DEPARTMENT OF FISH AND GAME

2207 Spenard Road ANCHORAGE, ALASKA 99503-1617 03-84-7.10-0.6

January 27, 1984

FEB 13 1984

Bill Wilson Principal Investigator Arctic Environmental Information Data Center 707 A Street Anchorage, Alaska 99501

Dear Bill:

Attached are the scatter plots referenced to in the draft Winter Studies Report that you requested as part of your November 10, 1983 review comments on that report. These plots were part of a preliminary analysis of our basic data and should therefore be used with discretion. I have enclosed an interoffice memo summarizing the rational used in developing the plots. I will be happy to answer any further questions you may have.

Sincerely,

Thomas W. Trent

Aquatic Studies Coordinator Su Hydro Aquatic Studies Telephone: (907) 274-7583

Richard Fleming/with attachments Eric Marchegiani/with attachments

...- - 3r. A ARCTIC ENVIRONT TO INFORMATION

AND DATE PATER 707 A STREET

ANCHORAGE, AK 99501

MEMORANDUM

State of Alaska

TO: Christopher Estes

Aquatic Habitat & Instream Flow

Project Leader

Su Hydro Aquatic Studies

THRU: Andy Hoffmann

Fisheries Biologist FROM:

> Len Vining Fisheries Biologist

Su Hydro Aquatic Studies

January 31, 1984 DATE:

FILE NO: 03-84-7.10-0.6

TELEPHONE NO:

SUBJECT:

Scatter Plots Requested By AEIDC, November 10, 1983.

The following preliminary scatter plots are organized by water quality variable (i.e., temperature, dissolved oxygen, conductivity and pH). For each variable, scatter plots are provided for left and right banks of the four sloughs studied (sloughs 8A, 9, 11, and 21). These plots are preliminary and were used for initial data screening and trend analyses. They are in an unrefined form and are not intended for general distribution. I feel that further work expended on these plots would not be a valuable use of time and effort. If there are additional questions that arise for these plots they should be dealt with on an informal basis.

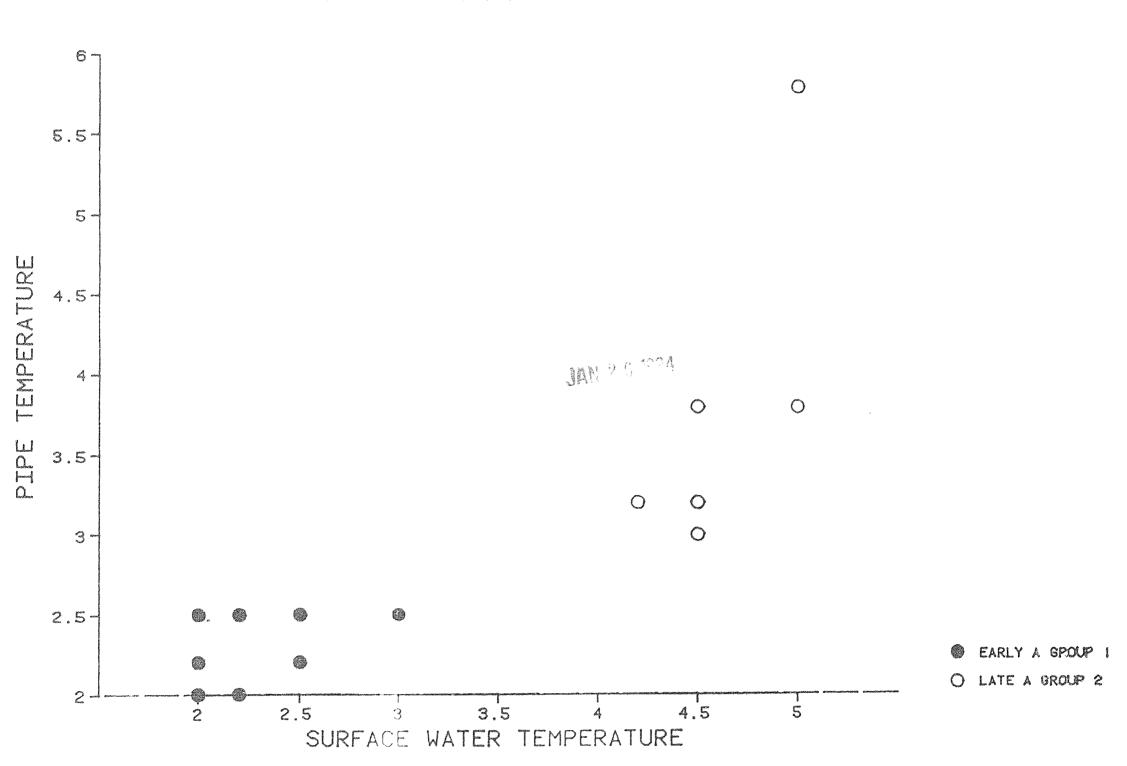
The following comments are provided to aid in the interpretation of the attached scatter plots.

- In each figure, intragravel water quality data is plotted on the 1. vertical axis and surface water quality data on the horizontal axis.
- 2. Descriptive information of slough, bank, and water quality variable is given at the top of each figure.
- 3. Units of water quality variables are as follows:
 - temperature given in °C,
 - b. dissolved oxygen (DO) given in mg/l,
 - C. conductivity given in umhos/cm,
 - pH given in pH units, representing the negative logarithm of the hydrogen ion concentration of the water sampled.
- The legend for each figure appears in the lower right-hand corner of the page. The following terms are defined as follows (refer to Tables in Appendix B of the Alaska Department of Fish and Game (ADF&G) Su Hydro Water Aquatic Studies report).

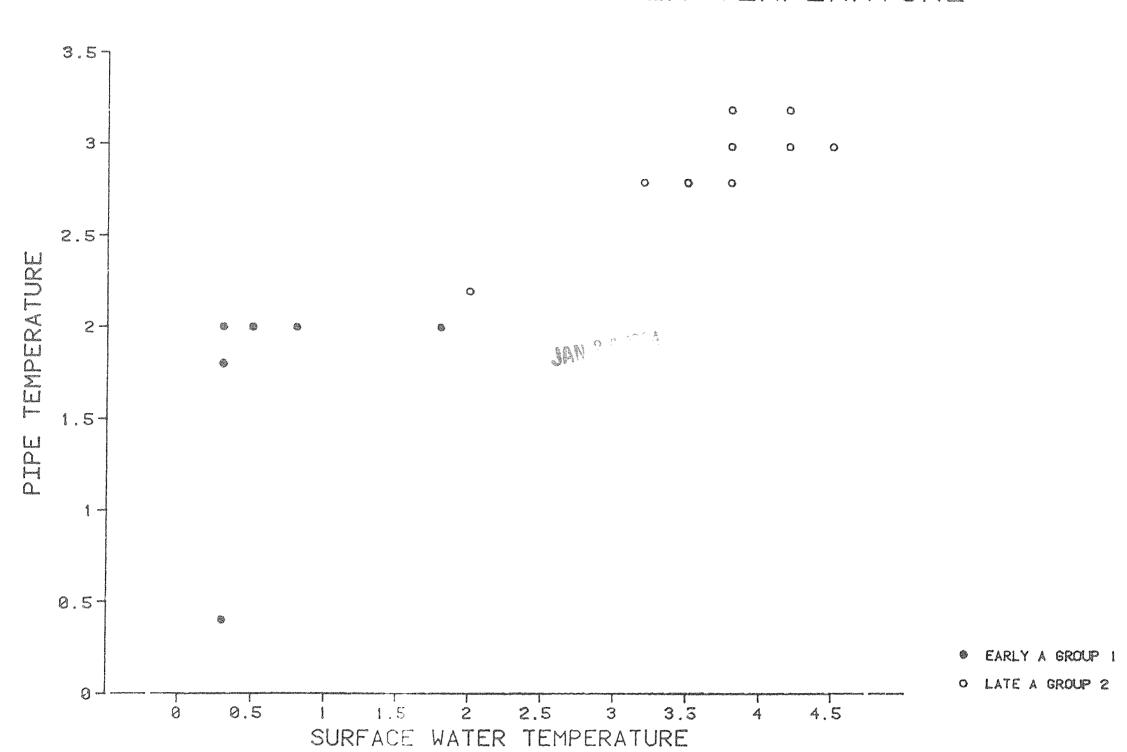
Late = Sampling period from 15 to 18 April, 1982. Early = Sampling period from 29 April to 2 May, 1982. Letters A, B or C = Site designations within a particular slough. Disregard "Group" designations.

- 5. There may be a discrepancy between the number of points plotted on a particular graph and the number of points reported in the corresponding table in Appendix B. This occurs because overlapping data points are represented as single points on the plots.
- 6. In the event that there is a discrepancy between the plots and data reported in the report, rely exclusively on the report data, because it has been checked thoroughly by ADF&G personnel.

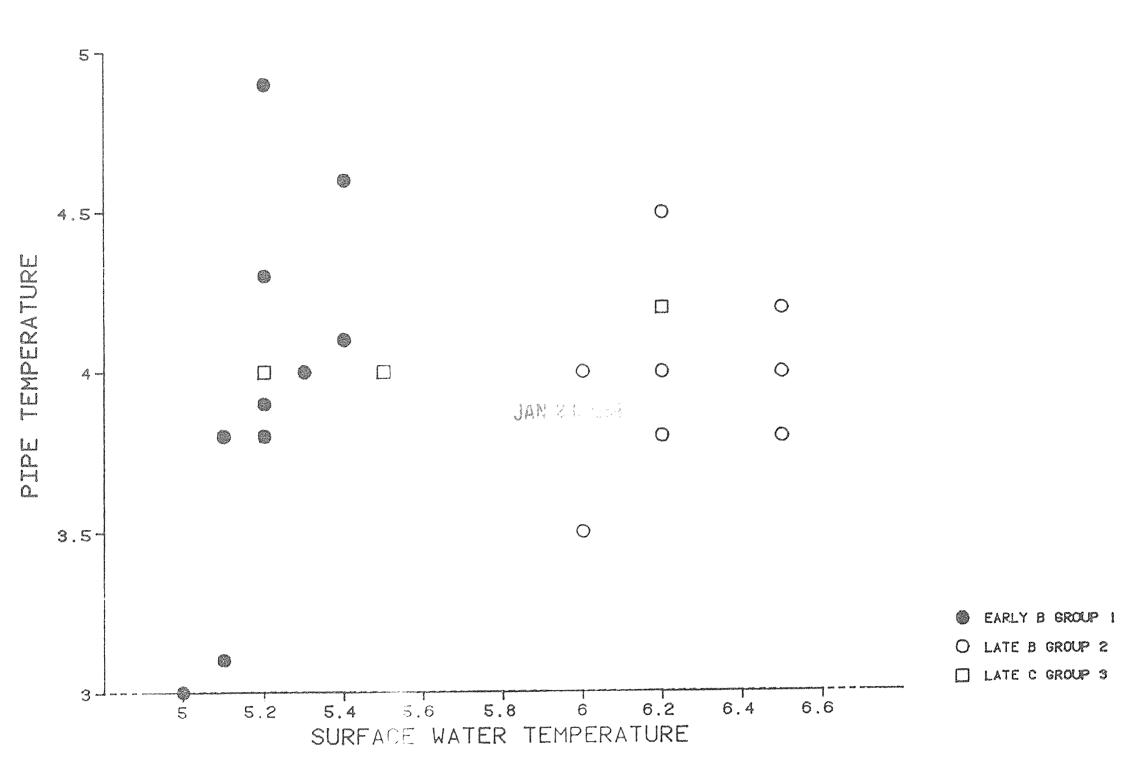
SLOUGH 8A LEFT BANK WATER TEMPERATURE



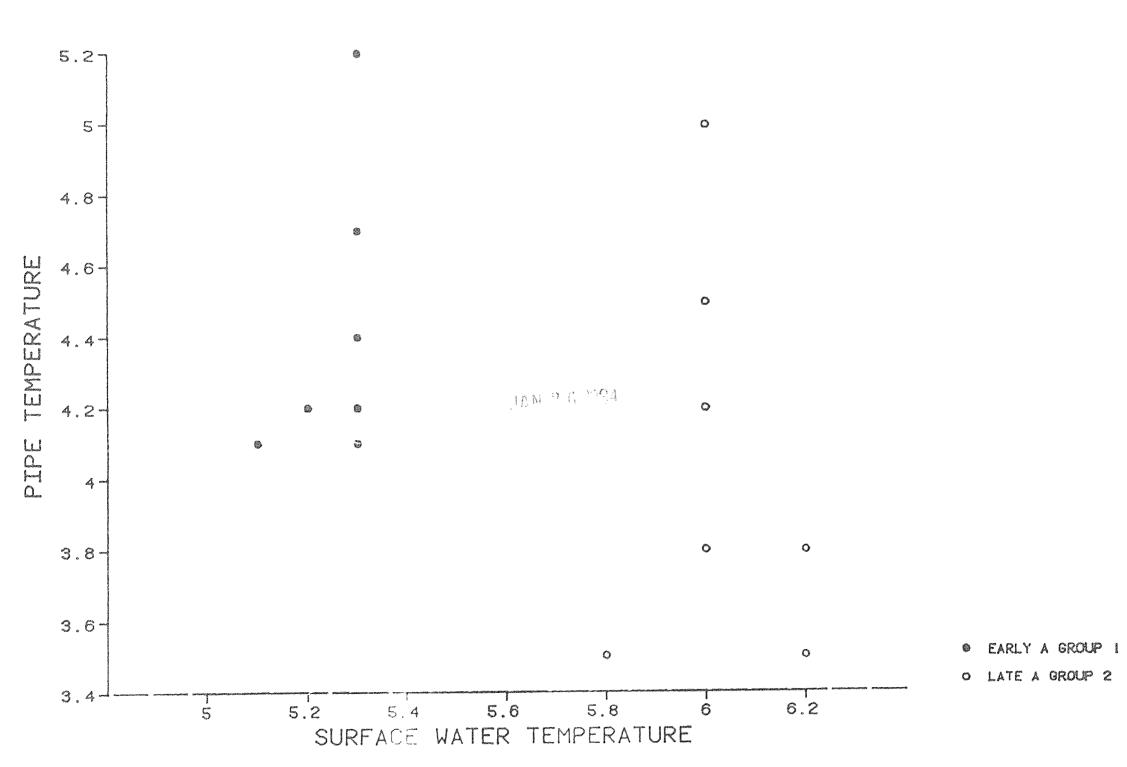
SLOUGH 8A RIGHT BANK WATER TEMPERATURE



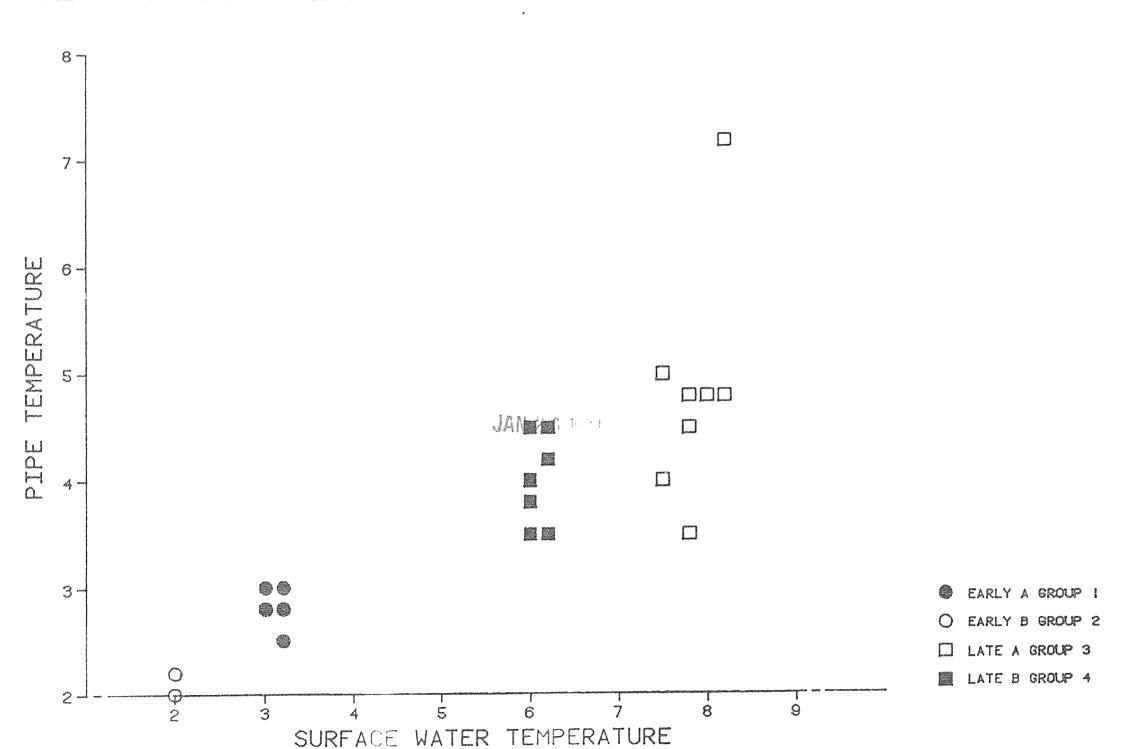
SLOUGH 9 LEFT BANK WATER TEMPERATURE



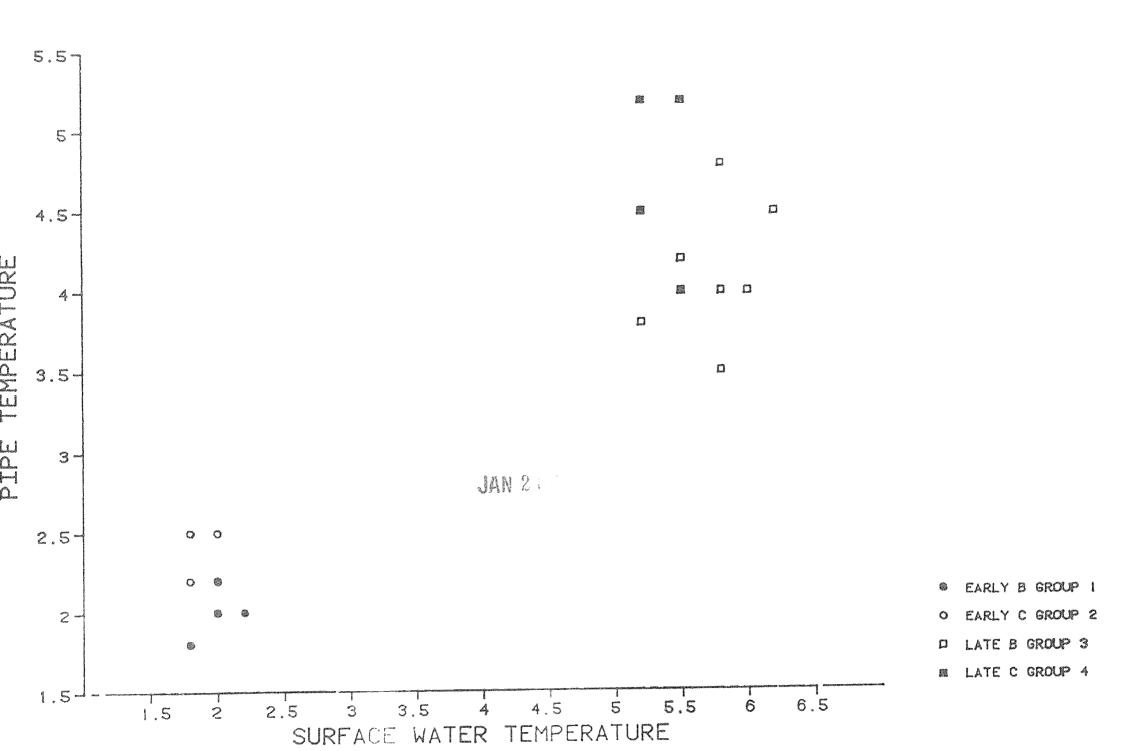
SLOUGH 9 RIGHT BANK WATER TEMPERATURE



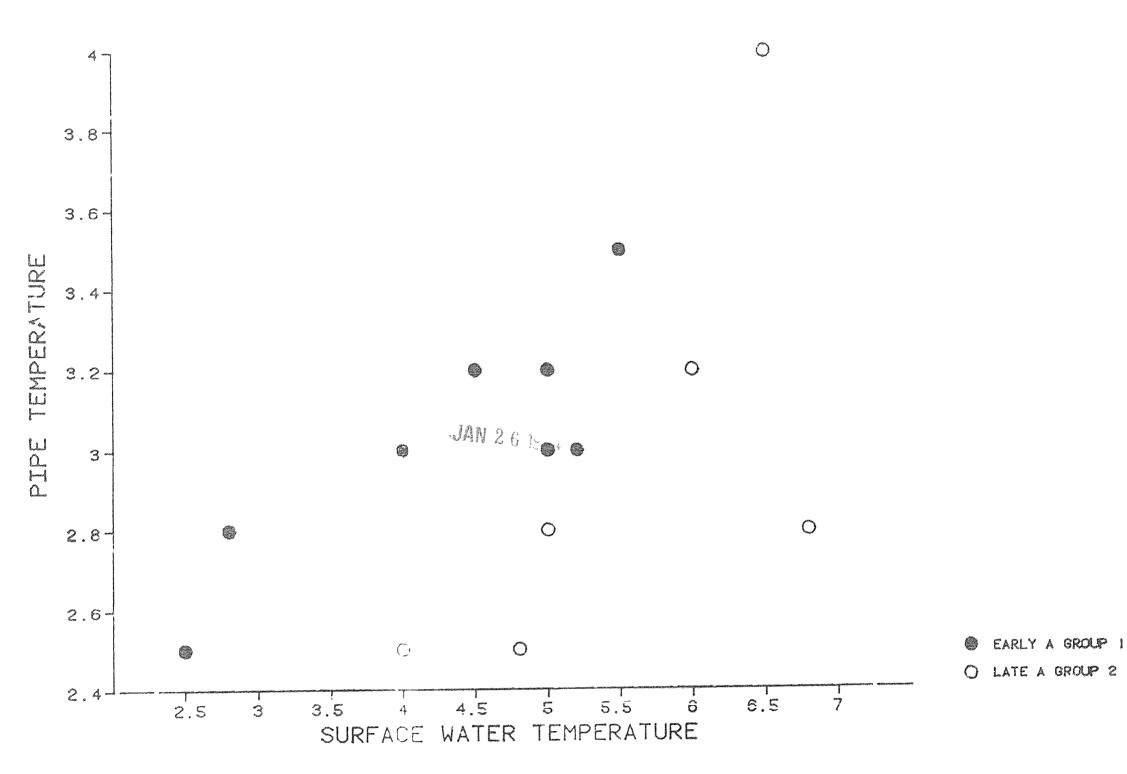
SLOUGH 11 LEFT BANK WATER TEMPERATURE



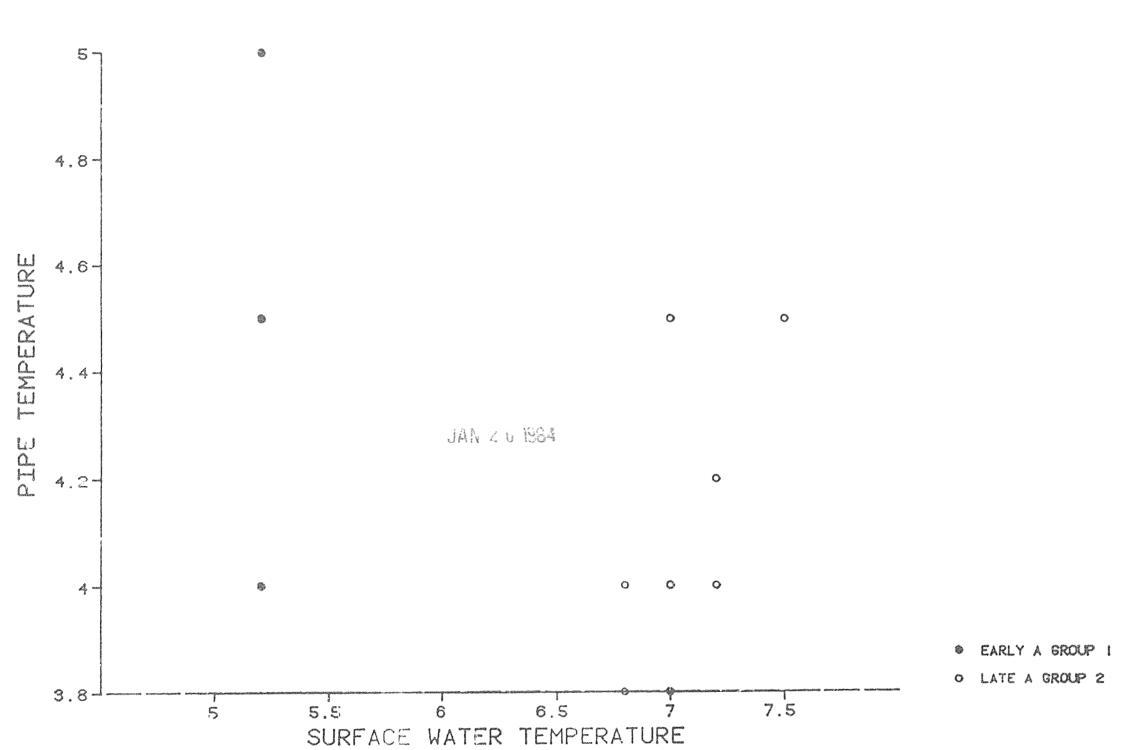
SLOUGH 11 RIGHT BANK WATER TEMPERATURE



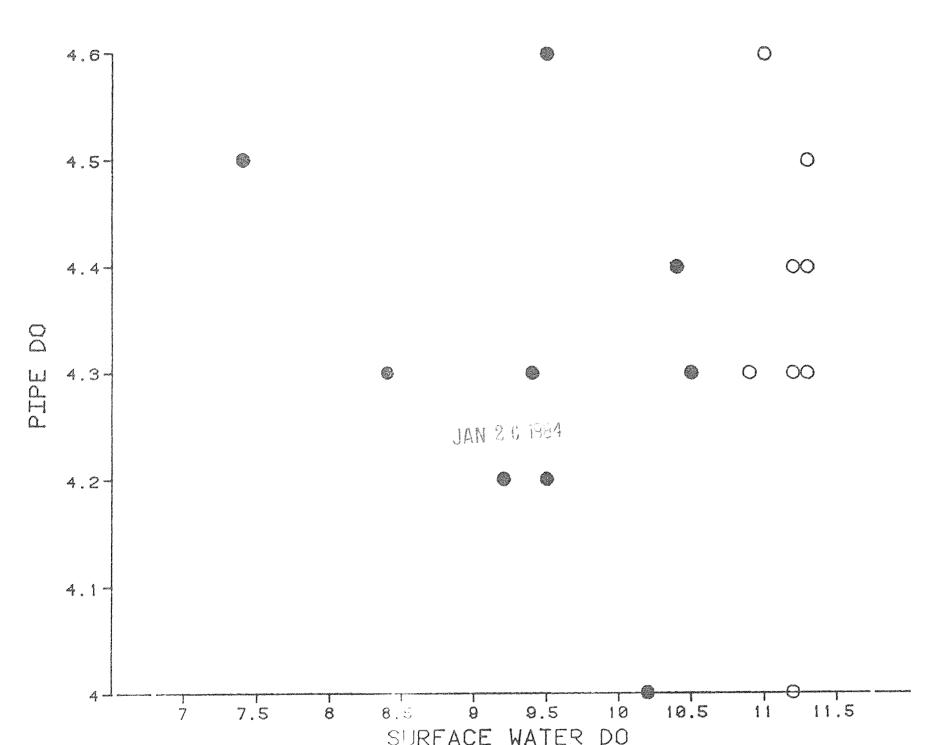
SLOUGH 21 LEFT BANK WATER TEMPERATURE



SLOUGH 21 RIGHT BANK WATER TEMPERATURE



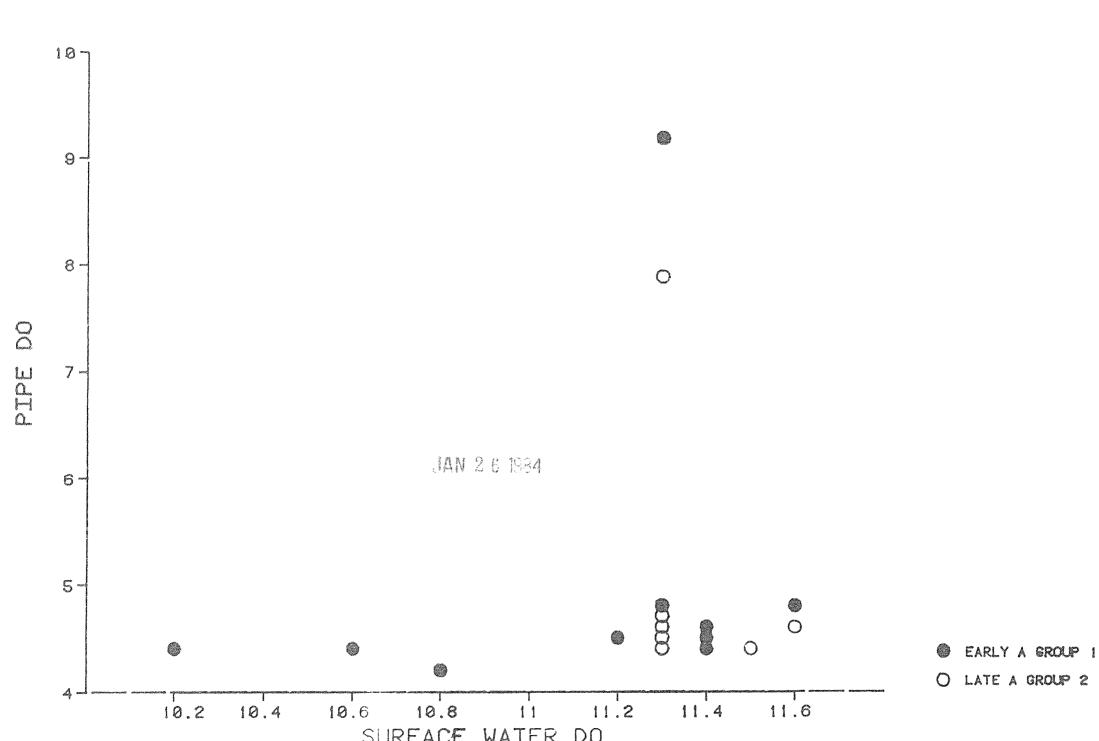
SLOUGH 8A LEFT BANK D.O.



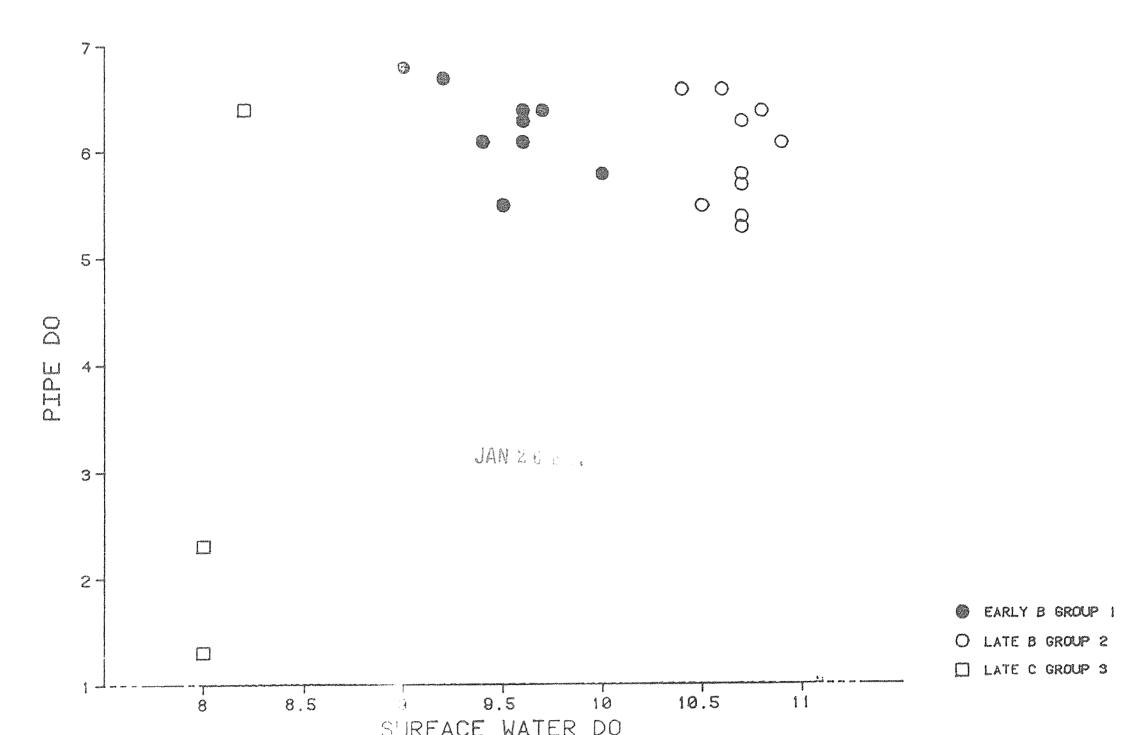
EARLY A GROUP I

O LATE A GROUP 2

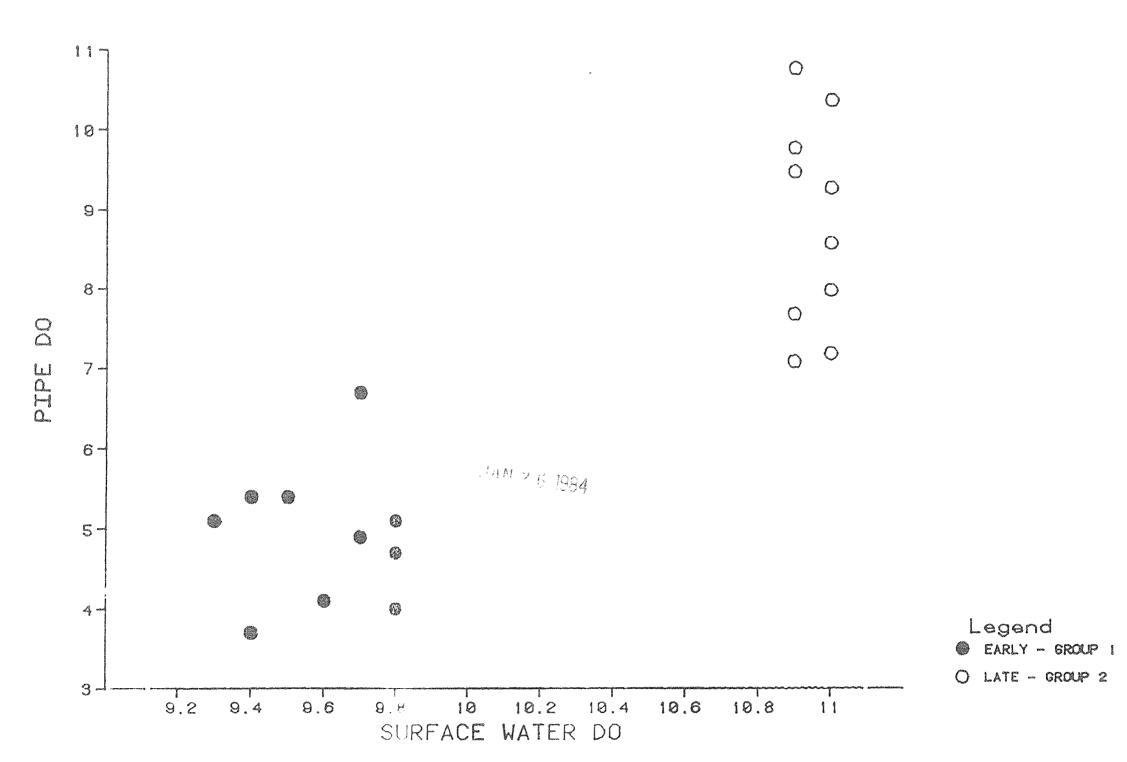




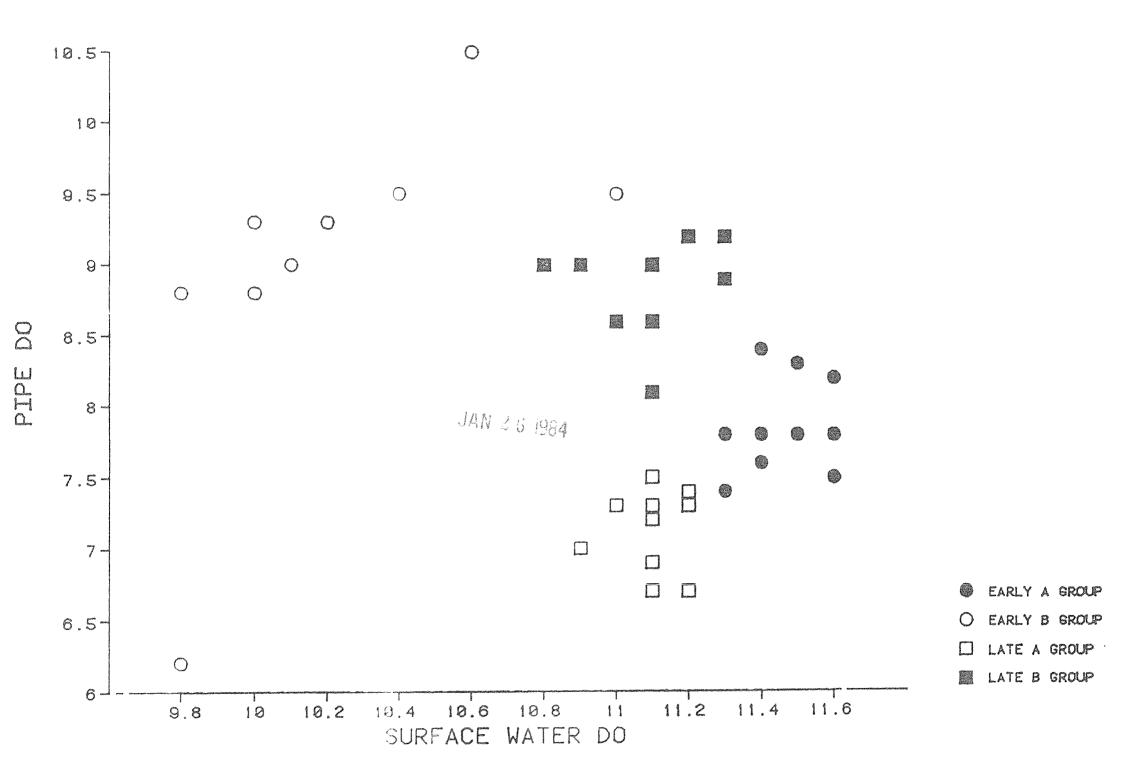
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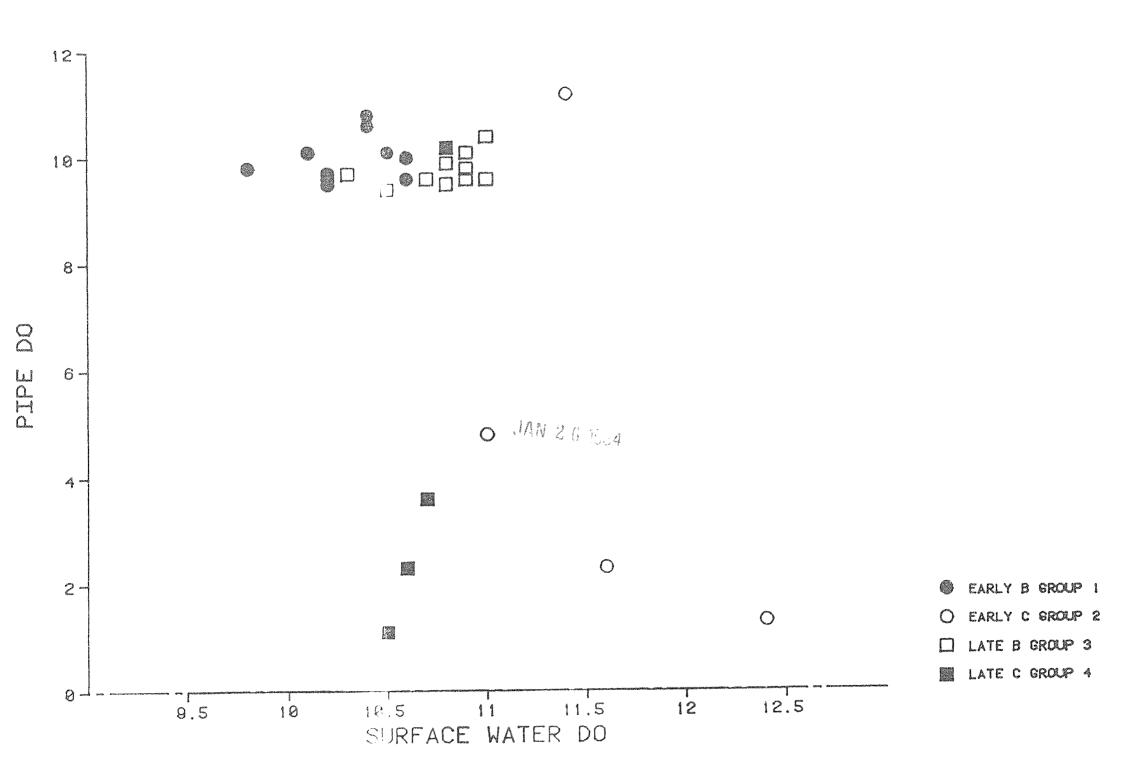
SLOUGH 9 RIGHT BANK D.O



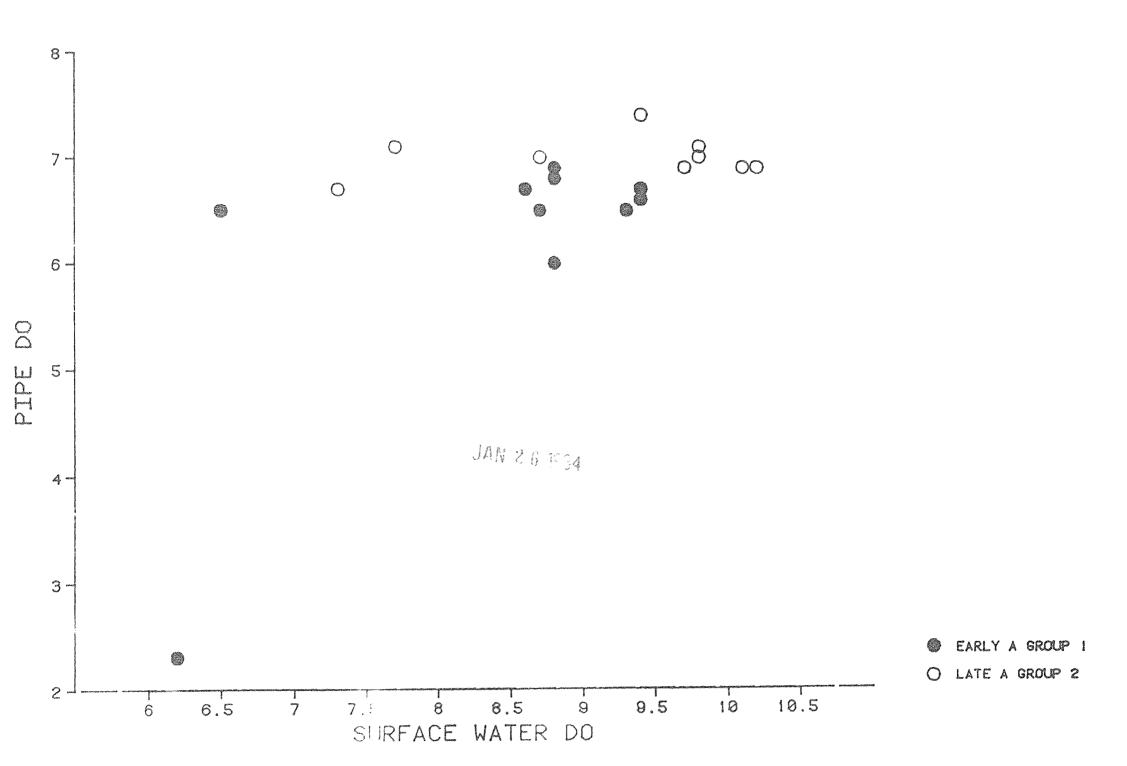
SLOUGH 11 LEFT BANK D.O.



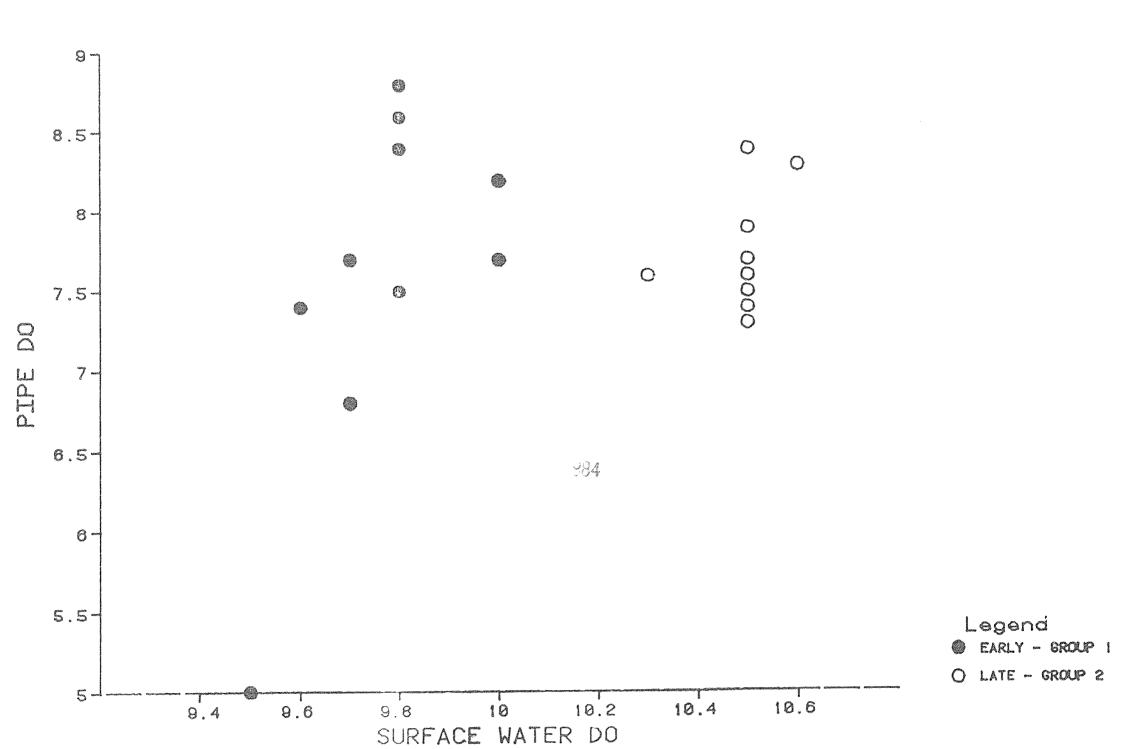
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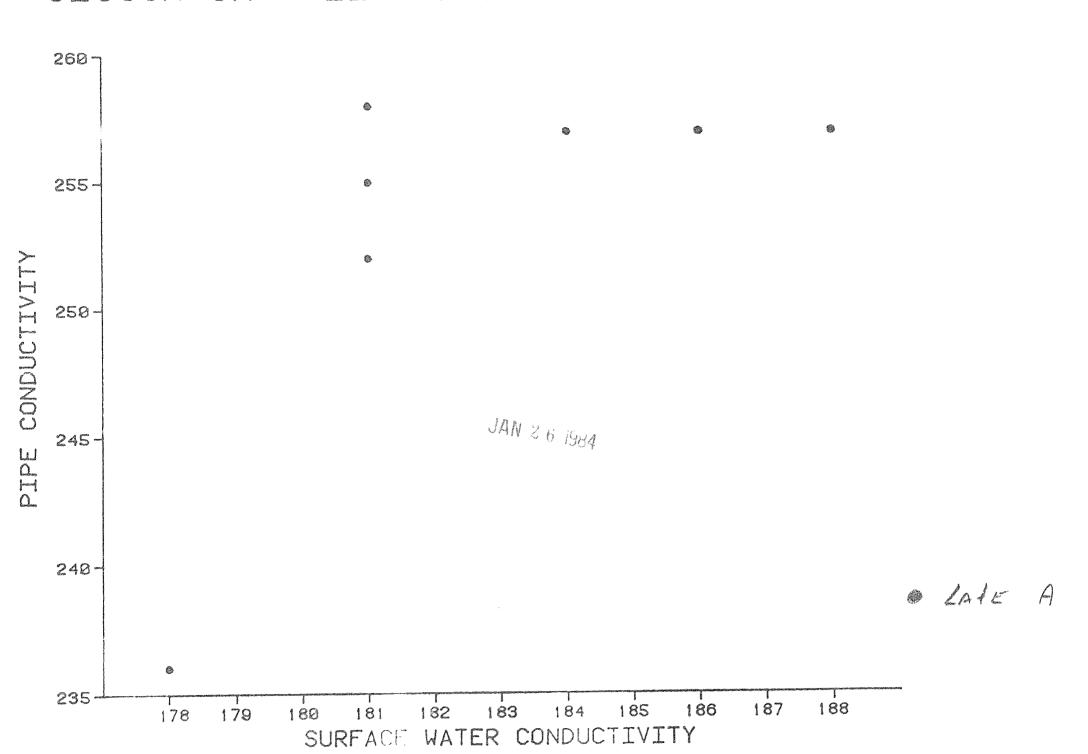
SLOUGH 21 LEFT BANK D.O.



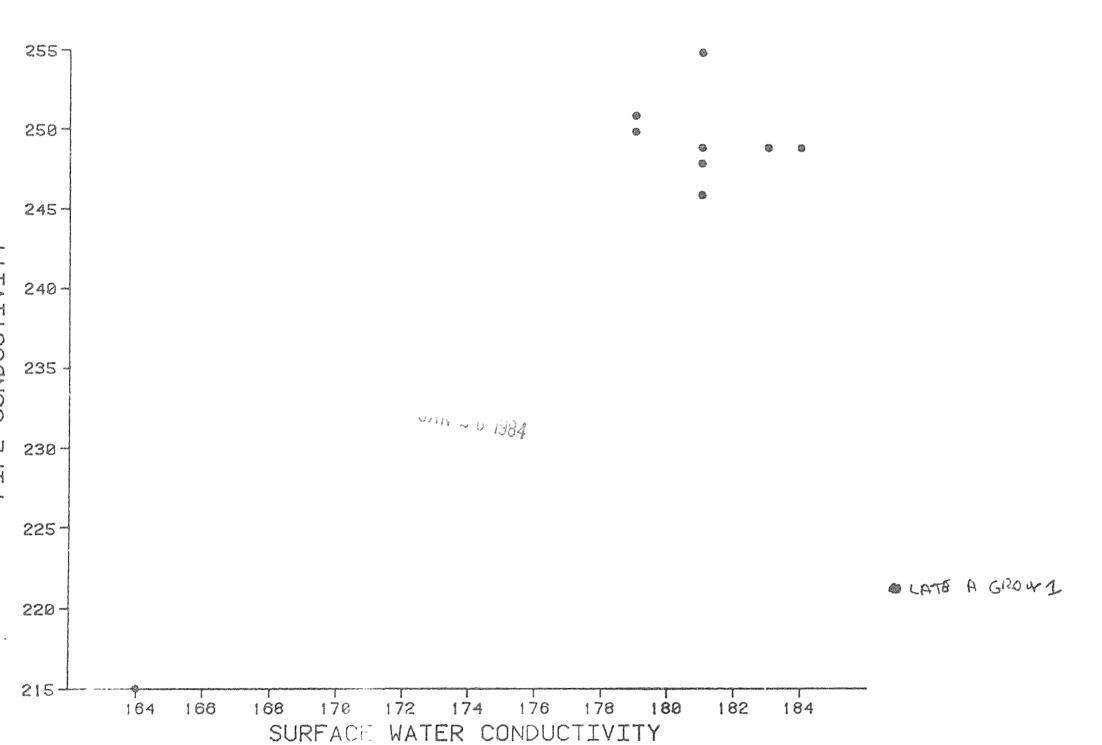
SLOUGH 21 RIGHT BANK D.O

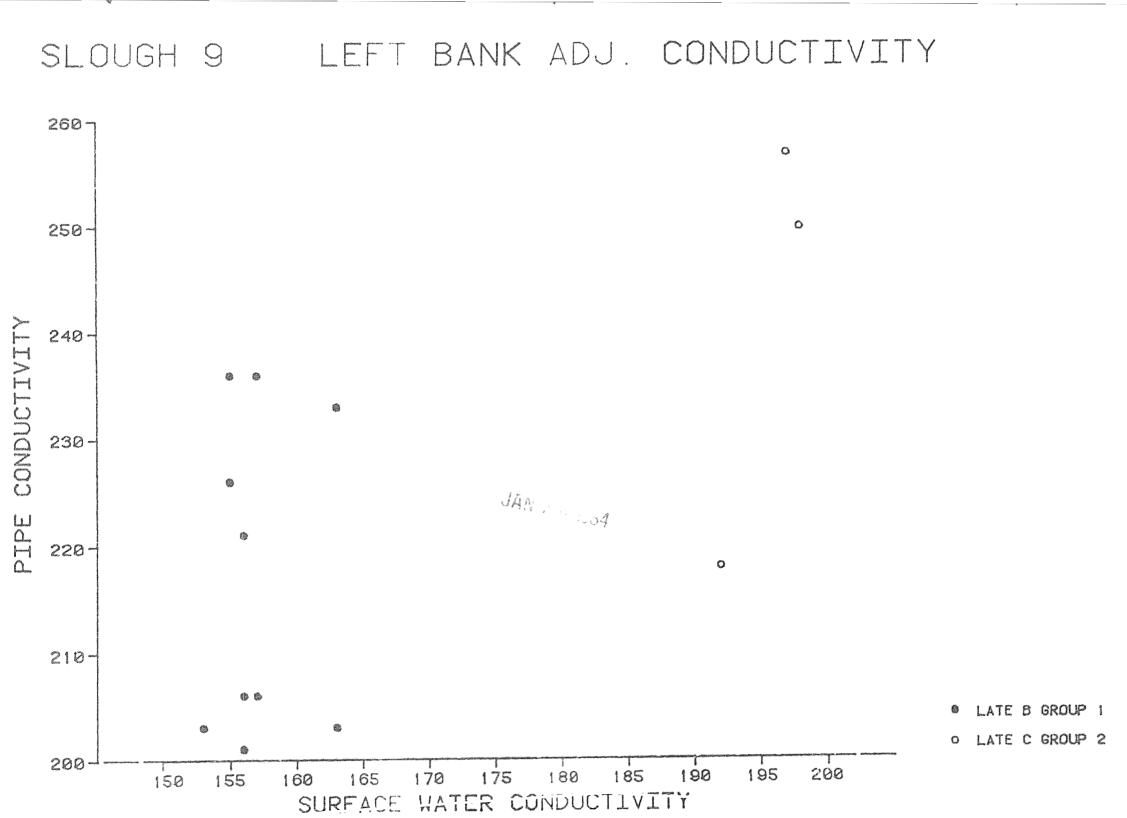


SLOUGH 8A LEF" BANK ADJ. CONDUCTIVITY

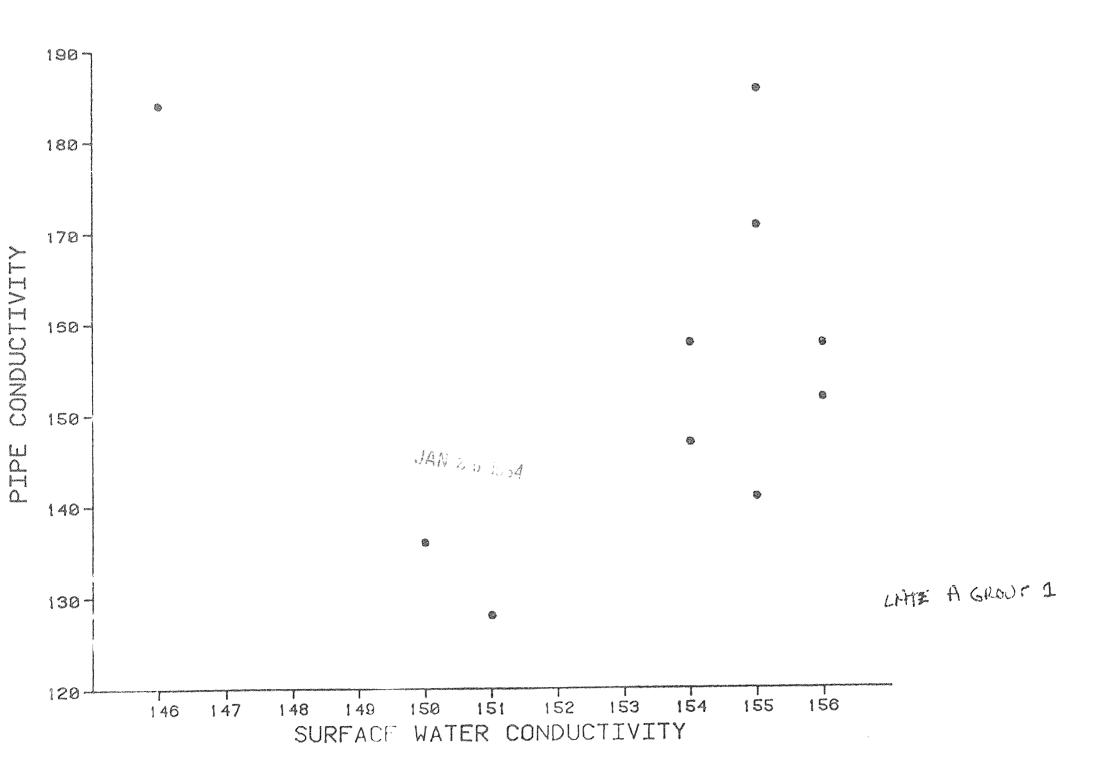


SLOUGH 8A REGHT BANK CONDUCTIVITY

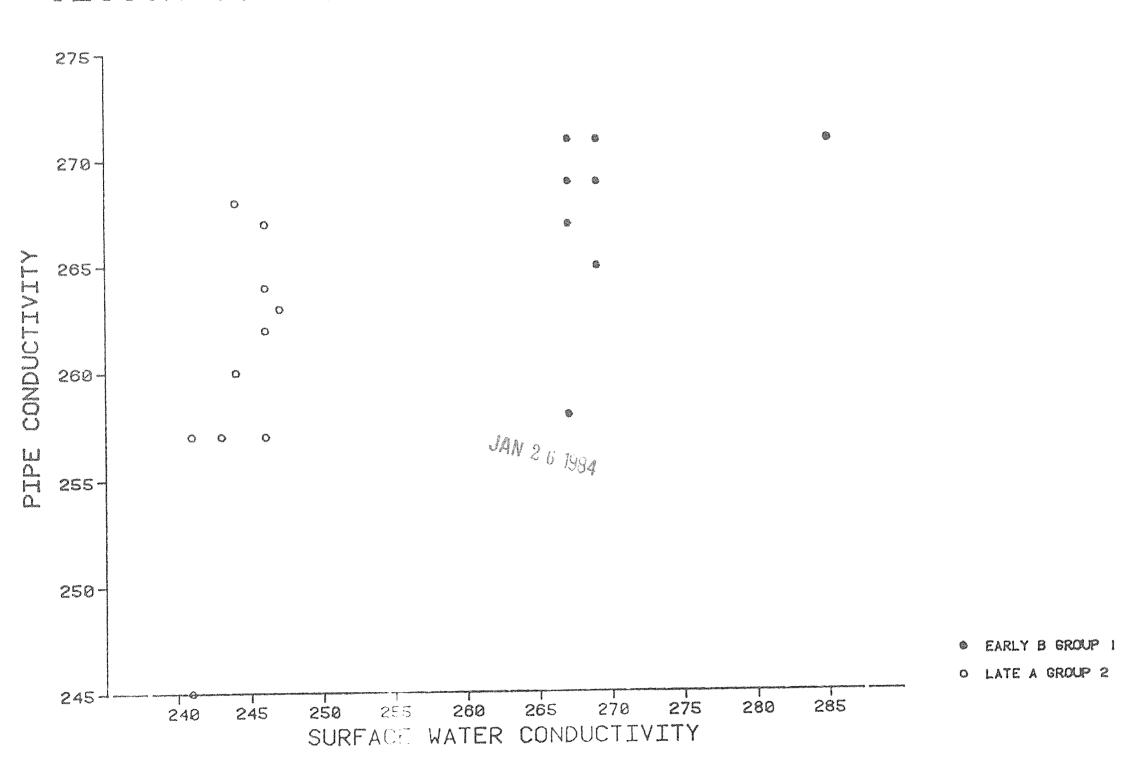




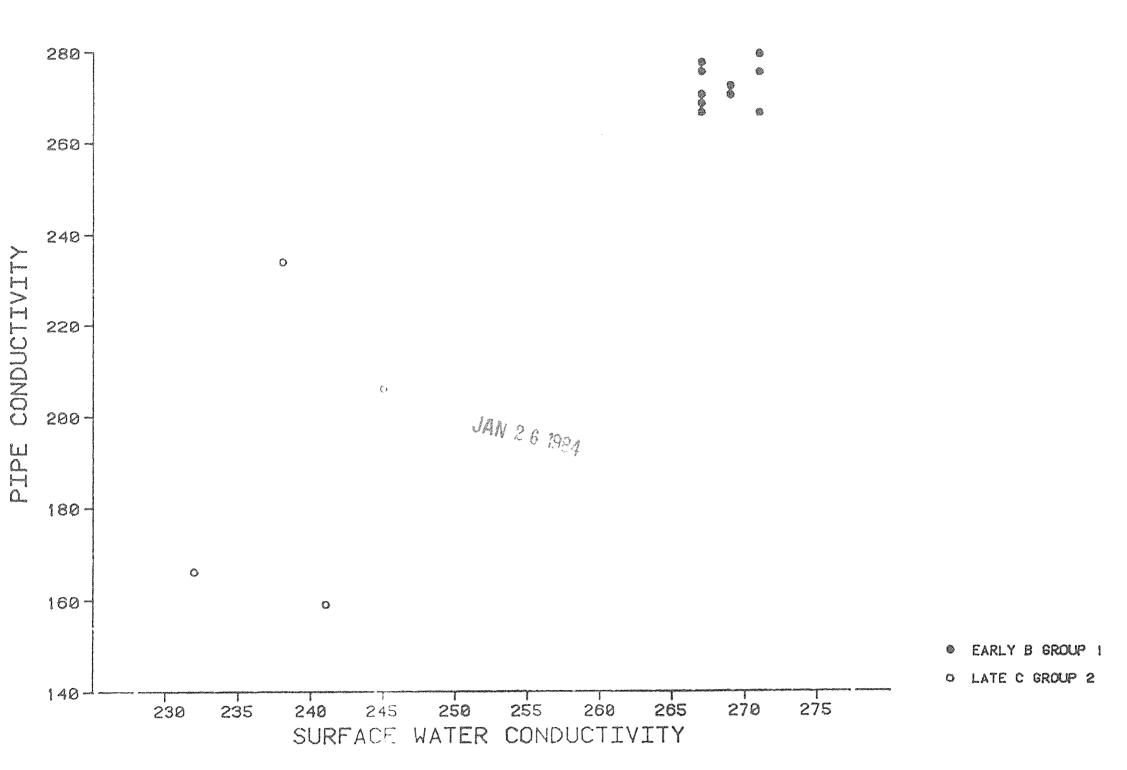
SLOUGH 9 RIGHT BANK CONDUCTIVITY



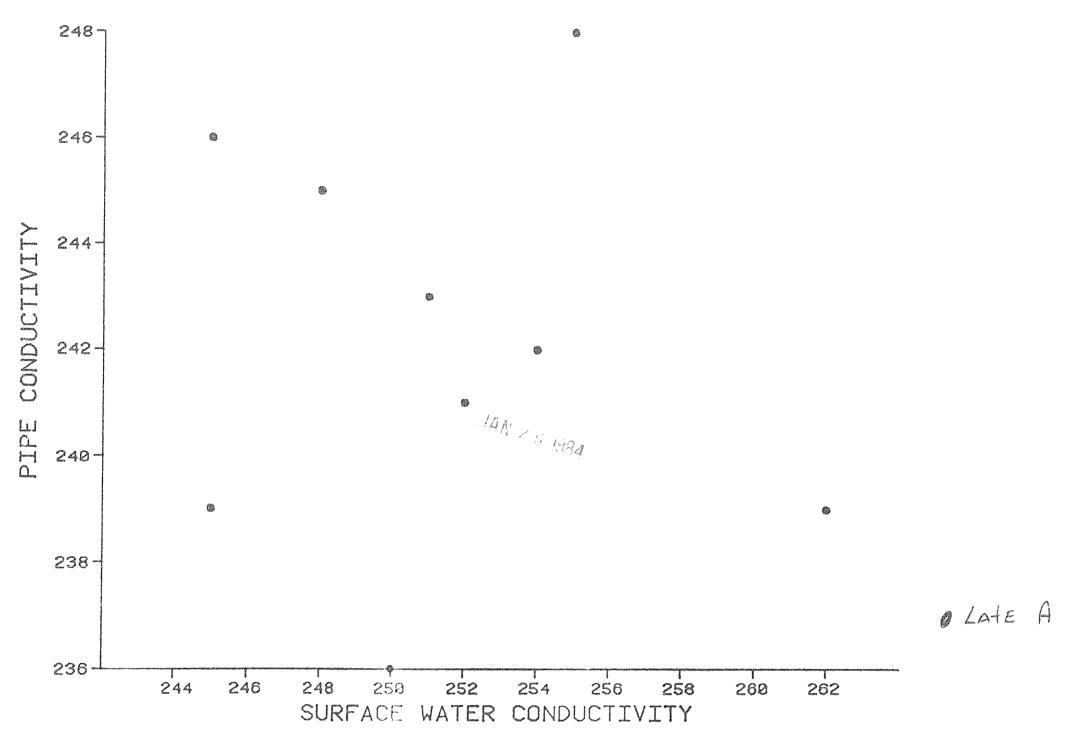
SLOUGH 11 LEFT BANK ADJ. CONDUCTIVITY



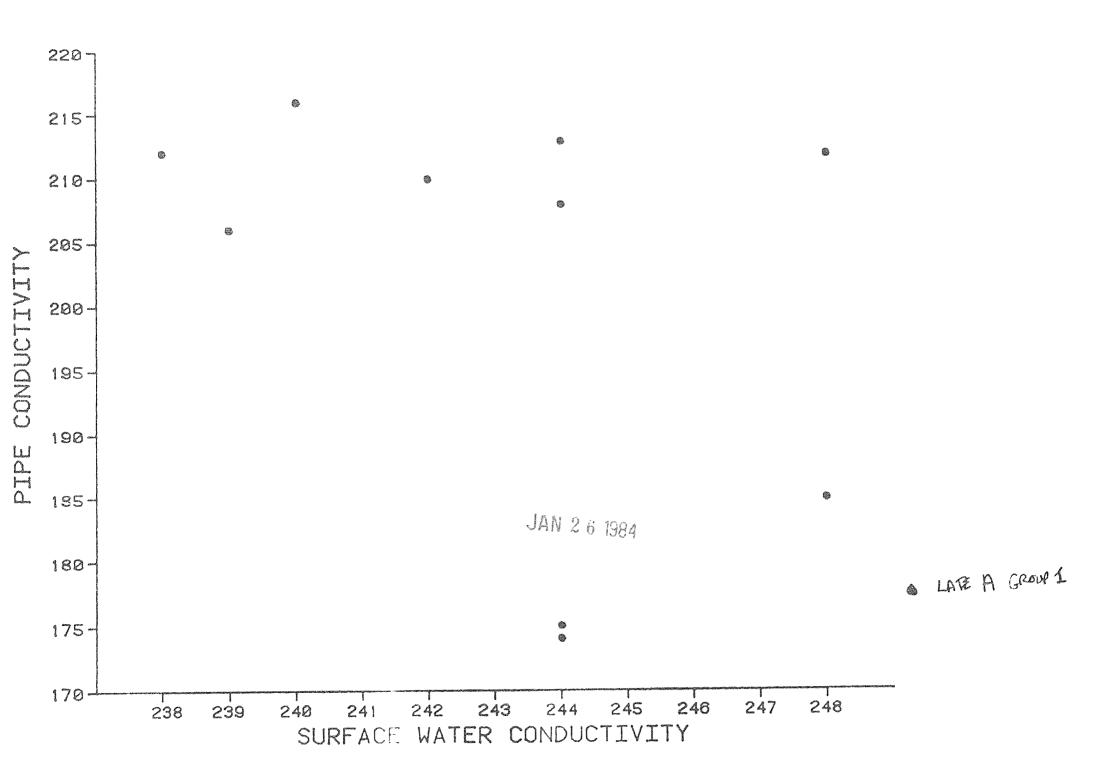
SLOUGH 11 RIGHT BANK CONDUCTIVITY



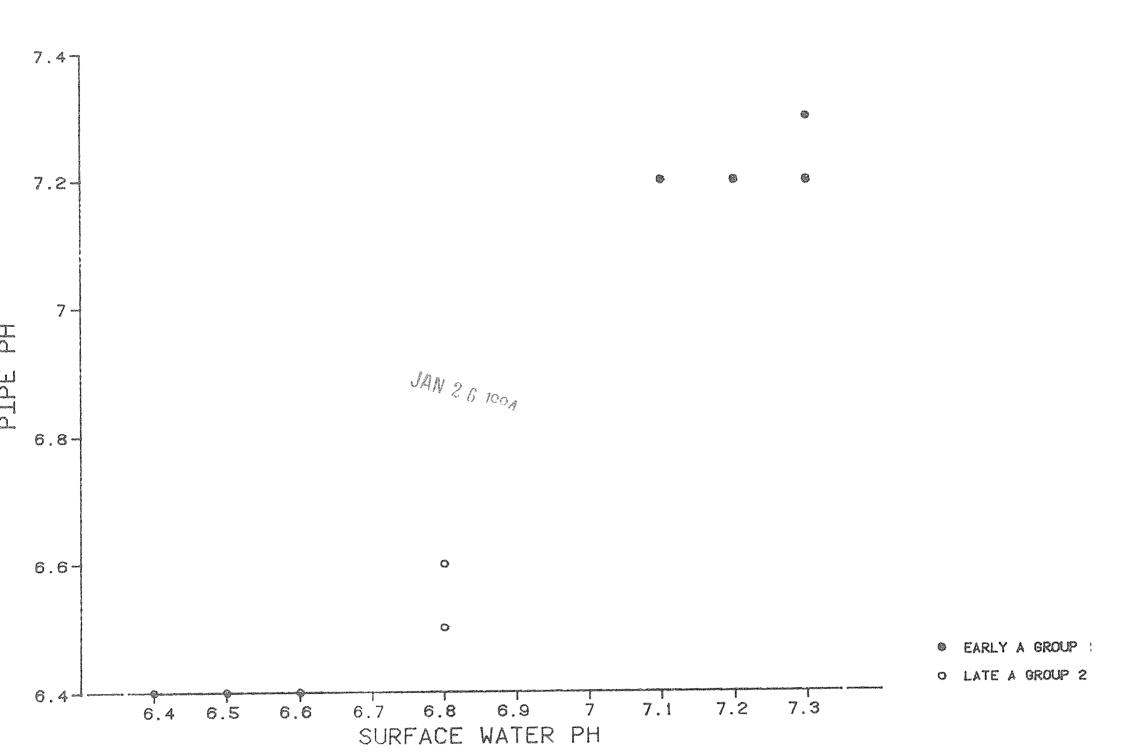
SLOUGH 21 LEFT BANK ADJ. CONDUCTIVITY



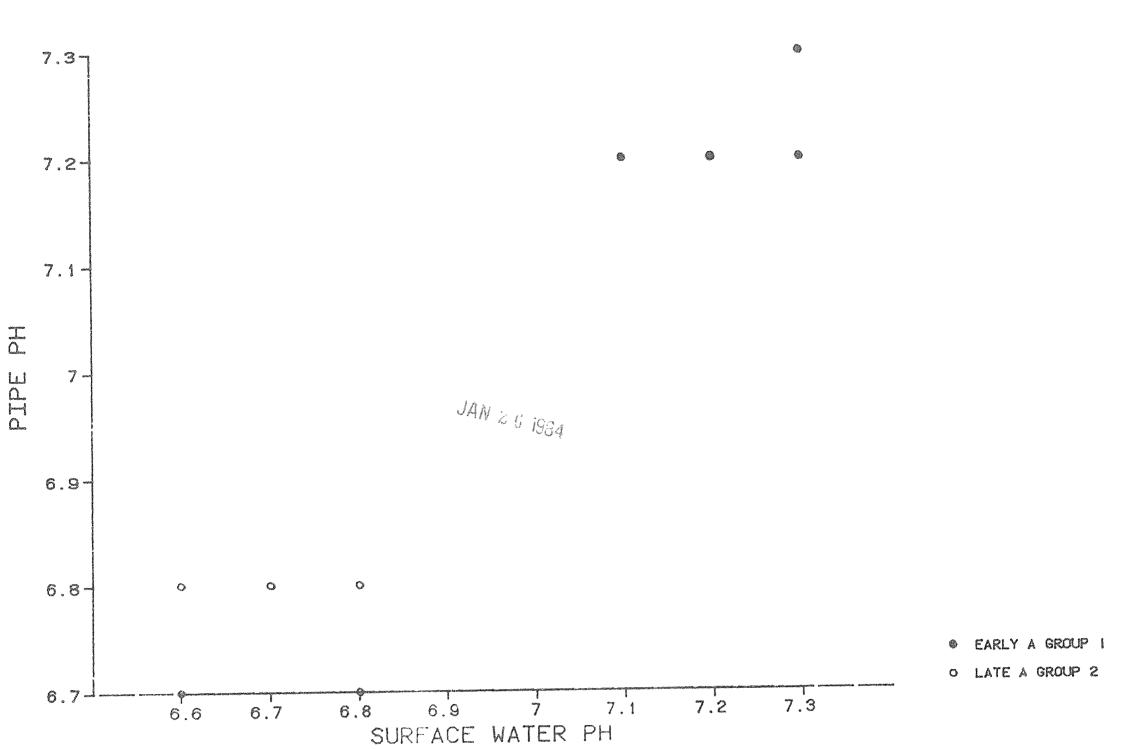
SLOUGH 21 RIGHT BANK CONDUCTIVITY



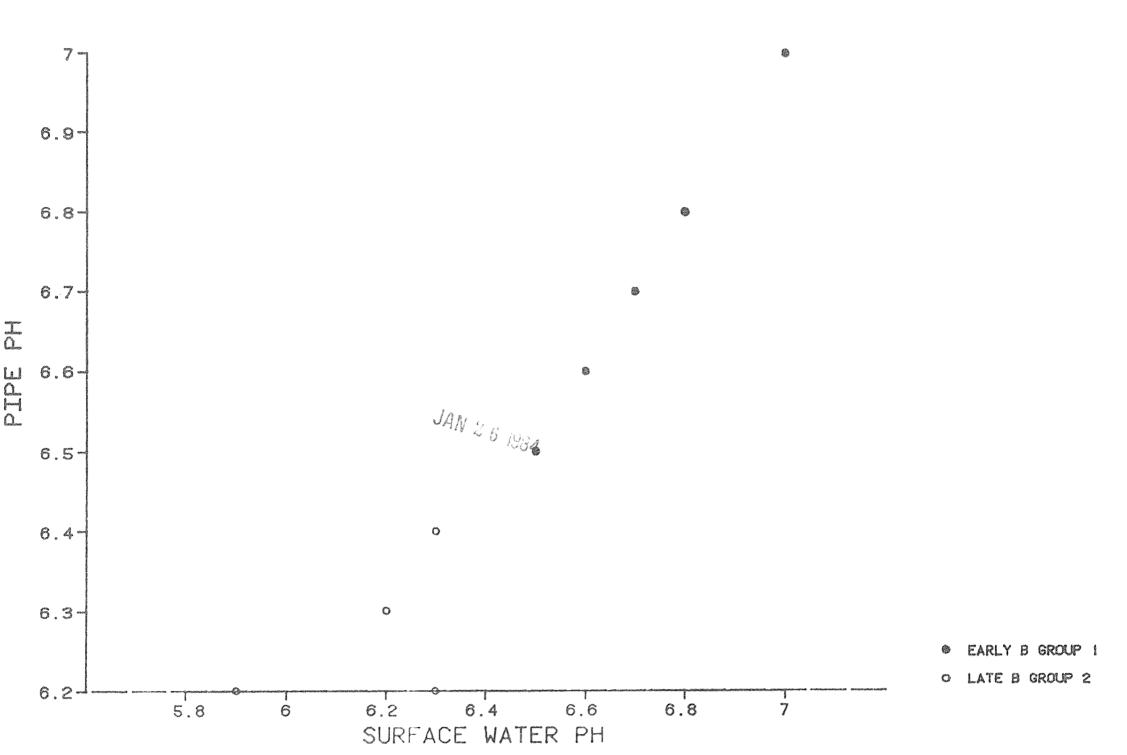
SLOUGH 8A LEFT BANK PH



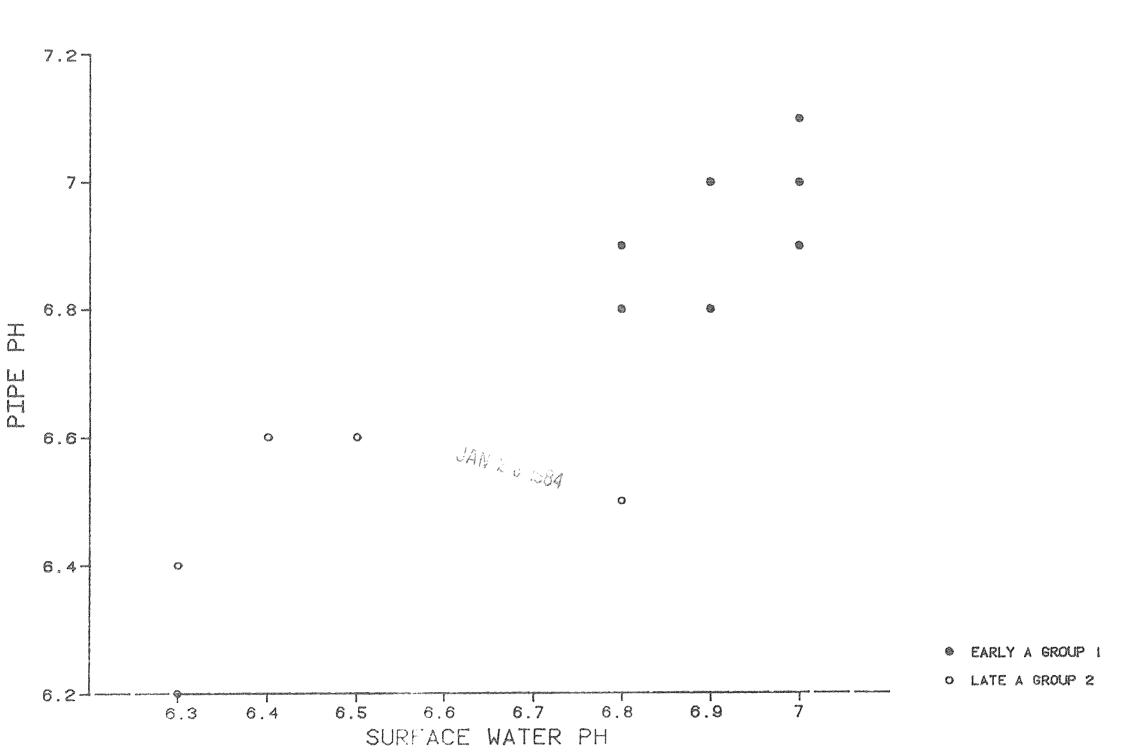
SLOUGH 8A RIGHT BANK PH



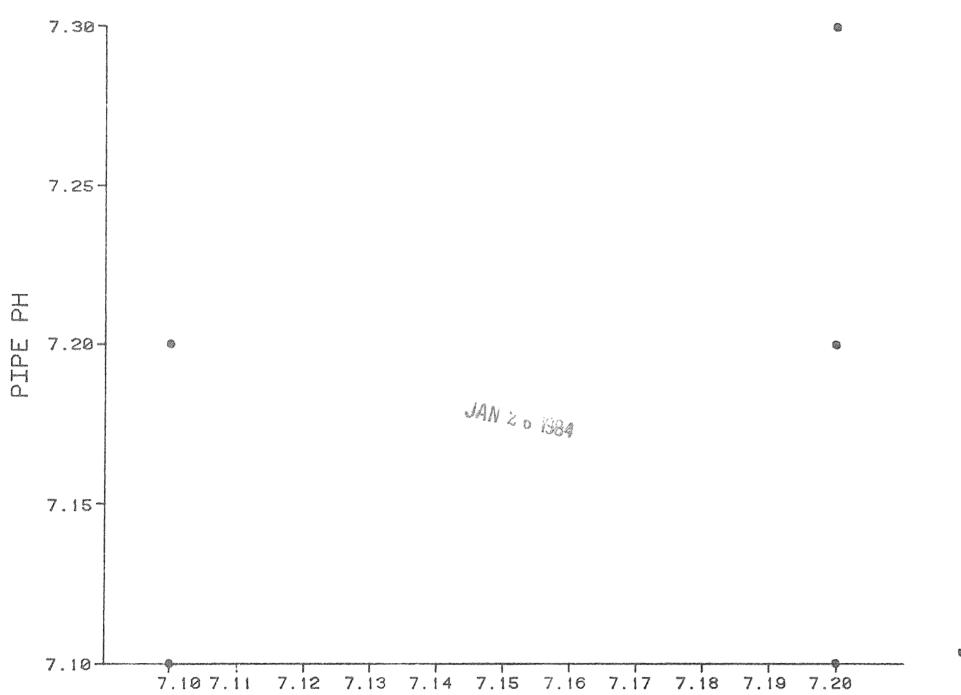
SLOUGH 9 LEFT BANK PH



SLOUGH 9 RIGHT BANK PH

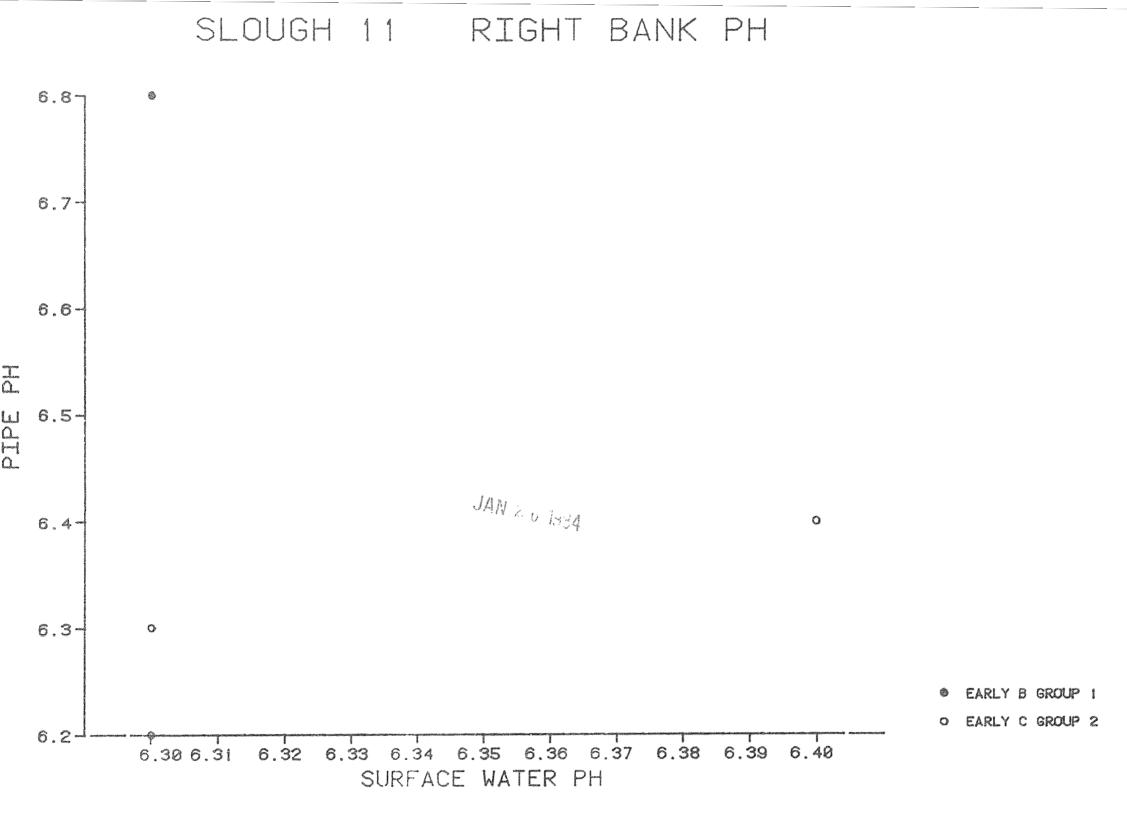


SLOUGH 11 LEFT BANK PH

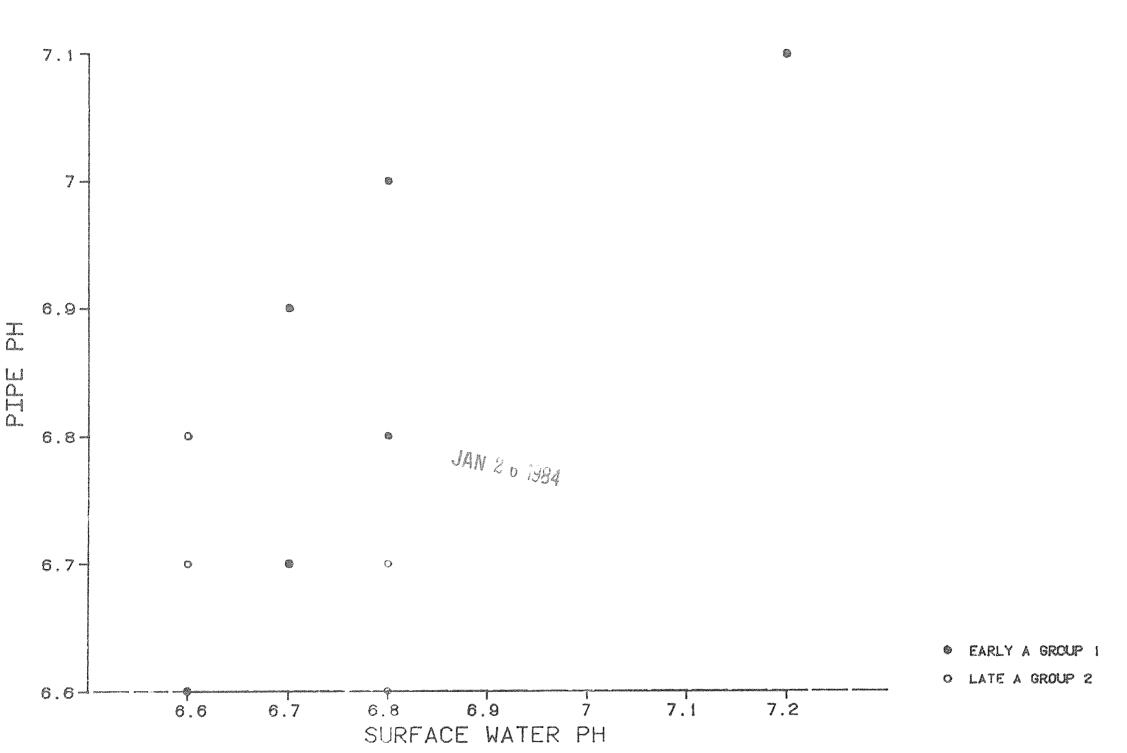


SURFACE WATER PH

EARLY A GROUP



SLOUGH 21 LEFT BANK PH



SLOUGH 21 RIGHT BANK PH

