleigh, N.C.	N/A
NCENRSRL	North Carolina Dept. of Env. and Natural Res. - Shellfish and Sanitation Recreational Water Quality Section Lab	83742
NC-HDL	North Carolina State Health Department Laboratory	9737

Protocol organization code	Protocol organization name	Historical fixed value code
NCMCDEHL	Mecklenburg Co. Dept. of Environmental Health Lab, North Carolina	83751
NC-MELR	Meritech Environmental Laboratories; Reidsville, N.C.	N/A
NC-NCIM	Univ. of North Carolina, Inst of Marine Sciences Chapel Hill, N.C.	N/A
NC-SUBAE	North Carolina State Univ, Dept. of Bio and Ag Eng, Raleigh NC	N/A
NC-TTL	Tritest Laboratory, Raleigh, North Carolina	N/A
NCUNCCSI	UNC Coastal Studies Institute Lab., Nags Head, N.C.	N/A
ND-GS	North Dakota Geological Survey	38001
ND-HD	North Dakota State Health Department	N/A
ND-HDL	North Dakota State Health Department Laboratory	38003; 9738
ND-SLAB	North Dakota State Laboratory	83841
ND-WC	North Dakota State Water Commission	38002
NE-DEQL	Nebraska Department of Environmental Quality Laboratory	31001
NE-HDL	Nebraska State Health Department Laboratory	9731
NE-HL	Harris Laboratories, Lincoln, Nebr.	83101
NE-MWL	Midwest Laboratories, Inc - Omaha, Nebr.	N/A
NE-OALI	Olsen's Agricultural Laboratory, Inc., McCook, Nebr.	83105
NE-UNLL	University of Nebraska, Limnology Laboratory, Lincoln, Nebr.	83107
NE-UNWSL	Univ. of Nebraska, Water Sciences Lab, Lincoln, Nebr.	83109
NE-WARDL	Ward Laboratories, Inc - Kearney, Nebr.	N/A
NH-HDL	New Hampshire State Health Department Laboratory	9733
NH-WSPCL	Water Supply & Pollution Control Comm. Lab., N.H.	83341
NJ-ACCUL	Accutest Laboratories, Dayton, N.J.	34007
NJ-AI	Analab Inc, Edison, N.J.	34008
NJ-CMCDH	Cape May County, N.J., Department of Health	34004
NJ-CMCPB	Cape May County, N.J., Planning Board	34005
NJ-DEP	New Jersey Department of Environmental Protection(DEP)	34001
NJ-DEPML	New Jersey, DEP, Bureau of Marine Water Monitoring Lab	34010
NJ-EMSL	EMSL Analytical Services, Westmont, N.J.	83481
NJ-HDL	N.J. Dpt Hlth&Senior Svcs-Div Pub Hlth&Env Labs-Env&Chem Lab	83441, 9734
NJ-QUANT	Quanterra Environmental Services, Summerset, N.J.	34006
NJ-RUESD	Rutgers Univeristy, Environmental Science Dept., New Jersey	83411
NJ-RUSIL	Rutgers University, Geology Dept, Stable Isotope Lab, New Jersey	83410
NJ-SCHD	Sussex County Health Department, New Jersey	83405
NJ-SHAW	Shaw Environmental & Infrastructure, Inc.	N/A

Protocol organization code	Protocol organization name	Historical fixed value code
NJ-TII	Teledyne Isotopes, Inc., New Jersey	83401
NJ-WSA	New Jersey Water Supply Authority	34009
NM-HDL	New Mexico State Health Department Laboratory	9735
NM-NMT	New Mexico Institute of Mining and Technology - Socorro	83523
NM-SWMTL	USBIA Soil, Water, & Material Testing Lab., New Mexico	83542
NM-UNM	University of New Mexico	83541
NOAA	U.S. National Oceanic and Atmospheric Administration	648
NON-USGS	*Organization other than U.S. Geological Survey*	N/A
NV-BEH	Nevada Bureau of Environmental Health	32006
NV-BLR	Nevada Bureau of Laboratories and Research	32019
NV-BMG	Nevada Bureau of Mines & Geology	32007
NV-CCCOG	Clark County COG, Nevada	32092
NV-CCDHD	Clark County District Health Department, Nevada	32015
NV-CCPW	Carson City Public Works, Carson City, Nev.	32021
NV-CHPS	Nevada Consumer Health Protection Service	32012
NV-DEP	Nevada Division of Environmental Protection	32001
NV-DF	Nevada Division of Forestry	32010
NV-DFG	Nevada Department of Fish & Game	32009
NV-DP	Nevada Division of Parks	32011
NV-DWR	Nevada Division of Water Resources	32003
NV-HDL	Nevada State Health Department Laboratory	9732
NV-LVVWD	Las Vegas Valley Water District, Nevada	32017
NV-MWC	Municipal Water Company, Nevada	32093
NV-SEMS	Sierra Environmental Monitoring Service, Nevada	83241
NV-SLTPW	City of South Lake Tahoe, Public Works Dept, Eng. Div.	83210
NV-SPPC	Sierra Pacific Power Co., Nevada	32018
NV-TMWRF	Truckee Meadows Water Reclamation Facility, Reno, Nev.	32022
NV-UNCA	Univ. of Nevada, College of Agriculture	32014
NV-UNDRI	Univ. of Nevada, Desert Research Institute	32013
NV-UNRNR	Univ. of Nevada, Div. of Renew. Nat. Resources	32005
NV-UNSIL	Univ. of Nevada, Stable Isotope Laboratory, Reno, Nev.	N/A
NV-WCCOG	Washoe County COG, Nevada	32091
NV-WCDHD	Washoe County District Health Department, Nevada	32016
NV-WCDWR	Washoe County Dept. of Water Res, Water Res Planning Div	83220
NV-WCU	Washoe County Utilities, Reno, Nev.	32020
NY-CSIL	Community Science Institute Laboratory, Ithaca, N.Y.	N/A

Protocol organization code	Protocol organization name	Historical fixed value code
NY-CU	Columbia University, New York	83671
NY-DEPLV	New York City Department of Environmental Protection Laboratory at Valhalla, N.Y.	N/A
NY-DEPLG	New York City Department of Environmental Protection Laboratory at Grahamsville, N.Y.	N/A
NY-DFWI	Darrin Fresh Water Institute, Bolton Landing, New York	83622
NY-DOH	New York Department of Health	36010
NY-EAITH	Environmental Associates, Ithaca, N.Y.	36015
NY-ECALB	New York Dept. of Environmental Conservation, Albany, N.Y.	36012
NY-ECL	Erie County Laboratory, New York	83650
NY-ECWAL	Erie County Water Authority Laboratory, Lackawanna, N.Y.	N/A
NY-FL	Friend Laboratory, Waverly , N.Y.	N/A
NY-HDL	New York State Health Department Laboratory	9736
NY-IWFP	City of Ithaca Water Filtration Plant, Ithaca, N.Y.	83641
NY-IWWTP	City of Ithaca Waste Water Treatment Plant, Ithaca, N.Y.	83640
NY-LDEO	Lamont-Doherty Earth Observatory, Palisades, N.Y.	83652
NY-LSLN	Life Science Laboratories, Inc. - North, Waddington, N.Y.	N/A
NY-MCHD	Monroe County Health Department, New York	83611
NY-ML	Onondaga Co.Drain.&Sanit. Lab (Metropolitan Lab) Syracuse, N.Y.	83631
NY-NCDH	Nassau County Department of Health, New York	9819
NY-NCPW	Nassau County Department of Public Works, New York	9829
NY-OCLAL	OCL Analytical Services, Boloomingburg, N.Y.	N/A
NY-OG	O'Brien and Gere Engineers, Syracuse, N.Y.	83621
NY-PTL	Premium Testing Laboratory, Lisbon, N.Y.	N/A
NY-SCDEC	Suffolk County Department of Envl Control, New York	9821
NY-SCDH	Suffolk County Department of Health, New York	9820
NY-SCWA	Suffolk County Water Authority, New York	9822
NY-STLBF	Severn-Trent Laboratory - Buffalo: Amherst, N.Y.	83656
NY-STLNB	Severn-Trent Laboratory – Newburgh: Newburgh, N.Y.	83655
NY-SUCE	Syracuse University, Dept. of Civil Engineering, New York	83630
NY-SUNYC	State University of New York at Cortland, New York	83660
NY-TALBF	TestAmerica Labs - Buffalo: Amherst, N.Y.	N/A
NY-UFI	Upstate Freshwater Institute, New York	83620
NY-URRGL	University of Rochester Rare Gas Lab, Rochester, N.Y.	N/A
NYIWWTPL	City of Ithaca Wastewater Treatment Plant Laboratory, New York	9830
NZ-RRL	Rafter Radiocarbon Laboratory – Institute of Geological and Nuclear	N/A

Protocol organization code	Protocol organization name	Historical fixed value code
	Sciences	
OBSERVER	Observer	99002
OH-BSAES	BSA Environmental Services, Inc. - Beachwood, Ohio	N/A
OH-CCBH	Cuyahoga County Board of Health, Ohio	39004
OH-CCCHD	Clark County Combined Health District, Ohio	N/A
OH-CWQAL	City of Columbus, Water Quality Assurance Laboratory, Ohio	83915
OH-CWTU	City of Celina, Water Treatment Utility, Ohio	N/A
OH-ECHD	Erie County Health Department, Ohio	N/A
OH-EPA	Ohio Environmental Protection Agency, Columbus, Ohio	83905
OH-HCQWL	Heidelberg College QW Lab, Tiffin, Ohio	39001
OH-HDL	Ohio State Health Department Laboratory	9739
OH-LCGDH	Lake County General Health District, Ohio	39003
OH-MEL	MASI Environmental Laboratories, Dublin, Ohio	N/A
OH-MWCD	Muskingum Water Conservancy District, Ohio	N/A
OH-NTLWC	National Testing Laboratory, Water Check Division, Ohio	83901
OH-STLCN	Severn-Trent Laboratory - North Canton: North Canton, Ohio	83920
OH-TALCN	TestAmerica Labs - North Canton: North Canton, Ohio	N/A
OH-UTLEC	University of Toledo, Lake Erie Center, Oregon, Ohio	N/A
OHNEORSD	Northeastern Ohio Regional Sewer District, Ohio	39002
OHORSANC	Ohio River Valley Water Sanitation Commission (ORSANCO)	N/A
OK-ACOG	Association of Central Oklahoma Governments	84009
OK-CCOKC	Oklahoma Conservation Commission, Oklahoma City, Okla.	84015
OK-CORPC	Oklahoma Corporation Commission	84011
OK-DA	Oklahoma State Department of Agriculture	84007
OK-DEQ	Oklahoma Department of Environmental Quality (ODEQ)	84017
OK-GS	Oklahoma Geological Survey, Norman, Oklahoma	84041
OK-HDL	Oklahoma State Health Department Laboratory	9740 84042
OK-HDRL	Oklahoma State Health Department Radiochemistry Laboratory	84005
OKOKCWWL	City of Oklahoma Water and Wastewater Utilities Environmental Lab	N/A
OK-OSU	Oklahoma State University, Stillwater, Okla.	84003
OK-TULSL	City of Tulsa Laboratory, Tulsa, Okla.	N/A
OK-WRB	Oklahoma Water Resources Board	84001
OR-AQAI	Aquatic Analysts, Inc, Milwaukie, Oreg.	N/A
OR-EWEB	Eugene Water and Electric Board, Eugene, Oreg.	N/A

Protocol organization code	Protocol organization name	Historical fixed value code
OR-HDL	Oregon State Health Department Laboratory	9741
OR-OGI	Oregon Graduate Institute, Beaverton, Oreg.	84101
OR-PAL	Pacific Agricultural Laboratory, Portland, Oreg.	N/A
OR-PBWW	City of Portland, Bureau of Water Works	41000
ORPSUESL	Portland State University, Environmental Sciences Lab	N/A
OTHER	*Other: Not valid for new data entry*	*99999*
PA-ACHDL	Allegheny County Health Dept. Laboratory, Pittsburgh, Pa.	84217
PA-ANSP	The Academy of Natural Sciences of Philadelphia, Pa.	42015
PA-AWAL	Altoona Water Authority Laboratory; Altoona, Pa.	N/A
PA-BGBI	Booth, Garrett, and Blair Inc., Ambler, Pa.	34003
PA-CCHDL	Chester County Health Department Lab, Pennsylvania	84215
PADCNRPI	Pennsylvania Dept. of Conservation and Natural Res., Presque Isle	N/A
PA-DEP	Pennsylvania Department of Environmental Protection	N/A
PA-DER	*Pennsylvania Department of Environmental Resources*	*9813*
PA-DOAL	Pennsylvania Department of Agriculture Laboratory	84210
PA-ECHDL	Erie County Health Department, Erie, Pa.	84218
PA-HDL	Pennsylvania State Health Department Laboratory	9742
PA-LL	Lancaster Laboratories, Lancaster, Pa.	84250
PA-MBWRL	Microbac Laboratories, Inc, Wareendale, Pa.	N/A
PA-MICRO	Microseeps, Inc - Pittsburgh, Pa.	N/A
PA-PHIL	City of Philadelphia, Pennsylvania	42010
PA-PHILU	City of Philadelphia, Pennsylvania and USGS	84240
PA-PSH	Penn State Harrisburg, Middletown, Pa.	42016
PA-PSUP	Penn State, Main Campus, University Park, Pennsylvania	N/A
PA-QUANT	Quanterra Environmental Services, Pittsburgh, Pa.	42020
PA-RFWI	Roy F. Weston Inc., West Chester, Pa.	34002
PA-RSCPI	Regional Science Consortium at Presque Isle, Erie, Pa.	N/A
PA-SAICH	Science Applications International Corp, Harrisburg, Pa.	N/A
PA-STLPT	Severn-Trent Laboratory - Pittsburgh: Pittsburgh, Pa.	84220
PA-TALPT	TestAmerica Labs - Pittsburgh: Pittsburgh, Pa.	N/A
PA-VOLUN	Volunteer citizen group, Lancaster, Pa.	42012
PR-HDL	Puerto Rico Health Department Laboratory	9772
PRIVLAB	Private Laboratory	9801
PUBLIC	Public Entity	84699
QAPROJCT	QA Project	80000
RI-HDL	Rhode Island State Health Department Laboratory	9744

Protocol organization code	Protocol organization name	Historical fixed value code
RI-PHWPP	Philip J. Holton Water Purification Plant, Scituate, R.I.	44001
RYI-SHDL	Ryukyu Islands, Southern Health Department Laboratory	9773
SC-HDL	South Carolina State Health Department Laboratory	9745
SC-SRL	Savannah River Lab, South Carolina	84541
SC-WRC	South Carolina Water Resources Commission	84540
SD-AES	South Dakota Agricultural Experiment Station	46003
SD-CHEM	South Dakota State Chemist	46004
SD-DWR	South Dakota Division of Water Rights	46007
SD-GS	South Dakota Geological Survey, Vermillion, S. Dak.	46008
SD-HDL	South Dakota Department of Health	46009 9746
SD-SDSSB	South Dakota State University, Dept. Station Biochemistry	46006
SD-SDSSL	South Dakota State University Soils Laboratory	46001
SD-SMT	South Dakota School of Mines and Technology	46005
SD-WRI	South Dakota Water Resources Institute	46002
SEPA	Southeastern Power Administration	1068
SLT-ND	Spirit Lake Tribe, North Dakota	38004
SRBC	Susquehanna River Basin Commission	42011
STDMETH	Std Methods Com that approves methods incld in std methods	N/A
SWE-RDL	Radioactive Dating Lab, Geol. Survey, Sweden-Frescati	80088
SWPA	Southwestern Power Administration	1072
TN-HDL	Tennessee State Health Department Laboratory	9747
TN-MIL	Microbial Insights Laboratory, Rockford, Tenn.	N/A
TN-PNASC	Pennington and Associates, Cookeville, Tenn.	N/A
TN-STLKX	Severn-Trent Laboratory - Knoxville: Knoxville, Tenn.	84710
TN-TALKX	TestAmerica Labs - Knoxville: Knoxville, Tenn.	N/A
TN-TVA	Tennessee Valley Authority	3315
TN-UREPL	URE Project Laboratory, Oak Ridge, Tenn.	84610
TN-UTK	University of Tennessee at Knoxville	47001
TTPI-HD	Trust Territories of the Pacific Islds Hlth Dept. Lab	9775
TX-AMTEL	Texas A&M, Trace Element Research Lab., College Station, Tex.	48001
TX-CEQLH	Texas Commission of Environmental Quality Lab, Houston, Tex.	N/A
TX-CEQLA	Texas Commission of Environmental Quality Lab, Austin, Tex.	N/A
TX-EELCS	Eastex Environmental Laboratories, Coldspring, Tex.	N/A
TX-GBRA	Guadalupe-Blanco River Authority	84833
TX-HDL	Texas State Health Department Laboratory	9748

Protocol organization code	Protocol organization name	Historical fixed value code
TX-HPWQL	City of Houston Public Works and Eng Water Quality Lab	N/A
TX-LCRAL	Lower Colorado River Authority Lab, Austin, Tex.	N/A
TX-STLAS	Severn-Trent Laboratory - Austin: Austin, Tex.	84820
TX-STLCC	Severn-Trent Laboratory - Corpus Christi: Corpus Christi, Tex.	84821
TX-TALAS	TestAmerica Labs - Austin: Austin, Tex.	N/A
TX-TALCC	TestAmerica Labs - Corpus Christi: Corpus Christi, Tex.	N/A
TXTIAERL	Texas Inst for Applied Envl Research Lab - Stephenville, Tex.	N/A
TX-TRAL	Trinity River Authority Laboratory - Dallas, Tex.	N/A
TX-TTCL	Texas Tech University - Civil Engineering Lab, Lubbock, Tex.	N/A
TX-UTIL	University of Texas - Isotope Geochemistry Lab, Austin, Tex.	N/A
TX-XENDL	XENCO Laboratories - Dallas, Tex.	N/A
US-GSA	U.S. General Services Administration	2300
US-OSW	U.S. Office of Saline Water	1076
USAEC	U.S. Atomic Energy Commission	1800
USAF	U.S. Air Force	701
USARMY	U.S. Army	702
USARS	U.S. Agricultural Research Service	504
USBIA	U.S. Bureau of Indian Affairs	1008
USBLM	U.S. Bureau of Land Management	1004
USBM	U.S. Bureau of Mines	1032
USBOOR	U.S. Bureau of Outdoor Recreation	1016
USBPA	Bonneville Power Administration, U.S. Department of Energy	1064
USBR	U.S. Bureau of Reclamation	1060
USBRBCOO	U.S. Bureau of Reclamation-Boulder Canyon Operations Office	N/A
USBRCOEA	U.S. Bureau of Reclamation - Environmental Applications and Research Group, Denver, Colo.	N/A
USBRLCRL	U.S. Bureau of Reclamation - Lower Colorado Regional Lab	N/A
USBRPNRL	U.S. Bureau of Reclamation - Pac NW Regional Lab Boise, Idaho	N/A
USBR-YAO	U.S. Bureau of Reclamation - Yuma Area Office	N/A
USBSFW	U.S. Bureau of Sport Fisheries and Wildlife	1050
USCOE	U.S. Corps of Engineers	810
USCOEKSD	Corps of Engineers, Kansas City District, Missouri	N/A
USCOETUL	Corps of Engineers, Tulsa District	40810
USDA	Department of Agriculture	500
USDAFFCA	USDA Forest Fire Laboratory, Riverside, Calif.	N/A
USDOC	Department of Commerce	600

Protocol organization code	Protocol organization name	Historical fixed value code
USDODCIV	Department of Defense - Civil	800
USDOHEW	Department of Health, Education and Welfare	900
USDOI	Department of the Interior	1000
USDOT	Department of Transportation	2100
USEPA	U.S. Environmental Protection Agency	2000
USEPA-R1	USEPA, Reg. 1, New England Regional Laboratory, Lexington	2010
USEPA-R2	USEPA, Region 2, Edison, New Jersey	2020
USEPA-R8	USEPA, Region 8, Denver, Colorado	N/A
USFDA	U.S. Food and Drug Administration	910
USFS	U.S. Forest Service	596
USFSARML	U.S. Forest Service – Air Resource Management Lab, Ft. Collins, Colo.	N/A
USFSFLCO	U.S. Forest Service – Forestry Sciences Lab, Ft. Collins, Colo.	N/A
USFWS	U.S. Fish & Wildlife Service	920
USGS	U.S. Geological Survey	N/A
USGS-AKL	District Water-Quality Lab, Anchorage, Alaska	80213
USGS-ALL	District Water-Quality Lab, Tuscaloosa, Alabama	80113
USGS-ARL	District Water-Quality Lab, Little Rock, Arkansas	80513
USGS-AZL	District Water-Quality Lab, Yuma, Arizona	80413
USGS-BRD	U.S. Geological Survey - Biological Resources Discipline	N/A
USGS-CVO	Cascades Volcano Obs Sediment Analysis Lab, Vancouver, Wash.	85315
USGS-CWC	USGS – Caribbean Water Science Center	N/A
USGS-GAL	Atlanta Central Laboratory, Georgia	80010
USGS-GD	U.S. Geological Survey - Geologic Discipline	N/A
USGS-HIL	District Water-Quality Lab, Honolulu, Hawaii	81513
USGS-LAL	District Water-Quality Lab, Baton Rouge, Louisiana	82213
USGS-MDL	District Water-Quality Lab, Baltimore, Maryland	82440
USGS-MOL	District Water-Quality Lab, Rolla, Missouri	82913
USGS-NCL	District Water-Quality Lab, Raleigh, North Carolina	83713
USGS-NEL	District Water-Quality Lab, Lincoln, Nebraska	83113
USGS-NGL	USGS Noble Gas Lab, Denver Federal Center (USGS GD Lab)	N/A
USGS-NJL	USGS New Jersey Water Science Center Laboratory	83413
USGS-NML	District Water-Quality Lab, Albuquerque, New Mexico	83513
USGS-NYL	New York WSC Low Ionic Strength Lab, Troy (formerly Albany)	83613, 80030
USGS-OGW	USGS - Office of Groundwater	N/A

Protocol organization code	Protocol organization name	Historical fixed value code
USGS-OHL	District Water-Quality Lab, Columbus, Ohio	83913
USGS-OKL	District Water-Quality Lab, Oklahoma City, Okla.	84013
USGS-ORL	District Water-Quality Lab, Portland, Oreg.	84113
USGS-OSW	USGS - Office of Surface Water	N/A
USGS-OWQ	USGS - Office of Water Quality	N/A
USGS-PAL	District Water-Quality Lab, Harrisburg, Pennsylvania	84213
USGS-PRL	District Water-Quality Lab, San Juan, P.R.	87213
USGS-UTL	District Water-Quality Lab, Salt Lake City, Utah	84913
USGS-VAL	District Water-Quality Lab, Charlottesville, Va.	85114
USGS-WAL	District Water-Quality Lab, Tacoma, Wash.	85313
USGS-WRD	U.S. Geological Survey - Water Resources Discipline	1028
USGS-WVL	District Water-Quality Lab, Charleston, W. Va.	85411
USGS-WYL	District Water-Quality Lab, Cheyenne, Wyo.	85613
USGSAKWC	USGS – Alaksa Water Science Center	N/A
USGSALWC	USGS – Alabama Water Science Center	N/A
USGSARWC	USGS – Arkansas Water Science Center	N/A
USGSAZWC	USGS – Arizona Water Science Center	N/A
USGSBGCA	USGS Biogeochemistry Lab, Menlo Park, Calif.	N/A
USGSBGGD	USGS Geologic Division, Branch of Geochemistry, Arvada, Colo.	80040
USGSBRFR	USGS-BRD-Forest&Rangeland Ecosystem Sci Ctr, Corvallis, Oreg.	N/A
USGSCAL1	District Water-Quality Lab, Sacramento, Calif.	80613
USGSCAL2	District Water-Quality Lab, San Diego, Calif.	80618
USGSCAWC	USGS - California Water Science Center	N/A
USGSCERC	USGS Columbia Environmental Science Center, Columbia, Mo.	N/A
USGSCFVA	USGS-NRP, Chlorofluorocarbon Laboratory, Reston, Va.	N/A
USGSCORL	USGS CO WSC Water-Quality Research Lab, Denver	N/A
USGSCOWC	USGS - Colorado Water Science Center	N/A
USGSCRCA	USGS Carbon Research Lab, Sacramento, Calif.	N/A
USGSCRCO	USGS Carbon Research Lab, Boulder, Colo.	80097
USGSCTWC	USGS – Connecticut Water Science Center	N/A
USGSDDEC	USGS Dept. of Defense Env Conservation (DODEC) Program	N/A
USGSFLWC	USGS – Florida Water Science Center	N/A
USGSGAWC	USGS - Georgia Water Science Center	N/A
USGSGDML	USGS-Geologic Discipline-Mineral Resources Lab, Denver, Colo.	N/A
USGSGDRL	USGS-Geologic Discipline-Radioisotope Lab-St. Petersburg, Fal.	N/A
USGSGEOG	U.S. Geological Survey - Geography Discipline	N/A

Protocol organization code	Protocol organization name	Historical fixed value code
USGSH3CA	USGS Tritium Lab, Menlo Park, Calif.	N/A
USGSH3VA	Headquarters Tritium Lab, Reston, Va.	85113
USGSIAWC	USGS – Iowa Water Science Center	N/A
USGSICAL	USGS-NRP, IC and Alkalinity at Lkwd; ICP used at USGSTMCO	N/A
USGSIDWC	USGS - Idaho Water Science Center	N/A
USGSILVA	USGS-NRP, Inorganic Geochemistry Lab, Reston, Va.	N/A
USGSILWC	USGS - Illinois Water Science Center	81700
USGSINWC	USGS - Indiana Water Science Center	N/A
USGSINAL	USGS-Indiana Water Science Center - Algal Biomass Lab	N/A
USGSISCA	USGS Isotope Research Lab, Menlo Park, Calif.	80098
USGSKSWC	USGS - Kansas Water Science Center	N/A
USGSKYWC	USGS - Kentucky Water Science Center	N/A
USGSLAWC	USGS - Louisana Water Science Center	N/A
USGSMAWC	USGS - Massachusetts-Rhode Island Water Science Center	N/A
USGSMDWC	USGS - Maryland-Delaware-District of Columbia WSC	N/A
USGSMEWC	USGS - Maine Water Science Center	N/A
USGSMICA	USGS-NRP, Metals Isotope Research Lab, Menlo Park, Calif.	N/A
USGSMIWC	USGS - Michigan Water Science Center	N/A
USGSMNWC	USGS - Minnesota Water Science Center	N/A
USGSMOLS	USGS District Water-Quality Lab, Lee's Summit, Mo.	N/A
USGSMOWC	USGS - Missouri Water Science Center	N/A
USGSMSWC	USGS - Mississippi Water Science Center	N/A
USGSMTWC	USGS - Montana Water Science Center	N/A
USGSNCWC	USGS - North Carolina Water Science Center	N/A
USGSNDWC	USGS - North Dakota Water Science Center	N/A
USGSNEWC	USGS - Nebraska Water Science Center	N/A
USGSNHWC	USGS - New Hampshire-Vermont Water Science Center	N/A
USGSNJWC	USGS - New Jersey Water Science Center	N/A
USGSNMWC	USGS - New Mexico Water Science Center	N/A
USGSNRCA	USGS-National Research Program Lab, Menlo Park, Calif.	80095
USGSNRCO	USGS-National Research Program Lab, Denver/Boulder, Colo.	80093
USGSNRVA	USGS-National Research Program Lab, Reston, Va.	80090
USGSNVWC	USGS - Nevada Water Science Center	N/A
USGSNWQA	USGS - NAWQA Program	N/A
USGSNWHC	USGS National Wildlife Health Center, Madison, Wis.	N/A
USGSNWQL	USGS-National Water Quality Lab, Denver, Colo.	80020

Protocol organization code	Protocol organization name	Historical fixed value code
USGSNYWC	USGS - New York Water Science Center	N/A
USGSOCFL	District Water-Quality Lab, Ocala, Fla.	81213
USGSOGCA	Organic Chemistry Research Lab, Sacramento, Calif.	N/A
USGSOGKS	District Res QW Lab, Lawrence, KS (Organic Geochemistry)	82013
USGSOHML	District Microbiological Laboratory, Columbus, Ohio	83914
USGSOHWC	USGS - Ohio Water Science Center	N/A
USGSOKWC	USGS - Oklahoma Water Science Center	N/A
USGSORWC	USGS - Oregon Water Science Center	N/A
USGSPAWC	USGS - Pennsylvania Water Science Center	N/A
USGSPIWC	USGS - Pacific Islands Water Science Center	N/A
USGSRLGD	USGS-Geologic Division Radionuclide Lab, Denver, Colo.	80045
USGSRSTE	USGS-Rsrch Lab, Reston Va., Trace Elmnts Sed Cores-Callendar	N/A
USGSSCWC	USGS - South Carolina Water Science Center	N/A
USGSSDCA	Sediment Analysis Lab, USGS, Marina, Calif.	80615
USGSSDGA	USGS, Sediment-partitioning Research Lab, Georgia	81350
USGSSDIA	USGS-Iowa District Sediment Lab, Iowa City, Iowa	81960
USGSSDKY	USGS-Kentucky District Sediment Lab, Louisville, Ky.	82105
USGSSDLA	Sediment Analysis Lab, USGS, Baton Rouge, La.	82215
USGSSDMO	Sediment Analysis Lab, USGS, Rolla, Mo.	82915
USGSSDMT	Sediment Analysis Lab, USGS, Helena, Mont.	83015
USGSSDNM	USGS District Sediment Laboratory, Albuquerque, N.M.	83514
USGSSDRL	USGS Sediment Radioisotope Lab, Menlo Park, Calif.	N/A
USGSSDWC	USGS - South Dakota Water Science Center	N/A
USGSSIVA	USGS-NRP, Stable Isotope Lab, Reston, Va.	N/A
USGSSMRL	USGS Solids/Organic Matter Research Lab, Denver, Colo.	80096
USGSSRIL	USGS Crustal Geophysics and Geochemistry Center, Strontium Isotope Lab	N/A
USGSTECO	USGS-NRP, Trace Element Research Lab, Boulder, Colo.	N/A
USGSTMCO	USGS-NRP, Trace Metals Research Lab, Boulder, Colo.	N/A
USGSTNWC	USGS - Tennessee Water Science Center	N/A
USGSTXAL	USGS-TX WSC Water-Quality Lab, Austin, Tex.	84813
USGSTXFL	USGS-TX WSC Water-Quality Lab, Fort Worth, Tex. (KIR fwr)	N/A
USGSTXHL	USGS-TX WSC Water-Quality Lab, Houston, Tex. (KIG hst)	N/A
USGSTXNL	USGS-TX WSC Water-Quality Lab, San Angelo, Tex. (KIJ ang)	N/A
USGSTXSL	USGS-TX WSC Water-Quality Lab, San Antonio, Tex. (KIK snt)	N/A
USGSTXWC	USGS - Texas Water Science Center	N/A

Protocol organization code	Protocol organization name	Historical fixed value code
USGSTXWL	USGS-TX WSC Water-Quality Lab, Wichita Falls, Tex. (KIL wch)	N/A
USGSUMES	USGS Upper Midwest Environmental Sci Center, La Crosse, Wis.	N/A
USGSUTWC	USGS - Utah Water Science Center	N/A
USGSUZCA	USGS-NRP, Unsaturated Zone Flow Lab, Menlo Park, Calif.	N/A
USGSVAWC	USGS - Virginia Water Science Center	N/A
USGSWAWC	USGS - Washington Water Science Center	N/A
USGSWEBB	USGS, Panola Mountain Research (WEBB) Lab, Ga.	81345
USGSWHMA	USGS, Biology Dept., Woods Hole Oceanographic Ins, Massachusetts	80042
USGSWIML	USGS-Wisconsin District Mercury Lab, Madison, Wis.	85550
USGSWIWC	USGS - Wisconsin Water Science Center	N/A
USGSWVWC	USGS - West Virginia Water Science Center	N/A
USGSWYWC	USGS - Wyoming Water Science Center	N/A
USGSYMPL	USGS Yucca Mountain Project Branch Lab, Denver, Colo.	N/A
USHHSICA	U.S. Health and Human Services Indian Health Services, California	80601
USHHSIMT	Billings Area Indian Health Service - Billings, Mont.	83003
USHUD	Department of Housing and Urban Development	2500
USMC	U.S. Marines	703
USNASA	U.S. National Aeronautics and Space Administration	2700
USNAVY	U.S. Navy	704
USNBS	U.S. National Bureau of Standards	655
USNIH	U.S. National Institutes of Health	930
USNIHCHD	NIH, Child Health and Human Development, E.K. Shriver Inst.	N/A
USNIPCC	U.S. National Industrial Pollution Control Council	642
USNPS	U.S. National Park Service	1053
USPHSDIH	U.S. Public Health Service, Division of Indian Health	2555
USPI-HDL	U.S. Miscellaneous Pacific Islands Hlth Dept. Laboratory	9777
USSCS	U.S. Soil Conservation Service	520
UT-HDL	Utah State Health Department Laboratory	9749
UT-KEL	Kennecott Environmental Lab, Salt Lake City, Utah	49001
UT-UUDGL	University of Utah Dissolved Gas Service Center	N/A
UT-UUHGL	University of Utah Low-Level Mercury Laboratory, Utah	
UT-UUMAL	University of Utah Metals Analysis	N/A
VA-CLS	Virginia Division of Consolidated Laboratory Services	85116
VA-FCES	Fairfax County Environmental Services Laboratory, Lorton, Va.	N/A
VA-GMU	George Mason University, Fairfax, Va.	51003

Protocol organization code	Protocol organization name	Historical fixed value code
VA-HDL	Virginia State Health Department Laboratory	9751
VA-HRSD	Hampton Roads Sanitation Dist, Cent Envir Lab, Virginia Beach, Va.	51001
VA-JCSA	James City Service Authority, James City County, Va.	85117
VA-JMU	James Madison University, Staunton, Va.	51006
VA-UVESL	Univ. of Virginia Dept. of Environmental Sciences Lab	85115
VA-VTOWL	Virginia Tech., Occoquan Watershed Monitoring Laboratory	51005
VI-HDL	Virgin Islands Health Department Laboratory	9778
VT-ASI	Analytical Services, Inc. - Williston, Vt.	N/A
VT-DECL	Vermont Department of Environmental Conservation Lab, Waterbury, Vt.	N/A
VT-HDL	Vermont State Health Department Laboratory	9750
VT-STLBL	Severn-Trent Laboratory - Burlington: Colchester, Vt.	85020
VT-TALBL	TestAmerica Labs - Burlington: South Burlington, Vt.	N/A
WA-AMTI	AM Test Inc., Washington	85341
WA-ARI	Analytical Resources Incorporated (Seattle, Washington)	85345
WA-BMSL	Battelle Marine Sciences Laboratory, Sequim, Wash.	N/A
WA-BRL	Brooks Rand Labs, Seattle, Wash.	N/A
WA-DE	Washington State Dept. of Ecology	85343
WA-EAI	Edge Analytical (MTC), Inc. Burlington, Wash.	85348
WA-EEI	Ecology and Environment Inc (Seattle, Washington)	85346
WA-FG	Frontier Geosciences, Seattle, Wash.	85351
WA-HDL	Washington State Health Department Laboratory	9753
WA-IELI	Inland Environmental Laboratory, Inc. Spokane, Wash.	85350
WA-ITC	International Technology Corporation, Richland, Wash.	85347
WA-MMS	Municipality of Metropolitan Seattle, Washington	85342
WA-SASI	Sound Analytical Services, Inc. Fife, Wash.	85349
WA-SHS	Washington State Dept. of Social and Health Services	85344
WA-STLRL	Severn-Trent Laboratory - Richland: Richland, Wash.	85301
WA-TALRL	TestAmerica Labs - Richland: Richland, Wash.	N/A
WA-TALST	TestAmerica Labs - Seattle: Bothell, Wash.	N/A
WA-WSUG	Washington State University, Dept. of Geology	85360
WI-DNR	Wisconsin Department of Natural Resources	85545
WI-DPH	Madison Department of Public Health, Madison, Wis.	85548
WI-HDL	Wisconsin State Health Department Laboratory	9755
WI-HLA	Hazelton Laboratories America (Madison, Wis.)	85544

Protocol organization code	Protocol organization name	Historical fixed value code
WI-MAYO	Mayo Clinic, University of Wisconsin	85541
WI-MMSD	Milwaukee Metropolitan Sewerage District, Milwaukee, Wis.	85547
WI-RLA	Robert E. Lee and Assoc., Green Bay, Wis.	85540
WI-SLH	State Laboratory of Hygiene, Wisconsin	85543
WI-TALWT	TestAmerica Labs - Watertown: Watertown, Wis.	N/A
WI-UWE	University of Wisconsin Extension	85542
WI-UWLRS	University of Wisconsin at LaCrosse, River Studies Center	85551
WK-HDL	Wake Island Health Department Laboratory	9779
WV-HDL	West Virginia State Health Department Laboratory	9754
WVWVUSIL	West Virginia Univ. Stable Isotope Lab, Morgantown, W. Va.	N/A
WY-DA	Wyoming Department of Agriculture	85641
WY-SHD	Wyoming State Health Department Laboratory	9756

4.12 Appendix L. Parameters Used in the Standard Ion-Balance Table

Note: This table lists the parameters that can be included in an ion-balance table by NWIS. The parameters listed under each ion code are ordered with the most preferred parameter first. The concentration of each selected parameter result is multiplied by the **Factor** to convert to milliequivalents per liter before inclusion in the ionic balance. If an ion does not have results for any of the listed parameters, then one result from each of the subsequent ion codes preceded by an ellipsis (...) is summed to compute the value used for that ion. For example, if none of the parameters listed for Alkalinity are present for the sample, then the Alkalinity contribution is computed from the most preferred result for each of HCO_3, plus CO_3, plus OH. The software requires at least one anion and one cation before a balance will be produced. The parameter 00191—Hydrogen Ion will be automatically calculated from stored result values (when needed results are present for the algorithm) for inclusion in the ion-balance table. Other parameters, such as 00618—Nitrate, will not be calculated in the standard ion-balance.

Cations			
Ion	**Code**	**Short Name**	**Factor**
Ca (major)	91051	Calcium, wf, ug/l	0.0000499
	00915	Calcium, wf, mg/l	0.0499
	00910	Calcium, wu, mg/l as CaCO3	0.01998
	00916	Calcium, wu, mg/l	0.0499
	00918	Calcium, wu, mg/l	0.0499
Mg (major)	91052	Magnesium, wf, ug/l	0.00008229
	00925	Magnesium, wf, mg/l	0.08229
	00920	Magnesium, wu, mg/l as CaCO3	0.01998
	00927	Magnesium, wu, mg/l	0.08229
	00921	Magnesium, wu, mg/l	0.08229
Na (major)	91053	Sodium, wf, ug/l	0.0000435
	00930	Sodium, wf, mg/l	0.04350
	00929	Sodium, wu, mg/l	0.04350
	00923	Sodium, wu, mg/l	0.04350
K (major)	91054	Potassium, wf, ug/l	0.00002558
	00935	Potassium, wf, mg/l	0.02558
	00937	Potassium, wu, mg/l	0.02558
	00939	Potassium, wu, mg/l	0.02558
Fe	04097	Iron, w,f<0.1u, ug/l	0.00003581
	01047	Iron(II), wf, ug/l	0.00003581
Fe	01046	Iron, wf, ug/l	0.00003581
	01048	Iron(II) + Iron(III), wf , ug/l	0.00003581
	62982	Iron, wf(ultra), ug/l	0.00003581

Cations			
Ion	**Code**	**Short Name**	**Factor**
	99114	Iron(II), wf,fld, mg/l	0.03581
	99115	Iron, wf, field, mg/l	0.03581
	99032	Iron (II), wu, ug/l	0.00003581
	71885	Iron, wu, ug/l	0.00003581
	74010	Iron, wu, mg/l	0.03581
	01045	Iron, wu, ug/l	0.00003581
	99128	Iron (II), wu, fld, mg/l	0.03581
	99129	Iron, wu, fld, mg/l	0.03581
Mn	01056	Manganese, wf, ug/l	0.00003640
	62990	Manganese, wf(ultra), ug/l	0.00003640
	71883	Manganese, wu, ug/l	0.00003640
	01055	Manganese, wu, ug/l	0.00003640
	01123	Manganese, wu, ug/l	0.00003640
H+	00191	Hydrogen ion, wf, cd, mg/l	0.99212

Anions			
Ion	**Code**	**Short Name**	**Factor**
Cl (major)	91001	Chloride, wf, ug/l	0.00002821
	00940	Chloride, wf, mg/l	0.02821
	99117	Chloride, wf,fld, mg/l	0.02821
	99220	Chloride, wu, mg/l	0.02821
SO_4 (major)	00945	Sulfate, wf, mg/l	0.02082
	00946	Sulfate, wu, mg/l	0.02082
	91005	Sulfate, wf, ug/l	0.00002082
	99113	Sulfate, wf,fld, mg/l	0.02082
	99890	Sulfate, wf, uncorr, mg/l	0.02082
	99127	Sulfate, wu, field, mg/l	0.02082
F (major)	91002	Fluoride, wf, ug/l	0.00005264
	00950	Fluoride, wf, mg/l	0.05264
	00951	Fluoride, wu, mg/l	0.05264
Alkalinity (major)	39086	Alkalinity, wf,icr,f, mg/l CaCO3	0.01998
Alkalinity (major)	29802	Alkalinity,wf,Gran,f, mg/l CaCO3	0.01998
	99431	Alkalinity,wf,Gran,f, ueq/L	0.001
	39036	Alkalinity,wf,fxEP,f, mg/l CaCO3	0.01998

Anions			
Ion	Code	Short Name	Factor
	00418	Alkalinity,wf,fxEP,f, mg/l CaCO3	0.01998
	39087	Alkalinity, wf,icr,l, mg/l CaCO3	0.01998
	29803	Alkalinity,wf,Gran,l, mg/l CaCO3	0.01998
	99432	Alkalinity,wf,Gran, Lab, ueq/L	0.001
	29801	Alkalinity,wf,fxEP,l, mg/l CaCO3	0.01998
	00421	Alkalinity,wf,fxEP,l, mg/l CaCO3	0.01998
	00419	ANC, wu,icr,fld, mg/l CaCO3	0.01998
	29813	ANC, wu,Gran,fld, mg/l CaCO3	0.01998
	00410	ANC, wu,fxdEP,fld, mg/l CaCO3	0.01998
	00416	ANC, wu,icr,lab, mg/l CaCO3	0.01998
	90410	ANC, wu,fxdEP,lab, mg/l CaCO3	0.01998
	00417	ANC, wu,fxdEP,lab, mg/l CaCO3	0.01998
	95410	ANC, wu,fxdEP,lab, mg/l CaCO3	0.01998
	00409	ANC, wu,Gran titr., ueq/L	0.001
	00413	ANC, wu,Gran titr., mg/l CaCO3	0.01998
	00431	ANC, wu, mg/l CaCO3	0.01998
	00411	ANC, wu,MethOrangEP, mg/l CaCO3	0.01998
	46005	ANC, wu, bromthymol blue EP, meq/L	1.000
	00415	ANC, wu, phenolphthalein EP, mg/l CaCO3	0.01998
...HCO_3	00453	Bicarbonate,wf,icr,f, mg/l	0.01639
	00450	Bicarbonate,wu,icr,f, mg/l	0.01639
	99440	Bicarbonate,wu,icr,f, mg/l	0.01639
	63786	Bicarbonate, wf, Gran, field, mg/l	0.01639
	29797	Bicarbonate, wu, Gran, lab, mg/l	0.01639
	29804	HCO3, wf,fixEP,fld, mg/l	0.01639
	00440	Bicarbonate, wu,fx,f, mg/l	0.01639
	29806	HCO3, wf,icr,lab, mg/l	0.01639
	00449	Bicarbonate,wu,icr,l, mg/l	0.01639
...HCO_3	90440	Bicarbonate,wu,icr,l, mg/l	0.01639
	63787	Bicarbonate, wf, Gran, lab, mg/l	0.01639
	29805	HCO3, wf,fixEP,lab, mg/l	0.01639
	00451	Bicarbonate,wu,fix,l, mg/l	0.01639
	95440	Bicarbonate, fxd,lab, mg/l	0.01639

Anions			
Ion	**Code**	**Short Name**	**Factor**
	00425	Bicarbonate, wu, mg/l CaCO3	0.01998
...CO_3	00452	Carbonate,wf,icr,fld, mg/l	0.03333
	00447	Carbonate,wu,icr,fld, mg/l	0.03333
	99445	Carbonate,wu,icr,fld, mg/l	0.03333
	63788	Carbonate, wf, Gran, field, mg/l	0.03333
	29798	Carbonate, wu,Gran,field, mg/l	0.03333
	29807	CO3, wf,fixEP,fld, mg/l	0.03333
	00445	Carbonate,wu,fxdEP,f, mg/l	0.03333
	29809	CO3, wf,icr,lab, mg/l	0.03333
	00446	Carbonate,wu,icr,lab, mg/l	0.03333
	90445	Carbonate,wu,icr,lab, mg/l	0.03333
	63789	Carbonate, wf, Gran, lab, mg/l	0.03333
	29808	CO3, wf,fixEP,lab, mg/l	0.03333
	00448	Carbonate,wu,fxdEP,lab, mg/l	0.03333
	95445	Carbonate, fxd,lab,u, mg/l	0.03333
...OH	71834	Hydroxide, wf,icr,f, mg/l	0.05880
	71832	Hydroxide, wu,icr,f, mg/l	0.05880
	99830	Hydroxide, wu,icr,fd, mg/l	0.05880
	29800	Hydroxide, wf,Gran,field, mg/l	0.05880
	29799	Hydroxide, wu,Gran,field, mg/l	0.05880
	29810	OH, wf,fixed,fld, mg/l	0.05880
	71830	Hydroxide,wu,fxdEP,f, mg/l	0.05880
	29812	OH, wf,icr,lab, mg/l	0.05880
	71831	Hydroxide, wu,icr,l, mg/l	0.05880
	90830	Hydroxide,wu,icr,lab, mg/l	0.05880
	29811	OH, wf,fixed,lab, mg/l	0.05880
	71833	Hydroxide,wu,fxdEP,l, mg/l	0.05880
	95830	Hydroxide, fxd,lab,u, mg/l	0.05880
	00420	Hydroxide, wu, mg/l	0.05880
NO_2+NO_3	00631	NO2+NO3, wf, mg/l as N	0.07139
	99889	NO2+NO3, wf,fld, mg/l as N	0.07139
	00630	NO3+NO2, wu, mg/l as N	0.07139
	90859	NO3+NO2, wu, calcd, mg/l as N	0.07139
...NO_2	00613	Nitrite, wf, mg/l as N	0.07139
	71856	Nitrite, wf, mg/l	0.02174

Anions			
Ion	**Code**	**Short Name**	**Factor**
	99116	Nitrite, wf,fld, mg/l as N	0.07139
	00615	Nitrite, wu, mg/l as N	0.07139
	71855	Nitrite, wu, mg/l	0.02174
	99125	Nitrite, wu, field, mg/l as N	0.07139
...NO_3	00618	Nitrate, wf, mg/l as N	0.07139
	71851	Nitrate, wf, mg/l	0.01613
	64832	Nitrate, wf, ug/L as N	0.00007139
	91003	Nitrate, wf, ug/l	0.00001613
	99121	Nitrate, wf, field, mg/l as N	0.07139
	00620	Nitrate, wu, mg/l as N	0.07139
	71850	Nitrate, wu, mg/l	0.01613
	99124	Nitrate, wu, field, mg/l as N	0.07139
	99130	Nitrate, wu, field, umol/l	0.001

4.13 Appendix M. Data Validation and Verification Checks

Calculated Parameters Comparison

For all calculated parameters (see *Appendix D)*, a check will be completed that compares any stored results with the rounded calculated value (if it can be calculated). If the values do not agree, a warning message is printed. An example message: "Stored Diss. solids, calcd (70301) is 235 and does not agree with computed value (250)."

Table 1. Data validation checks.

Field	Tests performed	Message
Agency Code and Site Number	not null and does not exist in sitefile_##	Station xxxxx123456789012345 does not exist in the SITEFILE.
Geologic Unit Code	not null and outside domain	Invalid Geologic-unit code: xxxx
Sample Type Code	null	Null sample-type code is invalid
Analysis Status Code	null	Null analysis-status code is invalid.
Hydrologic Condition Code	null	Null hydrologic-condition code is invalid.
Hydrologic Event Code	null	Null hydrologic-event code is invalid.
Sample Preparation Date	not null and prior to non-null sample end date	Parameter xxxxx; sample-prep date yyyymmdd prior to sample-end date
Sample Analysis Date	not null and prior to non-null sample end date	Parameter xxxxx; sample-analysis date yyyymmdd prior to sample-end date
Result Value	Entry is a fixed-value parameter and has non-null entry for: • Remark code • Method code • Value qualifier code • Report level • Report level code • Preparation set number • Analysis set number • Preparation date • Analysis date • Laboratory standard deviation	Fixed-value parameter xxxxx is incompatible with measurement-parameter attributes, such as remark code.

Table 1. Data validation checks.—Continued

Field	Tests Performed	Message
Result Value	Entry is a fixed-value parameter and result value is not within the fixed-value domain	Parameter xxxxx fixed-value xxxx is invalid.
Remark Code	Entry is M,N, or U and result value entry is not null	Parameter xxxxx null-value remark code: x accompanies a non-null result value xxx.
Method Code	not null and outside domain	Parameter xxxxx: Invalid method code: x.

Table 2. Field measurement checks.

[Note: *yyy*, result value; *xxxxx,* parameter code]

Parameter code	Test performed	Warning message
00400 and 00403	4.5>pH>9	pH (*xxxxx*) falls outside of range 4.5 to 9.0
00400 and 00403	P00400 is +/- 1.0 pH units different from 00403	pH (*xxxxx*) is more than 1.0 pH units from pH, wu,lab (*xxxxx*)
00095 and 90095	Calculate percent difference and report if % difference is +/-10% Calculation method: (A-B)/B X 100%, where A = lab conductance and B = field conductance.	SpecCond, wu25degCLab (*xxxxx*) differs from Specific cond at 25C (*xxxxx*) by *nn.n*%
00094, 00095, and 90095	Specific conductance is < 0	Specific cond at 25C (*xxxxx*) is -*yyy*—not a valid result
00094 and 90095	Calculate percent difference and report if % difference is +/-10% Calculation method: (A-B)/B X 100%, where A = lab conductance and B = field conductance.	SpecCond, wu25degCLab (*xxxxx*) differs from SpecCond,25degC,fld (*xxxxx*) by *nn.n*%
00300	Dissolved oxygen is > 20 and remark is null	Dissolved oxygen (*xxxxx*) is *yyy*--greater than 20 mg/L
00300	Dissolved oxygen is < 0	Dissolved oxygen (*xxxxx*) is -yyy--invalid result

Table 3. Chemical logic checks.

[Note: *yyy*, result value; *xxxxx,* parameter code]

Parameter code or variable	Test performed	Warning message
00095 [Specific cond at 25C] Cation sum in milliequivalents	Calculate ratio: cation sum/ (P00095*0.01) Report if result is <0.92 or >1.24	Cation/specific conductance ratio is *yyy*--outside limits of 0.92 to 1.24
00095 [Specific cond at 25C] Anion sum in milliequivalents	Calculate ratio: anion sum/ (P00095*0.01) Report if result is <0.92 or >1.24	Anion/specific conductance ratio is *yyy*--outside limits of 0.92 to 1.24
Cation sum / Anion sum, percent difference	Calculate cation/anion percent difference Report if result is >+/- 5.49%	Cation/anion percent difference is *yyy*--greater than +/- 5.49%
00095 [Specific cond at 25C] 70301 [Diss solids, calcd]	Calculate ratio: P70301/P00095 Report if result is < 0.55 or > 0.81	Dissolved solids sum/specific conductance ratio (*xxxxx*/*xxxxx*) is *yyy*--outside limits of 0.55 to 0.81
00095 [Specific cond at 25C] 70300 [Diss solids dry@180C]	Calculate ratio: P70300/P00095 Report if result is < 0.55 or > 0.81	Dissolved solids@180 C / specific conductance ratio (*xxxxx*/*xxxxx*) is *yyy*--outside limits of 0.55 to 0.81
70300 [Diss solids dry@180C] 70301 [Diss solids, calcd]	Calculate ratio: P70300/P70301. Report if result is < 0.90 or > 1.12	Dissolved solids@180 C / dissolved solids sum ratio (*xxxxx*/*xxxxx*) is *yyy*--outside limits of 0.90 to 1.12
49982 [Bulk density, soil, dry] 49983 [Mineral density, soil]	Calculate ratio: P49982/P49983. Report if result is < 0 or > 1	Bulk Density / Mineral Density ratio (*xxxxx*/*xxxxx*) is *yyy*--outside limits of 0 and 1
90861 [Ratio of particulate N/organic C, calcd]	Report if ratio is <0.076 or >0.176	Ratio of particulate N/org-C is outside range of 1/13 to 3/17
71820 [Density at 20C]	Report if value is <0.9583 or >1.0500	Density at 20C is *yyy*—invalid result
72211 [Density, water, at SG test-temp]	Report if value is <0.9583 or >1.0000	Density, water, at SG test-temp. is *yyy*—invalid result

Table 4. Bacteria logic checks.

[Note: *yyy*, result value; *xxxxx,* parameter code]

Total coliform parameter code	Test performed	Warning message
	Compare result for total coliform to the parameters below	
31501	31613 Fecal coliform, M-FC MF, 0.7u 31616 Fecal coliform,M-FC MF, 0.45u 31625 Fecal coliform, M-FC MF, 0.7u	Total coliform, M-EndoMF,imm (31501) is *yyy*; less than Fecal coliform, M-FC (*xxxxx*) *yyy*
31503	31613 Fecal coliform, M-FC MF, 0.7u 31616 Fecal coliform,M-FC MF, 0.45u 31625 Fecal coliform, M-FC MF, 0.7u	Total coliform, M-EndoMF,del (31503) is *yyy*; less than Fecal coliform, M-FC (*xxxxx*) *yyy*
31504	31613 Fecal coliform, M-FC MF, 0.7u 31616 Fecal coliform,M-FC MF, 0.45u 31625 Fecal coliform, M-FC MF, 0.7u	Total coliform, LES Endo,imm (31504) is *yyy*; less than Fecal coliform, M-FC (*xxxxx*) *yyy*
50017	31613 Fecal coliform, M-FC MF, 0.7u 31616 Fecal coliform,M-FC MF, 0.45u 31625 Fecal coliform, M-FC MF, 0.7u	Total coliform, ONPG-MUG (50017) is *yyy*; less than Fecal coliform, M-FC (*xxxxx*) *yyy*
31501	31633 Escherichia coli, m-TEC MF 31648 Escherichia coli, m-TEC MF 50278 E coli, NA-MUG MF,water	Total coliform, M-EndoMF,imm (31501) is *yyy*; less than E. coli, m-TEC, w (*xxxxx*) *yyy*
31503	31633 Escherichia coli, m-TEC MF 31648 Escherichia coli, m-TEC MF	Total coliform, M-EndoMF,del (31503) is *yyy*; less than E. coli (*xxxxx*) *yyy*
31504	31633 Escherichia coli, m-TEC MF 31648 Escherichia coli, m-TEC MF	Total coliform, LES Endo,imm (31504) is *yyy*; less than E. coli, m-TEC, w (*xxxxx*) *yyy*
50017	50278 E coli, NA-MUG MF,water 90901 E. coli, MI,w 90902 E. coli, modif m-TEC	Total coliform, ONPG-MUG (50017) is *yyy*; less than E. coli, NA-MUG,w (*xxxxx*) *yyy*
90900	90901 E. coli, MI,w 90902 E. coli, modif m-TEC	Tot. coliform, MI,w (90900) is *yyy*; less than E. coli, MI,w (*xxxxx*) *yyy*
50569	50468 E coli, Defined Substrate,w	Total coliform,DefinedSubst,w (50569) concentration is *yyy*; less than E. coli (50468) *yyy*

Table 4. Bacteria logic checks.—Continued

Perform the following tests for parameter codes:		
31501;31503; 31504;31505; 31507;31613; 31615;31616; 31617;31619; 31625;31633; 31648;31751; 31854;31855; 50017;50275; 50278;50466; 50467;50468; 50469;50569; 62998;63156; 78943;81803; 90900;90901; 90902;90903; 90904;90905; 90908;90911; 90912;95200; 99406;99407; 99418;99419	(1) Check for values stored as zero. If result = 0, print a warning (2) Check for negative values (< 0)	Bacteria concentration for *parameter short name (xxxxx)* is 0; value should be < maximum estimated number. Bacteria concentration for *parameter short name (xxxxx)* is *-yyy*; not a valid number

Table 5. Comparison between related constituents and between unfiltered and filtered constituents.

[Note: Parameters in Column A are compared with parameters in Column B and a message is printed if the result in column A is less that the result in column B. Results with remark codes E, A, V, and S are allowed. An example error message: Total solids dried @ 105C (00500) is E 5.0 mg/L, less than Susp solids dry@110C (70299) 6.2 mg/L]

Parameter code	Column A parameters	Parameter code	Column B parameters
00500	Total solids dried @ 105C	70299	Susp solids dry@110C
00500	Total solids dried @ 105C	00530	Suspended solids
00500	Total solids dried @ 105C	00510	Total solids after ignition
00500	Total solids dried @ 105C	00505	LOI of total solids
00500	Total solids dried @ 105C	70300	Diss solids dry@180C
00610	Ammonia, wu	00608	Ammonia, wf
00615	Nitrite, wu	00613	Nitrite, wf
00625	NH3+orgN, wu	00623	Ammonia + organic-N, wf
00623	Ammonia + organic-N, wf	00608	Ammonia, wf
00630	NO2+NO3, wu	00613	Nitrite, wf
00630	NO2+NO3, wu	00615	Nitrite, wu
00630	NO2+NO3, wu	00631	NO2+NO3, wf
00631	NO2+NO3, wf	00613	Nitrite, wf
00665	Phosphorus, wu	00671	Orthophosphate, wf
00665	Phosphorus, wu	70507	Orthophosphate, wu
00665	Phosphorus, wu	00666	Phosphorus, wf
00666	Phosphorus, wf	00671	Orthophosphate, wf
70507	Orthophosphate, wu	00671	Orthophosphate, wf
00669	Hydrolyzable phosphorus, wu	00672	Hydrolyzable phosphorus, wf
00680	Organic carbon, wu	00681	Organic carbon, wf
00680	Organic carbon, wu	00689	Organic carbon, ss,t
01002	Arsenic, wu	01000	Arsenic, wf
01007	Barium, wu,recov	01005	Barium, wf
01012	Beryllium, wu,recov	01010	Beryllium, w,f
01022	Boron, wu,recov	01020	Boron, wf

Table 5. Comparison between related constituents and between unfiltered and filtered constituents.—Continued

Parameter code	Column A parameters	Parameter code	Column B parameters
01027	Cadmium, wu	01025	Cadmium, wf
01034	Chromium, wu,recov	01030	Chromium, wf
01037	Cobalt, wu,recov	01035	Cobalt, wf
01042	Copper, wu,rec	01040	Copper, wf
01045	Iron, wu,rec	01046	Iron, wf
01051	Lead, wu,recov	01049	Lead, wf
01055	Manganese, wu,recov	01056	Manganese, wf
01062	Molybdenum, wu,recov	01060	Molybdenum, wf
01067	Nickel, wu,recov	01065	Nickel, wf
01077	Silver, wu,rec	01075	Silver, wf
01082	Strontium, wu,rec	01080	Strontium, wf
01087	Vanadium, wu	01085	Vanadium, wf
01092	Zinc, wu,rec	01090	Zinc, wf
01094	Zinc, wu,rec	01090	Zinc, wf
01097	Antimony, wu	01095	Antimony, wf
01105	Aluminum, wu,rec	01106	Aluminum, wf
01132	Lithium, wu,rec	01130	Lithium, wf
01147	Selenium, wu	01145	Selenium, wf
62854	Total nitrogen, wf	00608	Ammonia, wf
62854	Total nitrogen, wf	00631	NO2+NO3, wf
62854	Total nitrogen, wf	00613	Nitrite, wf
62855	Total nitrogen, wu	62854	Total nitrogen, wf
71900	Mercury, wu, rec	71890	Mercury, wf

Table 6. Comparison between selected constituents and sum of parts.

[Note: Unfiltered parameters are compared with sum of filtered and suspended parameters. A message is printed if the unfiltered result is less that the sum of filtered and suspended parameters. Results with remark codes E, A, V, and S are allowed. An example error message: NH3+orgN, wu (00625) is E 25 mg/l as N, less than sum of Ammonia + organic-N, wf (00623) + Ammonia + organic-N, ss,total (00624)(50 mg/l as N)]

Unfiltered parameter	***Filtered and suspended parameters for calculation of sum of parts***
00600 Total nitrogen, wu	*00625 NH3+orgN, wu + 00630 NO2+NO3, wu*
00600 Total nitrogen, wu	*62854 Total nitrogen, wf + 49570 Particulate-N, suspended*
00625 NH3+orgN, wu	*00623 Ammonia + organic-N, wf + 00624 Ammonia + organic-N, ss, total*
00680 Organic carbon, wu	*00681 Organic carbon, wf + 00689 Organic carbon, ss, total*
00685 Inorganic carbon, wu	*00691 Inorganic carbon, wf + 00688 Inorg carbon, ss, total*
01002 Arsenic, wu	*01000 Arsenic, wf + 01001 Arsenic, ss, total*
01007 Barium, wu,recov	*01005 Barium, wf + 01006 Barium, ss,recov*
01012 Beryllium, wu,recov	*01010 Beryllium, w,f + 01011 Beryllium, ss,recov*
01017 Bismuth, wu	*01015 Bismuth, wf + 01016 Bismuth, ss*
01022 Boron, wu,recov	*01021 Boron, ss,recov + 01020 Boron, wf*
01027 Cadmium, wu	*01026 Cadmium, ss,recov + 01025 Cadmium, wf*
01034 Chromium, wu,recov	*01030 Chromium, wf + 01031 Chromium, ss,recov*
01037 Cobalt, wu,recov	*01035 Cobalt, wf + 01036 Cobalt, ss,recov*
01042 Copper, wu,rec	*01040 Copper, wf + 01041 Copper, ss,recov*
01045 Iron, wu,rec	*01046 Iron, wf + 01044 Iron, ss,recov*
01051 Lead, wu,recov	*01049 Lead, wf + 01050 Lead, ss,recov*
01055 Manganese, wu,recov	*01056 Manganese, wf + 01054 Manganese, ss,recov*
01059 Thallium, wu	*01057 Thallium, wf + 01058 Thallium, ss,recov*
01062 Molybdenum, wu,recov	*01060 Molybdenum, wf + 01061 Molybdenum, ss,recov*
01067 Nickel, wu,recov	*01065 Nickel, wf + 01066 Nickel, ss,recov*
01077 Silver, wu,recov	*01076 Silver, ss,recov + 01075 Silver, wf*
01082 Strontium, wu,recov	*01080 Strontium, wf + 01081 Strontium, ss,recov*

Table 6. Comparison between selected constituents and sum of parts.—Continued

Unfiltered parameter	Filtered and suspended parameters for calculation of sum of parts
01087 Vanadium, wu	01085 Vanadium, wf + 01086 Vanadium, ss,total
01092 Zinc, wu,rec	01090 Zinc, wf + 01091 Zinc, ss,recov
01097 Antimony, wu	01095 Antimony, wu + 01096 Antimony, ss,total
01102 Tin, wu,recov	01100 Tin, wf + 01101 Tin, ss,recov
01105 Aluminum, wu,rec	01106 Aluminum, wf + 01107 Aluminum, ss,recov
01122 Gallium, wu	01120 Gallium, wf + 01121 Gallium, ss,total
01127 Germanium, wu	01125 Germanium, wf + 01126 Germanium, ss,total
01132 Lithium, wu,recov	01130 Lithium, wf + 01131 Lithium, ss,recov
01137 Rubidium, wu	01135 Rubidium, wf + 01136 Rubidium, ss,total
01147 Selenium, wu	01145 Selenium, wf + 01146 Selenium, ss,total
01152 Titanium, wu	01150 Titanium, wf + 01151 Titanium, ss,total
01154 Tungsten, wu	01155 Tungsten, wf + 01156 Tungsten, ss
01162 Zirconium, wu	01160 Zirconium, wf + 01161 Zirconium, ss,total
01189 Scandium, wu	01187 Scandium, wf + 01188 Scandium, ss
01196 Ytterbium, wu	01194 Ytterbium, wu + 01195 Ytterbium, ss
62854 Total nitrogen, wf	00608 Ammonia, wf + 00631 NO2+NO3, wf
62854 Total nitrogen, wf	00608 Ammonia, wf + 00613 Nitrite, wf
62855 Total nitrogen, wu	00608 Ammonia, wf + 00631 NO2+NO3, wf
62855 Total nitrogen, wu	62854 Total nitrogen, wf + 49570 Particulate-N, suspended
71900 Mercury, wu, recov	71890 Mercury, wf + 71895 Mercury, ss, recov

4.14 Appendix N. Parameter-Sequence Group Codes for Retrieval

Parameter-sequence group code	Parameter-sequence group short name	Parameter-sequence group description
INF	Information	Information about a data-collection site, sampling activity, analytical procedure, or quality-assurance measurement (Evaluation order 18)
PHY	Physical	General quantitative and qualitative observations as well as results computed from field and laboratory observations (Evaluation order 12)
INM	Inorganics, Major, Metals	Major metallic cations (including sodium, calcium, magnesium, and potassium); generally present in concentrations of milligrams per liter. (Evaluation order 4)
INN	Inorganics, Major, Non-metals	Major non-metallic anions (including chloride, fluoride, sulfate, and alkalinity related); generally present in concentrations of milligrams per liter. (Evaluation order 5)
NUT	Nutrient	Nitrogen- or phosphorus-based constituents. (Evaluation order 3)
MBI	Microbiological	Bacteria, viruses, protozoans, or other microbial constituents. (Evaluation order 14)
BIO	Biological	Algal and zooplankton constituents (including productivity, chlorophyll, and biomass). Information about biological samples (for example, sample size and weight parameters), including tissue samples, are grouped as Biological. (Evaluation order 17)
IMM	Inorganics, Minor, Metals	Trace metal cations or metal-based compounds; generally present in micrograms per liter. (Evaluation order 6)
IMN	Inorganics, Minor, Non-metals	Trace non-metallic elements or non-metallic based compounds, generally present in micrograms per liter. (Evaluation order 7)
OPE	Organics, Pesticide	Organic pesticide compounds, including their break-down products. When a chemical compound has more than one use, if the predominant use is for pesticides, it is assigned to this group; if the predominant use is other than as a pesticide, it is assigned to "Organics, other". (Evaluation order 10)

Parameter-sequence group code	Parameter-sequence group short name	Parameter-sequence group description
OPC	Organics, PCBs	Polychlorinated biphenol compounds, including their break-down products. (Evaluation order 9)
OOT	Organics, Other	Organic compounds not classified as pesticides or polychlorinated biphenol compounds, including volatile organic compounds and oil/grease constituents. (Evaluation order 11)
RAD	Radiochemical	Radioactive constituents, including gross alpha, gross beta, uranium, and radon. (Evaluation order 2)
ISO	Stable Isotopes	Isotopic constituents that are stable and not radioactive in nature, including isotope ratios. (Evaluation order 1)
SED	Sediment	Physical sediment-related constituents, including suspended sediment and bedload sediment. This group does not include parameters for the chemical analysis of sediment or dissolved solids. (Evaluation order 8)
POP	Population/Community	Biological population or community information. (Evaluation order 15)
HAB	Habitat	Physical habitat measurements. (Evaluation order 16)
TOX	Toxicity	Toxicity-test measurements. (Evaluation order 13)
OTH	Other	Other miscellaneous constituents. (Evaluation order 19)

5 Tip Sheets

5.1 Tip Sheet: How do I move around on the screens?

- You can use the <Enter> key to move through the fields one by one on any QWDATA screen. You must include an entry for fields that are mandatory (highlighted).
- In addition to the <Enter> key, special keystroke combinations are available to save time during data entry.

Cursor controls

Keystroke	Resulting Action
^D	**(Ctrl-D) Skip to next block**
#	**Delete (clear) entry in field** **[NOTE: used as null value indicator in data entry screens]**
/	**Move back one field**
/x	**Continue at item number x**
/+x	**Move forward (x) items, default x is 1**
/-x	**Move back (x) items, default x is 1**
/@	**Continue at item with string @ in label**
/p	**Back up to previous page (screen)**
/n	**Advance to next page (screen)**
/d	**Delete current parameter**
/a	**Insert new parameter**
/c	**Cancel editing of current record – no changes are saved**
/q	**Skip remaining items – changes are saved**

- Type a ?/ to show the list above on the screen.
- All of these control options are not available on each screen within QWDATA. Available cursor controls are shown on the bottom of the screens within the program.
- When the cursor is in the Method Code Field, the "/+" and "/-" options move the cursor to the next or previous block of result information, respectively. In other fields, these options move the cursor forward or backward the specified number of items."
- The “/x” option moves the cursor to the specified item or field within an item. For example “/3” moves the cursor to parameter number 3; “/dqi” moves the cursor to the DQI field.

5.2 Tip Sheet: How do I manually login my sample and enter field data?

> ***Note*** **:** The sampling site must exist in the NWIS Sitefile before samples can be logged in or water-quality data can be entered. The program for adding a new site to the NWIS database is described in *Section 3.7.2--Add new site or modify site information*. Access to this program may be restricted to more experienced database users.

- Choose option 1 from the main QWDATA menu.
- Items required to login a sample are highlighted on the screen and include: agency code, station number, begin date, time datum, time datum reliability code, medium code, sample type, analysis status, hydrologic condition, and hydrologic event. The items are sometimes referred to as the sample header information and are described in *Section 3.1*.
- If you are entering a tissue sample with a medium code of BA, BP, BAQ or BPQ, the organism and body part codes become mandatory fields.
- You can search the valid codes for most of the items on this screen by typing "?" in the first column after the item.
- After entering the sample header information, you are asked: ***Do you want to enter any data for this record (Y/N)?***
- If you respond with an ***"N"***, a record number is generated. You may want to keep track of this record number on your field sheet or another location for future reference.
- If you respond with a ***"Y"***, the following query appears:

  Are you entering lab (L) or field (F) data? (L or F, <CR>=F)?

  - If ***F*** is chosen, the program described in *Section 3.2.1* is initiated and you are asked: ***Enter field form nn, ?nn for detail of form nn, ? for list of forms available.***
  - If ***L*** is chosen, the program described in *Section 3.2.2* is initiated and you are asked: ***Enter field form nn, ?nn for detail of form nn, ? for list of forms available.***
- The ***"nn"*** in the prompt refers to the field form number contained in the file name: ***field.parmsnn***, stored in the directory ***/usr/local/nwis/data/auxdata/qw_field_forms/***, where "***nn***" represents the 2-digit form number (e.g. field.parms01).
  - Information about adding and designing a field form is available in *Section 2.10* and *Tip Sheet 5.3*.
- If you choose to enter field data (short form) and enter a field form number, you can enter the data value, rounding precision, data-value remark, data quality indicator (DQI), null-value qualifier, value qualifiers, and result field comments for each of the parameters in the field form, which are described in *Section 3.2.1*.
- If you choose to enter laboratory data (long form) and enter a field form number, in addition to the fields listed above, you can also enter information about the reporting level used, the preparatory set number and date; the analytical set number and date; and result field and result laboratory comments for each of the parameters in the field form, which are described in *Section 3.2.2*.

- Cursor control characters and options shown at the bottom of the field-data entry screen are described in *Section 2.2.2* and *Tip Sheet 5.1*, and can be displayed on the screen by typing "***?/***".
- Additional parameters may be added during data entry without adding them to the field form by entering ***"/a"*** at any time.
- After the data entry is complete, the user is given an opportunity to make changes or enter a carriage return to continue. This carriage return completes data entry and a record number is generated. You may want to keep track of this record number on your field sheet or another location for future reference.
- After the record is stored, you must answer the query: ***Login another record (Y/N,<CR>=Y)?*** An ***"N"*** ends the program and a ***"Y"*** allows the user to login another sample.
- If a ***"Y"*** is entered, you must answer the query: ***Do you wish to edit the same header (Y/N,<CR>=Y)?*** The ability to edit the previous sample information allows for the rapid login of samples that contain similar information contained in the previous sample.

5.3 Tip Sheet: How do I design a field form...and why would I want to?

- Field forms allow the user to design a data input file containing the parameters that are routinely entered for a particular project, field trip, a local office water-quality field sheet, or data from a non-USGS laboratory.
- Creation of new field forms should be completed if the available field forms do not contain one that can be used for the needed purpose. This requires that the available field forms be reviewed prior to creating a new one.
- A field form is a file containing a list of parameter codes, method codes, parameter names or descriptions, analyzing entity codes, and identification that a parameter is mandatory for that form. Field forms are used in the Enter Field Results, program *(Section 3.2.1)*, the Enter Laboratory Results program *(Section 3.2.2)* and in the Login Sample program *(Section 3.1)*.
- Any editor that produces an ASCII output file can be used to create or edit a field form file.
- Any numeric parameter can be entered into a field form. Alpha parameters (such as GUNIT for geologic unit code) cannot be used in the field form.
- Up to 100 parameters can be included in a field form.
- Attach to the directory: ***/usr/local/nwis/data/auxdata/qw_field_forms***
- **List the directory to see what field form numbers already exist before selecting a new 2-digit form number to create.**
- Initiate the editor from this directory and enter the data in the format shown below. Save the file as ***field.parmsnn*** where 'nn' is the new 2-digit number.
- The first line of the field form should be used to document the purpose of the field form by placing a "**#**" in the first column. Additional lines can be used for comments as long as a "**#**" is in the first column of the line. The format and an example of a field form are shown below.
- Use caution when creating descriptions for parameters to ensure that they are clear and match the definition in the PCD for that parameter. For example, if the parameter is defined as 'dissolved' in the PCD, then the description in the field form should contain 'dissolved' in the parameter description.
- Be sure that the final line of the field form contains a carriage return at the end. If this is not included, the last parameter will not be included to enter data.
- The field form must be space delimited. If any other delimiter is used an error will result when using the field form for data entry.

Format of Field Form

Line 1	**Begins with a "#" in column 1 and is used to describe the purpose of the field form, name of the person who designed the form, and date created. (This line is not required but is strongly recommended because the line is displayed if a list of field forms is requested.)**
Columns 1-5	**Parameter code [5 digits, use leading zeros].**
Column 6-10	**Method code [optional] (5-character code)**
Column 11	**Not used.**
Columns 12-36	**Parameter names or descriptions [could match local office water-quality field sheet]**
Column 40	**Y indicates parameter is mandatory.**
Column 42-49	**Analyzing entity code (8-character code, See Appendix K for allowed entries)**

Example of Field Form

```
#NAWQA SW field form for Biological project was created
#  by John Smith on 12-25-2009
#2345678901234567890123456789012345678901234567890123456789 Col numbers
00061      Streamflow
00065      Gage height
00010THM01 Temp water
00020      Temp air
00400PROBE pH
00095SC001 Specific Conductance
00300      Dissolved Oxygen
00025BAROM Barometric pressure
00452ASM01 CO3 Carbonate                  USGS-WRD
00453ASM01 HCO3 Bicarbonate               USGS-WRD
39086TT061 Alkalinity Inc. Titration      USGS-WRD
31625      Fecal Coliform
31673      Fecal strep
84164      SAMPLER TYPE                Y
71999      PURPOSE                     Y
99105      REPLICATE
99111      QA DATA TYPE                Y
```

5.4 Tip Sheet: How do I view my data in the database?

- Choose Option 3 – 'Data Review' from the main QWDATA menu and then select 4 - 'List Samples and Results'. See *Section 3.3.4* for more details about this option.
- Identify the records you want to view by entering information from the screen or a file. The file format can be record numbers or sample key-fields: agency, station number, date, time (optional-see *Section 2*), and medium code. See *Section 3.3.1* for information about selecting sites and (or) samples.
- Choose to display the data to the screen, or output to a file.
- Two options are available to view the data:

  1 -- short form
  2 -- long form

  If you have a small viewing area on your screen you will want to choose option 1. If you want to display the most complete set of information, you will want to choose option 2.

- Output from the two options:

Short Form

```
   --qwlist program processed: 06-15-2007 11:12

Record Number: 00400123       Database Number: 01
Agency and Site ID: USGS 12324590
Site Name: Little Blackfoot River near Garrison MT
Begin Date and Time: 2003-11-19 0810  End Date and Time:
Time Datum: MST     Time Datum Reliability: K
Medium: WS       Sample Type: 9       Country: US       State: 30
County: 077       Geologic Unit:
Project: 862014804       Lab ID: 3300010
Analysis Status: U       Hydrologic Condition: 9    Hydrologic Event: 9
Organism(ITIS):                Body Part:          Number of Parameters: 29
Sample Field Comment--
Sample Lab Comment--A-3300010 attention glenda brown- clark fork project,mt
Collecting Agency: USGS-WRD, U.S. Geological Survey-Water Resources
Discipline
Modify Date: 20041123    Modified By: pladd

      R            QUAL N D       R            R            QUAL N D       R
      E            CODE V Q       N            E            CODE V Q       N
PCODE M      VALUE 123  Q I METHD D      PCODE M      VALUE 123  Q I METHD D

00010          3.5        R       2      00020         12.0        R       3
00028        80020        R       4      00061           61        R       2
00065         1.27        R       3      00095          286        R       3
00400          8.2        R       2      00403         7.92        R EL006 2
00915      40.0262        R PLA11 3      00925       8.8715        R PLA11 3
01000        4.426        R PLM40 2      01002    3.8990584        R GF096 1
```

Long Form

```
   --qwlist program processed: 06-15-2007 11:14

Record Number: 00400123       Database Number: 01
Agency and Site ID: USGS 12324590              Site Name: Little Blackfoot River near Garrison MT
Begin Date and Time: 2003-11-19 0810  End Date and Time:                  Time Datum: MST     Time Datum Reliability: K
Medium: WS       Sample Type: 9       Country: US       State: 30       County: 077       Geologic Unit:
Project: 862014804       Lab ID: 3300010
Analysis Status: U       Hydrologic Condition: 9       Hydrologic Event: 9
Organism(ITIS):                Body Part:           Number of Parameters: 29
Sample Field Comment--
Sample Lab Comment--A-3300010 attention glenda brown- clark fork project,mt
Collecting Agency: USGS-WRD, U.S. Geological Survey-Water Resources Discipline
Modify Date: 20041123    Modified By: pladd

                       R  QUAL   N  D   R
                       E  CODES  V  Q   N
* PCODE METHD --VALUE--- M  1 2 3  Q  I   D   ANL-ENT   LSDEV    RPLV   RLCOD  PRP DATE   PREP-SET NO  ANL DATE    ANL-SET NO  MOD_DATE    MOD_BY

  00010             3.5              R   2                                                                  20060626  pladd
  00020            12.0              R   3                                                                  20060626  pladd
  00028           80020              R   4                                                                  20060626  pladd
  00095             286              R   3                                                                  20060626  pladd
  00400             8.2              R   2                                                                  20060626  pladd
  00403 EL006      7.92              R   2                     0.1     MRL                      20031201  PCA03335A     20060626  pladd
  00915 PLA11   40.0262              R   3                    0.01     IRL                      20040108  ICPOE04007A   20060626  plad
```

5.5 Tip Sheet: How do I edit data that are already in the database?

Data that are already in the database can be edited in one of two ways. From the main QWDATA menu, choose **option 2 – *Modify samples or results*** or **option 8 – *Batch Processing***. The *Batch Processing* option is recommended when large-scale or many small-scale changes to the database need to be made. The data are retrieved from the database in tab-delimited format. Changes are made to the batch files using the batch-file editor or an external text editor, and the corrected files are reprocessed using ***Batch Processing*** menu **options 1, 2, 3,** or **4**. This process is described in more detail in *Tip Sheet 5.9*.

This tip sheet describes the basic steps required to edit data that already exist in the database using **QWDATA main menu option 2**.

- The user must know the record number of the sample that is to be edited or the agency code, site number, begin date, begin time, end date (if there is one), end time (if there is one) and medium code before proceeding. **Note:** You must have write-access to the database.

- Choose **option 2 – *Modify samples or results*** from the main QWDATA menu.

- Choose **option 3 – *Edit samples or results*** from the *Modify samples or results* menu, and the following "qwedit" screen is displayed. **Note:** Before proceeding, confirm that the user is in the correct database.

qwedit – Water Quality Edit Program

Processing in database: 01

Enter record number:

(Q to quit, <CR> to select by agency-site-date-time-medium)

- Enter the sample record number or press the <Enter> key and enter the agency code, site number, date(s), time(s), and medium code. The program will respond and ask you to confirm if this is the desired record.

- If this is not the correct sample record, enter an 'n' and the program will reset the input screen to the "qwedit" screen above. If it is the correct sample record, enter a 'y' and the program will display the following "Edit Options" screen:

EDIT OPTIONS:

1 – Select another record

2 – Modify the record header

3 – Modify the analytical data

4 – Delete the record

Please enter your choice:

- Choose **Edit option 1** to select another record.
- Choose **Edit option 2** to add, delete, or change any of the record header information. The sample header information is described in *Section 3.1*. Choose Edit option 3 to add, delete, or change any of the analytical data or attributes associated with a result.
- For both **option 2 and 3**, the cursor control characters and options are shown at the bottom of the entry screen and are described in *Section 2.2.2* and in *Tip Sheet 5.1*, and can be displayed on the screen by typing "?/".
- Note that if the data have been reviewed, the DQI will have to be changed before making changes to an existing analytical result or its attributes.
- Choose **Edit option 4** to delete the entire record. The program will ask for confirmation that this record is to be deleted. To help ensure that no mistakes are made, the response must be "YES" in all capital letters.

Please enter your choice: 4

Are you sure you want to DELETE that record (Must enter YES to delete)?

- The program will confirm if the record has been deleted. If the record was not deleted, then the program returns the user to the "Edit Options" screen. If the record was successfully deleted, then the program returns the user to the initial "qwedit" screen.

5.6 Tip Sheet: How do I table data in publication-style table format?

This tip sheet describes the basic steps required to make a publication-style table. Publication-style tables include informative titles, column headings, and appropriate spacing for publishing tables of data. Links to sections in the documentation that contain details for certain topics are included. The user should refer to those sections for details that are not presented in this tip sheet.

- You must have a file of record numbers before beginning the tabling program. Create this file if you do not already have it. See *Section 3.3.1* or *Tip Sheet 5.15* for more information about retrieving records.

- From the main QWDATA menu, choose option 4 – *Data Output.*

- Choose option 3 – *Water-Quality Table by Sample (Publication Format)* from the Data Output menu. See *Section 3.4.3* for more details about this option.

- Enter the file name for the record-number file. Enter the file name for the output file.

- A table definition file is required. You may use an existing definition file or create one now. See *Section 3.4.3.2* for more information about table definitions.

- Provide parameter codes to be included in the table. This may be done interactively or by providing a file name for a file containing the parameter codes. See *Section 3.4.3.3* for more information about providing parameter codes and *Appendix G* for the format of a parameter code file.

Choose table output options from the screen. See *Section 3.4.3.4* for detailed information on table output options. Following is the table options screen with the default options shown by X's:

```
( 1) Limit Results by DQI Code:     X_Public accessible [ASR] __User Specified
( 2) Parameter Order:               X_Publication Order __As Supplied
( 3) Rounding of Result Values:     __None  __User  X_Default
( 4) Censoring of Zero Values:      X_None  __User Specified
( 5) Recensoring of Values:         X_None  __User Specified
( 6) Qualifiers in Output:          __Yes  X_No
( 7) Footnotes:                     __None  X_Remarks __Qualifiers
( 8) Create Parnames File:          __Yes  X_No
( 9) Time Datum:                    X_Watch  __User Specified
(10) Restrict parameters:           __None  X_Public
(11) Display text for fixed values: __Yes  X_No
(12) Calculated-value precedence:   X_Stored, calculated __User Specified


Enter item to change (1-12) or <CR> to continue:
```

Note: A user with read-only access to the database will be able to table results with data quality indicator (DQI) codes of A – historical, S – presumed satisfactory, or R – reviewed and accepted. A user must have write access to table results for DQI codes of Q – reviewed and rejected, I – awaiting review, U – unapproved method or lab., or P, O, or X – proprietary results.

- After the table is retrieved, you can create another table with the by-sample format by entering a 'Y' at the next prompt and the tabling program will begin again. If another table is not required, type 'N' at the prompt.

- The output file contains "Fortran carriage control" characters. Use the Unix command:
  asa <*filename*> | lp –y landscape –d<*printer name*>
  to print the formatted file. Fortran carriage-control characters are numeric codes written in the first column of each line describing how the printout should appear. If the command '–d<*printer name*>' is not appended, the destination will be your default printer. For more details, see manual page ("man lp").

5.7 Tip Sheet: How do I make flat files to use data in programs outside of QWDATA?

This tip sheet describes the basic steps required to make a flat file using column-style (by-sample) output. If you would like to make a flat file using row-style (by-result) output, refer to *Section 3.4.6*. Flat files do not include titles or column headings, but are simple columns of data. This type of output is typically used for simple data reviews or to enter data into other software. Links to sections in the documentation that contain details for certain topics are included in this tip sheet. The user should refer to those sections for details that are not presented in this tip sheet.

- ❖ You must have a file of record numbers before beginning the tabling program. Create this file if you do not already have it. See *Section 3.3.1* or *Tip Sheet 5.15* for more information about retrieving records.

- ❖ Choose option 4 – *Data Output* from the main QWDATA menu.

- ❖ Choose option 5 – *Flat File by Sample* from the Data Output menu.

- ❖ Six options are available to create a flat file using by-sample output:

```
qwtable -- Flat file (by sample)

You have 6 options for flatfile output:
  1 -- Fixed column flat file (qwflatout)
  2 -- Flat file with TAB delimiter (RDB format)
  3 -- Flat file with user-specified delimiter
(Following options include method code in output)
  4 -- Fixed column flat file (qwflatoutm)
  5 -- Flat file with TAB delimiter (RDB format)
  6 -- Flat file with user-specified delimiter

Enter option desired (1-6, <CR>=1):
```

  - ✓ Option 1 produces two files: one with the data in fixed columns separated by spaces and the other containing a list of parameter names. This option can be used to import the data to other programs; however, delimited files are better for some programs (see option 3).

  - ✓ Option 2 produces a tab-delimited RDB file with header lines at the top of the file containing parameter and format information followed by the data. Only those users wishing to use the RDB capabilities should choose this option.

- ✓ Option 3 produces two files: one with the data delimited by the user-defined delimiter and the other containing a list of parameter names. This option can be used to import the data to other programs.

- ✓ Options 4-6 are similar to options 1-3, but the output also includes method codes when method codes exist with a result. This option creates an extra spaces or column for each parameter specified in the parameter list to hold a method code; in some cases this column may be blank because no method code exists.

  * See *Section 3.4.5* for more details about these options.*

❖ Each option has the following prompts:

- ✓ Options 1 and 4:

  Enter name of file containing record numbers (Q to quit):
  Enter name of file to hold output –

- ✓ Options 2 and 5:

  Do you want remarks and values to be delimited (Y/N,<CR>=Y)?
  Enter name of file containing record numbers (Q to quit):
  Enter name of file to hold output –

- ✓ Options 3 and 6:

  Enter column separator char or TAB for tab char:
  Do you want remarks and values to be delimited (Y/N,<CR>=Y)?
  Enter name of file containing record numbers (Q to quit):
  Enter name of file to hold output –

- ✓ Options 2, 3, 5, or 6 allow you to separate remarks, such as < or E, into a different column from the values by answering 'Y' to that prompt. For options 3 and 6, any character may be used as a column separator, but the most common are tabs, commas, and slashes.

❖ Provide parameter codes to be tabled. This may be done interactively or by providing a file name for a file containing the parameter codes. See *Section 3.4.3.3* for more information about providing parameter codes and *Appendix G* for the format of a parameter code file.

❖ Choose table output options from the screen 'qwtable -- current selections for options'. See *Section 3.4.3.4* for detailed information on table output options. Following is the table options screen, X's indicate the default settings:

```
qwtable -- current selections for options

( 1) Limit results by DQI Codes:     X_Public accessible [ASR]  __User Specified
( 2) Parameter Order:                X_Publication Order  __As Supplied
( 3) Rounding of Result Values:      __None  __User  X_Default
( 4) Censoring of Zero Values:       X_None  __User Specified
( 5) Recensoring of Values:          X_None  __User Specified
( 6) Create Parnames File:           __Yes  X_No
( 7) Time Datum:                     X_Watch  __User Specified
( 8) Restrict parameters:            __None  X_Public
( 9) Display text for fixed values:  __Yes  X_No
(10) Calculated-value precedence:    X_Stored, calculated __User Specified


Enter item to change (1-10) or <CR> to continue:
```

Note: A user with read-only access to the database will be able to retrieve results with data quality indicator (DQI) codes of A – historical, S – presumed satisfactory, or R – reviewed and accepted. A user must have write access to retrieve results for DQI codes of Q – reviewed and rejected, I – in-review, U – unapproved method or laboratory, or P,O, or X – proprietary results.

- After the file is retrieved, you can create another flat file with the same format by entering a 'Y' at the next prompt and the tabling program will begin again. If another table is not required, type 'N' at the prompt.

5.8 Tip Sheet: How can I find a parameter code number or name?

- Several options for parameter code number or name queries are available on the *Support Files (Section 3.6)* menu option 6 of QWDATA.

- Option 2 on the *Support Files* menu gives you the option to retrieve parameter code information by parameter code or parameter name. Output is to the screen only:

```
qwpcdpeek
Only parameters that are displayed to the public
and can be entered into NWIS are retrieved by this program
        Do you want to identify parameters by:
          1. code
          2. name

 Please enter option (1,2,q): _
```

Choosing option 1 results in the following system prompt:

```
Do you want to enter parameters from the terminal? (y,n, <CR>=y): _
```

Choosing entry from the terminal results in the next prompt:

```
Enter parameter codes (<CR> to quit)
(To retrieve a range, enter PCODE-PCODE; <PCODE; >PCODE; <=PCODE; >=PCODE)

  1: _____________
```

Enter a 5-digit parameter code, a range of codes with a hyphen in the middle, or use the greater-than or less-than operators. Search results will be shown on the screen and include the parameter number(s) and name(s).

If you answered 'n' to the previous prompt to enter parameters at the terminal, the next prompt will look like this:

```
Enter the pathname of the
input file (q to quit): _testfile_____________________
```

The program requires a simple text-file formatted with integers in the first 5 columns, followed by a carriage return or a space. It does not read anything after the space to the right. It will also accept a range of parameters separated by a hyphen, or using the '=', '<', '>'. An example file:

```
# example file 'testfile'
00631
00670-00685
80155  sediment discharge
99100-99199
>=99600 silly text
<00090
<=00100
```

Choosing option 2 results in the following system prompt:

```
Do you want to enter parameter names from the terminal? (y,n,q, <CR>=y): _
```

Choosing entry from the terminal results in the next prompt:

```
Enter parameter names (<CR> to quit)

 1: _nitro_____________________________
 2: ______________________________
```

At this point, you may enter a parameter name, partial name, or string of letters. All parameter codes and names that contain the character string anywhere in the parameter long name will be displayed to the terminal.

If you answered 'n' to the prompt to enter parameter names at the terminal, the next prompt will look like this:

```
Enter the pathname of the
input file (q to quit): _____________________________
```

The input file should have a format as described above for terminal entry. Place separate name searches on their own line in the text file.

- Option 3 on the *Support Files* menu gives you an advanced search function, and only writes output to a file. It is described in the User Documentation in *Section 3.6.3*.

5.9 Tip Sheet: How do I load data using batch processing?

- Batch processing is used for loading electronic data files, generally from laboratories and including non-USGS laboratories, into the database.
- Files typically named ***qwsample*** and ***qwresult*** are used by QWDATA to load data via batch processing.
- Descriptions of the batch file formats are in *Appendix F*. A document that describes the requirements for external laboratories that may want to produce the batch format is located at (Internal USGS users only) http://phoenix.cr.usgs.gov/www/lab_coord.html.
- To begin batch processing, choose option 8 – *Batch Processing* from the main menu. See *Section 3.8* for more details about this option.
- The Water-Quality Data Transfer System (QWDX) is used by the NWQL and other USGS laboratories to transmit data to their customers. You should first retrieve the ***qwsample*** and ***qwresult*** batch files from the QWDX system. The retrieval can be done using an automated or manual process.
- The program will look for the ***qwsample*** and ***qwresult*** batch files in the directory where the program is initiated.
- The batch process can be run in one of three ways:
  1. The batch process updates sample records that are already in the database (option 1 – *Enter batch-file data for logged-in samples*). The data are matched based on agency code, site ID, begin date and time, end date and time, and medium code which are contained in the sample-level file (***qwsample***). The result-level data (***qwresult***) are appended to the existing sample.
  2. The batch process enters and updates samples in the database (option 2 – Enter b*atch-file data for all samples*). The data are matched based on agency code, site ID, begin date and time, end date and time, and medium code, which are contained in the sample-level file (***qwsample***). If a match is found, the result-level data (***qwresult***) are appended to the existing sample. If a match is not found, a new sample is created and the result-level data are processed.
  3. The batch process provides an interactive, screen-oriented, batch-precursor program for the expert user to set batch modes (option 4 – *Enter batch-file data with user-specified behavior*). The filename, the transactions allowed, whether or not the results are protected by DQI codes, the type of data that can be updated (lab only or lab + field), and whether or not an ionic balance is prepared are behavior modes that can be selected by the user. Four types of transactions are allowed:
     - Only updates to samples. This is the same mode as when the Batch Processing, option 1, *Enter batch-file data for logged-in samples* option is selected.
     - Only addition of new samples. This is the mode used for the addition of new samples to the database. This option cannot be used for updating existing samples.

- Any transaction. This is the same mode as when the Batch Processing, option 2, *Enter batch-file data for all samples* option is selected.
- Verification only, no transactions stored. This capability provides for a "dry run" of the batch program. This mode can be useful for checking data from an external source or for cleaning up data prior to an attempt at storage in the database. The sample record number is reported as "Unstored" on the WATLIST when this mode is used. Rejected sample and result files are created in verification mode, but these files contain only those records that would have been rejected if the user had attempted to store the data.

❖ Environmental and quality-control (QC) data are directed to an appropriate database based on the sample medium code. *Appendix A* describes medium codes and identifies which are environmental or QC media. Each user is linked with a pair of environmental and QC database numbers. The linkage can be changed using option 7 – *Utilities* from the main menu, submenu option 1 – *Change Database Number*. If no linkage has been established for the userid, then databases 01 and 02 are used for the environmental and QC samples.

❖ A record of the actions taken when a batch file is processed is written to a file named ***watlist.yyyymmdd.hhmmss***. The first page of this file identifies the options used during the batch processing and the file names processed. The subsequent pages present each of the samples processed, sorted by project number.

❖ Each result row printed in the *watlist* is preceded by a one-letter transaction code.

Transaction code	Explanation
N	New stored result from the batch
U	Updated result from the batch
P	Previously stored result prior to the batch
D	Deleted result stored prior to the batch
X	Present in the batch, but ignored due to errors
C	Calculated, not stored
'blank'	Previously stored and unchanged by the batch

❖ The *watlist* also contain a cation/anion balance and messages from validation checks. The *watlist* should be reviewed for chemical accuracy and preserved for the required length of time per Federal Records Disposition Schedule as part of the official record for the sample, as it is considered original data.

❖ Data for samples that are not successfully processed with the batch program are output to files for clean up (***rejected.sample.yyyymmdd.hhmmss*** and ***rejected.result.yyyymmdd.hhmmss***).

❖ Samples that are not successfully processed have one or more of the following problems:
(a) invalid formats (columns have been shifted, etc),
(b) invalid site IDs, dates, times, or medium codes,
(c) results for samples that do not already exist in the water-quality file (except for menu options 2 and 4),

(d) samples that contain results that are overwrite-protected with a DQI value (except menu options 3 and 4), and
(e) an incorrect transaction type is selected from menu option 4.

- There is a batch-file editor available through the batch menu, option 6 – *Edit tab-delimited batch files*, for fixing errors in files that are in the tab-delimited format. A text editor can also be used to edit the tab-delimited files, but the user should be extremely careful not to delete or add tabs used to separate the columns of data.
- To help verify the format of tab-delimited files, the program ***qwcat*** can be used. For more information about this program refer to *Section 3.9.*
- After the necessary steps are taken to correct any problems, the corrected samples can be entered by renaming the files to the appropriate batch filename (***qwsample*** and ***qwresult***) and initiating one of the batch input programs (options 1, or 2). If option 4 is selected, the files do not need to be renamed.
- If data are rejected during the batch loading because of DQI protection but you have reviewed the new data and accepted it, you can reload the data from the batch file and override the DQI protection using option 3 – *Reload batch-file data, overriding DQI*, assuming you are certain that you should overwrite the previously reviewed results.

5.10 Tip Sheet: How can I use SQL to retrieve data from the database?

- The Structured Query Language (SQL) provides a method for retrieving data from a relational database, such as NWIS.
- There are several different ways to query a database using SQL. This tip sheet focuses on the UNIX "tsql" command. Other mechanisms include packages such as MS-Access and ESRI-ArcInfo. Using "sqlplus" is another example. Each mechanism employs a different user interface and may have a somewhat different syntax.
- A valid "tsql" command consists of several phrases.
  tsql *database_name [options] "SQL_statment"*

tsql	Every tsql statement begins with this phrase.
database_name	Usually the characters "nwis" followed by a two-character state suffix. The name of the NWIS database on the local computer can be displayed with the UNIX command cat /usr/opt/nwis/.nwisdb.
[options]	Optional arguments to control the behavior of "tsql." The most commonly used option is "-rdb" to produce a RDB output. Use "man tsql" for other options.
"SQL_statment"	An SQL query enclosed in double-quotation marks.

- The output of a "tsql" query is often redirected to a file, or piped to another command for subsequent processing, using the UNIX-shell operators ">" or "|".
- Composition of the SQL statement consists of three main specifications:
  1. A list of the columns to output,
  2. The name of the database table(s) containing those columns, and
  3. An optional restriction clause that limits which rows of data are retrieved.
- The syntax for stating these specifications looks like:

  "**select** *column-list* **from** *table-name(s)* **where** *restriction-clause"*

- The column and the database table names can be determined from inspection of the database design documents.
- Here is an example query that retrieves a list of record numbers and parameter codes from database 01 where the 'V' remark code has been stored:

  tsql nwishq "select record_no, parm_cd from QW_RESULT_01 where remark_cd = 'V'"

  Note the two-column names are separated with a comma, the literal V-remark code is within single-quotation marks, and the entire SQL statement is surrounded by double-quotation marks. To save the results of this query into a file named "my_v_samples.txt", append the following to the command: ">my_v_samples.txt".

- This query employs the SQL keyword "distinct" to limit the output to unique record numbers where any results have a DQI code of 'A'. Thus, duplicated record numbers are omitted for those samples where more than one result satisfies the query.

  "**select distinct record_no from QW_RESULT_01 where dqi_cd = 'A'"**

- More than one table can be queried in the same SQL statement. When querying more than one table, each column name is annotated with a shorthand reference to the corresponding table, and you must identify (in the where clause) how the tables are linked or joined. Identically named columns in the two tables usually are linked. See below how the column record_no is joined from each table. For example:

  "select a.agency_cd, a.site_no, a.hyd_cond_cd, b.remark_cd, b.result_va, parm_cd from QW_SAMPLE_01 a, QW_RESULT_01 b where a.hyd_cond_cd in ('5','6','7','8') and a.record_no = b.record_no and b.parm_cd = '00061'"

  The two tables have been assigned the arbitrary shorthand names of "a" and "b" in the "from" clause, and this shorthand has been used as column-name prefixes in the column-name list, as well as the "where" clause. The shorthand prefix "a" identifies columns in the table QW_SAMPLE_01 and the shorthand prefix "b" identifies columns in the table QW_RESULT_01.

  The linkage between the two tables is specified by the phrase: **"and a.record_no = b.record_no".** An omitted or incorrect linkage phrase typically causes voluminously useless results and very slow query response time.

  This example investigates stations and instantaneous discharges (parameter code 00061) where the hydrologic condition is "falling stage", "stable high stage", "peak stage", or "rising stage".

- The "where" clause may contain column names, comparison operators, literals, and logical operators. Previous examples have demonstrated some of the syntax. Literal text variables are quoted; literal numeric variables are not quoted. The table below presents some additional operators that can be used in a "where" clause.

Operator	Type of operator	Explanation
=	comparison	equal to
!=	comparison	not equal to
>=	comparison	greater than or equal to (comparison differs for numeric or text variables)
<=	comparison	less than or equal to
>	comparison	greater than
<	comparison	less than
in	comparison	Value in list. The list is comma-delimited and contained within parenthesis.

Operator	Type of operator	Explanation
is null	comparison	Value is not stored. (No predicate is used.)
like	text comparison	Matches part of text. The metacharacter '%' matches any number of characters, and the metacharacter '_' matches any single character.
not	logical	negation
and	logical	both are true
or	logical	either are true

Here is an example query using some of the above operators.

"select a.record_no, b.parm_cd from QW_SAMPLE_01 a, QW_RESULT_01 b, QW_SAMPLE_CM_01 c where b.null_val_qual_cd is not null and a.record_no = b.record_no and c.sample_cm_tx like '%meter%' and b.record-_no = c.record_no"

This example retrieves the record number and parameter code for each result with a non-null null-value qualifier code and either field or laboratory sample comment contains the text "meter".

- Date and time variables (column names ending in "_dt") in the NWIS water-quality subsystem are stored within the database in Universal Coordinated Time (UTC). When retrieved using tsql, the time zone will be UTC. The time-datum information coded with the sample record is not used during this conversion. Therefore, to obtain date-time information as entered into the database, use SQL to select the record numbers, and then retrieve the date-time information using the database software rather than using SQL.

- Blank strings versus NULL/empty strings: Null is not equal to a blank string in Oracle. If searching with *column*='', Oracle will treat this as a null entry. If you have a clause that contains search criteria looking for blank strings, it will need to be written as *column*=' '.

- The information contained in this Tip Sheet is not a comprehensive SQL reference. Other references should be consulted for additional information.

5.11 Tip Sheet: How should sample type be coded for environmental and quality-control samples?

Sample Type is a required field to be stored with all samples. This tip sheet includes the recommended coding of sample type for environmental and quality-control (QC) samples. In addition, guidance is provided for storing selected parameter codes that are associated with certain sample types, which further describe QC samples. For complete descriptions of sample types, see Appendix A, table 4; however, some of these codes are now considered obsolete.

- The recommended sample type codes to use for your samples are shown in the following table. Although other codes exist in the QWDATA software and historical data, the codes shown in the table are the preferred sample types to use for storing new samples.

Sample type codes

Code	Description
9	Regular (discrete), environmental sample.
H	Composite (through time), environmental sample.
7	Replicate, environmental sample and the associated replicate quality-control sample(s).
2	Blank, quality-control sample.
1	Spike, quality-control sample.
3	Reference, quality-control sample.
B	Other, quality-control sample.

- For environmental samples that do not have an associated replicate QC sample, the coding is limited to two codes—9 (regular) and H (composite). For routine discrete samples, set sample type to 9 (regular). For samples that are composited through time and have both a begin date/time and an end date/time, set sample type to H (composite).

- For environmental samples that have associated replicate QC sample(s), code the environmental sample and QC sample(s) with sample type 7 (replicate). Storing sample type as 7 will help the user find replicate samples in both the environmental and QC database during retrieval.

- For the replicate sample type (7), fixed-value parameter 99105 (type of replicate) should be stored with the QC sample only to further describe that sample. For example, set 99105=10 if the replicate sample was collected with a concurrent sample collection procedure. (See Appendix B for all possible codes for any fixed-value parameter.)

- For blank sample types (sample type=2), the following fixed-value parameters should also be stored.
  99100 Type of blank solution (for example, 40=organic-free water)
  99101 Source of blank solution (for example, 10=NWQL)
  99102 Type of blank sample (for example, 100=field blank)

  In addition to storing fixed values, ancillary information about primary blank water lot numbers can be numerically stored with the following parameter codes.
  99200 Lot number, first, inorganic-grade water
  99202 Lot number, first, organic-grade water
  99204 Lot number, first, VOC-free water
  Parameter codes 99201, 99203, and 99205 also can be used to store lot numbers.

- For spike sample types (sample type=1), the following fixed-value parameters should also be stored.
  99106 Type of spike (for example, 10=field spike)
  99107 Spike source (for example, 10=NWQL)

  In addition to storing fixed values, other spike sample ancillary information can be numerically stored with the following parameter codes.
  99108 Spike volume, milliliters (or use 91132 Spike volume, microliters)
  99104 Reference material or spike lot number
  Parameter codes 99150, 99151, 99152, 99153, and 99154 also can be used to store lot numbers.

  Spike samples also need a result storing the sample volume appropriate for the spiked analytes of interest. The NWQL will normally provide a schedule-specific parameter, such as 99856; otherwise use 32002: Sample volume, milliliters.

- For reference sample types (sample type=3), the following fixed-value parameter should also be stored.
  99103 Source of reference material (for example, 100=chemical supplier)

  In addition to storing the fixed value, ancillary information for the reference material primary lot number can be numerically stored with the following parameter code.

  99104 Reference material or spike lot number
  Parameter codes 99150, 99151, 99152, 99153, and 99154 also can be used to store lot numbers.

- Quality-control samples are often used to isolate the source of a previously identified problem or to determine if a change in data collection and processing has an effect on the results. These samples are "topical" QC samples and should be coded with sample type B and further described with explanatory sample comments.
  In addition, the following fixed-value parameter can be stored.
  99112 Purpose of topical quality-control data (for example, 100=topical QC for variability due to field equipment)
- Users can develop field forms (5.3 Tip Sheet) to use with QC samples to help insure consistent coding of these types of samples.

5.12 Tip Sheet: Why is there an "M" in my data?

The "M" is one of three possible remark codes that are associated with nonquantitative measurement results.

Remark code	Explanation	Detection status
M	Presence of material verified but not quantified	Detected.
N	Presumptive evidence of presence of material	Detected.
U	Material specifically analyzed for but not detected	Not detected.

An "M" remark code may be printed in output for various reasons, as explained below.

Some procedures are inherently nonquantitative, such as the "sniff test" for hydrogen sulfide. Results for nonquantitative methods are stored in the database using the above remark codes without corresponding values. Sometimes, however, a quantitative method produces a numeric result below the range of reliable precision; this causes the value to round to zero. A zero is misleading because it implies that the material is known to be absent (not detected). The NWIS software replaces most values that round to zero with an "M" remark code. (Some parameters such as temperature are allowed to round to zero.)

You can determine whether the data are rounding to zero and being replaced with "M" by retrieving the unrounded data (see *Tip sheet* 5.19) and parameter code, remark, value, and method. If no quantitative results are presented when data are retrieved unrounded, then the "M" remark was stored.

Alternatively, results that are rounded to zero and replaced with an "M" remark code indicate that the quantified result is outside the reliable range and has no reportable digits. The rounding algorithm typically depends on the precision specifications that are associated with each analytical method; therefore, verify that the analytical method is stored and that the method code is correct. You can look up method and precision information by using the option described in *Section 3.6.8 – Display the Parameter Method Table.*

The precision specifications associated with a blank (*unknown*) method typically are crude and represent the reproduction of less modern methods. Storage of an appropriate method code may allow the result to round to a non-zero value. Similarly, storage of an inappropriate method code may also cause the rounding to be incorrect. In some cases, the method code stored with the result may be correct, but the rounding specification stored in NWIS may be incorrect. In these instances, you should work with the laboratory to determine if the rounding specification needs to be updated. If so, contact the Office of Water Quality to request that the method precision data be altered.

Some laboratories, including the National Water Quality Laboratory (NWQL), present raw results in their transmission to customers. Groups of raw results can be useful in statistical summaries and graphs, especially when analyzing quality-control samples; however, individual raw results should never be presented in USGS reports. Note that the NWQL's sample-status Web page presents raw laboratory results.

5.13 Tip Sheet: How do I make large-scale updates to data?

There are several different ways of making large-scale updates to the database, including batch processing, UNIX scripts, and Standard Query Language (SQL). Recommendations on which technique to use and when to use that technique are described in this tip sheet.

Batch Processing:

Batch processing can be used to change sample-level information or to add, change, or delete results for existing sample records.

- The NWIS software accepts "tab-delimited" formatted files. These files are typically called qwsample and qwresult. Description of the batch file format is in *Appendix F.* Users are referred to *Tip Sheet 5.9* or *Section 3.8* for more details on batch processing.
- To create a batch file which can be used for making updates, option 7 – *Produce tab-delimited batch files* can be used from the Batch Processing menu.
- Large-scale updates should be made using option 4 from the batch processing menu so that any attribute in the tab-delimited formatted can be updated. See below for details.
- A remark code of 'X' will delete a result and all of the associated attributes.
- A geologic-unit code of "DELETE" will delete a sample and all associated result records.
- The batch process to use for updating laboratory data that are already in the database is option 1 – *Enter batch-file data for logged-in samples (qwcardsin)*.
- The batch process to use for entering new samples or updating laboratory data is option 2 – *Enter batch-file data for all samples (qwenter)*.
- The batch process to use for updating laboratory data that have DQI protection is option 3 – *Reload QW data from batch file, overriding DQI (qwcardsinxdqi)*.
- Option 4 – *Enter batch-file data with user-specified behavior (user-specified modes)* allows the user to customize the batch processes by selecting:
    1. to enter a specific batch file name,
    2. one of four types of transactions (only updates to samples, only additions of new samples, any transaction, or verification only—no transactions stored),
    3. to over-ride update protection of reviewed results (DQI protection),
    4. to update only lab, or lab and field data,
    5. to print an ionic balance,
    6. to enable user-specified alert limits.
- A record of the actions completed during any batch process is written to a file named ***watlist.yymmdd.hhmmss*** for options 1, 2, and option 4.

- The parameter codes listed in the *watlist* are preceded by a one-letter code to indicate the type of transaction.
  - N New stored result from the batch
  - U Updated result from the batch
  - P Previously stored result prior to the batch
  - D Deleted result stored prior to the batch
  - X Present in the batch, but ignored due to errors
  - C Calculated, not stored
  - 'blank' Previously stored and unchanged by the batch

UNIX Scripts:

UNIX scripts generally are used to capture queries that are frequently repeated.

- UNIX scripts require the responses to database prompts to be exactly what was planned for in the UNIX script. If an unexpected database prompt is encountered while a UNIX script is processing, the script will provide responses to database prompts that are incorrect and data could potentially be corrupted.
- UNIX scripts should only be used by experienced UNIX users and in situations where there is no potential for planned database prompts to deviate from actual database prompts.

SQL:

SQL may be used for data retrievals by trained database personnel, but it is not recommended for any data updates. Reasons for this include: (1) date-time information are internally stored in UTC; (2) certain attributes have domain-list enforcement; (3) relational tables are linked with identifiers that could be corrupted and referential integrity broken; and (4) logical rules among inter-related fields (such as rpt_lev_va & rpt_lev_tp). See *Tip Sheet 5.10.*

- If a situation arises where you need to change a large data set and batch processing or UNIX scripts will not work, please contact the NWIS office for assistance in evaluating whether SQL can be used to change data for your particular data scenario. If SQL is determined to be the only viable approach, NWIS staff would assist in developing an SQL script to update the data.

5.14 Tip Sheet: How do I use null values?

There are two situations where a null value is appropriate. The first situation is a null value that is the result of non-quantitative test indicating only the presence or absence of a constituent. The second situation is when an attempted measurement is not successfully completed due to logistical problems or unintentional errors, and a null value is stored in the data documenting the measurement attempt and the reason that no numerical result was stored. In general, most null values will be from laboratory analyses; however, null values can also be entered for field values.

There are two ways that a null value can be entered into QWDATA

- **Interactive**
  - Details about how to enter data interactively in QWDATA is available in *Section 3.2.*
  - A null value is entered in the database interactively by entering a '#' character in the value field in the field form, the laboratory-data entry form, or while editing existing data.
  - After the '#' is entered, the user is required to qualify the null value with either a "null value remark" or a "null value qualifier", as described by the screen prompts:

You have specified a NULL result value. You must qualify null values with a null value remark code or a null value qualifier code.

Null Value Remarks:	**Null Value Qualifiers:**
M:Presence verified but not quantified	**a**:Planned measurement was not made
N:Presumptive evidence of presence.	**b**:Sample broken/spilled in shipment
U:Analyzed for but not detected.	**c**:Sample lost in lab
	e:Required equipment not functional/avail
	f:Sample discarded: improper filter
	i:Required sample type not received
	l:Analysis discarded: lab QC failure
	m:Results sent by separate memo
	n: Non-performing compound, reasons unknown
	o:Insufficient amount of water
	p:Sample discarded: improper preservation
	q:Sample discarded: holding time exceeded
	r:Sample ruined in preparation
	u:Unable to determine-matrix interference
	w:Sample discarded: warm when received
	x:Result failed quality assurance review

Enter a remark code (R) or a qualifier code (Q)?

- After entering ‘R’ or ‘Q’, choose the remark or qualifier for the null result.

➢ **Batch**

- A null value can be entered in using batch files if the value is blank and a valid null-qualifier or remark code is present for the result record in the tab-delimited “qwresult” file Batch processing is discussed in *Section 3.8.*

5.15 Tip Sheet: How do I retrieve records for use in other QWDATA programs?

Programs used to view data in the QW database (data review, data output, and graphics programs) either require or will accept a file of record numbers. Additional information about record numbers can be found in *Section 2.1.5*. This tip sheet describes how to create a file of record numbers from a single database. Site or record retrieval from multiple databases can be done using similar steps; the user is prompted for the information for each database specified. *Section 3.3.2* provides details about retrieving data from multiple databases.

- Selecting sites or samples from a single database may be accomplished from two options in the QWDATA main menu: option 3 – *Data Review* or option 4 – *Data Output*. From either of those menus, choose option 1 – *Select Sites or Samples*.

- Three options are available for retrieving water-quality records from specific sites and one option is for retrieving water-quality information for any sites. See *Section 3.3.1.1* for detailed information.

```
qwsiterec -- locate record numbers for use by QW application programs
QW database(s): 01

You may locate records for specific sites.

If you wish to locate records for specific sites the options are:
  1 -- You have a file containing site numbers
  2 -- You will enter site numbers at terminal
  3 -- You wish to locate sites based upon selection criteria

If you don't care which sites the option is:
  4 -- Locate QW records without regard to site

Please enter option (1-4,Q to quit):
```

- If sites are retrieved, the option is given to sort the sites after retrieval. The retrieved sites may be sorted on a variety of fields that will be displayed by the program.

- If the retrieved sites will be used in the future, save them to a file.

- Regardless of the option chosen, you will be given the opportunity to refine the water-quality records retrieved using the following menu:

```
Locate QW records

Enter an X to choose an item for limiting retrieval,
Enter a # to remove an item.

(1) DATE: _  (2)  MEDIUM CODE: _  (3) ANALYSIS-LEVEL CODES: _
(4) PROJECT ID: _  (5) GEOLOGIC UNIT: _  (6) PARAMETER VALUES AND CODES: _
(7) PARAMETER GROUPS: _ (8) DATA QUALITY INDICATOR CODES: _
```

- See *Section 3.3.1.2* for detailed information about the menu shown above.
- Select "ANALYSIS-LEVEL CODES" to retrieve proprietary and (or) internal-use data. See *Section 2.14* for definitions.
- You will be given another opportunity to save sites that contain the requested water-quality information to a file. This group of sites may be a subset of the sites retrieved using option 1 or 2 in the first menu shown above.
- The records retrieved can be sorted on a variety of fields (See *Section 3.3.1.2* for more detailed information):

```
qwsiterec -- Total number QW records located: 12227

Do you wish to sort the located QW records (Y/N)? Y

You may sort on any combination of the following fields:

   A -- Agency code            F -- Geologic unit code
   B -- Station number         G -- County code
   C -- Dates and times        H -- Station name
   D -- Medium code            I -- Station type
   E -- Project ID

The first field will be the primary sort
the next will be the secondary sort 1, ...
Please enter the sort codes on one line with no embedded spaces

Enter sort code(s):
```

- Provide a file name for the file to hold the water-quality records.
- The resulting file of record numbers can be used in QWDATA programs that accept files of record numbers. Use clear, descriptive filenames if these record numbers will be used again.

5.16 Tip Sheet: How do I enter reports into the problem-reporting system?

If you run across a problem while using NWIS or have questions about NWIS user documentation, reference lists or have ideas about enhancements, the problem-reporting system—GNATS—can be used to notify NWIS personnel. To access the GNATS system (internal USGS users only): *http://nwis.usgs.gov/cgi-bin/gnats_home.pl*.

The next screen should allow you to login using your Unix ID.

The main menu for GNATS will include options to create, edit, view, query, log out, and get help:

FOR NWIS USE ONLY

default User: yourID Access: edit NWIS Gnatsweb

MAIN PAGE | CREATE | QUERY | ADV. QUERY | LOG OUT | HELP

Main Page

Create Problem Report:	create
Edit Problem Report:	edit #
View Problem Report:	view #
Query Problem Reports:	query advanced query
Log Out / Change Database:	logout
Get Help:	help

Create a New Problem Report

- Before you enter a new problem report for the problem you have identified, please do the following:
  - Attempt to recreate the problem two more times. By producing the behavior three times, you insure it is a 'bug' that can be recreated by following specific steps.

- Check the NWIS "Known Problems" page to see if a workaround to your problem is available (internal USGS users only): http://nwis.usgs.gov/IT/NWIS5_0/known_problems_nwis.html .

❖ To create a new problem report, click the create button from the main page.

❖ The Create Problem Report Screen contains several mandatory fields which contain an asterisk and are marked in red:

Create Problem Report

submit **or** reset

(Mandatory fields marked (*))

PR Creator's email Id: kalfsbek

Notify-List
Addresses to notify of significant PR changes

***Category**
What area does this PR fall into? The SIMS group includes ADRP.
The SF group is Sitefile

Category Type: ● General ● ADAPS ● QW ● GW ● WU ● NWISWeb ● NWIS-RT ● LRGS ● SIMS ● NWISView ● NFM ● PCFF ● HANDHELDS ● SF ● SedLOGIN ● SLEDS ● Any

Gen-dbChange - GW-Change GW/QW DB #, QW-Change DB Number
Gen-db_admin - Data-Base Administration Problem Report
Gen-ddl - Andy's DDL
Gen-discur - DISCUR Problem Report
Gen-gnats - Gnats Problem Report
Gen-installation - NWIS Installation PR
Gen-library - NWIS library PR
Gen-networks - Project/Networks windows program
Gen-nwdb - NWDB Problem Report
Gen-nwis - NWIS Default Problem Report
Gen-nwis_coo - NWIS COO Issues
Gen-ownereditor - Deletes Orphaned or Merges Owner Records
Gen-rdb2excel - Program to reformat rdb files to MSExcel format
Gen-reference_list - General Reference list issues
Gen-security - NWIS Security Issues
Gen-similar - Similar Code for Possible Consolidation
Gen-stn_change - Station Change-Inventory, Change, or Delete
Gen-test - Unit & Other Testing
Gen-tig - NWIS Technical Intergration Group Issue
Gen-tkg2 - TkG2 GRAPHICS

***Synopsis**
One-line summary of the PR

Severity
How severe is the PR? non-critical

Class
The type of bug
software-bug

***Release**
Release number or tag

NWIS 4.4
NWIS 4.5
NWIS 4.6
NWIS 4.7
NWIS 4.8
NWIS 4.9
NWIS 4.10
NWIS 4.11
NWIS 5.0 Oracle Port
NWIS 5.1 Post Oracle Port
NWISWeb July
NWISWeb Nov
NWISWeb Mar
DECODES 7.3
DECODES 7.3p1
DECODES 7.3p2
AWUDS 1.3
AWUDS 1.4
AWUDS 1.4.2
AWUDS 1.5
AWUDS 2.0
Unknown

***Environment**
Copy the result of 'uname -a', the URL of the web system you found the problem on or for NWIS 'nwisenv' command here

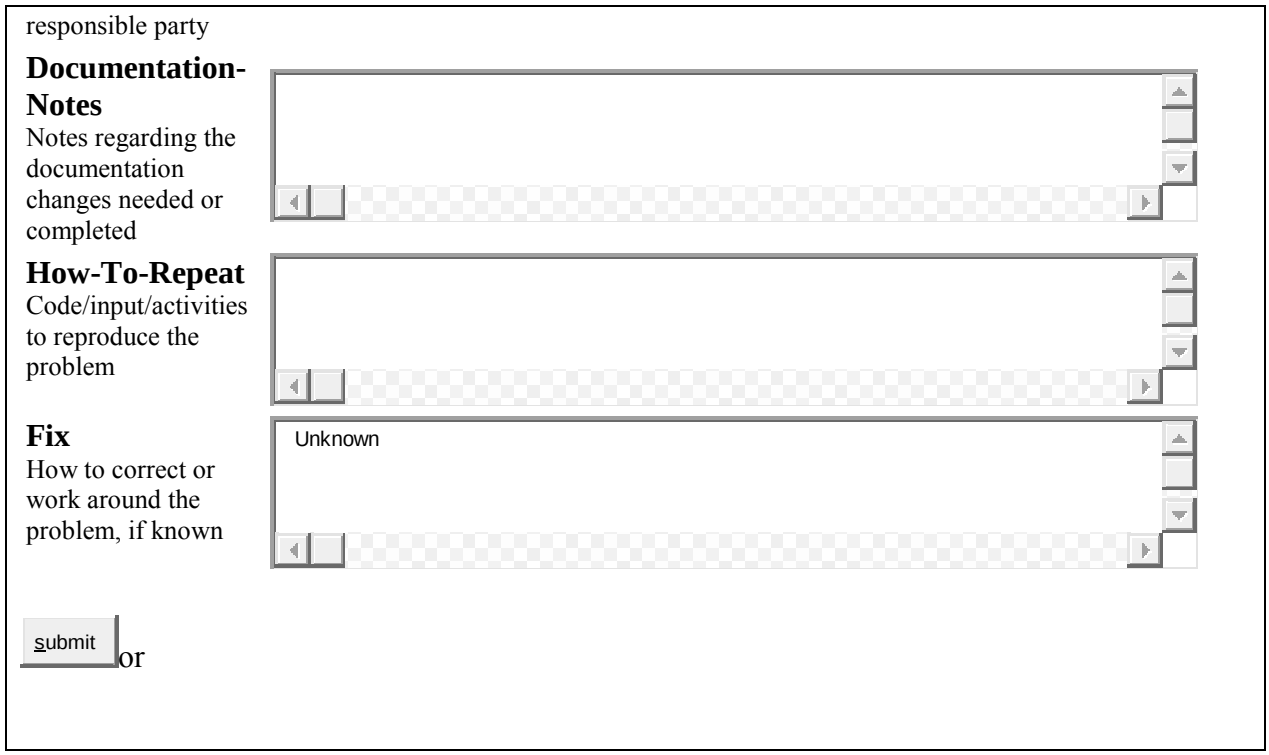
***Description**
Precise description of the problem

File Attachments:
Add a file attachment:

Project-Name
A short Project Name for tracking

***Documentation-Status**
Documentation status associated with PR. Add email id of party updating docs to notify list above
undetermined

Documentation-Responsible-Party
UNIX id of documentation



Notice that the "PR Creator's email ID" field will be automatically populated with your user ID.

- If there are others that might want to know about the progress of a solution to your problem, put their email IDs in the "Notify-List" box, separated by spaces. When information is added to the problem report, the PR Creator and those on the Notify-List will receive an email containing that information so that you know work is being completed on your problem.
- Choose the radio button for the "Category Type" that best represents where your problem occurred. The radio button chosen will limit the list of options in the category window. Click on the specific category from the window. If you know the name of the category, type it in the box, prefix first.
- The "Synopsis" should include enough of a description that someone would be able to determine the situation that caused the problem or created the question or enhancement. Consider using 10 words or less.
- Indicate the "Severity" by selecting from the drop-down list. Consider the extent to which your problem is hampering your work. A critical problem is one in which the programs stop working completely or data are incorrectly stored or displayed. A serious problem is one in which your workflow is seriously hampered. A non-critical problem is a question, an enhancement, or a problem that is annoying, but doesn't significantly affect your workflow.

- Indicate the "Class" of the problem by selecting from the drop-down list:
  - Software-bug – Problem requiring a correction to software
  - Software-enhancement – Suggested change in functionality
  - Support – Support problem or question
  - Documentation – Correction or improvement in documentation
  - Reference-list – Request for a change to a reference list
  - Duplicate – Duplicate of another existing PR
  - Mistaken – Accidental PR submission

  When you enter a new report you will likely use one of the first five choices.
- To determine the entries for release and environment, type nwisenv at your UNIX prompt. The release information is near the top of the resultant list in the form and will appear similar to: **nwis-5.0.1-4**. Choose the appropriate release from the "Release" pull down menu. Copy everything after **User Environment**: into the "Environment" text box.
- In the "Description" text box, enter a detailed description of your problem. This is your space to provide details to help NWIS personnel understand your problem. Please include results that illustrate the problem or how the problem is hampering your work. NWIS personnel will use this information to determine the severity of the problem as well as possible short-term and long-term solutions.
- If you have attachments that help illustrate the problem or provide information necessary to reproduce and troubleshoot the problem, provide the pathname in the "File Attachments" box. As an alternative, use the browse button to find the attachment on your machine, select it, and click open to place the pathname in the "File Attachments" box. ***Note: The GNATS web interface will only allow the addition of one attachment at a time. If you have multiple attachments to associate with a particular problem report, you will have to edit the PR each time you want to add another attachment.***
- The "Project Name" text box is generally reserved for NWIS and User Group's use. This field allows PR's to be associated together to provide a quick way of determining problems associated with a specific project release. There are projects that may cross multiple Categories, and usage of a consistent text-string will allow for grouping and retrieval of problem reports.
- In the "How to Repeat" text box, enter a step-by-step description you used to cause the problem to occur. You should include a list of the menu options used and a description of the files you used, if applicable. This set of instructions is critical for NWIS personnel to duplicate the problem on a test system.
- The "Fix" box will be completed by NWIS personnel or others when a fix or workaround information is available to resolve the issue.
- As a last step, click on the Submit button at the top or bottom of the page. You should get a message back that you will receive an email containing the problem report number and some information that you entered. You should also be returned to your previous page quickly, but if needed, click on your web browser "Back" button.

Edit an Existing Problem Report

- To edit an existing problem report, enter the number of the PR you want to access and select the "edit" button from the main page.
- All of the same fields displayed in the "Create a new problem report" screen are displayed in the "Edit" screen as well as some additional fields:
    - **Priority:** This field will be used by NWIS personnel and User Group members to determine the importance of this PR relative to other PRs and tasks.
    - **Responsible:** This is the person responsible for completing work related to the initial problem.
    - **Reason Changed:** The responsible party or state of a PR will change as the problem is analyzed. There are two text boxes – one for why changes were made to the responsible party and one for why "changes to state" were made.
    - **Fix-Risk**: The choices in this field are available to NWIS personnel to identify the related risk to fix the initial problem.
    - **Fix-Difficulty:** The choices in this field are available to NWIS personnel to identify the difficulty of the fix for the initial problem.
    - **Release-Note:** The text in this box will be used to populate the NWIS release notes with information about this problem.
    - **Audit-Trail:** A list of the changes made to the report is found here.
    - **Unformatted:** This is an unformatted version of what appears in the Audit-Trail text box.
- When you receive notification that your PR has been changed, you might be asked to test the fix provided by NWIS personnel. The edit screen will allow you to make updates to the PR:
    - If the problem has been fixed, change the "State" from feedback to closed and enter information about how it was tested and/or why it was closed in the "Reason Changed" box.
    - If the problem has not been fixed, change the "State" to open and provide information about what is still wrong in the "Reason Changed" box.
    - If the state does not need to be changed, but you have additional information to add to the report, append your information to the end of the text in the "Description" text box or attach a file using the "File Attachments" box.
    - After you have made your edits, click on the submit button at the top or bottom of the page. If there were any errors on your edit page you will be notified. Click the "Back" button on your browser, fix the errors and submit again.
    - When all the necessary information has been provided, you should get a message that your edit was successful and you will be returned to the previous page. You should be returned to your previous page quickly, but if needed, click the "Back" button on your web browser.

View an Existing Problem Report

- To view an existing problem report, enter the number for the PR you want to access and select the "view" button from the main page.
- All fields related to that PR will appear on the screen for you to view. If you decide to edit the same PR, click on the "edit" button at the top or bottom of the page.

Query Existing Problem Reports

- To query the existing problem reports, click on the "query" or "advanced query" buttons from the main page.
- The "query" button will take you to a page where you can build a query based on information stored in the GNATS database.
- The output from this query can be customized by selecting the columns of interest from the "Column Display" list and by sorting the PRs in the list on any field chosen from the "Sort by" list.
- The "advanced query" button will take you to a page where you can build a query based on text that occurs in the PR or by the date-of-arrival, modification or deletion of a PR.
- Common regular expressions for use with PR queries:
    - To limit the PRs to a particular category type (ADAPS, QW, GW, WU, NWIS-RT, NWISWeb, etc.), in query or advanced query, use the following in the category box and substitute the abbreviation for the category type you are interested in, for example:

      ADAPS-.*

    - Category type abbreviations: ADAPS, QW, GW, WU, NWISWEB, Gen, RT, LRGS, DAR, NWISView, NFM, PCFF, HANDHELDS

Exiting the GNATS System

- When you are done using the GNATS system, select the "Log Out" button from any screen. This will return you to the login screen or close your browser.

5.17 Tip Sheet: How do I make linear plots of my data?

This tip sheet describes the basic steps to make X,Y (linear) plots of data using a program available within QWDATA. If you would like to retrieve data from QWDATA and use a graphics program available outside of QWDATA, please refer to *Tip Sheet 5.7*. Links to sections in the documentation that contain details for certain topics are included. The user should refer to those sections for details that are not presented in this tip sheet.

- All graphics programs within QWDATA are available from option 5 – 'Applications' in the main QWDATA menu. Details for all the options in this menu are available in *Section 3.5* of the documentation. That option will display the following menu:

```
QW DATA PROCESSING ROUTINE   REV NWIS-5.0
YOU ARE USING WATER-QUALITY DATABASE NUMBER 01

      Applications

1 -- X,Y Plot
2 -- Boxplots
3 -- Stiff Diagrams
4 -- Piper Diagrams
5 -- Regression Plots
6 -- Summary Statistics Table
7 -- Detection Limits Table
8 -- Discharge Report for QW Samples


98 -- Exit menu

99 -- Exit system
Please enter a number from the above list or a Unix command:
```

- Option 1 from the applications menu creates an X,Y plot in three stages: ***(1)*** retrieves data from the QW database that are written to an ASCII file, ***(2)*** uses data in the ASCII file to create the plot in a separate graphics (TKG2) window, and **(3)** from the TKG2 window, the plot can be printed or saved to a file.
  - The first query is a check of your Unix DISPLAY environment variable to check that it is set correctly. If you need help with this step, please contact you local system administrator. You are given the opportunity to stop the program at this point.
  - The next query is asking for a file of record numbers to identify what samples will be included in the plot. All graphical programs require an input file of record numbers to operate. The format of this file is one record number per line in columns 1-8 and can be generated through QWDATA (*see Section 3.3.1*) or created with an editor. Examples of this input file are shown in *Appendix G*.
  - The next query asks for the name of the ASCII data output file. The program produces an output ASCII file that contains the data used in the plot; the file will be saved to the directory where you started QWDATA.

- The next query will give you the choice of the type of X,Y plot that will be produced. Three options exist for plotting the data: ***(1)*** 1-7 parameters by one parameter, ***(2)*** 1-7 parameters by sample date, and ***(3)*** Multiple stations by sample date for one parameter. All three options will handle data from multiple stations; however, only option ***(3)*** will identify the individual stations on the plot.
- Which type of plot you choose determines the next set of queries, but most queries are related to what parameters you want to include in the plot. Enter the parameter codes that you wish to include on the plot.
- After the program retrieves the data, a short set of summary information for the data retrieved is displayed to the screen for your review.
- The next prompt, List the Data?, allows you to display all the data to the screen. If you choose 'Y' then the data are displayed in a paired format. For example if option 1 was selected and parameter 00010 was chosen for the X-axis and parameters 00025, 00095, and 00915 were chosen for the Y-axis, the following data would be displayed:

```
P 00010  00025  00095  00915
 T plot title in columns 3-42 (optional)
 X Temperature, water
 Y   1 Air pressure           0 POINTS
 H    00010       00025       00010       00025       00010       00025
 Y   2 Specific cond at 25C   2 POINTS
 H    00010       00095       00010       00095       00010       00095
 * 0.1500E+01  0.1600E+03  0.1400E+02  0.1150E+03
 Y   3 Calcium, wf            3 POINTS
 H    00010       00915       00010       00915       00010       00915
 * 0.1500E+01  0.1900E+02  0.1400E+02  0.1500E+02  0.1500E+02  0.1300E+02
 END OF DATA
```

- The next queries allow you to customize the plot title and axes labels.
- Finally, you have the option of connecting the plot points with lines.
- A separate TKG2 window should appear on your screen. From that window you can select the output format by selecting the 'TKG2 Displayer' button to see your output options.

  The output options are printing the plot, saving the plot as a TKG2 control file, or export the plot into a Framemaker Interchange Format (mif), portable document format (pdf), portable network graphics (png), or postscript (ps) file.

  Any TKG2 or G2 files that are made can be manipulated outside of QWDATA by using TKG2. All files that are produced will be available in your working directory.
- When your output option is completed, you should use the 'Exit' option from the TKG2 Displayer window and then return to the Unix screen. Enter <CR> in that window and you will be returned to the applications menu.

5.18 Tip Sheet: How do I make boxplots of my data?

This tip sheet describes the basic steps to make boxplots of data using a program available within QWDATA. If you would like to retrieve data from QWDATA and use a graphics program available outside of QWDATA, please refer to *Tip Sheet 5.7*. Links to sections in the documentation that contain details for certain topics are included. The user should refer to those sections for details that are not presented in this tip sheet.

- All graphics programs within QWDATA are available from option 5 – 'Applications' in the main QWDATA menu. Details for all the options in this menu are available in *Section 3.5* of the documentation. That option will show the following menu:

```
                QW DATA PROCESSING ROUTINE   REV NWIS-5.0

YOU ARE USING WATER-QUALITY DATABASE NUMBER 01

      Applications

1 -- X,Y Plot
2 -- Boxplots
3 -- Stiff Diagrams
4 -- Piper Diagrams
5 -- Regression Plots
6 -- Summary Statistics Table
7 -- Detection Limits Table
8 -- Discharge Report for QW Samples

98 -- Exit menu

99 -- Exit system

Please enter a number from the above list or a Unix command:
```

- Option 2 from the applications menu creates a boxplot in two stages: ***(1)*** retrieves data from the QW database that are written to an ASCII file and ***(2)*** uses data in the ASCII file to create the plot in a separate graphics (S-Plus) window and write the output to a file.
  - You should check that your UNIX DISPLAY environment variable is set correctly. If you need help with this step, please contact the local system administrator.
  - The first query is asking for the name of a file of record numbers to identify what samples will be included in the plot. All graphical programs require an input file of record numbers to operate. The format of this file is one record number per line in columns 1-8 and can be generated through QWDATA (see *Section 3.3.1*) or created with an editor. Examples of this input file are shown in *Appendix G*.

- The next query asks for the name of the ASCII data output file. The ASCII files produced from S-Plus programs will be saved to the directory where you started QWDATA . Any other files that are produced while using this program (for example, PDF or Postscript) will be saved in a directory named NWIS_Swork that is created in your home directory.
- The next query will allow you to select the type of boxplot for output from the following three options:

```
-------------------------------------------------------------------------------
Data-retrieval options                                              Code
-------------------------------------------------------------------------------
One station with one or more parameters                              1
Multiple stations with one parameter                                 2
Multiple stations treated as one                                     3
-------------------------------------------------------------------------------
  Enter code for option, <cr> = 3                    >
```

- Enter the desired parameter code(s) when prompted.
- After the data are retrieved, a table of summary information appears on the screen for your review:

```
RETRIEVING DATA ... RETRIEVAL COMPLETED

RETRIEVAL OPTION 2: PARAMETER CODE 00915 FOR  1 STATIONS
-------------------------------------------
GROUPS RETRIEVED  1    MIN VALUE   13.000
GROUPS WITH DATA  1    MAX VALUE   19.000
-------------------------------------------
SUMMARY OF VALUES BY GROUP:
-------------------------------------------------------------------------
GROUP       NUM OF          25TH           75TH
IDENTIFIER   VALUES   MINIMUM   PCTILE   MEDIAN   PCTILE
MAXIMUM
-------------------------------------------------------------------------
05016000       3*   13.000   14.000   15.000   17.000   19.000
-------------------------------------------------------------------------
 LIST THE DATA?  Ans: y / n, <cr> = n >
```

- If any censored values are found in the retrieved data, the next query will ask the user if these values should be estimated and what method should be used. More information about the two different methods is available in: *Statistical Methods in Water Resources* by D.R. Helsel and R.M. Hirsch.
- The next prompt, 'List the Data?', allows you to display all the data to the screen.
- The next prompt, 'Plot the Data?', asks if you want to plot the retrieved data. If you answer 'y' then you will choose between a schematic and a truncated boxplot for output. Details about each of these plots are available in *Section 3.5.2* of the user documentation.
- The next set of queries will allow you to customize the plot title and the axes labels.
- The next query will allow you to choose an S-Plus output option.

The output options are printing the plot to a separate x-window or a Tektronix window; or save the plot as a PDF, HP Laserjet, Encapsulated Postscript (EPS), or a Postscript file. For specific details on these output options, please refer to *Section 3.5*. If option (1) is selected, a separate S-Plus window appears that includes the plot. To exit cleanly from this window, the user should include all responses in the UNIX window, not in the S-Plus window.

- The next query will allow you to use a different output option for the same plot.
- If you select 'n' and hit <CR> you will be returned to the main applications menu.

5.19 Tip Sheet: How can I round my results in QWDATA output?

❖ Rounding of values in table or flatfile output from QWDATA is controlled from the tabling options screen for the output format. The tabling options screen for publication format tables is shown below as an example:

```
( 1) Limit Results by DQI Code:     X_Public accessible [ASR] __User Specified
( 2) Parameter Order:               X_Publication Order __As Supplied
( 3) Rounding of Result Values:     __None  __User  X_Default
( 4) Censoring of Zero Values:      X_None  __User Specified
( 5) Recensoring of Values:         X_None  __User Specified
( 6) Qualifiers in Output:          __Yes  X_No
( 7) Footnotes:                     __None  X_Remarks __Qualifiers
( 8) Create Parnames File:          __Yes  X_No
( 9) Time Datum:                    X_Watch Time  __User Specified
(10) Restrict parameters:           __None  X_Public
(11) Display text for fixed values: __Yes  X_No
(12) Calculated-value precedence:   X_Stored, calculated __User Specified
```

❖ There are three different ways result values can be rounded upon output from QWDATA. Most of the output options use one rounding option for the entire table:

Default **User** **None**

Note: The Office of Water Quality generally recommends that default rounding is used for publication of water-quality results from QWDATA, with specific other instructions for Radiological results (See Memos 2002.11 and 2008.06 at *http://water.usgs.gov/admin/memo/QW/*).

❖ **Default rounding** allows the software to employ the use of either the **lab standard deviation** stored with the result value or the **rounding array** from the parameter-method table.

- The **laboratory standard deviation** can be stored with each result and will be used to round the result value if it exists. This value is used with the ASTM E29-93a standard to determine the appropriate rounding for the result value. Details of this rounding application are available on the Phoenix web page dedicated to rounding. To retrieve the laboratory standard deviation, select a by-result output format and use the ALPHA parameter code of LSDEV.

- If the laboratory standard deviation is not stored with the result value, the 10-element **rounding array** stored in the parameter-method table will be used. This rounding array contains ten elements: nine precision codes that apply to values within specific decadal ranges and one element for the maximum decimals (MaxDec) used to display any value. The nine precision codes have meanings as follows:

Element	Applies to values with absolute magnitude:	Meaning of precision code
1	less than 0.01 *	Number of digits shown to the right of the decimal. (Eg. A raw number of 0.12345 rounded using a precision code of 3 is displayed as 0.123.
2	less than 0.1 and greater than or equal to 0.01	
3	less than 1.0 and greater than or equal to 0.1	
4	less than 10. and greater than or equal to 1.0	Number of significant digits shown. Precisions 10 - 16 are signified by the symbols below: 10 - : (colon) 11 - ; (semi-colon) 12 - < (less than) 13 - = (equal) 14 - > (greater than) 15 - ? (question mark) 16 - @ (at symbol)
5	less than 100. and greater than or equal to 10	
6	less than 1,000. and greater than or equal to 100	
7	less than 10,000. and greater than or equal to 1,000	
8	less than 100,000. and greater than or equal to 10,000	
9	greater than or equal to 100,000	

*Values equal to zero will be rounded using MaxDec, unless replaced by an "M" remark.

- **User rounding** allows the software to employ the use of a rounding code stored with a result. In some instances the default rounding behavior is not desired and user rounding will result in a rounded value that is controlled by the user-entered rounding code. The code stored is used in the same way as an element from the rounding array described above. If no code is stored with the result, the rounding array in the parameter-method table will be used.

  Note: Historically the stored user-rounding codes have been entered inconsistently and the use of this option may result in undesired output.

- **No rounding** will result in the value being included in output in the same way it is stored in QWDATA.

  Note: Data output with no rounding may be useful for plots to avoid step patterns in the data.

- The Publication Export output option allows the use of more than one rounding option in a table, by employing rounding on a parameter code basis if the user selects “custom” rounding (see *Appendix G* for input format).

Reminders about rounding in QWDATA output:

If an 'M' appears in place of a result in the output, the program has identified that the result will round to zero. If a zero is not allowed for that parameter, an 'M' is included. A separate flag in the parameter reference table indicates whether a zero is allowed for a specific parameter. Check *Appendix I* for a complete listing of parameters that are not allowed to have a zero result.

- Fixed-value parameters (e.g. sampling method, sampler type, purpose of site visit) will not be rounded.
- If the rounding of the results does not seem correct, please enter a GNATS report with the details of the output. Details on how to enter a GNATS report are included in *Tip Sheet 5.16.*

Laboratories may supply a rounding code that is slightly different than those used in NWIS. Please contact the laboratory for details about the rounding codes used.

Note that NWQL uses a similar but not identical rounding array. The NWQL array has 7 elements corresponding to elements 1-7 of the NWIS array. NWQL elements 1-3, however, represent the number of significant digits to be shown. Thus a value to be displayed as 0.012 carries a precision code of 2 at NWQL and 3 in NWIS.

❖ Example of rounding from QWDATA:

Unrounded Value	Precision Code	Rounded Result
-0.123	1	-0.1
1.5692	3	1.57
202.95	2	200

❖ Detailed discussions about rounding in QWDATA are available in the following sections of the QW User's Documentation:

- *2.7.1 – Numeric Information – Rounding*
- *3.4.3.4 – Water Quality Table Options – Rounding of Result Values*
- *3.4.7.3 – Flat File with TAB Delimiter (Publication Export) – Specify Output Options*
- *3.6.8 – Display the Parameter Method Table*

5.20 Tip Sheet: How do I change data quality-indicator codes?

Because the review status of a result changes through time, an application in QWDATA was designed to help users set data quality-indicator (DQI) codes. See *Section 3.7.6* for a complete description of this process. By default, data are entered into QWDATA with a DQI code of "S," presumed satisfactory. After data are reviewed, their status is either "approved" or "rejected." Water-quality data typically are reviewed and published annually as part of the *Annual Water Data Report*. Therefore, DQI codes typically need to be changed on at least annually, although more regular updates of the review status are encouraged.

A DQI code will:

- indicate the review status of a result,
- affect whether the result will be included in the retrieval of output and displayed to the public via NWISWeb Interface,
- control the ability of the batch software to overwrite a value, and
- impact the display or output of algorithm-calculated values.

The list of valid DQI codes is in *Appendix A, Table 9*. A discussion of how DQI codes are used during retrieval of output is in *Section 3.4.* Details on how DQI codes affect batch processing are in *Section 3.8*.

- For a small amount of result updates
  - DQI codes can always be changed on a result-by-result basis by using the regular QWDATA edit program. See *Section 3.2.1* or *Tip Sheet 5.5.*
- For larger-scale result updates
  - Frequently, a large data set for a project or a water year will be approved at once. Updating DQI codes for large data sets is usually done by the database administrator, water-quality specialist, or an experienced project chief.
  - It is best to begin with a file of record numbers, although this is not required, because the program will accept input to the screen. See *Tip Sheet 5.15,* then, from the main QWDATA menu, select Option 7—Utilities.
  - From the Utilities menu, select Option 6—Set Data Quality-Indicator (DQI) Code.
  - Indicate your source of identifying records (from a file or the screen), or you may identify samples for a list of agency codes and station IDs (*Section 2.4.2–2.4.3*) for a range of dates.
- You can select to change DQI codes for all parameters and method codes in the samples or for only specified parameters and methods. Input specific parameter-method pairs from the screen or a file (file format is given in *Appendix G*.)

- There are eight options for remapping DQI codes, including a user-specified option. The typical records approval is Option 1, where data change from DQI=S, presumed satisfactory, to DQI=R, reviewed. A report will be generated listing the remapping of DQI codes that will occur. You are given an opportunity to review the report before the changes are made in
  QWDATA. You may want to review this report in another UNIX window, so you can return to the same place in the DQI application.

- Finally, the application will ask if you want to update the results. If you approve the remapping after your report review, answering "Y" to the prompt will update the DQI codes for all of the data that you specified.

5.21 Tip Sheet: How do I rapidly determine discharge for surface-water quality samples?

Water discharge is an important measurement to include with surface-water quality sampling results, and it is normally included as one of the parameters in water-quality data publications. Water discharge at the time of sampling can be obtained from time-series records at surface-water data-collection sites equipped with an automated gage-height recorder. The QWDATA system includes a program for selecting the appropriate discharge for water-quality sampling events from the time series of instantaneous or daily-discharge values. The program may be started by using Option 8 of the QWDATA Applications menu or noninteractively from the UNIX command line, with syntax shown below (options enclosed in brackets).

qwdischarge [**--database** *NWISZZ*] [**--db_no** *num*] [**--record_file** *filename*]
[**--output_file** *filename*] [**--output_format** rdb or print_ready] [**--help**]

The interactive menu method is suitable for a small number of computations. See *Section 3.5.8* for the menu option behavior. Otherwise, use the command line noninteractively, for example:

```
qwdischarge -db_no 01 -record_file qwrec -output_file q.rdb -output_format
rdb &
```

A file containing the record numbers of the samples needing discharges is required ("qwrec" in the example). Record numbers are listed one per line, optionally concatenated with a database number. If a record number that does not exist in the database is specified, the program will print a message like the one below, and continue to process subsequent record numbers.

```
Entry on line 2052 does not exist: 01002379
```

Many projects will have a record-number file for the relevant samples. Users performing an end-of-year compilation of data may need to assemble a list of potential record numbers. The SQL query below shows how to obtain the record numbers of all samples collected since September 30, 2009, at sites with the capability to store a discharge time series (aka a "data descriptor" record, see the *ADAPS manual, section 3.2.3*).

```
tsql nwishq -Gnwis_select "select distinct record_no from QW_SAMPLE_01 a,
SITEFILE_01 b, LOC_01 c, DD_01 d where a.sample_start_dt > '30-sep-2009' and
a.agency_cd = b.agency_cd and a.site_no = b.site_no and b.site_id = c.site_id
and c.loc_id = d.loc_id and d.parm_cd = '00060'" >qwrec
```

For each sample (record number) specified, the program will attempt to look up the most appropriate discharge value from the time-series records. Initially, the program will attempt to find an unremarked instantaneous discharge value for the site that is closest in time to the water-quality sample. The program will search no further than 30 minutes of the sample collection time. Failing to find an appropriate instantaneous discharge, the program will search for a mean daily discharge. A number of circumstances may occur that cause the program to not find an appropriate discharge for a sample. Examples of this are listed on the following page.

- Discharge is not provided for composite samples (sample-end date is specified).
- No discharge is determined if no "primary data descriptor" has been defined in ADAPS.
- Instantaneous discharge is not determined for samples precise only to the day, and no discharge is provided if sample-date precision is less than day-of-month.
- If the daily mean discharge remark code is "1" or "e" (write protected or estimated), then the daily mean is reported, because the instantaneous discharges may be inaccurate.
- If the instantaneous discharge remark code is nonblank, and the daily mean discharge remark code is blank, then the daily mean is provided.
- If no instantaneous discharge is possible, and the daily mean discharge is remarked with "2," "E," "&," ">," or "<," then no discharge is determined.
- A warning message is printed if the daily mean discharge was computed in a different time datum that the water-quality sample.
- Neither sample medium nor site type is used to control discharge determinations.

If a tab-delimited RDB file is output, the following columns are presented (**--output_format** rdb).

Column name/header	Description
record_no	Sample record number (eight digits). Database number (two digits) is appended in RDB format or shown as a separate column in print format.
agency_cd	Agency code associated with the site (five characters). Not shown in print format.
site_no	Site-identification number (15 characters).
sample_start_dttm	Beginning date-time associated with the sample (12 characters). In print format, the end date and time of a composite sample are shown on the line below.
sample_start_tz_cd	Time datum associated with the sample (six characters).
medium_cd	Medium code associated with the sample (three characters).
error_cd	Any or none of the following messages may be presented. ❖ Failed. DV not present, No UV present for this sample within 30 minutes ❖ Failed. Due to Remark, Daily Value is of questionable quality. Inspect manually ❖ Failed. End date is populated (implies Composited Sample); cannot find an appropriate discharge value ❖ Failed. Imprecise Sample time: DV missing day of month, or UV missing time ❖ Warning. 2 UVs present at an equal time-interval from sample ❖ No Primary DD present for this station

Column name/header	Description
	❖ WARNING: Daily value was computed for the day in XXXX.
discharge_dt	Date of recommended discharge (eight characters).
discharge_tm	Time of the recommended discharge (six characters).
discharge_tz_cd	Time datum of the recommended discharge (six characters).
data_aging_cd	Data-aging code of the recommended discharge (two characters).
value	The recommended discharge value for the sample (cubic feet per second).
remark_cd	The remark code of the recommended discharge (two characters).
suggest_parameter_cd	The recommended QW parameter code for the discharge (five characters). If an instantaneous value is selected, then the suggested parameter code will be "00061," otherwise parameter code "00060" will be suggested for a daily discharge value.
suggest_remark_cd	The recommended QW remark code for the discharge (one char). If a daily discharge is suggested, and that daily discharge is remarked as "Estimated," then a QW remark code of "E" (estimated) is suggested.
suggest_dqi_cd	The recommended QW data-quality indicator code for the discharge (one character). If the discharge data-aging status is approved ("A"), then the suggested DQI code is "R" (reviewed and approved). Otherwise, the suggested DQI code is "S" (presumed satisfactory).

Similar information is presented in a landscape-oriented print-format file (**--output_format** print_ready). Processing time generally exceeds 1-discharge determination per second.