

SUMMARY OF WATER QUALITY TESTS

NANTICOKE WATERSHED



SUMMARY OF WATER QUALITY TESTS

JOB NO.:- SL 181-3

MONITORING STATION NO:- N-1

LOCATION:- Inlet of Box Culvert under " River Road "

DATE	TIME	FIELD DATA				LABORATORY DATA							REMARKS & SPECIAL TESTS	
		Method	FLOW		Temp. °C	pH	Acidity mg/L	Alkalinity mg/L	IRON		SO ⁴ mg/L			
			Q	GPM					Total mg/L	Fe ⁺⁺ mg/L				
9/10/73	1230	CD	550	20	4.55	190	0	31	16	880				
9/26/73	0900	CM	3130	14	4.85	480	0	210	180	2100				
10/24/73	1150	CD	340	10	3.65	260	0	80	63	1348				
11/27/73	0840	CD	160	9	5.40	156	0	22	10	725				
1/09/74	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ				Δ NOT OBSERVED
2/05/74	0900	SD	9700	8	6.18	394	0	250	226	1600				
3/20/74	1810	SD	9000	12	6.60	390	0	397	220	1600				
4/30/74	0855	SD	5100	16	6.78	146	0	141	136	2050				
5/30/74	1525	SD	1800	20	6.65	260	0	104	103	1100				
6/26/74	1620	CD	300	20	6.70	36	84	8.5	2.2	150				
7/17/74	1205	WP	340	22	6.00	76	110	5.4	3.4	300				
8/21/74	1135	WP	325	20	6.40	46	64	12	10	775				

SUMMARY OF WATER QUALITY TESTS

MONITORING STATION NO:- N-2

JOB NO.:- SL 181-3

LOCATION:- 500 feet above confluence with Espy Run

FIELD DATA				LABORATORY DATA						REMARKS & SPECIAL TESTS	
DATE	TIME	FLOW		pH	pH	Acidity mg/L	Alkalinity mg/L	IRON			SO ⁴ mg/L
		Method	Q GPM					Temp. C	Total mg/L		
9/10/73	1300	EC	360	21	3.40	440	0	52	26	1500	
9/26/73	1330	EC	2800	18	4.55	490	0	230	210	2300	
10/24/73	1130	EC	275	10	3.60	340	0	99	72	1626	
11/27/73	0810	EC	55	9	4.60	1100	0	22	19	725	
1/9/74		NR									
2/5/74	0810	EC	9410	4	6.05	482	0	288	240	1725	
3/20/74	1800	EC	8630	13	6.40	424	0	422	223	1350	
4/30/74	0830	EC	4860	14	6.78	232	0	168	166	575	
5/30/74	1525	EC	1680	20	5.85	200	0	118	118	1275	
6/26/74	1610	EC	60	19	4.68	132	0	14	10	600	
7/17/74	1145	EC	220	23	4.82	104	0	16	10	775	
8/21/74	1140	EC	300	20	6.7	72	18	114	112	650	

BoD - 6 mg/l; NH₃N - 9 mg/l
Coliform - 1/100

SUMMARY OF WATER QUALITY TESTS

JOB NO.:- SL 181-3

MONITORING STATION NO:- N-3

LOCATION:- Concrete weir 1000' upstream of Sta. N-1

DATE	TIME	FIELD DATA				LABORATORY DATA						REMARKS & SPECIAL TESTS
		Method	FLOW		pH	Acidity mg/L	Alkalinity mg/L	IRON		SO ⁴ mg/L		
			Q GPM	Temp. C				Total mg/L	Fe ⁺⁺ mg/L			
9/10/73	1315	CD	190	18	6.90	0	36	6.0	3.6	240		
9/26/73	1300	TW	310	17	6.85	0	40	5.3	4.5	170		
10/24/73	1115	W	60	7	6.75	40	82	3.8	1.1	926		
11/27/73	0755	W	100	8	6.50	30	102	7.4	5.6	350		
1/9/74		NR										
2/5/74	0800	W	290	1	6.20	68	262	6.0	5.6	475		
3/20/74	1745	W	370	10	6.80	40	200	5.0	2.2	325		
4/30/74	0820	W	243	14	6.90	30	284	2.8	0	600		
5/30/74	1525	W	120		5.35	3.6	172	3.3	0	200		
6/26/74	1600	W	240	19	6.82	150	256	6.9	0	250		
7/17/74	1140	EST	120	20	7.15	180	292	3.1	2.2	225		
8/21/74	1120	EST	25	20	7.35	50	112	12	3.4	150		

BoD - 1 mg/l
 { NH₃N - 1.65 mg/l
 Coliform - TNTC

SUMMARY OF WATER QUALITY TESTS

MONITORING STATION NO.: N-4

JOB NO.: SL 181-3

LOCATION: Inlet of culvert under Dundee Road, Mine Pool Discharge, (Borehole)

DATE	TIME	FIELD DATA				LABORATORY DATA						REMARKS & SPECIAL TESTS
		FLOW		Temp. °C	pH	pH	Acidity mg/L	Alkalinity mg/L	IRON		SO ⁴ mg/L	
		Method	Q GPM						Total mg/L	Fe ⁺⁺ mg/L		
9/10/73	1430	CD	350	14	5.90	5.5	240	0	190	170	1800	
9/26/73	1430	CD	2800	15	5.30	3.2	410	0	270	260	2500	
10/24/73	1030	CD	275	13	5.65	3.9	440	0	342	179	2173	
11/27/73	0910	EST*	55	10	6.40	6.0	194	354	2.0	0	200	
1/9/74	0830	CD	6700	14	5.85	3.6	466	0	261	256	2025	
2/5/74	0925	CD	8500	14	5.75	3.6	750	0	530	251	1975	
3/20/74	1730	CD	7900	16	5.70	3.7	760	0	367	245	1700	
4/30/74	0915		4000	16	5.68	3.3	262	0	175	175	1775	
5/30/74	1320		1500	17	5.50	3.0	420	0	166	166	1250	
6/26/74	1550	EST*	5	20	6.30	6.1	28	716	6.8	5.6	125	
7/17/74	0750		No Flow									
8/21/74	0610		DRY									
11/18/74	0900	CD	960		NS							

*Surface runoff - not bore hole discharge

SUMMARY OF WATER QUALITY TESTS

MONITORING STATION NO:- N-5

JOB NO.:- SL 181-3

LOCATION:- Inlet culvert under Middle Road

DATE	TIME	FIELD DATA				LABORATORY DATA						REMARKS & SPECIAL TESTS	
		FLOW		Temp. °C	pH	pH	Acidity mg/L	Alkalinity mg/L	IRON		SO ⁴ mg/L		
		Method	Q GPM						Total mg/L	Fe ⁺⁺ mg/L			
9/10/73	1545		NO FLOW										
9/26/73	1815	VM	2.5	20	2.95	2.8	440	0	48	10	800		
10/24/73	1010		No Flow										
11/27/73	0925	VM	2	8	5.20	3.5	500	0	14	13	300		
1/9/74		NR											
2/5/74	0945	VE	380	1	4.15	3.2	140	0	13	1	275		
3/20/74	1710	VE	450	10	4.15	4.0	24	0	5	0	95		
4/30/74	0925	EST	5	15	3.38	3.2	110	0	13.5	5.6	450		
5/30/74	1130	VM	10	21	3.45	3.1	80	0	12.2	2.2	225		
6/26/74	1530	VM	30	19	3.98	3.2	74	0	12.5	6.7	100		
7/17/74	0815		No Flow										
8/21/74	0605		DRY										

SUMMARY OF WATER QUALITY TESTS

JOB NO.:- SL 181-3

MONITORING STATION NO:- N-6

LOCATION:- Inlet culvert under Back Road

DATE		FIELD DATA				LABORATORY DATA						REMARKS & SPECIAL TESTS	
		TIME	FLOW		Temp. C	pH	Acidity mg/L	Alkalinity mg/L	IRON		SO ⁴ mg/L		
			Method	Q GPM					Total mg/L	Fe ⁺⁺ mg/L			
9/10/73	1730		No Flow										
9/26/73	1825		Dry										
10/23/73	1845		Dry										
10/24/73	0915		Dry										
11/27/73	0940		Dry										
1/8/74	1710		Dry										
2/5/74	1040		Dry										
3/20/74	1620	EV	250	10	5.37	2	14	0.6	0	37			
4/30/74	0950	VM	8	14	4.75	4	0	1.1	0	150			* 25 GPM Flow from leaking Water Main
5/30/74	1110		*										
6/26/74	1520		*										
7/17/74	0835		No Flow										
8/21/74	0600		DRY										

SUMMARY OF WATER QUALITY TESTS

MONITORING STATION NO:- N-7

JOB NO.:- SL 181-3

LOCATION:- Inlet of culvert under Back Road

FIELD DATA				LABORATORY DATA						REMARKS & SPECIAL TESTS		
DATE	TIME	FLOW		pH	pH	Temp. °C	Acidity mg/L	Alkalinity mg/L	IRON		SO ⁴ mg/L	
		Method	Q GPM						Total mg/L			Fe ⁺⁺ mg/L
9/10/73	1730		No Flow									
9/26/73	1815	VM	12	6.6	5.9	18	1	0	0.5	4.5	29	
10/23/73	1735		Dry									
10/24/73	0920		Dry									
11/27/73	0945		No Flow									
1/8/74			NR									
2/5/74	1050	EV	400	7.25	5.7	2	4	14	0.1	0	40	
3/20/74	1610	EV	550	6.98	6.0	9	2	22	0.6	0	14	
4/30/74	0945	EV	110	6.45	5.4	18	2	6	0.3	0	175	
5/30/74	1105	EST	10	7.23	6.8	18	2	42	0.1	0	200	
6/26/74	1515		No Flow									
7/17/74	0830		DRY									
8/21/74	0600		DRY									

SUMMARY OF WATER QUALITY TESTS

MONITORING STATION NO:- N-8

JOB NO.:- SL 181-3

LOCATION:- Concrete Weir at inlet of culvert

DATE	TIME	FIELD DATA				LABORATORY DATA							REMARKS & SPECIAL TESTS
		Method	Q GPM	Temp. C	pH	Acidity mg/L	Alkalinity mg/L	IRON			SO ⁴ mg/L		
								Total mg/L	Fe ⁺⁺ mg/L				
9/10/73	1610	EST	120	14	6.80	0	0	0.2	<.2		29		
9/26/73	1920	W	310	17	6.20	6	0	<.1	<.1		22		
10/23/73	1820	W	180	10	6.70	8	8	0.1	0		47		
11/27/73	1010	W	240	7	6.20	6	44	0.3	0		40		
11/28/73	1200	W	790		NS								
1/8/74	1740	W	700	1	6.55	2	8	0.1	0		45		
2/5/74	1000	W	850	1	6.55	2	6	0.4	0		32		
3/20/74	1435	W	1100	7	5.87	6	10	0.8	0		27		
4/30/74	1000	W	400	14	6.33	4	10	0.1	0		200		
5/30/74	0945	W	250	14	7.30	4	12	0	0		125		
6/26/74	1455	W	250	16	6.38	6	12	0.1	0		19		
7/17/74	0900	W	70	14	5.65	12	20	0.1	0		23		
8/21/74	1640	W	40	18	7.20	100	200	0.3	0		100		

SUMMARY OF WATER QUALITY TESTS

MONITORING STATION NO: - N-8A

JOB NO.: - SL 181-3

LOCATION: - Concrete weir 400 downstream of N-8

FIELD DATA				LABORATORY DATA						REMARKS & SPECIAL TESTS			
DATE	TIME	FLOW		PH	Acidity mg/L	Alkalinity mg/L	IRON		SO ⁴ mg/L				
		Method	Q GPM				Temp. °C	Total mg/L			Fe ⁺⁺ mg/L		
9/26/73	1945	EV	180	16	6.40	6.2	0	0	0.3	< 0.3	0	24	
10/23/73	1750	VM	8	10	7.00	6.2	4	10	0.7	0	0	29	
11/27/73	1000	EST	150	7	6.20	5.5	6	6	0.3	0	0	35	
11/28/73	1215	EST	380		NS								
1/8/74	1730	EST	400	0	7.12	5.7	2	8	0	0	0	30	Weir by-Passed
5/30/74	0950	Dry											

SUMMARY OF WATER QUALITY TESTS

MONITORING STATION NO:- N-8B

JOB NO.:- SL 181-3

LOCATION:- Flume outlet under abandoned RR bed

FIELD DATA		LABORATORY DATA							REMARKS & SPECIAL TESTS			
		DATE	TIME	FLOW		pH	Acidity mg/L	Alkalinity mg/L		IRON		
Method	Q (GPM)			Temp. C	Total mg/L				Fe ⁺⁺ mg/L	SO ⁴ mg/L		
1/8/74	1800	CD	125	0	7.20	5.5	2	4	0	0	60	
2/5/74	1025	VM	10	1	6.85	5.4	4	4	0.4	0	33	
3/20/74	1445	CD	660	10	5.65	5.9	2	12	0.6	0	40	
4/30/74	1020	CD	20	16	6.40	5.5	20	100	0.1	0	200	
5/30/74	0955		DRY									
6/26/74	1445		DRY									
7/17/74	0905		DRY									
8/21/74	1430		DRY									

SUMMARY OF WATER QUALITY TESTS

MONITORING STATION NO:-- N-9

JOB NO.:-- SL 181-3

LOCATION:-- Inlet culvert under mine access road off back (Concrete flume)

DATE		FIELD DATA			LABORATORY DATA						REMARKS & SPECIAL TESTS	
		TIME	FLOW		pH	Acidity mg/L	Alkalinity mg/L	IRON		SO ⁴ mg/L		
Method	Q		Temp. °C	Total				Fe ⁺⁺	mg/L		mg/L	mg/L
9/10/73	1745	N0	FLOW									
9/26/73	1830	WP	55	18	6.55	8	0	0.1	<.1	10		
10/23/73	1730		DRY									
11/27/73	1035	WP	35	8	6.60	6	14	0.3	0	30		
1/8/74	1710	EV	330	0	7.55	4	12	0	0	14		
2/5/74	1100	EST	900	1	7.25	4	14	0	0	16		
3/20/74	1605	EV	310	9	6.98	4	20	2.5	0	16		
4/30/74	0935	EV	110	14	6.30	4	18	0	0	150		
5/30/74	1055	CD	20	22	7.25	4	20	0.1	0	200		
6/26/74	1510	VE	20	18	6.98	12	24	0.1	0	11		
7/17/74	0820		DRY									
8/21/74	0555		DRY									

SUMMARY OF WATER QUALITY TESTS

MONITORING STATION NO:- N-9A

JOB NO.:- SL 181-3

LOCATION:- Top of concrete flume

FIELD DATA				LABORATORY DATA						REMARKS & SPECIAL TESTS
DATE	TIME	FLOW		pH	Acidity mg/L	Alkalinity mg/L	IRON		SO ⁴ mg/L	
		Method	Q (GPM)				Total mg/L	Fe ⁺⁺ mg/L		
9/10/73	1945	EST	5	7.25	0	6	0.1	<.1	12	
9/26/73			NS							
10/23/73	1700	W	70	7.10	8	12	0.4	0	123	
11/27/73	1115	W	220	6.50	10	16	0.3	0	40	
1/8/74	1605	W	290	7.85	2	10	0	0	13	
2/5/74	1100	W	600	7.08	2	12	0.4	0	19	
3/20/74	1515	W	670	6.55	4	20	0.6	0	14	
4/30/74	1045	W	140	6.80	2	16	0	0	125	
5/30/74	1010	W	270	7.55	4	18	0.1	0	125	
6/26/74	1440	W	140	6.42	6	20	0.1	0	16	
7/17/74	0920	W	70	6.50	18	24	0.1	0	14	
8/21/74	1415	W	35	7.55	6	18	0.5	0	225	

SUMMARY OF WATER QUALITY TESTS

MONITORING STATION NO:-- N-10

JOB NO.:-- SL 181-3

LOCATION:-- Inlet of C.M. Plate, culvert off of Kosiuszko Avenue

DATE	TIME	FIELD DATA			LABORATORY DATA							REMARKS & SPECIAL TESTS	
		Method	Q (GPM)	Temp C	pH	Acidity mg/L	Alkalinity mg/L	IRON		SO ⁴ mg/L			
								Total	Fe ⁺⁺ mg/L				
9/10/73	2030		No Flow										
9/26/73	1715	VM	12	15	6.05	6	0	8.0	1.0	150			
10/24/73	1000		NO FLOW										
11/27/73	1245	VM	3	8	5.88	46	16	7.6	6.7	165			
1/8/74			NR										
2/5/74	1300	VM	20	1	5.75	46	6	4.0	1.1	95			
3/20/74	1700	CD	80	9	5.67	30	12	2.7	0	125			
4/30/74	1145	VM	15	16	6.02	34	30	6.6	2.2	90			
5/30/74	1620	CD	40	21	7.03	300	240	3.8	2.2	150			
6/26/74	1325	CD	100	18	6.90	80	316	2.5	0	100			Strong Sewage Odor
7/17/74	1110		DRY										
8/21/74	0540		DRY										

SUMMARY OF WATER QUALITY TESTS

MONITORING STATION NO: - N-11

JOB NO.: - SL 181-3

LOCATION: - Culvert under dirt road off of Espy Street

FIELD DATA				LABORATORY DATA						REMARKS & SPECIAL TESTS
DATE	TIME	FLOW		pH	Acidity mg/L	Alkalinity mg/L	IRON		SO ⁴ mg/L	
		Method	Q GPM				Temp. C	Total mg/L		
9/10/73	2020	EST	1	NS	NS					
9/26/73	1650	VM	6	16	3.50	36	0	0.9	<.5	110
10/24/73	0945		NO FLOW			48	0	2.5	0	103
11/27/73	1210	VM	4	8	3.92	74	0	10.6	0	200
1/8/74			NR							
2/5/74	1235	VM	15	1	5.08	54	0	2.2	0	110
3/20/74	1650	EST	25	11	4.05	44	0	2.1	0	110
4/30/74	1140	VM	10	15	3.92	38	0	0.3	0	240
5/30/74	1630	VM	5	22	3.90	22	0	1.7	0	150
6/26/74	1350	VM	10	18	4.02	26	0	1.9	1.1	200
7/17/74	1055		No Flow							
8/21/74	0545		DRY							

SUMMARY OF WATER QUALITY TESTS

JOB NO. :- SL 181-3

MONITORING STATION NO. :- N-12

LOCATION :- 100' N.W. of N-11 at confluence with Espy Run

FIELD DATA				LABORATORY DATA						REMARKS & SPECIAL TESTS	
DATE	TIME	FLOW		pH	Acidity mg/L	Alkalinity mg/L	IRON		SO ⁴ mg/L		
		Method	Q GPM				Total mg/L	Fe ⁺⁺ mg/L			
9/10/73	2020	N0	FLOW								
9/26/73	1700	VM	10	3.90	57	0	0.4	<.4		310	
10/24/73	0955	V	DRY								
11/27/73	1220	VM	6	3.98	86	0	0.4	0		300	
1/8/74			NR								
2/5/74	1240	VM	8	5.25	54	0	0.6	0		195	
3/20/74	1645	EST	40	4.15	34	0	0.8	0		200	
4/30/74	1135	DM	5	3.85	34	0	4.0	3.4		145	
5/30/74	1635	DM	5	3.85	36	0	0.2	0		225	
6/26/74	1355	DM	5	3.85	38	0	1.3	0		100	
7/17/74	1052		DRY								
8/21/74	0550		DRY								

SUMMARY OF WATER QUALITY TESTS

MONITORING STATION NO:- N-13

JOB NO.:- SL 181-3

LOCATION:- Concrete weir 600' below coal Co. water reservoir

DATE		FIELD DATA				LABORATORY DATA						REMARKS & SPECIAL TESTS
		TIME	Method	FLOW		pH	Acidity mg/L	Alkalinity mg/L	IRON		SO ⁴ mg/L	
				Q GPM	Temp. °C				Total mg/L	Fe ⁺⁺ mg/L		
9/10/73	1830		No Flow									
9/26/73	1530	WP	150	16	6.95	0	0	0.2	<.2	5		
10/23/73	1530	VM	15	11	7.10	4	12	0.4	0	41		
11/27/73	1155	W	60	7	6.35	10	14	0.4		15		
1/8/74	1650	W	160	1	7.58	2	10	0	0	13		
2/5/74	1240	W	180	1	7.32	6	14	0.1	0	14		
3/20/74	1550	W	190	5	7.03	4	16	0	0	14		
4/30/74	1120	W	95	15	6.98	4	8	0	0	40		
5/30/74	1030	W	50	15	7.35	4	14	0.1	0	175		
6/26/74	1410	EST	20	16	6.10	8	16	0.4	0	16		Weir Bypassed
7/17/74	1033	EST	25	14	5.85	16	20	0.5	0	16		
8/21/74	1350		DRY									

SUMMARY OF WATER QUALITY TESTS

MONITORING STATION NO:- N-13A

JOB NO.:- SL 181-3

LOCATION:- Concrete weir 100' above Coal Co. water reservoir

FIELD DATA				LABORATORY DATA							REMARKS & SPECIAL TESTS	
DATE	TIME	FLOW		pH	Acidity mg/L	Alkalinity mg/L	IRON			SO ⁴ mg/L		
		Method	Q GPM				Temp. C	Total mg/L	Fe ⁺⁺ mg/L			
9/10/73	1830	EST	20	16	7.55	0	2	0.2	<.2	10		
9/26/73	1600	WP	90	16	6.85	14	0	0.3	<.3	5		
10/23/73	1610	VM	25	11	7.20	2	10	0.4	0	23		
11/27/73	1135	W	100	7	6.30	10	10	0.4	0	25		
1/08/74	1635	W	180	1	7.58	2	10	0	0	22		
2/05/74	1145	W	280	2	7.23	4	10	0	0	11		
3/20/74	1540	W	250	6	6.77	4	16	0	0	14		
4/30/74	1105	W	95	14	7.18	4	8	0.1	0	40		
5/30/74	1020	W	70	15	7.20	6	10	0.2	0	175		
6/26/74	1425	W	45	15	6.22	8	14	0.7	0	10		
7/17/74	0950	VM	10	16	6.00	10	14	2.3	0	6		
8/21/74	1400	VM	10	17	7.55	8	14	1.3	0	100		

SUMMARY OF WATER QUALITY TESTS

MONITORING STATION NO.:- MISCELLANEOUS

JOB NO.:- SL 181-3

LOCATION:- NANTICOKE WATERSHED - MISCELLANEOUS SAMPLING

STATION NO.	FIELD DATA				LABORATORY DATA						REMARKS & SPECIAL TESTS
	DATE	FLOW		Temp. C	pH	Acidity mg/L	Alkalinity mg/L	IRON		SO ⁴ mg/L	
		Method	Q (GPM)					Total mg/L	Fe ⁺⁺ mg/L		
N-3A	5/30/74	EST	50	20	6.70	92	490	3.4	0	700	
N-4A	7/17/74	WP	35		NR						
N-6A	5/30/74	EST	35	22	2.55	1780	0	146	1.1	3675	
N-6A	6/26/74	EST	25	18	2.58	2000	0	60.4	0	2625	
N-6A	7/17/74	WP	35	16	2.55	3100	0	231	9	3125	
N-6A	8/21/74	EV	30	27	NR	3700	0	126	0	4975	
N-10A	5/30/74	EST	20	22	6.95	16	304	4.6	3.4	700	
N-13B	7/17/74	*	*	23	4.60	20	0	1.4	0	150	* Seepage into Strip Mine
N-14	4/30/74	EST	10	15	6.35	32	0	38.2	28	365	