

Water-Data Report 2007

01462730 JACOBS CREEK AT WOOSAMONSA ROAD, NEAR HARBOURTON, NJ

DELAWARE RIVER BASIN

LOCATION.--Lat 40°20'27", long 74°50'18" referenced to North American Datum of 1983, Ewing Township, Mercer County, NJ, Hydrologic Unit 02040105, 200 ft downstream from Woosamonsa Road, 1.0 miles southeast from Harbourton, and 2.6 miles upstream from confluence with Woolsey Brook.

DRAINAGE AREA.--1.84 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1987-88, 2007.

REMARKS.--Total nitrogen (00600) equals the sum of filtered ammonia-plus-organic nitrogen (00623), filtered nitrite-plus-nitrate nitrogen (00631), and total particulate nitrogen (49570). Cooperative Network Site Descriptor: Statewide Status, NJ Department of Environmental Protection Watershed Management Area 11.

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, suspended residue, ammonia-plus-organic nitrogen in bed sediment, and phosphorus in bed sediment were performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 1 of 5

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

| Date | Time | Sample type | Turbdty white light, det ang 90+/-30 corrctd NTRU (63676) | UV absorb- ance, 254 nm, wat flt units | UV absorb- ance, 280 nm, wat flt units | Baro- metric pres- sure, mm Hg (00025) | Dis- solved oxygen, mg/L (00300) | Dis- solved oxygen, percent of sat- uration (00301) | pH, water, unfltrd field, std units | Specif- ic conduc- tance, μS/cm (00095) | Temper- ature, wat unf 25 degC (00020) | Temper- ature, air, deg C (00010) |
|--------------|------|---------------|--|---|---|---|--|---|--|--|--|---|
| Nov 28... | 0930 | Environmental | 1.7 | .060 | .048 | 765 | 12.1 | 101 | 7.6 | 204 | 8.0 | 7.7 |
| Feb 01... | 0924 | Field Blank | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01... | 0930 | Environmental | 1.2 | .030 | .022 | 758 | 14.6 | 101 | 7.7 | 242 | .0 | .2 |
| May 30... | 0930 | Environmental | 1.5 | .057 | .045 | 762 | 8.8 | 90 | 7.6 | 219 | 18.5 | 16.3 |
| Aug 08... | 0830 | Environmental | .9 | .063 | .049 | 748 | 6.7 | 78 | 7.5 | 240 | 27.0 | 23.6 |

01462730 JACOBS CREEK AT WOOSAMONSA ROAD, NEAR HARBOURTON, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
 Part 2 of 5
 [Remark codes: <, less than; E, estimated.]

| Date | Hardness, water, mg/L as CaCO ₃ (00900) | ANC, wat unf | | | | | | Residue water, fltrd, sum of consti- tuents water, fltrd, mg/L (00945) | Residue on evap. at 180degC wat flt mg/L (70301) | Residue total non- filter- able, mg/L (00530) | | | |
|-----------|--|--------------------------------------|--|--|--------------------------------------|--|---|---|---|---|-----|-----|----|
| | | Calcium water, mg/L (00915) | Magnes- ium, water, mg/L (00925) | Potas- sium, water, mg/L (00935) | Sodium, water, mg/L (00930) | Chlor- end pt, lab, mg/L as CaCO ₃ (90410) | Fluor- ide, water, fltrd, mg/L (00950) | Silica, water, fltrd, mg/L (00955) | Sulfate water, fltrd, mg/L (00945) | | | | |
| Nov 28... | 67 | 16.5 | 6.33 | 1.62 | 11.7 | 39 | 20.5 | <.10 | 17.8 | 19.0 | 124 | 124 | 1 |
| Feb 01... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01... | 72 | 17.3 | 6.92 | 1.18 | 15.1 | 42 | 29.6 | E.07 | 17.3 | 21.2 | 140 | 145 | 3 |
| May 30... | 72 | 18.2 | 6.51 | 1.40 | 13.3 | 51 | 23.1 | E.06 | 17.8 | 18.0 | 131 | 150 | 1 |
| Aug 08... | 82 | 20.6 | 7.35 | 1.88 | 13.3 | 61 | 23.0 | E.08 | 13.2 | 18.2 | 135 | 160 | 3 |

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
 Part 3 of 5
 [Remark codes: <, less than; E, estimated.]

| Date | Ammonia + org-N, water, fltrd, mg/L as N (00623) | | Nitrate Ammonia water, fltrd, mg/L as N (00608) | Partic- ulate nitro- gen, susp., water, mg/L (00631) | Total nitro- gen, water, fltrd, mg/L (00602) | Total nitro- gen, water, unfltrd mg/L (00600) | Ortho- phosphate, water, fltrd, mg/L as P (00671) | Phos- phorus, water, fltrd, mg/L (00666) | Phos- phorus, water, unfltrd mg/L (00665) | Total carbon, suspnd sedimnt total, mg/L (00694) | Inor- ganic carbon, suspnd sedimnt total, mg/L (00688) | Organic carbon, suspnd sedimnt total, mg/L (00689) | Organic carbon, water, fltrd, mg/L (00681) |
|-----------|---|-------|---|---|--|---|---|---|--|--|---|--|---|
| | | | | | | | | | | | | | |
| Nov 28... | .21 | .016 | 1.46 | <.02 | 1.7 | -- | .015 | .014 | .019 | <.1 | <.1 | <.1 | 1.9 |
| Feb 01... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01... | .15 | .029 | 1.35 | <.02 | 1.5 | -- | E.008 | .008 | .010 | <.1 | <.1 | <.1 | 1.0 |
| May 30... | .21 | <.010 | .55 | <.02 | .76 | -- | .016 | .022 | .025 | .2 | <.1 | .2 | 1.8 |
| Aug 08... | .19 | .023 | .17 | .02 | .36 | .38 | .016 | .021 | .026 | .2 | <.1 | .2 | 1.8 |

01462730 JACOBS CREEK AT WOOSAMONSA ROAD, NEAR HARBOURTON, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
 Part 4 of 5
 [Remark codes: <, less than; E, estimated.]

| Date | Arsenic | | Barium | | Beryllium | | Boron | | Chromium | | Copper | | Iron | | Lead | | | | | | | | | | | |
|-----------|-----------------------------|-----------------|-----------------------------|-----------------|-------------------|-----------------|-----------------------------|-----------------|------------------|-----------------|-------------------|-----------------|---------|-------------------|-----------------|-----------------------------|-----------------|------------------|-----------------|-------------------|-----------------|-----------------------------|-----------------|-------------------|-----------------|-----------------------------|
| | water, fltrd, unfltrd | µg/L (01000) | water, recover -able, | µg/L (01002) | water, unfltrd | µg/L (01007) | water, recover -able, | µg/L (01012) | water, fltrd, | µg/L (01020) | water, unfltrd | µg/L (01022) | Cadmium | water, unfltrd | µg/L (01027) | water, recover -able, | µg/L (01034) | water, fltrd, | µg/L (01040) | water, unfltrd | µg/L (01042) | water, recover -able, | µg/L (01045) | water, unfltrd | µg/L (01049) | water, recover -able, |
| Nov 28... | -- | -- | -- | -- | -- | 28 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| Feb 01... | <.12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | <.40 | -- | -- | -- | <.12 | -- | -- | -- | -- | -- | -- | -- | -- | | |
| 01... | .15 | .30 | 22.6 | <.06 | 24 | 24 | <.02 | <.60 | -- | E.8 | 95 | -- | E.06 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| May 30... | -- | -- | -- | -- | -- | 37 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| Aug 08... | .54 | .55 | 26.1 | <.06 | 53 | 56 | <.02 | <.60 | -- | E1.2 | 52 | -- | <.06 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
 Part 5 of 5
 [Remark codes: <, less than; E, estimated.]

| Date | Manganese | | Mercury | | Nickel | | Selenium | | Silver | | Zinc | | |
|-----------|-------------------|-----------------|---------|-------------------|--------|-------------------|----------|-------------------|---------|-------------------|------|-------------------|---------|
| | water, unfltrd | µg/L (01055) | Mercury | water, unfltrd | Nickel | water, unfltrd | recover | water, unfltrd | recover | water, unfltrd | Zinc | water, unfltrd | recover |
| Nov 28... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Feb 01... | -- | <.010 | -- | <.06 | -- | -- | -- | -- | <.60 | -- | -- | -- | -- |
| 01... | 24.6 | -- | <.010 | -- | .25 | .12 | <.02 | -- | <2 | -- | <2 | -- | -- |
| May 30... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Aug 08... | 9.3 | -- | <.010 | -- | .18 | .10 | <.02 | -- | <2.0 | -- | -- | -- | -- |

01462730 JACOBS CREEK AT WOOSAMONSA ROAD, NEAR HARBOURTON, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 1 of 4

[Remark codes: <, less than.]

| Date | Time | Ammonia | | | Inor- | | | Chrom- | | | | | |
|-----------|------|-----------------------------|--|--|---|--|---|---|--|--|---|--|---|
| | | pH bed sedimnt std | + org-N, bed sed total, mg/kg (70310) | Phos- phorus, bed sedimnt total, mg/kg (00626) | Total carbon, bed sedimnt total, g/kg (00693) | Inor- ganic carbon, bed sedimnt total, g/kg (00686) | Arsenic bed sedimnt recover -able, ug/g (64847) | Cadmium bed sedimnt recover -able, ug/g (01028) | ium, bed sedimnt recover -able, ug/g (01029) | Cobalt bed sedimnt recover -able, ug/g (01038) | Copper, bed sedimnt recover -able, ug/g (01043) | Iron, bed sedimnt total, ug/g (01170) | Lead, bed sedimnt recover -able, ug/g (01052) |
| Aug 08... | 0830 | 6.72 | 250 | 5,200 | 2.6 | <.2 | 9.5 | .130 | 22 | 17.2 | 52 | 39,000 | 18 |

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 2 of 4

[Remark codes: <, less than.]

| Date | Mangan- ese, bed sedimnt recover -able, ug/g (01053) | | | Sele- nium, bed sedimnt recover -able, ug/g (71921) | | | 1,2-Di- methyl- naphth- alene, ug/g (01068) | | | 1,6-Di- methyl- naphth- alene, ug/g (64848) | | | 1Methyl -9H- fluor- ene, ug/kg (01093) | | | 1- Methyl- phenan- threne, ug/kg (49403) | | | 236Tri- Methyl- naphth- alene, ug/kg (49398) | | | 2,6-Di- methyl- naphth- alene, ug/kg (49405) | | |
|-----------|--|---|---|---|---|---|---|---|---|--|---|---|---|-----|-----|---|-----|-----|---|-----|-----|---|-----|--|
| | Mercury bed sedimnt recover -able, ug/g (71921) | Nickel, bed sedimnt recover -able, ug/g (01068) | Zinc, bed sedimnt recover -able, ug/g (64848) | methyl- naphth- alene, ug/g (01093) | methyl- naphth- alene, ug/g (49403) | methyl- naphth- alene, ug/g (49404) | 1,2-Di- methyl- naphth- alene, ug/kg (49403) | 1,6-Di- methyl- naphth- alene, ug/kg (49404) | 1Methyl -9H- fluor- ene, ug/kg (49398) | 1- Methyl- phenan- threne, ug/kg (49410) | 236Tri- Methyl- naphth- alene, ug/kg (49388) | 2,6-Di- methyl- naphth- alene, ug/kg (49405) | | | | | | | | | | | | |
| Aug 08... | 640 | <.007 | 18.1 | .2 | 74 | <55 | <55 | <55 | <55 | <55 | <55 | <55 | <55 | <55 | <55 | <55 | <55 | <55 | <55 | <55 | <55 | <55 | <55 | |

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 3 of 4

[Remark codes: <, less than.]

| Date | 2-Methyl- anthra- cene, bed sedimnt <2 mm, ug/kg (49435) | 4H-Cyc- lopenta- phenan- threne, <2 mm, ug/kg (49411) | 9H- Fluor- ene, bed sedimnt wsv nat <2mm bs <2mm wsv nat | Ace- naphth- ene, bed sedimnt wsv nat ug/kg (49399) | Ace- naphth- ene, bed sedimnt wsv nat ug/kg (49429) | Antra- cene, bed sedimnt field, ug/kg (49428) | Benzo- [a]- anthra- cene, bed sedimnt field, ug/kg (49434) | Benzo- [a]- pyrene, bed sedimnt field, ug/kg (49436) | Benzo- [b]- fluor- ene, bed sedimnt field, ug/kg (49389) | Benzo- [ghi]- anthene, bed sedimnt field, ug/kg (49458) | Benzo- [k]- fluor- ene, bed sedimnt field, ug/kg (49408) | Benzo- [l]- anthene, bed sedimnt field, ug/kg (49397) | Chry- sene, bed sedimnt field, ug/kg (49450) | Dibenzo- -[a,h]- anthra- cene, bed sedimnt field, ug/kg (49461) |
|-----------|---|---|---|---|---|--|---|--|---|---|---|---|---|--|
| | 2-Methyl- anthra- cene, bed sedimnt wsv nat ug/kg (49435) | 4H-Cyc- lopenta- phenan- threne, bed sedimnt wsv nat ug/kg (49411) | 9H- Fluor- ene, bed sedimnt wsv nat ug/kg (49399) | Ace- naphth- ene, bed sedimnt wsv nat ug/kg (49429) | Ace- naphth- ene, bed sedimnt wsv nat ug/kg (49428) | Antra- cene, bed sedimnt field, ug/kg (49434) | Benzo- [a]- anthra- cene, bed sedimnt field, ug/kg (49436) | Benzo- [a]- pyrene, bed sedimnt field, ug/kg (49389) | Benzo- [b]- fluor- ene, bed sedimnt field, ug/kg (49458) | Benzo- [b]- anthene, bed sedimnt field, ug/kg (49408) | Benzo- [b]- anthene, bed sedimnt field, ug/kg (49397) | Benzo- [b]- anthene, bed sedimnt field, ug/kg (49450) | Chry- sene, bed sedimnt field, ug/kg (49461) | |
| Aug 08... | <55 | <55 | <55 | <55 | <55 | <55 | <55 | <55 | <55 | <55 | <55 | <55 | <55 | <55 |

01462730 JACOBS CREEK AT WOOSAMONSA ROAD, NEAR HARBOURTON, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 4 of 4

[Remark codes: <, less than.]

| Date | Fluor-anthene bed sed <2 mm wsv nat field, ug/kg (49466) | Indeno-[1,2,- 3-cd]- bed sed <2 mm, bed sed wsv nat bed sed <2 mm wsv nat bed sed ug/kg (49390) | Iso-phorone bed sed <2 mm, bed sed wsv nat wsv nat bed sed ug/kg (49400) | Naphth-alene, bed sed <2 mm bed sediment ug/kg (49402) | p-PCBs, bed sed wsv nat sediment ug/kg (39519) | Cresol, bed sed wsv nat field, ug/kg (49451) | Phenan-threne, bed sed wsv nat field, ug/kg (49409) | Phenan-threne, bed sed wsv nat field, ug/kg (49393) | Pyrene, bed sed wsv nat field, ug/kg (49387) | Bed sediment, dry svd sve dia percent <.063mm (80164) | Bed sediment, fall dia dst wat percent <.004mm (80157) |
|--------------|--|--|--|--|---|---|--|--|---|--|---|
| Aug 08... | <55 | <55 | <55 | <55 | <5.00 | <55 | <55 | <55 | <55 | 4 | 1 |