CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1983
CUMULATIVE MONTHLY REPORT

STATION NAME: THOMPSON CR BELO FAT HUGHES CR TYPE: STREAM TC1

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SAMPLE DATE:	01/19/83	02/16/83	03/23/83	04/27/83	05/24/83	06/28/83	07/20/83	08/24/83			11/09/83	
AIR TEMP :	2.000	2.000	1.500	7.000	24.000	14.500	19.500	20.000				
FLOW RATE :	5.200	3.900	7.100	21.000	156.000	44.000	16.000	8.400			9.100	
WATER LEVEL:												
PHYSICAL PROPERTIES												
SAMP-TMP,FIELD ,DEG. C	3.000	9.000	4.000		9.000	7.000	12.000	13.000			2.000	
COND. ,FIELD ,UMHO/CM	152.000	157.000	162.000		108.000	65.000	105.000	138.000			161.000	
PH ,FIELD ,PH	7.100	7.200	6.200		7.600	7.900	8.200	8.100			7.500	
PH ,LAB ,PH	7.400	7.300	7.700		7.400	7.300	7.600	8.000			7.500	
ALKALIN.,TOTAL ,MG/L	60.000	56.000	60.000		36.000	28.000	38.000	62.000			62.000	
HARDNESS,TOTAL ,MG/L	90.200	79.000	84.500		50.400	47.000	64.800	80.600			104.800	
SOLIDS ,SUSP ,MG/L	-1.000	1.000	1.000		80.000	4.000	1.000	26.000			8.000	
TURBID. ,FIELD ,NTU	0.760	0.510	0.590		34.000	1.600	1.000	8.600			5.400	
CATIONS												
CALCIUM ,TOTAL ,MG/L	20.400	18.100	21.500		9.300	7.900	13.900	19.800				
MAGNES. ,TOTAL ,MG/L	3.150	3.150	4.130		3.100	1.590	2.100	13.000			2.350	
SODIUM ,TOTAL ,MG/L	4.350	4.100	4.550		5.100	4.050	4.700	6.600				
POTASS. ,TOTAL ,MG/L	0.700	0.500	1.000		1.200	0.600	0.400	0.900				
ANIONS												
CHLORIDE, ,MG/L	1.130	1.130	1.130		1.130	1.690	1.690	1.690				
SULFATE , ,MG/L	56.000	42.000	46.000		30.000	38.000	-1.000	9.000			33.000	
PRIMARY												
ARSENIC ,TOTAL ,UG/L		-5.000			-5.000			-5.000				
CADMIUM ,TOTAL ,UG/L		-5.000			-5.000			-5.000				
CHROMIUM,T-TOT ,UG/L		-50.000			-50.000			-50.000				
LEAD ,TOTAL ,UG/L		-50.000			-50.000			-50.000			-50.000	

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1983
CUMULATIVE MONTHLY REPORT

STATION NAME: THOMPSON CR BELO PAT HUGHES CR TYPE: STREAM TC1

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MERCURY ,TOTAL ,UG/L		1.000										
SELENIUM,TOTAL ,UG/L		-10.000			-0.500			-0.500				
					-5.000			-50.000				
SECONDARY												
COPPER ,TOTAL ,UG/L		-10.000			10.000			-10.000			-10.000	
ZINC ,TOTAL ,UG/L		1.000			9.000			10.000			15.000	
IRON ,TOTAL ,UG/L		30.000			1890.000			370.000			160.000	
MANGAN. ,TOTAL ,UG/L		-10.000			50.000			-10.000			10.000	
TRACE METALS												
MOLY. ,TOTAL ,UG/L		-50.000			-50.000			-50.000			-50.000	
NUTRIENTS												
NITROGEN,NITRAT,MG/L	-0.100	-0.100	-0.050	5.300	-0.100	-0.100	9.200	0.600			0.200	
NITROGEN,KJELDL,MG/L	4.800	0.300	1.500	1.900	0.340	0.800	0.660	0.200				
PHOSPHAT,T-TOT ,MG/L	-0.050	-0.050	-0.050	0.060	-0.050	0.050	-0.050	0.100			-0.050	
ORGANICS												
CYANIDE ,TOTAL ,MG/L		-0.005			-0.050			-0.005				
TOC , ,MG/L	58.000	3.000	7.000	6.000	13.000	18.000	3.800	4.700				

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1983
CUMULATIVE MONTHLY REPORT

STATION NAME: THOMPSON CR ABOV PAT HUGHES CR TYPE: STREAM TC 2

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SAMPLE DATE:	01/19/83	02/16/83	03/23/83	04/27/83	05/24/83	06/28/83	07/20/83	08/24/83			11/09/83	
AIR TEMP :		5.000	2.000	10.000	24.000	15.000	20.000	25.500				
FLOW RATE :	5.000	3.700	6.000	18.700	152.200	43.800	15.800	8.300			9.000	
WATER LEVEL:												
PHYSICAL PROPERTIES												
SAMP-TMP,FIELD ,DEG. C	3.000	0.500	4.000	5.500	9.000	8.000	12.000	13.000			1.500	
COND. ,FIELD ,UMHO/CM	132.000	138.000	148.000	165.000	110.000	70.000	83.000	120.000			136.000	
PH ,FIELD ,PH	7.200	7.400	8.000	7.200	7.600	7.600	8.300	8.200			7.750	
PH ,LAB ,PH	7.500	7.500	7.600	7.800	7.400	7.400	7.600	7.900			7.500	
ALKALIN.,TOTAL ,MG/L	52.000	56.000	56.000	58.000	34.000	32.000	38.000	52.000			56.000	
HARDNESS,TOTAL ,MG/L	78.400	71.400	76.800	78.400	50.400	54.900	60.500	94.100			77.600	
SOLIDS ,SUSP ,MG/L	3.000	-1.000	2.000	9.000	59.000	3.000	2.000	30.000			10.000	
TURBID. ,FIELD ,NTU	0.500	0.560	0.510	3.800	20.000	1.600	1.000	10.000			8.000	
CATIONS												
CALCIUM ,TOTAL ,MG/L	20.400	16.600	20.000	17.300	15.600	11.000	13.900	18.000				
MAGNES. ,TOTAL ,MG/L	2.800	2.600	3.500	2.100	2.300	1.410	1.300	26.000			2.100	
SODIUM ,TOTAL ,MG/L	3.450	3.600	3.800	6.100	4.050	3.550	3.850	6.000				
POTASS. ,TOTAL ,MG/L	0.500	0.600	1.100	0.900	0.900	0.600	0.300	0.900				
ANIONS												
CHLORIDE, ,MG/L	1.130	1.690	0.560	1.130	1.690	1.130	0.560	1.130				
SULFATE , ,MG/L	36.000	68.000	30.000	24.000	44.000	8.000	22.000	20.000			23.000	
PRIMARY												
ARSENIC ,TOTAL ,UG/L		-5.000			-5.000			-5.000				
CADMIUM ,TOTAL ,UG/L		-5.000			-5.000			-5.000				
CHROMIUM,T-TOT ,UG/L		-50.000			-50.000			-50.000				
LEAD ,TOTAL ,UG/L		-50.000			-50.000			-50.000			-50.000	

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1983
CUMULATIVE MONTHLY REPORT

STATION NAME: THOMPSON CR ABOV PAT HUGHES CR TYPE: STREAM TC2

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MERCURY ,TOTAL ,UG/L		-0.500			-0.500			-0.500				
SELENIUM,TOTAL ,UG/L		-10.000			-5.000			-50.000				
SECONDARY												
COPPER ,TOTAL ,UG/L		-10.000			10.000			-10.000			20.000	
ZINC ,TOTAL ,UG/L		2.000			9.000			7.000			14.000	
IRON ,TOTAL ,UG/L		20.000			1250.000			430.000			270.000	
MANGAN. ,TOTAL ,UG/L		-10.000			30.000			10.000			10.000	
TRACE METALS												
MOLY. ,TOTAL ,UG/L		-50.000			-50.000			-50.000			-50.000	
NUTRIENTS												
NITROGEN,NITRAT,MG/L	-0.100	0.120	0.260	0.500	-0.100	-0.100	0.150	0.600			-0.100	
NITROGEN,KJELDL,MG/L	1.520	0.480	0.900	0.700	0.280	0.460	0.460	0.240				
PHOSPHAT,T-TOT ,MG/L	-0.050	-0.050	-0.050	0.060	-0.050	-0.050	-0.050	0.120			0.050	
ORGANICS												
CYANIDE ,TOTAL ,MG/L		-0.005			-0.050			-0.005				
TOC , ,MG/L	15.000	6.000	3.000	15.000	34.000	21.000	22.000	4.300				

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1983
CUMULATIVE MONTHLY REPORT

STATION NAME: THOMPSON CR BELOW BUCKSKIN CR TYPE: STREAM TC 3

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SAMPLE DATE:	01/19/83	02/16/83	03/23/83	04/27/83	05/24/83	06/28/83	07/20/83	08/24/83			11/09/83	
AIR TEMP :	4.000	3.000	2.000	10.500	25.500	13.000	19.000	20.000				
FLOW RATE :	5.000	3.700	6.000	19.700	152.200	43.800	15.800	8.300			9.000	
WATER LEVEL:												
PHYSICAL PROPERTIES												
SAMP-TMP,FIELD ,DEG. C	2.500	0.500	5.000	3.500	7.000	7.000	10.000	11.000			1.000	
COND. ,FIELD ,UMHO/CM	108.000	132.000	145.000	132.000	220.000	60.000	80.000	115.000			120.000	
PH ,FIELD ,PH	7.300	7.200	8.100	7.400	7.600	7.500	8.200	8.100			7.630	
PH ,LAB ,PH	7.600	7.400	7.600	7.900	7.300	7.200	7.500	8.000			7.600	
ALKALIN.,TOTAL ,MG/L	58.000	48.000	50.000	48.000	30.000	26.000	34.000	48.000			44.000	
HARDNESS,TOTAL ,MG/L	78.400	79.000	80.600	66.600	42.700	43.100	47.500	71.700			73.700	
SOLIDS ,SUSP ,MG/L	1.000	-1.000	12.000	11.000	78.000	1.000	1.000	28.000			12.000	
TURBID. ,FIELD ,NTU	0.550	0.620	6.700	2.700	17.000	1.800	1.000	8.100			11.000	
CATIONS												
CALCIUM ,TOTAL ,MG/L	18.900	15.100	16.900	11.000	9.300	9.400	13.900	18.000				
MAGNES. ,TOTAL ,MG/L	2.450	2.300	3.500	1.800	2.500	1.270	1.300	7.000				
SODIUM ,TOTAL ,MG/L	3.400	3.350	3.850	4.800	4.150	3.400	3.650	5.900			2.250	
POTASS. ,TOTAL ,MG/L	0.600	0.700	0.900	0.700	1.100	0.600	0.300	0.800				
ANIONS												
CHLORIDE, ,MG/L	0.560	1.130	0.560	1.130	0.560	1.130	1.130	1.690				
SULFATE , ,MG/L	38.000	2.000	41.000	22.000	48.000	10.000	18.000	19.000			21.000	
PRIMARY												
ARSENIC ,TOTAL ,UG/L		-5.000			-5.000			-5.000				
CADMIUM ,TOTAL ,UG/L		-5.000			-5.000			-5.000				
CHROMIUM,T-TOT ,UG/L		-50.000			-50.000			-50.000				
LEAD ,TOTAL ,UG/L		-50.000			-50.000			-50.000			-50.000	

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1983
CUMULATIVE MONTHLY REPORT

STATION NAME: THOMPSON CR BELOW BUCKSKIN CR TYPE: STREAM TC3

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MERCURY ,TOTAL ,UG/L		1.000			2.000			-0.500				
SELENIUM,TOTAL ,UG/L		-10.000			-5.000			-50.000				
SECONDARY												
COPPER ,TOTAL ,UG/L		-10.000			-10.000			-10.000			-10.000	
ZINC ,TOTAL ,UG/L		2.000			14.000			12.000			24.000	
IRON ,TOTAL ,UG/L		30.000			1590.000			380.000			290.000	
MANGAN. ,TOTAL ,UG/L		-10.000			40.000			-10.000			10.000	
TRACE METALS												
MOLY. ,TOTAL ,UG/L		-50.000			-50.000			-50.000			-50.000	
NUTRIENTS												
NITROGEN,NITRAT,MG/L	-0.100	0.120	-0.050	0.900	-0.100	-0.100	0.150	0.150			3.200	
NITROGEN,KJELDL,MG/L	1.320	0.460	0.600	1.400	0.250	0.420	0.740	0.260				
PHOSPHAT,T-TOT ,MG/L	-0.050	0.580	0.120	0.060	-0.050	-0.050	-0.050	0.170			0.080	
ORGANICS												
CYANIDE ,TOTAL ,MG/L		-0.005			-0.050			-0.005				
TOC , ,MG/L	46.000	3.000	4.000	5.000	14.000	9.200	8.000	5.100				

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1983
CUMULATIVE MONTHLY REPORT

STATION NAME: THOMPSON CR ABOVE BUCKSKIN CR TYPE: STREAM TC 4

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SAMPLE DATE:	01/19/83	02/16/83	03/23/83	04/27/83	05/24/83	06/28/83	07/20/83	08/24/83			11/09/83	
AIR TEMP :	2.000	2.000	3.000		21.500	18.000	21.000	20.500				
FLOW RATE :	5.000	3.700	6.000	17.000	149.000	43.700	15.800	8.300			9.000	
WATER LEVEL:												
PHYSICAL PROPERTIES												
SAMP-TMP,FIELD ,DEG. C	2.000	0.500	5.000	3.500	7.000	8.000	9.500	11.000			1.000	
COND. ,FIELD ,UMHO/CM	105.000	110.000	120.000	113.000	127.000	57.000	63.000	95.000			111.000	
PH ,FIELD ,PH	7.100	7.400	8.000	8.200	7.600	7.600	8.200	8.000			7.150	
PH ,LAB ,PH	7.600	7.500	7.500	7.500	7.600	7.300	7.500	7.900			7.500	
ALKALIN.,TOTAL ,MG/L	48.000	40.000	46.000	40.000	30.000	24.000	36.000	44.000			40.000	
HARDNESS,TOTAL ,MG/L	58.600	60.200	76.800	51.000	34.900	35.300	51.800	76.200			58.200	
SOLIDS ,SUSP ,MG/L	-1.000	-1.000	2.000	9.000	52.000	-1.000	2.000	22.000			13.000	
TURBID. ,FIELD ,NTU	0.400	0.400	0.800	2.400	12.000	1.600	1.100	7.200			12.000	
CATIONS												
CALCIUM ,TOTAL ,MG/L	15.700	12.100	16.900	12.600	9.300	7.900	10.400	16.200				
MAGNES. ,TOTAL ,MG/L	2.200	2.000	2.810	1.700	2.000	1.080	1.250	12.000			1.250	
SODIUM ,TOTAL ,MG/L	3.050	3.200	3.650	4.600	3.700	3.250	3.450	5.300				
POTASS. ,TOTAL ,MG/L	0.500	0.600	0.700	0.600	1.000	0.500	0.200	0.700				
ANIONS												
CHLORIDE, ,MG/L	0.560	1.130	0.560	1.130	1.130	1.130	1.130	1.130				
SULFATE , ,MG/L	22.000	26.000	25.000	22.000	24.000	7.000	20.000	13.000			15.000	
PRIMARY												
ARSENIC ,TOTAL ,UG/L		-5.000			-5.000			-5.000				
CADMIUM ,TOTAL ,UG/L		-5.000			-5.000			-5.000				
CHROMIUM,T-TOT ,UG/L		-50.000			-50.000			-50.000				
LEAD ,TOTAL ,UG/L		-50.000			-50.000			-50.000				

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1983
CUMULATIVE MONTHLY REPORT

STATION NAME: THOMPSON CR ABOVE BUCKSKIN CR TYPE: STREAM TC 4

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MERCURY ,TOTAL ,UG/L		2.000			-0.500			-0.500				
SELENIUM,TOTAL ,UG/L		-10.000			-5.000			-50.000				
SECONDARY												
COPPER ,TOTAL ,UG/L		-10.000			-10.000			10.000			-10.000	
ZINC ,TOTAL ,UG/L		4.000			11.000			20.000			26.000	
IRON ,TOTAL ,UG/L		50.000			1030.000			340.000			280.000	
MANGAN. ,TOTAL ,UG/L		-10.000			20.000			-10.000			10.000	
TRACE METALS												
MOLY. ,TOTAL ,UG/L		-50.000			-50.000			-50.000			-50.000	
NUTRIENTS												
NITROGEN,NITRAT,MG/L	-0.100	0.100	-0.050	1.100	-0.100	-0.100	-0.100	-0.100			-0.100	
NITROGEN,KJELDL,MG/L	1.120	3.200	1.200	1.000	0.250	0.380	0.220	3.000				
PHOSPHAT,T-TOT ,MG/L	-0.050	1.160	-0.050	0.060	-0.050	-0.050	-0.050	0.370			0.070	
ORGANICS												
CYANIDE ,TOTAL ,MG/L		-0.005			-0.050			-0.005				
TOC , ,MG/L	115.000	4.000	14.000	6.000	9.700	14.000	5.000	4.700				

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1983
CUMULATIVE MONTHLY REPORT

STATION NAME: SQUAW CR,MOUTH(BELOW CON.CAMP) TYPE: STREAM 551

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SAMPLE DATE:	01/19/83	02/16/83	03/23/83	04/27/83	05/24/83	06/28/83	07/20/83	08/24/83			11/09/83	
AIR TEMP :	-3.000	2.000	11.000	6.500	29.000	20.000	21.000	15.000			2.500	
FLOW RATE :	10.000	9.400	14.000	48.000	256.000	89.000	39.000	20.000			20.000	
WATER LEVEL:												
PHYSICAL PROPERTIES												
SAMP-TMP,FIELD ,DEG. C	1.000		6.000	2.000	9.000	10.000	11.000	10.000			1.500	
COND. ,FIELD ,UMHO/CM	184.000	225.000	240.000	176.000	186.000	119.000	150.000	188.000			254.000	
PH ,FIELD ,PH	7.200	7.300	8.200	8.200	7.700	7.900	8.200	8.200			8.230	
PH ,LAB ,PH	7.500	7.900	7.800	8.000	7.500	7.400	8.000	8.100			7.600	
ALKALIN.,TOTAL ,MG/L	98.000	94.000	96.000	76.000	46.000	52.000	68.000	92.000			118.000	
HARDNESS,TOTAL ,MG/L	105.800	112.800	115.200	86.200	54.300	62.700	86.400	116.500			143.600	
SOLIDS ,SUSP ,MG/L	2.000	2.000	2.000	26.000	120.000	12.000	2.000	17.000			10.000	
TURBID. ,FIELD ,NTU	1.600	1.200	1.900	6.500	32.000	3.400	2.800	5.600			4.200	
CATIONS												
CALCIUM ,TOTAL ,MG/L	23.600	22.600	20.000	15.700	10.900	12.600	19.000	23.300				
MAGNES. ,TOTAL ,MG/L	9.200	9.750	4.800	2.300	5.400	4.530	4.300	36.000			6.500	
SODIUM ,TOTAL ,MG/L	4.300	4.350	4.900	7.300	4.800	4.450	5.150	7.900				
POTASS. ,TOTAL ,MG/L	1.400	1.500	1.600	1.400	1.800	1.500	1.200	1.900				
ANIONS												
CHLORIDE, ,MG/L	1.130	2.250	1.130	1.690	1.690	1.690	2.250	2.250				
SULFATE , ,MG/L	38.000	33.000	33.000	30.000	8.000	7.000	8.000	17.000			41.000	
PRIMARY												
ARSENIC ,TOTAL ,UG/L		-5.000			-5.000			-5.000				
CADMIUM ,TOTAL ,UG/L		-5.000			-5.000			-5.000				
CHROMIUM,T-TOT ,UG/L		-50.000			-50.000			-50.000				
LEAD ,TOTAL ,UG/L		-50.000			-50.000			-50.000			-50.000	

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1983
CUMULATIVE MONTHLY REPORT

STATION NAME: SQUAW CR,MOUTH(BELOW CON.CAMP) TYPE: STREAM

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MERCURY ,TOTAL ,UG/L		-0.500			-0.500			-0.500				
SELENIUM,TOTAL ,UG/L		-10.000			-5.000			-50.000				
SECONDARY												
COPPER ,TOTAL ,UG/L		-10.000			10.000			10.000			-10.000	
ZINC ,TOTAL ,UG/L		3.000			31.000			8.000			17.000	
IRON ,TOTAL ,UG/L		70.000			2060.000			240.000			90.000	
MANGAN. ,TOTAL ,UG/L		20.000			70.000			10.000			20.000	
TRACE METALS												
MOLY. ,TOTAL ,UG/L		-50.000			-50.000			-50.000			-50.000	
NUTRIENTS												
NITROGEN,NITRAT,MG/L	-0.100	-0.100	-0.050	5.300	-0.100	-0.100	-0.100	-0.100				
NITROGEN,KJELDL,MG/L	3.760	0.780	4.800	0.700	2.650	0.690	0.710	1.400			1.200	
PHOSPHAT,T-TOT ,MG/L	-0.050	-0.050	-0.050	0.070	0.050	0.090	0.280	0.100			0.080	
ORGANICS												
CYANIDE ,TOTAL ,MG/L		-0.005			-0.050			-0.005				
TOC , ,MG/L	14.000	12.000	5.000	8.000	10.000	32.000	4.400	10.100				
BIOLOGICAL												
BACTERIA,COLIF ,MPN/100							6.000					
BACTERIA,FECAL ,MPN/100							2.000					

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1983
CUMULATIVE MONTHLY REPORT

STATION NAME: SQUAW CR-USGS GAUGING STATION TYPE: STREAM SQ2

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SAMPLE DATE:	01/19/83	02/16/83	03/23/83	04/27/83	05/24/83	06/28/83	07/20/83	08/24/83	09/20/83	10/13/83	11/09/83	12/30/83
AIR TEMP :	-4.000	3.000	6.500	4.500	23.000	15.000	20.000	12.000	4.000	10.000	2.000	
FLOW RATE :	10.000	9.400	14.000	48.000	256.000	89.000	39.000	20.000	13.000	12.000	20.000	19.000
WATER LEVEL:												
PHYSICAL PROPERTIES												
SAMP-TMP,FIELD ,DEG. C	1.500	0.500	6.000	1.000	7.000	9.000	8.000	8.000	4.000	6.500	2.000	
COND. ,FIELD ,UMHO/CM	184.000	197.000	195.000	163.000	95.000	104.000	135.000	173.000	190.000	186.000	250.000	230.000
PH ,FIELD ,PH	7.400	7.400	6.200	8.300	7.800	7.800	8.300	8.200	8.170	8.450	9.070	8.200
PH ,LAB ,PH	7.700	7.700	7.900	8.100	7.500	7.500	7.900	8.300	8.300	8.300	8.000	8.000
ALKALIN.,TOTAL ,MG/L	86.000	84.000	88.000	72.000	44.000	48.000	62.000	80.000	88.000	84.000	114.000	104.000
HARDNESS,TOTAL ,MG/L	105.800	97.800	103.700	74.500	58.200	62.700	73.400	103.000	124.800	106.700	155.200	148.800
SOLIDS ,SUSP ,MG/L	1.000	1.000	5.000	29.000	105.000	11.000	1.000	20.000	1.000	1.000	10.000	14.000
TURBID. ,FIELD ,NTU	1.500	1.100	1.700	5.500	30.000	3.600	2.500	6.600	1.600	1.300	4.300	
CATIONS												
CALCIUM ,TOTAL ,MG/L	22.000	19.600	18.500	15.700	9.300	12.600	19.000	19.800				
MAGNES. ,TOTAL ,MG/L	8.000	7.900	11.610	2.100	4.900	4.030	3.300	34.000	37.000	7.500	6.500	9.500
SODIUM ,TOTAL ,MG/L	4.200	4.250	4.600	7.100	4.750	4.050	5.100	6.700				
POTASS. ,TOTAL ,MG/L	1.200	1.400	1.500	1.300	1.500	1.500	1.100	1.700				
ANIONS												
CHLORIDE, ,MG/L	1.690	1.690	1.690	1.690	1.130	1.690	1.130	2.250				
SULFATE , ,MG/L	30.000	30.000	27.000	-2.000	34.000	23.000	-1.000	12.000	11.000	74.000	45.000	19.000
PRIMARY												
ARSENIC ,TOTAL ,UG/L		-5.000			-5.000			-5.000				
CADMIUM ,TOTAL ,UG/L		-5.000			-5.000			-5.000				
CHROMIUM,T-TOT ,UG/L		-50.000			-50.000			-50.000				
LEAD ,TOTAL ,UG/L		-50.000			-50.000			-50.000	-50.000	-50.000	-50.000	-50.000

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1983
CUMULATIVE MONTHLY REPORT

STATION NAME: SQUAW CR-USGS GAUGING STATION TYPE: STREAM 592

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MERCURY ,TOTAL ,UG/L		-0.500			-0.500			-0.500				
SELENIUM,TOTAL ,UG/L		-10.000			-5.000			-50.000				
SECONDARY												
COPPER ,TOTAL ,UG/L		-10.000			-10.000			-10.000	-10.000	10.000	10.000	-10.000
ZINC ,TOTAL ,UG/L		3.000			16.000			17.000	8.000	4.000	33.000	32.000
IRON ,TOTAL ,UG/L		50.000			1370.000			250.000	80.000	60.000	190.000	240.000
MANGAN. ,TOTAL ,UG/L		10.000			80.000			10.000	-10.000	-10.000	10.000	20.000
TRACE METALS												
MOLY. ,TOTAL ,UG/L		-50.000			-50.000			-50.000	-50.000	-50.000	-50.000	-50.000
NUTRIENTS												
NITROGEN,NITRAT,MG/L	-0.100	-0.100	-0.050	1.300	-0.100	-0.100	-0.100	0.800	-0.100	0.350	0.400	0.800
NITROGEN,KJELDL,MG/L	1.120	0.200	1.100	0.900	0.780	0.600	0.540	0.760				
PHOSPHAT,T-TOT ,MG/L	-0.050	0.680	-0.050	0.100	-0.050	0.120	0.070	0.190	0.060	0.140	0.080	0.200
ORGANICS												
CYANIDE ,TOTAL ,MG/L		-0.005			-0.050			-0.005				
TOC , ,MG/L	80.000	5.000	6.000	8.000	17.000	9.000	5.000	6.400				

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1983
CUMULATIVE MONTHLY REPORT

STATION NAME: SQUAW CR-BELOW REDBIRD MINE TYPE: STREAM S83

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SAMPLE DATE:	01/19/83	02/16/83	03/23/83	04/27/83	05/24/83	06/28/83	07/20/83	08/24/83	09/20/83		11/09/83	
AIR TEMP :	-4.000		3.500	4.500	21.000	15.000	20.500	9.000			2.000	
FLOW RATE :	9.700	8.900	13.100	45.200	248.000	88.900	38.900	19.900	12.800		18.700	
WATER LEVEL:												
PHYSICAL PROPERTIES												
SAMP-TMP,FIELD ,DEG. C	1.000		5.000		5.000	8.000	7.000	7.000	1.000			
COND. ,FIELD ,UMHO/CM	142.000	152.000	155.000	140.000	87.000	85.000	113.000	145.000	160.000		201.000	
PH ,FIELD ,PH	7.600	7.800	8.000	8.200	7.300	7.800	8.300	8.300	8.000		7.970	
PH ,LAB ,PH	7.700	7.800	7.800	8.100	7.700	7.600	7.800	8.100			8.000	
ALKALIN.,TOTAL ,MG/L	74.000	76.000	72.000	66.000	40.000	40.000	56.000	70.000			92.000	
HARDNESS,TOTAL ,MG/L	90.200	96.500	88.300	74.500	46.600	62.700	77.800	94.100			112.500	
SOLIDS ,SUSP ,MG/L	3.000	2.000	2.000	28.000	115.000	5.000	2.000	20.000			13.000	
TURBID. ,FIELD ,NTU	1.300	0.900	1.500	4.400	32.000	2.500	1.800	6.500			5.100	
CATIONS												
CALCIUM ,TOTAL ,MG/L	17.300	15.100	15.400	14.100	7.800	9.400	13.900	18.000				
MAGNES. ,TOTAL ,MG/L	6.400	6.100	7.200	1.900	4.800	3.600	2.200	22.000			4.500	
SODIUM ,TOTAL ,MG/L	4.150	4.300	4.500	7.200	4.850	4.000	5.000	6.800				
POTASS. ,TOTAL ,MG/L	1.200	1.500	1.600	1.300	2.100	1.400	1.100	1.700				
ANIONS												
CHLORIDE, ,MG/L	1.130	1.690	1.130	1.690	1.130	1.130	1.690	1.130				
SULFATE , ,MG/L	12.000	13.000	11.000	4.000	38.000	11.000	-1.000	-1.000			19.000	
PRIMARY												
ARSENIC ,TOTAL ,UG/L		-5.000			-5.000			-5.000				
CADMIUM ,TOTAL ,UG/L		-5.000			-5.000			-5.000				
CHROMIUM,T-TOT ,UG/L		-50.000			-50.000			-50.000				
LEAD ,TOTAL ,UG/L		-50.000			-50.000			-50.000			-50.000	

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1983
CUMULATIVE MONTHLY REPORT

STATION NAME: SQUAW CR-BELOW REDBIRD MINE TYPE: STREAM 593

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MERCURY ,TOTAL ,UG/L		-0.500			0.500			2.000				
SELENIUM,TOTAL ,UG/L		-10.000			-5.000			-50.000				
SECONDARY												
COPPER ,TOTAL ,UG/L		-10.000			10.000			10.000			-10.000	
ZINC ,TOTAL ,UG/L		5.000			29.000			10.000			24.000	
IRON ,TOTAL ,UG/L		50.000			2680.000			480.000			150.000	
MANGAN. ,TOTAL ,UG/L		-10.000			120.000			10.000			20.000	
TRACE METALS												
MOLY. ,TOTAL ,UG/L		-50.000			-50.000			-50.000			-50.000	
NUTRIENTS												
NITROGEN,NITRAT,MG/L	-0.100	-0.100	-0.050	3.500	-0.100	-0.100	0.500	-0.100			0.600	
NITROGEN,KJELDL,MG/L	1.680	0.660	1.700	0.700	0.340	0.400	0.620	0.240				
PHOSPHAT,T-TOT ,MG/L	-0.050	0.340	0.060	0.110	0.050	0.080	0.240	0.110			0.100	
ORGANICS												
CYANIDE ,TOTAL ,MG/L		-0.005			-0.050			-0.005				
TOC , ,MG/L	29.000	4.000	6.000	9.000	19.000	23.000	12.000	4.300				

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1983
CUMULATIVE MONTHLY REPORT

STATION NAME: BRUNO CR-USGS GAUGING STATION TYPE: STREAM 594

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SAMPLE DATE:	01/19/83	02/16/83	03/23/83	04/27/83	05/24/83	06/28/83	07/20/83	08/24/83	118/50/66	10/13/83	11/09/83	12/30/83
AIR TEMP :	-5.000	0.500	5.500	5.500	16.000	13.000	16.500	11.000		10.000	-1.000	-1.000
FLOW RATE : CFS	0.290	0.530	0.890	2.900	8.000	0.040	0.100					2.000
WATER LEVEL:												
PHYSICAL PROPERTIES												
SAMP-TMP ,FIELD ,DEG. C	4.000	3.500	6.000	1.500	6.000	8.000	8.000	8.000	12.000	7.000	3.500	3.000
COND. ,FIELD ,UMHO/CM	450.000	450.000	430.000	310.000	188.000	210.000	300.000	520.000	1050.000	495.000	509.000	319.000
PH ,FIELD ,PH	7.900	8.000	8.300	8.300	8.000	8.300	8.400	8.500	17.060	8.510	9.750	8.300
PH ,LAB ,PH	8.000	8.100	8.200	8.400	7.900	7.900	8.400	8.400	8.500	8.500	8.300	8.300
ALKALIN. ,TOTAL ,MG/L	172.000	184.000	154.000	112.000	74.000	84.000	118.000	156.000	204.000	198.000	200.000	204.000
ACIDITY ,CACO3 ,MG/L										189.300		
HARDNESS,CARBON,MG/L	243.000	259.400	234.200	152.900	93.100	109.800	155.500	340.500	328.600	272.300	306.500	342.200
SOLIDS ,DISS ,MG/L										305.000	355.000	
SOLIDS ,SUSP ,MG/L	3.000	1.000	8.000	105.000	117.000	6.000	4.000	25.000	1.000	2.000	12.000	5.000
TURBID. ,FIELD ,NTU	1.600	0.820	3.700	15.000	66.000	11.000	18.000	14.000	17.900	4.000	10.000	
CATIONS												
CALCIUM ,TOTAL ,MG/L	59.700	57.300	47.700	39.300	26.400	26.700	41.600	73.600		72.300	77.800	
MAGNES. ,TOTAL ,MG/L	20.750	20.750	15.500	2.300	6.100	5.100	9.400	138.000	92.000	19.000	19.000	18.500
SODIUM ,TOTAL ,MG/L	3.350	3.250	4.250	7.200	5.450	5.300	6.800	6.700		3.100	6.300	
POTASS. ,TOTAL ,MG/L	1.200	1.200	1.700	1.200	1.200	1.300	1.000	1.800		1.800	1.600	
ANIONS												
CHLORIDE, ,MG/L	2.250	2.250	6.200	7.330	2.820	3.950	5.070	9.580		5.970	4.880	
SULFATE , ,MG/L	48.000	90.000	105.000	68.000	148.000	2.000	48.000	125.000	31.000	175.000	209.000	76.000
MINOR												
FLUORIDE, ,MG/L										0.310	0.300	
SILICA , ,MG/L										1.900		

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1983
CUMULATIVE MONTHLY REPORT

STATION NAME: BRUNO CR-USGS GAUGING STATION TYPE: STREAM 594

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
GASES												
SULPHIDE,TOTAL ,MG/L										0.240	-0.100	
PRIMARY												
ARSENIC ,TOTAL ,UG/L		-5.000			-5.000			-5.000		-5.000		
BARIUM ,TOTAL ,UG/L										-100.000		
CADMIUM ,TOTAL ,UG/L		-5.000			-5.000			-5.000		-5.000		
CHROMIUM,T-TOT ,UG/L		-50.000			-50.000			-50.000		-50.000		
LEAD ,TOTAL ,UG/L		-50.000			-50.000			-50.000	-50.000	-50.000	-50.000	-50.000
MERCURY ,TOTAL ,UG/L		3.000			-0.500			-0.500		-0.500		
SELENIUM,TOTAL ,UG/L		-10.000			-5.000			-50.000		9.000		
SILVER ,TOTAL ,UG/L										-10.000		
SECONDARY												
COPPER ,TOTAL ,UG/L		-10.000			10.000			10.000	-10.000	10.000	-10.000	-10.000
ZINC ,TOTAL ,UG/L		55.000			165.000			71.000	39.000	67.000	318.000	362.000
IRON ,TOTAL ,UG/L		60.000			2080.000			250.000	20.000	100.000	170.000	270.000
MANGAN. ,TOTAL ,UG/L		10.000			50.000			-10.000	-10.000	-10.000	-10.000	10.000
TRACE METALS												
ALUMINUM,TOTAL ,UG/L										200.000		
COBALT ,TOTAL ,UG/L										-50.000		
MOLY. ,TOTAL ,UG/L		-50.000			-50.000			-50.000	-50.000	-50.000	-50.000	-50.000
NICKEL ,TOTAL ,UG/L										-50.000		
NUTRIENTS												
B.O.D. ,COD ,MG/L										18.000		
NITROGEN,NITRAT,MG/L	0.110	0.420	0.060	1.500	2.000	1.000	0.600	0.600	-0.100	0.650	0.500	0.400

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1983
CUMULATIVE MONTHLY REPORT

STATION NAME: BRUNO CR-USGS GAUGING STATION TYPE: STREAM S94

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
NITROGEN,KJELDL,MG/L	1.200	0.900	1.800	0.500	0.380	0.740	0.680	0.270				
PHOSPHAT,T-TOT ,MG/L	-0.050	-0.050	-0.050	0.110	0.050	0.090	0.090	0.060	-0.050	-0.050	0.050	0.050
ORGANICS												
CYANIDE ,TOTAL ,MG/L		-0.005			-0.050			-0.005		-0.005		
TOC , ,MG/L	18.000	6.000	6.000	16.000	67.000	35.000	18.000	6.600		3.700		

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1982
CUMULATIVE MONTHLY REPORT

STATION NUMBER: SQ4 BRUNO CREEK TYPE: STREAM

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SAMPLE DATE:	01/27/82	02/11/82	03/09/82	04/21/82	05/13/82	06/28/82	07/22/82	08/25/82	09/16/82	10/26/82	11/22/82	12/14/82
SAMPLE TIME:	1620	1426	1400	1037	950	1220	1113	1205	1010	1228	1105	1250
AIR TEMP(C):	0.0	-5.000		6.000	7.000	26.000	21.000	24.500	1.500	6.000	—	-4.000
FLOW RATE :	0.240	0.240	0.000	0.960	11.000	14.000	2.500	0.910	0.610	1.400	0.350	0.290
PHYSICAL PROPERTIES												
ALKAL.,TOT.	182.000	184.000		138.000	82.000	62.000	112.300	142.000	160.000	126.000	176.000	176.000
COND. (UMHOS/CM)	450.000	475.000		400.000	225.000	160.000	300.000	400.000	410.000	875.000	475.000	455.000
HARDNESS (AS CACO3)	257.400	277.200		192.000	105.800	80.800	157.600	64.350	210.000	404.000	257.400	255.400
PH(PH UNITS)FIELD	7.800	8.000		7.600	7.300	7.600	8.000	8.200	8.300	8.100	7.900	8.100
PH(PH UNITS)LAB	8.100	8.000		8.200	7.800	7.800	7.800	8.100	7.700			8.000
SOLIDS, SUS.	5.000	3.000		16.000	26.000	-2.000	2.000	-2.000	1.000	5019.000	2.000	2.000
SAMP. TEMP.	4.000	1.000		3.000	6.000	8.000	12.000	12.000	8.000	5.500	2.000	2.000
TURBIDITY (NTU)	0.800	3.000		20.000	24.000	7.400	2.000	1.400	1.200	>200.000	2.300	1.800
CATIONS												
CALCIUM	65.100	68.200		55.400	29.900	22.700	40.500	52.570	66.500	103.600	58.700	61.100
MAGNESIUM	28.590	26.950		16.320	8.140	6.580	16.320	18.250	17.600	44.000	20.500	16.300
POTASSIUM	1.300	1.400		1.600	1.100	0.700	1.100	1.400	1.300	3.800	1.300	1.300
SODIUM	3.850	3.450		6.100	4.100	3.240	3.450	3.550	3.350	8.700	2.380	2.850
ANIONS												
CHLORIDE	1.690	1.130		5.070	2.820	1.130	1.690	2.800	2.250	165.700	2.250	2.250
SULFATE	11.000	0.400		11.200	19.000	24.000	58.000	45.000	55.000	136.000	48.700	133.000
MINOR												
IRON		0.130			0.350			0.140			0.110	
MANGANESE		-0.010			0.010			-0.010			-0.010	

No DISCHARGE AT SAMPLING TIME (Drawdown test for PW #2)

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1982
CUMULATIVE MONTHLY REPORT

01/[illegible]/84

STATION NUMBER: SQ4 BRUNO CREEK TYPE: STREAM

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SAMPLE DATE:	01/27/82	02/11/82		04/21/82	05/13/82	06/28/82	07/22/82	08/25/82	09/16/82	10/26/82	11/22/82	12/14/82
PRIMARY												
ARSENIC, UG/L		-10.000			-10.000			-10.000			-10.000	
CADMIUM, UG/L		-5.000			-5.000			-5.000			-5.000	
CHROM., UG/L		-50.000			-50.000			-50.000			-50.000	
LEAD, UG/L		-50.000			-50.000			-50.000			-50.000	
MERCURY, UG/L		1.100			-0.500			-0.500			2.000	
SELENM., UG/L		-10.000			-10.000			-5.000			-10.000	
SECONDARY												
COPPER, UG/L		-10.000			-10.000			-10.000			-10.000	
ZINC, UG/L		35.000			189.000			45.000			53.000	
TRACE METALS												
MOLYBD., UG/L		60.000			-50.000			-50.000			-50.000	
NUTRIENTS												
NITROGEN (KJELDAHL)	0.740	0.800		6.700	3.900	2.100	0.900	0.900	-0.100	-0.100	0.550	0.260
NITROGEN (NITRATE)	0.100	0.100		1.000	0.400	-0.050	-0.050	—	0.280	0.620	-0.050	0.110
PHOSPHATE	-0.050	-0.050		-0.050	0.120	-0.050	-0.050	-0.050	-0.050	5.400	-0.050	-0.050
ORGANICS												
CARBON (TOT. ORG.)	2700.000	2100.000		15000.000	6000.000	7000.000	10000.000	38000.000	59000.000	10000.000		32000.000
CYANIDE		-0.005			-0.020			-0.050			-0.005	

NO DISCHARGE AT SAMPLING TIME (Drawdown test for PW #2)

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

R;

type sq4 listing b

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1982
CUMULATIVE MONTHLY REPORT

STATION NUMBER: SQ3 Squaw Creek at Redbird TYPE: STREAM

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SAMPLE DATE:	01/27/82	02/11/82	03/09/82	04/21/82	05/13/82	06/28/82	07/22/82	08/25/82	09/16/82	10/26/82	11/22/82	12/14/82
SAMPLE TIME:	1640	1400	1405	1007	1023	1200	1015	1130	1040	1250	1115	1205
AIR TEMP(C):	0.0	-8.900	5.000	5.600	11.100	27.800	21.000	25.500	5.500	4.500	—	-6.000
FLOW RATE :	7.600	7.000	11.000	18.000	158.000	267.000	46.000	16.000	13.000	17.000	26.000	11.000
PHYSICAL PROPERTIES												
ALKAL.,TOT.	90.000	74.000	72.000	82.000	62.000	32.000	52.000	69.000	76.000	72.000	76.000	70.000
COND. (UMHOS/CM)	150.000	165.000	153.000	167.000	140.000	71.000	113.000	150.000	150.000	145.000	200.000	148.000
HARDNESS (AS CACO3)	114.800	87.100	110.200	96.000	66.600	44.400	68.700	113.850	70.000	84.800	75.200	82.400
PH(PH UNITS) FIELD	7.500	8.000	7.800	7.600	7.400	7.600	7.600	8.100	8.200	8.000	7.700	7.500
PH(PH UNITS) LAB								7.700	7.400	—	—	7.600
SOLIDS, SUS.	3.000	2.000	3.000	2.000	9.000	3.000	1.000	3.000	-2.000	1.000	2.000	2.000
SAMP. TEMP.	0.0	1.000	4.000	6.000	5.000	9.500	10.500	11.000	3.000	4.000	0.0	1.000
TURBIDITY (NTU)	1.000	1.900	5.000	3.300	5.100	12.000	1.700	4.100	1.400	7.800	1.400	1.200
CATIONS												
CALCIUM	23.800	15.900	22.900	21.500	14.100	8.100	14.600	15.870	16.800	21.100	19.000	19.200
MAGNESIUM	9.980	8.040	7.790	8.750	4.730	2.090	4.200	4.840	5.800	4.980	6.400	3.950
POTASSIUM	1.500	1.500	1.500	1.500	1.400	1.100	1.500	1.700	1.500	1.600	1.500	1.500
SODIUM	6.200	4.900	4.950	6.900	4.350	2.680	3.300	4.100	4.050	3.650	4.300	4.050
ANIONS												
CHLORIDE	1.690	1.130	1.130	1.130	1.130	1.130	0.560	4.400	1.130	1.130	0.560	0.560
SULFATE	0.800	13.000	1.000	0.600	-0.100	22.000	2.000	50.000	16.000	8.000	-1.000	7.000
MINOR												
IRON		0.180			0.230			0.230			0.100	
MANGANESE		-0.010			0.010			-0.010			-0.010	

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1982
CUMULATIVE MONTHLY REPORT

STATION NUMBER: SQ3 Squaw Creek at Redbird TYPE: STREAM

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SAMPLE DATE:	01/27/82	02/11/82	03/09/82	04/21/82	05/13/82	06/28/82	07/22/82	08/25/82	09/16/82	10/26/82	11/22/82	12/14/82
PRIMARY												
ARSENIC, UG/L		-10.000			-10.000			-10.000			-10.000	
CADMIUM, UG/L		-5.000			-5.000			-5.000			-5.000	
CHROM., UG/L		-50.000			-50.000			-50.000			-50.000	
LEAD, UG/L		-50.000			-50.000			-50.000			-50.000	
MERCURY, UG/L		13.200			0.800			-0.500			-0.500	
SELENM., UG/L		-10.000			-10.000			-5.000			-10.000	
SECONDARY												
COPPER, UG/L		10.000			-10.000			-10.000			-10.000	
ZINC, UG/L		61.000			35.000			12.000			12.000	
TRACE METALS												
MOLYBD., UG/L		80.000			-50.000			-50.000			-50.000	
NUTRIENTS												
NITROGEN (KJELDAHL)	0.330	3.500	0.720	6.200	4.700	1.490	2.000	-0.100	-0.100	-0.100	0.550	0.800
NITROGEN (NITRATE)	-0.050	-0.050	-0.050	-0.050	-0.050	-0.050	-0.050	—	-0.050	-0.100	-0.050	-0.100
PHOSPHATE	-0.050	-0.050	-0.050	-0.050	0.080	-0.050	-0.050	-0.050	-0.050	-0.050	-0.050	-0.050
ORGANICS												
CARBON (TOT. ORG.)	4400.000	1500.000	3900.000	5000.000	9000.000	8000.000	5000.0009	0000.0009	2000.0001	0000.0007	0000.0004	3000.000
CYANIDE		-0.005			-0.020			-0.050			-0.005	

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

R;

.type sq4 listing b

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1982
CUMULATIVE MONTHLY REPORT

STATION NUMBER: SQ2 Squaw Creek at USGS Gage TYPE: STREAM

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SAMPLE DATE:	01/27/82	02/11/82	03/09/82	04/21/82	05/13/82	06/28/82	07/22/82	08/25/82	09/16/82	10/26/82	11/22/82	12/14/82
SAMPLE TIME:	1705	1452	1430	940	1050	1145	1140	1105	1100	1315	1122	1130
AIR TEMP(C):	-1.000	-3.500	5.000	0.400	12.000	25.000	23.000	22.000	10.500	4.500	—	-5.000
FLOW RATE :	7.800	7.200	11.000	19.000	169.000	281.000	48.000	17.000	14.000	18.000	26.000	11.000
PHYSICAL PROPERTIES												
ALKAL.,TOT.	90.000	102.000	78.000	94.000	66.000	32.000	60.000	81.000	82.000	82.000	92.000	82.000
COND. (UMHOS/CM)	150.000	250.000	175.000	225.000	143.000	81.000	128.000	180.000	190.000	240.000	225.000	200.000
HARDNESS (AS CACO3)	103.000	130.700	114.200	107.500	70.600	44.400	80.800	91.580	40.600	129.300	110.900	103.000
PH(PH UNITS)	7.500	7.400	7.800	7.900	7.800	7.800	7.900	8.200	8.300	7.800	7.600	7.800
SOLIDS, SUS.	-1.000	1.000	7.000	2.000	7.000	-2.000	3.000	1.000	-2.000	166.000	4.000	4.000
SAMP. TEMP.	0.0	0.0	4.000	2.000	6.000	9.500	13.000	12.000	5.000	4.000	0.0	2.000
TURBIDITY (NTU)	1.000	1.800	4.000	3.000	6.900	14.000	1.700	3.600	1.600	>200.000	1.600	1.600
CATIONS												
CALCIUM	20.600	28.600	26.200	24.600	18.900	9.700	14.600	20.830	28.900	48.600	30.200	23.100
MAGNESIUM	10.040	10.370	8.860	7.120	5.250	2.480	5.340	6.650	7.300	8.840	9.500	5.150
POTASSIUM	1.400	1.500	1.600	1.500	1.300	1.200	1.500	1.500	1.700	2.300	1.500	1.300
SODIUM	6.300	4.800	4.850	6.800	4.450	2.840	3.400	4.200	4.000	3.700	4.300	3.900
ANIONS												
CHLORIDE	1.130	1.130	1.130	1.130	2.250	1.130	1.690	2.100	1.690	11.800	1.690	1.690
SULFATE	0.600	3.400	1.800	2.800	1.000	22.000	8.000	30.000	18.000	58.000	11.300	18.000
MINOR												
IRON		0.310			0.270			0.260			0.120	
MANGANESE		-0.010			-0.010			0.010			-0.010	

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1982
CUMULATIVE MONTHLY REPORT

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1982
CUMULATIVE MONTHLY REPORT

STATION NUMBER: SQ2 SQUAW CREEK at USGS Gage TYPE: STREAM

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SAMPLE DATE:	01/27/82	02/11/82	03/09/82	04/21/82	05/13/82	06/28/82	07/22/82	08/25/82	09/16/82	10/26/82	11/22/82	12/14/82
PRIMARY												
ARSENIC, UG/L		-10.000			-10.000			-10.000			-10.000	
CADMIUM, UG/L		-5.000			-5.000			-5.000			-5.000	
CHROM., UG/L		-50.000			-50.000			-50.000			-50.000	
LEAD, UG/L		-50.000			-50.000			-50.000			-50.000	
MERCURY, UG/L		8.000			-0.500			-0.500			1.400	
SELENM., UG/L		-10.000			-10.000			-5.000			-10.000	
SECONDARY												
COPPER, UG/L		-10.000			-10.000			-10.000			10.000	
ZINC, UG/L		53.000			41.000			13.000			16.000	
TRACE METALS												
MOLYBD., UG/L		-50.000			-50.000			-50.000			-50.000	
NUTRIENTS												
NITROGEN (KJELDAHL)	2.700	1.700	0.410	8.600	2.100	0.800	0.850	0.800	-0.100	-0.100	1.900	0.210
NITROGEN (NITRATE)	-0.050	0.300	-0.050	-0.050	-0.050	-0.050	-0.050	—	-0.050	-0.100	-0.050	-0.100
PHOSPHATE	-0.050	-0.050	-0.050	-0.050	0.090	-0.050	-0.050	-0.050	-0.050	0.300	-0.050	-0.050
ORGANICS												
CARBON (TOT. ORG.)	3100.000	1200.000	3300.000	7000.000	7000.000	7000.0001	4000.0007	4000.0003	0000.0002	5000.0007	5000.0004	5000.000
CYANIDE		-0.005			-0.020			-0.050			-0.005	

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

R;

.type sq3 listing b

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1982
CUMULATIVE MONTHLY REPORT

STATION NUMBER: SQ1 Squaw Creek at mouth TYPE: STREAM

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SAMPLE DATE:	01/27/82	02/11/82	03/09/82	04/21/82	05/13/82	06/28/82	07/22/82	08/25/82	09/16/82	10/26/82	11/22/82	12/14/82
SAMPLE TIME:	1530	1600	1500	900	1155	1040	1310	1015	1150	1400	1140	1030
AIR TEMP(C):	2.000	-3.000	5.000	3.500	—	2.100	30.000	2.100	1.300	6.500	-8.000	-9.000
FLOW RATE :	7.600	7.000	11.000	18.000	158.000	267.000	46.000	16.000	13.000	17.000	26.000	11.000
PHYSICAL PROPERTIES												
ALKAL.,TOT.	96.000	102.000	96.000	98.000	68.000	50.000	82.000	96.000	110.000	304.000	104.000	90.000
COND. (UMHOS/CM)	250.000	250.000	225.000	225.000	150.000	89.000	150.000	225.000	250.000	215.000	174.000	220.000
HARDNESS (AS CACO3)	118.800	126.700	130.600	122.900	62.700	64.600	88.900	103.950	110.000	121.200	110.900	115.400
PH(PH UNITS)	7.400	7.900	8.000	8.200	7.600	7.800	8.000	7.800	8.100	7.800	7.600	8.000
SOLIDS, SUS.	8.000	-1.000	129.000	3.000	17.000	15.000	4.000	1.000	-2.000	2.000	-1.000	6.000
SAMP. TEMP.	3.000	0.0	7.000	1.000	10.000	10.500	16.000	13.000	10.000	6.000	0.0	2.000
TURBIDITY (NTU)	0.900	1.100	108.000	3.000	7.200	13.000	1.600	3.000	1.200	28.000	1.200	1.600
CATIONS												
CALCIUM	28.600	25.400	26.200	30.800	17.300	9.700	19.400	57.530	40.100	30.800	33.300	23.100
MAGNESIUM	11.840	12.180	11.920	9.340	5.890	3.120	6.790	9.200	8.600	7.690	9.300	6.200
POTASSIUM	1.800	1.600	2.400	1.700	1.400	1.300	1.700	2.000	2.400	1.700	1.800	1.400
SODIUM	6.440	5.050	5.250	7.300	4.550	3.040	3.550	4.950	4.900	3.850	4.600	3.950
ANIONS												
CHLORIDE	1.130	0.560	2.250	1.130	2.250	1.130	1.130	2.800	2.820	1.690	1.130	1.690
SULFATE	0.400	3.000	10.800	3.200	6.000	42.000	14.000	40.000	32.000	24.000	13.000	27.000
MINOR												
IRON		0.170			0.260			0.390			0.050	
MANGANESE		-0.010			-0.010			0.010			-0.010	
BIOLOGICAL												
COLI.,TOT.	0.000	0.000	4.000	-2.000	6.000	-1.000	11.000	3.000	103.000	12.000	3.000	4.000
COLI.,FEC.	0.000	0.000	-2.000	-2.000	-1.000	0.000	0.000	0.000	0.000	12.000	3.000	4.000

7
8

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1982
CUMULATIVE MONTHLY REPORT

STATION NUMBER: SQ1 Squaw Creek at mouth TYPE: STREAM

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SAMPLE DATE:	01/27/82	02/11/82	03/09/82	04/21/82	05/13/82	06/28/82	07/22/82	08/25/82	09/16/82	10/26/82	11/22/82	12/14/82
PRIMARY												
ARSENIC, UG/L		-10.000			-10.000			-10.000			-10.000	
CADMIUM, UG/L		-5.000			-5.000			-5.000			-5.000	
CHROM., UG/L		-50.000			-50.000			-50.000			-50.000	
LEAD, UG/L		-50.000			-50.000			-50.000			-50.000	
MERCURY, UG/L		2.500			0.500			-0.500			-0.500	
SELENM., UG/L		-10.000			-10.000			-5.000			-10.000	
SECONDARY												
COPPER, UG/L		10.000			-10.000			-10.000			10.000	
ZINC, UG/L		36.000			34.000			37.000			20.000	
TRACE METALS												
MOLYBD., UG/L		-50.000			-50.000			-50.000			-50.000	
NUTRIENTS												
NITROGEN (KJELDAHL)	0.400	1.100	3.800	3.300	3.800	1.500	0.900	0.800	-0.100	-0.100	1.250	0.220
NITROGEN (NITRATE)	0.200	-0.050	0.300	0.220	-0.050	-0.050	-0.050	—	-0.050	-0.100	-0.050	0.100
PHOSPHATE	0.050	-0.050	0.540	-0.050	0.075	0.160	-0.050	-0.050	-0.050	-0.050	-0.050	-0.050
ORGANICS												
CARBON (TOT. ORG.)	4100.000	7300.000	5500.000	9000.000	8000.000	6000.000	8000.000	78000.000	91000.000	10000.000	12000.000	20000.000
CYANIDE		-0.005			-0.020			-0.050			-0.005	

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

R;

.type sq2 listing b

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1982
CUMULATIVE MONTHLY REPORT

STATION NUMBER: TC4 THOMPSON CREEK ABOVE BUCK. TYPE: STREAM

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SAMPLE DATE:	01/27/82	02/11/82	03/09/82	04/20/82	05/13/82	06/28/82	07/22/82	08/25/82	09/16/82	10/26/82	11/22/82	12/14/82
SAMPLE TIME:	1040	1610	1010	1355	1409	1605	1403	1515	1300	1452	1300	1455
AIR TEMP(C):	—	—	5.600	—	—	2.900	26.500	26.500	16.500	5.500	-8.000	-4.000
FLOW RATE :	4.600	3.800	7.000	16.000	51.000	139.000	23.000	8.300	6.500	6.800	6.800	5.200
PHYSICAL PROPERTIES												
ALKAL.,TOT.	42.000	46.000	50.000	52.000	46.000	20.000	28.000	40.000	42.000	48.000	40.000	40.000
COND. (UMHOS/CM)	117.000	120.000	120.000	145.000	100.000	54.000	66.000	94.000	103.000	102.000	60.000	103.000
HARDNESS (AS CACO3)	59.400	71.300	89.800	76.800	51.000	28.300	52.500	44.550	42.000	52.500	59.400	61.800
PH(PH UNITS)	7.900	8.200	7.600	7.500	7.400	7.400	7.700	7.700	7.700	7.600	7.300	7.400
SOLIDS, SUS.	3.000	1.000	1.000	6.000	12.000	3.000	1.000	3.000	-2.000	2.000	1.000	2.000
SAMP. TEMP.	0.0	1.000	1.500	2.000	10.000	4.000	12.000	13.000	8.000	4.000	0.0	1.000
TURBIDITY (NTU)	0.380	1.300	1.600	1.200	4.300	6.000	1.300	1.600	1.000	3.700	0.700	0.400
CATIONS												
CALCIUM	15.900	12.700	21.300	20.000	11.000	8.100	8.100	11.900	12.800	14.600	12.700	14.900
MAGNESIUM	3.090	3.280	3.730	4.610	2.720	0.770	1.190	1.470	1.740	1.750	1.980	1.440
POTASSIUM	0.700	0.800	0.700	0.800	0.600	0.300	0.600	0.700	0.600	0.600	0.700	0.500
SODIUM	3.900	10.200	3.650	4.100	3.150	2.160	2.190	3.250	3.100	2.750	1.810	3.150
ANIONS												
CHLORIDE	0.560	1.130	0.560	1.130	1.130	0.560	0.560	11.300	1.130	0.560	1.130	0.560
SULFATE	-0.100	1.600	3.800	4.500	3.000	10.000	8.000	24.000	6.000	30.000	-1.000	18.000
MINOR												
IRON		0.240			0.190			0.190			0.050	
MANGANESE		-0.010			-0.010			-0.010			-0.010	

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1982
CUMULATIVE MONTHLY REPORT

STATION NUMBER: TC4 Thompson Creek above Buck. TYPE: STREAM

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SAMPLE DATE:	01/27/82	02/11/82	03/09/82	04/20/82	05/13/82	06/28/82	07/22/82	08/25/82	09/16/82	10/26/82	11/22/82	12/14/82
PRIMARY												
ARSENIC, UG/L		20.000			-10.000			-10.000			-10.000	
CADMIUM, UG/L		-5.000			-5.000			-5.000			-5.000	
CHROM., UG/L		-50.000			-50.000			-50.000			-50.000	
LEAD, UG/L		-50.000			-50.000			-50.000			-50.000	
MERCURY, UG/L		15.000			2.500			-0.500			1.500	
SELENM., UG/L		-10.000			-10.000			-5.000			-10.000	
SECONDARY												
COPPER, UG/L		20.000			-10.000			20.000			-10.000	
ZINC, UG/L		44.000			28.000			23.000			21.000	
TRACE METALS												
MOLYBD., UG/L		-50.000			-50.000			-50.000			-50.000	
NUTRIENTS												
NITROGEN (KJELDAHL)	0.320	0.300	0.130	0.700	0.600	1.600	0.650	0.500	-0.100	-0.100	1.150	0.220
NITROGEN (NITRATE)	-0.050	-0.050	-0.050	0.280	-0.050	-0.050	-0.050	—	-0.050	-0.100	-0.050	-0.100
PHOSPHATE	-0.050	0.200	-0.050	-0.050	0.050	-0.050	-0.050	-0.050	-0.050	0.150	-0.050	-0.050
ORGANICS												
CARBON (TOT. ORG.)	3100.000	3800.000	2700.000	8000.000	4000.000	6000.000	9000.0004	9000.0001	$000.0002	0000.0001	2000.000	5000.000
CYANIDE		-0.005			-0.020			-0.050			-0.005	

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

R;

.vmtype tc1 listing b
UNKNO

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1982
CUMULATIVE MONTHLY REPORT

STATION NUMBER: TC3 THOMPSON CR. below BUCK. TYPE: STREAM

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SAMPLE DATE:	01/27/82	02/11/82	03/09/82	04/20/82	05/13/82	06/28/82	07/22/82	08/25/82	09/16/82	10/26/82	11/22/82	12/14/82
SAMPLE TIME:	1145	1640	1025	1405	1430	1620	1440	1605	1330	1515	1313	1530
AIR TEMP(C):	—	—	5.000	—	—	2.600	2.800	2.600	1.400	4.000	-8.000	-4.000
FLOW RATE :	4.600	3.800	7.000	16.000	55.000	140.000	23.000	8.300	6.500	6.800	6.800	5.200
PHYSICAL PROPERTIES												
ALKAL.,TOT.	54.000	52.000	60.000	54.000	46.000	22.000	36.000	45.000	48.000	44.000	46.000	48.000
COND. (UMHOS/CM)	132.000	140.000	147.000	163.000	116.000	54.000	74.000	112.000	117.000	114.000	75.000	106.000
HARDNESS (AS CACO3)	67.300	83.200	106.100	80.600	58.800	36.400	56.600	49.500	49.000	68.700	71.300	82.400
PH(PH UNITS)	8.000	8.200	7.700	7.600	7.400	7.400	7.800	7.800	8.000	7.300	7.400	7.100
SOLIDS, SUS.	5.000	1.000	2.000	5.000	11.000	2.000	2.000	-2.000	1.000	1.000	-1.000	1.000
SAMP. TEMP.	0.0	0.0	2.000	2.000	8.000	4.000	12.000	13.000	8.000	4.000	0.0	1.000
TURBIDITY (NTU)	0.600	1.100	1.200	1.200	10.000	2.700	1.200	1.800	1.100	5.200	0.700	0.400
CATIONS												
CALCIUM	17.500	15.900	21.300	21.500	14.100	8.100	9.700	16.860	16.100	17.800	19.000	18.200
MAGNESIUM	3.780	3.490	4.410	4.710	3.020	0.890	1.570	1.980	2.050	2.130	2.450	1.450
POTASSIUM	0.900	0.800	0.900	0.900	0.700	0.400	0.600	0.800	0.800	0.700	0.700	0.500
SODIUM	4.150	3.700	3.900	4.800	3.400	2.280	2.250	3.400	3.350	2.850	1.860	3.200
ANIONS												
CHLORIDE	1.130	1.130	0.560	1.130	1.690	0.560	0.560	4.400	1.130	1.130	1.130	1.120
SULFATE	-0.100	2.600	6.200	3.900	13.000	22.000	14.000	27.000	34.000	36.000	-1.000	28.000
MINOR												
IRON		0.090			0.370			0.600			0.080	
MANGANESE		-0.010			0.010			-0.010			-0.010	

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1982
CUMULATIVE MONTHLY REPORT

STATION NUMBER: TC3 Thompson Cr. below Buck. TYPE: STREAM

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SAMPLE DATE:	01/27/82	02/11/82	03/09/82	04/20/82	05/13/82	06/28/82	07/22/82	08/25/82	09/16/82	10/26/82	11/22/82	12/14/82
PRIMARY												
ARSENIC, UG/L		-10.000			-10.000			-10.000			-10.000	
CADMIUM, UG/L		-5.000			-5.000			-5.000			-5.000	
CHRUM., UG/L		-50.000			-50.000			-50.000			-50.000	
LEAD, UG/L		-50.000			-50.000			-50.000			-50.000	
MERCURY, UG/L		-0.500			-0.500			-0.500			-0.500	
SELENM., UG/L		-10.000			-10.000			-5.000			-10.000	
SECONDARY												
COPPER, UG/L		-10.000			-10.000			30.000			-10.000	
ZINC, UG/L					31.000			21.000			37.000	
TRACE METALS												
MOLYBD., UG/L		-50.000			80.000			-50.000			-50.000	
NUTRIENTS												
NITROGEN (KJELDAHL)	0.380	0.200	0.150	6.400	2.800	0.700	0.550	0.550	-0.100	-0.100	1.900	0.220
NITROGEN (NITRATE)	-0.050	-0.050	-0.050	-0.050	-0.050	-0.050	-0.050	—	-0.050	-0.100	-0.050	-0.100
PHOSPHATE	-0.050	-0.050	-0.050	0.090	0.050	-0.050	-0.050	-0.050	-0.050	-0.050	-0.050	-0.050
ORGANICS												
CARBON (TOT. ORG.)	2400.000	2700.000	1400.000	5000.00010000.00011000.000			6000.00088000.00012000.00085000.00012000.00089000.000					
CYANIDE		-0.005			-0.020			-0.050			-0.005	

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

R;

```
.type tc4 listing b
INVALID CHARACTER '^' IN FILEID '^TYPE MODULE'.
INVALID CMS COMMAND

.P
```

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1982
CUMULATIVE MONTHLY REPORT

STATION NUMBER: TC2 Thompson Cr. above Pat H. TYPE: STREAM

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SAMPLE DATE:	01/27/82	02/11/82	03/09/82	04/20/82	05/13/82	06/28/82	07/22/82	08/25/82	09/16/82	10/26/82	11/22/82	12/14/82
SAMPLE TIME:	950	1635	1140	1340	1355	1645	1505	1655	1350	1535	1243	1555
AIR TEMP(C):	—	—	0.700	—	—	2.600	29.500	29.500	1.600	0.400	-1.000	-0.600
FLOW RATE :	4.600	3.800	7.000	16.000	55.000	140.000	23.000	8.300	6.500	6.800	6.800	5.200
PHYSICAL PROPERTIES												
ALKAL., TOT.	52.000	58.000	74.000	60.000	50.000	24.000	34.000	49.000	50.000	54.000	52.000	50.000
COND. (UMHOS/CM)	140.000	150.000	150.000	167.000	130.000	69.000	83.000	119.000	126.000	127.000	75.000	118.000
HARDNESS (AS CACO3)	71.300	79.200	93.800	99.800	62.700	48.500	60.600	61.880	54.000	68.700	75.200	65.900
PH(PH UNITS)	7.900	8.100	7.600	7.400	7.900	7.600	7.800	7.800	7.800	7.400	7.400	6.900
SOLIDS, SUS.	5.000	1.000	1.000	1.000	15.000	5.000	-2.000	-2.000	2.000	1.000	1.000	-1.000
SAMP. TEMP.	0.0	0.0	3.500	4.000	10.000	4.500	14.000	16.000	8.000	5.000	0.0	0.0
TURBIDITY (NTU)	0.380	1.000	1.100	1.000	7.400	2.800	1.000	1.400	1.0	2.800	0.600	0.400
CATIONS												
CALCIUM	19.000	14.300	26.200	23.100	15.700	8.100	13.000	17.860	18.400	17.800	19.000	18.200
MAGNESIUM	4.110	3.820	4.390	4.840	3.370	0.960	1.840	2.190	2.200	2.440	2.950	1.750
POTASSIUM	0.800	0.700	0.800	0.800	0.700	0.300	0.600	0.800	0.800	0.800	0.700	0.600
SODIUM	4.300	3.750	4.150	5.200	3.650	2.160	2.430	3.650	3.400	3.100	1.980	3.450
ANIONS												
CHLORIDE	1.130	0.560	1.130	0.560	1.130	0.560	1.130	5.600	1.130	2.250	0.560	0.560
SULFATE	2.200	2.800	4.200	1.500	9.000	18.000	11.000	25.000	24.000	32.000	-1.000	24.000
MINOR												
IRON		0.070			0.250			0.030			0.050	
MANGANESE		-0.010			0.010			-0.010			-0.010	

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1982
CUMULATIVE MONTHLY REPORT

STATION NUMBER: TC2 Thompson Cr. above Pat H. TYPE: STREAM

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SAMPLE DATE:	01/27/82	02/11/82	03/09/82	04/20/82	05/13/82	06/28/82	07/22/82	08/25/82	09/16/82	10/26/82	11/22/82	12/14/82
PRIMARY												
ARSENIC, UG/L		-10.000			-10.000			-10.000			-10.000	
CADMIUM, UG/L		-5.000			-5.000			-5.000			-5.000	
CHROM., UG/L		-50.000			-50.000			-50.000			-50.000	
LEAD, UG/L		-50.000			-50.000			-50.000			-50.000	
MERCURY, UG/L		70.000			-0.500			-0.500			-0.500	
SELENM., UG/L		-10.000			-10.000			-5.000			-10.000	
SECONDARY												
COPPER, UG/L		-10.000			-10.000			-10.000			-10.000	
ZINC, UG/L		11.000			29.000			12.000			11.000	
TRACE METALS												
MOLYBD., UG/L		60.000			-50.000			-50.000			-50.000	
NUTRIENTS												
NITROGEN (KJELDAHL)	0.200	1.300	0.180	6.300	3.300	1.600	0.250	0.850	0.260	-0.100	1.000	0.280
NITROGEN (NITRATE)	-0.050	-0.050	-0.050	-0.050	-0.050	-0.050	-0.050	—	-0.050	-0.100	0.170	-0.100
PHOSPHATE	-0.050	-0.050	-0.050	-0.050	-0.050	-0.050	-0.050	-0.050	-0.050	-0.050	-0.050	-0.050
ORGANICS												
CARBON (TOT. ORG.)	5100.000	600.000	4900.000	6000.000	16000.000	13000.000	6000.000	80000.000	19000.000	85000.000	10000.000	30000.000
CYANIDE		-0.005			-0.020			-0.050			-0.005	

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

R;

.type tc3 listing b

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1982
CUMULATIVE MONTHLY REPORT

STATION NUMBER: TC1 THOMPSON CR. below Pat H. TYPE: STREAM

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SAMPLE DATE:	01/27/82	02/11/82	03/09/82	04/20/82	05/13/82	06/28/82	07/22/82	08/25/82	09/16/82	10/26/82	11/22/82	12/14/82
SAMPLE TIME:	1215	1615	1205	1515	1510	1715	1530	1715	1413	1545	1230	1610
AIR TEMP(C):	—	—	7.000	—	—	—	2.700	24.500	1.600	0.400	-0.800	-0.700
FLOW RATE :	4.600	3.800	7.200	17.000	59.000	140.000	23.000	8.300	6.700	7.100	7.000	5.400
PHYSICAL PROPERTIES												
ALKAL.,TOT.	60.000	62.000	60.000	66.000	60.000	28.000	48.000	53.000	68.000	62.000	62.000	56.000
COND. (UMHOS/CM)	152.000	160.000	167.000	225.000	170.000	76.	100.000	133.000	141.000	158.000	115.000	163.000
HARDNESS (AS CACO3)	83.200	103.000	106.100	103.700	78.400	44.400	68.700	64.350	60.000	80.800	87.100	94.800
PH(PH UNITS)	7.900	8.200	7.700	7.400	7.800	7.600	7.800	7.900	8.000	7.200	7.400	7.200
SOLIDS, SUS.	1.000	-1.000	1.000	3.000	16.000	13.000	1.000	-2.000	2.000	25.000	1.000	3.000
SAMP. TEMP.	0.0	0.0	4.000	4.000	11.000	—	14.000	14.000	8.000	5.000	0.0	1.000
TURBIDITY (NTU)	0.280	1.400	1.200	1.400	7.400	2.800	1.100	1.800	1.000	3.400	0.900	0.700
CATIONS												
CALCIUM	20.600	15.900	24.500	29.200	23.600	9.700	14.600	19.840	17.600	22.700	22.200	26.400
MAGNESIUM	4.890	4.670	5.040	6.350	4.520	1.290	2.510	2.740	2.550	3.210	3.650	2.450
POTASSIUM	0.600	0.800	0.700	1.000	0.900	0.400	0.700	1.000	0.900	1.100	0.800	0.700
SODIUM	4.550	4.100	4.400	8.100	5.500	2.920	3.350	3.950	3.750	4.050	2.430	4.750
ANIONS												
CHLORIDE	0.560	1.130	0.560	1.690	1.690	1.130	1.130	4.400	0.560	1.130	1.130	1.690
SULFATE	0.400	2.000	3.000	7.400	27.000	20.000	10.000	13.000	38.000	64.000	20.200	47.000
MINOR												
IRON		0.080			0.310			0.290			0.080	
MANGANESE		-0.010			0.010			-0.010			-0.010	

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1982
CUMULATIVE MONTHLY REPORT

STATION NUMBER: TC1 Thompson Cr. below Pat H. TYPE: STREAM

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SAMPLE DATE:	01/27/82	02/11/82	03/09/82	04/20/82	05/13/82	06/28/82	07/22/82	08/25/82	09/16/82	10/26/82	11/22/82	12/14/82
PRIMARY												
ARSENIC, UG/L		-10.000			-10.000			-10.000			-10.000	
CADMIUM, UG/L		-5.000			-5.000			-5.000			-5.000	
CHROM., UG/L		-50.000			-50.000			-50.000			-50.000	
LEAD, UG/L		-50.000			-50.000			-50.000			-50.000	
MERCURY, UG/L		0.800			-0.500			-0.500			1.600	
SELENM., UG/L		-10.000			-10.000			-5.000			-10.000	
SECONDARY												
COPPER, UG/L		-10.000			-10.000			-10.000			-10.000	
ZINC, UG/L		17.000			27.000			13.000			28.000	
TRACE METALS												
MOLYBD., UG/L		70.000			-50.000			-50.000			-50.000	
NUTRIENTS												
NITROGEN (KJELDAHL)	0.130	1.100	0.350	3.000	4.100	1.350	0.450	0.700	0.430	-0.100	0.800	0.720
NITROGEN (NITRATE)	-0.050	-0.050	-0.050	0.080	0.100	-0.050	-0.050	—	-0.050	-0.100	0.210	-0.100
PHOSPHATE	-0.050	-0.050	-0.050	-0.050	-0.050	-0.050	-0.050	0.080	-0.050	-0.050	-0.050	-0.050
ORGANICS												
CARBON (TOT. ORG.)	3700.000	520.000	3700.000	9000.000	4000.000	5000.000	5000.000	99000.000	70000.000	26000.000	55000.000	80000.000
CYANIDE		-0.005			-0.020			-0.050			-0.005	

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

R;

.type sal listing b

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1984
CUMULATIVE MONTHLY REPORT

STATION NAME: BUCKSKIN MONITORING WELL TYPE: WELL

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SAMPLE DATE:					05/07/84			08/08/84			11/06/84	
AIR TEMP :												
FLOW RATE :												
WATER LEVEL:												
PHYSICAL PROPERTIES												
SAMP-TMP,FIELD ,DEG. C					8.000			8.000			7.000	
COND. ,FIELD ,UMHO/CM					237.000			252.000			259.000	
PH ,FIELD ,PH					8.650			8.400			8.100	
PH ,LAB ,PH					8.000			8.400			8.000	
ALKALIN.,TOTAL ,MG/L					76.000			76.000			72.000	
HARDNESS,TOTAL ,MG/L					54.900			98.000			66.200	
SOLIDS ,SUSP ,MG/L					7.000			3.000			4.000	
TURBID. ,FIELD ,NTU					0.290			0.350			0.350	
CATIONS												
CALCIUM ,TOTAL ,MG/L								11.000				
MAGNES. ,TOTAL ,MG/L					1.790			2.200			1.630	
SODIUM ,TOTAL ,MG/L								36.500				
POTASS. ,TOTAL ,MG/L								0.580				
ANIONS												
CHLORIDE, ,MG/L								2.160				
SULFATE , ,MG/L					66.000			24.700			37.000	
PRIMARY												
ARSENIC ,TOTAL ,UG/L								20.000				
CADMIUM ,TOTAL ,UG/L								-5.000				
CHROMIUM,T-TOT ,UG/L								-50.000				
LEAD ,TOTAL ,UG/L					-50.000						-50.000	

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1984
CUMULATIVE MONTHLY REPORT

STATION NAME: BUCKSKIN MONITORING WELL TYPE: WELL

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MERCURY ,TOTAL ,UG/L								0.900				
SELENIUM,TOTAL ,UG/L								-5.000				
SECONDARY												
COPPER ,TOTAL ,UG/L					-10.000						10.000	
ZINC ,TOTAL ,UG/L					32.000						-1.000	
IRON ,TOTAL ,UG/L					50.000						200.000	
MANGAN. ,TOTAL ,UG/L					20.000						70.000	
TRACE METALS												
MOLY. ,TOTAL ,UG/L					-50.000						-50.000	
NUTRIENTS												
NITROGEN,NITRAT,MG/L					-0.100						-0.100	
PHOSPHAT,T-TOT ,MG/L					-0.050						-0.050	
ORGANICS												
CYANIDE ,TOTAL ,MG/L								-0.005				

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

INQ373 - ERROR - UNDEFINED MACRO NAME 'REPORT'.
INQ039 - ERROR - MACRO EXPANSION TERMINATED DUE TO ABOVE ERROR.
INQ072 - ERROR - COMMAND 'HT' NOT RECOGNIZED.

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1984
CUMULATIVE MONTHLY REPORT

STATION NAME: SQUAW CR,MOUTH(BELOW CON.CAMP) TYPE: STREAM

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SAMPLE DATE:		02/15/84			05/09/84			08/08/84			11/06/84	
AIR TEMP :					14.000			30.000				
FLOW RATE :												
WATER LEVEL:												
PHYSICAL PROPERTIES												
SAMP-TMP,FIELD ,DEG. C		-0.500			11.000			17.000				
COND. ,FIELD ,UMHO/CM		312.000			184.000			230.000			297.000	
PH ,FIELD ,PH		8.200			5.750			8.280			8.020	
PH ,LAB ,PH		8.300			7.800			8.100			8.100	
ALKALIN.,TOTAL ,MG/L		128.000			90.000			98.000			112.000	
HARDNESS,TOTAL ,MG/L		165.100			105.800			129.400			180.300	
SOLIDS ,SUSP ,MG/L		3.000			22.000			-1.000			5.000	
TURBID. ,FIELD ,NTU		2.000			6.000						1.400	
CATIONS												
CALCIUM ,TOTAL ,MG/L								33.000				
MAGNES. ,TOTAL ,MG/L		12.800			9.500			8.100			12.700	
SODIUM ,TOTAL ,MG/L								6.500				
POTASS. ,TOTAL ,MG/L								1.740				
ANIONS												
CHLORIDE, ,MG/L								3.230				
SULFATE , ,MG/L		25.000			10.000			9.100			21.000	
PRIMARY												
ARSENIC ,TOTAL ,UG/L								7.000				
CADMIUM ,TOTAL ,UG/L								-5.000				
CHROMIUM,T-TOT ,UG/L								-50.000				
LEAD ,TOTAL ,UG/L					-50.000						-50.000	

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1984
CUMULATIVE MONTHLY REPORT

STATION NAME: SQUAW CR,MOUTH(BELOW CON.CAMP) TYPE: STREAM

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MERCURY ,TOTAL ,UG/L								-0.500				
SELENIUM,TOTAL ,UG/L								-5.000				
SECONDARY												
COPPER ,TOTAL ,UG/L					-10.000						-10.000	
ZINC ,TOTAL ,UG/L					37.000						17.000	
IRON ,TOTAL ,UG/L					220.000						80.000	
MANGAN. ,TOTAL ,UG/L					10.000						10.000	
TRACE METALS												
MOLY. ,TOTAL ,UG/L					-50.000						-50.000	
NUTRIENTS												
NITROGEN,NITRAT,MG/L		-0.100			-0.100						0.150	
PHOSPHAT,T-TOT ,MG/L		0.090			0.200						0.060	
ORGANICS												
CYANIDE ,TOTAL ,MG/L								-0.005				

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1984
CUMULATIVE MONTHLY REPORT

STATION NAME: SQUAW CR-USGS GAUGING STATION TYPE: STREAM

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SAMPLE DATE:	01/23/84	02/15/84	03/15/84	04/12/84	05/09/84	06/03/84	07/09/84	08/08/84	09/04/84	10/09/84	11/06/84	12/06/84
AIR TEMP :	-4.000	-2.000	7.000	-2.000								
FLOW RATE :						6.500	24.000	30.000	11.000	22.000		
WATER LEVEL:												
PHYSICAL PROPERTIES												
SAMP-TMP,FIELD ,DEG. C		-0.500	3.000	0.500	10.000	3.000	11.000	16.500	6.500	7.000		-1.000
COND. ,FIELD ,UMHO/CM	230.000	244.000	241.000	231.000	175.000	95.000	136.000	203.000	247.000	259.000	230.000	258.000
PH ,FIELD ,PH	8.300	8.500	7.900	7.490	5.500	7.260	8.100	8.340	8.130	8.600	8.050	7.740
PH ,LAB ,PH	7.800	8.000	7.600	7.900	7.000	7.800	8.000	8.200	8.100	8.000	7.900	7.800
ALKALIN.,TOTAL ,MG/L	110.000	104.000	92.000	102.000	64.000	44.000	60.000	94.000	118.000	102.000	92.000	100.000
HARDNESS,TOTAL ,MG/L	140.600	122.900	122.800	122.800	94.100	51.000	56.400	109.800	131.600	167.200	125.100	135.800
SOLIDS ,SUSP ,MG/L	3.000	8.000	7.000	2.000	14.000	58.000	10.000	2.000	-1.000	-1.000	9.000	-1.000
TURBID. ,FIELD ,NTU	3.600	4.100	3.700	3.900	6.000	17.000	2.500	2.200	1.500	1.400	2.000	1.800
CATIONS												
CALCIUM ,TOTAL ,MG/L								25.100				
MAGNES. ,TOTAL ,MG/L	10.400	9.600	9.900	9.000	7.600	4.200	2.500	7.100	11.200	29.300	10.600	11.200
SODIUM ,TOTAL ,MG/L								5.750				
POTASS. ,TOTAL ,MG/L								1.530				
ANIONS												
CHLORIDE, ,MG/L								2.160				
SULFATE , ,MG/L	72.000	20.000	18.000	26.000	24.000	4.000	2.000	6.600	11.500	13.200	13.000	25.000
PRIMARY												
ARSENIC ,TOTAL ,UG/L								7.000				
CADMIUM ,TOTAL ,UG/L								-5.000				
CHROMIUM,T-TOT ,UG/L								-50.000				
LEAD ,TOTAL ,UG/L	-50.000	-50.000	-50.000	-50.000	-50.000	-50.000	-50.000	-50.000	-50.000	-50.000	-50.000	-50.000

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1984
CUMULATIVE MONTHLY REPORT

STATION NAME: SQUAW CR-USGS GAUGING STATION TYPE: STREAM

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MERCURY ,TOTAL ,UG/L								-0.500				
SELENIUM,TOTAL ,UG/L								-5.000				
SECONDARY												
COPPER ,TOTAL ,UG/L	20.000	-10.000	-10.000	10.000	20.000	-10.000	-10.000	-10.000	-10.000	-10.000	-10.000	-10.000
ZINC ,TOTAL ,UG/L	33.000	24.000	42.000	32.000	43.000	30.000	14.000	9.000	17.000	28.000	36.000	27.000
IRON ,TOTAL ,UG/L	200.000	150.000	100.000	220.000	210.000	1410.000	120.000	100.000	50.000	100.000	90.000	110.000
MANGAN. ,TOTAL ,UG/L	10.000	10.000	-10.000	10.000	10.000	50.000	10.000	-10.000	-10.000	10.000	10.000	30.000
TRACE METALS												
MOLY. ,TOTAL ,UG/L	-50.000	-50.000	-50.000	-50.000	-50.000	- 50.000	-50.000	-50.000	-50.000	-50.000	-50.000	-50.000
NUTRIENTS												
NITROGEN,NITRAT,MG/L	0.400	-0.100	-0.100	-0.100	-0.100	0.200	-0.100		0.150	-0.100	0.300	0.110
PHOSPHAT,T-TOT ,MG/L	0.080	-0.050	0.120	-0.050	0.180	0.290	-0.050		-0.050	-0.050	0.090	0.060
ORGANICS												
CYANIDE ,TOTAL ,MG/L								-0.005				

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1984
CUMULATIVE MONTHLY REPORT

STATION NAME: SQUAW CR-BELOW REDBIRD MINE TYPE: STREAM

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SAMPLE DATE:		02/15/84	03/15/84		05/09/84	06/03/84		08/08/84			11/06/84	
AIR TEMP :		-1.000	4.000					29.000				
FLOW RATE :												
WATER LEVEL:												
PHYSICAL PROPERTIES												
SAMP-TMP,FIELD ,DEG. C			2.000		9.000	3.500		14.000			-2.000	
COND. ,FIELD ,UMHO/CM		191.000	187.000		144.000	85.000		158.000			196.000	
PH ,FIELD ,PH		8.000	7.650		7.400	9.340		8.250			7.750	
PH ,LAB ,PH		7.800	7.900		7.600			7.900			7.800	
ALKALIN.,TOTAL ,MG/L		88.000	78.000		70.000			74.000			77.000	
HARDNESS,TOTAL ,MG/L		96.000	89.300		70.600			94.100			114.100	
SOLIDS ,SUSP ,MG/L		14.000	6.000		14.000			-1.000			6.000	
TURBID. ,FIELD ,NTU		4.500	2.600		6.000			2.400			2.000	
CATIONS												
CALCIUM ,TOTAL ,MG/L								18.900				
MAGNES. ,TOTAL ,MG/L		7.300	7.500		6.100			6.050			8.650	
SODIUM ,TOTAL ,MG/L								5.850				
POTASS. ,TOTAL ,MG/L								1.540				
ANIONS												
CHLORIDE, ,MG/L								1.620				
SULFATE , ,MG/L		11.000	8.000		22.000			4.940			7.000	
PRIMARY												
ARSENIC ,TOTAL ,UG/L								-5.000				
CADMIUM ,TOTAL ,UG/L								-5.000				
CHROMIUM,T-TOT ,UG/L								-50.000				
LEAD ,TOTAL ,UG/L		-50.000	-50.000		-50.000			-50.000			-50.000	

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1984
CUMULATIVE MONTHLY REPORT

STATION NAME: SQUAW CR-BELOW REDBIRD MINE TYPE: STREAM

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MERCURY ,TOTAL ,UG/L								-0.500				
SELENIUM,TOTAL ,UG/L								-5.000				
SECONDARY												
COPPER ,TOTAL ,UG/L		-10.000	-10.000		-10.000			-10.000			-10.000	
ZINC ,TOTAL ,UG/L		1200.000	29.000		27.000			12.000			12.000	
IRON ,TOTAL ,UG/L		170.000	90.000		250.000			110.000			100.000	
MANGAN. ,TOTAL ,UG/L		10.000	-10.000		10.000			-10.000			-10.000	
TRACE METALS												
MOLY. ,TOTAL ,UG/L		-50.000	-50.000		-50.000			-50.000			-50.000	
NUTRIENTS												
NITROGEN,NITRAT,MG/L		-0.100	-0.100		-0.100						0.250	
PHOSPHAT,T-TOT ,MG/L		-0.050	-0.050		0.230						0.080	
ORGANICS												
CYANIDE ,TOTAL ,MG/L								-0.005				

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1984
CUMULATIVE MONTHLY REPORT

STATION NAME: BRUNO CR-USGS GAUGING STATION TYPE: STREAM

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SAMPLE DATE:	01/22/84	02/15/84	03/15/84	04/12/84	05/09/84	06/03/84	07/09/84	08/08/84	09/04/84	10/09/84	11/06/84	12/06/84
AIR TEMP :	-3.500	-3.500	4.500	1.500	12.500	7.500		30.000	9.000	20.000		-15.000
FLOW RATE :												
WATER LEVEL:												
PHYSICAL PROPERTIES												
SAMP-TMP ,FIELD ,DEG. C	4.500	3.000	6.000	3.500	11.000	5.000	11.000	13.000	6.000	7.000		
COND. ,FIELD ,UMHO/CM	378.000	543.000	549.000	534.000	478.000	194.000	328.000	428.000	518.000	533.000	552.000	536.000
PH ,FIELD ,PH	8.400	8.400	8.650	8.960	7.720	7.530	8.400	8.300	8.360	8.870	8.500	8.200
PH ,LAB ,PH	8.100	8.200	7.900	8.100	8.100	8.000	8.300	8.300	8.200	8.300	8.200	8.100
ALKALIN. ,TOTAL ,MG/L	210.000	216.000	202.000	202.000	172.000	70.000	136.000	166.000	194.000	203.000	200.000	200.000
ACIDITY ,CACO3 ,MG/L	.000											
HARDNESS ,TOTAL ,MG/L	304.000	341.400	305.000	305.000	262.600	101.900	184.200	258.700	267.000	319.200	283.400	298.800
SOLIDS ,DISS ,MG/L	325.000			215.000			120.000			435.000		
SOLIDS ,SUSP ,MG/L	2.000	16.000	23.000	4.000	12.000	96.000	9.000	-1.000	9.000	3.000	9.000	-1.000
TURBID. ,FIELD ,NTU	3.000	12.000	17.000	5.500	4.700	36.000	3.100	6.400	7.500	3.400	3.800	4.000
CATIONS												
CALCIUM ,TOTAL ,MG/L	68.500			78.300			33.200	56.600		67.010		
MAGNES. ,TOTAL ,MG/L	10.600	24.000	25.200	26.000	20.400	6.800	3.500	11.200	24.600	25.800	22.400	24.500
SODIUM ,TOTAL ,MG/L	4.250			3.300			5.900	4.600		5.920		
POTASS. ,TOTAL ,MG/L	1.300			2.600			1.160	1.040		1.430		
ANIONS												
CHLORIDE, ,MG/L	3.250			16.300			7.540	4.850		8.080		
SULFATE , ,MG/L	200.000	77.000	86.000	79.000	164.000	78.000	78.000	44.400	60.900	75.700	67.000	72.000
MINOR												
FLUORIDE, ,MG/L	0.340			0.310			0.210			0.330		
SILICA , ,MG/L	6.300			7.300			4.000			7.000		

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1984
CUMULATIVE MONTHLY REPORT

STATION NAME: BRUNO CR-USGS GAUGING STATION TYPE: STREAM

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BROMIDE , ,MG/L	-0.0500									0.620		
GASES												
SULPHIDE,TOTAL ,MG/L	-0.100			-0.100			-0.100			-0.100		
PRIMARY												
ARSENIC ,TOTAL ,UG/L	-5.000			-5.000			-10.000	19.000		11.000		
BARIUM ,TOTAL ,UG/L	-100.000			-100.000			-100.000			-100.000		
CADMIUM ,TOTAL ,UG/L	7.000			9.000			-5.000	-5.000		6.000		
CHROMIUM,T-TOT ,UG/L	-50.000			-50.000			-50.000	-50.000		-50.000		
LEAD ,TOTAL ,UG/L	-50.000	-50.000	-50.000	-50.000	-50.000	-50.000	-50.000	-50.000	-50.000	-50.000	-50.000	-50.000
MERCURY ,TOTAL ,UG/L	-0.500			-0.500			-0.500	-0.500		-0.500		
SELENIUM,TOTAL ,UG/L	3.000			-5.000			-5.000	-5.000		-5.000		
SILVER ,TOTAL ,UG/L	-5.000			-5.000			-5.000			-5.000		
SECONDARY												
COPPER ,TOTAL ,UG/L	-10.000	10.000	-10.000	10.000	-10.000	-10.000	-10.000	10.000	-10.000	-10.000	10.000	-10.000
ZINC ,TOTAL ,UG/L	225.000	339.000	255.000	281.000	209.000	208.000	120.000	172.000	267.000	272.000	258.000	168.000
IRON ,TOTAL ,UG/L	180.000	310.000	430.000	210.000	260.000	1040.000	220.000	230.000	220.000	100.000	380.000	150.000
MANGAN. ,TOTAL ,UG/L	-10.000	30.000	30.000	-10.000	10.000	40.000	20.000	-10.000	10.000	10.000	20.000	-10.000
TRACE METALS												
ALUMINUM,TOTAL ,UG/L	-50.000			-100.000			-100.000			-100.000		
COBALT ,TOTAL ,UG/L	-50.000			-50.000			-50.000			-50.000		
MOLY. ,TOTAL ,UG/L	-50.000	-50.000	-50.000	-50.000	150.000	-50.000	-50.000	-50.000	-50.000	-50.000	-50.000	-50.000
NICKEL ,TOTAL ,UG/L	-50.000			-50.000			-50.000			-50.000		
NUTRIENTS												
C.O.D. ,COD ,MG/L	29.000			9.000			-1.000			5.000		

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED

CYPRUS THOMPSON CREEK
WATER QUALITY MONITORING PROGRAM
SAMPLING DATA FOR 1984
CUMULATIVE MONTHLY REPORT

STATION NAME: BRUNO CR-USGS GAUGING STATION TYPE: STREAM

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
NITROGEN,NITRAT,MG/L	-0.100	-0.100	0.400	0.180	-0.100	0.550	-0.100		-0.100	0.600	0.330	-0.100
PHOSPHAT,T-TOT ,MG/L	-0.050	-0.050	-0.050	0.050	0.130	0.190	0.110		-0.050	-0.050	-0.050	-0.050
ORGANICS												
CYANIDE ,TOTAL ,MG/L	-0.0500			-0.005			-0.005	-0.005		-0.005		
TOC , ,MG/L	81.000			54.000			7.0			99.000		

NOTES: 1) RESULTS ARE EXPRESSED IN MILLIGRAMS PER LITER UNLESS OTHERWISE INDICATED
2) ALL RESULTS ARE TOTALS UNLESS OTHERWISE INDICATED
3) A NEGATIVE VALUE DENOTES LESS THAN THE VALUE INDICATED