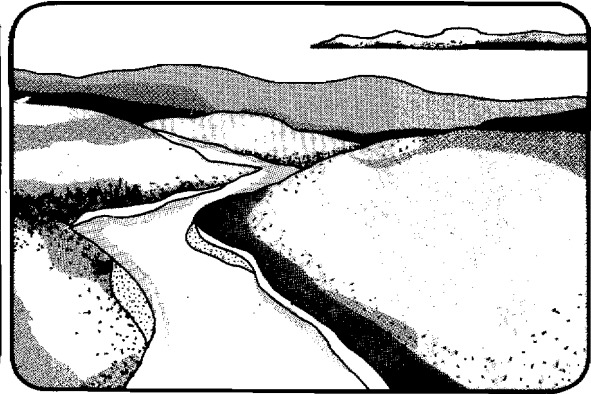
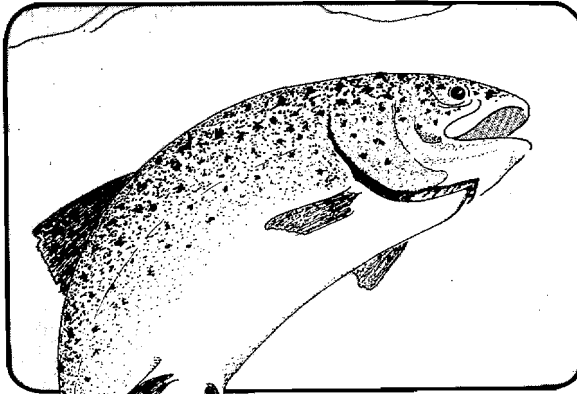
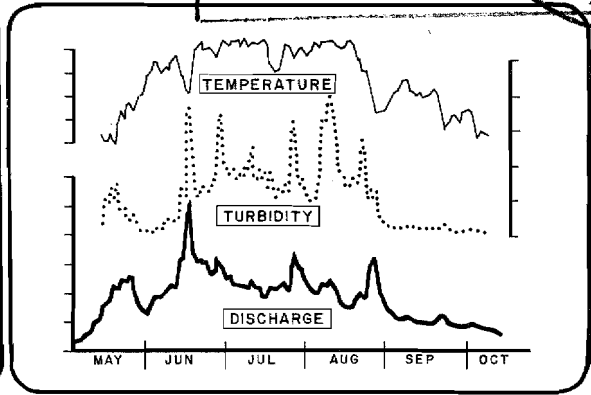
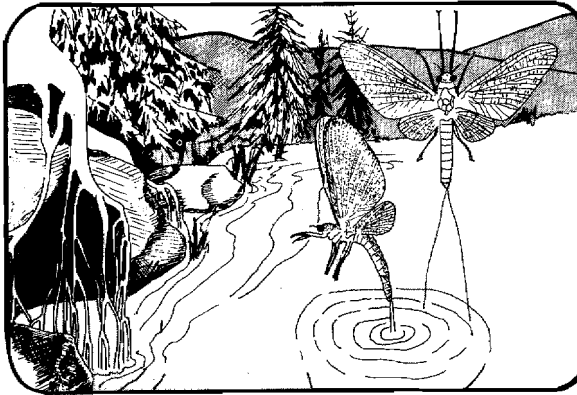
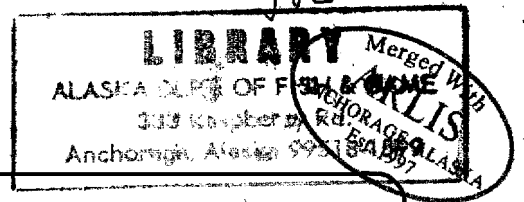




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TASKS 29 and 37 SUPPORT TECHNICAL REPORT

CONTINUOUS WATER TEMPERATURE INVESTIGATIONS

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TABLE OF CONTENTS

Page

TABLE OF CONTENTS.....	i
LIST OF APPENDIX TABLES.....	ii
LIST OF APPENDIX FIGURES.....	v
1.0 OBJECTIVES.....	1
2.0 METHODS.....	2
2.1 Site Selection.....	2
2.1.1 Task 29 Sites.....	2
2.1.2 Task 37 Sites.....	2
2.2 Field Data Collection.....	2
2.3 Data Analysis.....	6
3.0 DATA SUMMARY.....	10
3.1 Task 29 Sites.....	10
3.1.1 Lane Creek (RM 113.6, TRM 0.1).....	10
3.1.2 Fourth of July Creek (RM 131.1, TRM 0.2).....	10
3.1.3 Indian River - Site 3 (RM 131.1, TRM 0.2).....	13
3.1.4 Indian River - Site 4 (RM 131.1, TRM 0.2).....	13
3.1.5 Mainstem 2 Side Channel (RM 115.0).....	13
3.1.6 Side Channel at RM 117.9.....	16
3.1.7 Side Channel at RM 129.8.....	16
3.1.8 Side Channel at RM 131.3.....	19
3.1.9 Upper Side Channel 11 (RM 136.0).....	19
3.1.10 Upper Side Channel 21 (RM 141.6).....	23
3.1.11 Susitna River at RM 118.9.....	23
3.1.12 Susitna River at RM 127.1.....	23
3.1.13 Susitna River at RM 132.9.....	27
3.1.14 Susitna River at RM 137.5.....	27
3.1.15 Susitna River at RM 139.0.....	29
3.1.15.1 Susitna River at RM 139.0, Site 1.....	29
3.1.15.2 Susitna River at RM 139.0, Site 2.....	32
3.2 Task 37 Sites.....	32
3.2.1 Bushrod Slough (RM 117.9).....	32
3.2.2 Curry Slough (RM 119.7).....	34
3.2.3 Slough 10 (RM 133.8).....	34
3.2.3.1 Slough 10 Northeast Channel (RM 133.8).....	37
3.2.3.2 Slough 10 Northwest Channel (RM 133.8).....	37
4.0 CONTRIBUTORS.....	180

LIST OF APPENDIX TABLESPage

Table 1.	Continuous temperature monitoring stations in support of Task 29.....	3
Table 2.	Continuous temperature monitoring stations in support of Task 37.....	4
Table 3.	Susitna River mainstem, side channel, slough, and tributary winter season temperature data index, 1984-85.....	7
Table 4.	Datapod temperature recorder data summary: intragravel and surface water temperatures (°C) recorded at Lane Creek, RM 113.6, TRM 0.1.....	40
Table 5.	Datapod temperature recorder data summary: intragravel and surface water temperatures (°C) recorded at Fourth of July Creek - Site 3, RM 131.1, TRM 0.2.....	47
Table 6.	Datapod temperature recorder data summary: intragravel and surface water temperatures (°C) recorded at Indian River - Site 3, RM 138.6, TRM 0.2.....	54
Table 7.	Datapod temperature recorder data summary: intragravel and surface water temperatures (°C) recorded at Indian River - Site 4, RM 138.6, TRM 0.2.....	60
Table 8.	Datapod temperature recorder data summary: intragravel and surface water temperatures (°C) recorded at Mainstem 2 Side Channel, RM 115.0.....	68
Table 9.	Datapod temperature recorder data summary: intragravel and surface water temperatures (°C) recorded at the Side Channel at RM 117.9.....	75
Table 10.	Datapod temperature recorder data summary: intragravel and surface water temperatures (°C) recorded at the Side Channel at RM 129.8 when the site was frozen.....	81
Table 11.	Datapod temperature recorder data summary: intragravel and surface water temperatures (°C) recorded at the side channel at RM 131.3.....	84

<u>LIST OF APPENDIX TABLES (Continued)</u>		<u>Page</u>
Table 12.	Datapod temperature recorder data summary: intragravel and surface water temperatures (°C) recorded at Upper Side Channel 11 - Site 5, RM 136.0.....	91
Table 13.	Datapod temperature recorder data summary: intragravel and surface water temperatures (°C) recorded at Upper Side Channel 11 - Site 5 when the site was frozen, RM 136.0.....	96
Table 14.	Datapod temperature recorder data summary: intragravel and surface water temperatures (°C) recorded at Upper Side Channel 21, RM 141.6.....	101
Table 15.	Datapod temperature recorder data summary: intragravel and surface water temperatures (°C) recorded at Mainstem Susitna River at RM 118.9.....	108
Table 16.	Datapod temperature recorder data summary: intragravel and surface water temperatures (°C) recorded at Mainstem Susitna River at RM 127.1.....	115
Table 17.	Datapod temperature recorder data summary: intragravel and surface water temperatures recorded at Mainstem Susitna River at RM 132.9.....	121
Table 18.	Datapod temperature recorder data summary: intragravel and surface water temperatures (°C) recorded at Mainstem Susitna River at RM 132.9 when the site was frozen.....	128
Table 19.	Datapod temperature recorder data summary: intragravel and surface water temperatures (°C) recorded at Mainstem Susitna River at RM 137.5.....	131
Table 20.	Datapod temperature recorder data summary: intragravel and surface water temperatures (°C) recorded at Mainstem Susitna River at RM 137.5 when the site was frozen.....	136
Table 21.	Datapod temperature recorder data summary: intragravel and surface water temperatures (°C) recorded at Mainstem Susitna River at RM 139.0 - Site 1.....	138

<u>LIST OF APPENDIX TABLES (Continued)</u>	<u>Page</u>
Table 22. Datapod temperature recorder data summary: intragravel and surface water temperatures (°C) recorded at Mainstem Susitna River at RM 139.0 - Site 1 when the site was frozen.....	143
Table 23. Datapod temperature recorder data summary: intragravel and surface water temperatures (°C) recorded at Mainstem Susitna River at RM 139.0 - Site 2.....	147
Table 24. Datapod temperature recorder data summary: intragravel and surface water temperatures (°C) recorded at Bushrod Slough, RM 117.9.....	149
Table 25. Datapod temperature recorder data summary: intragravel and surface water temperatures (°C) recorded at Curry Slough, RM 119.7.....	156
Table 26. Datapod temperature recorder data summary: intragravel and surface water temperature (°C) recorded at Curry Slough when the site was frozen, RM 119.7.....	163
Table 27. Datapod temperature recorder data summary: intragravel and surface water temperatures (°C) recorded at Slough 10 Northeast, RM 134.0.....	165
Table 28. Datapod temperature recorder data summary: intragravel and surface water temperatures (°C) recorded at Slough 10 Northwest, RM 134.0.....	172

LIST OF APPENDIX FIGURESPage

Figure 1.	Locations of the temperature monitoring stations in mainstem, side channel, slough, and tributary habitats of the Susitna River during the 1984-85 winter season.....	5
Figure 2.	Mean daily intragravel and surface water temperatures (°C) recorded at Lane Creek, RM 113.6, TRM 0.1, during the 1984-85 winter season.....	11
Figure 3.	Mean daily intragravel and surface water temperatures (°C) recorded at Fourth of July Creek - Site 3, RM 131.1, TRM 0.2, during the 1984-85 winter season.....	12
Figure 4.	Mean daily intragravel and surface water temperatures (°C) recorded at Indian River - Site 3, RM 138.6, TRM 0.2, during the 1984-85 winter season.....	14
Figure 5.	Mean daily intragravel and surface water temperatures (°C) recorded at Indian River - Site 4, RM 138.6, TRM 0.2, during the 1984-85 winter season.....	15
Figure 6.	Mean daily intragravel and surface water temperatures (°C) recorded at Mainstem 2 Side Channel, RM 115.0, during the 1984-85 winter season.....	17
Figure 7.	Mean daily intragravel and surface water temperatures (°C) recorded at the side channel at RM 117.9, during the 1984-85 winter season.....	18
Figure 8.	Mean daily intragravel and surface water temperatures (°C) recorded at the side channel at RM 129.8, during the 1984-85 winter season.....	20
Figure 9.	Mean daily intragravel and surface water temperatures (°C) recorded at the side channel at RM 131.3, during the 1984-85 winter season.....	21
Figure 10.	Mean daily intragravel and surface water temperatures (°C) recorded at Upper Side Channel 11 - Site 5, RM 136.0, during the 1984-85 winter season.....	22

<u>LIST OF APPENDIX FIGURES (Continued)</u>	<u>Page</u>
Figure 11. Mean daily intragravel and surface water temperatures (°C) recorded at Upper Side Channel 21, RM 141.6, during the 1984-85 winter season.....	24
Figure 12. Mean daily intragravel and surface water temperatures (°C) recorded at Mainstem Susitna River at RM 118.9, during the 1984-85 winter season.....	25
Figure 13. Mean daily intragravel and surface water temperatures (°C) recorded at Mainstem Susitna River at RM 127.1, during the 1984-85 winter season.....	26
Figure 14. Mean daily intragravel and surface water temperatures (°C) recorded at Mainstem Susitna River below Slough 9A, RM 132.9, during the 1984-85 winter season.....	28
Figure 15. Mean daily intragravel and surface water temperatures (°C) recorded at the mainstem Susitna River RM 137.5 study site during the 1984-85 winter season.....	30
Figure 16. Mean daily intragravel and surface water temperatures (°C) recorded at the mainstem Susitna River RM 139.0 Site 1 study site during the 1984-85 winter season.....	31
Figure 17. Mean daily intragravel and surface water temperatures (°C) recorded at the mainstem Susitna River RM 139.0 Site 2 study site during the 1984-85 winter season.....	33
Figure 18. Mean daily intragravel and surface water temperatures (°C) recorded at Bushrod Slough, RM 117.9, during the 1984-85 winter season.....	35
Figure 19. Mean daily intragravel and surface water temperatures (°C) recorded at Curry Slough, RM 119.7, during the 1984-85 winter season.....	36
Figure 20. Mean daily intragravel and surface water temperatures (°C) recorded at Slough 10 Northeast, RM 133.8, during the 1984-85 winter season.....	38

LIST OF APPENDIX FIGURES (Continued)

Page

Figure 21.	Mean daily intragravel and surface water temperatures (°C) recorded at Slough 10 Northwest, RM 133.8, during the 1984-85 winter season.....	39
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1.0 OBJECTIVES

The objective of the 1984-85 winter season continuous water temperature study conducted by the ADF&G Susitna Hydro Aquatic Feasibility Study Team was to evaluate the surface and intragravel water temperatures at selected sites in support of Task 29 and 37.

This technical report presents a summary of the data collection methods and the findings of these temperature investigations.

2.0 METHODS

2.1 Site Selection

2.1.1 Task 29

In support of Task 29, water temperatures were recorded at 14 sites all of which were located between Talkeetna and Devil Canyon. Temperature stations were installed in tributary, side channel and mainstem habitats. These study sites were selected by Task 29 study personnel to meet the specific objectives of Task 29. Refer to the Task 29 summary report for the criteria used to select these study sites. These temperature stations are presented in Appendix Table 1 and Appendix Figure 1.

2.1.2 Task 37

In support of Task 37, water temperatures were recorded at 4 sites located in three slough habitats in the Talkeetna to Devil Canyon reach. At Curry and Bushrod Sloughs temperature stations were installed in areas of chum salmon spawning whereas the temperature stations located in both channels of Slough 10 were installed in areas absent of spawning chum salmon. As with Task 29 these study sites were selected by Task 37 study personnel to meet the specific objectives of Task 37. Refer to the Task 37 summary report for the criteria used to select these study sites. These temperature stations are presented in Appendix Table 2 and Appendix Figure 1.

2.2 Field Data Collection

Water temperatures were continuously recorded at each site using Omnidata two channel datapod recorders. The datapod recorders were installed at monitoring stations to simultaneously record both intra-gravel and surface water temperatures. Omnidata model DP2321 two channel temperature recorders (datapods) simultaneously record water temperatures using TP10V temperature probes. Instrument accuracy, as stated by the manufacturer, Omnidata International, is $\pm 0.1^{\circ}\text{C}$. Temperature data are recorded on an ultraviolet, erasable electronic memory chip referred to as a data storage module (DSM). Temperatures are measured every five minutes and the mean, minimum, and maximum temperature measured during each six-hour interval are recorded on the DSM.

Prior to installation each temperature probe was calibrated and assigned a correction factor. Intragravel temperatures were measured at a substrate depth of approximately 12 inches, whereas surface water temperatures were measured approximately two inches above the substrate.

The datapods were examined twice each month to exchange DSM's and to detect malfunctioning units. A short display sequence was activated on the datapod which enabled the field investigator to determine the operating condition of the instrument and the associated probes. The following information was displayed by the instrument and recorded by the field investigator: errors made in storage, number of storage points used, minutes until the next recording, and current water

Appendix Table 1. Continuous temperature monitoring stations in support of Task 29.

Study Site	River Mile/ Tributary Mile	Habitat
Lane Creek	113.6R/0.1	Tributary
Fourth of July Creek	131.1L/0.2	Tributary
Indian River	138.6L/0.2	Tributary
Mainstem 2	115.0R	Side Channel
Side Channel at RM 117.9	117.9L	Side Channel
Side Channel at RM 129.8	129.8R	Side Channel
Side Channel at RM 131.3	131.3R	Side Channel
Upper Side Channel 11	136.0R	Side Channel
Upper Side Channel 21	141.6R	Side Channel
Susitna River at RM 118.9	118.9L	Mainstem
Susitna River at RM 127.1	127.1C	Mainstem
Susitna River at RM 132.9	132.9R	Mainstem
Susitna River at RM 137.5	137.5L	Mainstem
Susitna River at 139.0	139.0L	Mainstem

Appendix Table 2. Continuous temperature monitoring stations in support of Task 37.

Study Site	River Mile	Habitat
Bushrod Slough	117.9L	Side Slough
Curry Slough	119.7R	Upland Slough
Slough 10 (Northeast Channel)	133.8L	Upland Slough
Slough 10 (Northwest Channel)	133.8L	Upland Slough

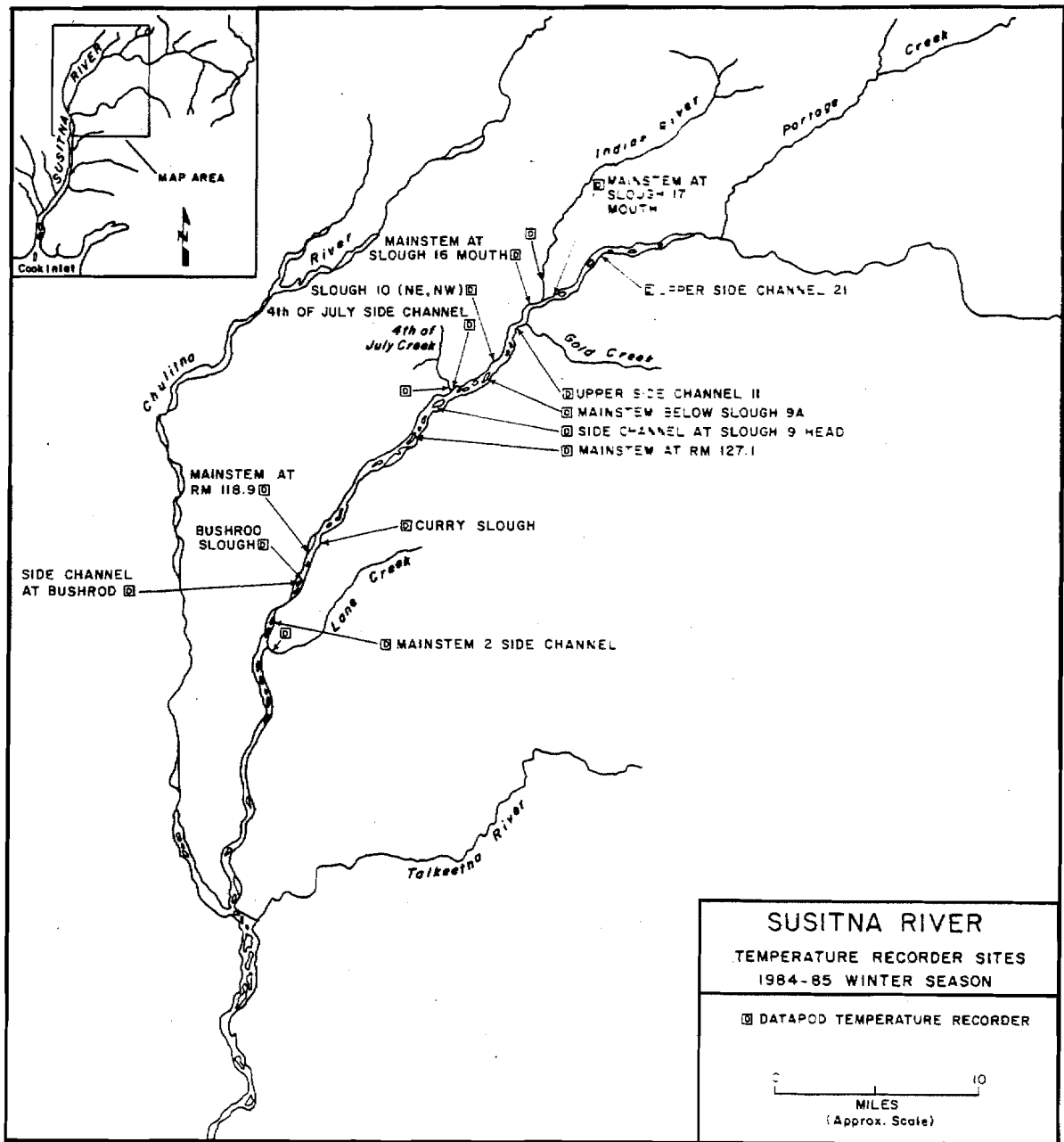


Figure 1. Locations of the temperature monitoring stations in mainstem, side channel, slough, and tributary habitats of the Susitna River during the 1984-85 winter season.

temperatures. An instantaneous surface water temperature was also measured using a calibrated Brooklyn thermometer (accuracy $\pm 0.1^{\circ}\text{C}$).

During the winter months, the datapod recorders and probes are periodically exposed to extreme environmental conditions which include ice formation, ice movement, and ambient air temperatures outside the manufacturer's (Omnidata International) stated operating range of -20°C to $+60^{\circ}\text{C}$. Extremely low air temperatures result in poor instrument performance and brittle probe connectors. Ice formation in the stream channel increases the difficulty of installing probes, and movement of the ice cover can sever the wire leads from the temperature probes. Winter installation of new probes through the ice often requires drilling through five feet of ice. During severe ice conditions it is also difficult to detect damaged probes making it necessary to rely on the short display sequence to determine the operating condition of the instrument.

Field installation procedures are outlined in the ADF&G Su Hydro Aquatic Studies (May, 1983 - June 1984) Procedures Manual (ADF&G 1983d).

2.3 Data Analysis

Water temperature data were retrieved from the datapod temperature recorders as six-hour minimum, mean, and maximum temperatures by reading the data storage module (DSM) via an Omnidata model 217 Datapod/cassette reader into a microcomputer. These six-hour data bases were edited and corrected for storage errors and anomalous data. Daily and monthly minimum, mean, and maximum temperatures were computer calculated from the edited data bases and reported in tables and plots.

Temperature data obtained when the study site was frozen are reported in tables separate from those temperatures obtained during an unfrozen period. Both unfrozen and frozen data are included in the plots. Also temperatures below -5°C are not recorded by the datapod recorder as these low temperatures exceed recording capabilities of the program.

A summary of the results of the 1984-85 winter temperature studies is presented by task and includes a brief description of the status of the monitoring station throughout the period of record and the data presented as a plot of surface and intragravel temperatures. Also the 1984-85 winter season period of record for each station is presented in Appendix Table 3.

Appendix Table 3. Susitna River mainstem, side channel, slough, and tributary winter season temperature data index. 1984-85.

Location	Temperature Type	Period of Record
Lane Creek RM 113.6, TRM 0.1	Intra/Surface	841012 - 841016
	Surface	841017 - 841019
	Intragravel	841109 - 841126
	Intra/Surface	841127 - 850220
	Intra/Surface	850308 - 850403
Mainstem 2 Side Channel RM 115.0	Intra/Surface	841016 - 841102
	Intragravel	841103 - 841106
	Intra/Surface	841107 - 841108
	Intragravel	841109 - 841111
	Intra/Surface	841112 - 850227
	Intra/Surface	850308 - 850423
Bushrod Slough RM 117.8	Intra/Surface	841012 - 841211
	Intra/Surface	850110 - 850215
	Intra/Surface	850309 - 850403
Side Channel RM 117.9	Intra/Surface	841127 - 850214
	Intra/Surface	850309 - 850403
Susitna River RM 118.9	Intra/Surface	841012 - 841026
	Intragravel	841027 - 841102
	Intra/Surface	841103 - 850425
Curry Slough RM 119.7	Intra/Surface	841017 - 850214
	Intragravel	850215 - 850403
Susitna River RM 127.1	Intra/Surface	841127 - 850220
	Intra/Surface	850309 - 850321
	Surface	850322 - 850402
	Intra/Surface	850403 - 850425
Side Channel at RM 129.8	Intra/Surface	841127 - 841219
	Intragravel	841220 - 850103

Appendix Table 3 (Continued).

Location	Temperature Type	Period of Record
Fourth of July Creek (Site #3) RM 131.1, TRM 0.2	Intra/Surface Intragravel Intra/Surface	841010 - 841013 841014 - 841128 841129 - 850403
Side Channel at RM 131.3	Intra/Surface Surface	841011 - 850401 850402 - 850403
Susitna River at RM 132.9	Intra/Surface Surface Intra/Surface Surface Intra/Surface Intragravel Intra/Surface	841012 - 850121 850122 - 850124 850125 - 850128 850129 - 850202 850203 - 850215 850216 - 850310 850311 - 850425
Slough 10 Northeast Channel RM 133.8	Intra/Surface Intragravel Intra/Surface	840901 - 851025 841026 - 841102 841109 - 850319
Slough 10 Northwest Channel RM 133.8	Surface Intra/Surface Intra/Surface	840901 - 840922 840923 - 8411-26 8412-11 - 850404
Upper Side Channel 11 (Site #5) RM 136.0	Intra/Surface Surface	841016 - 850323 850324 - 850405
Susitna River at RM 137.5	Intra/Surface Intra/Surface Intragravel Intra/Surface Surface	841107 - 841211 850111 - 850219 850220 - 850310 850311 - 850313 850314 - 850420

Appendix Table 3 (Continued).

Location	Temperature Type	Period of Record
Susitna River at (Site #1) RM 139.0	Intra/Surface	841016 - 850108
	Intra/Surface	850111 - 850204
	Intragravel	850205 - 850306
Susitna River at (Site #2) RM 139.0	Intra/Surface	850311 - 850422
Indian River (Site #3) RM 138.6, TRM 0.2	Intra/Surface	840901 - 850211
	Intra/Surface	840928 - 850425
Upper Side Channel 21 RM 141.6	Intra/Surface	841045 - 850404

3.0 DATA SUMMARY

3.1 Task 29 Sites

In support of Task 29, continuous intragravel and surface water temperatures were recorded in three tributaries, six side channel sites, and five mainstem locations.

3.1.1 Lane Creek (RM 113.6, TRM 0.1)

Intragravel and surface water temperatures were recorded at Lane Creek beginning on October 12, 1984 and were continued through April 3, 1985 (Appendix Table 3). Several gaps in the data record do exist resulting from a malfunctioning temperature recorder and damaged probes.

Minimum, mean, and maximum daily and monthly intragravel and surface water temperatures were developed from this data base and are presented in Appendix Table 4. The mean daily surface and intragravel water temperatures were plotted and are presented in Appendix Figure 2.

Upon installation of the Lane Creek temperature monitoring station both intragravel and surface water temperatures decreased. Due to malfunctioning probes the minimum intragravel and surface water temperature occurring in October was not determined. New probes were installed in November and temperatures were obtained until February 20, 1985. During this period intragravel and surface water temperatures exhibited similar trends with intragravel temperatures warmer than surface water. Between February 20 and March 8 another gap in the data exists. Following March 8 a continuous record of water temperature was obtained until April 3. Overall, from the temperature record obtained at Lane Creek intragravel water temperatures ranged from 0.3°C to 3.7° and surface water temperatures ranged from -0.3°C to 3.4°C.

3.1.2 Fourth of July Creek (RM 131.1, TRM 0.2)

The temperature station referred to as site 3 located in Fourth of July Creek was installed on October 10, 1984 and was continued through April 3, 1985. Sites 1 and 2 are previous temperature stations located in Fourth of July Creek. Gaps in the record occurred from October 26 to November 28 for intragravel and from October 14 to November 28 for surface water (Appendix Table 3). From these data daily and monthly minimum, mean, and maximum water temperatures were determined and are presented in Appendix Table 5. A plot of the mean daily water temperatures is presented in Appendix Figure 3.

Following installation of this temperature monitoring station both intragravel and surface water temperatures decreased rapidly. Temperatures decreased in October from 3.4°C to -0.3°C for intragravel and 3.1°C to -0.4°C for intragravel.

Upon reinstallation of new probes on November 28 and continuing thru April 3 both intragravel and surface water temperatures were stable and very similar. Intragravel temperatures ranged from -0.2°C to 0.5°C

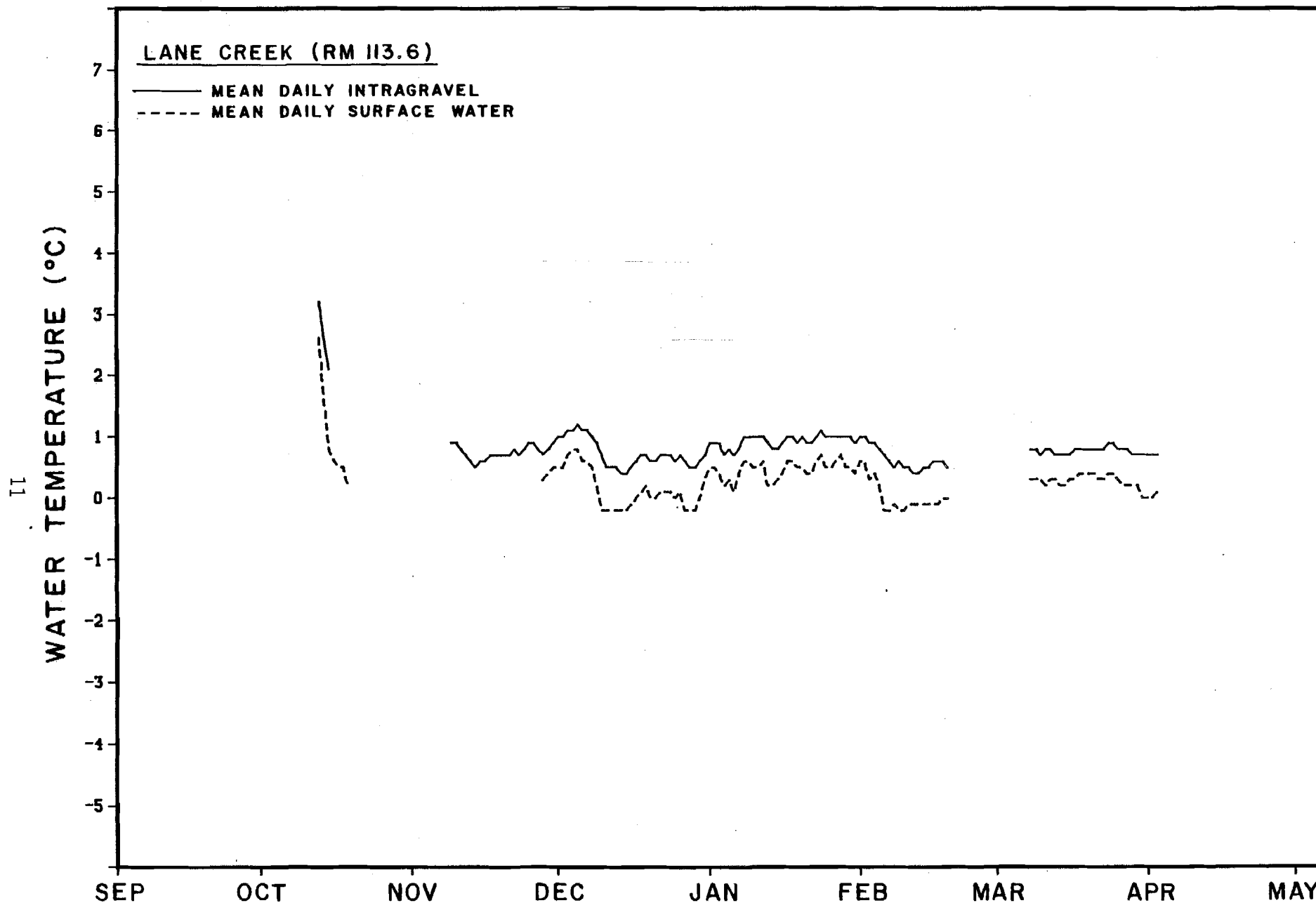


Figure 2. Mean daily intragravel and surface water temperatures ($^{\circ}\text{C}$) recorded at Lane Creek, RM 113.6, TRM 0.1, during the 1984-85 winter season.

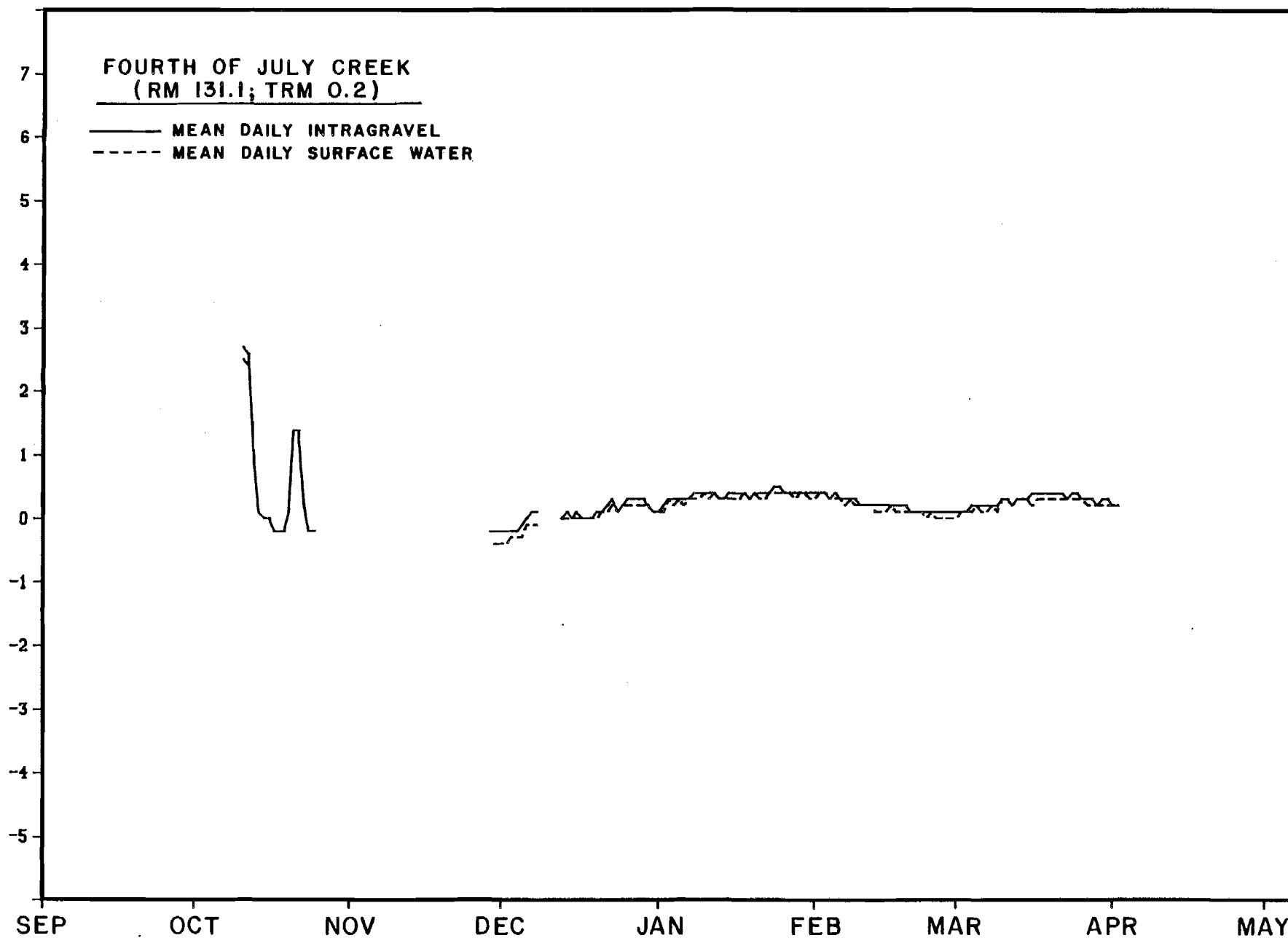


Figure 3. Mean daily intragravel and surface water temperatures ($^{\circ}\text{C}$) recorded at Fourth of July Creek - Site 3, RM 131.1, TRM 0.2, during the 1984-85 winter season.

compared to -0.4°C to 0.5°C for surface water temperature for the November 28 thru April 3 period of record.

3.1.3 Indian River (RM 131.1)

Both intragravel and surface water temperatures were monitored at two locations in Indian River. These temperature monitoring stations are referred to as sites 3 and 4. Sites 1 and 2 are previous temperature monitoring stations located in Indian River.

Site 3 (TRM 0.2)

Intragravel and surface water temperatures were recorded continuously at Site 3 in Indian River from September 1, through February 11, for intragravel, with surface water terminating on February 7. From these data minimum, mean and maximum daily and monthly intragravel and surface water temperatures were developed and are presented in Appendix Table 6. A plot of the mean daily intragravel and surface water temperatures are presented in Appendix Figure 4.

It was found that intragravel and surface water temperatures at Site 3 in Indian River were similar throughout the period of record. An overall decrease in both intragravel and surface water began in September and continued in October with intragravel water temperatures decreasing from a maximum daily temperature of 8.6°C occurring on September 6 to a maximum daily temperature of 0.1°C occurring on October 28. Surface water temperatures decreased from a maximum water temperature of 10.1°C occurring on September 6 to a maximum water temperature of 0.2°C occurring on October 30. These low temperatures remained through the period of record. From November 1 until February 7 both intragravel and surface water temperatures ranged from -0.1°C to 0.2°C .

3.1.4 Site 4

Intragravel and surface water temperatures were continuously monitored in Indian River at the Site 4 study site from September 28, to April 25. Minimum, mean and maximum daily and monthly intragravel and surface water temperatures were developed from this data base and are presented in Appendix Table 7. The mean daily values for both surface and intragravel were plotted and are presented in Appendix Figure 5.

As with site 3 in Indian River the intragravel and surface water temperatures at site 4 were found to be similar. Water temperatures were decreasing through September and October with maximum temperatures decreasing from 7.2°C to 0.5°C for intragravel and from 7.0°C to 0.3°C for surface water. Water temperatures did not vary significantly from November 1 to April 25 ranging from -0.1°C to 0.6°C for intragravel and from -0.2°C to 0.5°C for surface water.

3.1.5 Mainstem 2 Side Channel

Intragravel and surface water temperatures were recorded in Mainstem 2 Side Channel from October 16, 1984 to April 23, 1985. Due to a damaged

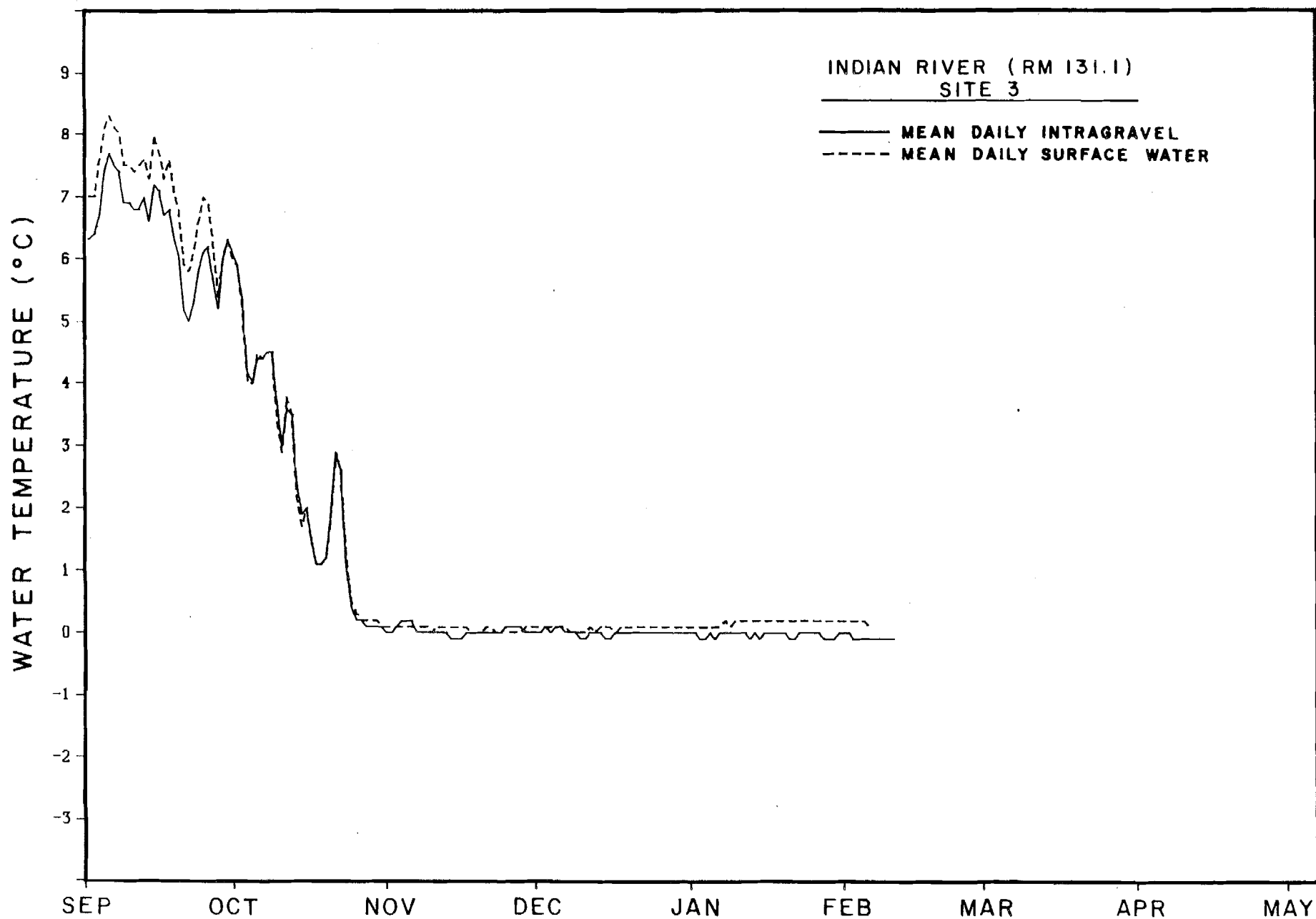


Figure 4. Mean daily intragravel and surface water temperatures ($^{\circ}\text{C}$) recorded at Indian River - Site 3, RM 138.6, TRM 0.2, during the 1984-85 winter season.

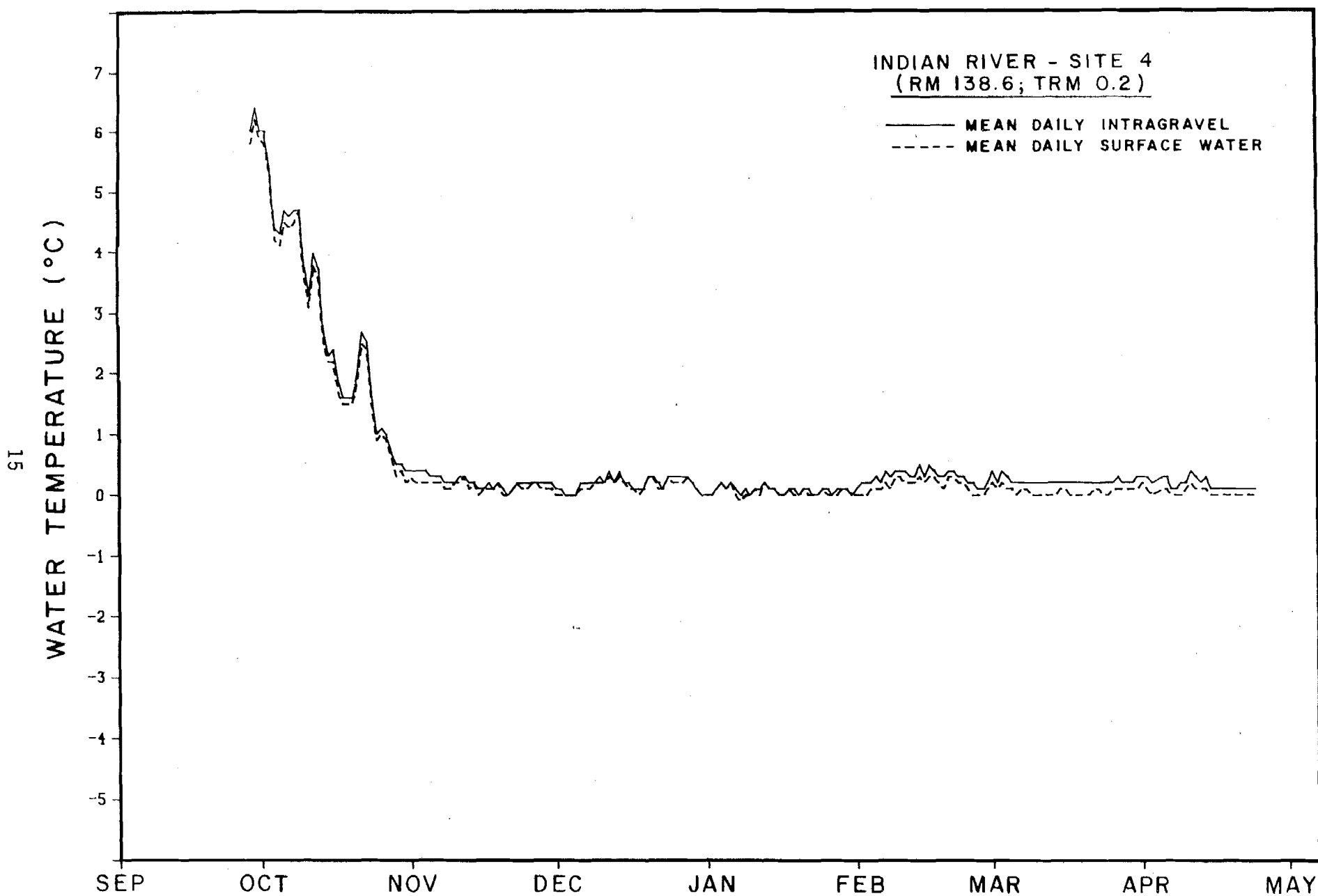


Figure 5. Mean daily intragravel and surface water temperatures ($^{\circ}\text{C}$) recorded at Indian River - Site 4, RM 138.6, TRM 0.2, during the 1984-85 winter season.

probe, surface water temperatures were not recorded from November 3 to November 6, and from November 9 to November 11. Intragravel and surface water temperatures were not recorded from February 28 to March 7 because of a malfunctioning temperature recorder.

Daily and monthly minimum, mean, and maximum surface and intragravel water temperatures developed from this data base are presented in Appendix Table 8. These data were plotted as mean daily temperatures which is presented in Appendix Figure 6.

From a review of these temperature data it was found that both intragravel and surface water temperatures declined rapidly in October until early November. Between October 16 and November 2, mean daily surface water temperatures decreased from a high of 4.3°C to a low of 0.6°C. Mean daily intragravel temperatures decreased from 4.1°C on October 16 to 0.0°C on November 7. Intragravel water temperatures near 0°C were recorded until late November at which time temperatures began to increase gradually. By mid December mean daily intragravel water temperatures had increased to 1.8°C. Surface water temperatures remained near 0°C until December 6 and increased rapidly to 2.1°C by December 9.

Intragravel and surface water temperatures remained stable throughout most of the remainder of the record although in early March for a brief period water temperatures fell slightly. Both intragravel and surface water temperatures began to increase near the end of the recording period (April 23). Overall intragravel water temperatures ranged from -0.2°C to 4.3°C and -0.3°C to 4.8°C for surface water for the entire period of record.

3.1.6 Side Channel at RM 117.9

Intragravel and surface water temperatures were recorded at this side channel from November 27 to February 14 and from March 9 to April 3.

Daily and monthly minimum, mean and maximum intragravel and surface water temperatures were developed and are presented in Appendix Table 9. A plot of mean daily intragravel and surface water temperatures developed from these data is presented in Appendix Figure 7.

Intragravel water temperatures were found to be warmer than surface water and to have very little fluctuation throughout the period of record. Between October 12 and April 3, daily intragravel temperatures ranged only from 3.4°C to 3.9°C compared to cooler surface water temperatures ranging from 0.5°C to 2.6°C.

3.1.7 Side Channel at RM 129.8

At this side channel intragravel water temperatures were recorded from November 27 to January 3 and surface water from November 27 to December 19 (Appendix Table 3). This temperature monitoring station was placed in the only open water lead available in the side channel on November 8. Upon installation of the datapod temperature recorder (November 27) the site was found to be frozen as was all of the side channel. This site

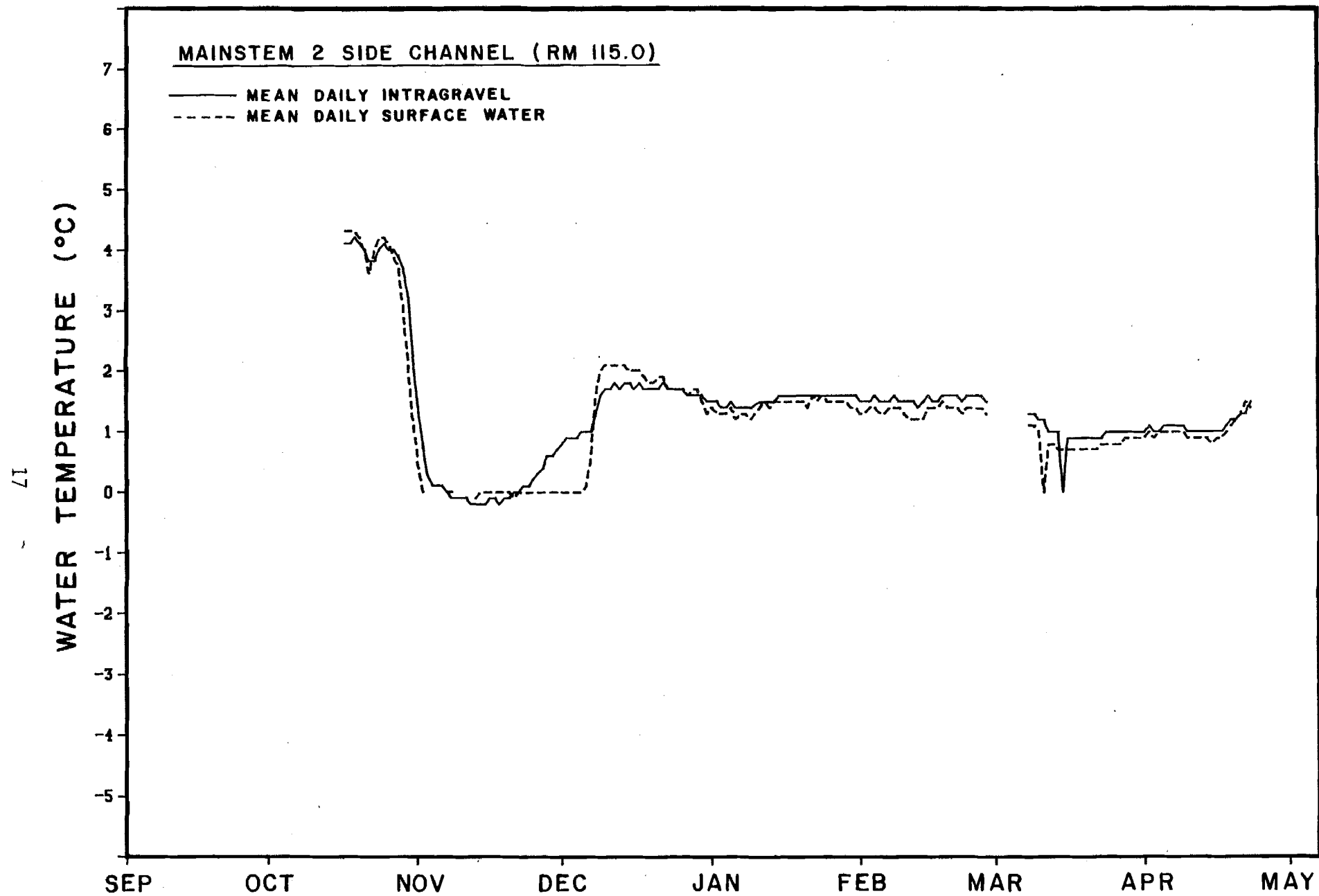


Figure 6. Mean daily intragravel and surface water temperatures ($^{\circ}\text{C}$) recorded at Mainstem 2 Side Channel, RM 115.0, during the 1984-85 winter season.

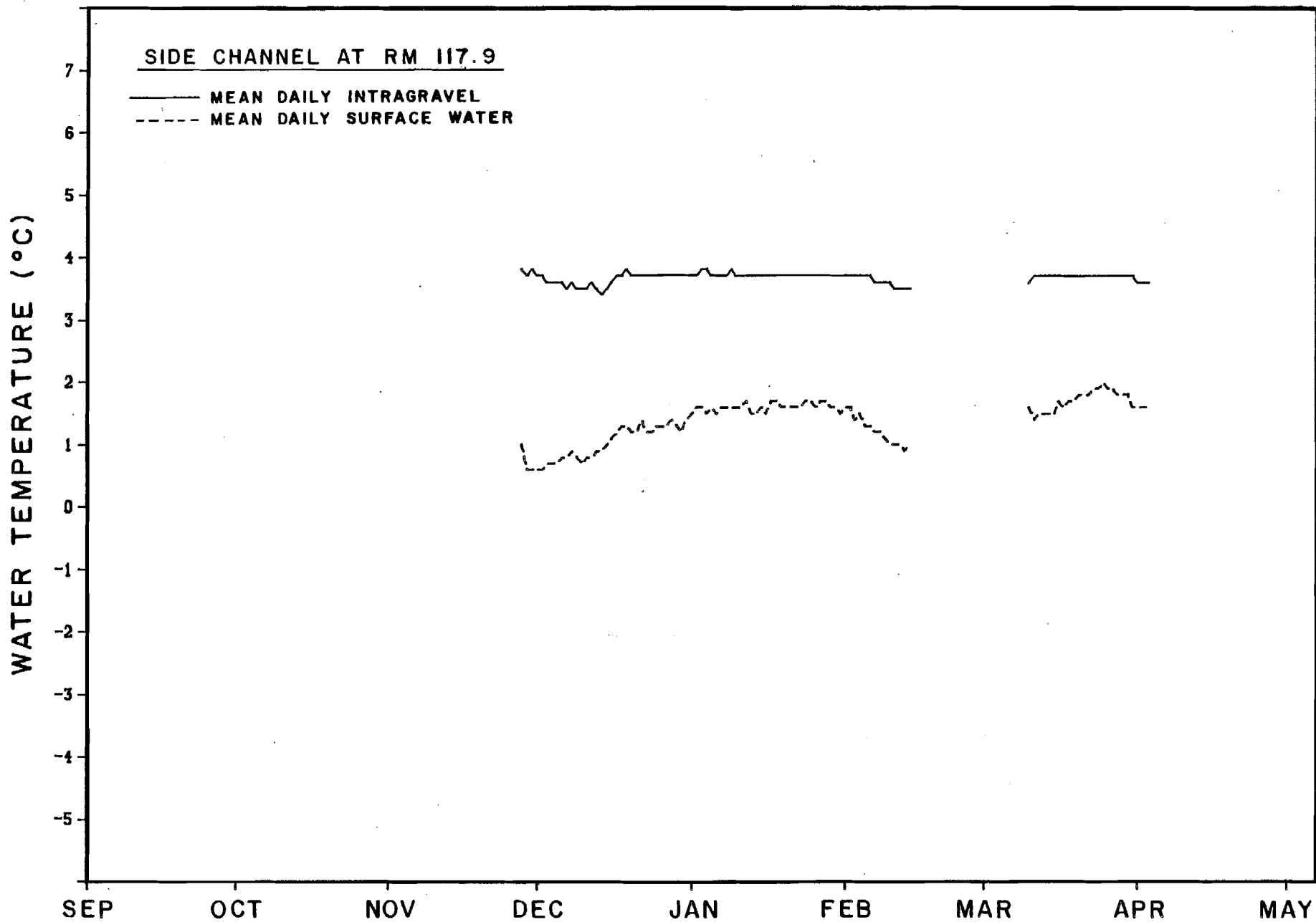


Figure 7. Mean daily intragravel and surface water temperatures ($^{\circ}\text{C}$) recorded at the side channel at RM 117.9, during the 1984-85 winter season.

was observed frozen through the period of record. Intragravel water temperatures ranged from -2.1°C to -0.1°C and -4.1°C to -0.2°C for surface water for the brief period of record for this site.

The temperatures obtained at this side channel are presented as daily and monthly minimum, mean, and maximums in Appendix Table 10. The mean daily intragravel and surface water temperatures are also presented as a plot in Appendix Figure 8.

3.1.8 Side Channel at Rm 131.3

Intragravel and surface water temperatures were recorded at this side channel study site from October 11 through April 3. A gap in the data occurred from January 5 to January 10 due to malfunctioning probes.

From this data base both daily and monthly minimum, mean, and maximum temperatures were developed and are presented in Appendix Table 11. A plot of the mean daily intragravel and surface water temperatures is presented in Appendix Figure 9.

The comparison of intragravel and surface water temperatures presented in Appendix Figure 9 illustrates a large dissimilarity between intragravel and surface water temperatures occurring from October thru mid-December. For this period intragravel water temperatures were warmer than surface water and ranged from 2.8°C to 4.1°C compared to surface water temperatures of 0.7°C to 4.4°C . Following mid-December water temperatures decreased and continuing through March intragravel water temperatures were similar although slightly warmer than surface water temperatures. At the end of the period of record (April 3) surface water temperatures had increased and were found to be slightly warmer than intragravel. From December 18 through the end of the period of record (April 3) intragravel water temperatures ranged from 0.1°C to 2.2°C and from 0.1°C to 4.4°C for surface water.

3.1.9 Upper Side Channel 11 (RM 136.0)

A continuous temperature recorder was installed in Upper Side Channel 11 on October 16 to monitor intragravel and surface water temperatures. Intragravel water temperatures were measured until March 23 at which time the intragravel probe failed. Surface water temperatures were monitored until April 5.

Mean daily and monthly minimum, mean, and maximum water temperatures were developed and are presented in Appendix Tables 12 and 13. Intragravel and surface mean daily water temperatures were plotted and are presented in Appendix Figure 10.

Following installation of this temperature recording station water temperatures decreased from 4.1°C to 0.5°C for intragravel and 4.5°C to -0.1°C for surface water (October 16-31). The temperature monitoring site was determined to be frozen on October 30 until March 23. Although the site was considered frozen, intragravel water temperatures were recorded from February 7 to March 23 and ranged from -0.1°C to 0.4°C while the surface water temperature probe remained frozen. From March

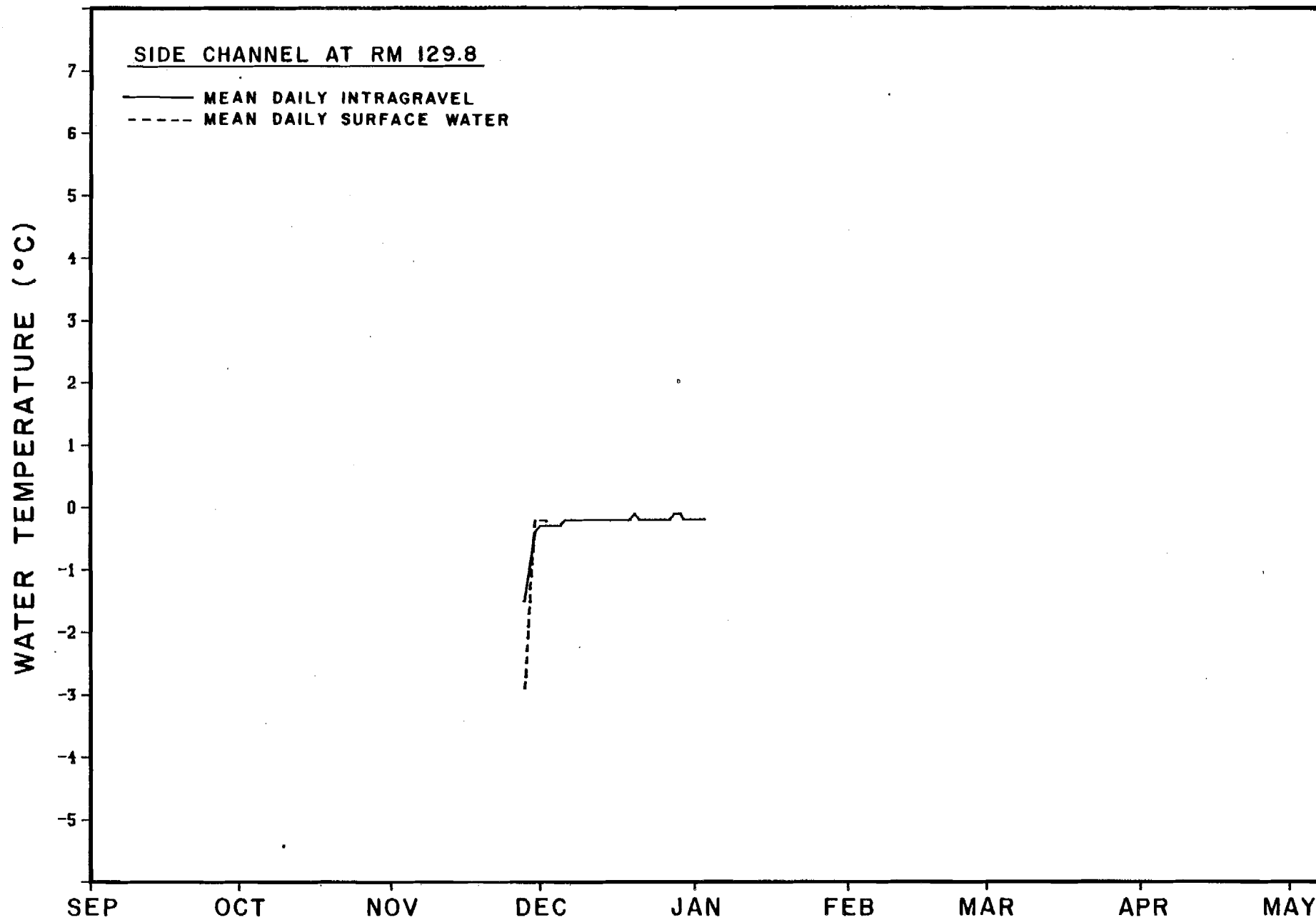


Figure 8. Mean daily intragravel and surface water temperatures ($^{\circ}\text{C}$) recorded at the side channel at RM 129.8, during the 1984-85 winter season.

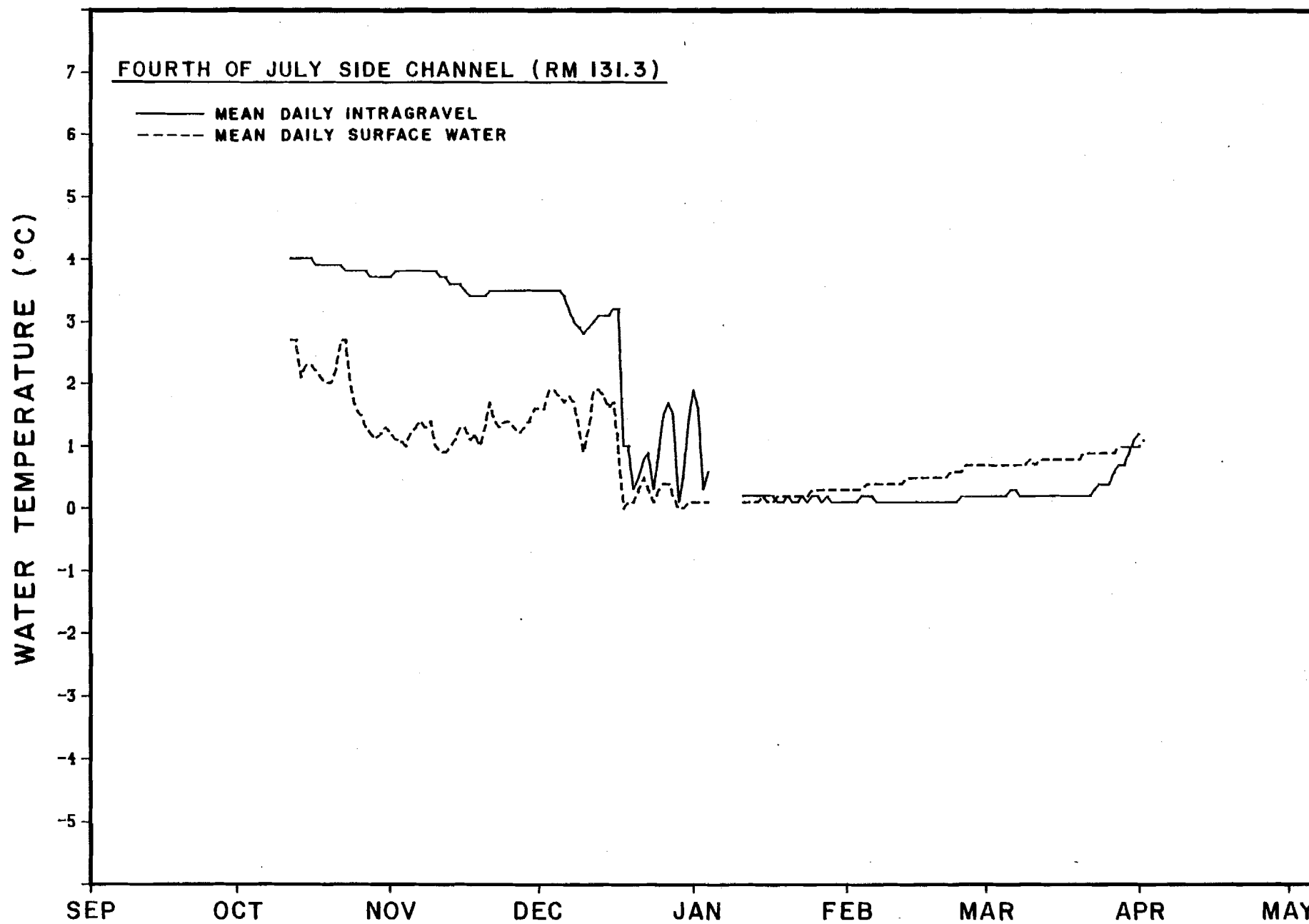


Figure 9. Mean daily intragravel and surface water temperatures ($^{\circ}\text{C}$) recorded at the side channel at RM 131.3, during the 1984-85 winter season.

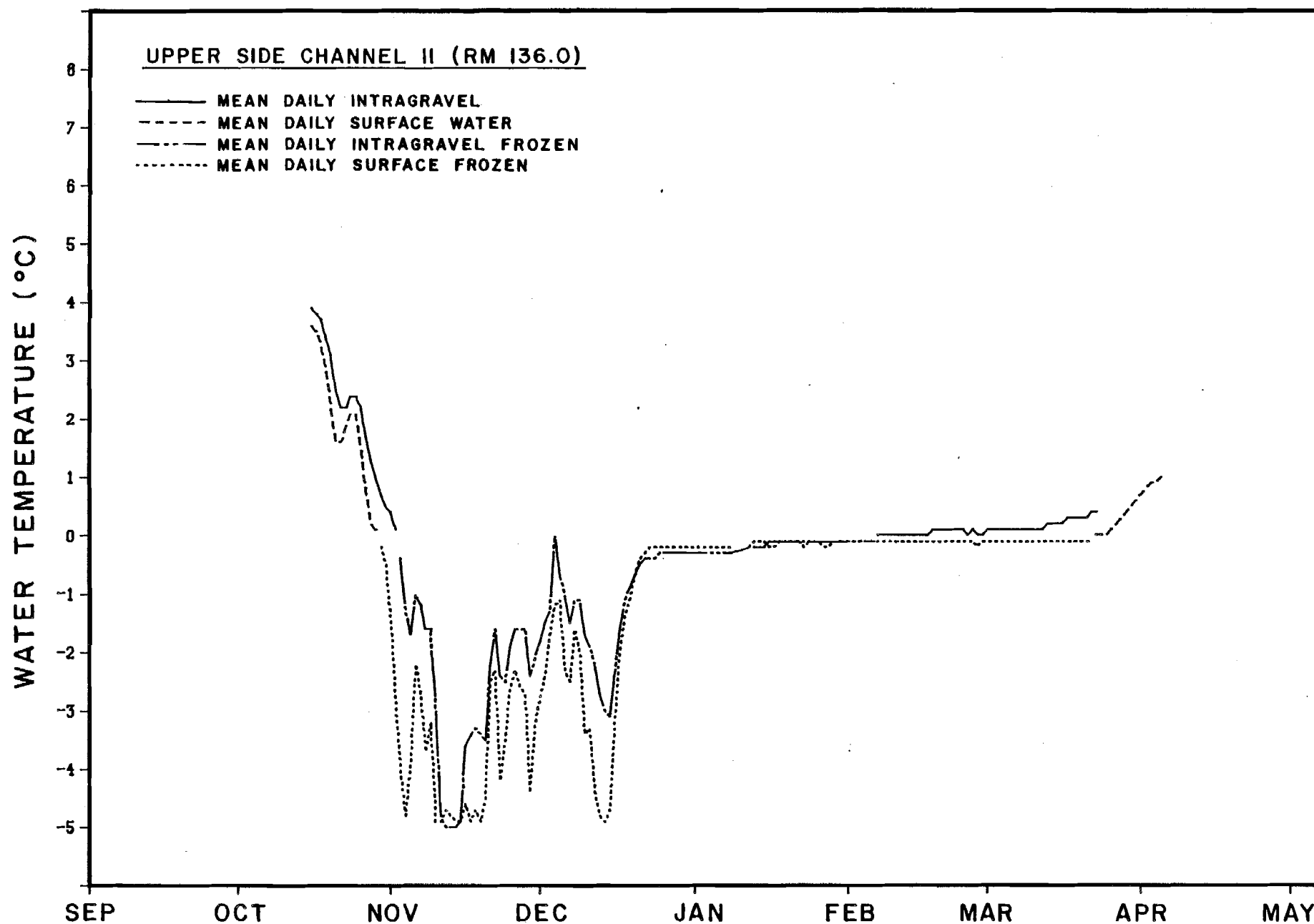


Figure 10. Mean daily intragravel and surface water temperatures (°C) recorded at Upper Side Channel 11 - Site 5, RM 136.0, during the 1984-85 winter season.

23 to April 5 surface water temperatures were recorded while the intragravel probe was found to be malfunctioning. For this period surface water temperatures ranged from -0.1°C to 1.1°C .

3.1.10 Upper Side Channel 21 (RM 141.6)

Continuous intragravel and surface water temperatures were recorded at Upper Side Channel 21 from October 15 to April 4 (Appendix Table 3).

Daily and monthly minimum, mean, and maximum intragravel and surface temperatures were developed from these data and are presented in Appendix Table 14. A plot of the mean daily intragravel and surface water temperatures is presented in Appendix Figure 11.

Throughout the period of record, intragravel water temperatures exceeded those of surface water. From October 15 to April 4, intragravel temperatures ranged from 2.0°C to 4.1°C compared to surface water temperatures of -0.1°C to 4.6°C .

3.1.11 Susitna River at RM 118.9

Intragravel and surface water temperatures were continuously recorded at the mainstem Susitna River, RM 118.9 study location from October 12 to April 25 (Appendix Table 3). These water temperature data are presented in Appendix Table 15 as daily and monthly minimum, mean and maximum water temperatures. The mean daily water temperatures for both intragravel and surface water were plotted and are presented in Appendix Figure 12. From a review of Appendix Figure 12 both intragravel and surface water temperatures exhibited substantial variation in water temperatures from October thru mid-November. During this period water temperatures ranged from 0.4°C to 3.4°C for intragravel compared to 0.0°C to 4.3°C for surface water. Following mid-November and continuing through the period of record (April 25) water temperatures showed very little variation with intragravel water temperatures found to be warmer than surface water. Water temperatures from mid-November until April 25, 1985 ranged from 0.6°C to 1.8°C for intragravel and 0.0°C to 0.3°C for surface water temperatures. Overall, intragravel water temperatures ranged from 0.4°C to 3.4°C and surface water from 0.0°C to 4.3°C for the period of record.

3.1.12 Susitna River at RM 127.1

Surface and intragravel water temperatures were recorded at the mainstem Susitna River, RM 127.1 study location from November 27 to April 25 (Appendix Table 3). Both intragravel and surface water temperatures were not recorded from February 21 to March 8 due to a malfunctioning datapod recorder. Between March 22 and April 2, intragravel temperatures only were not obtained due to a damaged probe.

Minimum, mean and maximum daily and monthly intragravel and surface water temperatures are presented in Appendix Table 16. From the mean daily temperatures a plot of both intragravel and surface water temperatures was developed and is presented in Appendix Figure 13.

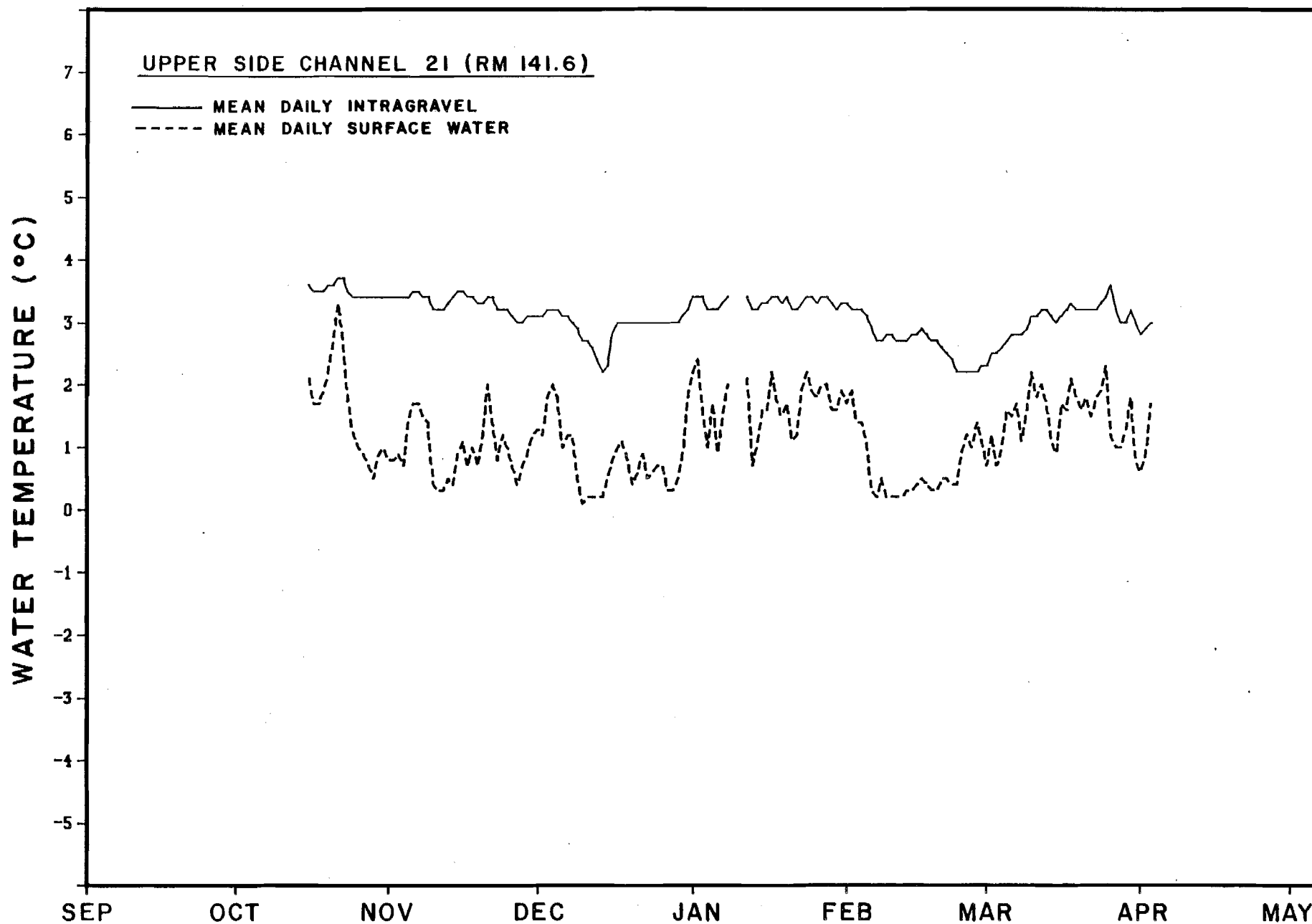


Figure 11. Mean daily intragravel and surface water temperatures ($^{\circ}\text{C}$) recorded at Upper Side Channel 21, RM 141.6, during the 1984-85 winter season.

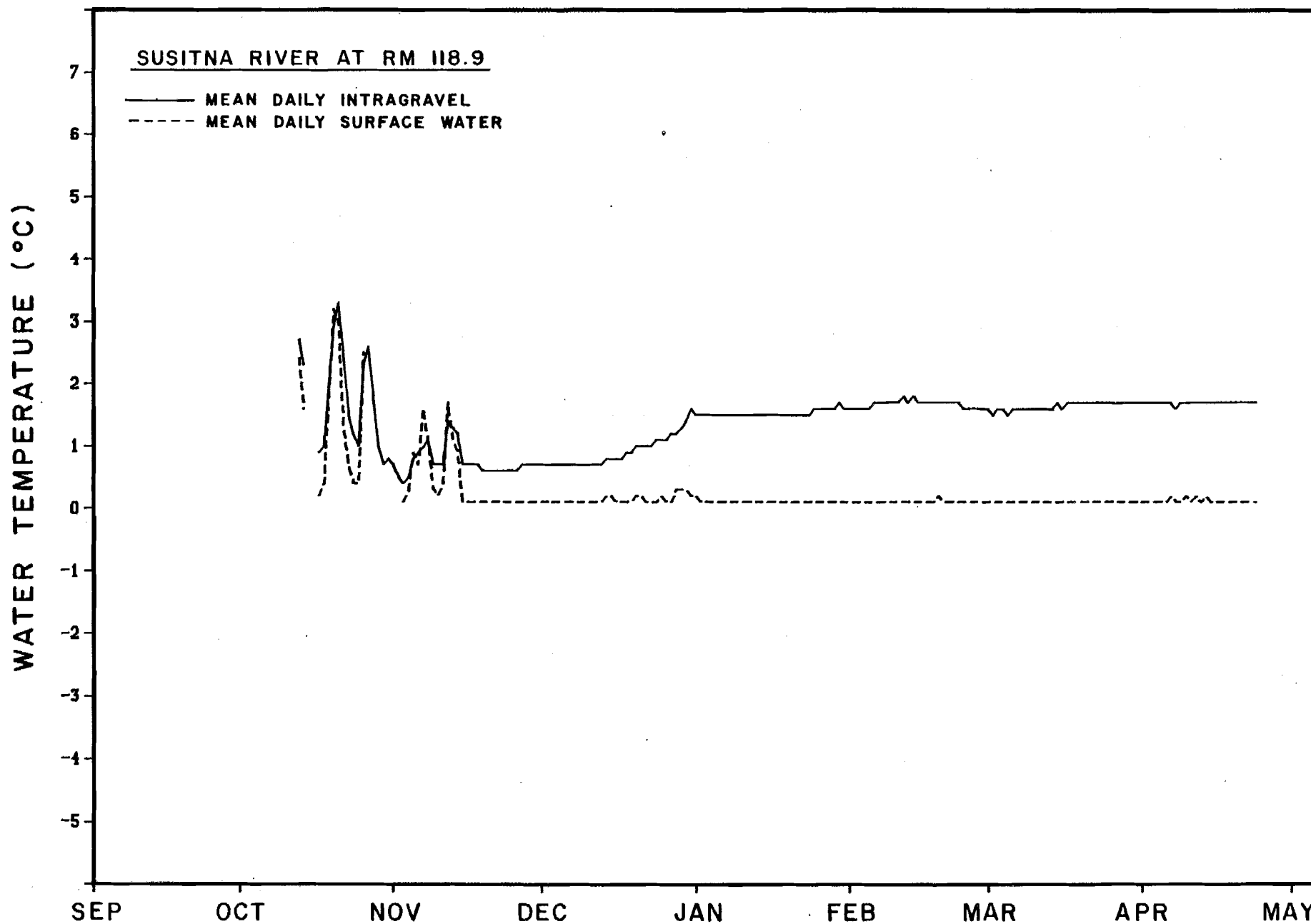


Figure 12. Mean daily intragravel and surface water temperatures ($^{\circ}\text{C}$) recorded at Mainstem Susitna River at RM 118.9, during the 1984-85 winter season.

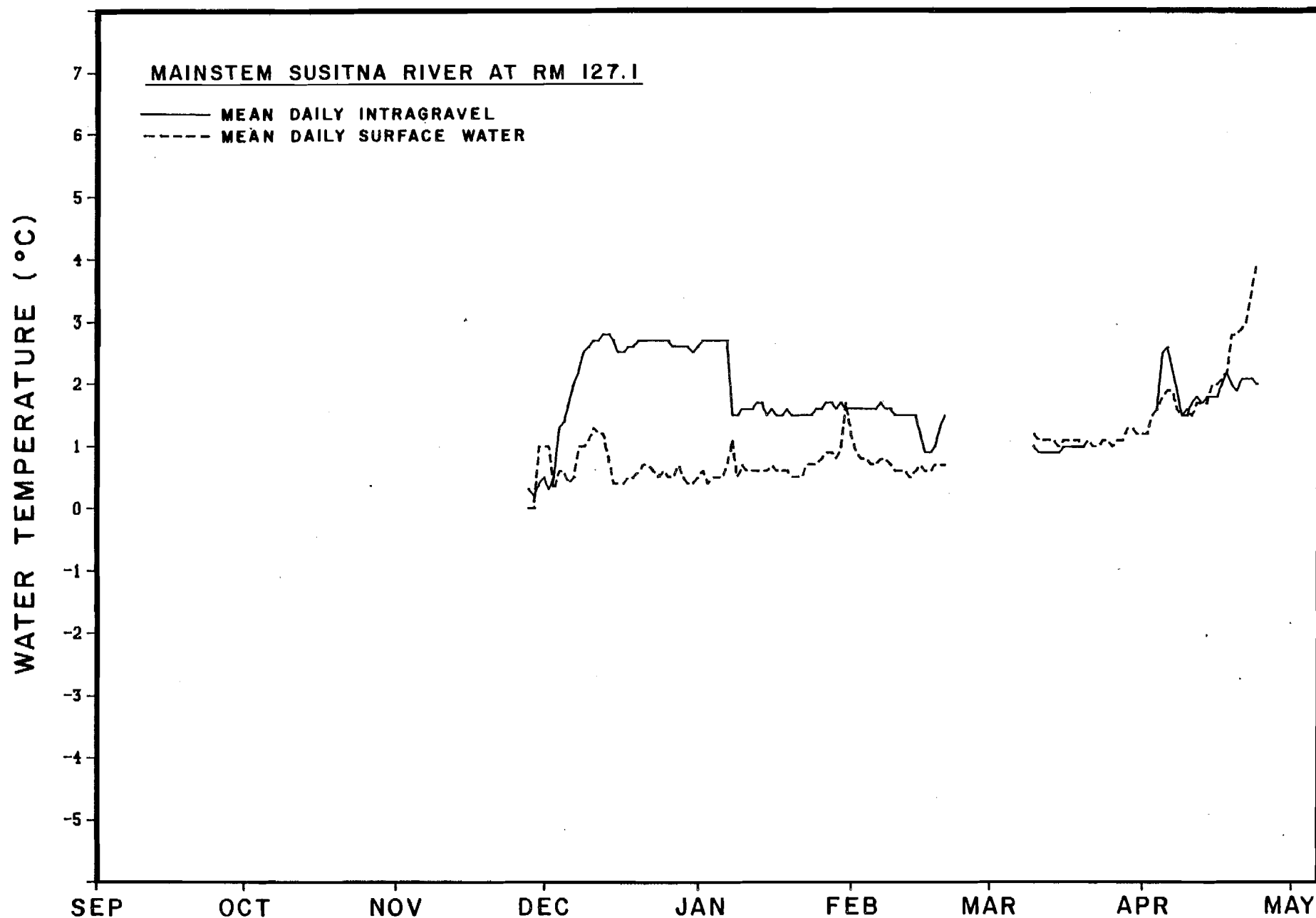


Figure 13. Mean daily intragravel and surface water temperatures (°C) recorded at Mainstem Susitna River at RM 127.1, during the 1984-85 winter season.

Following installation of this monitoring station intragravel water temperatures dramatically increased and continued to be quite warmer than surface water. Between November 27 and January 7 intragravel water temperatures ranged from 0.1°C to 2.9°C compared to -0.1°C to 1.7°C for surface water temperatures. Intragravel water temperatures decreased on January 8 but remained warmer than surface water until late April at which time the reverse occurred. From January 8 to April 9 intragravel water temperatures ranged from 0.5°C to 3.6°C compared to 0.4°C to 2.5°C for surface water temperatures. From April 10 until the station was pulled on April 25 intragravel temperatures were colder than surface water with maximum water temperatures obtained of 3.0°C for intragravel and 5.2°C for surface water. Overall for the period of record intragravel water temperatures ranged from 0.1°C to 3.6°C and -0.1°C to 5.2°C for surface water.

3.1.13 Susitna River at RM 132.9

Intragravel and surface water temperatures were recorded at the mainstem Susitna River, RM 132.9 study location from October 12 to April 25 (Appendix Table 3). Between October 28 and November 1 and December 13 to December 15 the surface water site was determined to be frozen. Also surface water temperatures were not recorded between February 16 to March 9 due to a damaged probe.

Daily and monthly minimum, mean, and maximum intragravel and surface water temperatures were developed from this data base and are presented in Appendix Tables 17 and 18. A plot of the mean daily surface and intragravel water temperatures is presented in Appendix Figure 14.

From a review of the plot of mean, daily intragravel and surface water temperatures, water temperatures were found to decrease following installation in October with water temperatures fluctuating approximately $\pm 1^{\circ}\text{C}$ until February. Intragravel water temperatures were generally warmer than surface water except for a brief period in October and late January. For the months of March and April intragravel temperatures were relatively constant and similar to surface water. For the months of October thru February 16 intragravel water temperatures ranged from -0.1°C to 3.4°C and surface water temperatures ranged from -1.3°C to 7.1°C. From mid-February thru the remainder of the period of record temperatures ranged from -0.2°C to 0.3°C and 0.0°C to 2.2°C for intragravel and surface water respectively.

3.1.14 Susitna River at RM 137.5

An intragravel and surface water temperature monitoring station was installed at the mainstem Susitna River, RM 137.5 study site on November 7. Intragravel water temperatures were obtained only until March 13 due to a malfunctioning probe. Surface water temperatures were monitored until April 20 although from March 29 through April 20 the site was determined to be frozen. Between December 12 and January 10 both intragravel and surface water temperatures were not obtained due to a malfunctioning temperature recorder. From February 20 to March 11 surface water temperatures were not obtained due to a malfunctioning probe.

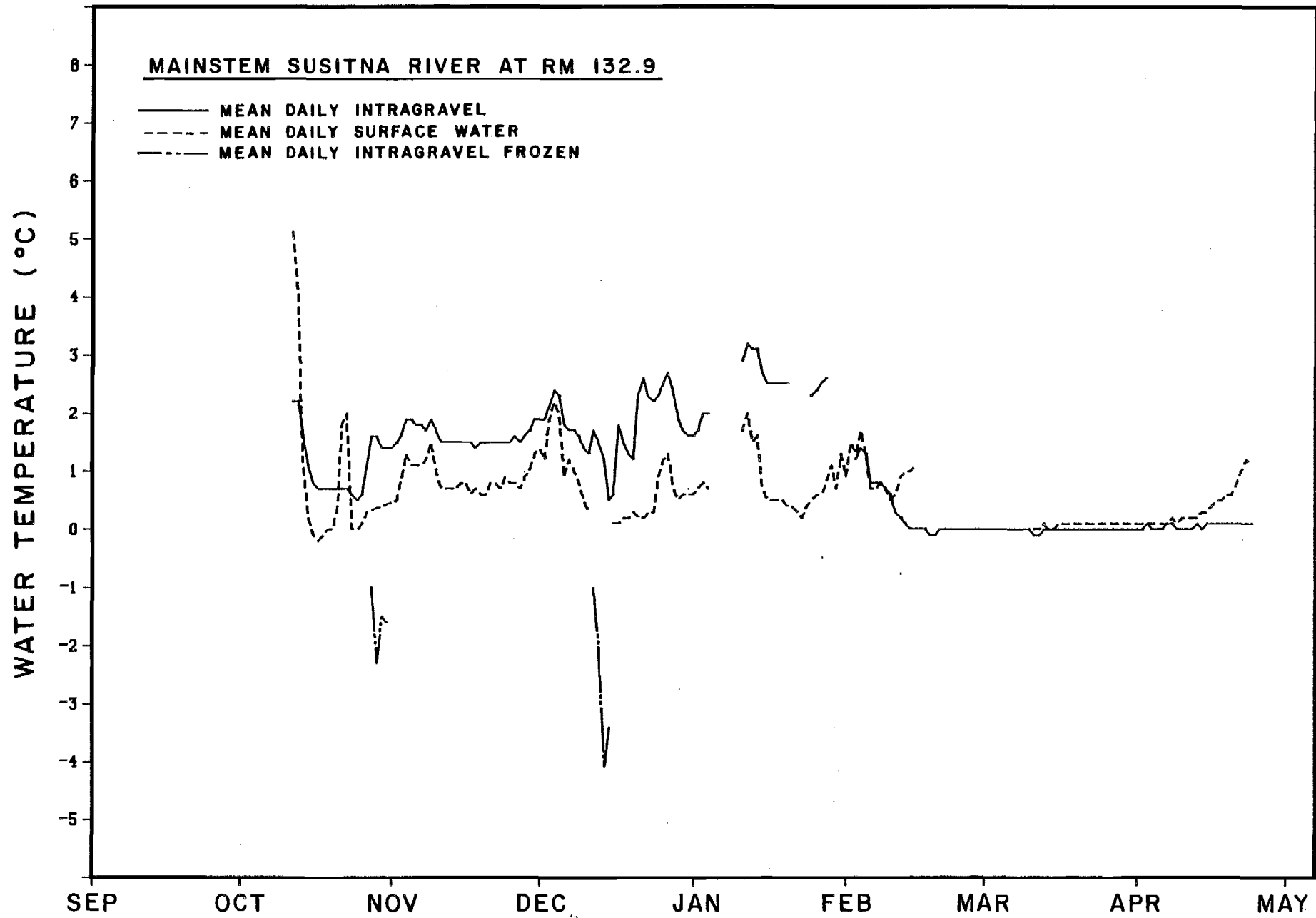


Figure 14. Mean daily intragravel and surface water temperatures (°C) recorded at Mainstem Susitna River below Slough 9A, RM 132.9, during the 1984-85 winter season.

From these data mean daily and monthly minimum, mean, and maximum intragravel and surface water temperatures were developed and are presented in Appendix Tables 19 and 20. Mean daily intragravel and surface water temperatures were plotted and are presented in Appendix Figure 15.

Beginning with the installation of this recorder on November 7 continuing until the recorder malfunction on December 12 intragravel water temperatures were found to steadily decrease while surface water temperatures showed a gradual increase. Intragravel water temperatures also during this period, exceeded those of surface water. Intragravel temperatures fell from a maximum temperature of 3.6°C on November 12 to a maximum temperature of 1.7°C occurring on December 12. Surface water temperatures showed a slight increase from a maximum temperature of 0.2°C occurring in late November to a maximum surface water temperature of 0.4°C on December 12. Temperatures were not recorded again until January 11 due to a faulty recorder. Following re-installation of the temperature recorder on January 11 intragravel water temperatures remained slightly warmer than surface water until February 5. Surface water temperature remained slightly warmer than intragravel from February 5 until February 20 at which time the surface water probe malfunctioned. From January 11 until February 20 intragravel water temperatures ranged from 0.3°C to 2.9°C and surface water temperatures ranged from 0.5°C to 3.4°C.

Only intragravel water temperatures were monitored from February 20 until March 13 and these temperatures ranged from 0.8°C to 1.6°C. Although only surface water temperatures were monitored from March 11 until April 20 due to a faulty intragravel probe these temperatures were obtained while the site was determined to be frozen. Temperatures as low as -4.8°C were obtained.

3.1.15 Susitna River at RM 139.0

Two temperature monitoring stations were located at this study site and are referred to as Site 1 and Site 2. Site 1 was replaced in March by Site 2 due to damaged probes at Site 1. The following summarizes the results of each site.

3.1.15.1 Susitna River at RM 139.0, Site 1

A temperature monitoring station was installed in the mainstem Susitna River at the RM 139.0 study location on October 6. Intragravel water temperatures were recorded until March 6 and surface water temperatures were collected only until February 4, due to a broken probe.

Mean daily and monthly intragravel and surface water temperatures were developed from these temperature data and are presented in Appendix Tables 21 and 22. A plot of the mean daily intragravel and surface water temperatures was developed and is presented in Appendix Figure 16.

Following installation of this temperature station on October 16 both intragravel and surface water temperatures decreased. From October 16

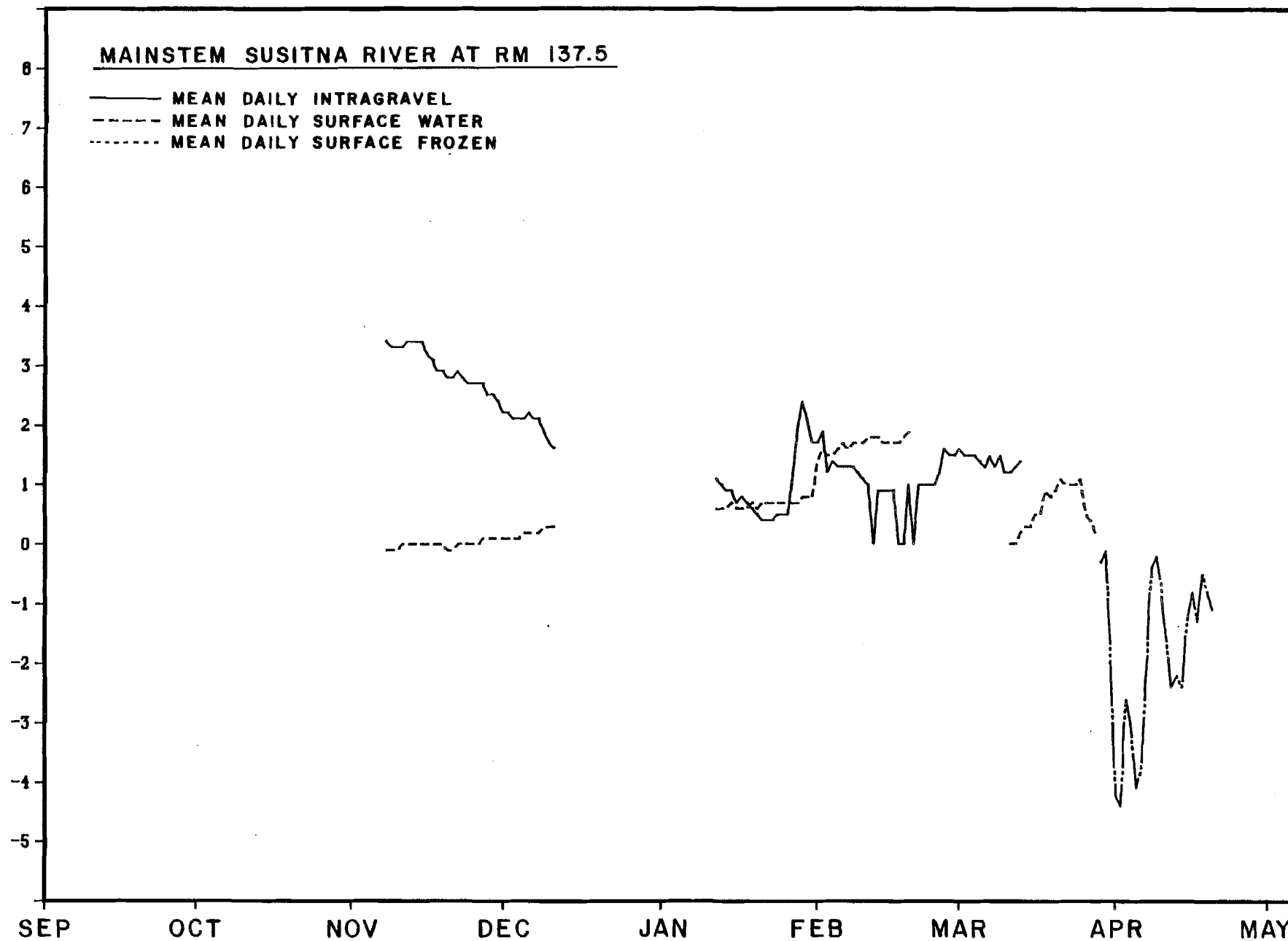


Figure 15. Mean daily intragravel and surface water temperatures (°C) recorded at the Mainstem Susitna River RM 137.5 study site during the 1984-85 winter season.

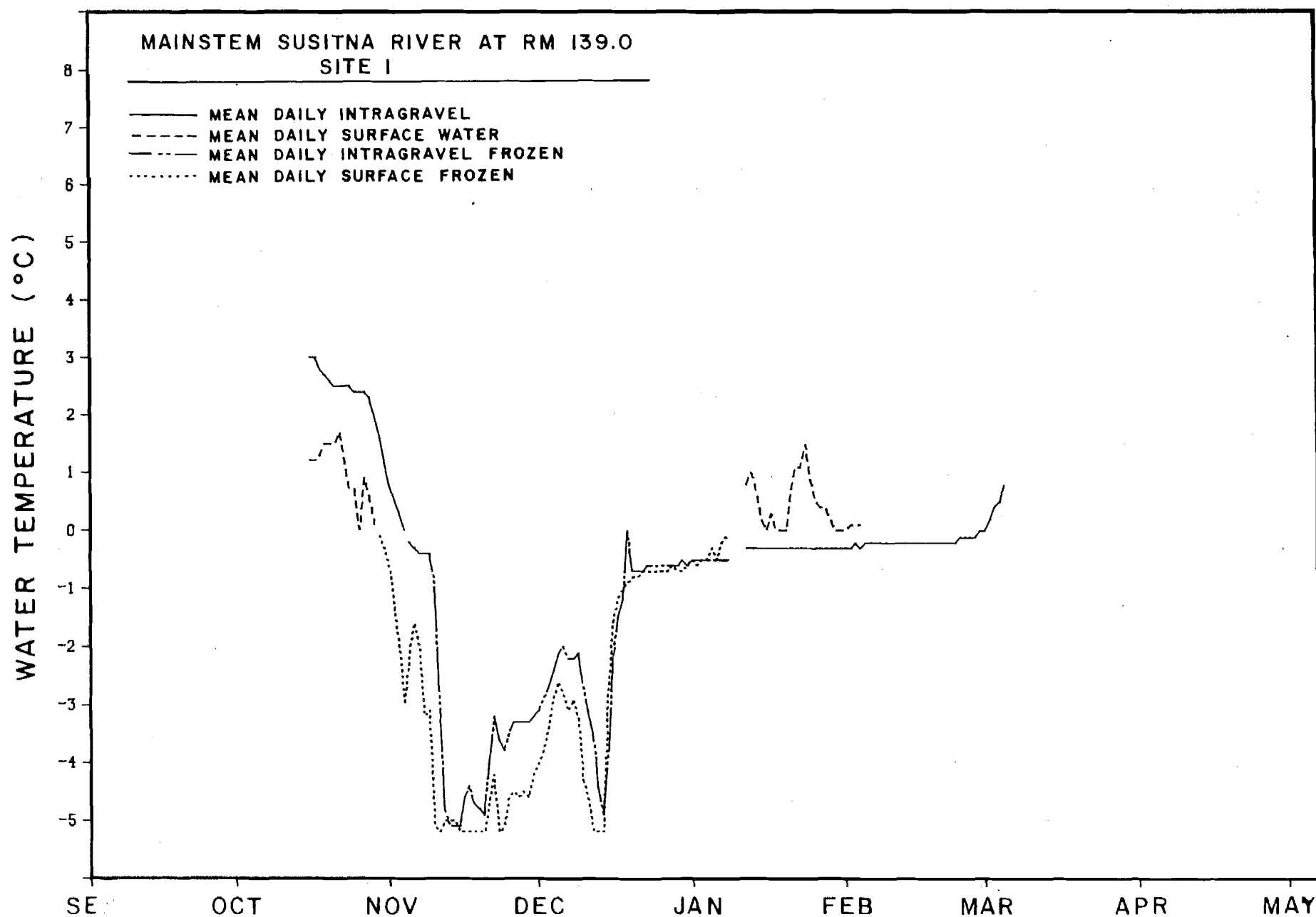


Figure 16. Mean daily intragravel and surface water temperatures ($^{\circ}\text{C}$) recorded at the Mainstem Susitna River RM 139.0 Site 1 study site during the 1984-85 winter season.

until November 4 intragravel water temperatures decreased from a maximum daily water temperature of 3.2°C (October 16) to a maximum intragravel temperature of 0.3°C occurring on November 4. Surface water temperatures decreased from a maximum daily temperature of 2.9°C (October 18) to 0.1°C occurring on October 30. This temperature site was observed to be frozen on October 21 with maximum water temperatures being recorded at the surface water probe of 0.0°C. Intragravel water temperatures remained only as high as 0.3°C until November 5 at which time intragravel water temperatures of -0.1°C were recorded. This temperature monitoring site was determined to be frozen from late October until January 8 with temperatures recorded as low as 5.1°C for both the intragravel and surface water for this time period. Although this site was unfrozen from January 11 until termination of the station on March 3 intragravel water temperatures remained low ranging from -0.4°C to 1.0°C. For the same time period surface water temperatures ranged from -0.1°C to 2.1°C.

3.1.15.2 Susitna River at RM 139.0, Site 2

Continuous intragravel and surface water temperatures were obtained from March 11 to April 22 at the Site 2 mainstem Susitna River study site located on river mile 139.0. This continuous monitoring station was installed to replace Site 1 following the Site 1 temperature probes being damaged by ice movement. From these data minimum, mean, and maximum daily and monthly intragravel and surface water temperatures were developed and are presented in Appendix Table 23. A plot of daily mean intragravel and surface water temperatures was developed and is presented in Appendix Figure 17.

Following installation of this station on March 11 and continuing through April 7, both intragravel and surface water temperatures decreased. Intragravel water temperatures were found to decrease from a maximum water temperature of 3.3°C occurring on March 15 to 1.5°C on April 7. Surface water temperatures were found to decrease from 4.0°C occurring on March 25 to 0.0°C on April 7. Temperatures began an increase on April 9 when intragravel water temperatures increased from 1.6°C to 2.5°C on April 22. Surface water temperatures increased from 0.9°C to 5.1°C on April 22.

3.2 Task 37 Sites

In support of Task 37 intragravel and surface water temperatures were continuously recorded at three sloughs located in the middle Susitna River. These sloughs were Bushrod, Curry and 10. The following summarizes the results of those temperature investigations.

3.2.1 Bushrod Slough (RM 117.9)

Surface and intragravel water temperatures were recorded in Bushrod Slough from October 12 through April 3. Gaps in the data occurred from December 12 to January 9, and from February 16 to March 8 due to a malfunctioning temperature recorder. These malfunctions were assumed to have resulted from ambient air temperatures outside of the operating range of the instrument.

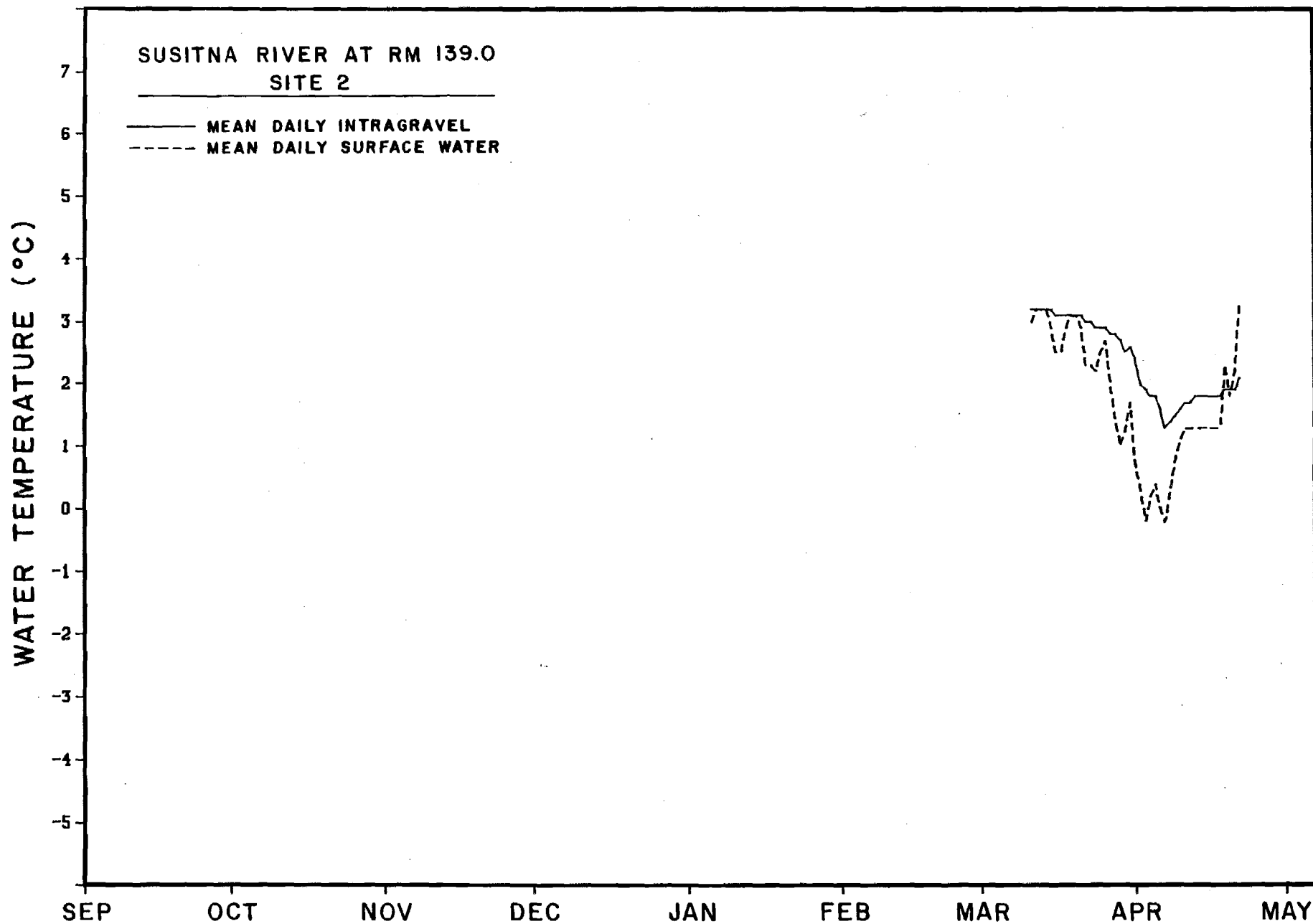


Figure 17. Mean daily intragravel and surface water temperatures (°C) recorded at the Mainstem Susitna River RM 139.0 Site 1 study site during the 1984-85 winter season.

Daily and monthly minimum, mean, and maximum water temperatures recorded at Bushrod Slough are presented in Appendix Table 24. A plot of the mean daily temperatures is presented in Appendix Figure 18.

Intragravel and surface water temperatures were found to decrease from October 12 until early to mid-November with surface water temperatures warmer than intragravel temperatures. By November 8 daily intragravel temperatures had declined to 2.3°C while low daily surface water temperatures of 2.0°C was recorded on November 13. By mid-November temperatures began to increase with both intragravel and surface temperatures similar and stable until mid-December when the recorder failed.

Intragravel and surface temperatures recorded between January 10 and February 15 also were similar. From March 9 to April 3, surface water temperatures exhibited more variation than intragravel temperatures. For this time period daily surface water temperatures increased from 2.0°C to 3.6°C while intragravel temperatures increased only from 3.1°C to 3.4°C.

3.2.2 Curry Slough (RM 119.7)

Surface and intragravel water temperatures were recorded at Curry Slough from October 17 until February 15 at which time the surface water probe was severed by ice movement. From February 16 to April 3 only intragravel water temperatures were collected at this study location.

Daily and monthly minimum, mean, and maximum water temperatures developed from this data base are presented in Appendix Tables 25 and 26. A plot of the mean daily surface and intragravel temperatures is presented in Appendix Figure 19.

For the period of record major decreases in water temperatures occurred in October thru early November and again during the month of February. From October 17 through November 14 intragravel water temperatures decreased from 4.6°C to 1.0°C and 4.3°C to 0.2°C for surface water. Beginning on October 29 and continuing through November 7 the surface water probe was frozen. Water temperatures were on the increase in mid-November ranging between 3.3°C to 4.3°C for intragravel and 3.1°C to 4.2°C for surface water until mid-February. Water temperatures again decreased during the last week of February through the first week of March. The surface water probe was lost on February 15 coinciding with a decrease in temperature. Intragravel water temperatures were as low as 1.8°C in early March and found to increase to 3.6°C by March 15.

By the time the station was removed on April 3 intragravel water temperatures had again decreased to a low of 1.7°C. Overall, intragravel water temperatures ranged from 1.0°C to 4.6°C and surface water temperatures from -0.2°C to 4.3°C for the period of record.

3.2.3 Slough 10 (RM 133.8)

Slough 10 is composed of two channels referred to as the northeast and northwest channels. The following summarizes the results of the temperature monitoring station located in each channel.

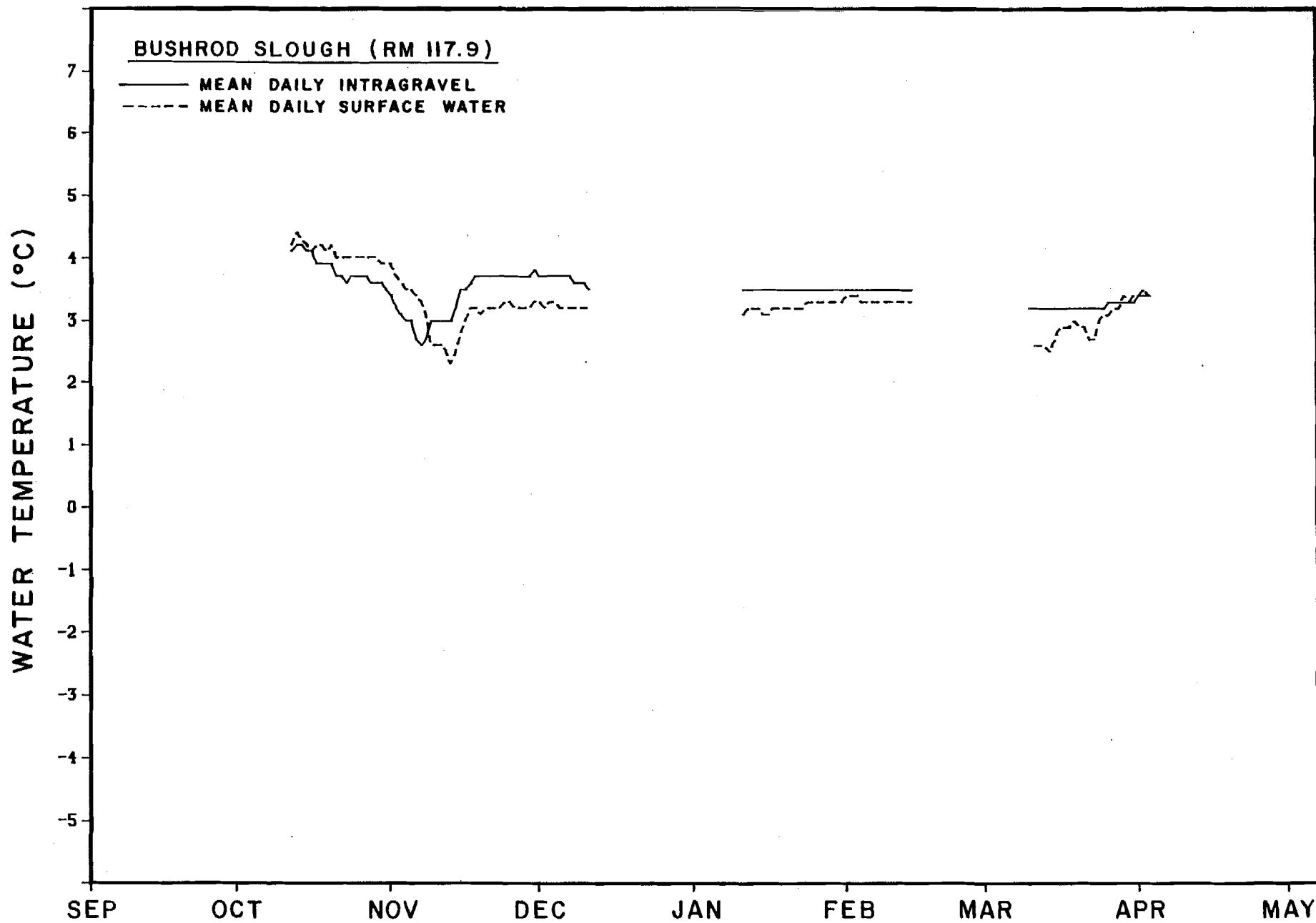


Figure 18. Mean daily intragravel and surface water temperatures ($^{\circ}\text{C}$) recorded at Bushrod Slough, RM 117.9, during the 1984-85 winter season.

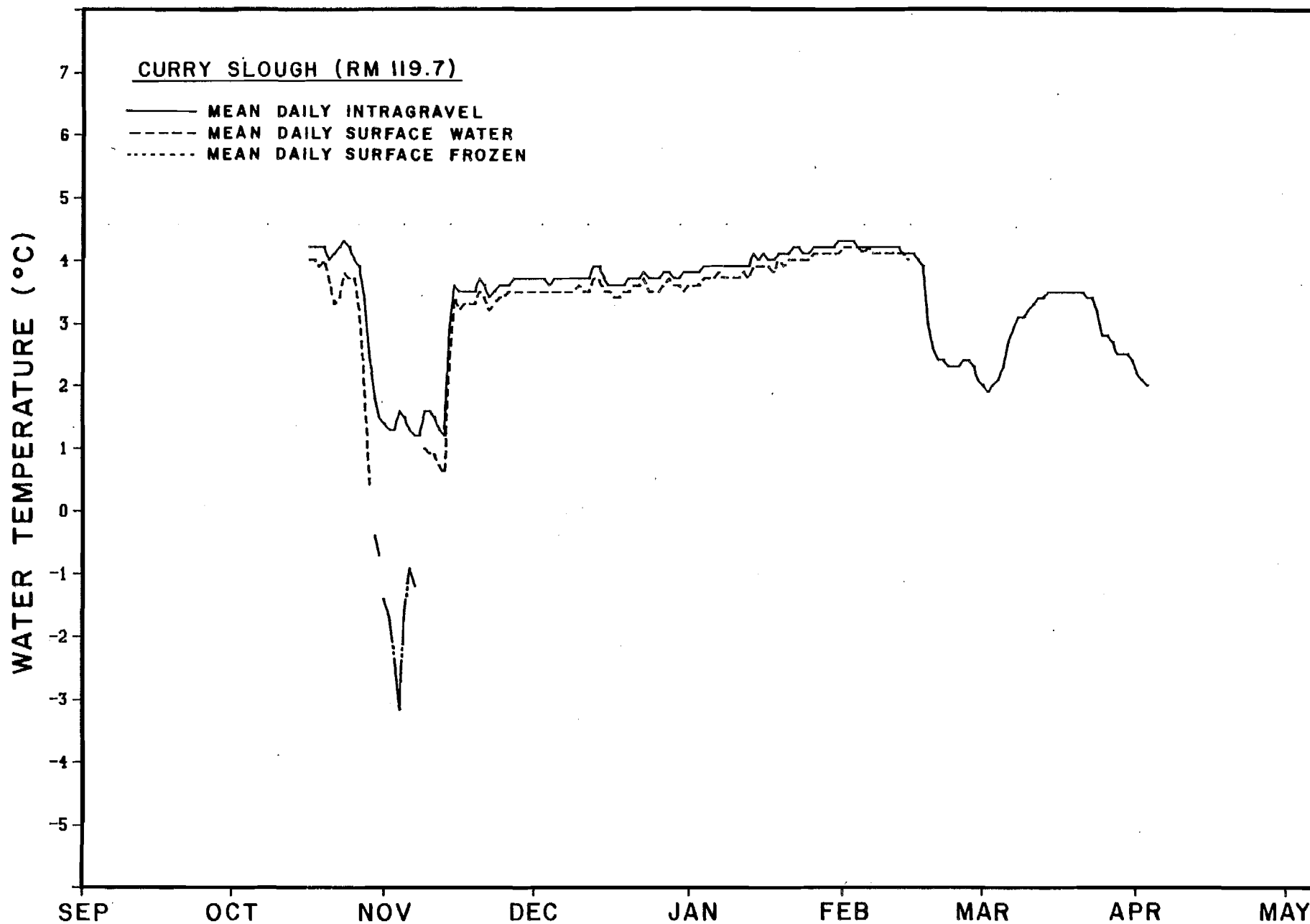


Figure 19. Mean daily intragravel and surface water temperatures ($^{\circ}\text{C}$) recorded at Curry Slough, RM 119.7, during the 1984-85 winter season.

3.2.3.1 Slough 10 Northeast Channel (RM 133.8)

Continuous surface and intragravel water temperatures were recorded in the Northeast Channel of Slough 10 from September 1 to March 19. Due to malfunctioning temperature probes, surface water temperatures were not recorded from October 26 through November 8, and intragravel water temperatures were not recorded from November 3 to November 8. Daily and monthly minimum, mean, and maximum temperatures developed from this data are presented in Appendix Table 27. A plot of mean daily surface and intragravel water temperatures is shown in Appendix Figure 20.

From a review of the plot of mean daily intragravel and surface water temperatures it was found that both surface and intragravel temperatures generally decreased from September to early December. Surface water was warmer than intragravel through September and a portion of October while intragravel was warmer for the remainder of the period of record (mid-December to March 19). Intragravel water temperatures ranged from 1.1°C to 4.2°C from installation of the station to December 14. Surface water temperatures ranged from 0.7°C to 6.4°C for the same period of record. From December 14 to termination of the station (March 19) intragravel temperatures exceeded surface water temperatures and ranged from 1.1°C to 3.6°C compared to 0.1°C to 2.5°C for surface water. Overall for the period of record temperatures ranged from 1.1°C to 4.2°C for intragravel and 0.1°C to 6.4°C for surface.

3.2.3.2 Slough 10 Northwest Channel (RM 133.8)

Surface water temperatures were recorded in the Northwest Channel of Slough 10 from September 1 to March 9. Due to a broken temperature probe, intragravel water temperatures were not recorded until September 23. Because of a malfunctioning recording instrument, water temperature data was not recorded between November 6 and November 8, from November 27 to December 10, and from March 7 to March 9.

Daily and monthly minimum, mean and maximum temperatures developed from this data base are presented in Appendix Table 28. A plot was developed of daily mean intragravel and surface water temperatures which is presented in Figure 21.

Intragravel and surface water temperatures were similar throughout the recording period with both intragravel and surface water temperatures generally decreasing until late October. Surface water temperatures were warmer than intragravel temperatures until October 27 at which time the trend reversed. Following November thru the remainder of the period of record both intragravel and surface water temperatures were relatively stable with intragravel water consistently warmer than surface water. Water temperatures in this channel of the slough for the period of record ranged from 2.6°C to 3.9°C for intragravel and 1.8°C to 6.7°C for surface water.

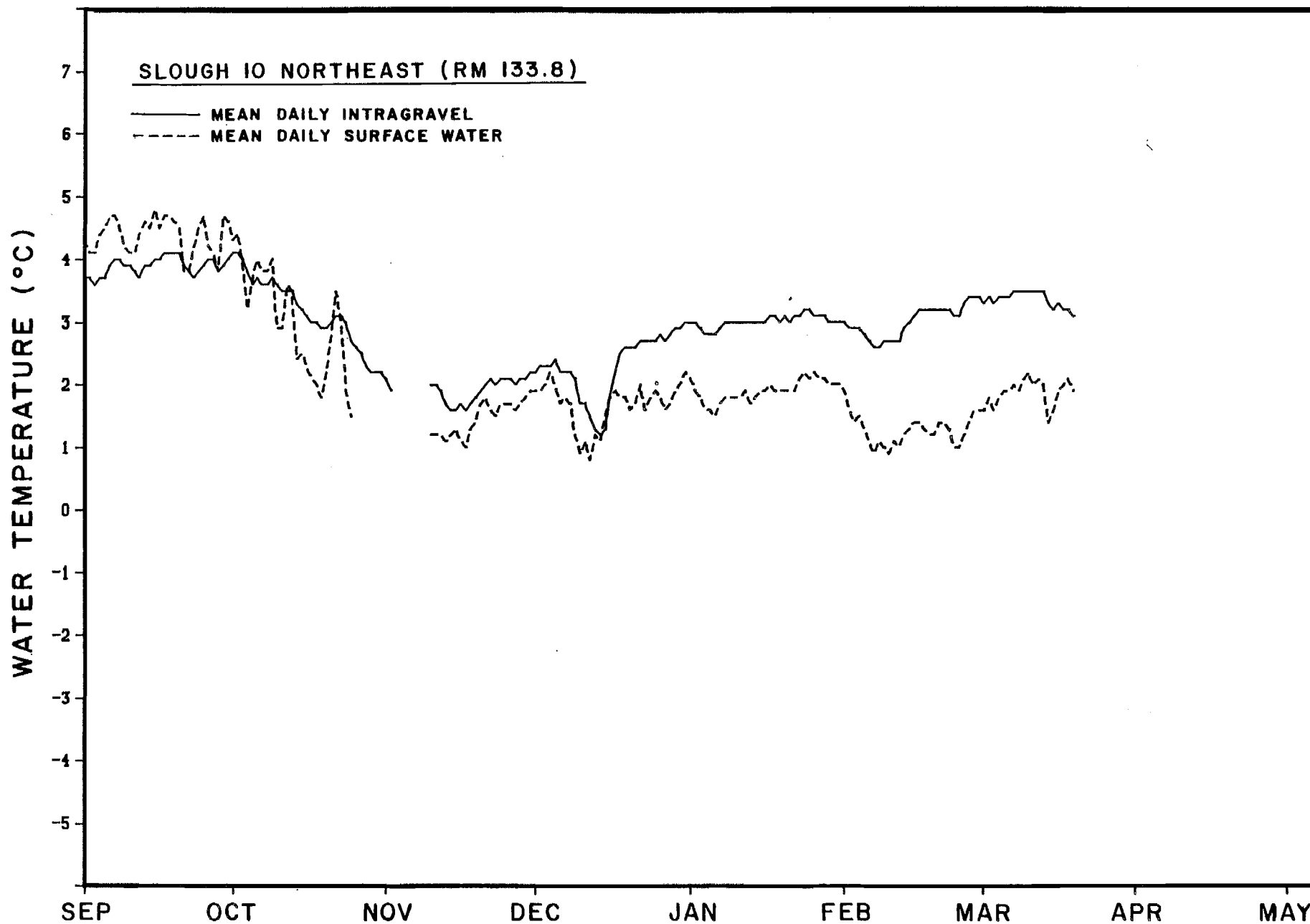


Figure 20. Mean daily intragravel and surface water temperatures ($^{\circ}\text{C}$) recorded at Slough 10 Northeast, RM 133.8, during the 1984-85 winter season.

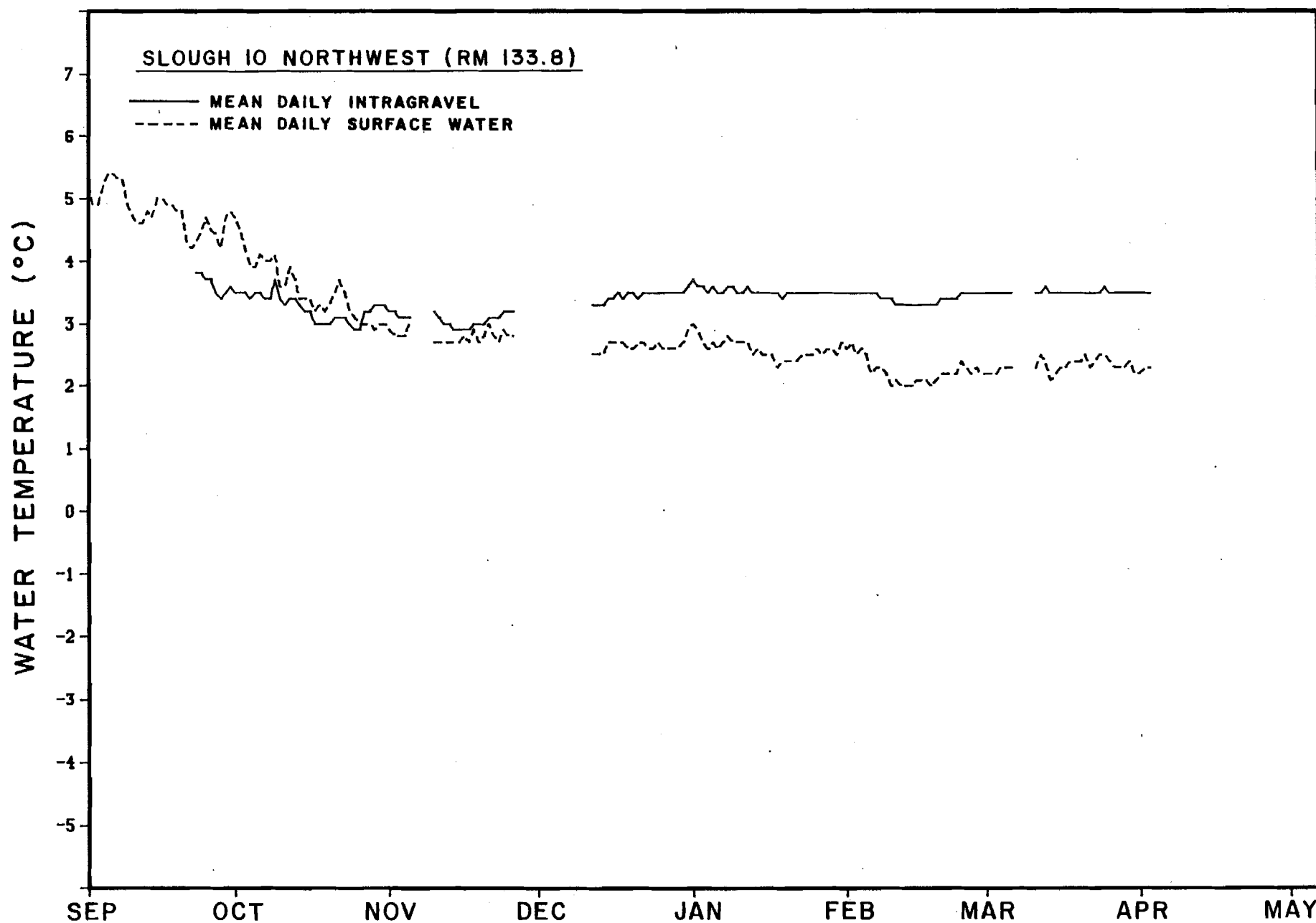


Figure 21. Mean daily intragravel and surface water temperatures ($^{\circ}\text{C}$) recorded at Slough 10 Northwest, RM 133.8, during the 1984-85 winter season.

Appendix Table 4. Datapod temperature recorder data summary:
intragravel and surface water temperatures (C)
recorded at Lane Creek, RM 113.6, TRM 0.1.

October 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841012	3.2	-----	3.6	2.5	-----	3.1
841013	2.9	3.2	3.7	2.3	2.6	3.4
841014	2.3	2.7	3.5	.9	1.6	2.7
841015	1.8	2.1	2.5	.2	.8	1.1
841016	1.7	-----	2.1	.1	.6	1.3
841017	-----	-----	-----	.1	.5	1.0
841018	-----	-----	-----	.1	.5	.9
841019	-----	-----	-----	0.0	.3	.4
Monthly Value	1.7	-----	3.7	0.0	-----	3.4

----- Data not available.

Appendix Table 4. (continued).

November 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841109	.8	.9	1.0	-----	-----	-----
841110	.8	.9	1.0	-----	-----	-----
841111	.7	.8	.9	-----	-----	-----
841112	.6	.6	.7	-----	-----	-----
841113	.5	.6	.7	-----	-----	-----
841114	.4	.5	.6	-----	-----	-----
841115	.5	.6	.6	-----	-----	-----
841116	.6	.7	.7	-----	-----	-----
841117	.6	.7	.7	-----	-----	-----
841118	.6	.7	.7	-----	-----	-----
841119	.7	.7	.7	-----	-----	-----
841120	.7	.7	.7	-----	-----	-----
841121	.7	.7	.8	-----	-----	-----
841122	.7	.8	.9	-----	-----	-----
841123	.7	.7	.8	-----	-----	-----
841124	.7	.8	.9	-----	-----	-----
841125	.8	.9	.9	-----	-----	-----
841126	.8	.9	.9	-----	-----	-----
841127	.7	-----	.7	0.0	-----	.2
841128	.7	.7	.8	.1	.3	.3
841129	.7	.8	.9	.1	.4	.5
841130	.8	.9	.9	.4	.5	.5
Monthly Value	.4	.7	1.0	0.0	-----	.5

----- Data not available.

Appendix Table 4. (continued).

December 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841201	.9	1.0	1.0	.4	.5	.6
841202	.9	1.0	1.0	.5	.5	.6
841203	1.0	1.1	1.1	.6	.7	.8
841204	1.1	1.2	1.2	.7	.8	.9
841205	1.1	1.2	1.2	.7	.8	.9
841206	1.0	1.1	1.2	.5	.6	.8
841207	1.0	1.1	1.1	.5	.6	.7
841208	.9	1.0	1.1	.3	.5	.6
841209	.7	.9	1.1	-0.3	.2	.6
841210	.6	.7	.7	-0.3	-0.2	-0.2
841211	.5	.5	.6	-0.3	-0.2	-0.1
841212	.4	.5	.6	-0.3	-0.2	-0.2
841213	.4	.5	.5	-0.3	-0.2	-0.1
841214	.3	.4	.5	-0.3	-0.2	-0.2
841215	.4	.4	.4	-0.3	-0.2	.3
841216	.3	.5	.6	-0.2	-0.1	.1
841217	.5	.6	.7	-0.1	0.0	.1
841218	.6	.7	.7	0.0	.1	.2
841219	.6	.7	.8	0.0	.2	.3
841220	.5	.6	.7	-0.2	0.0	.1
841221	.5	.6	.7	-0.2	0.0	.2
841222	.6	.7	.7	.1	.1	.3
841223	.6	.7	.7	-0.2	.1	.3
841224	.6	.7	.7	-0.1	.1	.3
841225	.6	.6	.7	-0.1	0.0	.2
841226	.6	.7	.7	-0.2	.1	.2
841227	.5	.6	.7	-0.2	-0.2	-0.1
841228	.5	.5	.6	-0.2	-0.2	-0.1
841229	.5	.5	.6	-0.2	-0.2	0.0
841230	.5	.6	.7	-0.2	0.0	.2
841231	.6	.7	.8	-0.1	.3	.5
Monthly Value	.3	.7	1.2	-0.3	.1	.9

Appendix Table 4. (continued).

January 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850101	.7	.9	.9	.4	.5	.5
850102	.8	.9	.9	.3	.5	.5
850103	.8	.9	1.0	.2	.4	.5
850104	.7	.7	.9	0.0	.2	.4
850105	.7	.8	.9	.1	.3	.5
850106	.7	.7	.8	0.0	.1	.3
850107	.7	.8	.9	.1	.4	.5
850108	.9	1.0	1.0	.5	.6	.8
850109	.9	1.0	1.0	.4	.6	.7
850110	.9	1.0	1.0	.4	.5	.7
850111	.9	1.0	1.1	.4	.5	.6
850112	.9	1.0	1.1	.3	.6	.7
850113	.8	.9	1.0	.1	.2	.4
850114	.8	.8	.9	.1	.2	.4
850115	.7	.8	.9	.2	.3	.4
850116	.8	.9	.9	.2	.4	.6
850117	.9	1.0	1.0	.4	.6	.7
850118	.9	1.0	1.1	.4	.6	.7
850119	.9	.9	1.0	.3	.5	.7
850120	.9	1.0	1.0	.4	.5	.6
850121	.8	.9	1.0	.2	.4	.5
850122	.9	.9	1.0	.4	.4	.6
850123	.9	1.0	1.1	.4	.6	.8
850124	1.0	1.1	1.2	.4	.7	.8
850125	.9	1.1	1.2	.2	.5	.7
850126	.9	1.0	1.0	.2	.5	.7
850127	.9	1.0	1.1	.3	.6	.7
850128	1.0	1.0	1.1	.5	.7	.8
850129	.9	1.0	1.1	.3	.5	.7
850130	.9	1.0	1.1	.3	.5	.7
850131	.8	.9	1.0	.1	.4	.7
Monthly Value	.7	.9	1.2	0.0	.5	.8

Appendix Table 4. (continued).

February 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850201	1.0	1.1	1.1	.4	.6	.7
850202	.9	1.0	1.1	.4	.6	.8
850203	.8	.9	1.1	0.0	.3	.7
850204	.8	.9	1.0	0.0	.4	.5
850205	.7	.8	.9	-0.2	.2	.5
850206	.6	.7	.8	-0.3	-0.2	-0.1
850207	.5	.6	.6	-0.3	-0.2	-0.1
850208	.5	.5	.6	-0.2	-0.1	0.0
850209	.5	.6	.6	-0.2	-0.2	-0.1
850210	.5	.5	.6	-0.2	-0.2	.1
850211	.4	.5	.5	-0.2	-0.1	-0.1
850212	.4	.4	.5	-0.2	-0.1	-0.1
850213	.4	.4	.5	-0.2	-0.1	-0.1
850214	.4	.5	.5	-0.2	-0.1	-0.1
850215	.4	.5	.6	-0.2	-0.1	.1
850216	.5	.6	.6	-0.2	-0.1	.1
850217	.5	.6	.7	-0.2	-0.1	.1
850218	.5	.6	.7	-0.2	0.0	.4
850219	.5	.5	.6	-0.2	0.0	.3
850220	.5	-----	.6	-0.2	-----	0.0
Monthly Value	.4	-----	1.1	-0.3	-----	.8

----- Data not available.

Appendix Table 4. (continued).

March 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850308	.7	.8	.9	0.0	.3	.6
850309	.7	.8	.8	0.0	.3	.5
850310	.7	.7	.8	.1	.2	.5
850311	.7	.8	.8	.1	.2	.3
850312	.7	.8	.8	.1	.3	.4
850313	.7	.7	.8	0.0	.3	.5
850314	.7	.7	.8	.1	.2	.3
850315	.7	.7	.8	-0.1	.2	.4
850316	.7	.7	.8	.1	.3	.5
850317	.7	.8	.8	.2	.3	.5
850318	.7	.8	.9	.2	.4	.5
850319	.7	.8	.9	.2	.4	.5
850320	.7	.8	.9	.2	.4	.6
850321	.8	.8	.9	.2	.4	.6
850322	.8	.8	1.0	.2	.3	.6
850323	.7	.8	.9	.1	.3	.6
850324	.8	.9	.9	.2	.4	.6
850325	.8	.9	1.0	.2	.4	.7
850326	.7	.8	.9	0.0	.3	.5
850327	.7	.8	.9	0.0	.3	.5
850328	.7	.8	.9	-0.1	.2	.5
850329	.7	.7	.9	0.0	.2	.5
850330	.7	.7	.9	-0.1	.2	.5
850331	.6	.7	.8	-0.1	0.0	.3
Monthly Value	.6	.8	1.0	-0.1	.3	.7

Appendix Table 4. (continued).

April 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850401	.6	.7	.7	-0.2	0.0	.2
850402	.6	.7	.7	-0.2	0.0	.2
850403	.6	.7	.7	-0.1	.1	.4
Monthly Value	.6	-----	.7	-0.2	-----	.4

Appendix Table 5.

Datapod temperature recorder data summary:
intragravel and surface water temperatures (C)
recorded at Fourth of July Creek - Site 3,
RM 131.1, TRM 0.2.

October 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841010	2.0	-----	2.6	1.8	-----	2.4
841011	2.2	2.7	3.4	1.9	2.5	3.1
841012	2.1	2.6	3.2	1.9	2.4	3.0
841013	0.0	.9	2.6	1.2	-----	2.4
841014	-0.2	.1	.6	-----	-----	-----
841015	-0.3	0.0	.7	-----	-----	-----
841016	-0.3	0.0	.4	-----	-----	-----
841017	-0.3	-0.2	0.0	-----	-----	-----
841018	-0.3	-0.2	-0.1	-----	-----	-----
841019	-0.2	-0.2	-0.1	-----	-----	-----
841020	-0.2	.1	.8	-----	-----	-----
841021	.7	1.4	2.2	-----	-----	-----
841022	1.0	1.4	2.0	-----	-----	-----
841023	-0.2	.2	1.1	-----	-----	-----
841024	-0.2	-0.2	-0.1	-----	-----	-----
841025	-0.3	-0.2	-0.1	-----	-----	-----
Monthly Value	-0.3	-----	3.4	1.2	-----	3.1

----- Data not available.

Appendix Table 5. (continued).

November 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841128	-0.2	-----	-0.1	-----	-----	-----
841129	-0.2	-0.2	-0.1	-0.4	-----	-0.3
841130	-0.2	-0.2	-0.2	-0.4	-0.4	-0.4
Monthly Value	-0.2	-----	-0.1	-0.4	-----	-0.3

----- Data not available.

Appendix Table 5. (continued).

December 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841201	-0.2	-0.2	-0.2	-0.4	-0.4	-0.4
841202	-0.2	-0.2	-0.1	-0.4	-0.4	-0.3
841203	-0.2	-0.2	-0.2	-0.4	-0.4	-0.3
841204	-0.2	-0.2	-0.2	-0.4	-0.3	-0.3
841205	-0.2	-0.1	0.0	-0.4	-0.3	-0.2
841206	0.0	0.0	.1	-0.2	-0.1	-0.1
841207	0.0	.1	.1	-0.2	-0.1	-0.1
841208	.1	.1	.2	-0.2	-0.1	0.0
841209	0.0	----	.2	-0.3	----	0.0
841212	0.0	----	.1	0.0	----	.1
841213	0.0	0.0	.1	0.0	0.0	.1
841214	0.0	.1	.1	0.0	0.0	.1
841215	0.0	0.0	.1	0.0	0.0	.1
841216	0.0	.1	.1	0.0	0.0	.1
841217	0.0	0.0	.1	0.0	0.0	0.0
841218	0.0	0.0	.1	0.0	0.0	0.0
841219	0.0	0.0	.1	-0.1	0.0	0.0
841220	0.0	.1	.1	0.0	0.0	.1
841221	.1	.1	.2	0.0	.1	.2
841222	.1	.2	.3	.1	.1	.2
841223	.1	.3	.3	.1	.2	.2
841224	0.0	.1	.2	0.0	.1	.1
841225	.1	.2	.3	.1	.2	.2
841226	.2	.3	.3	.2	.2	.3
841227	.2	.3	.3	.2	.2	.3
841228	.2	.3	.3	.2	.2	.3
841229	.2	.3	.3	.2	.2	.3
841230	.1	.2	.3	.1	.2	.2
841231	0.0	.1	.2	0.0	.1	.2
Monthly Value	-0.2	.1	.3	-0.4	0.0	.3

----- Data not available.

Appendix Table 5. (continued).

January 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850101	0.0	.1	.2	0.0	.1	.2
850102	.1	.2	.2	0.0	.1	.2
850103	.2	.3	.4	.2	.2	.3
850104	.2	.3	.3	.2	.2	.3
850105	.3	.3	.4	.3	.3	.3
850106	.2	.3	.4	.2	.2	.3
850107	.3	.3	.4	.2	.3	.3
850108	.3	.4	.5	.3	.3	.4
850109	.3	.4	.5	.3	.4	.4
850110	.3	.4	.4	.3	.4	.4
850111	.3	.4	.4	.3	.3	.4
850112	.4	.4	.5	.3	.4	.4
850113	.3	.3	.5	.3	.3	.4
850114	.3	.3	.4	.2	.3	.3
850115	.3	.4	.4	.3	.3	.3
850116	.3	.4	.4	.3	.3	.4
850117	.3	.4	.4	.3	.3	.4
850118	.4	.4	.5	.3	.4	.4
850119	.3	.3	.5	.3	.3	.4
850120	.4	.4	.5	.4	.4	.4
850121	.3	.4	.5	.3	.3	.4
850122	.3	.4	.5	.3	.3	.4
850123	.3	.4	.5	.3	.4	.4
850124	.4	.5	.5	.4	.4	.5
850125	.4	.5	.5	.4	.4	.5
850126	.3	.4	.5	.3	.4	.4
850127	.4	.5	.5	.3	.4	.4
850128	.3	.4	.4	.3	.3	.4
850129	.3	.4	.5	.3	.4	.4
850130	.3	.4	.5	.3	.4	.5
850131	.2	.4	.5	.2	.3	.4
Monthly Value	0.0	.4	.5	0.0	.3	.5

Appendix Table 5. (continued).

February 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850201	.3	.4	.4	.2	.3	.4
850202	.4	.4	.5	.3	.4	.5
850203	.2	.4	.5	.2	.4	.5
850204	.2	.3	.4	.2	.3	.4
850205	.3	.4	.4	.3	.3	.4
850206	.3	.4	.4	.2	.3	.4
850207	.2	.3	.4	.1	.2	.4
850208	.2	.3	.4	.2	.2	.3
850209	.2	.3	.3	.1	.2	.3
850210	.2	.2	.3	.1	.2	.3
850211	.1	.2	.3	.1	.2	.2
850212	.1	.2	.3	.1	.2	.2
850213	.1	.2	.3	.1	.1	.2
850214	.1	.2	.3	.1	.1	.2
850215	.1	.2	.3	.1	.1	.2
850216	.1	.2	.3	.1	.2	.2
850217	.1	.2	.2	.1	.1	.2
850218	.1	.2	.3	.1	.1	.2
850219	.1	.2	.2	0.0	.1	.2
850220	.1	.1	.2	0.0	.1	.2
850221	.1	.1	.2	0.0	.1	.1
850222	0.0	.1	.2	0.0	.1	.1
850223	0.0	.1	.2	0.0	0.0	.2
850224	0.0	.1	.2	0.0	.1	.1
850225	0.0	.1	.1	0.0	0.0	.1
850226	0.0	.1	.1	0.0	0.0	.1
850227	.1	.1	.1	0.0	0.0	.1
850228	0.0	.1	.1	0.0	0.0	.1
Monthly Value	0.0	.2	.5	0.0	.2	.5

----- Data not available.

Appendix Table 5. (continued).

March 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850301	0.0	.1	.1	0.0	0.0	.1
850302	.1	.1	.2	0.0	.1	.2
850303	.1	.1	.2	.1	.1	.1
850304	.1	.2	.2	.1	.1	.2
850305	.2	.2	.3	.1	.2	.2
850306	.1	.2	.3	0.0	.1	.2
850307	.1	.2	.2	0.0	.1	.2
850308	.2	.2	.2	.1	.2	.2
850309	.2	.2	.3	.1	.1	.3
850310	.2	.3	.3	.2	.3	.3
850311	.2	.3	.4	.2	.3	.3
850312	.2	.2	.3	.1	.2	.3
850313	.2	.3	.4	.1	.2	.3
850314	.3	.3	.4	.2	.3	.4
850315	.3	.3	.4	.2	.3	.3
850316	.3	.3	.4	.2	.3	.3
850317	.3	.3	.4	.3	.3	.4
850318	.3	.4	.4	.3	.3	.4
850319	.3	.4	.4	.3	.3	.3
850320	.3	.4	.4	.3	.3	.4
850321	.3	.4	.4	.3	.3	.4
850322	.3	.4	.4	.3	.3	.4
850323	.2	.3	.4	.2	.3	.3
850324	.3	.4	.4	.2	.3	.4
850325	.3	.4	.4	.3	.3	.4
850326	.2	.3	.4	.2	.3	.4
850327	.2	.3	.4	.2	.2	.3
850328	.2	.3	.4	.1	.2	.3
850329	.2	.3	.3	.1	.2	.3
850330	.2	.3	.4	.2	.2	.3
850331	.2	.3	.3	.1	.2	.3
Monthly Value	0.0	.3	.4	0.0	.2	.4

Appendix Table 5. (continued).

April 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850401	.2	.2	.3	.1	.2	.2
850402	.2	.2	.3	.1	.2	.2
850403	.2	-----	.2	.1	-----	.2
Monthly Value	.2	-----	.3	.1	-----	.2

----- Data not available.

Appendix Table 6.

Datapod temperature recorder data summary:
intragravel and surface water temperatures (C)
recorded at Indian River - Site 3, RM 138.6,
TRM 0.2.

September 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
840901	5.3	6.0	7.0	5.2	6.8	8.7
840902	5.5	6.3	7.2	5.4	7.0	8.8
840903	5.5	6.4	7.1	5.4	7.0	8.5
840904	6.0	6.7	7.8	6.3	7.6	9.3
840905	6.6	7.4	8.2	6.9	8.1	9.7
840906	7.0	7.7	8.6	7.2	8.3	10.1
840907	6.9	7.5	8.3	7.2	8.1	9.1
840908	6.6	7.4	8.2	6.8	8.0	9.3
840909	5.7	6.9	8.1	5.9	7.5	9.1
840910	5.6	6.9	8.0	5.8	7.5	9.2
840911	5.6	6.8	7.8	5.7	7.4	8.9
840912	6.1	6.8	7.6	6.6	7.5	8.7
840913	6.7	7.0	7.5	7.2	7.6	8.2
840914	5.8	6.6	7.6	6.2	7.3	8.5
840915	6.4	7.2	8.3	7.0	8.0	9.7
840916	5.9	7.1	8.2	6.1	7.7	9.2
840917	5.7	6.7	7.7	6.1	7.3	8.3
840918	6.5	6.8	7.1	7.2	7.6	7.9
840919	6.1	6.4	6.8	6.8	7.1	7.4
840920	5.3	6.0	7.0	6.0	6.8	7.9
840921	4.0	5.2	6.5	4.6	5.9	7.4
840922	3.8	5.0	6.4	4.4	5.8	7.4
840923	4.3	5.3	6.3	5.0	6.1	7.3
840924	5.1	5.8	6.5	5.8	6.6	7.4
840925	5.6	6.1	6.8	6.3	7.0	7.8
840926	5.5	6.2	7.0	5.9	6.9	8.0
840927	4.8	5.7	6.8	5.2	6.3	7.6
840928	4.2	5.2	6.3	4.6	5.4	6.9
840929	5.6	6.0	6.5	5.6	6.0	6.6
840930	5.7	6.3	7.0	5.6	6.3	7.2
Monthly Value	3.8	6.4	8.6	4.4	7.1	10.1

Appendix Table 6. (continued).

October 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841001	5.3	6.1	6.8	5.0	6.0	6.7
841002	5.5	5.9	6.6	5.4	5.9	6.8
841003	4.5	5.4	6.3	4.3	5.2	6.1
841004	3.2	4.2	5.6	2.8	4.0	5.3
841005	3.4	4.0	4.8	3.3	4.0	5.0
841006	3.8	4.4	5.2	3.8	4.5	5.6
841007	3.8	4.4	5.2	3.6	4.4	5.4
841008	4.1	4.5	5.0	4.0	4.5	5.1
841009	4.1	4.5	5.1	4.0	4.5	5.5
841010	2.7	3.7	5.0	2.3	3.4	4.9
841011	2.2	3.0	3.8	1.8	2.9	3.8
841012	3.2	3.6	4.3	3.4	3.8	4.9
841013	3.1	3.5	4.0	3.0	3.5	4.2
841014	1.7	2.5	3.6	1.4	2.2	3.4
841015	1.4	1.9	2.4	1.1	1.7	2.4
841016	1.4	2.0	3.1	1.4	2.0	3.1
841017	.6	1.5	2.3	.6	1.5	2.3
841018	.4	1.1	2.0	.4	1.1	2.0
841019	.3	1.1	1.6	.4	1.1	1.6
841020	.9	1.2	1.7	.9	1.2	1.8
841021	1.4	1.9	2.6	1.5	1.9	2.6
841022	2.4	2.9	3.6	2.4	2.9	3.6
841023	2.1	2.6	3.4	2.1	2.6	3.4
841024	.4	1.2	2.1	.5	1.3	2.1
841025	.1	.4	.8	.2	.5	.9
841026	.1	.2	.6	.1	.3	.6
841027	.1	.2	.3	.1	.2	.4
841028	0.0	.1	.2	.1	.2	.3
841029	0.0	.1	.3	.1	.2	.4
841030	0.0	.1	.1	.1	.2	.2
841031	.1	.1	.2	0.0	.1	.2
Monthly Value	0.0	2.5	6.8	0.0	2.5	6.8

----- Data not available.

Appendix Table 6. (continued).

November 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841101	-0.1	0.0	.2	0.0	.1	.2
841102	0.0	0.0	.3	0.0	.1	.2
841103	0.0	.1	.5	0.0	.1	.2
841104	0.0	.2	.4	.1	.1	.2
841105	.1	.2	.3	.1	.1	.1
841106	.1	.2	.4	0.0	.1	.1
841107	-0.1	0.0	.3	0.0	.1	.2
841108	-0.1	0.0	0.0	0.0	.1	.2
841109	-0.1	0.0	.1	0.0	.1	.2
841110	-0.1	0.0	.1	0.0	0.0	.1
841111	-0.1	0.0	.2	0.0	.1	.1
841112	-0.1	0.0	0.0	0.0	.1	.1
841113	-0.1	0.0	0.0	.1	.1	.1
841114	-0.1	-0.1	-0.1	.1	.1	.1
841115	-0.1	-0.1	0.0	0.0	.1	.1
841116	-0.1	-0.1	0.0	0.0	.1	.2
841117	-0.1	0.0	0.0	0.0	.1	.1
841118	0.0	0.0	.1	0.0	0.0	.1
841119	0.0	0.0	.1	0.0	0.0	.1
841120	0.0	0.0	.1	0.0	0.0	.1
841121	0.0	0.0	.1	0.0	.1	.1
841122	0.0	0.0	.1	0.0	.1	.1
841123	0.0	0.0	.1	0.0	0.0	.1
841124	0.0	0.0	.1	0.0	0.0	.1
841125	0.0	.1	.1	0.0	.1	.1
841126	0.0	.1	.1	0.0	0.0	0.0
841127	0.0	.1	.2	0.0	0.0	.1
841128	0.0	.1	.2	0.0	0.0	.1
841129	0.0	0.0	.1	0.0	.1	.1
841130	0.0	0.0	0.0	0.0	.1	.1
Monthly Value	-0.1	0.0	.5	0.0	.1	.2

Appendix Table 6. (continued).

December 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841201	0.0	0.0	.1	.1	.1	.1
841202	0.0	0.0	.1	0.0	.1	.1
841203	0.0	.1	.2	.1	.1	.1
841204	0.0	0.0	.2	0.0	.1	.1
841205	0.0	.1	.1	0.0	.1	.1
841206	0.0	.1	.1	0.0	.1	.1
841207	0.0	0.0	.1	0.0	.1	.1
841208	0.0	0.0	0.0	0.0	0.0	.1
841209	-0.1	0.0	0.0	0.0	----	.1
841210	-0.1	-0.1	0.0	-0.1	----	0.0
841211	-0.1	-0.1	0.0	0.0	0.0	.1
841212	-0.1	0.0	0.0	0.0	.1	.1
841213	-0.1	0.0	0.0	0.0	0.0	.1
841214	-0.1	0.0	0.0	0.0	.1	.1
841215	-0.1	-0.1	0.0	0.0	.1	.1
841216	-0.1	-0.1	0.0	0.0	.1	.1
841217	-0.1	0.0	0.0	0.0	0.0	.1
841218	0.0	0.0	.1	0.0	.1	.1
841219	0.0	0.0	.1	0.0	.1	.1
841220	0.0	0.0	0.0	.1	.1	.2
841221	0.0	0.0	0.0	.1	.1	.2
841222	-0.1	0.0	0.0	0.0	.1	.1
841223	-0.1	0.0	0.0	.1	.1	.1
841224	-0.1	0.0	0.0	0.0	.1	.2
841225	-0.1	0.0	0.0	.1	.1	.2
841226	-0.1	0.0	0.0	.1	.1	.2
841227	-0.1	0.0	0.0	.1	.1	.2
841228	-0.1	0.0	0.0	.1	.1	.2
841229	-0.1	0.0	0.0	.1	.1	.1
841230	-0.1	0.0	0.0	.1	.1	.2
841231	0.0	0.0	.1	.1	.1	.2
Monthly Value	-0.1	0.0	.2	-0.1	.1	.2

----- Data not available.

Appendix Table 6. (continued).

January 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850101	0.0	0.0	0.0	.1	.1	.1
850102	-0.1	0.0	0.0	.1	.1	.1
850103	-0.1	-0.1	0.0	.1	.1	.2
850104	-0.1	-0.1	0.0	.1	.1	.2
850105	-0.1	0.0	0.0	.1	.1	.1
850106	-0.1	-0.1	0.0	.1	.1	.2
850107	-0.1	0.0	0.0	.1	.1	.2
850108	0.0	0.0	0.0	.1	.2	.2
850109	-0.1	0.0	0.0	.1	.1	.2
850110	-0.1	0.0	0.0	.1	.2	.2
850111	-0.1	0.0	0.0	.1	.2	.2
850112	-0.1	0.0	0.0	.1	.2	.2
850113	-0.1	-0.1	0.0	-0.1	.2	.2
850114	-0.1	0.0	0.0	.1	.2	.2
850115	-0.1	-0.1	-0.1	.1	.2	.2
850116	-0.1	0.0	0.0	.1	.2	.2
850117	-0.1	0.0	0.0	.2	.2	.2
850118	-0.1	0.0	0.0	.1	.2	.2
850119	-0.1	0.0	0.0	.1	.2	.2
850120	-0.1	0.0	0.0	.1	.2	.2
850121	-0.1	-0.1	0.0	.1	.2	.2
850122	-0.1	-0.1	0.0	.1	.2	.2
850123	-0.1	0.0	0.0	.1	.2	.2
850124	-0.1	0.0	0.0	.1	.2	.2
850125	-0.1	0.0	0.0	.1	.2	.2
850126	-0.1	0.0	0.0	.1	.2	.2
850127	0.0	0.0	0.0	.2	.2	.2
850128	-0.1	-0.1	0.0	.1	.2	.2
850129	-0.1	-0.1	0.0	.1	.2	.2
850130	-0.1	-0.1	0.0	.1	.2	.2
850131	0.0	0.0	0.0	.2	.2	.2
Monthly Value	-0.1	0.0	0.0	-0.1	.2	.2

Appendix Table 6. (continued).

February 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850201	-0.1	-----	0.0	.1	-----	.2
850202	-0.1	0.0	0.0	.1	.2	.2
850203	-0.1	-0.1	-0.1	.1	.2	.2
850204	-0.1	-0.1	0.0	.2	.2	.2
850205	-0.1	-0.1	0.0	.1	.2	.2
850206	-0.1	-0.1	0.0	.1	.1	.2
850207	-0.1	-0.1	0.0	0.0	-----	.2
850208	-0.1	-0.1	0.0	-----	-----	-----
850209	-0.1	-0.1	0.0	-----	-----	-----
850210	-0.1	-0.1	0.0	-----	-----	-----
850211	-0.1	-0.1	0.0	-----	-----	-----
Monthly Value	-0.1	-----	0.0	0.0	-----	.2

----- Data not available.

Appendix Table 7.

Datapod temperature recorder data summary:
intragravel and surface water temperatures (C)
recorded at Indian River - Site 4, RM 138.6,
TRM 0.2.

September 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
840928	5.8	-----	6.2	5.7	-----	6.0
840929	5.6	6.0	6.6	5.5	5.8	6.5
840930	5.7	6.4	7.2	5.5	6.2	7.0
Monthly Value	5.6	-----	7.2	5.5	-----	7.0

----- Data not available.

Appendix Table 7. (continued).

October 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841001	5.1	6.0	6.9	4.9	5.9	6.7
841002	5.5	6.0	6.9	5.3	5.8	6.8
841003	4.6	5.4	6.2	4.5	5.3	6.0
841004	3.3	4.4	5.5	3.2	4.2	5.3
841005	3.6	4.3	5.1	3.5	4.1	5.0
841006	4.0	4.7	5.6	3.9	4.5	5.5
841007	3.9	4.6	5.4	3.7	4.4	5.2
841008	4.2	4.7	5.2	4.1	4.5	5.1
841009	4.2	4.7	5.6	4.1	4.7	5.4
841010	2.9	3.8	5.0	2.7	3.6	4.8
841011	2.5	3.3	3.9	2.3	3.1	3.8
841012	3.5	4.0	5.0	3.4	3.8	4.9
841013	3.3	3.7	4.3	3.1	3.5	4.1
841014	2.0	2.7	3.6	1.8	2.5	3.4
841015	1.8	2.3	2.8	1.6	2.2	2.6
841016	1.9	2.4	3.3	1.7	2.2	3.2
841017	1.1	1.9	2.5	1.0	1.7	2.4
841018	1.1	1.6	2.4	.9	1.5	2.3
841019	1.1	1.6	2.0	.9	1.5	1.8
841020	1.4	1.6	2.0	1.2	1.5	1.9
841021	1.6	2.0	2.5	1.4	1.9	2.3
841022	2.3	2.7	3.3	2.2	2.5	3.2
841023	2.2	2.5	3.2	2.0	2.4	3.0
841024	1.0	1.7	2.3	.9	1.5	2.1
841025	.8	1.0	1.4	.6	.9	1.3
841026	.8	1.1	1.6	.6	1.0	1.5
841027	.8	1.0	1.2	.6	.9	1.1
841028	.5	.7	.9	.2	.6	.8
841029	.4	.5	.6	.2	.3	.5
841030	.4	.5	.6	.2	.4	.5
841031	.3	.4	.5	.1	.2	.3
Monthly Value	.3	2.8	6.9	.1	2.7	6.8

Appendix Table 7. (continued).

November 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841101	.3	.4	.5	.1	.3	.3
841102	.3	.4	.5	.1	.2	.3
841103	.3	.4	.5	.1	.2	.3
841104	.2	.4	.5	.1	.2	.4
841105	.2	.4	.5	0.0	.2	.3
841106	.2	.3	.4	0.0	.2	.3
841107	.2	.3	.4	.1	.2	.2
841108	.1	.2	.3	.1	.1	.3
841109	.1	.2	.3	0.0	.1	.2
841110	.1	.2	.3	.1	.2	.3
841111	.1	.3	.5	0.0	.2	.4
841112	.1	.3	.5	0.0	.3	.4
841113	.1	.2	.3	.1	.1	.2
841114	.1	.2	.3	.1	.2	.3
841115	0.0	.1	.2	-0.1	0.0	.2
841116	0.0	.1	.3	0.0	.1	.2
841117	.1	.2	.3	0.0	.1	.3
841118	.1	.1	.3	0.0	.1	.2
841119	.1	.2	.3	.1	.2	.3
841120	-0.1	.1	.2	-0.1	0.0	.1
841121	-0.1	0.0	.1	-0.1	0.0	0.0
841122	0.0	.1	.3	0.0	.1	.3
841123	.1	.2	.3	.1	.2	.3
841124	.1	.2	.3	0.0	.1	.3
841125	.1	.2	.3	.1	.1	.3
841126	.1	.2	.3	.1	.2	.3
841127	.1	.2	.5	0.0	.2	.4
841128	.1	.2	.3	0.0	.1	.3
841129	0.0	.2	.3	0.0	.1	.3
841130	.1	.2	.2	0.0	.1	.2
Monthly Value	-0.1	.2	.5	-0.1	.1	.4

Appendix Table 7. (continued).

December 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841201	0.0	.1	.2	-0.1	0.0	.2
841202	0.0	.1	.2	-0.1	0.0	.2
841203	-0.1	0.0	.1	-0.1	0.0	.1
841204	-0.1	0.0	.1	-0.1	0.0	0.0
841205	-0.1	0.0	.2	-0.1	0.0	.1
841206	.1	.2	.3	0.0	.1	.2
841207	.1	.2	.3	0.0	.1	.2
841208	.1	.2	.3	0.0	.1	.2
841209	.1	.2	.5	0.0	.2	.4
841210	.1	.3	.5	.1	.2	.4
841211	.1	.2	.3	.1	.2	.3
841212	.2	.4	.5	.1	.3	.4
841213	.1	.3	.5	0.0	.3	.4
841214	.3	.4	.5	.3	.3	.4
841215	.1	.2	.5	.1	.2	.4
841216	.1	.2	.3	0.0	.1	.2
841217	0.0	.1	.2	0.0	.1	.2
841218	0.0	.1	.2	0.0	0.0	.1
841219	0.0	.1	.5	-0.1	.1	.4
841220	.1	.3	.5	0.0	.3	.4
841221	.1	.3	.5	.1	.3	.4
841222	.1	.2	.3	0.0	.1	.2
841223	0.0	.1	.2	-0.1	.1	.1
841224	.1	.3	.5	0.0	.3	.4
841225	.1	.3	.5	0.0	.2	.4
841226	.1	.3	.5	0.0	.3	.4
841227	.2	.3	.5	.1	.2	.4
841228	.1	.3	.5	0.0	.3	.4
841229	.1	.2	.3	.1	.2	.3
841230	0.0	.1	.2	-0.1	.1	.2
841231	0.0	0.0	.1	-0.1	0.0	.1
Monthly Value	-0.1	.2	.5	-0.1	.1	.4

Appendix Table 7. (continued).

January 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850101	0.0	0.0	.1	-0.1	0.0	.1
850102	0.0	0.0	.1	-0.1	0.0	.1
850103	0.0	.1	.3	-0.1	.1	.2
850104	.1	.2	.3	0.0	.2	.3
850105	0.0	.1	.2	0.0	.1	.2
850106	0.0	.2	.3	0.0	.2	.3
850107	-0.1	.1	.3	-0.1	0.0	.2
850108	-0.1	0.0	.1	-0.2	-0.1	0.0
850109	0.0	.1	.2	-0.1	0.0	.2
850110	-0.1	0.0	.3	-0.2	0.0	.2
850111	0.0	.1	.2	0.0	.1	.2
850112	0.0	.1	.2	-0.1	0.0	.1
850113	.1	.2	.3	.1	.2	.3
850114	0.0	.1	.3	0.0	.1	.2
850115	0.0	.1	.2	0.0	.1	.2
850116	0.0	0.0	.2	-0.1	0.0	.2
850117	0.0	0.0	.1	-0.1	0.0	.1
850118	0.0	.1	.2	-0.1	.1	.2
850119	-0.1	.1	.3	-0.1	0.0	.2
850120	-0.1	0.0	.2	-0.1	0.0	.2
850121	0.0	.1	.3	0.0	.1	.3
850122	0.0	.1	.2	-0.1	0.0	.2
850123	-0.1	0.0	.2	-0.1	0.0	.1
850124	0.0	0.0	.2	-0.1	0.0	.1
850125	0.0	.1	.2	-0.1	.1	.2
850126	-0.1	.1	.2	-0.1	0.0	.2
850127	0.0	0.0	.1	-0.1	0.0	.1
850128	0.0	.1	.2	-0.1	0.0	.1
850129	0.0	.1	.3	-0.1	.1	.2
850130	0.0	.1	.2	-0.1	.1	.2
850131	-0.1	0.0	.1	-0.1	0.0	0.0
Monthly Value	-0.1	.1	.3	-0.2	0.0	.3

Appendix Table 7. (continued).

February 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850201	.1	----	.3	0.0	-----	.2
850202	.1	.2	.3	-0.1	0.0	.1
850203	.1	.2	.3	-0.1	0.0	.1
850204	.1	.2	.3	0.0	.1	.2
850205	.1	.3	.4	0.0	.1	.2
850206	.1	.2	.4	-0.1	.1	.3
850207	.2	.4	.6	0.0	.2	.4
850208	.1	.3	.4	0.0	.1	.3
850209	.1	.4	.6	0.0	.2	.4
850210	.2	.4	.6	.1	.3	.5
850211	.2	.4	.6	0.0	.2	.4
850212	.1	.3	.6	0.0	.2	.4
850213	.2	.3	.6	.1	.2	.4
850214	.2	.5	.6	.1	.3	.4
850215	.2	.4	.6	0.0	.2	.5
850216	.2	.5	.6	.1	.3	.5
850217	.2	.4	.6	.1	.3	.5
850218	.1	.3	.6	0.0	.2	.4
850219	.1	.3	.6	0.0	.1	.4
850220	.2	.4	.6	0.0	.3	.4
850221	.2	.4	.6	.1	.3	.4
850222	.1	.3	.6	0.0	.2	.4
850223	.1	.3	.6	0.0	.2	.4
850224	.1	.2	.4	0.0	.1	.2
850225	.1	.2	.3	0.0	0.0	.1
850226	.1	.1	.3	-0.1	0.0	.1
850227	0.0	.1	.2	-0.1	0.0	0.0
850228	.1	.2	.4	-0.1	.1	.2
Monthly Value	0.0	.3	.6	-0.1	.2	.5

----- Data not available.

Appendix Table 7. (continued).

March 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850301	.2	.4	.6	0.0	.2	.4
850302	.1	.2	.4	0.0	.1	.3
850303	.2	.4	.6	.1	.2	.4
850304	.2	.3	.4	0.0	.1	.3
850305	.2	.2	.4	0.0	.1	.2
850306	.1	.2	.3	0.0	0.0	.1
850307	.1	.2	.3	-0.1	.1	.2
850308	.1	.2	.4	0.0	.1	.2
850309	.1	.2	.3	0.0	0.0	.1
850310	.1	.2	.3	-0.1	0.0	.1
850311	.1	.2	.2	0.0	0.0	.1
850312	.1	.2	.2	-0.1	0.0	.1
850313	.1	.2	.2	-0.1	0.0	.1
850314	.1	.2	.3	-0.1	0.0	.1
850315	.1	.2	.3	0.0	.1	.1
850316	.1	.2	.3	0.0	.1	.2
850317	.1	.2	.3	-0.1	0.0	.2
850318	.1	.2	.2	-0.1	0.0	.1
850319	.1	.2	.3	-0.1	0.0	.1
850320	.1	.2	.4	-0.1	0.0	.2
850321	.1	.2	.3	-0.1	0.0	.2
850322	.1	.2	.4	-0.1	.1	.3
850323	.1	.2	.4	-0.1	.1	.3
850324	.1	.2	.4	-0.1	0.0	.2
850325	.1	.2	.3	-0.1	0.0	.2
850326	.1	.2	.4	-0.1	.1	.3
850327	.1	.3	.4	-0.1	.1	.3
850328	.1	.2	.4	-0.1	.1	.2
850329	.1	.2	.4	-0.1	.1	.3
850330	.1	.3	.4	-0.1	.1	.2
850331	.1	.3	.6	0.0	.1	.4
Monthly Value	.1	.2	.6	-0.1	.1	.4

Appendix Table 7. (continued).

April 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850401	.1	.3	.6	0.0	.2	.5
850402	.1	.3	.6	-0.1	.1	.4
850403	0.0	.2	.4	-0.1	0.0	.3
850404	0.0	-----	.4	-0.2	-----	.2
850405	0.0	.3	.6	-0.2	.1	.5
850406	0.0	.3	.6	-0.2	.1	.4
850407	0.0	.1	.3	-0.2	0.0	.2
850408	0.0	.1	.2	-0.2	0.0	.1
850409	.1	.2	.3	-0.1	0.0	.2
850410	.1	.2	.4	-0.1	.1	.3
850411	0.0	.3	.6	-0.1	.2	.4
850412	0.0	.2	.6	-0.2	.1	.4
850413	0.0	.2	.4	-0.2	.1	.3
850414	0.0	.3	.6	-0.1	.1	.4
850415	-0.1	.1	.3	-0.2	0.0	.1
850416	-0.1	.1	.4	-0.2	0.0	.3
850417	-0.1	.1	.4	-0.2	0.0	.3
850418	0.0	.1	.3	-0.2	0.0	.2
850419	0.0	.1	.4	-0.2	0.0	.2
850420	-0.1	.1	.4	-0.2	0.0	.2
850421	-0.1	.1	.4	-0.2	0.0	.2
850422	-0.1	.1	.4	-0.2	0.0	.2
850423	-0.1	.1	.4	-0.2	0.0	.2
850424	-0.1	.1	.3	-0.2	0.0	.2
850425	0.0	-----	.3	-0.2	-----	.2
Monthly Value	-0.1	.2	.6	-0.2	0.0	.5

----- Data not available.

Appendix Table 8.

Datapod temperature recorder data summary:
intragravel and surface water temperatures (C)
recorded at Mainstem 2 Side Channel, RM 115.0.

October 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841016	3.9	-----	4.2	3.7	-----	4.8
841017	3.9	4.1	4.2	3.8	4.3	4.6
841018	3.9	4.1	4.3	3.6	4.3	4.7
841019	4.1	4.2	4.3	4.1	4.3	4.5
841020	3.9	4.1	4.2	3.9	4.1	4.3
841021	3.9	4.0	4.0	3.3	4.0	4.2
841022	3.6	3.8	3.9	2.3	3.6	4.1
841023	3.7	3.8	4.1	3.7	4.0	4.4
841024	3.9	4.0	4.3	3.9	4.2	4.6
841025	3.9	4.1	4.2	3.9	4.2	4.5
841026	3.9	4.0	4.2	3.7	4.1	4.5
841027	3.8	4.0	4.2	3.5	3.9	4.3
841028	3.7	3.9	4.2	3.1	3.6	4.1
841029	3.4	3.7	4.1	2.5	3.0	3.5
841030	2.9	3.2	3.7	1.8	2.1	3.0
841031	1.9	2.3	3.0	.9	1.2	1.9
Monthly Value	1.9	-----	4.3	.9	-----	4.8

----- Data not available.

Appendix Table 8. (continued).

November 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841101	1.1	1.5	2.1	.3	.5	1.1
841102	.6	.8	1.3	0.0	0.0	.3
841103	.1	.3	.7	----	----	----
841104	0.0	.1	.2	----	----	----
841105	0.0	.1	.1	----	----	----
841106	0.0	.1	.1	----	----	----
841107	-0.1	0.0	.1	-0.1	0.0	.1
841108	-0.2	-0.1	-0.1	-0.1	0.0	.1
841109	-0.2	-0.1	-0.1	----	----	----
841110	-0.2	-0.1	-0.1	----	----	----
841111	-0.2	-0.1	-0.1	----	----	----
841112	-0.2	-0.2	-0.1	-0.3	----	-0.1
841113	-0.2	-0.2	-0.1	-0.1	-0.1	0.0
841114	-0.2	-0.2	-0.1	-0.1	0.0	0.0
841115	-0.2	-0.2	-0.1	-0.1	0.0	0.0
841116	-0.2	-0.1	-0.1	-0.1	0.0	0.0
841117	-0.2	-0.1	-0.1	-0.1	0.0	0.0
841118	-0.2	-0.2	-0.1	-0.1	0.0	0.0
841119	-0.1	-0.1	0.0	-0.1	0.0	0.0
841120	-0.2	-0.1	0.0	-0.1	0.0	0.0
841121	-0.1	0.0	0.0	-0.1	-0.1	0.0
841122	0.0	0.0	.1	-0.1	0.0	0.0
841123	0.0	.1	.2	-0.1	0.0	.1
841124	.1	.1	.2	-0.1	0.0	0.0
841125	.1	.2	.3	-0.1	0.0	0.0
841126	.2	.3	.4	-0.1	0.0	.1
841127	.3	.4	.5	0.0	0.0	0.0
841128	.5	.6	.6	-0.1	0.0	0.0
841129	.6	.6	.7	-0.1	0.0	0.0
841130	.6	.7	.8	-0.1	0.0	0.0
Monthly Value	-0.2	.1	2.1	-0.3	0.0	1.1

---- Data not available.

Appendix Table 8. (continued).

December 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841201	.7	.8	.8	-0.1	0.0	0.0
841202	.8	.9	.9	-0.1	0.0	0.0
841203	.8	.9	.9	-0.1	0.0	0.0
841204	.9	.9	1.0	-0.1	0.0	0.0
841205	1.0	1.0	1.0	-0.1	0.0	0.0
841206	1.0	1.0	1.1	0.0	.1	.4
841207	1.0	1.0	1.1	.1	.6	1.0
841208	1.0	1.3	1.5	.8	1.6	1.9
841209	1.4	1.6	1.7	1.8	2.0	2.2
841210	1.6	1.7	1.8	2.0	2.1	2.1
841211	1.7	1.7	1.8	2.0	2.1	2.2
841212	1.7	1.8	1.8	2.0	2.1	2.2
841213	1.7	1.7	1.8	2.0	2.1	2.2
841214	1.7	1.8	1.9	2.0	2.1	2.2
841215	1.7	1.8	1.8	1.9	2.0	2.1
841216	1.7	1.7	1.8	1.8	2.0	2.0
841217	1.7	1.8	1.8	1.8	2.0	2.0
841218	1.6	1.7	1.8	1.8	1.9	2.0
841219	1.7	1.7	1.8	1.8	1.8	1.9
841220	1.7	1.7	1.8	1.7	1.8	1.9
841221	1.7	1.7	1.8	1.8	1.9	2.0
841222	1.7	1.8	1.8	1.7	1.9	2.0
841223	1.6	1.7	1.8	1.6	1.7	1.9
841224	1.6	1.7	1.8	1.6	1.7	1.9
841225	1.6	1.7	1.7	1.5	1.7	1.7
841226	1.6	1.7	1.7	1.5	1.7	1.7
841227	1.6	1.6	1.7	1.6	1.6	1.7
841228	1.6	1.6	1.7	1.6	1.7	1.8
841229	1.6	1.6	1.7	1.4	1.7	1.8
841230	1.5	1.6	1.7	1.2	1.4	1.7
841231	1.5	1.5	1.6	1.2	1.3	1.6
Monthly Value	.7	1.5	1.9	-0.1	1.4	2.2

Appendix Table 8. (continued).

January 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850101	1.5	1.5	1.6	1.3	1.4	1.6
850102	1.4	1.5	1.5	1.2	1.3	1.5
850103	1.4	1.4	1.5	1.2	1.3	1.4
850104	1.4	1.4	1.5	1.2	1.3	1.4
850105	1.4	1.5	1.5	1.3	1.4	1.5
850106	1.3	1.4	1.5	1.1	1.2	1.4
850107	1.3	1.4	1.5	1.1	1.3	1.4
850108	1.4	1.4	1.5	1.1	1.3	1.4
850109	1.3	1.4	1.4	1.1	1.2	1.3
850110	1.4	----	1.4	1.3	----	1.4
850111	1.4	1.5	1.6	1.3	1.5	1.6
850112	1.4	1.6	1.6	1.4	1.6	1.7
850113	1.5	1.5	1.6	1.3	1.4	1.6
850114	1.5	1.5	1.6	1.3	1.5	1.6
850115	1.5	1.6	1.6	1.3	1.5	1.6
850116	1.5	1.6	1.6	1.3	1.5	1.6
850117	1.6	1.6	1.6	1.4	1.5	1.6
850118	1.5	1.6	1.6	1.3	1.5	1.6
850119	1.5	1.6	1.6	1.3	1.5	1.6
850120	1.5	1.6	1.6	1.5	1.6	1.6
850121	1.5	1.6	1.6	1.3	1.4	1.5
850122	1.5	1.6	1.6	1.4	1.6	1.6
850123	1.6	1.6	1.6	1.4	1.5	1.6
850124	1.6	1.6	1.6	1.4	1.6	1.6
850125	1.6	1.6	1.6	1.5	1.5	1.6
850126	1.6	1.6	1.6	1.3	1.5	1.6
850127	1.6	1.6	1.6	1.4	1.5	1.6
850128	1.6	1.6	1.6	1.4	1.5	1.6
850129	1.5	1.6	1.6	1.3	1.4	1.6
850130	1.5	1.6	1.6	1.3	1.4	1.6
850131	1.5	1.6	1.6	1.3	1.5	1.6
Monthly Value	1.3	1.5	1.6	1.1	1.4	1.7

---- Data not available.

Appendix Table 8. (continued).

February 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850201	1.5	1.5	1.6	1.2	1.3	1.5
850202	1.4	1.5	1.6	1.2	1.3	1.5
850203	1.5	1.5	1.6	1.3	1.4	1.5
850204	1.5	1.6	1.6	1.3	1.4	1.5
850205	1.5	1.5	1.6	1.3	1.3	1.4
850206	1.5	1.5	1.6	1.3	1.3	1.4
850207	1.5	1.5	1.6	1.3	1.4	1.4
850208	1.5	1.6	1.6	1.3	1.4	1.5
850209	1.5	1.5	1.6	1.3	1.4	1.4
850210	1.5	1.5	1.6	1.2	1.3	1.4
850211	1.4	1.5	1.5	1.1	1.2	1.3
850212	1.4	1.5	1.5	1.1	1.2	1.3
850213	1.4	1.4	1.5	1.1	1.2	1.3
850214	1.4	1.5	1.5	1.1	1.2	1.4
850215	1.4	1.6	1.6	1.0	1.4	1.5
850216	1.5	1.5	1.6	1.3	1.4	1.5
850217	1.5	1.5	1.5	1.3	1.4	1.5
850218	1.5	1.6	1.6	1.4	1.5	1.5
850219	1.5	1.6	1.6	1.3	1.4	1.5
850220	1.6	1.6	1.6	1.4	1.4	1.5
850221	1.5	1.6	1.6	1.3	1.4	1.5
850222	1.5	1.6	1.6	1.3	1.3	1.4
850223	1.5	1.6	1.6	1.3	1.4	1.5
850224	1.5	1.6	1.6	1.4	1.4	1.5
850225	1.5	1.6	1.6	1.3	1.4	1.5
850226	1.5	1.6	1.6	1.3	1.4	1.5
850227	1.5	1.5	1.6	1.3	1.3	1.4
Monthly Value	1.4	1.5	1.6	1.0	1.4	1.5

Appendix Table 8. (continued).

March 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850308	1.2	1.3	1.4	.9	1.1	1.2
850309	1.2	1.3	1.3	.9	1.1	1.2
850310	1.1	1.2	1.3	.9	1.0	1.1
850311	1.1	1.2	1.3	.7	0.0	1.1
850312	1.0	1.1	1.1	.7	.8	.9
850313	1.0	1.0	1.1	.7	.8	.8
850314	.9	1.0	1.1	.7	.7	.8
850315	.9	1.0	1.0	.7	.7	.8
850316	.9	.9	1.0	.7	.7	.8
850317	.9	.9	1.0	.6	.7	.8
850318	.8	.9	1.0	.6	.7	.8
850319	.9	.9	1.0	.7	.7	.8
850320	.8	.9	1.0	.6	.7	.8
850321	.9	.9	1.0	.6	.7	.8
850322	.8	.9	1.0	.7	.7	.8
850323	.9	.9	1.0	.7	.8	.8
850324	.9	1.0	1.0	.7	.8	.9
850325	.9	1.0	1.0	.7	.8	.9
850326	.9	1.0	1.1	.7	.8	.9
850327	.9	1.0	1.1	.7	.8	.9
850328	.9	1.0	1.1	.8	.9	1.0
850329	1.0	1.0	1.1	.8	.9	1.0
850330	1.0	1.0	1.1	.8	.9	1.0
850331	.9	1.0	1.1	.8	.9	1.0
Monthly Value	.8	1.0	1.4	.6	.8	1.2

Appendix Table 8. (continued).

April 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850401	1.0	1.0	1.1	.8	.9	1.0
850402	1.0	1.1	1.1	.8	1.0	1.0
850403	.9	1.0	1.1	.8	.9	1.0
850404	1.0	1.0	1.1	.9	1.0	1.0
850405	1.0	1.1	1.1	.9	1.0	1.1
850406	1.0	1.1	1.2	.9	1.0	1.1
850407	1.0	1.1	1.2	.9	1.0	1.0
850408	1.0	1.1	1.2	.9	1.0	1.1
850409	1.0	1.1	1.1	.9	1.0	1.1
850410	1.0	1.1	1.1	.8	.9	1.0
850411	.9	1.0	1.1	.8	.9	1.0
850412	.9	1.0	1.1	.8	.9	1.0
850413	1.0	1.0	1.1	.8	.9	1.0
850414	.9	1.0	1.1	.8	.9	1.0
850415	.9	1.0	1.0	.7	.8	1.0
850416	.9	1.0	1.0	.7	.9	1.0
850417	.9	1.0	1.1	.7	.9	1.2
850418	1.0	1.1	1.2	.8	1.0	1.5
850419	1.1	1.2	1.3	.9	1.1	1.5
850420	1.1	1.2	1.3	1.0	1.2	1.6
850421	1.1	1.3	1.4	1.0	1.3	1.9
850422	1.2	1.3	1.6	1.1	1.5	2.1
850423	1.3	1.5	1.6	1.2	1.4	1.9
Monthly Value	.9	1.1	1.6	.7	1.0	2.1

Appendix Table 9. Datapod temperature recorder data summary:
intragravel and surface water temperatures (C)
recorded at the Side Channel at RM 117.9.

November 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841127	3.7	-----	3.7	.9	-----	1.1
841128	3.7	3.8	3.8	.7	0.0	1.1
841129	3.7	3.7	3.8	.5	.6	.7
841130	3.7	3.8	3.8	.5	.6	.7
Monthly Value	3.7	-----	3.8	.5	-----	1.1

----- Data not available.

Appendix Table 9. (continued).

December 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841201	3.7	3.7	3.8	.5	.6	.6
841202	3.6	3.7	3.7	.5	.6	.7
841203	3.6	3.6	3.7	.6	.7	.8
841204	3.6	3.6	3.7	.6	.7	.8
841205	3.5	3.6	3.6	.7	.7	.9
841206	3.5	3.6	3.6	.7	.8	.9
841207	3.5	3.5	3.6	.8	.8	.9
841208	3.5	3.6	3.6	.8	.9	1.0
841209	3.5	3.5	3.6	.7	.8	1.0
841210	3.4	3.5	3.5	.7	.7	.9
841211	3.4	3.5	3.5	.7	.8	.9
841212	3.5	3.6	3.6	.7	.8	.9
841213	3.4	3.5	3.6	.8	.9	1.0
841214	3.4	3.4	3.5	.8	.9	1.0
841215	3.4	3.5	3.5	.8	1.0	1.2
841216	3.5	3.6	3.6	1.1	1.2	1.3
841217	3.6	3.7	3.8	1.2	1.2	1.3
841218	3.7	3.7	3.8	1.2	1.3	1.4
841219	3.7	3.8	3.8	1.1	1.3	1.4
841220	3.7	3.7	3.8	1.1	1.2	1.3
841221	3.7	3.7	3.8	1.1	1.2	1.4
841222	3.7	3.7	3.7	1.3	1.4	1.5
841223	3.7	3.7	3.7	1.0	1.2	1.4
841224	3.6	3.7	3.8	1.1	1.2	1.3
841225	3.7	3.7	3.8	1.2	1.3	1.4
841226	3.7	3.7	3.7	1.2	1.3	1.4
841227	3.7	3.7	3.8	1.2	1.3	1.4
841228	3.6	3.7	3.7	1.3	1.4	1.4
841229	3.7	3.7	3.7	1.1	1.3	1.5
841230	3.6	3.7	3.7	1.1	1.2	1.3
841231	3.7	3.7	3.7	1.2	1.4	1.6
Monthly Value	3.4	3.6	3.8	.5	1.0	1.6

Appendix Table 9. (continued).

January 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850101	3.7	3.7	3.8	1.5	1.5	1.6
850102	3.7	3.7	3.8	1.4	1.6	1.7
850103	3.8	3.8	3.8	1.5	1.6	1.7
850104	3.7	3.8	3.8	1.4	1.5	1.6
850105	3.7	3.7	3.8	1.4	1.6	1.7
850106	3.7	3.7	3.8	1.4	1.5	1.6
850107	3.7	3.7	3.8	1.4	1.6	1.7
850108	3.7	3.7	3.8	1.6	1.6	1.8
850109	3.7	3.8	3.8	1.6	1.6	1.7
850110	3.7	3.7	3.8	1.5	1.6	1.8
850111	3.7	3.7	3.8	1.5	1.6	1.8
850112	3.7	3.7	3.8	1.5	1.7	1.8
850113	3.7	3.7	3.8	1.4	1.5	1.6
850114	3.7	3.7	3.7	1.3	1.5	1.6
850115	3.7	3.7	3.8	1.5	1.6	1.6
850116	3.7	3.7	3.8	1.3	1.5	1.6
850117	3.7	3.7	3.8	1.5	1.7	1.7
850118	3.7	3.7	3.8	1.6	1.7	1.8
850119	3.7	3.7	3.8	1.4	1.6	1.7
850120	3.7	3.7	3.8	1.5	1.6	1.7
850121	3.7	3.7	3.8	1.4	1.6	1.7
850122	3.7	3.7	3.8	1.5	1.6	1.7
850123	3.7	3.7	3.8	1.5	1.6	1.8
850124	3.7	3.7	3.8	1.5	1.7	1.8
850125	3.7	3.7	3.8	1.5	1.7	1.8
850126	3.7	3.7	3.8	1.5	1.6	1.8
850127	3.7	3.7	3.8	1.6	1.7	1.8
850128	3.7	3.7	3.8	1.7	1.7	1.8
850129	3.7	3.7	3.8	1.5	1.6	1.8
850130	3.7	3.7	3.8	1.5	1.6	1.7
850131	3.7	3.7	3.8	1.4	1.6	1.7
Monthly Value	3.7	3.7	3.8	1.3	1.6	1.8

Appendix Table 9. (continued).

February 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850201	3.7	3.7	3.8	1.5	1.6	1.7
850202	3.7	3.7	3.7	1.5	1.6	1.7
850203	3.7	3.7	3.8	1.2	1.4	1.6
850204	3.6	3.7	3.7	1.3	1.5	1.6
850205	3.6	3.7	3.7	1.2	1.3	1.4
850206	3.6	3.7	3.7	1.2	1.3	1.5
850207	3.5	3.6	3.7	1.1	1.2	1.4
850208	3.5	3.6	3.7	1.1	1.2	1.4
850209	3.5	3.6	3.6	.9	1.1	1.2
850210	3.5	3.6	3.6	.8	1.0	1.1
850211	3.5	3.5	3.6	.8	1.0	1.2
850212	3.5	3.5	3.6	.7	1.0	1.0
850213	3.5	3.5	3.6	.7	.9	1.0
850214	3.5	3.5	3.6	.8	1.0	1.1
Monthly Value	3.5	-----	3.8	.7	-----	1.7

----- Data not available.

Appendix Table 9. (continued).

March 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850309	3.6	-----	3.7	1.5	-----	1.7
850310	3.6	3.6	3.7	1.4	1.6	1.8
850311	3.6	3.7	3.7	1.3	1.5	1.6
850312	3.6	3.7	3.7	1.3	1.5	1.7
850313	3.6	3.7	3.8	1.3	1.5	1.9
850314	3.6	3.7	3.8	1.2	1.5	2.0
850315	3.6	3.7	3.8	1.0	1.5	2.1
850316	3.7	3.7	3.8	1.4	1.7	1.9
850317	3.6	3.7	3.8	1.4	1.6	2.0
850318	3.6	3.7	3.8	1.4	1.7	2.1
850319	3.6	3.7	3.8	1.5	1.7	2.2
850320	3.6	3.7	3.8	1.5	1.8	2.3
850321	3.7	3.7	3.8	1.6	1.8	2.3
850322	3.7	3.7	3.9	1.4	1.8	2.5
850323	3.7	3.7	3.9	1.5	1.9	2.4
850324	3.7	3.7	3.8	1.6	1.9	2.3
850325	3.7	3.7	3.9	1.7	2.0	2.5
850326	3.7	3.7	3.9	1.5	1.9	2.6
850327	3.6	3.7	3.9	1.4	1.8	2.5
850328	3.6	3.7	3.8	1.3	1.8	2.6
850329	3.6	3.7	3.8	1.4	1.8	2.4
850330	3.6	3.7	3.8	1.5	1.8	2.2
850331	3.5	3.7	3.8	1.3	1.6	2.2
Monthly Value	3.5	3.7	3.9	1.0	1.7	2.6

----- Data not available.

Appendix Table 9. (continued).

April 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850401	3.5	3.6	3.8	1.2	1.6	2.4
850402	3.5	3.6	3.7	1.4	1.6	2.2
850403	3.5	3.6	3.7	1.4	1.6	2.0
Monthly Value	3.5	-----	3.8	1.2	-----	2.4

----- Data not available.

Appendix Table 10. Datapod temperature recorder data summary:
intragravel and surface water temperatures (C)
recorded at the Side Channel at RM 129.8 when
the site was frozen.

November 1984 (Site frozen)						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841127	-1.2	-----	-1.0	-2.1	-----	-1.8
841128	-1.8	-1.5	-1.1	-3.5	-2.9	-2.1
841129	-2.1	-0.9	-0.1	-4.1	-1.4	-0.2
841130	-0.5	-0.4	-0.3	-0.3	-0.2	-0.2
Monthly Value	-2.1	-----	-0.1	-4.1	-----	-0.2

----- Data not available.

Appendix Table 10. (continued).

December 1984 (Site frozen)						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841201	-0.4	-0.3	-0.3	-0.3	-0.2	-0.2
841202	-0.4	-0.3	-0.2	-0.3	-0.2	-0.2
841203	-0.3	-0.3	-0.2	-0.3	-0.3	-0.2
841204	-0.3	-0.3	-0.2	-0.3	-0.3	-0.2
841205	-0.3	-0.3	-0.2	-0.3	-0.3	-0.2
841206	-0.3	-0.2	-0.2	-0.3	-0.2	-0.2
841207	-0.3	-0.2	-0.2	-0.3	-0.2	-0.2
841208	-0.3	-0.2	-0.2	-0.3	-0.2	-0.2
841209	-0.3	-0.2	-0.1	-0.3	-0.2	-0.2
841210	-0.3	-0.2	-0.1	-0.3	-0.2	-0.1
841211	-0.3	-0.2	-0.1	-0.3	-0.2	-0.1
841212	-0.3	-0.2	-0.1	-0.3	-0.2	-0.1
841213	-0.3	-0.2	-0.1	-0.3	-0.2	-0.1
841214	-0.2	-0.2	-0.1	-0.3	-0.2	-0.2
841215	-0.2	-0.2	-0.1	-0.3	-0.2	-0.1
841216	-0.2	-0.2	-0.1	-0.3	-0.2	-0.2
841217	-0.2	-0.2	-0.1	-0.2	-0.2	-0.2
841218	-0.2	-0.2	-0.1	-0.3	-0.2	-0.2
841219	-0.2	-0.2	-0.1	-0.3	-0.2	-0.1
841220	-0.2	-0.1	-0.1	-----	-----	-----
841221	-0.2	-0.2	-0.1	-----	-----	-----
841222	-0.3	-0.2	-0.1	-----	-----	-----
841223	-0.2	-0.2	-0.1	-----	-----	-----
841224	-0.2	-0.2	-0.1	-----	-----	-----
841225	-0.2	-0.2	-0.1	-----	-----	-----
841226	-0.2	-0.2	-0.1	-----	-----	-----
841227	-0.2	-0.2	-0.1	-----	-----	-----
841228	-0.2	-0.1	-0.1	-----	-----	-----
841229	-0.2	-0.1	-0.1	-----	-----	-----
841230	-0.3	-0.2	-0.1	-----	-----	-----
841231	-0.2	-0.2	-0.1	-----	-----	-----
Monthly Value	-0.4	-0.2	-0.1	-0.3	-----	-0.1

----- Data not available.

Appendix Table 10. (continued).

January 1985 (Site frozen)						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850101	-0.2	-0.2	-0.1	-----	-----	-----
850102	-0.2	-0.2	-0.1	-----	-----	-----
850103	-0.3	-0.2	-0.1	-----	-----	-----
Monthly Value	-0.3	-----	-0.1	-----	-----	-----

----- Data not available.

Appendix Table 11. Datapod temperature recorder data summary:
intragravel and surface water temperatures (C)
recorded at the Side Channel at RM 131.3.

October 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841011	4.0	-----	4.1	3.0	-----	4.2
841012	3.9	4.0	4.1	1.8	2.7	4.4
841013	3.9	4.0	4.1	1.8	2.7	3.8
841014	3.9	4.0	4.0	1.3	2.1	3.5
841015	3.9	4.0	4.0	1.7	2.3	3.2
841016	3.9	4.0	4.0	1.7	2.3	3.6
841017	3.9	3.9	4.0	1.4	2.2	3.1
841018	3.8	3.9	4.0	1.3	2.1	3.3
841019	3.8	3.9	4.0	1.3	2.0	2.8
841020	3.8	3.9	3.9	1.5	2.0	2.5
841021	3.8	3.9	3.9	1.8	2.2	2.5
841022	3.8	3.9	3.9	2.3	2.8	3.6
841023	3.8	3.8	3.9	2.1	2.7	3.3
841024	3.8	3.8	3.9	1.3	2.0	2.6
841025	3.8	3.8	3.9	1.1	1.6	2.3
841026	3.7	3.8	3.9	1.0	1.5	2.1
841027	3.7	3.8	3.8	1.0	1.3	1.9
841028	3.7	3.7	3.8	.9	1.2	1.8
841029	3.6	3.7	3.8	.8	1.1	1.7
841030	3.7	3.7	3.7	.9	1.2	1.6
841031	3.7	3.7	3.8	1.0	1.3	1.7
Monthly Value	3.6	3.9	4.1	.8	2.0	4.4

----- Data not available.

Appendix Table 11. (continued).

November 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841101	3.7	3.7	3.8	.9	1.2	1.7
841102	3.7	3.8	3.8	.8	1.1	1.6
841103	3.7	3.8	3.8	.8	1.1	1.8
841104	3.7	3.8	3.8	.8	1.0	1.5
841105	3.7	3.8	3.9	1.0	1.2	1.5
841106	3.7	3.8	3.9	1.1	1.3	1.7
841107	3.7	3.8	3.8	1.1	1.4	1.7
841108	3.7	3.8	3.9	.9	1.3	1.7
841109	3.7	3.8	3.9	1.1	1.4	1.7
841110	3.7	3.8	3.8	.7	0.0	1.2
841111	3.7	3.7	3.8	.7	.9	1.1
841112	3.6	3.7	3.8	.7	.9	1.0
841113	3.6	3.6	3.7	.8	1.0	1.3
841114	3.6	3.6	3.7	.9	1.1	1.3
841115	3.5	3.6	3.6	1.1	1.3	1.6
841116	3.4	3.5	3.6	1.0	1.3	1.5
841117	3.4	3.4	3.5	.9	1.1	1.3
841118	3.4	3.4	3.5	1.0	1.2	1.5
841119	3.3	3.4	3.4	.9	1.0	1.2
841120	3.3	3.4	3.4	1.1	1.3	1.5
841121	3.4	3.5	3.5	1.4	1.7	1.9
841122	3.4	3.5	3.5	1.1	1.4	1.8
841123	3.4	3.5	3.5	1.1	1.3	1.5
841124	3.4	3.5	3.5	1.2	1.4	1.6
841125	3.5	3.5	3.5	1.1	1.4	1.7
841126	3.5	3.5	3.6	1.2	1.3	1.5
841127	3.4	3.5	3.6	.7	1.2	1.5
841128	3.5	3.5	3.6	1.1	1.3	1.6
841129	3.4	3.5	3.6	1.1	1.4	1.7
841130	3.5	3.5	3.5	1.4	1.6	1.7
Monthly Value	3.3	3.6	3.9	.7	1.2	1.9

Appendix Table 11. (continued).

December 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841201	3.5	3.5	3.6	1.4	1.6	1.8
841202	3.5	3.5	3.6	1.4	1.6	1.9
841203	3.5	3.5	3.6	1.7	1.9	2.1
841204	3.4	3.5	3.5	1.8	1.9	2.1
841205	3.4	3.5	3.5	1.5	1.8	2.1
841206	3.3	3.4	3.4	1.4	1.7	2.2
841207	3.1	3.2	3.3	1.7	1.8	2.0
841208	2.8	3.0	3.1	1.6	1.7	1.8
841209	2.7	2.9	2.9	1.0	1.3	1.6
841210	2.8	2.8	2.9	.8	.9	1.1
841211	2.8	2.9	3.0	.9	1.3	1.9
841212	2.9	3.0	3.1	1.7	1.9	2.2
841213	3.0	3.1	3.2	1.8	1.9	2.1
841214	3.1	3.1	3.2	1.5	1.8	2.0
841215	3.1	3.1	3.2	1.5	1.6	1.8
841216	3.1	3.2	3.2	1.4	1.7	2.2
841217	.8	3.1	3.2	-0.1	.9	1.6
841218	.1	1.0	1.8	-0.1	0.0	0.0
841219	.2	1.0	1.8	0.0	.1	.2
841220	.3	.3	.4	0.0	.1	.2
841221	.3	.5	.6	.1	.3	.4
841222	.6	.7	1.1	.4	.5	.6
841223	.3	.9	1.3	.1	.3	.6
841224	.2	.3	.3	0.0	.1	.1
841225	.3	.9	1.3	.1	.2	.4
841226	1.3	1.5	1.6	.3	.4	.5
841227	1.6	1.7	1.8	.2	.4	.5
841228	.1	1.5	2.0	0.0	.2	.4
841229	.1	.1	.2	-0.1	0.0	0.0
841230	.1	.5	1.2	-0.1	0.0	.1
841231	1.1	1.5	1.7	0.0	.1	.2
Monthly Value	.1	2.2	3.6	-0.1	1.0	2.2

Appendix Table 11. (continued).

January 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850101	1.7	1.9	2.1	.1	.1	.2
850102	.1	1.6	2.2	0.0	.1	.1
850103	.2	.3	1.0	0.0	.1	.1
850104	.1	.6	1.4	0.0	.1	.1
850111	.1	.2	.2	0.0	.1	.1
850112	.1	.2	.2	.1	.1	.2
850113	.1	.2	.2	.1	.1	.2
850114	.1	.2	.2	.1	.1	.2
850115	.1	.2	.2	.1	.2	.2
850116	.1	.2	.2	.1	.1	.2
850117	.1	.2	.2	.1	.1	.2
850118	.1	.1	.2	.1	.2	.2
850119	.1	.1	.2	.1	.2	.3
850120	.1	.2	.2	.1	.2	.2
850121	.1	.1	.2	.1	.2	.2
850122	.1	.1	.2	.2	.2	.3
850123	.1	.2	.2	.1	.2	.3
850124	.1	.1	.2	.1	.2	.3
850125	.1	.2	.2	.2	.2	.3
850126	.1	.2	.2	.2	.3	.3
850127	.1	.1	.2	.2	.3	.3
850128	.1	.2	.2	.2	.3	.3
850129	.1	.1	.2	.2	.3	.3
850130	.1	.1	.2	.2	.3	.4
850131	.1	.1	.2	.2	.3	.3
Monthly Value	.1	.3	2.2	0.0	.2	.4

Appendix Table 11. (continued).

February 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850201	.1	.1	.2	.3	.3	.4
850202	.1	.1	.2	.3	.3	.4
850203	.1	.1	.2	.2	.3	.4
850204	.1	.2	.2	.3	.3	.4
850205	.1	.2	.2	.3	.4	.4
850206	.1	.2	.2	.3	.4	.5
850207	.1	.1	.2	.2	.4	.5
850208	.1	.1	.2	.3	.4	.5
850209	.1	.1	.2	.3	.4	.5
850210	.1	.1	.2	.3	.4	.5
850211	.1	.1	.2	.3	.4	.5
850212	.1	.1	.2	.3	.4	.5
850213	.1	.1	.2	.3	.5	.5
850214	.1	.1	.2	.4	.5	.5
850215	.1	.1	.2	.4	.5	.5
850216	.1	.1	.2	.3	.5	.5
850217	.1	.1	.2	.4	.5	.6
850218	.1	.1	.2	.3	.5	.6
850219	.1	.1	.2	.3	.5	.6
850220	.1	.1	.2	.3	.5	.6
850221	.1	.1	.2	.3	.5	.6
850222	.1	.1	.2	.3	.6	.7
850223	.1	.1	.2	.4	.6	.7
850224	.1	.2	.2	.5	.6	.7
850225	.1	.2	.2	.5	.7	.7
850226	.1	.2	.2	.5	.7	.7
850227	.2	.2	.2	.5	.7	.7
850228	.1	.2	.2	.5	.7	.7
Monthly Value	.1	.1	.2	.2	.5	.7

Appendix Table 11. (continued).

March 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850301	.1	.2	.2	.6	.7	.7
850302	.2	.2	.2	.6	.7	.7
850303	.2	.2	.2	.6	.7	.7
850304	.2	.2	.2	.6	.7	.7
850305	.2	.2	.3	.6	.7	.7
850306	.2	.3	.3	.7	.7	.7
850307	.2	.3	.3	.6	.7	.7
850308	.2	.2	.3	.6	.7	.7
850309	.2	.2	.2	.7	.7	.8
850310	.2	.2	.3	.7	.8	.8
850311	.2	.2	.3	.6	.7	.8
850312	.2	.2	.2	.7	.8	.8
850313	.2	.2	.3	.7	.8	.8
850314	.2	.2	.2	.7	.8	.8
850315	.2	.2	.2	.7	.8	.8
850316	.2	.2	.2	.7	.8	.8
850317	.2	.2	.2	.7	.8	.9
850318	.2	.2	.2	.7	.8	.9
850319	.2	.2	.3	.7	.8	.9
850320	.2	.2	.3	.7	.8	.9
850321	.2	.3	.3	.7	.9	.9
850322	.2	.3	.3	.7	.9	.9
850323	.3	.3	.4	.8	.9	.9
850324	.4	.4	.4	.8	.9	.9
850325	.3	.4	.4	.8	.9	.9
850326	.3	.4	.5	.8	.9	1.0
850327	.5	.6	.7	.8	.9	1.0
850328	.6	.7	.7	.8	1.0	1.0
850329	.7	.7	.8	.8	1.0	1.0
850330	.8	.9	1.0	.8	1.0	1.0
850331	.9	1.1	1.2	.8	1.0	1.1
Monthly Value	.1	.3	1.2	.6	.8	1.1

Appendix Table 11. (continued).

April 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850401	1.1	1.2	1.7	.8	1.0	1.1
850402	-----	-----	-----	.9	1.1	1.1
850403	-----	-----	-----	1.0	-----	1.1
Monthly Value	1.1	-----	1.7	.8	-----	1.1

----- Data not available.

Appendix Table 12.

Datapod temperature recorder data summary:
intragravel and surface water temperatures (C)
recorded at Upper Side Channel 11 - Site 5,
RM 136.0.

October 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841016	3.6	3.9	4.1	3.1	3.7	4.5
841017	3.5	3.8	4.0	2.7	3.6	4.4
841018	3.4	3.7	3.9	2.4	3.3	4.3
841019	3.1	3.4	3.8	1.9	2.9	3.9
841020	2.7	3.1	3.5	1.6	2.2	2.8
841021	2.3	2.5	2.9	1.2	1.6	2.0
841022	2.0	2.2	2.4	.9	1.6	2.6
841023	2.1	2.2	2.5	1.3	1.9	2.7
841024	2.2	2.4	2.6	1.5	2.1	2.9
841025	2.1	2.4	2.6	1.4	2.1	3.3
841026	1.9	2.2	2.6	.8	1.5	2.3
841027	1.5	1.7	2.2	.3	.8	1.3
841028	1.0	1.3	1.6	0.0	.2	.6
841029	.8	1.0	1.2	-0.1	.1	.4
841030	.6	.7	.9	*****	*****	*****
841031	.5	.5	.7	*****	*****	*****
Monthly Value	.5	-----	4.1	-0.1	-----	4.5

----- Data not available.

***** Site frozen, data available in Table 13.

Appendix Table 12. (continued).

November 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841101	.2	.4	.5	*****	*****	*****
841102	-0.1	.1	.3	*****	*****	*****
Monthly Value	-0.1	-----	.5	*****	*****	*****

----- Data not available.

***** Site frozen, data available in Table 13 for 841103-850206.

Appendix Table 12. (continued).

February 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850207	-0.1	0.0	.1	*****	*****	*****
850208	-0.1	0.0	0.0	*****	*****	*****
850209	-0.1	0.0	.1	*****	*****	*****
850210	-0.1	0.0	.1	*****	*****	*****
850211	0.0	0.0	.1	*****	*****	*****
850212	0.0	0.0	.1	*****	*****	*****
850213	0.0	0.0	.1	*****	*****	*****
850214	0.0	0.0	.1	*****	*****	*****
850215	0.0	0.0	.1	*****	*****	*****
850216	-0.1	0.0	.1	*****	*****	*****
850217	0.0	0.0	.1	*****	*****	*****
850218	0.0	.1	.1	*****	*****	*****
850219	-0.1	.1	.2	*****	*****	*****
850220	0.0	.1	.2	*****	*****	*****
850221	0.0	.1	.2	*****	*****	*****
850222	0.0	.1	.2	*****	*****	*****
850223	0.0	.1	.2	*****	*****	*****
850224	0.0	.1	.1	*****	*****	*****
850225	0.0	0.0	.1	*****	*****	*****
850226	0.0	.1	.1	*****	*****	*****
850227	0.0	0.0	0.0	*****	*****	*****
850228	0.0	0.0	.1	*****	*****	*****
Monthly Value	-0.1	0.0	.2	*****	*****	*****

----- Data not available.

***** Site frozen, data available in Table 13.

Appendix Table 12. (continued).

March 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850301	0.0	.1	.1	*****	*****	*****
850302	.1	.1	.1	*****	*****	*****
850303	.1	.1	.1	*****	*****	*****
850304	.1	.1	.1	*****	*****	*****
850305	.1	.1	.2	*****	*****	*****
850306	.1	.1	.1	*****	*****	*****
850307	.1	.1	.1	*****	*****	*****
850308	.1	.1	.1	*****	*****	*****
850309	.1	.1	.1	*****	*****	*****
850310	.1	.1	.2	*****	*****	*****
850311	.1	.1	.1	*****	*****	*****
850312	.1	.1	.1	*****	*****	*****
850313	.1	.2	.2	*****	*****	*****
850314	.2	.2	.2	*****	*****	*****
850315	.1	.2	.2	*****	*****	*****
850316	.2	.2	.2	*****	*****	*****
850317	.2	.3	.3	*****	*****	*****
850318	.3	.3	.3	*****	*****	*****
850319	.2	.3	.3	*****	*****	*****
850320	.2	.3	.3	*****	*****	*****
850321	.3	.3	.3	*****	*****	*****
850322	.3	.4	.4	*****	*****	*****
850323	.3	.4	.4	-0.1	0.0	0.0
850324	-----	-----	-----	-0.1	0.0	0.0
850325	-----	-----	-----	0.0	0.0	.1
850326	-----	-----	-----	0.0	.1	.2
850327	-----	-----	-----	.1	.2	.3
850328	-----	-----	-----	.2	.2	.3
850329	-----	-----	-----	.3	.4	.4
850330	-----	-----	-----	.4	.5	.6
850331	-----	-----	-----	.5	.6	.6
Monthly Value	0.0	.2	.4	-0.1	-----	.6

----- Data not available.

***** Site frozen, data available in Table 13.

Appendix Table 12. (continued).

April 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850401	----	----	----	.6	.7	.8
850402	----	----	----	.7	.8	.9
850403	----	----	----	.8	.9	1.0
850404	----	----	----	.9	.9	1.0
850405	----	----	----	.9	1.0	1.1
Monthly Value	----	----	----	.6	----	1.1

---- Data not available.

Appendix Table 13. Datapod temperature recorder data summary:
intragravel and surface water temperatures (C)
recorded at Upper Side Channel 11 - Site 5
when the site was frozen, RM 136.0.

October 1984 (Site frozen)						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841030	+++++	+++++	+++++	-0.4	-0.2	0.0
841031	+++++	+++++	+++++	-0.8	-0.5	-0.4
Monthly Value	+++++	+++++	+++++	-0.8	-----	0.0

----- Data not available.

+++++ Site not frozen, data available in Table 12.

Appendix Table 13. (continued)

November 1984 (Site frozen)						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841101	+++++	+++++	+++++	-2.0	-1.4	-0.8
841102	+++++	+++++	+++++	-3.7	-2.9	-1.8
841103	-0.7	-0.4	-0.1	-4.9	-4.1	-2.7
841104	-1.8	-1.3	-0.6	-4.9	-4.8	-3.9
841105	-2.0	-1.7	-1.1	-4.9	-3.8	-1.9
841106	-1.1	-1.0	-0.9	-2.6	-2.2	-1.8
841107	-1.4	-1.2	-1.0	-3.2	-2.7	-2.4
841108	-1.9	-1.6	-1.3	-4.4	-3.7	-2.7
841109	-1.7	-1.6	-1.6	-4.5	-3.2	-3.0
841110	-4.1	-3.0	-1.7	-4.9	-4.9	-4.5
841111	-5.0	-4.8	-4.0	-4.9	-4.9	-4.9
841112	-5.0	-5.0	-5.0	-4.9	-4.7	-4.7
841113	-5.0	-5.0	-5.0	-4.9	-4.8	-4.7
841114	-5.0	-5.0	-5.0	-4.9	-4.9	-4.9
841115	-5.0	-4.9	-4.3	-4.9	-4.9	-4.9
841116	-4.3	-3.6	-3.1	-4.9	-4.6	-4.3
841117	-3.7	-3.4	-3.0	-4.9	-4.9	-4.4
841118	-3.6	-3.3	-3.0	-4.9	-4.7	-4.2
841119	-3.9	-3.4	-3.0	-4.9	-4.9	-4.5
841120	-4.0	-3.5	-2.9	-4.9	-4.5	-3.5
841121	-2.9	-2.2	-1.6	-3.5	-2.5	-1.8
841122	-1.8	-1.6	-1.4	-3.5	-2.3	-1.8
841123	-2.8	-2.4	-1.8	-4.6	-4.2	-3.4
841124	-2.8	-2.5	-2.1	-4.1	-3.5	-2.9
841125	-2.1	-1.9	-1.7	-2.9	-2.6	-2.4
841126	-1.7	-1.6	-1.5	-2.4	-2.3	-2.2
841127	-1.7	-1.6	-1.5	-2.9	-2.6	-2.3
841128	-1.8	-1.6	-1.6	-4.3	-2.7	-2.4
841129	-2.7	-2.4	-1.9	-4.9	-4.4	-3.6
841130	-2.4	-2.1	-1.8	-3.6	-3.2	-2.9
Monthly Value	-5.0	-2.6	-0.1	-4.9	-3.7	-0.8

+++++ Site not frozen, data available in Table 12.

Appendix Table 13. (continued).

January 1985 (Site frozen)						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850101	-0.4	-0.3	-0.3	-0.2	-0.2	-0.2
850102	-0.4	-0.3	-0.3	-0.3	-0.2	-0.2
850103	-0.4	-0.3	-0.2	-0.2	-0.2	-0.2
850104	-0.3	-0.3	-0.2	-0.2	-0.2	-0.1
850105	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2
850106	-0.3	-0.3	-0.2	-0.3	-0.2	-0.1
850107	-0.3	-0.3	-0.2	-0.2	-0.2	-0.1
850108	-0.3	-0.3	-0.3	-0.2	-0.2	-0.2
850111	-0.3	-----	-0.2	-0.2	-----	-0.2
850112	-0.3	-0.2	-0.2	-0.2	-0.2	-0.1
850113	-0.3	-0.2	-0.1	-0.2	-0.1	-0.1
850114	-0.2	-0.2	-0.1	-0.2	-0.1	-0.1
850115	-0.2	-0.2	-0.1	-0.2	-0.1	-0.1
850116	-0.2	-0.1	-0.1	-0.2	-0.2	-0.1
850117	-0.2	-0.1	-0.1	-0.2	-0.2	-0.1
850118	-0.2	-0.1	-0.1	-0.2	-0.1	-0.1
850119	-0.2	-0.1	-0.1	-0.2	-0.1	-0.1
850120	-0.2	-0.1	0.0	-0.2	-0.1	-0.1
850121	-0.2	-0.1	0.0	-0.2	-0.1	-0.1
850122	-0.2	-0.1	0.0	-0.2	-0.1	-0.1
850123	-0.2	-0.2	-0.1	-0.2	-0.1	-0.1
850124	-0.2	-0.1	-0.1	-0.2	-0.1	-0.1
850125	-0.2	-0.1	-0.1	-0.2	-0.1	-0.1
850126	-0.2	-0.1	-0.1	-0.2	-0.1	-0.1
850127	-0.2	-0.1	-0.1	-0.2	-0.2	-0.1
850128	-0.2	-0.1	-0.1	-0.2	-0.2	-0.1
850129	-0.2	-0.1	0.0	-0.2	-0.1	-0.1
850130	-0.2	-0.1	0.0	-0.2	-0.1	-0.1
850131	-0.2	-0.1	-0.1	-0.2	-0.1	-0.1
Monthly Value	-0.4	-0.2	0.0	-0.3	-0.2	-0.1

----- Data not available.

Appendix Table 13. (continued).

February 1985 (Site frozen)						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850201	-0.2	-0.1	0.0	-0.2	-0.1	-0.1
850202	-0.1	-0.1	0.0	-0.2	-0.1	-0.1
850203	-0.1	-0.1	-0.1	-0.2	-0.1	-0.1
850204	-0.1	-0.1	0.0	-0.2	-0.1	-0.1
850205	-0.1	-0.1	0.0	-0.2	-0.1	-0.1
850206	-0.1	-0.1	0.0	-0.2	-0.1	-0.1
850207	+++++	+++++	+++++	-0.2	-0.1	0.0
850208	+++++	+++++	+++++	-0.2	-0.1	-0.1
850209	+++++	+++++	+++++	-0.2	-0.1	-0.1
850210	+++++	+++++	+++++	-0.2	-0.1	-0.1
850211	+++++	+++++	+++++	-0.2	-0.1	-0.1
850212	+++++	+++++	+++++	-0.2	-0.1	0.0
850213	+++++	+++++	+++++	-0.2	-0.1	-0.1
850214	+++++	+++++	+++++	-0.2	-0.1	-0.1
850215	+++++	+++++	+++++	-0.2	-0.1	-0.1
850216	+++++	+++++	+++++	-0.2	-0.1	0.0
850217	+++++	+++++	+++++	-0.2	-0.1	0.0
850218	+++++	+++++	+++++	-0.2	-0.1	0.0
850219	+++++	+++++	+++++	-0.2	-0.1	0.0
850220	+++++	+++++	+++++	-0.2	-0.1	0.0
850221	+++++	+++++	+++++	-0.2	-0.1	0.0
850222	+++++	+++++	+++++	-0.2	-0.1	0.0
850223	+++++	+++++	+++++	-0.2	-0.1	0.0
850224	+++++	+++++	+++++	-0.2	-0.1	-0.1
850225	+++++	+++++	+++++	-0.2	-0.1	-0.1
850226	+++++	+++++	+++++	-0.2	-0.1	-0.1
850227	+++++	+++++	+++++	-0.2	-0.2	-0.2
850228	+++++	+++++	+++++	-0.2	-0.1	-0.1
Monthly Value	-0.2	+++++	0.0	-0.2	-0.1	0.0

----- Data not available.

+++++ Site not frozen, data available in Table 12.

Appendix Table 13. (continued).

March 1985 (Site frozen)						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850301	+++++	+++++	+++++	-0.2	-0.1	-0.1
850302	+++++	+++++	+++++	-0.2	-0.1	-0.1
850303	+++++	+++++	+++++	-0.2	-0.1	-0.1
850304	+++++	+++++	+++++	-0.2	-0.1	-0.1
850305	+++++	+++++	+++++	-0.1	-0.1	-0.1
850306	+++++	+++++	+++++	-0.1	-0.1	-0.1
850307	+++++	+++++	+++++	-0.1	-0.1	-0.1
850308	+++++	+++++	+++++	-0.1	-0.1	-0.1
850309	+++++	+++++	+++++	-0.1	-0.1	-0.1
850310	+++++	+++++	+++++	-0.1	-0.1	-0.1
850311	+++++	+++++	+++++	-0.1	-0.1	-0.1
850312	+++++	+++++	+++++	-0.1	-0.1	-0.1
850313	+++++	+++++	+++++	-0.1	-0.1	-0.1
850314	+++++	+++++	+++++	-0.1	-0.1	-0.1
850315	+++++	+++++	+++++	-0.1	-0.1	0.0
850316	+++++	+++++	+++++	-0.1	-0.1	-0.1
850317	+++++	+++++	+++++	-0.1	-0.1	0.0
850318	+++++	+++++	+++++	-0.1	-0.1	0.0
850319	+++++	+++++	+++++	-0.1	-0.1	-0.1
850320	+++++	+++++	+++++	-0.1	-0.1	-0.1
850321	+++++	+++++	+++++	-0.1	-0.1	0.0
850322	+++++	+++++	+++++	-0.1	-0.1	0.0
850323	+++++	+++++	+++++	-0.1	-----	-0.1
Monthly Value	+++++	+++++	+++++	-0.2	-0.1	0.0
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850329	-----	-----	-----	-0.9	-0.3	-0.1
850330	-----	-----	-----	-0.4	-0.3	-0.1
850331	-----	-----	-----	-4.0	-2.3	-0.5
Monthly Value	-----	-----	-----	-4.0	-----	-0.1

----- Data not available.

Appendix Table 14. Datapod temperature recorder data summary:
intragravel and surface water temperatures (C)
recorded at Upper Side Channel 21, RM 141.6.

October 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841015	3.6	-----	3.7	2.0	-----	2.8
841016	3.5	3.6	3.7	1.7	2.1	2.8
841017	3.5	3.5	3.6	1.2	1.7	2.6
841018	3.4	3.5	3.6	1.2	1.7	2.6
841019	3.4	3.5	3.6	1.2	1.9	2.9
841020	3.5	3.6	3.6	1.6	2.2	3.1
841021	3.6	3.6	3.6	1.8	2.7	3.4
841022	3.6	3.7	3.8	2.7	3.3	4.2
841023	3.6	3.6	3.8	1.8	2.7	3.4
841024	3.5	3.5	3.7	1.0	1.7	2.5
841025	3.4	3.4	3.5	.8	1.2	1.6
841026	3.4	3.4	3.5	.5	1.0	1.6
841027	3.3	3.4	3.5	.5	.9	1.4
841028	3.3	3.4	3.4	.4	.7	1.0
841029	3.3	3.4	3.4	.3	.5	.9
841030	3.3	3.4	3.4	.4	.9	1.4
841031	3.3	3.4	3.5	.6	1.0	1.3
Monthly Value	3.3	-----	3.8	.3	-----	4.2

----- Data not available.

Appendix Table 14. (continued).

November 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841101	3.3	3.4	3.5	.5	.8	1.1
841102	3.4	3.4	3.5	.5	.8	1.2
841103	3.3	3.4	3.5	.5	.9	1.5
841104	3.3	3.4	3.5	.4	.7	1.2
841105	3.4	3.4	3.5	.9	1.4	1.9
841106	3.4	3.5	3.6	1.3	1.7	2.3
841107	3.4	3.5	3.5	1.2	1.7	2.1
841108	3.3	3.4	3.5	.7	1.5	1.9
841109	3.3	3.4	3.5	.6	1.4	1.8
841110	3.1	3.2	3.4	.2	.3	.6
841111	3.1	3.2	3.2	.1	.3	.5
841112	3.2	3.2	3.3	.2	.3	.5
841113	3.2	3.3	3.4	.3	.5	.7
841114	3.3	3.4	3.5	.3	.4	.7
841115	3.4	3.5	3.5	.6	.9	1.2
841116	3.4	3.5	3.5	.7	1.1	1.4
841117	3.3	3.4	3.5	.4	.7	1.1
841118	3.4	3.4	3.4	.6	1.0	1.4
841119	3.2	3.3	3.4	.4	.6	.8
841120	3.3	3.3	3.4	.7	1.2	1.5
841121	3.3	3.4	3.4	1.5	2.0	2.1
841122	3.3	3.4	3.4	.6	1.4	2.0
841123	3.1	3.2	3.3	.5	.8	1.3
841124	3.2	3.2	3.3	.9	1.2	1.5
841125	3.1	3.2	3.3	.8	1.0	1.3
841126	3.1	3.1	3.2	.4	.7	1.0
841127	2.9	3.0	3.1	.1	.4	.7
841128	3.0	3.0	3.1	.5	.7	.8
841129	3.0	3.1	3.1	.4	.9	1.3
841130	3.1	3.1	3.1	1.0	1.2	1.4
Monthly Value	2.9	3.3	3.6	.1	1.0	2.3

Appendix Table 14. (continued).

December 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841201	3.1	3.1	3.2	1.0	1.3	1.8
841202	3.0	3.1	3.2	.9	1.2	1.7
841203	3.1	3.2	3.2	1.7	1.8	2.0
841204	3.2	3.2	3.3	1.9	2.0	2.2
841205	3.1	3.2	3.3	1.3	1.8	2.4
841206	3.0	3.1	3.3	.7	1.0	1.4
841207	3.0	3.1	3.1	.7	1.2	1.5
841208	3.0	3.0	3.1	.9	1.2	1.4
841209	2.8	2.9	3.1	.1	.5	1.4
841210	2.7	2.7	2.9	.1	.1	.3
841211	2.6	2.7	2.7	.1	.2	.3
841212	2.4	2.6	2.7	.1	.2	.3
841213	2.4	2.4	2.5	.1	.2	.3
841214	2.0	2.2	2.5	.1	.2	.3
841215	2.0	2.3	2.6	.2	.5	.7
841216	2.6	2.8	2.9	.5	.8	1.0
841217	2.9	3.0	3.1	.6	1.0	1.3
841218	3.0	3.0	3.1	.4	1.1	1.5
841219	2.9	3.0	3.1	.3	.8	1.6
841220	2.9	3.0	3.0	.3	.4	.5
841221	2.9	3.0	3.0	.3	.6	.9
841222	2.9	3.0	3.1	.7	.9	1.1
841223	2.9	3.0	3.1	0.0	.5	1.1
841224	2.9	3.0	3.0	.3	.6	1.3
841225	2.9	3.0	3.0	.4	.7	1.1
841226	2.9	3.0	3.1	.3	.7	1.1
841227	2.9	3.0	3.0	.2	.3	.4
841228	2.9	3.0	3.0	.2	.3	.4
841229	2.9	3.0	3.0	.2	.4	.6
841230	3.0	3.1	3.2	.2	.9	1.6
841231	3.2	3.2	3.3	1.0	1.8	2.2
Monthly Value	2.0	2.9	3.3	0.0	.8	2.4

Appendix Table 14. (continued).

January 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850101	3.3	3.4	3.4	2.0	2.2	2.5
850102	3.4	3.4	3.4	2.1	2.4	2.5
850103	3.2	3.4	3.4	.8	1.5	2.2
850104	3.1	3.2	3.3	.7	1.0	1.7
850105	3.0	3.2	3.4	1.3	1.7	2.1
850106	3.2	3.2	3.4	.6	.9	1.7
850107	3.2	3.3	3.4	.7	1.5	2.1
850108	3.3	3.4	3.4	1.7	2.0	2.5
850111	3.4	-----	3.5	2.1	-----	2.4
850112	3.4	3.4	3.5	1.2	2.1	2.5
850113	3.1	3.2	3.5	.5	.7	1.1
850114	3.1	3.2	3.3	.4	1.1	1.6
850115	3.2	3.3	3.3	1.2	1.5	1.7
850116	3.2	3.3	3.4	1.0	1.7	2.1
850117	3.4	3.4	3.5	1.8	2.2	2.4
850118	3.3	3.4	3.5	.8	1.7	2.3
850119	3.1	3.3	3.4	.7	1.5	2.5
850120	3.3	3.4	3.4	1.2	1.7	2.1
850121	3.1	3.2	3.4	.6	1.1	1.8
850122	3.2	3.2	3.3	.8	1.2	1.9
850123	3.2	3.3	3.4	1.2	1.9	2.5
850124	3.4	3.4	3.5	1.9	2.2	2.5
850125	3.3	3.4	3.5	.8	1.9	2.4
850126	3.2	3.3	3.4	.8	1.8	2.6
850127	3.3	3.4	3.4	1.3	2.0	2.3
850128	3.3	3.4	3.4	1.6	2.0	2.5
850129	3.1	3.3	3.4	.5	1.5	2.5
850130	3.1	3.2	3.3	.9	1.6	2.3
850131	3.1	3.3	3.4	1.0	1.9	2.7
Monthly Value	3.0	3.3	3.5	.4	1.7	2.7

----- Data not available.

Appendix Table 14. (continued).

February 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850201	3.2	3.3	3.4	.9	1.7	2.4
850202	3.1	3.2	3.4	.9	1.9	2.7
850203	3.1	3.2	3.4	.9	1.4	2.2
850204	3.1	3.2	3.2	.8	1.4	1.9
850205	3.0	3.1	3.1	.4	1.1	1.7
850206	2.8	2.9	3.1	-0.1	.3	.6
850207	2.7	2.7	2.8	-0.1	.2	.6
850208	2.7	2.7	2.9	.3	.4	.9
850209	2.7	2.8	2.9	.1	.2	.4
850210	2.7	2.8	2.8	.1	.2	.4
850211	2.7	2.7	2.8	.1	.2	.4
850212	2.7	2.7	2.8	.1	.2	.3
850213	2.7	2.7	2.8	.2	.2	.3
850214	2.7	2.8	2.8	.2	.3	.4
850215	2.7	2.8	2.9	.3	.4	.6
850216	2.8	2.9	2.9	.3	.5	.6
850217	2.7	2.8	2.9	.1	.4	.6
850218	2.7	2.7	2.9	.1	.3	.6
850219	2.6	2.7	2.8	.1	.3	.5
850220	2.6	2.6	2.7	.2	.5	.8
850221	2.4	2.5	2.6	.2	.5	.8
850222	2.3	2.4	2.5	.2	.4	.6
850223	2.1	2.2	2.4	.2	.4	.8
850224	2.1	2.2	2.3	.5	.9	1.4
850225	2.2	2.2	2.3	.8	1.2	1.7
850226	2.1	2.2	2.2	.5	1.1	1.4
850227	2.2	2.2	2.4	.3	1.4	2.2
850228	2.2	2.3	2.3	.3	1.1	1.4
Monthly Value	2.1	2.7	3.4	-0.1	.7	2.7

Appendix Table 14. (continued).

March 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850301	2.2	2.3	2.4	.3	.7	1.4
850302	2.3	2.5	2.6	.6	1.2	1.6
850303	2.4	2.5	2.6	.2	.7	1.6
850304	2.5	2.6	2.7	.4	1.0	1.9
850305	2.7	2.7	2.9	.7	1.5	2.4
850306	2.7	2.8	2.9	.5	1.5	2.7
850307	2.8	2.8	3.0	.9	1.7	2.6
850308	2.8	2.8	2.9	.6	1.1	1.8
850309	2.8	2.9	3.1	.9	1.6	2.5
850310	3.0	3.1	3.3	1.5	2.2	3.6
850311	3.0	3.1	3.3	1.2	1.8	2.6
850312	3.1	3.2	3.3	1.6	2.0	2.5
850313	2.9	3.1	3.3	.7	1.7	3.3
850314	2.9	3.1	3.3	.4	1.1	2.7
850315	2.8	3.0	3.1	.1	.9	2.3
850316	3.0	3.2	3.3	.7	1.7	3.0
850317	3.0	3.2	3.3	.5	1.6	2.9
850318	3.2	3.3	3.5	1.6	2.1	3.3
850319	3.1	3.2	3.4	1.2	1.8	3.2
850320	3.0	3.2	3.4	.5	1.6	3.8
850321	3.1	3.2	3.5	.8	1.8	3.8
850322	3.0	3.1	3.5	.5	1.5	4.2
850323	2.9	3.2	3.6	.3	1.8	4.6
850324	3.0	3.3	3.6	.7	1.9	4.2
850325	3.1	3.4	4.1	.9	2.3	4.6
850326	2.8	3.6	4.1	0.0	1.2	4.0
850327	2.9	3.2	3.4	0.0	1.0	3.5
850328	2.7	3.0	3.2	.1	1.0	3.6
850329	2.7	3.0	3.3	0.0	1.3	3.9
850330	3.0	3.2	3.5	.8	1.8	4.1
850331	2.7	3.0	3.3	0.0	.8	2.5
Monthly Value	2.2	3.0	4.1	0.0	1.5	4.6

Appendix Table 14. (continued).

April 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850401	2.7	2.8	3.0	0.0	.6	1.8
850402	2.7	2.8	3.1	.1	.9	2.9
850403	2.9	3.0	3.4	.7	1.7	3.7
850404	2.9	-----	3.3	.2	-----	1.1
Monthly Value	2.7	-----	3.4	0.0	-----	3.7

----- Data not available.

Appendix Table 15. Datapod temperature recorder data summary:
intragravel and surface water temperatures (C)
recorded at Mainstem Susitna River at RM 118.9.

October 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841012	2.8	-----	3.0	2.5	-----	2.9
841013	2.6	2.7	2.9	2.1	2.4	2.8
841014	2.0	2.3	2.7	1.1	1.6	2.3
841016	.9	-----	1.1	.1	-----	.4
841017	.8	.9	.9	.1	.2	.4
841018	.8	1.0	1.3	.1	.4	2.6
841019	1.1	1.9	2.6	.3	1.8	3.9
841020	2.6	2.9	3.3	2.0	3.2	4.3
841021	3.0	3.3	3.4	1.4	3.0	4.2
841022	1.8	2.5	3.0	.6	1.3	1.9
841023	1.3	1.5	1.8	.3	.7	1.0
841024	1.0	1.2	1.5	.1	.4	.8
841025	.9	1.0	1.6	.1	.4	1.3
841026	1.6	2.3	2.9	1.1	2.5	4.3
841027	2.3	2.6	2.9	-----	-----	-----
841028	1.3	1.8	2.6	-----	-----	-----
841029	.8	1.0	1.4	-----	-----	-----
841030	.7	.7	.8	-----	-----	-----
841031	.7	.8	1.0	-----	-----	-----
Monthly Value	.7	-----	3.4	.1	-----	4.3

----- Data not available.

Appendix Table 15. (continued).

November 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841101	.6	.7	.9	----	----	----
841102	.4	.5	.7	----	----	----
841103	.4	.4	.6	0.0	.1	.2
841104	.5	.5	.7	.1	.3	.8
841105	.6	.8	.9	.5	.9	1.3
841106	.7	.9	1.0	0.0	.6	1.1
841107	.8	1.1	1.3	1.1	1.5	1.9
841108	.9	1.1	1.3	.5	1.1	1.9
841109	.7	.7	1.0	.2	.4	.6
841110	.7	.7	.7	.2	.2	.4
841111	.7	.7	1.0	.2	.4	1.0
841112	1.0	1.4	1.7	.9	1.7	2.1
841113	.9	1.3	1.7	.2	1.1	1.8
841114	.8	1.2	1.4	.1	.9	1.7
841115	.6	.7	.8	.1	.1	.2
841116	.6	.7	.7	.1	.1	.2
841117	.6	.7	.7	.1	.1	.2
841118	.6	.7	.7	.1	.1	.2
841119	.6	.6	.7	.1	.1	.2
841120	.6	.6	.7	.1	.1	.2
841121	.6	.6	.6	.1	.1	.1
841122	.5	.6	.7	.1	.1	.2
841123	.6	.6	.6	.1	.1	.1
841124	.6	.6	.6	.1	.1	.1
841125	.6	.6	.6	.1	.1	.1
841126	.6	.7	.7	.1	.1	.2
841127	.6	.7	.7	.1	.1	.2
841128	.6	.7	.7	.1	.1	.1
841129	.6	.7	.7	.1	.1	.2
841130	.7	.7	.7	.1	.1	.1
Monthly Value	.4	.7	1.7	0.0	.4	2.1

----- Data not available.

Appendix Table 15. (continued).

December 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841201	.7	.7	.7	.1	.1	.2
841202	.7	.7	.7	.1	.1	.2
841203	.7	.7	.7	.1	.1	.1
841204	.6	.7	.7	0.0	.1	.1
841205	.7	.7	.7	.1	.1	.1
841206	.7	.7	.7	.1	.1	.2
841207	.7	.7	.7	.1	.1	.2
841208	.7	.7	.7	.1	.1	.2
841209	.7	.7	.7	.1	.1	.2
841210	.7	.7	.8	.1	.1	.2
841211	.7	.7	.8	.1	.1	.2
841212	.7	.7	.7	.1	.1	.1
841213	.7	.7	.9	.1	.1	.2
841214	.8	.8	.9	.1	.2	.2
841215	.8	.8	.9	.1	.2	.2
841216	.8	.8	.9	.1	.1	.2
841217	.8	.8	.9	.1	.1	.1
841218	.8	.9	.9	.1	.1	.2
841219	.8	.9	1.0	.1	.1	.2
841220	.9	1.0	1.0	.1	.2	.2
841221	1.0	1.0	1.1	.1	.2	.2
841222	1.0	1.0	1.1	.1	.1	.2
841223	1.0	1.0	1.1	.1	.1	.2
841224	1.0	1.1	1.1	.1	.1	.2
841225	1.1	1.1	1.2	.1	.2	.2
841226	1.1	1.1	1.2	.1	.1	.2
841227	1.1	1.2	1.3	.1	.1	.2
841228	1.2	1.2	1.3	.1	.3	.3
841229	1.2	1.3	1.3	.2	.3	.3
841230	1.2	1.4	1.6	.2	.3	.3
841231	1.5	1.6	1.6	.2	.2	.3
Monthly Value	.6	.9	1.6	0.0	.1	.3

Appendix Table 15. (continued).

January 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850101	1.5	1.5	1.5	.2	.2	.2
850102	1.4	1.5	1.5	.1	.1	.2
850103	1.5	1.5	1.6	.1	.1	.2
850104	1.4	1.5	1.5	.1	.1	.2
850105	1.4	1.5	1.5	.1	.1	.2
850106	1.4	1.5	1.5	.1	.1	.2
850107	1.4	1.5	1.5	.1	.1	.2
850108	1.4	1.5	1.5	.1	.1	.1
850109	1.4	1.5	1.5	.1	.1	.1
850110	1.4	-----	1.5	.1	-----	.1
850111	1.4	1.5	1.5	.1	.1	.1
850112	1.4	1.5	1.5	.1	.1	.2
850113	1.4	1.5	1.5	0.0	.1	.2
850114	1.4	1.5	1.5	0.0	.1	.2
850115	1.4	1.5	1.5	.1	.1	.2
850116	1.4	1.5	1.6	.1	.1	.1
850117	1.4	1.5	1.5	.1	.1	.1
850118	1.4	1.5	1.6	.1	.1	.1
850119	1.5	1.5	1.6	.1	.1	.2
850120	1.5	1.5	1.6	.1	.1	.2
850121	1.5	1.5	1.6	.1	.1	.2
850122	1.4	1.5	1.6	.1	.1	.2
850123	1.5	1.5	1.6	.1	.1	.2
850124	1.5	1.5	1.6	.1	.1	.2
850125	1.5	1.6	1.7	.1	.1	.2
850126	1.5	1.6	1.7	.1	.1	.2
850127	1.5	1.6	1.6	.1	.1	.1
850128	1.6	1.6	1.7	.1	.1	.2
850129	1.6	1.6	1.7	.1	.1	.2
850130	1.6	1.7	1.7	.1	.1	.2
850131	1.6	1.6	1.7	.1	.1	.1
Monthly Value	1.4	1.5	1.7	0.0	.1	.2

----- Data not available.

Appendix Table 15. (continued).

February 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850201	1.6	1.6	1.7	.1	.1	.2
850202	1.6	1.6	1.7	.1	.1	.2
850203	1.6	1.6	1.6	.1	.1	.2
850204	1.6	1.6	1.7	.1	.1	.2
850205	1.6	1.6	1.7	.1	.1	.2
850206	1.6	1.7	1.7	.1	.1	.2
850207	1.6	1.7	1.7	.1	.1	.2
850208	1.7	1.7	1.7	.1	.1	.2
850209	1.7	1.7	1.7	.1	.1	.2
850210	1.7	1.7	1.8	.1	.1	.2
850211	1.7	1.7	1.8	.1	.1	.2
850212	1.7	1.8	1.8	.1	.1	.2
850213	1.7	1.7	1.8	.1	.1	.2
850214	1.7	1.8	1.8	.1	.1	.2
850215	1.7	1.7	1.8	.1	.1	.2
850216	1.7	1.7	1.8	.1	.1	.2
850217	1.6	1.7	1.8	.1	.1	.2
850218	1.7	1.7	1.8	.1	.1	.2
850219	1.7	1.7	1.8	.1	.2	.2
850220	1.6	1.7	1.7	.1	.1	.2
850221	1.6	1.7	1.7	.1	.1	.2
850222	1.6	1.7	1.7	.1	.1	.2
850223	1.5	1.7	1.7	.1	.1	.2
850224	1.5	1.6	1.7	.1	.1	.2
850225	1.6	1.6	1.7	.1	.1	.2
850226	1.5	1.6	1.6	.1	.1	.2
850227	1.5	1.6	1.6	.1	.1	.2
850228	1.5	1.6	1.6	.1	.1	.2
Monthly Value	1.5	1.7	1.8	.1	.1	.2

Appendix Table 15. (continued).

March 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850301	1.5	1.6	1.6	.1	.1	.2
850302	1.5	1.5	1.6	.1	.1	.2
850303	1.5	1.6	1.7	.1	.1	.2
850304	1.5	1.6	1.7	.1	.1	.2
850305	1.5	1.5	1.6	.1	.1	.2
850306	1.5	1.6	1.6	.1	.1	.2
850307	1.5	1.6	1.6	.1	.1	.2
850308	1.5	1.6	1.6	.1	.1	.2
850309	1.5	1.6	1.7	.1	.1	.2
850310	1.5	1.6	1.7	.1	.1	.2
850311	1.5	1.6	1.7	.1	.1	.2
850312	1.6	1.6	1.7	.1	.1	.2
850313	1.6	1.6	1.7	.1	.1	.2
850314	1.6	1.6	1.7	.1	.1	.2
850315	1.6	1.7	1.7	.1	.1	.2
850316	1.6	1.6	1.7	.1	.1	.2
850317	1.6	1.7	1.7	.1	.1	.2
850318	1.6	1.7	1.7	.1	.1	.2
850319	1.6	1.7	1.7	.1	.1	.2
850320	1.6	1.7	1.7	.1	.1	.2
850321	1.6	1.7	1.7	.1	.1	.2
850322	1.6	1.7	1.7	0.0	.1	.2
850323	1.6	1.7	1.7	.1	.1	.2
850324	1.6	1.7	1.7	.1	.1	.2
850325	1.6	1.7	1.7	.1	.1	.2
850326	1.6	1.7	1.7	0.0	.1	.2
850327	1.6	1.7	1.7	.1	.1	.2
850328	1.6	1.7	1.7	.1	.1	.2
850329	1.6	1.7	1.7	.1	.1	.2
850330	1.6	1.7	1.7	.1	.1	.2
850331	1.6	1.7	1.7	.1	.1	.2
Monthly Value	1.5	1.6	1.7	0.0	.1	.2

Appendix Table 15. (continued).

April 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850401	1.6	1.7	1.7	.1	.1	.2
850402	1.6	1.7	1.7	.1	.1	.2
850403	1.6	1.7	1.7	.1	.1	.2
850404	1.6	1.7	1.7	0.0	.1	.2
850405	1.6	1.7	1.7	.1	.1	.2
850406	1.6	1.7	1.7	.1	.1	.2
850407	1.6	1.7	1.7	.1	.2	.2
850408	1.6	1.6	1.7	.1	.1	.2
850409	1.6	1.7	1.7	.1	.1	.2
850410	1.6	1.7	1.7	.1	.2	.2
850411	1.6	1.7	1.7	.1	.1	.2
850412	1.6	1.7	1.7	.1	.2	.2
850413	1.6	1.7	1.7	.1	.1	.2
850414	1.6	1.7	1.7	.1	.2	.2
850415	1.6	1.7	1.7	.1	.1	.2
850416	1.6	1.7	1.7	.1	.1	.2
850417	1.6	1.7	1.7	0.0	.1	.2
850418	1.6	1.7	1.7	0.0	.1	.2
850419	1.6	1.7	1.7	.1	.1	.2
850420	1.6	1.7	1.7	.1	.1	.2
850421	1.6	1.7	1.7	.1	.1	.2
850422	1.6	1.7	1.7	.1	.1	.2
850423	1.6	1.7	1.7	0.0	.1	.2
850424	1.6	1.7	1.7	.1	.1	.2
850425	1.7	-----	1.7	.1	-----	.2
Monthly Value	1.6	1.7	1.7	0.0	.1	.2

----- Data not available.

Appendix Table 16.

Datapod temperature recorder data summary:
intragravel and surface water temperatures (C)
recorded at Mainstem Susitna River at RM 127.1.

November 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841127	.5	----	.8	-0.1	----	0.0
841128	.3	.3	.5	-0.1	0.0	0.0
841129	.1	.2	.4	-0.1	0.0	0.0
841130	.2	.4	.5	-0.1	0.0	.2
Monthly Value	.1	----	.8	-0.1	----	.2

---- Data not available.

Appendix Table 16. (continued).

December 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841201	.3	.5	.6	0.0	0.0	.1
841202	.2	.3	.4	0.0	0.0	.2
841203	.4	.5	.7	.1	.3	.5
841204	.7	1.3	1.8	.4	.6	.7
841205	1.2	1.4	1.6	.4	.6	.7
841206	1.5	1.7	1.9	0.0	.4	.7
841207	1.9	2.0	2.1	0.0	.5	1.0
841208	2.0	2.2	2.4	.8	1.0	1.2
841209	2.3	2.5	2.6	.7	1.0	1.6
841210	2.5	2.6	2.7	.3	1.1	1.6
841211	2.6	2.7	2.8	.4	1.3	1.6
841212	2.7	2.7	2.9	.9	1.2	1.7
841213	2.7	2.8	2.9	.8	1.2	1.7
841214	2.7	2.8	2.8	.5	.8	1.1
841215	2.6	2.7	2.8	.3	.4	1.0
841216	2.5	2.5	2.6	.3	.4	.4
841217	2.5	2.5	2.6	.3	.4	.7
841218	2.5	2.6	2.7	.4	.5	.6
841219	2.5	2.6	2.7	.4	.5	.6
841220	2.6	2.7	2.7	.5	.6	.7
841221	2.7	2.7	2.8	.6	.7	.9
841222	2.7	2.7	2.8	.5	.7	.8
841223	2.6	2.7	2.7	.4	.6	.7
841224	2.6	2.7	2.7	.3	.5	.6
841225	2.6	2.7	2.7	.5	.6	.7
841226	2.6	2.7	2.8	.4	.5	.6
841227	2.5	2.6	2.7	.4	.5	.7
841228	2.5	2.6	2.7	.6	.7	.7
841229	2.6	2.6	2.7	.3	.5	.7
841230	2.5	2.6	2.6	.2	.4	.5
841231	2.5	2.5	2.6	.4	.4	.5
Monthly Value	.2	2.3	2.9	0.0	.6	1.7

Appendix Table 16. (continued).

January 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850101	2.5	2.6	2.6	.4	.5	.7
850102	2.6	2.7	2.8	.5	.6	.7
850103	2.6	2.7	2.7	.3	.4	.5
850104	2.7	2.7	2.8	.3	.5	.6
850105	2.6	2.7	2.8	.4	.5	.6
850106	2.6	2.7	2.8	.4	.5	.6
850107	2.3	2.7	2.8	.5	.7	1.1
850108	1.3	1.5	2.2	.5	1.1	1.5
850109	1.5	1.5	1.6	.4	.5	.7
850110	1.5	1.6	1.7	.5	.8	1.1
850111	1.5	1.5	1.7	.5	.6	.7
850112	1.5	1.6	1.9	.4	.6	.7
850113	1.5	1.7	1.7	.5	.6	.7
850114	1.5	1.7	1.7	.5	.6	.8
850115	1.5	1.6	1.6	.5	.6	.7
850116	1.5	1.6	1.7	.5	.7	.8
850117	1.4	1.5	1.6	.5	.6	.7
850118	1.5	1.6	1.6	.5	.6	.7
850119	1.4	1.6	1.7	.5	.6	.7
850120	1.4	1.5	1.5	.3	.5	.7
850121	1.4	1.5	1.5	.4	.5	.7
850122	1.4	1.5	1.5	.4	.5	.7
850123	1.5	1.5	1.6	.5	.7	1.0
850124	1.5	1.6	1.6	.6	.7	.8
850125	1.5	1.6	1.7	.5	.7	.9
850126	1.5	1.6	1.8	.6	.8	1.2
850127	1.6	1.7	2.0	.7	.9	1.5
850128	1.6	1.7	2.1	.7	.9	1.3
850129	1.6	1.6	1.7	.6	.8	1.1
850130	1.5	1.7	1.7	.6	1.0	1.6
850131	1.6	1.6	1.8	1.3	1.7	2.5
Monthly Value	1.3	1.8	2.8	.3	.7	2.5

Appendix Table 16. (continued).

February 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850201	1.5	1.6	1.7	.7	1.2	2.5
850202	1.6	1.6	1.8	.7	.9	1.3
850203	1.6	1.6	1.8	.7	.8	1.0
850204	1.5	1.6	1.8	.6	.8	1.0
850205	1.5	1.6	1.8	.6	.7	1.0
850206	1.6	1.6	1.7	.5	.7	.9
850207	1.6	1.7	1.8	.5	.8	1.1
850208	1.5	1.6	1.7	.6	.8	1.0
850209	1.5	1.6	1.7	.6	.7	1.0
850210	1.5	1.5	1.6	.5	.6	.9
850211	1.4	1.5	1.6	.4	.6	.8
850212	1.4	1.5	1.6	.4	.6	.7
850213	1.4	1.5	1.6	.4	.5	.7
850214	1.2	1.4	1.5	.4	.6	.7
850215	1.0	1.2	1.3	.5	.7	.8
850216	.5	.9	1.1	.4	.7	.7
850217	.7	.9	1.1	.5	.6	.8
850218	.6	1.0	1.5	.6	.7	.8
850219	1.0	1.3	1.6	.6	.7	.8
850220	1.2	1.5	1.9	.6	.7	.9
Monthly Value	.5	-----	1.9	.4	-----	2.5

----- Data not available.

Appendix Table 16. (continued).

March 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850309	.9	-----	1.1	1.1	-----	1.4
850310	.8	1.0	1.1	1.0	1.2	1.4
850311	.8	.9	1.0	.9	1.1	1.3
850312	.7	.9	1.1	.9	1.1	1.3
850313	.7	.9	1.2	.9	1.1	1.4
850314	.7	.9	1.1	.9	1.1	1.3
850315	.6	.9	1.1	.8	1.0	1.4
850316	.8	1.0	1.2	.9	1.1	1.4
850317	.8	1.0	1.3	.8	1.1	1.5
850318	.8	1.0	1.4	.8	1.1	1.5
850319	.8	1.0	1.4	.8	1.1	1.4
850320	.8	1.0	1.5	.8	1.0	1.7
850321	.8	-----	.9	.8	1.1	1.4
850322	-----	-----	-----	.7	1.0	1.5
850323	-----	-----	-----	.7	1.0	1.7
850324	-----	-----	-----	.8	1.1	1.7
850325	-----	-----	-----	.8	1.1	1.8
850326	-----	-----	-----	.7	1.0	1.7
850327	-----	-----	-----	.7	1.1	1.7
850328	-----	-----	-----	.7	1.1	1.8
850329	-----	-----	-----	.8	1.3	1.9
850330	-----	-----	-----	.9	1.3	1.9
850331	-----	-----	-----	.7	1.2	2.0
Monthly Value	.6	-----	1.5	.7	1.1	2.0

----- Data not available.

Appendix Table 16. (continued).

April 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850401	-----	-----	-----	.7	1.2	1.9
850402	-----	-----	-----	.7	1.2	1.7
850403	1.4	-----	1.8	.9	1.5	2.2
850404	1.2	1.6	2.2	1.1	1.6	2.4
850405	1.8	2.5	3.4	1.1	1.8	2.4
850406	1.9	2.6	3.6	1.2	1.9	2.7
850407	1.9	2.3	2.9	1.6	1.9	2.5
850408	1.6	1.9	2.1	1.2	1.6	2.0
850409	1.2	1.5	1.8	1.1	1.5	2.1
850410	1.2	1.5	1.8	1.2	1.6	2.1
850411	1.5	1.7	1.9	1.1	1.6	2.1
850412	1.6	1.8	2.0	1.2	1.7	2.3
850413	1.4	1.7	2.0	1.4	1.7	2.3
850414	1.6	1.8	1.9	1.3	1.7	2.1
850415	1.3	1.8	2.5	1.4	2.0	2.8
850416	1.3	1.8	2.6	1.3	2.0	3.0
850417	1.4	2.0	3.0	1.2	2.1	3.4
850418	1.6	2.1	2.9	1.4	2.2	3.3
850419	1.4	1.9	2.7	2.1	2.9	3.9
850420	1.4	1.9	2.6	2.3	2.8	3.7
850421	1.6	2.1	2.9	2.1	2.9	3.9
850422	1.5	2.1	2.8	2.3	3.0	4.0
850423	1.5	2.1	3.0	2.7	3.5	4.7
850424	1.2	2.0	3.0	3.0	3.9	5.2
850425	1.4	-----	2.0	3.3	-----	4.0
Monthly Value	1.2	1.9	3.6	.7	2.1	5.2

----- Data not available.

Appendix Table 17. Datapod temperature recorder data summary:
intragravel and surface water temperatures (C)
recorded at Mainstem Susitna River at RM 132.9.

October 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841012	2.0	2.2	2.5	2.2	5.1	7.1
841013	2.0	2.2	2.5	1.6	4.1	6.8
841014	1.4	1.7	2.3	.1	1.1	2.9
841015	.9	1.1	1.6	-0.3	.2	.8
841016	.7	.8	1.0	-0.3	-0.1	.2
841017	.6	.6	.8	-0.2	-0.2	.1
841018	.6	.7	.8	-0.2	-0.1	.2
841019	.6	.7	.9	-0.2	0.0	.3
841020	.7	.7	.8	-0.1	0.0	.2
841021	.6	.7	.8	-0.1	.4	1.4
841022	.6	.7	.9	1.3	1.8	2.7
841023	.6	.7	.8	.4	2.0	2.8
841024	.5	.6	.7	-0.2	0.0	.4
841025	.5	.5	.6	-0.2	0.0	.3
841026	.5	.6	.9	-0.1	.1	.5
841027	.8	1.1	1.5	-1.3	.3	.9
841028	1.5	1.6	1.8	*****	*****	*****
841029	1.5	1.6	1.8	*****	*****	*****
841030	1.4	1.4	1.6	*****	*****	*****
841031	1.3	1.4	1.5	*****	*****	*****
Monthly Value	.5	1.1	2.5	-1.3	-----	7.1

----- Data not available.

***** Site frozen, data available in Table 18.

Appendix Table 17. (continued).

November 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841101	1.4	1.5	1.6	-0.2	-----	.1
841102	1.5	1.5	1.6	.1	.5	.8
841103	1.5	1.6	1.8	.5	.9	1.5
841104	1.7	1.9	2.1	1.0	1.3	1.7
841105	1.8	1.9	2.1	.9	1.1	1.2
841106	1.8	1.8	1.9	1.0	1.1	1.2
841107	1.8	1.8	1.9	1.0	1.1	1.3
841108	1.6	1.7	1.9	.9	1.2	1.4
841109	1.7	1.9	2.0	1.2	1.5	1.7
841110	1.6	1.7	1.9	.8	1.0	1.2
841111	1.5	1.5	1.7	.6	.7	.9
841112	1.4	1.5	1.5	.6	.7	.7
841113	1.4	1.5	1.5	.7	.7	.8
841114	1.4	1.5	1.5	.7	.7	.8
841115	1.5	1.5	1.6	.7	.8	.9
841116	1.5	1.5	1.6	.7	.8	.9
841117	1.4	1.5	1.6	.3	.6	.8
841118	1.4	1.5	1.5	.5	.7	.9
841119	1.4	1.5	1.5	.5	.6	.7
841120	1.4	1.5	1.5	.6	.7	.8
841121	1.5	1.6	1.6	.7	.8	1.0
841122	1.5	1.5	1.6	.6	.8	.9
841123	1.4	1.5	1.6	.6	.7	.8
841124	1.5	1.5	1.6	.7	.9	1.0
841125	1.5	1.5	1.6	.7	.8	.9
841126	1.5	1.6	1.6	.7	.8	.9
841127	1.5	1.5	1.6	.6	.7	.8
841128	1.5	1.6	1.7	.8	.9	1.1
841129	1.5	1.7	1.8	.7	1.0	1.4
841130	1.8	1.9	2.0	1.2	1.3	1.6
Monthly Value	1.4	1.6	2.1	-0.2	.9	1.7

----- Data not available.

Appendix Table 17. (continued).

December 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841201	1.8	1.9	2.0	1.1	1.4	1.7
841202	1.7	1.9	2.0	.8	1.2	1.6
841203	1.9	2.1	2.3	1.6	1.9	2.3
841204	2.2	2.4	2.5	2.0	2.2	2.5
841205	2.1	2.3	2.5	1.1	2.0	2.7
841206	1.7	1.8	2.2	.7	.9	1.3
841207	1.7	1.7	1.9	1.0	1.2	1.4
841208	1.6	1.7	1.8	.7	1.0	1.2
841209	1.4	1.6	1.7	.6	.8	1.2
841210	1.3	1.4	1.5	.4	.5	.6
841211	1.3	1.3	1.6	-0.3	.3	.5
841212	1.5	1.7	2.0	*****	*****	*****
841213	1.4	1.5	1.5	*****	*****	*****
841214	1.0	1.2	1.4	*****	*****	*****
841215	.2	.5	1.0	*****	*****	*****
841216	.3	.6	2.3	-0.3	.1	.2
841217	1.5	1.8	2.4	.1	.1	.3
841218	1.4	1.5	1.6	.1	.2	.2
841219	.8	1.3	1.6	.1	.2	.3
841220	.9	1.2	2.0	.2	.3	.3
841221	2.0	2.3	2.4	.1	.2	.3
841222	2.3	2.6	2.9	.2	.2	.3
841223	2.1	2.3	2.4	.2	.3	.3
841224	2.0	2.2	2.3	.2	.3	.4
841225	2.2	2.4	2.4	.3	.9	1.3
841226	2.4	2.5	2.6	.9	1.2	1.5
841227	2.5	2.7	2.7	1.3	1.3	1.5
841228	2.1	2.4	2.7	.5	.7	1.3
841229	1.7	1.9	2.1	.4	.5	.6
841230	1.6	1.7	1.8	.5	.6	.7
841231	1.5	1.6	1.7	.5	.6	.6
Monthly Value	.2	1.8	2.9	-0.3	.8	2.7

***** Site frozen, data available in Table 18.

Appendix Table 17. (continued).

January 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850101	1.5	1.6	1.7	.5	.6	.6
850102	1.6	1.7	1.9	.5	.7	1.1
850103	1.8	2.0	2.1	.7	.8	1.0
850104	1.8	2.0	2.2	.7	.7	.9
850111	2.5	2.9	3.1	1.3	1.7	2.0
850112	2.9	3.2	3.4	1.7	2.0	2.3
850113	2.9	3.1	3.2	1.3	1.5	1.7
850114	2.8	3.1	3.3	.7	1.6	2.2
850115	2.5	2.7	2.8	.6	.7	.8
850116	2.3	2.5	2.5	.4	.5	.6
850117	2.2	2.5	2.5	.4	.5	.5
850118	2.1	2.5	2.5	.4	.5	.6
850119	2.3	2.5	2.6	.4	.5	.5
850120	2.2	2.5	2.6	.4	.4	.5
850121	2.1	2.5	2.5	.3	.4	.5
850122	-----	-----	-----	.2	.3	.4
850123	-----	-----	-----	.2	.2	.3
850124	-----	-----	-----	.2	.4	.6
850125	2.0	2.3	2.4	.4	.5	.7
850126	2.1	2.4	2.5	.5	.6	.6
850127	2.2	2.5	2.5	.5	.6	.7
850128	2.3	2.6	2.8	.6	.8	1.1
850129	-----	-----	-----	.7	1.0	1.4
850130	-----	-----	-----	.7	.7	.9
850131	-----	-----	-----	.9	1.3	2.0
Monthly Value	1.5	-----	3.4	.2	.8	2.3

----- Data not available.

Appendix Table 17. (continued).

February 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850201	-----	-----	-----	.7	.9	1.2
850202	-----	-----	-----	1.0	1.5	1.7
850203	1.0	1.2	1.3	1.0	1.3	1.7
850204	1.2	1.4	1.6	1.1	1.7	2.1
850205	1.0	1.3	1.5	.7	1.3	1.9
850206	.7	.8	1.0	.4	.7	1.0
850207	.7	.8	1.0	.5	.7	1.0
850208	.7	.8	.9	.7	.8	1.1
850209	.6	.7	.8	.6	.7	.8
850210	.4	.6	.8	.5	.5	.7
850211	.2	.4	.5	.4	.7	.8
850212	.1	.2	.3	.8	.9	1.0
850213	0.0	.1	.2	.9	1.0	1.0
850214	0.0	0.0	.1	.8	1.0	1.2
850215	-0.1	0.0	.1	1.0	1.1	1.1
850216	-0.1	0.0	0.0	-----	-----	-----
850217	-0.1	0.0	0.0	-----	-----	-----
850218	-0.2	-0.1	0.0	-----	-----	-----
850219	-0.1	-0.1	0.0	-----	-----	-----
850220	-0.1	0.0	0.0	-----	-----	-----
850221	-0.1	0.0	0.0	-----	-----	-----
850222	-0.1	0.0	.1	-----	-----	-----
850223	-0.1	0.0	0.0	-----	-----	-----
850224	-0.1	0.0	0.0	-----	-----	-----
850225	-0.1	0.0	0.0	-----	-----	-----
850226	0.0	0.0	.1	-----	-----	-----
850227	-0.1	0.0	0.0	-----	-----	-----
850228	-0.1	0.0	0.0	-----	-----	-----
Monthly Value	-0.2	.3	1.6	.4	-----	2.1

----- Data not available.

Appendix Table 17. (continued).

March 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850301	-0.1	0.0	0.0	-----	-----	-----
850302	-0.1	0.0	0.0	-----	-----	-----
850303	-0.1	0.0	0.0	-----	-----	-----
850304	-0.1	0.0	0.0	-----	-----	-----
850305	-0.1	0.0	0.0	-----	-----	-----
850306	-0.1	0.0	0.0	-----	-----	-----
850307	0.0	0.0	0.0	-----	-----	-----
850308	0.0	0.0	0.0	-----	-----	-----
850309	0.0	0.0	0.0	-----	-----	-----
850310	-0.1	0.0	0.0	-----	-----	-----
850311	-0.1	-0.1	0.0	0.0	0.0	.1
850312	-0.1	0.1	0.0	0.0	0.0	.1
850313	-0.1	0.0	0.0	0.0	.1	.1
850314	-0.1	0.0	0.0	0.0	0.0	.1
850315	-0.1	0.0	0.0	0.0	0.0	.1
850316	-0.1	0.0	0.0	0.0	.1	.1
850317	-0.1	0.0	0.0	0.0	.1	.1
850318	-0.1	0.0	0.0	0.0	.1	.1
850319	-0.1	0.0	0.0	0.0	.1	.1
850320	-0.1	0.0	.1	0.0	.1	.1
850321	-0.1	0.0	.1	0.0	.1	.2
850322	-0.1	0.0	.1	0.0	.1	.2
850323	-0.1	0.0	.1	0.0	.1	.2
850324	-0.1	0.0	.1	0.0	.1	.2
850325	-0.1	0.0	.1	0.0	.1	.2
850326	-0.1	0.0	.1	0.0	.1	.2
850327	-0.1	0.0	.1	0.0	.1	.2
850328	-0.1	0.0	.1	0.0	.1	.2
850329	-0.1	0.0	.1	.1	.1	.2
850330	0.0	0.0	.1	.1	.1	.2
850331	0.0	0.0	.1	0.0	.1	.2
Monthly Value	-0.1	0.0	.1	0.0	.1	.2

----- Data not available.

Appendix Table 17. (continued).

April 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850401	0.0	0.0	.1	0.0	.1	.2
850402	0.0	0.0	.1	0.0	.1	.2
850403	0.0	.1	.1	.1	.1	.2
850404	0.0	0.0	.1	.1	.1	.2
850405	0.0	0.0	.1	0.0	.1	.2
850406	0.0	0.0	.1	0.0	.1	.2
850407	0.0	.1	.1	.1	.1	.2
850408	0.0	.1	.1	.1	.2	.2
850409	0.0	0.0	.1	.1	.1	.2
850410	0.0	0.0	.1	.1	.2	.2
850411	0.0	0.0	.1	.1	.2	.3
850412	0.0	0.0	.1	.1	.2	.3
850413	0.0	.1	.1	.1	.2	.3
850414	0.0	0.0	.1	.2	.3	.4
850415	0.0	.1	.1	.2	.3	.4
850416	0.0	.1	.2	.3	.4	.6
850417	0.0	.1	.2	.3	.5	.7
850418	0.0	.1	.2	.3	.5	.9
850419	0.0	.1	.2	.4	.6	.9
850420	0.0	.1	.2	.4	.6	1.1
850421	0.0	.1	.2	.4	.8	1.5
850422	0.0	.1	.2	.5	1.0	1.9
850423	0.0	.1	.2	.6	1.2	2.2
850424	.1	.1	.3	.6	1.1	2.1
850425	.1	-----	.2	.7	-----	1.2
Monthly Value	0.0	.1	.3	0.0	.4	2.2

----- Data not available.

Appendix Table 18.

Datapod temperature recorder data summary:
intragravel and surface water temperatures (C)
recorded at Mainstem Susitna River at RM 132.9
when the site was frozen.

October 1984 (Site frozen)						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841028	+++++	+++++	+++++	-1.5	-1.0	-0.3
841029	+++++	+++++	+++++	-3.0	-2.3	-1.5
841030	+++++	+++++	+++++	-3.1	-1.5	-0.5
841031	+++++	+++++	+++++	-2.2	-1.6	-1.2
Monthly Value	+++++	+++++	+++++	-3.1	-----	-0.3

----- Data not available.

+++++ Site not frozen, data available in Table 19.

Appendix Table 18. (continued).

November 1984 (Site frozen)						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841101	+++++	+++++	+++++	-2.3	-----	-0.1
Monthly Value	+++++	+++++	+++++	-2.3	-----	-0.1

----- Data not available.

+++++ Site not frozen, data available in Table 17.

Appendix Table 18. (continued).

December 1984 (Site frozen)						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841212	+++++	+++++	+++++	-1.9	-1.0	-0.3
841213	+++++	+++++	+++++	-3.2	-2.1	-1.8
841214	+++++	+++++	+++++	-4.8	-4.1	-3.2
841215	+++++	+++++	+++++	-4.8	-3.4	-0.3
Monthly Value	+++++	+++++	+++++	-4.8	-----	-0.3

----- Data not available.

+++++ Site not frozen, data available in Table 17.

Appendix Table 19. Datapod temperature recorder data summary:
intragravel and surface water temperatures (C)
recorded at Mainstem Susitna River at RM 137.5.

November 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841107	3.3	-----	3.5	-0.2	-----	0.0
841108	3.2	3.4	3.5	-0.2	-0.1	0.0
841109	3.2	3.3	3.3	-0.2	-0.1	0.0
841110	3.2	3.3	3.3	-0.2	-0.1	0.0
841111	3.2	3.3	3.4	-0.1	0.0	0.0
841112	3.3	3.4	3.6	-0.1	0.0	0.0
841113	3.2	3.4	3.5	-0.1	0.0	0.0
841114	3.3	3.4	3.5	-0.1	0.0	0.0
841115	3.3	3.4	3.4	-0.1	0.0	0.0
841116	3.0	3.2	3.3	-0.1	0.0	0.0
841117	2.9	3.1	3.2	-0.1	0.0	.1
841118	2.8	2.9	3.0	-0.1	0.0	0.0
841119	2.7	2.9	3.0	-0.1	0.0	0.0
841120	2.7	2.8	2.9	-0.1	-0.1	0.0
841121	2.8	2.8	2.9	-0.1	-0.1	0.0
841122	2.8	2.9	2.9	-0.1	0.0	.1
841123	2.7	2.8	2.9	-0.1	0.0	.1
841124	2.7	2.7	2.8	0.0	0.0	.1
841125	2.7	2.7	2.8	0.0	0.0	.1
841126	2.7	2.7	2.8	0.0	0.0	.1
841127	2.6	2.7	2.8	0.0	.1	.2
841128	2.4	2.5	2.6	.1	.1	.1
841129	2.4	2.5	2.5	.1	.1	.2
841130	2.3	2.4	2.5	.1	.1	.1
Monthly Value	2.3	3.0	3.6	-0.2	0.0	.2

----- Data not available.

Appendix Table 19. (continued).

December 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841201	2.2	2.2	2.3	.1	.1	.2
841202	2.1	2.2	2.3	.1	.1	.2
841203	2.0	2.1	2.1	.1	.1	.2
841204	2.1	2.1	2.2	.1	.1	.2
841205	2.1	2.2	2.2	.1	.2	.2
841206	2.1	2.2	2.2	.2	.2	.2
841207	2.0	2.1	2.1	.2	.2	.2
841208	2.0	2.1	2.1	.2	.2	.3
841209	1.8	1.9	2.0	.2	.2	.3
841210	1.6	1.7	1.9	.2	.3	.3
841211	1.5	1.6	1.7	.2	.3	.4
Monthly Value	1.5	-----	2.3	.1	-----	.4

----- Data not available.

Appendix Table 19. (continued).

January 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850111	1.1	-----	1.2	.5	-----	.6
850112	1.1	1.1	1.2	.5	.6	.6
850113	.9	1.0	1.2	.5	.6	.7
850114	.8	.9	.9	.5	.6	.7
850115	.7	.9	.9	.6	.7	.7
850116	.7	.7	.8	.5	.6	.7
850117	.7	.8	.8	.6	.6	.6
850118	.6	.7	.9	.6	.6	.7
850119	.5	.6	.7	.5	.6	.7
850120	.5	.5	.7	.6	.6	.7
850121	.4	.4	.5	.6	.7	.7
850122	.3	.4	.4	.6	.7	.7
850123	.3	.4	.4	.6	.7	.7
850124	.4	.5	.6	.6	.7	.7
850125	-----	-----	-----	.7	.7	.8
850126	.4	.5	.6	.7	.7	.8
850127	.6	1.0	1.3	.7	.7	.8
850128	1.1	1.9	2.3	.7	.7	.8
850129	2.2	2.4	2.9	.7	.8	.9
850130	1.8	2.1	2.8	.7	.8	.9
850131	1.6	1.7	2.1	.7	.8	.8
Monthly Value	.3	-----	2.9	.5	.7	.9

----- Data not available.

Appendix Table 19. (continued).

February 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850201	1.6	1.7	1.9	1.4	1.6	1.9
850202	1.7	1.9	2.1	1.4	1.6	1.9
850203	.6	1.2	2.2	1.4	1.5	1.6
850204	1.3	1.4	1.6	1.4	1.5	1.6
850205	1.2	1.3	1.3	1.4	1.6	1.6
850206	1.1	1.3	1.4	1.4	1.7	1.7
850207	1.3	1.3	1.4	1.5	1.6	1.7
850208	1.2	1.3	1.3	1.5	1.7	1.7
850209	1.1	1.2	1.3	1.5	1.7	1.7
850210	.9	1.1	1.3	1.6	1.7	1.8
850211	.9	1.0	1.0	1.7	1.8	1.8
850212	.8	0.0	1.0	1.7	1.8	1.8
850213	.8	.9	1.0	1.6	1.8	1.8
850214	.8	.9	1.0	1.6	1.7	1.8
850215	.8	.9	1.0	1.6	1.7	1.8
850216	.8	.9	1.0	1.5	1.7	1.8
850217	.8	0.0	1.0	1.6	1.7	1.8
850218	.8	0.0	1.0	1.7	1.8	1.9
850219	.8	1.0	1.1	1.7	1.9	2.0
850220	.8	0.0	1.0	-----	-----	-----
850221	.9	1.0	1.1	-----	-----	-----
850222	.9	1.0	1.1	-----	-----	-----
850223	.8	1.0	1.1	-----	-----	-----
850224	.8	1.0	1.0	-----	-----	-----
850225	.9	1.2	1.6	-----	-----	-----
850226	1.4	1.6	1.8	-----	-----	-----
850227	1.3	1.5	1.6	-----	-----	-----
850228	1.3	1.5	1.6	-----	-----	-----
Monthly Value	.6	1.2	2.2	.7	-----	3.4

----- Data not available.

Appendix Table 19. (continued).

March 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850301	1.4	1.5	1.6	-----	-----	-----
850302	1.3	1.5	1.6	-----	-----	-----
850303	1.2	1.5	1.6	-----	-----	-----
850304	1.3	1.5	1.5	-----	-----	-----
850305	1.3	1.4	1.5	-----	-----	-----
850306	1.0	1.3	1.4	-----	-----	-----
850307	1.2	1.5	1.6	-----	-----	-----
850308	1.0	1.3	1.6	-----	-----	-----
850309	1.2	1.5	1.6	-----	-----	-----
850310	.9	1.2	1.5	-----	-----	-----
850311	.9	1.2	1.3	-0.1	0.0	.3
850312	1.0	1.3	1.5	-0.1	0.0	.3
850313	1.1	1.4	1.5	-0.1	.2	.7
850314	-----	-----	-----	.1	.3	.7
850315	-----	-----	-----	.1	.3	.8
850316	-----	-----	-----	.1	.5	.7
850317	-----	-----	-----	.2	.5	.9
850318	-----	-----	-----	.5	.9	1.5
850319	-----	-----	-----	.3	.8	1.6
850320	-----	-----	-----	.2	.9	2.1
850321	-----	-----	-----	.3	1.1	2.5
850322	-----	-----	-----	.3	1.0	2.7
850323	-----	-----	-----	.2	1.0	2.5
850324	-----	-----	-----	.1	1.0	2.5
850325	-----	-----	-----	.3	1.1	2.7
850326	-----	-----	-----	0.0	.5	1.2
850327	-----	-----	-----	-0.1	.4	1.3
850328	-----	-----	-----	-0.1	.2	.6
850329	-----	-----	-----	-0.1	-----	.1
Monthly Value	.9	-----	1.6	-0.1	-----	2.7

----- Data not available.

Appendix Table 20.

Datapod temperature recorder data summary:
intragravel and surface water temperatures (C)
recorded at Mainstem Susitna River at RM 137.5
when the site was frozen.

March 1985 (Site frozen)						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850329	-----	-----	-----	-0.9	-0.3	-0.1
850330	-----	-----	-----	-0.4	-0.3	-0.1
850331	-----	-----	-----	-4.0	-2.3	-0.5
Monthly Value	-----	-----	-----	-4.0	-----	-0.1

----- Data not available.

Appendix Table 20. (continued).

April 1985 (Site frozen)						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850401	-----	-----	-----	-4.8	-4.2	-1.3
850402	-----	-----	-----	-4.8	-4.4	-2.5
850403	-----	-----	-----	-4.0	-2.6	-0.5
850404	-----	-----	-----	-4.5	-3.0	-0.3
850405	-----	-----	-----	-4.8	-4.1	-1.2
850406	-----	-----	-----	-4.8	-3.8	-0.8
850407	-----	-----	-----	-4.6	-2.3	-0.1
850408	-----	-----	-----	-0.6	-0.4	-0.1
850409	-----	-----	-----	-0.3	-0.2	-0.2
850410	-----	-----	-----	-0.9	-0.7	-0.3
850411	-----	-----	-----	-2.1	-1.6	-0.8
850412	-----	-----	-----	-3.1	-2.4	-1.5
850413	-----	-----	-----	-2.7	-2.2	-1.5
850414	-----	-----	-----	-3.1	-2.4	-1.7
850415	-----	-----	-----	-2.0	-1.3	-0.1
850416	-----	-----	-----	-2.5	-0.8	-0.1
850417	-----	-----	-----	-3.3	-1.3	-0.1
850418	-----	-----	-----	-1.5	-0.5	-0.1
850419	-----	-----	-----	-2.1	-0.8	-0.1
850420	-----	-----	-----	-2.5	-1.1	-0.1
Monthly Value	-----	-----	-----	-4.8	-----	-0.1

----- Data not available.

Appendix Table 21.

Datapod temperature recorder data summary:
intragravel and surface water temperatures (C)
recorded at Mainstem Susitna River at RM 139.0
- Site 1.

October 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841016	2.9	3.0	3.2	.5	1.2	2.7
841017	2.9	3.0	3.0	.4	1.2	2.4
841018	2.7	2.8	2.9	.4	1.3	2.9
841019	2.6	2.7	2.8	.8	1.5	2.3
841020	2.5	2.6	2.7	1.2	1.5	2.1
841021	2.5	2.5	2.6	1.1	1.5	1.9
841022	2.5	2.5	2.5	1.2	1.7	2.6
841023	2.4	2.5	2.5	.3	1.2	1.9
841024	2.4	2.5	2.5	.2	.7	1.3
841025	2.4	2.4	2.4	-0.2	.7	1.4
841026	2.3	2.4	2.4	.6	1.0	1.4
841027	2.3	2.3	2.4	.5	.9	1.8
841028	2.2	2.3	2.4	.1	.6	1.2
841029	1.8	2.0	2.2	-0.2	.1	.4
841030	1.4	1.6	1.9	-0.3	-----	.1
841031	1.0	1.2	1.5	*****	*****	*****
Monthly Value	1.0	-----	3.2	-0.3	-----	2.9

----- Data not available.

***** Site frozen, data available in Table 22.

Appendix Table 21. (continued).

November 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841101	.6	.8	1.1	*****	*****	*****
841102	.4	.5	.7	*****	*****	*****
841103	.2	.3	.5	*****	*****	*****
841104	-0.1	0.0	.3	*****	*****	*****
Monthly Value	-0.1	-----	1.1	*****	*****	*****

----- Data not available.

***** Site frozen, data available in Table 22 for 841105-850108.

Appendix Table 21. (continued).

January 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850111	-0.3	-----	-0.3	.7	-----	.8
850112	-0.3	-0.3	-0.3	.7	.8	.9
850113	-0.4	-0.3	-0.3	.8	1.0	1.2
850114	-0.3	-0.3	-0.3	.2	.7	1.6
850115	-0.3	-0.3	-0.3	0.0	.2	.2
850116	-0.3	-0.3	-0.3	-0.1	0.0	.3
850117	-0.3	-0.3	-0.2	0.0	.3	.5
850118	-0.3	-0.3	-0.2	0.0	0.0	0.0
850119	-0.3	-0.3	-0.2	-0.1	0.0	.3
850120	-0.3	-0.3	-0.2	0.0	0.0	.4
850121	-0.3	-0.3	-0.2	.1	.7	.9
850122	-0.3	-0.3	-0.2	.7	1.1	1.5
850123	-0.3	-0.3	-0.2	.1	1.1	2.1
850124	-0.3	-0.3	-0.3	1.1	1.5	1.9
850125	-0.3	-0.3	-0.2	.7	.9	1.8
850126	-0.3	-0.2	-0.2	.4	.5	.9
850127	-0.3	-0.3	-0.3	.3	.4	.4
850128	-0.3	-0.3	-0.3	.4	.4	.4
850129	-0.3	-0.3	-0.2	0.0	.2	.5
850130	-0.3	-0.2	-0.2	0.0	0.0	.1
850131	-0.3	-0.3	-0.3	0.0	0.0	0.0
Monthly Value	-0.4	-0.3	-0.2	-0.1	.5	2.1

----- Data not available.

Appendix Table 21. (continued).

February 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850201	-0.3	-0.3	-0.2	0.0	0.0	.1
850202	-0.3	-0.2	-0.2	0.0	.1	.1
850203	-0.3	-0.2	-0.2	0.0	.1	.1
850204	-0.3	-0.3	-0.2	0.0	.1	.1
850205	-0.3	-0.2	-0.2	-----	-----	-----
850206	-0.3	-0.2	-0.2	-----	-----	-----
850207	-0.3	-0.2	-0.2	-----	-----	-----
850208	-0.3	-0.2	-0.2	-----	-----	-----
850209	-0.3	-0.2	-0.2	-----	-----	-----
850210	-0.3	-0.2	-0.2	-----	-----	-----
850211	-0.3	-0.2	-0.2	-----	-----	-----
850212	-0.3	-0.2	-0.2	-----	-----	-----
850213	-0.3	-0.2	-0.2	-----	-----	-----
850214	-0.3	-0.2	-0.2	-----	-----	-----
850215	-0.3	-0.2	-0.2	-----	-----	-----
850216	-0.3	-0.2	-0.2	-----	-----	-----
850217	-0.3	-0.2	-0.2	-----	-----	-----
850218	-0.3	-0.2	-0.2	-----	-----	-----
850219	-0.3	-0.2	-0.2	-----	-----	-----
850220	-0.3	-0.2	-0.2	-----	-----	-----
850221	-0.3	-0.2	-0.2	-----	-----	-----
850222	-0.3	-0.2	-0.1	-----	-----	-----
850223	-0.2	-0.2	-0.1	-----	-----	-----
850224	-0.2	-0.1	-0.1	-----	-----	-----
850225	-0.2	-0.1	-0.1	-----	-----	-----
850226	-0.1	-0.1	-0.1	-----	-----	-----
850227	-0.1	-0.1	-0.1	-----	-----	-----
850228	-0.1	0.0	0.0	-----	-----	-----
Monthly Value	-0.3	-0.2	0.0	0.0	-----	.1

----- Data not available.

Appendix Table 21. (continued).

March 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850301	0.0	0.0	.1	-----	-----	-----
850302	.1	.2	.3	-----	-----	-----
850303	.3	.4	.5	-----	-----	-----
850304	.5	.5	.7	-----	-----	-----
850305	.6	.8	.9	-----	-----	-----
850306	.9	-----	1.0	-----	-----	-----
Monthly Value	0.0	-----	1.0	-----	-----	-----

----- Data not available.

Appendix Table 22. Datapod temperature recorder data summary:
 intragravel and surface water temperatures (C)
 recorded at Mainstem Susitna River at RM 139.0
 - Site 1 when the site was frozen.

October 1984 (Site frozen)						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841031	----	----	----	-0.5	-0.3	0.0
Monthly Value	----	----	----	-0.5	----	0.0

---- Data not available.

Appendix Table 22. (continued).

November 1984 (Site frozen)						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841101	+++++	+++++	+++++	-0.9	-0.6	-0.4
841102	+++++	+++++	+++++	-1.6	-1.3	-0.8
841103	+++++	+++++	+++++	-2.4	-2.0	-1.4
841104	+++++	+++++	+++++	-3.5	-3.0	-2.0
841105	-0.3	-0.2	-0.1	-3.1	-2.1	-1.2
841106	-0.4	-0.3	-0.2	-1.8	-1.6	-1.2
841107	-0.4	-0.4	-0.3	-2.4	-2.0	-1.8
841108	-0.5	-0.4	-0.3	-4.1	-3.2	-2.1
841109	-0.5	-0.4	-0.4	-4.2	-3.1	-2.8
841110	-1.8	-0.9	-0.4	-5.2	-5.1	-4.2
841111	-4.0	-3.0	-1.8	-5.2	-5.2	-5.2
841112	-5.1	-4.8	-4.0	-5.2	-5.0	-5.0
841113	-5.1	-5.1	-5.1	-5.0	-5.0	-5.0
841114	-5.1	-5.1	-5.1	-5.2	-5.0	-5.0
841115	-5.1	-5.1	-5.1	-5.2	-5.2	-5.2
841116	-5.1	-4.6	-4.2	-5.2	-5.2	-5.2
841117	-4.7	-4.4	-4.2	-5.2	-5.2	-5.2
841118	-4.8	-4.7	-4.5	-5.2	-5.2	-5.2
841119	-5.0	-4.8	-4.5	-5.2	-5.2	-5.2
841120	-5.1	-4.9	-4.5	-5.2	-5.2	-5.2
841121	-4.5	-4.0	-3.5	-5.2	-4.7	-4.1
841122	-3.5	-3.2	-3.1	-5.1	-4.2	-3.9
841123	-3.9	-3.6	-3.2	-5.2	-5.2	-5.1
841124	-3.9	-3.8	-3.7	-5.2	-5.1	-4.8
841125	-3.7	-3.5	-3.4	-4.9	-4.6	-4.5
841126	-3.4	-3.3	-3.3	-4.5	-4.5	-4.4
841127	-3.3	-3.3	-3.2	-4.8	-4.6	-4.4
841128	-3.3	-3.3	-3.2	-4.6	-4.5	-4.4
841129	-3.3	-3.3	-3.3	-4.7	-4.6	-4.4
841130	-3.3	-3.2	-3.1	-4.4	-4.2	-4.1
Monthly Value	-5.1	-3.2	-0.1	-5.2	-4.1	-0.4

+++++ Site not frozen, data available in Table 21.

Appendix Table 22. (continued).

December 1984 (Site frozen)						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841201	-3.1	-3.1	-3.0	-4.1	-4.0	-3.8
841202	-3.0	-2.9	-2.9	-3.8	-3.8	-3.7
841203	-2.9	-2.7	-2.6	-3.7	-3.4	-3.2
841204	-2.6	-2.4	-2.2	-3.2	-2.9	-2.6
841205	-2.3	-2.1	-2.0	-2.7	-2.6	-2.4
841206	-2.1	-2.0	-1.9	-3.1	-2.8	-2.4
841207	-2.2	-2.2	-2.1	-3.3	-3.1	-3.0
841208	-2.2	-2.2	-2.1	-3.0	-2.9	-2.8
841209	-2.3	-2.1	-2.1	-3.7	-3.2	-2.8
841210	-2.9	-2.7	-2.2	-4.6	-4.3	-3.6
841211	-3.2	-3.1	-2.9	-5.0	-4.6	-4.5
841212	-4.0	-3.5	-3.2	-5.2	-5.2	-5.0
841213	-4.6	-4.4	-4.0	-5.2	-5.2	-5.2
841214	-5.1	-4.9	-4.6	-5.2	-5.2	-4.8
841215	-5.1	-3.8	-2.8	-4.8	-2.8	-1.9
841216	-2.8	-2.2	-1.8	-2.0	-1.6	-1.4
841217	-1.7	-1.5	-1.3	-1.4	-1.2	-1.1
841218	-1.3	-1.2	-1.0	-1.1	-1.0	-1.0
841219	-1.0	0.0	-0.8	-1.0	-0.9	-0.8
841220	-0.9	-0.7	-0.7	-0.9	-0.8	-0.8
841221	-0.7	-0.7	-0.6	-0.8	-0.8	-0.7
841222	-0.7	-0.7	-0.6	-0.8	-0.7	-0.7
841223	-0.6	-0.6	-0.6	-0.7	-0.7	-0.7
841224	-0.6	-0.6	-0.6	-0.8	-0.7	-0.7
841225	-0.6	-0.6	-0.6	-0.7	-0.7	-0.7
841226	-0.6	-0.6	-0.5	-0.7	-0.7	-0.7
841227	-0.6	-0.6	-0.5	-0.7	-0.7	-0.6
841228	-0.6	-0.6	-0.5	-0.7	-0.6	-0.5
841229	-0.6	-0.6	-0.6	-0.7	-0.7	-0.6
841230	-0.6	-0.5	-0.5	-0.7	-0.7	-0.6
841231	-0.6	-0.6	-0.5	-0.7	-0.6	-0.5
Monthly Value	- 5.1	-1.8	-0.5	-5.2	-2.2	-0.5

Appendix Table 22. (continued).

January 1985 (Site frozen)						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850101	-0.6	-0.5	-0.5	-0.6	-0.5	-0.4
850102	-0.6	-0.5	-0.5	-0.6	-0.6	-0.6
850103	-0.6	-0.5	-0.5	-0.6	-0.5	-0.4
850104	-0.6	-0.5	-0.5	-0.6	-0.5	-0.4
850105	-0.6	-0.5	-0.5	-0.5	-0.3	-0.1
850106	-0.6	-0.5	-0.5	-0.5	-0.5	-0.3
850107	-0.6	-0.5	-0.5	-0.4	-0.2	-0.1
850108	-0.5	-0.5	-0.5	-0.2	-0.1	0.0
Monthly Value	-0.6	-----	-0.5	-0.6	-----	0.0

----- Data not available.

Appendix Table 23.

Datapod temperature recorder data summary:
 intragravel and surface water temperatures (C)
 recorded at Mainstem Susitna River at RM 139.0
 - Site 2.

March 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850311	3.2	3.2	3.3	1.9	3.0	3.3
850312	3.2	3.2	3.3	1.9	3.2	3.4
850313	3.2	3.2	3.3	2.1	3.1	3.4
850314	3.1	3.2	3.3	2.6	3.2	3.6
850315	3.1	3.2	3.3	2.5	2.9	3.2
850316	3.1	3.1	3.2	1.8	2.5	2.9
850317	3.1	3.1	3.2	2.1	2.5	2.9
850318	3.0	3.1	3.2	2.7	2.9	3.1
850319	3.0	3.1	3.2	2.8	3.1	3.7
850320	3.0	3.1	3.2	2.7	3.1	3.8
850321	3.0	3.1	3.2	2.5	2.9	3.8
850322	2.9	3.0	3.1	1.7	2.3	3.5
850323	2.8	3.0	3.1	1.6	2.4	3.6
850324	2.8	2.9	3.0	1.2	2.2	3.3
850325	2.8	2.9	3.0	1.8	2.5	4.0
850326	2.8	2.9	3.1	2.0	2.7	3.8
850327	2.8	2.8	3.0	1.3	2.0	3.5
850328	2.6	2.8	2.9	.4	1.5	2.5
850329	2.5	2.7	2.7	.5	1.0	2.0
850330	2.5	2.5	2.7	.5	1.3	2.1
850331	2.5	2.6	2.7	1.1	1.7	3.0
Monthly Value	2.5	3.0	3.3	.4	2.5	4.0

Appendix Table 23. (continued).

April 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850401	2.0	2.4	2.6	0.0	.7	1.7
850402	1.9	2.0	2.1	-0.2	.3	1.9
850403	1.8	1.9	2.0	-0.3	-0.2	-0.1
850404	1.8	1.8	1.9	-0.1	.2	.5
850405	1.6	1.8	1.9	-0.2	.4	1.4
850406	1.3	1.6	1.8	-0.2	0.0	.5
850407	1.3	1.3	1.5	-0.3	-0.2	0.0
850408	1.3	1.4	1.5	-0.2	.3	.6
850409	1.4	1.5	1.6	.5	.8	.9
850410	1.5	1.6	1.7	.9	1.1	1.3
850411	1.6	1.7	1.8	1.1	1.3	1.4
850412	1.7	1.7	1.8	1.1	1.3	1.4
850413	1.7	1.8	1.8	1.2	1.3	1.4
850414	1.7	1.8	1.8	1.2	1.3	1.4
850415	1.8	1.8	1.9	1.2	1.3	1.4
850416	1.8	1.8	1.9	1.1	1.3	1.5
850417	1.7	1.8	1.9	1.0	1.3	1.5
850418	1.7	1.8	1.9	1.0	1.3	2.4
850419	1.7	1.9	2.2	1.1	2.3	4.5
850420	1.7	1.9	2.1	1.0	1.8	3.4
850421	1.7	1.9	2.3	1.0	2.2	4.3
850422	1.6	2.1	2.5	.9	3.3	5.1
Monthly Value	1.3	1.8	2.6	-0.3	1.1	5.1

Appendix Table 24. Datapod temperature recorder data summary:
intragravel and surface water temperatures (C)
recorded at Bushrod Slough, RM 117.9.

October 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841012	4.0	4.1	4.3	3.9	4.2	4.7
841013	4.0	4.2	4.4	4.1	4.4	4.9
841014	4.1	4.2	4.3	4.1	4.3	4.5
841015	4.0	4.1	4.3	4.0	4.2	4.5
841016	3.9	4.1	4.2	3.9	4.1	4.4
841017	3.8	3.9	4.2	4.1	4.2	4.3
841018	3.6	3.9	4.1	4.0	4.1	4.3
841019	3.6	3.9	4.1	4.0	4.1	4.3
841020	3.6	3.9	4.1	4.1	4.1	4.2
841021	3.5	3.7	3.9	4.0	4.1	4.2
841022	3.4	3.7	4.0	3.9	4.0	4.1
841023	3.2	3.6	3.9	3.9	4.0	4.1
841024	3.3	3.6	3.8	3.9	4.0	4.1
841025	3.4	3.7	3.9	3.9	4.0	4.1
841026	3.3	3.7	3.9	3.9	4.0	4.1
841027	3.5	3.7	3.8	3.9	4.0	4.1
841028	3.4	3.6	3.8	3.8	4.0	4.1
841029	3.4	3.6	3.7	3.9	4.0	4.0
841030	3.3	3.6	3.8	3.8	3.9	4.0
841031	3.3	3.5	3.7	3.8	3.9	4.0
Monthly Value	3.2	-----	4.4	3.8	-----	4.9

----- Data not available.

Appendix Table 24. (continued).

November 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841101	3.2	3.4	3.5	3.7	3.9	3.9
841102	3.1	3.2	3.5	3.6	3.7	3.9
841103	2.9	3.1	3.3	3.5	3.6	3.8
841104	2.8	3.0	3.3	3.5	3.5	3.7
841105	2.8	3.0	3.2	3.4	3.5	3.6
841106	2.6	2.7	2.9	3.4	3.4	3.5
841107	2.4	2.6	2.8	3.3	3.3	3.4
841108	2.3	2.7	3.1	2.5	3.1	3.4
841109	3.0	3.0	3.2	2.4	2.6	2.9
841110	3.0	3.0	3.2	2.4	2.6	2.8
841111	3.0	3.0	3.1	2.4	2.6	2.8
841112	2.9	3.0	3.1	2.4	2.5	2.7
841113	2.9	3.0	3.2	2.0	2.3	2.5
841114	3.1	3.2	3.4	2.3	2.5	2.8
841115	3.3	3.5	3.5	2.6	2.8	3.1
841116	3.5	3.5	3.6	2.8	3.0	3.2
841117	3.6	3.7	3.7	3.0	3.2	3.3
841118	3.6	3.7	3.7	3.0	3.2	3.3
841119	3.6	3.7	3.7	2.9	3.1	3.3
841120	3.6	3.7	3.7	3.1	3.2	3.4
841121	3.6	3.7	3.7	3.1	3.2	3.3
841122	3.6	3.7	3.8	3.1	3.2	3.3
841123	3.6	3.7	3.7	3.1	3.2	3.4
841124	3.7	3.7	3.7	3.1	3.3	3.3
841125	3.6	3.7	3.7	3.1	3.3	3.4
841126	3.6	3.7	3.7	3.1	3.2	3.3
841127	3.6	3.7	3.7	3.1	3.2	3.3
841128	3.6	3.7	3.7	3.1	3.2	3.3
841129	3.6	3.7	3.8	3.1	3.2	3.4
841130	3.7	3.8	3.8	3.1	3.3	3.4
Monthly Value	2.3	3.4	3.8	2.0	3.1	3.9

Appendix Table 24. (continued).

December 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841201	3.7	3.7	3.8	3.1	3.3	3.4
841202	3.7	3.7	3.8	3.1	3.2	3.4
841203	3.7	3.7	3.7	3.2	3.3	3.4
841204	3.7	3.7	3.8	3.2	3.3	3.3
841205	3.6	3.7	3.7	3.1	3.2	3.3
841206	3.6	3.7	3.7	3.1	3.2	3.3
841207	3.6	3.7	3.7	3.0	3.2	3.3
841208	3.6	3.6	3.7	3.1	3.2	3.3
841209	3.6	3.6	3.7	3.0	3.2	3.3
841210	3.6	3.6	3.6	3.1	3.2	3.3
841211	2.4	3.5	3.7	2.0	3.1	3.4
Monthly Value	2.4	-----	3.8	2.0	-----	3.4

----- Data not available.

Appendix Table 24. (continued).

January 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850110	3.4	-----	3.5	3.0	-----	3.1
850111	3.4	3.5	3.6	3.0	3.1	3.2
850112	3.5	3.5	3.6	3.1	3.2	3.2
850113	3.5	3.5	3.6	3.0	3.2	3.3
850114	3.5	3.5	3.5	3.1	3.2	3.3
850115	3.4	3.5	3.5	3.1	3.1	3.2
850116	3.4	3.5	3.5	2.9	3.1	3.2
850117	3.4	3.5	3.5	3.1	3.2	3.2
850118	3.4	3.5	3.5	3.1	3.2	3.3
850119	3.4	3.5	3.6	3.0	3.2	3.3
850120	3.4	3.5	3.6	3.1	3.2	3.3
850121	3.5	3.5	3.6	3.1	3.2	3.3
850122	3.5	3.5	3.5	3.0	3.2	3.3
850123	3.5	3.5	3.5	3.1	3.2	3.3
850124	3.4	3.5	3.6	3.2	3.3	3.4
850125	3.5	3.5	3.6	3.1	3.3	3.3
850126	3.5	3.5	3.6	3.2	3.3	3.3
850127	3.5	3.5	3.6	3.2	3.3	3.4
850128	3.5	3.5	3.6	3.2	3.3	3.4
850129	3.5	3.5	3.6	3.3	3.3	3.4
850130	3.5	3.5	3.6	3.2	3.3	3.4
850131	3.5	3.5	3.5	3.1	3.3	3.4
Monthly Value	3.4	3.5	3.6	2.9	3.2	3.4

----- Data not available.

Appendix Table 24. (continued).

February 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850201	3.5	3.5	3.6	3.3	3.4	3.4
850202	3.5	3.5	3.6	3.3	3.4	3.5
850203	3.5	3.5	3.6	3.2	3.4	3.4
850204	3.5	3.5	3.6	3.2	3.3	3.4
850205	3.4	3.5	3.5	3.2	3.3	3.3
850206	3.4	3.5	3.5	3.2	3.3	3.4
850207	3.4	3.5	3.5	3.2	3.3	3.4
850208	3.4	3.5	3.5	3.2	3.3	3.4
850209	3.4	3.5	3.5	3.3	3.3	3.4
850210	3.4	3.5	3.6	3.2	3.3	3.4
850211	3.4	3.5	3.5	3.2	3.3	3.4
850212	3.4	3.5	3.5	3.2	3.3	3.3
850213	3.4	3.5	3.5	3.2	3.3	3.4
850214	3.4	3.5	3.5	3.2	3.3	3.4
850215	2.9	-----	3.5	2.6	-----	3.4
Monthly Value	2.9	-----	3.6	2.6	-----	3.5

----- Data not available.

Appendix Table 24. (continued).

March 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850309	3.2	-----	3.2	2.6	-----	3.1
850310	3.2	3.2	3.3	2.6	-----	3.1
850311	3.2	3.2	3.2	2.2	2.7	3.1
850312	3.1	3.2	3.2	2.1	2.6	3.0
850313	3.1	3.2	3.2	2.0	2.6	3.2
850314	3.1	3.2	3.2	2.0	2.5	3.1
850315	3.1	3.2	3.2	2.0	2.7	3.1
850316	3.1	3.2	3.2	2.4	2.9	3.3
850317	3.2	3.2	3.2	2.4	2.9	3.2
850318	3.2	3.2	3.2	2.4	2.9	3.3
850319	3.2	3.2	3.3	2.3	3.0	3.3
850320	3.1	3.2	3.3	2.1	2.9	3.7
850321	3.2	3.2	3.3	2.1	2.9	3.8
850322	3.1	3.2	3.3	2.0	2.7	3.7
850323	3.1	3.2	3.3	2.1	2.7	3.7
850324	3.2	3.2	3.3	2.3	3.0	3.6
850325	3.2	3.2	3.3	2.5	3.1	3.7
850326	3.2	3.3	3.3	2.4	3.1	3.8
850327	3.2	3.3	3.3	2.4	3.2	3.7
850328	3.2	3.3	3.3	2.6	3.2	3.7
850329	3.2	3.3	3.3	2.8	3.4	3.5
850330	3.3	3.3	3.3	2.8	3.3	3.5
850331	3.3	3.3	3.3	3.0	3.4	3.5
Monthly Value	3.1	3.2	3.3	2.0	2.9	3.8

----- Data not available.

Appendix Table 24. (continued).

April 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850401	3.3	3.4	3.4	3.1	3.4	3.5
850402	3.3	3.4	3.4	3.2	3.5	3.6
850403	3.3	3.4	3.4	3.0	3.4	3.6
Monthly Value	3.3	-----	3.4	3.0	-----	3.6

----- Data not available.

Appendix Table 25.

Datapod temperature recorder data summary:
intragravel and surface water temperatures (C)
recorded at Curry Slough, RM 119.7.

October 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841017	4.1	4.2	4.6	3.8	4.0	4.3
841018	4.0	4.2	4.6	3.8	4.0	4.3
841019	3.9	4.2	4.4	3.7	3.9	4.2
841020	4.0	4.2	4.5	3.8	4.0	4.3
841021	3.9	4.0	4.2	3.4	3.7	3.9
841022	3.9	4.1	4.4	2.9	3.3	3.7
841023	3.9	4.2	4.5	3.1	3.4	4.0
841024	4.2	4.3	4.6	3.4	3.8	4.1
841025	4.0	4.2	4.4	3.5	3.7	4.1
841026	3.9	4.0	4.3	3.4	3.7	3.9
841027	3.6	3.9	4.1	2.8	3.3	3.8
841028	2.7	3.3	3.7	1.2	1.9	3.0
841029	2.1	2.5	2.8	-0.2	.4	1.2
841030	1.4	1.8	2.3	*****	*****	*****
841031	1.3	1.5	1.8	*****	*****	*****
Monthly Value	1.3	-----	4.6	-0.2	-----	4.3

----- Data not available.

***** Site frozen, data available in Table 26.

Appendix Table 25. (continued).

November 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841101	1.3	1.5	1.7	*****	*****	*****
841102	1.1	1.3	1.6	*****	*****	*****
841103	1.2	1.3	1.7	*****	*****	*****
841104	1.5	1.6	1.8	*****	*****	*****
841105	1.4	1.5	1.6	*****	*****	*****
841106	1.2	1.3	1.5	*****	*****	*****
841107	1.1	1.2	1.3	*****	*****	*****
841108	1.0	1.3	2.0	.7	-----	1.0
841109	1.5	1.6	1.7	.8	1.0	1.3
841110	1.5	1.6	1.6	.8	.9	1.1
841111	1.4	1.5	1.5	.6	.9	1.0
841112	1.2	1.3	1.4	.4	.7	.8
841113	1.1	1.2	1.3	.2	.6	.8
841114	1.3	2.9	3.9	.7	2.4	3.6
841115	3.5	3.6	3.7	3.3	3.4	3.5
841116	3.4	3.5	3.6	3.2	3.2	3.4
841117	3.4	3.5	3.6	3.2	3.3	3.4
841118	3.4	3.5	3.5	3.2	3.3	3.3
841119	3.4	3.5	3.6	3.3	3.3	3.5
841120	3.6	3.7	3.8	3.4	3.5	3.6
841121	3.3	3.5	3.7	3.2	3.4	3.5
841122	3.3	3.4	3.5	3.1	3.2	3.3
841123	3.5	3.5	3.6	3.2	3.3	3.4
841124	3.5	3.6	3.6	3.2	3.4	3.4
841125	3.6	3.6	3.6	3.3	3.4	3.5
841126	3.6	3.7	3.7	3.4	3.5	3.5
841127	3.7	3.7	3.8	3.3	3.5	3.6
841128	3.7	3.7	3.8	3.4	3.5	3.6
841129	3.7	3.7	3.8	3.4	3.5	3.6
841130	3.7	3.7	3.8	3.4	3.5	3.6
Monthly Value	1.0	2.6	3.9	.2	2.7	3.6

----- Data not available.

***** Site frozen, data available in Table 26.

Appendix Table 25. (continued).

December 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841201	3.7	3.7	3.8	3.4	3.5	3.6
841202	3.7	3.7	3.8	3.3	3.5	3.6
841203	3.6	3.7	3.7	3.4	3.5	3.5
841204	3.6	3.6	3.7	3.4	3.5	3.5
841205	3.6	3.7	3.7	3.5	3.5	3.5
841206	3.6	3.7	3.7	3.4	3.5	3.6
841207	3.6	3.6	3.7	3.4	3.5	3.5
841208	3.6	3.7	3.7	3.5	3.5	3.6
841209	3.7	3.7	3.8	3.5	3.5	3.6
841210	3.7	3.7	3.8	3.5	3.6	3.6
841211	3.6	3.7	3.7	3.5	3.5	3.6
841212	3.7	3.7	3.8	3.5	3.5	3.6
841213	3.8	3.9	4.0	3.6	3.7	3.9
841214	3.8	3.9	4.0	3.6	3.7	3.8
841215	3.6	3.7	3.8	3.5	3.5	3.6
841216	3.6	3.6	3.7	3.4	3.5	3.5
841217	3.6	3.6	3.6	3.3	3.4	3.5
841218	3.5	3.6	3.6	3.3	3.4	3.5
841219	3.6	3.6	3.7	3.4	3.5	3.5
841220	3.6	3.7	3.8	3.5	3.5	3.7
841221	3.7	3.7	3.8	3.5	3.6	3.6
841222	3.7	3.7	3.8	3.5	3.6	3.6
841223	3.7	3.8	3.8	3.5	3.7	3.7
841224	3.7	3.7	3.8	3.4	3.5	3.6
841225	3.7	3.7	3.7	3.4	3.5	3.6
841226	3.7	3.7	3.7	3.4	3.5	3.6
841227	3.7	3.8	3.9	3.5	3.6	3.7
841228	3.8	3.8	3.9	3.5	3.7	3.7
841229	3.7	3.7	3.9	3.5	3.6	3.7
841230	3.7	3.7	3.8	3.3	3.6	3.7
841231	3.7	3.8	3.8	3.3	3.5	3.7
Monthly Value	3.5	3.7	4.0	3.3	3.5	3.9

Appendix Table 25. (continued).

January 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850101	3.7	3.8	3.8	3.5	3.6	3.6
850102	3.7	3.8	3.8	3.5	3.6	3.6
850103	3.7	3.8	3.8	3.5	3.6	3.7
850104	3.8	3.9	3.9	3.6	3.7	3.8
850105	3.8	3.9	3.9	3.6	3.7	3.8
850106	3.8	3.9	3.9	3.7	3.7	3.8
850107	3.8	3.9	4.0	3.7	3.8	3.9
850108	3.8	3.9	3.9	3.6	3.7	3.8
850109	3.8	3.9	3.9	3.0	3.7	3.8
850110	3.8	-----	4.0	3.7	-----	3.8
850111	3.8	3.9	4.0	3.7	3.7	3.8
850112	3.9	3.9	4.0	3.7	3.8	3.9
850113	3.9	3.9	4.0	3.7	3.7	3.9
850114	4.0	4.1	4.2	3.9	3.9	4.0
850115	3.9	4.0	4.1	3.8	3.9	4.0
850116	4.0	4.1	4.1	3.8	3.9	4.0
850117	4.0	4.0	4.1	3.7	3.9	3.9
850118	3.9	4.0	4.0	3.6	3.8	3.9
850119	4.0	4.1	4.1	3.8	4.0	4.0
850120	4.0	4.1	4.2	3.8	3.9	4.1
850121	4.0	4.1	4.2	3.9	4.0	4.1
850122	4.1	4.2	4.2	3.8	4.0	4.1
850123	4.2	4.2	4.2	3.8	4.0	4.1
850124	4.1	4.1	4.2	3.8	4.0	4.1
850125	4.0	4.1	4.2	3.9	4.0	4.1
850126	4.1	4.2	4.3	4.0	4.1	4.1
850127	4.2	4.2	4.3	4.0	4.1	4.1
850128	4.2	4.2	4.3	4.0	4.1	4.1
850129	4.2	4.2	4.3	3.1	4.1	4.1
850130	4.2	4.2	4.3	4.1	4.1	4.2
850131	4.2	4.3	4.3	4.1	4.2	4.2
Monthly Value	3.7	4.0	4.3	3.0	3.9	4.2

----- Data not available.

Appendix Table 25. (continued).

February 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850201	4.2	4.3	4.3	4.1	4.2	4.2
850202	4.2	4.3	4.3	4.1	4.2	4.3
850203	4.2	4.3	4.3	4.1	4.2	4.3
850204	4.2	4.2	4.3	4.1	4.2	4.2
850205	4.2	4.2	4.3	4.1	4.1	4.2
850206	4.1	4.2	4.3	4.0	4.2	4.2
850207	4.1	4.2	4.3	4.0	4.1	4.2
850208	4.1	4.2	4.3	3.9	4.1	4.2
850209	4.1	4.2	4.3	3.8	4.1	4.2
850210	4.1	4.2	4.2	4.0	4.1	4.2
850211	4.1	4.2	4.2	3.9	4.1	4.2
850212	4.1	4.2	4.2	3.8	4.1	4.2
850213	4.1	4.1	4.2	3.9	4.1	4.1
850214	4.1	4.1	4.2	3.7	4.1	4.1
850215	4.0	4.1	4.2	-----	-----	-----
850216	3.9	4.0	4.1	-----	-----	-----
850217	3.5	3.9	4.0	-----	-----	-----
850218	2.7	3.0	3.6	-----	-----	-----
850219	2.5	2.6	2.8	-----	-----	-----
850220	2.3	2.4	2.6	-----	-----	-----
850221	2.2	2.4	2.4	-----	-----	-----
850222	2.2	2.3	2.4	-----	-----	-----
850223	2.2	2.3	2.3	-----	-----	-----
850224	2.3	2.3	2.3	-----	-----	-----
850225	2.3	2.4	2.4	-----	-----	-----
850226	2.3	2.4	2.4	-----	-----	-----
850227	2.1	2.3	2.3	-----	-----	-----
850228	2.1	2.2	2.2	-----	-----	-----
Monthly Value	2.1	3.5	4.3	3.7	-----	4.3

----- Data not available.

Appendix Table 25. (continued).

March 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850301	1.9	2.0	2.2	-----	-----	-----
850302	1.8	2.0	2.1	-----	-----	-----
850303	1.9	2.0	2.2	-----	-----	-----
850304	2.0	2.1	2.2	-----	-----	-----
850305	2.2	2.3	2.6	-----	-----	-----
850306	2.5	2.7	2.8	-----	-----	-----
850307	2.7	2.9	3.0	-----	-----	-----
850308	3.0	3.1	3.2	-----	-----	-----
850309	3.1	3.2	3.2	-----	-----	-----
850310	3.1	3.2	3.3	-----	-----	-----
850311	3.2	3.3	3.4	-----	-----	-----
850312	3.3	3.4	3.5	-----	-----	-----
850313	3.4	3.4	3.5	-----	-----	-----
850314	3.4	3.5	3.5	-----	-----	-----
850315	3.4	3.5	3.6	-----	-----	-----
850316	3.5	3.5	3.6	-----	-----	-----
850317	3.5	3.5	3.6	-----	-----	-----
850318	3.5	3.5	3.6	-----	-----	-----
850319	3.5	3.5	3.5	-----	-----	-----
850320	3.5	3.5	3.5	-----	-----	-----
850321	3.5	3.5	3.5	-----	-----	-----
850322	3.3	3.4	3.5	-----	-----	-----
850323	3.3	3.4	3.4	-----	-----	-----
850324	2.9	3.2	3.3	-----	-----	-----
850325	2.4	2.8	3.4	-----	-----	-----
850326	2.2	2.9	3.3	-----	-----	-----
850327	2.1	2.7	3.2	-----	-----	-----
850328	1.8	2.5	3.3	-----	-----	-----
850329	1.9	2.5	3.1	-----	-----	-----
850330	1.9	2.5	3.1	-----	-----	-----
850331	2.0	2.4	3.0	-----	-----	-----
Monthly Value	1.8	3.0	3.6	-----	-----	-----

----- Data not available.

Appendix Table 25. (continued).

April 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850401	1.8	2.2	2.6	-----	-----	-----
850402	1.8	2.1	2.5	-----	-----	-----
850403	1.7	2.0	2.5	-----	-----	-----
Monthly Value	1.7	-----	2.6	-----	-----	-----

----- Data not available.

Appendix Table 26. Datapod temperature recorder data summary:
intragravel and surface water temperatures (C)
recorded at Curry Slough when the site was
frozen, RM 119.7.

October 1984 (Site frozen)						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841030	+++++	+++++	+++++	-0.5	-0.4	-0.2
841031	+++++	+++++	+++++	-1.0	-0.7	-0.4
Monthly Value	+++++	+++++	+++++	-1.0	-----	-0.2

----- Data not available.

+++++ Site not frozen, data available in Table 25.

Appendix Table 26. (continued).

November 1984 (Site frozen)						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841101	+++++	+++++	+++++	-1.7	-1.4	-1.0
841102	+++++	+++++	+++++	-2.1	-1.7	-1.2
841103	+++++	+++++	+++++	-2.8	-2.3	-1.5
841104	+++++	+++++	+++++	-3.7	-3.2	-2.3
841105	+++++	+++++	+++++	-2.9	-1.6	-0.5
841106	+++++	+++++	+++++	-1.3	-0.9	-0.5
841107	+++++	+++++	+++++	-1.6	-1.2	-0.9
841108	+++++	+++++	+++++	-2.4	-----	-1.1
Monthly Value	+++++	+++++	+++++	-3.7	-----	-0.5

----- Data not available.

+++++ Site not frozen, data available in Table 25.

Appendix Table 27. Datapod temperature recorder data summary:
intragravel and surface water temperatures (C)
recorded at Slough 10 - Northeast, RM 133.8.

September 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
840901	3.6	3.7	3.8	3.6	4.3	5.9
840902	3.6	3.7	3.8	3.5	4.0	5.8
840903	3.6	3.6	3.8	3.4	4.1	5.6
840904	3.6	3.7	3.8	3.8	4.4	6.2
840905	3.7	3.7	3.9	3.8	4.5	5.8
840906	3.8	3.9	4.0	4.1	4.7	6.1
840907	3.9	4.0	4.1	4.1	4.7	5.7
840908	3.9	4.0	4.1	4.0	4.5	6.0
840909	3.8	3.9	4.1	3.4	4.2	6.0
840910	3.7	3.8	4.0	3.4	4.1	6.0
840911	3.6	3.8	3.9	3.3	4.1	6.2
840912	3.7	3.7	3.9	3.7	4.4	5.4
840913	3.8	3.9	3.9	4.0	4.6	5.1
840914	3.8	3.9	4.0	3.7	4.5	5.7
840915	3.9	4.0	4.1	4.0	4.8	6.4
840916	3.9	4.0	4.1	3.7	4.5	6.4
840917	4.0	4.1	4.1	4.1	4.7	5.5
840918	4.0	4.1	4.2	4.4	4.7	5.6
840919	4.0	4.1	4.1	4.2	4.6	5.2
840920	4.0	4.1	4.2	3.7	4.5	5.6
840921	3.8	3.9	4.1	3.1	3.8	5.3
840922	3.6	3.8	3.9	3.0	3.8	5.3
840923	3.6	3.7	3.8	3.3	4.2	5.3
840924	3.7	3.8	3.9	3.9	4.5	5.5
840925	3.8	3.9	4.0	4.2	4.7	5.6
840926	3.9	4.0	4.0	3.6	4.2	5.1
840927	3.8	4.0	4.0	3.3	4.1	5.7
840928	3.7	3.8	4.0	3.0	3.8	5.0
840929	3.8	3.9	4.0	4.4	4.7	5.4
840930	3.9	4.0	4.1	4.1	4.6	5.3
Monthly Value	3.6	3.9	4.2	3.0	4.4	6.4

Appendix Table 27. (continued).

October 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841001	3.9	4.1	4.1	3.6	4.3	5.5
841002	4.0	4.1	4.1	3.8	4.4	5.2
841003	3.8	4.0	4.1	3.2	3.9	4.9
841004	3.6	3.8	4.0	2.5	3.2	4.4
841005	3.6	3.6	3.7	2.7	3.7	4.9
841006	3.6	3.7	3.7	3.4	4.0	4.9
841007	3.6	3.6	3.8	3.1	3.8	4.9
841008	3.6	3.6	3.8	3.4	3.8	4.7
841009	3.6	3.7	3.8	3.4	4.0	4.8
841010	3.5	3.6	3.8	2.3	2.9	3.7
841011	3.4	3.5	3.6	2.2	2.9	3.9
841012	3.4	3.5	3.6	3.1	3.6	4.3
841013	3.4	3.5	3.6	2.8	3.4	4.5
841014	3.2	3.3	3.5	2.0	2.4	3.0
841015	3.1	3.2	3.3	1.8	2.5	3.4
841016	3.0	3.1	3.2	1.7	2.3	3.1
841017	3.0	3.0	3.2	1.6	2.1	2.8
841018	2.9	3.0	3.1	1.4	2.0	2.7
841019	2.8	2.9	3.0	1.2	1.9	2.7
841020	2.8	2.9	2.9	1.4	2.2	2.8
841021	2.9	3.0	3.1	2.3	2.8	3.2
841022	3.0	3.1	3.2	2.8	3.5	4.5
841023	3.0	3.1	3.3	2.3	3.0	3.5
841024	2.7	3.0	3.1	1.3	1.9	2.7
841025	2.7	2.7	2.8	1.2	1.5	1.8
841026	2.5	2.6	2.7	-----	-----	-----
841027	2.3	2.5	2.6	-----	-----	-----
841028	2.3	2.3	2.5	-----	-----	-----
841029	2.1	2.2	2.4	-----	-----	-----
841030	2.1	2.2	2.3	-----	-----	-----
841031	2.1	2.2	2.3	-----	-----	-----
Monthly Value	2.1	3.2	4.1	1.2	3.0	5.5

----- Data not available.

Appendix Table 27. (continued).

November 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841101	2.0	2.1	2.2	-----	-----	-----
841102	1.3	1.9	2.1	-----	-----	-----
841109	2.0	-----	2.2	1.4	-----	1.7
841110	2.0	2.0	2.1	1.1	1.2	1.5
841111	1.9	2.0	2.0	.9	1.2	1.3
841112	1.7	1.9	1.9	1.1	1.2	1.4
841113	1.6	1.7	1.8	.9	1.1	1.3
841114	1.6	1.6	1.7	1.0	1.2	1.4
841115	1.6	1.6	1.7	1.2	1.3	1.5
841116	1.6	1.7	1.7	.9	1.1	1.5
841117	1.6	1.6	1.7	.7	1.0	1.4
841118	1.7	1.7	1.8	.9	1.3	1.6
841119	1.7	1.8	1.8	1.0	1.4	1.6
841120	1.8	1.9	2.0	1.5	1.7	1.7
841121	2.0	2.0	2.1	1.7	1.8	1.9
841122	2.0	2.1	2.2	1.5	1.6	1.9
841123	1.8	2.0	2.1	1.4	1.5	1.7
841124	2.0	2.1	2.2	1.6	1.7	1.8
841125	2.0	2.1	2.2	1.6	1.7	1.8
841126	2.0	2.1	2.1	1.5	1.7	1.7
841127	2.0	2.0	2.1	1.3	1.6	1.7
841128	2.0	2.1	2.2	1.5	1.7	1.8
841129	2.0	2.1	2.2	1.4	1.8	1.9
841130	2.1	2.2	2.2	1.7	1.9	1.9
Monthly Value	1.3	1.9	2.2	.7	1.5	1.9

----- Data not available.

Appendix Table 27. (continued).

December 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841201	2.1	2.2	2.3	1.7	1.9	2.0
841202	2.2	2.3	2.3	1.7	1.9	2.0
841203	2.2	2.3	2.3	2.0	2.0	2.1
841204	2.3	2.4	2.4	2.0	2.2	2.2
841205	2.3	2.3	2.4	1.7	2.0	2.2
841206	2.1	2.2	2.3	1.6	1.7	1.8
841207	2.2	2.2	2.2	1.6	1.8	1.9
841208	2.2	2.2	2.3	1.5	1.7	1.8
841209	1.9	2.1	2.3	.7	1.2	1.8
841210	1.6	1.7	1.9	.7	.9	1.2
841211	1.6	1.7	1.7	.8	1.1	1.3
841212	1.3	1.4	1.6	.7	.8	1.1
841213	1.2	1.3	1.3	.9	1.2	1.4
841214	1.1	1.2	1.3	.9	1.1	1.2
841215	1.1	1.3	1.6	1.0	1.5	1.7
841216	1.5	1.8	2.1	1.6	1.8	2.0
841217	2.0	2.2	2.4	1.6	1.9	2.0
841218	2.4	2.5	2.6	1.5	1.8	2.0
841219	2.5	2.6	2.7	1.5	1.8	2.1
841220	2.5	2.6	2.6	1.5	1.6	1.7
841221	2.5	2.6	2.7	1.5	1.7	1.9
841222	2.6	2.7	2.7	1.8	2.0	2.1
841223	2.6	2.7	2.7	1.0	1.7	2.1
841224	2.7	2.7	2.8	1.6	1.8	2.1
841225	2.7	2.7	2.8	1.7	1.9	2.0
841226	2.7	2.8	2.8	1.6	1.9	2.1
841227	2.7	2.7	2.8	1.5	1.6	1.7
841228	2.7	2.8	2.9	1.6	1.7	1.9
841229	2.8	2.9	2.9	1.7	1.9	2.0
841230	2.8	2.9	3.0	1.6	2.0	2.2
841231	2.9	3.0	3.0	1.9	2.2	2.2
Monthly Value	1.1	2.3	3.0	.7	1.7	2.2

Appendix Table 27. (continued).

January 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850101	2.9	3.0	3.1	1.9	2.1	2.2
850102	2.9	3.0	3.0	1.8	1.9	2.0
850103	2.8	2.9	3.0	1.7	1.8	1.9
850104	2.8	2.8	2.9	1.5	1.6	1.7
850105	2.8	2.8	2.9	1.5	1.6	1.7
850106	2.8	2.8	2.9	1.4	1.6	1.7
850107	2.8	2.9	3.0	1.6	1.7	1.9
850108	3.0	3.0	3.1	1.7	1.8	1.9
850109	3.0	3.0	3.1	1.6	1.8	1.9
850110	3.0	3.0	3.1	1.6	1.8	2.0
850111	3.0	3.0	3.1	1.7	1.8	1.9
850112	3.0	3.0	3.1	1.7	1.9	2.0
850113	2.9	3.0	3.1	1.6	1.7	1.8
850114	3.0	3.0	3.1	1.6	1.8	1.9
850115	3.0	3.0	3.1	1.6	1.9	1.9
850116	3.0	3.0	3.1	1.6	1.9	2.0
850117	3.0	3.1	3.1	1.8	2.0	2.1
850118	3.0	3.1	3.2	1.7	1.9	2.0
850119	2.9	3.0	3.1	1.7	1.9	2.0
850120	3.0	3.1	3.2	1.7	1.9	2.1
850121	3.0	3.0	3.1	1.7	1.8	2.0
850122	3.0	3.1	3.2	1.8	1.9	2.1
850123	3.0	3.1	3.2	2.0	2.1	2.3
850124	3.1	3.2	3.3	2.0	2.2	2.3
850125	3.1	3.2	3.2	1.9	2.1	2.2
850126	3.0	3.1	3.2	2.0	2.2	2.3
850127	3.0	3.1	3.2	1.7	2.1	2.2
850128	3.0	3.1	3.1	2.0	2.1	2.2
850129	2.9	3.0	3.1	1.7	2.0	2.2
850130	2.8	3.0	3.1	1.7	2.0	2.3
850131	2.9	3.0	3.0	1.7	2.0	2.2
Monthly Value	2.8	3.0	3.3	1.4	1.9	2.3

Appendix Table 27. (continued).

February 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850201	2.8	3.0	3.0	1.3	1.9	2.2
850202	2.8	2.9	3.0	1.4	1.6	1.9
850203	2.8	2.9	3.0	1.1	1.4	1.7
850204	2.8	2.9	2.9	1.2	1.5	1.7
850205	2.7	2.8	2.8	1.2	1.3	1.5
850206	2.6	2.7	2.8	1.0	1.1	1.3
850207	2.5	2.6	2.7	.5	.9	1.2
850208	2.5	2.6	2.7	.8	1.1	1.4
850209	2.6	2.7	2.7	.8	1.0	1.2
850210	2.6	2.7	2.7	.7	.9	1.1
850211	2.7	2.7	2.8	.9	1.1	1.2
850212	2.7	2.7	2.8	.8	1.0	1.2
850213	2.7	2.9	3.0	1.0	1.2	1.3
850214	2.9	3.0	3.1	1.1	1.3	1.3
850215	3.0	3.1	3.2	1.2	1.4	1.7
850216	3.1	3.2	3.3	1.3	1.4	1.5
850217	3.1	3.2	3.3	.7	1.3	1.4
850218	3.1	3.2	3.3	1.1	1.2	1.4
850219	3.2	3.2	3.3	1.1	1.2	1.4
850220	3.1	3.2	3.4	1.1	1.4	1.8
850221	3.1	3.2	3.4	1.2	1.4	1.7
850222	3.1	3.2	3.3	1.1	1.3	1.6
850223	3.0	3.1	3.3	.1	1.0	1.4
850224	2.9	3.1	3.2	.6	1.0	1.3
850225	3.1	3.3	3.4	1.1	1.2	1.5
850226	3.3	3.4	3.4	1.0	1.4	1.6
850227	3.3	3.4	3.5	1.1	1.6	1.9
850228	3.3	3.4	3.5	1.3	1.6	1.8
Monthly Value	2.5	3.0	3.5	.1	1.3	2.2

Appendix Table 27. (continued).

March 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850301	3.2	3.3	3.4	1.3	1.6	2.0
850302	3.3	3.4	3.4	1.6	1.8	2.0
850303	3.3	3.3	3.4	1.4	1.6	2.0
850304	3.3	3.4	3.4	1.5	1.8	2.0
850305	3.4	3.4	3.5	1.4	1.9	2.2
850306	3.3	3.4	3.5	1.5	1.9	2.2
850307	3.4	3.5	3.6	1.8	2.0	2.3
850308	3.4	3.5	3.6	1.7	1.9	2.2
850309	3.5	3.5	3.6	1.7	2.1	2.3
850310	3.5	3.5	3.6	1.9	2.2	2.5
850311	3.4	3.5	3.6	1.9	2.0	2.3
850312	3.4	3.5	3.6	1.9	2.1	2.4
850313	3.3	3.5	3.6	1.6	2.0	2.4
850314	3.0	3.3	3.6	.4	1.4	2.0
850315	3.1	3.2	3.4	1.0	1.6	2.3
850316	3.2	3.3	3.4	1.6	1.9	2.3
850317	3.1	3.2	3.4	1.6	2.0	2.3
850318	3.2	3.2	3.3	1.7	2.1	2.4
850319	2.9	3.1	3.2	.7	1.9	2.3
Monthly Value	2.9	-----	3.6	.4	-----	2.5

----- Data not available.

Appendix Table 28. Datapod temperature recorder data summary:
intragravel and surface water temperatures (C)
recorded at Slough 10 - Northwest, RM 133.8.

September 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
840901	-----	-----	-----	4.2	5.2	6.5
840902	-----	-----	-----	4.0	4.9	6.0
840903	-----	-----	-----	4.0	4.9	6.2
840904	-----	-----	-----	4.4	5.2	6.6
840905	-----	-----	-----	4.7	5.4	6.6
840906	-----	-----	-----	4.9	5.4	6.3
840907	-----	-----	-----	4.7	5.3	6.1
840908	-----	-----	-----	4.6	5.3	6.7
840909	-----	-----	-----	4.1	4.9	6.2
840910	-----	-----	-----	4.0	4.7	6.0
840911	-----	-----	-----	3.8	4.6	5.9
840912	-----	-----	-----	4.2	4.6	5.4
840913	-----	-----	-----	4.4	4.8	5.2
840914	-----	-----	-----	4.1	4.7	5.7
840915	-----	-----	-----	4.4	5.0	6.0
840916	-----	-----	-----	4.2	5.0	6.2
840917	-----	-----	-----	4.5	4.9	5.4
840918	-----	-----	-----	4.6	4.9	5.6
840919	-----	-----	-----	4.6	4.8	5.2
840920	-----	-----	-----	4.3	4.8	5.9
840921	-----	-----	-----	3.7	4.3	5.5
840922	-----	-----	-----	3.5	4.2	5.5
840923	3.6	3.8	3.9	3.7	4.3	5.0
840924	3.5	3.8	3.8	4.1	4.5	5.2
840925	3.5	3.7	3.8	4.3	4.7	5.6
840926	3.4	3.7	3.8	4.1	4.5	5.4
840927	3.2	3.5	3.7	3.8	4.4	5.4
840928	3.2	3.4	3.5	3.6	4.2	5.2
840929	3.2	3.5	3.6	4.4	4.7	5.2
840930	3.3	3.6	3.7	4.3	4.8	5.7
Monthly Value	3.2	-----	3.9	3.5	4.8	6.7

----- Data not available.

Appendix Table 28. (continued).

October 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841001	3.3	3.5	3.6	4.1	4.7	5.5
841002	3.2	3.5	3.7	4.2	4.5	5.1
841003	3.3	3.5	3.6	3.7	4.2	5.2
841004	3.2	3.4	3.6	3.4	3.8	4.8
841005	3.1	3.5	3.5	3.5	3.9	4.5
841006	3.1	3.5	3.6	3.7	4.1	4.7
841007	3.1	3.4	3.5	3.6	4.0	4.6
841008	3.1	3.4	3.5	3.7	4.0	4.5
841009	3.2	3.7	3.9	3.7	4.1	4.7
841010	3.1	3.4	3.7	3.2	3.6	4.5
841011	3.0	3.3	3.4	3.1	3.6	4.4
841012	3.1	3.4	3.5	3.5	3.9	4.5
841013	3.1	3.4	3.5	3.4	3.7	4.3
841014	3.0	3.3	3.4	3.0	3.4	4.1
841015	2.9	3.2	3.3	3.0	3.4	3.9
841016	2.9	3.2	3.3	3.0	3.4	4.1
841017	2.8	3.0	3.2	2.9	3.2	3.8
841018	2.8	3.0	3.1	2.9	3.3	3.9
841019	2.8	3.0	3.1	2.9	3.2	3.7
841020	2.7	3.0	3.1	2.9	3.3	3.5
841021	2.8	3.1	3.2	3.2	3.5	3.7
841022	2.8	3.1	3.2	3.4	3.7	4.2
841023	2.8	3.1	3.2	3.1	3.5	3.7
841024	2.7	3.0	3.1	2.8	3.2	3.6
841025	2.6	2.9	3.0	2.9	3.1	3.5
841026	2.7	2.9	3.0	2.9	3.0	3.4
841027	2.7	3.2	3.4	2.8	3.0	3.4
841028	3.0	3.2	3.4	2.8	3.0	3.3
841029	3.0	3.3	3.4	2.7	2.9	3.2
841030	3.0	3.3	3.3	2.7	3.0	3.2
841031	3.0	3.3	3.4	2.8	3.0	3.2
Monthly Value	2.6	3.3	3.9	2.7	3.5	5.5

Appendix Table 28. (continued).

November 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841101	2.9	3.2	3.4	2.7	2.9	3.2
841102	2.7	3.2	3.3	2.7	2.8	3.1
841103	2.9	3.1	3.3	2.6	2.8	3.1
841104	2.8	3.1	3.2	2.7	2.8	3.1
841105	2.9	3.1	3.2	2.8	3.0	3.1
841109	3.2	-----	3.3	2.7	-----	3.0
841110	3.1	3.2	3.3	2.7	2.7	2.9
841111	3.0	3.1	3.2	2.7	2.7	2.8
841112	3.0	3.0	3.1	2.7	2.7	2.8
841113	2.9	3.0	3.1	2.6	2.7	2.8
841114	2.9	2.9	3.0	2.6	2.7	2.8
841115	2.8	2.9	2.9	2.7	2.7	2.9
841116	2.9	2.9	3.0	2.7	2.9	2.9
841117	2.9	2.9	3.0	2.7	2.7	2.9
841118	2.9	3.0	3.1	2.7	2.9	2.9
841119	3.0	3.0	3.0	2.7	2.7	2.8
841120	2.9	3.0	3.1	2.7	2.8	2.9
841121	3.0	3.1	3.1	2.8	3.0	3.1
841122	3.1	3.1	3.2	2.7	2.9	3.1
841123	3.0	3.1	3.2	2.6	2.7	2.9
841124	3.1	3.2	3.3	2.8	2.9	3.0
841125	3.1	3.2	3.3	2.7	2.8	2.9
841126	3.0	3.2	3.2	2.5	2.8	2.8
Monthly Value	2.7	3.1	3.4	2.5	2.8	3.2

----- Data not available.

Appendix Table 28. (continued).

December 1984						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
841211	3.3	-----	3.3	2.5	-----	2.6
841212	3.3	3.3	3.4	2.4	2.5	2.6
841213	3.3	3.3	3.4	2.4	2.5	2.6
841214	3.3	3.3	3.3	2.4	2.5	2.6
841215	3.3	3.4	3.4	2.6	2.7	2.7
841216	3.4	3.4	3.5	2.6	2.7	2.8
841217	3.4	3.5	3.5	2.6	2.7	2.8
841218	3.4	3.4	3.5	2.4	2.7	2.8
841219	3.4	3.5	3.5	2.5	2.6	2.8
841220	3.4	3.5	3.5	2.5	2.6	2.6
841221	3.4	3.4	3.5	2.6	2.7	2.8
841222	3.4	3.5	3.5	2.4	2.7	2.8
841223	3.4	3.5	3.5	2.3	2.6	2.8
841224	3.4	3.5	3.5	2.5	2.6	2.7
841225	3.4	3.5	3.5	2.6	2.7	2.8
841226	3.5	3.5	3.5	2.5	2.6	2.8
841227	3.4	3.5	3.5	2.5	2.6	2.6
841228	3.4	3.5	3.5	2.4	2.6	2.7
841229	3.5	3.5	3.5	2.4	2.6	2.7
841230	3.5	3.5	3.6	2.4	2.7	2.8
841231	3.5	3.6	3.7	2.7	2.9	3.0
Monthly Value	3.3	3.4	3.7	2.3	2.6	3.0

----- Data not available.

Appendix Table 28. (continued).

January 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850101	3.6	3.6	3.7	2.8	3.0	3.0
850102	3.6	3.7	3.7	2.9	2.9	3.0
850103	3.5	3.6	3.7	2.5	2.7	2.9
850104	3.5	3.5	3.6	2.4	2.6	2.8
850105	3.5	3.6	3.6	2.4	2.7	2.8
850106	3.5	3.5	3.6	2.5	2.6	2.7
850107	3.5	3.5	3.6	2.4	2.7	2.8
850108	3.5	3.6	3.6	2.7	2.8	2.9
850109	3.5	3.6	3.6	2.4	2.7	2.9
850110	3.5	3.5	3.6	2.5	2.7	2.9
850111	3.5	3.5	3.6	2.5	2.7	2.9
850112	3.5	3.6	3.6	2.3	2.7	2.9
850113	3.5	3.5	3.5	2.4	2.5	2.6
850114	3.5	3.5	3.5	2.5	2.6	2.7
850115	3.5	3.5	3.5	2.3	2.6	2.7
850116	3.4	3.5	3.5	2.2	2.5	2.6
850117	3.4	3.5	3.5	2.3	2.5	2.6
850118	3.4	3.5	3.5	2.1	2.3	2.4
850119	3.4	3.4	3.5	2.2	2.4	2.5
850120	3.4	3.5	3.5	2.2	2.4	2.6
850121	3.4	3.5	3.5	2.2	2.4	2.6
850122	3.4	3.5	3.5	2.3	2.4	2.5
850123	3.5	3.5	3.5	2.4	2.5	2.7
850124	3.5	3.5	3.5	2.5	2.5	2.7
850125	3.5	3.5	3.5	2.3	2.5	2.6
850126	3.5	3.5	3.6	2.4	2.6	2.7
850127	3.5	3.5	3.6	2.3	2.5	2.7
850128	3.5	3.5	3.6	2.4	2.6	2.7
850129	3.5	3.5	3.6	2.3	2.6	2.7
850130	3.5	3.5	3.5	2.3	2.5	2.7
850131	3.5	3.5	3.5	2.4	2.7	2.8
Monthly Value	3.4	3.5	3.7	2.1	2.6	3.0

Appendix Table 28. (continued).

February 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850201	3.5	3.5	3.6	2.1	2.6	2.7
850202	3.5	3.5	3.6	2.5	2.7	2.9
850203	3.5	3.5	3.6	2.3	2.5	2.6
850204	3.5	3.5	3.6	2.4	2.6	2.7
850206	3.4	3.5	3.5	2.2	2.2	2.5
850207	3.4	3.5	3.5	2.1	2.3	2.5
850208	3.4	3.4	3.5	2.2	2.3	2.6
850209	3.4	3.4	3.5	2.1	2.2	2.4
850210	3.3	3.4	3.4	1.8	2.0	2.2
850211	3.2	3.3	3.4	1.9	2.1	2.2
850212	3.2	3.3	3.4	1.8	2.0	2.1
850213	3.2	3.3	3.3	1.8	2.0	2.1
850214	3.2	3.3	3.3	1.8	2.0	2.1
850215	3.2	3.3	3.4	1.9	2.1	2.2
850216	3.2	3.3	3.4	2.0	2.1	2.3
850217	3.2	3.3	3.4	2.0	2.1	2.3
850218	3.3	3.3	3.4	1.9	2.0	2.3
850219	3.3	3.3	3.4	2.0	2.1	2.3
850220	3.3	3.4	3.5	2.1	2.2	2.4
850221	3.3	3.4	3.5	2.1	2.1	2.4
850222	3.3	3.4	3.5	2.1	2.2	2.4
850223	3.4	3.4	3.5	2.1	2.2	2.5
850224	3.4	3.5	3.5	2.2	2.4	2.5
850225	3.5	3.5	3.5	2.1	2.3	2.5
850226	3.5	3.5	3.5	2.1	2.2	2.4
850227	3.5	3.5	3.5	1.8	2.3	2.6
850228	3.4	3.5	3.5	2.0	2.2	2.6
Monthly Value	3.2	3.4	3.6	1.8	2.2	2.9

Appendix Table 28. (continued).

March 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850301	3.4	3.5	3.5	2.1	2.2	2.4
850302	3.4	3.5	3.5	2.0	2.2	2.6
850303	3.4	3.5	3.5	2.0	2.1	2.4
850304	3.4	3.5	3.5	2.1	2.3	2.4
850305	3.4	3.5	3.5	1.9	2.3	2.6
850306	3.4	3.5	3.5	2.0	2.3	2.6
850310	3.5	-----	3.5	2.3	-----	2.8
850311	3.5	3.5	3.5	2.1	2.3	2.6
850312	3.5	3.5	3.7	2.2	2.5	2.7
850313	3.5	3.6	3.7	2.0	2.4	2.9
850314	3.4	3.5	3.6	1.9	2.1	2.8
850315	3.4	3.5	3.5	1.9	2.2	2.7
850316	3.5	3.5	3.5	2.0	2.3	2.6
850317	3.5	3.5	3.5	2.1	2.3	2.7
850318	3.5	3.5	3.6	2.1	2.4	2.8
850319	3.5	3.5	3.6	2.1	2.4	3.0
850320	3.5	3.5	3.6	2.1	2.4	3.2
850321	3.5	3.5	3.6	2.1	2.5	3.1
850322	3.5	3.5	3.6	2.1	2.3	3.1
850323	3.4	3.5	3.6	1.9	2.4	3.1
850324	3.5	3.5	3.7	2.0	2.5	3.2
850325	3.5	3.6	3.7	2.1	2.5	3.3
850326	3.5	3.5	3.7	2.0	2.4	3.3
850327	3.5	3.5	3.7	2.0	2.3	3.3
850328	3.4	3.5	3.6	1.9	2.3	3.2
850329	3.4	3.5	3.6	2.0	2.3	3.1
850330	3.5	3.5	3.6	2.1	2.4	3.3
850331	3.4	3.5	3.6	1.9	2.2	3.0
Monthly Value	3.4	3.5	3.7	1.9	2.3	3.3

----- Data not available.

Appendix Table 28. (continued).

April 1985						
Date	Intragravel			Surface Water		
	Min	Mean	Max	Min	Mean	Max
850401	3.4	3.5	3.6	1.9	2.2	2.9
850402	3.4	3.5	3.6	1.9	2.3	2.9
850403	3.4	3.5	3.6	2.0	2.3	2.9
850404	3.4	-----	3.5	2.0	-----	2.3
Monthly Value	3.4	-----	3.6	1.9	-----	2.9

----- Data not available.

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