

ABBREVIATIONS USED – Minor and Trace Elements (data source: U.S. Geological Survey)

WELL AND SAMPLE IDENTIFIERS (file last modified September 2007)

LOCAL – Local number used to identify well. First two letters represent the county (AD = Adams County), the following digits represent incremental numbers.

STAID – Station identifier. For the U.S. Geological Survey wells, it is 15 digits long and is comprised of the latitude and longitude plus a two digit sequence number.

SOURCE – U.S. Geological Survey (USGS). Samples collected for a wide range of water-quality, water resources, and other hydrogeologic investigations.

DATES – Date the sample was collected.

LAT – Latitude of well, in degrees, minutes, and seconds, in format DDMMSS.

LONG – Longitude of well, in degrees, minutes, and seconds, in format DDMMSS.

DLAT – Latitude of well, in degrees and decimal minutes and seconds, in format DD.MMSS.

DLONG – Longitude of well, in degrees and decimal minutes and seconds, in format DD.MMSS.

CNTYC – County where well is located. For USGS, the counties are Adams, Allegheny, Armstrong, Beaver, Bedford, Berks, Blair, Bradford, Bucks, Butler, Cambria, Cameron, Carbon, Centre, Chester, Clarion, Clearfield, Clinton, Columbia, Crawford, Cumberland, Dauphin, Delaware, Elk, Erie, Fayette, Franklin, Fulton, Greene, Huntingdon, Indiana, Jefferson, Juniata, Lancaster, Lebanon, Lehigh, Luzerne, Lycoming, McKean, Mifflin, Monroe, Montgomery, Northampton, Northumberland, Perry, Philadelphia, Pike, Potter, Schuylkill, Snyder, Somerset, Sullivan, Susquehanna, Tioga, Union, Venango, Warren, Washington, Wayne, Westmoreland, Wyoming, York.

BASINS – The PADEP basin (numbers range from 1-35) the well is located in. For USGS, wells are located in Basins 1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35.

GEO1 – General geologic unit. For USGS, the units are acoal (anthracite coal bearing), bcoal (bituminous coal bearing), dkcryst (dark crystalline), ltcrys (light crystalline), pocarb (Precambrian through Ordovician carbonates), qscong (quartzite, sandstone, and conglomerate), redsed (red sedimentary rocks), schist (schist), sdcarb (Silurian and Devonian carbonates), shale (shale), trised (Triassic age sedimentary rocks), uncon (unconsolidated sand and gravel, age unknown), ice (glacial sediments).

GEO1 – Generated numeric code that relates to GEO1. acoal = 1, bcoal = 2, dkcryst = 3, ltcrys = 4, pocarb = 5, qscong = 6, redsed = 7, schist = 8, sdcarb = 9, shale = 10, trised = 11, uncon = 12, ice = 13.

PARAMETER CODES (Analyte sampled)

P00720 – Cyanide, unfiltered (unf), in milligrams per liter (mg/L)
P00723 – Cyanide, filtered (fil), mg/L
P01000 – Arsenic, fil, in micrograms per liter ($\mu\text{g/L}$)
P01002 – Arsenic, unf, $\mu\text{g/L}$
P01005 – Barium, fil, $\mu\text{g/L}$
P01007 – Barium, unf, $\mu\text{g/L}$
P01010 – Beryllium, fil, $\mu\text{g/L}$
P01020 – Boron, fil, $\mu\text{g/L}$
P01022 – Boron, unf, $\mu\text{g/L}$
P01025 – Cadmium, fil, $\mu\text{g/L}$
P01027 – Cadmium, unf, $\mu\text{g/L}$
P01030 – Chromium, fil, $\mu\text{g/L}$
P01032 – Chromium VI, fil, $\mu\text{g/L}$
P01034 – Chromium, unf, $\mu\text{g/L}$
P78247 – Chromium VI, unf, $\mu\text{g/L}$
P01035 – Cobalt, fil, $\mu\text{g/L}$
P01037 – Cobalt, unf, $\mu\text{g/L}$
P01040 – Copper, fil, $\mu\text{g/L}$
P01042 – Copper, unf, $\mu\text{g/L}$
P01049 – Lead, fil, $\mu\text{g/L}$
P01051 – Lead, unf, $\mu\text{g/L}$
P01055 – Manganese, unf, $\mu\text{g/L}$
P01056 – Manganese, fil, $\mu\text{g/L}$
P01057 – Thallium, fil, $\mu\text{g/L}$
P01060 – Molybdenum, fil, $\mu\text{g/L}$
P01062 – Molybdenum, unf, $\mu\text{g/L}$
P01065 – Nickel, fil, $\mu\text{g/L}$
P01067 – Nickel, unf, $\mu\text{g/L}$
P01075 – Silver, fil, $\mu\text{g/L}$
P01077 – Silver, unf, $\mu\text{g/L}$
P01080 – Strontium, fil, $\mu\text{g/L}$
P01082 – Strontium, unf, $\mu\text{g/L}$
P01085 – Vanadium, fil, $\mu\text{g/L}$
P01087 – Vanadium, unf, $\mu\text{g/L}$
P01090 – Zinc, fil, $\mu\text{g/L}$
P01092 – Zinc, unf, $\mu\text{g/L}$
P01095 – Antimony, fil, $\mu\text{g/L}$
P01105 – Aluminum, unf, $\mu\text{g/L}$
P01106 – Aluminum, fil, $\mu\text{g/L}$
P01130 – Lithium, fil, $\mu\text{g/L}$
P01132 – Lithium, unf, $\mu\text{g/L}$
P01145 – Selenium, fil, $\mu\text{g/L}$
P01147 – Selenium, unf, $\mu\text{g/L}$
P62452 – Arsenite (H_3AsO_3), fil, $\mu\text{g/L}$ as Arsenic
P62453 – Arsenate (H_2AsO_4^-), fil, $\mu\text{g/L}$ as Arsenic

P62454 – Monomethylarsonate ((CH₃)HAsO₃-), fil, µg/L as Arsenic
 P62455 – Dimethylarsinate ((CH₃)₂HAsO₂), fil, µg/L as Arsenic
 P71890 – Mercury, fil, µg/L
 P71900 – Mercury, unf, µg/L

**ANALYTES WITH NATIONAL DRINKING WATER STANDARDS and CURRENT (2004)
 U.S. Environmental Protection Agency Maximum Contaminant Level (MCL) and Secondary Maximum
 Contaminant Level (SMCL)**

<u>Analyte</u>	<u>MCL</u>	<u>Units</u>
P00720 Cyanide, unf	0.2	mg/L
P00723 Cyanide, fil	0.2	mg/L
P01000 Arsenic, fil	10	µg/L
P01002 Arsenic, unf	10	µg/L
P01005 Barium, fil	2000	µg/L
P01007 Barium, unf	2000	µg/L
P01010 Beryllium, fil	4	µg/L
P01025 Cadmium, fil	5	µg/L
P01027 Cadmium, unf	5	µg/L
P01030 Chromium, fil	100	µg/L
P01032 Chromium VI, fil	100	µg/L
P01034 Chromium, unf	100	µg/L
P01040 Copper, fil	1300	µg/L
P01042 Copper, unf	1300	µg/L
P78247 Chromium VI, unf	100	µg/L
P01049 Lead, fil	15	µg/L
P01051 Lead, unf	15	µg/L
P01145 Selenium, fil	50	µg/L
P01147 Selenium, unf	50	µg/L
P01057 Thallium, fil	2	µg/L
P01095 Antimony, fil	6	µg/L
P71890 Mercury, fil	2	µg/L
P71900 Mercury, unf	2	µg/L

<u>Analyte</u>	<u>SMCL</u>	<u>Units</u>
P01040 Copper, fil	1000	µg/L
P01042 Copper, unf	1000	µg/L
P01075 Silver, fil	100	µg/L
P01077 Silver, unf	100	µg/L
P01090 Zinc, fil	5000	µg/L
P01092 Zinc, unf	5000	µg/L
P01105 Aluminum, unf	50	µg/L
P01106 Aluminum, fil	50	µg/L