

Water-Data Report 2012

01411675 MUDDY RUN NEAR OLIVET, NJ

MAURICE RIVER BASIN

LOCATION.--Lat 39°33'14", long 75°09'51" referenced to North American Datum of 1983, Pittsgrove Township, Salem County, NJ, Hydrologic Unit 02040206, at bridge on Sheep Pen Road, 0.1 mi upstream of Palatine lake, 0.6 mi northwest of Olivet, and 1.7 mi southeast of Greenville.

DRAINAGE AREA.--17.6 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	23.5
May 10, 2012	48.8
Aug 7, 2012	24.6

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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; E, estimated]

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)
11-29-2011	1000	760	18.9	0.370	0.288	--	6.0	58	7.0
02-09-2012	1100	762	11.8	.150	.116	24	10.1	82	7.2
05-10-2012	1000	750	17.1	.440	.347	49	7.2	75	6.4
08-07-2012	1000	760	24.4	.294	.228	25	4.5	55	6.4

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)
11-29-2011	1000	150	12.6	1.8	97	88	43.5	< 1.0	9.22
02-09-2012	1100	161	4.5	2.1	87	94	47.3	3.0	10.1
05-10-2012	1000	--	15.8	2.8	92	74	36.8	3.0	7.91
08-07-2012	1000	162	23.0	11	128	E 89	49.4	8.0	10.6

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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; E, estimated]

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)
11-29-2011	1000	4.96	3.65	8.89	17.4	0.47	18.5	0.05	< .03	8.80
02-09-2012	1100	5.36	2.95	8.36	13.3	.34	18.6	< .04	< .03	6.85
05-10-2012	1000	4.14	2.86	7.62	14.0	.53	16.1	.06	< .03	6.53
08-07-2012	1000	5.57	3.52	9.69	23.6	1.66	19.3	.06	< .03	6.18

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)
11-29-2011	1000	12.3	0.47	0.022	2.59	0.082	0.026	0.109	3.1	3.1
02-09-2012	1100	14.3	.29	.023	4.39	.055	.010	.020	4.7	4.7
05-10-2012	1000	12.5	.57	.076	1.79	.081	.035	.058	2.4	2.4
08-07-2012	1000	18.5	.50	E .029	.371	.289	.022	.113	.87	1.2

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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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; E, estimated]

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)
11-29-2011	1000	--	--	--	--	--	--	--	--	--
02-09-2012	1100	70.0	.04	.035	< .30	< .70	310	.48	19.5	.006
05-10-2012	1000	--	--	--	--	--	--	--	--	--
08-07-2012	1000	89.5	.05	.023	< .30	< .70	926	1.06	158	.006

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)
11-29-2011	1000	--	--	--	--	--	--	--	0.47	8.92
02-09-2012	1100	1.2	< .015	7.4	.36	.40	16	.311	.34	3.65
05-10-2012	1000	--	--	--	--	--	--	--	.53	8.49
08-07-2012	1000	1.9	< .015	5.1	2.1	2.4	20	.146	1.66	7.70

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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	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-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	1000	E .0093	< .0060	< .010	E .018	< .010	< .0060	< .006	< .0080	0.020

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	1000	0.006	< .006	0.028	< .042	< .120	< .014	E .153	< .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)	Cyper-methrin, water, filtered, recoverable, µg/L (61586)	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82682)	Desulfanyl-fipronil amide, water, filtered, recoverable, µg/L (62169)
05-10-2012	1000	< .08	< .0036	< .010	< .008	< .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	1000	< .012	< .0060	< .04	< .08	< .008	< .0100	< .014	< .040	< .016

WATER-QUALITY DATA
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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	1000	< .0056	< .021	< .010	< .016	< .054	< .08	< .030	< .012	< .024

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	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	1000	< .018	< .0048	< .012	< .014	< .008	< .010	< .022	< .016	0.010

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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	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
05-10-2012	1000	< .012	< .014	< .008	0.106	< .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,	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
05-10-2012	1000	< .027	< .020	< .0511	< .080	0.008	< .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,	Tebu-thiuron, water, filtered, recoverable,	Tefluthrin, water, filtered, recoverable,	Terbufos oxygen 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
05-10-2012	1000	0.009	< .028	< .014	< .045	< .018	< .008	< .016	E .004	< .018

01411675 MUDDY RUN NEAR OLIVET, NJ—Continued

**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	Trifluralin, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82661)
05-10-2012	1000	< .018