



Water-Data Report 2006

01466500 MCDONALDS BRANCH IN BYRNE STATE FOREST, NJ

DELAWARE RIVER BASIN

LOCATION.--Lat 39°53'06", long 74°30'19" referenced to North American Datum of 1983, Woodland Township, Burlington County, NJ, Hydrologic Unit 02040202, on right bank, 25 ft upstream from culvert on Butterworth Road in Brendan T. Byrne State Forest, 3.4 mi upstream from confluence with Cooper Branch, and 7.0 mi southeast of Browns Mills.

DRAINAGE AREA.--2.35 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1953 to current year. Prior to October 1962, published as "McDonald Branch in Lebanon State Forest". Prior to October 2003, published as "McDonalds Branch in Lebanon State Forest".

REVISED RECORDS.--WDR NJ-82-2: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 117.73 ft above NGVD of 1929 (levels from New Jersey Geological Survey benchmark).

REMARKS.--Records fair except for estimated daily discharges, which are poor. Gage-height record is collected above concrete control and discharge record, which includes leakage around control, is measured at site 785 ft downstream. Several measurements of water temperature were made during the year. Satellite gage-height telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7.0 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan 04	0145	*6.0	*1.63

01466500 MCDONALDS BRANCH IN BYRNE STATE FOREST, NJ—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
DAILY MEAN VALUES
[*e*, estimated]

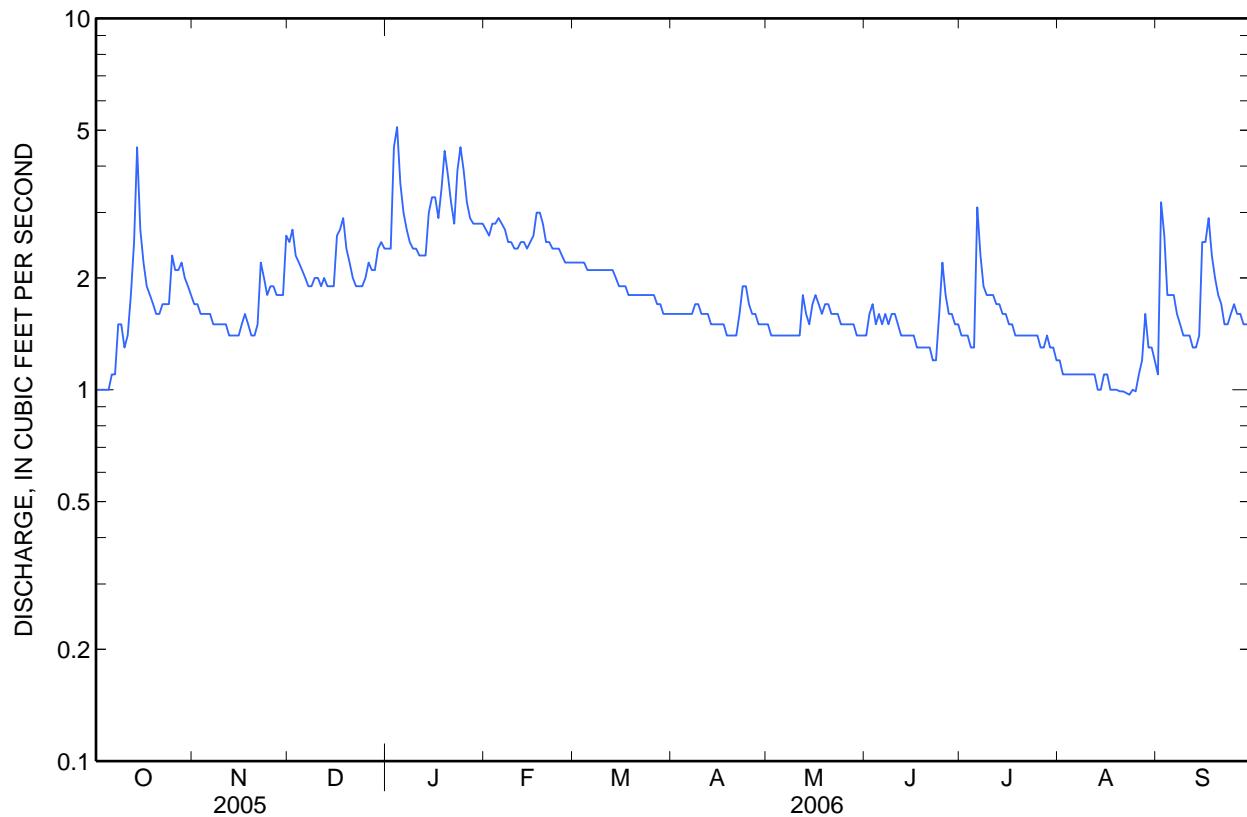
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1.0	1.7	2.5	2.4	2.7	2.2	1.6	1.5	1.4	1.4	1.2	1.1
2	1.0	1.7	2.7	2.4	2.6	2.2	1.6	1.4	1.6	1.4	1.1	3.2
3	1.0	1.6	2.3	4.5	2.8	2.2	1.6	1.4	1.7	1.4	1.1	2.6
4	1.0	1.6	2.2	5.1	2.8	2.2	1.6	1.4	1.5	1.3	1.1	1.8
5	1.0	1.6	2.1	3.6	2.9	2.1	1.6	1.4	1.6	1.3	1.1	1.8
6	1.1	1.6	2.0	3.0	2.8	2.1	1.6	1.4	1.5	3.1	1.1	1.8
7	1.1	1.5	1.9	2.7	2.7	2.1	1.6	1.4	1.6	2.3	1.1	1.6
8	1.5	1.5	1.9	2.5	2.5	2.1	1.7	1.4	1.5	1.9	1.1	1.5
9	1.5	1.5	2.0	2.4	2.5	2.1	1.7	1.4	1.6	1.8	1.1	1.4
10	1.3	1.5	2.0	2.4	2.4	2.1	1.6	1.4	1.6	1.8	1.1	1.4
11	1.4	1.5	1.9	2.3	2.4	2.1	1.6	1.4	1.5	1.8	1.1	1.4
12	1.8	1.4	2.0	2.3	2.5	2.1	1.6	1.8	1.4	1.7	1.1	1.3
13	2.5	1.4	1.9	2.3	2.5	2.1	1.5	1.6	1.4	1.7	1.0	1.3
14	4.5	1.4	1.9	3.0	2.4	2.0	1.5	1.5	1.4	1.6	1.0	1.4
15	2.7	1.4	1.9	3.3	2.5	1.9	1.5	1.7	1.4	1.6	1.1	2.5
16	2.2	1.5	2.6	3.3	2.6	1.9	1.5	1.8	1.4	1.5	1.1	2.5
17	1.9	1.6	2.7	2.9	3.0	1.9	1.5	1.7	1.3	1.5	1.0	2.9
18	1.8	1.5	2.9	3.5	3.0	1.8	1.4	1.6	1.3	1.4	1.0	2.3
19	1.7	1.4	2.4	4.4	2.8	1.8	1.4	1.7	1.3	1.4	1.0	2.0
20	1.6	1.4	2.2	3.8	2.5	1.8	1.4	1.7	1.3	1.4	0.99	1.8
21	1.6	1.5	2.0	3.2	2.5	1.8	1.4	1.6	1.3	1.4	0.99	1.7
22	1.7	2.2	1.9	2.8	2.4	1.8	1.6	1.6	1.2	1.4	0.98	e1.5
23	1.7	2.0	1.9	3.9	2.4	1.8	1.9	1.6	1.2	1.4	0.97	e1.5
24	1.7	1.8	1.9	4.5	2.4	1.8	1.9	1.5	1.6	1.4	1.0	e1.6
25	2.3	1.9	2.0	3.9	2.3	1.8	1.7	1.5	2.2	1.4	0.99	e1.7
26	2.1	1.9	2.2	3.2	2.2	1.8	1.6	1.5	1.8	1.3	1.1	1.6
27	2.1	1.8	2.1	2.9	2.2	1.7	1.6	1.5	1.6	1.3	1.2	1.6
28	2.2	1.8	2.1	2.8	2.2	1.7	1.5	1.5	1.6	1.4	1.6	1.5
29	2.0	1.8	2.4	2.8	---	1.6	1.5	1.4	1.5	1.3	1.3	1.5
30	1.9	2.6	2.5	2.8	---	1.6	1.5	1.4	1.5	1.3	1.3	1.5
31	1.8	---	2.4	2.8	---	1.6	---	1.4	---	1.2	1.2	---
Total	54.70	49.6	67.4	97.7	71.5	59.8	47.3	47.1	44.8	48.1	34.12	53.3
Mean	1.76	1.65	2.17	3.15	2.55	1.93	1.58	1.52	1.49	1.55	1.10	1.78
Max	4.5	2.6	2.9	5.1	3.0	2.2	1.9	1.8	2.2	3.1	1.6	3.2
Min	1.0	1.4	1.9	2.3	2.2	1.6	1.4	1.4	1.2	1.2	0.97	1.1
Cfsm	0.75	0.70	0.93	1.34	1.09	0.82	0.67	0.65	0.64	0.66	0.47	0.76
In.	0.87	0.79	1.07	1.55	1.13	0.95	0.75	0.75	0.71	0.76	0.54	0.84

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2006, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1.54	1.68	2.04	2.26	2.39	2.84	2.86	2.57	2.13	1.83	1.76	1.61
Max	4.45	4.82	5.75	4.78	5.69	5.67	5.74	6.86	5.35	4.15	5.65	4.31
(WY)	(1959)	(1973)	(1973)	(1973)	(1973)	(1979)	(1984)	(1998)	(1979)	(1958)	(1958)	(1958)
Min	0.80	0.88	0.87	0.85	0.83	0.94	1.10	1.17	1.05	0.90	0.80	0.71
(WY)	(1996)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(1995)	(1995)	(2002)	(2002)	(1995)

01466500 MCDONALDS BRANCH IN BYRNE STATE FOREST, NJ—Continued**SUMMARY STATISTICS**

	Calendar Year 2005	Water Year 2006	Water Years 1954 - 2006	
Annual total	786.00	675.42		
Annual mean	2.15	1.85	2.12	
Highest annual mean			3.85	1973
Lowest annual mean			0.95	2002
Highest daily mean	5.8	Apr 3	5.1	Jan 4
Lowest daily mean	1.0	Sep 22	0.97	Aug 23
Annual seven-day minimum	1.0	Sep 22	0.99	Aug 19
Maximum peak flow			6.0	Jan 4
Maximum peak stage			1.63	Jan 4
Instantaneous low flow			0.93	Aug 22, 23
Annual runoff (cfsm)	0.916	0.787	0.904	
Annual runoff (inches)	12.44	10.69	12.28	
10 percent exceeds	3.1	2.7	3.5	
50 percent exceeds	2.1	1.6	1.8	
90 percent exceeds	1.2	1.2	1.1	



01466500 MCDONALDS BRANCH IN BYRNE STATE FOREST, NJ—Continued**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 1963-96, 1998 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1968 to September 1992.

pH: October 1984 to September 1992.

WATER TEMPERATURE: October 1960 to September 1992.

DISSOLVED OXYGEN: October 1984 to September 1992.

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). Bacteria samples were collected synoptically over a 30-day period during the summer. Chemical analyses are from samples collected as water flows over the weir at the gaging station. All discharge record represents flow at a point 785 ft downstream of the gaging station. Discharges at the weir may be about 1 ft³/s less than the discharge values in the following water-quality table. Samples on Sep. 28, Nov. 1, and Dec. 20, 2005, and Feb. 8, May 3, 10, 17, 24, 31, June 12 (at 1030), and Aug. 28 (at 1015), 2006 were collected as part of the Ambient Surface-Water-Quality Monitoring Network; those on Sep. 28 and Dec. 20, 2005 were for the low-level mercury assessment. All other samples were collected as part of the U.S. Geological Survey Hydrologic Benchmark Network.

COOPERATIVE NETWORK SITE DESCRIPTOR: Background and Low-Level Mercury Assessment special study site, New Jersey Department of Environmental Protection (NJDEP) Watershed Management Area 19.

COOPERATION.--Physical measurements and samples for laboratory analyses on Nov. 1, and Dec. 20, 2005, and Feb. 8, June 12 (at 1030), and Aug. 28 (at 1015), 2006 were provided by personnel of the NJDEP. Bacteria samples (May 3, 10, 17, 24, and 31) were provided by the local county health department under the direction of the NJDEP through the County Environmental Health Act. Determinations of filtered ammonia, filtered orthophosphorus, BOD, total suspended residue, fecal coliform, E. coli, and enterococcus bacteria on those dates were performed by the NJ Department of Health and Senior Services. Analyses of samples collected as part of the Hydrologic Benchmark Network were performed by the USGS New York Water Science Center Laboratory in Troy, New York.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005**
[Remark codes: <, less than.]

Date	Time	Sample type	Turbdty white light, det ang 90+/-30 corrctd	Baro- metric pres- sure,	Dis- solved oxygen, oxygen, of sat-	Dis- solved oxygen, percent of sat-	pH, water, unfltrd field, std	Specif. conduct- tance, wat unf uS/cm	Mercury water, fltrd, Low level
		NTRU (63676)	mm Hg (00025)	mg/L (00300)	saturation (00301)	units (00400)	25 degC (00095)	deg C (00020)	deg C (00010) (50287)
Sep									
28...	0900	Field Blank	--	--	--	--	--	--	<.04
28...	0930	Environmental	.3	765	4.0	38	4.3	23	14.0
									13.3
									1.12

01466500 MCDONALDS BRANCH IN BYRNE STATE FOREST, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 1 of 5

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

Date	Time	Sample type	Turbdty white light, det ang 90+/-30 corctd cfs (00061)	UV absorb- ance, 254 nm, wat flt units	UV absorb- ance, 280 nm, wat flt units	Baro- metric pressure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)	
Nov 01...	1000	Environmental	1.8	.3	.228	.168	762	3.4	30	4.1	56	12.5
Dec 20...	0930	<i>Field Blank</i>	--	--	--	--	--	--	--	--	--	--
20...	1000	Environmental	--	.9	--	--	764	10.5	77	4.2	88	4.0
Feb 08...	1015	Environmental	2.5	.4	.440	.328	762	6.5	50	4.0	63	-4.0
Jun 12...	1030	Environmental	1.4	.3	.231	.177	757	6.1	59	4.2	43	17.0
Aug 28...	1015	Environmental	1.8	.6	.381	.286	755	2.4	25	4.1	43	19.5

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 2 of 5

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

Date	Temperature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO ₃ (00900)	Calcium water, mg/L (00915)	Magnes- ium, water, mg/L (00925)	Potas- sium, water, mg/L (00935)	Sodium, water, mg/L (00930)	Chlor- ide, water, mg/L (00940)	Fluor- ide, water, mg/L (00950)	Silica, water, mg/L (00955)	Sulfate water, mg/L (00945)	Residue on evap.	Residue total at 105 deg. C, sus- pended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
											180degC (70300)		
Nov 01...	9.7	5	.72	.727	.30	2.48	3.70	<.10	4.6	9.23	29	1	.15
Dec 20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	2.5	--	--	--	--	--	--	--	--	--	--	--	--
Feb 08...	4.7	4	.64	.491	.27	2.03	3.34	E.06	3.2	7.47	33	<1	.26
Jun 12...	13.4	3	.40	.387	.22	1.90	3.38	<.10	3.5	4.67	24	1	.19
Aug 28...	16.8	4	.55	.559	.27	2.15	3.63	<.10	4.4	5.22	33	<1	.27

01466500 MCDONALDS BRANCH IN BYRNE STATE FOREST, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 3 of 5

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

Date	Ammonia water, filtrd, mg/L as N (00608)	Nitrite + nitrate water, filtrd, mg/L as N (00631)	Particulate nitrogen, susp, water, mg/L (49570)	Ortho-phosphate, water, filtrd, mg/L as P (00671)	Phosphorus, water, filtrd, mg/L (00666)	Phosphorus, water, unfltrd, mg/L (00665)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, filtrd, mg/L (00681)	BOD, 5 day, 20 degC (00310)	water, unfltrd, mg/L (00310)	Alum-inum, water, filtrd, ug/L (01106)	Arsenic water, filtrd, ug/L (01000)
Nov 01...	<.010	<.06	<.02	E.004	E.003	<.004	<.1	<.1	<.1	5.8	E1.0	149	--	
Dec 20...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Feb 08...	.015	<.06	<.02	E.004	<.004	E.003	.1	<.1	.1	8.6	<1.0	--	.27	
Jun 12...	.015	<.06	.03	E.009	<.004	<.004	.3	<.1	.3	6.3	--	--	--	
Aug 28...	.019	<.06	.03	.026	E.002	.005	.3	<.1	.3	9.9	--	--	.22	

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 4 of 5

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

Date	Arsenic water, unfltrd ug/L (01002)	Barium, water, unfltrd recover -able, ug/L (01007)	Beryllium, water, unfltrd recover -able, ug/L (01012)	Boron, water, unfltrd recover -able, ug/L (01020)	Boron, water, filtrd, ug/L (01022)	Cadmium water, unfltrd recover -able, ug/L (01027)	Chromium, water, unfltrd recover -able, ug/L (01034)	Copper, water, unfltrd recover -able, ug/L (01042)	Iron, water, unfltrd recover -able, ug/L (01046)	Lead, water, unfltrd recover -able, ug/L (01045)	Manganese, water, unfltrd recover -able, ug/L (01051)	Mercury water, filtrd, ug/L (50287)	
Nov 01...	--	--	--	10	--	--	--	155	--	--	--	--	
Dec 20...	--	--	--	--	--	--	--	--	--	--	--	<.04	
20...	--	--	--	--	--	--	--	--	--	--	--	1.40	
Feb 08...	.37	14.4	.07	8.4	11	.05	.44	1.0	--	214	1.20	15.7	--
Jun 12...	--	--	--	8.5	--	--	--	--	--	--	--	--	
Aug 28...	.34	17.7	<.06	12	10	.04	.20	E.5	--	313	.96	10.3	--

01466500 MCDONALDS BRANCH IN BYRNE STATE FOREST, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 5 of 5

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

Date	Mercury ug/L (71900)	Nickel, water, unfltrd recover -able, ug/L (01067)	Selen- ium, recover -able, ug/L (01147)	Silver, water, unfltrd recover -able, ug/L (01077)	Zinc, water, unfltrd recover -able, ug/L (01092)
Nov 01...	--	--	--	--	--
Dec 20...	--	--	--	--	--
20...	--	--	--	--	--
Feb 08...	<.010	.65	.13	<.16	12
Jun 12...	--	--	--	--	--
Aug 28...	<.010	.62	.12	<.16	6

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 1 of 5

[Remark codes: <, less than.]

Date	Time	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-DB, water, fltrd, ug/L (39732)	CIAT, water, fltrd, 0.7u GF ug/L (38746)	CEAT, water, fltrd, ug/L (04040)	OIET, water, fltrd, ug/L (04038)	3-Hydroxy carbo- furan, wat flt 0.7u GF ug/L (50355)	Aci- fluor- fen, water, fltrd 0.7u GF ug/L (49308)	Aldi- carb sulfone, water, fltrd 0.7u GF ug/L (49315)	Aldi- carb oxide, wat flt 0.7u GF ug/L (49313)	Aldi- carb sulf- oxide, wat flt 0.7u GF ug/L (49314)	Aldi- carb, water, fltrd, 0.7u GF ug/L (49312)	Atra- zine, water, fltrd, ug/L (39632)
Jun 12...	1030	<.190	<.04	<.02	<.03	<.08	<.032	<.008	<.028	<.02	<.100	<.15	<.008

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 2 of 5

[Remark codes: <, less than.]

Date	Bendio- carb, water, fltrd, ug/L (50299)	Benomyl water, fltrd, ug/L (50300)	Bensul- furon- methyl, water, fltrd, 0.7u GF ug/L (61693)	Ben- tazon, water, fltrd, 0.7u GF ug/L (38711)	Bromo- cil, water, fltrd, 0.7u GF ug/L (04029)	Brom- oxynil, water, fltrd, 0.7u GF ug/L (49311)	Caf- feine, water, fltrd, 0.7u GF ug/L (50305)	Car- baryl, water, fltrd, 0.7u GF ug/L (49310)	Carbo- furan, water, fltrd, 0.7u GF ug/L (49309)	Chlor- aben, water, fltrd, 0.7u GF ug/L (61188)	Chloro- di- amino- s-tri- azine, water, fltrd, 0.7u GF ug/L (50306)	Clopyr- alid, water, fltrd, 0.7u GF ug/L (04039)	
Jun 12...	<.08	<.022	<.02	<.02	<.02	<.04	<.018	<.02	<.016	<.02	<.032	<.04	<.07

01466500 MCDONALDS BRANCH IN BYRNE STATE FOREST, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 3 of 5

[Remark codes: <, less than.]

Date	Dacthal		Di-chlor-						Fluo-				
	mono-	water,	Dicamba	prop,	Dinoseb	Diphen-	Diuron,	Fenuron	Flumet-	meturon	Imaza-	Imaze-	
	Cyclo-	acid, water,	water,	water,	amid, water,	water,	water,	water,	sulam,	water,	quin,	thapyr,	
	ate,	filtrd	filtrd	filtrd	filtrd	filtrd	filtrd	filtrd	filtrd	filtrd	filtrd,	filtrd,	
	water,	0.7u GF	0.7u GF	0.7u GF	0.7u GF	0.7u GF	0.7u GF	0.7u GF	0.7u GF	0.7u GF	water,	water,	
Date	ug/L	(04031)	(49304)	ug/L	(38442)	ug/L	(49302)	ug/L	(49301)	ug/L	(40433)	ug/L	
Jun													
12...	<.01	<.03	<.04	<.03	<.04	<.01	<.02	<.10	<.02	<.04	<.02	<.04	<.020

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 4 of 5

[Remark codes: <, less than.]

Date									N-(4-				
	Linuron	MCPA,	MCPB,	Meta-	Methio-	Meth-	Metsul-	Chloro-	Nico-	Norflur	Ory-	Zalin,	
	water,	water,	water,	laxyl,	carb,	omyl,	furon,	-N'	neburon	sul-	azon,	water,	
	filtrd	filtrd	filtrd	water,	filtrd	filtrd	water,	methyl-	water,	water,	filtrd,	filtrd,	
	0.7u GF	0.7u GF	0.7u GF	filtrd,	0.7u GF	0.7u GF	filtrd,	urea,	0.7u GF	filtrd,	0.7u GF	0.7u GF	
Date	ug/L												
	(38478)	(38482)	(38487)	(50359)	(38501)	(38501)	(49296)	(61697)	(61692)	(49294)	(50364)	(49293)	
Jun													
12...	<.01	<.07	<.10	<.03	<.034	<.070	<.07	<.04	<.01	<.04	<.02	<.02	<.05

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 5 of 5

[Remark codes: <, less than.]

Date	Pic-		Propi-		Pro-		Sulfo-		Tebu-		Tri-		
	Pic-	loram,	Propham	con-	poxur,	Siduron	met-	ruron,	thiuron	Terba-	cil,	water,	clopyr,
	water,	water,	water,	zole,	water,	filtrd	water,	water,	water,	filtrd	water,	filtrd	
	filtrd	filtrd	filtrd	water,	filtrd	0.7u GF	filtrd,	filtrd,	0.7u GF	filtrd,	water,	filtrd	
	0.7u GF	0.7u GF	0.7u GF	ug/L	ug/L	0.7u GF							
Date	ug/L	ug/L	ug/L	(50471)	(38538)	(38538)	(38548)	(50337)	(82670)	(04032)	(49235)		
Jun													
12...	<.03	<.030	<.01	<.008	<.02	<.090	<.026	<.026	<.026	<.03			

01466500 MCDONALDS BRANCH IN BYRNE STATE FOREST, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
[Remark codes: <, less than.]

Date	Time	Instan- taneous dis- charge, (00061)	Temper- ature, water, (00010)	Enter- coccii,		E coli, m-TEC MF, water, col/ (31649)	Fecal coli- form, ECbroth MF, water, col/ (31633)	MPN/ 100 mL (31615)
				m-E	MF,			
May								
03...	0950		1.4	12.4	<10	<10	<20	
10...	0935		1.4	11.8	<10	<10	<20	
17...	0945		1.7	12.4	10	10	<20	
24...	1000		1.6	12.0	<10	<10	<20	
31...	0940		1.4	14.1	<10	<10	<20	

01466500 MCDONALDS BRANCH IN BYRNE STATE FOREST, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 1 of 2
 [Remark codes: <, less than.]

Date	Time	Instantaneous discharge, cfs (00061)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO ₃ (00900)	Calcium water, mg/L (00915)	Magnesium water, mg/L (00925)	Potassium water, mg/L (00935)	Sodium water, mg/L (00930)	ANC, water, unfltrd Gran titr., ueq/L (00409)	Chloride, water, fltrd, mg/L (00940)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, unfltrd mg/L as N (00610)
Oct													
06...	1353	1.0	--	4	1.06	.35	.33	1.74	7	3.5	2.06	2.9	--
08...	0643	1.3	--	4	.82	.37	.31	1.88	-5	3.7	2.21	3.1	<.028
08...	1958	2.0	--	4	.87	.53	.39	2.16	-43	4.5	2.09	4.2	<.028
09...	2153	1.3	--	4	.60	.50	.34	2.22	-36	4.9	2.18	4.3	<.028
14...	1915	3.7	15.2	4	.63	.54	.47	2.14	-92	4.3	1.64	5.2	.076
14...	1930	3.7	15.9	4	.78	.47	.54	2.07	-139	4.1	1.57	6.9	.084
14...	1955	3.5	15.9	4	.69	.56	.55	2.22	-134	4.1	1.78	7.6	.103
Nov													
25...	2155	2.0	8.9	5	.74	.67	.27	2.23	-87	3.8	1.80	8.3	.034
Dec													
19...	0845	2.5	2.2	5	.82	.68	.25	2.10	-83	4.2	1.64	9.0	<.028
Jan													
04...	0755	5.4	4.0	4	.81	.51	.22	1.90	-136	3.6	1.31	8.8	.047
19...	2330	4.3	4.1	4	.76	.48	.18	1.92	-129	4.0	1.25	7.6	.071
Feb													
03...	0810	2.9	6.1	3	.61	.41	.16	1.83	-70	3.8	1.45	6.4	.034
Mar													
16...	0945	1.9	6.8	3	.59	.40	.22	1.83	-85	3.7	1.51	6.1	.042
Apr													
26...	0915	1.6	10.7	4	.61	.49	.20	1.97	-70	3.5	1.39	5.4	<.028
May													
12...	0050	1.7	--	3	.58	.40	.25	1.81	-20	3.1	1.77	3.5	.384
Jun													
02...	2255	1.6	--	3	.45	.36	.27	1.81	-31	3.4	1.73	3.4	.161
12...	0815	1.4	13.4	3	.57	.41	.25	1.82	-8	3.2	1.60	3.5	<.028
24...	1815	1.4	15.5	3	.55	.36	.34	1.68	-23	3.2	1.89	3.0	.284
Jul													
06...	0135	1.4	16.4	3	.54	.36	.30	1.67	-31	3.3	1.73	2.9	.151
06...	0205	1.4	16.9	3	.52	.35	.26	1.56	-46	2.9	1.45	2.6	.119
07...	1855	2.0	17.2	3	.61	.41	.22	1.81	-76	3.4	1.43	3.5	.125
Aug													
27...	1850	1.2	16.1	4	.75	.41	.26	1.92	2	3.6	2.34	3.0	.094
28...	0320	1.4	16.2	4	.91	.43	.29	1.94	-5	3.5	2.35	3.2	.138
28...	0350	1.4	16.3	4	.81	.45	.30	1.89	-8	3.4	2.17	3.4	.100
29...	0250	1.3	16.5	4	.86	.50	.30	2.12	-25	3.9	2.24	4.0	.121
31...	0800	1.2	16.0	3	.49	.45	.27	2.00	-43	3.8	2.20	3.6	.030

01466500 MCDONALDS BRANCH IN BYRNE STATE FOREST, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 2 of 2
 [Remark codes: <, less than.]

Date	Nitrate water, fltrd, mg/L as N (00618)	Organic carbon, water, fltrd, mg/L (00681)	Alum-inum, water, fltrd, ug/L (01106)	Organic monomer alum-inum, wat unf ug/L (49288)
Oct				
06...	.04	4.3	63	<40
08...	<.03	3.9	117	<40
08...	<.03	8.7	232	58
09...	<.03	6.7	127	53
14...	<.03	18.7	263	129
14...	<.03	20.4	342	160
14...	<.03	20.1	319	144
Nov				
25...	<.03	10.3	232	90
Dec				
19...	<.03	8.0	282	90
Jan				
04...	<.03	14.8	341	158
19...	<.03	7.6	342	153
Feb				
03...	<.03	10.6	284	118
Mar				
16...	<.03	6.1	243	96
Apr				
26...	<.03	1.6	169	70
May				
12...	.06	9.1	151	<40
Jun				
02...	<.03	7.3	128	<40
12...	<.03	4.7	161	<40
24...	.04	5.6	99	<40
Jul				
06...	<.03	6.1	120	45
06...	<.03	9.3	149	62
07...	<.03	15.5	291	124
Aug				
27...	<.03	4.8	93	<40
28...	<.03	5.7	102	<40
28...	<.03	6.8	111	<40
29...	<.03	8.0	155	56
31...	<.03	6.2	131	<40