

THE STATE OF THE LAKE

This document is the most recent summary of water quality and lake level information pertaining to Pleasant Lake. It is compiled and maintained by the Pleasant Lake Management District.

June, 2009

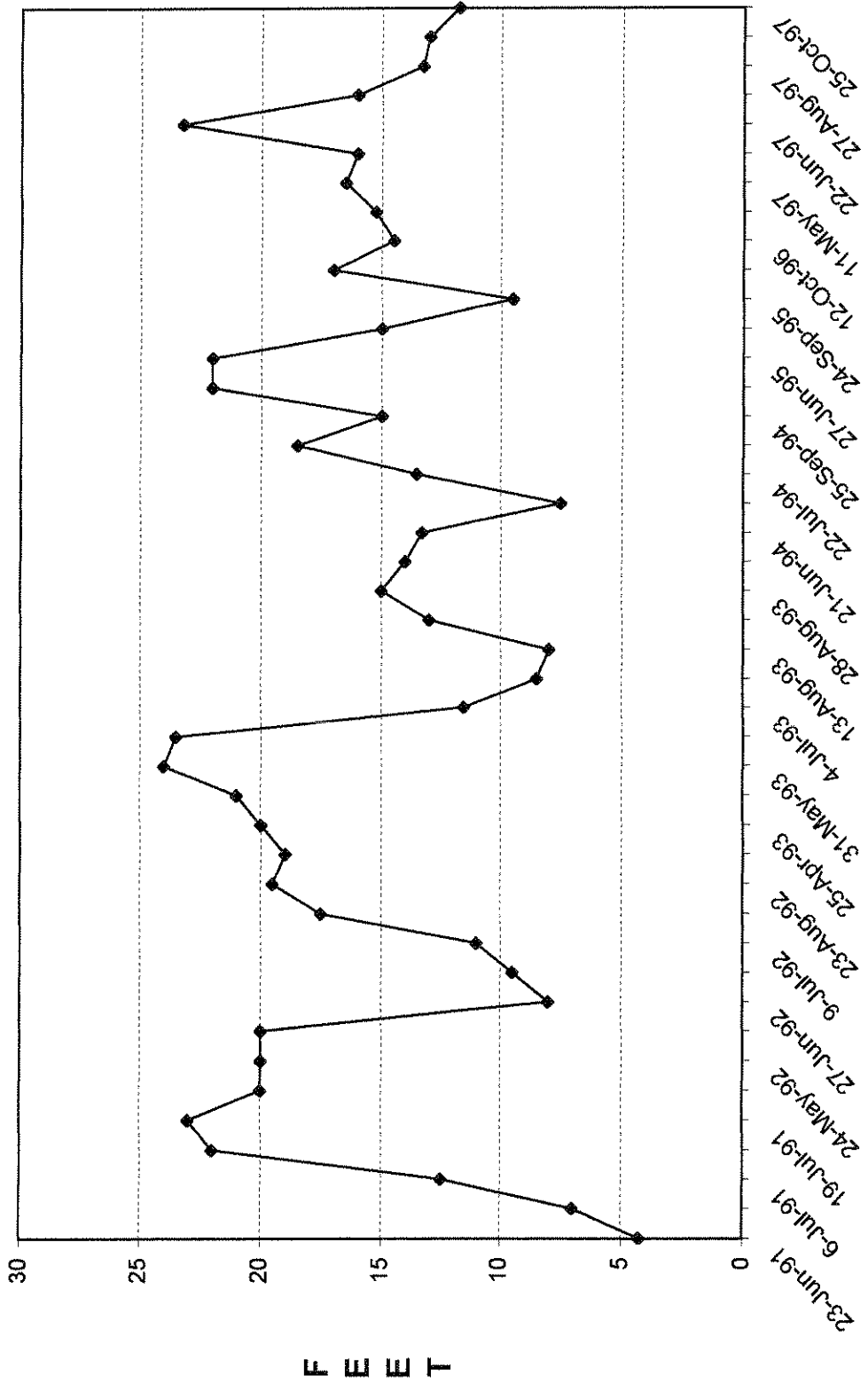
THE TROPHIC STATE INDEX (TSI)

The Trophic State Index is an indicator of water quality. It is a way to measure the "health" of a lake. An index number is calculated from Secchi depth readings because water clarity indicates how much algal growth is occurring in a lake. An index number is also calculated from chlorophyll A (the green pigment in algae) and from phosphorus, the nutrient that fuels algal growth. The attached charts show the historical data we have on Pleasant Lake. We will continue to record this data and publish the results here. Along with it we will try to provide helpful hints and useful information that will help to preserve our beautiful lake. The ranges and definitions are as follows:

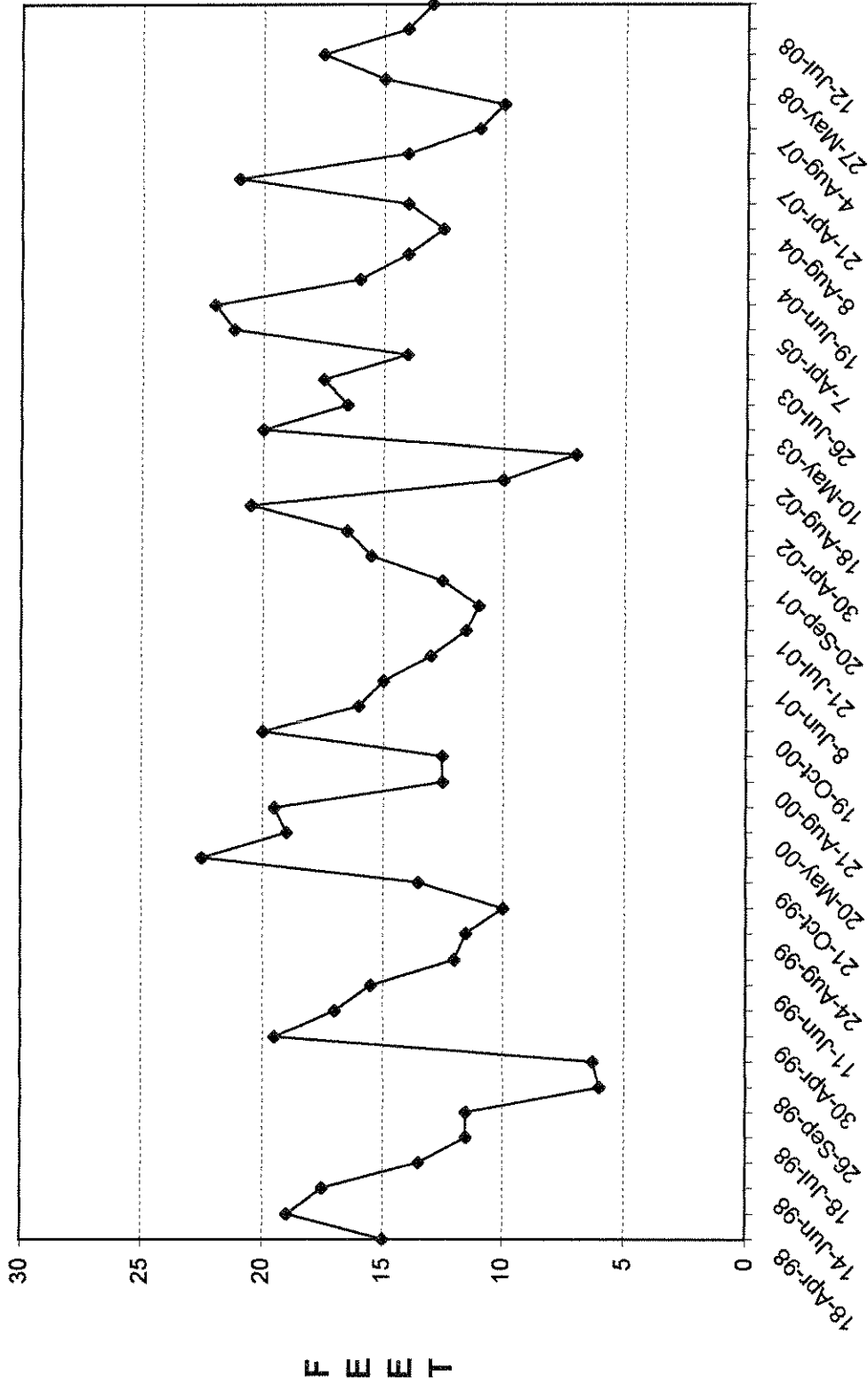
TERM	TSI RANGE	DEFINITION
Oligotrophic	1 - 39	Generally clear, deep and free of weeds or algae blooms. Though beautiful, they are low in nutrients and do not support large fish populations. (from a clarity standpoint, this is most desirable)
Mesotrophic	40 - 50	Moderately fertile. Reasonable clarity and plant growth. (this range is OK)
Eutrophic	51 - 70	Abundant plant growth and algae. Low water clarity. (not where we want to be!)
Hyper-Eutrophic	71 - 100	Over abundance of plant growth and algae. Later stages of the lake lifecycle. (are we sampling the lake or your septic system?)

NOTE: In looking at the TSI graphs remember that the lower the reading on the graph, the better.
Just like your golf score! The lower the better!

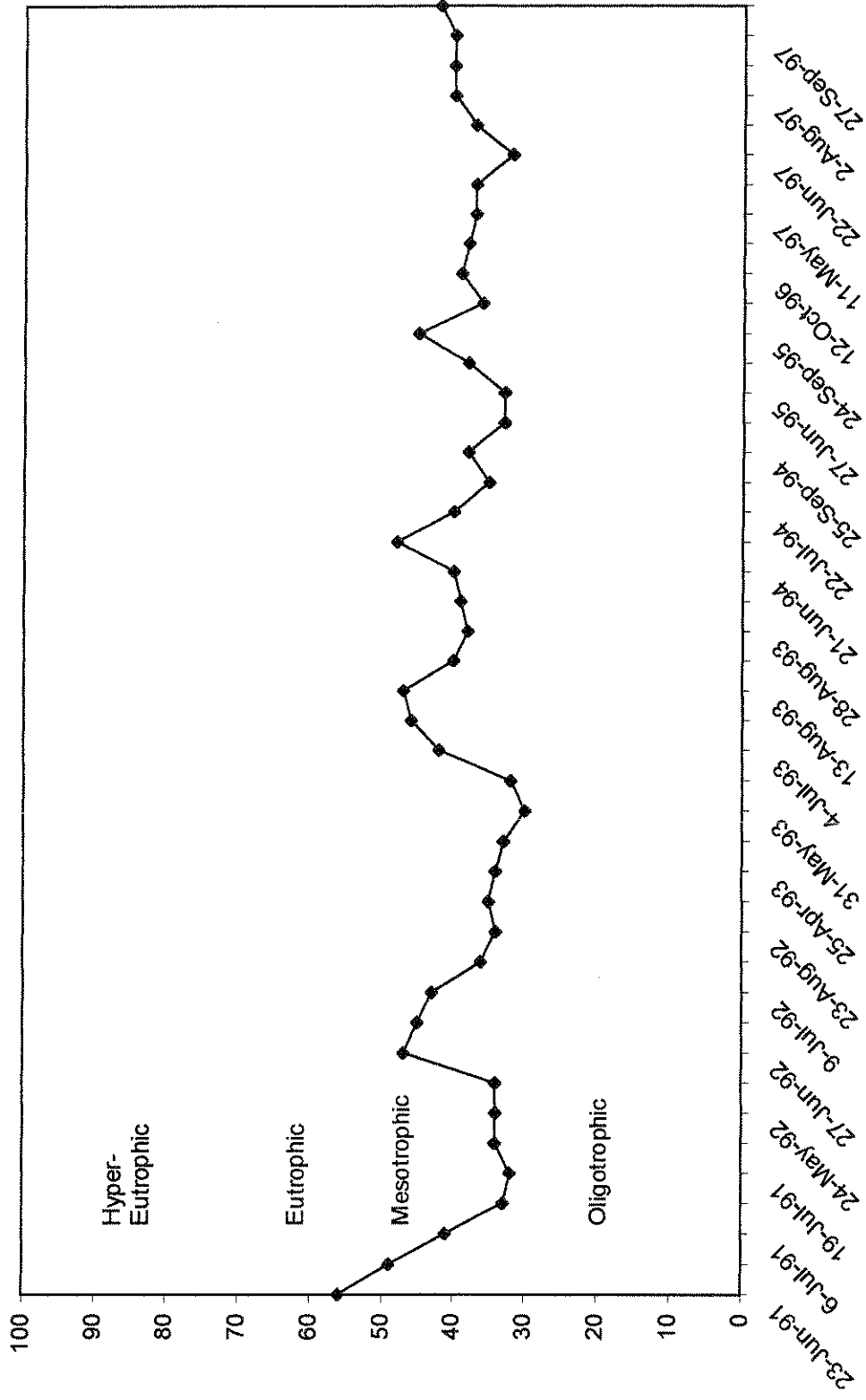
SECCHI DISK READINGS - PAGE ONE



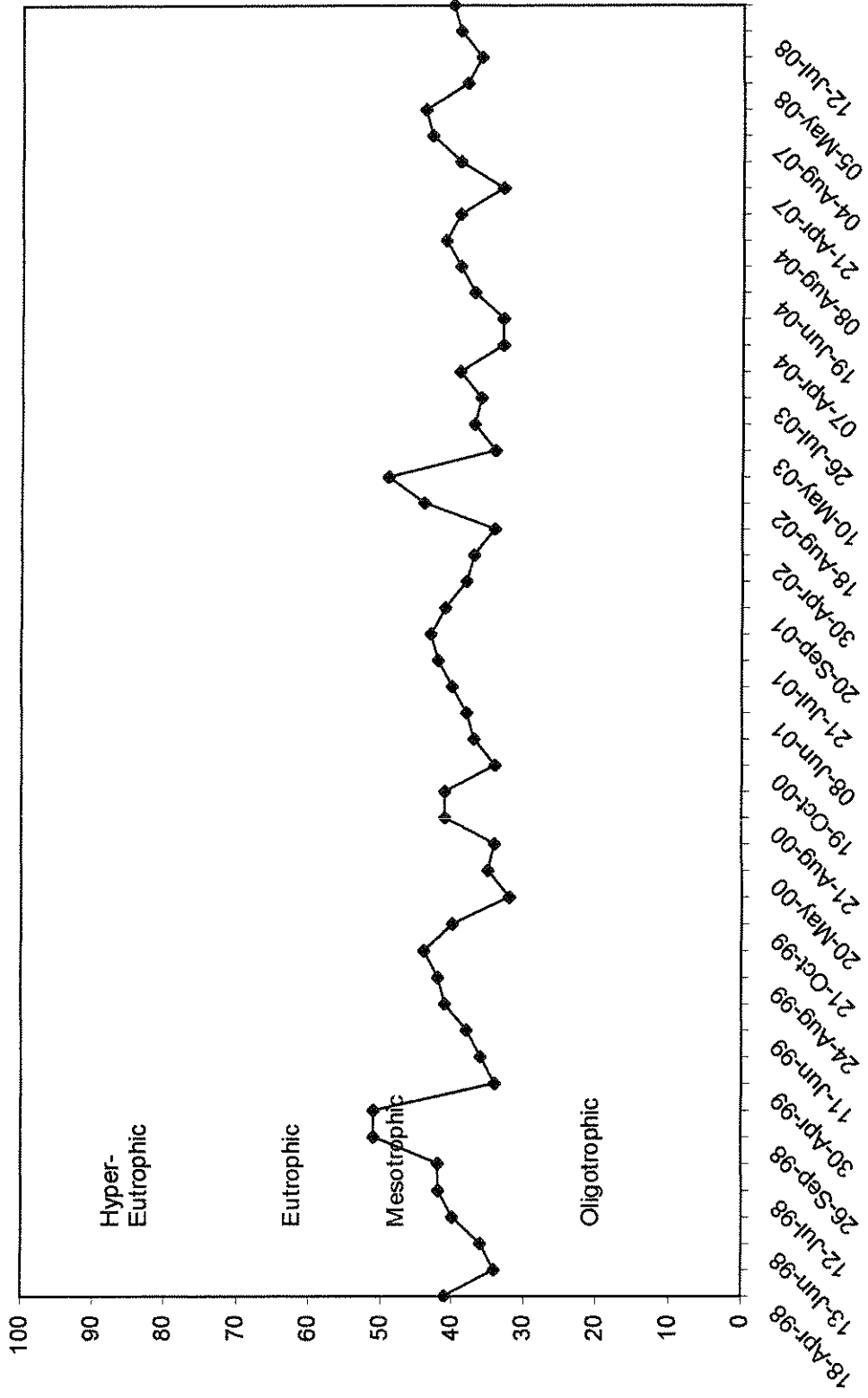
SECCHI DISK READINGS - PAGE TWO



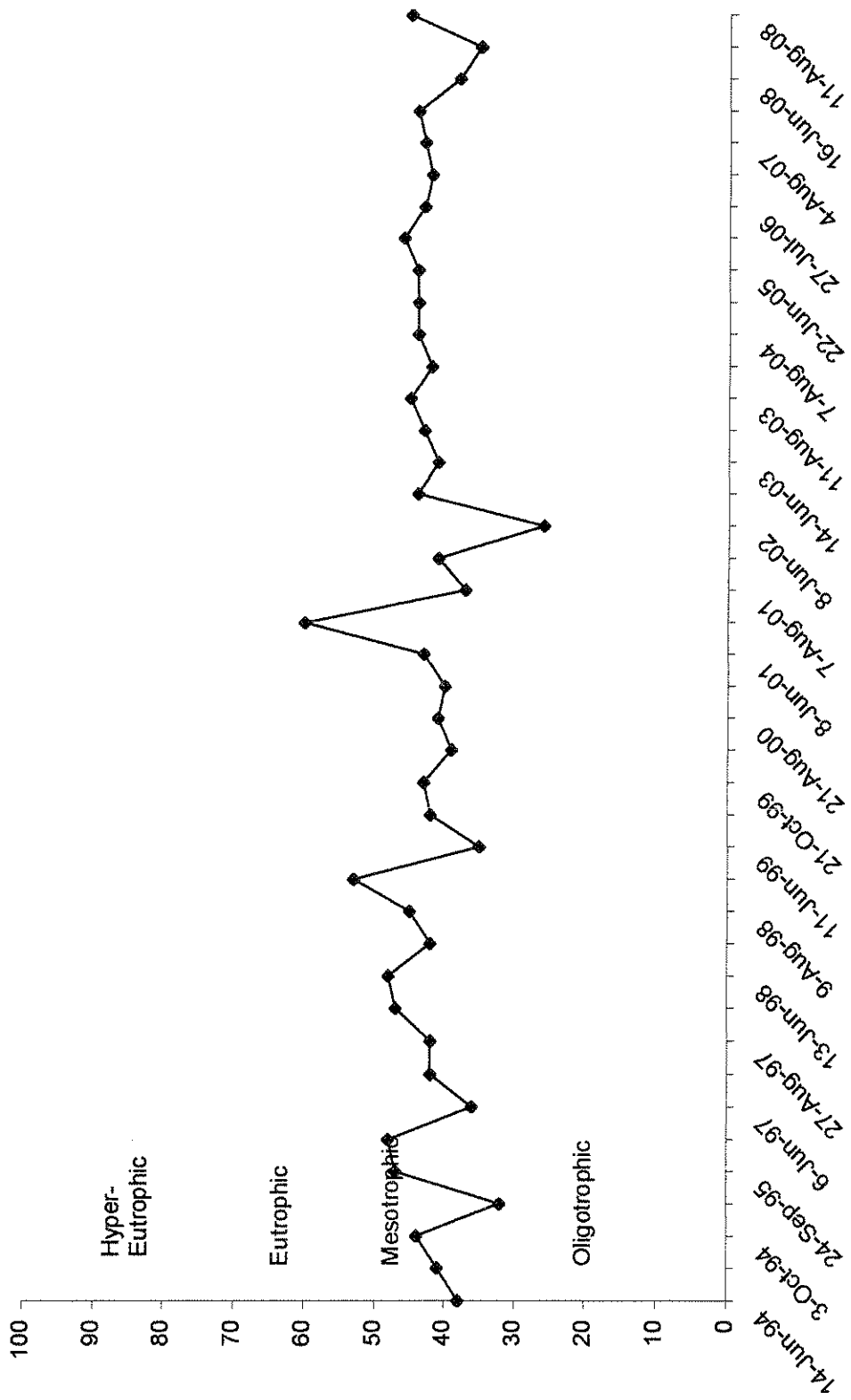
SECCHI DISK TSI - PAGE ONE



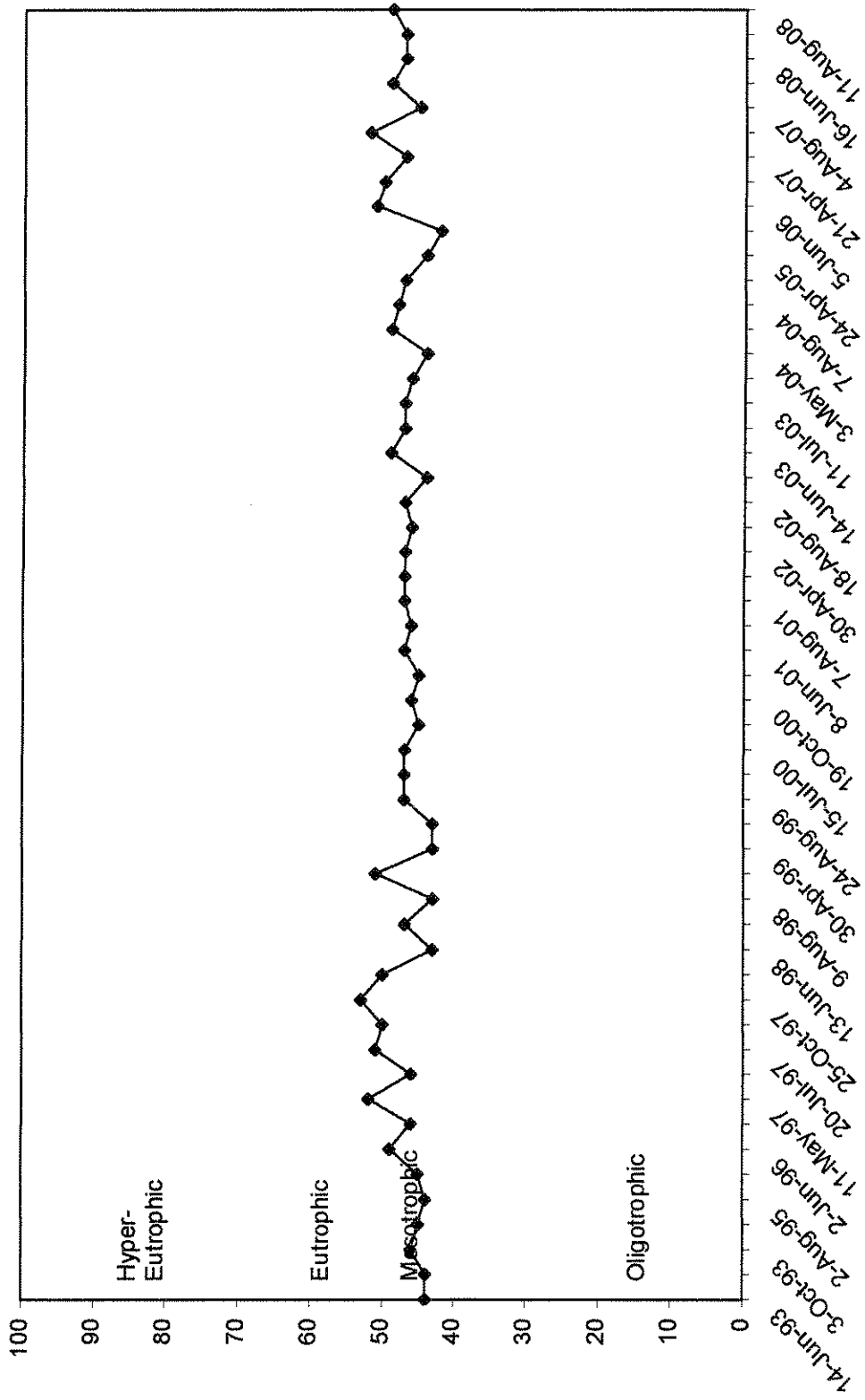
SECCHI DISK TSI - PAGE TWO



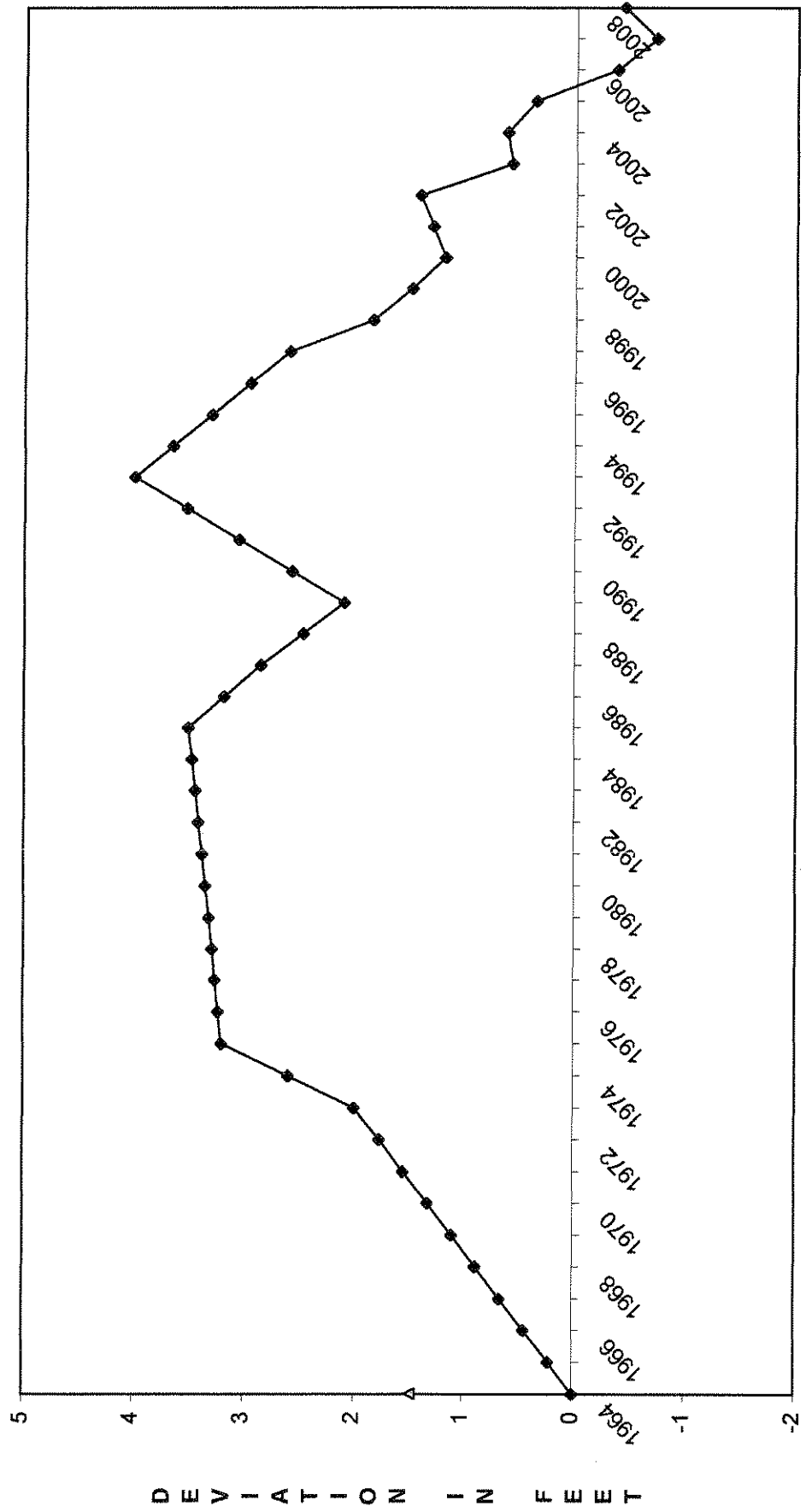
CHLOROPHYLL TSI



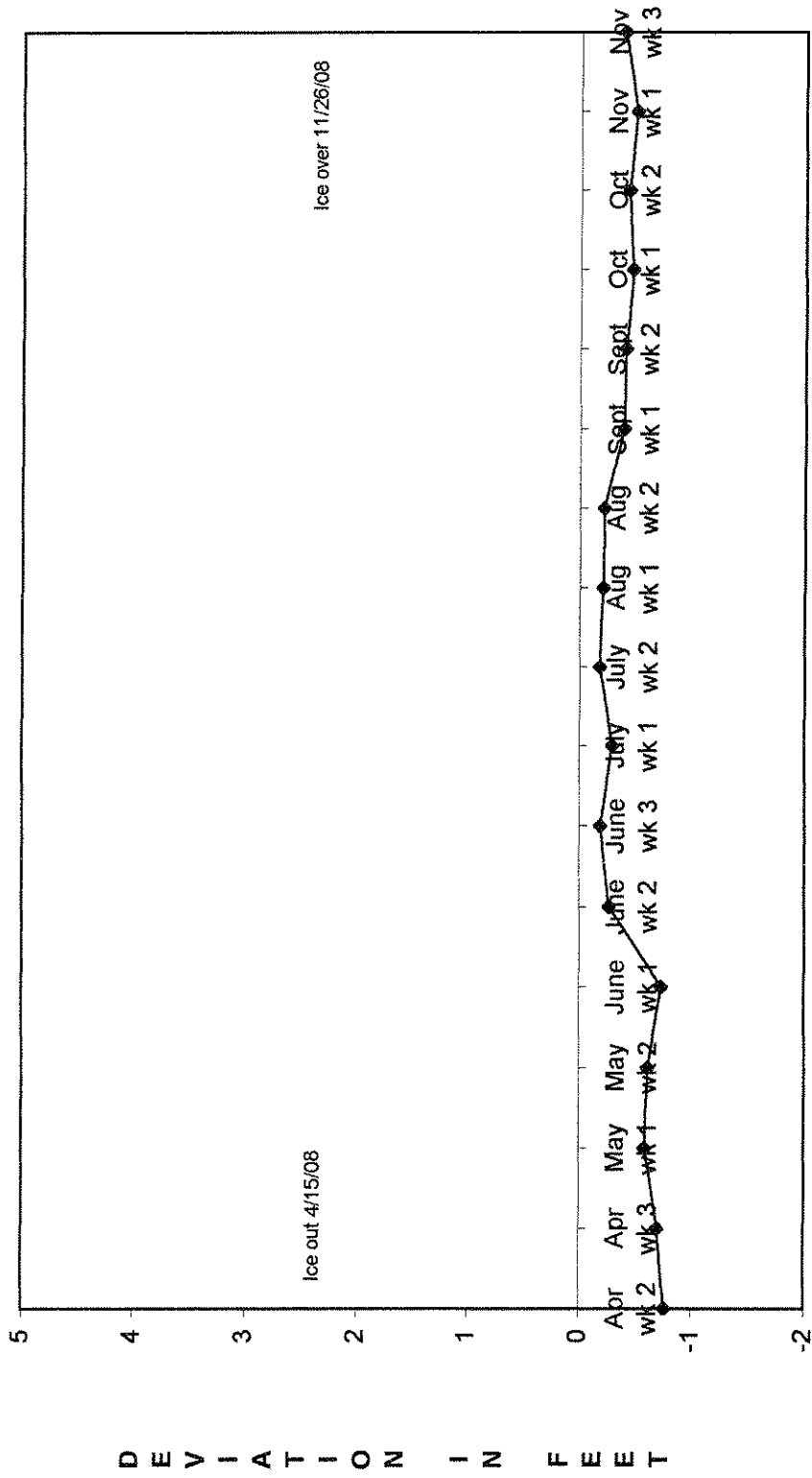
PHOSPHORUS TSI



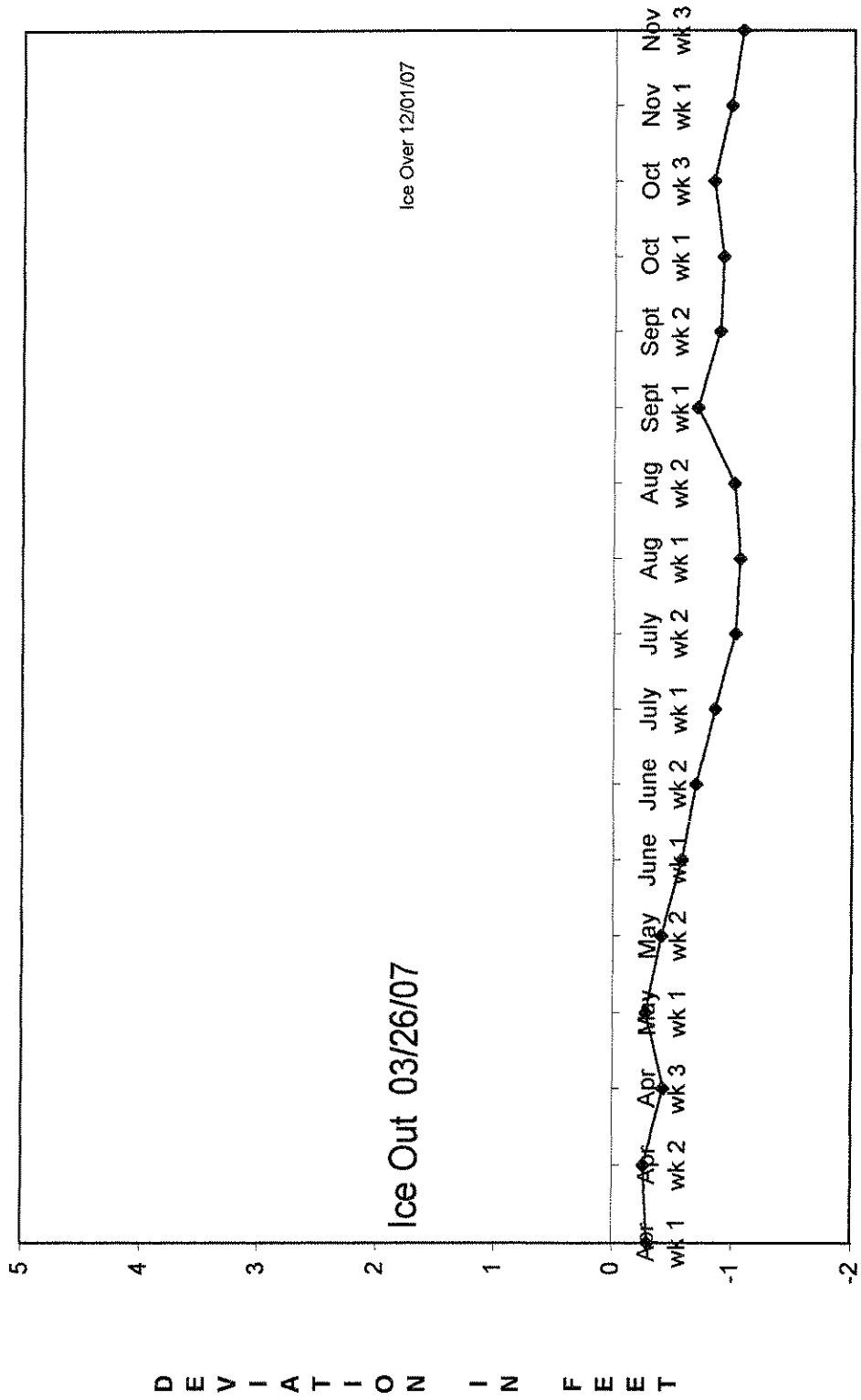
PLEASANT LAKE AVERAGE LEVEL - 1964 BASE YEAR



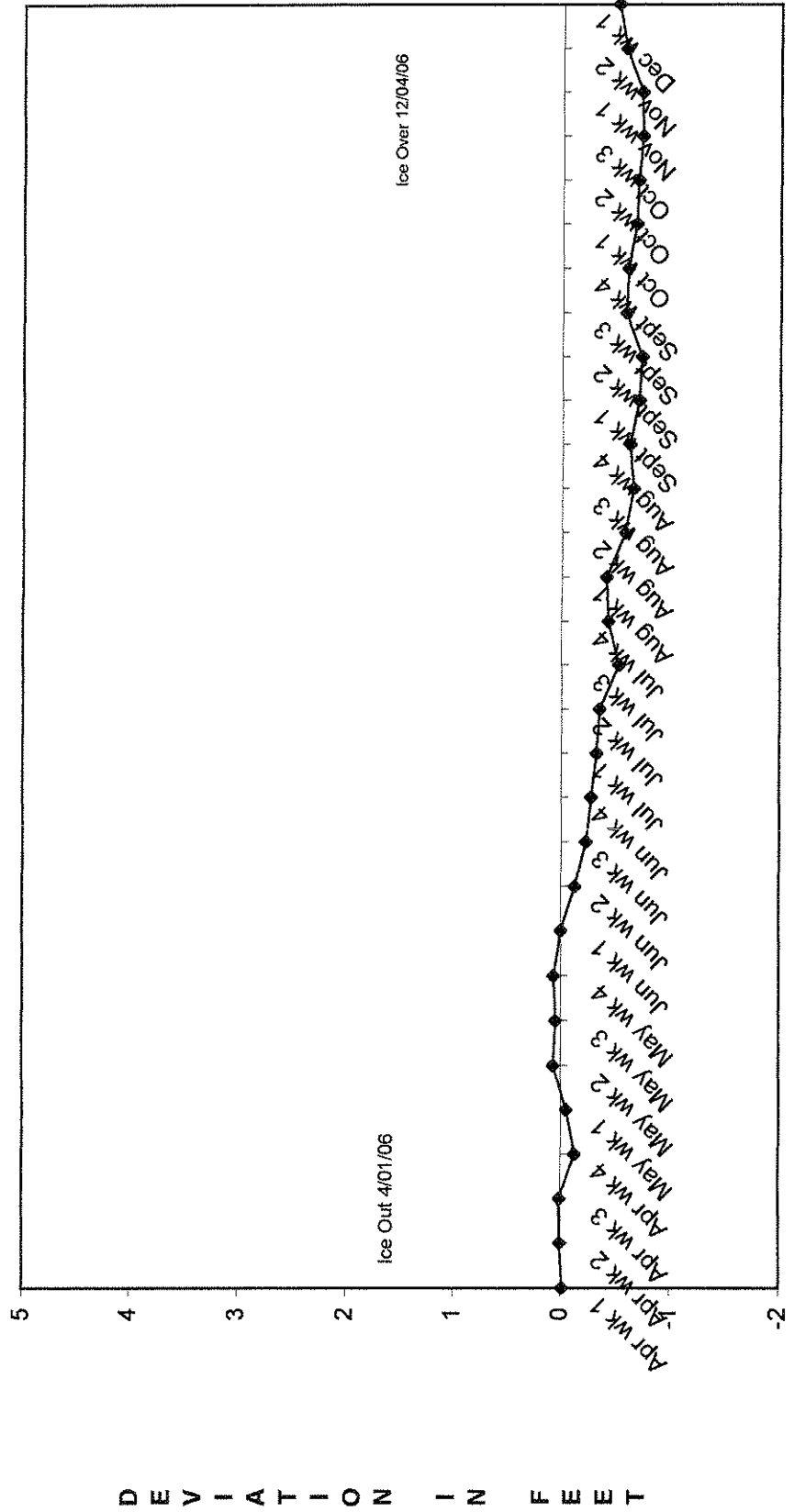
2008 PLEASANT LAKE LEVEL - 1964 BASE YEAR



2007 PLEASANT LAKE LEVEL - 1964 BASE YEAR

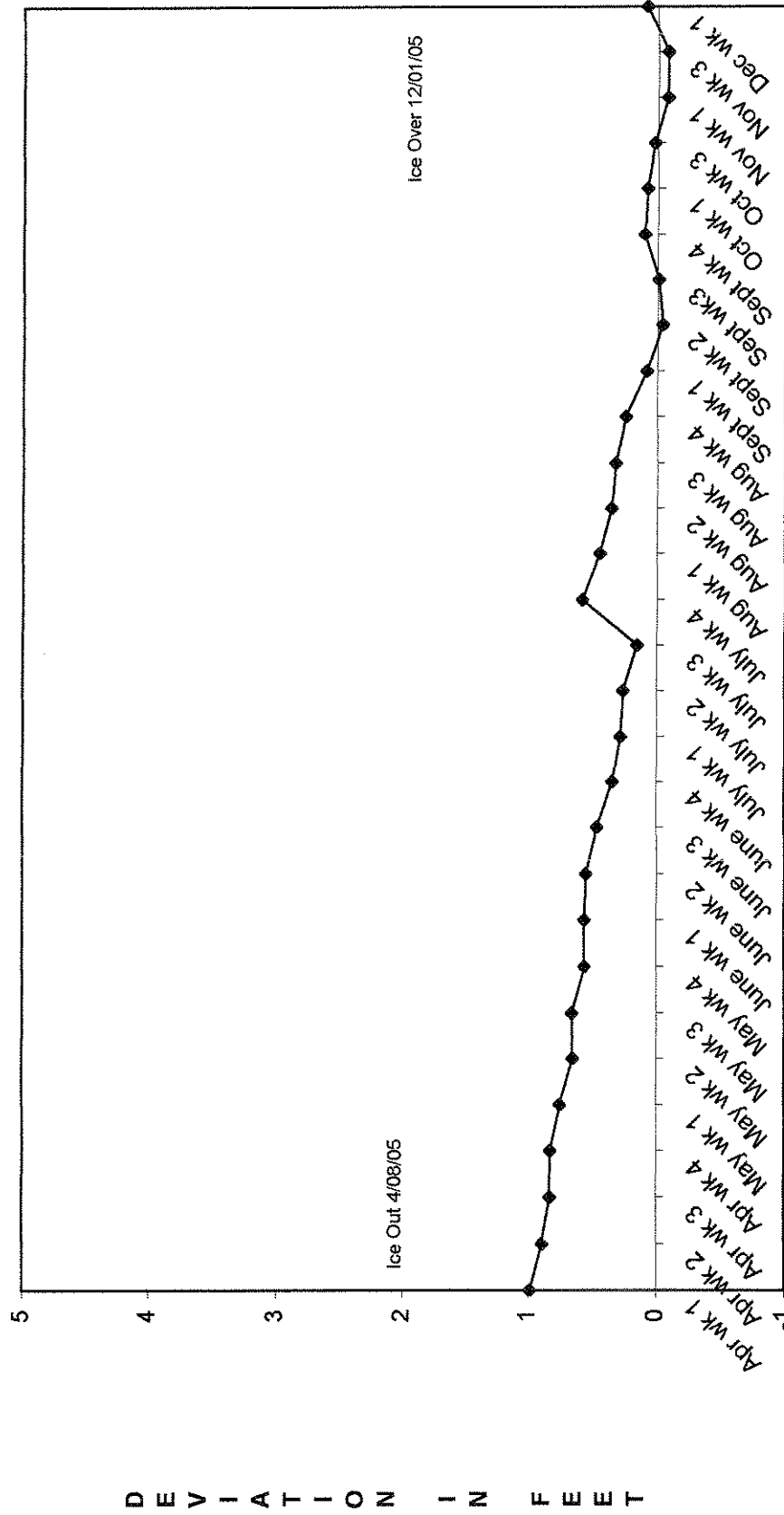


2006 PLEASANT LAKE LEVEL - 1964 BASE YEAR



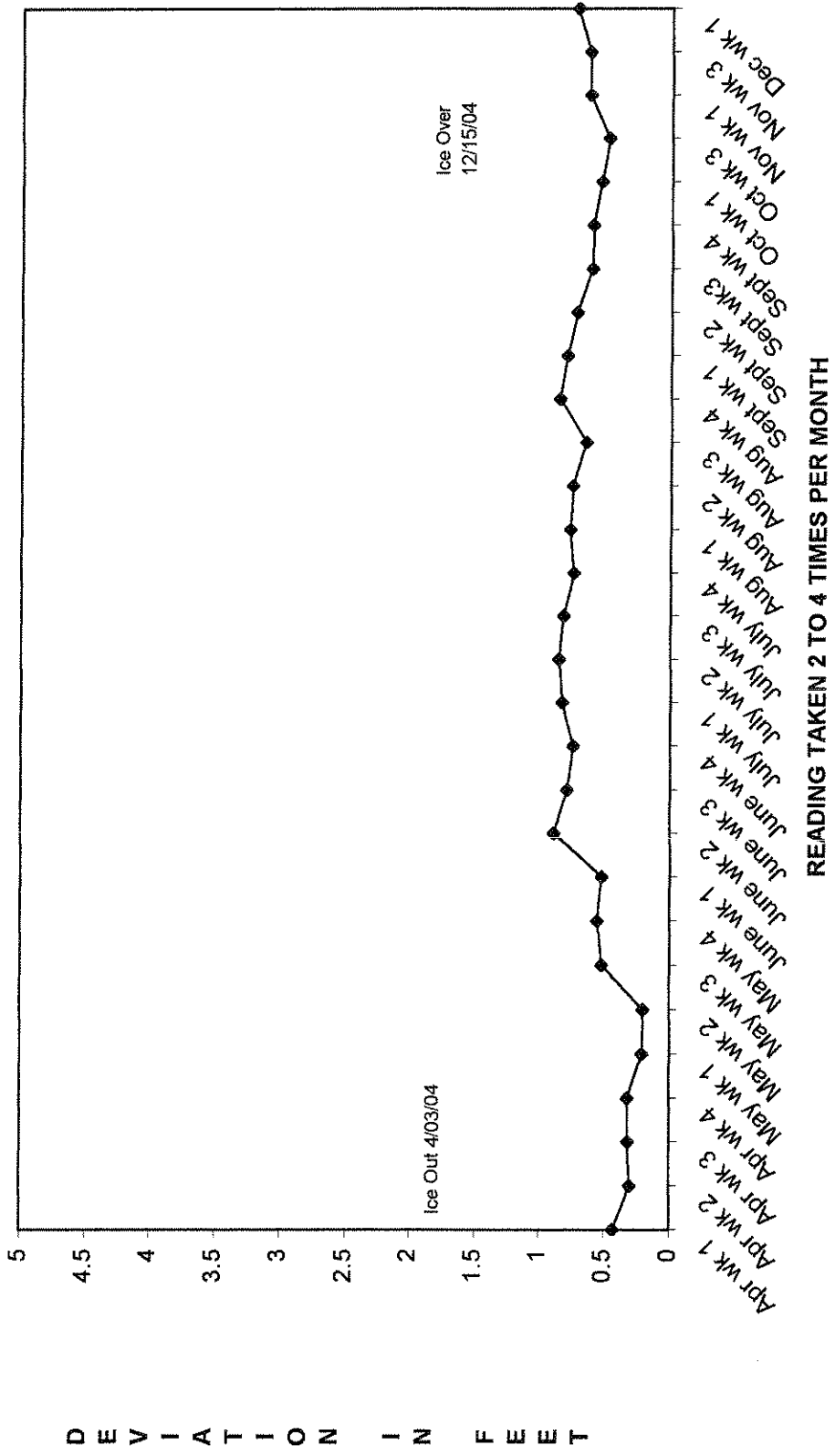
READING TAKEN 4 TIMES PER MONTH

2005 PLEASANT LAKE LEVEL - 1964 BASE YEAR

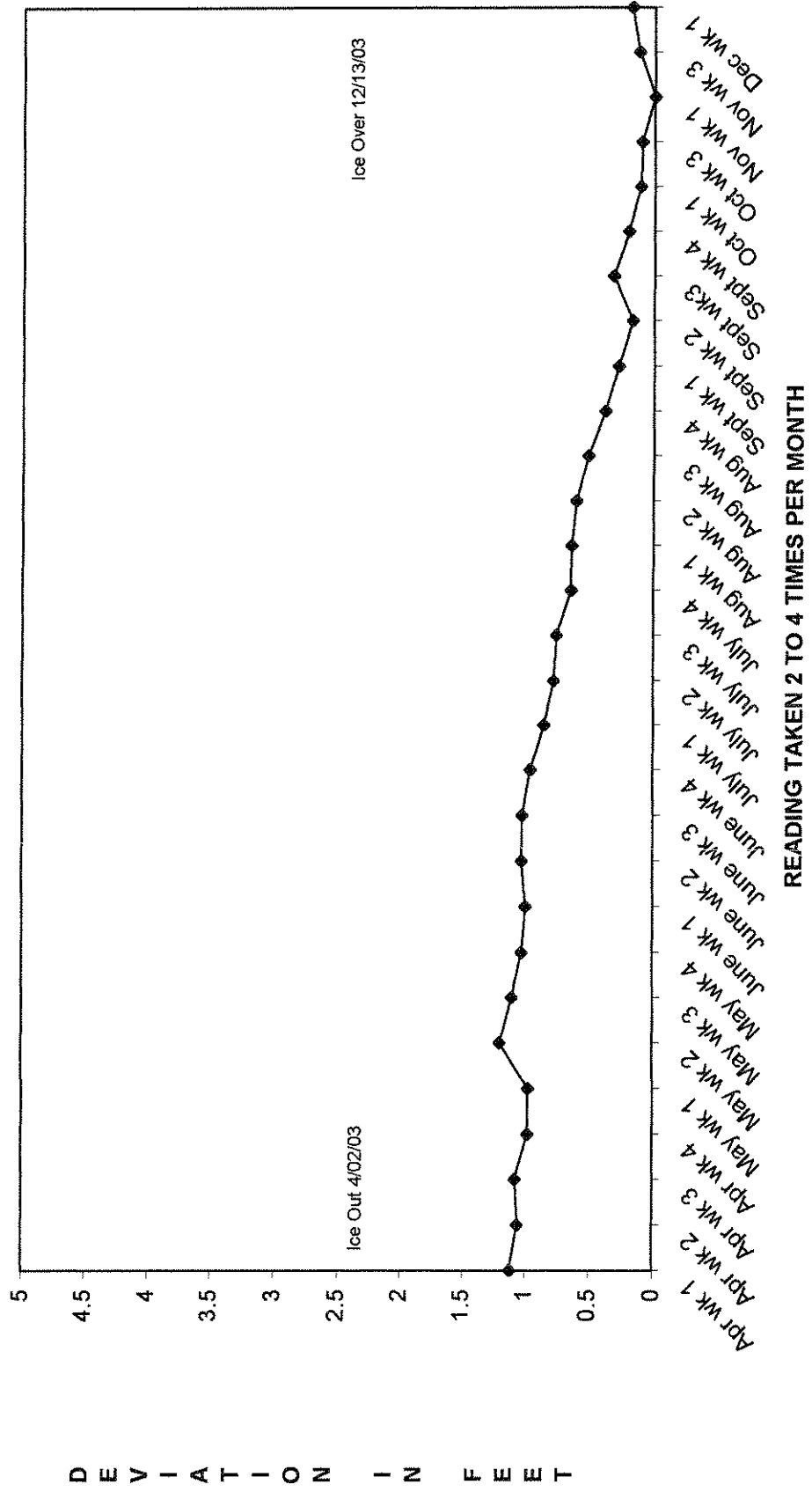


READING TAKEN 2 TO 4 TIMES PER MONTH

2004 PLEASANT LAKE LEVEL - 1964 BASE YEAR



2003 PLEASANT LAKE LEVEL - 1964 BASE YEAR



DEVIATION IN FEET

Ice Out 4/02/03

Ice Over 12/13/03

READING TAKEN 2 TO 4 TIMES PER MONTH