

Water-Data Report 2012

01411468 SCOTLAND RUN AT MALAGA, NJ

MAURICE RIVER BASIN

LOCATION.--Lat 39°34'22", long 75°03'30" referenced to North American Datum of 1983, Franklin Township, Gloucester County, NJ, Hydrologic Unit 02040206, at bridge on U.S. Route 40 (Harding Highway), 150 ft downstream from spillway of Malaga Lake, 0.6 mi northwest of Malaga, 2.0 mi upstream of dam at Willow Grove Lake, and 2.0 mi south of Iona..

DRAINAGE AREA.--27.9 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Miscellaneous measurements, water year 2012.

GAGE.--Reference point only.

DISCHARGE MEASUREMENTS
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Date	Discharge, in ft³/s
May 31, 2012	22.2
Sep 4, 2012	30.5

01411468 SCOTLAND RUN AT MALAGA, NJ—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 2011, 2012.

COOPERATION.--Physical measurements and samples for laboratory analyses were provided by personnel of the NJ Department of Environmental Protection. Determinations of dissolved ammonia and suspended residue were performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory.

REMARKS.--Cooperative Network Site Descriptor: HUC14, NJ Department of Environmental Protection Watershed Management Area 17.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 1 of 6

[%, percent; ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Barometric pressure, mm Hg (00025)	Temperature, air, °C (00020)	Absorbance, UV, 254 nm, 1 cm path length, water, filtered, units per cm (50624)	Absorbance, UV, organic constituents, 280 nm, 1 cm path length, water, filtered, units per cm (61726)	Discharge, instantaneous, ft ³ /s (00061)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)	pH, water, unfiltered, field, standard units (00400)
12-06-2011	1000	762	15.0	0.450	0.356	--	7.7	70	6.3
03-26-2012	1000	755	12.5	.474	.378	--	8.7	85	6.3
05-31-2012	1000	755	23.0	.664	.531	22	7.0	86	6.3
09-04-2012	1000	760	24.0	.257	.204	30	7.1	81	6.3

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 2 of 6

[%, percent; ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Specific conductance, water, unfiltered, µS/cm at 25°C (00095)	Temperature, water, °C (00010)	Turbidity, water, unfiltered, broad band light source (400-680 nm), detectors at multiple angles including 90 +/- 30 degrees, ratiometric correction, NTRU (63676)	Dissolved solids dried at 180°C, water, filtered, mg/L (70300)	Dissolved solids, water, filtered, sum of constituents, mg/L (70301)	Hardness, water, mg/L as CaCO ₃ (00900)	Suspended solids, water, unfiltered, mg/L (00530)	Calcium, water, filtered, mg/L (00915)
12-06-2011	1000	114	11.0	3.4	83	60	25.1	2.0	6.20
03-26-2012	1000	112	14.0	1.9	77	58	25.8	2.0	5.91
05-31-2012	1000	81	25.7	1.1	71	42	15.5	< 1.0	3.19
09-04-2012	1000	72	25.0	1.3	55	36	14.2	< 1.0	2.60

01411468 SCOTLAND RUN AT MALAGA, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 3 of 6

[%, percent; ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Magnesium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)	Sodium, water, filtered, mg/L (00930)	ANC, water, unfiltered, fixed endpoint (pH 4.5) titration, laboratory, mg/L as CaCO ₃ (90410)	Carbon (inorganic plus organic), suspended sediment, total, mg/L (00694)	Chloride, water, filtered, mg/L (00940)	Fluoride, water, filtered, mg/L (00950)	Inorganic carbon, suspended sediment, total, mg/L (00688)	Silica, water, filtered, mg/L as SiO ₂ (00955)
12-06-2011	1000	2.33	1.64	10.1	15.8	0.35	18.1	< .04	0.15	5.53
03-26-2012	1000	2.68	2.42	9.05	14.0	.43	16.6	< .04	< .03	1.83
05-31-2012	1000	1.82	1.67	8.09	7.89	.65	14.1	< .04	< .03	4.19
09-04-2012	1000	1.87	1.58	7.23	5.21	.70	12.7	< .04	< .03	1.08

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 4 of 6

[%, percent; ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Ammonia plus organic nitrogen		Nitrate plus nitrite		Particulate nitrogen, suspended in water, mg/L (49570)	Phosphorus, water, filtered, mg/L as P (00666)	Phosphorus, water, unfiltered, mg/L as P (00665)	Total nitrogen, water, filtered, mg/L (00602)	Total nitrogen, water, unfiltered, mg/L (00600)
		Sulfate, water, filtered, mg/L (00945)	Ammonia, water, filtered, mg/L as N (00623)	Ammonia, water, filtered, mg/L as N (00608)	Nitrate plus nitrite, water, filtered, mg/L as N (00631)					
12-06-2011	1000	5.10	0.43	0.051	0.411	< .017	0.010	0.017	0.84	< .85
03-26-2012	1000	6.96	.53	.058	.889	< .017	.010	.025	1.4	< 1.4
05-31-2012	1000	3.67	.61	.057	.080	.069	.017	.035	.69	.76
09-04-2012	1000	5.00	.47	.077	.162	.091	.012	.027	.63	.72

01411468 SCOTLAND RUN AT MALAGA, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 5 of 6

[%, percent; ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Barium, water, unfiltered, recoverable, µg/L (01007)	Beryllium, water, unfiltered, recoverable, µg/L (01012)	Cadmium, water, unfiltered, µg/L (01027)	Chromium, water, unfiltered, recoverable, µg/L (01034)	Copper, water, unfiltered, recoverable, µg/L (01042)	Iron, water, unfiltered, recoverable, µg/L (01045)	Lead, water, unfiltered, recoverable, µg/L (01051)	Manganese, water, unfiltered, recoverable, µg/L (01055)	Mercury, water, unfiltered, recoverable, µg/L (71900)
12-06-2011	1000	--	--	--	--	--	--	--	--	--
03-26-2012	1000	48.2	.05	.032	.30	9.7	1,010	1.18	42.2	.007
05-31-2012	1000	--	--	--	--	--	--	--	--	--
09-04-2012	1000	36.5	.02	.211	< .30	.96	525	.54	11.8	< .005

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 6 of 6

[%, percent; ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Nickel, water, unfiltered, recoverable, µg/L (01067)	Silver, water, unfiltered, recoverable, µg/L (01077)	Zinc, water, unfiltered, recoverable, µg/L (01092)	Arsenic, water, filtered, µg/L (01000)	Arsenic, water, unfiltered, µg/L (01002)	Boron, water, unfiltered, recoverable, micrograms per liter (01022)	Selenium, water, unfiltered, µg/L (01147)	Organic carbon, suspended sediment, total, mg/L (00689)	Organic carbon, water, filtered, mg/L (00681)
12-06-2011	1000	--	--	--	--	--	--	--	0.20	9.03
03-26-2012	1000	3.2	< .015	5.3	.58	.63	14	.130	.43	6.83
05-31-2012	1000	--	--	--	--	--	--	--	.65	9.65
09-04-2012	1000	1.9	< .015	4.0	.49	.47	11	.100	.70	4.77

01411468 SCOTLAND RUN AT MALAGA, NJ—Continued

WATER-QUALITY DATA

WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 1 of 10

[µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	1-Naphthol, water, filtered (0.7 micron glass fiber filter), recoverable,	2,6-Diethyl-aniline, water, filtered (0.7 micron glass fiber filter), recoverable,	2-Chloro-2',6'-diethyl-acetanilide, water, filtered, recoverable,	2-Chloro-4-isopropyl-amino-6-amino-s-triazine, water, filtered, recoverable,	2-Ethyl-6-methyl-aniline, water, filtered, recoverable,	3,4-Dichloro-aniline, water, filtered, recoverable,	3,5-Di-chloro-aniline, water, filtered, recoverable,	4-Chloro-2-methyl-phenol, water, filtered, recoverable,	Aceto-chlor, water, filtered, recoverable,
		µg/L (49295)	µg/L (82660)	µg/L (61618)	µg/L (04040)	µg/L (61620)	µg/L (61625)	µg/L (61627)	µg/L (61633)	µg/L (49260)
05-31-2012	1000	< .0360	< .0060	< .010	E .107	< .010	E .0033	< .006	< .0080	0.036

WATER-QUALITY DATA

WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 2 of 10

[µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Alachlor, water, filtered, recoverable,	alpha-Endo-sulfan, water, filtered, recoverable,	Atrazine, water, filtered, recoverable,	Azinphos-methyl oxygen analog, water, filtered, recoverable,	Azinphos-methyl, water, filtered (0.7 micron glass fiber filter), recoverable,	Benfluralin, water, filtered (0.7 micron glass fiber filter), recoverable,	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable,	Carbofuran, water, filtered (0.7 micron glass fiber filter), recoverable,
		µg/L (46342)	µg/L (34362)	µg/L (39632)	µg/L (61635)	µg/L (82686)	µg/L (82673)	µg/L (82680)	µg/L (82674)
05-31-2012	1000	0.008	< .006	1.06	< .042	< .120	< .014	E .006	< .060

WATER-QUALITY DATA

WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 3 of 10

[µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Chlorpyrifos oxygen analog, water, filtered, recoverable,	Chlorpyrifos, water, filtered, recoverable,	cis-Permethrin, water, filtered (0.7 micron glass fiber filter), recoverable,	cis-Propicon-azole, water, filtered, recoverable,	Cyanazine, water, filtered, recoverable,	Cyfluthrin, water, filtered, recoverable,	Cypermethrin, water, filtered, recoverable,	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable,	Desulfanyl-fipronil amide, water, filtered, recoverable,
		µg/L (61636)	µg/L (38933)	µg/L (82687)	µg/L (79846)	µg/L (04041)	µg/L (61585)	µg/L (61586)	µg/L (82682)	µg/L (62169)
05-31-2012	1000	< .08	< .0036	< .010	< .008	< .022	< .016	< .020	0.0019	< .029

01411468 SCOTLAND RUN AT MALAGA, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 4 of 10

[µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Desulfinyl-fipronil, water, filtered, recoverable, µg/L (62170)	Diazinon, water, filtered, recoverable, µg/L (39572)	Dichlorvos, water, filtered, recoverable, µg/L (38775)	Dicrotophos, water, filtered, recoverable, µg/L (38454)	Dieldrin, water, filtered, recoverable, µg/L (39381)	Dimethoate, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82662)	Disulfoton sulfone, water, filtered, recoverable, µg/L (61640)	Disulfoton, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82677)	Endosulfan sulfate, water, filtered, recoverable, µg/L (61590)
05-31-2012	1000	< .012	< .0060	< .04	< .08	< .008	< .0100	< .014	< .040	< .016

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 5 of 10

[µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	EPTC, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82668)	Ethion monoxon, water, filtered, recoverable, µg/L (61644)	Ethion, water, filtered, recoverable, µg/L (82346)	Ethoprop, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82672)	Fenamiphos sulfone, water, filtered, recoverable, µg/L (61645)	Fenamiphos sulfoxide, water, filtered, recoverable, µg/L (61646)	Fenamiphos, water, filtered, recoverable, µg/L (61591)	Fipronil sulfide, water, filtered, recoverable, µg/L (62167)	Fipronil sulfone, water, filtered, recoverable, µg/L (62168)
05-31-2012	1000	< .0056	< .021	< .010	< .016	< .054	< .08	< .030	< .012	< .024

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 6 of 10

[µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Fipronil, water, filtered, recoverable, µg/L (62166)	Fonofos, water, filtered, recoverable, µg/L (04095)	Hexazinone, water, filtered, recoverable, µg/L (04025)	Iprodione, water, filtered, recoverable, µg/L (61593)	Isofenphos, water, filtered, recoverable, µg/L (61594)	lambda-Cyhalothrin, water, filtered, recoverable, µg/L (61595)	Malaoxon, water, filtered, recoverable, µg/L (61652)	Malathion, water, filtered, recoverable, µg/L (39532)	Metalaxyl, water, filtered, recoverable, µg/L (61596)
05-31-2012	1000	E .002	< .0048	< .012	< .014	< .008	< .010	< .022	< .016	< .014

01411468 SCOTLAND RUN AT MALAGA, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 7 of 10

[µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Methidathion, water, filtered, recoverable,	Methyl paraoxon, water, filtered, recoverable,	Methyl parathion, water, filtered, recoverable,	Metolachlor, water, filtered, recoverable,	Metribuzin, water, filtered, recoverable,	Molinate, water, filtered, recoverable,	Myclobutanol, water, filtered, recoverable,	Oxyfluorfen, water, filtered, recoverable,	Pendimethalin, water, filtered, recoverable,
		(61598) µg/L	(61664) µg/L	(0.7 micron glass fiber filter), µg/L	(82667) µg/L	(39415) µg/L	(82630) µg/L	(0.7 micron glass fiber filter), µg/L	(82671) µg/L	(61599) µg/L
05-31-2012	1000	< .012	< .014	< .008	0.526	< .012	< .0040	0.005	< .010	0.018

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 8 of 10

[µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Phorate oxygen analog, water, filtered, recoverable,	Phorate, water, filtered, recoverable,	Phosmet oxygen analog, water, filtered, recoverable,	Phosmet, water, filtered, recoverable,	Prometon, water, filtered, recoverable,	Prometryn, water, filtered, recoverable,	Propanil, water, filtered, recoverable,	Propargite, water, filtered, recoverable,	Propyzamide, water, filtered, recoverable,	
		(61666) µg/L	(0.7 micron glass fiber filter), µg/L	(82664) µg/L	(61668) µg/L	(61601) µg/L	(04037) µg/L	(04036) µg/L	(0.7 micron glass fiber filter), µg/L	(82679) µg/L	(0.7 micron glass fiber filter), µg/L
05-31-2012	1000	< .027	< .020	< .0511	< .080	0.015	< .010	< .010	< .020	< .0036	

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 9 of 10

[µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Simazine, water, filtered, recoverable,	Tebu-thiuron, water, filtered, recoverable,	Tefluthrin, water, filtered, recoverable,	Terbufos sulfone, water, filtered, recoverable,	Terbufos, water, filtered, recoverable,	Terbutyl-azine, water, filtered, recoverable,	Thioben-carb, water, filtered, recoverable,	trans-Propicon-azole, water, filtered, recoverable,	Tribuphos, water, filtered, recoverable,
		(04035) µg/L	(0.7 micron glass fiber filter), µg/L	(82670) µg/L	(61606) µg/L	(61674) µg/L	(0.7 micron glass fiber filter), µg/L	(82675) µg/L	(04022) µg/L	(82681) µg/L
05-31-2012	1000	0.069	< .028	< .014	< .045	< .018	< .008	< .016	< .018	< .018

01411468 SCOTLAND RUN AT MALAGA, NJ—Continued

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO
SEPTEMBER 2012**

Part 10 of 10
[µg/L, micrograms per liter; <, less than;
E, estimated]

Date	Sample start time	Trifluralin, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82661)
05-31-2012	1000	< .018

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**

Part 1 of 6
[mm, millimeters; <, less than; M, presence verified but not quantified]

Date	Sample start time	Moisture content, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, percent (49282)	pH, bed sediment, standard units (70310)	Carbon (inorganic plus organic), bed sediment, total, dry weight, grams per kilogram (00693)	Inorganic carbon, bed sediment, total, dry weight, grams per kilogram (00686)	Phosphorus, bed sediment, total, dry weight, milligrams per kilogram as phosphorus (00668)	Cadmium, bed sediment, recoverable, dry weight, milligrams per kilogram (01028)	Chromium, bed sediment, recoverable, dry weight, milligrams per kilogram (01029)	Cobalt, bed sediment, recoverable, dry weight, milligrams per kilogram (01038)	Copper, bed sediment, recoverable, dry weight, milligrams per kilogram (01043)
09-04-2012	1000	23	5.90	0.3	< .2	M	< .100	0.9	< .1	< 1

01411468 SCOTLAND RUN AT MALAGA, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 2 of 6

[mm, millimeters; <, less than; M, presence verified but not quantified]

Date	Sample start time	Iron, bed sediment, total digestion, dry weight, milligrams per kilogram (01170)	Lead, bed sediment, recoverable, dry weight, milligrams per kilogram (01052)	Manganese, bed sediment, recoverable, dry weight, milligrams per kilogram (01053)	Mercury, bed sediment, recoverable, dry weight, milligrams per kilogram (71921)	Nickel, bed sediment, recoverable, dry weight, milligrams per kilogram (01068)	Zinc, bed sediment, recoverable, dry weight, milligrams per kilogram (01093)	Arsenic, bed sediment, recoverable, dry weight, milligrams per kilogram (64847)	Selenium, bed sediment, recoverable, dry weight, milligrams per kilogram (64848)	p-Cresol, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram (49451)
09-04-2012	1000	270	1.0	0.8	< .005	0.3	< 2.0	0.1	< .1	< 50

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 3 of 6

[mm, millimeters; <, less than; M, presence verified but not quantified]

Date	Sample start time	PCBs, bed sediment, recoverable, dry weight, micrograms per kilogram (39519)	1,2-Dimethylnaphthalene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram (49403)	1,6-Dimethylnaphthalene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram (49404)	1-Methyl-9H-fluorene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram (49398)	1-Methylphenanthrene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram (49410)	1-Methylpyrene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram (49388)	2,3,6-Trimethylnaphthalene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram (49405)	2,6-Dimethylnaphthalene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram (49406)	2-Ethyl-naphthalene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram (49948)
09-04-2012	1000	< 5.00	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50

01411468 SCOTLAND RUN AT MALAGA, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 4 of 6

[mm, millimeters; <, less than; M, presence verified but not quantified]

Date	Sample start time	2-Methylanthracene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram (49435)	4H-Cyclopenta[def]phenanthrene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram (49411)	9H-Fluorene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram (49399)	Acenaphthene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram (49429)	Acenaphthylene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram (49428)	Anthracene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram (49434)	Benzo[a]anthracene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram (49436)	Benzo[a]pyrene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram (49389)	Benzo[b]fluoranthene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram (49458)
		09-04-2012	1000	< 50	< 50	< 50	< 50	< 50	< 50	< 50

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 5 of 6

[mm, millimeters; <, less than; M, presence verified but not quantified]

Date	Sample start time	Benzo[ghi]perylene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram (49408)	Benzo[k]fluoranthene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram (49397)	Chrysene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram (49450)	Dibenzo[a,h]anthracene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram (49461)	Fluoranthene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram (49466)	Indeno[1,2,3-cd]pyrene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram (49390)	Isophorone, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram (49400)	Naphthalene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram (49402)	Phenanthrene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram (49409)
		09-04-2012	1000	< 50	< 50	< 50	< 50	< 50	< 50	< 50

01411468 SCOTLAND RUN AT MALAGA, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 6 of 6

[mm, millimeters; <, less than; M, presence verified but not quantified]

Date	Sample start time	Phenanthrene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram (49393)	Pyrene, bed sediment smaller than 2 millimeters, wet sieved (native water), field, recoverable, dry weight, micrograms per kilogram (49387)	Bed sediment, dry sieved, sieve diameter, percent smaller than 0.0625 mm (80164)
09-04-2012	1000	< 50	< 50	0.0