Remedial Investigation of the Vienna Wells Site:

Maries County, Missouri, 2011–2016

Administrative report prepared for the U.S. Environmental Protection Agency

Final Draft, June 2017

Contract No. DW1495797201-5

VOLUME II

Prepared by:

Jordan Wilson, Hydrologist, U.S. Geological Survey, Missouri Water Science Center

USGS
science for a changing world

30307678

Table 1-01. General operational history of the former hat factory, Vienna, Missouri.

[PCE, tetrachlorothylene; VOC, volatile organic compound; ft^2, square feet]

Dates	Reference	Description of known operations	PCE VOC use?
1952	Construction of original building and oral history accounts	Construction of original 16,300 ft^2-building. Operations during this period are assumed to be the same as operations in 1959.	Unlikely, but possible small "spot" treatment of finished hats as was documented at New Haven facility (USEPA, 2006)
1955	Air photo (fig. A-01, Appendix A) and oral history accounts	Operations during this period are assumed to be the same as operations in 1959.	
1955-59	Oral history accounts	Probable construction of restrooms and maintenance/boiler room (likely no main boiler as of yet) and small addition east of office in hat body storage area. Operations during this period are assumed to be the same as operations in 1959.	
1959	Oral history accounts	As of 1959, facility received wool hat bodies (pre-formed and dyed cones of fabric) from several vendors at southeast corner of building. These were "sized" using metal dies and shaped using wood blocks. Hats were then trimmed, and liners were installed. No dyes or chemicals were reportedly used. Known cleaning at this time used small brushes and sanders. Finished hats shipped out from the NW corner of original building.	
1960-65	Oral history	The facility began receiving minor raw wool that was "spun" into cords in cording room to make wool bodies in west part of shipping area. Operations during this period are assumed to be the same as operations in 1959.	
1965-67	Oral history	Construction of dye room, forming room, and northern "L" extension (figs. 1-09 and A-02). Most construction was done by employees.	Possible
1969	Oral history, large scape production of finished hats from raw fur and probable enhanced solvent use.	By this time, the hat factory was processing large amount of raw rabbit fur hides into finished hats. Some employees recall a "sweet" smell like dry cleaning solvent in some areas. Solvents were likely used in the process after the raw fur was removed from hides but before hat bodies were pressed into shapes at the west part of the factory.	Yes (likely)
1985	Oral history	Decline in production and shift away from high-end fur hats to specialty hats (ladies hats and later kids' cowboy hats, etc.). Probably decline in dye rooms use and perhaps solvent use.	Unlikely (unknown)
1996	Jackson, 2009	Facility closes	No

Table 1-02. Geological unit properties in the Vienna Wells site area, Vienna, Missouri.

[ft, feet; gpm, gallons per minute; thickness data from geologic logs of production and monitoring wells in Vienna except for the Derby-Doe Run Formation, which was taken from Miller and Vandike (1997)]

System	Formation	Approximate thickness (ft)	General lithology	General hydrologic properties	Hydrogeologic unit
Ordovician	Jefferson City Dolomite	0 - 70	Fine- to medium-crystalline, cherty dolomite with numerous green shale partings; some thin sandstone beds	Adequate for small domestic supply. Yields of 5 to 15 gpm locally. Less permeable than surrounding units and impedes downward water movement.	Ozark aquifer
	Roubidoux Formation (exposed in the vicinity of the former Langenberg hat factory)	0 - 170	Cherty, sand dolomite and dolomite sandstone; oolitic	Normal yields of 10 to 30 gpm. Target unit for newer domestic wells.	
	Upper Gasconade Dolomite	20 - 70	Massively-bedded, coarsely-crystalline, chert free dolomite	Lower permeability than surrounding units.	
	Lower Gasconade Dolomite	155 - 205	Very cherty dolomite, algal reef zones in upper part	Combined yields of upper and lower units range from 10 to 20 gpm.	
	Gunter Sandstone Member of Gasconade Dolomite	20 - 35	Sandstone and/or sandy dolomite	Normal yield of 20 to 70 gpm.	
Cambrian	Eminence Dolomite	235 - 240	Medium to coarse-grained dolomite with low chert content	Yields of 75 to 250 gpm.	
	Potosi Dolomite	315	Fine- to medium-crystalline dolomite, with abundant quartz druse	Target zone of most high-capacity wells. Yields 25 to 600 gpm.	
	Derby-Doe Run	150	Fine-grained dolomite in upper part, shaley near base with glauconite	Yields of 30 to 50 gpm available locally in upper part, usually not a significant aquifer	St. Francois confining unit

Table 2-01. Summary of Remedial Investigation activities at the Vienna Wells site, Vienna, Missouri, 2011–16.

Event	Date
Tree-core sampling	Summer 2011; Spring 2013; Summer 2013; Summer 2014; Spring 2015; Fall 2015
Stream, spring, and seep sampling	September 2011; May 2012; March 2014
Groundwater sampling of domestic wells	November 2011; March 2014
Geophysical Logging	January 2012; August 2015
Sampling of sanitary sewer	January - March 2012
Soil sampling conducted by the U.S. Geological Survey	January 2012; May/June 2012; November 2012; November 2013; March/May 2014; September 2014
Monitoring well installation	May 2012 - March 2016
Groundwater sampling of monitoring wells	January 2013; April/May 2013; July 2013; December 2013; March 2014; May 2014; September 2014; April 2015; March 2016
Sampling of on-site septic tanks	November 2013; May 2014
Vapor intrusion sampling	April 2014; July 2014; October 2014; January 2015
Sampling of Vienna water distribution system	June 2014
Soil sampling conducted by the U.S. Environmental Protection Agency	March/April 2015
Slug testing of monitoring wells	December 2015 - April 2016

Table 2-02. Summary of bedrock and overburden monitoring wells at the Vienna Wells site, Vienna, Missouri.

Monitoring well	Well type	Drill method	Monitoring interval depth below land surface, in feet	Location
MW-01	Bedrock	Cable tool	46.5-60	On hat factory property
MW-01A	Bedrock	Cable tool	19-42.2	
MW-02S	Bedrock	Cable tool	16.6-38	
MW-02D	Bedrock	Cable tool	65-79	
MW-03S	Bedrock	Cable tool	30.6-49.4	
MW-03D	Bedrock	Cable tool	52-64	
MW-04S	Bedrock	Cable tool	30.6-45	
MW-04D	Bedrock	Cable tool	53-69.4	
MW-05S	Bedrock	Cable tool	32-45	
MW-05D	Bedrock	Cable tool	62-75	
MW-06	Bedrock	Cable tool	104-119	
MW-06A	Bedrock	Cable tool	34-94	
MW-07	Bedrock	Cable tool	35-53	
MW-08A	Bedrock	Air rotary	90-175	Off hat factory property
MW-08	Bedrock	Air rotary	265-324	
MW-09S	Overburden	Cable tool	0-14	
MW-09D	Bedrock	Cable tool	25-40	

Table 2-03. Method detection limits for constituents analyzed using the portable gas chromatograph.

[µg/L, microgram per liter; µg/kg, microgram per kilogram]

Constituent	Method detection limit	
	Water (µg/L)	Soil (µg/kg)
Tetrachloroethene	2.75	11.0
Trichloroethene	2.09	8.37
cis-dichloroethene	4.5	18.0
Benzene	1.67	6.69
Toluene	1.73	6.91

Table 3-01. List of contaminants of concern and contaminants of potential concern at the Vienna Wells site, Vienna, Missouri.

Contaminant of concern included in the remedial investigation	Contaminant of potential concern included in the baseline risk assessment
Alluminum	1,1,2-trichloro-trifluoroethane (CFC-113)
Arsenic	1,2-dichloroethane (cis-DCE)
Benzene	Arsenic
Benzo(a)anthracene	Benzene
Benzo(a)pyrene	Benzo(a)anthracene
Benzo(b)fluoranthene	Benzo(a)pyrene
Benzo(k)fluoranthene	Benzo(b)fluoranthene
1,1,2-trichloro-trifluoroethane (CFC-113)	Bromide
Chromium	Bromodichloromethane
cis-1,2-dichloroethene (*cis*-DCE)	Carbon tetrachloride
Dibenzo(ah)anathracene	Chloroform
Dieldrin	Chloromethane
Indeno(1,2,3,-*cd*)pyrene	Chromium
Manganese	Desethyl atrazine
Tetrachloroethene (PCE)	Dibenzo(ah)anthracene
Thallium	Dichlorodiphenyldichloroethane (DDD)
Trichloroethene (TCE)	Dichlorodiphenyldichloroethylene (DDE)
	Dichlorodiphenyltrichloroethane (DDT)
	Dieldrin
	Heptachlor epoxide
	Lead
	Methyl acetate
	Nitrate
	p-cresol
	Tetrachloroethene (PCE)
	Trichloroethene (TCE)

Table 3-02. Extent and magnitude of tetrachloroethylene (PCE) contamination at various depth intervals below ground surface (bgs), Vienna Wells site, Vienna, Missouri.

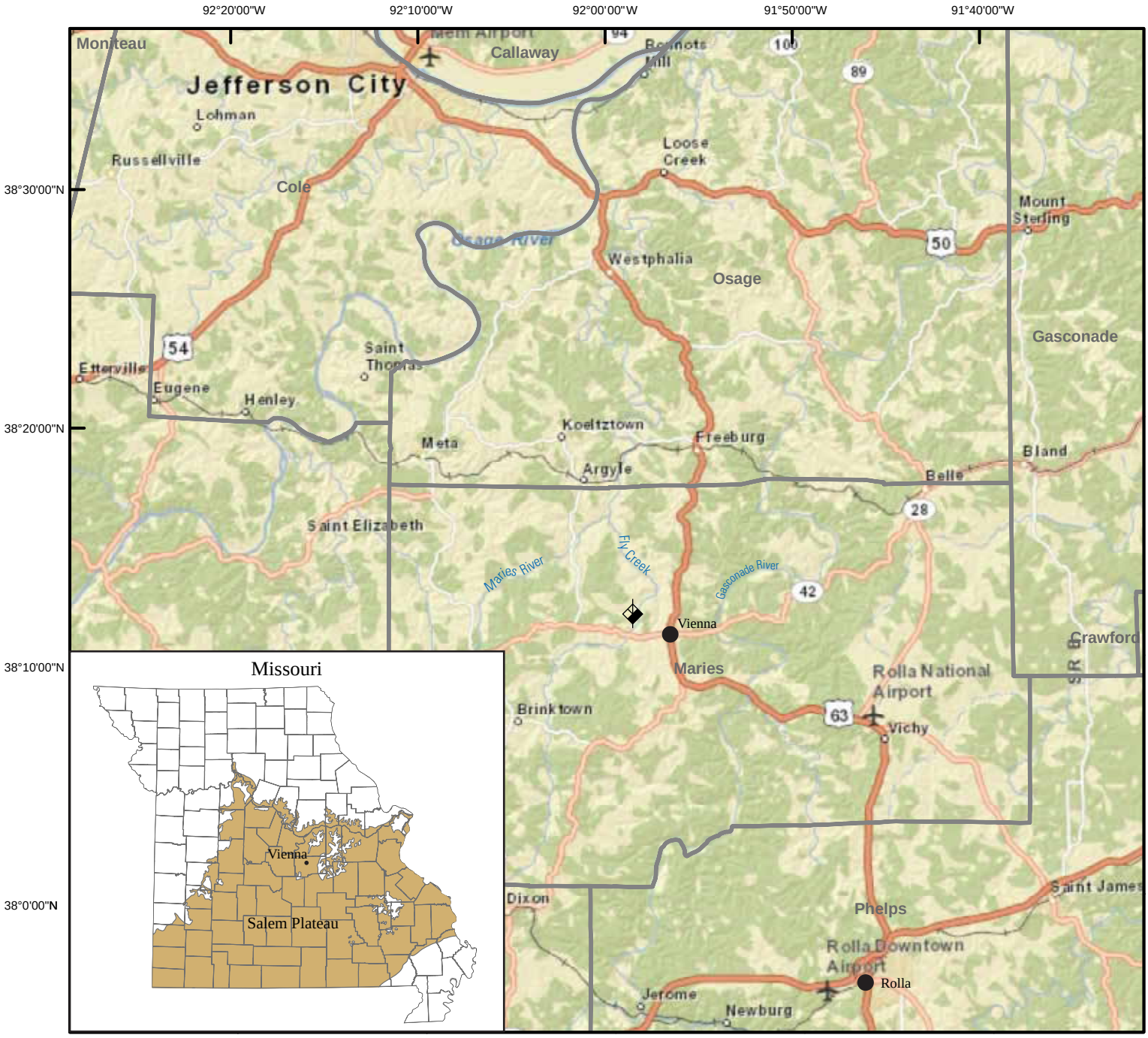
[ft^2, square feet; µg/kg, micrograms per kilogram of soil; ft^3, cubic feet; -, not appicable]

	Areal extent of each PCE-concentration interval, in ft^2					Volume of soil in each PCE-concentration interval, in ft^3					Mean PCE Concentration, µg/kg					Mass of PCE, in kg				
Depth interval bgs, in feet	0-5.1 µg/kg	5.1-100 µg/kg	100-2,400 µg/kg	2,400-24,000 µg/kg	24,000-240,000 µg/kg	0-5.1 µg/kg	5.1-100 µg/kg	100-2,400 µg/kg	2,400-24,000 µg/kg	24,000-240,000 µg/kg	0-5.1 µg/kg	5.1-100 µg/kg	100-2,400 µg/kg	2,400-24,000 µg/kg	24,000-240,000 µg/kg	0-5.1 µg/kg	5.1-100 µg/kg	100-2,400 µg/kg	2,400-24,000 µg/kg	24,000-240,000 µg/kg
0.0-0.5	303,833	148,165	14,079	657	-	151,916	74,083	7,040	328	-	2.4	19	814	2,654		0.02	0.06	0.26	0.04	-
0.5-2.0	352,550	42,550	9,591	2,551	11	528,825	63,825	14,386	3,827	16	0.4	28	667	6,223	26,330	0.01	0.08	0.43	1.08	0.02
2.0-4.0	317,632	82,796	23,831	1,636	-	635,264	165,592	47,663	3,272	-	1.7	33	685	3,381	-	0.05	0.25	1.5	0.50	-
4.0-6.0	284,727	67,651	43,508	8,719	-	569,453	135,302	87,015	17,438	-	2.6	46	659	7,720	-	0.07	0.28	2.6	6.1	-
6.0-8.0	306,737	60,129	54,034	1,625	-	613,474	120,257	108,069	3,250	-	2.8	27	698	3,709	-	0.08	0.15	3.4	0.55	-
8.0-10.0	53,593	96,757	61,935	-	-	107,187	193,513	123,871	-	-	3.0	23	459	-	-	0.01	0.20	2.6	-	-
10.0-12.0	18,282	17,470	95,881	11,376	-	36,565	34,940	191,761	22,751	-	1.3	33	971	3,312	-	0.00	0.05	8.4	3.41	-
12.0-14.0	406	5,688	26,814	-	-	813	11,376	53,628	-	-	0.6	52	506	-	-	0.00	0.03	1.2	-	-
14.0-16.0	19,907	23,970	-	-	-	39,815	47,940	-	-	-	2.1	14	-	-	-	0.00	0.03	-	-	-
16.0-18.0	-	3,638	-	-	-	-	7,276	-	-	-	-	12	-	-	-	-	0.00	-	-	-

Table 3-03. Average calculated vertical hydraulic gradients in monitoring well clusters, Vienna Wells site, Vienna, Missouri.

[ft, feet; NAVD88, North American Vertical Datum of 1988]

Monitoring well cluster (fig. D-01)	Monitoring well	Water-level elevation, in ft above the NAVD88	Vertical difference in well open-interval midpoints, in ft	Vertical Gradient (ft/ft)	Average vertical gradient (ft/ft)
MW-01	VIN-MW01A	813.78	24.4	0.49	0.51
	VIN-MW01	801.83			
	VIN-MW01A	811.17	24.4	0.48	
	VIN-MW01	799.47			
	VIN-MW01A	819.83	24.4	0.69	
	VIN-MW01	803.07			
	VIN-MW01A	817.91	24.4	0.57	
	VIN-MW01	803.99			
	VIN-MW01A	810.97	24.4	0.45	
	VIN-MW01	799.97			
	VIN-MW01A	811.65	24.4	0.48	
	VIN-MW01	799.88			
	VIN-MW01A	813.82	24.4	0.49	
	VIN-MW01	801.96			
	VIN-MW01A	810.93	24.4	0.47	
	VIN-MW01	799.45			
	VIN-MW01A	813.6	24.4	0.50	
	VIN-MW01	801.28			
	VIN-MW01A	814.84	24.4	0.48	
	VIN-MW01	803.11			
MW-03	VIN-MW03S	795.79	18.0	0.02	0.09
	VIN-MW03D	795.4			
	VIN-MW03S	788.94	18.0	0.09	
	VIN-MW03D	787.31			
	VIN-MW03S	788.44	18.0	0.03	
	VIN-MW03D	788.89			
	VIN-MW03S	794.44	18.0	0.21	
	VIN-MW03D	790.7			
MW-04	VIN-MW04D	786.81	25.3	0.71	0.58
	VIN-MW04S	768.89			
	VIN-MW04D	778.56	25.3	0.71	
	VIN-MW04S	796.44			
	VIN-MW04D	771.03	25.3	0.56	
	VIN-MW04S	785.11			
	VIN-MW04D	772.19	25.3	0.52	
	VIN-MW04S	785.4			
	VIN-MW04D	774.96	25.3	0.60	
	VIN-MW04S	790.1			
	VIN-MW04D	770.91	25.3	0.57	
	VIN-MW04S	785.18			
	VIN-MW04D	774.22	25.3	0.46	
	VIN-MW04S	785.78			
	VIN-MW04D	777.46	25.3	0.52	
	VIN-MW04S	790.61			
MW-05	VIN-MW05S	754.48	29.5	0.34	0.34
	VIN-MW05D	744.47			
	VIN-MW05S	758.51	29.5	0.35	
	VIN-MW05D	748.3			
	VIN-MW05S	760.77	29.5	0.33	
	VIN-MW05D	751.04			
MW-06	VIN-MW06	759.97	47.5	0.56	0.53
	VIN-MW06A	786.48			
	VIN-MW06	765.61	47.5	0.51	
	VIN-MW06A	789.66			
MW-08	MW-08	743.56	162.5	0.02	0.02
	MW-08A	746.05			
MW-09	MW-09S	735.72	26.5	0.05	0.05
	MW-09D	734.37			



Map image is the intellectual property of Esri and is used herein under license. Copyright © 2015 Esri and its licensors. All rights reserved.
Universal Transverse Mercator projection zone 15

Explanation

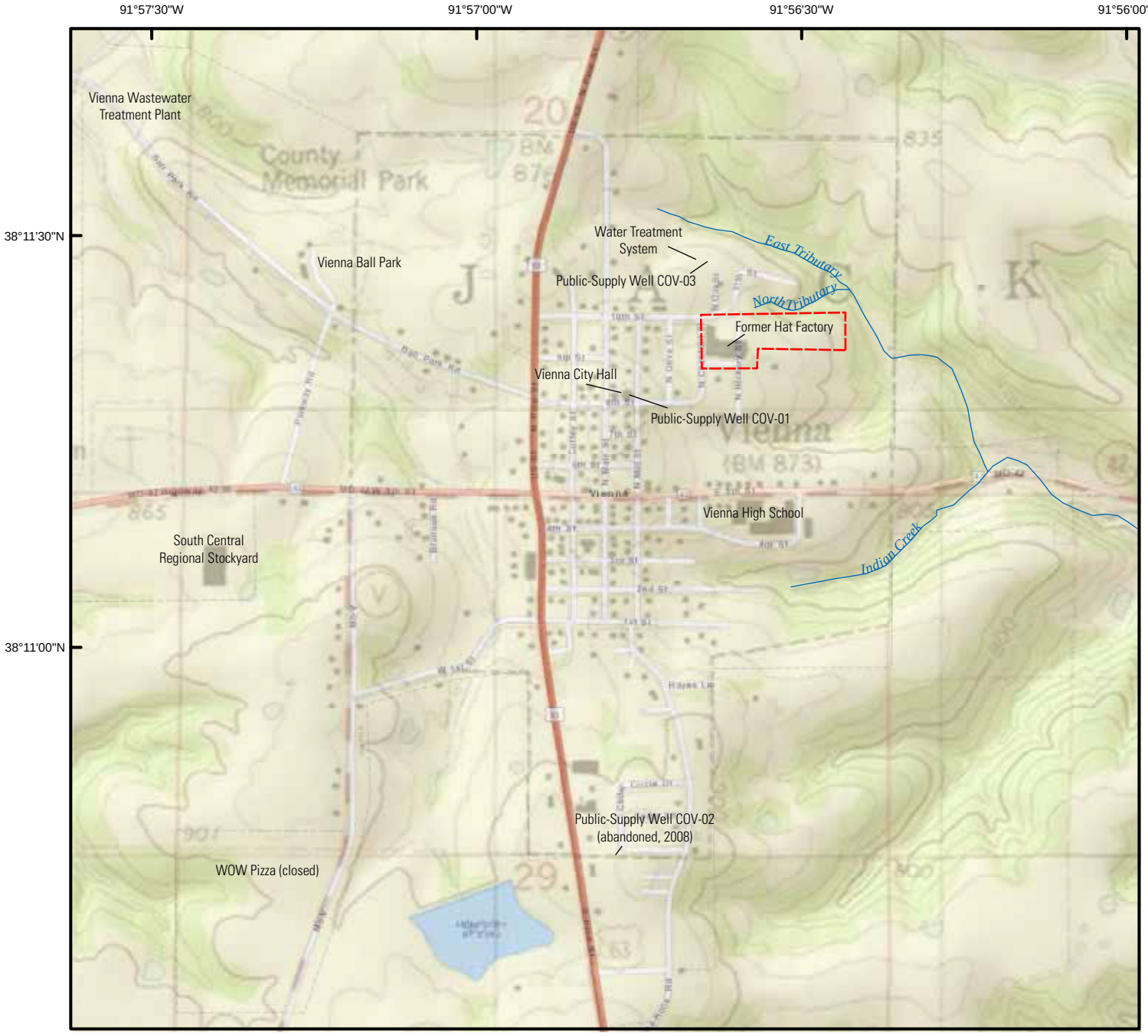
NOAA weather station (COOP ID 238620) -- Period of record of hourly precipitation and daily temperature from 1948 to 2012.

County boundary

0 2.5 5 10 Miles

0 2.5 5 10 Kilometers

Figure 1-01. Location of the city of Vienna, Maries County, and a National Oceanic and Atmospheric Administration (NOAA) weather station, Missouri.



Map image is the intellectual property of Esri and is used herein under license. Copyright © 2015 Esri and its licensors. All rights reserved.
Universal Transverse Mercator projection zone 15
North American Datum of 1983

Figure 1-02. Local points of interest and the former hat factory property, Vienna, Missouri.

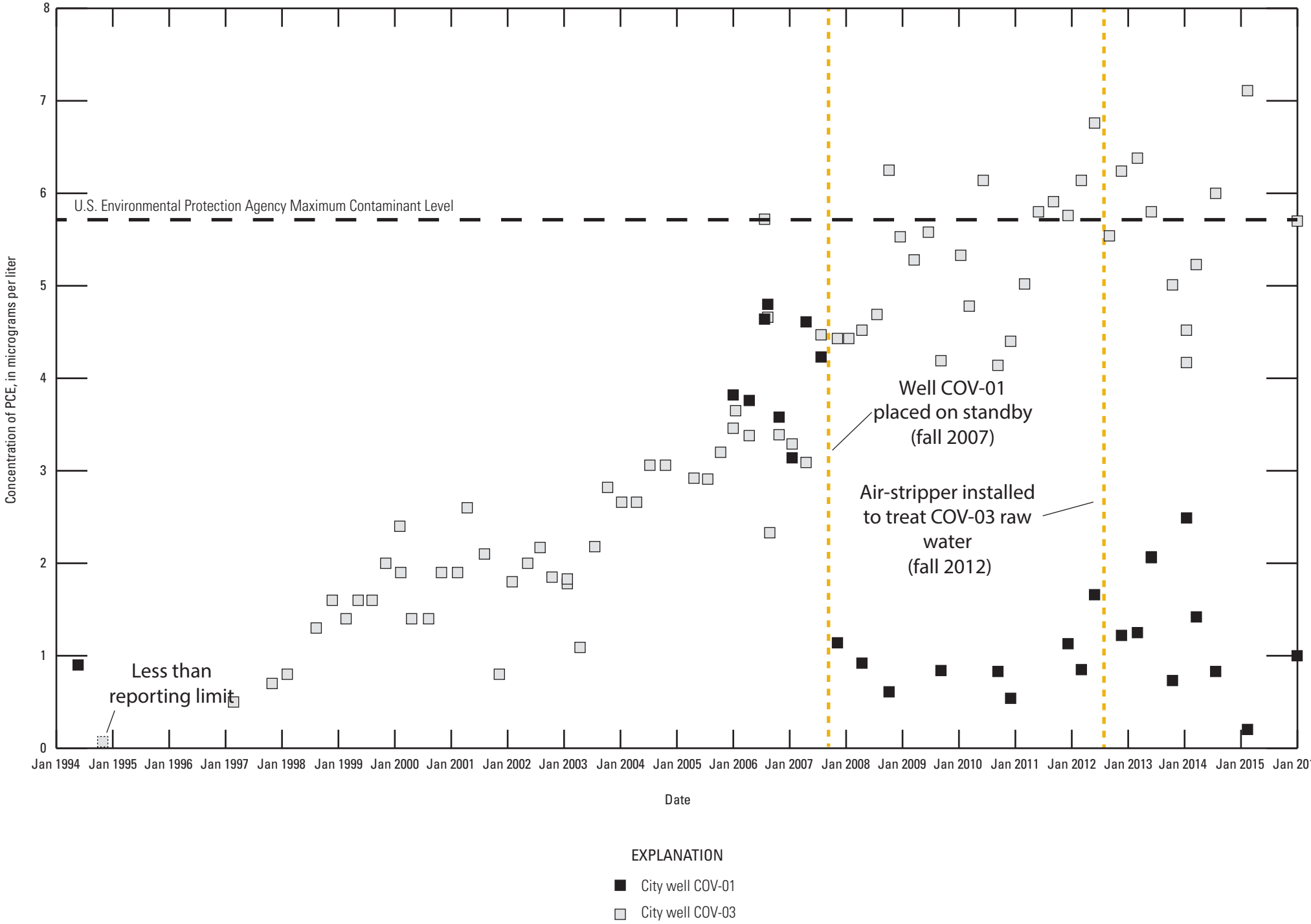


Figure 1-03. Concentration of tetrachloroethene (PCE) in Vienna public-supply wells COV-01 and COV-03 before treatment, January 1994 through January 2016.

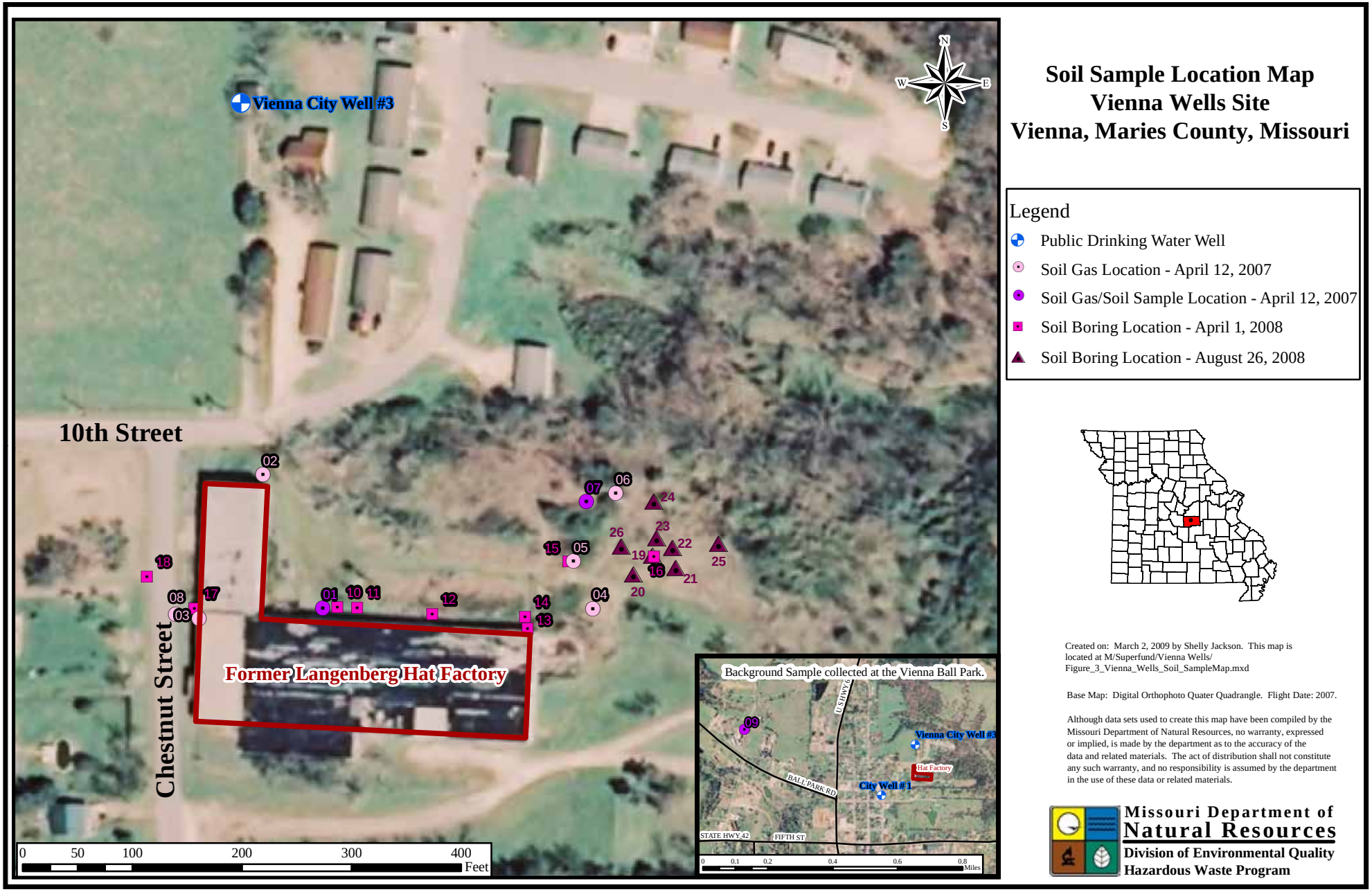
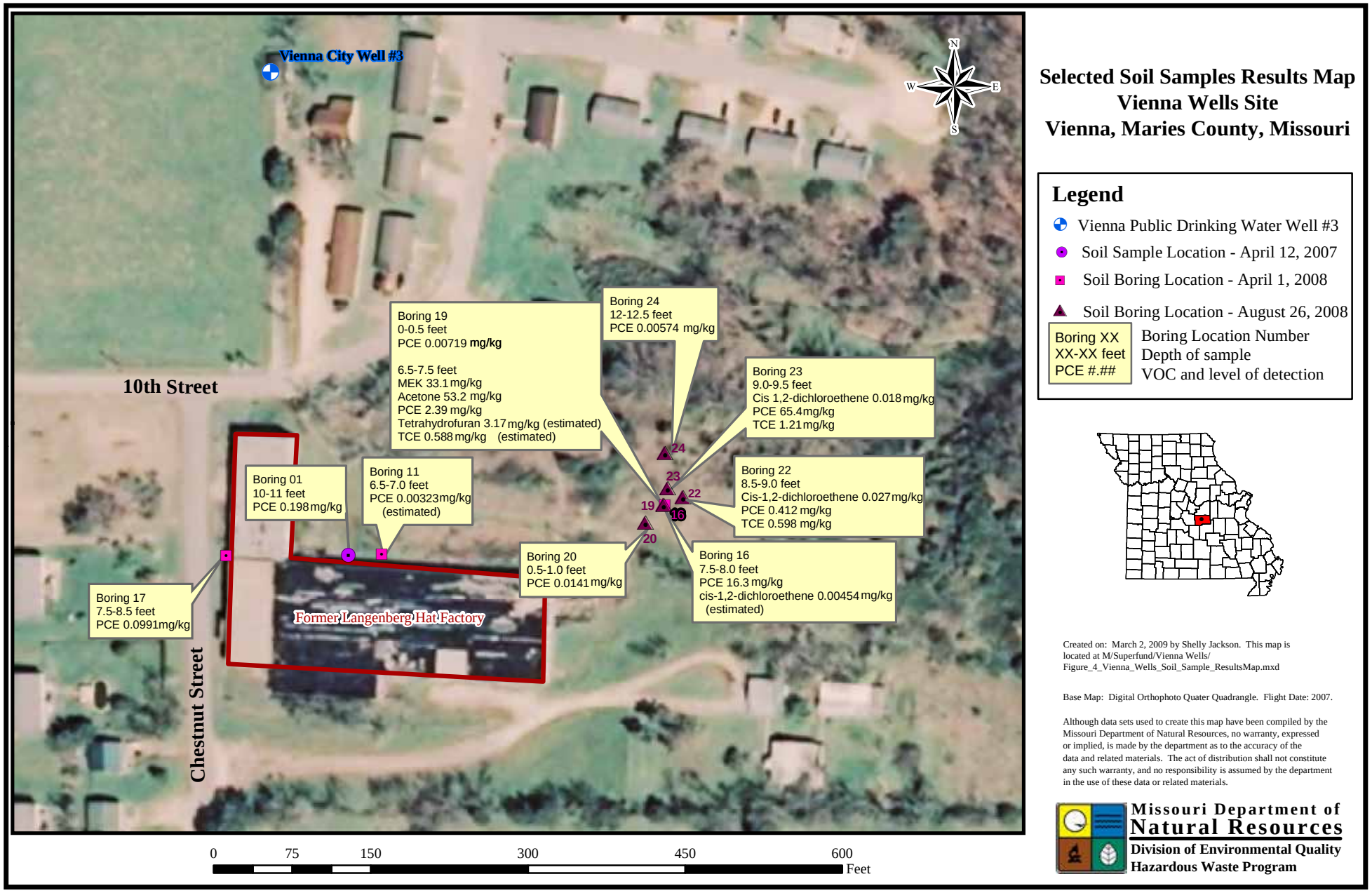


Figure 1-04. Location of Missouri Department of Natural Resources soil samples collected from April 12, 2007, to August, 26, 2008, at the Vienna Wells site in Vienna, Missouri. Modified from Jackson, 2009.



Selected Soil Samples Results Map
Vienna Wells Site
Vienna, Maries County, Missouri

Legend

- Vienna Public Drinking Water Well #3
- Soil Sample Location - April 12, 2007
- Soil Boring Location - April 1, 2008
- Soil Boring Location - August 26, 2008

Boring XX
XX-XX feet
PCE #.##

Boring Location Number
Depth of sample
VOC and level of detection

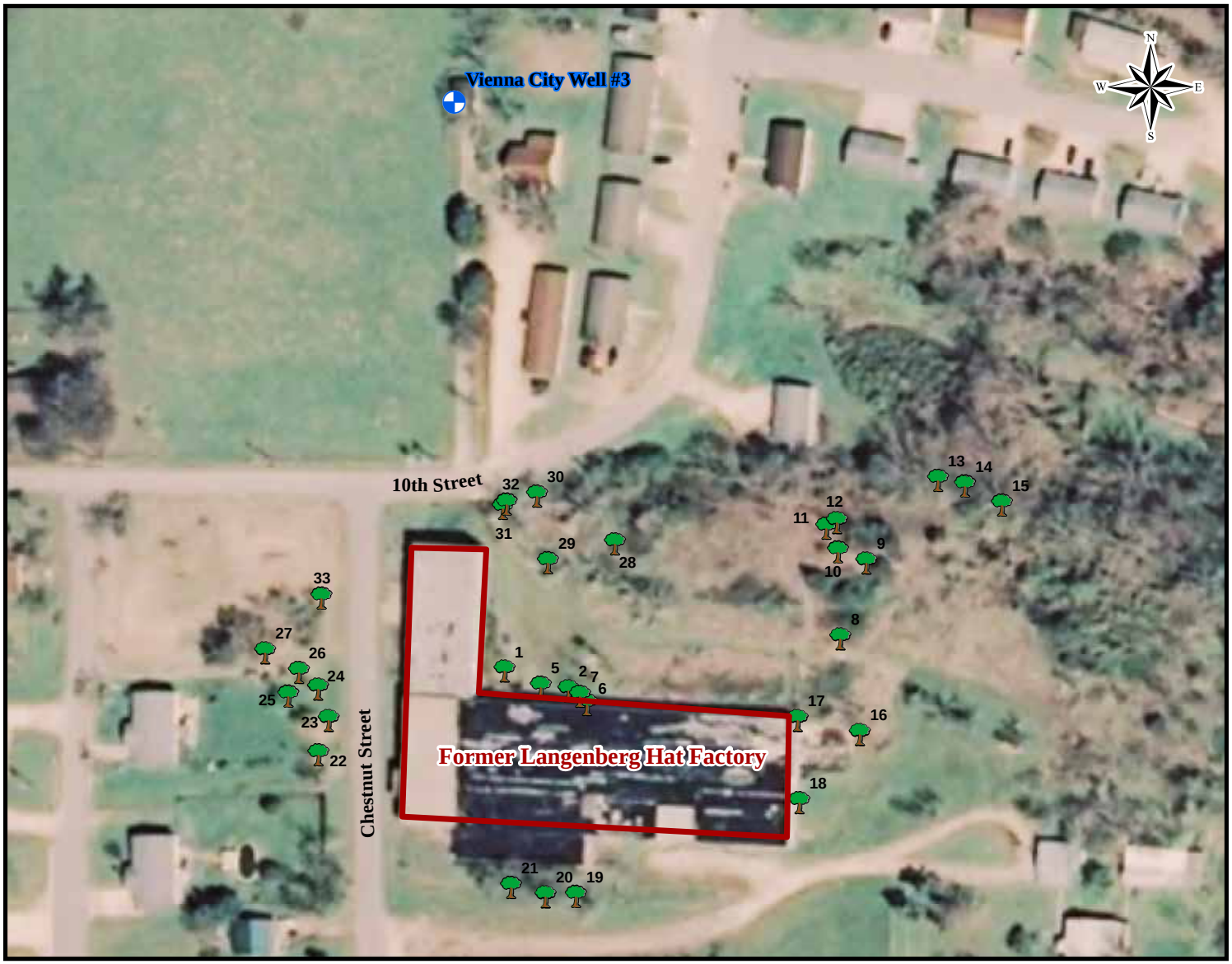
Created on: March 2, 2009 by Shelly Jackson. This map is located at M/Superfund/Vienna Wells/ Figure_4_Vienna_Wells_Soil_Sample_ResultsMap.mxd

Base Map: Digital Orthophoto Quater Quadrangle. Flight Date: 2007.

Although data sets used to create this map have been compiled by the Missouri Department of Natural Resources, no warranty, expressed or implied, is made by the department as to the accuracy of the data and related materials. The act of distribution shall not constitute any such warranty, and no responsibility is assumed by the department in the use of these data or related materials.

Missouri Department of
Natural Resources
Division of Environmental Quality
Hazardous Waste Program

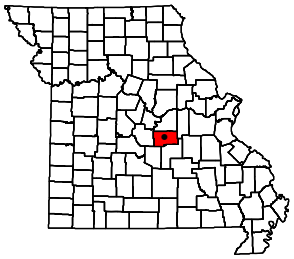
Figure 1-05. Result summaries of select Missouri Department of Natural Resources soil samples collected from April 12, 2007, to August 26, 2008, at the former hat factory property in Vienna, Missouri. Modified from Jackson, 2009.



Tree Core Sample Location Map
Vienna Wells Site
Vienna, Maries County, Missouri

Legend

- Public Drinking Water Well
- Tree Core Sample ## = Sample ID
  Sampled October 16, 2007



Created on: March 2, 2009 by Shelly Jackson. This map is located at M:/Superfund/Vienna Wells/ Figure_6_Vienna_Wells_TreeCore_SampleMap.mxd

Base Map: Digital Orthophoto Quater Quadrangle. Flight Date: 2007.

Although data sets used to create this map have been compiled by the Missouri Department of Natural Resources, no warranty, expressed or implied, is made by the department as to the accuracy of the data and related materials. The act of distribution shall not constitute any such warranty, and no responsibility is assumed by the department in the use of these data or related materials.

Missouri Department of Natural Resources
Division of Environmental Quality
Hazardous Waste Program

Figure 1-06. Locations of tree-core samples collected by Missouri Department of Natural Resources staff on October 16, 2007, at the Vienna Wells site, Vienna, Missouri. Modified from Jackson, 2009.

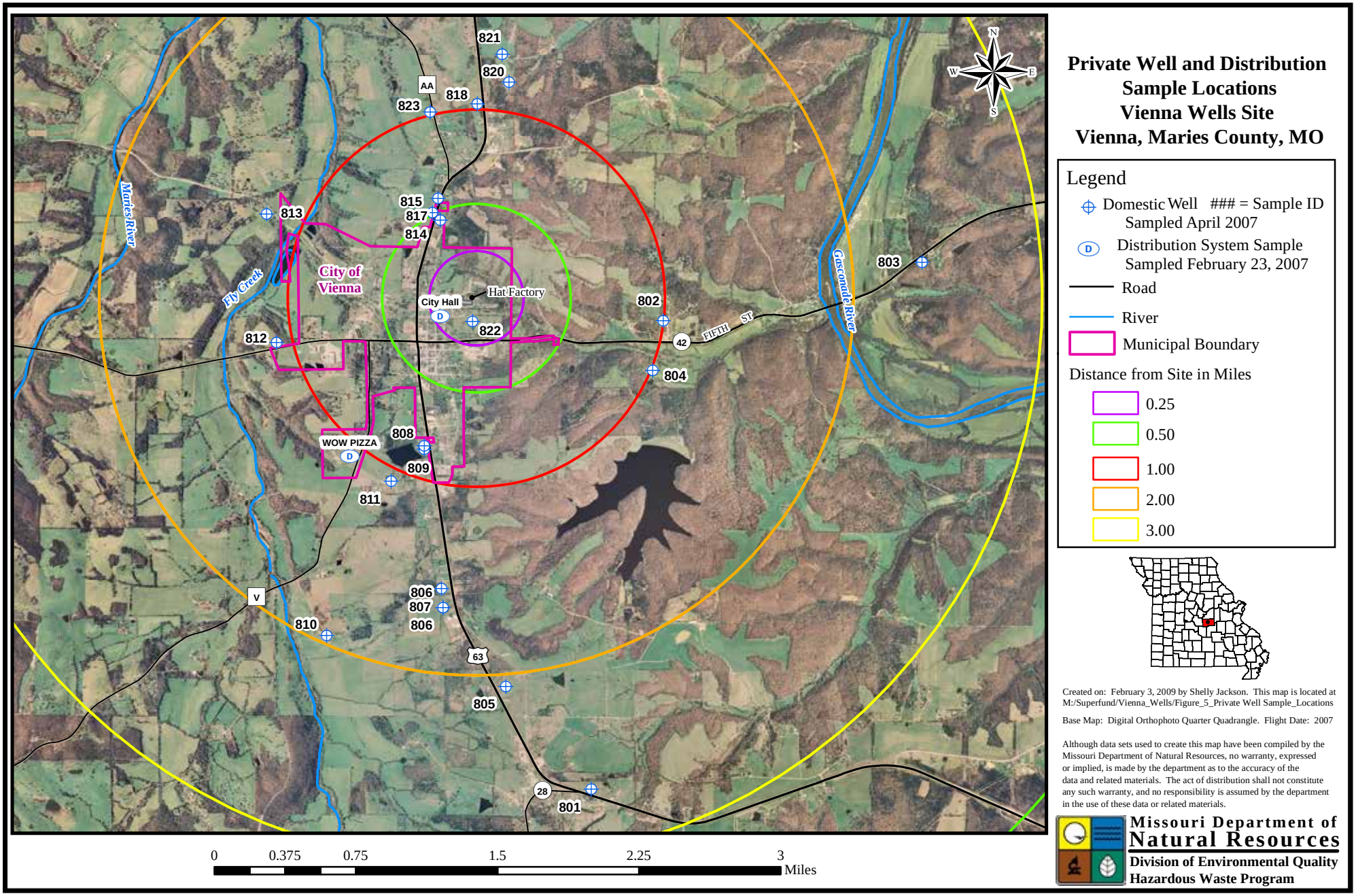
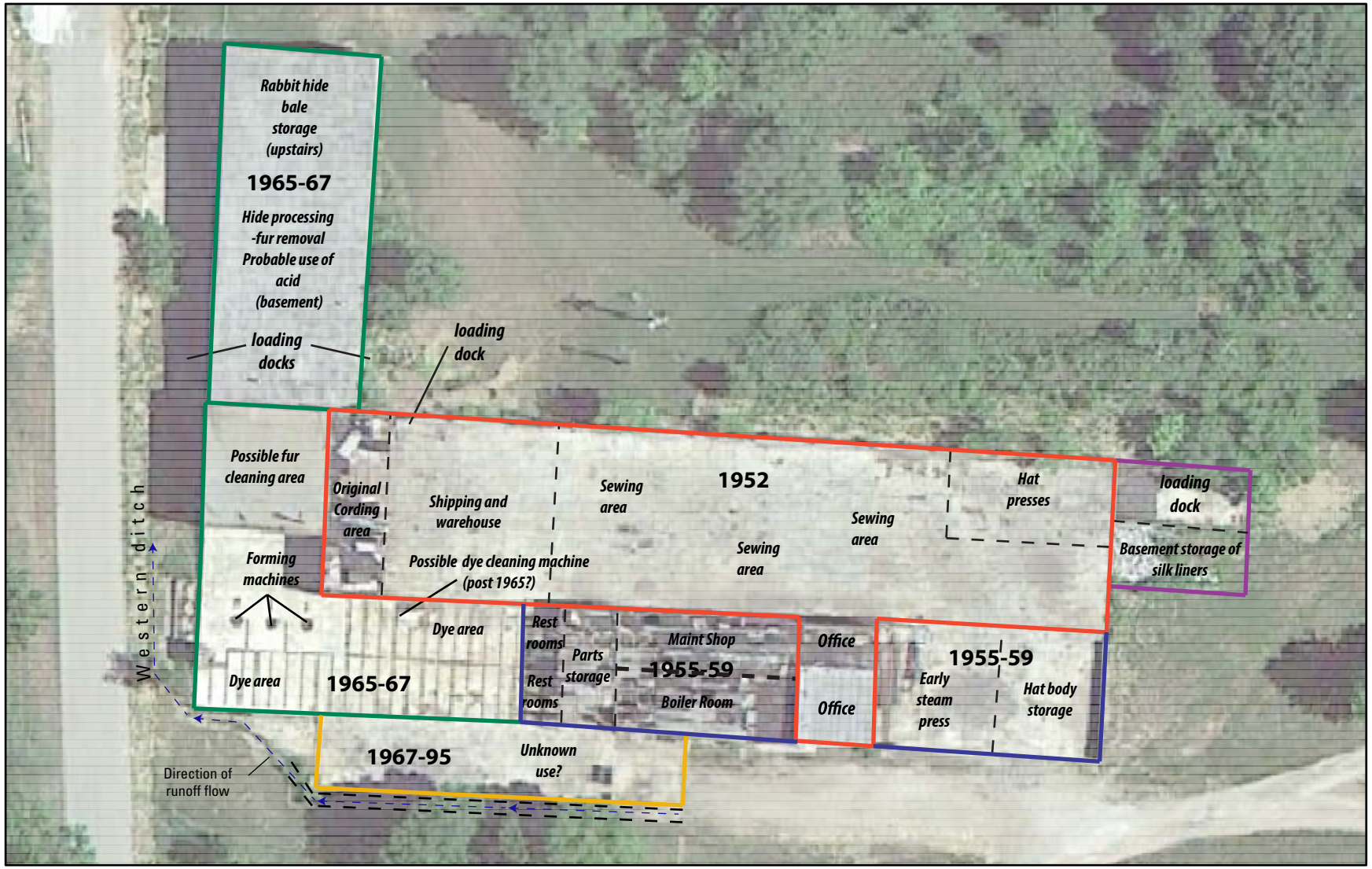


Figure 1-07. Locations of domestic well and distribution samples collected in April 2007 and February 2007, respectively, Vienna, Missouri. Modified from Jackson, 2009.

Figure 1-08. Approximate location of dumps at the former hat factory property, Vienna, Missouri.



Base from Google Earth, 2012
Universal Transverse Mercator projection zone 15

0 15 30 60 Feet
0 15 30 60 Meters

N

Explanation

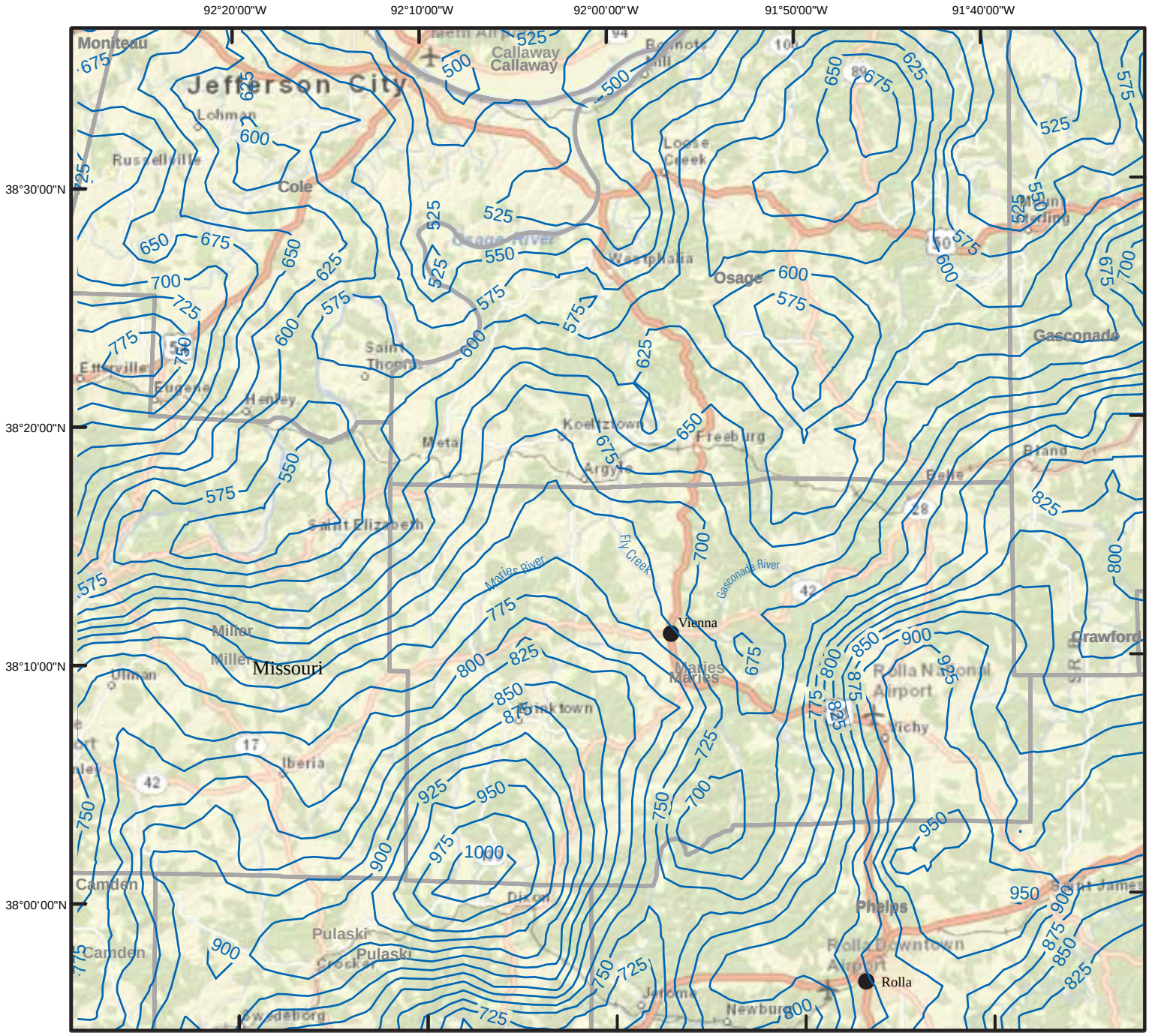
Operational history and use

- **1952 --** Cording, shipping, sewing, pressing, and office area
- **1955 to 1959 --** Restrooms, parts storage, paint shop, boiler room, early steam press, and hat body storage area
- **1965 to 1967--** Fur cleaning and dying area
- **1967 to 1995 --** Unknown use
- **Unknown --** Loading dock and basement storage area

Structural features

- **Concrete Culvert**

Figure 1-09. Operational history and locations of former process areas and general dates of building additions of the former hat factory, Vienna, Missouri.



Map image is the intellectual property of Esri and is used herein under license. Copyright © 2015 Esri and its licensors. All rights reserved.
Universal Transverse Mercator projection zone 15

0 2.5 5 10 Miles
0 2.5 5 10 Kilometers

Explanation

County Boundary

740 **Water-table contour** -- Shows altitude of water table, 1987-2005. Contour interval 25 feet. Datum is North American Vertical Datum of 1988.

Figure 1-10. Regional potentiometric map of Vienna and the surrounding area developed from driller's logs from 1987 to 2005 by the Missouri Department of Natural Resources, Missouri.

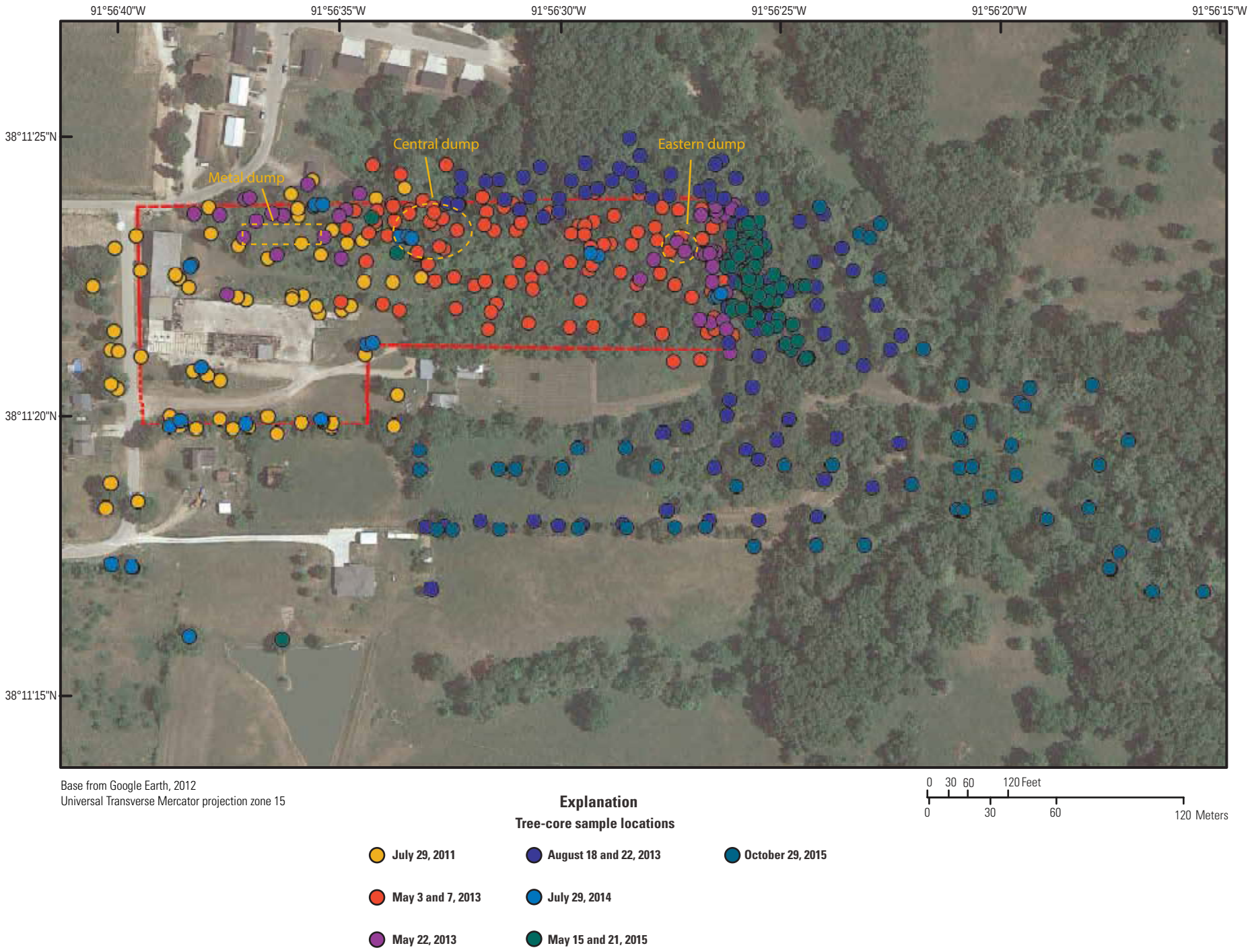
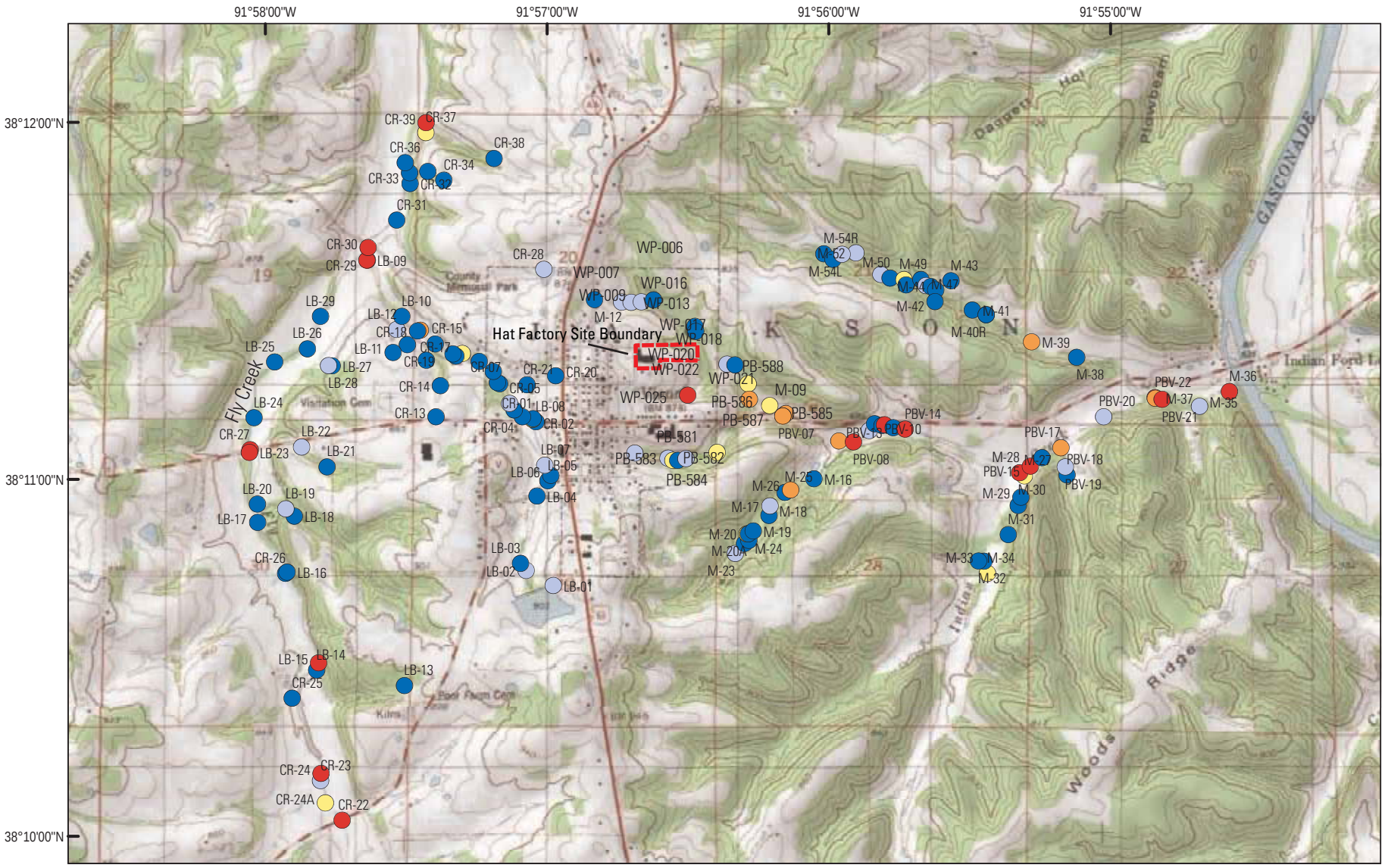
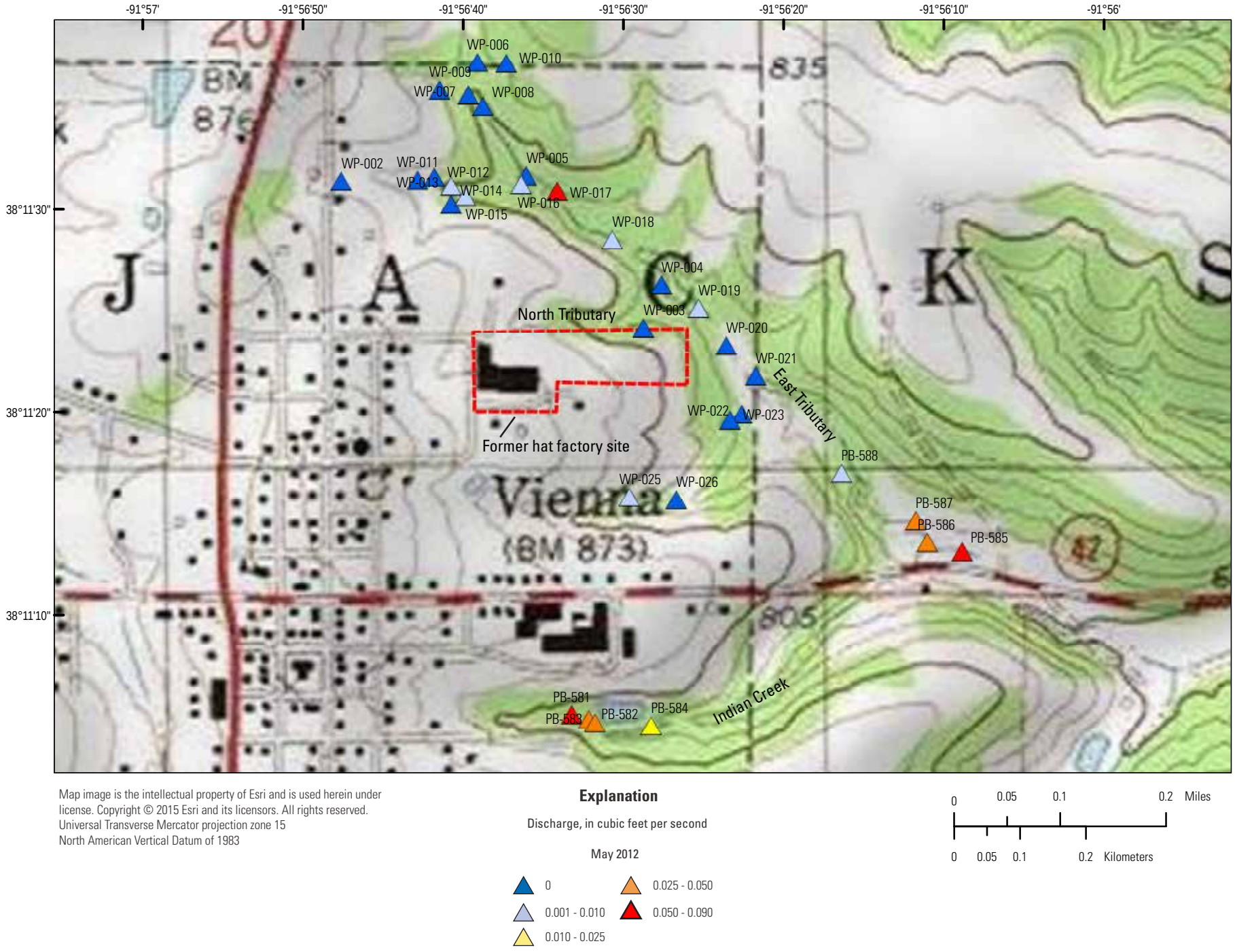


Figure 2-01. Locations of tree-core samples at the Vienna Wells site, Vienna, Missouri, 2011-2015.



Map image is the intellectual property of Esri and is used herein under license. Copyright © 2015 Esri and its licensors. All rights reserved.
Universal Transverse Mercator projection zone 15

Figure 2-02. Locations of discharge measurements during the seepage run in September 2011, Vienna, Missouri.



Map image is the intellectual property of Esri and is used herein under license. Copyright © 2015 Esri and its licensors. All rights reserved.
Universal Transverse Mercator projection zone 15
North American Vertical Datum of 1983

Figure 2-03. Locations of discharge measurements during the seepage run in May 2012, Vienna, Missouri.

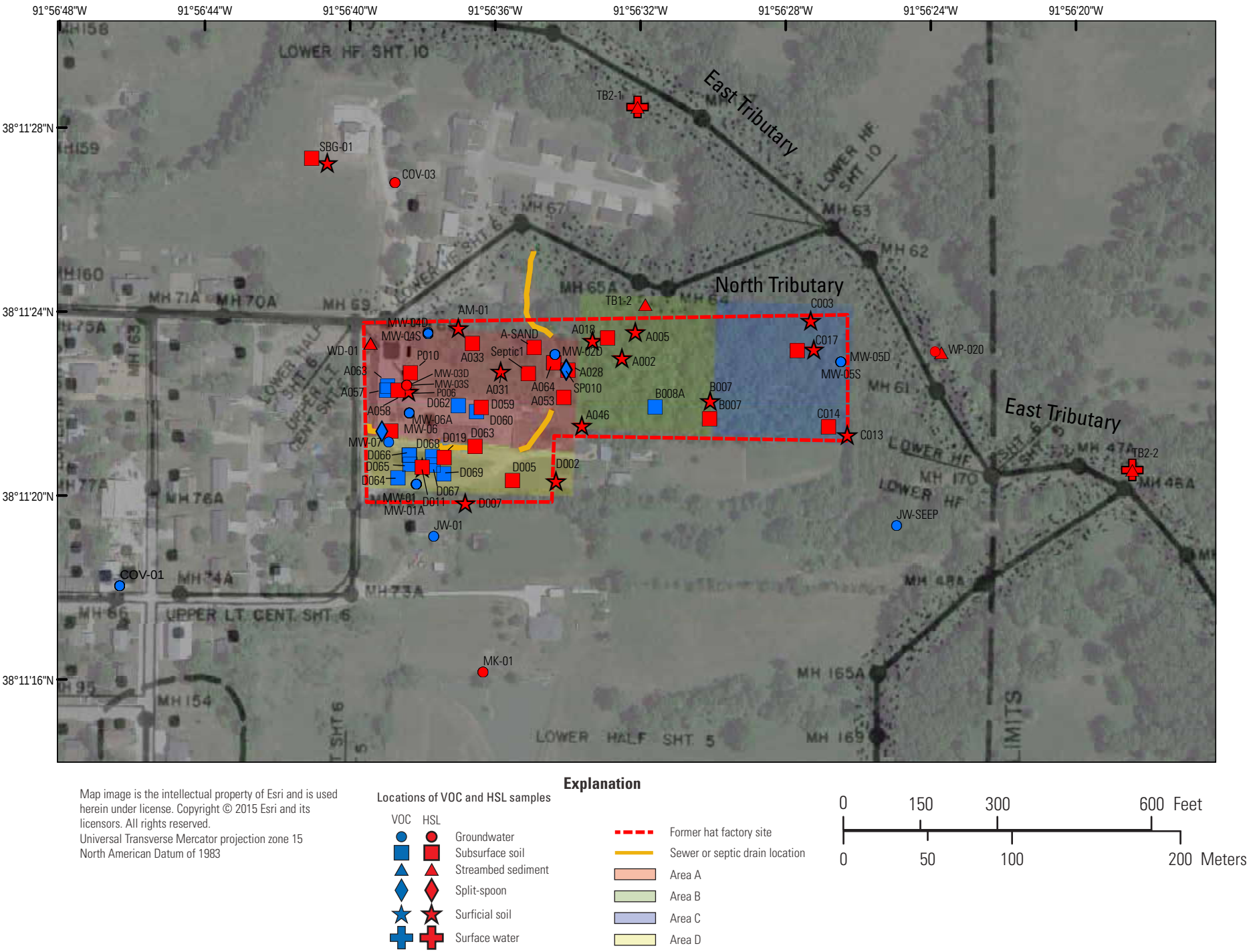
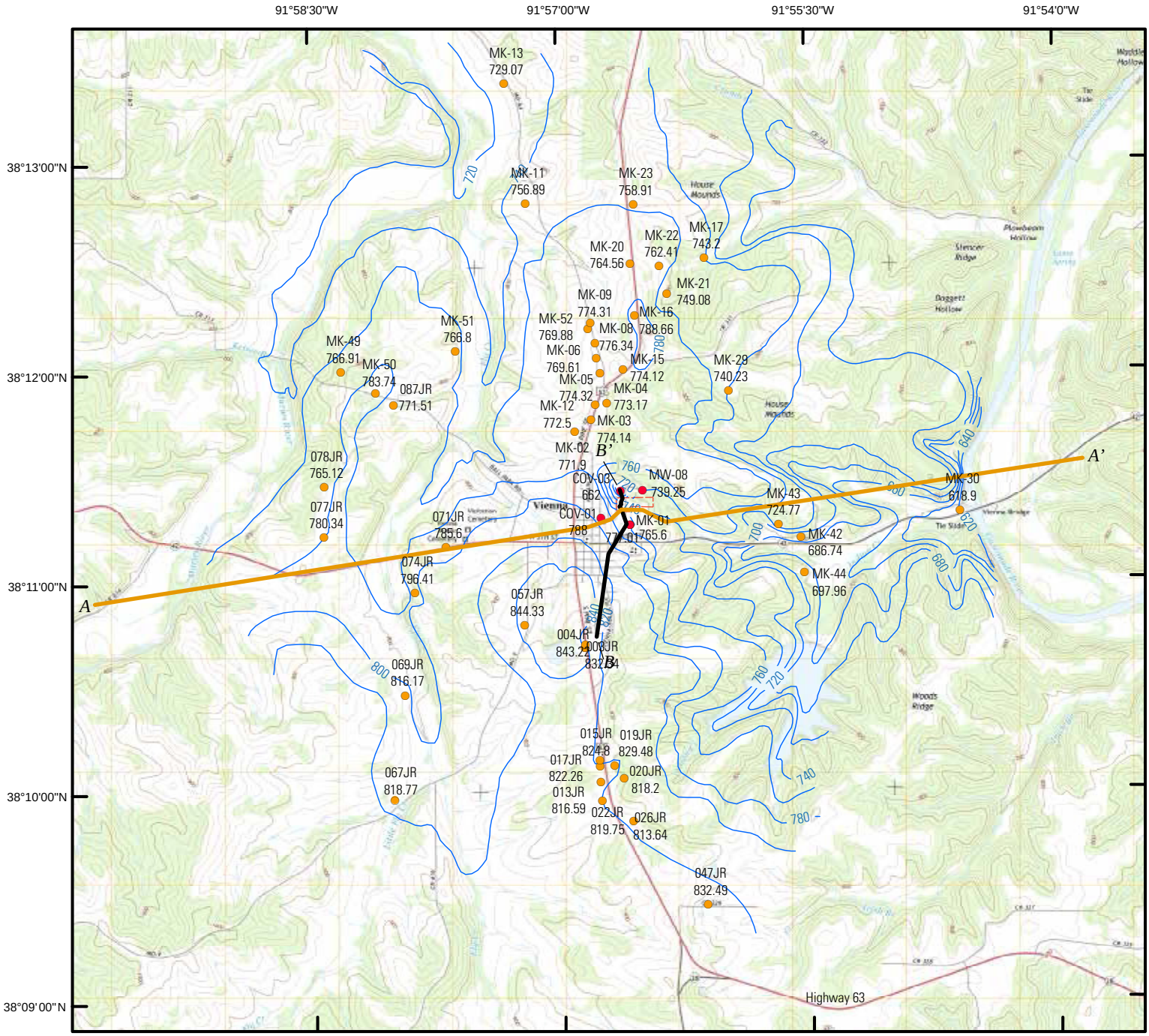


Figure 2-04. Locations of volatile organic compound (VOC) samples, hazardous substance list (HSL) samples, and sewer and septic drains at the Vienna Wells site, Vienna, Missouri.



Map image is the intellectual property of Esri and is used herein under license. Copyright © 2015 Esri and its licensors. All rights reserved.
Universal Transverse Mercator projection zone 15
North American Datum of 1983

0 750 1,500 3,000 Feet
0 750 1,500 3,000 Meters

Explanation

A — A' / B — B' **Geologic sections** -- See figures 3-05 and 3-06.

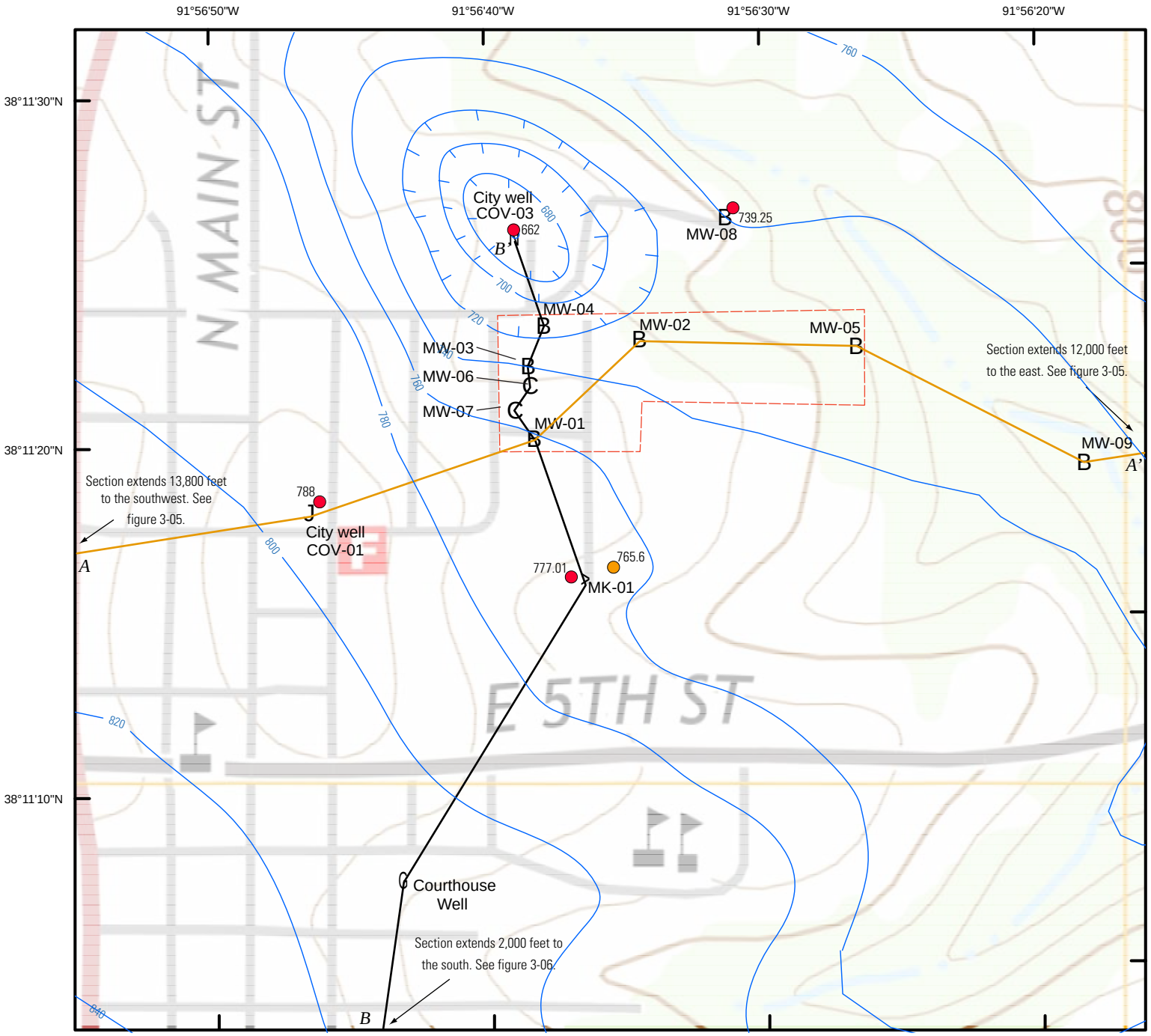
Former hat factory site

740 **Water-table contour** -- Shows altitude of water table. Contour interval 20 feet. Datum is North American Vertical Datum of 1988.

MK-42 686.74 **Water-level measurement** -- Water-level measurement from domestic wells in feet below ground surface, 2011. Datum is North American Vertical Datum of 1988.

MK-01 765.60 **Water-level measurement** -- Water-level measurement from wells in feet below ground surface, 2016. Datum is North American Vertical Datum of 1988. Measured while city well COV-03 had been pumping for two hours.

Figure 2-05. Potentiometric map of the Ozark aquifer in the Vienna, Missouri, area, 2011 and 2016.



Map image is the intellectual property of Esri and is used herein under license. Copyright © 2015 Esri and its licensors. All rights reserved.
Universal Transverse Mercator projection zone 15
Horizontal coordinate information referenced to the North American Datum of 1983
Vertical coordinate information referenced to the North American Vertical Datum of 1988 (NAVD 88)

0 75 150 300 Feet
0 75 150 300 Meters

Explanation

Geologic sections, property boundary, and water-table contours

A —— A'
B —— B'
Geologic sections -- See figures 3-05, and 3-06.

Former hat factory property boundary

740
Water-table contour -- Shows altitude of water table. Contour interval 20 feet. Datum is NAVD 1988.

765.6
Water-level measurement -- Water-level measurement from domestic wells in feet below ground surface, 2011. Datum is North American Vertical Datum of 1988.

Well types

J **Water-sample well** -- Well used exclusively for water-sample collection.
N **Public-supply well**
B **Monitoring well** -- Used for discrete water-level measurements and water-sample collection.
C **Monitoring well with recorder** -- Continuous water-level data, 2015.
> **Domestic well**
G **Capped well** -- Courthouse Well #1 was covered when the streeat was resurfaced.

777.01
Water-level measurement -- Water-level measurement from wells in feet below ground surface, 2016. Datum is North American Vertical Datum of 1988. Measured while city well COV-03 had been pumping for two hours.

Figure 2-06. Potentiometric map of the former hat factory property and surrounding area and topographic contours in Vienna, Missouri, 2011 and 2016.

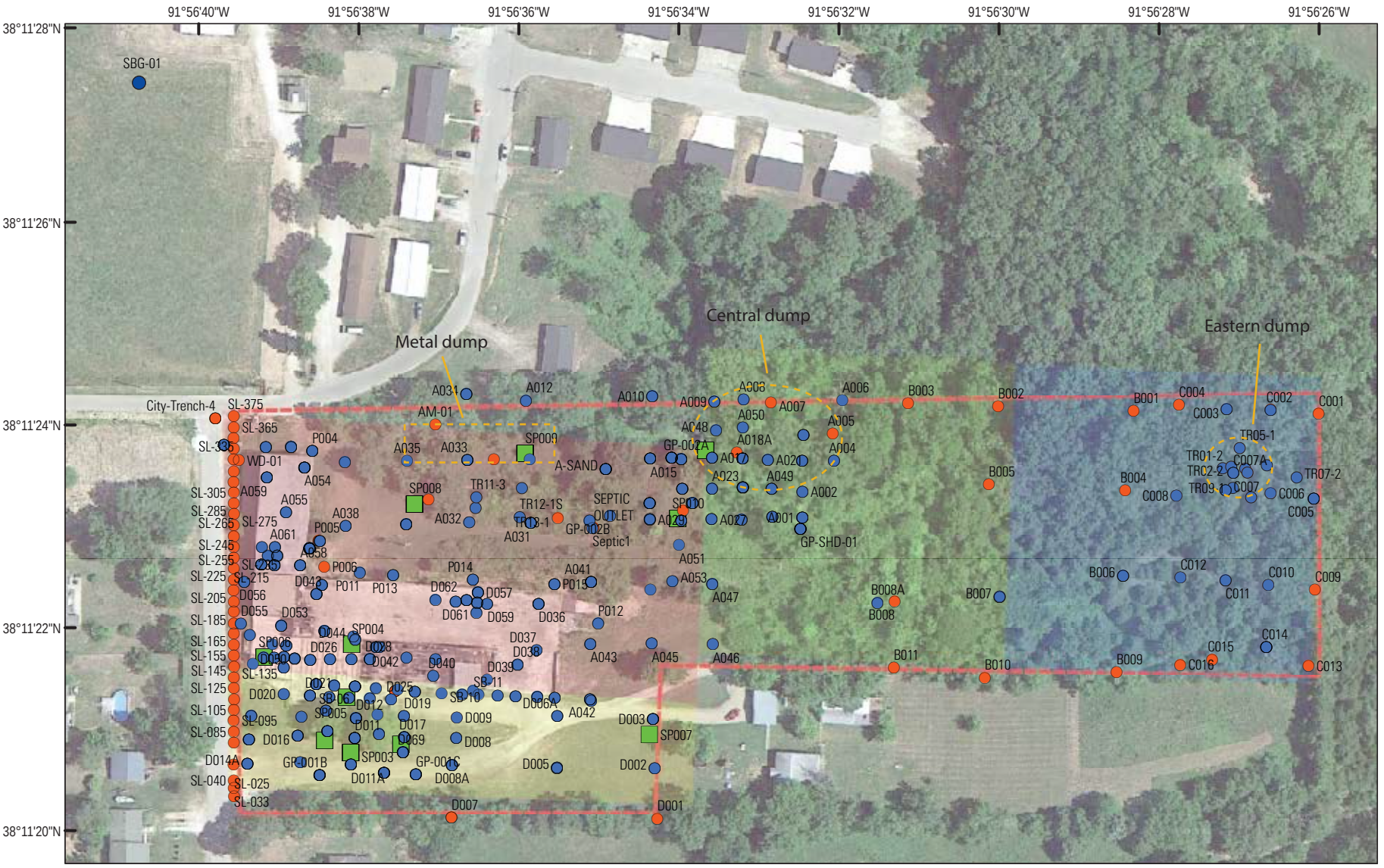


Figure 2-07. Locations of surficial, subsurface, and split-spoon soil sample locations collected from January 2012 to September 2014, Vienna, Missouri.

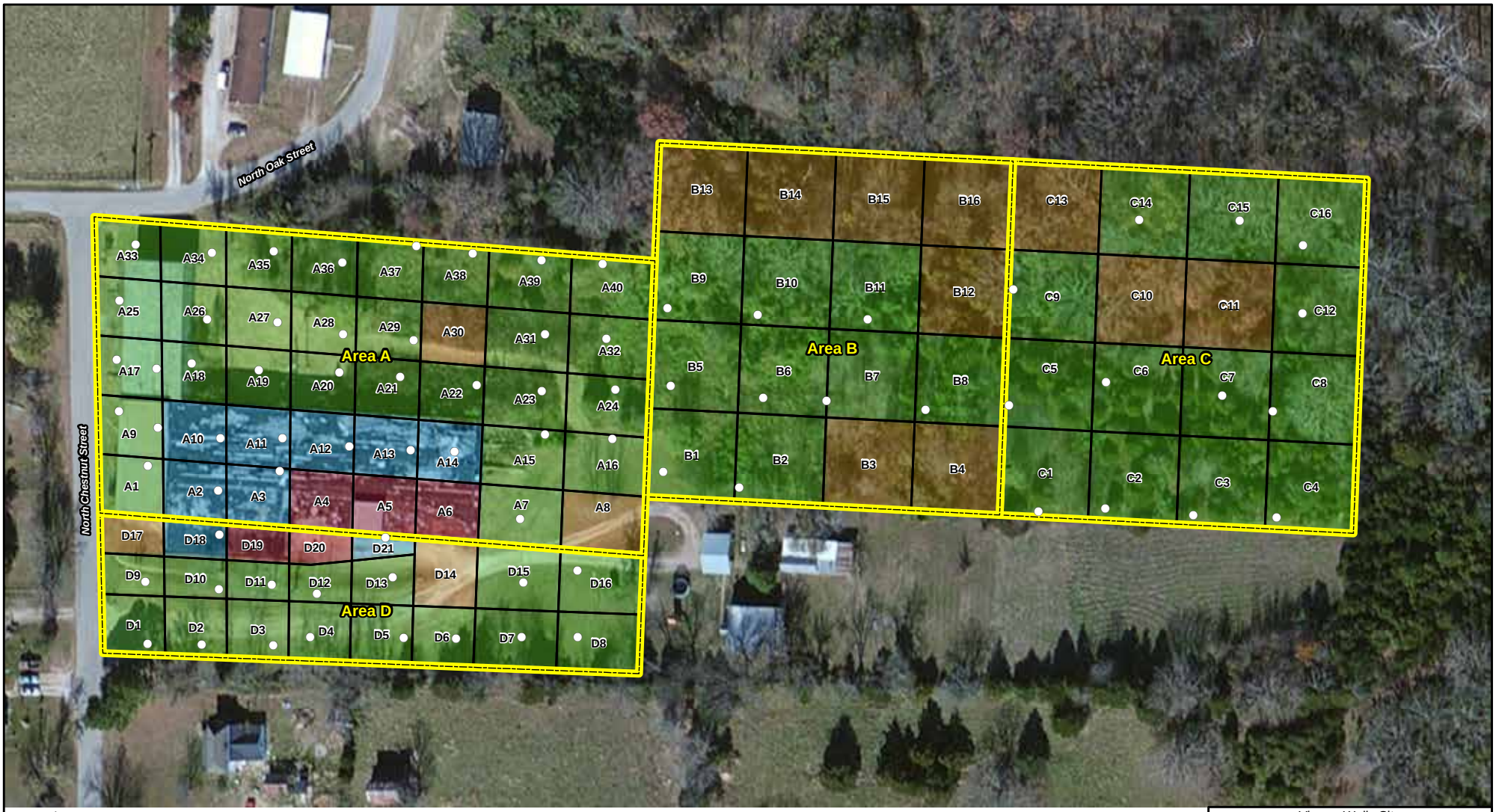
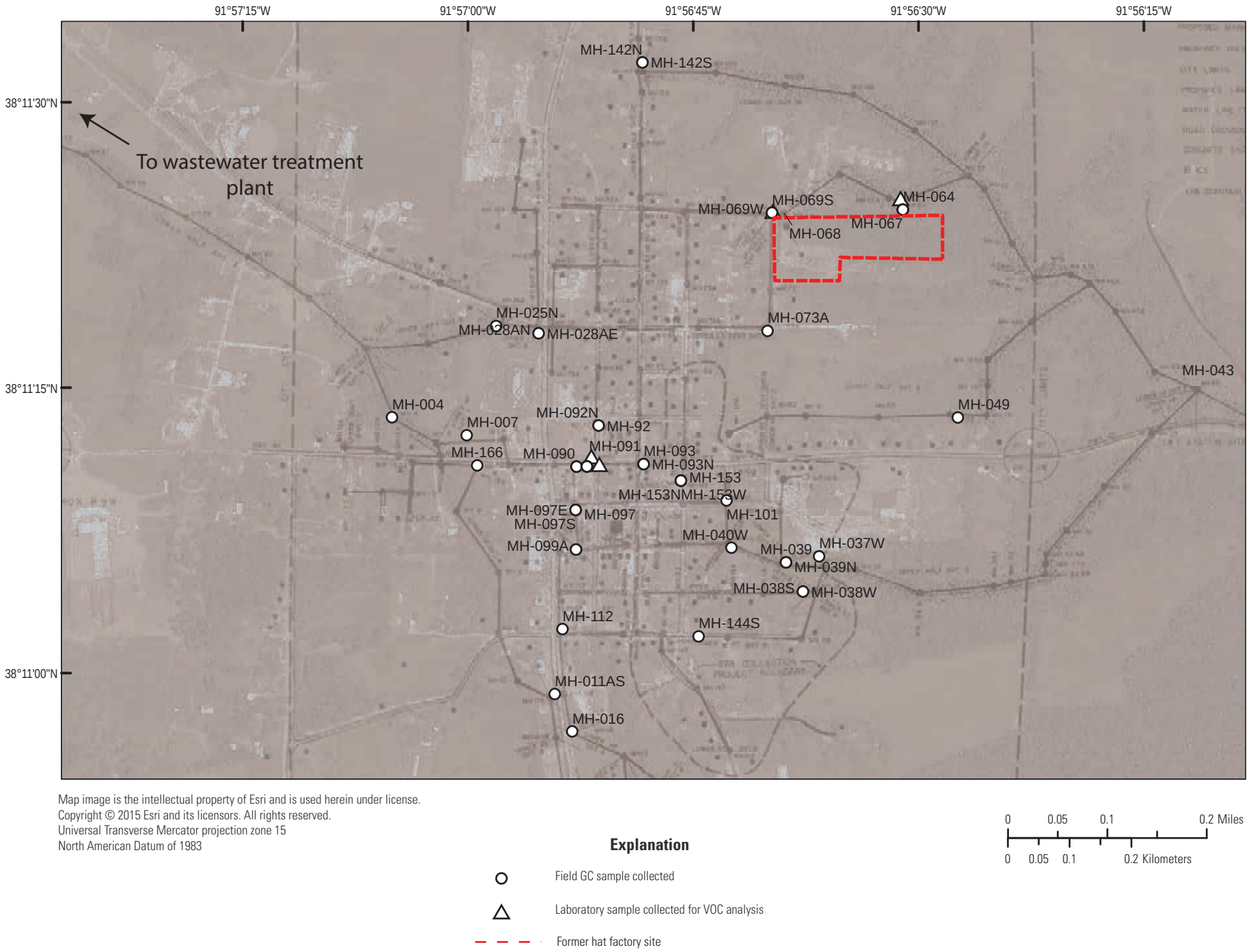


Figure 2-08. Locations of surficial and subsurface soil sample locations collected by the U.S. Environmental Protection Agency, Vienna, Missouri, 2015.



Map image is the intellectual property of Esri and is used herein under license.
Copyright © 2015 Esri and its licensors. All rights reserved.
Universal Transverse Mercator projection zone 15
North American Datum of 1983

Explanation

- Field GC sample collected
- Laboratory sample collected for VOC analysis
- Former hat factory site

0 0.05 0.1 0.2 Miles
0 0.05 0.1 0.2 Kilometers

Figure 2-09. Locations of field gas chromatograph (GC) and laboratory volatile organic compound (VOC) sewer samples, Vienna, Missouri, 2012.

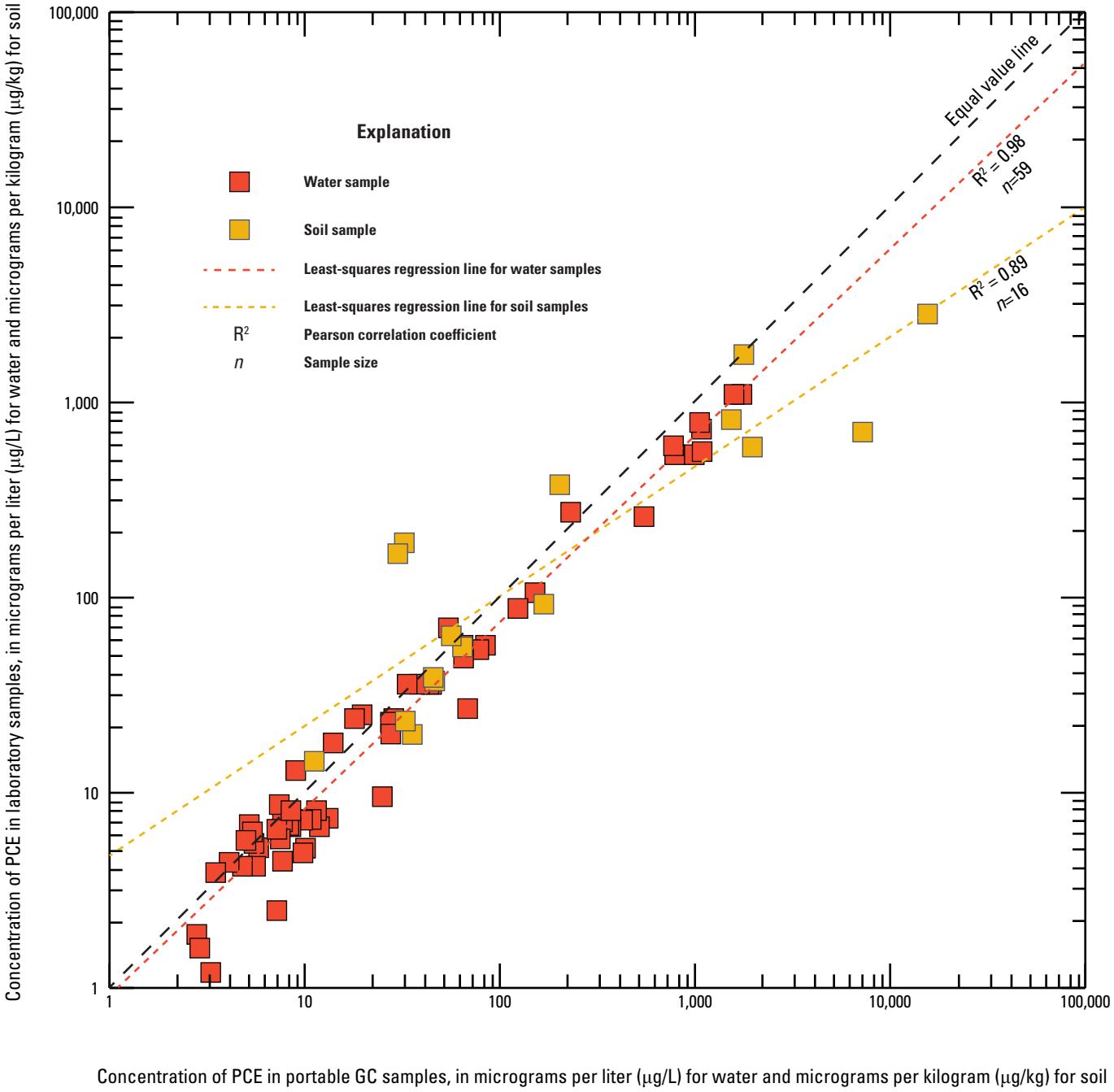


Figure 2-10. Relation between concentrations of tetrachloroethene (PCE) in laboratory samples and portable gas chromatograph (GC) samples in soil and water samples collected at the Vienna Wells site, Vienna, Missouri, 2011-2016.

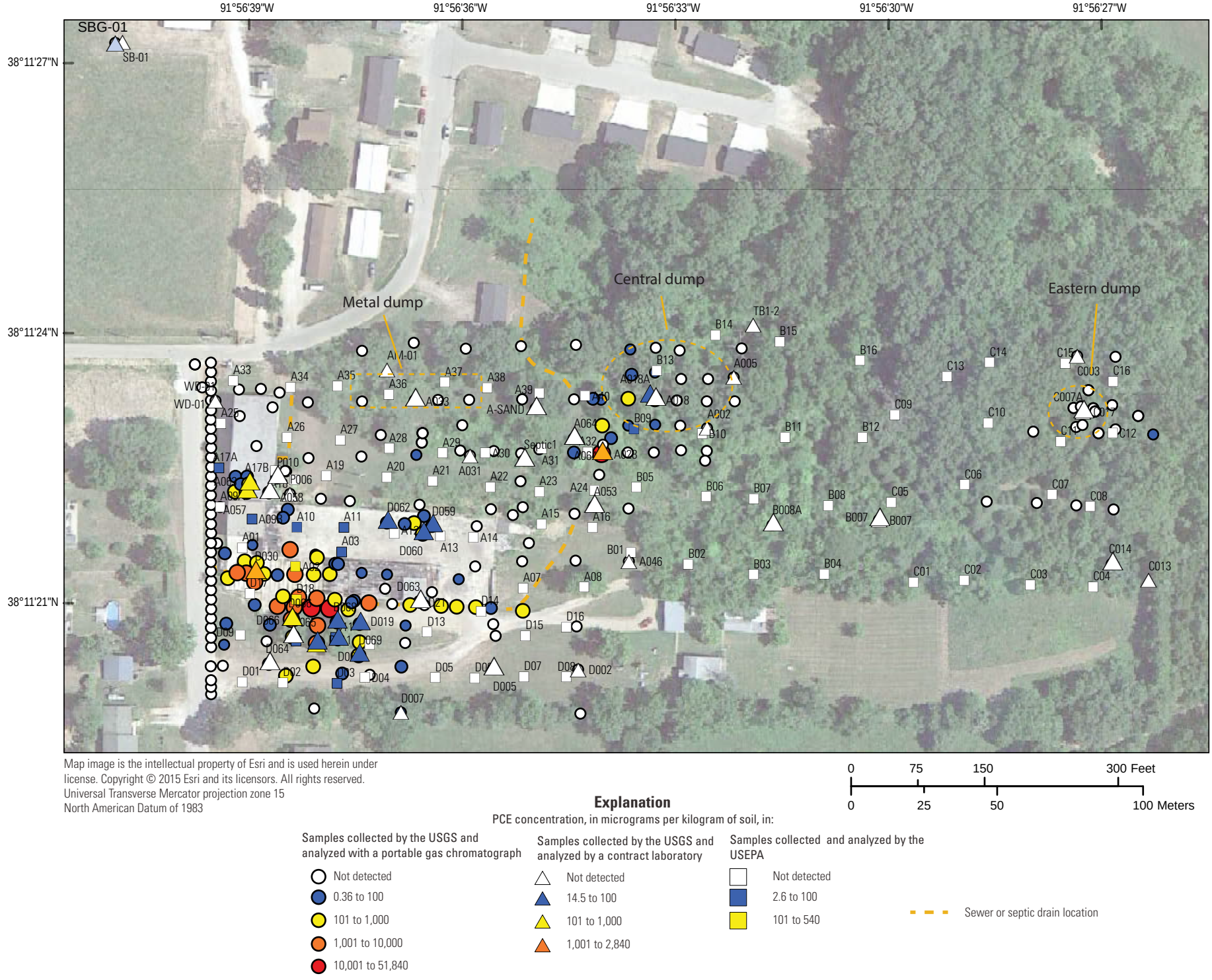


Figure 3-01. Maximum concentration of tetrachloroethene (PCE) in soil samples in each soil boring collected by the U.S. Environmental Protection Agency (USEPA) and U.S. Geological Survey (USGS) at the Vienna Wells site, Vienna, Missouri.

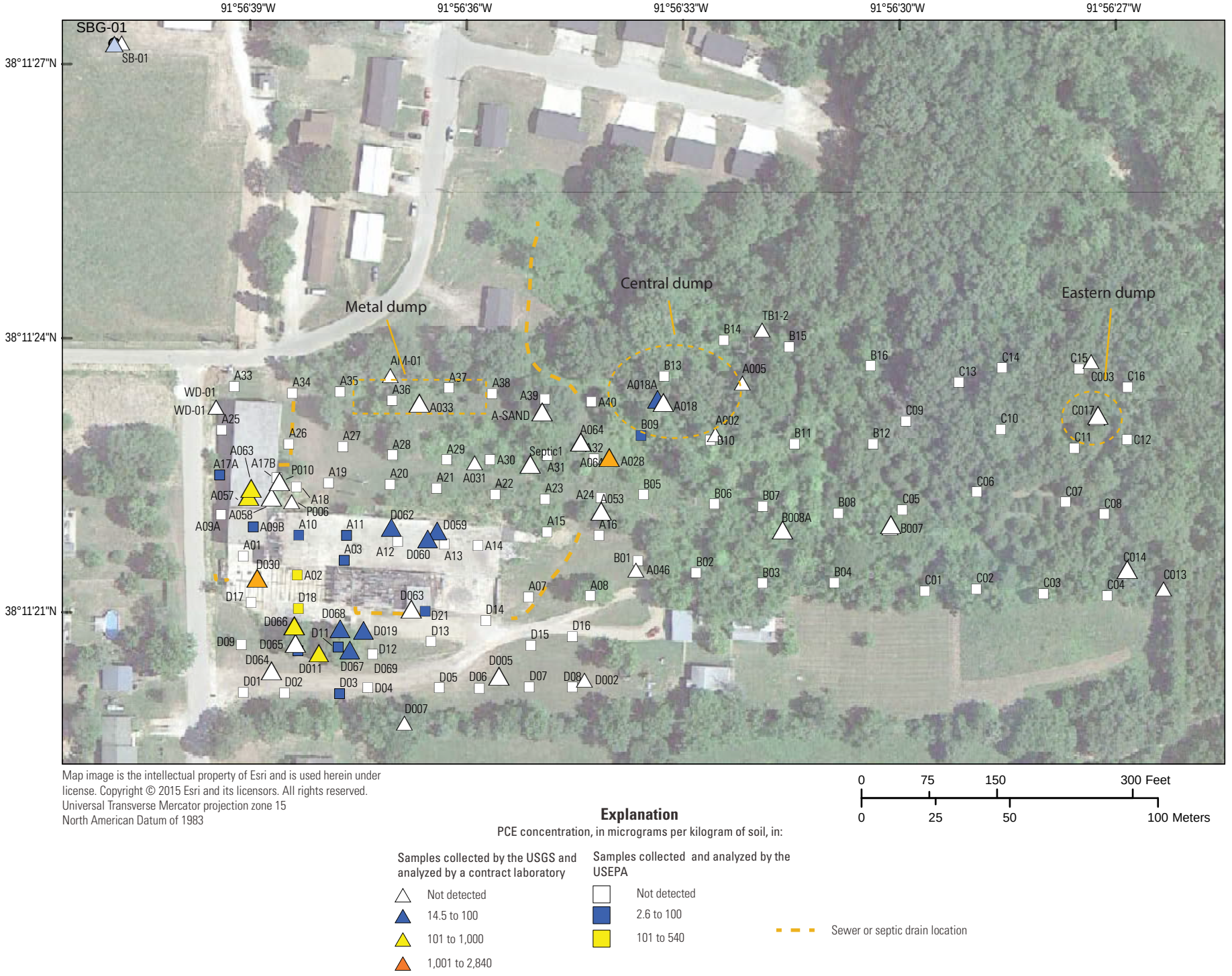


Figure 3-02. Maximum concentration of tetrachloroethene (PCE) in selected laboratory soil samples collected by the U.S. Environmental Protection Agency (USEPA) and U.S. Geological Survey (USGS) at the Vienna Wells site, Vienna, Missouri.

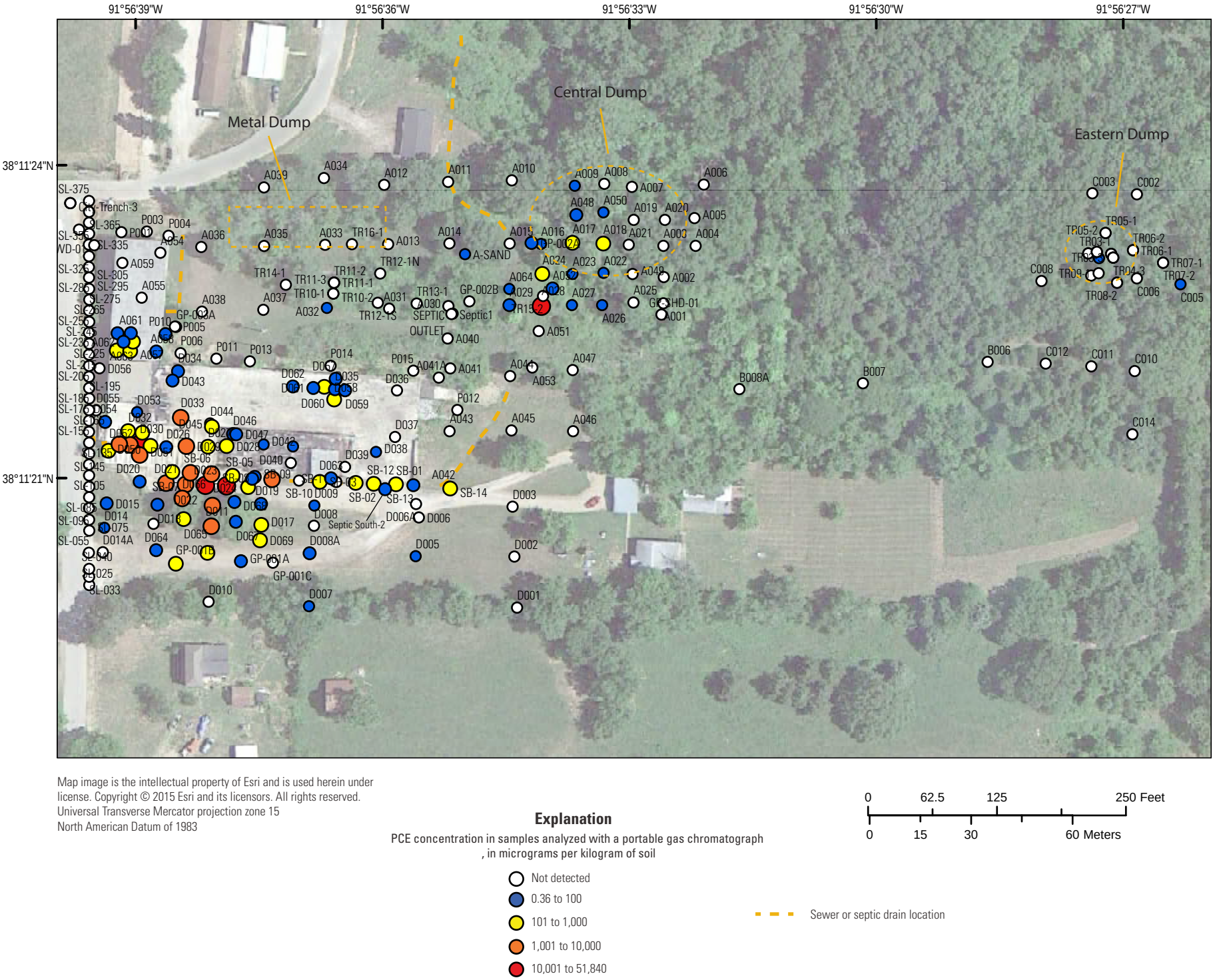


Figure 3-03. Maximum concentration of tetrachloroethene (PCE) in soil samples in each soil boring collected by the U.S. Geological Survey (USGS) and analyzed with a portable gas chromatograph at the Vienna Wells site, Vienna, Missouri.

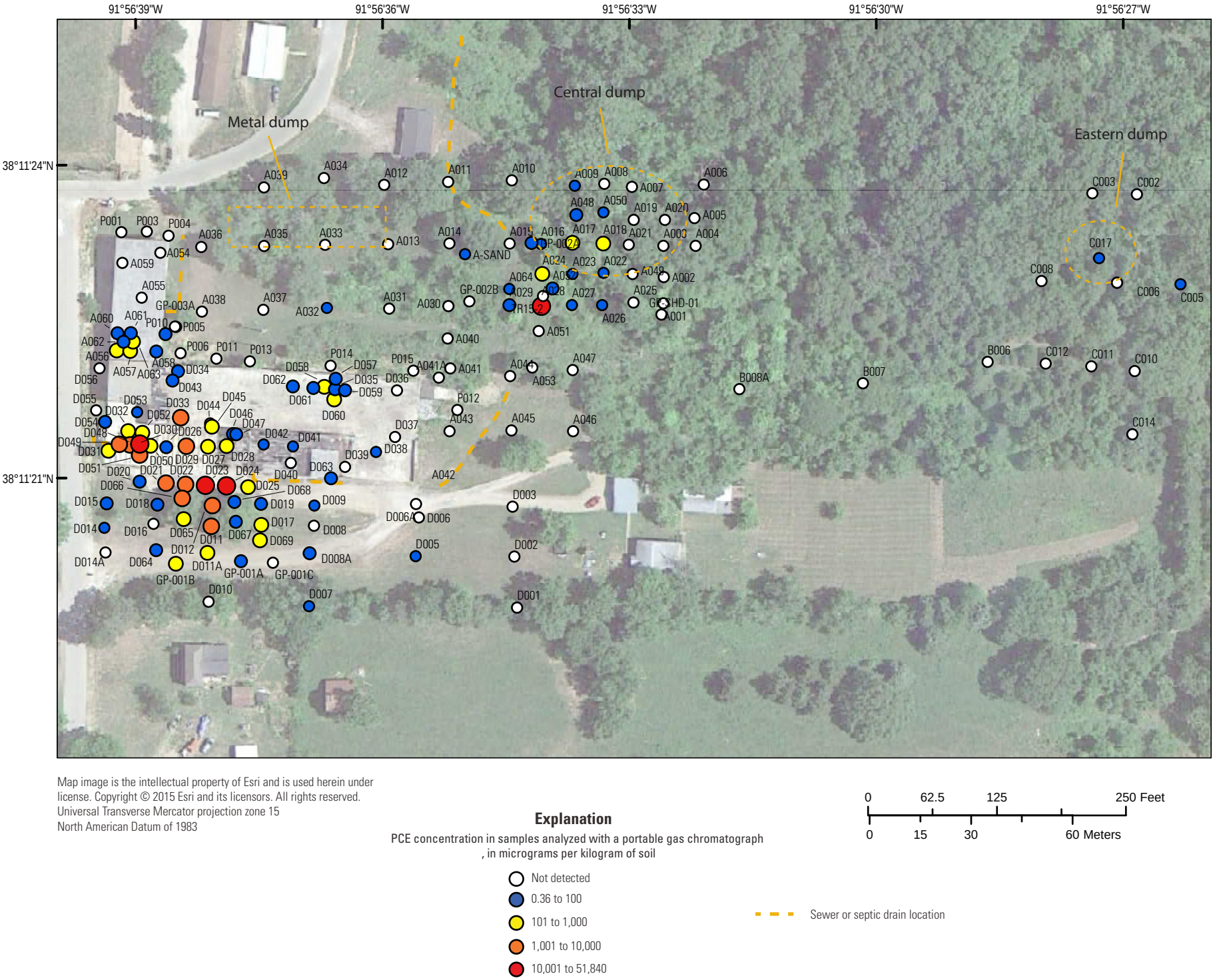
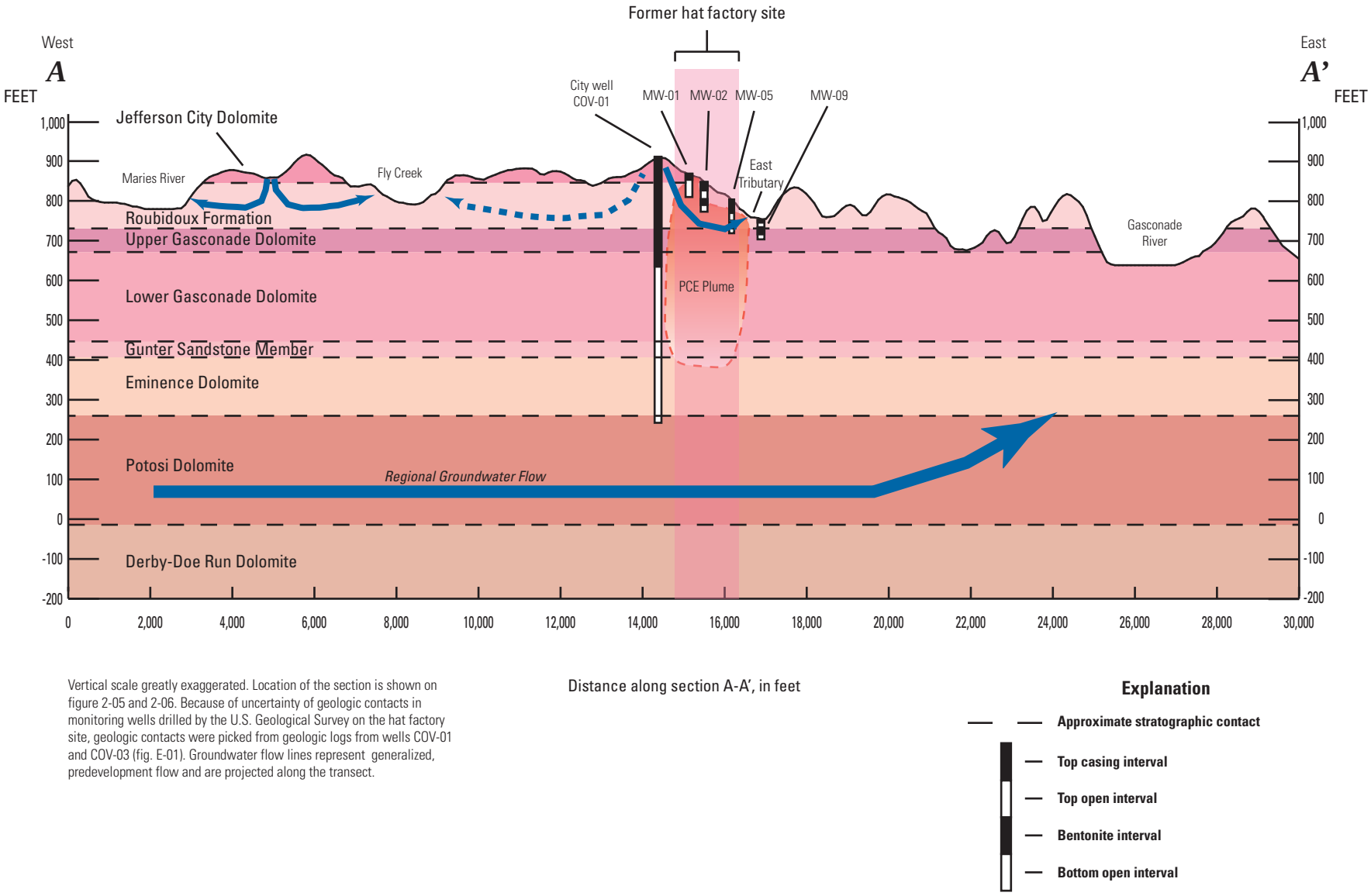


Figure 3-04. Maximum concentration of tetrachloroethene (PCE) in select soil samples collected by the U.S. Geological Survey (USGS) and analyzed with a portable gas chromatograph at the Vienna Wells site, Vienna, Missouri.



Vertical scale greatly exaggerated. Location of the section is shown on figure 2-05 and 2-06. Because of uncertainty of geologic contacts in monitoring wells drilled by the U.S. Geological Survey on the hat factory site, geologic contacts were picked from geologic logs from wells COV-01 and COV-03 (fig. E-01). Groundwater flow lines represent generalized, predevelopment flow and are projected along the transect.

Figure 3-05. Generalized geohydrologic section *A-A'* in and near Vienna, Missouri.

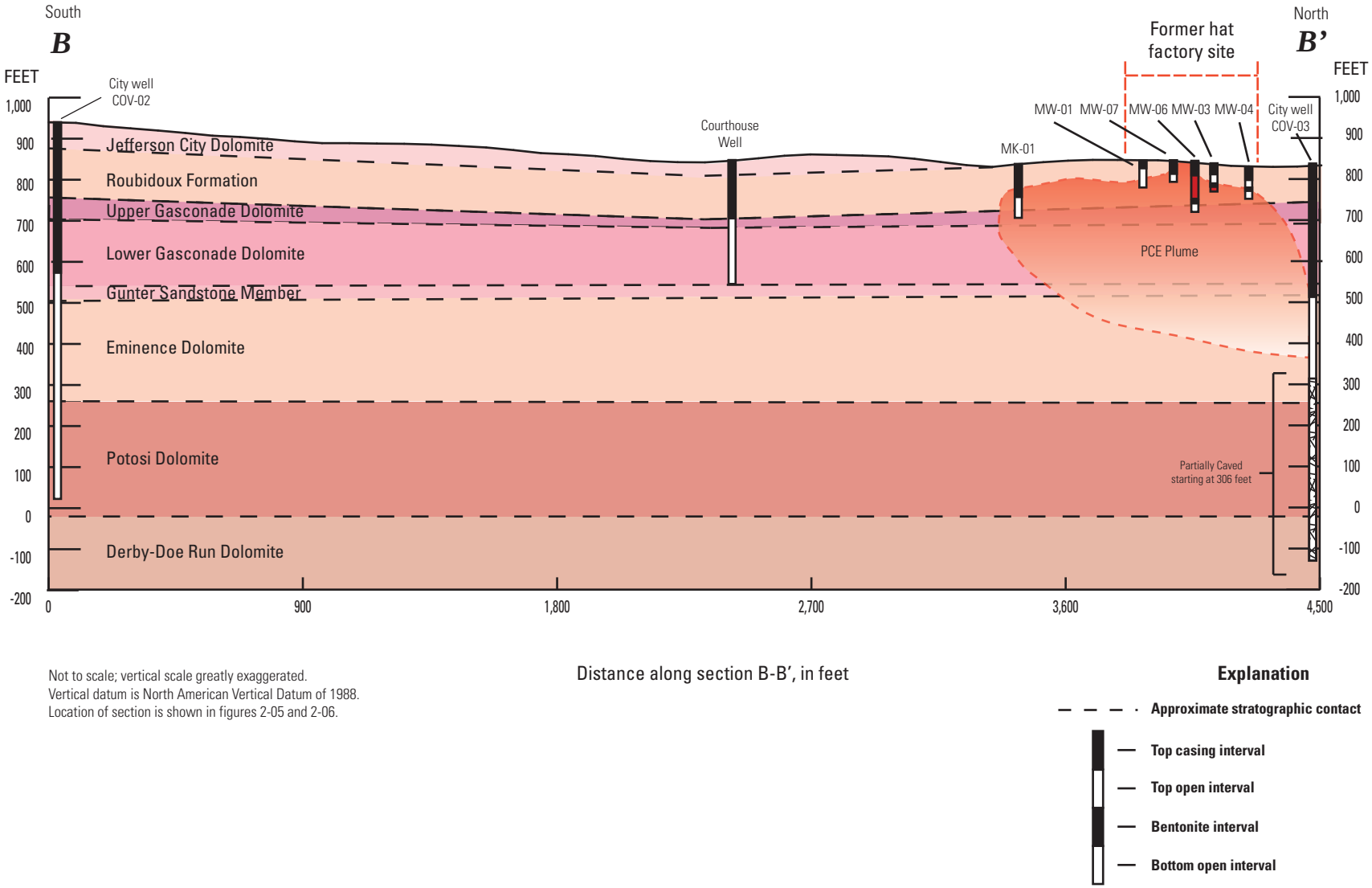


Figure 3-06. Generalized geohydrologic section *B-B'* in and near Vienna, Missouri.

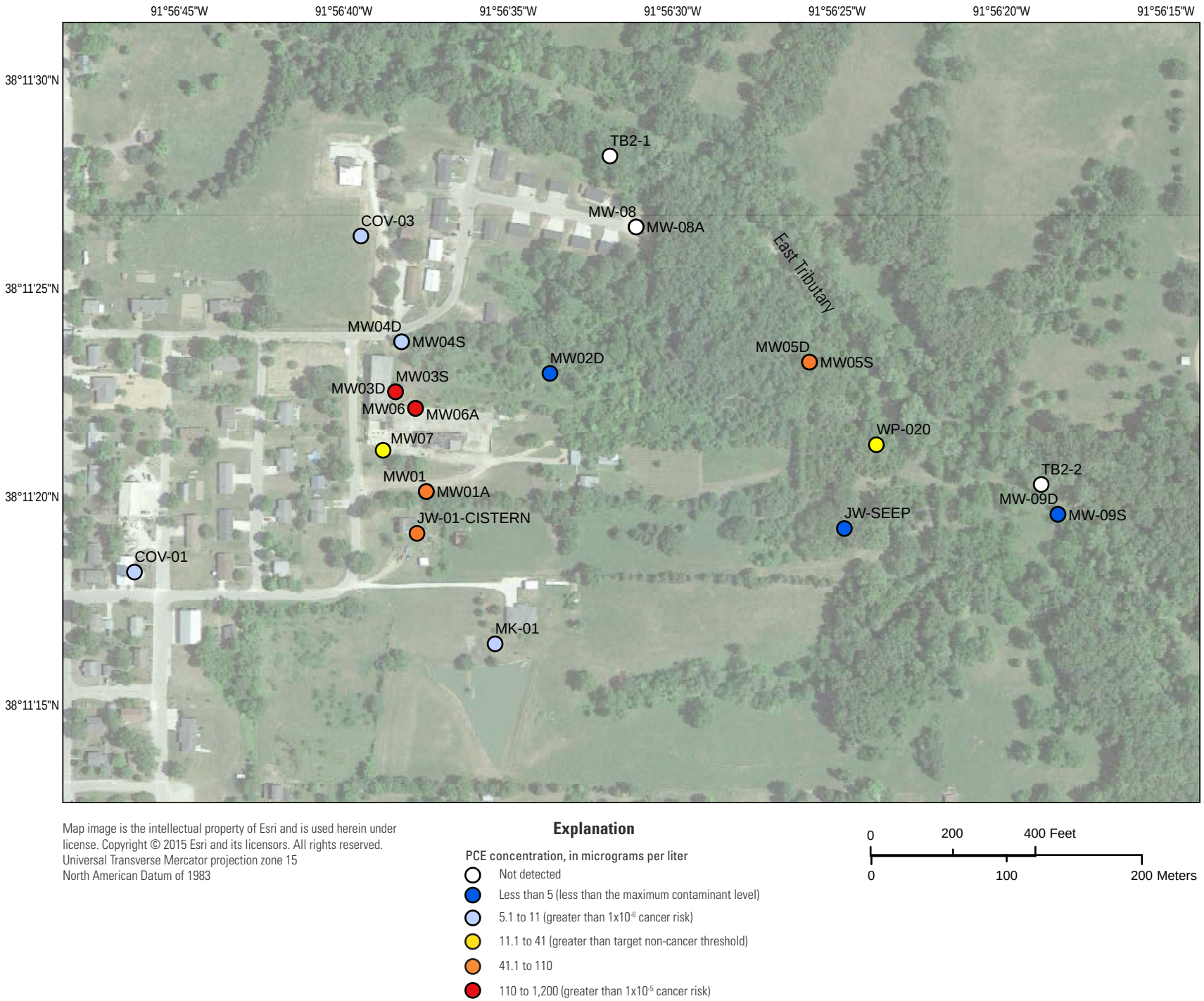
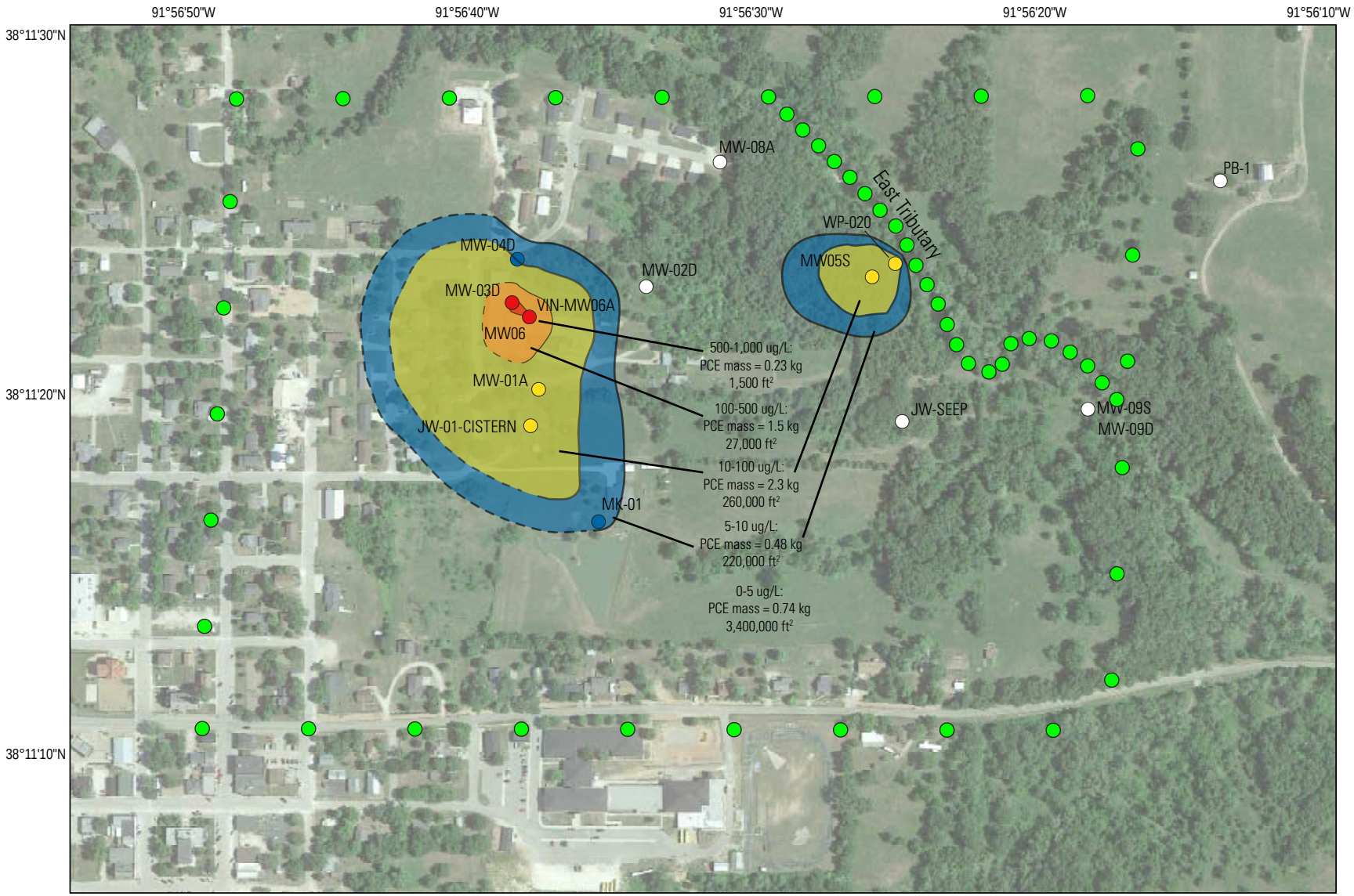


Figure 3-07. Maximum concentrations of tetrachloroethene (PCE) in groundwater and surface-water samples collected during 2012-2016, Vienna, Missouri.



Map image is the intellectual property of Esri and is used herein under license. Copyright © 2015 Esri and its licensors. All rights reserved.
Universal Transverse Mercator projection zone 15
North American Datum of 1983

Explanation

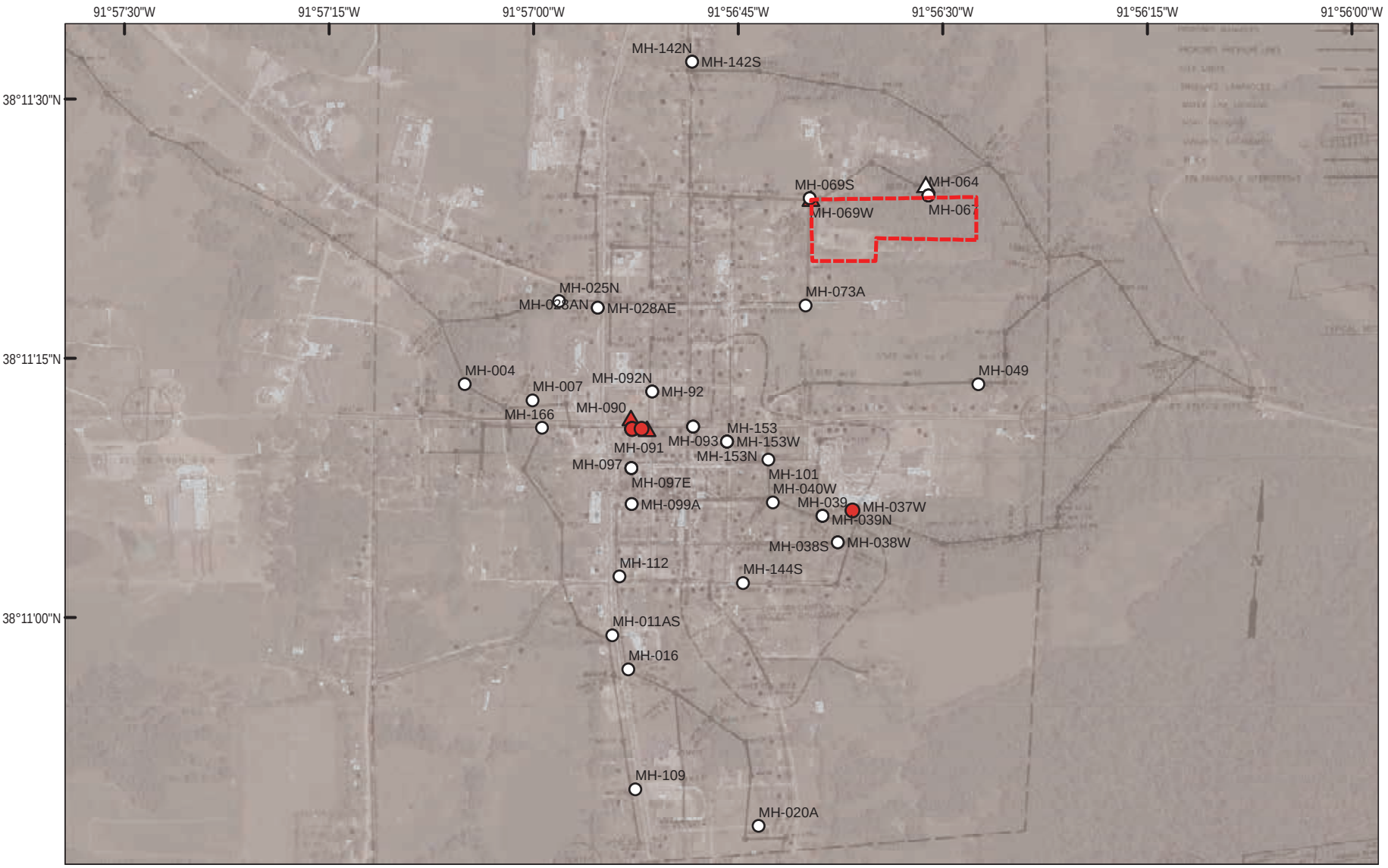
PCE concentration, in micrograms per liter, March 2016
- Less than 5
- 5 to 10
- 10 to 100
- 100 to 500
- 500 to 1,000

Estimated PCE concentration, in micrograms per liter, March 2016
- No Fill — Less than 5
- 5 to 10
- 10 to 100
- 100 to 500
- 500 to 1,000

Presumed PCE concentration of 0 micrograms per liter

0 250 500 Feet
0 125 250 Meters

Figure 3-08. Estimated spatial distribution of tetrachloroethene (PCE) concentrations in shallow groundwater above an altitude of 710 feet at the Vienna Wells site, Vienna, Missouri.



Map image is the intellectual property of Esri and is used herein under license.
Copyright © 2015 Esri and its licensors. All rights reserved.
Municipal sewer map from the city of Vienna, Missouri.
Universal Transverse Mercator projection zone 15
North American Datum of 1983

Explanation

PCE concentrations, in micrograms per liter (µg/L)

Former hat factory site

Portable GC samples

- Not detected below portable GC detection limit (2.65 µg/L)
- Below detection limit but measured by GC

Laboratory VOC samples

- Not detected below laboratory reporting limit (1 µg/L)
- Detected above laboratory detection limit and below reporting limit (1 µg/L)

0 0.05 0.1 0.2 Miles

0 0.05 0.1 0.2 Kilometers

Figure 3-09. Concentrations of tetrachloroethene (PCE) in portable gas chromatograph (GC) and laboratory volatile organic compound (VOC) sewer samples, Vienna, Missouri, 2012.

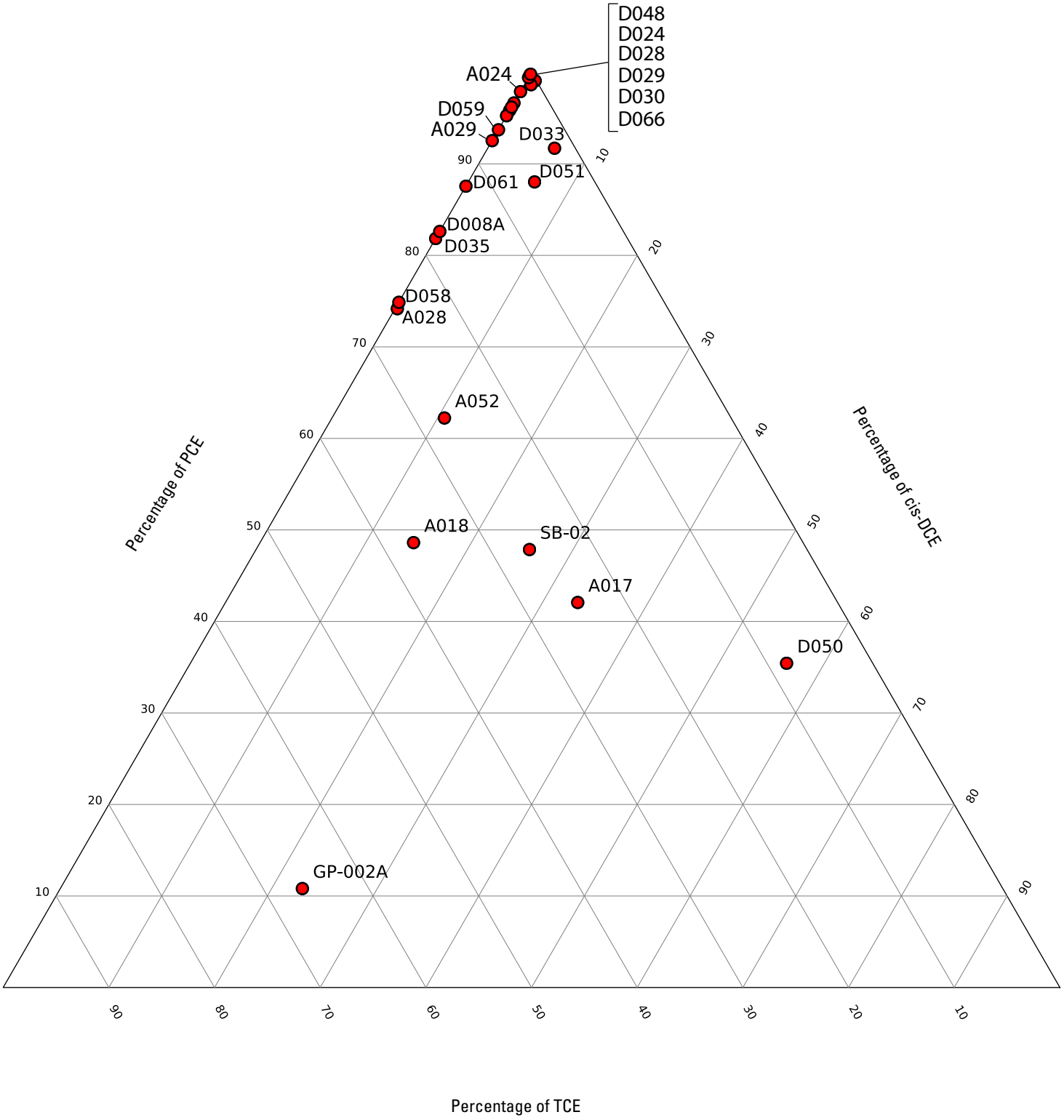


Figure 4-01. Percentage of tetrachloroethene (PCE), trichloroethene (TCE), and cis-1,2-dichloroethene (cis-DCE) by molar weight in soil samples, Vienna, Missouri, 2012–14.

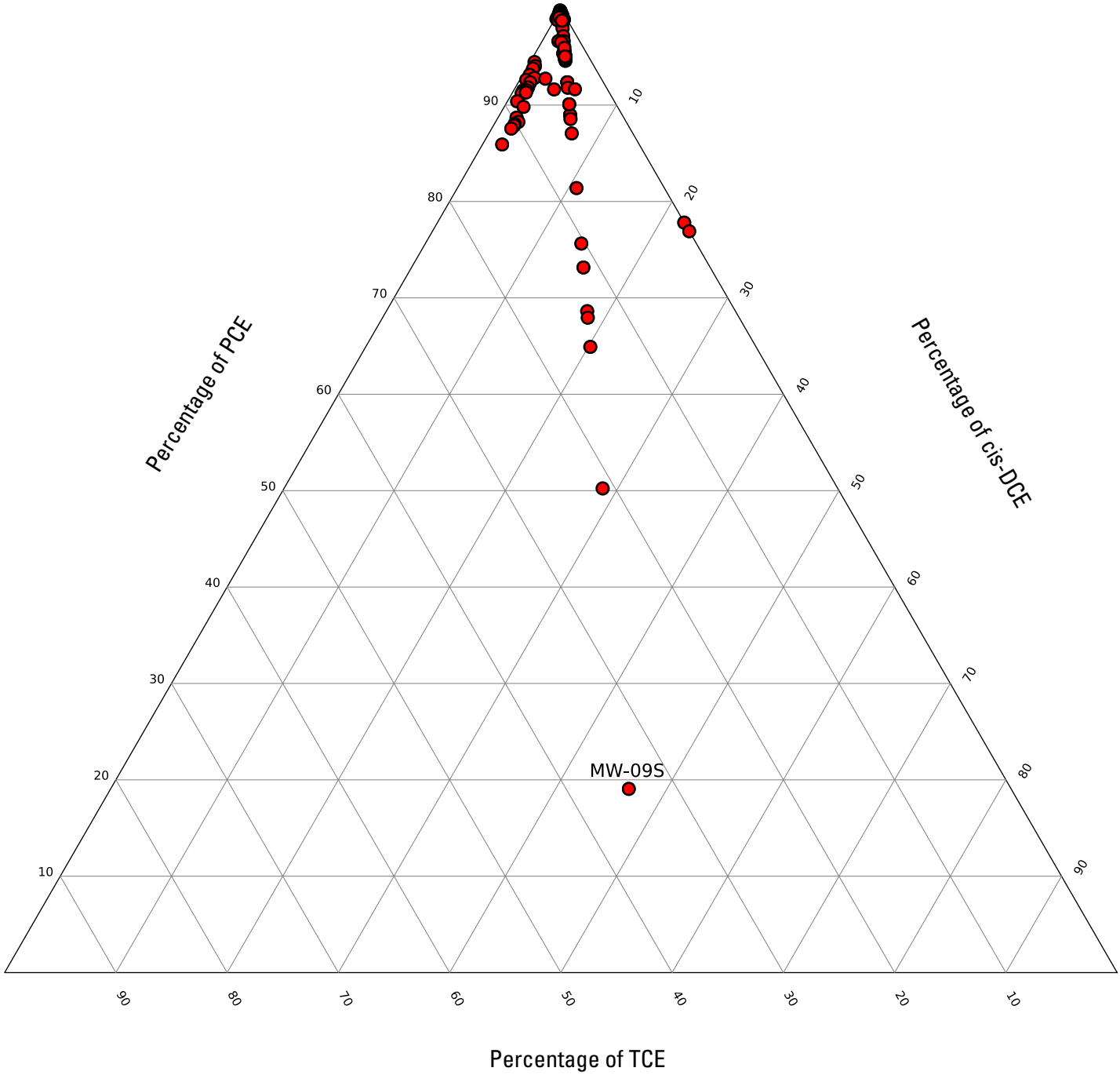


Figure 4-02. Percentage of tetrachloroethene (PCE), trichloroethene (TCE), and cis-1,2-dichloroethene (cis-DCE) by molar weight in groundwater samples, Vienna, Missouri, 2012-2014.

Appendix A: Historical Orthoimagery of the Former Hat Factory

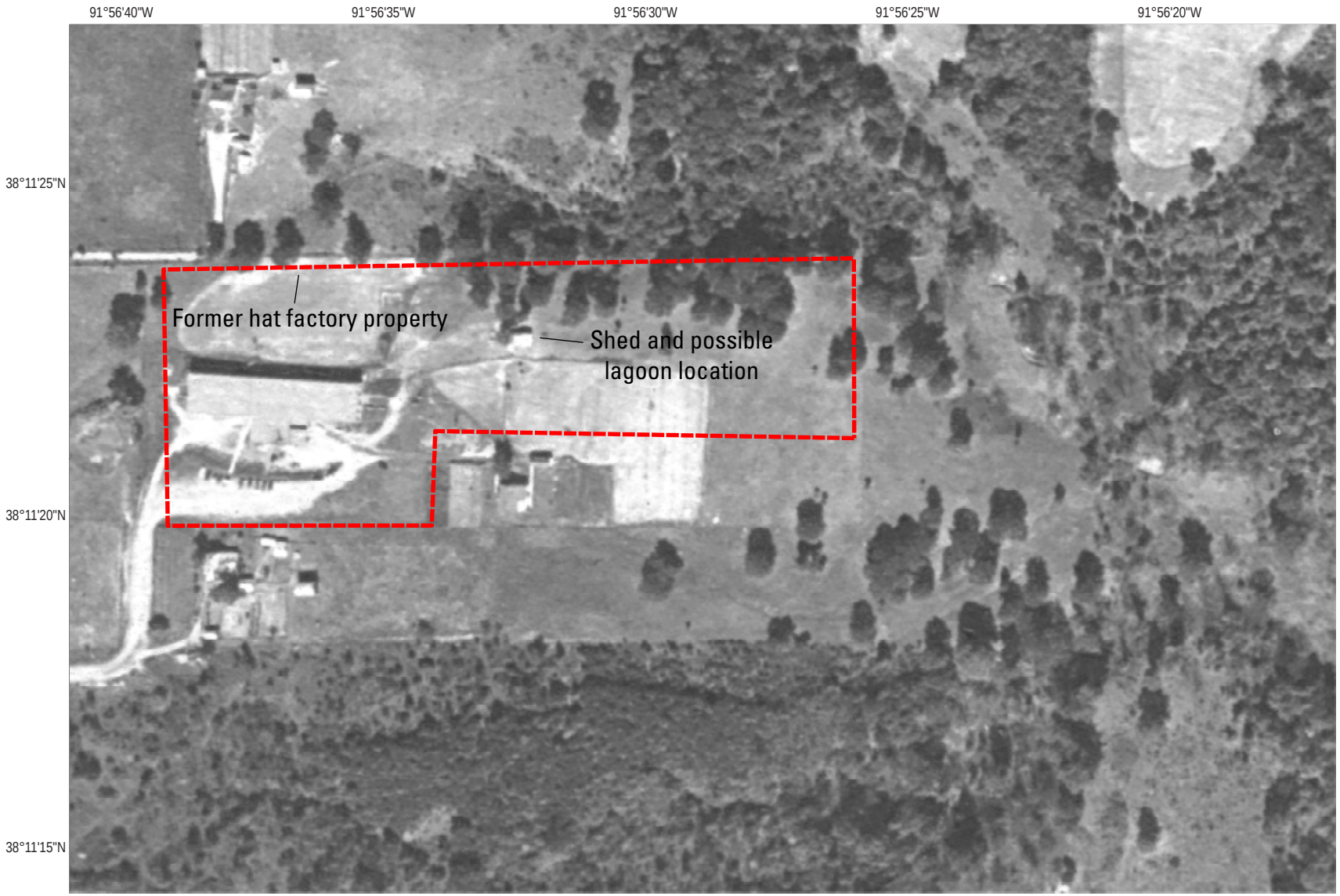


Figure A-01. The former hat factory and surrounding area, Missouri, 1955.

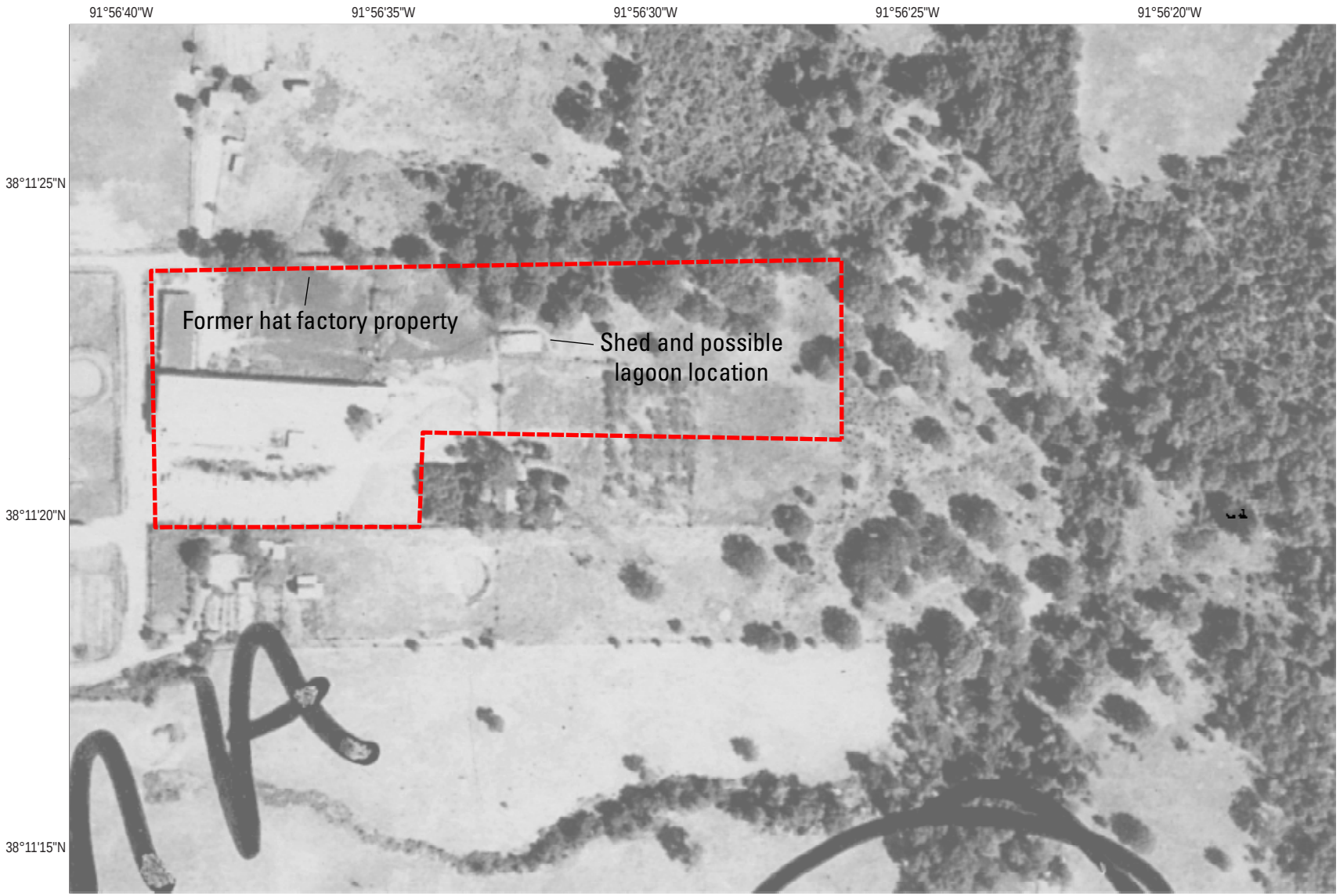


Figure A-02. The former hat factory and surrounding area, Missouri, 1967.

Figure A-03. The former hat factory and surrounding area, Missouri, 1995.

Appendix B: Data Tables for Soil, Water, and Tree-core Samples

Table B-01. Concentrations of VOCs in water samples analyzed using the portable gas chromatograph.

[TVOC, total volatile organic compounds; µg/L, microgram per liter; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; GW, groundwater; BH, borehole; --, sample not analyzed for constituent or measurement not made; ND, less than the detection limit; CS, cistern; DW, domestic well; UNK, unknown; MW, monitoring well; PS, public supply; SE, seep; SP, spring; SW, surface water; LK, lake; PL, pool; ST, stream; WA, water; DR, drill water; SN, sanitary sewer; TP, tap]

Sample identifier (fig. 3-07) [Short forms found in table D-01]	Media	Feature	Top of sampling interval, in feet	Bottom of sampling interval, in feet	Date	Time	TVOC (µg/L)	Concentration of constituents in µg/L						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
VIN-MW-01	GW	BH	0	40.00	05/29/2012	1345	--	15.50	ND	ND	ND	0.36	0.67	--
VIN-MW-01	GW	BH	35	40.00	05/30/2012	0820	--	24.70	ND	ND	ND	--	3.24	--
VIN-MW-01	GW	BH	35	40.00	05/30/2012	0820	--	27.00	ND	ND	ND	--	--	--
VIN-MW-01	GW	BH	45.7	60.00	06/01/2012	0840	--	24.30	ND	ND	ND	ND	ND	--
VIN-MW-01	GW	BH	45.7	60.00	06/01/2012	1015	--	19.30	ND	ND	ND	ND	13.00	--
VIN-MW-01	GW	BH	45.7	60.00	06/01/2012	1105	--	18.60	ND	ND	ND	ND	10.30	--
VIN-MW-01	GW	BH	45.7	60.00	06/01/2012	1225	--	9.72	ND	ND	ND	ND	1.06	--
VIN-MW-01	GW	BH	37.6	43.00	06/01/2012	1240	--	31.60	ND	ND	ND	ND	53.70	--
VIN-MW-01	GW	BH	45.7	60.00	06/01/2012	1345	--	14.30	ND	ND	ND	ND	1.75	--
VIN-MW-01	GW	BH	37.6	43.00	06/01/2012	1415	--	33.80	ND	ND	ND	ND	49.20	--
VIN-MW-01	GW	BH	37.6	43.00	06/01/2012	1430	--	25.90	ND	ND	ND	ND	39.10	--
VIN-MW-01	GW	BH	37.6	43.00	06/01/2012	1455	--	28.10	ND	ND	ND	ND	42.70	--
VIN-MW-01	GW	BH	37.6	43.00	06/04/2012	1015	--	25.00	ND	ND	ND	ND	14.10	--
VIN-MW-01	GW	BH	45.7	60.00	06/04/2012	1200	--	7.38	ND	ND	ND	ND	0.97	--
VIN-MW-02	GW	BH	0	30.00	06/13/2012	0905	--	29.50	11.70	ND	ND	ND	ND	--
VIN-MW-02	GW	BH	30	55.00	06/14/2012	0850	--	3.03	ND	ND	ND	ND	ND	--
VIN-MW-02	GW	BH	30	80.00	06/15/2012	0930	--	1.84	ND	ND	ND	ND	ND	--
VIN-MW-02	GW	BH	70	80.00	06/15/2012	1230	--	0.62	ND	ND	ND	ND	ND	--
VIN-MW-02	GW	BH	70	80.00	06/15/2012	1340	--	0.79	ND	ND	ND	ND	ND	--
VIN-MW-02	GW	BH	70	80.00	06/15/2012	1425	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-02	GW	BH	30	80.00	06/18/2012	0900	--	3.43	ND	ND	ND	ND	ND	--
VIN-MW-03	GW	BH	0	45.00	06/21/2012	0845	--	67.56	ND	ND	ND	ND	3.89	--
VIN-MW-03	GW	BH	55	60.00	06/21/2012	1350	--	3,430.00	ND	ND	ND	ND	ND	--
VIN-MW-03	GW	BH	40	60.00	06/22/2012	0900	--	418.00	ND	ND	ND	ND	ND	--
VIN-MW-03	GW	BH	40	60.00	06/22/2012	0900	--	615.00	ND	ND	ND	ND	ND	--
VIN-MW-03	GW	BH	40	60.00	06/22/2012	1110	--	1,000.00	ND	ND	ND	ND	ND	--
VIN-MW-03	GW	BH	40	60.00	06/22/2012	1145	--	576.00	ND	ND	ND	ND	ND	--
VIN-MW-03	GW	BH	40	60.00	06/22/2012	1220	--	930.00	ND	ND	ND	ND	ND	--
VIN-MW-04	GW	BH	55	60.00	06/27/2012	1345	--	10.10	ND	ND	ND	ND	ND	--
VIN-MW-04	GW	BH	55	65.00	06/28/2012	0705	--	7.26	ND	ND	ND	ND	ND	--
VIN-MW-04	GW	BH	55	65.00	06/28/2012	0810	--	22.40	ND	ND	ND	ND	ND	--
VIN-MW-04	GW	BH	55	65.00	06/28/2012	0840	--	22.30	ND	ND	ND	ND	ND	--
VIN-MW-04	GW	BH	55	65.00	06/28/2012	0920	--	18.70	ND	ND	ND	ND	ND	--
VIN-MW-03	GW	BH	51.7	51.70	09/05/2012	1105	--	9.31	ND	ND	ND	ND	ND	--
VIN-MW-04	GW	BH	45.5	45.50	09/05/2012	1125	--	5.77	ND	ND	ND	ND	ND	--
VIN-MW05	GW	BH	0	5.00	3/13/2014	0950	8.35	1.10	ND	ND	ND	ND	ND	--
VIN-MW05	GW	BH	0	0.00	3/21/2014	1000	128.70	97.20	ND	ND	ND	ND	ND	--
VIN-MW05	GW	BH	0	0.00	3/21/2014	1010	64.63	46.40	ND	ND	ND	ND	ND	--
VIN-MW05	GW	BH	20	75.00	3/25/2014	1010	97.42	ND	ND	ND	ND	ND	ND	--
VIN-MW05	GW	BH	20	75.00	3/25/2014	1010	--	80.40	ND	ND	ND	ND	ND	--
VIN-MW05	GW	BH	20	75.00	3/26/2014	0955	48.30	76.60	ND	ND	ND	ND	ND	--
VIN-D028	GW	BH	0	0.00	4/14/2014	0955	41.64	8.60	ND	ND	ND	ND	ND	ND
VIN-MW-06	GW	BH	25	25.00	9/25/2014	0915	--	1,620.00	ND	6.00	ND	ND	ND	--
VIN-MW-06	GW	BH	35	35.00	9/25/2014	1020	--	1,287.00	4.90	6.00	ND	ND	ND	--
VIN-MW-06	GW	BH	34	39.00	9/25/2014	1110	--	1,040.00	ND	ND	ND	ND	ND	--
VIN-MW-06	GW	BH	39	45.00	9/25/2014	1155	--	1,688.00	ND	ND	ND	ND	ND	--
VIN-MW-06	GW	BH	45	50.00	9/25/2014	1230	--	992.00	ND	ND	ND	ND	ND	--
VIN-MW-06	GW	BH	34	50.00	9/30/2014	0855	--	2,460.00	ND	ND	ND	ND	ND	--
VIN-MW-06	GW	BH	34	55.00	9/30/2014	0940	--	1,464.00	ND	ND	ND	ND	ND	--
VIN-MW-06	GW	BH	34	60.00	9/30/2014	1030	--	1,145.00	ND	ND	ND	ND	ND	--
VIN-MW-06	GW	BH	34	60.00	9/30/2014	1125	--	5,232.00	ND	ND	ND	ND	ND	--
VIN-MW-06	GW	BH	34	60.00	10/1/2014	0830	--	1,272.00	ND	ND	--	ND	ND	--
VIN-MW-06	GW	BH	34	65.00	10/1/2014	0930	--	744.00	ND	ND	--	ND	ND	--
VIN-MW-06	GW	BH	34	70.00	10/1/2014	1025	--	184.00	ND	ND	--	ND	ND	--
VIN-MW-06	GW	BH	34	75.00	10/1/2014	1100	--	726.00	ND	ND	--	ND	ND	--
VIN-MW-06	GW	BH	34	80.00	10/1/2014	1150	--	648.00	ND	ND	--	ND	ND	--
VIN-MW-06	GW	BH	34	85.00	10/1/2014	1235	--	649.28	ND	ND	--	ND	ND	--
VIN-MW-06	GW	BH	34	90.00	10/2/2014	1315	--	920.00	ND	ND	--	ND	ND	--
VIN-MW-06	GW	BH	34	90.00	10/2/2014	1355	--	776.00	ND	ND	--	ND	ND	--
VIN-MW-06	GW	BH	0	90.00	10/7/2014	0840	--	41.10	ND	ND	--	ND	ND	--
VIN-MW-06	GW	BH	34	90.00	10/7/2014	0900	--	755.00	ND	ND	--	ND	ND	--
VIN-MW-06	GW	BH	34	90.00	10/7/2014	0900	--	1,176.00	ND	ND	--	ND	ND	--
VIN-MW-06	GW	BH	34	95.00	10/7/2014	1010	--	382.08	ND	ND	--	ND	ND	--
VIN-MW-06	GW	BH	34	100.00	10/7/2014	1100	--	121.68	ND	ND	--	ND	ND	--
VIN-MW-06	GW	BH	34	100.00	10/7/2014	1100	--	75.90	ND	ND	--	ND	ND	--
VIN-MW-06	GW	BH	34	105.00	10/7/2014	1235	--	96.70	ND	ND	--	ND	ND	--
VIN-MW-06	GW	BH	34	110.00	10/7/2014	1340	--	165.00	ND	ND	--	0.79	0.97	--
VIN-MW-06	GW	BH	34	110.00	10/7/2014	1340	--	338.00	ND	ND	--	ND	ND	--
VIN-MW-06	GW	BH	0	0.00	10/8/2014	0830	--	164.00	ND	ND	--	ND	ND	--
VIN-MW-06	GW	BH	0	0.00	10/8/2014	0830	--	244.00	ND	ND	--	ND	ND	--
VIN-MW-06	GW	BH	34	110.00	10/8/2014	0845	--	1,360.00	ND	ND	--	ND	ND	--
VIN-MW-06	GW	BH	34	115.00	10/8/2014	0950	--	138.72	ND	ND	--	ND	ND	--
VIN-MW-06	GW	BH	34	120.00	10/8/2014	1055	--	137.76	ND	ND	--	ND	ND	--
VIN-MW-06	GW	BH	34	102.00	10/30/2014	0950	--	1,040.00	ND	ND	ND	ND	ND	--
VIN-MW-06	GW	BH	34	102.00	10/30/2014	1105	--	848.00	ND	ND	ND	ND	ND	--
VIN-MW-07	GW	BH	0	12.30	11/3/2014	1030	--	240.00	ND	ND	ND	ND	ND	--
VIN-MW-06	GW	BH	34	102.00	11/3/2014	1045	--	328.00	ND	ND	ND	ND	ND	--
VIN-MW-06	GW	BH	34	102.00	11/3/2014	1205	--	1,096.00	ND	ND	ND	ND	ND	--
VIN-MW-06	GW	BH	34	102.00	11/3/2014	1335	--	1,600.00	ND	ND	ND	ND	ND	--
VIN-MW-07	GW	BH	0	18.97	11/5/2014	0905	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-07	GW	BH	0	18.97	11/5/2014	0905	--	55.70	ND	ND	ND	ND	ND	--
VIN-MW-06	GW	BH	34	102.00	11/5/2014	0935	--	808.00	ND	ND	ND	ND	ND	--

Table B-01. Concentrations of VOCs in water samples analyzed using the portable gas chromatograph.—Continued

[TVOC, total volatile organic compounds; µg/L, microgram per liter; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; GW, groundwater; BH, borehole; --, sample not analyzed for constituent or measurement not made; ND, less than the detection limit; CS, cistern; DW, domestic well; UNK, unknown; MW, monitoring well; PS, public supply; SE, seep; SP, spring; SW, surface water; LK, lake; PL, pool; ST, stream; WA, water; DR, drill water; SN, sanitary sewer; TP, tap]

Sample identifier (fig. 3-07) [Short forms found in table D-01]	Media	Feature	Top of sampling interval, in feet	Bottom of sampling interval, in feet	Date	Time	TVOC (µg/L)	Concentration of constituents in µg/L						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
VIN-MW-07	GW	BH	0	35.00	11/5/2014	1030	--	16.40	ND	ND	ND	ND	ND	--
VIN-MW-06	GW	BH	34	102.00	11/5/2014	1042	--	1,072.00	ND	ND	ND	ND	ND	--
VIN-MW-06	GW	BH	34	102.00	11/5/2014	1310	--	774.00	2.90	ND	ND	ND	ND	--
VIN-MW-06	GW	BH	34	102.00	11/6/2014	0920	--	256.00	ND	ND	ND	ND	ND	--
VIN-MW-06A	GW	BH	0	58.50	11/6/2014	0940	--	640.00	ND	ND	ND	ND	ND	--
VIN-MW-07	GW	BH	0	35.00	11/6/2014	1000	--	2,600.00	ND	ND	ND	ND	ND	--
VIN-MW-07	GW	BH	35	40.00	11/6/2014	1005	--	8.00	ND	ND	ND	ND	ND	--
VIN-MW-07	GW	BH	0	35.00	11/6/2014	1015	--	1.70	ND	ND	--	ND	ND	--
VIN-MW-06	GW	BH	34	102.00	11/6/2014	1050	--	600.00	ND	ND	ND	ND	ND	--
VIN-MW-06	GW	BH	34	102.00	11/6/2014	1235	--	440.00	ND	ND	ND	ND	ND	--
VIN-MW-06	GW	BH	34	102.00	11/6/2014	1320	--	816.00	ND	ND	ND	ND	ND	--
VIN-MW-06	GW	BH	34	102.00	11/6/2014	1400	--	952.00	ND	ND	ND	ND	ND	--
VIN-MW-08	GW	BH	90	185.00	8/7/15	0750	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	GW	BH	90	260.00	8/7/15	1050	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	GW	BH	90	260.00	8/7/15	1100	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	GW	BH	90	260.00	8/10/15	0823	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	GW	BH	90	260.00	8/10/15	UNK	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	GW	BH	0	0.00	8/11/15	0905	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	GW	BH	90	125.00	8/11/15	0920	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	GW	BH	90	125.00	8/11/15	0923	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	GW	BH	90	145.00	8/11/15	0925	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	GW	BH	90	165.00	8/11/15	0930	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	GW	BH	90	185.00	8/11/15	0933	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	GW	BH	90	185.00	8/11/15	0935	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	GW	BH	90	205.00	8/11/15	0938	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	GW	BH	90	225.00	8/11/15	0940	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	GW	BH	90	245.00	8/11/15	0942	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	GW	BH	90	260.00	8/11/15	0945	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	GW	BH	90	325.00	9/22/15	1245	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	GW	BH	145	145.00	9/22/15	1300	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	GW	BH	165	165.00	9/22/15	1315	--	ND	ND	ND	ND	ND	0.80	--
VIN-MW-08	GW	BH	175	175.00	9/22/15	1330	--	ND	ND	ND	ND	ND	1.10	--
VIN-MW-08	GW	BH	215	215.00	9/22/15	1350	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	GW	BH	320	320.00	9/22/15	1430	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	GW	BH	290	290.00	9/22/15	UNK	--	ND	ND	ND	ND	ND	ND	--
VIN-JW-01	GW	CS	--	--	6/27/2014	0940	--	32.90	ND	ND	--	ND	ND	--
VIN-JW-01	GW	CS	--	--	6/27/2014	0940	--	65.20	ND	ND	--	ND	ND	--
VIN-JW-01	GW	CS	--	--	9/23/2014	1145	--	43.30	0.80	ND	ND	ND	ND	--
VIN-JW-01	GW	CS	--	--	3/9/16	1150	--	14.00	ND	ND	ND	ND	ND	--
VIN-MK-01	GW	DW	--	--	11/15/2011	1050	--	10.04	ND	ND	--	ND	ND	--
004JR	GW	DW	--	--	11/15/2011	1115	--	ND	ND	ND	--	ND	ND	--
MK-02	GW	DW	--	--	11/15/2011	1150	--	ND	ND	ND	--	ND	ND	--
MK-03	GW	DW	--	--	11/15/2011	1240	--	ND	ND	ND	--	ND	ND	--
003JR	GW	DW	--	--	11/15/2011	1300	--	ND	ND	ND	--	ND	ND	--
MK-04	GW	DW	--	--	11/15/2011	1320	--	ND	ND	ND	--	ND	ND	--
007JR	GW	DW	--	--	11/15/2011	1400	--	ND	ND	ND	--	ND	ND	--
013JR	GW	DW	--	--	11/15/2011	1420	--	ND	ND	ND	--	ND	ND	--
MK-05	GW	DW	--	--	11/15/2011	1420	--	ND	ND	ND	--	ND	ND	--
MK-06	GW	DW	--	--	11/15/2011	1525	--	ND	ND	ND	--	ND	ND	--
MK-07	GW	DW	--	--	11/16/2011	1050	--	ND	ND	ND	ND	ND	ND	--
017JR	GW	DW	--	--	11/16/2011	1120	--	ND	ND	ND	--	ND	ND	--
020JR	GW	DW	--	--	11/16/2011	1215	--	ND	ND	ND	--	ND	ND	--
MK-09	GW	DW	--	--	11/16/2011	1245	--	ND	ND	ND	ND	ND	ND	--
MK-10	GW	DW	--	--	11/16/2011	1310	--	ND	ND	ND	ND	ND	ND	--
022JR	GW	DW	--	--	11/16/2011	1320	--	ND	ND	ND	ND	ND	ND	--
MK-11	GW	DW	--	--	11/16/2011	1420	--	ND	ND	ND	ND	ND	ND	--
MK-12	GW	DW	--	--	11/16/2011	1515	--	ND	ND	ND	ND	ND	ND	--
027JR	GW	DW	--	--	11/16/2011	1525	--	ND	ND	ND	ND	ND	ND	--
029JR	GW	DW	--	--	11/16/2011	1525	--	ND	ND	ND	ND	ND	ND	--
028JR	GW	DW	--	--	11/16/2011	UNK	--	ND	ND	ND	ND	ND	ND	--
MK-13	GW	DW	--	--	11/17/2011	1025	--	ND	ND	ND	ND	ND	ND	--
MK-14	GW	DW	--	--	11/17/2011	1155	--	ND	ND	ND	ND	ND	ND	--
MK-15	GW	DW	--	--	11/17/2011	1240	--	ND	ND	ND	ND	ND	ND	--
041JR	GW	DW	--	--	11/17/2011	1255	--	ND	ND	ND	ND	ND	ND	--
MK-16	GW	DW	--	--	11/17/2011	1405	--	ND	ND	ND	ND	ND	ND	--
MK-18	GW	DW	--	--	11/17/2011	1515	--	ND	ND	ND	ND	ND	ND	--
053JR	GW	DW	--	--	11/18/2011	1155	--	ND	ND	ND	ND	ND	ND	--
057JR	GW	DW	--	--	11/18/2011	1250	--	ND	ND	ND	ND	ND	ND	--
065JR	GW	DW	--	--	11/18/2011	1355	--	ND	ND	ND	ND	ND	ND	--
067JR	GW	DW	--	--	11/18/2011	1450	--	ND	ND	ND	ND	ND	ND	--
MK-19	GW	DW	--	--	11/22/2011	1025	--	ND	ND	ND	ND	ND	ND	--
MK-20	GW	DW	--	--	11/22/2011	1140	--	ND	ND	ND	ND	ND	ND	--
MK-20	GW	DW	--	--	11/22/2011	1140	--	0.52	ND	ND	ND	ND	ND	--
MK-20	GW	DW	--	--	11/22/2011	1140	--	ND	ND	ND	ND	ND	ND	--
MK-21	GW	DW	--	--	11/22/2011	1350	--	ND	ND	ND	ND	ND	ND	--
MK-22	GW	DW	--	--	11/22/2011	1430	--	ND	ND	ND	ND	ND	ND	--
MK-23	GW	DW	--	--	11/22/2011	1505	--	ND	ND	ND	ND	ND	ND	--
069JR	GW	DW	--	--	11/28/2011	1055	--	ND	ND	ND	ND	ND	ND	--
MK-29	GW	DW	--	--	11/28/2011	1105	--	ND	ND	ND	ND	ND	ND	--
086JR	GW	DW	--	--	11/28/2011	1145	--	ND	ND	ND	ND	ND	ND	--
MK-30	GW	DW	--	--	11/28/2011	1210	--	ND	ND	ND	ND	ND	ND	--

Table B-01. Concentrations of VOCs in water samples analyzed using the portable gas chromatograph.—Continued

[TVOC, total volatile organic compounds; µg/L, microgram per liter; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; GW, groundwater; BH, borehole; --, sample not analyzed for constituent or measurement not made; ND, less than the detection limit; CS, cistern; DW, domestic well; UNK, unknown; MW, monitoring well; PS, public supply; SE, seep; SP, spring; SW, surface water; LK, lake; PL, pool; ST, stream; WA, water; DR, drill water; SN, sanitary sewer; TP, tap]

Sample identifier (fig. 3-07) [Short forms found in table D-01]	Media	Feature	Top of sampling interval, in feet	Bottom of sampling interval, in feet	Date	Time	TVOC (µg/L)	Concentration of constituents in µg/L						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
071JR	GW	DW	--	--	11/28/2011	1220	--	ND	ND	ND	ND	ND	ND	--
087JR	GW	DW	--	--	11/28/2011	1245	--	ND	ND	ND	ND	ND	ND	--
073JR	GW	DW	--	--	11/28/2011	1305	--	ND	ND	ND	ND	ND	ND	--
MK-34	GW	DW	--	--	11/28/2011	1310	--	ND	ND	ND	ND	ND	ND	--
075JR	GW	DW	--	--	11/28/2011	1340	--	ND	ND	ND	ND	ND	ND	--
MK-35	GW	DW	--	--	11/28/2011	1340	--	ND	ND	ND	ND	ND	ND	--
MK-43	GW	DW	--	--	11/28/2011	1500	--	ND	ND	ND	ND	ND	ND	--
077JR	GW	DW	--	--	11/28/2011	1515	--	ND	ND	ND	ND	ND	ND	--
MK-44	GW	DW	--	--	11/28/2011	1540	--	ND	ND	ND	ND	ND	ND	--
078JR	GW	DW	--	--	11/28/2011	1555	--	ND	ND	ND	ND	ND	ND	--
MK-49	GW	DW	--	--	11/29/2011	1115	--	ND	ND	ND	ND	ND	ND	--
MK-50	GW	DW	--	--	11/29/2011	1155	--	ND	ND	ND	ND	ND	ND	--
MK-51	GW	DW	--	--	11/29/2011	1240	--	ND	ND	ND	ND	ND	ND	--
MK-52	GW	DW	--	--	11/29/2011	1405	--	ND	ND	ND	ND	ND	ND	--
VIN-MK-01	GW	DW	--	--	11/30/2011	1045	--	7.52	ND	ND	ND	ND	ND	--
VIN-MK-01	GW	DW	--	--	11/30/2011	1050	--	8.20	0.28	ND	ND	ND	ND	--
VIN-MK-01	GW	DW	--	--	11/30/2011	1110	--	9.84	0.36	ND	ND	ND	ND	--
VIN-MK-01	GW	DW	--	--	11/30/2011	1130	--	9.52	0.32	ND	ND	ND	ND	--
VIN-MK-01	GW	DW	--	--	11/30/2011	1145	--	9.76	0.28	ND	ND	ND	ND	--
VIN-MK-01	GW	DW	84	84.00	01/05/2012	1200	--	2.80	ND	ND	ND	ND	ND	--
VIN-MK-01	GW	DW	94	94.00	01/05/2012	1222	--	2.80	ND	ND	ND	ND	ND	--
VIN-MK-01	GW	DW	104	104.00	01/05/2012	1238	--	3.40	ND	ND	ND	ND	ND	--
VIN-MK-01	GW	DW	114	114.00	01/05/2012	1254	--	3.10	ND	ND	ND	ND	ND	--
VIN-MK-01	GW	DW	124	124.00	01/05/2012	1307	--	3.30	ND	ND	ND	ND	ND	--
VIN-MK-01	GW	DW	134	134.00	01/05/2012	1322	--	3.70	ND	ND	ND	ND	ND	--
VIN-MK-01	GW	DW	143	143.00	01/05/2012	1335	--	3.70	ND	ND	ND	ND	ND	--
VIN-MK-01	GW	DW	--	--	01/06/2012	1038	--	9.00	ND	ND	ND	ND	ND	--
VIN-MK-01	GW	DW	84	84.00	01/06/2012	1124	--	11.08	0.32	ND	ND	ND	ND	--
VIN-MK-01	GW	DW	84	84.00	01/06/2012	1124	--	ND	ND	ND	ND	ND	ND	--
VIN-MK-01	GW	DW	94	94.00	01/06/2012	1137	--	6.68	ND	ND	ND	ND	ND	--
VIN-MK-01	GW	DW	104	104.00	01/06/2012	1152	--	9.20	ND	ND	ND	ND	ND	--
VIN-MK-01	GW	DW	114	114.00	01/06/2012	1206	--	6.88	ND	ND	ND	ND	ND	--
VIN-MK-01	GW	DW	124	124.00	01/06/2012	1221	--	8.64	ND	ND	ND	ND	ND	--
VIN-MK-01	GW	DW	134	134.00	01/06/2012	1236	--	9.04	ND	ND	ND	ND	ND	--
VIN-MK-01	GW	DW	143	143	01/06/2012	1251	--	5.68	ND	ND	ND	ND	ND	--
VIN-MK-01	GW	DW	--	--	01/06/2012	1300	--	12.72	0.32	ND	ND	ND	ND	--
VIN-MK-01	GW	DW	--	--	1/18/2013	1000	--	5.20	ND	ND		ND	ND	--
VIN-MK-01	GW	DW	--	--	1/18/2013	1000	--	6.24	ND	ND		ND	ND	--
VIN-MK-01	GW	DW	--	--	5/1/2013	0935	--	8.30	ND	ND	--	ND	ND	--
VIN-MK-01	GW	DW	--	--	3/17/2014	1230	20.27	13.20	ND	ND	ND	ND	ND	--
VIN-MK-01	GW	DW	--	--	5/21/2014	1005	--	7.41	0.48	ND	ND	ND	ND	--
VIN-MK-01	GW	DW	--	--	8/13/2014	1030	--	9.30	ND	ND	ND	ND	ND	--
VIN-MK-01	GW	DW	--	--	9/23/2014	1400	--	10.80	ND	ND	ND	ND	ND	--
VIN-MK-01	GW	DW	--	--	4/16/15	1030	--	8.50	ND	ND	ND	ND	ND	--
VIN-MK-01	GW	DW	--	--	3/11/16	1115	--	5.40	ND	ND	ND	ND	ND	--
VIN-MW-03D	GW	MW	52	64.00	1/17/2013	1100	--	1,990.00	4.50	ND	ND	ND	ND	--
VIN-MW-04D	GW	MW	53	69.40	1/17/2013	1230	--	9.80	ND	ND		ND	ND	--
VIN-MW-01	GW	MW	46.5	60.00	1/17/2013	UNK	--	0.62	ND	ND	ND	ND	ND	--
VIN-MW-01A	GW	MW	19	42.20	1/17/2013	UNK	--	19.70	ND	ND		ND	ND	--
VIN-MW-02D	GW	MW	65	79.00	1/17/2013	UNK	--	0.76	ND	ND	ND	ND	ND	--
VIN-MW-02D	GW	MW	65	79.00	4/30/2013	1100	--	2.00	ND	ND	--	ND	ND	--
VIN-MW-04S	GW	MW	30.6	45.00	4/30/2013	1150	--	19.40	ND	ND	--	ND	ND	--
VIN-MW-04D	GW	MW	53	69.40	4/30/2013	1300	--	11.50	ND	ND	--	ND	ND	--
VIN-MW-01	GW	MW	46.5	60.00	4/30/2013	1402	--	3.30	ND	ND	--	ND	ND	--
VIN-MW-01A	GW	MW	19	42.20	4/30/2013	1520	--	44.70	ND	ND	--	ND	ND	--
VIN-MW-03S	GW	MW	30.6	49.40	5/1/2013	1055	--	151.50	ND	ND	ND	ND	ND	--
VIN-MW-03D	GW	MW	52	64.00	5/1/2013	1100	--	140.00	ND	ND	--	ND	ND	--
VIN-MW-03D	GW	MW	52	64.00	5/1/2013	1100	--	230.67	ND	ND	ND	ND	ND	--
VIN-MW-01	GW	MW	46.5	60.00	3/19/2014	1045	8.27	2.80	ND	ND	ND	ND	ND	--
VIN-MW-01A	GW	MW	19	42.20	3/19/2014	1245	98.92	78.00	ND	ND	ND	ND	ND	--
VIN-MW-03D	GW	MW	52	64.00	3/19/2014	1350	108.90	62,400.00	ND	ND	ND	ND	ND	--
VIN-MW-03D	GW	MW	52	64.00	3/19/2014	1350	63.67	1,280.00	ND	ND	ND	ND	ND	--
VIN-MW-03D	GW	MW	52	64.00	3/19/2014	1350	--	968.00	ND	ND	ND	ND	ND	--
VIN-MW-03D	GW	MW	52	64.00	3/19/2014	1350	--	1,328.00	ND	ND	ND	ND	ND	--
VIN-MW-03S	GW	MW	30.6	49.40	3/19/2014	1450	128.60	123.80	ND	ND	ND	3.80	ND	--
VIN-MW-01	GW	MW	46.5	60.00	5/20/2014	1015	--	1.71	ND	ND	ND	ND	ND	--
VIN-MW-01A	GW	MW	19	42.20	5/20/2014	1100	--	33.50	ND	ND	ND	ND	ND	--
VIN-MW-03D	GW	MW	52	64.00	5/20/2014	1230	--	14,000.00	ND	ND	ND	ND	ND	--
VIN-MW-02D	GW	MW	65	79.00	8/11/2014	1115	--	3.50	ND	ND	ND	ND	ND	--
VIN-MW-04D	GW	MW	53	69.40	8/11/2014	1245	--	6.10	ND	ND	ND	ND	ND	--
VIN-MW-01	GW	MW	46.5	60.00	8/12/2014	1030	--	2.30	ND	ND	ND	ND	ND	--
VIN-MW-01A	GW	MW	19	42.20	8/12/2014	1100	--	36.40	ND	ND	ND	ND	ND	--
VIN-MW-03D	GW	MW	52	64.00	8/12/2014	1215	--	913.00	1.90	ND	ND	ND	ND	--
VIN-MW-03D	GW	MW	52	64.00	8/12/2014	1215	--	1,120.00	ND	ND	ND	ND	ND	--
VIN-MW-02D	GW	MW	65	79.00	9/22/2014	1300	--	2.60	ND	ND	ND	ND	ND	--
VIN-MW-04D	GW	MW	53	69.40	9/22/2014	1400	--	5.60	ND	ND	ND	ND	ND	--
VIN-MW-01	GW	MW	46.5	60.00	9/23/2014	1030	--	1.40	ND	ND	ND	ND	ND	--
VIN-MW-01A	GW	MW	19	42.20	9/23/2014	1115	--	27.50	ND	ND	ND	ND	ND	--
VIN-MW-03S	GW	MW	30.6	49.40	9/24/2014	1045	--	68.80	ND	ND	ND	ND	ND	--
VIN-MW-05S	GW	MW	32	45.00	9/24/2014	1045	--	64.80	ND	ND	ND	ND	ND	--
VIN-MW-05D	GW	MW	62	75.00	9/24/2014	1150	--	68.40	ND	ND	ND	ND	ND	--

Table B-01. Concentrations of VOCs in water samples analyzed using the portable gas chromatograph.—Continued

[TVOC, total volatile organic compounds; µg/L, microgram per liter; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; GW, groundwater; BH, borehole; --, sample not analyzed for constituent or measurement not made; ND, less than the detection limit; CS, cistern; DW, domestic well; UNK, unknown; MW, monitoring well; PS, public supply; SE, seep; SP, spring; SW, surface water; LK, lake; PL, pool; ST, stream; WA, water; DR, drill water; SN, sanitary sewer; TP, tap]

Sample identifier (fig. 3-07) [Short forms found in table D-01]	Media	Feature	Top of sampling interval, in feet	Bottom of sampling interval, in feet	Date	Time	TVOC (µg/L)	Concentration of constituents in µg/L						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
VIN-MW-03D	GW	MW	52	64.00	9/24/2014	1300	--	1,080.00	ND	ND	ND	ND	ND	--
VIN-MW-05D	GW	MW	62	75.00	4/13/15	1300	--	11.90	ND	ND	ND	ND	ND	--
VIN-MW-05S	GW	MW	32	45.00	4/13/15	1350	--	84.40	ND	ND	ND	ND	ND	--
VIN-MW-02D	GW	MW	65	79.00	4/14/15	1130	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-04D	GW	MW	53	69.40	4/14/15	1310	--	4.10	ND	ND	ND	ND	ND	--
VIN-MW-04S	GW	MW	30.6	45.00	4/14/15	1330	--	3.50	ND	ND	ND	ND	ND	--
VIN-MW-01	GW	MW	46.5	60.00	4/14/15	1540	--	1.00	ND	ND	ND	ND	ND	--
VIN-MW-01A	GW	MW	19	42.20	4/15/15	1110	--	28.60	ND	ND	ND	ND	ND	--
VIN-MW-03D	GW	MW	52	64.00	4/15/15	1220	--	548.00	ND	ND	ND	ND	ND	--
VIN-MW-06	GW	MW	104	119.00	4/20/15	1150	--	787.00	2.80	ND	ND	ND	ND	--
VIN-MW-06A	GW	MW	34	94.00	4/20/15	1340	--	2,172.00	2.40	ND	ND	ND	ND	--
VIN-MW-06A	GW	MW	34	94.00	4/20/15	1341	--	1,740.00	2.40	ND	ND	ND	ND	--
VIN-MW-06A	GW	MW	34	94.00	4/20/15	1341	--	1,746.80	ND	ND	ND	ND	ND	--
VIN-MW-07	GW	MW	35	53.00	4/21/15	1130	--							--
VIN-MW-07	GW	MW	35	53.00	4/21/15	1130	--	38.70	ND	ND	ND	ND	ND	--
VIN-MW-01	GW	MW	46.5	60.00	3/10/16	1115	--	1.70	ND	ND	ND	ND	ND	--
VIN-MW-01A	GW	MW	19	42.20	3/11/16	1250	--	18.00	ND	ND	ND	ND	ND	--
VIN-MW-04D	GW	MW	53	69.40	3/11/16	1350	--	7.20	ND	ND	ND	ND	ND	--
VIN-MW-04S	GW	MW	30.6	45.00	3/11/16	1400	--	8.50	ND	ND	ND	ND	ND	--
VIN-MW-05D	GW	MW	62	75.00	3/14/16	1120	--	5.50	ND	ND	ND	ND	ND	--
VIN-MW-05S	GW	MW	32	45.00	3/14/16	1200	--	54.50	ND	ND	ND	ND	ND	--
VIN-MW-03D	GW	MW	52	64.00	3/14/16	1310	--	1,056.00	ND	ND	ND	ND	ND	--
VIN-MW-02D	GW	MW	65	79.00	3/14/16	1320	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-02D	GW	MW	65	79.00	3/14/16	1320	--	2.90	ND	ND	ND	ND	ND	--
VIN-MW-03S	GW	MW	30.6	49.40	3/14/16	UNK	--	27.60	ND	ND	ND	ND	ND	--
VIN-MW-06	GW	MW	104	119.00	3/15/16	1040	--	992.00	ND	ND	ND	ND	ND	--
VIN-MW-06	GW	MW	104	119.00	3/15/16	1041	--	1,088.00	ND	ND	ND	ND	ND	--
VIN-MW-06A	GW	MW	34	94.00	3/15/16	1155	--	1,584.00	ND	ND	ND	ND	ND	--
VIN-MW-09D	GW	MW	25	40.00	3/15/16	1330	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-09S	GW	MW	0	14.00	3/15/16	1410	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08A	GW	MW	90	175.00	3/17/16	1400	--	1.50	ND	ND	ND	ND	ND	--
VIN-MW-08A	GW	MW	90	175.00	3/17/16	1400	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	GW	MW	265	324.00	3/17/16	1415	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-02D	GW	MW	65	79.00	UNK	1120	7.34	2.20	ND	ND	ND	ND	ND	--
VIN-MW-02D	GW	MW	65	79.00	UNK	1120	7.34	2.20	ND	ND	ND	ND	ND	--
VIN-MW-04D	GW	MW	53	69.40	UNK	1230	--	3.70	ND	ND	ND	ND	ND	--
VIN-MW-04D	GW	MW	53	69.40	UNK	1230	--	3.70	ND	ND	ND	ND	ND	--
VIN-MW-04D	GW	MW	53	69.40	UNK	1230	13.35	7.70	ND	ND	ND	ND	ND	--
VIN-MW-04D	GW	MW	53	69.40	UNK	1230	13.35	7.70	ND	ND	ND	ND	ND	--
VIN-COV-03	GW	PS	--	--	1/17/2013	1010	--	5.30	ND	ND		ND	ND	--
VIN-COV-01	GW	PS	--	--	1/17/2013	1045	--	1.70	ND	ND		ND	ND	--
VIN-COV-03	GW	PS	--	--	5/1/2013	1300	--	7.00	ND	ND	--	ND	ND	--
VIN-COV-01	GW	PS	--	--	5/1/2013	1400	--	1.60	ND	ND	--	ND	ND	--
VIN-COV-03	GW	PS	--	--	3/17/2014	1441	19.34	10.10	ND	ND	ND	ND	ND	--
VIN-COV-01	GW	PS	--	--	5/21/2014	1100	--	1.44	ND	ND	ND	ND	ND	--
VIN-COV-03	GW	PS	--	--	5/21/2014	1145	--	5.81	0.43	ND	ND	ND	ND	--
VIN-COV-01	GW	PS	--	--	8/13/2014	1130	--	ND	ND	ND	ND	ND	ND	--
VIN-COV-01	GW	PS	--	--	8/13/2014	1230	--	4.50	ND	ND	ND	ND	ND	--
VIN-COV-01	GW	PS	--	--	9/24/2014	1310	--	0.90	ND	ND	ND	ND	ND	--
VIN-COV-03	GW	PS	--	--	9/24/2014	1330	--	7.50	0.40	ND	ND	ND	ND	--
VIN-COV-03	GW	PS	--	--	4/20/15	1425	--							--
VIN-COV-03	GW	PS	--	--	4/20/15	1425	--	7.70	ND	ND	ND	ND	ND	--
VIN-COV-01	GW	PS	--	--	4/20/15	1520	--	ND	ND	ND	ND	ND	ND	--
VIN-COV-01	GW	PS	--	--	3/9/16	UNK	--	ND	ND	ND	ND	ND	ND	--
VIN-COV-03	GW	PS	--	--	3/10/16	1205	--	5.00	ND	ND	ND	ND	ND	--
PBV-09	GW	SE	--	--	09/28/2011	1020	--	ND	ND	ND	ND	ND	ND	--
PBV-20	GW	SE	--	--	09/28/2011	1435	--	ND	ND	ND	ND	ND	ND	--
P004	GW	SE	--	--	3/13/2014	1159	9.07	ND	ND	ND	ND	ND	ND	--
P006	GW	SE	--	--	3/18/2014	1400	13.17	ND	ND	ND	ND	ND	ND	--
A033	GW	SE	--	--	3/18/2014	1402	9.41	0.90	ND	ND	ND	ND	ND	--
A027	GW	SE	--	--	3/20/2014	0849	2.60	ND	ND	ND	ND	ND	ND	--
A028	GW	SE	--	--	3/20/2014	0851	2.86	ND	ND	ND	ND	ND	ND	--
A017	GW	SE	--	--	3/20/2014	0926	4.15	1.20	ND	ND	ND	ND	ND	--
A023	GW	SE	--	--	3/20/2014	1100	1.39	ND	ND	ND	ND	ND	ND	--
M-14	GW	SP	--	--	09/27/2011	1510	--	ND	ND	ND	0.50	ND	ND	--
LB-19	GW	SP	--	--	09/28/2011	1557	--	ND	ND	ND	ND	ND	ND	--
LB-28	GW	SP	--	--	09/29/2011	1032	--	ND	ND	ND	ND	ND	ND	--
LB-22	GW	SP	--	--	09/29/2011	UNK	--							--
MK-17	GW	SP	--	--	11/17/2011	1500	--	ND	ND	ND	ND	ND	ND	--
VIN-WP-020	GW	SP	0	0.00	03/12/2012	1045	--	1.30	ND	ND	ND	ND	ND	--
PB-582	GW	SP	--	--	05/08/2012	1115	--	ND	ND	ND	ND	ND	ND	--
VIN-WP-020	GW	SP	0	0.00	05/08/2012	1320	--	ND	ND	ND	ND	ND	ND	--
VIN-JW-Seep	GW	SP	0	0.00	3/19/2014	1205	--	3.60	ND	ND	ND	ND	ND	--
VIN-WP-020	GW	SP	0	0.00	3/19/2014	1215	11.83	ND	ND	ND	ND	ND	ND	--
VIN-WP-020	GW	SP	0	0.00	3/19/2014	1215	--	ND	ND	ND	ND	ND	ND	--
VIN-JW-Seep	GW	SP	0	0.00	4/17/2014	0855	--	0.60	ND	ND	ND	ND	ND	ND
VIN-JW-Seep	GW	SP	0	0.00	4/17/2014	0855	--	1.20	ND	ND	ND	ND	ND	--
VIN-WP-020	GW	SP	0	0.00	4/17/2014	1215	68.98							ND
VIN-JW-Seep	GW	SP	0	0.00	5/19/2014	1220	--	0.60	ND	ND	ND	ND	ND	ND
VIN-JW-Seep	GW	SP	0	0.00	6/27/2014	1040	--	0.50						--
VIN-WP-020	GW	SP	0	0.00	4/6/15	1305	--	4.80						--
VIN-JW-Seep	GW	SP	0	0.00	4/6/15	1325	--							--

Table B-01. Concentrations of VOCs in water samples analyzed using the portable gas chromatograph.—Continued

[TVOC, total volatile organic compounds; µg/L, microgram per liter; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; GW, groundwater; BH, borehole; --, sample not analyzed for constituent or measurement not made; ND, less than the detection limit; CS, cistern; DW, domestic well; UNK, unknown; MW, monitoring well; PS, public supply; SE, seep; SP, spring; SW, surface water; LK, lake; PL, pool; ST, stream; WA, water; DR, drill water; SN, sanitary sewer; TP, tap]

Sample identifier (fig. 3-07) [Short forms found in table D-01]	Media	Feature	Top of sampling interval, in feet	Bottom of sampling interval, in feet	Date	Time	TVOC (µg/L)	Concentration of constituents in µg/L						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
VIN-Vienna Spring	GW	SP	0	0.00	4/16/15	1050	--	ND	ND	ND	ND	ND	ND	--
Spring D	GW	SP	0	0.00	9/25/15	1300	--	ND	ND	ND	ND	ND	ND	--
Spring A	GW	SP	0	0.00	9/25/15	1430	--	ND	ND	ND	ND	ND	ND	--
Spring B	GW	SP	0	0.00	9/25/15	1440	--	ND	ND	ND	ND	ND	ND	--
Spring C	GW	SP	0	0.00	9/25/15	1445	--	ND	ND	ND	ND	ND	ND	--
VIN-JW-Seep	GW	SP	0	0.00	3/9/16	1120	--	ND	ND	ND	ND	ND	ND	--
VIN-WP-020	GW	SP	0	0.00	3/9/16	1120	--	9.00	ND	ND	ND	ND	ND	--
LB-01	SW	LK	--	--	09/28/2011	0925	--	ND	ND	ND	ND	ND	ND	--
PBV-04	SW	PL	--	--	09/27/2011	1232	--	ND	ND	ND	ND	ND	ND	--
LB-18	SW	PL	--	--	09/28/2011	1045	--	ND	ND	ND	ND	ND	ND	--
M-01	SW	ST	--	--	09/27/2011	1145	--	ND	ND	8.30	5.30	2.30	ND	--
PBV-01	SW	ST	--	--	09/27/2011	1150	--	ND	ND	ND	ND	ND	ND	--
PBV-02	SW	ST	--	--	09/27/2011	1205	--	ND	ND	ND	ND	ND	ND	--
PBV-03	SW	ST	--	--	09/27/2011	1225	--	ND	ND	ND	ND	ND	ND	--
M-07	SW	ST	--	--	09/27/2011	1240	--	ND	ND	ND	0.70	ND	ND	--
PBV-05	SW	ST	--	--	09/27/2011	1250	--	ND	ND	ND	ND	ND	ND	--
M-08	SW	ST	--	--	09/27/2011	1300	--	ND	ND	11.00	6.80	3.80	ND	--
M-09	SW	ST	--	--	09/27/2011	1315	--	ND	ND	ND	0.60	ND	ND	--
M-10	SW	ST	--	--	09/27/2011	1330	--	ND	ND	ND	ND	ND	ND	--
M-13	SW	ST	--	--	09/27/2011	1500	--	ND	ND	ND	0.50	ND	ND	--
CR-01	SW	ST	--	--	09/28/2011	0927	--	ND	ND	ND	ND	ND	ND	--
M-15	SW	ST	--	--	09/28/2011	0930	--	ND	ND	ND	ND	ND	ND	--
M-17	SW	ST	--	--	09/28/2011	0950	--	ND	ND	ND	ND	ND	ND	--
CR-05	SW	ST	--	--	09/28/2011	0954	--	ND	ND	ND	ND	ND	ND	--
M-19	SW	ST	--	--	09/28/2011	1010	--	ND	ND	ND	ND	ND	ND	--
M-20	SW	ST	--	--	09/28/2011	1015	--	ND	ND	ND	ND	ND	ND	--
M-21	SW	ST	--	--	09/28/2011	1030	--	ND	ND	ND	ND	ND	ND	--
PBV-12	SW	ST	--	--	09/28/2011	1033	--	ND	ND	ND	ND	ND	ND	--
CR-10	SW	ST	--	--	09/28/2011	1038	--	ND	ND	ND	ND	ND	ND	--
M-23	SW	ST	--	--	09/28/2011	1045	--	ND	ND	ND	ND	ND	ND	--
LB-07	SW	ST	--	--	09/28/2011	1046	--	ND	ND	ND	ND	ND	ND	--
CR-12	SW	ST	--	--	09/28/2011	1057	--	ND	ND	ND	ND	ND	ND	--
M-24	SW	ST	--	--	09/28/2011	1100	--	ND	ND	ND	ND	ND	ND	--
CR-21	SW	ST	--	--	09/28/2011	1113	--	ND	ND	ND	ND	ND	ND	--
LB-08	SW	ST	--	--	09/28/2011	1113	--	ND	ND	ND	ND	ND	ND	--
CR-14	SW	ST	--	--	09/28/2011	1115	--	ND	ND	ND	ND	ND	ND	--
M-26	SW	ST	--	--	09/28/2011	1130	--	ND	ND	ND	ND	ND	ND	--
CR-17	SW	ST	--	--	09/28/2011	1206	--	ND	ND	ND	ND	ND	ND	--
M-27	SW	ST	--	--	09/28/2011	1220	--	ND	ND	ND	ND	ND	ND	--
LB-11	SW	ST	--	--	09/28/2011	1225	--	ND	ND	ND	ND	ND	ND	--
M-28	SW	ST	--	--	09/28/2011	1240	--	ND	ND	ND	ND	ND	ND	--
LB-12	SW	ST	--	--	09/28/2011	1242	--	ND	ND	ND	ND	ND	ND	--
CR-20	SW	ST	--	--	09/28/2011	1304	--	ND	ND	ND	ND	ND	ND	--
CR-27	SW	ST	--	--	09/28/2011	1337	--	ND	ND	ND	ND	ND	ND	--
PBV-17	SW	ST	--	--	09/28/2011	1340	--	ND	ND	ND	ND	ND	ND	--
M-32	SW	ST	--	--	09/28/2011	1355	--	ND	ND	ND	ND	ND	ND	--
M-32	SW	ST	--	--	09/28/2011	1355	--	ND	ND	ND	ND	ND	ND	--
M-34	SW	ST	--	--	09/28/2011	1410	--	ND	ND	ND	ND	ND	ND	--
PBV-18	SW	ST	--	--	09/28/2011	1410	--	ND	ND	ND	ND	ND	ND	--
PBV-19	SW	ST	--	--	09/28/2011	1415	--	ND	ND	ND	ND	ND	ND	--
CR-22	SW	ST	--	--	09/28/2011	1438	--	ND	ND	ND	ND	ND	ND	--
LB-15	SW	ST	--	--	09/28/2011	1453	--	ND	ND	ND	ND	ND	ND	--
CR-23	SW	ST	--	--	09/28/2011	1455	--	ND	ND	ND	ND	ND	ND	--
PBV-22	SW	ST	--	--	09/28/2011	1549	--	ND	ND	ND	ND	ND	ND	--
PBV-21	SW	ST	--	--	09/28/2011	1550	--	ND	ND	ND	ND	ND	ND	--
LB-09	SW	ST	--	--	09/28/2011	UNK	--	ND	ND	ND	ND	ND	ND	--
CR-28	SW	ST	--	--	09/29/2011	0853	--	ND	ND	ND	ND	ND	ND	--
M-54R	SW	ST	--	--	09/29/2011	0945	--	ND	ND	ND	ND	ND	ND	--
M-54L	SW	ST	--	--	09/29/2011	1000	--	ND	ND	ND	ND	ND	ND	--
M-42	SW	ST	--	--	09/29/2011	1015	--	ND	ND	ND	ND	ND	ND	--
CR-35	SW	ST	--	--	09/29/2011	1029	--	ND	ND	ND	ND	ND	ND	--
M-45	SW	ST	--	--	09/29/2011	1030	--	ND	ND	ND	ND	ND	ND	--
M-49	SW	ST	--	--	09/29/2011	1045	--	ND	ND	ND	0.28	ND	ND	--
CR-37	SW	ST	--	--	09/29/2011	1048	--	ND	ND	ND	ND	ND	ND	--
M-51	SW	ST	--	--	09/29/2011	1120	--	ND	ND	ND	ND	ND	ND	--
PB-581	SW	ST	--	--	05/08/2012	1057	--	ND	ND	ND	ND	ND	ND	--
WP-007	SW	ST	--	--	05/08/2012	1135	--	ND	ND	ND	ND	ND	ND	--
PB-583	SW	ST	--	--	05/08/2012	1136	--	ND	ND	ND	ND	ND	ND	--
WP-010	SW	ST	--	--	05/08/2012	1150	--	ND	ND	ND	ND	ND	ND	--
WP-011	SW	ST	--	--	05/08/2012	1205	--	ND	ND	ND	ND	ND	ND	--
WP-012	SW	ST	--	--	05/08/2012	1205	--	ND	ND	ND	ND	ND	ND	--
WP-014	SW	ST	--	--	05/08/2012	1225	--	ND	ND	ND	ND	ND	ND	--
WP-015	SW	ST	--	--	05/08/2012	1230	--	ND	ND	ND	ND	ND	1.70	--
WP-015	SW	ST	--	--	05/08/2012	1230	--	ND	ND	ND	ND	ND	ND	--
WP-016	SW	ST	--	--	05/08/2012	1245	--	ND	ND	ND	ND	ND	ND	--
PB-585	SW	ST	--	--	05/08/2012	1250	--	ND	ND	ND	ND	ND	ND	--
WP-017	SW	ST	--	--	05/08/2012	1300	--	ND	ND	ND	ND	ND	ND	--
WP-019	SW	ST	--	--	05/08/2012	1315	--	ND	ND	ND	ND	ND	ND	--
PB-586	SW	ST	--	--	05/08/2012	1322	--	ND	ND	ND	ND	ND	ND	--
PB-587	SW	ST	--	--	05/08/2012	1345	--	ND	ND	ND	ND	ND	ND	--
WP-025	SW	ST	--	--	05/08/2012	1350	--	ND	ND	ND	ND	ND	ND	--
PB-588	SW	ST	--	--	05/08/2012	1415	--	ND	ND	ND	ND	ND	ND	--
VIN-P-01	SW	ST	--	--	1/17/2013	1250	--	ND	ND	ND	ND	ND	ND	--
VIN-P-02	SW	ST	--	--	1/17/2013	1300	--	ND	ND	ND	ND	ND	ND	--

Table B-01. Concentrations of VOCs in water samples analyzed using the portable gas chromatograph.—Continued

[TVOC, total volatile organic compounds; µg/L, microgram per liter; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; GW, groundwater; BH, borehole; --, sample not analyzed for constituent or measurement not made; ND, less than the detection limit; CS, cistern; DW, domestic well; UNK, unknown; MW, monitoring well; PS, public supply; SE, seep; SP, spring; SW, surface water; LK, lake; PL, pool; ST, stream; WA, water; DR, drill water; SN, sanitary sewer; TP, tap]

Sample identifier (fig. 3-07) [Short forms found in table D-01]	Media	Feature	Top of sampling interval, in feet	Bottom of sampling interval, in feet	Date	Time	TVOC (µg/L)	Concentration of constituents in µg/L						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
VIN-P-03	SW	ST	--	--	1/17/2013	1310	--	ND	ND	ND	ND	ND	ND	--
VIN-TB2-1	SW	ST	0	0.00	3/19/2014	1100	--	ND	ND	ND	ND	ND	ND	--
VIN-TB2-1	SW	ST	0	0.00	3/19/2014	1100	2.89	ND	ND	ND	ND	ND	ND	--
VIN-TB2-Trickle	SW	ST	0	0.00	3/19/2014	1130	4.61	2.20	ND	ND	ND	ND	ND	--
VIN-TB2-2	SW	ST	0	0.00	3/19/2014	1145	--	ND	ND	ND	ND	ND	ND	--
VIN-TB2-2	SW	ST	0	0.00	3/19/2014	1145	4.56	ND	ND	ND	ND	ND	ND	--
VIN-TB2-2	SW	ST	0	0.00	4/17/2014	0902	--	ND	ND	ND	ND	ND	ND	ND
VIN-TB2-2A	SW	ST	0	0.00	4/17/2014	0915	22.91	ND	ND	ND	ND	ND	ND	ND
VIN-TB2-2B	SW	ST	0	0.00	4/17/2014	0920	--	ND	ND	ND	ND	ND	ND	ND
VIN-TB2-2C	SW	ST	0	0.00	4/17/2014	0925	23.06	ND	ND	ND	ND	ND	ND	ND
James Creek	SW	ST	0	0.00	4/17/2014	0935	38.96	ND	ND	ND	ND	ND	ND	ND
VIN-TB2-2A	SW	ST	0	0.00	5/19/2014	UNK	--	ND	ND	ND	ND	ND	ND	ND
VIN-TB2-2B	SW	ST	0	0.00	5/19/2014	UNK	--	ND	ND	ND	ND	ND	ND	ND
VIN-TB2-2C	SW	ST	0	0.00	5/19/2014	UNK	--	ND	ND	ND	ND	ND	ND	ND
VIN-TB2-2D	SW	ST	0	0.00	5/19/2014	UNK	--	ND	ND	ND	ND	ND	ND	ND
VIN-TB2-2E	SW	ST	0	0.00	5/19/2014	UNK	--	ND	ND	ND	ND	ND	ND	ND
VIN-TB2-2B	SW	ST	0	0.00	6/27/2014	1010	--	ND	ND	ND	ND	ND	ND	--
VIN-TB2-2C	SW	ST	0	0.00	6/27/2014	1015	--	0.70	ND	ND	ND	ND	ND	--
VIN-TB2-2C	SW	ST	0	0.00	6/27/2014	1015	--	ND	ND	ND	ND	ND	ND	--
Vienna	WA	DR	--	--	06/12/2012	0949	--	ND	ND	ND	ND	ND	ND	--
Vienna	WA	DR	--	--	06/12/2012	1023	--	ND	ND	ND	ND	ND	ND	--
Vienna	WA	DR	--	--	06/19/2012	0905	--	ND	ND	ND	ND	ND	ND	--
Vienna	WA	DR	--	--	06/21/2012	1115	--	ND	ND	ND	ND	ND	ND	--
Vienna	WA	DR	--	--	06/21/2012	1115	--	ND	ND	ND	ND	ND	ND	--
Vienna	WA	DR	--	--	06/27/2012	0720	--							--
MH-069W	WA	SN	--	--	01/30/2012	1000	--	ND	ND	ND	ND	ND	ND	--
MH-069S	WA	SN	--	--	01/30/2012	1005	--	ND	ND	ND	ND	ND	ND	--
MH-064	WA	SN	--	--	01/30/2012	1050	--	ND	ND	ND	ND	ND	ND	--
MH-073A	WA	SN	--	--	01/30/2012	1110	--	ND	ND	ND	ND	ND	ND	--
MH-142N	WA	SN	--	--	01/30/2012	1130	--	ND	ND	ND	ND	ND	ND	--
MH-142S	WA	SN	--	--	01/30/2012	1131	--	ND	ND	ND	ND	ND	ND	--
MH-028AN	WA	SN	--	--	01/30/2012	1215	--	ND	ND	ND	ND	ND	ND	--
MH-028AE	WA	SN	--	--	01/30/2012	1216	--	ND	ND	ND	ND	ND	ND	--
MH-112S	WA	SN	--	--	01/30/2012	1310	--	ND	ND	ND	ND	ND	ND	--
MH-101	WA	SN	--	--	01/30/2012	1315	--	ND	ND	ND	ND	ND	ND	--
MH-040W	WA	SN	--	--	01/30/2012	1330	--	ND	ND	ND	ND	ND	ND	--
MH-038S	WA	SN	--	--	01/30/2012	1350	--	ND	ND	ND	ND	ND	ND	--
MH-038W	WA	SN	--	--	01/30/2012	1350	--	ND	ND	ND	ND	ND	ND	--
MH-037W	WA	SN	--	--	01/30/2012	1400	--	0.50	ND	ND	ND	ND	ND	--
MH-090E	WA	SN	--	--	01/30/2012	1440	--	1.30	ND	ND	ND	ND	ND	--
MH-090S	WA	SN	--	--	01/30/2012	1440	--	1.28	ND	ND	ND	ND	ND	--
MH-016	WA	SN	--	--	01/30/2012	1500	--	ND	ND	ND	ND	ND	ND	--
MH-011AS	WA	SN	--	--	01/30/2012	1510	--	ND	ND	ND	ND	ND	ND	--
MH-007	WA	SN	--	--	01/31/2012	1025	--	ND	ND	ND	ND	0.90	ND	--
MH-004	WA	SN	--	--	01/31/2012	1055	--	ND	ND	ND	ND	1.10	ND	--
MH-166	WA	SN	--	--	01/31/2012	1105	--	ND	ND	ND	ND	1.70	ND	--
MH-025N	WA	SN	--	--	01/31/2012	1120	--	ND	ND	ND	ND	ND	ND	--
MH-049	WA	SN	--	--	01/31/2012	1140	--	ND	ND	ND	ND	0.60	ND	--
MH-144S	WA	SN	--	--	01/31/2012	1200	--	ND	ND	ND	ND	0.90	ND	--
MH-109	WA	SN	--	--	01/31/2012	1210	--	ND	ND	ND	ND	0.90	ND	--
MH-020A	WA	SN	--	--	01/31/2012	1230	--	ND	ND	ND	ND	0.90	ND	--
MH-093N	WA	SN	--	--	02/22/2012	1000	--	ND	ND	ND	ND	ND	ND	--
MH-091N	WA	SN	--	--	02/22/2012	1010	--	1.33	ND	ND	ND	ND	ND	--
MH-097E	WA	SN	--	--	02/22/2012	1025	--	ND	ND	ND	ND	ND	ND	--
MH-097S	WA	SN	--	--	02/22/2012	1025	--	ND	ND	ND	ND	ND	ND	--
MH-090E	WA	SN	--	--	02/22/2012	1040	--	ND	ND	ND	ND	ND	ND	--
MH-090N	WA	SN	--	--	02/22/2012	1040	--	1.63	1.33	12.50	ND	ND	ND	--
MH-090S	WA	SN	--	--	02/22/2012	1040	--	ND	ND	ND	ND	ND	ND	--
MH-153W	WA	SN	--	--	02/22/2012	1100	--	ND	ND	ND	ND	ND	ND	--
MH-040N	WA	SN	--	--	02/22/2012	1120	--	ND	ND	ND	ND	ND	ND	--
MH-040W	WA	SN	--	--	02/22/2012	1120	--	ND	ND	ND	ND	ND	ND	--
MH-039N	WA	SN	--	--	02/22/2012	1130	--	ND	ND	ND	ND	ND	ND	--
MH-037S	WA	SN	--	--	02/22/2012	1140	--	ND	ND	ND	ND	ND	ND	--
MH-037W	WA	SN	--	--	02/22/2012	1140	--	ND	ND	ND	ND	ND	ND	--
MH-069W	WA	SN	--	--	03/12/2012	0945	--	ND	ND	ND	ND	ND	ND	--
MH-069S	WA	SN	--	--	03/12/2012	0946	--	ND	ND	ND	ND	ND	ND	--
MH-064	WA	SN	--	--	03/12/2012	1025	--	ND	ND	ND	ND	ND	ND	--
MH-092N	WA	SN	--	--	03/12/2012	1110	--	ND	ND	ND	ND	ND	ND	--
MH-091E	WA	SN	--	--	03/12/2012	1120	--	ND	ND	ND	ND	ND	ND	--
MH-091N	WA	SN	--	--	03/12/2012	1120	--	2.20	ND	ND	ND	ND	ND	--
MH-093N	WA	SN	--	--	03/12/2012	1130	--	ND	ND	ND	ND	ND	ND	--
MH-090N	WA	SN	--	--	03/12/2012	1140	--	1.50	ND	ND	ND	ND	ND	--
MH-090E	WA	SN	--	--	03/12/2012	1145	--	ND	ND	ND	ND	ND	ND	--
MH-090S	WA	SN	--	--	03/12/2012	1155	--	ND	ND	ND	ND	ND	ND	--
MH-097E	WA	SN	--	--	03/12/2012	1220	--	ND	ND	ND	ND	ND	ND	--
MH-097S	WA	SN	--	--	03/12/2012	1220	--	ND	ND	ND	ND	ND	ND	--
MH-099A	WA	SN	--	--	03/12/2012	1245	--	ND	ND	ND	ND	ND	ND	--
City Hall	WA	TP	--	--	6/12/2014	1105	--	ND	ND	ND	ND	ND	ND	--
Vienna Park	WA	TP	--	--	6/12/2014	1120	--	ND	ND	ND	ND	ND	ND	--
Stock Yard	WA	TP	--	--	6/12/2014	1215	--	ND	ND	ND	ND	ND	ND	--

Table B-02. Concentrations of VOCs in soil samples analyzed using the portable gas chromatograph.

[TVOC, total volatile organic compounds; µg/kg, microgram of constituent per gram of soil; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; SO, soil; BH, borehole; --, sample not analyzed for constituent; ND, not detected; UNK, unknown; EX, excavation; TR, trench]

Sample identifier (fig. 3-03)	Media	Feature	Top	Bottom	Date	Time	TVOC (µg/kg)	Concentration of constituents in µg/kg						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
North Septic	SO	TR	0	0.00	11/25/2013	1000	--	ND	ND	ND	ND	ND	ND	--
South Septic	SO	TR	0	0.00	11/25/2013	1230	--	ND	ND	ND	ND	ND	ND	--
Septic South-2	SO	EX	2	2.00	12/3/2013	1245	--	19.20	ND	ND	ND	ND	ND	--
Septic South-Bulk	SO	EX	2	2.00	12/3/2013	1245	--	ND	ND	ND	ND	ND	ND	--
Septic South-1	SO	EX	2	2.00	12/3/2013	1247	--	ND	ND	ND	ND	ND	ND	--
North Septic Drainage	SO	BH	2	2.00	5/6/2014	1155	21.21	2.00	ND	ND	ND	ND	ND	ND
Septic1	SO	BH	0	0.00	5/7/2014	1045	--	ND	ND	ND	ND	ND	ND	ND
A001	SO	EX	0	1.00	3/11/2014	1142	4.21	ND	ND	ND	ND	ND	ND	--
A002	SO	EX	0	1.00	3/11/2014	1147	5.51	--	--	--	--	--	--	--
A003	SO	EX	0	1.00	3/11/2014	1155	5.94	--	--	--	--	--	--	--
A004	SO	EX	0	1.00	3/11/2014	1158	9.70	ND	ND	ND	ND	ND	ND	--
A005	SO	EX	0	1.00	3/11/2014	1158	3.63	--	--	--	--	--	--	--
A006	SO	EX	0	1.00	3/11/2014	1202	4.47	--	--	--	--	--	--	--
A011	SO	EX	0	1.00	3/11/2014	1208	1.37	--	--	--	--	--	--	--
A008	SO	EX	0	1.00	3/11/2014	1219	3.87	--	--	--	--	--	--	--
A009	SO	EX	0	1.00	3/11/2014	1222	2.67	--	--	--	--	--	--	--
A017	SO	EX	0	1.00	3/11/2014	1255	16.10	--	--	--	--	--	--	--
A024	SO	EX	0	1.00	3/11/2014	1319	5.21	--	--	--	--	--	--	--
A025	SO	EX	0	1.00	3/11/2014	1332	6.90	--	--	--	--	--	--	--
A026	SO	EX	0	1.00	3/11/2014	1335	5.64	--	--	--	--	--	--	--
A027	SO	EX	0	1.00	3/11/2014	1338	6.81	--	--	--	--	--	--	--
A028	SO	EX	0	1.00	3/11/2014	1342	8.77	--	--	--	--	--	--	--
A031	SO	EX	0	1.00	3/11/2014	1416	9.47	--	--	--	--	--	--	--
A032	SO	EX	0	1.00	3/11/2014	1425	4.84	--	--	--	--	--	--	--
A037	SO	EX	0	1.00	3/11/2014	1435	4.62	--	--	--	--	--	--	--
A033	SO	EX	0	1.00	3/11/2014	1441	9.10	--	--	--	--	--	--	--
A039	SO	EX	0	1.00	3/11/2014	1454	4.63	--	--	--	--	--	--	--
A035	SO	EX	0	1.30	3/11/2014	1459	9.29	--	--	--	--	--	--	--
A010	SO	EX	0	1.50	3/11/2014	1228	3.76	--	--	--	--	--	--	--
A012	SO	EX	0	1.50	3/11/2014	1235	1.20	--	--	--	--	--	--	--
A013	SO	EX	0	1.50	3/11/2014	1240	4.73	--	--	--	--	--	--	--
A014	SO	EX	0	1.50	3/11/2014	1243	5.42	--	--	--	--	--	--	--
A015	SO	EX	0	1.50	3/11/2014	1247	11.75	--	--	--	--	--	--	--
A016	SO	EX	0	1.50	3/11/2014	1251	2.34	--	--	--	--	--	--	--
A018	SO	EX	0	1.50	3/11/2014	1259	17.97	--	--	--	--	--	--	--
A019	SO	EX	0	1.50	3/11/2014	1303	4.76	--	--	--	--	--	--	--
A021	SO	EX	0	1.50	3/11/2014	1307	6.29	--	--	--	--	--	--	--
A022	SO	EX	0	1.50	3/11/2014	1311	4.51	--	--	--	--	--	--	--
A023	SO	EX	0	1.50	3/11/2014	1315	4.07	--	--	--	--	--	--	--
A029	SO	EX	0	1.50	3/11/2014	1359	4.82	--	--	--	--	--	--	--
A030	SO	EX	0	1.50	3/11/2014	1409	4.76	--	--	--	--	--	--	--
A034	SO	EX	0	1.50	3/11/2014	1449	4.25	--	--	--	--	--	--	--
D001	SO	EX	0	1.00	3/13/2014	1000	9.23	--	--	--	--	--	--	--
D005	SO	EX	0	1.00	3/13/2014	1018	6.18	--	--	--	--	--	--	--
D006	SO	EX	0	1.00	3/13/2014	1021	--	--	--	--	--	--	--	--
D011	SO	EX	0	1.00	3/13/2014	1039	30.54	122.80	ND	ND	ND	ND	ND	--
D014	SO	EX	0	1.00	3/13/2014	1057	6.41	--	--	--	--	--	--	--
P005	SO	EX	0	1.00	3/13/2014	1147	32.29	ND	ND	ND	ND	ND	ND	--
A041A	SO	EX	0	1.00	3/13/2014	1400	9.18	--	--	--	--	--	--	--
A043	SO	EX	0	1.30	3/13/2014	1250	8.30	--	--	--	--	--	--	--
A041	SO	EX	0	1.30	3/13/2014	1303	8.18	--	--	--	--	--	--	--
D002	SO	EX	0	1.50	3/13/2014	1003	9.32	--	--	--	--	--	--	--
D003	SO	EX	0	1.50	3/13/2014	1007	1.78	--	--	--	--	--	--	--
D007	SO	EX	0	1.50	3/13/2014	1026	23.09	8.80	ND	ND	ND	ND	ND	--
D008	SO	EX	0	1.50	3/13/2014	1031	4.18	--	--	--	--	--	--	--
D009	SO	EX	0	1.50	3/13/2014	1035	0.40	--	--	--	--	--	--	--
D010	SO	EX	0	1.50	3/13/2014	1035	6.08	--	--	--	--	--	--	--
D012	SO	EX	0	1.50	3/13/2014	1048	21.97	23.20	ND	ND	ND	ND	ND	--
P001	SO	EX	0	1.50	3/13/2014	1122	13.97	ND	ND	ND	ND	ND	ND	--
P004	SO	EX	0	1.50	3/13/2014	1138	5.90	--	--	--	--	--	--	--
A042	SO	EX	0	1.50	3/13/2014	1242	5.96	--	--	--	--	--	--	--
A040	SO	EX	0	1.50	3/13/2014	1315	6.46	--	--	--	--	--	--	--
A044	SO	EX	0	1.50	3/13/2014	1331	4.85	--	--	--	--	--	--	--
A045	SO	EX	0	1.50	3/13/2014	1345	53.41	ND	ND	ND	ND	ND	ND	--
A046	SO	EX	0	1.50	3/13/2014	1350	42.62	ND	ND	ND	ND	ND	ND	--
P006	SO	EX	0	1.50	3/13/2014	1408	5.97	--	--	--	--	--	--	--
A048	SO	BH	2	2.00	3/25/2014	1427	13.66	4.00	ND	ND	ND	ND	ND	--
A022	SO	BH	2.2	2.20	3/25/2014	1105	3.13	ND	ND	ND	ND	ND	ND	--
A023	SO	BH	2.4	2.40	3/25/2014	1041	2.89	ND	ND	ND	ND	ND	ND	--
A018	SO	BH	2.5	2.50	3/25/2014	1304	12.11	24.40	10.40	ND	ND	ND	ND	--
A017	SO	BH	2.5	2.50	3/25/2014	1406	9.39	16.40	ND	ND	ND	ND	ND	--
A023	SO	BH	4	4.00	3/25/2014	1050	7.43	10.00	ND	ND	ND	ND	ND	--
A022	SO	BH	4	4.00	3/25/2014	1123	6.91	ND	ND	ND	ND	ND	ND	--
A018	SO	BH	4	4.00	3/25/2014	1303	29.38	49.20	24.40	ND	ND	ND	ND	--
A018	SO	BH	4	4.00	3/25/2014	1311	37.94	92.80	52.00	52.00	ND	ND	ND	--
A017	SO	BH	4	4.00	3/25/2014	1405	25.10	40.80	10.40	ND	ND	ND	ND	--

Table B-02. Concentrations of VOCs in soil samples analyzed using the portable gas chromatograph.—Continued

[TVOC, total volatile organic compounds; µg/kg, microgram of constituent per gram of soil; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; SO, soil; BH, borehole; --, sample not analyzed for constituent; ND, not detected; UNK, unknown; EX, excavation; TR, trench]

Sample identifier (fig. 3-03)	Media	Feature	Top	Bottom	Date	Time	TVOC (µg/kg)	Concentration of constituents in µg/kg						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
A016	SO	BH	4	4.00	3/25/2014	1455	14.08	ND	ND	ND	ND	ND	ND	--
A024	SO	BH	4	4.00	3/25/2014	1527	--	21.20	ND	ND	ND	ND	ND	--
A022	SO	BH	6	6.00	3/25/2014	1148	8.22	6.40	ND	ND	ND	ND	ND	--
A018	SO	BH	6	6.00	3/25/2014	1310	94.73	297.60	178.80	ND	ND	ND	ND	--
A048	SO	BH	6	6.00	3/25/2014	1334	29.99	16.00	ND	ND	ND	ND	ND	--
A017	SO	BH	6	6.00	3/25/2014	1411	98.97	293.60	136.00	136.00	ND	ND	ND	--
A016	SO	BH	6	6.00	3/25/2014	1505	2.45	ND	ND	ND	ND	ND	ND	--
A024	SO	BH	6	6.00	3/25/2014	1537	114.20	40.80	23.20	ND	ND	ND	ND	--
A018	SO	BH	6.5	6.50	3/25/2014	1312	14.58	32.00	20.00	ND	ND	ND	ND	--
A017	SO	BH	7	7.00	3/25/2014	1410	15.78	37.20	10.40	ND	ND	ND	ND	--
A022	SO	BH	8	8.00	3/25/2014	1143	9.85	ND	ND	ND	ND	ND	ND	--
A016	SO	BH	8	8.00	3/25/2014	1500	4.17	ND	ND	ND	ND	ND	ND	--
A024	SO	BH	8	8.00	3/25/2014	1540	118.30	54.40	ND	ND	ND	ND	ND	--
A016	SO	BH	9.5	9.50	3/25/2014	1510	7.11	4.80	ND	ND	ND	ND	ND	--
A022	SO	BH	10	10.00	3/25/2014	1216	6.65	ND	ND	ND	ND	ND	ND	--
A024	SO	BH	10	10.00	3/25/2014	1546	15.38	52.00	ND	ND	ND	ND	ND	--
A016	SO	BH	11	11.00	3/25/2014	1508	--	4.80	ND	ND	ND	ND	ND	--
A022	SO	BH	11.5	11.50	3/25/2014	1215	7.61	4.00	ND	ND	ND	ND	ND	--
A024	SO	BH	12	12.00	3/25/2014	1548	--	676.00	12.80	ND	ND	ND	ND	--
A049	SO	BH	1.4	1.40	3/26/2014	1244	10.63	ND	ND	ND	ND	ND	ND	--
A009	SO	BH	1.5	1.50	3/26/2014	0948	4.94	ND	ND	ND	ND	ND	ND	--
A015	SO	BH	2	2.00	3/26/2014	1025	6.97	ND	ND	ND	ND	ND	ND	--
A002	SO	BH	2	2.00	3/26/2014	1315	2.30	ND	ND	ND	ND	ND	ND	--
A001	SO	BH	2	2.00	3/26/2014	1334	7.82	ND	ND	ND	ND	ND	ND	--
A025	SO	BH	2	2.00	3/26/2014	1402	3.53	ND	ND	ND	ND	ND	ND	--
A026	SO	BH	2	2.00	3/26/2014	1422	6.76	ND	ND	ND	ND	ND	ND	--
A027	SO	BH	2	2.00	3/26/2014	1448	6.17	ND	ND	ND	ND	ND	ND	--
A028	SO	BH	2	2.00	3/26/2014	1523	12.76	ND	ND	ND	ND	ND	ND	--
A002	SO	BH	3.5	3.50	3/26/2014	1315	9.07	ND	ND	ND	ND	ND	ND	--
A009	SO	BH	3.8	3.80	3/26/2014	0945	7.89	ND	ND	ND	ND	ND	ND	--
A015	SO	BH	4	4.00	3/26/2014	1037	6.47	ND	ND	ND	ND	ND	ND	--
A049	SO	BH	4	4.00	3/26/2014	1250	8.09	ND	ND	ND	ND	ND	ND	--
A001	SO	BH	4	4.00	3/26/2014	1335	0.59	ND	ND	ND	ND	ND	ND	--
A025	SO	BH	4	4.00	3/26/2014	1401	5.96	ND	ND	ND	ND	ND	ND	--
A009	SO	BH	4.2	4.20	3/26/2014	0954	45.53	5.20	ND	ND	ND	ND	ND	--
A049	SO	BH	5	5.00	3/26/2014	1252	5.00	ND	ND	ND	ND	ND	ND	--
A025	SO	BH	5	5.00	3/26/2014	1410	1.27	ND	ND	ND	ND	ND	ND	--
A015	SO	BH	6	6.00	3/26/2014	1035	6.24	ND	ND	ND	ND	ND	ND	--
A049	SO	BH	6	6.00	3/26/2014	1253	1.30	ND	ND	ND	ND	ND	ND	--
A001	SO	BH	6	6.00	3/26/2014	1345	0.31	ND	ND	ND	ND	ND	ND	--
A026	SO	BH	6	6.00	3/26/2014	1427	4.13	ND	ND	ND	ND	ND	ND	--
A027	SO	BH	6	6.00	3/26/2014	1450	8.23	9.60	4.00	ND	ND	ND	ND	--
A028	SO	BH	6	6.00	3/26/2014	1532	524.20	1,760.00	1,760.00	ND	ND	ND	ND	--
A025	SO	BH	7	7.00	3/26/2014	1407	7.08	ND	ND	ND	ND	ND	ND	--
A015	SO	BH	7.5	7.50	3/26/2014	1036	5.79	ND	ND	ND	ND	ND	ND	--
A001	SO	BH	8	8.00	3/26/2014	1344	6.86	ND	ND	ND	ND	ND	ND	--
A026	SO	BH	9	9.00	3/26/2014	1434	1.94	ND	ND	ND	ND	ND	ND	--
A027	SO	BH	9.7	9.70	3/26/2014	1501	--	ND	ND	ND	ND	ND	ND	--
A015	SO	BH	10	10.00	3/26/2014	1050	4.33	ND	ND	ND	ND	ND	ND	--
A028	SO	BH	11.2	11.20	3/26/2014	1541	--	9,588.00	3,592.00	26.40	ND	ND	ND	--
A015	SO	BH	12	12.00	3/26/2014	1053	5.26	ND	ND	ND	ND	ND	ND	--
A050	SO	BH	1.5	1.50	4/1/2014	1232	24.50	ND	ND	ND	ND	ND	ND	--
A008	SO	BH	1.5	1.50	4/1/2014	1249	19.28	ND	ND	ND	ND	ND	ND	--
A030	SO	BH	1.6	1.60	4/1/2014	1414	11.06	ND	ND	ND	ND	ND	ND	--
A010	SO	BH	2	2.00	4/1/2014	1313	32.81	ND	ND	ND	ND	ND	ND	--
A050	SO	BH	2.5	2.50	4/1/2014	1231	12.77	4.80	ND	ND	ND	ND	ND	--
A008	SO	BH	3	3.00	4/1/2014	1250	14.68	ND	ND	ND	ND	ND	ND	--
A030	SO	BH	3.3	3.30	4/1/2014	1412	11.64	ND	ND	ND	ND	ND	ND	--
A029	SO	BH	3.5	3.50	4/1/2014	1019	9.79	ND	ND	ND	ND	ND	ND	--
A029A	SO	BH	6	6.00	4/1/2014	1057	30.78	51.60	ND	ND	ND	ND	ND	--
A010	SO	BH	6	6.00	4/1/2014	1328	14.73	ND	ND	ND	ND	ND	ND	--
A029A	SO	BH	7.7	7.70	4/1/2014	1056	27.83	32.40	1.60	ND	ND	ND	ND	--
A010	SO	BH	8.6	8.60	4/1/2014	1338	26.97	ND	ND	ND	ND	ND	ND	--
A029A	SO	BH	9.5	9.50	4/1/2014	1207	43.38	58.00	ND	ND	ND	ND	ND	--
A029A	SO	BH	11.5	11.50	4/1/2014	1206	86.43	94.00	6.00	ND	ND	ND	ND	--
A031	SO	BH	2	2.00	4/2/2014	1017	7.82	ND	ND	ND	ND	ND	ND	--
A032	SO	BH	2	2.00	4/2/2014	1141	6.21	ND	ND	ND	ND	ND	ND	--
A037	SO	BH	2	2.00	4/2/2014	1300	5.33	ND	ND	ND	ND	ND	ND	--
A037A	SO	BH	2	2.00	4/2/2014	1314	14.55	ND	ND	ND	ND	ND	ND	--
A038	SO	BH	2	2.00	4/2/2014	1336	18.12	ND	ND	ND	ND	ND	ND	--
P011	SO	BH	2	2.00	4/2/2014	1459	12.92	ND	ND	ND	ND	ND	ND	--
A031	SO	BH	4	4.00	4/2/2014	1016	24.94	ND	ND	ND	ND	ND	ND	--
A032	SO	BH	4	4.00	4/2/2014	1140	18.81	ND	ND	ND	ND	ND	ND	--
A037	SO	BH	4	4.00	4/2/2014	1258	21.52	ND	ND	ND	ND	ND	ND	--
A037A	SO	BH	4	4.00	4/2/2014	1315	28.38	ND	ND	ND	ND	ND	ND	--
P011A	SO	BH	4	4.00	4/2/2014	1515	82.82	ND	ND	ND	ND	ND	ND	--
A038	SO	BH	4	4.00	4/2/2014	UNK	18.62	ND	ND	ND	ND	ND	ND	--
A037	SO	BH	5.5	5.50	4/2/2014	1304	7.99	ND	ND	ND	ND	ND	ND	--
A031	SO	BH	6	6.00	4/2/2014	1026	13.97	ND	ND	ND	ND	ND	ND	--
A032	SO	BH	6	6.00	4/2/2014	1151	9.04	ND	ND	ND	ND	ND	ND	--

Table B-02. Concentrations of VOCs in soil samples analyzed using the portable gas chromatograph.—Continued

[TVOC, total volatile organic compounds; µg/kg, microgram of constituent per gram of soil; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; SO, soil; BH, borehole; --, sample not analyzed for constituent; ND, not detected; UNK, unknown; EX, excavation; TR, trench]

Sample identifier (fig. 3-03)	Media	Feature	Top	Bottom	Date	Time	TVOC (µg/kg)	Concentration of constituents in µg/kg						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
A031	SO	BH	8	8.00	4/2/2014	1025	13.87	ND	ND	ND	ND	ND	ND	--
A032	SO	BH	8	8.00	4/2/2014	1150	11.95	ND	ND	ND	ND	ND	ND	--
A031	SO	BH	10	10.00	4/2/2014	1037	15.05	ND	ND	ND	ND	ND	ND	--
A032	SO	BH	10	10.00	4/2/2014	1204	9.71	ND	ND	ND	ND	ND	ND	--
A031	SO	BH	11.6	11.60	4/2/2014	1036	15.89	ND	ND	ND	ND	ND	ND	--
A032	SO	BH	12	12.00	4/2/2014	1203	19.14	ND	ND	ND	ND	ND	ND	--
A032	SO	BH	14	14.00	4/2/2014	1215	20.71	ND	ND	ND	ND	ND	ND	--
A032	SO	BH	16	16.00	4/2/2014	1232	14.05	ND	ND	ND	ND	ND	ND	--
A032	SO	BH	17	17.00	4/2/2014	1231	18.33	3.20	ND	ND	6.00	ND	ND	--
A032	SO	BH	18	18.00	4/2/2014	1230	18.79	8.00	ND	ND	ND	ND	ND	--
P010	SO	BH	4	4.00	4/3/2014	1400	--	ND	ND	ND	ND	ND	ND	--
P010	SO	BH	5.5	5.50	4/3/2014	1420	19.13	6.00	ND	ND	ND	ND	ND	--
A038	SO	BH	7.3	7.30	4/3/2014	1347	7.11	ND	ND	ND	ND	ND	ND	--
P010	SO	BH	7.5	7.50	4/3/2014	1419	37.45	13.20	ND	ND	ND	ND	ND	--
P010	SO	BH	10	10.00	4/3/2014	1423	36.91	12.00	ND	ND	ND	ND	ND	--
P010	SO	BH	10.8	10.80	4/3/2014	1425	40.53	11.20	ND	ND	ND	ND	ND	--
P010	SO	BH	12	12.00	4/3/2014	1424	39.52	13.20	ND	ND	ND	ND	ND	--
P010	SO	BH	14	14.00	4/3/2014	1456	73.00	37.60	ND	ND	ND	ND	ND	--
P010	SO	BH	15.2	15.20	4/3/2014	1435	63.29	32.00	ND	ND	ND	ND	ND	--
P010	SO	BH	16	16.00	4/3/2014	1434	115.80	68.00	ND	ND	ND	ND	ND	--
P010	SO	BH	16.2	16.20	4/3/2014	1443	36.08	15.20	ND	ND	ND	ND	ND	--
D011A	SO	BH	0.75	0.75	4/7/2014	1520	21.35	ND	4.40	ND	ND	ND	ND	--
D005	SO	BH	1	1.00	4/7/2014	0956	4.48	ND	ND	ND	ND	ND	ND	--
D002	SO	BH	1.5	1.50	4/7/2014	1124	7.44	ND	ND	ND	ND	ND	ND	--
D005	SO	BH	2	2.00	4/7/2014	0950	4.97	ND	ND	ND	ND	ND	ND	--
D006A	SO	BH	2	2.00	4/7/2014	1023	4.15	ND	ND	ND	ND	ND	ND	--
D003	SO	BH	2	2.00	4/7/2014	1043	3.45	ND	ND	ND	ND	ND	ND	--
A042	SO	BH	2	2.00	4/7/2014	1310	9.30	ND	ND	ND	ND	ND	ND	--
A043	SO	BH	2	2.00	4/7/2014	1334	13.57	ND	ND	ND	ND	ND	ND	--
D008	SO	BH	2	2.00	4/7/2014	1430	12.04	ND	ND	ND	ND	ND	ND	--
D008A	SO	BH	2	2.00	4/7/2014	1451	12.33	ND	ND	ND	ND	ND	ND	--
D011A	SO	BH	2	2.00	4/7/2014	1518	24.24	10.80	ND	ND	ND	ND	ND	--
D002	SO	BH	2.2	2.20	4/7/2014	1127	20.70	ND	ND	ND	ND	ND	ND	--
D005	SO	BH	4	4.00	4/7/2014	0955	3.81	ND	ND	ND	ND	ND	ND	--
D006A	SO	BH	4	4.00	4/7/2014	1024	5.24	ND	ND	ND	ND	ND	ND	--
D003	SO	BH	4	4.00	4/7/2014	1044	4.96	ND	ND	ND	ND	ND	ND	--
A042	SO	BH	4	4.00	4/7/2014	1311	15.21	ND	ND	ND	ND	ND	ND	--
A043	SO	BH	4	4.00	4/7/2014	1335	15.00	ND	ND	ND	ND	ND	ND	--
P012	SO	BH	4	4.00	4/7/2014	1410	19.92	ND	ND	ND	ND	ND	ND	--
D008	SO	BH	4	4.00	4/7/2014	1431	16.70	ND	ND	ND	ND	ND	ND	--
D008A	SO	BH	4	4.00	4/7/2014	1453	9.63	ND	ND	ND	ND	ND	ND	--
D011A	SO	BH	4	4.00	4/7/2014	1519	17.86	6.80	ND	ND	ND	ND	ND	--
A042	SO	BH	4.8	4.80	4/7/2014	1324	30.92	ND	ND	ND	ND	ND	ND	--
D005	SO	BH	5	5.00	4/7/2014	1000	10.26	5.20	ND	ND	ND	ND	ND	--
D003	SO	BH	5.5	5.50	4/7/2014	1054	3.66	ND	ND	ND	ND	ND	ND	--
A043	SO	BH	5.5	5.50	4/7/2014	1348	25.65	ND	ND	ND	ND	ND	ND	--
D008	SO	BH	5.5	5.50	4/7/2014	1439	5.89	ND	ND	ND	ND	ND	ND	--
D008A	SO	BH	6	6.00	4/7/2014	1500	14.35	3.60	2.80	ND	ND	ND	ND	--
D011A	SO	BH	6	6.00	4/7/2014	1526	24.42	12.00	ND	ND	ND	ND	ND	--
D003	SO	BH	8	8.00	4/7/2014	1055	4.21	ND	ND	ND	ND	ND	ND	--
D008A	SO	BH	8	8.00	4/7/2014	1501	31.23	21.60	3.60	ND	ND	ND	ND	--
D011A	SO	BH	8	8.00	4/7/2014	1527	53.10	61.60	ND	ND	ND	ND	ND	--
D003	SO	BH	9	9.00	4/7/2014	1105	5.21	ND	ND	ND	ND	ND	ND	--
D011A	SO	BH	10	10.00	4/7/2014	1532	178.40	160.80	ND	ND	ND	ND	ND	--
D011	SO	BH	1.5	1.50	4/8/2014	1253	74.63	25.20	ND	ND	ND	ND	ND	--
D014A	SO	BH	2	2.00	4/8/2014	1023	35.82	ND	ND	ND	ND	ND	ND	--
D014	SO	BH	2	2.00	4/8/2014	1109	34.27	8.00	ND	ND	ND	ND	ND	--
D016	SO	BH	2	2.00	4/8/2014	1139	28.88	ND	ND	ND	ND	ND	ND	--
D017	SO	BH	2	2.00	4/8/2014	1341	40.72	6.40	ND	ND	ND	ND	ND	--
D012	SO	BH	2	2.00	4/8/2014	1417	66.87	37.60	ND	ND	ND	ND	ND	--
D014A	SO	BH	3.8	3.80	4/8/2014	1024	17.84	ND	ND	ND	ND	ND	ND	--
D014	SO	BH	4	4.00	4/8/2014	1110	21.45	ND	ND	ND	ND	ND	ND	--
D016	SO	BH	4	4.00	4/8/2014	1140	26.12	ND	ND	ND	ND	ND	ND	--
D011	SO	BH	4	4.00	4/8/2014	1254	245.90	155.20	ND	ND	ND	ND	ND	--
D017	SO	BH	4	4.00	4/8/2014	1342	50.24	ND	ND	ND	ND	ND	ND	--
D012	SO	BH	4	4.00	4/8/2014	1418	92.81	65.60	ND	ND	ND	ND	ND	--
D012	SO	BH	5	5.00	4/8/2014	1423	430.40	680.00	ND	ND	ND	ND	ND	--
D014A	SO	BH	5.5	5.50	4/8/2014	1038	20.44	ND	ND	ND	ND	ND	ND	--
D014	SO	BH	5.5	5.50	4/8/2014	1119	19.32	ND	ND	ND	ND	ND	ND	--
D016	SO	BH	6	6.00	4/8/2014	1151	26.09	ND	ND	ND	ND	ND	ND	--
D011	SO	BH	6	6.00	4/8/2014	1304	340.90	476.80	ND	ND	ND	ND	ND	--
D017	SO	BH	6	6.00	4/8/2014	1350	107.60	74.00	ND	ND	ND	ND	ND	--
D012	SO	BH	6	6.00	4/8/2014	1424	313.90	1,822.40	ND	ND	ND	ND	ND	--
D014A	SO	BH	6.5	6.50	4/8/2014	1039	38.12	ND	ND	ND	ND	ND	ND	--
D014	SO	BH	7.1	7.10	4/8/2014	1120	51.50	4.00	ND	ND	ND	ND	ND	--
D016	SO	BH	7.6	7.60	4/8/2014	1152	39.72	ND	ND	ND	ND	ND	ND	--
D011	SO	BH	8	8.00	4/8/2014	1305	301.20	1,039.20	ND	ND	ND	ND	ND	--
D017	SO	BH	8	8.00	4/8/2014	1351	217.90	227.20	ND	ND	ND	ND	ND	--
D012	SO	BH	8	8.00	4/8/2014	1425	151.80	1,092.80	ND	ND	ND	ND	ND	--
D012	SO	BH	8.2	8.20	4/8/2014	1452	106.80	311.20	ND	ND	ND	ND	ND	--

Table B-02. Concentrations of VOCs in soil samples analyzed using the portable gas chromatograph.—Continued

[TVOC, total volatile organic compounds; µg/kg, microgram of constituent per gram of soil; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; SO, soil; BH, borehole; --, sample not analyzed for constituent; ND, not detected; UNK, unknown; EX, excavation; TR, trench]

Sample identifier (fig. 3-03)	Media	Feature	Top	Bottom	Date	Time	TVOC (µg/kg)	Concentration of constituents in µg/kg						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
D017	SO	BH	8.6	8.60	4/8/2014	1358	39.84	280.80	ND	ND	ND	ND	ND	--
D011	SO	BH	9	9.00	4/8/2014	1311	52.50	112.00	ND	ND	ND	ND	ND	--
D011	SO	BH	10.2	10.20	4/8/2014	1312	100.80	193.44	ND	ND	ND	ND	ND	--
D026	SO	BH	1.5	1.50	4/9/2014	1434	--	ND	ND	ND	ND	ND	ND	--
D027	SO	BH	1.5	1.50	4/9/2014	1543	--	8.00	ND	ND	ND	ND	ND	--
D020	SO	BH	2	2.00	4/9/2014	0955	178.50	52.80	ND	ND	ND	ND	ND	--
D021	SO	BH	2	2.00	4/9/2014	1021	824.80	748.80	ND	ND	ND	ND	ND	--
D022	SO	BH	2	2.00	4/9/2014	1055	--	2,684.00	ND	ND	ND	ND	ND	--
D023	SO	BH	2	2.00	4/9/2014	1124	--	11,136.00	ND	ND	ND	ND	ND	--
D024	SO	BH	2	2.00	4/9/2014	1200	--	26,424.00	60.00	ND	ND	ND	ND	--
D019	SO	BH	2.5	2.50	4/9/2014	1345	--	64.00	ND	ND	ND	ND	ND	--
D009	SO	BH	2.8	2.80	4/9/2014	1512	--	8.80	ND	ND	ND	ND	ND	--
D026	SO	BH	3	3.00	4/9/2014	1432	--	ND	ND	ND	ND	ND	ND	--
D027	SO	BH	3	3.00	4/9/2014	1542	--	332.00	ND	ND	ND	ND	ND	--
D020	SO	BH	3.2	3.20	4/9/2014	0954	347.50	4.00	ND	ND	ND	ND	ND	--
D024	SO	BH	3.3	3.30	4/9/2014	1154	--	240.00	ND	ND	ND	ND	ND	--
D026	SO	BH	3.4	3.40	4/9/2014	1446	--	40.00	ND	ND	ND	ND	ND	--
D025	SO	BH	3.7	3.70	4/9/2014	1327	--	352.00	ND	ND	ND	ND	ND	--
D026	SO	BH	3.8	3.80	4/9/2014	1445	--	8.80	ND	ND	ND	ND	ND	--
D021	SO	BH	4	4.00	4/9/2014	1020	864.50	2,802.40	ND	ND	ND	ND	ND	--
D022	SO	BH	4	4.00	4/9/2014	1054	--	8,876.00	ND	ND	ND	ND	ND	--
D023	SO	BH	4	4.00	4/9/2014	1123	--	10,468.00	ND	ND	ND	ND	ND	--
D019	SO	BH	4	4.00	4/9/2014	1344	--	ND	ND	ND	ND	ND	ND	--
D027	SO	BH	4.2	4.20	4/9/2014	1552	--	472.00	ND	ND	ND	ND	ND	--
D023	SO	BH	4.8	4.80	4/9/2014	1135	--	497.20	ND	ND	ND	ND	ND	--
D021	SO	BH	5	5.00	4/9/2014	1036	897.10	5,560.00	ND	ND	ND	ND	ND	--
D022	SO	BH	6	6.00	4/9/2014	1104	--	664.00	ND	ND	ND	ND	ND	--
D021	SO	BH	7	7.00	4/9/2014	1031	584.60	1,144.40	ND	ND	ND	ND	ND	--
D029	SO	BH	2	2.00	4/14/2014	1056	93.80	52.40	ND	ND	ND	ND	ND	ND
D030	SO	BH	2	2.00	4/14/2014	1139	891.30	3,023.20	44.00	144.00	ND	ND	ND	ND
D031	SO	BH	2	2.00	4/14/2014	1237	293.90	136.00	ND	ND	ND	ND	ND	ND
D033	SO	BH	2	2.00	4/14/2014	1419	--	10.40	ND	ND	ND	ND	ND	ND
D034	SO	BH	2	2.00	4/14/2014	1451	383.40	26.96	ND	ND	ND	ND	ND	ND
D028	SO	BH	3	3.00	4/14/2014	1002	21.19	ND	ND	ND	ND	ND	ND	ND
D029	SO	BH	4	4.00	4/14/2014	1055	418.90	427.20	4.00	ND	ND	ND	ND	ND
D030	SO	BH	4	4.00	4/14/2014	1138	774.80	4,800.00	ND	ND	ND	ND	ND	ND
D033	SO	BH	4	4.00	4/14/2014	1418	71.95	948.00	ND	ND	ND	ND	ND	ND
D034	SO	BH	4	4.00	4/14/2014	1450	72.06	2.40	ND	ND	ND	ND	ND	ND
D028	SO	BH	5	5.00	4/14/2014	1012	67.27	49.68	ND	ND	ND	ND	ND	ND
D030	SO	BH	5	5.00	4/14/2014	1146	1,557.00	51,840.00	ND	ND	ND	ND	ND	64,776.00
D032	SO	BH	5	5.00	4/14/2014	1355	265.90	178.80	ND	ND	ND	ND	ND	ND
D033	SO	BH	5	5.00	4/14/2014	1426	332.50	347.20	15.20	72.00	ND	ND	ND	ND
D028	SO	BH	6	6.00	4/14/2014	1011	151.10	178.28	ND	ND	ND	ND	ND	ND
D029	SO	BH	6	6.00	4/14/2014	1109	683.40	2,584.00	ND	ND	ND	ND	ND	ND
D034	SO	BH	6	6.00	4/14/2014	1503	224.30	6.00	ND	ND	ND	ND	ND	ND
D033	SO	BH	6.2	6.20	4/14/2014	1425	656.70	1,785.60	30.40	58.56	ND	ND	ND	ND
D034	SO	BH	8	8.00	4/14/2014	1512	94.43	7.60	ND	ND	ND	ND	ND	ND
D028	SO	BH	8.5	8.50	4/14/2014	1019	534.20	890.40	4.00	ND	ND	ND	ND	ND
D041	SO	BH	0.6	0.60	4/15/2014	1301	70.53	2.80	ND	ND	ND	ND	ND	ND
D035	SO	BH	0.7	0.70	4/15/2014	1000	19.81	ND	ND	ND	ND	ND	ND	ND
D042	SO	BH	0.7	0.70	4/15/2014	1318	126.60	ND	ND	ND	ND	ND	ND	ND
D036	SO	BH	0.8	0.80	4/15/2014	1035	50.54	ND	ND	ND	ND	ND	ND	ND
D047	SO	BH	0.9	0.90	4/15/2014	1544	--	ND	ND	ND	ND	ND	ND	ND
D040	SO	BH	1	1.00	4/15/2014	1251	89.40	ND	ND	ND	ND	ND	ND	ND
D044	SO	BH	1	1.00	4/15/2014	1431	79.61	ND	ND	ND	ND	ND	ND	ND
D046	SO	BH	1	1.00	4/15/2014	1518	115.90	10.40	ND	ND	ND	ND	ND	ND
D039	SO	BH	1.2	1.20	4/15/2014	1155	33.13	ND	ND	ND	ND	ND	ND	ND
D041	SO	BH	1.4	1.40	4/15/2014	1300	75.42	ND	ND	ND	ND	ND	ND	ND
D042	SO	BH	1.7	1.70	4/15/2014	1317	35.11	7.60	ND	ND	ND	ND	ND	ND
D035	SO	BH	2	2.00	4/15/2014	1001	84.78	66.00	11.60	ND	ND	ND	ND	ND
D038	SO	BH	2	2.00	4/15/2014	1134	91.58	ND	ND	ND	ND	ND	ND	ND
D044	SO	BH	2	2.00	4/15/2014	1430	57.32	ND	ND	ND	ND	ND	ND	ND
D045	SO	BH	2	2.00	4/15/2014	1456	139.50	52.04	ND	ND	ND	ND	ND	ND
D046	SO	BH	2	2.00	4/15/2014	1519	74.82	6.80	ND	ND	ND	ND	ND	ND
D036	SO	BH	2.5	2.50	4/15/2014	1033	19.47	ND	ND	ND	ND	ND	ND	ND
D038	SO	BH	3	3.00	4/15/2014	1135	40.18	6.80	ND	ND	ND	ND	ND	ND
D046	SO	BH	3.5	3.50	4/15/2014	1523	80.66	11.20	ND	ND	ND	ND	ND	ND
D037	SO	BH	3.6	3.60	4/15/2014	1110	31.45	ND	ND	ND	ND	ND	ND	ND
D043	SO	BH	3.6	3.60	4/15/2014	1348	108.90	ND	ND	ND	ND	ND	ND	ND
D047	SO	BH	3.9	3.90	4/15/2014	1543	--	46.80	ND	ND	ND	ND	ND	ND
D035	SO	BH	4	4.00	4/15/2014	1002	14.87	22.12	ND	ND	ND	ND	ND	ND
D036	SO	BH	4	4.00	4/15/2014	1034	15.40	ND	ND	ND	ND	ND	ND	ND
D043	SO	BH	4	4.00	4/15/2014	1356	77.03	ND	ND	ND	ND	ND	ND	ND
D045	SO	BH	4	4.00	4/15/2014	1455	321.00	286.80	ND	ND	ND	ND	ND	ND
D046	SO	BH	4	4.00	4/15/2014	1520	110.60	36.80	ND	ND	ND	ND	ND	ND
D045	SO	BH	4.5	4.50	4/15/2014	1502	288.70	300.80	ND	ND	ND	ND	ND	ND
D035	SO	BH	6	6.00	4/15/2014	1017	26.89	2.80	ND	ND	ND	ND	ND	ND
D036	SO	BH	6	6.00	4/15/2014	1046	12.62	ND	ND	ND	ND	ND	ND	ND
D043	SO	BH	6	6.00	4/15/2014	1357	98.37	4.00	ND	ND	ND	ND	ND	ND
D036	SO	BH	7.5	7.50	4/15/2014	1047	24.27	ND	ND	ND	ND	ND	ND	ND

Table B-02. Concentrations of VOCs in soil samples analyzed using the portable gas chromatograph.—Continued

[TVOC, total volatile organic compounds; µg/kg, microgram of constituent per gram of soil; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; SO, soil; BH, borehole; --, sample not analyzed for constituent; ND, not detected; UNK, unknown; EX, excavation; TR, trench]

Sample identifier (fig. 3-03)	Media	Feature	Top	Bottom	Date	Time	TVOC (µg/kg)	Concentration of constituents in µg/kg						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
D043	SO	BH	8	8.00	4/15/2014	1417	110.40	13.60	ND	ND	ND	ND	ND	ND
D043	SO	BH	10.2	10.20	4/15/2014	1416	64.45	4.80	ND	ND	ND	ND	ND	ND
D050	SO	BH	0.9	0.90	4/16/2014	1142	68.24	12.00	ND	151.20	18.40	ND	ND	ND
D051	SO	BH	1	1.00	4/16/2014	1210	132.20	748.00	24.00	ND	ND	ND	ND	ND
D056	SO	BH	1	1.00	4/16/2014	1455	81.43	ND	ND	ND	ND	ND	ND	ND
P014	SO	BH	1	1.00	4/16/2014	1557	--	ND	ND	ND	ND	ND	ND	ND
D052	SO	BH	1.2	1.20	4/16/2014	1242	153.70	788.00	ND	ND	ND	ND	ND	ND
D048	SO	BH	1.3	1.30	4/16/2014	1057	944.00	2,008.00	18.00	11.60	ND	ND	ND	ND
D049	SO	BH	1.7	1.70	4/16/2014	1130	87.04	275.20	ND	ND	ND	ND	ND	ND
D050	SO	BH	2	2.00	4/16/2014	1141	85.13	28.80	9.60	65.60	ND	ND	ND	ND
D051	SO	BH	2	2.00	4/16/2014	1211	190.80	1,070.00	128.00	104.00	ND	ND	ND	ND
D053	SO	BH	2	2.00	4/16/2014	1340	78.83	ND	ND	ND	ND	ND	ND	ND
P013	SO	BH	2	2.00	4/16/2014	1527	98.10	ND	ND	ND	ND	ND	ND	ND
D048	SO	BH	2.2	2.20	4/16/2014	1056	498.70	3,104.00	ND	ND	ND	ND	ND	ND
D051	SO	BH	2.5	2.50	4/16/2014	1212	249.70	2,496.00	24.00	ND	ND	ND	ND	ND
D055	SO	BH	2.5	2.50	4/16/2014	1430	108.60	ND	ND	ND	ND	ND	ND	ND
D049	SO	BH	3	3.00	4/16/2014	1126	330.50	2,272.00	ND	ND	ND	ND	ND	ND
D050	SO	BH	3	3.00	4/16/2014	1140	77.63	68.00	18.40	92.80	ND	ND	ND	ND
P014	SO	BH	3	3.00	4/16/2014	1558	--	ND	ND	ND	ND	ND	ND	ND
D048	SO	BH	3.2	3.20	4/16/2014	1055	121.50	864.00	ND	ND	ND	ND	ND	ND
D052	SO	BH	3.2	3.20	4/16/2014	1241	85.33	254.40	ND	ND	ND	ND	ND	ND
D054	SO	BH	3.5	3.50	4/16/2014	1400	148.20	ND	ND	ND	ND	ND	ND	ND
D049	SO	BH	3.7	3.70	4/16/2014	1125	235.40	1,376.00	ND	ND	ND	ND	ND	ND
D050	SO	BH	4	4.00	4/16/2014	1143	166.80	162.40	29.60	87.20	ND	ND	ND	ND
D053	SO	BH	4	4.00	4/16/2014	1339	74.46	ND	ND	ND	ND	ND	ND	ND
P013	SO	BH	4	4.00	4/16/2014	1526	96.09	ND	ND	ND	ND	ND	ND	ND
D052	SO	BH	4.2	4.20	4/16/2014	1240	160.00	502.40	ND	ND	ND	ND	ND	ND
D053	SO	BH	4.5	4.50	4/16/2014	1349	79.62	ND	ND	ND	ND	ND	ND	ND
D050	SO	BH	4.7	4.70	4/16/2014	1152	52.90	30.80	ND	ND	ND	ND	ND	ND
P014	SO	BH	5.1	5.10	4/16/2014	1600	--	ND	ND	ND	ND	ND	ND	ND
D054	SO	BH	5.2	5.20	4/16/2014	1405	78.13	63.20	ND	ND	ND	ND	ND	ND
D053	SO	BH	5.5	5.50	4/16/2014	1348	59.44	4.00	ND	ND	ND	ND	ND	ND
P013	SO	BH	5.5	5.50	4/16/2014	1540	74.47	ND	ND	ND	ND	ND	ND	ND
D056	SO	BH	7	7.00	4/16/2014	1454	92.68	2.40	ND	ND	ND	ND	ND	ND
D056	SO	BH	9	9.00	4/16/2014	1453	--	ND	ND	ND	ND	ND	ND	ND
A052	SO	BH	1	1.00	4/17/2014	1348	46.78	2.00	ND	ND	ND	ND	0.80	ND
A021	SO	BH	1.2	1.20	4/17/2014	1231	70.49	0.80	ND	ND	ND	ND	ND	ND
A041	SO	BH	1.5	1.50	4/17/2014	1029	34.42	ND	ND	ND	ND	ND	0.40	ND
P015	SO	BH	2	2.00	4/17/2014	1007	38.67	ND	ND	ND	ND	ND	ND	ND
A041A	SO	BH	2	2.00	4/17/2014	1050	42.06	ND	ND	ND	ND	ND	ND	ND
A003	SO	BH	2	2.00	4/17/2014	1248	78.46	ND	ND	ND	ND	ND	ND	ND
A051	SO	BH	2	2.00	4/17/2014	1325	--	ND	ND	ND	ND	ND	ND	ND
A004	SO	BH	2.2	2.20	4/17/2014	1131	56.13	ND	ND	ND	ND	ND	ND	ND
A020	SO	BH	2.2	2.20	4/17/2014	1147	57.72	ND	ND	ND	ND	ND	ND	ND
A041	SO	BH	2.5	2.50	4/17/2014	1030	38.64	ND	ND	ND	ND	ND	0.80	ND
A021	SO	BH	2.5	2.50	4/17/2014	1226	91.34	ND	ND	ND	ND	ND	0.80	ND
A004	SO	BH	3	3.00	4/17/2014	1130	50.33	ND	ND	ND	ND	ND	0.80	ND
A021	SO	BH	3	3.00	4/17/2014	1227	66.76	ND	ND	ND	ND	ND	ND	ND
A052	SO	BH	3	3.00	4/17/2014	1347	36.91	7.20	ND	ND	ND	ND	ND	ND
A041	SO	BH	4	4.00	4/17/2014	1028	51.90	ND	ND	ND	ND	ND	0.80	ND
A041A	SO	BH	4	4.00	4/17/2014	1049	39.44	ND	ND	ND	ND	ND	1.20	ND
A020	SO	BH	4	4.00	4/17/2014	1146	62.00	0.40	ND	ND	ND	ND	0.80	ND
A003	SO	BH	4	4.00	4/17/2014	1247	77.27	0.40	ND	ND	ND	ND	ND	ND
A052	SO	BH	4	4.00	4/17/2014	1346	53.71	27.20	6.40	ND	ND	ND	ND	ND
A003	SO	BH	4.5	4.50	4/17/2014	1258	73.86	ND	ND	ND	ND	ND	0.80	ND
P015	SO	BH	5	5.00	4/17/2014	1016	30.80	ND	ND	ND	ND	ND	ND	ND
A041	SO	BH	5.2	5.20	4/17/2014	1038	38.04	ND	ND	ND	ND	ND	ND	ND
P015	SO	BH	6	6.00	4/17/2014	1015	44.44	ND	ND	ND	ND	ND	0.80	ND
A020	SO	BH	6	6.00	4/17/2014	1200	41.68	ND	ND	ND	ND	ND	0.80	ND
A041A	SO	BH	6.2	6.20	4/17/2014	1059	43.50	ND	ND	ND	ND	ND	ND	ND
A003	SO	BH	6.4	6.40	4/17/2014	1257	73.05	ND	ND	ND	ND	ND	0.80	ND
A020	SO	BH	7.2	7.20	4/17/2014	1159	66.33	0.80	ND	ND	ND	ND	ND	ND
A052	SO	BH	7.6	7.60	4/17/2014	1355	60.36	44.00	15.20	4.40	ND	ND	ND	ND
A052	SO	BH	8.1	8.10	4/17/2014	1400	71.42	19.20	7.20	3.20	ND	ND	ND	ND
C007A	SO	BH	1	1.00	4/21/2014	1334	89.24	ND	ND	ND	ND	ND	ND	ND
C007	SO	BH	1	1.00	4/21/2014	1346	77.17	0.72	ND	ND	ND	ND	ND	ND
C005	SO	BH	1	1.00	4/21/2014	1402	95.73	1.04	ND	ND	ND	ND	ND	ND
C011	SO	BH	1.5	1.50	4/21/2014	1127	139.40	ND	ND	ND	ND	ND	0.76	ND
C002	SO	BH	2	2.00	4/21/2014	1236	110.40	ND	ND	ND	ND	ND	ND	ND
C003	SO	BH	2	2.00	4/21/2014	1258	135.50	ND	ND	ND	ND	ND	ND	ND
C008	SO	BH	2	2.00	4/21/2014	1315	28.67	ND	ND	ND	ND	ND	ND	ND
C007	SO	BH	2	2.00	4/21/2014	1350	66.21	0.60	ND	ND	ND	ND	0.72	ND
C005	SO	BH	2	2.00	4/21/2014	1401	83.70	ND	ND	ND	ND	ND	ND	ND
C014	SO	BH	2	2.00	4/21/2014	1501	--	ND	ND	ND	ND	ND	ND	ND
B006	SO	BH	2	2.00	4/21/2014	UNK	14.82	ND	ND	ND	ND	ND	0.72	ND
C006	SO	BH	2.1	2.10	4/21/2014	1425	--	1.48	ND	ND	ND	ND	ND	ND
C010	SO	BH	2.3	2.30	4/21/2014	1140	37.22	ND	ND	ND	ND	ND	1.20	ND
C007	SO	BH	2.4	2.40	4/21/2014	1345	82.06	ND	ND	ND	ND	ND	ND	ND
C012	SO	BH	2.6	2.60	4/21/2014	1100	40.90	ND	ND	ND	ND	ND	2.40	ND
C007A	SO	BH	2.8	2.80	4/21/2014	1333	113.40	ND	ND	ND	ND	ND	ND	ND

Table B-02. Concentrations of VOCs in soil samples analyzed using the portable gas chromatograph.—Continued

[TVOC, total volatile organic compounds; µg/kg, microgram of constituent per gram of soil; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; SO, soil; BH, borehole; --, sample not analyzed for constituent; ND, not detected; UNK, unknown; EX, excavation; TR, trench]

Sample identifier (fig. 3-03)	Media	Feature	Top	Bottom	Date	Time	TVOC (µg/kg)	Concentration of constituents in µg/kg						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
C011	SO	BH	3	3.00	4/21/2014	1126	61.63	ND	ND	ND	ND	ND	ND	ND
C003	SO	BH	3.3	3.30	4/21/2014	1257	80.82	ND	ND	ND	ND	ND	ND	ND
C002	SO	BH	3.6	3.60	4/21/2014	1235	59.85	ND	ND	ND	ND	ND	ND	ND
C005	SO	BH	3.6	3.60	4/21/2014	1400	84.90	ND	ND	ND	ND	ND	ND	ND
B006	SO	BH	4	4.00	4/21/2014	1046	7.53	ND	ND	ND	ND	ND	0.80	ND
C014	SO	BH	4	4.00	4/21/2014	1500	--	ND	ND	ND	ND	ND	ND	ND
C005	SO	BH	5	5.00	4/21/2014	1405	--	4.60	ND	ND	ND	ND	ND	ND
C014	SO	BH	6	6.00	4/21/2014	1510	--	ND	ND	ND	ND	ND	0.80	ND
B006	SO	BH	6.3	6.30	4/21/2014	1045	8.92	ND	ND	ND	ND	ND	ND	ND
C014	SO	BH	7.3	7.30	4/21/2014	1509	--	0.60	ND	ND	ND	ND	ND	ND
B007	SO	BH	1.5	1.50	4/22/2014	1001	72.41	0.36	ND	ND	ND	ND	ND	ND
B008A	SO	BH	1.5	1.50	4/22/2014	1034	18.03	ND	ND	ND	ND	ND	ND	ND
A045	SO	BH	1.5	1.50	4/22/2014	1213	35.84	ND	ND	ND	ND	ND	ND	ND
A047	SO	BH	2	2.00	4/22/2014	1114	16.32	ND	ND	ND	ND	ND	ND	ND
A046	SO	BH	2	2.00	4/22/2014	1143	20.93	0.64	ND	ND	ND	ND	ND	ND
A013	SO	BH	2	2.00	4/22/2014	1400	40.29	ND	ND	ND	ND	ND	ND	ND
A012	SO	BH	2	2.00	4/22/2014	1440	30.90	ND	ND	ND	ND	ND	ND	ND
A033	SO	BH	2	2.00	4/22/2014	1510	48.99	0.36	ND	ND	ND	ND	ND	ND
A034	SO	BH	2	2.00	4/22/2014	1530	14.58	ND	ND	ND	ND	ND	ND	ND
A036	SO	BH	2	2.00	4/22/2014	1620	15.76	ND	ND	ND	ND	ND	ND	ND
A035	SO	BH	2.5	2.50	4/22/2014	1558	17.36	ND	ND	ND	ND	ND	ND	ND
A045	SO	BH	2.8	2.80	4/22/2014	1212	34.17	0.36	ND	ND	ND	ND	ND	ND
A044	SO	BH	2.9	2.90	4/22/2014	1200	34.96	ND	ND	ND	ND	ND	ND	ND
A053	SO	BH	2	3.00	4/22/2014	1315	49.34	ND	ND	ND	ND	ND	ND	ND
B007	SO	BH	3	3.00	4/22/2014	1000	44.17	ND	ND	ND	ND	ND	ND	ND
A012	SO	BH	3	3.00	4/22/2014	1441	24.76	0.40	ND	ND	ND	ND	ND	ND
B008A	SO	BH	3.5	3.50	4/22/2014	1033	22.98	ND	ND	ND	ND	ND	ND	ND
A036	SO	BH	3.8	3.80	4/22/2014	1619	--	ND	ND	ND	ND	ND	ND	ND
A047	SO	BH	4	4.00	4/22/2014	1113	31.61	ND	ND	ND	ND	ND	ND	ND
A033	SO	BH	4	4.00	4/22/2014	1509	13.50	ND	ND	ND	ND	ND	ND	ND
A034	SO	BH	4	4.00	4/22/2014	1532	15.99	ND	ND	ND	ND	ND	ND	ND
A034	SO	BH	4.4	4.40	4/22/2014	1538	21.25	ND	ND	ND	ND	ND	ND	ND
A047	SO	BH	4.9	4.90	4/22/2014	1122	12.17	ND	ND	ND	ND	ND	ND	ND
A053	SO	BH	6	6.00	4/22/2014	1328	41.45	ND	ND	ND	ND	ND	ND	ND
A034	SO	BH	6.4	6.40	4/22/2014	1537	15.69	ND	ND	ND	ND	ND	ND	ND
A034	SO	BH	6.4	6.40	4/22/2014	1539	15.85	ND	ND	ND	ND	ND	1.44	ND
B007	SO	BH	1	2.00	4/23/2014	1225	15.36	ND	ND	ND	ND	ND	ND	ND
C007A	SO	BH	2	2.00	4/23/2014	1140	23.33	3.64	ND	ND	ND	ND	0.80	ND
P004	SO	BH	2	2.00	4/23/2014	1321	54.10	ND	ND	ND	ND	ND	ND	ND
P003	SO	BH	2	2.00	4/23/2014	1347	16.13	ND	ND	ND	ND	ND	ND	ND
P001	SO	BH	2	2.00	4/23/2014	1416	18.50	ND	ND	ND	ND	ND	ND	ND
A033A	SO	BH	3	3.00	4/23/2014	1000	17.99	ND	ND	ND	ND	ND	0.68	ND
P004	SO	BH	4	4.00	4/23/2014	1320	21.99	ND	ND	ND	ND	ND	ND	ND
P003	SO	BH	4	4.00	4/23/2014	1346	28.75	ND	ND	ND	ND	2.04	ND	ND
P001	SO	BH	4	4.00	4/23/2014	1415	20.58	ND	ND	ND	ND	ND	1.36	ND
A033A	SO	BH	5.4	5.40	4/23/2014	1026	53.10	ND	ND	ND	ND	ND	ND	ND
P004	SO	BH	5.5	5.50	4/23/2014	1331	22.89	ND	ND	ND	ND	ND	ND	ND
A033B	SO	BH	6	6.00	4/23/2014	1110	54.78	ND	ND	ND	ND	ND	1.12	ND
P003	SO	BH	6	6.00	4/23/2014	1355	15.69	ND	ND	ND	ND	ND	ND	ND
P001	SO	BH	6.5	6.50	4/23/2014	1425	15.53	ND	ND	ND	ND	ND	ND	ND
P004	SO	BH	7	7.00	4/23/2014	1330	24.19	ND	ND	ND	ND	ND	0.92	ND
P003	SO	BH	7	7.00	4/23/2014	1354	13.19	ND	ND	ND	ND	ND	ND	ND
A028	SO	BH	10	11.00	4/23/2014	1615	--	15,552.00	4,256.00	ND	ND	ND	86.40	ND
C014	SO	BH	2	2.00	4/23/2014	1200	18.69	ND	ND	ND	ND	ND	0.56	ND
A055	SO	BH	1	1.00	4/29/2014	1119	8.18	ND	ND	ND	ND	ND	ND	ND
D057	SO	BH	2	2.00	4/29/2014	1204	25.99	32.80	ND	ND	ND	ND	ND	ND
D058	SO	BH	2	2.00	4/29/2014	1237	--	126.40	33.60	ND	ND	ND	ND	ND
A054	SO	BH	2.5	2.50	4/29/2014	1012	4.41	ND	ND	ND	ND	ND	ND	ND
D058	SO	BH	3.9	3.90	4/29/2014	1236	--	96.80	3.20	ND	ND	ND	ND	ND
A054	SO	BH	4	4.00	4/29/2014	1024	5.50	ND	ND	ND	ND	ND	ND	ND
A055	SO	BH	4	4.00	4/29/2014	1118	10.30	ND	ND	ND	ND	ND	ND	ND
D057	SO	BH	4	4.00	4/29/2014	1203	14.25	7.20	ND	ND	ND	ND	ND	ND
D058	SO	BH	4.8	4.80	4/29/2014	1248	--	55.60	ND	ND	ND	ND	ND	ND
D057	SO	BH	5	5.00	4/29/2014	1214	15.21	10.00	ND	ND	ND	ND	ND	ND
D058	SO	BH	5.7	5.70	4/29/2014	1247	--	46.00	ND	ND	ND	ND	ND	ND
D057	SO	BH	5.8	5.80	4/29/2014	1213	20.59	ND	ND	ND	ND	ND	ND	ND
A054	SO	BH	6	6.00	4/29/2014	1025	5.02	ND	ND	ND	ND	ND	ND	ND
A054	SO	BH	7.8	7.80	4/29/2014	1026	6.11	ND	ND	ND	ND	ND	ND	ND
A054	SO	BH	8	8.00	4/29/2014	1035	5.12	ND	ND	ND	ND	ND	ND	ND
A054	SO	BH	8.5	8.50	4/29/2014	1042	6.05	ND	ND	ND	ND	ND	ND	ND
A054	SO	BH	8.8	8.80	4/29/2014	1036	7.12	ND	ND	ND	ND	ND	ND	ND
A060	SO	BH	1	1.00	4/30/2014	1423	38.31	58.40	ND	ND	ND	ND	ND	ND
A058	SO	BH	1.5	1.50	4/30/2014	1152	13.32	8.80	ND	ND	ND	ND	ND	ND
A062	SO	BH	1.5	1.50	4/30/2014	1518	35.03	54.00	ND	ND	ND	ND	ND	ND
A056	SO	BH	2	2.00	4/30/2014	1018	37.80	51.60	ND	ND	ND	ND	ND	ND
A057	SO	BH	2	2.00	4/30/2014	1109	20.85	26.00	ND	ND	ND	ND	ND	ND
A063	SO	BH	2	2.00	4/30/2014	1542	4.97	126.40	ND	ND	ND	ND	ND	ND
A059	SO	BH	2.2	2.20	4/30/2014	1334	35.11	ND	ND	ND	ND	ND	ND	ND
A061	SO	BH	2.5	2.50	4/30/2014	1445	18.03	14.40	ND	ND	ND	ND	ND	ND
A060	SO	BH	2.6	2.60	4/30/2014	1422	43.74	49.20	ND	ND	ND	ND	ND	ND

Table B-02. Concentrations of VOCs in soil samples analyzed using the portable gas chromatograph.—Continued

[TVOC, total volatile organic compounds; µg/kg, microgram of constituent per gram of soil; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; SO, soil; BH, borehole; --, sample not analyzed for constituent; ND, not detected; UNK, unknown; EX, excavation; TR, trench]

Sample identifier (fig. 3-03)	Media	Feature	Top	Bottom	Date	Time	TVOC (µg/kg)	Concentration of constituents in µg/kg						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
A061	SO	BH	2.9	2.90	4/30/2014	1517	17.54	24.80	ND	ND	ND	ND	ND	ND
A058	SO	BH	3.8	3.80	4/30/2014	1151	12.09	16.00	ND	ND	ND	ND	ND	ND
A059	SO	BH	3.8	3.80	4/30/2014	1333	16.36	ND	ND	ND	ND	ND	ND	ND
A056	SO	BH	4	4.00	4/30/2014	1017	76.74	106.40	ND	ND	ND	ND	ND	ND
A057	SO	BH	4	4.00	4/30/2014	1110	92.54	202.80	ND	ND	ND	ND	ND	ND
A057	SO	BH	5	5.00	4/30/2014	1119	27.49	88.40	ND	ND	ND	ND	ND	ND
A058	SO	BH	5.5	5.50	4/30/2014	1205	17.58	14.00	ND	ND	ND	ND	ND	ND
A056	SO	BH	6	6.00	4/30/2014	1039	81.31	92.40	ND	ND	ND	ND	ND	ND
A059	SO	BH	6	6.00	4/30/2014	1345	9.94	ND	ND	ND	ND	ND	ND	ND
A063	SO	BH	6	6.00	4/30/2014	1554	--	112.00	ND	ND	ND	ND	ND	ND
A057	SO	BH	6.6	6.60	4/30/2014	1118	39.99	112.40	ND	ND	ND	ND	ND	ND
A058	SO	BH	6.8	6.80	4/30/2014	1204	19.31	5.20	ND	ND	ND	ND	ND	ND
A056	SO	BH	7.8	7.80	4/30/2014	1040	83.34	110.80	ND	ND	ND	ND	ND	ND
A059	SO	BH	8	8.00	4/30/2014	1344	12.11	ND	ND	ND	ND	ND	ND	ND
A063	SO	BH	9.6	9.60	4/30/2014	1602	--	124.40	ND	ND	ND	ND	ND	ND
D059	SO	BH	2	2.00	5/1/2014	1016	23.12	ND	3.20	ND	ND	ND	ND	ND
D060	SO	BH	2	2.00	5/1/2014	1047	91.37	122.00	ND	ND	ND	ND	ND	ND
D061	SO	BH	2	2.00	5/1/2014	1233	99.38	96.00	10.80	ND	ND	ND	ND	ND
D062	SO	BH	1.5	2.50	5/1/2014	1300	--	46.40	ND	ND	ND	ND	ND	ND
D030	SO	BH	1	3.00	5/1/2014	1145	727.90	1,780.00	48.40	246.40	ND	ND	ND	ND
D059	SO	BH	4	4.00	5/1/2014	1015	42.98	60.40	1.60	ND	ND	ND	ND	ND
D060	SO	BH	4	4.00	5/1/2014	1046	33.92	66.80	ND	ND	ND	ND	ND	ND
D030	SO	BH	4	4.00	5/1/2014	1155	--	162.80	ND	ND	ND	ND	ND	ND
D061	SO	BH	4	4.00	5/1/2014	1234	32.37	46.00	1.20	ND	ND	ND	ND	ND
D059	SO	BH	4.5	4.50	5/1/2014	1020	28.86	32.80	ND	ND	ND	ND	ND	ND
D062	SO	BH	4.5	4.50	5/1/2014	1310	--	19.20	ND	ND	ND	ND	ND	ND
D060	SO	BH	4	4.60	5/1/2014	1100	9.61	45.60	ND	ND	ND	ND	ND	ND
D061	SO	BH	5.8	5.80	5/1/2014	1245	23.39	23.60	ND	ND	ND	ND	ND	ND
SBG-01	SO	BH	0.5	2.00	5/5/2014	1550	28.34	ND	ND	ND	ND	ND	ND	ND
D063	SO	BH	1	2.00	5/5/2014	1330	49.87	20.80	ND	ND	ND	ND	ND	ND
SBG-01	SO	BH	2	2.00	5/5/2014	1542	111.90	1.60	ND	ND	ND	ND	ND	ND
D005	SO	BH	1.5	3.00	5/5/2014	1445	26.40	3.20	ND	ND	ND	ND	ND	ND
A064	SO	BH	0	4.00	5/5/2014	1050	14.64	2.00	ND	ND	ND	ND	ND	ND
D019	SO	BH	3	4.00	5/5/2014	1420	50.46	35.60	2.00	ND	ND	ND	ND	ND
A064	SO	BH	4	4.00	5/5/2014	1105	13.67	ND	ND	ND	ND	ND	ND	ND
P010	SO	BH	2	5.00	5/5/2014	1230	122.70	2.40	ND	ND	ND	ND	ND	ND
A064	SO	BH	6	6.00	5/5/2014	1104	14.77	2.40	ND	ND	ND	ND	ND	ND
A018	SO	BH	5	6.50	5/5/2014	1030	151.00	88.00	77.20	ND	ND	ND	ND	ND
D011	SO	BH	6	8.00	5/5/2014	1400	145.60	168.00	ND	ND	ND	ND	ND	ND
A064	SO	BH	7	8.00	5/5/2014	1100	12.79	3.20	ND	ND	ND	ND	ND	ND
A064	SO	BH	10	10.00	5/5/2014	1115	14.13	7.60	ND	ND	ND	ND	ND	ND
A064	SO	BH	12	12.00	5/5/2014	1116	11.41	2.80	ND	ND	ND	ND	ND	ND
A064	SO	BH	14.6	14.60	5/5/2014	1125	46.69	8.80	ND	ND	ND	ND	ND	ND
SL-01	SO	EX	0.75	0.75	5/6/2014	1250	48.82	ND	ND	ND	ND	ND	ND	ND
D065	SO	BH	1	1.00	5/6/2014	1320	69.46	2.00	ND	ND	ND	ND	ND	ND
D015	SO	BH	1	1.00	5/6/2014	1455	--	19.60	ND	ND	ND	ND	ND	ND
D069	SO	BH	2	2.00	5/6/2014	0957	12.96	3.20	ND	ND	ND	ND	ND	ND
D067	SO	BH	2	2.00	5/6/2014	1143	27.96	20.80	ND	ND	ND	ND	ND	ND
D066	SO	BH	2	2.00	5/6/2014	1410	97.18	96.80	ND	ND	ND	ND	ND	ND
D018	SO	BH	2	2.00	5/6/2014	1518	--	23.60	ND	ND	ND	ND	ND	ND
D068	SO	BH	1.5	3.00	5/6/2014	1228	68.17	56.40	ND	ND	ND	ND	ND	ND
D064	SO	BH	2.4	3.00	5/6/2014	1105	34.79	26.00	ND	ND	ND	ND	ND	ND
D015	SO	BH	3	3.00	5/6/2014	1454	--	5.60	ND	ND	ND	ND	ND	ND
D018	SO	BH	3	3.00	5/6/2014	1519	--	24.00	ND	ND	ND	ND	ND	ND
D064	SO	BH	3.1	3.10	5/6/2014	1108	22.60	12.40	ND	ND	ND	ND	ND	ND
D066	SO	BH	3.5	3.50	5/6/2014	1411	103.40	87.20	ND	ND	ND	ND	ND	ND
D067	SO	BH	3	3.60	5/6/2014	1145	33.67	64.40	ND	ND	ND	ND	ND	ND
D015	SO	BH	3.9	3.90	5/6/2014	1501	--	3.20	ND	ND	ND	ND	ND	ND
D065	SO	BH	3.5	4.00	5/6/2014	1335	78.04	9.60	ND	ND	ND	ND	ND	--
D069	SO	BH	4	4.00	5/6/2014	0956	27.35	12.00	ND	ND	ND	ND	ND	ND
D065	SO	BH	4	4.00	5/6/2014	1331	121.90	24.40	ND	ND	ND	ND	ND	ND
D067	SO	BH	4.4	4.40	5/6/2014	1157	29.97	21.60	ND	ND	ND	ND	ND	ND
D069	SO	BH	6	6.00	5/6/2014	1005	36.50	17.60	ND	ND	ND	ND	ND	ND
D065	SO	BH	6	6.00	5/6/2014	1347	99.28	6.40	ND	ND	ND	ND	ND	ND
D065	SO	BH	7.5	7.50	5/6/2014	1346	153.90	149.20	ND	ND	ND	ND	ND	ND
D066	SO	BH	7.1	7.70	5/6/2014	1425	626.80	1,536.00	4.40	ND	ND	ND	ND	ND
D069	SO	BH	6.9	7.90	5/6/2014	1006	24.84	11.20	ND	ND	ND	ND	ND	ND
D069	SO	BH	8	8.00	5/6/2014	1007	55.47	48.40	ND	ND	ND	ND	ND	ND
D065	SO	BH	8.2	8.20	5/6/2014	1354	115.40	94.40	ND	ND	ND	ND	ND	ND
D066	SO	BH	8.2	8.90	5/6/2014	1435	467.10	1,968.00	3.20	ND	ND	ND	ND	ND
D069	SO	BH	9.5	9.50	5/6/2014	1019	101.20	141.60	ND	ND	ND	ND	ND	ND
D069	SO	BH	10.9	10.90	5/6/2014	1018	113.30	228.80	ND	ND	ND	ND	ND	ND
A-SAND	SO	BH	2	2.00	5/7/2014	1135	--	ND	ND	ND	ND	ND	ND	ND
A-SAND	SO	BH	4	4.00	5/7/2014	1133	--	ND	ND	ND	ND	ND	ND	ND
A-SAND	SO	BH	4.5	5.50	5/7/2014	1145	--	ND	ND	ND	ND	ND	ND	ND
A-SAND	SO	BH	6	6.00	5/7/2014	1137	--	3.60	ND	ND	ND	ND	ND	ND
A-SAND	SO	BH	8	8.00	5/7/2014	1136	--	3.20	ND	ND	ND	ND	ND	ND
A-SAND	SO	BH	8.5	8.50	5/7/2014	1156	--	ND	ND	ND	ND	ND	ND	ND
A-SAND	SO	BH	9	9.00	5/7/2014	1155	--	ND	ND	ND	ND	ND	ND	ND
A-SAND	SO	BH	10.6	10.60	5/7/2014	1154	--	2.00	ND	ND	ND	ND	ND	ND
C001	SO	EX	0	0.50	3/5/2014	1158	18.01	26.00	ND	ND	ND	ND	ND	--

Table B-02. Concentrations of VOCs in soil samples analyzed using the portable gas chromatograph.—Continued

[TVOC, total volatile organic compounds; µg/kg, microgram of constituent per gram of soil; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; SO, soil; BH, borehole; --, sample not analyzed for constituent; ND, not detected; UNK, unknown; EX, excavation; TR, trench]

Sample identifier (fig. 3-03)	Media	Feature	Top	Bottom	Date	Time	TVOC (µg/kg)	Concentration of constituents in µg/kg						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
C002	SO	EX	0	0.50	3/5/2014	1204	75.13	22.00	ND	ND	ND	ND	ND	--
C003	SO	EX	0	0.50	3/5/2014	1208	19.54	13.20	ND	ND	ND	ND	ND	--
C004	SO	EX	0	0.50	3/5/2014	1210	9.53	3.60	ND	ND	ND	ND	ND	--
C005	SO	EX	0	0.50	3/5/2014	1220	15.77	ND	ND	ND	ND	ND	ND	--
C006	SO	EX	0	0.50	3/5/2014	1223	9.02	ND	ND	ND	ND	ND	ND	--
C007	SO	EX	0	0.50	3/5/2014	1225	8.46	ND	ND	ND	ND	ND	ND	--
C008	SO	EX	0	0.50	3/5/2014	1228	6.98	ND	ND	ND	ND	ND	ND	--
C009	SO	EX	0	0.50	3/5/2014	1232	8.85	ND	ND	ND	ND	ND	ND	--
C010	SO	EX	0	0.50	3/5/2014	1236	11.56	ND	ND	ND	ND	ND	ND	--
C011	SO	EX	0	0.50	3/5/2014	1239	4.30	ND	ND	ND	ND	ND	ND	--
C012	SO	EX	0	0.50	3/5/2014	1242	3.85	ND	ND	ND	ND	ND	ND	--
C013	SO	EX	0	0.50	3/5/2014	1250	7.38	ND	ND	ND	ND	ND	ND	--
C014	SO	EX	0	0.50	3/5/2014	1252	5.43	ND	ND	ND	ND	ND	ND	--
C015	SO	EX	0	0.50	3/5/2014	1258	5.43	ND	ND	ND	ND	ND	ND	--
C016	SO	EX	0	0.50	3/5/2014	1302	6.26	ND	ND	ND	ND	ND	ND	--
B001	SO	EX	0	0.50	3/5/2014	1312	3.70	ND	ND	ND	ND	ND	ND	--
B002	SO	EX	0	0.50	3/5/2014	1317	4.03	ND	ND	ND	ND	ND	ND	--
B003	SO	EX	0	0.50	3/5/2014	1327	4.39	ND	ND	ND	ND	ND	ND	--
B004	SO	EX	0	0.50	3/5/2014	1340	4.53	ND	ND	ND	ND	ND	ND	--
B005	SO	EX	0	0.50	3/5/2014	1350	6.24	ND	ND	ND	ND	ND	ND	--
B006	SO	EX	0	0.50	3/5/2014	1357	3.96	ND	ND	ND	ND	ND	ND	--
B007	SO	EX	0	0.50	3/5/2014	1400	4.34	ND	ND	ND	ND	ND	ND	--
B008	SO	EX	0	0.50	3/5/2014	1405	4.04	ND	ND	ND	ND	ND	ND	--
B009	SO	EX	0	0.50	3/5/2014	1415	2.85	ND	ND	ND	ND	ND	ND	--
B010	SO	EX	0	0.50	3/5/2014	1420	2.19	ND	ND	ND	ND	ND	ND	--
B011	SO	EX	0	0.50	3/5/2014	1425	2.36	ND	ND	ND	ND	ND	ND	--
A001	SO	EX	0	0.00	3/11/2014	1140	13.18	ND	ND	ND	ND	ND	ND	--
A007	SO	EX	0	0.00	3/11/2014	1230	0.96	--	--	--	--	--	--	--
A002	SO	EX	0	0.50	3/11/2014	1145	37.49	ND	ND	ND	ND	ND	ND	--
A003	SO	EX	0	0.50	3/11/2014	1153	6.83	--	--	--	--	--	--	--
A004	SO	EX	0	0.50	3/11/2014	1156	11.04	--	--	--	--	--	--	--
A005	SO	EX	0	0.50	3/11/2014	1157	7.33	--	--	--	--	--	--	--
A006	SO	EX	0	0.50	3/11/2014	1200	4.90	--	--	--	--	--	--	--
A007	SO	EX	0	0.50	3/11/2014	1206	12.89	ND	ND	ND	ND	ND	ND	--
A008	SO	EX	0	0.50	3/11/2014	1215	1.81	--	--	--	--	--	--	--
A009	SO	EX	0	0.50	3/11/2014	1220	4.12	--	--	--	--	--	--	--
A010	SO	EX	0	0.50	3/11/2014	1225	2.21	--	--	--	--	--	--	--
A011	SO	EX	0	0.50	3/11/2014	1229	6.03	--	--	--	--	--	--	--
A012	SO	EX	0	0.50	3/11/2014	1233	1.29	--	--	--	--	--	--	--
A013	SO	EX	0	0.50	3/11/2014	1237	10.90	--	--	--	--	--	--	--
A014	SO	EX	0	0.50	3/11/2014	1241	7.73	--	--	--	--	--	--	--
A015	SO	EX	0	0.50	3/11/2014	1245	4.70	--	--	--	--	--	--	--
A016	SO	EX	0	0.50	3/11/2014	1249	3.63	--	--	--	--	--	--	--
A017	SO	EX	0	0.50	3/11/2014	1253	12.60	--	--	--	--	--	--	--
A018	SO	EX	0	0.50	3/11/2014	1257	8.70	--	--	--	--	--	--	--
A019	SO	EX	0	0.50	3/11/2014	1301	2.63	--	--	--	--	--	--	--
A021	SO	EX	0	0.50	3/11/2014	1305	4.66	--	--	--	--	--	--	--
A022	SO	EX	0	0.50	3/11/2014	1309	1.63	--	--	--	--	--	--	--
A023	SO	EX	0	0.50	3/11/2014	1313	4.53	--	--	--	--	--	--	--
A024	SO	EX	0	0.50	3/11/2014	1317	4.64	--	--	--	--	--	--	--
A025	SO	EX	0	0.50	3/11/2014	1330	2.02	--	--	--	--	--	--	--
A026	SO	EX	0	0.50	3/11/2014	1333	4.80	--	--	--	--	--	--	--
A028	SO	EX	0	0.50	3/11/2014	1340	8.14	--	--	--	--	--	--	--
A029	SO	EX	0	0.50	3/11/2014	1355	1.03	--	--	--	--	--	--	--
A031	SO	EX	0	0.50	3/11/2014	1414	6.43	--	--	--	--	--	--	--
A032	SO	EX	0	0.50	3/11/2014	1422	7.32	--	--	--	--	--	--	--
A033	SO	EX	0	0.50	3/11/2014	1440	6.61	--	--	--	--	--	--	--
A034	SO	EX	0	0.50	3/11/2014	1447	9.82	--	--	--	--	--	--	--
A039	SO	EX	0	0.50	3/11/2014	1452	3.80	--	--	--	--	--	--	--
A035	SO	EX	0	0.50	3/11/2014	1456	4.33	--	--	--	--	--	--	--
A027	SO	EX	0	0.50	3/11/2014	UNK	7.12	--	--	--	--	--	--	--
A037	SO	EX	0	0.50	3/11/2014	UNK	3.58	--	--	--	--	--	--	--
P001	SO	EX	0	0.00	3/13/2014	1121	2.81	--	--	--	--	--	--	--
D001	SO	EX	0	0.50	3/13/2014	0956	14.17	ND	ND	ND	ND	ND	ND	--
D002	SO	EX	0	0.50	3/13/2014	1002	1.22	--	--	--	--	--	--	--
D003	SO	EX	0	0.50	3/13/2014	1005	0.33	--	--	--	--	--	--	--
D004	SO	EX	0	0.50	3/13/2014	1010	1.34	--	--	--	--	--	--	--
D005	SO	EX	0	0.50	3/13/2014	1015	8.62	--	--	--	--	--	--	--
D006	SO	EX	0	0.50	3/13/2014	1019	6.04	--	--	--	--	--	--	--
D007	SO	EX	0	0.50	3/13/2014	1024	1.22	--	--	--	--	--	--	--
D008	SO	EX	0	0.50	3/13/2014	1029	6.71	--	--	--	--	--	--	--
D009	SO	EX	0	0.50	3/13/2014	1033	11.64	14.00	ND	ND	ND	ND	ND	--
D011	SO	EX	0	0.50	3/13/2014	1037	20.88	64.40	ND	ND	ND	ND	ND	--
D010	SO	EX	0	0.50	3/13/2014	1040	1.12	--	--	--	--	--	--	--
D012	SO	EX	0	0.50	3/13/2014	1047	11.07	11.20	ND	ND	ND	ND	ND	--
D014	SO	EX	0	0.50	3/13/2014	1055	6.42	--	--	--	--	--	--	--
D015	SO	EX	0	0.50	3/13/2014	1102	1.37	--	--	--	--	--	--	--
P001	SO	EX	0	0.50	3/13/2014	1120	22.85	ND	ND	ND	ND	ND	ND	--
P002	SO	EX	0	0.50	3/13/2014	1124	9.63	--	--	--	--	--	--	--
P003	SO	EX	0	0.50	3/13/2014	1132	13.36	ND	ND	ND	ND	ND	ND	--
P004	SO	EX	0	0.50	3/13/2014	1133	25.28	ND	ND	ND	ND	ND	ND	--

Table B-02. Concentrations of VOCs in soil samples analyzed using the portable gas chromatograph.—Continued

[TVOC, total volatile organic compounds; µg/kg, microgram of constituent per gram of soil; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; SO, soil; BH, borehole; --, sample not analyzed for constituent; ND, not detected; UNK, unknown; EX, excavation; TR, trench]

Sample identifier (fig. 3-03)	Media	Feature	Top	Bottom	Date	Time	TVOC (µg/kg)	Concentration of constituents in µg/kg						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
P005	SO	EX	0	0.50	3/13/2014	1145	17.87	ND	ND	ND	ND	ND	ND	--
A042	SO	EX	0	0.50	3/13/2014	1240	6.25	--	--	--	--	--	--	--
A043	SO	EX	0	0.50	3/13/2014	1247	1.98	--	--	--	--	--	--	--
A041	SO	EX	0	0.50	3/13/2014	1259	3.69	--	--	--	--	--	--	--
A040	SO	EX	0	0.50	3/13/2014	1312	1.25	--	--	--	--	--	--	--
A044	SO	EX	0	0.50	3/13/2014	1328	5.58	--	--	--	--	--	--	--
A045	SO	EX	0	0.50	3/13/2014	1337	4.95	--	--	--	--	--	--	--
A046	SO	EX	0	0.50	3/13/2014	1347	1.84	--	--	--	--	--	--	--
A041A	SO	EX	0	0.50	3/13/2014	1358	5.02	--	--	--	--	--	--	--
P006	SO	EX	0	0.50	3/13/2014	1405	5.50	--	--	--	--	--	--	--
AM01	SO	EX	0	0.50	3/18/2014	0830	11.86	ND	ND	ND	ND	ND	ND	--
C003	SO	EX	0	0.50	3/18/2014	0937	9.63	ND	ND	ND	ND	ND	ND	--
C017	SO	EX	0	0.50	3/18/2014	0949	8.38	ND	ND	ND	ND	ND	ND	--
C013	SO	EX	0	0.50	3/18/2014	1002	12.93	ND	ND	ND	ND	ND	ND	--
B007	SO	EX	0	0.50	3/18/2014	1015	12.69	ND	ND	ND	ND	ND	ND	--
A005	SO	EX	0	0.50	3/18/2014	1040	7.27	ND	ND	ND	ND	ND	ND	--
A002	SO	EX	0	0.50	3/18/2014	1055	3.69	ND	ND	ND	ND	ND	ND	--
A018A	SO	EX	0	0.50	3/18/2014	1110	9.93	ND	ND	ND	ND	ND	ND	--
A031	SO	EX	0	0.50	3/18/2014	1130	5.60	ND	ND	ND	ND	ND	ND	--
A046	SO	EX	0	0.50	3/18/2014	1205	10.35	ND	ND	ND	ND	ND	ND	--
D002	SO	EX	0	0.50	3/18/2014	1305	8.01	ND	ND	ND	ND	ND	ND	--
D007	SO	EX	0	0.50	3/18/2014	1320	10.48	ND	ND	ND	ND	ND	ND	--
D011	SO	EX	0	0.50	3/18/2014	1355	36.40	32.40	ND	ND	ND	ND	ND	--
P006	SO	EX	0	0.50	3/18/2014	1400	10.25	ND	ND	ND	ND	ND	ND	--
SBG-01	SO	EX	0	0.50	3/18/2014	1430	14.15	ND	ND	ND	ND	ND	ND	--
A022	SO	BH	0.4	0.40	3/25/2014	1106	5.35	ND	ND	ND	ND	ND	ND	--
A023	SO	BH	0.5	0.50	3/25/2014	1042	7.76	ND	ND	ND	ND	ND	ND	--
P010	SO	BH	0	0.00	4/3/2014	1401	11.17	4.80	ND	ND	ND	ND	ND	--
D006A	SO	BH	0.5	0.50	4/7/2014	1025	10.15	ND	ND	10.40	ND	ND	ND	--
D003	SO	BH	0.5	0.50	4/7/2014	1045	3.72	ND	ND	ND	ND	ND	ND	--
A042	SO	BH	0.5	0.50	4/7/2014	1312	10.07	ND	ND	ND	ND	ND	ND	--
P012	SO	BH	0.5	0.50	4/7/2014	1411	23.89	ND	ND	ND	ND	ND	ND	--
D008A	SO	BH	0.5	0.50	4/7/2014	1452	11.87	ND	ND	ND	ND	ND	ND	--
D014A	SO	BH	0.5	0.50	4/8/2014	1022	--	ND	ND	ND	ND	ND	ND	--
D014	SO	BH	0.5	0.50	4/8/2014	1108	35.89	ND	ND	ND	ND	ND	ND	--
D016	SO	BH	0.5	0.50	4/8/2014	1138	30.88	ND	ND	ND	ND	ND	ND	--
D011	SO	BH	0.5	0.50	4/8/2014	1252	88.04	30.80	ND	ND	ND	ND	ND	--
D017	SO	BH	0.5	0.50	4/8/2014	1340	37.05	ND	ND	ND	ND	ND	ND	--
D025	SO	BH	0.2	0.20	4/9/2014	1326	--	496.40	ND	ND	ND	ND	ND	--
D021	SO	BH	0.5	0.50	4/9/2014	1022	3.5 TVOC in 50	61.60	ND	ND	ND	ND	ND	--
D028	SO	BH	0	0.00	4/14/2014	1040	601.30	108.00	ND	ND	ND	ND	ND	ND
D037	SO	BH	0.5	0.50	4/15/2014	1109	37.26	ND	ND	ND	ND	ND	ND	ND
D038	SO	BH	0.5	0.50	4/15/2014	1136	70.56	ND	ND	ND	ND	ND	ND	ND
D040	SO	BH	0.5	0.50	4/15/2014	1250	118.30	12.80	ND	ND	ND	ND	ND	ND
D055	SO	BH	0.5	0.50	4/16/2014	1423	64.85	4.80	ND	ND	ND	ND	ND	ND
P015	SO	BH	0.5	0.50	4/17/2014	1008	24.97	ND	ND	ND	ND	ND	ND	ND
A054	SO	BH	0.5	0.50	4/29/2014	1013	4.51	ND	ND	ND	ND	ND	ND	ND
A055	SO	BH	0.5	0.50	4/29/2014	1120	7.87	ND	ND	ND	ND	ND	ND	ND
D057	SO	BH	0.5	0.50	4/29/2014	1205	15.61	ND	ND	ND	ND	ND	ND	ND
D058	SO	BH	0.5	0.50	4/29/2014	1238	--	7.20	ND	ND	ND	ND	ND	ND
A056	SO	BH	0.5	0.50	4/30/2014	1019	38.48	52.80	ND	ND	ND	ND	ND	ND
A057	SO	BH	0.5	0.50	4/30/2014	1108	31.36	34.40	ND	ND	ND	ND	ND	ND
A058	SO	BH	0.5	0.50	4/30/2014	1153	10.60	2.80	ND	ND	ND	ND	ND	ND
A059	SO	BH	0.5	0.50	4/30/2014	1335	--	ND	ND	ND	ND	ND	ND	ND
A061	SO	BH	0.5	0.50	4/30/2014	1446	25.64	19.20	ND	ND	ND	ND	ND	ND
A062	SO	BH	0.5	0.50	4/30/2014	1519	18.47	30.40	ND	ND	ND	ND	ND	ND
A063	SO	BH	0.5	0.50	4/30/2014	1543	55.95	30.00	ND	ND	ND	ND	ND	ND
D028	SO	BH	0	0.00	5/1/2014	1200	41.13	3,040.00	ND	ND	ND	ND	ND	ND
SL-085	SO	EX	1	1.00	01/18/2012	1535	--	ND	ND	ND	ND	ND	ND	--
SL-105	SO	EX	1	1.00	01/18/2012	1555	--	ND	ND	ND	ND	ND	ND	--
SL-125	SO	EX	1	1.00	01/18/2012	1625	--	ND	ND	ND	ND	ND	ND	--
SL-025	SO	EX	2.5	2.50	01/18/2012	1030	--	ND	ND	ND	ND	ND	ND	--
SL-040	SO	EX	2.5	2.50	01/18/2012	1115	--	ND	ND	ND	ND	ND	ND	--
SL-033	SO	EX	2.5	2.50	01/18/2012	1116	--	ND	ND	ND	ND	ND	ND	--
SL-055	SO	EX	2.5	2.50	01/18/2012	1400	--	ND	ND	ND	ND	ND	ND	--
SL-075	SO	EX	2.5	2.50	01/18/2012	1515	--	ND	ND	ND	ND	ND	ND	--
SL-095	SO	EX	3.5	3.50	01/18/2012	1545	--	ND	ND	ND	ND	ND	ND	--
SL-115	SO	EX	3.5	3.50	01/18/2012	1615	--	ND	ND	ND	ND	ND	ND	--
SL-135	SO	EX	3.5	3.50	01/18/2012	1650	--	ND	ND	ND	ND	ND	ND	--
SL-050	SO	EX	0.5	0.50	01/18/2012	1430	--	ND	ND	ND	ND	ND	ND	--
SL-145	SO	EX	1	1.00	01/19/2012	0815	--	ND	ND	ND	ND	ND	ND	--
SL-165	SO	EX	1	1.00	01/19/2012	0845	--	ND	ND	ND	ND	ND	ND	--
SL-185	SO	EX	1	1.00	01/19/2012	0925	--	ND	ND	ND	ND	ND	ND	--
SL-205	SO	EX	1	1.00	01/19/2012	0955	--	ND	ND	ND	ND	ND	ND	--
SL-225	SO	EX	1	1.00	01/19/2012	1025	--	ND	ND	ND	ND	ND	ND	--
SL-245	SO	EX	1	1.00	01/19/2012	1050	--	ND	ND	ND	ND	ND	ND	--
SL-265	SO	EX	1	1.00	01/19/2012	1255	--	ND	ND	ND	ND	ND	ND	--
SL-285	SO	EX	1	1.00	01/19/2012	1330	--	ND	ND	ND	ND	ND	ND	--
SL-305	SO	EX	1	1.00	01/19/2012	1355	--	ND	ND	ND	ND	ND	ND	--
SL-305	SO	EX	1	1.00	01/19/2012	1400	--	ND	ND	ND	ND	ND	ND	--
SL-325	SO	EX	1	1.00	01/19/2012	1425	--	ND	ND	ND	ND	ND	ND	--
SL-345	SO	EX	1	1.00	01/19/2012	1510	--	ND	ND	ND	ND	ND	ND	--
SL-365	SO	EX	1	1.00	01/19/2012	1540	--	ND	ND	ND	ND	ND	ND	--
SL-215	SO	EX	2.5	2.50	01/19/2012	1015	--	ND	ND	ND	ND	ND	ND	--

Table B-02. Concentrations of VOCs in soil samples analyzed using the portable gas chromatograph.—Continued

[TVOC, total volatile organic compounds; µg/kg, microgram of constituent per gram of soil; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; SO, soil; BH, borehole; --, sample not analyzed for constituent; ND, not detected; UNK, unknown; EX, excavation; TR, trench]

Sample identifier (fig. 3-03)	Media	Feature	Top	Bottom	Date	Time	TVOC (µg/kg)	Concentration of constituents in µg/kg						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
SL-155	SO	EX	3.5	3.50	01/19/2012	0830	--	ND	ND	ND	ND	ND	ND	--
SL-175	SO	EX	3.5	3.50	01/19/2012	0900	--	ND	ND	ND	ND	ND	ND	--
SL-195	SO	EX	3.5	3.50	01/19/2012	0935	--	ND	ND	ND	ND	ND	ND	--
SL-235	SO	EX	3.5	3.50	01/19/2012	1045	--	ND	ND	ND	ND	ND	ND	--
SL-255	SO	EX	3.5	3.50	01/19/2012	1120	--	ND	ND	ND	ND	ND	ND	--
SL-275	SO	EX	3.5	3.50	01/19/2012	1310	--	ND	ND	ND	ND	ND	ND	--
SL-295	SO	EX	3.5	3.50	01/19/2012	1345	--	ND	ND	ND	ND	ND	ND	--
SL-315	SO	EX	3.5	3.50	01/19/2012	1415	--	ND	ND	ND	ND	ND	ND	--
SL-335	SO	EX	3.5	3.50	01/19/2012	1455	--	ND	ND	ND	ND	ND	ND	--
SL-355	SO	EX	3.5	3.50	01/19/2012	1520	--	ND	ND	ND	ND	ND	ND	--
SL-375	SO	EX	3.5	3.50	01/19/2012	1600	--	ND	ND	ND	ND	ND	ND	--
GP-001A	SO	BH	1.5	1.5	05/14/2012	1055	--	ND	ND	ND	ND	ND	ND	--
GP-001B	SO	BH	1.5	1.5	05/14/2012	1237	--	ND	ND	ND	ND	ND	ND	--
GP-001C	SO	BH	1.5	1.5	05/14/2012	1333	--	ND	ND	ND	ND	ND	ND	--
GP-001A	SO	BH	2.5	2.5	05/14/2012	1055	--	ND	ND	ND	ND	ND	ND	--
GP-001B	SO	BH	2.5	2.5	05/14/2012	1238	--	28.40	ND	ND	ND	ND	ND	--
GP-001C	SO	BH	2.7	2.7	05/14/2012	1335	--	ND	ND	ND	ND	ND	ND	--
GP-001A	SO	BH	3.5	3.5	05/14/2012	1056	--	ND	ND	ND	ND	ND	ND	--
GP-001B	SO	BH	3.7	3.7	05/14/2012	1234	--	36.00	ND	ND	ND	ND	ND	--
GP-001C	SO	BH	3.8	3.8	05/14/2012	1327	--	ND	ND	ND	ND	ND	ND	--
GP-001A	SO	BH	4	4	05/14/2012	1242	--	18.00	ND	ND	ND	ND	ND	--
GP-001A	SO	BH	5	5	05/14/2012	1131	--	ND	ND	ND	ND	ND	ND	--
GP-001B	SO	BH	5	5	05/14/2012	1300	--	17.20	ND	ND	ND	ND	ND	--
GP-001C	SO	BH	5	5	05/14/2012	1350	--	ND	ND	ND	ND	ND	ND	--
GP-001A	SO	BH	6	6	05/14/2012	1132	--	ND	ND	ND	ND	ND	ND	--
GP-001C	SO	BH	6.8	6.8	05/14/2012	1345	--	ND	ND	ND	ND	ND	ND	--
GP-001A	SO	BH	7	7	05/14/2012	1125	--	52.80	ND	ND	ND	ND	ND	--
GP-001B	SO	BH	7	7	05/14/2012	1300	--	225.60	ND	ND	ND	ND	ND	--
GP-001A	SO	BH	8	8	05/14/2012	1158	--	30.40	ND	ND	ND	ND	ND	--
GP-001B	SO	BH	8.2	8.2	05/14/2012	1304	--	ND	ND	ND	ND	ND	ND	--
GP-001B	SO	BH	9	9	05/14/2012	1310	--	102.40	ND	ND	ND	ND	ND	--
GP-001A	SO	BH	0.5	0.5	05/14/2012	1054	--	ND	ND	ND	ND	ND	ND	--
GP-001B	SO	BH	0.5	0.5	05/14/2012	1236	--	ND	ND	ND	ND	ND	ND	--
GP-001C	SO	BH	0.5	0.5	05/14/2012	1330	--	ND	ND	ND	ND	ND	ND	--
GP-002B	SO	BH	0.7	0.70	06/06/2012	1145	--	ND	ND	ND	ND	ND	ND	--
GP-003A	SO	BH	0.7	0.7	06/06/2012	1240	--	ND	ND	ND	ND	ND	ND	--
GP-002A	SO	BH	1	1.00	06/06/2012	1050	--	ND	ND	ND	ND	ND	ND	--
GP-004A	SO	BH	1.5	1.5	06/06/2012	1305	--	ND	ND	ND	ND	ND	ND	--
GP-002B	SO	BH	1.9	1.90	06/06/2012	1140	--	ND	ND	ND	ND	ND	ND	--
GP-003A	SO	BH	2	2.00	06/06/2012	1235	--	ND	ND	ND	ND	ND	ND	--
GP-002A	SO	BH	2.5	2.50	06/06/2012	1050	--	ND	ND	ND	ND	ND	ND	--
GP-002A	SO	BH	3.5	3.50	06/06/2012	1045	--	ND	ND	ND	ND	ND	ND	--
GP-003A	SO	BH	3.5	3.50	06/06/2012	1235	--	ND	ND	ND	ND	ND	ND	--
GP-004A	SO	BH	3.9	3.9	06/06/2012	1305	--	ND	ND	ND	ND	ND	ND	--
GP-003A	SO	BH	4.5	4.5	06/06/2012	1245	--	ND	ND	ND	ND	ND	ND	--
GP-002A	SO	BH	5	5.00	06/06/2012	1105	--	44.80	35.20	5.60	ND	ND	ND	--
GP-004A	SO	BH	6	6	06/06/2012	1240	--	ND	ND	ND	ND	ND	ND	--
GP-003A	SO	BH	6	6	06/06/2012	1245	--	ND	ND	ND	ND	ND	ND	--
GP-004A	SO	BH	7.5	6	06/06/2012	1245	--	ND	ND	ND	ND	ND	ND	--
GP-002A	SO	BH	6.5	6.50	06/06/2012	1105	--	64.80	147.20	54.40	3.20	ND	ND	--
GP-002A	SO	BH	7.5	7.50	06/06/2012	1058	--	8.80	33.60	8.00	ND	ND	ND	--
GP-004A	SO	BH	8.5	8.5	06/06/2012	1330	--	ND	ND	ND	ND	ND	ND	--
GP-002A	SO	BH	9	9.00	06/06/2012	1117	--	32.00	92.00	12.00	ND	ND	ND	--
GP-002A	SO	BH	9.1	9.10	06/06/2012	1115	--	73.60	357.60	91.20	3.20	ND	ND	--
GP-004A	SO	BH	10	10	06/06/2012	1325	--	ND	ND	ND	ND	ND	ND	--
GP-002A	SO	BH	0.5	0.50	06/06/2012	UNK	--	ND	ND	ND	ND	ND	ND	--
GP-SHD-01	SO	BH	1	1.00	11/29/2012	1140	--	ND	ND	ND	ND	ND	ND	--
GP-SHD-01	SO	BH	2.4	2.40	11/29/2012	1140	--	ND	ND	ND	ND	ND	ND	--
GP-SHD-01	SO	BH	3.8	3.80	11/29/2012	1140	--	ND	ND	ND	ND	ND	ND	--
GP-SHD-01	SO	BH	5	5.00	11/29/2012	1255	--	ND	ND	ND	ND	ND	ND	--
GP-SHD-01	SO	BH	6	6.00	11/29/2012	1255	--	ND	ND	ND	ND	ND	ND	--
GP-SHD-01	SO	BH	7.5	7.50	11/29/2012	1210	--	ND	ND	ND	ND	ND	ND	--
GP-SHD-01	SO	BH	8.2	8.20	11/29/2012	1325	--	ND	ND	ND	ND	ND	ND	--
GP-SHD-01	SO	BH	8.6	8.60	11/29/2012	1320	--	ND	ND	ND	ND	ND	ND	--
GP-SHD-01	SO	BH	0.5	0.50	11/29/2012	1140	--	ND	ND	ND	ND	ND	ND	--
SB-003	SO	BH	1	1.00	4/24/2013	1122	--	160.00	ND	ND	--	ND	ND	--
SB-006	SO	BH	1	1.00	4/24/2013	1315	--	617.33	ND	ND	--	ND	ND	--
SB-005	SO	BH	1.4	1.40	4/24/2013	1300	--	222.40	ND	ND	--	ND	ND	--
SB-001	SO	BH	2	2.00	4/24/2013	1035	--	ND	ND	ND	--	ND	ND	--
SB-004	SO	BH	2	2.00	4/24/2013	1220	--	ND	ND	ND	--	ND	ND	--
SB-002	SO	BH	2.5	2.50	4/24/2013	UNK	--	559.20	243.20	176.80	--	ND	ND	--
SB-003	SO	BH	3	3.00	4/24/2013	1122	--	ND	ND	ND	--	ND	ND	--
SB-005	SO	BH	3.4	3.40	4/24/2013	1255	--	944.00	16.00	ND	--	ND	ND	--
SB-006	SO	BH	3.5	3.50	4/24/2013	1310	--	2,786.67	ND	ND	--	ND	ND	--
SB-004	SO	BH	4	4.00	4/24/2013	1218	--	112.00	ND	ND	--	ND	ND	--
SB-001	SO	BH	4	4.00	4/24/2013	UNK	--	406.40	16.00	ND	--	ND	ND	--
SB-006	SO	BH	4.7	4.70	4/24/2013	1324	--	3,893.33	ND	53.33	--	ND	ND	--
SB-004	SO	BH	5.5	5.50	4/24/2013	1235	--	ND	ND	ND	--	ND	ND	--
SB-001	SO	BH	6	6.00	4/24/2013	UNK	--	360.00	ND	ND	--	ND	ND	--
SB-004	SO	BH	7.5	7.50	4/24/2013	1230	--	1,504.00	ND	ND	--	ND	ND	--
SB-002	SO	BH	0.2	0.20	4/24/2013	1111	--	72.00	ND	ND	--	ND	ND	--
SB-007	SO	BH	0.6	0.60	4/25/2013	0934	--	ND	ND	ND	--	ND	ND	--
SB-008	SO	BH	1.5	1.50	4/25/2013	1006	--	392.00	ND	ND	--	ND	ND	--
SB-010	SO	BH	1.5	1.50	4/25/2013	1145	--	ND	ND	ND	--	ND	ND	--

Table B-02. Concentrations of VOCs in soil samples analyzed using the portable gas chromatograph.—Continued

[TVOC, total volatile organic compounds; µg/kg, microgram of constituent per gram of soil; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; SO, soil; BH, borehole; --, sample not analyzed for constituent; ND, not detected; UNK, unknown; EX, excavation; TR, trench]

Sample identifier (fig. 3-03)	Media	Feature	Top	Bottom	Date	Time	TVOC (µg/kg)	Concentration of constituents in µg/kg						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
SB-011	SO	BH	1.5	1.50	4/25/2013	1200	--	ND	ND	ND	--	ND	ND	--
SB-007	SO	BH	2	2.00	4/25/2013	0930	--	18.00	ND	ND	--	ND	ND	--
SB-009	SO	BH	2.7	2.70	4/25/2013	1105	--	84.00	ND	ND	--	ND	ND	--
SB-007	SO	BH	3.6	3.60	4/25/2013	0932	--	200.00	ND	ND	--	ND	ND	--
SB-008	SO	BH	3.7	3.70	4/25/2013	1005	--	1,362.00	ND	ND	--	ND	ND	--
SB-013	SO	BH	3.7	3.7	4/25/2013	1242	--	ND	ND	ND	--	ND	ND	--
SB-012	SO	BH	4	4.00	4/25/2013	1215	--	ND	ND	ND	--	ND	ND	--
SB-007	SO	BH	4.6	4.60	4/25/2013	0950	--	392.00	ND	ND	--	ND	ND	--
SB-013	SO	BH	5.5	5.5	4/25/2013	1251	--	47.20	ND	ND	--	ND	ND	--
SB-007	SO	BH	5.9	5.90	4/25/2013	0949	--	900.00	ND	ND	--	ND	ND	--
SB-008	SO	BH	6	6.00	4/25/2013	1020	--	206.00	ND	ND	--	ND	ND	--
SB-012	SO	BH	6	6.00	4/25/2013	1226	--	125.33	ND	ND	--	ND	ND	--
SB-013	SO	BH	6.7	6.7	4/25/2013	1248	--	ND	ND	ND	--	ND	ND	--
SB-012	SO	BH	7.6	7.60	4/25/2013	1225	--	221.33	ND	ND	--	ND	ND	--
SB-008	SO	BH	7.7	7.70	4/25/2013	1018	--	1,792.00	ND	ND	--	ND	ND	--
SB-008	SO	BH	9	9.00	4/25/2013	1037	--	1,516.00	ND	ND	--	ND	ND	--
SB-008	SO	BH	11.7	11.70	4/25/2013	1036	--	2,060.00	ND	ND	--	ND	ND	--
SB-008	SO	BH	12.3	12.30	4/25/2013	1049	--	1,066.00	ND	ND	--	ND	ND	--
SB-14	SO	BH	3.5	3.5	5/3/2013	UNK	--	105.33	ND	ND	--	ND	ND	--
SB-14	SO	BH	5	5	5/3/2013	UNK	--	ND	ND	ND	--	ND	ND	--
VIN-TR01-1	SO	TR	1	1.00	11/12/2013	1030	--	ND	ND	ND	ND	ND	ND	--
VIN-TR02-1	SO	TR	1	1.00	11/12/2013	1040	--	ND	ND	ND	ND	ND	ND	--
VIN-TR04-1	SO	TR	1	1.00	11/12/2013	1057	--	ND	ND	ND	ND	ND	ND	--
VIN-TR05-1	SO	TR	1	1.00	11/12/2013	1103	--	ND	ND	ND	ND	ND	ND	--
VIN-TR06-1	SO	TR	1	1.00	11/12/2013	1110	--	ND	ND	ND	ND	ND	ND	--
VIN-TR07-1	SO	TR	1	1.00	11/12/2013	1112	--	ND	ND	ND	ND	ND	ND	--
VIN-TR08-1	SO	TR	1	1.00	11/12/2013	1130	--	ND	ND	ND	ND	ND	ND	--
VIN-TR09-1	SO	TR	1	1.00	11/12/2013	1155	--	ND	ND	ND	ND	ND	ND	--
VIN-TR10-1	SO	TR	1	1.00	11/12/2013	1220	--	ND	ND	ND	ND	ND	ND	--
VIN-TR11-1	SO	TR	1	1.00	11/12/2013	1235	--	ND	ND	ND	ND	ND	ND	--
VIN-TR12-1N	SO	TR	1	1.00	11/12/2013	1250	--	ND	ND	ND	ND	ND	ND	--
VIN-TR12-1S	SO	TR	1	1.00	11/12/2013	1250	--	ND	ND	ND	ND	ND	ND	--
VIN-TR13-1	SO	TR	1	1.00	11/12/2013	1305	--	ND	ND	ND	ND	ND	ND	--
VIN-TR14-1	SO	TR	1	1.00	11/12/2013	1350	--	ND	ND	ND	ND	ND	ND	--
VIN-TR16-1	SO	TR	1	1.00	11/12/2013	1425	--	ND	ND	ND	ND	ND	ND	--
VIN-SEPTIC OUTLET	SO	TR	1	1.00	11/12/2013	1450	--	ND	ND	ND	ND	ND	ND	--
VIN-TR03-1	SO	TR	1	1.00	11/12/2013	UNK	--	ND	ND	ND	ND	ND	ND	--
VIN-TR01-2	SO	TR	2	2.00	11/12/2013	1035	--	ND	ND	ND	ND	ND	ND	--
VIN-TR02-2	SO	TR	2	2.00	11/12/2013	1045	--	ND	ND	ND	ND	ND	ND	--
VIN-TR03-2	SO	TR	2	2.00	11/12/2013	1052	--	ND	ND	ND	ND	ND	ND	--
VIN-TR04-2	SO	TR	2	2.00	11/12/2013	1100	--	ND	ND	ND	ND	ND	ND	--
VIN-TR05-2	SO	TR	2	2.00	11/12/2013	1105	--	ND	ND	ND	ND	ND	ND	--
VIN-TR06-2	SO	TR	2	2.00	11/12/2013	1111	--	ND	ND	ND	ND	ND	ND	--
VIN-TR07-2	SO	TR	2	2.00	11/12/2013	1115	--	ND	ND	ND	ND	ND	ND	--
VIN-TR08-2	SO	TR	2	2.00	11/12/2013	1133	--	ND	ND	ND	ND	ND	ND	--
VIN-TR10-2	SO	TR	2	2.00	11/12/2013	1221	--	ND	ND	ND	ND	ND	ND	--
VIN-TR11-2	SO	TR	2	2.00	11/12/2013	1235	--	ND	ND	ND	ND	ND	ND	--
VIN-TR15-2	SO	TR	2	2.00	11/12/2013	1400	--	ND	ND	ND	ND	ND	ND	--
VIN-TR03-3	SO	TR	3	3.00	11/12/2013	1055	--	ND	ND	ND	ND	ND	ND	--
VIN-TR04-3	SO	TR	3	3.00	11/12/2013	1100	--	ND	ND	ND	ND	ND	ND	--
VIN-TR11-3	SO	TR	3	3.00	11/12/2013	1235	--	ND	ND	ND	ND	ND	ND	--
VIN-LB-Well	SO	TR	0	0.00	11/12/2013	0700	--	ND	ND	ND	ND	ND	ND	--
MD-02	SO	TR	0	1.00	11/25/2013	1055	--	ND	ND	ND	ND	ND	ND	--
MD-03	SO	TR	0	1.00	11/25/2013	1055	--	ND	ND	ND	ND	ND	ND	--
MD-05	SO	TR	0	1.00	11/25/2013	1130	--	ND	ND	ND	ND	ND	ND	--
Lagoon	SO	TR	1	2.00	11/25/2013	0835	--	ND	ND	ND	ND	ND	ND	--
MD-04	SO	TR	2	3.00	11/25/2013	1120	--	ND	ND	ND	ND	ND	ND	--
MD-01	SO	TR	0	0.00	11/25/2013	1035	--	ND	ND	ND	ND	ND	ND	--
WD-01	SO	EX	0	1.50	3/20/2014	1115	6.00	ND	ND	ND	ND	ND	ND	--
City-Trench-3	SO	EX	1.5	1.50	4/23/2014	1104	54.98	ND	ND	ND	ND	ND	0.72	ND
City-Trench-2	SO	EX	2	2.00	4/23/2014	1105	71.03	ND	ND	ND	ND	ND	ND	ND
City-Trench-1	SO	EX	2	2.00	4/23/2014	1107	74.24	ND	ND	ND	ND	ND	ND	ND
City-Trench-4	SO	EX	0.5	0.50	4/23/2014	1110	48.84	ND	ND	ND	ND	ND	ND	ND
SL-01	SO	BH	2	2.00	5/6/2014	1251	56.10	ND	ND	ND	ND	ND	ND	ND
SP-001	SO	BH	9	10.00	8/11/2014	1105	--	36.49	ND	ND	ND	ND	ND	--
SP-001	SO	BH	9	10.00	8/11/2014	1110	--	11.77	ND	ND	ND	ND	ND	--
SP-001	SO	BH	10	11.00	8/11/2014	1230	--	48.12	ND	ND	ND	ND	ND	--
SP-001	SO	BH	10	11.00	8/11/2014	1231	--	35.73	ND	ND	ND	ND	ND	--
SP-002	SO	BH	8	9.00	8/13/2014	0900	--	469.60	ND	ND	ND	ND	ND	--
SP-002	SO	BH	9	10.00	8/13/2014	0945	--	26.90	ND	ND	ND	ND	ND	--
SP-005	SO	BH	4.5	0.00	8/14/2014	1317	--	3,904.00	ND	ND	ND	ND	ND	--
SP-005	SO	BH	5	0.00	8/14/2014	1330	--	4,416.00	ND	ND	ND	ND	ND	--
SP-004	SO	BH	4	4.00	8/14/2014	1205	--	4,104.00	ND	ND	ND	ND	ND	--
SP-005	SO	BH	4.5	4.50	8/14/2014	1317	--	12,960.00	ND	ND	ND	ND	ND	--
SP-004	SO	BH	6	6.00	8/14/2014	1227	--	2,399.20	ND	ND	ND	ND	ND	--
SP-003	SO	BH	9.5	9.50	8/14/2014	0817	--	229.60	ND	ND	ND	ND	ND	--
SP-003	SO	BH	10.16	10.16	8/14/2014	0840	--	328.48	ND	ND	ND	ND	ND	--
SP-003	SO	BH	11	11.00	8/14/2014	0841	--	48.73	ND	ND	ND	ND	ND	--
SP-003	SO	BH	12	12.00	8/14/2014	0920	--	121.04	ND	ND	ND	ND	ND	--
SP-006	SO	BH	3	3.00	8/18/2014	922	--	1,136.00	ND	ND	ND	ND	ND	--
SP-006	SO	BH	5	5.00	8/18/2014	1000	--	7,232.00	ND	ND	ND	ND	ND	--
SP-006	SO	BH	5.5	5.50	8/18/2014	1040	--	9,401.60	ND	ND	ND	ND	ND	--

Table B-02. Concentrations of VOCs in soil samples analyzed using the portable gas chromatograph.—Continued

[TVOC, total volatile organic compounds; µg/kg, microgram of constituent per gram of soil; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; SO, soil; BH, borehole; --, sample not analyzed for constituent; ND, not detected; UNK, unknown; EX, excavation; TR, trench]

Sample identifier (fig. 3-03)	Media	Feature	Top	Bottom	Date	Time	TVOC (µg/kg)	Concentration of constituents in µg/kg						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
SP-007	SO	BH	5	5.00	8/18/2014	1325	--	ND	ND	ND	ND	ND	ND	--
SP-008	SO	BH	4.5	4.50	9/2/2014	0857	--	ND	ND	ND	ND	ND	ND	--
SP-008	SO	BH	3.5	3.50	9/3/2014	0858	--	ND	ND	ND	ND	ND	ND	--
SP-008	SO	BH	5.8	5.80	9/3/2014	0933	--	ND	ND	ND	ND	ND	ND	--
SP-008	SO	BH	6.8	6.80	9/3/2014	0928	--	ND	ND	ND	ND	ND	ND	--
SP-008	SO	BH	9.2	9.20	9/3/2014	UNK	--	ND	ND	ND	ND	ND	ND	--
SP010	SO	BH	4	4.00	9/8/2014	0850	--	24.40	4.80	ND	ND	ND	ND	--
SP009	SO	BH	4.25	4.25	9/8/2014	0957	--	ND	ND	ND	ND	ND	ND	--
SP009	SO	BH	6.7	6.70	9/8/2014	UNK	--	ND	ND	ND	ND	ND	ND	--
SP009	SO	BH	9	9.00	9/8/2014	1030	--	ND	ND	ND	ND	ND	ND	--
SP009	SO	BH	11	11.00	9/8/2014	1054	--	ND	ND	ND	ND	ND	ND	--
SP009	SO	BH	15	15.00	9/8/2014	1134	--	ND	ND	ND	ND	ND	ND	--
SP011	SO	BH	5	5.00	9/9/2014	1050	--	3,144.00	1,808.00	10.00	ND	ND	ND	--
SP010	SO	BH	6	6.00	9/9/2014	0903	--	162.80	26.40	ND	ND	ND	ND	--
SP011	SO	BH	7	7.00	9/9/2014	1110	--	512.00	ND	ND	ND	ND	ND	--
SP010	SO	BH	8	8.00	9/9/2014	0915	--	18.40	9.20	ND	ND	ND	ND	--
SP011	SO	BH	8	8.00	9/9/2014	1142	--	8,864.00	2,464.00	ND	ND	ND	ND	--

Table B-03. Concentrations of VOCs in drill-cutting samples analyzed using the portable gas chromatograph.

[TVOC, total volatile organic compounds; µg/kg, microgram of constituent per gram of soil; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; CU, cuttings; BH, borehole; --, sample not analyzed for constituent; ND, not detected; UNK, unknown]

Sample identifier (fig. 3-07)	Media	Feature	Top	Bottom	Date	Time	TVOC (µg/kg)	Concentration of constituents in µg/kg						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
VIN-MW-01	CU	BH	0	3.00	05/23/2012	1055	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-01	CU	BH	0	12.00	05/23/2012	1300	--	27.00	ND	ND	ND	ND	ND	--
VIN-MW-01	CU	BH	0	13.00	05/23/2012	1400	--	4.00	ND	ND	ND	ND	ND	--
VIN-MW-01	CU	BH	0	13.00	05/24/2012	0815	--	77.00	ND	ND	ND	16.45	15.26	--
VIN-MW-01	CU	BH	0	14.50	05/24/2012	1055	--	14.13	ND	ND	ND	9.22	9.04	--
VIN-MW-01	CU	BH	0	19.00	05/24/2012	1215	--	5.00	ND	ND	ND	2.90	4.20	--
VIN-MW-01	CU	BH	0	19.00	05/25/2012	0810	--	22.10	ND	ND	ND	ND	10.60	--
VIN-MW-01	CU	BH	0	25.00	05/29/2012	1035	--	22.20	ND	ND	ND	0.73	1.84	--
VIN-MW-01	CU	BH	0	25.00	05/29/2012	1035	--	9.08	ND	117.00	ND	ND	ND	--
VIN-MW-01	CU	BH	0	30.00	05/29/2012	1130	--	26.10	ND	ND	ND	0.47	0.64	--
VIN-MW-01	CU	BH	0	35.00	05/29/2012	1230	--	48.90	ND	ND	ND	4.04	2.43	--
VIN-MW-01	CU	BH	0	40.00	05/29/2012	1325	--	24.70	ND	ND	ND	1.25	1.75	--
VIN-MW-01	CU	BH	40	42.50	05/30/2012	0915	--	16.10	ND	ND	ND	0.45	0.41	--
VIN-MW-01	CU	BH	42.5	45.00	05/30/2012	0955	--	12.90	ND	ND	ND	1.25	0.54	--
VIN-MW-01	CU	BH	45	50.00	05/30/2012	1050	--	10.80	ND	ND	ND	ND	ND	--
VIN-MW-01	CU	BH	50	55.00	05/30/2012	1205	--	7.98	ND	ND	ND	ND	0.88	--
VIN-MW-01	CU	BH	50	55.00	05/30/2012	1205	--	5.21	ND	ND	ND	ND	0.50	--
VIN-MW-01	CU	BH	55	60.00	05/30/2012	1417	--	3.19	ND	ND	ND	ND	0.50	--
VIN-MW-02	CU	BH	0	5.00	06/12/2012	1020	--	1.26	0.63	ND	ND	0.25	ND	--
VIN-MW-02	CU	BH	5	12.00	06/12/2012	1100	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-02	CU	BH	12	15.00	06/12/2012	1150	--	29.70	73.10	14.80	ND	ND	ND	--
VIN-MW-02	CU	BH	15	20.00	06/12/2012	1215	--	26.50	46.20	3.86	ND	ND	ND	--
VIN-MW-02	CU	BH	20	22.50	06/12/2012	1230	--	12.67	19.60	ND	ND	ND	ND	--
VIN-MW-02	CU	BH	22.5	25.00	06/12/2012	1250	--	42.90	20.70	ND	ND	ND	ND	--
VIN-MW-02	CU	BH	25	30.00	06/12/2012	1400	--	28.50	9.71	ND	ND	ND	ND	--
VIN-MW-02	CU	BH	30	35.00	06/13/2012	1150	--	15.20	4.81	ND	ND	1.01	ND	--
VIN-MW-02	CU	BH	30	40.00	06/13/2012	1235	--	3.87	ND	ND	ND	1.03	1.43	--
VIN-MW-02	CU	BH	30	45.00	06/13/2012	1315	--	3.33	ND	ND	ND	ND	ND	--
VIN-MW-02	CU	BH	30	50.00	06/13/2012	1410	--	2.13	ND	ND	ND	ND	ND	--
VIN-MW-02	CU	BH	30	55.00	06/13/2012	1540	--	1.54	ND	ND	ND	ND	ND	--
VIN-MW-02	CU	BH	55	60.00	06/14/2012	1010	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-02	CU	BH	60	65.00	06/14/2012	1105	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-02	CU	BH	65	70.00	06/14/2012	1150	--	1.31	ND	ND	ND	ND	ND	--
VIN-MW-02	CU	BH	70	75.00	06/14/2012	1325	--	1.71	ND	ND	ND	ND	ND	--
VIN-MW-02	CU	BH	75	80.00	06/14/2012	1445	--	ND	ND	ND	ND	ND	0.66	--
VIN-MW-02	CU	BH	0	6.00	06/19/2012	0945	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-02	CU	BH	6	8.00	06/19/2012	1010	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-02	CU	BH	8	11.00	06/19/2012	1035	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-02	CU	BH	11	15.00	06/19/2012	1215	--	ND	ND	ND	--	ND	ND	--
VIN-MW-02	CU	BH	15	17.00	06/19/2012	1230	--	2.34	ND	ND	--	ND	ND	--

Table B-03. Concentrations of VOCs in drill-cutting samples analyzed using the portable gas chromatograph.—Continued

[TVOC, total volatile organic compounds; µg/kg, microgram of constituent per gram of soil; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; CU, cuttings; BH, borehole; --, sample not analyzed for constituent; ND, not detected; UNK, unknown]

Sample identifier (fig. 3-07)	Media	Feature	Top	Bottom	Date	Time	TVOC (µg/kg)	Concentration of constituents in µg/kg						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
VIN-MW-02	CU	BH	17	25.00	06/19/2012	1300	--	12.40	ND	ND	--	ND	ND	--
VIN-MW-02	CU	BH	25	30.00	06/19/2012	1330	--	17.30	ND	ND	--	ND	ND	--
VIN-MW-02	CU	BH	30	35.00	06/20/2012	0850	--	42.80	ND	ND	--	ND	ND	--
VIN-MW-02	CU	BH	35	38.00	06/20/2012	0915	--	58.70	ND	ND	--	ND	ND	--
VIN-MW-02	CU	BH	38	41.00	06/20/2012	0950	--	141.40	ND	ND	--	ND	ND	--
VIN-MW-02	CU	BH	41	45.00	06/20/2012	1115	--	84.00	ND	ND	--	ND	1.44	--
VIN-MW-03	CU	BH	45	50.00	06/21/2012	1145	--	53.70	ND	ND	--	ND	3.30	--
VIN-MW-03	CU	BH	50	55.00	06/21/2012	1335	--	125.00	ND	ND	--	ND	ND	--
VIN-MW-03	CU	BH	50	55.00	06/21/2012	1350	--	1,066.67	4.17	ND	--	ND	ND	--
VIN-MW-03	CU	BH	55	60.00	06/21/2012	1435	--	133.00	ND	ND	--	ND	ND	--
VIN-MW-03	CU	BH	60	65.00	06/22/2012	1340	--	67.60	ND	ND	--	ND	ND	--
VIN-MW-04	CU	BH	0	7.00	06/26/2012	1005	--	ND	ND	ND	--	ND	ND	--
VIN-MW-04	CU	BH	7	10.00	06/26/2012	1015	--	ND	ND	ND	--	ND	ND	--
VIN-MW-04	CU	BH	10	15.00	06/26/2012	1100	--	ND	ND	ND	--	ND	ND	--
VIN-MW-04	CU	BH	15	20.00	06/26/2012	1200	--	ND	ND	ND	--	ND	ND	--
VIN-MW-04	CU	BH	20	25.00	06/26/2012	1220	--	9.00	ND	ND	--	ND	ND	--
VIN-MW-04	CU	BH	25	30.00	06/26/2012	1230	--	ND	ND	ND	--	ND	ND	--
VIN-MW-04	CU	BH	30	35.00	06/26/2012	1255	--	19.20	ND	70.20	--	ND	ND	--
VIN-MW-04	CU	BH	35	40.00	06/26/2012	1345	--	11.84	ND	ND	--	ND	ND	--
VIN-MW-04	CU	BH	35	40.00	06/27/2012	0705	--	6.28	ND	ND	--	ND	ND	--
VIN-MW-04	CU	BH	40	45.00	06/27/2012	0955	--	8.51	ND	ND	--	ND	ND	--
VIN-MW-04	CU	BH	45	50.00	06/27/2012	1040	--	8.95	ND	ND	--	ND	ND	--
VIN-MW-04	CU	BH	50	55.00	06/27/2012	1210	--	14.00	ND	ND	--	ND	ND	--
VIN-MW-04	CU	BH	55	60.00	06/27/2012	1325	--	13.70	ND	ND	--	ND	ND	--
VIN-MW-04	CU	BH	60	65.00	06/27/2012	1440	--	9.98	ND	ND	--	ND	ND	--
VIN-MW-04	CU	BH	65	70.00	06/28/2012	1045	--	6.45	ND	ND	--	ND	ND	--
VIN-MW05	CU	BH	0	5.00	3/11/2014	1330	--		ND	ND	--	(4.00)	ND	--
VIN-MW05	CU	BH	0	10.00	3/13/2014	1025	--	3.20	ND	ND	--	ND	ND	--
VIN-MW05	CU	BH	0	12.00	3/13/2014	1047	10.44	3.60	ND	ND	--	ND	ND	--
VIN-MW05	CU	BH	0	15.00	3/13/2014	1100	10.19	8.40	ND	ND	ND	ND	ND	--
VIN-MW05	CU	BH	15	18.00	3/13/2014	1135	31.01	4.40	ND	ND	ND	ND	ND	--
VIN-MW05	CU	BH	0		3/13/2014	1240	65.61	33.20	ND	ND	ND	ND	ND	--
VIN-MW05	CU	BH	0	20.00	3/13/2014	1305	89.44	26.00	ND	ND	ND	ND	ND	--
VIN-MW05	CU	BH	20	25.00	3/18/2014	1010	45.40	14.80	ND	ND	ND	ND	9.20	--
VIN-MW05	CU	BH	20	35.00	3/18/2014	1216	21.20	11.60	ND	ND	ND	ND	ND	--
VIN-MW05	CU	BH	20	29.00	3/18/2014	1120	14.97	ND	ND	ND	ND	ND	ND	--
VIN-MW05	CU	BH	20	34.00	3/19/2014	0930	51.32	29.50	ND	ND	ND	ND	ND	--
VIN-MW05	CU	BH	50	55.00	3/19/2014	1250	74.80	18.08	ND	ND	ND	ND	ND	--
VIN-MW05	CU	BH	20	50.00	3/19/2014	1200	79.50	12.10	ND	ND	ND	4.20	3.70	--
VIN-MW05	CU	BH	34	40.00	3/19/2014	1030	96.60	16.20	ND	ND	ND	4.10	5.10	--

Table B-03. Concentrations of VOCs in drill-cutting samples analyzed using the portable gas chromatograph.—Continued

[TVOC, total volatile organic compounds; µg/kg, microgram of constituent per gram of soil; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; CU, cuttings; BH, borehole; --, sample not analyzed for constituent; ND, not detected; UNK, unknown]

Sample identifier (fig. 3-07)	Media	Feature	Top	Bottom	Date	Time	TVOC (µg/kg)	Concentration of constituents in µg/kg						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
VIN-MW05	CU	BH	40	45.00	3/19/2014	UNK	57.20	8.77	ND	ND	ND	2.83	3.64	--
VIN-MW05	CU	BH	20	60.00	3/19/2014	1346	72.98	10.20	ND	ND	ND	ND	ND	--
VIN-MW05	CU	BH	60	65.00	3/19/2014	1445	68.50	10.00	ND	ND	ND	1.90	ND	--
VIN-MW05	CU	BH	50	55.00	3/19/2014	1250	--	11.40	ND	ND	ND	ND	2.12	--
VIN-MW05	CU	BH	20	65.00	3/24/2014	1025	--	147.40	ND	ND	ND	ND	ND	--
VIN-MW05	CU	BH	20	70.00	3/24/2014	1146	--	147.60	ND	ND	ND	ND	1.23	--
VIN-MW05	CU	BH	20	75.00	3/24/2014	1255	--	14.00	ND	ND	ND	2.02	ND	--
VIN-MW05	CU	BH	20	65.00	3/24/2014	1025	--	61.10	ND	ND	ND	ND	ND	--
VIN-MW-06	CU	BH	18	18.00	9/24/2014	UNK	--	3,200.00	ND	ND	ND	ND	ND	--
VIN-MW-06	CU	BH	25	25.00	9/24/2014	UNK	--	1,650.00	ND	ND	ND	ND	ND	--
VIN-MW-06	CU	BH	10	10.00	9/24/2014	UNK	--	1,348.00	ND	12.00	ND	ND	ND	--
VIN-MW-07	CU	BH	5	5.00	10/28/2014	0930	--	1,920.00	ND	ND	ND	ND	ND	--
VIN-MW-07	CU	BH	0	5.00	10/30/2014	1010	--	1,664.00	ND	ND	ND	ND	ND	--
VIN-MW-07	CU	BH	0	7.00	10/30/2014	1030	--	992.00	ND	ND	ND	ND	ND	--
VIN-MW-07	CU	BH	0	9.00	10/30/2014	1205	--	1,016.00	ND	ND	ND	ND	ND	--
VIN-MW-07	CU	BH	0	13.00	10/30/2014	1255	--	448.00	ND	ND	ND	ND	ND	--
VIN-MW-07	CU	BH	0	18.00	10/30/2014	1355	--	416.00	ND	ND	ND	ND	ND	--
VIN-MW-07	CU	BH	0	21.00	11/3/2014	1130	--	82.80	ND	ND	ND	ND	ND	--
VIN-MW-07	CU	BH	0	28.00	11/3/2014	1240	--	30.58	ND	ND	ND	1.90	3.90	--
VIN-MW-07	CU	BH	0	30.00	11/3/2014	1315	--	8.40	ND	ND	ND	1.20	2.00	--
VIN-MW-07	CU	BH	35	40.00	11/5/2014	1330	--	3.30	ND	ND	ND	ND	ND	--
VIN-MW-07	CU	BH	35	53.00	11/6/2014	1120	--	2.10	ND	ND	ND	ND	ND	--
VIN-MW-08	CU	BH	90	185.00	8/7/15	0936	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	CU	BH	90	200.00	8/7/15	0943	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	CU	BH	90	220.00	8/7/15	0955	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	CU	BH	90	240.00	8/7/15	0955	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	CU	BH	90	240.00	8/7/15	0955	--	ND	ND	ND	ND	1.37	ND	--
VIN-MW-08	CU	BH	90	260.00	8/7/15	1017	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	CU	BH	90	260.00	8/10/15	1100	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	CU	BH	90	260.00	8/10/15	1245	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	CU	BH	90	270.00	8/11/15	0950	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	CU	BH	90	280.00	8/11/15	0958	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	CU	BH	90	290.00	8/11/15	1005	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	CU	BH	90	300.00	8/11/15	1010	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	CU	BH	90	305.00	8/11/15	1015	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	CU	BH	90	315.00	8/11/15	1021	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	CU	BH	90	325.00	8/11/15	1025	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-08	CU	BH	90	325.00	8/11/15	UNK	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-09	CU	BH	14	15.00	2/5/16	1055	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-09	CU	BH	15	20.00	2/5/16	1215	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-09	CU	BH	25	30.00	2/5/16	1215	--	ND	ND	ND	ND	ND	ND	--
VIN-MW-09	CU	BH	20	25.00	2/5/16	1350	--	ND	ND	ND	ND	8.40	7.20	--

Table B-04. Concentrations of volatile organic compounds in quality-assurance samples analyzed using the portable gas chromatograph.

[TVOC, total volatile organic compounds; µg/L, microgram per liter; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; QC, quality control; AB, air blank; --, sample not analyzed for constituent; ND, not detected; UNK, unknown; ST, standard]

Sample location	Media	Feature	Top	Bottom	Date	Time	TVOC (µg/L)	Concentration of constituents in µg/L						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
lab	QC	AB	0	0.00	09/28/2011	0807	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	09/29/2011	0729	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	09/29/2011	0729	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	09/29/2011	0840	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	09/29/2011	0841	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	09/29/2011	0859	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	09/29/2011	0913	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	09/29/2011	0929	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	09/29/2011	0645	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	09/29/2011	0645	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	10/04/2011	0700	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	10/04/2011	0718	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	11/03/2011	0740	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	11/03/2011	0758	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	11/08/2011	0830	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	12/01/2011	0736	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	01/05/2012	0700	--	15.60	17.80	36.70	3.30	11.50	12.60	--
lab	QC	AB	0	0.00	01/05/2012	0700	--	16.00	18.30	35.00	3.20	11.20	12.50	--
lab	QC	AB	0	0.00	01/05/2012	0700	--	13.00	12.50	24.90	2.70	7.50	7.80	--
lab	QC	AB	0	0.00	01/05/2012	0814	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	01/05/2012	1219	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	01/09/2012	0746	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	01/09/2012	1000	--	11.50	10.10	22.90	2.40	6.60	6.20	--
lab	QC	AB	0	0.00	01/09/2012	1000	--	12.20	10.70	23.60	3.30	6.80	6.60	--
lab	QC	AB	0	0.00	01/09/2012	1000	--	13.00	12.50	24.90	2.70	7.50	7.80	--
lab	QC	AB	0	0.00	01/09/2012	1000	--	20.00	14.50	35.00	2.80	12.40	16.40	--
lab	QC	AB	0	0.00	01/09/2012	1024	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	01/19/2012	1216	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	03/14/2012	0808	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	03/14/2012	0833	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	05/09/2012	0715	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	05/09/2012	0735	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	05/14/2012	UNK	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	05/23/2012	0845	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	05/23/2012	0908	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	05/23/2012	0924	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	05/24/2012	0851	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	05/24/2012	0855	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	05/24/2012	1130	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	05/24/2012	1320	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	05/25/2012	0721	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	05/29/2012	0716	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	05/29/2012	0815	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	05/29/2012	1348	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	05/30/2012	0715	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	05/30/2012	1011	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	05/31/2012	0715	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	06/01/2012	0714	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	06/01/2012	0836	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	06/01/2012	1220	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	06/01/2012	1342	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	06/04/2012	0757	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	06/04/2012	1224	--	1.10	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	06/06/2012	0649	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	06/12/2012	0733	--	ND	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/12/2012	0815	--	ND	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/13/2012	0646	--	ND	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/13/2012	0711	--	ND	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/14/2012	0715	--	ND	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/14/2012	0730	--	ND	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/14/2012	1426	--	ND	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/15/2012	0712	--	ND	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/15/2012	0732	--	ND	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/18/2012	0730	--	ND	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/18/2012	0747	--	ND	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/18/2012	1443	--	1.82	0.86	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/18/2012	1459	--	ND	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/19/2012	0706	--	ND	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/19/2012	0729	--	ND	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/19/2012	1535	--	ND	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/20/2012	0657	--	ND	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/20/2012	0712	--	ND	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/20/2012	1103	--	1.44	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/20/2012	1340	--	7.30	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/20/2012	1358	--	ND	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/21/2012	0702	--	ND	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/21/2012	0719	--	ND	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/21/2012	0945	--	0.99	ND	ND	--	ND	ND	--

Table B-04. Concentrations of volatile organic compounds in quality-assurance samples analyzed using the portable gas chromatograph.—Continued

[TVOC, total volatile organic compounds; µg/L, microgram per liter; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; QC, quality control; AB, air blank; --, sample not analyzed for constituent; ND, not detected; UNK, unknown; ST, standard]

Sample location	Media	Feature	Top	Bottom	Date	Time	TVOC (µg/L)	Concentration of constituents in µg/L						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
Vienna	QC	AB	0	0.00	06/21/2012	1110	--	ND	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/21/2012	1445	--	26.60	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/21/2012	1505	--	13.00	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/21/2012	1505	--	5.60	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/21/2012	1630	--	8.30	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/21/2012	1700	--	8.30	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/22/2012	0625	--	ND	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/22/2012	0647	--	ND	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/22/2012	1200	--	18.50	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/22/2012	1215	--	6.30	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/22/2012	1320	--	22.30	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/22/2012	1320	--	4.30	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/26/2012	0719	--	ND	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/26/2012	0741	--	ND	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/27/2012	0529	--	ND	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	06/27/2012	0543	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	06/27/2012	1203	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	06/28/2012	0528	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	06/28/2012	0545	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	09/05/2012	1235	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	09/05/2012	1300	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	09/05/2012	1529	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	11/29/2012	0825	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	11/30/2012	0730	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	11/30/2012	0710	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	1/23/2013	0606	--	0.94	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	4/23/2013	0750	--	ND	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	4/24/2013	0907	--	ND	ND	ND	--	ND	ND	--
Vienna	QC	AB	0	0.00	4/24/2013	1155	--	ND	ND	ND	--	ND	ND	--
lab	QC	AB	0	0.00	4/25/2013	0651	--	ND	ND	ND	--	ND	ND	--
lab	QC	AB	0	0.00	4/25/2013	0707	--	ND	ND	ND	--	ND	ND	--
lab	QC	AB	0	0.00	5/2/2013	0803	--	ND	ND	ND	--	ND	ND	--
lab	QC	AB	0	0.00	5/2/2013	0818	--	ND	ND	ND	--	ND	ND	--
lab	QC	AB	0	0.00	5/2/2013	1242	--	3.00	ND	ND	--	ND	ND	--
lab	QC	AB	0	0.00	5/2/2013	1301	--	ND	ND	ND	--	ND	ND	--
lab	QC	AB	0	0.00	5/3/2013	0718	--	ND	ND	ND	--	ND	ND	--
lab	QC	AB	0	0.00	5/3/2013	0732	--	ND	ND	ND	--	ND	ND	--
lab	QC	AB	0	0.00	11/12/2013	0703	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	11/12/2013	0726	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	11/12/2013	1355	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	11/12/2013	1517	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	11/12/2013	1609	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	11/12/2013	1734	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	11/25/2013	1355	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	11/25/2013	1355	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	11/26/2013	0638	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	3/4/2014	1247	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	3/4/2014	1303	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	3/6/2014	0718	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	3/7/2014	0650	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	3/7/2014	0702	--	ND	ND	ND	ND	ND	ND	--
air outside office	QC	AB	0	0.00	3/11/2014	UNK	3.00	--	--	--	--	--	--	--
lab	QC	AB	0	0.00	3/11/2014	UNK	7.08	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	3/12/2014	0702	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	3/13/2014	UNK	0.65	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	3/13/2014	UNK	1.37	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	3/13/2014	UNK	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	3/18/2014	0525	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	3/18/2014	1150	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	3/18/2014	1732	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	3/19/2014	0711	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	3/19/2014	1247	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	3/24/2014	0558	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	3/24/2014	1603	--	1.75	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	3/25/2014	0600	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	3/26/2014	0634	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	3/26/2014	0707	--	1.30	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	3/26/2014	0714	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	3/26/2014	1657	--	ND	2.20	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	3/26/2014	1709	--	2.30	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	4/1/2014	1131	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	4/3/2014	1223	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	4/3/2014	1333	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	4/4/2014	0725	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	4/7/2014	0745	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	4/8/2014	0958	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	4/9/2014	0959	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	4/9/2014	1034	--	ND	ND	ND	ND	ND	ND	--

Table B-04. Concentrations of volatile organic compounds in quality-assurance samples analyzed using the portable gas chromatograph. —Continued

[TVOC, total volatile organic compounds; µg/L, microgram per liter; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; QC, quality control; AB, air blank; --, sample not analyzed for constituent; ND, not detected; UNK, unknown; ST, standard]

Sample location	Media	Feature	Top	Bottom	Date	Time	TVOC (µg/L)	Concentration of constituents in µg/L						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
lab	QC	AB	0	0.00	4/9/2014	1132	--	7.90	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	4/9/2014	1140	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	4/9/2014	1322	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	4/9/2014	1346	--	1.30	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	4/9/2014	1353	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	4/9/2014	1427	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	4/14/2014	0751	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	4/14/2014	1142	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	4/15/2014	0751	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	4/16/2014	0701	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	4/17/2014	1001	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	4/21/2014	1020	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	4/22/2014	0939	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	4/23/2014	0942	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	4/29/2014	1013	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	4/30/2014	1012	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	5/1/2014	1034	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	5/1/2014	1034	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	5/5/2014	1025	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	5/6/2014	1014	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	5/7/2014	UNK	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	5/20/2014	0757	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	5/22/2014	1043	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	5/22/2014	1205	--	6.76	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	5/22/2014	1217	--	3.50	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	5/22/2014	1229	--	1.60	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	5/22/2014	1244	--	0.71	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	5/22/2014	1253	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	5/22/2014	1309	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	5/22/2014	1329	--	ND	ND	1.40	ND	ND	ND	--
lab	QC	AB	0	0.00	7/1/2014	0953	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	7/1/2014	1023	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	7/2/2014	0828	--	2.60	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	7/2/2014	0839	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	7/2/2014	0845	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	7/7/2014	0953	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	7/7/2014	1023	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/11/2014	0720	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/11/2014	0726	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/11/2014	0727	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/11/2014	0733	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/11/2014	0805	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/11/2014	0811	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/11/2014	1411	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/11/2014	1417	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/11/2014	1424	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/11/2014	1503	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/11/2014	1517	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/11/2014	1603	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/13/2014	1352	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/13/2014	1402	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/13/2014	1430	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/13/2014	1443	--	4.37	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/13/2014	1453	--	1.17	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/13/2014	1500	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/14/2014	1515	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/14/2014	1521	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/14/2014	1628	--	10.40	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/14/2014	1651	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/18/2014	1448	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/18/2014	1517	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/18/2014	1553	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/18/2014	1607	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/26/2014	0829	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/26/2014	0846	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/26/2014	0923	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/26/2014	0933	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/26/2014	0829	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	9/8/2014	0818	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	9/8/2014	0949	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	9/9/2014	0731	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	9/10/2014	UNK	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	9/10/2014	UNK	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	9/25/2014	0946	--	0.41	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	9/29/2014	0901	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	9/29/2014	0901	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	9/30/2014	0855	--	ND	ND	ND	ND	ND	ND	--

Table B-04. Concentrations of volatile organic compounds in quality-assurance samples analyzed using the portable gas chromatograph. —Continued

[TVOC, total volatile organic compounds; µg/L, microgram per liter; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; QC, quality control; AB, air blank; --, sample not analyzed for constituent; ND, not detected; UNK, unknown; ST, standard]

Sample location	Media	Feature	Top	Bottom	Date	Time	TVOC (µg/L)	Concentration of constituents in µg/L						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
Vienna	QC	AB	0	0.00	9/30/2014	1140	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	9/30/2014	1140	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	10/1/2014	0709	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	10/2/2014	0652	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	10/7/2014	0715	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	10/8/2014	1310	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	10/8/2014	0754	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	AB	0	0.00	10/9/2014	0740	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	10/21/2014	0708	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	10/23/2014	0813	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	10/23/2014	0630	--	19.70	16.50	32.90	3.90	11.50	11.00	--
lab	QC	AB	0	0.00	10/28/2014	1330	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	10/28/2014	1400	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	11/3/2014	0912	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	11/5/2014	0928	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	6/1/15	1122	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	6/1/15	1131	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	6/1/15	1140	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	6/19/15	1333	--	49.50	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	6/19/15	1347	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	6/19/15	1400	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/7/15	0759	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/7/15	1244	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/7/15	UNK	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/10/15	UNK	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	8/11/15	0635	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	9/24/15	1102	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	9/24/15	1102	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	2/9/16	0849	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	3/16/16	1614	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	3/17/16	0647	--	ND	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	3/17/16	UNK	--	2.60	ND	ND	ND	ND	ND	--
lab	QC	AB	0	0.00	3/17/16	UNK	--	ND	ND	ND	ND	ND	ND	--
G-205d	QC	EB	0	0.00	11/17/2011	1418	--	11.12	ND	ND	ND	ND	ND	--
G-250T	QC	EB	0	0.00	11/17/2011	1440	--	ND	ND	ND	ND	ND	ND	--
lab	QC	EB	0	0.00	10/8/2014	1544	--	ND	ND	ND	ND	ND	ND	--
lab	QC	ST	0	0.00	09/28/2011	0700	--	13.20	12.40	23.80	4.57	7.62	31.70	--
lab	QC	ST	0	0.00	09/28/2011	0700	--	8.20	7.10	14.00	3.10	4.80	17.40	--
lab	QC	ST	0	0.00	09/28/2011	0700	--	7.80	6.90	13.60	2.60	4.80	16.90	--
lab	QC	ST	0	0.00	09/28/2011	0700	--	13.00	12.50	24.90	2.70	7.50	7.80	--
lab	QC	ST	0	0.00	09/28/2011	0700	--	13.76	11.16	19.44	1.72	6.16	8.80	--
lab	QC	ST	0	0.00	09/28/2011	0700	--	11.68	10.16	17.92	1.58	5.36	7.52	--
lab	QC	ST	0	0.00	09/28/2011	0700	--	12.40	10.68	18.36	1.59	5.08	7.88	--
lab	QC	ST	0	0.00	09/29/2011	0645	--	8.90	9.90	21.70	1.90	6.30	6.20	--
lab	QC	ST	0	0.00	09/29/2011	0645	--	8.10	8.90	19.40	1.70	5.70	5.80	--
lab	QC	ST	0	0.00	09/29/2011	0645	--	7.40	8.80	20.00	2.10	5.70	5.60	--
lab	QC	ST	0	0.00	09/29/2011	0645	--	7.70	8.70	19.80	2.10	5.60	5.70	--
lab	QC	ST	0	0.00	09/29/2011	0645	--	8.40	9.10	20.20	2.00	5.80	5.90	--
lab	QC	ST	0	0.00	09/29/2011	0645	--	8.40	9.10	20.20	2.00	5.80	5.90	--
lab	QC	ST	0	0.00	09/29/2011	0645	--	10.50	10.90	23.10	2.80	6.70	6.60	--
lab	QC	ST	0	0.00	09/30/2011	0645	--	13.40	11.60	21.50	2.10	6.40	7.20	--
lab	QC	ST	0	0.00	09/30/2011	0645	--	12.20	11.80	22.90	2.30	6.70	6.80	--
lab	QC	ST	0	0.00	09/30/2011	0645	--	9.00	10.60	6.00	2.00	6.00	6.30	--
lab	QC	ST	0	0.00	09/30/2011	0645	--	13.10	12.40	23.30	--	7.20	7.30	--
lab	QC	ST	0	0.00	09/30/2011	0645	--	11.90	11.10	21.60	--	6.60	6.80	--
lab	QC	ST	0	0.00	10/03/2011	0715	--	8.50	12.50	27.50	2.80	7.50	6.10	--
lab	QC	ST	0	0.00	10/03/2011	0715	--	9.20	8.90	17.60	--	5.30	5.70	--
lab	QC	ST	0	0.00	10/03/2011	0715	--	10.20	9.60	19.20	1.80	5.90	6.30	--
lab	QC	ST	0	0.00	10/04/2011	0645	--	6.80	10.80	25.10	2.40	7.00	5.40	--
lab	QC	ST	0	0.00	10/04/2011	0645	--	6.50	8.70	ND	ND	ND	5.40	--
lab	QC	ST	0	0.00	10/04/2011	0645	--	6.50	8.20	17.10	1.70	5.00	5.00	--
lab	QC	ST	0	0.00	10/04/2011	0645	--	7.60	8.60	17.90	1.90	5.20	5.80	--
lab	QC	ST	0	0.00	10/04/2011	0645	--	13.80	12.50	24.90	2.70	7.50	7.80	--
lab	QC	ST	0	0.00	10/04/2011	0645	--	18.50	14.70	28.60	3.00	8.70	8.50	--
lab	QC	ST	0	0.00	10/04/2011	0645	--	13.80	12.50	24.90	2.70	7.50	7.80	--
lab	QC	ST	0	0.00	10/04/2011	0645	--	5.60	--	8.80	--	11.10	--	--
lab	QC	ST	0	0.00	10/04/2011	0645	--	8.20	8.60	16.90	1.90	5.10	5.60	--
lab	QC	ST	0	0.00	10/04/2011	0645	--	10.70	10.80	22.50	--	6.50	6.80	--
lab	QC	ST	0	0.00	11/03/2011	0725	--	75.30	ND	57.00	6.00	ND	28.10	--
lab	QC	ST	0	0.00	11/03/2011	0725	--	--	--	--	--	--	--	--
lab	QC	ST	0	0.00	11/03/2011	0725	--	--	--	--	--	--	--	--
lab	QC	ST	0	0.00	11/08/2011	0800	--	ND	ND	ND	ND	0.40	3.00	--
lab	QC	ST	0	0.00	11/08/2011	0800	--	ND	ND	ND	ND	ND	0.30	--
lab	QC	ST	0	0.00	11/08/2011	0800	--	ND	ND	ND	ND	ND	0.30	--
lab	QC	ST	0	0.00	11/08/2011	0800	--	ND	ND	ND	ND	0.90	ND	--
lab	QC	ST	0	0.00	11/08/2011	0800	--	ND	ND	ND	ND	0.50	0.60	--
lab	QC	ST	0	0.00	11/08/2011	0800	--	ND	ND	ND	ND	1.30	ND	--
lab	QC	ST	0	0.00	11/08/2011	0800	--	ND	ND	ND	ND	ND	ND	--

Table B-04. Concentrations of volatile organic compounds in quality-assurance samples analyzed using the portable gas chromatograph. —Continued

[TVOC, total volatile organic compounds; µg/L, microgram per liter; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; QC, quality control; AB, air blank; --, sample not analyzed for constituent; ND, not detected; UNK, unknown; ST, standard]

Sample location	Media	Feature	Top	Bottom	Date	Time	TVOC (µg/L)	Concentration of constituents in µg/L						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
lab	QC	ST	0	0.00	11/08/2011	0800	--	ND	ND	ND	ND	ND	0.30	--
lab	QC	ST	0	0.00	11/17/2011	0645	--	17.80	14.50	30.40	3.00	8.00	11.80	--
lab	QC	ST	0	0.00	12/01/2011	0645	--	14.50	12.60	29.60	3.00	7.90	10.10	--
lab	QC	ST	0	0.00	12/01/2011	0645	--	18.10	14.10	30.30	3.10	7.90	12.10	--
lab	QC	ST	0	0.00	12/01/2011	0645	--	13.00	12.50	24.90	2.70	7.50	7.80	--
lab	QC	ST	0	0.00	12/01/2011	0645	--	14.40	13.90	28.20	3.30	8.40	8.70	--
lab	QC	ST	0	0.00	01/18/2012	1130	--	--	--	--	--	--	--	--
lab	QC	ST	0	0.00	01/18/2012	1130	--	24.30	16.00	34.40	2.90	14.00	17.70	--
lab	QC	ST	0	0.00	01/18/2012	1130	--	25.20	16.60	35.40	3.50	14.00	18.00	--
lab	QC	ST	0	0.00	01/18/2012	1130	--	--	--	--	--	--	--	--
lab	QC	ST	0	0.00	01/18/2012	1130	--	15.10	14.30	28.70	3.50	8.50	9.70	--
lab	QC	ST	0	0.00	01/18/2012	1130	--	16.30	15.00	29.80	5.90	8.80	9.90	--
lab	QC	ST	0	0.00	01/18/2012	1130	--	15.20	14.10	28.10	2.70	8.10	9.50	--
lab	QC	ST	0	0.00	01/19/2012	0700	--	<DL	10.90	23.70	1.70	6.60	7.30	--
lab	QC	ST	0	0.00	01/19/2012	0700	--	12.20	12.20	26.50	2.10	7.40	8.40	--
lab	QC	ST	0	0.00	01/19/2012	0700	--	12.10	12.00	26.30	2.20	7.20	8.40	--
lab	QC	ST	0	0.00	01/19/2012	0700	--	16.10	14.10	30.00	2.50	8.60	9.90	--
lab	QC	ST	0	0.00	01/19/2012	0700	--	--	--	--	--	--	--	--
lab	QC	ST	0	0.00	01/19/2012	0700	--	15.00	14.50	29.90	4.10	8.50	10.10	--
lab	QC	ST	0	0.00	01/19/2012	0700	--	10.00	13.44	(4.00)	(4.00)	7.72	6.68	--
lab	QC	ST	0	0.00	01/19/2012	0700	--	8.40	15.20	30.40	2.60	8.80	7.04	--
lab	QC	ST	0	0.00	01/19/2012	0700	--	12.10	12.00	25.70	1.89	7.06	8.40	--
lab	QC	ST	0	0.00	01/31/2012	0750	--	9.90	10.40	21.90	1.80	6.60	6.20	--
lab	QC	ST	0	0.00	01/31/2012	0750	--	10.40	10.60	21.80	1.80	6.60	6.40	--
lab	QC	ST	0	0.00	01/31/2012	0750	--	12.60	12.40	25.40	2.20	7.50	7.90	--
lab	QC	ST	0	0.00	01/31/2012	0750	--	12.90	12.30	25.20	2.00	7.30	8.80	--
lab	QC	ST	0	0.00	02/01/2012	0810	--	9.80	9.20	20.20	2.10	5.50	6.00	--
lab	QC	ST	0	0.00	02/01/2012	0810	--	10.80	10.10	21.90	1.70	6.00	6.80	--
lab	QC	ST	0	0.00	02/01/2012	0810	--	10.30	10.30	22.00	ND	6.10	7.00	--
lab	QC	ST	0	0.00	02/01/2012	0810	--	10.30	10.30	22.00	ND	6.10	7.00	--
lab	QC	ST	0	0.00	02/23/2012	0755	--	8.50	9.10	19.90	1.43	5.90	5.40	--
lab	QC	ST	0	0.00	02/23/2012	0755	--	9.70	9.80	20.60	1.70	6.20	6.30	--
lab	QC	ST	0	0.00	02/23/2012	0755	--	9.70	10.00	20.90	2.80	6.10	5.90	--
lab	QC	ST	0	0.00	02/23/2012	0755	--	10.40	10.70	21.80	1.59	6.50	6.50	--
lab	QC	ST	0	0.00	02/23/2012	0755	--	11.20	11.00	23.20	3.40	6.80	7.40	--
lab	QC	ST	0	0.00	03/14/2012	0815	--	14.90	13.40	25.10	2.80	7.60	8.50	--
lab	QC	ST	0	0.00	03/14/2012	0815	--	14.40	13.00	24.60	2.30	7.40	8.20	--
lab	QC	ST	0	0.00	03/14/2012	0815	--	22.70	13.90	13.90	5.70	12.00	16.90	--
lab	QC	ST	0	0.00	03/14/2012	0815	--	14.40	12.90	25.20	3.00	7.30	8.70	--
lab	QC	ST	0	0.00	05/09/2012	0650	--	6.20	8.30	13.90	2.30	5.30	3.50	--
lab	QC	ST	0	0.00	05/09/2012	0650	--	9.60	9.40	19.80	ND	5.90	5.10	--
lab	QC	ST	0	0.00	05/09/2012	0650	--	13.00	9.90	21.50	2.00	9.20	9.50	--
lab	QC	ST	0	0.00	05/09/2012	0650	--	13.00	12.50	24.90	2.70	7.50	7.80	--
lab	QC	ST	0	0.00	05/09/2012	0650	--	7.80	9.00	17.30	1.80	5.00	4.80	--
lab	QC	ST	0	0.00	05/09/2012	0650	--	10.10	9.10	16.60	1.80	5.00	6.20	--
lab	QC	ST	0	0.00	05/09/2012	0650	--	13.00	12.50	24.90	2.70	7.50	7.80	--
lab	QC	ST	0	0.00	05/09/2012	0650	--	9.90	12.30	28.00	3.00	6.70	6.40	--
lab	QC	ST	0	0.00	05/14/2012	0900	--	9.00	7.00	16.70	1.50	6.30	5.40	--
lab	QC	ST	0	0.00	05/14/2012	0900	--	9.60	7.20	18.10	1.50	6.70	7.10	--
lab	QC	ST	0	0.00	05/14/2012	0900	--	ND	ND	ND	ND	ND	ND	--
lab	QC	ST	0	0.00	05/14/2012	0900	--	13.00	12.50	24.90	2.70	7.50	7.80	--
lab	QC	ST	0	0.00	05/22/2012	1003	--	22.80	23.30	44.90	7.10	14.00	24.30	--
lab	QC	ST	0	0.00	05/22/2012	1003	--	25.00	25.50	47.30	6.42	14.40	26.00	--
lab	QC	ST	0	0.00	05/22/2012	1003	--	27.60	26.40	50.50	10.20	14.40	26.00	--
lab	QC	ST	0	0.00	05/22/2012	1003	--	13.00	12.50	24.90	2.70	7.50	7.80	--
lab	QC	ST	0	0.00	05/22/2012	1003	--	12.60	12.20	23.00	1.47	7.15	7.53	--
Vienna	QC	ST	0	0.00	05/23/2012	0939	--	13.80	13.20	25.30	1.92	7.60	7.02	--
Vienna	QC	ST	0	0.00	05/23/2012	0958	--	13.40	13.00	24.10	1.42	7.23	6.95	--
Vienna	QC	ST	0	0.00	05/24/2012	0715	--	--	--	--	--	--	--	--
Vienna	QC	ST	0	0.00	05/24/2012	0715	--	15.00	13.00	23.60	1.21	6.81	6.90	--
Vienna	QC	ST	0	0.00	05/24/2012	0715	--	15.50	14.10	24.40	2.39	7.31	7.02	--
Vienna	QC	ST	0	0.00	05/24/2012	0715	--	16.30	13.90	24.50	1.56	7.03	7.51	--
Vienna	QC	ST	0	0.00	05/24/2012	0715	--	15.40	14.60	24.70	1.43	7.27	6.96	--
Vienna	QC	ST	0	0.00	05/25/2012	0715	--	16.80	15.50	25.10	1.63	7.72	6.96	--
Vienna	QC	ST	0	0.00	05/25/2012	0721	--	17.30	15.90	26.10	1.64	7.92	6.90	--
Vienna	QC	ST	0	0.00	05/25/2012	0721	--	17.60	16.00	24.80	1.91	7.87	6.68	--
Vienna	QC	ST	0	0.00	05/29/2012	0710	--	10.30	10.10	20.30	1.52	6.27	4.55	--
Vienna	QC	ST	0	0.00	05/29/2012	0710	--	12.20	11.20	21.50	1.45	6.71	5.14	--
Vienna	QC	ST	0	0.00	05/29/2012	0710	--	12.70	11.40	21.60	1.48	6.72	5.31	--
Vienna	QC	ST	0	0.00	05/29/2012	0710	--	14.70	12.70	20.10	1.67	6.41	5.43	--
Vienna	QC	ST	0	0.00	05/30/2012	0715	--	16.10	15.70	26.00	1.65	8.05	6.41	--
Vienna	QC	ST	0	0.00	05/30/2012	1122	--	18.90	17.30	28.10	1.73	8.77	7.32	--
Vienna	QC	ST	0	0.00	05/30/2012	1445	--	15.80	14.10	23.10	1.31	7.13	5.88	--
Vienna	QC	ST	0	0.00	06/01/2012	0710	--	8.39	6.88	12.40	0.73	3.55	2.85	--
Vienna	QC	ST	0	0.00	06/01/2012	0710	--	19.10	14.80	27.20	2.18	8.24	7.12	--
Vienna	QC	ST	0	0.00	06/01/2012	0710	--	22.80	17.60	31.30	1.98	9.62	8.45	--

Table B-04. Concentrations of volatile organic compounds in quality-assurance samples analyzed using the portable gas chromatograph. —Continued

[TVOC, total volatile organic compounds; µg/L, microgram per liter; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; QC, quality control; AB, air blank; --, sample not analyzed for constituent; ND, not detected; UNK, unknown; ST, standard]

Sample location	Media	Feature	Top	Bottom	Date	Time	TVOC (µg/L)	Concentration of constituents in µg/L						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
Vienna	QC	ST	0	0.00	06/01/2012	1555	--	22.40	16.90	30.20	2.79	8.98	8.29	--
Vienna	QC	ST	0	0.00	06/04/2012	0817	--	15.40	13.60	27.10	1.68	8.32	5.75	--
Vienna	QC	ST	0	0.00	06/04/2012	1321	--	18.90	14.90	26.90	2.29	7.96	6.21	--
Vienna	QC	ST	0	0.00	06/06/2012	0630	--	15.40	12.90	25.00	1.50	7.30	5.80	--
Vienna	QC	ST	0	0.00	06/06/2012	0630	--	17.10	13.80	25.90	2.10	7.80	6.40	--
Vienna	QC	ST	0	0.00	06/06/2012	0630	--	19.90	15.30	27.30	1.70	8.30	7.30	--
Vienna	QC	ST	0	0.00	06/06/2012	0630	--	21.40	15.70	28.00	2.00	8.40	7.80	--
Vienna	QC	ST	0	0.00	06/06/2012	0630	--	13.00	12.50	24.90	2.70	7.50	7.80	--
Vienna	QC	ST	0	0.00	06/06/2012	0630	--	12.60	12.40	24.10	2.70	7.30	7.50	--
Vienna	QC	ST	0	0.00	06/06/2012	0630	--	12.70	12.80	24.50	2.30	7.20	7.40	--
Vienna	QC	ST	0	0.00	06/06/2012	0630	--	12.80	12.20	23.40	3.10	6.90	7.60	--
Vienna	QC	ST	0	0.00	06/12/2012	0710	--	3.84	4.77	11.40	1.65	3.39	2.11	--
Vienna	QC	ST	0	0.00	06/12/2012	0710	--	5.84	7.42	16.70	1.63	4.82	3.41	--
Vienna	QC	ST	0	0.00	06/12/2012	0905	--	4.08	4.83	11.50	1.66	3.35	2.22	--
Vienna	QC	ST	0	0.00	06/12/2012	0927	--	4.67	5.97	13.80	1.70	4.11	2.68	--
Vienna	QC	ST	0	0.00	06/12/2012	1155	--	5.01	6.51	15.00	1.57	4.29	2.92	--
Vienna	QC	ST	0	0.00	06/12/2012	1521	--	5.92	6.93	15.50	2.95	4.40	3.35	--
Vienna	QC	ST	0	0.00	06/12/2012	1521	--	5.92	6.93	15.50	2.95	4.40	3.35	--
Vienna	QC	ST	0	0.00	06/12/2012	1605	--	4.60	5.31	12.60	2.00	3.36	2.42	--
Vienna	QC	ST	0	0.00	06/12/2012	1720	--	26.30	16.50	38.10	2.80	13.50	20.40	--
Vienna	QC	ST	0	0.00	06/13/2012	0620	--	21.70	13.80	31.60	2.49	11.10	16.30	--
Vienna	QC	ST	0	0.00	06/13/2012	0620	--	22.00	14.00	31.30	2.40	11.10	16.60	--
Vienna	QC	ST	0	0.00	06/13/2012	0746	--	13.00	12.50	24.90	2.70	7.50	7.80	--
Vienna	QC	ST	0	0.00	06/13/2012	0803	--	13.60	12.90	26.30	2.96	7.90	8.35	--
Vienna	QC	ST	0	0.00	06/13/2012	1727	--	14.80	12.10	24.90	3.41	7.27	8.32	--
Vienna	QC	ST	0	0.00	06/14/2012	0700	--	11.50	10.80	21.90	2.37	6.43	6.94	--
Vienna	QC	ST	0	0.00	06/14/2012	0700	--	12.00	11.30	22.80	2.43	6.64	7.43	--
Vienna	QC	ST	0	0.00	06/14/2012	0700	--	13.20	11.90	ND	2.43	7.02	7.60	--
Vienna	QC	ST	0	0.00	06/14/2012	0700	--	12.90	11.60	23.20	3.47	6.88	7.28	--
Vienna	QC	ST	0	0.00	06/14/2012	0700	--	13.00	11.60	22.40	ND	6.91	7.37	--
Vienna	QC	ST	0	0.00	06/15/2012	0625	--	12.60	11.60	23.60	2.55	6.89	7.63	--
Vienna	QC	ST	0	0.00	06/15/2012	0625	--	12.80	12.30	24.60	2.80	7.23	7.87	--
Vienna	QC	ST	0	0.00	06/15/2012	0625	--	13.10	12.30	24.80	2.70	7.04	8.38	--
Vienna	QC	ST	0	0.00	06/18/2012	0708	--	10.90	10.40	20.10	2.19	6.56	5.78	--
Vienna	QC	ST	0	0.00	06/18/2012	0708	--	11.80	10.80	21.80	2.50	6.68	6.47	--
Vienna	QC	ST	0	0.00	06/18/2012	0708	--	13.80	12.50	25.50	2.80	7.49	8.15	--
Vienna	QC	ST	0	0.00	06/19/2012	0700	--	12.60	11.70	23.50	2.52	6.98	7.27	--
Vienna	QC	ST	0	0.00	06/19/2012	0700	--	13.10	11.80	23.60	2.80	6.88	7.29	--
Vienna	QC	ST	0	0.00	06/19/2012	0700	--	14.10	12.80	25.90	2.82	7.52	8.10	--
Vienna	QC	ST	0	0.00	06/19/2012	0700	--	14.50	11.90	25.20	2.84	7.15	7.71	--
Vienna	QC	ST	0	0.00	06/20/2012	0640	--	11.90	12.20	24.60	2.85	7.36	7.21	--
Vienna	QC	ST	0	0.00	06/20/2012	0640	--	7.15	8.92	20.40	2.39	5.51	4.38	--
Vienna	QC	ST	0	0.00	06/20/2012	0640	--	8.99	10.70	23.60	2.75	6.50	5.49	--
Vienna	QC	ST	0	0.00	06/20/2012	0640	--	14.50	12.20	25.20	3.27	7.22	7.72	--
Vienna	QC	ST	0	0.00	06/21/2012	0645	--	13.00	12.30	24.40	2.63	7.33	7.40	--
Vienna	QC	ST	0	0.00	06/21/2012	0645	--	8.88	10.30	22.30	3.56	6.19	5.10	--
Vienna	QC	ST	0	0.00	06/21/2012	0645	--	14.50	12.80	25.70	2.84	7.44	8.04	--
Vienna	QC	ST	0	0.00	06/22/2012	0610	--	13.20	10.40	21.80	3.35	6.27	6.65	--
Vienna	QC	ST	0	0.00	06/22/2012	0610	--	9.82	10.20	20.60	ND	6.36	5.97	--
Vienna	QC	ST	0	0.00	06/22/2012	0610	--	14.30	11.90	24.30	3.19	6.94	7.60	--
Vienna	QC	ST	0	0.00	06/26/2012	0655	--	15.80	15.40	30.00	3.46	8.65	9.74	--
Vienna	QC	ST	0	0.00	06/26/2012	0655	--	2.63	2.41	5.17	0.86	1.38	ND	--
Vienna	QC	ST	0	0.00	06/26/2012	0655	--	3.92	6.85	29.10	ND	4.71	1.89	--
Vienna	QC	ST	0	0.00	06/26/2012	0655	--	15.80	18.10	92.80	32.40	17.00	8.78	--
Vienna	QC	ST	0	0.00	06/26/2012	0655	--	ND	ND	1.69	ND	ND	ND	--
Vienna	QC	ST	0	0.00	06/26/2012	0655	--	15.50	14.70	29.00	3.28	8.05	9.28	--
Vienna	QC	ST	0	0.00	06/26/2012	0655	--	15.60	14.70	29.60	3.50	7.92	9.32	--
Vienna	QC	ST	0	0.00	06/26/2012	1620	--	13.40	12.20	25.00	9.24	7.52	7.83	--
Vienna	QC	ST	0	0.00	06/27/2012	0605	--	--	--	--	--	--	--	--
Vienna	QC	ST	0	0.00	06/27/2012	0605	--	12.90	12.60	29.60	ND	7.93	7.01	--
Vienna	QC	ST	0	0.00	06/27/2012	0605	--	13.40	13.00	33.00	ND	8.21	7.01	--
Vienna	QC	ST	0	0.00	06/27/2012	0605	--	14.70	12.00	32.60	9.42	7.88	7.71	--
Vienna	QC	ST	0	0.00	06/28/2012	0515	--	12.00	11.60	25.30	6.99	6.85	5.88	--
Vienna	QC	ST	0	0.00	06/28/2012	0515	--	1.89	1.82	2.74	ND	ND	ND	--
Vienna	QC	ST	0	0.00	06/28/2012	0515	--	12.10	11.60	26.90	ND	7.11	5.86	--
Vienna	QC	ST	0	0.00	06/28/2012	0515	--	12.60	11.60	25.90	5.01	6.87	6.07	--
Vienna	QC	ST	0	0.00	09/05/2012	1220	--	7.68	8.75	24.30	8.41	5.97	3.98	--
Vienna	QC	ST	0	0.00	09/05/2012	1220	--	7.83	9.44	18.10	ND	5.47	4.16	--
Vienna	QC	ST	0	0.00	09/05/2012	1220	--	11.50	10.20	14.70	2.78	5.80	5.87	--
Vienna	QC	ST	0	0.00	11/29/2012	0822	--	11.10	11.70	23.70	1.57	7.11	6.92	--
Vienna	QC	ST	0	0.00	11/29/2012	0822	--	11.10	11.70	23.70	1.57	7.11	6.92	--
Vienna	QC	ST	0	0.00	11/29/2012	0600	--	9.82	10.20	20.60	ND	5.71	5.33	--
Vienna	QC	ST	0	0.00	11/30/2012	0710	--	11.10	11.20	24.60	4.13	7.08	7.65	--
Vienna	QC	ST	0	0.00	11/30/2012	0710	--	11.50	11.40	25.40	2.72	7.20	7.78	--
Vienna	QC	ST	0	0.00	11/30/2012	0710	--	12.00	11.80	25.60	2.34	7.35	8.12	--
Vienna	QC	ST	0	0.00	11/30/2012	0710	--	14.90	11.20	25.60	1.44	9.29	13.90	--
Vienna	QC	ST	0	0.00	11/30/2012	0710	--	17.00	11.60	28.80	5.40	9.90	15.00	--

Table B-04. Concentrations of volatile organic compounds in quality-assurance samples analyzed using the portable gas chromatograph. —Continued

[TVOC, total volatile organic compounds; µg/L, microgram per liter; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; QC, quality control; AB, air blank; --, sample not analyzed for constituent; ND, not detected; UNK, unknown; ST, standard]

Sample location	Media	Feature	Top	Bottom	Date	Time	TVOC (µg/L)	Concentration of constituents in µg/L						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
Vienna	QC	ST	0	0.00	11/30/2012	0710	--	16.70	12.50	29.30	1.70	10.50	15.70	--
Vienna	QC	ST	0	0.00	11/30/2012	0710	--	13.00	12.50	24.90	2.70	7.50	7.80	--
PID	QC	ST	0	0.00	1/17/2013	1000	--	13.80	12.50	24.90	2.70	7.50	7.80	--
PID	QC	ST	0	0.00	1/23/2013	0652	--	48.10	27.00	47.70	8.30	16.80	18.00	--
PID	QC	ST	0	0.00	1/23/2013	0652	--	13.80	12.50	24.90	2.70	7.50	7.80	--
PID	QC	ST	0	0.00	1/23/2013	0652	--	13.80	12.80	19.90	--	5.90	6.30	--
lab	QC	ST	0	0.00	4/23/2013	0640	--	9.00	7.30	22.70	--	7.00	7.20	--
lab	QC	ST	0	0.00	4/23/2013	0640	--	9.40	7.50	17.60	--	6.50	8.10	--
lab	QC	ST	0	0.00	4/23/2013	0640	--	11.10	8.10	18.60	--	6.60	9.10	--
lab	QC	ST	0	0.00	4/23/2013	0640	--	10.30	7.50	17.00	--	6.10	8.50	--
lab	QC	ST	0	0.00	4/23/2013	0640	--	9.50	6.60	16.60	--	5.30	7.60	--
lab	QC	ST	0	0.00	4/23/2013	0640	--	13.00	12.50	24.90	--	7.50	7.80	--
lab	QC	ST	0	0.00	4/24/2013	0645	--	14.30	14.80	26.80	--	9.40	7.40	--
lab	QC	ST	0	0.00	4/24/2013	0645	--	11.40	11.20	19.60	--	6.90	5.10	--
Vienna	QC	ST	0	0.00	4/24/2013	0645	--	2.40	3.60	ND	--	ND	ND	--
Vienna	QC	ST	0	0.00	4/24/2013	0645	--	4.00	7.10	14.70	--	4.70	2.20	--
Vienna	QC	ST	0	0.00	4/24/2013	0645	--	20.30	18.40	32.80	--	11.30	10.30	--
Vienna	QC	ST	0	0.00	4/24/2013	0645	--	--	--	--	--	--	--	--
Vienna	QC	ST	0	0.00	4/24/2013	0645	--	18.90	19.30	33.70	--	11.90	9.90	--
lab	QC	ST	0	0.00	4/25/2013	0635	--	19.90	20.30	38.40	--	13.50	10.60	--
lab	QC	ST	0	0.00	4/25/2013	0635	--	14.50	13.10	23.00	--	8.20	7.30	--
lab	QC	ST	0	0.00	4/25/2013	0635	--	21.80	22.10	39.70	--	14.20	12.10	--
lab	QC	ST	0	0.00	4/25/2013	0635	--	20.00	20.10	36.20	--	12.90	11.20	--
lab	QC	ST	0	0.00	4/25/2013	0635	--	13.00	12.50	24.90	--	7.50	7.80	--
lab	QC	ST	0	0.00	4/25/2013	0635	--	7.10	6.90	6.90	--	3.50	4.00	--
Vienna	QC	ST	0	0.00	4/25/2013	0635	--	11.20	10.10	21.50	--	5.70	5.90	--
lab	QC	ST	0	0.00	5/2/2013	0750	--	8.80	8.70	19.60	--	5.90	4.10	--
lab	QC	ST	0	0.00	5/2/2013	0750	--	9.70	10.00	31.40	--	7.70	4.60	--
lab	QC	ST	0	0.00	5/2/2013	0750	--	11.20	11.20	23.90	--	7.30	5.80	--
lab	QC	ST	0	0.00	5/2/2013	0750	--	11.20	11.00	23.30	--	7.00	6.00	--
lab	QC	ST	0	0.00	5/2/2013	0750	--	11.70	11.60	24.00	--	7.30	6.30	--
lab	QC	ST	0	0.00	5/2/2013	0750	--	10.90	10.70	21.50	--	6.40	5.70	--
lab	QC	ST	0	0.00	5/3/2013	0710	--	11.50	11.30	23.40	--	7.00	6.40	--
lab	QC	ST	0	0.00	5/3/2013	0710	--	11.30	12.20	29.80	--	8.10	6.10	--
lab	QC	ST	0	0.00	5/3/2013	0710	--	3.00	3.60	6.40	--	ND	1.70	--
lab	QC	ST	0	0.00	5/3/2013	0710	--	5.10	6.00	12.00	--	3.30	2.80	--
lab	QC	ST	0	0.00	5/3/2013	0710	--	8.90	8.70	16.90	--	4.90	4.30	--
lab	QC	ST	0	0.00	5/3/2013	0710	--	9.30	8.80	16.70	--	4.80	4.10	--
lab	QC	ST	0	0.00	5/3/2013	0710	--	13.00	12.50	24.90	--	7.50	7.80	--
lab	QC	ST	0	0.00	11/12/2013	0700	--	3.70	4.10	10.10	ND	2.40	2.30	--
lab	QC	ST	0	0.00	11/12/2013	0700	--	11.80	10.60	21.20	2.10	6.20	7.60	--
lab	QC	ST	0	0.00	11/12/2013	0700	--	12.20	12.00	23.20	2.50	7.10	6.90	--
lab	QC	ST	0	0.00	11/12/2013	0700	--	ND	ND	ND	ND	2.22	ND	--
lab	QC	ST	0	0.00	11/12/2013	0700	--	2.81	4.47	8.89	0.89	2.22	ND	--
lab	QC	ST	0	0.00	11/12/2013	0700	--	2.52	3.76	7.70	0.74	1.91	ND	--
lab	QC	ST	0	0.00	11/12/2013	0700	--	15.60	12.90	24.30	ND	6.28	8.76	--
lab	QC	ST	0	0.00	11/12/2013	0700	--	7.50	7.50	14.90	1.50	4.10	3.40	--
lab	QC	ST	0	0.00	11/25/2013	1300	--	ND	ND	ND	ND	ND	ND	--
lab	QC	ST	0	0.00	11/25/2013	1300	--	7.30	5.00	10.10	ND	3.00	3.90	--
lab	QC	ST	0	0.00	11/25/2013	1300	--	9.70	7.10	13.50	1.40	4.10	5.10	--
lab	QC	ST	0	0.00	11/25/2013	1300	--	16.00	16.00	30.30	3.20	9.00	8.30	--
lab	QC	ST	0	0.00	11/26/2013	0630	--	19.20	21.60	41.50	4.50	12.90	12.10	--
lab	QC	ST	0	0.00	11/26/2013	0630	--	20.60	23.50	44.80	5.00	13.70	13.70	--
lab	QC	ST	0	0.00	11/26/2013	0630	--	21.50	23.90	44.50	4.90	13.60	14.30	--
lab	QC	ST	0	0.00	11/26/2013	0630	--	13.00	12.50	24.70	2.70	7.50	7.80	--
lab	QC	ST	0	0.00	11/26/2013	0630	--	12.90	12.00	22.30	2.45	6.45	7.12	--
lab	QC	ST	0	0.00	3/4/2014	1359	--	16.40	ND	ND	ND	ND	ND	--
lab	QC	ST	0	0.00	3/4/2014	1422	--	287.00	ND	ND	ND	ND	ND	--
lab	QC	ST	0	0.00	3/4/2014	1454	--	1,271.00	ND	ND	ND	ND	ND	--
lab	QC	ST	0	0.00	3/6/2014	0720	--	4.30	5.00	10.10	1.00	3.00	3.10	--
lab	QC	ST	0	0.00	3/6/2014	0720	--	5.60	6.90	13.70	1.40	4.10	4.10	--
lab	QC	ST	0	0.00	3/6/2014	0720	--	6.00	6.60	13.20	1.30	3.90	4.20	--
lab	QC	ST	0	0.00	3/6/2014	0720	--	13.00	12.50	24.90	2.70	7.50	7.80	--
lab	QC	ST	0	0.00	3/6/2014	0720	--	7.50	7.40	16.10	ND	5.10	4.30	--
lab	QC	ST	0	0.00	3/6/2014	0720	--	14.40	12.70	25.70	2.90	7.70	8.10	--
lab	QC	ST	0	0.00	3/6/2014	0720	--	12.70	12.80	25.10	2.60	7.60	7.80	--
lab	QC	ST	0	0.00	3/6/2014	0720	--	12.10	12.20	26.60	3.00	8.00	7.90	--
lab	QC	ST	0	0.00	3/6/2014	0720	--	10.00	10.50	21.70	2.40	6.40	6.30	--
lab	QC	ST	0	0.00	3/6/2014	0720	--	6.40	7.70	ND	ND	6.30	4.00	--
lab	QC	ST	0	0.00	3/6/2014	0720	--	--	--	--	--	--	--	--
lab	QC	ST	0	0.00	3/6/2014	0720	--	20.30	16.20	23.80	2.30	6.90	7.30	--
lab	QC	ST	0	0.00	3/12/2014	0720	--	10.20	11.40	24.90	2.70	7.00	6.20	--
lab	QC	ST	0	0.00	3/12/2014	0720	--	12.30	13.00	27.90	2.90	7.90	7.60	--
lab	QC	ST	0	0.00	3/12/2014	0750	--	11.40	12.40	26.40	2.80	7.60	6.80	--
lab	QC	ST	0	0.00	3/12/2014	0750	--	11.10	12.00	25.50	2.50	7.40	6.70	--
lab	QC	ST	0	0.00	3/13/2014	0750	--	12.30	13.30	27.60	3.20	7.70	7.70	--
lab	QC	ST	0	0.00	3/18/2014	0830	--	12.70	14.00	28.20	3.20	8.10	7.90	--
lab	QC	ST	0	0.00	3/18/2014	0830	--	13.20	14.00	28.20	3.20	8.10	7.90	--

Table B-04. Concentrations of volatile organic compounds in quality-assurance samples analyzed using the portable gas chromatograph. —Continued

[TVOC, total volatile organic compounds; µg/L, microgram per liter; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; QC, quality control; AB, air blank; --, sample not analyzed for constituent; ND, not detected; UNK, unknown; ST, standard]

Sample location	Media	Feature	Top	Bottom	Date	Time	TVOC (µg/L)	Concentration of constituents in µg/L						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
lab	QC	ST	0	0.00	3/18/2014	0830	--	13.10	14.00	28.60	3.30	7.90	8.20	--
lab	QC	ST	0	0.00	3/19/2014	0700	--	9.90	7.40	16.30	2.00	4.10	4.80	--
lab	QC	ST	0	0.00	3/19/2014	0700	--	10.60	10.70	21.80	2.60	6.00	6.20	--
lab	QC	ST	0	0.00	3/19/2014	0700	--	9.90	7.40	16.30	2.00	4.10	4.80	--
lab	QC	ST	0	0.00	3/19/2014	0650	--	13.80	17.30	34.30	3.80	10.00	8.90	--
lab	QC	ST	0	0.00	3/24/2014	0640	--	13.90	12.80	25.50	3.00	7.80	8.00	--
lab	QC	ST	0	0.00	3/24/2014	0640	--	13.70	13.60	27.40	3.20	8.30	7.80	--
lab	QC	ST	0	0.00	3/24/2014	0640	--	13.90	13.10	25.40	3.00	7.50	7.80	--
lab	QC	ST	0	0.00	3/25/2014	0700	--	5.90	5.90	11.50	1.30	3.40	3.70	--
lab	QC	ST	0	0.00	3/25/2014	0700	--	5.40	5.40	10.50	1.10	3.10	3.40	--
lab	QC	ST	0	0.00	3/25/2014	0700	--	6.80	7.10	13.20	1.40	3.90	4.20	--
lab	QC	ST	0	0.00	3/25/2014	0700	--	13.00	12.50	24.90	2.70	7.50	7.80	--
lab	QC	ST	0	0.00	3/25/2014	0700	--	10.80	12.60	18.30	12.60	ND	4.80	--
lab	QC	ST	0	0.00	3/25/2014	0700	--	9.00	9.10	18.60	2.00	5.50	5.40	--
lab	QC	ST	0	0.00	3/25/2014	0700	--	13.00	12.50	24.90	2.70	7.50	7.80	--
lab	QC	ST	0	0.00	3/25/2014	0700	--	11.70	11.20	23.70	2.20	6.70	7.50	--
lab	QC	ST	0	0.00	3/25/2014	0700	--	16.20	14.90	32.40	3.10	9.40	10.30	--
lab	QC	ST	0	0.00	3/26/2014	0635	--	18.60	16.00	32.00	3.20	9.70	11.90	--
lab	QC	ST	0	0.00	3/26/2014	0635	--	6.80	6.10	13.60	1.50	3.60	4.20	--
lab	QC	ST	0	0.00	3/26/2014	0635	--	6.80	6.10	13.60	1.50	3.60	4.20	--
lab	QC	ST	0	0.00	3/26/2014	0635	--	8.60	8.70	18.60	2.20	5.40	5.40	--
lab	QC	ST	0	0.00	3/26/2014	0635	--	13.00	12.50	24.90	2.70	7.50	7.80	--
lab	QC	ST	0	0.00	3/26/2014	0635	--	11.50	9.40	20.30	1.90	5.30	6.50	--
lab	QC	ST	0	0.00	3/26/2014	0635	--	16.70	13.20	27.40	2.60	7.50	9.50	--
lab	QC	ST	0	0.00	3/26/2014	0635	--	12.80	10.30	22.50	2.30	5.90	7.20	--
lab	QC	ST	0	0.00	4/1/2014	0908	--	14.70	11.60	24.70	2.40	7.90	7.90	--
lab	QC	ST	0	0.00	4/1/2014	0908	--	13.40	10.30	21.50	2.00	6.90	7.00	--
lab	QC	ST	0	0.00	4/1/2014	0908	--	--	--	--	--	--	--	--
lab	QC	ST	0	0.00	4/1/2014	0908	--	18.10	15.40	29.70	3.00	9.20	10.30	--
lab	QC	ST	0	0.00	4/2/2014	0635	--	16.40	13.90	30.10	3.80	9.30	9.30	--
lab	QC	ST	0	0.00	4/2/2014	0635	--	17.50	16.00	34.30	4.20	10.90	10.40	--
lab	QC	ST	0	0.00	4/2/2014	0635	--	13.00	12.50	24.90	2.70	7.50	7.80	--
lab	QC	ST	0	0.00	4/2/2014	0635	--	15.40	15.70	30.70	3.80	9.30	9.00	--
lab	QC	ST	0	0.00	4/3/2014	1015	--	16.40	13.90	30.10	3.80	9.30	9.30	--
lab	QC	ST	0	0.00	4/3/2014	1015	--	17.50	16.00	34.30	4.20	10.90	10.40	--
lab	QC	ST	0	0.00	4/3/2014	1015	--	16.40	13.90	30.10	3.80	9.30	9.30	--
lab	QC	ST	0	0.00	4/4/2014	0650	--	10.00	10.80	22.10	2.20	7.00	6.40	--
lab	QC	ST	0	0.00	4/4/2014	0650	--	10.60	11.80	23.90	2.50	7.40	6.80	--
lab	QC	ST	0	0.00	4/7/2014	0715	--	10.80	11.70	26.80	2.80	8.20	6.80	--
lab	QC	ST	0	0.00	4/7/2014	0715	--	9.50	10.60	23.20	2.40	7.00	5.80	--
lab	QC	ST	0	0.00	4/7/2014	0715	--	7.70	10.40	20.50	2.30	6.00	5.20	--
lab	QC	ST	0	0.00	4/7/2014	0715	--	12.00	12.30	24.10	2.50	7.00	7.90	--
Vienna	QC	ST	0	0.00	4/7/2014	0715	--	11.60	13.20	26.30	2.70	7.90	7.80	--
Vienna	QC	ST	0	0.00	4/7/2014	0715	--	12.30	13.00	26.00	2.70	7.40	7.90	--
Vienna	QC	ST	0	0.00	4/8/2014	0735	--	ND	15.00	29.70	3.20	9.30	ND	--
Vienna	QC	ST	0	0.00	4/8/2014	0735	--	ND	13.60	26.90	2.80	8.50	ND	--
Vienna	QC	ST	0	0.00	4/8/2014	0735	--	12.20	16.60	20.90	2.30	6.30	7.00	--
Vienna	QC	ST	0	0.00	4/8/2014	0735	--	11.80	10.80	20.90	2.30	6.30	7.00	--
Vienna	QC	ST	0	0.00	4/8/2014	0735	--	11.60	10.70	20.90	2.30	6.20	6.90	--
Vienna	QC	ST	0	0.00	4/8/2014	0735	--	9.00	9.30	18.70	2.00	5.20	5.80	--
Vienna	QC	ST	0	0.00	4/8/2014	0735	--	8.10	7.90	16.50	1.90	4.20	5.00	--
Vienna	QC	ST	0	0.00	4/8/2014	0735	--	8.00	8.40	16.90	1.80	4.60	5.00	--
Vienna	QC	ST	0	0.00	4/8/2014	0735	--	13.00	12.50	24.90	2.70	7.50	7.80	--
Vienna	QC	ST	0	0.00	4/9/2014	0720	--	14.20	13.50	27.50	2.90	8.90	8.80	--
Vienna	QC	ST	0	0.00	4/9/2014	0720	--	12.60	11.30	21.50	2.40	7.00	7.30	--
Vienna	QC	ST	0	0.00	4/9/2014	0720	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	ST	0	0.00	4/9/2014	0720	--	11.90	10.30	20.10	2.20	5.90	6.90	--
Vienna	QC	ST	0	0.00	4/14/2014	0750	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	ST	0	0.00	4/14/2014	0750	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	ST	0	0.00	4/14/2014	0750	--	20.10	15.30	30.30	3.20	9.10	9.50	--
Vienna	QC	ST	0	0.00	4/14/2014	0750	--	9.60	11.60	24.50	2.70	7.10	6.40	--
Vienna	QC	ST	0	0.00	4/14/2014	0750	--	11.50	12.00	22.10	2.10	6.90	7.40	--
Vienna	QC	ST	0	0.00	4/14/2014	0750	--	9.50	11.30	24.30	3.00	6.80	6.00	ND
Vienna	QC	ST	0	0.00	4/14/2014	0750	--	10.20	10.50	19.70	1.90	6.00	6.30	ND
Vienna	QC	ST	0	0.00	4/14/2014	0750	--	ND	5.90	ND	2.50	ND	ND	--
Vienna	QC	ST	0	0.00	4/14/2014	0750	--	12.40	14.70	29.50	3.10	8.40	7.50	--
Vienna	QC	ST	0	0.00	4/14/2014	0750	--	13.00	14.50	26.70	2.50	8.30	8.70	--
Vienna	QC	ST	0	0.00	4/15/2014	0755	--	9.97	8.70	16.90	2.04	4.64	5.71	--
Vienna	QC	ST	0	0.00	4/15/2014	0755	--	11.70	9.56	17.90	2.15	5.01	6.70	--
Vienna	QC	ST	0	0.00	4/15/2014	0755	--	10.50	9.41	17.10	1.97	5.10	5.90	--
Vienna	QC	ST	0	0.00	4/15/2014	0755	--	11.50	11.00	19.70	2.10	5.80	6.40	--
Vienna	QC	ST	0	0.00	4/15/2014	0755	--	10.90	11.00	20.80	2.30	6.00	6.40	--
lab	QC	ST	0	0.00	4/16/2014	0640	--	11.10	11.00	20.70	2.10	6.20	6.90	--
lab	QC	ST	0	0.00	4/16/2014	0640	--	10.10	10.10	17.90	2.15	5.01	6.70	--
lab	QC	ST	0	0.00	4/16/2014	0640	91.24	11.00	10.70	21.40	2.30	5.90	7.20	--
Vienna	QC	ST	0	0.00	4/16/2014	0640	--	12.20	13.10	25.40	2.80	7.20	8.10	--
Vienna	QC	ST	0	0.00	4/16/2014	0640	91.24	12.60	12.20	23.00	2.50	6.60	7.90	--
Vienna	QC	ST	0	0.00	4/17/2014	0655	--	9.10	8.10	16.20	1.90	4.30	5.60	--
Vienna	QC	ST	0	0.00	4/17/2014	0655	--	11.80	10.60	19.10	2.20	5.50	7.10	--
Vienna	QC	ST	0	0.00	4/17/2014	0655	--	9.50	8.10	16.30	1.90	4.40	5.60	--
Vienna	QC	ST	0	0.00	4/17/2014	0655	--	13.00	12.50	24.90	2.70	7.50	7.80	--
Vienna	QC	ST	0	0.00	4/17/2014	0655	--	16.60	12.00	22.40	2.40	6.50	9.10	--

Table B-04. Concentrations of volatile organic compounds in quality-assurance samples analyzed using the portable gas chromatograph. —Continued

[TVOC, total volatile organic compounds; µg/L, microgram per liter; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; QC, quality control; AB, air blank; --, sample not analyzed for constituent; ND, not detected; UNK, unknown; ST, standard]

Sample location	Media	Feature	Top	Bottom	Date	Time	TVOC (µg/L)	Concentration of constituents in µg/L						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
Vienna	QC	ST	0	0.00	4/17/2014	0655	--	17.30	12.10	21.50	2.20	6.40	8.90	--
Vienna	QC	ST	0	0.00	4/17/2014	0655	--	17.80	13.40	25.00	2.50	7.20	9.60	--
Vienna	QC	ST	0	0.00	4/21/2014	0710	--	ND	ND	ND	ND	ND	ND	--
Vienna	QC	ST	0	0.00	4/21/2014	0710	--	15.30	11.40	22.70	2.30	7.10	8.40	--
Vienna	QC	ST	0	0.00	4/21/2014	0710	--	15.10	11.10	21.80	2.10	6.80	8.20	--
Vienna	QC	ST	0	0.00	4/21/2014	0710	--	13.00	12.50	24.90	2.70	7.50	7.80	--
Vienna	QC	ST	0	0.00	4/21/2014	0710	--	16.00	11.70	21.90	2.10	6.40	8.60	--
Vienna	QC	ST	0	0.00	4/22/2014	0720	--	14.70	11.20	21.80	2.30	6.30	7.90	--
Vienna	QC	ST	0	0.00	4/22/2014	0720	--	15.60	11.60	22.10	2.30	6.50	8.30	--
Vienna	QC	ST	0	0.00	4/22/2014	0720	--	17.90	12.60	23.20	2.30	6.90	9.30	--
Vienna	QC	ST	0	0.00	4/22/2014	0720	--	15.00	9.80	19.00	1.80	5.50	7.90	--
Vienna	QC	ST	0	0.00	4/22/2014	0720	--	14.00	10.24	19.40	2.20	5.60	7.30	--
Vienna	QC	ST	0	0.00	4/23/2014	0730	--	13.80	9.40	17.80	2.10	5.10	7.60	--
Vienna	QC	ST	0	0.00	4/23/2014	0730	--	13.60	10.40	19.30	2.10	5.70	7.20	--
Vienna	QC	ST	0	0.00	4/23/2014	0730	--	14.70	10.50	20.00	2.20	5.80	7.90	--
Vienna	QC	ST	0	0.00	4/29/2014	0700	--	14.20	10.90	20.80	2.20	6.40	7.10	--
Vienna	QC	ST	0	0.00	4/29/2014	0700	--	14.80	10.40	19.00	2.00	5.70	6.90	--
Vienna	QC	ST	0	0.00	4/29/2014	0700	--	16.30	11.60	20.70	2.20	6.20	7.90	--
Vienna	QC	ST	0	0.00	4/30/2014	0630	--	11.70	9.30	18.70	2.10	5.70	6.10	--
Vienna	QC	ST	0	0.00	4/30/2014	0630	--	10.80	8.50	17.10	2.00	5.10	5.50	--
Vienna	QC	ST	0	0.00	4/30/2014	0630	--	16.60	12.40	21.20	2.30	6.30	8.50	--
Vienna	QC	ST	0	0.00	4/30/2014	0630	--	17.00	11.90	20.80	2.20	6.20	8.10	--
Vienna	QC	ST	0	0.00	5/1/2014	0710	--	15.40	12.10	22.00	2.40	6.40	7.60	--
Vienna	QC	ST	0	0.00	5/1/2014	0710	--	15.90	11.30	20.20	2.20	6.00	7.60	--
Vienna	QC	ST	0	0.00	5/1/2014	0710	--	16.60	12.00	21.70	2.30	6.40	7.70	--
Vienna	QC	ST	0	0.00	5/5/2014	0630	--	15.10	11.00	21.60	2.00	6.90	7.90	--
Vienna	QC	ST	0	0.00	5/5/2014	0630	--	15.10	10.60	20.50	1.90	6.50	7.80	--
Vienna	QC	ST	0	0.00	5/5/2014	0630	--	13.00	12.50	24.90	2.70	7.50	7.80	--
Vienna	QC	ST	0	0.00	5/5/2014	0630	--	13.00	12.50	24.90	2.70	7.50	7.80	--
Vienna	QC	ST	0	0.00	5/5/2014	0630	--	11.80	11.80	21.50	2.30	6.30	6.90	--
lab	QC	ST	0	0.00	5/6/2014	0650	--	10.80	12.60	27.50	ND	7.60	7.60	ND
Vienna	QC	ST	0	0.00	5/6/2014	0650	--	14.00	15.50	29.60	3.60	8.50	9.20	--
Vienna	QC	ST	0	0.00	5/6/2014	0650	--	13.90	14.20	27.00	3.20	7.70	8.50	--
Vienna	QC	ST	0	0.00	5/6/2014	0650	--	14.70	15.10	28.80	3.20	8.20	9.40	ND
Vienna	QC	ST	0	0.00	5/7/2014	0700	--	11.80	12.90	26.50	3.10	7.50	7.90	--
Vienna	QC	ST	0	0.00	5/7/2014	0700	--	13.10	12.90	24.60	2.80	7.20	8.50	--
Vienna	QC	ST	0	0.00	5/7/2014	0700	--	13.00	13.50	27.10	3.30	7.60	8.60	--
Vienna	QC	ST	0	0.00	5/20/2014	0730	--	10.30	10.80	22.30	2.60	6.70	6.70	--
Vienna	QC	ST	0	0.00	5/20/2014	0730	--	9.30	10.90	23.50	2.80	7.00	6.40	--
Vienna	QC	ST	0	0.00	5/20/2014	0730	--	11.20	12.20	25.70	3.00	7.50	7.60	--
Vienna	QC	ST	0	0.00	5/20/2014	0730	--	13.00	12.50	24.90	2.70	7.50	7.80	--
Vienna	QC	ST	0	0.00	5/22/2014	0840	--	11.30	12.10	25.80	2.90	7.70	7.60	--
Vienna	QC	ST	0	0.00	5/22/2014	0840	--	9.40	9.50	20.00	2.30	6.00	5.80	--
Vienna	QC	ST	0	0.00	5/22/2014	0840	--	10.20	10.00	20.80	2.40	6.20	6.20	--
Vienna	QC	ST	0	0.00	5/22/2014	0840	--	13.00	12.50	24.90	2.70	7.50	7.80	--
Vienna	QC	ST	0	0.00	5/22/2014	0840	--	13.00	12.60	25.00	2.60	7.60	7.90	--
Vienna	QC	ST	0	0.00	5/22/2014	0840	--	7.79	10.20	23.40	2.60	6.50	5.20	--
Vienna	QC	ST	0	0.00	5/22/2014	0840	--	11.30	11.90	25.50	2.80	7.30	7.20	--
Vienna	QC	ST	0	0.00	5/22/2014	0840	--	167.90	ND	135.00	ND	ND	ND	--
Vienna	QC	ST	0	0.00	5/22/2014	0840	--	91.00	ND	ND	ND	ND	ND	--
Vienna	QC	ST	0	0.00	5/22/2014	0840	--	11.50	14.90	31.90	3.40	8.90	7.90	--
lab	QC	ST	0	0.00	7/1/2014	0700	--	6.80	6.70	11.80	1.10	3.60	4.30	--
lab	QC	ST	0	0.00	7/1/2014	0700	--	9.20	9.10	16.60	1.60	4.90	5.80	--
lab	QC	ST	0	0.00	7/1/2014	0700	--	13.00	12.50	24.90	2.70	7.50	7.80	--
lab	QC	ST	0	0.00	7/2/2014	0700	--	8.90	8.60	17.90	1.90	5.70	5.20	--
lab	QC	ST	0	0.00	7/2/2014	0700	--	12.90	12.20	25.60	2.70	8.00	7.70	--
lab	QC	ST	0	0.00	7/2/2014	0700	--	11.20	11.60	23.10	2.60	7.10	7.20	--
lab	QC	ST	0	0.00	7/7/2014	0700	--	9.90	10.50	23.00	2.60	6.90	5.90	--
lab	QC	ST	0	0.00	7/7/2014	0700	--	13.90	13.40	28.00	ND	8.60	8.30	--
lab	QC	ST	0	0.00	7/7/2014	0700	--	ND	ND	ND	ND	ND	ND	--
lab	QC	ST	0	0.00	8/11/2014	0742	--	10.60	8.79	19.10	1.90	5.89	5.78	--
lab	QC	ST	0	0.00	8/11/2014	0754	--	11.60	9.86	21.10	2.08	6.56	6.47	--
lab	QC	ST	0	0.00	8/11/2014	1436	--	11.80	11.70	26.30	2.72	7.74	7.63	--
lab	QC	ST	0	0.00	8/13/2014	1409	--	15.00	13.20	27.60	2.70	8.40	8.90	--
lab	QC	ST	0	0.00	8/14/2014	1535	--	12.70	13.30	26.20	2.77	7.63	7.80	--
lab	QC	ST	0	0.00	8/18/2014	1502	--	12.00	10.00	23.00	2.00	6.96	6.87	--
lab	QC	ST	0	0.00	8/26/2014	0730	--	12.30	12.90	24.80	1.90	7.30	8.20	--
lab	QC	ST	0	0.00	8/26/2014	0730	--	13.10	13.10	24.50	1.90	7.20	8.40	--
lab	QC	ST	0	0.00	8/26/2014	0730	--	9.50	9.40	18.60	1.40	5.30	6.10	--
lab	QC	ST	0	0.00	9/8/2014	0800	--	14.90	12.70	28.60	2.80	8.70	9.20	--
lab	QC	ST	0	0.00	9/8/2014	0800	--	14.00	12.10	27.10	2.70	8.10	8.60	--
lab	QC	ST	0	0.00	9/8/2014	0800	--	14.50	12.70	29.00	2.60	8.70	9.00	--
lab	QC	ST	0	0.00	9/8/2014	0800	--	12.80	11.00	25.10	ND	7.50	7.90	--
lab	QC	ST	0	0.00	9/8/2014	0800	--	11.20	9.80	23.00	ND	6.60	6.80	--
lab	QC	ST	0	0.00	9/8/2014	0800	--	ND	ND	ND	ND	ND	ND	--
lab	QC	ST	0	0.00	9/8/2014	0800	--	14.20	12.00	25.90	ND	7.90	8.80	--
lab	QC	ST	0	0.00	9/8/2014	0800	--	15.40	12.50	27.10	ND	8.00	9.80	--
lab	QC	ST	0	0.00	9/8/2014	0800	--	13.10	11.20	25.20	ND	7.30	8.50	--
lab	QC	ST	0	0.00	9/8/2014	0800	--	15.10	12.70	27.50	ND	8.00	9.70	--
lab	QC	ST	0	0.00	9/8/2014	0800	--	13.10	11.10	24.70	ND	7.00	8.70	--
lab	QC	ST	0	0.00	9/9/2014	0700	--	8.50	9.50	21.10	2.50	6.10	5.20	--
lab	QC	ST	0	0.00	9/9/2014	0700	--	11.40	12.00	26.00	3.00	7.60	7.30	--

Table B-04. Concentrations of volatile organic compounds in quality-assurance samples analyzed using the portable gas chromatograph. —Continued

[TVOC, total volatile organic compounds; µg/L, microgram per liter; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; QC, quality control; AB, air blank; --, sample not analyzed for constituent; ND, not detected; UNK, unknown; ST, standard]

Sample location	Media	Feature	Top	Bottom	Date	Time	TVOC (µg/L)	Concentration of constituents in µg/L						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
lab	QC	ST	0	0.00	9/9/2014	0700	--	ND	ND	ND	ND	ND	ND	--
lab	QC	ST	0	0.00	9/10/2014	0630	--	10.80	11.30	23.60	2.60	6.80	6.90	--
lab	QC	ST	0	0.00	9/10/2014	0630	--	ND	ND	ND	ND	ND	ND	--
lab	QC	ST	0	0.00	9/10/2014	0630	--	16.20	14.50	29.40	3.10	8.80	10.30	--
lab	QC	ST	0	0.00	9/29/2014	0840	--	7.20	6.00	20.00	ND	5.40	4.70	--
lab	QC	ST	0	0.00	9/29/2014	0840	--	17.10	12.60	31.60	2.50	9.10	9.40	--
lab	QC	ST	0	0.00	9/29/2014	0840	--	18.50	13.70	32.80	2.50	9.70	10.40	--
lab	QC	ST	0	0.00	9/29/2014	0840	--	19.30	13.90	33.00	2.60	9.60	10.60	--
lab	QC	ST	0	0.00	9/29/2014	0840	--	13.00	12.50	24.90	2.70	7.50	7.80	--
lab	QC	ST	0	0.00	10/1/2014	0635	--	16.20	13.00	31.40	2.90	8.70	10.20	--
lab	QC	ST	0	0.00	10/1/2014	0635	--	17.00	13.40	32.20	3.20	8.70	10.40	--
lab	QC	ST	0	0.00	10/1/2014	0635	--	19.20	14.30	33.70	3.40	9.00	11.70	--
lab	QC	ST	0	0.00	10/1/2014	0635	--	13.00	12.50	24.90	2.70	7.50	7.80	--
lab	QC	ST	0	0.00	10/1/2014	0635	--	13.80	12.90	24.10	2.50	7.40	7.70	--
lab	QC	ST	0	0.00	10/1/2014	0635	--	ND	ND	ND	ND	ND	ND	--
lab	QC	ST	0	0.00	10/2/2014	0615	--	12.70	12.90	27.00	3.00	8.00	8.10	--
lab	QC	ST	0	0.00	10/2/2014	0615	--	12.70	12.20	24.20	2.60	7.40	7.90	--
lab	QC	ST	0	0.00	10/7/2014	0710	--	13.94	13.20	27.45	2.73	8.98	7.87	--
lab	QC	ST	0	0.00	10/7/2014	0710	--	15.50	14.70	30.00	3.20	9.18	8.88	--
lab	QC	ST	0	0.00	10/7/2014	0710	--	12.70	13.80	29.20	2.69	9.00	7.86	--
lab	QC	ST	0	0.00	10/8/2014	0715	--	15.70	15.40	31.30	3.51	9.97	9.50	--
lab	QC	ST	0	0.00	10/8/2014	0715	--	13.50	14.60	30.00	3.30	9.41	8.67	--
lab	QC	ST	0	0.00	10/8/2014	0715	--	15.60	15.00	29.70	3.17	9.24	9.89	--
lab	QC	ST	0	0.00	10/8/2014	1445	--	8.60	9.72	6.03	2.39	6.03	5.31	--
lab	QC	ST	0	0.00	10/8/2014	1505	--	13.00	12.50	24.50	2.68	7.28	7.39	--
lab	QC	ST	0	0.00	10/8/2014	1517	--	ND	ND	21.90	2.16	6.56	ND	--
lab	QC	ST	0	0.00	10/9/2014	0715	--	15.00	15.00	30.00	3.26	9.16	8.96	--
lab	QC	ST	0	0.00	10/9/2014	0715	--	15.40	14.70	28.50	2.95	8.81	8.94	--
lab	QC	ST	0	0.00	10/23/2014	0801	--	6.25	6.97	15.50	1.28	4.33	4.19	--
lab	QC	ST	0	0.00	10/23/2014	0821	--	8.21	8.40	18.30	1.55	5.16	5.61	--
lab	QC	ST	0	0.00	10/23/2014	0827	--	8.42	9.05	19.80	1.80	5.44	5.65	--
lab	QC	ST	0	0.00	10/23/2014	0835	--	7.04	7.73	16.00	1.46	4.46	4.61	--
lab	QC	ST	0	0.00	10/23/2014	0859	--	10.90	11.20	22.10	2.22	6.57	6.44	--
lab	QC	ST	0	0.00	10/23/2014	0630	--	20.60	17.60	37.80	4.70	13.40	12.40	--
lab	QC	ST	0	0.00	10/23/2014	0630	--	ND	ND	ND	ND	ND	ND	--
lab	QC	ST	0	0.00	10/28/2014	1322	--	15.30	15.40	33.90	3.63	9.41	10.50	--
lab	QC	ST	0	0.00	10/28/2014	1322	--	14.90	16.00	34.40	3.80	9.50	10.40	--
lab	QC	ST	0	0.00	10/30/2014	0730	--	15.00	13.00	31.40	3.30	ND	ND	--
lab	QC	ST	0	0.00	10/30/2014	0730	--	15.50	12.30	29.60	3.20	8.00	8.80	--
lab	QC	ST	0	0.00	11/3/2014	0730	--	16.80	12.30	30.90	3.00	8.80	9.50	--
lab	QC	ST	0	0.00	11/3/2014	0730	--	17.40	12.80	30.80	3.00	8.70	9.70	--
lab	QC	ST	0	0.00	11/3/2014	0730	--	16.10	12.50	31.40	3.00	8.40	9.60	--
lab	QC	ST	0	0.00	11/3/2014	0730	--	17.70	14.00	35.00	3.40	9.20	10.90	--
lab	QC	ST	0	0.00	11/5/2014	0730	--	15.30	11.90	29.90	2.80	8.10	8.70	--
lab	QC	ST	0	0.00	11/5/2014	0730	--	15.20	12.40	30.80	3.20	8.40	8.90	--
lab	QC	ST	0	0.00	11/5/2014	0730	--	19.10	14.90	35.80	3.60	9.60	11.80	--
lab	QC	ST	0	0.00	11/5/2014	0730	--	19.10	15.20	38.40	3.90	10.30	12.50	--
lab	QC	ST	0	0.00	11/5/2014	0730	--	19.10	14.90	35.80	3.60	9.60	11.80	--
lab	QC	ST	0	0.00	11/6/2014	0730	--	9.40	9.10	18.20	1.90	5.40	5.30	--
lab	QC	ST	0	0.00	11/6/2014	0730	--	9.40	9.00	17.10	1.80	4.90	5.10	--
lab	QC	ST	0	0.00	11/6/2014	0730	--	9.80	9.90	18.20	1.90	5.40	5.50	--
lab	QC	ST	0	0.00	5/6/15	0630	--	11.70	10.60	25.80	1.70	7.30	7.71	--
lab	QC	ST	0	0.00	5/6/15	0630	--	11.50	10.20	24.70	1.80	6.99	7.40	--
lab	QC	ST	0	0.00	5/8/15	0813	--	9.50	9.60	22.00	2.46	6.17	5.65	--
lab	QC	ST	0	0.00	5/8/15	0842	--	10.40	10.00	22.70	2.24	6.30	6.18	--
lab	QC	ST	0	0.00	5/8/15	0842	--	13.00	12.50	24.90	2.70	7.50	7.80	--
lab	QC	ST	0	0.00	5/8/15	0842	--	16.10	14.60	26.30	3.41	7.96	9.82	--
lab	QC	ST	0	0.00	6/19/15	0655	--	5.80	5.50	14.40	1.30	4.30	3.60	--
lab	QC	ST	0	0.00	6/19/15	0655	--	6.90	6.90	18.10	1.70	5.30	4.70	--
lab	QC	ST	0	0.00	6/19/15	0655	--	7.60	6.90	17.10	1.50	5.10	5.00	--
lab	QC	ST	0	0.00	6/19/15	0655	--	13.00	12.50	24.90	2.70	7.50	7.80	--
lab	QC	ST	0	0.00	6/19/15	0655	--	13.60	14.70	31.10	3.50	9.10	8.60	--
lab	QC	ST	0	0.00	6/19/15	0655	--	9.30	11.60	25.50	2.90	7.30	6.40	--
lab	QC	ST	0	0.00	6/19/15	0655	--	13.90	14.50	27.80	2.80	8.10	9.00	--
lab	QC	ST	0	0.00	6/19/15	0655	--	ND	4.00	ND	ND	ND	ND	--
lab	QC	ST	0	0.00	6/19/15	0655	--	ND	ND	ND	ND	ND	ND	--
lab	QC	ST	0	0.00	6/19/15	0655	--	ND	ND	ND	ND	ND	ND	--
lab	QC	ST	0	0.00	6/19/15	0655	--	ND	ND	ND	ND	ND	ND	--
lab	QC	ST	0	0.00	6/19/15	0655	--	6.90	8.70	22.90	ND	6.00	5.30	--
lab	QC	ST	0	0.00	6/19/15	0655	--	13.00	12.50	24.90	ND	7.50	7.80	--
lab	QC	ST	0	0.00	6/19/15	0655	--	12.10	10.10	26.00	ND	6.90	6.90	--
lab	QC	ST	0	0.00	8/7/15	0637	--	17.00	18.30	30.10	ND	9.50	9.61	--
lab	QC	ST	0	0.00	8/7/15	0637	--	10.20	11.50	16.70	ND	5.69	5.25	--
lab	QC	ST	0	0.00	8/7/15	0637	--	17.60	18.50	32.70	ND	9.59	8.34	--
lab	QC	ST	0	0.00	8/10/15	0550	--	25.20	22.90	48.50	ND	13.00	13.80	--
lab	QC	ST	0	0.00	8/10/15	0550	--	23.20	20.90	41.40	ND	11.00	12.00	--
lab	QC	ST	0	0.00	8/10/15	0550	--	13.00	12.50	24.90	ND	7.50	7.80	--

Table B-04. Concentrations of volatile organic compounds in quality-assurance samples analyzed using the portable gas chromatograph. —Continued

[TVOC, total volatile organic compounds; µg/L, microgram per liter; PCE, tetrachloroethene; TCE, trichloroethene; cDCE, cis-dichloroethene; tDCE, trans-dichloroethene; QC, quality control; AB, air blank; --, sample not analyzed for constituent; ND, not detected; UNK, unknown; ST, standard]

Sample location	Media	Feature	Top	Bottom	Date	Time	TVOC (µg/L)	Concentration of constituents in µg/L						
								PCE	TCE	cDCE	tDCE	Benzene	Toluene	CFC-113
lab	QC	ST	0	0.00	8/10/15	0550	--	12.90	12.40	25.90	ND	7.80	7.50	--
lab	QC	ST	0	0.00	8/10/15	0550	--	12.70	11.60	25.70	ND	7.50	7.20	--
lab	QC	ST	0	0.00	8/11/15	0612	--	11.10	11.40	24.60	ND	7.50	7.70	--
lab	QC	ST	0	0.00	8/11/15	0612	--	12.10	12.10	25.20	ND	7.80	8.10	--
lab	QC	ST	0	0.00	8/11/15	0612	--	14.00	12.90	26.90	ND	8.10	7.60	--
lab	QC	ST	0	0.00	8/11/15	0612	--	12.40	10.40	27.00	ND	7.10	6.70	--
lab	QC	ST	0	0.00	8/11/15	0612	--	13.00	13.40	29.50	ND	8.20	8.20	--
lab	QC	ST	0	0.00	9/24/15	1025	--	8.50	8.70	21.40	ND	6.10	6.30	--
lab	QC	ST	0	0.00	9/24/15	1025	--	8.20	9.50	22.60	ND	6.40	6.50	--
lab	QC	ST	0	0.00	9/24/15	1025	--	13.00	12.50	24.90	ND	7.50	7.80	--
lab	QC	ST	0	0.00	9/24/15	1025	--	10.40	8.80	19.40	1.90	6.10	5.90	--
lab	QC	ST	0	0.00	9/24/15	1025	--	9.40	8.00	16.80	1.70	5.20	5.30	--
lab	QC	ST	0	0.00	9/24/15	1025	--	9.90	10.40	21.60	2.40	6.50	6.60	--
lab	QC	ST	0	0.00	9/24/15	1025	--	13.00	12.50	24.90	2.70	7.50	7.80	--
lab	QC	ST	0	0.00	9/24/15	1025	--	16.60	13.10	25.80	2.30	8.00	9.20	--
lab	QC	ST	0	0.00	2/9/16	0830	--	11.90	12.90	29.40	3.10	8.40	7.40	--
lab	QC	ST	0	0.00	2/9/16	0830	--	12.20	13.40	30.80	3.30	8.80	7.90	--
lab	QC	ST	0	0.00	3/16/16	1500	--	9.10	10.10	23.70	2.80	6.90	8.00	--
lab	QC	ST	0	0.00	3/16/16	1500	--	9.40	9.60	21.40	2.70	6.30	7.50	--
lab	QC	ST	0	0.00	3/17/16	0600	--	10.80	9.80	22.10	2.40	6.40	6.40	--
lab	QC	ST	0	0.00	3/17/16	0600	--	12.70	12.10	26.20	2.80	7.80	8.10	--
lab	QC	ST	0	0.00	3/17/16	0600	--	13.50	11.90	25.20	2.60	7.50	7.90	--
lab	QC	ST	0	0.00	3/17/16	0600	--	14.50	12.70	26.50	2.70	7.50	8.50	--
lab	QC	ST	0	0.00	9/302014	0800	--	12.40	14.60	30.40	3.50	8.72	8.72	--
lab	QC	ST	0	0.00	9/302014	0800	--	13.00	13.40	26.30	3.22	7.56	8.39	--
lab	QC	ST	0	0.00	9/302014	0800	--	12.70	12.50	26.90	2.56	7.74	8.57	--

Table B-05. Concentrations of constituents in tree-core samples.

[ng/L; nanogram per liter; PCE, tetrachloroethene; TCE, trichloroethene; CFC-113, 1,1,2-trichloro-trifluoroethane; T, tree; S, shrub; <MDL, less than the method detection limit; <MRL, less than the method reporting limit; Duplicate samples have the date of the last sampling round]

Sample Name (fig. C-01)	Date	Species	Duplicate?	Concentrations of Constituent, in ng/L			Tree Diameter (inches)	Type
				PCE	TCE	CFC-113		
TC001	9/8/2011	Birch	No	1,207.0	75.0	ND	8.0	T
TC002	9/8/2011	Elm	No	616.0	<MDL	ND	8.0	T
TC003	9/8/2011	Box Elder	No	2.0	<MDL	ND	4.0	T
TC004	9/8/2011	Mulberry	No	14.0	<MDL	ND	4.0	T
TC005	9/8/2011	Elm	No	<MDL	<MDL	ND	4.0	T
TC006	9/15/2011	Catalpa	No	8.0	<MDL	ND	6.0	T
TC007	9/8/2011	Persimmon	No	2.0	<MDL	ND	6.0	T
TC008	9/8/2011	Unknown	No	207.0	<MDL	ND	4.0	T
TC009	9/8/2011	Hackberry	No	1.0	<MDL	ND	4.0	T
TC010	9/8/2011	Fruit Tree	No	<MDL	<MDL	ND	4.0	T
TC011	9/8/2011	Elm	No	<MDL	<MDL	ND	3.0	T
TC012	7/29/2014	Elm	Yes	13,273.0	444.6	ND	21.3	T
TC013	7/29/2014	Hickory	Yes	10,582.0	<MRL	ND	16.0	T
TC014	5/15/2015	Ash	Yes	5,337.2	425.3	ND	21.0	T
TC015	9/8/2011	Mulberry	No	10.0	<MDL	ND	7.0	T
TC016	9/8/2011	Elm	No	579.0	<MDL	ND	14.0	T
TC017	9/8/2011	Walnut	No	188.0	<MDL	ND	12.0	T
TC018	9/8/2011	Walnut	No	92.0	<MDL	ND	13.0	T
TC019	9/8/2011	Walnut	No	367.0	<MDL	ND	6.0	T
TC020	7/29/2014	Unknown	Yes	9,236.0	318.4	ND	13.5	T
TC021	9/8/2011	Elm	No	4.0	<MDL	ND	12.0	T
TC022	9/8/2011	Pine	No	325.0	<MDL	ND	12.0	T
TC023	9/8/2011	Pine	No	693.0	<MDL	ND	12.0	T
TC024	9/8/2011	Ash	No	161.0	<MDL	ND	18.0	T
TC025	9/8/2011	Oak	No	<MDL	<MDL	ND	25.0	T
TC026	9/8/2011	Elm	No	<MDL	<MDL	ND	18.0	T
TC027	9/8/2011	Hackberry	No	<MDL	<MDL	ND	18.0	T
TC028	9/8/2011	Maple	No	<MDL	<MDL	ND	12.0	T
TC029	9/8/2011	Autumn Olive	No	<MDL	<MDL	ND	13.0	T
TC030	9/8/2011	Catalpa	No	995.0	901.0	ND	7.0	T
TC031	9/8/2011	Box Elder	No	28.0	<MDL	ND	12.0	T
TC032	7/29/2014	Sycamore	Yes	11,191.0	6,431.7	ND	14.0	T
TC033	9/8/2011	Oak	No	221.0	25.0	ND	33.0	T
TC034	9/8/2011	Oak	No	6.0	<MDL	ND	33.0	T
TC035	9/8/2011	Oak	No	30.0	<MDL	ND	40.0	T
TC036	9/8/2011	Oak	No	<MDL	<MDL	ND	16.0	T
TC037	9/8/2011	Ash-Birch	No	<MDL	<MDL	ND	14.0	T
TC038	9/15/2011	Elm	No	6.0	<MDL	ND	20.0	T
TC039	9/15/2011	Elm	No	1.0	<MDL	ND	18.0	T
TC040	9/15/2011	Elm	No	2.0	<MDL	ND	19.0	T
TC041	9/15/2011	Maple	No	1.0	<MDL	ND	14.0	T
TC042	9/15/2011	Elm	No	<MDL	<MDL	ND	25.0	T
TC043	9/15/2011	Elm	No	<MDL	<MDL	ND	16.0	T
TC044	9/15/2011	Elm	No	<MDL	<MDL	ND	13.0	T
TC045	9/15/2011	Elm	No	<MDL	<MDL	ND	6.0	T
TC046	9/15/2011	Elm	No	<MDL	<MDL	ND	8.0	T
TC047	9/15/2011	Elm	No	1.0	<MDL	ND	4.0	T
TC048	9/15/2011	Box Elder	No	40.0	<MDL	ND	4.0	T
TC049	9/15/2011	Maple	No	3.0	<MDL	ND	6.0	T
TC050	9/15/2011	Elm	No	435.0	<MDL	ND	5.0	T
TC051	9/15/2011	Elm	No	1.0	<MDL	ND	7.0	T
TC052	9/15/2011	Oak	No	10.0	<MDL	ND	13.0	T

Table B-05. Concentrations of constituents in tree-core samples.—Continued

[ng/L; nanogram per liter; PCE, tetrachloroethene; TCE, trichloroethene; CFC-113, 1,1,2-trichloro-trifluoroethane; T, tree; S, shrub; <MDL, less than the method detection limit; <MRL, less than the method reporting limit; Duplicate samples have the date of the last sampling round]

Sample Name (fig. C-01)	Date	Species	Duplicate?	Concentrations of Constituent, in ng/L			Tree Diameter (inches)	Type
				PCE	TCE	CFC-113		
TC053	9/15/2011	Oak	No	46.0	<MDL	ND	7.0	T
TC054	9/15/2011	Cedar	No	2.0	<MDL	ND	10.0	T
TC055	9/15/2011	Elm	No	<MDL	<MDL	ND	4.0	T
TC056	9/15/2011	Oak	No	8.0	<MDL	ND	4.0	T
TC057	9/15/2011	Oak	No	10.0	<MDL	ND	11.0	T
TC058	9/15/2011	Elm	No	<MDL	<MDL	ND	16.0	T
TC059	9/15/2011	Elm	No	<MDL	<MDL	ND	6.0	T
TC060	9/15/2011	Elm	No	<MDL	<MDL	ND	10.0	T
TC061	9/15/2011	Elm	No	<MDL	<MDL	ND	6.0	T
TC062	9/15/2011	Elm	No	<MDL	<MDL	ND	14.0	T
TC063	5/22/2013	Oak	Yes	511.9	102.0	ND	25.0	T
TC064	5/3/2013	Oak	No	349.7	<MDL	ND	26.0	T
TC065	5/3/2013	Oak	No	325.1	<MRL	ND	26.0	T
TC066	5/3/2013	Oak	No	7.6	<MDL	ND	36.0	T
TC067	5/3/2013	Oak	No	<MDL	<MDL	ND	21.0	T
TC068	5/3/2013	Cedar	No	<MRL	<MDL	67.0	21.0	T
TC069	5/3/2013	Oak	No	<MDL	<MDL	ND	11.0	T
TC070	5/3/2013	Cedar	No	<MRL	<MDL	17.9	8.0	T
TC071	5/3/2013	Oak	No	<MDL	<MDL	ND	4.0	T
TC072	5/3/2013	Oak	No	<MRL	<MDL	ND	32.0	T
TC073	5/3/2013	Oak	No	<MDL	<MDL	ND	17.5	T
TC074	5/3/2013	Ash	No	<MDL	<MDL	ND	8.5	T
TC075	5/3/2013	Cedar	No	<MDL	<MDL	ND	5.8	T
TC076	5/3/2013	Unknown	No	<MDL	<MDL	ND	8.5	T
TC077	5/3/2013	Ash	No	<MDL	<MDL	ND	9.0	T
TC078	8/18/2013	Silver maple	Yes	10.8	<MRL	ND	6.0	T
TC079	5/3/2013	Silver maple	No	<MDL	<MDL	ND	4.0	T
TC080	5/3/2013	Unknown	No	<MDL	<MDL	ND	7.0	T
TC081	5/3/2013	Elm	No	<MDL	<MDL	ND	5.0	T
TC082	5/3/2013	Catalpa	No	33.3	<MDL	ND	12.0	T
TC083	5/3/2013	Elm	No	<MDL	<MDL	ND	30.0	T
TC084	5/3/2013	Oak	No	57.8	<MDL	ND	35.0	T
TC085	5/3/2013	Oak	No	<MDL	<MDL	ND	24.0	T
TC086	5/3/2013	Oak	No	<MDL	<MDL	ND	28.0	T
TC087	5/3/2013	Oak	No	<MRL	<MDL	ND	32.0	T
TC088	5/3/2013	Oak	No	<MDL	<MDL	ND	34.0	T
TC089	5/3/2013	Oak	No	<MDL	<MDL	ND	28.0	T
TC090	5/3/2013	Oak	No	14.4	<MDL	ND	31.0	T
TC091	5/3/2013	Oak	No	<MDL	<MDL	10.4	28.0	T
TC092	5/3/2013	Oak	No	<MRL	<MDL	2.8	33.0	T
TC093	5/3/2013	Oak	No	<MDL	<MDL	ND	39.0	T
TC094	5/3/2013	Oak	No	<MDL	<MDL	ND	17.0	T
TC095	5/3/2013	Oak	No	<MDL	<MDL	ND	15.5	T
TC096	5/3/2013	Ash/Elm?	No	<MDL	<MDL	ND	12.0	T
TC097	5/3/2013	Box Elder	No	<MDL	<MDL	ND	9.0	T
TC098	5/3/2013	Elm	No	<MDL	<MDL	ND	6.0	T
TC099	5/3/2013	Walnut	No	701.5	743.2	ND	7.5	T
TC100	5/3/2013	Walnut	No	<MRL	<MDL	ND	11.0	T
TC101	5/3/2013	Catalpa	No	<MDL	<MDL	ND	16.0	T
TC102	5/3/2013	Box Elder	No	<MRL	<MDL	ND	4.0	T
TC103	5/3/2013	Box Elder	No	<MDL	<MDL	ND	7.0	T
TC104	5/3/2013	Catalpa?	No	<MDL	<MDL	ND	9.0	T

Table B-05. Concentrations of constituents in tree-core samples.—Continued

[ng/L; nanogram per liter; PCE, tetrachloroethene; TCE, trichloroethene; CFC-113, 1,1,2-trichloro-trifluoroethane; T, tree; S, shrub; <MDL, less than the method detection limit; <MRL, less than the method reporting limit; Duplicate samples have the date of the last sampling round]

Sample Name (fig. C-01)	Date	Species	Duplicate?	Concentrations of Constituent, in ng/L			Tree Diameter (inches)	Type
				PCE	TCE	CFC-113		
TC105	5/7/2013	Cedar	No	40.6	<MDL	26.8	10.0	T
TC106	5/7/2013	Oak	No	9.4	<MDL	ND	6.0	T
TC107	5/3/2013	Cedar	No	54.4	<MDL	ND	12.0	T
TC108	5/3/2013	Elm	No	279.1	<MDL	ND	10.0	T
TC109	5/3/2013	Elm	No	<MRL	<MDL	ND	10.0	T
TC110	5/3/2013	Red oak	No	<MRL	<MDL	ND	8.0	T
TC111	5/3/2013	Cherry	No	8.2	<MDL	ND	10.0	T
TC112	5/3/2013	Oak	No	36.2	<MDL	ND	22.0	T
TC113	5/3/2013	Oak	No	<MRL	<MDL	ND	20.0	T
TC114	5/3/2013	Chinese Elm	No	<MDL	<MDL	ND	6.0	T
TC115	5/3/2013	Cedar	No	<MRL	<MDL	19.5	5.0	T
TC116	5/3/2013	Oak	No	<MDL	<MDL	ND	24.0	T
TC117	5/3/2013	Cedar	No	<MDL	<MDL	ND	8.0	T
TC118	5/3/2013	Cedar	No	<MRL	<MDL	47.2	12.0	T
TC119	5/3/2013	Mulberry	No	<MRL	<MDL	ND	16.0	T
TC120	5/3/2013	Willow	No	<MDL	<MDL	ND	8.0	T
TC121	5/3/2013	Elm	No	<MRL	<MDL	ND	10.0	T
TC122	5/3/2013	Cherry	No	<MRL	<MDL	ND	8.0	T
TC123	5/3/2013	Elm	No	<MRL	<MDL	ND	6.0	T
TC124	5/3/2013	Elm	No	<MDL	<MDL	ND	4.0	T
TC125	5/3/2013	Hackberry	No	<MRL	<MDL	ND	6.0	T
TC126	5/3/2013	Unknown	No	1,019.8	<MDL	ND	26.4	T
TC127	5/3/2013	Unknown	No	<MRL	<MDL	ND	7.0	T
TC128	5/3/2013	Unknown	No	<MRL	<MDL	ND	9.3	T
TC129	5/3/2013	Cedar	No	<MRL	<MDL	9.9	8.0	T
TC130	5/3/2013	Cedar	No	<MRL	<MDL	24.9	6.3	T
TC131	5/3/2013	Cedar	No	<MRL	<MDL	52.7	12.3	T
TC132	5/3/2013	Cedar	No	<MDL	<MDL	17.0	6.0	T
TC133	5/3/2013	Unknown	No	<MDL	<MDL	ND	6.0	T
TC134	5/3/2013	Maple	No	<MDL	<MDL	ND	10.0	T
TC135	5/3/2013	Cedar	No	<MRL	<MDL	2.2	8.0	T
TC136	5/7/2013	Unknown	No	<MDL	<MDL	ND	10.5	T
TC137	5/7/2013	Maple	No	6,950.2	4,662.6	ND	12.3	T
TC138	5/7/2013	Cedar	No	202.5	<MDL	19.6	5.5	T
TC139	5/7/2013	Unknown	No	<MDL	<MDL	ND	6.5	T
TC140	5/7/2013	Ash?	No	<MRL	<MDL	ND	5.0	T
TC141	5/7/2013	Cedar	No	156.4	<MDL	ND	8.5	T
TC142	5/7/2013	Cedar	No	75.7	<MDL	18.7	9.3	T
TC143	5/7/2013	Unknown	No	<MRL	<MDL	7.5	4.5	T
TC144	5/7/2013	Unknown	No	<MDL	<MDL	ND	16.3	T
TC145	5/7/2013	Unknown	No	8.2	<MDL	ND	9.8	T
TC146	5/7/2013	Unknown	No	<MDL	<MDL	ND	10.0	T
TC147	5/7/2013	Ash?	No	<MRL	<MDL	ND	10.5	T
TC148	5/7/2013	Unknown	No	570.9	<MDL	ND	25.0	T
TC149	5/7/2013	Cedar	No	74.2	<MDL	17.2	7.8	T
TC150	5/7/2013	Cedar	No	34.3	<MDL	11.1	7.0	T
TC151	5/7/2013	Oak	No	20.8	<MDL	ND	13.0	T
TC152	5/7/2013	Cedar	No	21.2	<MDL	ND	5.3	T
TC153	5/7/2013	Blackjack Oak	No	348.7	<MDL	ND	29.7	T
TC154	5/7/2013	Cedar	No	<MRL	<MDL	ND	8.0	T
TC155	5/7/2013	Cedar	No	<MRL	<MDL	ND	17.0	T
TC156	5/7/2013	Cedar	No	8.2	<MDL	ND	9.0	T

Table B-05. Concentrations of constituents in tree-core samples.—Continued

[ng/L; nanogram per liter; PCE, tetrachloroethene; TCE, trichloroethene; CFC-113, 1,1,2-trichloro-trifluoroethane; T, tree; S, shrub; <MDL, less than the method detection limit; <MRL, less than the method reporting limit; Duplicate samples have the date of the last sampling round]

Sample Name (fig. C-01)	Date	Species	Duplicate?	Concentrations of Constituent, in ng/L				
				PCE	TCE	CFC-113	Tree Diameter (inches)	Type
TC157	5/7/2013	Cedar	No	14.9	<MDL	10.7	16.8	T
TC158	5/7/2013	Cedar	No	6.5	<MDL	ND	10.3	T
TC159	5/7/2013	Oak	No	6.7	<MDL	ND	13.0	T
TC160	5/7/2013	Unknown	No	<MDL	<MDL	ND	10.5	T
TC161	5/7/2013	Ash?	No	<MDL	<MDL	ND	9.0	T
TC162	5/7/2013	Ash?	No	<MDL	<MDL	ND	11.5	T
TC163	5/7/2013	Cedar	No	<MRL	<MDL	73.8	8.0	T
TC164	5/7/2013	Ash?	No	<MDL	<MDL	ND	12.5	T
TC165	5/7/2013	Ash?	No	<MDL	<MDL	ND	6.5	T
TC166	5/7/2013	Cedar	No	18.9	<MDL	85.0	5.8	T
TC167	5/7/2013	Cedar	No	10.8	<MDL	ND	5.5	T
TC168	5/7/2013	Cedar	No	19.4	<MDL	97.5	5.5	T
TC169	8/18/2013	Walnut	Yes	716.9	<MDL	ND	10.0	T
TC170	5/22/2013	Oak	No	9.3	<MDL	2.7	6.0	T
TC171	5/22/2013	Cedar	No	70.0	<MDL	26.5	11.5	T
TC172	5/22/2013	Cedar	No	12.3	<MDL	13.7	7.0	T
TC173	5/22/2013	Cedar	No	<MRL	<MDL	7.1	7.0	T
TC174	5/22/2013	Unknown	No	13.2	<MDL	4.7	4.5	T
TC175	5/22/2013	Cedar	No	44.2	<MDL	29.9	4.0	T
TC176	5/22/2013	Cedar	No	26.2	<MDL	11.6	9.0	T
TC177	5/22/2013	Unknown	No	23.4	<MDL	1.6	7.0	T
TC178	5/22/2013	Oak	No	6.3	<MDL	ND	5.0	T
TC179	5/22/2013	Oak	No	11.6	<MDL	ND	8.0	T
TC180	5/22/2013	Oak	No	11.1	<MDL	ND	5.3	T
TC181	5/22/2013	Unknown	No	<MDL	<MDL	ND	5.3	T
TC182	5/22/2013	Oak	No	<MRL	<MDL	ND	5.8	T
TC183	5/22/2013	Oak	No	<MRL	<MDL	ND	7.5	T
TC184	5/22/2013	Cedar	No	13.9	<MDL	ND	9.0	T
TC185	5/22/2013	Oak	No	<MDL	<MDL	ND	13.3	T
TC186	5/22/2013	Cedar	No	<MRL	<MDL	ND	10.0	T
TC187	5/22/2013	Cedar	No	167.2	<MDL	365.5	4.0	T
TC188	5/22/2013	Oak	No	103.1	<MDL	6.3	5.5	T
TC189	5/22/2013	Unknown	No	<MRL	<MDL	ND	4.0	T
TC190	5/22/2013	Unknown	No	<MRL	<MDL	ND	2.5	T
TC191	5/22/2013	Unknown	No	<MDL	<MDL	ND	3.8	T
TC192	5/22/2013	Unknown	No	<MRL	<MDL	5.3	3.0	T
TC193	5/22/2013	Cedar	No	18.1	<MDL	10.9	3.0	T
TC194	5/22/2013	Oak	No	16.1	<MDL	ND	7.0	T
TC195	5/22/2013	Oak	No	<MRL	<MDL	ND	9.0	T
TC196	5/22/2013	Unknown	No	<MRL	<MDL	ND	4.5	T
TC197	5/22/2013	Cedar	No	93.7	<MDL	31.4	19.0	T
TC198	5/22/2013	Oak	No	<MRL	<MDL	ND	12.3	T
TC199	5/22/2013	Cedar	No	21.7	<MDL	10.8	9.0	T
TC200	5/22/2013	Unknown	No	63.2	<MRL	5.5	10.0	T
TC201	5/22/2013	Oak	No	<MDL	<MDL	ND	10.3	T
TC202	5/22/2013	Cedar	No	<MRL	<MDL	ND	5.0	T
TC203	5/22/2013	Unknown	No	<MDL	<MDL	ND	10.0	T
TC204	5/22/2013	Cedar	No	<MRL	<MDL	3.7	9.0	T
TC205	5/22/2013	Unknown	No	<MDL	<MDL	ND	6.5	T
TC206	5/22/2013	Ash	No	<MRL	<MDL	ND	14.0	T
TC207	5/22/2013	Box Elder	No	<MRL	<MDL	ND	5.0	T
TC208	5/22/2013	Ash	No	<MDL	<MDL	ND	10.5	T

Table B-05. Concentrations of constituents in tree-core samples.—Continued

[ng/L; nanogram per liter; PCE, tetrachloroethene; TCE, trichloroethene; CFC-113, 1,1,2-trichloro-trifluoroethane; T, tree; S, shrub; <MDL, less than the method detection limit; <MRL, less than the method reporting limit; Duplicate samples have the date of the last sampling round]

Sample Name (fig. C-01)	Date	Species	Duplicate?	Concentrations of Constituent, in ng/L			Tree Diameter (inches)	Type
				PCE	TCE	CFC-113		
TC209	5/22/2013	Unknown	No	<MRL	<MDL	ND	4.5	T
TC210	5/22/2013	Box Elder	No	<MDL	<MDL	ND	7.0	T
TC211	5/22/2013	Unknown	No	<MRL	<MDL	ND	4.0	T
TC212	8/18/2013	elm	No	<MRL	<MDL	ND	7.0	T
TC213	8/18/2013	Redbud	No	<MDL	<MDL	ND	6.0	T
TC214	8/18/2013	Cedar	No	50.7	<MDL	45.4	10.0	T
TC215	8/18/2013	Unknown	No	10.4	<MDL	ND	3.0	T
TC216	8/18/2013	Walnut	No	<MDL	<MDL	ND	12.0	T
TC217	8/18/2013	Walnut	No	<MRL	<MDL	ND	5.0	T
TC218	8/18/2013	hackberry	No	<MDL	<MDL	ND	11.0	T
TC219	8/18/2013	Cedar	No	<MRL	<MDL	ND	14.0	T
TC220	8/18/2013	Unknown	No	<MDL	<MDL	ND	12.0	T
TC221	8/18/2013	Walnut	No	<MRL	<MDL	ND	10.0	T
TC222	8/18/2013	Walnut	No	15.7	<MDL	ND	7.0	T
TC223	8/18/2013	elm	No	<MDL	<MDL	ND	6.0	T
TC224	8/18/2013	Cedar	No	<MDL	<MDL	20.4	7.0	T
TC225	8/18/2013	chinese elm	No	57.0	<MDL	ND	6.0	T
TC226	8/18/2013	White oak	No	9.3	<MDL	ND	24.0	T
TC227	8/18/2013	hickory	No	<MDL	<MDL	ND	8.0	T
TC228	8/18/2013	sycamore	No	<MRL	<MDL	ND	11.0	T
TC229	8/18/2013	Walnut	No	<MDL	<MDL	ND	17.0	T
TC230	8/18/2013	elm	No	<MDL	<MDL	ND	16.0	T
TC231	8/18/2013	White oak	No	<MRL	<MDL	ND	24.0	T
TC232	8/18/2013	Walnut	No	<MDL	<MDL	ND	13.0	T
TC233	8/18/2013	elm	No	<MDL	<MDL	ND	13.0	T
TC234	8/18/2013	elm	No	<MDL	<MDL	ND	12.0	T
TC235	8/18/2013	sycamore	No	75.9	<MDL	23.6	12.0	T
TC236	8/18/2013	chinese elm	No	<MDL	<MDL	ND	6.0	T
TC237	8/18/2013	Unknown	No	<MDL	<MDL	ND	10.0	T
TC238	8/18/2013	Red oak	No	<MDL	<MDL	ND	18.0	T
TC239	8/18/2013	Unknown	No	<MRL	<MDL	ND	10.0	T
TC240	8/18/2013	Red oak	No	<MDL	<MDL	ND	12.0	T
TC241	8/18/2013	Walnut	No	<MRL	<MDL	ND	11.0	T
TC242	8/18/2013	Ash	No	10.3	<MDL	ND	16.0	T
TC243	8/18/2013	Ash	No	<MRL	<MDL	ND	12.0	T
TC244	8/18/2013	Ash	No	<MDL	<MDL	ND	12.0	T
TC245	8/18/2013	Red oak	No	<MDL	<MDL	ND	12.0	T
TC246	8/18/2013	Walnut	No	<MDL	<MDL	ND	12.0	T
TC247	8/18/2013	Cedar	No	<MRL	<MDL	ND	3.0	T
TC248	8/18/2013	Cedar	No	21.9	<MDL	ND	3.0	T
TC249	8/18/2013	Red oak	No	53.0	<MDL	21.4	40.0	T
TC250	8/18/2013	Unknown	No	23.9	<MDL	ND	3.0	T
TC251	8/18/2013	Red oak	No	170.2	<MDL	31.7	23.0	T
TC252	5/15/2015	Ash	Yes	<MRL	<MDL	ND	24.0	T
TC253	8/18/2013	Red oak	No	20.2	<MDL	ND	26.0	T
TC254	8/18/2013	Red oak	No	47.8	<MDL	ND	22.0	T
TC255	8/18/2013	Red oak	No	40.7	<MDL	ND	10.0	T
TC256	8/18/2013	Cedar	No	36.9	<MDL	ND	3.0	T
TC257	8/18/2013	Cedar	No	66.2	<MDL	ND	4.0	T
TC258	8/18/2013	Cedar	No	29.6	<MDL	ND	4.0	T
TC259	8/18/2013	Red oak	No	<MRL	<MDL	27.3	6.0	T
TC260	5/15/2015	Blackjack Oak	No	1,688.1	<MDL	ND	24.0	T

Table B-05. Concentrations of constituents in tree-core samples.—Continued

[ng/L; nanogram per liter; PCE, tetrachloroethene; TCE, trichloroethene; CFC-113, 1,1,2-trichloro-trifluoroethane; T, tree; S, shrub; <MDL, less than the method detection limit; <MRL, less than the method reporting limit; Duplicate samples have the date of the last sampling round]

Sample Name (fig. C-01)	Date	Species	Duplicate?	Concentrations of Constituent, in ng/L			Tree Diameter (inches)	Type
				PCE	TCE	CFC-113		
TC261	8/18/2013	White oak	No	470.6	<MDL	24.9	22.0	T
TC262	8/18/2013	Red oak	No	150.4	<MDL	ND	7.0	T
TC263	8/18/2013	Red oak	No	<MRL	<MDL	ND	10.0	T
TC264	8/18/2013	Cedar	No	84.0	<MDL	ND	13.0	T
TC265	8/18/2013	Cedar	No	<MRL	<MDL	ND	11.0	T
TC266	8/18/2013	Cedar	No	<MRL	<MDL	ND	13.0	T
TC267	8/18/2013	Cedar	No	31.1	<MDL	ND	13.0	T
TC268	8/18/2013	Cedar	No	<MRL	<MDL	ND	5.0	T
TC269	8/18/2013	White oak	No	<MRL	<MDL	ND	28.0	T
TC270	8/22/2013	Sycamore	No	493.8	<MRL	ND	12.0	T
TC271	8/22/2013	Sycamore	No	<MRL	<MDL	ND	10.0	T
TC272	8/22/2013	Walnut	No	13.8	<MDL	ND	10.0	T
TC273	8/22/2013	sycamore	No	6.9	<MDL	ND	34.0	T
TC274	8/22/2013	sycamore	No	<MRL	<MDL	ND	15.0	T
TC275	8/22/2013	sycamore	No	22.8	<MDL	ND	32.0	T
TC276	8/22/2013	sycamore	No	80.7	<MRL	ND	30.0	T
TC277	8/22/2013	sycamore	No	21.3	<MDL	ND	20.0	T
TC278	8/22/2013	Walnut	No	111.8	<MDL	ND	11.0	T
TC279	8/22/2013	Poplar	No	17.2	<MDL	ND	11.0	T
TC280	8/22/2013	elm	No	31.0	<MDL	ND	14.0	T
TC281	8/22/2013	Walnut	No	<MRL	<MDL	ND	9.0	T
TC282	8/22/2013	Cedar	No	<MRL	<MDL	ND	8.0	T
TC283	8/22/2013	Red oak	No	9.0	<MDL	ND	24.0	T
TC284	8/22/2013	Red oak	No	<MDL	<MDL	ND	16.0	T
TC285	8/22/2013	White oak	No	<MDL	<MDL	ND	13.0	T
TC286	8/22/2013	White oak	No	<MDL	<MDL	ND	10.0	T
TC287	8/22/2013	White oak	No	<MRL	<MDL	ND	26.0	T
TC288	8/22/2013	White oak	No	<MRL	<MDL	ND	30.0	T
TC289	8/22/2013	Cedar	No	<MDL	<MDL	4.0	12.0	T
TC290	8/22/2013	Cedar	No	<MRL	<MDL	ND	12.0	T
TC291	8/22/2013	Cedar	No	<MRL	<MDL	ND	12.0	T
TC292	8/22/2013	Cedar	No	<MDL	<MDL	ND	4.0	T
TC293	8/22/2013	Cedar	No	<MDL	<MDL	ND	14.0	T
TC294	8/22/2013	Red oak	No	<MDL	<MDL	ND	24.0	T
TC295	8/22/2013	Red oak	No	<MRL	<MDL	ND	24.0	T
TC296	8/22/2013	White oak	No	<MRL	<MDL	ND	15.0	T
TC297	8/22/2013	Cedar	No	<MRL	<MDL	ND	24.0	T
TC298	8/22/2013	Cedar	No	<MDL	<MDL	ND	25.0	T
TC299	8/22/2013	Cedar	No	<MDL	<MDL	35.5	12.0	T
TC300	8/22/2013	Cedar	No	<MDL	<MDL	ND	9.0	T
TC301	8/22/2013	Cedar	No	<MDL	<MDL	ND	17.0	T
TC302	8/22/2013	Cedar	No	<MDL	<MDL	ND	14.0	T
TC303	8/22/2013	Cedar	No	<MDL	<MDL	ND	9.0	T
TC304	8/22/2013	Cedar	No	<MDL	<MDL	ND	14.0	T
TC305	8/22/2013	White oak	No	<MDL	<MDL	ND	15.0	T
TC306	8/22/2013	Cedar	No	16.3	<MDL	ND	12.0	T
TC307	8/22/2013	Cedar	No	<MDL	<MDL	ND	13.0	T
TC308	8/22/2013	White oak	No	<MDL	<MDL	ND	18.0	T
TC309	7/29/2014	Elm	No	56.6	<MRL	ND	0.5	T
TC310	7/29/2014	Cedar	No	18.0	<MDL	ND	3.8	T
TC311	7/29/2014	Elm	No	1,055.2	<MRL	ND	14.9	T
TC312	7/29/2014	Elm	No	9.7	<MDL	ND	17.2	T

Table B-05. Concentrations of constituents in tree-core samples.—Continued

[ng/L; nanogram per liter; PCE, tetrachloroethene; TCE, trichloroethene; CFC-113, 1,1,2-trichloro-trifluoroethane; T, tree; S, shrub; <MDL, less than the method detection limit; <MRL, less than the method reporting limit; Duplicate samples have the date of the last sampling round]

Sample Name (fig. C-01)	Date	Species	Duplicate?	Concentrations of Constituent, in ng/L			Tree Diameter (inches)	Type
				PCE	TCE	CFC-113		
TC313	7/29/2014	Elm	No	122.9	<MDL	ND	17.2	T
TC314	7/29/2014	Elm	No	395.3	<MRL	ND	3.4	T
TC315	7/29/2014	Maple	No	<MRL	<MDL	ND	11.1	T
TC316	7/29/2014	Catalpa	No	881.7	803.3	ND	7.3	T
TC317	7/29/2014	Catalpa	No	11.8	<MDL	ND	6.3	T
TC318	7/29/2014	Elm	No	33.1	<MRL	ND	5.0	T
TC319	7/29/2014	Unknown	No	52.2	<MDL	ND	1.0	T
TC320	7/29/2014	Elm	No	12.0	<MDL	ND	5.6	T
TC321	7/29/2014	Blackjack Oak	No	77.2	<MDL	ND	38.7	T
TC322	7/29/2014	Wahoo	No	14.6	<MDL	ND	6.2	T
TC323	7/29/2014	Elm	No	819.0	<MRL	ND	10.0	T
TC324	7/29/2014	Elm	No	19.4	<MDL	ND	5.1	T
TC325	7/29/2014	Hackberry	No	<MRL	<MDL	ND	3.5	T
TC326	7/29/2014	Beech	No	19.0	<MDL	ND	1.8	T
TC327	7/29/2014	Cedar	No	40.2	<MDL	ND	2.5	T
TC328	7/29/2014	Blackjack Oak	No	238.7	<MDL	ND	24.3	T
TC329	7/29/2014	Cedar	No	<MRL	<MDL	ND	5.0	T
TC330	7/29/2014	Cedar	No	<MRL	<MDL	ND	2.5	T
TC331	7/29/2014	Unknown	No	<MDL	<MDL	ND	5.3	T
TC332	7/29/2014	Unknown	No	<MRL	<MDL	ND	14.9	T
TC333	7/29/2014	Unknown	No	<MDL	<MDL	ND	6.5	T
TC334	7/29/2014	Unknown	No	<MDL	<MDL	ND	20.9	T
TC335	7/30/2014	Unknown	No	<MDL	<MDL	ND	19.9	T
TC336	5/15/2015	Oak	No	2.0	<MDL	ND	22.0	T
TC337	5/15/2015	Oak	No	40.2	<MDL	ND	18.5	T
TC338	5/15/2015	Oak	No	69.7	<MDL	ND	17.0	T
TC339	5/15/2015	Basswood	No	<MDL	<MDL	ND	8.0	T
TC340	5/15/2015	Basswood	No	0.3	<MDL	ND	8.0	T
TC341	5/15/2015	Ash	No	25.0	<MDL	ND	13.0	T
TC342	5/15/2015	Oak	No	207.5	<MDL	ND	7.0	T
TC343	5/15/2015	Oak	No	100.4	<MDL	ND	8.0	T
TC344	5/15/2015	Oak	No	51.4	<MDL	ND	8.0	T
TC345	5/15/2015	Oak	No	171.4	<MDL	ND	7.0	T
TC346	5/15/2015	Oak	No	470.0	<MDL	ND	5.5	T
TC347	5/15/2015	Basswood	No	85.3	<MDL	ND	4.0	T
TC348	5/15/2015	Oak	No	4.7	<MDL	ND	7.5	T
TC349	5/15/2015	Oak	No	6.2	<MDL	ND	7.0	T
TC350	5/15/2015	Oak	No	22.2	<MDL	ND	8.0	T
TC351	5/15/2015	Ash	No	2.1	<MDL	ND	11.5	T
TC352	5/15/2015	Oak	No	93.6	<MDL	ND	8.0	T
TC353	5/15/2015	Oak	No	1.3	<MDL	ND	9.0	T
TC354	5/15/2015	Oak	No	56.0	<MDL	ND	7.5	T
TC355	5/15/2015	Oak	No	3.6	<MDL	ND	32.0	T
TC356	5/15/2015	Oak	No	0.3	<MDL	ND	-	T
TC357	5/15/2015	Basswood	No	342.8	<MDL	ND	5.0	T
TC358	5/15/2015	Unknown	No	3.9	<MDL	ND	5.0	T
TC359	5/15/2015	Oak	No	3.6	<MDL	ND	4.5	T
TC360	5/15/2015	Red oak	No	263.2	<MDL	ND	36.0	T
TC361	5/15/2015	Blackjack Oak	No	3,214.7	<MDL	ND	26.0	T
TC362	5/15/2015	Post Oak	No	31.9	<MDL	ND	18.0	T
TC363	5/15/2015	Black Oak	No	168.5	<MDL	ND	8.0	T
TC364	5/15/2015	Junipesus Virgiana (Red	No	354.6	<MDL	ND	12.0	T

Table B-05. Concentrations of constituents in tree-core samples.—Continued

[ng/L; nanogram per liter; PCE, tetrachloroethene; TCE, trichloroethene; CFC-113, 1,1,2-trichloro-trifluoroethane; T, tree; S, shrub; <MDL, less than the method detection limit; <MRL, less than the method reporting limit; Duplicate samples have the date of the last sampling round]

Sample Name (fig. C-01)	Date	Species	Duplicate?	Concentrations of Constituent, in ng/L			Tree Diameter (inches)	Type
				PCE	TCE	CFC-113		
TC365	5/15/2015	Black Walnut	No	4,847.9	<MDL	ND	12.0	T
TC366	5/15/2015	Basswood	No	376.7	<MDL	ND	10.0	T
TC367	5/15/2015	Junipesus Virgiana (Red	No	498.7	<MDL	ND	6.0	T
TC368	5/15/2015	Black Oak	No	4.0	<MDL	ND	6.0	T
TC369	5/15/2015	Black Oak	No	<MDL	<MDL	ND	4.0	T
TC370	5/15/2015	Black Oak	No	9.8	<MDL	ND	7.0	T
TC371	5/15/2015	Unknown	No	<MDL	<MDL	ND	4.0	T
TC372	5/15/2015	Eastern Red Cedar	No	68.2	<MDL	ND	6.0	T
TC373	5/15/2015	Eastern Red Cedar	No	258.4	<MDL	ND	7.0	T
TC374	5/15/2015	Eastern Red Cedar	No	367.9	<MDL	ND	14.0	T
TC375	5/15/2015	Black Oak	No	<MDL	<MDL	ND	5.0	T
TC376	5/15/2015	Eastern Red Cedar	No	22.5	<MDL	ND	24.0	T
TC377	5/15/2015	Eastern Red Cedar	No	66.7	<MDL	ND	14.0	T
TC378	5/15/2015	Eastern Red Cedar	No	28.5	<MDL	ND	5.0	T
TC379	5/15/2015	Black Oak	No	4.6	<MDL	ND	5.0	T
TC380	5/21/2015	elm	No	15.6	<MDL	ND	3.5	T
TC381	5/21/2015	Red cedar	No	766.5	<MDL	ND	4.0	T
TC382	5/21/2015	Red cedar	No	168.6	<MDL	ND	5.0	T
TC383	5/21/2015	Red cedar	No	155.9	<MDL	ND	3.0	T
TC384	5/21/2015	Oak	No	47.3	<MDL	ND	3.5	T
TC385	5/21/2015	Oak	No	45.5	<MDL	ND	4.0	T
TC386	5/21/2015	Oak	No	388.4	<MDL	ND	3.0	T
TC387	5/21/2015	Oak	No	47.9	<MDL	ND	3.0	T
TC388	5/21/2015	Red cedar	No	147.4	<MDL	ND	3.5	T
TC389	5/21/2015	Red cedar	No	347.6	<MDL	ND	3.0	T
TC390	5/21/2015	Red cedar	No	213.6	<MDL	ND	2.5	T
TC391	5/21/2015	Red cedar	No	47.3	<MDL	ND	3.0	T
TC392	5/21/2015	Red cedar	No	47.7	<MDL	ND	4.0	T
TC393	5/21/2015	Red cedar	No	345.8	<MDL	ND	3.0	T
TC394	5/21/2015	Red cedar	No	252.0	<MDL	ND	2.0	T
TC395	5/21/2015	Red cedar	No	402.5	<MDL	ND	3.0	T
TC396	5/21/2015	Basswood	No	17.5	<MDL	ND	3.0	T
TC397	5/21/2015	Oak	No	<MDL	<MDL	ND	16.0	T
TC398	5/21/2015	Unknown	No	70.9	<MDL	ND	2.0	T
TC399	5/21/2015	Basswood	No	<MDL	<MDL	ND	5.5	T
TC400	5/21/2015	Basswood	No	16.7	<MDL	ND	4.0	T
TC401	5/21/2015	Unknown	No	3.4	<MDL	ND	2.0	T
TC402	5/21/2015	Unknown	No	<MDL	<MDL	ND	2.0	T
TC403	5/21/2015	Red cedar	No	1,436.3	<MDL	ND	3.0	T
TC404	5/21/2015	Red cedar	No	122.1	<MDL	ND	2.5	T
TC405	5/21/2015	Elm	No	4.2	<MDL	ND	4.0	T
TC406	5/21/2015	Red cedar	No	153.5	<MDL	ND	3.0	T
TC407	5/21/2015	Red cedar	No	526.0	<MDL	ND	3.5	T
TC408	5/21/2015	Red cedar	No	317.3	<MDL	ND	2.0	T
TC409	5/21/2015	Red cedar	No	495.1	<MDL	ND	3.0	T
TC410	5/21/2015	Red cedar	No	834.3	<MDL	ND	3.0	T
TC411	5/21/2015	Unknown	No	2,052.2	<MDL	ND	26.0	T
TC412	5/21/2015	Red cedar	No	374.2	<MDL	ND	3.5	T
TC413	5/21/2015	Unknown	No	258.1	<MDL	ND	2.0	T
TC414	5/21/2015	Red cedar	No	295.2	<MDL	ND	3.0	T
TC415	5/21/2015	Red cedar	No	626.2	<MDL	ND	4.0	T
TC416	5/21/2015	Unknown	No	<MDL	<MDL	ND	2.0	T

Table B-05. Concentrations of constituents in tree-core samples.—Continued

[ng/L; nanogram per liter; PCE, tetrachloroethene; TCE, trichloroethene; CFC-113, 1,1,2-trichloro-trifluoroethane; T, tree; S, shrub; <MDL, less than the method detection limit; <MRL, less than the method reporting limit; Duplicate samples have the date of the last sampling round]

Sample Name (fig. C-01)	Date	Species	Duplicate?	Concentrations of Constituent, in ng/L			Tree Diameter (inches)	Type
				PCE	TCE	CFC-113		
TC418	5/21/2015	Unknown	No	4.6	<MDL	ND	0.8	S
TC419	5/21/2015	Unknown	No	<MDL	<MDL	ND	0.3	S
TC420	5/21/2015	Unknown	No	<MDL	<MDL	ND	0.5	S
TC421	5/21/2015	Unknown	No	77.5	<MDL	ND	0.3	S
TC422	5/21/2015	Unknown	No	<MDL	<MDL	ND	0.3	S
TC423	5/21/2015	Unknown	No	<MDL	<MDL	ND	0.3	S
TC424	5/21/2015	Unknown	No	<MDL	<MDL	ND	0.5	S
TC425	5/21/2015	Unknown	No	<MDL	<MDL	ND	0.3	S
TC426	5/21/2015	Unknown	No	173.1	<MDL	ND	0.2	T
TC427	5/21/2015	Unknown	No	76.9	<MDL	ND	0.3	T
TC428	5/21/2015	Unknown	No	<MDL	<MDL	ND	-	T
TC429	5/21/2015	Unknown	No	5.7	<MDL	ND	-	T
TC430	5/21/2015	Unknown	No	<MDL	<MDL	ND	-	T
TC431	10/29/2015	Cedar	No	<MRL	<MRL	ND	21.5	T
TC432	10/29/2015	Cedar	No	<MDL	<MRL	ND	15.1	T
TC433	10/29/2015	Cedar	No	<MRL	<MRL	ND	13.6	T
TC434	10/29/2015	Cedar	No	<MRL	<MRL	ND	23.8	T
TC435	10/29/2015	Cedar	No	<MDL	<MRL	ND	16.2	T
TC436	10/29/2015	Cedar	No	<MRL	<MRL	ND	17.2	T
TC437	10/29/2015	Cedar	No	<MRL	<MRL	ND	15.5	T
TC438	10/29/2015	Cedar	No	<MRL	<MRL	ND	15.1	T
TC439	10/29/2015	Cedar	No	<MDL	<MRL	ND	14.9	T
TC440	10/29/2015	Oak	No	<MDL	<MRL	ND	25.0	T
TC441	10/29/2015	Oak	No	<MDL	<MRL	ND	26.0	T
TC442	10/29/2015	Oak	No	<MDL	<MRL	ND	42.0	T
TC443	10/29/2015	Oak	No	<MDL	<MRL	ND	30.5	T
TC444	10/29/2015	Oak	No	<MRL	<MRL	ND	20.5	T
TC445	10/29/2015	Oak	No	<MDL	92.5	ND	24.5	T
TC446	10/29/2015	Oak	No	15.7	<MRL	ND	35.0	T
TC447	10/29/2015	Cedar	No	8.6	<MRL	ND	13.0	T
TC448	10/29/2015	Cedar	No	13.1	<MRL	ND	21.0	T
TC449	10/29/2015	Oak	No	20.2	<MRL	ND	35.0	T
TC450	10/29/2015	Cedar	No	<MDL	<MRL	ND	14.8	T
TC451	10/29/2015	Cedar	No	<MDL	<MRL	ND	17.5	T
TC452	10/29/2015	Cedar	No	<MDL	<MRL	ND	20.5	T
TC453	10/29/2015	Oak	No	<MDL	<MRL	ND	18.5	T
TC454	10/29/2015	Oak	No	<MDL	<MRL	ND	15.5	T
TC455	10/29/2015	Oak	No	<MRL	120.5	ND	22.0	T
TC456	10/29/2015	Sycamore	No	<MDL	165.4	ND	95.1	T
TC457	10/29/2015	Unknown	No	<MDL	<MRL	ND	11.5	T
TC458	10/29/2015	Unknown	No	<MDL	<MRL	ND	22.0	T
TC459	10/29/2015	Sycamore	No	9.5	<MRL	ND	24.5	T
TC460	10/29/2015	Unknown	No	<MRL	<MRL	ND	18.8	T
TC461	10/29/2015	Sycamore	No	<MDL	<MDL	ND	25.0	T
TC462	10/29/2015	Sycamore	No	<MDL	<MDL	ND	23.0	T
TC463	10/29/2015	Unknown	No	<MRL	110.7	ND	15.8	T
TC464	10/29/2015	Unknown	No	<MDL	122.9	ND	15.0	T
TC465	10/29/2015	Sycamore	No	<MDL	<MDL	ND	15.5	T
TC466	10/29/2015	Sycamore	No	<MDL	<MDL	ND	22.0	T
TC467	10/29/2015	Unknown	No	<MDL	<MDL	ND	16.8	T
TC468	10/29/2015	Sycamore	No	<MDL	<MDL	ND	21.5	T
TC469	10/29/2015	Sycamore	No	28.7	<MDL	ND	31.7	T

Table B-05. Concentrations of constituents in tree-core samples.—Continued

[ng/L; nanogram per liter; PCE, tetrachloroethene; TCE, trichloroethene; CFC-113, 1,1,2-trichloro-trifluoroethane; T, tree; S, shrub; <MDL, less than the method detection limit; <MRL, less than the method reporting limit; Duplicate samples have the date of the last sampling round]

Sample Name (fig. C-01)	Date	Species	Duplicate?	Concentrations of Constituent, in ng/L			Tree Diameter (inches)	Type
				PCE	TCE	CFC-113		
TC470	10/29/2015	Sycamore	No	<MRL	<MRL	ND	22.0	T
TC470	10/29/2015	Sycamore	No	<MRL	<MRL	ND	22.0	T
TC471	10/29/2015	Walnut	No	<MDL	<MDL	ND	23.0	T
TC472	10/29/2015	Oak	No	<MDL	<MDL	ND	15.5	T
TC473	10/29/2015	Sycamore	No	<MRL	<MDL	ND	16.8	T
TC474	10/29/2015	Sycamore	No	<MDL	<MDL	ND	27.8	T
TC475	10/29/2015	Oak	No	<MDL	<MDL	ND	21.3	T
TC476	10/29/2015	Sycamore	No	<MDL	<MDL	ND	55.0	T
TC477	10/29/2015	Unknown	No	<MDL	<MDL	ND	17.0	T
TC478	10/29/2015	Unknown	No	<MDL	<MDL	ND	-	T
TC479	10/29/2015	Sycamore	No	<MDL	<MDL	ND	71.0	T
TC480	10/29/2015	Unknown	No	<MRL	<MDL	ND	24.0	T
TC481	10/29/2015	Unknown	No	<MDL	<MDL	ND	15.5	T
TC482	10/29/2015	Unknown	No	<MDL	<MDL	ND	14.0	T
TC483	10/29/2015	Unknown	No	<MDL	<MDL	ND	15.8	T
TC484	10/29/2015	Walnut	No	<MDL	<MDL	ND	15.8	T
TC485	10/29/2015	Slippery elm	No	<MDL	<MDL	ND	43.5	T
TC486	10/29/2015	Walnut	No	<MRL	<MRL	ND	58.0	T
TC487	10/29/2015	Walnut	No	<MRL	<MDL	ND	26.5	T
TC488	10/29/2015	Walnut	No	<MRL	<MDL	ND	42.5	T

Table B-06. Concentrations of constituents in laboratory soil samples collected by the USGS MWSC.

[Concentrations are in microgram per kilogram of soil unless otherwise indicated; USGS, United States Geological Survey; MWSC, Missouri Water Science Center; SD, sediment; SUR; surficial soil; U, not detected above the detection limit; J, detected above the detection limit but below the reporting limit; SO, soil; SUB; subsurface soil; SS; split-spoon; --, no data]

Sample Name (fig. 2-04)	Date	Medium	Type	Depth top	Depth bottom	1,1,1,2-Tetrachloroethane	1,1,2,2-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloro-1,2,2-trifluoroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene
TB2-1	3/19/2014	SD	SUR	0	0.5	59.1 U	59.1 U	59.1 U	59.1 U	59.1 U	59.1 U	59.1 U	59.1 U
TB2-2	3/19/2014	SD	SUR	0	0.5	65 U	65 U	65 U	65 U	65 U	65 U	65 U	65 U
WP-020	3/19/2014	SD	SUR	0	0.5	76.2 U	76.2 U	76.2 U	76.2 U	76.2 U	76.2 U	76.2 U	76.2 U
TB1-2	3/19/2014	SD	SUR	0	0.5	61 U	61 U	61 U	61 U	61 U	61 U	61 U	61 U
WD-01	3/19/2014	SD	SUR	0	0.5	67.4 U	67.4 U	67.4 U	67.4 U	67.4 U	67.4 U	67.4 U	67.4 U
WD-01	3/19/2014	SD	SUR	0	0.5	71.4 U	71.4 U	71.4 U	71.4 U	71.4 U	71.4 U	71.4 U	71.4 U
C003	3/18/2014	SO	SUR	0	0.5	70.1 U	70.1 U	70.1 U	70.1 U	70.1 U	70.1 U	70.1 U	70.1 U
C017	3/18/2014	SO	SUR	0	0.5	103 U	103 U	103 U	103 U	103 U	103 U	103 U	103 U
C013	3/18/2014	SO	SUR	0	0.5	62.2 U	62.2 U	62.2 U	62.2 U	62.2 U	62.2 U	62.2 U	62.2 U
B007	3/18/2014	SO	SUR	0	0.5	64.9 U	64.9 U	64.9 U	64.9 U	64.9 U	64.9 U	64.9 U	64.9 U
A005	3/18/2014	SO	SUR	0	0.5	72.4 U	72.4 U	72.4 U	72.4 U	72.4 U	72.4 U	72.4 U	72.4 U
A002	3/18/2014	SO	SUR	0	0.5	61.6 U	61.6 U	61.6 U	61.6 U	61.6 U	61.6 U	61.6 U	61.6 U
A018A	3/18/2014	SO	SUR	0	0.5	67.1 U	67.1 U	67.1 U	67.1 U	67.1 U	67.1 U	67.1 U	67.1 U
A031	3/18/2014	SO	SUR	0	0.5	60.6 U	60.6 U	60.6 U	60.6 U	60.6 U	60.6 U	60.6 U	60.6 U
AM-01	3/18/2014	SO	SUR	0	0.5	74.7 U	74.7 U	74.7 U	74.7 U	74.7 U	74.7 U	74.7 U	74.7 U
A046	3/18/2014	SO	SUR	0	0.5	73.9 U	73.9 U	73.9 U	73.9 U	73.9 U	73.9 U	73.9 U	73.9 U
D002	3/18/2014	SO	SUR	0	0.5	66.6 U	66.6 U	66.6 U	66.6 U	66.6 U	66.6 U	66.6 U	66.6 U
D007	3/18/2014	SO	SUR	0	0.5	63.6 U	63.6 U	63.6 U	63.6 U	63.6 U	63.6 U	63.6 U	63.6 U
D011	3/18/2014	SO	SUR	0	0.5	61.9 U	61.9 U	61.9 U	61.9 U	61.9 U	61.9 U	61.9 U	61.9 U
P006	3/18/2014	SO	SUR	0	0.5	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U
SBG-01	3/18/2014	SO	SUR	0	0.5	61.9 U	61.9 U	61.9 U	61.9 U	61.9 U	61.9 U	61.9 U	61.9 U
A033	4/23/2014	SO	SUB	2.5	3.5	73 U	73 U	73 U	73 U	73 U	73 U	73 U	73 U
B008A	4/22/2014	SO	SUB	1.5	1.5	60.7 U	60.7 U	60.7 U	60.7 U	60.7 U	60.7 U	60.7 U	60.7 U
C007A	4/23/2014	SO	SUB	1	3.5	64.8 U	64.8 U	64.8 U	64.8 U	64.8 U	64.8 U	64.8 U	64.8 U
C014	4/23/2014	SO	SUB	2.5	4	67.6 U	67.6 U	67.6 U	67.6 U	67.6 U	67.6 U	67.6 U	67.6 U
B007	4/22/2014	SO	SUB	1	2	67.9 U	67.9 U	67.9 U	67.9 U	67.9 U	67.9 U	67.9 U	67.9 U
A053	4/23/2014	SO	SUB	2	3	56.6 U	56.6 U	56.6 U	56.6 U	56.6 U	56.6 U	56.6 U	56.6 U
A028	4/22/2014	SO	SUB	9	11	71.7 U	71.7 U	71.7 U	71.7 U	71.7 U	71.7 U	71.7 U	71.7 U
A057	4/30/2014	SO	SUB	3	4	60.5 U	60.5 U	60.5 U	19.4 J	60.5 U	60.5 U	60.5 U	60.5 U
A058	4/30/2014	SO	SUB	4	6.5	54.4 U	54.4 U	54.4 U	54.4 U	54.4 U	54.4 U	54.4 U	54.4 U
A063	5/1/2014	SO	SUB	1.5	2.5	56.7 U	56.7 U	56.7 U	56.7 U	56.7 U	56.7 U	56.7 U	56.7 U
D059	5/1/2014	SO	SUB	4	5	58.3 U	58.3 U	58.3 U	58.3 U	58.3 U	58.3 U	58.3 U	58.3 U
D060	5/1/2014	SO	SUB	4	4.6	54.2 U	54.2 U	54.2 U	54.2 U	54.2 U	54.2 U	54.2 U	54.2 U
D030	5/1/2014	SO	SUB	1	3	54.1 U	54.1 U	54.1 U	801 --	54.1 U	54.1 U	54.1 U	54.1 U
D062	5/1/2014	SO	SUB	1.5	2.5	58.4 U	58.4 U	58.4 U	58.4 U	58.4 U	58.4 U	58.4 U	58.4 U
P010	5/5/2014	SO	SUB	3	5	56.5 U	56.5 U	56.5 U	56.5 U	56.5 U	56.5 U	56.5 U	56.5 U
SBG-01	5/5/2014	SO	SUB	0.5	2	58 U	58 U	58 U	58 U	58 U	58 U	58 U	58 U
Septic1	5/7/2014	SO	SUB	0	0	118 U	118 U	118 U	118 U	118 U	118 U	118 U	118 U
A-SAND	5/7/2014	SO	SUB	4.5	5.5	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U
A018	5/5/2014	SO	SUB	5	6.5	54.2 U	54.2 U	54.2 U	54.2 U	54.2 U	54.2 U	54.2 U	54.2 U
A064	5/5/2014	SO	SUB	2	4	62.1 U	62.1 U	62.1 U	62.1 U	62.1 U	62.1 U	62.1 U	62.1 U
D063	5/5/2014	SO	SUB	1	2	66.7 U	66.7 U	66.7 U	66.7 U	66.7 U	66.7 U	66.7 U	66.7 U
D011	5/5/2014	SO	SUB	6	8	63.9 U	63.9 U	63.9 U	63.9 U	63.9 U	63.9 U	63.9 U	63.9 U
D019	5/5/2014	SO	SUB	3	4	66.4 U	66.4 U	66.4 U	66.4 U	66.4 U	66.4 U	66.4 U	66.4 U
D005	5/5/2014	SO	SUB	1.5	3	60.5 U	60.5 U	60.5 U	60.5 U	60.5 U	60.5 U	60.5 U	60.5 U
A064	5/5/2014	SO	SUB	7	8	70.2 U	70.2 U	70.2 U	70.2 U	70.2 U	70.2 U	70.2 U	70.2 U
D069	5/6/2014	SO	SUB	6.9	7.9	53.6 U	53.6 U	53.6 U	53.6 U	53.6 U	53.6 U	53.6 U	53.6 U
D064	5/6/2014	SO	SUB	2.5	3	60.4 U	60.4 U	60.4 U	60.4 U	60.4 U	60.4 U	60.4 U	60.4 U
D067	5/6/2014	SO	SUB	3	3.6	62.9 U	62.9 U	62.9 U	62.9 U	62.9 U	62.9 U	62.9 U	62.9 U
D068	5/6/2014	SO	SUB	1.5	3	56.9 U	56.9 U	56.9 U	56.9 U	56.9 U	56.9 U	56.9 U	56.9 U
D065	5/6/2014	SO	SUB	3.5	4	67.2 U	67.2 U	67.2 U	67.2 U	67.2 U	67.2 U	67.2 U	67.2 U
D066	5/6/2014	SO	SUB	7.1	7.7	68.9 U	68.9 U	68.9 U	68.9 U	68.9 U	68.9 U	68.9 U	68.9 U
D066	5/6/2014	SO	SUB	8.2	8.9	67.5 U	67.5 U	67.5 U	67.5 U	67.5 U	67.5 U	67.5 U	67.5 U
SP006	8/18/2014	SO	SS	4.5	5.5	61.3 U	61.3 U	61.3 U	77.8 --	61.3 U	61.3 U	61.3 U	61.3 U
SP010	9/10/2014	SO	SS	3.5	4	66.5 U	66.5 U	66.5 U	66.5 U	66.5 U	66.5 U	66.5 U	66.5 U
SP010	9/10/2014	SO	SS	7.5	8	59.7 U	59.7 U	59.7 U	59.7 U	59.7 U	59.7 U	59.7 U	59.7 U
SP010	9/10/2014	SO	SS	7.5	8	62.4 U	62.4 U	62.4 U	62.4 U	62.4 U	62.4 U	62.4 U	62.4 U

Table B-06. Concentrations of constituents in laboratory soil samples collected by the USGS MWSC.—Continued

[Concentrations are in microgram per kilogram of soil unless otherwise indicated; USGS, United States Geological Survey; MWSC, Missouri Water Science Center; SD, sediment; SUR; surficial soil; U, not detected above the detection limit; J, detected above the detection limit but below the reporting limit; SO, soil; SUB; subsurface soil; SS; split-spoon; --, no data]

Sample Name (fig. 2-04)	Date	Medium	Type	Depth top	Depth bottom	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-trimethylbenzene	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane
TB2-1	3/19/2014	SD	SUR	0	0.5	59.1 U	118 U	200 U	59.1 U	118 U	59.1 U	59.1 U	59.1 U
TB2-2	3/19/2014	SD	SUR	0	0.5	65 U	130 U	190 U	65 U	130 U	65 U	65 U	65 U
WP-020	3/19/2014	SD	SUR	0	0.5	76.2 U	152 U	260 U	76.2 U	152 U	76.2 U	76.2 U	76.2 U
TB1-2	3/19/2014	SD	SUR	0	0.5	61 U	122 U	180 U	61 U	122 U	61 U	61 U	61 U
WD-01	3/19/2014	SD	SUR	0	0.5	67.4 U	135 U	210 U	67.4 U	135 U	67.4 U	67.4 U	67.4 U
WD-01	3/19/2014	SD	SUR	0	0.5	71.4 U	143 U	220 U	71.4 U	143 U	71.4 U	71.4 U	71.4 U
C003	3/18/2014	SO	SUR	0	0.5	70.1 U	140 U	200 U	70.1 U	140 U	70.1 U	70.1 U	70.1 U
C017	3/18/2014	SO	SUR	0	0.5	103 U	206 U	300 U	103 U	206 U	103 U	103 U	103 U
C013	3/18/2014	SO	SUR	0	0.5	62.2 U	124 U	200 U	62.2 U	124 U	62.2 U	62.2 U	62.2 U
B007	3/18/2014	SO	SUR	0	0.5	64.9 U	130 U	220 U	64.9 U	130 U	64.9 U	64.9 U	64.9 U
A005	3/18/2014	SO	SUR	0	0.5	72.4 U	145 U	220 U	72.4 U	145 U	72.4 U	72.4 U	72.4 U
A002	3/18/2014	SO	SUR	0	0.5	61.6 U	123 U	210 U	61.6 U	123 U	61.6 U	61.6 U	61.6 U
A018A	3/18/2014	SO	SUR	0	0.5	67.1 U	134 U	2,100 U	67.1 U	134 U	67.1 U	67.1 U	67.1 U
A031	3/18/2014	SO	SUR	0	0.5	60.6 U	121 U	190 U	60.6 U	121 U	60.6 U	60.6 U	60.6 U
AM-01	3/18/2014	SO	SUR	0	0.5	74.7 U	149 U	230 U	74.7 U	149 U	74.7 U	74.7 U	74.7 U
A046	3/18/2014	SO	SUR	0	0.5	73.9 U	148 U	220 U	73.9 U	148 U	73.9 U	73.9 U	73.9 U
D002	3/18/2014	SO	SUR	0	0.5	66.6 U	133 U	200 U	66.6 U	133 U	66.6 U	66.6 U	66.6 U
D007	3/18/2014	SO	SUR	0	0.5	63.6 U	127 U	180 U	63.6 U	127 U	63.6 U	63.6 U	63.6 U
D011	3/18/2014	SO	SUR	0	0.5	61.9 U	124 U	920 U	61.9 U	124 U	61.9 U	61.9 U	61.9 U
P006	3/18/2014	SO	SUR	0	0.5	67 U	134 U	190 U	67 U	134 U	67 U	67 U	67 U
SBG-01	3/18/2014	SO	SUR	0	0.5	61.9 U	124 U	210 U	61.9 U	124 U	61.9 U	61.9 U	61.9 U
A033	4/23/2014	SO	SUB	2.5	3.5	73 U	146 U	210 U	73 U	146 U	73 U	73 U	73 U
B008A	4/22/2014	SO	SUB	1.5	1.5	60.7 U	121 U	121 U	60.7 U	121 U	60.7 U	60.7 U	60.7 U
C007A	4/23/2014	SO	SUB	1	3.5	64.8 U	130 U	190 U	64.8 U	130 U	64.8 U	64.8 U	64.8 U
C014	4/23/2014	SO	SUB	2.5	4	67.6 U	135 U	200 U	67.6 U	135 U	67.6 U	67.6 U	67.6 U
B007	4/22/2014	SO	SUB	1	2	67.9 U	136 U	200 U	67.9 U	136 U	67.9 U	67.9 U	67.9 U
A053	4/23/2014	SO	SUB	2	3	56.6 U	113 U	190 U	56.6 U	113 U	56.6 U	56.6 U	56.6 U
A028	4/22/2014	SO	SUB	9	11	71.7 U	143 U	220 U	71.7 U	143 U	71.7 U	71.7 U	71.7 U
A057	4/30/2014	SO	SUB	3	4	60.5 U	121 U	121 U	60.5 U	121 U	60.5 U	60.5 U	60.5 U
A058	4/30/2014	SO	SUB	4	6.5	54.4 U	109 U	180 U	54.4 U	109 U	54.4 U	54.4 U	54.4 U
A063	5/1/2014	SO	SUB	1.5	2.5	56.7 U	113 U	113 U	56.7 U	113 U	56.7 U	56.7 U	56.7 U
D059	5/1/2014	SO	SUB	4	5	58.3 U	117 U	190 U	58.3 U	117 U	58.3 U	58.3 U	58.3 U
D060	5/1/2014	SO	SUB	4	4.6	54.2 U	108 U	108 U	54.2 U	108 U	54.2 U	54.2 U	54.2 U
D030	5/1/2014	SO	SUB	1	3	54.1 U	108 U	180 U	54.1 U	108 U	54.1 U	54.1 U	54.1 U
D062	5/1/2014	SO	SUB	1.5	2.5	58.4 U	117 U	117 U	58.4 U	117 U	58.4 U	58.4 U	58.4 U
P010	5/5/2014	SO	SUB	3	5	56.5 U	113 U	190 U	56.5 U	113 U	56.5 U	56.5 U	56.5 U
SBG-01	5/5/2014	SO	SUB	0.5	2	58 U	116 U	190 U	58 U	116 U	58 U	58 U	58 U
Septic1	5/7/2014	SO	SUB	0	0	118 U	237 U	380 U	118 U	237 U	118 U	118 U	118 U
A-SAND	5/7/2014	SO	SUB	4.5	5.5	66 U	132 U	210 U	66 U	132 U	66 U	66 U	66 U
A018	5/5/2014	SO	SUB	5	6.5	54.2 U	108 U	180 U	54.2 U	108 U	54.2 U	15.2 J	54.2 U
A064	5/5/2014	SO	SUB	2	4	62.1 U	124 U	180 U	62.1 U	124 U	62.1 U	62.1 U	62.1 U
D063	5/5/2014	SO	SUB	1	2	66.7 U	133 U	200 U	66.7 U	133 U	66.7 U	66.7 U	66.7 U
D011	5/5/2014	SO	SUB	6	8	63.9 U	128 U	210 U	63.9 U	128 U	63.9 U	63.9 U	63.9 U
D019	5/5/2014	SO	SUB	3	4	66.4 U	133 U	210 U	66.4 U	133 U	66.4 U	66.4 U	66.4 U
D005	5/5/2014	SO	SUB	1.5	3	60.5 U	121 U	180 U	60.5 U	121 U	60.5 U	60.5 U	60.5 U
A064	5/5/2014	SO	SUB	7	8	70.2 U	140 U	140 U	70.2 U	140 U	70.2 U	70.2 U	70.2 U
D069	5/6/2014	SO	SUB	6.9	7.9	53.6 U	107 U	107 U	53.6 U	107 U	53.6 U	53.6 U	53.6 U
D064	5/6/2014	SO	SUB	2.5	3	60.4 U	121 U	121 U	60.4 U	121 U	60.4 U	60.4 U	60.4 U
D067	5/6/2014	SO	SUB	3	3.6	62.9 U	126 U	126 U	62.9 U	126 U	62.9 U	62.9 U	62.9 U
D068	5/6/2014	SO	SUB	1.5	3	56.9 U	114 U	114 U	56.9 U	114 U	56.9 U	56.9 U	56.9 U
D065	5/6/2014	SO	SUB	3.5	4	67.2 U	134 U	134 U	67.2 U	134 U	67.2 U	67.2 U	67.2 U
D066	5/6/2014	SO	SUB	7.1	7.7	68.9 U	138 U	138 U	68.9 U	138 U	68.9 U	68.9 U	68.9 U
D066	5/6/2014	SO	SUB	8.2	8.9	67.5 U	135 U	135 U	67.5 U	135 U	67.5 U	67.5 U	67.5 U
SP006	8/18/2014	SO	SS	4.5	5.5	61.3 U	123 U	123 U	61.3 U	123 U	61.3 U	61.3 U	61.3 U
SP010	9/10/2014	SO	SS	3.5	4	66.5 U	133 U	133 U	66.5 U	133 U	66.5 U	66.5 U	66.5 U
SP010	9/10/2014	SO	SS	7.5	8	59.7 U	119 U	119 U	59.7 U	119 U	59.7 U	59.7 U	59.7 U
SP010	9/10/2014	SO	SS	7.5	8	62.4 U	125 U	125 U	62.4 U	125 U	62.4 U	62.4 U	62.4 U

Table B-06. Concentrations of constituents in laboratory soil samples collected by the USGS MWSC.—Continued

[Concentrations are in microgram per kilogram of soil unless otherwise indicated; USGS, United States Geological Survey; MWSC, Missouri Water Science Center; SD, sediment; SUR; surficial soil; U, not detected above the detection limit; J, detected above the detection limit but below the reporting limit; SO, soil; SUB; subsurface soil; SS; split-spoon; --, no data]

Sample Name (fig. 2-04)	Date	Medium	Type	Depth top	Depth bottom	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol
TB2-1	3/19/2014	SD	SUR	0	0.5	59.1 U	59.1 U	59.1 U	59.1 U	59.1 U	59.1 U	200 U	200 U	200 U
TB2-2	3/19/2014	SD	SUR	0	0.5	65 U	65 U	65 U	65 U	65 U	65 U	190 U	190 U	190 U
WP-020	3/19/2014	SD	SUR	0	0.5	76.2 U	76.2 U	76.2 U	76.2 U	76.2 U	76.2 U	260 U	260 U	260 U
TB1-2	3/19/2014	SD	SUR	0	0.5	61 U	61 U	61 U	61 U	61 U	61 U	180 U	180 U	180 U
WD-01	3/19/2014	SD	SUR	0	0.5	67.4 U	67.4 U	67.4 U	67.4 U	67.4 U	67.4 U	210 U	210 U	210 U
WD-01	3/19/2014	SD	SUR	0	0.5	71.4 U	71.4 U	71.4 U	71.4 U	71.4 U	71.4 U	220 U	220 U	220 U
C003	3/18/2014	SO	SUR	0	0.5	70.1 U	70.1 U	70.1 U	70.1 U	70.1 U	70.1 U	200 U	200 U	200 U
C017	3/18/2014	SO	SUR	0	0.5	103 U	103 U	103 U	103 U	103 U	103 U	300 U	300 U	300 U
C013	3/18/2014	SO	SUR	0	0.5	62.2 U	62.2 U	62.2 U	62.2 U	62.2 U	62.2 U	200 U	200 U	200 U
B007	3/18/2014	SO	SUR	0	0.5	64.9 U	64.9 U	64.9 U	64.9 U	64.9 U	64.9 U	220 U	220 U	220 U
A005	3/18/2014	SO	SUR	0	0.5	72.4 U	72.4 U	72.4 U	72.4 U	72.4 U	72.4 U	220 U	220 U	220 U
A002	3/18/2014	SO	SUR	0	0.5	61.6 U	61.6 U	61.6 U	61.6 U	61.6 U	61.6 U	210 U	210 U	210 U
A018A	3/18/2014	SO	SUR	0	0.5	67.1 U	67.1 U	67.1 U	67.1 U	67.1 U	67.1 U	2,100 U	2,100 U	2,100 U
A031	3/18/2014	SO	SUR	0	0.5	60.6 U	60.6 U	60.6 U	60.6 U	60.6 U	60.6 U	190 U	190 U	190 U
AM-01	3/18/2014	SO	SUR	0	0.5	74.7 U	74.7 U	74.7 U	74.7 U	74.7 U	74.7 U	230 U	230 U	230 U
A046	3/18/2014	SO	SUR	0	0.5	73.9 U	73.9 U	73.9 U	73.9 U	73.9 U	73.9 U	220 U	220 U	220 U
D002	3/18/2014	SO	SUR	0	0.5	66.6 U	66.6 U	66.6 U	66.6 U	66.6 U	66.6 U	200 U	200 U	200 U
D007	3/18/2014	SO	SUR	0	0.5	63.6 U	63.6 U	63.6 U	63.6 U	63.6 U	63.6 U	180 U	180 U	180 U
D011	3/18/2014	SO	SUR	0	0.5	61.9 U	61.9 U	61.9 U	61.9 U	61.9 U	61.9 U	920 U	920 U	920 U
P006	3/18/2014	SO	SUR	0	0.5	67 U	67 U	67 U	67 U	67 U	67 U	190 U	190 U	190 U
SBG-01	3/18/2014	SO	SUR	0	0.5	61.9 U	61.9 U	61.9 U	61.9 U	61.9 U	61.9 U	210 U	210 U	210 U
A033	4/23/2014	SO	SUB	2.5	3.5	73 U	73 U	73 U	73 U	73 U	73 U	210 U	210 U	210 U
B008A	4/22/2014	SO	SUB	1.5	1.5	60.7 U	60.7 U	60.7 U	60.7 U	60.7 U	60.7 U	-- --	-- --	-- --
C007A	4/23/2014	SO	SUB	1	3.5	64.8 U	64.8 U	64.8 U	64.8 U	64.8 U	64.8 U	190 U	190 U	190 U
C014	4/23/2014	SO	SUB	2.5	4	67.6 U	67.6 U	67.6 U	67.6 U	67.6 U	67.6 U	200 U	200 U	200 U
B007	4/22/2014	SO	SUB	1	2	67.9 U	67.9 U	67.9 U	67.9 U	67.9 U	67.9 U	200 U	200 U	200 U
A053	4/23/2014	SO	SUB	2	3	56.6 U	56.6 U	56.6 U	56.6 U	56.6 U	56.6 U	190 U	190 U	190 U
A028	4/22/2014	SO	SUB	9	11	71.7 U	71.7 U	71.7 U	71.7 U	71.7 U	71.7 U	220 U	220 U	220 U
A057	4/30/2014	SO	SUB	3	4	60.5 U	60.5 U	60.5 U	60.5 U	60.5 U	60.5 U	-- --	-- --	-- --
A058	4/30/2014	SO	SUB	4	6.5	54.4 U	54.4 U	54.4 U	54.4 U	54.4 U	54.4 U	180 U	180 U	180 U
A063	5/1/2014	SO	SUB	1.5	2.5	56.7 U	56.7 U	56.7 U	56.7 U	56.7 U	56.7 U	-- --	-- --	-- --
D059	5/1/2014	SO	SUB	4	5	58.3 U	58.3 U	58.3 U	58.3 U	58.3 U	58.3 U	190 U	190 U	190 U
D060	5/1/2014	SO	SUB	4	4.6	54.2 U	54.2 U	54.2 U	54.2 U	54.2 U	54.2 U	-- --	-- --	-- --
D030	5/1/2014	SO	SUB	1	3	54.1 U	54.1 U	54.1 U	54.1 U	54.1 U	54.1 U	180 U	180 U	180 U
D062	5/1/2014	SO	SUB	1.5	2.5	58.4 U	58.4 U	58.4 U	58.4 U	58.4 U	58.4 U	-- --	-- --	-- --
P010	5/5/2014	SO	SUB	3	5	56.5 U	56.5 U	56.5 U	56.5 U	56.5 U	56.5 U	190 U	190 U	190 U
SBG-01	5/5/2014	SO	SUB	0.5	2	58 U	58 U	58 U	58 U	58 U	58 U	190 U	190 U	190 U
Septic1	5/7/2014	SO	SUB	0	0	118 U	118 U	118 U	118 U	118 U	118 U	380 U	380 U	380 U
A-SAND	5/7/2014	SO	SUB	4.5	5.5	66 U	66 U	66 U	66 U	66 U	66 U	210 U	210 U	210 U
A018	5/5/2014	SO	SUB	5	6.5	54.2 U	19.5 J	15.2 J	54.2 U	41.8 J	54.2 U	180 U	180 U	180 U
A064	5/5/2014	SO	SUB	2	4	62.1 U	62.1 U	62.1 U	62.1 U	62.1 U	62.1 U	180 U	180 U	180 U
D063	5/5/2014	SO	SUB	1	2	66.7 U	66.7 U	66.7 U	66.7 U	66.7 U	66.7 U	200 U	200 U	200 U
D011	5/5/2014	SO	SUB	6	8	63.9 U	63.9 U	63.9 U	63.9 U	63.9 U	63.9 U	210 U	210 U	210 U
D019	5/5/2014	SO	SUB	3	4	66.4 U	66.4 U	66.4 U	66.4 U	66.4 U	66.4 U	210 U	210 U	210 U
D005	5/5/2014	SO	SUB	1.5	3	60.5 U	60.5 U	60.5 U	60.5 U	60.5 U	60.5 U	180 U	180 U	180 U
A064	5/5/2014	SO	SUB	7	8	70.2 U	70.2 U	70.2 U	70.2 U	70.2 U	70.2 U	-- --	-- --	-- --
D069	5/6/2014	SO	SUB	6.9	7.9	53.6 U	53.6 U	53.6 U	53.6 U	53.6 U	53.6 U	-- --	-- --	-- --
D064	5/6/2014	SO	SUB	2.5	3	60.4 U	60.4 U	60.4 U	60.4 U	60.4 U	60.4 U	-- --	-- --	-- --
D067	5/6/2014	SO	SUB	3	3.6	62.9 U	62.9 U	62.9 U	62.9 U	62.9 U	62.9 U	-- --	-- --	-- --
D068	5/6/2014	SO	SUB	1.5	3	56.9 U	56.9 U	56.9 U	56.9 U	56.9 U	56.9 U	-- --	-- --	-- --
D065	5/6/2014	SO	SUB	3.5	4	67.2 U	67.2 U	67.2 U	67.2 U	67.2 U	67.2 U	-- --	-- --	-- --
D066	5/6/2014	SO	SUB	7.1	7.7	68.9 U	68.9 U	68.9 U	68.9 U	68.9 U	68.9 U	-- --	-- --	-- --
D066	5/6/2014	SO	SUB	8.2	8.9	67.5 U	67.5 U	67.5 U	67.5 U	67.5 U	67.5 U	-- --	-- --	-- --
SP006	8/18/2014	SO	SS	4.5	5.5	61.3 U	61.3 U	61.3 U	61.3 U	61.3 U	61.3 U	-- --	-- --	-- --
SP010	9/10/2014	SO	SS	3.5	4	66.5 U	66.5 U	66.5 U	66.5 U	66.5 U	66.5 U	-- --	-- --	-- --
SP010	9/10/2014	SO	SS	7.5	8	59.7 U	59.7 U	59.7 U	59.7 U	59.7 U	59.7 U	-- --	-- --	-- --
SP010	9/10/2014	SO	SS	7.5	8	62.4 U	62.4 U	62.4 U	62.4 U	62.4 U	62.4 U	-- --	-- --	-- --

Table B-06. Concentrations of constituents in laboratory soil samples collected by the USGS MWSC.—Continued

[Concentrations are in microgram per kilogram of soil unless otherwise indicated; USGS, United States Geological Survey; MWSC, Missouri Water Science Center; SD, sediment; SUR; surficial soil; U, not detected above the detection limit; J, detected above the detection limit but below the reporting limit; SO, soil; SUB; subsurface soil; SS; split-spoon; --, no data]

Sample Name (fig. 2-04)	Date	Medium	Type	Depth top	Depth bottom	2,4-Dimethylphenol	2,4-Dinitrophenol	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Chloronaphthalene	2-Chlorophenol	2-Chlorotoluene	2-Methyl-4,6-dinitrophenol	2-Methylnaphthalene
TB2-1	3/19/2014	SD	SUR	0	0.5	200 U	1,100 U	200 U	200 U	200 U	200 U	59.1 U	410 U	200 U
TB2-2	3/19/2014	SD	SUR	0	0.5	190 U	990 U	190 U	190 U	190 U	190 U	65 U	380 U	190 U
WP-020	3/19/2014	SD	SUR	0	0.5	260 U	1,300 U	260 U	260 U	260 U	260 U	76.2 U	520 U	260 U
TB1-2	3/19/2014	SD	SUR	0	0.5	180 U	950 U	180 U	180 U	180 U	180 U	61 U	370 U	180 U
WD-01	3/19/2014	SD	SUR	0	0.5	210 U	1,100 U	210 U	210 U	210 U	210 U	67.4 U	430 U	210 U
WD-01	3/19/2014	SD	SUR	0	0.5	220 U	1,100 U	220 U	220 U	220 U	220 U	71.4 U	440 U	220 U
C003	3/18/2014	SO	SUR	0	0.5	200 U	1,100 U	200 U	200 U	200 U	200 U	70.1 U	410 U	200 U
C017	3/18/2014	SO	SUR	0	0.5	300 U	1,600 U	300 U	300 U	300 U	300 U	103 U	600 U	300 U
C013	3/18/2014	SO	SUR	0	0.5	200 U	1,000 U	200 U	200 U	200 U	200 U	62.2 U	390 U	200 U
B007	3/18/2014	SO	SUR	0	0.5	220 U	1,100 U	220 U	220 U	220 U	220 U	64.9 U	440 U	220 U
A005	3/18/2014	SO	SUR	0	0.5	220 U	1,100 U	220 U	220 U	220 U	220 U	72.4 U	440 U	220 U
A002	3/18/2014	SO	SUR	0	0.5	210 U	1,100 U	210 U	210 U	210 U	210 U	61.6 U	420 U	210 U
A018A	3/18/2014	SO	SUR	0	0.5	2,100 U	11,000 U	2,100 U	2,100 U	2,100 U	2,100 U	67.1 U	4,300 U	2,100 U
A031	3/18/2014	SO	SUR	0	0.5	190 U	1,000 U	190 U	190 U	190 U	190 U	60.6 U	390 U	190 U
AM-01	3/18/2014	SO	SUR	0	0.5	230 U	1,200 U	230 U	230 U	230 U	230 U	74.7 U	460 U	230 U
A046	3/18/2014	SO	SUR	0	0.5	220 U	1,200 U	220 U	220 U	220 U	220 U	73.9 U	450 U	220 U
D002	3/18/2014	SO	SUR	0	0.5	200 U	1,100 U	200 U	200 U	200 U	200 U	66.6 U	410 U	200 U
D007	3/18/2014	SO	SUR	0	0.5	180 U	930 U	180 U	180 U	180 U	180 U	63.6 U	360 U	180 U
D011	3/18/2014	SO	SUR	0	0.5	920 U	4,800 U	920 U	920 U	920 U	920 U	61.9 U	1,800 U	920 U
P006	3/18/2014	SO	SUR	0	0.5	190 U	1,000 U	190 U	190 U	190 U	190 U	67 U	380 U	190 U
SBG-01	3/18/2014	SO	SUR	0	0.5	210 U	1,100 U	210 U	210 U	210 U	210 U	61.9 U	420 U	210 U
A033	4/23/2014	SO	SUB	2.5	3.5	210 U	1,100 U	210 U	210 U	210 U	210 U	73 U	430 U	210 U
B008A	4/22/2014	SO	SUB	1.5	1.5	-- --	-- --	-- --	-- --	-- --	-- --	60.7 U	-- --	-- --
C007A	4/23/2014	SO	SUB	1	3.5	190 U	980 U	190 U	190 U	190 U	190 U	64.8 U	380 U	190 U
C014	4/23/2014	SO	SUB	2.5	4	200 U	1,100 U	200 U	200 U	200 U	200 U	67.6 U	410 U	200 U
B007	4/22/2014	SO	SUB	1	2	200 U	1,000 U	200 U	200 U	200 U	200 U	67.9 U	390 U	200 U
A053	4/23/2014	SO	SUB	2	3	190 U	990 U	190 U	190 U	190 U	190 U	56.6 U	380 U	190 U
A028	4/22/2014	SO	SUB	9	11	220 U	1,100 U	220 U	220 U	220 U	220 U	71.7 U	440 U	220 U
A057	4/30/2014	SO	SUB	3	4	-- --	-- --	-- --	-- --	-- --	-- --	60.5 U	-- --	-- --
A058	4/30/2014	SO	SUB	4	6.5	180 U	910 U	180 U	180 U	180 U	180 U	54.4 U	350 U	180 U
A063	5/1/2014	SO	SUB	1.5	2.5	-- --	-- --	-- --	-- --	-- --	-- --	56.7 U	-- --	-- --
D059	5/1/2014	SO	SUB	4	5	190 U	980 U	190 U	190 U	190 U	190 U	58.3 U	380 U	190 U
D060	5/1/2014	SO	SUB	4	4.6	-- --	-- --	-- --	-- --	-- --	-- --	54.2 U	-- --	-- --
D030	5/1/2014	SO	SUB	1	3	180 U	910 U	180 U	180 U	180 U	180 U	54.1 U	350 U	180 U
D062	5/1/2014	SO	SUB	1.5	2.5	-- --	-- --	-- --	-- --	-- --	-- --	58.4 U	-- --	-- --
P010	5/5/2014	SO	SUB	3	5	190 U	980 U	190 U	190 U	190 U	190 U	56.5 U	380 U	190 U
SBG-01	5/5/2014	SO	SUB	0.5	2	190 U	1,000 U	190 U	190 U	190 U	190 U	58 U	390 U	190 U
Septic1	5/7/2014	SO	SUB	0	0	380 U	2,000 U	380 U	380 U	380 U	380 U	118 U	770 U	380 U
A-SAND	5/7/2014	SO	SUB	4.5	5.5	210 U	1,100 U	210 U	210 U	210 U	210 U	66 U	420 U	210 U
A018	5/5/2014	SO	SUB	5	6.5	180 U	930 U	180 U	180 U	180 U	180 U	54.2 U	360 U	180 U
A064	5/5/2014	SO	SUB	2	4	180 U	950 U	180 U	180 U	180 U	180 U	62.1 U	370 U	180 U
D063	5/5/2014	SO	SUB	1	2	200 U	1,000 U	200 U	200 U	200 U	200 U	66.7 U	390 U	200 U
D011	5/5/2014	SO	SUB	6	8	210 U	1,100 U	210 U	210 U	210 U	210 U	63.9 U	420 U	210 U
D019	5/5/2014	SO	SUB	3	4	210 U	1,100 U	210 U	210 U	210 U	210 U	66.4 U	430 U	210 U
D005	5/5/2014	SO	SUB	1.5	3	180 U	930 U	180 U	180 U	180 U	180 U	60.5 U	360 U	180 U
A064	5/5/2014	SO	SUB	7	8	-- --	-- --	-- --	-- --	-- --	-- --	70.2 U	-- --	-- --
D069	5/6/2014	SO	SUB	6.9	7.9	-- --	-- --	-- --	-- --	-- --	-- --	53.6 U	-- --	-- --
D064	5/6/2014	SO	SUB	2.5	3	-- --	-- --	-- --	-- --	-- --	-- --	60.4 U	-- --	-- --
D067	5/6/2014	SO	SUB	3	3.6	-- --	-- --	-- --	-- --	-- --	-- --	62.9 U	-- --	-- --
D068	5/6/2014	SO	SUB	1.5	3	-- --	-- --	-- --	-- --	-- --	-- --	56.9 U	-- --	-- --
D065	5/6/2014	SO	SUB	3.5	4	-- --	-- --	-- --	-- --	-- --	-- --	67.2 U	-- --	-- --
D066	5/6/2014	SO	SUB	7.1	7.7	-- --	-- --	-- --	-- --	-- --	-- --	68.9 U	-- --	-- --
D066	5/6/2014	SO	SUB	8.2	8.9	-- --	-- --	-- --	-- --	-- --	-- --	67.5 U	-- --	-- --
SP006	8/18/2014	SO	SS	4.5	5.5	-- --	-- --	-- --	-- --	-- --	-- --	61.3 U	-- --	-- --
SP010	9/10/2014	SO	SS	3.5	4	-- --	-- --	-- --	-- --	-- --	-- --	66.5 U	-- --	-- --
SP010	9/10/2014	SO	SS	7.5	8	-- --	-- --	-- --	-- --	-- --	-- --	59.7 U	-- --	-- --
SP010	9/10/2014	SO	SS	7.5	8	-- --	-- --	-- --	-- --	-- --	-- --	62.4 U	-- --	-- --

Table B-06. Concentrations of constituents in laboratory soil samples collected by the USGS MWSC.—Continued

[Concentrations are in microgram per kilogram of soil unless otherwise indicated; USGS, United States Geological Survey; MWSC, Missouri Water Science Center; SD, sediment; SUR; surficial soil; U, not detected above the detection limit; J, detected above the detection limit but below the reporting limit; SO, soil; SUB; subsurface soil; SS; split-spoon; --, no data]

Sample Name (fig. 2-04)	Date	Medium	Type	Depth top	Depth bottom	2-Nitroaniline	2-Nitrophenol	3,3-Dichloro benzidine	3-Nitroaniline	4-Bromophe nyl phenyl ether	4-Chloro 3 methylphe nol	4-Chloroaniline	4-Chlorophe nyl phenyl ether
TB2-1	3/19/2014	SD	SUR	0	0.5	410 U	200 U	1,300 U	410 U	250 U	200 U	200 U	200 U
TB2-2	3/19/2014	SD	SUR	0	0.5	380 U	190 U	1,200 U	380 U	240 U	190 U	190 U	190 U
WP-020	3/19/2014	SD	SUR	0	0.5	520 U	260 U	1,600 U	520 U	320 U	260 U	260 U	260 U
TB1-2	3/19/2014	SD	SUR	0	0.5	370 U	180 U	1,100 U	370 U	230 U	180 U	180 U	180 U
WD-01	3/19/2014	SD	SUR	0	0.5	430 U	210 U	1,300 U	430 U	270 U	210 U	210 U	210 U
WD-01	3/19/2014	SD	SUR	0	0.5	440 U	220 U	1,400 U	440 U	270 U	220 U	220 U	220 U
C003	3/18/2014	SO	SUR	0	0.5	410 U	200 U	1,300 U	410 U	250 U	200 U	200 U	200 U
C017	3/18/2014	SO	SUR	0	0.5	600 U	300 U	1,900 U	600 U	370 U	300 U	300 U	300 U
C013	3/18/2014	SO	SUR	0	0.5	390 U	200 U	1,200 U	390 U	250 U	200 U	200 U	200 U
B007	3/18/2014	SO	SUR	0	0.5	440 U	220 U	1,400 U	440 U	280 U	220 U	220 U	220 U
A005	3/18/2014	SO	SUR	0	0.5	440 U	220 U	1,400 U	440 U	280 U	220 U	220 U	220 U
A002	3/18/2014	SO	SUR	0	0.5	420 U	210 U	1,300 U	420 U	260 U	210 U	210 U	210 U
A018A	3/18/2014	SO	SUR	0	0.5	4,300 U	2,100 U	13,000 U	4,300 U	2,700 U	2,100 U	2,100 U	2,100 U
A031	3/18/2014	SO	SUR	0	0.5	390 U	190 U	1,200 U	390 U	240 U	190 U	190 U	190 U
AM-01	3/18/2014	SO	SUR	0	0.5	460 U	230 U	1,400 U	460 U	290 U	230 U	230 U	230 U
A046	3/18/2014	SO	SUR	0	0.5	450 U	220 U	1,400 U	450 U	280 U	220 U	220 U	220 U
D002	3/18/2014	SO	SUR	0	0.5	410 U	200 U	1,300 U	410 U	250 U	200 U	200 U	200 U
D007	3/18/2014	SO	SUR	0	0.5	360 U	180 U	1,100 U	360 U	220 U	180 U	180 U	180 U
D011	3/18/2014	SO	SUR	0	0.5	1800 U	920 U	5,800 U	1,800 U	1,200 U	920 U	920 U	920 U
P006	3/18/2014	SO	SUR	0	0.5	380 U	190 U	1,200 U	380 U	240 U	190 U	190 U	190 U
SBG-01	3/18/2014	SO	SUR	0	0.5	420 U	210 U	1,300 U	420 U	260 U	210 U	210 U	210 U
A033	4/23/2014	SO	SUB	2.5	3.5	430 U	210 U	1,300 U	430 U	270 U	210 U	210 U	210 U
B008A	4/22/2014	SO	SUB	1.5	1.5	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
C007A	4/23/2014	SO	SUB	1	3.5	380 U	190 U	1,200 U	380 U	240 U	190 U	190 U	190 U
C014	4/23/2014	SO	SUB	2.5	4	410 U	200 U	1,300 U	410 U	260 U	200 U	200 U	200 U
B007	4/22/2014	SO	SUB	1	2	390 U	200 U	1,200 U	390 U	250 U	200 U	200 U	200 U
A053	4/23/2014	SO	SUB	2	3	380 U	190 U	1,200 U	380 U	240 U	190 U	190 U	190 U
A028	4/22/2014	SO	SUB	9	11	440 U	220 U	1,400 U	440 U	280 U	220 U	220 U	220 U
A057	4/30/2014	SO	SUB	3	4	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
A058	4/30/2014	SO	SUB	4	6.5	350 U	180 U	1,100 U	350 U	220 U	180 U	180 U	180 U
A063	5/1/2014	SO	SUB	1.5	2.5	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D059	5/1/2014	SO	SUB	4	5	380 U	190 U	1,200 U	380 U	240 U	190 U	190 U	190 U
D060	5/1/2014	SO	SUB	4	4.6	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D030	5/1/2014	SO	SUB	1	3	350 U	180 U	1,100 U	350 U	220 U	180 U	180 U	180 U
D062	5/1/2014	SO	SUB	1.5	2.5	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
P010	5/5/2014	SO	SUB	3	5	380 U	190 U	1,200 U	380 U	240 U	190 U	190 U	190 U
SBG-01	5/5/2014	SO	SUB	0.5	2	390 U	190 U	1,200 U	390 U	240 U	190 U	190 U	190 U
Septic1	5/7/2014	SO	SUB	0	0	770 U	380 U	2,400 U	770 U	480 U	380 U	380 U	380 U
A-SAND	5/7/2014	SO	SUB	4.5	5.5	420 U	210 U	1,300 U	420 U	260 U	210 U	210 U	210 U
A018	5/5/2014	SO	SUB	5	6.5	360 U	180 U	1,100 U	360 U	230 U	180 U	180 U	180 U
A064	5/5/2014	SO	SUB	2	4	370 U	180 U	1,100 U	370 U	230 U	180 U	180 U	180 U
D063	5/5/2014	SO	SUB	1	2	390 U	200 U	1,200 U	390 U	250 U	200 U	200 U	200 U
D011	5/5/2014	SO	SUB	6	8	420 U	210 U	1,300 U	420 U	260 U	210 U	210 U	210 U
D019	5/5/2014	SO	SUB	3	4	430 U	210 U	1,300 U	430 U	270 U	210 U	210 U	210 U
D005	5/5/2014	SO	SUB	1.5	3	360 U	180 U	1,100 U	360 U	220 U	180 U	180 U	180 U
A064	5/5/2014	SO	SUB	7	8	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D069	5/6/2014	SO	SUB	6.9	7.9	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D064	5/6/2014	SO	SUB	2.5	3	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D067	5/6/2014	SO	SUB	3	3.6	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D068	5/6/2014	SO	SUB	1.5	3	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D065	5/6/2014	SO	SUB	3.5	4	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D066	5/6/2014	SO	SUB	7.1	7.7	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D066	5/6/2014	SO	SUB	8.2	8.9	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
SP006	8/18/2014	SO	SS	4.5	5.5	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
SP010	9/10/2014	SO	SS	3.5	4	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
SP010	9/10/2014	SO	SS	7.5	8	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
SP010	9/10/2014	SO	SS	7.5	8	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --

Table B-06. Concentrations of constituents in laboratory soil samples collected by the USGS MWSC.—Continued

[Concentrations are in microgram per kilogram of soil unless otherwise indicated; USGS, United States Geological Survey; MWSC, Missouri Water Science Center; SD, sediment; SUR; surficial soil; U, not detected above the detection limit; J, detected above the detection limit but below the reporting limit; SO, soil; SUB; subsurface soil; SS; split-spoon; --, no data]

Sample Name (fig. 2-04)	Date	Medium	Type	Depth top	Depth bottom	4-Chloro toluene	4-Isopropyl toluene	4-Nitroaniline	4-Nitrophenol	9H-Fluorene	Acenaphthene	Acenaphthylene	Acetone	Aldrin	alpha-Endosulfan	alpha-HCH
TB2-1	3/19/2014	SD	SUR	0	0.5	59.1 U	59.1 U	410 U	1100 U	200 U	200 U	200 U	295 U	1 U	1 U	1 U
TB2-2	3/19/2014	SD	SUR	0	0.5	65 U	65 U	380 U	990 U	190 U	190 U	190 U	325 U	1 U	1 U	1 U
WP-020	3/19/2014	SD	SUR	0	0.5	76.2 U	76.2 U	520 U	1,300 U	260 U	260 U	260 U	381 U	1.3 U	1.3 U	1.3 U
TB1-2	3/19/2014	SD	SUR	0	0.5	61 U	61 U	370 U	950 U	180 U	180 U	180 U	305 U	0.94 U	0.94 U	0.9 U
WD-01	3/19/2014	SD	SUR	0	0.5	67.4 U	67.4 U	430 U	1100 U	210 U	210 U	77 J	337 U	11 U	11 U	11 U
WD-01	3/19/2014	SD	SUR	0	0.5	71.4 U	71.4 U	440 U	1100 U	220 U	220 U	49 J	357 U	11 U	11 U	11 U
C003	3/18/2014	SO	SUR	0	0.5	70.1 U	70.1 U	410 U	1100 U	200 U	200 U	200 U	116 J	1 U	1 U	1 U
C017	3/18/2014	SO	SUR	0	0.5	103 U	103 U	600 U	1600 U	300 U	300 U	300 U	276 J	1.6 U	1.6 U	1.6 U
C013	3/18/2014	SO	SUR	0	0.5	62.2 U	62.2 U	390 U	1,000 U	200 U	200 U	200 U	191 J	0.99 U	0.99 U	1 U
B007	3/18/2014	SO	SUR	0	0.5	64.9 U	64.9 U	440 U	1,100 U	220 U	220 U	220 U	105 J	1.1 U	1.1 U	1.1 U
A005	3/18/2014	SO	SUR	0	0.5	72.4 U	72.4 U	440 U	1,100 U	220 U	220 U	220 U	362 U	1.1 U	1.1 U	1.1 U
A002	3/18/2014	SO	SUR	0	0.5	61.6 U	61.6 U	420 U	1,100 U	210 U	210 U	210 U	308 U	1.1 U	1.1 U	1.1 U
A018A	3/18/2014	SO	SUR	0	0.5	67.1 U	67.1 U	4,300 U	11,000 U	2,100 U	2,100 U	1,600 J	336 U	11 U	11 U	11 U
A031	3/18/2014	SO	SUR	0	0.5	60.6 U	60.6 U	390 U	1,000 U	190 U	190 U	190 U	122 J	1 U	1 U	1 U
AM-01	3/18/2014	SO	SUR	0	0.5	74.7 U	74.7 U	460 U	1,200 U	230 U	230 U	230 U	373 U	1.2 U	1.2 U	1.2 U
A046	3/18/2014	SO	SUR	0	0.5	73.9 U	73.9 U	450 U	1,200 U	220 U	220 U	220 U	370 U	1.2 U	1.2 U	1.2 U
D002	3/18/2014	SO	SUR	0	0.5	66.6 U	66.6 U	410 U	1,100 U	200 U	200 U	200 U	333 U	1 U	1 U	1 U
D007	3/18/2014	SO	SUR	0	0.5	63.6 U	63.6 U	360 U	930 U	180 U	180 U	180 U	318 U	0.95 U	0.95 U	1 U
D011	3/18/2014	SO	SUR	0	0.5	61.9 U	61.9 U	1,800 U	4,800 U	920 U	920 U	920 U	310 U	9.7 U	9.7 U	9.7 U
P006	3/18/2014	SO	SUR	0	0.5	67 U	67 U	380 U	1,000 U	190 U	190 U	190 U	335 U	10 U	10 U	10 U
SBG-01	3/18/2014	SO	SUR	0	0.5	61.9 U	61.9 U	420 U	1100 U	210 U	210 U	210 U	309 U	1.1 U	1.1 U	1.1 U
A033	4/23/2014	SO	SUB	2.5	3.5	73 U	73 U	430 U	1100 U	210 U	210 U	210 U	365 U	1.1 U	1.1 U	1.1 U
B008A	4/22/2014	SO	SUB	1.5	1.5	60.7 U	60.7 U	--	-- --	-- --	-- --	-- --	--	58.9 J	--	-- --	-- -- --
C007A	4/23/2014	SO	SUB	1	3.5	64.8 U	64.8 U	380 U	980 U	190 U	190 U	190 U	131 J	1 U	1 U	1 U
C014	4/23/2014	SO	SUB	2.5	4	67.6 U	67.6 U	410 U	1,100 U	200 U	200 U	200 U	77.1 J	1.1 U	1.1 U	1.1 U
B007	4/22/2014	SO	SUB	1	2	67.9 U	67.9 U	390 U	1,000 U	200 U	200 U	200 U	69.9 J	1 U	1 U	1 U
A053	4/23/2014	SO	SUB	2	3	56.6 U	56.6 U	380 U	990 U	190 U	190 U	190 U	69.7 J	1 U	1 U	1 U
A028	4/22/2014	SO	SUB	9	11	71.7 U	71.7 U	440 U	1,100 U	220 U	220 U	220 U	358 U	1.1 U	1.1 U	1.1 U
A057	4/30/2014	SO	SUB	3	4	60.5 U	60.5 U	--	-- --	-- --	-- --	--	302 U	--	-- --	-- -- --
A058	4/30/2014	SO	SUB	4	6.5	54.4 U	54.4 U	350 U	910 U	180 U	180 U	180 U	37 J	0.91 U	0.91 U	0.9 U
A063	5/1/2014	SO	SUB	1.5	2.5	56.7 U	56.7 U	--	-- --	-- --	-- --	--	50.5 J	--	-- --	-- -- --
D059	5/1/2014	SO	SUB	4	5	58.3 U	58.3 U	380 U	980 U	190 U	190 U	190 U	46.1 J	0.98 U	0.98 U	1 U
D060	5/1/2014	SO	SUB	4	4.6	54.2 U	54.2 U	--	-- --	-- --	-- --	--	33.6 J	--	-- --	-- -- --
D030	5/1/2014	SO	SUB	1	3	54.1 U	54.1 U	350 U	910 U	180 U	180 U	180 U	31.4 J	0.91 U	0.91 U	0.9 U
D062	5/1/2014	SO	SUB	1.5	2.5	58.4 U	58.4 U	--	-- --	-- --	-- --	--	292 U	--	-- --	-- -- --
P010	5/5/2014	SO	SUB	3	5	56.5 U	56.5 U	380 U	980 U	190 U	190 U	190 U	59.3 J	0.99 U	0.99 U	1 U
SBG-01	5/5/2014	SO	SUB	0.5	2	58 U	58 U	390 U	1,000 U	190 U	190 U	190 U	290 U	1 U	1 U	1 U
Septic1	5/7/2014	SO	SUB	0	0	118 U	118 U	770 U	2,000 U	380 U	380 U	380 U	169 J	31 --	2 U	2 U
A-SAND	5/7/2014	SO	SUB	4.5	5.5	66 U	66 U	420 U	1,100 U	210 U	210 U	210 U	104 J	1.1 U	1.1 U	1.1 U
A018	5/5/2014	SO	SUB	5	6.5	54.2 U	54.2 U	360 U	930 U	180 U	180 U	180 U	53.7 J	0.94 U	0.94 U	0.9 U
A064	5/5/2014	SO	SUB	2	4	62.1 U	62.1 U	370 U	950 U	180 U	180 U	180 U	311 U	0.98 U	0.98 U	1 U
D063	5/5/2014	SO	SUB	1	2	66.7 U	66.7 U	390 U	1,000 U	200 U	200 U	200 U	42.7 J	1 U	1 U	1 U
D011	5/5/2014	SO	SUB	6	8	63.9 U	63.9 U	420 U	1,100 U	210 U	210 U	210 U	43.4 J	1.1 U	1.1 U	1.1 U
D019	5/5/2014	SO	SUB	3	4	66.4 U	66.4 U	430 U	1,100 U	210 U	210 U	210 U	39.2 J	1.1 U	1.1 U	1.1 U
D005	5/5/2014	SO	SUB	1.5	3	60.5 U	60.5 U	360 U	930 U	180 U	180 U	180 U	33.3 J	0.95 U	0.95 U	1 U
A064	5/5/2014	SO	SUB	7	8	70.2 U	70.2 U	--	-- --	-- --	-- --	--	56.2 J	--	-- --	-- -- --
D069	5/6/2014	SO	SUB	6.9	7.9	53.6 U	53.6 U	--	-- --	-- --	-- --	--	268 U	--	-- --	-- -- --
D064	5/6/2014	SO	SUB	2.5	3	60.4 U	60.4 U	--	-- --	-- --	-- --	--	302 U	--	-- --	-- -- --
D067	5/6/2014	SO	SUB	3	3.6	62.9 U	62.9 U	--	-- --	-- --	-- --	--	314 U	--	-- --	-- -- --
D068	5/6/2014	SO	SUB	1.5	3	56.9 U	56.9 U	--	-- --	-- --	-- --	--	284 U	--	-- --	-- -- --
D065	5/6/2014	SO	SUB	3.5	4	67.2 U	67.2 U	--	-- --	-- --	-- --	--	336 U	--	-- --	-- -- --
D066	5/6/2014	SO	SUB	7.1	7.7	68.9 U	68.9 U	--	-- --	-- --	-- --	--	345 U	--	-- --	-- -- --
D066	5/6/2014	SO	SUB	8.2	8.9	67.5 U	67.5 U	--	-- --	-- --	-- --	--	337 U	--	-- --	-- -- --
SP006	8/18/2014	SO	SS	4.5	5.5	61.3 U	61.3 U	--	-- --	-- --	-- --	--	306 U	--	-- --	-- -- --
SP010	9/10/2014	SO	SS	3.5	4	66.5 U	66.5 U	--	-- --	-- --	-- --	--	134 J	--	-- --	-- -- --
SP010	9/10/2014	SO	SS	7.5	8	59.7 U	59.7 U	--	-- --	-- --	-- --	--	299 U	--	-- --	-- -- --
SP010	9/10/2014	SO	SS	7.5	8	62.4 U	62.4 U	--	-- --	-- --	-- --	--	147 J	--	-- --	-- -- --

Table B-06. Concentrations of constituents in laboratory soil samples collected by the USGS MWSC.—Continued

[Concentrations are in microgram per kilogram of soil unless otherwise indicated; USGS, United States Geological Survey; MWSC, Missouri Water Science Center; mg/Kg, milligrams per kilogram of soil; SD, sediment; SUR; surficial soil; U, not detected above the detection limit; J, detected above the detection limit but below the reporting limit; SO, soil; SUB; subsurface soil; SS; split-spoon; --, no data]

Sample Name (fig. 2-04)	Date	Medium	Type	Depth top	Depth bottom	Anthracene	Antimony, in mg/Kg	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Arsenic, in mg/Kg
TB2-1	3/19/2014	SD	SUR	0	0.5	200 U	300 J	42 U	42 U	42 U	42 U	42 U	42 U	42 U	42 U	5,100 --
TB2-2	3/19/2014	SD	SUR	0	0.5	190 U	270 J	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	5,600 --
WP-020	3/19/2014	SD	SUR	0	0.5	260 U	210 J	53 U	53 U	53 U	53 U	53 U	53 U	53 U	53 U	6,900 --
TB1-2	3/19/2014	SD	SUR	0	0.5	180 U	730 J	38 U	38 U	38 U	38 U	38 U	38 U	38 U	38 U	11,000 --
WD-01	3/19/2014	SD	SUR	0	0.5	58 J	1,000 J	44 U	44 U	44 U	44 U	44 U	44 U	44 U	44 U	7,000 --
WD-01	3/19/2014	SD	SUR	0	0.5	36 J	940 J	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	7,300 --
C003	3/18/2014	SO	SUR	0	0.5	200 U	1,200 U	42 U	42 U	42 U	42 U	42 U	42 U	42 U	42 U	2,800 --
C017	3/18/2014	SO	SUR	0	0.5	300 U	740 J	62 U	62 U	62 U	62 U	62 U	62 U	62 U	62 U	3,000 --
C013	3/18/2014	SO	SUR	0	0.5	200 U	620 J	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	6,800 --
B007	3/18/2014	SO	SUR	0	0.5	220 U	230 J	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	5,500 --
A005	3/18/2014	SO	SUR	0	0.5	220 U	330 J	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	5,500 --
A002	3/18/2014	SO	SUR	0	0.5	210 U	920 J	43 U	43 U	43 U	43 U	43 U	43 U	43 U	43 U	9,300 --
A018A	3/18/2014	SO	SUR	0	0.5	1,300 J	25,000 J	44 U	44 U	44 U	44 U	44 U	44 U	44 U	44 U	9,700 --
A031	3/18/2014	SO	SUR	0	0.5	190 U	700 J	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	7,100 --
AM-01	3/18/2014	SO	SUR	0	0.5	230 U	950 J	48 U	48 U	48 U	48 U	48 U	48 U	48 U	48 U	9,000 --
A046	3/18/2014	SO	SUR	0	0.5	220 U	620 J	46 U	46 U	46 U	46 U	46 U	46 U	46 U	46 U	6,400 --
D002	3/18/2014	SO	SUR	0	0.5	200 U	410 J	41 U	41 U	41 U	41 U	41 U	41 U	41 U	41 U	8,200 --
D007	3/18/2014	SO	SUR	0	0.5	180 U	950 J	38 U	38 U	38 U	38 U	38 U	38 U	38 U	38 U	13,000 --
D011	3/18/2014	SO	SUR	0	0.5	920 U	190 J	38 U	38 U	38 U	38 U	38 U	38 U	38 U	38 U	5,200 --
P006	3/18/2014	SO	SUR	0	0.5	190 U	470 J	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	10,000 --
SBG-01	3/18/2014	SO	SUR	0	0.5	210 U	410 J	43 U	43 U	43 U	43 U	43 U	43 U	43 U	43 U	6,200 --
A033	4/23/2014	SO	SUB	2.5	3.5	210 U	1.1 U	44 U	44 U	44 U	44 U	44 U	44 U	44 U	44 U	12 --
B008A	4/22/2014	SO	SUB	1.5	1.5	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
C007A	4/23/2014	SO	SUB	1	3.5	190 U	0.76 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	3.8 --
C014	4/23/2014	SO	SUB	2.5	4	200 U	1.1 U	42 U	42 U	42 U	42 U	42 U	42 U	42 U	42 U	8.9 --
B007	4/22/2014	SO	SUB	1	2	200 U	0.86 --	41 U	41 U	41 U	41 U	41 U	41 U	41 U	41 U	11 --
A053	4/23/2014	SO	SUB	2	3	190 U	1.8 --	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	12 --
A028	4/22/2014	SO	SUB	9	11	220 U	1.1 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	15 --
A057	4/30/2014	SO	SUB	3	4	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
A058	4/30/2014	SO	SUB	4	6.5	180 U	0.35 J	36 U	36 U	36 U	36 U	36 U	36 U	36 U	36 U	2.6 --
A063	5/1/2014	SO	SUB	1.5	2.5	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D059	5/1/2014	SO	SUB	4	5	190 U	0.76 --	39 U	39 U	39 U	39 U	39 U	39 U	39 U	39 U	6.9 --
D060	5/1/2014	SO	SUB	4	4.6	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D030	5/1/2014	SO	SUB	1	3	180 U	0.61 J	36 U	36 U	36 U	36 U	36 U	36 U	36 U	36 U	3.9 --
D062	5/1/2014	SO	SUB	1.5	2.5	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
P010	5/5/2014	SO	SUB	3	5	190 U	4.5 J	39 U	39 U	39 U	39 U	39 U	39 U	39 U	39 U	8.3 --
SBG-01	5/5/2014	SO	SUB	0.5	2	190 U	0.96 U	41 U	41 U	41 U	41 U	41 U	41 U	41 U	41 U	8.3 --
Septic1	5/7/2014	SO	SUB	0	0	380 U	2 U	80 U	80 U	80 U	80 U	80 U	80 U	41 J	80 U	9.4 --
A-SAND	5/7/2014	SO	SUB	4.5	5.5	210 U	1.7 J	43 U	43 U	43 U	43 U	43 U	43 U	43 U	43 U	26 --
A018	5/5/2014	SO	SUB	5	6.5	180 U	1.3 J	37 U	37 U	37 U	37 U	37 U	37 U	37 U	37 U	7.9 --
A064	5/5/2014	SO	SUB	2	4	180 U	0.73 U	39 U	39 U	39 U	39 U	39 U	39 U	39 U	39 U	6.3 --
D063	5/5/2014	SO	SUB	1	2	200 U	1.4 J	41 U	41 U	41 U	41 U	41 U	41 U	41 U	41 U	9.1 --
D011	5/5/2014	SO	SUB	6	8	210 U	0.31 J	44 U	44 U	44 U	44 U	44 U	44 U	44 U	44 U	9.9 --
D019	5/5/2014	SO	SUB	3	4	210 U	1.1 J	46 U	46 U	46 U	46 U	46 U	46 U	46 U	46 U	10 --
D005	5/5/2014	SO	SUB	1.5	3	180 U	1.2 J	38 U	38 U	38 U	38 U	38 U	38 U	38 U	38 U	5.7 --
A064	5/5/2014	SO	SUB	7	8	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D069	5/6/2014	SO	SUB	6.9	7.9	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D064	5/6/2014	SO	SUB	2.5	3	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D067	5/6/2014	SO	SUB	3	3.6	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D068	5/6/2014	SO	SUB	1.5	3	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D065	5/6/2014	SO	SUB	3.5	4	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D066	5/6/2014	SO	SUB	7.1	7.7	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D066	5/6/2014	SO	SUB	8.2	8.9	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
SP006	8/18/2014	SO	SS	4.5	5.5	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
SP010	9/10/2014	SO	SS	3.5	4	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
SP010	9/10/2014	SO	SS	7.5	8	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
SP010	9/10/2014	SO	SS	7.5	8	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --

Table B-06. Concentrations of constituents in laboratory soil samples collected by the USGS MWSC.—Continued

[Concentrations are in microgram per kilogram of soil unless otherwise indicated; USGS, United States Geological Survey; MWSC, Missouri Water Science Center; mg/Kg, milligrams per kilogram of soil; SD, sediment; SUR; surficial soil; U, not detected above the detection limit; J, detected above the detection limit but below the reporting limit; SO, soil; SUB; subsurface soil; SS; split-spoon; --, no data]

Sample Name (fig. 2-04)	Date	Medium	Type	Depth top	Depth bottom	Benzene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (ghi) perylene	Benzo (k) fluoranthene	Benzoic acid	Benzyl alcohol	Benzyl-n-butyl-phthalate	Beryllium, in mg/Kg
TB2-1	3/19/2014	SD	SUR	0	0.5	35.4 U	200 U	200 U	200 U	200 U	200 U	1,300 U	840 U	200 U	230 U
TB2-2	3/19/2014	SD	SUR	0	0.5	39 U	190 U	190 U	190 U	190 U	190 U	1,200 U	790 U	190 U	240 U
WP-020	3/19/2014	SD	SUR	0	0.5	45.7 U	260 U	260 U	260 U	260 U	260 U	1,600 U	1,100 U	260 U	500 --
TB1-2	3/19/2014	SD	SUR	0	0.5	36.6 U	180 U	180 U	180 U	180 U	180 U	1,100 U	750 U	180 U	56 J
WD-01	3/19/2014	SD	SUR	0	0.5	40.4 U	240 J	280 J	650 J	130 J	190 J	1,300 U	880 U	210 U	290 U
WD-01	3/19/2014	SD	SUR	0	0.5	42.8 U	150 J	180 J	400 J	110 J	140 J	1,400 U	910 U	49 J	310 U
C003	3/18/2014	SO	SUR	0	0.5	42.1 U	200 U	200 U	200 U	200 U	200 U	1,300 U	840 U	200 U	140 J
C017	3/18/2014	SO	SUR	0	0.5	61.8 U	300 U	300 U	300 U	300 U	300 U	1,900 U	1,200 U	300 U	330 U
C013	3/18/2014	SO	SUR	0	0.5	37.3 U	200 U	200 U	200 U	200 U	200 U	1,200 U	810 U	200 U	130 J
B007	3/18/2014	SO	SUR	0	0.5	38.9 U	220 U	220 U	220 U	220 U	220 U	1,400 U	910 U	220 U	260 U
A005	3/18/2014	SO	SUR	0	0.5	43.4 U	220 U	220 U	220 U	220 U	220 U	1,400 U	910 U	29 J	140 J
A002	3/18/2014	SO	SUR	0	0.5	37 U	210 U	210 U	210 U	210 U	210 U	1,300 U	870 U	210 U	120 J
A018A	3/18/2014	SO	SUR	0	0.5	40.3 U	9,100 --	6,400 --	12,000 --	1,400 J	4300 --	13,000 U	8,800 U	2,100 U	330 U
A031	3/18/2014	SO	SUR	0	0.5	36.4 U	21 J	16 J	37 J	190 U	190 U	1,200 U	800 U	190 U	270 U
AM-01	3/18/2014	SO	SUR	0	0.5	44.8 U	230 U	230 U	230 U	230 U	230 U	1,400 U	950 U	230 U	270 U
A046	3/18/2014	SO	SUR	0	0.5	44.4 U	220 U	220 U	17 J	220 U	220 U	1,400 U	920 U	220 U	140 J
D002	3/18/2014	SO	SUR	0	0.5	39.9 U	200 U	200 U	200 U	200 U	200 U	1,300 U	840 U	200 U	250 U
D007	3/18/2014	SO	SUR	0	0.5	38.2 U	17 J	18 J	28 J	180 U	180 U	1,100 U	740 U	180 U	200 U
D011	3/18/2014	SO	SUR	0	0.5	37.2 U	920 U	920 U	110 J	170 J	920 U	5,800 U	3,800 U	920 U	210 U
P006	3/18/2014	SO	SUR	0	0.5	40.2 U	53 J	140 J	710 --	260 --	170 J	1,200 U	790 U	190 U	250 U
SBG-01	3/18/2014	SO	SUR	0	0.5	37.1 U	210 U	210 U	210 U	210 U	210 U	1,300 U	870 U	210 U	120 J
A033	4/23/2014	SO	SUB	2.5	3.5	43.8 U	210 U	210 U	210 U	210 U	210 U	1,300 U	880 U	210 U	1.1 --
B008A	4/22/2014	SO	SUB	1.5	1.5	36.4 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
C007A	4/23/2014	SO	SUB	1	3.5	38.9 U	190 U	190 U	190 U	190 U	190 U	200 J	780 U	190 U	0.39 --
C014	4/23/2014	SO	SUB	2.5	4	40.6 U	200 U	200 U	200 U	200 U	200 U	1,300 U	840 U	200 U	1 --
B007	4/22/2014	SO	SUB	1	2	40.7 U	200 U	200 U	200 U	200 U	200 U	1,200 U	810 U	200 U	0.79 --
A053	4/23/2014	SO	SUB	2	3	34 U	190 U	14 J	16 J	29 J	190 U	1,200 U	790 U	190 U	0.89 --
A028	4/22/2014	SO	SUB	9	11	43 U	220 U	220 U	220 U	220 U	220 U	1,400 U	910 U	220 U	1.3 --
A057	4/30/2014	SO	SUB	3	4	36.3 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
A058	4/30/2014	SO	SUB	4	6.5	32.6 U	180 U	180 U	180 U	180 U	180 U	1,100 U	730 U	180 U	0.31 --
A063	5/1/2014	SO	SUB	1.5	2.5	34 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D059	5/1/2014	SO	SUB	4	5	35 U	190 U	190 U	190 U	190 U	190 U	1,200 U	780 U	190 U	0.47 --
D060	5/1/2014	SO	SUB	4	4.6	32.5 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D030	5/1/2014	SO	SUB	1	3	32.4 U	180 U	180 U	180 U	180 U	180 U	1,100 U	720 U	180 U	0.2 U
D062	5/1/2014	SO	SUB	1.5	2.5	35 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
P010	5/5/2014	SO	SUB	3	5	33.9 U	190 U	190 U	190 U	190 U	190 U	1,200 U	780 U	190 U	0.13 J
SBG-01	5/5/2014	SO	SUB	0.5	2	34.8 U	190 U	190 U	190 U	190 U	190 U	1,200 U	800 U	190 U	0.13 J
Septic1	5/7/2014	SO	SUB	0	0	71.1 U	36 J	380 U	380 U	100 J	380 U	2,400 U	1,600 U	380 U	0.49 U
A-SAND	5/7/2014	SO	SUB	4.5	5.5	39.6 U	210 U	210 U	210 U	210 U	210 U	1,300 U	860 U	210 U	0.27 U
A018	5/5/2014	SO	SUB	5	6.5	9.22 J	180 U	180 U	180 U	180 U	180 U	1,100 U	740 U	180 U	0.19 U
A064	5/5/2014	SO	SUB	2	4	37.3 U	180 U	180 U	180 U	180 U	180 U	1,100 U	760 U	180 U	0.31 --
D063	5/5/2014	SO	SUB	1	2	40 U	200 U	58 J	37 J	94 J	200 U	1,200 U	810 U	200 U	0.2 J
D011	5/5/2014	SO	SUB	6	8	38.3 U	210 U	210 U	210 U	210 U	210 U	1,300 U	860 U	210 U	2.4 --
D019	5/5/2014	SO	SUB	3	4	39.8 U	210 U	210 U	210 U	210 U	210 U	1,300 U	880 U	210 U	0.19 J
D005	5/5/2014	SO	SUB	1.5	3	36.3 U	180 U	180 U	180 U	180 U	180 U	1,100 U	740 U	180 U	0.079 J
A064	5/5/2014	SO	SUB	7	8	42.1 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D069	5/6/2014	SO	SUB	6.9	7.9	32.1 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D064	5/6/2014	SO	SUB	2.5	3	36.2 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D067	5/6/2014	SO	SUB	3	3.6	37.7 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D068	5/6/2014	SO	SUB	1.5	3	34.1 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D065	5/6/2014	SO	SUB	3.5	4	40.3 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D066	5/6/2014	SO	SUB	7.1	7.7	41.4 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D066	5/6/2014	SO	SUB	8.2	8.9	40.5 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
SP006	8/18/2014	SO	SS	4.5	5.5	36.8 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
SP010	9/10/2014	SO	SS	3.5	4	39.9 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
SP010	9/10/2014	SO	SS	7.5	8	35.8 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
SP010	9/10/2014	SO	SS	7.5	8	37.5 U	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --

Table B-06. Concentrations of constituents in laboratory soil samples collected by the USGS MWSC.—Continued

[Concentrations are in microgram per kilogram of soil unless otherwise indicated; USGS, United States Geological Survey; MWSC, Missouri Water Science Center; SD, sediment; SUR; surficial soil; U, not detected above the detection limit; J, detected above the detection limit but below the reporting limit; SO, soil; SUB; subsurface soil; SS; split-spoon; --, no data]

Sample Name (fig. 2-04)	Date	Medium	Type	Depth top	Depth bottom	beta-Endosulfan	beta-HCH	Bis (2-chloroethoxy) methane	Bis (2-chloroethyl) ether	Bis (2-chloroisopropyl) ether	Bis (2-ethylhexyl) phthalate	Bromo benzene
TB2-1	3/19/2014	SD	SUR	0	0.5	1 U	1 U	130 U	200 U	200 U	200 U	59.1 U
TB2-2	3/19/2014	SD	SUR	0	0.5	1 U	1 U	120 U	190 U	190 U	190 U	65 U
WP-020	3/19/2014	SD	SUR	0	0.5	1.3 U	1.3 U	160 U	260 U	260 U	260 U	76.2 U
TB1-2	3/19/2014	SD	SUR	0	0.5	0.94 U	0.94 U	110 U	180 U	180 U	180 U	61 U
WD-01	3/19/2014	SD	SUR	0	0.5	11 U	11 U	130 U	210 U	210 U	290 J	67.4 U
WD-01	3/19/2014	SD	SUR	0	0.5	11 U	11 U	140 U	220 U	220 U	100 J	71.4 U
C003	3/18/2014	SO	SUR	0	0.5	1 U	1 U	130 U	200 U	200 U	200 U	70.1 U
C017	3/18/2014	SO	SUR	0	0.5	1.6 U	1.6 U	190 U	300 U	300 U	300 U	103 U
C013	3/18/2014	SO	SUR	0	0.5	0.99 U	0.99 U	120 U	200 U	200 U	200 U	62.2 U
B007	3/18/2014	SO	SUR	0	0.5	1.1 U	1.6 --	140 U	220 U	220 U	220 U	64.9 U
A005	3/18/2014	SO	SUR	0	0.5	1.1 U	1.1 U	140 U	220 U	220 U	220 U	72.4 U
A002	3/18/2014	SO	SUR	0	0.5	1.1 U	1.1 U	130 U	210 U	210 U	77 J	61.6 U
A018A	3/18/2014	SO	SUR	0	0.5	11 U	11 U	1,300 U	2,100 U	2,100 U	2,100 U	67.1 U
A031	3/18/2014	SO	SUR	0	0.5	1 U	1 U	120 U	190 U	190 U	190 U	60.6 U
AM-01	3/18/2014	SO	SUR	0	0.5	1.2 U	1.2 U	140 U	230 U	230 U	230 U	74.7 U
A046	3/18/2014	SO	SUR	0	0.5	1.2 U	1.2 U	140 U	220 U	220 U	220 U	73.9 U
D002	3/18/2014	SO	SUR	0	0.5	1 U	1 U	130 U	200 U	200 U	200 U	66.6 U
D007	3/18/2014	SO	SUR	0	0.5	0.95 U	0.95 U	110 U	180 U	180 U	180 U	63.6 U
D011	3/18/2014	SO	SUR	0	0.5	9.7 U	9.7 U	580 U	920 U	920 U	920 U	61.9 U
P006	3/18/2014	SO	SUR	0	0.5	10 U	10 U	120 U	190 U	190 U	1,400 --	67 U
SBG-01	3/18/2014	SO	SUR	0	0.5	1.1 U	1.1 U	130 U	210 U	210 U	210 U	61.9 U
A033	4/23/2014	SO	SUB	2.5	3.5	1.1 U	1.1 U	130 U	210 U	210 U	210 U	73 U
B008A	4/22/2014	SO	SUB	1.5	1.5	-- --	-- --	-- --	-- --	-- --	-- --	60.7 U
C007A	4/23/2014	SO	SUB	1	3.5	1 U	1 U	120 U	190 U	190 U	190 U	64.8 U
C014	4/23/2014	SO	SUB	2.5	4	1.1 U	1.1 U	130 U	200 U	200 U	200 U	67.6 U
B007	4/22/2014	SO	SUB	1	2	1 U	1 U	120 U	200 U	200 U	200 U	67.9 U
A053	4/23/2014	SO	SUB	2	3	1 U	1 U	120 U	190 U	190 U	190 U	56.6 U
A028	4/22/2014	SO	SUB	9	11	1.1 U	1.1 U	140 U	220 U	220 U	220 U	71.7 U
A057	4/30/2014	SO	SUB	3	4	-- --	-- --	-- --	-- --	-- --	-- --	60.5 U
A058	4/30/2014	SO	SUB	4	6.5	0.91 U	0.91 U	110 U	180 U	180 U	180 U	54.4 U
A063	5/1/2014	SO	SUB	1.5	2.5	-- --	-- --	-- --	-- --	-- --	-- --	56.7 U
D059	5/1/2014	SO	SUB	4	5	0.98 U	0.98 U	120 U	190 U	190 U	190 U	58.3 U
D060	5/1/2014	SO	SUB	4	4.6	-- --	-- --	-- --	-- --	-- --	-- --	54.2 U
D030	5/1/2014	SO	SUB	1	3	0.91 U	0.91 U	110 U	180 U	180 U	180 U	54.1 U
D062	5/1/2014	SO	SUB	1.5	2.5	-- --	-- --	-- --	-- --	-- --	-- --	58.4 U
P010	5/5/2014	SO	SUB	3	5	0.99 U	0.99 U	120 U	190 U	190 U	190 U	56.5 U
SBG-01	5/5/2014	SO	SUB	0.5	2	1 U	1 U	120 U	190 U	190 U	190 U	58 U
Septic1	5/7/2014	SO	SUB	0	0	2 U	2 U	240 U	380 U	380 U	380 U	118 U
A-SAND	5/7/2014	SO	SUB	4.5	5.5	1.1 U	1.1 U	130 U	210 U	210 U	210 U	66 U
A018	5/5/2014	SO	SUB	5	6.5	0.94 U	0.94 U	110 U	180 U	180 U	29 J	54.2 U
A064	5/5/2014	SO	SUB	2	4	0.98 U	0.98 U	110 U	180 U	180 U	180 U	62.1 U
D063	5/5/2014	SO	SUB	1	2	1 U	1 U	120 U	200 U	200 U	200 U	66.7 U
D011	5/5/2014	SO	SUB	6	8	1.1 U	1.1 U	130 U	210 U	210 U	210 U	63.9 U
D019	5/5/2014	SO	SUB	3	4	1.1 U	1.1 U	130 U	210 U	210 U	210 U	66.4 U
D005	5/5/2014	SO	SUB	1.5	3	0.95 U	0.95 U	110 U	180 U	180 U	180 U	60.5 U
A064	5/5/2014	SO	SUB	7	8	-- --	-- --	-- --	-- --	-- --	-- --	70.2 U
D069	5/6/2014	SO	SUB	6.9	7.9	-- --	-- --	-- --	-- --	-- --	-- --	53.6 U
D064	5/6/2014	SO	SUB	2.5	3	-- --	-- --	-- --	-- --	-- --	-- --	60.4 U
D067	5/6/2014	SO	SUB	3	3.6	-- --	-- --	-- --	-- --	-- --	-- --	62.9 U
D068	5/6/2014	SO	SUB	1.5	3	-- --	-- --	-- --	-- --	-- --	-- --	56.9 U
D065	5/6/2014	SO	SUB	3.5	4	-- --	-- --	-- --	-- --	-- --	-- --	67.2 U
D066	5/6/2014	SO	SUB	7.1	7.7	-- --	-- --	-- --	-- --	-- --	-- --	68.9 U
D066	5/6/2014	SO	SUB	8.2	8.9	-- --	-- --	-- --	-- --	-- --	-- --	67.5 U
SP006	8/18/2014	SO	SS	4.5	5.5	-- --	-- --	-- --	-- --	-- --	-- --	61.3 U
SP010	9/10/2014	SO	SS	3.5	4	-- --	-- --	-- --	-- --	-- --	-- --	66.5 U
SP010	9/10/2014	SO	SS	7.5	8	-- --	-- --	-- --	-- --	-- --	-- --	59.7 U
SP010	9/10/2014	SO	SS	7.5	8	-- --	-- --	-- --	-- --	-- --	-- --	62.4 U

Table B-06. Concentrations of constituents in laboratory soil samples collected by the USGS MWSC.—Continued

[Concentrations are in microgram per kilogram of soil unless otherwise indicated; USGS, United States Geological Survey; MWSC, Missouri Water Science Center; mg/Kg, milligrams per kilogram of soil; SD, sediment; SUR; surficial soil; U, not detected above the detection limit; J, detected above the detection limit but below the reporting limit; SO, soil; SUB; subsurface soil; SS; split-spoon; --, no data]

Sample Name (fig. 2-04)	Date	Medium	Type	Depth top	Depth bottom	Bromo chloromethane	Bromo dichloromethane	Bromomethane	Cadmium, in mg/Kg	Carbazole	Carbon disulfide	Chlordane technical	Chloro benzene	Chloro ethane
TB2-1	3/19/2014	SD	SUR	0	0.5	59.1 U	59.1 U	236 U	1,400 --	200 U	118 U	21 U	e U	295 U
TB2-2	3/19/2014	SD	SUR	0	0.5	65 U	65 U	260 U	1,500 --	190 U	130 U	20 U	65 U	325 U
WP-020	3/19/2014	SD	SUR	0	0.5	76.2 U	76.2 U	305 U	2,500 --	260 U	152 U	27 U	76.2 U	381 U
TB1-2	3/19/2014	SD	SUR	0	0.5	61 U	61 U	244 U	2,600 --	180 U	122 U	19 U	61 U	305 U
WD-01	3/19/2014	SD	SUR	0	0.5	67.4 U	67.4 U	270 U	3,100 --	16 J	135 U	220 U	67.4 U	337 U
WD-01	3/19/2014	SD	SUR	0	0.5	71.4 U	71.4 U	285 U	3,500 --	220 U	143 U	230 U	71.4 U	357 U
C003	3/18/2014	SO	SUR	0	0.5	70.1 U	70.1 U	280 U	940 --	200 U	140 U	21 U	70.1 U	351 U
C017	3/18/2014	SO	SUR	0	0.5	103 U	103 U	412 U	1,500 --	300 U	206 U	31 U	103 U	515 U
C013	3/18/2014	SO	SUR	0	0.5	62.2 U	62.2 U	249 U	1,600 --	200 U	124 U	20 U	62.2 U	311 U
B007	3/18/2014	SO	SUR	0	0.5	64.9 U	64.9 U	260 U	1,400 --	220 U	130 U	23 U	64.9 U	325 U
A005	3/18/2014	SO	SUR	0	0.5	72.4 U	72.4 U	290 U	1,600 --	220 U	145 U	23 U	72.4 U	362 U
A002	3/18/2014	SO	SUR	0	0.5	61.6 U	61.6 U	246 U	2,800 --	210 U	123 U	22 U	61.6 U	308 U
A018A	3/18/2014	SO	SUR	0	0.5	67.1 U	67.1 U	269 U	16,000 --	2,100 U	134 U	220 U	67.1 U	336 U
A031	3/18/2014	SO	SUR	0	0.5	60.6 U	60.6 U	243 U	2,200 --	190 U	121 U	20 U	60.6 U	303 U
AM-01	3/18/2014	SO	SUR	0	0.5	74.7 U	74.7 U	299 U	3,000 --	230 U	149 U	24 U	74.7 U	373 U
A046	3/18/2014	SO	SUR	0	0.5	73.9 U	73.9 U	296 U	1,700 --	220 U	148 U	23 U	73.9 U	370 U
D002	3/18/2014	SO	SUR	0	0.5	66.6 U	66.6 U	266 U	2,000 --	200 U	133 U	21 U	66.6 U	333 U
D007	3/18/2014	SO	SUR	0	0.5	63.6 U	63.6 U	255 U	3,100 --	180 U	127 U	19 U	63.6 U	318 U
D011	3/18/2014	SO	SUR	0	0.5	61.9 U	61.9 U	248 U	1,300 --	920 U	124 U	190 U	61.9 U	310 U
P006	3/18/2014	SO	SUR	0	0.5	67 U	67 U	268 U	2,400 --	190 U	134 U	200 U	67 U	335 U
SBG-01	3/18/2014	SO	SUR	0	0.5	61.9 U	61.9 U	247 U	1,600 --	210 U	124 U	22 U	61.9 U	309 U
A033	4/23/2014	SO	SUB	2.5	3.5	73 U	73 U	292 U	4.9 --	210 U	146 U	22 U	73 U	365 U
B008A	4/22/2014	SO	SUB	1.5	1.5	60.7 U	60.7 U	243 U	-- --	-- --	121 U	-- --	60.7 U	304 U
C007A	4/23/2014	SO	SUB	1	3.5	64.8 U	64.8 U	259 U	0.87 --	190 U	130 U	20 U	64.8 U	324 U
C014	4/23/2014	SO	SUB	2.5	4	67.6 U	67.6 U	271 U	3.9 --	200 U	135 U	21 U	67.6 U	338 U
B007	4/22/2014	SO	SUB	1	2	67.9 U	67.9 U	272 U	2.8 --	200 U	136 U	21 U	67.9 U	339 U
A053	4/23/2014	SO	SUB	2	3	56.6 U	56.6 U	227 U	2.9 --	190 U	113 U	20 U	56.6 U	283 U
A028	4/22/2014	SO	SUB	9	11	71.7 U	71.7 U	287 U	4 --	220 U	143 U	23 U	71.7 U	358 U
A057	4/30/2014	SO	SUB	3	4	60.5 U	60.5 U	242 U	-- --	-- --	121 U	-- --	60.5 U	302 U
A058	4/30/2014	SO	SUB	4	6.5	54.4 U	54.4 U	218 U	1.2 --	180 U	109 U	18 U	54.4 U	272 U
A063	5/1/2014	SO	SUB	1.5	2.5	56.7 U	56.7 U	227 U	-- --	-- --	113 U	-- --	56.7 U	284 U
D059	5/1/2014	SO	SUB	4	5	58.3 U	58.3 U	233 U	3.1 --	190 U	117 U	20 U	58.3 U	292 U
D060	5/1/2014	SO	SUB	4	4.6	54.2 U	54.2 U	217 U	-- --	-- --	108 U	-- --	54.2 U	271 U
D030	5/1/2014	SO	SUB	1	3	54.1 U	54.1 U	216 U	1.9 --	180 U	108 U	18 U	54.1 U	270 U
D062	5/1/2014	SO	SUB	1.5	2.5	58.4 U	58.4 U	233 U	-- --	-- --	117 U	-- --	58.4 U	292 U
P010	5/5/2014	SO	SUB	3	5	56.5 U	56.5 U	226 U	4.8 --	190 U	113 U	20 U	56.5 U	282 U
SBG-01	5/5/2014	SO	SUB	0.5	2	58 U	58 U	232 U	3.2 --	190 U	116 U	20 U	58 U	290 U
Septic1	5/7/2014	SO	SUB	0	0	118 U	118 U	474 U	8.9 --	380 U	237 U	41 U	118 U	592 U
A-SAND	5/7/2014	SO	SUB	4.5	5.5	66 U	66 U	264 U	8.7 --	210 U	132 U	22 U	66 U	330 U
A018	5/5/2014	SO	SUB	5	6.5	54.2 U	54.2 U	217 U	3.5 --	180 U	108 U	19 U	10.8 J	271 U
A064	5/5/2014	SO	SUB	2	4	62.1 U	62.1 U	248 U	1.9 --	180 U	124 U	20 U	62.1 U	311 U
D063	5/5/2014	SO	SUB	1	2	66.7 U	66.7 U	267 U	4.4 --	200 U	133 U	21 U	66.7 U	334 U
D011	5/5/2014	SO	SUB	6	8	63.9 U	63.9 U	256 U	4.4 --	210 U	128 U	22 U	63.9 U	319 U
D019	5/5/2014	SO	SUB	3	4	66.4 U	66.4 U	266 U	4.4 --	210 U	133 U	23 U	66.4 U	332 U
D005	5/5/2014	SO	SUB	1.5	3	60.5 U	60.5 U	242 U	2.4 --	180 U	121 U	19 U	60.5 U	302 U
A064	5/5/2014	SO	SUB	7	8	70.2 U	70.2 U	281 U	-- --	-- --	140 U	-- --	70.2 U	351 U
D069	5/6/2014	SO	SUB	6.9	7.9	53.6 U	53.6 U	214 U	-- --	-- --	107 U	-- --	53.6 U	268 U
D064	5/6/2014	SO	SUB	2.5	3	60.4 U	60.4 U	242 U	-- --	-- --	121 U	-- --	60.4 U	302 U
D067	5/6/2014	SO	SUB	3	3.6	62.9 U	62.9 U	251 U	-- --	-- --	126 U	-- --	62.9 U	314 U
D068	5/6/2014	SO	SUB	1.5	3	56.9 U	56.9 U	228 U	-- --	-- --	114 U	-- --	56.9 U	284 U
D065	5/6/2014	SO	SUB	3.5	4	67.2 U	67.2 U	269 U	-- --	-- --	134 U	-- --	67.2 U	336 U
D066	5/6/2014	SO	SUB	7.1	7.7	68.9 U	68.9 U	276 U	-- --	-- --	138 U	-- --	68.9 U	345 U
D066	5/6/2014	SO	SUB	8.2	8.9	67.5 U	67.5 U	270 U	-- --	-- --	135 U	-- --	67.5 U	337 U
SP006	8/18/2014	SO	SS	4.5	5.5	61.3 U	61.3 U	245 U	-- --	-- --	123 U	-- --	61.3 U	306 U
SP010	9/10/2014	SO	SS	3.5	4	66.5 U	66.5 U	266 U	-- --	-- --	133 U	-- --	66.5 U	333 U
SP010	9/10/2014	SO	SS	7.5	8	59.7 U	59.7 U	239 U	-- --	-- --	119 U	-- --	59.7 U	299 U
SP010	9/10/2014	SO	SS	7.5	8	62.4 U	62.4 U	250 U	-- --	-- --	125 U	-- --	62.4 U	312 U

Table B-06. Concentrations of constituents in laboratory soil samples collected by the USGS MWSC.—Continued

[Concentrations are in microgram per kilogram of soil unless otherwise indicated; USGS, United States Geological Survey; MWSC, Missouri Water Science Center; mg/Kg, milligrams per kilogram of soil; SD, sediment; SUR; surficial soil; U, not detected above the detection limit; J, detected above the detection limit but below the reporting limit; SO, soil; SUB; subsurface soil; SS; split-spoon; --, no data]

Sample Name (fig. 2-04)	Date	Medium	Type	Depth top	Depth bottom	Chloro methane	Chlorpyrifos	Chromium, in mg/Kg	Chrysene	cis-1,2-Dichloroethene	cis-1,3-Dichloro propene	cis-Chlordane	Copper, in mg/Kg
TB2-1	3/19/2014	SD	SUR	0	0.5	59.1 U	8.4 U	20,000 J	200 U	59.1 U	59.1 U	1 U	4,500 U
TB2-2	3/19/2014	SD	SUR	0	0.5	65 U	8.1 U	20,000 J	190 U	65 U	65 U	1 U	4,900 U
WP-020	3/19/2014	SD	SUR	0	0.5	76.2 U	11 U	19,000 J	260 U	76.2 U	76.2 U	1.3 U	13,000 --
TB1-2	3/19/2014	SD	SUR	0	0.5	61 U	7.6 U	13,000 J	180 U	61 U	61 U	0.94 U	23,000 --
WD-01	3/19/2014	SD	SUR	0	0.5	67.4 U	8.9 U	29,000 J	300 J	67.4 U	67.4 U	11 U	36,000 --
WD-01	3/19/2014	SD	SUR	0	0.5	71.4 U	9.2 U	27,000 J	180 J	71.4 U	71.4 U	11 U	39,000 --
C003	3/18/2014	SO	SUR	0	0.5	70.1 U	8.6 U	6,400 --	200 U	70.1 U	70.1 U	1 U	6,400 J
C017	3/18/2014	SO	SUR	0	0.5	103 U	12 U	9,600 J	300 U	103 U	103 U	1.6 U	17,000 --
C013	3/18/2014	SO	SUR	0	0.5	62.2 U	8.2 U	10,000 J	200 U	62.2 U	62.2 U	0.99 U	27,000 --
B007	3/18/2014	SO	SUR	0	0.5	64.9 U	9.2 U	9,500 J	220 U	64.9 U	64.9 U	20 J	7,500 --
A005	3/18/2014	SO	SUR	0	0.5	72.4 U	9.2 U	10,000 J	220 U	72.4 U	72.4 U	1.1 U	7,700 --
A002	3/18/2014	SO	SUR	0	0.5	61.6 U	8.9 U	13,000 J	210 U	61.6 U	61.6 U	1.1 U	12,000 --
A018A	3/18/2014	SO	SUR	0	0.5	67.1 U	9 U	82,000 J	7,800 --	67.1 U	67.1 U	11 U	1,500,000 --
A031	3/18/2014	SO	SUR	0	0.5	60.6 U	8.1 U	18,000 J	21 J	60.6 U	60.6 U	1 U	19,000 --
AM-01	3/18/2014	SO	SUR	0	0.5	74.7 U	9.7 U	16,000 J	230 U	74.7 U	74.7 U	1.2 U	27,000 --
A046	3/18/2014	SO	SUR	0	0.5	73.9 U	9.4 U	12,000 J	220 U	73.9 U	73.9 U	1.2 U	12,000 --
D002	3/18/2014	SO	SUR	0	0.5	66.6 U	8.4 U	16,000 J	200 U	66.6 U	66.6 U	1 U	10,000 --
D007	3/18/2014	SO	SUR	0	0.5	63.6 U	7.6 U	13,000 J	21 J	63.6 U	63.6 U	0.95 U	6,300 --
D011	3/18/2014	SO	SUR	0	0.5	61.9 U	19 U	9,300 J	920 U	61.9 U	61.9 U	9.7 U	15,000 --
P006	3/18/2014	SO	SUR	0	0.5	67 U	8.2 U	17,000 J	190 J	67 U	67 U	10 U	11,000 --
SBG-01	3/18/2014	SO	SUR	0	0.5	61.9 U	8.9 U	11,000 J	210 U	61.9 U	61.9 U	1.1 U	8,700 --
A033	4/23/2014	SO	SUB	2.5	3.5	73 U	8.7 U	39 --	210 U	73 U	73 U	1.1 U	11 --
B008A	4/22/2014	SO	SUB	1.5	1.5	60.7 U	-- --	-- --	-- --	60.7 U	60.7 U	-- --	-- --
C007A	4/23/2014	SO	SUB	1	3.5	64.8 U	8.1 U	7.7 --	190 U	64.8 U	64.8 U	1 U	6.9 --
C014	4/23/2014	SO	SUB	2.5	4	67.6 U	8.8 U	23 --	200 U	67.6 U	67.6 U	1.1 U	20 --
B007	4/22/2014	SO	SUB	1	2	67.9 U	8.2 U	21 --	200 U	67.9 U	67.9 U	1 U	16 --
A053	4/23/2014	SO	SUB	2	3	56.6 U	8.1 U	22 --	190 U	56.6 U	56.6 U	1 U	85 --
A028	4/22/2014	SO	SUB	9	11	71.7 U	9.3 U	26 --	220 U	71.7 U	71.7 U	1.1 U	17 --
A057	4/30/2014	SO	SUB	3	4	60.5 U	-- --	-- --	-- --	60.5 U	60.5 U	-- --	-- --
A058	4/30/2014	SO	SUB	4	6.5	54.4 U	7.4 U	6.4 --	180 U	54.4 U	54.4 U	0.91 U	4.4 --
A063	5/1/2014	SO	SUB	1.5	2.5	56.7 U	-- --	-- --	-- --	56.7 U	56.7 U	-- --	-- --
D059	5/1/2014	SO	SUB	4	5	58.3 U	7.9 U	20 --	190 U	58.3 U	58.3 U	0.98 U	18 --
D060	5/1/2014	SO	SUB	4	4.6	54.2 U	-- --	-- --	-- --	54.2 U	54.2 U	-- --	-- --
D030	5/1/2014	SO	SUB	1	3	54.1 U	7.2 U	15 --	180 U	210 --	54.1 U	0.91 U	7.5 --
D062	5/1/2014	SO	SUB	1.5	2.5	58.4 U	-- --	-- --	-- --	58.4 U	58.4 U	-- --	-- --
P010	5/5/2014	SO	SUB	3	5	56.5 U	7.9 U	79 --	190 U	56.5 U	56.5 U	0.99 U	74 --
SBG-01	5/5/2014	SO	SUB	0.5	2	58 U	8.2 U	24 --	190 U	58 U	58 U	1 U	16 --
Septic1	5/7/2014	SO	SUB	0	0	118 U	16 U	26 --	26 J	118 U	118 U	8.7 J	120 --
A-SAND	5/7/2014	SO	SUB	4.5	5.5	66 U	8.8 U	46 --	210 U	66 U	66 U	1.1 U	11 --
A018	5/5/2014	SO	SUB	5	6.5	54.2 U	7.5 U	23 --	180 U	16.8 J	54.2 U	0.94 U	6.5 --
A064	5/5/2014	SO	SUB	2	4	62.1 U	7.9 U	13 --	180 U	62.1 U	62.1 U	0.98 U	8.9 --
D063	5/5/2014	SO	SUB	1	2	66.7 U	8.1 U	30 --	200 U	66.7 U	66.7 U	1 U	9.2 --
D011	5/5/2014	SO	SUB	6	8	63.9 U	8.8 U	30 --	210 U	63.9 U	63.9 U	1.1 U	15 --
D019	5/5/2014	SO	SUB	3	4	66.4 U	9.2 U	31 --	210 U	66.4 U	66.4 U	1.1 U	8.7 --
D005	5/5/2014	SO	SUB	1.5	3	60.5 U	7.7 U	64 --	180 U	60.5 U	60.5 U	0.95 U	5.4 --
A064	5/5/2014	SO	SUB	7	8	70.2 U	-- --	-- --	-- --	70.2 U	70.2 U	-- --	-- --
D069	5/6/2014	SO	SUB	6.9	7.9	53.6 U	-- --	-- --	-- --	53.6 U	53.6 U	-- --	-- --
D064	5/6/2014	SO	SUB	2.5	3	60.4 U	-- --	-- --	-- --	60.4 U	60.4 U	-- --	-- --
D067	5/6/2014	SO	SUB	3	3.6	62.9 U	-- --	-- --	-- --	62.9 U	62.9 U	-- --	-- --
D068	5/6/2014	SO	SUB	1.5	3	56.9 U	-- --	-- --	-- --	56.9 U	56.9 U	-- --	-- --
D065	5/6/2014	SO	SUB	3.5	4	67.2 U	-- --	-- --	-- --	67.2 U	67.2 U	-- --	-- --
D066	5/6/2014	SO	SUB	7.1	7.7	68.9 U	-- --	-- --	-- --	68.9 U	68.9 U	-- --	-- --
D066	5/6/2014	SO	SUB	8.2	8.9	67.5 U	-- --	-- --	-- --	67.5 U	67.5 U	-- --	-- --
SP006	8/18/2014	SO	SS	4.5	5.5	61.3 U	-- --	-- --	-- --	14.1 J	61.3 U	-- --	-- --
SP010	9/10/2014	SO	SS	3.5	4	66.5 U	-- --	-- --	-- --	66.5 U	66.5 U	-- --	-- --
SP010	9/10/2014	SO	SS	7.5	8	59.7 U	-- --	-- --	-- --	59.7 U	59.7 U	-- --	-- --
SP010	9/10/2014	SO	SS	7.5	8	62.4 U	-- --	-- --	-- --	62.4 U	62.4 U	-- --	-- --

Table B-06. Concentrations of constituents in laboratory soil samples collected by the USGS MWSC.—Continued

[Concentrations are in microgram per kilogram of soil unless otherwise indicated; USGS, United States Geological Survey; MWSC, Missouri Water Science Center; SD, sediment; SUR; surficial soil; U, not detected above the detection limit; J, detected above the detection limit but below the reporting limit; SO, soil; SUB; subsurface soil; SS; split-spoon; --, no data]

Sample Name (fig. 2-04)	Date	Medium	Type	Depth top	Depth bottom	Coumaphos	delta HCH	Demeton-O	Demeton-S	Diazinon	Dibenzo (ah) anthracene	Dibenzo furan	Dibromo chloromethane	Dibromo methane
TB2-1	3/19/2014	SD	SUR	0	0.5	42 U	1 U	8.4 U	8.4 U	8.4 U	200 U	200 U	59.1 U	118 U
TB2-2	3/19/2014	SD	SUR	0	0.5	8.1 U	1 U	8.1 U	8.1 U	8.1 U	190 U	190 U	65 U	130 U
WP-020	3/19/2014	SD	SUR	0	0.5	11 U	1.3 U	11 U	11 U	11 U	260 U	260 U	76.2 U	152 U
TB1-2	3/19/2014	SD	SUR	0	0.5	38 U	0.94 U	7.6 U	7.6 U	7.6 U	180 U	180 U	61 U	122 U
WD-01	3/19/2014	SD	SUR	0	0.5	45 U	11 U	8.9 U	8.9 U	8.9 U	39 J	210 U	67.4 U	135 U
WD-01	3/19/2014	SD	SUR	0	0.5	46 U	11 U	9.2 U	9.2 U	9.2 U	220 R	220 U	71.4 U	143 U
C003	3/18/2014	SO	SUR	0	0.5	8.6 U	1 U	8.6 U	8.6 U	8.6 U	200 U	200 U	70.1 U	140 U
C017	3/18/2014	SO	SUR	0	0.5	12 U	1.6 U	12 U	12 U	12 U	300 U	300 U	103 U	206 U
C013	3/18/2014	SO	SUR	0	0.5	8.2 U	0.99 U	8.2 U	8.2 U	8.2 U	200 U	200 U	62.2 U	124 U
B007	3/18/2014	SO	SUR	0	0.5	9.2 U	1.1 U	9.2 U	9.2 U	9.2 U	220 U	220 U	64.9 U	130 U
A005	3/18/2014	SO	SUR	0	0.5	9.2 U	1.1 U	9.2 U	9.2 U	9.2 U	220 U	220 U	72.4 U	145 U
A002	3/18/2014	SO	SUR	0	0.5	8.9 U	1.1 U	8.9 U	8.9 U	8.9 U	210 U	210 U	61.6 U	123 U
A018A	3/18/2014	SO	SUR	0	0.5	45 U	11 U	9 U	9 U	9 U	2,100 U	2,100 U	67.1 U	134 U
A031	3/18/2014	SO	SUR	0	0.5	40 U	1 U	8.1 U	8.1 U	8.1 U	190 U	190 U	60.6 U	121 U
AM-01	3/18/2014	SO	SUR	0	0.5	9.7 U	1.2 U	9.7 U	9.7 U	9.7 U	230 U	230 U	74.7 U	149 U
A046	3/18/2014	SO	SUR	0	0.5	47 U	1.2 U	9.4 U	9.4 U	9.4 U	220 U	220 U	73.9 U	148 U
D002	3/18/2014	SO	SUR	0	0.5	8.4 U	1 U	8.4 U	8.4 U	8.4 U	200 U	200 U	66.6 U	133 U
D007	3/18/2014	SO	SUR	0	0.5	7.6 U	0.95 U	7.6 U	7.6 U	7.6 U	180 U	180 U	63.6 U	127 U
D011	3/18/2014	SO	SUR	0	0.5	97 U	9.7 U	19 U	19 U	19 U	920 U	920 U	61.9 U	124 U
P006	3/18/2014	SO	SUR	0	0.5	41 U	10 U	8.2 U	8.2 U	8.2 U	47 J	190 U	67 U	134 U
SBG-01	3/18/2014	SO	SUR	0	0.5	8.9 U	1.1 U	8.9 U	8.9 U	8.9 U	210 U	210 U	61.9 U	124 U
A033	4/23/2014	SO	SUB	2.5	3.5	8.7 U	1.1 U	8.7 U	8.7 U	8.7 U	210 U	210 U	73 U	146 U
B008A	4/22/2014	SO	SUB	1.5	1.5	-- --	-- --	-- --	-- --	-- --	-- --	-- --	60.7 U	121 U
C007A	4/23/2014	SO	SUB	1	3.5	8.1 U	1 U	8.1 U	8.1 U	8.1 U	190 U	190 U	64.8 U	130 U
C014	4/23/2014	SO	SUB	2.5	4	8.8 U	1.1 U	8.8 U	8.8 U	8.8 U	200 U	200 U	67.6 U	135 U
B007	4/22/2014	SO	SUB	1	2	8.2 U	1 U	8.2 U	8.2 U	8.2 U	200 U	200 U	67.9 U	136 U
A053	4/23/2014	SO	SUB	2	3	8.1 U	1 U	8.1 U	8.1 U	8.1 U	190 U	190 U	56.6 U	113 U
A028	4/22/2014	SO	SUB	9	11	9.3 U	1.1 U	9.3 U	9.3 U	9.3 U	220 U	220 U	71.7 U	143 U
A057	4/30/2014	SO	SUB	3	4	-- --	-- --	-- --	-- --	-- --	-- --	-- --	60.5 U	121 U
A058	4/30/2014	SO	SUB	4	6.5	7.4 U	0.91 U	7.4 U	7.4 U	7.4 U	180 U	180 U	54.4 U	109 U
A063	5/1/2014	SO	SUB	1.5	2.5	-- --	-- --	-- --	-- --	-- --	-- --	-- --	56.7 U	113 U
D059	5/1/2014	SO	SUB	4	5	7.9 U	0.98 U	7.9 U	7.9 U	7.9 U	190 U	190 U	58.3 U	117 U
D060	5/1/2014	SO	SUB	4	4.6	-- --	-- --	-- --	-- --	-- --	-- --	-- --	54.2 U	108 U
D030	5/1/2014	SO	SUB	1	3	7.2 U	0.91 U	7.2 U	7.2 U	7.2 U	180 U	180 U	54.1 U	108 U
D062	5/1/2014	SO	SUB	1.5	2.5	-- --	-- --	-- --	-- --	-- --	-- --	-- --	58.4 U	117 U
P010	5/5/2014	SO	SUB	3	5	7.9 U	0.99 U	7.9 U	7.9 U	7.9 U	190 U	190 U	56.5 U	113 U
SBG-01	5/5/2014	SO	SUB	0.5	2	8.2 U	1 U	8.2 U	8.2 U	8.2 U	190 U	190 U	58 U	116 U
Septic1	5/7/2014	SO	SUB	0	0	16 U	2 U	16 U	16 U	16 U	380 U	380 U	118 U	237 U
A-SAND	5/7/2014	SO	SUB	4.5	5.5	8.8 U	1.1 U	8.8 U	8.8 U	8.8 U	210 U	210 U	66 U	132 U
A018	5/5/2014	SO	SUB	5	6.5	7.5 U	0.94 U	7.5 U	7.5 U	7.5 U	180 U	180 U	54.2 U	30.9 J
A064	5/5/2014	SO	SUB	2	4	7.9 U	0.98 U	7.9 U	7.9 U	7.9 U	180 U	180 U	62.1 U	124 U
D063	5/5/2014	SO	SUB	1	2	8.1 U	1 U	8.1 U	8.1 U	8.1 U	200 U	200 U	66.7 U	133 U
D011	5/5/2014	SO	SUB	6	8	8.8 U	1.1 U	8.8 U	8.8 U	8.8 U	210 U	210 U	63.9 U	128 U
D019	5/5/2014	SO	SUB	3	4	9.2 U	1.1 U	9.2 U	9.2 U	9.2 U	210 U	210 U	66.4 U	133 U
D005	5/5/2014	SO	SUB	1.5	3	7.7 U	0.95 U	7.7 U	7.7 U	7.7 U	180 U	180 U	60.5 U	121 U
A064	5/5/2014	SO	SUB	7	8	-- --	-- --	-- --	-- --	-- --	-- --	-- --	70.2 U	140 U
D069	5/6/2014	SO	SUB	6.9	7.9	-- --	-- --	-- --	-- --	-- --	-- --	-- --	53.6 U	107 U
D064	5/6/2014	SO	SUB	2.5	3	-- --	-- --	-- --	-- --	-- --	-- --	-- --	60.4 U	121 U
D067	5/6/2014	SO	SUB	3	3.6	-- --	-- --	-- --	-- --	-- --	-- --	-- --	62.9 U	126 U
D068	5/6/2014	SO	SUB	1.5	3	-- --	-- --	-- --	-- --	-- --	-- --	-- --	56.9 U	114 U
D065	5/6/2014	SO	SUB	3.5	4	-- --	-- --	-- --	-- --	-- --	-- --	-- --	67.2 U	134 U
D066	5/6/2014	SO	SUB	7.1	7.7	-- --	-- --	-- --	-- --	-- --	-- --	-- --	68.9 U	138 U
D066	5/6/2014	SO	SUB	8.2	8.9	-- --	-- --	-- --	-- --	-- --	-- --	-- --	67.5 U	135 U
SP006	8/18/2014	SO	SS	4.5	5.5	-- --	-- --	-- --	-- --	-- --	-- --	-- --	61.3 U	123 U
SP010	9/10/2014	SO	SS	3.5	4	-- --	-- --	-- --	-- --	-- --	-- --	-- --	66.5 U	133 U
SP010	9/10/2014	SO	SS	7.5	8	-- --	-- --	-- --	-- --	-- --	-- --	-- --	59.7 U	119 U
SP010	9/10/2014	SO	SS	7.5	8	-- --	-- --	-- --	-- --	-- --	-- --	-- --	62.4 U	125 U

Table B-06. Concentrations of constituents in laboratory soil samples collected by the USGS MWSC.—Continued

[Concentrations are in microgram per kilogram of soil unless otherwise indicated; USGS, United States Geological Survey; MWSC, Missouri Water Science Center; SD, sediment; SUR; surficial soil; U, not detected above the detection limit; J, detected above the detection limit but below the reporting limit; SO, soil; SUB; subsurface soil; SS; split-spoon; --, no data]

Sample Name (fig. 2-04)	Date	Medium	Type	Depth top	Depth bottom	Dichloro difluoromethane		Dichloro methane		Dichlorvos		Dieldrin		Diethyl phthalate		Dimethoate		Dimethyl phthalate	
TB2-1	3/19/2014	SD	SUR	0	0.5	59.1	U	79.2	J	42	U	1	U	200	U	8.4	U	200	U
TB2-2	3/19/2014	SD	SUR	0	0.5	65	U	65	J	8.1	U	1	U	190	U	8.1	U	190	U
WP-020	3/19/2014	SD	SUR	0	0.5	76.2	U	135	J	11	U	1.3	U	260	U	11	U	260	U
TB1-2	3/19/2014	SD	SUR	0	0.5	61	U	119	J	38	U	0.94	U	180	U	7.6	U	180	U
WD-01	3/19/2014	SD	SUR	0	0.5	67.4	U	119	J	45	U	11	U	210	U	8.9	U	210	U
WD-01	3/19/2014	SD	SUR	0	0.5	71.4	U	74.9	J	46	U	11	U	220	U	9.2	U	220	U
C003	3/18/2014	SO	SUR	0	0.5	70.1	U	139	J	8.6	U	1	U	200	U	8.6	U	200	U
C017	3/18/2014	SO	SUR	0	0.5	103	U	184	J	12	U	1.2	J	300	U	12	U	300	U
C013	3/18/2014	SO	SUR	0	0.5	62.2	U	131	J	8.2	U	0.99	U	200	U	8.2	U	200	U
B007	3/18/2014	SO	SUR	0	0.5	64.9	U	110	J	9.2	U	21	--	220	U	9.2	U	220	U
A005	3/18/2014	SO	SUR	0	0.5	72.4	U	132	J	9.2	U	1.1	U	220	U	9.2	U	220	U
A002	3/18/2014	SO	SUR	0	0.5	61.6	U	109	J	8.9	U	1.1	U	210	U	8.9	U	210	U
A018A	3/18/2014	SO	SUR	0	0.5	67.1	U	126	J	45	U	11	U	2,100	U	9	U	2,100	U
A031	3/18/2014	SO	SUR	0	0.5	60.6	U	110	J	40	U	1	U	190	U	8.1	U	190	U
AM-01	3/18/2014	SO	SUR	0	0.5	74.7	U	119	J	9.7	U	1.2	U	230	U	9.7	U	230	U
A046	3/18/2014	SO	SUR	0	0.5	73.9	U	124	J	47	U	1.2	U	220	U	9.4	U	220	U
D002	3/18/2014	SO	SUR	0	0.5	66.6	U	52.6	J	8.4	U	1	U	200	U	8.4	U	200	U
D007	3/18/2014	SO	SUR	0	0.5	63.6	U	130	J	7.6	U	0.95	U	180	U	7.6	U	180	U
D011	3/18/2014	SO	SUR	0	0.5	61.9	U	128	J	97	U	9.7	U	920	U	19	U	920	U
P006	3/18/2014	SO	SUR	0	0.5	67	U	68.4	J	41	U	10	U	190	U	8.2	U	190	U
SBG-01	3/18/2014	SO	SUR	0	0.5	61.9	U	119	J	8.9	U	1.1	U	210	U	8.9	U	210	U
A033	4/23/2014	SO	SUB	2.5	3.5	73	U	146	U	8.7	U	1.1	U	210	U	8.7	U	210	U
B008A	4/22/2014	SO	SUB	1.5	1.5	60.7	U	77.1	J	--	--	--	--	--	--	--	--	--	--
C007A	4/23/2014	SO	SUB	1	3.5	64.8	U	130	U	8.1	U	1	U	190	U	8.1	U	190	U
C014	4/23/2014	SO	SUB	2.5	4	67.6	U	135	U	8.8	U	1.1	U	200	U	8.8	U	200	U
B007	4/22/2014	SO	SUB	1	2	67.9	U	136	U	8.2	U	1	U	200	U	8.2	U	200	U
A053	4/23/2014	SO	SUB	2	3	56.6	U	113	U	8.1	U	1	U	190	U	8.1	U	190	U
A028	4/22/2014	SO	SUB	9	11	71.7	U	143	U	9.3	U	1.1	U	220	U	9.3	U	220	U
A057	4/30/2014	SO	SUB	3	4	60.5	U	121	U	--	--	--	--	--	--	--	--	--	--
A058	4/30/2014	SO	SUB	4	6.5	54.4	U	109	U	7.4	U	0.91	U	180	U	7.4	U	180	U
A063	5/1/2014	SO	SUB	1.5	2.5	56.7	U	113	U	--	--	--	--	--	--	--	--	--	--
D059	5/1/2014	SO	SUB	4	5	58.3	U	117	U	7.9	U	0.98	U	190	U	7.9	U	190	U
D060	5/1/2014	SO	SUB	4	4.6	54.2	U	108	U	--	--	--	--	--	--	--	--	--	--
D030	5/1/2014	SO	SUB	1	3	54.1	U	108	U	7.2	U	0.91	U	180	U	7.2	U	180	U
D062	5/1/2014	SO	SUB	1.5	2.5	58.4	U	117	U	--	--	--	--	--	--	--	--	--	--
P010	5/5/2014	SO	SUB	3	5	56.5	U	113	U	7.9	U	0.78	J	190	U	7.9	U	190	U
SBG-01	5/5/2014	SO	SUB	0.5	2	58	U	116	U	8.2	U	1	U	190	U	8.2	U	190	U
Septic1	5/7/2014	SO	SUB	0	0	118	U	237	U	16	U	27	--	380	U	16	U	380	U
A-SAND	5/7/2014	SO	SUB	4.5	5.5	66	U	132	U	8.8	U	1.2	--	210	U	8.8	U	210	U
A018	5/5/2014	SO	SUB	5	6.5	54.2	U	108	U	7.5	U	0.94	U	180	U	7.5	U	180	U
A064	5/5/2014	SO	SUB	2	4	62.1	U	124	U	7.9	U	0.98	U	180	U	7.9	U	180	U
D063	5/5/2014	SO	SUB	1	2	66.7	U	133	U	8.1	U	1	U	200	U	8.1	U	200	U
D011	5/5/2014	SO	SUB	6	8	63.9	U	128	U	8.8	U	1.1	U	210	U	8.8	U	210	U
D019	5/5/2014	SO	SUB	3	4	66.4	U	133	U	9.2	U	1.1	U	210	U	9.2	U	210	U
D005	5/5/2014	SO	SUB	1.5	3	60.5	U	121	U	7.7	U	0.95	U	180	U	7.7	U	180	U
A064	5/5/2014	SO	SUB	7	8	70.2	U	140	U	--	--	--	--	--	--	--	--	--	--
D069	5/6/2014	SO	SUB	6.9	7.9	53.6	U	107	U	--	--	--	--	--	--	--	--	--	--
D064	5/6/2014	SO	SUB	2.5	3	60.4	U	121	U	--	--	--	--	--	--	--	--	--	--
D067	5/6/2014	SO	SUB	3	3.6	62.9	U	126	U	--	--	--	--	--	--	--	--	--	--
D068	5/6/2014	SO	SUB	1.5	3	56.9	U	114	U	--	--	--	--	--	--	--	--	--	--
D065	5/6/2014	SO	SUB	3.5	4	67.2	U	134	U	--	--	--	--	--	--	--	--	--	--
D066	5/6/2014	SO	SUB	7.1	7.7	68.9	U	138	U	--	--	--	--	--	--	--	--	--	--
D066	5/6/2014	SO	SUB	8.2	8.9	67.5	U	135	U	--	--	--	--	--	--	--	--	--	--
SP006	8/18/2014	SO	SS	4.5	5.5	61.3	U	154	J	--	--	--	--	--	--	--	--	--	--
SP010	9/10/2014	SO	SS	3.5	4	66.5	U	158	J	--	--	--	--	--	--	--	--	--	--
SP010	9/10/2014	SO	SS	7.5	8	59.7	U	161	J	--	--	--	--	--	--	--	--	--	--
SP010	9/10/2014	SO	SS	7.5	8	62.4	U	154	J	--	--	--	--	--	--	--	--	--	--

Table B-06. Concentrations of constituents in laboratory soil samples collected by the USGS MWSC.—Continued

[Concentrations are in microgram per kilogram of soil unless otherwise indicated; USGS, United States Geological Survey; MWSC, Missouri Water Science Center; SD, sediment; SUR; surficial soil; U, not detected above the detection limit; J, detected above the detection limit but below the reporting limit; SO, soil; SUB; subsurface soil; SS; split-spoon; --, no data]

Sample Name (fig. 2-04)	Date	Medium	Type	Depth top	Depth bottom	Di (n-butyl) phthalate	Di (n-octyl) phthalate	Disulfoton	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin ketone	EPN
TB2-1	3/19/2014	SD	SUR	0	0.5	200 U	200 U	8.4 U	1 U	1 U	1 U	1 U	8.4 U
TB2-2	3/19/2014	SD	SUR	0	0.5	190 U	190 U	8.1 U	1 U	1 U	1 U	1 U	8.1 U
WP-020	3/19/2014	SD	SUR	0	0.5	260 U	260 U	11 U	1.3 U	1.3 U	1.3 U	1.3 U	11 U
TB1-2	3/19/2014	SD	SUR	0	0.5	180 U	180 U	7.6 U	0.94 U	0.94 U	0.94 U	0.94 U	7.6 U
WD-01	3/19/2014	SD	SUR	0	0.5	210 U	210 U	8.9 U	11 U	11 U	11 U	11 U	8.9 U
WD-01	3/19/2014	SD	SUR	0	0.5	220 U	220 R	9.2 U	11 U	11 U	11 U	11 U	9.2 U
C003	3/18/2014	SO	SUR	0	0.5	200 U	200 U	8.6 U	1 U	1 U	1 U	1 U	8.6 U
C017	3/18/2014	SO	SUR	0	0.5	300 U	300 U	12 U	1.6 U	1.6 U	1.6 U	1.6 U	12 U
C013	3/18/2014	SO	SUR	0	0.5	200 U	200 U	8.2 U	0.99 U	0.99 U	0.99 U	0.99 U	8.2 U
B007	3/18/2014	SO	SUR	0	0.5	220 U	220 U	9.2 U	1.1 U	1.1 U	1.1 U	1.1 U	9.2 U
A005	3/18/2014	SO	SUR	0	0.5	220 U	220 U	9.2 U	1.1 U	1.1 U	1.1 U	1.1 U	9.2 U
A002	3/18/2014	SO	SUR	0	0.5	42 J	210 U	8.9 U	1.1 U	1.1 U	1.1 U	1.1 U	8.9 U
A018A	3/18/2014	SO	SUR	0	0.5	2,100 U	2,100 U	9 U	11 U	11 U	11 U	11 U	9 U
A031	3/18/2014	SO	SUR	0	0.5	190 U	190 U	8.1 U	1 U	1 U	1 U	1 U	8.1 U
AM-01	3/18/2014	SO	SUR	0	0.5	230 U	230 U	9.7 U	1.2 U	1.2 U	1.2 U	1.2 U	9.7 U
A046	3/18/2014	SO	SUR	0	0.5	220 U	220 U	9.4 U	1.2 U	1.2 U	1.2 U	1.2 U	9.4 U
D002	3/18/2014	SO	SUR	0	0.5	200 U	200 U	8.4 U	1 U	1 U	1 U	1 U	8.4 U
D007	3/18/2014	SO	SUR	0	0.5	180 U	180 U	7.6 U	0.95 U	0.95 U	0.95 U	0.95 U	7.6 U
D011	3/18/2014	SO	SUR	0	0.5	920 U	920 U	19 U	9.7 U	9.7 U	9.7 U	9.7 U	19 U
P006	3/18/2014	SO	SUR	0	0.5	36 J	190 U	8.2 U	10 U	10 U	10 U	10 U	8.2 U
SBG-01	3/18/2014	SO	SUR	0	0.5	210 U	210 U	8.9 U	1.1 U	1.1 U	1.1 U	1.1 U	8.9 U
A033	4/23/2014	SO	SUB	2.5	3.5	210 U	210 U	8.7 U	1.1 U	1.1 U	1.1 U	1.1 U	8.7 U
B008A	4/22/2014	SO	SUB	1.5	1.5	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
C007A	4/23/2014	SO	SUB	1	3.5	190 U	190 U	8.1 U	1 U	1 U	1 U	1 U	8.1 U
C014	4/23/2014	SO	SUB	2.5	4	200 U	200 U	8.8 U	1.1 U	1.1 U	1.1 U	1.1 U	8.8 U
B007	4/22/2014	SO	SUB	1	2	200 U	200 U	8.2 U	1 U	1 U	1 U	1 U	8.2 U
A053	4/23/2014	SO	SUB	2	3	190 U	190 U	8.1 U	1 U	1 U	1 U	1 U	8.1 U
A028	4/22/2014	SO	SUB	9	11	220 U	220 U	9.3 U	1.1 U	1.1 U	1.1 U	1.1 U	9.3 U
A057	4/30/2014	SO	SUB	3	4	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
A058	4/30/2014	SO	SUB	4	6.5	180 U	180 U	7.4 U	0.91 U	0.91 U	0.91 U	0.91 U	7.4 U
A063	5/1/2014	SO	SUB	1.5	2.5	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D059	5/1/2014	SO	SUB	4	5	190 U	190 U	7.9 U	0.98 U	0.98 U	0.98 U	0.98 U	7.9 U
D060	5/1/2014	SO	SUB	4	4.6	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D030	5/1/2014	SO	SUB	1	3	180 U	180 U	7.2 U	0.91 U	0.91 U	0.91 U	0.91 U	7.2 U
D062	5/1/2014	SO	SUB	1.5	2.5	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
P010	5/5/2014	SO	SUB	3	5	190 U	190 U	7.9 U	0.99 U	0.99 U	0.99 U	0.99 U	7.9 U
SBG-01	5/5/2014	SO	SUB	0.5	2	190 U	190 U	8.2 U	1 U	1 U	1 U	1 U	8.2 U
Septic1	5/7/2014	SO	SUB	0	0	380 U	380 U	16 U	2 U	1.4 J	2 U	2 U	16 U
A-SAND	5/7/2014	SO	SUB	4.5	5.5	210 U	210 U	8.8 U	1.1 U	1.1 U	1.1 U	1.1 U	8.8 U
A018	5/5/2014	SO	SUB	5	6.5	180 U	180 U	7.5 U	0.94 U	0.94 U	0.94 U	0.94 U	7.5 U
A064	5/5/2014	SO	SUB	2	4	180 U	180 U	7.9 U	0.98 U	0.98 U	0.98 U	0.98 U	7.9 U
D063	5/5/2014	SO	SUB	1	2	200 U	200 U	8.1 U	1 U	1 U	1 U	1 U	8.1 U
D011	5/5/2014	SO	SUB	6	8	210 U	210 U	8.8 U	1.1 U	1.1 U	1.1 U	1.1 U	8.8 U
D019	5/5/2014	SO	SUB	3	4	210 U	210 U	9.2 U	1.1 U	1.1 U	1.1 U	1.1 U	9.2 U
D005	5/5/2014	SO	SUB	1.5	3	180 U	180 U	7.7 U	0.95 U	0.95 U	0.95 U	0.95 U	7.7 U
A064	5/5/2014	SO	SUB	7	8	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D069	5/6/2014	SO	SUB	6.9	7.9	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D064	5/6/2014	SO	SUB	2.5	3	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D067	5/6/2014	SO	SUB	3	3.6	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D068	5/6/2014	SO	SUB	1.5	3	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D065	5/6/2014	SO	SUB	3.5	4	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D066	5/6/2014	SO	SUB	7.1	7.7	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D066	5/6/2014	SO	SUB	8.2	8.9	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
SP006	8/18/2014	SO	SS	4.5	5.5	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
SP010	9/10/2014	SO	SS	3.5	4	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
SP010	9/10/2014	SO	SS	7.5	8	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
SP010	9/10/2014	SO	SS	7.5	8	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --

Table B-06. Concentrations of constituents in laboratory soil samples collected by the USGS MWSC.—Continued

[Concentrations are in microgram per kilogram of soil unless otherwise indicated; USGS, United States Geological Survey; MWSC, Missouri Water Science Center; SD, sediment; SUR; surficial soil; U, not detected above the detection limit; J, detected above the detection limit but below the reporting limit; SO, soil; SUB; subsurface soil; SS; split-spoon; --, no data]

Sample Name (fig. 2-04)	Date	Medium	Type	Depth top	Depth bottom	Ethoprop	Ethyl methyl ketone	Ethylbenzene	Fensulfothion	Fenthion	Fluoranthene	gamma-Chlordane
TB2-1	3/19/2014	SD	SUR	0	0.5	8.4 U	591 U	59.1 U	42 U	8.4 U	200 U	1 U
TB2-2	3/19/2014	SD	SUR	0	0.5	8.1 U	650 U	65 U	8.1 U	8.1 U	190 U	1 U
WP-020	3/19/2014	SD	SUR	0	0.5	11 U	762 U	76.2 U	11 U	11 U	260 U	1.3 U
TB1-2	3/19/2014	SD	SUR	0	0.5	7.6 U	610 U	61 U	38 U	7.6 U	180 U	0.94 U
WD-01	3/19/2014	SD	SUR	0	0.5	8.9 U	674 U	67.4 U	45 U	8.9 U	300 J	5.7 J
WD-01	3/19/2014	SD	SUR	0	0.5	9.2 U	714 U	71.4 U	46 U	9.2 U	150 J	6.3 J
C003	3/18/2014	SO	SUR	0	0.5	8.6 U	62.4 J	70.1 U	8.6 U	8.6 U	200 U	1 U
C017	3/18/2014	SO	SUR	0	0.5	12 U	118 J	103 U	12 U	12 U	300 U	1.6 U
C013	3/18/2014	SO	SUR	0	0.5	8.2 U	65.3 J	62.2 U	8.2 U	8.2 U	200 U	0.99 U
B007	3/18/2014	SO	SUR	0	0.5	9.2 U	649 U	64.9 U	9.2 U	9.2 U	220 U	20 --
A005	3/18/2014	SO	SUR	0	0.5	9.2 U	724 U	72.4 U	9.2 U	9.2 U	220 U	1.1 U
A002	3/18/2014	SO	SUR	0	0.5	8.9 U	616 U	61.6 U	8.9 U	8.9 U	210 U	1.1 U
A018A	3/18/2014	SO	SUR	0	0.5	9 U	71.2 J	67.1 U	45 U	9 U	18,000 --	11 U
A031	3/18/2014	SO	SUR	0	0.5	8.1 U	60.6 J	60.6 U	40 U	8.1 U	190 U	1 U
AM-01	3/18/2014	SO	SUR	0	0.5	9.7 U	92.6 J	74.7 U	9.7 U	9.7 U	230 U	1.2 U
A046	3/18/2014	SO	SUR	0	0.5	9.4 U	739 U	73.9 U	47 U	9.4 U	220 U	1.2 U
D002	3/18/2014	SO	SUR	0	0.5	8.4 U	666 U	66.6 U	8.4 U	8.4 U	200 U	1 U
D007	3/18/2014	SO	SUR	0	0.5	7.6 U	636 U	63.6 U	7.6 U	7.6 U	27 J	0.95 U
D011	3/18/2014	SO	SUR	0	0.5	19 U	91.7 J	61.9 U	97 U	19 U	920 U	4.8 J
P006	3/18/2014	SO	SUR	0	0.5	8.2 U	670 U	67 U	41 U	8.2 U	61 J	10 U
SBG-01	3/18/2014	SO	SUR	0	0.5	8.9 U	619 U	61.9 U	8.9 U	8.9 U	210 U	1.1 U
A033	4/23/2014	SO	SUB	2.5	3.5	8.7 U	729 U	73 U	8.7 U	8.7 U	210 U	1.1 U
B008A	4/22/2014	SO	SUB	1.5	1.5	-- --	607 U	60.7 U	-- --	-- --	-- --	-- --
C007A	4/23/2014	SO	SUB	1	3.5	8.1 U	648 U	64.8 U	8.1 U	8.1 U	190 U	1 U
C014	4/23/2014	SO	SUB	2.5	4	8.8 U	676 U	67.6 U	8.8 U	8.8 U	200 U	1.1 U
B007	4/22/2014	SO	SUB	1	2	8.2 U	679 U	67.9 U	8.2 U	8.2 U	200 U	1 U
A053	4/23/2014	SO	SUB	2	3	8.1 U	566 U	56.6 U	8.1 U	8.1 U	190 U	1 U
A028	4/22/2014	SO	SUB	9	11	9.3 U	717 U	71.7 U	9.3 U	9.3 U	220 U	1.1 U
A057	4/30/2014	SO	SUB	3	4	-- --	605 U	60.5 U	-- --	-- --	-- --	-- --
A058	4/30/2014	SO	SUB	4	6.5	7.4 U	544 U	54.4 U	7.4 U	7.4 U	180 U	0.91 U
A063	5/1/2014	SO	SUB	1.5	2.5	-- --	38.6 J	56.7 U	-- --	-- --	-- --	-- --
D059	5/1/2014	SO	SUB	4	5	7.9 U	44.9 J	58.3 U	7.9 U	7.9 U	190 U	0.98 U
D060	5/1/2014	SO	SUB	4	4.6	-- --	44.5 J	54.2 U	-- --	-- --	-- --	-- --
D030	5/1/2014	SO	SUB	1	3	7.2 U	43.2 J	54.1 U	7.2 U	7.2 U	180 U	0.91 U
D062	5/1/2014	SO	SUB	1.5	2.5	-- --	584 U	58.4 U	-- --	-- --	-- --	-- --
P010	5/5/2014	SO	SUB	3	5	7.9 U	565 U	56.5 U	7.9 U	7.9 U	190 U	0.99 U
SBG-01	5/5/2014	SO	SUB	0.5	2	8.2 U	580 U	58 U	8.2 U	8.2 U	190 U	1 U
Septic1	5/7/2014	SO	SUB	0	0	16 U	1180 U	118 U	16 U	16 U	46 J	14 --
A-SAND	5/7/2014	SO	SUB	4.5	5.5	8.8 U	660 U	66 U	8.8 U	8.8 U	210 U	1.1 U
A018	5/5/2014	SO	SUB	5	6.5	7.5 U	542 U	54.2 U	7.5 U	7.5 U	180 U	0.94 U
A064	5/5/2014	SO	SUB	2	4	7.9 U	621 U	62.1 U	7.9 U	7.9 U	180 U	0.98 U
D063	5/5/2014	SO	SUB	1	2	8.1 U	667 U	66.7 U	8.1 U	8.1 U	200 U	1 U
D011	5/5/2014	SO	SUB	6	8	8.8 U	639 U	63.9 U	8.8 U	8.8 U	210 U	1.1 U
D019	5/5/2014	SO	SUB	3	4	9.2 U	664 U	66.4 U	9.2 U	9.2 U	210 U	1.1 U
D005	5/5/2014	SO	SUB	1.5	3	7.7 U	605 U	60.5 U	7.7 U	7.7 U	180 U	0.95 U
A064	5/5/2014	SO	SUB	7	8	-- --	702 U	70.2 U	-- --	-- --	-- --	-- --
D069	5/6/2014	SO	SUB	6.9	7.9	-- --	536 U	53.6 U	-- --	-- --	-- --	-- --
D064	5/6/2014	SO	SUB	2.5	3	-- --	604 U	60.4 U	-- --	-- --	-- --	-- --
D067	5/6/2014	SO	SUB	3	3.6	-- --	629 U	62.9 U	-- --	-- --	-- --	-- --
D068	5/6/2014	SO	SUB	1.5	3	-- --	569 U	56.9 U	-- --	-- --	-- --	-- --
D065	5/6/2014	SO	SUB	3.5	4	-- --	672 U	67.2 U	-- --	-- --	-- --	-- --
D066	5/6/2014	SO	SUB	7.1	7.7	-- --	689 U	68.9 U	-- --	-- --	-- --	-- --
D066	5/6/2014	SO	SUB	8.2	8.9	-- --	675 U	67.5 U	-- --	-- --	-- --	-- --
SP006	8/18/2014	SO	SS	4.5	5.5	-- --	613 U	61.3 U	-- --	-- --	-- --	-- --
SP010	9/10/2014	SO	SS	3.5	4	-- --	665 U	66.5 U	-- --	-- --	-- --	-- --
SP010	9/10/2014	SO	SS	7.5	8	-- --	597 U	59.7 U	-- --	-- --	-- --	-- --
SP010	9/10/2014	SO	SS	7.5	8	-- --	624 U	62.4 U	-- --	-- --	-- --	-- --

Table B-06. Concentrations of constituents in laboratory soil samples collected by the USGS MWSC.—Continued

[Concentrations are in microgram per kilogram of soil unless otherwise indicated; USGS, United States Geological Survey; MWSC, Missouri Water Science Center; SD, sediment; SUR; surficial soil; U, not detected above the detection limit; J, detected above the detection limit but below the reporting limit; SO, soil; SUB; subsurface soil; SS; split-spoon; --, no data]

Sample Name (fig. 2-04)	Date	Medium	Type	Depth top	Depth bottom	Heptachlor	Heptachlor epoxide	Hexachloro benzene	Hexachloro butadiene	Hexachlorocyclo pentadiene	Hexachloroethan e
TB2-1	3/19/2014	SD	SUR	0	0.5	1 U	1 U	200 U	64 U	200 U	200 U
TB2-2	3/19/2014	SD	SUR	0	0.5	1 U	1 U	190 U	65 U	190 U	190 U
WP-020	3/19/2014	SD	SUR	0	0.5	1.3 U	1.3 U	260 U	81 U	260 U	260 U
TB1-2	3/19/2014	SD	SUR	0	0.5	0.94 U	0.94 U	180 U	61 U	180 U	180 U
WD-01	3/19/2014	SD	SUR	0	0.5	11 U	11 U	210 U	67.4 U	210 U	210 U
WD-01	3/19/2014	SD	SUR	0	0.5	11 U	11 U	220 U	71.4 U	220 U	220 U
C003	3/18/2014	SO	SUR	0	0.5	1 U	1 U	200 U	70.1 U	200 U	200 U
C017	3/18/2014	SO	SUR	0	0.5	1.6 U	1.6 U	300 U	103 U	300 U	300 U
C013	3/18/2014	SO	SUR	0	0.5	0.99 U	0.99 U	200 U	62.2 U	200 U	200 U
B007	3/18/2014	SO	SUR	0	0.5	1.1 U	3.6 J	220 U	69 U	220 U	220 U
A005	3/18/2014	SO	SUR	0	0.5	1.1 U	1.1 U	220 U	72.4 U	220 U	220 U
A002	3/18/2014	SO	SUR	0	0.5	1.1 U	1.1 U	210 U	66 U	210 U	210 U
A018A	3/18/2014	SO	SUR	0	0.5	11 U	11 U	2,100 U	670 U	2,100 U	2,100 U
A031	3/18/2014	SO	SUR	0	0.5	1 U	1 U	190 U	60.6 U	190 U	190 U
AM-01	3/18/2014	SO	SUR	0	0.5	1.2 U	1.2 U	230 U	74.7 U	230 U	230 U
A046	3/18/2014	SO	SUR	0	0.5	1.2 U	1.2 U	220 U	73.9 U	220 U	220 U
D002	3/18/2014	SO	SUR	0	0.5	1 U	1 U	200 U	66.6 U	200 U	200 U
D007	3/18/2014	SO	SUR	0	0.5	0.95 U	0.95 U	180 U	63.6 U	180 U	180 U
D011	3/18/2014	SO	SUR	0	0.5	9.7 U	9.7 U	920 U	290 U	920 U	920 U
P006	3/18/2014	SO	SUR	0	0.5	10 U	10 U	190 U	67 U	190 U	190 U
SBG-01	3/18/2014	SO	SUR	0	0.5	1.1 U	1.1 U	210 U	66 U	210 U	210 U
A033	4/23/2014	SO	SUB	2.5	3.5	1.1 U	1.1 U	210 U	73 U	210 U	210 U
B008A	4/22/2014	SO	SUB	1.5	1.5	-- --	-- --	-- --	60.7 U	-- --	-- --
C007A	4/23/2014	SO	SUB	1	3.5	1 U	1 U	190 U	64.8 U	190 U	190 U
C014	4/23/2014	SO	SUB	2.5	4	1.1 U	1.1 U	200 U	67.6 U	200 U	200 U
B007	4/22/2014	SO	SUB	1	2	1 U	1 U	200 U	67.9 U	200 U	200 U
A053	4/23/2014	SO	SUB	2	3	1 U	1 U	190 U	60 U	190 U	190 U
A028	4/22/2014	SO	SUB	9	11	1.1 U	1.1 U	220 U	71.7 U	220 U	220 U
A057	4/30/2014	SO	SUB	3	4	-- --	-- --	-- --	60.5 U	-- --	-- --
A058	4/30/2014	SO	SUB	4	6.5	0.91 U	0.91 U	180 U	55 U	180 U	180 U
A063	5/1/2014	SO	SUB	1.5	2.5	-- --	-- --	-- --	56.7 U	-- --	-- --
D059	5/1/2014	SO	SUB	4	5	0.98 U	0.98 U	190 U	59 U	190 U	190 U
D060	5/1/2014	SO	SUB	4	4.6	-- --	-- --	-- --	54.2 U	-- --	-- --
D030	5/1/2014	SO	SUB	1	3	0.91 U	0.91 U	180 U	55 U	180 U	180 U
D062	5/1/2014	SO	SUB	1.5	2.5	-- --	-- --	-- --	58.4 U	-- --	-- --
P010	5/5/2014	SO	SUB	3	5	0.99 U	0.99 U	190 U	59 U	190 U	190 U
SBG-01	5/5/2014	SO	SUB	0.5	2	1 U	1 U	190 U	60 U	190 U	190 U
Septic1	5/7/2014	SO	SUB	0	0	2 U	2 U	380 U	120 U	380 U	380 U
A-SAND	5/7/2014	SO	SUB	4.5	5.5	1.1 U	1.1 U	210 U	66 U	210 U	210 U
A018	5/5/2014	SO	SUB	5	6.5	0.94 U	0.94 U	180 U	56 U	180 U	180 U
A064	5/5/2014	SO	SUB	2	4	0.98 U	0.98 U	180 U	62.1 U	180 U	180 U
D063	5/5/2014	SO	SUB	1	2	1 U	1 U	200 U	66.7 U	200 U	200 U
D011	5/5/2014	SO	SUB	6	8	1.1 U	1.1 U	210 U	65 U	210 U	210 U
D019	5/5/2014	SO	SUB	3	4	1.1 U	1.1 U	210 U	67 U	210 U	210 U
D005	5/5/2014	SO	SUB	1.5	3	0.95 U	0.95 U	180 U	60.5 U	180 U	180 U
A064	5/5/2014	SO	SUB	7	8	-- --	-- --	-- --	70.2 U	-- --	-- --
D069	5/6/2014	SO	SUB	6.9	7.9	-- --	-- --	-- --	53.6 U	-- --	-- --
D064	5/6/2014	SO	SUB	2.5	3	-- --	-- --	-- --	60.4 U	-- --	-- --
D067	5/6/2014	SO	SUB	3	3.6	-- --	-- --	-- --	62.9 U	-- --	-- --
D068	5/6/2014	SO	SUB	1.5	3	-- --	-- --	-- --	56.9 U	-- --	-- --
D065	5/6/2014	SO	SUB	3.5	4	-- --	-- --	-- --	67.2 U	-- --	-- --
D066	5/6/2014	SO	SUB	7.1	7.7	-- --	-- --	-- --	68.9 U	-- --	-- --
D066	5/6/2014	SO	SUB	8.2	8.9	-- --	-- --	-- --	67.5 U	-- --	-- --
SP006	8/18/2014	SO	SS	4.5	5.5	-- --	-- --	-- --	61.3 U	-- --	-- --
SP010	9/10/2014	SO	SS	3.5	4	-- --	-- --	-- --	66.5 U	-- --	-- --
SP010	9/10/2014	SO	SS	7.5	8	-- --	-- --	-- --	59.7 U	-- --	-- --
SP010	9/10/2014	SO	SS	7.5	8	-- --	-- --	-- --	62.4 U	-- --	-- --

Table B-06. Concentrations of constituents in laboratory soil samples collected by the USGS MWSC.—Continued

[Concentrations are in microgram per kilogram of soil unless otherwise indicated; USGS, United States Geological Survey; MWSC, Missouri Water Science Center; mg/Kg, milligrams per kilogram of soil; SD, sediment; SUR; surficial soil; U, not detected above the detection limit; J, detected above the detection limit but below the reporting limit; SO, soil; SUB; subsurface soil; SS; split-spoon; --, no data]

Sample Name (fig. 2-04)	Date	Medium	Type	Depth top	Depth bottom	Indeno [1,2,3-cd] pyrene	Isobutyl methyl ketone	Isophorone	Isopropyl benzene	Lead, in mg/Kg	Lindane	Malathion
TB2-1	3/19/2014	SD	SUR	0	0.5	200 U	295 U	200 U	59.1 U	13,000 J	1 U	8.4 U
TB2-2	3/19/2014	SD	SUR	0	0.5	190 U	325 U	190 U	65 U	9,400 J	1 U	8.1 U
WP-020	3/19/2014	SD	SUR	0	0.5	260 U	381 U	260 U	76.2 U	14,000 J	1.3 U	11 U
TB1-2	3/19/2014	SD	SUR	0	0.5	180 U	305 U	180 U	61 U	33,000 J	0.94 U	7.6 U
WD-01	3/19/2014	SD	SUR	0	0.5	120 J	337 U	210 U	67.4 U	47,000 J	11 U	8.9 U
WD-01	3/19/2014	SD	SUR	0	0.5	88 J	357 U	220 U	71.4 U	49,000 J	11 U	9.2 U
C003	3/18/2014	SO	SUR	0	0.5	200 U	351 U	200 U	70.1 U	12,000 J	1 U	8.6 U
C017	3/18/2014	SO	SUR	0	0.5	300 U	515 U	300 U	103 U	27,000 J	1.6 U	12 U
C013	3/18/2014	SO	SUR	0	0.5	200 U	311 U	200 U	62.2 U	24,000 J	0.99 U	8.2 U
B007	3/18/2014	SO	SUR	0	0.5	220 U	325 U	220 U	64.9 U	15,000 J	1.1 U	9.2 U
A005	3/18/2014	SO	SUR	0	0.5	220 U	362 U	220 U	72.4 U	28,000 J	1.1 U	9.2 U
A002	3/18/2014	SO	SUR	0	0.5	210 U	308 U	210 U	61.6 U	54,000 J	1.1 U	8.9 U
A018A	3/18/2014	SO	SUR	0	0.5	1,600 J	336 U	2,100 U	67.1 U	1,000,000 J	11 U	9 U
A031	3/18/2014	SO	SUR	0	0.5	11 J	303 U	190 U	60.6 U	17,000 J	1 U	8.1 U
AM-01	3/18/2014	SO	SUR	0	0.5	230 U	373 U	230 U	74.7 U	150,000 J	1.2 U	9.7 U
A046	3/18/2014	SO	SUR	0	0.5	220 U	370 U	220 U	73.9 U	32,000 J	1.2 U	9.4 U
D002	3/18/2014	SO	SUR	0	0.5	200 U	333 U	200 U	66.6 U	20,000 J	1 U	8.4 U
D007	3/18/2014	SO	SUR	0	0.5	10 J	318 U	180 U	63.6 U	24,000 J	0.95 U	7.6 U
D011	3/18/2014	SO	SUR	0	0.5	920 U	310 U	920 U	61.9 U	53,000 J	9.7 U	19 U
P006	3/18/2014	SO	SUR	0	0.5	200 --	335 U	190 U	67 U	17,000 J	10 U	8.2 U
SBG-01	3/18/2014	SO	SUR	0	0.5	210 U	309 U	210 U	61.9 U	17,000 J	1.1 U	8.9 U
A033	4/23/2014	SO	SUB	2.5	3.5	210 U	365 U	210 U	73 U	15 --	1.1 U	8.7 U
B008A	4/22/2014	SO	SUB	1.5	1.5	-- --	304 U	-- --	60.7 U	-- --	-- --	-- --
C007A	4/23/2014	SO	SUB	1	3.5	190 U	324 U	190 U	64.8 U	11 --	1 U	8.1 U
C014	4/23/2014	SO	SUB	2.5	4	200 U	338 U	200 U	67.6 U	13 --	1.1 U	8.8 U
B007	4/22/2014	SO	SUB	1	2	200 U	339 U	200 U	67.9 U	14 --	1 U	8.2 U
A053	4/23/2014	SO	SUB	2	3	12 J	283 U	190 U	56.6 U	70 --	1 U	8.1 U
A028	4/22/2014	SO	SUB	9	11	220 U	358 U	220 U	71.7 U	17 --	1.1 U	9.3 U
A057	4/30/2014	SO	SUB	3	4	-- --	302 U	-- --	60.5 U	-- --	-- --	-- --
A058	4/30/2014	SO	SUB	4	6.5	180 U	272 U	180 U	54.4 U	3.2 J	0.91 U	7.4 U
A063	5/1/2014	SO	SUB	1.5	2.5	-- --	284 U	-- --	56.7 U	-- --	-- --	-- --
D059	5/1/2014	SO	SUB	4	5	190 U	292 U	190 U	58.3 U	12 --	0.98 U	7.9 U
D060	5/1/2014	SO	SUB	4	4.6	-- --	271 U	-- --	54.2 U	-- --	-- --	-- --
D030	5/1/2014	SO	SUB	1	3	180 U	270 U	180 U	54.1 U	12 --	0.91 U	7.2 U
D062	5/1/2014	SO	SUB	1.5	2.5	-- --	292 U	-- --	58.4 U	-- --	-- --	-- --
P010	5/5/2014	SO	SUB	3	5	190 U	282 U	190 U	56.5 U	68 --	0.99 U	7.9 U
SBG-01	5/5/2014	SO	SUB	0.5	2	190 U	290 U	190 U	58 U	12 --	1 U	8.2 U
Septic1	5/7/2014	SO	SUB	0	0	380 U	592 U	380 U	118 U	92 --	2 U	16 U
A-SAND	5/7/2014	SO	SUB	4.5	5.5	210 U	330 U	210 U	66 U	20 --	1.1 U	8.8 U
A018	5/5/2014	SO	SUB	5	6.5	180 U	271 U	180 U	14.1 J	8.9 --	0.94 U	7.5 U
A064	5/5/2014	SO	SUB	2	4	180 U	311 U	180 U	62.1 U	16 --	0.98 U	7.9 U
D063	5/5/2014	SO	SUB	1	2	26 J	334 U	200 U	66.7 U	13 --	1 U	8.1 U
D011	5/5/2014	SO	SUB	6	8	210 U	319 U	210 U	63.9 U	9.8 J	1.1 U	8.8 U
D019	5/5/2014	SO	SUB	3	4	210 U	332 U	210 U	66.4 U	9.1 --	1.1 U	9.2 U
D005	5/5/2014	SO	SUB	1.5	3	180 U	302 U	180 U	60.5 U	12 --	0.95 U	7.7 U
A064	5/5/2014	SO	SUB	7	8	-- --	351 U	-- --	70.2 U	-- --	-- --	-- --
D069	5/6/2014	SO	SUB	6.9	7.9	-- --	268 U	-- --	53.6 U	-- --	-- --	-- --
D064	5/6/2014	SO	SUB	2.5	3	-- --	302 U	-- --	60.4 U	-- --	-- --	-- --
D067	5/6/2014	SO	SUB	3	3.6	-- --	314 U	-- --	62.9 U	-- --	-- --	-- --
D068	5/6/2014	SO	SUB	1.5	3	-- --	284 U	-- --	56.9 U	-- --	-- --	-- --
D065	5/6/2014	SO	SUB	3.5	4	-- --	336 U	-- --	67.2 U	-- --	-- --	-- --
D066	5/6/2014	SO	SUB	7.1	7.7	-- --	345 U	-- --	68.9 U	-- --	-- --	-- --
D066	5/6/2014	SO	SUB	8.2	8.9	-- --	337 U	-- --	67.5 U	-- --	-- --	-- --
SP006	8/18/2014	SO	SS	4.5	5.5	-- --	306 U	-- --	61.3 U	-- --	-- --	-- --
SP010	9/10/2014	SO	SS	3.5	4	-- --	333 U	-- --	66.5 U	-- --	-- --	-- --
SP010	9/10/2014	SO	SS	7.5	8	-- --	299 U	-- --	59.7 U	-- --	-- --	-- --
SP010	9/10/2014	SO	SS	7.5	8	-- --	312 U	-- --	62.4 U	-- --	-- --	-- --

Table B-06. Concentrations of constituents in laboratory soil samples collected by the USGS MWSC.—Continued

[Concentrations are in microgram per kilogram of soil unless otherwise indicated; USGS, United States Geological Survey; MWSC, Missouri Water Science Center; mg/Kg, milligrams per kilogram of soil; SD, sediment; SUR; surficial soil; U, not detected above the detection limit; J, detected above the detection limit but below the reporting limit; SO, soil; SUB; subsurface soil; SS; split-spoon; --, no data]

Sample Name (fig. 2-04)	Date	Medium	Type	Depth top	Depth bottom	Mercury, in mg/Kg	Merphos	Methyl parathion	Methyl tert butyl ether	Mevinphos	Moisture content	Mono crotophos	m-Xylene plus p-xylene
TB2-1	3/19/2014	SD	SUR	0	0.5	11 J	8.4 U	8.4 U	118 U	8.4 U	22 --	8.4 U	118 U
TB2-2	3/19/2014	SD	SUR	0	0.5	5.7 J	8.1 U	8.1 U	130 U	8.1 U	18 --	8.1 U	130 U
WP-020	3/19/2014	SD	SUR	0	0.5	60 J	11 U	11 U	152 U	11 U	39 --	11 U	152 U
TB1-2	3/19/2014	SD	SUR	0	0.5	40 J	7.6 U	7.6 U	122 U	7.6 U	14 --	7.6 U	122 U
WD-01	3/19/2014	SD	SUR	0	0.5	130 J	8.9 U	8.9 U	135 U	8.9 U	26 --	8.9 U	135 U
WD-01	3/19/2014	SD	SUR	0	0.5	130 J	9.2 U	9.2 U	143 U	9.2 U	28 --	9.2 U	143 U
C003	3/18/2014	SO	SUR	0	0.5	40 J	8.6 U	8.6 U	140 U	8.6 U	23 --	8.6 U	140 U
C017	3/18/2014	SO	SUR	0	0.5	66 J	12 U	12 U	206 U	12 U	47 --	12 U	206 U
C013	3/18/2014	SO	SUR	0	0.5	55 J	8.2 U	8.2 U	124 U	8.2 U	19 --	8.2 U	124 U
B007	3/18/2014	SO	SUR	0	0.5	30 J	9.2 U	9.2 U	130 U	9.2 U	28 --	9.2 U	130 U
A005	3/18/2014	SO	SUR	0	0.5	59 J	9.2 U	9.2 U	145 U	9.2 U	28 --	9.2 U	145 U
A002	3/18/2014	SO	SUR	0	0.5	50 J	8.9 U	8.9 U	123 U	8.9 U	25 --	8.9 U	123 U
A018A	3/18/2014	SO	SUR	0	0.5	73 J	9 U	9 U	134 U	9 U	26 J	9 U	134 U
A031	3/18/2014	SO	SUR	0	0.5	39 J	8.1 U	8.1 U	121 U	8.1 U	18 --	8.1 U	121 U
AM-01	3/18/2014	SO	SUR	0	0.5	67 J	9.7 U	9.7 U	149 U	9.7 U	32 --	9.7 U	149 U
A046	3/18/2014	SO	SUR	0	0.5	51 J	9.4 U	9.4 U	148 U	9.4 U	29 --	9.4 U	148 U
D002	3/18/2014	SO	SUR	0	0.5	39 J	8.4 U	8.4 U	133 U	8.4 U	21 --	8.4 U	133 U
D007	3/18/2014	SO	SUR	0	0.5	36 J	7.6 U	7.6 U	127 U	7.6 U	13 --	7.6 U	127 U
D011	3/18/2014	SO	SUR	0	0.5	25 J	19 U	19 U	124 U	19 U	16 --	19 U	124 U
P006	3/18/2014	SO	SUR	0	0.5	50 J	8.2 U	8.2 U	134 U	8.2 U	19 --	8.2 U	134 U
SBG-01	3/18/2014	SO	SUR	0	0.5	34 J	8.9 U	8.9 U	124 U	8.9 U	25 --	8.9 U	124 U
A033	4/23/2014	SO	SUB	2.5	3.5	0.0035 J	8.7 U	8.7 U	146 U	8.7 U	25 --	8.7 U	146 U
B008A	4/22/2014	SO	SUB	1.5	1.5	-- --	-- --	-- --	121 U	-- --	20 --	-- --	121 U
C007A	4/23/2014	SO	SUB	1	3.5	0.042 --	8.1 U	8.1 U	130 U	8.1 U	18 --	8.1 U	130 U
C014	4/23/2014	SO	SUB	2.5	4	0.068 --	8.8 U	8.8 U	135 U	8.8 U	24 --	8.8 U	135 U
B007	4/22/2014	SO	SUB	1	2	0.052 --	8.2 U	8.2 U	136 U	8.2 U	21 --	8.2 U	136 U
A053	4/23/2014	SO	SUB	2	3	0.038 --	8.1 U	8.1 U	113 U	8.1 U	18 --	8.1 U	113 U
A028	4/22/2014	SO	SUB	9	11	0.078 --	9.3 U	9.3 U	143 U	9.3 U	29 --	9.3 U	143 U
A057	4/30/2014	SO	SUB	3	4	-- --	-- --	-- --	121 U	-- --	19 --	-- --	121 U
A058	4/30/2014	SO	SUB	4	6.5	0.011 J	7.4 U	7.4 U	109 U	7.4 U	9.4 --	7.4 U	109 U
A063	5/1/2014	SO	SUB	1.5	2.5	-- --	-- --	-- --	113 U	-- --	14 --	-- --	113 U
D059	5/1/2014	SO	SUB	4	5	0.013 --	7.9 U	7.9 U	117 U	7.9 U	16 --	7.9 U	117 U
D060	5/1/2014	SO	SUB	4	4.6	-- --	-- --	-- --	108 U	-- --	9.4 --	-- --	108 U
D030	5/1/2014	SO	SUB	1	3	0.0021 J	7.2 U	7.2 U	108 U	7.2 U	9.2 --	7.2 U	108 U
D062	5/1/2014	SO	SUB	1.5	2.5	-- --	-- --	-- --	117 U	-- --	16 --	-- --	117 U
P010	5/5/2014	SO	SUB	3	5	0.062 --	7.9 U	7.9 U	113 U	7.9 U	16 --	7.9 U	113 U
SBG-01	5/5/2014	SO	SUB	0.5	2	0.057 --	8.2 U	8.2 U	116 U	8.2 U	19 --	8.2 U	116 U
Septic1	5/7/2014	SO	SUB	0	0	1.6 --	16 U	16 U	237 U	16 U	59 --	16 U	237 U
A-SAND	5/7/2014	SO	SUB	4.5	5.5	0.014 --	8.8 U	8.8 U	132 U	8.8 U	24 --	8.8 U	132 U
A018	5/5/2014	SO	SUB	5	6.5	0.011 U	7.5 U	7.5 U	108 U	7.5 U	12 --	7.5 U	108 U
A064	5/5/2014	SO	SUB	2	4	0.021 --	7.9 U	7.9 U	124 U	7.9 U	16 --	7.9 U	124 U
D063	5/5/2014	SO	SUB	1	2	0.0064 J	8.1 U	8.1 U	133 U	8.1 U	19 --	8.1 U	133 U
D011	5/5/2014	SO	SUB	6	8	0.04 --	8.8 U	8.8 U	128 U	8.8 U	25 --	8.8 U	128 U
D019	5/5/2014	SO	SUB	3	4	0.079 --	9.2 U	9.2 U	133 U	9.2 U	28 --	9.2 U	133 U
D005	5/5/2014	SO	SUB	1.5	3	0.0018 J	7.7 U	7.7 U	121 U	7.7 U	13 --	7.7 U	121 U
A064	5/5/2014	SO	SUB	7	8	-- --	-- --	-- --	140 U	-- --	27 --	-- --	140 U
D069	5/6/2014	SO	SUB	6.9	7.9	-- --	-- --	-- --	107 U	-- --	13 --	-- --	107 U
D064	5/6/2014	SO	SUB	2.5	3	-- --	-- --	-- --	121 U	-- --	21 --	-- --	121 U
D067	5/6/2014	SO	SUB	3	3.6	-- --	-- --	-- --	126 U	-- --	21 --	-- --	126 U
D068	5/6/2014	SO	SUB	1.5	3	-- --	-- --	-- --	114 U	-- --	15 --	-- --	114 U
D065	5/6/2014	SO	SUB	3.5	4	-- --	-- --	-- --	134 U	-- --	24 --	-- --	134 U
D066	5/6/2014	SO	SUB	7.1	7.7	-- --	-- --	-- --	138 U	-- --	28 --	-- --	138 U
D066	5/6/2014	SO	SUB	8.2	8.9	-- --	-- --	-- --	135 U	-- --	25 --	-- --	135 U
SP006	8/18/2014	SO	SS	4.5	5.5	-- --	-- --	-- --	123 U	-- --	19 --	-- --	123 U
SP010	9/10/2014	SO	SS	3.5	4	-- --	-- --	-- --	133 U	-- --	22 --	-- --	133 U
SP010	9/10/2014	SO	SS	7.5	8	-- --	-- --	-- --	119 U	-- --	16 --	-- --	119 U
SP010	9/10/2014	SO	SS	7.5	8	-- --	-- --	-- --	125 U	-- --	18 --	-- --	125 U

Table B-06. Concentrations of constituents in laboratory soil samples collected by the USGS MWSC.—Continued

[Concentrations are in microgram per kilogram of soil unless otherwise indicated; USGS, United States Geological Survey; MWSC, Missouri Water Science Center; mg/Kg, milligrams per kilogram of soil; SD, sediment; SUR; surficial soil; U, not detected above the detection limit; J, detected above the detection limit but below the reporting limit; SO, soil; SUB; subsurface soil; SS; split-spoon; --, no data]

Sample Name (fig. 2-04)	Date	Medium	Type	Depth top	Depth bottom	Naled	Naphthalene	n-Butyl methyl ketone	n-Butylbenzene	Nickel, in mg/Kg	Nitro benzene	N-Nitrosodi methylamine
TB2-1	3/19/2014	SD	SUR	0	0.5	42 U	295 U	295 U	59.1 U	6,100 --	200 U	200 U
TB2-2	3/19/2014	SD	SUR	0	0.5	8.1 U	325 U	325 U	65 U	6,400 --	190 U	190 U
WP-020	3/19/2014	SD	SUR	0	0.5	11 U	381 U	381 U	76.2 U	19,000 --	260 U	260 U
TB1-2	3/19/2014	SD	SUR	0	0.5	38 U	305 U	305 U	61 U	19,000 --	180 U	180 U
WD-01	3/19/2014	SD	SUR	0	0.5	45 U	337 U	337 U	67.4 U	15,000 --	210 U	210 U
WD-01	3/19/2014	SD	SUR	0	0.5	46 U	357 U	357 U	71.4 U	16,000 --	220 U	220 U
C003	3/18/2014	SO	SUR	0	0.5	8.6 U	351 U	351 U	70.1 U	6,900 --	200 U	200 U
C017	3/18/2014	SO	SUR	0	0.5	12 U	515 U	515 U	103 U	8,100 --	300 U	300 U
C013	3/18/2014	SO	SUR	0	0.5	8.2 U	311 U	311 U	62.2 U	8,300 --	200 U	200 U
B007	3/18/2014	SO	SUR	0	0.5	9.2 U	325 U	325 U	64.9 U	9,200 --	220 U	220 U
A005	3/18/2014	SO	SUR	0	0.5	9.2 U	362 U	362 U	72.4 U	8,500 --	220 U	220 U
A002	3/18/2014	SO	SUR	0	0.5	8.9 U	308 U	308 U	61.6 U	14,000 --	210 U	210 U
A018A	3/18/2014	SO	SUR	0	0.5	45 U	2,100 U	336 U	67.1 U	67,000 --	2,100 U	2,100 U
A031	3/18/2014	SO	SUR	0	0.5	40 U	303 U	303 U	60.6 U	12,000 --	190 U	190 U
AM-01	3/18/2014	SO	SUR	0	0.5	9.7 U	373 U	373 U	74.7 U	11,000 --	230 U	230 U
A046	3/18/2014	SO	SUR	0	0.5	47 U	370 U	370 U	73.9 U	11,000 --	220 U	220 U
D002	3/18/2014	SO	SUR	0	0.5	8.4 U	333 U	333 U	66.6 U	11,000 --	200 U	200 U
D007	3/18/2014	SO	SUR	0	0.5	7.6 U	318 U	318 U	63.6 U	16,000 --	180 U	180 U
D011	3/18/2014	SO	SUR	0	0.5	97 U	920 U	310 U	61.9 U	10,000 --	920 U	920 U
P006	3/18/2014	SO	SUR	0	0.5	41 U	335 U	335 U	67 U	12,000 --	190 U	190 U
SBG-01	3/18/2014	SO	SUR	0	0.5	8.9 U	309 U	309 U	61.9 U	9,800 --	210 U	210 U
A033	4/23/2014	SO	SUB	2.5	3.5	8.7 U	365 U	365 U	73 U	10 --	210 U	210 U
B008A	4/22/2014	SO	SUB	1.5	1.5	-- --	304 U	304 U	60.7 U	-- --	-- --	-- --
C007A	4/23/2014	SO	SUB	1	3.5	8.1 U	324 U	324 U	64.8 U	4.7 --	190 U	190 U
C014	4/23/2014	SO	SUB	2.5	4	8.8 U	338 U	338 U	67.6 U	9.3 --	200 U	200 U
B007	4/22/2014	SO	SUB	1	2	8.2 U	339 U	339 U	67.9 U	13 --	200 U	200 U
A053	4/23/2014	SO	SUB	2	3	8.1 U	283 U	283 U	56.6 U	22 --	190 U	190 U
A028	4/22/2014	SO	SUB	9	11	9.3 U	358 U	358 U	71.7 U	17 --	220 U	220 U
A057	4/30/2014	SO	SUB	3	4	-- --	302 U	302 U	60.5 U	-- --	-- --	-- --
A058	4/30/2014	SO	SUB	4	6.5	7.4 U	272 U	272 U	54.4 U	6.7 --	180 U	180 U
A063	5/1/2014	SO	SUB	1.5	2.5	-- --	284 U	284 U	56.7 U	-- --	-- --	-- --
D059	5/1/2014	SO	SUB	4	5	7.9 U	292 U	292 U	58.3 U	15 --	190 U	190 U
D060	5/1/2014	SO	SUB	4	4.6	-- --	271 U	271 U	54.2 U	-- --	-- --	-- --
D030	5/1/2014	SO	SUB	1	3	7.2 U	270 U	270 U	54.1 U	8.2 --	180 U	180 U
D062	5/1/2014	SO	SUB	1.5	2.5	-- --	292 U	292 U	58.4 U	-- --	-- --	-- --
P010	5/5/2014	SO	SUB	3	5	7.9 U	282 U	282 U	56.5 U	28 --	190 U	190 U
SBG-01	5/5/2014	SO	SUB	0.5	2	8.2 U	290 U	290 U	58 U	15 --	190 U	190 U
Septic1	5/7/2014	SO	SUB	0	0	16 U	592 U	592 U	118 U	29 --	380 U	380 U
A-SAND	5/7/2014	SO	SUB	4.5	5.5	8.8 U	330 U	330 U	66 U	12 --	210 U	210 U
A018	5/5/2014	SO	SUB	5	6.5	7.5 U	180 J	271 U	54.2 U	6.8 --	180 U	180 U
A064	5/5/2014	SO	SUB	2	4	7.9 U	311 U	311 U	62.1 U	8.5 --	180 U	180 U
D063	5/5/2014	SO	SUB	1	2	8.1 U	334 U	334 U	66.7 U	13 --	200 U	200 U
D011	5/5/2014	SO	SUB	6	8	8.8 U	319 U	319 U	63.9 U	29 --	210 U	210 U
D019	5/5/2014	SO	SUB	3	4	9.2 U	332 U	332 U	66.4 U	14 --	210 U	210 U
D005	5/5/2014	SO	SUB	1.5	3	7.7 U	302 U	302 U	60.5 U	5.1 --	180 U	180 U
A064	5/5/2014	SO	SUB	7	8	-- --	351 U	351 U	70.2 U	-- --	-- --	-- --
D069	5/6/2014	SO	SUB	6.9	7.9	-- --	268 U	268 U	53.6 U	-- --	-- --	-- --
D064	5/6/2014	SO	SUB	2.5	3	-- --	302 U	302 U	60.4 U	-- --	-- --	-- --
D067	5/6/2014	SO	SUB	3	3.6	-- --	314 U	314 U	62.9 U	-- --	-- --	-- --
D068	5/6/2014	SO	SUB	1.5	3	-- --	284 U	284 U	56.9 U	-- --	-- --	-- --
D065	5/6/2014	SO	SUB	3.5	4	-- --	336 U	336 U	67.2 U	-- --	-- --	-- --
D066	5/6/2014	SO	SUB	7.1	7.7	-- --	345 U	345 U	68.9 U	-- --	-- --	-- --
D066	5/6/2014	SO	SUB	8.2	8.9	-- --	337 U	337 U	67.5 U	-- --	-- --	-- --
SP006	8/18/2014	SO	SS	4.5	5.5	-- --	306 U	306 U	61.3 U	-- --	-- --	-- --
SP010	9/10/2014	SO	SS	3.5	4	-- --	333 U	333 U	66.5 U	-- --	-- --	-- --
SP010	9/10/2014	SO	SS	7.5	8	-- --	299 U	299 U	59.7 U	-- --	-- --	-- --
SP010	9/10/2014	SO	SS	7.5	8	-- --	312 U	312 U	62.4 U	-- --	-- --	-- --

Table B-06. Concentrations of constituents in laboratory soil samples collected by the USGS MWSC.—Continued

[Concentrations are in microgram per kilogram of soil unless otherwise indicated; USGS, United States Geological Survey; MWSC, Missouri Water Science Center; SD, sediment; SUR; surficial soil; U, not detected above the detection limit; J, detected above the detection limit but below the reporting limit; SO, soil; SUB; subsurface soil; SS; split-spoon; --, no data]

Sample Name (fig. 2-04)	Date	Medium	Type	Depth top	Depth bottom	N-Nitrosodi-n-propylamine		N-Nitroso diphenylamine		n-Propyl benzene		o-Cresol		o-Xylene		p,p'-DDD		p,p'-DDE		p,p'-DDT	
TB2-1	3/19/2014	SD	SUR	0	0.5	200	U	200	U	59.1	U	200	U	59.1	U	2.1	U	1	U	1	U
TB2-2	3/19/2014	SD	SUR	0	0.5	190	U	190	U	65	U	190	U	65	U	2.1	U	1	U	1	U
WP-020	3/19/2014	SD	SUR	0	0.5	260	U	260	U	76.2	U	260	U	76.2	U	2.7	U	1.3	U	1.3	U
TB1-2	3/19/2014	SD	SUR	0	0.5	180	U	180	U	61	U	180	U	61	U	1.9	U	0.94	U	0.94	U
WD-01	3/19/2014	SD	SUR	0	0.5	210	U	210	U	67.4	U	210	U	67.4	U	23	U	11	J	26	--
WD-01	3/19/2014	SD	SUR	0	0.5	220	U	220	U	71.4	U	220	U	71.4	U	23	U	12	--	26	--
C003	3/18/2014	SO	SUR	0	0.5	200	U	200	U	70.1	U	200	U	70.1	U	2.1	U	1	U	1	U
C017	3/18/2014	SO	SUR	0	0.5	300	U	300	U	103	U	300	U	103	U	1.3	J	21	--	15	--
C013	3/18/2014	SO	SUR	0	0.5	200	U	200	U	62.2	U	200	U	62.2	U	2	U	0.99	U	0.99	U
B007	3/18/2014	SO	SUR	0	0.5	220	U	220	U	64.9	U	220	U	64.9	U	3.3	J	13	--	62	--
A005	3/18/2014	SO	SUR	0	0.5	220	U	220	U	72.4	U	220	U	72.4	U	2.3	U	1.1	U	1.1	U
A002	3/18/2014	SO	SUR	0	0.5	210	U	210	U	61.6	U	210	U	18.5	J	2.2	U	1.1	U	1	J
A018A	3/18/2014	SO	SUR	0	0.5	2,100	U	2,100	U	67.1	U	2,100	U	67.1	U	22	U	11	U	11	U
A031	3/18/2014	SO	SUR	0	0.5	190	U	190	U	60.6	U	190	U	60.6	U	2.1	U	1	U	1	U
AM-01	3/18/2014	SO	SUR	0	0.5	230	U	230	U	74.7	U	230	U	74.7	U	2.5	U	3.1	--	3.1	--
A046	3/18/2014	SO	SUR	0	0.5	220	U	220	U	73.9	U	220	U	73.9	U	2.4	U	1.2	U	1.2	U
D002	3/18/2014	SO	SUR	0	0.5	200	U	200	U	66.6	U	200	U	66.6	U	2.1	U	1	U	1	U
D007	3/18/2014	SO	SUR	0	0.5	180	U	180	U	63.6	U	180	U	63.6	U	1.9	U	0.95	U	0.95	U
D011	3/18/2014	SO	SUR	0	0.5	920	U	920	U	61.9	U	920	U	61.9	U	20	U	9.7	U	12	J
P006	3/18/2014	SO	SUR	0	0.5	190	U	190	U	67	U	190	U	67	U	21	U	10	U	10	U
SBG-01	3/18/2014	SO	SUR	0	0.5	210	U	210	U	61.9	U	210	U	61.9	U	2.2	U	1.1	U	1.1	U
A033	4/23/2014	SO	SUB	2.5	3.5	210	U	210	U	73	U	210	U	73	U	2.3	U	1.1	U	1.1	U
B008A	4/22/2014	SO	SUB	1.5	1.5	--	--	--	--	60.7	U	--	--	60.7	U	--	--	--	--	--	--
C007A	4/23/2014	SO	SUB	1	3.5	190	U	190	U	64.8	U	190	U	64.8	U	2.1	U	0.73	J	1	U
C014	4/23/2014	SO	SUB	2.5	4	200	U	200	U	67.6	U	200	U	67.6	U	2.2	U	1.1	U	1.1	U
B007	4/22/2014	SO	SUB	1	2	200	U	200	U	67.9	U	200	U	67.9	U	2.1	U	1	U	1	U
A053	4/23/2014	SO	SUB	2	3	190	U	190	U	56.6	U	190	U	56.6	U	2.1	U	1	U	1	U
A028	4/22/2014	SO	SUB	9	11	220	U	220	U	71.7	U	220	U	71.7	U	2.3	U	1.1	U	1.1	U
A057	4/30/2014	SO	SUB	3	4	--	--	--	--	60.5	U	--	--	60.5	U	--	--	--	--	--	--
A058	4/30/2014	SO	SUB	4	6.5	180	U	180	U	54.4	U	180	U	54.4	U	1.9	U	0.91	U	0.91	U
A063	5/1/2014	SO	SUB	1.5	2.5	--	--	--	--	56.7	U	--	--	56.7	U	--	--	--	--	--	--
D059	5/1/2014	SO	SUB	4	5	190	U	190	U	58.3	U	190	U	58.3	U	2	U	0.98	U	0.98	U
D060	5/1/2014	SO	SUB	4	4.6	--	--	--	--	54.2	U	--	--	54.2	U	--	--	--	--	--	--
D030	5/1/2014	SO	SUB	1	3	180	U	180	U	54.1	U	180	U	54.1	U	1.9	U	0.91	U	0.91	U
D062	5/1/2014	SO	SUB	1.5	2.5	--	--	--	--	58.4	U	--	--	58.4	U	--	--	--	--	--	--
P010	5/5/2014	SO	SUB	3	5	190	U	190	U	56.5	U	190	U	56.5	U	2	U	2.2	--	2.9	J
SBG-01	5/5/2014	SO	SUB	0.5	2	190	U	190	U	58	U	190	U	58	U	2.1	U	1	U	1	U
Septic1	5/7/2014	SO	SUB	0	0	380	U	380	U	118	U	380	U	118	U	4.1	U	1.1	J	9.9	J
A-SAND	5/7/2014	SO	SUB	4.5	5.5	210	U	210	U	66	U	210	U	66	U	2.2	U	1.1	U	1.1	U
A018	5/5/2014	SO	SUB	5	6.5	180	U	180	U	54.2	U	180	U	54.2	U	1.9	U	0.94	U	0.94	U
A064	5/5/2014	SO	SUB	2	4	180	U	180	U	62.1	U	180	U	62.1	U	2	U	0.98	U	0.98	U
D063	5/5/2014	SO	SUB	1	2	200	U	200	U	66.7	U	200	U	66.7	U	2.1	U	1	U	1	U
D011	5/5/2014	SO	SUB	6	8	210	U	210	U	63.9	U	210	U	63.9	U	2.3	U	1.1	U	1.1	U
D019	5/5/2014	SO	SUB	3	4	210	U	210	U	66.4	U	210	U	66.4	U	2.3	U	1.1	U	1.1	U
D005	5/5/2014	SO	SUB	1.5	3	180	U	180	U	60.5	U	180	U	60.5	U	1.9	U	0.95	U	0.95	U
A064	5/5/2014	SO	SUB	7	8	--	--	--	--	70.2	U	--	--	70.2	U	--	--	--	--	--	--
D069	5/6/2014	SO	SUB	6.9	7.9	--	--	--	--	53.6	U	--	--	53.6	U	--	--	--	--	--	--
D064	5/6/2014	SO	SUB	2.5	3	--	--	--	--	60.4	U	--	--	60.4	U	--	--	--	--	--	--
D067	5/6/2014	SO	SUB	3	3.6	--	--	--	--	62.9	U	--	--	62.9	U	--	--	--	--	--	--
D068	5/6/2014	SO	SUB	1.5	3	--	--	--	--	56.9	U	--	--	56.9	U	--	--	--	--	--	--
D065	5/6/2014	SO	SUB	3.5	4	--	--	--	--	67.2	U	--	--	67.2	U	--	--	--	--	--	--
D066	5/6/2014	SO	SUB	7.1	7.7	--	--	--	--	68.9	U	--	--	68.9	U	--	--	--	--	--	--
D066	5/6/2014	SO	SUB	8.2	8.9	--	--	--	--	67.5	U	--	--	67.5	U	--	--	--	--	--	--
SP006	8/18/2014	SO	SS	4.5	5.5	--	--	--	--	61.3	U	--	--	61.3	U	--	--	--	--	--	--
SP010	9/10/2014	SO	SS	3.5	4	--	--	--	--	66.5	U	--	--	66.5	U	--	--	--	--	--	--
SP010	9/10/2014	SO	SS	7.5	8	--	--	--	--	59.7	U	--	--	59.7	U	--	--	--	--	--	--
SP010	9/10/2014	SO	SS	7.5	8	--	--	--	--	62.4	U	--	--	62.4	U	--	--	--	--	--	--

Table B-06. Concentrations of constituents in laboratory soil samples collected by the USGS MWSC.—Continued

[Concentrations are in microgram per kilogram of soil unless otherwise indicated; USGS, United States Geological Survey; MWSC, Missouri Water Science Center; SD, sediment; SUR; surficial soil; U, not detected above the detection limit; J, detected above the detection limit but below the reporting limit; SO, soil; SUB; subsurface soil; SS; split-spoon; --, no data]

Sample Name (fig. 2-04)	Date	Medium	Type	Depth top	Depth bottom	p,p'-Methoxychlor	Parathion	PCBs	p-Cresol	Pentachloro phenol	Phenanthrene	Phenol	Phorate
TB2-1	3/19/2014	SD	SUR	0	0.5	1 U	8.4 U	42 U	200 U	200 U	200 U	200 U	8.4 U
TB2-2	3/19/2014	SD	SUR	0	0.5	1 U	8.1 U	40 U	190 U	190 U	190 U	190 U	8.1 U
WP-020	3/19/2014	SD	SUR	0	0.5	1.3 U	11 U	53 U	260 U	260 U	260 U	260 U	11 U
TB1-2	3/19/2014	SD	SUR	0	0.5	0.94 U	7.6 U	38 U	180 U	180 U	180 U	180 U	7.6 U
WD-01	3/19/2014	SD	SUR	0	0.5	11 U	8.9 U	44 U	290 --	210 U	31 J	210 U	8.9 U
WD-01	3/19/2014	SD	SUR	0	0.5	11 U	9.2 U	45 U	440 J	220 U	220 U	220 U	9.2 U
C003	3/18/2014	SO	SUR	0	0.5	1 U	8.6 U	42 U	200 U	200 U	200 U	200 U	8.6 U
C017	3/18/2014	SO	SUR	0	0.5	1.6 U	12 U	62 U	300 U	300 U	300 U	300 U	12 U
C013	3/18/2014	SO	SUR	0	0.5	0.99 U	8.2 U	40 U	200 U	200 U	200 U	200 U	8.2 U
B007	3/18/2014	SO	SUR	0	0.5	1.1 U	9.2 U	45 U	220 U	220 U	220 U	220 U	9.2 U
A005	3/18/2014	SO	SUR	0	0.5	1.1 U	9.2 U	45 U	220 U	220 U	220 U	220 U	9.2 U
A002	3/18/2014	SO	SUR	0	0.5	1.1 U	8.9 U	43 U	210 U	210 U	210 U	210 U	8.9 U
A018A	3/18/2014	SO	SUR	0	0.5	11 U	9 U	44 U	2,100 U	2,100 U	2,100 U	2,100 U	9 U
A031	3/18/2014	SO	SUR	0	0.5	1 U	8.1 U	40 U	190 U	190 U	190 U	190 U	8.1 U
AM-01	3/18/2014	SO	SUR	0	0.5	1.2 U	9.7 U	48 U	230 U	230 U	230 U	230 U	9.7 U
A046	3/18/2014	SO	SUR	0	0.5	1.2 U	9.4 U	46 U	220 U	220 U	220 U	220 U	9.4 U
D002	3/18/2014	SO	SUR	0	0.5	1 U	8.4 U	41 U	200 U	200 U	200 U	200 U	8.4 U
D007	3/18/2014	SO	SUR	0	0.5	0.95 U	7.6 U	38 U	180 U	180 U	14 J	180 U	7.6 U
D011	3/18/2014	SO	SUR	0	0.5	9.7 U	19 U	38 U	920 U	920 U	920 U	920 U	19 U
P006	3/18/2014	SO	SUR	0	0.5	10 U	8.2 U	40 U	190 U	190 U	28 J	190 U	8.2 U
SBG-01	3/18/2014	SO	SUR	0	0.5	1.1 U	8.9 U	43 U	210 U	210 U	210 U	210 U	8.9 U
A033	4/23/2014	SO	SUB	2.5	3.5	1.1 U	8.7 U	44 U	210 U	210 U	210 U	210 U	8.7 U
B008A	4/22/2014	SO	SUB	1.5	1.5	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
C007A	4/23/2014	SO	SUB	1	3.5	1 U	8.1 U	40 U	190 U	190 U	190 U	190 U	8.1 U
C014	4/23/2014	SO	SUB	2.5	4	1.1 U	8.8 U	42 U	200 U	200 U	200 U	200 U	8.8 U
B007	4/22/2014	SO	SUB	1	2	1 U	8.2 U	41 U	200 U	200 U	200 U	200 U	-- --
A053	4/23/2014	SO	SUB	2	3	1 U	8.1 U	40 U	190 U	190 U	190 U	190 U	8.1 U
A028	4/22/2014	SO	SUB	9	11	1.1 U	9.3 U	45 U	220 U	220 U	220 U	220 U	9.3 U
A057	4/30/2014	SO	SUB	3	4	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
A058	4/30/2014	SO	SUB	4	6.5	0.91 U	7.4 U	36 U	180 U	180 U	180 U	180 U	7.4 U
A063	5/1/2014	SO	SUB	1.5	2.5	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D059	5/1/2014	SO	SUB	4	5	0.98 U	7.9 U	39 U	190 U	190 U	190 U	190 U	7.9 U
D060	5/1/2014	SO	SUB	4	4.6	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D030	5/1/2014	SO	SUB	1	3	0.91 U	7.2 U	36 U	180 U	180 U	180 U	180 U	7.2 U
D062	5/1/2014	SO	SUB	1.5	2.5	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
P010	5/5/2014	SO	SUB	3	5	0.99 U	7.9 U	39 U	190 U	190 U	190 U	190 U	7.9 U
SBG-01	5/5/2014	SO	SUB	0.5	2	1 U	8.2 U	41 U	190 U	190 U	190 U	190 U	8.2 U
Septic1	5/7/2014	SO	SUB	0	0	2 U	16 U	41 J	380 U	380 U	380 U	380 U	16 U
A-SAND	5/7/2014	SO	SUB	4.5	5.5	1.1 U	8.8 U	43 U	210 U	210 U	20 J	210 U	8.8 U
A018	5/5/2014	SO	SUB	5	6.5	0.94 U	7.5 U	37 U	180 U	180 U	180 U	180 U	7.5 U
A064	5/5/2014	SO	SUB	2	4	0.98 U	7.9 U	39 U	180 U	180 U	180 U	180 U	7.9 U
D063	5/5/2014	SO	SUB	1	2	1 U	8.1 U	41 U	200 U	200 U	200 U	200 U	8.1 U
D011	5/5/2014	SO	SUB	6	8	1.1 U	8.8 U	44 U	210 U	210 U	210 U	210 U	8.8 U
D019	5/5/2014	SO	SUB	3	4	1.1 U	9.2 U	46 U	210 U	210 U	210 U	210 U	9.2 U
D005	5/5/2014	SO	SUB	1.5	3	0.95 U	7.7 U	38 U	180 U	180 U	180 U	180 U	7.7 U
A064	5/5/2014	SO	SUB	7	8	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D069	5/6/2014	SO	SUB	6.9	7.9	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D064	5/6/2014	SO	SUB	2.5	3	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D067	5/6/2014	SO	SUB	3	3.6	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D068	5/6/2014	SO	SUB	1.5	3	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D065	5/6/2014	SO	SUB	3.5	4	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D066	5/6/2014	SO	SUB	7.1	7.7	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
D066	5/6/2014	SO	SUB	8.2	8.9	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
SP006	8/18/2014	SO	SS	4.5	5.5	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
SP010	9/10/2014	SO	SS	3.5	4	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
SP010	9/10/2014	SO	SS	7.5	8	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
SP010	9/10/2014	SO	SS	7.5	8	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --

Table B-06. Concentrations of constituents in laboratory soil samples collected by the USGS MWSC.—Continued

[Concentrations are in microgram per kilogram of soil unless otherwise indicated; USGS, United States Geological Survey; MWSC, Missouri Water Science Center; mg/Kg, milligrams per kilogram of soil; SD, sediment; SUR; surficial soil; U, not detected above the detection limit; J, detected above the detection limit but below the reporting limit; SO, soil; SUB; subsurface soil; SS; split-spoon; --, no data]

Sample Name (fig. 2-04)	Date	Medium	Type	Depth top	Depth bottom	Phorate soil	Pyrene	Ronnel	sec-Butylbenzene	Selenium, in mg/Kg	Silver, in mg/Kg	Styrene	Sulfotepp
TB2-1	3/19/2014	SD	SUR	0	0.5	-- --	200 U	8.4 U	59.1 U	1,800 U	900 U	59.1 U	8.4 U
TB2-2	3/19/2014	SD	SUR	0	0.5	-- --	190 U	8.1 U	65 U	1,900 U	970 U	65 U	8.1 U
WP-020	3/19/2014	SD	SUR	0	0.5	-- --	260 U	11 U	76.2 U	2,600 U	1,300 U	76.2 U	11 U
TB1-2	3/19/2014	SD	SUR	0	0.5	-- --	180 U	7.6 U	61 U	2,000 U	1,000 U	61 U	7.6 U
WD-01	3/19/2014	SD	SUR	0	0.5	-- --	630 J	8.9 U	67.4 U	2,300 U	1,200 U	67.4 U	8.9 U
WD-01	3/19/2014	SD	SUR	0	0.5	-- --	450 J	9.2 U	71.4 U	2,500 U	1,200 U	71.4 U	9.2 U
C003	3/18/2014	SO	SUR	0	0.5	-- --	200 U	8.6 U	70.1 U	2,300 U	1,200 U	70.1 U	8.6 U
C017	3/18/2014	SO	SUR	0	0.5	-- --	300 U	12 U	103 U	2,600 U	1,300 U	103 U	12 U
C013	3/18/2014	SO	SUR	0	0.5	-- --	200 U	8.2 U	62.2 U	1,900 U	930 U	62.2 U	8.2 U
B007	3/18/2014	SO	SUR	0	0.5	-- --	220 U	9.2 U	64.9 U	2,100 U	1,100 U	64.9 U	9.2 U
A005	3/18/2014	SO	SUR	0	0.5	-- --	220 U	9.2 U	72.4 U	2,300 U	1,100 U	72.4 U	9.2 U
A002	3/18/2014	SO	SUR	0	0.5	-- --	210 U	8.9 U	61.6 U	2,200 U	1,100 U	61.6 U	8.9 U
A018A	3/18/2014	SO	SUR	0	0.5	-- --	15,000 --	9 U	67.1 U	2,600 U	210 J	67.1 U	9 U
A031	3/18/2014	SO	SUR	0	0.5	-- --	27 J	8.1 U	60.6 U	2,100 U	1,100 U	60.6 U	8.1 U
AM-01	3/18/2014	SO	SUR	0	0.5	-- --	230 U	9.7 U	74.7 U	2,200 U	1,100 U	74.7 U	9.7 U
A046	3/18/2014	SO	SUR	0	0.5	-- --	27 J	9.4 U	73.9 U	2,300 U	1,100 U	73.9 U	9.4 U
D002	3/18/2014	SO	SUR	0	0.5	-- --	200 U	8.4 U	66.6 U	2,000 U	1,000 U	66.6 U	8.4 U
D007	3/18/2014	SO	SUR	0	0.5	-- --	27 J	7.6 U	63.6 U	1,600 U	810 U	63.6 U	7.6 U
D011	3/18/2014	SO	SUR	0	0.5	-- --	920 U	19 U	61.9 U	1,700 U	860 U	61.9 U	19 U
P006	3/18/2014	SO	SUR	0	0.5	-- --	81 J	8.2 U	67 U	2,000 U	1,000 U	67 U	8.2 U
SBG-01	3/18/2014	SO	SUR	0	0.5	-- --	210 U	8.9 U	61.9 U	2,100 U	1,000 U	61.9 U	8.9 U
A033	4/23/2014	SO	SUB	2.5	3.5	-- --	210 U	8.7 U	73 U	2.2 U	1.1 U	73 U	8.7 U
B008A	4/22/2014	SO	SUB	1.5	1.5	-- --	-- --	-- --	60.7 U	-- --	-- --	60.7 U	-- --
C007A	4/23/2014	SO	SUB	1	3.5	-- --	190 U	8.1 U	64.8 U	0.76 U	0.76 U	64.8 U	8.1 U
C014	4/23/2014	SO	SUB	2.5	4	-- --	200 U	8.8 U	67.6 U	2.1 U	1.1 U	67.6 U	8.8 U
B007	4/22/2014	SO	SUB	1	2	8.2 U	200 U	8.2 U	67.9 U	1.3 U	0.67 U	67.9 U	8.2 U
A053	4/23/2014	SO	SUB	2	3	-- --	14 J	8.1 U	56.6 U	1.7 U	0.84 U	56.6 U	8.1 U
A028	4/22/2014	SO	SUB	9	11	-- --	220 U	9.3 U	71.7 U	2.1 U	1.1 U	71.7 U	9.3 U
A057	4/30/2014	SO	SUB	3	4	-- --	-- --	-- --	60.5 U	-- --	-- --	60.5 U	-- --
A058	4/30/2014	SO	SUB	4	6.5	-- --	180 U	7.4 U	54.4 U	1.5 U	0.76 U	54.4 U	7.4 U
A063	5/1/2014	SO	SUB	1.5	2.5	-- --	-- --	-- --	56.7 U	-- --	-- --	56.7 U	-- --
D059	5/1/2014	SO	SUB	4	5	-- --	190 U	7.9 U	58.3 U	1.5 U	0.74 U	58.3 U	7.9 U
D060	5/1/2014	SO	SUB	4	4.6	-- --	-- --	-- --	54.2 U	-- --	-- --	54.2 U	-- --
D030	5/1/2014	SO	SUB	1	3	-- --	180 U	7.2 U	54.1 U	1.6 U	0.81 U	54.1 U	7.2 U
D062	5/1/2014	SO	SUB	1.5	2.5	-- --	-- --	-- --	58.4 U	-- --	-- --	58.4 U	-- --
P010	5/5/2014	SO	SUB	3	5	-- --	190 U	7.9 U	56.5 U	1.6 U	0.82 U	56.5 U	7.9 U
SBG-01	5/5/2014	SO	SUB	0.5	2	-- --	190 U	8.2 U	58 U	1.9 U	0.96 U	58 U	8.2 U
Septic1	5/7/2014	SO	SUB	0	0	-- --	31 J	16 U	118 U	3.9 U	2 U	118 U	16 U
A-SAND	5/7/2014	SO	SUB	4.5	5.5	-- --	210 U	8.8 U	66 U	2.2 U	1.1 U	66 U	8.8 U
A018	5/5/2014	SO	SUB	5	6.5	-- --	180 U	7.5 U	54.2 U	1.6 U	0.78 U	54.2 U	7.5 U
A064	5/5/2014	SO	SUB	2	4	-- --	180 U	7.9 U	62.1 U	1.5 U	0.73 U	62.1 U	7.9 U
D063	5/5/2014	SO	SUB	1	2	-- --	220 --	8.1 U	66.7 U	2.1 U	1 U	66.7 U	8.1 U
D011	5/5/2014	SO	SUB	6	8	-- --	210 U	8.8 U	63.9 U	4.6 U	2.3 U	63.9 U	8.8 U
D019	5/5/2014	SO	SUB	3	4	-- --	210 U	9.2 U	66.4 U	1.9 U	0.93 U	66.4 U	9.2 U
D005	5/5/2014	SO	SUB	1.5	3	-- --	180 U	7.7 U	60.5 U	1.7 U	0.86 U	60.5 U	7.7 U
A064	5/5/2014	SO	SUB	7	8	-- --	-- --	-- --	70.2 U	-- --	-- --	70.2 U	-- --
D069	5/6/2014	SO	SUB	6.9	7.9	-- --	-- --	-- --	53.6 U	-- --	-- --	53.6 U	-- --
D064	5/6/2014	SO	SUB	2.5	3	-- --	-- --	-- --	60.4 U	-- --	-- --	60.4 U	-- --
D067	5/6/2014	SO	SUB	3	3.6	-- --	-- --	-- --	62.9 U	-- --	-- --	62.9 U	-- --
D068	5/6/2014	SO	SUB	1.5	3	-- --	-- --	-- --	56.9 U	-- --	-- --	56.9 U	-- --
D065	5/6/2014	SO	SUB	3.5	4	-- --	-- --	-- --	67.2 U	-- --	-- --	67.2 U	-- --
D066	5/6/2014	SO	SUB	7.1	7.7	-- --	-- --	-- --	68.9 U	-- --	-- --	68.9 U	-- --
D066	5/6/2014	SO	SUB	8.2	8.9	-- --	-- --	-- --	67.5 U	-- --	-- --	67.5 U	-- --
SP006	8/18/2014	SO	SS	4.5	5.5	-- --	-- --	-- --	61.3 U	-- --	-- --	61.3 U	-- --
SP010	9/10/2014	SO	SS	3.5	4	-- --	-- --	-- --	66.5 U	-- --	-- --	66.5 U	-- --
SP010	9/10/2014	SO	SS	7.5	8	-- --	-- --	-- --	59.7 U	-- --	-- --	59.7 U	-- --
SP010	9/10/2014	SO	SS	7.5	8	-- --	-- --	-- --	62.4 U	-- --	-- --	62.4 U	-- --

Table B-06. Concentrations of constituents in laboratory soil samples collected by the USGS MWSC.—Continued

[Concentrations are in microgram per kilogram of soil unless otherwise indicated; USGS, United States Geological Survey; MWSC, Missouri Water Science Center; mg/Kg, milligrams per kilogram of soil; SD, sediment; SUR; surficial soil; U, not detected above the detection limit; J, detected above the detection limit but below the reporting limit; SO, soil; SUB; subsurface soil; SS; split-spoon; --, no data]

Sample Name (fig. 2-04)	Date	Medium	Type	Depth top	Depth bottom	Sulprofos	tert Butylbenzene	Tetrachloro ethene	Tetrachloro methane	Tetraethyl pyrophosphate (TEPP)	Thallium, in mg/Kg	Tokuthion
TB2-1	3/19/2014	SD	SUR	0	0.5	8.4 U	59.1 U	59.1 U	59.1 U	8.4 U	410 J	8.4 U
TB2-2	3/19/2014	SD	SUR	0	0.5	8.1 U	65 U	65 U	65 U	8.1 U	600 J	8.1 U
WP-020	3/19/2014	SD	SUR	0	0.5	11 U	76.2 U	76.2 U	76.2 U	11 U	1,700 J	11 U
TB1-2	3/19/2014	SD	SUR	0	0.5	7.6 U	61 U	61 U	61 U	7.6 U	1,800 J	7.6 U
WD-01	3/19/2014	SD	SUR	0	0.5	8.9 U	67.4 U	67.4 U	67.4 U	8.9 U	1,700 J	8.9 U
WD-01	3/19/2014	SD	SUR	0	0.5	9.2 U	71.4 U	71.4 U	71.4 U	9.2 U	950 J	9.2 U
C003	3/18/2014	SO	SUR	0	0.5	8.6 U	70.1 U	70.1 U	70.1 U	8.6 U	610 J	8.6 U
C017	3/18/2014	SO	SUR	0	0.5	12 U	103 U	103 U	103 U	12 U	530 J	12 U
C013	3/18/2014	SO	SUR	0	0.5	8.2 U	62.2 U	62.2 U	62.2 U	8.2 U	970 J	8.2 U
B007	3/18/2014	SO	SUR	0	0.5	9.2 U	64.9 U	64.9 U	64.9 U	9.2 U	1,200 J	9.2 U
A005	3/18/2014	SO	SUR	0	0.5	9.2 U	72.4 U	72.4 U	72.4 U	9.2 U	930 J	9.2 U
A002	3/18/2014	SO	SUR	0	0.5	8.9 U	61.6 U	61.6 U	61.6 U	8.9 U	1,700 J	8.9 U
A018A	3/18/2014	SO	SUR	0	0.5	9 U	67.1 U	24.8 J	67.1 U	9 U	2,000 J	9 U
A031	3/18/2014	SO	SUR	0	0.5	8.1 U	60.6 U	60.6 U	60.6 U	8.1 U	490 J	8.1 U
AM-01	3/18/2014	SO	SUR	0	0.5	9.7 U	74.7 U	74.7 U	74.7 U	9.7 U	1,000 J	9.7 U
A046	3/18/2014	SO	SUR	0	0.5	9.4 U	73.9 U	73.9 U	73.9 U	9.4 U	1,100 J	9.4 U
D002	3/18/2014	SO	SUR	0	0.5	8.4 U	66.6 U	66.6 U	66.6 U	8.4 U	1,400 J	8.4 U
D007	3/18/2014	SO	SUR	0	0.5	7.6 U	63.6 U	63.6 U	63.6 U	7.6 U	890 J	7.6 U
D011	3/18/2014	SO	SUR	0	0.5	19 U	61.9 U	191 --	61.9 U	19 U	470 J	19 U
P006	3/18/2014	SO	SUR	0	0.5	8.2 U	67 U	67 U	67 U	8.2 U	1,700 J	8.2 U
SBG-01	3/18/2014	SO	SUR	0	0.5	8.9 U	61.9 U	61.9 U	61.9 U	8.9 U	1,500 J	8.9 U
A033	4/23/2014	SO	SUB	2.5	3.5	8.7 U	73 U	73 U	73 U	8.7 U	2.2 U	8.7 U
B008A	4/22/2014	SO	SUB	1.5	1.5	-- --	60.7 U	60.7 U	60.7 U	-- --	-- --	-- --
C007A	4/23/2014	SO	SUB	1	3.5	8.1 U	64.8 U	64.8 U	64.8 U	8.1 U	0.55 J	8.1 U
C014	4/23/2014	SO	SUB	2.5	4	8.8 U	67.6 U	67.6 U	67.6 U	8.8 U	2.1 U	8.8 U
B007	4/22/2014	SO	SUB	1	2	8.2 U	67.9 U	67.9 U	67.9 U	8.2 U	0.35 J	8.2 U
A053	4/23/2014	SO	SUB	2	3	8.1 U	56.6 U	56.6 U	56.6 U	8.1 U	0.84 J	8.1 U
A028	4/22/2014	SO	SUB	9	11	9.3 U	71.7 U	2840 --	71.7 U	9.3 U	0.53 J	9.3 U
A057	4/30/2014	SO	SUB	3	4	-- --	60.5 U	379 --	60.5 U	-- --	-- --	-- --
A058	4/30/2014	SO	SUB	4	6.5	7.4 U	54.4 U	54.4 U	54.4 U	7.4 U	0.55 J	7.4 U
A063	5/1/2014	SO	SUB	1.5	2.5	-- --	56.7 U	168 --	56.7 U	-- --	-- --	-- --
D059	5/1/2014	SO	SUB	4	5	7.9 U	58.3 U	23.3 J	58.3 U	7.9 U	0.45 J	7.9 U
D060	5/1/2014	SO	SUB	4	4.6	-- --	54.2 U	39 J	54.2 U	-- --	-- --	-- --
D030	5/1/2014	SO	SUB	1	3	7.2 U	54.1 U	1760 --	54.1 U	7.2 U	0.73 J	7.2 U
D062	5/1/2014	SO	SUB	1.5	2.5	-- --	58.4 U	37.4 J	58.4 U	-- --	-- --	-- --
P010	5/5/2014	SO	SUB	3	5	7.9 U	56.5 U	56.5 U	56.5 U	7.9 U	1.3 J	7.9 U
SBG-01	5/5/2014	SO	SUB	0.5	2	8.2 U	58 U	58 U	58 U	8.2 U	2.2 --	8.2 U
Septic1	5/7/2014	SO	SUB	0	0	16 U	118 U	118 U	118 U	16 U	1.6 J	16 U
A-SAND	5/7/2014	SO	SUB	4.5	5.5	8.8 U	66 U	66 U	66 U	8.8 U	0.53 J	8.8 U
A018	5/5/2014	SO	SUB	5	6.5	7.5 U	54.2 U	54.2 U	54.2 U	7.5 U	1.6 U	7.5 U
A064	5/5/2014	SO	SUB	2	4	7.9 U	62.1 U	62.1 U	62.1 U	7.9 U	1 J	7.9 U
D063	5/5/2014	SO	SUB	1	2	8.1 U	66.7 U	66.7 U	66.7 U	8.1 U	2.1 U	8.1 U
D011	5/5/2014	SO	SUB	6	8	8.8 U	63.9 U	92.6 --	63.9 U	8.8 U	4.6 U	8.8 U
D019	5/5/2014	SO	SUB	3	4	9.2 U	66.4 U	19.9 J	66.4 U	9.2 U	0.75 J	9.2 U
D005	5/5/2014	SO	SUB	1.5	3	7.7 U	60.5 U	60.5 U	60.5 U	7.7 U	1 J	7.7 U
A064	5/5/2014	SO	SUB	7	8	-- --	70.2 U	70.2 U	70.2 U	-- --	-- --	-- --
D069	5/6/2014	SO	SUB	6.9	7.9	-- --	53.6 U	14.5 J	53.6 U	-- --	-- --	-- --
D064	5/6/2014	SO	SUB	2.5	3	-- --	60.4 U	60.4 U	60.4 U	-- --	-- --	-- --
D067	5/6/2014	SO	SUB	3	3.6	-- --	62.9 U	55.9 J	62.9 U	-- --	-- --	-- --
D068	5/6/2014	SO	SUB	1.5	3	-- --	56.9 U	63.7 --	56.9 U	-- --	-- --	-- --
D065	5/6/2014	SO	SUB	3.5	4	-- --	67.2 U	67.2 U	67.2 U	-- --	-- --	-- --
D066	5/6/2014	SO	SUB	7.1	7.7	-- --	68.9 U	817 --	68.9 U	-- --	-- --	-- --
D066	5/6/2014	SO	SUB	8.2	8.9	-- --	67.5 U	591 --	67.5 U	-- --	-- --	-- --
SP006	8/18/2014	SO	SS	4.5	5.5	-- --	61.3 U	705 --	61.3 U	-- --	-- --	-- --
SP010	9/10/2014	SO	SS	3.5	4	-- --	66.5 U	66.5 U	66.5 U	-- --	-- --	-- --
SP010	9/10/2014	SO	SS	7.5	8	-- --	59.7 U	59.7 U	59.7 U	-- --	-- --	-- --
SP010	9/10/2014	SO	SS	7.5	8	-- --	62.4 U	62.4 U	62.4 U	-- --	-- --	-- --

Table B-06. Concentrations of constituents in laboratory soil samples collected by the USGS MWSC.—Continued

[Concentrations are in microgram per kilogram of soil unless otherwise indicated; USGS, United States Geological Survey; MWSC, Missouri Water Science Center; SD, sediment; SUR; surficial soil; U, not detected above the detection limit; J, detected above the detection limit but below the reporting limit; SO, soil; SUB; subsurface soil; SS; split-spoon; --, no data]

Sample Name (fig. 2-04)	Date	Medium	Type	Depth top	Depth bottom	Toluene	Toxaphene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Tribromomethane
TB2-1	3/19/2014	SD	SUR	0	0.5	59.1 U	21 U	59.1 U	59.1 U	59.1 U
TB2-2	3/19/2014	SD	SUR	0	0.5	65 U	20 U	65 U	65 U	65 U
WP-020	3/19/2014	SD	SUR	0	0.5	76.2 U	27 U	76.2 U	76.2 U	76.2 U
TB1-2	3/19/2014	SD	SUR	0	0.5	61 U	19 U	61 U	61 U	61 U
WD-01	3/19/2014	SD	SUR	0	0.5	67.4 U	220 U	67.4 U	67.4 U	67.4 U
WD-01	3/19/2014	SD	SUR	0	0.5	71.4 U	230 U	71.4 U	71.4 U	71.4 U
C003	3/18/2014	SO	SUR	0	0.5	70.1 U	21 U	70.1 U	70.1 U	70.1 U
C017	3/18/2014	SO	SUR	0	0.5	103 U	31 U	103 U	103 U	103 U
C013	3/18/2014	SO	SUR	0	0.5	62.2 U	20 U	62.2 U	62.2 U	62.2 U
B007	3/18/2014	SO	SUR	0	0.5	64.9 U	23 U	64.9 U	64.9 U	64.9 U
A005	3/18/2014	SO	SUR	0	0.5	72.4 U	23 U	72.4 U	72.4 U	72.4 U
A002	3/18/2014	SO	SUR	0	0.5	61.6 U	22 U	61.6 U	61.6 U	61.6 U
A018A	3/18/2014	SO	SUR	0	0.5	67.1 U	220 U	67.1 U	67.1 U	67.1 U
A031	3/18/2014	SO	SUR	0	0.5	60.6 U	20 U	60.6 U	60.6 U	60.6 U
AM-01	3/18/2014	SO	SUR	0	0.5	74.7 U	24 U	74.7 U	74.7 U	74.7 U
A046	3/18/2014	SO	SUR	0	0.5	73.9 U	23 U	73.9 U	73.9 U	73.9 U
D002	3/18/2014	SO	SUR	0	0.5	66.6 U	21 U	66.6 U	66.6 U	66.6 U
D007	3/18/2014	SO	SUR	0	0.5	63.6 U	19 U	63.6 U	63.6 U	63.6 U
D011	3/18/2014	SO	SUR	0	0.5	61.9 U	190 U	61.9 U	61.9 U	61.9 U
P006	3/18/2014	SO	SUR	0	0.5	67 U	200 U	67 U	67 U	67 U
SBG-01	3/18/2014	SO	SUR	0	0.5	61.9 U	22 U	61.9 U	61.9 U	61.9 U
A033	4/23/2014	SO	SUB	2.5	3.5	73 U	22 U	73 U	73 U	73 U
B008A	4/22/2014	SO	SUB	1.5	1.5	60.7 U	-- --	60.7 U	60.7 U	60.7 U
C007A	4/23/2014	SO	SUB	1	3.5	64.8 U	20 U	64.8 U	64.8 U	64.8 U
C014	4/23/2014	SO	SUB	2.5	4	67.6 U	21 U	67.6 U	67.6 U	67.6 U
B007	4/22/2014	SO	SUB	1	2	67.9 U	21 U	67.9 U	67.9 U	67.9 U
A053	4/23/2014	SO	SUB	2	3	56.6 U	20 U	56.6 U	56.6 U	56.6 U
A028	4/22/2014	SO	SUB	9	11	71.7 U	23 U	71.7 U	71.7 U	71.7 U
A057	4/30/2014	SO	SUB	3	4	60.5 U	-- --	60.5 U	60.5 U	60.5 U
A058	4/30/2014	SO	SUB	4	6.5	54.4 U	18 U	54.4 U	54.4 U	54.4 U
A063	5/1/2014	SO	SUB	1.5	2.5	56.7 U	-- --	56.7 U	56.7 U	56.7 U
D059	5/1/2014	SO	SUB	4	5	58.3 U	20 U	58.3 U	58.3 U	58.3 U
D060	5/1/2014	SO	SUB	4	4.6	54.2 U	-- --	54.2 U	54.2 U	54.2 U
D030	5/1/2014	SO	SUB	1	3	54.1 U	18 U	54.1 U	54.1 U	54.1 U
D062	5/1/2014	SO	SUB	1.5	2.5	58.4 U	-- --	58.4 U	58.4 U	58.4 U
P010	5/5/2014	SO	SUB	3	5	56.5 U	20 U	56.5 U	56.5 U	56.5 U
SBG-01	5/5/2014	SO	SUB	0.5	2	58 U	20 U	58 U	58 U	58 U
Septic1	5/7/2014	SO	SUB	0	0	118 U	41 U	118 U	118 U	118 U
A-SAND	5/7/2014	SO	SUB	4.5	5.5	66 U	22 U	66 U	66 U	66 U
A018	5/5/2014	SO	SUB	5	6.5	54.2 U	19 U	33.6 J	13.6 J	54.2 U
A064	5/5/2014	SO	SUB	2	4	62.1 U	20 U	62.1 U	62.1 U	62.1 U
D063	5/5/2014	SO	SUB	1	2	66.7 U	21 U	66.7 U	66.7 U	66.7 U
D011	5/5/2014	SO	SUB	6	8	63.9 U	22 U	63.9 U	63.9 U	63.9 U
D019	5/5/2014	SO	SUB	3	4	66.4 U	23 U	66.4 U	66.4 U	66.4 U
D005	5/5/2014	SO	SUB	1.5	3	60.5 U	19 U	60.5 U	60.5 U	60.5 U
A064	5/5/2014	SO	SUB	7	8	70.2 U	-- --	70.2 U	70.2 U	70.2 U
D069	5/6/2014	SO	SUB	6.9	7.9	53.6 U	-- --	53.6 U	53.6 U	53.6 U
D064	5/6/2014	SO	SUB	2.5	3	60.4 U	-- --	60.4 U	60.4 U	60.4 U
D067	5/6/2014	SO	SUB	3	3.6	62.9 U	-- --	62.9 U	62.9 U	62.9 U
D068	5/6/2014	SO	SUB	1.5	3	56.9 U	-- --	56.9 U	56.9 U	56.9 U
D065	5/6/2014	SO	SUB	3.5	4	67.2 U	-- --	67.2 U	67.2 U	67.2 U
D066	5/6/2014	SO	SUB	7.1	7.7	68.9 U	-- --	68.9 U	68.9 U	68.9 U
D066	5/6/2014	SO	SUB	8.2	8.9	67.5 U	-- --	67.5 U	67.5 U	67.5 U
SP006	8/18/2014	SO	SS	4.5	5.5	61.3 U	-- --	61.3 U	61.3 U	61.3 U
SP010	9/10/2014	SO	SS	3.5	4	66.5 U	-- --	66.5 U	66.5 U	66.5 U
SP010	9/10/2014	SO	SS	7.5	8	59.7 U	-- --	59.7 U	59.7 U	59.7 U
SP010	9/10/2014	SO	SS	7.5	8	62.4 U	-- --	62.4 U	62.4 U	62.4 U

Table B-06. Concentrations of constituents in laboratory soil samples collected by the USGS MWSC.—Continued

[Concentrations are in microgram per kilogram of soil unless otherwise indicated; USGS, United States Geological Survey; MWSC, Missouri Water Science Center; mg/Kg, milligrams per kilogram of soil; SD, sediment; SUR; surficial soil; U, not detected above the detection limit; J, detected above the detection limit but below the reporting limit; SO, soil; SUB; subsurface soil; SS; split-spoon; --, no data]

Sample Name (fig. 2-04)	Date	Medium	Type	Depth top	Depth bottom	Trichloroethene	Trichlorofluoromethane	Trichloromethane	Trichloronate	Vinyl chloride	Xylene all isomers	Zinc, in mg/Kg
TB2-1	3/19/2014	SD	SUR	0	0.5	59.1 U	59.1 U	59.1 U	8.4 U	47.3 U	177 U	20,000
TB2-2	3/19/2014	SD	SUR	0	0.5	65 U	65 U	65 U	8.1 U	52 U	195 U	14,000
WP-020	3/19/2014	SD	SUR	0	0.5	76.2 U	76.2 U	76.2 U	11 U	60.9 U	228 U	42,000
TB1-2	3/19/2014	SD	SUR	0	0.5	61 U	61 U	61 U	7.6 U	48.8 U	183 U	77,000
WD-01	3/19/2014	SD	SUR	0	0.5	67.4 U	67.4 U	67.4 U	8.9 U	53.9 U	202 U	360,000
WD-01	3/19/2014	SD	SUR	0	0.5	71.4 U	71.4 U	71.4 U	9.2 U	57.1 U	214 U	440,000
C003	3/18/2014	SO	SUR	0	0.5	70.1 U	70.1 U	70.1 U	8.6 U	56.1 U	210 U	24,000
C017	3/18/2014	SO	SUR	0	0.5	103 U	103 U	103 U	12 U	82.4 U	309 U	51,000
C013	3/18/2014	SO	SUR	0	0.5	62.2 U	62.2 U	62.2 U	8.2 U	49.7 U	187 U	29,000
B007	3/18/2014	SO	SUR	0	0.5	64.9 U	64.9 U	64.9 U	9.2 U	51.9 U	195 U	26,000
A005	3/18/2014	SO	SUR	0	0.5	72.4 U	72.4 U	72.4 U	9.2 U	57.9 U	217 U	120,000
A002	3/18/2014	SO	SUR	0	0.5	61.6 U	61.6 U	61.6 U	8.9 U	49.3 U	185 U	180,000
A018A	3/18/2014	SO	SUR	0	0.5	67.1 U	67.1 U	67.1 U	9 U	53.7 U	201 U	2,200,000
A031	3/18/2014	SO	SUR	0	0.5	60.6 U	60.6 U	60.6 U	8.1 U	48.5 U	182 U	34,000
AM-01	3/18/2014	SO	SUR	0	0.5	74.7 U	74.7 U	74.7 U	9.7 U	59.7 U	224 U	120,000
A046	3/18/2014	SO	SUR	0	0.5	73.9 U	73.9 U	73.9 U	9.4 U	59.2 U	222 U	58,000
D002	3/18/2014	SO	SUR	0	0.5	66.6 U	66.6 U	66.6 U	8.4 U	53.2 U	200 U	38,000
D007	3/18/2014	SO	SUR	0	0.5	63.6 U	63.6 U	63.6 U	7.6 U	50.9 U	191 U	58,000
D011	3/18/2014	SO	SUR	0	0.5	61.9 U	61.9 U	61.9 U	19 U	49.6 U	186 U	25,000
P006	3/18/2014	SO	SUR	0	0.5	67 U	67 U	67 U	8.2 U	53.6 U	201 U	43,000
SBG-01	3/18/2014	SO	SUR	0	0.5	61.9 U	61.9 U	61.9 U	8.9 U	49.5 U	186 U	33,000
A033	4/23/2014	SO	SUB	2.5	3.5	73 U	73 U	73 U	8.7 U	58.4 U	219 U	18
B008A	4/22/2014	SO	SUB	1.5	1.5	60.7 U	60.7 U	60.7 U	-- --	48.6 U	182 U	--
C007A	4/23/2014	SO	SUB	1	3.5	64.8 U	64.8 U	64.8 U	8.1 U	51.9 U	194 U	19
C014	4/23/2014	SO	SUB	2.5	4	67.6 U	67.6 U	67.6 U	8.8 U	54.1 U	203 U	16
B007	4/22/2014	SO	SUB	1	2	67.9 U	67.9 U	67.9 U	8.2 U	54.3 U	204 U	44
A053	4/23/2014	SO	SUB	2	3	56.6 U	56.6 U	56.6 U	8.1 U	45.3 U	170 U	120
A028	4/22/2014	SO	SUB	9	11	889 --	71.7 U	71.7 U	9.3 U	57.3 U	215 U	39
A057	4/30/2014	SO	SUB	3	4	60.5 U	60.5 U	60.5 U	-- --	48.4 U	181 U	--
A058	4/30/2014	SO	SUB	4	6.5	54.4 U	54.4 U	54.4 U	7.4 U	43.5 U	163 U	8.8
A063	5/1/2014	SO	SUB	1.5	2.5	56.7 U	56.7 U	56.7 U	-- --	45.4 U	170 U	--
D059	5/1/2014	SO	SUB	4	5	58.3 U	58.3 U	58.3 U	7.9 U	46.6 U	175 U	47
D060	5/1/2014	SO	SUB	4	4.6	54.2 U	54.2 U	54.2 U	-- --	43.4 U	163 U	--
D030	5/1/2014	SO	SUB	1	3	39.5 J	54.1 U	54.1 U	7.2 U	43.2 U	162 U	20
D062	5/1/2014	SO	SUB	1.5	2.5	58.4 U	58.4 U	58.4 U	-- --	46.7 U	175 U	--
P010	5/5/2014	SO	SUB	3	5	56.5 U	56.5 U	56.5 U	7.9 U	45.2 U	169 U	190
SBG-01	5/5/2014	SO	SUB	0.5	2	58 U	58 U	58 U	8.2 U	46.4 U	174 U	48
Septic1	5/7/2014	SO	SUB	0	0	118 U	118 U	118 U	16 U	94.8 U	355 U	680
A-SAND	5/7/2014	SO	SUB	4.5	5.5	66 U	66 U	66 U	8.8 U	52.8 U	198 U	24
A018	5/5/2014	SO	SUB	5	6.5	54.2 U	54.2 U	54.2 U	7.5 U	43.4 U	163 U	20
A064	5/5/2014	SO	SUB	2	4	62.1 U	62.1 U	62.1 U	7.9 U	49.7 U	186 U	36
D063	5/5/2014	SO	SUB	1	2	66.7 U	66.7 U	66.7 U	8.1 U	53.4 U	200 U	25
D011	5/5/2014	SO	SUB	6	8	63.9 U	63.9 U	63.9 U	8.8 U	51.1 U	192 U	31
D019	5/5/2014	SO	SUB	3	4	66.4 U	66.4 U	66.4 U	9.2 U	53.1 U	199 U	21
D005	5/5/2014	SO	SUB	1.5	3	60.5 U	60.5 U	60.5 U	7.7 U	48.4 U	181 U	15
A064	5/5/2014	SO	SUB	7	8	70.2 U	70.2 U	70.2 U	-- --	56.2 U	211 U	--
D069	5/6/2014	SO	SUB	6.9	7.9	53.6 U	53.6 U	53.6 U	-- --	42.9 U	161 U	--
D064	5/6/2014	SO	SUB	2.5	3	60.4 U	60.4 U	60.4 U	-- --	48.3 U	181 U	--
D067	5/6/2014	SO	SUB	3	3.6	62.9 U	62.9 U	62.9 U	-- --	50.3 U	189 U	--
D068	5/6/2014	SO	SUB	1.5	3	56.9 U	56.9 U	56.9 U	-- --	45.5 U	171 U	--
D065	5/6/2014	SO	SUB	3.5	4	67.2 U	67.2 U	67.2 U	-- --	53.7 U	202 U	--
D066	5/6/2014	SO	SUB	7.1	7.7	68.9 U	68.9 U	68.9 U	-- --	55.2 U	207 U	--
D066	5/6/2014	SO	SUB	8.2	8.9	67.5 U	67.5 U	67.5 U	-- --	54 U	202 U	--
SP006	8/18/2014	SO	SS	4.5	5.5	61.3 U	61.3 U	61.3 U	-- --	49 U	184 U	--
SP010	9/10/2014	SO	SS	3.5	4	66.5 U	66.5 U	66.5 U	-- --	53.2 U	200 U	--
SP010	9/10/2014	SO	SS	7.5	8	59.7 U	59.7 U	59.7 U	-- --	47.8 U	179 U	--
SP010	9/10/2014	SO	SS	7.5	8	62.4 U	62.4 U	62.4 U	-- --	49.9 U	187 U	--

Table B-07. Select laboratory results and field measurements for water samples collected by the USGS MO WSC.
[USGS, United States Geological Survey; MWSC, Missouri Water Science Center; µg/L, micrograms per liter; PCE, tetrachloroethene; TCE, trichloroethene; cis-DCE, cis-1,2,-dichloroethene; --, no data; E, detected above the detection limit but below the reporting limit; <, less than; M, constituent presence verified but not quantified]

Station name (fig. 3-07) Short names are found in table D-01.	Station number	Date	Sample start time	Record number	Type	Barometric pressure, millimeters of mercury	Air temperature, degrees Celsius	Dissolved oxygen, milligrams per liter	pH	Specific conductance, microsiemens per centimeter at 25 degrees Celsius	Water temperature, degrees Celsius	Altitude of land surface, feet	Depth of well, feet below land surface datum	Chromium (µg/L)	Dieldrin (µg/L)	Benzene (µg/L)	PCE (µg/L)	TCE (µg/L)	cis-DCE (µg/L)
Indian Creek Trib TB-2	381120091561901	3/19/2014	1145	1401913	SW	--	--	--	--	--	--	738	--	E 1.5	-- --	< 1	< 1	< 1	< 1
Indian Creek Trib TB2-1	381128091563201	3/19/2014	1100	1401912	SW	--	--	--	--	--	--	770	--	E 2.6	-- --	< 1	< 1	< 1	< 1
T40N R09W 21DCA2[1]	381116091554201	3/31/2014	1100	1401907	GW	--	--	--	--	--	--	739	--	-- --	-- --	< 1	< 1	< 1	< 1
T40N R09W 21DDD[1]	381114091552101	3/31/2014	1420	1401906	GW	--	--	--	--	--	--	693	--	-- --	-- --	< 1	< 1	< 1	< 1
T40N R09W 22CCC[1]	381113091551301	3/31/2014	1500	1401905	GW	--	--	--	--	--	--	706	366	-- --	-- --	< 1	< 1	< 1	< 1
Vienna Blanks	381122091563601	1/18/2013	1130	1300038	B	--	--	--	--	--	--	--	--	-- --	-- --	< 0.026	< 0.026	< 0.022	< 0.022
Vienna Blanks	381122091563601	12/11/2013	1500	1400031	B	--	--	--	--	--	--	--	--	-- --	-- --	< 0.026	< 0.026	< 0.022	< 0.022
Vienna Blanks	381122091563601	12/16/2013	1215	1400035	B	--	--	--	--	--	--	--	--	-- --	-- --	< 0.026	< 0.026	< 0.022	< 0.022
Vienna Blanks	381122091563601	3/19/2014	1500	1400064	B	--	--	--	--	--	--	--	--	-- --	-- --	< 0.026	< 0.026	< 0.022	< 0.022
Vienna Blanks	381122091563601	3/31/2014	1515	1400700	B	--	--	--	--	--	--	--	--	-- --	-- --	< 1	< 1	< 1	< 1
Vienna Blanks	381122091563601	5/21/2014	1200	1400097	B	--	--	--	--	--	--	--	--	-- --	-- --	< 0.026	< 0.026	< 0.022	< 0.022
Vienna Blanks	381122091563601	9/24/2014	1500	1400567	B	--	--	--	--	--	--	--	--	-- --	-- --	< 1	< 1	< 1	< 1
Vienna Blanks	381122091563601	4/6/2015	800	1500079	B	--	--	--	--	--	--	--	--	-- --	-- --	< 1	< 1	< 1	< 1
Vienna Blanks	381122091563601	4/15/2015	1500	1500108	B	--	--	--	--	--	--	--	--	-- --	-- --	< 1	< 1	< 1	< 1
Vienna Blanks	381122091563601	4/21/2015	1601	1500083	B	--	--	--	--	--	--	--	--	-- --	-- --	< 1	< 1	< 1	< 1
Vienna Blanks	381122091563601	3/10/2016	1400	1600119	B	--	--	--	--	--	--	--	--	-- --	-- --	< 1	< 1	< 1	< 1
Vienna Blanks	381122091563601	3/17/2016	1500	1600125	B	--	--	--	--	--	--	--	--	-- --	-- --	< 1	< 1	< 1	< 1
VIN COV-01	381118091564601	1/17/2013	1045	1300319	GW	738	--	0.1	7.2	613	15.4	888	670	-- --	-- --	< 0.026	1.22	0.023	< 0.022
VIN COV-01	381118091564601	5/1/2013	1400	1300791	GW	740	--	0.4	7.3	612	16.3	888	670	-- --	-- --	< 0.026	1.25	0.021	< 0.022
VIN COV-01	381118091564601	7/31/2013	1100	1301454	GW	740	--	0.7	7.5	618	17.4	888	670	-- --	-- --	< 0.026	2.07	0.029	< 0.022
VIN COV-01	381118091564601	7/31/2013	1101	1300394	QGW	740	--	0.7	7.5	618	17.4	888	670	-- --	-- --	< 0.026	2.06	0.029	< 0.022
VIN COV-01	381118091564601	12/16/2013	945	1400190	GW	740	5	0.3	7.1	577	15.4	888	670	-- --	-- --	< 0.026	5.01	0.431	0.055
VIN COV-01	381118091564601	3/18/2014	1340	1400510	GW	727	--	0.6	7.2	617	15.5	888	670	-- --	-- --	< 0.026	2.49	0.039	< 0.022
VIN COV-01	381118091564601	5/21/2014	1100	1400792	GW	739	--	2.5	7.2	611	17	888	670	-- --	-- --	< 0.026	1.42	0.025	< 0.022
VIN COV-01	381118091564601	9/24/2014	1310	1401737	GW	744	--	0.4	7.2	617	15.6	888	670	-- --	-- --	< 1	E 0.83	< 1	< 1
VIN COV-01	381118091564601	4/20/2015	1520	1501140	GW	732	--	0.6	7.2	622	15.5	888	670	-- --	-- --	< 0.026	0.203	< 0.022	< 0.022
VIN COV-01	381118091564601	3/9/2016	1430	1600771	GW	735	--	--	7.3	629	15.2	888	670	-- --	-- --	< 1	< 1	< 1	< 1
VIN COV-03	381126091563901	1/17/2013	1010	1300318	GW	735	--	0.2	7.1	577	15.4	838	970	-- --	-- --	< 0.026	6.24	0.395	0.046
VIN COV-03	381126091563901	5/1/2013	1300	1300790	GW	740	--	0.4	7.3	583	18.1	838	970	-- --	-- --	< 0.026	6.38	0.36	0.043
VIN COV-03	381126091563901	7/31/2013	945	1301453	GW	740	--	0.6	7.3	581	15.5	838	970	-- --	-- --	< 0.026	5.8	0.352	0.042
VIN COV-03	381126091563901	12/16/2013	1100	1400191	GW	740	5.5	2.7	7.3	607	14.8	838	970	-- --	-- --	< 0.026	0.732	< 0.022	< 0.022
VIN COV-03	381126091563901	3/17/2014	1440	1400507	GW	735	--	0.5	7.2	582	15.4	838	970	-- --	< 0.01	< 0.026	4.17	0.403	0.049
VIN COV-03	381126091563901	3/17/2014	1441	1400063	QGW	735	--	0.5	7.2	582	15.4	838	970	-- --	< 0.01	< 0.026	4.52	0.419	0.056
VIN COV-03	381126091563901	5/20/2014	1145	1400796	GW	741	--	0.3	7.2	584	15.6	838	970	-- --	-- --	< 0.026	5.23	0.39	0.059
VIN COV-03	381126091563901	9/24/2014	1330	1401736	GW	745	--	0.4	7.2	581	15.6	838	970	-- --	-- --	< 1	6	E 0.46	< 1
VIN COV-03	381126091563901	4/20/2015	1425	1501141	GW	--	--	--	--	--	--	838	970	-- --	-- --	< 0.026	7.11	0.462	0.055
VIN COV-03	381126091563901	3/10/2016	1205	1600769	GW	742	--	--	6.9	614	15.1	838	970	-- --	-- --	< 1	5.7	E 0.43	< 1
VIN MK-01	381116091563601	11/30/2011	1145	1200220	GW	--	--	--	7.2	755	15.1	828	147	-- --	-- --	< 0.026	7.24	0.312	0.018
VIN MK-01	381116091563601	1/18/2013	1000	1300325	GW	740	--	--	7.1	762	15.1	828	147	-- --	-- --	< 0.026	6.87	0.4	0.025
VIN MK-01	381116091563601	5/1/2013	935	1300787	GW	740	--	0.3	7.2	763	15.8	828	147	-- --	-- --	< 0.026	6.78	0.36	0.027
VIN MK-01	381116091563601	7/30/2013	1415	1301452	GW	740	--	1.2	7.5	757	15.2	828	147	-- --	-- --	< 0.026	7.63	0.341	0.031
VIN MK-01	381116091563601	12/16/2013	1200	1400192	GW	740	5.7	0.2	7.1	758	15.1	828	147	-- --	-- --	< 0.026	6.4	0.423	0.035
VIN MK-01	381116091563601	3/17/2014	1230	1400506	GW	737	--	1.2	7.2	768	14.9	828	147	-- --	< 0.01	< 0.026	6.1	0.42	0.034
VIN MK-01	381116091563601	5/21/2014	1005	1400793	GW	734	--	0.4	7	757	15.5	828	147	-- --	-- --	< 0.026	8.7	0.412	0.033
VIN MK-01	381116091563601	9/23/2014	1400	1401740	GW	745	--	0.2	7	755	15.4	828	147	-- --	-- --	< 1	7	< 1	< 1
VIN MK-01	381116091563601	4/16/2015	1030	1501144	GW	742	--	0.2	6.9	755	15.1	828	147	-- --	-- --	< 1	7	< 1	< 1
VIN MK-01	381116091563601	3/11/2016	1115	1600823	GW	747	--	2.8	7.2	746	14.7	828	147	-- --	-- --	< 1	6.3	< 1	< 1
VIN-JW-01-CISTERN	381119091563801	6/27/2014	940	1401804	GW	--	--	7.2	7.3	631	15.7	851	18.2	-- --	-- --	< 0.026	49	0.235	0.09
VIN-JW-01-CISTERN	381119091563801	4/21/2015	1055	1501139	GW	736	--	8.2	7.2	636	13.1	851	18.2	-- --	-- --	< 1	36	< 1	< 1
VIN-JW-SEEP	381119091562501	5/19/2014	1220	1400801	GW	741	--	14.5	7.3	544	15.8	870	--	-- --	-- --	< 0.026	0.964	0.04	< 0.022
VIN-JW-SEEP	381119091562501	6/27/2014	1040	1401032	GW	740	--	3.1	7.5	646	20.7	870	--	-- --	-- --	< 0.026	0.634	0.016	< 0.022
VIN-MH-069S	--	03/12/12	0946	--	WA	--	--	--	--	--	--	--	--	-- --	-- --	--	E 0.2	< 1	< 1
VIN-MH-064	--	03/12/12	1025	--	WA	--	--	--	--	--	--	--	--	-- --	-- --	--	< 1	< 1	< 1
VIN-MH-090N	--	03/12/12	1140	--	WA	--	--	--	--	--	--	--	--	-- --	-- --	--	E 1	< 1	< 1
VIN-MH-090E	--	03/12/12	1145	--	WA	--	--	--	--	--	--	--	--	-- --	-- --	--	E 0.91	< 1	< 1

[1] Sample not located on figures, but is located south of the hat factory property along highway 42.

Table B-07. Select laboratory results and field measurements for water samples collected by the USGS MO WSC.—Continued

[USGS, United States Geological Survey; MWSC, Missouri Water Science Center; µg/L, micrograms per liter; PCE, tetrachloroethene; TCE, trichloroethene; cis-DCE, cis-1,2,-dichloroethene; --, no data; E, detected above the detection limit but below the reporting limit; <, less than; M, constituent presence verified but not quantified]

Station name (fig. 3-07) Short names are found in table D-01.	Station number	Date	Sample start time	Record number	Type	Barometric pressure, millimeters of mercury	Air temperature, degrees Celsius	Dissolved oxygen, milligrams per liter	pH	Specific conductance, microsiemens per centimeter at 25 degrees Celsius	Water temperature, degrees Celsius	Altitude of land surface, feet	Depth of well, feet below land surface datum	Chromium (µg/L)	Dieldrin (µg/L)	Benzene (µg/L)	PCE (µg/L)	TCE (µg/L)	cis-DCE (µg/L)
VIN-JW-SEEP	381119091562501	4/6/2015	1320	1501049	GW	739	--	8.6	5.3	72	10.5	870	--	-- --	-- --	< 1	< 1	< 1	< 1
VIN-JW-SEEP	381119091562501	3/9/2016	1120	1600773	GW	739	--	--	7.1	185	11.6	870	--	-- --	-- --	< 1	< 1	< 1	< 1
VIN-MW01	381120091563802	1/17/2013	1355	1300322	GW	738	--	5	7.1	920	14.1	851	60	-- --	-- --	< 0.026	1.6	< 0.022	< 0.022
VIN-MW01	381120091563802	4/30/2013	1402	1300785	GW	734	--	6.5	7.7	924	17.5	851	60	-- --	-- --	E 0.145	1.2	< 0.022	< 0.022
VIN-MW01	381120091563802	7/30/2013	1250	1301450	GW	739	--	6.9	7	883	16.2	851	60	-- --	-- --	< 0.026	0.749	< 0.022	< 0.022
VIN-MW01	381120091563802	12/11/2013	1130	1400171	GW	751	-6.1	6.6	6.7	932	12.1	851	60	-- --	-- --	< 0.026	2.23	< 0.022	< 0.022
VIN-MW01	381120091563802	3/19/2014	1045	1400511	GW	735	--	5.6	7	918	12.3	851	60	-- --	-- --	< 0.026	1.88	< 0.022	< 0.022
VIN-MW01	381120091563802	5/20/2014	1016	1400798	QGW	739	--	6	6.9	931	17.6	851	60	-- --	-- --	< 0.026	1.39	< 0.022	< 0.022
VIN-MW01	381120091563802	5/20/2014	1015	1400799	GW	742	--	6	6.9	931	17.6	851	60	-- --	-- --	< 0.026	1.42	< 0.022	< 0.022
VIN-MW01	381120091563802	9/23/2014	1030	1401743	GW	747	--	6.8	6.9	936	16.7	851	60	-- --	-- --	< 1	1	< 1	< 1
VIN-MW01	381120091563802	4/14/2015	1540	1501087	GW	742	--	5.3	7	907	15.8	851	60	-- --	-- --	< 1	E 0.88	< 1	< 1
VIN-MW01	381120091563802	3/10/2016	1115	1600770	GW	742	--	6.9	7.1	951	14.9	851	60	-- --	-- --	< 1	1.6	< 1	< 1
VIN-MW01A	381120091563801	6/4/2012	1015	1201034	GW	--	--	7	7.4	1170	17	851	42.2	-- --	-- --	E 0.016	9.55	0.045	< 0.022
VIN-MW01A	381120091563801	1/17/2013	1420	1300323	GW	738	--	7.1	7.1	1260	--	851	42.2	-- --	-- --	< 0.026	25.1	0.079	< 0.022
VIN-MW01A	381120091563801	4/30/2013	1520	1300786	GW	734	--	7.2	7	1210	16.6	851	42.2	-- --	-- --	< 0.026	35.9	0.079	< 0.022
VIN-MW01A	381120091563801	7/30/2013	1330	1301451	GW	739	--	6.5	7.4	1200	16.1	851	42.2	-- --	-- --	< 0.026	32.7	0.093	< 0.022
VIN-MW01A	381120091563801	12/11/2013	1120	1400170	GW	751	-6.1	8.8	6.9	1190	14.4	851	42.2	-- --	-- --	< 0.026	36.3	0.121	< 0.022
VIN-MW01A	381120091563801	3/19/2014	1245	1400512	GW	735	--	7.5	7.2	1180	11.6	851	42.2	-- --	-- --	< 0.026	54.1	0.106	< 0.022
VIN-MW01A	381120091563801	5/20/2014	1100	1400797	GW	740	--	7.6	7	1230	18.9	851	42.2	-- --	-- --	< 0.026	36	0.105	< 0.022
VIN-MW01A	381120091563801	9/23/2014	1115	1401742	GW	746	--	7.2	6.9	1220	18	851	42.2	-- --	-- --	< 1	23	< 1	< 1
VIN-MW01A	381120091563801	4/15/2015	1110	1501086	GW	740	--	6.5	6.8	1200	15.5	851	42.2	-- --	-- --	< 1	24	< 1	< 1
VIN-MW01A	381120091563801	3/11/2016	1250	1600822	GW	745	--	8.1	7.1	1190	16	851	42.2	-- --	-- --	< 1	24	< 1	< 1
VIN-MW02D	381123091563402	1/17/2013	1130	1300320	GW	738	--	5	7.4	686	13.2	826	79	-- --	-- --	< 0.026	1.83	0.208	< 0.022
VIN-MW02D	381123091563402	4/30/2013	1100	1300782	GW	730	--	8	7.4	695	13.9	826	79	-- --	-- --	E 0.013	1.62	0.141	< 0.022
VIN-MW02D	381123091563402	7/30/2013	1020	1301448	GW	740	--	8	7.3	696	14.6	826	79	-- --	-- --	< 0.026	2.48	0.19	0.014
VIN-MW02D	381123091563402	12/10/2013	1105	1400167	GW	741	-2.2	7.3	7.3	698	12.3	826	79	-- --	-- --	< 0.026	2.87	0.146	< 0.022
VIN-MW02D	381123091563402	3/18/2014	1120	1400508	GW	729	--	4.1	7.2	692	14.5	826	79	-- --	-- --	< 0.026	1.56	0.067	< 0.022
VIN-MW02D	381123091563402	5/19/2014	1200	1400802	GW	741	--	8	7.2	691	15.2	826	79	-- --	-- --	< 0.026	1.82	0.166	< 0.022
VIN-MW02D	381123091563402	9/22/2014	1300	1401745	GW	746	--	7.3	7.2	695	18	826	79	-- --	-- --	< 1	3	< 1	< 1
VIN-MW02D	381123091563402	4/14/2015	1130	1501090	GW	744	--	3.1	7.1	685	17.7	826	79	-- --	-- --	< 1	1	< 1	< 1
VIN-MW02D	381123091563402	3/14/2016	1320	1600817	GW	733	--	4.4	7.3	690	14.9	826	79	-- --	-- --	< 1	1.6	< 1	< 1
VIN-MW03D	381122091563902	1/18/2013	1100	1300324	GW	740	--	5.5	6.9	1060	14.2	840	64	-- --	-- --	< 0.52	978	2.55	0.743
VIN-MW03D	381122091563902	5/1/2013	1100	1300789	GW	741	--	7.2	7.1	817	14.9	840	64	-- --	-- --	< 0.026	274	0.384	0.071
VIN-MW03D	381122091563902	7/31/2013	1230	1301456	GW	740	--	6.4	7.3	801	14.8	840	64	-- --	-- --	< 0.26	227	0.307	< 0.22
VIN-MW03D	381122091563902	12/11/2013	1315	1400173	GW	753	-5.4	5.9	6.7	1000	14.1	840	64	-- --	-- --	< 0.026	1140	3.3	0.647
VIN-MW03D	381122091563902	12/11/2013	1316	1400030	QGW	753	-5.5	5.9	6.7	1000	14.1	840	64	-- --	-- --	< 0.026	1200	3.26	0.637
VIN-MW03D	381122091563902	3/19/2014	1350	1400513	GW	736	--	4.8	7	1040	14.4	840	64	-- --	E 0.0035	< 2.6	998	3.1	< 2.2
VIN-MW03D	381122091563902	5/20/2014	1230	1400795	GW	737	--	6.4	6.9	983	15.1	840	64	-- --	-- --	< 2.6	909	2.25	< 2.2
VIN-MW03D	381122091563902	9/23/2014	1300	1401741	GW	746	--	6.6	6.9	1060	15.3	840	64	-- --	-- --	< 1	730	2	0.4
VIN-MW03D	381122091563902	4/15/2015	1220	1501085	GW	740	--	6.7	6.9	848	14.6	840	64	-- --	-- --	< 5	260	< 5	< 5
VIN-MW03D	381122091563902	3/14/2016	1410	1600816	GW	732	--	6.4	7.2	896	14.4	840	64	-- --	-- --	< 1	790	2	< 1
VIN-MW03S	381122091563901	5/1/2013	1055	1300788	GW	741	--	7.5	7.5	646	17.4	840	49.4	-- --	-- --	0.036	106	0.132	0.013
VIN-MW03S	381122091563901	7/31/2013	1330	1301457	GW	740	--	5.5	8	650	17.6	840	49.4	-- --	-- --	< 0.026	55.5	0.074	< 0.022
VIN-MW03S	381122091563901	12/11/2013	1305	1400172	GW	753	-5.7	0.7	7.3	586	12.9	840	49.4	-- --	-- --	4.19	27.1	0.074	< 0.022
VIN-MW03S	381122091563901	3/19/2014	1450	1400514	GW	736	--	2.9	7.2	289	14.3	840	49.4	-- --	-- --	1.89	88	< 0.22	< 0.22
VIN-MW03S	381122091563901	5/20/2014	1256	1400794	GW	737	--	5.2	7.3	275	17	840	49.4	-- --	-- --	2.07	44	0.099	< 0.22
VIN-MW03S	381122091563901	3/14/2016	1420	1600815	GW	732	--	7.4	8.1	585	14.8	840	49.4	-- --	-- --	< 1	20	< 1	< 1
VIN-MW04D	381124091563802	1/17/2013	1230	1300321	GW	738	--	5.2	7.3	915	11.9	833	70	-- --	-- --	< 0.026	4.92	< 0.022	< 0.022
VIN-MW04D	381124091563802	4/30/2013	1300	1300784	GW	732	--	7	7.9	1020	16.3	833	70	-- --	-- --	0.044	8.08	< 0.022	< 0.022
VIN-MW04D	381124091563802	7/30/2013	1120	1301449	GW	740	--	6	7.3	974	15.5	833	70	-- --	-- --	< 0.026	8.06	0.013	< 0.022
VIN-MW04D	381124091563802	12/10/2013	1200	1400169	GW	741	-2.2	7.3	7	954	14.1	833	70	-- --	-- --	< 0.026	5.9	< 0.022	< 0.022

Table B-07. Select laboratory results and field measurements for water samples collected by the USGS MO WSC.—Continued

[USGS, United States Geological Survey; MWSC, Missouri Water Science Center; µg/L, micrograms per liter; PCE, tetrachloroethene; TCE, trichloroethene; cis-DCE, cis-1,2,-dichloroethene; --, no data; E, detected above the detection limit but below the reporting limit; <, less than; M, constituent presence verified but not quantified]

Station name (figs. 1-02 and 3-07) Short names are found in table D-01.	Station number	Date	Sample start time	Record number	Type	Barometric pressure, millimeters of mercury	Air temperature, degrees Celsius	Dissolved oxygen, milligrams per liter	pH	Specific conductance, microsiemens per centimeter at 25 degrees Celsius	Water temperature, degrees Celsius	Altitude of land surface, feet	Depth of well, feet below land surface datum	Chromium (µg/L)		Dieldrin (µg/L)		Benzene (µg/L)	PCE (µg/L)	TCE (µg/L)	cis-DCE (µg/L)
VIN-MW04D	381124091563802	3/18/2014	1230	1400509	GW	729	--	4.9	7	927	14.9	833	70	--	--	--	--	< 0.026	4.46	< 0.022	< 0.022
VIN-MW04D	381124091563802	5/19/2014	1338	1400800	GW	742	--	5.8	6.9	982	16.5	833	70	--	--	--	--	< 0.026	3.13	< 0.022	< 0.022
VIN-MW04D	381124091563802	9/22/2014	1400	1401744	GW	746	--	6	7	931	17	833	70	--	--	--	--	< 1	4	< 1	< 1
VIN-MW04D	381124091563802	4/14/2015	1310	1501089	GW	742	--	5	6.9	995	16.2	833	70	--	--	--	--	< 1	4	< 1	< 1
VIN-MW04D	381124091563802	3/11/2016	1345	1600821	GW	745	--	6.4	7	940	14.9	833	70	--	--	--	--	< 1	6.5	< 1	< 1
VIN-MW04S	381124091563801	4/30/2013	1200	1300783	GW	736	--	7.6	7.4	1090	15	833	45	--	--	--	--	< 0.026	11.7	0.021	< 0.022
VIN-MW04S	381124091563801	7/31/2013	1120	1301455	GW	740	--	4	7.5	1050	16.8	833	45	--	--	--	--	< 0.026	5.44	< 0.022	< 0.022
VIN-MW04S	381124091563801	12/10/2013	1215	1400168	GW	741	-2.3	0.6	6.9	1030	11.8	833	45	--	--	--	--	< 0.026	3.59	< 0.022	< 0.022
VIN-MW04S	381124091563801	4/14/2015	1330	1501088	GW	743	--	3	7.4	1290	14.8	833	45	--	--	--	--	< 1	4	< 1	< 1
VIN-MW04S	381124091563801	3/11/2016	1400	1600820	GW	745	--	8.9	7.2	1020	14.5	833	45	--	--	--	--	< 1	8.1	< 1	< 1
VIN-MW05D	381123091562602	9/24/2014	1150	1401738	GW	747	--	0.3	7	830	14.2	790	73.31	--	--	--	--	< 1	27	< 1	< 1
VIN-MW05D	381123091562602	9/24/2014	1151	1400568	QGW	747	--	0.3	7	830	14.2	790	73.31	--	--	--	--	< 1	27	< 1	< 1
VIN-MW05D	381123091562602	4/13/2015	1300	1501092	GW	743	--	0.2	7	840	13.7	790	73.31	--	--	--	--	< 1	7	< 1	< 1
VIN-MW05D	381123091562602	3/14/2016	1115	1600819	GW	734	--	3.4	7.2	841	13.4	790	73.31	--	--	--	--	< 1	5.5	< 1	< 1
VIN-MW05S	381123091562601	9/24/2014	1045	1401739	GW	747	--	5.3	6.8	838	16.6	790	43.81	--	--	--	--	< 1	57	< 1	< 1
VIN-MW05S	381123091562601	4/13/2015	1350	1501091	GW	743	--	5.1	6.9	807	13.6	790	43.81	--	--	--	--	< 1	57	< 1	< 1
VIN-MW05S	381123091562601	3/14/2016	1200	1600818	GW	734	--	6.8	7.1	845	13.9	790	43.81	--	--	--	--	< 1	70	< 1	< 1
VIN-MW06	381122091563801	10/1/2014	1355	1501436	GW	--	--	--	--	--	--	844	120	--	--	--	--	< 1	600	2	< 1
VIN-MW06	381122091563801	4/20/2015	1150	1501143	GW	733	--	2.1	7	814	15.5	844	120	--	--	--	--	< 1	540	3	0.4
VIN-MW06	381122091563801	3/15/2016	1040	1600814	GW	727	--	3.7	7.2	824	15.9	844	120	--	--	--	--	< 1	540	4	0.4
VIN-MW06	381122091563801	3/15/2016	1041	1600208	QGW	727	--	3.7	7.2	824	15.9	844	120	--	--	--	--	< 1	560	4	< 1
VIN-MW06A	381122091563802	4/20/2015	1340	1501142	GW	734	--	6.3	7	997	15.6	844	97.11	--	--	--	--	< 1	640	3	0.6
VIN-MW06A	381122091563802	4/20/2015	1341	1500085	QGW	734	--	6.3	7	997	15.6	844	97.11	--	--	--	--	< 1	1100	3	0.6
VIN-MW06A	381122091563802	3/15/2016	1155	1600812	GW	727	--	5.9	7.1	1020	16.2	844	97.11	--	--	--	--	< 1	1100	2	< 1
VIN-MW07	381121091563901	4/21/2015	1130	1501138	GW	735	--	1.4	7	918	16.7	844	53	--	--	--	--	< 1	36	< 1	< 1
VIN-MW-08	381126091563101	9/22/2015	1235	1502139	GW	744	--	1.6	7	586	14.9	800	324	--	--	--	--	< 1	< 1	< 1	< 1
VIN-MW-08	381126091563101	3/16/2016	1415	1600808	GW	739	--	0.7	7.5	550	15.7	800	324	--	--	--	--	< 1	< 1	< 1	< 1
VIN-MW-08A	381126091563102	3/17/2016	1400	1600807	GW	740	--	1.1	7.4	669	15.3	803	160	--	--	--	--	< 1	< 1	< 1	< 1
VIN-MW-09D	381120091562002	3/15/2016	1330	1600809	GW	728	--	1	7.3	636	15.4	732	40	--	--	--	--	< 1	< 1	< 1	< 1
VIN-MW-09S	381120091562001	3/15/2016	1410	1600824	GW	728	--	1.9	7.3	484	13	732	14	--	--	--	--	< 1	E 0.7	< 1	< 1
VIN-PB-1	381125091561201	3/31/2014	1330	1401909	GW	--	--	--	--	--	--	826	--	--	--	--	--	< 1	< 1	< 1	< 1
VIN-PB-2	381119091552901	3/31/2014	1030	1401908	GW	--	--	--	--	--	--	761	--	--	--	--	--	< 1	< 1	< 1	< 1
VIN-VIENNA SPRING	381104091563401	4/16/2015	1050	1501437	GW	--	--	--	--	--	--	801	--	--	--	--	--	< 1	< 1	< 1	< 1
WP-020	381121091562401	1/17/2013	1320	1300326	GW	--	--	--	7.3	611	3.9	758	--	--	--	--	--	< 0.026	< 0.026	< 0.022	< 0.022
WP-020	381121091562401	5/3/2013	1200	1300792	GW	735	--	9.8	7	280	10.2	758	--	--	--	--	--	< 0.026	5.21	< 0.022	< 0.022
WP-020	381121091562401	5/3/2013	1201	1300793	QGW	735	--	9.8	7	280	10.2	758	--	--	--	--	--	< 0.026	5.32	< 0.022	< 0.022
WP-020	381121091562401	3/19/2014	1215	1400546	GW	--	--	--	7.4	709	7	758	--	E	1.4	<	0.01	< 1	< 1	< 1	< 1
WP-020	381121091562401	4/6/2015	1300	1501050	GW	739	--	9.3	6	197	9.3	758	--	--	--	--	--	< 1	4	< 1	< 1
WP-020	381121091562401	3/9/2016	1100	1600774	GW	740	--	--	7.1	546	9.6	758	--	--	--	--	--	< 1	13	< 1	< 1
VIN-CITYHALL	381118091564701	6/12/2014	1105		WA	--	--	--	--	--	--	--	--	--	--	--	--	< 1	< 1	< 1	< 1
VIN-BALLPARK	381130091571401	6/12/2014	1120		WA	--	--	--	--	--	--	--	--	--	--	--	--	< 1	< 1	< 1	< 1
VIN-STOCKYARD	381108091572501	6/12/2014	1215		WA	--	--	--	--	--	--	--	--	--	--	--	--	< 1	< 1	< 1	< 1

Table B-08. Discharge, temperature, and specific conductance measured during seepage studies near Vienna, Missouri, 2011-2012.

[ft^3/s, cubic feet per second; µS/cm, microSiemens per centimeter; --, no data]

Sample Location (fig. 2-02)	Date	Discharge, in ft^3/s	Measurement method	Water temperature, in degrees Celsius	Specific conductance, in µS/cm
CR-24A	9/27/2011	0.020	Estimated	--	--
M-54L	9/27/2011	0.003	Estimated	16.30	503
M-36	9/27/2011	0.190	Estimated	15.50	423
PBV-05	9/27/2011	0.002	Estimated	17.10	225
PBV-06	9/27/2011	0.018	Measured	--	--
PBV-01	9/27/2011	0.002	Estimated	17.60	850
M-01	9/27/2011	0.006	Estimated	16.50	779
M-02	9/27/2011	0	Measured	--	--
M-03	9/27/2011	0	Measured	--	--
M-04	9/27/2011	0	Measured	--	--
PBV-02	9/27/2011	0.002	Estimated	14.20	718
M-05	9/27/2011	0.005	Estimated	17.90	519
M-06	9/27/2011	0	Measured	--	--
PBV-03	9/27/2011	0.018	Measured	15.30	758
PBV-04	9/27/2011	0	Measured	15.40	437
M-07	9/27/2011	0.075	Estimated	16.90	474
M-08	9/27/2011	0.014	Estimated	17.10	600
M-09	9/27/2011	0.026	Estimated	17.40	556
M-10	9/27/2011	0.020	Estimated	16.50	707
PBV-07	9/27/2011	0.027	Measured	14.80	--
M-11	9/27/2011	0.026	Measured	18.10	--
M-12	9/27/2011	0	Measured	--	--
M-13	9/27/2011	0.002	Estimated	19.50	752
M-14	9/27/2011	0.003	Estimated	20.20	891
PBV-07R	9/28/2011	0.027	Measured	14.80	593
PBV-09	9/28/2011	0.005	Estimated	17.20	497
PBV-10	9/28/2011	0	Measured	--	--
PBV-11	9/28/2011	0	Measured	--	--
PBV-12	9/28/2011	0.090	Estimated	15.50	497
PBV-13	9/28/2011	0	Measured	--	--
PBV-14	9/28/2011	0.107	Measured	15.70	499
PBV-15	9/28/2011	0.198	Measured	--	--
PBV-16	9/28/2011	0	Measured	--	--
PBV-18	9/28/2011	0	Measured	16.40	457
PBV-19	9/28/2011	0.002	Estimated	16.30	441
PBV-17	9/28/2011	0.034	Measured	18.00	445
PBV-20	9/28/2011	0.002	Estimated	20.20	468
PBV-22	9/28/2011	0.070	Measured	18.80	367
PBV-21	9/28/2011	0.380	Measured	18.70	422
M-15	9/28/2011	0.031	Measured	14.40	458
CR-20	9/28/2011	0	Measured	16.00	579
CR-21	9/28/2011	0	Measured	--	726
LB-02	9/28/2011	0.008	Estimated	--	--
LB-03	9/28/2011	0	Measured	--	--
CR-06	9/28/2011	0	Measured	--	--
CR-07	9/28/2011	0	Measured	--	--
CR-08	9/28/2011	0	Measured	--	--
CR-09	9/28/2011	0	Measured	--	--
M-21	9/28/2011	0	Measured	15.70	779
CR-10	9/28/2011	0.011	Measured	--	490
LB-07	9/28/2011	0.009	Estimated	16.10	379
CR-11	9/28/2011	0	Measured	--	--
CR-12	9/28/2011	0	Measured	--	544
CR-13	9/28/2011	0	Measured	--	--

Table B-08. Discharge, temperature, and specific conductance measured during seepage studies near Vienna, Missouri, 2011-2012.—Continued

[ft^3/s, cubic feet per second; µS/cm, microSiemens per centimeter; --, no data]

Sample Location (fig. 2-02)	Date	Discharge, in ft^3/s	Measurement method	Water temperature, in degrees Celsius	Specific conductance, in µS/cm
M-25	9/28/2011	0	Measured	17.00	622
CR-14	9/28/2011	0	Measured	--	470
CR-15	9/28/2011	0	Measured	--	--
CR-16	9/28/2011	0	Measured	--	--
CR-17	9/28/2011	0.047	Measured	16.30	503
CR-18	9/28/2011	0	Measured	--	--
CR-19	9/28/2011	0	Measured	--	--
CR-22	9/28/2011	0.150	Measured	20.60	279
CR-23	9/28/2011	0.002	Estimated	--	577
CR-24	9/28/2011	0.172	Measured	--	441
CR-25	9/28/2011	0	Measured	--	--
CR-26	9/28/2011	0	Measured	--	--
CR-27	9/28/2011	0.328	Measured	--	393
CR-01	9/28/2011	0.018	Estimated	15.10	407
CR-02	9/28/2011	0	Measured	--	--
CR-03	9/28/2011	0	Measured	--	--
CR-04	9/28/2011	0	Measured	--	--
CR-05	9/28/2011	0.010	Measured	--	424
PBV-08	9/28/2011	0.090	Measured	14.80	505
LB-01	9/28/2011	0.008	Estimated	18.50	180
M-16	9/28/2011	0	Measured	--	--
M-17	9/28/2011	0.002	Estimated	17.30	544
M-18	9/28/2011	0	Measured	--	--
M-19	9/28/2011	0.001	Estimated	16.90	479
M-20	9/28/2011	0.001	Estimated	16.00	579
M-20A	9/28/2011	0.011	Estimated	16.30	538
LB-04	9/28/2011	0	Measured	--	--
LB-06	9/28/2011	0	Measured	--	--
M-22	9/28/2011	0.001	Estimated	16.10	419
M-23	9/28/2011	0.002	Estimated	15.50	555
M-24	9/28/2011	0.001	Estimated	17.10	503
LB-05	9/28/2011	0	Measured	--	--
LB-08	9/28/2011	0.001	Estimated	15.70	558
M-26	9/28/2011	0.030	Estimated	17.00	419
LB-09	9/28/2011	0.089	Measured	19.60	469
M-27	9/28/2011	0.024	Estimated	17.70	359
LB-10	9/28/2011	0	Measured	--	--
LB-11	9/28/2011	0	Measured	20.90	332
M-28	9/28/2011	0.174	Estimated	18.60	456
LB-12	9/28/2011	0.002	Estimated	16.30	272
M-29	9/28/2011	0	Measured	--	--
M-30	9/28/2011	0	Measured	--	--
M-31	9/28/2011	0	Measured	--	--
M-32	9/28/2011	0.001	Estimated	19.60	317
M-33	9/28/2011	0.001	Estimated	20.60	279
M-34	9/28/2011	0.012	Estimated	20.30	360
LB-13	9/28/2011	0	Measured	--	--
LB-14	9/28/2011	0	Measured	--	--
M-35	9/28/2011	0.003	Estimated	--	--
LB-15	9/28/2011	0.246	Measured	21.50	378
LB-16	9/28/2011	0	Measured	--	--
LB-17	9/28/2011	0	Measured	--	--
LB-18	9/28/2011	0	Measured	17.30	524
LB-19	9/28/2011	0.004	Estimated	15.30	408

Table B-08. Discharge, temperature, and specific conductance measured during seepage studies near Vienna, Missouri, 2011-2012.—Continued

[ft^3/s, cubic feet per second; µS/cm, microSiemens per centimeter; --, no data]

Sample Location (figs. 2-02 and 2-03)	Date	Discharge, in ft^3/s	Measurement method	Water temperature, in degrees Celsius	Specific conductance, in µS/cm
LB-20	9/28/2011	0	Measured	--	--
CR-31	9/29/2011	0	Measured	--	692
LB-25	9/29/2011	0	Measured	--	--
CR-32	9/29/2011	0	Measured	--	--
M-42	9/29/2011	0.001	Estimated	15.00	333
CR-33	9/29/2011	0	Measured	--	--
M-43	9/29/2011	0.001	Estimated	15.60	468
LB-26	9/29/2011	0	Measured	--	--
M-44	9/29/2011	0	Measured	--	--
CR-34	9/29/2011	0	Measured	--	--
LB-27	9/29/2011	0	Measured	--	--
CR-35	9/29/2011	0	Measured	--	550
M-45	9/29/2011	0.001	Estimated	16.20	436
LB-28	9/29/2011	0.002	Estimated	16.10	710
M-46	9/29/2011	0.002	Estimated	16.10	392
M-47	9/29/2011	0	Measured	--	--
CR-36	9/29/2011	0	Measured	--	--
M-48	9/29/2011	0	Measured	--	--
LB-29	9/29/2011	0	Measured	--	--
M-49	9/29/2011	0.014	Measured	15.90	477
CR-37	9/29/2011	0.020	Measured	--	525
CR-38	9/29/2011	0	Measured	--	--
M-50	9/29/2011	0	Measured	--	--
M-51	9/29/2011	0.004	Estimated	17.20	567
M-52	9/29/2011	0.003	Estimated	18.50	522
CR-39	9/29/2011	0.563	Measured	--	450
M-53	9/29/2011	0	Measured	--	--
M-54R	9/29/2011	0.001	Estimated	16.90	505
CR-28	9/29/2011	0.003	Estimated	--	210
LB-21	9/29/2011	0	Measured	--	--
LB-22	9/29/2011	0.002	Estimated	13.70	494
CR-29	9/29/2011	0.075	Measured	--	491
CR-30	9/29/2011	0.379	Measured	--	437
M-37	9/29/2011	0.035	Measured	16.30	398
M-38	9/29/2011	0	Measured	--	--
LB-23	9/29/2011	0.243	Measured	16.70	400
M-39	9/29/2011	0.030	Measured	15.20	437
M-40L	9/29/2011	0	Measured	--	--
M-40R	9/29/2011	0.001	Estimated	14.70	312
M-41	9/29/2011	0	Measured	15.30	511
LB-24	9/29/2011	0	Measured	--	--
WP-002	5/8/2012	0	Measured	--	--
WP-003	5/8/2012	0	Measured	--	--
WP-004	5/8/2012	0	Measured	--	--
WP-005	5/8/2012	0	Measured	--	--
WP-006	5/8/2012	0	Measured	--	--
WP-007	5/8/2012	0	Measured	--	--
WP-008	5/8/2012	0	Measured	--	--
WP-009	5/8/2012	0	Measured	--	--
WP-010	5/8/2012	0.001	Estimated	--	--
WP-011	5/8/2012	0	Measured	--	--
WP-012	5/8/2012	0.001	Estimated	--	--
WP-013	5/8/2012	0.005	Estimated	--	--
WP-014	5/8/2012	0.001	Estimated	--	--

Table B-08. Discharge, temperature, and specific conductance measured during seepage studies near Vienna, Missouri, 2011-2012.—Continued

[ft^3/s, cubic feet per second; µS/cm, microSiemens per centimeter; --, no data]

Sample Location (fig. 2-03)	Date	Discharge, in ft^3/s	Measurement method	Water temperature, in degrees Celsius	Specific conductance, in µS/cm
WP-015	5/8/2012	0.005	Estimated	--	--
WP-016	5/8/2012	0.006	Estimated	--	--
WP-017	5/8/2012	0.056	Measured	--	--
WP-018	5/8/2012	0.005	Estimated	--	--
WP-019	5/8/2012	0.005	Estimated	--	--
WP-020	5/8/2012	0	Measured	24.30	1,095
WP-021	5/8/2012	0	Measured	--	--
WP-022	5/8/2012	0	Measured	--	--
WP-023	5/8/2012	0	Measured	--	--
WP-025	5/8/2012	0.005	Estimated	--	--
WP-026	5/8/2012	0.001	Estimated	--	--
PB-581	5/8/2012	0.065	Measured	17.60	981
PB-582	5/8/2012	0.038	Measured	14.50	782
PB-583	5/8/2012	0.032	Measured	14.60	865
PB-584	5/8/2012	0.018	Measured	--	--
PB-585	5/8/2012	0.090	Measured	18.60	624
PB-586	5/8/2012	0.038	Measured	18.10	731
PB-587	5/8/2012	0.043	Measured	18.20	568
PB-588	5/8/2012	0.009	Estimated	16.30	503

Table B-09. Analytical results of samples analyzed with the portable gas chromatograph and USGS contract lab.

[USGS, United States Geological Survey; ug/L, micrograms per liter; ug/kg, micrograms per kilogram of soil; PCE, tetrachloroethene; TCE, trichloroethene; cis-DCE, cis-1,2-dichloroethene; trans-DCE, trans-1,2-dichloroethene; SO, soil; BH, borehole; <, less than; ND, not detected; GW, groundwater; MW, monitoring well; CS, cistern; DW, domestic well; PS, public supply; SP, spring; SE, seep; WA, water; SN, sanitary sewer; SW, surface water; ST, stream; TP, tap]

Location (figs. 3-01 and 3-07)	Media	Feature	Date	Time	Concentration in ug/L (water) or ug/kg (soil) in samples analyzed by the USGS contract lab					Concentration in ug/L (water) or ug/kg (soil) in samples analyzed by the portable gas chromatograph				
					PCE	TCE	cis-DCE	trans-DCE	Toluene	PCE	TCE	cis-DCE	trans-DCE	Toluene
A028	SO	BH	04/23/14	1615	2,840.	889	<1.40	<1.40	<1.40	15,552	ND	ND	ND	ND
VIN-SP006	SO	BH	08/18/14	1000	705.	<61.3	14.1J	<61.3	<61.3	7,232	ND	ND	ND	ND
D066	SO	BH	05/06/14	1435	591.	<67.5	<67.5	<67.5	<67.5	1,968	3.2	ND	ND	ND
D030	SO	BH	05/01/14	1145	1,760.	39.5	210	<54.1	<54.1	1,780	ND	ND	ND	ND
VIN-MW-06A	GW	MW	04/20/15	1341	1,100.	2.6	0.59J	<1	<1	1,740	2.4	ND	ND	ND
D066	SO	BH	05/06/14	1425	817.	<68.9	<68.9	<68.9	<68.9	1,536	4.4	ND	ND	ND
VIN-MW-03D	GW	MW	09/23/14	1300	730.	<1	<1	<1	<1	1,080	ND	ND	ND	ND
VIN-MW-06	GW	MW	04/20/15	1150	540.	3.3	0.40J	<1	<1	787	2.8	ND	ND	ND
VIN-MW-06	GW	MW	10/01/14	1355	600.	1.7	<1	<1	<1	776	ND	ND	ND	ND
VIN-MW-03D	GW	MW	04/15/15	1220	260.	<1	<1	<1	<1	548	ND	ND	ND	ND
VIN-MW-03D	GW	MW	05/01/13	1100	274.	0.38	0.07	<.018	0.04	230.7	ND	ND	ND	ND
A057	SO	BH	04/30/14	1110	379.	<60.5	<60.5	<60.5	<60.5	202.8	ND	ND	ND	ND
D011	SO	BH	05/05/14	1400	92.6	<63.9	<63.9	<63.9	<63.9	168	ND	ND	ND	ND
VIN-MW-03S	GW	MW	05/01/13	1055	106.	0.13	.01J	<.018	0.04	151.5	ND	ND	ND	ND
VIN-MW-03S	GW	MW	03/19/14	1450	88.	<0.22	<0.22	<0.18	<0.2	123.8	ND	ND	ND	ND
A018	SO	BH	05/05/14	1030	<54.2	<54.2	<54.2	<54.2	<54.2	88	77.2	ND	ND	ND
VIN-MW-05S	GW	MW	04/13/15	1350	57.	<1	<1	<1	<1	84.4	ND	ND	ND	ND
VIN-MW-01A	GW	MW	03/19/14	1245	54.13	0.11	<.022	<.018	<.02	78	ND	ND	ND	ND
VIN-MW-05D	GW	MW	09/24/14	1150	27.	<1	<1	<1	<1	68.4	ND	ND	ND	ND
JW-01	GW	CS	06/27/14	0940	49.	0.235	0.09	0.0184	0.0355	65.2	ND	ND	ND	ND
VIN-MW-05S	GW	MW	09/24/14	1045	57.	<1	<1	<1	<1	64.8	ND	ND	ND	ND
D067	SO	BH	05/06/14	1145	55.9J	<62.9	<62.9	<62.9	<62.9	64.4	ND	ND	ND	ND
D068	SO	BH	05/06/14	1228	63.7	<56.9	<56.9	<56.9	<56.9	56.4	ND	ND	ND	ND
D062	SO	BH	05/01/14	1300	37.4J	<58.4	<58.4	<58.4	<58.4	46.4	ND	ND	ND	ND
D060	SO	BH	05/01/14	1100	39J	<54.2	<54.2	<54.2	<54.2	45.6	ND	ND	ND	ND
VIN-MW-01A	GW	MW	04/30/13	1520	35.9	0.08	<.022	<.018	<.02	44.7	ND	ND	ND	ND
VIN-JW-01	GW	CS	09/23/14	1145	36.	<1	<1	<1	<1	43.3	0.8	ND	ND	ND
VIN-MW-07	GW	MW	04/21/15	1130	36.	<1	<1	<1	<1	38.7	ND	ND	ND	ND
D019	SO	BH	05/05/14	1420	19.9J	<66.4	<66.4	<66.4	<66.4	35.6	2	ND	ND	ND
VIN-MW-01A	GW	MW	05/20/14	1100	36.	.1	<.02	<.02	<.02	33.5	ND	ND	ND	ND
D059	SO	BH	05/01/14	1020	23.3J	<58.3	<58.3	<58.3	<58.3	32.8	ND	ND	ND	ND
D011	SO	BH	03/18/14	1335	191.	<61.9	<61.9	<61.9	<61.9	32.4	ND	ND	ND	ND
A063	SO	BH	04/30/14	1545	168.	<56.7	<56.7	<56.7	<56.7	30	ND	ND	ND	ND
VIN-MW-01A	GW	MW	04/15/15	1110	24.	<1	<1	<1	<1	28.6	ND	ND	ND	ND
VIN-MW-01A	GW	MW	09/23/14	1115	23.	<1	<1	<1	<1	27.5	ND	ND	ND	ND
D064	SO	BH	05/06/14	1105	<60.4	<60.4	<60.4	<60.4	<60.4	26	ND	ND	ND	ND
VIN-MW-01A	GW	BH	06/04/12	1015	9.55	.05	<.06	<.06	9.66	25	ND	ND	ND	14.1
VIN-SP010	SO	BH	09/09/14	0915	<59.7	<59.7	<59.7	<59.7	<59.7	24.4	4.8	ND	ND	ND
VIN-SP010	SO	BH	09/09/14	0850	<66.5	<66.5	<66.5	<66.5	<66.5	22.4	ND	ND	ND	ND
D063	SO	BH	05/05/14	1330	<66.7	<66.7	<66.7	<66.7	<66.7	20.8	ND	ND	ND	ND
VIN-MW-01A	GW	MW	01/17/13	1420	25.1	0.08	<.022	<.018	<.02	19.7	ND	ND	ND	ND
A058	SO	BH	04/30/14	1210	<54.4	<54.4	<54.4	<54.4	<54.4	14	ND	ND	ND	ND
VIN-MK-01	GW	DW	03/17/14	1230	7.4	0.37J	<1.0	<1.0	<1.0	13.2	ND	ND	ND	ND
VIN-MW-05D	GW	MW	04/13/15	1300	6.7	<1	<1	<1	<1	11.9	ND	ND	ND	ND
VIN-MW-04D	GW	BH	04/30/13	1300	8.1	<.022	<.022	<.018	0.04	11.5	ND	ND	ND	ND
D069	SO	BH	05/06/14	1006	14.5J	<53.6	<53.6	<53.6	<53.6	11.2	ND	ND	ND	ND
VIN-MK-01	GW	DW	09/23/14	1400	7.3	<1	<1	<1	<1	10.8	ND	ND	ND	ND
VIN-COV-03	GW	PS	03/17/14	1441	5.2	0.33J	<1.0	<1.0	<1.0	10.1	ND	ND	ND	ND
VIN-MW-04D	GW	MW	01/17/13	1230	4.92	<.022	<.022	<.018	<.02	9.8	ND	ND	ND	ND
VIN-MK-01	GW	DW	11/30/11	1145	7.24	0.31	0.02	<.06	<.06	9.76	0.28	ND	ND	ND
D065	SO	BH	05/06/14	1335	<67.2	<67.2	<67.2	<67.2	<67.2	9.6	ND	ND	ND	ND
VIN-MK-01	GW	MW	04/16/15	1030	6.7	<1	<1	<1	<1	8.5	ND	ND	ND	ND
VIN-MK-01	GW	DW	05/01/13	0935	6.8	0.36	0.03	<.018	<.02	8.3	ND	ND	ND	ND
VIN-MW-04D	GW	BH	03/18/14	1230	4.46	<.022	<.022	<.018	<.02	7.7	ND	ND	ND	ND
VIN-COV-03	GW	PS	04/20/15	1425	7.11	.46	.06	<1	<1	7.7	ND	ND	ND	ND
VIN-COV-03	GW	PS	09/24/14	1330	5.8	.46	<1	<1	<1	7.5	0.4	ND	ND	ND
VIN-MK-01	GW	DW	05/21/14	1005	8.7	.41	.03	<.02	<.02	7.41	0.48	ND	ND	ND
VIN-COV-01	GW	PS	03/18/14	1340	2.49	0.04	<.022	<.018	0.06	7.2	ND	ND	ND	ND
VIN-COV-03	GW	PS	05/20/14	1145	5.23	.39	<.02	<.02	<.02	5.81	ND	ND	ND	ND
VIN-MW-04D	GW	MW	09/22/14	1400	4.2	<1	<1	<1	<1	5.6	ND	ND	ND	ND
VIN-COV-03	GW	PS	01/17/13	1010	6.24	0.4	0.05	<.018	0.02	5.3	ND	ND	ND	ND
VIN-MK-01	GW	DW	01/18/13	1000	6.87	0.4	0.03	<.018	<.02	5.2	ND	ND	ND	ND
VIN-WP-020	GW	SP	04/06/15	1300	4.2	<1	<1	<1	<1	4.8	ND	ND	ND	ND
VIN-MW-04D	GW	MW	04/14/15	1310	4.4	<1	<1	<1	<1	4.1	ND	ND	ND	ND
C007A	SO	BH	04/23/14	1140	<1.22	<1.22	<1.22	<1.22	<1.22	3.64	ND	ND	ND	ND
VIN-MW-04S	GW	MW	04/14/15	1330	3.9	<1	<1	<1	<1	3.5	ND	ND	ND	ND
MW-01D	GW	MW	04/30/13	1402	1.2	<.022	<.022	<.018	0.09	3.3	ND	ND	ND	ND
A064	SO	BH	05/05/14	1100	<70.2	<70.2	<70.2	<70.2	<70.2	3.2	ND	ND	ND	ND
D005	SO	BH	05/05/14	1445	<60.5	<60.5	<60.5	<60.5	<60.5	3.2	ND	ND	ND	ND
VIN-MW-01	GW	MW	03/19/14	1045	1.88	<.022	<.022	<.018	<.02	2.8	ND	ND	ND	ND
VIN-MW-02D	GW	MW	09/22/14	1300	2.6	<1	<1	<1	<1	2.6	ND	ND	ND	ND
P010	SO	BH	05/05/14	1230	<56.5	<56.5	<56.5	<56.5	<56.5	2.4	ND	ND	ND	ND
VIN-MW-02D	GW	MW	03/18/14	1120	1.56	0.07	<.022	<.018	<.02	2.2	ND	ND	ND	ND
VIN-MW-02D	GW	MW	04/30/13	1100	1.62	.14	<.022	<.018	<.02	2	ND	ND	ND	ND
A064	SO	BH	05/05/14	1050	<62.1	<62.1	<62.1	<62.1	<62.1	2	ND	ND	ND	ND
VIN-MW-01	GW	MW	05/20/14	1015	1.42	<.022	<.02	<.02	.02 J	1.71	ND	ND	ND	ND
VIN-COV-01	GW	PS	01/17/13	1045	1.22	0.02	<.022	<.018	0.07	1.7	ND	ND	ND	ND
VIN-COV-03	GW	PS	05/01/13	1300	6.4	0.36	0.04	<.018	<.02	1.6	ND	ND	ND	ND

Table B-09. Analytical results of samples analyzed with the portable gas chromatograph and USGS contract lab.—Continued

[USGS, United States Geological Survey; ug/L, micrograms per liter; ug/kg, micrograms per kilogram of soil; PCE, tetrachloroethene; TCE, trichloroethene; cis-DCE, cis-1,2-dichloroethene; trans-DCE, trans-1,2-dichloroethene; SO, soil; BH, borehole; <, less than; ND, not detected; GW, groundwater; MW, monitoring well; CS, cistern; DW, domestic well; PS, public supply; SP, spring; SE, seep; WA, water; SN, sanitary sewer; SW, surface water; ST, stream; TP, tap]

Location (figs. 3-01 and 3-07)	Media	Feature	Date	Time	Concentration in ug/L (water) or ug/kg (soil) in samples analyzed by the USGS contract lab					Concentration in ug/L (water) or ug/kg (soil) in samples analyzed by the portable gas chromatograph				
					PCE	TCE	cis-DCE	trans-DCE	Toluene	PCE	TCE	cis-DCE	trans-DCE	Toluene
VIN-COV-01	GW	PS	05/01/13	1400	1.25	.02J	<.022	<.018	<.02	1.6	ND	ND	ND	ND
VIN-COV-01	GW	PS	05/21/14	1100	1.42	.02	<.02	<.02	<.02	1.44	ND	ND	ND	ND
VIN-MW-01	GW	MW	09/23/14	1030	1.4	<1	<1	<1	<1	1.4	ND	ND	ND	ND
MH-090N	WA	SN	03/12/12	1140	1.0 J	<1.0	<1.0	<1.0	<1.0	1.25	ND	ND	ND	ND
VIN-MW-01	GW	MW	04/14/15	1540	.88	<1	<1	<1	<1	1	ND	ND	ND	ND
VIN-COV-01	GW	PS	09/24/14	1310	.83	<1	<1	<1	<1	0.9	ND	ND	ND	ND
VIN-MW-02D	GW	MW	01/17/13	1130	1.83	0.21	<.022	<.018	<.02	0.76	ND	ND	ND	ND
MW-01D	GW	MW	01/17/13	1355	1.6	<.022	<.022	<.018	<.02	0.62	ND	ND	ND	ND
VIN-JW-SEEP	GW	SE	05/19/14	1220	.96	.04 J	<.02	<.02	<.02	0.6	ND	ND	ND	ND
VIN-JW-SEEP	GW	SE	06/27/14	1040	.64	<.08	<.08	<.08	0.08	0.5	ND	ND	ND	ND
MH-069S	WA	SN	03/12/12	0946	0.20 J	<1.0	<1.0	<1.0	<1.0	ND	ND	ND	ND	ND
MH-064	WA	SN	03/12/12	1025	<1.0	<1.0	<1.0	<1.0	<1.0	ND	ND	ND	ND	ND
MH-090E	WA	SN	03/12/12	1145	0.91 J	<1.0	<1.0	<1.0	<1.0	ND	ND	ND	ND	ND
VIN-MW-04S	GW	MW	04/30/13	1200	11.7	0.02J	<.022	<.018	<.02	ND	ND	ND	ND	ND
VIN-WP-020	GW	SP	05/03/13	1200	5.2	<.022	<.022	<.018	<.02	ND	ND	ND	ND	ND
VIN-WP-020	GW	SP	05/03/13	1201	5.32	<.022	<.022	<.018	<.02	ND	ND	ND	ND	ND
C3	SO	BH	03/18/14	0937	<70.1	<70.1	<70.1	<70.1	<70.1	ND	ND	ND	ND	ND
C17	SO	BH	03/18/14	0949	<103	<103	<103	<103	<103	ND	ND	ND	ND	ND
C13	SO	BH	03/18/14	1002	<62.2	<62.2	<62.2	<62.2	<62.2	ND	ND	ND	ND	ND
B7	SO	BH	03/18/14	1015	<64.9	<64.9	<64.9	<64.9	<64.9	ND	ND	ND	ND	ND
A005	SO	BH	03/18/14	1040	<72.4	<72.4	<72.4	<72.4	<72.4	ND	ND	ND	ND	ND
A002	SO	BH	03/18/14	1050	<61.6	<61.6	<61.6	<61.6	<61.6	ND	ND	ND	ND	ND
A018A	SO	BH	03/18/14	1115	24.8J	<67.1	<67.1	<67.1	<67.1	ND	ND	ND	ND	ND
A031	SO	BH	03/18/14	1130	<60.6	<60.6	<60.6	<60.6	<60.6	ND	ND	ND	ND	ND
AM01	SO	BH	03/18/14	1155	<74.7	<74.7	<74.7	<74.7	<74.7	ND	ND	ND	ND	ND
A046	SO	BH	03/18/14	1205	<73.9	<73.9	<73.9	<73.9	<73.9	ND	ND	ND	ND	ND
D002	SO	BH	03/18/14	1305	<66.6	<66.6	<66.6	<66.6	<66.6	ND	ND	ND	ND	ND
D007	SO	BH	03/18/14	1320	<63.6	<63.6	<63.6	<63.6	<63.6	ND	ND	ND	ND	ND
P-6	SO	BH	03/18/14	1400	<67.0	<67.0	<67.0	<67.0	<67.0	ND	ND	ND	ND	ND
SB-01	SD	BH	03/18/14	1430	<61.9	<61.9	<61.9	<61.9	<61.9	ND	ND	ND	ND	ND
TB2-1	SW	ST	03/19/14	1100	<1.0	<1.0	<1.0	<1.0	<1.0	ND	ND	ND	ND	ND
TB2-2	SW	ST	03/19/14	1145	<1.0	<1.0	<1.0	<1.0	<1.0	ND	ND	ND	ND	ND
VIN-WP-020	GW	SP	03/19/14	1215	<1.0	<1.0	<1.0	<1.0	<1.0	ND	ND	ND	ND	ND
VIN-WP-020	SD	BH	03/19/14	1215	<76.2	<76.2	<76.2	<76.2	<76.2	ND	ND	ND	ND	ND
WD-01	SD	BH	03/20/14	1115	<67.4	<67.4	<67.4	<67.4	<67.4	ND	ND	ND	ND	ND
B008A	SO	BH	04/22/14	1034	<1.25	<1.25	<1.25	<1.25	<1.25	ND	ND	ND	ND	ND
A053	SO	BH	04/22/14	1315	<1.22	<1.22	<1.22	<1.22	<1.22	ND	ND	ND	ND	ND
A033	SO	BH	04/23/14	1000	<1.34	<1.34	<1.34	<1.34	<1.34	ND	ND	ND	ND	ND
C014	SO	BH	04/23/14	1200	<1.31	<1.31	<1.31	<1.31	<1.31	ND	ND	ND	ND	ND
B007	SO	BH	04/23/14	1225	<1.26	<1.26	<1.26	<1.26	<1.26	ND	ND	ND	ND	ND
SBG-01	SO	BH	05/05/14	1550	<58.0	<58.0	<58.0	<58.0	<58.0	ND	ND	ND	ND	ND
Septic1	SO	BH	05/07/14	1045	<118	<118	<118	<118	<118	ND	ND	ND	ND	ND
SAND	SO	BH	05/07/14	1145	<66.0	<66.0	<66.0	<66.0	<66.0	ND	ND	ND	ND	ND
City Hall	WA	TP	06/12/14	1105	<1	<1	<1	<1	<1	ND	ND	ND	ND	ND
Ballpark	WA	TP	06/12/14	1120	<1	<1	<1	<1	<1	ND	ND	ND	ND	ND
Stockyard	WA	TP	06/12/14	1215	<1	<1	<1	<1	<1	ND	ND	ND	ND	ND
VIN-JW-SEEP	GW	SE	04/06/15	1320	<1	<1	<1	<1	<1	ND	ND	ND	ND	ND
VIN-MW-02D	GW	MW	04/14/15	1130	1.1	<1	<1	<1	<1	ND	ND	ND	ND	ND
VIN-Vienna Spring	GW	SP	04/16/15	1050	<1	<1	<1	<1	<1	ND	ND	ND	ND	ND
VIN-COV-01	GW	PS	04/20/15	1520	.2	<1	<1	<1	<1	ND	ND	ND	ND	ND
VIN-MW-08	GW	MW	09/22/15	1235	<1	<1	<1	<1	0.80 J	ND	ND	ND	ND	ND
VIN-WP-020	GW	SP	03/09/16	1100	13	<1	<1	<1	<1	9	ND	ND	ND	ND
VIN-JW-SEEP	GW	SE	03/09/16	1120	<1	<1	<1	<1	<1	ND	ND	ND	ND	ND
VIN-MW-05D	GW	MW	03/14/16	1115	5.5	<1	<1	<1	<1	5.5	ND	ND	ND	ND
VIN-MW-05S	GW	MW	03/14/16	1200	70.	<1	<1	<1	<1	54.5	ND	ND	ND	ND
VIN-MW-02D	GW	MW	03/14/16	1320	1.6	<1	<1	<1	<1	2.9	ND	ND	ND	ND
VIN-MW-04D	GW	MW	03/11/16	1345	6.5	<1	<1	<1	<1	7.2	ND	ND	ND	ND
VIN-MW-04S	GW	MW	03/11/16	1400	8.1	<1	<1	<1	<1	8.5	ND	ND	ND	ND
VIN-MW-01	GW	MW	03/10/16	1115	1.6	<1	<1	<1	<1	1.7	ND	ND	ND	ND
VIN-MW-01A	GW	MW	03/11/16	1250	24.	<1	<1	<1	<1	18	ND	ND	ND	ND
VIN-MW-03D	GW	MW	03/14/16	1410	790.	1.8	<1	<1	<1	1056	ND	ND	ND	ND
VIN-MK-01	GW	MW	03/11/16	1115	6.3	<1	<1	<1	<1	5.4	ND	ND	ND	ND
VIN-MW-06	GW	MW	03/15/16	1040	540.	4.4	0.42J	<1	<1	992	ND	ND	ND	ND
VIN-MW-06	GW	MW	03/15/16	1041	560.	4.2	<1	<1	<1	1088	ND	ND	ND	ND
VIN-MW-06A	GW	MW	03/15/16	1155	1,100.	2.5	<1	<1	<1	1584	ND	ND	ND	ND
VIN-COV-03	GW	PS	03/10/16	1205	5.7	.43	<1	<1	<1	5	ND	ND	ND	ND
VIN-COV-01	GW	PS	03/09/16	1430	<1	<1	<1	<1	<1	ND	ND	ND	ND	ND
VIN-JW-01	GW	CS	03/09/16	1150	18.	<1	<1	<1	<1	14	ND	ND	ND	ND
VIN-MW-03S	GW	MW	03/14/16	1420	20.	<1	<1	<1	<1	27.6	ND	ND	ND	ND
VIN-MW-08	GW	MW	03/16/16	1415	<1	<1	<1	<1	5.8	ND	ND	ND	ND	ND
VIN-MW-08A	GW	MW	03/17/16	1400	<1	<1	<1	<1	<1	1.5	ND	ND	ND	ND
VIN-MW-09S	GW	MW	03/15/16	1410	0.74J	<1	<1	<1	0.60J	ND	ND	ND	ND	ND
VIN-MW-09D	GW	MW	03/15/16	1330	<1	<1	<1	<1	<1	ND	ND	ND	ND	ND

Table B-10. Select laboratory results for soil samples collected by the United States Environmental Protection Agency.

[µg/kg, microgram of constituent per kilogram of soil; mg/kg, milligram of constituent per kilogram of soil; U, constituent was not detected at or below the reporting limit; J, identification of constituent is acceptable and reported as an estimated value; UJ, constituent detected at or below reporting limit and the reporting limit is estimated; --, no data; R, the presence of absence of the constituent could not be determined because of quality control issues]

| Location (fig. 2-08) | Date | Sample type | Depth top, in feet | Depth bottom, in feet | Concentration, in µg/kg | | | | | | | | | | | | | | | | | | | | Concentration, in mg/kg | | | | | | | | | | | | | | | | | | |

Table B-10. Select laboratory results for soil samples collected by the United States Environmental Protection Agency.—Continued

[µg/kg, microgram of constituent per kilogram of soil; mg/kg, milligram of constituent per kilogram of soil; U, constituent was not detected at or below the reporting limit; J, identification of constituent is acceptable and reported as an estimated value; UJ, constituent detected at or below reporting limit and the reporting limit is estimated; --, no data; R, the presence of absence of the constituent could not be determined because of quality control issues]

| Location (fig. 2-08) | Date | Sample type | Depth top, in feet | Depth bottom, in feet | Concentration, in µg/kg | | | | | | | | | | | | | | | | | | | | Concentration, in mg/kg | | | | | | | | | | | | | | | | | | |

Table B-10. Select laboratory results for soil samples collected by the United States Environmental Protection Agency.—Continued

[µg/kg, microgram of constituent per kilogram of soil; mg/kg, milligram of constituent per kilogram of soil; U, constituent was not detected at or below the reporting limit; J, identification of constituent is acceptable and reported as an estimated value; UJ, constituent detected at or below reporting limit and the reporting limit is estimated; --, no data; R, the presence of absence of the constituent could not be determined because of quality control issues]

Location (fig. 2-08)	Date	Sample type	Depth top, in feet	Depth bottom, in feet	Concentration, in µg/kg																				Concentration, in mg/kg																							
					Benzo(a) anthracene		Benzo(a) pyrene		Benzo(b) fluoranthene		Benzo(k) fluoranthene		Dibenzo(ah) anthracene		Indeno(123-cd) pyrene		Dieldrin		Tetrachloro ethene		Heptachlor epoxide		PCB-1254 (Aroclor-1254)		Aluminum		Arsenic		Total Chromium		Manganese		Thallium		Benzene	
B05	4/1/15 9:40 AM	N	0	0	240	U	240	U	240	U	240	U	240	U	240	U	4.5	U	4.9	U	2.3	U	5,180	--	7	--	14	--	1180	--	2.3	U	4.9	U	45	U
D15	4/1/15 9:45 AM	N	0	0	230	U	--	R	--	R	--	R	--	R	--	R	22	U	3.9	U	11	U	10,300	--	8.2	--	16.2	--	785	--	2.3	U	3.9	U	44	U
B06	4/1/15 9:50 AM	N	0	0	230	U	230	U	230	U	230	U	230	U	230	U	4.5	U	4.2	U	2.3	U	5,250	--	5.3	--	10.3	--	1030	--	2.3	U	4.2	U	45	U
B07	4/1/15 10:05 AM	N	0	0	220	U	220	U	220	U	220	U	220	U	220	U	4.3	U	3.5	U	2.2	U	8,060	--	5.9	--	12.5	--	681	--	2.3	U	3.5	U	43	U
D16	4/1/15 10:12 AM	N	0	0	240	U	240	U	240	U	240	U	240	U	240	U	4.6	U	4.8	U	2.4	U	6,550	--	6.2	--	10.9	--	713	--	2.6	U	4.8	U	46	U
B08	4/1/15 10:18 AM	N	0	0	200	U	200	U	200	U	200	U	200	U	200	U	3.9	U	2.8	U	2	U	7,690	--	6.1	--	10.6	--	503	--	2.2	U	2.8	U	39	U
B09	4/1/15 10:30 AM	N	0	0	2300	U	2300	U	2300	U	2300	U	2300	U	2300	U	220	U	4.3	U	120	U	6,600	--	6.9	--	19.9	--	1490	--	2.4	U	4.3	U	450	U
D17	4/1/15 10:42 AM	N	0	0	--	R	--	R	--	R	--	R	--	R	--	R	270	U	5.1	U	140	U	6,400	--	6.3	--	14.7	--	716	--	2.1	U	5.1	U	550	U
B10	4/1/15 11:00 AM	N	0	0	230	U	230	U	230	U	230	U	230	U	230	U	4.4	U	4	U	2.3	U	5,990	--	6.2	--	11.5	--	1430	--	2.5	U	4	U	44	U
B16	4/1/15 11:10 AM	N	0	0	250	U	250	U	250	U	250	U	250	U	250	U	4.8	U	4.3	U	2.5	U	4,670	--	3.6	--	8.6	U	1280	--	2.6	U	4.3	U	48	U
B12	4/1/15 11:22 AM	N	0	0	220	U	220	U	220	U	220	U	220	U	220	U	4.2	U	3.7	U	2.2	U	5,750	--	4.4	--	9.2	--	719	--	2.3	U	3.7	U	42	U
B11	4/1/15 11:29 AM	N	0	0	230	U	230	U	230	U	230	U	230	U	230	U	4.6	U	4.5	U	2.4	U	4,830	--	3.6	--	7.3	U	1230	--	2.4	U	4.5	U	46	U
B13	4/1/15 12:08 PM	N	0	0	240	U	240	U	240	U	240	U	240	U	240	U	4.7	U	4.3	U	2.4	U	5,840	--	4	--	10.4	--	1240	--	2.5	U	4.3	U	47	U
B14	4/1/15 12:15 PM	N	0	0	250	U	250	U	250	U	250	U	250	U	250	U	4.8	U	4.3	U	2.5	U	5,100	--	5.5	--	11.6	--	1350	--	2.6	U	4.3	U	48	U
B15	4/1/15 12:20 PM	N	0	0	2600	U	2600	U	2600	U	2600	U	2600	U	2600	U	51	U	4.5	U	28	--	4,670	--	3.9	--	10.5	--	512	--	2.9	U	4.5	U	510	U
C01	4/1/15 1:52 PM	N	0	0	250	U	250	U	250	U	250	U	250	U	250	U	4.9	U	4.5	U	2.5	U	5,220	--	4.9	--	9.3	--	638	--	2.3	U	4.5	U	49	U
C02	4/1/15 2:13 PM	N	0	0	250	U	250	U	250	U	250	U	250	U	250	U	4.8	U	3.4	U	2.5	U	4,900	--	4.9	--	7.9	--	1150	--	2.4	U	3.4	U	48	U
C03	4/1/15 2:32 PM	N	0	0	230	U	230	U	230	U	230	U	230	U	230	U	4.4	U	3.9	U	2.3	U	5,280	--	7.8	--	9.9	--	1230	--	2.4	U	3.9	U	44	U
C04	4/1/15 2:50 PM	N	0	0	220	U	220	U	220	U	220	U	220	U	220	U	4.3	U	5.3	U	2.2	U	5,270	--	9	--	11	--	1560	--	2.5	U	5.3	U	43	U
C05	4/1/15 3:14 PM	FD	0	0	220	U	220	U	220	U	220	U	220	U	220	U	4.3	U	3.1	U	2.2	U	5,590	--	4.9	--	8.8	--	633	--	2.2	U	3.1	U	43	U
C05	4/1/15 3:14 PM	N	0	0	230	U	230	U	230	U	230	U	230	U	230	U	4.3	U	3.2	U	2.2	U	5,410	--	4.7	--	8.3	--	557	--	2.3	U	3.2	U	43	U
C06	4/1/15 4:20 PM	N	0	0	230	U	230	U	230	U	230	U	230	U	230	U	4.5	U	3.3	U	2.3	U	4,850	--	4.8	--	7.7	--	870	--	2.4	U	3.3	U	45	U
B05	4/3/15 12:30 PM	FD	4	5	220	U	220	U	220	U	220	U	220	U	220	U	4.3	U	3.7	U	2.2	U	17,500	--	13.8	--	54.4	--	31.4	--	2.6	--	3.7	U	43	U
B05	4/3/15 12:30 PM	N	4	5	220	U	220	U	220	U	220	U	220	U	220	U	4.3	U	2.9	U	2.2	U	11,300	--	13.9	--	28.5	--	22.6	--	2.6	U	2.9	U	43	U
B05	4/3/15 1:00 PM	FD	7	8	240	U	240	U	240	U	240	U	240	U	240	U	4.7	U	3.5	U	2.4	U	12,400	--	8.7	--	21.2	--	31.2	--	2.1	U	3.5	U	47	U
B05	4/3/15 1:00 PM	N	7	8	210	U	210	U	210	U	210	U	210	U	210	U	4.1	U	2.7	U	2.1	U	11,800	--	4.8	--	12.7	--	44.4	--	2.2	U	2.7	U	41	U
B06	4/3/15 1:33 PM	N	4	5	220	U	220	U	220	U	220	U	220	U	220	U	4.3	U	3.7	U	2.2	U	17,900	--	10.3	--	33.2	--	19.9	--	2.3	U	3.7	U	43	U
B06	4/3/15 1:33 PM	N	7	8	230	U	230	U	230	U	230	U	230	U	230	U	4.6	U	3.6	U	2.3	U	11,700	--	8.6	--	18.6	--	16.8	--	2.3	U	3.6	U	46	U
B01	4/3/15 1:53 PM	N	4	5	200	U	200	U	200	U	200	U	200	U	200	U	3.9	U	2.7	U	2	U	16,000	--	11.2	--	38	--	25.2	--	2.2	U	2.7	U	39	U
B01	4/3/15 1:53 PM	N	7	8	230	U	230	U	230	U	230	U	230	U	230	U	4.4	U	3.8	U	2.3	U	16,400	--	8.2	--	20.8	--	44.4	--	2.3	U	3.8	U	44	U
B07	4/3/15 2:00 PM	N	4	5	230	U	230	U	230	U	230	U	230	U	230	U	4.4	U	4.2	U	2.3	U	19,200	--	13.6	--	42.7	--	21	--	2.3	U	4.2	U	44	U
B07	4/3/15 2:00 PM	N	7	8	230	U	230	U	230	U	230	U	230	U	230	U	4.5	U	3.6	U	2.3	U	19,300	--	19.2	--	39.3	--	23.7	--	2.7	--	3.6	U	45	U
B08	4/3/15 2:42 PM	N	4	5	220	U	220	U	220	U	220	U	220	U	220	U	4.3	U	3.3	U	2.2	U	18,200	--	10.8	--	28.6	--	24.2	--	2.4	U	3.3	U	43	U
B08	4/3/15 2:42 PM	N	7	8	230	U	230	U	230	U	230	U	230	U	230	U	4.5	U	3.1	U	2.3	U	10,800	--	7	--	19	--	23.9	--	2.5	U	3.1	U	45	U
B02	4/3/15 3:20 PM	N	4	5	200	U	200	U	200	U	200	U	200	U	200	U	3.9	U	2.6	U	2	U	11,800	--	9.1	--	31.8	--	26.6	--	2.2	U	2.6	U	39	U
B09	4/3/15 3:23 PM	N	4	5	230	U	230	U	230	U	230	U	230	U	230	U	4.4	U	3.8	U	2.3	U	15,600	--	15.3	--	39.4	--	22.8	--	2.5	U	3.8	U	44	U
B09	4/3/15 3:23 PM	N	7	8	230	U	230	U	230	U	230	U	230	U	230	U	4.4	U	3.8	--	2.2	U	18,400	--	17.7	--	45.2	--	52.9	--	2.9	--	3.8	U	44	U
B02	4/3/15 3:30 PM	N	7	8	230	U	230	U	230	U	230	U	230	U	230	U	4.5	U	3.3	U	2.3	U	15,400	--	6.6	--	16.5	--	14.6	--	2.4	U	3.3	U	45	U
B10	4/3/15 3:55 PM	N	4	5	210	U	210	U	210	U	210	U	210	U	210	U	4.2	U	3.2	U	2.2	U	13,200	--	10.3	--	23	--	16.7	--	2.1	U	3.2	U	42	U
B10	4/3/15 3:55 PM	N	7	8	220	U	220	U	220	U	220	U	220	U	220	U	4.3	U	3.9	U	2.2	U	3,810	--	3.2	J	14.4	--	20.2	--	2.3	U	3.9	U	43	U
B11	4/3/15 4:22 PM	N	4	5	180	U	180	U	180	U	180	U	180	U	180	U	3.5	U	3.1	U	1.8	U	3,090	--	2.6	J	11.4	--	16.1	--	1.9	U	3.1	U	35	U
B11	4/3/15 4:22 PM	N	6	7	230	U	230	U	230	U	230	U	230	U	230	U	4.4	UJ	4	U	2.3	UJ	14,900	--	11.5	--	22.3	--	38.7	--	2	U	4	U	44	U
C01	4/3/15 4:43 PM	N	4	5	220	U	220	U	220	U	220	U	220	U	220	U	4.3	UJ	3.1	U	2.2	UJ	17,700	--	12.5	--	31.3	--	49.8	--	2.4	U	3.1	U	43	U
C01	4/3/15 4:43 PM	N	6	7	220	U	220	U	220	U	220	U	220	U	220	U	4.2	U	4.4	U	2.2	U	20,700	--	10	--	23.1	--	72.4	--	2.5	U	4.4	U	42	U
C02	4/3/15 5:09 PM	N	4	5	220	U	220	U	220	U	220	U	220	U	220	U	4.4	U	4.3	U	2.3	U	15,500	--	11.8	--	27.3	--	21.9	--	2.4	U	4.3	U	44	U
C02	4/3/15 5:09 PM	N	7	8	180	U	180	U	180	U	180	U	180	U	180	U	3.5	U	3.1	U	1.8	U	3,440	--	1.6	U	5.9	--	8.8	--	1.9	U	3.1	U	35	U
C03	4/3/15 5:28 PM	N	4	5	220	U	220	U	220	U	220	U	220	U	220	U	4.3	U	3.7	U	2.2	U	16,200	--	11.3	--	30.7	--	28.1	--	2.4	U	3.7	U	43	U
C03	4/3/15 5:28 PM	N	7	8	200	U	200	U	200	U	200	U	200	U	200	U	3.8	U	3	U	1.9	U	5,360	--	3.1	U	7.9	--	179	--	2	U	3	U	38	U
C04	4/3/15 5:57 PM	N	4	5	210	U	210	U	210	U	210	U	210	U	210	U	4.1	U	3.3	U	2.1	U	18	U	0.89	U	0.89	U	1.3	U	2.2	U	3.3	U	41	U
C04	4/3/15 5:57 PM	N	7	8	220	U	220	U	220	U	220	U	220	U	220	U	4.2	U	4	U	2.2	U	3,530	--	0.97	U	2.4	--	299	--	2.4	U	4	U	42	U
C05	4/4/15 9:40 AM	N	4	5	210	U	210	U	210	U	210	U	210	U	210	U	4.1	U	4.4	U	2.1	U	10,900	--	6.7	--	26.3	--	29	--	2.1	U	4.4	U	41	U
C05	4/4/15 9:40 AM	N	7	8	220	U	220	U	220	U	220	U	220	U	220	U	4.3	U	6.1	U	2.2	U	17,000	--	9	--	23.6	--	28.1	--	2.4	U	6.1	U	43	U
C06	4/4/15 10:15 AM	N	4	5	220	U	220	U	220	U	220	U	220	U	220	U	4.1	U	3	U	2.1	U	14,200	--	12.8	--	36.7	--	20.3	--	2.3	U	3	U	41	U
C06	4/4/15 10:15 AM	N	7	8	210	U	210	U	210	U	210	U	210	U	210	U	4.1	U	4.7	U	2.1	U	23,200	--	13.3	J	31	--	47.7	--	2.3	U	4.7	U	41	U
C07	4/4/15 10:50 AM	N	4	5	220	U	220	U	220	U	220	U	220	U	220	U	4.3	U	3.3	U	2.2	U	15,100	--	12.6	--	28.9	--	40.3	--	2.4	--	3.3	U	43	U
C07	4/4/15 10:50 AM	N	7	8	200	U	200	U	200	U	200	U	200	U	200	U	4	U	4.2	U	2.1	U	16,100	--	12.6	--	27.6	--	137	--	2.8	--	4.2	U	40	U
C08	4/4/15 11:35 AM	N	4	5	180	U	180	U	180	U	180	U	180	U	180	U	3.5	U	2.7	U	1.8	U	3,160	--	2.3	U	7.6	--	21.2	--	1.9	U	2.7	U	35	U
C08	4/4/15 11:35 AM	N	6	7	190	U	190	U	190	U	190	U	190	U	190	U	3.7	U	3.5	U	1.9	U	6,520	--	4.8	--	12.5	--	22.4	--	2	U	3.5	U	37	U

Table B-10. Select laboratory results for soil samples collected by the United States Environmental Protection Agency.—Continued

[µg/kg, microgram of constituent per kilogram of soil; mg/kg, milligram of constituent per kilogram of soil; U, constituent was not detected at or below the reporting limit; J, identification of constituent is acceptable and reported as an estimated value; UJ, constituent detected at or below reporting limit and the reporting limit is estimated; --, no data; R, the presence of absence of the constituent could not be determined because of quality control issues]

Location (fig. 2-08)	Date	Sample type	Depth top, in feet	Depth bottom, in feet	Concentration, in µg/kg																				Concentration, in mg/kg																			
					Benzo(a) anthracene		Benzo(a) pyrene		Benzo(b) fluoranthene		Benzo(k) fluoranthene		Dibenzo(ah) anthracene		Indeno(123-cd) pyrene		Dieldrin		Tetrachloro ethene		Heptachlor epoxide		PCB-1254 (Aroclor-1254)		Aluminum		Arsenic		Total Chromium		Manganese		Thallium		Benzene	
C09	4/4/15 12:00 PM	N	4	5	180	U	180	U	180	U	180	U	180	U	180	U	3.5	U	2.9	U	1.8	U	4,460	--	3.2	U	8.3	--	29.2	--	1.9	U	2.9	U	35	U
C09	4/4/15 12:00 PM	N	6	7	190	U	190	U	190	U	190	U	190	U	190	U	3.8	U	4.6	U	1.9	U	1,740	--	2.4	U	5.6	--	6.5	--	1.8	U	4.6	U	38	U
C12	4/4/15 12:12 PM	FD	4	5	220	U	220	U	220	U	220	U	220	U	220	U	4.2	U	4.7	U	2.2	U	18	U	6.4	--	0.9	U	1.3	U	2.2	U	4.7	U	42	U
C12	4/4/15 12:12 PM	N	4	5	210	U	210	U	210	U	210	U	210	U	210	U	4	U	3.5	U	2.1	U	14,300	--	9.8	--	36.9	--	37.6	--	2.3	U	3.5	U	40	U
C12	4/4/15 12:12 PM	FD	7	8	210	U	210	U	210	U	210	U	210	U	210	U	4.1	U	5.8	U	2.1	U	14,500	--	5.2	--	14.4	--	69.8	--	2.1	U	5.8	U	41	U
C12	4/4/15 12:12 PM	N	7	8	210	U	210	U	210	U	210	U	210	U	210	U	4.1	U	4.2	U	2.1	U	22,300	--	8.3	--	32.3	--	34.7	--	2.6	--	4.2	U	41	U
C15	4/4/15 12:32 PM	N	4	5	180	U	180	U	180	U	180	U	180	U	180	U	3.6	U	4.9	U	1.8	U	4,050	--	1.8	--	8.3	--	52.5	--	1.9	U	4.9	U	36	U
C14	4/4/15 1:07 PM	N	4	5	180	U	180	U	180	U	180	U	180	U	180	U	3.5	U	2.9	U	1.8	U	2,560	--	1.6	U	7.3	--	18.7	--	1.8	U	2.9	U	35	U
C14	4/4/15 1:07 PM	N	6	7	190	U	190	U	190	U	190	U	190	U	190	U	3.7	U	3.6	U	1.9	U	5,570	--	3.3	--	8.8	--	42.1	--	1.9	U	3.6	U	37	U
C15	4/4/15 1:32 PM	N	6	7	190	U	190	U	190	U	190	U	190	U	190	U	3.6	U	3.4	U	1.9	U	9,220	--	6.4	--	19.8	--	73.1	--	1.9	U	3.4	U	36	U
C16	4/4/15 1:49 PM	N	4	5	190	U	190	U	190	U	190	U	190	U	190	U	3.6	U	3.1	U	1.9	U	2,390	--	2	J	8.5	U	137	--	2	U	3.1	U	36	U
C16	4/4/15 1:49 PM	N	6	7	210	U	210	U	210	U	210	U	210	U	210	U	4.1	U	3.8	U	2.1	U	14,100	--	6.4	--	19	--	45.2	--	2.4	U	3.8	U	41	U
C08	4/6/15 9:34 AM	N	0	0	450	U	450	U	450	U	450	U	450	U	450	U	4.4	U	3.3	U	2.3	U	5,200	--	3.7	J	8	--	757	--	2.1	U	3.3	U	44	U
C12	4/6/15 9:49 AM	N	0	0	1200	U	1200	U	1200	U	1200	U	1200	U	1200	U	4.8	U	4.9	U	2.5	U	3,730	--	2.6	J	5.8	--	1090	--	2.6	U	4.9	U	48	U
C11	4/6/15 10:05 AM	N	0	0	1200	U	1200	U	1200	U	1200	U	1200	U	1200	U	4.5	U	4.3	U	2.3	U	4,450	--	3.6	J	21	--	824	--	2.6	U	4.3	U	45	U
C10	4/6/15 10:06 AM	N	0	0	1200	U	1200	U	1200	U	1200	U	1200	U	1200	U	4.5	U	3.9	U	2.3	U	4,140	--	3.2	J	7.5	--	947	--	2.4	U	3.9	U	45	U
C13	4/6/15 10:31 AM	N	0	0	1000	U	1000	U	1000	U	1000	U	1000	U	1000	U	4	U	3.3	U	2	U	4,610	--	3.4	J	8.4	--	987	--	2.5	U	3.3	U	40	U
C14	4/6/15 10:55 AM	N	0	0	1200	U	1200	U	1200	U	1200	U	1200	U	1200	U	4.7	U	5.7	U	2.4	U	2,480	--	2.8	J	9.8	--	633	--	2.6	U	5.7	U	47	U
C15	4/6/15 10:56 AM	N	0	0	1200	U	1200	U	1200	U	1200	U	1200	U	1200	U	4.6	U	3.7	U	2.4	U	3,880	--	2.8	J	7.5	--	899	--	2.5	U	3.7	U	46	U
C16	4/6/15 11:15 AM	N	0	0	1100	U	1100	U	1100	U	1100	U	1100	U	1100	U	4.4	U	6.7	U	2.3	U	3,810	--	2.5	J	8.3	--	651	--	2.5	U	6.7	U	44	U
A09A	4/6/15 12:34 PM	N	0	0	4500	U	4500	U	4500	U	4500	U	4500	U	4500	U	22	U	5	U	11	U	7,250	--	5.8	--	19.5	--	676	--	2.3	U	5	U	170	J
A01	4/6/15 12:35 PM	N	0	0	2000	U	2000	U	2000	U	2000	U	2000	U	2000	U	20	U	3.4	U	10	U	7,870	--	5.6	--	17.7	--	773	--	2	U	3.4	U	130	J
A25	4/6/15 12:58 PM	N	0	0	1100	U	1100	U	1100	U	1100	U	1100	U	1100	U	4.2	U	3.8	U	2.2	U	9,310	--	9.3	--	17.3	--	2030	--	2.3	U	3.8	U	42	U
A17B	4/6/15 12:59 PM	N	0	0	4400	U	4400	U	4400	U	4400	U	4400	U	4400	U	21	U	6.6	U	11	U	2,710	--	4.7	--	14.8	--	418	--	2.4	U	6.6	U	43	U
A33	4/6/15 1:11 PM	N	0	0	3900	U	3900	U	3900	U	3900	U	3900	U	3900	U	19	U	2.8	U	9.9	U	7,790	--	5	--	17.6	--	539	--	2.1	U	2.8	U	38	U
A34	4/6/15 1:25 PM	N	0	0	1900	U	1900	U	1900	U	1900	U	1900	U	1900	U	3.8	U	3.9	U	1.9	U	6,210	--	5.2	--	15.6	--	503	--	2.9	U	3.9	U	38	U
A26	4/6/15 1:29 PM	N	0	0	1200	U	1200	U	1200	U	1200	U	1200	U	1200	U	4.6	U	--	R	2.4	U	5,420	--	5.3	--	19.6	--	537	--	2.5	U	--	R	46	U
A18	4/6/15 1:45 PM	N	0	0	2900	U	2900	U	2900	U	2900	U	2900	U	2900	U	9.8	--	5.6	U	2.9	U	5,210	--	4.9	--	22.1	--	556	--	3.2	U	5.6	U	57	U
A19	4/6/15 1:55 PM	N	0	0	2500	U	2500	U	2500	U	2500	U	2500	U	2500	U	4.8	U	8.1	U	2.5	U	3,120	--	3.8	J	25.4	--	435	--	2.2	U	8.1	U	48	U
A27	4/6/15 2:00 PM	N	0	0	1300	U	1300	U	1300	U	1300	U	1300	U	1300	U	5.1	U	9.1	U	2.6	U	5,080	--	4	--	18	--	555	--	2.6	U	9.1	U	51	U
A35	4/6/15 2:18 PM	FD	0	0	1200	U	1200	U	1200	U	1200	U	1200	U	1200	U	4.5	U	3.8	U	2.3	U	6,800	--	6.5	--	17.4	--	615	--	2.4	U	3.8	U	45	U
A35	4/6/15 2:18 PM	N	0	0	1400	U	1400	U	1400	U	1400	U	1400	U	1400	U	5.3	U	4.2	U	2.7	U	6,630	--	5.6	--	12.3	--	466	--	2.3	U	4.2	U	53	U
A20	4/6/15 2:20 PM	N	0	0	1300	U	1300	U	1300	U	1300	U	1300	U	1300	U	5.1	U	7.2	U	2.7	U	6,070	--	4.9	--	11.8	--	559	--	2.7	U	7.2	U	51	U
A28	4/6/15 2:40 PM	N	0	0	1200	U	1200	U	1200	U	1200	U	1200	U	1200	U	4.7	U	4	U	2.4	U	8,310	--	6.1	--	13.4	--	557	--	2.8	U	4	U	47	U
A36	4/6/15 2:50 PM	N	0	0	2300	U	2300	U	2300	U	2300	U	2300	U	2300	U	4.4	U	4	U	2.2	U	7,760	--	9.3	--	13.8	--	837	--	2.3	U	4	U	44	U
A21	4/6/15 3:00 PM	N	0	0	1200	U	1200	U	1200	U	1200	U	1200	U	1200	U	4.5	U	4.9	U	2.3	U	6,500	--	6.9	--	13.3	--	1360	--	2.7	U	4.9	U	45	U
A29	4/6/15 3:08 PM	N	0	0	440	U	440	U	440	U	440	U	440	U	440	U	4.3	U	3.4	U	2.2	U	9,510	--	6	--	16	--	375	--	2.2	U	3.4	U	43	U
A37	4/6/15 3:26 PM	N	0	0	1100	U	1100	U	1100	U	1100	U	1100	U	1100	U	4.2	U	4.1	U	2.2	U	8,390	--	7	--	13.8	--	567	--	2.3	U	4.1	U	42	U
A22	4/6/15 3:33 PM	FD	0	0	1400	U	1400	U	1400	U	1400	U	1400	U	1400	U	5.3	U	9	U	2.7	U	9,500	--	7.3	--	15.1	--	592	--	3	U	9	U	53	U
A22	4/6/15 3:33 PM	N	0	0	1300	U	1300	U	1300	U	1300	U	1300	U	1300	U	4.9	U	7.2	U	2.5	U	7,160	--	5.2	--	11	--	444	--	2.4	U	7.2	U	49	U
A30	4/6/15 3:41 PM	N	0	0	1100	U	1100	U	1100	U	1100	U	1100	U	1100	U	4.1	U	3.4	U	2.1	U	7,640	--	5.2	--	13	--	458	--	2.3	U	3.4	U	41	U
A23	4/6/15 4:06 PM	N	0	0	1200	U	1200	U	1200	U	1200	U	1200	U	1200	U	4.8	U	7.8	U	2.4	U	7,280	--	5.7	--	14.6	--	486	--	2.3	U	7.8	U	48	U
A38	4/6/15 4:10 PM	N	0	0	1100	U	1100	U	1100	U	1100	U	1100	U	1100	U	4.4	U	6.7	U	2.3	U	7,300	--	8.8	--	14.1	--	1000	--	2.3	U	6.7	U	44	U
A15	4/6/15 4:25 PM	N	0	0	6200	U	6200	U	6200	U	6200	U	6200	U	6200	U	30	U	13	U	16	U	7,140	--	5.2	--	24	--	526	--	3.3	U	13	U	60	U
A39	4/6/15 4:26 PM	FD	0	0	1000	U	1000	U	1000	U	1000	U	1000	U	1000	U	4	U	3.9	U	2.1	U	6,990	--	7	--	13.4	--	467	--	2.2	U	3.9	U	40	U
A39	4/6/15 4:26 PM	N	0	0	1100	U	1100	U	1100	U	1100	U	1100	U	1100	U	4.1	U	7.1	U	2.1	U	9,620	--	8	--	14.4	--	538	--	2.2	U	7.1	U	41	U
C09	4/6/15 4:30 PM	N	0	0	1200	U	1200	U	1200	U	1200	U	1200	U	1200	U	4.5	U	4.7	U	2.3	U	5,180	--	3.8	J	8.2	--	796	--	2.4	U	4.7	U	45	U
A07	4/6/15 4:41 PM	FD	0	0	2300	U	2300	U	2300	U	2300	U	2300	U	2300	U	23	U	4.9	U	12	U	7,800	--	7.3	--	16.3	--	794	--	2.2	U	4.9	U	45	U
A07	4/6/15 4:41 PM	N	0	0	2400	U	2400	U	3400	--	2400	U	2400	U	2400	U	23	U	5	U	12	U	7,310	--	7.2	--	16.5	--	1140	--	2.4	U	5	U	46	U
A31	4/6/15 5:03 PM	N	0	0	420	U	420	U	420	U	420	U	420	U	420	U	4.1	U	--	R	2.1	U	8,210	--	7.5	--	13.5	--	1410	--	2.3	U	--	R	41	U
A32	4/6/15 5:03 PM	N	0	0	1200	U	1200	U	1200	U	1200	U	1200	U	1200	U	4.5	U	3.6	U	2.3	U	10,800	--	9	--	18.5	--	943	--	2.3	U	3.6	U	45	U
A08	4/6/15 5:10 PM	N	0	0	5500	U	5500	U	5500	U	5500	U	5500	U	5500	U	27	U	--	R	14	U	4,290	--	5.1	--	20.3	--	1650	--	2.7	U	--	R	53	U
A40	4/6/15 5:16 PM	N	0	0	2500	U	2500	U	2500	U	2500	U	2500	U	2500	U	4.7	U	3.7	U	2.4	U	4,840	--	4.7	--	9.1	--	562	--	2.6	U	3.7	U	47	U
A16	4/6/15 5:26 PM	N	0	0	9600	U	9600	U	9600	U	9600	U	9600	U	9600	U	50	--	--	R	79	--	4,770	--	5.4	--	23.5	--	750	--	3.2	U	--	R	93	U
A24	4/6/15 5:41 PM	N	0	0	1200	U	1200	U	1200	U	1200	U	1200	U	1200	U	15	--	3.7	U	2.8	--	10,100	--	7.2	--	21.2	--	759	--	3	U	3.7	U	1200	J

Appendix C: Maps of PCE, TCE, and CFC-113 Concentrations in Tree Cores

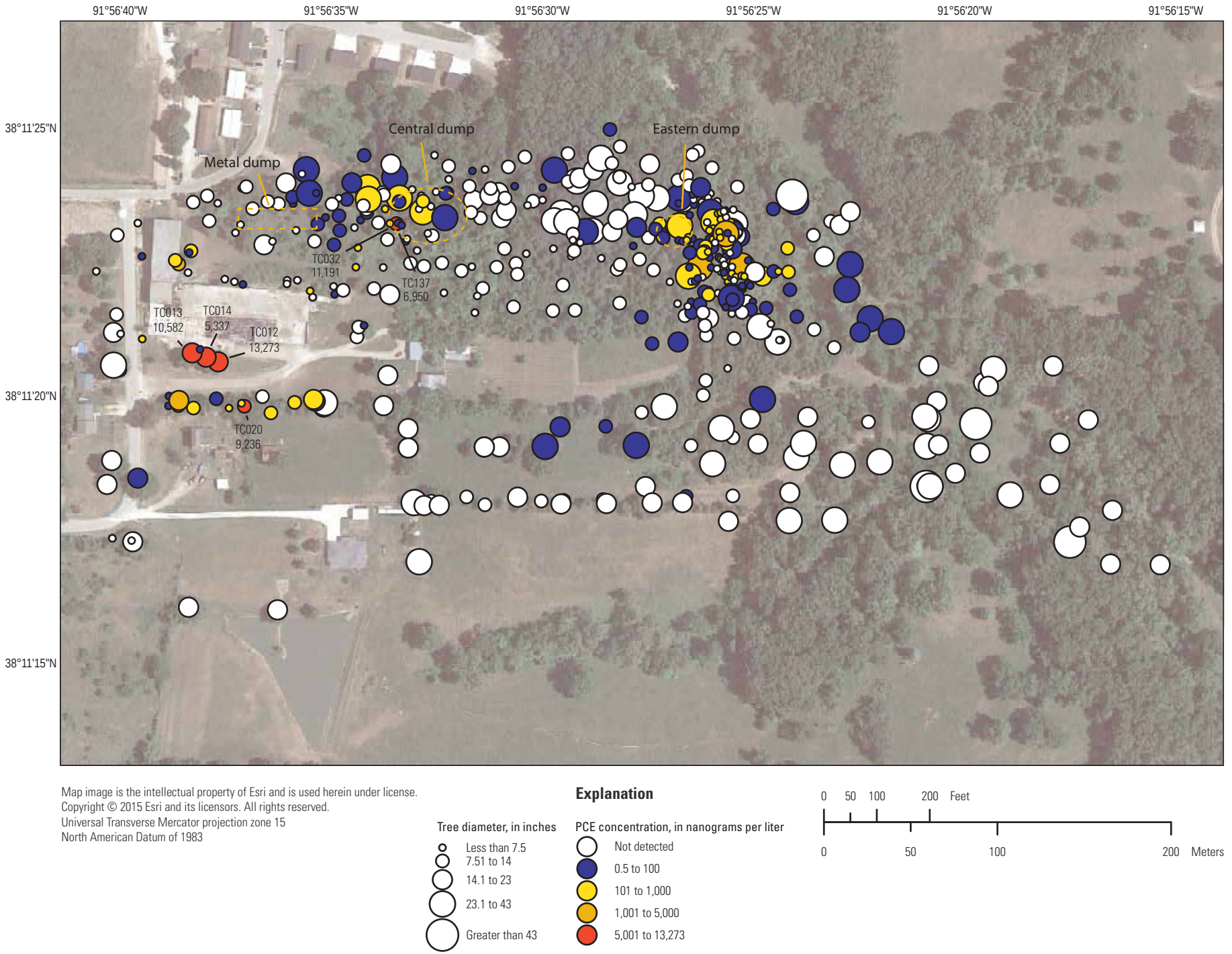
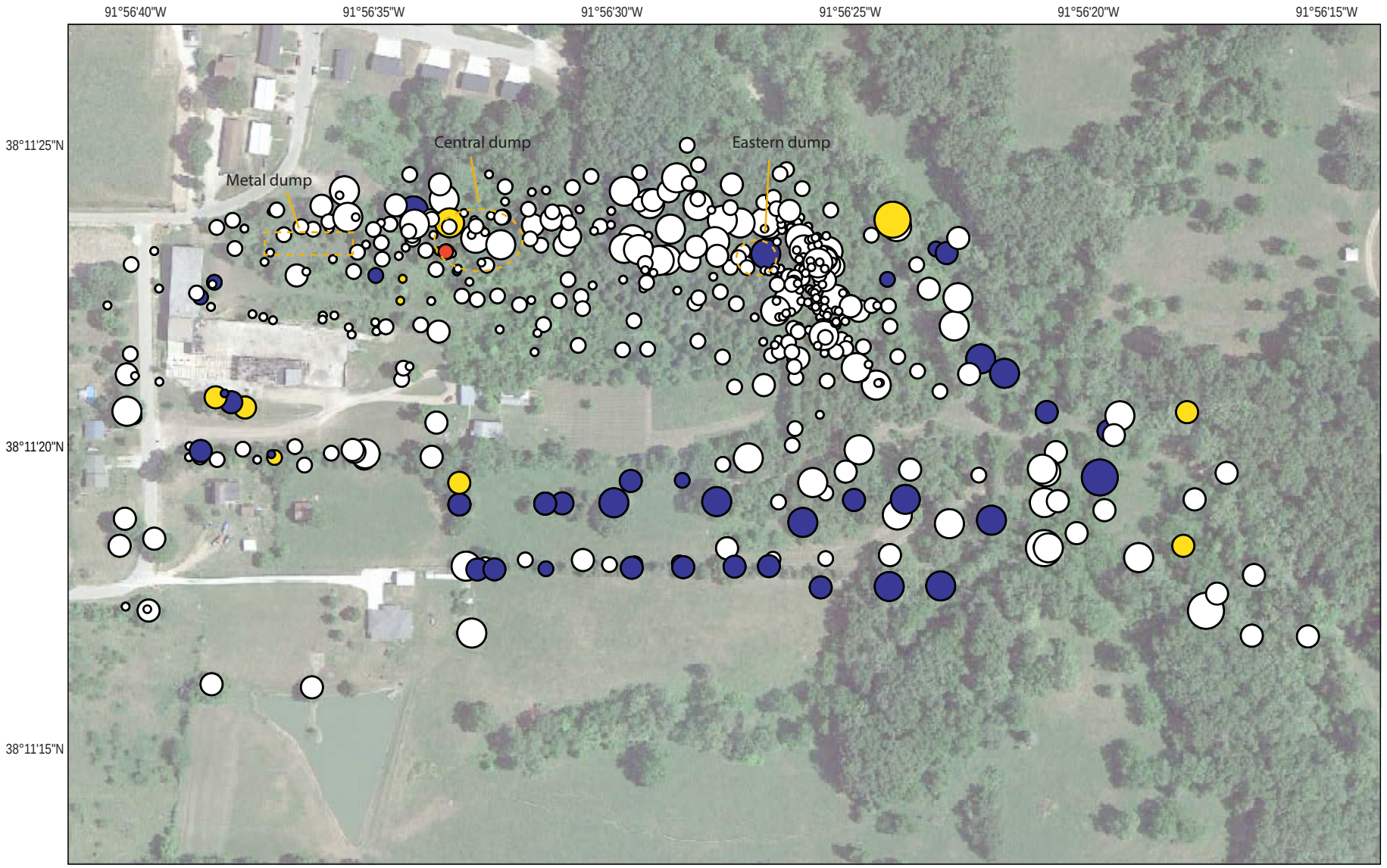


Figure C-01. Concentration of tetrachloroethene (PCE) in tree-core samples, Vienna, Missouri, 2012-2015.



Map image is the intellectual property of Esri and is used herein under license. Copyright © 2015 Esri and its licensors. All rights reserved.
Universal Transverse Mercator projection zone 15
North American Datum of 1983

Explanation

Tree diameter, in inches
- Less than 7.5
- 7.51 to 14
- 14.1 to 23
- 23.1 to 43
- Greater than 43

TCE concentration, in nanograms per liter
- Not detected
- 7.8 to 100
- 101 to 1,000
- 1,001 to 5,000
- 5,001 to 6,432

0 50 100 200 Feet
0 50 100 200 Meters

Figure C-02. Concentration of trichloroethene (TCE) in tree-core samples, Vienna, Missouri, 2012-2015.

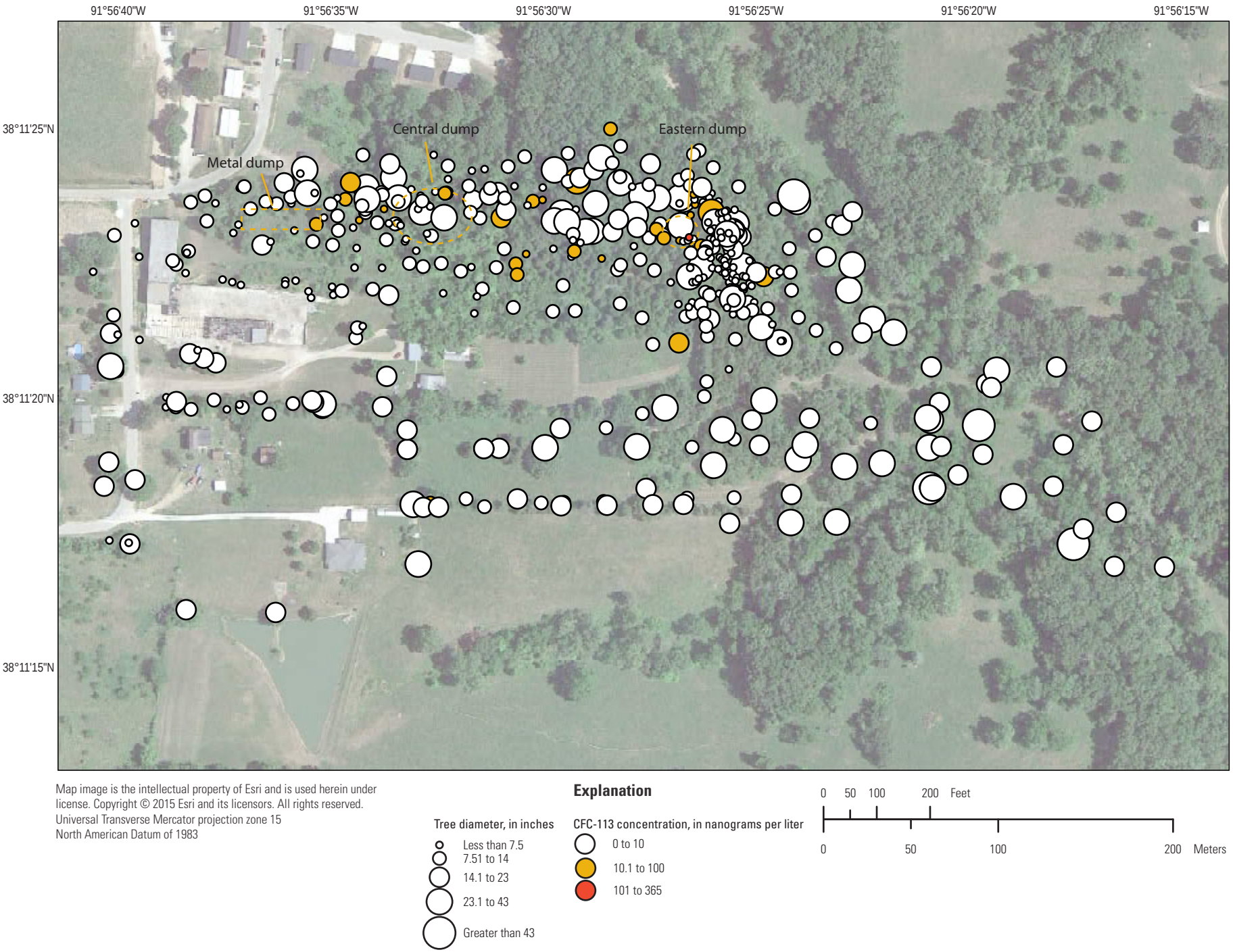
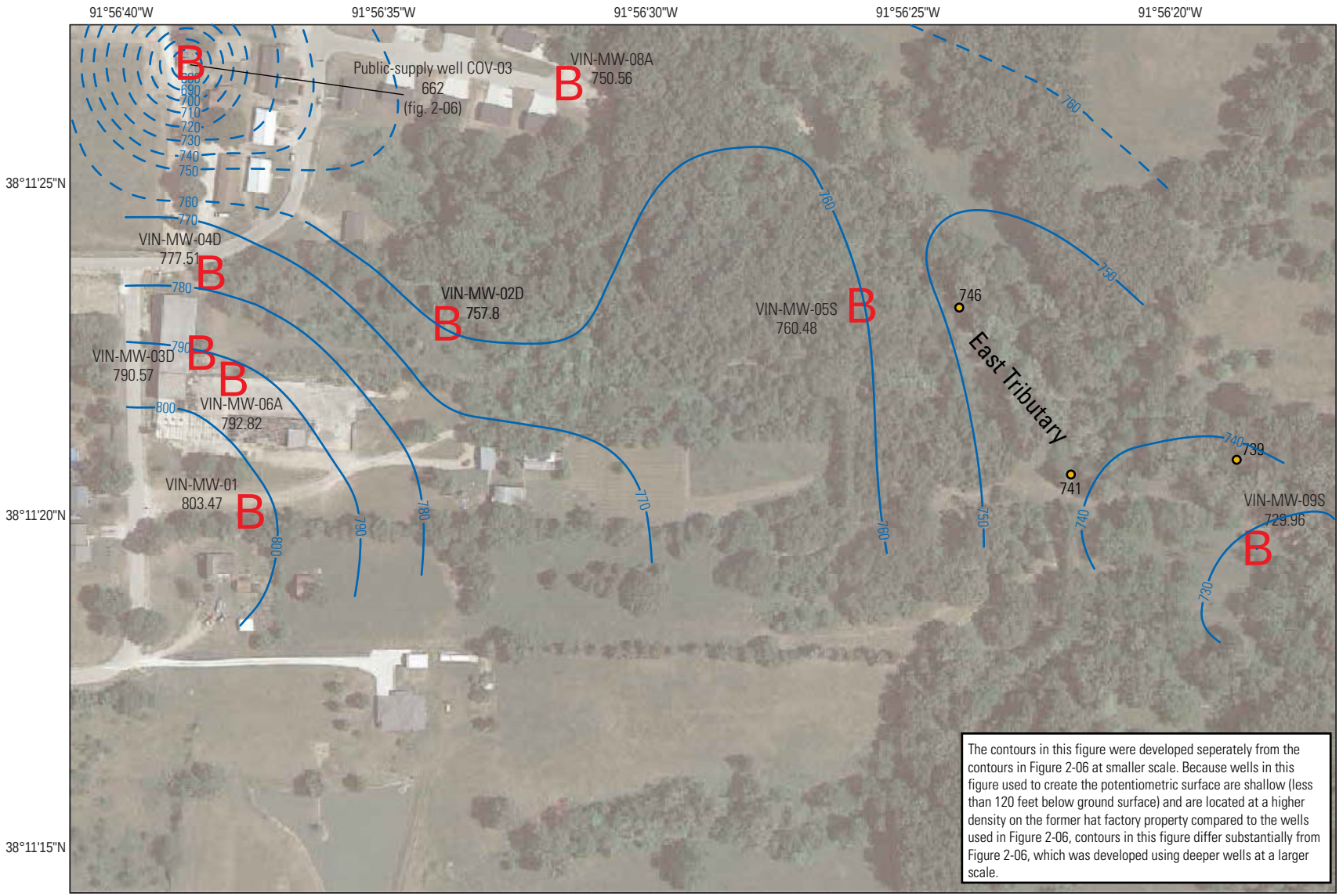


Figure C-03. Concentration of 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113) in tree-core samples, Vienna, Missouri, 2012-2015.

Appendix D: Contour Maps and Maps and Plots of Tetrachloroethene in Groundwater and Surface-water



Base from Google Earth, 2012
Universal Transverse Mercator projection, zone 15
Horizontal coordinate information referenced to the North American Datum of 1983 (NAD 83)
Vertical coordinate information referenced to the North American Vertical Datum of 1988 (NAVD 88)

0 30 60 120 Feet
0 30 60 120 Meters

Explanation

VIN-MW-09S 729.96 B **Well and identifier --** Value is water level in feet above NAVD 88 measured in March 2016.

758 **Location of tributary point --** Value is altitude of water in stream in feet above NAVD 88 used in estimation of water-table surface.

800 **Water-table contour --** Shows altitude of water table, March 2016. Dashed where approximately located. Contour interval 10 feet. Datum is NAVD 1988.

Figure D-01. Potentiometric surface of shallow groundwater at the Vienna Wells site, Vienna, Missouri, 2016.

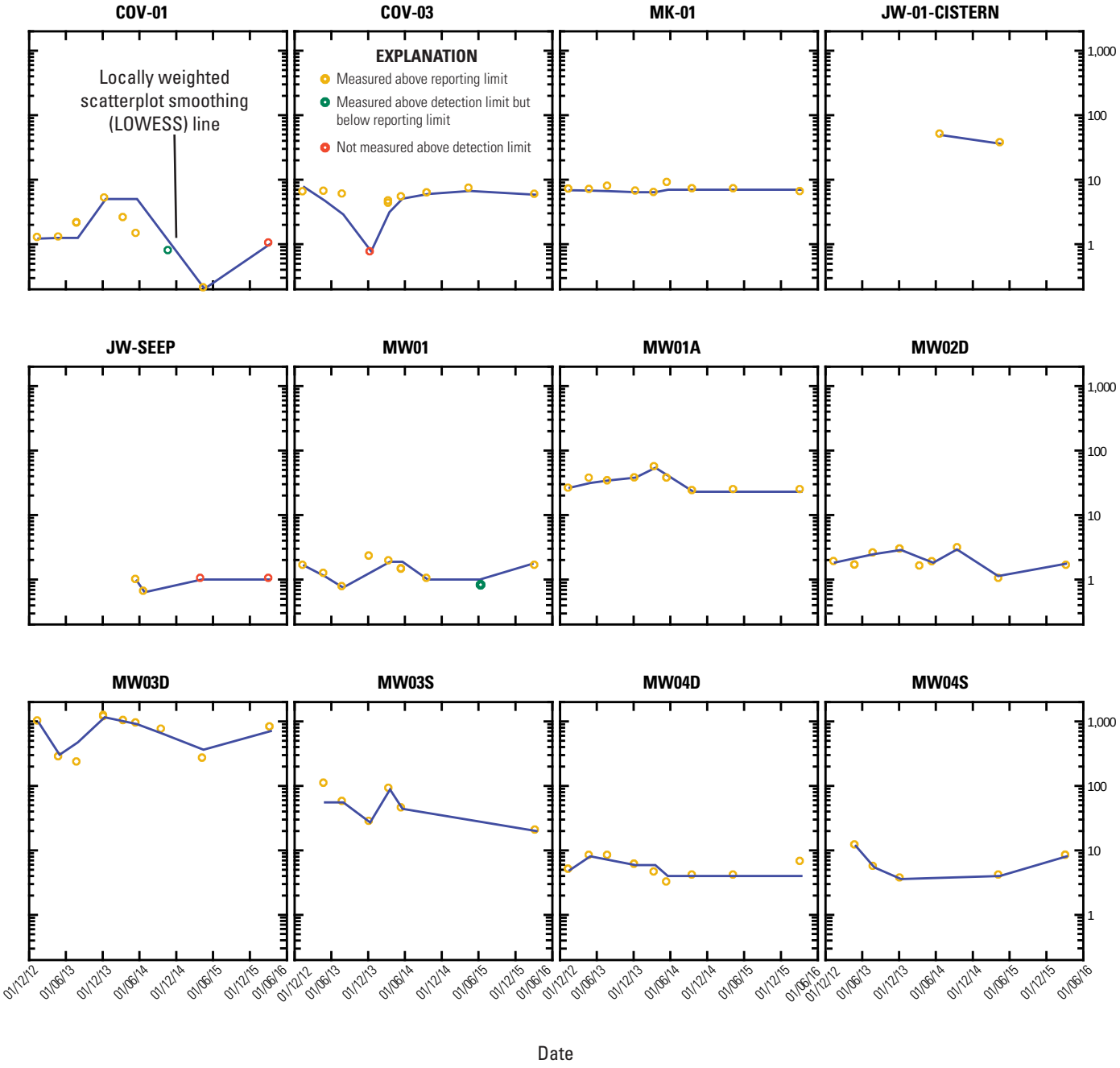


Figure D-02. Concentrations of tetrachloroethene (PCE) in well and spring samples analyzed by two contract laboratories, Vienna, Missouri, 2012-2016.

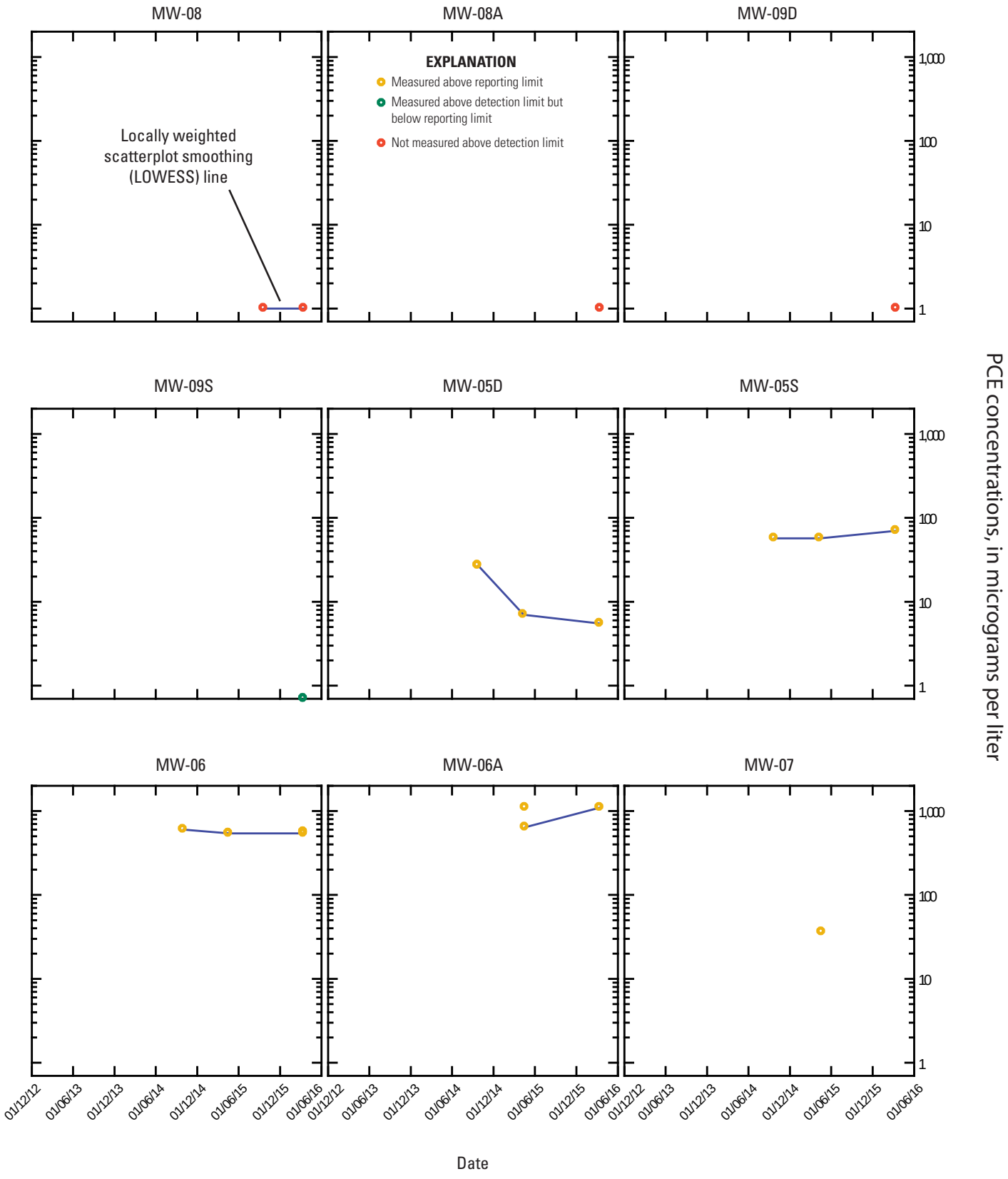


Figure D-03. Concentrations of tetrachloroethene (PCE) in well samples analyzed by two contract laboratories, Vienna, Missouri, 2012-2016.

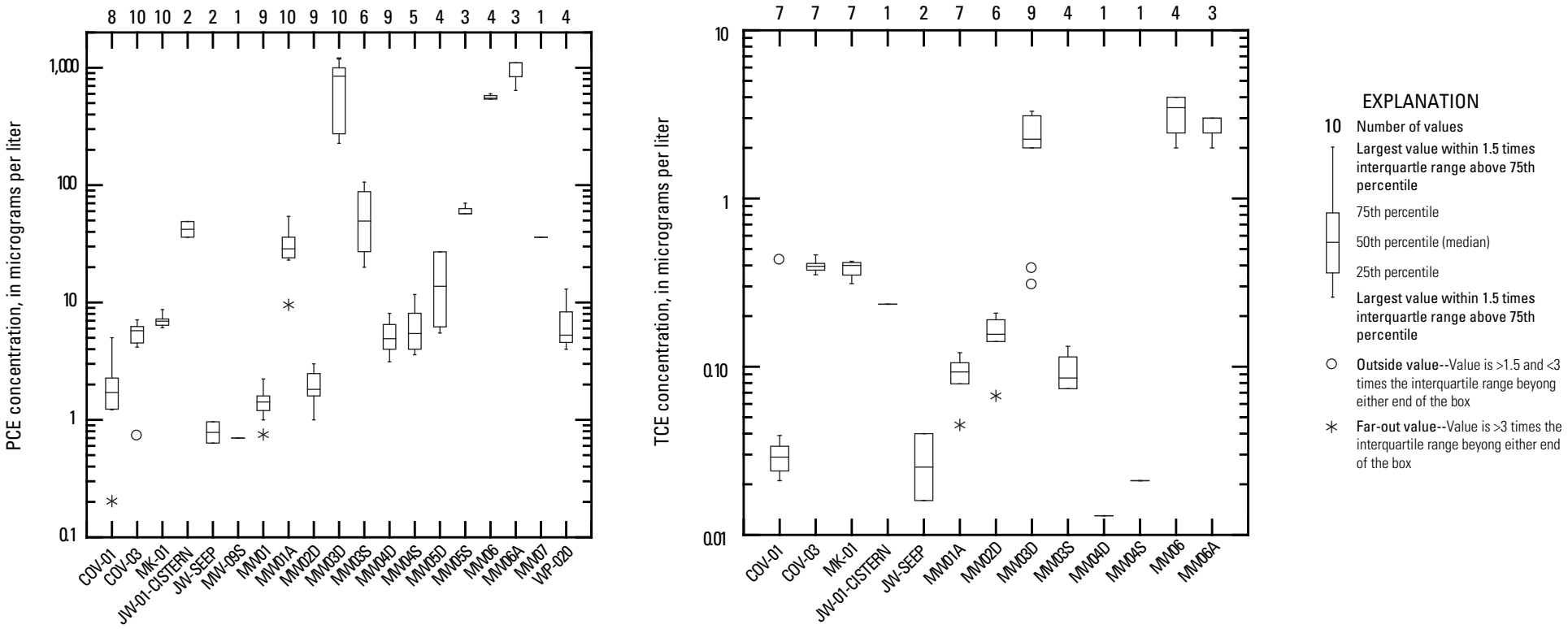


Figure D-04. Summary of tetrachloroethene (PCE) and trichloroethene (TCE) concentrations in samples with detections from monitoring wells, Vienna, Missouri.

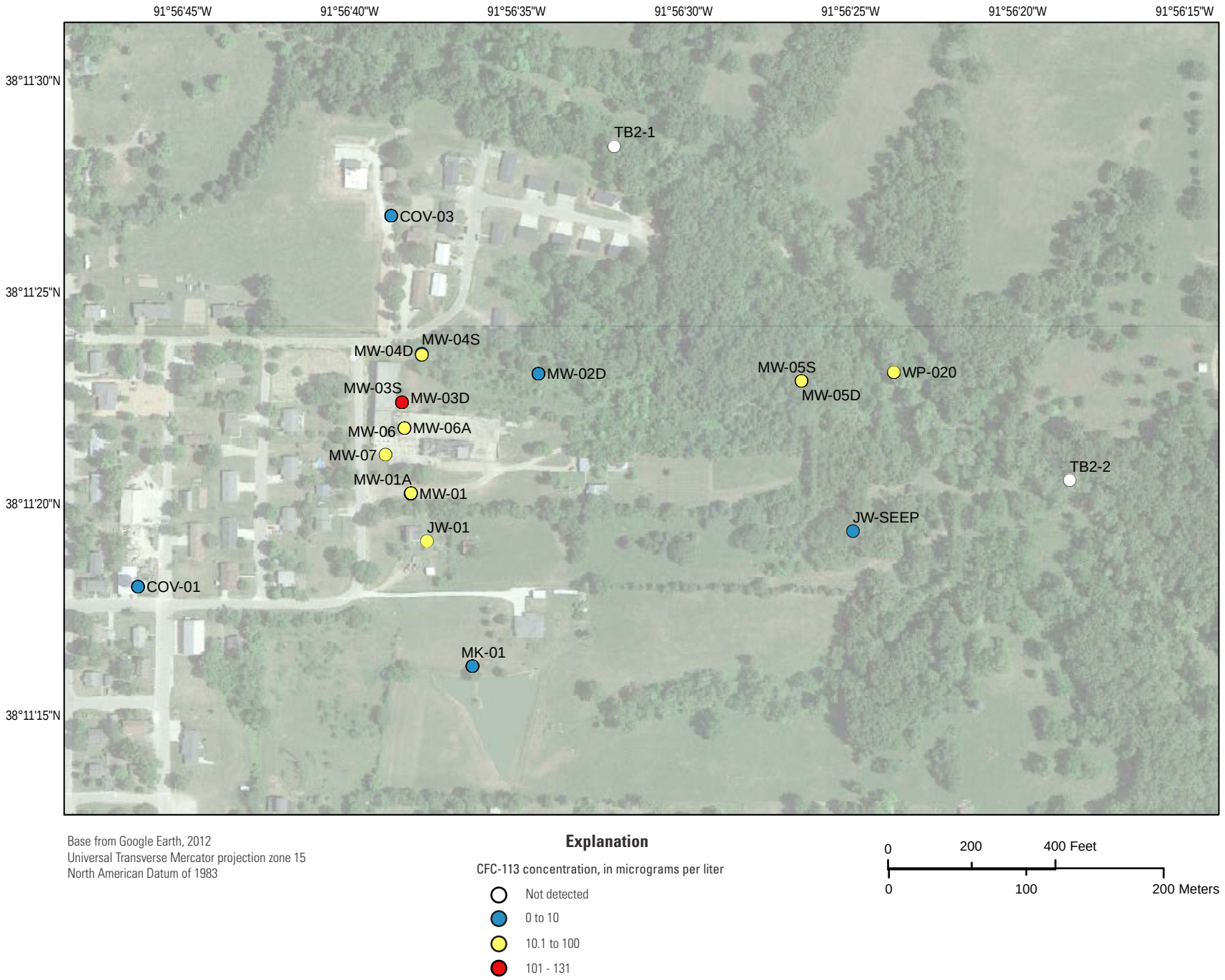


Figure D-05. Maximum concentrations of 1,1,2-trichloro-trifluoroethane (CFC-113) in groundwater and surface-water samples during 2012-2016, Vienna, Missouri.

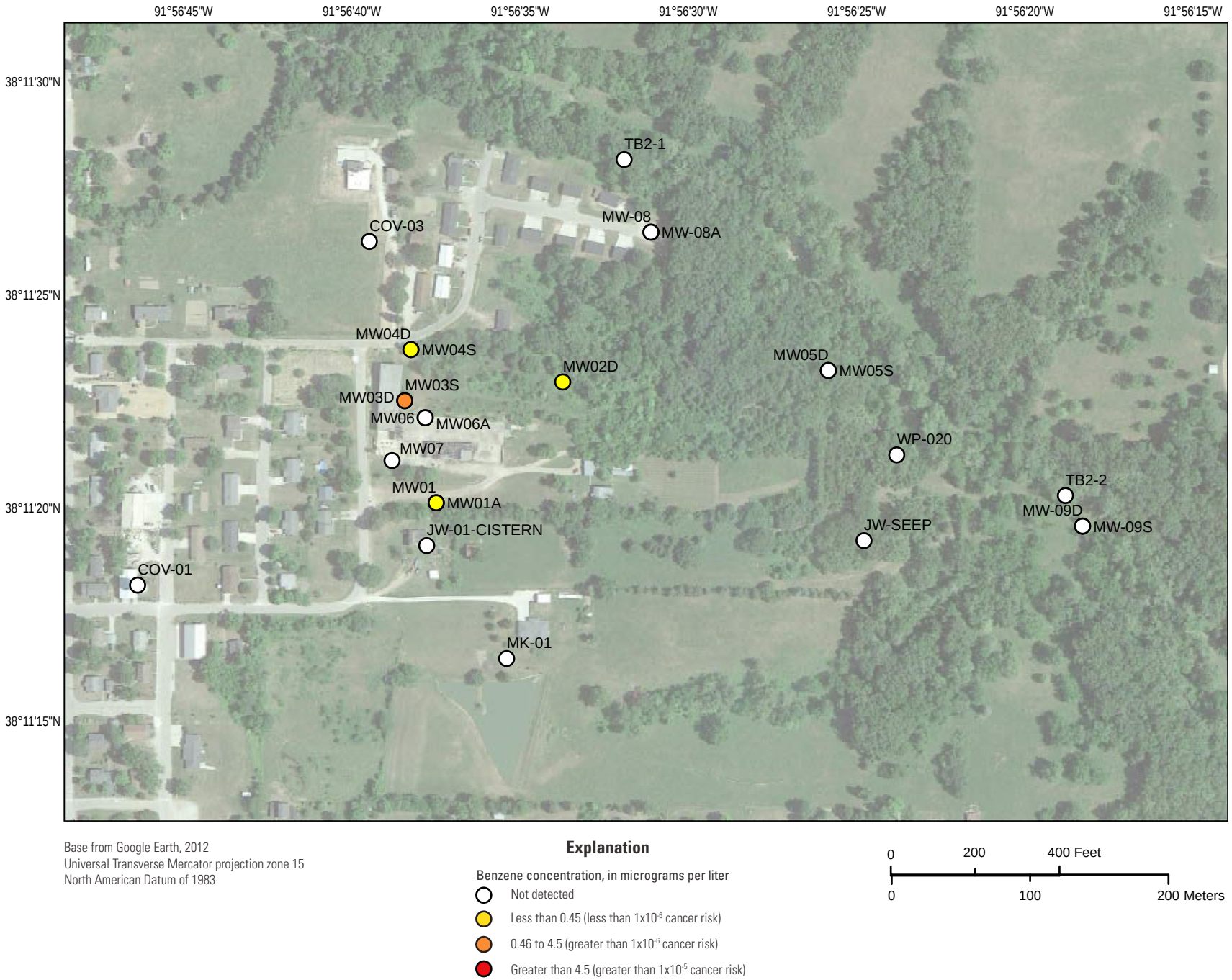


Figure D-06. Maximum concentrations of benzene in groundwater and surface-water samples during 2012-2016, Vienna, Missouri.

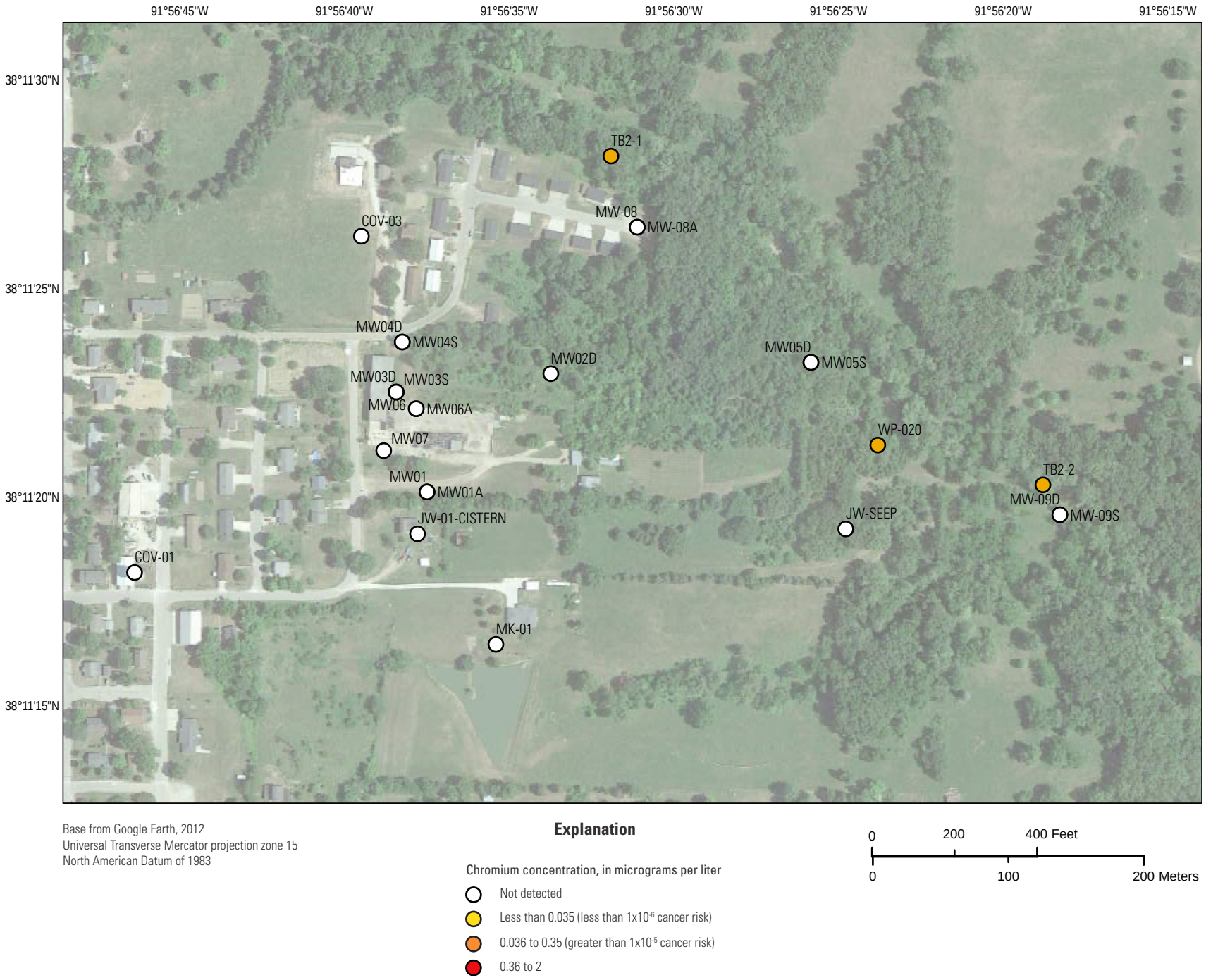


Figure D-07. Maximum concentrations of chromium in groundwater and surface-water samples during 2012-2016, Vienna, Missouri.

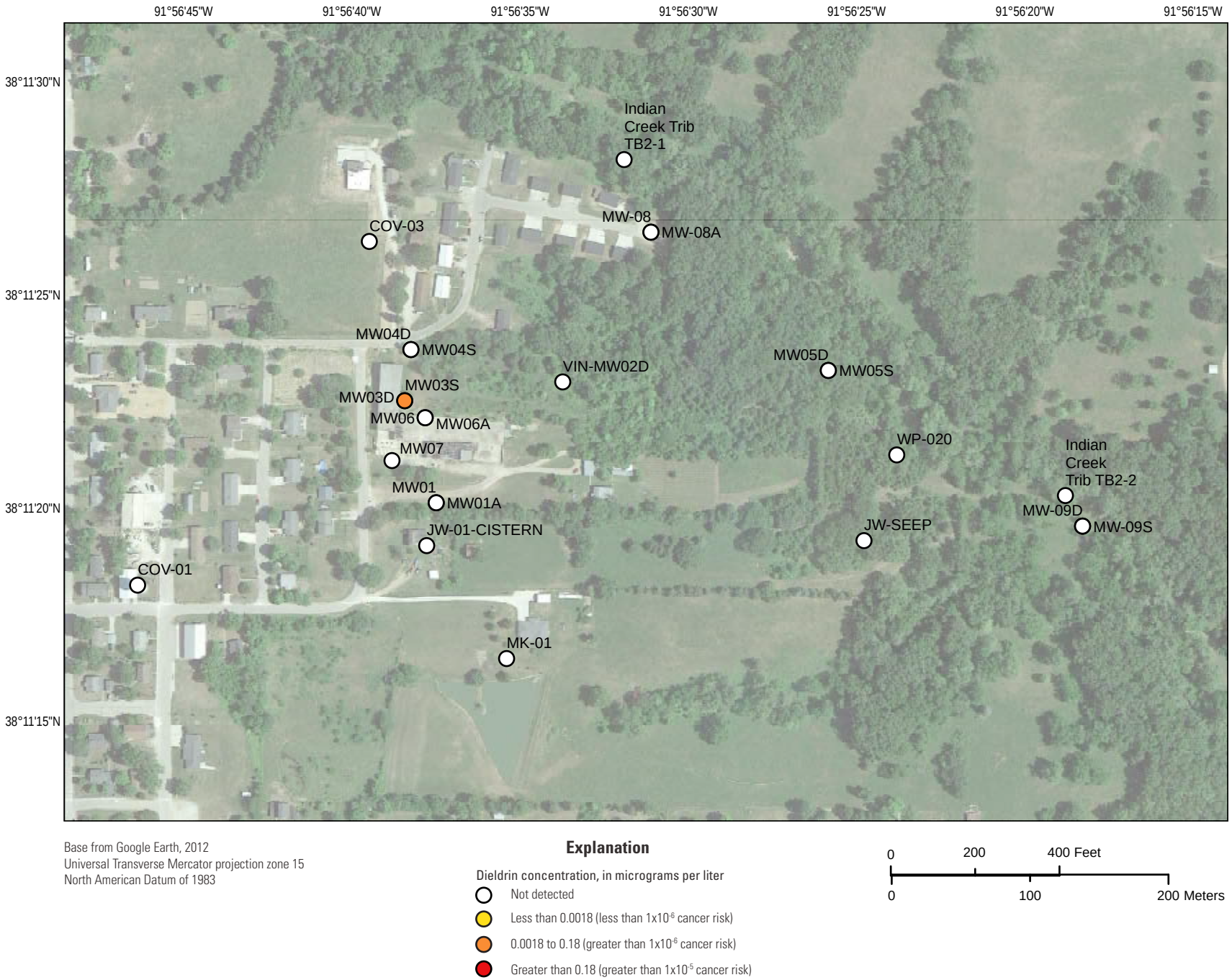
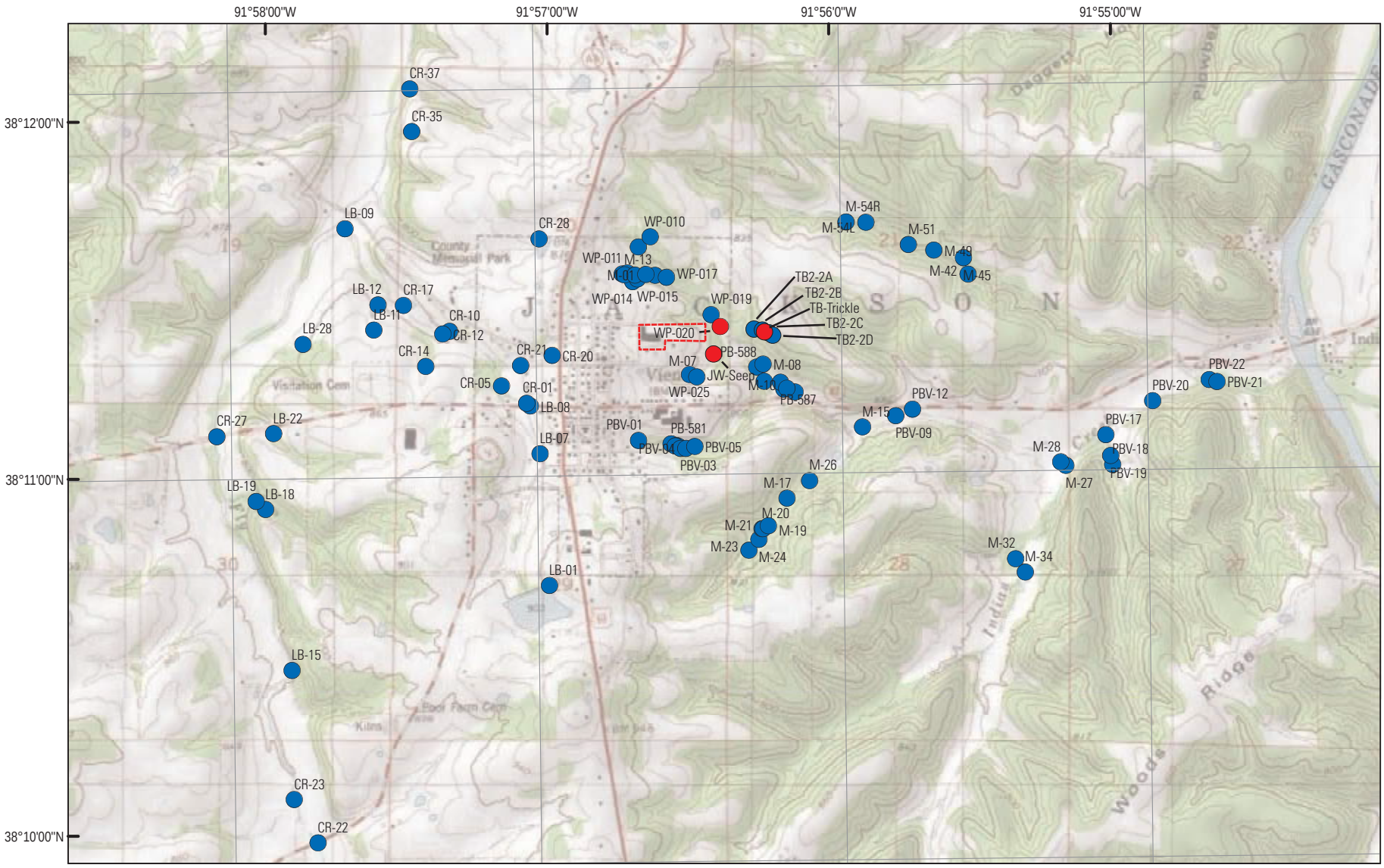


Figure D-08. Maximum concentrations of dieldrin in groundwater and surface-water samples during 2012-2016, Vienna, Missouri.



Map image is the intellectual property of Esri and is used herein under license. Copyright © 2015 Esri and its licensors. All rights reserved.
Universal Transverse Mercator projection zone 15
North American Datum of 1983

Explanation

Former hat factory site

Concentration of PCE, in µg/L

- Not detected - 1.00
- 1.00 - 3.00

0 0.25 0.5 1 Miles

0 0.25 0.5 1 Kilometers

Figure D-09. Locations of water samples collected during the seepage reconnaissance from 2011 to 2012 and water samples collected in the vicinity of WP-020 in 2014, Vienna, Missouri, 2011-2014.

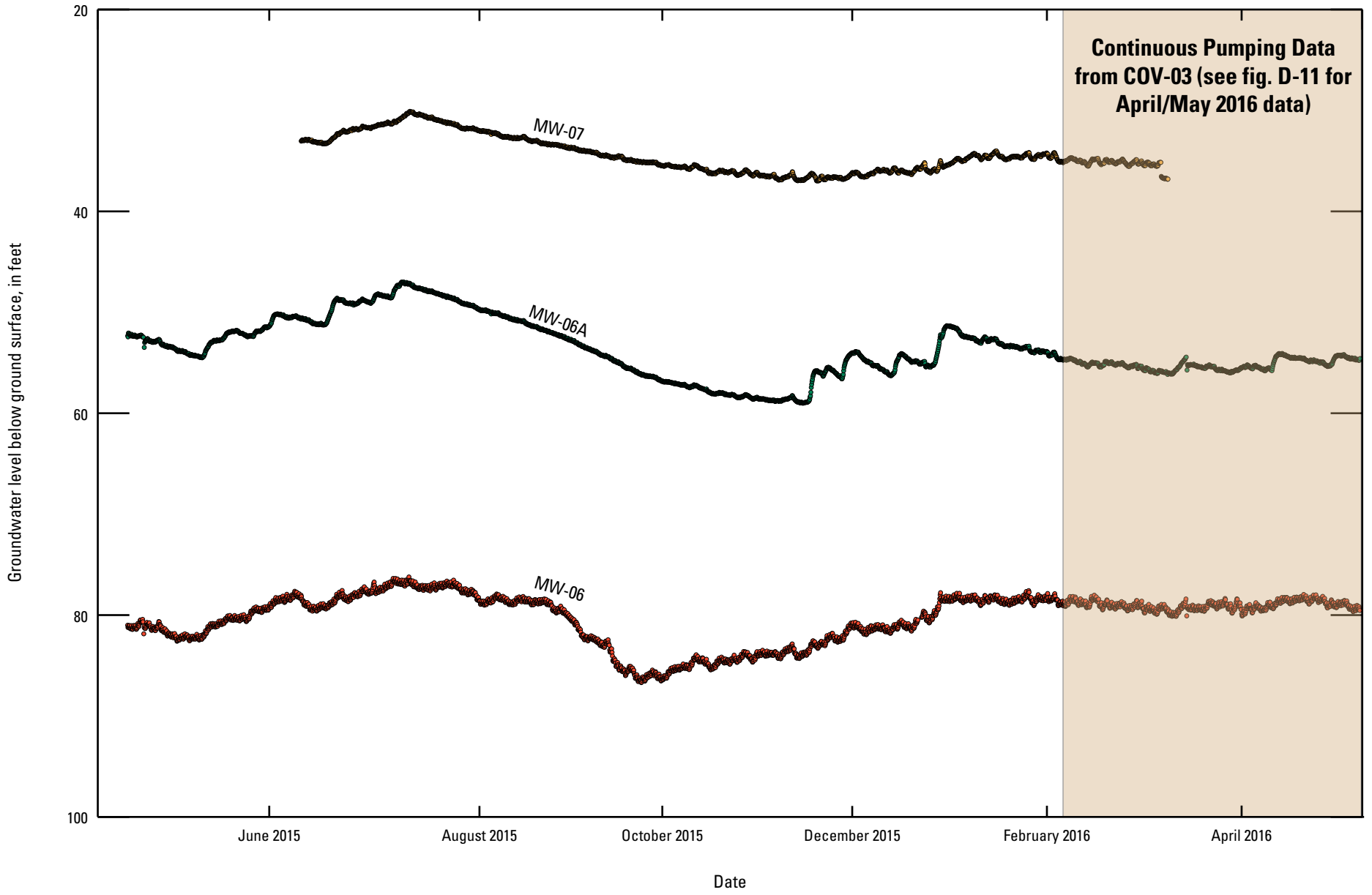


Figure D-10. Continuous water level in monitoring wells MW-06, MW-06A, and MW-07 and occurences of pumping of COV-03, Vienna, Missouri, 2015-2016.

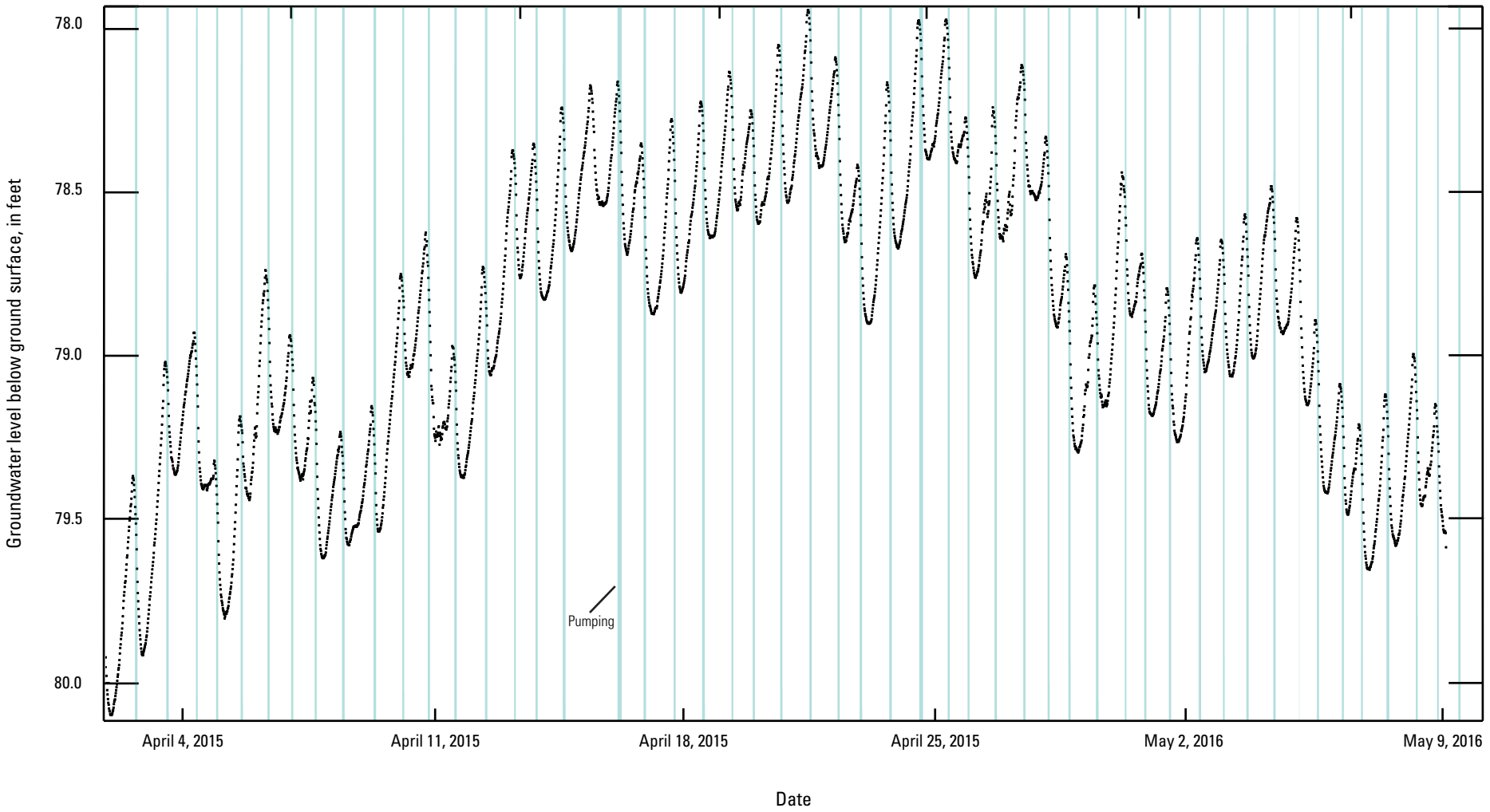


Figure D-11. Continuous water level in monitoring well MW-06 and occurences of pumping of COV-03, Vienna, Missouri, 2016.

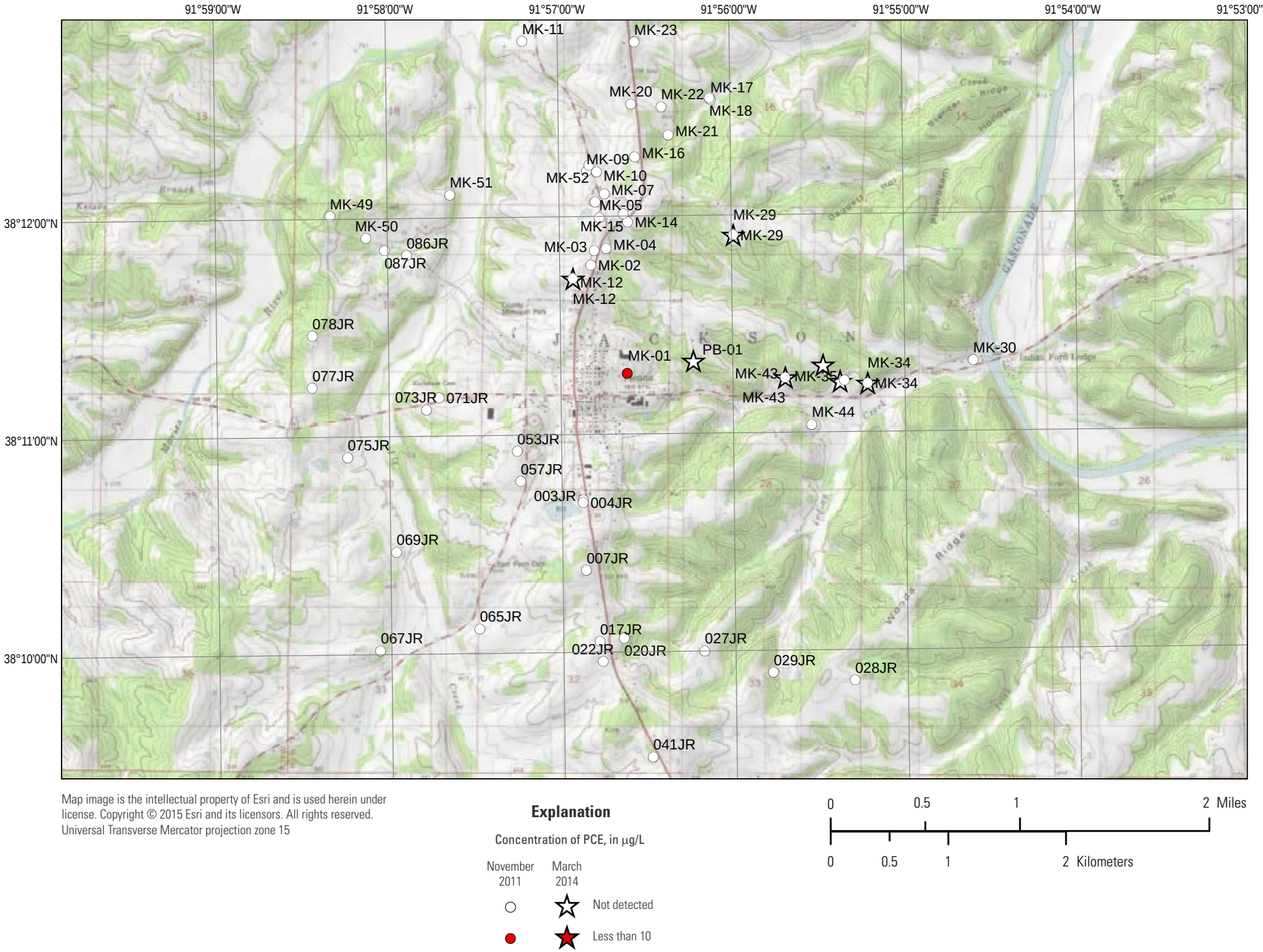


Figure D-12. Concentrations of tetrachloroethene (PCE) in domestic-well samples collected in November 2011 (analyzed by portable gas chromatograph) and March 2014 (analyzed by laboratory), Vienna, Missouri.

Appendix E: Public-Supply Well Logs

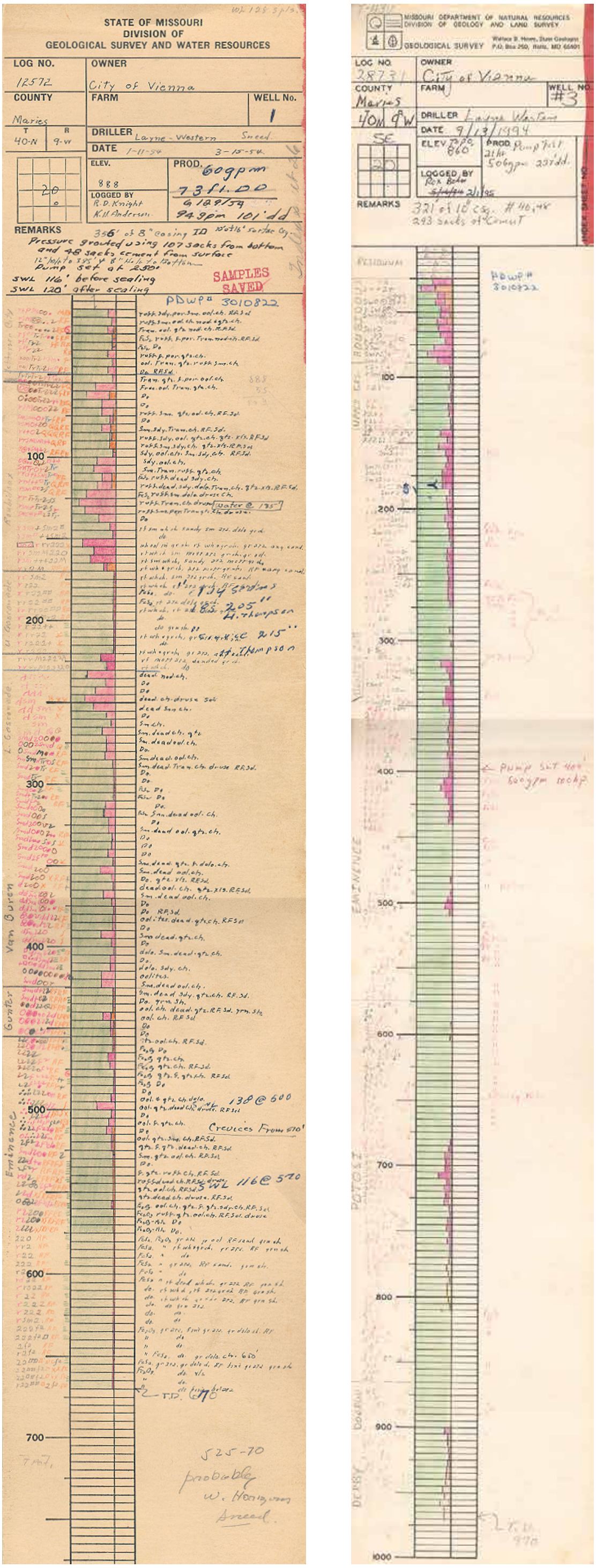


Figure E-01. Geologic logs of city wells COV-01 (left) and COV-03 (right) completed by the Missouri Department of Natural Resources based on driller's logs.

Appendix F: Aquifer-test Description, Data, and Results

Slug Testing of A Bedrock Monitoring Well at the Vienna Wells Remedial Investigation Site, Vienna, Missouri, December 22, 2015 – April 1, 2016

Introduction:

This narrative is a summary of field activities, field data collected, and the computer analysis/computations performed on the field data from the Vienna Wells Remedial Investigation site, Vienna, Missouri from December 22, 2015 to April 1, 2016. Activities included slug testing of bedrock monitoring wells, recording of slug test's raw data, and analyzing these data for the purpose of estimating hydraulic conductivity (K) values of the Roubidoux Formation and Eminence Dolomite underlying the Vienna Wells Remedial Investigation site.

At the request of the U.S. Environmental Protection Agency, the U.S. Geological Survey (USGS) is conducting a remedial investigation (RI) to determine the source of tetrachloroethene (PCE) contamination in two public water-supply wells in the city of Vienna, Missouri (COV-01 and COV-03; figs. 1-02 and 1-03 in text). During the early 2000s, PCE was detected in both public supply wells. On December 22, 2015, slug testing of an on-site monitoring well (MW-06) was performed by two USGS employees from Rolla, Missouri. From February 5, 2016 to April 1, 2016, slug testing of five on-site monitoring wells (MW-01, MW-02D, MW-03D, MW-04D, and MW-05D) and two off-site bedrock monitoring wells (MW-08 and MW-09D) was performed by one USGS employee from Rolla, Missouri. Secondary efforts conducted back at Rolla, Missouri included a review and analysis of the raw slug test data.

Slug testing summary:

Field activities and collection of field data

A single bedrock monitoring well (MW-06) was slug tested on December 22, 2015. MW-06 is a deep well within a well nest, which also includes a shallow interval (MW-06A) in the annular space between a 6.25-inch, steel casing and the 2.5-inch schedule 80 polyvinylchloride (PVC) casing of MW-06 (fig. H-06 in Appendix H). Both wells are open only to the Roubidoux formation, and MW-06 is open to a 10-ft, screened interval with a filter pack (table 1).

The Vienna city well COV-03 is located about 500 feet to the north (figs. 1-02) and pumps on two different schedules (figs. 1 and 2). Because the city well is triggered when the water level in the storage tank falls below a certain level, transducer data show pumping typically occurs twice daily from 5 to 9 a.m. and 6 p.m. to 12 a.m. (fig. 1) or once from 12 p.m. to 8 p.m., dropping the water table in the unconfined aquifer about 0.5 feet (fig. 2). Following the first slug tests on December 22, 2015, slug testing was timed so that COV-03 was not pumping during testing.

Table 1. Monitoring well contruction and pumping information at the Vienna Wells site, Vienna, Missouri.

[bgs, below ground surface; gpm, gallons per minute; --, no data; A, annular well; S, shallow well; D, deep well]

Well Name	Local Well Name	Total depth (feet bgs)	Open Interval (feet)	Last Pump Date	Last Ambient Water Level (feet bgs)	Last Well Yield (gpm)	Last Drawdown (feet bgs)	Specific Capacity (gpm/foot)
VIN-MW-01	MW-01	60	14	3/10/2016	50.25	0.2	56.82	0.03
VIN-MW-01A	MW-01A	42	23	3/11/2016	38.52	0.13	40.41	0.069
VIN-MW-02S	MW-02S	38	21	--	--	--	--	--
VIN-MW-02D	MW-02D	79	14	3/14/2016	70.46	0.2	74.4	0.051
VIN-MW-03S	MW-03S	49	19	3/14/2016	--	--	--	--
VIN-MW-03D	MW-03D	64	12	3/14/2016	51.77	0.3	54.28	0.12
VIN-MW-04S	MW-04S	45	18	3/11/2016	44.54	--	--	--
VIN-MW-04D	MW-04D	70	17	3/11/2016	57.85	0.5	61.67	0.131
VIN-MW-05S	MW-05S	46	14	3/14/2016	30.99	0.3	34.68	0.081
VIN-MW-05D	MW-05D	75	13	3/14/2016	40.72	0.6	54.34	0.044
VIN-MW-06	MW-06	119	15	3/15/2016	81.94	1.0	100.7	0.053
VIN-MW-06A	MW-06A	94	60	3/15/2016	57.89	1.0	76.36	0.054
VIN-MW-08	MW-08	324	59	3/16/2016	54.42	2.0	106.67	0.038
VIN-MW-08A	MW-08A	175	85	3/17/2016	51.93	1.5	73.07	0.071
VIN-MW-09S	MW-09S	19	14	3/15/2016	4.8	0.6	6.43	0.368
VIN-MW-09D	MW-09D	40	15	3/15/2016	6.29	1.2	11.49	0.231

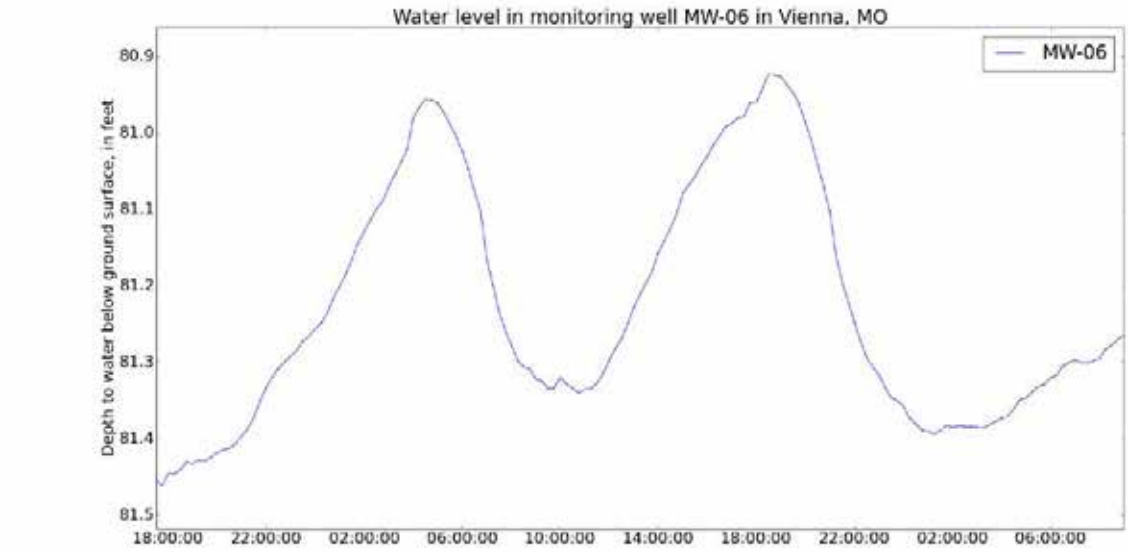


Figure 1. Water level in MW-06 showing two typical daily drawdown curves from the pumping of COV-03.

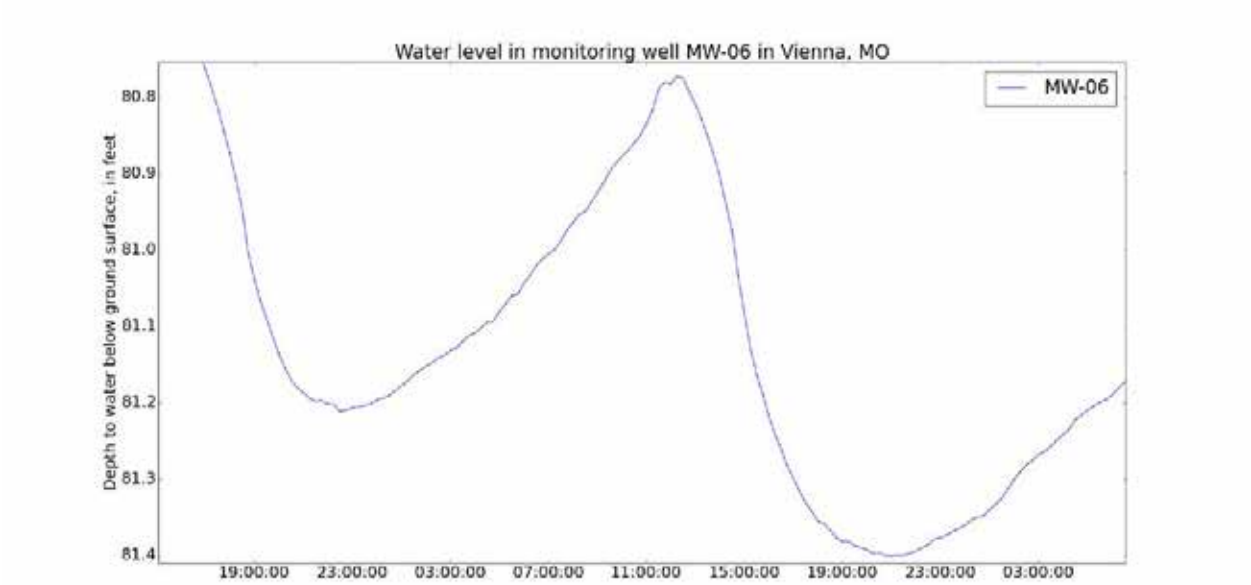


Figure 2. Water level in MW-06 showing one typical daily drawdown curve from the pumping of COV-03.

Between February 5, 2016 and March 9, 2016, the remaining five on-site monitoring wells (MW-01, MW-02D, MW-03D, MW-04D, and MW-05D) were slug tested. Each of these five wells is a deep well within a well nest (figs. H-01 through H-05). Four of the five wells (MW-01, MW-02D, MW-03D, and MW-04D) have 2-inch schedule 40 PVC casing with a 10-ft, screened interval with a filter pack. The fifth well (MW-05D) has 2.5-inch schedule 80 PVC casing with a 10-ft, screened interval. All these wells are open to the Roubidoux Formation underlying the Vienna Wells Remedial Investigation site (fig. 2-06).

On April 1, 2016, two off-site bedrock monitoring wells (MW-08 and MW-09D) were slug tested. The first monitoring well, MW-08, is a deep well located north of the former Langenberg Hat Factory (fig. 2-06) and has a 2.5-inch schedule 80 PVC casing with a 59-ft open-hole interval open to the Eminence Dolomite (figs. H-08 and 2-06). The second off-site bedrock monitoring well (MW-09D) is a deep well within a well nest located adjacent to a stream southeast of the hat factory (fig. A-2) and has a 2-inch schedule 40 PVC casing with a 10-ft, screened interval open to the Roubidoux Formation (fig. H-09).

Slug testing consisted of a combination of rising head and falling head tests as follows:

1. the initial water level was recorded;
2. live reading of the transducer was started;
3. the transducer's reading was recorded;
4. a 10-ft, 1.5-in schedule 40 PVC slug filled with clean sand was lowered until a response was measured in the water level (i.e. the slug touched the water);
5. the slug was raised slightly and the water was allowed to stabilize to within about 0.01 feet;
6. the slug was instantaneously dropped 10 feet into the water resulting in a head displacement (rising head or slug-in test);
7. the response of the well was recorded by the transducer in half-second increments;
8. the water level was allowed to stabilize to within about 0.01 feet;
9. the slug was instantaneously removed from the well about 10 feet (falling head or slug-out test);
10. the response of the well was recorded by the transducer in half-second increments.
11. the water level was then allowed to stabilize to within about 0.01 feet;

When time permitted, the rising- and/or falling-head test was repeated.

During field testing of MW-06 at 12:15 p.m., the sound of the nearby air stripper, which treats the water from COV-03, was heard, indicating that the well had recently started pumping (fig. 3). Around 12:50 p.m. the air stripper turned off, indicating that the well had recently stopped pumping.

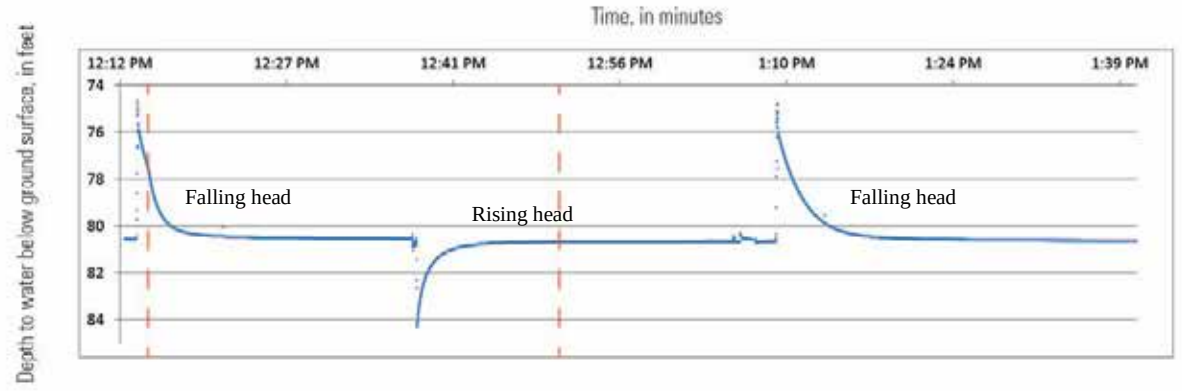


Figure 3. Water level in MW-06 during the entirety of the slug tests. Red dashed lines indicate the approximate time that the pump in COV-03 was turned on and then off.

Slug test analysis

After the raw slug-test data were collected, the information was exported into a spreadsheet program. In the spreadsheet, the displacement was calculated by subtracting the transducer's reading from its initial reading at the beginning of the test. Also, the displacement from the rising-head test was multiplied by -1 to reflect the displacement across the x-axis. The water level at the beginning of the head displacement test was determined, and this beginning displacement was used as the displacement at time zero for the purpose of graphing. The Bouwer and Rice (1976), and Bouwer (1989) analysis for an unconfined aquifer was used. A double break in three of the slug tests (MW-01, MW-06, and MW-08) was observed.

The actual K-value calculations were done using the computer software package AQTESOLV (Duffield, 1996). This program is based on the Bouwer and Rice (1976) and Bouwer (1989) methods and uses the following equation to compute K:

$$K = [(\ln (y_o / y_t)) * (r_c^2 \ln (R_e / r_w))] / [(2 L) * (t)]$$

where:

K = horizontal K of the aquifer, in feet per day:

y_o = residual drawdown in the well at time zero due to the instantaneous removal of the slug from the well, in feet;

y_t = residual drawdown in the well after time, in seconds t;

r_c = effective radius of the well casing (casing radius), in feet;

$\ln (R_e / r_w)$ = empirical shape factor determined from a graph provided in Bouwer and Rice (1976), in feet;

R_e = effective radius over which head loss occurs, in feet;

r_w = effective radius of the well (well bore radius), in feet;

L = height of the well screen (screen length) or contributing interval, saturated interval for unconfined aquifer, in feet; and

t = time after slug removed, in seconds.

The residual drawdown was plotted on a semi-log graph with displacement on a log scale (y-axis), and the time was plotted on an arithmetic scale (x-axis). The value for $[\ln (y_o / y_t) / t]$ was obtained from the slope of the best-fit line in the early time data. The value for the term $[\ln (R_e / r_w)]$ was calculated using the additional variables H (total well penetration depth) and either A and B or C, which are dimensionless parameters that are a function of (L / r_w) and were read from a graph provided in Bouwer and Rice (1976). The slope of the displacement-time plot was fitted manually using the recommended head ranges of 0.15 ft/ft to 0.35 ft/ft by Butler (1998).

The K-value calculations include consideration of the filter packs. When the water level rises in the filter-packed screened section of the well, the thickness and porosity of the filter pack must be taken into account when calculating the effective radius of the casing (r_c). This was done using the formula provided by Bouwer (1989), $r_c = [(1 - n) r^2 + (n * r_w^2)]^{1/2}$. All terms have been defined previously except for *n*, which is the porosity of the filter pack and is assumed to be 0.25. The displacement curves, input variables used, and resulting estimated K values are summarized in table F-1 and figures F-1 through F-20.

Table F-1. Characteristics of slug tests and values used in estimation of hydraulic conductivity for all monitoring wells.

[NWIS, National Water Information System; hr, hour; WL, water level; ft, feet; mp, measuring point; bgs, below ground surface; Kv, vertical hydraulic conducivity; Hh, horizontal hydraulic conducivity; R, Roubidoux Formation; E, Eminence Dolomite]

NWIS Well name	Slug test type	Date	Start time	End time	Duration (hr)	WL above the top of the screen (ft)	Transducer level (ft)	WL below mp (ft)	WL bgs (ft)	Initial displacement [H(0); ft]	Water column height (H; ft)	Aquifer	Saturated aquifer thickness (b; ft)	Kv/ Kh	Depth to top of screen (d; ft)	Screen length (L; ft)	Casing radius [r(c); ft]	Well radius [r(w); ft]	Radius of well skin [r(sk); ft]	Theoretical initial displacement [H(0)*; ft]	Hydraulic conductivity (K; ft/day)	Transmissivity (ft^2/day)	Hydraulic conductivity (K; ft/day)
MW-01	Falling	2/5/2016	8:58:45	12:18:42	3.33	-1.57	12.61	50.13	48.07	6.94	11.93	R	134	1	46.5	13.5	0.09	0.26	0.26	6.64	0.0360	4.82	0.04
MW-01	Rising	2/5/2016	12:18:43	14:18:21	1.99	-0.31	13.87	48.87	46.81	8.83	13.19	R	135	1	46.5	13.5	0.09	0.26	0.26	6.64	0.273	37.0	0.3
MW-02D	Falling	3/9/2016	12:55:37	14:35:29	1.66	-2.94	9.77	70.59	67.94	15.08	11.06	R	94	1	65.0	14.0	0.09	0.26	0.26	6.64	3.25	306	3
MW-02D	Rising	3/9/2016	14:35:29	15:27:02	0.86	-3.13	9.57	70.78[1]	68.13	3.65	10.87	R	94	1	65.0	14.0	0.09	0.26	0.26	6.64	0.920	86.4	0.9
MW-03D	Falling	3/9/2016	9:26:41	10:06:08	0.66	2.35	16.82	52.05	49.65	9.41	14.35	R	48	1	52.0	12.0	0.09	0.26	0.26	6.64	6.94	336	7
MW-03D	Rising	3/9/2016	10:06:09	10:18:57	0.21	2.41	16.88	51.99[1]	49.59	6.85	14.41	R	48	1	52.0	12.0	0.09	0.26	0.26	6.64	3.88	188	4
MW-04D	Falling	3/9/2016	10:35:27	11:37:49	1.04	-2.34	15.17	58.09	55.34	9.09	14.66	R	15	1	53.0	17.0	0.09	0.26	0.26	6.64	6.22	91.2	6
MW-04D	Rising	3/9/2016	11:37:50	12:40:20	1.04	-2.11	15.40	57.86[1]	55.11	8.51	14.89	R	15	1	53.0	17.0	0.09	0.26	0.26	6.64	6.27	93.3	6
MW-05D	Falling	2/29/2016	8:21:52	12:06:44	3.75	22.82	21.98	40.81	39.18	9.52	35.82	R	82	1	62.0	13.0	0.10	0.26	0.26	6.64	0.830	67.9	0.8
MW-05D	Rising	2/29/2016	12:06:45	12:58:41	0.87	22.65	21.82	40.98[1]	39.35	9.36	35.65	R	82	1	62.0	13.0	0.10	0.26	0.26	6.64	0.920	75.1	0.9
MW-06	Falling	12/22/2015	12:13:23	12:37:13	0.40	23.48	15.68	83.68	80.52	5.89	38.48	R	39	1	104.0	15.0	0.10	0.26	0.26	5.31	4.50	178	5
MW-06	Falling	12/22/2015	13:05:45	13:45:19	0.66	23.41	15.60	83.75[1]	80.59	5.86	38.41	R	39	1	104.0	15.0	0.10	0.26	0.26	5.31	2.23	87.9	2
MW-06	Rising	12/22/2015	12:37:13	13:05:45	0.48	23.51	15.71	83.65[1]	80.49	3.75	38.51	R	40	1	104.0	15.0	0.10	0.26	0.26	5.31	3.02	119	3
MW-08	Falling	4/1/2016	11:53:48	12:14:48	0.35	209.66	18.06	54.77	55.34	6.94	269.66	E	235	1	265.0	60.0	0.10	0.26	0.26	5.31	0.710	167	0.7
MW-08	Falling	4/1/2016	12:46:47	13:07:27	0.34	208.96	17.36	55.47[1]	56.04	9.48	268.96	E	235	1	265.0	60.0	0.10	0.26	0.26	5.31	0.930	219	0.9
MW-08	Rising	4/1/2016	12:19:34	12:40:34	0.35	209.61	18.01	54.82[1]	55.39	4.92	269.61	E	235	1	265.0	60.0	0.10	0.26	0.26	5.31	0.500	118	0.5
MW-09D	Falling	4/1/2016	13:27:37	13:38:42	0.18	23.38	17.34	6.45	3.62	9.91	36.38	R	68	1	27.0	13.0	0.09	0.26	0.26	6.64	21.0	1,430	20
MW-09D	Falling	4/1/2016	13:58:55	14:04:20	0.09	23.39	17.36	6.44[1]	3.61	10.05	36.39	R	68	1	27.0	13.0	0.09	0.26	0.26	6.64	52.4	3,580	50
MW-09D	Rising	4/1/2016	13:52:08	13:57:44	0.09	23.44	17.40	6.39[1]	3.56	5.21	36.44	R	68	1	27.0	13.0	0.09	0.26	0.26	6.64	44.2	3,020	40
MW-09D	Rising	4/1/2016	14:05:45	14:11:37	0.10	23.45	17.42	6.38[1]	3.55	4.09	36.45	R	68	1	27.0	13.0	0.09	0.26	0.26	6.64	29.7	2,030	30

[1] Water level was estimated from the transducer level using the initial matched transducer-water level measurement.

Table F-2. List of abbreviations used in Aqtesolve output.

Abbrevation	Description
K	Hydrualic conductivity
y0	Y-intercept of hand-fit line
Kz	Vertical hydraulic conductivity
Kr	Horizontal hydraulic conductivity
ft	feet
min	minute

Assumptions and possible sources of error for slug test analysis

The general assumptions related to the Bouwer and Rice (1976) and Bouwer (1989) method of analysis of slug-test data are (1) aquifer has infinite areal extent, (2) aquifer is homogenous, isotropic, and of uniform thickness, (3) aquifer is unconfined, (4) test well is fully or partially penetrating, (5) flow to well is quasi-steady-state, and (6) volume of water is injected into or discharged from the well instantaneously. The main limitation related to slug tests is the volume of the aquifer being tested. In slug tests, only the geologic material in the immediate vicinity of the well is tested. Macroscale features such as fractures, solution enlarged joints and bedding planes, or faults are generally not evaluated if the well borehole does not intersect these features.

Also, the use of a non-vented transducer assumes that barometric changes do not affect the test. Overall, the assumption that barometric effects are minimal is accepted for the purpose of slug tests; thus, the tests have not been adjusted for barometric changes. Previous readings from a barometric pressure transducer at the site showed changes of less than 0.01 ft in an hour. Most slug tests lasted less than an hour, and the longest test was under four hours (table F-1).

As described in an update to the Bouwer and Rice (1976) method (Bouwer, 1989), sometimes a double straight-line effect is observed in the early-time data. This double straight line is attributed to non-instantaneous drainage of the filter pack. If a double straight-line effect is observed, the second straight line represents the K of the formation. The second break seen in one of the bedrock slug-test analyses (MW-06; fig. F-11) is likely attributed to the effect of nearby pumping from COV-03 rather than the reason provided by Bouwer (1989). This is suspected because the slope of the second break observed is greater than the slope of the first break and the following two tests do not have the second break (fig. 4). In MW-01, the break was likely the double straight line described by Bouwer and Rice because the water level was below the screen; however, the break in MW-08 did not appear to be related to the double straight line described by Bouwer and Rice, and a best-fit line was drawn to the first slope.

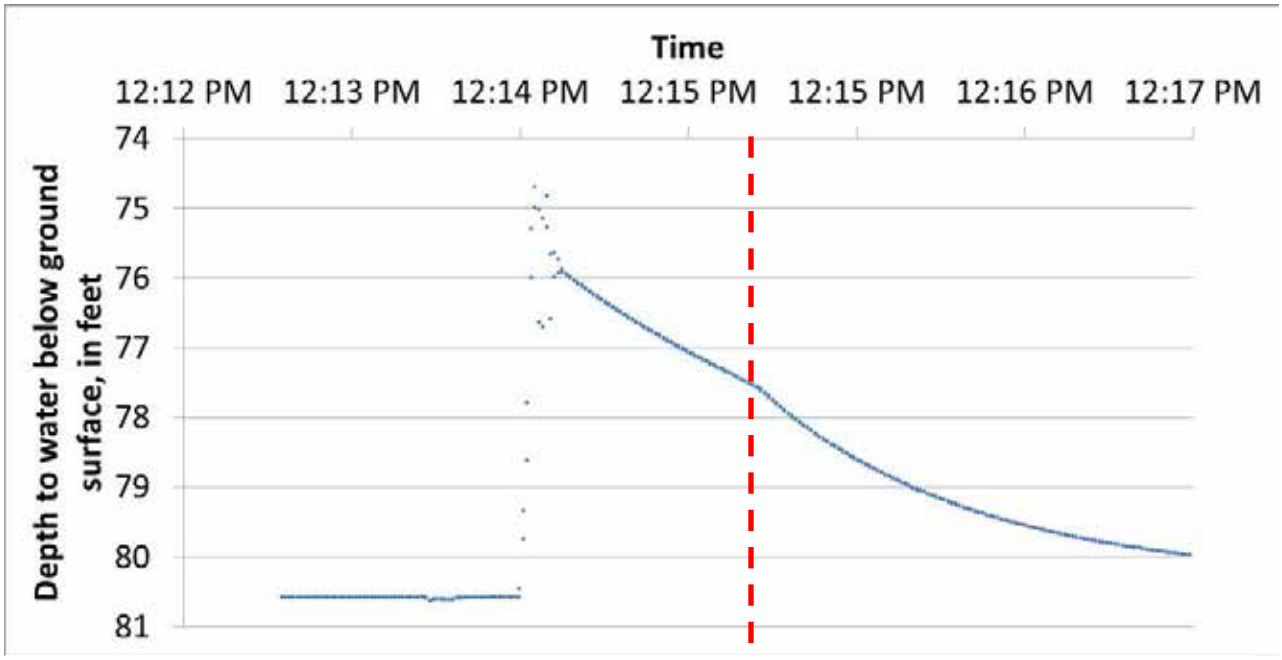


Figure 4. Double straight line in displacement data during the first falling head slug test around when Vienna city well COV-06 was turned on (dashed, red line).

On several of the slug tests, the water level change measured by the transducer was greater than the theoretical displacement caused by the slug. The cause for this greater displacement is most likely because of the use of a non-vented transducer, which experiences an increase in pressure head upon initial deployment of the slug, which quickly dissipates. When this artificial displacement was observed (i.e. the initial displacement was greater than the theoretical displacement) the measurements greater than the theoretical displacement were ignored and not used in curve fitting.

Summary of slug test results

Overall, K estimates ranged from 0.04 to 50 ft/day in the Roubidoux Formation and 0.5 to 0.9 ft/day in MW-08 in the Eminence Dolomite formation (table F-1). As anticipated from specific capacities, MW-01 had the smallest K values (0.04 and 0.3 ft/day), which are about one to two orders of magnitude smaller than the other wells. Although the effect of pumping of COV-03 on the water level in MW-06 is clear and likely caused a double-line effect during the slug test, the calculated K values were not substantially different when using the recommended head range suggested by Butler (1998). MW-09D had the largest K values, which ranged from 20 to 50 ft/day, and likely contains a large amount of fractured rock because of its proximity to a nearby stream. The remaining wells have K values ranging from 0.8 to 7 ft/day.

The data are used in the final RI report to provide an estimate of K for the Roubidoux Formation and Eminence Dolomite formation. The general estimates of K calculated in this report (1 to 5 ft/day) for the Roubidoux Formation are comparable to values of 0.69 to 2.59 ft/day reported by Imes (1989) for the Ozark aquifer. Comparing the calculated transmissivities in this report (table F-1) with transmissivities from aquifer tests in Arkansas (Pugh, 2008), values in this report (5 to 4,000 ft^2/day) generally agree with those in Arkansas (48 to 3,530 ft^2/day). Unfortunately, no values for K of the Eminence Dolomite formation could be found.

References

Bouwer, H., and Rice, R.C., 1976, A slug test for determining hydraulic conductivity of unconfined aquifers with completely or partially penetrating wells: Water Resources Research, Vol. 12, No. 3, 423 p.

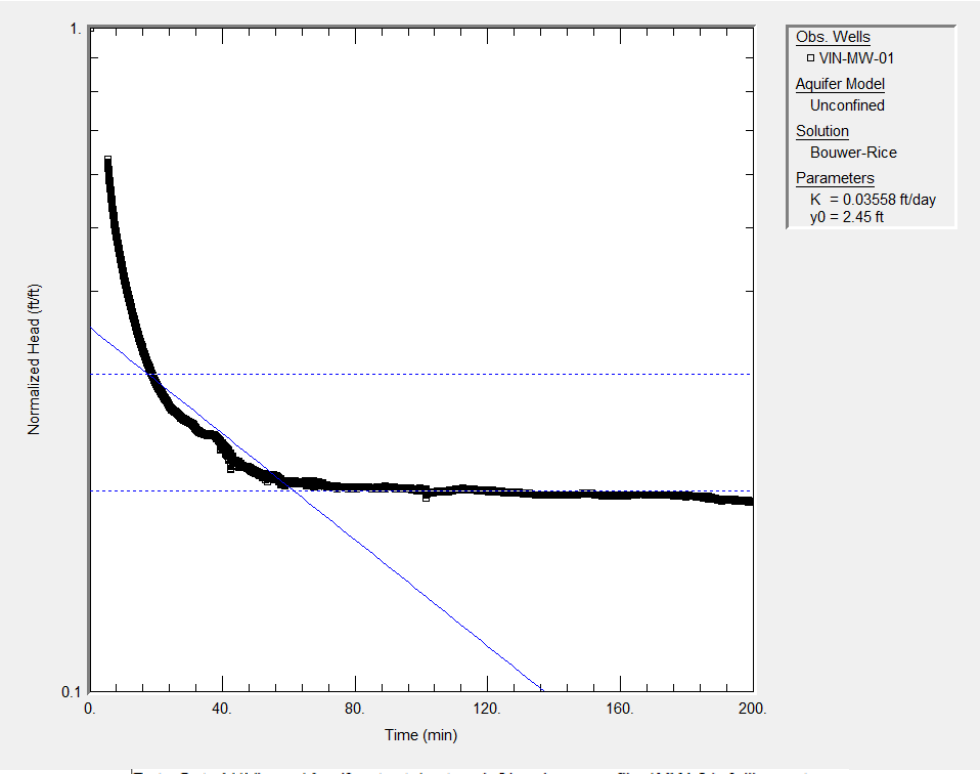
Butler, J.J., Jr., 1998, The design, performance, and analysis of slug tests: Lewis Publishers, New York, 252 p.

Bouwer, H., 1989, The Bouwer and Rice slug test – an update: Ground Water, Vol. 27, No. 3, 304 p.

Duffield, D.M., 1996, AQTESOLV for Windows: HydroSOLVE, Inc., ARCADIS Geraghty & Miller, Inc. Reston, Virginia.

Pugh, A.L., 2008, Summary of aquifer test data for Arkansas—1940 to 2006: U.S. Geological Survey Scientific Investigations Report 2008-5149, 33 p.

Imes, J.L., 1989, Analysis of the effect of pumping on ground-water flow in the Springfield Plateau and Ozark aquifers near Springfield, Missouri: U.S. Geological Survey Water-Resources Investigations Report 89-4079, 70 p.



Data Set: V:\Vienna\Aquifer_tests\aqtesolv&leveloggers_files\MW-01_falling.aqt
Date: 06/13/16
Time: 13:45:08

PROJECT INFORMATION

Company: USGS
Client: USEPA
Project: EJ8000
Location: Vienna, MO
Test Date: 2/5/2016
Test Well: VIN-MW-01

AQUIFER DATA

Saturated Thickness: 134. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

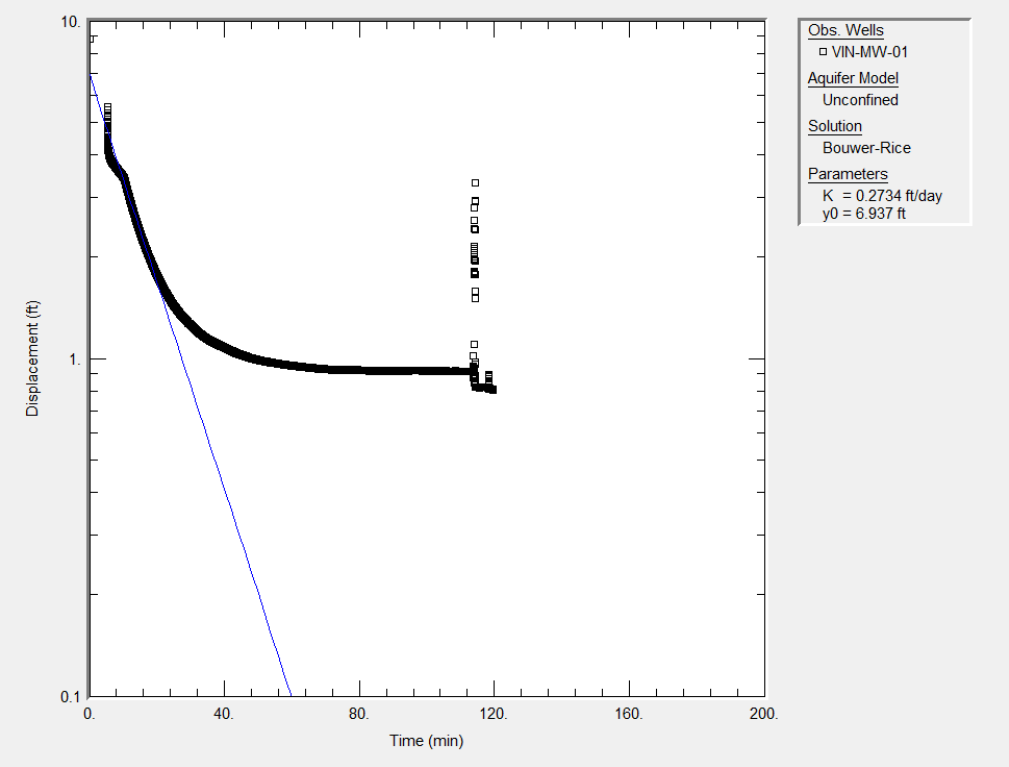
Test Well: VIN-MW-01

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 6.94 ft
Static Water Column Height: 11.93 ft
Casing Radius: 0.09 ft
Well Radius: 0.26 ft
Well Skin Radius: 0.26 ft
Screen Length: 13.5 ft
Total Well Penetration Depth: 60. ft
Corrected Casing Radius (Bouwer-Rice Method): 0.1516 ft
Gravel Pack Porosity: 0.25

No. of Observations: 19461

Figure F-1. Displacement-time graph for the falling-head slug test of MW-01.



Data Set: V:\Vienna\Aquifer_tests\levelogger_files\MW-01_rising.aqt
Date: 04/19/16
Time: 18:02:59

PROJECT INFORMATION

Company: USGS
Client: USEPA
Project: EJ8000
Location: Vienna, MO
Test Date: 2/5/2016
Test Well: VIN-MW-01

AQUIFER DATA

Saturated Thickness: 135. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

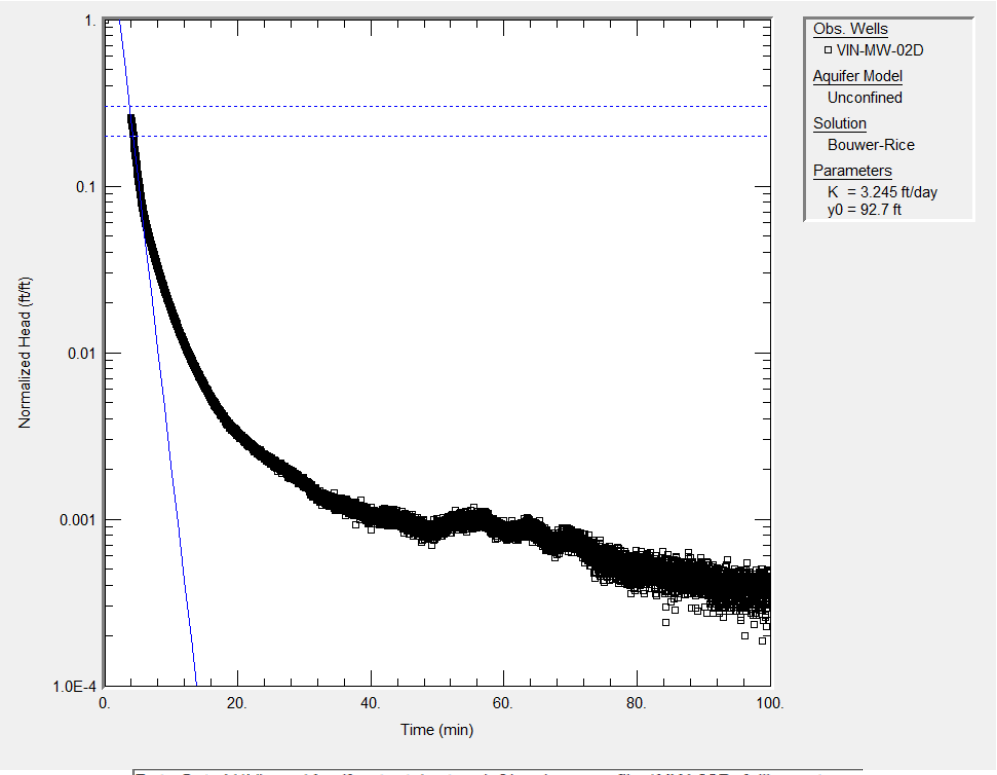
Test Well: VIN-MW-01

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 8.83 ft
Static Water Column Height: 13.19 ft
Casing Radius: 0.09 ft
Well Radius: 0.26 ft
Well Skin Radius: 0.26 ft
Screen Length: 13.5 ft
Total Well Penetration Depth: 60. ft
Corrected Casing Radius (Bouwer-Rice Method): 0.1516 ft
Gravel Pack Porosity: 0.25

No. of Observations: 11439

Figure F-2. Displacement-time graph for the rising-head slug test of MW-01.



Data Set: V:\Vienna\Aquifer_tests\aqtesolv&leveloggers_files\MW-02D_falling.aqt
Date: 06/13/16
Time: 13:49:05

PROJECT INFORMATION

Company: USGS
Client: USEPA
Project: EJ8000
Location: Vienna, MO
Test Date: 3/9/2016
Test Well: VIN-MW-02

AQUIFER DATA

Saturated Thickness: 94. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

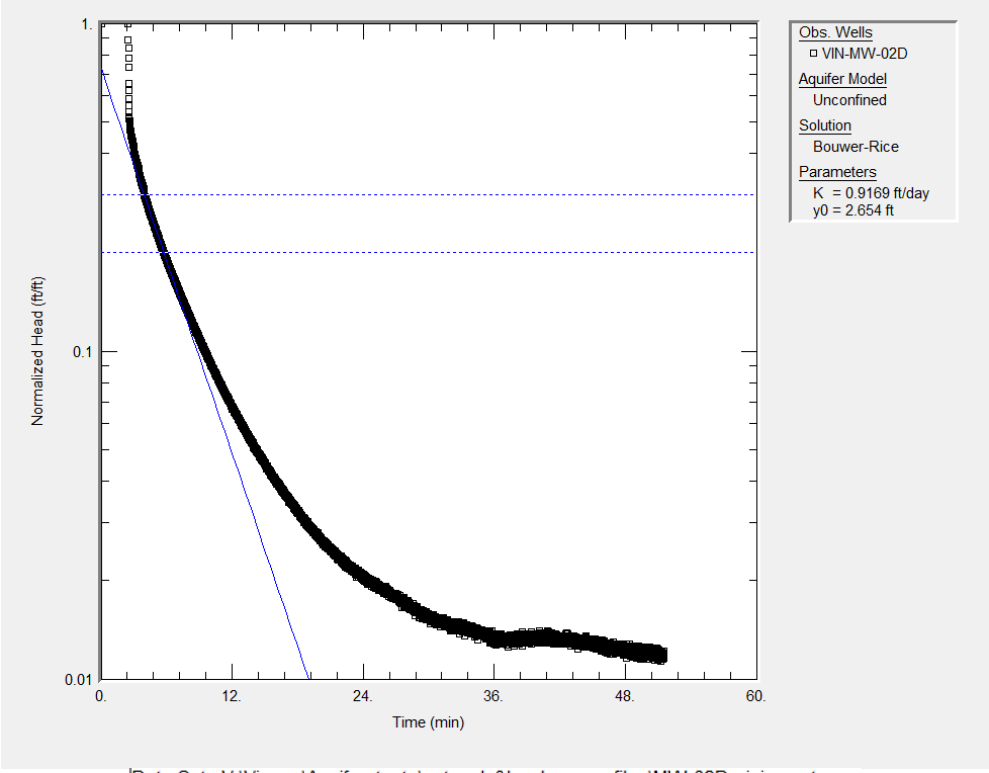
Test Well: VIN-MW-02D

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 15.08 ft
Static Water Column Height: 11.06 ft
Casing Radius: 0.09 ft
Well Radius: 0.26 ft
Well Skin Radius: 0.26 ft
Screen Length: 14. ft
Total Well Penetration Depth: 79. ft
Corrected Casing Radius (Bouwer-Rice Method): 0.1516 ft
Gravel Pack Porosity: 0.25

No. of Observations: 9590

Figure F-3. Displacement-time graph for the falling-head slug test of MW-02D.



Data Set: V:\Vienna\Aquifer_tests\aqtesolv&leveloggers_files\MW-02D_rising.aqt
Date: 06/13/16
Time: 13:50:53

PROJECT INFORMATION

Company: USGS
Client: USEPA
Project: EJ8000
Location: Vienna, MO
Test Date: 3/9/2016
Test Well: VIN-MW-02

AQUIFER DATA

Saturated Thickness: 94. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

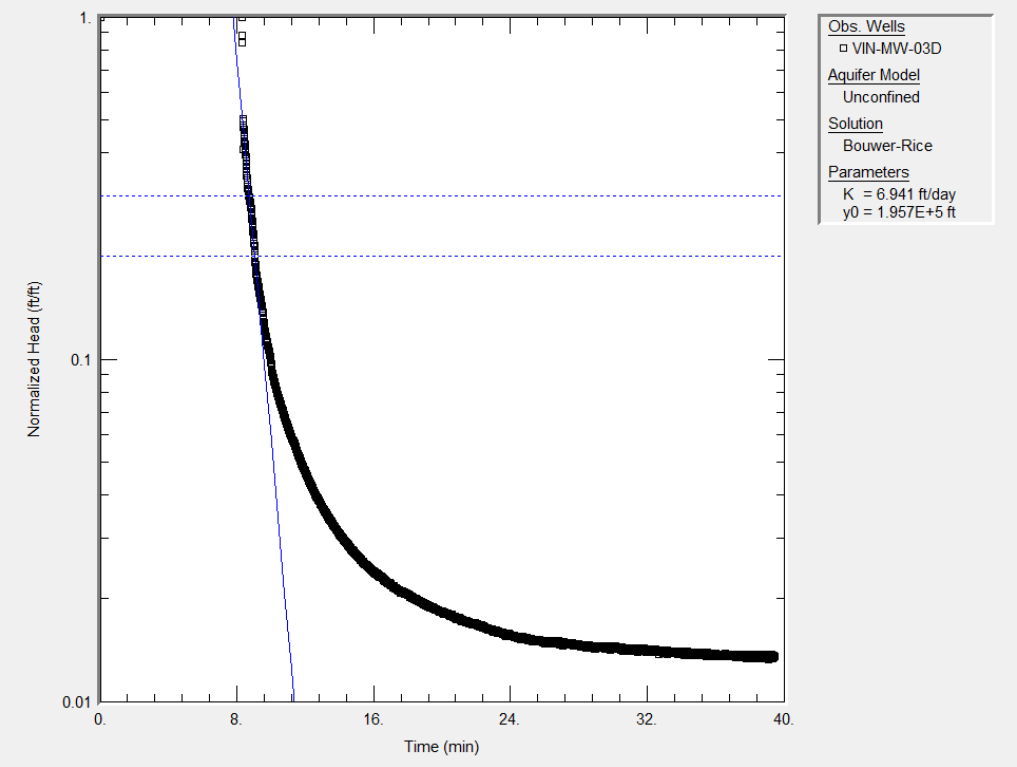
Test Well: VIN-MW-02D

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 3.65 ft
Static Water Column Height: 10.87 ft
Casing Radius: 0.09 ft
Well Radius: 0.26 ft
Well Skin Radius: 0.26 ft
Screen Length: 14. ft
Total Well Penetration Depth: 79. ft
Corrected Casing Radius (Bouwer-Rice Method): 0.1516 ft
Gravel Pack Porosity: 0.25

No. of Observations: 4907

Figure F-4. Displacement-time graph for the rising-head slug test of MW-02D.



Data Set: V:\Vienna\Aquifer_tests\aqtesolv&leveloggers_files\MW-03D_falling.aqt
Date: 06/13/16
Time: 13:53:50

PROJECT INFORMATION

Company: USGS
Client: USEPA
Project: EJ8000
Location: Vienna, MO
Test Date: 3/9/2016
Test Well: VIN-MW-03D

AQUIFER DATA

Saturated Thickness: 48. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

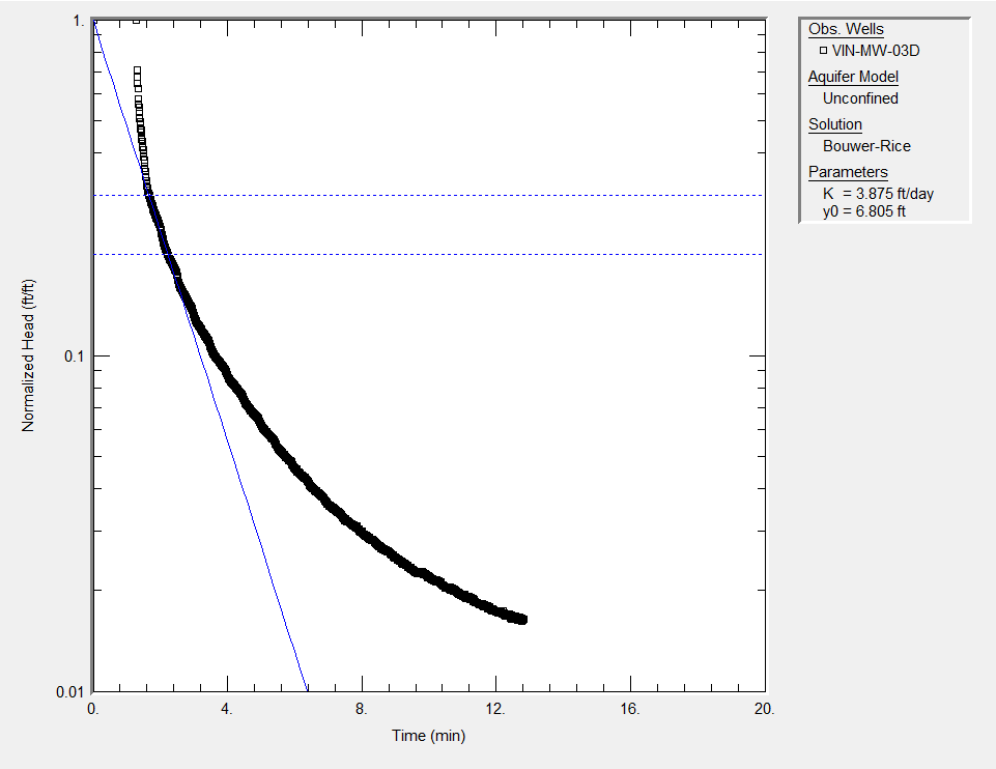
Test Well: VIN-MW-03D

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 9.41 ft
Static Water Column Height: 14.35 ft
Casing Radius: 0.09 ft
Well Radius: 0.26 ft
Well Skin Radius: 0.26 ft
Screen Length: 12. ft
Total Well Penetration Depth: 64. ft
Corrected Casing Radius (Bouwer-Rice Method): 0.1516 ft
Gravel Pack Porosity: 0.25

No. of Observations: 3116

Figure F-5. Displacement-time graph for the falling-head slug test of MW-03D.



Data Set: V:\Vienna\Aquifer_tests\aqtesolv&leveloggers_files\MW-03D_rising.aqt
Date: 06/13/16
Time: 14:05:35

PROJECT INFORMATION

Company: USGS
Client: USEPA
Project: EJ8000
Location: Vienna, MO
Test Date: 3/9/2016
Test Well: VIN-MW-03D

AQUIFER DATA

Saturated Thickness: 48. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

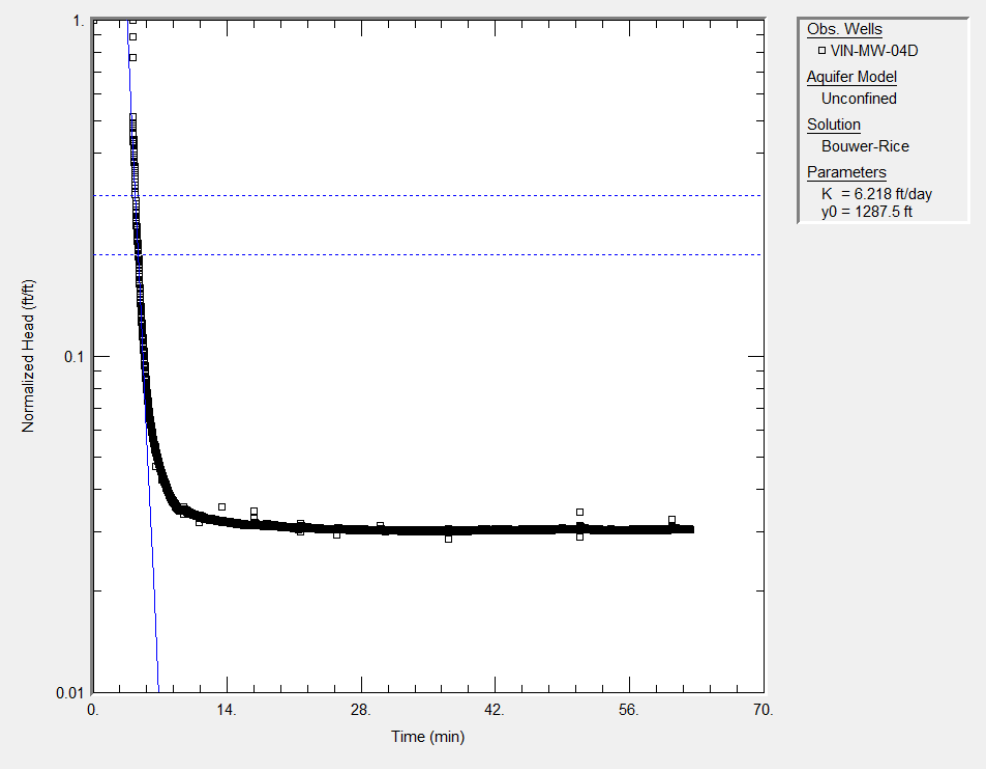
Test Well: VIN-MW-03D

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 6.85 ft
Static Water Column Height: 14.41 ft
Casing Radius: 0.09 ft
Well Radius: 0.26 ft
Well Skin Radius: 0.26 ft
Screen Length: 12. ft
Total Well Penetration Depth: 64. ft
Corrected Casing Radius (Bouwer-Rice Method): 0.1516 ft
Gravel Pack Porosity: 0.25

No. of Observations: 1153

Figure F-6. Displacement-time graph for the rising-head slug test of MW-03D.



Data Set: V:\Vienna\Aquifer_tests\aqtesolv&leveloggers_files\MW-04D_falling.aqt
Date: 06/13/16
Time: 13:57:46

PROJECT INFORMATION

Company: USGS
Client: USEPA
Project: EJ8000
Location: Vienna, MO
Test Date: 3/9/2016
Test Well: VIN-MW-04D

AQUIFER DATA

Saturated Thickness: 15. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

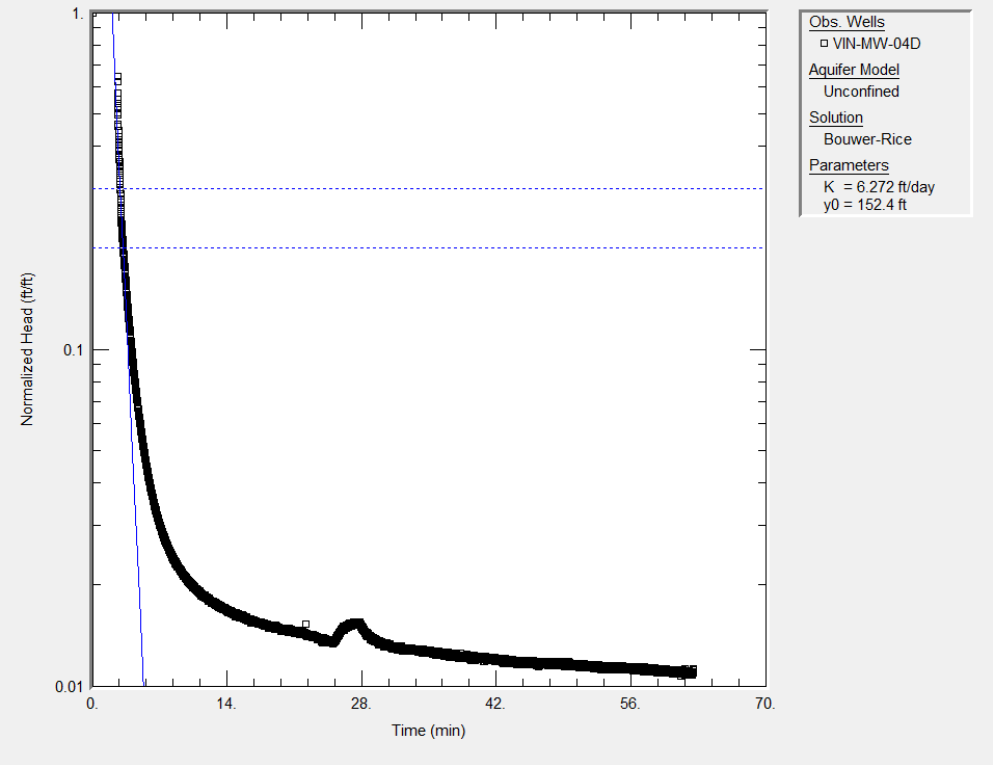
Test Well: VIN-MW-04D

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 9.1 ft
Static Water Column Height: 14.66 ft
Casing Radius: 0.09 ft
Well Radius: 0.26 ft
Well Skin Radius: 0.26 ft
Screen Length: 17. ft
Total Well Penetration Depth: 70. ft
Corrected Casing Radius (Bouwer-Rice Method): 0.1516 ft
Gravel Pack Porosity: 0.25

No. of Observations: 5828

Figure F-7. Displacement-time graph for the falling-head slug test of MW-04D.



Data Set: V:\Vienna\Aquifer_tests\aqtesolv&leveloggers_files\MW-04D_rising.aqt
Date: 06/13/16
Time: 13:59:05

PROJECT INFORMATION

Company: USGS
Client: USEPA
Project: EJ8000
Location: Vienna, MO
Test Date: 3/9/2016
Test Well: VIN-MW-04D

AQUIFER DATA

Saturated Thickness: 15. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

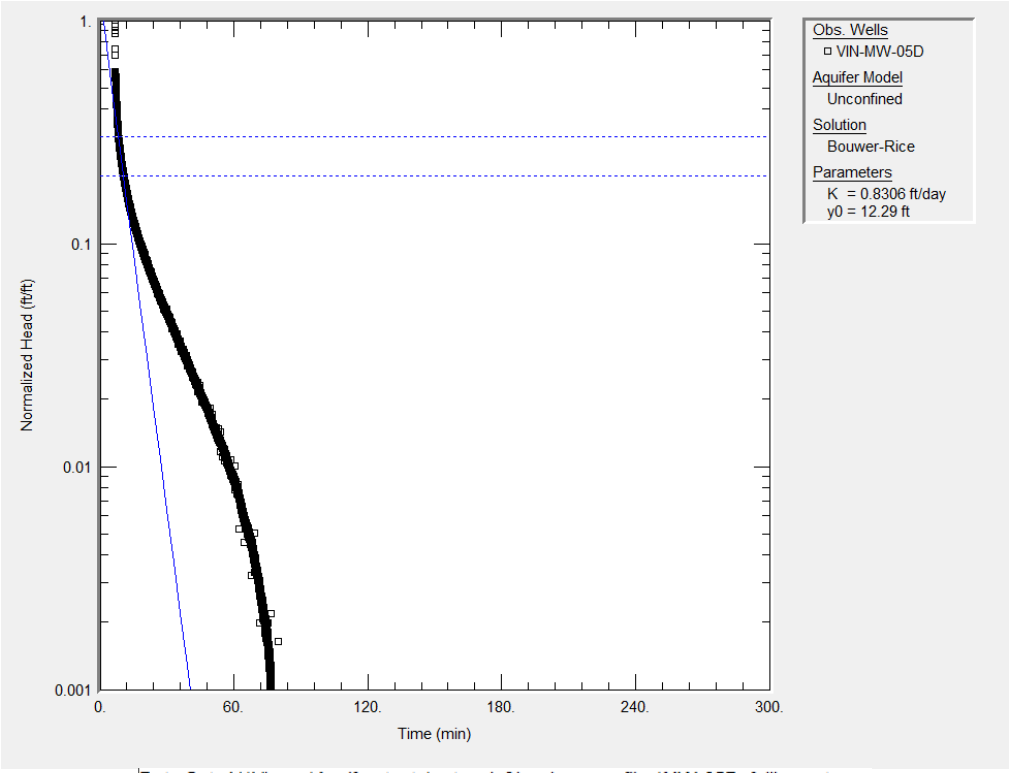
Test Well: VIN-MW-04D

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 8.51 ft
Static Water Column Height: 14.89 ft
Casing Radius: 0.09 ft
Well Radius: 0.26 ft
Well Skin Radius: 0.26 ft
Screen Length: 17. ft
Total Well Penetration Depth: 70. ft
Corrected Casing Radius (Bouwer-Rice Method): 0.1516 ft
Gravel Pack Porosity: 0.25

No. of Observations: 5991

Figure F-8. Displacement-time graph for the rising-head slug test of MW-04D.



Data Set: V:\Vienna\Aquifer_tests\aqtesolv&leveloggers_files\MW-05D_falling.aqt
Date: 06/13/16
Time: 14:07:31

PROJECT INFORMATION

Company: USGS
Client: USEPA
Project: EJ8000
Location: Vienna, MO
Test Date: 2/29/2016
Test Well: VIN-MW-05D

AQUIFER DATA

Saturated Thickness: 82. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

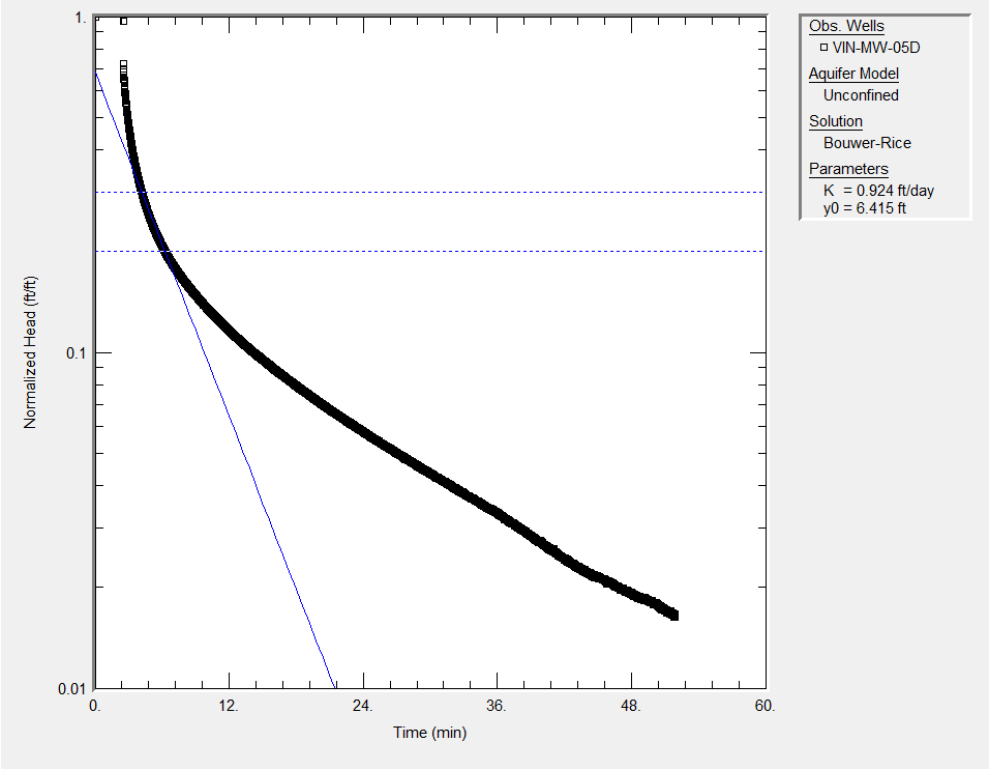
Test Well: VIN-MW-05D

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 9.52 ft
Static Water Column Height: 35.82 ft
Casing Radius: 0.1 ft
Well Radius: 0.26 ft
Well Skin Radius: 0.26 ft
Screen Length: 13. ft
Total Well Penetration Depth: 75. ft
Corrected Casing Radius (Bouwer-Rice Method): 0.1562 ft
Gravel Pack Porosity: 0.25

No. of Observations: 21810

Figure F-9. Displacement-time graph for the falling-head slug test of MW-05D.



Data Set: V:\Vienna\Aquifer_tests\aqtesolv&leveloggers_files\MW-05D_rising.aqt
Date: 06/13/16
Time: 14:09:07

PROJECT INFORMATION

Company: USGS
Client: USEPA
Project: EJ8000
Location: Vienna, MO
Test Date: 2/29/2016
Test Well: VIN-MW-05D

AQUIFER DATA

Saturated Thickness: 82. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

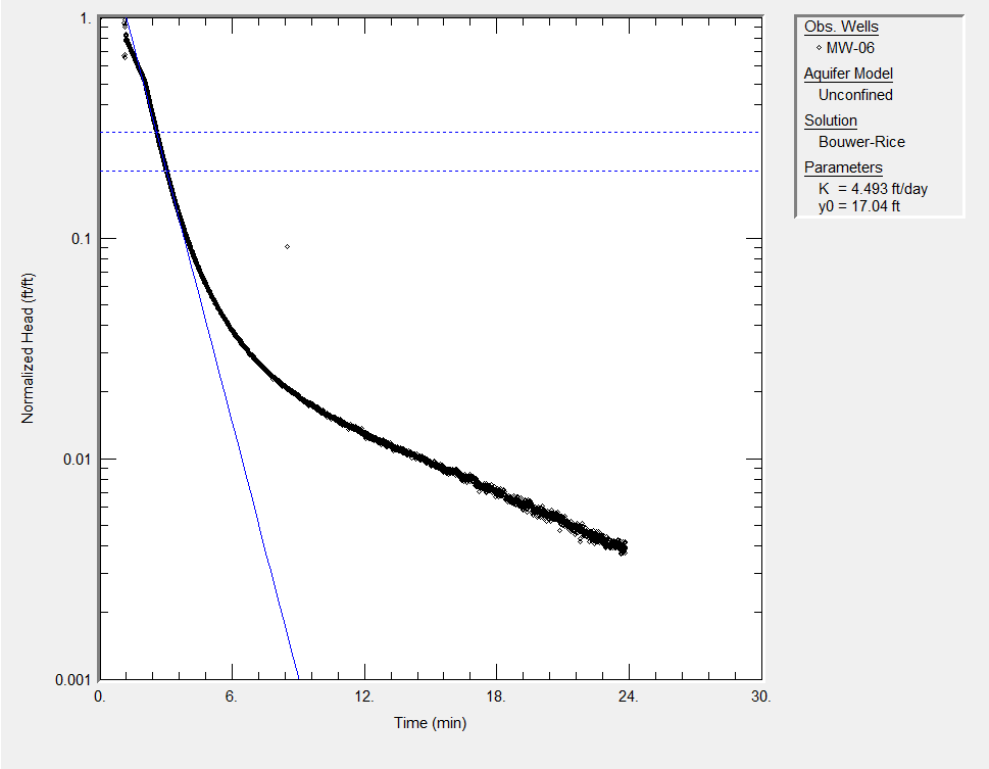
Test Well: VIN-MW-05D

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 9.36 ft
Static Water Column Height: 35.65 ft
Casing Radius: 0.1 ft
Well Radius: 0.26 ft
Well Skin Radius: 0.26 ft
Screen Length: 13. ft
Total Well Penetration Depth: 75. ft
Corrected Casing Radius (Bouwer-Rice Method): 0.1562 ft
Gravel Pack Porosity: 0.25

No. of Observations: 4943

Figure F-10. Displacement-time graph for the rising-head slug test of MW-05D.



Data Set: V:\Vienna\Aquifer_tests\aqtesolv&leveloggers_files\MW-06_falling1.aqt
Date: 06/13/16
Time: 14:17:13

PROJECT INFORMATION

Company: USGS
Client: USEPA
Project: EJ8000
Location: Vienna, MO
Test Date: 12/22/2015
Test Well: VIN-MW-06

AQUIFER DATA

Saturated Thickness: 39. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

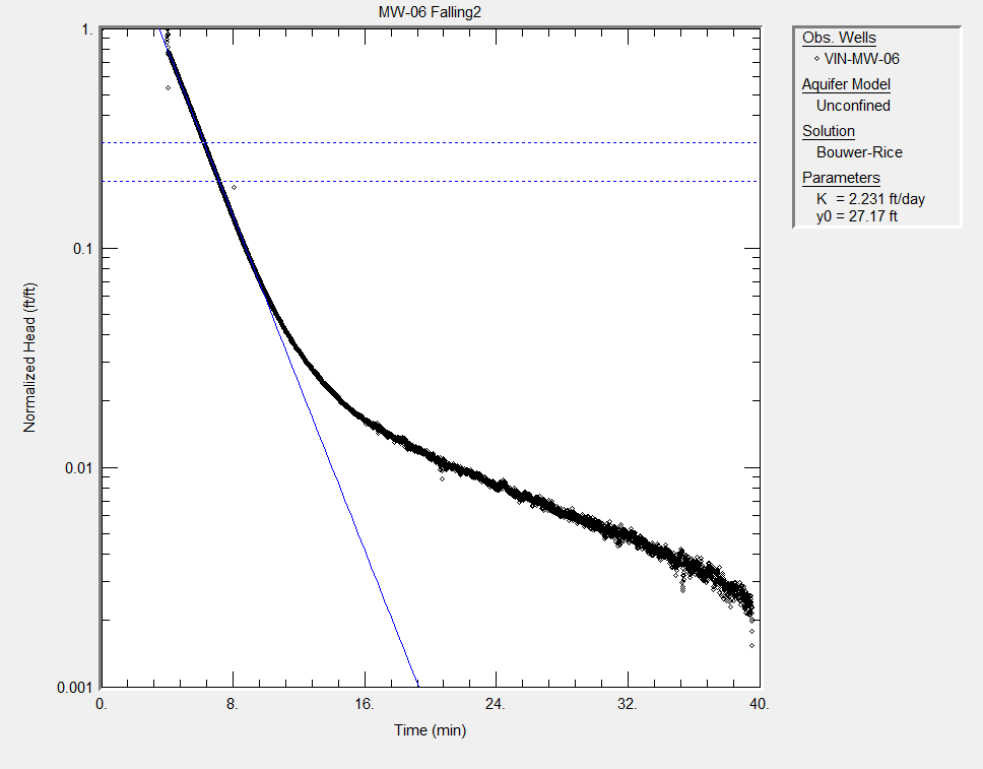
Test Well: MW-06

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 5.89 ft
Static Water Column Height: 32.16 ft
Casing Radius: 0.1 ft
Well Radius: 0.26 ft
Well Skin Radius: 0.26 ft
Screen Length: 15. ft
Total Well Penetration Depth: 119. ft
Corrected Casing Radius (Bouwer-Rice Method): 0.1562 ft
Gravel Pack Porosity: 0.25

No. of Observations: 2731

Figure F-11. Displacement-time graph for the first falling-head slug test of MW-06.



Data Set: V:\Vienna\Aquifer_tests\aqtesolv&leveloggers_files\MW-06_falling2.aqt
Title: MW-06 Falling2
Date: 06/13/16
Time: 14:16:38

PROJECT INFORMATION

Company: USGS
Client: USEPA
Project: EJ8000
Location: Vienna, MO
Test Date: 12/22/2015
Test Well: VIN-MW-06

AQUIFER DATA

Saturated Thickness: 39. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

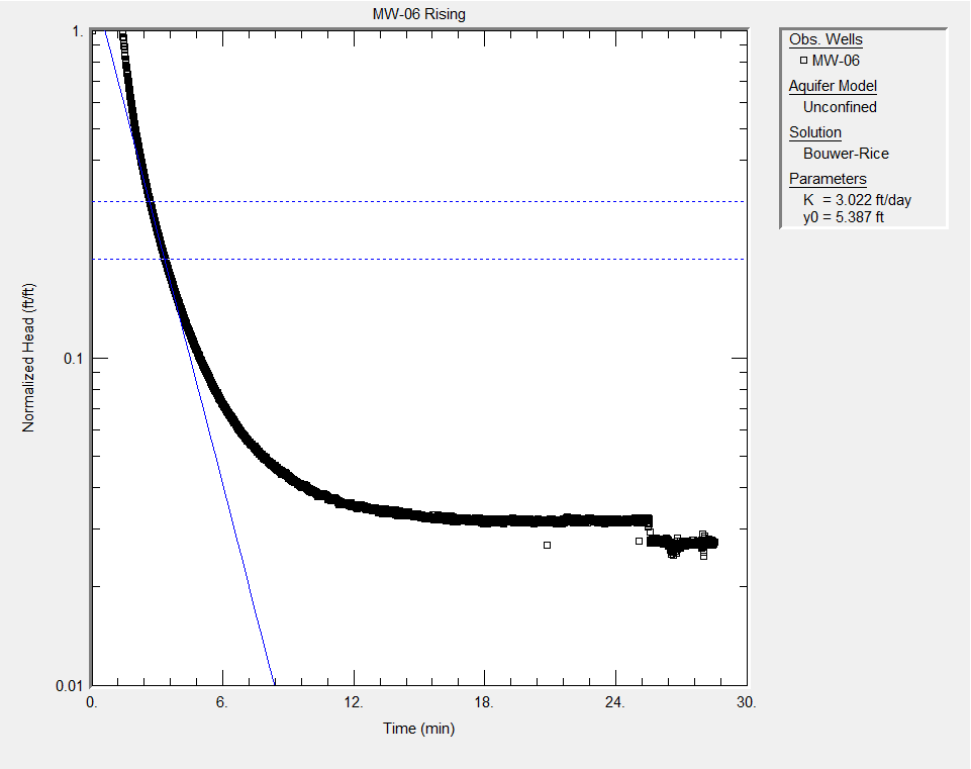
Test Well: VIN-MW-06

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 5.86 ft
Static Water Column Height: 31.96 ft
Casing Radius: 0.1 ft
Well Radius: 0.26 ft
Well Skin Radius: 0.26 ft
Screen Length: 15. ft
Total Well Penetration Depth: 119. ft
Corrected Casing Radius (Bouwer-Rice Method): 0.1562 ft
Gravel Pack Porosity: 0.25

No. of Observations: 4270

Figure F-13. Displacement-time graph for the second falling-head slug test of MW-06.



Data Set: V:\Vienna\Aquifer_tests\aqtesolv&leveloggers_files\MW-06_rising.aqt
Title: MW-06 Rising
Date: 06/13/16
Time: 14:15:27

PROJECT INFORMATION

Company: USGS
Client: USEPA
Project: EJ8000
Location: Vienna, MO
Test Date: 12/22/2015
Test Well: VIN-MW-06

AQUIFER DATA

Saturated Thickness: 40. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

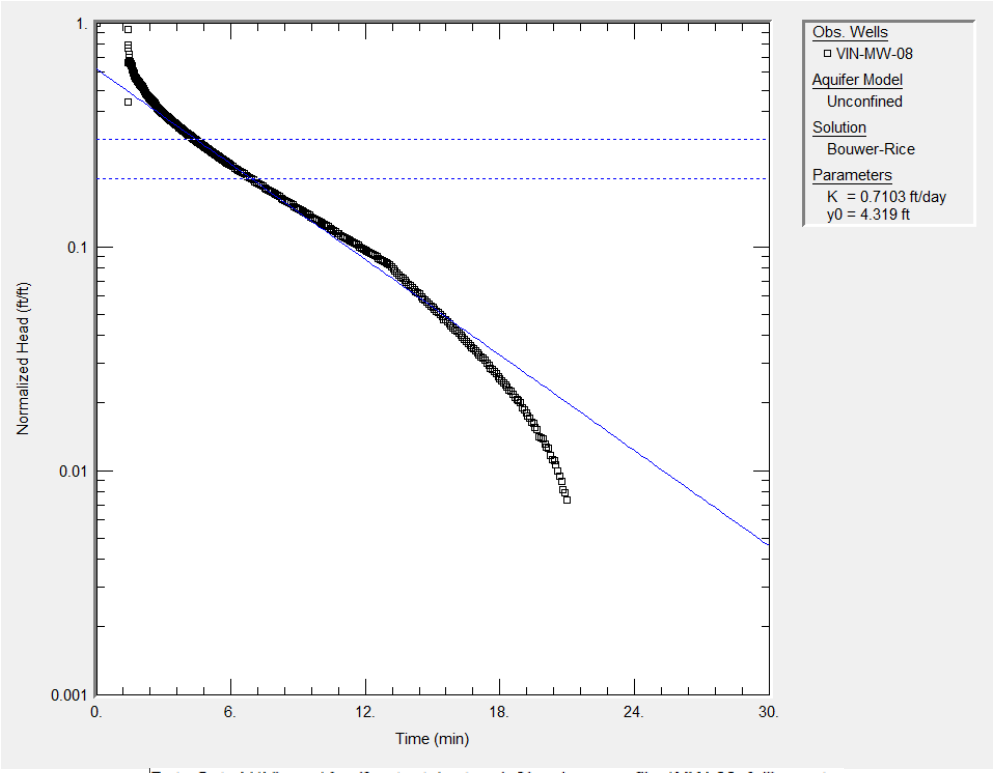
Test Well: MW-06

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 3.75 ft
Static Water Column Height: 38. ft
Casing Radius: 0.1 ft
Well Radius: 0.26 ft
Well Skin Radius: 0.26 ft
Screen Length: 15. ft
Total Well Penetration Depth: 119. ft
Corrected Casing Radius (Bouwer-Rice Method): 0.1562 ft
Gravel Pack Porosity: 0.25

No. of Observations: 3255

Figure F-12. Displacement-time graph for the rising-head slug test of MW-06.



Data Set: V:\Vienna\Aquifer_tests\aqtesolv&leveloggers_files\MW-08_falling.aqt
Date: 06/13/16
Time: 14:19:06

PROJECT INFORMATION

Company: USGS
Client: USEPA
Project: EJ8000
Location: Vienna, MO
Test Date: 4/1/2016
Test Well: VIN-MW-08

AQUIFER DATA

Saturated Thickness: 235. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

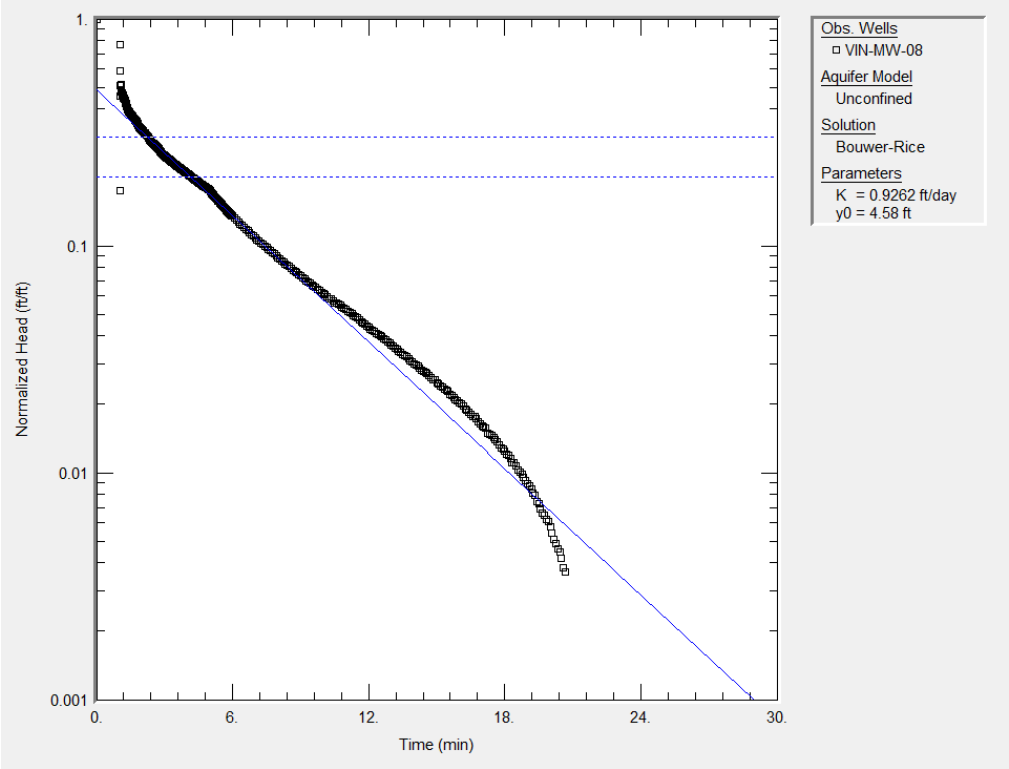
Test Well: VIN-MW-08

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 6.94 ft
Static Water Column Height: 269.7 ft
Casing Radius: 0.1 ft
Well Radius: 0.26 ft
Well Skin Radius: 0.26 ft
Screen Length: 60. ft
Total Well Penetration Depth: 325. ft
Corrected Casing Radius (Bouwer-Rice Method): 0.26 ft
Gravel Pack Porosity: 1.

No. of Observations: 523

Figure F-14. Displacement-time graph for the first falling-head slug test of MW-08.



Data Set: V:\Vienna\Aquifer_tests\aqtesolv&leveloggers_files\MW-08_falling2.aqt
Date: 06/13/16
Time: 14:20:23

PROJECT INFORMATION

Company: USGS
Client: USEPA
Project: EJ8000
Location: Vienna, MO
Test Date: 4/1/2016
Test Well: VIN-MW-08

AQUIFER DATA

Saturated Thickness: 235. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

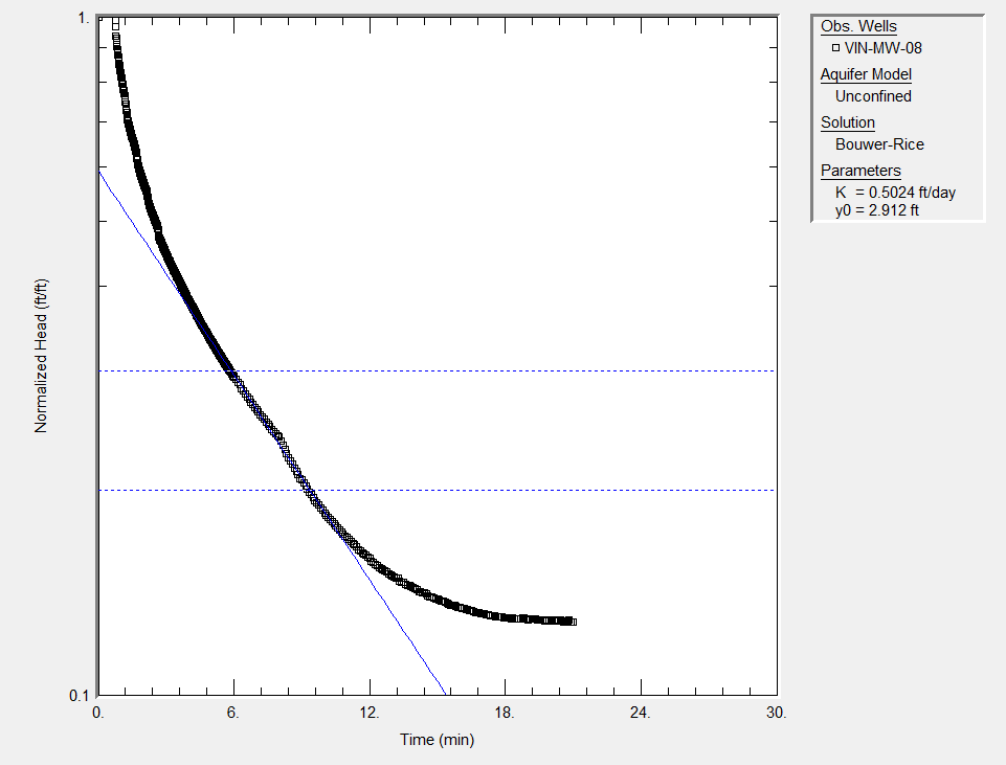
Test Well: VIN-MW-08

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 9.45 ft
Static Water Column Height: 269. ft
Casing Radius: 0.1 ft
Well Radius: 0.26 ft
Well Skin Radius: 0.26 ft
Screen Length: 60. ft
Total Well Penetration Depth: 325. ft
Corrected Casing Radius (Bouwer-Rice Method): 0.26 ft
Gravel Pack Porosity: 1.

No. of Observations: 556

Figure F-15. Displacement-time graph for the second falling-head slug test of MW-08.



Data Set: V:\Vienna\Aquifer_tests\aqtesolv&leveloggers_files\MW-08_rising.aqt
Date: 06/13/16
Time: 14:21:43

PROJECT INFORMATION

Company: USGS
Client: USEPA
Project: EJ8000
Location: Vienna, MO
Test Date: 4/1/2016
Test Well: VIN-MW-08

AQUIFER DATA

Saturated Thickness: 235. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

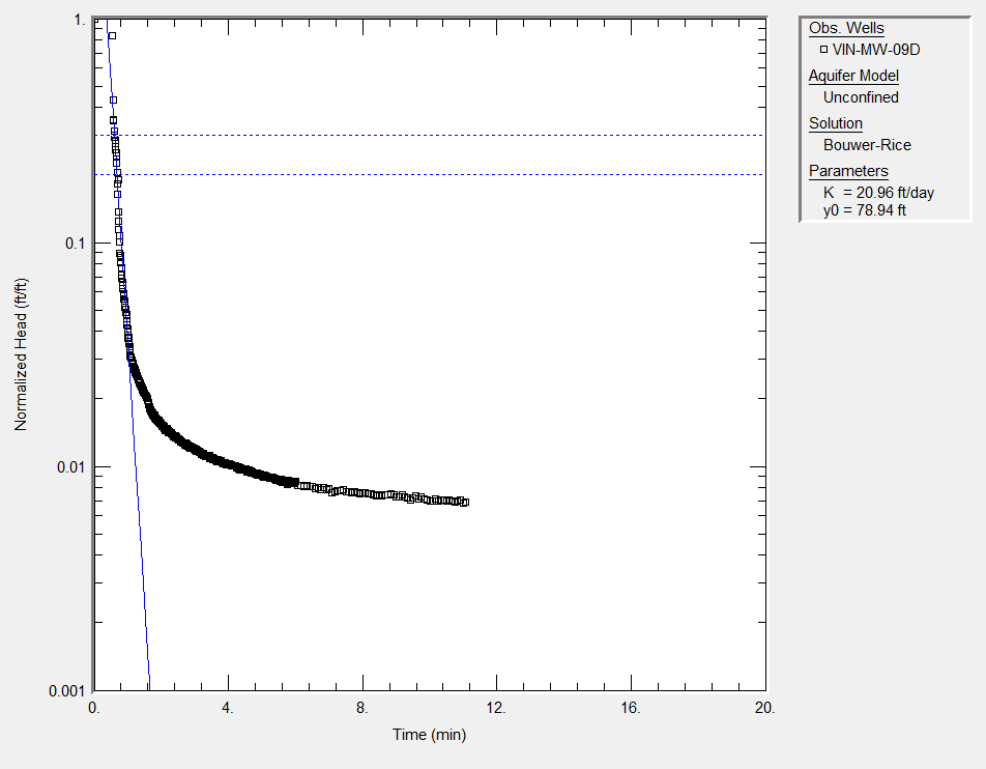
Test Well: VIN-MW-08

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 4.92 ft
Static Water Column Height: 269.6 ft
Casing Radius: 0.1 ft
Well Radius: 0.26 ft
Well Skin Radius: 0.26 ft
Screen Length: 60. ft
Total Well Penetration Depth: 325. ft
Corrected Casing Radius (Bouwer-Rice Method): 0.26 ft
Gravel Pack Porosity: 1.

No. of Observations: 586

Figure F-16. Displacement-time graph for the rising-head slug test of MW-08.



Data Set: V:\Vienna\Aquifer_tests\aqtesolv&leveloggers_files\MW-09D_falling1.aqt
Date: 06/13/16
Time: 14:24:28

PROJECT INFORMATION

Company: USGS
Client: USEPA
Project: EJ8000
Location: Vienna, MO
Test Date: 4/1/2016
Test Well: VIN-MW-09D

AQUIFER DATA

Saturated Thickness: 68. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

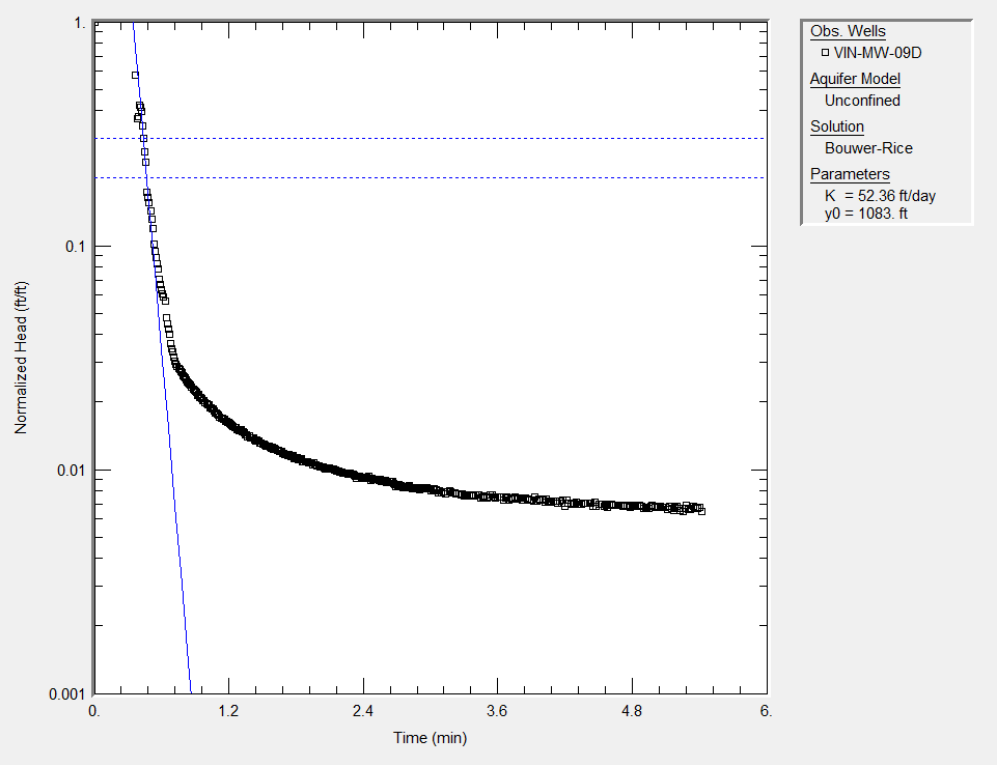
Test Well: VIN-MW-09D

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 9.91 ft
Static Water Column Height: 36.38 ft
Casing Radius: 0.09 ft
Well Radius: 0.26 ft
Well Skin Radius: 0.26 ft
Screen Length: 13. ft
Total Well Penetration Depth: 40. ft
Corrected Casing Radius (Bouwer-Rice Method): 0.1516 ft
Gravel Pack Porosity: 0.25

No. of Observations: 488

Figure F-17. Displacement-time graph for the first falling-head slug test of MW-09D.



Data Set: V:\Vienna\Aquifer_tests\aqtesolv&leveloggers_files\MW-09D_falling2.aqt
Date: 06/13/16
Time: 14:26:12

PROJECT INFORMATION

Company: USGS
Client: USEPA
Project: EJ8000
Location: Vienna, MO
Test Date: 4/1/2016
Test Well: VIN-MW-09D

AQUIFER DATA

Saturated Thickness: 68. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

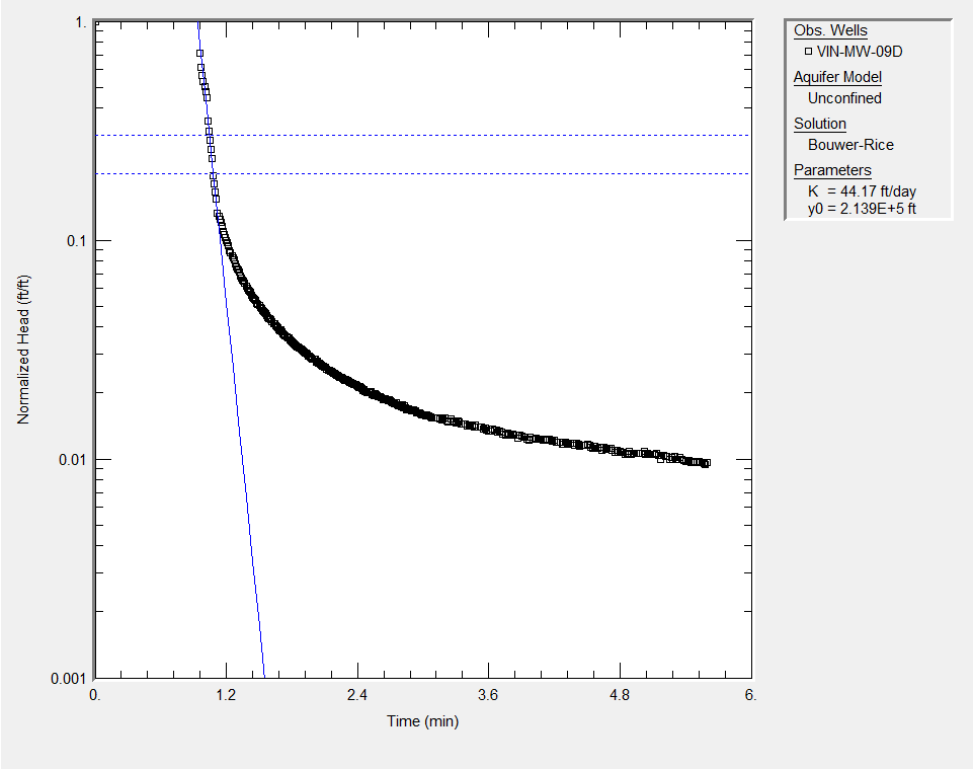
Test Well: VIN-MW-09D

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 10.05 ft
Static Water Column Height: 36.39 ft
Casing Radius: 0.09 ft
Well Radius: 0.26 ft
Well Skin Radius: 0.26 ft
Screen Length: 13. ft
Total Well Penetration Depth: 40. ft
Corrected Casing Radius (Bouwer-Rice Method): 0.1516 ft
Gravel Pack Porosity: 0.25

No. of Observations: 409

Figure F-18. Displacement-time graph for the second falling-head slug test of MW-09D.



Data Set: V:\Vienna\Aquifer_tests\aqtesolv&leveloggers_files\MW-09D_rising1.aqt
Date: 06/13/16
Time: 14:27:46

PROJECT INFORMATION

Company: USGS
Client: USEPA
Project: EJ8000
Location: Vienna, MO
Test Date: 4/1/2016
Test Well: VIN-MW-09D

AQUIFER DATA

Saturated Thickness: 68. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

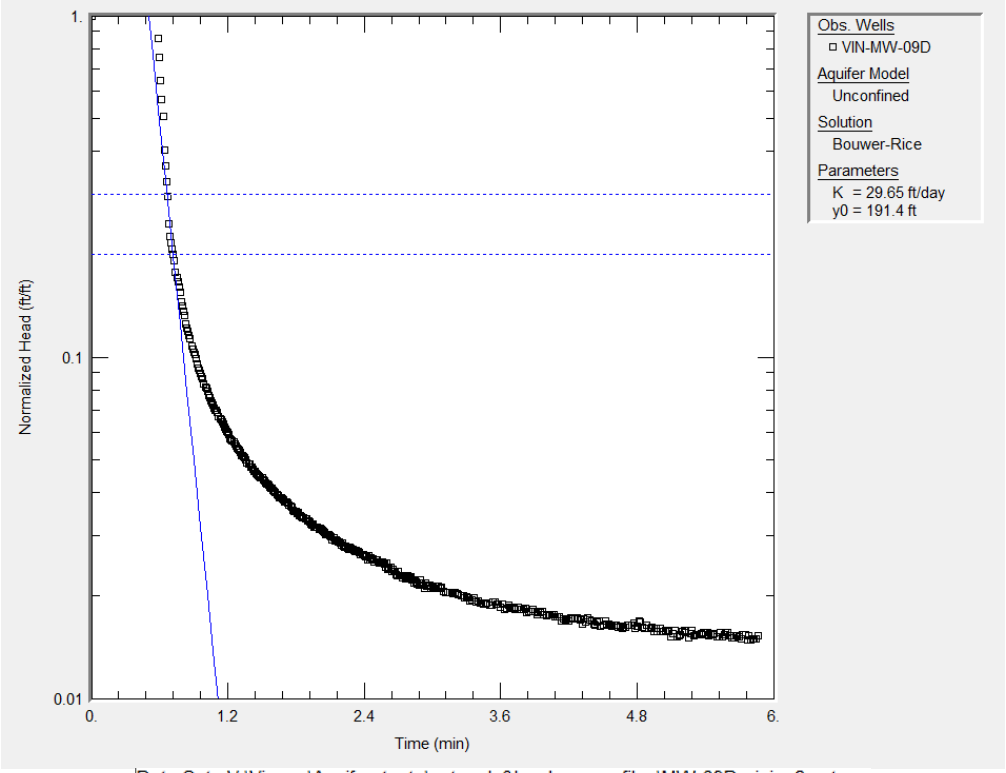
Test Well: VIN-MW-09D

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 5.21 ft
Static Water Column Height: 36.44 ft
Casing Radius: 0.09 ft
Well Radius: 0.26 ft
Well Skin Radius: 0.26 ft
Screen Length: 13. ft
Total Well Penetration Depth: 40. ft
Corrected Casing Radius (Bouwer-Rice Method): 0.1516 ft
Gravel Pack Porosity: 0.25

No. of Observations: 362

Figure F-19. Displacement-time graph for the first rising-head slug test of MW-09D.



Data Set: V:\Vienna\Aquifer_tests\aqtesolv&leveloggers_files\MW-09D_rising2.aqt
Date: 06/13/16
Time: 14:29:00

PROJECT INFORMATION

Company: USGS
Client: USEPA
Project: EJ8000
Location: Vienna, MO
Test Date: 4/1/2016
Test Well: VIN-MW-09D

AQUIFER DATA

Saturated Thickness: 68. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: VIN-MW-09D

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 4.09 ft
Static Water Column Height: 36.45 ft
Casing Radius: 0.09 ft
Well Radius: 0.26 ft
Well Skin Radius: 0.26 ft
Screen Length: 13. ft
Total Well Penetration Depth: 40. ft
Corrected Casing Radius (Bouwer-Rice Method): 0.1516 ft
Gravel Pack Porosity: 0.25

No. of Observations: 415

Figure F-20. Displacement-time graph for the second rising-head slug test of MW-09D.

Appendix G: Geophysical Logs of Wells MK-01 and MW-08

V1.1

USGS science for a changing world

BOREHOLE GEOPHYSICAL LOG

English/Metric units E

SiteID (C1) 381116091563601	**Station name (C12)** VIN-MK-01	**Other ID**
County Maries	**State** Missouri	**Log date** 01/05/2012&01/06/2012
Owner No personal identification information		**Project** Vienna Wells
Location description		
Latitude 38.187874 (Google Earth)	**Longitude** -91.943364 (google Earth)	**Lat/Long datum** NAD83
Altitude LMP 839 feet (Google Earth)	**Altitude datum** NGVD88	**Log measurement point (LMP)** LS
Height LMP Depth below (-) /above (+) LS	**Description of LMP** Land surface, top of casing	
Borehole depth 148 feet	**Borehole diameter** 6 inches	**Casing bottom** 80 feet
Casing diameter 6 inches	**Casing type** Steel	**Source of data** Owner
Logging unit USGS MOWSC	**Log orientiation** Down	**Magnetic declination**
Recorded by John Schumacher	**Observed by** Michael Kleeschulte	
Software non-ASCII logs	**Type of log**	
Fluid type Water	**Fluid depth below LMP** 61.5 feet	**at time** 10:30

Hydrologic conditions

Tool manufacturer and model, tool serial number, log date and time, logging direction and speed, depth error after logging, log parameter(s) and date(s) of calibration check

Tool run 1 Mt Sopris, 2PGA+2PFA (SN 3427), logging down 15 ft/min.
Temp specific conductance calibrated in Rolla office.

Tool run 2 Mt Sopris, 2PGA+2PFA (SN 2952), logging gamma up 25 ft/min.
Not calibrated since purchased. Zero tool check at LS (0.5 ft error)

Tool run 3 Mt Sopris heat pulse (SN 3122) with 8-in baffles. Not calibrated. Zero check on retun 3.18 start 3.16 retun (0.2 ft error)

Tool run 4 Mt Sopris, Sampler 2PFA-1000 (SN 3162), sampling down at 84 ft (1200), 94 ft (1222), 104 ft (1238), 114 ft (1254), 124 ft (1307), 134 ft (1322), and 143 ft (1335).

Tool run 5 Mt Sopris, Caliper 2PCA (SN 3426), logging up at 15 ft/min. Calibrated immediately before use in field.
Zero check tool top at LS tol at 7.58 start and 7.59 on return = error 0.01 ft

Tool run 6 (01/06/2012) Mt Sopris, 2PGA+2PFA (SN 3427), logging down 15 ft/min. Well pumping at 3.2 gpm above casing around 78 ft.
Temp specific conductance calibrated in Rolla office on 01/05/2012.

Remarks Tool 7:(01/06/2012) Mt Sopris, 2PGA+2PFA (SN 2952), logging gamma up 25 ft/min.
Not calibrated since purchased. Zero tool check at LS (0.5 ft error)

Tool 8:Mt Sopris, Sampler 2PFA-1000 (SN 3162), sampling down at 84 ft (1124), 94 ft (1137), 104 ft (1152), 114 ft (1206), 124 ft (1221), 134 ft (1236), and 143 ft (1251).

Figure G-01. Geophysical log conducted on domestic well MK-01, Vienna, Missouri.

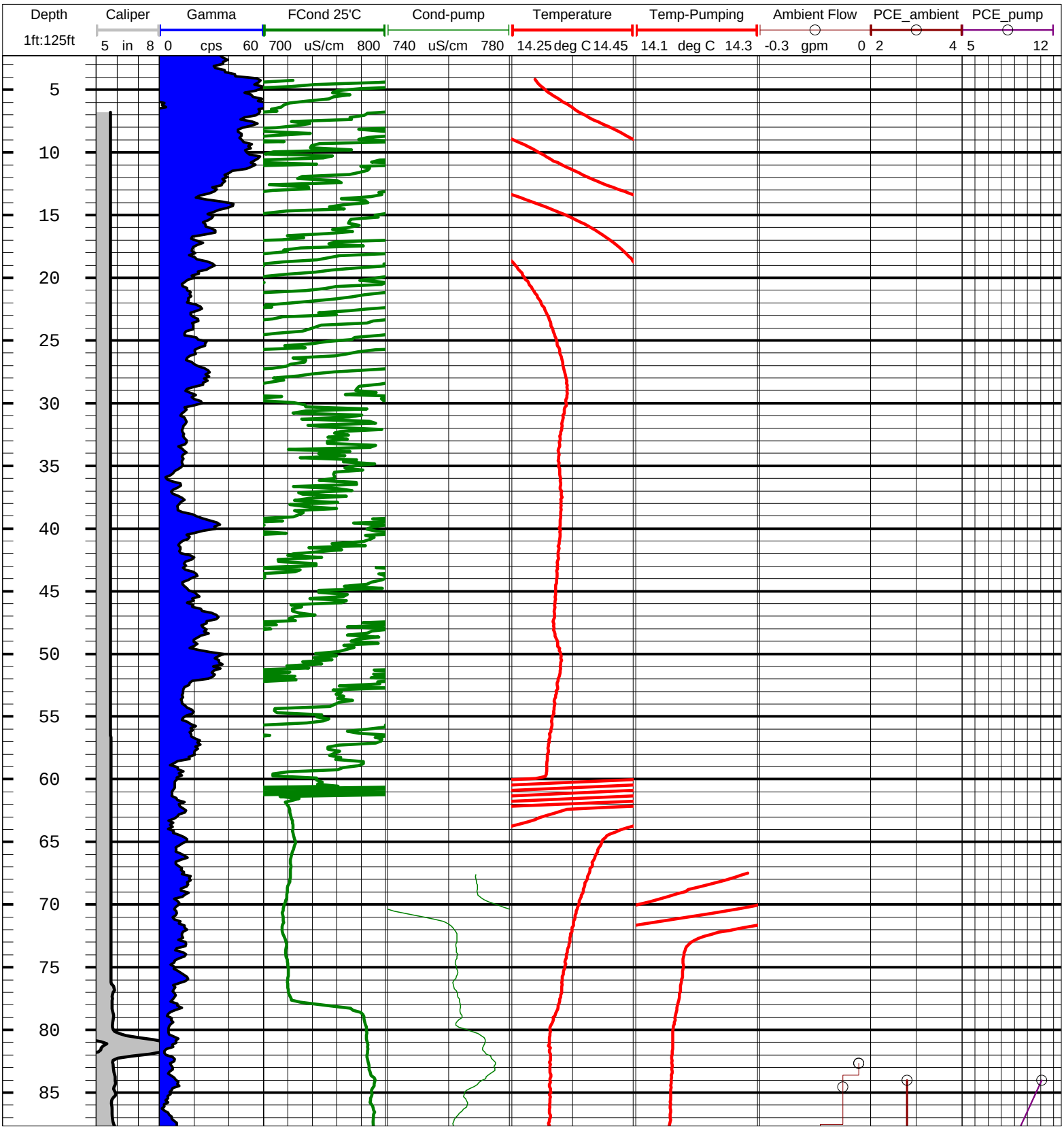


Figure G-01. Geophysical log conducted on domestic well MK-01, Vienna, Missouri.

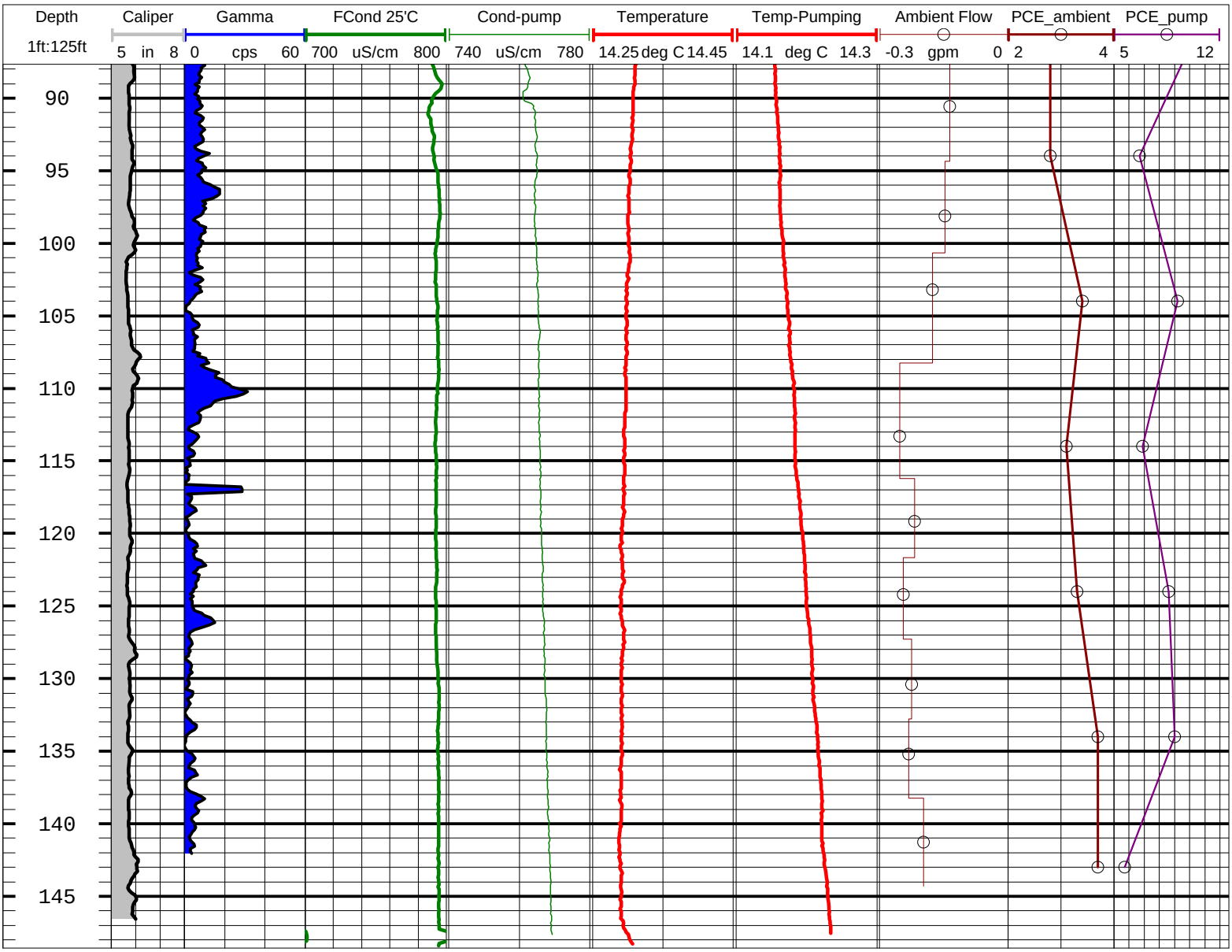


Figure G-01. Geophysical log conducted on domestic well MK-01, Vienna, Missouri.

V1.1

USGS science for a changing world

BOREHOLE GEOPHYSICAL LOG

English/Metric units E

SiteID (C1) 381126091563101	**Station name (C12)** VIN-MW-08	**Other ID**
County Maries	**State** Missouri	**Log date** 08/17/2015
Owner No personal identification information		**Project** Vienna Wells
Location description End of 11th Street		
Latitude 38.190637	**Longitude** -91.942007	**Lat/Long datum** NAD83
Altitude LMP 803 ft	**Altitude datum** NGVD88	**Log measurement point (LMP)** LS
Height LMP 0.0 ft	**Description of LMP** Land surface, top of casing	
Borehole depth 325	**Borehole diameter** 6-in	**Casing bottom** 90
Casing diameter 6	**Casing type** steel	**Source of data** Geol log
Logging unit MOWSC	**Log orientiation** Down	**Magnetic declination**
Recorded by John Schumacher	**Observed by** D. Smith, J. Eillis	
Software non-ASCII logs	**Type of log**	
Fluid type Water	**Fluid depth below LMP** 58.59	**at time** 11:35

Hydrologic conditions Cloudy. Warm. Thunderstorm approaching.

Tool manufacturer and model, tool serial number, log date and time, logging direction and speed, depth error after logging, log parameter(s) and date(s) of calibration check

Tool run 1 Mt Sopris, 2PGA+2PFA fluid T&SC down (SN 3427) ~ 15 ft/min, start @ 1141, BOH tool ~323 ft

Tool run 2 Mt Sopris, 2PGA+2PFA gamma up (SN 2952) ~ 25 ft/min, start @ 1214.

Tool run 3 Mt Sopris, 2CAA caliper checked 10.21=10.38. Recalibrated onsite; after 4.52=4.52. BOH ~323 ft bls.
Up at 19 ft/min end at 1649, error ~ 0.42 ft

Tool run 4 Mt Sopris, heat pulse HFP-2293 (SN 3122), full baffle ambient flow going down checked lower readings with baffle up.
Possible slight upward flow in lower parts of borehole.
SWL rising slight perhaps due to low pressure & thunderstorm during this log.

Tool run 5 (10/13/15) Mt Sopris Optical Televiewer, exposure ~30%, athmuthal resolution at 1800.

Tool run 6

Remarks

Figure G-02. Geophysical log conducted on monitoring well MW-08 under ambient conditions, Vienna, Missouri.

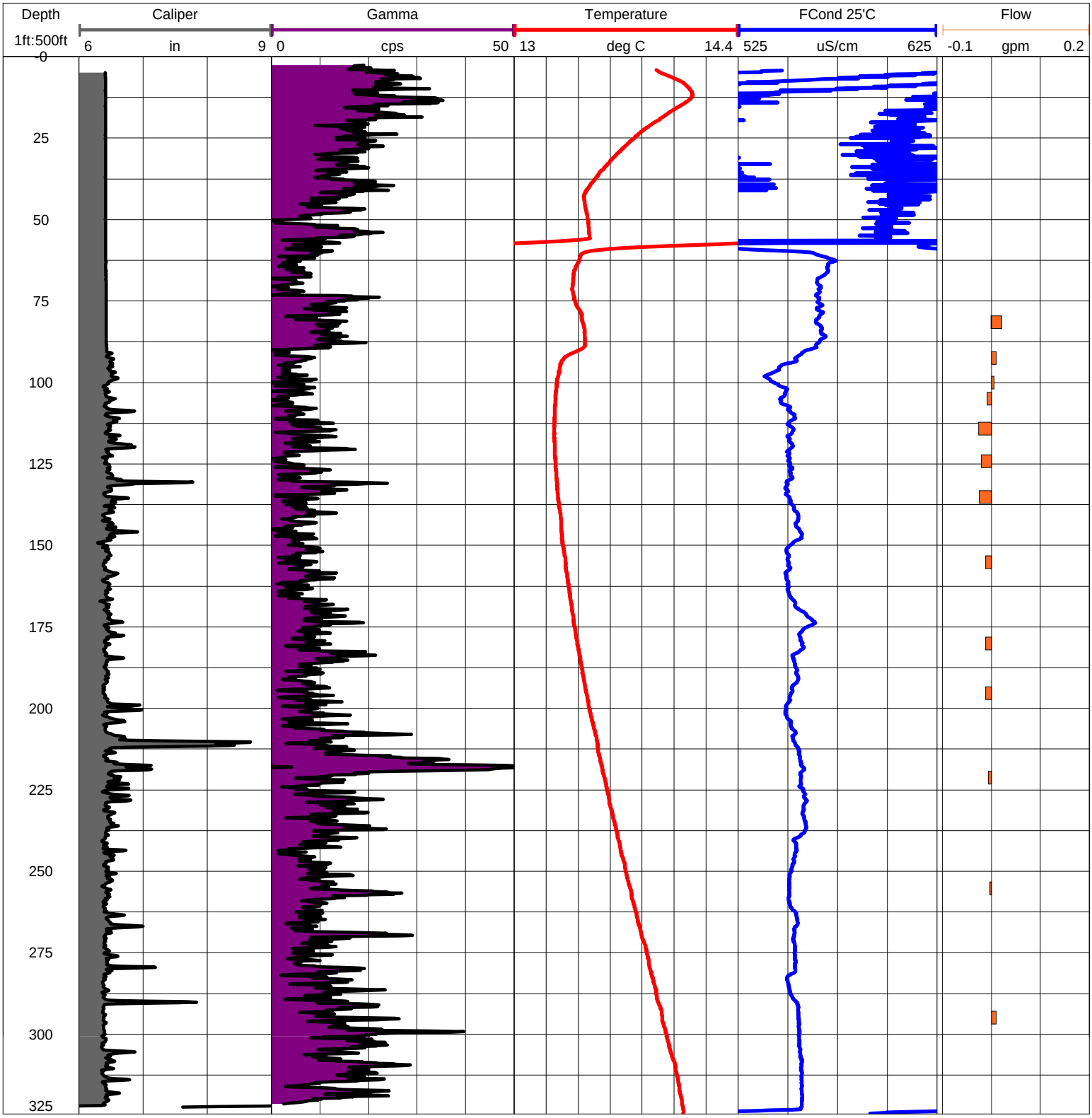


Figure G-02. Geophysical log conducted on monitoring well MW-08 under ambient conditions, Vienna, Missouri.

V1.1

USGS science for a changing world

BOREHOLE GEOPHYSICAL LOG

English/Metric units E

SiteID (C1) 381126091563101	**Station name (C12)** VIN-MW-08	**Other ID**
County Maries	**State** MO	**Log date** 9/22/2015
Owner No personal identification information		**Project** Vienna Wells
Location description		
Latitude 38.190637	**Longitude** -91.942007	**Lat/Long datum** NAD83
Altitude LMP 803 ft	**Altitude datum** NGVD88	**Log measurement point (LMP)** LS
Height LMP 0.0 ft	**Description of LMP** Land surface, top of casing	
Borehole depth 325	**Borehole diameter** 6-in	**Casing bottom** 90
Casing diameter 6	**Casing type** steel	**Source of data** Geologic log
Logging unit MOWSC	**Log orientiation** Down	**Magnetic declination**
Recorded by D. Smith	**Observed by** J. Schumacher and J. Wilson	
Software non-ASCII logs	**Type of log**	
Fluid type Water	**Fluid depth below LMP** 68.31	**at time** 0755

Hydrologic conditions Pumping with 3" pump set at 200' bgs at 10 gal/min

Tool manufacturer and model, tool serial number, log date and time, logging direction and speed, depth error after logging, log parameter(s) and date(s) of calibration check

Tool run 1: Mt Sopris, 2PGA+2PFA (SN 3427) fluid T&SC down, start @ 0945 9-22-15, BOH tool ~323 ft.

Tool run 2: Mt Sopris, heat pulse HFP-2293 (SN 3122) down @ 1105 with 8-in baffles. Not calibrated.

Tool run 3 Mt Sopris, fluid point sampler (2PFA-1000; SN 3162) down @ 1244 and sampled 145 ft (1250), 165 ft (1314), 175 ft, 215 ft (1346), 290 ft, and 325 ft.

Tool run 4

Tool run 5

Tool run 6

Remarks

Figure G-03. Geophysical log conducted on monitoring well MW-08 under pumping conditions, Vienna, Missouri.

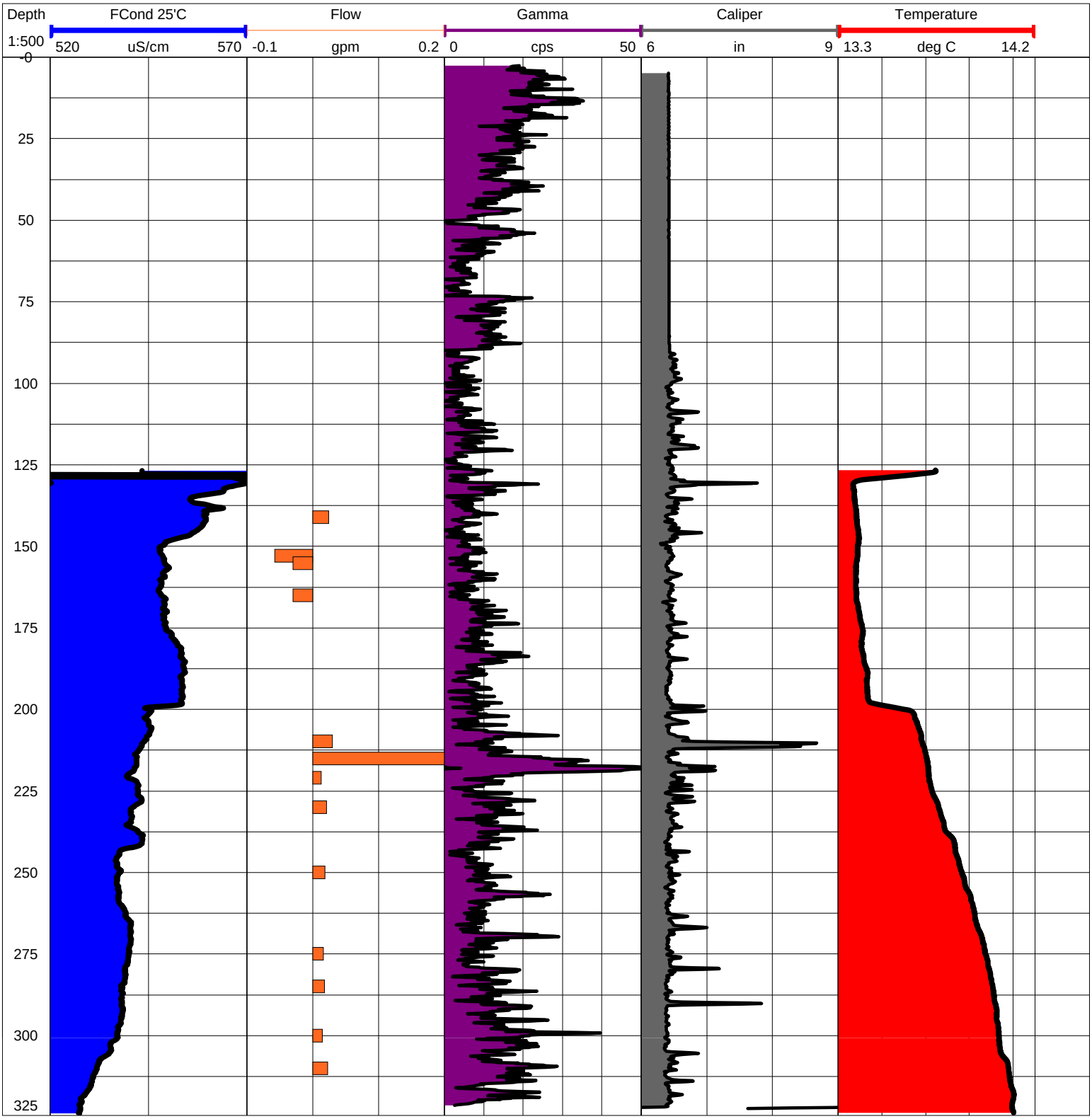


Figure G-03. Geophysical log conducted on monitoring well MW-08 under pumping conditions, Vienna, Missouri.

Appendix H: Monitoring Well Construction Diagrams

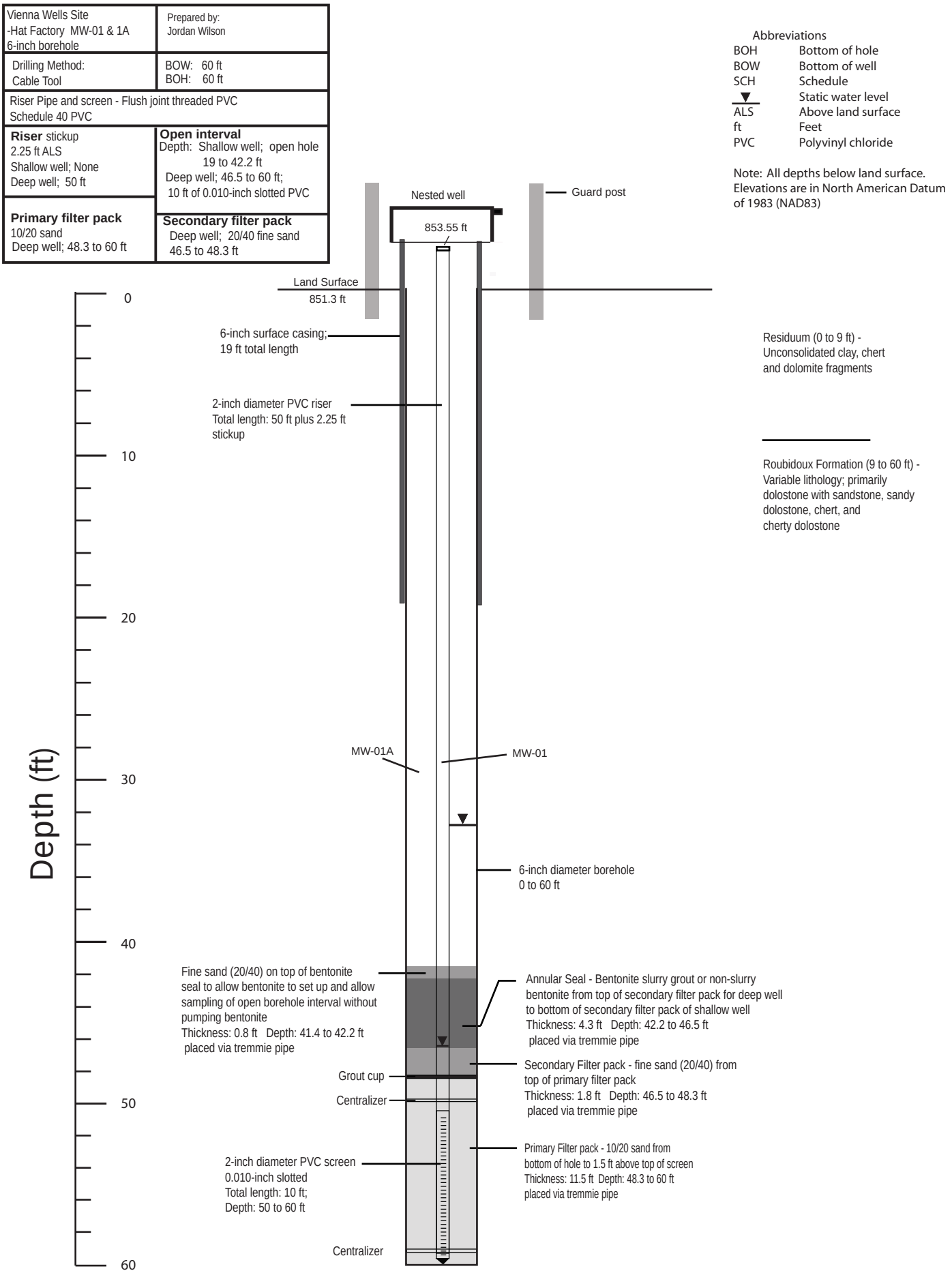


Figure H-01. Schematic diagram for well MW-01 and MW-01A

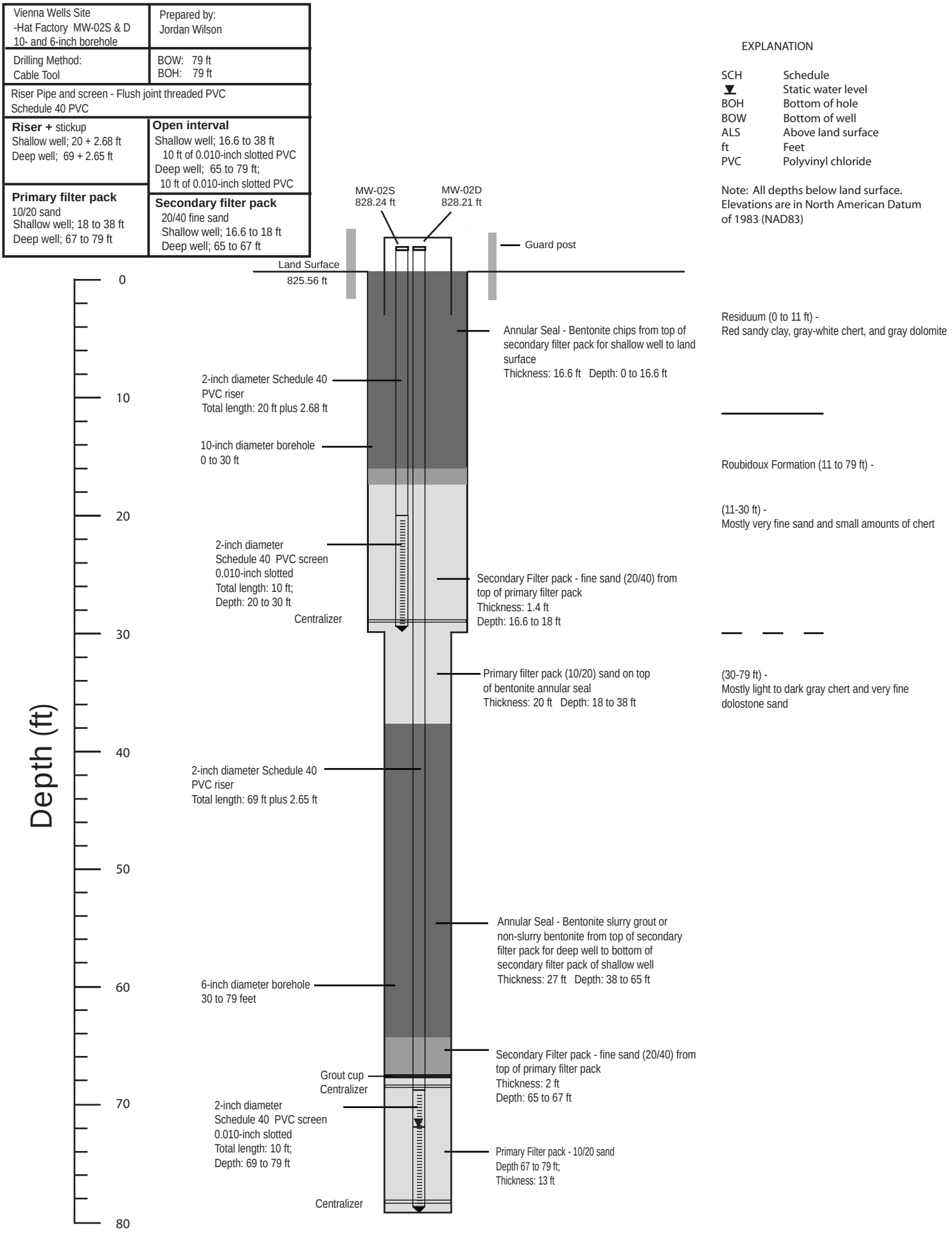


Figure H-02. Schematic diagram for well MW-02S and MW-02D.

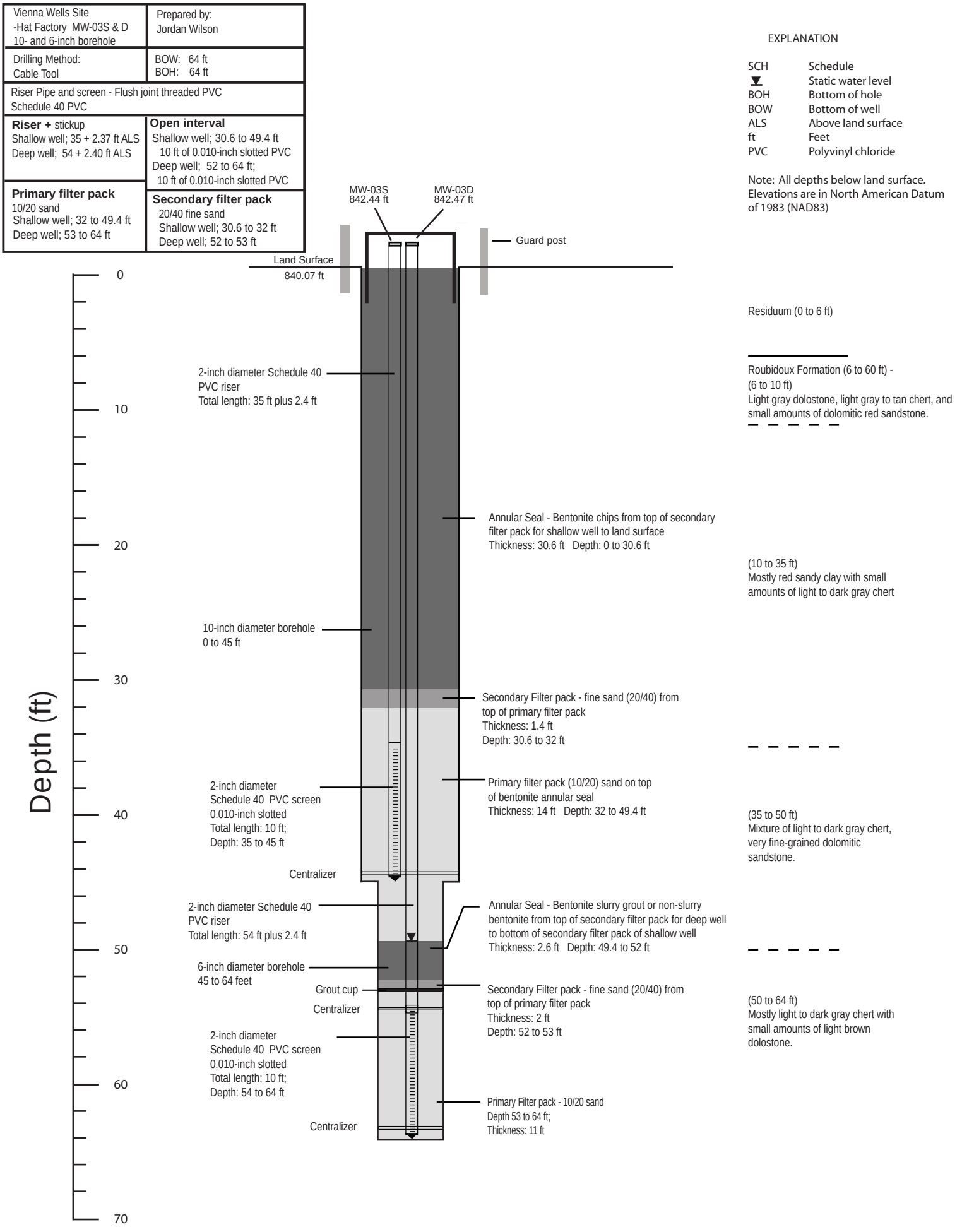


Figure H-03. Schematic diagram for well MW-03S and MW-03D.

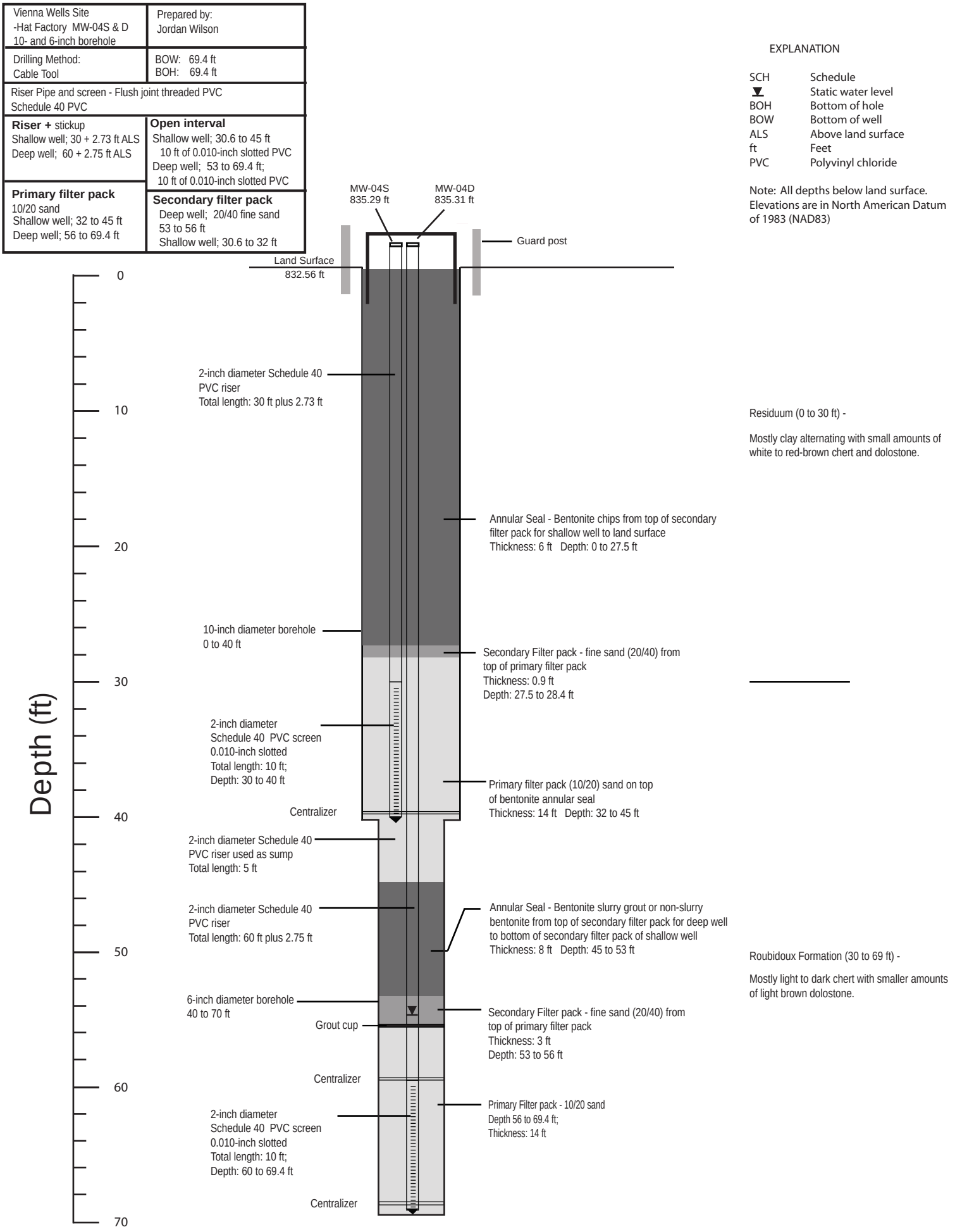


Figure H-04. Schematic diagram for wells MW-04S and MW-04D.

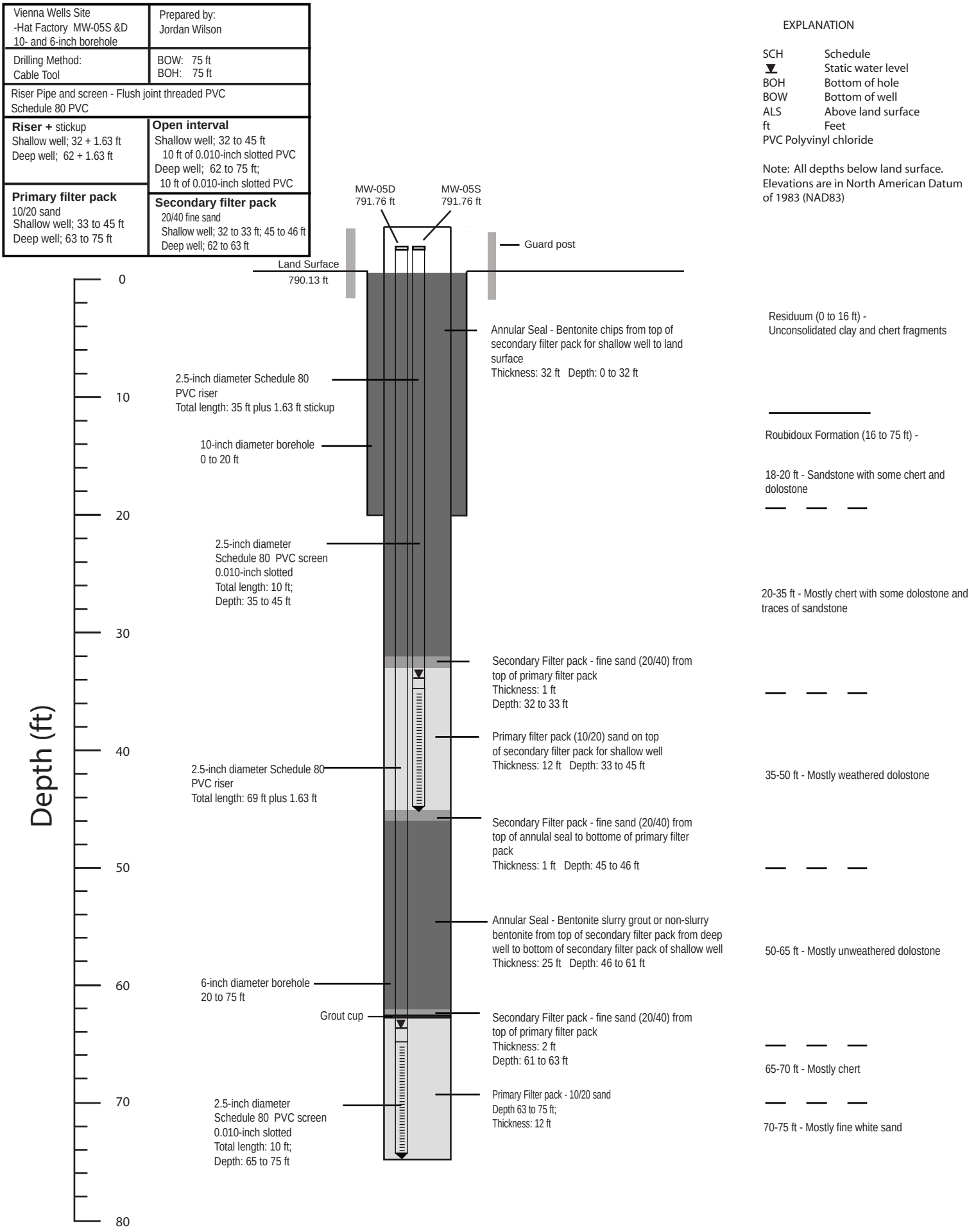


Figure H-05. Schematic diagram for well MW-05S and MW-05D.

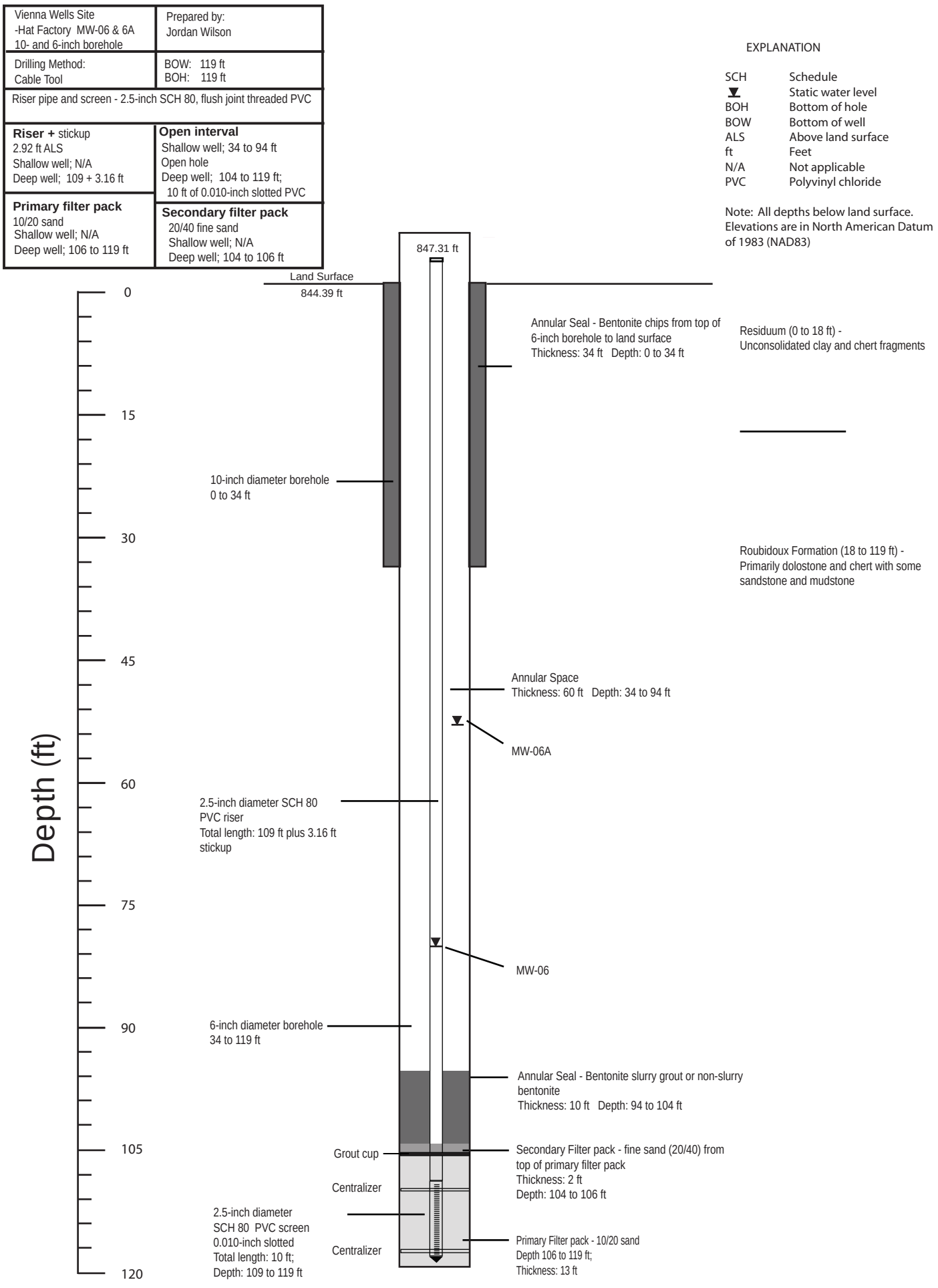


Figure H-06. Schematic diagram for well MW-06 and MW-06A.

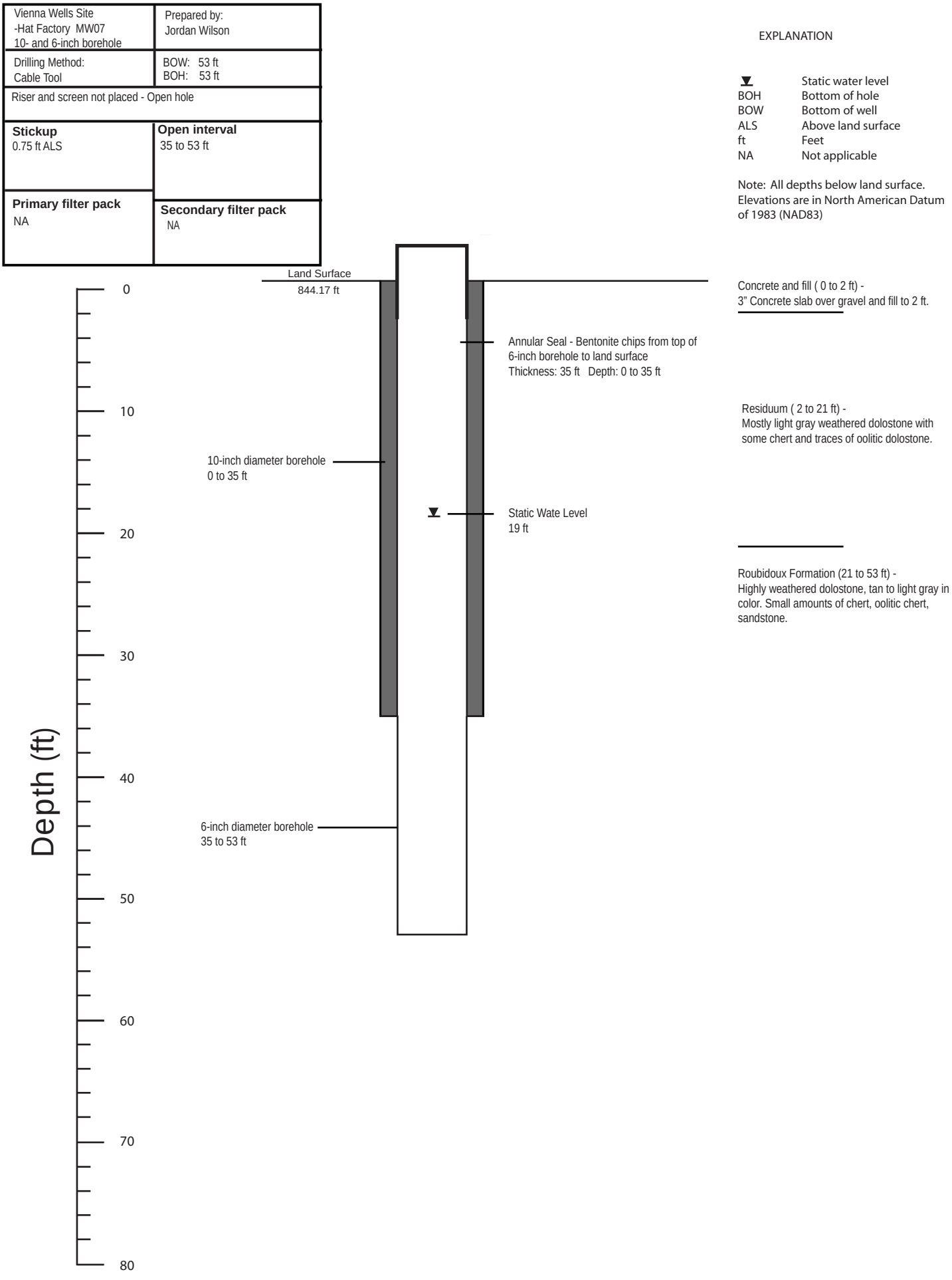


Figure H-07. Schematic diagram for well MW07.

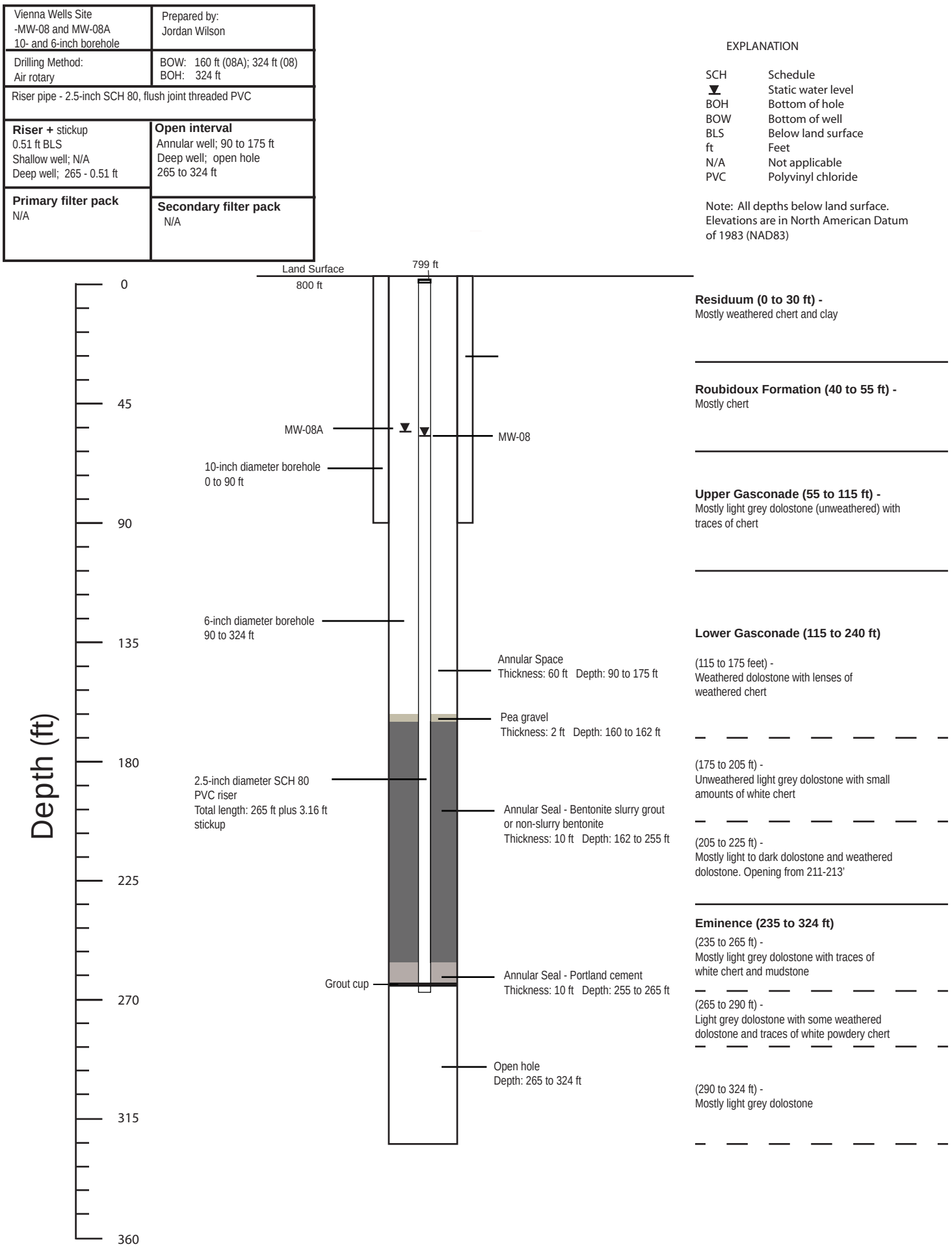


Figure H-08. Schematic diagram for well MW-08 and MW-08A.

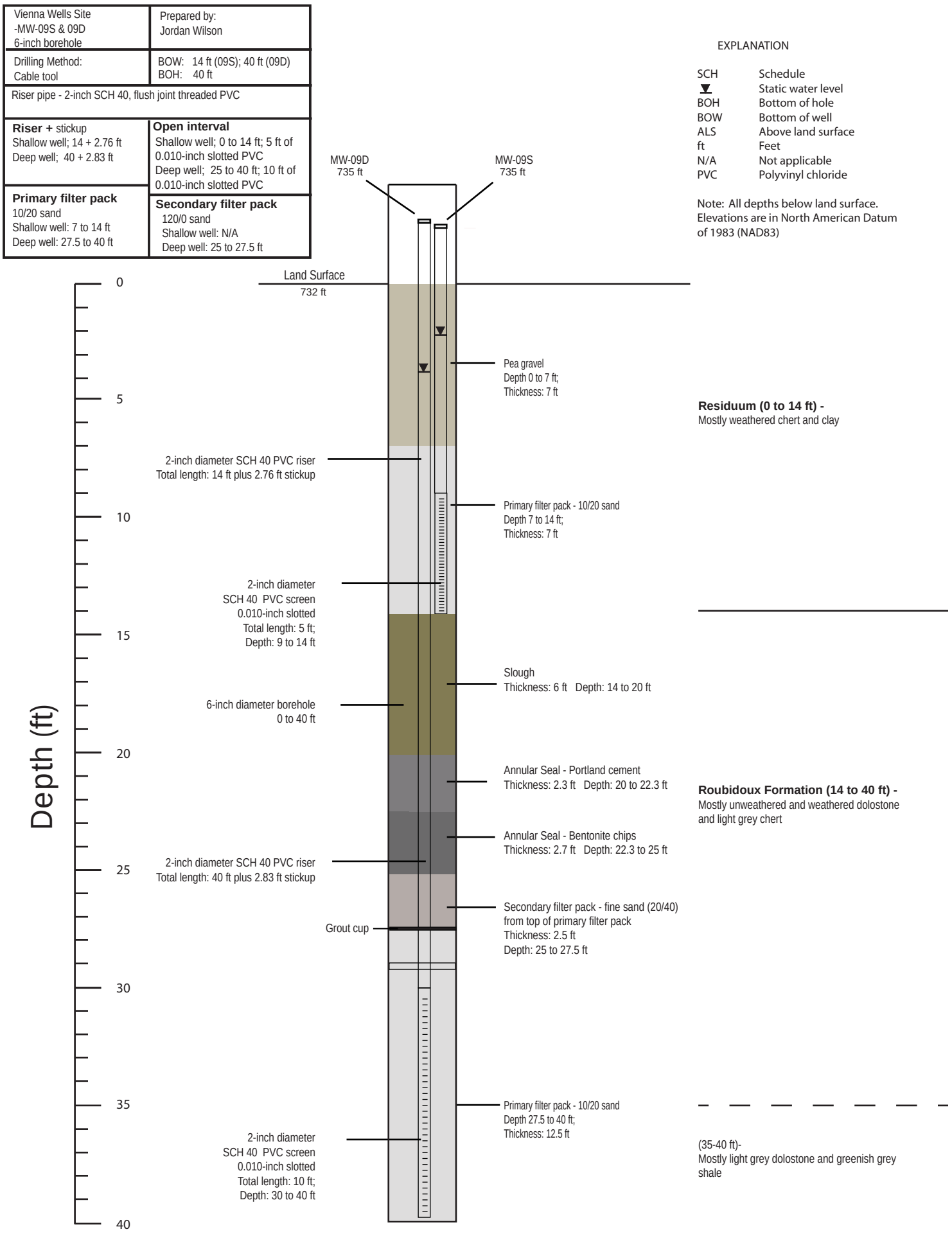


Figure H-09. Schematic diagram for well MW-09S and MW-09D.

Appendix I: Maps of Constituents in Soil Samples

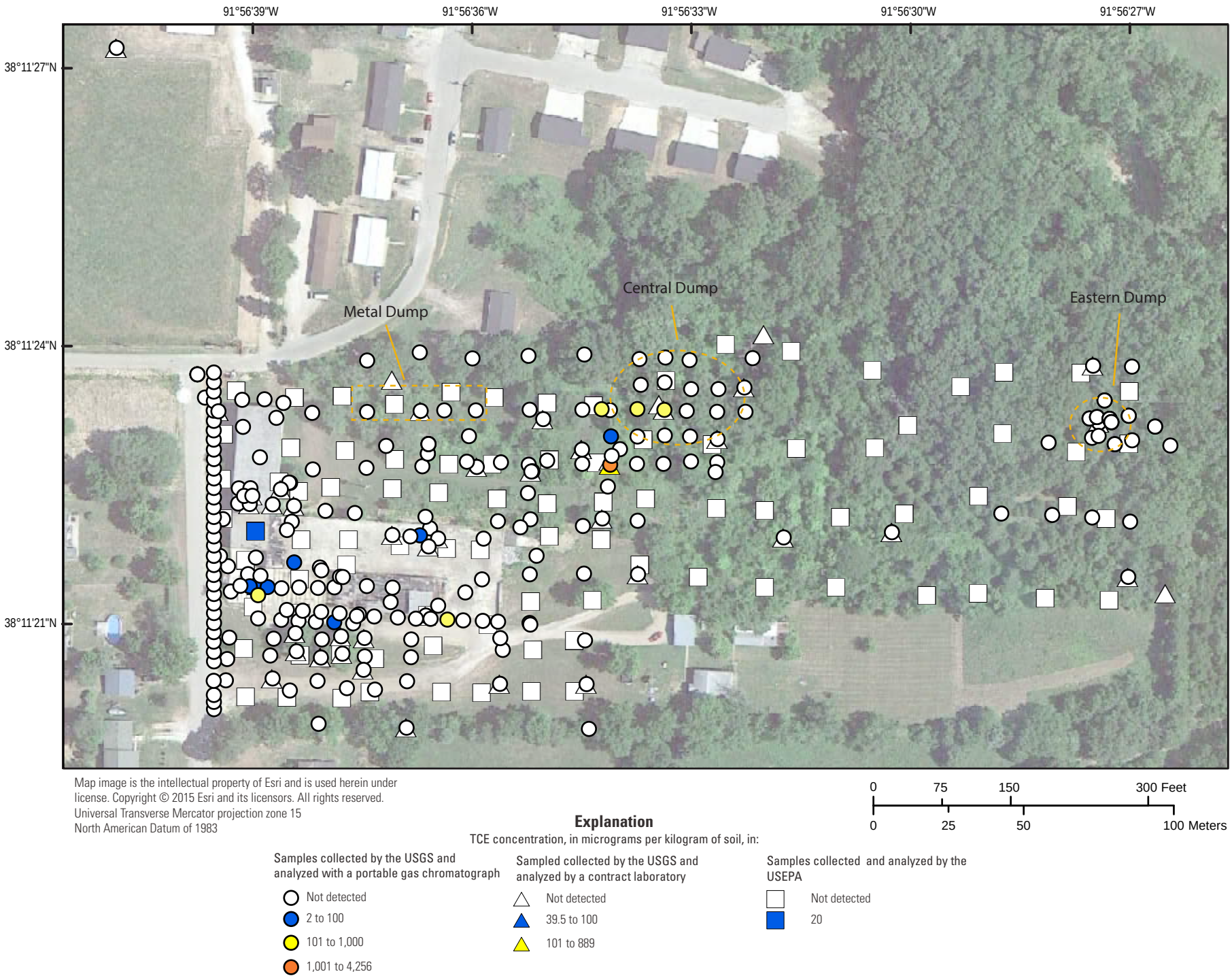


Figure I-01. Maximum concentration of trichloroethene (TCE) in soil samples in each soil boring collected by the United States Environmental Protection Agency (USEPA) and United States Geological Survey (USGS)at the Vienna Wells site, Vienna, Missouri.

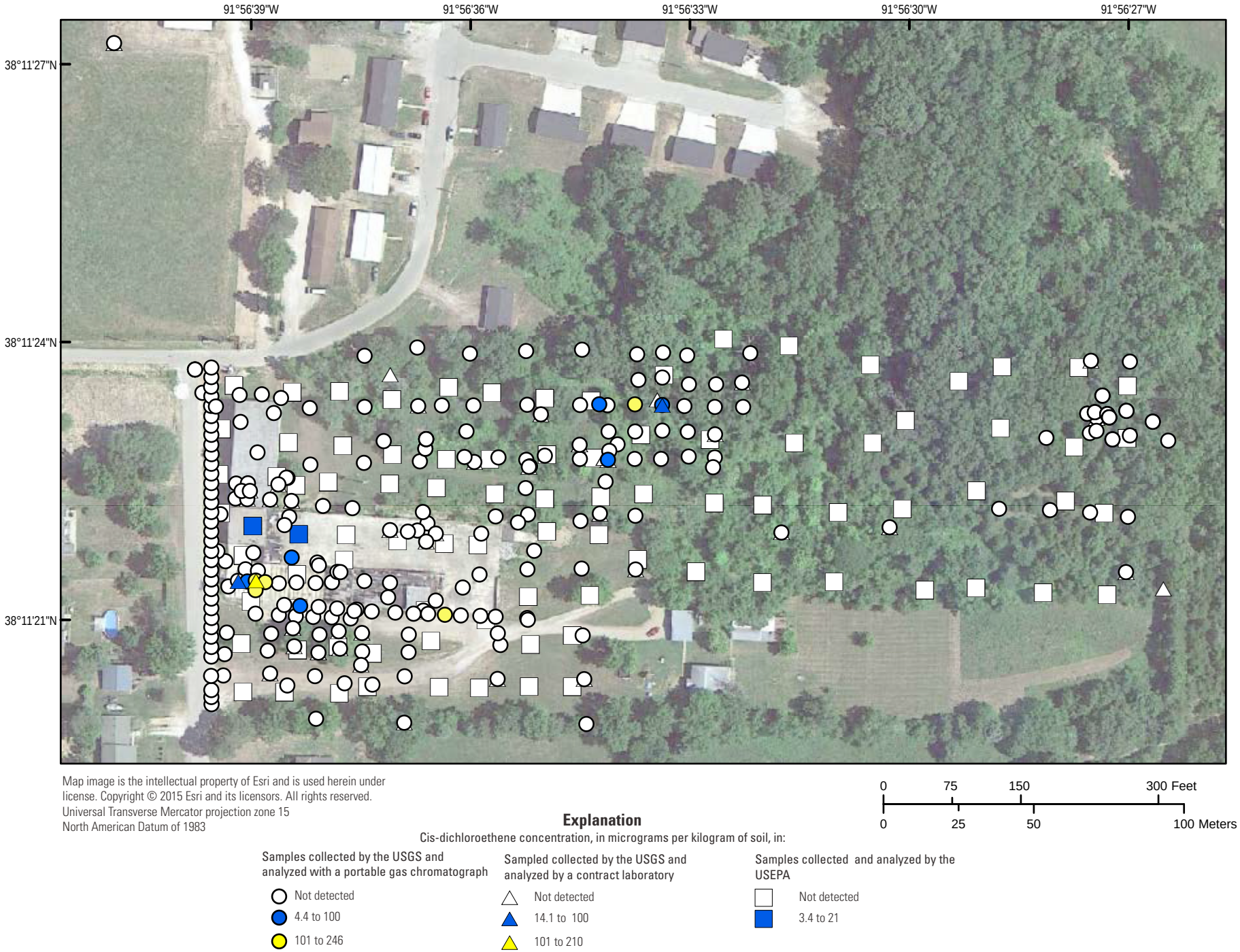


Figure I-02. Maximum concentration of cis-dichloroethene (cis-DCE) in soil samples in each soil boring collected by the United States Environmental Protection Agency (USEPA) and United States Geological Survey (USGS)at the Vienna Wells site, Vienna, Missouri.

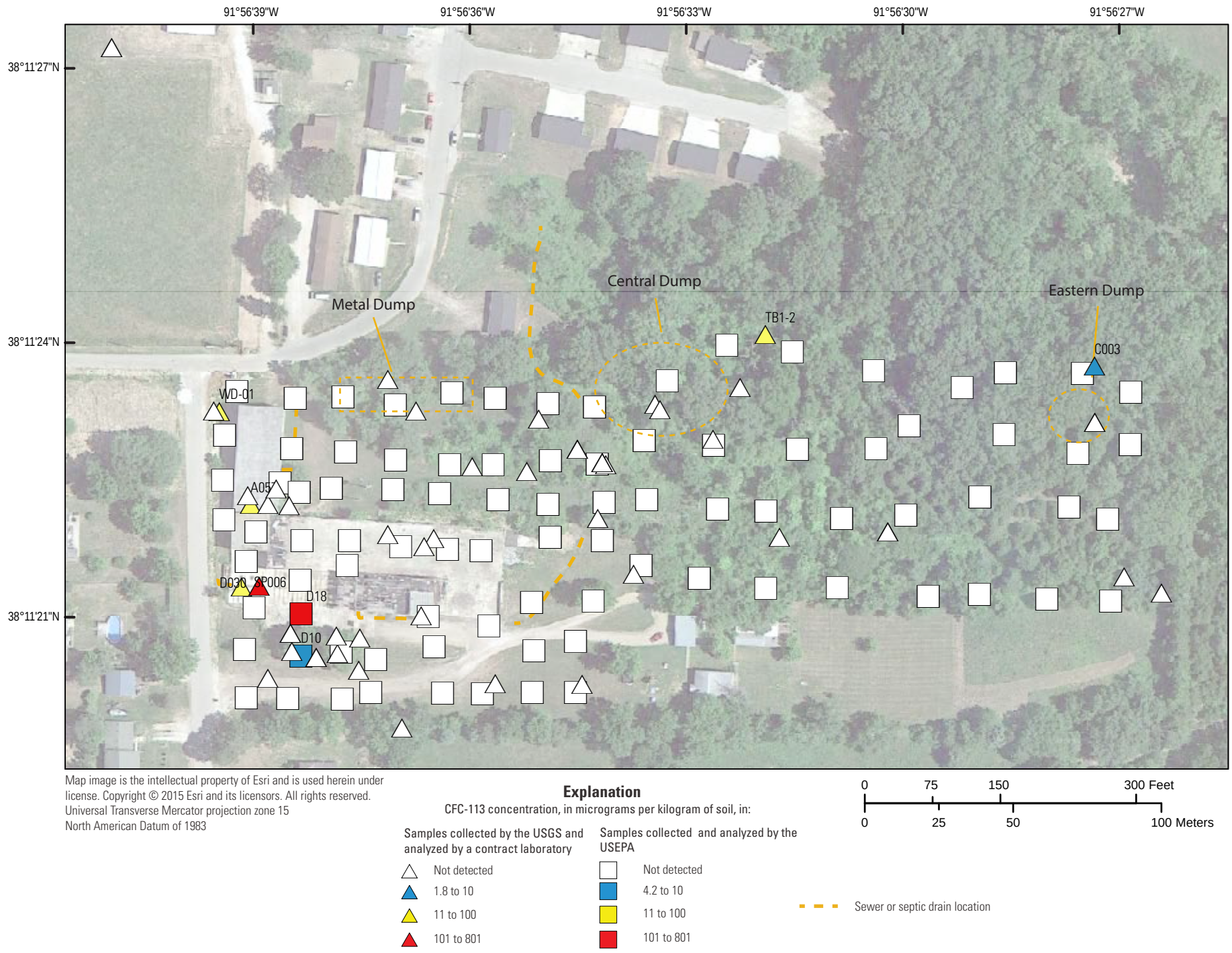
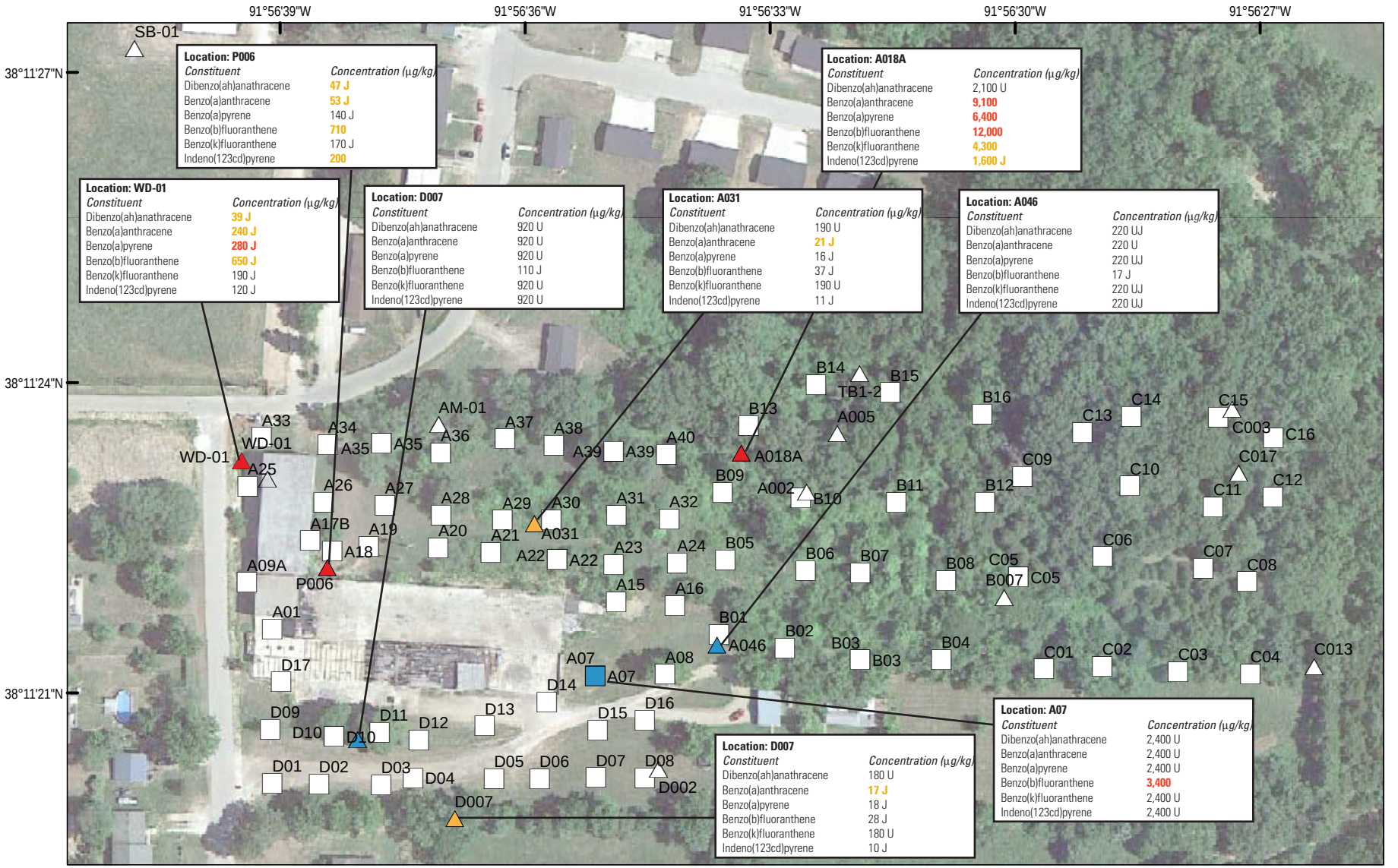


Figure I-03. Maximum concentration of 1,1,2-trichloro-trifluoroethane (CFC-113) in soil and sediment samples in each soil boring collected by the United States Environmental Protection Agency (USEPA) and United States Geological Survey (USGS)at the Vienna Wells site, Vienna, Missouri.



Map image is the intellectual property of Esri and is used herein under license. Copyright © 2015 Esri and its licensors. All rights reserved.
Universal Transverse Mercator projection zone 15
North American Datum of 1983

Explanation

Number of PAH detections in:

Samples collected by the USGS and analyzed by a contract laboratory

- 0
- 1 to 2
- 3 to 4
- 5 to 6

Samples collected and analyzed by the USEPA

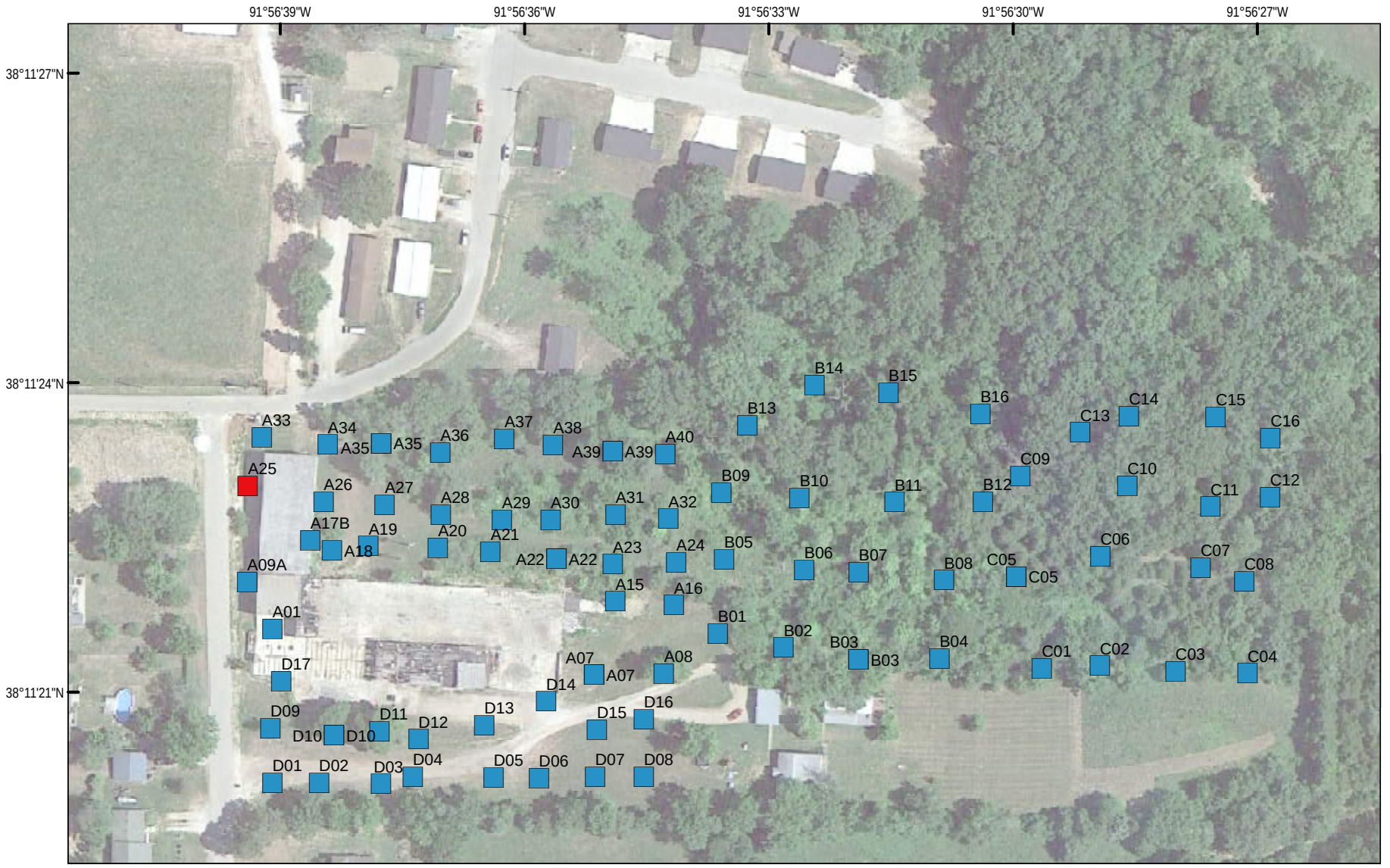
- 0
- 1 to 2
- 3 to 4
- 5 to 6

0 75 150 300 Feet
0 25 50 100 Meters

Qualifiers

- U Not detected
- J Detected below the reporting limit
- UJ Detected below the reporting limit and the reporting limit was estimated
- 100 Greater than $1x10^{-6}$ cancer risk
- 100 Greater than $1x10^{-5}$ cancer risk

Figure I-04. Concentration of polyaromatic hydrocarbons (PAHs) in surficial (less than 0.5 feet below ground surface) soil and sediment samples collected at the Vienna Wells site, Vienna, Missouri.



Map image is the intellectual property of Esri and is used herein under license. Copyright © 2015 Esri and its licensors. All rights reserved.
Universal Transverse Mercator projection zone 15
North American Datum of 1983

Explanation

Manganese concentration, in micrograms per kilogram of soil, in:

Samples collected and analyzed by the USEPA

- 375,000 to 1,800,000
- 1,800,001 to 2,030,000 (greater than target non-cancer threshold)

Figure I-05. Concentration of mangenese in surficial (less than 0.5 feet below ground surface) soil samples collected at the Vienna Wells site, Vienna, Missouri.

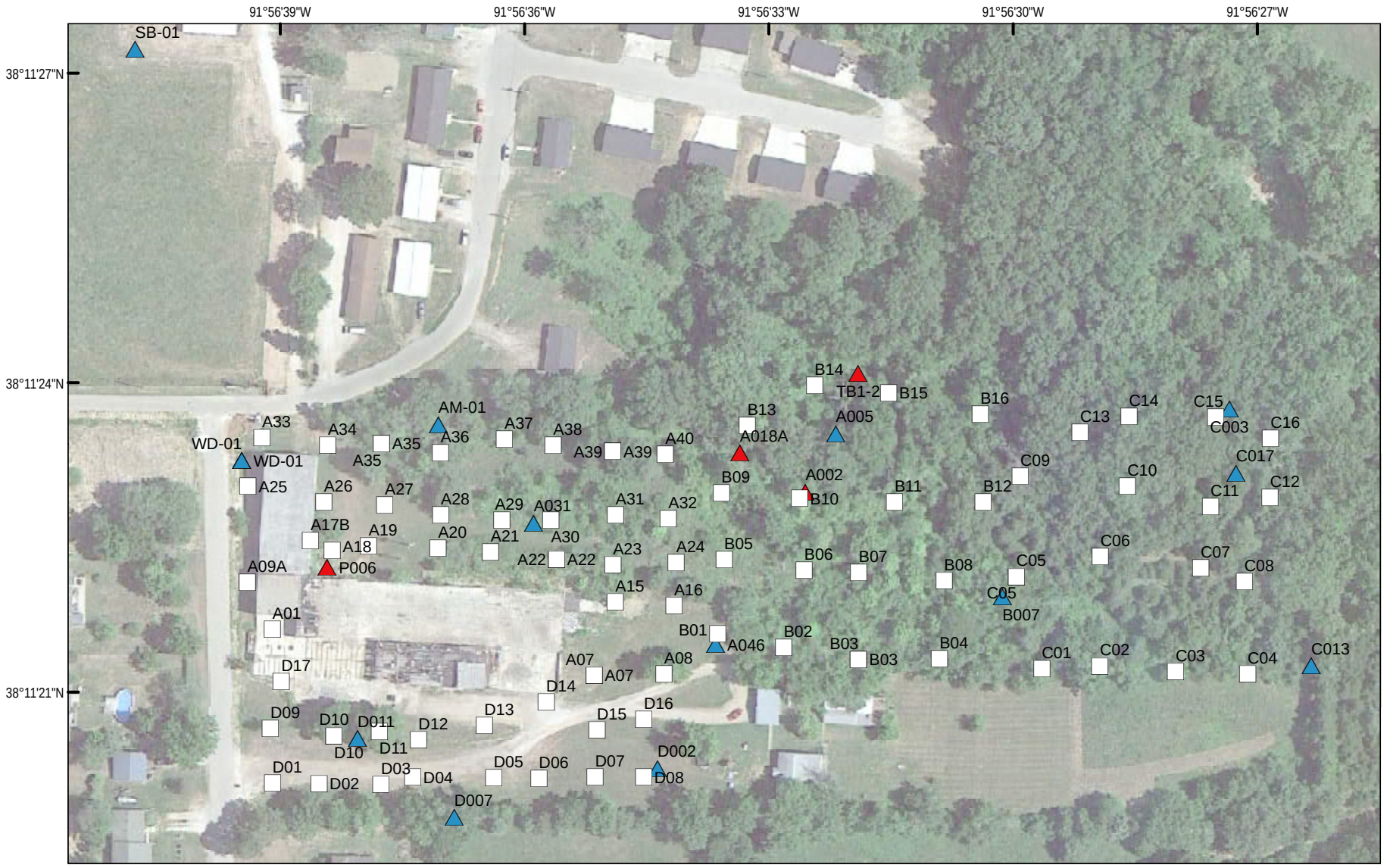


Figure I-06. Concentration of thallium in surficial (less than 0.5 feet below ground surface) soil samples collected at the Vienna Wells site, Vienna, Missouri.

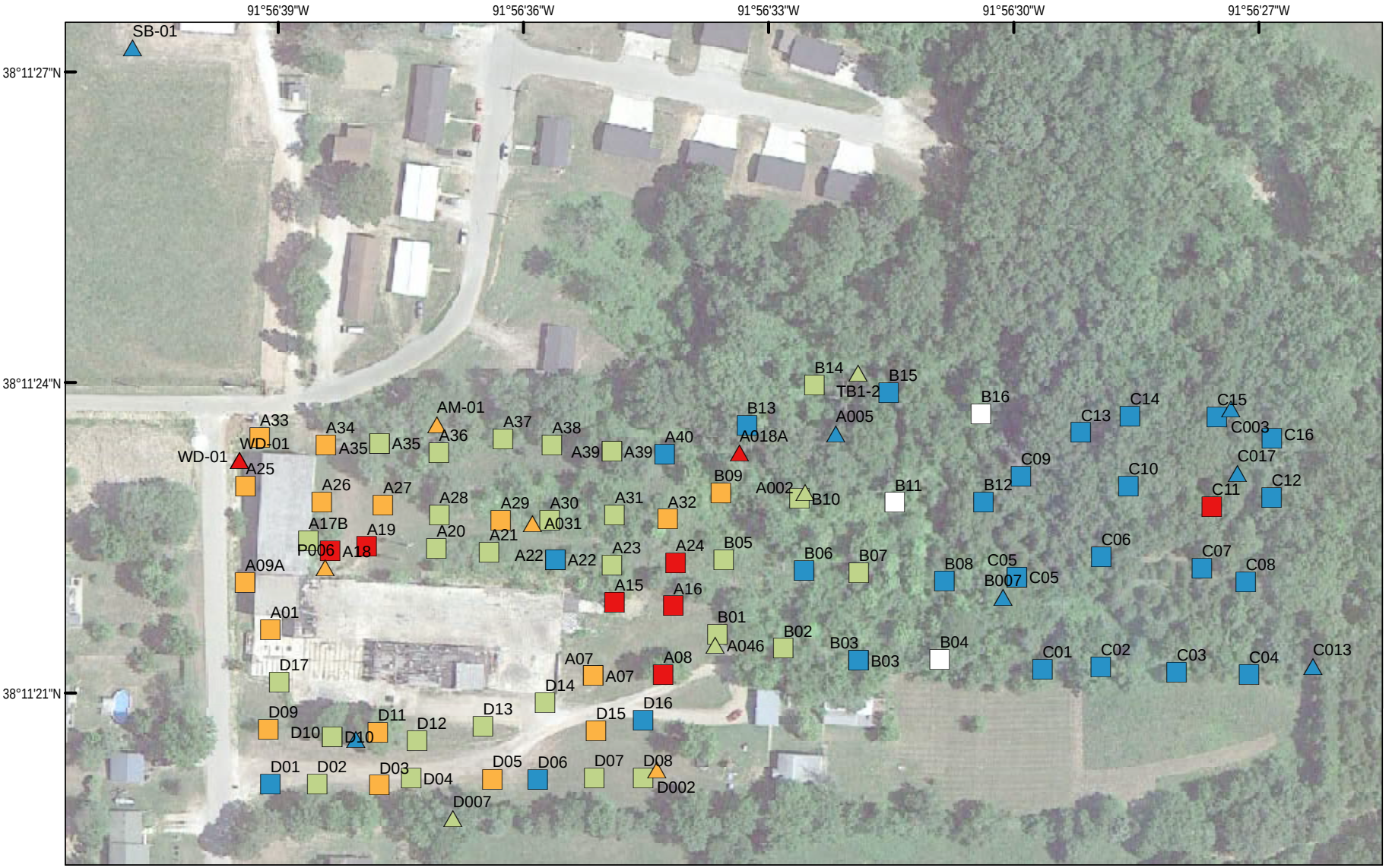


Figure I-07. Concentration of chromium in surficial (less than 0.5 feet below ground surface) soil samples collected at the Vienna Wells site, Vienna, Missouri.

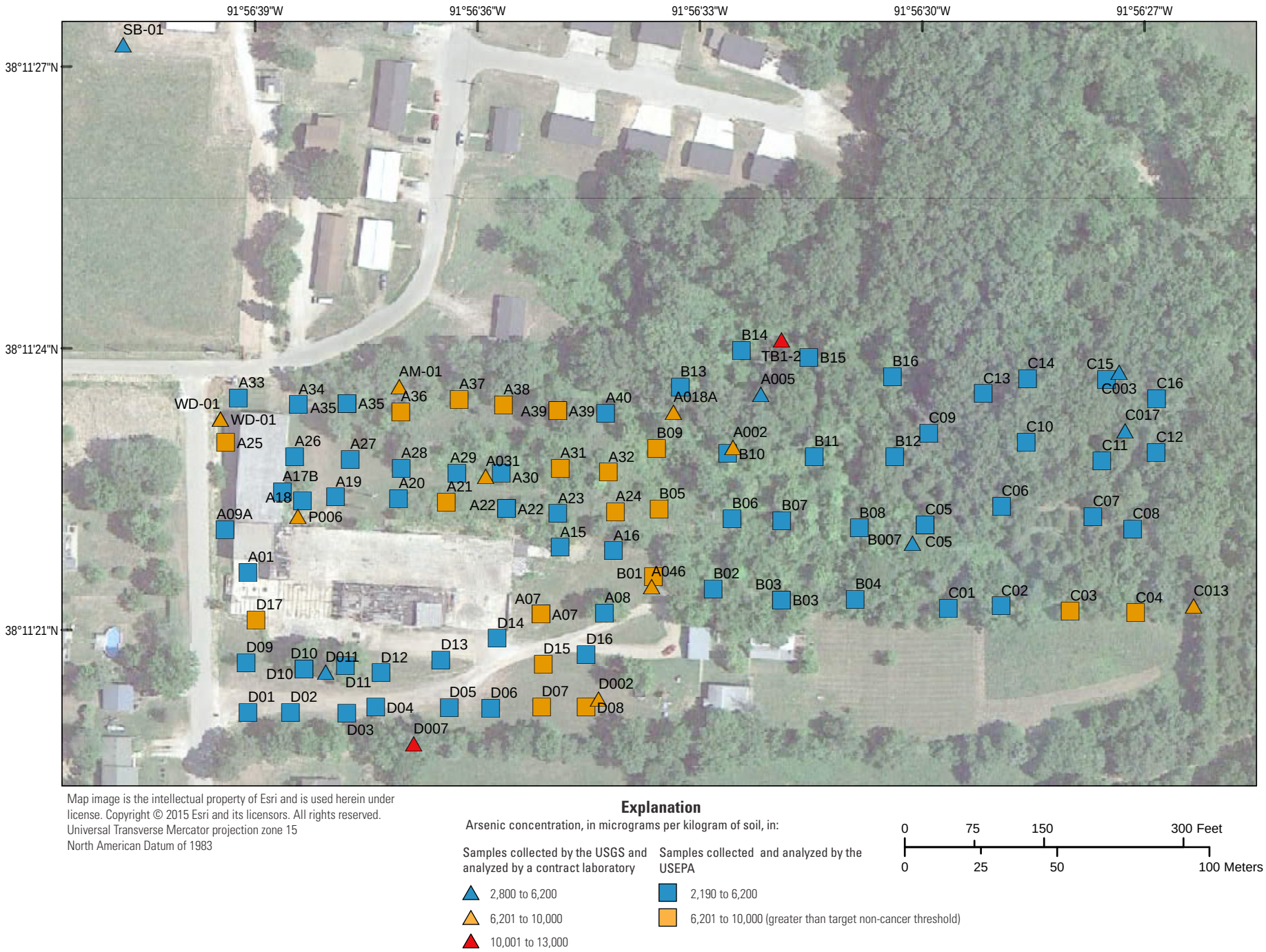


Figure I-08. Concentration of arsenic in surficial (less than 0.5 feet below ground surface) soil samples collected at the Vienna Wells site, Vienna, Missouri.

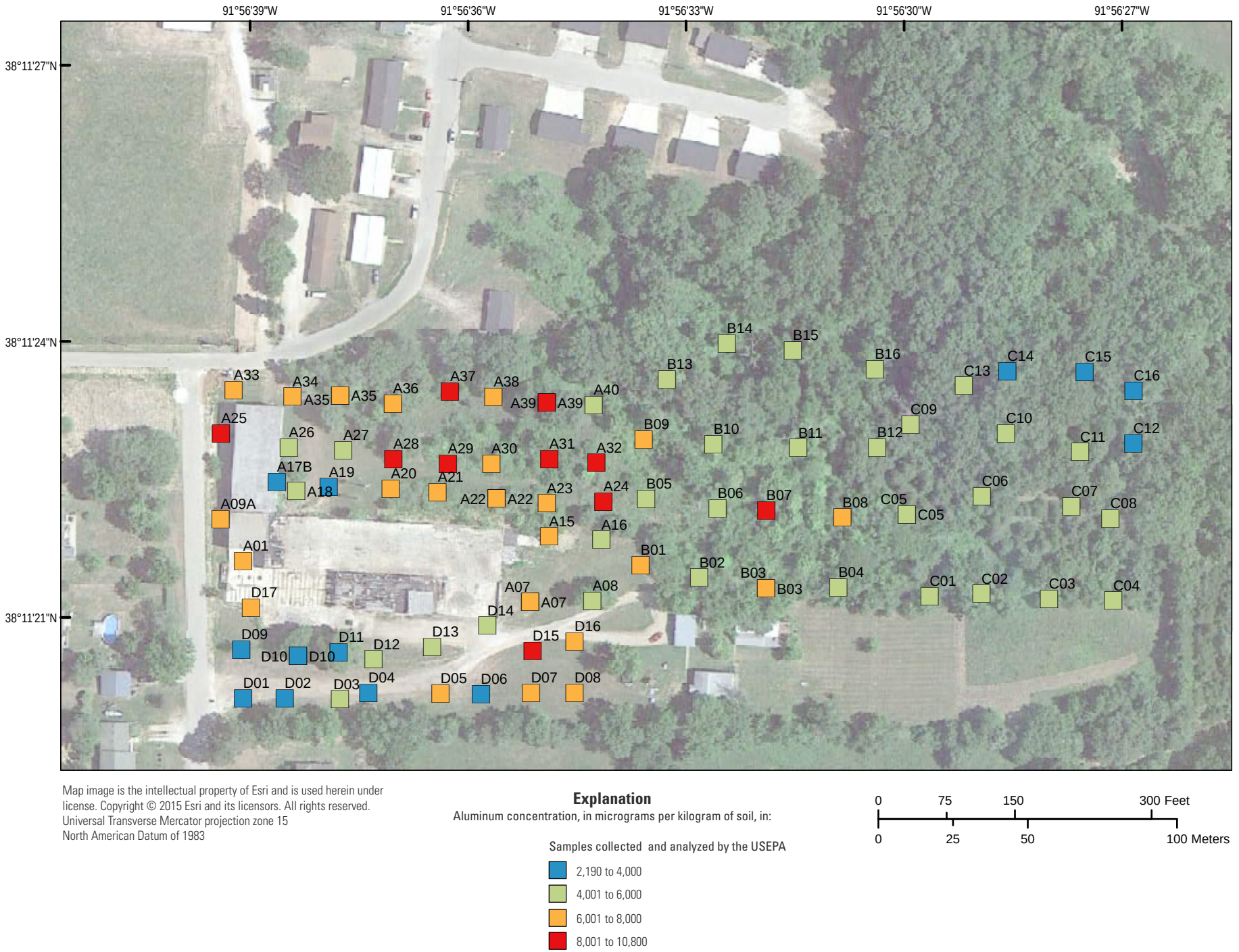


Figure I-09. Concentration of aluminum in surficial (less than 0.5 feet below ground surface) soil samples collected at the Vienna Wells site, Vienna, Missouri.

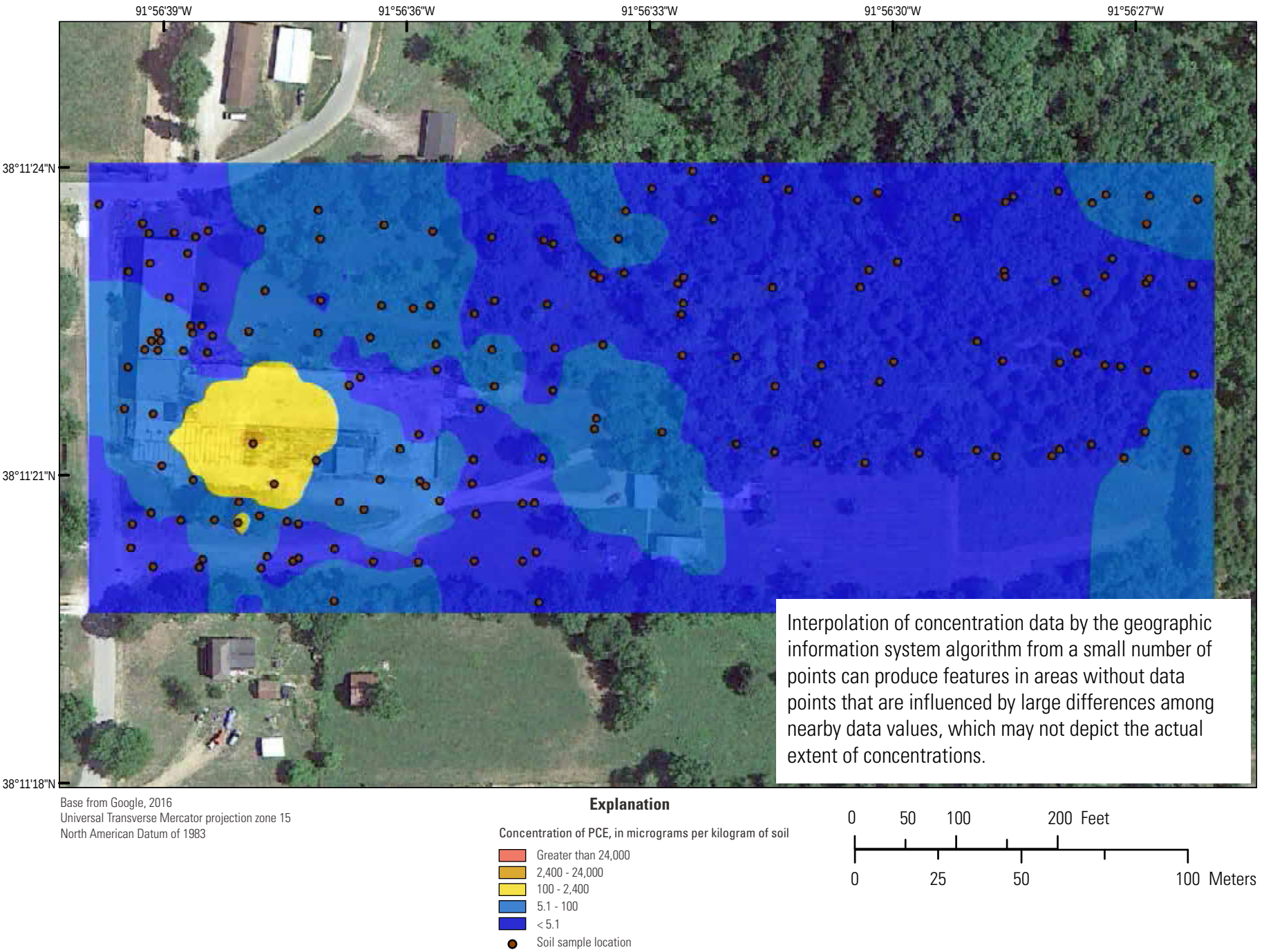


Figure I-10. Tetrachloroethene (PCE) concentration between 0 and 0.5 feet below ground surface, Vienna, Missouri.

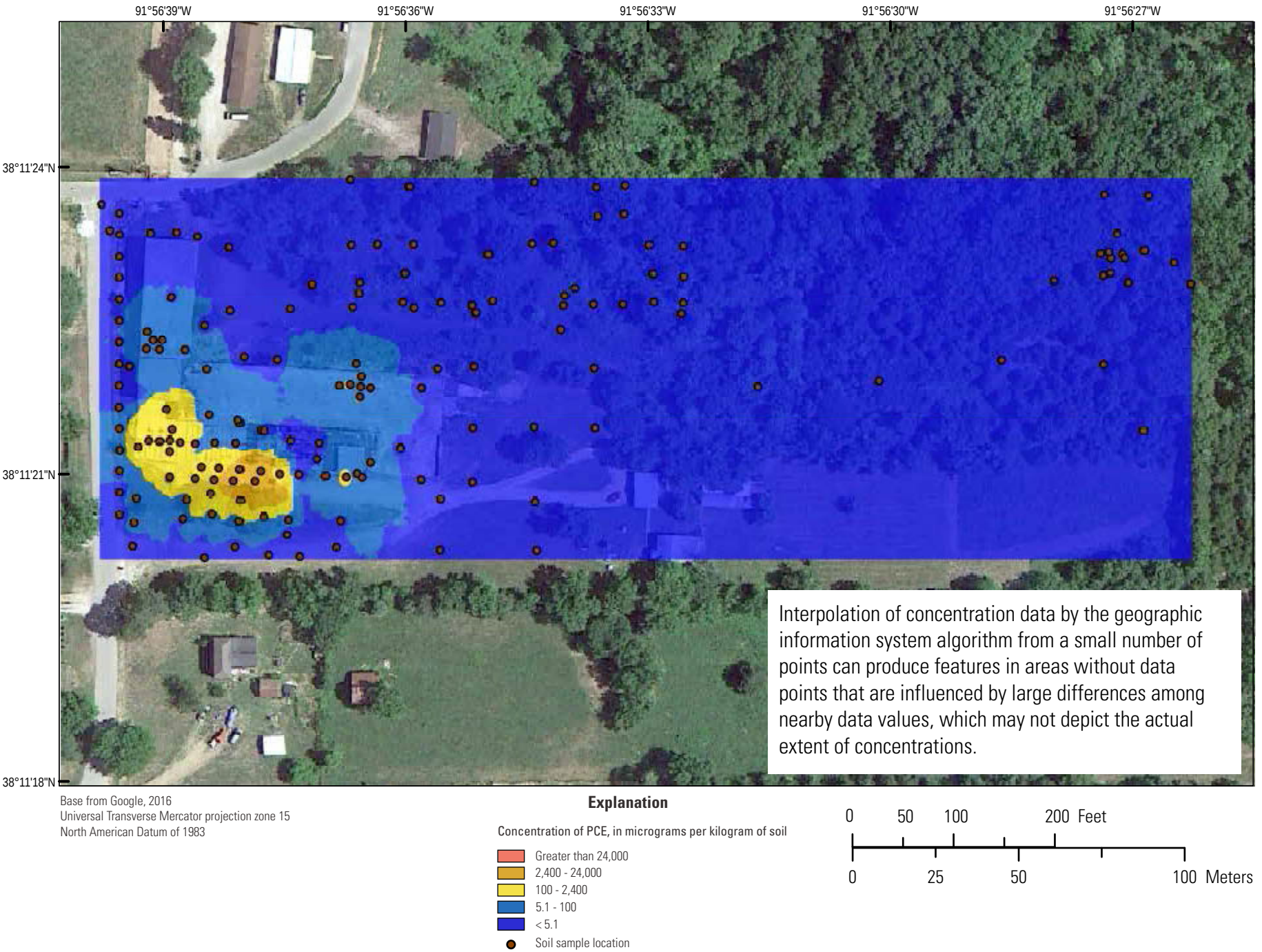


Figure I-11. Tetrachloroethene (PCE) concentration between 0.5 and 2 feet below ground surface, Vienna, Missouri.

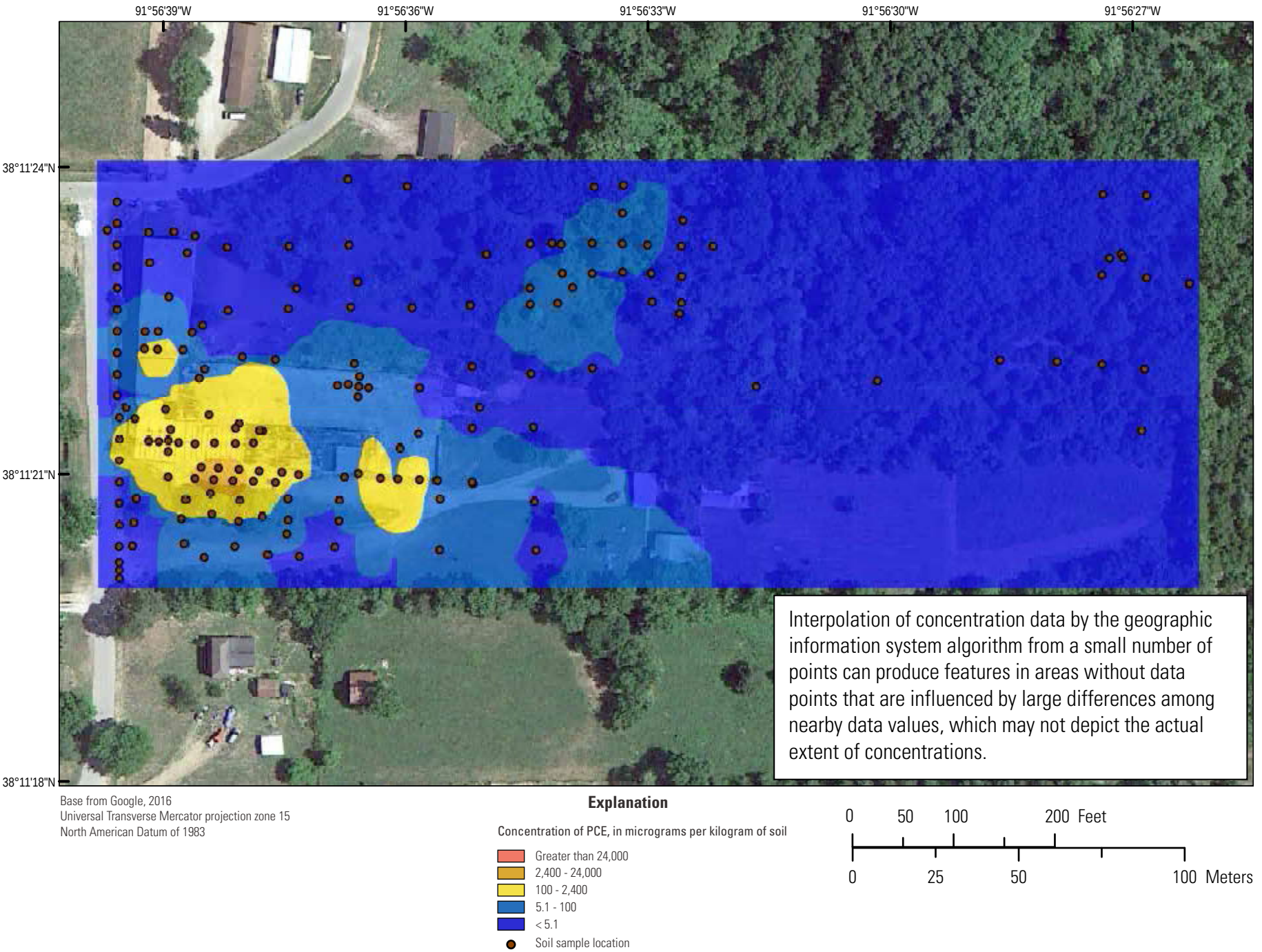


Figure I-12. Tetrachloroethene (PCE) concentration between 2 and 4 feet below ground surface, Vienna, Missouri.

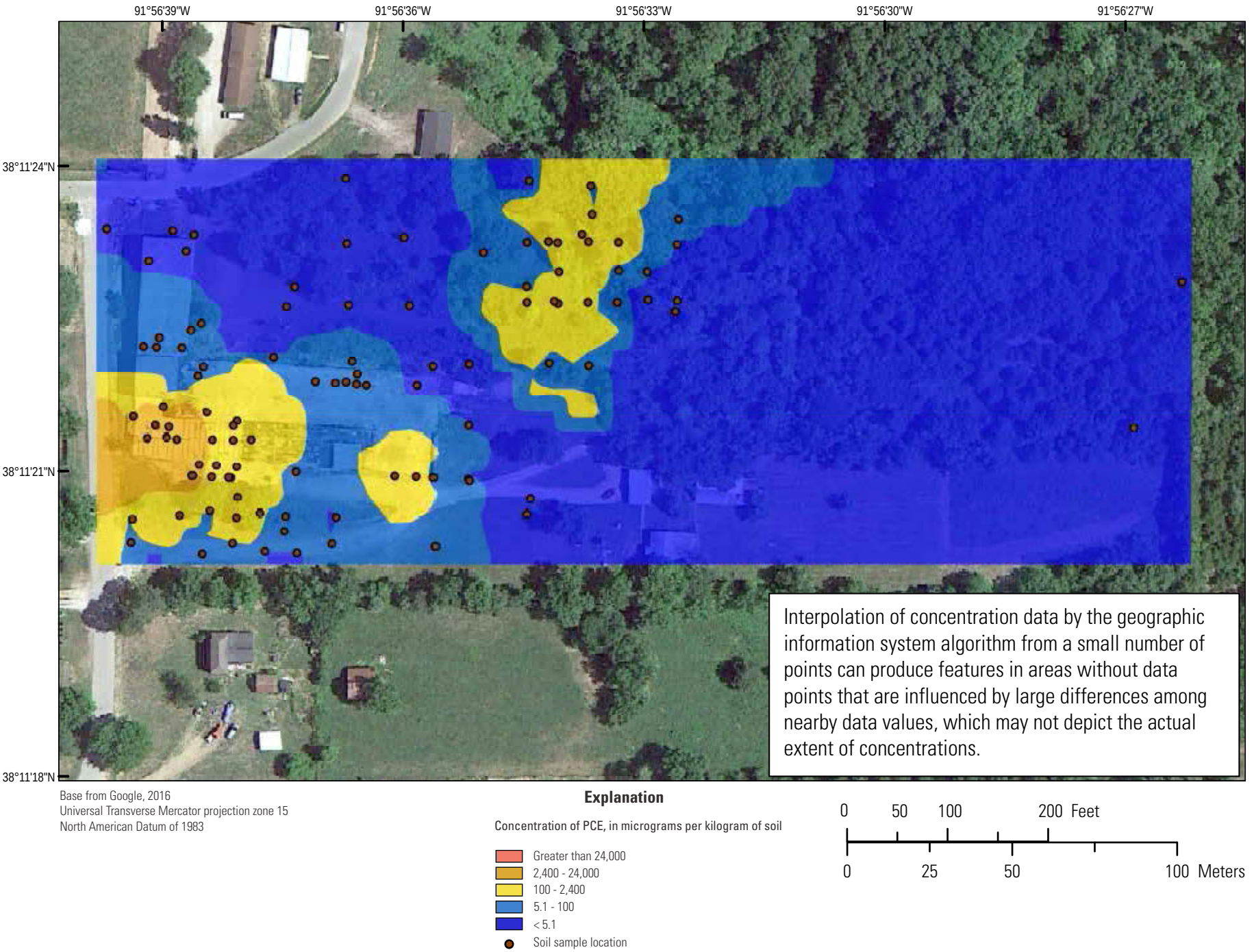


Figure I-13. Tetrachloroethene (PCE) concentration between 4 and 6 feet below ground surface, Vienna, Missouri.

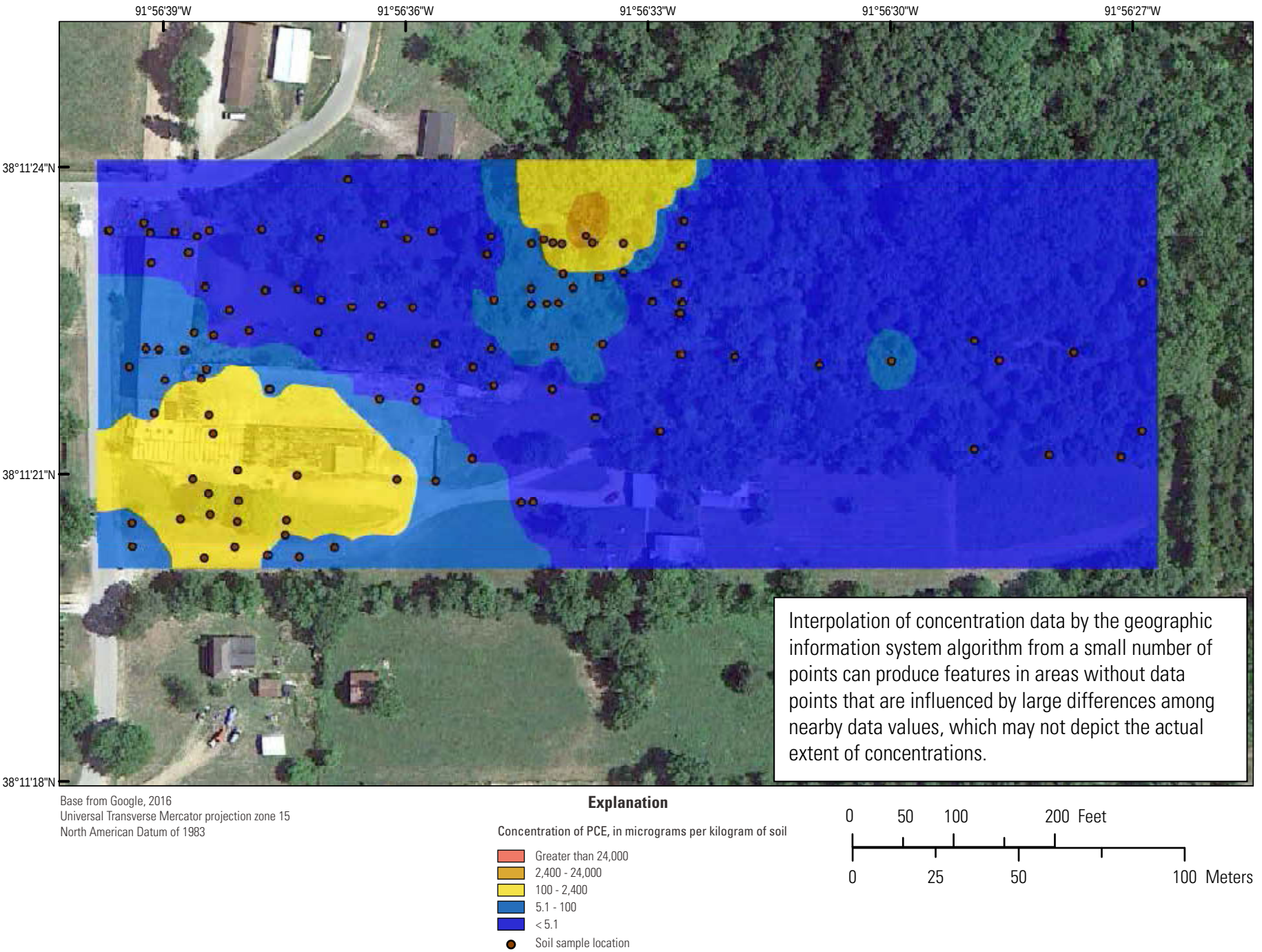


Figure I-14. Tetrachloroethene (PCE) concentration between 6 and 8 feet below ground surface, Vienna, Missouri.

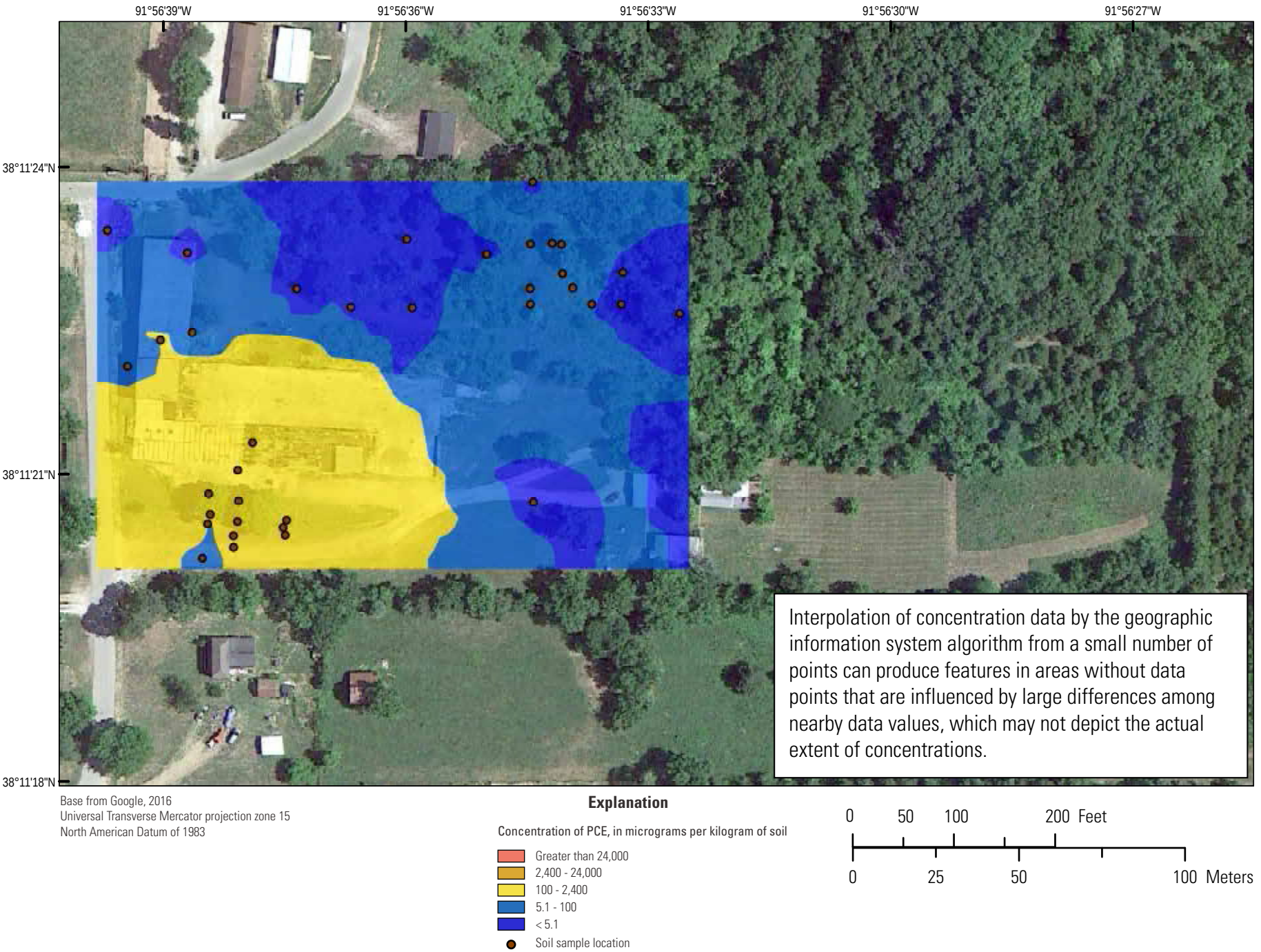


Figure I-15. Tetrachloroethene (PCE) concentration between 8 and 10 feet below ground surface, Vienna, Missouri.

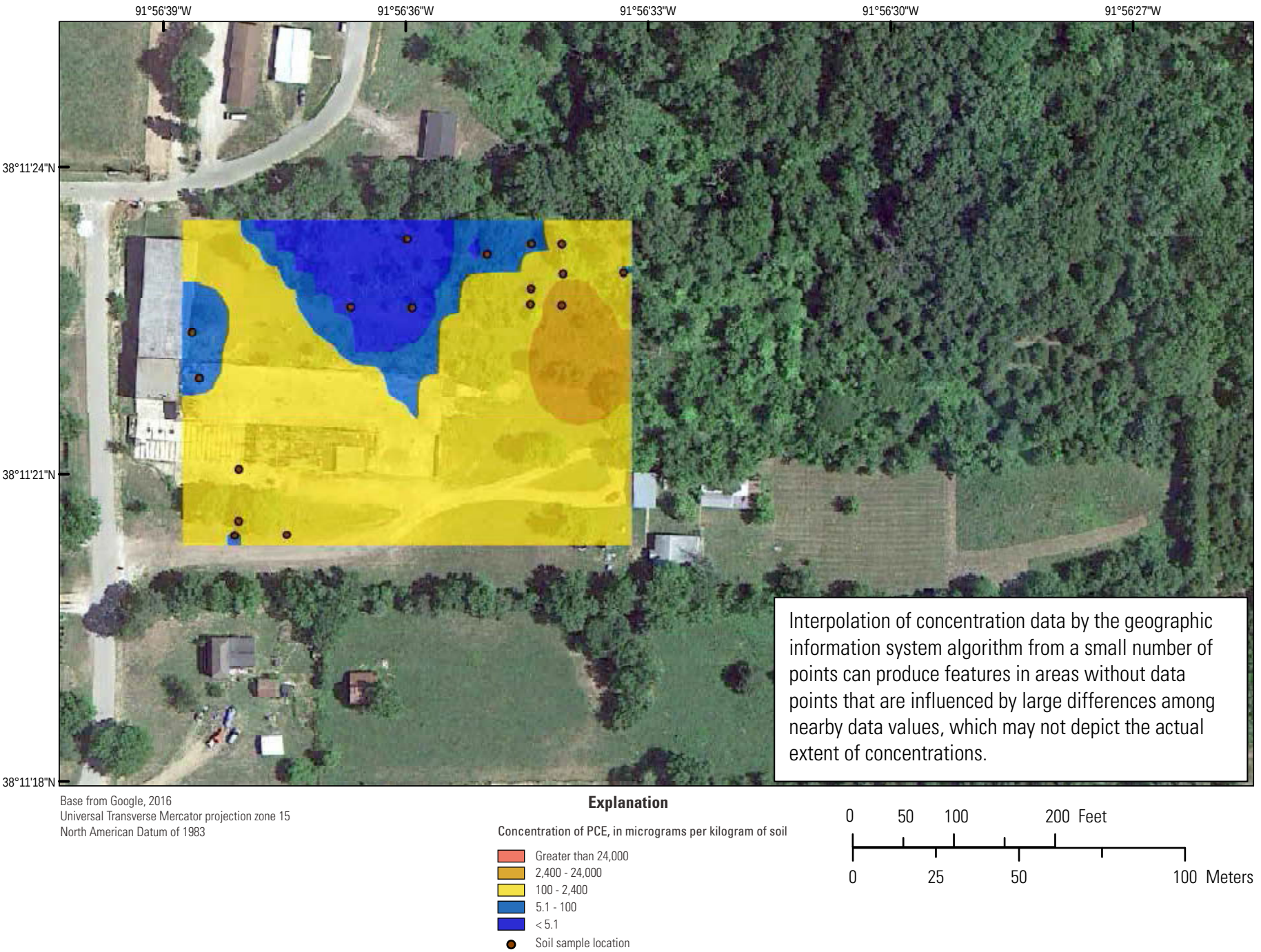


Figure I-16. Tetrachloroethene (PCE) concentration between 10 and 12 feet below ground surface, Vienna, Missouri.

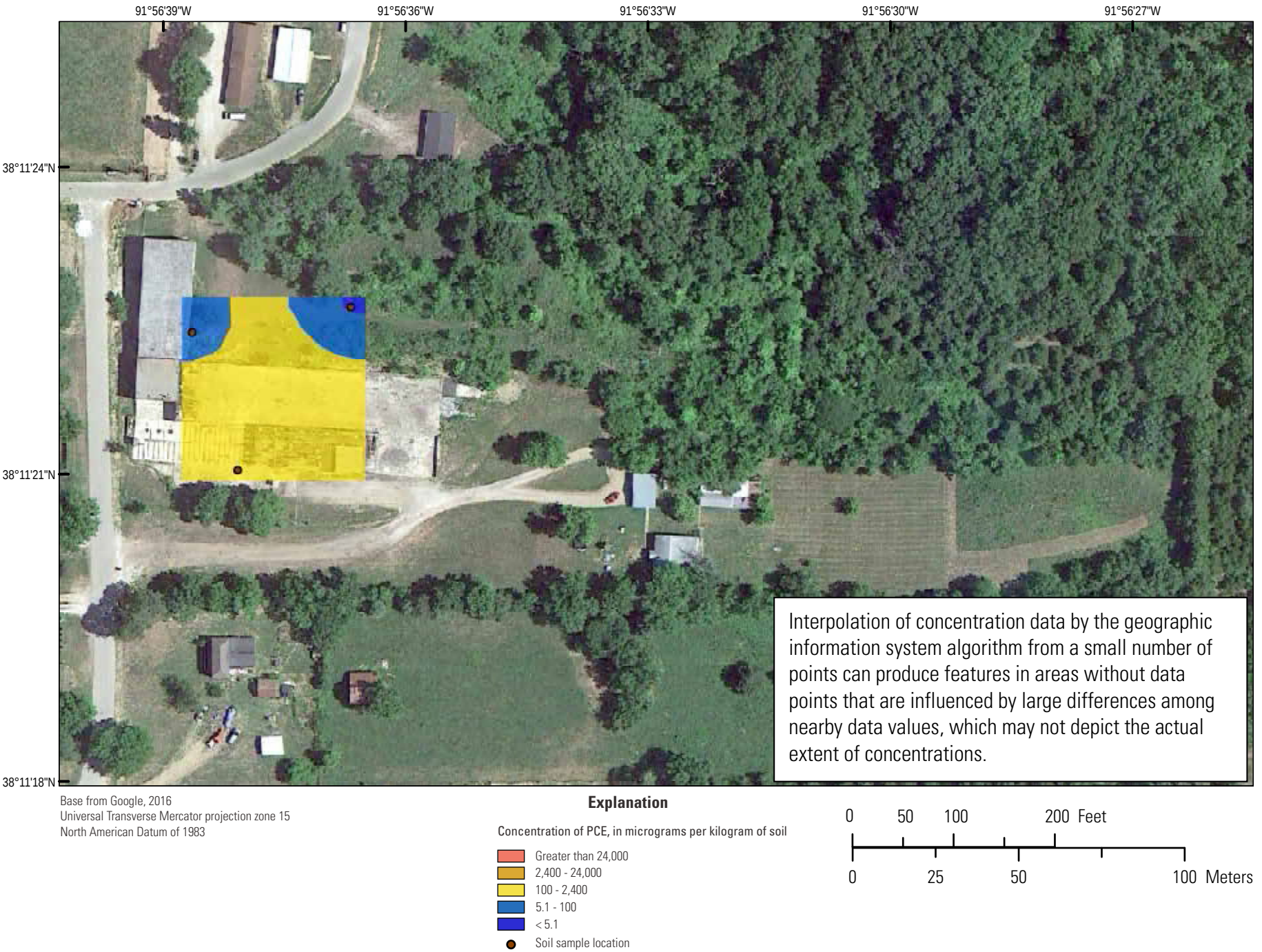


Figure I-17. Tetrachloroethene (PCE) concentration between 12 and 14 feet below ground surface, Vienna, Missouri.

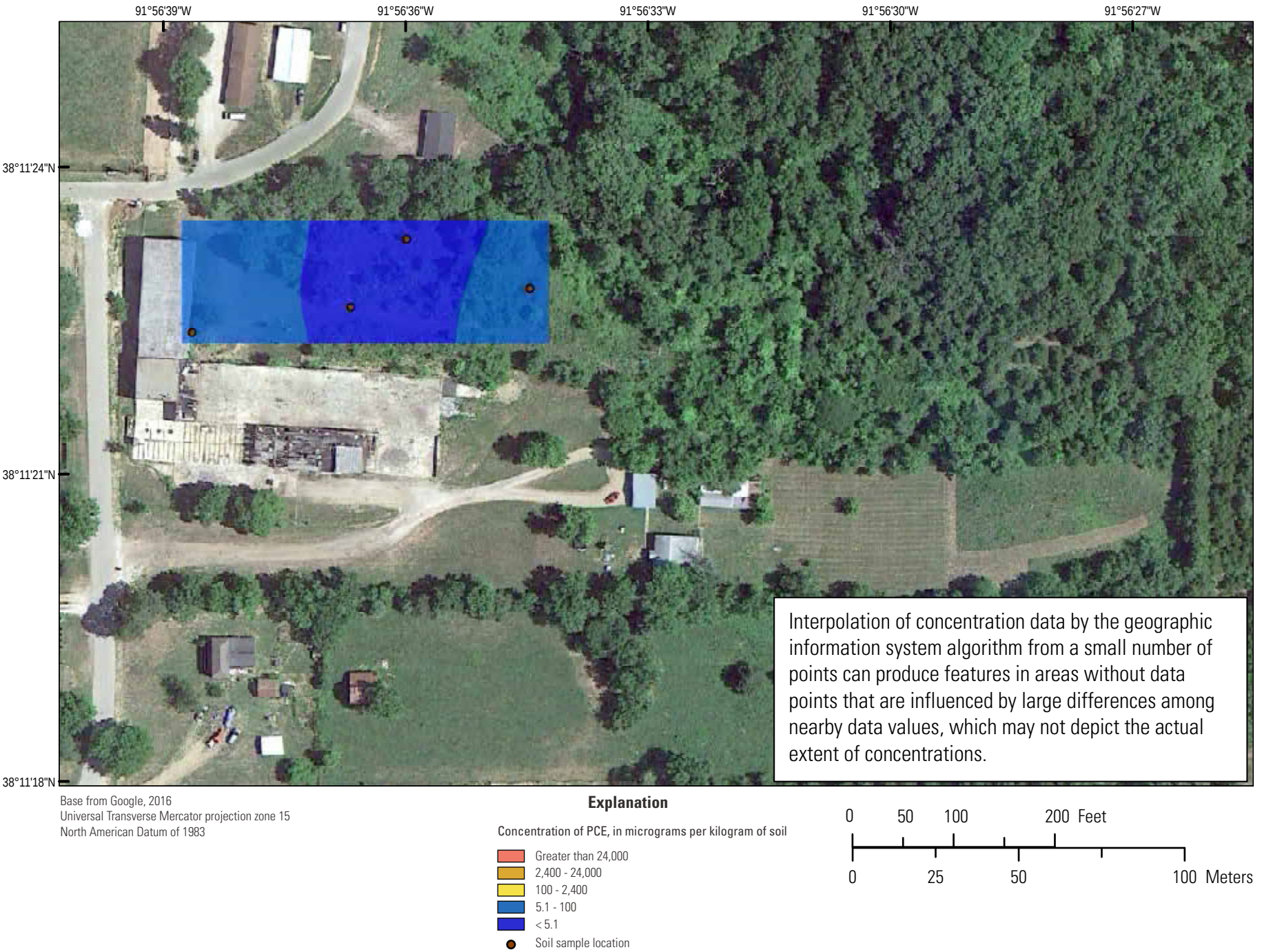


Figure I-18. Tetrachloroethene (PCE) concentration between 14 and 16 feet below ground surface, Vienna, Missouri.

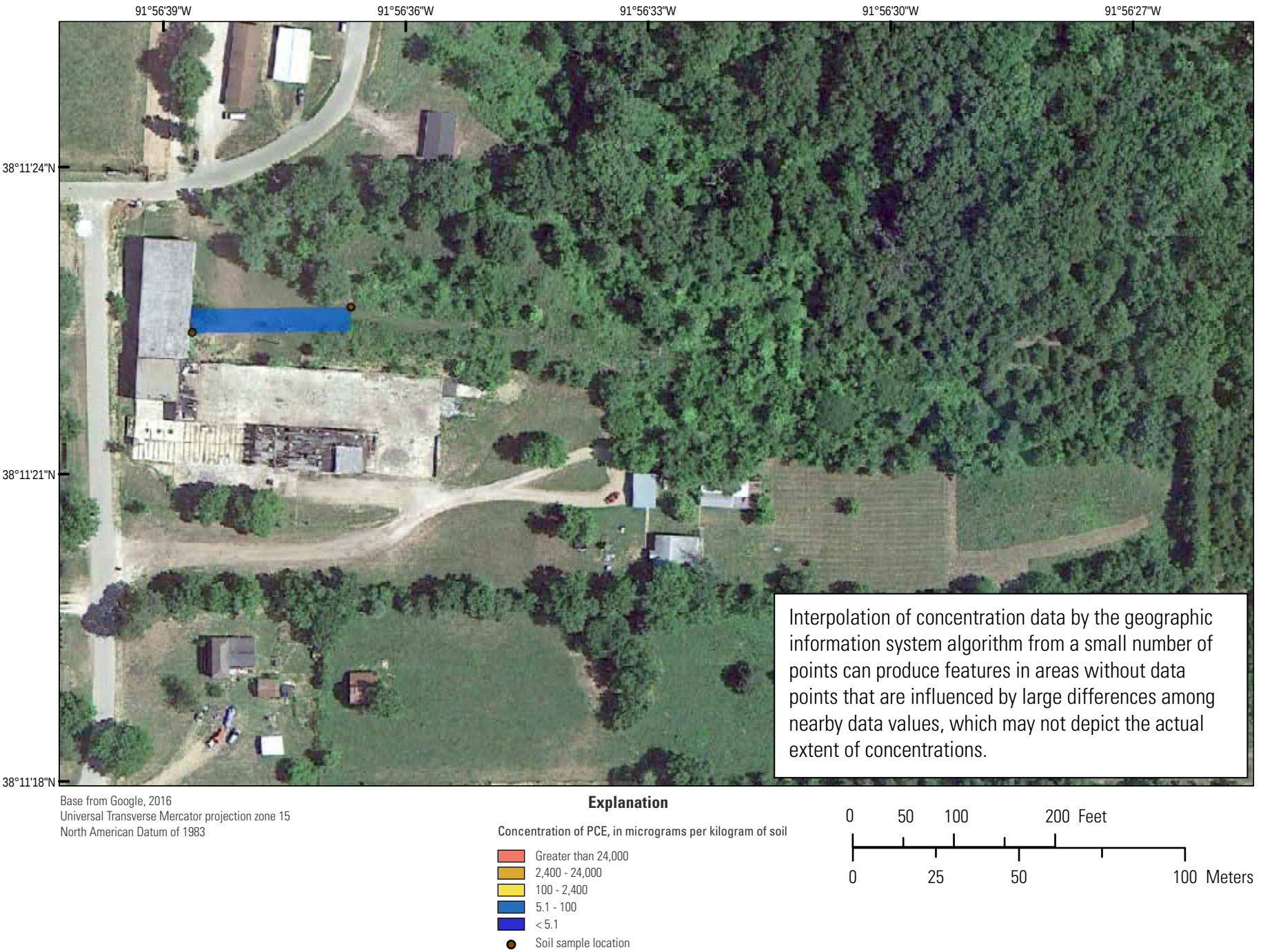


Figure I-19. Tetrachloroethene (PCE) concentration between 16 and 18 feet below ground surface, Vienna, Missouri.

Appendix J: Vapor-Intrusion Maps of PCE, TCE, and Benzene

Table J-01. Concentrations of constituents in vapor-intrusion samples collected by the USEPA, Vienna, Missouri, 2014-2015.

[Concentrations of samples are in µg/m^3; USEPA, United States Environmental Protection Agency; PCE, tetrachloroethene; TCE, trichloroethene; U, the analyte was not detected at or above the reporting limit; UJ, the analyte was not detected at or above the reporting limit, and the reporting limit is an estimate; J, the value is based on the addition of measured values as well as the reporting limit, and the true value may be smaller]

Name (fig. J-01)	Location	Date	1,1,2-Trichloroethane	1,2,4-Trimethyl benzene	1,2-Dichloroethane	1,3,5-Trimethyl benzene	2-Hexanone	Benzene	Bromodichloro methane	Carbon Tetrachloride	Chloroform	m and/or p-Xylene	o-Xylene	Total Xylene	PCE	TCE
VIN-VI-8	Field Blank	07/09/2014	0.23 U	2.46	0.19 U	2.46 U	2.05 U	0.31 U	3.35 U	0.41 U	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-FB-02	Field Blank	10/23/2014	0.41 UJ	1.1	0.85 U	1 U	0.8 U	0.68 U	1.3 U	1.3 U	1 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-1	Crawl space	04/01/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.31 U	3.35 U	0.41 U	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-1	Crawl space	07/08/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.31 U	3.35 U	0.566	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-1	Crawl space	10/22/2014	0.41 UJ	1.1 U	0.85 U	1.0 U	0.8 U	0.68 U	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-1	Crawl space	01/13/2015	1.2 U	1.1 U	0.85 U	1.0 U	0.8 U	1.7	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-1	Indoor air	04/01/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.894	3.35 U	0.41 U	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-1	Indoor air	07/08/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.31 U	3.35 U	0.41 U	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-1	Indoor air	10/22/2014	0.41 UJ	1.1 U	0.85 U	1.0 U	0.8 U	0.68 U	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-1	Indoor air	01/13/2015	1.2 U	3.0	0.85 U	1.0 U	0.8 U	3.7	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-1	Well grab	04/02/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.31 U	3.35 U	0.41 U	2.44 U	4.34 U	2.17 U	6.51 U	1490.0	3.17
VIN-VI-2	Crawl space	04/01/2014	0.273	2.46 U	0.607	2.46 U	2.05 U	0.575	3.35 U	0.755	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.537
VIN-VI-2	Crawl space	07/08/2014	0.23 U	2.46 U	1.78	2.46 U	2.05 U	0.511	3.35 U	0.41 U	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.537
VIN-VI-2	Crawl space	10/21/2014	0.41 UJ	1.1 U	1.7	1.0 U	0.8 U	1.0	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-2	Crawl space	01/13/2015	1.2 U	1.1 U	0.85 U	1.0 U	0.8 U	0.68 U	1.3 U	1.3 U	1.0 U	2.7	1.1	3.8	1.4 U	1.1 U
VIN-VI-2	Indoor air Kitchen	04/01/2014	0.23 U	2.46 U	1.01	2.46 U	2.05 U	0.511	3.35 U	0.629	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.752
VIN-VI-2	Indoor air Kitchen	07/08/2014	0.23 U	2.46 U	3.36	2.46 U	2.05 U	0.894	3.35 U	0.44	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.967
VIN-VI-2	Indoor air Kitchen	10/21/2014	0.41 UJ	1.1 U	4.1	1.0 U	0.8 U	1.4	1.3 U	1.3 U	1.0 U	2.6	0.94 U	3.54 J	1.4 U	1.1 U
VIN-VI-2	Indoor air Kitchen	01/13/2015	1.2 U	1.1 U	0.96	1.0 U	0.8 U	1.1	1.3 U	1.3 U	1.0 U	5.7	2.4	8.1	1.4 U	1.1 U
VIN-VI-2	Indoor air Living Room	04/01/2014	0.23 U	2.46 U	1.46	2.46 U	2.05 U	0.543	3.35 U	0.629	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.752
VIN-VI-2	Indoor air Living Room	07/08/2014	0.23 U	2.46 U	3.76	2.46 U	2.05 U	0.798	3.35 U	0.44	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.967
VIN-VI-2	Indoor air Living Room	10/21/2014	0.41 UJ	1.1 U	6.2	1.0 U	0.8 U	1.4	1.3 U	1.3 U	1.0 U	2.6	0.94 U	3.54 J	1.4 U	1.1 U
VIN-VI-2	Indoor air Living Room	01/13/2015	1.2 U	1.1 U	1.7	1.0 U	0.8 U	1.2	1.3 U	1.3 U	1.0 U	5.8	2.6	8.4	1.4 U	1.1 U
VIN-VI-3	Indoor air	04/01/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.99	3.35 U	0.41 U	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-3	Indoor air	07/09/2014	0.23 U	4.32	0.971	2.46 U	2.05 U	0.766	3.35 U	0.629	2.44 U	5.56	2.17 U	7.73 J	0.41 U	0.43 U
VIN-VI-3	Indoor air	10/21/2014	0.41 UJ	3.6	0.85 U	1.0 U	1.2	2.5	1.3 U	1.3 U	1.0 U	9.4	3.2	12.6	1.4 U	1.1 U
VIN-VI-3	Indoor air	01/13/2015	1.2 U	1.8	0.85 U	1.0 U	0.8 U	2.0	1.3 U	1.3 U	1.0 U	4.9	1.6	6.5	1.4 U	1.1 U
VIN-VI-3	Subslab	04/01/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.31 U	3.35 U	0.41 U	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-3	Subslab	07/09/2014	0.327	2.46 U	0.19 U	2.46 U	2.05 U	0.31 U	3.35 U	0.566	2.44 U	4.34 U	2.17 U	6.51 U	0.61	0.43 U
VIN-VI-3	Subslab	10/21/2014	0.41 UJ	1.1 U	0.85 U	1.0 U	0.8 U	0.68 U	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-3	Subslab	01/13/2015	1.2 U	1.1 U	0.85 U	1.0 U	0.8 U	0.68 U	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-4	Indoor air	04/01/2014	0.327	2.46 U	1.9	2.46 U	2.05 U	0.607	3.35 U	1.13	2.44 U	4.34 U	2.17 U	6.51 U	0.475	0.43 U
VIN-VI-4	Indoor air	07/08/2014	0.23 U	2.46 U	7.73	2.46 U	2.05 U	0.383	3.35 U	0.44	2.44 U	4.34 U	2.17 U	6.51 U	5.56	0.43 U
VIN-VI-4	Indoor air	10/21/2014	0.41 UJ	1.1 U	8.9	1.0 U	0.8 U	1.3	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	2.1	1.1 U
VIN-VI-4	Indoor air	01/14/2015	1.2 U	1.1 U	2.7	1.0 U	0.8 U	1.0	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-4	Subslab	04/01/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.31 U	3.35 U	0.41 U	2.44 U	4.34 U	2.17 U	6.51 U	0.881	0.43 U
VIN-VI-4	Subslab	07/08/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.31 U	3.35 U	0.41 U	2.44 U	4.34 U	2.17 U	6.51 U	4.0	0.43 U
VIN-VI-4	Subslab	10/21/2014	0.41 UJ	1.1 U	0.85 U	1.0 U	0.8 U	0.68 U	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	4.8	1.1 U
VIN-VI-4	Subslab	01/14/2015	1.2 U	1.1 U	0.85 U	1.0 U	0.8 U	0.68 U	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	1.6	1.1 U
VIN-VI-5	Crawl space	04/01/2014	0.23 U	3.73	0.19 U	2.46 U	2.05 U	1.18	3.35 U	0.41 U	2.44 U	9.94	3.39	13.33	0.41 U	0.43 U
VIN-VI-5	Crawl space	07/08/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.415	3.35 U	0.503	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-5	Crawl space	10/21/2014	0.41 UJ	1.5	0.85 U	1.0 U	0.8 U	0.68 U	1.3 U	1.3 U	1.0 U	5.1	2.1	7.2	9.7	1.1 U
VIN-VI-5	Crawl space	01/13/2015	1.2 U	2.7	0.85 U	1.0 U	1.1	1.6	1.3 U	1.3 U	1.0 U	7.0	2.7	9.7	1.4 U	1.1 U
VIN-VI-5	Indoor air	04/01/2014	0.23 U	2.46 U	0.364	2.46 U	2.05 U	1.53	3.35 U	0.41 U	2.44 U	6.42	2.17 U	8.59 J	0.41 U	0.43 U
VIN-VI-5	Indoor air	07/08/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.351	3.35 U	0.692	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-5	Indoor air	10/21/2014	0.41 UJ	1.3	5.6	1.0 U	0.8 U	0.68 U	1.3 U	1.3 U	1.0 U	4.3	1.8	6.1	1.4 U	1.1 U
VIN-VI-5	Indoor air	01/13/2015	1.2 U	4.4	10.0	1.4	1.2	2.0	1.3 U	1.3 U	1.0 U	11.0	4.1	15.1	1.4 U	1.1 U
VIN-VI-6	Crawl space	04/01/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.447	3.35 U	0.41 U	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-6	Crawl space	07/08/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.511	3.35 U	0.44	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U

Table J-01. Concentrations of constituents in vapor-intrusion samples collected by the USEPA, Vienna, Missouri, 2014-2015.—Continued

[Concentrations of samples are in µg/m3; USEPA, United States Environmental Protection Agency; PCE, tetrachloroethene; TCE, trichloroethene; U, the analyte was not detected at or above the reporting limit; UJ, the analyte was not detected at or above the reporting limit, and the reporting limit is an estimate; J, the value is based on the addition of measured values as well as the reporting limit, and the true value may be smaller]

Name (fig. J-01)	Location	Date	1,1,2-Trichloroethane	1,2,4-Trimethyl benzene	1,2-Dichloroethane	1,3,5-Trimethyl benzene	2-Hexanone	Benzene	Bromodichloro methane	Carbon Tetrachloride	Chloroform	m and/or p-Xylene	o-Xylene	Total Xylene	PCE	TCE
VIN-VI-6	Crawl space	10/21/2014	0.41 UJ	1.1 U	0.85 U	1.0 U	0.8 U	0.68 U	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-6	Crawl space	01/13/2015	1.2 U	1.1 U	0.85 U	1.0 U	0.8 U	0.94	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-6	Indoor air	04/01/2014	0.23 U	3.29	0.688	2.46 U	2.05 U	3.83	3.35 U	0.44	2.44 U	9.68	2.95	12.63	0.41 U	0.43 U
VIN-VI-6	Indoor air	07/08/2014	0.23 U	15.7	2.91	4.13	2.05 U	6.23	3.35 U	0.44	2.44 U	43.3	14.8	58.1	0.41 U	0.43 U
VIN-VI-6	Indoor air	10/21/2014	0.41 UJ	7.2	2.8	2.0	1.7	3.8	1.3 U	1.3 U	1.0 U	27.0	10.0	37.0	1.4 U	1.1 U
VIN-VI-6	Indoor air	01/13/2015	1.2 U	3.2	0.85 U	1.0 U	0.8 U	1.8	1.3 U	1.3 U	1.0 U	8.3	3.0	11.3	1.4 U	1.1 U
VIN-VI-7	Indoor air	04/01/2014	0.23 U	2.46 U	3.6	2.46 U	2.05 U	0.798	3.35 U	0.44	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-7	Indoor air	07/08/2014	0.23 U	3.98	6.55	2.46 U	2.05 U	2.08	3.35 U	0.44	2.44 U	6.94	2.39	9.33	0.41 U	0.43 U
VIN-VI-7	Indoor air	10/21/2014	0.41 UJ	3.6	12.0	1.0 U	1.4	3.6	1.3 U	1.3 U	1.0 U	9.3	3.4	12.7	1.4 U	1.1 U
VIN-VI-7	Indoor air	01/13/2015	1.2 U	2.9	3.1	1.0 U	0.8 U	1.9	1.3 U	1.3 U	1.0 U	4.8	1.8	6.6	1.4 U	1.1 U
VIN-VI-7	Indoor Air Rec Area	01/13/2015	1.2 U	3.0	1.9	1.0 U	0.8 U	1.8	1.3 U	1.3 U	1.0 U	4.2	1.5	5.7	1.4 U	1.1 U
VIN-VI-8	Indoor air	04/01/2014	0.23 U	2.46 U	0.485	2.46 U	2.05 U	0.415	3.35 U	0.692	15.6	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-8	Indoor air	04/01/2014	0.23 U	2.46	0.526	2.46 U	2.05 U	0.415	3.35 U	0.692	14.5	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-8	Indoor air	07/09/2014	0.23 U	2.46 U	0.971	2.46 U	2.05 U	0.415	3.35 U	4.28	10.5	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-8	Indoor air	07/09/2014	0.23 U	2.46	0.85	2.46 U	2.05 U	0.415	3.35 U	3.58	8.79	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-8	Indoor air	10/21/2014	0.41 UJ	1.1 U	1.8	1.0 U	0.8 U	0.74	1.8	1.3 U	110.0	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-8	Indoor air	01/13/2015	1.2 U	1.1 U	0.85 U	1.0 U	0.8 U	1.6	1.3 U	1.3 U	5.3	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-8	Subslab	04/01/2014	0.23 U	2.46 U	0.243	2.46 U	2.05 U	0.31 U	3.35 U	0.44	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-8	Subslab	04/01/2014	0.273	2.46	0.243	2.46 U	2.05 U	0.351	3.35 U	0.44	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-8	Subslab	07/09/2014	0.23 U	2.6	0.19 U	2.46 U	2.05 U	0.31 U	3.35 U	0.41 U	2.44 U	4.34 U	2.17 U	6.51 U	0.746	0.43 U
VIN-VI-8	Subslab	07/09/2014	0.23 U	2.46	0.19 U	2.46 U	2.05 U	0.31 U	3.35 U	0.41 U	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-8	Subslab	10/21/2014	0.41 UJ	1.1 U	0.85 U	1.0 U	0.8 U	0.68 U	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-8	Subslab	01/13/2015	1.2 U	1.1 U	0.85 U	1.0 U	0.8 U	0.68 U	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-9	Indoor air	01/13/2015	1.2 U	1.1	0.85 U	1 U	0.8 U	1.2	1.3 U	1.3 U	1 U	2.3	0.94 U	3.24	1.4 U	1.1 U
VIN-VI-9	Indoor air Basement	04/01/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.31 U	3.35 U	0.44	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-9	Indoor air Basement	07/08/2014	0.23 U	3.88	0.19 U	2.46 U	2.05 U	0.31 U	3.35 U	0.41 U	2.44 U	13.1	4.82	17.92	0.41 U	0.43 U
VIN-VI-9	Indoor air Basement	10/21/2014	0.41 UJ	1.9	0.85 U	1.0 U	0.8 U	0.68 U	1.3 U	1.3 U	1.0 U	8.2	3.2	11.4	1.4 U	1.1 U
VIN-VI-9	Indoor air Basement	01/13/2015	1.2 U	1.1 U	0.85 U	1.0 U	0.8 U	1.2	1.3 U	1.3 U	1.0 U	2.3	0.94 U	3.24 J	1.4 U	1.1 U
VIN-VI-9	Indoor air first floor	04/01/2014	0.23 U	17.1	0.324	4.86	2.05 U	13.1	3.35 U	0.566	2.44 U	65.3	20.4	85.7	0.41 U	0.43 U
VIN-VI-9	Indoor air first floor	07/08/2014	0.23 U	65.3	1.25	16.3	2.05 U	17.8	3.35 U	0.44	2.44 U	123.0	46.0	169.0	0.41 U	0.43 U
VIN-VI-9	Indoor air first floor	10/21/2014	0.41 UJ	49.0	0.95	15.0	5.6	24.0	1.3 U	1.3 U	1.0 U	130.0	53.0	183.0	1.4 U	1.1 U
VIN-VI-9	Indoor air first floor	01/13/2015	1.2 U	18.0	0.85 U	5.2	3.4	13.0	1.5	1.3 U	1.0 U	71.0	23.0	94.0	1.4 U	1.1 U
VIN-VI-9	Subslab	01/13/2015	1.2 U	1.1	0.85 U	1 U	0.8 U	0.68 U	1.3 U	1.3 U	1 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-9	Subslab Basement	04/01/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.31 U	3.35 U	0.41 U	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-9	Subslab Basement	07/08/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.31 U	3.35 U	0.41 U	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-9	Subslab Basement	10/21/2014	0.41 UJ	1.1 U	0.85 U	1.0 U	0.8 U	0.81	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-9	Subslab Basement	01/13/2015	1.2 U	1.1 U	0.85 U	1.0 U	0.8 U	0.68 U	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-9	Subslab first floor	04/01/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.31 U	3.35 U	0.41 U	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-9	Subslab first floor	07/08/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.319	3.35 U	0.41 U	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-9	Subslab first floor	10/21/2014	0.41 UJ	1.1 U	0.85 U	1.0 U	0.8 U	0.68 U	1.3 U	1.3 U	1.0 U	2.3	0.94 U	3.24 J	1.4 U	1.1 U
VIN-VI-9	Subslab first floor	01/13/2015	1.2 U	1.1 U	0.85 U	1.0 U	0.8 U	0.68 U	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-10	Crawl space	04/01/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.31 U	3.35 U	0.41 U	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-10	Crawl space	07/09/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.31 U	3.35 U	0.41 U	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-10	Crawl space	10/21/2014	0.41 UJ	1.1 U	0.85 U	1.0 U	0.8 U	0.68 U	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-10	Crawl space	01/13/2015	1.2 U	1.1 U	0.85 U	1.0 U	0.8 U	0.93	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-10	Indoor air	04/01/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.31 U	3.35 U	0.44	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-10	Indoor air	07/09/2014	0.327	2.46 U	0.19 U	2.46 U	2.05 U	0.31 U	3.35 U	0.566	2.44 U	4.34 U	2.17 U	6.51 U	0.475	0.43 U
VIN-VI-10	Indoor air	10/21/2014	0.41 UJ	1.1 U	0.85 U	1.0 U	0.8 U	1.7	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-10	Indoor air	01/13/2015	1.2 U	1.1 U	0.85 U	1.0 U	0.8 U	0.87	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U

Table J-01. Concentrations of constituents in vapor-intrusion samples collected by the USEPA, Vienna, Missouri, 2014-2015.—Continued

[Concentrations of samples are in µg/m3; USEPA, United States Environmental Protection Agency; PCE, tetrachloroethene; TCE, trichloroethene; U, the analyte was not detected at or above the reporting limit; UJ, the analyte was not detected at or above the reporting limit, and the reporting limit is an estimate; J, the value is based on the addition of measured values as well as the reporting limit, and the true value may be smaller]

Name (fig. J-01)	Location	Date	1,1,2-Trichloroethane	1,2,4-Trimethyl benzene	1,2-Dichloroethane	1,3,5-Trimethyl benzene	2-Hexanone	Benzene	Bromodichloro methane	Carbon Tetrachloride	Chloroform	m and/or p-Xylene	o-Xylene	Total Xylene	PCE	TCE
VIN-VI-11	Crawl space	04/01/2014	1.25	2.46 U	1.13	2.46 U	2.05 U	1.02	3.35 U	2.33	2.44 U	4.34 U	2.17 U	6.51 U	1.76	1.45
VIN-VI-11	Crawl space	10/21/2014	0.41 UJ	1.1 U	0.85 U	1.0 U	0.8 U	0.68 U	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-11	Crawl space	01/13/2015	1.2 U	1.1 U	0.85 U	1.0 U	0.8 U	1.0	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-11	Indoor air	04/01/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.31 U	3.35 U	0.41 U	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-11	Indoor air	07/09/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.31 U	3.35 U	0.629	2.44 U	4.34 U	2.17 U	6.51 U	0.949	0.43 U
VIN-VI-11	Indoor air	10/21/2014	0.41 UJ	1.1 U	0.85 U	1.0 U	0.8 U	0.68 U	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-11	Indoor air	01/13/2015	1.2 U	1.1 U	0.85 U	1.0 U	0.8 U	1.0	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-12	Indoor air	04/01/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.31 U	3.35 U	0.41 U	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-12	Indoor air	07/08/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.31 U	3.35 U	0.44	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-12	Indoor air	10/21/2014	0.41 UJ	1.2	0.85 U	1.0 U	0.8 U	0.74	1.3 U	1.3 U	1.0 U	6.1	2.1	8.2	1.4 U	1.1 U
VIN-VI-12	Indoor air	10/21/2014	0.41 UJ	1.1	0.85 U	1 U	0.8 U	0.7	1.3 U	1.3 U	1 U	5.6	2	7.6	1.4 U	1.1 U
VIN-VI-12	Subslab	04/01/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.31 U	3.35 U	0.41 U	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-12	Subslab	07/08/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.31 U	3.35 U	0.44	2.44 U	4.34 U	2.17 U	6.51 U	1.63	0.43 U
VIN-VI-12	Subslab	10/21/2014	0.41 UJ	1.1 U	0.85 U	1.0 U	0.8 U	1.9	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-12	Subslab	10/21/2014	0.41 UJ	1.1	0.85 U	1 U	0.8 U	0.68 U	1.3 U	1.3 U	1 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-13	Crawl space	04/01/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.543	3.35 U	0.41 U	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-13	Crawl space	07/08/2014	0.23 U	2.46 U	0.364	2.46 U	2.05 U	1.15	3.35 U	0.41 U	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-13	Crawl space	10/21/2014	0.41 UJ	1.1 U	0.85 U	1.0 U	0.8 U	0.68 U	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-13	Crawl space	01/14/2015	1.2 U	1.1 U	0.85 U	1.0 U	0.8 U	0.83	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-13	Indoor air	04/01/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	1.15	3.35 U	0.503	2.64	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-13	Indoor air	07/08/2014	0.23 U	2.46 U	1.01	2.46 U	2.05 U	3.29	3.35 U	0.566	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-13	Indoor air	10/21/2014	0.41 UJ	1.6	0.85 U	1.0 U	1.0	2.4	1.3 U	1.3 U	1.2	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-13	Indoor air	01/14/2015	1.2 U	1.1 U	0.85 U	1.0 U	0.8 U	1.9	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-14	Crawl space	04/01/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.319	3.35 U	0.41 U	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-14	Crawl space	07/09/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.511	3.35 U	0.566	2.44 U	7.38	2.95	10.33	0.41 U	0.43 U
VIN-VI-14	Crawl space	10/21/2014	0.41 UJ	1.1 U	0.85 U	1.0 U	0.8 U	0.68 U	1.3 U	1.3 U	1.0 U	2.9	1.0	3.9	1.4 U	1.1 U
VIN-VI-14	Crawl space	01/13/2015	1.2 U	9.5	0.85 U	2.6	1.8	8.6	1.3 U	1.3 U	1.0 U	37.0	11.0	48.0	1.4 U	1.1 U
VIN-VI-14	Indoor air	04/01/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.319	3.35 U	0.44	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-14	Indoor air	07/09/2014	0.23 U	3.73	0.19 U	2.46 U	2.05 U	0.479	3.35 U	0.566	2.44 U	15.8	5.38	21.18	0.41 U	0.43 U
VIN-VI-14	Indoor air	10/21/2014	0.41 UJ	1.1 U	0.85 U	1.0 U	2.2	0.68 U	1.3 U	1.3 U	1.0 U	10.0	3.4	13.4	1.4 U	1.1 U
VIN-VI-14	Indoor air	01/13/2015	1.2 U	10.0	0.85 U	2.6	2.4	8.6	1.3 U	1.3 U	1.0 U	40.0	12.0	52.0	1.4 U	1.1 U
VIN-VI-15	Indoor air	04/01/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.31 U	3.35 U	0.41 U	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-15	Indoor air	07/08/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.351	3.35 U	0.503	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-15	Indoor air	10/21/2014	0.41 UJ	1.7	0.85 U	1.0 U	0.8 U	1.5	1.3 U	1.3 U	1.3	3.1	1.4	4.5	3.3	1.1 U
VIN-VI-15	Indoor air	01/13/2015	1.2 U	1.1 U	0.85 U	1.0 U	0.8 U	1.4	1.3 U	1.3 U	1.6	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-16	Crawl space	04/01/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.351	3.35 U	0.41 U	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-16	Crawl space	07/08/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.479	3.35 U	0.566	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-16	Crawl space	10/21/2014	0.41 UJ	1.1 U	0.85 U	1.0 U	0.8 U	0.84	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	2.0	1.1 U
VIN-VI-16	Crawl space	01/13/2015	1.2 U	1.1 U	0.85 U	1.0 U	0.8 U	0.92	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	11.0	1.1 U
VIN-VI-16	Indoor air	04/01/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.383	3.35 U	0.503	2.44 U	4.34 U	2.17 U	6.51 U	0.41 U	0.43 U
VIN-VI-16	Indoor air	07/08/2014	0.23 U	3.49	0.19 U	2.46 U	2.05 U	0.351	3.35 U	0.503	2.44 U	7.6	5.17	12.77	0.41 U	0.43 U
VIN-VI-16	Indoor air	10/21/2014	0.41 UJ	1.1 U	0.85 U	1.0 U	0.8 U	0.68 U	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	12.0	1.1 U
VIN-VI-16	Indoor air	01/13/2015	1.2 U	1.1 U	0.85 U	1.0 U	0.8 U	0.89	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	1.4 U	1.1 U
VIN-VI-17	Indoor air	07/08/2014	0.23 U	57.5	2.02	13.7	2.05 U	15.1	3.35 U	0.503	4.2	74.6	28.5	103.1	3.46	0.43 U
VIN-VI-17	Indoor air	10/22/2014	0.41 UJ	11.0	0.85 U	2.8	0.8 U	6.6	1.3 U	1.3 U	1.0 U	25.0	9.2	34.2	2.6	1.1 U
VIN-VI-17	Indoor air	01/13/2015	1.2 U	12.0	0.85 U	3.0	1.8	8.7	1.3 U	1.3 U	1.0 U	28.0	11.0	39.0	1.4 U	1.1 U
VIN-VI-17	Subslab	07/08/2014	0.23 U	2.46 U	0.19 U	2.46 U	2.05 U	0.31 U	3.35 U	0.41 U	2.44 U	4.34 U	2.17 U	6.51 U	0.678	0.43 U
VIN-VI-17	Subslab	10/22/2014	0.41 UJ	1.1 U	0.85 U	1.0 U	0.8 U	0.68 U	1.3 U	1.3 U	1.0 U	1.9 U	0.94 U	2.84 U	2.7	1.1 U
VIN-VI-17	Subslab	01/13/2015	1.2 U	1.3	0.85 U	1.0 U	0.8 U	0.78	1.3 U	1.3 U	1.0 U	2.8	1.0	3.8	1.4 U	1.1 U

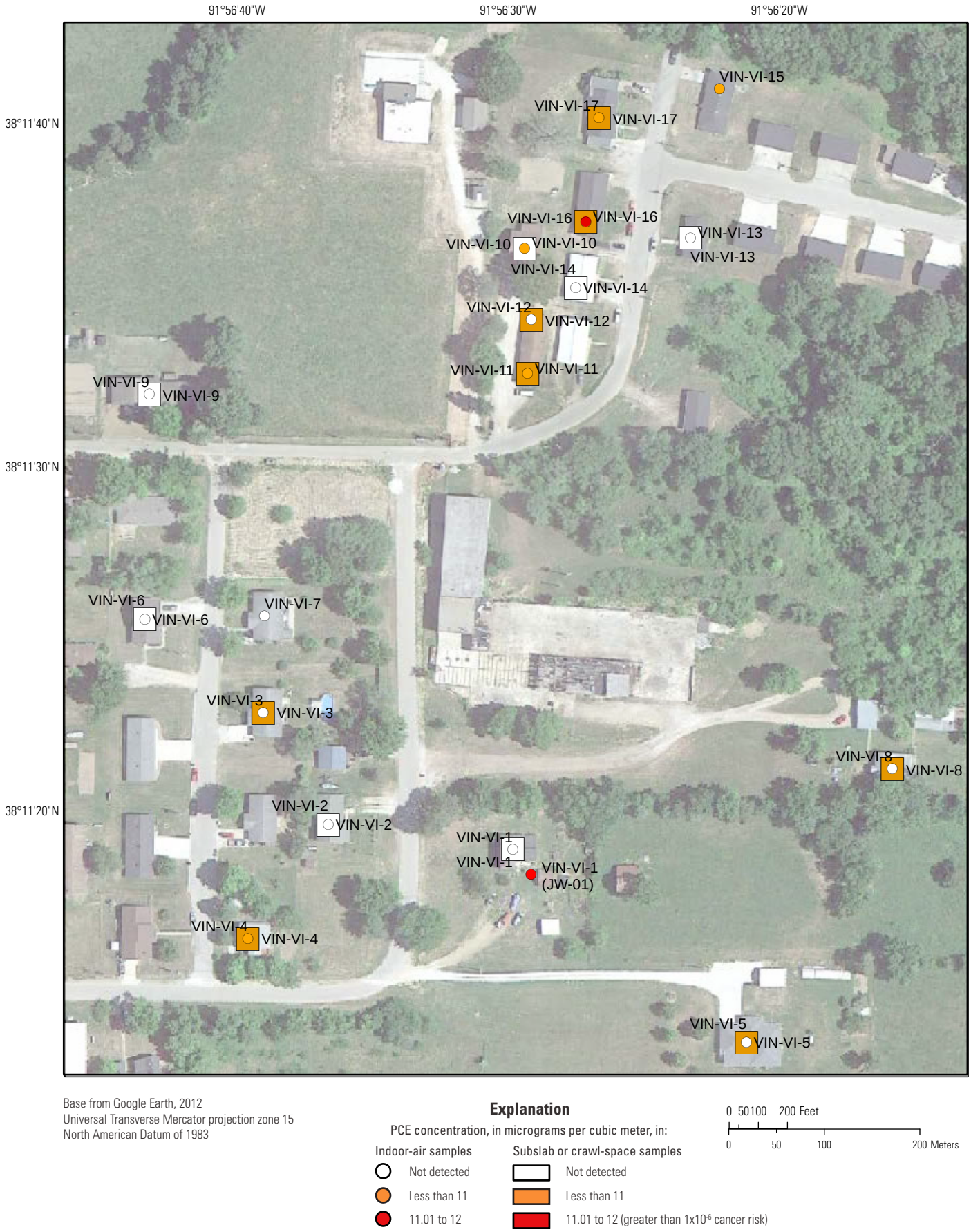


Figure J-01. Maximum concentrations of tetrachloroethene (PCE) concentrations in vapor-intruson samples, Vienna, Missouri.

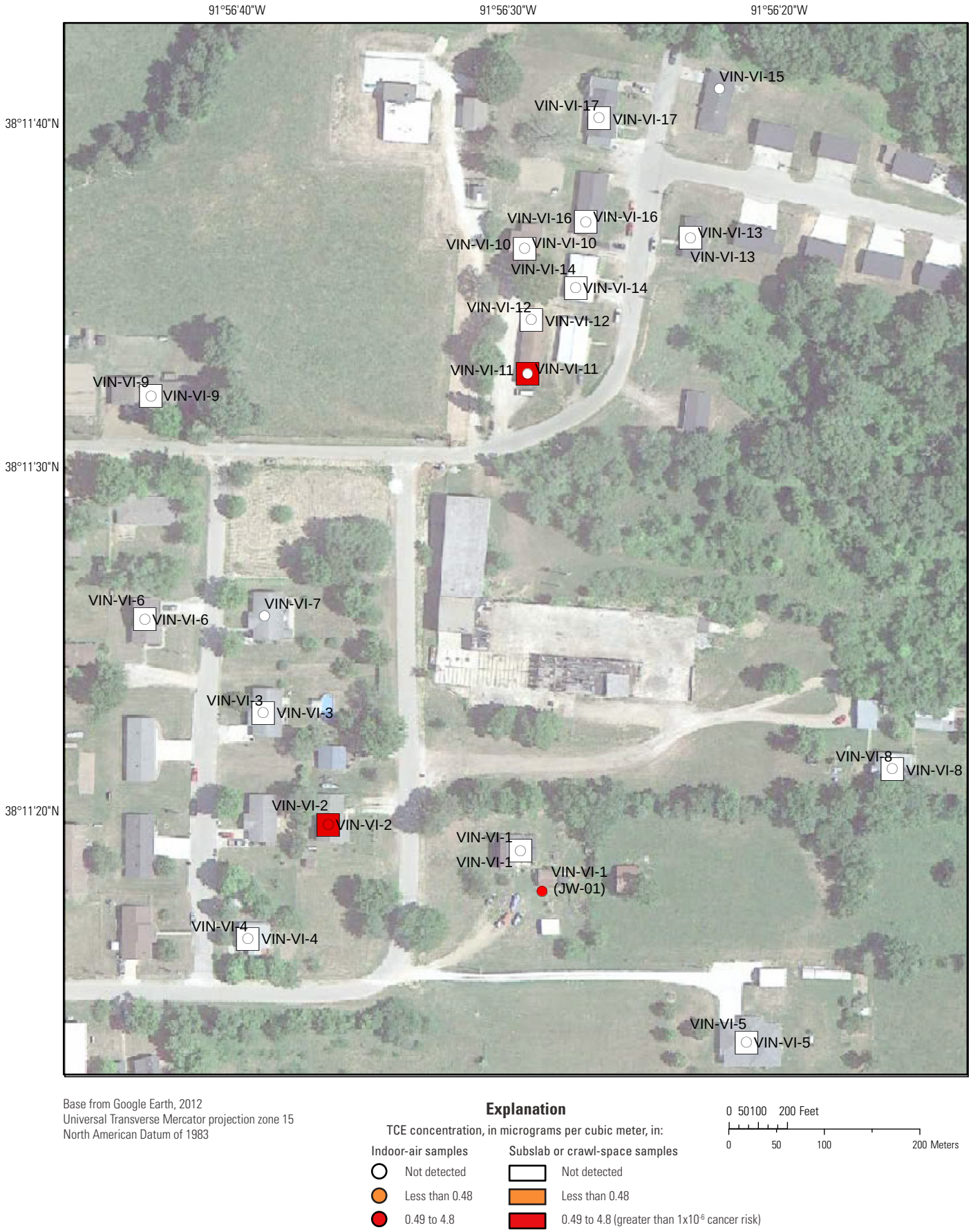


Figure J-02. Maximum concentrations of trichloroethene (TCE) concentrations in vapor-intruson samples, Vienna, Missouri.

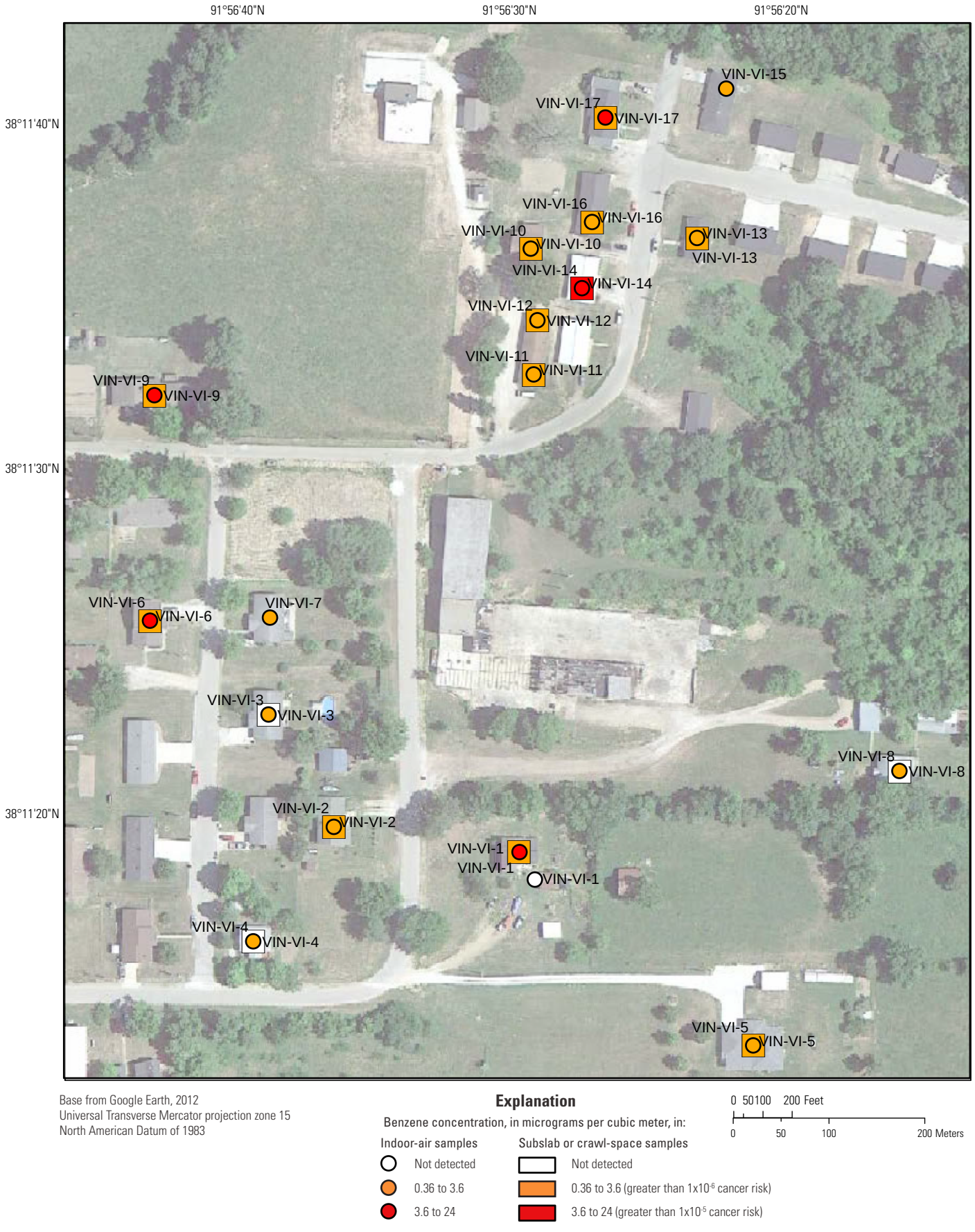


Figure J-03. Maximum concentrations of benzene concentrations in vapor-intruson samples, Vienna, Missouri.

Appendix K: List of Chemical Constituents Analyzed for in Laboratory Methods

Table K-01. List of analytes and analytical methods on the hazardous susbtance list (HSL) for water and soil samples.

[USPEA, U.S. Environmental Protection Agency; USGS, U.S. Geological Survey; VOCs, volatile organic compounds; NA, not applicable; --, no data]

Analyte and method	
Volatile Organic Compounds - method 8260C (water) and method 8260B (soil)	**Semi-Volatile Organic Compounds - method 8270D (water and soil)**
1,1,1,2-Tetrachloroethane	1,2,4-Trichlorobenzene
1,1,1-Trichloroethane	2,4,5-Trichlorophenol
1,1,2,2-Tetrachloroethane	2,4,6-Trichlorophenol
1,1,2-Trichloro-1,2,2-trifluoroethane	2,4-Dichlorophenol
1,1,2-Trichloroethane	2,4-Dimethylphenol
1,1-Dichloroethane	2,4-Dinitrophenol
1,1-Dichloroethene	2,4-Dinitrotoluene
1,1-Dichloropropene	2,6-Dinitrotoluene
1,2,3-Trichlorobenzene	2-Chloronaphthalene
1,2,3-Trichloropropane	2-Chlorophenol
1,2,4-Trichlorobenzene	2-Methylnaphthalene
1,2,4-Trimethylbenzene	2-Methylphenol
1,2-Dibromo-3-chloropropane	2-Nitroaniline
1,2-Dibromoethane	2-Nitrophenol
1,2-Dichlorobenzene	3,3´-Dichlorobenzidine
1,2-Dichloroethane	3-Nitroaniline
1,2-Dichloropropane	4,6-Dinitro-2-methylphenol
1,3,5-Trimethylbenzene	4-Bromophenyl phenyl ether
1,3-Dichlorobenzene	4-Chloro-3-methylphenol
1,3-Dichloropropane	4-Chloroaniline
1,4-Dichlorobenzene	4-Chlorophenyl phenyl ether
2,2-Dichloropropane	4-Nitroaniline
2-Butanone	4-Nitrophenol
2-Chlorotoluene	Acenaphthene
2-Hexanone	Acenaphthylene
4-Chlorotoluene	Anthracene
4-Isopropyltoluene	Benzo(a)anthracene
4-Methyl-2-pentanone	Benzo(a)pyrene
Acetone	Benzo(b)fluoranthene
Benzene	Benzo(g,h,i)perylene
Bromobenzene	Benzo(k)fluoranthene
Bromochloromethane	Benzoic acid
Bromodichloromethane	Benzyl alcohol
Bromoform	Bis(2-chloroethoxy)methane
Bromomethane	Bis(2-chloroethyl) ether
Carbon disulfide	Bis(2-chloroisopropyl) ether
Carbon tetrachloride	Bis(2-ethylhexyl) phthalate
Chlorobenzene	Butyl benzyl phthalate
Chloroethane	Carbazole
Chloroform	Chrysene
Chloromethane	Di-n-butyl phthalate
cis-1,2-Dichloroethene	Di-n-octyl phthalate
cis-1,3-Dichloropropene	Dibenzo(a,h)anthracene
Dibromochloromethane	Dibenzofuran
Dibromomethane	Diethyl phthalate
Dichlorodifluoromethane	Dimethyl phthalate
Ethylbenzene	Fluoranthene
Hexachlorobutadiene	Fluorene
Isopropylbenzene	Hexachlorobenzene
m,p-Xylene	Hexachlorobutadiene
Methylene chloride	Hexachlorocyclopentadiene
n-Butylbenzene	Hexachloroethane
n-Propylbenzene	Indeno(1,2,3-cd)pyrene
Naphthalene	Isophorone
o-Xylene	m & p Cresol
p-Isopropyltoluene	N-Nitrosodi-n-propylamine
sec-Butylbenzene	N-Nitrosodimethylamine
Styrene	N-Nitrosodiphenylamine
tert-Butylbenzene	Naphthalene
Tetrachloroethene	Nitrobenzene
Toluene	Pentachlorophenol
Total xylenes	Phenanthrene
trans-1,2-Dichloroethene	Phenol
trans-1,3-Dichloropropene	Pyrene
Trichloroethene	Surr: 2,4,6-Tribromophenol
Trichlorofluoromethane	Surr: 2-Fluorobiphenyl
Vinyl chloride	Surr: 2-Fluorophenol
Surr: 4-Bromofluorobenzene	Surr: Nitrobenzene-d5
Surr: Dibromofluoromethane	Surr: Phenol-d5
Surr: Toluene-d8	Surr: Terphenyl-d14

Table K-01. List of analytes and analytical methods on the hazardous susbtance list (HSL) for water and soil samples.—Continued

[USPEA, U.S. Environmental Protection Agency; USGS, U.S. Geological Survey; VOCs, volatile organic compounds; NA, not applicable; --, no data]

Analyte and method
Organochlorine Pesticides - Method 8081B (water and soil)
4,4'-DDD
4,4'-DDE
4,4'-DDT
Aldrin
alpha-BHC
alpha-Chlordane
beta-BHC
Chlordane (Technical)
delta-BHC
Dieldrin
Endosulfan I
Endosulfan II
Endosulfan sulfate
Endrin
Endrin aldehyde
Endrin ketone
gamma-BHC
gamma-Chlordane
Heptachlor
Heptachlor epoxide
Methoxychlor
Toxaphene
Surr: Decachlorobiphenyl
Surr: Tetrachloro-m-xylene
Polychlorinated Biphenyls - Method 8082A (water and soil)
Aroclor 1016
Aroclor 1221
Aroclor 1232
Aroclor 1242
Aroclor 1248
Aroclor 1254
Aroclor 1260
Aroclor 1262
Aroclor 1268
Total PCBs
Surr: Tetrachloro-m-xylene
Surr: Decachlorobiphenyl
Organophosphorus Pesticides - Method 8141A (water and soil)
Bolstar
Chlorpyrifos
Coumaphos
Demeton-O
Demeton-S
Diazinon
Dichlorvos
Dimethoate
Disulfoton
Ethoprop
Ethyl p-nitrophenyl phenylphosphorothioate
Fensulfothion
Fenthion
Malathion
Merphos
Mevinphos
Monocrotophos
Naled
Parathion
Parathion-methyl
Phorate
Ronnel
Sulfotepp
Tetraethyl pyrophosphate
Tokuthion
Trichloronate
Surr: Triphenyl phosphate
Inorganic Anions - USEPA method 300.0 (water)
Bromide
Chloride
Fluoride
Nitrate
Nitrite
ortho-Phosphate-P
Sulfate
Metals - method 6020A (water) and method 6010C (soil)
Antimony
Arsenic
Beryllium
Cadmium
Chromium
Copper
Lead
Nickel
Selenium
Silver
Thallium
Zinc
Mercury - method 7470A (water) and method 7471A (soil)
Mercury
Percent Moisture ASTM method D2216 (soil)
Percent Moisture

Table K-02. Analytical constituents measured in USEPA soil samples.
[CAS, Chemical Abstracts Service]

Constituent	Method	CAS Number
1,1,1-TRICHLOROETHANE	3230.16E	71-55-6
1,1,2,2-TETRACHLOROETHANE	3230.16E	79-34-5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	3230.16E	76-13-1
1,1,2-TRICHLOROETHANE	3230.16E	79-00-5
1,1-DICHLOROETHANE	3230.16E	75-34-3
1,1-DICHLOROETHENE	3230.16E	75-35-4
1,2,3-TRICHLOROBENZENE	3230.16E	87-61-6
1,2,4-TRICHLOROBENZENE	3230.16E	120-82-1
1,2-DIBROMO-3-CHLOROPROPANE	3230.16E	96-12-8
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	3230.16E	106-93-4
1,2-DICHLOROBENZENE	3230.16E	95-50-1
1,2-DICHLOROETHANE	3230.16E	107-06-2
1,2-DICHLOROPROPANE	3230.16E	78-87-5
1,3-DICHLOROBENZENE	3230.16E	541-73-1
1,4-DICHLOROBENZENE	3230.16E	106-46-7
2-HEXANONE	3230.16E	591-78-6
ACETONE	3230.16E	67-64-1
BENZENE	3230.16E	71-43-2
BROMOCHLOROMETHANE	3230.16E	74-97-5
BROMODICHLOROMETHANE	3230.16E	75-27-4
BROMOFORM	3230.16E	75-25-2
BROMOMETHANE	3230.16E	74-83-9
CARBON DISULFIDE	3230.16E	75-15-0
CARBON TETRACHLORIDE	3230.16E	56-23-5
CHLOROBENZENE	3230.16E	108-90-7
CHLOROETHANE	3230.16E	75-00-3
CHLOROFORM	3230.16E	67-66-3
CHLOROMETHANE	3230.16E	74-87-3
CIS-1,2-DICHLOROETHENE	3230.16E	156-59-2
CIS-1,3-DICHLOROPROPENE	3230.16E	10061-01-5
CYCLOHEXANE	3230.16E	110-82-7
DIBROMOCHLOROMETHANE	3230.16E	124-48-1
DICHLORODIFLUOROMETHANE	3230.16E	75-71-8
ETHYLBENZENE	3230.16E	100-41-4
ISOPROPYLBENZENE (CUMENE)	3230.16E	98-82-8
M, P XYLENES	3230.16E	179601-23-1
METHYL ACETATE	3230.16E	79-20-9
METHYL ETHYL KETONE (2-BUTANONE)	3230.16E	78-93-3
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	3230.16E	108-10-1
METHYLCYCLOHEXANE	3230.16E	108-87-2
METHYLENE CHLORIDE	3230.16E	75-09-2
O-XYLENE (1,2-DIMETHYLBENZENE)	3230.16E	95-47-6
STYRENE	3230.16E	100-42-5
TERT-BUTYL METHYL ETHER	3230.16E	1634-04-4
TETRACHLOROETHENE(PCE)	3230.16E	127-18-4
TOLUENE	3230.16E	108-88-3
TRANS-1,2-DICHLOROETHENE	3230.16E	156-60-5
TRANS-1,3-DICHLOROPROPENE	3230.16E	10061-02-6
TRICHLOROETHENE (TCE)	3230.16E	79-01-6
TRICHLOROFLUOROMETHANE	3230.16E	75-69-4
VINYL CHLORIDE	3230.16E	75-01-4

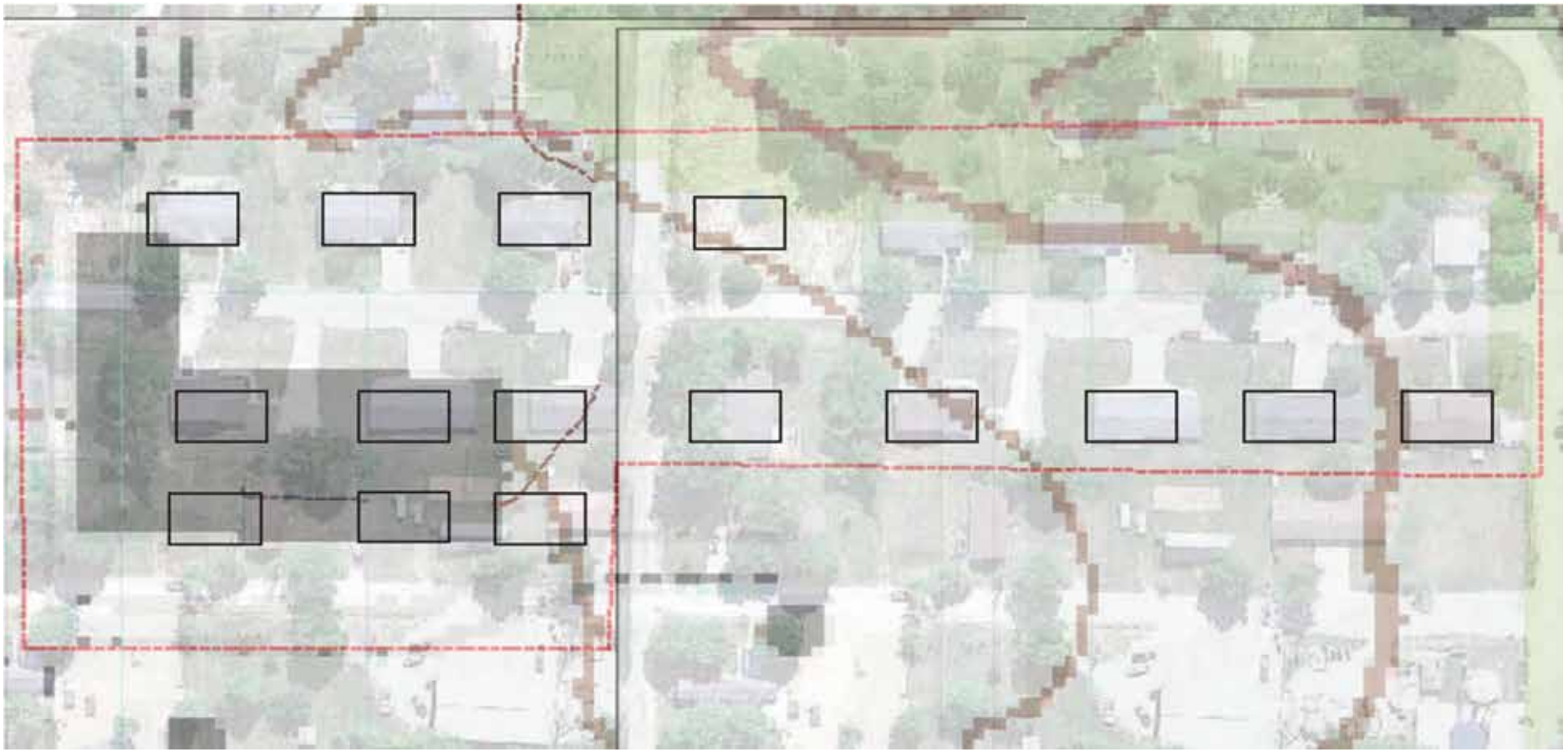
Table K-02. Analytical constituents measured in USEPA soil samples.—Continued
[CAS, Chemical Abstracts Service]

Constituent	Method	CAS Number
ALUMINUM	SW6010B	7429-90-5
ANTIMONY	SW6010B	7440-36-0
ARSENIC	SW6010B	7440-38-2
BARIUM	SW6010B	7440-39-3
BERYLLIUM	SW6010B	7440-41-7
CADMIUM	SW6010B	7440-43-9
CALCIUM	SW6010B	7440-70-2
CHROMIUM, TOTAL	SW6010B	7440-47-3
COBALT	SW6010B	7440-48-4
COPPER	SW6010B	7440-50-8
IRON	SW6010B	7439-89-6
LEAD	SW6010B	7439-92-1
MAGNESIUM	SW6010B	7439-95-4
MANGANESE	SW6010B	7439-96-5
NICKEL	SW6010B	7440-02-0
POTASSIUM	SW6010B	7440-09-7
SELENIUM	SW6010B	7782-49-2
SILVER	SW6010B	7440-22-4
SODIUM	SW6010B	7440-23-5
THALLIUM	SW6010B	7440-28-0
VANADIUM	SW6010B	7440-62-2
ZINC	SW6010B	7440-66-6
MERCURY	SW7473	7439-97-6
ALDRIN	SW8081A_SW8082	309-00-2
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	SW8081A_SW8082	319-84-6
ALPHA ENDOSULFAN	SW8081A_SW8082	959-98-8
ALPHA-CHLORDANE	SW8081A_SW8082	5103-71-9
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	SW8081A_SW8082	319-85-7
BETA ENDOSULFAN	SW8081A_SW8082	33213-65-9
CHLORDANE; GAMMA-	SW8081A_SW8082	5566-34-7
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	SW8081A_SW8082	319-86-8
DIELDRIN	SW8081A_SW8082	60-57-1
ENDOSULFAN SULFATE	SW8081A_SW8082	1031-07-8
Endrin	SW8081A_SW8082	72-20-8
ENDRIN ALDEHYDE	SW8081A_SW8082	7421-93-4
ENDRIN KETONE	SW8081A_SW8082	53494-70-5
GAMMA BHC (LINDANE)	SW8081A_SW8082	58-89-9
HEPTACHLOR	SW8081A_SW8082	76-44-8
HEPTACHLOR EPOXIDE	SW8081A_SW8082	1024-57-3
METHOXYCHLOR	SW8081A_SW8082	72-43-5
P,P’-DDD	SW8081A_SW8082	72-54-8
P,P’-DDE	SW8081A_SW8082	72-55-9
P,P’-DDT	SW8081A_SW8082	50-29-3
PCB-1016 (AROCLOR 1016)	SW8081A_SW8082	12674-11-2
PCB-1221 (AROCLOR 1221)	SW8081A_SW8082	11104-28-2
PCB-1232 (AROCLOR 1232)	SW8081A_SW8082	11141-16-5
PCB-1242 (AROCLOR 1242)	SW8081A_SW8082	53469-21-9
PCB-1248 (AROCLOR 1248)	SW8081A_SW8082	12672-29-6
PCB-1254 (AROCLOR 1254)	SW8081A_SW8082	11097-69-1
PCB-1260 (AROCLOR 1260)	SW8081A_SW8082	11096-82-5
PCB-1262 (AROCHLOR 1262)	SW8081A_SW8082	PCB1262
PCB-1268 (AROCLOR 1268)	SW8081A_SW8082	11100-14-4
TOXAPHENE	SW8081A_SW8082	8001-35-2

Table K-02. Analytical constituents measured in USEPA soil samples.—Continued
[CAS, Chemical Abstracts Service]

Constituent	Method	CAS Number
1,2,4,5-TETRACHLOROBENZENE	SW8270D	95-94-3
2,4,5-TRICHLOROPHENOL	SW8270D	95-95-4
2,4,6-TRICHLOROPHENOL	SW8270D	88-06-2
2,4-DICHLOROPHENOL	SW8270D	120-83-2
2,4-DIMETHYLPHENOL	SW8270D	105-67-9
2,4-DINITROPHENOL	SW8270D	51-28-5
2,4-DINITROTOLUENE	SW8270D	121-14-2
2,6-DINITROTOLUENE	SW8270D	606-20-2
2-CHLORONAPHTHALENE	SW8270D	91-58-7
2-CHLOROPHENOL	SW8270D	95-57-8
2-METHYLNAPHTHALENE	SW8270D	91-57-6
2-METHYLPHENOL (O-CRESOL)	SW8270D	95-48-7
2-NITROANILINE	SW8270D	88-74-4
2-NITROPHENOL	SW8270D	88-75-5
3,3'-DICHLOROBENZIDINE	SW8270D	91-94-1
3-NITROANILINE	SW8270D	99-09-2
4,6-DINITRO-2-METHYLPHENOL	SW8270D	534-52-1
4-BROMOPHENYL PHENYL ETHER	SW8270D	101-55-3
4-CHLORO-3-METHYLPHENOL	SW8270D	59-50-7
4-CHLOROANILINE	SW8270D	106-47-8
4-CHLOROPHENYL PHENYL ETHER	SW8270D	7005-72-3
4-METHYLPHENOL (P-CRESOL)	SW8270D	106-44-5
4-NITROANILINE	SW8270D	100-01-6
4-NITROPHENOL	SW8270D	100-02-7
ACENAPHTHENE	SW8270D	83-32-9
ACENAPHTHYLENE	SW8270D	208-96-8
ANTHRACENE	SW8270D	120-12-7
ATRAZINE	SW8270D	1912-24-9
BENZALDEHYDE	SW8270D	100-52-7
BENZO(A)ANTHRACENE	SW8270D	56-55-3
BENZO(A)PYRENE	SW8270D	50-32-8
BENZO(B)FLUORANTHENE	SW8270D	205-99-2
BENZO(G,H,I)PERYLENE	SW8270D	191-24-2
BENZO(K)FLUORANTHENE	SW8270D	207-08-9
BENZYL BUTYL PHTHALATE	SW8270D	85-68-7
BIPHENYL (DIPHENYL)	SW8270D	92-52-4
BIS(2-CHLOROETHOXY) METHANE	SW8270D	111-91-1
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	SW8270D	111-44-4
BIS(2-ETHYLHEXYL) PHTHALATE	SW8270D	117-81-7
CAPROLACTAM	SW8270D	105-60-2
CARBAZOLE	SW8270D	86-74-8
CHRYSENE	SW8270D	218-01-9
DIBENZ(A,H)ANTHRACENE	SW8270D	53-70-3
DIBENZOFURAN	SW8270D	132-64-9
DIETHYL PHTHALATE	SW8270D	84-66-2
DIMETHYL PHTHALATE	SW8270D	131-11-3
DI-N-BUTYL PHTHALATE	SW8270D	84-74-2
DI-N-OCTYLPHTHALATE	SW8270D	117-84-0
FLUORANTHENE	SW8270D	206-44-0
FLUORENE	SW8270D	86-73-7
HEXACHLOROBENZENE	SW8270D	118-74-1
HEXACHLOROBUTADIENE	SW8270D	87-68-3
HEXACHLOROCYCLOPENTADIENE	SW8270D	77-47-4
HEXACHLOROETHANE	SW8270D	67-72-1
INDENO(1,2,3-C,D)PYRENE	SW8270D	193-39-5
ISOPHORONE	SW8270D	78-59-1
NAPHTHALENE	SW8270D	91-20-3
NITROBENZENE	SW8270D	98-95-3
N-NITROSODI-N-PROPYLAMINE	SW8270D	621-64-7
N-NITROSODIPHENYLAMINE	SW8270D	86-30-6
PENTACHLOROPHENOL	SW8270D	87-86-5
PHENANTHRENE	SW8270D	85-01-8
PHENOL	SW8270D	108-95-2
PYRENE	SW8270D	129-00-0

Appendix L: Baseline Risk Assessment Data Tables



BLACK & VEATCH
building a world of difference™

Figure L-01. Hypothetical on-site residential exposure areas used in the human-health risk assessment, Vienna, Missouri. Modified from Black & Veatch Special Projects Corp., 2016.

Table L-01. Preliminary chemicals of potential concern in soil. Modified from Black & Veatch Special Projects Corp., 2016.

[ESV_{NOAEL}, ecological screening values for the no-observable-effects level; Ref., reference; HQ, hazard quotient; >, greater than; BKGD, background; COPC, concentration of potential chemical; µg/kg, microgram per kilogram; mg/kg, milogram per kilogram; J, detected above the detction limit but below the reporting limit; -, no data; NC, not calculated; ND, not determined; NA, not applicable; %, percent]

Analyte	Frequency of Detection	Maximum Conc.	Exposure Point Conc.	ESV_{NOAEL} Plants	Ref.	ESV_{NOAEL} Invertebrates	Ref.	ESV_{NOAEL} Mammals	Ref.	ESV_{NOAEL} Birds	Ref.	HQ_{NOAEL} Plants	HQ_{NOAEL} Invertebrates	HQ_{NOAEL} Mammals	HQ_{NOAEL} Birds	Site Background	Regional Background	US Background	Is HQ > 1 and is EPC > BKGD?	COPC
Organics (µg/kg)																				
Acetone	86/102	2900 J	346.6	NA	-	40	d	1200	c	14000	c	NC	9	0.3	0.02	ND	-	-	**Yes**	**EPC > $ESV_{NOAEL\ Inv.}$**
Aroclor 1254	3/100	1200 J	78.69	160000	c	NA	-	440	c	41	c	0.0005	NC	0.2	2	ND	-	-	**Yes**	**EPC > $ESV_{NOAEL\ Bird}$**
bis(2-Ethylhexyl)phthalate	2/95	1400	269.8	NA	-	230	d	590	c	20	c	NC	1	0.5	13	ND	-	-	**Yes**	**EPC > $ESV_{NOAEL\ Bird}$**
cis-Chlordane	3/100	430	15.83	2200	c	170	d	270	c	280	c	0.007	0.09	0.06	0.06	ND	-	-	No	EPC < $ESV_{NOAEL\ All}$
Dieldrin	6/100	50	3.488	10000	c	100	d	4.9	a	22	a	0.0003	0.03	0.7	0.2	ND	-	-	No	EPC < $ESV_{NOAEL\ All}$
Di-n-butylphthalate	2/100	42 J	42	160000	c	220	d	180000	c	11	c	0.0003	0.2	0.0002	4	ND	-	-	**Yes**	**EPC > $ESV_{NOAEL\ Bird}$**
Endrin	1/100	5.9	5.9	3.4	c	25	d	23	c	1.4	c	2	0.2	0.3	4	ND	-	-	**Yes**	**EPC > $ESV_{NOAEL\ Plant\ \&\ Bird}$**
Heptachlor Epoxide	5/100	79	4.157	NA	-	0.4	d	NA	-	NA	-	NC	10	NC	NC	ND	-	-	**Yes**	**EPC > $ESV_{NOAEL\ Inv.}$**
Methyl Acetate	39/83	170	17.63	NA	-	NA	-	NA	-	NA	-	NC	NC	NC	NC	NA	-	-	**Yes**	**No ESV**
p,p'-DDD	9/100	210	14.91	NA	-	NA	-	4100	c	6.3	c	NC	NC	0.004	2	ND	-	-	**Yes**	**EPC > $ESV_{NOAEL\ Bird}$**
p,p'-DDE	7/100	1600	134.6	NA	-	NA	-	3700	c	110	c	NC	NC	0.04	1	ND	-	-	**Yes**	**EPC > $ESV_{NOAEL\ Bird}$**
p,p'-DDT	10/100	1500	126	4100	c	3370	d	44	c	360	c	0.03	0.04	3	0.4	ND	-	-	No	EPC < $ESV_{NOAEL\ All}$
DDD/DDE/DDT Total	13/100	3185	275.5	4100	c	3370	d	21	a	93	a	0.07	0.08	13	3	ND	-	-	**Yes**	**EPC > $ESV_{NOAEL\ Mam.\ \&\ Bird}$**
Tetrachloroethene	4/90	191	9.887	10000	c	60	d	180	c	NA	-	0.001	0.2	0.05	NC	ND	-	-	No	EPC < $ESV_{NOAEL\ All}$
trans-Chlordane	9/86	310	23.88	2200	c	170	d	270	c	280	c	0.01	0.1	0.09	0.09	NA	-	-	No	EPC < $ESV_{NOAEL\ All}$
High mol wt PAHs (µg/kg)																				
Benzo[a]anthracene	4/95	9100																		
Benzo[a]pyrene	4/82	6400																		
Benzo[b]fluoranthene	7/82	12000																		
Benzo[ghi]perylene	3/82	1400 J																		
Benzo[k]fluoranthene	2/82	4300																		
Chrysene	4/95	7800																		
Dibenzo[a,h]anthracene	1/82	47 J																		
Fluoranthene	3/100	18000																		
Indeno[1,2,3-cd]pyrene	4/82	1600 J																		
Pyrene	6/95	15000																		
HMW PAHs (Total - includes nondetects)	8/100	76,650 J	5349	NA	a	18,000	a	1100	a	NA	a	NC	0.3	5	NC	ND	-	-	**Yes**	**EPC > $ESV_{NOAEL\ Mam.}$**
Metals (mg/kg)																				
Aluminum	86/86	10800	6215	pH	a	pH	a	pH	a	pH	a	NC	NC	NC	NC	NA	61770	1% - 30%	No	EPC < BKGD
Antimony	13/100	25 J	1.416	11	c	78	a	0.27	a	NA	a	0.1	0.02	5	NC	0.41	1	1	**Yes**	**EPC > $ESV_{NOAEL\ Mam.}$**
Cadmium	57/100	16	1.309	32	a	140	a	0.36	a	0.77	a	0.04	0.009	4	2	1.6	1.01	0.4	No	EPC < BKGD
Chromium	97/100	82 J	15.43	0.35	c	7.8	a	34	a	26	a	44	2	0.5	0.6	11	55.5	45	No	EPC < BKGD
Cobalt	69/86	18.6 J	9.497	13	a	1000	b	230	a	120	a	0.7	NC	0.04	0.08	NA	10.5	8	No	EPC < $ESV_{NOAEL\ All}$
Copper	87/100	1500	62.93	70	a	80	a	49	a	28	a	0.9	0.8	1	2	8.7	14.6	24	**Yes**	**EPC > $ESV_{NOAEL\ Bird}$**
Iron	86/86	27400	13621	pH	a	pH	a	pH	a	pH	a	NC	NC	NC	NC	NA	16990	0.2% - 55%	No	EPC < BKGD
Lead	100/100	1000 J	108.8	120	a	1700	a	56	a	11	a	0.9	0.06	2	10	17	24.7	32	**Yes**	**EPC > $ESV_{NOAEL\ Mam.\ \&\ Bird}$**
Manganese	86/86	2030	877.6	220	a	450	a	4000	a	4300	a	4	2	0.2	0.2	NA	NA	600	**Yes**	**EPC > $ESV_{NOAEL\ Plant\ \&\ Inv.}$**
Mercury	22/100	0.97	0.0899	0.3	b	0.1	b	1.7	c	0.013	c	0.3	0.9	0.05	7	0.034	0.064	-	**Yes**	**EPC > $ESV_{NOAEL\ Bird}$**
Nickel	98/100	67	11.61	38	a	280	a	130	a	210	a	0.3	0.04	0.09	0.06	9.8	13.7	20	No	EPC < $ESV_{NOAEL\ All}$
Thallium	14/100	2 J	1.278	1	b	NA	-	0.22	c	6.3	c	1	NC	6	0.2	1.5	NA	-	No	EPC < BKGD
Vanadium	86/86	52.3	26.82	60	c	20	b	280	a	7.8	a	0.4	1	0.1	3	NA	64.6	75	No	EPC < BKGD
Zinc	78/100	2200 J	154.8	160	a	120	a	79	a	46	a	1	1	2	3	33	47.4	50	**Yes**	**EPC > $ESV_{NOAEL\ Mam.\ \&\ Bird}$**

Individual analytes were screened as the summed total concentration.

a - U. S. Environmental Protection Agency

b - Oak Ridge National Laboratory

c - Los Alamos National Laboratory

Table L-01. Preliminary chemicals of potential concern in soil. Modified from Black & Veatch Special Projects Corp., 2016.—Continued

[ESV_{LOAEL}, ecological screening values for the lowest-observable-effect level; Ref., reference; HQ, hazard quotient; >, greater than; BKGD, background; COPC, concentration of potential chemical; µg/kg, microgram per kilogram; mg/kg, milogram per kilogram; J, detected above the detction limit but below the reporting limit; -, no data; NC, not calculated; ND, not determined; NA, not applicable; %, percent]

Analyte	Frequency of Detection	Maximum Conc.	Exposure Point Conc.	ESV_{LOAEL} Plants	Ref.	ESV_{LOAEL} Invertebrates	Ref.	ESV_{LOAEL} Mammals	Ref.	ESV_{LOAEL} Birds	Ref.	HQ_{LOAEL} Plants	HQ_{LOAEL} Invertebrates	HQ_{LOAEL} Mammals	HQ_{LOAEL} Birds	Site Background	Regional Background	US Background	Is HQ > 1 and is EPC > BKGD?	COPC
Organics (ug/kg)																				
Acetone	86/102	2900 J	346.6	NA	-	120000	d	NA	-	NA	-	NC	0.003	NC	NC	ND	-	-	No	EPC < $ESV_{LOAEL\ Inv.}$
Aroclor 1254	3/100	1200 J	78.69	NA	-	NA	-	NA	-	410	c	NC	NC	NC	0.2	ND	-	-	No	EPC < $ESV_{LOAEL\ Bird}$
bis(2-Ethylhexyl)phthalate	2/95	1400	270	NA	-	1900	d	NA	-	200	c	NC	0.1	NC	1	ND	-	-	**Yes**	**EPC > $ESV_{LOAEL\ Bird}$**
Di-n-butylphthalate	2/100	42 J	42	NA	-	NA	-	NA	-	110	c	NC	NC	NC	0.4	ND	-	-	No	EPC < $ESV_{LOAEL\ Bird}$
Endrin	1/100	5.9	5.9	34	c	NA	-	NA	-	14	c	0.2	NC	NC	0.4	ND	-	-	No	EPC < $ESV_{LOAEL\ Plant\ \&\ Bird}$
Heptachlor Epoxide	5/100	79	4.16	NA	-	0.4	d	NA	-	NA	-	NC	10	NC	NC	ND	-	-	**Yes**	**EPC > $ESV_{NOAEL\ Inv.}$**
Methyl Acetate	39/83	170	17.6	NA	-	NA	-	NA	-	NA	-	NC	NC	NC	NC	NA	-	-	**Yes**	**No ESV**
p,p'-DDD	9/100	210	14.91	NA	-	NA	-	NA	-	33	c	NC	NC	NC	0.5	ND	-	-	No	EPC < $ESV_{LOAEL\ Bird}$
p,p'-DDE	7/100	1600	134.6	NA	-	NA	-	NA	-	550	c	NC	NC	NC	0.2	ND	-	-	No	EPC < $ESV_{LOAEL\ Bird}$
p,p'-DDT	10/100	1500	126	NA	-	NA	-	NA	-	NA	-	NC	NC	NC	NC	ND	-	-	No	EPC < $ESV_{NOAEL\ All}$
DDD/DDE/DDT Total	13/100	3185	276	NA	-	NA	-	105	a	930	a	NC	NC	3	0.3	ND	-	-	**Yes**	**EPC > $ESV_{LOAEL\ Mam.}$**
High mol wt PAHs (µg/kg)																				
Benzo[a]anthracene	4/95	9100	Individual analytes were screened as the summed total concentration.																	
Benzo[a]pyrene	4/82	6400																		
Benzo[b]fluoranthene	7/82	12000																		
Benzo[ghi]perylene	3/82	1400 J																		
Benzo[k]fluoranthene	2/82	4300																		
Chrysene	4/95	7800																		
Dibenzo[a,h]anthracene	1/82	47 J																		
Fluoranthene	3/100	18000																		
Indeno[1,2,3-cd]pyrene	4/82	1600 J																		
Pyrene	6/95	15000																		
HMW PAHs (Total)	8/100	76,650 J	5349	NA	-	NA	-	5500	a	NA	-	NC	NC	1	NC	ND	-	-	No	EPC < $ESV_{LOAEL\ Mam.}$
Metals (mg/kg)																				
Antimony	13/100	25 J	1.416	NA	-	NA	-	2.7	a	NA	-	NC	NC	0.5	NC	0.41	1	1	No	EPC < $ESV_{LOAEL\ Mam.}$
Copper	87/100	1500	62.93	NA	-	NA	-	82	a	84	a	NC	NC	0.8	0.7	8.7	14.6	24	No	EPC < $ESV_{LOAEL\ Mam.\ \&\ Bird}$
Lead	100/100	1000 J	109	NA	-	NA	-	106	a	22	a	NC	NC	1	5	17	24.7	32	**Yes**	**EPC > $ESV_{LOAEL\ Bird}$**
Manganese	86/86	2030	877.6	1100	c	4500	c	NA	-	NA	-	0.8	0.2	NC	NC	NA	NA	600	No	EPC < $ESV_{LOAEL\ Plant\ \&\ Inv.}$
Mercury	22/100	0.97	0.0899	NA	-	NA	-	NA	-	0.13	c	NC	NC	NC	0.7	0.034	0.064	-	No	EPC < $ESV_{LOAEL\ Bird}$
Zinc	78/100	2200 J	154.8	NA	-	930	c	790	a	460	a	NC	0.2	0.2	0.3	33	47.4	50	No	EPC < $ESV_{LOAEL\ Inv.\ Mam.\ \&\ Bird}$

a - U. S. Environmental Protection Agency
b - Oak Ridge National Laboratory
c - Los Alamos National Laboratory
d - ECOSAR & Region 4 soil model

Table L-02. Preliminary chemicals of potential concern in sediment. Modified from Black & Veatch Special Projects Corp., 2016.

[RESV, refined ecological screening value; HQ, hazard quotient; >, greater than; BKGD, background; COPC, concentration of potential chemical; µg/kg, microgram per kilogram; mg/kg, milogram per kilogram; J, detected above the detction limit but below the reporting limit; -, no data; ND, not applicable; <, less than; U, analyte not detected at or above reporting limit; HMW PAH; high molecular-weight, polycyclic-aromatic hydrocarbon; LMW PAH, low molecular-weight, polycyclic-aromatic hydrocarbon]

Analyte	Frequency of Detection	Maximum Conc.	Exposure Point Conc. [1]	RESV	Ref.	HQ_{RESV}	Site Background	Regional Background	US Background	Is HQ > 1 and is EPC > BKGD?	COPC
Organics (ug/kg)											
Bis(2-ethylhexyl) phthalate	2/6	290 J	195	2647	a	0.07	ND	-	-	No	EPC < RESV
cis-Chlordane	0/6	11 U	5.5	17.6	b	0.3	ND	-	-	No	EPC < RESV
gamma-Chlordane	2/6	6 J	6	17.6	b	0.3	ND	-	-	No	EPC < RESV
Total Chlordane	2/6	11.5 J	11.5	17.6	b	0.7	ND	-	-	No	EPC < RESV
p,p'-DDD	0/6	23 U	11.5	28	b	0.4	ND	-	-	No	EPC < RESV
p,p'-DDE	2/6	11.5	11.5	31.3	b	0.4	ND	-	-	No	EPC < RESV
p,p'-DDT	2/6	26	26	62.9	b	0.4	ND	-	-	No	EPC < RESV
Total DDD/DDE/DDT	2/6	49	49	572	b	0.09	ND	-	-	No	EPC < RESV
p-Cresol	2/6	365 J	365	260	c	1	ND	-	-	**Yes**	**EPC > RESV**
Low mol wt PAHs (µg/kg)											
2-Methylnaphthalene	0/6	260 U	Individual analytes were screened as the summed total concentration.								
Acenaphthene	0/6	260 U									
Acenaphthylene	2/6	77 J									
Anthracene	2/6	58 J									
Fluorene	0/6	260 U									
Naphthalene	0/6	320.5 U									
Phenanthrene	1/6	31 J									
LMW PAHs (Total)	2/6	643.5 J	643.5	1442	a	0.4	ND	-	-	No	EPC < RESV
High mol wt PAHs (µg/kg)											
Benzo[a]anthracene	2/6	195 J	Individual analytes were screened as the summed total concentration.								
Benzo[a]pyrene	2/6	230 J									
Benzo[b]fluoranthene	2/6	525 J									
Benzo[ghi]perylene	2/6	120 J									
Benzo[k]fluoranthene	2/6	165 J									
Chrysene	2/6	240 J									
Dibenzo[a,h]anthracene	1/6	39 J									
Fluoranthene	2/6	225 J									
Indeno[1,2,3-cd]pyrene	2/6	104 J									
Pyrene	2/6	540 J									
HMW PAHs (Total)	2/6	2383 J	2383	6676	a	0.4	ND	-	-	No	EPC < RESV
Total PAHs	2/6	3026.5 J	3026.5	22800	b	0.1	ND	-	-	No	EPC < RESV

Table L-02. Preliminary chemicals of potential concern in sediment. Modified from Black & Veatch Special Projects Corp., 2016.—Continued

[RESV, refined ecological screening value; HQ, hazard quotient; >, greater than; BKGD, background; COPC, concentration of potential chemical; µg/kg, microgram per kilogram; mg/kg, milogram per kilogram; J, detected above the detction limit but below the reporting limit; -, no data; ND, not applicable; <, less than; U, analyte not detected at or above reporting limit; HMW PAH; high molecular-weight, polycyclic-aromatic hydrocarbon; LMW PAH, low molecular-weight, polycyclic-aromatic hydrocarbon]

Analyte	Frequency of Detection	Maximum Conc.	Exposure Point Conc.	RESV	Ref.	HQ_{RESV}	Site Background	Regional Background	US Background	Is HQ > 1 and is EPC > BKGD?	COPC
Metals (mg/kg)											
Arsenic (Total)	6/6	11	10.4	33	b	0.3	5.1	-	-	No	EPC < RESV
Cadmium (Total)	6/6	3.3	3.3	5	b	0.7	1.4	-	-	No	EPC < RESV
Copper (Total)	4/6	37.5	37.1	149	b	0.2	ND	-	-	No	EPC < RESV
Lead (Total)	6/6	48 J	47.1	128	b	0.4	13	-	-	No	EPC < RESV
Zinc (Total)	6/6	400 J	345	459	b	0.8	20	-	-	No	EPC < RESV

RESV Source:

a - MacDonald, D.D. 1994. Approach to the Assessment of Sediment Quality in Florida Coastal Waters. Florida Department of Environmental Protection. 1994 Florida Sediment Quality Assessment Guidelines for Florida Coastal Waters.

b - MacDonald, D.D.; Ingersoll, C.G.; Smorong, D.E.; Lindskoog, R.A.; Sloane, G; and T. Biernacki. 2003.

c - Region 4 Sediment Model based on equilibrium partitioning with surface water.

Table L-03. Preliminary chemicals of potential concern in groundwater. Modified from Black & Veatch Special Projects Corp., 2016.

[RESV, refined ecological screening value; HQ, hazard quotient; >, greater than; EPC, exposure point concentration; BKGD, background; COPC, concentration of potential chemical; µg/L, microgram per liter; J, detected above the detction limit but below the reporting limit; -, no data; NA, not applicable; <, less than]

Analyte	Frequency of Detection	Maximum Conc.	Exposure Point Conc. [1]	RESV	Ref.	HQ_{RESV}	Site Background	Regional Background	US Background	Is HQ > 1 and is EPC > BKGD?	COPC
Organics (µg/L)											
Tetrachloroethene	74/74	1140	315.2	430	a	0.7	NA	NA	NA	No	EPC < RESV
Metals (µg/L)											
Chromium (Total)	1/2	13 J	13	16	b	0.8	NA	NA	NA	No	EPC < RESV
Anions (µg/L)											
Chloride	8/8	240000	157500	860000	b	0.2	NA	NA	NA	No	EPC < RESV

a - Great Lakes Initiative - acute effects

b - National Water Quality Recommendations - acute effects

Table L-04. Summary of human-health risks and hazards for detected chemicals of potential concern, Vienna, Missouri.

[B(a)P, benzo(a)pyrene; B(b)f, benzo(b)fluoranthene; D(ah)A, dibenzo(ah)anthracene; I(1,2,3cd)P, ideno[1,2,3-cd]pyrene; As, arsenic; Cr, chromium; PCE, tetrachloroethene; TCE, trichloroethene; CNS, central nervous system; Al, aluminum; Mn, manganese; Tl, thallium; B(a)A, benzo(a)anthracene]

Location	Receptor		Excess Cancer Risk [1]	Note	Total Non-cancer Hazard Index [2]	Highest Target Organ Non-cancer Hazard Index [3]	Note
Current/Future On Site Exposure Areas							
On Site Exposure Area 1	Future Child Resident	Soil		Excess cancer risk due to ingestion of and dermal contact with soil containing B(a)P, B(b)f, D(ah)A, I(1,2,3cd)P, As, Cr; groundwater containing Benzene, Dieldrin, PCE, TCE and Cr; and vapor intrusion containing Benzene, PCE and TCE.	5		Non-cancer hazards primarily due to ingestion of soil containing Al, and Mn; groundwater containing PCE; and vapor intrusion containing PCE. Non-cancer hazards (effects on skin) primarily due to ingestion of soil containing As and Tl.
		Groundwater			17		
		Vapor Intrusion			12		
		Total			33	28	
	Future Lifetime Resident	Soil	9E-05				
		Groundwater	4E-04				
		Vapor Intrusion	5E-05				
		Total	5E-04				
On Site Exposure Area 2	Future Child Resident	Soil		Excess cancer risk due to ingestion of and dermal contact with soil containing As and Cr; groundwater containing Benzene, Dieldrin, PCE, TCE and Cr; and vapor intrusion containing Benzene, PCE and TCE.	2		Non-cancer hazards primarily due to ingestion of soil containing Mn; groundwater containing PCE; and vapor intrusion containing PCE.
		Groundwater			17		
		Vapor Intrusion			12		
		Total			31	27	
	Future Lifetime Resident	Soil	6E-05				
		Groundwater	4E-04				
		Vapor Intrusion	5E-05				
		Total	5E-04				
On Site Exposure Area 3	Future Child Resident	Soil		Excess cancer risks due to ingestion of and dermal contact with soil containing As and Cr; groundwater containing Benzene, Dieldrin, PCE, TCE and Cr; and vapor intrusion containing Benzene, PCE and TCE.	3		Non-cancer hazards primarily due to ingestion of soil containing Al and Mn; groundwater containing PCE; and vapor intrusion containing PCE. Non-cancer hazards (effects on skin) primarily due to ingestion of soil containing As and Tl.
		Groundwater			17		
		Vapor Intrusion			12		
		Total			32	27	
	Future Lifetime Resident	Soil	7E-05				
		Groundwater	4E-04				
		Vapor Intrusion	5E-05				
		Total	5E-04				

Table L-04. Summary of human-health risks and hazards for detected chemicals of potential concern, Vienna, Missouri. —Continued

[B(a)P, benzo(a)pyrene; B(b)f, benzo(b)fluoranthene; D(ah)A, dibenzo(ah)anthracene; I(1,2,3cd)P, ideno[1,2,3-cd]pyrene; As, arsenic; Cr, chromium; PCE, tetrachloroethene; TCE, trichloroethene; CNS, central nervous system; Al, aluminum; Mn, manganese; Tl, thallium; B(a)A, benzo(a)anthracene]

Location	Receptor		Excess Cancer Risk [1]	Note	Total Non-cancer Hazard Index [2]	Highest Target Organ Non-cancer Hazard Index [3]	Note
On Site Exposure Area 4	Future Child Resident	Soil		Excess cancer risks due to ingestion of and dermal contact with soil containing B(a)P, As and Cr; groundwater containing Benzene, Dieldrin, PCE, TCE and Cr; and vapor intrusion containing Benzene, PCE and TCE.	3		Non-cancer hazards primarily due to ingestion of soil containing Mn; groundwater containing PCE and vapor intrusion containing PCE.
		Groundwater			17		
		Vapor Intrusion			12		
		Total			31	27	
	Future Lifetime Resident	Soil	7E-05				
		Groundwater	4E-04				
		Vapor Intrusion	5E-05				
		Total	5E-04				
On Site Exposure Area 5	Future Child Resident	Soil		Excess cancer risks due to ingestion of and dermal contact with soil containing As and Cr; groundwater containing Benzene, Dieldrin, PCE, TCE and Cr; and vapor intrusion containing Benzene, PCE and TCE.	3		Non-cancer hazards primarily due to ingestion of and dermal contact with soil containing Al and Mn; groundwater containing PCE; and vapor intrusion containing PCE.
		Groundwater			17		
		Vapor Intrusion			12		
		Total			31	28	
	Future Lifetime Resident	Soil	6E-05				
		Groundwater	4E-04				
		Vapor Intrusion	5E-05				
		Total	5E-04				
On Site Exposure Area 6	Future Child Resident	Soil		Excess cancer risks due to ingestion of and dermal contact with soil containing As and Cr; groundwater containing Benzene, Dieldrin, PCE, TCE and Cr; and vapor intrusion containing Benzene, PCE and TCE.	2		Non-cancer hazards primarily due to ingestion of and dermal contact with soil containing Al and Mn; groundwater containing PCE; and vapor intrusion containing PCE.
		Groundwater			17		
		Vapor Intrusion			12		
		Total			31	28	
	Future Lifetime Resident	Soil	7E-05				
		Groundwater	4E-04				
		Vapor Intrusion	5E-05				
		Total	5E-04				

Table L-04. Summary of human-health risks and hazards for detected chemicals of potential concern, Vienna, Missouri.—Continued

[B(a)P, benzo(a)pyrene; B(b)f, benzo(b)fluoranthene; D(ah)A, dibenzo(ah)anthracene; I(1,2,3cd)P, ideno[1,2,3-cd]pyrene; As, arsenic; Cr, chromium; PCE, tetrachloroethene; TCE, trichloroethene; CNS, central nervous system; Al, aluminum; Mn, manganese; Tl, thallium; B(a)A, benzo(a)anthracene]

Location	Receptor		Excess Cancer Risk [1]	Note	Total Non-cancer Hazard Index [2]	Highest Target Organ Non-cancer Hazard Index [3]	Note
On Site Exposure Area 7	Future Child Resident	Soil		Excess cancer risks due to ingestion of and dermal contact with soil containing Aroclor 1254, B(a)A, B(a)P, B(b)F, B(k)F, I(123cd)P, As and Cr; outdoor vapors from soil containing PCE, groundwater containing Benzene, Dieldrin, PCE, TCE and Cr; and vapor intrusion containing Benzene, PCE and TCE.	8		Non-cancer hazards primarily due to ingestion and dermal contact with soil containing Al and Mn; outdoor vapors from soil containing PCE; groundwater containing PCE; and vapor intrusion containing PCE. Non-cancer hazards primarily due to ingestion of and dermal contact with soil containing Aroclor 1254; groundwater containing TCE; and vapor intrusion containing TCE. Non-cancer hazards (effects on Skin) primarily due to ingestion of soil containing As and Tl.
		Groundwater			17		
		Vapor Intrusion			12		
		Total			37	28	
	Future Lifetime Resident	Soil	7E-04				
		Groundwater	4E-04				
		Vapor Intrusion	5E-05				
		Total	1E-03				
On Site Exposure Area 8	Future Child Resident	Soil		Excess cancer risks due to ingestion of and dermal contact with soil containing Dieldrin, Heptachlor Epoxide, As and Cr; groundwater containing Benzene, Dieldrin, PCE, TCE and Cr; and vapor intrusion containing Benzene, PCE and TCE.	4		Non-cancer hazards primarily due to ingestion of and dermal contact with soil containing Mn; groundwater containing PCE; and vapor intrusion containing PCE. Non-cancer hazards (effects on skin) primarily due to ingestion of soil containing As and Tl.
		Groundwater			17		
		Vapor Intrusion			12		
		Total			33	28	
	Future Lifetime Resident	Soil	7E-05				
		Groundwater	4E-04				
		Vapor Intrusion	5E-05				
		Total	5E-04				
On Site Exposure Area 9	Future Child Resident	Soil		Excess cancer risks due to ingestion of and dermal contact with soil containing As and Cr; groundwater containing Benzene, Dieldrin, PCE, TCE and Cr; and vapor intrusion containing Benzene, PCE and TCE.	4		Non-cancer hazards primarily due to ingestion and dermal contact with soil containing Mn; groundwater containing PCE; and vapor intrusion containing PCE. Non-cancer hazards (effects on skin) primarily due to ingestion of soil containing As and Tl.
		Groundwater			17		
		Vapor Intrusion			12		
		Total			33	28	
	Future Lifetime Resident	Soil	5E-05				
		Groundwater	4E-04				
		Vapor Intrusion	5E-05				
		Total	5E-04				

Table L-04. Summary of human-health risks and hazards for detected chemicals of potential concern, Vienna, Missouri.—Continued

[B(a)P, benzo(a)pyrene; B(b)f, benzo(b)fluoranthene; D(ah)A, dibenzo(ah)anthracene; I(1,2,3cd)P, ideno[1,2,3-cd]pyrene; As, arsenic; Cr, chromium; PCE, tetrachloroethene; TCE, trichloroethene; CNS, central nervous system; Al, aluminum; Mn, manganese; Tl, thallium; B(a)A, benzo(a)anthracene]

Location	Receptor		Excess Cancer Risk [1]	Note	Total Non-cancer Hazard Index [2]	Highest Target Organ Non-cancer Hazard Index [3]	Note
On Site Exposure Area 10	Future Child Resident	Soil		Excess cancer risks due to ingestion of and dermal contact with soil containing As and Cr; groundwater containing Benzene, Dieldrin, PCE, TCE and Cr; and vapor intrusion containing Benzene, PCE and TCE.	2		Non-cancer hazards primarily due to ingestion and dermal contact with soil containing Mn; groundwater containing PCE; and vapor intrusion containing PCE.
		Groundwater			17		
		Vapor Intrusion			12		
		Total			31	28	
	Future Lifetime Resident	Soil	5E-05				
		Groundwater	4E-04				
		Vapor Intrusion	5E-05				
		Total	5E-04				
On Site Exposure Area 11	Future Child Resident	Soil		Excess cancer risks due to ingestion of and dermal contact with soil containing As and Cr; groundwater containing Benzene, Dieldrin, PCE, TCE and Cr; and vapor intrusion containing Benzene, PCE and TCE.	3		Non-cancer hazards primarily due to ingestion and dermal contact with soil containing Al and Mn; groundwater containing PCE; and vapor intrusion containing PCE. Non-cancer hazards (effects on Skin) primarily due to ingestion and dermal contact with soil containing As and Tl.
		Groundwater			17		
		Vapor Intrusion			12		
		Total			32	27	
	Future Lifetime Resident	Soil	4E-05				
		Groundwater	4E-04				
		Vapor Intrusion	5E-05				
		Total	4E-04				
On Site Exposure Area 12	Future Child Resident	Soil		Excess cancer risks due to ingestion of and dermal contact with soil containing As and Cr; groundwater containing Benzene, Dieldrin, PCE, TCE and Cr; and vapor intrusion containing Benzene, PCE and TCE.	2		Non-cancer hazards primarily due to ingestion and dermal contact with soil containing Mn; groundwater containing PCE; and vapor intrusion containing PCE.
		Groundwater			17		
		Vapor Intrusion			12		
		Total			31	28	
	Future Lifetime Resident	Soil	4E-05				
		Groundwater	4E-04				
		Vapor Intrusion	5E-05				
		Total	4E-04				

Table L-04. Summary of human-health risks and hazards for detected chemicals of potential concern, Vienna, Missouri.—Continued

[B(a)P, benzo(a)pyrene; B(b)f, benzo(b)fluoranthene; D(ah)A, dibenzo(ah)anthracene; I(1,2,3cd)P, ideno[1,2,3-cd]pyrene; As, arsenic; Cr, chromium; PCE, tetrachloroethene; TCE, trichloroethene; CNS, central nervous system; Al, aluminum; Mn, manganese; Tl, thallium; B(a)A, benzo(a)anthracene]

Location	Receptor		Excess Cancer Risk [1]	Note	Total Non-cancer Hazard Index [2]	Highest Target Organ Non-cancer Hazard Index [3]	Note
On Site Exposure Area 13	Future Child Resident	Soil		Excess cancer risks due to ingestion of and dermal contact with soil containing As and Cr; groundwater containing Benzene, Dieldrin, PCE, TCE and Cr; and vapor intrusion containing Benzene, PCE and TCE.	4		Non-cancer hazards primarily due to ingestion and dermal contact with soil containing Mn; groundwater containing PCE; and vapor intrusion containing PCE.
		Groundwater			17		
		Vapor Intrusion			12		
		Total			32	28	
	Future Lifetime Resident	Soil	5E-05				
		Groundwater	4E-04				
		Vapor Intrusion	5E-05				
		Total	5E-04				
On Site Exposure Area 14	Future Child Resident	Soil		Excess cancer risks due to ingestion of and dermal contact with soil containing As and Cr; groundwater containing Benzene, Dieldrin, PCE, TCE and Cr; and vapor intrusion containing Benzene, PCE and TCE.	2		Non-cancer hazards primarily due to ingestion and dermal contact with soil containing Mn; groundwater containing PCE; and vapor intrusion containing PCE.
		Groundwater			17		
		Vapor Intrusion			12		
		Total			31	27	
	Future Lifetime Resident	Soil	5E-05				
		Groundwater	4E-04				
		Vapor Intrusion	5E-05				
		Total	5E-04				

Table L-04. Summary of human-health risks and hazards for detected chemicals of potential concern, Vienna, Missouri.—Continued

[B(a)P, benzo(a)pyrene; B(b)f, benzo(b)fluoranthene; D(ah)A, dibenzo(ah)anthracene; I(1,2,3cd)P, ideno[1,2,3-cd]pyrene; As, arsenic; Cr, chromium; PCE, tetrachloroethene; TCE, trichloroethene; CNS, central nervous system; Al, aluminum; Mn, manganese; Tl, thallium; B(a)A, benzo(a)anthracene; COC, chemical of concern; EPA, envrionmental protection agency]

Location	Receptor		Excess Cancer Risk [1]	Note	Total Non-cancer Hazard Index [2]	Highest Target Organ Non-cancer Hazard Index [3]	Note
On Site Site Wide Exposure	Future Child Resident	Soil		Excess cancer risks due to ingestion of and dermal contact with soil containing B(a)A, B(a)P, B(b)F, D(ah)A, As and Cr; groundwater containing Benzene, Dieldrin, PCE, TCE and Cr; and vapor intrusion containing Benzene, PCE, and TCE.	3		Non-cancer hazards primarily due to ingestion and dermal contact with soil containing Mn; groundwater containing PCE; and vapor intrusion containing PCE. Non-cancer hazards (effects on Skin) primarily due to ingestion of soil containing As and Tl.
		Groundwater			17		
		Vapor Intrusion			12		
		Total			32	27	
	Future Lifetime Resident	Soil	9E-05				
		Groundwater	4E-04				
		Vapor Intrusion	5E-05				
		Total	5E-04				
	Current/Future Recreational User	Total	3E-06	No COCs - Excess cancer risk within USEPA's generally acceptable risk range.	0.2	0.1	No COCs - Non-cancer hazards are not expected.
	Future Industrial/ Commercial Worker	Total	5E-05	No COCs - Excess cancer risk within USEPA's generally acceptable risk range.	4	4	Non-cancer hazards primarily due to ingestion with groundwater and vapor intrusion containing PCE.
	Future Construction Worker	Total	6E-06	No COCs - Excess cancer risk within USEPA's generally acceptable risk range.	3	3	Non-cancer hazards primarily due to ingestion and dermal contact with soil containing Al and Mn.

Table L-04. Summary of human-health risks and hazards for detected chemicals of potential concern, Vienna, Missouri.—Continued

[B(a)P, benzo(a)pyrene; B(b)f, benzo(b)fluoranthene; D(ah)A, dibenzo(ah)anthracene; I(1,2,3cd)P, ideno[1,2,3-cd]pyrene; As, arsenic; Cr, chromium; PCE, tetrachloroethene; TCE, trichloroethene; CNS, central nervous system; Al, aluminum; Mn, manganese; Tl, thallium; B(a)A, benzo(a)anthracene]

Location	Receptor		Excess Cancer Risk [1]	Note	Total Non-cancer Hazard Index [2]	Highest Target Organ Non-cancer Hazard Index [3]	Note
Current/Future Off Site Exposure Areas							
Off Site Residential Well at JW-01	Current/Future Child Resident	Total		No COCs - Excess cancer risk within USEPA's generally acceptable risk range.	4	4	Non-cancer hazards primarily due to ingestion of, dermal contact with and inhalation of groundwater containing PCE and vapor intrusion containing PCE.
	Current/Future Lifetime Resident	Total	3E-05				
Off Site Residential Well at MK-01	Current/Future Child Resident	Total		No COCs - Excess cancer risk within USEPA's generally acceptable risk range.	2	1	No COCs - The total hazard index is greater than 1; however, no target organ hazard indexes are greater than 1. (Non cancer hazards are not expected)
	Current/Future Lifetime Resident	Total	3E-05				
Off Site Residential Well at MK-12	Current/Future Child Resident	Total		No COCs - Excess cancer risk within USEPA's generally acceptable risk range.	No Detected COPCs	No Detected COPCs	No COCs - Non-cancer hazards are not expected.
	Current/Future Lifetime Resident	Total	No Detected COPCs				
Off Site Residential Well at MK-29	Current/Future Child Resident	Total		No COCs - Excess cancer risk within USEPA's generally acceptable risk range.	No Detected COPCs	No Detected COPCs	No COCs - Non-cancer hazards are not expected.
	Current/Future Lifetime Resident	Total	No Detected COPCs				
Off Site Residential Well at MK-34	Current/Future Child Resident	Total		No COCs - Excess cancer risk within USEPA's generally acceptable risk range.	No Detected COPCs	No Detected COPCs	No COCs - Non-cancer hazards are not expected.
	Current/Future Lifetime Resident	Total	No Detected COPCs				

Table L-04. Summary of human-health risks and hazards for detected chemicals of potential concern, Vienna, Missouri.—Continued

[B(a)P, benzo(a)pyrene; B(b)f, benzo(b)fluoranthene; D(ah)A, dibenzo(ah)anthracene; I(1,2,3cd)P, ideno[1,2,3-cd]pyrene; As, arsenic; Cr, chromium; PCE, tetrachloroethene; TCE, trichloroethene; CNS, central nervous system; Al, aluminum; Mn, manganese; Tl, thallium; B(a)A, benzo(a)anthracene]

Location	Receptor		Excess Cancer Risk [1]	Note	Total Non-cancer Hazard Index [2]	Highest Target Organ Non-cancer Hazard Index [3]	Note
Off Site Residential Well at MK-35	Current/Future Child Resident	Total		No COCs - Excess cancer risk within USEPA's generally acceptable risk range.	No Detected COPCs	No Detected COPCs	No COCs - Non-cancer hazards are not expected.
	Current/Future Lifetime Resident	Total	No Detected COPCs				
Off Site Residential Well at MK-43	Current/Future Child Resident	Total		No COCs - Excess cancer risk within USEPA's generally acceptable risk range.	No Detected COPCs	No Detected COPCs	No COCs - Non-cancer hazards are not expected.
	Current/Future Lifetime Resident	Total	No Detected COPCs				
Off Site Residential Well at PB-01	Current/Future Child Resident	Total		No COCs - Excess cancer risk within USEPA's generally acceptable risk range.	No Detected COPCs	No Detected COPCs	No COCs - Non-cancer hazards are not expected.
	Current/Future Lifetime Resident	Total	No Detected COPCs				
Off Site Residential Well at PB-02	Current/Future Child Resident	Total		No COCs - Excess cancer risk within USEPA's generally acceptable risk range.	No Detected COPCs	No Detected COPCs	No COCs - Non-cancer hazards are not expected.
	Current/Future Lifetime Resident	Total	No Detected COPCs				
Offsite Public-Supply Wells	Current/Future Child Resident	Total		No COCs - Excess cancer risk within USEPA's generally acceptable risk range.	0.8	0.3	No COCs - Non-cancer hazards are not expected.
	Current/Future Lifetime Resident	Total	3E-06				
Offsite Creeks	Current/Future Recreational	Total	3E-06	No COCs - Excess cancer risk within USEPA's generally acceptable risk range.	0.07	0.06	No COCs - Non-cancer hazards are not expected.

Table L-04. Summary of human-health risks and hazards for detected chemicals of potential concern, Vienna, Missouri.—Continued

[B(a)P, benzo(a)pyrene; B(b)f, benzo(b)fluoranthene; D(ah)A, dibenzo(ah)anthracene; I(1,2,3cd)P, ideno[1,2,3-cd]pyrene; As, arsenic; Cr, chromium; PCE, tetrachloroethene; TCE, trichloroethene; CNS, central nervous system; Al, aluminum; Mn, manganese; Tl, thallium; B(a)A, benzo(a)anthracene]

Location	Receptor		Excess Cancer Risk [1]	Note	Total Non-cancer Hazard Index [2]	Highest Target Organ Non-cancer Hazard Index [3]	Note
Off Site Residential at 402 North Chestnut	Current Child Resident	Total		No COCs - Excess cancer risk within USEPA's generally acceptable risk range.	0.5	0.5	No COCs - Non-cancer hazards are not expected.
	Current Lifetime Resident	Total	7E-06				
Off Site Residential at 411 North Chestnut	Current Child Resident	Total		No COCs - Excess cancer risk within USEPA's generally acceptable risk range.	3	1	No COCs - The total hazard index is greater than 1; however, no target organ hazard indexes are greater than 1. (Non cancer hazards are not expected)
	Current Lifetime Resident	Total	4E-05				
Off Site Residential at 414 North Olive	Current Child Resident	Total		No COCs - Excess cancer risk within USEPA's generally acceptable risk range.	1	0.7	No COCs - Non-cancer hazards are not expected.
	Current Lifetime Resident	Total	2E-05				
Off Site Residential at 436 8th Street	Current Child Resident	Total		No COCs - Excess cancer risk within USEPA's generally acceptable risk range.	3	2	Non-cancer hazards (effects on nasal) primarily due to inhalation of indoor vapors containing 1,1,2-Trichloroethane.
	Current Lifetime Resident	Total	9E-05				
Off Site Residential at 461 8th Street	Current Child Resident	Total		No COCs - Excess cancer risk within USEPA's generally acceptable risk range.	2	1	No COCs - The total HI is greater than 1; however, no target organ HIs are greater than 1. (Non cancer hazards are not expected)
	Current Lifetime Resident	Total	5E-05				
Off Site Residential at 505 North Olive	Current Child Resident	Total		No COCs - Excess cancer risk within USEPA's generally acceptable risk range.	2	2	Non-cancer hazards (effects on blood) primarily due to inhalation of indoor vapors containing 1,2,4-Trimethylbenzene, 1.3.5-Trimethylbenzene and Benzene.
	Current Lifetime Resident	Total	4E-05				
Off Site Residential at 506 North Olive	Current Child Resident	Total		No COCs - Excess cancer risk within USEPA's generally acceptable risk range.	2	2	Non-cancer hazards primarily due to inhalation of indoor vapors containing 1,2-Dichloroethane.
	Current Lifetime Resident	Total	1E-04				

Table L-04. Summary of human-health risks and hazards for detected chemicals of potential concern, Vienna, Missouri.—Continued

[B(a)P, benzo(a)pyrene; B(b)f, benzo(b)fluoranthene; D(ah)A, dibenzo(ah)anthracene; I(1,2,3cd)P, ideno[1,2,3-cd]pyrene; As, arsenic; Cr, chromium; PCE, tetrachloroethene; TCE, trichloroethene; CNS, central nervous system; Al, aluminum; Mn, manganese; Tl, thallium; B(a)A, benzo(a)anthracene]

Location	Receptor		Excess Cancer Risk [1]	Note	Total Non-cancer Hazard Index [2]	Highest Target Organ Non-cancer Hazard Index [3]	Note
Off Site Residential at 545 North Chestnut	Current Child Resident	Total		Excess cancer risk due to inhalation of indoor vapors containing 1,2-Dichloroethane, Benzene, Bromodichloromethane, Carbon Tetrachloride and Chloroform.	1	1	No COCs - The total hazard index does not exceed 1. (Non cancer hazards are not expected)
	Current Lifetime Resident	Total	8E-04				
Off Site Residential at 640 10th Street	Current Child Resident	Total		No COCs - Excess cancer risk within USEPA's generally acceptable risk range.	9	7	Non-cancer hazards primarily due to inhalation of indoor vapors containing 1,2-Dichloroethane, 1,3,5-Trimethylbenzene, 2-Hexanone, m and/or p-Xylene and o-Xylene. Non-cancer hazards (effects on blood) primarily due to inhalation of 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene and Benzene. Non-cancer hazards (effects on respiratory system) primarily due to inhalation of 1,3,5-Trimethylbenzene.
	Current Lifetime Resident	Total	1E-04				
Off Site Residential at 660 Oak Street	Current Child Resident	Total		No COCs - Excess cancer risk within USEPA's generally acceptable risk range.	2	2	Non-cancer hazards (effects on nasal) primarily due to inhalation of indoor vapors containing 1,1,2-Trichloroethane.
	Current Lifetime Resident	Total	6E-06				
Off Site Residential at 662 Oak Street	Current Child Resident	Total		No COCs - Excess cancer risk within USEPA's generally acceptable risk range.	7	6	Non-cancer hazards (effects on nasal) primarily due to inhalation of indoor vapors containing 1,1,2-Trichloroethane.
	Current Lifetime Resident	Total	3E-05				
Off Site Residential at 665 Oak Street	Current Child Resident	Total		No COCs - Excess cancer risk within USEPA's generally acceptable risk range.	0.3	0.2	No COCs - Non-cancer hazards are not expected.
	Current Lifetime Resident	Total	5E-06				
Off Site Residential at 667 Oak Street	Current Child Resident	Total		No COCs - Excess cancer risk within USEPA's generally acceptable risk range.	0.5	0.3	No COCs - Non-cancer hazards are not expected.
	Current Lifetime Resident	Total	3E-05				
Off Site Residential at 671 Oak Street	Current Child Resident	Total		No COCs - Excess cancer risk within USEPA's generally acceptable risk range.	0.9	0.5	No COCs - Non-cancer hazards are not expected.
	Current Lifetime Resident	Total	2E-05				

Table L-04. Summary of human-health risks and hazards for detected chemicals of potential concern, Vienna, Missouri.—Continued

[B(a)P, benzo(a)pyrene; B(b)f, benzo(b)fluoranthene; D(ah)A, dibenzo(ah)anthracene; I(1,2,3cd)P, ideno[1,2,3-cd]pyrene; As, arsenic; Cr, chromium; PCE, tetrachloroethene; TCE, trichloroethene; CNS, central nervous system; Al, aluminum; Mn, manganese; Tl, thallium; B(a)A, benzo(a)anthracene]

Location	Receptor		Excess Cancer Risk [1]	Note	Total Non-cancer Hazard Index [2]	Highest Target Organ Non-cancer Hazard Index [3]	Note
Off Site Residential at 672 Oak Street	Current Child Resident	Total		No COCs - Excess cancer risk within USEPA's generally acceptable risk range.	2	2	Non-cancer hazards (effects on blood) primarily due to inhalation of indoor vapors containing 1,2,4-Trimethylbenzene, 1.3.5-Trimethylbenzene and Benzene.
	Current Lifetime Resident	Total	3E-05				
Off Site Residential at 676 Oak Street	Current Child Resident	Total		No COCs - Excess cancer risk within USEPA's generally acceptable risk range.	0.9	0.5	No COCs - Non-cancer hazards are not expected.
	Current Lifetime Resident	Total	6E-06				
Off Site Residential at 682 Oak Street	Current Child Resident	Total		No COCs - Excess cancer risk within USEPA's generally acceptable risk range.	12	11	Non-cancer hazards (effects on blood) primarily due to inhalation of indoor vapors containing 1,2,4-Trimethylbenzene, 1.3.5-Trimethylbenzene and Benzene; effects on CNS due to 1,2-dichloroethane, 1,3,5-Trimethylbenzene and m,p,o-xylene; and effects on respiratory system due to 1,3,5-Trimethylbenzene.
	Current Lifetime Resident	Total	1E-04				

Table D-01. List of National Water Information System (NWIS) station names and aliases used in this report.

NWIS Station name (fig. 3-07)	Alias
Indian Creek Trib TB-2	TB2-2
Indian Creek Trib TB2-1	TB2-1
T40N R09W 21DCA2	MK-43
T40N R09W 21DDD	MK-35
T40N R09W 22CCC	MK-34
Vienna Blanks	Vienna Blanks
VIN COV-01	COV-01
VIN COV-03	COV-03
VIN MK-01	MK-01
VIN-JW-01-CISTERN	JW-01
VIN-JW-SEEP	JW-SEEP
VIN-MW01	MW-01
VIN-MW01A	MW-01A
VIN-MW02D	MW-02D
VIN-MW03D	MW-03D
VIN-MW03S	MW-03S
VIN-MW04D	MW-04D
VIN-MW04S	MW-04S
VIN-MW05D	MW-05D
VIN-MW05S	MW-05S
VIN-MW06	MW-06
VIN-MW06A	MW-06A
VIN-MW07	MW-07
VIN-MW-08	MW-08
VIN-MW-08A	MW-08A
VIN-MW-09D	MW-09D
VIN-MW-09S	MW-09S
VIN-PB-1	PB-01
VIN-PB-2	PB-02
VIN-VIENNA SPRING	Vienna Spring
WP-020	WP-020

Table D-02. Monthly groundwater yields and PCE concentrations used to estimate mass removal of PCE from public-supply wells COV-01 and COV-03 from 1995 to 2015 in Vienna, Missouri.

[PCE, tetrachloroethene; µg/L, micrograms per liter; g, grams; kg, kilograms; --, no data available]

	COV-01			COV-03				
Date	Yield, in gallons	PCE concentration, in µg/L	Estimated Mass of PCE removed, in g	Yield, in gallons	PCE concentration in raw water, in µg/L	PCE concentration in treated water, in µg/L	Estimated Mass of PCE removed, in g	Cumulative Estimated Mass of PCE removed, in kg
July-95	81,400	0.90	0.28	2,741,000	--	--	0.00	0.00
August-95	119,600	0.90	0.41	2,723,000	--	--	0.00	0.00
September-95	22,900	0.90	0.08	2,704,000	--	--	0.00	0.00
October-95	1,800	0.90	0.01	2,523,000	--	--	0.00	0.00
November-95	100,000	0.90	0.34	2,025,000	--	--	0.00	0.00
December-95	4,500	0.90	0.02	2,385,000	--	--	0.00	0.00
January-96	23,800	0.90	0.08	2,410,000	--	--	0.00	0.00
February-96	128,900	0.90	0.44	2,183,000	--	--	0.00	0.00
March-96	191,400	0.90	0.65	2,085,000	--	--	0.00	0.00
April-96	222,700	0.90	0.76	1,918,000	--	--	0.00	0.00
May-96	9,600	0.90	0.03	2,333,000	--	--	0.00	0.00
June-96	65,300	0.90	0.22	2,431,000	--	--	0.00	0.00
July-96	400	0.90	0.00	2,728,000	--	--	0.00	0.00
August-96	232,100	0.90	0.79	2,557,000	--	--	0.00	0.00
September-96	4,700	0.90	0.02	2,497,000	--	--	0.00	0.00
October-96	27,900	0.90	0.10	2,552,000	--	--	0.00	0.00
November-96	71,900	0.90	0.24	2,836,000	--	--	0.00	0.00
December-96	153,100	0.90	0.52	2,364,000	--	--	0.00	0.00
January-97	157,000	0.90	0.53	2,259,000	--	--	0.00	0.01
February-97	141,800	0.90	0.48	1,882,000	--	--	0.00	0.01
March-97	114,000	0.90	0.39	2,077,000	0.50	--	0.00	0.01
April-97	180,600	0.90	0.62	1,968,000	0.50	--	3.72	0.01
May-97	99,000	0.90	0.34	2,319,000	0.50	--	4.39	0.02
June-97	50,300	0.90	0.17	2,271,000	0.50	--	4.30	0.02
July-97	184,800	0.90	0.63	2,639,000	0.50	--	4.99	0.03
August-97	157,900	0.90	0.54	2,804,000	0.50	--	5.31	0.03
September-97	203,000	0.90	0.69	2,433,000	0.50	--	4.60	0.04
October-97	166,900	0.90	0.57	2,511,000	0.50	--	4.75	0.04
November-97	88,900	0.90	0.30	2,578,000	0.70	--	4.88	0.05
December-97	96,400	0.90	0.33	2,455,000	0.70	--	6.50	0.05
January-98	134,200	0.90	0.46	2,634,000	0.70	--	6.98	0.06
February-98	160,500	0.90	0.55	2,528,000	0.80	--	6.70	0.07
March-98	147,800	0.90	0.50	2,782,000	0.80	--	8.42	0.08
April-98	115,500	0.90	0.39	2,416,000	0.80	--	7.32	0.09
May-98	118,000	0.90	0.40	1,355,200	0.80	--	4.10	0.09
June-98	298,600	0.90	1.02	3,616,800	0.80	--	10.95	0.10
July-98	102,200	0.90	0.35	2,536,000	0.80	--	7.68	0.11
August-98	52,600	0.90	0.18	2,742,000	1.30	--	8.30	0.12
September-98	27,900	0.90	0.10	2,859,000	1.30	--	14.07	0.13
October-98	100,400	0.90	0.34	2,631,000	1.30	--	12.95	0.15
November-98	102,300	0.90	0.35	2,363,000	1.30	--	11.63	0.16
December-98	92,000	0.90	0.31	2,622,000	1.60	--	12.90	0.17
January-99	49,400	0.90	0.17	2,902,000	1.60	--	17.57	0.19
February-99	86,600	0.90	0.30	2,094,000	1.60	--	12.68	0.20
March-99	34,400	0.90	0.12	2,475,000	1.40	--	14.99	0.22
April-99	109,300	0.90	0.37	2,234,000	1.40	--	11.84	0.23
May-99	58,900	0.90	0.20	2,520,000	1.60	--	13.35	0.24
June-99	35,900	0.90	0.12	2,650,000	1.60	--	16.05	0.26
July-99	59,600	0.90	0.20	3,143,000	1.60	--	19.03	0.28
August-99	94,300	0.90	0.32	2,992,000	1.60	--	18.12	0.30
September-99	29,400	0.90	0.10	2,824,000	1.60	--	17.10	0.31
October-99	1,200	0.90	0.00	2,607,000	1.60	--	15.79	0.33
November-99	117,900	0.90	0.40	2,383,000	2.00	--	14.43	0.34
December-99	349,900	0.90	1.19	2,300,000	2.00	--	17.41	0.36
January-00	98,700	0.90	0.34	2,518,000	2.00	--	19.06	0.38
February-00	140,800	0.90	0.48	2,227,000	1.90	--	16.86	0.40
March-00	104,200	0.90	0.35	2,447,000	1.90	--	17.60	0.42
April-00	180,700	0.90	0.62	2,231,000	1.90	--	16.04	0.43
May-00	279,700	0.90	0.95	2,577,000	1.40	--	18.53	0.45
June-00	153,300	0.90	0.52	2,424,000	1.40	--	12.84	0.47
July-00	401,000	0.90	1.37	2,226,000	1.40	--	11.80	0.48
August-00	349,600	0.90	1.19	2,425,000	1.40	--	12.85	0.49
September-00	186,800	0.90	0.64	2,441,000	1.40	--	12.93	0.51
October-00	236,800	0.90	0.81	2,252,000	1.40	--	11.93	0.52
November-00	157,500	0.90	0.54	2,392,000	1.90	--	12.68	0.53
December-00	156,000	0.90	0.53	2,662,000	1.90	--	19.14	0.55
January-01	46,900	0.90	0.16	2,640,000	1.90	--	18.99	0.57
February-01	128,500	0.90	0.44	2,021,000	1.90	--	14.53	0.59
March-01	139,200	0.90	0.47	2,386,000	1.90	--	17.16	0.61
April-01	97,900	0.90	0.33	2,420,000	1.90	--	17.40	0.62
May-01	134,500	0.90	0.46	2,350,000	2.60	--	16.90	0.64
June-01	222,600	0.90	0.76	2,267,000	2.60	--	22.31	0.66
July-01	641,100	0.90	2.18	2,137,000	2.60	--	21.03	0.69
August-01	119,500	0.90	0.41	3,008,000	2.10	--	29.60	0.72
September-01	246,800	0.90	0.84	2,521,000	2.10	--	20.04	0.74
October-01	209,500	0.90	0.71	2,366,000	2.10	--	18.81	0.76
November-01	114,300	0.90	0.39	2,281,000	2.10	--	18.13	0.78
December-01	258,300	0.90	0.88	2,214,000	0.80	--	17.60	0.79
January-02	81,500	0.90	0.28	2,396,000	0.80	--	7.26	0.80
February-02	113,900	0.90	0.39	2,087,000	1.80	--	6.32	0.81
March-02	187,800	0.90	0.64	2,301,000	1.80	--	15.68	0.82
April-02	281,200	0.90	0.96	2,076,000	1.80	--	14.14	0.84
May-02	602,800	0.90	2.05	1,686,000	1.80	--	11.49	0.85
June-02	12,700	0.90	0.04	2,462,000	2.00	--	16.77	0.87
July-02	8,800	0.90	0.03	2,490,000	2.00	--	18.85	0.89

Table D-02. Monthly groundwater yields and PCE concentrations used to estimate mass removal of PCE from public-supply wells COV-01 and COV-03 from 1995 to 2015 in Vienna, Missouri.—Continued

[PCE, tetrachloroethene; µg/L, micrograms per liter; g, grams; kg, kilograms; --, no data available]

Date	COV-01			COV-03				Cumulative Estimated Mass of PCE removed, in kg
	Yield, in gallons	PCE concentration, in µg/L	Estimated Mass of PCE removed, in g	Yield, in gallons	PCE concentration in raw water, in µg/L	PCE concentration in treated water, in µg/L	Estimated Mass of PCE removed, in g	
August-02	16,700	0.90	0.06	2,707,000	2.17	--	20.49	0.91
September-02	72,500	0.90	0.25	2,364,000	2.17	--	19.42	0.93
October-02	4,700	0.90	0.02	2,341,000	2.17	--	19.23	0.95
November-02	2,400	0.90	0.01	2,190,000	1.85	--	17.99	0.97
December-02	10,200	0.90	0.03	2,343,000	1.85	--	16.41	0.98
January-03	6,700	0.90	0.02	2,334,000	1.85	--	16.34	1.00
February-03	2,800	0.90	0.01	2,002,000	1.83	--	14.02	1.01
March-03	27,300	0.90	0.09	2,335,000	1.83	--	16.17	1.03
April-03	14,100	0.90	0.05	2,343,000	1.83	--	16.23	1.05
May-03	9,800	0.90	0.03	2,190,000	1.09	--	15.17	1.06
June-03	26,300	0.90	0.09	2,235,000	1.09	--	9.22	1.07
July-03	48,000	0.90	0.16	2,794,000	1.09	--	11.53	1.08
August-03	13,100	0.90	0.04	2,911,000	2.18	--	12.01	1.09
September-03	40,900	0.90	0.14	2,183,000	2.18	--	18.01	1.11
October-03	8,200	0.90	0.03	2,408,000	2.18	--	19.87	1.13
November-03	10,200	0.90	0.03	2,002,000	2.82	--	16.52	1.15
December-03	8,200	0.90	0.03	2,124,000	2.82	--	22.67	1.17
January-04	31,400	0.90	0.11	2,233,000	2.82	--	23.83	1.20
February-04	11,800	0.90	0.04	2,103,000	2.66	--	22.45	1.22
March-04	33,100	0.90	0.11	2,177,000	2.66	--	21.92	1.24
April-04	11,100	0.90	0.04	2,116,000	2.66	--	21.30	1.26
May-04	10,100	0.90	0.03	2,686,000	2.66	--	27.04	1.29
June-04	18,500	0.90	0.06	2,574,000	2.66	--	25.92	1.31
July-04	84,400	0.90	0.29	2,872,000	2.66	--	28.92	1.34
August-04	56,700	0.90	0.19	2,792,000	3.06	--	28.11	1.37
September-04	5,400	0.90	0.02	2,511,000	3.06	--	29.08	1.40
October-04	5,300	0.90	0.02	2,292,000	3.06	--	26.55	1.43
November-04	3,100	0.90	0.01	2,162,000	3.06	--	25.04	1.45
December-04	7,700	0.90	0.03	2,179,000	3.06	--	25.24	1.48
January-05	4,700	0.90	0.02	2,233,000	3.06	--	25.86	1.50
February-05	0	0.90	0.00	2,032,000	0.00	--	23.53	1.53
March-05	25,900	0.90	0.09	2,110,000	0.00	--	0.00	1.53
April-05	42,500	0.90	0.14	2,074,000	0.00	--	0.00	1.53
May-05	155,600	0.90	0.53	2,176,000	2.92	--	0.00	1.53
June-05	238,700	0.90	0.81	2,325,000	2.92	--	25.70	1.55
July-05	56,400	0.90	0.19	2,764,000	2.92	--	30.55	1.59
August-05	166,800	0.90	0.57	2,510,000	2.91	--	27.74	1.61
September-05	0	0.90	0.00	2,228,000	2.91	--	24.54	1.64
October-05	0	0.90	0.00	2,186,000	2.91	--	24.08	1.66
November-05	0	0.90	0.00	2,214,000	3.20	--	24.39	1.69
December-05	0	0.90	0.00	2,315,000	3.20	--	28.04	1.71
January-06	0	0.90	0.00	2,254,000	3.20	--	27.30	1.74
February-06	157,600	3.82	0.54	2,052,000	3.65	--	24.85	1.77
March-06	16,200	3.82	0.23	2,309,000	3.65	--	31.90	1.80
April-06	66,000	3.82	0.95	2,370,000	3.65	--	32.74	1.83
May-06	0	3.76	0.00	2,467,000	3.38	--	34.08	1.87
June-06	142,100	3.76	2.02	2,683,000	3.38	--	34.32	1.90
July-06	18,400	3.76	0.26	2,689,000	3.38	--	34.40	1.94
August-06	0	4.64	0.00	2,791,000	5.72	--	35.71	1.97
September-06	0	4.80	0.00	2,384,000	4.66	--	51.61	2.03
October-06	0	4.80	0.00	2,323,000	2.33	--	40.97	2.07
November-06	0	4.80	0.00	2,251,000	2.33	--	19.85	2.09
December-06	156,200	3.58	2.84	2,197,000	3.39	--	19.38	2.11
January-07	0	3.58	0.00	2,154,000	3.39	--	27.64	2.14
February-07	19,600	3.14	0.27	2,581,000	3.29	--	33.12	2.17
March-07	16,200	3.14	0.19	2,281,000	3.29	--	28.40	2.20
April-07	26,900	3.14	0.32	2,099,000	3.29	--	26.14	2.22
May-07	97,200	4.61	1.16	2,276,000	3.09	--	28.34	2.25
June-07	26,300	4.61	0.46	2,425,000	3.09	--	28.36	2.28
July-07	90,500	4.61	1.58	2,423,000	3.09	--	28.34	2.31
August-07	524,700	4.61	9.16	2,215,000	3.09	--	25.91	2.35
September-07	103,300	4.23	1.80	2,356,000	4.47	--	27.55	2.38
October-07	18,200	4.23	0.29	2,424,000	4.47	--	41.01	2.42
November-07	31,600	4.23	0.51	2,112,000	4.47	--	35.73	2.45
December-07	1,000	1.14	0.02	2,265,000	4.43	--	38.32	2.49
January-08	0	1.14	0.00	2,434,000	4.43	--	40.81	2.53
February-08	2,200	1.14	0.01	2,246,000	4.43	--	37.66	2.57
March-08	2,000	0.50	0.01	2,294,000	4.43	--	38.46	2.61
April-08	2,300	0.50	0.00	2,186,000	4.43	--	36.65	2.65
May-08	0	0.92	0.00	2,243,000	4.52	--	37.61	2.68
June-08	0	0.92	0.00	2,208,000	4.52	--	37.77	2.72
July-08	0	0.92	0.00	2,452,000	4.52	--	41.95	2.76
August-08	0	0.92	0.00	2,340,000	4.52	--	40.03	2.80
September-08	0	0.50	0.00	2,164,000	4.69	--	37.02	2.84
October-08	0	0.50	0.00	2,248,000	4.69	--	39.91	2.88
November-08	0	0.61	0.00	2,210,000	6.25	--	39.23	2.92
December-08	0	0.61	0.00	2,116,000	6.25	--	50.06	2.97
January-09	0	0.61	0.00	2,164,000	6.25	--	51.19	3.02
February-09	0	0.50	0.00	1,818,000	5.53	--	43.01	3.06
March-09	0	0.50	0.00	2,003,000	5.53	--	41.92	3.11
April-09	0	0.50	0.00	1,925,000	5.53	--	40.29	3.15
May-09	0	0.50	0.00	2,117,000	5.28	--	44.31	3.19
June-09	0	0.50	0.00	2,081,000	5.28	--	41.59	3.23
July-09	0	0.50	0.00	2,160,000	5.28	--	43.17	3.28
August-09	0	0.50	0.00	2,174,000	5.58	--	43.45	3.32
September-09	0	0.50	0.00	2,116,000	5.58	--	44.69	3.36

Table D-02. Monthly groundwater yields and PCE concentrations used to estimate mass removal of PCE from public-supply wells COV-01 and COV-03 from 1995 to 2015 in Vienna, Missouri.—Continued

[PCE, tetrachloroethene; µg/L, micrograms per liter; g, grams; kg, kilograms; --, no data available]

Date	COV-01			COV-03				Cumulative Estimated Mass of PCE removed, in kg
	Yield, in gallons	PCE concentration, in µg/L	Estimated Mass of PCE removed, in g	Yield, in gallons	PCE concentration in raw water, in µg/L	PCE concentration in treated water, in µg/L	Estimated Mass of PCE removed, in g	
October-09	0	0.84	0.00	2,042,000	4.19	--	43.13	3.41
November-09	0	0.84	0.00	1,929,000	4.19	--	30.59	3.44
December-09	0	0.84	0.00	2,107,000	4.19	--	33.42	3.47
January-10	0	0.84	0.00	2,483,000	4.19	--	39.38	3.51
February-10	0	0.84	0.00	2,096,000	4.19	--	33.24	3.54
March-10	0	0.50	0.00	2,380,000	5.33	--	37.74	3.58
April-10	0	0.50	0.00	2,075,000	4.78	--	41.86	3.62
May-10	0	0.50	0.00	2,136,000	4.78	--	38.65	3.66
June-10	0	0.50	0.00	2,074,000	4.78	--	37.52	3.70
July-10	0	0.50	0.00	2,033,000	6.14	--	36.78	3.74
August-10	0	0.50	0.00	2,137,000	6.14	--	49.66	3.79
September-10	0	0.50	0.00	2,216,000	6.14	--	51.50	3.84
October-10	0	0.50	0.00	2,176,000	6.14	--	50.57	3.89
November-10	0	0.83	0.00	1,839,000	4.14	--	42.74	3.93
December-10	0	0.83	0.00	2,637,000	4.14	--	41.32	3.97
January-11	0	0.54	0.00	2,424,000	4.40	--	37.98	4.01
February-11	0	0.54	0.00	2,247,000	4.40	--	37.42	4.05
March-11	0	0.54	0.00	2,188,000	4.40	--	36.44	4.08
April-11	0	0.50	0.00	2,022,000	5.02	--	33.67	4.12
May-11	0	0.50	0.00	2,088,000	5.02	--	39.67	4.16
June-11	0	0.50	0.00	2,066,000	5.02	--	39.26	4.20
July-11	0	0.50	0.00	2,239,000	5.80	--	42.54	4.24
August-11	0	0.50	0.00	2,318,000	5.80	--	50.89	4.29
September-11	0	0.50	0.00	2,321,000	5.80	--	50.95	4.34
October-11	0	0.50	0.00	2,284,000	5.91	--	50.14	4.39
November-11	0	0.50	0.00	2,244,000	5.91	--	50.20	4.44
December-11	0	0.50	0.00	2,156,000	5.91	--	48.23	4.49
January-12	0	0.50	0.00	2,160,000	5.91	--	48.32	4.54
February-12	0	1.13	0.00	1,940,000	5.76	--	43.40	4.58
March-12	0	1.13	0.00	1,191,500	5.76	--	25.98	4.61
April-12	0	0.85	0.00	2,514,800	6.14	--	54.83	4.66
May-12	0	0.85	0.00	2,534,500	6.14	--	58.90	4.72
June-12	0	0.85	0.00	2,654,200	6.14	--	61.68	4.78
July-12	0	1.66	0.00	3,120,900	6.76	--	72.53	4.85
August-12	0	1.66	0.00	2,732,400	6.76	--	69.91	4.92
September-12	0	1.66	0.00	2,492,200	6.76	--	63.77	4.99
October-12	0	1.66	0.00	374,800	6.76	--	9.59	5.00
November-12	0	1.66	0.00	5,260,900	6.76	0.61	134.61	5.13
December-12	0	1.66	0.00	2,931,000	6.76	0.61	74.99	5.21
January-13	0	1.66	0.00	3,175,500	6.76	0.61	81.25	5.29
February-13	0	1.66	0.00	2,539,200	6.76	0.61	64.97	5.35
March-13	0	1.66	0.00	2,862,000	6.76	0.50	73.23	5.43
April-13	0	1.66	0.00	2,724,500	6.76	0.50	69.71	5.50
May-13	0	1.66	0.00	2,879,300	6.76	0.50	73.67	5.57
June-13	0	1.66	0.00	2,640,900	6.76	0.50	67.57	5.64
July-13	0	1.66	0.00	2,695,800	6.76	0.50	68.98	5.71
August-13	0	1.66	0.00	2,877,600	6.76	0.50	73.63	5.78
September-13	0	1.66	0.00	2,642,700	6.76	0.50	67.62	5.85
October-13	0	1.66	0.00	2,498,000	6.76	0.50	63.92	5.91
November-13	0	1.66	0.00	2,409,600	6.76	0.50	61.65	5.97
December-13	0	1.66	0.00	2,462,300	6.76	0.50	63.00	6.04
January-14	0	1.66	0.00	2,566,500	6.76	0.50	65.67	6.10
February-14	0	1.66	0.00	2,174,000	6.76	0.50	55.63	6.16
March-14	0	1.66	0.00	2,450,000	6.76	0.50	62.69	6.22
April-14	0	1.66	0.00	2,360,100	6.76	0.50	60.39	6.28
May-14	0	1.66	0.00	2,514,600	6.76	0.50	64.34	6.35
June-14	0	1.66	0.00	2,259,500	6.76	0.50	57.81	6.40
July-14	0	1.66	0.00	2,280,900	6.76	0.50	58.36	6.46
August-14	0	1.66	0.00	2,321,600	6.76	0.50	59.40	6.52
September-14	0	1.66	0.00	2,067,800	6.76	0.50	52.91	6.57
October-14	0	1.66	0.00	2,125,000	6.76	0.50	54.37	6.63
November-14	0	1.66	0.00	2,003,400	6.76	0.50	51.26	6.68
December-14	0	1.66	0.00	2,190,600	6.76	0.50	56.05	6.74
January-15	0	1.66	0.00	2,166,100	6.76	0.50	55.42	6.79
February-15	0	1.66	0.00	2,011,800	6.76	0.50	51.48	6.84
March-15	0	1.66	0.00	2,113,700	6.76	0.50	54.08	6.90
April-15	0	1.66	0.00	2,115,000	6.76	0.50	54.12	6.95
May-15	0	1.66	0.00	1,984,300	6.76	0.50	50.77	7.00
June-15	0	1.66	0.00	1,932,600	6.76	0.50	49.45	7.05

Table D-03. Water-level measurements in domestic wells in the vicinity of Vienna, 2011 and 2016.

NWIS Station name (figs. 2-05, 2-06, and D-01)	Well Alias	Date	Water-level elevation, in feet above the North American Vertical Datum of 1988
T40N R09W 30DCA	069JR	11/28/2011	816.17
T40N R09W 16BDC	MK-17	11/17/2011	743.20
T40N R09W 30ACA	074JR	11/28/2011	796.41
T40N R09W 21DCA	MK-42	11/28/2011	686.74
T40N R09W 22DCA	MK-30	11/28/2011	618.90
T40N R09W 21DCA2	MK-43	11/28/2011	724.77
T40N R09W 08BCC	MK-13	11/17/2011	729.07
T40N R09W 19BAD	087JR	11/29/2011	771.51
T40N R09W 28AAC	MK-44	11/28/2011	697.96
T40N R09W 31BDA	067JR	11/18/2011	818.77
T40N R09W 33CCD	047JR	11/17/2011	832.49
T40N R09W 18DDC	MK-51	11/29/2011	766.80
T40N R09W 17DAA	MK-21	11/22/2011	749.08
T40N R09W 30AAB	071JR	11/28/2011	785.60
T40N R09W 19BAC	MK-50	11/29/2011	783.74
T40N R09W 20DDC	MK-01	11/15/2011	765.60
T40N R09W 17ADD2	MK-22	11/22/2011	762.41
T40N R09W 17BBA	MK-11	11/16/2011	756.89
T40N R09W 29BCD	057JR	11/18/2011	844.33
T40N R09W 32ABD	019JR	11/15/2011	829.48
T40N R09W 29DBB2	004JR	11/15/2011	843.22
T40N R09W 19CCC	077JR	11/28/2011	780.34
T40N R09W 29DBB	003JR	11/15/2011	832.34
T40N R09W 32AAD	020JR	11/16/2011	818.20
T40N R09W 17DDB	MK-16	11/17/2011	788.66
T40N R09W 17ADC	MK-20	11/22/2011	764.56
T40N R09W 21BAD	MK-29	11/28/2011	740.23
T40N R09W 32ACB	015JR	11/15/2011	824.80
T40N R09W 17AAB	MK-23	11/22/2011	758.91
T40N R09W 17DCC3	MK-09	11/16/2011	774.31
T40N R09W 32ABC	013JR	11/15/2011	816.59
T40N R09W 20BDD	MK-12	11/16/2011	772.50
T40N R09W 17DCC5	MK-52	11/29/2011	769.88
T40N R09W 19CBC	078JR	11/28/2011	765.12
T40N R09W 32ACB2	017JR	11/15/2011	822.26
T40N R09W 17DCC2	MK-08	11/16/2011	776.34
T40N R09W 20ABA	MK-05	11/15/2011	774.32
T40N R09W 20ABC	MK-03	11/15/2011	774.14
T40N R09W 20ACA	MK-02	11/15/2011	771.90
T40N R09W 17DCC	MK-06	11/15/2011	769.61
T40N R09W 20ABD	MK-04	11/15/2011	773.17
T40N R09W 32ACA	022JR	11/16/2011	819.75

Table D-03. Water-level measurements in domestic wells in the vicinity of Vienna, 2011 and 2016.

NWIS Station name (figs. 2-05, 2-06, and D-01)	Well Alias	Date	Water-level elevation, in feet above the North American Vertical Datum of 1988
T40N R09W 20AAB2	MK-15	11/17/2011	774.12
VIN-MW-05S	MW-05S	2/29/2016	760.48
VIN-MW-02D	MW-02D	3/7/2016	757.8
VIN-MW-04D	MW-04D	3/7/2016	777.51
VIN-MW-01	MW-01	3/7/2016	803.47
VIN-MW-03D	MW-03D	3/7/2016	790.54
VIN-MW06A	MW-06A	3/7/2016	792.82
VIN-MW-09S	MW-09S	3/15/2016	729.96
VIN-MW-08A	MW-08A	3/17/2016	750.56
VIN-MW08	MW-08	6/23/2016	739.25
VIN MK-01	MK-01	6/23/2016	777.01
VIN COV-01	COV-01	6/23/2016	788.00
VIN COV-03	COV-03	6/23/2016	662.00