

APPENDIX B
FIELD DATA AND CHEMICAL ANALYSIS
STREAM SAMPLING

Schematic of PINEY CREEK
WATERSHED Stream Quality
Monitoring Stations With
Average Flow & Acid Load
Conditions

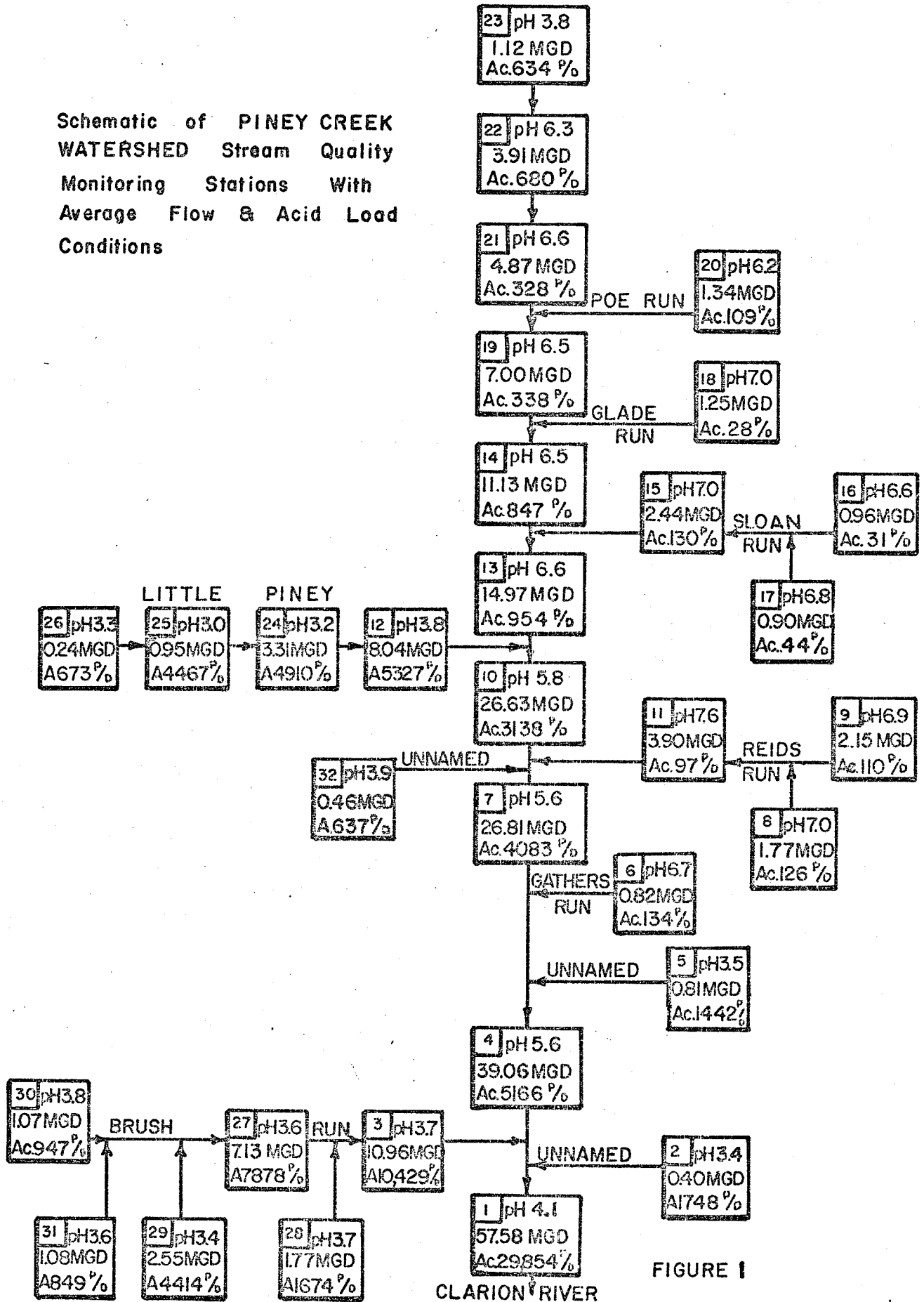


FIGURE 1

CLARION RIVER

STREAM MONITORING POINTS
PINEY CREEK AND MAJOR TRIBUTARIES

<u>Station</u>	<u>Location</u>
PX 1	Mouth of Piney Creek, downstream from bridge carrying Pa. 854 over Piney Creek.
PX 2	Mouth of the unnamed tributary to Piney Creek that flows north from Shamburg, approximately 1/2 mile north of Pine Grove Church.
PX 3	Mouth of Brush Run, approximately 200 feet upstream from confluence with Piney Creek.
PX 4	Piney Creek, just upstream from mouth of Brush Run.
PX 5	Mouth of unnamed tributary to Piney Creek, approximately 1.5 miles east of Pine Grove Church and approximately 1/2 mile northeast and downstream of where unnamed tributary crosses T-484.
PX 6	Mouth of Gathers Run, approximately 50 feet upstream from confluence with Piney Creek and approximately 1/2 mile north of where T-484 crosses Gathers Run.
PX 7	Piney Creek, just upstream of the confluence with Gathers Run.
PX 8	Mouth of unnamed tributary to Reids Run, 1 1/4 mile southeast of Reidsburg along Pa. 839, and at location where gas pipe crosses the tributary.
PX 9	Reids Run, 1 1/4 mile southeast of Reidsburg along Pa. 839 and on downstream side of bridge carrying Pa. 839 which crosses Reids Run.
PX 10	Piney Creek, Reidsburg village on downstream side of steel bridge that carries T-528 over Piney Creek.
PX 11	Mouth of Reids Run, approximately 100 feet upstream from confluence with Piney Creek.
PX 12	Mouth of Little Piney Creek.
PX 13	Piney Creek, just upstream from mouth of Little Piney Creek.
PX 14	Piney Creek, just upstream from mouth of Sloan Run and on the upstream side of bridge that carries T-525 over Piney Creek.
PX 15	Mouth of Sloan Run, approximately 50 feet upstream from bridge that carries T-525 over Sloan Run.
PX 16	Sloan Run, just upstream from the mouth of Parsons Run.
PX 17	Mouth of Parsons Run to Sloan Run.
PX 18	Mouth of Glade Run, approximately 1/2 mile east of Limestone.
PX 19	Piney Creek, just upstream from mouth of Glade Run.
PX 20	Mouth of Poe Run.
PX 21	Piney Creek, approximately 20' upstream from bridge carrying LR 16014 over Piney Creek.

<u>Station</u>	<u>Location</u>
PX 22	Piney Creek, at Kingsville, 450' east of bridge on LR 16009 crossing Piney Creek.
PX 23	Piney Creek, approximately 1 1/4 mile northeast of Kingsville, 100' downstream from bridge that carries T-522 over Piney Creek.
PX 24	Little Piney Creek, approximately 2 miles southeast of Mechanicsville near crossroads of T-540 and T-538 and approximately 100 feet downstream from bridge that carries T-540 over Little Piney Creek.
PX 25	Little Piney Creek, on the upstream side of bridge on township road T-556 over Little Piney Creek.
PX 26	Little Piney Creek, downstream side of bridge on LR 16009 and approximately 3,000 feet north of Holden.
PX 27	Brush Run, between lanes on I-80, 100 feet east of bridge on LR 16074.
PX 28	Unnamed tributary to Brush Run, on downstream side of bridge on old T-530 off LR 16074, 500 feet north of the west bound lane of I-80.
PX 29	Unnamed tributary to Brush Run, on downstream side of bridge that carries LR 16038 over said tributary, flowing southwest from Strattanville borough.
PX 30	Brush Run, approximately 1/2 mile west, and downstream of, bridge that carries T-490 over Brush Run, bridge is approximately 400 feet south of intersection of T-538 and T-490 and is approximately 700 feet north of the west bound lane of I-80.
PX 31	Unnamed tributary to Brush Run, approximately 500 feet southwest of bridge that carries T-538 over this stream. The bridge is approximately 1900 feet west of the intersection of T-538 and T-490 and approximately 800 feet north of the west bound lane of I-80.
PX 32	Unnamed tributary to Piney Creek, on the downstream side of the bridge that carries T-529 over the stream. The bridge is located approximately 1 mile southeast of the intersection of T-529 and T-486 and approximately 1/2 mile northeast of the intersection of Pa. 68 and Pa. 839.

FIELD DATA AND CHEMICAL ANALYSES - STREAM SAMPLING

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-1 Piney Creek downstream from bridge carrying State Route 854 near mouth of Piney Creek. PPM

DATE	GPM	pH	ACD	ALK	T.Fe	SO ₄	ALK	ACD	T.Fe	SO ₄
08-18-75	13,461	3.6	220	0	3.5	440	0	35,537	565	71,074
11-24-75	26,980	4.6	60	6.0	5.1	525	1,943	19,426	1,651	169,974
02-02-76	50,177	4.0	66	0	5.2	240	0	39,740	3,130	144,510
03-02-76	57,306	4.0	76	0	4.9	160	0	52,263	3,370	110,028
04-01-76	121,603	4.8	28	6	2.9	198	8,755	40,859	4,232	288,929
04-30-76	48,330	4.0	66	0	4.1	225	0	38,277	2,378	130,491
06-02-76	23,518	4.7	38	4	4.7	238	1,129	10,724	1,326	67,167
06-28-76	25,467	4.6	54	6	4.5	263	1,834	16,503	1,375	80,374
08-05-76	25,539	3.6	78	0	5.3	298	0	23,905	1,624	91,327
08-31-76	13,574	3.8	84	0	7.2	380	0	13,683	1,173	61,897
09-29-76	33,953	3.7	92	0	8.3	335	0	37,484	3,382	136,491
MIN.	13,461	3.6	28	0	2.9	160	0	10,724	1,173	61,897
MAX.	121,603	4.8	220	6.0	8.3	525	8,755	52,263	4,232	288,929
AVG.	39,992	4.1					1,242	29,854	2,201	122,933

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-2 Unnamed tributary that flows north from Shamburg at mouth, approximately 1/2 mile north of Piney Grove Church.

08-18-75	177	3.0	1,030	0	50	1,474	0	2,188	106	3,131
11-24-75	313	3.1	580	0	70.2	1,550	0	2,178	264	5,821
02-02-76	123	3.6	420	0	32.5	1,200	0	620	48	1,771
03-03-76	594	3.6	572	0	46.2	1,125	0	4,076	329	8,016
04-01-76	259	3.8	280	0	35.0	888	0	870	109	2,760
04-30-76	245	2.9	506	0	46.2	1,150	0	1,488	136	3,381
06-07-76	279	2.5	848	0	85.5	1,800	0	2,839	286	6,026
06-29-76	256	3.5	520	0	41.3	650	0	1,597	127	1,997
08-02-76	222	3.1	598	0	44.5	1,088	0	1,593	119	2,898
09-01-76	98	3.1	520	0	78	1,400	0	612	92	1,646
09-29-76	475	4.2	206	0	49.5	1,050	0	1,174	282	5,985
MIN.	98	2.5	84	0	7.2	380	0	612	48	1,646
MAX.	594	4.2	1,030	0	85.5	1,800	0	4,076	329	8,016
AVG.	276	3.4					0	1,748	173	3,948

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-3 Brush Run at mouth approximately 200' upstream from
 PPD confluence with Piney Creek.

DATE	GPM	PH	PPM			PPD				
			ACD	ALK	T.Fe	SO ₄	ACD	ALK	T.Fe	
08-18-75	2,432	3.5	108	0	2.5	748	0	3,152	73	21,830
11-24-75	4,155	3.3	40	0	4.2	600	0	1,994	209	29,913
02-02-76	12,146	3.9	132	0	5.6	800	0	19,239	816	116,602
03-02-76	10,372	3.8	132	0	6.4	400	0	16,429	797	49,784
04-01-76	11,848	3.9	80	0	3.2	345	0	11,374	455	49,051
04-30-76	10,573	3.5	106	0	4.2	365	0	13,449	533	46,310
06-02-76	9,218	4.2	76	0	3.0	300	0	8,407	332	33,185
06-29-76	3,693	4.2	178	0	1.8	525	0	7,888	80	23,266
08-05-76	4,159	3.4	176	0	2.0	725	0	8,784	100	36,183
08-31-76	4,573	3.5	184	0	2.8	725	0	10,097	154	39,785
09-29-76	10,532	3.8	110	0	1.8	325	0	13,902	228	41,075
MIN.	2,432	3.3	40	0	1.8	300	0	1,994	73	21,830
MAX.	12,146	4.2	184	0	6.4	800	0	19,239	816	116,602
AVG.	7,609	3.7						10,429	343	44,271

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-4 Piney Creek just upstream from the mouth of Brush Run.

DATE	GPM	PH	ACD	ALK	T.Fe	SO ₄	PPD			
							ACD	ALK	T.Fe	
08-18-75	9,873	6.8	0	14	0.78	396	1,659	0	92	46,916
11-24-75	19,100	5.2	4	10	1.0	150	2,292	917	229	34,380
02-02-76	45,468	5.0	16	10	2.3	160	5,456	8,730	1,255	87,299
03-02-76	43,298	4.2	24	2	2.7	250	1,039	12,470	1,403	129,893
04-01-76	52,334	5.5	10	10	1.5	145	6,280	6,280	942	91,061
04-30-76	41,161	5.5	18	12	1.4	172	5,927	8,891	692	84,956
06-02-76	23,941	5.2	20	12	1.7	225	3,448	5,746	488	64,641
06-29-76	17,436	6.8	24	30	0.7	123	6,277	5,022	146	25,736
08-05-76	18,545	5.9	24	106	0.6	163	23,589	5,341	134	36,274
08-31-76	4,848	6.0	22	28	1.5	155	1,629	1,280	87	9,017
09-29-76	22,401	5.8	8	24	1.3	145	5,772	2,150	349	38,978
MIN.	9,873	4.2	0	2	0.6	123	1,039	0	87	9,017
MAX.	52,334	6.8	24	106	2.7	396	23,589	12,470	1,403	129,893
AVG.	27,128	5.6					5,761	5,166	529	59,014

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-5 Mouth of unnamed tributary to Piney Creek, approximately 1.5 miles east of Piney Grove Church at approximately 1/2 mile northeast of where unnamed tributary crosses T-484.

DATE	GPM	pH	ACD	ALK	T.Fe	SO ₄	ALK	ACD	T.Fe	SO ₄
08-18-75	122	3.5	138	0	3.3	1,540	0	202	4.8	2,255
11-25-75	265	3.3	340	0	22.5	1,150	0	1,082	72	3,659
02-04-76	941	4.0	216	0	12.2	1,150	0	2,439	138	12,986
03-03-76	715	3.5	224	0	20.5	1,050	0	1,923	176	9,013
04-01-76	753	4.0	74	0	3.1	1,475	0	669	28	13,328
04-30-76	577	3.1	286	0	58	1,187	0	1,980	402	8,219
06-07-76	660	3.0	324	0	19.8	1,150	0	2,566	157	9,108
06-29-76	693	3.5	150	0	73.3	650	0	1,247	610	5,405
08-02-76	647	3.5	230	0	7.4	1,225	0	1,786	57	9,511
09-01-76	134	3.4	300	0	22.5	1,675	0	482	36	2,693
09-30-76	685	3.6	182	0	9.8	775	0	1,496	80	6,371
MIN.	122	3.0	74	0	3.1	650	0	202	4.8	2,255
MAX.	941	4.0	340	0	73.3	1,675	0	2,566	610	13,328
AVG.	563	3.5						1,442	160	7,504

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-6 Gathers Run at mouth about 50' upstream from confluence with Piney Creek, approximately 1/2 mile north of where T-484 crosses Gathers Run.

DATE	GPM	pH	ACD	ALK	T.Fe	SO ₄	ALK	ACD	T.Fe	SO ₄
08-18-75	241	7.1	0	32	0.25	792	93	0	0.72	2,290
11-25-75	343	6.1	28	22	0.1	310	91	115	0.41	1,277
02-04-76	721	7.5	6	24	0.4	180	208	52	3.5	1,557
03-03-76	775	6.9	6	24	0.2	385	223	56	1.9	3,582
04-01-76	794	6.7	4	22	0.2	205	210	38	1.9	1,953
04-30-76	611	6.4	36	22	0.4	282	161	264	2.9	2,068
06-07-76	719	6.9	32	36	0.1	825	311	276	0.86	7,118
06-29-76	698	7.2	28	64	0.3	203	536	235	2.5	1,700
08-02-76	628	6.6	42	230	0.2	298	1,733	317	1.5	2,246
09-01-76	96	6.3	78	46	0.05	390	53	90	0.06	449
09-30-76	699	6.0	4	36	0.4	253	302	34	3.4	2,122
MIN.	96	6.0	0	22	0.05	180	53	0	0.06	449
MAX.	794	7.5	78	230	0.4	825	1,733	317	3.5	7,118
AVG.	575	6.7		356				134	1.79	2,397

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-7 Piney Creek just upstream from the mouth of Gathers Run.

PPD

PPM

DATE	GPM	pH	PPM				PPD			
			ACD	ALK	T.Fe	SO ₄	ALK	ACD	T.Fe	SO ₄
08-19-75	6,279	6.8	0	14	0.28	264	1,055	0	21	19,892
11-25-75	18,530	6.5	8	12	0.9	165	2,668	1,779	200	36,690
03-03-76	31,450	4.0	30	0	2.1	230	0	11,322	793	86,801
06-03-76	15,773	4.5	28	18	1.7	155	3,407	5,300	322	29,338
10-01-76	21,069	6.0	8	26	0.6	145	4,840	2,023	152	36,660
MIN.	6,279	4.0	0	0	0.28	145	0	0	21	19,892
MAX.	31,450	6.8	30	26	2.1	264	4,840	11,322	793	86,801
AVG.	18,620	5.6					2,394	4,083	298	41,876

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-8 Mouth of unnamed tributary to Reids Run about 500' south-west of junction of St. Rt. 839 and T-178 near where gas pipe crosses the tributary.

08-19-75	254	7.3	0	56	0.62	264	171	0	1.9	51
11-25-75	765	6.7	0	30	0.4	172	275	0	3.7	1,579
03-03-76	1,050	8.0	2	30	0.2	95	378	25	2.5	1,197
06-02-76	2,641	6.5	18	46	6.1	173	1,458	570	193	5,483
09-30-76	1,443	6.3	2	40	0.3	145	693	35	5.20	2,511
MIN.	254	6.3	0	30	0.2	95	171	0	1.9	51
MAX.	2,641	8.0	18	56	6.1	264	1,458	570	193	5,483
AVG.	1,231	7.0					595	126	41	2,164

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-9 Reids Run below confluence with unnamed tributary where gas line crosses west of St. Rt. 839 bridge which crosses Reids Run.

PPD

DATE	GPM	pH	ACD	ALK	T.Fe	SO ₄	ALK	ACD	T.Fe	SO ₄
08-19-75	214	7.1	0	36	0.26	20	92	0	0.67	51
11-25-75	1,102	6.3	0	34	0.3	50	449	0	4.0	661
03-03-76	1,390	7.7	4	34	0.5	190	567	67	8.3	3,168
06-02-76	3,371	6.7	12	48	3.1	88	1,942	485	125	3,560
09-30-76	1,383	6.5	0	40	0.3	38	664	0	4.98	631
MIN.	214	6.3	0	34	0.26	20	92	0	0.67	51
MAX.	3,371	7.7	12	48	3.1	190	1,942	485	125	3,560
AVG.	1,492	6.9					743	110	29	1,614

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-10 Piney Creek just west of Reidsburg on downstream side of steel bridge that carries T-528 over Piney Creek.

08-20-75	5,618	6.9	0	14	0.32	176	944	0	22	11,865
11-26-75	14,658	6.7	4	20	0.8	180	3,518	704	141	31,662
02-04-76	32,781	6.1	12	20	1.9	400	7,867	4,720	747	157,349
03-03-76	27,702	4.2	24	2	2.0	185	665	7,978	665	61,499
04-01-76	40,840	5.7	8	10	1.1	115	4,901	3,921	539	56,359
04-30-76	24,105	6.1	12	12	0.8	147	3,471	3,471	231	42,521
06-03-76	10,013	4.6	28	4	0.8	128	481	3,364	96	15,380
06-28-76	9,651	6.9	26	40	0.7	130	4,632	3,011	81	15,056
08-04-76	11,279	5.3	16	48	0.6	190	6,497	2,166	81	25,716
09-01-76	9,823	6.0	26	46	0.4	120	1,262	713	11	3,292
09-27-76	16,950	4.8	22	14	1.4	145	3,781	4,475	378	29,493
MIN.	5,618	4.2	0	2	0.32	115	481	0	11	3,292
MAX.	40,840	6.9	28	48	2.0	400	7,867	7,978	747	157,349
AVG.	18,493	5.8					3,456	3,138	272	40,926

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-11 Reids Run at mouth approximately 100' upstream
 from confluence with Piney Creek.
 PPM

DATE	GPM	pH	ACD	ALK	T.Fe	SO ₄	ALK	ACD	T.Fe	SO ₄
08-20-75	695	7.7	0	52	0.85	176	434	0	7.1	1,468
11-25-75	2,014	8.8	0	22	0.3	98	532	0	7.3	2,369
03-03-76	5,972	7.9	4	36	0.6	145	2,580	287	43	10,391
06-02-76	1,656	7.1	10	44	0.7	155	874	199	14	3,080
09-30-76	3,205	6.5	0	40	0.4	85	1,205	0	15	3,269
MIN.	696	6.5	0	22	0.3	85	434	0	7.1	1,468
MAX.	5,972	8.8	10	52	0.85	176	2,580	286	43	10,391
AVG.	2,708	7.6					1,125	97	17	4,115

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-12 Little Piney Creek at mouth.

DATE	GPM	pH	ACD	ALK	T.Fe	SO ₄	ALK	ACD	T.Fe	SO ₄
08-20-75	2,003	3.5	110	0	2.6	242	0	2,644	62	5,817
11-26-75	4,018	3.9	112	0	2.4	275	0	5,400	116	13,259
02-04-76	8,733	4.2	62	6	4.4	225	0	6,497	482	19,039
03-02-76	8,334	3.8	146	0	11.5	330	0	14,601	1,150	33,002
04-01-76	15,890	3.9	50	0	3.3	145	0	9,534	629	27,649
04-30-76	6,658	3.7	44	0	2.2	140	0	3,515	176	11,185
06-04-76	2,250	3.4	62	0	2.7	165	0	1,674	73	4,455
06-28-76	2,376	4.3	66	0	2.2	193	0	1,882	63	5,503
08-04-76	2,318	3.4	98	0	4.7	155	0	2,726	131	4,311
09-01-76	2,395	4.4	44	2	1.4	120	58	1,265	40	3,449
09-27-76	6,476	3.5	114	0	6.2	245	0	8,859	482	19,039
MIN.	2,003	3.4	44	0	1.4	120	0	1,265	40	3,449
MAX.	15,890	4.4	146	6	11.5	330	58	14,601	1,150	33,002
AVG.	5,586	3.8					5.27	5,327	304	12,808

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-13 Piney Creek just upstream from the mouth of Little Piney Creek.

DATE	GPM	pH	PPM							
			ACD	ALK	T.Fe	SO ₄	SO ₄			
08-20-75	2,598	7.1	0	32	0.66	198	998	0	21	6,173
11-26-75	7,531	6.6	0	22	0.2	140	1,988	0	18	12,652
02-04-76	16,532	7.5	8	22	0.6	150	4,364	1,587	119	29,758
03-02-76	17,507	6.2	10	32	0.5	175	6,723	2,101	105	36,765
04-01-76	28,951	6.6	2	22	0.4	125	7,643	695	139	43,427
04-30-76	14,763	6.1	10	18	0.3	87	3,189	1,772	53	15,413
06-04-76	3,873	7.0	18	32	0.3	148	1,487	837	14	6,878
06-28-76	4,358	6.8	28	39	0.4	123	2,040	1,464	21	6,432
08-05-76	4,597	6.6	8	162	0.2	155	8,937	441	11	8,550
09-01-76	4,290	6.2	18	42	0.1	110	2,162	927	5.2	5,663
09-27-76	9,317	5.9	6	32	1.2	120	3,578	671	134	13,416
MIN.	2,598	5.9	0	18	0.1	87	998	0	5.2	5,663
MAX.	28,951	7.5	28	162	1.2	198	8,937	2,101	139	43,427
AVG.	10,392	6.6					3,919	954	58	16,830

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-14 Piney Creek just upstream from the mouth of Sloan Run on upstream side of bridge that carries T-525 over Piney Creek.

08-20-75	1,974	7.2	0	32	0.18	176	758	0	4.3	4,169
11-26-75	9,062	6.4	4	24	0.2	137	2,610	435	22	14,897
03-02-76	12,241	5.4	12	24	0.5	225	3,525	1,763	73	33,051
06-03-76	9,932	6.9	16	26	0.3	120	3,099	1,907	36	14,302
09-30-76	5,529	6.5	2	36	0.4	170	2,388	133	26	11,279
MIN.	1,974	5.4	0	24	0.18	120	758	0	4.3	4,169
MAX.	12,241	7.2	16	36	0.5	225	3,525	1,907	73	33,051
AVG.	7,748	6.5					2,476	847	32	15,540

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-15 Sloan Run at mouth about 50' upstream from bridge that carries T-525 over Sloan Run. PPD

DATE	GPM	pH	ACD	ALK	T.Fe	SO ₄	ALK	ACD	T.Fe	SO ₄
08-20-75	335	7.4	0	42	0.52	176	169	0	2.1	708
11-25-75	1,538	6.6	12	164	0.3	135	3,028	222	5.5	2,492
03-02-76	2,667	7.2	8	38	0.5	70	1,216	256	16	2,241
06-02-76	1,032	7.1	14	38	0.4	173	471	173	4.95	2,142
09-30-76	2,933	6.7	0	32	0.3	140	1,126	0	11	4,927
MIN.	335	6.6	0	32	0.3	70	169	0	2.1	708
MAX.	2,933	7.4	14	164	0.52	176	3,028	256	16	4,927
AVG.	1,701	7.0					1,202	130	7.9	2,502

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-16 Sloan Run just upstream from the mouth of Parsons Run.

DATE	GPM	pH	ACD	ALK	T.Fe	SO ₄	ALK	ACD	T.Fe	SO ₄
08-19-75	154	6.9	0	30	0.38	432	55	0	0.70	798
11-26-75	433	6.5	4	40	0.1	135	208	21	0.52	701
03-02-76	1,168	6.6	6	26	0.2	160	364	84	2.8	2,243
06-02-76	311	7.0	14	36	0.2	160	134	52	0.75	597
09-30-76	1,264	6.2	0	54	0.2	100	819	0	3.03	1,517
MIN.	154	6.2	0	26	0.1	100	55	0	0.52	597
MAX.	1,264	7.0	14	54	0.38	432	819	84	3.03	2,243
AVG.	666	6.6					316	31	1.56	1,171

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-17 Parsons Run at mouth.

DATE	GPM	PH	PPM				PPD			
			ACD	ALK	T.Fe	SO ₄	ALK	ACD	T.Fe	SO ₄
08-19-75	226	7.5	0	46	0.31	984	125	0	0.84	2,669
11-26-75	374	6.3	4	24	0.1	150	108	18	0.45	673
03-02-76	911	6.9	10	32	0.3	130	350	109	3.3	1,421
06-02-76	444	7.3	12	50	0.2	198	266	64	1.07	1,055
09-30-76	1,138	6.2	2	52	0.3	210	710	27	4.10	2,868
MIN.	226	6.2	0	24	0.1	130	108	0	0.45	673
MAX.	1,138	7.5	12	52	0.31	984	710	109	4.10	2,868
AVG.	619	6.8					312	44	1.95	1,737

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-18 Glade Run at mouth, approximately 1/2 mile east of Limestone.

08-19-75	358	7.3	0	30	2.8	144	129	0	12	619
11-25-75	939	6.2	0	34	0.1	100	383	0	1.1	1,127
03-02-76	1,684	7.7	4	26	0.3	175	525	81	6.1	3,537
06-03-76	408	7.1	12	32	0.4	100	157	59	1.95	490
09-30-76	939	6.6	0	34	0.2	90	383	0	2.25	1,014
MIN.	358	6.2	0	26	0.1	90	129	0	1.1	490
MAX.	1,684	7.7	12	34	2.8	175	525	81	6.1	3,537
AVG.	866	7.0					315	28	4.7	1,357

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-19 Piney Creek just upstream from the mouth of Glade Run.

DATE	GPM	pH	PPM				SO ₄			
			ACD	ALK	T.Fe	SO ₄				
08-19-75	1,710	7.2	0	20	0.35	288	410	0	7.2	5,960
11-25-75	5,046	6.3	8	28	0.5	130	1,695	484	30	7,872
03-02-76	11,144	5.2	6	24	0.6	150	3,209	802	80	20,059
06-07-76	1,787	7.0	14	24	0.1	160	515	300	2.1	3,431
09-30-76	4,436	6.6	2	28	0.4	128	1,490	106	21	6,814
MIN.	1,710	5.2	0	20	0.1	128	410	0	2.1	3,431
MAX.	11,144	7.0	14	28	0.6	288	3,209	802	80	20,059
AVG.	4,825	6.5					1,464	338	28	8,827

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-20 Poe Run at mouth behind houses where pipeline crosses stream.

DATE	GPM	pH	ACD	ALK	T.Fe	SO ₄	ALK	ACD	T.Fe	SO ₄
11-24-75	1,184	5.1	8	12	1.7	187	171	114	24	2,657
03-03-76	1,120	5.1	8	8	2.0	120	108	108	27	1,613
06-03-76	279	6.4	28	30	0.2	95	100	94	0.67	318
09-30-76	690	7.2	28	34	0.2	55	282	232	1.66	455
MIN.	279	5.1	0	8	0.2	55	100	0	0.67	318
MAX.	1,418	7.2	28	34	2.0	396	408	232	27	6,738
AVG.	938	6.2					214	109	12	2,356

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-21 Piney Creek below unnamed northern tributary, approximately 20' upstream of bridge. PPD

DATE	GPM	pH	ACD	ALK	T.Fe	SO ₄	ALK	ACD	T.Fe	SO ₄
08-18-75	1,413	7.3	0	26	0.22	374	441	0	3.7	6,342
11-24-75	3,388	5.6	8	14	0.4	125	569	325	16	5,081
03-03-76	7,139	7.0	4	14	0.6	215	1,199	343	51	18,419
06-07-76	1,699	6.9	36	94	1.5	100	1,916	734	31	2,039
09-30-76	3,317	6.0	6	38	0.2	270	1,513	239	7.96	10,747
MIN.	1,413	5.6	0	14	0.2	100	441	0	3.7	2,039
MAX.	7,139	7.3	36	94	1.5	374	1,916	734	51	18,419
AVG.	3,391	6.6					1,128	328	22	8,526

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-22 Piney Creek at Kingsville, 450' east of bridge on L.R. 16009 crossing Piney Creek.

DATE	GPM	pH	ACD	ALK	T.Fe	SO ₄	ALK	ACD	T.Fe	SO ₄
08-18-75	1,090	7.0	0	24	0.48	572	314	0	6.3	7,482
11-24-75	530	4.5	28	20	1.2	287	127	178	7.6	1,827
02-04-76	3,995	7.5	6	24	1.6	351	1,151	288	78	16,827
03-01-76	4,948	5.6	10	16	0.9	240	950	594	53	14,251
04-01-76	3,571	6.4	4	16	1.0	210	686	171	43	8,999
04-30-76	3,480	6.5	4	20	1.0	210	835	167	42	8,770
06-07-76	3,537	7.2	76	46	0.3	373	1,952	3,226	13	15,832
06-28-76	3,286	6.6	14	46	15.3	313	1,814	552	603	12,342
08-02-76	3,745	6.2	44	180	2.9	425	8,089	1,977	130	19,100
08-31-76	458	5.9	50	46	0.6	400	253	275	3.3	2,198
09-30-76	1,246	6.1	4	50	0.6	325	748	60	8.97	4,859
MIN.	458	4.5	0	16	0.3	210	127	0	3.3	1,827
MAX.	4,948	7.5	76	180	15.3	572	8,089	3,226	603	19,100
AVG.	2,717	6.3					1,538	680	90	10,226

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-23 Piney Creek approximately 1 1/4 mile northeast of Kingsville, 100' from bridge that carries T-552 over Piney Creek.

DATE	GPM	pH	ACD	ALK	T.Fe	SO ₄	ALK	ACD	T.Fe	SO ₄
08-19-75	304	3.6	62	0	2.0	960	0	226	7.3	3,502
11-24-75	379	3.8	76	0	5.9	675	0	346	27	3,072
03-03-76	1,170	4.1	80	2	2.5	640	28	1,124	35	8,989
06-03-76	595	3.4	144	0	2.7	738	0	1,028	19	5,269
09-30-76	1,431	4.2	26	10	2.1	375	172	447	36	6,440
MIN.	304	3.4	26	0	2.0	375	0	226	7.3	3,072
MAX.	1,431	4.2	144	10	5.9	960	172	1,124	36	8,989
AVG.	776	3.8					40	634	25	5,454

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-24 Little Piney Creek 2 miles southeast of Mechanicsville near cross roads of T-540 and T-538, approximately 100' downstream from bridge that carries T-540 over Little Piney Creek.

DATE	GPM	pH	ACD	ALK	T.Fe	SO ₄	ALK	ACD	T.Fe	SO ₄
08-18-75	586	3.1	190	0	11	418	0	1,336	77	2,939
11-26-75	1,772	3.5	64	0	3.3	250	0	1,361	70	5,316
03-01-76	4,748	3.2	220	0	35.5	550	0	12,534	2,023	31,335
06-03-76	1,108	3.1	100	0	6.9	193	0	1,330	92	2,566
09-30-76	3,264	3.0	204	0	33.8	308	0	7,990	1,324	12,064
MIN.	586	3.0	64	0	3.3	193	0	1,330	70	2,566
MAX.	4,748	3.5	220	0	35.5	550	0	12,534	2,023	31,335
AVG.	2,296	3.2					0	4,910	717	10,844

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-25 Little Piney Creek on the upstream side of bridge on PPM township road T-556 over PPD Little Piney Creek.

DATE	GPM	pH	ACD	ALK	T.Fe	SO ₄	ALK	ACD	T.Fe	SO ₄
08-18-75	50	2.9	600	0	44	1,452	0	360	26	871
11-24-75	202	3.1	328	0	37.5	650	0	795	91	1,576
02-03-76	678	3.4	396	0	100	1,560	0	3,222	814	12,692
03-01-76	1,511	2.8	584	0	130.7	1,485	0	10,592	2,371	26,934
04-01-76	859	3.1	376	0	63	825	0	3,876	649	8,504
04-29-76	717	2.8	360	0	58.5	900	0	3,097	503	7,744
06-03-76	145	2.7	458	0	74.8	1,188	0	797	130	2,067
06-28-76	70	3.6	300	0	37.8	475	0	252	32	399
08-02-76	82	2.8	734	0	130.7	1,138	0	722	129	1,120
08-31-76	12	2.9	460	0	38	1,225	0	66	32	399
09-27-76	2,895	2.8	730	0	138.3	775	0	25,360	4,805	26,924
MIN.	12	2.7	300	0	37.5	475	0	66	26	399
MAX.	2,895	3.6	734	0	138.3	1,560	0	25,360	4,805	26,934
AVG.	656	3.0		0			0	4,467	871	8,112

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-26

Little Piney Creek downstream side of bridge on L.R. 16009, approximately 3000' north of Holden.

08-19-75	75	3.1	620	0	54	1,932	0	558	49	1,739
11-24-75	512	3.1	384	0	64.8	1,425	0	2,358	398	8,751
02-03-76	203	4.0	276	0	60	1,075	0	672	146	2,619
03-01-76	369	3.5	324	0	54.2	1,125	0	1,435	240	4,984
04-01-76	211	3.4	222	0	53.2	825	0	562	135	2,089
04-29-76	141	3.0	268	0	46.2	800	0	453	78	1,354
06-03-76	99	2.9	378	0	29.8	1,150	0	449	35	1,366
06-28-76	63	3.6	464	0	47	1,138	0	351	36	860
08-02-76	36	3.2	284	0	30.9	850	0	123	13	367
08-31-76	36	3.1	388	0	55	1,750	0	168	24	756
09-27-76	90	3.6	258	0	13.8	500	0	279	15	540
MIN.	36	2.9	222	0	13.8	500	0	123	13	367
MAX.	512	4.0	620	0	64.8	1,932	0	2,358	398	8,751
AVG.	167	3.3		0			0	673	106	2,311

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-27 Brush Run between the lanes of I-80, 100' east of PPD bridge on L.R. 16074.

PPM

DATE	GPM	pH	ACD	ALK	T.Fe	SO ₄	ALK	ACD	T.Fe	SO ₄
08-18-75	2,104	3.4	140	0	9.6	770	0	3,535	242	19,441
11-25-75	2,933	3.4	228	0	10	775	0	8,025	352	27,278
02-03-76	9,079	3.9	134	0	7.5	530	0	14,599	817	57,742
03-01-76	7,666	3.7	102	0	7.1	350	0	9,383	653	32,195
04-01-76	5,178	3.7	96	0	6.6	390	0	5,965	410	24,233
04-30-76	5,216	3.3	184	0	8.2	862	0	11,517	512	53,954
06-03-76	2,157	3.3	150	0	6.1	100	0	3,883	158	2,588
06-29-76	5,149	3.8	156	0	7.9	350	0	9,639	488	21,626
08-02-76	5,105	3.6	124	0	8.2	850	0	7,596	502	52,071
08-30-76	1,156	3.4	178	0	7.7	850	0	2,469	107	11,791
09-28-76	8,727	3.7	96	0	5.9	425	0	10,054	618	44,508
MIN.	1,156	3.3	96	0	5.9	100	0	2,469	107	2,588
MAX.	9,079	3.9	228	0	10	862	0	14,599	817	57,742
AVG.	4,952	3.6		0			0	7,878	442	31,584

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-28

Unnamed tributary to Brush Run near mouth, that flows south from Stone House on downstream side of bridge on old T-530 off L.R. 16074 approximately 500' north of the west bound lane of I-80.

DATE	GPM	pH	ACD	ALK	T.Fe	SO ₄	ALK	ACD	T.Fe	SO ₄
08-18-75	335	3.5	140	0	2.4	506	0	563	9.6	2,034
11-25-75	501	3.6	116	0	2.7	600	0	698	16	3,610
02-03-76	1,258	4.0	86	0	2.5	298	0	1,298	38	4,499
03-01-76	1,818	3.8	110	0	2.5	360	0	2,399	54	7,853
04-01-76	1,906	4.0	68	0	2.1	288	0	1,555	48	6,587
04-30-76	1,682	3.5	122	0	2.4	437	0	2,462	48	8,820
06-07-76	717	3.5	162	0	1.8	475	0	1,394	15	4,087
06-28-76	1,865	4.2	186	0	2.5	388	0	4,163	56	8,683
08-02-76	1,670	3.8	100	0	2.1	318	0	2,004	42	6,373
08-31-76	164	3.5	176	0	2.5	600	0	346	4.9	1,181
09-28-76	1,643	4.0	78	0	1.5	360	0	1,538	30	7,098
MIN.	164	3.5	68	0	1.5	288	0	346	4.9	1,181
MAX.	1,906	4.2	186	0	2.7	600	0	4,163	54	8,820
AVG.	1,233	3.7		0			0	1,674	33	5,530

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-29 On downstream side of bridge that carries L.R. 16038 over unnamed tributary; tributary is the one that flows southwest from Strattanville borough. PPD

DATE	GPM	pH	ACD	ALK	T.Fe	SO ₄	ALK	ACD	T.Fe	SO ₄
08-18-75	661	3.2	260	0	17	814	0	2,062	135	6,457
11-25-75	871	3.2	232	0	24.5	775	0	2,425	256	8,100
02-03-76	1,546	3.8	160	0	10.7	850	0	2,968	199	15,769
03-01-76	2,527	3.5	130	0	9.7	100	0	3,941	294	3,032
04-01-76	1,915	3.5	148	0	12.0	750	0	3,401	276	17,235
04-29-76	1,727	3.1	200	0	16.2	1,088	0	4,145	336	22,548
06-07-76	1,350	3.0	318	0	9.6	738	0	5,152	156	11,956
06-28-76	1,888	3.8	252	0	23.8	613	0	5,709	539	13,888
08-02-76	1,889	3.3	188	0	20.0	813	0	4,262	453	18,429
09-01-76	2,240	3.3	274	0	24.0	1,000	0	7,365	645	26,880
09-27-76	2,858	3.8	208	0	9.6	550	0	7,134	329	18,863
MIN.	661	3.0	130	0	9.6	100	0	2,062	135	3,032
MAX.	2,858	3.8	318	0	24.5	1,088	0	7,365	645	26,880
AVG.	1,770	3.4					0	4,414	329	14,832

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-30 Brush Creek approximately 1/2 mile west of bridge that carries T-490 over Brush Run and is just upstream from intermittent unnamed tributary to Brush Run. This bridge is approximately 400' south of intersection T-538 and T-490. It is approximately 700' north of west bound lane of I-80.

DATE	GPM	pH	ACD	ALK	T.Fe	SO ₄	ALK	ACD	T.Fe	SO ₄
08-18-75	192	3.6	190	0	2.0	1,332	0	438	4.6	3,069
11-24-75	452	3.5	144	0	1.5	720	0	781	8.1	3,907
02-03-76	920	3.8	124	0	1.8	824	0	1,369	20	9,097
03-01-76	740	3.8	100	0	1.3	99	0	888	12	880
04-01-76	737	4.0	88	0	1.4	1,775	0	778	12	15,698
04-29-76	736	3.7	100	0	1.6	662	0	883	14	5,847
06-03-76	540	3.7	132	0	0.9	700	0	855	5.8	4,536
06-28-76	620	4.3	124	0	1.9	838	0	923	14	6,235
08-02-76	744	3.9	152	0	1.3	318	0	1,357	12	9,562
08-31-76	97	3.6	230	0	1.9	1,263	0	268	2.2	1,470
09-27-76	2,381	4.2	66	8	0.7	370	229	1,886	20	10,572
MIN.	97	3.5	66	0	0.7	99	0	268	2.2	880
MAX.	2,381	4.3	230	8	2.0	1,775	229	1,886	20	15,698
AVG.	742	3.8					21	947	11	5,876

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-31 Intermittent unnamed tributary to Brush Run at mouth,
 PPM 1 mile northwest of Waterson. PPD

DATE	GPM	pH	ACD	ALK	T.Fe	SO ₄	ALK	ACD	T.Fe	SO ₄
08-18-75	89	3.4	150	0	3.8	858	0	160	4.1	916
11-24-75	25	3.5	148	0	2.0	575	0	45	0.61	175
03-01-76	431	3.8	112	0	1.5	750	0	579	7.8	3,880
06-03-76	556	3.5	126	0	1.0	328	0	841	6.7	2,188
09-27-76	2,666	4.0	82	0	0.8	370	0	2,623	26	11,837
MIN.	25	3.4	82	0	0.8	328	0	45	0.61	175
MAX.	2,666	4.0	150	0	3.8	858	0	2,623	26	11,837
AVG.	753	3.6					0	849	9.4	3,799

PINEY CREEK WATERSHED FLOW MEASUREMENT STATION NUMBER PX-32 Unnamed tributary to Piney Creek on downstream side of
 bridge that carries T-529 over stream. The bridge is located approximately 1 mile southeast of intersection of T-529
 and T-486, approximately 1/2 mile northwest of the intersection of State Route 68 and State Route 839 in a direct line.

DATE	GPM	pH	ACD	ALK	T.Fe	SO ₄	ALK	ACD	T.Fe	SO ₄
03-03-76	413	3.3	258	0	14.3	825	0	1,279	71	4,090
06-02-76	89	4.1	194	0	4.3	738	0	207	4.6	788
09-30-76	459	4.3	78	0	1.7	270	0	430	9.36	1,487
MIN.	89	3.3	78	0	1.7	270	0	207	4.6	788
MAX.	459	4.3	258	0	14.3	825	0	1,279	71	4,090
AVG.	320	3.9					0	637	28	2,122

TIPPLE MONITORING POINTS

Station

Location

PY-M1	Monitoring point located above Limestone, tipple south of L. R. 16071 on Piney Creek
PY-M2	Monitoring point located below Limestone, tipple south of L. R. 16071 at bridge which parralles Rt. 66
PY-M3	Monitoring point located above Strattanville tipple at bridge where L. R. 16038 crosses unnamed tributary to Brush Run
PY-M4	Monitoring point located below Strattanville, tipple northwest of Rehobeth Church
PY-M5	Monitoring point located above C & K Coal Co. tipple at point downstream where Brush Run intercepts Piney Creek
PY-M6	Monitoring point located below C & K Coal Co. tipple at bridge where L. R. 16030 crosses Piney Creek

PINEY CREEK WATERSHED WEIR NUMBER PY-M1 Monitoring point located above Limestone tipples south of L.R. 16071 on Piney Creek.

DATE	GPM	PH	PPM				
			ACD	ALK	T.Fe	SO ₄	SO ₄
03-18-76		5.0	30	16	0.7	145	
04-30-76		6.4	12	18	0.2	155	
05-19-76		6.8	44	42	0.6	165	
06-16-76		6.0	38	18	1.1	180	
07-26-76		6.4	8	24	0.4	133	
08-26-76		6.1	16	36	0.4	185	
09-28-76		6.3	26	26	7.5	210	
MIN.		5.0	8	16	0.2	133	
MAX.		6.8	44	42	7.5	210	
AVG.		6.1					

PINEY CREEK WATERSHED WEIR NUMBER PY-M2 Monitoring point located below Limestone tipples south of L.R. 16071 at bridge which parallels St. Rt. 66.

03-18-76		7.5	12	26	0.9	150	
04-30-76		6.3	18	22	0.5	127	
05-19-76		6.8	36	44	1.2	140	
06-16-76		6.3	34	22	2.1	155	
07-26-76		6.8	4	36	0.8	180	
08-26-76		6.3	14	34	0.3	133	
09-28-76		6.2	8	28	6.8	210	
MIN.		6.2	4	22	0.3	127	
MAX.		7.5	36	44	6.8	210	
AVG.		6.6					

PINEY CREEK WATERSHED WEIR NUMBER PY-M3 Monitoring point located above Strattanville tipple at bridge where L.R. 16038 crosses unnamed tributary to Brush Run. PPD

DATE	GPM	pH	ACD	ALK	T.Fe ppm	SO ₄	ALK	ACD	T.Fe	SO ₄
03-18-76		3.8	265	0	10.0	738				
04-30-76		3.2	184	0	12.5	738				
05-19-76		3.4	240	0	9.7	738				
06-16-76		2.7	320	0	9.9	700				
07-26-76		3.3	174	0	9.5	544				
08-26-76		3.2	286	0	9.7	863				
09-28-76		3.4	214	0	8.7	675				
MIN.		2.7	174	0	8.7	544				
MAX.		3.8	320	0	12.5	863				
AVG.		3.3								

PINEY CREEK WATERSHED WEIR NUMBER PY-M4 Monitoring point located below Strattanville tipple northwest of Rehoboth church.

DATE	GPM	pH	ACD	ALK	T.Fe ppm	SO ₄
03-18-76		3.5	220	0	7.8	863
04-30-76		3.2	182	0	7.9	825
05-19-76		3.4	234	0	19.0	825
06-16-76		2.7	252	0	17.8	775
07-26-76		3.2	174	0	25.0	544
08-26-76		3.1	290	0	18.0	1025
09-28-76		3.4	198	0	26.5	850
MIN.		2.7	174	0	7.8	544
MAX.		3.5	290	0	26.5	1025
AVG.		3.2				

PINEY CREEK WATERSHED WEIR NUMBER PY-M5 Monitoring point located above C&K Coal Co. tipple at point downstream where Brush Run intercepts Piney Creek.

PPM

DATE	GPM	PH	PPM				SO ₄			
			ACD	ALK	T.Fe	SO ₄				
03-26-76	54,861	5.6	12	14	1.5	160	9,216	7,899	987	105,333
04-30-76	47,916	4.8	10	14	1.4	127	8,050	5,750	805	73,024
05-19-76	35,625	6.8	38	30	1.9	115	12,825	16,245	812	49,162
06-16-76	23,888	6.2	20	18	1.6	120	5,160	5,733	458	34,399
07-26-76	25,000	5.8	12	12	1.2	205	3,600	3,600	360	61,500
08-26-76	16,805	5.9	36	28	0.5	173	5,646	7,260	44	34,887
09-27-76	31,944	6.1	18	22	4.0	155	8,433	6,900	331	59,416
MIN.	16,805	4.8	10	12	0.5	115	3,600	3,600	44	34,399
MAX.	54,861	6.8	38	30	4.0	205	12,825	16,245	987	105,333
AVG.	33,720	5.9					7,561	7,627	542	59,674

PINEY CREEK WATERSHED WEIR NUMBER PY-M6 Monitoring point located below C&K Coal Co. tipple at bridge where L.R. 16030 crosses Piney Creek.

DATE	GPM	PH	ACD	ALK	T.Fe	SO ₄	ACD	ALK	T.Fe	SO ₄
04-30-76	47,916	4.3	32	4	2.5	197	2,300	18,399	1,437	113,273
05-19-76	35,625	5.0	56	10	4.2	205	4,275	23,940	1,796	87,638
06-16-76	23,888	5.7	36	12	3.2	148	3,440	10,319	917	42,425
07-26-76	25,000	4.2	34	2	2.2	238	600	10,200	660	71,400
08-26-76	16,805	4.4	86	10	2.3	245	2,017	17,342	463	49,407
09-27-76	31,944	5.5	14	18	7.5	235	6,900	5,366	2,875	90,082
MIN.	16,805	4.1	14	2	2.2	148	600	5,366	463	42,425
MAX.	54,861	5.7	86	18	7.5	245	6,900	26,333	2,875	115,208
AVG.	33,720	4.7					2,978	15,986	1,380	81,348