



Water-Data Report 2009

01407450 MINE BROOK AT COLTS NECK, NJ

SHREWSBURY RIVER BASIN

LOCATION.--Lat 40°17'29", long 74°10'10" referenced to North American Datum of 1983, Colts Neck Township, Monmouth County, NJ, Hydrologic Unit 02030104, at bridge on Creamery Road, 0.4 mi northeast of Colts Neck, and 0.5 mi upstream from Yellow Brook.

DRAINAGE AREA.--5.48 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1969-74, 1989, 2002 to current year. Miscellaneous measurements, water years 1979-82.

GAGE.--Staff gage.

**DISCHARGE MEASUREMENTS
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Date	Discharge, in ft ³ /s
Jun 2, 2009	5.90
Jul 16, 2009	4.41

01407450 MINE BROOK AT COLTS NECK, NJ—Continued**WATER-QUALITY RECORDS**

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

REMARKS.--Cooperative Network Site Descriptor: Statewide Status, NJ Department of Environmental Protection Watershed Management Area 12.

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 5

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

Date	Time	Baro-metric pressure, mm Hg (00025)	Temper-ature, air, deg C (00020)	UV absorb-ance, 254 nm, wat flt units (50624)	UV absorb-ance, 280 nm, wat flt units (61726)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of saturation (00301)	pH, water, unfiltrd field, std units (00400)	Specif-ic conduc-tance, µS/cm @ 25 degC (00095)	Turbdty white light, det ang 90+/-30 90+/-30 corrctd NTRU (63676)	Dis-solved solids dried @ 180degC wat flt (70300) mg/L (70301)	Dis-solved solids, sum of constituents, mg/L (70301)
Dec												
01...	0900	749	9.5	.393	.318	10.2	87	6.7	117	8.0	27	84
Feb												
19...	0930	745	10.0	.088	.077	11.2	90	6.5	172	5.7	7.0	112
May												
12...	0930	764	15.5	.191	.156	9.9	92	6.7	161	12.0	11	129
Aug												
11...	1000	757	24.5	.148	.123	7.9	88	6.7	163	20.3	30	113
E89												
E86												
E93												

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

Part 2 of 5

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

Date	Hard-ness, water, mg/L as CaCO3 (00900)	Sus-pended solids, water, mg/L (00530)	Cal-cium, water, mg/L (00915)	Magnes-iun, water, mg/L (00925)	Potas-sium, water, mg/L (00935)	Sodium, water, mg/L (00930)	ANC, wat unf fixed pt, lab, mg/L as CaCO3 (90410)	Total carbon, suspnd sedimnt total, mg/L (00694)	Chlor-ide, water, filtrd, mg/L (00940)	Fluor-ide, water, filtrd, mg/L (00950)	Inor-ganic carbon, suspnd sediment total, mg/L (00688)	Silica, water, filtrd, mg/L as SiO2 (00955)	Sulfate water, filtrd, mg/L (00945)
Dec													
01...	24	5	6.15	2.17	2.70	8.84	9	1.1	17.6	.11	<.04	7.8	10.8
Feb													
19...	35	7	8.81	3.22	2.04	14.3	E7	.3	29.1	.14	<.04	11.3	13.6
May													
12...	34	8	8.42	3.17	2.13	11.9	9	.6	27.3	.11	<.04	11.3	13.8
Aug													
11...	39	7	10.3	3.27	2.51	10.9	13	.5	28.0	.20	<.04	15.2	12.6

01407450 MINE BROOK AT COLTS NECK, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 3 of 5

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

Date	Ammonia + org-N, water, filtrd, mg/L as N (00623)	Ammonia water, filtrd, mg/L as N (00608)	Nitrate + nitrite water, filtrd, mg/L as N (00631)	Ortho-phosphate, water, filtrd, mg/L as P (00671)	Partic- ulate nitro- gen, susp, water, mg/L as P (49570)	Phos- phorus, water, filtrd, mg/L as P (00666)	Phos- phorus, water, unfiltrd, mg/L as P (00665)	Total nitro- gen, water, filtrd, mg/L (00602)	Total nitro- gen, water, unfiltrd, mg/L (00600)	Barium, water, unfiltrd, recover- able, μg/L (01007)	Beryll- ium, water, unfiltrd, recover- able, μg/L (01012)	Chrom- ium, water, unfiltrd, recover- able, μg/L (01034)	
Dec 01...	.34	.071	.40	.012	.08	.034	.141	.74	.82	--	--	--	--
Feb 19...	.21	.033	.50	E.006	.02	.013	.051	.71	.73	46.3	.07	.14	.95
May 12...	.29	.045	.53	E.003	.04	.023	.068	.82	.86	--	--	--	--
Aug 11...	.56	.073	.40	E.003	E.02	.021	.085	.96	E.98	50.0	E.02	.07	1.5

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 4 of 5

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

Date	Mangan-												Organic carbon, susnd sedimnt total, mg/L (00689)
	Copper, water, unfiltrd recover- able, μg/L (01042)	Iron, water, unfiltrd recover- able, μg/L (01045)	Lead, water, unfiltrd recover- able, μg/L (01051)	Manganese, water, unfiltrd recover- able, μg/L (01055)	Mercury water, unfiltrd recover- able, μg/L (71900)	Nickel, water, unfiltrd recover- able, μg/L (01067)	Silver, water, unfiltrd recover- able, μg/L (01077)	Zinc, water, unfiltrd recover- able, μg/L (01092)	Arsenic water, filtrd, unfiltrd 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)	
Dec 01...	--	--	--	--	--	--	--	--	--	--	--	--	1.07
Feb 19...	<4.0	2,930	.25	52.9	<.010	2.5	<.06	11.5	.33	.40	20	.15	.29
May 12...	--	--	--	--	--	--	--	--	--	--	--	--	.55
Aug 11...	<4.0	4,570	.31	56.3	.013	2.2	<.06	5.5	.48	1.1	28	.14	.49

01407450 MINE BROOK AT COLTS NECK, NJ—Continued

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

Part 5 of 5

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

Date	Organic carbon, water, fltrd, (00681)
Dec 01...	6.6
Feb 19...	1.2
May 12...	2.7
Aug 11...	2.4

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

Part 1 of 7

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

	2,6-Di-	2Chloro		2-	3,4-Di-	3,5-Di-	Chloro-		Aceto-	Ala-	Endo-	Atra-	Azin-
Date	ethyl-	-2',6'-		Ethyl-	chloro-	chloro-	chlor,	chlor,	chlor,	chlor,	sulfan,	zine,	phos-
	aniline	diethyl		methyl-	aniline	aniline	methyl-	water,	water,	water,	water,	water,	methyl
0.7µ GF	0.7µ GF	wat flt	CIAT,	water,	aniline	water,	phenol,	water,	water,	water,	water,	water,	water,
Date	µg/L												
	(49295)	(82660)	(61618)	(04040)	(61620)	(61625)	(61627)	(61633)	(49260)	(46342)	(34362)	(39632)	(61635)
May													
12...	<.04	<.006	<.010	E.004	<.010	<.004	<.004	<.005	<.010	<.008	<.006	<.007	<.04

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

Part 2 of 7

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

	Azin-	Ben-	Car-	Carbo-	Chlor-		cis-	cis-					Desulf-
Date	phos-	flur-	baryl,	furan,	pyrifos	Chlor-	Per-	Propi-					inyl-
	methyl,	alin,	water,	water,	oxon,	pyrifos	methrin	conazole,	Cyana-	Cyflu-	Cyper-	DCPA,	fipro-
0.7µ GF	0.7µ GF	0.7µ GF	0.7µ GF	0.7µ GF	0.7µ GF	0.7µ GF	0.7µ GF	0.7µ GF	0.7µ GF	0.7µ GF	0.7µ GF	0.7µ GF	0.7µ GF
Date	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L							
	(82686)	(82673)	(82680)	(82674)	(61636)	(38933)	(82687)	(79846)	(04041)	(61585)	(61586)	(82682)	(62169)
May													
12...	<.120	<.014	<.200	<.060	<.05	<.010	<.014	E.002	<.040	<.016	<.020	<.006	<.029

01407450 MINE BROOK AT COLTS NECK, NJ—Continued

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, fltrd, μg/L (62170)	Diazi- non, water, fltrd, μg/L (39572)	Di- chlor- vos, water, fltrd, μg/L (38775)	Dicro- tophos, water, fltrd, μg/L (38454)	Diel- drin, water, fltrd, μg/L (39381)	Dimeth- oate, water, fltrd 0.7μ GF	Disulf- oton sulfone water, fltrd 0.7μ GF	Disul- foton, water, fltrd 0.7μ GF	Endo- sulfan sulfate water, fltrd 0.7μ GF	EPTC, water, fltrd 0.7μ GF	Ethion monoxon water, fltrd μg/L (82668)	Ethion, Ethion, water, fltrd μg/L (61644)	Etho- prop, water, fltrd μg/L (82346)	Etho- prop, water, fltrd μg/L (82672)
May 12...	<.012	<.005	<.02	<.08	<.009	<.006	<.01	<.04	<.022	<.002	<.02	<.012	<.016	

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 4 of 7

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

Date	Fenami- phos sulfone water, fltrd, μg/L (61645)	Fenami- phos oxide, water, fltrd, μg/L (61646)	Fenami- phos, water, fltrd, μg/L (61591)	Fipro- nil sulfide water, fltrd, μg/L (62167)	Fipro- nil sulfone water, fltrd, μg/L (62168)	Fipro- nil water, fltrd, μg/L (62166)	Fonofos water, fltrd, μg/L (04095)	Hexa- zinone, water, fltrd, μg/L (04025)	Ipro- dione, water, fltrd, μg/L (61593)	Isofen- phos, water, fltrd, μg/L (61594)	lambda- Cyhalo- thrin, water, fltrd, μg/L (61595)	Mala- xon, water, fltrd, μg/L (61652)	Mala- thion, water, fltrd, μg/L (39532)	
May 12...	<.053	<.08	<.03	<.013	<.024	E.003	<.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	Meta- laxyl, water, fltrd, μg/L (61596)	Methid- athion, water, fltrd, μg/L (61598)	Methyl para- thion, water, fltrd, μg/L (61664)	Methyl para- oxon, water, fltrd, μg/L (82667)	Metola- chlor, water, fltrd, μg/L (39415)	Metri- buzin, water, fltrd, μg/L (82630)	Moli- nate, water, fltrd 0.7μ GF	Myclo- butanil water, fltrd, μg/L (82671)	Oxy- fluor- fen, water, fltrd 0.7μ GF	Pendi- meth- alin, water, fltrd 0.7μ GF	Phorate oxon, water, fltrd μg/L (82683)	Phorate water, fltrd μg/L (61666)	Phosmet water, fltrd μg/L (82664)	Phosmet water, fltrd μg/L (61668)
May 12...	E.009	<.006	<.01	<.008	E.004	<.016	<.002	<.010	<.006	<.012	<.03	<.020	<.05	

01407450 MINE BROOK AT COLTS NECK, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 6 of 7

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

Date	Phosmet water, fltrd, μg/L (61601)	Prome- ton, water, fltrd, μg/L (04037)	Prome- tryn, water, fltrd, μg/L (04036)	Pro- panil, water, fltrd, 0.7μ GF μg/L (82679)	Propar- gite, water, fltrd 0.7μ GF μg/L (82685)	Propy- amide, water, fltrd 0.7μ GF μg/L (82676)	Tebu- zine, water, fltrd 0.7μ GF μg/L (04035)	Thiuron water, fltrd 0.7μ GF μg/L (82670)	Teflu- thrin, water, fltrd 0.7μ GF μg/L (61606)	Ter- bufos oxon sulfone μg/L (61674)	Terbu- fos, water, fltrd 0.7μ GF μg/L (82675)	Ter- butyl- azine, water, fltrd μg/L (04022)	Thio- bencarb water, fltrd 0.7μ GF μg/L (82681)
May 12...	<.200	<.01	<.006	<.014	<.02	<.004	E.007	<.02	<.010	<.04	<.02	<.01	<.016

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

Part 7 of 7

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

Date	trans- Propi- con- azole, water, fltrd, μg/L (79847)	Tri- flu- r- alin, water, fltrd 0.7μ GF μg/L (61610)	Tri- flu- r- alin, water, fltrd 0.7μ GF μg/L (82661)
May 12...	E.01	<.035	<.012

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 1 of 4

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

Date	Mois- ture, <2 mm, wsv nat fld dry percent (49282)	Inor- Total bed sed bed sedimnt std units (70310)	Phos- ganic carbon, bed bed sedimnt total, mg/kg (00693)	Chrom- ium, Cadmium bed bed sedimnt recover total, mg/kg (00686)	Cobalt bed bed sedimnt recover recover -able, -able, -able, μg/g (01028)	Copper, bed bed sedimnt recover recover -able, -able, -able, μg/g (01038)	Iron, bed bed sedimnt total digest, -able, μg/g (01043)	Lead, bed bed sedimnt recover recover -able, -able, -able, μg/g (01170)	Mangan- ese, bed bed sedimnt recover recover -able, -able, -able, μg/g (01052)	Mercury bed bed sedimnt recover recover -able, -able, -able, μg/g (01053)			
Aug 11...	22	6.48	1.2	<.2	E670	.110	38	5.1	7	42,000	8.7	200	<.007

01407450 MINE BROOK AT COLTS NECK, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 2 of 4

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

Date	Nickel, bed sedimnt -able, µg/g (01068)	Zinc, bed sedimnt recover -able, µg/g (01093)	Arsenic bed sedimnt recover -able, µg/g (64847)	Sele- nium, bed sedimnt recover -able, µg/g (64848)	p- Cresol, bed sed wsv nat field, sedimnt µg/kg (49451)	1,2-Di- methyl- naphth- PCBs, bed sedimnt <2 mm, µg/kg (39519)	1,6-Di- methyl- naphth- alene, bed sed bed sedimnt <2 mm, µg/kg (49403)	-9H- methyl- naphth- alene, bed sed bed sedimnt <2 mm, µg/kg (49404)	1Methyl phenan- threne, bed sed bed sedimnt <2 mm, µg/kg (49398)	1- Methyl- pyrene, bed sed bed sedimnt <2 mm, µg/kg (49410)	236Tri- methyl- naphth- alene, bed sed bed sedimnt <2 mm, µg/kg (49388)	2,6-Di- methyl- naphth- alene, bed sed bed sedimnt <2 mm, µg/kg (49405)	
Aug 11...	11.5	48	18.1	.3	<52	<5.00	<52	<52	<52	<52	<52	<52	<52

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 3 of 4

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

Date	2-Ethyl naphth- alene <2 mm wsv nat µg/kg (49948)	2-Methyl anthra- cene, bed sed <2 mm bed sed <2mm µg/kg (49435)	4H-Cyc- lopenta [def]- phenan- threne, wsv nat <2 mm, bs <2mm µg/kg (49411)	9H- Fluor- ene, bed sed <2 mm, wsv nat <2 mm, wsv nat <2 mm, wsv nat µg/kg (49399)	Ace- naphth- ene, bed sed <2 mm, wsv nat <2 mm, wsv nat <2 mm, wsv nat µg/kg (49429)	Ace- naphth- ylene, bed sed <2 mm, wsv nat <2 mm, wsv nat <2 mm, wsv nat µg/kg (49428)	Anthra- cene, bed sed <2 mm, wsv nat <2 mm, wsv nat <2 mm, wsv nat field, <2 mm, wsv nat <2 mm, wsv nat <2 mm, wsv nat µg/kg (49434)	Benzo- [a]- anthra- cene, bed sed <2 mm, wsv nat <2 mm, wsv nat <2 mm, wsv nat <2 mm, wsv nat µg/kg (49436)	Benzo- [a]- pyrene, bed sed <2 mm, wsv nat <2 mm, wsv nat <2 mm, wsv nat <2 mm, wsv nat µg/kg (49389)	Benzo- [b]- fluor- ene, bed sed <2 mm, wsv nat <2 mm, wsv nat <2 mm, wsv nat <2 mm, wsv nat µg/kg (49458)	Benzo- [ghi]- peryl- ene, bed sed <2 mm, wsv nat <2 mm, wsv nat <2 mm, wsv nat <2 mm, wsv nat µg/kg (49408)	Benzo- [k]- fluor- ene, bed sed <2 mm, wsv nat <2 mm, wsv nat <2 mm, wsv nat <2 mm, wsv nat µg/kg (49397)	Chry- sene, bed sed <2 mm, wsv nat <2 mm, wsv nat <2 mm, wsv nat <2 mm, wsv nat µg/kg (49450)
Aug 11...	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 4 of 4

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

Date	Dibenzo -[a,h]- anthra- cene, bed sed <2 mm, bed sed <2 mm, field, µg/kg (49461)	Fluor- anthenene, bed sed wsv nat <2 mm, field, µg/kg (49466)	Indeno- [1,2,- 3-cd]- pyrene, bed sed bed sed wsv nat <2 mm, field, µg/kg (49390)	Iso- phorone, bed sed <2 mm, field, µg/kg (49400)	Naphth- alene, bed sed <2 mm, field, µg/kg (49402)	Phenan- threne, bed sed <2 mm, field, µg/kg (49409)	Phenan- threne, bed sed <2 mm, field, µg/kg (49393)	Pyrene, bed sed <2 mm, field, µg/kg (49387)	Bed sedimnt dry svd sve dia percent <0.0625 mm
Aug 11...	<52	E4	<52	<52	<52	<52	<52	E2	0.0