SPOKANE RIVER BASIN

12414500 ST. JOE RIVER AT CALDER, ID--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1989 to September 1993, April to September 1996.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
APR											
16...	1345	6270	46	7.8	9.5	5.0	0.4	11.4	97	K1	40
MAY											
13...	1435	5100	44	8.0	13.0	6.5	0.4	11.6	102	K4	K8
JUN											
12...	1030	5230	37	7.6	24.0	9.0	1.0	11.2	104	K1	50
JUL											
16...	0900	1230	54	7.5	23.0	17.0	--	8.3	93	K2	--
AUG											
12...	1330	595	62	8.4	29.0	18.5	0.3	8.4	96	K1	<1
SEP											
04...	1345	436	65	7.7	17.0	14.5	0.3	9.4	100	K4	K8

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER WH FET FIELD MG/L AS HCO3 (00440)	CAR-BONATE WATER WH FET FIELD MG/L AS CO3 (00445)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)
SEP									
04...	28	8.2	1.8	1.4	10	0.8	39	0	32

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)
SEP								
04...	1.1	0.2	<0.1	9.5	58	42	0.08	68.3

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
APR								
16...	<0.01	0.09	0.060	<0.2	<0.01	0.02	7	119
MAY								
13...	<0.01	0.06	0.020	<0.2	0.02	<0.01	5	69
JUN								
12...	<0.01	<0.05	<0.015	<0.2	<0.01	<0.01	6	85
JUL								
16...	<0.01	0.07	0.030	<0.2	<0.01	<0.01	1	3.3
AUG								
12...	<0.01	<0.05	0.020	<0.2	<0.01	0.01	1	1.6
SEP								
04...	<0.01	<0.05	<0.015	<0.2	<0.01	<0.01	2	2.4

K Results based on counts outside ideal colony range.

WATER QUALITY RECORDS

PERIOD OF RECORD.--July 1989 To September 1993, April to September 1996, April 1998 to current.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: July 29 to September 30, 1998.

INSTRUMENTATION.--Temperature recording data logger.

EXTREMES FOR CURRENT PERIOD.--
WATER TEMPERATURE: Maximum, 23.1 °C August 4; minimum 11.5 °C September 30.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
APR											
27...	1320	5010	42	7.1	21.0	6.2	.82	12.4	108	K1	K2
MAY											
11...	1215	6360	34	7.3	19.5	7.3	.51	12.1	110	K1	K1
JUN											
15...	1220	2980	46	7.4	16.5	10.4	.42	10.4	103	K14	35
JUL											
08...	1500	1380	57	6.7	30.0	17.9	.22	9.7	111	K1	K4
AUG											
10...	1300	607	66	8.0	30.5	19.7	.22	9.6	114	K5	K15
SEP											
14...	1330	413	69	7.8	27.5	16.0	--	14.6	157	K10	120

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC WATER UNFLTRD FET FIELD MG/L AS HCO3 (00440)	ANC UNFLTRD CARB FET FIELD MG/L AS CO3 (00445)
SEP								
14...	31	9.2	1.9	1.4	9	.84	39	0

DATE	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)
SEP								
14...	32	1.0	.35	<.10	8.8	43	.06	47.8

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
APR								
27...	<.010	<.050	.035	<.10	<.010	<.010	3	41
MAY								
11...	<.010	<.050	.068	<.10	<.010	<.010	5	86
JUN								
15...	<.010	.057	.053	<.10	.019	.014	2	16
JUL								
08...	<.010	<.050	.054	<.10	<.010	.020	2	7.5
AUG								
10...	<.010	<.050	.046	<.10	<.010	<.010	1	1.6
SEP								
14...	.012	<.050	.028	<.10	<.010	<.010	1	1.1

K Results based on counts outside ideal range.

SPOKANE RIVER BASIN

12414500 ST. JOE RIVER AT CALDER, ID--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JULY			AUGUST			SEPTEMBER	
1	---	---	---	21.3	17.9	19.7	20.2	17.1	18.6
2	---	---	---	21.0	17.1	18.9	20.3	16.8	18.5
3	---	---	---	22.6	19.2	20.9	20.5	16.8	18.6
4	---	---	---	23.1	20.0	21.6	20.5	16.9	18.7
5	---	---	---	23.0	20.2	21.7	20.5	17.1	18.7
6	---	---	---	22.8	20.2	21.6	20.5	17.1	18.7
7	---	---	---	21.8	19.5	20.8	19.0	17.2	18.2
8	---	---	---	21.1	18.2	19.8	20.6	17.6	18.9
9	---	---	---	21.3	18.0	19.7	19.3	17.1	18.5
10	---	---	---	21.6	18.5	20.1	17.9	16.1	17.0
11	---	---	---	22.0	18.9	20.5	18.5	15.8	17.1
12	---	---	---	22.1	18.9	20.6	18.4	15.3	16.8
13	---	---	---	22.6	19.2	20.9	18.0	15.0	16.6
14	---	---	---	22.6	19.7	21.2	18.2	14.9	16.5
15	---	---	---	22.3	19.7	21.0	18.4	15.0	16.7
16	---	---	---	20.6	18.5	19.5	18.4	15.8	16.9
17	---	---	---	18.9	16.9	17.8	17.6	15.7	16.7
18	---	---	---	18.0	15.5	16.8	16.9	15.3	16.1
19	---	---	---	18.5	15.0	16.8	15.3	13.9	14.6
20	---	---	---	19.3	15.8	17.5	15.2	13.3	14.2
21	---	---	---	20.5	17.2	18.8	15.2	12.5	13.8
22	---	---	---	20.3	17.7	19.1	14.9	12.2	13.5
23	---	---	---	18.9	16.3	17.3	14.9	12.4	13.5
24	---	---	---	18.0	15.5	16.8	14.2	12.1	13.1
25	---	---	---	19.2	15.8	17.5	13.5	12.5	13.0
26	---	---	---	18.5	16.0	17.3	14.6	12.1	13.1
27	---	---	---	18.9	15.3	17.1	14.7	12.2	13.3
28	---	---	---	19.2	15.5	17.3	14.4	12.1	13.1
29	22.6	20.2	21.4	19.5	16.1	17.7	14.1	11.6	12.9
30	22.1	20.0	21.1	20.0	16.5	18.1	13.9	11.5	12.6
31	22.3	19.8	20.9	20.5	16.8	18.6	---	---	---
MONTH	---	---	---	23.1	15.0	19.1	20.6	11.5	15.9

WATER QUALITY RECORDS

PERIOD OF RECORD.--July 1989 To September 1993, April to September 1996, April 1998 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: July 29 to September 30, 1998, May 11 to September 30, 1999 (discontinued).

INSTRUMENTATION.--Temperature recording data logger.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 23.1 ^{o}C Aug. 4, 1998.

EXTREMES FOR CURRENT PERIOD.--
WATER TEMPERATURE: Maximum, 21.0 ^{o}C Aug. 6, 19.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)
OCT										
21...	1315	357	61	7.5	9.0	7.0	--	--	--	--
NOV										
19...	1215	531	53	7.9	7.5	5.0	--	--	--	--
DEC										
09...	1400	688	56	7.3	2.5	2.0	--	--	--	--
JAN										
26...	1400	1100	51	7.7	-2.0	.0	--	--	--	--
FEB										
09...	1135	952	52	7.4	.0	1.0	--	--	--	--
MAR										
10...	0900	1140	54	6.9	5.0	2.0	--	--	--	--
APR										
14...	0845	2470	53	7.1	5.5	3.1	1.1	12.5	100	<1
MAY										
10...	1115	4320	45	7.6	6.5	3.9	1.5	12.3	102	<1
JUN										
08...	0710	6990	34	7.4	7.5	6.0	1.5	11.7	101	K7
JUL										
14...	0910	2790	38	7.3	17.5	11.6	1.6	10.1	102	K6
AUG										
10...	1515	929	54	7.7	33.0	18.7	.32	11.9	139	K4
SEP										
09...	0845	546	61	7.4	14.5	11.1	.42	9.4	93	K2

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC WATER UNFLTRD FET FIELD MG/L AS HCO3 (00440)	ANC UNFLTRD CARB FET FIELD MG/L AS CO3 (00445)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)
OCT										
21...	--	27	8.1	1.8	--	--	--	--	--	--
NOV										
19...	--	22	6.3	1.4	--	--	--	--	--	--
DEC										
09...	--	22	6.5	1.5	--	--	--	--	--	--
JAN										
26...	--	23	6.7	1.6	--	--	--	--	--	--
FEB										
09...	--	25	7.2	1.6	--	--	--	--	--	--
MAR										
10...	--	25	7.2	1.6	--	--	--	--	--	--
APR										
14...	240	22	6.5	1.5	--	--	--	--	--	--
MAY										
10...	K3	19	5.4	1.2	1.0	--	--	26	0	22
JUN										
08...	K6	14	4.1	.90	.85	--	--	19	0	16
JUL										
14...	K5	15	4.5	.96	.85	--	--	22	0	18
AUG										
10...	K2	23	6.9	1.4	1.2	--	--	32	0	27
SEP										
09...	41	26	7.6	1.6	1.2	9	.72	36	0	29

K Results based on counts outside ideal colony range.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
OCT									
21...	--	--	--	--	.005	<.002	<.10	.002	.001
NOV									
19...	--	--	--	--	.018	.003	<.10	.004	<.001
DEC									
09...	--	--	--	--	<.005	.002	<.10	.003	.002
JAN									
26...	--	--	--	--	.010	.003	E.06	.005	.003
FEB									
09...	--	--	--	--	.007	.003	<.10	.005	.003
MAR									
10...	--	--	--	--	<.005	<.002	<.10	<.004	.002
APR									
14...	--	--	--	--	<.005	.003	<.10	.007	.003
MAY									
10...	.79	.20	<.10	9.3	<.005	.004	<.10	.004	.002
JUN									
08...	.78	.15	<.10	8.0	.018	.004	.11	.009	.004
JUL									
14...	.37	.11	<.10	7.9	<.005	<.002	E.06	.005	.002
AUG									
10...	.49	.19	<.10	9.8	<.005	.011	E.07	<.004	.002
SEP									
09...	.91	E.16	<.10	9.6	<.005	.013	E.08	<.004	.002

DATE	TIME	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
OCT									
21...	1315	<1	<1	<1	<1	<20	<10	--	--
NOV									
19...	1215	<1	<1	<1	<1	<20	<10	--	--
DEC									
09...	1400	<1	<1	<1	<1	<20	<10	--	--
JAN									
26...	1400	<1	<1	<1	<1	<20	<10	--	--
FEB									
09...	1135	<1	<1	<1	<1	<20	<10	--	--
MAR									
10...	0900	<1	<1	<1	<1	<20	<40	--	--
APR									
14...	0845	<1	<1	<1	<1	<20	<40	1	6.7
MAY									
10...	1115	<1	<.1	<1	<.1	<1	<1.0	1	12
JUN									
08...	0710	<1	<.1	<1	<.1	1	<1.0	8	151
JUL									
14...	0910	<1	<.1	<1	<.1	2	<1.0	2	15
AUG									
10...	1515	<1	<.1	<1	<.1	<1	<1.0	1	2.5
SEP									
09...	0845	<1	<.1	<1	<.1	<1	<1.0	<1	--

E Positive detection but below stated detection limits.

WATER TEMPERATURE, DEGREES CELSIUS, MAY TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN
		APRIL			MAY	
1	---	---	---	---	---	---
2	---	---	---	---	---	----
3	---	---	---	---	---	---
4	---	---	---	---	---	---
5	---	---	---	---	---	---
6	---	---	---	---	---	---
7	---	---	---	---	---	---
8	---	---	---	---	---	---
9	---	---	---	---	---	---
10	---	---	---	---	---	---
11	---	---	---	7.6	4.3	6.0
12	---	---	---	7.3	6.0	6.3
13	---	---	---	6.6	4.8	5.7
14	---	---	---	7.4	5.1	6.1
15	---	---	---	6.2	4.8	5.7
16	---	---	---	6.9	5.1	6.0
17	---	---	---	6.9	5.9	6.4
18	---	---	---	7.4	5.9	6.7
19	---	---	---	8.2	5.9	6.9
20	---	---	---	7.4	5.7	6.3
21	---	---	---	8.3	5.5	6.8
22	---	---	---	8.5	5.5	7.0
23	---	---	---	9.0	5.9	7.4
24	---	---	---	8.8	5.9	7.3
25	---	---	---	8.3	5.5	6.9
26	---	---	---	7.9	5.2	6.6
27	---	---	---	8.3	5.1	6.7
28	---	---	---	8.8	5.7	7.3
29	---	---	---	8.3	5.9	7.1
30	---	---	---	7.6	5.4	6.6
31	---	---	---	6.9	5.4	6.0
MONTH	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.7	6.0	6.7	10.0	8.5	9.2	18.2	15.2	16.9	15.8	12.1	13.8
2	7.4	6.2	6.6	9.4	7.7	8.2	19.8	16.4	18.1	15.0	11.9	13.2
3	6.5	5.7	6.0	9.0	6.6	7.7	20.0	17.7	18.8	14.9	11.3	13.0
4	7.9	5.5	6.6	8.7	7.1	8.0	19.5	17.2	18.3	14.5	11.9	13.3
5	7.6	6.0	6.6	11.8	7.4	9.4	19.3	17.1	18.2	15.2	12.1	13.6
6	6.6	5.7	6.2	13.0	9.3	11.2	21.0	17.7	19.2	14.4	12.5	13.3
7	6.8	5.1	6.0	12.5	10.5	11.5	20.6	18.0	19.2	15.2	11.4	13.1
8	6.6	5.9	6.3	12.8	9.3	11.1	19.0	16.1	17.7	15.7	11.3	13.3
9	7.1	5.5	6.3	13.6	10.0	11.9	19.8	16.4	18.1	15.5	11.6	13.5
10	7.7	5.7	6.7	14.5	11.0	12.8	20.5	16.8	18.4	16.0	12.1	13.9
11	9.9	6.6	8.1	14.9	11.4	13.2	18.5	16.8	17.8	15.5	11.6	13.4
12	10.2	7.6	8.9	15.3	11.9	13.7	19.3	15.8	17.5	15.2	11.0	13.0
13	9.7	7.9	8.4	15.3	12.1	13.9	17.7	14.9	16.1	15.2	10.8	12.8
14	9.9	7.6	8.6	14.7	12.1	13.6	15.5	14.1	14.7	15.5	11.1	13.1
15	10.4	7.7	8.9	13.6	11.4	12.3	14.4	13.6	13.9	15.7	11.4	13.4
16	10.0	7.7	9.0	13.5	10.0	11.7	16.4	13.2	14.6	15.2	11.6	13.3
17	9.6	7.4	8.6	14.2	11.3	12.9	18.4	14.4	16.4	15.8	11.6	13.5
18	9.0	7.1	8.1	15.7	12.4	14.0	19.3	15.8	17.6	15.8	11.8	13.6
19	9.3	7.3	8.3	15.5	12.4	14.1	21.0	17.1	19.0	15.7	11.8	13.5
20	9.0	7.4	8.2	16.3	13.3	14.9	20.8	17.4	19.2	15.0	11.0	12.8
21	9.0	7.6	8.1	16.4	14.1	15.5	20.8	17.7	19.2	14.5	10.5	12.4
22	7.9	7.3	7.5	16.3	13.6	15.2	20.2	16.6	18.4	14.9	10.7	12.6
23	9.4	7.1	8.1	16.8	13.8	15.5	20.2	16.3	18.1	14.7	10.8	12.7
24	9.1	7.9	8.6	16.4	13.3	14.6	19.2	16.4	17.9	13.8	11.6	12.5
25	9.0	7.1	8.0	14.2	12.1	13.1	20.5	16.8	18.5	11.9	10.4	11.2
26	8.5	6.6	7.4	15.8	12.4	14.2	20.8	16.9	18.8	10.8	9.0	10.0
27	9.1	6.9	8.0	17.1	13.9	15.7	20.3	17.2	18.7	10.2	7.9	8.9
28	8.8	7.3	8.1	18.4	15.2	16.9	18.2	16.8	17.4	10.2	6.8	8.3
29	10.0	8.0	8.9	19.3	16.1	17.6	19.5	16.3	17.8	9.4	6.8	7.9
30	9.9	9.0	9.4	17.7	15.8	16.7	18.7	16.3	17.6	10.2	6.5	8.1
31	---	---	---	17.9	15.0	16.5	16.3	13.6	15.0	---	---	---
MONTH	10.4	5.1	7.7	19.3	6.6	13.1	21.0	13.2	17.6	16.0	6.5	12.4

COLLECTION METHODS.--Composite of 5, 0.25 m^2 samples. Richest targeted habitat--riffles.
MESH SIZE.--425 um.
AVERAGE DEPTH.-- 0.25 m.
AVERAGE PERCENT SHADING.--30.
AVERAGE VELOCITY.-- 2.6 cfs.
SUBSTRATE EMBEDDEDNESS CLASS RANGE.--4.
PERCENT FINES RANGE.--<10.
HABITAT QUALITY INDEX.--78.
REMARKS.--Few riffles, many deep pools.

BIOLOGICAL DATA, JULY 1998
BENTHIC INVERTEBRATE COLLECTION DATA

ORGANISM **TAXON** *GENUS SPECIES*	DATE JULY 8	NUMBER OF INDIV-IDUALS	PERCENT COMPO-SITION	FUNC-TIONAL FEEDING GROUP	POLLU-TION TOLER-ANCE VALUE
NON-INSECTS					
Nematoda		4	0.2	PA	5
Enchytraeidae		4	0.2	CG	10
Acari		4	0.2	PA	5
EPHEMEROPTERA					
Baetidae		4	0.2	CG	4
Acentrella insignificans		96	3.8	CG	6
Acentrella turbida		560	22.4	CG	4
Baetis tricaudatus		224	9.0	CG	6
Centroptilum		4	0.2	CG	2
Diphetor hageni		4	0.2	CG	5
Attenella margarita		24	1.0	CG	2
Drunella doddsi		8	0.3	CG	0
Drunella grandis/spinifera		8	0.3	CG	0
Serratella		148	5.9	CG	2
Cinygmula		4	0.2	SC	4
Epeorus albertae		108	4.3	SC	1
Epeorus deceptivus		8	0.3	SC	0
Heptagenia/Nixe		56	2.2	SC	2
Rhithrogena		276	11.0	SC	0
Leptophlebiidae		12	0.5	CG	2
PLECOPTERA					
Chloroperlidae		40	1.6	PR	1
Calineuria californica		8	0.3	PR	2
Claassenia sabulosa		8	0.3	PR	3
Hesperoperla pacifica		16	0.6	PR	2
Isoperla		4	0.2	PR	2
Pteronarcys californica		4	0.2	OM	1
TRICHOPTERA					
Arctopsyche grandis		4	0.2	PR	1
Amiocentrus aspilus		4	0.2	CG	3
Brachycentrus americanus		52	2.1	OM	1
Brachycentrus occidentalis		172	6.9	OM	1
Micrasema		4	0.2	MH	1
Culoptila		4	0.2	SC	2
Glossosoma		4	0.2	SC	1
Hydropsyche		64	2.6	CF	4
Lepidostoma-sand case larva		8	0.3	SH	1
Neophylax rickeri		4	0.2	SC	2
COLEOPTERA					
Narpus		16	0.6	CG	4
Optioservus		8	0.3	SC	4
Ordobrevia nubifera		12	0.5	CG	4
Zaitzevia		40	1.6	CG	4
DIPTERA					
Atherix		4	0.2	PR	4
Simulium		20	0.8	CF	6
Tipulidae		4	0.2	UN	3
Antocha		24	1.0	CG	3
Hexatoma		4	0.2	PR	2
CHIRONOMIDAE					
Chironomidae-pupae		88	3.5	UN	6
Cladotanytarsus		4	0.2	CG	7
Diamesa		8	0.3	CG	5
Eukiefferiella		20	0.8	OM	8
Micropsectra		4	0.2	CG	7
Microtendipes		8	0.3	CG	6
Orthocladius Complex		88	3.5	CG	6
Pagastia		16	0.6	CG	1
Polypedilum		136	5.4	OM	6
Potthastia Gaedii Gr.		4	0.2	CG	2
Rheotanytarsus		36	1.4	CF	6
Tvetenia Bavarica Gr.		4	0.2	CG	5

TOTAL NUMBER OF TAXA 56
TOTAL NUMBER OF ORGANISMS 2504/m^2
HILSENHOFF BIOTIC INDEX 3.40

EPT ABUNDANCE 1944/m^2
NUMBER EPT TAXA 32

12414500 ST. JOE RIVER AT CALDER, ID--Continued

COLLECTION METHODS.--Qualitative multiple habitat, relative abundance.
MESH SIZE.--210 um.
GEAR TYPE.--D-frame net and visual collections.

REACH LENGTH.--899 m.

AVERAGE WIDTH.-- 80 m.

HABITAT QUALITY INDEX.--78.

REMARKS.--Few riffles, many deep pools.

BIOLOGICAL DATA, JULY 1998
BENTHIC INVERTEBRATE COLLECTION DATA

ORGANISM **TAXON** *GENUS SPECIES*	DATE JULY 8	NUMBER OF INDIV-IDUALS	PERCENT COMPO-SITION	FUNC-TIONAL FEEDING GROUP	POLLU-TION TOLER-ANCE VALUE
NON-INSECTS					
Enchytraeidae		5	0.2	CG	10
Sphaeriidae		5	0.2	CG	8
Margaritifera		5	0.2	CF	4
ODANATA					
Enallagma/ischnura		5	0.2	PR	9
EPHEMEROPTERA					
Baetidae		15	0.5	CG	4
Acentrella insignificans		125	3.8	CG	6
Acentrella turbida		65	2.0	CG	4
Baetis tricaudatus		235	7.2	CG	6
Callibaetis		140	4.3	CG	9
Centroptilum		475	14.5	CG	2
Attenella margarita		85	2.6	CG	2
Drunella coloradensis/flavilinea		5	0.2	CG	0
Ephemerella inermis/infrequens		30	0.9	CG	1
Serratella		40	1.2	CG	2
Timpanoga hecuba		20	0.6	CG	7
Epeorus albertae		20	0.6	SC	1
Heptagenia/Nixe		5	0.2	SC	2
Rhithrogena		50	1.5	SC	0
Leptophlebiidae		5	0.2	CG	2
Ameletus		15	0.5	CG	0
Siphlonurus		50	1.5	CG	7
PLECOPTERA					
Chloroperlidae		20	0.6	PR	1
HEMIPTERA					
Corixidae		125	3.8	UN	8
Gerris		5	0.2	PR	11
TRICHOPTERA					
Brachycentrus occidentalis		180	5.5	OM	1
Hydropsyche		10	0.3	CF	4
Lepidostoma-turret case larva		265	8.1	SH	2
Mystacides		10	0.3	OM	4
Dicosmoecus gilvipes		5	0.2	SC	2
Psychoglypha subborealis		5	0.2	OM	2
COLEOPTERA					
Dytiscidae		5	0.2	PR	5
Optioservus		20	0.6	SC	4
Zaitzevia		5	0.2	CG	4
DIPTERA					
Culicidae		10	0.3	CG	8
Empididae		5	0.2	PR	6
Simulium		20	0.6	CF	6
Tipulidae		10	0.3	UN	3
CHIRONOMIDAE					
Chironomidae-pupae		20	0.6	UN	6
Ablabesmyia		10	0.3	CG	8
Brillia		10	0.3	SH	5
Corynoneura		10	0.3	CG	7
Cricotopus Bicinctus Gr.		170	5.2	CG	7
Cryptochironomus		10	0.3	PR	8
Eukiefferiella		10	0.3	OM	8
Limnophyes		10	0.3	CG	8
Micropsectra		45	1.4	CG	7
Odontomesa		25	0.8	CG	4
Orthocladius Complex		55	1.7	CG	6
Pagastia		10	0.3	CG	1
Paratanytarsus		35	1.1	UN	6
Paratendipes		10	0.3	CG	8
Pentaneura		10	0.3	CG	6
Phaenopsectra		10	0.3	SC	7
Polypedilum		160	4.9	OM	6
Rheotanytarsus		25	0.8	CF	6
Stilocladius		10	0.3	UN	6
Thienemanniella		395	12.0	CG	6
Thienemannimyia Gr.		115	3.5	PR	6
Zavrelimyia		25	0.8	PR	8

TOTAL NUMBER OF TAXA	59	EPT ABUNDANCE	1875
TOTAL NUMBER OF ORGANISMS	3280	NUMBER EPT TAXA	24
HILSENHOFF BIOTIC INDEX	4.65		

SPOKANE RIVER BASIN

12414500 ST. JOE RIVER AT CALDER, ID--Continued

WATER-QUALITY RECORDS

BIOLOGICAL DATA, JULY 1998

DATE	TIME	ORGANISM	INDI-VIDUALS IN SAMPLE (NO.) (81614)	WEIGHT SAMPLE BIOTA TISSUE COMP. AVERAGE (GRAMS) (01373)	LENGTH SAMPLE BIOTA TISSUE COMP. AVERAGE (CM) (01371)	ALUMI-NUM, BIOTA, TISSUE, DRY WGT REC (UG/G) (49237)	ANTI-MONY, BIOTA, TISSUE, DRY WGT REC (UG/G) (49246)	ARSENIC BIOTA, TISSUE, DRY WGT REC (UG/G) (49247)
JUL 08	1410	Mt. whitefish	8	--	--	1.5	<.2	<.2

DATE	BARIUM, BIOTA, TISSUE, DRY WGT REC (UG/G) (49238)	BERYL-LIUM-, BIOTA, TISSUE, DRY WGT REC (UG/G) (49248)	BORON, BIOTA, TISSUE, DRY WGT REC (UG/G) (49239)	CADMIUM BIOTA, TISSUE, DRY WGT REC (UG/G) (49249)	CHROM-IUM-, BIOTA, TISSUE, DRY WGT REC (UG/G) (49240)	COBALT, BIOTA TISSUE, DRY WGT REC (UG/G) (49250)	COPPER, BIOTA, TISSUE, DRY WGT REC (UG/G) (49241)	IRON, BIOTA, TISSUE, DRY WGT REC (UG/G) (49242)	LEAD, BIOTA, TISSUE, DRY WGT REC (UG/G) (49251)	MANGAN-ESE, BIOTA, TISSUE, DRY WGT REC (UG/G) (49243)
JUL 08	.3	<.2	.4	<.2	<.5	<.2	1.5	21	<.2	1.4

DATE	MERCURY BIOTA, TISSUE, DRY WGT REC (UG/G) (49258)	MOLYB-DENUM, BIOTA, TISSUE, DRY WGT REC (UG/G) (49252)	NICKEL, BIOTA, TISSUE, DRY WGT REC (UG/G) (49253)	SELEN-IUM, BIOTA, TISSUE, DRY WGT REC (UG/G) (49254)	SILVER, BIOTA, TISSUE, DRY WGT REC (UG/G) (49255)	STRON-TIUM, BIOTA, TISSUE, DRY WGT REC (UG/G) (49244)	VANA-DIUM BIO TIS DRY WGT REC (UG/G) (49465)	ZINC, BIOTA, TISSUE, DRY WGT REC (UG/G) (49245)	URANIUM BIOTA, TISSUE, DRY WGT REC (UG/G) (49257)	WATER, PRESENT BIO TIS DRY WGT REC PERCENT (49273)
JUL 08	.2	<.2	<.2	1.0	<.2	1.2	<.2	16	<.2	71

DATE	TIME	ORGANISM	INDI-VIDUALS IN SAMPLE (NO.) (81614)	WEIGHT SAMPLE BIOTA TISSUE COMP. AVERAGE (GRAMS) (01373)	LENGTH SAMPLE BIOTA TISSUE COMP. AVERAGE (CM) (01371)	ALDRIN, BIOTA, WH ORG WW, REC (UG/KG) (49353)	CIS-CHLOR-DANE, BIOTA, WH ORG WW, REC (UG/KG) (49380)
JUL 08	1400	Mt. whitefish	8	--	--	<5.00	<5.00

DATE	CHLOR-DANE, BIOTA, WH ORG WW, REC (UG/KG) (49379)	O,P'-DCPA, BIOTA, WH ORG WW, REC (UG/KG) (49378)	P,P'-DDT, BIOTA, WH ORG WW, REC (UG/KG) (49377)	P,P'-DDT, BIOTA, WH ORG WW, REC (UG/KG) (49376)	O,P'-DDD, BIOTA, WH ORG WW, REC (UG/KG) (49375)	O,P'-DDD, BIOTA, WH ORG WW, REC (UG/KG) (49374)	P,P'-DDE, BIOTA, WH ORG WW, REC (UG/KG) (49373)	DDE, BIOTA, WH ORG WW, REC (UG/KG) (49372)	TRANS-DIEL-DRIN, BIOTA, WH ORG WW, REC (UG/KG) (49371)
JUL 08	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	10.0	<5.00

DATE	ENDRIN, BIOTA, WH ORG WW, REC (UG/KG) (49370)	HEPTA-CHLOR, BIOTA, WH ORG WW, REC (UG/KG) (49369)	HEPTA-CHLOR EPOXIDE BIOTA, WH ORG WW, REC (UG/KG) (49368)	BENZENE HEXA-CHLORO-BIOTA, WH ORG WW, REC (UG/KG) (49367)	ALPHA-BHC, BIOTA, WH ORG WW, REC (UG/KG) (49366)	BETA-BHC, BIOTA, WH ORG WW, REC (UG/KG) (49365)	DELTA-BHC, BIOTA, WH ORG WW, REC (UG/KG) (49364)	LINDANE BIOTA, WH ORG WW, REC (UG/KG) (49363)	METHOXY CHLOR, O,P'-, BIOTA, WH ORG WW, REC (UG/KG) (49362)
JUL 08	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00

DATE	METHOXY CHLOR, P,P'-, BIOTA, WH ORG WW, REC (UG/KG) (49361)	MIREX, BIOTA, WH ORG WW, REC (UG/KG) (49360)	CIS-NONA-CHLOR, BIOTA, WH ORG WW, REC (UG/KG) (49359)	TRANS-NONA-CHLOR, BIOTA, WH ORG WW, REC (UG/KG) (49358)	OXY-CHLOR DANE, BIOTA, WH ORG WW, REC (UG/KG) (49357)	PENTA CHLORO ANISOLE BIOTA, WH ORG WW, REC (UG/KG) (49356)	PCB, BIOTA, WH ORG WW, REC (UG/KG) (49354)	TOXA-PHENE, BIOTA, WH ORG WW, REC (UG/KG) (49355)	LIPIDS, BIOTA, WH ORG WW, REC PERCENT (49289)
JUL 08	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<50.0	<200	3.90

COLLECTION METHODS.--Electrofishing; backpack (11A); boat (13A).

LENGTH OF REACH.--899 m.

TIME ELAPSED FOR EACH COLLECTION METHOD.--Backpack (11A)-0.17 hours; boat (13A)-0.97 hours.

ANOMALY CODES.--AA-none; DE-deformities; ER-eroded fins; LE-lesions; TU-tumors; AL-anchor worms; BL-black spot; CL-leeches; IC-ich; NE-blind; P -other parasites; PE-popeye.

HABITAT QUALITY INDEX.--78.

BIOLOGICAL DATA, JULY 1998
FISH COLLECTION DATA

ORGANISM **FAMILY** *GENUS SPECIES* (COMMON)	DATE	NUMBER OF INDIV-IDUALS	PERCENT COMPO-SITION	LENGTH RANGE TOTAL MM	WEIGHT RANGE IN GM	ORIGIN	TROPHIC GROUP OF ADULTS	TEMPER-ATURE PREFER-ENCE	NUMBER AND TYPE OF ANOMALY
	JUL 8								
Catostomidae (Suckers)									
Catostomus columbianus (Bridgelip sucker)		6	8	360-471	605-1060	NATIVE	HERBIVORE	COOL	6-AA
Catostomus macrocheilus (Largescale sucker)		35	46.7	310-542	323-1740	NATIVE	OMNIVORE	COOL	35-AA
Cottidae (Sculpins)									
Cottus confusus (Shorthead sculpin)		3	4	52-79	1-5	NATIVE	INVERTIVORE	COLD	3-AA
Cottus rhotheus (Torrent sculpin)		7	9.3	54-95	2-16	NATIVE	INVERTIVORE	COLD	7-AA
Cyprinidae (Carps and minnows)									
Ptychocheilus oregonensis (Northern pikeminnow)		6	8.0	87-351	5-404	NATIVE	PISCIVORE	COOL	6-AA
Rhynichthys osculus (Longnose dace)		1	1.3	76	3	NATIVE	INVERTIVORE	COOL	1-AA
Richardsonius balteatus (Redside shiner)		8	10.7	71-100	3-10	NATIVE	INVERTIVORE	COOL	8-AA
Salmonidae (Trouts)									
Oncorhynchus clarki (Cutthroat trout)		1	1.3	310	336	NATIVE	INVERTIVORE	COLD	1-AA
Prosopium williamsoni (Mountain whitefish)		8	10.7	210-324	212-311	NATIVE	INVERTIVORE	COLD	8-AA

SUMMARY STATISTICS
TOTAL NUMBER OF TAXA 9
TOTAL INDIVIDUALS 75

WATER QUALITY RECORDS

PERIOD OF RECORD.--July 1989 to September 1993, April to September 1996, April 1998 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: July to September 1998, May to September 1999, May to September 2000 (discontinued).

INSTRUMENTATION.--Temperature recording data logger.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum 24.1 °C Aug. 1, 4, 2000.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 24.1 °C Aug. 1, 4.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)
NOV										
16...	1445	650	51	7.7	8.0	4.5	--	--	--	--
JAN										
04...	1610	992	48	7.7	0.0	0.0	--	--	--	--
FEB										
15...	1415	1300	50	7.5	3.0	2.5	--	--	--	--
MAR										
29...	1230	3430	52	7.6	9.0	3.5	.7	12.4	100	K2
MAY										
03...	1245	8720	37	7.5	13.0	5.8	.5	11.6	100	<1
JUN										
01...	0800	5810	36	7.0	9.0	6.4	.3	10.0	86	K4
JUL										
06...	0915	1580	48	7.2	20.0	12.0	.3	12.8	128	K4
AUG										
09...	0910	580	62	7.2	22.0	18.2	.6	--	--	K12
SEP										
06...	1510	686	64	7.6	23.0	12.6	<.5	8.7	87	K10

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC WATER UNFLTRD FET FIELD MG/L AS HCO3 (00440)	ANC UNFLTRD CARB FET FIELD MG/L AS CO3 (00445)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
NOV										
16...	--	23	6.8	1.5	1.2	--	--	--	--	<.3
JAN										
04...	--	22	6.6	1.5	--	--	--	--	--	--
FEB										
15...	--	22	6.5	1.5	--	--	--	--	--	--
MAR										
29...	K1	22	6.3	1.4	--	--	30	0	24	--
MAY										
03...	<1	--	--	--	--	--	--	--	--	--
JUN										
01...	K3	--	--	--	--	--	--	--	--	--
JUL										
06...	K8	--	--	--	--	--	--	--	--	--
AUG										
09...	K13	--	--	--	--	--	--	--	--	--
SEP										
06...	K6	28	8.3	1.7	1.3	.7	37	0	30	.9

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)
NOV										
16...	<.3	<.1	9.6	.007	<.002	<.1	<.008	.001	<1	<1
JAN										
04...	--	--	--	.009	.007	<.1	<.008	<.001	<1	<1
FEB										
15...	--	--	--	<.005	<.002	<.1	E.006	.002	<1	<1
MAR										
29...	--	--	--	<.005	<.002	<.1	E.007	.002	<1	<1
MAY										
03...	--	--	--	.014	.005	<.1	E.004	.001	--	--
JUN										
01...	--	--	--	<.005	.002	<.1	.008	<.001	--	--
JUL										
06...	--	--	--	.005	<.002	.1	E.005	.003	--	--
AUG										
09...	--	--	--	<.005	.009	E.07	<.008	.001	--	--
SEP										
06...	E.2	<.1	9.6	<.005	.003	E.06	<.008	<.001	--	--

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV										
16...	E20.3	E7	<1	<1	1.5	1	<1	<1	--	--
JAN										
04...	28.6	E7	<1	<1	1.4	<1	3	1.5	--	--
FEB										
15...	51.1	E8	<1	<1	1.9	1	1	<1	--	--
MAR										
29...	98.9	E6	<1	<1	2.9	<1	1	<1	3	28
MAY										
03...	--	--	--	--	--	--	--	--	15	353
JUN										
01...	--	--	--	--	--	--	--	--	3	47
JUL										
06...	--	--	--	--	--	--	--	--	2	8.5
AUG										
09...	--	--	--	--	--	--	--	--	1	1.6
SEP										
06...	--	--	--	--	--	--	--	--	1	1.9

E Positive detection but below stated detection limit.
K Results based on counts outside ideal colony range.

WATER TEMPERATURE, DEGREES CELSIUS, MAY TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN
		APRIL			MAY	
1	---	---	---	---	---	---
2	---	---	---	---	---	---
3	---	---	---	---	---	---
4	---	---	---	6.1	5.3	5.7
5	---	---	---	6.4	5.1	5.7
6	---	---	---	6.6	5.0	5.8
7	---	---	---	7.3	4.8	6.0
8	---	---	---	6.9	5.0	5.9
9	---	---	---	6.9	5.9	6.4
10	---	---	---	6.6	5.5	5.9
11	---	---	---	5.8	4.2	4.7
12	---	---	---	6.7	4.4	5.3
13	---	---	---	8.4	4.8	6.4
14	---	---	---	7.9	6.4	7.1
15	---	---	---	9.3	6.2	7.6
16	---	---	---	9.5	6.7	8.1
17	---	---	---	9.3	7.2	8.2
18	---	---	---	9.0	6.6	7.8
19	---	---	---	8.4	6.7	7.2
20	---	---	---	8.7	6.4	7.4
21	---	---	---	8.6	7.3	7.9
22	---	---	---	9.6	7.2	8.3
23	---	---	---	9.2	7.3	8.3
24	---	---	---	8.7	6.9	7.8
25	---	---	---	9.2	7.0	8.0
26	---	---	---	8.9	7.3	7.8
27	---	---	---	7.9	6.7	7.3
28	---	---	---	8.4	7.0	7.7
29	---	---	---	8.4	6.7	7.5
30	---	---	---	7.9	6.2	7.1
31	---	---	---	7.6	6.7	7.1
MONTH	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	9.5	6.2	7.7	15.6	13.4	14.6	24.1	18.6	20.9	16.0	14.6	15.5
2	9.5	7.6	8.7	15.6	12.9	14.4	23.7	18.4	20.7	14.6	12.9	13.9
3	10.9	7.9	9.3	14.9	11.4	12.7	23.9	18.4	20.7	16.2	12.0	13.7
4	11.2	8.4	9.9	11.7	10.3	10.9	24.1	18.9	21.0	16.2	12.8	14.2
5	10.9	9.0	9.8	11.8	10.0	11.0	23.6	18.3	20.5	13.5	12.1	12.9
6	10.9	8.6	9.8	12.8	11.4	12.0	23.4	18.3	20.4	13.4	11.7	12.2
7	11.8	8.9	10.3	15.4	11.5	13.2	23.4	18.0	20.3	16.4	11.0	13.3
8	11.5	8.9	9.8	15.1	12.9	14.0	23.7	17.6	20.1	13.2	11.7	12.6
9	8.9	7.8	8.1	15.4	12.0	13.7	23.0	18.0	20.2	12.6	10.9	11.6
10	7.8	6.9	7.2	16.4	13.4	15.0	22.4	18.6	20.4	11.7	11.0	11.4
11	7.8	6.4	7.1	17.5	14.0	15.8	22.0	18.4	20.0	13.8	10.7	12.0
12	8.1	7.5	7.8	18.4	14.9	16.7	20.9	16.4	18.5	16.0	11.7	13.6
13	9.6	7.6	8.5	19.2	16.2	17.7	20.5	15.9	18.1	17.8	13.1	15.1
14	9.5	8.4	8.6	19.4	16.4	18.0	20.4	15.6	17.9	18.8	13.8	16.0
15	10.7	7.8	9.2	19.7	16.7	18.1	20.4	15.6	17.8	18.0	14.6	16.0
16	11.5	7.9	9.8	18.8	15.6	17.3	20.5	15.1	17.7	18.4	14.6	16.3
17	11.2	8.6	10.0	19.4	15.9	17.6	20.4	14.9	17.5	19.6	15.2	17.0
18	10.9	8.9	9.9	19.2	16.4	17.7	20.4	15.7	17.8	16.7	15.2	15.9
19	10.7	9.2	9.9	20.4	16.4	18.2	18.4	15.2	16.7	17.5	14.3	15.6
20	12.6	8.6	10.4	20.9	17.0	18.9	18.0	13.8	15.7	14.6	12.1	13.2
21	12.3	9.8	11.2	21.0	17.2	19.0	18.9	13.4	15.9	12.1	9.8	11.2
22	14.3	10.6	12.4	20.1	17.6	18.8	19.4	13.8	16.4	11.8	8.3	9.7
23	13.8	10.9	12.4	21.2	17.0	18.8	19.9	14.3	16.9	11.2	6.7	8.7
24	12.8	10.4	11.2	21.5	16.8	19.0	20.2	15.7	17.6	11.2	6.4	8.5
25	13.8	9.2	11.5	21.5	17.0	19.0	21.0	16.2	18.4	11.5	6.7	8.9
26	14.8	11.4	13.2	21.5	17.2	19.2	20.1	16.2	17.9	11.8	7.2	9.2
27	15.6	12.0	13.9	21.9	17.2	19.3	18.0	14.8	16.2	12.1	7.3	9.5
28	15.9	12.6	14.4	22.4	17.2	19.5	18.4	13.1	15.6	11.7	7.8	9.5
29	15.7	13.2	14.7	23.4	18.0	20.3	18.3	13.2	15.5	9.5	8.4	9.0
30	16.0	12.9	14.6	23.2	18.4	20.6	19.2	14.6	16.6	10.0	9.0	9.4
31	---	---	---	22.9	18.8	20.3	18.0	14.6	16.2	---	---	---
MONTH	16.0	6.2	10.4	23.4	10.0	16.8	24.1	13.1	18.3	19.6	6.4	12.5

WATER QUALITY RECORDS

PERIOD OF RECORD.--July 1989 to September 1993, April to September 1996, April 1998 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: July to September 1998, May to September 1999, July to September 2000, July to September 2001 (discontinued).

INSTRUMENTATION.--Temperature recording data logger.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 24.5 °C Aug. 7, 2001.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum recorded, 24.5 °C Aug. 7.

REMARKS.--Missing data due to lost data logger.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)
OCT										
17...	1405	377	58	7.4	24.0	9.7	--	--	--	--
NOV										
28...	1400	349	56	7.5	4.5	.5	--	--	--	--
JAN										
09...	1140	301	56	7.6	3.5	.5	--	--	--	--
FEB										
27...	1145	321	56	7.6	6.0	2.0	--	--	--	--
APR										
11...	0930	952	57	7.6	5.0	3.8	1.1	12.2	101	S2
MAY										
02...	0900	6450	38	7.5	5.5	4.0	3.0	10.9	89.1	S3
JUN										
26...	1145	1290	51	7.8	21.0	14.0	3.0	8.9	93.7	S2
JUL										
18...	1345	726	60	7.9	21.5	15.9	.7	7.9	86.7	S3
AUG										
07...	1330	483	65	7.8	29.5	21.7	1.5	7.6	93.4	S3
SEP										
18...	0830	317	70	6.8	10.0	14.8	2.2	11.3	121	S3

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC WATER UNFLTRD FET FIELD MG/L AS HCO3 (00440)	ANC UNFLTRD CARB FET FIELD MG/L AS CO3 (00445)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)
SEP													
18...	32.0	9.62	1.93	1.5	9.26	.79	39	0	32	1.2	.2	<.2	8.5

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT							
17...	.005	<.08	.008	<.007	E.002	--	--
NOV							
28...	.024	<.08	.005	E.005	<.004	--	--
JAN							
09...	<.002	E.07	.021	<.007	<.004	--	--
FEB							
27...	.003	<.08	.014	<.007	E.003	--	--
APR							
11...	<.002	<.08	<.005	<.007	.006	2	5.1
MAY							
02...	.007	.11	.024	E.004	.014	6	104
JUN							
26...	<.002	.08	.006	<.007	.008	3	10
JUL							
18...	.009	.09	.007	<.007	.004	2	3.9
AUG							
07...	.006	E.05	<.005	<.007	.004	1	1.3
SEP							
18...	.004	E.07	.009	<.007	E.004	2	1.7

< Less than
E Estimated value
S Most probable value

SPOKANE RIVER BASIN

12414500 ST. JOE AT CALDER, ID--Continued

WATER TEMPERATURE, DEGREES CELSIUS, JULY TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	18.5	14.2	16.4	18.7	16.3	17.6
2	---	---	---	---	---	---	21.4	15.8	18.5	19.2	15.3	17.1
3	---	---	---	---	---	---	22.6	17.4	19.7	19.6	15.3	17.4
4	---	---	---	---	---	---	21.4	17.9	19.5	19.8	15.5	17.6
5	---	---	---	---	---	---	21.8	16.4	19.0	17.7	15.8	16.8
6	---	---	---	---	---	---	23.6	17.7	20.5	16.9	14.1	15.5
7	---	---	---	---	---	---	24.5	19.0	21.5	16.9	13.3	14.8
8	---	---	---	---	---	---	23.8	19.3	21.4	16.8	12.4	14.5
9	---	---	---	---	---	---	23.6	19.2	21.3	16.9	12.4	14.6
10	---	---	---	---	---	---	23.8	19.2	21.4	17.1	12.8	14.9
11	---	---	---	---	---	---	23.6	19.0	21.3	17.7	13.2	15.3
12	---	---	---	---	---	---	23.3	19.0	20.9	18.0	13.6	15.8
13	---	---	---	---	---	---	22.3	19.8	20.9	18.5	14.2	16.3
14	---	---	---	---	---	---	22.8	18.8	20.7	19.2	14.7	16.8
15	---	---	---	---	---	---	23.1	19.0	21.0	19.3	14.9	17.0
16	---	---	---	---	---	---	23.1	19.0	20.9	19.0	14.9	16.9
17	---	---	---	---	---	---	22.6	19.0	20.7	18.7	15.8	16.9
18	---	---	---	---	---	---	22.4	18.7	20.5	18.7	15.0	16.7
19	---	---	---	---	---	---	21.6	17.6	19.6	16.3	13.8	15.1
20	---	---	---	---	---	---	20.9	16.6	18.8	16.6	12.2	14.2
21	---	---	---	---	---	---	20.5	16.3	18.4	14.9	12.1	13.4
22	---	---	---	---	---	---	19.2	17.1	18.1	16.1	11.5	13.6
23	---	---	---	---	---	---	18.8	16.6	17.6	16.8	12.1	14.2
24	---	---	---	---	---	---	19.8	16.3	17.8	17.2	12.8	14.7
25	---	---	---	---	---	---	20.1	15.5	17.6	16.0	13.2	14.4
26	---	---	---	22.4	17.1	19.6	20.5	15.5	18.0	15.3	13.3	14.3
27	---	---	---	22.4	17.4	19.8	20.9	16.4	18.6	16.6	13.6	14.8
28	---	---	---	19.5	16.9	17.9	19.0	16.8	17.9	15.3	13.6	14.4
29	---	---	---	17.7	15.6	16.4	20.0	15.3	17.6	15.8	12.4	13.9
30	---	---	---	17.9	14.5	15.9	20.5	16.3	18.3	15.5	11.5	13.3
31	---	---	---	17.1	14.9	15.7	20.5	16.6	18.4	---	---	---
MONTH	---	---	---	---	---	---	24.5	14.2	19.4	19.8	11.5	15.4

COLLECTION METHODS.--Composite of 5, 0.25 m^2 samples. Richest targeted habitat--riffles.
MESH SIZE.--425 um.
AVERAGE DEPTH.--0.23 m.
AVERAGE PERCENT SHADING.--20.
AVERAGE VELOCITY.-- 0.61 m/s.
SUBSTRATE EMBEDDEDNESS CLASS RANGE.--4.
PERCENT FINES AVERAGE.--14.

BIOLOGICAL DATA, SEPTEMBER 2000
BENTHIC INVERTEBRATE COLLECTION DATA

ORGANISM **TAXON** *GENUS SPECIES*	DATE Sept. 15	NUMBER OF INDIV-IDUALS	PERCENT COMPO-SITION
NON-INSECTS			
Uncinais uncinata		8	0.14
Acari		32	0.56
EPHEMEROPTERA			
Acentrella insignificans		40	0.70
Acentrella turbida		16	0.28
Baetis tricaudatus		32	0.56
Drunella doddsi		8	0.14
Drunella grandis		40	0.70
Ephemerella inermis/infrequens		1528	26.64
Serratella tibialis		32	0.56
Rhithrogena		312	5.44
Paraleptophlebia		232	4.04
PLECOPTERA			
Chloroperlidae		40	0.70
Sweltsa		16	0.28
Zapada cinctipes		8	0.14
Calineuria californica		8	0.14
Doroneuria		16	0.28
Hesperoperla pacifica		8	0.14
Perlodidae-early instar		16	0.28
Isoperla		32	0.56
Skwala		8	0.14
Pteronarcys		8	0.14
TRICOPTERA			
Brachycentrus occidentalis		144	2.51
Glossosoma		256	4.46
Arctopsyche grandis		16	0.28
Hydropsyche		2304	40.17
COLEOPTERA			
Zaitzevia		120	2.09
DIPTERA			
Atherix		8	0.14
Simulium		48	0.84
Tanyderidae		8	0.14
Antocha		24	0.42
Hexatoma		8	0.14
Limnophila		16	0.28
CHIRONOMIDAE			
Chironomidae-pupae		88	1.53
Micropsectra		48	0.84
Orthocladius Complex		144	2.51
Pagastia		8	0.14
Potthastia Gaedii group		40	0.70
Tvetenia Discoloripes group		16	0.28

SUMMARY STATISTICS
TOTAL NUMBER OF TAXA 38
TOTAL INDIVIDUALS 5,736

WATER QUALITY RECORDS

PERIOD OF RECORD.--July 1989 to September 1993, April to September 1996, April 1998 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: July to September 1998, May to September 1999, July to September 2000, July to September 2001 (discontinued).

INSTRUMENTATION.--Temperature recording data logger.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 24.5 °C Aug. 7, 2001.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum recorded, 24.5 °C Aug. 7.

REMARKS.--Missing data due to lost data logger.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)
OCT										
17...	1405	377	58	7.4	24.0	9.7	--	--	--	--
NOV										
28...	1400	349	56	7.5	4.5	.5	--	--	--	--
JAN										
09...	1140	301	56	7.6	3.5	.5	--	--	--	--
FEB										
27...	1145	321	56	7.6	6.0	2.0	--	--	--	--
APR										
11...	0930	952	57	7.6	5.0	3.8	1.1	12.2	101	S2
MAY										
02...	0900	6450	38	7.5	5.5	4.0	3.0	10.9	89.1	S3
JUN										
26...	1145	1290	51	7.8	21.0	14.0	3.0	8.9	93.7	S2
JUL										
18...	1345	726	60	7.9	21.5	15.9	.7	7.9	86.7	S3
AUG										
07...	1330	483	65	7.8	29.5	21.7	1.5	7.6	93.4	S3
SEP										
18...	0830	317	70	6.8	10.0	14.8	2.2	11.3	121	S3

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC WATER UNFLTRD FET FIELD MG/L AS HCO3 (00440)	ANC UNFLTRD CARB FET FIELD MG/L AS CO3 (00445)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)
SEP													
18...	32.0	9.62	1.93	1.5	9.26	.79	39	0	32	1.2	.2	<.2	8.5

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT							
17...	.005	<.08	.008	<.007	E.002	--	--
NOV							
28...	.024	<.08	.005	E.005	<.004	--	--
JAN							
09...	<.002	E.07	.021	<.007	<.004	--	--
FEB							
27...	.003	<.08	.014	<.007	E.003	--	--
APR							
11...	<.002	<.08	<.005	<.007	.006	2	5.1
MAY							
02...	.007	.11	.024	E.004	.014	6	104
JUN							
26...	<.002	.08	.006	<.007	.008	3	10
JUL							
18...	.009	.09	.007	<.007	.004	2	3.9
AUG							
07...	.006	E.05	<.005	<.007	.004	1	1.3
SEP							
18...	.004	E.07	.009	<.007	E.004	2	1.7

< Less than
E Estimated value
S Most probable value

SPOKANE RIVER BASIN

12414500 ST. JOE AT CALDER, ID--Continued

WATER TEMPERATURE, DEGREES CELSIUS, JULY TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	18.5	14.2	16.4	18.7	16.3	17.6
2	---	---	---	---	---	---	21.4	15.8	18.5	19.2	15.3	17.1
3	---	---	---	---	---	---	22.6	17.4	19.7	19.6	15.3	17.4
4	---	---	---	---	---	---	21.4	17.9	19.5	19.8	15.5	17.6
5	---	---	---	---	---	---	21.8	16.4	19.0	17.7	15.8	16.8
6	---	---	---	---	---	---	23.6	17.7	20.5	16.9	14.1	15.5
7	---	---	---	---	---	---	24.5	19.0	21.5	16.9	13.3	14.8
8	---	---	---	---	---	---	23.8	19.3	21.4	16.8	12.4	14.5
9	---	---	---	---	---	---	23.6	19.2	21.3	16.9	12.4	14.6
10	---	---	---	---	---	---	23.8	19.2	21.4	17.1	12.8	14.9
11	---	---	---	---	---	---	23.6	19.0	21.3	17.7	13.2	15.3
12	---	---	---	---	---	---	23.3	19.0	20.9	18.0	13.6	15.8
13	---	---	---	---	---	---	22.3	19.8	20.9	18.5	14.2	16.3
14	---	---	---	---	---	---	22.8	18.8	20.7	19.2	14.7	16.8
15	---	---	---	---	---	---	23.1	19.0	21.0	19.3	14.9	17.0
16	---	---	---	---	---	---	23.1	19.0	20.9	19.0	14.9	16.9
17	---	---	---	---	---	---	22.6	19.0	20.7	18.7	15.8	16.9
18	---	---	---	---	---	---	22.4	18.7	20.5	18.7	15.0	16.7
19	---	---	---	---	---	---	21.6	17.6	19.6	16.3	13.8	15.1
20	---	---	---	---	---	---	20.9	16.6	18.8	16.6	12.2	14.2
21	---	---	---	---	---	---	20.5	16.3	18.4	14.9	12.1	13.4
22	---	---	---	---	---	---	19.2	17.1	18.1	16.1	11.5	13.6
23	---	---	---	---	---	---	18.8	16.6	17.6	16.8	12.1	14.2
24	---	---	---	---	---	---	19.8	16.3	17.8	17.2	12.8	14.7
25	---	---	---	---	---	---	20.1	15.5	17.6	16.0	13.2	14.4
26	---	---	---	22.4	17.1	19.6	20.5	15.5	18.0	15.3	13.3	14.3
27	---	---	---	22.4	17.4	19.8	20.9	16.4	18.6	16.6	13.6	14.8
28	---	---	---	19.5	16.9	17.9	19.0	16.8	17.9	15.3	13.6	14.4
29	---	---	---	17.7	15.6	16.4	20.0	15.3	17.6	15.8	12.4	13.9
30	---	---	---	17.9	14.5	15.9	20.5	16.3	18.3	15.5	11.5	13.3
31	---	---	---	17.1	14.9	15.7	20.5	16.6	18.4	---	---	---
MONTH	---	---	---	---	---	---	24.5	14.2	19.4	19.8	11.5	15.4

COLLECTION METHODS.--Composite of 5, 0.25 m^2 samples. Richest targeted habitat--riffles.
MESH SIZE.--425 um.
AVERAGE DEPTH.--0.23 m.
AVERAGE PERCENT SHADING.--20.
AVERAGE VELOCITY.-- 0.61 m/s.
SUBSTRATE EMBEDDEDNESS CLASS RANGE.--4.
PERCENT FINES AVERAGE.--14.

BIOLOGICAL DATA, SEPTEMBER 2000
BENTHIC INVERTEBRATE COLLECTION DATA

ORGANISM **TAXON** *GENUS SPECIES*	DATE Sept. 15	NUMBER OF INDIV-IDUALS	PERCENT COMPO-SITION
NON-INSECTS			
Uncinais uncinata		8	0.14
Acari		32	0.56
EPHEMEROPTERA			
Acentrella insignificans		40	0.70
Acentrella turbida		16	0.28
Baetis tricaudatus		32	0.56
Drunella doddsi		8	0.14
Drunella grandis		40	0.70
Ephemerella inermis/infrequens		1528	26.64
Serratella tibialis		32	0.56
Rhithrogena		312	5.44
Paraleptophlebia		232	4.04
PLECOPTERA			
Chloroperlidae		40	0.70
Sweltsa		16	0.28
Zapada cinctipes		8	0.14
Calineuria californica		8	0.14
Doroneuria		16	0.28
Hesperoperla pacifica		8	0.14
Perlodidae-early instar		16	0.28
Isoperla		32	0.56
Skwala		8	0.14
Pteronarcys		8	0.14
TRICHOPTERA			
Brachycentrus occidentalis		144	2.51
Glossosoma		256	4.46
Arctopsyche grandis		16	0.28
Hydropsyche		2304	40.17
COLEOPTERA			
Zaitzevia		120	2.09
DIPTERA			
Atherix		8	0.14
Simulium		48	0.84
Tanyderidae		8	0.14
Antocha		24	0.42
Hexatoma		8	0.14
Limnophila		16	0.28
CHIRONOMIDAE			
Chironomidae-pupae		88	1.53
Micropsectra		48	0.84
Orthocladius Complex		144	2.51
Pagastia		8	0.14
Potthastia Gaedii group		40	0.70
Tvetenia Discoloripes group		16	0.28

SUMMARY STATISTICS
TOTAL NUMBER OF TAXA 38
TOTAL INDIVIDUALS 5,736