#### **APPENDIX**

The data presented in this Appendix are based on 72 samples taken during each month of a one year period from November, 1973 through October, 1974. During the first month two sets of 72 samples were taken. These two sample sets were averaged for the month to avoid a misinterpretation of the statistical analysis of the data. November, having two sampling periods, would have a larger influence on the average, for example, than each of the other months. The analysis of the samples was conducted by Buchart-Horn Consulting Engineers, using standard methods developed by the American Waterworks Association.

#### SAMPLE POINT NO. 1 HEADWATERS MAHANDY CREEK DISCHARGE

DATE CES COM MCD DH					A C I	DITY	ALKA	LINITY	TOTAL	I RON	SULF	AT ES
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC.	LB/DAY	CONC.	LB/DAY	CONC.	LB/ DAY
11/-6/73	0.20	90.	0.13	3.2	162.0	175.	0.0	0.	1.52	2.	195.0	200 •
12/11/73	0.91	408.	0.59	3.4	132.0	648.	0.0	0.	1.20	6.	146.0	717.
1/ 9/74	0.45	202.	0.29	3.5	118.0	286.	0.0	0.	1.68	4.	155.0	376 •
2/ 5/74	0.60	269.	0 • 39	3.6	110.0	356.	0.0	0.	1.68	5.	120.0	388•
3/ 5/74	0.45	202.	0 • 29	3.5	96.0	233•	0.0	0.	1.68	4.	150.0	364.
4/ 3/74	0.45	202.	0 • 29	3.5	140.0	340.	0.0	0.	1.12	3.	150.0	364.
5/ 8/74	0.14	63.	0.09	3.5	130.0	98•	0.0	0.	1.80	1 •	225.0	170 •
6/11/74	0.08	36.	0.05	3.5	118.0	51.	0.0	0.	2.10	1.	200.0	86.
7/ 9/74	0.36	162.	0.23	3.5	400.0	777•	0.0	0.	2.10	4.	150.0	291.
8/13/74	0.14	63.	0.09	3 • 4	160.0	121.	0.0	0.	2.30	2.	325.0	245.
9/11/74	0.50	224.	0.32	3.3	134.0	361.	0.0	0.	1.20	3.	300.0	809.
10/ 9/74	0.21	94.	0.14	3.3	300•0	340.	0.0	0.	1.70	2.	300.0	340 •
MI NI MUM	0.08	36 •	0.05	3.2	96.0	51.	0.0	0•	1.12	1.	120.0	86•
MAXIMUM	0.91	408.	0.59	3•6	400.0	777.	0.0	0.	2.30	6.	325.0	809.
AVERAGE	0.37	168.	0 • 24	3 • 4	166.7	315.	0.0	0.	1.67	3.	200.5	363.

## SAMPLE PCINT NO. 2 NORTH MAHANDY CREFK AT PARK PLACE

DATE CES GPM MGD F					ACI	YT10	ALKA	LINITY	TOTAL	I RON	SULF	AT ES
DATE	CFS	GPM	MGD	PH	CONC.	L B/DAY	CONC •	LB/DAY	CONC.	L8/DAY	CONC.	LB/DAY
11/ 5/73	2.09	938.	1.35	4.3	13.0	147.	0.0	0.	0.00	0.	6.0	68•
12/11/73	13.90	6239 •	3.98	4.7	6.0	450.	0.0	0.	0.15	11.	45.0	3374.
1/ 9/74	4.68	2101.	3.02	4.7	4.0	101.	2.0	50.	0.15	4.	6.0	151.
2/ 5/74	2.35	1055.	1.52	6 • 4	6.0	76.	4.0	51.	0.15	2•	3.0	101.
3/ 5/74	1.62	727.	1.05	5 • 2	4 • 0	35.	0.0	0.	0.44	4.	7.0	61.
4/ 3/74	2 • 65	1189.	1.71	4.9	0.0	0.	4.0	57.	0.00	0.	30.0	429 •
5/ 8/74	0.30	1 35 •	0.19	4.8	2.0	3∙	0.0	0.	0.00	0.	150.0	243.
6/11/74	0.15	67.	0.10	4.6	2.0	2•	0.0	0.	0.20	0.	4.0	3.
7/ 9/74	0.50	224.	0.32	4.6	16.0	43.	0.0	0.	0.00	0.	175.0	472.
8/13/74	0.40	180 •	0 • 26	4.8	8.0	17.	0.0	0.	0.00	0.	275.0	593.
9/11/74	1.50	673.	0.97	5 • 2	10.0	81.	0.0	0.	0.30	2.	200.0	1618.
10/ 9/74	1.25	561.	0.81	4 •8	4.0	27.	0.0	0•	0.20	1.	275.0	1854.
MUMINIM	0.15	67.	0 • 10	4.3	0.0	0.	0.0	0•	0.00	0.	4.0	3.
MAXIMUM	13.90	6239.	8.98	6 • 4	16.0	450.	4.0	57.	0.44	11.	275.0	3374 •
AVERAGE	2.62	1174.	1.69	4.9	6.3	82.	8 • 0	13.	0.13	2 •	98.4	747.

## SAMFLE POINT NO. 3 NORTH MAHANDY CREEK AT BOWMAN'S

	FLOW					DITY	ALKA	LINITY	TOTAL	I RON	SULF	AT ES
DATE	CFS	GPM 	MGD	PH	CONC.	L B/DAY	C0NC •	Y A GV EJ	CONC.	L8/DAY	CONC.	LB/ DAY
11/ 6/73	8.60	3360.	5.56	4 • 1	8.0	371.	0.0	0.	0.37	17.	22 • 0	1020.
12/11/73	21.70	9740.	14.93	4.7	6.0	702.	0.0	0.	0.59	69.	56.0	6554.
1/ 9/74	12.80	5745•	8 ∙27	4.7	8.0	552•	2.0	138.	0.15	10.	9.0	621.
2/ 5/74	11.20	5027.	7.24	4.9	4.0	242.	4.0	242.	0.59	36.	9.0	544.
3/ 5/74	4.80	2154.	3.10	4.8	6.0	155.	0.0	0.	2.18	56.	6.0	155.
4/ 3/74	11.20	5027.	7.24	4 • 8	6.0	362.	0.0	0.	0.48	29.	30.0	1812.
5/ 8/74	1.52	682.	0.98	4 • 2	10.0	€2•	0.0	0.	0.80	7.	150.0	1230 •
6/11/74	1.30	583.	0.84	4 • 2	8.0	56.	0.0	0 •	0.20	1.	14.0	98•
7/ 9/74	3.10	1391.	2.00	4.5	20.0	334.	0.0	0.	0.40	7.	175.0	2926 •
8/13/74	1.20	539•	0.79	4.3	12.0	78.	0.0	0.	0.10	1 •	250.0	1618.
9/11/74	2.96	1329.	1.91	4.7	10.0	160.	0.0	0.	0.60	10.	200.0	3193.
10/ 9/74	1.60	718.	1.03	4.3	6.0	52.	0.0	0.	0.10	1 •	250.0	2157.
MINIMUM	1.20	539•	0.78	4 • 1	4.0	52•	0.0	0.	0.10	1.	6.0	98•
MUM IXAVI	21.70	9740 •	14.03	4.9	20.0	702•	4.0	242.	2.18	69.	250.0	6554.
AVERAGE	6.83	3066•	4.42	4.5	8.7	2€2•	0.5	32.	0.55	20•	97.6	1827.

SAMPLE POINT NO. 4 MAHANCY CITY BORE HOLE DISCHARGE

	FLOW					DITY	ALKA	LINITY	TOTAL	IRON	SULF	AT ES
DATE	CFS	GPM	MGD	PH	CONC.	L B/DAY	CONC .	L8/DAY	CONC.	LB/DAY	CONC.	LB/ DAY
11/6/73	7.06	3169.	4.56	3.8	91.0	3465.	0.0	0.	17.45	664.	180.0	6854.
12/11/73	27.00	12118.	17 • 45	4.5	80.0	11650.	0.0	0.	16.90	2461.	350.0	50969
1/ 9/74	8.56	3842.	5.53	4.8	92.0	4248.	0.0	0.	8.37	386.	204.0	9418.
2/ 5/74	17.70	7944.	11.44	4.9	102.0	9737.	0.0	0.	8.63	824.	195.0	18616.
3/ 5/74	14.60	6553.	9 • 44	4.7	74.0	5827.	0.0	0.	9.16	721.	175.0	13780 •
4/ 3/74	8.45	3793.	5 • 46	4.7	80.0	3646.	0.0	0.	7.38	336.	200.0	9115.
5/ 8/74	10.50	4713.	6.79	4.7	50.0	2832.	0.0	0.	8-40	476.	225.0	12742.
6/11/74	7.57	3398•	4.89	4 • 8	64.0	2613.	0.0	0.	8.90	363.	175.0	7145.
7/ 9/74	5.98	2684 •	3.86	4 • 6	600.0	19352.	0.0	0.	10.50	339.	170.0	5483.
8/13/74	6.93	3110.	4.48	4.5	88.0	3289.	0.0	0.	10.60	396.	325.0	12148.
9/11/74	14.40	6463.	9.31	4.9	60.0	4660.	0.0	0.	16.40	1274.	225.0	17475.
10/9/74	6.93	3110.	4 • 48	4.6	300.0	11213.	0.0	0.	11.80	441.	325.0	12148.
MUM IN IM	5.98	2684.	3.86	3.8	50.0	2613.	0.0	0.	7.38	336.	170.0	5483.
MAXI MUM	27.00	12118.	17.45	4.9	600.0	19352.	0.0	0.	17.45	2461.	350.0	50969
AVERAGE	11.31	- 5075.	7.31	4.6	140-1	6878.	0.0	0.	11.21	724 •	229.1	14658

## SAMPLE POINT NO. 5 MAHANOY CREEK AT FOOTBALL FIELD

FLOW					ACI	DITY	ALKA	LINITY	TOTAL	IRON	SULF	AT ES
DATE	CFS	GPM	MGD	PН	CONC.	LB/DAY	CONC.	LB /DAY	CONC.	LB/DAY	CONC.	LB/ DAY
11/ 6/73	17.40	7810.	11.25	4.3	28.0	2628.	0.0	0.	7.02	659.	173.0	16236.
12/11/73	59.10	26526.	38 • 20	4.4	50.0	15938.	0.0	0.	11.84	3774.	110.0	35063.
1/ 9/74	25.10	11266.	16.22	4.8	62.0	8393.	0.0	0.	4.94	669.	149.0	20171.
2/ 5/74	31.90	14318.	20.62	4 • 8	56.0	9635.	0.0	0.	4.94	850.	135.0	23227.
3/ 5/74	22.20	9964.	14.35	5.0	30.0	3592.	0.0	0.	5.57	667.	125.0	14967.
4/ 3/74	27.00	12118.	17.45	4.9	42.0	6116.	0.0	0.	4.76	693.	225.0	32766.
5/ 8/74	12.30	5521.	7.95	5.0	40.0	2654.	0.0	0.	5.20	345.	150.0	9951.
6/11/74	8.90	3995•	5.75	5.2	22.0	1056.	0.0	0.	5.10	245.	149.0	7152.
7/ 9/74	9.30	4174.	6.01	4 • 8	72.0	3612.	0.0	0.	4.70	236.	125.0	6270 •
8/13/74	7.51	3371.	4.85	4 .8	42.0	1701.	0.0	0.	5.20	211.	225.0	9114.
9/11/74	15.60	7002.	10.08	4 • 6	52.0	4375.	0.0	0.	7.20	606.	200.0	16828.
10/9/74	8.87	3981.	5.73	4.8	30.0	1435.	0.0	0.	5.30	254•	275.0	13156.
MI NI MUM	7.51	3371.	4.85	4.3	22.0	1056.	0.0	0.	4.70	211.	110.0	6270 •
MAXI MUM	59.10	26526.	38 • 20	5.2	72.0	15938.	0.0	0.	11.84	3774.	275.0	35063•
AVERAGE	20.43	9170.	13.21	4.8	43.8	5095.	0.0	0.	5.98	767.	170.1	17075.

## SAMPLE POINT NO. 6 WASTE HOUSE RUN

FLOW					AC I	DITY	ALKA	LINITY	TOTAL	IRON	SULF	AT ES
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC .	L8 /DA Y	CONC.	LB/DAY	CONC.	LB/ DAY
11/ 6/73	4.55	2042•	2.94	5.2	5.0	123.	1.0	25.	0.00	0.	17.0	417.
12/11/73	15.30	6867.	9.89	4.9	6.0	495.	2.0	165.	0.15	12.	45.0	3713.
1/ 9/74	4.37	1961.	2.82	5.9	2.0	47.	4.0	94.	0.00	0.	7.0	165.
2/ 5/74	10.60	4758 •	6.85	7.0	4.0	229.	8.0	457.	0.00	0.	8.0	457.
3/ 5/74	2.24	1005.	1.45	6.4	2.0	24.	2.0	24.	0.15	2.	6.0	72.
4/ 3/74	7.48	3357.	4.83	6.7	4.0	161.	0.0	0.	0.24	10.	35.0	1412.
5/ 8/74	1.81	812.	1.17	7.2	2.0	20.	0.0	0.	0.30	3.	30.0	293.
6/11/74	1.32	592.	0.85	6.7	2.0	14.	0.0	0.	0.30	2.		
7/ 9/74	2.63	1180.	1.70	6.9	12.0	170.	0.0	0.			6.0	43.
8/13/74	0.87	390 •	0.56	7.7	4.0				0.10	1.	30.0	426.
						19.	0.0	0.	0.00	0.	250.0	1173.
9/11/74	1.95	875.	1.26	7.7	8.0	84.	6.0	63.	0.00	0.	175.0	1841.
10/9/74	1.50	673.	0.97	6.7	8.0	65.	0.0	0.	0.00	0.	225.0	1820 •
MI NI MUM	0.87	390•	0.56	4.9	2.0	14.	0.0	0.	0.00	0.	6.0	43.
MAXI MUM	15.30	6867.	9 • 89	7.7	12.0	495.	8.0	457.	0.30	12.	250.0	
AVERAGE	4.55	2043.	2.94	6.6	4.9	121.	1.9	69.	0.10	3.	69.5	3713. 986.

## SAMPLE POINT NO. 7 GILBERTON SHAFT DISCHARGE

		FLOW			AC	DITY	ALKA	LINITY	TOTAL	IRON	SUL	FAT FS
DATE	CFS	GPM	MGD	PH	CONC.	L B/DAY	CONC •	LB/DAY	CONC.	LB/DAY	CONC.	LB/DAY
11/ 6/73	22.30	10009.	14.41	5.9	105•0	12629.	46.0	5533•	57.32	6894.	762.0	91650 •
12/13/73	22.30	10009.	14.41	6.2	18.0	2165.	22.0	2646.	37.90	4558.	825.0	99228•
1/ 9/74	22.30	10009.	14.41	6.4	120.0	14433.	74.0	8900.	42.26	5083.	1550 • 0	186428.
2/ 8/74	22.30	10009.	14.41	6.4	118.0	14193.	152.0	18282.	85.05	10229.	650.0	78179.
3/ 5/74	22.30	10009.	14.41	6 • 4	200.0	24055.	126.0	15155.	71.60	8612.	550.0	66152.
4/ 3/74	22.30	10009.	14.41	6.3	130.0	15636.	100.0	12028.	50.40	6062.	750.0	90207.
5/ 8/74	22.30	10009.	14.41	6.3	96.0	11546.	0.0	0.	61.20	7361.	575.0	69159.
6/13/74	FLOW NO	T DETERM	I NEC/NOV	VATER	SAMPLE	TAKEN						
					0.0	0 •	0.0	0. 0.	00	0.	0.0	0.
7/ 9/74	FLOW NO	T DETERM	I NE D/ NOV	VATER	SAMPLE	TAKEN						
					0.0	0 •	0.0	0. 0.	00	0.	0.0	0.
8/13/74	22.30	10009.	14.41	6 • 1	100.0	12028.	32.0	3849.	54.60	6567.	950.0	114262.
9/11/74	22.30	10009.	14.41	6.5	188.0	22612.	26.0	3127.	73.20	8804.	1150.0	138317.
10/ 9/74	FLOW NO	T DETERM	INED/ NOV	ATER	SAMPLE	TAKEN						
					0.0	0.	0.0	0. 0.	00	0.	0.0	0.
MINI MUM	0.00	0.	0.00	0.0	0.0	0.	0.0	0.	0.00	0.	0.0	0 •
MUM IX AM	22.30	10009.	14.41	6.5	200.0	24055.	152.0	18282.	85.05	10229.	1550.0	186428 .
AVERAGE	16.72	7507•	10.81	6.3	119.4	14366.	64.2	7724.	59.28	7130.	862.4	103731.

#### SAMPLE PCINT NO. 8.1 MAHANCY CREK ABOVE GILBERTON SHAFT

	FLOW				AC I	YT10	ALKA	LINITY	TOTAL	IRON	SULF	AT ES
DATE	CFS	GPM	MGD	PН	CONC.	L E/DAY	CONC .	LB/DAY	CONC.	L8/DAY	CONC.	LB/DAY
11/ 6/73	17.72	7953•	11.45	4 • 1	47.0	4492•	0.0	0.	8.30	793.	183.0	17490 •
12/13/73	54.30	24372.	35 • 10	4.2	88.0	25772	0.0	0.	20.59	6030	190.0	55645
1/ 9/74	22.80	10233.	14.74	4.7	94.0	11559.	0.0	0.	8 • 63	1061.	255.0	31358.
2/ 8/74	37.20	16697.	24.04	4.7	70.0	14045.	0.0	0.	7.61	1527.	135.0	27086 •
3/ 5/74	22.20	9964.	14.35	4.7	70.0	8382•	0.0	0.	6.44	771.	100.0	11974.
4/ 3/74	39.10	17549.	25 • 27	4.9	40.0	8435.	0.0	0.	3.10	654.	175.0	36905.
5/ 8/74	9.38	4210.	6.06	4.6	58.0	2934.	0.0	0.	3.90	197.	150.0	7589 •
6/13/74	10.20	4578 •	6.59	4.5	42.0	2311.	0.0	0.	3.70	204.	150.0	8252.
7/ 9/74	9.64	4327 •	6.23	4 • 4	58.0	3016.	0.0	0.	2.20	114.	115.0	5979 •
8/13/74	7.85	3523•	5.07	4 . 4	58.0	2456.	0.0	0.	2.70	114.	250.0	10585.
9/11/74	15.30	6857.	9 •89	4.3	52.0	4291.	0.0	0.	4.80	396.	275.0	22693.
10/ 9/74	10.70	4803.	6.92	4 • 0	40.0	2308.	0.0	0.	3.90	225•	275.0	15870.
MINIMUM	7.85	3523•	5.07	4.0	40.0	2308.	0.0	0.	2.20	114.	100.0	5979•
MAXI MUM	54.30	24372.	35.10	4.9	94.0	25772.	0.0	0.	20.59	6030.	275.0	55645
AVERAGE	21.37	9590•	13.81	4 • 5	59.8	7500.	0.0	0•	6.32	1007.	187.8	20952.

### SAMPLE POINT NO. 8.2 MAHANGY CREEK BELOW GILBERTON SHAFT

	FLOW					Y1 I C	ALKA	LINITY	TOTAL	I RON	SULF	AT ES
DATE	CFS	GPM	MGD	РH	CONC.	LB/DAY	CONC •	LB /DA Y	CONC.	L8/DAY	CONC.	LB/DAY
11/ 6/73	41.10	18447.	26.56	5 • 7	117.0	25936.	36.0	7980.	44.37	9836.	665.0	147413.
12/13/73	76.60	34381.	49.51	5∙8	56.0	23136.	0.0	0.	28.71	11861.	550 • 0	227230 •
1/ 9/74	45.10	20242.	29 • 15	6.3	118.0	28703.	4 • 0	973.	44.35	10788.	950.0	231086.
2/ 8/74	59.27	25602.	38.31	6.2	50.0	15984.	64.0	20459.	38.06	12167.	505.0	161436.
3/ 5/74	44.50	19973.	28.76	6.3	98.0	23521.	30.0	7200.	36.85	8844.	325.0	78004.
4/ 3/74	61.40	27558•	39 • 68	6.3	90.0	29805.	20.0	6623.	31.43	10408.	350.0	115907.
5/ 8/74	31.70	14228.	20 • 49	6.3	76.0	12994.	10.0	1710.	49.20	8412.	475.0	81213.
6/13/74	10.20	4578.	õ ∙59	4.5	42.0	2311.	0.0	0.	3.70	204.	150.0	8252.
7/ 9/74	9.64	4327.	6 • 23	4 • 4	58.0	3016.	0.0	0 •	2.20	114.	115.0	5979 •
8/13/74	7 • 85	3523.	5.07	4 • 4	58.0	2456.	0.0	0.	2.70	114.	250.0	10585.
9/11/74	37.60	16876.	24.30	6.5	48.0	9734.	0.0	0.	53.50	10850.	800.0	162238 •
10/ 9/74	10.70	4803.	6.92	4.0	40.0	2308.	0.0	0•	3.90	225•	275.0	15870.
MUMINIM	7 • 85	3523•	5.07	4.0	40.0	2308•	0 • 0	0.	2.20	114.	115.0	5979•
MAXIMUM	76.60	34331.	49.51	6.5	118.0	29805.	64.0	20459.	53.50	12167.	950 • 0	231086.
AVERAGE	36.30	16295•	23.46	5.6	70.9	14992.	13.7	3745.	28.25	6985.	450.8	103768.

SAMFLE POINT NO. 9 MAHANCY CREEK BELOW MAHANCY PLANE

	FLOW					YT1D	ALKA	LINITY	TOTAL	I RON	SULF	AT ES
DATE	CFS	GPM	MGD	₽H	CONC.	LB/DAY	CONC .	LB/DAY	CONC.	LB/DAY	CONC.	LB/DAY
11/ 6/73	52.30	23474.	33.80	5•2	43.0	12130.	1.0	282•	42.83	12082.	685.0	193226.
12/11/73	71.90	32271.	46 • 47	6.1	60.0	23268.	0.0	0.	24.80	9617.	445.0	172569.
1/8/74	55.60	24955.	35.94	6.6	78.0	23391.	0.0	0.	46.18	13848.	700.0	209916.
2/ 5/74	63.70	28591.	41.17	6.9	38.0	13056.	18.0	6184.	33.34	11455.	695.0	238780 •
3/ 4/74	51.10	22935.	33.03	6.8	50.0	13780.	0.0	0.	41.83	11529.	450.0	124024.
4/ 3/74	79.90	35862.	51.64	6.8	44.0	18962.	16.0	6895.	28.33	12209.	400.0	172377.
5/ 8/74	59.20	26571.	38 • 26	7.0	62.0	19796.	0.0	0.	44.70	14273.	675.0	215526.
6/11/74	14.10	6329•	9.11	6.6	14.0	1065.	2.0	152.	3.10	236.	110.0	8365.
7/ 9/74	16.50	7406.	10.66	6.6	60.0	5340.	0.0	0.	35.60	3168.	750.0	66745.
8/12/74	8.32	3734.	5.38	5.6	40.0	1795.	0.0	0.	1.80	81.	225.0	10097.
9/11/74	36.40	16338.	23.53	6 • 8	60.0	11779.	0.0	0.	38.60	7578.	800.0	157060.
10/8/74	11.80	5296.	7.63	4.6	32.0	2037.	0.0	0.	3.10	197•	275.0	17502.
MUNINUM	8.32	3734.	5 • 38	4.6	14.0	1065.	0.0	0.	1.80	81.	110.0	8365.
MAXI MUM	79.90	35862.	51.64	7.0	78.0	23391.	18.0	6895•	46.18	14273.	800.0	238780 •
AVERAGE	43.40	19480•	28.05	6.3	48.4	12200.	3.1	1126.	28.68	8023.	517.5	132182.

#### SAMPLE POINT NO. 10 GIRARDVILLE NO. 1 DISCHARGE

		FLOW			ACI	DITY	ALKA	LINITY	TOTAL	IRON	SULF	AT ES
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC.	LB/DAY	CONC.	LBZDAY	CONC.	LB/DAY
11/ 6/73	1.57	705.	1.01	5.8	80.0	677.	45.0	381•	24.95	211.	565.0	4784.
12/11/73	4.26	1912.	2.75	5.6	88.0	2022.	38.0	873.	24.06	553.	600.0	13786.
1/8/74	3.86	1732.	2.49	6.0	114.0	2373.	34.0	708.	28.37	591.	490.0	10201.
2/ 5/74	4.52	2029 •	2.92	6.2	60.0	1463.	74.0	1804.	25.73	627.	505.0	12311.
3/ 4/74	3.78	1697.	2 • 4 4	6 • 1	80.0	1631.	76.0	1549.	24.70	504.	350.0	7136.
4/ 3/74	3.98	1786.	2.57	6.0	135.0	2898•	64.0	1374.	23.33	501.	350 • 0	7513.
5/ 8/74	1 • 96	880.	1 • 27	6.2	74.0	782.	46.0	486.	26.60	281.	300.0	3171.
6/11/74	2.48	1113.	1.60	6.5	28.0	375.	52.0	696.	25.60	342.	275.0	3678.
7/ 9/74	2.78	1248.	1.80	6.3	60.0	900.	22.0	330.	26.70	400.	480.0	7197.
8/12/74	2.03	911.	1.31	6.0	80.0	876.	64.0	701.	24.00	263.	450.0	4927.
9/11/74	3.34	1499.	2.16	6.1	82.0	1477.	40.0	721 •	27.40	494.	600.0	10809.
10/ 8/74	2.48	1113.	1.60	4.6	10.0	134.	44.0	589•	22.60	302.	625.0	8360.
MI NI MUM	1.57	705.	1 • 0 1	4.6	10.0	134.	22.0	330•	22.60	211.	275.0	3171.
MA XI MUM	4.52	2029.	2.92	6.5	135.0	2898.	76.0	1804.	28.37	627.	625.0	13786
AVERAGE	3.09	1385.	1.99	5.9	74.3	1301.	49.9	851.	25.34	422.	465 •8	7823.

### SAMPLE POINT NO. 11 GIRARDVILLE NO. 2 DISCHARGE

		FLOW			AC I	DITY	ALKA	LINITY	TOTAL	IRON	SULE	AT ES
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC .	LB /DA Y	CONC.	LB/DAY	CONC.	LB/DAY
11/ 6/73	0.83	373.	0.54	6.1	50.0	224•	37.0	166.	25.99	116.	425.0	1903.
12/11/73	1.34	601.	0.87	5.9	18.0	130.	40.0	289.	23.96	173.	680.0	4915.
1/8/74	0.74	332.	0.48	6.3	64.0	255.	48.0	192.	14.74	59.	410.0	1636.
2/ 5/74	1 • 4 0	628•	0.90	6.5	14.0	106.	68.0	513.	19.44	147.	445.0	3360 •
3/ 4/74	1.08	485.	0.70	6.4	66.0	384.	60.0	350.	15.20	89.	300.0	1748 •
4/ 3/74	1.22	548.	0.79	6 • 4	84.0	553.	68.0	447.	15.24	100.	350.0	2303.
5/ 8/74	0.84	377.	0.54	6.9	38.0	172.	46.0	208.	18.40	83.	350.0	1586.
6/11/74	0.96	431.	0.62	6.5	30.0	155.	44.0	228.	19.00	98•	225.0	1165.
7/ 9/74	0.62	278•	0.40	6.5	62.0	207.	40.0	134.	18.60	62•	410.0	1371.
8/12/74	0.68	305.	0.44	5.6	80.0	293.	62.0	227.	17.50	64.	475.0	1742.
9/11/74	1.11	498.	0.72	6.5	28.0	168.	40.0	239.	18.40	110.	600.0	3592.
10/ 8/74	0.81	364.	0.52	6.2	6.0	26.	30.0	131.	17.70	77.	475.0	2075.
MINIMUM	0.62	278.	0 • 40	5.9	6.0	26.	30.0	131.	14.74	59.	225.0	1165.
MAXI MUM	1.40	628.	0.90	6.9	84.0	553.	68.0	513.	25.99	173.	680.0	4915.
AVERAGE	0.97	4 35 •	0.63	6 • 4	45.0	223.	48.6	260.	18.68	98.	428 • 8	2283.

SAMPLE POINT NO. 12 GIRARDVILLE NO. 3 DISCHARGE

		FLOW			AC I	DITY	ALKA	LINITY	TOTAL	IRON	SULF	AT ES
DATE	CFS	SPM	MGD	PH	CONC.	LB/DAY	CONC .	LB/DAY	CONC.	LB/DAY	CONC.	LB/DAY
11/ 6/73	0.44	197.	0.28	5.8	34.0	81.	8.0	19.	20.11	48.	270.0	641.
12/11/73	0.42	189.	0.27	5.2	64.0	145.	8.0	18.	23.96	54.	405.0	917.
1/8/74	0.39	175.	0.25	5.9	90.0	189.	14.0	29.	14.35	30.	325.0	684.
2/ 5/74	0.42	189.	0.27	5.9	54.0	122.	36.0	82.	18.37	42.	380.0	861.
3/ 4/74	0.42	189.	0.27	6.0	98.0	222.	40.0	91.	15.15	34 •	275.0	623.
4/ 3/74	0.42	189.	0 • 27	5.8	80.0	181.	24.0	54.	10.48	24 •	225.0	510.
5/ 8/74	0.51	229 •	0.33	6 • 1	42.0	116.	16.0	44.	12.50	34.	225.0	619.
6/10/74	0.39	175.	0 • 25	6.3	120.0	252.	30.0	63.	13.10	28.	225.0	473.
7/ 8/74	0.42	189.	0.27	6.3	36.0	82.	20.0	45.	14.80	34.	335.0	759 •
8/12/74	0.42	139.	0.27	6.0	60.0	136.	28.0	6.3.	12.40	28•	350.0	793.
9/10/74	0.49	220•	0.32	6.5	38.0	100.	16.0	42.	18.30	48.	375.0	991.
10/8/74	0.42	189.	0 • 27	5•6	6.0	14.	28.0	63.	13.10	30.	500.0	1133.
MINIMUM	0.39	175.	0 • 25	5.2	6.0	14.	8.0	18.	10.48	24.	225.0	473.
MUMIXAM	0.51	229 •	0.33	6.5	120.0	252.	40.0	91 •	23.96	54.	500.0	1133.
AVERAGE	0.43	193.	0 • 28	5.9	60.2	137.	22.3	51.	15.55	36.	324.2	75^•

### SAMPLE PCINT NO. 13 GIRARDVILLE NO. 4 DISCHARGE

		-FLOW			AC I	<b>DITY</b>	ALKA	LINITY	TOTAL	I RON	SULF	AT ES
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC.	LB /DA Y	CONC.	L8/DAY	CONC.	LB/DAY
11/ 6/73	0.06	27.	0 • 0 4	3 • 4	50.0	16.	0.0	0.	12.74	4.	425.0	138•
12/11/73	0.08	35.	0.05	3.2	70.0	30.	0.0	0.	13.96	6.	476.0	205.
1/ 8/74	0.11	49.	0.07	4 • 1	88.0	52.	0.0	0.	12.86	8.	420.0	249 •
2/ 4/74	0.11	49.	0.07	3.4	86.0	51.	0.0	0.	16.44	10.	325.0	193.
3/ 4/74	0.11	49.	0.07	3.9	60.0	36.	0.0	0.	13.96	8.	225.0	133.
4/ 2/74	0.11	49.	0.07	4.0	94.0	56.	0.0	0.	8. 81	5.	200.0	119.
5/ 8/74	0.11	49.	0.07	3.8	70.0	42.	0.0	0.	6.40	4.	175.0	104.
6/10/74	0.11	49.	0.07	3.7	70.0	42.	0.0	0.	8.20	5.	225.0	133.
7/ 8/74	0.06	27.	0.04	3.8	400.0	129.	0.0	0.	10.40	3.	375.0	121.
8/12/74	0.06	27.	0.04	3.9	70.0	23.	0.0	0.	7.90	3.	350.0	113.
9/10/74	0.09	40.	0.06	3.7	72.0	35.	0.0	0.	8.60	4.	425.0	206.
10/ 8/74	0.10	45.	0.06	3.5	62.0	33•	0.0	0.	8.20	4.	600.0	324.
MUM IN IM	0.06	27.	0.04	3.2	50.0	16.	0.0	0.	6.40	3.	175.0	104.
MAXI MUM	0.11	49.	0.07	4 • 1	400.0	129.	0.0	0.	16.44	10.	600.0	324 •
AVERAGE	0.09	42.	0.06	3.7	99.3	45.	0.0	0.	10.71	5•	351.8	170 .

SAMPLE POINT NO. 14 MAHANOY CREEK BELOW GIRARDVILLE DISCHARGES

		FLOW			ACI	DITY	ALKA	LINITY-	TOTAL	I RON	SIII E	AT ES
DATE	CES	GPM	MGD	PH	CONC.	LB/DAY	CONC.	LB/DAY	C BNC .	LB/DAY	CONC.	LB/DAY
11/ 6/73	52.40	23519.	33.87	5.5	47.0	13283.	1.0	283.	38.05	10754.	765 • 0	216205.
12/11/73	92.00	41293.	59 • 46	6.1	26.0	12901.	0.0	0.	23.84	11830.	440.0	218330 •
1/8/74	63.00	28276.	40.72	6 • 4	64.0	21747.	0.0	0.	38.37	13038.	685.0	232758 •
2/ 5/74	56.70	29937.	43.11	6.9	68.0	24463.	22.0	7914.	31.08	11181.	400.0	143900.
3/ 4/74	59.70	26795.	38 • 59	6.7	40.0	12880.	0.0	0.	31.08	10008.	450.0	144897.
4/ 2/74	87.20	39138.	56 • 36	6.5	36.0	16931.	12.0	5644.	8.81	4143.	175.0	82305.
5/ 8/74	68.90	30925.	44.53	6.9	52.0	19324.	0.0	0.	42.40	15756.	475.0	176517.
6/10/74	56.50	25359•	36 • 52	6.8	52.0	15846.	0.0	0.	43.30	13195.	425.0	129512.
7/ 9/74	25.30	11355.	16.35	6.5	52.0	7096.	0.0	0.	6.50	887.	225.0	30703.
8/12/74	12.20	5476.	7.89	6.5	38.0	2500.	8.0	526.	7.70	507.	300.0	19740 •
9/10/74	35.10	15754.	22.69	6.8	40.0	7573.	0.0	0.	6.30	1193.	175.0	33130 •
10/ 8/74	19.50	8752.	12.50	5•8	40.0	4207.	0.0	0.	7.50	789.	325.0	34182.
MUMINIM	12.20	5476•	7 •89	5.5	26.0	2500•	0.0	0.	6.30	507.	175.0	19740 •
MAXINUN	92.00	41293.	59.46	6.9	68.0	24463.	22.0	7914.	43.30	15756.	765.0	232758.
AVERAGE	53.21	23882.	34.39	6 • 4	46.3	13229•	3.6	1197.	23.74	7773.	403.3	121848.

		FLOW			AC I	DITY	ALKA	LINITY	TOTAL	I RON	SULF	AT ES
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC .	LB/DAY	C DNC .	LB/DAY	CONC.	LB/DAY
11/ 6/73	10.20	4578.	5.59	6.5	60.0	3301.	186.0	10233.	27.91	1535.	1065.0	58590.
12/11/73	11.40	5117.	7 • 37	6.1	88.0	5411.	200.0	12297.	26.13	1607.	1300.0	79932
1/8/74	11.40	5117.	7.37	6.3	132.0	8116.	246.0	15126.	34.69	2133.	1325.0	81469.
2/ 5/74	25.40	11400 .	16 • 42	6.3	136.0	18631.	260.0	35619.	31.08	4258.	850.0	116446.
3/ 5/74	27.30	12253.	17.64	6 • 4	0.08	11779.	282.0	41523.	36.85	5426.	425.0	62578 •
4/ 3/74	25.40	11400 .	16.42	6.3	144.0	19727.	274.0	37537.	26.67	3654.	1050.0	143846.
5/ 7/74	25.40	11400.	16.42	6.3	100.0	13700.	222.0	30413.	29.10	3987.	950.0	130146.
6/10/74	20.30	9111.	13.12	6.2	180.0	19708.	230.0	25182.	29.70	3252.	1075.0	117700 •
7/ 9/74	18.50	8348.	12.02	6.3	108.0	10835.	230.0	23074.	28.70	2879.	1350.0	135432.
8/12/74	17.80	7989•	11.50	6.3	66.0	6336•	258.0	24769.	28.50	2736.	1275.0	122406 •
9/11/74	17.80	7989.	11.50	6 • 4	76.0	7296.	116.0	11137.	36.40	3495.	1475.0	141607.
10/ 8/74	16.50	7406.	10.66	6.2	142.0	12637.	182.0	16197.	27.60	2456.	300.0	26698•
MI NI MUM	10.20	4578.	6 • 59	6 • 1	60.0	3301.	116.0	10233.	26.13	1535.	300.0	26698•
MAXI MUM	27.30	12253.	17.64	6.5	180.0	19727.	282.0	41523.	36.85	5426.	1475.0	143846.
AVERAGE	18.96	8509.	12.25	6.3	109.3	1145.6	223.8	23592•	30.28	3118.	1036.7	101404.

### SAMPLE POINT NO. 16 PACKER NO. 5B DISCHARGE

		FLOW			AC I	DI TY	ALKA	LINITY	TOTAL	I RON	SH F	AT ES
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC .	LB /DA Y	CONC.	LB/DAY	CONC.	LB/DAY
11/ 6/73	15.40	6912.	9•95	6 • 4	75.0	6230.	179.0	14868.	30.92	2568.	1125.0	93443.
12/11/73	38.10	17101.	24.62	6 • 1	0.0	0.	184.0	37811.	28.56	5869.	1375.0	282554.
1/8/74	38.10	17101.	24.62	6.4	180.0	36989.	214.0	43976.	39.69	8156.	1050.0	215768.
2/ 4/74	24.10	10817.	15.58	6.3	170.0	22097.	240.0	31196.	29.99	3898.	1075.0	139733.
3/ 4/74	19.20	8618 .	12.41	6.3	114.0	11805.	244.0	25268.	33.34	3453.	1075.0	111323.
4/ 2/74	12.10	5431.	7.82	6.3	110.0	7179.	222.0	14488.	28.33	1849.		
5/ 7/74	13.60	6104.	3.79	6.3	112.0	8215.	232.0	17018.	30.10		1350.0	88103.
6/10/74	11.20	5027.	7.24	6.2	112.0	6766.				2208.	925.0	67851.
7/ 8/74	23.40	10503.	15.12	6.3			222.0	13410.	30-70	1855.	950.0	57387•
8/12/74	31.70				140.0	17669.	210.0	26504.	31.10	3925•	1300.0	164071.
		14228.	20 • 49	6.3	42.0	7181.	226.0	38640.	29.10	4975.	1450.0	247914.
9/10/74	19.70	8842.	12.73	5 • 4	40.0	4250.	210.0	22313.	38.40	4080.	1525.0	162035.
10/ 8/74	23.30	10458.	15.06	6.2	130.0	16337.	128.0	16086.	29.20	3670.	1625.0	204213.
MUM IN IM	11.20	5027.	7.24	6 • 1	0.0	C •	128.0	13410.	28.33	1849.	925.0	57387.
MA XI MUM	38.10	17101.	24.62	5 • 4	180.0	36989.	244.0	43976.	39.69	8156.	1625.0	282554
AVERAGE	22.49	10095.	14.54	6.3	102.1	12060.	209.3	25131.	31.62	3875.	1235.4	152866 •

### SAMPLE POINT NO. 17 CONFLUENCE OF SHENANDOAH AND MAHANDY CREEKS

DATE CFS GPM MGD P				AC I	DITY	ALKA	LINITY	TOTAL	IRON	SULE	AT ES	
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC.	LB/DAY	CONC.	LB/DAY	CONC.	LB/DAY
11/ 6/73	66.30	29758.	42.85	5.5	60.0	21455.	1.0	358•	30.61	10946.	580.0	207403.
		53860.	77.56	5.9	62.0	40128.	2.0	1294.	26.92	17423.	550.0	355973
1/8/74		45781.	65.92	6 • 4	64.0	35209.	8.0	4401.	39.69	21835.	690.0	379597
2/ 4/74		49372.	71.10	6.3	52.0	30851.	0.0	0.	26.78	15888.	350.0	207651
3/ 4/74	98.50	44210.	63.66	6 • 6	44.0	23376.	0.0	0.	24.70	13122.	425.0	225787
4/ 2/74		53860.	77.56	6.0	54.0	34950.	16.0	10356.	13.10	8479.	400.0	258890.
5/ 7/74	113.00	50718.	73.03	6.3	36.0	21941.	30.0	18284.	21.40	13043.	575.0	350445.
6/10/74	78.60	35278.	50 -80	6.5	62.0	26284.	24.0	10174.	29.80	12633.	600.0	254359
7/ 8/74	63.60	28546.	41-11	6.7	84.0	28814.	0.0	0.	35.60	12212.	800.0	274423.
8/12/74	25.90	11625.	16.74	6.7	50.0	€985.	60.0	8382.	11.20	1565.	550.0	76831.
9/10/74	42.60	19120.	27.53	7 - 1	34.0	7812.	2.0	460.	7.50	1723.	400.0	91906.
10/ 8/74	43.10	19345.	27.86	4 • 8	88.0	20457.	0.0	0.	13.90	3231.	950.0	220838
MINI MUM	25.90	11625.	16.74	4.8	34.0	6985.	0.0	0.	7.50	1565.	350.0	76831.
MA XI MUM	120.00	53860.	77.56	7 • 1	88.0	40128.	60.0	18284.	39.69	21835.	950.0	379597
AVERAGE	81.97	36789.	52.98	6.2	57.5	24855.	11.9	4476.	23.43	11008.	572 • 5	242008

#### SAMPLE POINT NO. 18 MAHANOY CREEK BELOW PACKERS

		FLOW-			AC I	DITY	ALKA	LINITY	TOTAL	I RON	SULF	AT ES
DATE	CFS	GPM	MGD	PН	CONC.	LB/DAY	CONC .	LB/DAY	CONC.	L8/DAY	CONC.	LB/DAY
11/6/73	92.10	41338.	59.53	6.1	60.0	29805.	30.0	14902.	30.99	15394.	725.0	360140 •
12/10/73	130.00	58348.	84.02	6.0	18.0	12621.	34.0	23839.	26.92	18875.	745.0	522364.
1/8/74	140.00	62837.	90.48	6 • 4	88.0	66448.	66.0	49836.	34.74	26232.	1050.0	792850 •
2/ 4/74	163.00	73160.	105.35	6.2	80.0	70332•	78.0	68573.	31.08	27324.	400.0	351658.
3/ 4/74	150.00	67325.	96•95	6.5	116.0	93848.	52.0	42070.	21.73	17580.	800.0	647224.
4/ 2/74	140.00	62837.	90.48	6.3	90.0	67959.	76.0	57387.	20.00	15102.	600.0	453057.
5/ 7/74	108.00	48474.	69.80	6.5	50.0	29125.	144.0	83880.	26.60	15495.	1000.0	582502.
6/10/74	119.00	53411.	76.91	6.3	102.0	65467.	104.0	66750.	31.80	20410.	650.0	417190 •
7/ 8/74	113.00	50718.	73.03	6.5	54.0	32911.	44.0	26817.	33.00	20112.	1025.0	624706.
8/12/74	66.50	29847.	42.98	6 • 4	78.0	27976.	164.0	58822.	23.30	8357.	1125.0	403504.
9/10/74	87.80	39408.	56.75	6.5	40.0	18942.	74.0	35043.	28.40	13449.	950.0	449875.
10/8/74	84.00	37702.	54.29	6 • 1	80.0	36245.	30.0	13592•	21.70	9831.	1300.0	588974.
MI NI MUM	66.50	29847.	42.98	6.0	18.0	12621.	30.0	13592.	20.00	8357.	400.0	351658.
MAXI MUM	163.00	73160.	105.35	6.5	116.0	93848.	164.0	83880.	34.74	27324.	1300.0	792850 •
AVERAGE	116.12	52117.	75.05	6.3	71.3	45973.	74.7	45126.	27.52	17347.	864.2	516170.

## SAMPLE POINT NO. 19 SHENANDOAH CREEK IN SHENANDOAH

		FLOW			AC I	YT10	ALKA	LINITY-	TOTAL	I RON	SULF	AT ES
DATE	CFS	GPM	MGD	PН	CONC.	LBZDAY	CONC .	LB /DAY	CONC.	LB/DAY	CONC.	LB/DAY
11/ 6/73	6.99	3137.	4.52	4.6	223.0	8407.	2.0	75.	36.44	1374 •	650.0	24506 •
12/11/73	4.20	1885.	2.71	4.3	220.0	4984.	0.0	0.	29.39	666.	800 • 0	18122.
1/ 9/74	4.20	1885.	2.71	4.9	170.0	3851.	0.0	0•	29.86	675.	675.0	15291.
2/ 5/74	3.36	1508.	2.17	5 • 1	120.0	2175.	8.0	145.	31 • 85	577.	625.0	11326.
3/ 5/74	6.04	2711.	3.90	4.8	202.0	6581.	0.0	0.	7 • 85	256.	550.0	17917.
4/ 3/74	12.80	5745.	8 • 27	3.8	170.0	11736.	0.0	0.	10.48	724.	725.0	50052.
5/ 8/74	14.60	6553.	9.44	4.0	186.0	14647.	0.0	0.	10.60	835.	825.0	64965.
6/11/74	1.47	660 •	0.95	7.0	40.0	317.	74.0	587.	1.10	9.	150.0	1189.
7/ 9/74	6.13	2751.	3.96	4.3	266.0	8795.	0.0	0.	22.30	737.	1200.0	39675.
8/13/74	1.08	485 •	0.70	7.5	92.0	536.	272.0	1584.	1.90	11.	275.0	1602.
9/11/74	0.90	404 •	0.58	7 • 1	50.0	243.	60.0	291 •	14.00	68.	200.0	971.
10/8/74	13.80	6194.	8.92	4.3	182.0	13546.	0.0	0.	23.00	1712.	1550.0	115368.
MI NI MUM	0.90	404.	0 •58	3.8	40.0	243.	0.0	0.	1.10	9.	150.0	971.
MAXI MUM	14.60	6553.	9.44	7.5	266.0	14647.	272.0	1584.	36.44	1712.	1550.0	115368.
AVERAGE	6.30	2827•	4.07	5 • 1	160 • 1	6318.	34.7	224.	18.23	637.	685.4	30082.

### SAMPLE PCINT NO. 20 SHENANDOAH CREEK BELOW SHENANDOAH

		FLOW			AC I	DI TY	ALKA	LINITY	TOTAL	IRON	SULF	AT ES
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC .	LB /DAY	CONC.	LB/DAY	CONC.	LB/DAY
11/ 6/73	12.90	5790.	8 • 34	3.9	252.0	17533.	0.0	0.	40.31	2805.	900.0	62619.
12/11/73	16.10	7226.	10 - 41	3.6	222.0	19278.	0.0	0.	28.56	2480.	850.0	73811.
1/ 9/74	12.80	5745.	8 • 27	5.0	166.0	11460.	0.0	0.	38.37	2649.	880.0	60753.
2/ 5/74	13.00	5835•	8.40	5.0	190.0	13322.	8.0	561•	23.71	1662.	625.0	43822.
3/ 5/74	15.20	6822•	9.82	4.5	142.0	11641.	0.0	0.	133.88	10976.	425.0	34842.
4/ 3/74	18.00	8079.	11.63	4 • 1	130.0	12621.	0.0	0.	23.57	2288.	1025.0	99511.
5/ 8/74	26.30	11804.	17.00	4.2	200.0	28370.	0.0	0.	13.00	1844.	675.0	95749.
6/11/74	11.60	5206.	7.50	4.9	134.0	8384.	0.0	0.	76.90	4811.	350.0	21898 •
7/ 9/74	17.40	7810.	11.25	4 • 4	196.0	18394.	0.0	0.	19.90	1868.	850.0	79770.
8/13/74	8.13	3649.	5.25	6.7	82.0	3596•	0.0	0.	17.80	781.	575.0	25213.
9/11/74	6.98	3133.	4.51	4.9	112.0	4216.	0.0	0.	16.20	610.	725.0	27294.
10/ 9/74	14.80	6643.	9.57	3.9	202.0	16125.	0.0	0.	20.50	1636.	1700.0	135701.
MI NI MUM	6.98	3133.	4.51	3.6	82.0	3596•	0.0	0.	13.00	610.	350.0	21898.
MAXI MUM	26.30	11804.	17.00	6.7	252.0	28370.	8.0	561.	133.38	10976.	1700.0	135701.
AVERAGE	14.43	6479.	9.33	4 • 6	169.0	13745.	0.7	47.	37.72	2867.	798.3	63415.

SAMPLE PCINT NO. 21 LOST CREEK DISCHARGE

		-FLOW			AC I	Y110	ALKA	LINITY	TOTAL	I RON	SULF	AT ES
DATE	CFS	GPM	MGD	PН	CONC.	LB/DAY	CONC .	L8/DAY	CONC.	LB/DAY	CONC.	LB/DAY
11/ 6/73	0.05	22.	0.03	4 • 0	25.0	7.	0.0	0.	0.29	0.	63.0	17.
12/11/73	0.55	247.	0.35	3.6	44.0	131.	0.0	0.	0 • 44	1 •	60.0	178.
1/ 9/74	0.16	72.	0.10	4.3	18.0	16.	0.0	0.	0.59	1.	63.0	54.
2/ 5/74	0.38	171.	0.25	4 - 1	28.0	57.	0.0	0.	0.74	2.	56.0	115.
3/ 5/74	0.31	139.	0 • 20	4.3	20.0	33.	0.0	0.	0.59	1 •	225.0	376.
4/ 3/74	1.10	494.	0.71	3.2	26.0	154.	0.0	0.	0.71	4 •	225.0	1335.
5/ 8/74	0.15	67.	0.10	4 • 1	18.0	15.	0.0	0.	0.50	0.	150.0	121.
6/11/74	0.01	4 •	0.01	4.2	14.0	1.	0.0	0.	0.40	0.	57.0	3∙
7/ 9/74	0.04	18.	0.03	4 • 4	20.0	4.	0.0	0.	0.30	0•	350.0	76.
8/13/74	0.03	13.	0.02	4.3	20.0	3∙	0.0	0.	0.70	0.	225.0	36 •
9/11/74	0.02	9.	0.01	4.2	22.0	2.	0.0	0 •	0.10	0.	175.0	19 •
10/ 9/74	0.02	9•	0 •0 1	3.8	20.0	2•	0.0	0.	0.30	0.	275.0	30 •
MI NI MUM	0.01	4 •	0.01	3.2	14.0	1.	0.0	0.	0.10	0.	56.0	3.
MAXI MUM	1.10	494.	0.71	4.4	44.0	154.	0.0	0.	0.74	4.	350.0	1335.
AVERAGE	0.23	105.	0.15	4.0	22.9	35∙	0.0	0.	0.47	1 .	160.3	197.

SAMPLE PGINT NO. 22 LOST CREEK

	DATE CFS GPM MGD P				AC I	DITY	ALKA	LINITY	TOTAL	IRON	SULF	AT ES
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC .	LB/DAY	CONC.	LB/DAY	CONC.	LB/DAY
11/ 6/73	0.29	130•	0 • 19	5.7	5.0	8.	8.0	13.	0.15	0.	30.0	47.
12/11/73	1.32	592.	0.85	5 • 4	8.0	57.	2.0	14.	0.00	0.	35.0	249 •
1/ 9/74	0.63	283•	0 • 4 1	5.7	2.0	7.	4.0	14.	0.15	1.	11.0	37 •
2/ 5/74	1.03	462.	0.67	6.7	4.0	22•	10.0	56.	0.15	1.	9.0	50 •
3/ 5/74	0.70	314.	0.45	6.4	6.0	23.	22.0	83.	0.44	2.	150.0	566.
4/ 3/74	2.36	1059.	1.53	5 • 4	6.0	76.	10.0	127.	0.24	3.	30.0	382.
5/ 8/74	0.85	382.	0.55	7.0	2.0	9.	10.0	46.	0.00	0.	30.0	138.
6/11/74	0.10	45.	0.06	6.7	4.0	2.	14.0	8.	0.30	0.	13.0	7.
7/ 9/74	0.15	67.	0.10	7.0	8.0	6.	2.0	2.	0.10	0.	300.0	243.
8/13/74	0.15	67.	0 - 10	7.5	6.0	5.	14.0	11.	0.00	0.	175.0	142.
9/11/74	0.15	67.	0.10	7.5	8.0	6.	10.0	8.	0.30	0.	14.0	11.
10/ 9/74	0.16	72.	0.10	6.4	8.0	7•	0.0	0.	0.00	0.	225.0	194.
MINIMUM	0.10	45.	0.06	5.4	2.0	2.	0.0	0.	0.00	0.	9.0	7.
MAXI MUM	2.36	1059•	1.53	7.5	8.0	76.	22.0	127.	0.44	3.	300.0	566.
AVERAGE	0.66	295 •	0.42	6.4	5.6	19.	8.8	32•	0.15	1 •	85.2	172.

SAMPLE POINT NO. 23 LOST CREEK BALL FIELD DISCHARGE

		-FLOW			AC	IDITY	ALKA	LINIT	Υ	TOTAL	_ I	RON	SUL	FAT ES
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC •	LB/	DAY	CONC.	L	B/DAY	CONC.	LB/DAY
11/ 6/73	FLOW NOT	DETERM	INED/NO	WATER	SAMPLE	TAKEN					_			
					0.0	0.	0.0	0.	0.	00	0.		0.0	0 •
12/11/73	FLOW NOT	DETERM	I NEDZ NO	WATER										
					0.0	0 •	0.0	0.	0.	00	0.		0.0	0 •
1/8/74	2.81	1261.	1.82	6 • 4	48.0	727•	84.0	12	73.	19.44		295.	1100.0	16671.
2/ 5/74	0.99	444.	0 • 64	6.6	58 • 0	310.	104.0	5	55.	31.85		170.	850.0	4539.
3/ 5/74	1.31	588.	0.85	6.5	150.0	1060.	134.0	9	47.	21.73		154.	725.0	5123.
4/ 3/74	1.95	875.	1.26	6.1	46.0	484.	112.0	11	78.	19.76		208.	950.0	9992.
5/ 8/74	1.36	610.	0 • 88	6.4	30.0	220.	136.0	9	98.	21.60		158.	900.0	6602.
6/11/74	1.76	790.	1.14	6.3	44.0	418.	116.0	11	01.	20.50		195.	825.0	7831.
7/ 9/74	1.20	539.	0.78	6.3	40.0	259•	72.0	4	66.	15.90		103.		7443.
8/13/74	FLOW NOT	DETERM	INED/NO	WATER	SAMPLE	TAKEN								,
					0.0	0.	0.0	0.	0.	00	0.		0.0	0.
9/11/74	FLOW NOT	DETERM	INED/NO	WATER	SAMPLE	TAK EN								
					0.0	0.	0.0	0.	0.	00	0.		0.0	0.
10/ 9/74	FLOW NOT	DETERM	INED/NO	WATER	SAMPLE	TAK EN				-				• •
					0.0	0 •	0.0	0.	0.	00	0.		0.0	0 •
MI NI MUM	0.00	0.	0.00	0.0	0.0	0.	0.0		0.	0.00		0.	0.0	0.
MAXIMUM	2.81	1261.	1.82	6.6	150.0	1060.	136.0	12	73.	31.85		295.	1150.0	16671.
AVERAGE	0.95	426 •	0.61	6.4	59.4	497.	108.3		31.	21.54		183.		8314.

		FLOW			A C I	DITY	ALKAI	LINITY	TOTAL	TRON	5111 5	AT ES
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC .	LB/DAY	CONC.	LB/DAY	CONC.	LB/ DAY
11/ 6/73	19.00	8528•	12.28	3.8	242.0	24799.	0.0	0.	54.50	5585.	825.0	84544.
12/11/73	18.20	8169.	11.76	4 • 2	1040.0	102089.	0.0	0.	24.59	2414.	1025.0	100616.
1/8/74	14.20	6373.	9 • 18	4.7	300.0	22976.	0.0	0.	41.27	3161.	1050.0	80418
2/ 5/74	12.80	5745.	8 • 27	5.0	190.0	13117.	0.0	0.	6.44	445.	600.0	41422.
3/ 5/74	15.30	6867.	9 •89	4.7	152.0	12543.	0.0	0.	80.48	6641.	550 • 0	45387.
4/ 3/74	21.00	9425•	13.57	3.9	164.0	18575.	0.0	0•	28.33	3209.	825.0	93443.
5/ 8/74	28.50	12792.	18 • 42	4 • 5	230.0	35355.	0.0	0.	17.40	2675.	850.0	130658.
6/11/74	10.10	4533.	6.53	6.2	44.0	2397.	0.0	0.	26.60	1449.	275.0	14981.
7/ 9/74	17.80	7989.	11.50	4.6	148.0	14209.	0.0	0.	20.70	1987.	1100.0	105605.
8/13/74	9.06	4066.	5.86	6.8	100.0	4887.	126.0	6157.	12.80	625•	500.0	24433.
9/11/74	6.42	2882.	4.15	4.9	72.0	2493.	0.0	0.	18.70	648.	800.0	
10/ 9/74	14.90	6688•	9.63	4 • 1	230.0	18484.	0.0	0.	21.30	1712.	1300.0	27701. 104473.
MI NI MUM	6.42	2882.	4.15	3.8	44.0	2397.	0.0	0.	6.44	445.	275.0	14981.
MAXIMUM	28.50	12792.	18.42	6.8	1040.0	102089.	126.0	6157.	80.48	6641.	1300.0	
AVERAGE	15.61	7005.	10.09	4.8	242.7	22660•	10.5	513.	29.43	2546.	808.3	130658. 71140.

SAMPLE POINT NO. 25 HAMMOND BORE HOLE DISCHARGE

	FLOW PATE CFS GPM MGD P					DITY	ALKA	LINITY	TOTAL	I RON	- 614.5	47.50
DATE	CFS	GPM	MGD	PH	CONC.	L B/DAY	CONC.	LB/DAY	CONC.	LB/DAY	CONC.	AT ES
11 / 6 /77	4 00											
11/ 6/73	4.22	1894.	2.73	6 • 0	130.0	2959.	171.0	3892.	48.60	1106.	1100.0	25037.
12/11/73	3.80	1706.	2 • 46	6.0	66.0	1353.	198.0	4058.	33.87	694.	650 •0	13322.
1/ 9/74	4.94	2217.	3.19	6.3	118.0	3144.	220.0	5862.	46.38	1236.	1100.0	29308
2/ 5/74	5.37	2410.	3.47	6.4	222.0	6430.	210.0	6082.	54.40	1576.	675.0	19550 •
3/ 5/74	3.83	1719.	2 • 48	6.4	260.0	5371.	260.0	5371.	48.57	1003.	775.0	16009.
4/ 3/74	4.28	1921•	2.77	6.3	96.0	2216.	220.0	5079.	41.91	967.	925.0	21353.
5/ 8/74	3.52	1580 •	2.28	6.3	156.0	2962.	170.0	3227.	46.80	889.	775.0	
6/11/74	4.33	1943.	2.80	6 • 4	174.0	4064.	206.0	4811.	48.80	1140.		14714.
7/ 9/74	4.31	1934.	2.79	6.3	66.0	1534.	174.0	4045.	47.10	1095.	800.0	18683.
8/13/74	2.27	1019.	1.47	6.3	18.0	220•	220.0	2694.	42.30		1150.0	26733.
9/11/74	3.24	1454 .	2.09	6.3	46.0	804.	170.0	2971.		518.	1100.0	13468.
10/ 9/74	2 • 84	1275.	1.84	6.0	62.0	950.	158.0	2420.	49.10	858.	1300.0	22718.
					00	3004	130.0	2420•	42.50	651.	1675.0	25657.
MI NI MUM	2.27	1019.	1.47	6.0	18.0	220.	158.0	0.4.0.0				
MAXIMUM	5.37	2410.	3.47	6.4	260.0			2420•	33.87	518.	650.0	13322.
AVERAGE	3.91	1756 .	2 • 5 3	6.2		6430.	260.0	6082.	54.40	1576.	1675.0	29308.
	J - / 1	1,30	£ • 3.3	0 • 2	117.8	26€7•	198.1	4209.	45•86	978.	1002.1	20546.

SAMPLE POINT NO. 26 HAMMOND DISCHARGE

		-FLOW			AC	YT 101		-ALKA	LINI	Y	TOTAL	180	N	SUL	E AT (	
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY		NC •		'DAY			DAY			B/DAY
11/ 6/73		0.	0.00	3.6	267.0	0.		0.0		0.	17.87		0.	1445.0		
12/11/73	0.00	0.	0.00	3.4	166.0	0.		0.0		0.	16.90			1415.0		0 •
1/ 9/74	0.04	18.	0.03	4.3	288.0	62.		0.0		0.			0.	1050.0		0 •
2/ 5/74	0.08	36 •	0.05	3.7	270.0	117.		0.0			20.59		4.	1150.0		248.
3/ 5/74	0.03	1.3.	0.02	4.2	220.0	36.				0.	26.44		11.	1525.0		658 •
4/ 3/74	0.05	22.	0.03	4.2	200.0	54.		0.0		0.	17.01		3.	1000.0		162.
5/ 8/74	0.04	18 •	0.03	4.3	176.0			0.0		0.	11.91		з.	1100.0		297.
6/11/74	0.01	4.	0.00	4 • 4		38.		0.0		0.	12.60		з.	1100.0		237.
7/ 9/74	0.00	0.	0.00	4.4	92.0	5.		0.0		0.	8.80		0 •	900.0		49.
	FLOW NOT				218.0	0.		0.0		0.	5.70		0.	1300.0		0.
0,13,14	, ECM NOT	DETERM	I NEDY NU	WAIER	SAMPLE											
9/11/74	FLOW NOT	DETERM	I NEDZ NO	WATER	0.0 SAMPLE	0. TAKEN	0.0		0•	0.	00	0.	0	• 0	0.	
10/ 9/74	FLOW NOT	DETERM	INEDZNO	WATER	0.0 SAMPLE	0. TAKEN	0.0		0.	0.	00	0•	0	0.0	0 •	
					0.0	0.	0.0		0.	0.	00	0.	0	• 0	0.	
MI NI MUM	0.00	0 •	0.00	0.0	0.0	0.		0.0		0.	0.00					_
MAXI MUM	9.08	36 •	0.05	4 . 4	288.0	117.		0.0		0.			0.	0.0		0 •
AVERAGE	0.02	9.	0.01	4 • 1	210.8	35.		C • O		0.	26.44 15.31	1	3.	1525.0 1171.1		658. 183.

		FLOW			AC I	DITY	ALKA	LINITY	TOTAL	I RON	5111 6	AT ES
DATE	CFS	GPM	MGD	РH 	CONC.	LB/DAY	CONC.	LB/DAY	CONC.	LB/DAY	CONC.	LB/DAY
11/6/73	15.30	6867.	9.89	4.5	135.0	11140.	0.0	0.	41.58	3431.	940.0	77570
12/11/73	15.40	6912.	9.95	5 • 1	94.0	7808.	0.0	0.	25.35	2106.		77570 •
1/8/74	22.00	9874.	14.22	5.8	106.0	12578.	0.0	0.	24.36	2891.	750 • 0 950 • 0	62295.
2/ 5/74	21.80	9785.	14.09	6.3	114.0	13404.	18.0	2116.	31.85	3745.	950 • 0	112725.
3/ 5/74	18.40	8259.	11.89	5.8	70.0	6947.	0.0	0.	27.83	2762		111700
4/ 3/74	26.30	11804.	17.00	5.0	140.0	19859.	0.0	0.	22.38	3175.	575 • 0 600 • 0	57064 •
5/ 8/74	27.40	12298.	17.71	5 • 1	138.0	20394.	0.0	0.	17.80	2631.	800.0	85110.
6/11/74	14.30	6418.	9 • 24	6.4	22.0	1697.	74.0	5707.	16.10	1242.	675.0	118226.
7/ 9/74	19.30	8662.	12.47	5.9	84.0	8744.	0.0	0.	22.20	2311.	1100.0	52061.
8/13/74	10.10	4533.	6.53	6.4	40.0	2179.	116.0	6319.	19.90	1084.	950.0	114505.
9/11/74	11.50	5162.	7.43	6.4	32.0	1985.	20.0	1241.	19.80	1228.	1050.0	51751.
10/ 9/74	19.20	8618.	12.41	4.7	202.0	20918.	0.0	0.	22.40	2320.	1450.0	65127. 150 <b>156.</b>
MI NI MUM	10.10	4533.	6.53	4.5	22.0	1697.	0.0	0.	16.10	1084.	575 • 0	£17£1
MA XI MUM	27.40	12298.	17.71	6 • 4	202.0	20918.	116.0	6319.	41.58	3745.	1450.0	51751.
AVERAGE	18.42	8266.	11.90	5.6	98.1	10638.	19.0	1282.	24.30	2410.	899.2	150156. 88191.

### SAMPLE POINT NO. 28 CONNERT ON NO. 1 DISCHARGE

		FLOW			ACI	DITY	ALKA	LINITY	TOTAL	I RON	SIII E	AT ES
DATE	CFS	GPM 	MGD	PH	CONC.	LB/DAY	CONC.	LB/DAY	CONC.	L8/DAY	CONC.	LB/DAY
11/ 6/73	1.12	503.	0.72	6.8	0.0	0.	217.0	1311.	1.62	10.	875.0	5 20 6
12/11/73	1.67	750•	1.08	6.6	0.0	0.	260.0	2342.	9.44	85.	700.0	5286.
1/8/74	2.80	1257.	1.81	6.9	44.0	664.	270.0	4078.	2.35	35.	1000.0	6305.
2/ 5/74	2.50	1122.	1.62	6.9	24.0	324.	280.0	3775.	4.14	56.	825.0	15102.
3/ 5/74	2.13	956 •	1.38	6.8	34.0	391.	288.0	3309.	2.01	23.	500.0	11124.
4/ 3/74	3.71	1665.	2.40	6.7	36.0	720.	280.0	5603.	1.91	38.		6893.
5/ 8/74	1 • 40	628.	0.90	6.8	14.0	106.	282.0	2129.	2.30	17.	700.0	14007.
6/11/74	1.20	539.	0.78	6.8	0.0	0.	264.0	1709.	1.50		725 • 0	5474.
7/ 9/74	1.60	718.	1.03	6.7	78.0	673.	270.0	2330.	0.90	10.	575.0	3722.
8/12/74	0.86	386.	0.56	6.7	0.0	0.	296.0	1373.	1.60	8.	1050.0	9061.
9/11/74	0.72	323.	0.47	6.8	24.0	93.	210.0	816.	1.60	7.	1025.0	4754.
10/ 9/74	0.75	337.	0 • 48	6.5	20.0	81.	166.0	671.		6.	1075.0	4175.
							100.00	011.	4.20	17.	1225.0	4955.
MI NI MUM	0.72	323.	0.47	6.5	0.0	0.	166.0	671.	0.00	_		
MAXI MUM	3.71	1665.	2.40	6.9	78.0	720.	296.0		0.90	6.	575 • 0	3722•
AVERAGE	1.70	765.	1.10	6.7	22.3	254 •	256.9	5603.	9.44	85.	1225.0	15102.
					22.0	2544	23019	2454.	2.80	26.	864.6	7571.

# SAMPLE PCINT NO. 29 CONNERTON NO. 2 DISCHARGE

DATE	CFS	-FLOW	MGD	РН	ACI	LE/DAY	ALKA	LINITY LB/DAY	TOTAL	IRON L8/DAY	SULF	AT ES
11/ 7/73 12/12/73 1/ 8/74 2/ 5/74 3/ 5/74 4/ 3/74 5/ 8/74 6/10/74 7/ 9/74 9/11/74 10/ 9/74	0.05 0.08 0.09 0.36 0.32 0.41 0.20 0.20 0.26 0.12	22. 36. 40. 162. 144. 184. 90. 90. 117. 54.	0.03 0.05 0.06 0.23 0.21 0.26 0.13 0.13 0.17 0.08	6.6 6.0 6.6 6.7 6.4 6.1 6.4 6.4 6.5 6.6	50.0 0.0 128.0 126.0 26.0 150.0 82.0 12.0 144.0 20.0 74.0	13. 0. 62. 245. 45. 332. 88. 13. 202. 13.	174.0 224.0 186.0 160.0 170.0 170.0 202.0 200.0 180.0 216.0 132.0	47. 97. 90. 311. 293. 376. 218. 216. 252. 140. 78.	30.48 30.59 41.27 33.34 39.30 29.29 34.30 36.80 36.60 33.20 39.60	8. 13. 20. 65. 68. 65. 37. 40. 51. 21.	1000.0 575.0 1075.0 775.0 925.0 1150.0 1025.0 950.0 1450.0 1300.0	270 • 248 • 522 • 1505 • 1596 • 2543 • 1106 • 1025 • 2033 • 841 • 816 •
MI NI NUM MA XI NUM A VERAGE	0.13 0.05 0.41 0.19	58. 22. 184. 87.	0.08 0.03 0.26 0.13	6.0 6.7 6.4	0.0 150.0 77.7	84. 0. 332. 95.	116.0 116.0 224.0 177.5	47. 376. 183.	34.40 29.29 41.27 34.93	24. 8. 68. 36.	1575.0 575.0 1575.0	248 · 2543 · 1134 ·

#### SAMPLE POINT NO. 30 SHENANDOAH CREEK BELOW CONNERTON

	DATE CES GPM MGD PI					YT10	ALKA	LINITY-	TOTAL	I RON	SULF	AT ES
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC .	LB/DAY	CONC.	LB/DAY	CONC.	LB/DAY
11/ 7/73	20.50	9201.	13.25	4.8	17.0	1880.	1.0	111.	42.34	4681.	875.0	96747.
12/12/73	19.50	8752.	12.60	5.7	46.0	4838.	8.0	841.	21.66	2278.	575.0	60475.
1/8/74	31.60	14183.	20 • 4 2	6 • 1	92.0	15680.	14.0	2386.	27.37	4665.	1025.0	174697.
2/ 5/74	23.80	10682.	15.38	6.3	72.0	9242.	20.0	2567.	27.83	3572.	775.0	99484 •
3/ 5/74	22.10	9919.	14.28	6 • 4	90.0	10728.	20.0	2384.	26.76	3190.	550.0	65558 •
4/ 3/74	36.30	16293.	23.46	5 • 4	100.0	19579.	16.0	3133.	20.24	3963.	700.0	137050 •
5/ 8/74	43.80	19659.	28.31	5•4	98.0	23151.	2.0	472.	19.90	4701.	825.0	194895.
6/11/74	12.50	5610.	8.08	6.3	10.0	674.	90.0	6068.	13.80	930.	600.0	40452.
7/ 9/74	22.60	10144.	14.61	6.3	100.0	12189.	126.0	15359.	17.50	2133.	1150.0	140178.
8/12/74	11.40	5117.	7.37	6.4	40.0	2459.	154.0	9469.	17.50	1076.	900.0	55338 •
9/11/74	12.60	5655•	8.14	6.6	60.0	4078.	22.0	1495.	18.80	1278.	1100.0	74754.
10/ 9/74	20.80	9336.	13.44	4.8	88.0	9872.	0.0	0•	19.70	2210.	1550.0	173888.
MI NI MUM	11.40	5117.	7 • 37	4 • 8	10.0	674.	0.0	0.	13.80	930.	550.0	40452.
MAXI MUM	43.80	19659.	28.31	6 • 6	100.0	23151.	154.0	15359.	42.34	4701.	1550.0	194895.
AVERAGE	23.12	10379.	14.95	5.9	67.8	9531.	39•4	3690•	22.78	2890.	885.4	109459.

#### SAMPLE POINT NO. 31 NORTH GIRARDVILLE DISCHARGE

		-FLOW			AC I	DITY	ALKA	LINITY	TOTAL	I RON	SULF	AT ES
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC .	LB /DA Y	CONC.	LB/DAY	CONC.	LB/DAY
11/ 7/73	0.01	4.	0.01	6.0	23.0	1 •	33.0	2.	50.74	3 ⋅	915.0	49.
12/11/73	0.00	0.	0.00	5.6	190.0	0.	0.0	0.	32.93	0.	425.0	0 •
1/8/74	0.27	121.	0.17	6.3	170.0	248.	62.0	90.	46.03	67.	1055.0	1536.
2/ 4/74	0.24	108.	0.16	6.4	84.0	109.	98.0	127.	48.57	63.	900.0	1165.
3/ 4/74	0.26	117.	0.17	6.5	100.0	140.	108.0	151.	52 • 96	74.	850.0	1192.
4/ 2/74	0.17	76.	0 - 11	6.5	12.0	11.	92.0	84.	37.14	34.	900.0	825.
5/ 8/74	0.17	76.	0.11	6.6	72.0	66.	120.0	110.	43.50	40.	825.0	756.
6/10/74	0.11	49.	0.07	6.6	0.0	0.	150.0	89.	0.00	0.	755 • 0	448 •
7/ 8/74	0.08	36 •	0.05	6.4	142.0	61.	150.0	65.	43.40	19.	1350.0	583.
8/12/74	0.02	9•	0.01	6 • 4	60.0	6.	164.0	18.	41.80	5.	1100.0	119.
9/11/74	0.02	9.	0.01	6 • 6	116.0	13.	82.0	9.	49.60	5.	1200.0	129 •
10/ 8/74	0.02	9•	0.01	6.3	208•0	22•	126.0	14.	44.20	5∙	1500.0	162.
MINI MUM	0.00	0 •	0.00	5.6	0.0	0.	0.0	0.	0.00	0.	425.0	0.
MA XI MUM	0.27	121.	0.17	6.6	208.0	248.	164.0	151.	52 • 96	74 .	1500.0	1536.
AVERAGE	0.11	51.	0.07	6.3	98.1	56.	98.8	63•	40-91	26.	981.3	580.

### SAMPLE PCINT NO. 32 SOUTH PRESTON DISCHARGE

		FLOW			AC I	D1TY	ALKA	LINITY	TOTAL	I RON	SULF	AT ES
DATE	CFS	GPM	MGD	РН	CONC.	LB/DAY	CONC .	LB /DA Y	CONC.	LB/DAY	CONC.	L8/DAY
11/ 7/73	0.60	269•	0 • 39	6.5	54.0	175.	70.0	227.	23.96	78.	300.0	971.
12/10/73	0.86	386•	0.56	6.3	80.0	371.	88.0	408.	23.22	108.	275.0	1276.
1/8/74	1.50	673.	0.97	6.0	46.0	372.	24.0	194.	12.52	101.	230.0	1861.
2/ 4/74	1.68	754 •	1.09	6.2	10.0	91.	90.0	816.	10.59	96•	200.0	1812.
3/ 4/74	1.32	592.	0.85	6.5	69.0	427.	54.0	384.	14.35	102.	225.0	1602.
4/ 2/74	2.12	952.	1.37	6.4	24.0	274.	52.0	595.	10.71	122.	225.0	2573.
5/ 7/74	2.40	1077.	1.55	6 • 4	18.0	233•	62.0	803.	12.50	162.	75.0	971.
6/10/74	2.67	1198.	1.73	6.5	2.0	29.	78.0	1123.	12.70	183.	100.0	1440 •
7/ 8/74	2.50	1122.	1.62	6.8	60.0	809.	80.0	1079.	13.50	182 •	250.0	3371.
8/12/74	1.04	467.	0.67	6.9	32.0	179.	100.0	561.	13.00	73.	275.0	1543.
9/10/74	1 • 35	606.	0.87	6.8	30.0	218.	52.0	379.	12.50	91 •	325.0	2366.
10/ 8/74	1.20	539•	0 •78	6.2	44.0	285.	60.0	388•	11.60	75•	400.0	2589 •
MUMINIM	0.60	269•	0 • 39	6.0	2.0	29•	24.0	194.	10.59	73.	75.0	971.
MAXI MUM	2.67	1198.	1.73	6.9	80.0	809.	100.0	1123.	23.96	183.	400.0	3371.
AVERAGE	1.60	720•	1.04	6.5	38.3	289.	67.5	580.	14.26	114.	240.0	1864.

		FLOW-			AC I	YT10	ALKA	LINITY	TOTAL	I RON	SULF	AT ES
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC •	LB/DAY	CONC.	LB/DAY	CONC.	LB/DAY
11/ 7/73	87.60	39318.	56.62	6.4	23.0	10867.	72.0	34018.	27.93	13196.	900.0	425226.
12/10/73	148.00	66427.	95 • 66	6.3	34.0	27140.	48.0	38316.	26.13	20858.	450.0	359209.
1/8/74	160.00	71813.	103.41	6.4	64.0	55230.	82.0	70763.	33.59	28987.	995.0	858650 •
2/ 4/74	151.00	67774.	97.59	6.0	46.0	37463.	72.0	58638.	26.78	21810.	425.0	346130 •
3/ 4/74	138.00	61939.	89 • 19	6 • 4	80.0	59545.	84.0	62522•	34.49	25671.	725.0	539623.
4/ 2/74	145.00	65081.	93.72	6 • 4	30.0	23462.	80.0	62565.	24.76	19364.	775.0	606099.
5/ 7/74		54758.	78.85	6.6	70.0	46061.	140.0	92122.	28.80	18951.	975.0	641561.
6/10/74		54309.	78 • 20	6.5	6.0	3916.	112.0	73093.	32.90	21471.	675.0	440517.
7/ 8/74	120.00	53860.	77.56	6.5	110.0	71195.	68.0	44011.	23.00	14886.	950.0	614863.
8/12/74	65.20	29264.	42.14	6.6	82.0	28836.	174.0	61189.	22.10	7772.	1050.0	369241.
9/10/74	95•20	42729.	61.53	6.6	64.0	32862.	70.0	35943.	18.50	9499.	925.0	474955.
10/8/74	87.00	39048.	56 • 23	6.2	74.0	34724.	54.0	25339•	21.80	10229•	1350.0	633471.
MI NI MUM	65.20	29264.	42.14	6.0	6.0	3916.	48.0	25339.	18.50	7772.	425.0	346130 .
MA XI MUM	160.00	71813.	103.41	6.6	110.0	71195.	174.0	92122.	34.49	28987.	1350.0	858650.
AVERAGE	120.00	53860.	77.56	6 • 4	56.9	35942.	88.0	54876.	26.73	17725.	849.6	525795.

### SAMPLE PCINT NO. 34 NORTH PRESTON DISCHARGE

		FLOW			AC I	DITY	ALKA	LINITY	TOTAL	I RON	SULE	AT ES
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC.	LB /DA Y	CONC.	LB/DAY	CONC.	LB/DAY
11/ 7/73	0.99	444.	0.64	3.3	190.0	1015.	0.0	0.	39.54	211.	1000.0	5340 •
12/10/73	0.13	58.	0.08	3 • 1	480.0	337.	0.0	0.	32.93	23.	925.0	649 •
1/8/74	2.34	1050.	1.51	3 - 1	254.0	3206.	0.0	0.	26.48	334.	1050.0	13252.
2/ 4/74	1.04	467.	0.67	3.0	296.0	1660.	0.0	0.	32.20	181.	900.0	5048
3/ 4/74	0.48	215.	0.31	3.3	294.0	761.	0.0	0.	39.30	102.	725.0	1877•
4/ 2/74	0.74	332.	0 • 48	3.3	204.0	814.	0.0	0.	26.43	105.	825.0	3293•
5/ 8/74	0.56	296 •	0.43	3.4	210.0	748.	0.0	0.	29.40	105.	725.0	2581.
6/10/74	0.18	81.	0.12	3.2	290.0	282.	0.0	0.	33.50	33.	700.0	680 •
7/ 8/74	0.24	108.	0.16	3.4	1300.0	1683.	0.0	0.	34.50	45.	1100.0	1424.
8/12/74	0.50	224.	0.32	3.4	260.0	701.	0.0	0.	30.60	83.	1100.0	2966
9/10/74	0.50	224 •	0.32	3.3	210.0	566.	0.0	0.	27.20	73•	1325.0	3573•
10/ 8/74	0.58	260.	0 • 37	3 • 1	200.0	626.	0.0	0.	33.50	105.	1350.0	4223.
MUM IN IM	0.13	58.	0.08	3.0	190.0	282•	0.0	0.	26.43	23•	700.0	649.
MAXI MUM	2.34	1050.	1.51	3.4	1300.0	3206.	0.0	0.	39.54	334 •	1350.0	13252.
AVERAGE	0.70	313.	0 • 45	3.2	349.0	1033.	0.0	0.	32.13	117.	977.1	3742.

### SAMPLE POINT NO. 35 MAHANDY CREEK BELOW PRESTON

	DATE CES GPM MGD PA					DI TY	ALKA	LINITY	TOTAL	I RON	SULF	AT ES
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC •	LB/DAY	CONC.	LB/DAY	CONC.	LB/DAY
11/ 7/73		49372.		6.4	18.0	10679.	58.0	34411.	33.01	19584.	925.0	548792.
12/10/73			106.00	6 • 4	50.0	44227.	50.0	44227.	26.92	23812.	850.0	751858.
1/8/74		67325.		6.5	84.0	67959.	76.0	61486.	32.56	26342.	1050.0	849482.
2/ 4/74		76750.	110.52	6.2	34.0	31358.	72.0	66405.	27.83	25667.	800.0	737836.
3/ 4/74		66876.	96.30	6.6	62.0	49825.	80.0	64291.	26.78	21521.	800.0	642909.
4/ 2/74			109 •87	6.5	52.0	47679.	80.0	73352.	26.67	24454.	850.0	779365.
5/ 7/74		64183.	92.42	6.6	60.0	46277.	124.0	95638.	29.40	22676.	775.0	597739.
6/10/74		60144.	86.61	6 • 4	88.0	63601.	102.0	73719.	31.60	22838.	800.0	578187.
7/ 8/74		54758•	78.85	6.5	82.0	53957.	88.0	57905.	25.20	16582.	1175.0	773163.
8/12/74	69.60	31239.	44.98	6.6	60.0	22523.	174.0	65318.	20.30	7620.	1075.0	403544.
9/10/74	99•20	44524•	64.11	6.8	60.0	32102.	92.0	49224.	16.90	9042.	1075.0	575167.
10/ 8/74	90.30	40530.	58 • 36	6.2	50.0	24352.	52.0	25326.	20.40	9936•	1250.0	608795.
MI NI MUM	69.60	31239.	44.98	6.2	18.0	10€79.	50.0	25326•	16.90	7620.	775.0	403544.
MA XI MUM	171.00	76750.	110.52	6.8	88.0	67959.	174.0	95638.	33.01	26342.	1250.0	849482.
AVERAGE	131.01	59801.	84.67	6.5	58.3	41212.	87.3	59275.	26.46	19173.	952 • 1	653903.

### SAMPLE PCINT NO. 36 CENTRALIA TUNNEL DISCHARGE

DATE CES GPM MGI					AC I	YTIO	ALKA	LINITY	TOTAL	IRON	SIII E	AT ES
DATE	CFS	GPM 	MGD	PH	CONC.	LB/DAY	CONC .	LB/DAY	CONC.	LB/DAY	CONC.	LB/DAY
11/ 7/73	8.92	4004.	5.77	3.4	280.0	13471.	0.0	0.	17.09	822•	800.0	38488.
12/10/73	18.70	8393.	12.09	3.3	290.0	29249.	0.0	0.	21 • 85	2204.	750.0	75644
1/8/74	25.30	11355.	16 • 35	3 • 4	210.0	28656.	0.0	0.	7.37	1006.	560.0	
2/ 4/74	27.90	12522.	18.03	3 - 1	180.0	27086.	0.0	0.	8.89	1338.	500.0	76416.
3/ 4/74	17.90	8034.	11.57	3.5	212.0	20467.	0.0	0.	9. 71	937.		75240 •
4/ 2/74	19.70	8842.	12.73	3.6	164.0	17425.	0.0	0.	9• 76	1037.	350.0	33790 •
5/ 7/74	15.20	6822.	9.82	3.5	198.0	16232.	0.0	0.	7.50	615.	425.0	45157.
6/10/74	13.40	6014.	8 • 66	3.5	180.0	13009.	0.0	0.	8.70	629.	475.0	38941.
7/ 8/74	8 • 25	3703.	5.33	3.5	232.0	10323.	0.0	0.	10.00		425.0	30716.
8/12/74	9.45	4241.	6.11	3.6	230.0	11723.	0.0	0.		445.	775.0	34485.
9/10/74	9.36	4201.	6.05	3.4	206.0	10400.	0.0	0.	8.40	428.	575.0	29 30 7 •
10/ 8/74	8.45	3793.	5.46	3.2	250.0	11394.	0.0		7.80	394.	825.0	41649.
					23000	110346	0.0	0.	9.80	447.	825.0	37600.
MI NI MUM	8.25	3703.	5.33	3.1	164.0	10323.	0.0					
MAXI MUM	27.90	12522.	18.03	3.6	290.0	29249		0.	7.37	394.	350.0	29307
AVERAGE	15.21	6827.	9.83				0.0	0.	21 • 85	2204.	825.0	.76416 •
	. 5	0027	7 • O.J	3.4	219.3	17453.	0.0	0.	10.57	858.	607.1	46453.

## SAMPLE PRINT NO. 37 MAHANCY CREEK AT BIG MINE RUN

		FLNW-			AC I	YIIO	AI KAI	LINITY	TOTAL	I RON	S.41.1	
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC •	LB /DAY	CONC.	LEZDAY	CONC.	FATES LB/DAY
11/ 8/73 12/10/73 1/ 8/74 2/ 4/74 3/ 4/74 4/ 2/74	164.00 189.00 207.00 150.00	84829. 92908. 71813.	87.25 106.00 122.15 133.79 103.41 143.48	6 • 1 5 • 8 6 • 3 6 • 4 6 • 5	90.0 94.0 56.0 60.0	65531. 83147. 57085. 66988. 75941.	23.0 6.0 26.0 36.0 62.0	16747. 5307. 26504. 40193. 53504.	34.82 23.84 29.73 25.73 26.78	25353. 21087. 30306. 28727. 23110.	900 • 0 650 • 0 1010 • 0 650 • 0 600 • 0	655315. 574951. 1029572. 725700. 517779.
5/ 7/74 6/10/74 6/10/74 7/ 8/74 8/12/74 9/10/74 10/ 8/74	164.00 145.00 127.00 81.60		143.48 106.00 93.72 82.08 52.74 69.16 64.18	6.5 6.6 6.4 6.5 6.6 6.7 6.2	20.0 40.0 80.0 66.0 60.0 52.0 34.0	23947. 35382. 62565. 45209. 26407. 30010. 18210.	26.0 80.0 82.0 50.0 116.0 62.0 30.0	31131. 70763. 64129. 34249. 51053. 35781. 16067.	25.00 26.90 28.30 29.10 18.70 14.50 19.30	29934. 23794. 22132. 19933. 8230. 8368. 10337.	600.0 950.0 775.0 1175.0 1100.0 950.0	718419 • 840312 • 606099 • 804850 • 484124 • 548253 • 602525 •
MINIMUM MAXIMUM AVERAGE	81.60 222.00 150.07	36625. 99641. 57359.	52.74 143.48 97.00	5 • 8 6 • 7 6 • 4	20.0 94.0 61.7	18210. 83147. 49202.	6.0 116.0 49.9	5307• 70763• 37119•	14.50 34.82 25.22	8230. 30306. 20943.	600 •0 1175 •0 873 •8	484124. 1029572. 675658.

### SAMFLE POINT NO. 38 BAST DISCHARGE

DATE CES				AC I	YT 10	AI KAI	LINITY	TOTAL	I RCN			
DATE	CFS	GPM	MGD	РН	CONC.	LB/DAY	CONC .	LB/DAY	C DNC .	LB/DAY	CONC.	LB/DAY
11/ 8/73	3.63	1629.	2.35	6.4	50 • 0	979.	103.0	2017.	27.40	536•	900.0	17621.
12/10/73	4 • 35	1952.	2.81	6.1	120.0	, 2815.	88.0	2065.	26.32	618.	650.0	15250 •
1/ 7/74 2/ 4/74	4 • 35	1952.	2.81	6.2	148.0	3472.	150.0	3519.	29.73	699.	575.0	13491.
3/ 4/74	5 • 75	2581.	3.72	6.2	50.0	1551.	152.0	4714.	33.34	1034.	450.0	13956.
4/ 2/74	4 • 35 5 • 25	1952.	2 • 8 1	6 • 3	180.0	4223.	162.0	3801.	32.20	755.	400.0	9385.
5/ 7/74	5•08	2356. 2280.	3 • 39	6 • 4	70.0	1982.	134.0	3794.	27.38	775.	550.0	15574.
6/10/74	5.00	2244.	3.28	6.3	80.0	2192.	128.0	3507.	29.80	816.	700.0	19179 •
7/ 8/74	4.75	2132.	3.23 3.07	6 • 4 6 • 3	100.0	2697.	138.0	3722.	31.70	855.	450.0	12135.
9/12/74	3.20	1436.	2.07	6.3	94.0 20.0	2408.	130.0	3331.	31.50	807.	700.0	17934.
9/10/74	3 • 75	1683.	2.42	6.5	100.0	345.	136.0	2347.	30.10	520•	725.0	12513.
10/ 8/74	3.59	1511.	2.32	6.1	2.0	2023. 39.	84.0	1699.	33.90	685.	350.0	17192.
				., • •	2.40	39.	88.0	1704.	31.20	604.	825.0	15974.
MINIMUM	3.20	1436.	2.07	6 • 1	2.0	39.	84.0	1699.	26 70			
MA XI MUM	5.75	2581.	3.72	6.5	180.0	4223.	162.0	4714.	26 • 32	520•	400.0	9385.
AVERAGE	4.42	1984.	2 • 86	5.3	84.5	2060.	124.4	3013.	33.90 30.39	1034. 725.	900.0 647.9	19179. 15017.

	DATE CES CEM MCD I					DITY	ALKA	LINITY	TOTAL	I RON	SULF	AT ES
DATE	CFS	G₽M 	MGD	PH	CONC.	L8/DAY	CONC •	LB/DAY	C ONC .	LB/DAY	CONC.	LB/DAY
11/ 8/73		65530•	94.36	6 • 4	50.0	39373.	22.0	17324.	32.20	25356.	1000.0	787456.
12/10/73		75404.		6 • 1	60•0	54367.	14.0	12686.	24.59	22281.	550.0	498363.
1/7/74			129.91	6 • 4	38.0	41196.	20.0	21682.	27.25	29542.	575.0	623358.
2/ 4/74			130 •56	6.6	32.0	34864.	38.0	41401.	29.99	32674.	800.0	871595.
3/ 4/74			106.00	6.4	66.0	58380.	66.0	58380.	24.70	21848.	525.0	464383.
4/ 2/74		108169.	155.76	6.5	40.0	51994.	28.0	36396.	23.10	30026.	600.0	779905.
5/ 7/74		76302.	109.87	6 • 6	52.0	47679.	84.0	77020.	27.30	25031.	575.0	527218.
6/10/74		66427.	95.66	6.4	32.0	25544.	80.0	63859.	19.10	15246.	550.0	439034.
7/ 8/74	137.00	61490 •	38.55	6 • 4	44.0	32512.	52.0	38424.	21.10	15591.	1150.0	849752.
8/12/74		42908.	61.79	6 • 7	40.0	20625.	118.0	60843.	19.40	10003.	1025.0	528513.
9/10/74	114.00	51167.	73.68	6.8	40.0	24595.	52.0	31973.	18.20	11191.	1075.0	660978.
10/8/74	104.00	46679.	67.22	6 • 4	24.0	13462.	40.0	22437•	20.10	11275.	1275.0	715183.
MINI MUM	95.60	42908.	61.79	6 • 1	24.0	13462.	14.0	12686.	18.20	10003.	525.0	439034.
MA XI MUM	241.00	108169.		6.8	66.0	58380.	118.0	77020.	32.20	32674.	1275.0	871595.
AVERAGE	157.55	70714.	101.83	6.5	43.2	37049.	51.2	40202.	23• 92	20839.	808.3	645478.

#### SAMPLE PCINT NO. 40 ASHLAND NO. 1 DISCHARGE

DATE CES COM MCD					AC I	DITY	ALKA	LINITY	TOTAL	IRON	SIH E	AT ES
DATE	CFS	GPM	MGD	РH 	CONC.	LE/DAY	CONC •	LB /DA Y	CONC.	LB/DAY	CONC.	LB/DAY
11/ 8/73	0.13	58.	0.08	5.5	80.0	56.	5.0	4.	33.54	24.	725.0	508.
12/10/73	0.15	67.	0 - 10	5.5	130.0	105.	0.0	0.	26.92	22.	550.0	445.
1/ 7/74	0.20	90.	0.13	6.0	90.0	97.	2.0	2.	46.38	50.	475.0	512.
2/ 4/74	0.18	81.	0.12	6.1	54.0	52.	0.0	0.	43.13	42.	475.0	461.
3/ 4/74	0.16	72.	0.10	6.2	70.0	60.	8.0	7.	43.13	37.	400.0	345.
41 2/74	0.25	112.	0.16	6.2	92.0	124.	0.0	0.	30.95	42.	525.0	
5/ 7/74	0.20	90.	0.13	6.3	36.0	39.	0.0	0.	36.70	40.	425.0	708
6/10/74	0.21	94.	0 - 14	6.0	44.0	50.	22.0	25.	47.20	53.		458 •
7/ 8/74	0.19	85.	0.12	6.5	110.0	113.	20.0	20.	45.50		400.0	453.
8/12/74	0.11	49.	0.07	6.6	58.0	34.	20.0			47.	650.0	666•
9/10/74	0.15	67.	0.10	6.1	170.0	138.	10.0	12.	39.90	24.	625.0	371.
10/8/74	0.14	63.	0.09	5.8	70.0			8.	48.30	39•	775.0	627 •
		0.54	0.00	3.0	70.0	53.	238.0	180.	36.40	27.	800.0	604.
MI NI MUM	0.11	49.	0.07	5 <b>•5</b>	36.0	34.	0.0	0.	26• 92	22•	400.0	345•
MAXIMUM	0.25	112.	0.16	6.6	170.0	138.	238.0	180.	48.30	53.	800.0	708.
AVERAGE	0.17	77 •	0 - 11	6 • 1	83.7	77•	27.1	21.	39.84	37.	568 • 8	513.

### SAMPLE POINT NO. 41 ASHLAND NO. 2 DISCHARGE

OATE CES COMMITTEE					AC I	DITY	ALKA	LINITY	TOTAL	I RON	5111 5	AT ES
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC.	LB /DA Y	CONC.	LB/DAY	CONC.	LB/DAY
11/ 8/73	0.14	63.	0.09	7.6	0.0	0.	251.0	190.	5.60	4.	825.0	623•
12/10/73	0.16	72.	0.10	7.3	0.0	0.	350.0	302.	6.17	5.	575.0	496•
1/ 7/74	0.22	99•	0.14	7.2	0.0	0 •	434.0	515.	13.22	16.	600.0	712.
2/ 4/74	0.22	99.	0.14	7.0	14.0	17.	400.0	475.	10.00	12.	525.0	623.
3/ 4/74	0.18	81.	0.12	7.0	0.0	0.	422.0	410.	11.52	11.	575.0	558 •
4/ 2/74	0.28	126.	0.18	6.9	36.0	54.	392.0	592.	14.52	22•	575.0	868.
5/ 7/74	0.22	99.	0.14	6.8	0.0	0.	390.0	463.	7.10	8.	650.0	771•
6/10/74	0.19	85.	0.12	7.0	20.0	20.	396.0	406.	19.50	20.	475.0	
7/ 8/74	0.20	90.	0.13	7.0	68.0	73•	360.0	388.	16.40	18.		487.
8/12/74	0.12	54.	0.08	7 • 1	0.0	0.	405.0	263.	13.20	9.	825.0	890 •
9/10/74	0.15	67.	0.10	7.3	24.0	19.	246.0	199.	13.50		700.0	453.
10/ 8/74	0.17	76 •	0 - 1 1	7.2	0.0	0.	266.0	244.	3.50	11. 3.	825.0 850.0	667.
									3.30	J•	030.0	779•
MINIMUM	0.12	54.	0.08	6.8	0.0	0.	246.0	190.	3.50	3.	475.0	457
MA XI MUM	0.28	126.	0.18	7.6	68.0	73.	434.0	592.	19.50	22.		453.
AVERAGE	0.19	84.	0 • 12	7 • 1	13.5	15.	359.4	370.	11.19	12.	850.0 666.7	890. 661.

## SAMPLE PCINT NO. 42 ASHLAND NO. 3 DISCHARGE

	DATE CES COM MCD				AC I	DITY	ALKA	LINITY	TOTAL	IRON	SULF	AT ES
DATE	CFS	GPM	MGD	РН	CONC.	LB/DAY	CONC .	LB/DAY	CONC.	LB/DAY	CONC.	LB/DAY
11/ 8/73	0.07	31.	0.05	6.9	4.0	2.	9.0	3.	1.77	1.	155.0	59 •
12/10/73	0.11	49.	0.07	5.8	0.0	0.	14.0	8.	2.01	1.	275.0	163.
1/7/74	0.43	193.	0.28	4.6	24.0	56.	4.0	9.	1.36	3.	180.0	417.
2/ 4/74	0.39	175.	0 • 25	5.2	10.0	21.	6.0	13.	1.52	3.	191.0	402.
3/ 4/74	0.34	153.	0 . 22	6.5	10.0	18.	14.0	26.	1.20	2.	176.0	323.
4/ 2/74	0.52	233.	0 • 34	6.7	12.0	34.	8.0	22.	0.95	3.	135.0	379 •
5/ 7/74	0.31	139.	0 • 20	6.7	6.0	10.	20.0	33.	0.90	2.	105.0	176.
6/10/74	0.27	121.	0.17	6.8	4.0	6.	16.0	23.	0.50	1 •	151.0	220 •
7/ 8/74	0.53	238.	0 • 34	6.8	24.0	69.	12.0	34.	1.10	3.	175.0	500 •
8/12/74	0.10	45.	0.06	7 - 1	2.0	1.	8.0	4.	0.80	0.	225.0	121.
9/10/74	0.23	103.	0.15	6.5	8.0	10.	10.0	12.	0.40	0.	300.0	372.
10/ 8/74	0.18	8.1 •	0.12	6 • 4	4.0	4.	66.0	64.	1 • 40	1 •	225.0	218.
NI NI MUM	0.07	31.	0.05	4.6	0.0	0.	4.0	3•	0.40	0.	105.0	59•
MAXI MUM	0.53	238.	0.34	7 - 1	24.0	69.	66.0	64.	2.01	3.	300.0	500 •
AVERAGE	0.29	130.	0.19	6.3	9.0	19.	15.6	21.	1.16	2.	191.1	279.

### SAMPLE POINT NO. 43 MAHANDY CREEK BELOW ASHLAND

		FLNW-			AC I	DITY	ALKA	LINITY	TOTAL	IRON	SULI	FAT ES
DATE	CFS	GPM	MGD	РН	CONC.	LB/DAY	CONC •	LB /DA Y	CONC.	LB/DAY	CONC.	LB/DAY
11/ 8/73			97.59	6.3	50.0	40721•	38.0	30948.	28.96	23586.	865.0	704476.
12/10/73		80341.	115.69	6.0	62.0	59857.	12.0	11585.	24.59	23740.	450.0	434449.
1/11/74	210.00	94255•	135.73	6.4	54.0	61163.	26.0	29449.	28.04	31759.	675.0	764534.
2/ 6/74	203.00	91113.	131.20	6.7	72.0	78832.	50.0	54744.	22.71	24865.	925.0	1012771.
3/ 6/74	161.00	72262.	104.06	6.7	54.0	46891.	60.0	52102.	29.99	26042.	600.0	521015.
4/ 3/74	262.00	117594.	169.34	6.3	80.0	113048.	32.0	45219.	21.43	30283.	600.0	847864.
5/ 9/74	178.00	79892.	115.04	6.8	14.0	13441.	94.0	90245.	19.50	18721.	650.0	624032.
6/11/74	154.00	69120.	99.53	6.7	8.0	6645.	132.0	109640.	20.00	16612.	725.0	602188.
7/ 9/74	152.00	68223.	98.24	6.7	68.0	55748.	62.0	50829.	16.50	13527.	1050.0	860808.
8/13/74	101.00	45332.	65 • 28	6.9	30.0	16342.	114.0	62101.	20.00	10895.	950.0	517510.
9/11/74	119.00	53411.	76.91	6.8	36.0	23106.	64.0	41077.	17.60	11296.	1050.0	673922.
10/ 9/74	105.00	47576.	68.51	6.2	42.0	24012.	30.0	17151.	20.80	11892.	1475.0	843279.
MI NI MUM	101.00	45332.	65.28	6.0	8.0	6645.	12.0	11585.	16.50	10895.	450.0	434449.
MAXI MUM	262.00	117594.	169.34	6.9	80.0	113048.	132.0	109640.	29.99	31759.	1475.0	
AVERAGE	164.67	73908.	106 • 43	6.5	47.5	44984.	59.5	49591 •	22.51	20268.	834.6	

### SAMFLE PCINT NO. 44 LITTLE MAHANOY CREEK

FLOW					AC I	DITY	ALKA	LINITY	TOTAL	I RON	SULF	AT ES
DATE	CES	GPM	MGD	PH	CONC.	LB/DAY	CONC .	LB/DAY	CONC.	LB/DAY	CONC.	LB/DAY
11/ 8/73	11.40	5117.	7 • 37	6.7	6.0	369.	24.0	1476.	0.22	14.	40.0	2459 •
12/13/73	37.30	10741.	24.11	6.7	12.0	2414.	10.0	2012.	0.15	30.	5.0	1006.
1/11/74	21.50	9650.	13.90	6.7	2.0	232.	12.0	1392.	0.15	17.	11.0	1276 •
2/ 6/74	21.50	9650.	13.90	7.0	14.0	1623.	16.0	1855.	0.15	17.	13.0	1507.
3/ 6/74	22.60	10144.	14.61	7.4	4.0	488.	26.0	3169.	0.15	13.	50.0	6095.
4/ 3/74	54.60	24506.	35 • 29	6.8	4.0	1178.	22.0	6479.	0.00	0.	30.0	8835.
5/ 9/74	9.46	4246.	6.11	7.3	4.0	204.	22.0	1123.	0.10	5.	150.0	7653.
6/11/74	11.80	5296 •	7.63	7.4	2.0	127.	28.0	1782.	0.30	19.	7.0	446.
7/ 9/74	9.97	4430 .	6.38	7.4	10.0	532.	24.0	1278.	0.10	5.	175.0	9316.
8/13/74	5.66	2540 •	3.66	7.8	2.0	£1.	36.0	1099.	0.10	3.	45.0	1374.
9/11/74	11.40	5117.	7.37	8.0	8.0	492.	16.0	984.	0.20	12.		
10/ 9/74	0.10	2765.	3.98	5.5	4.0	133.	30.0	997.			225.0	13834.
•			3,4,7,	.,.5		1000	,0.0	4976	0.00	0.	275.0	9137.
MI NI MUM	5.66	2540.	3.65	6.5	2.0	61.	10.0	984.	0.00	0.	5.0	446.
MAXI MUM	54.60	24506.	₹5.29	8.0	14.0	2414.	36.0	6479.	0.30	30.	275.0	13834.
AVERAGE	18.60	8350•	12.02	7 - 1	6.0	654 •	22.2	1970.	0.13	12.	85.5	5245•

FLOW					AC I	Y11	ALKA	LINITY	TOTAL	IRON	SULF	AT ES
DATE	CES	GPM	MGD	PH	CONC.	LB/DAY	CONC •	LB ZDA Y	C O NC .	LB/DAY	CONC.	LB/DAY
11/ 8/73	6.42	2882.	4.15	6.6	5.0	173.	ñ0	208.	0.10	3.	27.0	935.
12/13/73	22.30	10009.	14.41	6.6	4.0	481.	4.0	481.	0.29	35.	40.0	4811.
1/11/74	14.60	6553.	9.44	6.7	4.0	315.	8.0	630。	0.15	12.	7.0	551.
2/ 6/74	10.40	4668.	6.72	7.2	6.0	337.	8.0	449.	0.00	0.	7.0	393。
3/ 6/74	9.21	4134.	5.95	7 . 4	6.0	298.	18.0	894.	0.15	7.	8.0	397。
4/ 3/74	23.80	10682.	15.38	7.2	4.0	513.	6.0	770.	0.00	0.	35.0	4493.
5/ 9/74	4.05	1818。	2.62	7.5	4.0	87.	10.0	218.	0.20	4.	35.0	765.
6/11/74	5.76	2585.	3.72	7.3	2.0	62.	8.0	249.	0.00	0.	6.0	186.
7/ 9/74	5.70	2558。	3.68	7.5	18.0	553.	10.0	307.	0.50	15.	200.0	6149.
8/13/74	5.92	2657。	3.83	7.9	2.0	64.	12.0	333.	0.00	0.	225.0	7184.
9/11/74	8.02	3600。	5.18	8.3	12.0	519.	20.0	865.	0.50	22.	175.0	7570。
10/ 9/74	2.50	1122.	1.62	6.7	4.0	54.	14.0	189.	0.00	0.	250.0	3371.
MI NI MUM	2.50	1122.	1.62	6 . 6	2.0	54.	4.0	189.	0.00	0.	6.0	186.
MAXI MUM	23.80	10682.	15 s 38	8.3	18.0	553.	20.0	894.	0.50	35.	250.0	7570。
AVERAGE	9.89	4439.	6 • 39	7.2	5.9	288。	10.3	470.	0.16	8.	84.6	3067 .

SAMPLE PRINT NO. 46 LITTLE MAHANDY CREEK BELOW PATTLING RUN

	FLOW				AC I	DITY	ALKA	LINITY	TOTAL	1808	SULF	AT ES
DATE	CFS	GPM	MGD	₽Н	CONC .	LB/DAY	CONC .	LB ZDA Y	CONC.	LEZDAY	CONC.	LB/DAY
												~~~~~
11/ 8/73	15.50	6957.	10.02	6.6	6.0	502.	17.0	1421.	0.15	13.	23.0	1923.
12/13/73	66.20	29713.	42.79	6.6	12.0	4285.	6.0	2142.	0.15	54.	9.0	3213.
1/11/74	33.40	14991.	21.59	6.6	4.0	721.	12.0	2162.	0.15	27.	9.0	1621.
2/ 6/74	30.00	13465.	19.39	7.1	4.0	647.	14 . 0	2265.	0.15	24.	9.0	1456.
3/ 6/74	25.50	11445.	16.48	7.4	6.0	£25·	18.0	2476.	0.29	40.	9.0	1238。
4/ 3/74	85.30	38285.	55.13	7.0	2.0	920.	12.0	5521.	0.00	0.	225.0	103515.
5/ 9/74	19.60	8797。	12.67	7.3	4 . 0	423.	18.0	1903.	0.30	32.	30.0	3171.
6/11/74	15.60	7002.	10.08	7.3	2.0	168.	22.0	1851.	0.20	17.	6.0	505 4
7/ 9/74	13.90	6239。	8.93	7.4	24.0	1799.	16.0	1200.	0.10	7.	35 • 0	2624 .
8/13/74	11.60	5206.	7.50	7 . 6	2.0	125.	25.0	1376.	0.00	0.	225.0	14077 .
9/11/74	21.20	9515。	13.70	8.0	10.0	1143.	6.0	686。	0.00	0 .	175.0	20010.
10/ 9/74	7.46	3348.	4.82	6 • 6	4.0	161.	10.0	402.	0.30	12.	250.0	10059 .
MINIMUM	7.46	3348.	4.82	6.6	2.0	125.	6.0	402.	0.00	0.	6.0	505.
MAXI MUM	85.30	33285.	55.13	8.0	24.0	4285.	22.0	5521.	0.30	54.	250.0	103515.
AVERAGE	28.77	12914.	18 .60	7 • 1	6.7	977.	14.4	1950.	0.15	19.	83.8	13618 .

SAMPLE POINT NO. 47 MAHANCY CREEK AND LITTLE MAHANCY CREEK CONFLUENCE

FLOW					AC [	DITY	ALKAI	LINITY	TOTAL	I RON	SULF	AT ES
DATE	CFS	GPM	MGD	РΗ	CONC.	LB/DAY	CONC .	LH /DA Y	CUNC.	LEZDAY	CONC.	LB/ DAY
11/ 8/73	144.00	64632.	93.07	6.3	50.0	36633*	31.0	24077.	21.59	16761.	900.0	699002.
12/13/73	231.00			5.9	90.0	112132.	2.0	2492.	27.37	34100.	400.0	498362
1/11/74	239.00	107271.	154.47	6.6	44.0	56718.	24.0	30937。	29.44	37950.	575.0	741207。
2/ 6/74	220.00	98743.	142.19	6.9	46.0	54583.	44.0	52209.	29.44	34933。	825 .0	978927.
3/ 6/74	152.00	68223.	98 . 24	6 .8	34.0	27874.	46.0	37712.	15.20	12461.	400.0	327927.
4/ 4/74	333.00	149461.	215.22	6.8	20.0	35921.	20.0	35921.	10.95	19667.	400.0	718419.
5/ 9/74	192.00	86176.	124.09	6.7	20.0	20711.	0.98	91129.	17.25	17863.	950.0	983781.
6/12/74	167.00	74955。	107.94	7.0	40.0	36029.	76.0	68455.	21.30	19636.	550.0	495396。
7/ 9/74	170.00	76302.	109.47	5.7	46.0	42177.	54.0	49513.	13.00	11920.	950.0	871055.
8/13/74	120.00	53860.	77.56	6.9	22.0	14239.	76.0	49189.	16.70	10809.	900.0	582502.
9/11/74	141.00	53285.	91.13	7 - 1	24.0	18252.	30.0	22815.	13.10	9962.	850.0	646415.
10/ 9/74	115.00	51616.	74.33	6.5	34.0	21089.	26.0	16127.	21.50	13336.	1000.0	620257。
NI NI NUN	115.00	51616.	74.33	5.9	20.0	14239.	2.0	2492.	10.95	9962.	400.0	327927.
MUM IX AM	333.00	149461.	215.22	7.1	90.0	112132.	0.83	91129.	29.44	37950.	1000.0	983781.
AVERAGE	185 • 33	93184.	119.78	5.7	39.2	39880.	43.1	40048.	19.78	19950.	725.0	680270.

		FLOW			AC I	DITY	ALKA	LINITY	TOTAL	IRON	SULF	AT FS
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC .	LHYDAY	C DNC •	LB/DAY	CONC.	LBZDAY
11/ 8/73	0.24	108.	0.16	5.5	130.0	168.	401.0	519.	36.83	48.	1265.0	1637。
12/12/73	0.27	121.	0.17	6.1	134.0	195.	478.0	696.	30.25	44.	1400.0	2039。
1/7/74	0.34	153.	0.22	6.0	124.0	227。	658.0	1207.	35.87	66.	1050.0	1925.
2/ 6/74	0.36	162.	0.23	6.6	186.0	361.	628.0	1219.	29.99	58.	1300.0	2524 .
3/ 6/74	0.32	144.	0.21	6.6	154.0	266.	676.0	1167.	29.99	52.	850.0	1467.
4/ 4/74	0.36	162.	0.23	6.5	20.0	39.	710.0	1379.	26.67	52.	1100.0	2136.
5/ 9/74	0.29	130.	0.19	6 .8	30 • 0	47.	622.0	973.	29.80	47.	1375.0	2151.
6/12/74	0.22	99.	0.14	6.6	154.0	183.	690.0	819.	31.20	37.	1000.0	1187.
7/10/74	0.37	165.	0.24	6.6	224.0	447.	640.0	1277.	30.20	60.	1550.0	3093.
8/13/74	0.28	126.	0.18	6.7	44.0	66.	614.0	927。	34.60	52.	1475 .0	2228.
9/12/74	0.28	126.	0.18	6.4	140.0	211.	388.0	586.	34.80	53.	1775.0	2681.
1 0/1 0/74	0.28	126.	0.18	6.4	236.0	356.	328.0	495.	34.70	52.	1725.0	2605.
MI NI MUM	0.22	99 .	0.14	6.0	20.0	39.	328.0	495.	26.67	37.	850.0	1187。
MAXI MUM	0.37	166.	0 .24	6.8	236.0	447.	710.0	1379.	36.83	66.	1775.0	3093.
AVERAGE	0.30	135.	0.19	6.5	131.3	214.	569.4	939.	32.07	52.	1322.1	2139.

SAMPLE POINT NO. 49 HIG RUN NO. 2 DISCHARGE

FLOW					AC I	YT10	AL KA	LINITY	TOTAL	I RON	SULF	AT ES
DATE	CFS	GPM	MGD	РН	CONC.	L8/DAY	CONC .	LBZDAY	CONC.	LB/DAY	CONC.	LB/DAY
11/ 8/73	2 • 35	1055.	1.52	6.5	80.0	1014.	307.0	3891.	19.51	247.	815.0	10330 .
12/12/73	3.80	1706.	2.46	6.3	0.06	1640.	400.0	8198.	20.97	430.	650.0	13322.
1/ 7/74	5.70	2558 •	3 • 68	6.1	56.0	1722.	532.0	16355.	30.75	945.	1100.0	33817.
2/ 6/74	7.12	3196.	4.60	6.6	88.0	3379.	554.0	21275.	24.70	949.	950.0	36482.
3/ 5/74	5.50	2917.	4.20	6.5	88.0	3085.	458.0	16057.	35.67	1251.	675.0	23664.
4/ 4/74	7.50	3366。	4.85	6.5	90.0	3641.	456.0	18446.	28.10	1137.	975.0	39440 .
5/ 9/74	5.70	2559 •	3.58	6.9	4.0	123.	389.0	11959.	25.50	734.	950.0	29206.
6/12/74	3.90	1750 .	2.52	6.6	80.0	1683.	394.0	8288.	29.90	629。	675 .0	14198.
7/10/74	2.85	1279.	1.84	6.5	158.0	2429.	398.0	6118.	28.40	437.	650.0	9992.
8/13/74	4.00	1795 .	2.59	6.6	102.0	2201.	416.0	8975.	37.60	811.	975.0	21035.
9/12/74	2.50	1122.	1.62	6.5	128.0	1726.	222.0	2993.	29.30	395。	1100.0	14832.
1 0/1 0/74	0.25	112.	0.16	6 • 4	100.0	135.	202.0	272.	21.10	28.	850.0	1146.
MINIMUM	0.25	112.	0.16	6.1	4.0	123.	202.0	272.	19,51	28.	650.0	1146.
MAXI MUM	7.50	3366 .	4.85	6.9	158.0	3641.	554.0	21275.	37.60	1251.	1100.0	39440 .
AVERAGE	4 • 35	1951.	2.81	6.5	87.8	1898.	394.0	10236.	27.62	670.	863.8	20622.

FLOW					AC I	DI TY	AL KA	LINITY-	TOTAL	IRON	SULF	AT ES
DATE	CFS	SPM	MGD	РН	CONC.	LEZDAY	CONC .	LH/DAY	CONC.	LB/DAY	CONC.	LB/ DAY
11/ 8/73	4.52	2074 .	2.99	7.3	0.05	748.	247.0	6155.	21.71		700.0	10605
12/12/73	4.11	1845.	2.66	6.7	0.0	0.	250.0	5542.	18.89	541. 419.	790.0 600.0	19685。 13300。
1/ 9/74	6.36	3079.	4.43	7 . 1	0.0	0.	428.0	15836.	26.44	978.	900.0	33300 •
2/ 6/74	8.00	3591.	5.17	7.0	54.0	2330.	400.C	17259.	30.59	1320.	725.0	31283.
3/ 6/74	4 . 34	1948.	2.81	7.2	52.0	1217.	386.0	9035.	19.80	463.	1025.0	23993.
4/ 4/74	12.20	5476。	7.39	7.0	22.0	1448.	258.0	16977.	20.00	1316.	625.0	41126.
5/ 9/74	4.29	1925 .	2.77	7.4	26.0	602.	330.0	7636。	18.90	437.	825.0	19089 .
6/12/74	2.80	1257.	1.81	7.4	0.0	0.	342.0	5165.	17.40	263.	475.0	7173.
7/10/74	4.06	1822.	2.62	7.4	64.0	1401.	370.0	8102.	20.00	438.	1150.0	25182.
8/13/74	3.92	1759.	2.53	7.4	32.0	677。	364.0	7696.	19.20	405.	950.0	20086.
9/12/74	3.30	1481.	2 • 13	7.4	34.0	605.	230.0	4094.	19.10	340.	1050.0	18689。
10/10/74	2.10	943.	1 • 36	6.7	28.0	317.	194.0	2197.	11.60	131.	950.0	9627。
MINIMUM	2.10	943.	1 • 36	6.7	0.0	C •	194.0	2197.	11.60	131.	475.0	7173.
MAXINUM	12.20	5476.	7 • 89	7.4	64.0	2330.	428.0	17259.	30.59	1320 .	1150.0	41126 .
AVERAGE	5.05	2267.	3.26	7.2	28.5	775.	316.6	8808	20.30	588.	830.4	21878.

DATE CES COM MCD					AC I	YT1G	ALKA	LINITY	TOTAL	I RON	SULF	AT ES
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC .	LB/DAY	CONC.	LB/DAY	CONC.	LB/DAY
117 8/73	2.96	1329.	1.91	7.6	0.0	0.	182.0	2906.	2.62	42.	565.0	9020.
12/12/73	15.00	6732•	9 • 69	6.7	0.0	0.	136.0	11003.	5.57	451.	300.0	24271.
1/ 9/74	9.79	4394.	6.33	7.4	0.0	0.	304.0	16052.	13.59	718.	675.0	35642.
2/ 6/74	13.50	6059.	8.73	7.2	0.0	0.	308.0	22426.	17.86	1300.	600.0	43688 •
3/ 6/74	8.52	3824 •	5.51	7.7	0.0	0.	260.0	11948.	12.18	560.	400.0	18381.
4/ 4/74	22.60	10144.	14.61	7.3	16.0	1950.	140.0	17065.	13.57	1654.	275.0	33521.
5/ 9/74	11.80	5296 •	7.63	7.5	0.0	0.	194.0	12347.	3.50	223.	475.0	30231.
6/12/74	2.23	1001.	1.44	7.8	0.0	0.	248.0	2983.	6.10	73.	450.0	5412.
7/10/74	6.31	2832.	4.08	7.7	42.0	1429.	270.0	9189.	13.20	449.	950.0	32332.
8/13/74	4.88	2190.	3.15	7.6	0.0	0.	294.0	7739.	11.70	308.	850.0	22372.
9/12/74	2.73	1248.	1.80	7.7	0.0	0.	168.0	2519.	8.50	127.	925.0	13869
10/10/74	2.50	1122.	1.62	6.8	0.0	0.	186.0	2508.	11.50	155.	875.0	11798.
									1.050	133.	373.0	11/90*
MINIMUM	2.23	1001.	1.44	6.7	0.0	0.	136.0	2508.	2.62	42.	275.0	5412.
MAXIMUM	22.50	10144.	14.61	7.8	42.0	1950.	308.0	22426.	17.86	1654	950.0	43688
AVERAGE	8.57	3848•	5.54	7 • 4	4.8	282.	224.2	9890.	9.99	505.	611.7	23378.

### SAMPLE POINT NO. 52 MAHANCY CREEK BELOW BIG RUN

FLOW					AC I	DITY	ALKA	LINITY	TOTAL	IRON		FAT ES
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC .	LB/DAY	CONC.	LB/DAY	CONC.	LB/DAY
11/ 8/73			78.85	6.6	20.0	13160.	36.0	23688.	23.66	15569.	715.0	470478
12/12/73				6 • 1	0 • 0	0.	12.0	15245.	14.35	19427.	395.0	534742.
		118043.		6.9	30.0	42555.	38.0	53903.	26.44	37505.	850.0	1205724.
		111311.		7.0	0.0	0.	50.0	66880.	19.80	26484.	600.0	802558.
		105476.		6.9	50.0	63374.	48.0	60839.	18.86	23905.	525.0	665427.
		162029.		6.8	24.0	4 <i>€</i> 730.	32.0	62306.	13.10	25507.	330.0	642532.
5/ 9/74		90215.	129.91	6.9	60.0	65046.	92.0	99737.	15.30	16587.	900.0	975691.
6/12/74		76302•	109 • 87	7.0	30.0	27507.	74.0	67851.	21.30	19530.	725.0	664753.
7/10/74		30341.	115.69	6.9	54.0	52134.	62.0	59857.	19.30	18633.	925.0	893034.
8/13/74		58348.	84.02	6.9	28.0	19632.	80.0	56093.	16.30	11429.	950.0	666102.
9/12/74		65081.	93.72	7.0	38.0	29718.	30.0	23462.	12.60	9854.	775 • 0	606099.
10/10/74	126.00	56553.	81.44	6.3	28.0	19028.	66.0	44853.	16.90	11485.	1100.0	747544.
MUM IN IM	122.00	54758.	78.85	6 • 1	0.0	0.	12.0	16245.	12.60	9854.	330.0	470478.
MAXI MUM	361.00	162029.	233.32	7.0	60.0	65046.	92.0	99737.	26.44	37505.		1205724
AVERAGE	202.58	90926•	130.93	6.8	30.2	31574.	51.7	52976.	18.16	19659.	732.5	739557.

### SAMPLE PCINT NO. 53 MOWRY DISCHARGE

	FLOW					DITY	ALKA	LINITY-	TOTAL	IRON	SIII F	AT ES
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	conc.	LB/DAY	CONC.	LB/DAY	CONC.	LB/DAY
117 8/73	0.06	27.	0 •04	3.4	75.0	24.	0.0	0.	3.72	1.	150.0	49 •
12/12/73	0.20	90.	0.13	3.3	74.0	80.	0.0	0.	5.36	6.	110.0	119.
1/ 9/74	0.31	139.	0.20	4.0	48.0	e0.	0.0	0.	5.15	9.	150.0	251.
2/ 6/74	0.39	175.	0 • 25	3.9	60.0	126.	0.0	0.	4.35	9.	102.0	215.
3/ 6/74	0.31	139.	0 • 20	3.9	42.0	70.	0.0	0.	1.68	3.	225.0	376.
4/ 4/74	0.57	256.	0 .37	3.9	44.0	135.	0.0	0.	8.57	26.	200.0	615.
5/ 9/74	0.17	76.	0 • 11	4.8	50.0	46.	0.0	0.	1.90	2.	225.0	206.
6/12/74	0.17	76.	0 • 1 1	3.7	48.0	44.	0.0	0.	5.20	5•	175.0	
7/10/74	0 • 1 7	76 •	0.11	3.6	74.0	68.	0.0	0.	3.50	3.	175.0	160.
8/14/74	0.06	27.	0.04	3.6	58.0	19.	0.0	0.	7.00	2.	225.0	160 •
9/12/74	0.09	40 •	0.06	3.4	64.0	31.	0.0	0.	6.80	3.	200.0	73.
10/10/74	0.06	27.	0 • 9 4	3 • 4	52.0	17.	0.0	0.	5.60	2.	325.0	97. 105.
MI NI MUM	0.06	27.	0.04	3.3	42.0	17.	0.0	0.	1.68	1.	102.0	49.
MAXI MUM	0.57	256.	0 • 37	4.8	75.0	135.	0.0	0.	8.57	26.	325.0	615.
AVERAGE	0.21	96.	0 • 14	3.7	57•4	€2•	0.0	0.	4.91	6.	188.5	202

#### SAMPLE POINT NO. 54 HELFENSTEIN TUNNEL DISCHARGE

	FLOW					D[TY	ALKA	LINITY	TOTAL	I RON	SULF	AT ES
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC •	LB/DAY	CONC.	LB/DAY	CONC.	LB/DAY
11/ 8/73	1 • 14	512.	0.74	6.4	22.0	135.	36.0	221.	26.01	160.	625.0	3843.
12/12/73	2.88	1293.	1.86	6 • 1	42.0	652•	4.0	62.	16.90	263.	575.0	8932.
1/10/74	4.41	1979.	2.85	6.6	22.0	523•	122.0	2902.	12.18	290.	475.0	11298.
2/ 6/74	5.69	2554 •	3.68	6.4	26.0	798.	54.0	1657.	13.22	406.	475.0	14577.
3/ 6/74	2.55	1145.	1.65	6.8	26.0	358.	120.0	1650.	12.86	177.	350.0	4814.
4/ 4/74	6.53	2931.	4.22	6.7	30.0	1057.	14.0	493.	10.00	352.	350 •0	12327.
5/ 9/74	2.59	1162.	1.67	7.0	0.0	0.	158.0	2207.	10.10	141.	550.0	7683.
6/13/74	1.91	857.	1.23	7 - 1	36.0	371.	152.0	1566.	11.80	122.	325.0	3348 .
7/10/74	2.00	898.	1.29	6.9	44.0	475.	96.0	1036.	11.90	128.	675.0	7281.
8/14/74	1.90	853.	1.23	7.3	18.0	184.	102.0	1045.	11.70	120.	675.0	6917.
9/12/74	0.83	373.	0.54	6.7	20.0	90•	70.0	313.	11.10	50.	750.0	3357.
1 0/1 0/74	0.92	413.	0 •59	6.4	38.0	189.	60.0	298•	11.30	56.	750.0	3722.
MINIMUM	0.83	373.	0 •54	6 • 1	0.0	0.	4.0	62.	10.00	50.	325 • 0	3348.
MAXI MUM	6.53	2931.	4.22	7.3	44.0	1057.	158.0	2902.	26.01	406.	750.0	14577.
AVERAGE	2.78	1247.	1.80	6.7	27.0	403.	82.3	1121.	13.26	189.	547.9	7342.

## SAMPLE POINT NO. 55 MAHANCY CREEK BELOW HELFENSTEIN TUNNEL

FLOW					AC I	DITY	ALKA	LINITY	TOTAL	I RON	SULF	AT ES
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC .	LB/DAY	CONC.	LB/DAY	CONC.	LB/DAY
11/ 8/73	130.00	58348.	84.02	6 • 1	30.0	21035.	25.0	17529.	21.27	14914.	765.0	536387 •
12/12/73	S86.00	128366.	184.85	6.2	16.0	24681.	14.0	21596.	10.89	16798.	360.0	555318.
1/10/74	270.00	121185.	174.51	5.5	28.0	40775.	36.0	52425.	20.00	29125.	575.0	837346.
		122531.		6.8	54.0	79511.	50.0	73622.	24.74	36428.	525 • 0	773028.
		119838.	172.57	6.6	46.0	66243.	42.0	60483.	17.01	24496.	475.0	684035.
4/ 4/74		168312.	242.37	6.8	10.0	20226.	24.0	48542.	11.19	22633.	150.0	303386.
5/ 9/74		88869•	127.97	7 - 1	22.0	23494.	78.0	83298.	14.90	15912.	825.0	881034.
6/13/74		76302.	109.87	6.9	40.0	36676.	80.0	73352.	25.00	22923.	575.0	527218.
7/10/74	181.00	81239.	116.98	5.9	44.0	42954.	54.0	52716.	17.80	17377.	850.0	829795.
8/14/74		57451.	82.73	7.1	26.0	17950.	108.0	74560.	9.30	6420.	825.0	569557.
9/12/74		65081.	93.72	7 - 1	22.0	17205.	40.0	31282.	11.30	8837.	825.0	645202.
10/10/74	134.00	60144.	86 • 61	6.6	24.0	17346.	60.0	43364.	14.40	10407.	925.0	668529.
MINIMUM	128.00	57451.		6 • 1	10.0	17205.	14.0	17529.	9.30	6420.	150.0	303386.
MUM IX AM	375.00	168312.		7 • 1	54.0	79511.	108.0	83298•	25.00	36428.	925.0	881034.
AVERAGE	213.08	95639.	137.72	6.7	30.2	34008.	50.9	52731.	16.48	18856.	639.6	650903.

### SAMPLE PCINT NO. 56 DOUTYVILLE TUNNEL DISCHARGE

	FLOW					DITY	ALKA	LINITY	TOTAL	I RON	SULF	AT FS
DATE	CFS	GPM	MGD	PН	CONC.	LB/DAY	CONC .	LB/DAY	CONC.	LE/DAY	CONC.	LB/DAY
11/ 9/73	10.10	4533.	6.53	3.7	140.0	7626.	0.0	0.	27.94	1522.	890.0	48482.
12/13/73	14.90	6688.	9.63	3.5	186.0	14948.	0.0	0.	28.56	2295.	725.0	58264.
1/10/74	16.30	7316.	10.54	4.0	84.0	7385.	0.0	0 •	22.52	1980.	525.0	46155.
2/6/74	21.80	9785.	14.09	3.9	134.0	15756.	0.0	0.	21.85	2569.	675.0	79366.
3/ 6/74	13.70	6149.	8.85	3.7	204.0	15074.	0.0	0.	19.80	1463.	550.0	40640 .
4/ 4/74	19.50	3752.	12.60	3.5	110.0	11569.	0.0	0.	14.52	1527.	425.0	44699.
5/ 9/74	12.60	5655.	8.14	4.6	152.0	10330.	0.0	0.	18.90	1284.	850.0	57765.
6/13/74	15.00	6732•	9.69	3.8	172.0	13915.	0.0	0.	23.60	1909.	600.0	48542.
7/10/74	12.50	5610.	8 • 0 8	3.7	216.0	14563.	0.0	0.	22.00	1483.	925.0	62363.
8/14/74	10.70	4303.	6.92	3.6	184.0	10619.	0.0	0.	25.30	1460.	1025.0	59154.
9/12/74	7.40	3321.	4.78	3.7	160.0	6386.	0.0	0.	20.90	834.	1175.0	46897.
10/10/74	7.85	3523•	5.07	3.3	186.0	7875.	0.0	0.	28.30	1198.	1300.0	55041.
NI NI MUM	7.40	3321.	4.78	3.3	84.0	6386.	0.0	0.	14.52	834.	425.0	40640.
MUM IX AM	21.80	9785.	14.09	4.6	216.0	15756.	0.0	0.	28.56	2569.	1300.0	79366
AVERAGE	13.53	6072•	8.74	3.7	160.7	11337.	0.0	0.	22.85	1627.	805.4	53947.

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		FLOW-			AC I	DITY	ALKA	LINITY	TOTAL	I RON	SUL	FAT ES
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC .	LB/DAY	CONC.	LB/DAY	CONC.	LB/DAY
11/ 9/73	151.00	67774.	97.59	5.5	30.0	24433.	13.0	10588.	28.52	23227•	800.0	651539 •
12/13/73	296.00	132855.	191.31	5.8	76.0	121333.	8.0	12772.	15.57	24857.	400.0	638595.
1/10/74	282.00	126571.	182.26	6 • 4	32.0	48671.	10.0	15210.	21.85	33233.	550.0	836537.
2/ 6/74	311.00	139587.	201.01	6.6	40.0	67056.	20.0	33548.	24.74	41499.	475.0	796760 •
3/ 6/74	283.00	127020.	182.91	6.6	30.0	45791.	24.0	36633.	17.93	27368.	475.0	725026.
4/ 5/74	403.00	180880.	260 •47	6.4	38.0	82597.	2.0	4347.	10.48	22779.	325.0	706418.
5/10/74	206.00	92460.	133.14	6.9	36.0	39998.	48.0	53331.	14.80	16444.	850.0	944408 .
6/13/74	189.00	84829•	122.15	6.7	44.0	44853.	48.0	48930.	24.60	25077.	600.0	611627.
7/10/74	187.00	83932.	120.86	6.6	64.0	64550.	38.0	38326.	17.60	17751.	1050.0	1059020.
8/14/74	137.00	61490.	88.55	6.9	32.0	23645.	58.0	42857.	10.40	7685.	875.0	646550 •
9/12/74	152.00	68223•	98.24	6.9	24.0	19676.	22.0	18036.	10.90	8936.	925.0	758331.
10/10/74	142.00	63734.	91.78	6.3	28.0	21445.	34.0	26040•	14.40	11029.	1075.0	823323.
MI NI MUM	137.00	61490.	88.55	5.5	24.0	19676.	2.0	4347.	10.40	7685.	325.0	611627.
MAXI MUM	403.00	180880.	260.47	6.9	76.0	121333.	58.0	53331.	28.52	41499.	1075.0	1059020.
AVERAGE	228.25	102446.	147.52	6.5	39.5	50341.	27.1	28385.	17.65	21657.	700.0	766511.

#### SAMPLE POINT NO. 58 MAHANDY CREEK IN EAST CAMERON AT RT. 125

		FLOW-			AC I	YT10	ALKA	LINITY	TOTAL	I RON	SULF	AT ES
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC •	LB /DA Y	CONC.	LB/DAY	CONC.	LR/DAY
11/ 9/73	143.00	54183.	92.42	6.0	40.0	30851.	16.0	12340.	22.23	17145.	675.0	520611.
12/13/73	309.00	138689.	199.71	5•7	50 <b>•</b> 0	83330.	2.0	3333.	12.86	21433.	275.0	458316.
1/11/74	291.00	130610.	188.08	6 • 4	20.0	31390.	26.0	40807.	13.22	20749.	425.0	667045.
2/ 6/74	311.00	139587.	201.01	6.7	22.0	36903.	30.0	50322.	17.86	29958.	575.0	964499.
3/ 6/74	282.00	126571.	182.26	6.8	22.0	33461.	32.0	48671.	17.01	25872.	400.0	608391.
4/ 5/74	4 08 • 00	183124.	263.70	6.7	24.0	52813.	14.0	30808.	10.95	24096.	225.0	495126.
5/10/74	210.00	94255•	135.73	6.9	8.0	9061.	50.0	56632.	14.00	15857.	700.0	792850 •
6/13/74		86625.	124.74	6.9	40.0	41638.	54.0	56211.	17.10	17800.	575.0	598548.
7/10/74		86176 •	124.09	7 • 1	45.0	47636.	36.0	37280.	15.80	16362.	975.0	1009670.
8/15/74	140.00	62837.	90 • 48	7.4	32.0	24163.	48.0	36245.	10.80	8155.	900.0	679586.
9/13/74		65978.	95.01	7.0	16.0	12686.	20.0	15857.	10.20	8087.	700.0	554995.
10/10/74	144.00	64632.	93.07	6.5	16.0	12427.	38.0	29513.	13.50	10485.	900.0	699002•
MINI MUM	140.00	62837.	90 • 48	5.7	8.0	9061.	2.0	3333.	10.20	8087.	225 •0	458316•
MUM IX AM	408.00	183124.	263.70	7.4	50.0	83330.	54.0	56632.	22.23	29958.	975.0	1009670.
AVERAGE	230.83	103605.	149.19	6.7	28.0	34697.	30.5	34835.	14.63	18000.	610.4	670719.

#### SAMPLE POINT NO. 59 MAHANGY CREEK IN WEST CAMERON

	FLOW					DITY	AL KAI	_INITY	TOTAL	IRON	SULE	AT ES
DATE	CFS	GPM	MGD	PH	CONC.	LE/DAY	CONC .	LB/DAY	CONC.	LB/DAY	CONC.	LB/DAY
11/ 9/73				5.9	40.0	33440.	10.0	8360.	16.98	14195.	600.0	501598 •
12/13/73	316.00	141831.	204.24	5•7	34.0	57948.	2.0	3409.	12.18	20759.	325.0	553916.
1/11/74	298.00	133752.	192.60	6.5	20.0	32145.	24.0	38575.	11.20	18001.	425.0	683091.
2/ 6/74	307.00	137792.	198 • 42	6.8	38.0	62921.	28.0	46363.	12.86	21294.	425.0	703721.
3/ 6/74	304.00	136445.	196.48	6.9	22.0	36072.	38.0	62306.	15.15	24840.	375.0	614863.
4/ 5/74	415.00	186266.	268 • 22	6.7	20.0	44766.	14.0	31336.	9.05	20257.	225.0	503621.
5/ 9/74	220.00	98743.	142.19	7 - 1	10.0	11866.	46.0	54583.	9.60	11391.	800.0	949262.
6/12/74	208.00	93357.	134.43	7.0	20.0	22437.	50.0	56093.	15.00	16828.	475.0	532881.
7/10/74	195.00	87522.	126.03	7.1	46.0	48380.	26.0	27345.	11.70	12305.	675.0	709924.
8/15/74	147.00	65978.	95.01	7.4	24.0	19028.	52.0	41228.	10.70	8483.	875.0	693743.
9/13/74	150.00	67325.	96.95	7.2	20.0	16181.	20.0	16181.	16.30	13187.	775.0	626998
10/10/74	142.00	63734.	91.78	6.5	12.0	9191.	28.0	21445.	10.40	7965.	1125.0	861617.
MINIMUM	142.00	63734.	91.78	5.7	10.0	9191.	2.0	3409.	9.05	7965.	225.0	501598.
MAXI MUM	415.00	186266.	268 • 22	7.4	46.0	62921.	52.0	62306.	16.98	24840.	1125.0	949262.
AVERAGE	238.08	106859.	153.88	6.7	25.5	32865.	28.2	33935.	12.59	15792.	591.7	661270 •

		FLOW-			AC I	DITY	ALKA	LINITY	TOTAL	I RON	SUL	FATES
DATE	CFS	GPM 	MGD	PH 	CONC.	LE/DAY	CONC .	LB /DAY	CONC.	L9/DAY	CONC.	LB/DAY
11/ 9/73			109.87	6.3	30.0	27507.	14.0	12837.	17.46	16009.	625.0	573063.
12/12/73				5.9	30.0	66179.	2.0	4412.	9.71	21420.	1300.0	
		146320.		6.2	20.0	35166.	12.0	21100.	0.00	0.	235.0	413199.
		139138.		6.7	22.0	36784.	22.0	36784.	10.00	16720.	425.0	710598.
		134201.		6.7	16.0	25803.	30.0	48380.	13.96	22513.	325.0	524117.
		139856.		6.8	16.0	36503.	20.0	45629.	13.10	29887.	275.0	627403.
5/ 9/74			1 37 • 67	6.9	10.0	11488.	32.0	36762.	9.60	11029.	750.0	861617.
6/12/74			131.85	7.0	26.0	28607.	56.0	61616.	12.90	14194.	525 • 0	577648
7/10/74			128.62	6.9	26.0	27906.	32.0	34346.	10.60	11377.	750 • 0	804985
8/15/74		64632.	93.07	7.5	20.0	15533.	44.0	34173.	9.30	7223.	875.0	679586.
9/12/74		68671.	98.89	7.5	20.0	16504.	18.0	14854.	6.20	5116.	850.0	701429
10/10/74	145.00	65081.	93.72	6 • 4	8.0	6257.	30.0	23462.	8.50	6648.	875.0	684305.
MINIMUM	144.00			5.9	8.0	€257.	2.0	4412.	0.00	0.	235.0	413199.
MAXI MUM		189856.		7.5	30.0	66179.	56.0	61616.	17.46	29887.		2867741.
AVERAGE	249.58	112021.	161.31	6.7	20.3	27853.	26.0	31196.	10.11	13511.	650 • 8	835474.

### SAMPLE POINT NO. 61 ZERBE RUN IN TREVORTON

		FL.OW			AC I	D11Y	ALKAI	_INITY	TOTAL	I RON	SIII E	AT ES
DA TE	CFS	GPM 	MGD	PH	CONC.	LB/DAY	CONC .	LB /DAY	CBNC.	LBZDAY	CONC.	LB/DAY
11/ 9/73	2.55	1145.	1.65	6.2	6.0	83.	8.0	110.	0.29	4.	90.0	1238 •
12/13/73	7.80	3501.	5.04	5 • 7	10.0	421.	4.0	168.	0.44	19.	30.0	1262
1/10/74	6.50	2917.	4 • 20	6.6	4.0	140.	10.0	351.	0.15	5.	12.0	
2/ 7/74	6.14	2756.	3.97	7.2	4.0	132.	10.0	331.	0.15	5•	3.0	421.
3/ 7/74	3.23	1450 •	2.09	7.2	4 • 0	70.	16.0	279.	0.29	5.		265.
4/ 4/74	18.70	8393.	12.09	6.6	6.0	605.	6.0	605.			300.0	5226 •
5/ 9/74	6.43	2386.	4.16	7.2	0.0	0.	14.0		0.24	24.	45.0	4539 🔹
6/12/74	1.62	727.	1.05	7.2	6.0	52•		486.	1.00	35.	30.0	1040 .
7/10/74	2.58	1158.	1.67	7.4	24.0		18.0	157.	0.40	3 •	6.0	52.
8/14/74	1.23	552•				334.	10.0	139.	0.50	7.	500.0	2783.
9/13/74	1.12		0.79	7.7	6.0	40.	16.0	106.	0.60	4.	325.0	2156.
10/10/74		503.	0.72	7.5	14.0	85.	10.0	60.	0.60	4.	150.0	906.
10/10//4	1.20	539.	0.78	6.6	8.0	52•	10.0	65.	0.50	3.	250 • 0	1618.
MINIMUM	1.12	503.	0.72	5.7	0•0	0.	4.0	60.	0.15	3.	<i>(</i> 0	
MAXI MUM	18.70	8393.	12.09	7.7	24.0	€05.	18.0	505.			6.0	52.
AVERAGE	4.92	2211.	3.18	6.9	7.7	168.	11.0	238•	1 • 0 0 0 • 4 3	35. 10.	325.0 120.5	5226. 1792.

## SAMPLE POINT NO. 62 NORTH FRANKLIN OVERFLOW DISCHARGE

	CES GRM MCD				AC I	DITY	ALKAI	LINITY	TOTAL	I RON	SIH F	AT ES
DATE	CFS	GP M	MGD	PH	CONC.	LB/DAY	CUNC .	LB /DAY	C DNC .	LBZDAY	CONC.	LB/DAY
11/ 9/73	14.00	6284.	9.05	3.6	110.0	8306.	0.0	0.	43.52	3286•1	590.0	44551.
12/13/73	11.60	5206.	7.50	3.4	140.0	8759.	0.0	0.	32.93	2060.	450.0	28154.
1/10/74	14.90	6234 •	9.05	3.9	162.0	12233.	0.0	0.	33.01	2493.	550 • 0	41530 •
2/ 7/74	11.20	5027.	7 • 24	3.9	130.0	7853.	0.0	0.	38.06	2299	350.0	21143.
3/ 7/74	8 • 81	3954•	5 • 69	3.8	144.0	6842.	0.0	0.	40.55	1927.	350.0	16631.
4/ 4/74	17.70	7944 .	11.44	3.6	124.0	11838.	0.0	0.	25•95	2477.	400.0	38186.
5/10/74	17.90	8034.	11.57	5.0	90.0	8689.	0.0	0.	33.70	3254	625.0	50340
6/12/74	11.00	4937.	7.11	4.0	130.0	7713.	0.0	0.	37.50	2225	450 • 0	26698•
7/10/74	14.10	6329.	9.11	3.8	212.0	16122.	0.0	0.	36.70	2791.	525.0	
8/15/74	9.02	4048.	5.83	3.8	160.0	7784.	9.0	0.	51.20	2491	575.0	47531.
9/13/74	3.06	3618.	5.21	3.6	500.0	21736.	0.0	0.	48.40	2104	700.0	27974.
10/10/74	8.32	3734 •	5 • 38	3.8	100.0	4487.	0.0	0.	36.40	1633.		30430
							0.0	0.	30+40	1033.	750.0	33656.
MUNINUM	8.06	3618.	5.21	3.4	90.0	4487.	0.0	0.	25.95	1633.	350.0	16631.
MAXINUM	17.90	8034.	11.57	5.0	500.0	21736.	0.0	0.	51.20	3285.	750.0	60340
AVERAGE	12.14	5450 •	7.85	3.8	166.8	10197.	0•0	0.	38.16	2420.	534 • 6	34735.

## SAMPLE PCINT NO. 63 SOUTH TREVORTON DISCHARGE

		FLOW			AC I	DITY	ALKAI	LINITY	TOTAL	IRON	SULF	AT ES
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC .	LB/DAY	CONC.	LR/DAY	CONC.	LB/DAY
11/ 9/73	0.08	36 •	0.05	3.3	70.0	30.	0.0	0.	7.61	3.	150.0	65.
12/13/73	0.17	76.	0.11	3.1	140.0	128.	0.0	0.	8.89	8.	275.0	252•
1/10/74	0.31	139.	0.20	3.7	70.0	117.	0.0	0.	3.40	6.	175.0	293•
2/ 7/74	0.39	175.	0.25	3.7	74.0	156.	0.0	0.	3.59	8.	175.0	368.
3/ 7/74	0.17	76.	0.11	3.6	84.0	77.	0.0	0.	4.15	4.	150.0	
4/ 4/74	0.50	224 •	0.32	3.5	88.0	237.	0.0	0.	3.81	10.	150.0	138.
5/10/74	0.32	144.	0.21	5.0	52.0	90•	0.0	0.	2.70	5.	175.0	405.
6/12/74	0.15	67.	0.10	3.7	80.0	65.	0.0	0.	3.10	3.	100.0	302.
7/10/74	0.65	292.	0.42	3.8	102.0	358.	0.0	0.	3.00	-		81.
8/15/74	0.17	76.	0 • 11	3.6	74.0	68.	0.0	0.	2.60	11.	200.0	701.
9/13/74	0.17	76.	0.11	3.3	62.0	57.	0.0	0.	2.60		225.0	206.
10/10/74	0.15	67.	0.10	3.3	68.0	55.	0.0	0.	3.30	2. 3.	175.0 275.0	160 • 222 •
MUM IN 1M	80.0	36.	0.05	3.1	52.0	30•	0.0	0.	2.60	2.	100.0	65•
MAXI MUM	0.65	292.	0.42	5.0	140.0	358.	0.0	0.	8.89	11.	275.0	701.
AVERAGE	0.27	121.	0 • 17	3.6	80.3	120.	0.0	0.	4.06	5.	185.4	266

## SAMPLE POINT NO. 64 ZERBE RUN BELOW TREVORTON

		FLOW			AC I	DITY	ALKA	LINITY	TOTAL	I RON	SULF	AT ES
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC .	LB/DAY	CONC.	LB/DAY	CONC.	LB/ DAY
11/ 9/73	10.30	4623.	6 • 66	3.6	100.0	5555.	0.0	0.	17.54	974.	450.0	24999 •
12/13/73	24.00	10772.	15.51	3.5	88.0	11391.	0.0	0.	16.00	2071.	275.0	35597.
1/10/74	24.40	10952.	15.77	3.9	82.0	10791.	0.0	0.	21.21	2791.	200.0	26320
2/ 7/74	15.50	6957.	10.02	3.9	104.0	8694.	0.0	0.	17.37	1452	200.0	16720 •
3/ 7/74	10.80	4947.	6.98	3.8	134.0	7806.	0.0	0.	16.10	938•		
4/ 4/74	43.90	19704.	28 • 37	4.2	54.0	12786.	0.0	0.	8.31	2086.	225.0	13106.
5/ 9/74	21.35	9583.	13.80	5 • 4	50.0	5758.	0.0	0.	13.30		175.0	41436.
6/12/74	10.40	4668 •	6.72	4.0	106.0	5946.	0.0	0.		1532.	300.0	34546.
7/10/74	17.50	7855.	11.31	3.7	148.0	13969.	0.0		32.30	1812.	350.0	19632.
8/14/74	10.50	4713.	6.79	3.9	160.0	9061.		0.	23.30	2199.	500.0	47193.
9/13/74	8.29	3721.	5.36	3.8	90.0	4024.	0.0	0.	27.50	1557.	450 • 0	25484.
10/10/74	9.42	4228.	6.09	3.6	105.0		0.0	0.	14.60	653.	450.0	20121.
	2412	TE 6.13	3.09	3.0	105.0	5386.	0.0	0.	22.10	1123.	475.0	24133.
MI NI MUM	8.29	3721.	5.36	3.5	50.0	4024.	0.0	0•				
MAXI MUM	43.90	19704.	28.37	5.4	160.0	13969.			8.81	653.	175.0	13106.
AVERAGE	17.20	7718.	11.11	3.9	101.8		0.0	0.	32.30	2791.	500.0	47193.
	, , , ,			339	101.0	8431.	0.0	0.	19.18	1599.	337.5	27441.

#### SAMPLE POINT NO. 65 SUNSHINE MINE DISCHARGE

		FLOW			ACI	DITY	AL KA	LINITY	TOTAL	IRON	CIN E	AT ES
DATE	CFS	GPM	MGD	РН	CONC.	LB/DAY	CONC .	LB/DAY	CONC.	LB/DAY	CONC.	LB/DAY
11/ 9/73	0.16	72.	0.10	3.2	112.0	97.	0.0	0.	2.69	2.	190.0	164.
12/13/73	0.43	193.	0.28	3.2	50.0	116.	0.0	0.	5.15	12.		
1/10/74	0.63	283.	0.41	3.9	38.0	129.	0.0	0.			105.0	244•
2/ 7/74	0.73	328.	0 • 47	3.8	38.0	150.	0.0		1.36	5.	300.0	1019.
3/ 7/74	0.60	269.	0.39	3.5	48.0			0.	1.05	4 •	100.0	394 •
4/ 4/74	1.50	673.	0.97	3.8		155.	0.0	0.	1.52	5 •	175.0	566.
5/ 9/74	0.80	359.			50.0	405.	0.0	0.	1.67	14.	150.0	1214.
6/12/74			0.52	4 • 6	40.0	173.	0.0	0.	1.00	4.	175.0	755.
	0.65	292.	0.42	3.7	34.0	119.	0.0	0.	1.30	5.	175.0	614.
7/10/74	0.67	301.	0.43	3.7	80.0	289.	0.0	0.	1.20	4.	175.0	632.
8/15/74	0.15	67.	0.10	3.7	46.0	37.	0.0	0.	1.40	1.	225.0	
9/12/74	0.17	76.	0.11	3.6	66.0	61.	0.0	0.	0.90	1.		182.
10/10/74	0.14	63.	0.09	3.4	68.0	51.	0.0	0.			225.0	206.
						31.	0.0	0.	1.70	1.	325.0	245.
MI NI MUM	0.14	63.	0.09	3.2	34.0	37.	0.0	0.	0.90	•		
MAXI MUM	1.50	673.	0.97	4.6	112.0	405.				1.	100.0	164.
AVERAGE	0.55	248.	0.36	3.7	55.8		0.0	0.	5.15	14.	325.0	1214.
		_ , , ,	3 3 30	3 • 7	23.0	148.	0.0	0.	1 • 74	5.	193.3	520 •

## SAMPLE POINT NO. 66 ZERRE RUN AT CONFLUENCE

	DATE CES COM MCD DH				AC I	DITY	ALKA	LINITY	TOTAL	I RON	SULF	AT ES
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC.	LB /DAY	C ONC .	LB/DAY	CONC.	LB/DAY
11/ 9/73	18.70	8393.	12.09	3.2	215.0	21685.	0.0	0.	26.27	2650.	400.0	40344.
12/12/73	38.00	17056.	24.56	3.3	132.0	27054.	0.0	0.	11.84	2427.	175.0	35867.
1/10/74	30.20	13555.	19.52	3.9	100.0	16288.	0.0	0.	15.15	2468.	225.0	36649.
2/ 7/74	41.90	18806.	27.08	3.4	154.0	34802.	0.0	0.	12.58	2843.	355.0	80226.
3/ 7/74	19.00	8528 •	12.28	3.7	118.0	12092.	0.0	0.	13.44	1377.	150.0	15372.
4/ 4/74	66.60	29892.	43.04	4.0	54.0	19397.	0.0	0.	6.67	2396.	175.0	62862.
5/ 9/74	39.70	17819.	25.66	4.6	134.0	28693.	0.0	0.	15.30	3276.	325.0	69590 •
6/12/74	10.51	4717.	6.79	3.4	160.0	9070.	0.0	0.	9.30	527.	350.0	19840.
7/10/74	27.20	12208.	17.58	3.5	170.0	24940.	0.0	0.	11.00	1614.	425.0	62349.
8/15/74	11.80	5296.	7.63	3.5	162.0	10310.	0.0	0.	21.50	1368.	500.0	31822.
9/12/74	9.78	4390•	6.32	3.5	148.0	7807.	0.0	0.	6.20	327.	575.0	30331.
1 0/1 0/74	12.00	5386•	7.76	3.3	300.0	19417.	0.0	0.	11.40	738•	550.0	35597•
MINIMUM	9.78	4390•	6 • 32	3.2	54.0	7807.	0.0	0.	6.20	327.	150.0	15372.
MAXI MUM	66.60	29892.	43.04	4.6	300.0	34802.	0.0	0.	26.27	3276.	575.0	80226.
AVERAGE	27.12	12170.	17.53	3.6	153.9	19296.	0.0	0.	13.39	1834.	350 • 4	43404.

## SAMPLE POINT NO. 67 MAHANCY CREEK BELOW ZERBE RUN

	DATE CES COM MCD					DITY	ALKA	LINITY	TOTAL	IRON		AT ES
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC .	LB/DAY	CONC.	LB/DAY	CONC.	LB/DAY
11/ 9/73			132.50	5 • 3	90.0	99511.	7.0	7740.	18.16	20079.	650.0	718689.
12/12/73				5.3	48.0	106921.	2.0	4455.	10.00	22275.	255 • 0	568020.
		151706.		5.9	6.0	10938.	8.0	14584.	9.71	17701.	550.0	1002658
		152603.		6 • 4	18.0	.300E	10.0	18338.	9.71	17806.	505.0	926069.
		139587.		6 • 4	32.0	53676.	24.0	40257.	12.52	21001.	350.0	587086
		220377.		6.7	10.0	26482.	12.0	31779.	10.95	28998.	280.0	741503.
		108169.		6.8	10.0	12998.	26.0	33796.	10.30	13388.	675.0	877394
		102334.		6.9	12.0	14757.	52.0	63946.	13.10	16109.	475.0	584120
7/10/74	_		142.84	6.9	54.0	64366.	8.0	9536.	10.90	12992.	600.0	715183.
8/15/74			98 •89	7.2	26.0	21455.	32.0	26407.	10.20	8417.	725.0	598278
9/12/74			104.70	6.9	20.0	17475.	5.0	5243.	6.30	5505.	825.0	720846
10/10/74	162.00	72711.	104.70	5 • 4	50.0	17475.	12.0	10485.	11.40	9961.	1025.0	895597.
MI NI MUM	153.00		98.89	5.3	6.0	10938.	2.0	4455.	6.30	5505•	255.0	5680 20 •
MUM IX AM		220377.		7.2	90.0	106921.	52.0	63946.	18.16	28998.	1025.0	1002658.
AVERAGE	272.08	122120.	175.85	6 • 4	28.8	39922.	16.6	22214.	11.10	16186.	576.3	744620.

### SAMPLE POINT NO. 68 SCHWAEEN CREEK

		FLOW			AC I	DITY	ALKA	LINITY	TOTAL	I RON		AT ES
DATE	CFS	GPM	MGD	PH	CONC.	LB/DAY	CONC.	LB /DAY	CONC.	LB/DAY	CONC.	LB/ DAY
11/ 9/73	25.60	11490.	16.55	6.4	8.0	1105.	36.0	4971.	0.22	30.	220.0	30376.
12/12/73	72.50	32540.	46.86	6.0	14.0	5474.	12.0	4692.	0.29	113.	30.0	11731.
1/10/74	28.40	12747.	18.36	7.0	2.0	306.	20.0	3064.	0.15	23.	40.0	6127
2/ 7/74	30.40	13645.	19 •65	7.1	4.0	656.	20.0	3279.	0.15	25•	35.0	5739
3/ 7/74	24.50	10996.	15.83	8 • 1	0.0	0.	24.0	3171.	0.00	0.	75.0	9911.
4/ 4/74	129.00	57899.	83.38	7.3	2.0	1392.	20.0	13915.	0.24	167.	200.0	139153.
5/ 9/74	55.00	9874.	14.22	7.5	4.0	475.	36.0	4272	0.60	71.	175.0	20765
6/12/74	9.01	4044.	5.82	7.4	6.0	292.	56.0	2721.	0.30	15.	225.0	
7/10/74	18.30	8214.	11.83	8.0	20.0	1974.	38.0	3751.	0.20	20.		10934.
8/14/74	11.90	5341.	7.69	8 - 1	4.0	257.	60.0	3851.	2.00	128.	200.0	19740 •
9/12/74	8.86	3977.	5.73	8 • 1	10.0	478.	50.0	956•	0.30		225.0	14441.
10/10/74	6.63	2976.	4.29	6 • 4	10.0	358.	24.0	858•		14.	175.0	8363.
						000	74.0	000•	0.30	11.	250.0	8940 •
MI NI MUM	6.63	2976.	4 • 29	6.0	0.0	0.	12.0	858•	0.00	0.	30.0	5739.
MUM IX AM	129.00	57899.	83.38	8 - 1	20.0	5474.	60.0	13915.	2.00	167.	250.0	139153.
AVERAGE	32.26	14479.	20.85	7 • 3	7.0	1064.	30.5	4125.	0.40	51.	154 . 2	23852

# SAMPLE POINT NO. 69 SCHWAREN CREEK RELOW MOUSE CREEK

		FLOW			AC I	DITY	ALKA	LINITY	TOTAL	. [RON	SULF	AT ES
DATE	CFS	GPM	MGD	РН	CONC.	LB/DAY	CONC .	LB/DAY	CONC.	LBZDAY	CONC.	LB/DAY
11/ 9/73	30.40	13645.	19.65	6.5	6.0	984.	43.0	7050.	0.15	25.	21.0	3443.
12/12/73	86.10	38645.	55.65	6.3	16.0	7430.	14.0	6501.	0.44	204.	11.0	5108.
1/10/74	40.10	17998.	25.92	6.6	8.0	1730.	40.0	8651.	0.15	32.	20.0	4326.
2/ 7/74	41.50	18627.	26.82	7 • 1	2.0	448.	38.0	8506.	0.15	34.	12.0	2686.
3/ 7/74	31.80	14273.	20 • 55	7.4	0.0	0.	38.0	6518.	0.00	0.	200.0	34303.
4/ 4/74	150.00	67325。	96.95	7 . 1	4.0	3236。	32.0	25889.	0.48	388.	150.0	121355.
5/ 9/74	25.70	11535.	16.61	7.5	2.0	277.	62.0	8594.	0.50	69.	200.0	27723.
6/12/74	11.60	5206.	7.50	7.4	6.0	375.	86.0	5381.	0.30	19.	225.0	14077。
7/10/74	27.70	12433.	17.90	8.0	20.0	2988.	50.0	7470。	0.30	45.	175.0	26145.
8/14/74	16.80	7540.	10.86	8.0	0.0	0.	70.0	6343.	0.10	9.	150.0	13592.
9/12/74	10.20	4578。	ő <b>∗</b> 59	8.2	0.0	0 .	40.0	2201.	0.20	11.	175.0	9627。
10/10/74	10.80	4847.	5.98	6.6	10.0	583.	38.0	2214.	0.00	0.	225.0	13106.
MUMINIM	10.20	4578.	6 • 59	6.3	0.0	0.	14.0	2201.	0.00	0.	11.0	2686•
MAXI MUM	150.00	67325.	96.95	8.2	20.0	7430.	86.0	25889。	0.50	388.	225.0	121355.
AVERAGE	40.22	18054.	26.00	7.2	6.2	1504.	45.9	7943.	0.23	70.	130.3	22958.

#### SAMPLE PCINT NO. 70 MOUSE CREEK

	ATE CES COM MCD				AC I	YT10	ALKA	LINITY	TOTAL	I RON	SULF	AT ES
DATE	CFS	GPM	MGD	PH	CONC.	LBZDAY	CONC .	LB ZDA Y	CONC.	LB/DAY	CONC.	LB/DAY
11/ 9/73	7.03	3155.	4.54	7.3	5.0	190.	73.0	2768.	0.15	6.	19.0	720 .
12/12/73	19.20	8618.	12.41	6.6	10.0	1036.	40.0	4142.	0.15	16.	13.0	1346.
1/10/74	10.10	4533。	6.53	7.2	0.0	0.	62.0	3377.	0.15	8.	35.0	1907.
2/ 7/74	10.50	4713.	6.79	7.2	2.0	113.	76.0	4304.	0.00	0.	11.0	ó23 e
3/ 7/74	8.75	3927。	5.66	7.6	0.0	0.	88.0	4153.	0.29	14.	175.0	8259。
4/ 4/74	30.50	13689.	19.71	7 - 1	4.0	658.	50.0	8225.	0.48	79.	175.0	28788.
5/ 9/74	8.51	3820.	5.50	7.7	2.0	92.	108.0	4957。	0.20	9.	200.0	9180 .
6/12/74	2.79	1252.	1.80	7.9	2.0	30.	140.0	2107.	0.10	2.	175.0	2633。
7/10/74	10.10	4533.	6.53	8.3	26.0	1416.	108.0	5883.	0.10	5.	175.0	9533。
8/14/74	2.52	1131.	1.63	8.7	0.0	0.	130.0	1767.	0.20	3.	200.0	2718.
9/12/74	1.10	494.	0.71	8.2	0.0	0.	78.0	463.	0.10	1.	200.0	1187.
10/10/74	1.12	503.	0.72	7.6	0.0	0.	86.0	520.	0.00	0 .	300.0	1812.
MINIMUM	1.10	494.	0.71	6.6	0.0	0.	40.0	46.3。	0.00	0.	11.0	623.
MUM IX AM	30.50	13689.	19.71	8 . 7	26.0	1416.	140.0	8225.	0.48	79.	300.0	28788
AVERAGE	9.35	4197.	6.04	7.6	4.3	295。	86.6	3556•	0 • 1,6	12.	139.8	57 26 .

#### SAMPLE POINT NO. 71 MAHANDY CREEK AT OTTO

	DATE CES COM MCD					DITY	ALKA	LINITY	TOTAL	I RON	SUL	FATES
DATE	CFS	GPM	MGD	РН	CONC.	LB/DAY	CONC .	LB /DA Y	CONC.	LB/DAY	CONC.	LB/DAY
11/ 9/73				6.3	50.0	65531.	7.0	9174.	23.23	30446.	740.0	969865。
12/12/73	486.00	219133.	314.11	5.6	28.0	73395。	2.0	5243.	6.44	16881.	260.0	681527。
1/10/74	381.00	171005.	246 . 25	6 - 1	8.0	16439.	8.0	16439.	7.37	15145.	430.0	883623.
2/ 7/74	364.00	163375.	235.26	6.6	20.0	39265.	12.0	23559。	7.86	15431.	420.0	824564。
3/ 7/74	321.00	144075.	207.47	6.6	0.0	0.	16.0	27701.	10.59	18335.	325.0	562681.
4/ 4/74	668.00	299820.	431.74	6.3	12.0	43235.	12.0	43235.	11.19	40316.	290.0	1044835.
5/ 9/74	263.00	118043.	169.98	7.2	8.0	11348.	28.0	39718.	9.20	13050.	550.0	780175.
6/12/74	237.00	106373.	153.18	6.9	12.0	15339.	34.0	43461.	12.70	16234.	425.0	543264.
7/10/74	244.00	109515.	157.70	6.9	26.0	34217。	12.0	15792.	0.88	1158.	525.0	690912.
8/14/74	172.00	77199.	111.17	7 - 1	16.0	14843.	26.0	24120.	6.20	5752.	650.0	602997.
9/12/74	179.00	80341.	115.69	7.6	10.0	9654。	8.0	7724.	5.90	5696.	675.0	651674.
10/10/74	130.00	80790.	116.34	6.3	20.0	19417.	28.0	27183.	8.80	8543.	925.0	898024.
MUM IN IM	172.00	77199.	111.17	5 • 6	0.0	0.	2.0	5243.	0.88	1158.	260.0	543264.
MAXI MUM	668.00	299820。	431.74	7.6	50.0	73395。	34.0	43461.	23.23	40316.	925.0	1044835.
AVERAGE	311.50	139811.	201.33	6 • 7	17.5	28557.	16.1	23612.	9.20	15582.	517.9	761178.