

**GROUND-WATER DATA COLLECTED AT SPECIAL-STUDY SITES  
GROUND WATER PESTICIDES NETWORK PROJECT**

The following tables contain water-quality data from wells sampled in Pennsylvania during the first year of the Ground Water Pesticides Network project. The 5-year study is being conducted by the U.S. Geological Survey in cooperation with the Pennsylvania Department of Agriculture. Sites were selected to meet project objectives in the Annual Baseline Network, the Baseline Trends Network, and Hot-Spot Trends Networks. Twenty Annual Baseline Network sites were selected in the Blue Ridge and Triassic Lowlands orchard area to fill an existing data gap in ground-water quality; sites in this network are only sampled one time as part of an occurrence survey. Sixteen Baseline Trend Network sites were selected in four hydrogeologic settings (4 sites per setting) of carbonate bedrock where wells had previous detections of pesticides. The wells in this network are sampled yearly to evaluate trends. The three Hot-Spot Trend Network sites have well water with recorded pesticide concentrations at or above the Pennsylvania Pesticides and Ground Water Strategy action levels. These wells are sampled four times per year during: 1) declining water levels; 2) stable water levels; 3) rising water levels due to spring/summer flush; and 4) rising water levels due to winter recharge. Declining water level, rising water level due to spring/summer flush, and rising water level due to winter recharge samples from the Susquehanna River Basin are included in this report. Samples are identified by network in the third heading within the table: Annual Baseline = AB, Baseline Trends = BT, Baseline Trends Quality Assurance = BT-QA, and Hot-Spot Trends = HST. Well locations are shown in Figure 9, Figure 10, and Figure 11. The following analytical methods were used to determine results for the Annual Baseline samples: USGS National Water Quality Laboratory (NWQL)(Analyzing Agency Code 80020), pesticides - (SH2001) C-18 solid-phase extraction and capillary-column gas chromatography/mass spectrometry with selected-ion monitoring and (SH2060) graphitized carbon-based solid-phase extraction and high-performance liquid chromatography/mass spectrometry, nitrate/nitrite - colorimetry (cadmium reduction), total coliform and E. coli bacteria - Colilert Quantitray; PA Department of Environmental Protection Laboratory (PADEP)(Analyzing Agency Code 9813), pesticides - SAC USGS1 (EPA 525.2) solid phase extraction gas chromatography/mass spectrometry and (EPA 531.1) reverse phase high performance liquid chromatography column with post-column derivatization and fluorescence detection, nitrate/nitrite - colorimetry (cadmium reduction), total coliform and E. coli bacteria - Colilert Quantitray. For the Baseline Trend and Hot-Spot Trend samples, SH2001 pesticides were analyzed at the USGS NWQL, and SAC USGS2 (EPA525.2) pesticides were analyzed at the PADEP Laboratory. Pesticides analyzed for this study are identified by analyzing agency in the table which follows study area maps. Other data for the project can be found in the annual Water Data Report PA-03-1. For additional information, contact Connie Loper at the U.S. Geological Survey, 215 Limekiln Road, New Cumberland, PA 17070; 717-730-6976 (email caloper@usgs.gov).

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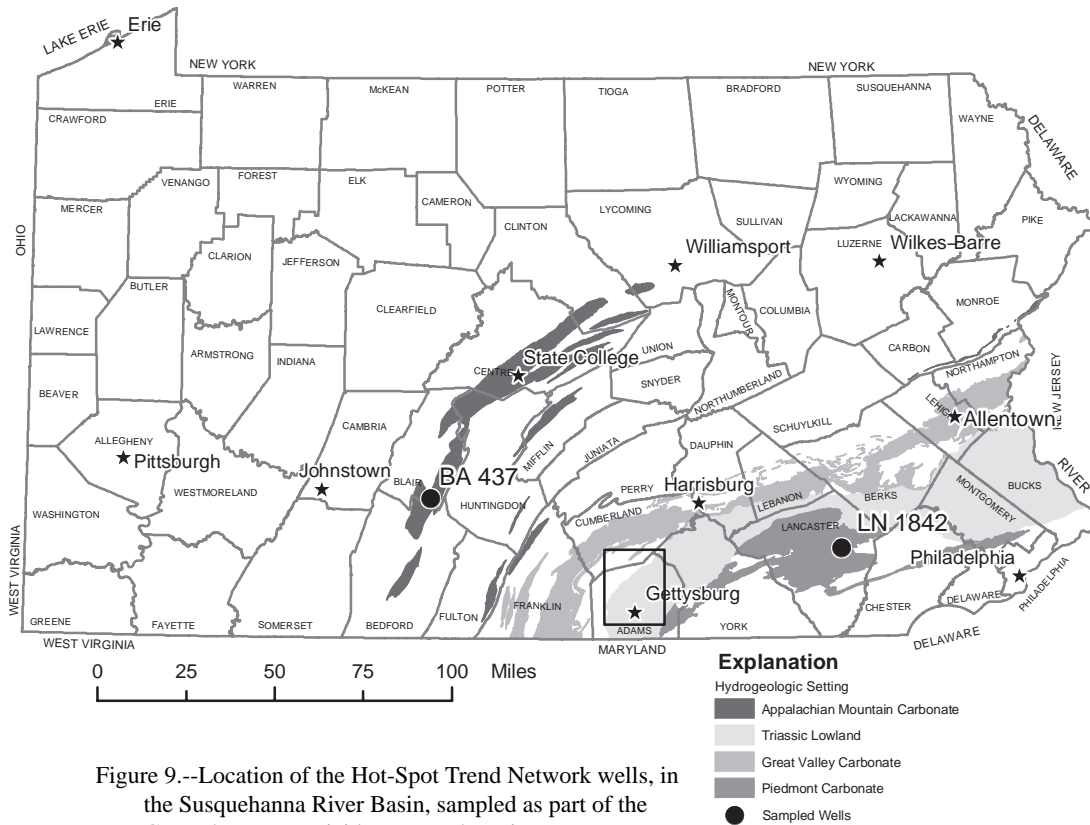


Figure 9.--Location of the Hot-Spot Trend Network wells, in the Susquehanna River Basin, sampled as part of the Ground Water Pesticides Network project

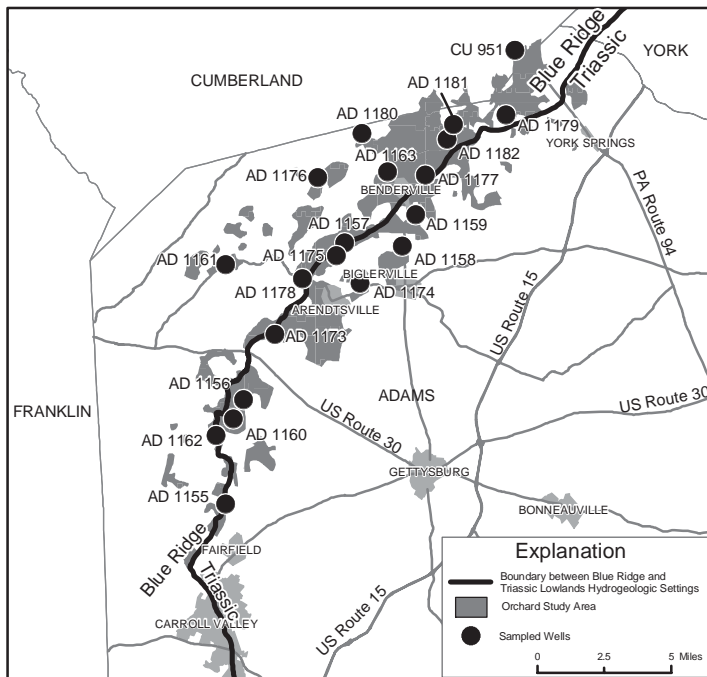


Figure 10.--Location of the Annual Baseline Network wells, in the Susquehanna River Basin, sampled as part of the Ground Water Pesticides Network project.

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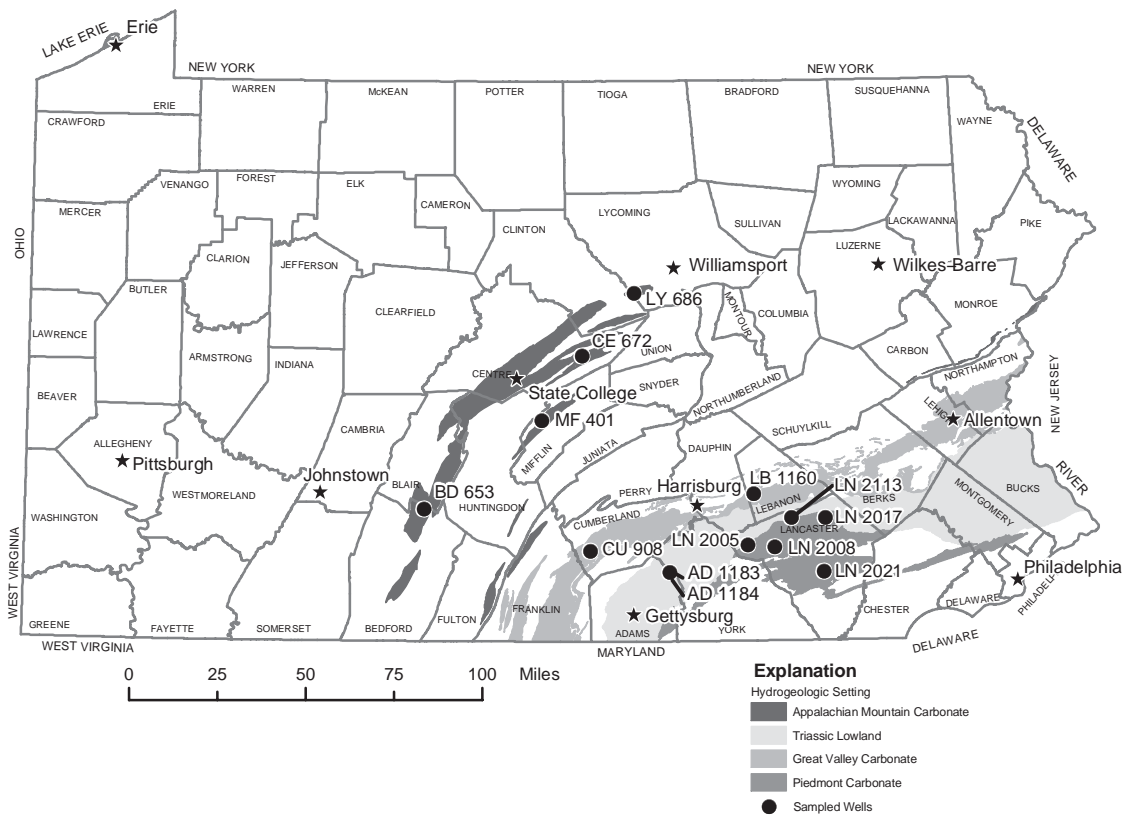


Figure 11.--Location of the Baseline Trend Network wells, in the Susquehanna River Basin, sampled as part of the Ground Water Pesticides Network project.

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**Compounds analyzed at the USGS National Water-Quality Laboratory for the Ground Water Pesticides Network Project**

Pesticide Schedule (SH2001)			Polar Pesticides and Metabolites Schedule (SH2060)	
Analyte	NWIS Parameter Code		Analyte	NWIS Parameter Code
Alpha-HC	34253		2,4,5-T (surrogate)	99958
Acetochlor	49260		2,4-D	39732
Alachlor	46342		2,4-D methyl ester	50470
2,6 -Diethylaniline	82660		2,4-DB	38746
Atrazine	39632		3(4-Chlorophenyl)-1-methyl urea	61692
Desethyl atrazine (CIAT)	04040		3-Ketocarbofuran	50295
Azinphos-methyl	82686		Acifluorfen	49315
Benfluralin	82673		Aldicarb	49312
Butylate	04028		Aldicarb sulfone	49313
Carbaryl	82680		Aldicarb sulfoxide	49314
Carbofuran	82674		Chloramben, methyl ester	61188
Chlorpyrifos	38933		Atrazine	39632
cis-Permethrin	82687		2-Hydroxyatrazine (OIET)	50355
Cyanazine	04041		Desethylatrazine (CIAT)	04040
Dacthal (DCPA)	82682		Deethyldeisopropylatrazine*	04039
Diazanon	39572		Deisopropylatrazine (CEAT)	04038
Diazinon-d10(surrogate)	91063		Barban	90640
Dieldrin	39381		Bendiocarb	50299
Disulfoton	82677		Benomyl	50300
EPTC	82668		Bensulfuron-methyl	61693
Ethalfuralin	82663		Bentazon	38711
Ethoprophos	82672		Bromacil	04029
Desulfinylfipronil amide	62169		Bromoxynil	49311
Fipronil sulfide	62167		Caffeine	50305
Fipronil sulfone	62168		Caffeine-C13	99959
Desulfinylfipronil	62170		Carbaryl	49310
Fipronil	62166		Carbofuran	49309
Fonofos	04095		3-Hydroxycarbofuran	49308
alpha-HCH-d6 (surrogate)	91065		Chlorimuron-ethyl	50306
Lindane	39341		Chlorothalonil	49306
Linuron	82666		Clopyralid	49305
Malathion	39532		Cycloate	04031
Parathion-methyl	82667		Dacthal monoacid	49304
Metolachlor	39415		Dicamba	38442
Metribuzin	82630		Dichlorprop	49302
Molinate	82671		Dinoseb	49301
Napropamide	82684		Diphenamid	04033
p,p'-DDE	34653		Diuron	49300
Parathion	39542		Fenuron	49297
Pebulate	82669		Flumetsulam	61694
Pendimethalin	82683		Fluometuron	38811
Phorate	82664		Imazaquin	50356
Prometon	04037		Imazethapyr	50407
Propyzamide	82676		Imidacloprid	61695
Propachlor	04024		Linuron	38478
Propanil	82679		MCPA	38482
Propargite	82685			

\* Chloro-di-amino-s-triazine

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**Compounds analyzed at the USGS National Water-Quality Laboratory for the Ground Water Pesticides Network Project--Continued**

Pesticide Schedule (SH2001)		Polar Pesticides & Metabolites Schedule (SH2060)	
Analyte	Parameter Code	Analyte	Parameter Code
Simazine	04035	MCPB	38487
Tebuthiuron	82670	Metalaxyl	50359
Terbacil	82665	Methiocarb	38501
Terbufos	82675	Methomyl	49296
Thiobencarb	82681	Metsulfuron methyl	61697
Triallate	82678	Neburon	49294
Trifluralin	82661	Nicosulfuron	50364
		Norflurazon	49293
		Oryzalin	49292
		Oxamyl	38866
		Picloram	49291
		Propham	49236
		Propicanazole	50471
		Propoxur	38538
		Siduron	38548
		Sulfometuron-methyl	50337
		Tebuthiuron	82670
		Terbacil	04032
		Tribenuron-methyl	61159
		Triclopyr	49235

**Compounds analyzed at the Pennsylvania Department of Environmental  
Protection Laboratory for the Ground Water Pesticides Network Project**

Pesticide Schedule used for Annual Baseline Network (SAC USGS1)		Pesticide Schedule Used for Baseline Trends and Hot-Spot Trends Networks (SAC USGS2)	
Analyte	NWIS Parameter Code	Analyte	NWIS Parameter Code
<u>EPA 525.2</u>		<u>EPA 525.2</u>	
Acetochlor	49260	Acetochlor	49260
Alachlor	46342	Alachlor	46342
Atrazine	39632	Atrazine	39632
Captan	61582	Chlorothalonil	49306
Chlorothalonil	49306	Chlorpyrifos (Dursban)	38933
Chlorpyrifos (Dursban)	38933	Hexachlorocyclopentadiene	34386
Diuron	49300	Metolachlor	39415
Hexachlorocyclopentadiene	34386	Metribuzin	82630
Methyl parathion	82667	Pendimethalin	82683
Metolachlor	39415	Simazine	04035
Metribuzin	82630		
Pendimethalin	82683		
Phosphamidon	None available		
Simazine	04035		
Terbacil	82665		
<u>EPA 531.1</u>			
Carbaryl	49310		
Methomyl	49296		
Oxamyl	38866		

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**REMARKS.**--Explanation of column headings--Station number: 15-digit unique identifier based on site latitude (first six digits), longitude (digits seven through thirteen), and a 2-digit sequence number suffix; Altitude of land surface: land-surface at well site in feet above sea level; Sampling method code 4040 = submersible pump; Sampling condition code 8 = pumping;  $\mu\text{S}/\text{cm}$ : microsiemens per centimeter at 25 degrees Celsius; deg C: degrees Celsius;  $\mu\text{g}/\text{L}$ : micrograms per liter (parts per billion);  $\text{mg}/\text{L}$  = milligrams per liter (parts per million); "<" = less than; "E" = estimated; "M" = presence of material verified but not quantified; CIAT = desethyl atrazine; CEAT = Deisopropylatrazine; OIET = 2-hydroxyatrazine; DCPA = dacthal; Network Identifier AB = Annual Baseline, BT = Baseline Trends, or HST = Hot-Spot Trends. Quality-control data for replicate samples are shown for Local Well ID 2017 (bacteria) on April 16, 2003 at 1033 and 1034 and for Local Well ID 686 (nitrate, nitrite) on April 30, 2003 at 1211 and 1212.

WATER-QUALITY DATA, WATER YEARS OCTOBER 2002 TO SEPTEMBER 2003

Station number	Local Well ID	Network Identifier	Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Depth of well, feet below LSD (72008)	Depth to water level, feet below LSD (72019)	Altitude of land surface feet (72000)	Pump or flow period prior to sampling, minutes (72004)	Sampling method, code (82398)	Turbidity, water, unfltrd field, NTU (61028)
ADAMS COUNTY												
394850077223401	AD 1155	AB	05-05-03	1255	1028	80020	202	23.57	670	75	4040	12
395212077214701	AD 1156	AB	05-05-03	1615	1028	80020	220	14.08	720	40	4040	--
395713077172701	AD 1157	AB	05-08-03	1045	1028	80020	260	9.00	920	30	4040	1.2
395706077150001	AD 1158	AB	05-07-03	1035	1028	80020	220	24.66	690	35	4040	12
395807077142601	AD 1159	AB	05-07-03	1550	1028	80020	160	12.60	630	40	4040	.2
3951350772221301	AD 1160	AB	05-06-03	1050	1028	80020	200	2.60	710	50	4040	.9
395632077223201	AD 1161	AB	05-14-03	1020	1028	80020	180	46.99	1300	50	4040	30
395102077225701	AD 1162	AB	05-14-03	1420	1028	80020	180	15.90	860	70	4040	110
395930077153601	AD 1163	AB	05-13-03	1150	1028	80020	190	5.12	730	85	4040	.2
395417077202601	AD 1173	AB	08-20-03	1035	1028	9813	99	10.42	760	50	4040	.6
395555077164801	AD 1174	AB	08-28-03	1400	1028	9813	225	16.55	735	60	4040	22
395649077174801	AD 1175	AB	08-20-03	1500	1028	9813	155	32.23	780	80	4040	.2
395919077183601	AD 1176	AB	08-21-03	1405	1028	9813	175	43.55	1145	50	4040	.5
395923077140001	AD 1177	AB	08-26-03	1000	1028	9813	120	50.08	750	45	4040	.5
395605077191501	AD 1178	AB	08-27-03	1000	1028	9813	140	37.50	660	40	4040	.6
400119077103401	AD 1179	AB	08-19-03	1100	1028	9813	200	11.40	835	50	4040	.5
400045077164201	AD 1180	AB	08-21-03	1029	1028	9813	180	4.80	970	62	4040	2.1
400101077124801	AD 1181	AB	08-28-03	1020	1028	9813	140	43.60	760	40	4040	10
400033077130401	AD 1182	AB	08-26-03	1320	1028	9813	210	21.80	890	55	4040	.6
395952077020501	AD 1183	BT	09-04-03	1505	1028	9813	240	--	455	85	4040	2.2
395955077020801	AD 1184	BT	10-02-03	1045	1028	9813	180	11.18	500	55	4040	2.0
BEDFORD COUNTY												
401525078213801	BD 653	BT	04-08-03	1505	1028	80020	170	61.39	1370	35	4040	--
BLAIR COUNTY												
401724078195801	BA 437	HST	03-25-03	1340	1028	80020	105	15.95	1435	65	4040	--
401724078195801	BA 437	HST	05-12-03	1310	1028	80020	105	24.88	1435	55	4040	.1
401724078195801	BA 437	HST	08-14-03	1120	1028	9813	105	23.94	1435	45	4040	.2
CENTRE COUNTY												
405253077301501	CE 672	BT	04-22-03	1105	1028	80020	200	94.80	1190	35	4040	--
CUMBERLAND COUNTY												
400514077274501	CU 908	BT	04-08-03	1030	1028	80020	182	37.67	650	35	4040	--
400324077100901	CU 951	AB	05-13-03	1530	1028	80020	90	24.00	940	60	4040	.1
LANCASTER COUNTY												
400456076065701	LN 1842	HST	03-26-03	1140	1028	80020	65	31.06	440	45	4040	--
400456076065701	LN 1842	HST	05-15-03	1435	1028	80020	65	33.40	440	35	4040	.3
400456076065701	LN 1842	HST	08-13-03	1410	1028	9813	65	32.80	440	30	4040	.5
400629076365201	LN 2005	BT	04-16-03	1505	1028	80020	100	7.54	390	35	4040	--
400558076281201	LN 2008	BT	04-09-03	1445	1028	80020	175	50.91	370	50	4040	--
401307076224301	LN 2113	BT	04-02-03	1545	1028	80020	200	--	500	45	4040	--
401254076114701	LN 2017	BT	04-16-03	1035	1028	80020	160	42.95	410	30	4040	--
401254076114701	LN 2017	BT-QA	04-16-03	1033	1028	80020	160	--	410	30	4040	--
401254076114701	LN 2017	BT-QA	04-16-03	1034	1028	80020	160	--	410	30	4040	--
395951076122301	LN 2021	BT	04-09-03	1000	1028	80020	150	22.82	370	50	4040	--
LEBANON COUNTY												
401856076345101	LB 1160	BT	04-02-03	1200	1028	80020	180	--	440	35	4040	--
LYCOMING COUNTY												
410805077131401	LY 686	BT	04-30-03	1210	1028	80020	175	83.95	765	40	4040	--
410805077131401	LY 686	BT-QA	04-30-03	1211	1028	80020	175	--	765	40	4040	--
410805077131401	LY 686	BT-QA	04-30-03	1212	1028	80020	175	--	765	40	4040	--
MIFFLIN COUNTY												
403706077432801	MF 401	BT	04-14-03	1125	1028	80020	120	5.60	870	35	4040	--

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WATER-QUALITY DATA, WATER YEARS OCTOBER 2002 TO SEPTEMBER 2003

Date	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unfltrd µS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)	E coli, Coli- lert Quantry water, MPN/ 100 mL (50468)
ADAMS COUNTY													
05-05-03	755	7.8	74	7.4	371	12.3	12.8	--	--	3.75	--	<.008	1
05-05-03	744	1.8	17	7.7	278	8.1	12.7	--	--	1.67	--	<.008	<1
05-08-03	734	1.9	19	7.8	171	16.2	12.6	--	--	.32	--	<.008	<1
05-07-03	741	3.9	38	7.8	254	17.2	12.7	--	--	1.89	--	<.008	<1
05-07-03	741	4.0	39	8.0	292	25.9	12.5	--	--	2.19	--	<.008	<1
05-06-03	741	4.9	48	7.8	388	14.6	13.4	--	--	4.75	--	<.008	<1
05-14-03	724	7.2	71	5.9	868	10.4	12.3	--	--	3.98	--	<.008	<1
05-14-03	737	7.8	77	6.3	101	16.3	13.2	--	--	1.38	--	<.008	<1
05-13-03	735	3.7	36	6.6	204	15.9	12.4	--	--	2.14	--	<.008	<1
08-20-03	746	8.6	84	6.8	307	22.5	13.1	--	--	4.28	--	<.010	<1
08-28-03	745	6.8	67	6.4	230	33.6	13.6	--	--	3.57	--	<.010	<1
08-20-03	746	1.3	13	7.0	191	29.3	13.2	--	--	.39	--	<.010	<1
08-21-03	733	9.3	91	5.8	175	27.4	12.8	--	--	7.47	--	<.010	<1
08-26-03	741	7.0	69	5.6	162	22.0	13.3	--	--	4.26	--	<.010	<1
08-27-03	739	4.8	46	6.7	157	21.2	12.2	--	--	2.69	--	<.010	<1
08-19-03	744	3.2	32	6.8	263	24.7	14.4	--	--	2.38	--	<.010	<1
08-21-03	738	7.6	77	5.7	137	25.3	14.7	--	--	2.72	--	<.010	<1
08-28-03	745	6.0	58	6.2	253	22.1	12.6	--	--	4.08	--	<.010	<1
08-26-03	737	6.5	66	6.6	215	27.0	14.5	--	--	4.07	--	<.010	1
09-04-03	745	2.4	24	7.4	677	26.1	13.4	--	--	8.12	--	<.010	11
10-02-03	750	.6	6	7.6	519	16.3	15.7	--	--	.37	--	<.010	<1
BEDFORD COUNTY													
04-08-03	729	8.6	80	7.2	732	2.4	10.3	--	--	14.2	--	<.008	<1
BLAIR COUNTY													
03-25-03	719	6.0	59	7.4	4640	22.1	11.0	--	--	41.9	--	E.004	1
05-12-03	712	.4	4	7.0	2230	13.4	11.8	307	69.4	69.4	.095	.029	16
08-14-03	733	.5	5	6.9	2220	29.1	13.1	321	72.4	72.5	.066	.020	6
CENTRE COUNTY													
04-22-03	721	7.7	73	7.2	581	13.5	10.4	--	--	7.48	--	<.008	1
CUMBERLAND COUNTY													
04-08-03	752	9.4	86	7.2	650	2.0	10.7	--	--	8.61	--	<.008	3
05-13-03	729	6.5	62	6.8	222	13.5	11.2	--	--	1.55	--	<.008	<1
LANCASTER COUNTY													
03-26-03	744	8.1	81	--	1110	18.2	13.9	--	--	41.6	--	<.008	<1
05-15-03	752	8.3	81	7.0	1090	19.0	13.7	--	--	40.2	--	<.008	<1
08-13-03	757	8.0	80	7.3	1070	31.1	14.9	--	--	42.2	--	<.010	<1
04-16-03	747	1.7	16	7.1	663	31.6	11.7	--	--	23.2	--	<.008	1
04-09-03	755	7.8	73	7.3	600	5.4	12.0	--	--	20.8	--	<.008	<1
04-02-03	745	3.1	31	7.2	562	27.1	13.7	--	--	11.4	--	<.008	<1
04-16-03	749	8.0	76	7.2	702	22.8	12.4	--	--	11.2	--	<.008	<1
04-16-03	--	--	--	--	--	--	--	--	--	--	--	--	<1
04-16-03	--	--	--	--	--	--	--	--	--	--	--	--	<1
04-09-03	755	7.7	73	7.1	1090	4.4	12.6	--	--	7.63	--	<.008	<1
LEBANON COUNTY													
04-02-03	750	6.0	58	7.2	660	21.4	13.1	--	--	5.23	--	<.008	<1
LYCOMING COUNTY													
04-30-03	744	10.6	97	7.4	642	18.1	10.4	--	--	13.6	--	<.008	<1
04-30-03	--	--	--	--	--	--	--	--	--	13.6	--	<.008	--
04-30-03	--	--	--	--	--	--	--	--	--	13.4	--	<.008	--
MIFFLIN COUNTY													
04-14-03	746	5.4	51	6.8	976	13.5	11.8	--	--	7.44	--	<.008	<1

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Date	Total coli-form, Colert Quantry MPN/100 mL (50569)	2,4,5-T surrog, water, fltrd, percent recovry (99958)	2,4-D methyl ester water, fltrd, µg/L (50470)	2,4-D water, fltrd, µg/L (39732)	2,4-DB water, fltrd, 0.7µ GF (38746)	2,6-Di-ethyl-aniline water, fltrd, 0.7µ GF (82660)	CIAT, water, fltrd, µg/L (04040)	CEAT, water, fltrd, µg/L (04038)	OIET, water, fltrd, µg/L (50355)	3-Hydroxy-carbo-furan, wat flt 0.7µ GF (49308)	3-Keto-carbo-furan, water, fltrd, µg/L (50295)	Aceto-chlor, water, fltrd, µg/L (49260)	Acifluor-fen, water, fltrd, 0.7µ GF (49315)
ADAMS COUNTY													
05-05-03	10	71.0	.663	E2.52	<.02	<.006	E.085	E.11	<.008	<.006	<2	<.006	<.007
05-05-03	<1	75.5	<.009	<.02	<.02	<.006	<.006	<.04	<.008	<.006	<2	<.006	<.007
05-08-03	<1	89.4	<.009	<.02	<.02	<.006	<.006	<.04	<.008	<.006	<2	<.006	<.007
05-07-03	<1	74.1	<.009	<.02	<.02	<.006	<.006	<.04	<.008	<.006	<2	<.006	<.007
05-07-03	23	74.6	<.009	<.02	<.02	<.006	E.007	<.04	<.008	<.006	<2	<.006	<.007
05-06-03	<1	74.7	<.009	<.02	<.02	<.006	<.006	<.04	<.008	<.006	<2	<.006	<.007
05-14-03	25	106	<.009	<.02	<.02	<.006	E.007	E.17	<.008	<.006	<2	<.006	<.007
05-14-03	<1	96.7	<.009	<.02	<.02	<.006	<.006	<.04	<.008	<.006	<2	<.006	<.007
05-13-03	20	100	<.009	<.02	<.02	<.006	<.006	<.04	<.008	<.006	<2	<.006	<.007
08-20-03	<1	--	--	--	--	--	--	--	--	--	--	<.100	--
08-28-03	2	--	--	--	--	--	--	--	--	--	--	<.100	--
08-20-03	1	--	--	--	--	--	--	--	--	--	--	<.100	--
08-21-03	<1	--	--	--	--	--	--	--	--	--	--	<.100	--
08-26-03	2	--	--	--	--	--	--	--	--	--	--	<.100	--
08-27-03	<1	--	--	--	--	--	--	--	--	--	--	<.100	--
08-19-03	50	--	--	--	--	--	--	--	--	--	--	<.100	--
08-21-03	19	--	--	--	--	--	--	--	--	--	--	<.100	--
08-28-03	2	--	--	--	--	--	--	--	--	--	--	<.100	--
08-26-03	48	--	--	--	--	--	--	--	--	--	--	<.100	--
09-04-03	200	--	--	--	--	--	--	--	--	--	--	<.100	--
10-02-03	11	--	--	--	--	--	--	--	--	--	--	<.110	--
BEDFORD COUNTY													
04-08-03	<1	--	--	--	--	<.006	E.279	--	--	--	--	<.006	--
BLAIR COUNTY													
03-25-03	4	--	--	--	--	<.006	E.177	--	--	--	--	<.006	--
05-12-03	35	--	--	--	--	.013	E.201	--	--	--	--	<.006	--
08-14-03	170	--	--	--	--	--	--	--	--	--	--	<.100	--
CENTRE COUNTY													
04-22-03	2	--	--	--	--	<.006	E.040	--	--	--	--	<.006	--
CUMBERLAND COUNTY													
04-08-03	4	--	--	--	--	<.006	E.425	--	--	--	--	<.006	--
05-13-03	<1	95.8	<.009	<.02	<.02	<.006	<.006	<.04	<.008	<.006	<2	<.006	<.007
LANCASTER COUNTY													
03-26-03	1	--	--	--	--	<.006	E.542	--	--	--	--	.577	--
05-15-03	<1	--	--	--	--	E.005	E.345	--	--	--	--	.298	--
08-13-03	1	--	--	--	--	--	--	--	--	--	--	<.100	--
04-16-03	99	--	--	--	--	<.006	E.239	--	--	--	--	<.006	--
04-09-03	70	--	--	--	--	<.006	E.345	--	--	--	--	<.006	--
04-02-03	<1	--	--	--	--	<.006	E.127	--	--	--	--	<.006	--
04-16-03	<1	--	--	--	--	<.006	E.232	--	--	--	--	<.006	--
04-16-03	1	--	--	--	--	--	--	--	--	--	--	--	--
04-16-03	2	--	--	--	--	--	--	--	--	--	--	--	--
04-09-03	<1	--	--	--	--	<.006	E.178	--	--	--	--	<.006	--
LEBANON COUNTY													
04-02-03	6	--	--	--	--	<.006	E.100	--	--	--	--	<.006	--
LYCOMING COUNTY													
04-30-03	<1	--	--	--	--	<.006	E.241	--	--	--	--	<.006	--
04-30-03	--	--	--	--	--	--	--	--	--	--	--	--	--
04-30-03	--	--	--	--	--	--	--	--	--	--	--	--	--
MIFFLIN COUNTY													
04-14-03	<1	--	--	--	--	<.006	E.315	--	--	--	--	<.006	--



**GROUND-WATER DATA COLLECTED AT SPECIAL-STUDY SITES  
GROUND WATER PESTICIDES NETWORK PROJECT**

WATER-QUALITY DATA, WATER YEARS OCTOBER 2002 TO SEPTEMBER 2003

Date	Ala- chlor, water, fltrd, µg/L (46342)	Aldi- carb sulfone water, fltrd 0.7µ GF µg/L (49313)	Aldi- carb sulf- oxide, wat flt 0.7µ GF µg/L (49314)	Aldi- carb, water, fltrd 0.7µ GF µg/L (49312)	alpha- HCH, water, fltrd, µg/L (34253)	alpha- HCH-d6, surrog, wat flt 0.7µ GF recovery (91065)	Atra- zine, water, fltrd, µg/L (39632)	Azin- phos- methyl, fltrd 0.7µ GF µg/L (82686)	Barban, surrog, Sched. 2060/ 9060, wat flt pct rcv (90640)	Bendio- carb, water, fltrd, µg/L (50299)	Ben- flur- alin, water, fltrd 0.7µ GF µg/L (82673)	Benomyl water, fltrd, µg/L (50300)	Bensul- furon, water, fltrd, µg/L (61693)
ADAMS COUNTY													
05-05-03	<.004	<.02	<.008	<.04	<.005	89.0	.040	<.050	88.8	<.03	<.010	E.026	<.02
05-05-03	<.004	<.02	<.008	<.04	<.005	102	<.007	<.050	101	<.03	<.010	<.004	<.02
05-08-03	<.004	<.02	<.008	<.04	<.005	95.3	<.007	<.050	98.4	<.03	<.010	<.004	<.02
05-07-03	<.004	<.02	<.008	<.04	<.005	90.5	<.007	<.050	93.1	<.03	<.010	<.004	<.02
05-07-03	<.010	<.02	<.008	<.04	<.005	93.4	.011	<.050	93.8	<.03	<.010	<.004	<.02
05-06-03	<.004	<.02	<.008	<.04	<.005	94.3	<.007	<.050	99.0	<.03	<.010	<.004	<.02
05-14-03	<.004	<.02	<.008	<.04	<.005	99.1	.007	<.050	E148	<.03	<.010	E.005	<.02
05-14-03	<.004	<.02	<.008	<.04	<.005	97.2	<.007	<.050	109	<.03	<.010	<.004	<.02
05-13-03	<.004	<.02	<.008	<.04	<.005	91.4	<.007	<.050	98.4	<.03	<.010	<.004	<.02
08-20-03	<.10	--	--	--	--	--	<.10	<.100	--	--	--	--	--
08-28-03	<.10	--	--	--	--	--	<.10	<.500	--	--	--	--	--
08-20-03	<.10	--	--	--	--	--	<.10	<.100	--	--	--	--	--
08-21-03	<.10	--	--	--	--	--	<.10	<.100	--	--	--	--	--
08-26-03	<.10	--	--	--	--	--	<.10	<.100	--	--	--	--	--
08-27-03	<.10	--	--	--	--	--	<.10	<.100	--	--	--	--	--
08-19-03	<.10	--	--	--	--	--	<.10	<.100	--	--	--	--	--
08-21-03	<.10	--	--	--	--	--	<.10	<.100	--	--	--	--	--
08-28-03	<.10	--	--	--	--	--	<.10	<.500	--	--	--	--	--
08-26-03	<.10	--	--	--	--	--	<.10	<.100	--	--	--	--	--
09-04-03	4.19	--	--	--	--	--	<.10	--	--	--	--	--	--
10-02-03	<.11	--	--	--	--	--	<.10	--	--	--	--	--	--
BEDFORD COUNTY													
04-08-03	<.010	--	--	--	<.005	94.4	.233	<.050	--	--	<.010	--	--
BLAIR COUNTY													
03-25-03	.060	--	--	--	<.005	95.4	.511	<.050	--	--	<.010	--	--
05-12-03	.292	--	--	--	<.005	99.1	.881	<.050	--	--	<.010	--	--
08-14-03	.28	--	--	--	--	--	1.11	--	--	--	--	--	--
CENTRE COUNTY													
04-22-03	<.004	--	--	--	<.005	86.0	.030	<.050	--	--	<.010	--	--
CUMBERLAND COUNTY													
04-08-03	<.004	--	--	--	<.005	93.5	.125	<.050	--	--	<.010	--	--
05-13-03	<.004	<.02	<.008	<.04	<.005	89.4	<.007	<.050	108	<.03	<.010	<.004	<.02
LANCASTER COUNTY													
03-26-03	3.33	--	--	--	<.005	83.9	.627	<.050	--	--	<.010	--	--
05-15-03	1.52	--	--	--	E.002	86.2	.310	<.050	--	--	<.010	--	--
08-13-03	1.79	--	--	--	--	--	<.10	--	--	--	--	--	--
04-16-03	.007	--	--	--	<.005	94.9	.152	<.050	--	--	<.010	--	--
04-09-03	<.004	--	--	--	<.005	100	.331	<.050	--	--	<.010	--	--
04-02-03	.234	--	--	--	<.005	82.8	.036	<.050	--	--	<.010	--	--
04-16-03	<.004	--	--	--	<.005	97.1	.129	<.050	--	--	<.010	--	--
04-16-03	--	--	--	--	--	--	--	--	--	--	--	--	--
04-16-03	--	--	--	--	--	--	--	--	--	--	--	--	--
04-09-03	<.004	--	--	--	<.005	107	.223	<.050	--	--	<.010	--	--
LEBANON COUNTY													
04-02-03	<.020	--	--	--	<.005	81.4	.068	<.050	--	--	<.010	--	--
LYCOMING COUNTY													
04-30-03	<.010	--	--	--	<.005	89.5	.137	<.050	--	--	<.010	--	--
04-30-03	--	--	--	--	--	--	--	--	--	--	--	--	--
04-30-03	--	--	--	--	--	--	--	--	--	--	--	--	--
MIFFLIN COUNTY													
04-14-03	<.004	--	--	--	<.005	88.2	.102	<.050	--	--	<.010	--	--

**GROUND-WATER DATA COLLECTED AT SPECIAL-STUDY SITES  
GROUND WATER PESTICIDES NETWORK PROJECT**

WATER-QUALITY DATA, WATER YEARS OCTOBER 2002 TO SEPTEMBER 2003

Date	Ben- tazon, water, fltrd 0.7µ GF (38711) µg/L	Broma- cil, water, fltrd (04029) µg/L	Brom- oxynil, water, fltrd (49311) µg/L	Butyl- ate, water, fltrd (04028) µg/L	Caf- feine, water, fltrd, (50305) µg/L	Caf- feine- 13C, surrog, wat flt percent (99959) recovery	Captan, water, fltrd, (61582) µg/L	Car- baryl, water, fltrd (49310) µg/L	Car- baryl, water, fltrd (82680) µg/L	Carbo- furan, water, fltrd (49309) 0.7µ GF µg/L	Carbo- furan, water, fltrd (82674) 0.7µ GF µg/L	Chlor- amben methyl ester, water, fltrd, (61188) µg/L	Chlori- muron, water, fltrd, (50306) µg/L
ADAMS COUNTY													
05-05-03	<.01	<.03	<.02	<.002	<.010	112	--	<.03	E.007	<.006	<.020	<.02	<.010
05-05-03	<.01	<.03	<.02	<.002	<.010	110	--	<.03	<.041	<.006	<.020	<.02	<.010
05-08-03	<.01	<.03	<.02	<.002	<.010	130	--	<.03	<.041	<.006	<.020	<.02	<.010
05-07-03	<.01	<.03	<.02	<.002	<.010	124	--	<.03	<.041	<.006	<.020	<.02	<.010
05-07-03	<.01	<.03	<.02	<.002	<.010	105	--	<.03	<.041	<.006	<.020	<.02	<.010
05-06-03	<.01	<.03	<.02	<.002	<.010	98.8	--	<.03	<.041	<.006	<.020	<.02	<.010
05-14-03	<.01	<.03	<.02	<.002	<.010	E187	--	<.03	<.041	<.006	<.020	<.02	<.010
05-14-03	<.01	<.03	<.02	<.002	<.010	108	--	<.03	<.041	<.006	<.020	<.02	<.010
05-13-03	<.01	<.03	<.02	<.002	<.010	133	--	<.03	<.041	<.006	<.020	<.02	<.010
08-20-03	--	--	--	--	--	--	<.50	--	<1.60	--	--	--	--
08-28-03	--	--	--	--	--	--	<1.00	--	<1.60	--	--	--	--
08-20-03	--	--	--	--	--	--	<.50	--	<1.60	--	--	--	--
08-21-03	--	--	--	--	--	--	<.50	--	<1.60	--	--	--	--
08-26-03	--	--	--	--	--	--	<.50	--	<1.60	--	--	--	--
08-27-03	--	--	--	--	--	--	<.50	--	<1.60	--	--	--	--
08-19-03	--	--	--	--	--	--	<.50	--	<1.60	--	--	--	--
08-21-03	--	--	--	--	--	--	<.50	--	<1.60	--	--	--	--
08-28-03	--	--	--	--	--	--	<1.00	--	<1.60	--	--	--	--
08-26-03	--	--	--	--	--	--	<.50	--	<1.60	--	--	--	--
09-04-03	--	--	--	--	--	--	--	--	--	--	--	--	--
10-02-03	--	--	--	--	--	--	--	--	--	--	--	--	--
BEDFORD COUNTY													
04-08-03	--	--	--	<.002	--	--	--	--	<.041	--	<.020	--	--
BLAIR COUNTY													
03-25-03	--	--	--	<.002	--	--	--	--	<.041	--	<.020	--	--
05-12-03	--	--	--	.006	--	--	--	--	E.004	--	E.011	--	--
08-14-03	--	--	--	--	--	--	--	--	--	--	--	--	--
CENTRE COUNTY													
04-22-03	--	--	--	<.002	--	--	--	--	<.041	--	<.020	--	--
CUMBERLAND COUNTY													
04-08-03	--	--	--	<.002	--	--	--	--	<.041	--	<.020	--	--
05-13-03	<.01	<.03	<.02	<.002	<.010	139	--	<.03	<.041	<.006	<.020	<.02	<.010
LANCASTER COUNTY													
03-26-03	--	--	--	.030	--	--	--	--	<.041	--	<.020	--	--
05-15-03	--	--	--	.022	--	--	--	--	<.041	--	E.006	--	--
08-13-03	--	--	--	--	--	--	--	--	--	--	--	--	--
04-16-03	--	--	--	<.002	--	--	--	--	<.041	--	<.020	--	--
04-09-03	--	--	--	<.002	--	--	--	--	<.041	--	<.020	--	--
04-02-03	--	--	--	<.002	--	--	--	--	<.041	--	<.020	--	--
04-16-03	--	--	--	<.002	--	--	--	--	<.041	--	<.020	--	--
04-16-03	--	--	--	--	--	--	--	--	--	--	--	--	--
04-16-03	--	--	--	--	--	--	--	--	--	--	--	--	--
04-09-03	--	--	--	<.002	--	--	--	--	<.041	--	<.020	--	--
LEBANON COUNTY													
04-02-03	--	--	--	<.002	--	--	--	--	<.041	--	<.020	--	--
LYCOMING COUNTY													
04-30-03	--	--	--	<.002	--	--	--	--	<.041	--	<.020	--	--
04-30-03	--	--	--	--	--	--	--	--	--	--	--	--	--
04-30-03	--	--	--	--	--	--	--	--	--	--	--	--	--
MIFFLIN COUNTY													
04-14-03	--	--	--	<.002	--	--	--	--	<.041	--	<.020	--	--

**GROUND-WATER DATA COLLECTED AT SPECIAL-STUDY SITES  
GROUND WATER PESTICIDES NETWORK PROJECT**

WATER-QUALITY DATA, WATER YEARS OCTOBER 2002 TO SEPTEMBER 2003

Date	Chloro- di- amino- s-tri- azine, wat flt µg/L (04039)	Chloro- thalo- nil, water, fltrd 0.7µ GF (49306)	Chlor- pyrifos water, fltrd, µg/L (38933)	cis- Per- methrin water fltrd 0.7µ GF (82687)	Clopyr- alid, water, fltrd 0.7µ GF (49305)	Cyana- zine, water, fltrd, µg/L (04041)	Cyclo- ate, water, fltrd, µg/L (04031)	Dacthal mono- acid, water, fltrd 0.7µ GF (49304)	DCPA, water, fltrd µg/L (82682)	Desulf- inyl fipro- nil, water, fltrd, µg/L (62170)	Diazi- non, water, fltrd, µg/L (39572)	Diazi- non-d10 surrog. wat flt 0.7µ GF percent recovry (91063)	Dicamba water fltrd 0.7µ GF µg/L (38442)
ADAMS COUNTY													
05-05-03	E.02	<.04	<.005	<.006	<.01	<.018	<.01	<.01	<.003	<.004	<.005	116	<.01
05-05-03	<.01	<.04	<.005	<.006	<.01	<.018	<.01	<.01	<.003	<.004	<.005	115	<.01
05-08-03	<.01	<.04	<.005	<.006	<.01	<.018	<.01	<.01	<.003	<.004	<.005	93.2	<.01
05-07-03	<.01	<.04	<.005	<.006	<.01	<.018	<.01	<.01	<.003	<.004	<.005	116	<.01
05-07-03	<.01	<.04	<.005	<.006	<.01	<.018	<.01	<.01	<.003	<.004	<.005	115	<.01
05-06-03	E.01	<.04	<.005	<.006	<.01	<.018	<.01	<.01	<.003	<.004	<.005	112	<.01
05-14-03	E.25	<.04	<.005	<.006	<.01	<.018	<.01	<.01	<.003	<.004	<.005	103	<.01
05-14-03	E.01	<.04	<.005	<.006	<.01	<.018	<.01	<.01	<.003	<.004	<.005	107	<.01
05-13-03	<.01	<.04	<.005	<.006	<.01	<.018	<.01	<.01	<.003	<.004	<.005	93.6	<.01
08-20-03	--	<.10	<.10	--	--	--	--	--	--	--	--	--	--
08-28-03	--	<.10	<.10	--	--	--	--	--	--	--	--	--	--
08-20-03	--	<.10	<.10	--	--	--	--	--	--	--	--	--	--
08-21-03	--	<.10	<.10	--	--	--	--	--	--	--	--	--	--
08-26-03	--	<.10	<.10	--	--	--	--	--	--	--	--	--	--
08-27-03	--	<.10	<.10	--	--	--	--	--	--	--	--	--	--
08-19-03	--	<.10	<.10	--	--	--	--	--	--	--	--	--	--
08-21-03	--	<.10	<.10	--	--	--	--	--	--	--	--	--	--
08-28-03	--	<.10	<.10	--	--	--	--	--	--	--	--	--	--
08-26-03	--	<.10	<.10	--	--	--	--	--	--	--	--	--	--
09-04-03	--	<.10	<.10	--	--	--	--	--	--	--	--	--	--
10-02-03	--	<.11	<.11	--	--	--	--	--	--	--	--	--	--
BEDFORD COUNTY													
04-08-03	--	--	<.005	<.006	--	<.018	--	--	<.003	<.004	<.005	116	--
BLAIR COUNTY													
03-25-03	--	--	<.020	<.006	--	<.018	--	--	<.003	<.004	<.005	117	--
05-12-03	--	--	<.005	<.006	--	E.131	--	--	<.003	<.004	<.005	107	--
08-14-03	--	<.10	<.10	--	--	--	--	--	--	--	--	--	--
CENTRE COUNTY													
04-22-03	--	--	<.005	<.006	--	<.018	--	--	<.003	<.004	<.005	101	--
CUMBERLAND COUNTY													
04-08-03	--	--	<.005	<.006	--	<.018	--	--	<.003	<.004	<.005	107	--
05-13-03	<.01	<.04	<.005	<.006	<.01	<.018	<.01	<.01	<.003	<.004	<.005	93.5	<.01
LANCASTER COUNTY													
03-26-03	--	--	<.005	<.006	--	--	--	--	<.003	<.004	<.005	115	--
05-15-03	--	--	<.005	<.006	--	.414	--	--	<.003	<.004	<.005	99.0	--
08-13-03	--	<.10	<.10	--	--	--	--	--	--	--	--	--	--
04-16-03	--	--	<.005	<.006	--	<.018	--	--	<.003	<.004	<.005	109	--
04-09-03	--	--	<.005	<.006	--	<.018	--	--	<.003	<.004	<.005	112	--
04-02-03	--	--	<.005	<.006	--	<.018	--	--	<.003	<.004	<.005	111	--
04-16-03	--	--	<.005	<.006	--	<.018	--	--	<.003	<.004	<.005	111	--
04-16-03	--	--	--	--	--	--	--	--	--	--	--	--	--
04-16-03	--	--	--	--	--	--	--	--	--	--	--	--	--
04-09-03	--	--	<.005	<.006	--	<.018	--	--	<.003	<.004	<.005	115	--
LEBANON COUNTY													
04-02-03	--	--	<.005	<.006	--	<.018	--	--	<.003	<.004	<.005	106	--
LYCOMING COUNTY													
04-30-03	--	--	<.005	<.006	--	<.018	--	--	<.003	<.004	<.005	116	--
04-30-03	--	--	--	--	--	--	--	--	--	--	--	--	--
04-30-03	--	--	--	--	--	--	--	--	--	--	--	--	--
MIFFLIN COUNTY													
04-14-03	--	--	<.005	<.006	--	<.018	--	--	<.003	<.004	<.005	104	--

**GROUND-WATER DATA COLLECTED AT SPECIAL-STUDY SITES  
GROUND WATER PESTICIDES NETWORK PROJECT**

WATER-QUALITY DATA, WATER YEARS OCTOBER 2002 TO SEPTEMBER 2003

Date	Di-chlor-prop, water, fltrd 0.7µ GF µg/L (49302)	Diel-drin, water, fltrd µg/L (39381)	Dinoseb water, fltrd 0.7µ GF µg/L (49301)	Diphen-amid, water, fltrd µg/L (04033)	Disul-foton, water, fltrd 0.7µ GF µg/L (82677)	Diuron, water, fltrd 0.7µ GF µg/L (49300)	EPTC, water, fltrd 0.7µ GF µg/L (82668)	Ethal-flur-alin, water, fltrd 0.7µ GF µg/L (82663)	Etho-prop, water, fltrd 0.7µ GF µg/L (82672)	Fenuron water, fltrd 0.7µ GF µg/L (49297)	Desulf-inyl-fipro-nil amide, wat flt µg/L (62169)	Fipro-nil sulfide water, fltrd µg/L (62167)	Fipro-nil sulfone water, fltrd µg/L (62168)
ADAMS COUNTY													
05-05-03	<.01	<.010	E.01	<.03	<.02	.19	<.002	<.009	<.005	<.03	<.009	<.005	<.005
05-05-03	<.01	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.009	<.005	<.005
05-08-03	<.01	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.009	<.005	<.005
05-07-03	<.01	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.009	<.005	<.005
05-07-03	<.01	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.009	<.005	<.005
05-06-03	<.01	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.009	<.005	<.005
05-14-03	<.01	<.005	<.01	<.03	<.02	E.01	<.002	<.009	<.005	<.03	<.009	<.005	<.005
05-14-03	<.01	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.009	<.005	<.005
05-13-03	<.01	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.009	<.005	<.005
08-20-03	--	--	--	--	--	<.10	--	--	--	--	--	--	--
08-28-03	--	--	--	--	--	--	--	--	--	--	--	--	--
08-20-03	--	--	--	--	--	<.10	--	--	--	--	--	--	--
08-21-03	--	--	--	--	--	<.10	--	--	--	--	--	--	--
08-26-03	--	--	--	--	--	<.10	--	--	--	--	--	--	--
08-27-03	--	--	--	--	--	<.10	--	--	--	--	--	--	--
08-19-03	--	--	--	--	--	<.10	--	--	--	--	--	--	--
08-21-03	--	--	--	--	--	<.10	--	--	--	--	--	--	--
08-28-03	--	--	--	--	--	--	--	--	--	--	--	--	--
08-26-03	--	--	--	--	--	<.10	--	--	--	--	--	--	--
09-04-03	--	--	--	--	--	--	--	--	--	--	--	--	--
10-02-03	--	--	--	--	--	--	--	--	--	--	--	--	--
BEDFORD COUNTY													
04-08-03	--	<.005	--	--	<.02	--	<.002	<.009	<.005	--	<.009	<.005	<.005
BLAIR COUNTY													
03-25-03	--	<.005	--	--	<.02	--	<.002	<.009	<.005	--	<.009	<.005	<.005
05-12-03	--	.034	--	--	<.02	--	.013	<.009	<.005	--	<.009	<.005	<.005
08-14-03	--	--	--	--	--	--	--	--	--	--	--	--	--
CENTRE COUNTY													
04-22-03	--	<.005	--	--	<.02	--	<.002	<.009	<.005	--	<.009	<.005	<.005
CUMBERLAND COUNTY													
04-08-03	--	<.005	--	--	<.02	--	<.002	<.009	<.005	--	<.009	<.005	<.005
05-13-03	<.01	<.005	<.01	<.03	<.02	.03	<.002	<.009	<.005	<.03	<.009	<.005	<.005
LANCASTER COUNTY													
03-26-03	--	<.005	--	--	<.02	--	.232	<.009	<.005	--	<.009	<.005	<.005
05-15-03	--	<.015	--	--	<.02	--	.227	<.009	<.005	--	<.009	<.005	<.005
08-13-03	--	--	--	--	--	--	--	--	--	--	--	--	--
04-16-03	--	.005	--	--	<.02	--	<.002	<.009	<.005	--	<.009	<.005	<.005
04-09-03	--	<.005	--	--	<.02	--	<.002	<.009	<.005	--	<.009	<.005	<.005
04-02-03	--	<.005	--	--	<.02	--	<.002	<.009	<.005	--	<.009	<.005	<.005
04-16-03	--	<.005	--	--	<.02	--	<.002	<.009	<.005	--	<.009	<.005	<.005
04-16-03	--	--	--	--	--	--	--	--	--	--	--	--	--
04-16-03	--	--	--	--	--	--	--	--	--	--	--	--	--
04-09-03	--	<.005	--	--	<.02	--	<.002	<.009	<.005	--	<.009	<.005	<.005
LEBANON COUNTY													
04-02-03	--	<.005	--	--	<.02	--	<.002	<.009	<.005	--	<.009	<.005	<.005
LYCOMING COUNTY													
04-30-03	--	<.005	--	--	<.02	--	<.002	<.009	<.005	--	<.009	<.005	<.005
04-30-03	--	--	--	--	--	--	--	--	--	--	--	--	--
04-30-03	--	--	--	--	--	--	--	--	--	--	--	--	--
MIFFLIN COUNTY													
04-14-03	--	<.005	--	--	<.02	--	<.002	<.009	<.005	--	<.009	<.005	<.005

**GROUND-WATER DATA COLLECTED AT SPECIAL-STUDY SITES  
GROUND WATER PESTICIDES NETWORK PROJECT**

WATER-QUALITY DATA, WATER YEARS OCTOBER 2002 TO SEPTEMBER 2003

Date	Fipronil, water, fltrd, µg/L (62166)	Flumet- sulam, water, fltrd, µg/L (61694)	Fluo- meturon water fltrd 0.7µ GF µg/L (38811)	Fonofos water, fltrd, µg/L (04095)	Hexa- chloro- cyclo- penta- diene, wat unf µg/L (34386)	Imaza- quin, water, fltrd, µg/L (50356)	Imaze- thapyr, water, fltrd, µg/L (50407)	Imida- cloprid water, fltrd, µg/L (61695)	Lindane water, fltrd, µg/L (39341)	Linuron water fltrd 0.7µ GF µg/L (38478)	Linuron water fltrd 0.7µ GF µg/L (82666)	Mala- thion, water, fltrd, µg/L (39532)	MCPA, water, fltrd 0.7µ GF µg/L (38482)
ADAMS COUNTY													
05-05-03	<.007	<.01	<.03	<.003	--	<.02	<.02	E.006	<.004	<.01	<.035	<.027	<.02
05-05-03	<.007	<.01	<.03	<.003	--	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02
05-08-03	<.007	<.01	<.03	<.003	--	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02
05-07-03	<.007	<.01	<.03	<.003	--	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02
05-07-03	<.007	<.01	<.03	<.003	--	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02
05-06-03	<.007	<.01	<.03	<.003	--	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02
05-14-03	<.007	<.01	<.03	<.003	--	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02
05-14-03	<.007	<.01	<.03	<.003	--	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02
05-13-03	<.007	<.01	<.03	<.003	--	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02
08-20-03	--	--	--	--	<.10	--	--	--	--	--	--	--	--
08-28-03	--	--	--	--	<.10	--	--	--	--	--	--	--	--
08-20-03	--	--	--	--	<.10	--	--	--	--	--	--	--	--
08-21-03	--	--	--	--	<.10	--	--	--	--	--	--	--	--
08-26-03	--	--	--	--	<.10	--	--	--	--	--	--	--	--
08-27-03	--	--	--	--	<.10	--	--	--	--	--	--	--	--
08-19-03	--	--	--	--	<.10	--	--	--	--	--	--	--	--
08-21-03	--	--	--	--	<.10	--	--	--	--	--	--	--	--
08-28-03	--	--	--	--	<.10	--	--	--	--	--	--	--	--
08-26-03	--	--	--	--	<.10	--	--	--	--	--	--	--	--
09-04-03	--	--	--	--	<.10	--	--	--	--	--	--	--	--
10-02-03	--	--	--	--	<.11	--	--	--	--	--	--	--	--
BEDFORD COUNTY													
04-08-03	<.007	--	--	<.003	--	--	--	--	<.004	--	<.035	<.027	--
BLAIR COUNTY													
03-25-03	<.007	--	--	<.003	--	--	--	--	<.004	--	<.035	<.027	--
05-12-03	<.007	--	--	<.003	--	--	--	--	<.004	--	<.035	<.027	--
08-14-03	--	--	--	--	<.1	--	--	--	--	--	--	--	--
CENTRE COUNTY													
04-22-03	<.007	--	--	<.003	--	--	--	--	<.004	--	<.035	<.027	--
CUMBERLAND COUNTY													
04-08-03	<.007	--	--	<.003	--	--	--	--	<.004	--	<.035	<.027	--
05-13-03	<.007	<.01	<.03	<.003	--	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02
LANCASTER COUNTY													
03-26-03	<.007	--	--	<.003	--	--	--	--	<.004	--	<.035	<.027	--
05-15-03	<.007	--	--	<.003	--	--	--	--	<.004	--	.127	<.027	--
08-13-03	--	--	--	--	<.10	--	--	--	--	--	--	--	--
04-16-03	<.007	--	--	<.003	--	--	--	--	<.004	--	<.035	<.027	--
04-09-03	<.007	--	--	<.003	--	--	--	--	<.004	--	<.035	<.027	--
04-02-03	<.007	--	--	<.003	--	--	--	--	<.004	--	<.035	<.027	--
04-16-03	<.007	--	--	<.003	--	--	--	--	<.004	--	<.035	<.027	--
04-16-03	--	--	--	--	--	--	--	--	--	--	--	--	--
04-16-03	--	--	--	--	--	--	--	--	--	--	--	--	--
04-09-03	<.007	--	--	<.003	--	--	--	--	<.004	--	<.035	<.027	--
LEBANON COUNTY													
04-02-03	<.007	--	--	<.003	--	--	--	--	<.004	--	<.035	<.027	--
LYCOMING COUNTY													
04-30-03	<.007	--	--	<.003	--	--	--	--	<.004	--	<.035	<.027	--
04-30-03	--	--	--	--	--	--	--	--	--	--	--	--	--
04-30-03	--	--	--	--	--	--	--	--	--	--	--	--	--
MIFFLIN COUNTY													
04-14-03	<.007	--	--	<.003	--	--	--	--	<.004	--	<.035	<.027	--

**GROUND-WATER DATA COLLECTED AT SPECIAL-STUDY SITES  
GROUND WATER PESTICIDES NETWORK PROJECT**

WATER-QUALITY DATA, WATER YEARS OCTOBER 2002 TO SEPTEMBER 2003

Date	MCPB, water, fltrd 0.7µ GF µg/L (38487)	Meta- laxyl, water, fltrd, µg/L (50359)	Methio- carb, water, fltrd 0.7µ GF µg/L (38501)	Meth- omyl, water, fltrd 0.7µ GF µg/L (49296)	Methyl para- thion, water, fltrd 0.7µ GF µg/L (82667)	Metola- chlor, water, fltrd, µg/L (39415)	Metri- buzin, water, fltrd, µg/L (82630)	Metsul- furon, water, fltrd, µg/L (61697)	Moli- nate, water, fltrd 0.7µ GF µg/L (82671)	N-(4- Chloro- phenyl) -N'- methyl- urea, µg/L (61692)	Naprop- amide, water, fltrd 0.7µ GF µg/L (82684)	Neburon water, fltrd 0.7µ GF µg/L (49294)	Nico- sul- furon, water, fltrd, µg/L (50364)
ADAMS COUNTY													
05-05-03	<.01	M	<.008	<.004	<.006	E.008	<.006	<.03	<.002	<.02	<.007	<.01	<.01
05-05-03	<.01	<.02	<.008	<.004	<.006	<.013	<.006	<.03	<.002	<.02	<.007	<.01	<.01
05-08-03	<.01	<.02	<.008	<.004	<.006	<.013	<.006	<.03	<.002	<.02	<.007	<.01	<.01
05-07-03	<.01	<.02	<.008	<.004	<.006	<.013	<.006	<.03	<.002	<.02	<.007	<.01	<.01
05-07-03	<.01	<.02	<.008	<.004	<.006	<.013	<.006	<.03	<.002	<.02	<.007	<.01	<.01
05-06-03	<.01	<.02	<.008	<.004	<.006	<.013	<.006	<.03	<.002	<.02	<.007	<.01	<.01
05-14-03	<.01	<.02	<.008	<.004	<.006	E.004	<.006	<.03	<.002	<.02	<.007	<.01	<.01
05-14-03	<.01	<.02	<.008	<.004	<.006	<.013	<.006	<.03	<.002	<.02	<.007	<.01	<.01
05-13-03	<.01	<.02	<.008	<.004	<.006	<.013	<.006	<.03	<.002	<.02	<.007	<.01	<.01
08-20-03	--	--	--	<1.60	<.100	<.10	<.10	--	--	--	--	--	--
08-28-03	--	--	--	<1.60	<.100	<.10	<.10	--	--	--	--	--	--
08-20-03	--	--	--	<1.60	<.100	<.10	<.10	--	--	--	--	--	--
08-21-03	--	--	--	<1.60	<.100	<.10	<.10	--	--	--	--	--	--
08-26-03	--	--	--	<1.60	<.100	<.10	<.10	--	--	--	--	--	--
08-27-03	--	--	--	<1.60	<.100	<.10	<.10	--	--	--	--	--	--
08-19-03	--	--	--	<1.60	<.100	<.10	<.10	--	--	--	--	--	--
08-21-03	--	--	--	<1.60	<.100	<.10	<.10	--	--	--	--	--	--
08-28-03	--	--	--	<1.60	<.100	<.10	<.10	--	--	--	--	--	--
08-26-03	--	--	--	<1.60	<.100	<.10	<.10	--	--	--	--	--	--
09-04-03	--	--	--	--	--	33.6	<.10	--	--	--	--	--	--
10-02-03	--	--	--	--	--	<.11	<.10	--	--	--	--	--	--
BEDFORD COUNTY													
04-08-03	--	--	--	--	<.006	.062	<.006	--	<.002	--	<.007	--	--
BLAIR COUNTY													
03-25-03	--	--	--	--	<.006	8.50	<.006	--	<.002	--	<.007	--	--
05-12-03	--	--	--	--	<.006	E25.9	<.006	--	<.002	--	<.007	--	--
08-14-03	--	--	--	--	--	E41.9	<.10	--	--	--	--	--	--
CENTRE COUNTY													
04-22-03	--	--	--	--	<.006	<.013	<.006	--	<.002	--	<.007	--	--
CUMBERLAND COUNTY													
04-08-03	--	--	--	--	<.006	E.005	<.006	--	<.002	--	<.007	--	--
05-13-03	<.01	<.02	<.008	<.004	<.006	<.013	<.006	<.03	<.002	<.02	<.007	<.01	<.01
LANCASTER COUNTY													
03-26-03	--	--	--	--	<.006	E210	<.006	--	<.002	--	.044	--	--
05-15-03	--	--	--	--	<.008	E150	.007	--	<.002	--	.033	--	--
08-13-03	--	--	--	--	--	E83.8	<.10	--	--	--	--	--	--
04-16-03	--	--	--	--	<.006	.074	E.004	--	<.002	--	<.007	--	--
04-09-03	--	--	--	--	<.006	E.010	<.006	--	<.002	--	<.007	--	--
04-02-03	--	--	--	--	<.006	.034	<.006	--	<.005	--	<.007	--	--
04-16-03	--	--	--	--	<.006	E.003	<.006	--	<.004	--	<.007	--	--
04-16-03	--	--	--	--	--	--	--	--	--	--	--	--	--
04-16-03	--	--	--	--	--	--	--	--	--	--	--	--	--
04-09-03	--	--	--	--	<.006	<.013	<.006	--	<.002	--	<.007	--	--
LEBANON COUNTY													
04-02-03	--	--	--	--	<.006	E.004	<.006	--	<.005	--	<.007	--	--
LYCOMING COUNTY													
04-30-03	--	--	--	--	<.006	<.013	<.006	--	<.002	--	<.007	--	--
04-30-03	--	--	--	--	--	--	--	--	--	--	--	--	--
04-30-03	--	--	--	--	--	--	--	--	--	--	--	--	--
MIFFLIN COUNTY													
04-14-03	--	--	--	--	<.006	E.007	<.006	--	<.002	--	<.007	--	--

**GROUND-WATER DATA COLLECTED AT SPECIAL-STUDY SITES  
GROUND WATER PESTICIDES NETWORK PROJECT**

WATER-QUALITY DATA, WATER YEARS OCTOBER 2002 TO SEPTEMBER 2003

Date	Norflur azon, water, fltrd 0.7µ GF µg/L (49293)	Ory- zalin, water, fltrd 0.7µ GF µg/L (49292)	Oxamyl, water, fltrd 0.7µ GF µg/L (38866)	p,p'- DDE, water, fltrd, µg/L (34653)	Para- thion, water, fltrd, µg/L (39542)	Peb- ulate, water, fltrd 0.7µ GF µg/L (82669)	Pendi- meth- alin, water, fltrd 0.7µ GF µg/L (82683)	Phorate water fltrd 0.7µ GF µg/L (82664)	Pic- loram, water, fltrd 0.7µ GF µg/L (49291)	Prome- ton, water, fltrd, µg/L (04037)	Pron- amide, water, fltrd 0.7µ GF µg/L (82676)	Propa- chlor, water, fltrd, µg/L (04024)	Pro- panil, water, fltrd 0.7µ GF µg/L (82679)
ADAMS COUNTY													
05-05-03	E.15	<.02	<.01	<.003	<.010	<.004	<.022	<.011	<.02	.03	<.004	<.010	<.060
05-05-03	<.02	<.02	<.01	<.003	<.010	<.004	<.022	<.011	<.02	<.01	<.004	<.010	<.011
05-08-03	<.02	<.02	<.01	<.003	<.010	<.004	<.022	<.011	<.02	<.01	<.004	<.010	<.011
05-07-03	<.02	<.02	<.01	<.003	<.010	<.004	<.022	<.011	<.02	<.01	<.004	<.010	<.011
05-07-03	<.02	<.02	<.01	<.003	<.010	<.004	<.022	<.011	<.02	<.01	<.004	<.010	<.011
05-06-03	<.02	<.02	<.01	<.003	<.010	<.004	<.022	<.011	<.02	<.01	<.004	<.010	<.011
05-14-03	<.02	<.02	<.01	<.003	<.010	<.004	<.022	<.011	<.02	<.01	<.004	<.010	<.011
05-14-03	<.02	<.02	<.01	<.003	<.010	<.004	<.022	<.011	<.02	<.01	<.004	<.010	<.011
05-13-03	<.02	<.02	<.01	<.003	<.010	<.004	<.022	<.011	<.02	<.01	<.004	<.010	<.011
08-20-03	--	--	<1.60	--	--	--	<.100	--	--	--	--	--	--
08-28-03	--	--	<1.60	--	--	--	<.100	--	--	--	--	--	--
08-20-03	--	--	<1.60	--	--	--	<.100	--	--	--	--	--	--
08-21-03	--	--	<1.60	--	--	--	<.100	--	--	--	--	--	--
08-26-03	--	--	<1.60	--	--	--	<.100	--	--	--	--	--	--
08-27-03	--	--	<1.60	--	--	--	<.100	--	--	--	--	--	--
08-19-03	--	--	<1.60	--	--	--	<.100	--	--	--	--	--	--
08-21-03	--	--	<1.60	--	--	--	<.100	--	--	--	--	--	--
08-28-03	--	--	<1.60	--	--	--	<.100	--	--	--	--	--	--
08-26-03	--	--	<1.60	--	--	--	<.100	--	--	--	--	--	--
09-04-03	--	--	--	--	--	--	<.100	--	--	--	--	--	--
10-02-03	--	--	--	--	--	--	<.110	--	--	--	--	--	--
BEDFORD COUNTY													
04-08-03	--	--	--	<.003	<.010	<.004	<.022	<.011	--	E.01	<.004	<.010	<.011
BLAIR COUNTY													
03-25-03	--	--	--	<.003	<.010	<.004	<.022	<.011	--	.13	<.004	<.010	<.011
05-12-03	--	--	--	<.003	<.010	<.004	<.022	<.011	--	.26	<.004	<.010	<.011
08-14-03	--	--	--	--	--	--	<.100	--	--	--	--	--	--
CENTRE COUNTY													
04-22-03	--	--	--	<.003	<.010	<.004	<.022	<.011	--	<.01	<.004	<.010	<.011
CUMBERLAND COUNTY													
04-08-03	--	--	--	<.003	<.010	<.004	<.022	<.011	--	.02	<.004	<.010	<.011
05-13-03	<.02	<.02	<.01	<.003	<.010	<.004	<.022	<.011	<.02	<.01	<.004	<.010	<.011
LANCASTER COUNTY													
03-26-03	--	--	--	<.003	<.010	<.004	<.022	<.011	--	.06	<.004	<.010	<.011
05-15-03	--	--	--	<.003	<.010	.007	<.045	<.011	--	.04	<.004	<.100	<.011
08-13-03	--	--	--	--	--	--	<.100	--	--	--	--	--	--
04-16-03	--	--	--	<.003	<.010	<.004	<.022	<.011	--	E.01	<.004	<.010	<.011
04-09-03	--	--	--	<.003	<.010	<.004	<.022	<.011	--	<.01	<.004	<.010	<.011
04-02-03	--	--	--	<.003	<.010	<.004	<.022	<.011	--	<.01	<.004	<.010	<.011
04-16-03	--	--	--	<.003	<.010	<.004	<.022	<.011	--	M	<.004	<.010	<.011
04-16-03	--	--	--	--	--	--	--	--	--	--	--	--	--
04-16-03	--	--	--	--	--	--	--	--	--	--	--	--	--
04-09-03	--	--	--	<.003	<.010	<.004	<.022	<.011	--	E.01	<.004	<.010	<.011
LEBANON COUNTY													
04-02-03	--	--	--	<.003	<.010	<.004	<.022	<.011	--	.02	<.004	<.010	<.011
LYCOMING COUNTY													
04-30-03	--	--	--	<.003	<.010	<.004	<.022	<.011	--	<.01	<.004	<.010	<.011
04-30-03	--	--	--	--	--	--	--	--	--	--	--	--	--
04-30-03	--	--	--	--	--	--	--	--	--	--	--	--	--
MIFFLIN COUNTY													
04-14-03	--	--	--	<.003	<.010	<.004	<.022	<.011	--	<.01	<.004	<.010	<.011

**GROUND-WATER DATA COLLECTED AT SPECIAL-STUDY SITES  
GROUND WATER PESTICIDES NETWORK PROJECT**

WATER-QUALITY DATA, WATER YEARS OCTOBER 2002 TO SEPTEMBER 2003

Date	Propar- gite, water, fltrd 0.7µ GF µg/L (82685)	Propham water fltrd 0.7µ GF µg/L (49236)	Propi- cona- zole, water, fltrd, µg/L (50471)	Pro- poxur, water, fltrd 0.7µ GF µg/L (38538)	Siduron water, fltrd, µg/L (38548)	Sima- zine, water, fltrd, µg/L (04035)	Sulfo- met- ruron, water, fltrd, µg/L (50337)	Tebu- thiuron water fltrd 0.7µ GF µg/L (82670)	Terba- cil, water, fltrd 0.7µ GF µg/L (82665)	Terba- cil, water, fltrd, µg/L (04032)	Terbu- fos, water, fltrd 0.7µ GF µg/L (82675)	Thio- bencarb water fltrd 0.7µ GF µg/L (82681)	Tri- allate, water, fltrd 0.7µ GF µg/L (82678)
ADAMS COUNTY													
05-05-03	<.02	<.010	<.02	<.008	<.02	.104	E.006	<.02	<.034	<.010	<.02	<.005	<.002
05-05-03	<.02	<.010	<.02	<.008	<.02	<.005	<.009	<.02	<.034	<.010	<.02	<.005	<.002
05-08-03	<.02	<.010	<.02	<.008	<.02	<.005	<.009	<.02	<.034	<.010	<.02	<.005	<.002
05-07-03	<.02	<.010	<.02	<.008	<.02	<.005	<.009	<.02	<.034	<.010	<.02	<.005	<.002
05-07-03	<.02	<.010	<.02	<.008	<.02	<.005	<.002	<.02	<.034	<.010	<.02	<.005	<.002
05-06-03	<.02	<.010	<.02	<.008	<.02	<.005	<.009	<.02	<.034	<.010	<.02	<.005	<.002
05-14-03	<.02	<.010	<.02	<.008	<.02	.151	<.009	<.02	<.034	<.010	<.02	<.005	<.002
05-14-03	<.02	<.010	<.02	<.008	<.02	<.005	<.009	<.02	<.034	<.010	<.02	<.005	<.002
05-13-03	<.02	<.010	<.02	<.008	<.02	<.005	<.009	<.02	<.034	<.010	<.02	<.005	<.002
08-20-03	--	--	--	--	--	<.10	--	--	<.100	--	<.02	<.005	<.002
08-28-03	--	--	--	--	--	<.10	--	--	<.250	--	--	--	--
08-20-03	--	--	--	--	--	<.10	--	--	<.100	--	--	--	--
08-21-03	--	--	--	--	--	<.10	--	--	<.100	--	--	--	--
08-26-03	--	--	--	--	--	<.10	--	--	<.100	--	--	--	--
08-27-03	--	--	--	--	--	<.10	--	--	<.100	--	--	--	--
08-19-03	--	--	--	--	--	<.10	--	--	<.100	--	--	--	--
08-21-03	--	--	--	--	--	<.10	--	--	<.100	--	--	--	--
08-28-03	--	--	--	--	--	<.10	--	--	<.250	--	--	--	--
08-26-03	--	--	--	--	--	<.10	--	--	<.100	--	--	--	--
09-04-03	--	--	--	--	--	<.10	--	--	--	--	--	--	--
10-02-03	--	--	--	--	--	<.10	--	--	--	--	--	--	--
BEDFORD COUNTY													
04-08-03	<.02	--	--	--	--	.016	--	<.02	<.034	--	<.02	<.005	<.002
BLAIR COUNTY													
03-25-03	<.02	--	--	--	--	.055	--	<.02	<.034	--	<.02	<.005	<.002
05-12-03	<.02	--	--	--	--	.126	--	<.02	<.034	--	<.02	<.005	<.002
08-14-03	--	--	--	--	--	.26	--	--	--	--	--	--	--
CENTRE COUNTY													
04-22-03	<.02	--	--	--	--	<.005	--	<.02	<.034	--	<.02	<.005	<.002
CUMBERLAND COUNTY													
04-08-03	<.02	--	--	--	--	.026	--	<.02	<.034	--	<.02	<.005	<.002
05-13-03	<.02	<.010	<.02	<.008	<.02	<.005	<.009	<.02	<.034	<.010	<.02	<.005	<.002
LANCASTER COUNTY													
03-26-03	<.02	--	--	--	--	.074	--	<.02	E.280	--	<.02	<.005	<.002
05-15-03	<.02	--	--	--	--	.049	--	E.01	E.233	--	<.02	<.005	<.002
08-13-03	--	--	--	--	--	<.10	--	--	--	--	--	--	--
04-16-03	<.02	--	--	--	--	E.004	--	<.02	<.034	--	<.02	<.005	<.002
04-09-03	<.02	--	--	--	--	<.005	--	<.02	<.034	--	<.02	<.005	<.002
04-02-03	<.02	--	--	--	--	<.005	--	<.02	<.034	--	<.02	<.005	<.002
04-16-03	<.02	--	--	--	--	.040	--	<.02	<.034	--	<.02	<.005	<.002
04-16-03	--	--	--	--	--	--	--	--	--	--	--	--	--
04-16-03	--	--	--	--	--	--	--	--	--	--	--	--	--
04-09-03	<.02	--	--	--	--	<.005	--	<.02	<.034	--	<.02	<.005	<.002
LEBANON COUNTY													
04-02-03	<.02	--	--	--	--	.006	--	<.02	<.034	--	<.02	<.005	<.002
LYCOMING COUNTY													
04-30-03	<.02	--	--	--	--	<.005	--	<.02	<.034	--	<.02	<.005	<.002
04-30-03	--	--	--	--	--	--	--	--	--	--	--	--	--
04-30-03	--	--	--	--	--	--	--	--	--	--	--	--	--
MIFFLIN COUNTY													
04-14-03	<.02	--	--	--	--	.018	--	<.02	<.034	--	<.02	<.005	<.002



**GROUND-WATER DATA COLLECTED AT SPECIAL-STUDY SITES  
GROUND WATER PESTICIDES NETWORK PROJECT**

WATER-QUALITY DATA, WATER YEARS OCTOBER 2002 TO SEPTEMBER 2003

Date	Tri-clopyr, water, fltrd 0.7µ GF µg/L (49235)	Tri-flur-alin, water, fltrd 0.7µ GF µg/L (82661)	Phos-phami-don, water, fltrd 0.7µ GF µg/L	Purpose site visit, code (50280)	Sample purpose code (71999)	Sample volume, Sched-ule 2001, mL (99856)	Sample volume, Sched-ules 2060 & 9060, mL (99840)	Sam-pling condi-tion, code (72006)	Type of sample related QA data, code (99111)	Type of repli-cate, code (99105)	Data base number	Medium code
ADAMS COUNTY												
05-05-03	<.02	<.009	--	2001	50.00	961	965	8.00	100	--	01	6
05-05-03	<.02	<.009	--	2001	50.00	927	971	8.00	10	--	01	6
05-08-03	<.02	<.009	--	2001	50.00	931	951	8.00	--	--	01	6
05-07-03	<.02	<.009	--	2001	50.00	933	957	8.00	--	--	01	6
05-07-03	<.02	<.009	--	2001	50.00	935	937	8.00	--	--	01	6
05-06-03	<.02	<.009	--	2001	50.00	943	929	8.00	100	--	01	6
05-14-03	<.02	<.009	--	2001	50.00	938	947	8.00	--	--	01	6
05-14-03	<.02	<.009	--	2001	50.00	937	956	8.00	--	--	01	6
05-13-03	<.02	<.009	--	2001	50.00	941	933	8.00	40	--	01	6
08-20-03	--	--	<0.10	2001	50.00	--	--	8.00	--	--	01	6
08-28-03	--	--	<0.10	2001	50.00	--	--	8.00	--	--	01	6
08-20-03	--	--	<0.10	2001	50.00	--	--	8.00	--	--	01	6
08-21-03	--	--	<0.10	2001	50.00	--	--	8.00	--	--	01	6
08-26-03	--	--	<0.10	2001	50.00	--	--	8.00	--	--	01	6
08-27-03	--	--	<0.10	2001	50.00	--	--	8.00	100	--	01	6
08-19-03	--	--	<0.10	2001	50.00	--	--	8.00	--	--	01	6
08-21-03	--	--	<0.10	2001	50.00	--	--	8.00	--	--	01	6
08-28-03	--	--	<0.10	2001	50.00	--	--	8.00	--	--	01	6
08-26-03	--	--	<0.10	2001	50.00	--	--	8.00	--	--	01	6
09-04-03	--	--	--	2001	50.00	--	--	8.00	--	--	01	6
10-02-03	--	--	--	2001	50.00	--	--	8.00	--	--	01	6
BEDFORD COUNTY												
04-08-03	--	<.009	--	2001	50.00	935	--	8.00	10	--	01	6
BLAIR COUNTY												
03-25-03	--	<.009	--	2001	50.00	917	--	8.00	--	--	01	6
05-12-03	--	<.009	--	2001	50.00	947	--	8.00	--	--	01	6
08-14-03	--	--	--	2001	50.00	--	--	8.00	--	--	01	6
CENTRE COUNTY												
04-22-03	--	<.009	--	2001	50.00	937	--	8.00	--	--	01	6
CUMBERLAND COUNTY												
04-08-03	--	<.009	--	2001	50.00	932	--	8.00	--	--	01	6
05-13-03	<.02	<.009	--	2001	50.00	923	924	8.00	40	--	01	6
LANCASTER COUNTY												
03-26-03	--	<.009	--	2001	50.00	945	--	8.00	--	--	01	6
05-15-03	--	<.009	--	2001	50.00	960	--	8.00	--	--	01	6
08-13-03	--	--	--	2001	50.00	--	--	8.00	--	--	01	6
04-16-03	--	<.009	--	2001	50.00	953	--	8.00	--	--	01	6
04-09-03	--	<.009	--	2001	50.00	930	--	8.00	--	--	01	6
04-02-03	--	<.009	--	2001	50.00	949	--	8.00	10	--	01	6
04-16-03	--	<.009	--	2001	50.00	958	--	8.00	30	20.00	01	6
04-16-03	--	--	--	2098	50.00	--	--	8.00	--	20.00	02	S
04-16-03	--	--	--	2098	50.00	--	--	8.00	--	20.00	02	S
04-09-03	--	<.009	--	2001	50.00	926	--	8.00	--	--	01	6
LEBANON COUNTY												
04-02-03	--	<.009	--	2001	50.00	938	--	8.00	--	--	01	6
LYCOMING COUNTY												
04-30-03	--	<.009	--	2001	50.00	934	--	8.00	30	30.00	01	6
04-30-03	--	--	--	2098	50.00	--	--	8.00	--	30.00	02	S
04-30-03	--	--	--	2098	50.00	--	--	8.00	--	30.00	02	S
MIFFLIN COUNTY												
04-14-03	--	<.009	--	2001	50.00	935	--	8.00	--	--	01	6







**GROUND-WATER DATA COLLECTED AT SPECIAL-STUDY SITES  
GROUND WATER PESTICIDES NETWORK PROJECT**

QUALITY-CONTROL DATA, WATER YEARS OCTOBER 2002 TO SEPTEMBER 2003

Date	Pro-poxur, water, fltrd 0.7µ GF µg/L (38538)	Siduron water, fltrd, µg/L (38548)	Sima-zine, water, fltrd, µg/L (04035)	Sulfo-met-ruron, water, fltrd, µg/L (50337)	Tebu-thiuron water fltrd 0.7µ GF µg/L (82670)	Terba-cil, water, fltrd 0.7µ GF µg/L (82665)	Terba-cil, water, fltrd, µg/L (04032)	Terbu-fos, water, fltrd 0.7µ GF µg/L (82675)	Thio-bencarb water fltrd 0.7µ GF µg/L (82681)	Tri-allate, water, fltrd 0.7µ GF µg/L (82678)	Tri-clopyr, water, fltrd 0.7µ GF µg/L (49235)	Tri-flur-alin, water, fltrd 0.7µ GF µg/L (82661)	Purpose site visit, code (50280)
03-24-03	--	--	--	--	--	--	--	--	--	--	--	--	2098
03-24-03	--	--	<.005	--	<.02	<.034	--	<.02	<.005	<.002	--	<.009	2098
03-24-03	--	--	--	--	--	--	--	--	--	--	--	--	2098
05-06-03	--	--	<.005	--	<.02	<.034	--	<.02	<.005	<.002	--	<.009	2098
05-06-03	<.008	<.02	--	<.009	<.006	--	<.010	--	--	--	<.02	--	2098
04-02-03	--	--	--	--	--	--	--	--	--	--	--	--	2098
04-08-03	--	--	--	--	--	--	--	--	--	--	--	--	2098
05-05-03	--	--	--	--	--	--	--	--	--	--	--	--	2098
05-05-03	--	--	--	--	--	--	--	--	--	--	--	--	2098
05-05-03	--	--	--	--	--	--	--	--	--	--	--	--	2098

Date	Sample purpose code (71999)	Sample volume, Schedule 2001, mL (99856)	Sample volume, Schedules 2060 & 9060, mL (99840)	Source of blank solution, code (99101)	Reference material or spike lot number (99104)	Type of blank sample, code (99102)	Type of blank solution, code (99100)
03-24-03	50.00	--	--	80.00	--	200.00	200.00
03-24-03	50.00	924	--	10.00	80201	200.00	40.00
03-24-03	50.00	--	--	80.00	2330	200.00	10.00
05-06-03	50.00	938	--	10.00	80201	150.00	40.00
05-06-03	50.00	--	933	10.00	80201	150.00	40.00
04-02-03	50.00	--	--	80.00	--	100.00	200.00
04-08-03	50.00	--	--	80.00	--	100.00	200.00
05-05-03	50.00	--	--	80.00	--	30.00	200.00
05-05-03	50.00	--	--	80.00	--	100.00	200.00
05-05-03	50.00	--	--	80.00	2330	30.00	10.00

**GROUND-WATER DATA COLLECTED AT SPECIAL-STUDY SITES  
GROUND WATER PESTICIDES NETWORK PROJECT**

**401435076540910 - QUALITY-ASSURANCE RESULTS**

**REMARKS.**--A commercially-available and USGS-certified mixture of pesticides and herbicides was spiked into approximately 3 liters of organic-free blank water May 6, 2003 to create three 1-L triplicate quality-assurance samples which were submitted to the U.S. Geological Survey National Water Quality Laboratory. These samples are used to determine both precision and accuracy. Concentrations of pesticides and herbicides (in µg/L) and calculated recoveries (in percent) are shown in the table below for estimation of accuracy. Less-than values were set equal to zero for calculations; E = estimated value; "<" = less than.

QUALITY-CONTROL DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003--Continued

Parameter code	Constituent	Concentration, in micrograms per liter				
		Laboratory results		a Calculated concentration in spiked blank C	Recovery in percent [(B-A)/C] x 100	
		Blank (05/06/03 @ 1300)	Spiked Blank (05/06/03 @ 1240)			
A	B					
49260	Acetochlor	<0.006	0.494	.40	124	
46342	Alachlor	<0.004	0.477	.40	119	
34253	Alpha BHC	<0.005	0.415	.40	104	
39632	Atrazine	<0.007	0.444	.40	111	
82673	Benfluralin	<0.010	0.307	.40	77	
04028	Butylate	<0.002	0.425	.40	106	
82680	Carbaryl	<0.041	EO.282	.40	71	
82674	Carbofuran	<0.020	EO.368	.40	92	
38933	Chlorpyrifos	<0.005	0.367	.40	92	
04041	Cyanazine	<0.018	0.467	.40	117	
82682	DCPA (Dacthal)	<0.003	0.437	.40	109	
04040	CIAT (Desethyl Atrazine)	<0.006	EO.205	.40	51	
39572	Diazinon	<0.005	0.423	.40	106	
39381	Dieldrin	<0.005	0.347	.39	89	
82660	2,6-Diethyl Aniline	<0.006	0.347	.40	87	
82677	Disulfoton	<0.02	0.174	.40	44	
82668	EPTC	<0.002	0.344	.40	86	
82663	Ethalfuralin	<0.009	0.338	.40	84	
82672	Ethoprop	<0.005	0.315	.40	79	
04095	Fonofos	<0.003	0.444	.40	111	
39341	Lindane	<0.004	0.436	.40	109	
82666	Linuron	<0.035	0.488	.40	122	
39532	Malathion	<0.027	0.330	.39	85	
82686	Methyl Azinphos	<0.050	EO.128	.40	32	
82667	Methyl Parathion	<0.006	0.348	.40	87	
39415	Metolachlor	<0.013	0.484	.40	121	
82630	Metribuzin	<0.006	0.396	.40	99	
82671	Molinate	<0.002	0.366	.40	92	
82684	Napropamide	<0.007	0.294	.40	74	
34653	P, P' DDE	<0.003	0.225	.40	56	
39542	Parathion	<0.010	0.369	.40	92	
82669	Pebulate	<0.004	0.360	.40	90	
82683	Pendimethalin	<0.022	0.284	.40	71	
82687	Permethrin, cis	<0.006	0.208	.40	52	
82664	Phorate	<0.011	0.297	.40	74	
04037	Prometon	<0.01	0.416	.40	104	
82676	Pronamide	<0.004	0.409	.40	103	
04024	Propachlor	<0.010	0.411	.40	103	
82679	Propanil	<0.011	0.403	.40	101	
82685	Propargite	<0.02	0.218	.40	54	
04035	Simazine	<0.005	0.420	.40	105	
82670	Tebuthiuron	<0.02	0.398	.40	100	
82665	Terbacil	<0.034	EO.334	.40	84	
82675	Terbufos	<0.02	0.304	.40	76	
82681	Thiobencarb	<0.005	0.410	.40	102	
82678	Triallate	<0.002	0.395	.40	99	
82661	Trifluralin	<0.009	0.317	.40	79	
					Mean recovery	90
					Standard deviation	21
					Median recovery	92

a Calculated concentration of spike in sample equals the concentration of the spike solution, in micrograms per milliliter x amount of spike added, in milliliters, divided by the spiked sample volume, in liters.

**GROUND-WATER DATA COLLECTED AT SPECIAL-STUDY SITES  
GROUND WATER PESTICIDES NETWORK PROJECT**

**401435076540910 - QUALITY-ASSURANCE RESULTS**

**REMARKS.**--A commercially-available and USGS-certified mixture of pesticides and herbicides was spiked into approximately 3 liters of organic-free blank water May 6, 2003 to create three 1-L triplicate quality-assurance samples which were submitted to the U.S. Geological Survey National Water Quality Laboratory. These samples are used to determine both precision and accuracy. Concentrations of pesticides and herbicides (in µg/L) and calculated recoveries (in percent) are shown in the table below for estimation of accuracy. Less-than values were set equal to zero for calculations; E = estimated value; "<" = less than.

QUALITY-CONTROL DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003--Continued

Parameter code	Constituent	Concentration, in micrograms per liter				
		Laboratory results		a Calculated concentration in spiked blank C	Recovery in percent [(B-A)/C] x 100	
		Blank (05/06/03 @ 1300)	Spiked Blank (05/06/03 @ 1241)			
		A	B	C		
49260	Acetochlor	<0.006	0.488	.40	122	
46342	Alachlor	<0.004	0.466	.40	116	
34253	Alpha BHC	<0.005	0.417	.40	104	
39632	Atrazine	<0.007	0.450	.40	112	
82673	Benfluralin	<0.010	0.322	.40	80	
04028	Butylate	<0.002	0.442	.40	110	
82680	Carbaryl	<0.041	EO.265	.40	66	
82674	Carbofuran	<0.020	EO.360	.40	90	
38933	Chlorpyrifos	<0.005	0.386	.40	96	
04041	Cyanazine	<0.018	0.473	.40	118	
82682	DCPA (Dacthal)	<0.003	0.430	.40	108	
04040	CIAT (Desethyl Atrazine)	<0.006	EO.203	.40	51	
39572	Diazinon	<0.005	0.439	.40	110	
39381	Dieldrin	<0.005	0.379	.39	97	
82660	2,6-Diethyl Aniline	<0.006	0.353	.40	88	
82677	Disulfoton	<0.02	0.170	.40	42	
82668	EPTC	<0.002	0.353	.40	88	
82663	Ethalfluralin	<0.009	0.342	.40	86	
82672	Ethoprop	<0.005	0.324	.40	81	
04095	Fonofos	<0.003	0.444	.40	111	
39341	Lindane	<0.004	0.429	.40	107	
82666	Linuron	<0.035	0.457	.40	114	
39532	Malathion	<0.027	0.319	.39	82	
82686	Methyl Azinphos	<0.050	EO.122	.40	30	
82667	Methyl Parathion	<0.006	0.330	.40	82	
39415	Metolachlor	<0.013	0.479	.40	120	
82630	Metribuzin	<0.006	0.393	.40	98	
82671	Molinate	<0.002	0.366	.40	92	
82684	Napropamide	<0.007	0.321	.40	80	
34653	P, P' DDE	<0.003	0.245	.40	61	
39542	Parathion	<0.010	0.367	.40	92	
82669	Pebulate	<0.004	0.366	.40	92	
82683	Pendimethalin	<0.022	0.304	.40	76	
82687	Permethrin, cis	<0.006	0.220	.40	55	
82664	Phorate	<0.011	0.305	.40	76	
04037	Prometon	<0.01	0.429	.40	107	
82676	Pronamide	<0.004	0.402	.40	100	
04024	Propachlor	<0.010	0.405	.40	101	
82679	Propanil	<0.011	0.383	.40	96	
82685	Propargite	<0.02	0.237	.40	59	
04035	Simazine	<0.005	0.412	.40	103	
82670	Tebuthiuron	<0.02	0.399	.40	100	
82665	Terbacil	<0.034	EO.316	.40	79	
82675	Terbufos	<0.02	0.321	.40	80	
82681	Thiobencarb	<0.005	0.414	.40	104	
82678	Triallate	<0.002	0.400	.40	100	
82661	Trifluralin	<0.009	0.331	.40	83	
					Mean recovery	90
					Standard deviation	21
					Median recovery	92

a Calculated concentration of spike in sample equals the concentration of the spike solution, in micrograms per milliliter x amount of spike added, in milliliters, divided by the spiked sample volume, in liters.

**GROUND-WATER DATA COLLECTED AT SPECIAL-STUDY SITES  
GROUND WATER PESTICIDES NETWORK PROJECT**

**401435076540910 - QUALITY-ASSURANCE RESULTS**

**REMARKS.**--A commercially-available and USGS-certified mixture of pesticides and herbicides was spiked into approximately 3 liters of organic-free blank water May 6, 2003 to create three 1-L triplicate quality-assurance samples which were submitted to the U.S. Geological Survey National Water Quality Laboratory. These samples are used to determine both precision and accuracy. Concentrations of pesticides and herbicides (in µg/L) and calculated recoveries (in percent) are shown in the table below for estimation of accuracy. Less-than values were set equal to zero for calculations; E = estimated value; "<" = less than.

QUALITY-CONTROL DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003--Continued

Parameter code	Constituent	Concentration, in micrograms per liter				
		Laboratory results		a Calculated concentration in spiked blank C	Recovery in percent [(B-A)/C] x 100	
		Blank (05/06/03 @ 1300)	Spiked Blank (05/06/03 @ 1242)			
		A	B	C		
49260	Acetochlor	<0.006	0.498	.40	124	
46342	Alachlor	<0.004	0.475	.40	119	
34253	Alpha BHC	<0.005	0.404	.40	101	
39632	Atrazine	<0.007	0.440	.40	110	
82673	Benfluralin	<0.010	0.334	.40	84	
04028	Butylate	<0.002	0.413	.40	103	
82680	Carbaryl	<0.041	EO.321	.40	80	
82674	Carbofuran	<0.020	EO.384	.40	96	
38933	Chlorpyrifos	<0.005	0.400	.40	100	
04041	Cyanazine	<0.018	0.464	.40	116	
82682	DCPA (Dacthal)	<0.003	0.429	.40	107	
04040	CIAT (Desethyl Atrazine)	<0.006	EO.208	.40	52	
39572	Diazinon	<0.005	0.446	.40	112	
39381	Dieldrin	<0.005	0.350	.39	90	
82660	2,6-Diethyl Aniline	<0.006	0.334	.40	84	
82677	Disulfoton	<0.02	0.165	.40	41	
82668	EPTC	<0.002	0.330	.40	82	
82663	Ethalfuralin	<0.009	0.346	.40	86	
82672	Ethoprop	<0.005	0.326	.40	82	
04095	Fonofos	<0.003	0.452	.40	113	
39341	Lindane	<0.004	0.420	.40	105	
82666	Linuron	<0.035	0.494	.40	124	
39532	Malathion	<0.027	0.368	.39	94	
82686	Methyl Azinphos	<0.050	EO.132	.40	33	
82667	Methyl Parathion	<0.006	0.355	.40	89	
39415	Metolachlor	<0.013	0.502	.40	126	
82630	Metribuzin	<0.006	0.398	.40	100	
82671	Molinate	<0.002	0.360	.40	90	
82684	Napropamide	<0.007	0.308	.40	77	
34653	P, P' DDE	<0.003	0.220	.40	55	
39542	Parathion	<0.010	0.391	.40	98	
82669	Pebulate	<0.004	0.360	.40	90	
82683	Pendimethalin	<0.022	0.314	.40	79	
82687	Permethrin, cis	<0.006	0.204	.40	51	
82664	Phorate	<0.011	0.299	.40	75	
04037	Prometon	<0.01	0.436	.40	109	
82676	Pronamide	<0.004	0.410	.40	102	
04024	Propachlor	<0.010	0.405	.40	101	
82679	Propanil	<0.011	0.409	.40	102	
82685	Propargite	<0.02	0.224	.40	56	
04035	Simazine	<0.005	0.430	.40	108	
82670	Tebuthiuron	<0.02	0.386	.40	96	
82665	Terbacil	<0.034	EO.332	.40	83	
82675	Terbufos	<0.02	0.322	.40	80	
82681	Thiobencarb	<0.005	0.420	.40	105	
82678	Triallate	<0.002	0.403	.40	101	
82661	Trifluralin	<0.009	0.339	.40	85	
					Mean recovery	91
					Standard deviation	21
					Median recovery	96

a Calculated concentration of spike in sample equals the concentration of the spike solution, in micrograms per milliliter x amount of spike added, in milliliters, divided by the spiked sample volume, in liters.



**GROUND-WATER DATA COLLECTED AT SPECIAL-STUDY SITES  
GROUND WATER PESTICIDES NETWORK PROJECT**

**401435076540910 - QUALITY-ASSURANCE RESULTS**

**REMARKS.**--A commercially-available mixture of pesticides was spiked into approximately 3 liters of organic-free blank water May 6, 2003 to create three 1-L triplicate quality assurance samples which were submitted to the U.S. Geological Survey National Water Quality Laboratory. These samples are used to determine both precision and accuracy. Concentrations of pesticides and herbicides (in µg/L) and calculated recoveries (in percent) are shown in the table below for estimation of accuracy. Less-than values were set equal to zero for calculations; E = estimated value; "<" = less than.

QUALITY-CONTROL DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003--Continued

Parameter code	Constituent	Concentration, in micrograms per liter				
		Laboratory results		a Calculated concentration in spiked blank C	Recovery in percent [(B-A)/C] x 100	
		Blank (05/06/03 @ 1305)	Spiked Blank (05/06/03 @ 1243)			
		A	B			
49312	Aldicarb	<0.04	E1.47	3.2	46	
49313	Aldicarb sulfone	<0.02	E1.51	3.2	47	
49314	Aldicarb sulfoxide	<0.008	E1.19	3.2	37	
49310	Carbaryl	<0.03	2.25	3.2	70	
49309	Carbofuran	<0.006	2.47	3.2	77	
49308	3-Hydroxy carbofuran	<0.006	2.05	3.2	64	
38501	Methiocarb	<0.008	E2.31	3.2	72	
49296	Methomyl	<0.004	E1.97	3.2	62	
38866	Oxamyl	<0.01	1.46	3.2	46	
38538	Propoxur	<0.008	2.17	3.2	68	
					Mean recovery	59
					Standard deviation	14
					Median recovery	63

a Calculated concentration of spike in sample equals the concentration of the spike solution, in micrograms per milliliter x amount of spike added, in milliliters, divided by the spiked sample volume, in liters.

**401435076540910 - QUALITY-ASSURANCE RESULTS**

**REMARKS.**--A commercially-available mixture of pesticides was spiked into approximately 3 liters of organic-free blank water May 6, 2003 to create three 1-L triplicate quality assurance samples which were submitted to the U.S. Geological Survey National Water Quality Laboratory. These samples are used to determine both precision and accuracy. Concentrations of pesticides and herbicides (in µg/L) and calculated recoveries (in percent) are shown in the table below for estimation of accuracy. Less-than values were set equal to zero for calculations; E = estimated value; "<" = less than.

QUALITY-CONTROL DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003--Continued

Parameter code	Constituent	Concentration, in micrograms per liter				
		Laboratory results		a Calculated concentration in spiked blank C	Recovery in percent [(B-A)/C] x 100	
		Blank (05/06/03 @ 1305)	Spiked Blank (05/06/03 @ 1244)			
		A	B			
49312	Aldicarb	<0.04	E0.36	3.2	11	
49313	Aldicarb sulfone	<0.02	E2.07	3.2	65	
49314	Aldicarb sulfoxide	<0.008	E0.812	3.2	25	
49310	Carbaryl	<0.03	2.36	3.2	74	
49309	Carbofuran	<0.006	2.65	3.2	83	
49308	3-Hydroxy carbofuran	<0.006	2.49	3.2	78	
38501	Methiocarb	<0.008	E0.516	3.2	16	
49296	Methomyl	<0.004	E0.930	3.2	29	
38866	Oxamyl	<0.01	1.57	3.2	49	
38538	Propoxur	<0.008	2.53	3.2	79	
					Mean recovery	51
					Standard deviation	28
					Median recovery	57

a Calculated concentration of spike in sample equals the concentration of the spike solution, in micrograms per milliliter x amount of spike added, in milliliters, divided by the spiked sample volume, in liters.

**GROUND-WATER DATA COLLECTED AT SPECIAL-STUDY SITES  
GROUND WATER PESTICIDES NETWORK PROJECT**

**401435076540910 - QUALITY-ASSURANCE RESULTS**

**REMARKS.**--A commercially-available mixture of pesticides was spiked into approximately 3 liters of organic-free blank water May 6, 2003 to create three 1-L triplicate quality assurance samples which were submitted to the U.S. Geological Survey National Water Quality Laboratory. These samples are used to determine both precision and accuracy. Concentrations of pesticides and herbicides (in µg/L) and calculated recoveries (in percent) are shown in the table below for estimation of accuracy. Less-than values were set equal to zero for calculations; E = estimated value; "<" = less than.

QUALITY-CONTROL DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003--Continued

Parameter code	Constituent	Concentration, in micrograms per liter				
		Laboratory results			Recovery in percent [(B-A)/C] x 100	
		Blank (05/06/03 @ 1305)	Spiked Blank (05/06/03 @ 1245)	<sup>a</sup> Calculated concentration in spiked blank		
		A	B	C		
49312	Aldicarb	<0.04	E0.35	3.2	11	
49313	Aldicarb sulfone	<0.02	E2.02	3.2	63	
49314	Aldicarb sulfoxide	<0.008	E0.743	3.2	23	
49310	Carbaryl	<0.03	2.87	3.2	90	
49309	Carbofuran	<0.006	2.95	3.2	92	
49308	3-Hydroxy carbofuran	<0.006	2.77	3.2	87	
38501	Methiocarb	<0.008	E0.520	3.2	16	
49296	Methomyl	<0.004	E0.807	3.2	25	
38866	Oxamyl	<0.01	1.89	3.2	59	
38538	Propoxur	<0.008	2.74	3.2	86	
					Mean recovery	55
					Standard deviation	33
					Median recovery	61

<sup>a</sup> Calculated concentration of spike in sample equals the concentration of the spike solution, in micrograms per milliliter x amount of spike added, in milliliters, divided by the spiked sample volume, in liters.

**401435076540910 - QUALITY-ASSURANCE RESULTS**

**REMARKS.**--A commercially-available and USGS-certified mixture of pesticides and herbicides was spiked into two 3-liter bottles of organic-free blank water August 27, 2003 to create three 1-L triplicate quality-assurance samples (2 1-liter bottles per sample). A commercially-available mixture of carbamate pesticides was spiked into approximately 3 liters of organic-free blank water at an elevated concentration due to the higher respective reporting limits for these three pesticides. Triplicate samples for carbamate pesticide analysis were submitted in 40-mL vials. All samples were analyzed at the Pennsylvania Department of Environmental Protection Bureau of Laboratories. Triplicate spiked samples are used to determine both precision and accuracy. Concentrations of analytes in blank water were assumed to be less than the reporting limits for purposes of calculations. Concentrations of pesticides and herbicides (in µg/L) and calculated recoveries (in percent) are shown in the table below for estimation of accuracy. Less-than values were set equal to zero for calculations; E = estimated value; "<" = less than.

QUALITY-CONTROL DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003--Continued

Parameter code	Constituent	Concentration, in micrograms per liter				
		Laboratory results			Recovery in percent [(B-A)/C] x 100	
		Assumed Concentration of Blank	Spiked Blank (08/27/03 @ 1100)	<sup>a</sup> Calculated concentration in spiked blank		
		A	B	C		
49260	Acetochlor	<0.10	0.13	.40	32	
46342	Alachlor	<0.10	0.38	.40	95	
39632	Atrazine	<0.10	0.35	.40	88	
38933	Chlorpyrifos (Dursban)	<0.10	0.34	.41	83	
82686	Methyl Azinphos	<0.10	0.49	.40	122	
82667	Methyl Parathion	<0.10	0.43	.41	105	
39415	Metolachlor	<0.10	0.34	.40	85	
82630	Metribuzin	<0.10	0.17	.40	42	
82683	Pendimethalin	<0.10	0.38	.40	95	
04035	Simazine	<0.10	0.41	.40	102	
82665	Terbacil	<0.10	0.34	.40	85	
Carbamates:						
49310	Carbaryl	<1.6	3.47	3.2	108	
49296	Methomyl	<1.6	3.30	3.2	103	
38866	Oxamyl	<1.6	3.35	3.2	105	
					Mean recovery	89
					Standard deviation	25
					Median recovery	94

<sup>a</sup> Calculated concentration of spike in sample equals the concentration of the spike solution, in micrograms per milliliter x amount of spike added, in milliliters, divided by the spiked sample volume, in liters

**GROUND-WATER DATA COLLECTED AT SPECIAL-STUDY SITES  
GROUND WATER PESTICIDES NETWORK PROJECT**

**401435076540910 - QUALITY-ASSURANCE RESULTS**

**REMARKS.**--A commercially-available and USGS-certified mixture of pesticides and herbicides was spiked into two 3-liter bottles of organic-free blank water August 27, 2003 to create three 1-L triplicate quality-assurance samples (2 1-liter bottles per sample). A commercially-available mixture of carbamates pesticides was spiked into approximately 3 liters of organic-free blank water at an elevated concentration due to the higher respective reporting limits for these three pesticides. Triplicate samples for carbamate pesticide analysis were submitted in 40-mL vials. All samples were analyzed at the Pennsylvania Department of Environmental Protection Bureau of Laboratories. Triplicate spiked samples are used to determine both precision and accuracy. Concentrations of analytes in blank water were assumed to be less than the reporting limits for purposes of calculations. Concentrations of pesticides and herbicides (in µg/L) and calculated recoveries (in percent) are shown in the table below for estimation of accuracy. Less-than values were set equal to zero for calculations; E = estimated value; "<" = less than.

QUALITY-CONTROL DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003--Continued

		Concentration, in micrograms per liter			
		Laboratory results			
Parameter code	Constituent	Assumed Concentration of Blank	Spiked Blank (08/27/03 @ 1105)	<sup>a</sup> Calculated concentration in spiked blank	Recovery in percent
		A	B	C	[(B-A)/C] x 100
49260	Acetochlor	<0.10	0.12	.40	30
46342	Alachlor	<0.10	0.38	.40	95
39632	Atrazine	<0.10	0.34	.40	85
38933	Chlorpyrifos (Dursban)	<0.10	0.34	.41	83
82686	Methyl Azinphos	<0.10	0.50	.40	125
82667	Methyl Parathion	<0.10	0.41	.41	100
39415	Metolachlor	<0.10	0.36	.40	90
82630	Metribuzin	<0.10	0.19	.40	48
82683	Pendimethalin	<0.10	0.37	.40	92
04035	Simazine	<0.10	0.40	.40	100
82665	Terbacil	<0.10	0.37	.40	92
Carbamates:					
49310	Carbaryl	<1.6	3.86	3.2	121
49296	Methomyl	<1.6	3.47	3.2	108
38866	Oxamyl	<1.6	3.32	3.2	104
Mean recovery					91
Standard deviation					25
Median recovery					93

<sup>a</sup> Calculated concentration of spike in sample equals the concentration of the spike solution, in micrograms per milliliter x amount of spike added, in milliliters, divided by the spiked sample volume, in liters.

**GROUND-WATER DATA COLLECTED AT SPECIAL-STUDY SITES  
GROUND WATER PESTICIDES NETWORK PROJECT**

**401435076540910 - QUALITY-ASSURANCE RESULTS**

**REMARKS.**--A commercially-available and USGS-certified mixture of pesticides and herbicides was spiked into two 3-liter bottles of organic-free blank water August 27, 2003 to create three 1-L triplicate quality assurance samples (2 1-liter bottles per sample). A commercially-available mixture of carbamates pesticides was spiked into approximately 3 liters of organic-free blank water at an elevated concentration due to the higher respective reporting limits for these three pesticides. Triplicate samples for carbamate pesticide analysis were submitted in 40-mL vials. All samples were analyzed at the Pennsylvania Department of Environmental Protection Bureau of Laboratories. Triplicate spiked samples are used to determine both precision and accuracy. Concentrations of analytes in blank water were assumed to be less than the reporting limits for purposes of calculations. Concentrations of pesticides and herbicides (in µg/L) and calculated recoveries (in percent) are shown in the table below. Less-than values were set equal to zero for calculations; E = estimated value; "<" = less than.

QUALITY-CONTROL DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003--Continued

		Concentration, in micrograms per liter				
		Laboratory results				
Parameter code	Constituent	Assumed Concentration of Blank	Spiked Blank (08/27/03 @ 1110)	<sup>a</sup> Calculated concentration in spiked blank	Recovery in percent	
		A	B	C	[(B-A)/C] x 100	
49260	Acetochlor	<0.10	0.23	.40	58	
46342	Alachlor	<0.10	0.44	.40	110	
39632	Atrazine	<0.10	0.45	.40	112	
38933	Chlorpyrifos (Dursban)	<0.10	0.42	.41	102	
82686	Methyl Azinphos	<0.10	0.49	.40	122	
82667	Methyl Parathion	<0.10	0.46	.41	112	
39415	Metolachlor	<0.10	0.39	.40	98	
82630	Metribuzin	<0.10	0.21	.40	52	
82683	Pendimethalin	<0.10	0.45	.40	112	
04035	Simazine	<0.10	0.54	.40	135	
82665	Terbacil	<0.10	0.40	.40	100	
Carbamates:						
49310	Carbaryl	<1.6	2.84	3.2	90	
49296	Methomyl	<1.6	3.41	3.2	107	
38866	Oxamyl	<1.6	3.06	3.2	96	
Mean recovery					100	
Standard deviation					22	
Median recovery					104	

<sup>a</sup> Calculated concentration of spike in sample equals the concentration of the spike solution, in micrograms per milliliter x amount of spike added, in milliliters, divided by the spiked sample volume, in liters.

**GROUND-WATER DATA COLLECTED AT SPECIAL-STUDY SITES  
GROUND WATER PESTICIDES NETWORK PROJECT**

**401435076540910 - QUALITY-ASSURANCE RESULTS**

REMARKS.--A commercially-available anion solution (including nitrate-N and nitrite-N) of known concentration was spiked into 1-L of inorganic blank water on May 13, 2003 at 1130, 1131, and 1132, and three triplicate spiked samples were submitted for analysis for estimates of precision and accuracy. Concentrations of analytes in blank water were assumed to be less than the reporting limits for purposes of calculations. Concentrations of nitrate-N and nitrite-N (in mg/L) and calculated recoveries (in percent) are shown in the table below for estimations of accuracy. Less-than values were set equal to zero for calculations; "<" = less than. All samples were analyzed at the U.S. Geological Survey National Water Quality Laboratory.

QUALITY-CONTROL DATA, WATER YEAR OCTOBER 2002 to September 2003 --Continued

Concentration, in milligrams per liter									
Laboratory results									
Sample Time	Assumed Concentration of Blank		Spiked Blank			<sup>a</sup> Calculated concentration in spiked blank		Recovery in percent	
	Nitrate + Nitrite-N	Nitrite	Nitrate + Nitrite-N	Nitrate-N	Nitrite-N	Nitrate-N	Nitrite-N	Nitrate-N	Nitrite-N
	A	A	B	B	C	C	[(B-A)/C] x 100		
1130	<0.06	<0.008	6.51	5.56	.953	5.61	.95	99	100
1131	<0.06	<0.008	6.74	5.77	.973	5.61	.95	103	102
1132	<0.06	<0.008	6.46	5.51	.946	5.61	.95	98	100

<sup>a</sup> Calculated concentration of spike in sample equals the concentration of the spike solution, in micrograms per milliliter x amount of spike added, in milliliters, divided by the spiked sample volume, in liters

Using the results from these spiked triplicate samples, the Relative Standard Deviation (RSD), otherwise known as the coefficient of variation, was calculated as a measure of precision using the following formula:

RSD = standard deviation of triplicate results divided by the mean concentration of the triplicate results

RSD Nitrate-N = .024 mg/L  
RSD Nitrite-N = .015 mg/L

**GROUND-WATER DATA COLLECTED AT SPECIAL-STUDY SITES  
GROUND WATER PESTICIDES NETWORK PROJECT**

**401435076540910 - QUALITY-ASSURANCE RESULTS**

**REMARKS.**--A U.S. Geological Survey Standard Reference Water Sample (SRWS) N78 was submitted to the Pennsylvania Department of Environmental Protection Bureau of Laboratories on August 27, 2003 for estimation of accuracy. Blank water concentration is assumed to be less than the reporting limits for purpose of calculation. The concentrations of nitrate-N (in mg/L) and the calculated recovery (in percent) are shown in the table below for estimation of accuracy. Less-than values were set equal to zero for calculation; "<" = less than; "mg/L" = milligrams per liter.

QUALITY-CONTROL DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003--Continued

Concentration, in milligrams per liter				
Laboratory results				
Constituent	Assumed Concentration of Blank Nitrate A	Reported Value of Nitrate in SRWS B	Prepared Sample Value of Nitrate in SRWS C	Recovery in percent [(B-A)/C] x 100
Nitrate-N	<0.04	.70	.66	106