

Water-Data Report 2012

01411670 MUDDY RUN AT ROUTE 611, AT ELMER, NJ

MAURICE RIVER BASIN

LOCATION.--Lat 39°35'20", long 75°09'53" referenced to North American Datum of 1983, Upper Pittsgrove Twp, Salem County, NJ, Hydrologic Unit 02040206, at bridge on County Route 611 (Centerton Road), at outlet of Elmer Lake, 0.6 mi southeast of Elmer, 2.6 mi west of Newfield, and 2.9 mi upstream of Palatine Lake.

DRAINAGE AREA.--11.5 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
Feb 9, 2012	13.6
May 10, 2012	27.1
Aug 7, 2012	9.14

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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, unfiltered, mg/L (00300)	Dissolved oxygen, unfiltered, % saturation (00301)	pH, water, unfiltered, field, standard units (00400)
12-20-2011	0930	764	7.5	0.196	0.151	--	9.3	79	6.2
02-09-2012	0900	765	.0	.147	.113	14	10.4	82	6.5
05-10-2012	0900	751	15.0	.394	.311	27	5.9	59	7.0
08-07-2012	0930	761	24.0	.345	.268	9.1	3.4	41	6.3

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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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)
12-20-2011	0930	193	7.8	5.0	127	109	58.1	9.0	12.5
02-09-2012	0900	190	5.3	6.9	114	111	60.6	12	12.8
05-10-2012	0900	163	17.8	7.9	99	91	48.5	8.0	10.8
08-07-2012	0930	183	24.1	3.3	110	97	51.2	5.0	11.2

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WATER-QUALITY DATA
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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 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)
12-20-2011	0930	6.55	3.73	7.39	12.1	0.90	19.2	0.05	< .03	9.76
02-09-2012	0900	6.93	3.63	7.38	11.3	1.24	19.4	< .04	< .03	8.13
05-10-2012	0900	5.24	3.74	8.34	17.2	1.14	18.2	.07	< .03	7.31
08-07-2012	0930	5.63	4.51	11.6	25.4	1.48	23.0	.07	< .03	4.68

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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Date	Sample start time	Sulfate, water, filtered, mg/L (00945)	Ammonia plus organic nitrogen, 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)	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)
12-20-2011	0930	19.0	0.39	0.073	5.35	0.096	0.015	0.036	5.7	5.8
02-09-2012	0900	19.4	.35	.051	5.87	.145	.011	.040	6.2	6.4
05-10-2012	0900	14.8	1.1	.400	2.73	.108	.041	.098	3.8	4.0
08-07-2012	0930	16.5	.61	.059	.910	.160	.025	.072	1.5	1.7

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WATER-QUALITY DATA
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[%, 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)
12-20-2011	0930	--	--	--	--	--	--	--	--	--
02-09-2012	0900	77.9	.11	.103	.48	.71	475	.75	52.4	.006
05-10-2012	0900	--	--	--	--	--	--	--	--	--
08-07-2012	0930	70.1	.04	< .016	< .30	< .70	1,010	.24	69.1	< .005

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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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)
12-20-2011	0930	--	--	--	--	--	--	0.89	5.06	
02-09-2012	0900	2.1	< .015	10.7	.47	.65	13	.511	1.24	3.81
05-10-2012	0900	--	--	--	--	--	--	1.11	7.44	
08-07-2012	0930	1.3	.047	4.2	.96	.92	20	.147	1.48	9.15

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WATER-QUALITY DATA

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

Date	Sample start time	1-Naphthol, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (49295)	2,6-Diethyl-aniline, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82660)	2-Chloro-2',6'-diethyl-acetanilide, water, filtered, recoverable, µg/L (61618)	2-Chloro-4-isopropyl-amino-6-amino-s-triazine, water, filtered, recoverable, µg/L (04040)	2-Ethyl-6-methyl-aniline, water, filtered, recoverable, µg/L (61620)	3,4-Dichloro-aniline, water, filtered, recoverable, µg/L (61625)	3,5-Di-chloro-aniline, water, filtered, recoverable, µg/L (61627)	4-Chloro-2-methyl-phenol, water, filtered, recoverable, µg/L (61633)	Aceto-chlor, water, filtered, recoverable, µg/L (49260)
05-10-2012	0900	E .0239	< .0060	< .010	E .022	< .010	< .0060	< .006	< .0080	0.025

WATER-QUALITY DATA

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

Date	Sample start time	Alachlor, water, filtered, recoverable, µg/L (46342)	alpha-Endo-sulfan, water, filtered, recoverable, µg/L (34362)	Atrazine, water, filtered, recoverable, µg/L (39632)	Azinphos-methyl oxygen analog, water, filtered, recoverable, µg/L (61635)	Azinphos-methyl, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82686)	Benfluralin, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82673)	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82680)	Carbofuran, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82674)
05-10-2012	0900	0.007	< .006	0.072	< .042	< .120	< .014	E .282	< .060

WATER-QUALITY DATA

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

Date	Sample start time	Chlorpyrifos oxygen analog, water, filtered, recoverable, µg/L (61636)	Chlorpyrifos, water, filtered, recoverable, µg/L (38933)	cis-Permethrin, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82687)	cis-Propicon-azole, water, filtered, recoverable, µg/L (79846)	Cyanazine, water, filtered, recoverable, µg/L (04041)	Cyfluthrin, water, filtered, recoverable, µg/L (61585)	Cypermethrin, water, filtered, recoverable, µg/L (61586)	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82682)	Desulfinyl-fipronil amide, water, filtered, recoverable, µg/L (62169)
05-10-2012	0900	< .08	< .0036	< .010	E .007	< .022	< .016	< .020	0.0018	< .029

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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[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)
05-10-2012	0900	< .012	< .0060	< .04	< .08	< .008	< .0100	< .014	< .040	< .016

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[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)
05-10-2012	0900	< .0056	< .021	< .010	< .016	< .054	< .08	< .030	< .012	< .024

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[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)
05-10-2012	0900	< .018	< .0048	< .012	< .014	< .008	< .010	< .022	< .016	0.017

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WATER-QUALITY DATA
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[µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Methidathion, water, filtered, recoverable, µg/L (61598)	Methyl paraoxon, water, filtered, recoverable, µg/L (61664)	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82667)	Metolachlor, water, filtered, recoverable, µg/L (39415)	Metribuzin, water, filtered, recoverable, µg/L (82630)	Molinate, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82671)	Myclobutanol, water, filtered, recoverable, µg/L (61599)	Oxyfluorfen, water, filtered, recoverable, µg/L (61600)	Pendimethalin, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82683)
05-10-2012	0900	< .012	< .014	< .008	0.150	< .012	< .0040	< .010	< .010	< .012

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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

Date	Sample start time	Phorate oxygen analog, water, filtered, recoverable, µg/L (61666)	Phorate, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82664)	Phosmet oxygen analog, water, filtered, recoverable, µg/L (61668)	Phosmet, water, filtered, recoverable, µg/L (61601)	Prometon, water, filtered, recoverable, µg/L (04037)	Prometryn, water, filtered, recoverable, µg/L (04036)	Propanil, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82679)	Propargite, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82685)	Propyzamide, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82676)
05-10-2012	0900	< .027	< .020	< .0511	< .080	0.006	< .010	< .010	< .020	< .0036

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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

Date	Sample start time	Simazine, water, filtered, recoverable, µg/L (04035)	Tebu-thiuron, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82670)	Tefluthrin, water, filtered, recoverable, µg/L (61606)	Terbufos oxygen sulfone, water, filtered, recoverable, µg/L (61674)	Terbufos, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82675)	Terbutyl-azine, water, filtered, recoverable, µg/L (04022)	Thioben-carb, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82681)	trans-Propicon-azole, water, filtered, recoverable, µg/L (79847)	Tribuphos, water, filtered, recoverable, µg/L (61610)
05-10-2012	0900	0.012	< .028	< .014	< .045	< .018	< .008	< .016	E .015	< .018

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**WATER-QUALITY DATA
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[µg/L, micrograms per liter; <, less than;
E, estimated]

Date	Sample start time	Trifluralin, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82661)
05-10-2012	0900	< .018