Begin METADATA documentation

METADATA Date: August 18, 2011
METADATA Contact: Jeffrey D. Martin

U.S. Geological Survey

NAWQA Pesticide Synthesis Project

5957 Lakeside Boulevard

Indianapolis, IN 46278-1996

voice: (317) 290-3333 x148

fax: (317) 290-3313

email: jdmartin@usgs.gov

METADATA Data Description:

Filename: matrix.spikes.txt

Source: U.S. Geological Survey Data Series 630, appendix 2.

URL http://pubs.usgs.gov/ds/630/

The data provided herein are an UPDATED water-quality quality-control data set processed similarly to that provided in--

U.S. Geological Survey Scientific Investigations Report 2009-5189, Adjustment of Pesticide Concentrations for Temporal Changes in Analytical Recovery, 1992-2006

URL http://pubs.usgs.gov/sir/2009/5189/

Concentrations and recoveries of as many as 44 pesticides and 8 degradates in 1,819 matrix spikes collected at 361 stream-water sites and 999 matrix spikes collected at 633 groundwater sites from May 8, 1992, to August 31, 2010, are provided in this tab-delimited ASCII file.

NOTE: This is a "row" format data file. Each row contains information about one pesticide measured in one matrix spike.

This data file contains 125,374 rows of data (excludes rows of METADATA comments, 1 row of attribute labels, and 1 row of field descriptions).

METADATA Basic documentation of dataset elements:

Data Attributes:

pstaid	15s
suid	4s
dates	8d
sdectime	9n
year	9n
month	9n
day	9n
pcode	5s
plname	25s
stimes	4s
smedim	3s
sremrk	1s

svalue	9n
ssched	9s
etimes	4s
emedim	3s
eremrk	1s
evalue	9n
esched	9s
lotno	9n
sch	145
ugml	9n
spivol	9n
samvol	9n
recov	9n
sname	50s

Note: The row in the data file that follows the row of attribute labels describes the width of the field and the data type. S or s indicates a text attribute, D or d indicates a date attribute, and N or n indicates a numeric attribute. For example: 15s indicates a 0- to 15-character text attribute, whereas 9N indicates a 0- to 9-digit numeric attribute. Attribute labels may be longer than the width of the field.

Attribute label: pstaid

Attribute description: U.S. Geological Survey (USGS) site identification number.

Note: pstaid is the "parent" site identification number. At some sites, the actual location of sample collection (at the "child" site identification number) may have changed during the period of sample collection, but the sites are considered equivalent.

Attribute label: suid

Attribute description: National Stream Quality Accounty Network (NASQAN) Program (suid = NSQN) or National Water Quality Assessment (NAWQA) Program Study-Unit identifier

Code Description

ACAD Acadian-Pontchartrain Drainages

ACFB Apalachicola-Chattahoochee-Flint River Basin

ALBE Albemarle-Pamlico Drainage Basin

ALMN Allegheny and Monongahela River Basins

CAZB Central Arizona Basins

CCYK Central Columbia Plateau-Yakima River Basin

CNBR Central Nebraska Basins

CONN Connecticut, Housatonic, and Thames River Basins

COOK Cook Inlet Basin

DELR Delaware River Basin

EIWA Eastern Iowa Basins

GAFL Georgia-Florida Coastal Plain

GRSL Great Salt Lake Basins

HDSN Hudson River Basin

HPGW High Plains Regional Ground Water Study

KANA Kanawha-New River Basins

LERI Lake Erie-Lake Saint Clair Drainages

LINJ Long Island-New Jersey Coastal Drainages

LIRB Lower Illinois River Basin

LSUS Lower Susquehanna River Basin

MISE Mississippi Embayment

MOBL Mobile River Basin

NECB New England Coastal Basins

NROK Northern Rockies Intermontane Basins

NSQN NASQAN

NVBR Las Vegas Valley Area and Carson and Truckee River Basins

OAHU Island of Oahu

OZRK Ozark Plateaus

PODL Potomac River Basin and Delmarva Peninsula

PUGT Puget Sound Basin

REDN Red River of the North Basin

RIOG Rio Grande Valley

SACR Sacramento River Basin

SANA Santa Ana Basin

SANJ San Joaquin-Tulare Basins

SANT Santee River Basin and Coastal Drainages

SCTX South-Central Texas

SOFL Southern Florida

SPLT South Platte River Basin

TENN Tennessee River Basin

TRIN Trinity River Basin

UCOL Upper Colorado River Basin

UIRB Upper Illinois River Basin

UMIS Upper Mississippi River Basin

USNK Upper Snake River Basin

WHMI White, Great Miami, and Little Miami River Basins

WILL Willamette Basin

WMIC Western Lake Michigan Drainages

YELL Yellowstone River Basin

Attribute label: dates

Attribute description: Date of matrix spike and environmental background sample, YYYYMMDD.

Attribute label: sdectime

Attribute description: Decimal date/time of matrix spike.

Attribute label: year

Attribute description: Year of matrix spike and environmental background sample.

Attribute label: month

Attribute description: Month of matrix spike and environmental background sample.

Attribute label: day

Attribute description: Day of matrix spike and environmental background sample.

Attribute label: pcode

Attribute description: Parameter code. The 5-digit number used to identify variables in the USGS National Water Information System (NWIS).

Attribute label: plname

Attribute description: Common name of the pesticide or degradate.

Attribute label: stimes

Attribute description: Time of matrix spike.

Attribute label: smedim

Attribute description: Medium of matrix spike.

Code Description

WGQ Groundwater

WSQ Surface water

Attribute label: sremrk

Attribute description: Remark code for the measured pesticide concentration in the ${\sf matrix\ spike\ (svalue)}$.

Code Description

Not Detected. Concentration reported as less than svalue.

(blank) Detected. Concentration reported as svalue.

E Detected. Concentration is estimated as svalue.

Estimated concentration may result from any of the following reasons:

1. The compound is characterized as a "poor performer" in the method on the basis of laboratory QC samples. In general, compounds with less than 60 % recovery, greater than 120 % recovery, or greater than 25 % relative standard

deviation of recovery are considered poor performers. All detections of these compounds are remarked ${\tt E.}$

- 2. The compound was detected at a concentration less than the reporting level or less than the lowest calibration standard.
- 3. The sample was diluted to bring the concentration into the calibration range.

Attribute label: svalue

Attribute description: Measured pesticide concentration in the matrix spike, in micrograms per liter.

Attribute label: ssched

Code

Attribute description: Analytical schedule (method and suite of pesticides) used to measure pesticides in the matrix spike.

NWQL2001 NWQL schedule 2001
NWQL2003 NWQL schedule 2010
NWQL2010 NWQL schedule 2010
NWQL2033 NWQL schedule 2033

Description

Attribute label: etimes

Attribute description: Time of environmental background sample.

Attribute label: emedim

Attribute description: Medium of environmental background sample.

Code Description

WG Groundwater

WS Surface water

Attribute label: eremrk

Attribute description: Remark code for the measured pesticide concentration in the environmental background sample (evalue).

Code Description

Not Detected. Concentration reported as less than evalue.

(blank) Detected. Concentration reported as evalue.

E Detected. Concentration is estimated as evalue.

Estimated concentration may result from any of the following reasons:

- 1. The compound is characterized as a "poor performer" in the method on the basis of laboratory QC samples. In general, compounds with less than 60 % recovery, greater than 120 % recovery, or greater than 25 % relative standard deviation of recovery are considered poor performers. All detections of these compounds are remarked E.
- 2. The compound was detected at a concentration less than the reporting level or less than the lowest calibration standard.
- 3. The sample was diluted to bring the concentration into the calibration range.

Attribute label: evalue

Attribute description: Measured pesticide concentration in the environmental background sample, in micrograms per liter.

Attribute label: esched

Attribute description: Analytical schedule (method and suite of pesticides) used to measure pesticides in the environmental background sample.

Code Description

NWQL2001 NWQL schedule 2001

NWQL2003 NWQL schedule 2003

NWQL2010 NWQL schedule 2010

NWQL2033 NWQL schedule 2033

Attribute label: lotno

Attribute description: Spike solution lot number

Note: This is the NWIS lot number NOT the manufacturer's lot number.

See http://wwwnwql.cr.usgs.gov/USGS/spike/spike.html for more information.

Also see companion data file: spike.solutions.txt

Attribute label: sch

Attribute description: USGS National Water Quality Laboratory (NWQL) analytical schedules appropriate for spike solution

Code Description

2001/2010 NWQL schedules 2001 and 2010

2003 NWQL schedule 2003

2003/2032/2033 NWQL schedules 2003, 2032, and 2033

Attribute label: ugml

Attribute description: Concentration of pesticide or degradate in spike solution, in micrograms per milliliter.

Attribute label: spivol

Attribute description: Volume of spike solution added to the matrix spike, in milliliters.

Attribute label: samvol

Attribute description: Volume of the matrix spike, in milliliters.

Attribute label: recov

Attribute description: Recovery of pesticide in the matrix spike, in percent.

Attribute label: sname

Attribute description: Name of the stream-water or groundwater site where the matrix spike and the environmental background sample were collected (pstaid).

End METADATA documentation