

APPENDIX

TEST RESULTS - WATER SAMPLES STATION NO. 18

Located at Pennsylvania Department of Highways Bridge approximately 500 ft. upstream from junction of Chalfant Run with Thompson Run.

<u>Date</u>	<u>pH</u>	<u>Acidity</u> <u>as mg/LCaCO₃</u>	<u>Alkalinity</u> <u>as mg/LCaCO₃</u>	<u>Iron</u> <u>p.p.m.</u>	<u>Sulfate</u> <u>p.p.m.</u>	<u>Alum.</u> <u>mg/L</u>	<u>Flow</u> <u>m.g.d.</u>
4-23-74	4.3	26	0	1.1	225	7.5	
7-14-71	6.5	10	10.0	1.66	280		
4-9-71	4.9	111	8.0	3.60	325		
3-22-71	5.2	98	13.0	2.40	640		
1-22-71	5.3	62	6.0	0.2	340		
11-20-70	6.8	11	10.0	.02	420		
10-16-70	7.5	7.0	48	.06	265		

STATION NO. 2SF

Located on Chalfant Run approx. 1500 ft. upstream from its intersection with Thompson Run.

STATION NO. 3-S

4-23-74	4.8	12	4	0	280	5.5	
11-14-72	5.7	26	59	2.76	132		
9-14-72	6.5	9.0	16	0.34	306		5.8
9-11-72	5.0	48	3.0	1.40	460		4.67

STATION NO. 3S

This station is located on a small tributary opposite Station No. 5S, which is located on the main branch of Chalfant Run..

4-23-74	4.5	24	0	1.9	225	7.7	
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<u>Date</u>	<u>pH</u>	<u>Acidity</u> <u>as mg/LCaCO₃</u>	<u>Alkalinity</u> <u>as mg/LCaCO₃</u>	<u>Iron</u> <u>p.p.m.</u>	<u>Sulfate</u> <u>p.p.m.</u>	<u>Alum.</u> <u>mg/L</u>	<u>Flow</u> <u>m.g.d.</u>
4-23-74	5.9	10.0	122	.9	150	.8	
7-14-71	7.1	7.0	63.0	0.69	225		
4-9-71	6.6	18	11.0	1.20	480		
3-22-71	6.4	92	19.0	1.84	640		
1-22-71	7.1	5.0	45	5.0	470		
11-20-70	7.6	3.0	49	.08	165		
10-16-70	7.7	3.0	66	.16	105		

STATION NO. 5S

Located on Chalfant Run at Rodi Road.

4-23-74	5.1	10	8	1.7	380	6.9	
7-14-71	4.5	38	0	1.92	275		
4-9-71	5.0	101	6.0	0.78	400		
3-22-71	5.5	117	28.0	1.73	650		
1-22-71	5.3	53	14	1.3	380		
11-20-70	5.7	17	5.0	1.0	470		
10-16-70	7.4	7.0	29	.82	395		

STATION 6SF

Located along an unnamed stream parallel to Lougeay Road and being approximately 15 ft. upstream from the intersection of Lougeay Road with old Rodi Road.

<u>Date</u>	<u>pH</u>	<u>Acidity</u> <u>as mg/LCaCO₃</u>	<u>Alkalinity</u> <u>as mg/LCaCO₃</u>	<u>Iron</u> <u>p.p.m.</u>	<u>Sulfate</u> <u>p.p.m.</u>	<u>Alum.</u> <u>mg/L</u>	<u>Flow</u> <u>m.g.d.</u>
4-23-74	6.0	12	108	.2	275	.5	
11-14-72	6.9	0	85	0.29	186		
7-14-71	7.5	3.0	52.0	0.50	275		
4-9-71	7.8	6.0	25.0	0.65	315		.442
3-22-71	6.5	14	14.0	0.60	570		.641
1-22-71	7.7	5.0	58	1.0	290		
11-20-70	8.0	1.0	92	.10	330		
10-16-70	7.9	2.0	90	.12	395		

STATION 7S

Located on a tributary along Lougeay Road, being upstream 2500 ft. from the intersection of Lougeay Road and the old Rodi Road. Discharge D-1.

4-23-74	6.0	10	72	.6	275	2.8	
7-14-71	6.9	12	31.0	1.53	255		
4-9-71	5.2	41	9.0	1.03	880		
3-22-71	5.4	55	18.0	1.60	620		
1-22-71	7.2	6.0	50	0.40	455		
11-20-70	7.9	3.0	75	.02	500		
10-16-70	8.1	1.0	71	.08	455		

STATION NO. 9S

Located along Chalfant Run at Rodi Road.

<u>Date</u>	<u>pH</u>	<u>Acidity</u> <u>as mg/LCaCO₃</u>	<u>Alkalinity</u> <u>as mg/LCaCO₃</u>	<u>Iron</u> <u>p.p.m.</u>	<u>Sulfate</u> <u>p.p.m.</u>	<u>Alum.</u> <u>mg/L</u>	<u>Flow</u> <u>m.g.d.</u>
4-23-74	5.0	40	8	2.8	225	7.1	
7-14-71	4.5	38	0	2.22	295		
4-9-71	4.8	116	9.0	0.63	340		
3-22-71	5.0	130	10.0	1.89	620		
1-22-71	5.4	75	10	.2	305		
11-20-70	6.9	9.0	12	.20	480		
10-16-70	6.6	9.0	23	.94	320		

STATION NO. 10S

This station located in relation with Station 11S, top of the waterfall, which is located southwesterly from the stream.

4-23-74	2.8	400	0	16.2	400	20.6	
7-14-71	3.0	359	0	39.5	830		
4-9-71	3.6	500	0	40.8	1180		
3-22-71	3.6	568	0	113	1850		
1-22-71	3.5	453	0	30.7	770		
11-20-70	5.0	61	6.0	.30	520		
10-16-70	3.4	371	0	20.4	860		

STATION NO. 11S

Located southwesterly 300 ft. of Merrie Woode Drive and William Penn Highway, small pipe discharging. Discharge D-2.

<u>Date</u>	<u>pH</u>	<u>Acidity</u> <u>as mg/LCaCO₃</u>	<u>Alkalinity</u> <u>as mg/LCaCO₃</u>	<u>Iron</u> <u>p.p.m.</u>	<u>Sulfate</u> <u>p.p.m.</u>	<u>Alum.</u> <u>mg/L</u>	<u>Flow</u> <u>m.g.d.</u>
4-23-74	2.8	320	0	16.9	425	20.9	
7-14-71	3.0	384	0	28.0	440		
4-9-71	3.6	486	0	38.3	680		
3-22-71	3.6	558	0	109	1550		
1-22-71	3.7	482	0	29.8	650		
11-20-70	3.4	415	0	27.0	800		
10-16-70	3.3	401	0	27.9	455		

STATION NO. 12S

Located in relationship with Station 11S, top of the waterfall.

4-23-74	5.9	14	72	.5	200	3.6	
7-14-71	4.5	72	0	9.9	350		
4-9-71	5.4	42	10.0	0.52	700		
3-22-71	5.6	37	11.0	1.50	320		
1-22-71	5.4	65	12	12.4	320		
11-20-70	3.4	399	0	24.8	670		
10-16-70	4.8	116	1.0	2.7	210		

STATION NO. 13SF

Located in vicinity to ascertain a relationship with Station 11S, top of the waterfall.

<u>Date</u>	<u>pH</u>	<u>Acidity</u> <u>as mg/LCaCO₃</u>	<u>Alkalinity</u> <u>as mg/LCaCO₃</u>	<u>Iron</u> <u>p.p.m.</u>	<u>Sulfate</u> <u>p.p.m.</u>	<u>Alum.</u> <u>mg/L</u>	<u>Flow</u> <u>m.g.d.</u>
4-23-74	5.2	30	16	1.5	150	6.5	
7-14-71	3.7	138	0	4.1	360		2.0
4-9-71	4.0	186	0	2.26	325		2.0
3-22-71	4.5	207	0	4.25	950		2.006
1-22-71	4.9	108	7.0	2.9	370		
11-20-70	4.6	117	1.0	2.2	750		
10-16-70	4.5	97	0	3.5	430		

STATION NO. 14S

This station located on Chalfant Run, vicinity of Merrie Woode Drive.

4-23-74							
9-14-72	6.6	10.	16	0.41	290		
9-11-72	4.6	54	1.0	0.99	480		

STATION NO. 15SF

Located on Chalfant Run, slightly downstream from the intersection of Chalfant Run with Duff's Run.

4-23-74	4.4	58	0	.9	100	5.8	
9-14-72	6.2	11	9.0	0.80	326		4.98
9-11-72	4.7	65	2.0	1.15	450		

STATION NO. 16SF

This station located adjacent to Parkway Ramp heading west toward Pittsburgh.

<u>Date</u>	<u>pH</u>	<u>Acidity</u> <u>as mg/LCaCO₃</u>	<u>Alkalinity</u> <u>as mg/LCaCO₃</u>	<u>Iron</u> <u>p.p.m.</u>	<u>Sulfate</u> <u>p.p.m.</u>	<u>Alum.</u> <u>mg/L</u>	<u>Flow</u> <u>m.g.d.</u>
9-11-72	4.5	211	0	6.32	780		.740

STATION NO. 17S

Located on Duff Run downstream 400 ft. from the intersection of Rodi Road and Maple Lane.

4-23-74	4.0	176	0	2.2	475	16.1	
11-14-72	6.6	9.0	50	2.60	240		
7-14-71	4.3	187	0	1.15	590		
4-9-71	4.4	261	0	1.72	960		
3-22-71	4.3	278	0	4.90	640		
1-22-71	4.8	325	1.0	1.8	610		
11-20-70	5.2	141	9.0	2.0	750		
10-16-70	4.5	147	0	2.0	235		

STATION NO. 18S

Located - vicinity of Homewood Drive. Discharge D-3.

4-22-74	3.1	420	0	7.3	525	28.3	
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STATION NO. 19SF

Located on Duff Run above the intersection of Rodi Road and Duff Road.

4-22-74	3.8	178	0	3.4	475	15.9	
7-14-71	4.4	135	0	3.84	680		.2142
4-9-71	4.2	280	0	2.18	520		.468
3-22-71	4.4	255	0	7.10	825		.096
1-22-71	4.2	210	0	9.4	670		
11-20-70	4.7	164	4.0	1.2	730		
10-16-70	4.2	182	0	4.2	880		

STATION NO. 20S

Located along hillside abutting Duff Run, approximately 600 ft. upstream from the intersection of Rodi Road and Duff Road. Discharge D-5

<u>Date</u>	<u>pH</u>	<u>Acidity</u> <u>as mg/LCaCO₃</u>	<u>Alkalinity</u> <u>as mg/LCaCO₃</u>	<u>Iron</u> <u>p.p.m.</u>	<u>Sulfate</u> <u>p.p.m.</u>	<u>Alum.</u> <u>mg/L</u>	<u>Flow</u> <u>m.g.d.</u>
4-22-74	3.0	350	0	3.5	425	23.0	
9-11-72	3.4	491	0	10.9	790		
7-14-71	3.5	303	0	5.8	350		

STATION 22SF

This station located on Chalfant Run, vicinity of large culvert under Parkway ramps, slightly upstream from its intersection with Duff's Run.

9-11-72	5.3	24	5.0	0.72	346		1.7
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STATION NO. 23S

Located in Bullock Pens Park, Churchill Borough.

7-14-71	5.1	24	4.0	1.18	225		
4-9-71	5.2	57	7.0	0.80	520		
3-22-71	5.3	79	13.0	1.34	420		
1-22-71	5.1	125	1.0	1.8	580		
11-20-70	7.1	4.0	27	.12	345		
10-16-70	7.3	8.0	39	.40	450		

STATION NO. 28S

Near the mouth of Long Run.

4-22-74	5.7	36	58	.2	175	1.5	
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STATION NO. 29SF

Located on Long Run, approximately 500 feet downstream from the Long Road Sewage Treatment Plant.

<u>Date</u>	<u>pH</u>	<u>Acidity</u> as mg/LCaCO ₃	<u>Alkalinity</u> as mg/LCaCO ₃	<u>Iron</u> p.p.m.	<u>Sulfate</u> p.p.m.	<u>Alum.</u> mg/L	<u>Flow</u> m.g.d.
4-22-74	5.6	54	70	.2	150	1.7	
11-14-72	6.8	0	83	1.80	156		
9-14-72	6.5	23	31	0.23	266		1.015
9-11-74	5.9	44	11	0.90	316		.600

STATION NO. 30S

Located on the tributary to Long Run which carries the effluent from the Long Road Sewage Treatment Plant and Discharge D-10.

4-22-74	4.2	136	0	.7	425	14.6	
4-9-71	5.4	9.0	7.0	0.54	450		
3-22-71	5.4	102	19.0	0.27	670		
1-22-71	6.3	41	10	.68	620		
10-16-70	5.4	29	5.0	1.3	670		

STATION NO. 31SF

This station is located immediately above the Long Road Sewage Treatment Plant effluent discharge pipe.

7-14-71	4.5	76	0	1.70	450		.20
4-9-71	5.0	113	11.0	1.03	700		.213
3-22-71	5.1	160	11.0	1.84	570		.156
1-22-71	4.9	86	7.0	.94	370		
11-20-70	5.3	38	5.0	.3	420		
10-16-70	5.0	43	3.0	1.2	450		

STATION NO. 36SF

Located on Chalfant Run at the bridge on Long Road paralleling No. 18 Fairway, Churchill Country Club.

<u>Date</u>	<u>pH</u>	<u>Acidity</u> <u>as mg/LCaCO₃</u>	<u>Alkalinity</u> <u>as mg/LCaCO₃</u>	<u>Iron</u> <u>p.p.m.</u>	<u>Sulfate</u> <u>p.p.m.</u>	<u>Alum.</u> <u>mg/L</u>	<u>Flow</u> <u>m.g.d.</u>
4-22-74	4.1	96	0	1.5	175	8.9	
7-14-71	4.3	112	0	0.85	315		.620
4-9-71	4.2	204	0	2.18	420		.754
3-22-71	4.3	217	0	4.70	615		1.0
1-22-71	5.0	131	7.0	3.3	500		
11-20-70	4.9	77	3.0	.6	430		
10-16-70	4.8	44	3.0	1.3	410		

STATION NO. 37S

Located on a tributary from the Blackridge Civic Association at its junction with Chalfant Run.

4-22-74	3.8	100	0	2.0	275	7.6	
11-14-72	5.4	9.0	26	2.26	176		
7-14-71	4.5	50	0	1.03	325		
4-9-71	4.9	110	10.0	1.40	700		
3-22-71	5.1	161	17.0	1.73	510		
1-22-71	5.2	62	9.0	3.3	330		
11-20-70	5.4	31	6.0	1.8	380		
10-16-70	7.2	7.0	27	.77	810		

STATION NO. 39S

Located on main tributary from the Blackridge Civic Association located below the Churchill Borough Sewage Pump Station.

<u>Date</u>	<u>pH</u>	<u>Acidity</u> as mg/LCaCO ₃	<u>Alkalinity</u> as mg/LCaCO ₃	<u>Iron</u> p.p.m.	<u>Sulfate</u> p.p.m.	<u>Alum.</u> mg/L	<u>Flow</u> m.g.d.
4-22-74	3.3	170	0	2.2	225	9.0	
7-14-71	3.5	187	0	2.26	420		
4-9-71	3.9	243	0	4.72	690		
3-22-71	4.2	245	0	5.40	575		0.35
1-22-71	5.1	67	7.0	0.6	270		
11-20-70	3.7	183	0	4.0	510		
10-16-70	3.7	159	0	9.1	225		

STATION NO. 40S

This station located approximately 100 ft. north of the Blackridge tributary to Chalfant Run. Discharge D-12.

7-14-71	3.5	242	0	13.5	370		
4-9-71	3.5	403	0	30.6	660		
3-22-71	3.8	291	0	69.0	800		
1-22-71	3.6	325	0	16.4	540		
11-20-70	3.5	240	0	9.8	610		
10-16-70	3.2	232	0	11.8	245		

STATION NO. 41SF

Located on Chalfant Run opposite No. 1 Tee, Churchill Country Club.

<u>Date</u>	<u>pH</u>	<u>Acidity</u> <u>as mg/LCaCO₃</u>	<u>Alkalinity</u> <u>as mg/LCaCO₃</u>	<u>Iron</u> <u>p.p.m.</u>	<u>Sulfate</u> <u>p.p.m.</u>	<u>Alum.</u> <u>mg/L</u>	<u>Flow</u> <u>m.g.d.</u>
4-22-74	4.4	50	0	1.1	200	4.8	
11-14-72	5.5	0	32	0.29	150		
9-14-72	4.9	39	3.0	0.30	326		.4
7-14-71	4.4	115	0	0.61	390		.4
4-9-71	4.3	177	0	1.31	310		.63
3-22-71	4.4	216	0	3.85	800		.47
1-22-71	4.5	136	0	1.84	500		
11-20-70	5.0	75	7.0	1.8	480		
10-16-70	4.9	37	2.0	1.6	370		

STATION NO. 42SF

Located slightly upstream from junction of this tributary with Chalfant Run; this tributary flowing southwesterly with its headwaters near Ritzland Drive.

4-22-74	5.4	12	16	1.5	150	3.9	
11-14-72	5.4	0	37	0.23	148		
7-14-71	6.4	16	9.0	0.59	320		
4-9-71	5.1	83	51.0	0.65	295		.336
3-22-71	5.2	124	13.0	5.05	825		.275
1-22-71	5.9	50	6.0	.29	310		
11-20-70	7.0	15	18	2.26	330		
10-16-70	7.4	39	1.0	.10	335		

STATION NO. 44S

Located on Chalfant Run at rear of No. 1 Green, Churchill Country Club.

<u>Date</u>	<u>pH</u>	<u>Acidity</u> <u>as mg/LCaCO₃</u>	<u>Alkalinity</u> <u>as mg/LCaCO₃</u>	<u>Iron</u> <u>p.p.m.</u>	<u>Sulfate</u> <u>p.p.m.</u>	<u>Alum.</u> <u>mg/L</u>	<u>Flow</u> <u>c.g.d.</u>
4/22/74	3.6	100	0	2.1	225	5.9	
11-14-72	5.2	5.0	8.0	0.36	158		
7-14-71	4.5	128	0	0.93	410		
4-9-71	4.0	255	0	4.72	520		
3-22-71	4.2	288	0	8.95	875		
1-22-71	4.0	207	0	5.2	650		
11-20-70	6.8	17	19	.22	580		
10-16-70	4.3	101	0	1.0	370		

STATION NO. 45SF

Located on Park Avenue at house No. 720. Discharge D-19.

4-22-74	3.1	200	0	2.6	300	14.3	
11-14-72	3.6	111	0	3.40	235		
9/14-72	3.5	242	0	7.8	500		
9-11-72	3.5	248	0	6.9	550		
7-14-71	3.4	223	0	4.7	520		.530
4-9-71	3.7	367	0	14.4	680		.276
3-22-71	4.0	377	0	21.9	725		.396
1-22-71	3.6	302	0	6.8	520		
11-20-70	3.4	250	0	6.5	710		
10-16-70	3.2	227	0	3.8	550		

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STATION NO. 46SF

Located at the culvert which runs under Laketon Road; also being on the upper tributary of Chalfant Run

<u>Date</u>	<u>pH</u>	<u>Acidity</u> as mg/LCaCO ₃	<u>Alkalinity</u> as mg/LCaCO ₃	<u>Iron</u> p.p.m.	<u>Sulfate</u> p.p.m.	<u>alum.</u> mg/L	<u>Flow.</u> m.g.d.
4-22-74	4.3	82	0	1.4	250	11.4	
9-14-72	5.1	21	4.0	0.67	280		.226
9-11-72	4.7	58	2.0	1.49	316		
7-14-71	4.4	142	0	0.75	360		.131
4-9-71	4.0	228	0	3.06	310		
3-22-71	4.2	145	0	5.90	765		.230
1-22-71	4.2	196	0	1.0	130		
11-20-70	5.1	127	8.0	1.2	500		
10-16-70	4.7	59	1.0	1.0	450		

STATION NO. 49SF

This station consists of a discharge from a corrugated pipe at the rear of 9244 Vantine Street. Discharge D-22.

4-22-74	2.8	260	0	10.2	350	23.2	
11-14-72	4.3	29	0	1.78	193		
7-14-71	3.2	357	0	16.7	440		.057
4-9-71	3.6	470	0	23.0	520		.026
3-22-71	3.8	488	0	100	740		.088
1-22-71	3.4	441	0	24.0	550		
11-20-70	3.3	411	0	13.4	730		
10-16-70	2.8	407	0	16.9	650		