



Water-Data Report 2009

01408495 UNION BRANCH AT PINE LAKE PARK, NJ

TOMS RIVER BASIN

LOCATION.--Lat 40°00'23", long 74°14'50" referenced to North American Datum of 1983, Manchester Township, Ocean County, NJ, Hydrologic Unit 02040301, at bridge on Beacon Street at Pine Lake Park, 500 ft downstream from Pine Lake, 0.5 mi west of Glen Cedar City, and 3.5 mi east of Lakehurst.

DRAINAGE AREA.--62.5 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 2008 to August 2009.

REMARKS.--Cooperative Network Site Descriptor: Statewide Status, NJ Department of Environmental Protection Watershed Management Area 13.

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

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 1 of 6

[Remark codes: <, less than; E, estimated.]

Date	Time	Medium name	Sample type	Barometric pressure, mm Hg (00025)	Temperature, air, deg C (00020)	UV absorbance, 254 nm, wat flt (50624)	UV absorbance, 280 nm, wat flt (61726)	Dissolved oxygen, mg/L (00300)
Dec 01...	0800	Surface water	Regular	751	9.0	.345	.263	9.8
Feb 19...	0745	QC sample - Artificial	Field Blank	--	--	--	--	--
May 28...	0800	Surface water	Regular	748	5.0	.283	.217	11.0
Aug 24...	0900	Surface water	Regular	760	12.5	.450	.355	8.2
	1000	Surface water	Regular	763	23.5	.721	.575	5.8

01408495 UNION BRANCH AT PINE LAKE PARK, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 2 of 6

[Remark codes: <, less than; E, estimated.]

Date	Dis-solved oxygen, percent of saturation (00301)	pH, water, field, std (00400)	Specif-ic conduc-tance, $\mu\text{S}/\text{cm}$ @ 25 degC (00095)	Turbdty white light, det ang 90+/-30	Dis-solved solids dried @ 180degC	Sus-pended solids, water, mg/L as CaCO3	Magnes-ium, water, filtrd, mg/L (00915)	Potas-sium, water, filtrd, mg/L (00925)	Sodium, water, filtrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)
Dec 01...	81	4.5	90	6.6	1.1	65	10	2	2.23	1.09
Feb 19...	--	--	--	--	--	--	--	--	--	--
19...	86	4.7	84	4.5	1.3	48	8	6	1.86	.897
May 28...	88	5.0	78	18.3	2.4	54	8	2	1.83	.876
Aug 24...	71	5.1	68	24.2	3.9	59	8	4	1.75	.760
									.89	7.59
										<1.7

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 3 of 6

[Remark codes: <, less than; E, estimated.]

Date	Total carbon, suspnd sedimnt total, mg/L (00694)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Inor-ganic carbon, suspnd sedimnt total, mg/L (00688)	Silica, water, fltrd, mg/L as SiO2 (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate + nitrite water, fltrd, mg/L as N (00631)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Partic-ulate nitrogen, susp, water, mg/L as P (49570)	Phos-phorus, water, fltrd, mg/L as P (00666)	Phos-phorus, water, unfltrd mg/L as P (00665)
Dec 01...	.4	14.0	<.08	<.04	5.0	8.97	.31	.031	.32	<.010	E.01	E.007	.011
Feb 19...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	.4	13.4	<.08	<.04	4.1	7.60	.33	.033	.41	<.010	.03	E.005	.010
May 28...	1.5	15.0	<.08	<.04	3.3	5.41	.40	.070	.38	<.010	.10	E.007	.022
Aug 24...	1.7	12.8	<.08	<.04	4.6	4.20	.42	.056	.24	E.004	.11	.008	.031

01408495 UNION BRANCH AT PINE LAKE PARK, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 4 of 6

[Remark codes: <, less than; E, estimated.]

Date	Total nitro- gen, water, filtrd, unfiltrd (00602)	Total nitro- gen, water, unfiltrd (00600)	Barium, water, unfiltrd recover -able, (01007)	Beryll- ium, water, unfiltrd recover -able, (01012)	Cadmium water, unfiltrd recover -able, (01027)	Chrom- ium, water, unfiltrd Copper, water, filtrd, recover -able, (01034)	Copper, water, unfiltrd recover -able, (01040)	Iron, water, unfiltrd recover -able, (01042)	Lead, water, unfiltrd recover -able, (01049)	Mangan- ese, water, unfiltrd recover -able, (01051)	Mercury water, filtrd, (71890)
Dec											
01...	.63	E.64	--	--	--	--	--	--	--	--	--
Feb											
19...	--	--	--	--	--	<1.0	--	--	<.06	--	--
19...	.74	.78	22.1	.05	.08	<.40	--	<4.0	437	--	.81
May											
28...	.78	.88	--	--	--	--	--	--	--	--	--
Aug											
24...	.66	.77	19.8	.03	<.06	.53	--	<4.0	2,650	--	1.95
											22.9
											--

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 5 of 6

[Remark codes: <, less than; E, estimated.]

Date	Mercury water, unfiltrd recover -able, μg/L (71900)	Nickel, water, unfiltrd recover -able, μg/L (01065)	Nickel, water, unfiltrd recover -able, μg/L (01067)	Silver, water, unfiltrd recover -able, μg/L (01077)	Zinc, water, unfiltrd recover -able, μg/L (01090)	Zinc, water, unfiltrd recover -able, μg/L (01092)	Arsenic water, filtrd, recover -able, μg/L (01000)	Arsenic water, unfiltrd recover -able, μg/L (01002)	Boron, water, unfiltrd recover -able, μg/L (01022)	Selen- ium, water, unfiltrd recover -able, μg/L (01147)	Organic carbon, susnd sedimnt total, mg/L (00689)	Organic carbon, water, filtrd, mg/L (00681)
Dec												
01...	--	--	--	--	--	--	--	--	--	--	.36	8.2
Feb												
19...	--	<.12	--	--	<2.0	--	<.06	--	--	--	--	--
19...	E.006	--	.97	<.06	--	14.8	.27	.26	E11	E.11	.36	5.9
May												
28...	--	--	--	--	--	--	--	--	--	--	1.49	8.5
Aug												
24...	.012	--	.93	<.06	--	9.4	.62	.79	15	.16	1.71	11.5

01408495 UNION BRANCH AT PINE LAKE PARK, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 1 of 7

[Remark codes: <, less than; E, estimated.]

Date	1-Naph-thol, water, 0.7µ GF	ethyl-aniline water, 0.7µ GF	2,6-Di-ethyl-aniline water, 0.7µ GF	2-Chloro-diethyl water, 0.7µ GF	CIAT, water, 0.7µ GF	2- 6-chloro-aniline water, 0.7µ GF	3,4-Di-chloro-aniline water, 0.7µ GF	3,5-Di-chloro-aniline water, 0.7µ GF	4-Chloro-phenol, water, 0.7µ GF	Aceto-chlor, water, 0.7µ GF	Ala-chlor, water, 0.7µ GF	alpha-sulfan, water, 0.7µ GF	Atra-zine, water, 0.7µ GF	Azin-phos-methyl oxon, water, 0.7µ GF
	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)	µg/L (46342)	µg/L (34362)	µg/L (39632)	µg/L (61635)	
May 28...	<.04	<.006	<.010	E.005	<.010	<.004	<.004	<.005	<.010	<.008	<.006	.008	<.04	

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 2 of 7

[Remark codes: <, less than; E, estimated.]

Date	Azin-phos-methyl, water, 0.7µ GF	Ben-flur-alin, water, 0.7µ GF	Car-baryl, water, 0.7µ GF	Carbo-furan, water, 0.7µ GF	Chlor-pyrifos oxon, water, 0.7µ GF	Chlor-pyrifos water, 0.7µ GF	Chlor-pyrifos water, 0.7µ GF	cis-Per-methrin	cis-Propi-conazole, water, 0.7µ GF	Cyana-zine, water, 0.7µ GF	Cyflu-thrin, water, 0.7µ GF	Cyper-methrin, water, 0.7µ GF	DCPA, water, 0.7µ GF	Desulf-inyl-fipro-nil, water, 0.7µ GF
	µg/L (82686)	µg/L (82673)	µg/L (82680)	µg/L (82674)	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)	
May 28...	<.120	<.014	E.008	<.060	<.05	<.010	<.014	<.006	<.040	<.016	<.020	<.006	<.029	

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 3 of 7

[Remark codes: <, less than; E, estimated.]

Date	Desulf-inyl-fipro-nil, water, 0.7µ GF	Diazi-non, water, 0.7µ GF	Di-chlor-vos, water, 0.7µ GF	Dicro-tophos, water, 0.7µ GF	Diel-drin, water, 0.7µ GF	Dimeth-oate, water, 0.7µ GF	Disulf-oton, water, 0.7µ GF	Disul-foton, water, 0.7µ GF	Endo-sulfan, water, 0.7µ GF	EPTC, water, 0.7µ GF	Ethion-monoxon water, 0.7µ GF	Ethion, water, 0.7µ GF	Etho-prop, water, 0.7µ GF	
	µg/L (62170)	µg/L (39572)	µg/L (38775)	µg/L (38454)	µg/L (39381)	µg/L (82662)	µg/L (61640)	µg/L (82677)	µg/L (61590)	µg/L (82668)	µg/L (61644)	µg/L (82346)	µg/L (82672)	
May 28...	<.012	<.005	<.02	<.08	<.009	<.006	<.01	<.04	<.022	<.002	<.02	<.012	<.016	

01408495 UNION BRANCH AT PINE LAKE PARK, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 4 of 7

[Remark codes: <, less than; E, estimated.]

Date	Fenami-													
	Fenami-phos	sulf-	Fenami-phos	Fipro-nil	Fipro-nil	Fipro-	Fonofos	Hexa-	Ipro-	Isofen-	lambda-	Cyhalo-	Mala-	Mala-
water,	oxide,	water,	water,	water,	water,	water,	water,	zinone,	dione,	phos,	water,	oxon,	water,	thion,
fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,
µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	(62168)	(62166)	(04095)	(61593)	(61594)	(61595)	(61652)	(39532)
(61645)	(61646)	(61591)	(62167)	(62168)	(62166)	(04095)	(04025)	(61593)	(61594)	(61595)	(61652)	(39532)		
May 28...	<.053	<.08	<.03	<.013	<.024	E.004	<.010	<.008	<.014	<.006	<.010	<.080	<.020	

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 5 of 7

[Remark codes: <, less than; E, estimated.]

Date	Methyl													
	Meta-laxyl,	Methid-athion,	Methyl-oxon,	Methyl-para-thion,	Metola-chlor,	Metri-buzin,	Moli-nate,	Myclo-butanol	Oxy-fluor-fen,	Pendi-meth-alin,	Phorate	Phorate	Phosmet	
water,	water,	water,	water,	water,	water,	water,	water,	water,	water,	water,	water,	water,	water,	
fltrd,	fltrd,	fltrd,	fltrd,	0.7µ GF	fltrd,	fltrd,	0.7µ GF	fltrd,	fltrd,	0.7µ GF	fltrd,	0.7µ GF	fltrd,	
µg/L	µg/L	µg/L	µg/L	µg/L	(82667)	(39415)	(82630)	(82671)	(61599)	(61600)	(82683)	(61666)	(82664)	(61668)
(61596)	(61598)	(61664)	(62166)	(82667)	(39415)	(82630)	(82671)	(61599)	(61600)	(82683)	(61666)	(82664)	(61668)	
May 28...	<.007	<.006	<.01	<.008	E.005	<.016	<.002	<.010	<.006	<.012	<.03	<.020	<.05	

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 6 of 7

[Remark codes: <, less than; E, estimated.]

Date	Ter-													
	Phosmet	Prome-ton,	Prome-tryn,	Propanil,	Propar-gite,	Propy-zamide,	Tebu-simazine,	Terbufos	Terbu-	Ter-	Thio-			
water,	water,	water,	water,	water,	water,	water,	water,	oxon	fos,	buthyl-	ben carb			
fltrd,	fltrd,	fltrd,	fltrd,	0.7µ GF	0.7µ GF	0.7µ GF	0.7µ GF	fltrd,	water,	water,	water,			
µg/L	µg/L	µg/L	µg/L	(82679)	(82685)	(82676)	(04035)	(82670)	(61606)	(61674)	(82675)	(04022)	(82681)	
(61601)	(04037)	(04036)	(82679)	(82685)	(82676)	(04035)	(04035)	(82670)	(61606)	(61674)	(82675)	(04022)	(82681)	
May 28...	<.200	E.01	<.006	<.014	<.02	<.004	<.010	.03	<.010	<.04	<.02	<.01	<.016	

01408495 UNION BRANCH AT PINE LAKE PARK, NJ—Continued

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO
SEPTEMBER 2009**

Part 7 of 7

[Remark codes: <, less than; E, estimated.]

	trans-	Tri-	
	Propi-	flur-	
Date	con-a- zole, water, filtrd,	Tribu- phos, water, filtrd,	alin, water, filtrd 0.7 μ GF
	$\mu\text{g/L}$	$\mu\text{g/L}$	$\mu\text{g/L}$
	(79847)	(61610)	(82661)

	May		
	28...	<.02	<.035