Site Descriptions for Ambient Ground-Water-Quality Network
Multiple Sites

REMARKS.--During 2004, 30 wells were sampled as part of an ongoing study of the ambient ground-water quality in West Virginia. Samples included field determinations, major ions, nutrients, bacteria, metals, volatile organic compounds, and radon. One or more volatile organic compounds were detected at 9 of 30 sites. At selected sites (indicated by an asterisk [*]), pesticides were measured,and one or more pesticides were detected at three of these 10 sites. Values in the table that report detections of VOC or pesticides are **shown in bold.**

Station Number	Site Name	Latitude	Longitude	County
384817081453001*	Jac-0167	Lat 38°48'17",	long 81°45'30",	Jackson County.
392407081271002*	Woo-0159	Lat 39°24'00",	long 81°27'00",	Wood County.
393911080513702	Wet-0132	Lat 39°39'11",	long 80°51'37",	Wetzel County.
392831080513101	Tyl-0092	Lat 39°28'31",	long 80°51'31",	Tyler County.
391936080473501	Dod-0066	Lat 39°19'36",	long 80°47'35",	Doddridge County.
392831080595001	Tyl-0093	Lat 39°28'31",	long 80°59'50",	Tyler County.
380410082304001	Way-0146	Lat 38°04'10",	long 82°30'40",	Wayne County.
372649081524101	Mcd-0202	Lat 37°26'49",	long 81°52'41",	McDowell County.
373853082075401	Mig-0142	Lat 37°38'53",	long 82°07'54",	Mingo County.
392148077444201	Jef-0640	Lat 39°21'48",	long 77°44'42",	Jefferson County.
392107078060301*	Ber-0838	Lat 39°21'07",	long 78°06'03",	Berkeley County.
393436077544301*	Ber-0839	Lat 39°34'36",	long 77°54'43",	Berkeley County.
393437078160901	Mrg-0085	Lat 39°34'37",	long 78°16'09",	Morgan County.
392858078131601	Mrg-0086	Lat 39°28'58",	long 78°13'16",	Morgan County.
391758078003901*	Jef-0641	Lat 39°17'58",	long 78°00'39",	Jefferson County.
381515081560201	Lin-0182	Lat 38°15'15",	long 81°56'02",	Lincoln County.
381846081531901	Lin-0183	Lat 38°18'46",	long 81°53'19",	Lincoln County.
381504081541301	Lin-0184	Lat 38°15'04",	long 81°54'13",	Lincoln County.
381417082145801	Lin-0185	Lat 38°14'17",	long 82°14'58",	Lincoln County.
382008080292801	Web-0167	Lat 38°20'08",	long 80°29'28",	Webster County.
381708080570201*	Nic-0221	Lat 38°17'08",	long 80°57'02",	Nicholas County.
375357080380301*	Grb-0228	Lat 37°53'57",	long 80°38'03",	Greenbrier County.
384726081392001*	Jac-0168	Lat 38°47'26",	long 81°39'20",	Jackson County.
385305081554501*	Mas-0966	Lat 38°53'05",	long 81°55'45",	Mason County.
385743082053401	Mas-0967	Lat 38°57'43",	long 82°05'34",	Mason County.
371958081285301*	Mcd-0048	Lat 37°19'58",	long 81°28'53",	McDowell County.
375719080430601	Grb-0290	Lat 37°57'19",	long 80°43'06",	Greenbrier County.
375958080450601	Grb-0172	Lat 37°59'58",	long 80°45'06",	Greenbrier County.
392909081054801	Tyl-0094	Lat 39°29'09",	long 81°05'48",	Tyler County.
384922081334101	Jac-0169	Lat 38°49'22",	long 81°33'41",	Jackson County.

Station number	Date	Time	County	Geo-logic unit	Depth of well, feet below LSD (72008)	Alti-tude of land surface feet (72000)	Tur-bidity, NTU (00076)	Baro-metric pres-sure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)
384817081453001	05-03-04	1400	JACKSON	317DKRD	150	580	<1.0	752	1.5	E.2	--
392407081271002	05-04-04	1000	WOOD	111ALVM	85	630	<1.0	753	36	E.6	--
393911080513702	05-04-04	1430	WETZEL	111ALVM	58	630	<1.0	750	99	1.9	19
392831080513101	05-05-04	1045	TYLER	317DKRD	109.5	720	<1.0	746	11	E.4	--
391936080473501	05-05-04	1430	DODDRIDGE	317DKRD	70	780	<1.0	743	3.1	E.2	--
392831080595001	05-06-04	1215	TYLER	317DKRD	30	670	<1.0	748	169	3.0	30
380410082304001	05-11-04	1215	WAYNE	327PSVL	102	640	<1.0	754	5.7	E.1	--
372649081524101	05-12-04	1430	MCDOWELL	327PSVL	100	1070	<1.0	742	20	E.2	--
373853082075401	05-13-04	1030	MINGO	327PSVL	200	1390	<1.0	750	41	1.6	16
392148077444201	05-17-04	1515	JEFFERSON	377TMSN	100	300	<1.0	764	95	5.8	56
392107078060301	05-18-04	1000	BERKELEY	374ELBK	186	727	<1.0	752	119	7.7	74
393436077544301	05-18-04	1415	BERKELEY	367BKMN	115	480	<1.0	756	42	7.9	76
393437078160901	05-19-04	1015	MORGAN	351TNLY	219	830	<1.0	746	17	13.0	128
392858078131601	05-19-04	1500	MORGAN	341DVNUM	186	1010	2.4	742	114	E.8	--
391758078003901	05-20-04	1145	JEFFERSON	361MRBG	185	549	48	759	44	1.6	16
381515081560201	06-01-04	1600	LINCOLN	321CNMG	80	780	1.5	740	.6	E.2	--
381846081531901	06-02-04	1115	LINCOLN	321CNMG	140	940	21	740	55	4.0	45
381504081541301	06-02-04	1530	LINCOLN	321CNMG	50	780	<1.0	743	77	E.8	--
381417082145801	06-03-04	1145	LINCOLN	321CNMG	44	730	2.0	751	77	E.7	--
382008080292801	06-07-04	1500	WEBSTER	327KNWH	80	3100	650	690	17	1.1	11
381708080570201	06-08-04	1000	NICHOLAS	327PSVL	223	1326	2.5	734	61	E.9	--
375357080380301	06-08-04	1530	GREENBRIER	331MCCK	170	2460	3.0	706	6.2	1.8	18
384726081392001	06-14-04	1230	JACKSON	317DKRD	220	660	4.0	749	1.6	1.7	18
385305081554501	06-15-04	1130	MASON	111ALVM	56	583	3.0	750	51	1.6	17
385743082053401	06-15-04	1445	MASON	111ALVM	72	620	3.0	750	75	3.7	36
371958081285301	06-17-04	1300	MCDOWELL	331MCCK	70	1500	1.9	729	9.3	E.2	--
375719080430601	06-22-04	1115	GREENBRIER	327PSVL	220	3446	2.3	676	105	1.9	20
375958080450601	06-22-04	1445	GREENBRIER	331BLPR	74	2380	1.4	703	54	1.2	12
392909081054801	06-23-04	1145	TYLER	111ALVM	47	615	<1.0	748	39	E.9	--
384922081334101	06-23-04	1615	JACKSON	317DKRD	440	656	<1.0	748	6.0	<.4	--

Station number	Date	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Noncarb hard-ness, wat unf lab, mg/L as CaCO3 (00903)	Calcium water unfltrd recover-able, mg/L (00916)	Magnes-ium, water, unfltrd recover-able, mg/L (00927)	Potas-sium, water, unfltrd recover-able, mg/L (00937)	Sodium, water, unfltrd recover-able, mg/L (00929)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Acidity water, unfltrd heated, mg/L as H+ (71825)	Acidity water, unfltrd mg/L as CaCO3 (00435)
384817081453001	05-03-04	8.7	1190	13.7	--	1.9	.28	.6	280	403	<.1	--
392407081271002	05-04-04	7.0	673	14.7	109	103	9.5	1.4	20	187	.4	20
393911080513702	05-04-04	6.4	482	14.4	56	60	8.5	1.4	20	129	.6	30
392831080513101	05-05-04	7.6	784	14.9	--	28	5.4	1.8	130	220	.1	5.0
391936080473501	05-05-04	7.9	247	14.0	--	17	3.1	1.0	33	128	<.1	--
392831080595001	05-06-04	5.1	70	14.3	6	4.3	1.6	.8	4.9	11	.4	20
380410082304001	05-11-04	7.7	438	14.6	--	13	2.4	2.6	77	149	.1	5.0
372649081524101	05-12-04	7.1	315	14.0	--	10	2.6	1.7	52	130	.2	9.9
373853082075401	05-13-04	6.9	731	14.9	--	41	12	2.6	84	167	.4	20
392148077444201	05-17-04	6.8	726	13.7	65	85	39	2.3	7.2	308	.4	20
392107078060301	05-18-04	6.7	729	12.6	52	85	36	1.8	4.2	309	.5	25
393436077544301	05-18-04	6.8	637	13.2	184	101	17	1.5	2.7	138	.3	15
393437078160901	05-19-04	7.3	502	13.8	47	51	23	.8	5.7	175	.1	5.0
392858078131601	05-19-04	6.3	252	13.8	--	12	15	.7	12	117	.6	30
391758078003901	05-20-04	6.9	650	14.1	124	97	15	1.7	23	180	.4	20
381515081560201	06-01-04	9.0	666	15.0	--	1.5	.25	1.0	160	315	<.1	--
381846081531901	06-02-04	6.8	460	19.1	14	61	10	2.3	8.5	180	.4	20
381504081541301	06-02-04	6.4	237	11.8	--	33	3.4	1.4	8.7	100	.1	5.0
381417082145801	06-03-04	6.5	373	12.7	8	42	6.7	1.6	19	125	.3	15
382008080292801	06-07-04	5.9	48	11.3	12	3.7	2.4	1.2	.2	7	.3	15
381708080570201	06-08-04	6.5	286	14.2	--	18	4.4	4.1	28	100	.2	9.9
375357080380301	06-08-04	7.6	283	12.2	2	34	11	.6	8.4	128	<.1	--
384726081392001	06-14-04	8.7	897	16.8	--	.86	.14	.5	220	413	<.1	--
385305081554501	06-15-04	6.8	381	16.3	89	85	10	1.1	8.2	165	.3	15
385743082053401	06-15-04	6.5	555	13.8	59	60	7.9	1.0	3.9	123	.4	20
371958081285301	06-17-04	7.5	352	15.0	--	34	7.5	.6	28	152	.1	5.0
375719080430601	06-22-04	5.9	96	12.5	--	11	3.6	.7	2.2	43	.2	9.9
375958080450601	06-22-04	6.0	333	13.1	15	11	3.6	1.0	21	28	.5	25
392909081054801	06-23-04	6.7	459	18.3	54	49	7.9	2.3	21	101	.2	9.9
384922081334101	06-23-04	8.3	1340	16.9	--	1.5	.32	.5	330	623	<.1	--

Station number	Date	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicar-bonate, wat flt incrm. titr., field, mg/L (00453)	Carbon-ate, wat flt incrm. titr., field, mg/L (00452)	Bromide water, fltrd, mg/L (71870)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, unfltrd mg/L (00951)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 105degC wat unf mg/L (00500)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water unfltrd mg/L (71845)	Ammonia water, unfltrd mg/L as N (00610)
384817081453001	05-03-04	381	450	13	.74	140	3.1	16	705	709	.17	.13
392407081271002	05-04-04	231	282	<1	.11	31	.2	54	415	413	--	<.01
393911080513702	05-04-04	124	151	<1	.11	24	.3	70	298	297	.03	.02
392831080513101	05-05-04	211	257	<1	1.0	109	.4	7.0	437	433	.28	.22
391936080473501	05-05-04	120	146	<1	<.05	3.8	.2	.57	145	151	.09	.07
392831080595001	05-06-04	9	11	<1	.14	3.0	<.1	8.5	55	57	--	<.01
380410082304001	05-11-04	145	177	<1	.36	48	.6	<.07	248	245	.73	.57
372649081524101	05-12-04	124	151	<1	.20	20	.3	.78	178	178	.26	.20
373853082075401	05-13-04	164	200	<1	.42	77	.2	73	417	409	.58	.45
392148077444201	05-17-04	315	384	<1	<.10	15	.1	55	422	427	--	<.01
392107078060301	05-18-04	346	416	<1	.06	14	.2	27	419	402	--	<.01
393436077544301	05-18-04	310	378	<1	.05	6.8	.1	7.1	282	358	--	<.01
393437078160901	05-19-04	176	214	<1	<.05	17	<.1	27	285	275	.03	.02
392858078131601	05-19-04	98	119	<1	.12	6.6	.2	1.4	139	133	--	<.01
391758078003901	05-20-04	290	354	<1	.05	30	.2	24	551	375	--	<.01
381515081560201	06-01-04	300	--	--	.22	26	1.3	1.4	390	384	.21	.16
381846081531901	06-02-04	171	208	<1	.05	5.8	<.1	30	276	252	.03	.02
381504081541301	06-02-04	81	99	<1	<.05	2.5	.1	15	131	132	.13	.10
381417082145801	06-03-04	110	134	<1	<.05	2.4	.2	54	231	223	.17	.13
382008080292801	06-07-04	19	23	<1	<.05	.4	<.1	2.8	945	19	.18	.14
381708080570201	06-08-04	108	132	<1	.14	23	.2	.88	148	146	.67	.52
375357080380301	06-08-04	120	146	<1	<.05	4.6	.1	15	159	159	--	<.01
384726081392001	06-14-04	335	--	--	.12	20	3.9	37	530	542	.13	.10
385305081554501	06-15-04	153	187	<1	.05	5.6	.2	21	229	222	--	<.01
385743082053401	06-15-04	162	198	<1	.26	14	.2	61	357	365	--	<.01
371958081285301	06-17-04	142	173	<1	<.05	10	.2	17	199	193	.26	.20
375719080430601	06-22-04	41	50	<1	<.05	.3	.1	6.5	65	60	--	<.01
375958080450601	06-22-04	96	117	<1	.11	45	<.1	5.7	178	125	.31	.24
392909081054801	06-23-04	100	122	<1	.12	35	.2	61	276	259	.03	.02
384922081334101	06-23-04	630	690	22	.45	82	4.7	.32	826	824	.13	.10

Station number	Date	Nitrate water unfltrd mg/L as N (00620)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Nitrite water, unfltrd mg/L as N (00615)	Phos-phorus, water, unfltrd mg/L (00665)	Organic carbon, water, unfltrd mg/L (00680)	E coli, NA-MUG MF, water, col/ 100 mL (50278)	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)	Total coli-form, M-Endo, immed, col/ 100 mL (31501)	Alum-inum, water, unfltrd recover -able, ug/L (01105)	Anti-mony, water, unfltrd ug/L (01097)	Arsenic water unfltrd ug/L (01002)
384817081453001	05-03-04	--	<.02	<.01	.02	.5	<1	<1	<1	11	<1	7
392407081271002	05-04-04	--	3.6	<.01	<.02	.3	<1	<1	<1	<3	<1	<4
393911080513702	05-04-04	--	2.4	<.01	.04	.3	<1	<1	<1	<3	<1	<4
392831080513101	05-05-04	.04	.05	.01	<.02	.4	<1	<1	E3	3	<1	6
391936080473501	05-05-04	--	<.02	<.01	<.02	.2	<1	<1	<1	3	<1	6
392831080595001	05-06-04	--	2.5	<.01	.04	.2	<1	<1	<1	16	<1	<4
380410082304001	05-11-04	--	<.02	<.01	.03	1.1	<1	<1	<1	<3	<1	<4
372649081524101	05-12-04	--	<.02	<.01	.13	1.1	<1	<1	<1	<3	<1	<4
373853082075401	05-13-04	--	<.02	<.01	.06	.6	<1	<1	<1	<3	<1	<4
392148077444201	05-17-04	--	.14	<.01	<.02	2.1	<1	<1	<1	<3	<1	<4
392107078060301	05-18-04	--	8.3	<.01	<.02	2.7	<1	<1	220	<3	<1	<4
393436077544301	05-18-04	--	6.4	<.01	<.02	2.6	<1	<1	42	4	<1	<4
393437078160901	05-19-04	--	<.02	<.01	<.02	<.1	--	--	--	<3	<1	<4
392858078131601	05-19-04	--	<.02	<.01	.06	<.1	<1	<1	<1	<3	<1	8
391758078003901	05-20-04	1.09	1.1	.01	.11	<.1	<1	E1	E4	2600	<1	<4
381515081560201	06-01-04	--	<.02	<.01	.06	.6	<1	<1	E5	10	<1	<4
381846081531901	06-02-04	--	1.5	<.01	.08	3.4	<1	<1	45	414	<1	<4
381504081541301	06-02-04	--	<.02	<.01	.03	.6	<1	<1	31	6	<1	<4
381417082145801	06-03-04	--	<.02	<.01	.05	.1	<1	<1	E10	<3	<1	<4
382008080292801	06-07-04	--	.03	.05	.64	.5	<1	<1	<1	25800	<1	5
381708080570201	06-08-04	--	<.02	<.01	.08	.7	<1	<1	<1	<3	<1	<4
375357080380301	06-08-04	--	.10	<.01	.03	.2	<1	<1	<1	<3	<1	5
384726081392001	06-14-04	--	<.02	<.01	.04	.8	<1	<1	<1	5	<1	<4
385305081554501	06-15-04	--	.66	<.01	<.02	.7	<1	<1	<1	<3	<1	<4
385743082053401	06-15-04	--	11	<.01	<.02	.4	<1	<1	E5	<3	<1	<4
371958081285301	06-17-04	--	<.02	<.01	.03	1.0	<1	<1	E17	4	<1	<4
375719080430601	06-22-04	--	<.02	<.01	<.02	.7	E1	<1	48	<3	<1	<4
375958080450601	06-22-04	--	<.02	.01	.30	.7	<1	<1	<1	7	<1	5
392909081054801	06-23-04	--	.69	<.01	<.02	1.0	<1	<1	E10	<3	<1	<4
384922081334101	06-23-04	--	<.02	<.01	.03	32	<1	<1	270	<3	<1	<4

Station number	Date	Barium, water, unfltrd recover -able, ug/L (01007)	Beryll-ium, water, unfltrd recover -able, ug/L (01012)	Cadmium water, unfltrd ug/L (01027)	Chrom-ium, water, unfltrd recover -able, ug/L (01034)	Cyanide water unfltrd mg/L (00720)	Iron, water, unfltrd recover -able, ug/L (01045)	Lead, water, unfltrd recover -able, ug/L (01051)	Mangan-ese, water, unfltrd recover -able, ug/L (01055)	Mercury water, unfltrd recover -able, ug/L (71900)	Nickel, water, unfltrd recover -able, ug/L (01067)	Selen-ium, water, unfltrd ug/L (01147)
384817081453001	05-03-04	150	<1	<.5	<1	<.01	9	<2	7	<.1	<1	<4
392407081271002	05-04-04	60	<1	<.5	<1	<.01	<2	<2	36	<.1	<1	<4
393911080513702	05-04-04	59	<1	<.5	<1	<.01	<2	<2	11	<.1	<1	<4
392831080513101	05-05-04	510	<1	<.5	<1	<.01	90	<2	65	<.1	<1	<4
391936080473501	05-05-04	330	<1	<.5	<1	<.01	74	<2	77	<.1	<1	<4
392831080595001	05-06-04	60	<1	<.5	<1	<.01	30	<2	18	<.1	3	<4
380410082304001	05-11-04	380	<1	<.5	<1	<.01	214	<2	17	<.1	<1	<4
372649081524101	05-12-04	360	<1	<.5	<1	<.01	1110	<2	163	<.1	<1	<4
373853082075401	05-13-04	520	<1	<.5	<1	<.01	2340	<2	328	<.1	<1	<4
392148077444201	05-17-04	54	<1	.7	<1	<.01	16	3	28	<.1	<1	<4
392107078060301	05-18-04	66	<1	<.5	<1	<.01	<2	<2	<1	<.1	<1	<4
393436077544301	05-18-04	38	<1	<.5	<1	<.01	8	<2	<1	<.1	<1	<4
393437078160901	05-19-04	76	<1	<.5	<1	<.01	152	<2	17	<.1	<1	<4
392858078131601	05-19-04	150	<1	<.5	<1	<.01	3370	<2	1190	<.1	<1	<4
391758078003901	05-20-04	75	<1	<.5	10	<.01	5420	3	146	<.1	8	<4
381515081560201	06-01-04	59	<1	<.5	<1	<.01	52	<2	4	<.1	<1	<4
381846081531901	06-02-04	220	<1	.5	8	<.01	593	4	667	<.1	7	<4
381504081541301	06-02-04	110	<1	<.5	<1	<.01	2390	<2	607	<.1	<1	<4
381417082145801	06-03-04	64	<1	<.5	<1	<.01	5230	<2	450	<.1	<1	<4
382008080292801	06-07-04	110	<1	2.2	30	<.01	29700	71	631	.8	60	<4
381708080570201	06-08-04	980	<1	<.5	<1	<.01	4050	<2	291	<.1	<1	<4
375357080380301	06-08-04	190	<1	<.5	<1	<.01	3	<2	<1	<.1	<1	<4
384726081392001	06-14-04	56	<1	<.5	<1	<.01	5	<2	3	<.1	<1	<4
385305081554501	06-15-04	55	<1	<.5	<1	<.01	8	<2	1	<.1	<1	<4
385743082053401	06-15-04	47	<1	<.5	<1	<.01	8	<2	<1	<.1	<1	<4
371958081285301	06-17-04	950	<1	<.5	<1	<.01	84	<2	29	<.1	<1	<4
375719080430601	06-22-04	88	<1	<.5	<1	<.01	208	<2	25	<.1	2	<4
375958080450601	06-22-04	330	<1	1.7	<1	<.01	39400	<2	810	<.1	3	<4
392909081054801	06-23-04	40	<1	<.5	<1	<.01	55	<2	281	<.1	<1	<4
384922081334101	06-23-04	87	<1	<.5	<1	<.01	9	<2	3	<.1	<1	<4

Station number	Date	Thallium, water, unfltrd ug/L (01059)	Zinc, water, unfltrd recoverable, ug/L (01092)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)
384817081453001	05-03-04	<2	3	<.006	<.006	<.006	<.005	<.005	<.007	<.050	<.010	<.004
392407081271002	05-04-04	<2	5	<.006	<.006	<.006	<.005	<.005	<.007	<.050	<.010	<.004
393911080513702	05-04-04	<2	8	--	--	--	--	--	--	--	--	--
392831080513101	05-05-04	<2	8	--	--	--	--	--	--	--	--	--
391936080473501	05-05-04	<2	7	--	--	--	--	--	--	--	--	--
392831080595001	05-06-04	<2	12	--	--	--	--	--	--	--	--	--
380410082304001	05-11-04	<2	9	--	--	--	--	--	--	--	--	--
372649081524101	05-12-04	<2	10	--	--	--	--	--	--	--	--	--
373853082075401	05-13-04	<2	3	--	--	--	--	--	--	--	--	--
392148077444201	05-17-04	<2	200	--	--	--	--	--	--	--	--	--
392107078060301	05-18-04	<2	4	<.006	**E.006**	<.006	<.005	<.005	**.007**	<.050	<.010	<.004
393436077544301	05-18-04	<2	3	<.006	**E.006**	<.006	<.005	<.005	**E.006**	<.050	<.010	<.004
393437078160901	05-19-04	<2	2	--	--	--	--	--	--	--	--	--
392858078131601	05-19-04	<2	3	--	--	--	--	--	--	--	--	--
391758078003901	05-20-04	<2	10	<.006	**E.040**	<.006	<.005	<.005	**.045**	<.050	<.010	<.004
381515081560201	06-01-04	<2	<2	--	--	--	--	--	--	--	--	--
381846081531901	06-02-04	<2	382	--	--	--	--	--	--	--	--	--
381504081541301	06-02-04	<2	5	--	--	--	--	--	--	--	--	--
381417082145801	06-03-04	<2	16	--	--	--	--	--	--	--	--	--
382008080292801	06-07-04	<2	971	--	--	--	--	--	--	--	--	--
381708080570201	06-08-04	<2	3	<.006	<.006	<.006	<.005	<.005	<.007	<.050	<.010	<.004
375357080380301	06-08-04	<2	<2	<.006	<.006	<.006	<.005	<.005	<.007	<.050	<.010	<.004
384726081392001	06-14-04	<2	130	<.006	<.006	<.006	<.005	<.005	<.007	<.050	<.010	<.004
385305081554501	06-15-04	<2	4	<.006	<.006	<.006	<.005	<.005	<.007	<.050	<.010	<.004
385743082053401	06-15-04	<2	6	--	--	--	--	--	--	--	--	--
371958081285301	06-17-04	<2	3	<.006	<.006	<.006	<.005	<.005	<.007	<.050	<.010	<.004
375719080430601	06-22-04	<2	24	--	--	--	--	--	--	--	--	--
375958080450601	06-22-04	<2	47	--	--	--	--	--	--	--	--	--
392909081054801	06-23-04	<2	2	--	--	--	--	--	--	--	--	--
384922081334101	06-23-04	<2	34	--	--	--	--	--	--	--	--	--

Station number	Date	1,1,1-Tri-chloro-ethane, water, unfltrd ug/L (34506)	1,1-Di-chloro-ethane, water unfltrd ug/L (34496)	1,4-Di-chloro-benzene water unfltrd ug/L (34571)	Di-ethyl ether, water, unfltrd ug/L (81576)	Diiso-propyl ether, water, unfltrd ug/L (81577)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	Toluene water unfltrd ug/L (34010)	Tri-chloro-methane water unfltrd ug/L (32106)	Rn-222, water, unfltrd pCi/L (82303)
384817081453001	05-03-04	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.1	1040
392407081271002	05-04-04	<.1	<.1	<.1	<.2	<.2	<.2	<.1	**1.7**	290
393911080513702	05-04-04	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.1	770
392831080513101	05-05-04	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.1	920
391936080473501	05-05-04	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.1	1370
392831080595001	05-06-04	**.1**	<.1	<.1	<.2	<.2	<.2	<.1	<.1	1760
380410082304001	05-11-04	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.1	80
372649081524101	05-12-04	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.1	160
373853082075401	05-13-04	<.1	<.1	<.1	<.2	<.2	**.9**	<.1	<.1	60
392148077444201	05-17-04	<.1	<.1	<.1	<.2	<.2	**E.1**	<.1	**.6**	610
392107078060301	05-18-04	<.1	<.1	<.1	<.2	<.2	**E.2**	<.1	<.1	1450
393436077544301	05-18-04	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.1	980
393437078160901	05-19-04	<.1	<.1	<.1	<.2	<.2	<.2	**1.4**	<.1	340
392858078131601	05-19-04	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.1	250
391758078003901	05-20-04	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.1	220
381515081560201	06-01-04	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.1	1200
381846081531901	06-02-04	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.1	280
381504081541301	06-02-04	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.1	1520
381417082145801	06-03-04	<.1	<.1	<.1	<.2	<.2	**1.5**	<.1	<.1	2670
382008080292801	06-07-04	<.1	<.1	**.4**	<.2	<.2	<.2	<.1	<.1	100
381708080570201	06-08-04	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.1	60
375357080380301	06-08-04	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.1	1540
384726081392001	06-14-04	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.1	360
385305081554501	06-15-04	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.1	430
385743082053401	06-15-04	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.1	580
371958081285301	06-17-04	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.1	160
375719080430601	06-22-04	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.1	190
375958080450601	06-22-04	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.1	150
392909081054801	06-23-04	**.4**	**.1**	<.1	**.2**	**4.9**	<.2	<.1	<.1	440
384922081334101	06-23-04	<.1	<.1	<.1	<.2	<.2	<.2	<.1	<.1	300

Remark codes used in this table:
< -- Less than
E -- Estimated value

ORGANIC COMPOUNDS IN GROUND WATER

REMARKS.—Ground water was analyzed for all the compounds listed in the table below. Each of these compounds is identified by name and U.S. Geological Survey National Water Information System parameter code (WATSTORE Code). Method Reporting Limit (MRL) is also provided for each compound, as a concentration (µg/L). A measured or estimated concentration is shown in the preceding table for each compound detected in the samples; compounds not detected in any sample are not shown in the table.

The MRL provides an index to indicate where measurement uncertainty is increased. When an analyte is detected and all criteria for a positive result are met, the concentration is reported. If the analyte is detected at a concentration less than the MRL, an "E" code is reported with the value. An "E" code is also reported with the value if the analyte is qualitatively identified as present, but the quantitative determination is substantially more uncertain, even if the measured value is greater than the MRL. If a compound was not detected, it is recorded in U.S. Geological Survey files and in these tables as being in a concentration less than the MRL.

Samples from all wells in the network were analyzed for the compounds listed in the first table, volatile organic compounds. Samples from 10 selected wells, marked with an asterisk (*), were also analyzed for the pesticides listed in the second table.

Volatile organic compounds

WATSTORE Code	Compounds	MRL ug/L	WATSTORE Code	Compounds	MRL ug/L
77652	1,1,2-Trichloro-1,2,2-trifluoroethane (CFC-113)	<.1	34371	Ethylbenzene	<.1
34501	1,1-Dichloroethene	<.1	50005	Methyl tert-pentyl ether	<.2
34536	1,2-Dichlorobenzene	<.1	85795	m-Xylene plus p-xylene	<.2
32103	1,2-Dichloroethane	<.2	77135	o-Xylene	<.1
34541	1,2-Dichloropropane	<.1	77128	Styrene	<.1
34566	1,3-Dichlorobenzene	<.1	50004	tert-Butyl ethyl ether	<.1
34030	Benzene	<.1	34475	Tetrachloroethene	<.1
32101	Bromodichloromethane	<.1	32102	Tetrachloromethane	<.2
34301	Chlorobenzene	<.1	34546	trans-1,2-Dichloroethene	<.1
77093	cis-1,2-Dichloroethene	<.1	32104	Tribromomethane	<.2
32105	Dibromochloromethane	<.2	39180	Trichloroethene	<.1
34668	Dichlorodifluoromethane	<.2	34488	Trichlorofluoromethane	<.2
34423	Dichloromethane	<.2	39175	Vinyl chloride	<.2
81576	Diethyl ether	<.2			

Pesticides

WATSTORE Code	Compounds	MRL (ug/L)	WATSTORE Code	Compounds	MRL (ug/L)
82660	2,6-Diethylaniline	<.006	62166	Fipronil	<.016
49260	Acetochlor	<.006	04095	Fonofos	<.003
46342	Alachlor	<.005	39341	Lindane	<.004
34253	alpha-HCH	<.005	82666	Linuron	<.035
82686	Azinphos-methyl	<.050	39532	Malathion	<.027
82673	Benfluralin	<.010	82667	Methyl parathion	<.015
04028	Butylate	<.004	82630	Metribuzin	<.006
82680	Carbaryl	<.041	82671	Molinate	<.003
82674	Carbofuran	<.020	82684	Napropamide	<.007
38933	Chlorpyrifos	<.005	39542	Parathion	<.010
82687	cis-Permethrin	<.006	82669	Pebulate	<.004
04041	Cyanazine	<.018	82683	Pendimethalin	<.022
82682	DCPA	<.003	82664	Phorate	<.011
62170	Desulfinyl fipronil	<.012	82676	Propyzamide	<.004
39572	Diazinon	<.005	04024	Propachlor	<.025
82677	Disulfoton	<.02	82679	Propanil	<.011
82668	EPTC	<.004	82685	Propargite	<.02
82663	Ethalfluralin	<.009	82670	Tebuthiuron	<.02
82672	Ethoprop	<.005	82675	Terbufos	<.02
62169	Desulfinylfipronil amide	<.029	82681	Thiobencarb	<.010
62167	Fipronil sulfide	<.013	82678	Triallate	<.002
62168	Fipronil sulfone	<.024	82661	Trifluralin	<.009

Listed below are 14 sites that were sampled as part of a study to examine the transport of arsenic, introduced as a poultry-feed additive, through an agricultural watershed located in the headwaters of Muddy Creek, approximately 12 miles northwest of Harrisonburg, VA. The study area included 7 wells, 4 drive points, 2 stream sites, and 1 spring located in 0.463 mi^2 drainage.

Quarterly samples were collected at the sites listed below between February and November 2003. Additional samples were collected at each stream site during spring run-off periods following the application of composted poultry litter to the fields. The following tables report results of the field and laboratory determinations of water quality. Field determinations for all sites included pH, specific conductance, water, temperature, dissolved oxygen, and alkalinity. All samples were analyzed for major ions, nutrients, total arsenic, and selected arsenic species (arsenite (As III), arsenate (As V), dimethylarsenate (DMA), and monomethylarsenate (MMA)). Samples were analyzed by the USGS National Water Quality Laboratory in Denver, CO.

Station Number	Station Name	Latitude	Longitude	Site Description
Wells				
383152078570901	39S 2 (MC-04)	38°31'52"	78°57'09"	Lower Shallow Well— 12 feet deep
383152078570902	39S 9 (MC-17)	38°31'52"	78°57'09"	Lower Deep Well— 40 feet deep
383155078571201	39S 4 (MC-08)	38°31'55"	78°57'12"	Middle Shallow Well— 21 feet deep
383155078571202	39S 19 (MC-34)	38°31'55"	78°57'12"	Middle Deep Well— 47 feet deep
383211078573201	39S 16 (MC-30)	38°32'11"	78°57'32"	Single Well— 52 feet deep
383211078574001	39S 14 (MC-28)	38°32'11"	78°57'40"	Upper Shallow Well— 62 feet deep
383211078574002	39S 15 (MC-29)	38°32'11"	78°57'40"	Upper Deep Well— 99 feet deep
Drive Points				
383152078570903	39S 21 (MC-23 DP)	38°31'52"	78°57'09"	Hyporheic Zone Sample— 1.5 feet deep
383213078573702	39S 50 (MC-50 DP)	38°32'13"	78°57'37"	Hyporheic Zone Sample— 3 feet deep
Stream Sites				
0162101790	Muddy Creek Tributary 1 Tributary 2 above 771 near Singers Glen, VA	38°31'52"	78°57'09"	Downstream most sample point in study area. Collected stage and rainfall data.
0162101710	Muddy Creek Tributary 1 Tributary 2 near Gap near Singers Glen, VA	38°32'13"	78°57'37"	Stream site located upstream of fields where poultry litter is applied. Collected stage data.
Spring				
383216078572801	39SS 1	38°32'16"	78°57'28"	Discharges into stream channel between two stream sites and near MC-30.

Date	Station name	Station number	Time	Altitude of land surface feet (72000)	Gage height, feet (00065)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)
FEB 2003							
06...	MUDDY CR TRIB1 TRIB2 NR GAP NR SINGERS GLEN, VA	0162101710	1145	1626	--	1.2	728
MAY							
14...	MUDDY CR TRIB1 TRIB2 NR GAP NR SINGERS GLEN, VA	0162101710	0945	1626	6.36	--	719
JUN							
04...	MUDDY CR TRIB1 TRIB2 NR GAP NR SINGERS GLEN, VA	0162101710	1945	1626	--	--	--
04...	MUDDY CR TRIB1 TRIB2 NR GAP NR SINGERS GLEN, VA	0162101710	2045	1626	--	--	--
04...	MUDDY CR TRIB1 TRIB2 NR GAP NR SINGERS GLEN, VA	0162101710	2245	1626	--	--	--
13...	MUDDY CR TRIB1 TRIB2 NR GAP NR SINGERS GLEN, VA	0162101710	1343	1626	6.73	--	--
13...	MUDDY CR TRIB1 TRIB2 NR GAP NR SINGERS GLEN, VA	0162101710	1413	1626	--	--	--
13...	MUDDY CR TRIB1 TRIB2 NR GAP NR SINGERS GLEN, VA	0162101710	1513	1626	6.70	--	--
13...	MUDDY CR TRIB1 TRIB2 NR GAP NR SINGERS GLEN, VA	0162101710	1943	1626	6.58	--	--
JUL							
28...	MUDDY CR TRIB1 TRIB2 NR GAP NR SINGERS GLEN, VA	0162101710	1430	1626	--	--	719
NOV							
19...	MUDDY CR TRIB1 TRIB2 NR GAP NR SINGERS GLEN, VA	0162101710	0945	1626	--	--	--
19...	MUDDY CR TRIB1 TRIB2 NR GAP NR SINGERS GLEN, VA	0162101710	1330	1626	4.92	--	710

Date	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unf lab, uS/cm 25 degC (90095)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)
FEB 2003													
06...	11.1	82	6.7	--	--	142	.0	1.0	--	--	--	--	--
MAY													
14...	10.4	104	7.3	7.5	86	107	22.0	12.5	38	11.7	2.11	.1	1.05
JUN													
04...	--	--	--	7.3	99	--	--	--	44	13.0	2.81	.1	1.27
04...	--	--	--	7.0	108	--	--	--	32	8.36	2.72	.1	1.18
04...	--	--	--	7.0	69	--	--	--	31	8.65	2.17	.1	.94
13...	--	--	--	7.0	106	--	--	--	35	8.58	3.20	.1	1.05
13...	--	--	--	7.6	88	--	--	--	34	8.85	2.80	.1	.86
13...	--	--	--	7.1	70	--	--	--	29	8.22	2.14	.1	.75
13...	--	--	--	7.2	72	--	--	--	31	8.85	2.14	.1	.81
JUL													
28...	7.0	81	6.9	7.5	188	201	30.0	19.6	100	33.5	4.33	.1	1.61
NOV													
19...	--	--	--	7.4	120	--	--	--	49	15.2	2.77	.1	1.62
19...	9.5	94	6.9	7.3	76	98	15.0	11.6	32	8.55	2.56	.1	.68

Date	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Chlor-ide, water, fltrd, mg/L (00940)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Ortho-phos-phate, water, fltrd, mg/L (00660)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Arsen-ate, water, fltrd, ug/L as As (62453)	Arsenic water unfltrd ug/L (01002)	Arsen-ite, water, fltrd, ug/L as As (62452)
FEB 2003													
06...	--	--	--	--	--	.06	.05	--	--	--	<.2	<2	<.1
MAY													
14...	33	23	.99	8.2	7.1	--	E.03	.13	--	<.02	<.2	<2	<.1
JUN													
04...	40	--	1.29	6.9	5.9	.31	.24	.35	.227	.07	<.2	E1	<.1
04...	49	--	2.31	5.3	4.7	.81	.63	.38	2.71	.88	1.3	4	.2
04...	22	--	.98	6.1	5.6	.12	.09	.41	.153	.05	<.2	<2	<.1
13...	90	--	1.74	4.9	4.9	.19	.14	E.05	--	E.01	.5	11	.8
13...	36	--	1.02	5.2	4.1	.18	.14	.39	.340	.11	.7	3	.2
13...	23	--	.98	6.0	5.0	.09	.07	.38	.190	.06	.3	E2	<.1
13...	23	--	.97	7.1	5.7	.11	.09	.29	.126	.04	<.2	<2	.1
JUL													
28...	93	89	1.31	11.0	6.8	--	<.04	.23	.064	.02	<.2	<2	<.1
NOV													
19...	39	--	2.21	8.4	7.5	1.06	.82	.92	.340	.11	.3	M	.4
19...	15	9	1.35	5.8	4.9	.12	.09	3.10	.110	.04	<.3	<2	.4

Date	Iron, water, fltrd, ug/L (01046)	Di-methyl-arsin-ate, wat flt ug/L as As (62455)	Mono-methyl-arson-ate, wat flt ug/L as As (62454)
FEB 2003			
06...	--	<.1	<.1
MAY			
14...	39	<.1	<.1
JUN			
04...	104	<.1	<.1
04...	199	<.1	.2
04...	181	<.1	<.1
13...	383	.3	.5
13...	352	.3	.5
13...	281	<.1	<.1
13...	169	.1	.2
JUL			
28...	36	<.1	<.1
NOV			
19...	115	.2	.2
19...	130	<.2	<.2

Date	Station name	Station number	Time	Altitude of land surface feet (72000)	Gage height, feet (00065)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)
FEB 2003							
05...	Muddy Cr. Trib1 Trib2 Ab 771 nr Singers Glen, VA	0162101790	1315	1515	--	7.3	723
MAY							
13...	Muddy Cr. Trib1 Trib2 Ab 771 nr Singers Glen, VA	0162101790	1000	1515	6.21	--	719
JUN							
07...	Muddy Cr. Trib1 Trib2 Ab 771 nr Singers Glen, VA	0162101790	1145	1515	--	--	--
07...	Muddy Cr. Trib1 Trib2 Ab 771 nr Singers Glen, VA	0162101790	1245	1515	--	--	--
07...	Muddy Cr. Trib1 Trib2 Ab 771 nr Singers Glen, VA	0162101790	1345	1515	--	--	--
08...	Muddy Cr. Trib1 Trib2 Ab 771 nr Singers Glen, VA	0162101790	2113	1515	--	--	--
08...	Muddy Cr. Trib1 Trib2 Ab 771 nr Singers Glen, VA	0162101790	2143	1515	--	--	--
08...	Muddy Cr. Trib1 Trib2 Ab 771 nr Singers Glen, VA	0162101790	2243	1515	--	--	--
08...	Muddy Cr. Trib1 Trib2 Ab 771 nr Singers Glen, VA	0162101790	2343	1515	--	--	--
JUL							
30...	Muddy Cr. Trib1 Trib2 Ab 771 nr Singers Glen, VA	0162101790	1240	1515	6.69	--	729
NOV							
18...	Muddy Cr. Trib1 Trib2 Ab 771 nr Singers Glen, VA	0162101790	1000	1515	6.32	--	732

Date	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unf lab, uS/cm 25 degC (90095)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)
FEB 2003													
05...	11.4	103	8.8	--	--	373	4.5	8.6	--	--	--	--	--
MAY													
13...	9.6	97	7.8	7.9	166	216	21.0	13.1	79	26.0	3.48	.1	1.76
JUN													
07...	--	--	--	7.8	192	--	--	--	93	26.6	6.38	.1	2.29
07...	--	--	--	7.5	170	--	--	--	80	22.6	5.79	.1	2.36
07...	--	--	--	E7.2	164	--	--	--	77	22.2	5.28	.1	2.23
08...	--	--	--	7.7	204	--	--	--	98	27.9	6.97	.1	2.46
08...	--	--	--	7.8	192	--	--	--	93	25.5	7.05	.1	2.51
08...	--	--	--	7.5	179	--	--	--	88	24.9	6.27	.1	2.45
08...	--	--	--	7.6	169	--	--	--	83	24.1	5.57	.1	2.28
JUL													
30...	10.5	119	8.5	8.5	302	422	26.0	19.2	170	59.7	5.30	.1	2.56
NOV													
18...	9.4	84	8.0	7.8	230	317	--	8.8	120	43.7	3.40	.1	1.71

Date	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Chlor-ide, water, fltrd, mg/L (00940)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Ortho-phos-phate, water, fltrd, mg/L (00660)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Arsen-ate, water, fltrd, ug/L as As (62453)	Arsenic water unfltrd ug/L (01002)	Arsen-ite, water, fltrd, ug/L as As (62452)
FEB 2003													
05...	--	--	--	--	--	--	<.04	--	--	--	<.2	<2	<.1
MAY													
13...	--	62	2.41	7.5	8.1	--	E.02	1.33	.095	.03	<.2	E1	<.1
JUN													
07...	--	--	2.64	6.3	6.7	.08	.07	.94	1.02	.33	.7	E2	<.1
07...	--	--	3.41	5.5	6.5	.28	.22	1.06	1.90	.62	1.1	3	<.1
07...	74	--	2.72	6.0	7.1	.14	.10	1.09	1.35	.44	.6	E2	<.1
08...	--	--	3.34	6.4	7.4	--	<.04	1.14	.819	.27	.5	<2	<.1
08...	91	--	2.87	6.1	6.9	.12	.09	1.06	1.32	.43	.8	E1	<.1
08...	82	--	3.06	6.3	7.6	.22	.17	1.20	1.26	.41	.9	3	.1
08...	--	--	2.67	6.7	7.7	.10	.08	1.22	.813	.27	.5	E2	<.1
JUL													
30...	147	144	4.97	6.1	8.4	--	<.04	2.62	.098	.03	<.2	<2	<.1
NOV													
18...	110	102	2.51	9.1	8.3	.09	.07	1.26	.110	.04	<.3	<2	<.3

Date	Iron, water, fltrd, ug/L (01046)	Di-methyl-arsin-ate, wat flt ug/L as As (62455)	Mono-methyl-arson-ate, wat flt ug/L as As (62454)
FEB 2003			
05...	--	<.1	<.1
MAY			
13...	44	<.1	<.1
JUN			
07...	70	<.1	<.1
07...	106	<.1	.3
07...	112	<.1	<.1
08...	48	<.1	<.1
08...	83	<.1	<.1
08...	119	<.1	.4
08...	107	<.1	<.1
JUL			
30...	20	<.1	<.1
NOV			
18...	15	<.2	<.2

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD, SPECIAL, AND MISCELLANEOUS SITES
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
ARSENIC TRANSPORT IN MUDDY CREEK BASIN, VIRGINIA--Continued

Date	Station name	Station number	Time	Depth of well, feet below LSD (72008)	Altitude of land surface feet (72000)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)
FEB 2003							
05...	39S 2(MC-04)	383152078570901	1015	12.00	1517.56	6.3	723
MAY							
13...	39S 2(MC-04)	383152078570901	0945	12.00	1517.56	1.9	719
JUL							
30...	39S 2(MC-04)	383152078570901	1445	12.00	1517.56	1.9	729
NOV							
18...	39S 2(MC-04)	383152078570901	1015	12.00	1517.56	--	732

Date	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unf lab, uS/cm 25 degC (90095)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)
FEB 2003													
05...	5.0	44	7.2	--	--	479	3.0	7.2	--	--	--	--	--
MAY													
13...	2.1	21	6.8	7.2	446	469	11.5	12.7	230	67.6	14.7	.1	4.84
JUL													
30...	.4	4	6.8	7.3	471	523	26.0	17.6	250	76.2	15.3	.2	5.66
NOV													
18...	3.6	36	7.1	7.0	420	459	--	13.6	230	68.6	14.2	.1	4.05

Date	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Orthophosphate, water, fltrd, mg/L as P (00671)	Arsenate, water, fltrd, ug/L as As (62453)	Arsenic water unfltrd ug/L (01002)	Arsenite, water, fltrd, ug/L as As (62452)	Iron, water, fltrd, ug/L (01046)
FEB 2003													
05...	--	208	253	--	--	--	<.04	--	--	<.2	<2	<.1	--
MAY													
13...	192	180	--	7.83	7.4	18.4	<.04	5.52	<.02	<.2	<2	<.1	<10
JUL													
30...	223	214	--	7.91	8.8	17.7	<.04	4.80	<.02	<.2	<2	<.1	<8
NOV													
18...	110	188	--	6.74	8.1	12.8	<.04	2.38	<.02	<.3	<2	<.3	E4

Date	Dimethylarsinate, wat flt ug/L as As (62455)	Monomethylarsonate, wat flt ug/L as As (62454)
FEB 2003		
05...	<.1	<.1
MAY		
13...	<.1	<.1
JUL		
30...	<.1	<.1
NOV		
18...	<.2	<.2

Date	Station name	Station number	Time	Depth of well, feet below LSD (72008)	Altitude of land surface feet (72000)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)
FEB 2003							
05...	39S 9(MC-17)	383152078570902	1250	40.00	1518.11	2.5	725
MAY							
13...	39S 9(MC-17)	383152078570902	1430	40.00	1518.11	.74	719
JUL							
31...	39S 9(MC-17)	383152078570902	1015	40.00	1518.11	1.2	730
NOV							
18...	39S 9(MC-17)	383152078570902	1300	40.00	1518.11	--	732

Date	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unf lab, uS/cm 25 degC (90095)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)
FEB 2003													
05...	2.1	20	7.6	--	--	445	3.5	12.7	--	--	--	--	--
MAY													
13...	1.5	16	7.3	7.4	451	481	21.5	15.4	250	64.3	21.3	.1	2.88
JUL													
31...	3.1	32	7.3	7.8	442	461	23.0	14.9	250	63.3	21.4	.1	3.04
NOV													
18...	1.5	15	7.6	7.5	412	455	--	13.8	240	62.1	20.3	.1	2.67

Date	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicar-bonate, wat flt incrm. titr., field, mg/L (00453)	Chlor-ide, water, fltrd, mg/L (00940)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Arsen-ate, water, fltrd, ug/L as As (62453)	Arsenic water unfltrd ug/L (01002)	Arsen-ite, water, fltrd, ug/L as As (62452)	Iron, water, fltrd, ug/L (01046)
FEB 2003													
05...	--	186	227	--	--	--	<.04	--	--	<.2	<2	<.1	--
MAY													
13...	176	196	--	7.06	7.8	24.6	<.04	1.88	<.02	<.2	<2	<.1	<10
JUL													
31...	159	215	--	6.61	8.3	24.9	<.04	.94	<.02	<.2	<2	<.1	E4
NOV													
18...	110	199	--	5.90	8.3	22.1	<.04	.59	<.02	<.3	<2	<.3	E3

Date	Di-methyl-arsin-ate, wat flt ug/L as As (62455)	Mono-methyl-arson-ate, wat flt ug/L as As (62454)
FEB 2003		
05...	<.1	<.1
MAY		
13...	<.1	<.1
JUL		
31...	<.1	<.1
NOV		
18...	<.2	<.2

Date	Station name	Station number	Time	Depth of well, feet below LSD (72008)	Alti-tude of land surface feet (72000)	Tur-bidity, NTU (00076)	Baro-metric pres-sure, mm Hg (00025)
FEB 2003							
05...	39S 21(MC-23 DP)	383152078570903	1400	3.3	1515.1	1000	725
MAY							
15...	39S 21(MC-23 DP)	383152078570903	0945	3.3	1515.1	--	720
JUL							
30...	39S 21(MC-23 DP)	383152078570903	1340	3.3	1515.1	--	--

Date	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conduc-tance, wat unf lab, uS/cm 25 degC (90095)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, air, deg C (00020)	Temper-ature, water, deg C (00010)	Hard-ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Sodium adsorp-tion ratio (00931)	Sodium, water, fltrd, mg/L (00930)
FEB 2003													
05...	3.8	31	7.6	--	--	469	--	4.5	--	--	--	--	--
MAY													
15...	7.0	76	6.4	7.2	488	491	18.5	16.3	220	71.1	9.56	.1	4.41
JUL													
30...	<1.0	--	6.6	7.2	448	499	26.0	20.2	230	71.5	11.4	.1	4.19

Date	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Chlor-ide, water, fltrd, mg/L (00940)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Ortho-phos-phate, water, fltrd, mg/L (00660)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Arsen-ate, water, fltrd, ug/L as As (62453)	Arsenic water unfltrd ug/L (01002)	Arsen-ite, water, fltrd, ug/L as As (62452)
FEB 2003													
05...	--	--	--	--	--	4.60	3.57	--	--	--	2.4	10	3.4
MAY													
15...	229	247	7.39	8.9	7.9	2.69	2.09	<.06	1.07	.35	1.2	3	1.1
JUL													
30...	234	256	6.66	9.5	2.0	1.85	1.44	<.60	1.78	.58	1.0	2	1.0

Date	Iron, water, fltrd, ug/L (01046)	Di-methyl-arsin-ate, wat flt ug/L as As (62455)	Mono-methyl-arson-ate, wat flt ug/L as As (62454)
FEB 2003			
05...	--	<.1	<.1
MAY			
15...	6920	<.1	<.1
JUL			
30...	7180	<.1	<.1

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD, SPECIAL, AND MISCELLANEOUS SITES
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
ARSENIC TRANSPORT IN MUDDY CREEK BASIN, VIRGINIA--Continued

Date	Station name	Station number	Time	Depth of well, feet below LSD (72008)	Altitude of land surface feet (72000)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)
FEB 2003							
05...	39S 4(MC-08)	383155078571201	1715	21.00	1523.78	30	725
MAY							
13...	39S 4(MC-08)	383155078571201	1625	21.00	1523.78	40	719
JUL							
31...	39S 4(MC-08)	383155078571201	1145	21.00	1523.78	--	730
NOV							
18...	39S 4(MC-08)	383155078571201	1430	21.00	1523.78	--	730

Date	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unf lab, uS/cm 25 degC (90095)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)
FEB 2003													
05...	4.3	40	7.4	--	--	417	3.5	9.1	--	--	--	--	--
MAY													
13...	1.7	17	7.1	7.3	398	434	22.0	12.9	200	50.9	17.2	.2	5.81
JUL													
31...	1.2	12	7.0	7.5	423	453	23.0	14.6	210	55.0	18.2	.2	7.16
NOV													
18...	3.3	33	7.4	7.4	400	436	10.5	13.6	220	56.3	18.2	.1	4.19

Date	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Chloride, water, fltrd, mg/L (00940)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Orthophosphate, water, fltrd, mg/L (00660)	Orthophosphate, water, fltrd, mg/L as P (00671)	Arsenate, water, fltrd, ug/L as As (62453)	Arsenic water unfltrd ug/L (01002)	Arsenite, water, fltrd, ug/L as As (62452)	Iron, water, fltrd, ug/L (01046)
FEB 2003													
05...	--	--	--	--	--	<.04	--	--	--	<.2	<2	<.1	--
MAY													
13...	165	152	9.75	8.2	16.5	<.04	5.39	.147	.05	<.2	M	<.1	<10
JUL													
31...	185	181	9.70	8.6	14.8	<.04	5.14	.092	.03	<.2	M	<.1	<8
NOV													
18...	110	174	7.95	9.1	13.5	<.04	4.68	.123	.04	<.3	<2	<.3	E6

Date	Di-methyl-arsin-ate, wat flt ug/L as As (62455)	Mono-methyl-arson-ate, wat flt ug/L as As (62454)
FEB 2003		
05...	<.1	<.1
MAY		
13...	<.1	<.1
JUL		
31...	<.1	<.1
NOV		
18...	<.2	<.2

Date	Station name	Station number	Time	Depth of well, feet below LSD (72008)	Alti-tude of land surface feet (72000)	Tur-bidity, NTU (00076)	Baro-metric pres-sure, mm Hg (00025)
FEB 2003							
07...	39S 19(MC-34)	383155078571202	1030	47.0	1523.9	15	720
MAY							
14...	39S 19(MC-34)	383155078571202	1640	47.0	1523.9	20	719
JUL							
31...	39S 19(MC-34)	383155078571202	1315	47.0	1523.9	22	730
NOV							
18...	39S 19(MC-34)	383155078571202	1545	47.0	1523.9	--	--

Date	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conduc-tance, wat unf lab, uS/cm 25 degC (90095)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, air, deg C (00020)	Temper-ature, water, deg C (00010)	Hard-ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Sodium adsorp-tion ratio (00931)	Sodium, water, fltrd, mg/L (00930)
FEB 2003													
07...	4.6	45	7.3	--	--	388	1.5	11.6	--	--	--	--	--
MAY													
14...	4.5	45	6.9	7.2	364	385	27.0	12.6	180	46.6	16.3	.1	3.15
JUL													
31...	3.9	39	6.7	7.5	393	420	24.0	13.4	200	52.4	17.7	.1	3.58
NOV													
18...	4.1	--	7.2	7.0	386	421	10.5	12.9	210	55.9	17.8	.1	2.79

Date	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Chlor-ide, water, fltrd, mg/L (00940)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Ortho-phos-phate, water, fltrd, mg/L (00660)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Arsen-ate, water, fltrd, ug/L as As (62453)	Arsenic water unfltrd ug/L (01002)	Arsen-ite, water, fltrd, ug/L as As (62452)	Iron, water, fltrd, ug/L (01046)
FEB 2003													
07...	--	--	--	--	--	<.04	--	--	--	<.2	<2	<.1	--
MAY													
14...	144	141	7.61	8.7	13.7	<.04	6.83	.202	.07	<.2	<2	<.1	<10
JUL													
31...	165	159	7.08	9.0	10.8	<.04	7.38	.113	.04	<.2	<2	<.1	<8
NOV													
18...	171	174	6.26	9.5	10.4	<.04	5.16	.126	.04	<.3	<2	<.3	E3

Date	Di-methyl-arsin-ate, wat flt ug/L as As (62455)	Mono-methyl-arson-ate, wat flt ug/L as As (62454)
FEB 2003		
07...	<.1	<.1
MAY		
14...	<.1	<.1
JUL		
31...	<.1	<.1
NOV		
18...	<.2	<.2

Date	Station name	Station number	Time	Depth of well, feet below LSD (72008)	Alti-tude of land surface feet (72000)	Tur-bidity, NTU (00076)	Baro-metric pres-sure, mm Hg (00025)
FEB 2003							
06...	39S 16(MC-30)	383211078573201	1740	52.00	1585.9	5.7	726
MAY							
14...	39S 16(MC-30)	383211078573201	1415	52.00	1585.9	7.0	719
JUL							
30...	39S 16(MC-30)	383211078573201	1055	52.00	1585.9	8.6	725
NOV							
17...	39S 16(MC-30)	383211078573201	1730	52.00	1585.9	1.3	729

Date	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conduc-tance, wat unf lab, uS/cm 25 degC (90095)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, air, deg C (00020)	Temper-ature, water, deg C (00010)	Hard-ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Sodium adsorp-tion ratio (00931)	Sodium, water, fltrd, mg/L (00930)
FEB 2003													
06...	4.1	39	7.2	--	--	424	1.0	10.9	--	--	--	--	--
MAY													
14...	2.9	29	6.8	7.1	359	372	24.0	12.7	170	41.3	16.8	.2	7.02
JUL													
30...	2.4	24	6.8	7.3	368	366	27.0	13.0	190	45.3	18.6	.2	6.16
NOV													
17...	1.2	12	7.0	7.1	372	389	12.0	13.0	190	46.5	18.8	.2	5.62

Date	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Chlor-ide, water, fltrd, mg/L (00940)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Arsen-ate, water, fltrd, ug/L as As (62453)	Arsenic water unfltrd ug/L (01002)	Arsen-ite, water, fltrd, ug/L as As (62452)	Iron, water, fltrd, ug/L (01046)	Di-methyl-arsin-ate, wat flt ug/L as As (62455)
FEB 2003													
06...	--	--	--	--	--	<.04	--	--	<.2	<2	<.1	--	<.1
MAY													
14...	136	154	8.82	6.8	19.5	<.04	.52	<.02	<.2	E1	<.1	<10	<.1
JUL													
30...	165	169	6.11	7.1	17.7	<.04	3.21	<.02	<.2	<2	<.1	<8	<.1
NOV													
17...	158	155	5.58	7.7	17.1	<.04	3.22	<.02	<.3	<2	<.3	<6	<.2

Date	Mono-methyl-arson-ate, wat flt ug/L as As (62454)
FEB 2003	
06...	<.1
MAY	
14...	<.1
JUL	
30...	<.1
NOV	
17...	<.2

Date	Station name	Station number	Time	Depth of well, feet below LSD (72008)	Altitude of land surface feet (72000)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)
FEB 2003							
06...	39S 14(MC-28)	383211078574001	1240	62.0	1633.1	11	728
MAY							
12...	39S 14(MC-28)	383211078574001	1645	62.0	1633.1	7.1	713
JUL							
29...	39S 14(MC-28)	383211078574001	1440	62.0	1633.1	5.3	723
NOV							
19...	39S 14(MC-28)	383211078574001	1000	62.0	1633.1	--	710

Date	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unf lab, uS/cm 25 degC (90095)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)
FEB 2003													
06...	2.6	25	7.1	--	--	442	-1.5	11.0	--	--	--	--	--
MAY													
12...	2.5	25	6.7	7.2	419	432	17.0	12.9	210	75.3	4.37	.2	5.19
JUL													
29...	1.8	19	6.7	7.1	404	428	25.0	14.9	210	75.1	4.90	.2	5.87
NOV													
19...	1.5	15	7.0	7.2	406	445	16.0	13.3	210	76.2	4.31	.2	5.56

Date	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Chloride, water, fltrd, mg/L (00940)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Orthophosphate, water, fltrd, mg/L as P (00671)	Arsenate, water, fltrd, ug/L as As (62453)	Arsenic water unfltrd ug/L (01002)	Arsenite, water, fltrd, ug/L as As (62452)	Iron, water, fltrd, ug/L (01046)	Dimethylarsinate, wat flt ug/L as As (62455)
FEB 2003													
06...	--	--	--	--	--	<.04	--	--	<.2	<2	<.1	--	<.1
MAY													
12...	167	121	10.0	10.1	4.7	<.04	9.50	E.01	<.2	<2	<.1	E6	<.1
JUL													
29...	166	160	8.95	9.6	4.5	<.04	9.64	E.01	<.2	<2	<.1	E6	<.1
NOV													
19...	64	157	9.30	9.7	4.6	<.04	8.96	E.02	<.3	<2	.3	19	<.2

Date	Monomethylarsonate, wat flt ug/L as As (62454)
FEB 2003	
06...	<.1
MAY	
12...	<.1
JUL	
29...	<.1
NOV	
19...	<.2

Date	Station name	Station number	Time	Depth of well, feet below LSD (72008)	Altitude of land surface feet (72000)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)
FEB 2003							
06...	39S 15(MC-29)	383211078574002	1430	99	1633.6	9.1	728
MAY							
14...	39S 15(MC-29)	383211078574002	1100	99	1633.6	1.9	719
JUL							
29...	39S 15(MC-29)	383211078574002	1230	99	1633.6	2.2	723
NOV							
19...	39S 15(MC-29)	383211078574002	1300	99	1633.6	--	710

Date	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unf lab, uS/cm 25 degC (90095)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)
FEB 2003													
06...	3.8	37	7.3	--	--	371	--	12.0	--	--	--	--	--
MAY													
14...	3.7	38	7.2	7.0	373	394	12.0	13.7	180	65.7	4.49	.1	4.28
JUL													
29...	3.5	36	6.9	6.9	366	388	25.5	13.6	200	71.3	4.48	.1	4.19
NOV													
19...	4.1	42	7.4	7.3	347	370	14.0	12.7	190	67.6	3.97	.1	3.11

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD, SPECIAL, AND MISCELLANEOUS SITES
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
ARSENIC TRANSPORT IN MUDDY CREEK BASIN, VIRGINIA--Continued

Date	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Chlor-ide, water, fltrd, mg/L (00940)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Arsen-ate, water, fltrd, ug/L as As (62453)	Arsenic water unfltrd ug/L (01002)	Arsen-ite, water, fltrd, ug/L as As (62452)	Iron, water, fltrd, ug/L (01046)	Di-methyl-arsin-ate, wat flt ug/L as As (62455)
FEB 2003													
06...	--	--	--	--	--	<.04	--	--	<.2	<2	<.1	--	<.1
MAY													
14...	146	152	6.46	7.9	6.1	<.04	8.71	E.01	<.2	E1	<.1	<10	<.1
JUL													
29...	161	162	5.92	8.2	5.4	<.04	7.43	E.01	<.2	<2	<.1	<8	<.1
NOV													
19...	73	155	5.11	8.4	4.9	<.04	6.01	E.02	<.3	<2	<.3	<6	<.2

Date	Mono-methyl-arson-ate, wat flt ug/L as As (62454)
FEB 2003	
06...	<.1
MAY	
14...	<.1
JUL	
29...	<.1
NOV	
19...	<.2

Date	Station name	Station number	Time	Depth of well, feet below LSD (72008)	Tur-bidity, NTU (00076)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)
FEB 2003							
07...	39S 50 (MC-50 DP)	383213078573702	1215	1.5	290	720	7.4
MAY							
15...	39S 50 (MC-50 DP)	383213078573702	0930	1.5	--	720	5.4

Date	Dis-solved oxygen, percent of sat-uration (00301)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conduc-tance, wat unf lab, uS/cm 25 degC (90095)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, air, deg C (00020)	Temper-ature, water, deg C (00010)	Hard-ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Sodium adsorp-tion ratio (00931)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)
FEB 2003													
07...	57	6.8	--	--	130	2.0	2.0	--	--	--	--	--	--
MAY													
15...	58	6.5	7.4	99	93	--	15.8	42	13.3	2.11	.1	1.14	38

Date	Chlor-ide, water, fltrd, mg/L (00940)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Ortho-phos-phate, water, fltrd, mg/L (00660)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Arsen-ate, water, fltrd, ug/L as As (62453)	Arsenic water unfltrd ug/L (01002)	Arsen-ite, water, fltrd, ug/L as As (62452)	Iron, water, fltrd, ug/L (01046)	Di-methyl-arsin-ate, wat flt ug/L as As (62455)
FEB 2003													
07...	--	--	--	.22	.17	--	--	--	<.2	8	.3	--	<.1
MAY													
15...	1.00	8.6	6.9	--	<.04	.22	.245	.08	<.2	<2	<.1	49	<.1

Date	Mono-methyl-arson-ate, wat flt ug/L as As (62454)
FEB 2003	
07...	<.1
MAY	
15...	<.1

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD, SPECIAL, AND MISCELLANEOUS SITES
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
ARSENIC TRANSPORT IN MUDDY CREEK BASIN, VIRGINIA--Continued

Date	Station name	Station number	Time	Altitude of land surface feet (72000)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)
FEB 2003							
06...	39SS 1	383216078572801	1405	1610	728	7.6	72
MAY							
14...	39SS 1	383216078572801	1520	1610	719	6.3	60
JUL							
29...	39SS 1	383216078572801	1200	1610	723	5.2	50
NOV							
17...	39SS 1	383216078572801	1600	1610	729	5.3	51

Date	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unf lab, uS/cm 25 degC (90095)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)
FEB 2003													
06...	6.8	--	--	296	1.5	10.9	--	--	--	--	--	--	--
MAY													
14...	6.9	7.3	281	360	27.0	10.9	140	51.0	3.53	.1	2.21	125	128
JUL													
29...	7.4	6.8	326	344	25.0	11.4	180	64.3	4.12	.1	2.34	154	149
NOV													
17...	7.2	7.2	291	406	14.0	11.6	160	59.1	3.58	.1	1.91	76	155

Date	Chloride, water, fltrd, mg/L (00940)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Orthophosphate, water, fltrd, mg/L (00660)	Orthophosphate, water, fltrd, mg/L as P (00671)	Arsenate, water, fltrd, ug/L as As (62453)	Arsenic water unfltrd ug/L (01002)	Arsenite, water, fltrd, ug/L as As (62452)	Iron, water, fltrd, ug/L (01046)	Dimethylarsinate, wat flt ug/L as As (62455)	Monomethylarsonate, wat flt ug/L as As (62454)
FEB 2003													
06...	--	--	--	<.04	--	--	--	<.2	<2	<.1	--	<.1	<.1
MAY													
14...	4.10	8.7	8.4	<.04	3.19	.055	.02	<.2	<2	<.1	<10	<.1	<.1
JUL													
29...	4.86	9.4	7.7	<.04	3.28	--	E.02	<.2	<2	<.1	<8	<.1	<.1
NOV													
17...	3.88	9.1	9.0	<.04	2.04	--	E.02	<.3	<2	<.3	<6	<.2	<.2

Remark codes used in this table:
< -- Less than
E -- Estimated value
M -- Presence verified, not quantified