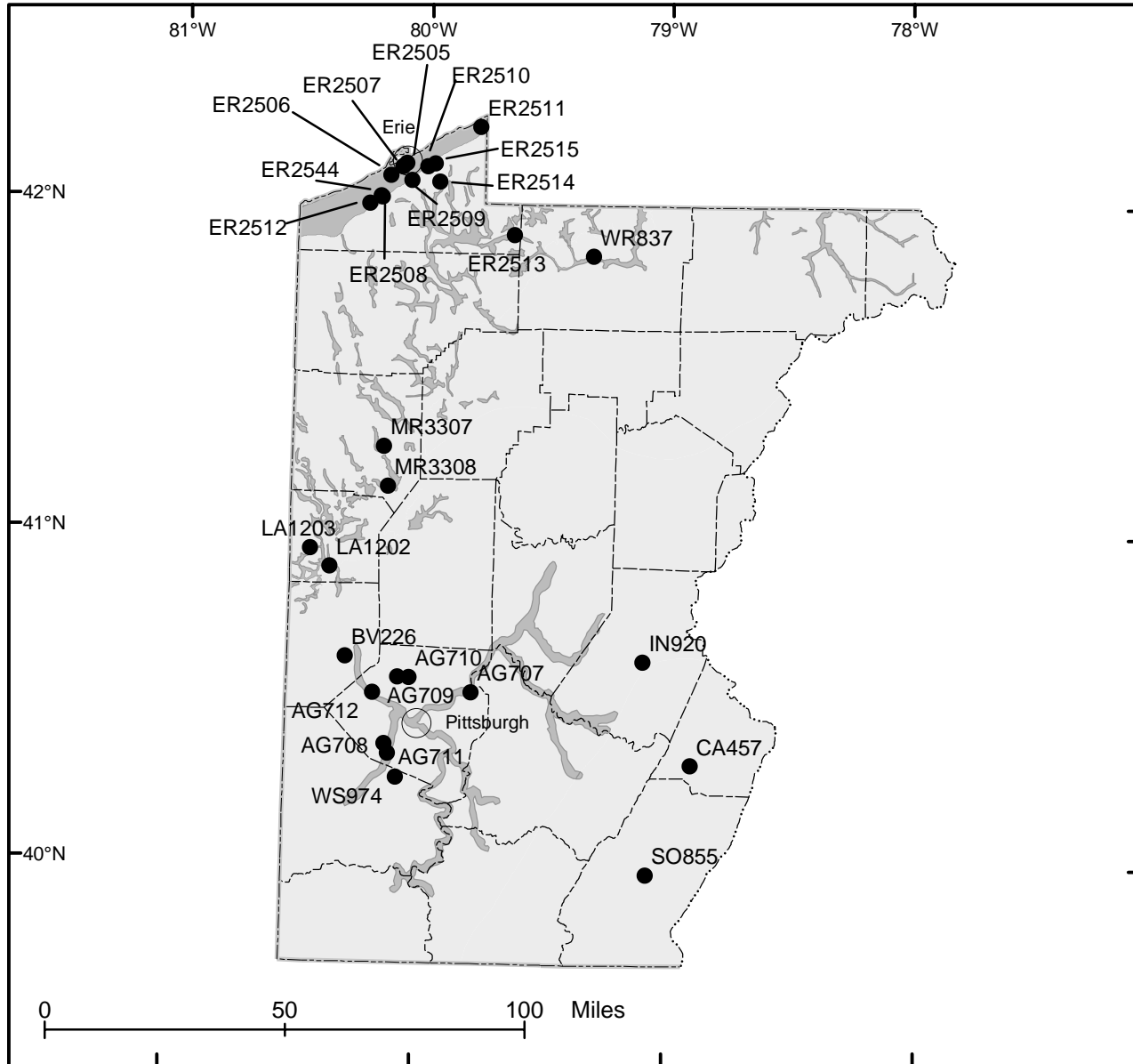


**GROUND-WATER DATA COLLECTED AT SPECIAL-STUDY SITES  
STATEWIDE ASSESSMENT OF METHYL-TERT-BUTYL-ETHER (MTBE) IN GROUND WATER**

The following table contains water-quality data from wells sampled as part of a study of MTBE in ground water in Pennsylvania. The U.S. Geological Survey, in cooperation with the Pennsylvania Department of Environmental Protection, conducted the study. The wells were sampled for MTBE, a gasoline additive, BTEX compounds (benzene, toluene, ethyl benzene, and xylene), pH, specific conductance, and temperature. Samples were collected from 86 wells in four geologic settings, and in various land use settings, across the state. Other data for the project can be found in the annual Water Data Reports PA-02-1, and PA-02-2. For additional information, contact Steve McAuley at the U.S. Geological Survey, 1000 Church Hill Road, Pittsburgh, PA 15025; 412-490-3801 (email: smcauley@usgs.gov).



**EXPLANATION**

● Sample Location

**Aquifer Type**

□ Siliciclastic

■ Unconsolidated

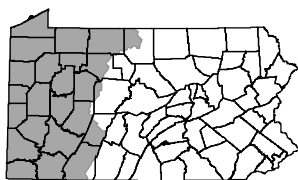


Figure 7.--Location of wells sampled as part of the MTBE in ground water project.

**GROUND-WATER DATA COLLECTED AT SPECIAL-STUDY SITES**  
**STATEWIDE ASSESSMENT OF METHYL-TERT-BUTYL-ETHER (MTBE) IN GROUND WATER PROJECT--Continued**

**REMARKS.**--Explanation of column headings--SITE IDENTIFIER: 15-digit unique identifier based on site latitude (first six digits), longitude (digits seven through thirteen), and a 2-digit sequence number suffix; ELEVATION OF LAND SURFACE: land-surface at well site in feet above sea level; All samples taken while pumping the well;  $\mu\text{S}/\text{CM}$ : microsiemens per centimeter at 25 degrees Celsius; DEG C: degrees Celsius;  $\mu\text{G}/\text{L}$ : micrograms per liter; "<" = less than; "E" = estimated. Quality-control data for a replicate sample are shown for Local Well Number AG 710 on August 20, 2001 at 1220.

WATER-QUALITY DATA, WATER YEARS OCTOBER 2000 TO SEPTEMBER 2002

SITE IDENTIFIER	LOCAL WELL NUMBER	DATE	TIME	AGENCY COLLECTING SAMPLE (NUMBER)	AGENCY ANALYZING SAMPLE (NUMBER)	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM ABOVE NGVD (72000)	PH WATER WHOLE FIELD (STANDARD ARD UNITS)	SPECIFIC CONDUCTANCE ( $\mu\text{S}/\text{CM}$ ) (00095)	TEMPERATURE WATER (DEG C) (00010)	XYLENE WATER UNFLTRD REC ( $\mu\text{G}/\text{L}$ ) (81551)
ALLEGHENY COUNTY												
402056080064301	AG 711	08-23-01	1025	1028	80020	9.33	108	850	7.4	2250	14.5	<.2
402240080073001	AG 708	08-06-01	1530	1028	80020	45.00	80	860	7.2	3090	15.0	<.2
403154080103401	AG 712	02-14-02	1030	1028	80020	--	60	730	7.5	642	14.0	<.2
403212079465801	AG 707	07-23-01	1100	1028	80020	--	60	755	7.1	491	15.0	<.2
403441080015401	AG 710	08-20-01	1215	1028	80020	--	131	1200	8.2	1200	13.0	<.2
403441080015401	AG 710	08-20-01	1220	1028	80020	--	131	1200	--	--	--	<.2
4034470800044101	AG 709	08-17-01	1140	1028	80020	12.90	185	1250	6.8	1280	14.0	<.2
BEAVER COUNTY												
403816080172401	BV 226	08-16-01	1045	1028	80020	--	100	1010	8.7	535	14.0	<.2
CAMBRIA COUNTY												
401929078540901	CA 457	10-25-01	0830	1028	80020	--	225	1750	7.2	580	12.0	<.2
ERIE COUNTY												
415441079383101	ER 2513	10-30-01	0940	1028	80020	--	80	1680	7.6	272	13.0	<.2
415958080140701	ER 2512	08-27-01	1340	1028	80020	--	45	935	7.1	413	15.0	<.2
420106080110401	ER 2508	11-07-01	1030	1028	80020	33.25	43	990	7.7	426	12.0	<.2
420123080112201	ER 8544	08-27-01	1130	1028	80020	63.78	83.1	975	7.7	567	13.5	<.2
420405079570501	ER 2514	11-07-01	1730	1028	80020	4.60	20	1345	7.4	1390	13.0	<.2
420417080034901	ER 2509	11-07-01	1345	1028	80020	--	100	1045	7.7	482	13.0	<.2
420504080090301	ER 2505	08-28-01	0820	1028	80020	21.00	24	740	7.6	1360	12.5	<.2
420640080061101	ER 2507	10-09-01	1630	1028	80020	11.71	24.1	710	7.0	768	16.5	<.2
420646080000501	ER 2510	11-07-01	1610	1028	80020	--	25	970	7.4	763	12.0	<.2
420717080051301	ER 2506	10-09-01	1115	1028	80020	5.88	19.34	670	9.1	2610	13.0	E.3
420720079581501	ER 2515	11-02-01	1100	1028	80020	62.85	90	1140	8.1	813	13.0	<.2
421402079471401	ER 2511	11-08-01	0920	1028	80020	17.80	88	495	7.5	1330	11.5	<.2
INDIANA COUNTY												
403802079054701	IN 920	10-30-01	1610	1028	80020	--	60	1350	8.4	369	13.0	<.2
LAWRENCE COUNTY												
405423080213701	LA 1202	11-15-01	1600	1028	80020	29.44	79	830	6.8	570	13.0	<.2
405739080263001	LA 1203	11-15-01	1725	1028	80020	--	100	1020	8.8	883	11.5	<.2
MERCER COUNTY												
410905080080101	MR 3308	11-15-01	1225	1028	80020	31.30	64.2	1280	6.9	626	11.5	<.2
411612080091501	MR 3307	11-15-01	1000	1028	80020	--	65	1250	7.4	1390	11.0	<.2
SOMERSET COUNTY												
395946079043401	SO 855	10-18-01	1345	1028	80020	--	47	2110	4.8	87	12.5	<.2
WARREN COUNTY												
415101079190301	WR 837	10-30-01	1150	1028	80020	--	51	1205	7.4	303	11.0	<.2
WASHINGTON COUNTY												
401644080043701	WS 974	07-16-01	0850	1028	80020	--	55	990	7.3	1150	15.5	<.2

**GROUND-WATER DATA COLLECTED AT SPECIAL-STUDY SITES**  
**STATEWIDE ASSESSMENT OF METHYL-TERT-BUTYL-ETHER (MTBE) IN GROUND WATER PROJECT--Continued**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2002

DATE	BENZENE 14BRFL- SURROG VOC	BENZENE TOTAL (µG/L) (34030)	ETHANE 12DICL SURROG VOC	ETHYL- BENZENE TOTAL (µG/L) (34371)	METHYL TERT- BUTYL ETHER WAT UNF REC (µG/L) (78032)	META/ PARA- XYLENE WATER UNFLTRD REC (µG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (µG/L) (77135)	TOLUENE D8 SURROG VOC UNFLTRD REC PERCENT (99833)	TOLUENE TOTAL (µG/L) (34010)	SET NUMBER VOC AN- ALYSIS (NO. ) (99931)
	UNFLTRD REC PERCENT (99834)		UNFLTRD REC PERCENT (99832)	BENZENE TOTAL (µG/L) (34030)	ETHYL- BENZENE TOTAL (µG/L) (34371)	METHYL TERT- BUTYL ETHER WAT UNF REC (µG/L) (78032)	META/ PARA- XYLENE WATER UNFLTRD REC (µG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (µG/L) (77135)	TOLUENE D8 SURROG VOC UNFLTRD REC PERCENT (99833)	TOLUENE TOTAL (µG/L) (34010)
ALLEGHENY COUNTY										
08-23-01	111	<.2	103	<.2	<.2	<.2	<.2	97.1	.2	2.01
08-06-01	79.6	<.2	115	<.2	<.2	<.2	<.2	98.6	<.2	7.01
02-14-02	97.3	<.2	103	<.2	<.2	<.2	<.2	100	<.2	6.02
07-23-01	95.5	<.2	103	<.2	<.2	<.2	<.2	101	<.2	7.01
08-20-01	110	<.2	99.2	<.2	<.2	<.2	<.2	96.9	<.2	2.01
08-20-01	108	<.2	94.9	<.2	<.2	<.2	<.2	102	<.2	2.01
08-17-01	114	<.2	102	<.2	E.1	<.2	<.2	101	<.2	2.01
BEAVER COUNTY										
08-16-01	111	<.2	99.2	<.2	<.2	<.2	<.2	97.1	<.2	2.01
CAMBRIA COUNTY										
10-25-01	97.0	<.2	117	<.2	<.2	<.2	<.2	105	<.2	6.01
ERIE COUNTY										
10-30-01	84.2	<.2	118	<.2	<.2	<.2	<.2	102	<.2	6.01
08-27-01	106	<.2	102	<.2	<.2	<.2	<.2	95.8	<.2	2.01
11-07-01	84.4	<.2	120	<.2	<.2	<.2	<.2	103	<.2	6.01
08-27-01	103	<.2	95.4	<.2	<.2	<.2	<.2	96.2	<.2	2.01
11-07-01	84.7	<.2	118	<.2	<.2	<.2	<.2	102	<.2	6.01
11-07-01	86.5	<.2	121	<.2	<.2	<.2	<.2	102	<.2	6.01
08-28-01	106	<.2	96.1	<.2	<.2	<.2	<.2	96.1	<.2	2.01
10-09-01	99.7	<.2	99.0	<.2	<.2	<.2	<.2	83.5	<.2	2.01
11-07-01	84.4	<.2	119	<.2	<.2	<.2	<.2	103	<.2	6.01
10-09-01	96.5	1.0	107	.1	E.2	E.2	.1	98.5	<.2	6.01
11-02-01	82.8	<.2	118	<.2	<.2	<.2	<.2	100	<.2	6.01
11-08-01	86.7	<.2	119	<.2	<.2	<.2	<.2	104	<.2	6.01
INDIANA COUNTY										
10-30-01	83.6	<.2	112	<.2	<.2	<.2	<.2	101	<.2	6.01
LAWRENCE COUNTY										
11-15-01	96.3	<.2	102	<.2	<.2	<.2	<.2	98.8	<.2	7.01
11-15-01	93.2	<.2	105	<.2	<.2	<.2	<.2	101	<.2	7.01
MERCER COUNTY										
11-15-01	98.3	<.2	105	<.2	<.2	<.2	<.2	99.6	<.2	7.01
11-15-01	96.3	<.2	99.9	<.2	<.2	<.2	<.2	99.2	<.2	7.01
SOMERSET COUNTY										
10-18-01	93.0	<.2	112	<.2	<.2	<.2	<.2	104	<.2	6.01
WARREN COUNTY										
10-30-01	95.6	<.2	123	<.2	<.2	<.2	<.2	106	<.2	6.01
WASHINGTON COUNTY										
07-16-01	90.3	<.2	91.0	<.2	<.2	<.2	<.2	101	<.2	5.01

**GROUND-WATER DATA COLLECTED AT SPECIAL-STUDY SITES  
STATEWIDE ASSESSMENT OF METHYL-TERT-BUTYL-ETHER (MTBE) IN GROUND WATER PROJECT--Continued**

**REMARKS.**--The following are quality control samples (blanks) processed during 2001 water year and are defined in the explanation of records section entitled, "Water Quality-Control Data"; "<" = less than.

QUALITY-CONTROL DATA, WATER YEARS OCTOBER 2000 TO SEPTEMBER 2002

SITE IDENTIFIER	LOCAL WELL NUMBER	DATE	TIME	AGENCY COL-LECTING	AGENCY ANA-LYZING	XYLENE WATER	BENZENE 14BRFL-SURROG	ETHANE 12DICL SURROG	METHYL TERT-BUTYL ETHER	META/PARA-XYLENE WATER		
				SAMPLE (CODE NUMBER) (00027)	SAMPLE (CODE NUMBER) (00028)	UNFLTRD REC (μG/L) (81551)	UNFLTRD REC PERCENT (99834)	BENZENE TOTAL (μG/L) (34030)	UNFLTRD REC PERCENT (99832)	ETHYL-BENZENE TOTAL (μG/L) (34371)	WAT UNF REC (μG/L) (78032)	UNFLTRD REC (μG/L) (85795)
402617080084200	PITTSBURGH OFFICE	07-17-01	1500	1028	80020	<.2	92.6	<.2	89.8	<.2	<.2	<.2
402617080084200	PITTSBURGH OFFICE	08-29-01	1400	1028	80020	<.2	110	<.2	98.5	<.2	<.2	<.2

DATE	O-XYLENE WATER WHOLE TOTAL (μG/L) (77135)	TOLUENE D8 SURROG VOC UNFLTRD REC PERCENT (99833)	TOLUENE TOTAL (μG/L) (34010)	BLANK, TYPE OF SAMPLE (CODE) (99102)	SET NUMBER VOC AN-ALYSIS (NO.) (99931)
	07-17-01	<.2	101	<.2	80
08-29-01	<.2	94.6	<.2	30	2.01



