

# Explanation of the Groundwater Database and Data Entry

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## **Abstract**

This document describes data entry procedures to the Texas Water Development Board (TWDB) groundwater database used by employees of the agency and includes an explanation of the data codes. The manual addresses elements in each table of the relational database, beginning with the well record or schedule and including information in the remarks, casing, water level, and water quality tables. This information is supplemented by maps and numerous two-column tables listing definitions of the coded elements. The database uses a Microsoft Access interface; thus, screen shots of this interface further serve to illustrate data entry. TWDB employees are solely responsible for entering data they have collected or receive from cooperating entities, either through entry of individual well information or through uploading of large amounts of specially formatted data.

Information within the groundwater database is mirrored in the agency's Water Information Integration and Dissemination (WIID) ArcIMS mapping application, found on the TWDB Web site. This application allows geographical display of all wells and springs within the database and provides links to information contained in the database tables and to any scanned images that exist in hard copy at the TWDB map room. A Microsoft Access copy of the database that contains an almost identical interface to the internal database is regularly updated by the Groundwater Database Administrator and also made available to the public on the TWDB Web site. This manual provides equally useful information to TWDB employees and public users of either the downloaded copy of the Access database or the WIID mapping application. It supersedes all previous editions of TWDB UM (User's Manual) 50 *Ground-Water Data System Data Dictionary*.

## Introduction

The groundwater database of the Texas Water Development Board (TWDB) contains information on more than 130,000 wells and springs within Texas, representing many years of collection efforts from various agencies. As of October 2008, more than 84,000 wells in the database had miscellaneous water level measurements. Some 8,500 of those wells are classified as current observation wells, with at least one yearly measurement. Additionally, analyses of over 107,000 water quality samples from over 55,000 groundwater sites have been entered in the database. Water quality information from these sites includes 564,000 infrequent constituents, such as trace metals, organics, nutrients, and radioactive constituents.

Until 1988, the TWDB database contained primarily legacy data from well and spring sites that were not routinely visited or monitored. Since then, monitoring programs have been initiated and expanded at sites that are revisited either annually or on a less frequent but cyclical basis, resulting in a robust database in which water level, water quality, and other meta data associated with the wells and springs at nearly 15,000 sites are regularly updated.

All users of the data should be aware that although the database includes the best information available to TWDB's knowledge, some of the data are provided by cooperators of TWDB, and a large percentage of all the data was collected from sites that are not part of TWDB's or cooperators' routine monitoring programs. As a result, inaccuracies exist. However, TWDB continuously strives to remove or revise inaccurate data, and the agency actively encourages users to report any inaccuracies to [wiid\\_data@twdb.state.tx.us](mailto:wiid_data@twdb.state.tx.us).

## **Purpose of the User's Manual**

In 1990, Phil Nordstrom and Roger Quincy originally published this document for use as a manual for TWDB employees to provide (1) a description of and instructions for completing a well schedule (or well or spring record form) and (2) a step-by-step data entry procedure for the groundwater database through an explanation of all codes. As of the date of publication of this revised manual, TWDB employees continue to be the only people who enter data, although the agency receives a significant amount of information from outside agencies and cooperators that is typically reformatted for inclusion in the database. When the public was provided online access to the information within the database in 2002 through several avenues (a mapping application, text and scanned image files, and a copy of the entire database in Microsoft Access), TWDB also provided a link to the manual as a .pdf file or scanned image on its Web site.

The purpose of this revised document remains the same—to describe data entry procedures and explain codes, frequently through the use of screen shots of the TWDB database as it appears in its Microsoft Access interface to TWDB employees. Because many people outside the agency may now also periodically download the entire database with an interface that is nearly identical to that used by TWDB employees, this revision also provides some additional explanatory information. The TWDB groundwater Database Administrator maintains the most up-to-date tables of the coded elements in the database, and any significant changes or additions the Administrator makes in the future will result in much more frequent revisions to this document.



## **History of the TWDB Groundwater Database**

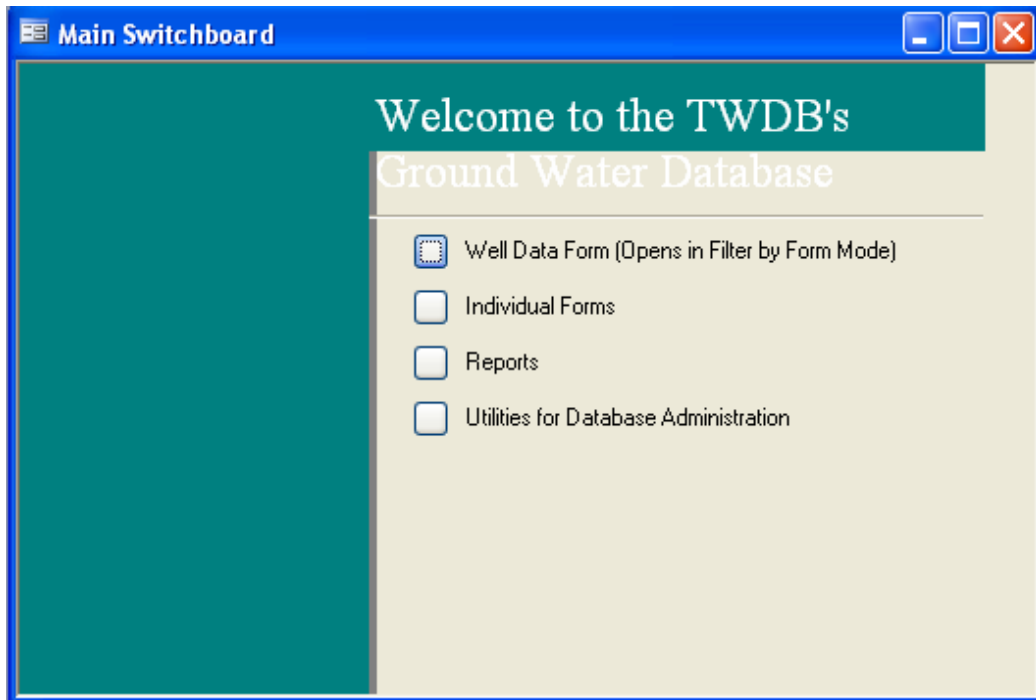
Information on water wells and springs has resided in file folders for decades at TWDB, at one of its predecessor agencies, or as original copies in agencies such as the U.S. Geological Survey. The oldest “drilling” date for a well in the TWDB database is recorded as 1820 for a hand-dug well used for stock on the Rancho San Isidro Viejo in Starr County. Its U.S. Geological Survey well schedule, recorded in 1950, includes a note stating that the well was known to have been in use in 1926. This well schedule still resides in the TWDB map room well file, as do numerous other schedules of water wells drilled in the early 1900s in Texas. TWDB continues to maintain paper copies of all data collected on wells and springs in its map room at its Austin headquarters in the Stephen F. Austin building; however, not every piece of information in the database is included on a paper copy in the files. In the past several decades, employees of TWDB (and its predecessors) have added water level and water quality information from reports, particularly TWDB reports. Furthermore, in 2002, TWDB scanned all paper copies of well-related information in its map room files and currently continues to scan all information as it is collected.

The first digital storage of information in a flat file computer format began in the 1960s as TWDB (and its predecessors) keypunched reams of groundwater data. The first compilation of digital data as a relational database began in the early-to-mid-1980s on a Sperry Univac DB 4 system. This database was relational but not Structured Query Language (SQL) compliant. SQL, often pronounced “SEQUEL” after its original acronym, is a declarative query and data manipulation computer language designed for retrieving and managing data in relational databases. In the late 1980s, the agency transferred the groundwater information to an Informix system operating on a Unix platform, a system both relational and SQL compliant. Most recently

(in 2004), the agency transferred the groundwater information to a Microsoft SQL server platform with a Microsoft Access interface.

## Main Menu of the TWDB Groundwater Database

The main menu offers entry into four main screen categories: the well data form, individual forms, printed reports, and utility forms for database administration (Figure 1).



**Figure 1. Main menu of the TWDB groundwater database.**

This document will concentrate on explaining the cornerstone of the system—the entry of well schedule (or well/spring record) data into the database—and entry of data in the other essential individual forms. We will not discuss reports or utilities for database administration that are intended for TWDB personnel, although several of the reports that TWDB can produce from this database are available to the public as text and image files, by county, on the TWDB Web site at <http://www.twdb.state.tx.us/publications/reports/GroundWaterReports/GWDatabaseReports/GWdatabaserpt.htm>.

Additionally, an entire copy of the database, operating on a Microsoft Access platform or “back end” with a Microsoft Access “front end,” or interface—identical to the interface used by TWDB internally—is always available to the public as a zipped.mdb file at the same Web site address.

### **Data Entry Forms**

In the TWDB groundwater database, eight different data entry forms corresponding to the main data tables are available (Figure 2), beginning with the well schedule (well or spring data or record of well) and including well (or spring) data remarks, casing records, water level forms for all wells in the observation network or any miscellaneous wells, water level forms for all continuous recorders with five-day measurements, basic inorganic water quality, infrequent constituent water quality (trace element) information, and water quality data from cooperators. The photos and TWDB notes forms are for in-house use only and are not published to the Web. An explanation of those forms is not included in this manual as there are separate TWDB work process documents that address those data entry procedures.

The well data form contains links to each of the other seven forms, and six of these forms—remarks, casing records, water levels, 5-day water levels, water quality, and infrequent constituents—can be found under the “Individual Forms” field on the main menu.

**Figure 2. TWDB groundwater database well data form (well schedule form).**

The well data form, as mentioned above, is the lynchpin of the system because it includes a site identifier number (or state well number) in all tables, making the database relational. Other key features of the form are latitude and longitude fields, which allow for two-dimensional georeferencing of all database information. Without correct information about the location and subsurface location (or aquifer) in which the well is completed, the value of any other water level and water quality data is questionable.

The well data form is also used to inventory springs. The database contains nearly 133,000 wells and more than 2,000 spring sites; for simplicity's sake, however, discussion of data entry in most of the dictionary will refer to wells. Obviously, spring information could and does exist in records throughout the database, with the exception of the casing records and 5-day water level forms.

## **Well-Numbering System (Site Identification)**

To facilitate the location of wells (and springs) and to avoid duplication of state well numbers, the Texas Department of Water Resources (one of TWDB's predecessor agencies) originally adopted a statewide well-numbering system now used by TWDB. Use of the term "state well number" by agency employees began in a practical manner, particularly because TWDB and its predecessors and affiliates such as the U.S. Geological Survey have historically been concerned with collecting groundwater data throughout the state. This numbering system originally appeared to accommodate the needs of these agencies and arguably still does.

However, as more local agencies have begun their own data collection programs and databases, the limitations of the state well number have become apparent. Some local groundwater conservation districts, for example, register many more wells than a state or federal agency would typically have the resources to inventory, and the TWDB numbering system is inadequate to meet their needs. Also, the term could imply that a state well number is mandatory for all water wells drilled in the state, but such a number is not required. The purpose of our database is not to include every well in the state; the purpose is to provide information on water levels, water quality, and well characteristics for water planning, groundwater availability models, and local and regional assessment of aquifers. Fortunately, many water well (and spring) owners have graciously offered information to allow TWDB to assign a state well number. Also, many of these same people have allowed measuring and sampling for water quality testing in their wells or springs.

The statewide well-numbering system is based on dividing the state into a grid of 1-degree quadrangles, formed by degrees of latitude and longitude. Each 1-degree quadrangle is divided into sixty-four 7½-minute quadrangles corresponding to U.S. Geological Survey named

topographic quadrangles, and each of these quadrangles is further divided into nine 2½-minute quadrangles (Figure 3).

Each 1-degree quadrangle in the state has been assigned an identification number of 01 through 89. Each of the 7½-minute quadrangles is numbered consecutively from left to right, beginning in the upper left-hand corner of the 1-degree quadrangle. The 2½-minute quadrangles within each 7½-minute quadrangle are numbered in a similar pattern (left to right, top to bottom). The first two digits of the site identification number identify the 1-degree quadrangle; the third and fourth digits identify the 7½-minute quadrangle; the fifth digit identifies the 2½-minute quadrangle; and the last two digits identify the site within the 2½-minute quadrangle.

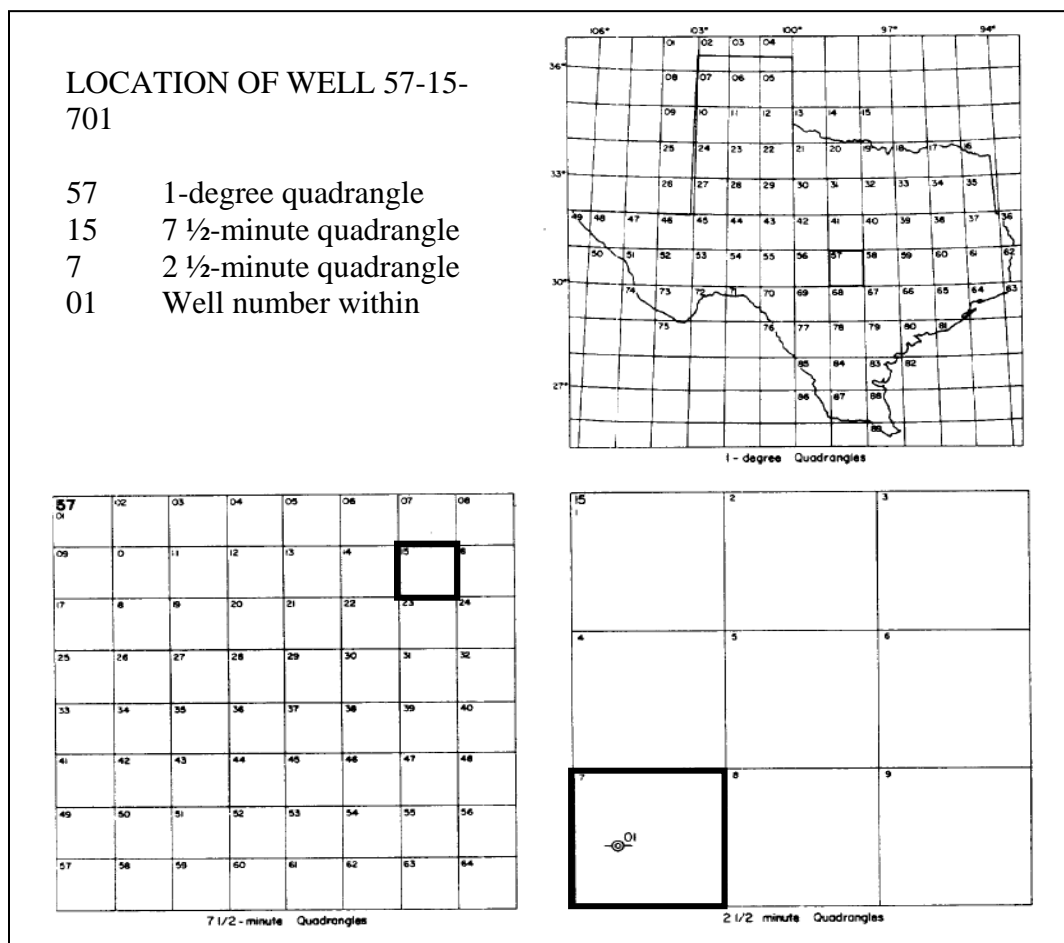


Figure 3. State well- (or site) numbering system.

## **Well Schedule**

The well schedule (or record of well or well report) form (Figure 4), along with detailed well location information, is required before TWDB assigns a permanent state well number. The majority of wells in the database were originally inventoried out in the field on paper using a format only slightly modified from an original U.S. Geological Survey well schedule; therefore, especially for wells drilled before 1990, any record appearing in the database without a back-up well schedule (in the scanned image file) should not be considered as reliable as those that do.

The well schedule contains all of the information required to complete the well data form in the groundwater database, so it is a good idea to complete a well schedule when out in the field at the site before entering data in the groundwater database. However, TWDB employees having direct access to the groundwater database either in the field and especially in the office may forego filling out a paper copy and instead directly fill in the well data form with the same information on the well schedule. In practice, the terms “well schedule,” “well report,” “record of well,” and “well data form” are used interchangeably.





## Well Record Data Entry

### State Well Number

Each well record in the TWDB groundwater database is identified by this unique, seven-digit number. The system allows for the numbering of up to 99 wells in each 2½-minute quadrangle. Only well numbers assigned by authorized persons are accepted in the database, thus avoiding duplication of well numbers.

- Enter the seven-digit well number, for wells 1-99 in each 2½-minute quadrangle.

Example:

1	8
---	---

2	0
---	---

2	0	1
---	---	---

Note: Wells located in 1-degree quadrangles 1–9 will effectively have a six-digit state well number since the leading zero is not displayed. These well numbers can be entered with or without the zero.

Example:

0	6
---	---

4	4
---	---

2	5	4
---	---	---

 or

	6
--	---

4	4
---	---

2	5	4
---	---	---

### Previous Well Number

If another number was previously used to identify the well, enter it here. It may comprise letters, numbers, special characters, or any combination of those, up to eight characters. This field is generally used to refer to well numbers from reports printed prior to state well number usage or may indicate a well number change due to improved location accuracy.

- Enter the previous well number or name.

Examples: 

H	I	L	L	T	O	P	
---	---	---	---	---	---	---	--

1	3	0	8	1	0	9	
---	---	---	---	---	---	---	--

1	2	9	-	A			
---	---	---	---	---	--	--	--

G	2	1		1	2	9	
---	---	---	--	---	---	---	--

## County Code

The TWDB groundwater database uses “FIPS” (Federal Information Processing Standards) county codes, which is the same system of county codes used nationwide by federal agencies. Alpha and numerical codes formerly used in older data systems to identify Texas counties are not applicable to this system.

- From the drop down menu, select the county code that corresponds to the county in which the well is located (Figure 5).

**Note:** County code is a mandatory entry; data will not be stored if this field is blank.

The screenshot shows a software window titled 'welldata'. The main form contains the following fields and values:

- State Well Number: 3961501
- Prev. Well No.: (empty)
- County Code: 895 (dropdown menu is open showing a list of Texas counties)
- Basin: 12
- GMA: 12
- RWPA: G
- GCD: 199912GX
- Aquifer Code: 124SM
- Latitude: 310303
- Longitude: 962543
- Coord Accuracy: 0
- Aquifer ID1: 1
- Aquifer ID2: (empty)
- Aquifer ID3: (empty)
- Owner: Twin Creek WSC
- Driller: C. C. Capps
- New Baden Well: (empty)
- Well Depth: 1202
- Source of Depth: (dropdown)
- Altitude: 427
- Source of Alt. Datum: M
- Date Drilled: / / 1951
- Well Type: W
- User Code: 880900
- Type of Lift: S
- Type of Power: E
- Horsepower: (empty)
- Primary Use: P
- Secondary Use: (dropdown)
- Tertiary Use: (dropdown)
- Water Level: C
- Water Quality: Y
- Well Logs: (empty)
- Other Data: (empty)
- Construction: (dropdown)
- Completion: (dropdown)
- Casing Material: (dropdown)
- Screen Material: (dropdown)
- Date Collected or Updated: 07/09/2002
- Reporting Agency: 01
- Well Schedule in File: Y
- Date Updated: 10/28/2005
- UserID: dwuerch

At the bottom of the window, there are several buttons: Remarks, Casing Records, Water Levels, 5 Day Water Levels, Water Quality, Infrequent Constituents, Coop Water Quality, Photos, and TWDB Notes. A status bar at the very bottom indicates 'Record: 1 of 1 (Filtered)'.

Figure 5. Drop down menu for the “County Code” field.

## Basin

Texas has 15 major river and 8 coastal basins. The coastal basins are named according to the major river basins that bound them. For example, the Brazos-Colorado Coastal Basin is bounded by the Brazos River Basin to the north and the Colorado River Basin to the south. Each coastal basin is also bounded by a bay or some other outlet to the Gulf of Mexico.

- From the drop down menu, select the numerical code that corresponds to the river basin in which the well is located (Figure 6).

The screenshot shows a software window titled 'welldata'. The 'Basin' field is highlighted with a dropdown menu open, listing eight options: 1 Canadian River, 2 Red River, 3 Sulphur River, 4 Cypress River, 5 Sabine River, 6 Neches River, 7 Neches-Trinity Rivers, and 8 Trinity River. The 'Basin' field currently shows the value '12'. Other fields include State Well Number (3961501), County Code (395), GCD (199912GX), and Aquifer Code (124SMBR). The form also contains fields for Owner (C. C. Capps), Well Name (Neches River), Date (07/09/2002), and various other parameters like Type of Lift, Type of Power, and Horsepower. At the bottom, there are buttons for 'Edit Record', 'Save Record', 'New Filter', 'Add New Well', and 'Close Form', along with a 'Well Schedule' button. A status bar at the very bottom indicates 'Record: 1 of 1 (Filtered)'.

Figure 6. Drop down menu for the “Basin” field.

Figure 7 shows the location of each of the river and coastal basins within Texas.

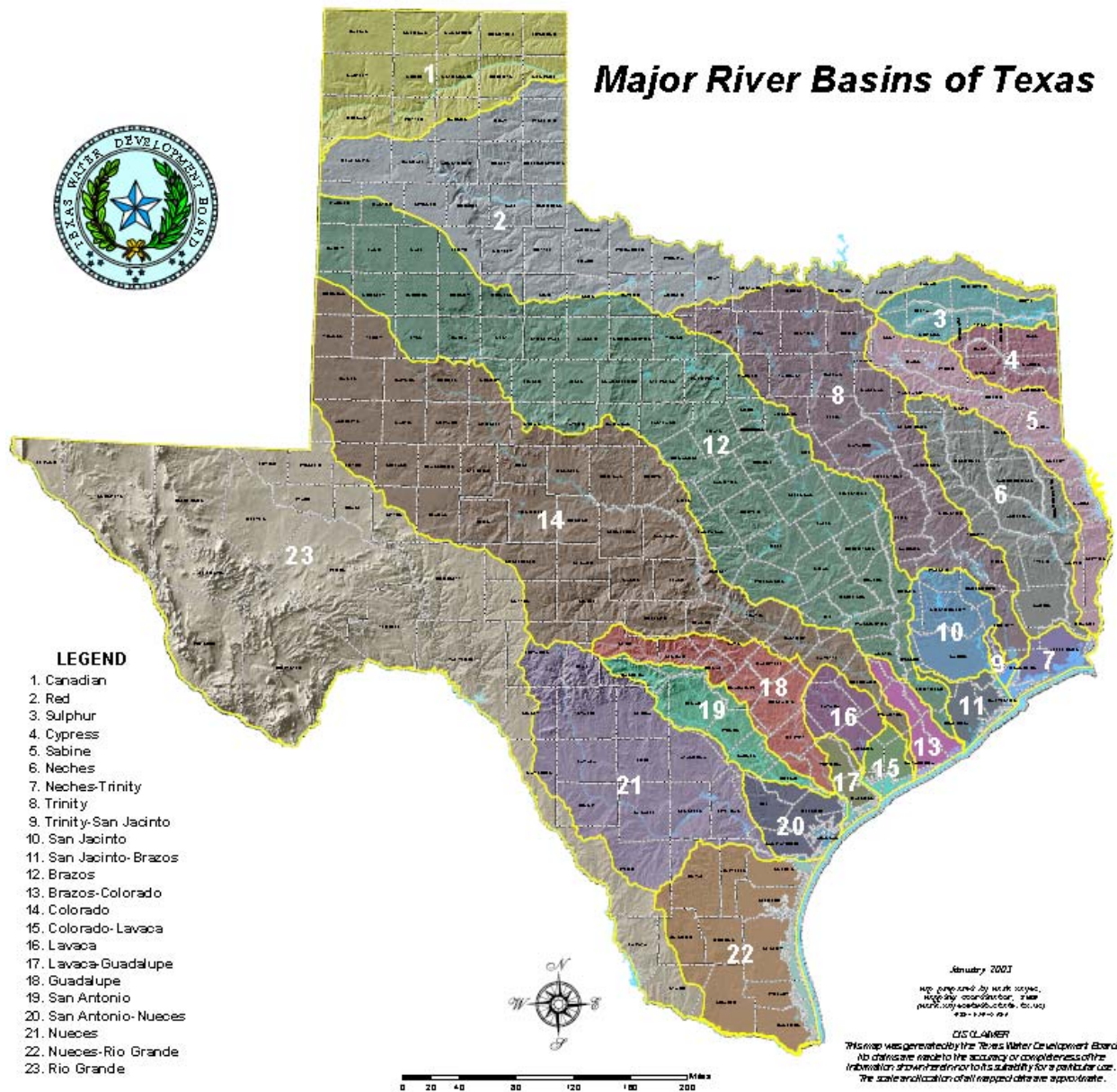


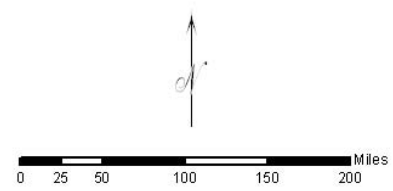
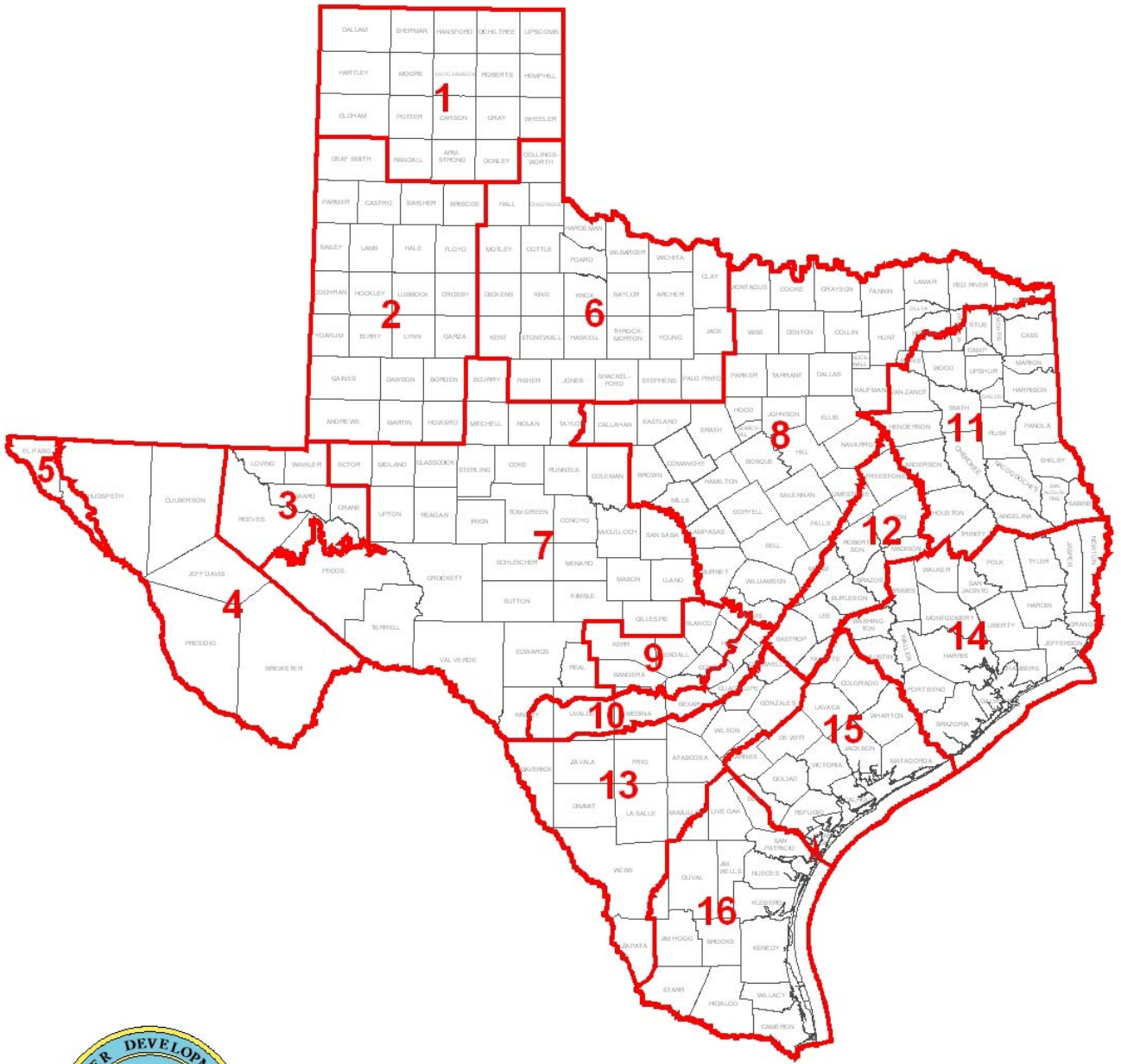
Figure 7. Major river basins of Texas.

## Groundwater Management Area

The “GMA” field in the TWDB groundwater database is used to indicate the groundwater management area in which the well is located. There are 16 groundwater management areas in Texas. The coverage for each groundwater management area is shown in Figure 8. The numerical code corresponds to the groundwater management area number. For example, you would enter “7” for groundwater management area 7.

- Locate the county in which the well is located on the map in Figure 8.
- In the “GMA” field, enter the code for the groundwater management area in which the well is located.

**Note:** For most of the counties, the groundwater management area boundaries follow the county lines, but in a few cases the boundaries cut through the county. If you are unsure which groundwater management area is the correct one for your well, contact the TWDB Water Level Program Specialist.



**DISCLAIMER**  
 This map was generated by the Texas Water Development Board using GIS (Geographical Information System) software. No claims are made to the accuracy or completeness of the information shown herein nor to its suitability for a particular use. The scale and location of all mapped data are approximate.

Map updated by Mark Hayes, GISD  
 (Mark.Hayes@twdb.state.tx.us) 512-926-0828  
 August 2007

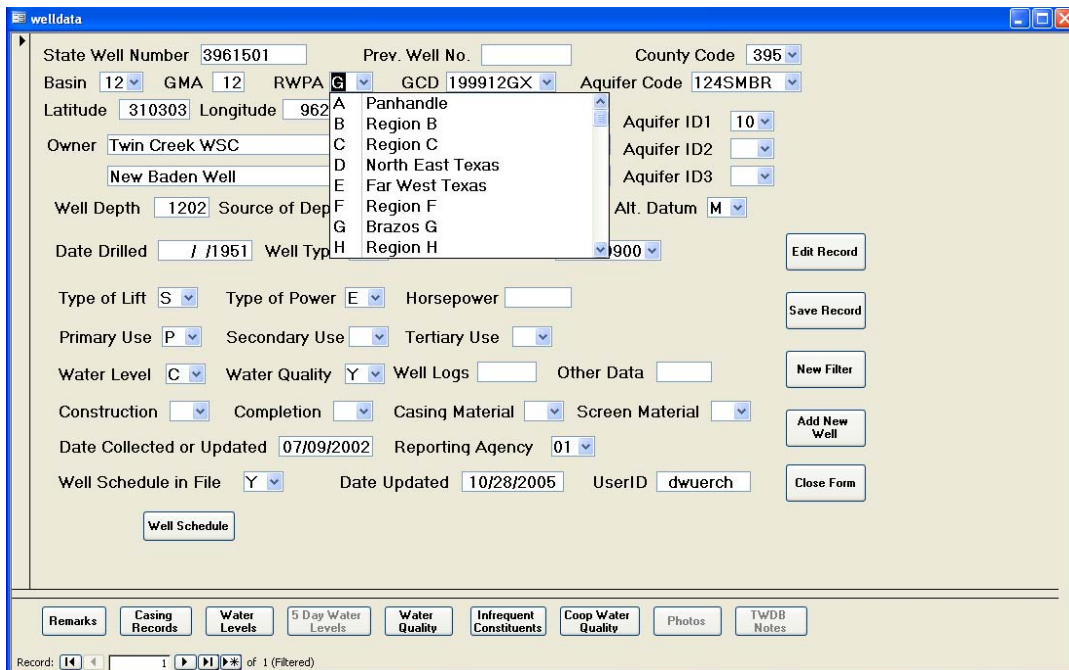
Figure 8. Map of groundwater management areas.

## Regional Water Planning Area

The “RWPA” field in the TWDB groundwater database is used to indicate the regional water planning area in which the well is located (Figure 9). There are 16 regional water planning areas in Texas. The coverage area of each is shown in Figure 10.

- Locate the county in which the well is located on the map in Figure 10.
- From the drop down menu in the “RWPA” field, select the code corresponding to the regional water planning area for the county in which the well is located.

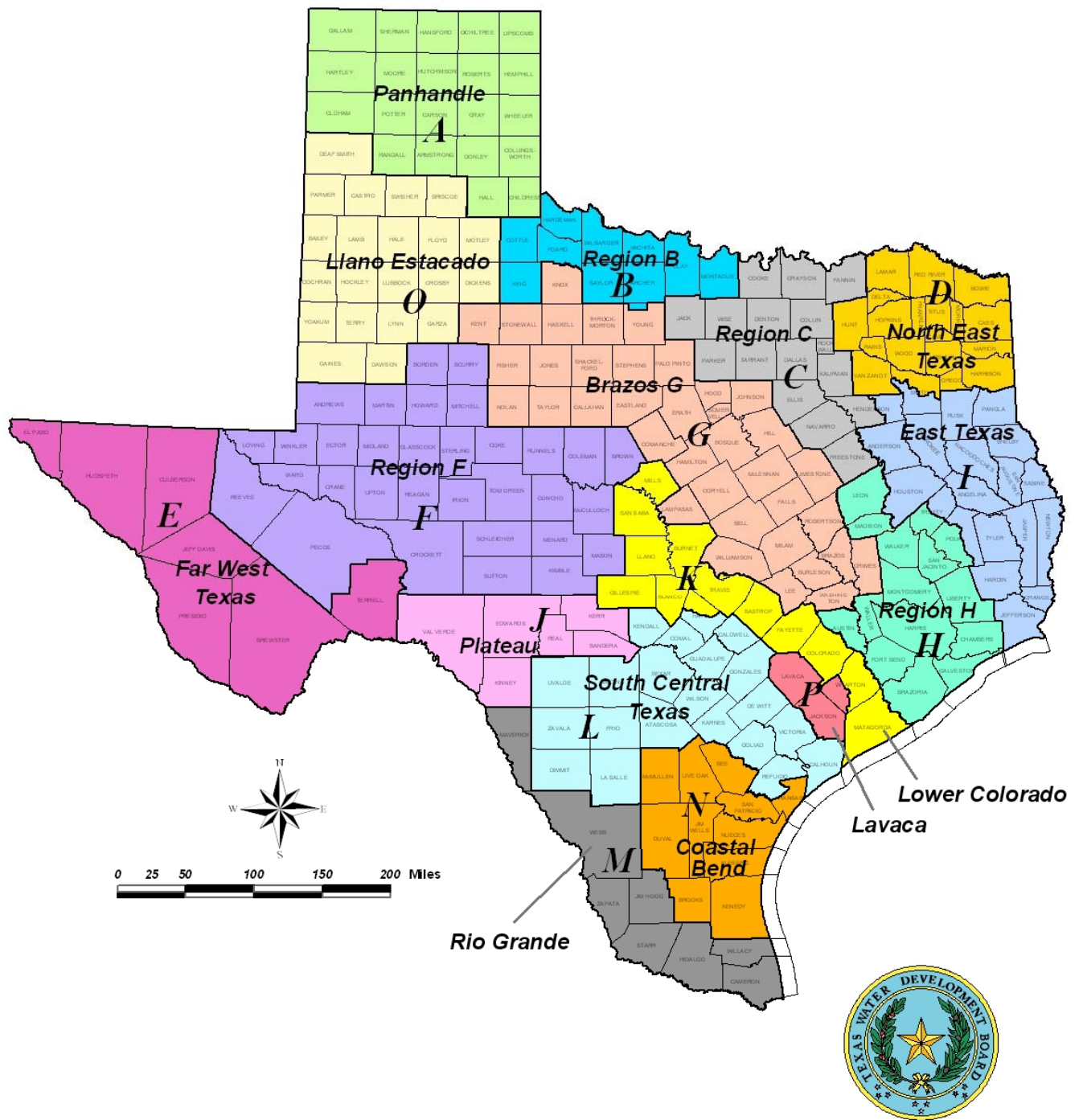
**Note:** For most of the counties, the regional water planning area boundaries follow the county lines, but in a few cases the boundaries cut through the county. If you are unsure which regional water planning area is the correct one for your well, contact the TWDB Water Level Program Specialist.



The screenshot shows a web-based form titled "welldata" with various input fields and a dropdown menu for "RWPA". The RWPA dropdown is open, showing options A through H. The form includes fields for State Well Number (3961501), Prev. Well No., County Code (395), Basin (12), GMA (12), GCD (199912GX), and Aquifer Code (124SMBR). Other fields include Latitude (310303), Longitude (962), Owner (Twin Creek WSC), Well Depth (1202), Date Drilled (/ /1951), Well Type (900), Type of Lift (S), Type of Power (E), Horsepower, Primary Use (P), Secondary Use, Tertiary Use, Water Level (C), Water Quality (Y), Well Logs, Other Data, Construction, Completion, Casing Material, Screen Material, Date Collected or Updated (07/09/2002), Reporting Agency (01), Well Schedule in File (Y), Date Updated (10/28/2005), and UserID (dwuerch). Buttons for Edit Record, Save Record, New Filter, Add New Well, and Close Form are visible. A bottom navigation bar contains tabs for Remarks, Casing Records, Water Levels, 5 Day Water Levels, Water Quality, Infrequent Constituents, Coop Water Quality, Photos, and TWDB Notes. The status bar at the bottom indicates "Record: 1 of 1 (Filtered)".

Figure 9. Drop down menu for the “RWPA” field.





Updated by Mark Hayes  
 Mapping Coordinator  
 RIO Division/GIS Section  
 4/15/2008

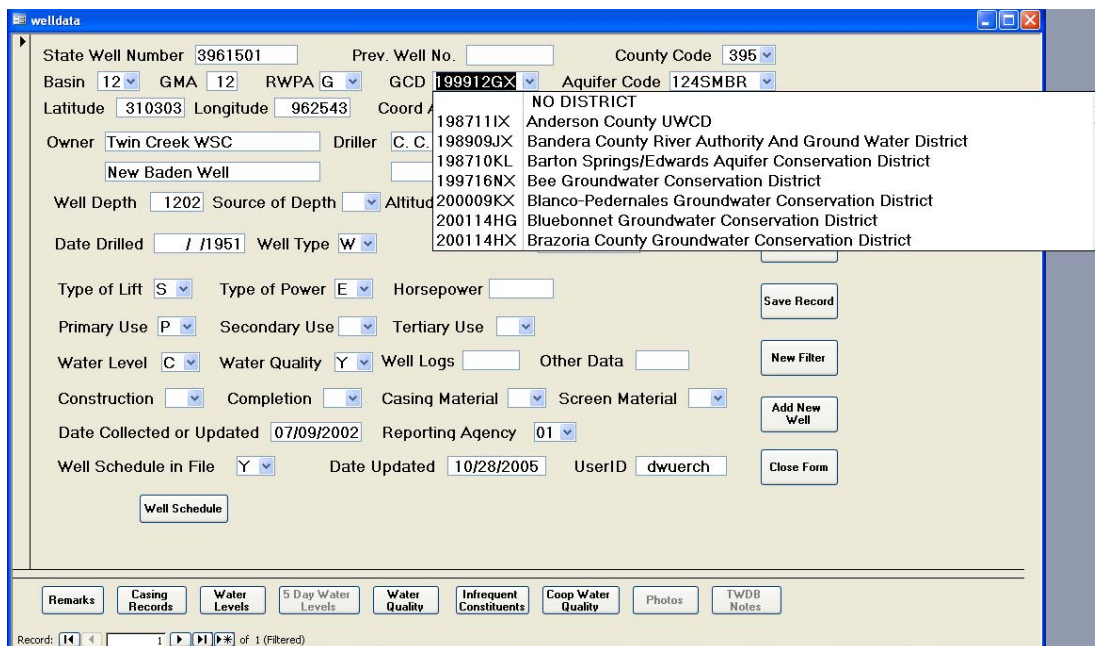
Figure 10. Map of regional water planning areas.

## Groundwater Conservation District

The “GCD” field in the TWDB groundwater database is used to indicate the groundwater conservation district in which the well is located (Figure 11). The coverage area for each of the districts is shown in Figure 12. As new districts are confirmed, the TWDB Database Administrator adds the new district and its ID to the TWDB database.

- Locate the county in which the well is located on the map in Figure 12.
- From the drop down menu in the “GCD” field, select the District ID corresponding to the groundwater conservation district in which the well is located.

Note: In some cases, a county may have more than one groundwater conservation district associated with it or only part of the county may be covered by the district. In these cases, you might need to enter the latitude and longitude of the well into the Water Information Integration Dissemination (WIID) with the groundwater districts layer visible (Figure 13). If there is no district associated with part or all of the county in which the well is located, leave this field blank.



The screenshot shows a web-based form titled "welldata" with various input fields and a dropdown menu. The "GCD" field is currently set to "199912GX" and is open, displaying a list of options: "NO DISTRICT", "Anderson County UWCD", "Bandera County River Authority And Ground Water District", "Barton Springs/Edwards Aquifer Conservation District", "Bee Groundwater Conservation District", "Blanco-Pedernales Groundwater Conservation District", "Bluebonnet Groundwater Conservation District", and "Brazoria County Groundwater Conservation District". Other fields include "State Well Number" (3961501), "County Code" (395), "Basin" (12), "GMA" (12), "RWPA" (G), "Latitude" (310303), "Longitude" (962543), "Owner" (Twin Creek WSC), "Driller" (C. C.), "Well Depth" (1202), "Date Drilled" (/ /1951), "Well Type" (W), "Type of Lift" (S), "Type of Power" (E), "Horsepower", "Primary Use" (P), "Secondary Use", "Tertiary Use", "Water Level" (C), "Water Quality" (Y), "Well Logs", "Other Data", "Construction", "Completion", "Casing Material", "Screen Material", "Date Collected or Updated" (07/09/2002), "Reporting Agency" (01), "Well Schedule in File" (Y), "Date Updated" (10/28/2005), and "UserID" (dwuerch). Buttons for "Save Record", "New Filter", "Add New Well", and "Close Form" are visible. At the bottom, there are tabs for "Remarks", "Casing Records", "Water Levels", "5 Day Water Levels", "Water Quality", "Infrequent Constituents", "Coop Water Quality", "Photos", and "TWDB Notes". The status bar at the bottom indicates "Record: 14 of 1 (Filtered)".

Figure 11. Drop down menu for the “GCD” field.

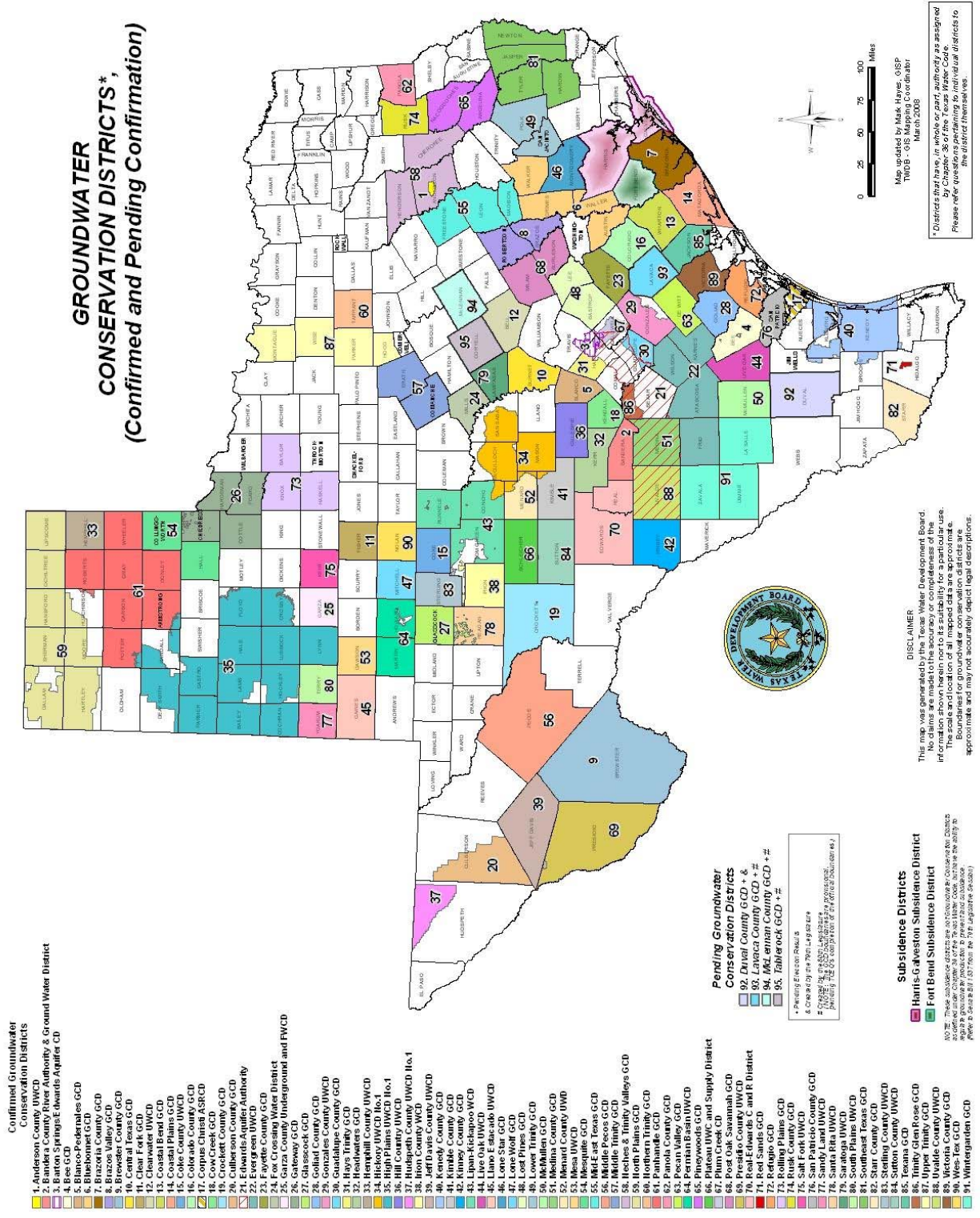


Figure 12. Map of groundwater conservation districts.

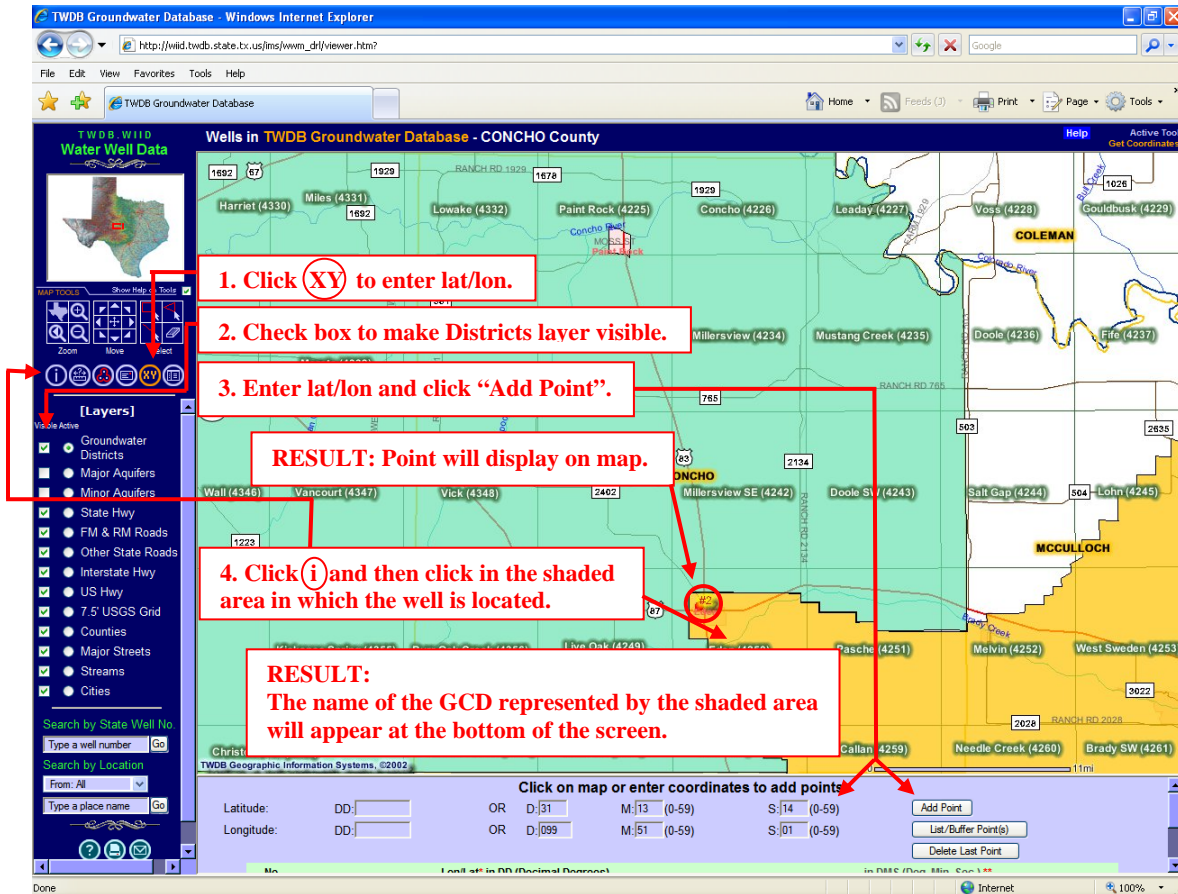


Figure 13. Using the Water Information Integration Dissemination to identify the groundwater conservation district for a well location (lat=latitude; lon=longitude; GCD=groundwater conservation district).

## **Aquifer Code**

The aquifer codes used in the TWDB groundwater database are adopted from the U.S. Geological Survey's Water Data Storage and Retrieval (WATSTORE) system. The code consists of three digits designating the geologic era, system, and series followed by a four- or five-unit alpha code designating the aquifer(s) or stratigraphic unit(s). For example, the aquifer code 123VKGB represents the following information:

1 = Cenozoic Erathem

2 = Tertiary System

3 = Eocene Series

VKGB = Vicksburg Formation

A TWDB professional geologist with the most experience in the area in which the well is located assigns the aquifer codes. Appendices A and B list the aquifers and hydrologic units for Texas, both alphabetically and in aquifer code sequence. This field is mandatory to register a well into the database. To change an aquifer code already in the database, contact the TWDB Database Administrator or his designated representative.

- Enter the aquifer code that corresponds to the name of the aquifer in which the well is located.

## **Latitude/Longitude**

The values of latitude and longitude in the groundwater database are locators. They should represent the best available information about the location of the well. The location should be entered as precisely as it is known, and the accuracy of the location should be indicated by a suitable entry in the "Coordinate Accuracy" field.

- Latitude: Enter the best available value for the latitude of the site in degrees, minutes, and seconds. Six digits must be coded. Latitude is a mandatory entry; data will not be stored if this field is blank.
- Longitude: Enter the best available value for the longitude of the site in degrees, minutes, and seconds. Use leading zeros if needed; seven digits must be coded. Longitude is a mandatory entry; data will not be stored if this field is blank.

## Coordinate Accuracy

The “Coord Accuracy” field is intended to reflect the accuracy of the latitude and longitude data. All sites inventoried in the field should be precisely located with a portable global positioning system unit and coded 0.

- From the drop down menu, select the appropriate code indicating the accuracy of latitude and longitude (Figure 14).

The screenshot shows a web-based data entry form titled 'welldata'. The form contains several input fields and dropdown menus. A dropdown menu is open for the 'Coord Accuracy' field, showing the following options:

- 0 GPS
- 1 +/- 1 Second
- 2 +/- 5 Seconds
- 3 +/- 10 Seconds
- 4 +/- 1 Minute
- 5 Center of 2 1/2 Minute Quad

Other visible fields include: State Well Number (3961501), Prev. Well No., County Code (395), Basin (12), GMA (12), RWPA (G), GCD (199912GX), Aquifer Code (124SMBR), Latitude (310303), Longitude (962543), Owner (Twin Creek WSC), Driller (C. C. Capps), Well Depth (1202), Source of Depth, Altitude (427), Date Drilled (/ /1951), Well Type (W), User Code (880900), Type of Lift (S), Type of Power (E), Horsepower, Primary Use (P), Secondary Use, Tertiary Use, Water Level (C), Water Quality (Y), Well Logs, Other Data, Construction, Completion, Casing Material, Screen Material, Date Collected or Updated (07/09/2002), Reporting Agency (01), Well Schedule in File (Y), Date Updated (10/28/2005), and UserID (dwuerch). Buttons for 'Edit Record', 'Save Record', 'New Filter', 'Add New Well', and 'Close Form' are also present.

Figure 14. Drop down menu for the “Coord Accuracy” field.

## Aquifer Identification

There are three “Aquifer ID” fields: Aquifer ID1, Aquifer ID2, and Aquifer ID3 (Figure 15).

These fields are two-digit codes that represent one of the 30 major and minor aquifer groups and the catch-all category (code 22) for all other aquifers not yet designated by TWDB as major or minor. Aquifer ID1 is a mandatory field. Aquifer ID2 and Aquifer ID3 should only be used for wells that are completed in multiple aquifers. Maps of the 9 major aquifers and 21 minor aquifers are provided in Figures 16 and 17.

The screenshot shows the 'welldata' application window. The main form contains the following fields and values:

- State Well Number: 3961501
- Prev. Well No.: [Empty]
- County Code: 395
- Basin: 12, GMA: 12, RWPA: G, GCD: 199912GX, Aquifer Code: 124SMBR
- Latitude: 310303, Longitude: 962543, Coord Accuracy: 0
- Owner: Twin Creek WSC, Driller: C. C. Capps
- Well Depth: 1202, Source of Depth: [Empty], Altitude: 427, Source of Alt. Datum: M
- Date Drilled: / / 1951, Well Type: W, User Code: 880900
- Type of Lift: S, Type of Power: E, Horsepower: [Empty]
- Primary Use: P, Secondary Use: [Empty], Tertiary Use: [Empty]
- Water Level: C, Water Quality: Y, Well Logs: [Empty], Other Data: [Empty]
- Construction: [Empty], Completion: [Empty], Casing Material: [Empty], Screen Material: [Empty]
- Date Collected or Updated: 07/09/2002, Reporting Agency: 01
- Well Schedule in File: Y, Date Updated: 10/28/2005, UserID: dwuerch

A dropdown menu for 'Aquifer ID1' is open, showing a list of 31 aquifer codes and names:

- 1 HUECO-MESILLA BOLSON
- 2 WEST TEXAS BOLSON
- 3 CENOZOIC PECOS ALLUVIUM
- 4 SEYMOUR
- 5 BRAZOS RIVER ALLUVIUM
- 6 BLAINE
- 7 BLOSSOM
- 8 BONE SPRING-VICTORIO PEAK
- 9 CAPITAN REEF COMPLEX
- 10 CARRIZO-WILCOX
- 11 EDWARDS (BFZ)
- 12 EDWARDS-TRINITY (HIGH PLAINS)
- 13 EDWARDS-TRINITY PLATEAU
- 14 ELLENBURGER-SAN SABA
- 15 GULF COAST
- 16 HICKORY
- 17 IGNEOUS
- 18 MARATHON
- 19 MARBLE FALLS
- 20 NACATOCH
- 21 OGALLALA
- 22 OTHER
- 23 RITA BLANCA
- 24 QUEEN CITY
- 25 RUSTLER
- 26 DOCKUM
- 27 SPARTA
- 28 TRINITY
- 29 WOODBINE
- 30 LIPAN
- 31 YEGUA - JACKSON

At the bottom of the window, there are buttons for 'Remarks', 'Casing Records', 'Water Levels', '5 Day Water Levels', 'Water Quality', 'Infrequent Constituents', 'Coop Water Quality', and 'Photos'. A status bar at the bottom left shows 'Record: 1 of 1 (Filtered)'.

Figure 15. Drop down menu for the three “Aquifer ID” fields.

# Major Aquifers of Texas

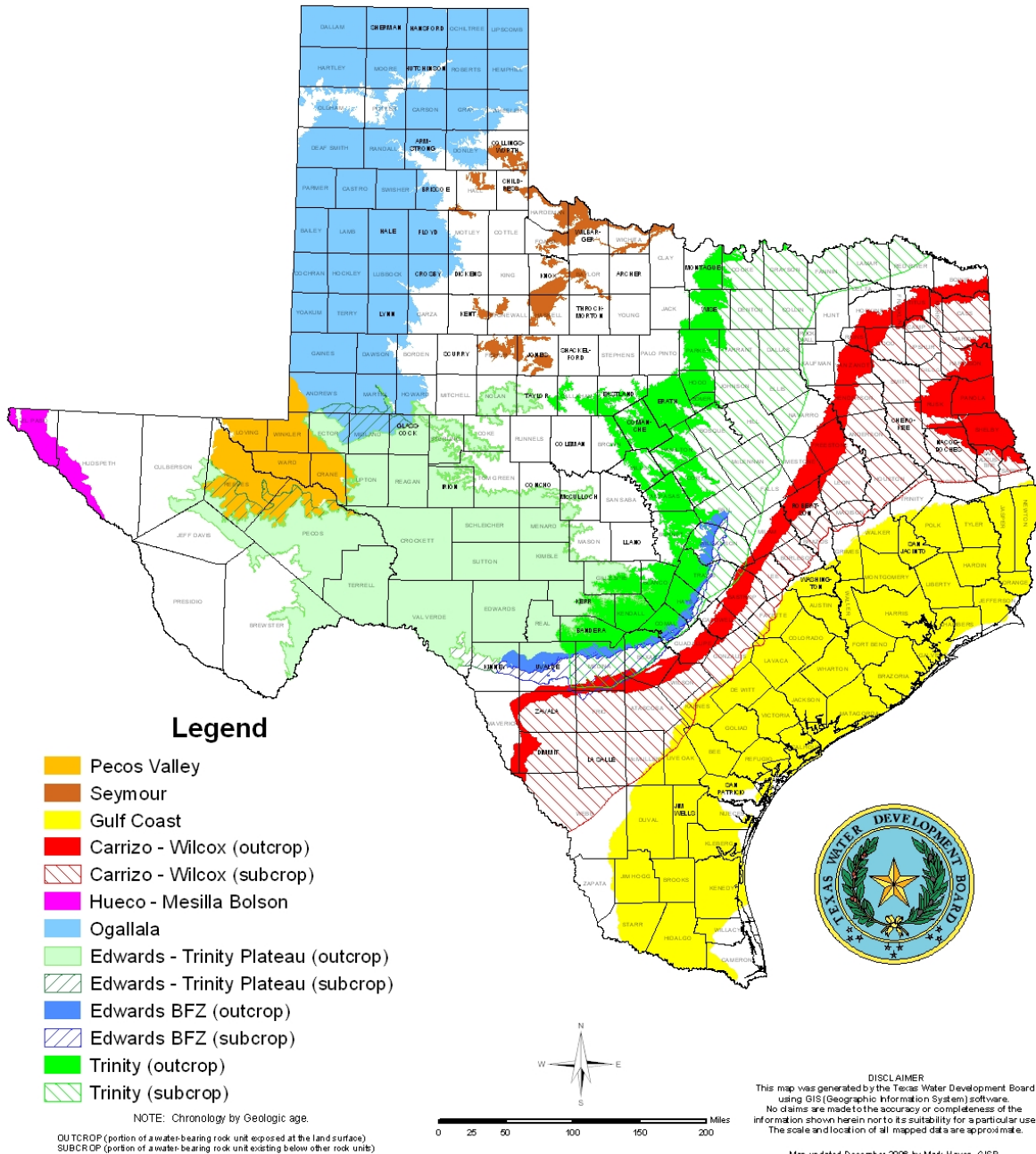


Figure 16. Major aquifers of Texas.



# Minor Aquifers of Texas

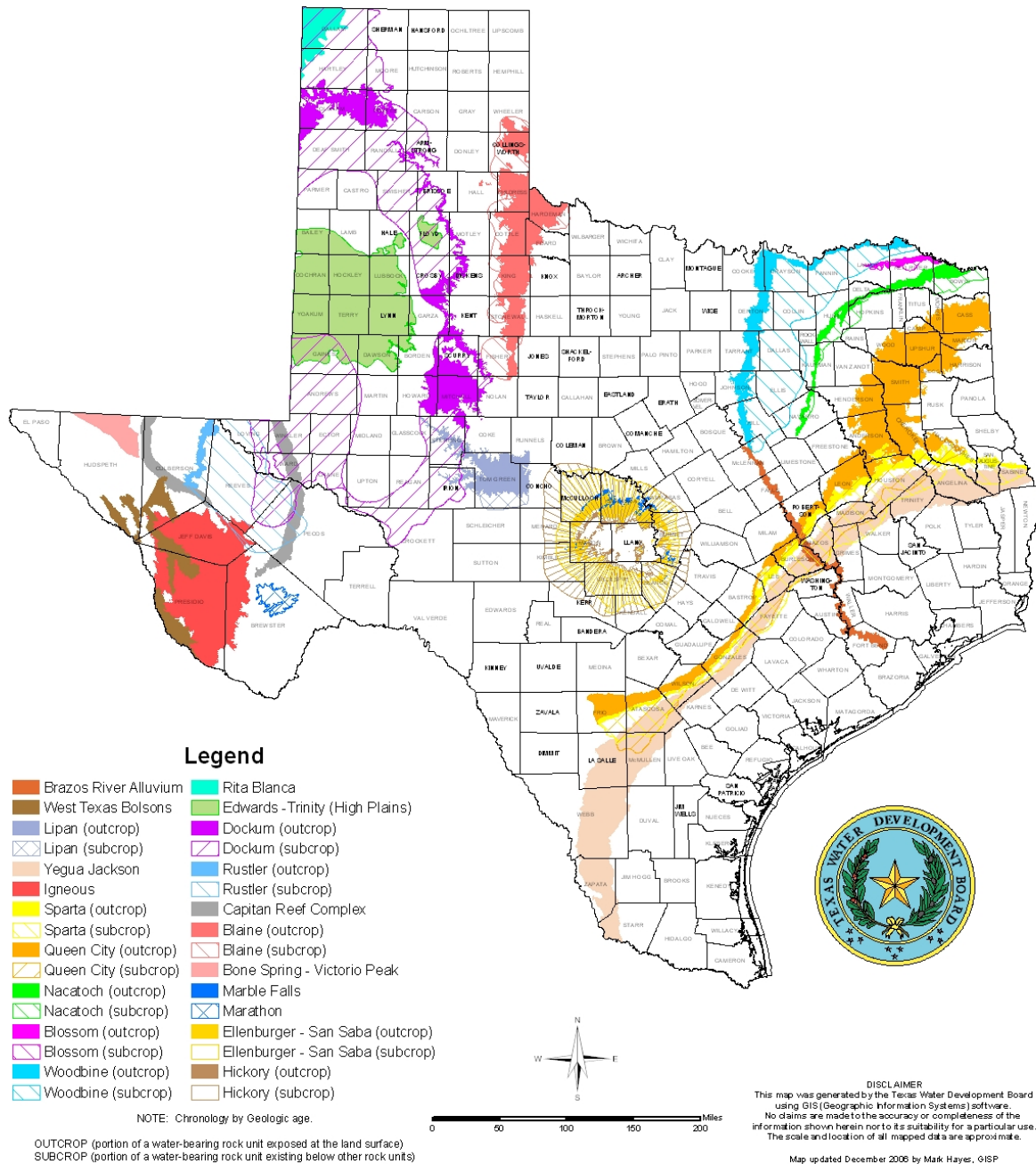


Figure 17. Minor aquifers of Texas.

## Owner

The “Owner” field is used to record the ownership of the well at the time of the survey. As ownership of the well changes, this field should be updated to reflect the current owner’s name.

Two lines of 22 characters per line are provided to record the name of the owner and the name or number assigned to the well by the owner.

- Enter the owner’s name exactly as you wish to see it in a published table, using appropriate punctuation and capitalization. Use any space left over on the second line for the owner’s well name or number.

Example:

S	o	u	t	h		T	e	x	a	s		R	a	n	c	h			
H	o	u	s	e		w	e	l	l										

## Driller

The “Driller” field is used to record the name of the person or company that drilled and constructed the well. Two lines of 20 characters per line are provided to record the name of the driller.

- Enter the driller’s name (or company name) exactly as you wish to see it in a published table, using appropriate capitalization and punctuation. Use meaningful abbreviations to keep the name within 20 characters per line.
- If the well was deepened or otherwise altered by a different driller, make an appropriate notation in the remarks form.
- Do not put the driller’s address in this field.

Example:

C	e	n	t	r	a	l		T	e	x	a	s							
D	r	i	l	l	i	n	g		C	o	.	,	I	n	c	.			

## Well Depth

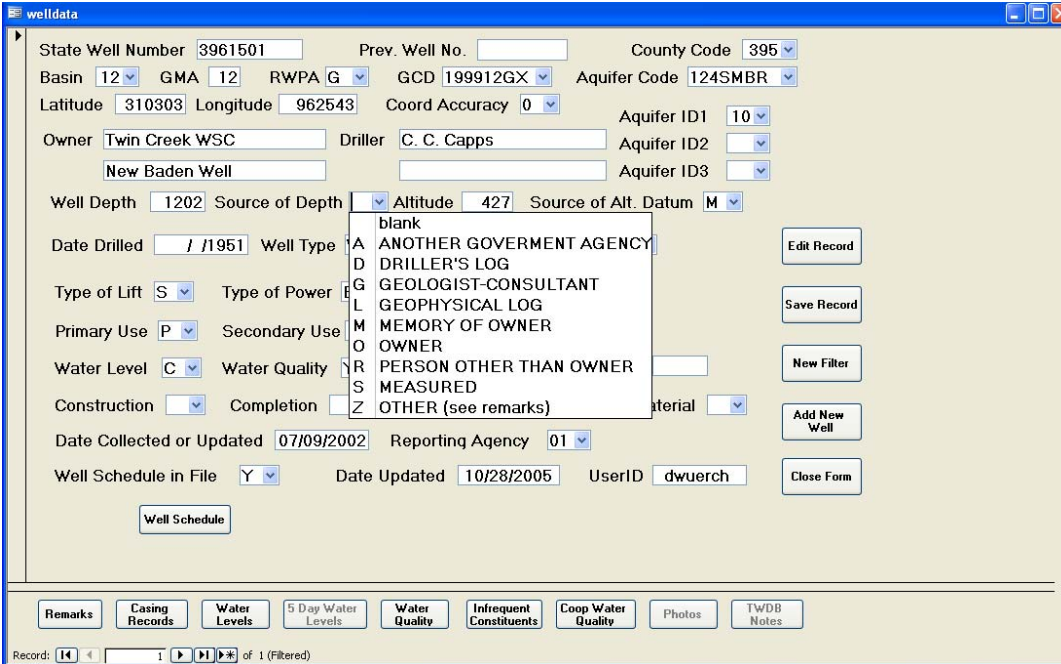
The depth of the well is the greatest depth to which the well can be sounded. If measurement is not practical, use the reported depth at which the well was finished.

- Enter the depth of the completed well, in feet below land surface.

## Source of Depth

Source of depth refers to the source of the information from which well depth was obtained.

- From the drop down menu, select the appropriate code indicating how the well depth information was obtained (Figure 18).



The screenshot shows a web-based form titled "welldata". The form contains various input fields and dropdown menus. The "Source of Depth" dropdown menu is open, displaying a list of options: blank, A ANOTHER GOVERNMENT AGENCY, D DRILLER'S LOG, G GEOLOGIST-CONSULTANT, L GEOPHYSICAL LOG, M MEMORY OF OWNER, O OWNER, R PERSON OTHER THAN OWNER, S MEASURED, and Z OTHER (see remarks). Other visible fields include State Well Number (3961501), Basin (12), GMA (12), RWPA (G), GCD (199912GX), Aquifer Code (124SMBR), Latitude (310303), Longitude (962543), Coord Accuracy (0), Aquifer ID1 (10), Owner (Twin Creek WSC), Driller (C. C. Capps), Well Depth (1202), Altitude (427), Source of Alt. Datum (M), Date Drilled (/ /1951), Well Type (A), Type of Lift (S), Type of Power (G), Primary Use (P), Secondary Use (M), Water Level (C), Water Quality (S), Construction ( ), Completion ( ), Date Collected or Updated (07/09/2002), Reporting Agency (01), Well Schedule in File (Y), Date Updated (10/28/2005), and UserID (dwuerch). Buttons for "Edit Record", "Save Record", "New Filter", "Add New Well", and "Close Form" are also present. At the bottom, there are tabs for "Remarks", "Casing Records", "Water Levels", "5 Day Water Levels", "Water Quality", "Infrequent Constituents", "Coop Water Quality", "Photos", and "TWDB Notes".

Figure 18. Drop down menu for the “Source of Depth” field.

## Altitude

Altitude is the elevation of the land at the site in feet above mean sea level.

- Enter the altitude.

## Source of Altitude Data

The “Source of Alt. Datum” field refers to the source of the information from which the altitude was obtained.

- From the drop down menu, select the appropriate code for the method used to determine altitude (Figure 19).

The screenshot shows a software window titled 'welldata'. The form contains various fields for well information. The 'Source of Alt. Datum' field is currently set to 'M' and its dropdown menu is open, displaying the following options: 'blank', 'A ALTIMETER', 'G GPS', 'L LEVEL OR OTHER SURVEYING METH.', 'M INTERPOLATED FROM TOPO MAP', and 'Z OTHER'. Other visible fields include State Well Number (3961501), Basin (12), GMA (12), RWPA (G), GCD (199912GX), Aquifer Code (124SMBR), Latitude (310303), Longitude (962543), Coord Accuracy (0), Owner (Twin Creek WSC), Driller (C. C. Capps), Well Depth (1202), Altitude (427), Date Drilled (/ /1951), Well Type (W), User Code (880900), Type of Lift (S), Type of Power (E), Horsepower, Primary Use (P), Secondary Use, Tertiary Use, Water Level (C), Water Quality (Y), Well Logs, Other Data, Construction, Completion, Casing Material, Screen Material, Date Collected or Updated (07/09/2002), Reporting Agency (01), Well Schedule in File (Y), Date Updated (10/28/2005), and UserID (dwuerch). At the bottom, there are buttons for 'Remarks', 'Casing Records', 'Water Levels', '5 Day Water Levels', 'Water Quality', 'Infrequent Constituents', 'Coop Water Quality', 'Photos', and 'TWDB Notes'. A status bar at the very bottom indicates 'Record: 14 of 1 (Filtered)'.

Figure 19. Drop down menu for the “Source of Alt Datum” field.

## Date Drilled

Date drilled refers to the date the drilling was completed.

- Enter the date drilled. If the day, month, or year is not known, leave the spaces blank. Use leading zeros for month or day values less than 10. Enter four digits for the year.

## Well Type

Well type is the principal use of the well or the purpose for which the well was constructed. If the well has been converted and is no longer serving the same purpose as was originally

intended, this field should reflect the current use. However, the original purpose should be noted in the remarks form.

- From the drop down menu, select the appropriate code indicating the principal use of the well (Figure 20). If the well is destroyed, make appropriate notations in the remarks.

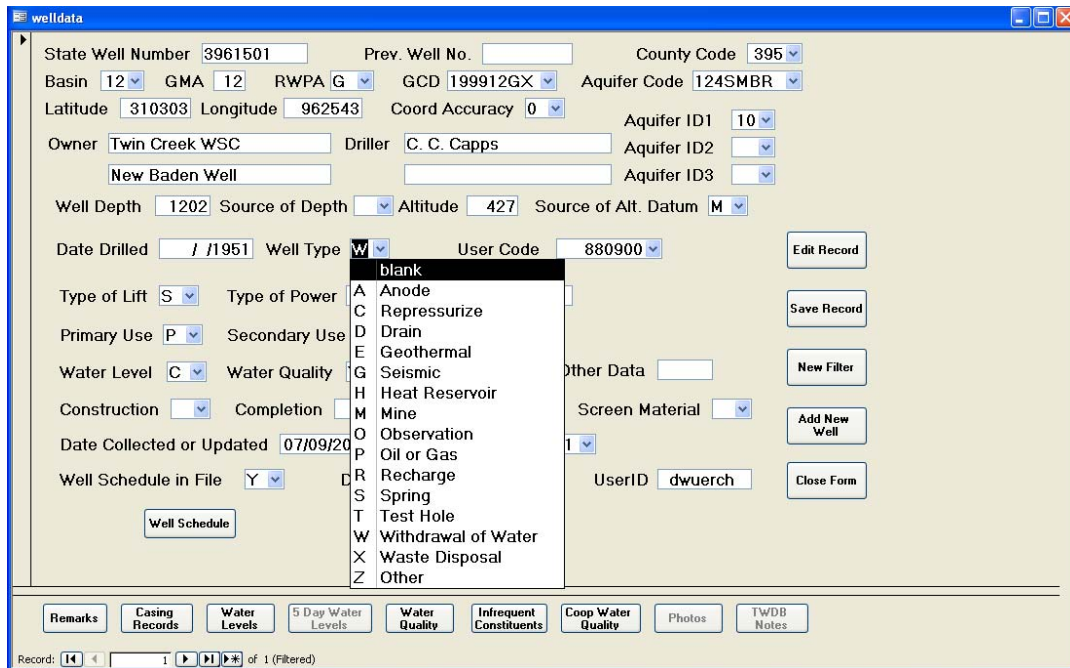


Figure 20. Drop down menu for the “Well Type” field.

## User Code

The user code is assigned only to public supply and industrial wells that in the past were inventoried annually by TWDB to capture information on wells typically pumping large volumes of water. Currently, the TWDB Public Supply Inventory Specialist obtains these numbers from the Groundwater Database Administrator during inventory of new public supply wells as appropriate and when necessary. All wells belonging to a single user are assigned the same user number, thus enabling TWDB to compile information on all wells belonging to a given user regardless of the well’s location, date drilled, or aquifer completion. User codes for these wells are identical to the alpha codes in the Water Use Survey database maintained by TWDB’s Water Resources Planning and Information group.

- Enter the six-digit user code if applicable.

## Type of Lift

The “Lift” field contains information about the pump or lift used to bring water to the surface.

- From the drop down menu, select the code corresponding to the type of pump or lift used (Figure 21).

The screenshot shows a software window titled 'welldata'. The 'Type of Lift' field is set to 'S'. A drop-down menu is open, showing the following options: blank, A AIRLIFT, B BUCKET, C CENTRIFUGAL PUMP, J JET PUMP, N NONE, P PISTON, R ROTARY PUMP, S SUBMERSIBLE PUMP, T TURBINE PUMP, U UNKNOWN, and Z OTHER (see remarks). Other fields in the form include State Well Number (3961501), Basin (12), GMA (12), RWPA (G), GCD (199912GX), Aquifer Code (124SMBR), Latitude (310303), Longitude (962543), Coord Accuracy (0), Aquifer ID1 (10), Owner (Twin Creek WSC), Driller (C. C. Capps), Well Depth (1202), Source of Depth, Altitude (427), Source of Alt. Datum (M), Date Drilled (/ /1951), Well Type (W), User Code (880900), Type of Power (E), Horsepower, Primary Use, Water Level, Construction, Date Collect, Well Schedu, and a date field (10/28/2005) with UserID (dwuerch). Buttons for Edit Record, Save Record, New Filter, Add New Well, and Close Form are visible. At the bottom, there are buttons for Remarks, Casing Records, Water Levels, 5 Day Water Levels, Water Quality, Infrequent Constituents, Coop Water Quality, Photos, and TWDB Notes. A status bar at the bottom indicates 'Record: 14 of 1 (Filtered)'.

Figure 21. Drop down menu for the “Type of Lift” field.

## Type of Power

Type of power refers to the power used to lift the water from the well.

- From the drop down menu, select the code corresponding to the type of power (Figure 22).

Note: If no pump or lift device is installed, leave this field blank even if a power source is available at the well site.

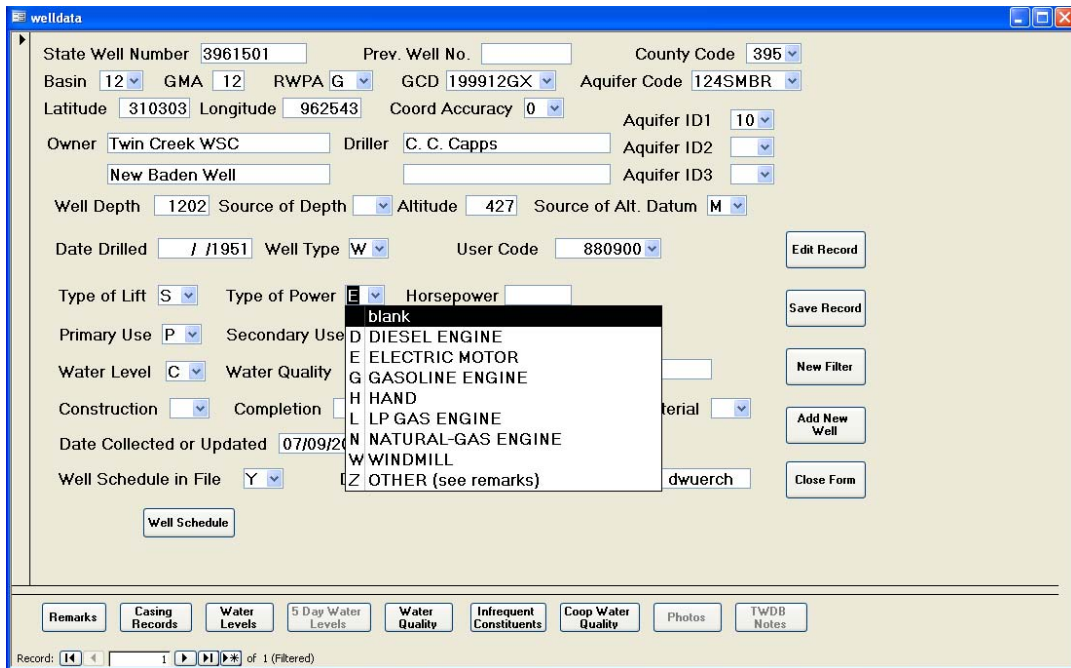


Figure 22. Drop down menu for the “Type of Power” field.

## Horsepower

Horsepower refers to the horsepower rating of the primary power source.

- Enter the horsepower rating.

Note: Two decimal places are provided for small motors. Enter 0.25, 0.50, or 0.75 for ¼, ½, or ¾ horsepower motors, respectively.

Example:

100 hp. =	100
7 ½ hp. =	7.5
¾ hp. =	0.75

## Primary/Secondary/Tertiary Use

These fields consist of information pertaining to the use or uses of water from a well. The water may be used for a single purpose or for several purposes. This record allows entry of up to three uses of water for each well (Figure 23). The water use codes are the same as those used by the U.S. Geological Survey WATSTORE System.

- Primary Use: From the drop down menu, select the corresponding code for the primary purpose for which the water is used. If water is used for only one purpose, this use should be indicated as the primary use.
- Secondary Use: If water from the well is used for more than one purpose, select the corresponding code for the secondary use from the drop down menu.
- Tertiary Use: If water from the well is used for more than two purposes, select the corresponding code for the third use type from the drop down menu.

In case of multiple use wells, it will often be a matter of judgment as to which use is primary, secondary, or tertiary.

The screenshot shows a web-based data entry form titled "welldata". The form contains various input fields and dropdown menus for well information. A dropdown menu is open for the "Primary Use" field, displaying a list of codes and their corresponding descriptions:

- blank
- A AIR CONDITIONING
- B BOTTLING
- C COMMERCIAL
- D DEWATER
- E POWER
- F FIRE
- H DOMESTIC
- I IRRIGATION
- J INDUSTRIAL (COOLING)
- K MINING
- M MEDICINAL
- N INDUSTRIAL
- P PUBLIC SUPPLY
- Q AQUACULTURE
- R RECREATION
- S STOCK
- T INSTITUTION
- U UNUSED
- Y DESALINATION
- Z OTHER (see remarks)

Figure 23. Drop down menu for the three well use fields.



## Water Level

This field indicates the availability of water level data for the well.

- From the drop down menu, select the code corresponding to the type of water level data available for the well (Figure 24). Do not leave this field blank. If no water level data is available select “N” for none.

The screenshot shows a software window titled 'welldata'. It contains various input fields for well information. The 'Water Level' field is currently open, showing a list of options: C (TWDB Current Observation Well), D (GCD Current Observation Well), U (USGS Current Observation Well), P (PWS Current Observation Well), H (Historical Observation Well), M (Miscellaneous Measurement), R (TWDB Recorder Well), and L (GCD Recorder Well). The 'C' option is selected. Other fields include State Well Number (3961501), Basin (12), GMA (12), RWPA (G), GCD (199912GX), Aquifer Code (124SMBR), Latitude (310303), Longitude (962543), Well Depth (1202), and Date Drilled (7/1/1951). Buttons for 'Edit Record', 'Save Record', 'New Filter', 'Add New Well', and 'Close Form' are visible on the right side of the form.

Figure 24. Drop down menu for the “Water Level” field.

## Water Quality

This field indicates the availability of one or more chemical analyses of water from the well.

- Enter one of these two codes:
  - Y – analysis is available
  - N – no analysis is available

## Well Logs

This field is used to enter information about the types of logs available for the well. Up to five entries may be entered in this field.

- Enter the proper code or codes from the look-up table in any order (Figure 25).

The screenshot shows the 'welldata' application window. A look-up table for the 'Well Logs' field is open, displaying a list of codes and their descriptions:

- A - Drilling Time
- B - Casing Collar
- C - Caliper
- D - Drillers
- E - Electric
- F - Fluid-Conductivity
- G - Geologists or Sample
- H - Magnetic
- I - Induction
- J - Gamma Ray
- K - Dipmeter Survey
- L - Lateral Log
- M - Microlog
- N - Neutron
- O - Microlateral Log
- P - Photographic
- Q - Radioactive Tracer
- R - Sonic
- S - Sonic
- T - Temperature
- U - Gamma-Gamma
- V - Fluid Velocity
- Y - Core
- Z - Other

The form fields are populated with the following data:

- State Well Number: 3961501
- Basin: 12
- GMA: 12
- RWPA: G
- Latitude: 310303
- Longitude: 962543
- Owner: Twin Creek WSC
- Driller: New Baden Well
- Well Depth: 1202
- Source of Depth: [dropdown]
- Date Drilled: / / 1951
- Well Type: W
- Type of Lift: S
- Type of Power: E
- Primary Use: P
- Secondary Use: [dropdown]
- Water Level: C
- Water Quality: Y
- Well Logs: [dropdown]
- Other Data: [text field]
- Construction: [dropdown]
- Completion: [dropdown]
- Casing Material: [dropdown]
- Screen Material: [dropdown]
- Date Collected or Updated: 07/09/2002
- Reporting Agency: 01
- Well Schedule in File: Y
- Date Updated: 10/28/2005
- UserID: dwuerch
- County Code: 395
- Aquifer Code: 124SMBR
- Aquifer ID1: 10
- Aquifer ID2: [dropdown]
- Aquifer ID3: [dropdown]
- Alt. Datum: M

Buttons at the bottom right include 'Edit Record', 'Save Record', 'New Filter', 'Add New Well', and 'Close Form'. A 'Well Schedule' button is located at the bottom left. A navigation bar at the very bottom shows 'Record: 1 of 1 (Filtered)'.

Figure 25. Look-up table for the “Well Logs” field.

## Other Data

This field is used to indicate the availability of geologic and/or hydrologic data associated with the well but not specifically listed previously.

- Enter the appropriate code(s) from the look-up table (Figure 26).

The screenshot shows the 'welldata' application window. The form contains the following fields and values:

- State Well Number: 3961501
- Prev. Well No.: [Empty]
- County Code: 395
- Basin: 12, GMA: 12, RWPA: G, GCD: 199912GX, Aquifer Code: 124SMBR
- Latitude: 310303, Longitude: 962543, Coord Accuracy: 0
- Aquifer ID1: 10
- Owner: Twin Creek WSC, Driller: C. C. Capps
- New Baden Well: [Empty]
- Aquifer ID2: [Empty], Aquifer ID3: [Empty]
- Well Depth: 1202, Source of Depth: [Empty], Altitude: 427, Source of Alt. Datum: M
- Date Drilled: / /1951, Well Type: W, User Code: 880900
- Type of Lift: S, Type of Power: E, Horsepower: [Empty]
- Primary Use: P, Secondary Use: [Empty], Tertiary Use: [Empty]
- Water Level: C, Water Quality: Y, Well Logs: [Empty], Other Data: [Empty]
- Construction: [Empty], Completion: [Empty], Casing Material: [Empty], Screen Material: [Empty]
- Date Collected or Updated: 07/09/2002, Reporting Agency: 01
- Well Schedule in File: Y, Date Updated: 10/28/2005, UserID: dwuerch

A look-up table for the 'Other Data' field is displayed, with the following options:

- A - Aquifer Test
- B - Power Field Test
- C - Specific Capacity
- Z - Other

Buttons at the bottom include: Edit Record, Save Record, New Filter, Add New Well, Close Form, and a 'Well Schedule' button. A navigation bar at the bottom shows 'Record: 14 of 1 (Filtered)'.

Figure 26. Look-up table for the “Other Data” field.

## Construction

Construction refers to the method by which the well was drilled or dug.

- From the drop down menu, select the code corresponding to the method of construction used (Figure 27).

The screenshot shows the 'welldata' application window with the 'Construction' dropdown menu open. The menu lists the following options:

- blank
- A Air Rotary
- B Bored or Augured
- C Cable-tool
- D Dug
- H Hydraulic Rotary
- J Jetted
- P Air Percussion
- R Reverse Rotary
- T Trenching
- V Driven
- W Drive and Wash

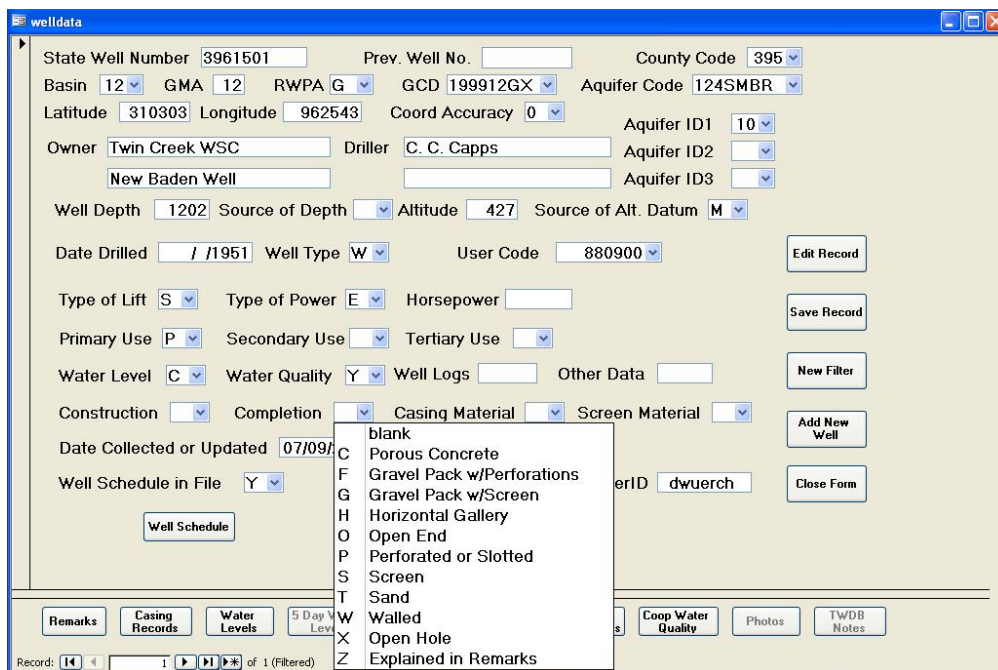
The form fields and values are the same as in Figure 26. The 'Construction' field is currently set to [Empty].

Figure 27. Drop down menu for the “Construction” field.

## Completion

Completion refers to the method of preparing a well for production and the nature of the openings that allow water to enter the well.

- From the drop down menu, select the code corresponding to the completion method used (Figure 28).



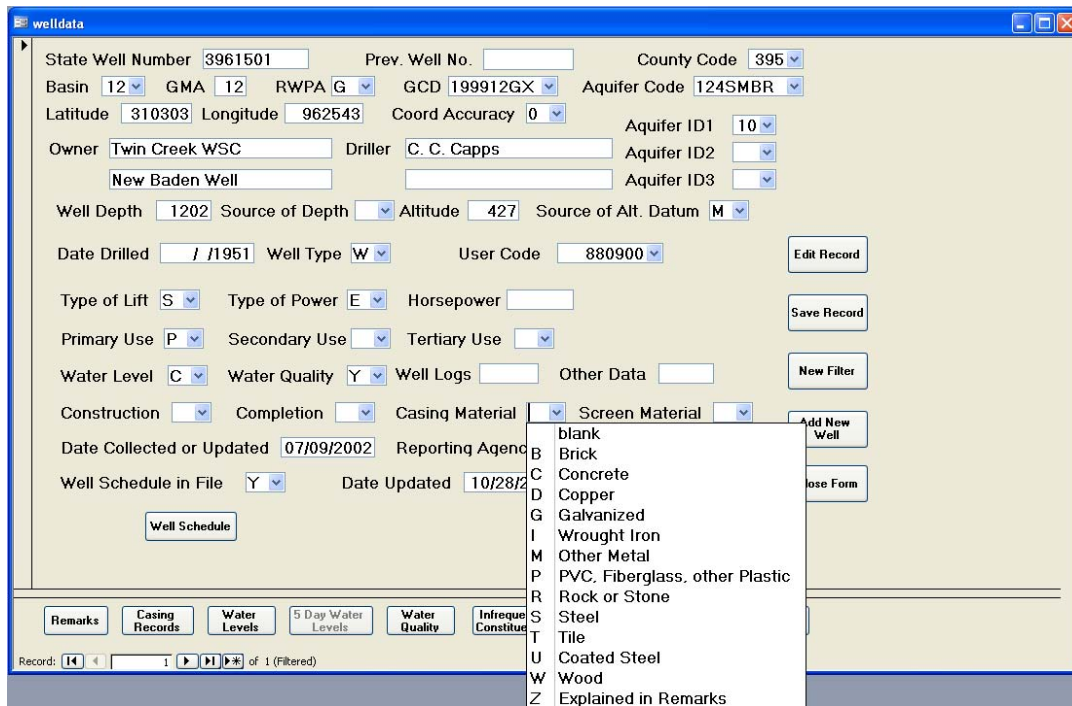
The screenshot shows the 'welldata' application window. The 'Completion' field is open, displaying a list of options: blank, Porous Concrete, Gravel Pack w/Perforations, Gravel Pack w/Screen, Horizontal Gallery, Open End, Perforated or Slotted, Screen, Sand, Walled, Open Hole, and Explained in Remarks. The 'Casing Material' field is also visible, with a value of 'dwuerch'. Other fields include State Well Number (3961501), County Code (395), Basin (12), GMA (12), RWPA (G), GCD (199912GX), Aquifer Code (124SMBR), Latitude (310303), Longitude (962543), Coord Accuracy (0), Aquifer ID1 (10), Owner (Twin Creek WSC), Driller (C. C. Capps), Well Depth (1202), Source of Depth, Altitude (427), Source of Alt. Datum (M), Date Drilled (/ /1951), Well Type (W), User Code (880900), Type of Lift (S), Type of Power (E), Horsepower, Primary Use (P), Secondary Use, Tertiary Use, Water Level (C), Water Quality (Y), Well Logs, Other Data, Construction, Completion, Casing Material, Screen Material, Date Collected or Updated (07/09/), Well Schedule in File (Y), and Well Schedule. Buttons for Edit Record, Save Record, New Filter, Add New Well, and Close Form are also present.

Figure 28. Drop down menu for the “Completion” field.

## Casing Material

Casing material refers to the type of material from which the well casing is made.

- From the drop down menu, select the code corresponding to the type of casing material used (Figure 29).



**Figure 29. Drop down menu for the “Casing Material” field.**

## Screen Material

Screen material refers to the type of material from which the screen or other open section is made.

- From the drop down menu, select the code corresponding to the type of screen material used (Figure 30).

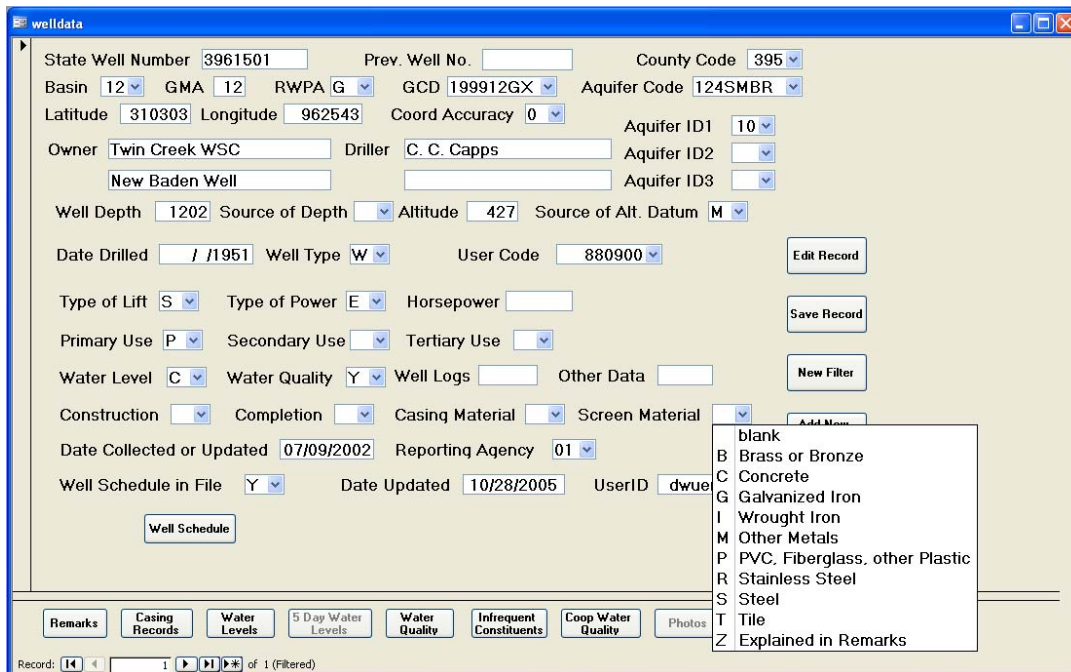


Figure 30. Drop down menu for the “Screen Material” field.

### Date Collected or Updated

The date the well was inventoried and data were field checked or the well re-inventoried and the record updated.

- Enter the date using leading zeros for month or day values less than 10. Enter four digits for the year.

Example: 

0	1
---	---

0	9
---	---

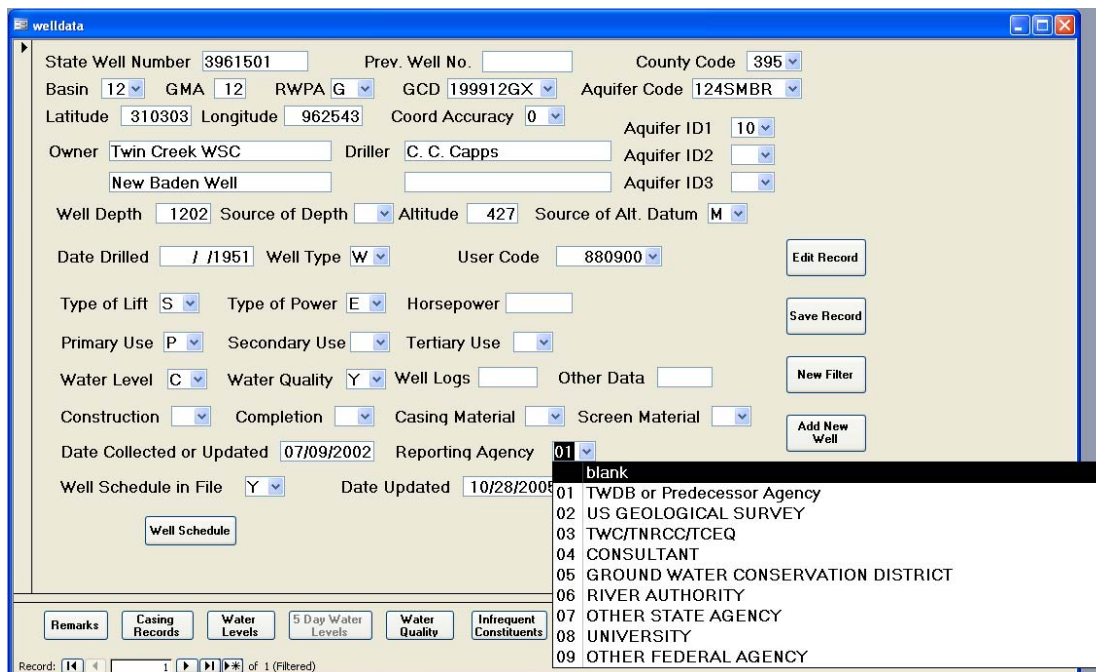
1	9	7	4
---	---	---	---

### Reporting Agency

The reporting agency is the agency that inventoried the well or reported the data.

- Select the proper code from the drop down menu (Figure 31).

**Note:** Although cities and private entities do frequently submit well data, these wells are then inventoried and the data verified by TWDB staff and would be coded as 01.



**Figure 31. Drop down menu for the “Reporting Agency” field.**

## Well Schedule in File

A well schedule (record of well) form, along with detailed well location information, is required before TWDB assigns a permanent well number. Any record appearing in this file without a back-up well schedule indicated should not be considered as reliable as those that do.

- Enter Y if a well schedule exists.
- Enter N if no well schedule is available.

## Date Updated

The date the information from the well schedule was entered into the groundwater database. This field automatically updates when the record is saved.

## User Identification

The “User ID” field is the unique identification assigned to the TWDB employee who entered or updated the information in the groundwater database. This identification is the same as the Windows user identification assigned by Programming and Development to every TWDB

employee. Programming and Development will add User IDs to the database as requested by the Database Administrator.

- Enter the User ID assigned to you. Whenever you enter a new well or update information on an existing well, you must enter your ID.



## Remarks Data Entry

The remarks form is provided for entering meaningful data for which no specific field is available. Data in this form will be stored exactly as entered. Use this space to explain entries in the other fields of the well record or to include any other pertinent comments about the well. The system provides for 20 lines of 35 characters per line.

Examples of the type of information that may be entered in the remarks form include pump setting, pumping levels, reported and measured yields, cemented interval, underream data, owner's well number or well name, and history of alteration of original well construction such as deepening or plugging. Personal information of well owners should not be put into this form.

Figure 32 shows the suggested sequence of remarks statements. Additional statements should be concise and restricted to the well description. They should begin with a capital and end with a period.

Remarks

Remarks for State Well Number: 5454804

Order	Remark 1	Remark 2
1	Well _____ in (TWDB, TWC, etc)	(Bull., Report, etc)_____.
2	Owner's well # _____.	
3	Geophysical log Q_____.	
4	Formerly used as a (PS, Irr, etc.)	well.
5	(Historical) observation well.	
6	Test hole.	
7	Converted oil test (Q_____).	
8	Stand by well.	
9	(Destroyed, plugged, abandoned)	(PS, Ind, etc.) well in 19__.
10	Unused (PS, Ind, etc.) well.	
11	Originally drilled to ___ feet in	19__.
12	Deepened from ___ feet to ___	feet in 19__.
13	Caved in at ___ feet.	
14	(Reported, measured, est.) yield	___ GPM.
15	(Reported, measured, est.) yield	___ GPM with ___ feet drawdown
16	after pumping ___ hours in 19__.	
17	Specific capacity ___ GPM/ft.	
18	Pumping level _____ feet.	
19	(Cemented, underreamed, gravel	packed) from ___ to ___ feet.
*		

Save Record      Edit Record      Close Form

Record: 19 of 19 (Filtered)

Figure 32: Well remarks field statement sequence.

## Casing Records Data Entry

This form is used to record the diameter of the casing and screen material installed in the well and the depths to the bottom of the cased and screened intervals. The term “screen” is used to mean the interval of openings through which water enters a well. This information should be entered in the same sequence as the material is set in the well, beginning with the top-most and generally largest diameter material. Information on casing and screen intervals for wells is generally found in the driller’s log.

- To enter the casing information in the TWDB groundwater database, click on the Casing Records button at the bottom of the screen.

Note: If you have entered any information in the well data form, you will need to save the record before going to the casing records screen, otherwise the information entered in the well data form will be lost. Figure 33 shows what the casing records screen looks like.

	Order	C/S/O	Diameter	Top Depth	Bottom Depth
▶	1	0	7	0	115
*					

Record: 1 of 1 (Filtered)

Figure 33: Casing records form.

**Table 1. Description of “Casing Records” fields in TWDB database.**

<b>Field</b>	<b>Description</b>
Order	Order refers to the entry order. These will run consecutively from 1, 2, 3... for each entry made.
C/S/O	Enter the code indicating if the interval is <b>cased (C)</b> , <b>screened (S)</b> (including all types of commercial screens, perforated casing, slotted casing, or other devices that function to hold the bore hole open and allow water to enter the well), or <b>open hole (O)</b> if the bore hole interval contains neither casing or screen.
Diameter	Enter the diameter, in inches, of the casing or screen. If open hole, leave blank.
Top Depth	Enter the depth, in feet, of top of each cased, screened, or open hole interval.
Bottom Depth	Enter the depth, in feet, of the bottom of each cased, screened, or open hole interval.

# Water Level Data Entry

The water level form can be accessed from either the main switchboard or the well data form.

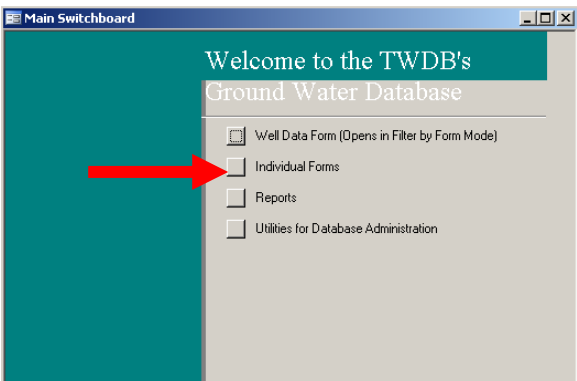

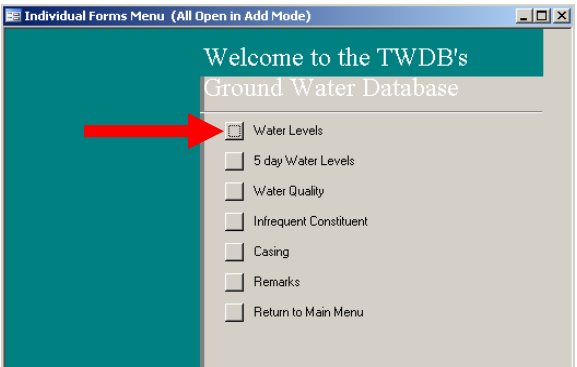

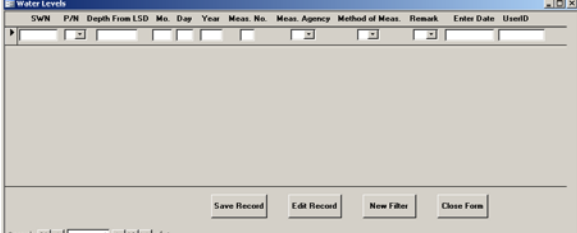
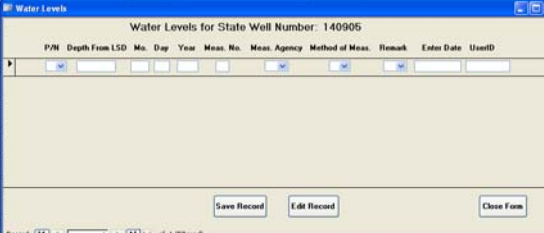
<p><b>From the main switchboard</b></p> <p>Click on Individual Forms:</p> 	<p><b>From the well data form</b></p> <p>Click on Water Levels:</p> 
<p>Click on Water Levels:</p> 	
<p>The following screens will appear:</p>	
	
<p>When accessing the water levels form from the main switchboard, you will be required to enter the state well number.</p>	<p>When accessing the water levels form from the well data form, you do not need to enter a state well number, but you will need to scroll down to a blank record before entering data, as all previous water levels for that well will appear on the form.</p>

Figure 34. Accessing the water levels form.

## **P/N—Visit Mark**

The “P/N” field is a visit mark that indicates whether the measurement is publishable (P) or not publishable (N). This is a mandatory field.

- Enter P if a water level was obtained. If the water level obtained is not indicative of the aquifer’s piezometric surface (for example the well was pumping or the measurement was questionable due to a spotty tape), document that with the appropriate code in the “Remarks” field.
- Enter N if no measurement was obtained. If you enter N for the visit mark, you need to enter a remark code to explain why.

## **Depth from Land Surface Datum**

The “Depth from LSD” field is the depth to the water from the land surface. Since the measuring point is often different from the land surface, depths will need to be adjusted to account for this.

The measuring point for each well is not stored in the system, but the value and current description of the measuring point should be kept current in field books.

All depths from land surface are entered into the system as negative values. In the case of flowing wells or where the water stands in the casing above land surface, this measurement above land surface is entered as a positive number.

- Enter the actual depth to water measurement from land surface.

## Month, Day, Year—Date of Visit

- In the “Mo., Day, Year” fields, enter the date when each measurement was taken. It is not necessary to use leading zeros for month or day values less than 10. Be sure to enter all four digits for the year.

### Example:

Enter March 7, 1932, as:

Enter October 19, 1965, as:

Enter January, 1946, as:

Enter 1954 as:

## Measurement Number

A measurement number is assigned for each measurement entered for a particular date.

If there is only one measurement,

- Enter “01” in the “Meas. No.” field.

If there is more than one measurement per date,

- Enter the measurements in chronological order on separate lines in the “Depth from LSD” field.
- Repeat the measurement date in the “Mo.,” “Day,” and “Year” fields.
- Number the measurements 1,2,3...99 in the “Meas. No.” field until all measurements entered for a particular date have been numbered.

## Measuring Agency

This refers to the agency or other entity by which the measurer is employed.

- From the drop down menu, select the appropriate code indicating which agency or entity made the measurement (Figure 35).

The screenshot shows the 'Water Levels' application window for State Well Number 5454804. The window contains a table with columns: P/N, Depth From LSD, Mo., Day, Year, Meas. No., Meas. Agency, Method of Meas., Remark, Enter Date, and UserID. The first row is selected, showing a depth of -344.2, measured on 8/1/2006, with Meas. No. 01 and Meas. Agency 01. A dropdown menu is open for the 'Meas. Agency' field, listing options from 01 to 12. The '01 TWDB and Predecessor Agencies' option is highlighted. Below the table are buttons for 'Hydrograph Data Export' (Excel2003, Excel2007), 'Save Record', 'Edit Record', and 'Close Form'. The status bar at the bottom indicates 'Record: 1 of 3 (Filtered)'.

P/N	Depth From LSD	Mo.	Day	Year	Meas. No.	Meas. Agency	Method of Meas.	Remark	Enter Date	UserID
P	-344.2	8	1	2006	01	01	1		3/15/2007	hrein
N		2	27	2008	01	01				dcoker
N		9	10	2008	01	01				dcoker
*										

- 01 TWDB and Predecessor Agencies
- 02 TWC/TNRCC/TCEQ
- 03 Other State Agencies
- 04 U.S. Geological Survey
- 05 Other Federal Agencies
- 06 Ground Water Conservation District
- 07 Registered Water Well Driller
- 08 Municipal Water Agency or PWS Corp.
- 09 Ground Water Consultant
- 10 Private Firm or Industry
- 11 Well Owner or Operator
- 12 Other or Source of Meas. Unknown

Figure 35. Drop down menu for “Meas. Agency” field.

## Method of Measurement

From the drop down menu, select the code corresponding to the method used to measure the water level (Figure 36).

The screenshot shows the 'Water Levels' application window for State Well Number 5454804. The window contains a table with columns: P/N, Depth From LSD, Mo., Day, Year, Meas. No., Meas. Agency, Method of Meas., Remark, Enter Date, and UserID. The first row is selected, showing a depth of -344.2, measured on 8/1/2006, with Meas. No. 01 and Meas. Agency 01. A dropdown menu is open for the 'Method of Meas.' field, listing options from 0 to 9. The '0 Sonic/Laser Device' option is highlighted. Below the table are buttons for 'Hydrograph Data Export' (Excel2003, Excel2007), 'Save Record', 'Edit Record', and 'Close Form'. The status bar at the bottom indicates 'Record: 1 of 3 (Filtered)'.

P/N	Depth From LSD	Mo.	Day	Year	Meas. No.	Meas. Agency	Method of Meas.	Remark	Enter Date	UserID
P	-344.2	8	1	2006	01	01	1		3/15/2007	hrein
N		2	27	2008	01	01				dcoker
N		9	10	2008	01	09				dcoker
*										

- 0 Sonic/Laser Device
- 1 Steel Tape
- 2 Electric Line
- 3 Air Line
- 4 Recorder
- 5 Pressure Gap
- 6 Logging Sonde
- 7 Unknown
- 8 Other
- 9 Recorder Sonde

Figure 36. Drop down menu for the “Method of Meas.” field.



## Remark

Remark codes are used to explain water level measurements that may not represent the piezometric surface of the aquifer. Water levels measured prior to 1990 used a different set of remark codes than those that are currently being used. Appendix C lists these historical remark codes and their meanings.

- From the drop down menu, select the appropriate remark code for each well visit (Figure 37).

The screenshot shows the 'Water Levels' software window for State Well Number 5454804. The main data entry form has the following fields: P/N (dropdown), Depth From LSD (text), Mo. (dropdown), Day (dropdown), Year (text), Meas. No. (text), Meas. Agency (dropdown), Method of Meas. (dropdown), Remark (dropdown), Enter Date (text), and User ID (text). The 'Remark' dropdown menu is open, displaying a list of codes from 01 to 82. The first option, '01 No unusual conditions noted at or near well site', is highlighted. Below the form are buttons for 'Hydrograph Data Export' (Excel2003, Excel2007), 'Save Record', and 'Edit'. The status bar at the bottom indicates 'Record: 1 of 3 (Filtered)'.

P/N	Depth From LSD	Mo.	Day	Year	Meas. No.	Meas. Agency	Method of Meas.	Remark	Enter Date	User ID
P	-344.2	8	1	2006	01	01	1		3/15/2007	hrein
N		2	27	2008	01	01	1			
N		9	10	2008	01	09	2			
*										

Remark dropdown menu options:

- 01 No unusual conditions noted at or near well site
- 02 Accurately reflect water-level conditions
- 02 Pumping-level measurement
- 03 Well or wells pumping nearby
- 04 Well pumped recently
- 05 Water level possibly affected by recent flooding
- 06 Measurement may reflect perched water table
- 07 Artificial recharge operation at or near well
- 08 Deviation due to recompletion in different zone
- 20 Questionable meas. - spotty tape
- 21 Questionable meas. - leaking airline
- 22 Questionable meas. - uncertain
- 23 Questionable meas. - deleted after review
- 24 Questionable meas. - may be from wrong well
- 25 Questionable meas. - tape does not fall free
- 26 Questionable meas. - spotty tape from oil/gas
- 40 No measurement - well destroyed
- 41 No measurement - well pumping
- 42 No measurement - can't insert tape/E-line in bore
- 43 No measurement - unable to reach water level
- 44 No measurement - tape or E-line hangs
- 45 No measurement - well bridged or caved
- 46 No measurement - well dry
- 47 No measurement - casing leaking or wet
- 48 No measurement - airline leaking or shut-in
- 50 No measurement - well flowing, unable to shut-in
- 51 No measurement - no reason stated
- 60 No measurement - unable to locate well
- 61 No meas. - temp. inaccessible (roads,gates,etc)
- 62 No meas. - temp. inaccessible (vicious animals)
- 63 No meas. - temp. blocked
- 64 Deleted as Obs. well due to owner request
- 65 Deleted as Obs. well due to hazards to measurer
- 80 Discontinued - no reason stated (outside source)
- 81 Well deleted from C program
- 82 C well not measured due to admin decision

Figure 37. Drop down menu for the “Remark” field.

## Enter Date/User ID

These two fields are automatically populated when you hit the Save Record button.

## 5-Day Water Levels Data Entry

A small percentage of water level observation wells are equipped with continuous water level recorders that provide uninterrupted records of water level changes. Digital data from the recorders is captured by a TWDB server from the Geostationary Operational Environmental Satellite (GOES) system. TWDB staff uploads these measurements six times a month into the 5-day water levels form (Figure 38) in the groundwater database. This screen looks identical to the water levels form, but it contains only information received from the continuous water level recorder wells. For TWDB personnel, refer to TWDB Work Process Document (WPD) 125 for more information on uploading water level data from recorders.

P/N	Depth From LSD	Mo.	Day	Year	Meas. No.	Meas. Agency	Method of Meas.	Remark	Enter Date
P	-193.57	4	30	1964	01	0	0		
P	-193.28	5	5	1964	01	0	0		
P	-189.88	5	10	1964	01	0	0		
P	-190.85	5	15	1964	01	0	0		
P	-194.1	5	20	1964	01	0	0		
P	-193.77	5	25	1964	01	0	0		
P	-196.4	5	30	1964	01	0	0		
P	-191.61	6	5	1964	01	0	0		
P	-189.65	6	10	1964	01	0	0		
P	-193.04	6	15	1964	01	0	0		
P	-193.96	6	20	1964	01	0	0		
P	-192.45	6	25	1964	01	0	0		
P	-197.92	6	30	1964	01	0	0		
P	-201.34	7	5	1964	01	0	0		
P	-202.01	7	10	1964	01	0	0		
P	-207.5	7	15	1964	01	0	0		
P	-209.82	7	20	1964	01	0	0		
P	-204.83	7	25	1964	01	0	0		
P	-202.49	7	30	1964	01	0	0		
P	-203.63	8	5	1964	01	0	0		
P	-204.57	8	10	1964	01	0	0		
P	-204.6	8	15	1964	01	0	0		
P	-199.97	8	20	1964	01	0	0		
P	-200.88	8	25	1964	01	0	0		
P	-203.9	8	30	1964	01	0	0		
P	-210.19	9	5	1964	01	0	0		
P	-210.3	9	10	1964	01	0	0		

Figure 38.: 5-day water levels form.

# Water Quality Data Entry

The water quality data form can be accessed from either the main switchboard or the well data form (Figure 39). This section describes only those fields in which data needs to be manually entered by field personnel upon returning from a water sampling trip. The remaining fields are updated automatically when the Water Quality Program Specialist uploads the analysis results from the lab.

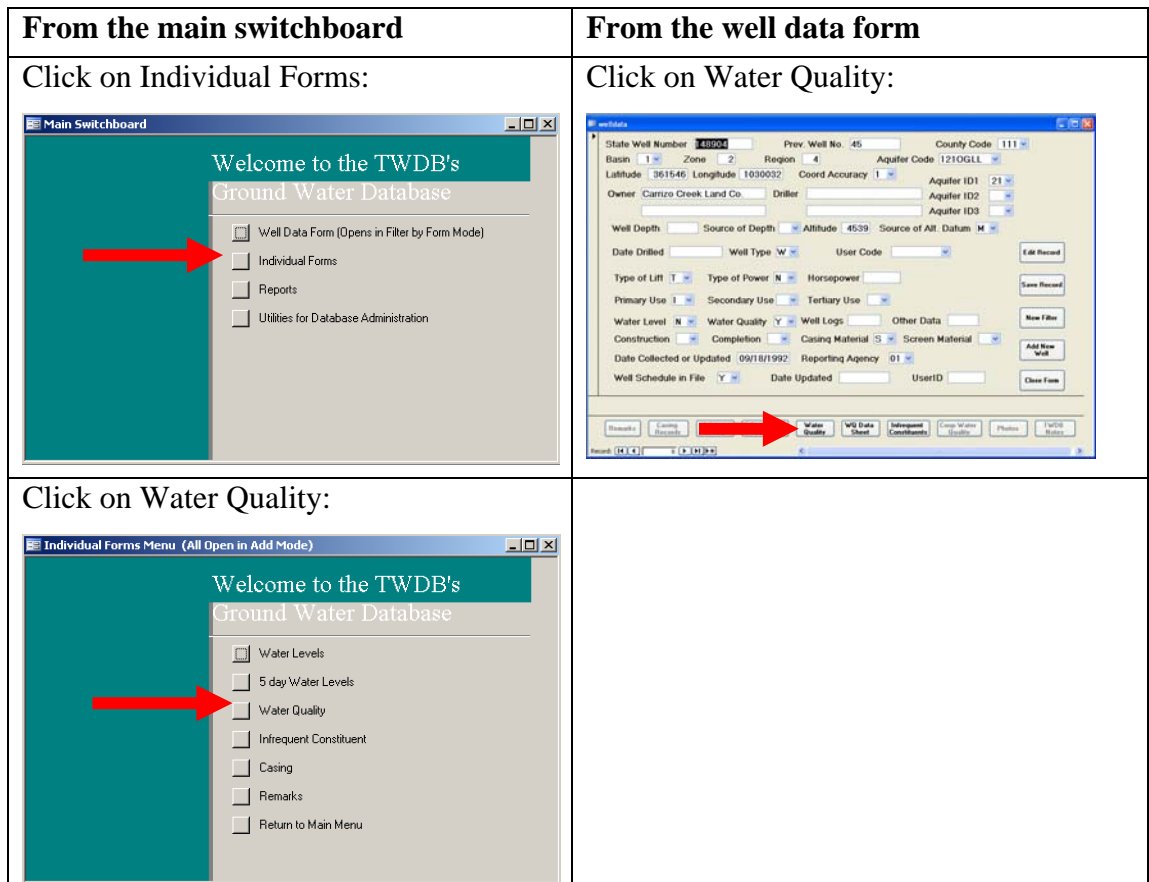


Figure 39. Accessing the water quality form.

Either method will take you to the water quality form (Figure 40).

**Figure 40: Water quality form.**

**Note:** If you accessed the water quality form from the main switchboard it will bring up a blank form, and you will need to enter the state well number. If you accessed the water quality form from the well data screen, you will not need to enter the state well number, but you will need to advance to a blank form as it will bring up all water quality records for that state well number.

### Sample Date

- Enter the date that the sample was collected, which is usually different from the date analyzed. However, if the laboratory date is all that is available, use it. It is not necessary to use leading zeros for month or day values less than 10. Be sure to enter all four digits for the year.

Example:

Enter March 7, 1932, as:

Enter October 19, 1965, as:

## Sample Number

The “Sample No.” field is used to identify the order in which the sample was taken when multiple samples were taken on a particular date.

- If only one analysis is available, then a one (1) should be placed in this field.
- For wells sampled more than once in any given day, each analysis will be numbered consecutively in this field. Up to nine analyses per day may be entered.

## Sample Time

This field is used to record the time of day the sample was taken. When more than one sample was taken on a particular day, it allows the sampler to record the time between sampling intervals. In order to distinguish between a.m. and p.m., a 24-hour clock is used.

- Enter the time as per the following examples:

Enter 8:45 a.m.. as: 

0	8	4	5
---	---	---	---

Enter 4:21 p.m.. as: 

1	6	2	1
---	---	---	---

## Sampled Interval

These fields are intended to be used ONLY if the aquifer and/or producing interval are different from the completed well. Some examples are as follows:

1. A Twin Mountains well with a depth of 1,600 feet completed from 1,450 to 1,600 feet had a chemical analysis run on a sample from the Paluxy formation between 800 and 920 feet.

**Sampled Interval: Top**

0900
------

**Bottom**

0920
------

**Sampled Aquifer**

218PLXY
---------

2. A chemical analysis run on a sample from a well completed in the Hueco Bolson indicated bad water from 800 to 920 feet, and the well was plugged back to 800 feet.

Sampled Interval: Top  Bottom  Sampled Aquifer

**Reliability Remark**

- From the drop down menu, select the appropriate code based on how the sample was collected (Figure 41).

Water Quality

State Well Number  Sample Date    Sample No  Sample Time

*Fill in the line below only if the sampled interval and aquifer is different from the completed well.*

Sampled Interval: Top  Bottom  Sampled Aquifer

Reliability Remark  Collecting Agency  Lab Code

Collection Remarks

Balanced/Unbalanced

Calcium

Magnesium

Sodium

Potassium

Strontium

B/U Value

Date Record Entered  Entered by

Print This w/ Infrequents Save Record Edit Record Close Form

Record: 1 of 1 (Filtered)

Reliability Remark dropdown menu options:

- 01 Reliability unknown, not available, or not yet entered into database.
- 02 Sample collected from tank, distribution, or bailed from well. Not indicative of aquifer quality. Data should be used carefully.
- 03 Sample collected from well not sufficiently pumped; and not filtered or preserved. Data should still be used carefully.
- 04 Sample collected from well sufficiently pumped but not filtered or preserved. Holding time probably not honored.
- 05 Chemical analysis taken from a report. Sample collection and preservation procedures unknown.
- 06 Sample filtered in the field. Temperature, conductivity, and pH measured in the field.
- 07 Same as #8, but not filtered in the field.
- 08 Sampled in accordance to TWDB's UM-51. Temp., cond., pH stabilized. Filtered + field tested for alk.. Preserved, chilled, holding time honored.
- 09 Same as #10 but not filtered
- 10 Sample collected by TCEQ staff following prescribed project QA-QC procedures.
- 11 Cation sample preserved and run thru TDH lab. Anion and nutrient sub-samples set to lab at T. Tech Univ. and ran within 24 hours.
- 12 Similar to #10 but sample results determined by using a Hach DR-2000 lab.
- 13 Collection procedures not documented, results obtained by use of a Ground Water District's Hach equipment.
- 14 Sample collected by USGS for NAWQA program utilizing the 'Clean Sample' technique

**Figure 41. Drop down menu for the “Reliability Remark” field.**

## Collecting Agency

- From the drop down menu, select the appropriate code for the agency collecting the sample (Figure 42).

The screenshot shows a software window titled "Water Quality". The interface includes several input fields and a list of options for the "Collecting Agency" field.

Fields visible include:

- State Well Number: 4644501
- Sample Date: [ ] [ ] [ ]
- Sample No: [ ]
- Sample Time: [ ]
- Reliability Remark: [ ]
- Collecting Agency: [ ] (dropdown menu open)
- Lab Code: [ ]
- Collection Remarks: [ ]
- Balanced/Unbalanced: [ ]
- Temp. C: [ ]
- Calcium: [ ] mg/L
- Magnesium: [ ] mg/L
- Sodium: [ ] mg/L
- Potassium: [ ] mg/L
- Strontium: [ ] mg/L
- Silica: [ ]
- Sulfate: [ ]
- Chloride: [ ]
- Fluoride: [ ]
- Nitrate: [ ]
- Bicarbonate: [ ]
- Carbonate: [ ]
- B/U Value: [ ]
- Date Record Entered: [ ]
- Entered: [ ]

The "Collecting Agency" dropdown menu is open, showing the following list of options:

- 01 Texas Water Development Board and Predecessor Agencies
- 02 Texas Department of Health
- 03 U.S. Geological Survey
- 04 TWC/TNRCC/TCEQ
- 05 Other State Agencies
- 06 Other Federal Agencies
- 07 Groundwater Conservation District (general)
- 08 Registered Water Well Driller
- 09 Municipal Water Agency or Public Water Supply Corporation
- 10 Ground Water Consultant
- 11 Private Firm or Industry
- 12 Well Owner or Operator
- 13 Gonzales County UWCD
- 14 Bexar Metropolitan Water District
- 15 Edwards Aquifer Authority (EAA)
- 16 Barton Springs/Edwards Aquifer CD
- 17 San Antonio Water System (SAWS)
- 18 Springhills Water Management District
- 19 Headwaters GCD (Kerr)
- 20 Other or Identity Unknown
- 21 Blanco-Pedernales GCD
- 22 High Plains UWCD #1
- 23 Hemphill UWCD
- 24 North Plains GCD #2
- 25 Panhandle GCD

At the bottom of the window, there is a "Print This w/ Infrequents" button and a record navigation bar showing "Record: 1 of 1 (Filtered)".

Figure 42. Drop down menu for the “Collecting Agency” field.

## Lab Code

- From the drop down menu, select the appropriate code for the laboratory performing the chemical analysis (Figure 43).

The screenshot shows a software window titled "Water Quality". The form contains the following fields and options:

- State Well Number: 4644501
- Sample Date: [ ] [ ] [ ]
- Sample No: [ ]
- Sample Time: [ ]
- Fill in the line below only if the sampled interval and aquifer is different from the completed well.
- Sampled Interval: Top [ ] Bottom [ ] Sampled Aquifer [ ]
- Reliability Remark: [v]
- Collecting Agency: [v]
- Lab Code: [v]
- Collection Remarks: [ ]
- Balanced/Unbalanced: [ ]
- Temp. C: [ ]
- pH: [ ]
- Sp: [ ]
- Calcium: [ ] [ ] mg/L
- Silica: [ ] [ ] mg/L
- Magnesium: [ ] [ ] mg/L
- Sulfate: [ ] [ ] mg/L
- Sodium: [ ] [ ] mg/L
- Chloride: [ ] [ ] mg/L
- Potassium: [ ] [ ] mg/L
- Fluoride: [ ] [ ] mg/L
- Strontium: [ ] [ ] mg/L
- Nitrate: [ ] [ ] mg/L
- Bicarbonate: [ ] mg/L
- B/U Value: [ ]
- Carbonate: [ ] mg/L
- Date Record Entered: [ ] [ ] [ ]
- Entered by: [ ]
- Buttons: Print This w/ Infreqs, Save Record, Edit
- Record: [ ] of 1 (Filtered)

The dropdown menu for "Lab Code" is open, showing the following list of options:

- 01 Texas Department of Health
- 02 U.S. Geological Survey
- 03 TWDB Field Analysis
- 04 Curtis Lab
- 05 Edna Wood Lab
- 06 Pope Testing Lab
- 07 Trinity Testing Lab
- 08 Microbiology
- 09 Southwestern Analytical Chemicals
- 10 Houston Laboratories
- 11 Texas Agri. Experiment Stations
- 12 WPA
- 13 University of Texas
- 14 Texas A&M University
- 15 Texas Tech University
- 16 NTSU Water Research Lab
- 17 El Paso Water Utilities
- 18 Radian Corporation
- 19 Combo of TDH(01) and TTU(15)
- 20 Texas Water Commission Lab
- 21 Railroad Commission
- 22 Ground Water Conservation District
- 23 Lower Colorado River Authority (LCRA)
- 24 Energy Labs Inc.
- 25 Immunoassay at TCEQ
- 26 Anacon, Inc
- 96 Misc. Municipal Lab
- 97 Misc. Industrial Lab
- 98 Misc. Commercial
- 99 Laboratory Unknown

Figure 43. Drop down menu for the "Lab Code" field.



## Collection Remarks

This field allows up to 30 alpha-numeric characters for recording data pertinent to that sample.

- Enter remarks as appropriate.

### Example:

1. Well pumping for 3 hours
2. Rotten egg odor
3. Sample has reddish color

## Temperature C

- In the “Temp. C” field, enter the temperature in degrees Celsius rounded off to the nearest whole number.

### Example:

Enter 8° as:

Enter 16° as:

Enter 21.7° as:

Should the need arise to have degrees Fahrenheit or both degrees Celsius and degrees Fahrenheit to several decimal places, the appropriate entry can be made on the infrequent constituent form.

## pH

- Enter the final pH reading. The first box is a flag field, provided for < (less than) and > (greater than) symbols as necessary. If you are entering the precise pH as it was determined in the field, leave the flag field blank.

### Example:

Enter a pH of 8.23 as: **pH**

## Specific Conductance

- Enter the final specific conductance reading in units of milligrams per liter. The first box is a flag field, provided for < (less than) and > (greater than) symbols as necessary. If you are entering the precise specific conductance as it was determined in the field, leave the flag field blank.

### Example:

Enter a specific conductance of 1305 as: **Specific Conductance**

# Infrequent Constituents Data Entry

The infrequent constituents form can be accessed from either the main switchboard or the well data form.

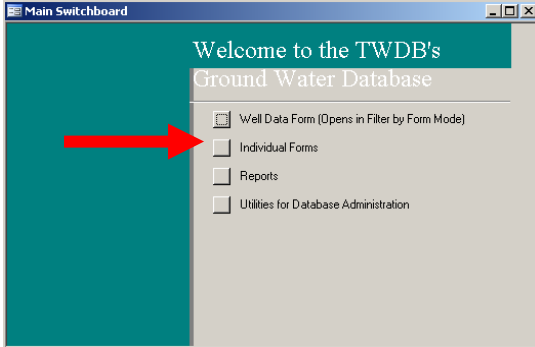
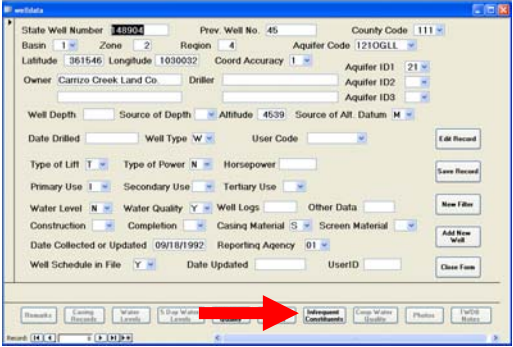
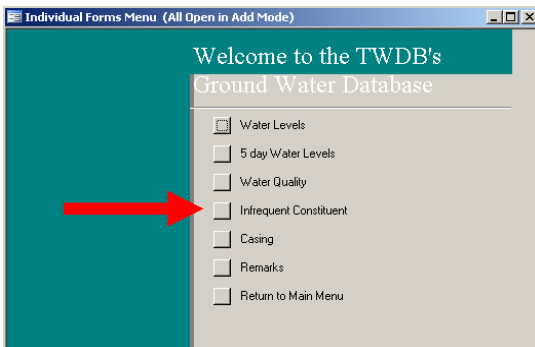
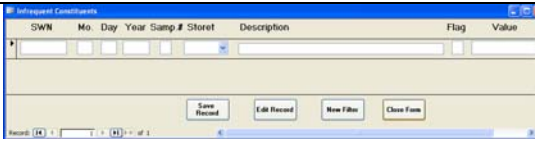
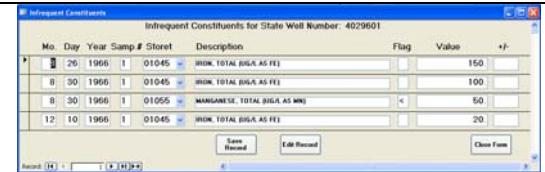
<p><b>From the main switchboard</b></p>	<p><b>From the well data form</b></p>
<p>Click on Individual Forms:</p> 	<p>Click on Infrequent Constituents:</p> 
<p>Click on Infrequent Constituents:</p> 	
<p>The following screens will appear</p>	
	
<p>When accessing the infrequent constituents form from the main switchboard, you will be required to enter the state well number.</p>	<p>When accessing the infrequent constituents form from the well data screen, you do not need to enter a state well number, but you will need to scroll to a blank record before entering data, as all previous entries for that well will appear on the form.</p>

Figure 44. Accessing the infrequent constituents form.

## Month, Day, Year—Date of Sample

- Enter the month, day, and year in which the sample was taken. It is not necessary to use leading zeros for month or day values less than 10. Be sure to enter all four digits for the year.

### Example:

Enter March 7, 1932, as:

Enter October 19, 1965, as:

Enter January 1946 as:

Enter 1954 as:

## Sample number

The “Samp. #” field is used to identify the order in which the sample was taken when multiple samples were taken on a particular date.

- If only one analysis is available, then a one (1) should be placed in this field.
- For wells sampled more than once in any given day, each analysis will be numbered consecutively in this field.

## STORET

STORET codes and their descriptions are provided in Appendices E and F in both alphabetical order and by STORET code sequence. STORET, short for STOrage and RETrieval, is a repository for water quality, biological, and physical data used by the U.S. Environmental Protection Agency, the U.S. Geological Survey, other federal agencies, and many others (<http://www.epa.gov/storet/>). The STORET data system is actively being populated with water quality data by the U.S. Environmental Protection Agency. Table 2 lists some commonly used

STORET codes. With each STORET code, only one specific unit can be used. For example, iron is recorded in micrograms per liter for STORET code 71885.

- Enter the appropriate STORET code for each analysis performed. Make sure the value entered from the lab report reflects the same unit of measure as is required in the STORET Dictionary (Appendices D and E or Table 2).

**Table 2: Commonly used STORET codes.**

<b>Code</b>	<b>Description</b>	<b>Unit of measure</b>
00010	Temperature	Celsius
82244	Phenol alkalinity	mg/L
39086	Total alkalinity	mg/L
99300	Oxygen, dissolved (photometer)	mg/L

mg/L = milligrams per liter

### **Description**

This field populates automatically when a STORET code is entered.

### **Flag**

The flag field is provided for < (less than) and > (greater than) symbols, as necessary.

### **Value**

- Enter the value from the lab report or field data sheet for each constituent.

+/-

The confidence interval field preceded by the +/- symbol, is usually used when entering radioactivity values.

## Coop Water Quality Form

The coop water quality form contains analyses acquired by outside cooperators, such as the U. S. Geological Survey and Texas Commission on Environmental Quality, who are sharing the information with TWDB. This form is similar to the infrequent constituents form but is kept separate because the data typically comes from sampling events focusing on one or just a few constituents as opposed to the infrequent constituents, which are associated with a routine water quality analysis.

Cooperative Water Quality for State Well Number: 3734104

Date	Storet	Entity	Lab	Relia- bility	Description	Flag	Value	+/-	Date Entered
3/6/2002	39033	04	25	11	ATRAZINE, TOTAL, UG/L	<	0.0500		2/6/2007
3/6/2002	82612	04	25	11	METOLACHLOR, WHOLE WATER, TOTAL RECOVERABLE, UG/L	<	0.0500		2/6/2007
4/19/2006	39033	04	25	11	ATRAZINE, TOTAL, UG/L		0.06		11/20/2007
*									

Record: 1 of 3 (Filtered)

Figure 45. Water quality coop form

# Appendices

## Appendix A – Aquifer Codes (Alphabetical By Name)

<b>Aquifer Code</b>	<b>Aquifer Name</b>
318ADML	Admiral Formation
211AGUJ	Aguja Formation
110ACPO	Alluvial Channel and Plain Deposits, and Ochoa Series
110ALVP	Alluvial Plain Deposits
110AVPW	Alluvial Plain Deposits and Whitehorse Group
110ABDC	Alluvial Plain Deposits, Blaine Gypsum, and Dog Creek Shale
110AVTC	Alluvial Terrace and Channel Deposits
110ATCF	Alluvial Terrace and Channel Deposits, and Flowerpot Shale
110ATCW	Alluvial Terrace and Channel Deposits, and Whitehorse Group
100ALVM	Alluvium
110AVAN	Alluvium and Antlers Sand
110AVAR	Alluvium and Arroyo Formation
110AVMA	Alluvium and Artesia Group
110AVAU	Alluvium and Austin Chalk
110AVBL	Alluvium and Blaine Gypsum
110AVCY	Alluvium and Canyon Group
110AVCZ	Alluvium and Carrizo Sand
110AVCH	Alluvium and Choza Formation
110AVCG	Alluvium and Cisco Group
110AVCF	Alluvium and Clear Fork Group
110AVCM	Alluvium and Cook Mountain Formation
110AVCC	Alluvium and Cretaceous Rocks
110AVDK	Alluvium and Dockum Formation
110AVME	Alluvium and Edwards and Associated Limestones
110AVEV	Alluvium and Evangeline Aquifer
110AVFV	Alluvium and Fluvial Terrace Deposits
110AVGR	Alluvium and Glen Rose Limestone
110AVGL	Alluvium and Goliad Sand
110AHTP	Alluvium and High Terrace Plain Deposits
110AVJK	Alluvium and Jackson Group
110AVML	Alluvium and Leona Formation
110AVLS	Alluvium and Lissie Sand
110AVLC	Alluvium and Lower Cretaceous Rocks
110AVMF	Alluvium and Marble Falls Limestone
110AVOG	Alluvium and Ogallala Formation
110AVPR	Alluvium and Pease River Group
110AVPS	Alluvium and Permian System
110AGRT	Alluvium and Precambrian Granite
110AVQC	Alluvium and Queen City Sand
110AVRF	Alluvium and Reklaw Formation
110AVSB	Alluvium and Simsboro Formation
110AVSS	Alluvium and Sparta Sand
110AVTY	Alluvium and Taylor Group
111AVMT	Alluvium and Terrace Deposits
110AVTV	Alluvium and Tertiary Volcanics
110AVTP	Alluvium and Travis Peak Formation
110AVVL	Alluvium and Vale Formation



## Appendix A – Aquifer Codes (Alphabetical By Name)

<b>Aquifer Code</b>	<b>Aquifer Name</b>
110AVMW	Alluvium and Wichita Group
110AVWX	Alluvium and Wilcox Group
110AVYG	Alluvium and Yegua Formation
110AASP	Alluvium, Antlers Sand, and Permian System
111ABZR	Alluvium, Brazos River
110AVCB	Alluvium, Choza Formation, and Bullwagon Dolomite
111AVCR	Alluvium, Colorado River
110AVET	Alluvium, Edwards and Associated Limestones, and Trinity Sands
110AVFP	Alluvium, Flood Plain
110AHTW	Alluvium, High Terrace Deposits, and Whitehorse Group
110ALWX	Alluvium, Leona Formation, and Wilcox Group
110ALTC	Alluvium, Low Terrace and Channel Fill Deposits
110ALTO	Alluvium, Low Terrace and Channel Fill Deposits, and Ogallala Formation
110ALTW	Alluvium, Low Terrace and Channel Fill Deposits, and Whitehorse Group
110ATSB	Alluvium, Terrace Deposits and Seymour Formation, and Blaine Formation
110AVTS	Alluvium, Terrace Deposits, and Seymour Formation
110ASSA	Alluvium, Terrace Deposits, Seymour Formation, and San Angelo Sandstone
367ALST	Alstate Shale
112ALLM	Alta Loma Sand
313ALTD	Altuda Formation
211ANCC	Anacacho Limestone
211ACCE	Anacacho Limestone and Escondido Formation
123ANHC	Anahuac Formation
211ANNN	Annuna Chalk
218ALRS	Antlers Sand
218ASDG	Antlers Sand and Dockum Formation
218ALSP	Antlers Sand and Pennsylvanian Rocks
218ANTP	Antlers Sand and Permian Rocks
NOT-APPL	Aquifer Code Is Not Applicable To This Well
UNKNOWN	Aquifer Not Able To Be Determined
319ARCT	Archer City Formation
318ARRY	Arroyo Formation
313ARTS	Artesia Group
211ASTN	Austin Chalk
211AEDD	Austin Chalk and Edwards and Associated Limestones
321AVIS	Avis Sandstone
110BIBC	Barrier Island and Beach Deposits
110BILD	Barrier Island Deposits
112BMNT	Beaumont Clay
112BMLS	Beaumont Clay and Lissie Formation
112BMLG	Beaumont Clay, Lissie Formation, and Goliad Sand
318BLPL	Belle Plains Formation
124BFCS	Bigford Formation and Carrizo Sand
124BGDF	Bigford Formation of Claiborne Group
313BLIN	Blaine Gypsum
211BLSM	Blossom Sand
120BLSN	Bolson Deposits
318BSVP	Bone Spring and Victorio Peak Limestones
318BSPG	Bone Spring Limestone

## Appendix A – Aquifer Codes (Alphabetical By Name)

<b>Aquifer Code</b>	<b>Aquifer Name</b>
211BNHM	Bonham Marl
211BQLS	Boquillas Formation
324BZRVL	Brazos River Conglomerate Member, Lower Part of Garner Formation
324BZRVU	Brazos River Conglomerate Member, Upper Part of Garner Formation
211BUDA	Buda Limestone
211BLWG	Buda Limestone and Washita Group
318BLGN	Bullwagon Dolomite Member of Vale Formation
122BKVL	Burkeville Aquiclude
124CABF	Calvert Bluff Formation
124CSB	Calvert Bluff Formation and Simsboro Sand Member
370CMBR	Cambrian System
124CRVR	Cane River Formation
321CNCS	Canyon and Cisco Groups
321CNYN	Canyon Group
371CPMN	Cap Mountain of The Riley Formation
313CPTN	Capitan Limestone
313CRDM	Capitan Reef Complex - Delaware Mountain Group
313CRCX	Capitan Reef Complex and Associated Limestones
124CRRZ	Carrizo Sand
124CZCB	Carrizo Sand and Calvert Bluff Formation
124CZSB	Carrizo Sand and Simsboro Sand Member of Rockdale Formation
124CZWX	Carrizo Sand and Wilcox Group, Undifferentiated
124CZCSB	Carrizo Sand, Calvert Bluff Formation, and Simsboro Formation
312CSTL	Castile Gypsum
122CTHL	Catahoula Formation
122CJCK	Catahoula Tuff and Jackson Group
100PECS	Cenozoic Pecos Alluvium
100CPCR	Cenozoic Pecos Alluvium and Cretaceous Rocks
100CPDG	Cenozoic Pecos Alluvium and Dockum Formation
100CPCRL	Cenozoic Pecos Alluvium and Lower Cretaceous Rocks
100CPDR	Cenozoic Pecos Alluvium and Dockum and Rustler Formations
112CEVG	Chicot and Evangeline Aquifers
112CHCT	Chicot Aquifer
112CHCTL	Chicot Aquifer, Lower
112CHCTM	Chicot Aquifer, Middle
112CHCTU	Chicot Aquifer, Upper
318CZVL	Choza and Vale Formations
318CHOZ	Choza Formation
318CZBW	Choza Formation and Bullwagon Dolomite
321CSCO	Cisco Group
318CLFK	Clear Fork Group
319CMJC	Coleman Junction Limestone Member of Putnam Formation
321CCPS	Colony Creek and Placid Shales
321CLCK	Colony Creek Shale
321CCRP	Colony Creek Shale, Ranger Limestone, and Placid Shale
218CMPK	Comanche Peak Limestone
124CKMN	Cook Mountain Formation
124CKMC	Cook Mountain Formation and Carrizo Sand
124CKMS	Cook Mountain Formation and Sparta Sand

## Appendix A – Aquifer Codes (Alphabetical By Name)

<b>Aquifer Code</b>	<b>Aquifer Name</b>
211CRSC	Corsicana Marl
218CCRK	Cow Creek Limestone
210CRCS	Cretaceous System
124CPRS	Cypress Aquifer
211DKOP	Dakota Group and Purgatoire Formation
211DLME	Dakota Group, Lytle, Morrison, and Exeter Sandstone
211DKPJ	Dakota Group, Purgatoire Formation, and Jurassic Rocks
211DKOT	Dakota Sandstone or Formation
313DLRM	Delaware Mountain Formation or Group
313DMBS	Delaware Mountain Group - Bone Spring Limestone
312DYLK	Dewey Lake Red Beds
231DCKM	Dockum Formation
231DCKP	Dockum Formation and Permian Rocks
313DCKB	Dog Creek Shale and Blaine Gypsum
313DCBF	Dog Creek Shale, Blaine Gypsum, and Flowerpot Shale
110DUNE	Dune Sand
110DOGL	Dune Sand and Ogallala Formation
112EFBL	Eagle Flat Bolson
211EGFD	Eagle Ford Shale
218EDRDA	Edwards and Associated Limestones
218EBFZA	Edwards and Associated Limestones (Balcones Fault Zone Aquifer)
218EDAS	Edwards and Associated Limestones and Antlers Sand
218EDGRU	Edwards and Associated Limestones and Upper Member of Glen Rose Limestone
218EDAD	Edwards and Associated Limestones, Antlers Sand, and Dockum Formation
218EDGR	Edwards and Associated Limestones, and Glen Rose Limestone
218EDPM	Edwards and Associated Limestones, and Permian System
218EDDT	Edwards and Associated Limestones, and Trinity Group
218EDRD	Edwards Limestone
124ELPC	El Pico Clay
367ELBG	Ellenburger Group
367EBCR	Ellenburger Group and Cambrian Rocks
367EBHK	Ellenburger Group and Hickory Sandstone
367EBPH	Ellenburger Group and Post-Hickory Sandstone Cambrian Rocks
367EBSS	Ellenburger Group and San Saba Aquifer
367EBSW	Ellenburger Group, San Saba Limestone, and Welge Sandstone
211ECDD	Escondido Formation
121EVJP	Evangeline and Jasper Aquifers
121EVGL	Evangeline Aquifer
121EVBV	Evangeline Aquifer and Burkeville Confining Unit
121EVJPU	Evangeline Aquifer and Upper Unit of Jasper Aquifer
221EXTR	Exeter Sandstone
122FLMG	Fleming Formation
122FBKV	Fleming Formation and Burkeville Confining Unit
313FLRP	Flowerpot Shale
218FKBT	Fredericksburg and Trinity Groups
218FKBG	Fredericksburg Group
218FGAS	Fredericksburg Group and Antlers Sand
218FRGR	Fredericksburg Group and Glen Rose Limestone
218GRGN	Georgetown Limestone

## Appendix A – Aquifer Codes (Alphabetical By Name)

<b>Aquifer Code</b>	<b>Aquifer Name</b>
218GLRS	Glen Rose Limestone
218GLRH	Glen Rose Limestone and Hensell Member of Pearsall Formation
218GLRP	Glen Rose Limestone and Pearsall Formation
218GLRT	Glen Rose Limestone and Trinity Sand Undifferentiated
218GRTM	Glen Rose Limestone and Twin Mountains Formation
218GRHH	Glen Rose Limestone, Hensell Sand, and Hosston Formation
218GLRSL	Glen Rose Limestone, Lower Member
218GRUH	Glen Rose Limestone, Upper and Hensell Shale Members of Pearsall Formation
218GLRSU	Glen Rose Limestone, Upper Member
218GRLH	Glen Rose Limestone, Lower and Hensell Shell Members of Pearsall Formation
218GRHC	Glen Rose Limestone and Hensell Shell and Cow Creek Limestone Members of Pearsall Formation
218GPSH	Glen Rose (Lower), Pearsall (Hensell, Cow Creek Members), Sligo and Hosston Formations
211GOBR	Gober Tongue of Austin Chalk
112GOLD	Goliad and Younger Rocks, Undifferentiated
121GOLD	Goliad Sand
121GDLG	Goliad Sand and Lagarto Clay
321GZCK	Gonzales Creek Member
367GRMN	Gorman Formation
321GRHM	Graham Formation
371GRNT	Granite Wash
112GRBL	Green River Bolson
112GLFC	Gulf Coast Aquifer
321HPVL	Harpersville Formation
218HCSH	Hensell and Cow Creek Members of Pearsall Formation, and Sligo and Hosston Formations
218HSCC	Hensell Sand and Cow Creek Limestone
218HNHS	Hensell Sand and Hosston Formation
218HEPF	Hensell Sand and Pearsall Formation
218HNSL	Hensell Sand Member of Travis Peak Formation
371HCKR	Hickory Sandstone
111HPPA	Holocene, Pleistocene, and Pliocene Alluvial Deposits
321HMCK	Home Creek Limestone
367HNCT	Honeycut Formation
124HOOP	Hooper Formation
217HSTN	Hosston Formation
217HSCC	Hosston Formation and Cow Creek Limestone
112HCBL	Hueco Bolson
120IGNS	Igneous Rocks
210CIGR	Igneous Rocks (Cretaceous)
124INDO	Indio Formation
120IVIG	Intrusive Rocks
124JCKS	Jackson Group
124JKYG	Jackson Group and Yegua Formation
122JSPR	Jasper Aquifer
122JBKV	Jasper Aquifer and Burkeville Aquiclude
122JPCL	Jasper Aquifer and Catahoula Sandstone
122JPJK	Jasper Aquifer and Jackson Group
122JSPRU	Jasper Aquifer, Upper Unit

## Appendix A – Aquifer Codes (Alphabetical By Name)

<b>Aquifer Code</b>	<b>Aquifer Name</b>
220JRSC	Jurassic System
122LGRT	Lagarto Clay
122LOKV	Lagarto Clay and Oakville Sandstone
124LRDO	Laredo Formation
112LEON	Leona Formation
112LNAN	Leona Formation and Antlers Sands
112LNAS	Leona Formation and Austin Chalk
112LNBD	Leona Formation and Buda Limestone
112LBLG	Leona Formation and Bullwagon Dolomite
112LNCZ	Leona Formation and Choza Formation
112LNSA	Leona Formation and San Angelo Sandstone
112LSRP	Leona Formation and Serpentine
112LWCX	Leona Formation and Wilcox Group
218FKBW	Limestones of Fredericksburg and Washita Groups
218FWGR	Limestones of Fredericksburg Group, Washita Group, and Upper Glen Rose Group
371LNMN	Lion Mountain Sandstone
112LISS	Lissie Formation
112GLD	Lissie Formation and Goliad Sand
217CRCSL	Lower Cretaceous Series
218GRCCU	Lower Glen Rose and Cow Creek Limestones
218LGR LH	Lower Glen Rose and Hosston Formation
318LDRS	Lueders Limestone
367MRTN	Marathon Limestone
320MBLF	Marble Falls Limestone
327MFEB	Marble Falls Limestone and Ellenburger Group
321MARK	Markley Formation
112MCSB	Mercedes-Sebastian Aquifer
318MRKL	Merkel Dolomite Member of Choza Formation
112MSBL	Mesilla Bolson
125MDWY	Midway Group
324MWBR	Mineral Wells and Brazos River Formations
324MLWL	Mineral Wells Formation
319MORN	Moran Formation
371MWLM	Morgan Creek Limestone and Welge and Lion Mountain Sandstones
371MCWG	Morgan Creek Limestone and Welge Sandstone
371MGCK	Morgan Creek Limestone Member of Wilberns Formation
211NCTC	Nacatoch Sand
211NVTY	Navarro and Taylor Groups
211NVR	Navarro Group
122OKVL	Oakville Sandstone
122OKVC	Oakville Sandstone and Catahoula Tuff
312OCHO	Ochoan Series
312OCAR	Ochoan Series and Artesia Group
121OGLM	Ogallala and Morrison Formations
121OGLP	Ogallala and Purgatoire Formations
121ODPJ	Ogallala Formation, Dakota Group, Purgatoire Formation, and Jurassic
121OGLL	Ogallala Formation
121OGAL	Ogallala Formation and Antlers Sand
121OGLD	Ogallala Formation and Dakota Group

## Appendix A – Aquifer Codes (Alphabetical By Name)

<b>Aquifer Code</b>	<b>Aquifer Name</b>
121OGDK	Ogallala Formation and Dockum Formation
121OGFG	Ogallala Formation and Fredericksburg Group
121OGLW	Ogallala Formation and Whitehorse Group
121OGPJ	Ogallala Formation, Purgatoire Formation, and Jurassic Formation
121OGDP	Ogallala Formation, Dakota Group, and Purgatoire Formation
121OGFA	Ogallala Formation, Fredericksburg Group, and Antlers Sand
400PCKD	Packsaddle Schist
300PLZC	Paleozoic Erathem
321PLPT	Palo Pinto Formation
321PPTC	Palo Pinto Formation and Turkey Creek Sandstone
321PLPN	Palo Pinto Limestone
218PXTM	Paluxy and Twin Mountains Formations
218PLXP	Paluxy Formation and Permian Rocks
218PLXY	Paluxy Sand
218PXGR	Paluxy Sand and Glen Rose Limestone
218PWPW	Pawpaw Formation
218PRHF	Pearsall and Hosston Formations
218PRSL	Pearsall Formation
218PSGH	Pearsall, Sligo, and Hosston Formations
318PRVR	Pease River Group
112PECSA	Pecos Aquifer
111PCRIV	Pecos River Alluvium
212PEN	Pen Formation
320PSLV	Pennsylvanian System
310PRMN	Permian System
318PTRL	Petrolia Formation
321PLCD	Placid Shale
321PSWM	Placid Shale and Wolf Mountain Formation
321PWWM	Placid Shale, Winchell Limestone, and Wolf Mountain Shale
112PLSC	Pleistocene Series
112PCPC	Pleistocene-Pliocene Series
371PNPK	Point Peak Shale Member of Wilberns Formation
400PCMB	Precambrian Erathem
400GRNT	Precambrian Granite
112PRBL	Presidio and Redford Bolsons
319PUBL	Pueblo Formation
217PGTM	Purgatoire and Morrison Formations
217PRGR	Purgatoire Formation
319PTNM	Putnam Formation
310QRRM	Quartermaster Formation
310QRMW	Quartermaster Formation and Whitehorse Group
110ALVM	Quaternary Alluvium
110QRNR	Quaternary System
124QCCZ	Queen City Sand and Carrizo Sand
124QCRK	Queen City Sand and Reklaw Formation
124QCSP	Queen City Sand and Sparta Sand
124QNCT	Queen City Sand of Claiborne Group
124QCCW	Queen City Sand, Carrizo Sand, and Wilcox Group
321RNGR	Ranger Limestone

## Appendix A – Aquifer Codes (Alphabetical By Name)

<b>Aquifer Code</b>	<b>Aquifer Name</b>
112RLBL	Red Light Draw Bolson
124RKCZ	Reklaw Formation and Carrizo Sand
124RKLW	Reklaw Formation of Claiborne Group
371RILY	Riley Formation
111RGRD	Rio Grande Alluvium
	Rocks Between Ellenburger-San Saba Aquifer and Hickory Sandstone Member of
371RESH	Riley Formation
312RSLR	Rustler Formation
312SLDO	Salado Formation
112SLBL	Salt Bolson
112SBCRC	Salt Bolson and Capitan Reef Complex
112SBCR	Salt Bolson and Cretaceous Rocks
112SBDM	Salt Bolson and Delaware Mountain Group
112SBLP	Salt Bolson and Permian Rocks
112SBTV	Salt Bolson and Tertiary Volcanics
313SADR	San Andres Limestone
318SAGL	San Angelo Sandstone
318SACZ	San Angelo Sandstone and Choza Formation
211SMGL	San Miguel Formation
371SNSB	San Saba Limestone
218SNEL	Santa Elena Limestone
313SVRV	Seven Rivers Formation
112SYCZ	Seymour and Choza Formations
112SYMR	Seymour Formation
112SCFX	Seymour Formation and Clear Fork Group
124SBHP	Simsboro Sand Member and Hooper Formation
124SMBR	Simsboro Sand Member of Rockdale Formation
219SLGH	Sligo and Hosston Formations
217SLGO	Sligo Formation
320SMCK	Smithwick Shale
110STEP	South Texas Eolian Plain Deposits
124SPRT	Sparta Sand
124SPCZ	Sparta Sand and Carrizo Sand
124SPQC	Sparta Sand and Queen City Sand
124SPSP	Sparta Sand and Spiller Sand Member of Cook Mountain Formation
124SPLR	Spiller Sand Member of Cook Mountain Formation
318SDPP	Standpipe Limestone Member of Arroy Formation
324STRN	Strawn Group
218SCMR	Sycamore Sand Member of Travis Peak Formation
112TAOG	Tahoka and Ogallala Formations
112TAHK	Tahoka Formation
112TEDAS	Tahoka Formation, Fredericksburg Group, and Antlers Sand
367TNRD	Tanyard Formation
211TYLR	Taylor Marl
125THCN	Tehuacana Member of Kincaid Formation
110TRRC	Terrace Deposits
327TSNS	Tesnus Formation
321TFGM	Thrifty and Graham Formations
321TRFT	Thrifty Formation
218TVPK	Travis Peak Formation

## Appendix A – Aquifer Codes (Alphabetical By Name)

<b>Aquifer Code</b>	<b>Aquifer Name</b>
218TPPX	Travis Peak Formation and Paluxy Sand
218TSEB	Trinity (Hensell Sand) and Ellenburger Groups
218TRNT	Trinity Group
218TRGM	Trinity Sand and Graham Formation
218TGHC	Trinity Sand, Graham Formation, and Home Creek Limestone
218TWMW	Twin Mountains and Mineral Wells Formations
218TWMT	Twin Mountains Formation
218TMFP	Twin Mountains Formation and Pennsylvanian Rocks
211CRCSU	Upper Cretaceous Series
218GRHCU	Upper Glen Rose, Hensell, and Cow Creek Members of Pearsall Formation
121UVLD	Uvalde Gravel
318VALE	Vale Formation
400VSPG	Valley Spring Gneiss
318VCPK	Victorio Peak Limestone
120VLCC	Volcanics
218WLNT	Walnut Clay
218WSHT	Washita Group
124WCHS	Weches Formation of Claiborne Group
371WGLM	Welge and Lion Mountain Sandstones
371WELG	Welge Sandstone
371WGLH	Welge, Lion Mountain, and Hickory Sandstones
313WTRS	Whitehorse Group
313WDCB	Whitehorse Group and Dog Creek and Blaine Formations
318WCCC	Wichita and Cisco Groups
318WCHT	Wichita Formation or Group
371WLBR	Wilberns Formation
124WXMW	Wilcox and Midway Groups
124WLCX	Wilcox Group
112GOWS	Willis and Goliad Sands
112WLLS	Willis Sand
125WLSP	Wills Point Formation
321WNCL	Winchell Limestone
321WFMP	Wolf Mountain and Posideon Shales
321WLFM	Wolf Mountain Shale
321WMPP	Wolf Mountain Shale, Posideon Shale, and Palo Pinto Limestone
319WFMP	Wolfcamp Formation
211WLFC	Wolfe City Sand Member of Taylor Marl
212WBPX	Woodbine and Paluxy Formations
212WDBN	Woodbine Sand
212WDBT	Woodbine Sand and Trinity Group
212WBPH	Woodbine Sand and Paluxy and Hosston Formations
124YGCM	Yegua and Cook Mountain Formations
124YEGU	Yegua Formation
124YGJK	Yegua Formation and Jackson Group



## Appendix B – Aquifer Codes (By Aquifer Code)

<b>Aquifer Code</b>	<b>Aquifer Name</b>
100ALVM	Alluvium
100CPCR	Cenozoic Pecos Alluvium and Cretaceous Rocks
100CPCRL	Cenozoic Pecos Alluvium and Lower Cretaceous Rocks
100CPDG	Cenozoic Pecos Alluvium and Dockum Formation
100CPDR	Cenozoic Pecos Alluvium and Dockum and Rustler Formations
100PECS	Cenozoic Pecos Alluvium
110AASP	Alluvium, Antlers Sand, and Permian System
110ABDC	Alluvial Plain Deposits, Blaine Gypsum, and Dog Creek Shale
110ACPO	Alluvial Channel and Plain Deposits, and Ochoa Series
110AGRT	Alluvium and Precambrian Granite
110AHTP	Alluvium and High Terrace Plain Deposits
110AHTW	Alluvium, High Terrace Deposits, and Whitehorse Group
110ALTC	Alluvium Low Terrace and Channel Fill Deposits
110ALTO	Alluvium, Low Terrace and Channel Fill Deposits, and Ogallala Formation
110ALTW	Alluvium, Low Terrace and Channel Fill Deposits, and Whitehorse Group
110ALVM	Quaternary Alluvium
110ALVP	Alluvial Plain Deposits
110ALWX	Alluvium, Leona Formation, and Wilcox Group
110ASSA	Alluvium, Terrace Deposits, Seymour Formation, and San Angelo Sandstone
110ATCF	Alluvial Terrace and Channel Deposits, and Flowerpot Shale
110ATCW	Alluvial Terrace and Channel Deposits, and Whitehorse Group
110ATSB	Alluvium, Terrace Deposits and Seymour Formation, and Blaine Formation
110AVAN	Alluvium and Antlers Sand
110AVAR	Alluvium and Arroyo Formation
110AVAU	Alluvium and Austin Chalk
110AVBL	Alluvium and Blaine Gypsum
110AVCB	Alluvium, Choza Formation, and Bullwagon Dolomite
110AVCC	Alluvium and Cretaceous Rocks
110AVCF	Alluvium and Clear Fork Group
110AVCG	Alluvium and Cisco Group
110AVCH	Alluvium and Choza Formation
110AVCM	Alluvium and Cook Mountain Formation
110AVCY	Alluvium and Canyon Group
110AVCZ	Alluvium and Carrizo Sand
110AVDK	Alluvium and Dockum Formation
110AVET	Alluvium, Edwards and Associated Limestones, and Trinity Sands
110AVEV	Alluvium and Evangeline Aquifer
110AVFP	Alluvium, Flood Plain
110AVFV	Alluvium and Fluvial Terrace Deposits
110AVGL	Alluvium and Goliad Sand
110AVGR	Alluvium and Glen Rose Limestone
110AVJK	Alluvium and Jackson Group
110AVLC	Alluvium and Lower Cretaceous Rocks
110AVLS	Alluvium and Lissie Sand
110AVMA	Alluvium and Artesia Group
110AVME	Alluvium and Edwards and Associated Limestones
110AVMF	Alluvium and Marble Falls Limestone

## Appendix B – Aquifer Codes (By Aquifer Code)

<b>Aquifer Code</b>	<b>Aquifer Name</b>
110AVML	Alluvium and Leona Formation
110AVMW	Alluvium and Wichita Group
110AVOG	Alluvium and Ogallala Formation
110AVPR	Alluvium and Pease River Group
110AVPS	Alluvium and Permian System
110AVPW	Alluvial Plain Deposits and Whitehorse Group
110AVQC	Alluvium and Queen City Sand
110AVRF	Alluvium and Reklaw Formation
110AVSB	Alluvium and Simsboro Formation
110AVSS	Alluvium and Sparta Sand
110AVTC	Alluvial Terrace and Channel Deposits
110AVTP	Alluvium and Travis Peak Formation
110AVTS	Alluvium, Terrace Deposits, and Seymour Formation
110AVTV	Alluvium and Tertiary Volcanics
110AVTY	Alluvium and Taylor Group
110AVVL	Alluvium and Vale Formation
110AVWX	Alluvium and Wilcox Group
110AVYG	Alluvium and Yegua Formation
110BIBC	Barrier Island and Beach Deposits
110BILD	Barrier Island Deposits
110DOGL	Dune Sand and Ogallala Formation
110DUNE	Dune Sand
110QRNR	Quaternary System
110STEP	South Texas Eolian Plain Deposits
110TRRC	Terrace Deposits
111ABZR	Alluvium, Brazos River
111AVCR	Alluvium, Colorado River
111AVMT	Alluvium and Terrace Deposits
111HPPA	Holocene, Pleistocene, and Pliocene Alluvial Deposits
111PCRV	Pecos River Alluvium
111RGRD	Rio Grande Alluvium
112ALLM	Alta Loma Sand
112BMLG	Beaumont Clay, Lissie Formation, and Goliad Sand
112BMLS	Beaumont Clay and Lissie Formation
112BMNT	Beaumont Clay
112CEVG	Chicot and Evangeline Aquifers
112CHCT	Chicot Aquifer
112CHCTL	Chicot Aquifer, Lower
112CHCTM	Chicot Aquifer, Middle
112CHCTU	Chicot Aquifer, Upper
112EFBL	Eagle Flat Bolson
112GLFC	Gulf Coast Aquifer
112GOLD	Goliad and Younger Rocks, Undifferentiated
112GOWS	Willis and Goliad Sands
112GRBL	Green River Bolson
112HCBL	Hueco Bolson
112LBLG	Leona Formation and Bullwagon Dolomite
112LEON	Leona Formation
112LGLD	Lissie Formation and Goliad Sand

## Appendix B – Aquifer Codes (By Aquifer Code)

<b>Aquifer Code</b>	<b>Aquifer Name</b>
112LISS	Lissie Formation
112LNAN	Leona Formation and Antlers Sands
112LNAS	Leona Formation and Austin Chalk
112LNBD	Leona Formation and Buda Limestone
112LNCZ	Leona Formation and Choza Formation
112LNSA	Leona Formation and San Angelo Sandstone
112LSRP	Leona Formation and Serpentine
112LWCX	Leona Formation and Wilcox Group
112MCSB	Mercedes-Sebastian Aquifer
112MSBL	Mesilla Bolson
112PCPC	Pleistocene-Pliocene Series
112PECSA	Pecos Aquifer
112PLSC	Pleistocene Series
112PRBL	Presidio and Redford Bolsons
112RLBL	Red Light Draw Bolson
112SBCR	Salt Bolson and Cretaceous Rocks
112SBCRC	Salt Bolson and Capitan Reef Complex
112SBDM	Salt Bolson and Delaware Mountain Group
112SBLP	Salt Bolson and Permian Rocks
112SBTV	Salt Bolson and Tertiary Volcanics
112SCFX	Seymour Formation and Clear Fork Group
112SLBL	Salt Bolson
112SYCZ	Seymour and Choza Formations
112SYMR	Seymour Formation
112TAHK	Tahoka Formation
112TAOG	Tahoka and Ogallala Formations
112TEDAS	Tahoka Formation, Fredericksburg Group, and Antlers Sand
112WLLS	Willis Sand
120BLSN	Bolson Deposits
120IGNS	Igneous Rocks
120IVIG	Intrusive Rocks
120VLCC	Volcanics
121EVBV	Evangeline Aquifer and Burkeville Aquiclude
121EVGL	Evangeline Aquifer
121EVJP	Evangeline and Jasper Aquifers
121EVJPU	Evangeline Aquifer and Upper Unit of Jasper Aquifer
121GDLG	Goliad Sand and Lagarto Clay
121GOLD	Goliad Sand
121ODPJ	Ogallala Formation, Dakota Group, Purgatoire Formation, and Jurassic Formation
121OGAL	Ogallala Formation and Antlers Sand
121OGDK	Ogallala Formation and Dockum Formation
121OGDP	Ogallala Formation, Dakota Group, and Purgatoire Formation
121OGFA	Ogallala Formation, Fredericksburg Group, and Antlers Sand
121OGFG	Ogallala Formation and Fredericksburg Group
121OGLD	Ogallala Formation and Dakota Group
121OGLL	Ogallala Formation
121OGLM	Ogallala and Morrison Formations
121OGLP	Ogallala and Purgatoire Formations
121OGLW	Ogallala Formation and Whitehorse Group

## Appendix B – Aquifer Codes (By Aquifer Code)

<b>Aquifer Code</b>	<b>Aquifer Name</b>
121OGPJ	Ogallala Formation, Purgatoire Formation, and Jurassic Formation
121UVLD	Uvalde Gravel
122BKVL	Burkeville Aquiclude
122CJCK	Catahoula Tuff and Jackson Group
122CTHL	Catahoula Formation
122FBKV	Fleming Formation and Burkeville Aquiclude
122FLMG	Fleming Formation
122JBKV	Jasper Aquifer and Burkeville Aquiclude
122JPCL	Jasper Aquifer and Catahoula Sandstone
122JPJK	Jasper Aquifer and Jackson Group
122JSPR	Jasper Aquifer
122JSPRU	Jasper Aquifer, Upper Unit
122LGRT	Lagarto Clay
122LOKV	Lagarto Clay and Oakville Sandstone
122OKVC	Oakville Sandstone and Catahoula Tuff
122OKVL	Oakville Sandstone
123ANHC	Anahuac Formation
124BFCS	Bigford Formation and Carrizo Sand
124BGDF	Bigford Formation of Claiborne Group
124CABF	Calvert Bluff Formation
124CBSB	Calvert Bluff Formation and Simsboro Sand Member
124CKMC	Cook Mountain Formation and Carrizo Sand
124CKMN	Cook Mountain Formation
124CKMS	Cook Mountain Formation and Sparta Sand
124CPRS	Cypress Aquifer
124CRRZ	Carrizo Sand
124CRVR	Cane River Formation
124CZCB	Carrizo Sand and Calvert Bluff Formation
124CZCSB	Carrizo Sand, Calvert Bluff Formation, and Simsboro Formation
124CZSB	Carrizo Sand and Simsboro Sand Member of Rockdale Formation
124CZWX	Carrizo Sand and Wilcox Group, Undifferentiated
124ELPC	El Pico Clay
124HOOP	Hooper Formation
124INDO	Indio Formation
124JCKS	Jackson Group
124JKYG	Jackson Group and Yegua Formation
124LRDO	Laredo Formation
124QCCW	Queen City Sand, Carrizo Sand, and Wilcox Group
124QCCZ	Queen City Sand and Carrizo Sand
124QCRK	Queen City Sand and Reklaw Formation
124QCSP	Queen City Sand and Sparta Sand
124QNCT	Queen City Sand of Claiborne Group
124RK CZ	Reklaw Formation and Carrizo Sand
124RKLW	Reklaw Formation of Claiborne Group
124SBHP	Simsboro Sand Member and Hooper Formation
124SMBR	Simsboro Sand Member of Rockdale Formation
124SPCZ	Sparta Sand and Carrizo Sand
124SPLR	Spiller Sand Member of Cook Mountain Formation
124SPQC	Sparta Sand and Queen City Sand

## Appendix B – Aquifer Codes (By Aquifer Code)

<b>Aquifer Code</b>	<b>Aquifer Name</b>
124SPRT	Sparta Sand
124SPSP	Sparta Sand and Spiller Sand Member of Cook Mountain Formation
124WCHS	Weches Formation of Claiborne Group
124WLCX	Wilcox Group
124WXMW	Wilcox and Midway Groups
124YEGU	Yegua Formation
124YGCM	Yegua and Cook Mountain Formations
124YGJK	Yegua Formation and Jackson Group
125MDWY	Midway Group
125THCN	Tehuacana Member of Kincaid Formation
125WLSF	Wills Point Formation
210CIGR	Igneous Rocks (Cretaceous)
210CRCS	Cretaceous System
211ACCE	Anacacho Limestone and Escondido Formation
211AEDD	Austin Chalk and Edwards and Associated Limestones
211AGUJ	Aguja Formation
211ANCC	Anacacho Limestone
211ANNN	Annuna Chalk
211ASTN	Austin Chalk
211BLSM	Blossom Sand
211BLWG	Buda Limestone and Washita Group
211BNHM	Bonham Marl
211BQLS	Boquillas Formation
211BUDA	Buda Limestone
211CRCSU	Upper Cretaceous Series
211CRSC	Corsicana Marl
211DKOP	Dakota Group and Purgatoire Formation
211DKOT	Dakota Sandstone or Formation
211DKPJ	Dakota Group, Purgatoire Formation, and Jurassic Rocks
211DLME	Dakota Group, Lytle, Morrison, and Exeter Sandstone
211ECDD	Escondido Formation
211EGFD	Eagle Ford Shale
211GOBR	Gober Tongue of Austin Chalk
211NCTC	Nacatoch Sand
211NVRN	Navarro Group
211NVTY	Navarro and Taylor Groups
211SMGL	San Miguel Formation
211TYLR	Taylor Marl
211WLFC	Wolfe City Sand Member of Taylor Marl
212PEN	Pen Formation
212WBPH	Woodbine Sand and Paluxy and Hosston Formations
212WBPX	Woodbine and Paluxy Formations
212WDBN	Woodbine Sand
212WDBT	Woodbine Sand and Trinity Group
217CRCSL	Lower Cretaceous Series
217HSCC	Hosston Formation and Cow Creek Limestone
217HSTN	Hosston Formation
217PGTM	Purgatoire and Morrison Formations
217PRGR	Purgatoire Formation

## Appendix B – Aquifer Codes (By Aquifer Code)

<b>Aquifer Code</b>	<b>Aquifer Name</b>
217SLGO	Sligo Formation
218ALRS	Antlers Sand
218ALSP	Antlers Sand and Pennsylvanian Rocks
218ANTP	Antlers Sand and Permian Rocks
218ASDG	Antlers Sand and Dockum Formation
218CCRK	Cow Creek Limestone
218CMPK	Comanche Peak Limestone
218EBFZA	Edwards and Associated Limestones (Balcones Fault Zone Aquifer)
218EDAD	Edwards and Associated Limestones, Antlers Sand, and Dockum Formation
218EDAS	Edwards and Associated Limestones and Antlers Sand
218EDDT	Edwards and Associated Limestones, and Trinity Group
218EDGR	Edwards and Associated Limestones, and Glen Rose Limestone
218EDGRU	Edwards and Associated Limestones and Upper Member of Glen Rose Limestone
218EDPM	Edwards and Associated Limestones, and Permian System
218EDRD	Edwards Limestone
218EDRDA	Edwards and Associated Limestones
218FGAS	Fredericksburg Group and Antlers Sand
218FKBG	Fredericksburg Group
218FKBT	Fredericksburg and Trinity Groups
218FKBW	Limestones of Fredericksburg and Washita Groups
218FRGR	Fredericksburg Group and Glen Rose Limestone
218FWGR	Limestones of Fredericksburg Group, Washita Group, and Upper Glen Rose Group
218GLRH	Glen Rose Limestone and Hensell Member of Pearsall Formation
218GLRP	Glen Rose Limestone and Pearsall Formation
218GLRS	Glen Rose Limestone
218GLRSL	Glen Rose Limestone, Lower Member
218GLRSU	Glen Rose Limestone, Upper Member
218GLRT	Glen Rose Limestone and Trinity Sand Undifferentiated
218GPSH	Glen Rose (Lower), Pearsall (Hensell, Cow Creek Members), Sligo, and Hosston Formations
218GRCCU	Lower Glen Rose and Cow Creek Limestones
218GRGN	Georgetown Limestone
218GRHC	Glen Rose Limestone and Hensell Shell and Cow Creek Limestone Members of Pearsall Formation
218GRHCU	Upper Glen Rose, Hensell, and Cow Creek Members of Pearsall Formation
218GRHH	Glen Rose Limestone, Hensell Sand, and Hosston Formation
218GRLH	Glen Rose Limestone, Lower and Hensell Shell Members of Pearsall Formation
218GRTM	Glen Rose Limestone and Twin Mountains Formation
218GRUH	Glen Rose Limestone, Upper and Hensell Shale Members of Pearsall Formation
218HCSH	Hensell and Cow Creek Members of Pearsall Formation, and Sligo and Hosston Formations
218HEPF	Hensell Sand and Pearsall Formation
218HNHS	Hensell Sand and Hosston Formation
218HNSL	Hensell Sand Member of Travis Peak Formation
218HSCC	Hensell Sand and Cow Creek Limestone
218LGRLH	Lower Glen Rose and Hosston Formation
218PLXP	Paluxy Formation and Permian Rocks
218PLXY	Paluxy Sand
218PRHF	Pearsall and Hosston Formations
218PRSL	Pearsall Formation
218PSGH	Pearsall, Sligo, and Hosston Formations
218PWPW	Pawpaw Formation

## Appendix B – Aquifer Codes (By Aquifer Code)

<b>Aquifer Code</b>	<b>Aquifer Name</b>
218PXGR	Paluxy Sand and Glen Rose Limestone
218PXTM	Paluxy and Twin Mountains Formations
218SCMR	Sycamore Sand Member of Travis Peak Formation
218SNEL	Santa Elena Limestone
218TGHC	Trinity Sand, Graham Formation, and Home Creek Limestone
218TMFP	Twin Mountains Formation and Pennsylvanian Rocks
218TPPX	Travis Peak Formation and Paluxy Sand
218TRGM	Trinity Sand and Graham Formation
218TRNT	Trinity Group
218TSEB	Trinity (Hensell Sand) and Ellenburger Groups
218TVPK	Travis Peak Formation
218TWTM	Twin Mountains Formation
218TWMW	Twin Mountains and Mineral Wells Formations
218WLNT	Walnut Clay
218WSHT	Washita Group
219SLGH	Sligo and Hosston Formations
220JRSC	Jurassic System
221EXTR	Exeter Sandstone
231DCKM	Dockum Formation
231DCKP	Dockum Formation and Permian Rocks
300PLZC	Paleozoic Erathem
310PRMN	Permian System
310QRMW	Quartermaster Formation and Whitehorse Group
310QRRM	Quartermaster Formation
312CSTL	Castile Gypsum
312DYLK	Dewey Lake Red Beds
312OCAR	Ochoan Series and Artesia Group
312OCHO	Ochoan Series
312RSLR	Rustler Formation
312SLDO	Salado Formation
313ALTD	Altuda Formation
313ARTS	Artesia Group
313BLIN	Blaine Gypsum
313CPTN	Capitan Limestone
313CRCX	Capitan Reef Complex and Associated Limestones
313CRDM	Capitan Reef Complex - Delaware Mountain Group
313DCBF	Dog Creek Shale, Blaine Gypsum, and Flowerpot Shale
313DCKB	Dog Creek Shale and Blaine Gypsum
313DLRM	Delaware Mountain Formation or Group
313DMBS	Delaware Mountain Group - Bone Spring Limestone
313FLRP	Flowerpot Shale
313SADR	San Andres Limestone
313SVRV	Seven Rivers Formation
313WDCB	Whitehorse Group and Dog Creek and Blaine Formations
313WTRS	Whitehorse Group
318ADML	Admiral Formation
318ARRY	Arroyo Formation
318BLGN	Bullwagon Dolomite Member of Vale Formation
318BLPL	Belle Plains Formation

## Appendix B – Aquifer Codes (By Aquifer Code)

<b>Aquifer Code</b>	<b>Aquifer Name</b>
318BSPG	Bone Spring Limestone
318BSVP	Bone Spring and Victorio Peak Limestones
318CHOZ	Choza Formation
318CLFK	Clear Fork Group
318CZBW	Choza Formation and Bullwagon Dolomite
318CZVL	Choza and Vale Formations
318LDRS	Lueders Limestone
318MRKL	Merkel Dolomite Member of Choza Formation
318PRVR	Pease River Group
318PTRL	Petrolia Formation
318SACZ	San Angelo Sandstone and Choza Formation
318SAGL	San Angelo Sandstone
318SDPP	Standpipe Limestone Member of Arroy Formation
318VALE	Vale Formation
318VCPK	Victorio Peak Limestone
318WCCC	Wichita and Cisco Groups
318WCHT	Wichita Formation or Group
319ARCT	Archer City Formation
319CMJC	Coleman Junction Limestone Member of Putnam Formation
319MORN	Moran Formation
319PTNM	Putnam Formation
319PUBL	Pueblo Formation
319WFMP	Wolfcamp Formation
320MBLF	Marble Falls Limestone
320PSLV	Pennsylvanian System
320SMCK	Smithwick Shale
321AVIS	Avis Sandstone
321CCPS	Colony Creek and Placid Shales
321CCRP	Colony Creek Shale, Ranger Limestone, and Placid Shale
321CLCK	Colony Creek Shale
321CNCS	Canyon and Cisco Groups
321CNYN	Canyon Group
321CSCO	Cisco Group
321GRHM	Graham Formation
321GZCK	Gonzales Creek Member
321HMCK	Home Creek Limestone
321HPVL	Harpersville Formation
321MARK	Markley Formation
321PLCD	Placid Shale
321PLPN	Palo Pinto Limestone
321PLPT	Palo Pinto Formation
321PPTC	Palo Pinto Formation and Turkey Creek Sandstone
321PSWM	Placid Shale and Wolf Mountain Formation
321PWWM	Placid Shale, Winchell Limestone, and Wolf Mountain Shale
321RNGR	Ranger Limestone
321TFGM	Thrifty and Graham Formations
321TRFT	Thrifty Formation
321WFMP	Wolf Mountain and Posideon Shales
321WLFM	Wolf Mountain Shale



## Appendix B – Aquifer Codes (By Aquifer Code)

<b>Aquifer Code</b>	<b>Aquifer Name</b>
321WMPP	Wolf Mountain Shale, Posideon Shale, and Palo Pinto Limestone
321WNCL	Winchell Limestone
324BZRVL	Brazos River Conglomerate Member, Lower Part of Garner Formation
324BZRVU	Brazos River Conglomerate Member, Upper Part of Garner Formation
324MLWL	Mineral Wells Formation
324MWBR	Mineral Wells and Brazos River Formations
324STRN	Strawn Group
327MFEB	Marble Falls Limestone and Ellenburger Group
327TSNS	Tesnus Formation
367ALST	Alstate Shale
367EBCR	Ellenburger Group and Cambrian Rocks
367EBHK	Ellenburger Group and Hickory Sandstone
367EBPH	Ellenburger Group and Post-Hickory Sandstone Cambrian Rocks
367EBSS	Ellenburger Group and San Saba Aquifer
367EBSW	Ellenburger Group, San Saba Limestone, and Welge Sandstone
367ELBG	Ellenburger Group
367GRMN	Gorman Formation
367HNCT	Honeycut Formation
367MRTN	Marathon Limestone
367TNRD	Tanyard Formation
370CMBR	Cambrian System
371CPMN	Cap Mountain of The Riley Formation
371GRNT	Granite Wash
371HCKR	Hickory Sandstone
371LNMN	Lion Mountain Sandstone
371MCWG	Morgan Creek Limestone and Welge Sandstone
371MGCK	Morgan Creek Limestone Member of Wilberns Formation
371MWLM	Morgan Creek Limestone and Welge and Lion Mountain Sandstones
371PNPK	Point Peak Shale Member of Wilberns Formation
371RESH	Rocks Between Ellenburger-San Saba Aquifer and Hickory Sandstone Member of Riley Formation
371RILY	Riley Formation
371SNSB	San Saba Limestone
371WELG	Welge Sandstone
371WGLH	Welge, Lion Mountain, and Hickory Sandstones
371WGLM	Welge and Lion Mountain Sandstones
371WLBR	Wilberns Formation
400GRNT	Precambrian Granite
400PCKD	Packsaddle Schist
400PCMB	Precambrian Erathem
400VSPG	Valley Spring Gneiss
NOT-APPL	Aquifer Code Is Not Applicable To This Well
UNKNOWN	Aquifer Not Able To Be Determined

**Appendix C – Historical Remark Codes**

<b>Remarks</b>	<b>Code</b>
No irregularities relative to measurement.	Leave Blank
Remarks not assembled for data collected before 1961.	01
Well pumping (pumping level measurement) Note: Use code 14 if no measurement is obtained.	02
Well or wells pumping nearby.	03
Well pumped recently.	04
Near wet weather lake (possible recharge factor). Note: Code 36 denotes another recharge factor.	05
(Artificial) Recharge Operation at or near well.	06
Questionable measurement, casing wet or leaking. Note: Use code 15 when no measurement is obtained.	07
Questionable measurement, wet, spotty mark. Note: For use with open hole (no casing) completion; otherwise use code 07.	08
Questionable measurement, leaking air line. Note: Use code 20 when no measurement is obtained.	09
No measurement – Well destroyed.	10
No measurement, well temporarily inaccessible (covered with rocks, debris, well thoroughly winterized, etc.), need permission to measure from new well owner.	11
No measurement, tape hangs.	12
No measurement, unable to insert tape in casing.	13
No measurement, pumping. Note: If measurement is obtained use code 02.	14
No measurement, casing leaking or wet. Note: Use code 07 when measurement is obtained.	15
No measurement, unable to locate well. Note: For use <u>if</u> reason(s) are other than those in code 22 (ex: covered over indefinitely but not destroyed).	16
No measurement, well apparently dry, unable to reach water. Note: Use when reported well depth was reached without finding water.	17
No measurement, well apparently caved, unable to reach water. Note: Use only when well depth reached appears to be or is obviously too shallow to be actual well depth and well is to be dropped from program; otherwise use Code 21.	18
Questionable measurement, pressure shut-in connection leaking Note: For use when measuring flowing well, use code 09 for air line method.	19
No measurement, pressure shut-in connection leaking. Note: May be used on flowing well or when attempting measurement by air line method.	20

**Appendix C – Historical Remark Codes**

<b>Remarks</b>	<b>Code</b>
No measurement, well filled with debris. Note: Do not confuse with Code 18, should be used when condition appears to be temporary.	21
No measurement, well apparently improperly located on map or description of well location inadequate.	22
No measurement, reason not stated. Note: For use when recording data from outside sources.	23
Measurements discontinued, no reason stated. Note: For use when recording data from outside sources.	24
No measurement, well flowing and unable to shut-in.	25
No measurement, well dropped from observation program (not needed or unsatisfactory – see well schedule remarks).	26
No measurement, well site temporarily inaccessible due to conditions caused by inclement weather or the well owner or operator.	27
Questionable measurement, reason for which is not clearly understood by measurer.	28
No measurement, unable to reach water. Note: For use when water level is beyond reach of measuring equipment at hand.	29
Owner does not want well measured (drop from active program)	30
No measurement, gate locked.	31
No measurement, pump house locked.	32
Questionable measurement, tape does not fall free.	33
No measurement, temporary, hazardous condition for measurer (bad animal, bad terrain, etc.). Note: Use code 39 when condition appears permanent and well will be dropped from program.	34
Questionable measurement, deleted after review by Section Head.	35
Questionable measurement, possible surface run-off due to recent heavy rains (a recharge factor).	36
No measurement, well reviewed by Section Head and deleted from current annual measurement due to national energy crisis limitations.	37
Questionable measurement, measurement may be from another well.	38
Well dropped from program because of continuing very hazardous conditions to measurer (ex: vicious animals).	39
No measurement, currently deleted due to work priorities or staff or unnecessary for water table configuration control in the area.	40
Measurement deviation from previous measurements is due to well work over resulting in change of producing interval.	41
No measurement due to long-term priority field work in connection with an Ogallala Aquifer System Study.	42
Questionable measurement, may reflect perched water table.	43

**Appendix D – Storet Codes (Alphabetical By Name)**

<b>Code</b>	<b>Long Description</b>	<b>Units</b>
77562	1,1,1,2-Tetrachloroethane, Total, ug/L	ug/L
34507	1,1,1-Trichloroethane, Dissolved, ug/L	ug/L
34506	1,1,1-Trichloroethane, Total, ug/L	ug/L
34516	1,1,2,2-Tetrachloroethane, Total, ug/L	ug/L
34512	1,1,2-Trichloroethane, Dissolved, ug/L	ug/L
34511	1,1,2-Trichloroethane, Total, ug/L	ug/L
34496	1,1-Dichloroethane, Total, ug/L	ug/L
34502	1,1-Dichloroethylene, Dissolved, ug/L	ug/L
34501	1,1-Dichloroethylene, Total, ug/L	ug/L
77168	1,1-Dichloropropene, Total, ug/L	ug/L
77613	1,2,3-Trichlorobenzene In Whole Water, ug/L	ug/L
77443	1,2,3-Trichloropropane, Total, ug/L	ug/L
77734	1,2,4,5-Tetrachlorobenzene In Whole Water, ug/L	ug/L
34552	1,2,4-Trichlorobenzene, Dissolved, ug/L	ug/L
34551	1,2,4-Trichlorobenzene, Total, ug/L	ug/L
04413	1,2-Dibromo-3-Chloropropane, Total, ug/L	ug/L
77651	1,2-Dibromoethane, Total, ug/L	ug/L
34537	1,2-Dichlorobenzene(Ortho), Dissolved, ug/L	ug/L
34536	1,2-Dichlorobenzene, Total, ug/L	ug/L
34532	1,2-Dichloroethane, Dissolved, ug/L	ug/L
32103	1,2-Dichloroethane, Total, ug/L	ug/L
34542	1,2-Dichloropropane, Dissolved, ug/L	ug/L
34541	1,2-Dichloropropane, Total, ug/L	ug/L
34347	1,2-Diphenylhydrazine, Dissolved, ug/L	ug/L
34346	1,2-Diphenylhydrazine, Total, ug/L	ug/L
34566	1,3-Dichlorobenzene, Total, ug/L	ug/L
77173	1,3-Dichloropropane, Total, ug/L	ug/L
34561	1,3-Dichloropropene In Whole Water Sample, ug/L	ug/L
77163	1,3-Dichloropropene, Total, ug/L	ug/L
34571	1,4-Dichlorobenzene, Total, ug/L	ug/L
78942	1-Chloro-2-Methylbenzene, Total, ug/L	ug/L
82637	1-Chloro-4-Methylbenzene, Total, ug/L	ug/L
49295	1-Naphthol, Water, 0.7 Um Filt, Tot Recv, ug/L	ug/L
73457	2 Butene Trans-1 4-Dichloro, Unfiltered, Rec	ug/L
39742	2, 4, 5-T, Water, Dissolved, ug/L	ug/L
39732	2, 4-D, Water, Dissolved, ug/L	ug/L
82660	2, 6-Diethylaniline, Water, Filtered, ug/L	ug/L
77170	2,2-Dichloropropane, Total, ug/L	ug/L
60039	2,3- Dichloro-2-Methyl-Butane In Whole Water, ug/L	ug/L
34676	2,3,7,8-Tetrachlorodibenzo-P-Dioxin(Tcdd)Diss ug/L	ug/L
39740	2,4,5-T, Total, ug/L	ug/L
39045	2,4,5-Tp Includes Acids & Salts In Water, ug/L	ug/L
77687	2,4,5-Trichlorophenol In Whole Water, ug/L	ug/L
34622	2,4,6-Trichlorophenol, Dissolved, ug/L	ug/L
34621	2,4,6-Trichlorophenol, Total, ug/L	ug/L
39730	2,4-D, Total, ug/L	ug/L
38745	2,4-Db, Total, ug/L	ug/L

## Appendix D – Storet Codes (Alphabetical By Name)

Code	Long Description	Units
38746	2,4-Db, Water, Dissolved, ug/L	ug/L
34602	2,4-Dichlorophenol, Dissolved, ug/L	ug/L
34601	2,4-Dichlorophenol, Total, ug/L	ug/L
34607	2,4-Dimethylphenol, Dissolved, ug/L	ug/L
34606	2,4-Dimethylphenol, Total, ug/L	ug/L
34617	2,4-Dinitrophenol, Dissolved, ug/L	ug/L
34616	2,4-Dinitrophenol, Total, ug/L	ug/L
34612	2,4-Dinitrotoluene, Dissolved, ug/L	ug/L
34611	2,4-Dinitrotoluene, Total, ug/L	ug/L
82183	2,4-Dp, Total, ug/L	ug/L
51002	2,6-Dinitro-2-Cresol, Total, ug/L	ug/L
34627	2,6-Dinitrotoluene, Dissolved, ug/L	ug/L
34626	2,6-Dinitrotoluene, Total, ug/L	ug/L
34577	2-Chloroethyl Vinyl Ether, Dissolved, ug/L	ug/L
34576	2-Chloroethyl Vinyl Ether, Total, ug/L	ug/L
34582	2-Chloronaphthalene, Dissolved, ug/L	ug/L
34581	2-Chloronaphthalene, Total, ug/L	ug/L
77182	2-Heptanone In Whole Water, ug/L	ug/L
77103	2-Hexanone, Water Whole, Total	ug/L
60013	2-Methyl Butane, Total, ug/L	ug/L
60012	2-Methyl Propane, Total, ug/L	ug/L
77416	2-Methylnaphthalene In Whole Water, ug/L	ug/L
34592	2-Nitrophenol, Dissolved, ug/L	ug/L
34591	2-Nitrophenol, Total, ug/L	ug/L
34632	3,3'-Dichlorobenzidine, Dissolved, ug/L	ug/L
34631	3,3'-Dichlorobenzidine, Total, ug/L	ug/L
60040	3-Chloro-2-Butanol In Whole Water Sample, ug/L	ug/L
49308	3-Hydroxy Carbofuran, Water, .7u Filt, Tot Rec ug/L	ug/L
82584	3-Hydroxy Carbofuran, In Water, ug/L	ug/L
60036	3-Methyl-4-Chlorophenol In Whole Water, ug/L	ug/L
51006	4,4'-Ddd, Total, ug/L	ug/L
51005	4,4'-Dde, Total, ug/L	ug/L
51007	4,4'-Ddt, Total, ug/L	ug/L
51008	4,6-Dinitro-2-Cresol In Whole Water, (ug/L)	ug/L
34637	4-Bromophenyl Phenyl Ether, Dissolved, ug/L	ug/L
34636	4-Bromophenyl Phenyl Ether, Total, ug/L	ug/L
77421	4-Chloro-3-Cresol, Total, ug/L	ug/L
60037	4-Chloroaniline In Whole Water, ug/L	ug/L
34642	4-Chlorophenyl Phenyl Ether, Dissolved, ug/L	ug/L
34641	4-Chlorophenyl Phenyl Ether, Total, ug/L	ug/L
34647	4-Nitrophenol, Dissolved, ug/L	ug/L
34646	4-Nitrophenol, Total, ug/L	ug/L
34253	A-Bhc-Alpha, Total, ug/L	ug/L
34206	Acenaphthene, Dissolved, ug/L	ug/L
34205	Acenaphthene, Total, ug/L	ug/L
34201	Acenaphthylene, Dissolved, ug/L	ug/L
34200	Acenaphthylene, Total, ug/L	ug/L
77057	Acetate Vinyl, Water, Unfiltered, Rec	ug/L
49260	Acetochlor, Water, Filtered Rec, ug/L	ug/L

## Appendix D – Storet Codes (Alphabetical By Name)

Code	Long Description	Units
81552	Acetone, Total, ug/L	ug/L
00435	Acidity Total (mg/L As CaCO <sub>3</sub> )	mg/L
00437	Acidity, Co <sub>2</sub> (Phenolph.) (mg/L As CaCO <sub>3</sub> )	mg/L
82242	Acidity, Total As CaCO <sub>3</sub> Field Data	mg/L
49315	Acifluorfen, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
79193	Acifluorfen, Total, ug/L	ug/L
34211	Acrolein, Dissolved, ug/L	ug/L
34210	Acrolein, Total, ug/L	ug/L
38576	Acrylamide, Total, ug/L	ug/L
34216	Acrylonitrile, Dissolved, ug/L	ug/L
34215	Acrylonitrile, Total, ug/L	ug/L
82383	Aggressive Index = Ph + Log(Ah)	LOGA
46342	Alachlor (Lasso), Dissolved, ug/L	ug/L
77825	Alachlor, Total, ug/L	ug/L
49313	Aldicarb Sulfone, .7 U Filt, Tot Recv, Water, ug/L	ug/L
82587	Aldicarb Sulfone, Total, ug/L	ug/L
82586	Aldicarb Sulfoxide, Total, ug/L	ug/L
49314	Aldicarb Sulfoxide, Water, .7u Filt, Tot Rec, ug/L	ug/L
49312	Aldicarb, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
39053	Aldicarb, Total, ug/L	ug/L
39331	Aldrin, Dissolved, ug/L	ug/L
39330	Aldrin, Total, ug/L	ug/L
82244	Alkalinity Phenolphthalein Field Data (mg/L)	mg/L
00431	Alkalinity Total Field (mg/L As CaCO <sub>3</sub> )	mg/L
39086	Alkalinity, Field, Dissolved As CaCO <sub>3</sub>	mg/L
00415	Alkalinity, Phenolphthalein, mg/L	mg/L
00410	Alkalinity, Total (mg/L As CaCO <sub>3</sub> )	mg/L
80000	Alpha Activity, pC/mg	pC/mg
80002	Alpha and Beta Activity, Total, pC/L	pC/L
80045	Alpha Gross Particle Activity, Total, pC/L	pC/L
60043	Alpha Hch, Dissolved, ug/L	ug/L
01515	Alpha, Dissolved Gross, As Uranium Natural, pC/L	pC/L
01503	Alpha, Dissolved, pC/L	pC/L
01516	Alpha, Suspended Gross, As Uranium Natural, pC/L	pC/L
01501	Alpha, Total, pC/L	pC/L
01106	Aluminum, Dissolved (ug/L As Al)	ug/L
01105	Aluminum, Total (ug/L As Al)	ug/L
79191	Ambush (Permethrin), Total, ug/L	ug/L
38401	Ametryn, Dissolved, ug/L	ug/L
82184	Ametryn, Total, ug/L	ug/L
82051	Amiben, Dissolved, ug/L	ug/L
49307	Amiben, Water, 0.7 Um Filt, Tot Recv, ug/L	ug/L
00619	Ammonia, Unionized (Calc Fr Temp-Ph-Nh <sub>4</sub> ) (mg/L)	mg/L
00612	Ammonia, Unionized, mg/L As N	mg/L
77089	Aniline In Whole Water, ug/L	ug/L
34221	Anthracene, Dissolved, ug/L	ug/L
34220	Anthracene, Total, ug/L	ug/L
01095	Antimony, Dissolved (ug/L As Sb)	ug/L
01097	Antimony, Total (ug/L As Sb)	ug/L

**Appendix D – Storet Codes (Alphabetical By Name)**

<b>Code</b>	<b>Long Description</b>	<b>Units</b>
73511	Arsenic Acid, Total, ug/L	ug/L
01000	Arsenic, Dissolved (ug/L As As)	ug/L
22678	Arsenic, Dissolved Organic, ug/L	ug/L
01002	Arsenic, Total (ug/L As As)	ug/L
34226	Asbestos (Fibrous), Dissolved, ug/L	ug/L
38414	Atraton (Gestamin), Total, ug/L	ug/L
82185	Atraton, Total, ug/L	ug/L
39630	Atrazine (Aatrex), Total, ug/L	ug/L
39033	Atrazine, Total, ug/L	ug/L
39632	Atrazine, Water, Dissolved, ug/L	ug/L
81890	Azodrin (Monocrotophos), Total, ug/L	ug/L
82052	Banvel (Dicamba), Total, ug/L	ug/L
38418	Barban, Total, ug/L	ug/L
01005	Barium, Dissolved (ug/L As Ba)	ug/L
01007	Barium, Total (ug/L As Ba)	ug/L
34255	B-Bhc-Beta, Total, ug/L	ug/L
39002	Benefin, Electroncapture, Total, ug/L	ug/L
82673	Benfluralin, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
38711	Bentazon, Dissolved, ug/L	ug/L
38710	Bentazon, Total, ug/L	ug/L
77221	Benzene 123-Tri Methyl, Water, Untltd, Rec	ug/L
34030	Benzene In Wtr Smpl Gc-Ms, Hexadecone Extr.(ug/L)	ug/L
34235	Benzene, Dissolved, ug/L	ug/L
78124	Benzene, Volatile Analysis, Total, ug/L	ug/L
73518	Benzenethiol, Total, ug/L	ug/L
34239	Benzidine, Dissolved, ug/L	ug/L
39120	Benzidine, Total, ug/L	ug/L
34527	Benzo(A) Anthracene, Total, ug/L	ug/L
34248	Benzo(A) Pyrene, Dissolved, ug/L	ug/L
34247	Benzo-(A)-Pyrene, Total, ug/L	ug/L
34231	Benzo(B)Fluoranthene, Dissolved, ug/L	ug/L
34230	Benzo(B)Fluoranthene, Total, ug/L	ug/L
34522	Benzo(Ghi) Perylene, Dissolved, ug/L	ug/L
34521	Benzo(Ghi)Perylene, Total, ug/L	ug/L
34243	Benzo(K)Fluoranthene, Dissolved, ug/L	ug/L
34242	Benzo(K)Fluoranthene, Total, ug/L	ug/L
77247	Benzoic Acid In Whole Water, ug/L	ug/L
77147	Benzyl Alcohol In Whole Water, ug/L	ug/L
01010	Beryllium, Dissolved (ug/L As Be)	ug/L
01012	Beryllium, Total (ug/L As Be)	ug/L
80001	Beta Activity, pC/mg	pC/mg
03511	Beta, Dissolved, Pc/Gm	PC/M
03503	Beta, Dissolved, pC/L	pC/L
03516	Beta, Suspended Gross, As Cs-137, pC/L	pC/L
80060	Beta, Suspended Gross, As Sr-Y-90, pC/L	pC/L
03501	Beta, Total, pC/L	pC/L
82197	Betasan (N-2-Mercaptoethyl Benzene Sulfmide) ug/L	ug/L
00440	Bicarbonate Ion (mg/L As Hco3)	mg/L
00453	Bicarbonate, Dissolved As Hco3, Field, mg/L	mg/L

## Appendix D – Storet Codes (Alphabetical By Name)

Code	Long Description	Units
00450	Bicarbonate,Increment Titration,(Hco3)Field,mg/L	mg/L
60008	Bi-Cyclo-Octa-Triene, Total, ug/L	ug/L
34278	Bis (2-Chloroethoxy) Methane, Total, ug/L	ug/L
34273	Bis (2-Chloroethyl) Ether, Total, ug/L	ug/L
34283	Bis (2-Chloroisopropyl) Ether, Total, ug/L	ug/L
34279	Bis(2-Chloroethoxy)Methane, Dissolved, ug/L	ug/L
34274	Bis(2-Chloroethyl) Ether, Dissolved, ug/L	ug/L
34284	Bis(2-Chloroisopropyl) Ether, Dissolved, ug/L	ug/L
77903	Bis(2-Ethylhexyl) Adipate In Whole Water, ug/L	ug/L
39103	Bis(2-Ethylhexyl) Phthalate, Dissolved, ug/L	ug/L
39100	Bis(2-Ethylhexyl) Phthalate, Total, ug/L	ug/L
01015	Bismuth, Dissolved (ug/L As Bi)	ug/L
01017	Bismuth, Total (ug/L As Bi)	ug/L
81651	Bisphenol, Total, ug/L	ug/L
01020	Boron, Dissolved (ug/L As B)	ug/L
01022	Boron, Total (ug/L As B)	ug/L
82198	Bromacil (Hyvar), Total, ug/L	ug/L
30234	Bromacil, Water, Whole, Recoverable, ug/L	ug/L
04029	Bromacil,Dissolved,Water,Total Recoverable, ug/L	ug/L
71870	Bromide, Dissolved, (mg/L As Br)	mg/L
82298	Bromide, Dissolved, (ug/L As Br)	ug/L
81555	Bromobenzene, Total, ug/L	ug/L
77297	Bromochloromethane, In Whole Water, ug/L	ug/L
32101	Bromodichloromethane, Total, ug/L	ug/L
34288	Bromoform, Dissolved, ug/L	ug/L
32104	Bromoform, Total, ug/L	ug/L
78383	Bromomethane, Total, ug/L	ug/L
49311	Bromoxynil, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
77860	Butachlor, Total, ug/L	ug/L
30235	Butachlor, Water, Whole, Recoverable, ug/L	ug/L
60017	Butyl Piperidine, Total, ug/L	ug/L
81410	Butylate (Sutan), Total, ug/L	ug/L
30236	Butylate, Water, Whole, Recoverable, ug/L	ug/L
04028	Butylate,Dissolved,Water,Total Recoverable, ug/L	ug/L
51003	Butylbenzyl Phthalate, Total, ug/L	ug/L
01025	Cadmium, Dissolved (ug/L As Cd)	ug/L
01027	Cadmium, Total, ug/L	ug/L
00910	Calcium (mg/L As CaCO3)	mg/L
00915	Calcium, Dissolved (mg/L As Ca)	mg/L
46552	Calcium, Field Acidified W/Hno3, Filtered, mg/L	mg/L
00916	Calcium, Total (mg/L As Ca)	mg/L
39640	Captan, Total, ug/L	ug/L
78168	Carbamates, ug/L	ug/L
77700	Carbaryl (Sevin), Total, ug/L	ug/L
82680	Carbaryl, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
49310	Carbaryl, Water, 0.7 Um Filt, Tot Recv, ug/L	ug/L
81405	Carbofuran (Euradan), Total, ug/L	ug/L
82674	Carbofuran, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
49309	Carbofuran, Water, 0.7 Um Filt, Tot Recv, ug/L	ug/L



## Appendix D – Storet Codes (Alphabetical By Name)

Code	Long Description	Units
28004	Carbon 14 Diss Apparent Age (Years Bp)	YR-B
82172	Carbon 14 Percent Modern	%
00405	Carbon Dioxide (mg/L As Co2)	mg/L
77041	Carbon Disulfide, Total, ug/L	ug/L
34297	Carbon Tetrachloride, Dissolved, ug/L	ug/L
32102	Carbon Tetrachloride, Total, ug/L	ug/L
00691	Carbon, Dissolved Inorganic (mg/L As C)	mg/L
00681	Carbon, Dissolved Organic (mg/L As C)	mg/L
00684	Carbon, Dissolved, Organic, Whatman Gf/F, mg/L	mg/L
00690	Carbon, Total (mg/L As C)	mg/L
00685	Carbon, Total Inorganic (mg/L As C)	mg/L
00680	Carbon, Total Organic (mg/L As C)	mg/L
82081	Carbon-13 / Carbon-12 Stable Isotope Ratio Per Mil	0/00
00445	Carbonate Ion (mg/L As Co3)	mg/L
00452	Carbonate, Incr Titration, Dissolved, Field, mg/L	mg/L
00447	Carbonate, Incremental Titration, Field, Tot.mg/L	mg/L
70978	Carboxin (Vitavax), Total, ug/L	ug/L
30245	Carboxin, Water, Whole, Recoverable, ug/L	ug/L
01110	Cerium, Dissolved (ug/L As Ce)	ug/L
01112	Cerium, Total, ug/L	ug/L
28410	Cesium 134, Dissolved, pC/L	pC/L
28414	Cesium 134, Total, pC/L	pC/L
28403	Cesium 137, Dissolved, pC/L	pC/L
28401	Cesium 137, Total, pC/L	pC/L
01115	Cesium, Dissolved (ug/L As Cs)	ug/L
01117	Cesium, Total, pC/L	pC/L
00335	Chemical Oxygen Demand, .025n K2cr207 (mg/L)	mg/L
39352	Chlordane (Tech Mix & Metabs), Dissolved, ug/L	ug/L
39350	Chlordane, Total, ug/L	ug/L
39348	Chlordane-Alpha, Total, ug/L	ug/L
39062	Chlordane-Cis, Total, ug/L	ug/L
39810	Chlordane-Gamma, Total, ug/L	ug/L
39065	Chlordane-Trans, Total, ug/L	ug/L
00941	Chloride, Dissolved, mg/L	mg/L
00940	Chloride, Total (mg/L As Cl)	mg/L
74052	Chlorinated Hydrocarbons, General (Permit)	GEN
81397	Chlorinated Organic Compounds, mg/L	mg/L
34302	Chlorobenzene, Dissolved, ug/L	ug/L
34301	Chlorobenzene, Total, ug/L	ug/L
39460	Chlorobenzilate, Total, ug/L	ug/L
34307	Chlorodibromomethane, Total, ug/L	ug/L
34312	Chloroethane, Dissolved, ug/L	ug/L
34311	Chloroethane, Total, ug/L	ug/L
60021	Chloroethylvinyl Ether, Total, ug/L	ug/L
34316	Chloroform, Dissolved, ug/L	ug/L
32106	Chloroform, Total, ug/L	ug/L
79132	Chloromethane, Total, ug/L	ug/L
77966	Chlorophenol, Total, ug/L	ug/L
49306	Chlorothalonil, Dissolved, ug/L	ug/L

## Appendix D – Storet Codes (Alphabetical By Name)

Code	Long Description	Units
77970	Chlorotoluene, Total, ug/L	ug/L
81322	Chlorpropham (Cipc), Total, ug/L	ug/L
38932	Chlorpyrifos, Water, Whole, Recoverable, ug/L	ug/L
01030	Chromium, Dissolved (ug/L As Cr)	ug/L
46560	Chromium, Field Acidified W/Hno3, Filtered, ug/L	ug/L
01034	Chromium, Total (ug/L As Cr)	ug/L
34321	Chrysene, Dissolved, ug/L	ug/L
34320	Chrysene, Total, ug/L	ug/L
82418	Cis Permethrin, Total, ug/L	ug/L
77093	Cis-1,2-Dichloroethylene, Total, ug/L	ug/L
34705	Cis-1,3-Dichloropropene, Dissolved, ug/L	ug/L
34704	Cis-1,3-Dichloropropene, Total, ug/L	ug/L
50003	Cis-1,3-Dichloropropylene, Total, ug/L	ug/L
82687	Cis-Permethrin, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
49305	Clopyralid, Water, 0.7 Um Filt, Tot Recv, ug/L	ug/L
82307	Cobalt 60, Dissolved, pC/L	
01035	Cobalt, Dissolved (ug/L As Co)	ug/L
01037	Cobalt, Total (ug/L As Co)	ug/L
74056	Coliform, Total, General (Permit)	GEN
01040	Copper, Dissolved (ug/L As Cu)	ug/L
01042	Copper, Total (ug/L As Cu)	ug/L
79778	Cresol, M- & P-, Total (ug/L)	ug/L
00725	Cyanate (mg/L As Ocn)	mg/L
81757	Cyanazine, Total, ug/L	ug/L
04041	Cyanazine,Dissolved,Water,Total Recoverable, ug/L	ug/L
00723	Cyanide, Dissolved, Std Method, ug/L	ug/L
00720	Cyanide, Total (mg/L As Cn)	mg/L
78248	Cyanide, Total, ug/L	ug/L
30254	Cycloate, Water, Whole, Recoverable, ug/L	ug/L
60029	Cycloheptane, Total, ug/L	ug/L
60006	Cycloheptatriene, Total, ug/L	ug/L
81570	Cyclohexane, Total, ug/L	ug/L
77097	Cyclohexanone, Total, ug/L	ug/L
81892	Cyloate (Roneet), Total, ug/L	ug/L
39771	Dacthal (Dcpa), Dissolved, ug/L	ug/L
39770	Dacthal (Dcpa), Total, ug/L	ug/L
49304	Dacthal Monoacid, Water, 0.7 Um Filt, Tot Rec,ug/L	ug/L
38433	Dalapon, Dissolved, ug/L	ug/L
38432	Dalapon, Total, ug/L	ug/L
39006	Dasanit (Fensulfothion), Total, ug/L	ug/L
38761	Dbcp (Dibromochloropropane), Dissolved, ug/L	ug/L
82682	Dcpa, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
39361	Ddd, Dissolved, ug/L	ug/L
39360	Ddd, Total, ug/L	ug/L
39366	Dde, Dissolved, ug/L	ug/L
39365	Dde, Total, ug/L	ug/L
39371	Ddt, Dissolved, ug/L	ug/L
39370	Ddt, Total, ug/L	ug/L
46373	Deethylatrazine (G-30033), Whole Water, ug/L	ug/L

## Appendix D – Storet Codes (Alphabetical By Name)

Code	Long Description	Units
75981	De-Ethylatrazine, Whole Water, Total, ug/L	ug/L
04040	Deethylatrazine,Dissolved,Water,Total Recov.,ug/L	ug/L
17794	Deethylhydroxyatrazine (G-17794), Total, ug/L	ug/L
81295	Def (Tribufos), Total, ug/L	ug/L
39040	Def, Total, ug/L	ug/L
46374	Deisopropylatrazine (G-28279), Whole Water, ug/L	ug/L
75980	De-Isopropylatrazine, Whole Water, Total, ug/L	ug/L
17792	Deisopropylhydroxyatrazine (G-17792), Total, ug/L	ug/L
82087	Delta 13 Carbon, Pdb Standard	None
50791	Delta Deuterium, Expressed As Permil Vsmow	0/00
50790	Delta Oxygen-18, Expressed As Permil Vsmow	0/00
49932	Delta Sulfur-34 On Sulfate, Diss.	PMIL
46323	Delta-Bhc, Total, ug/L	ug/L
39560	Demeton, Total, ug/L	ug/L
71820	Density (Gm/MI At 20c)	G/ML
28273	Diaminochloroatrazine (G-28273), Whole Water, ug/L	ug/L
04442	Diaminohydroxyatrazine (Gs-17791), Total, ug/L	ug/L
39572	Diazinon, Dissolved, ug/L	ug/L
39570	Diazinon, Total, ug/L	ug/L
51004	Dibenzo (A,H) Anthracene, Total, ug/L	ug/L
81302	Dibenzofuran In Whole Water, ug/L	ug/L
32105	Dibromochloromethane, Total, ug/L	ug/L
38760	Dibromochloropropane (Dbcp), Total, ug/L	ug/L
82625	Dibromochloropropane,Water,Total Recoverable,ug/L	ug/L
81522	Dibromoethane, Total, ug/L	ug/L
78756	Dibromomethane, Total, ug/L	ug/L
30217	Dibromomethane, Water, Whole Recoverable, ug/L	ug/L
39112	Dibutyl Phthalate, Total, ug/L	ug/L
38442	Dicamba (Banvel) Water, Dissolved, ug/L	ug/L
49303	Dichlobenil, Water, 0.7 Um Filt, Tot Recv, ug/L	ug/L
81524	Dichlorobenzene, Total, ug/L	ug/L
34668	Dichlorodifluoromethane, Total, ug/L	ug/L
81575	Dichloriodomethane, Total, ug/L	ug/L
78750	Dichloromethane, Total, ug/L	ug/L
60009	Dichloro-Methyl-Butane, Total, ug/L	ug/L
30190	Dichlorprop, Total, ug/L	ug/L
49302	Dichlorprop, Water, 0.7 Um Filt, Tot Recv, ug/L	ug/L
73071	Dichlorvos, Total, ug/L	ug/L
38446	Dicloran, Total, ug/L	ug/L
39381	Dieldrin, Dissolved, ug/L	ug/L
39380	Dieldrin, Total, ug/L	ug/L
46312	Diethyl Hexyl Phthalate, Total, ug/L	ug/L
34337	Diethyl Phthalate, Dissolved, ug/L	ug/L
34336	Diethyl Phthalate, Total, ug/L	ug/L
39031	Difolatan (Captafol), Total, ug/L	ug/L
60020	Dihydro-Dimethylfuran, Total, ug/L	ug/L
60028	Diiodochloromethane, Total, ug/L	ug/L
81577	Di-Isopropylether, Water, Unfltrd, Rec	ug/L
82662	Dimethoate, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L

## Appendix D – Storet Codes (Alphabetical By Name)

Code	Long Description	Units
46314	Dimethoate, Total, ug/L	ug/L
60010	Dimethyl Hexene, Total, ug/L	ug/L
60019	Dimethyl Pentene, Total, ug/L	ug/L
34342	Dimethyl Phthalate, Dissolved, ug/L	ug/L
34341	Dimethyl Phthalate, Total, ug/L	ug/L
60005	Dimethyl-Benzo-Dipyran-2-One, Total, ug/L	ug/L
34327	Di-N-Butyl Phthalate, Dissolved, ug/L	ug/L
39110	Di-N-Butyl Phthalate, Total, ug/L	ug/L
34597	Di-N-Octyl Phthalate, Dissolved, ug/L	ug/L
34596	Di-N-Octyl Phthalate, Total, ug/L	ug/L
38779	Dinoseb, Dissolved, ug/L	ug/L
30191	Dinoseb, Total, ug/L	ug/L
49301	Dinoseb, Water, 0.7 Um Filt, Tot Recv, ug/L	ug/L
78004	Diphenamid, Total, ug/L	ug/L
30255	Diphenamid, Water, Whole, Recoverable, ug/L	ug/L
77579	Diphenylamine, Total, ug/L	ug/L
78885	Diquat Dibromide (Reglone), Total, ug/L	ug/L
82677	Disulfoton, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
39010	Disulfoton, Flame Photometric, Total, ug/L	ug/L
81888	Disulfoton, Total, ug/L	ug/L
39011	Disyston, Whole Water Sample, ug/L	ug/L
39650	Diuron, Total, ug/L	ug/L
49300	Diuron, Water, 0.7 Um Filt, Tot Recv, ug/L	ug/L
60030	Dodecamethyl Cyclohexasiloxane, Total, ug/L	ug/L
38933	Dursban (Chloropyrifos) Dissolved, ug/L	ug/L
81403	Dursban (Chloropyrifos), Total, ug/L	ug/L
81294	Dyfonate (Fonofos), Total, ug/L	ug/L
39013	Dyfonate, Flame Photometric, Total, ug/L	ug/L
82105	Eicosane In Water, ug/L	ug/L
34361	Endosulfan - Alpha, Total, ug/L	ug/L
34356	Endosulfan - Beta, Total, ug/L	ug/L
82624	Endosulfan Ii, Total, ug/L	ug/L
34352	Endosulfan Sulfate, Dissolved, ug/L	ug/L
34351	Endosulfan Sulfate, Total, ug/L	ug/L
82354	Endosulfan, Dissolved, ug/L	ug/L
39388	Endosulfan, Total, ug/L	ug/L
38926	Endothall, Total, ug/L	ug/L
34367	Endrin Aldehyde, Dissolved, ug/L	ug/L
34366	Endrin Aldehyde, Total, ug/L	ug/L
39391	Endrin, Dissolved, ug/L	ug/L
39390	Endrin, Total, ug/L	ug/L
81679	Epiclorohydrin, Total, mg/L	mg/L
81894	Eptc (Eptam), Total, ug/L	ug/L
82668	Eptc, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
49298	Esfenvalerate, Water, 0.7 Um Filt, Tot Recv, ug/L	ug/L
82663	Ethalfuralin, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
38788	Ethalfuralin, Dissolved, ug/L	ug/L
38787	Ethalfuralin, Total, ug/L	ug/L
60007	Ethenyl Benzene, Total, ug/L	ug/L

## Appendix D – Storet Codes (Alphabetical By Name)

Code	Long Description	Units
81576	Ether Ethyl, Water Unfltrd, Recover	ug/L
50004	Ether Tertbutyl Ethyl, Unfiltered, Rec	ug/L
50005	Ether Tertpentyl Methyl, Unfiltered, Rec	ug/L
39398	Ethion, Total, ug/L	ug/L
82672	Ethoprop, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
81758	Ethoprop, Total, ug/L	ug/L
60018	Ethyl Cyclobutanone, Total, ug/L	ug/L
78013	Ethyl Hexanol In Water, ug/L	ug/L
78015	Ethyl Methyl Phenol In Water, ug/L	ug/L
46315	Ethyl Parathion, Total, ug/L	ug/L
78113	Ethylbenzene In Water, ug/L	ug/L
34372	Ethylbenzene, Dissolved, ug/L	ug/L
34371	Ethylbenzene, Total, ug/L	ug/L
60034	Ethylenedibromide (Edb), Total, ug/L	ug/L
38792	Etridiazole, Total, ug/L	ug/L
38463	Famphur, Dissolved, ug/L	ug/L
38929	Fenamiphos (Nemacur), Total, ug/L	ug/L
49297	Fenuron, Water, 0.7 Um Filt, Tot Recv, ug/L	ug/L
34377	Flouranthene, Dissolved ug/L	ug/L
38810	Fluometuron, Total, ug/L	ug/L
38811	Fluometuron, Water, Dissolved, ug/L	ug/L
34376	Fluoranthene, Total, ug/L	ug/L
34382	Fluorene, Dissolved, ug/L	ug/L
34381	Fluorene, Total, ug/L	ug/L
00950	Fluoride, Dissolved (mg/L As F)	mg/L
00951	Fluoride, Total (mg/L As F)	mg/L
00953	Fluorine, Total, ug/L	ug/L
79136	Fluorotrichloromethane, Total, ug/L	ug/L
82614	Fonofos (Dyfonate), Whole Water, Total Recov. ug/L	ug/L
04095	Fonofos, Dissolved, Water, Total Recoverable, ug/L	ug/L
82390	Free Acid, Total, mg/L	mg/L
77652	Freon 113, Water, Total Recoverable, ug/L	ug/L
05503	Gamma, Dissolved, pC/L	pC/L
05501	Gamma, Total, pC/L	pC/L
39340	Gamma-Bhc (Lindane), Total, ug/L	ug/L
01125	Germanium, Dissolved (ug/L As Ge)	ug/L
79743	Glyphosate, Total, ug/L	ug/L
82334	Gold, Dissolved (ug/L As Au)	ug/L
04241	Gross Alpha Radiation, Total, Produced Water, pCi/L	
75986	Gross Alpha, Dissolved (ug/L As U-Nat)	ug/L
04242	Gross Beta Radiation, Total, Produced Water, pCi/L	
03515	Gross Beta, Dissolved (pC/L As Cs-137)	pC/L
80050	Gross Beta, Dissolved (pCi/L As Sr/Y-90)	pC/L
39580	Guthion, Total, ug/L	ug/L
82082	H-2 / H-1 Stable Isotope Ratio (Deuterium/Protium)	0/00
78115	Halogen, Total Organic, ug/L	ug/L
00904	Hardness Noncarbonate, Dissolved, Field As CaCO3	mg/L
46570	Hardness, Ca mg Calculated (mg/L As CaCO3)	mg/L
00902	Hardness, Non-Carbonate (mg/L As CaCO3)	mg/L

## Appendix D – Storet Codes (Alphabetical By Name)

Code	Long Description	Units
00900	Hardness, Total (mg/L As CaCO <sub>3</sub> )	mg/L
82316	Helium, Dissolved (ug/L As He)	ug/L
39421	Heptachlor Epoxide, Dissolved, ug/L	ug/L
39420	Heptachlor Epoxide, Total, ug/L	ug/L
39411	Heptachlor, Dissolved, ug/L	ug/L
39410	Heptachlor, Total, ug/L	ug/L
60015	Heptacosone, Total, ug/L	ug/L
81589	Heptene In Water, ug/L	ug/L
99100	Herbicides, Chlor. Acid Phenoxy, Dissolved, ug/L	ug/L
00148	Herbicides, Total, ug/L	ug/L
39700	Hexachlorobenzene (Hcb), Total, ug/L	ug/L
34401	Hexachlorobenzene, Dissolved, ug/L	ug/L
34392	Hexachlorobutadiene, Dissolved, ug/L	ug/L
39702	Hexachlorobutadiene, Total, ug/L	ug/L
34386	Hexachlorocyclopentadiene, Total, ug/L	ug/L
34397	Hexachloroethane, Dissolved, ug/L	ug/L
34396	Hexachloroethane, Total, ug/L	ug/L
60035	Hexachloropentadiene, Total, ug/L	ug/L
34387	Hexachlorocyclopentadiene, Dissolved (ug/L)	ug/L
60031	Hexadecane, Total, ug/L	ug/L
45184	Hexanol In Water, ug/L	ug/L
38816	Hexazinone (Velpar), Total, ug/L	ug/L
30264	Hexazinone, Water, Whole, Recoverable, ug/L	ug/L
50577	Holmium, Dissolved (ug/L As Ho)	ug/L
01247	Holmium, Total ug/L	ug/L
81336	Hydrocarbon, Total, ug/L	ug/L
00191	Hydrogen Ion Concentration, Total, mg/L	mg/L
71875	Hydrogen Sulfide, mg/L	mg/L
71834	Hydroxide Dissolved In Water As Oh, Field (mg/L)	mg/L
71830	Hydroxide Ion (mg/L As Oh)	mg/L
34761	Hydroxyatrazine (G34048), Whole Water, ug/L	ug/L
60004	Hydroxy-Dimethyl-Benzopyranone, Total, ug/L	ug/L
60014	(Hydroxyphenol) Methylethyl Phenol, Total, ug/L	ug/L
34403	Indeno (1,2,3-Cd) Pyrene	ug/L
34404	Indeno (1,2,3-Cd) Pyrene, Dissolved, ug/L	ug/L
99200	Insecticides, Dissolved, ug/L	ug/L
71865	Iodide (mg/L As I)	mg/L
60027	Iodochloromethane, Total, ug/L	ug/L
77424	Iodomethane, Total, ug/L	ug/L
71885	Iron (ug/L As Fe)	ug/L
01046	Iron, Dissolved (ug/L As Fe)	ug/L
99302	Iron, Dissolved (ug/L) Photometer	ug/L
01047	Iron, Ferrous (ug/L As Fe)	ug/L
99303	Iron, Ferrous, Dissolved (ug/L) Photometer	ug/L
46563	Iron, Field Filtered, Acidified W/Hno <sub>3</sub> , ug/L	ug/L
01045	Iron, Total (ug/L As Fe)	ug/L
39430	Isodrin, Total, ug/L	ug/L
50000	Isodurene, Water, Unfiltered, Recover	ug/L
34409	Isophorone, Dissolved, ug/L	ug/L

**Appendix D – Storet Codes (Alphabetical By Name)**

<b>Code</b>	<b>Long Description</b>	<b>Units</b>
34408	Isophorone, Total, ug/L	ug/L
77223	Isopropylbenzene In Whole Water, Total, ug/L	ug/L
71814	Langelier Index of Water Corrosivity	CODE
01180	Lanthanum, Diss. (ug/L As La)	ug/L
01182	Lanthanum, Total (ug/L As La)	ug/L
01049	Lead, Dissolved (ug/L As Pb)	ug/L
46564	Lead, Field Filtered, Acidified W/Hno3, ug/L	ug/L
01051	Lead, Total (ug/L As Pb)	ug/L
82083	Li-7/ Li-6 Stable Isotope (Ratio Per Mil)	0/00
39782	Lindane, Total, ug/L	ug/L
39341	Lindane, Water, Dissolved, ug/L	ug/L
38477	Linuron (Lorox), Total, ug/L	ug/L
82666	Linuron, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
38478	Linuron, Water, Dissolved, ug/L	ug/L
01130	Lithium, Dissolved (ug/L As Li)	ug/L
46553	Lithium, Field Filtered, Acidified W/Hno3, mg/L	mg/L
01132	Lithium, Total (ug/L As Li)	ug/L
00920	Magnesium (mg/L As CaCO3)	mg/L
00925	Magnesium, Dissolved (mg/L As mg)	mg/L
46554	Magnesium, Field Filtered, Acidified W/Hno3, mg/L	mg/L
00927	Magnesium, Total (mg/L As mg)	mg/L
39532	Malathion, Dissolved, ug/L	ug/L
39530	Malathion, Total, ug/L	ug/L
01056	Manganese, Dissolved (ug/L As Mn)	ug/L
46565	Manganese, Field Filtered, Acidified W/Hno3, ug/L	ug/L
01055	Manganese, Total (ug/L As Mn)	ug/L
38482	Mcpa, Water, Dissolved, ug/L	ug/L
38487	Mcpb, Water, Dissolved, ug/L	ug/L
82512	M-Dichlorobenzene, Total, ug/L	ug/L
71890	Mercury, Dissolved (ug/L As Hg)	ug/L
71900	Mercury, Total (ug/L As Hg)	ug/L
38496	Merphos (Foley), Dissolved, ug/L	ug/L
30009	Merphos, Total Recoverable, ug/L	ug/L
77226	Mesitylene (1,3,5-Trimethylbenzene), Total, ug/L	ug/L
85795	Meta/Paraxylene, Water, Unfltrd, Rec	ug/L
04254	Metalaxyl, Whole Water, ug/L	ug/L
73570	Methacrylate Ethyl, Water, Unfiltered, Rec	ug/L
81593	Methacrylonitrate, Water, Unfltrd, Rec	ug/L
38927	Methamidaphos (Monitor), Total, ug/L	ug/L
38500	Methiocarb, Total, ug/L	ug/L
38501	Methiocarb, Water, Dissolved, ug/L	ug/L
39051	Methomyl, Total, ug/L	ug/L
49296	Methomyl, Water Filtered, Gf O.7u, Rec	ug/L
49229	Methomyl, Water, Dissolved, ug/L	ug/L
45202	Methoxy Ethyl Benzene, Total, ug/L	ug/L
78033	Methoxy Phenol, Total, ug/L	ug/L
39478	Methoxychlor, Dissolved, ug/L	ug/L
39480	Methoxychlor, Total, ug/L	ug/L
49991	Methyl Acrylate, Water Unfiltered, Rec	ug/L

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Code	Long Description	Units
34414	Methyl Bromide, Dissolved ug/L	ug/L
34413	Methyl Bromide, Total, ug/L	ug/L
45430	Methyl Butenol, Total, ug/L	ug/L
34418	Methyl Chloride, Total (ug/L)	ug/L
45277	Methyl Cyclopentanol In Water, ug/L	ug/L
45106	Methyl Cyclopentanone In Water, ug/L	ug/L
60032	Methyl Eicasane, Total, ug/L	ug/L
81595	Methyl Ethyl Ketone, Total, ug/L	ug/L
45292	Methyl Furanone, Total, ug/L	ug/L
76141	Methyl Isobutyl Ketone, Total, ug/L	ug/L
81597	Methyl Methacrylate, Total, ug/L	ug/L
39600	Methyl Parathion, Total, ug/L	ug/L
45169	Methyl Pentanol In Water, ug/L	ug/L
60033	Methyl Propylester Octadecanoic Acid, Total, ug/L	ug/L
82686	Methylazinphos, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
60016	Methylbenzene, (Toluene) Total, ug/L	ug/L
77100	Methylcyclohexane In Water, ug/L	ug/L
77052	Methylcyclopentane In Water, ug/L	ug/L
38260	Methylene Blue Active Substance, mg/L	mg/L
34424	Methylene Chloride, Dissolved, ug/L	ug/L
34423	Methylene Chloride, Total, ug/L	ug/L
60003	Methylethyl Phenol, Total, ug/L	ug/L
78133	Methyl-Isobutyl Ketone, Whole Water, Total	ug/L
82667	Methylparathion, 0.7 Um Filt, Tot Recv, Water,ug/L	ug/L
39356	Metolachlor (Dual), Total, ug/L	ug/L
39415	Metolachlor, Water, Dissolved, ug/L	ug/L
82612	Metolachlor, Whole Water, Total Recoverable, ug/L	ug/L
82630	Metribuzin (Sencor), Water, Dissolved, ug/L	ug/L
81408	Metribuzin (Sencor, Lexone), Total, ug/L	ug/L
82611	Metribuzin, Whole Water, Total Recoverable, ug/L	ug/L
39756	Mirex, Dissolved, ug/L	ug/L
39755	Mirex, Total, ug/L	ug/L
82671	Molinate, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
01060	Molybdenum, Dissolved, ug/L	ug/L
01062	Molybdenum, Total (ug/L As Mo)	ug/L
60041	Mtbe, Total, ug/L	ug/L
81710	M-Xylene, Total, ug/L	ug/L
34439	N - Nitrosodimethylamine, Dissolved, ug/L	ug/L
34429	N - Nitrosodi-N-Propylamine, Dissolved, ug/L	ug/L
34434	N - Nitrosodiphenylamine, Dissolved, ug/L	ug/L
34443	Naphthalene, Dissolved ug/L	ug/L
34696	Naphthalene, Total, ug/L	ug/L
39250	Naphthalenes, Polychlorinated, Total, ug/L	ug/L
82684	Napropamide, 0.7 Um Filter, Tot Recv, Water, ug/L	ug/L
79197	Napropamide, Total, ug/L	ug/L
77342	N-Butylbenzene, Whole Water, ug/L	ug/L
38522	Neburon, Dissolved, ug/L	ug/L
38521	Neburon, Total, ug/L	ug/L
49294	Neburon, Water, 0.7 Um Filt, Tot Recv, ug/L	ug/L



## Appendix D – Storet Codes (Alphabetical By Name)

Code	Long Description	Units
01237	Neodymium, Total ug/L	ug/L
01065	Nickel, Dissolved (ug/L As Ni)	ug/L
01067	Nickel, Total (ug/L As Ni)	ug/L
00618	Nitrate Nitrogen, Dissolved (mg/L As N)	mg/L
71851	Nitrate Nitrogen, Dissolved (mg/L As No3)	mg/L
00620	Nitrate Nitrogen, Total (mg/L As N)	mg/L
71850	Nitrate Nitrogen, Total (mg/L As No3)	mg/L
00613	Nitrite Nitrogen, Dissolved (mg/L As N)	mg/L
00615	Nitrite Nitrogen, Total (mg/L As N)	mg/L
71855	Nitrite Nitrogen, Total (mg/L As No2)	mg/L
00631	Nitrite Plus Nitrate, Dissolved (mg/L As N)	mg/L
00630	Nitrite Plus Nitrate, Total (mg/L As N)	mg/L
34448	Nitrobenzene, Dissolved ug/L	ug/L
34447	Nitrobenzene, Total, ug/L	ug/L
00597	Nitrogen Gas, Dissolved (mg/L of N)	mg/L
00608	Nitrogen, Ammonia, Dissolved (mg/L As N)	mg/L
99301	Nitrogen, Ammonia, Dissolved (mg/L) Photometer	mg/L
00610	Nitrogen, Ammonia, Total (mg/L As N)	mg/L
71845	Nitrogen, Ammonia, Total (mg/L As Nh4)	mg/L
00623	Nitrogen, Kjeldahl, Dissolved (mg/L As N)	mg/L
00625	Nitrogen, Kjeldahl, Total (mg/L As N)	mg/L
00607	Nitrogen, Organic, Dissolved (mg/L As N)	mg/L
00605	Nitrogen, Organic, Total (mg/L As N)	mg/L
00600	Nitrogen, Total (mg/L As N)	mg/L
71887	Nitrogen, Total (mg/L As No3)	mg/L
82084	Nitrogen-15/Nitrogen-14 Stable Isotope Ratio/Mil	0/00
78207	N-Nitrosodibutylamine In Whole Water, ug/L	ug/L
78200	N-Nitrosodiethylamine In Whole Water, ug/L	ug/L
34438	N-Nitrosodimethylamine, Total, ug/L	ug/L
34428	N-Nitroso-Di-N-Propylamine, Total, ug/L	ug/L
34433	N-Nitrosodiphenylamine, Total, ug/L	ug/L
78064	Norflurazon, Total, ug/L	ug/L
49293	Norflurazon, Water, 0.7 Um Filt, Tot Recv, ug/L	ug/L
60026	N-Propyl Benzamide, Total, ug/L	ug/L
77224	N-Propylbenzene, Total, ug/L	ug/L
82085	O-18/ O-16 Stable Isotope (Ratio Per Mil)	0/00
77275	O-Chlorotoluene In Whole Water, ug/L	ug/L
60022	O-Chlorotoluene, Total, ug/L	ug/L
49299	Ocresol 4, 6-Dinitro,.7u Filt, Water, Tot Recv, ug/L	ug/L
77152	O-Cresol In Whole Water, ug/L	ug/L
81674	Octanoic Acid In Water, ug/L	ug/L
81815	Orthene, Total, ug/L	ug/L
49292	Oryzalin (Surflan), Water, .7 U Filt, Tot Rec, ug/L	ug/L
01241	Osmium, Total, ug/L	ug/L
38865	Oxamyl (Vydate), Total, ug/L	ug/L
38866	Oxamyl, Water, Dissolved, ug/L	ug/L
00090	Oxidation Reduction Potential (Orp), Millivolts	MV
00299	Oxygen, Dissolved, Analysis By Probe (mg/L)	mg/L
00300	Oxygen, Dissolved, mg/L	mg/L

## Appendix D – Storet Codes (Alphabetical By Name)

Code	Long Description	Units
99300	Oxygen, Dissolved, mg/L Photometer	mg/L
50982	Oxygen-18/Oxygen-16 In Sulfate (Ratio Per Mil)	0/00
77135	O-Xylene, Total, ug/L	ug/L
00387	Ozone, mg/L	mg/L
39310	P,P' Ddd In Whole Water Sample (ug/L)	ug/L
39320	P,P' Dde In Whole Water Sample (ug/L)	ug/L
34653	P,P' Dde, Dissolved, ug/L	ug/L
39300	P,P' Ddt In Whole Water Sample (ug/L)	ug/L
82416	Paraquat, Total, ug/L	ug/L
39540	Parathion, Total, ug/L	ug/L
39542	Parathion, Water, Dissolved, ug/L	ug/L
39488	Pcb - 1221, Total, ug/L	ug/L
39492	Pcb - 1232, Total, ug/L	ug/L
39496	Pcb - 1242, Total, ug/L	ug/L
39502	Pcb - 1248 (Araclor), Dissolved, ug/L	ug/L
39500	Pcb - 1248, Total, ug/L	ug/L
39505	Pcb - 1254 (Araclor), Dissolved, ug/L	ug/L
39504	Pcb - 1254, Total, ug/L	ug/L
39509	Pcb - 1260 (Araclor), Dissolved, ug/L	ug/L
39508	Pcb - 1260, Total, ug/L	ug/L
81649	Pcb - 1262 (Araclor), Total, ug/L	ug/L
34671	Pcb- 1016, Total, ug/L	ug/L
34672	Pcb-1016, Dissolved (ug/L)	ug/L
34662	Pcb-1221, Dissolved (ug/L)	ug/L
34665	Pcb-1232, Dissolved (ug/L)	ug/L
34457	Pcb-1242, Dissolved (ug/L)	ug/L
39516	Pcbs, TOTAL, ug/L	ug/L
60023	P-Chlorotoluene, Total, ug/L	ug/L
77277	P-Chlorotoluene, Water, Total Recoverable, ug/L	ug/L
82669	Pebulate, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
79192	Pebulate, Total, ug/L	ug/L
82683	Pendimethalin, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
79190	Pendimethalin, Total, ug/L	ug/L
82410	Penoxalin (Prowl), Total, ug/L	ug/L
81316	Pentachloronitrobenzene, Total, ug/L	ug/L
39032	Pentachlorophenol (Pcp), Total, ug/L	ug/L
60001	Pentane, Total, ug/L	ug/L
60002	Pentyl Cyclopropane, Total, ug/L	ug/L
39034	Perthane, Total, ug/L	ug/L
00403	Ph (Standard Units) Lab	SU
00400	Ph (Standard Units), Field	SU
34462	Phenanthrene, Dissolved ug/L	ug/L
34461	Phenanthrene, Total, ug/L	ug/L
34466	Phenol, Dissolved ug/L	ug/L
34694	Phenol, Total, ug/L	ug/L
32730	Phenols, Total (ug/L)	ug/L
78076	Phenyl Ethanone In Water, ug/L	ug/L
82664	Phorate, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
38870	Phorate, Dissolved ug/L	ug/L

## Appendix D – Storet Codes (Alphabetical By Name)

Code	Long Description	Units
39023	Phorate, Total, ug/L	ug/L
81291	Phosalone, Total, ug/L	ug/L
99304	Phosphate, Dissolved (mg/L) Color Comparison	mg/L
00660	Phosphate, Ortho (mg/L As Po4)	mg/L
00650	Phosphate, Total (mg/L As Po4)	mg/L
00666	Phosphorus, Dissolved (mg/L As P)	mg/L
00671	Phosphorus, Dissolved Orthophosphate (mg/L As P)	mg/L
00673	Phosphorus, Dissolved, Organic (mg/L As P)	mg/L
70507	Phosphorus, In Total Orthophosphate (mg/L As P)	mg/L
00665	Phosphorus, Total (mg/L As P)	mg/L
71886	Phosphorus, Total As Po4 (mg/L)	mg/L
78721	Phthalates, Total, mg/L	mg/L
39720	Picloram, Total, ug/L	ug/L
49291	Picloram, Water, 0.7 Um Filt, Tot Recv, ug/L	ug/L
77356	P-Isopropyltoluene, Water, Total Recoverable, ug/L	ug/L
82068	Potassium 40 (K-40), Dissolved, pC/L	pC/L
75038	Potassium 40, Total, pC/L	pC/L
00935	Potassium, Dissolved (mg/L As K)	mg/L
46555	Potassium, Field Filtered, Acidified W/Hno3, mg/L	mg/L
00937	Potassium, Total (mg/L As K)	mg/L
49999	Prehnitene, Water, Unfiltered, Rec	ug/L
38872	Profluralin, Total, ug/L	ug/L
39056	Prometon, Total, ug/L	ug/L
04037	Prometon, Dissolved, Water, Total Recoverable, ug/L	ug/L
39057	Prometryne, Total, ug/L	ug/L
82676	Pronamide, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
39080	Pronamide, Total, ug/L	ug/L
30295	Propachlor, Water, Whole, Recoverable, ug/L	ug/L
04024	Propachlor, Dissolved, Water, Total Recoverable ug/L	ug/L
82359	Propane, Dissolved, ug/L	ug/L
82679	Propanil, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
39037	Propanil, Total, ug/L	ug/L
82685	Propargite, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
39024	Propazine, Coulson Conductivity, Total, ug/L	ug/L
78109	Propene 3-Chloro, Water, Unfltrd, Rec	ug/L
39052	Propham, Total, ug/L	ug/L
49236	Propham, Water, 0.7 Um Filt, Tot Recv, ug/L	ug/L
38538	Propoxur, Water, Dissolved, ug/L	ug/L
77222	Pseudocomene (1,2,4-Trimethylbenzene), Total, ug/L	ug/L
81277	Purgeable Organic Carbon, ug/L	ug/L
78132	P-Xylene, Total, ug/L	ug/L
34470	Pyrene, Dissolved, ug/L	ug/L
34469	Pyrene, Total, ug/L	ug/L
77045	Pyridine, Total, ug/L	ug/L
01490	Rad, Gross, Total Solids	mg/L
00189	Radioactivity, Whole Water, pC/L	pC/L
11500	Radium 226 + Radium 228, Dissolved, pC/L	pC/L
11503	Radium 226 + Radium 228, Total, pC/L	pC/L
09503	Radium 226, Dissolved, pC/L	pC/L

## Appendix D – Storet Codes (Alphabetical By Name)

Code	Long Description	Units
09511	Radium 226, Dissolved, Radon Method, pC/L	pC/L
09501	Radium 226, Total, pC/L	pC/L
81366	Radium 228, Dissolved (pC/L As Ra-228)	pC/L
11501	Radium 228, Total, pC/L	pC/L
82362	Radon 222, Dissolved Gas In Water, pC/L	pC/L
82305	Radon 222, Dissolved, pC/L	pC/L
82303	Radon 222, Total, pC/L	pC/L
75978	Ratio of Strontium87/Strontium86, Diss., Water	N/A
71860	Residual Sodium Carbonate	
70300	Residue, Total Filterable (Dried At 180c), mg/L	mg/L
77164	Resorcinal, Total, ug/L	ug/L
76002	Rn-222 2 Sigma In Whole Water, Total, pCi/L	pC/L
01135	Rubidium, Diss. (ug/L As Rb)	ug/L
01137	Rubidium, Total (ug/L As Rb)	ug/L
82086	S-34/ S-32 Stable Isotope (Ratio Per Mil)	0/00
77545	Safrole, Total, ug/L	ug/L
00480	Salinity In Parts Per Thousand	PPTH
77350	Sec Butylbenzene, Water, Total Recoverable, ug/L	ug/L
01145	Selenium, Dissolved (ug/L As Se)	ug/L
01147	Selenium, Total, ug/L	ug/L
00955	Silica, Dissolved (mg/L As SiO <sub>2</sub> )	mg/L
00956	Silica, Total (mg/L As SiO <sub>2</sub> )	mg/L
01140	Silicon, Dissolved (ug/L As Si)	ug/L
01142	Silicon, Total (ug/L As Si)	ug/L
01075	Silver, Dissolved (ug/L As Ag)	ug/L
46566	Silver, Field Filtered, Acidified W/HNO <sub>3</sub> , ug/L	ug/L
01077	Silver, Total (ug/L As Ag)	ug/L
39760	Silvex, Total, ug/L	ug/L
39762	Silvex, Water, Dissolved, ug/L	ug/L
39055	Simazine, Total, ug/L	ug/L
04035	Simazine, Dissolved, Water, Total Recoverable, ug/L	ug/L
38877	Simetryne, Total, ug/L	ug/L
39054	Simetryne, Total, ug/L	ug/L
00931	Sodium Adsorption Ratio (Sar)	RATI
32017	Sodium Chloride (NaCl), mg/L	mg/L
00933	Sodium Plus Potassium, mg/L	mg/L
00930	Sodium, Dissolved (mg/L As Na)	mg/L
46556	Sodium, Field Filtered, Acidified W/HNO <sub>3</sub> , mg/L	mg/L
00932	Sodium, Percent	%
00929	Sodium, Total (mg/L As Na)	mg/L
70301	Solids, Dissolved, Sum of Constituents, mg/L	mg/L
70299	Solids, Suspended, Residue On Evap At 180c, mg/L	mg/L
70304	Solids, Total Dissolved-Conductivity Meter (mg/L)	mg/L
00095	Specific Conductance (Umhos/Cm @25c)	MICR
00094	Specific Conductance, Field (Umhos/Cm At 25c)	MICR
82205	Specific Gravity (Gm/L)	GM/L
38878	Stirofos, Dissolved, ug/L	ug/L
31674	Streptococci, Fecal 10/MI	10/M
01080	Strontium, Dissolved (ug/L As Sr)	ug/L

## Appendix D – Storet Codes (Alphabetical By Name)

Code	Long Description	Units
48297	Strontium, Isotope of Mass 86 and 87 Ratio	N/A
01082	Strontium, Total (ug/L As Sr)	ug/L
81708	Styrene, Total, mg/L	mg/L
77128	Styrene, Total, ug/L	ug/L
00154	Sulfate, Total (mg/L As S)	mg/L
00946	Sulfate, Dissolved (mg/L As So4)	mg/L
00945	Sulfate, Total (mg/L As So4)	mg/L
00746	Sulfide, Dissolved (mg/L As S)	mg/L
00741	Sulfite, mg/L As S	mg/L
00740	Sulfite, mg/L As So3	mg/L
07140	Sulfur 35, Dissolved, pC/L	pC/L
07144	Sulfur 35, Total, pC/L	pC/L
80107	Sulfur, Total, mg/L	mg/L
39379	Sum of Ddt, Dde & Ddd Values, Total, ug/L	ug/L
78884	Surflan (Oryzalin), Total, ug/L	ug/L
38855	Swep, Dissolved, ug/L	ug/L
38854	Swep, Total, ug/L	ug/L
45607	Tebuthiuron (Graslan,Spike), Total, ug/L	ug/L
82670	Tebuthiuron, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
00010	Temperature, Water (Celsius)	C
00011	Temperature, Water (Fahrenheit)	FAHN
82665	Terbacil, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
30311	Terbacil, Water, Whole, Recoverable, ug/L	ug/L
82088	Terbufos (Counter), Total, ug/L	ug/L
82675	Terbufos, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
38888	Terbutryn, Dissolved, ug/L	ug/L
38887	Terbutryn, Total, ug/L	ug/L
39029	Terrachlor.Pentachloronitrobenzene(Gcl), Tot, ug/L	ug/L
77353	Tert-Butylbenzene, Water, Total Recoverable, ug/L	ug/L
78032	Tert-Butylmethylether, Total Recoverable, ug/L	ug/L
34476	Tetrachloroethylene, Dissolved, ug/L	ug/L
34475	Tetrachloroethylene, Total, ug/L	ug/L
60042	Tetrachloromethane, Total, ug/L	ug/L
81607	Tetrahydrofuran, Total, ug/L	ug/L
01057	Thallium, Dissolved (ug/L As Tl)	ug/L
01059	Thallium, Total (ug/L As Tl)	ug/L
82681	Thiobencarb, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
22505	Thorium 228, Total, pCi/L	pC/L
26501	Thorium 230, Total, pCi/L	pC/L
22501	Thorium 232, Total, PCi/L	pC/L
26403	Thorium, Natural, Dissolved pC/L	pC/L
82364	Thorium, Total In Water, ug/L	ug/L
01100	Tin, Dissolved (ug/L As Sn)	ug/L
01102	Tin, Total (ug/L As Sn)	ug/L
01150	Titanium, Dissolved (ug/L As Ti)	ug/L
34010	Toluene In Wtr Smpl Gc-Ms, Hexadone Extr. (ug/L/)	ug/L
77220	Toluene O-Methyl, Water, Unfiltered, Rec	ug/L
34481	Toluene, Dissolved, ug/L	ug/L
78131	Toluene, Volatile Analysis, Total, ug/L	ug/L

**Appendix D – Storet Codes (Alphabetical By Name)**

<b>Code</b>	<b>Long Description</b>	<b>Units</b>
60038	Total Nitroanalines In Whole Water, ug/L	ug/L
03550	Total Specific Radioactivity, Pc/Gr	PC/G
39786	Total Trithion, ug/L	ug/L
39401	Toxaphene, Dissolved, ug/L	ug/L
39400	Toxaphene, Total, ug/L	ug/L
34546	Trans-1,2-Dichloroethene, Total, ug/L	ug/L
50001	Trans-1,2-Dichloroethylene, Total, ug/L	ug/L
34700	Trans-1,3-Dichloropropene, Dissolved, ug/L	ug/L
34699	Trans-1,3-Dichloropropene, Total, ug/L	ug/L
50002	Trans-1,3-Dichloropropylene, Total, ug/L	ug/L
82420	Trans-Permethrin, Total, ug/L	ug/L
38893	Triadimefon, Dissolved, ug/L	ug/L
38892	Triadimefon, Total, ug/L	ug/L
82678	Triallate, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
78170	Trichlorobenzenes, Total, ug/L	ug/L
81853	Trichloroethane In Water, ug/L	ug/L
34485	Trichloroethylene, Dissolved, ug/L	ug/L
39180	Trichloroethylene, Total, ug/L	ug/L
34489	Trichlorofluoromethane, Dissolved, ug/L	ug/L
34488	Trichlorofluoromethane, Total, ug/L	ug/L
81611	Trichlorotrifluoroethane, Total, ug/L	ug/L
49235	Triclopyr, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
38903	Tricyclazole, Dissolved, ug/L	ug/L
38902	Tricyclazole, Total, ug/L	ug/L
82661	Trifluralin (Treflan), 0.7u Filt,Tot Rec,Wtr,ug/L	ug/L
38574	Trifluralin (Treflan), Dissolved, ug/L	ug/L
81284	Trifluralin (Treflan), Total, ug/L	ug/L
39030	Trifluralin, Total Recoverable, ug/L	ug/L
82080	Trihalomethane Total By Summation, ug/L	ug/L
60025	Triiodo Methane, Total, ug/L	ug/L
07013	Tritium Counting Error	TU
07012	Tritium In Water (Tritium Units)	TU
07018	Tritium, Dissolved (Tritium Units)	TU
07017	Tritium, Total (Tritium Units)	TU
07000	Tritium, Total, pCi/L	pC/L
38883	Turbacil, Dissolved, ug/L	ug/L
38882	Turbacil, Total, ug/L	ug/L
82079	Turbidity, Lab, Nephelometric Turbidity Units, Ntu	NTU
22603	Uranium 238, Dissolved, pC/L	pC/L
80020	Uranium, Dissolved By Extraction, ug/L	ug/L
22703	Uranium, Natural, Dissolved, ug/L	ug/L
28012	Uranium, Natural, Total (pC/L As U)	pC/L
22706	Uranium,Total ug/L As U3o8	ug/L
01085	Vanadium, Dissolved (ug/L As V)	ug/L
01087	Vanadium, Total (ug/L As V)	ug/L
30324	Vernolate, Total, ug/L	ug/L
34493	Vinyl Chloride, Dissolved, ug/L	ug/L
39175	Vinyl Chloride, Total, ug/L	ug/L
81551	Xylene, Total, ug/L	ug/L

**Appendix D – Storet Codes (Alphabetical By Name)**

<b>Code</b>	<b>Long Description</b>	<b>Units</b>
01194	Ytterbium, Diss. (ug/L As Y)	ug/L
01196	Ytterbium, Total (ug/L As Yb)	ug/L
01090	Zinc, Dissolved (ug/L As Zn)	ug/L
01092	Zinc, Total (ug/L As Zn)	ug/L

## Appendix E – Storet Codes (By Code)

Code	Long Description	Units
00010	Temperature, Water (Celsius)	C
00011	Temperature, Water (Fahrenheit)	FAHN
00090	Oxidation Reduction Potential (Orp), Millivolts	MV
00094	Specific Conductance, Field (Umhos/Cm At 25c)	MICR
00095	Specific Conductance (Umhos/Cm @25c)	MICR
00148	Herbicides, Total, ug/L	ug/L
00154	Sulfate, Total (mg/L As S)	mg/L
00189	Radioactivity, Whole Water, pC/L	pC/L
00191	Hydrogen Ion Concentration, Total, mg/L	mg/L
00299	Oxygen, Dissolved, Analysis By Probe (mg/L)	mg/L
00300	Oxygen, Dissolved, mg/L	mg/L
00335	Chemical Oxygen Demand, .025n K2cr207 (mg/L)	mg/L
00387	Ozone, mg/L	mg/L
00400	Ph (Standard Units), Field	SU
00403	Ph (Standard Units) Lab	SU
00405	Carbon Dioxide (mg/L As Co2)	mg/L
00410	Alkalinity, Total (mg/L As CaCO3)	mg/L
00415	Alkalinity, Phenolphthalein, mg/L	mg/L
00431	Alkalinity Total Field (mg/L As CaCO3)	mg/L
00435	Acidity Total (mg/L As CaCO3)	mg/L
00437	Acidity, Co2 (Phenolph.)(mg/L As CaCO3)	mg/L
00440	Bicarbonate Ion (mg/L As Hco3)	mg/L
00445	Carbonate Ion (mg/L As Co3)	mg/L
00447	Carbonate, Incremental Titration, Field, Tot.mg/L	mg/L
00450	Bicarbonate,Increment Titration,(Hco3)Field,mg/L	mg/L
00452	Carbonate, Incr Titration, Dissolved, Field, mg/L	mg/L
00453	Bicarbonate, Dissolved As Hco3, Field, mg/L	mg/L
00480	Salinity In Parts Per Thousand	PPTH
00597	Nitrogen Gas, Dissolved (mg/L of N)	mg/L
00600	Nitrogen, Total (mg/L As N)	mg/L
00605	Nitrogen, Organic, Total (mg/L As N)	mg/L
00607	Nitrogen, Organic, Dissolved (mg/L As N)	mg/L
00608	Nitrogen, Ammonia, Dissolved (mg/L As N)	mg/L
00610	Nitrogen, Ammonia, Total (mg/L As N)	mg/L
00612	Ammonia, Unionized, mg/L As N	mg/L
00613	Nitrite Nitrogen, Dissolved (mg/L As N)	mg/L
00615	Nitrite Nitrogen, Total (mg/L As N)	mg/L
00618	Nitrate Nitrogen, Dissolved (mg/L As N)	mg/L
00619	Ammonia, Unionized (Calc Fr Temp-Ph-Nh4) (mg/L)	mg/L
00620	Nitrate Nitrogen, Total (mg/L As N)	mg/L
00623	Nitrogen, Kjeldahl, Dissolved (mg/L As N)	mg/L
00625	Nitrogen, Kjeldahl, Total (mg/L As N)	mg/L
00630	Nitrite Plus Nitrate, Total (mg/L As N)	mg/L
00631	Nitrite Plus Nitrate, Dissolved (mg/L As N)	mg/L
00650	Phosphate, Total (mg/L As Po4)	mg/L
00660	Phosphate, Ortho (mg/L As Po4)	mg/L
00665	Phosphorus, Total (mg/L As P)	mg/L



## Appendix E – Storet Codes (By Code)

Code	Long Description	Units
00666	Phosphorus, Dissolved (mg/L As P)	mg/L
00671	Phosphorus, Dissolved Orthophosphate (mg/L As P)	mg/L
00673	Phosphorus, Dissolved, Organic (mg/L As P)	mg/L
00680	Carbon, Total Organic (mg/L As C)	mg/L
00681	Carbon, Dissolved Organic (mg/L As C)	mg/L
00684	Carbon, Dissolved, Organic, Whatman Gf/F, mg/L	mg/L
00685	Carbon, Total Inorganic (mg/L As C)	mg/L
00690	Carbon, Total (mg/L As C)	mg/L
00691	Carbon, Dissolved Inorganic (mg/L As C)	mg/L
00720	Cyanide, Total (mg/L As Cn)	mg/L
00723	Cyanide, Dissolved, Std Method, ug/L	ug/L
00725	Cyanate (mg/L As Ocn)	mg/L
00740	Sulfite, mg/L As So3	mg/L
00741	Sulfite, mg/L As S	mg/L
00746	Sulfide, Dissolved (mg/L As S)	mg/L
00900	Hardness, Total (mg/L As CaCO3)	mg/L
00902	Hardness, Non-Carbonate (mg/L As CaCO3)	mg/L
00904	Hardness Noncarbonate, Dissolved, Field As CaCO3	mg/L
00910	Calcium (mg/L As CaCO3)	mg/L
00915	Calcium, Dissolved (mg/L As Ca)	mg/L
00916	Calcium, Total (mg/L As Ca)	mg/L
00920	Magnesium (mg/L As CaCO3)	mg/L
00925	Magnesium, Dissolved (mg/L As mg)	mg/L
00927	Magnesium, Total (mg/L As mg)	mg/L
00929	Sodium, Total (mg/L As Na)	mg/L
00930	Sodium, Dissolved (mg/L As Na)	mg/L
00931	Sodium Adsorption Ratio (Sar)	RATI
00932	Sodium, Percent	%
00933	Sodium Plus Potassium, mg/L	mg/L
00935	Potassium, Dissolved (mg/L As K)	mg/L
00937	Potassium, Total (mg/L As K)	mg/L
00940	Chloride, Total (mg/L As Cl)	mg/L
00941	Chloride, Dissolved, mg/L	mg/L
00945	Sulfate, Total (mg/L As So4)	mg/L
00946	Sulfate, Dissolved (mg/L As So4)	mg/L
00950	Fluoride, Dissolved (mg/L As F)	mg/L
00951	Fluoride, Total (mg/L As F)	mg/L
00953	Fluorine, Total, ug/L	ug/L
00955	Silica, Dissolved (mg/L As SiO2)	mg/L
00956	Silica, Total (mg/L As SiO2)	mg/L
01000	Arsenic, Dissolved (ug/L As As)	ug/L
01002	Arsenic, Total (ug/L As As)	ug/L
01005	Barium, Dissolved (ug/L As Ba)	ug/L
01007	Barium, Total (ug/L As Ba)	ug/L
01010	Beryllium, Dissolved (ug/L As Be)	ug/L
01012	Beryllium, Total (ug/L As Be)	ug/L
01015	Bismuth, Dissolved (ug/L As Bi)	ug/L
01017	Bismuth, Total (ug/L As Bi)	ug/L
01020	Boron, Dissolved (ug/L As B)	ug/L

## Appendix E – Storet Codes (By Code)

<b>Code</b>	<b>Long Description</b>	<b>Units</b>
01022	Boron, Total (ug/L As B)	ug/L
01025	Cadmium, Dissolved (ug/L As Cd)	ug/L
01027	Cadmium, Total, ug/L	ug/L
01030	Chromium, Dissolved (ug/L As Cr)	ug/L
01034	Chromium, Total (ug/L As Cr)	ug/L
01035	Cobalt, Dissolved (ug/L As Co)	ug/L
01037	Cobalt, Total (ug/L As Co)	ug/L
01040	Copper, Dissolved (ug/L As Cu)	ug/L
01042	Copper, Total (ug/L As Cu)	ug/L
01045	Iron, Total (ug/L As Fe)	ug/L
01046	Iron, Dissolved (ug/L As Fe)	ug/L
01047	Iron, Ferrous (ug/L As Fe)	ug/L
01049	Lead, Dissolved (ug/L As Pb)	ug/L
01051	Lead, Total (ug/L As Pb)	ug/L
01055	Manganese, Total (ug/L As Mn)	ug/L
01056	Manganese, Dissolved (ug/L As Mn)	ug/L
01057	Thallium, Dissolved (ug/L As Tl)	ug/L
01059	Thallium, Total (ug/L As Tl)	ug/L
01060	Molybdenum, Dissolved, ug/L	ug/L
01062	Molybdenum, Total (ug/L As Mo)	ug/L
01065	Nickel, Dissolved (ug/L As Ni)	ug/L
01067	Nickel, Total (ug/L As Ni)	ug/L
01075	Silver, Dissolved (ug/L As Ag)	ug/L
01077	Silver, Total (ug/L As Ag)	ug/L
01080	Strontium, Dissolved (ug/L As Sr)	ug/L
01082	Strontium, Total (ug/L As Sr)	ug/L
01085	Vanadium, Dissolved (ug/L As V)	ug/L
01087	Vanadium, Total (ug/L As V)	ug/L
01090	Zinc, Dissolved (ug/L As Zn)	ug/L
01092	Zinc, Total (ug/L As Zn)	ug/L
01095	Antimony, Dissolved (ug/L As Sb)	ug/L
01097	Antimony, Total (ug/L As Sb)	ug/L
01100	Tin, Dissolved (ug/L As Sn)	ug/L
01102	Tin, Total (ug/L As Sn)	ug/L
01105	Aluminum, Total (ug/L As Al)	ug/L
01106	Aluminum, Dissolved (ug/L As Al)	ug/L
01110	Cerium, Dissolved (ug/L As Ce)	ug/L
01112	Cerium, Total, ug/L	ug/L
01115	Cesium, Dissolved (ug/L As Cs)	ug/L
01117	Cesium, Total, pC/L	pC/L
01125	Germanium, Dissolved (ug/L As Ge)	ug/L
01130	Lithium, Dissolved (ug/L As Li)	ug/L
01132	Lithium, Total (ug/L As Li)	ug/L
01135	Rubidium, Diss. (ug/L As Rb)	ug/L
01137	Rubidium, Total (ug/L As Rb)	ug/L
01140	Silicon, Dissolved (ug/L As Si)	ug/L
01142	Silicon, Total (ug/L As Si)	ug/L
01145	Selenium, Dissolved (ug/L As Se)	ug/L
01147	Selenium, Total, ug/L	ug/L

## Appendix E – Storet Codes (By Code)

Code	Long Description	Units
01150	Titanium, Dissolved (ug/L As Ti)	ug/L
01180	Lanthanum, Diss. (ug/L As La)	ug/L
01182	Lanthanum, Total (ug/L As La)	ug/L
01194	Ytterbium, Diss. (ug/L As Y)	ug/L
01196	Ytterbium, Total (ug/L As Yb)	ug/L
01237	Neodymium, Total ug/L	ug/L
01241	Osmium, Total, ug/L	ug/L
01247	Holmium, Total ug/L	ug/L
01490	Rad, Gross, Total Solids	mg/L
01501	Alpha, Total, pC/L	pC/L
01503	Alpha, Dissolved, pC/L	pC/L
01515	Alpha, Dissolved Gross, As Uranium Natural, pC/L	pC/L
01516	Alpha, Suspended Gross, As Uranium Natural, pC/L	pC/L
03501	Beta, Total, pC/L	pC/L
03503	Beta, Dissolved, pC/L	pC/L
03511	Beta, Dissolved, Pc/Gm	PC/M
03515	Gross Beta, Dissolved (pC/L As Cs-137)	pC/L
03516	Beta, Suspended Gross, As Cs-137, pC/L	pC/L
03550	Total Specific Radioactivity, Pc/Gr	PC/G
04024	Propachlor, Dissolved, Water, Total Recoverable ug/L	ug/L
04028	Butylate, Dissolved, Water, Total Recoverable, ug/L	ug/L
04029	Bromacil, Dissolved, Water, Total Recoverable, ug/L	ug/L
04035	Simazine, Dissolved, Water, Total Recoverable, ug/L	ug/L
04037	Prometon, Dissolved, Water, Total Recoverable, ug/L	ug/L
04040	Deethylatrazine, Dissolved, Water, Total Recov., ug/L	ug/L
04041	Cyanazine, Dissolved, Water, Total Recoverable, ug/L	ug/L
04095	Fonofos, Dissolved, Water, Total Recoverable, ug/L	ug/L
04241	Gross Alpha Radiation, Total, Produced Water, pCi/L	
04242	Gross Beta Radiation, Total, Produced Water, pCi/L	
04254	Metalaxyl, Whole Water, ug/L	ug/L
04413	1,2-Dibromo-3-Chloropropane, Total, ug/L	ug/L
04442	Diaminohydroxyatrazine (Gs-17791), Total, ug/L	ug/L
05501	Gamma, Total, pC/L	pC/L
05503	Gamma, Dissolved, pC/L	pC/L
07000	Tritium, Total, pCi/L	pC/L
07012	Tritium In Water (Tritium Units)	TU
07013	Tritium Counting Error	TU
07017	Tritium, Total (Tritium Units)	TU
07018	Tritium, Dissolved (Tritium Units)	TU
07140	Sulfur 35, Dissolved, pC/L	pC/L
07144	Sulfur 35, Total, pC/L	pC/L
09501	Radium 226, Total, pC/L	pC/L
09503	Radium 226, Dissolved, pC/L	pC/L
09511	Radium 226, Dissolved, Radon Method, pC/L	pC/L
11500	Radium 226 + Radium 228, Dissolved, pC/L	pC/L
11501	Radium 228, Total, pC/L	pC/L
11503	Radium 226 + Radium 228, Total, pC/L	pC/L
17792	Deisopropylhydroxyatrazine (G-17792), Total, ug/L	ug/L
17794	Deethylhydroxyatrazine (G-17794), Total, ug/L	ug/L

**Appendix E – Storet Codes (By Code)**

<b>Code</b>	<b>Long Description</b>	<b>Units</b>
22501	Thorium 232, Total, pCi/L	pC/L
22505	Thorium 228, Total, pCi/L	pC/L
22603	Uranium 238, Dissolved, pC/L	pC/L
22678	Arsenic, Dissolved Organic, ug/L	ug/L
22703	Uranium, Natural, Dissolved, ug/L	ug/L
22706	Uranium, Total ug/L As U3o8	ug/L
26403	Thorium, Natural, Dissolved pC/L	pC/L
26501	Thorium 230, Total, pCi/L	pC/L
28004	Carbon 14 Diss Apparent Age (Years Bp)	YR-B
28012	Uranium, Natural, Total (pC/L As U)	pC/L
28273	Diaminochloroatrazine (G-28273), Whole Water, ug/L	ug/L
28401	Cesium 137, Total, pC/L	pC/L
28403	Cesium 137, Dissolved, pC/L	pC/L
28410	Cesium 134, Dissolved, pC/L	pC/L
28414	Cesium 134, Total, pC/L	pC/L
30009	Merphos, Total Recoverable, ug/L	ug/L
30190	Dichlorprop, Total, ug/L	ug/L
30191	Dinoseb, Total, ug/L	ug/L
30217	Dibromomethane, Water, Whole Recoverable, ug/L	ug/L
30234	Bromacil, Water, Whole, Recoverable, ug/L	ug/L
30235	Butachlor, Water, Whole, Recoverable, ug/L	ug/L
30236	Butylate, Water, Whole, Recoverable, ug/L	ug/L
30245	Carboxin, Water, Whole, Recoverable, ug/L	ug/L
30254	Cycloate, Water, Whole, Recoverable, ug/L	ug/L
30255	Diphenamid, Water, Whole, Recoverable, ug/L	ug/L
30264	Hexazinone, Water, Whole, Recoverable, ug/L	ug/L
30295	Propachlor, Water, Whole, Recoverable, ug/L	ug/L
30311	Terbacil, Water, Whole, Recoverable, ug/L	ug/L
30324	Vernolate, Total, ug/L	ug/L
31674	Streptococci, Fecal 10/MI	10/M
32017	Sodium Chloride (Nacl), mg/L	mg/L
32101	Bromodichloromethane, Total, ug/L	ug/L
32102	Carbon Tetrachloride, Total, ug/L	ug/L
32103	1,2-Dichloroethane, Total, ug/L	ug/L
32104	Bromoform, Total, ug/L	ug/L
32105	Dibromochloromethane, Total, ug/L	ug/L
32106	Chloroform, Total, ug/L	ug/L
32730	Phenols, Total (ug/L)	ug/L
34010	Toluene In Wtr Smpl Gc-Ms, Hexadone Extr. (ug/L/)	ug/L
34030	Benzene In Wtr Smpl Gc-Ms, Hexadecone Extr.(ug/L)	ug/L
34200	Acenaphthylene, Total, ug/L	ug/L
34201	Acenaphthylene, Dissolved, ug/L	ug/L
34205	Acenaphthene, Total, ug/L	ug/L
34206	Acenaphthene, Dissolved, ug/L	ug/L
34210	Acrolein, Total, ug/L	ug/L
34211	Acrolein, Dissolved, ug/L	ug/L
34215	Acrylonitrile, Total, ug/L	ug/L
34216	Acrylonitrile, Dissolved, ug/L	ug/L
34220	Anthracene, Total, ug/L	ug/L

**Appendix E – Storet Codes (By Code)**

<b>Code</b>	<b>Long Description</b>	<b>Units</b>
34221	Anthracene, Dissolved, ug/L	ug/L
34226	Asbestos (Fibrous), Dissolved, ug/L	ug/L
34230	Benzo(B)Fluoranthene, Total, ug/L	ug/L
34231	Benzo(B)Fluoranthene, Dissolved, ug/L	ug/L
34235	Benzene, Dissolved, ug/L	ug/L
34239	Benzidine, Dissolved, ug/L	ug/L
34242	Benzo(K)Fluoranthene, Total, ug/L	ug/L
34243	Benzo(K)Fluoranthene, Dissolved, ug/L	ug/L
34247	Benzo-(A)-Pyrene, Total, ug/L	ug/L
34248	Benzo(A) Pyrene, Dissolved, ug/L	ug/L
34253	A-Bhc-Alpha, Total, ug/L	ug/L
34255	B-Bhc-Beta, Total, ug/L	ug/L
34273	Bis (2-Chloroethyl) Ether, Total, ug/L	ug/L
34274	Bis(2-Chloroethyl) Ether, Dissolved, ug/L	ug/L
34278	Bis (2-Chloroethoxy) Methane, Total, ug/L	ug/L
34279	Bis(2-Chloroethoxy)Methane, Dissolved, ug/L	ug/L
34283	Bis (2-Chloroisopropyl) Ether, Total, ug/L	ug/L
34284	Bis(2-Chloroisopropyl) Ether, Dissolved, ug/L	ug/L
34288	Bromoform, Dissolved, ug/L	ug/L
34297	Carbon Tetrachloride, Dissolved, ug/L	ug/L
34301	Chlorobenzene, Total, ug/L	ug/L
34302	Chlorobenzene, Dissolved, ug/L	ug/L
34307	Chlorodibromomethane, Total, ug/L	ug/L
34311	Chloroethane, Total, ug/L	ug/L
34312	Chloroethane, Dissolved, ug/L	ug/L
34316	Chloroform, Dissolved, ug/L	ug/L
34320	Chrysene, Total, ug/L	ug/L
34321	Chrysene, Dissolved, ug/L	ug/L
34327	Di-N-Butyl Phthalate, Dissolved, ug/L	ug/L
34336	Diethyl Pthalate, Total, ug/L	ug/L
34337	Diethyl Phthalate, Dissolved, ug/L	ug/L
34341	Dimethyl Pthalate, Total, ug/L	ug/L
34342	Dimethyl Phthalate, Dissolved, ug/L	ug/L
34346	1,2-Diphenylhydrazine, Total, ug/L	ug/L
34347	1,2-Diphenylhydrazine, Dissolved, ug/L	ug/L
34351	Endosulfan Sulfate, Total, ug/L	ug/L
34352	Endosulfan Sulfate, Dissolved, ug/L	ug/L
34356	Endosulfan - Beta, Total, ug/L	ug/L
34361	Endosulfan - Alpha, Total, ug/L	ug/L
34366	Endrin Aldehyde, Total, ug/L	ug/L
34367	Endrin Aldehyde, Dissolved, ug/L	ug/L
34371	Ethylbenzene, Total, ug/L	ug/L
34372	Ethylbenzene, Dissolved, ug/L	ug/L
34376	Fluoranthene, Total, ug/L	ug/L
34377	Flouranthene, Dissolved ug/L	ug/L
34381	Fluorene, Total, ug/L	ug/L
34382	Fluorene, Dissolved, ug/L	ug/L
34386	Hexachlorocyclopentadiene, Total, ug/L	ug/L
34387	Hexachlorocyclopentadiene, Dissolved (ug/L)	ug/L

## Appendix E – Storet Codes (By Code)

<b>Code</b>	<b>Long Description</b>	<b>Units</b>
34392	Hexachlorobutadiene, Dissolved, ug/L	ug/L
34396	Hexachloroethane, Total, ug/L	ug/L
34397	Hexachloroethane, Dissolved, ug/L	ug/L
34401	Hexachlorobenzene, Dissolved, ug/L	ug/L
34403	Indeno (1,2,3-Cd) Pyrene	ug/L
34404	Indeno (1,2,3-Cd) Pyrene, Dissolved, ug/L	ug/L
34408	Isophorone, Total, ug/L	ug/L
34409	Isophorone, Dissolved, ug/L	ug/L
34413	Methyl Bromide, Total, ug/L	ug/L
34414	Methyl Bromide, Dissolved ug/L	ug/L
34418	Methyl Chloride, Total (ug/L)	ug/L
34423	Methylene Chloride, Total, ug/L	ug/L
34424	Methylene Chloride, Dissolved, ug/L	ug/L
34428	N-Nitroso-Di-N-Propylamine, Total, ug/L	ug/L
34429	N - Nitrosodi-N-Propylamine, Dissolved, ug/L	ug/L
34433	N-Nitrosodiphenylamine, Total, ug/L	ug/L
34434	N - Nitrosodiphenylamine, Dissolved, ug/L	ug/L
34438	N-Nitrosodimethylamine, Total, ug/L	ug/L
34439	N - Nitrosodimethylamine, Dissolved, ug/L	ug/L
34443	Naphthalene, Dissolved ug/L	ug/L
34447	Nitrobenzene, Total, ug/L	ug/L
34448	Nitrobenzene, Dissolved ug/L	ug/L
34457	Pcb-1242, Dissolved (ug/L)	ug/L
34461	Phenanthrene, Total, ug/L	ug/L
34462	Phenanthrene, Dissolved ug/L	ug/L
34466	Phenol, Dissolved ug/L	ug/L
34469	Pyrene, Total, ug/L	ug/L
34470	Pyrene, Dissolved, ug/L	ug/L
34475	Tetrachloroethylene, Total, ug/L	ug/L
34476	Tetrachloroethylene, Dissolved, ug/L	ug/L
34481	Toluene, Dissolved, ug/L	ug/L
34485	Trichloroethylene, Dissolved, ug/L	ug/L
34488	Trichlorofluoromethane, Total, ug/L	ug/L
34489	Trichlorofluoromethane, Dissolved, ug/L	ug/L
34493	Vinyl Chloride, Dissolved, ug/L	ug/L
34496	1,1-Dichloroethane, Total, ug/L	ug/L
34501	1,1-Dichloroethylene, Total, ug/L	ug/L
34502	1,1-Dichloroethylene, Dissolved, ug/L	ug/L
34506	1,1,1-Trichloroethane, Total, ug/L	ug/L
34507	1,1,1-Trichloroethane, Dissolved, ug/L	ug/L
34511	1,1,2-Trichloroethane, Total, ug/L	ug/L
34512	1,1,2-Trichloroethane, Dissolved, ug/L	ug/L
34516	1,1,2,2-Tetrachloroethane, Total, ug/L	ug/L
34521	Benzo(Ghi)Perylene, Total, ug/L	ug/L
34522	Benzo(Ghi) Perylene, Dissolved, ug/L	ug/L
34527	Benzo(A) Anthracene, Total, ug/L	ug/L
34532	1,2-Dichloroethane, Dissolved, ug/L	ug/L
34536	1,2-Dichlorobenzene, Total, ug/L	ug/L
34537	1,2-Dichlorobenzene(Ortho), Dissolved, ug/L	ug/L

## Appendix E – Storet Codes (By Code)

<b>Code</b>	<b>Long Description</b>	<b>Units</b>
34541	1,2-Dichloropropane, Total, ug/L	ug/L
34542	1,2-Dichloropropane, Dissolved, ug/L	ug/L
34546	Trans-1,2-Dichloroethene, Total, ug/L	ug/L
34551	1,2,4-Trichlorobenzene, Total, ug/L	ug/L
34552	1,2,4-Trichlorobenzene, Dissolved, ug/L	ug/L
34561	1,3-Dichloropropene In Whole Water Sample, ug/L	ug/L
34566	1,3-Dichlorobenzene, Total, ug/L	ug/L
34571	1,4-Dichlorobenzene, Total, ug/L	ug/L
34576	2-Chloroethyl Vinyl Ether, Total, ug/L	ug/L
34577	2-Chloroethyl Vinyl Ether, Dissolved, ug/L	ug/L
34581	2-Chloronaphthalene, Total, ug/L	ug/L
34582	2-Chloronaphthalene, Dissolved, ug/L	ug/L
34591	2-Nitrophenol, Total, ug/L	ug/L
34592	2-Nitrophenol, Dissolved, ug/L	ug/L
34596	Di-N-Octyl Phthalate, Total, ug/L	ug/L
34597	Di-N-Octyl Phthalate, Dissolved, ug/L	ug/L
34601	2,4-Dichlorophenol, Total, ug/L	ug/L
34602	2,4-Dichlorophenol, Dissolved, ug/L	ug/L
34606	2,4-Dimethylphenol, Total, ug/L	ug/L
34607	2,4-Dimethylphenol, Dissolved, ug/L	ug/L
34611	2,4-Dinitrotoluene, Total, ug/L	ug/L
34612	2,4-Dinitrotoluene, Dissolved, ug/L	ug/L
34616	2,4-Dinitrophenol, Total, ug/L	ug/L
34617	2,4-Dinitrophenol, Dissolved, ug/L	ug/L
34621	2,4,6-Trichlorophenol, Total, ug/L	ug/L
34622	2,4,6-Trichlorophenol, Dissolved, ug/L	ug/L
34626	2,6-Dinitrotoluene, Total, ug/L	ug/L
34627	2,6-Dinitrotoluene, Dissolved, ug/L	ug/L
34631	3,3'-Dichlorobenzidine, Total, ug/L	ug/L
34632	3,3'-Dichlorobenzidine, Dissolved, ug/L	ug/L
34636	4-Bromophenyl Phenyl Ether, Total, ug/L	ug/L
34637	4-Bromophenyl Phenyl Ether, Dissolved, ug/L	ug/L
34641	4-Chlorophenyl Phenyl Ether, Total, ug/L	ug/L
34642	4-Chlorophenyl Phenyl Ether, Dissolved, ug/L	ug/L
34646	4-Nitrophenol, Total, ug/L	ug/L
34647	4-Nitrophenol, Dissolved, ug/L	ug/L
34653	P,P' Dde, Dissolved, ug/L	ug/L
34662	Pcb-1221, Dissolved (ug/L)	ug/L
34665	Pcb-1232, Dissolved (ug/L)	ug/L
34668	Dichlorodifluoromethane, Total, ug/L	ug/L
34671	Pcb- 1016, Total, ug/L	ug/L
34672	Pcb-1016, Dissolved (ug/L)	ug/L
34676	2,3,7,8-Tetrachlorodibenzo-P-Dioxin(Tcdd)Diss ug/L	ug/L
34694	Phenol, Total, ug/L	ug/L
34696	Naphthalene, Total, ug/L	ug/L
34699	Trans-1,3-Dichloropropene, Total, ug/L	ug/L
34700	Trans-1,3-Dichloropropene, Dissolved, ug/L	ug/L
34704	Cis-1,3-Dichloropropene, Total, ug/L	ug/L
34705	Cis-1,3-Dichloropropene, Dissolved, ug/L	ug/L

**Appendix E – Storet Codes (By Code)**

<b>Code</b>	<b>Long Description</b>	<b>Units</b>
34761	Hydroxyatrazine (G34048), Whole Water, ug/L	ug/L
38260	Methylene Blue Active Substance, mg/L	mg/L
38401	Ametryn, Dissolved, ug/L	ug/L
38414	Atraton (Gestamin), Total, ug/L	ug/L
38418	Barban, Total, ug/L	ug/L
38432	Dalapon, Total, ug/L	ug/L
38433	Dalapon, Dissolved, ug/L	ug/L
38442	Dicamba (Banvel) Water, Dissolved, ug/L	ug/L
38446	Dicloran, Total, ug/L	ug/L
38463	Famphur, Dissolved, ug/L	ug/L
38477	Linuron (Lorox), Total, ug/L	ug/L
38478	Linuron, Water, Dissolved, ug/L	ug/L
38482	Mcpa, Water, Dissolved, ug/L	ug/L
38487	Mcpb, Water, Dissolved, ug/L	ug/L
38496	Merphos (Foley), Dissolved, ug/L	ug/L
38500	Methiocarb, Total, ug/L	ug/L
38501	Methiocarb, Water, Dissolved, ug/L	ug/L
38521	Neburon, Total, ug/L	ug/L
38522	Neburon, Dissolved, ug/L	ug/L
38538	Propoxur, Water, Dissolved, ug/L	ug/L
38574	Trifluralin (Treflan), Dissolved, ug/L	ug/L
38576	Acrylamide, Total, ug/L	ug/L
38710	Bentazon, Total, ug/L	ug/L
38711	Bentazon, Dissolved, ug/L	ug/L
38745	2,4-Db, Total, ug/L	ug/L
38746	2,4-Db, Water, Dissolved, ug/L	ug/L
38760	Dibromochloropropane (Dbcp), Total, ug/L	ug/L
38761	Dbcp (Dibromochloropropane), Dissolved, ug/L	ug/L
38779	Dinoseb, Dissolved, ug/L	ug/L
38787	Ethalfuralin, Total, ug/L	ug/L
38788	Ethalfuralin, Dissolved, ug/L	ug/L
38792	Etridiazole, Total, ug/L	ug/L
38810	Fluometuron, Total, ug/L	ug/L
38811	Fluometuron, Water, Dissolved, ug/L	ug/L
38816	Hexazinone (Velpar), Total, ug/L	ug/L
38854	Swep, Total, ug/L	ug/L
38855	Swep, Dissolved, ug/L	ug/L
38865	Oxamyl (Vydate), Total, ug/L	ug/L
38866	Oxamyl, Water, Dissolved, ug/L	ug/L
38870	Phorate, Dissolved ug/L	ug/L
38872	Profluralin, Total, ug/L	ug/L
38877	Simetryne, Total, ug/L	ug/L
38878	Stirofos, Dissolved, ug/L	ug/L
38882	Turbacil, Total, ug/L	ug/L
38883	Turbacil, Dissolved, ug/L	ug/L
38887	Terbutryn, Total, ug/L	ug/L
38888	Terbutryn, Dissolved, ug/L	ug/L
38892	Triadimefon, Total, ug/L	ug/L
38893	Triadimefon, Dissolved, ug/L	ug/L



## Appendix E – Storet Codes (By Code)

<b>Code</b>	<b>Long Description</b>	<b>Units</b>
38902	Tricyclazole, Total, ug/L	ug/L
38903	Tricyclazole, Dissolved, ug/L	ug/L
38926	Endothall, Total, ug/L	ug/L
38927	Methamidaphos (Monitor), Total, ug/L	ug/L
38929	Fenamiphos (Nemacur), Total, ug/L	ug/L
38932	Chlorpyrifos, Water, Whole, Recoverable, ug/L	ug/L
38933	Dursban (Chloropyrifos) Dissolved, ug/L	ug/L
39002	Benefin, Electroncapture, Total, ug/L	ug/L
39006	Dasanit (Fensulfothion), Total, ug/L	ug/L
39010	Disulfoton, Flame Photometric, Total, ug/L	ug/L
39011	Disyston, Whole Water Sample, ug/L	ug/L
39013	Dyfonate, Flame Photometric, Total, ug/L	ug/L
39023	Phorate, Total, ug/L	ug/L
39024	Propazine, Coulson Conductivity, Total, ug/L	ug/L
39029	Terrachlor.Pentachloronitrobenzene(Gcl), Tot, ug/L	ug/L
39030	Trifluralin, Total Recoverable, ug/L	ug/L
39031	Difolatan (Captafol), Total, ug/L	ug/L
39032	Pentachlorophenol (Pcp), Total, ug/L	ug/L
39033	Atrazine, Total, ug/L	ug/L
39034	Perthane, Total, ug/L	ug/L
39037	Propanil, Total, ug/L	ug/L
39040	Def, Total, ug/L	ug/L
39045	2,4,5-Tp Includes Acids & Salts In Water, ug/L	ug/L
39051	Methomyl, Total, ug/L	ug/L
39052	Propham, Total, ug/L	ug/L
39053	Aldicarb, Total, ug/L	ug/L
39054	Simetryne, Total, ug/L	ug/L
39055	Simazine, Total, ug/L	ug/L
39056	Prometon, Total, ug/L	ug/L
39057	Prometryne, Total, ug/L	ug/L
39062	Chlordane-Cis, Total, ug/L	ug/L
39065	Chlordane-Trans, Total, ug/L	ug/L
39080	Pronamide, Total, ug/L	ug/L
39086	Alkalinity, Field, Dissolved As CaCO3	mg/L
39100	Bis(2-Ethylhexyl) Phthalate, Total, ug/L	ug/L
39103	Bis(2-Ethylhexyl) Phthalate, Dissolved, ug/L	ug/L
39110	Di-N-Butyl Phthalate, Total, ug/L	ug/L
39112	Dibutyl Phthalate, Total, ug/L	ug/L
39120	Benzidine, Total, ug/L	ug/L
39175	Vinyl Chloride, Total, ug/L	ug/L
39180	Trichloroethylene, Total, ug/L	ug/L
39250	Naphthalenes, Polychlorinated, Total, ug/L	ug/L
39300	P,P' Ddt In Whole Water Sample (ug/L)	ug/L
39310	P,P' Ddd In Whole Water Sample (ug/L)	ug/L
39320	P,P' Dde In Whole Water Sample (ug/L)	ug/L
39330	Aldrin, Total, ug/L	ug/L
39331	Aldrin, Dissolved, ug/L	ug/L
39340	Gamma-Bhc (Lindane), Total, ug/L	ug/L
39341	Lindane, Water, Dissolved, ug/L	ug/L

## Appendix E – Storet Codes (By Code)

<b>Code</b>	<b>Long Description</b>	<b>Units</b>
39348	Chlordane-Alpha, Total, ug/L	ug/L
39350	Chlordane, Total, ug/L	ug/L
39352	Chlordane (Tech Mix & Metabs), Dissolved, ug/L	ug/L
39356	Metolachlor (Dual), Total, ug/L	ug/L
39360	Ddd, Total, ug/L	ug/L
39361	Ddd, Dissolved, ug/L	ug/L
39365	Dde, Total, ug/L	ug/L
39366	Dde, Dissolved, ug/L	ug/L
39370	Ddt, Total, ug/L	ug/L
39371	Ddt, Dissolved, ug/L	ug/L
39379	Sum of Ddt, Dde & Ddd Values, Total, ug/L	ug/L
39380	Dieldrin, Total, ug/L	ug/L
39381	Dieldrin, Dissolved, ug/L	ug/L
39388	Endosulfan, Total, ug/L	ug/L
39390	Endrin, Total, ug/L	ug/L
39391	Endrin, Dissolved, ug/L	ug/L
39398	Ethion, Total, ug/L	ug/L
39400	Toxaphene, Total, ug/L	ug/L
39401	Toxaphene, Dissolved, ug/L	ug/L
39410	Heptachlor, Total, ug/L	ug/L
39411	Heptachlor, Dissolved, ug/L	ug/L
39415	Metolachlor, Water, Dissolved, ug/L	ug/L
39420	Heptachlor Epoxide, Total, ug/L	ug/L
39421	Heptachlor Epoxide, Dissolved, ug/L	ug/L
39430	Isodrin, Total, ug/L	ug/L
39460	Chlorobenzilate, Total, ug/L	ug/L
39478	Methoxychlor, Dissolved, ug/L	ug/L
39480	Methoxychlor, Total, ug/L	ug/L
39488	Pcb - 1221, Total, ug/L	ug/L
39492	Pcb - 1232, Total, ug/L	ug/L
39496	Pcb - 1242, Total, ug/L	ug/L
39500	Pcb - 1248, Total, ug/L	ug/L
39502	Pcb - 1248 (Araclor), Dissolved, ug/L	ug/L
39504	Pcb - 1254, Total, ug/L	ug/L
39505	Pcb - 1254 (Araclor), Dissolved, ug/L	ug/L
39508	Pcb - 1260, Total, ug/L	ug/L
39509	Pcb - 1260 (Araclor), Dissolved, ug/L	ug/L
39516	Pcbs, TOTAL, ug/L	ug/L
39530	Malathion, Total, ug/L	ug/L
39532	Malathion, Dissolved, ug/L	ug/L
39540	Parathion, Total, ug/L	ug/L
39542	Parathion, Water, Dissolved, ug/L	ug/L
39560	Demeton, Total, ug/L	ug/L
39570	Diazinon, Total, ug/L	ug/L
39572	Diazinon, Dissolved, ug/L	ug/L
39580	Guthion, Total, ug/L	ug/L
39600	Methyl Parathion, Total, ug/L	ug/L
39630	Atrazine (Aatrex), Total, ug/L	ug/L
39632	Atrazine, Water, Dissolved, ug/L	ug/L

## Appendix E – Storet Codes (By Code)

<b>Code</b>	<b>Long Description</b>	<b>Units</b>
39640	Captan, Total, ug/L	ug/L
39650	Diuron, Total, ug/L	ug/L
39700	Hexachlorobenzene (Hcb), Total, ug/L	ug/L
39702	Hexachlorobutadiene, Total, ug/L	ug/L
39720	Picloram, Total, ug/L	ug/L
39730	2,4-D, Total, ug/L	ug/L
39732	2, 4-D, Water, Dissolved, ug/L	ug/L
39740	2,4,5-T, Total, ug/L	ug/L
39742	2, 4, 5-T, Water, Dissolved, ug/L	ug/L
39755	Mirex, Total, ug/L	ug/L
39756	Mirex, Dissolved, ug/L	ug/L
39760	Silvex, Total, ug/L	ug/L
39762	Silvex, Water, Dissolved, ug/L	ug/L
39770	Dacthal (Dcpa), Total, ug/L	ug/L
39771	Dacthal (Dcpa), Dissolved, ug/L	ug/L
39782	Lindane, Total, ug/L	ug/L
39786	Total Trithion, ug/L	ug/L
39810	Chlordane-Gamma, Total, ug/L	ug/L
45106	Methyl Cyclopentanone In Water, ug/L	ug/L
45169	Methyl Pentanol In Water, ug/L	ug/L
45184	Hexanol In Water, ug/L	ug/L
45202	Methoxy Ethyl Benzene, Total, ug/L	ug/L
45277	Methyl Cyclopentanol In Water, ug/L	ug/L
45292	Methyl Furanone, Total, ug/L	ug/L
45430	Methyl Butenol, Total, ug/L	ug/L
45607	Tebuthiuron (Graslan,Spike), Total, ug/L	ug/L
46312	Diethyl Hexyl Phthalate, Total, ug/L	ug/L
46314	Dimethoate, Total, ug/L	ug/L
46315	Ethyl Parathion, Total, ug/L	ug/L
46323	Delta-Bhc, Total, ug/L	ug/L
46342	Alachlor (Lasso), Dissolved, ug/L	ug/L
46373	Deethylatrazine (G-30033), Whole Water, ug/L	ug/L
46374	Deisopropylatrazine (G-28279), Whole Water, ug/L	ug/L
46552	Calcium, Field Acidified W/Hno3, Filtered, mg/L	mg/L
46553	Lithium, Field Filtered, Acidified W/Hno3, mg/L	mg/L
46554	Magnesium, Field Filtered, Acidified W/Hno3, mg/L	mg/L
46555	Potassium, Field Filtered, Acidified W/Hno3, mg/L	mg/L
46556	Sodium, Field Filtered, Acidified W/Hno3, mg/L	mg/L
46560	Chromium, Field Acidified W/Hno3, Filtered, ug/L	ug/L
46563	Iron, Field Filtered, Acidified W/Hno3, ug/L	ug/L
46564	Lead, Field Filtered, Acidified W/Hno3, ug/L	ug/L
46565	Manganese, Field Filtered, Acidified W/Hno3, ug/L	ug/L
46566	Silver, Field Filtered, Acidified W/Hno3, ug/L	ug/L
46570	Hardness, Ca mg Calculated (mg/L As CaCO3)	mg/L
48297	Strontium, Isotope of Mass 86 and 87 Ratio	N/A
49229	Methomyl, Water, Dissolved, ug/L	ug/L
49235	Triclopyr, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
49236	Propham, Water, 0.7 Um Filt, Tot Recv, ug/L	ug/L
49260	Acetochlor, Water, Filtered Rec, ug/L	ug/L

**Appendix E – Storet Codes (By Code)**

<b>Code</b>	<b>Long Description</b>	<b>Units</b>
49291	Picloram, Water, 0.7 Um Filt, Tot Recv, ug/L	ug/L
49292	Oryzalin (Surflan), Water, .7 U Filt, Tot Rec,ug/L	ug/L
49293	Norflurazon, Water, 0.7 Um Filt, Tot Recv, ug/L	ug/L
49294	Neburon, Water, 0.7 Um Filt, Tot Recv, ug/L	ug/L
49295	1-Naphthol, Water, 0.7 Um Filt, Tot Recv, ug/L	ug/L
49296	Methomyl, Water Filtered, Gf 0.7u, Rec	ug/L
49297	Fenuron, Water, 0.7 Um Filt, Tot Recv, ug/L	ug/L
49298	Esfenvalerate, Water, 0.7 Um Filt, Tot Recv, ug/L	ug/L
49299	Ocresol 4, 6-Dinitro,.7u Filt,Water,Tot Recv,ug/L	ug/L
49300	Diuron, Water, 0.7 Um Filt, Tot Recv, ug/L	ug/L
49301	Dinoseb, Water, 0.7 Um Filt, Tot Recv, ug/L	ug/L
49302	Dichlorprop, Water, 0.7 Um Filt, Tot Recv, ug/L	ug/L
49303	Dichlobenil, Water, 0.7 Um Filt, Tot Recv, ug/L	ug/L
49304	Dacthal Monoacid, Water, 0.7 Um Filt, Tot Rec,ug/L	ug/L
49305	Clopyralid, Water, 0.7 Um Filt, Tot Recv, ug/L	ug/L
49306	Chlorothalonil, Dissolved, ug/L	ug/L
49307	Amiben, Water, 0.7 Um Filt, Tot Recv, ug/L	ug/L
49308	3-Hydroxy Carbofuran, Water, .7u Filt,Tot Rec ug/L	ug/L
49309	Carbofuran, Water, 0.7 Um Filt, Tot Recv, ug/L	ug/L
49310	Carbaryl, Water, 0.7 Um Filt, Tot Recv, ug/L	ug/L
49311	Bromoxynil, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
49312	Aldicarb, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
49313	Aldicarb Sulfone, .7 U Filt, Tot Recv, Water,ug/L	ug/L
49314	Aldicarb Sulfoxide, Water, .7u Filt, Tot Rec,ug/L	ug/L
49315	Acifluorfen, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
49932	Delta Sulfur-34 On Sulfate, Diss.	PMIL
49991	Methyl Acrylate, Water Unfiltered, Rec	ug/L
49999	Prehnitene, Water, Unfiltered, Rec	ug/L
50000	Isodurene, Water, Unfiltered, Recover	ug/L
50001	Trans-1,2-Dichloroethylene, Total, ug/L	ug/L
50002	Trans-1,3-Dichloropropylene, Total, ug/L	ug/L
50003	Cis-1,3-Dichloropropylene, Total, ug/L	ug/L
50004	Ether Tertbutyl Ethyl, Unfiltered, Rec	ug/L
50005	Ether Tertpentyl Methyl, Unfiltered, Rec	ug/L
50577	Holmium, Dissolved (ug/L As Ho)	ug/L
50790	Delta Oxygen-18, Expressed As Permil Vsmow	0/00
50791	Delta Deuterium, Expressed As Permil Vsmow	0/00
50982	Oxygen-18/Oxygen-16 In Sulfate (Ratio Per Mil)	0/00
51002	2,6-Dinitro-2-Cresol, Total, ug/L	ug/L
51003	Butylbenzyl Phthalate, Total, ug/L	ug/L
51004	Dibenzo (A,H) Anthracene, Total, ug/L	ug/L
51005	4,4'-Dde, Total, ug/L	ug/L
51006	4,4'-Ddd, Total, ug/L	ug/L
51007	4,4'-Ddt, Total, ug/L	ug/L
51008	4,6-Dinitro-2-Cresol In Whole Water, (ug/L)	ug/L
60001	Pentane, Total, ug/L	ug/L
60002	Pentyl Cyclopropane, Total, ug/L	ug/L
60003	Methylethyl Phenol, Total, ug/L	ug/L
60004	Hydroxy-Dimethyl-Benzopyranone, Total, ug/L	ug/L

## Appendix E – Storet Codes (By Code)

Code	Long Description	Units
60005	Dimethyl-Benzo-Dipyran-2-One, Total, ug/L	ug/L
60006	Cycloheptatriene, Total, ug/L	ug/L
60007	Ethenyl Benzene, Total, ug/L	ug/L
60008	Bi-Cyclo-Octa-Triene, Total, ug/L	ug/L
60009	Dichloro-Methyl-Butane, Total, ug/L	ug/L
60010	Dimethyl Hexene, Total, ug/L	ug/L
60012	2-Methyl Propane, Total, ug/L	ug/L
60013	2-Methyl Butane, Total, ug/L	ug/L
60014	(Hydroxyphenol) Methylethyl Phenol, Total, ug/L	ug/L
60015	Heptacosone, Total, ug/L	ug/L
60016	Methylbenzene, (Toluene) Total, ug/L	ug/L
60017	Butyl Piperidine, Total, ug/L	ug/L
60018	Ethyl Cyclobutanone, Total, ug/L	ug/L
60019	Dimethyl Pentene, Total, ug/L	ug/L
60020	Dihydro-Dimethylfuran, Total, ug/L	ug/L
60021	Chloroethylvinyl Ether, Total, ug/L	ug/L
60022	O-Chlorotoluene, Total, ug/L	ug/L
60023	P-Chlorotoluene, Total, ug/L	ug/L
60025	Triiodo Methane, Total, ug/L	ug/L
60026	N-Propyl Benzamide, Total, ug/L	ug/L
60027	Iodochloromethane, Total, ug/L	ug/L
60028	Diiodochloromethane, Total, ug/L	ug/L
60029	Cycloheptane, Total, ug/L	ug/L
60030	Dodecamethyl Cyclohexasiloxane, Total, ug/L	ug/L
60031	Hexadecane, Total, ug/L	ug/L
60032	Methyl Eicasane, Total, ug/L	ug/L
60033	Methyl Propylester Octadecanoic Acid, Total, ug/L	ug/L
60034	Ethylenedibromide (Edb), Total, ug/L	ug/L
60035	Hexachloropentadiene, Total, ug/L	ug/L
60036	3-Methyl-4-Chlorophenol In Whole Water, ug/L	ug/L
60037	4-Chloroaniline In Whole Water, ug/L	ug/L
60038	Total Nitroanalines In Whole Water, ug/L	ug/L
60039	2,3- Dichloro-2-Methyl-Butane In Whole Water, ug/L	ug/L
60040	3-Chloro-2-Butanol In Whole Water Sample, ug/L	ug/L
60041	Mtbe, Total, ug/L	ug/L
60042	Tetrachloromethane, Total, ug/L	ug/L
60043	Alpha Hch, Dissolved, ug/L	ug/L
70299	Solids, Suspended, Residue On Evap At 180c, mg/L	mg/L
70300	Residue, Total Filterable (Dried At 180c), mg/L	mg/L
70301	Solids, Dissolved, Sum of Constituents, mg/L	mg/L
70304	Solids, Total Dissolved-Conductivity Meter (mg/L)	mg/L
70507	Phosphorus, In Total Orthophosphate (mg/L As P)	mg/L
70978	Carboxin (Vitavax), Total, ug/L	ug/L
71814	Langelier Index of Water Corrosivity	CODE
71820	Density (Gm/MI At 20c)	G/ML
71830	Hydroxide Ion (mg/L As Oh)	mg/L
71834	Hydroxide Dissolved In Water As Oh, Field (mg/L)	mg/L
71845	Nitrogen, Ammonia, Total (mg/L As Nh4)	mg/L
71850	Nitrate Nitrogen, Total (mg/L As No3)	mg/L

## Appendix E – Storet Codes (By Code)

Code	Long Description	Units
71851	Nitrate Nitrogen, Dissolved (mg/L As No3)	mg/L
71855	Nitrite Nitrogen, Total (mg/L As No2)	mg/L
71860	Residual Sodium Carbonate	
71865	Iodide (mg/L As I)	mg/L
71870	Bromide, Dissolved, (mg/L As Br)	mg/L
71875	Hydrogen Sulfide, mg/L	mg/L
71885	Iron (ug/L As Fe)	ug/L
71886	Phosphorus, Total As Po4 (mg/L)	mg/L
71887	Nitrogen, Total (mg/L As No3)	mg/L
71890	Mercury, Dissolved (ug/L As Hg)	ug/L
71900	Mercury, Total (ug/L As Hg)	ug/L
73071	Dichlorvos, Total, ug/L	ug/L
73457	2 Butene Trans-1 4-Dichloro, Unfiltered, Rec	ug/L
73511	Arsenic Acid, Total, ug/L	ug/L
73518	Benzenethiol, Total, ug/L	ug/L
73570	Methacrylate Ethyl, Water, Unfiltered, Rec	ug/L
74052	Chlorinated Hydrocarbons, General (Permit)	GEN
74056	Coliform, Total, General (Permit)	GEN
75038	Potassium 40, Total, pC/L	pC/L
75978	Ratio of Strontium87/Strontium86, Diss., Water	N/A
75980	De-Isopropylatrazine, Whole Water, Total, ug/L	ug/L
75981	De-Ethylatrazine, Whole Water, Total, ug/L	ug/L
75986	Gross Alpha, Dissolved (ug/L As U-Nat)	ug/L
76002	Rn-222 2 Sigma In Whole Water, Total, pCi/L	pC/L
76141	Methyl Isobutyl Ketone, Total, ug/L	ug/L
77041	Carbon Disulfide, Total, ug/L	ug/L
77045	Pyridine, Total, ug/L	ug/L
77052	Methylcyclopentane In Water, ug/L	ug/L
77057	Acetate Vinyl, Water, Unfiltered, Rec	ug/L
77089	Aniline In Whole Water, ug/L	ug/L
77093	Cis-1,2-Dichloroethylene, Total, ug/L	ug/L
77097	Cyclohexanone, Total, ug/L	ug/L
77100	Methylcyclohexane In Water, ug/L	ug/L
77103	2-Hexanone, Water Whole, Total	ug/L
77128	Styrene, Total, ug/L	ug/L
77135	O-Xylene, Total, ug/L	ug/L
77147	Benzyl Alcohol In Whole Water, ug/L	ug/L
77152	O-Cresol In Whole Water, ug/L	ug/L
77163	1,3-Dichloropropene, Total, ug/L	ug/L
77164	Resorcinal, Total, ug/L	ug/L
77168	1,1-Dichloropropene, Total, ug/L	ug/L
77170	2,2-Dichloropropane, Total, ug/L	ug/L
77173	1,3-Dichloropropane, Total, ug/L	ug/L
77182	2-Heptanone In Whole Water, ug/L	ug/L
77220	Toluene O-Methyl, Water, Unfiltered, Rec	ug/L
77221	Benzene 123-Tri Methyl, Water, Untltd, Rec	ug/L
77222	Pseudocumene (1,2,4-Trimethylbenzene), Total, ug/L	ug/L
77223	Isopropylbenzene In Whole Water, Total, ug/L	ug/L
77224	N-Propylbenzene, Total, ug/L	ug/L

## Appendix E – Storet Codes (By Code)

Code	Long Description	Units
77226	Mesitylene (1,3,5-Trimethylbenzene), Total, ug/L	ug/L
77247	Benzoic Acid In Whole Water, ug/L	ug/L
77275	O-Chlorotoluene In Whole Water, ug/L	ug/L
77277	P-Chlorotoluene, Water, Total Recoverable, ug/L	ug/L
77297	Bromochloromethane, In Whole Water, ug/L	ug/L
77342	N-Butylbenzene, Whole Water, ug/L	ug/L
77350	Sec Butylbenzene, Water, Total Recoverable, ug/L	ug/L
77353	Tert-Butylbenzene, Water, Total Recoverable, ug/L	ug/L
77356	P-Isopropyltoluene, Water, Total Recoverable, ug/L	ug/L
77416	2-Methylnaphthalene In Whole Water, ug/L	ug/L
77421	4-Chloro-3-Cresol, Total, ug/L	ug/L
77424	Iodomethane, Total, ug/L	ug/L
77443	1,2,3-Trichloropropane, Total, ug/L	ug/L
77545	Safrole, Total, ug/L	ug/L
77562	1,1,1,2-Tetrachloroethane, Total, ug/L	ug/L
77579	Diphenylamine, Total, ug/L	ug/L
77613	1,2,3-Trichlorobenzene In Whole Water, ug/L	ug/L
77651	1,2-Dibromoethane, Total, ug/L	ug/L
77652	Freon 113, Water, Total Recoverable, ug/L	ug/L
77687	2,4,5-Trichlorophenol In Whole Water, ug/L	ug/L
77700	Carbaryl (Sevin), Total, ug/L	ug/L
77734	1,2,4,5-Tetrachlorobenzene In Whole Water, ug/L	ug/L
77825	Alachlor, Total, ug/L	ug/L
77860	Butachlor, Total, ug/L	ug/L
77903	Bis(2-Ethylhexyl) Adipate In Whole Water, ug/L	ug/L
77966	Chlorophenol, Total, ug/L	ug/L
77970	Chlorotoluene, Total, ug/L	ug/L
78004	Diphenamid, Total, ug/L	ug/L
78013	Ethyl Hexanol In Water, ug/L	ug/L
78015	Ethyl Methyl Phenol In Water, ug/L	ug/L
78032	Tert-Butylmethylether, Total Recoverable, ug/L	ug/L
78033	Methoxy Phenol, Total, ug/L	ug/L
78064	Norflurazon, Total, ug/L	ug/L
78076	Phenyl Ethanone In Water, ug/L	ug/L
78109	Propene 3-Chloro, Water, Unfltrd, Rec	ug/L
78113	Ethylbenzene In Water, ug/L	ug/L
78115	Halogen, Total Organic, ug/L	ug/L
78124	Benzene, Volatile Analysis, Total, ug/L	ug/L
78131	Toluene, Volatile Analysis, Total, ug/L	ug/L
78132	P-Xylene, Total, ug/L	ug/L
78133	Methyl-Isobutyl Ketone, Whole Water, Total	ug/L
78168	Carbamates, ug/L	ug/L
78170	Trichlorobenzenes, Total, ug/L	ug/L
78200	N-Nitrosodiethylamine In Whole Water, ug/L	ug/L
78207	N-Nitrosodibutylamine In Whole Water, ug/L	ug/L
78248	Cyanide, Total, ug/L	ug/L
78383	Bromomethane, Total, ug/L	ug/L
78721	Phthalates, Total, mg/L	mg/L
78750	Dichloromethane, Total, ug/L	ug/L

## Appendix E – Storet Codes (By Code)

<b>Code</b>	<b>Long Description</b>	<b>Units</b>
78756	Dibromomethane, Total, ug/L	ug/L
78884	Surflan (Oryzalin), Total, ug/L	ug/L
78885	Diquat Dibromide (Reglone), Total, ug/L	ug/L
78942	1-Chloro-2-Methylbenzene, Total, ug/L	ug/L
79132	Chloromethane, Total, ug/L	ug/L
79136	Fluorotrichloromethane, Total, ug/L	ug/L
79190	Pendimethalin, Total, ug/L	ug/L
79191	Ambush (Permethrin), Total, ug/L	ug/L
79192	Pebulate, Total, ug/L	ug/L
79193	Acifluorfen, Total, ug/L	ug/L
79197	Napropamide, Total, ug/L	ug/L
79743	Glyphosate, Total, ug/L	ug/L
79778	Cresol, M- & P-, Total (ug/L)	ug/L
80000	Alpha Activity, pC/mg	pC/mg
80001	Beta Activity, pC/mg	pC/mg
80002	Alpha and Beta Activity, Total, pC/L	pC/L
80020	Uranium, Dissolved By Extraction, ug/L	ug/L
80045	Alpha Gross Particle Activity, Total, pC/L	pC/L
80050	Gross Beta, Dissolved (pCi/L As Sr/Y-90)	pC/L
80060	Beta, Suspended Gross, As Sr-Y-90, pC/L	pC/L
80107	Sulfur, Total, mg/L	mg/L
81277	Purgeable Organic Carbon, ug/L	ug/L
81284	Trifluralin (Treflan), Total, ug/L	ug/L
81291	Phosalone, Total, ug/L	ug/L
81294	Dyfonate (Fonofos), Total, ug/L	ug/L
81295	Def (Tribufos), Total, ug/L	ug/L
81302	Dibenzofuran In Whole Water, ug/L	ug/L
81316	Pentachloronitrobenzene, Total, ug/L	ug/L
81322	Chlorpropham (Cipc), Total, ug/L	ug/L
81336	Hydrocarbon, Total, ug/L	ug/L
81366	Radium 228, Dissolved (pC/L As Ra-228)	pC/L
81397	Chlorinated Organic Compounds, mg/L	mg/L
81403	Dursban (Chloropyrifos), Total, ug/L	ug/L
81405	Carbofuran (Euradan), Total, ug/L	ug/L
81408	Metribuzin (Sencor, Lexone), Total, ug/L	ug/L
81410	Butylate (Sutan), Total, ug/L	ug/L
81522	Dibromoethane, Total, ug/L	ug/L
81524	Dichlorobenzene, Total, ug/L	ug/L
81551	Xylene, Total, ug/L	ug/L
81552	Acetone, Total, ug/L	ug/L
81555	Bromobenzene, Total, ug/L	ug/L
81570	Cyclohexane, Total, ug/L	ug/L
81575	Dichloriodomethane, Total, ug/L	ug/L
81576	Ether Ethyl, Water Unfltrd, Recover	ug/L
81577	Di-Isopropylether, Water, Unfltrd, Rec	ug/L
81589	Heptene In Water, ug/L	ug/L
81593	Methacrylonitrate, Water, Unfltrd, Rec	ug/L
81595	Methyl Ethyl Ketone, Total, ug/L	ug/L
81597	Methyl Methacrylate, Total, ug/L	ug/L



## Appendix E – Storet Codes (By Code)

<b>Code</b>	<b>Long Description</b>	<b>Units</b>
81607	Tetrahydrofuran, Total, ug/L	ug/L
81611	Trichlorotrifluoroethane, Total, ug/L	ug/L
81649	Pcb - 1262 (Araclor), Total, ug/L	ug/L
81651	Bisphenol, Total, ug/L	ug/L
81674	Octanoic Acid In Water, ug/L	ug/L
81679	Epiclorohydrin, Total, mg/L	mg/L
81708	Styrene, Total, mg/L	mg/L
81710	M-Xylene, Total, ug/L	ug/L
81757	Cyanazine, Total, ug/L	ug/L
81758	Ethoprop, Total, ug/L	ug/L
81815	Orthene, Total, ug/L	ug/L
81853	Trichloroethane In Water, ug/L	ug/L
81888	Disulfoton, Total, ug/L	ug/L
81890	Azodrin (Monocrotophos), Total, ug/L	ug/L
81892	Cyloate (Roneet), Total, ug/L	ug/L
81894	Eptc (Eptam), Total, ug/L	ug/L
82051	Amiben, Dissolved, ug/L	ug/L
82052	Banvel (Dicamba), Total, ug/L	ug/L
82068	Potassium 40 (K-40), Dissolved, pC/L	pC/L
82079	Turbidity, Lab, Nephelometric Turbidity Units, Ntu	NTU
82080	Trihalomethane Total By Summation, ug/L	ug/L
82081	Carbon-13 / Carbon-12 Stable Isotope Ratio Per Mil	0/00
82082	H-2 / H-1 Stable Isotope Ratio (Deuterium/Protium)	0/00
82083	Li-7/ Li-6 Stable Isotope (Ratio Per Mil)	0/00
82084	Nitrogen-15/Nitrogen-14 Stable Isotope Ratio/Mil	0/00
82085	O-18/ O-16 Stable Isotope (Ratio Per Mil)	0/00
82086	S-34/ S-32 Stable Isotope (Ratio Per Mil)	0/00
82087	Delta 13 Carbon, Pdb Standard	None
82088	Terbufos (Counter), Total, ug/L	ug/L
82105	Eicosane In Water, ug/L	ug/L
82172	Carbon 14 Percent Modern	%
82183	2,4-Dp, Total, ug/L	ug/L
82184	Ametryn, Total, ug/L	ug/L
82185	Atraton, Total, ug/L	ug/L
82197	Betasan (N-2-Mercaptoethyl Benzene Sulfmde) ug/L	ug/L
82198	Bromacil (Hyvar), Total, ug/L	ug/L
82205	Specific Gravity (Gm/L)	GM/L
82242	Acidity, Total As CaCO3 Field Data	mg/L
82244	Alkalinity Phenolphthalein Field Data (mg/L)	mg/L
82298	Bromide, Dissolved, (ug/L As Br)	ug/L
82303	Radon 222, Total, pC/L	pC/L
82305	Radon 222, Dissolved, pC/L	pC/L
82307	Cobalt 60, Dissolved, pC/L	
82316	Helium, Dissolved (ug/L As He)	ug/L
82334	Gold, Dissolved (ug/L As Au)	ug/L
82354	Endosulfan, Dissolved, ug/L	ug/L
82359	Propane, Dissolved, ug/L	ug/L
82362	Radon 222, Dissolved Gas In Water, pC/L	pC/L
82364	Thorium, Total In Water, ug/L	ug/L

## Appendix E – Storet Codes (By Code)

Code	Long Description	Units
82383	Aggressive Index = Ph + Log(Ah)	LOGA
82390	Free Acid, Total, mg/L	mg/L
82410	Penoxalin (Prowl), Total, ug/L	ug/L
82416	Paraquat, Total, ug/L	ug/L
82418	Cis Permethrin, Total, ug/L	ug/L
82420	Trans-Permethrin, Total, ug/L	ug/L
82512	M-Dichlorobenzene, Total, ug/L	ug/L
82584	3-Hydroxy Carbofuran, In Water, ug/L	ug/L
82586	Aldicarb Sulfoxide, Total, ug/L	ug/L
82587	Aldicarb Sulfone, Total, ug/L	ug/L
82611	Metribuzin, Whole Water, Total Recoverable, ug/L	ug/L
82612	Metolachlor, Whole Water, Total Recoverable, ug/L	ug/L
82614	Fonofos (Dyfonate), Whole Water, Total Recov. ug/L	ug/L
82624	Endosulfan Ii, Total, ug/L	ug/L
82625	Dibromochloropropane, Water, Total Recoverable, ug/L	ug/L
82630	Metribuzin (Sencor), Water, Dissolved, ug/L	ug/L
82637	1-Chloro-4-Methylbenzene, Total, ug/L	ug/L
82660	2, 6-Diethylaniline, Water, Filtered, ug/L	ug/L
82661	Trifluralin (Treflan), 0.7u Filt, Tot Rec, Wtr, ug/L	ug/L
82662	Dimethoate, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
82663	Ethalfuralin, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
82664	Phorate, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
82665	Terbacil, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
82666	Linuron, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
82667	Methylparathion, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
82668	Eptc, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
82669	Pebulate, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
82670	Tebuthiuron, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
82671	Molinate, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
82672	Ethoprop, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
82673	Benfluralin, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
82674	Carbofuran, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
82675	Terbufos, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
82676	Pronamide, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
82677	Disulfoton, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
82678	Triallate, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
82679	Propanil, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
82680	Carbaryl, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
82681	Thiobencarb, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
82682	Dcpa, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
82683	Pendimethalin, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
82684	Napropamide, 0.7 Um Filter, Tot Recv, Water, ug/L	ug/L
82685	Propargite, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
82686	Methylaziphos, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
82687	Cis-Permethrin, 0.7 Um Filt, Tot Recv, Water, ug/L	ug/L
85795	Meta/Paraxylene, Water, Unfltrd, Rec	ug/L
99100	Herbicides, Chlor. Acid Phenoxy, Dissolved, ug/L	ug/L
99200	Insecticides, Dissolved, ug/L	ug/L
99300	Oxygen, Dissolved (mg/L) Photometer	mg/L

**Appendix E – Storet Codes (By Code)**

<b>Code</b>	<b>Long Description</b>	<b>Units</b>
99301	Nitrogen, Ammonia, Dissolved (mg/L) Photometer	mg/L
99302	Iron, Dissolved (ug/L) Photometer	ug/L
99303	Iron, Ferrous, Dissolved (ug/L) Photometer	ug/L
99304	Phosphate, Dissolved (mg/L) Color Comparison	mg/L