

CRANCR01

LOCATION: Approximately 75 yards upstream of Browns Hill Road.

Latitude 41° 06' 03.80"

Longitude -75° 14' 58.60"

FIELD CHEMISTRY:

SITE ID	SAMPLE DATE	TEMP C	SpC mScm	DO mg/l	pH su	ORP mV	DO % sat.	COND mS/cm	TDS mg/l
CRANCR01	4/4/03	6.30	79	13.97	7.06	290	113.10	51	52
CRANCR01	5/2/03	13.43	84	9.99	7.46	192	95.80	65	54
CRANCR01	6/11/03	12.99	77	10.41	7.83	165	98.80	60	50
CRANCR01	7/9/03	18.30	94	9.30	7.38	191	98.90	82	61
CRANCR01	8/20/03	17.71	98	9.80	7.55	311	102.90	85	64
CRANCR01	9/10/03	14.23	99	9.02	7.71	319	88.00	79	65
CRANCR01	10/29/03	10.48	94	11.56	7.63	354	103.60	68	61
CRANCR01	11/22/03	7.64	63	11.80	7.46	294	98.80	42	41
CRANCR01	12/13/03	3.20	55	13.55	8.09	293	101.20	32	36
CRANCR01	1/24/04	0.01	56	12.65	8.41	186	86.60	29	36
CRANCR01	2/21/04	2.21	83	12.86	8.45	269	93.50	47	54
CRANCR01	3/27/04	8.09	85	12.24	7.74	289	103.60	57	55
wshed min.		0.01	29	5.42	5.47	46	57.70	1	19
wshed max.		26.25	548	14.37	8.99	561	113.10	388	356
wshed avg.		10.04	146	10.97	7.50	304	96.14	104	95

Temperatures that exceed Specific Water Quality Criteria in Chapter 93 of Title 25 of the PA Code are shown in red. SpC is specific conductance. DO is dissolved oxygen. ORP is oxidation reduction potential. COND is conductivity. TDS is total dissolved solids. Refer to Sampling and Analysis Plan under Phase I study results for quality assurance/quality control information.

LABORATORY DATA:

SITE ID	SAMPLE DATE	pH	NITRATE	NITRITE	TOTAL SUPSENDED	TOTAL PHOSPHORUS	FECAL COLIFORM
		su	mg/l	mg/l	SOLIDS mg/l	mg/l	CFU/100ml
CRANCR01	4/4/03	3.62	<0.1	<0.005	<1.0	0.1	0
CRANCR01	5/2/03	6.76	<0.1	<0.005	1.0	0.9	8
CRANCR01	6/11/03	6.48	<0.1	<0.005	1.9	0.09	8
CRANCR01	7/9/03	7.30	<0.1	0.01	<1.0	0.12	7
CRANCR01	8/20/03	6.94	0.43	0.01	<1.0	0.11	9
CRANCR01	10/29/03	6.48	<0.10	0.008	<1.0	0.14	350
CRANCR01	11/22/03	6.78	0.76	0.02	<1.0	0.07	125
CRANCR01	12/13/03	6.52	0.26	0.02	2.0	0.08	10
CRANCR01	1/24/04	6.31	<0.1	0.01	2.0	0.06	1
CRANCR01	2/21/04	6.12	0.24	0.04	<1.0	0.02	13
CRANCR01	3/27/04	6.35	0.12	<0.01	<1.0	<0.02	0
CRANCR01	9/10/03	6.70	0.35	0.005	1.0	0.16	1
Wshed min		5.47	0.10	0.005	1.0	0.01	0
Wshed max		8.19	1.51	0.050	13.0	0.90	5700
Wshed avg		6.85	0.50	0.019	2.7	0.11	

If the number of sample results where the analytical parameter was not detected exceeded 20% of the sample pool, they were not included in the calculated watershed average. If the number of non-detect samples was less than 20% of the sample pool, ½ of the detection limit was used to represent those samples in the calculated watershed average. Refer to Sampling and Analysis Plan under Phase I of study results for quality assurance/quality control information.

BENTHIC MACROINVERTEBRATES:

The following table compares trending results of the EPA/County scoring schemes for repeat sites (1995 through 2004).

Site #	Site Name	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995
PARACR03	Paradise Creek	33	31								31
BUTZRU01	Butz Run	29	23								
CRANCR01*	Cranberry Creek (Paradise)	29									
PARACR04	Paradise Creek	33	31								
DEHOCR04	Devils Hole Creek	31	31								
CRANCR03	Cranberry Creek (Paradise)	21	23								
SWIFCR06	Swiftwater Creek	21	23								
SWIFCR02	Swiftwater Creek	25	27								
FOHIRU01	Forest Hills Run	29	25								
PARACR01	Paradise Creek	29	29								
FOHIRU04	Forest Hills Run	25	19	25	29	25	27	27	23	31	
FOHIRU09	Forest Hills Run	15	17								
SWIFCR07	Swiftwater Creek	29	25	29	33						
SWIFCR05	Swiftwater Creek	33	23	25	29	27	25	29	21	25	19
SWIFCR03	Swiftwater Creek	29	29	25	29	29	17	27	19	27	23

The range 35 - 29 is considered optimal. The range 28 - 14 is the slightly to moderately impaired category, and any site with a total score of less than 14 is considered severely impaired.

* CRANCR01 is equivalent to CRCRPA01 in the Monroe County Water Quality Study in 2004

HABITAT ANALYSIS 2004

CRANCR01 192 Optimal 30 - 50% mix of boulder, cobble, or other stable habitat.
 Banks stable; no evidence of erosion or bank failure.
 Width of riparian zone 12-18 meters.

MACROINVERTEBRATE IDENTIFICATONS

2004 MONROE COUNTY WATER QUALITY STUDY

SITE ID: CRANCR01 (CRCRPA01)

Insecta		Philopotamidae	3	Simuliidae	
Ephemeroptera		Polycentropodidae	12	Tabanidae	
Baetidae	25	Psychomyiidae		Dixidae	
Baetiscidae		Beraeidae		Collembola	
Caenidae		Brachycentridae	1	Poduridae	
Ephemerellidae	2	Lepidostomatidae		Nemertea	
Ephemeridae		Helicopsychidae		Nematoda	
Heptageniidae	11	Leptoceridae	2	Nematomorpha	
Leptophlebiidae	7	Limnephilidae		Annelida	
Metretopodidae		Molannidae		Hirudinea	
Neophemeridae		Odontoceridae	1	Oligochaeta	
Oligoneuriidae	12	Phryganeidae		Lumbriculida	
Polymitarcyidae		Sericostomatidae		Lumbriculidae	1
Potamanthidae		Uenoidae	2	Tubificida	
Siphonuridae	8	Glossosomatidae		Platyhelminthes	
Tricorythidae		Hydroptilidae	4	Turbellaria	
Odonata		Rhyacophilidae		Planariidae	
Aeshnidae		Lepidoptera		Mollusca	
Cordulegastridae		Pyrilidae		Bivalva	
Corduliidae		Coleoptera		Unionidae	
Gomphidae	3	Dytiscidae		Sphaeriidae	
Libellulidae		Gyrinidae		Cyrenidae	
Macromiidae		Haliplidae		Corbiculidae	
Calopterygidae		Noteridae		Gastropoda	
Coenagrionidae		Elmidae	6	Ancylidae	3
Lestidae		Hydraenidae		Physidae	
Plecoptera		Hydrophilidae		Planorbidae	
Capniidae		Limnichidae		Bulimidae	
Chloroperlidae	5	Psephenidae	31	Limnaeidae	
Leuctridae	14	Ptilodactylidae		Crustacea	
Nemouridae		Megaloptera		Amphipoda	
Peltoperlidae		Corydalidae	9	Gammaridae	
Perlidae	18	Sialidae		Talitridae	
Perlodidae	19	Neuroptera		Isopoda	
Pteronarcyidae	2	Sisyridae		Asellidae	
Taeniopterygidae		Diptera		Decapoda	
Hemiptera		Ephydriidae		Cambaridae	
Belostomatidae		Athericidae		Arachnidia	
Corixidae		Tipulidae	1	Acari	
Gerridae		Empididae		Hydrachnidia	
Mesoveliidae		Blephariceridae			
Notonectidae		Ceratopogonidae			
Saldidae		Chaoboridae			
Veliidae		Chironomidae	69		
Trichoptera		Culicidae			
Hydropsychidae	40	Muscidae			