4 APPENDICES

4.1 Appendix A: Codes Used in Water-Quality System

Table 1. Medium Codes (Sample Level)

Medium Code	Description	Definition
0	Not determined	
A	Artificial	Any substance that is not part of an aquatic environment and cannot be described by the Sample Medium Codes B-J or I-9
B	Solids	Unconsolidated materials that may be soils, cores, borehole cuttings, sediments, matter suspended in water or wastewater, street sweepings, other particulate matter, or the total array of materials that are collected as part of a "clean sweep"
C	Animal tissue	Any type of tissue that comprises either whole or parts of insects, fish, or other organisms living in an aquatic environment, or warm bodied animals that may or may not have been collected from a water body.
D	Plant tissue	Any type of non-animal tissue that comprises either whole or parts of plants, aquatic or non-aquatic.
E	Core material	Consolidated or unconsolidated material removed from a pipe or casing during a drilling (coring) operation.
F	Interstitial water	Water occurring in the small openings, spaces, and voids between particles of unconsolidated materials in that portion of the vadose water zone between the root zone and the water table. The water is held in place by entrapment, ionic attraction, and capillary or adhesive forces, rather than from upward pressure components of saturation.
G	Soil	A wet or dry substance composed of unconsolidated fine grain rock fragments (minerals) and organic material that has been modified sufficiently by physical, chemical, or biological processes to support terrestrial plant growth.
H	Bottom material	A mixture of mineral and organic matter that compose the top bed deposits (usually the first few inches) underlying a body of water.
J	Sludge	An unconsolidated material, from an anthropogenic source, covering the ground or the bed of a water body, usually originating as a result of processes such as domestic or industrial waste treatment.

Table 1. Medium Codes (Sample Level - continued)

Medium Code	Description	Definition
K	Soil moisture	Water occupying voids between loose soil particles within the aerated root zone. The water is held in place by surface tension, capillary and hydroscopic forces in opposition to the pull of gravitational forces.
L-P	**Taxonomic data**	**Biological data distinct from non-taxonomic data which cannot be described by Sample Medium Codes A-K, Q-Z, or 1-9.**
L	Phytoplankton (quantitative)	Phytoplanktonic species composition and enumeration
M	Phytoplankton (qualitative)	Phytoplanktonic species composition
N	Periphyton (qualitative)	Periphytic species composition
O	Benthic invertebrates (quantitative)	Benthic invertebrates species composition and enumeration
P		Periphytic diatoms species composition and enumeration
Q-Z	**Quality-control sample**	**Quality-control sample used to estimate bias and variability in the environment samples.**
Q	Artificial	
R	Surface water	
S	Ground water	
T	Wet deposition	
U	Bulk deposition	
V	Suspended sediment	
W	Bottom material	
X	Animal tissue	
Y	Plant tissue	

Table 1. Medium Codes (Sample Level - continued)

Medium Code	Description	Definition
Z	Interstitial water	
1	Suspended sediment	Sediment carried in suspension by the turbulent components of the fluid or by the Brownian movement (a law of physics).
2	Leachate	A solution obtained by passing a liquid (usually aqueous) through an unconsolidated solid medium, thereby dissolving materials (from the solid medium) which become a part of the solution. It also contains those precipitates that are the result of the solution process and subsequent chemical or biological reactions.
3	Dry deposition	Solid, aerosol or gaseous materials deposited from the atmosphere during dry weather periods.
4	Landfill effluent	A liquid material (usually water) that is drained or pumped from a landfill. It usually is a liquid that has percolated through solid landfill material to become a transport medium for materials dissolved from the landfill.
5	Elutriation	A process by which a mixture of an unconsolidated solid medium (usually soil) and a liquid medium (usually water) has been agitated for a given period of time to dissolve materials from the solid. The solid/liquid mixture is finally separated and the resulting solution is analyzed for materials dissolved during the elutriation process.
6	Ground water	Water below the surface of the earth contained in the saturated zone. It does not include soil moisture or interstitial water.
7	Wet deposition	Water reaching the earth's surface through precipitation as rain, snow, sleet, hail or condensation of fog and dew. The water may contain undissolved particulate and gaseous materials acquired from the atmosphere during precipitation.
8	Bulk deposition	A mixture of undesignated proportions of wet and dry deposition sampled by a continuously open container.
9	Surface water	Water on the surface of the earth stored or transported in rivers, streams, estuaries, lakes, ponds, swamps, glaciers or other aquatic areas. It also may refer to water in urban drains and storm-sewer systems.

Table 1. Medium Codes (Sample Level - continued)

Medium Code	Description	Definition
$	Treated water supply	Water after being processed for some particular use(s)
%	Effluent	Waste water after use at some point source; such an industrial facility or sewage treatment plant
*	Air	Sample of atmospheric gases
&	Soil gas	Gases occurring in the small openings, spaces, and voids between articles of unconsolidated materials in that portion of the vadose water zone between the root zone and the water table
~	Hyporheic zone	Near-stream subsurface environment where mixing occurs between subsurface water and surface water. Water flows not only in the open stream channel, but also through the interstices of stream-channel and bank sediments, thus creating a mixing zone with subsurface water. There is not a precise separation between ground water and surface water, thus the hyporheic zone is not precisely defined.
{	QC sample for treated water supply	
}	QC sample for effluent	
[	QC sample for air	
]	QC sample for soil gas	
>	QC sample for hyporheic zone	
<	QC sample for soil	

Table 2. Quality Assurance Codes (Result Level)

Code	Description
A	Not reported
B	Non-USGS lab value--failed edit
C	Non-USGS field value--failed edit
D	USGS lab value--failed edit
E	USGS field value--failed edit
F	Non-USGS lab value--in review
G	Non-USGS field value--in review
H	USGS lab value--in review
I	USGS field value--in review
1	Non-USGS lab value--approved for transfer
2	Non-USGS field value--approved for transfer
3	USGS lab value--approved for transfer
4	USGS field value--approved for transfer
6	Non-USGS lab value--proprietary
7	Non-USGS field value--proprietary
8	USGS lab value--proprietary
9	USGS field value--proprietary

Table 3. Hydrologic Condition Codes (Sample Level)

Code	Description
A	Not determined
4	Stable, low stage
5	Falling stage
6	Stable, high stage
7	Peak stage
8	Rising stage
9	Stable, normal stage
X	Not applicable

Table 4. Hydrologic Event Code (Sample Level)

Code	Description
1	Drought
2	Spill
3	Regulated flow
4	Snowmelt
5	Earthquake
6	Hurricane
7	Flood
8	Volcanic action
9	Routine sample
A	Spring breakup
B	Under ice cover
C	Glacial lake outbreak
D	Mudflow
E	Tidal action
F	Drainage Basin for Sample Was Affected by Fire Prior to Sampling
H	Dambreak
J	Storm
K	Backwater
X	Not applicable
Z	Not determined (for historical data only; not valid during sample login)

Table 5. Sample Type Codes (Sample Level)

Code	Description
A	Not determined
B	Other QA
H	Composite
1	Spike
2	Blank
3	Reference
4	Blind
5	Duplicate
6	Reference Material
7	Replicate
8	Spike solution
9	Regular

Table 6. Analysis Types (Sample Level)

Type	Description
CH	Chemical
BI	Biological
SE	Sediment
NU	Nutrients
PE	Pesticides
BE	Bed material
ME	Metals
RA	Radiochemical

Table 7. Analysis Status Codes (Sample Level)

Code	Description
A	Not determined
H	Initial entry
1	Retrieved, in review
3	Data in temporary hold status
7	Reviewed, approved for transfer
9	Proprietary data (Regional Hydrologist approval required)

Table 8. Analysis Source Codes (Sample Level)

Code	Description
A	Not determined
B	Non-USGS field only
C	Non-USGS lab only
D	Non-USGS lab and field
F	USGS field and non-USGS field
G	USGS field and non-USGS lab
H	USGS field and non-USGS lab and field
1	USGS lab and non-USGS field
2	USGS lab and non-USGS lab
3	USGS lab and non-USGS lab and field
4	USGS lab and field and non-USGS field
5	USGS lab and field and non-USGS lab
6	USGS lab and field and non-USGS lab and field
7	USGS field only
8	USGS lab only
9	USGS lab and field

Table 9. District Processing Status Codes (Sample Level)

Code	Description	Codes used in sample inventory table
R	Ready to transmit	APPRO
Z	Complete, but do not transmit (Local-use data for internal use)	LOCAL
N	New record	NEW
F	Field data	FIELD
L	Laboratory data	LAB
P	Pending approval	FD+LB
T	Transmitted (This setting is only available for transfer programs and is not available to the user)	TRANS

Table 10. Remark Codes (Result Level)

Code		Description
<	Less than	Actual value is known to be less than the value shown.
>	Greater than	Actual value is known to be greater than the value shown.
E	Estimated value	Value is estimated
A	Average value	Value is an average
V	Contamination	Analyte was detected in both the environmental sample and the associated blanks. (see Office of Water Quality Memorandum 97.8)
S	Most probable value	Most probable value
Null Value Remark Codes		
M	Presence verified, not quantified	Presence of material verified but not quantified
N	Presumptive evidence of presence	Presumptive evidence of presence of material
U	Analyzed for, not detected	Material specifically analyzed for but not detected

Table 11. Station Type Codes (Site Level)

Codes	Types
AG	Aggregate ground water
AS	Aggregate surface water
DV	Diversion
ES	Estuary
GW	Well
LA	Land application
LK	Lake or reservoir
ME	Meteorological
OF	Outfall
PL	Water use/Place of use
SP	Spring
SS	Specific source
SW	Stream

Table 12. Primary Use of Site Codes (Site Level)

Code	Description	Definition
A	Anode	Anode is a hole used as an electrical anode. Include in this category wells used solely to ground pipelines or electronic relays and other installations.
C	Standby emergency supply	Standby emergency supply refers to a water-supply source that is used only when the principal supplier of water is unavailable.
D	Drain	Drainage refers to the drainage of surface water underground.
E	Geothermal	Geothermal well is a hole drilled for geothermal energy development. Use this category for "dry" geothermal wells or wells into which water is injected for heating. For "wet" geothermal wells, through which water is withdrawn, use "W - withdrawal of water" for the use of site, and "E - power generation" for the primary use of water.
G	Seismic	Seismic hole is one drilled for seismic exploration. If it has been converted to water supply, use “W – Withdrawal of water” for the use of site.
H	Heat	Heat reservoir refers to a well in which a fluid is circulated in a closed system. Water is neither added to, nor removed from, the aquifer.
M	Mine	Mine includes any tunnel, shaft, or other excavation constructed for the extraction of minerals.
O	Observation	Observation well is a cased test-hole or well, drilled for either water-level or water-quality observations. Do not use this category for an oil-test hole, or water-supply well used only incidentally as an observation well.

Table 12. Primary Use of Site Codes (Site Level - continued)

Code	Description	Definition
P	Oil or gas well	Oil or gas well is any well or hole drilled in search of, or for production of, petroleum or gas. It includes any oil or gas production well, dry hole, core hole, injection well drilled for secondary recovery of oil, etc. An oil-test hole converted to a water-supply well should be classified as withdrawal (W).
R	Recharge	Recharge site is a site constructed or converted for use in replenishing the aquifer. An irrigation well used to return water to the aquifer during nonpumping periods is a well for withdrawing water, not a drainage or recharge well. Use this category for wells that are used to return water to the aquifer after use, such as those for returning air-conditioning water.
S	Repressurize	Repressurize refers to pumping water into an aquifer in order to increase the pressure in the aquifer for a specific purpose; for example, water flood purposes in oil fields.
T	Test	Test hole is an uncased hole (or one cased only temporarily) that was drilled for water, or for geologic or hydrogeologic testing. It may be equipped temporarily with a pump in order to make a pumping test, but if the well is destroyed after testing is completed, it is still a test hole. A core hole drilled as a part of mining or quarrying exploration work should be in this class.
U	Unused	An unused site is an abandoned water-supply site or one for which no use is contemplated. At an abandoned farmstead, a well originally used for domestic purposes may be classed as unused, even though it is equipped with a pump. Similarly, a stock well with a pump may become unused when a pasture or corral is put into cultivation. An irrigation well that is not equipped with a pump, nor used because the yield is too low or the water is too mineralized, belongs in this class.
V	Withdrawal/Return	Ground-water sites that are used to both withdraw and inject water to a well, such as an irrigation well used to return water to the aquifer during nonpumping periods.
W	Withdrawal of water	Withdrawal of water refers to a site that supplies water for one of the purposes shown under use of water. It includes a dewatering well, if the dewatering is accomplished by pumping ground water.

Table 12. Primary Use of Site Codes (Site Level - continued)

Code	Description	Definition
X	Waste disposal	A waste-disposal site is one used to convey industrial waste, domestic sewage, oil-field brine, mine drainage, radioactive waste, or other waste fluid into an underground zone. An oil-test or deep-water well converted to waste disposal should be in this category.
Z	Destroyed	A destroyed site is one that is no longer in existence. The casing of most destroyed wells will be pulled, but some may be plugged or filled. Do not use this category for an abandoned site that merely is not in use.

Table 13. Primary Use of Water Codes (Site Level)

Code	Description	Definition
B	Bottling	Bottling refers to the storage of water in bottles and use of the water for potable purposes (see Medicinal).
C	Commercial	Commercial use refers to use by a business establishment that does not fabricate or produce a product. Filling stations and motels are examples of commercial establishments. If some product is manufactured, assembled, remodeled, or otherwise fabricated, use of water for that plant should be considered industrial, even though the water is not used directly in the product or in the manufacturing of the product.
D	Dewater	Dewatering means the water is pumped for dewatering a construction or mining site, or to lower the water table for agricultural purposes. In this respect, it differs from a drainage well that is used to drain surface water underground. If the main purpose for which the water is withdrawn is to provide drainage, dewatering should be indicated even though the water may be discharged into an irrigation ditch and subsequently used to irrigate land.
E	Power	Power generation refers to use of water for generation of any type of power.
F	Fire	Fire protection refers to the principal use of the water and should be indicated if the site was constructed principally for this purpose, even though the water may be used at times to supplement an industrial or defense supply, to irrigate a golf course, fill a swimming pool, or for other use.
H	Domestic	Domestic use is water used to supply household needs, principally for drinking, cooking, washing, and sanitary purposes, but including watering a lawn and caring for a few pets. Most domestic wells will be at suburban or farm homes, but wells supplying small quantities of water for domestic purposes for one-classroom schools, turnpike gates, and similar installations, should be in the domestic category.

Table 13. Primary Use of Water Codes (Site Level - continued)

Code	Description	Definition
I	Irrigation	Irrigation refers to the use of water to irrigate cultivated plants. Most irrigation sites will supply water for farm crops, but the category should include wells used to water the grounds of schools, industrial plants, or cemeteries, if more than a small amount of water is pumped and that is the sole use of the water.
J	Industrial (cooling)	Industrial cooling refers to a water supply used solely for industrial cooling.
K	Mining	Mining refers to a water supply used solely for mining purposes.
M	Medicinal	Medicinal refers to water purported to have therapeutic value. Water may be used for bathing and/or drinking. If use of water is mainly because of its claimed therapeutic value, use this category even though the water is bottled.
N	Industrial	Industrial use is within a plant that manufactures or fabricates a product. The water may or may not be incorporated into the product being manufactured. Industrial water may be used to cool machinery, to provide sanitary facilities for employees, to air-condition the plant, and to irrigate the ground at the plant.
P	Public supply	Public Supply use is water that is pumped and distributed to several homes. Such supplies may be owned by a municipality or community, a water district, or a private concern. In most States, public supplies are regulated by departments of health which enforce minimum safety and sanitary requirements. If the system supplies five or more homes, it should be considered a public supply, as four or less classify use as domestic. Water supplies for trailer or summer camps with five or more living units should be in this category, but motels and hotels are classified as commercial. Most public supply systems also furnish water for a variety of other uses, such as industrial, institutional, and commercial.
Q	Aquaculture	Aquaculture refers to a water supply used solely for aquaculture, such as fish farms.
R	Recreation	Recreation refers to water discharged into pools (or channels which are dammed downstream to form pools), for swimming, boating, fishing, ice rinks, and other recreational uses.
S	Stock	Stock Supply refers to the watering of livestock.
T	Institutional	Institutional refers to water used in the maintenance and operation of institutions such as large schools, universities, hospitals, rest homes, or similar installations. Owners of institutions may be individuals, corporations, churches, or governmental units.

Table 13. Primary Use of Water Codes (Site Level - continued)

Code	Description	Definition
U	Unused	Unused means water is not being removed from the site for one of the purposes described above. A test hole, oil or gas well, recharge, drainage, observation, or waste-disposal well will be in this category. Do not use this classification for an irrigation, domestic, stock, or other well during "off season" or temporary periods of nonuse. The use of water from a newly constructed site should be considered as the use for which it is intended even though it may not yet be in use when inventoried.
Y	Desalination	Desalination refers to water used in a desalting process whereby dissolved solids are removed to make water potable or suitable for other uses. Enter the type of use of the desalinated water in the next column, "Secondary Water Use".
Z	Other (explain in remarks)	Other refers to miscellaneous uses not included in the listed categories.

Table 14. Data Quality Indicator (DQI) Codes (Result Level)

DQI code	Description	Batch overwrite allowed*	Default public release
A	Historical data	No	Yes
S	Presumed satisfactory	Yes	Yes
I	Awaiting Review	Yes	No
R	Reviewed and accepted	No	Yes
Q	Reviewed and rejected	No	No
P	Proprietary, not reviewed	No	No
O	Proprietary, reviewed and approved	No	No
X	Proprietary, reviewed and rejected	No	No
U	Unapproved method or laboratory	Yes	No

*** Any DQI-protected value may be overwritten using the following batch processing menu options:**
9 -- Reload QW data from batch file, overriding DQI
10 -- Reload QA data from batch file, overriding DQI

Table 15. Null-Value Qualifiers (Result Level)

Null-value Qualifiers	Description
b	Sample broken/spilled in shipment
c	Sample lost in lab
e	Required equipment not functional or available
f	Sample discarded: improper filter used

Table 15. Null-Value Qualifiers (Result Level - continued)

Null-value Qualifiers	Description
i	Required sample type not received
l	Analysis discarded: Lab QC failure
m	Results sent by separate memo
o	Insufficient amount of water
p	Sample discarded: improper preservation
q	Sample discarded: holding time exceeded
r	Sample ruined in preparation
u	Unable to determine – matrix interference
w	Sample discarded: warm when received
x	Result failed quality assurance review

Table 16. Value-Qualifier Codes (Result Level)

Value-qualifier codes	Definition	Description
	Raised Reporting Level	
d	Diluted sample: method high range exceeded	Diluted sample: method high range exceeded
q	Insufficient sample received	Insufficient sample received
s	Instrument sensitivity problem	
x	Interference from sample matrix	Analyte interference from environmental sample matrix
	Method Problems	
a	Value was extrapolated at high end	Value was extrapolated above highest calibration standard, method range, or instrument linear range.
b	Value was extrapolated at low end	Value was extrapolated below lowest calibration standard, method range, or instrument linear range
f	Sample field preparation problem	Sample field preparation problem. Problem described in result comment.
i	Result may be affected by interference	Result may be affected by interference(s).
l	Sample lab preparation problem	Sample lab preparation problem. Problem described in result comment.
m	Value is highly variable by this method	Highly variable compound using this method, questionable precision and (or) accuracy. Citation of OFR or NWQL Technical Memo in result comment.

Table 16. Value-Qualifier Codes (Result Level – continued)

Value-qualifier	Definition	Description
	Method Problems	
n	Below the LRL and above the LT-MDL	Below the laboratory reporting level and above the long-term method detection level.
o	Result determined by alternate method	Result determined by alternate method. Reason described in result comment.
t	Below the long-term MDL	Below the long-term method detection level
w	High variability: precision and accuracy (questionable)	High variability: questionable precision and (or) accuracy. Cause explained in result comment.
	Rerun	
h	Compound identified, verified by second method	Compound identification verified by rerun using a different method; Alternate method identified in result comments.
p	Value reported is preferred	Value reported is preferred; explanation in result comments
r	Value verified by rerun, same method	Quantification verified by rerun using the same method
u	Value reported not confirmable, interference	Value reported not confirmable due to interference
y	Sample variability described in comment	Sample variability described in result comment.
z	Value verified by rerun, second method	Quantification verified by rerun using a different method
	Other	
+	Improper preservation	Improper preservation
@	Holding-time violation	Holding-time violation
*	Warm when received	Warm when received
c	See laboratory comment	See laboratory comments for this result
e	See field comment	See field comments for this result
v	Analyte detected in laboratory blank	Analyte detected in laboratory blank
	Biological	
&	Biological organism estimated as dominant	Biological organism estimated as dominant
g	Count < 0.5 percent	Biological organism count less than 0.5 percent; may be only observed.
j	Count >= 15 percent (dominant)	Biological organism count greater than or equal to 15 percent (dominant)
k	Counts outside the acceptable range	Results based upon colony counts outside the acceptable range

Table 17. Report Level Codes (Result Level)

Report Level Code	Definition	Description
MRL	Minimum Reporting Level	Smallest measured concentration of a constituent that can be reliably measured using a given analytical method (Timme, 1995)
MDL	Method Detection Limit	Minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero. It is determined from the analysis of a sample in a given matrix containing the analyte (U.S. Environmental Protection Agency, 1997)
LT-MDL	Long-Term Method Detection Limit	A detection level derived by determining the standard deviation of a minimum of 24 MDL spike sample measurements over an extended period of time. LT-MDL data are collected on a continuous basis to assess year-to-year variations in the LT-MDL.
LRL	Laboratory Reporting Level	Equal to twice the yearly-determined LT-MDL. At the LRL, the probability of a false negative is less than or equal to 1 percent. The reporting level is set equivalent to the LRL when an analyte is not detected in a sample. (Formerly referred to as Non-Detection Value (NDV))
IRL	Interim Reporting Level	A temporary reporting level used for new or custom schedules when LT-MDL data are unavailable and a LRL has not yet been established.
SSMDC	Sample-Specific Minimum Detectable Concentration	A reporting level that varies for each sample, primarily used in radiochemical analyses. Radiochemical measurements are not typically censored by the laboratory.
Blank	---	A blank report level code should only be stored when no report level is stored. If a report level value is entered, a report level code must also be stored.

Table 18: Alpha Parameter Codes Used in QWDATA (NWIS level)
[n/a, not applicable; dashes indicate that no information is needed.]

Alpha Parameter Code	Source	Length	Limitations	Description
ANULL	n/a	**8**	---	NULL column
Sample-level codes				
AGNCY	site	**5**	---	Agency code
ASRCE	sample	**1**	---	Analysis source code
ASTAT	sample	**1**	---	Analysis status code
ATYPE	sample	**5**	---	Analysis type code
BDATE	sample	**8**	---	Sample begin date – same value as DATES with different column heading
BTIME	sample	**6**	---	Sample begin time – same value as TIMES with different column heading
BDPRT	sample	**3**	---	Body part code
CNTYC	site	**3**	---	County code
CTBDA	site	**8**	---	Contributing drainage area
DATES	sample	**9**	---	Sampling date -- same value as BDATE with different column heading
DATTD	sample	**18**	---	Sample-start date, time, and time datum **NOTE: This will appear in output if the time-datum reliability code is 'K'; otherwise it will be blank in output.**
DATTM	sample	**12**	---	Sample date-time (see also DATES & TIMES)
DBNUM	NWIS	**2**	---	Database number
DISTR	site	**3**	---	District code
DSTAT	sample	**1**	---	District processing-status code
EDATE	sample	**8**	---	Sample end date
ETIME	sample	**4**	---	Sample end time
EVENT	sample	**1**	---	Hydrologic event code
GUNIT	site and (or) sample	**8**	---	Geologic unit code
HDATM	site	**9**	---	Horizontal datum (of LATLG)
HSTAT	sample	**1**	---	Hydrologic condition code
HSTNM	NWIS	**10**	---	NWIS hostname of machine
HUNIT	site	**8**	---	Hydrologic unit code
LABNO	sample	**7**	---	Laboratory identification number

Table 18: Alpha Parameter Codes Used in QWDATA (NWIS level) [n/a, not applicable; dashes indicate that no information is needed.]

Alpha Parameter Code	Source	Length	Limitations	Description
LATLG	site	**24**	---	Latitude-longitude (in DMS)
LOCAL	site	**26**	---	Local identifier (see also SNAME)
M1LAB	sample	**300**	---	Laboratory-supplied sample comment (same as SCMLB)
M2LAB	sample	**300**	---	Field-supplied sample comment (same as SCMFL)
MEDIM	sample	**1**	---	Medium code
PRIME	NWIS	**10**	---	NWIS Hostname of processing machine (same as HSTNM)
PRJCT	sample	**9**	---	Project code
SALTD	site	**8**	---	Altitude of land surface
SAMPL	NWIS	**8**	---	NWIS QWFILE record number
SCDAT	sample	**8**	---	Sample creation date
SCMFL	sample	**300**	---	Field sample comment (same as M2LAB)
SCMLB	sample	**300**	---	Lab sample comment (same as M1LAB)
SCUSR	sample	**8**	---	Sample creation userid
SITEC	site	**8**	---	Site type code
SMDAT	sample	**8**	---	Sample modification date
SMUSR	sample	**8**	---	Sample modification userid
SNAME	site	**50**	---	Station name
STAID	sample	**15**	---	Station identification number
STATE	site	**2**	---	State code
STRMK	site	**50**	---	Site remark
STYPE	sample	**1**	---	Sample-type code
TAXON	sample	**9**	---	ITIS taxonomic unit code
TDRCD	sample	**1**	---	Time-datum reliability code
TIMED	sample	**10**	---	Sample-start time and time datum **NOTE: This will appear in output if the time-datum reliability code is 'K'; otherwise it will be blank in output.**
TIMES	sample	**4**	---	Sample start time as HHMM -- same value as BTIME with different column heading
TMDTM	sample	**6**	---	Time Datum
VDATM	site	**10**	---	Vertical altitude datum

Table 18: Alpha Parameter Codes Used in QWDATA (NWIS level)
[n/a, not applicable; dashes indicate that no information is needed.]

Alpha Parameter Code	Source	Length	Limitations	Description
			Result-level codes	
ADATE	result	**8**	by-result only	Result analysis date
ANLNO	result	**12**	by-result only	Laboratory analysis-set number
DQIND	result	**1**	by-result only	Data-quality indicator code
LSDEV	result	**8**	by-result only	Laboratory standard deviation
METHD	result	**1**	by-result only	Method code
NULLQ	result	**1**	by-result only	NULL-result qualifier code
PCODE	result	**5**	by-result only	Parameter code
PDATE	result	**8**	by-result only	Sample preparation date
PLNAM	parameter-code dictionary	**54**	by-result only	Parameter long name
PRPNO	result	**12**	by-result only	Laboratory preparation-set number
QACOD	result	**1**	by-result only	Quality-assurance code
QUAL1	result	**1**	by-result only	Value-qualifier code 1
QUAL2	result	**1**	by-result only	Value-qualifier code 2
QUAL3	result	**1**	by-result only	Value-qualifier code 3
RCDAT	result	**8**	by-result only	Result creation date
RCMFL	result	**300**	by-result only	Field result comment
RCMLB	result	**300**	by-result only	Lab result comment
RCUSR	result	**8**	by-result only	Result creation userid
REMRK	result	**1**	by-result only	Remark code
RLTYP	result	**6**	by-result only	Reporting-level type
RMDAT	result	**8**	by-result only	Result modification date
RMUSR	result	**8**	by-result only	Result modification userid
RNDCD	result	**1**	by-result only	Rounding code
RPLEV	result	**9**	by-result only	Reporting level
UNITS	parameter-code dictionary	**16**	by-result only	Reporting units
VALUE	result	**9**	by-result only	Parameter value

Table 18: Alpha Parameter Codes Used in QWDATA (NWIS level)
[n/a, not applicable; dashes indicate that no information is needed.]

Alpha Parameter Code	Source	Length	Limitations	Description
Output selection codes				
ADDPC	result	---	by-sample only	Add all available numeric parameters
ALPHA	n/a	---	by-sample or by-result	Add all alphabetic parameters available
CALCV	n/a	---	by-sample only	Add calculated values

Table 19. Body Part Codes (Sample Level)

Fixed Value	Parameter Name
1	Alimentary
2	Mouth
3	Teeth
4	Esophagus
5	Stomach
6	Liver
7	Intestine
8	Bladder, gall
9	Anus
10	Cardio-vascular
11	Heart
12	Heart/ventricle
13	Heart/bulb art
14	Heart/auricle
15	Heart/conus art
16	Arteries
17	Veins
18	Endocrine
19	Cyclic change
20	Pituitary
21	Renal body
22	Adrenal
23	Suprarenal
25	Ultimabran body
26	Pseudobranch
27	Corp of stan
28	Thyroid
29	Pancreas
30	Sac vascule

Table 19. Body Part Codes (Sample Level - continued)

Fixed Value	Parameter Name
31	Excretory
32	Kidney
33	Kidney/glom
34	Kidney/aglom
35	Kidney/urin tub
36	Kidney/coll tub
37	Bladder
38	Ureters
39	Urinary pore
40	Hemopoietic
41	Head kidney
42	Thymus
43	Spleen
44	Lymphocytes
45	Nucleated rbs's
46	Thrombocytes
47	Eosinophiles
48	Heterophiles
49	Granulocytes
50	Musco-skel
51	Muscle/somatic
52	Muscle/visceral
53	Bone/cellular
54	Bone/acellular
55	Cartilage
56	Conn tissue
57	Scale
58	Skin
59	Organism, whole
60	Nervous
61	Brain
62	Spinal cord
63	Ganglions
64	Neurons
65	Nerve fibers
66	Reproductive
67	Repro cyc chan
68	Male
69	Female
70	Ovary
71	Respiratory
72	Gills

Table 19. Body Part Codes (Sample Level - continued)

73	Resp epithelium
74	Cells, chloride
75	Cells, secretory
76	Gill rakers
77	Sensory
78	Lateral line
79	Nasal passages
80	Tentacles
81	Eyes
82	Ears
83	Neuroepithelium
84	Bladder, swim
85	System, lymph
86	Fillet
87	Edible portion
88	Headless whole fish
89	Organism, whole, eviscerated
90	Viscera
91	Lipid tissue
92	Fry
93	Eggs
94	Unknown
95	No head or visc
96	No skin,hd,visc
97	Exoskeleton
98	Lips
99	Pharynx
100	Caeca
101	Capillaries
102	System, central nervous
103	Testes
104	Gill lamellae
105	Gill filaments
106	Neuromasts
107	Pit organ
108	Taste buds
109	Hypophysis
110	Saccus vasculosus
111	Urophysis
112	Pineal gland
113	Choroid gland

Table 19. Body Part Codes (Sample Level - continued)

114	Plasma
115	Larvae
116	Carcass
117	Filet/skin
118	Filet dorsal piece