

SOUTHEAST ALASKA

15081614 HALFMILE CREEK ABOVE DIVERSION NEAR KLAWOCK

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 2004 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: May 2004 to current year.

INSTRUMENTATION.--Electronic water-temperature recorder since May 2004, recording interval 15-minutes.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross-section on June 20 and August 17. A variation of 0.1°C was found in the temperature cross sections. The variation found between mean stream temperature and sensor temperature was less than 0.5°C.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 18.5°C, June 20, 2004; minimum, 0.0°C, on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 16.5°C, August 9-11; minimum, 0.0°C, on many days during the winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Location in X-sect. looking downstrm 1 bank (00009)	Specif. conductance wat unfltrd 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)
JUN									
20...	1621	2.00	55	7.9	13.5	18.5	755	10.4	101
20...	1622	7.00	55	7.9	13.5	18.5	755	10.3	100
20...	1623	12.0	55	7.9	13.5	18.5	755	10.4	101
20...	1624	17.0	55	7.9	13.5	18.5	755	10.4	101
20...	1625	22.0	55	7.9	13.5	18.5	755	10.4	101
AUG									
17...	1550	2.00	65	7.7	14.0	17.5	754	9.7	95
17...	1551	4.00	65	7.6	14.0	17.5	754	9.7	95
17...	1552	6.00	65	7.6	14.0	17.5	754	9.7	95
17...	1553	8.00	65	7.7	14.0	17.5	754	9.6	94
17...	1554	10.0	64	7.7	14.0	17.5	754	9.6	94

Date	Time	Medium code	Sample type	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Stream width, feet (00004)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd 25 degC (00095)	Temperature, air, deg C (00020)
DEC													
09...	1445	9	9	7.40	27	10	26.5	737	13.5	98	7.2	34	1.5
FEB													
24...	1330	9	9	7.40	25	10	44.5	750	13.1	96	7.6	28	.5
APR													
13...	1430	9	9	7.26	19	10	35.0	750	11.3	88	7.2	25	4.0
JUN													
20...	1645	9	9	6.79	3.0	10	24.0	755	10.4	101	7.9	55	18.5
AUG													
17...	1545	9	9	6.78	3.2	10	12.0	754	9.7	95	7.6	65	17.5

Date	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Calcium, water, unfltrd recoverable, mg/L (00916)	Magnesium, water, fltrd, mg/L (00925)	Magnesium, water, unfltrd recoverable, mg/L (00927)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr, field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)
DEC 09...	1.0	12	3.66	--	.609	--	.17	2.19	12	14	4.63	<.1	2.28
FEB 24...	2.0	10	3.29	--	.460	--	E.16	1.59	10	11	2.03	<.1	2.32
APR 13...	4.0	9	2.84	--	.425	--	.23	1.51	7	8	2.12	<.1	1.75
JUN 20...	13.5	23	7.83	7.88	.895	.84	E.15	1.81	22	26	1.74	<.1	3.04
AUG 17...	14.0	31	10.5	10.6	1.07	1.08	.19	1.96	25	31	1.81	<.1	3.56

SOUTHEAST ALASKA

15081614 HALFMILE CREEK ABOVE DIVERSION NEAR KLAWOCK—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd, mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd, mg/L (00665)	Total carbon, suspdn sediment total, mg/L (00694)
DEC 09...	.9	21	31	E.05	E.10	<.010	<.016	E.001	--	<.006	E.003	E.004	--
FEB 24...	.6	--	27	.10	.10	<.010	E.009	.002	--	<.006	E.004	E.003	--
APR 13...	.8	14	24	E.05	.10	E.006	.047	E.001	--	<.006	<.004	E.004	--
JUN 20...	1.2	--	34	E.08	.10	<.010	.018	<.002	<.02	<.006	.006	.005	.1
AUG 17...	.9	36	50	.10	.13	<.010	.044	E.001	<.02	<.006	E.003	E.003	<.1

Date	Organic carbon, water, fltrd, mg/L (00681)	Aluminum, water, fltrd, ug/L (01106)	Aluminum, water, unfltrd recover, ug/L (01105)	Antimony, water, fltrd, ug/L (01095)	Antimony, water, unfltrd, ug/L (01097)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Barium, water, unfltrd recover, ug/L (01007)	Beryllium, water, fltrd, ug/L (01010)	Beryllium, water, unfltrd recover, ug/L (01012)	Boron, water, fltrd, ug/L (01020)	Boron, water, unfltrd recover, ug/L (01022)	Cadmium water, fltrd, ug/L (01025)
DEC 09...	4.2	--	--	--	--	--	--	--	--	--	--	--	--
FEB 24...	5.4	--	--	--	--	--	--	--	--	--	--	--	--
APR 13...	4.5	--	--	--	--	--	--	--	--	--	--	--	--
JUN 20...	3.9	47	52	<.20	<.2	E.1	6	6	<.06	<.06	E7	<8	<.04
AUG 17...	3.5	50	67	<.20	<.2	E.1	7	7	<.06	<.06	E7	E5	<.04

Date	Cadmium water, unfltrd, ug/L (01027)	Chromium, water, fltrd, ug/L (01030)	Chromium, water, unfltrd recover, ug/L (01034)	Cobalt water, fltrd, ug/L (01035)	Cobalt water, unfltrd recover, ug/L (01037)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover, ug/L (01042)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover, ug/L (01051)	Lithium water, fltrd, ug/L (01130)	Lithium water, unfltrd recover, ug/L (01132)
DEC 09...	--	--	--	--	--	--	--	111	--	--	--	--	--
FEB 24...	--	--	--	--	--	--	--	120	--	--	--	--	--
APR 13...	--	--	--	--	--	--	--	75	--	--	--	--	--
JUN 20...	<.04	<.8	<.8	.033	.056	.7	.8	84	110	<.08	<.06	<.6	<.6
AUG 17...	<.04	<.8	<.8	.046	.062	.5	E.5	84	120	E.05	E.05	<.6	<.6

Date	Manganese, water, unfltrd recover, ug/L (01056)	Manganese, water, fltrd, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Mercury water, unfltrd recover, ug/L (71900)	Molybdenum, water, fltrd, ug/L (01060)	Molybdenum, water, unfltrd recover, ug/L (01062)	Nickel, water, fltrd, ug/L (01065)	Nickel, water, unfltrd recover, ug/L (01067)	Selenium, water, fltrd, ug/L (01145)	Selenium, water, unfltrd recover, ug/L (01147)	Silver, water, fltrd, ug/L (01075)	Silver, water, unfltrd recover, ug/L (01077)	Strontium, water, fltrd, ug/L (01080)
DEC 09...	4.7	--	--	--	--	--	--	--	--	--	--	--	--
FEB 24...	1.6	--	--	--	--	--	--	--	--	--	--	--	--
APR 13...	1.3	--	--	--	--	--	--	--	--	--	--	--	--
JUN 20...	1.5	3	<.01	<.01	<.4	<.2	.50	N	<.4	E.3	<.2	<.16	22
AUG 17...	1.8	5	<.01	E.01	<.4	<.2	.38	.41	<.4	.4	<.2	<.16	28

Date	Strontium, water, unfltrd recover, ug/L (01082)	Thallium, water, fltrd, ug/L (01057)	Thallium, water, unfltrd, ug/L (01059)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover, ug/L (01092)	Uranium natural water, fltrd, ug/L (22703)	Suspended sediment concentration, mg/L (80154)	Suspended sediment discharge, tons/d (80155)	Sampler type, code (84164)
DEC 09...	--	--	--	--	--	--	--	1	.07	3044
FEB 24...	--	--	--	--	--	--	--	--	--	3044
APR 13...	--	--	--	--	--	--	--	1	.05	3044
JUN 20...	21	<.04	<.2	.4	1.5	3	<.04	1	.01	3044
AUG 17...	27	<.04	<.2	.4	1.7	7	<.04	<1	--	3044

SOUTHEAST ALASKA

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TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.5	8.5	9.0	4.5	4.0	4.5	5.5	4.5	5.0	0.0	0.0	0.0
2	9.5	8.5	9.0	4.5	3.5	4.0	6.0	5.0	5.5	0.0	0.0	0.0
3	9.0	8.0	8.5	6.0	4.0	5.0	5.0	3.0	4.0	0.0	0.0	0.0
4	10.0	9.0	9.5	5.0	3.5	4.0	3.0	1.5	2.5	0.0	0.0	0.0
5	10.0	9.0	10.0	3.5	2.5	3.0	1.5	1.0	1.0	0.0	0.0	0.0
6	9.0	8.5	9.0	2.5	1.5	2.0	1.0	0.5	1.0	0.0	0.0	0.0
7	9.0	8.5	8.5	2.0	2.0	2.0	0.5	0.0	0.0	0.0	0.0	0.0
8	9.0	8.0	8.5	2.0	1.5	1.5	0.5	0.0	0.0	0.0	0.0	0.0
9	9.5	8.5	9.0	1.5	1.0	1.0	1.5	0.5	1.0	0.0	0.0	0.0
10	9.5	8.0	9.0	1.0	0.5	1.0	1.5	0.5	1.0	0.0	0.0	0.0
11	8.5	7.5	8.0	1.0	0.0	0.5	1.5	0.5	1.0	0.0	0.0	0.0
12	10.5	7.5	8.5	3.0	1.0	2.0	1.5	1.0	1.5	0.0	0.0	0.0
13	10.5	10.0	10.5	4.5	3.0	3.5	2.5	1.5	2.0	0.0	0.0	0.0
14	10.5	9.5	10.5	4.5	4.0	4.5	2.5	2.0	2.5	0.0	0.0	0.0
15	9.5	8.0	9.0	4.5	4.0	4.5	3.5	2.0	3.0	0.0	0.0	0.0
16	8.0	6.5	7.0	4.0	3.0	3.5	4.5	3.5	4.0	0.0	0.0	0.0
17	6.5	5.0	6.0	3.0	2.0	2.5	5.0	4.0	4.5	0.0	0.0	0.0
18	5.5	4.0	4.5	2.5	1.5	2.0	6.5	5.0	6.0	1.0	0.0	0.5
19	4.0	2.5	3.0	4.0	2.5	3.5	5.5	3.5	4.0	1.5	1.0	1.0
20	3.5	3.0	3.0	6.5	4.0	5.5	3.5	2.5	3.0	1.0	0.5	1.0
21	4.0	2.5	3.5	6.0	4.0	5.0	3.0	2.0	2.5	2.0	1.0	1.5
22	4.0	3.0	4.0	4.0	3.0	3.5	4.5	3.0	3.5	2.0	1.5	2.0
23	3.0	2.5	3.0	4.5	3.0	3.5	5.0	4.5	5.0	2.0	1.5	2.0
24	4.5	3.0	4.0	5.0	4.0	4.5	5.0	2.5	4.0	2.0	1.5	1.5
25	4.5	3.5	4.0	4.0	2.5	3.0	2.5	1.0	1.5	2.0	1.0	1.5
26	3.5	2.5	3.0	3.5	3.0	3.0	1.5	0.0	0.5	3.0	2.0	2.5
27	5.5	3.0	4.5	4.0	3.5	3.5	1.5	0.0	0.5	3.0	3.0	3.0
28	6.0	5.0	5.5	4.0	4.0	4.0	2.0	1.5	1.5	3.0	2.5	3.0
29	6.0	5.0	5.5	4.0	3.5	4.0	1.5	0.0	0.5	3.0	2.5	2.5
30	5.0	3.0	4.0	4.5	4.0	4.5	0.0	0.0	0.0	3.5	2.5	3.0
31	4.0	3.0	3.5	---	---	---	0.0	0.0	0.0	3.0	2.0	2.5
MONTH	10.5	2.5	6.6	6.5	0.0	3.3	6.5	0.0	2.3	3.5	0.0	0.9

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	3.5	2.5	3.0	4.0	3.0	3.5	2.0	1.0	1.5	8.0	7.0	7.5
2	3.0	2.0	2.5	4.0	3.0	3.5	2.0	0.5	1.5	8.5	7.5	8.0
3	2.5	2.0	2.5	3.5	3.0	3.0	3.0	1.5	2.0	9.0	8.0	8.5
4	2.5	0.5	1.0	3.5	3.0	3.5	3.5	2.0	2.5	9.0	7.0	8.0
5	0.5	0.0	0.0	3.5	2.5	3.0	3.5	2.5	3.0	9.5	8.0	8.5
6	0.0	0.0	0.0	3.5	2.0	3.0	4.5	2.5	3.5	9.5	6.5	8.0
7	0.0	0.0	0.0	4.5	3.5	4.0	5.0	3.5	4.0	10.5	8.5	9.5
8	1.0	0.0	0.5	5.0	4.5	4.5	5.0	3.5	4.0	11.0	8.5	9.5
9	1.5	1.0	1.5	5.5	4.5	5.0	4.5	3.5	4.0	12.0	9.0	10.5
10	2.0	1.5	1.5	6.0	4.5	5.5	4.0	3.0	3.5	12.0	9.5	11.0
11	1.5	0.0	0.5	5.0	4.5	4.5	3.5	2.5	3.0	12.0	11.0	11.5
12	0.5	0.0	0.0	5.0	4.5	4.5	4.5	2.5	3.5	11.0	10.5	10.5
13	0.5	0.0	0.0	5.5	3.5	4.5	4.5	2.5	3.5	11.0	10.0	10.5
14	0.0	0.0	0.0	4.5	3.0	4.0	4.5	2.5	3.5	11.0	9.0	10.0
15	1.0	0.0	0.5	4.5	3.0	4.0	4.0	3.0	3.5	10.5	8.5	9.5
16	1.0	0.5	1.0	3.0	2.0	2.5	6.0	3.5	4.5	10.5	8.5	9.5
17	1.0	0.5	1.0	2.0	1.5	2.0	6.0	3.5	5.0	11.0	8.5	10.0
18	1.0	1.0	1.0	1.5	0.5	1.0	5.5	4.0	5.0	11.5	9.0	10.5
19	1.0	0.0	0.5	0.5	0.0	0.0	6.0	5.0	5.5	11.0	9.5	10.5
20	0.5	0.0	0.5	0.0	0.0	0.0	6.5	5.0	6.0	10.5	9.5	10.0
21	1.5	0.5	1.0	0.0	0.0	0.0	7.0	6.0	6.5	10.5	9.5	10.0
22	1.5	1.0	1.5	1.5	0.0	1.0	8.0	4.5	6.0	11.0	9.0	10.0
23	1.5	1.0	1.5	2.0	0.5	1.0	9.5	5.5	7.5	10.0	9.0	9.5
24	2.0	1.0	1.5	1.5	0.5	1.5	11.5	7.5	9.0	10.5	9.0	9.5
25	2.0	1.0	1.5	3.0	1.5	2.0	9.5	8.5	8.5	11.0	9.0	10.0
26	2.5	2.0	2.0	4.5	3.0	3.5	10.5	7.5	9.0	12.5	10.0	11.5
27	2.5	1.5	2.0	4.0	2.5	3.5	11.5	9.0	10.0	11.5	10.5	11.0
28	3.5	2.5	3.0	3.5	2.0	2.5	10.5	8.5	9.5	11.5	9.5	10.5
29	---	---	---	3.0	2.0	2.5	9.5	7.5	8.5	11.0	10.0	10.5
30	---	---	---	3.0	2.0	2.5	8.0	7.5	8.0	12.0	10.0	11.0
31	---	---	---	3.0	2.0	2.5	---	---	---	12.0	10.0	11.0
MONTH	3.5	0.0	1.1	6.0	0.0	2.8	11.5	0.5	5.2	12.5	6.5	9.9

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TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	13.0	10.5	11.5	12.0	11.5	11.5	14.0	11.5	13.0	12.0	11.5	11.5
2	12.0	9.0	10.5	12.0	11.0	11.5	14.0	12.0	13.0	12.0	11.0	11.5
3	11.0	9.5	10.5	12.0	11.5	12.0	14.0	13.0	13.0	12.0	10.5	11.5
4	11.5	10.0	10.5	13.5	11.5	12.5	13.0	12.0	12.5	12.0	9.5	10.5
5	11.5	8.5	10.0	13.0	12.0	12.5	12.5	12.0	12.5	12.0	10.5	11.0
6	12.0	9.0	10.5	12.5	11.5	12.0	13.0	12.0	12.5	12.0	11.5	11.5
7	12.5	10.0	11.0	12.0	11.0	11.5	14.5	12.0	13.0	12.0	11.5	12.0
8	12.5	9.5	11.0	13.0	11.5	12.0	16.0	12.5	14.0	12.0	11.0	11.5
9	11.0	9.5	10.5	13.0	12.0	12.5	16.5	13.0	15.0	12.5	10.0	11.0
10	11.0	10.0	10.5	13.0	11.5	12.5	16.5	14.5	15.5	12.0	10.5	11.5
11	11.0	9.5	10.0	14.0	12.0	13.0	16.5	14.5	15.5	12.5	12.0	12.0
12	11.0	9.0	10.0	14.0	12.0	13.0	16.0	14.0	15.0	12.5	11.5	12.0
13	11.0	9.5	10.0	13.5	12.5	12.5	16.0	14.5	15.0	12.0	12.0	12.0
14	11.5	10.0	10.5	12.5	11.5	12.0	15.0	14.0	14.5	12.0	11.5	12.0
15	11.0	9.5	10.5	13.0	12.0	12.5	14.5	13.5	14.0	12.0	11.0	11.5
16	13.0	9.0	11.0	13.5	11.0	12.5	14.5	13.0	13.5	11.0	10.0	10.5
17	15.0	11.5	13.0	13.0	12.0	12.5	14.0	12.5	13.0	11.0	10.5	10.5
18	16.0	13.0	14.5	12.5	11.5	12.0	14.0	13.5	13.5	11.0	10.5	10.5
19	14.5	13.0	13.5	13.0	11.5	12.5	15.0	13.0	14.0	10.5	10.0	10.0
20	13.0	12.0	12.5	13.5	12.0	13.0	14.0	13.0	13.5	10.5	9.0	10.0
21	12.5	11.0	12.0	13.5	12.5	13.0	13.5	12.0	13.0	10.0	9.0	9.5
22	11.5	11.0	11.5	13.0	12.0	12.5	13.5	12.0	13.0	9.5	8.5	9.0
23	11.5	10.5	11.0	13.5	12.5	13.0	14.5	12.0	13.0	10.5	9.5	10.0
24	12.5	11.0	11.5	14.0	12.5	13.5	14.5	12.0	13.0	11.0	10.0	10.5
25	13.0	11.5	12.0	13.5	12.5	13.0	14.0	13.0	13.5	11.0	9.5	10.5
26	14.5	11.0	12.5	13.0	12.5	13.0	13.5	12.5	13.0	9.5	8.0	9.0
27	14.5	11.5	13.0	13.5	12.5	13.0	13.5	12.0	13.0	9.5	7.5	8.0
28	13.5	13.0	13.0	13.5	12.5	13.0	14.0	12.0	13.0	10.0	9.5	9.5
29	13.0	12.0	12.5	13.5	12.5	13.0	12.5	11.5	12.0	9.5	8.5	9.0
30	12.5	11.5	12.0	13.0	12.0	12.5	12.5	12.0	12.0	9.0	8.0	9.0
31	---	---	---	13.5	11.5	12.5	12.0	11.5	12.0	---	---	---
MONTH	16.0	8.5	11.4	14.0	11.0	12.5	16.5	11.5	13.4	12.5	7.5	10.6