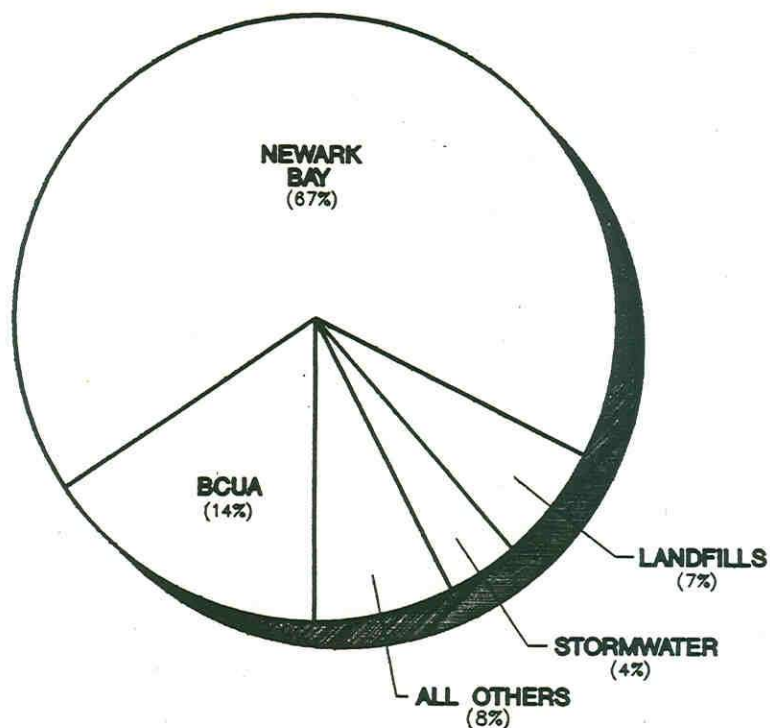


POLLUTANT LOADING TO LOWER HACKENSACK RIVER SUMMER 1988 (JUNE - SEPTEMBER)

BOD



NH₃-N

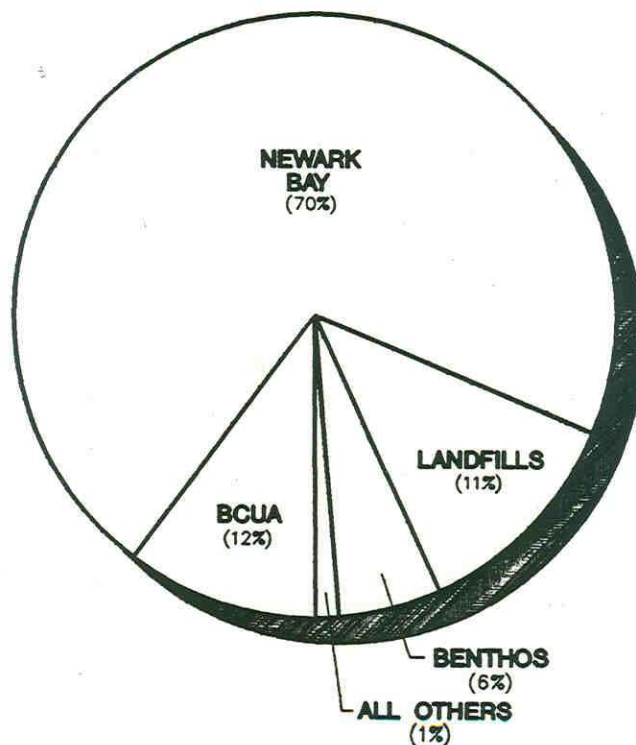


Figure 7.1 Pollutant Loading to Lower Hackensack River - Summer 1988

LOWER HACKENSACK RIVER WATERSHED SCHEMATIZATION

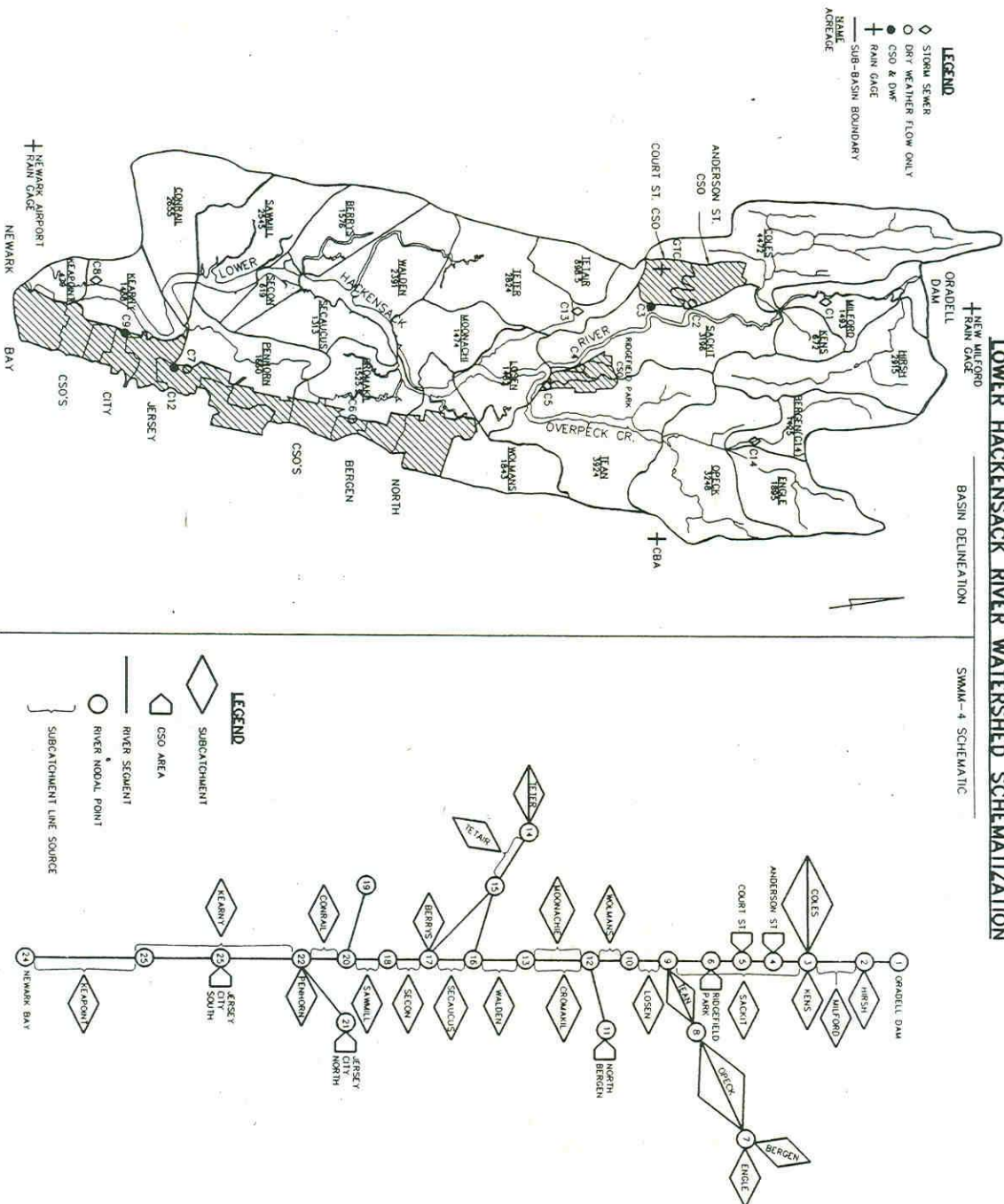


Figure 4.1: SWMM-4 Model Sub Basin Delineation

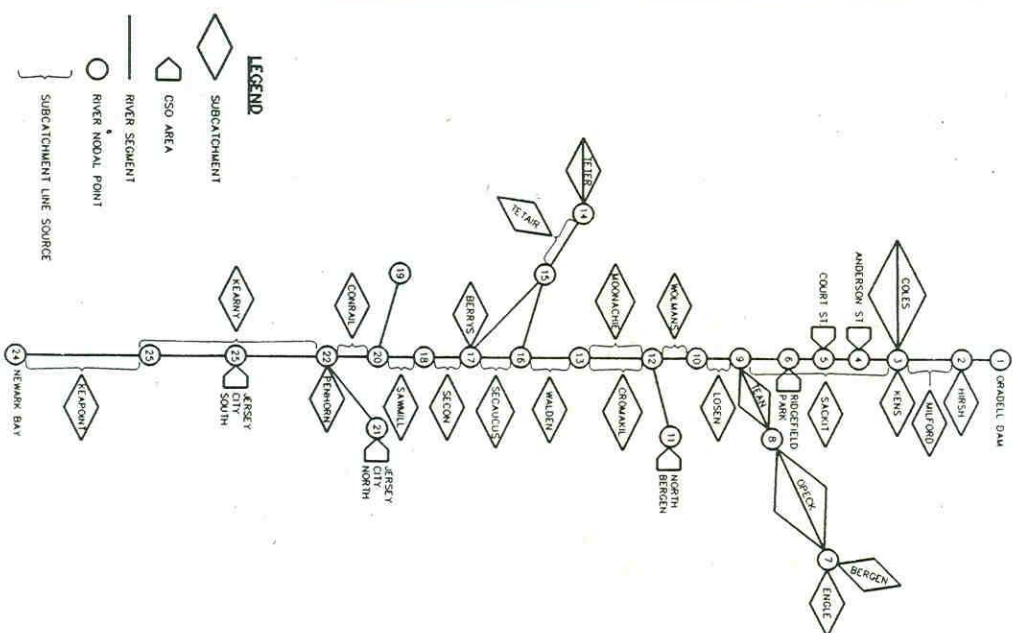


Figure 4.2: SWMM-4 Model Schematic

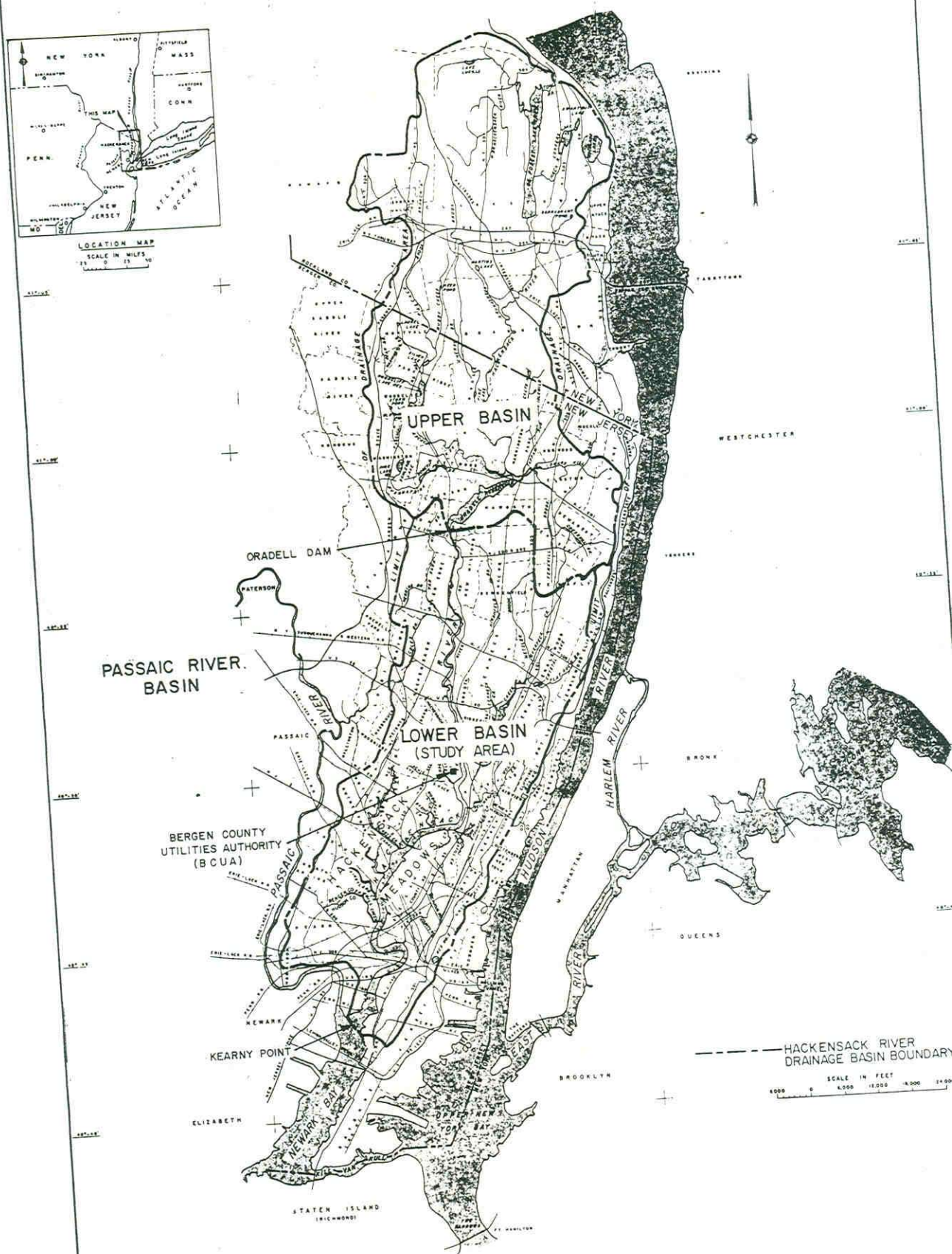


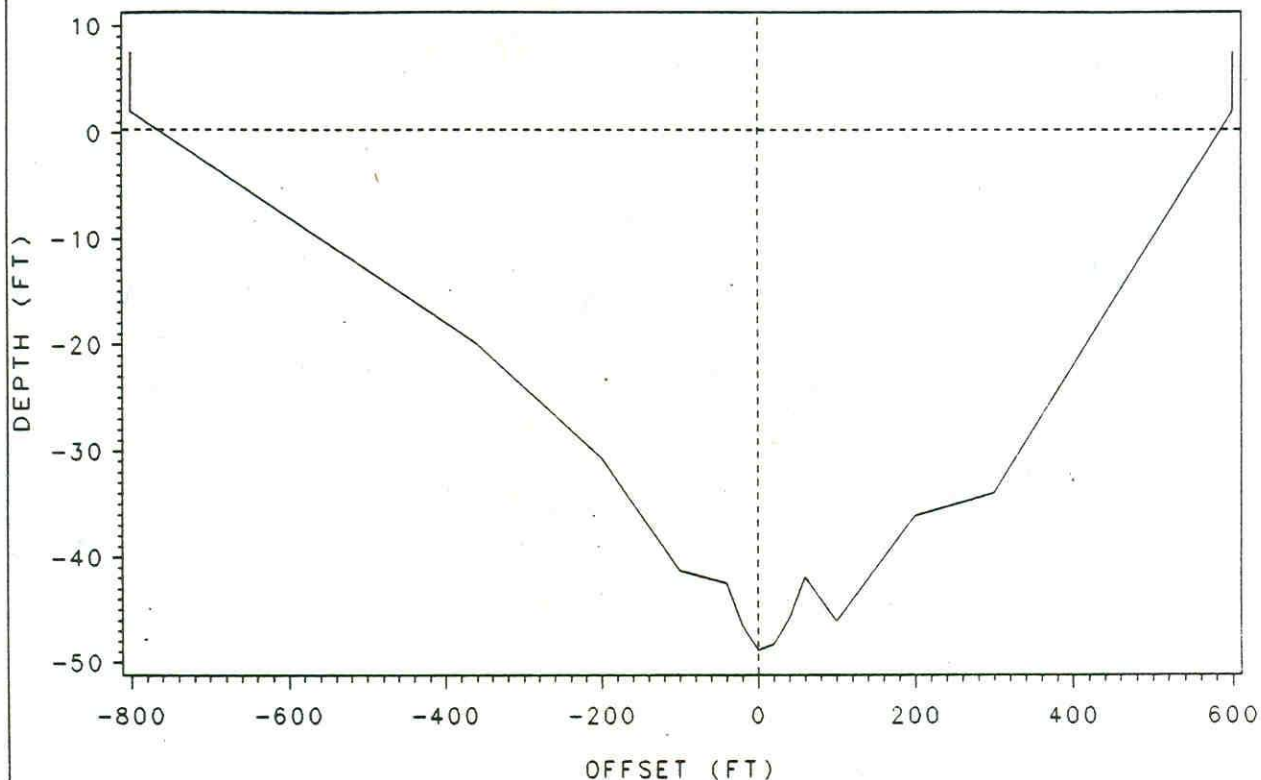
Figure 1.1 Hackensack River Drainage Basin and Location Map

APPENDIX A-1-2

Typical Cross-Sections of Lower Hackensack River

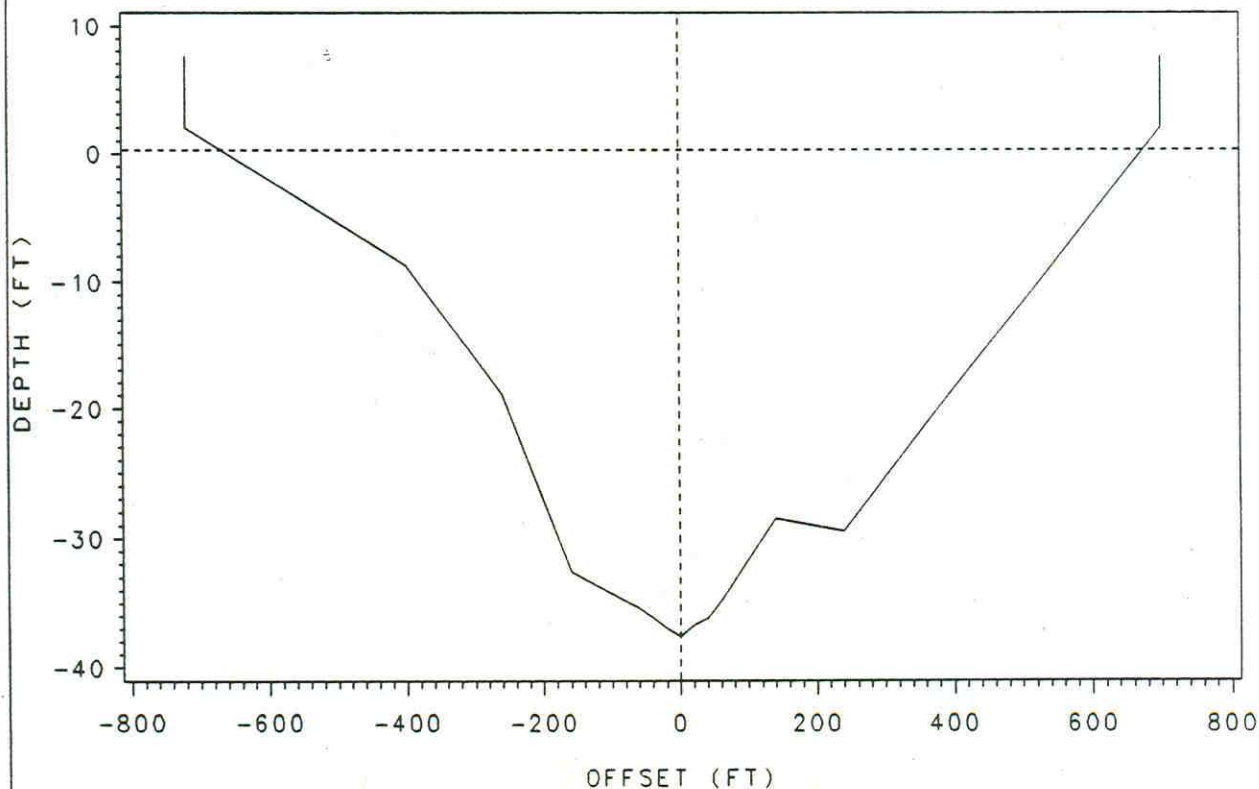
HACKENSACK USCOE REACH1

SECTION=1 DISTANCE FROM UPSTREAM SECTION (FT)=0



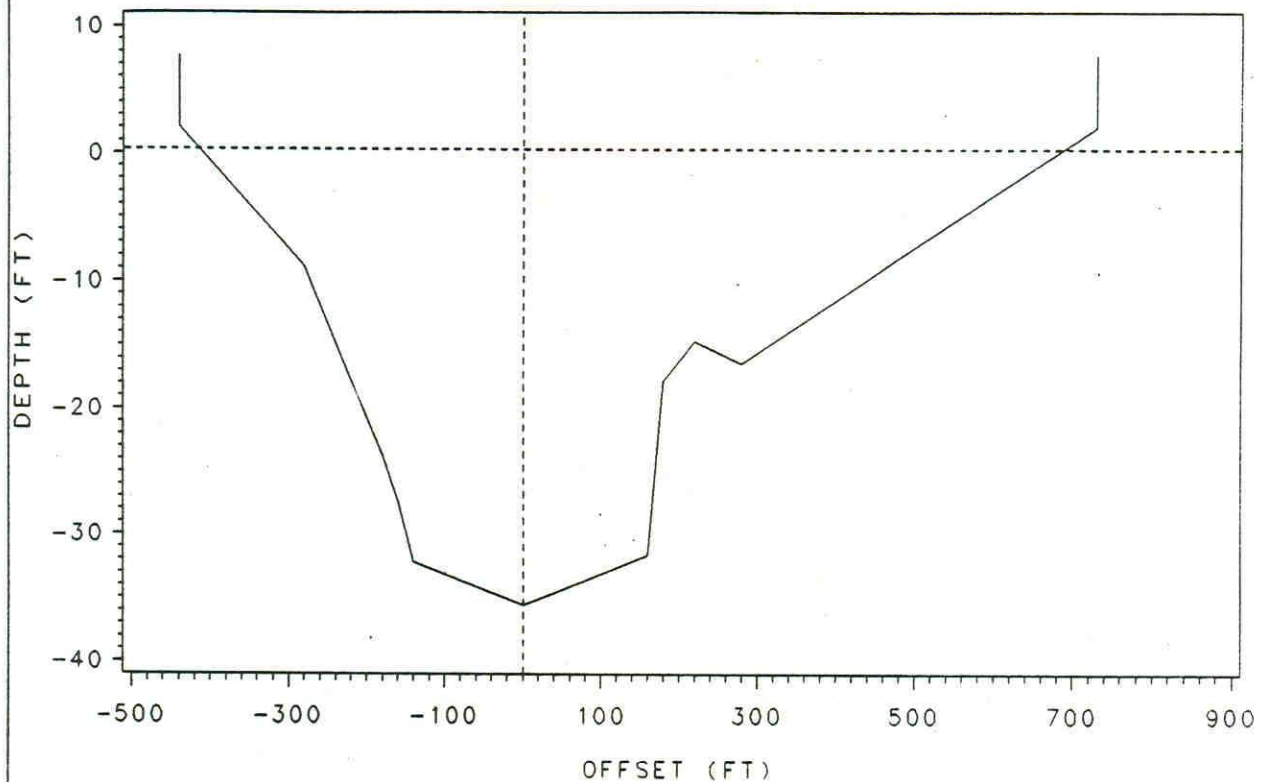
HACKENSACK USCOE REACH1

SECTION=2 DISTANCE FROM UPSTREAM SECTION (FT)=500



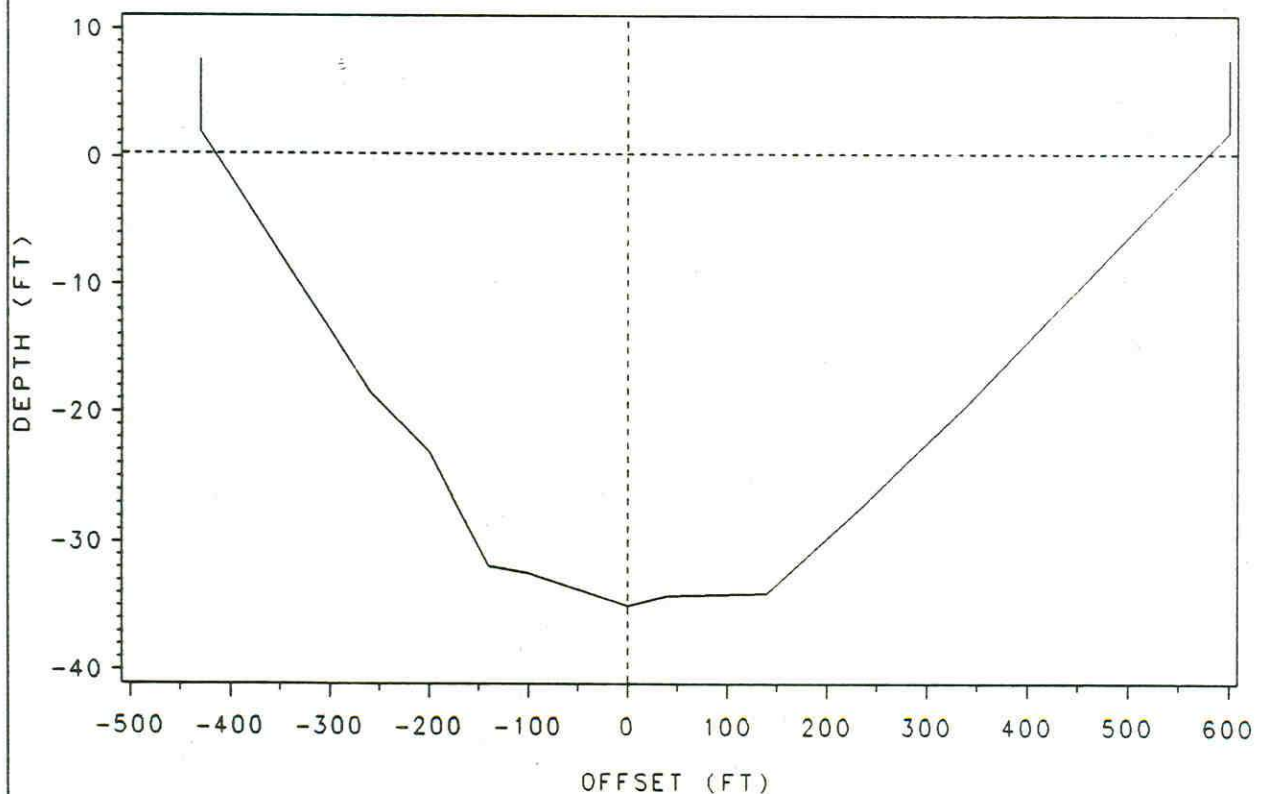
HACKENSACK USCOE REACH1

SECTION=3 DISTANCE FROM UPSTREAM SECTION (FT)=2500



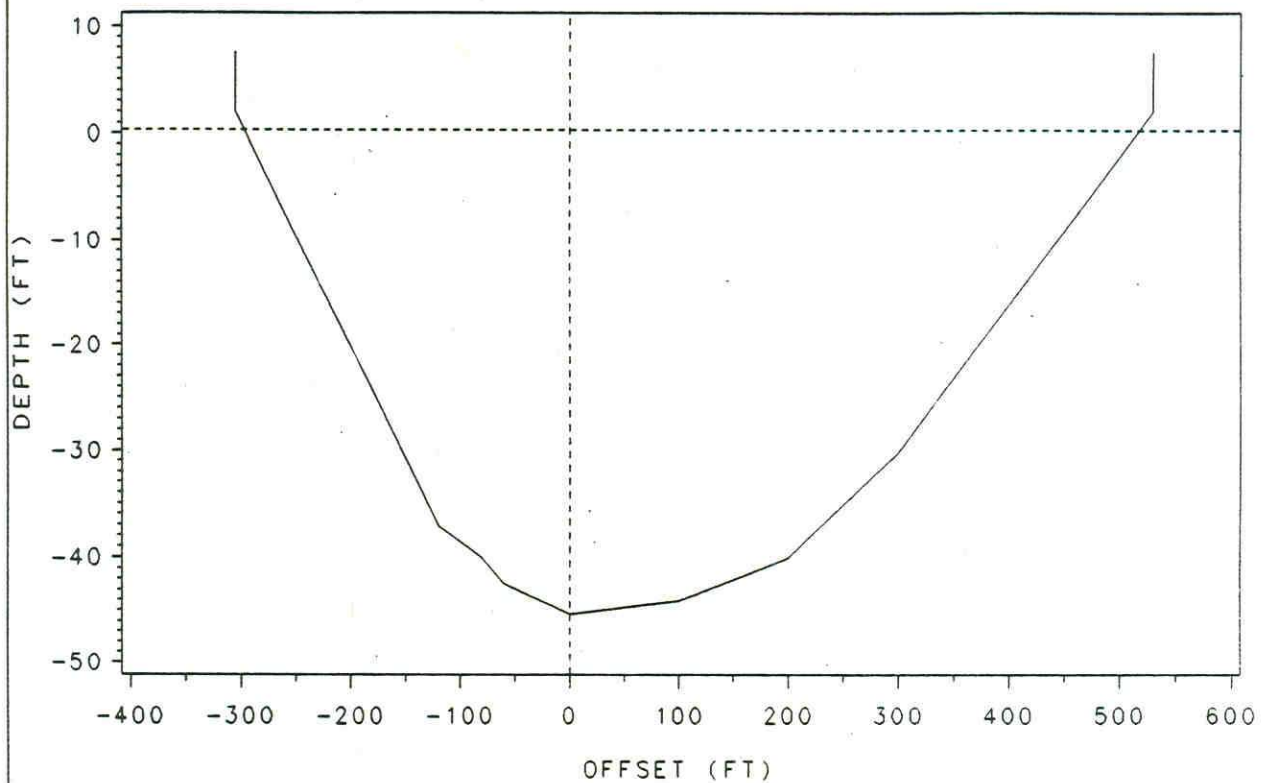
HACKENSACK USCOE REACH1

SECTION=4 DISTANCE FROM UPSTREAM SECTION (FT)=5050



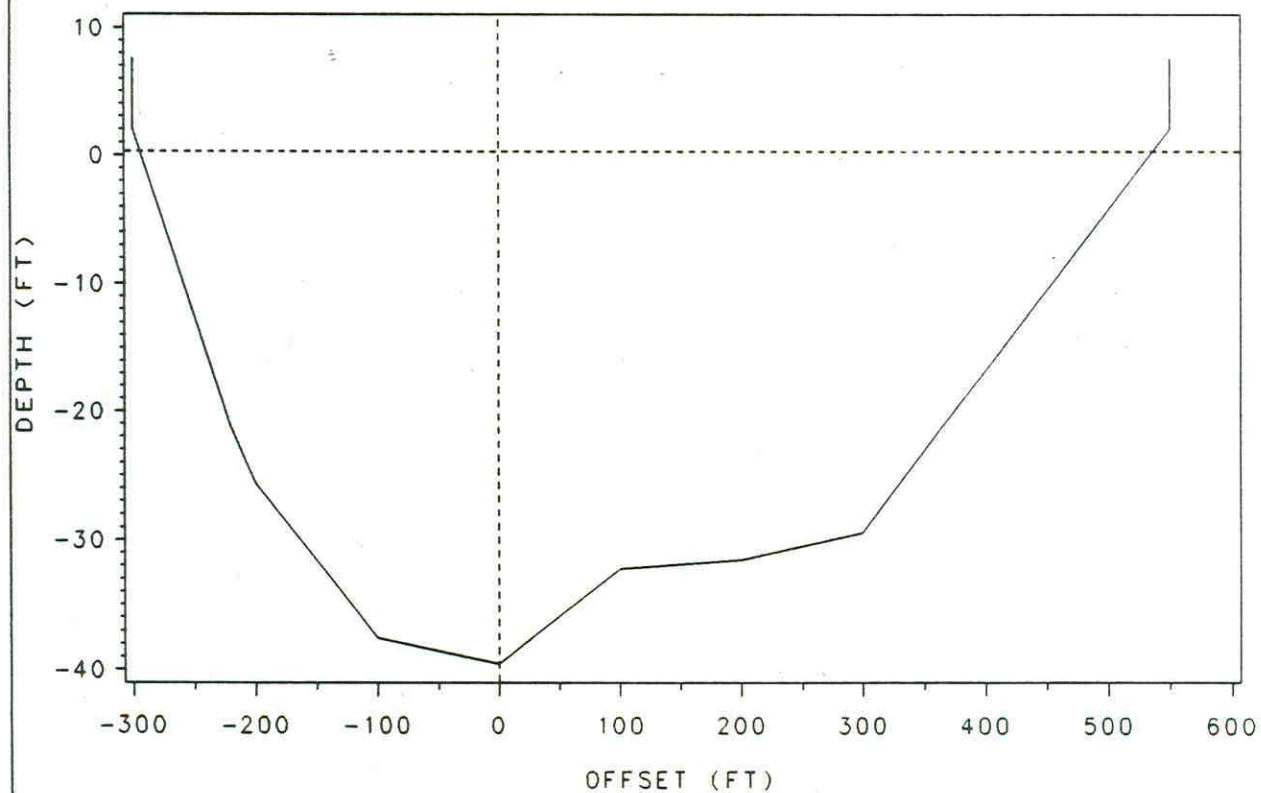
HACKENSACK USCOE REACH1

SECTION=5 DISTANCE FROM UPSTREAM SECTION (FT)=6075



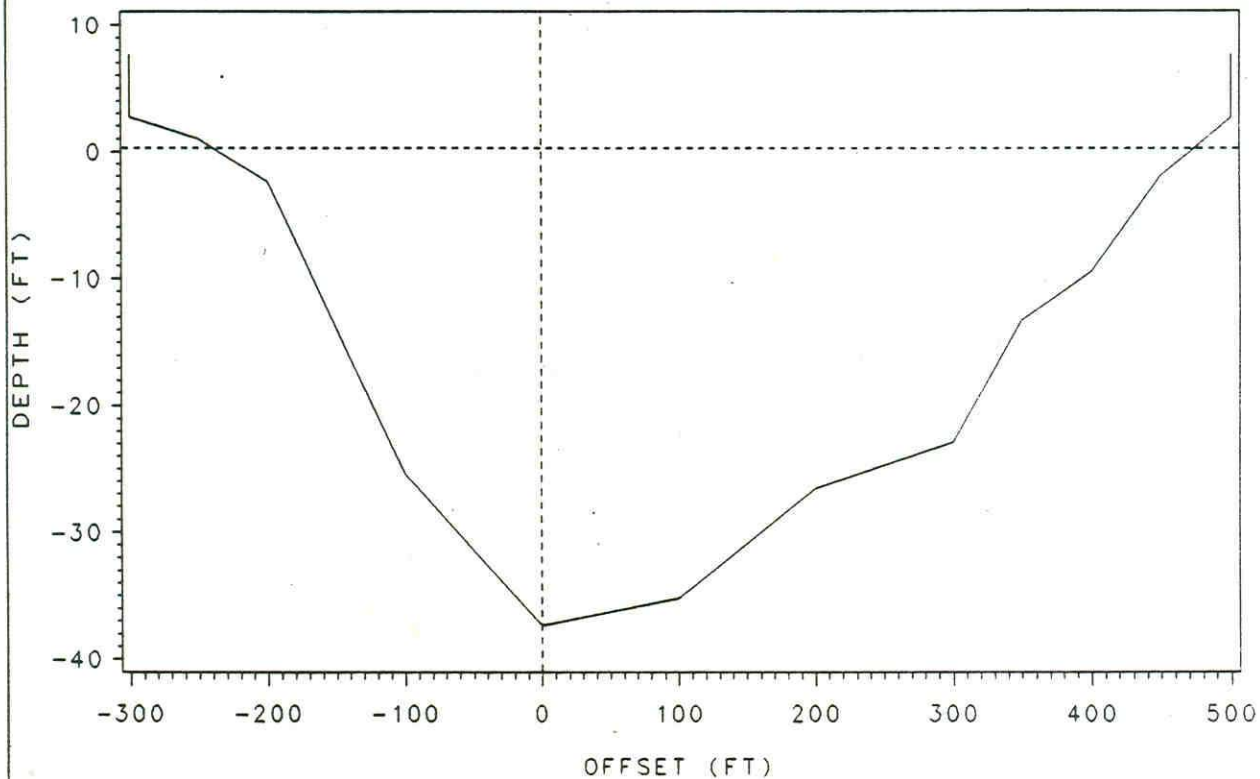
HACKENSACK USCOE REACH1

SECTION=6 DISTANCE FROM UPSTREAM SECTION (FT)=7435



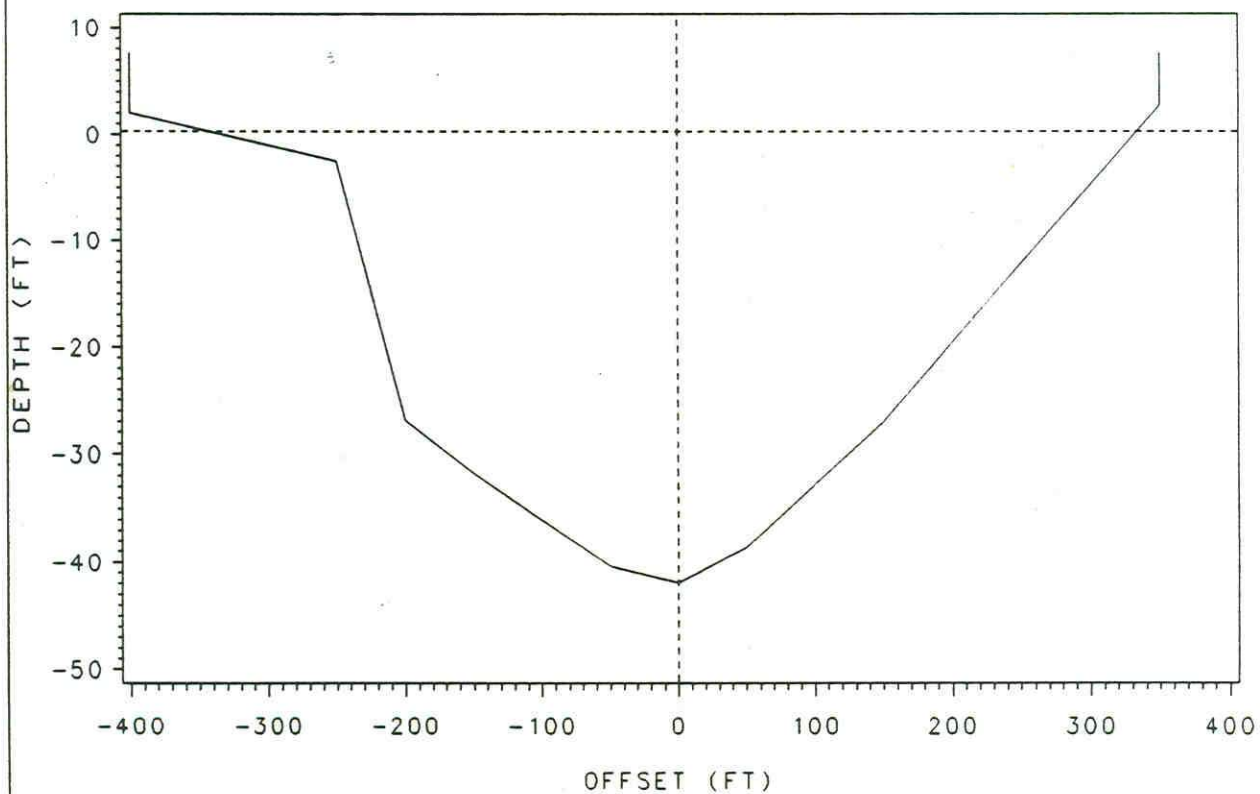
HACKENSACK USCOE REACH1

SECTION=13 DISTANCE FROM UPSTREAM SECTION (FT)=19305



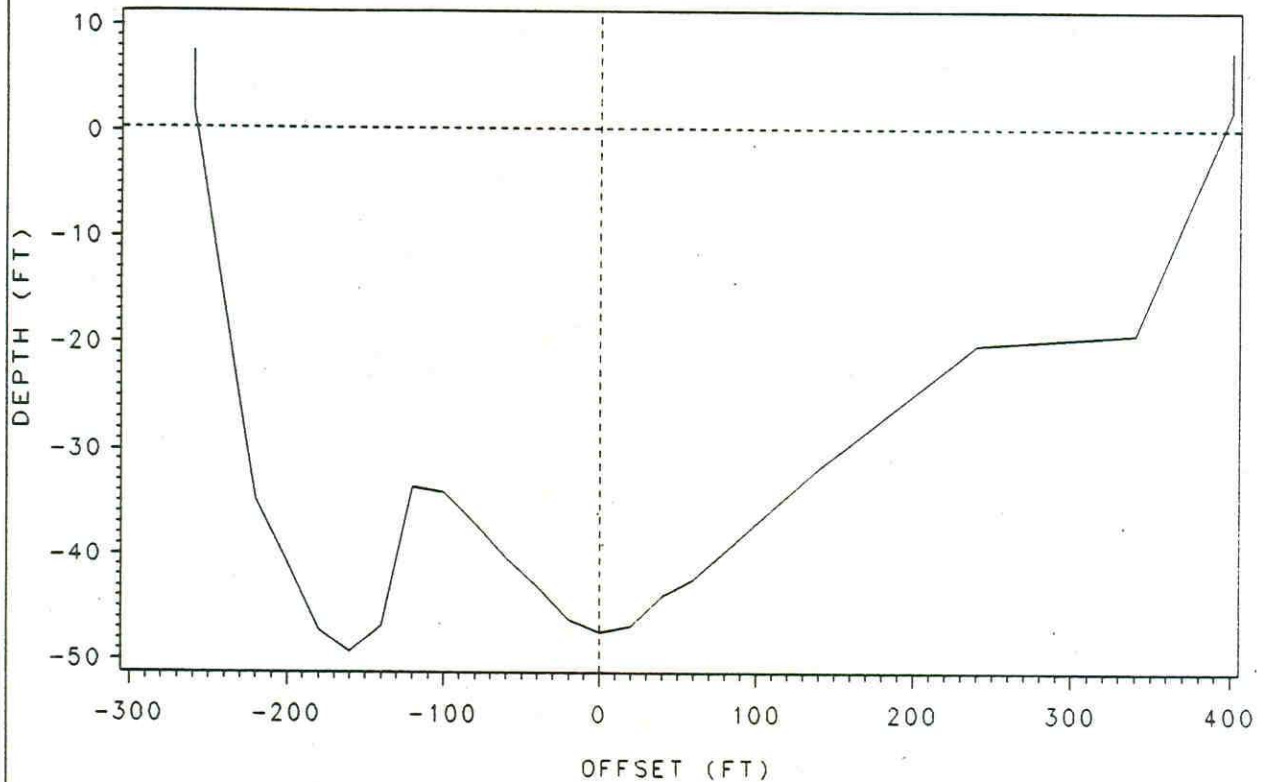
HACKENSACK USCOE REACH1

SECTION=14 DISTANCE FROM UPSTREAM SECTION (FT)=22345



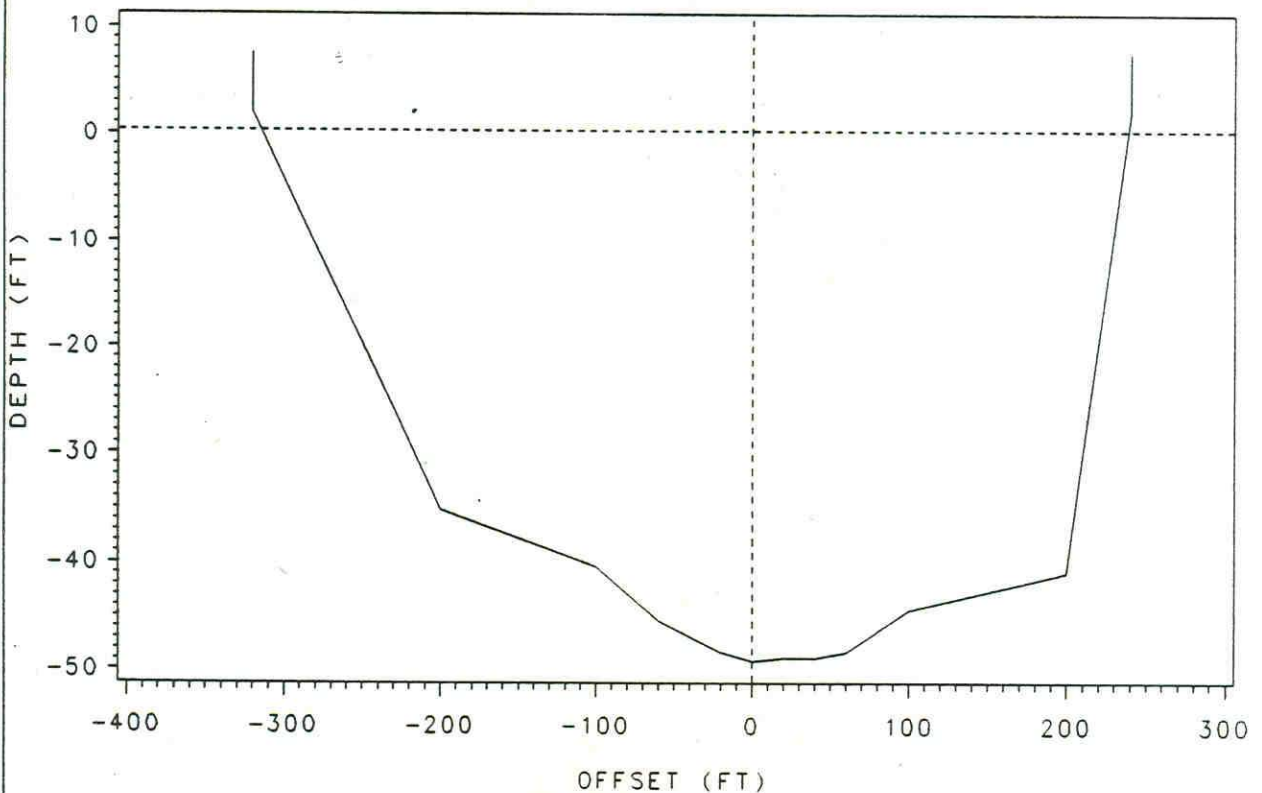
HACKENSACK USCOE REACH1

SECTION=7 DISTANCE FROM UPSTREAM SECTION (FT)=8450



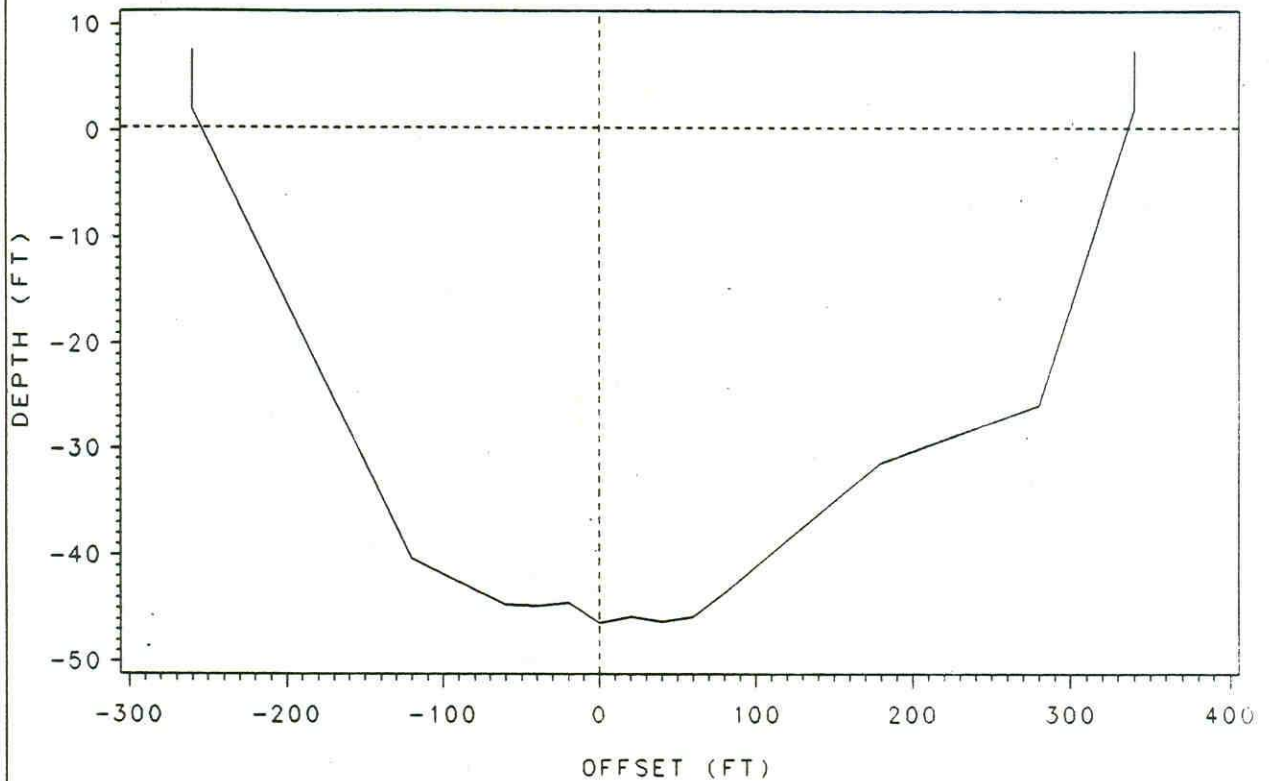
HACKENSACK USCOE REACH1

SECTION=8 DISTANCE FROM UPSTREAM SECTION (FT)=9650



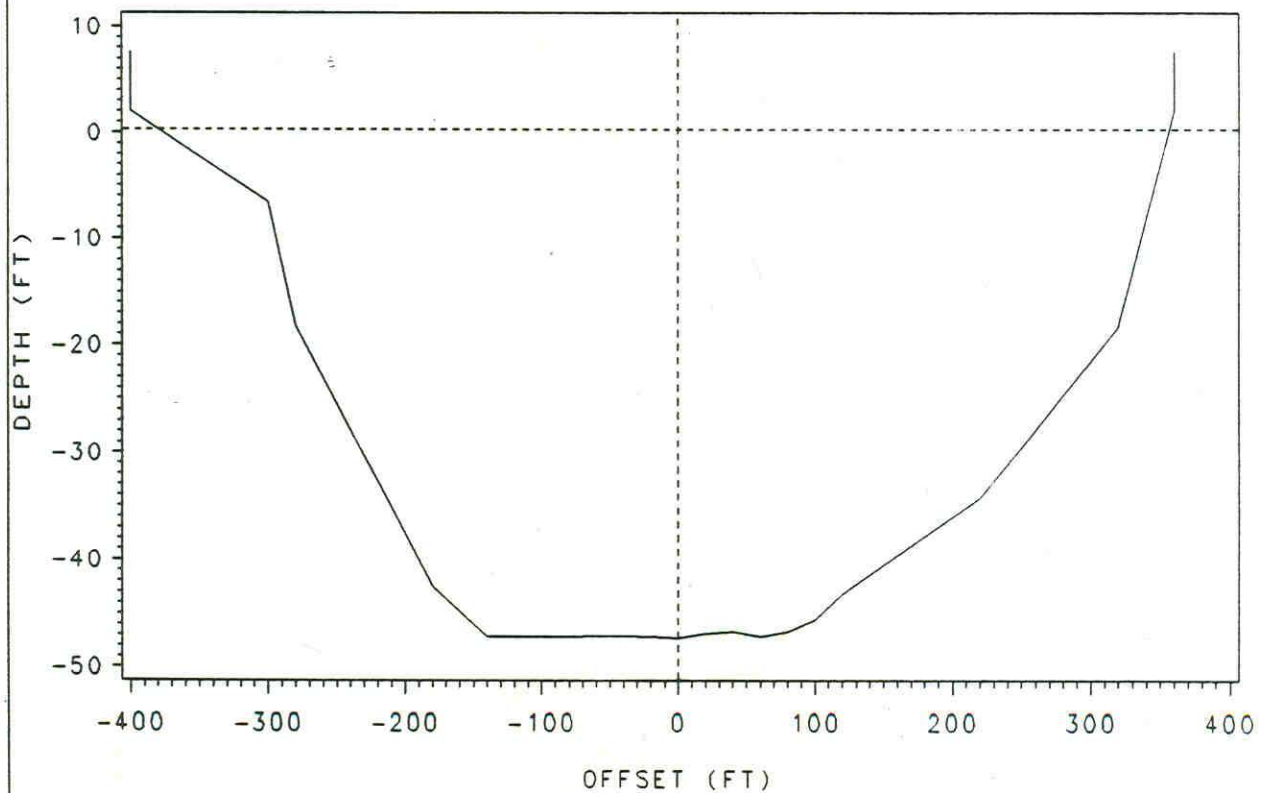
HACKENSACK USCOE REACH1

SECTION=9 DISTANCE FROM UPSTREAM SECTION (FT)=10175



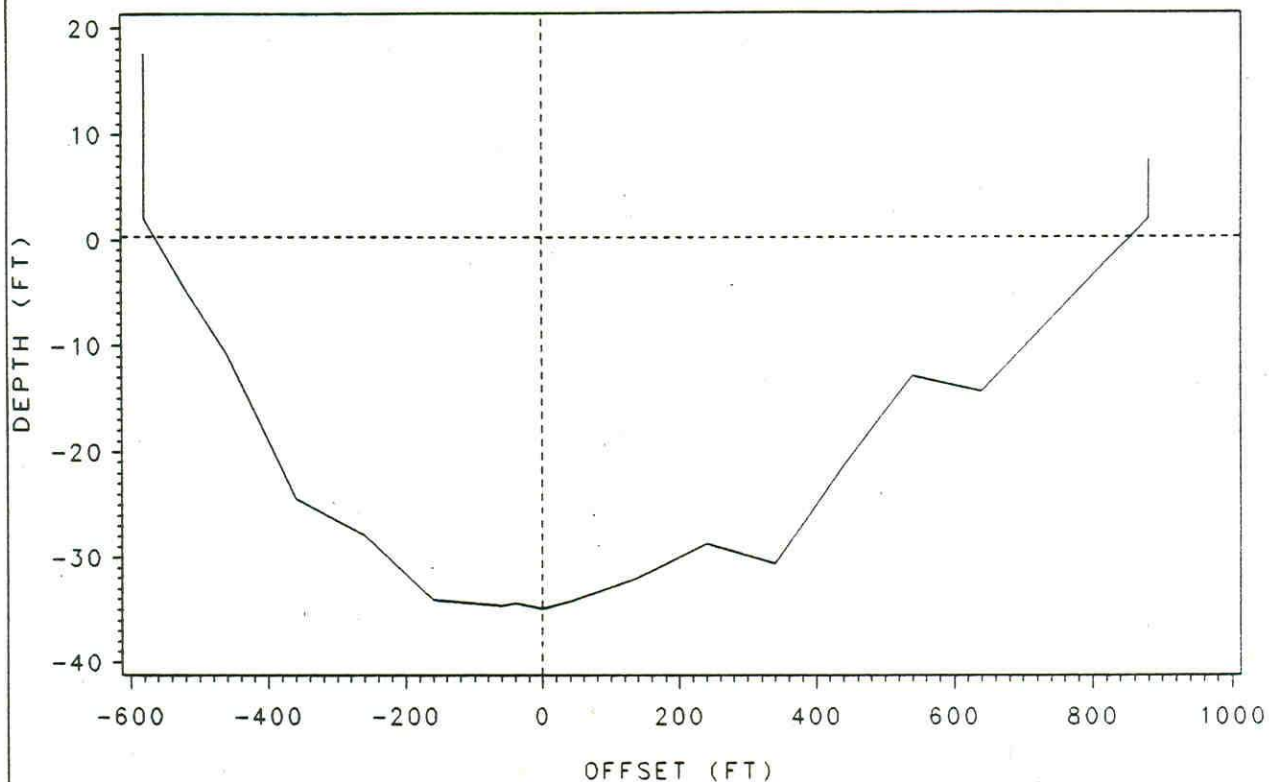
HACKENSACK USCOE REACH1

SECTION=10 DISTANCE FROM UPSTREAM SECTION (FT)=10945



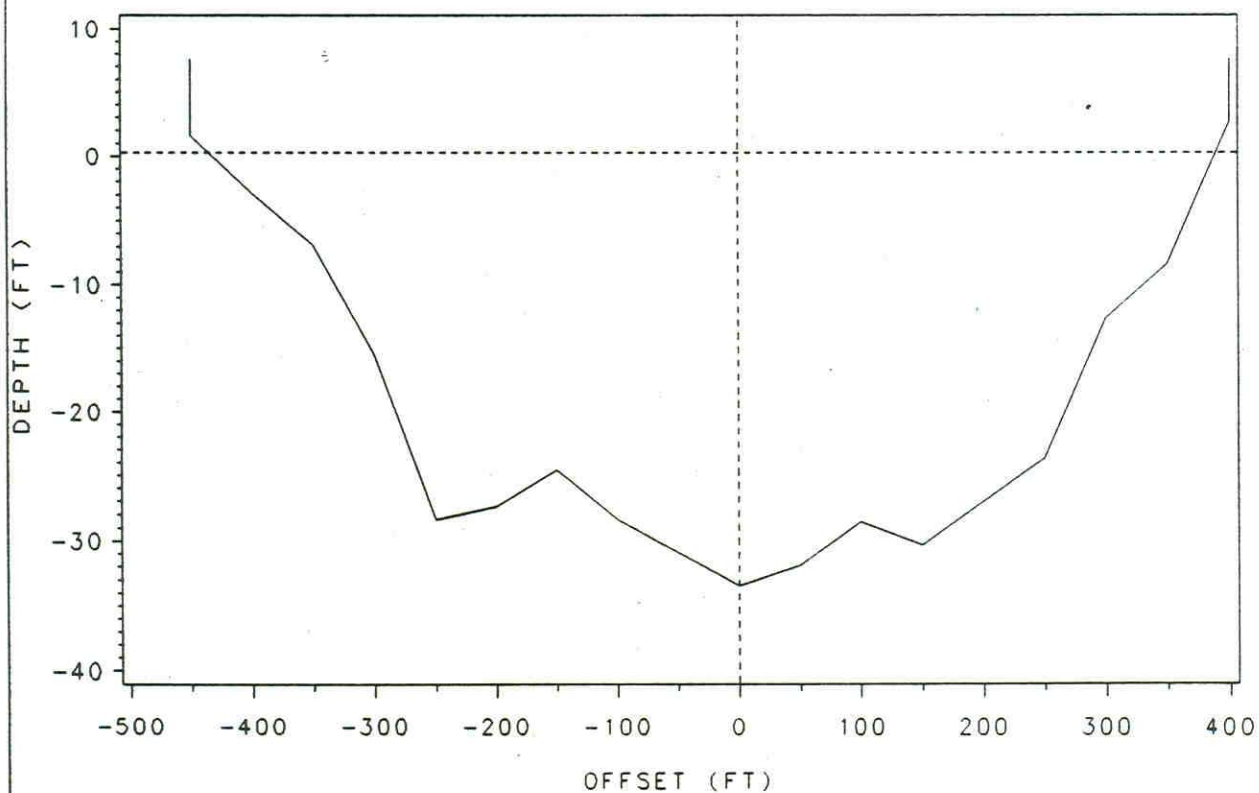
HACKENSACK USCOE REACH1

SECTION=11 DISTANCE FROM UPSTREAM SECTION (FT)=11730



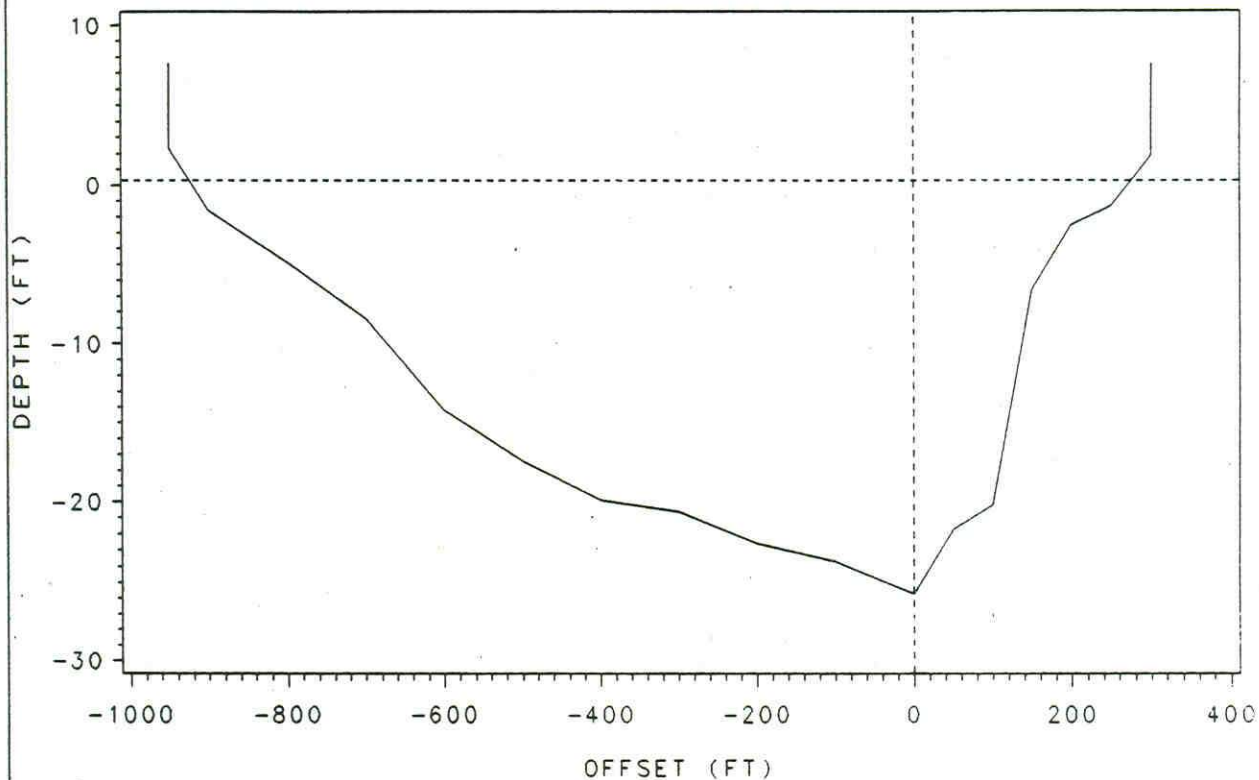
HACKENSACK USCOE REACH1

SECTION=12 DISTANCE FROM UPSTREAM SECTION (FT)=17680



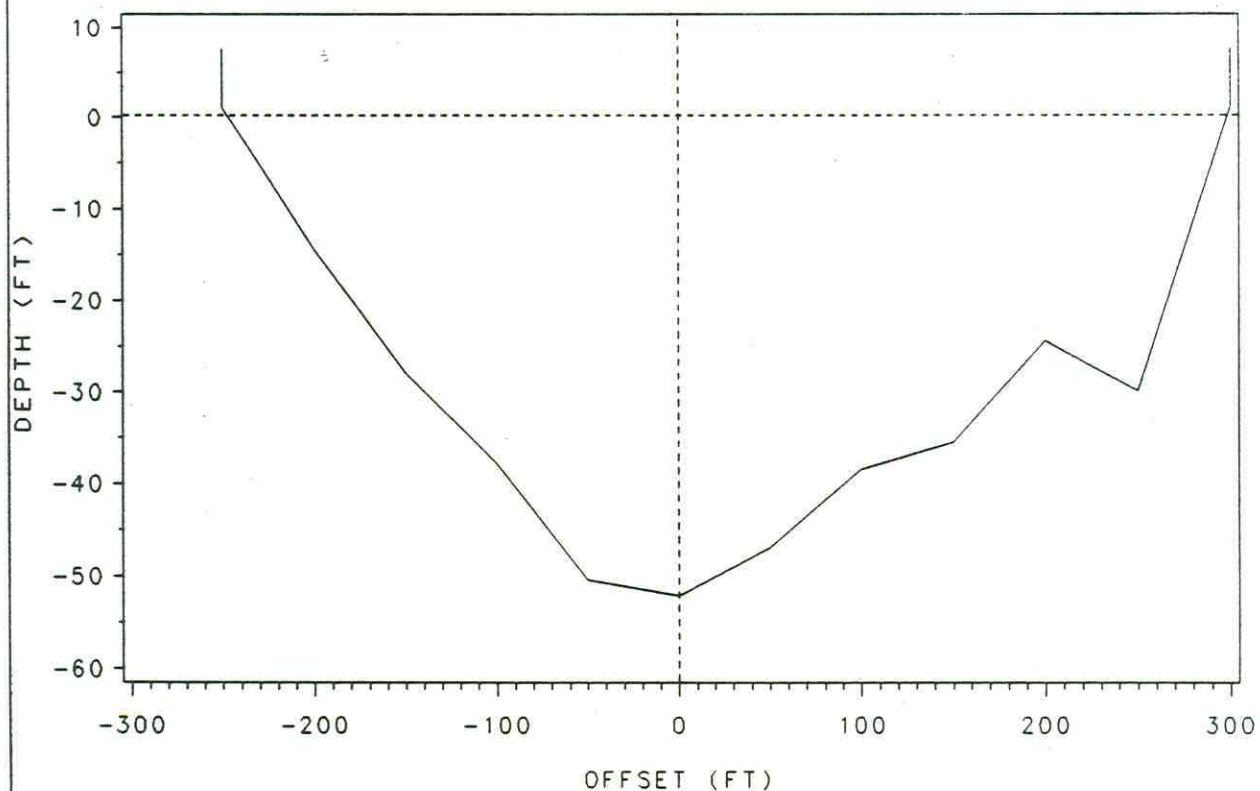
HACKENSACK USCOE REACH1

SECTION=15 DISTANCE FROM UPSTREAM SECTION (FT)=24030



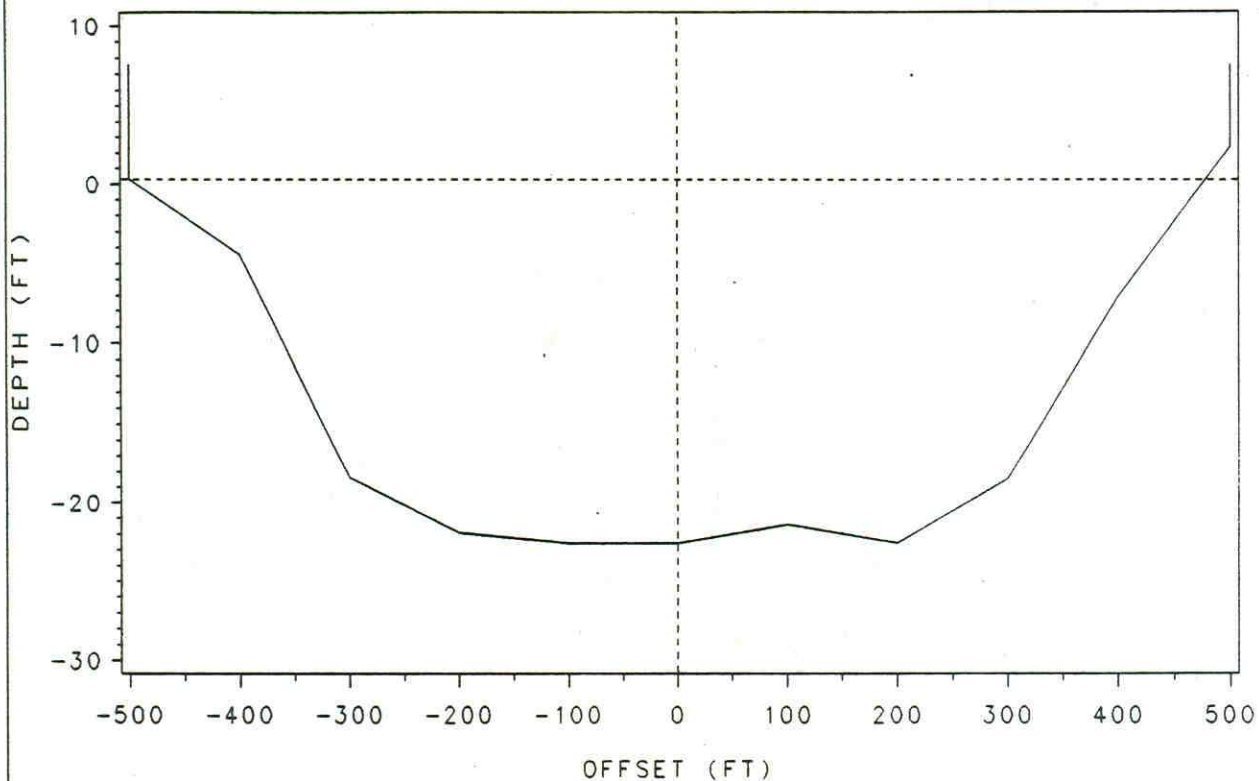
HACKENSACK USCOE REACH1

SECTION=16 DISTANCE FROM UPSTREAM SECTION (FT)=26560



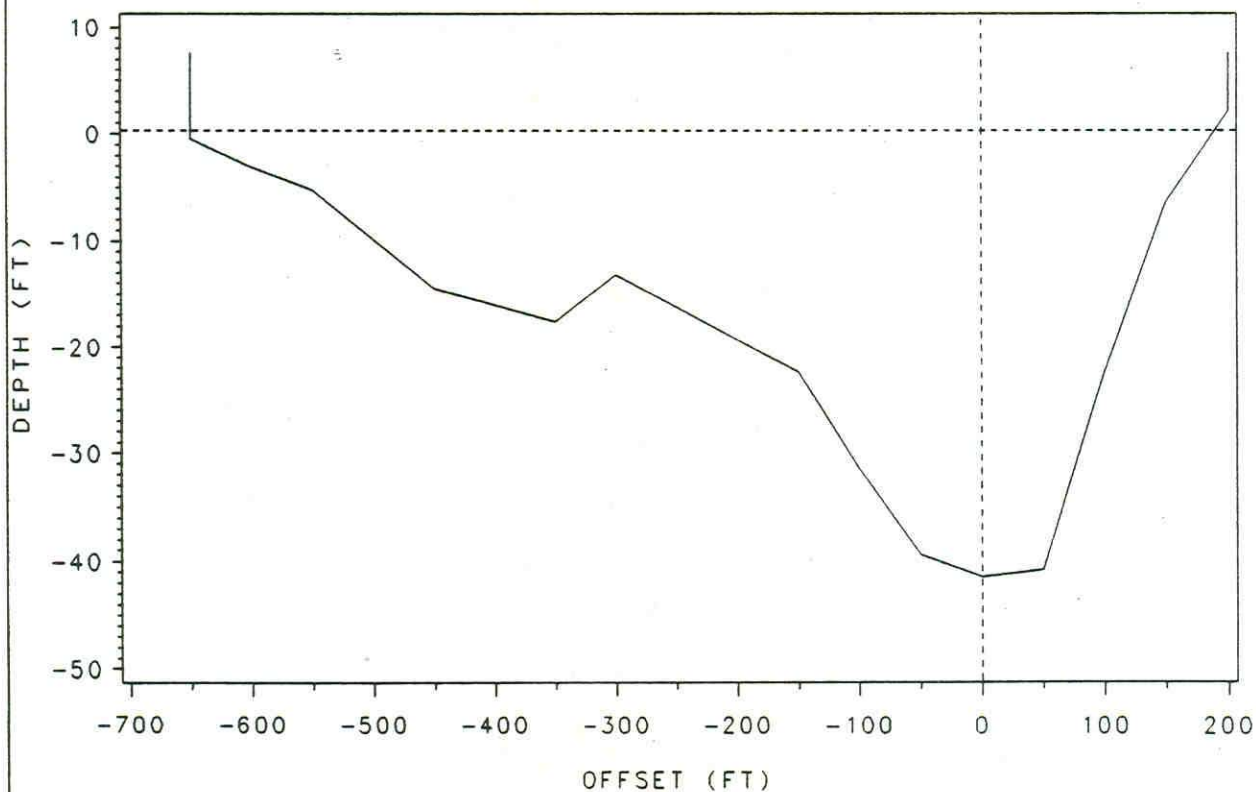
HACKENSACK USCOE REACH1

SECTION=17 DISTANCE FROM UPSTREAM SECTION (FT)=28960



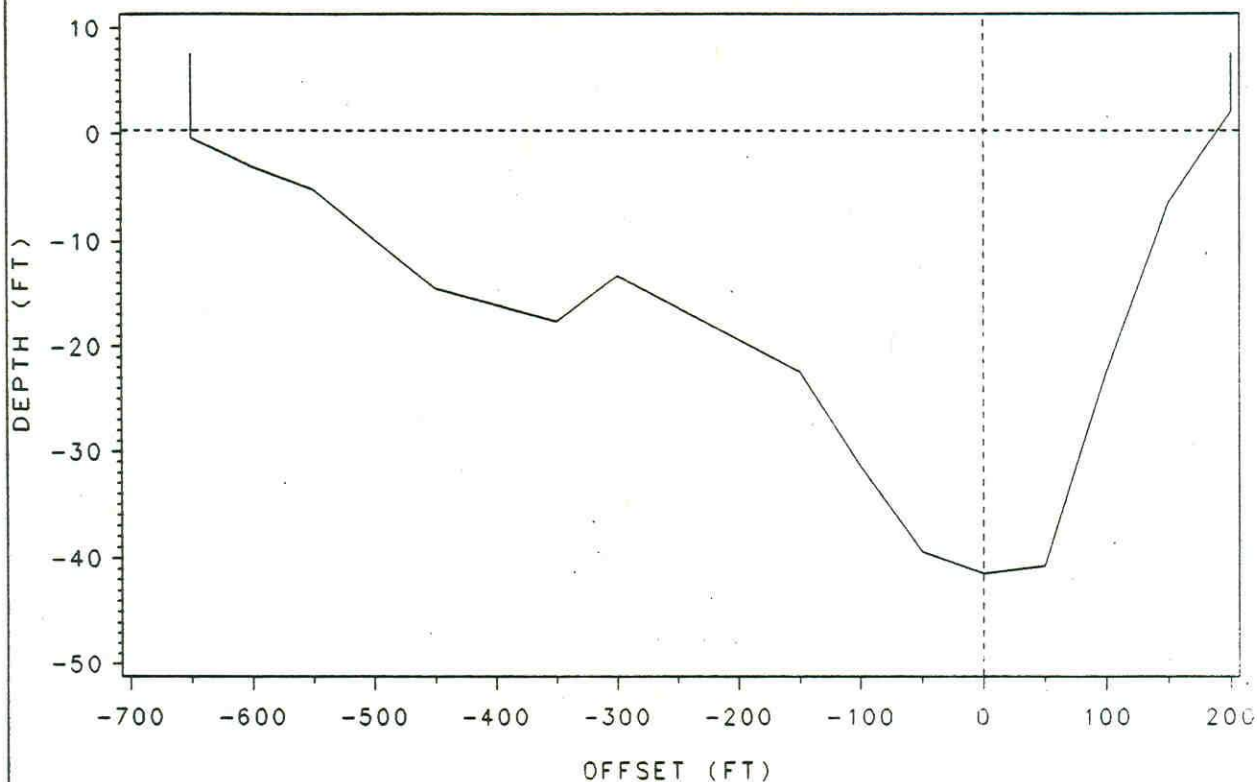
HACKENSACK USCOE REACH1

SECTION=18 DISTANCE FROM UPSTREAM SECTION (FT)=30340



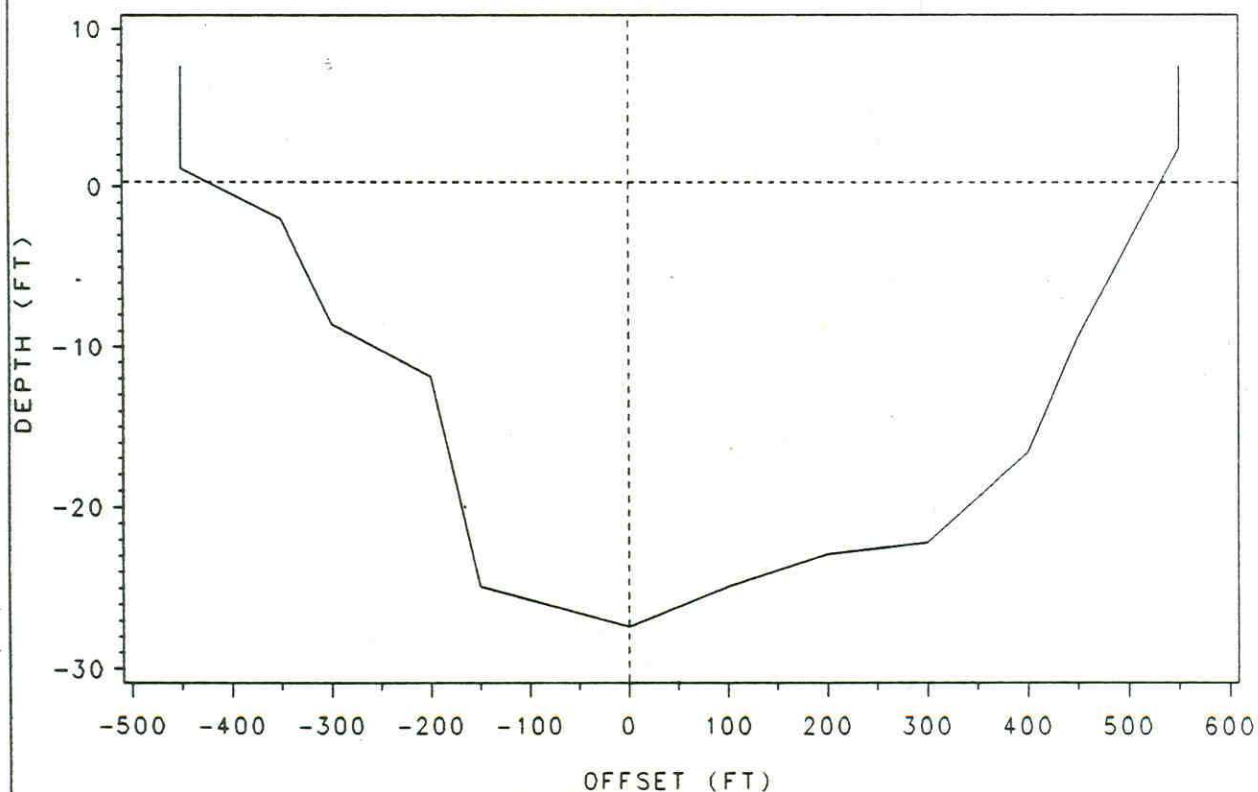
HACKENSACK USCOE REACH 2

SECTION=1 DISTANCE FROM UPSTREAM SECTION (FT)=0



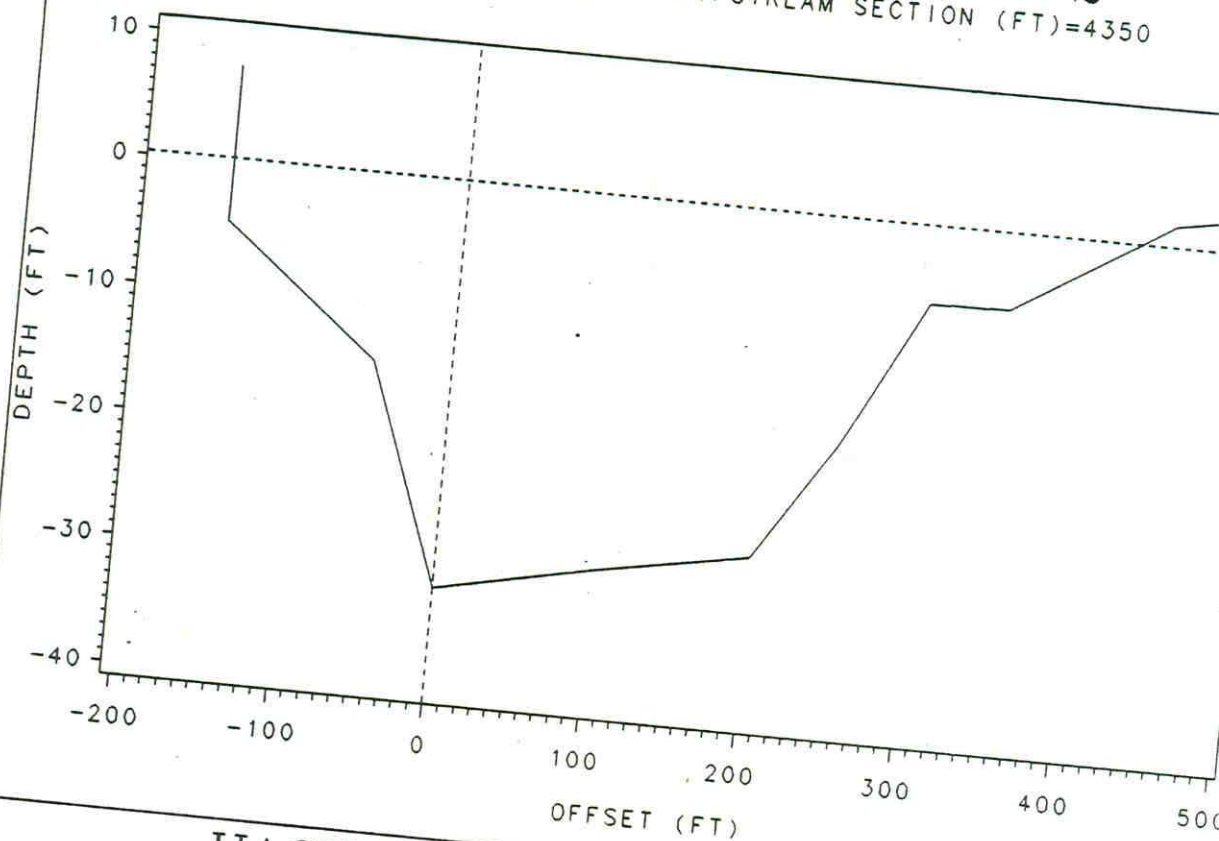
HACKENSACK USCOE REACH 2

SECTION=2 DISTANCE FROM UPSTREAM SECTION (FT)=570



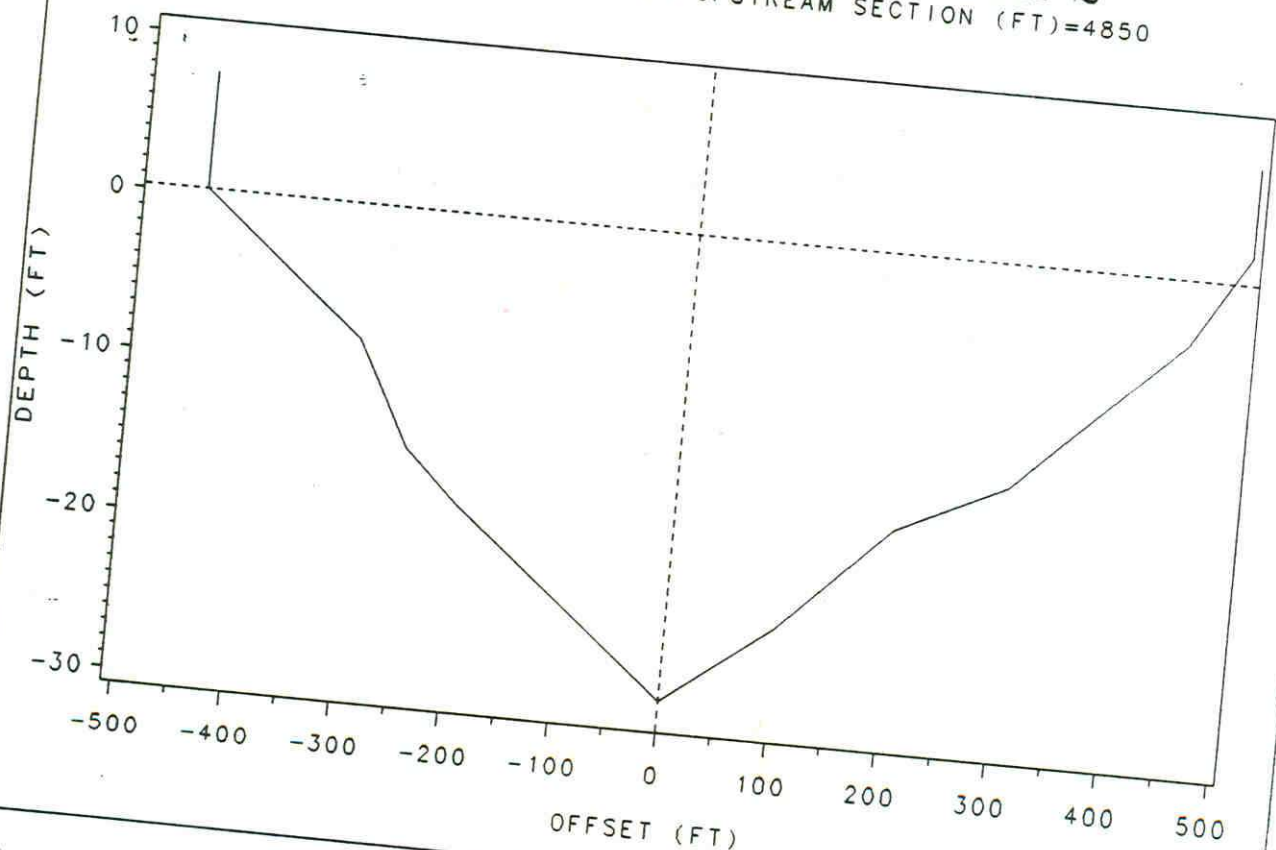
HACKENSACK USCOE REACH 2

SECTION=5 DISTANCE FROM UPSTREAM SECTION (FT)=4350



HACKENSACK USCOE REACH 2

SECTION=6 DISTANCE FROM UPSTREAM SECTION (FT)=4850



LOWER HACKENSACK RIVER STUDY RIVER MODEL (MIT-DNM) RESULTS

— OCEAN BOUNDARY AT NEWARK BAY - (R.M. = 1.3)

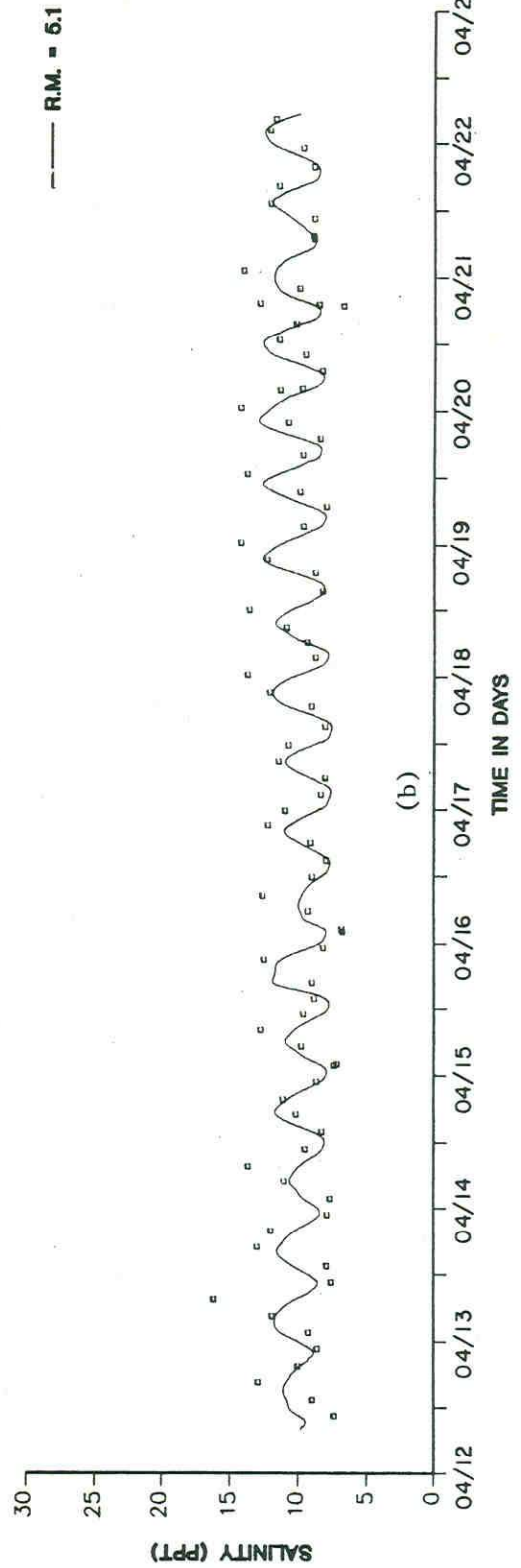
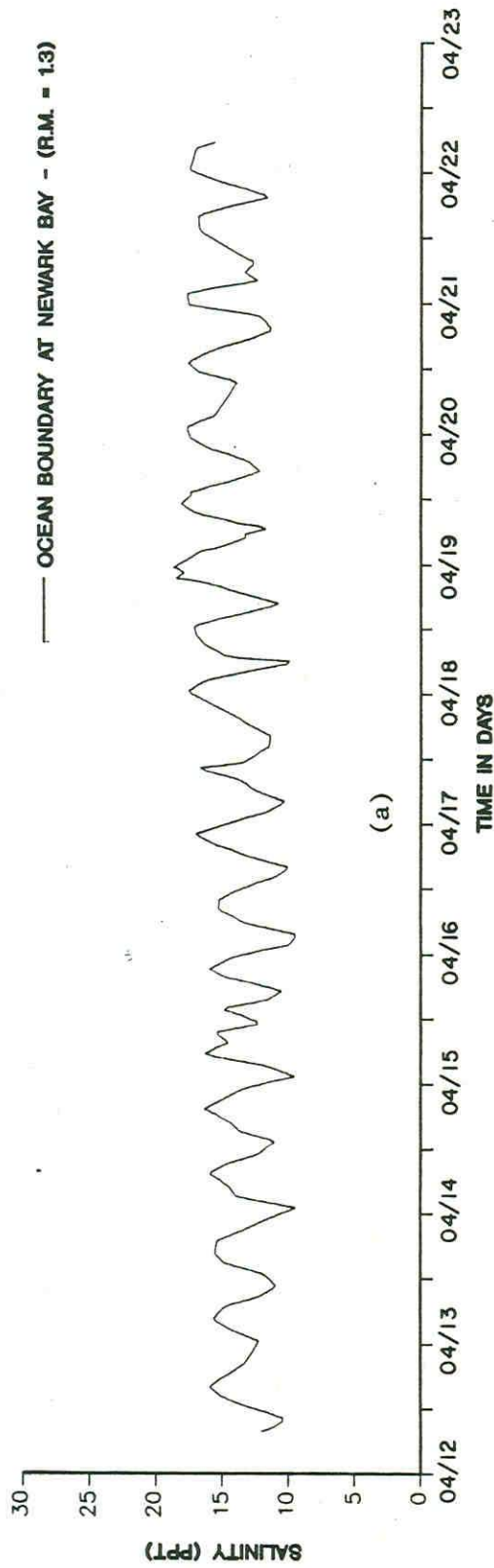


Figure 5.6 WATER QUALITY CALIBRATION - APRIL 1988

LOWER HACKENSACK RIVER STUDY RIVER MODEL (MIT-DNM) RESULTS

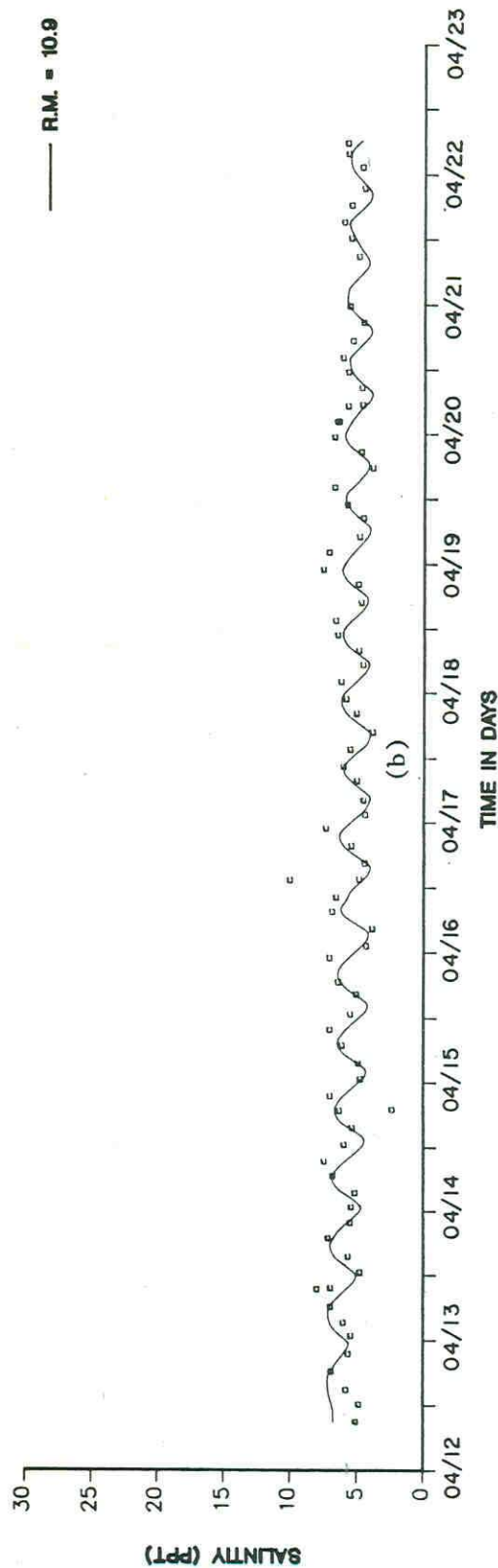
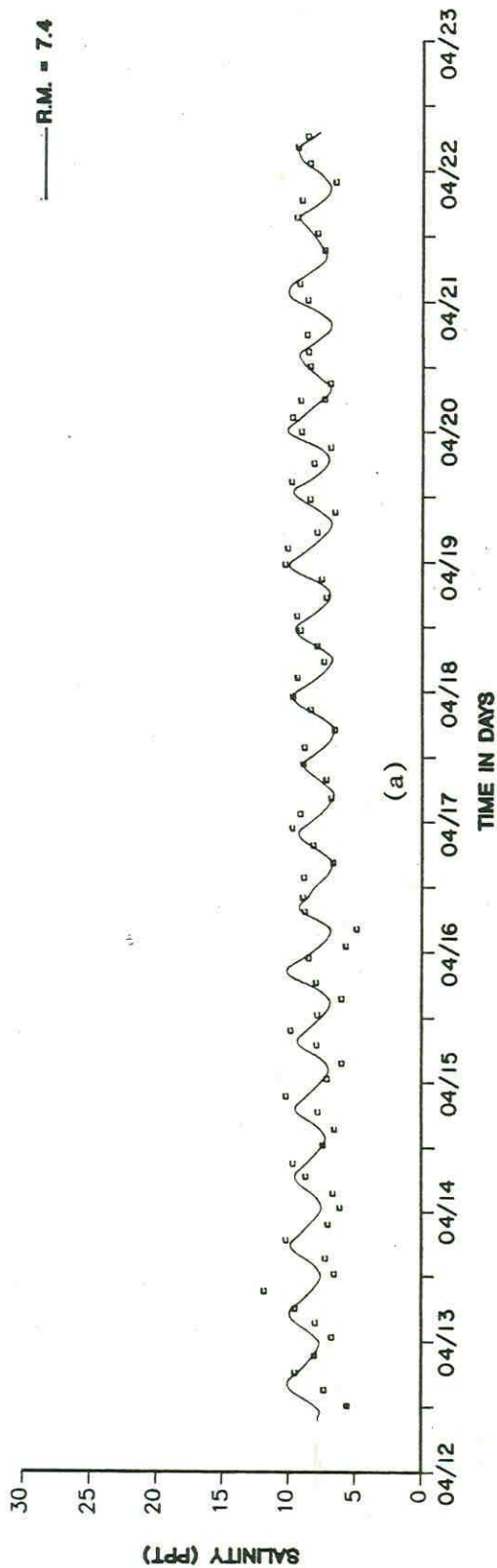


Figure 5.7 WATER QUALITY CALIBRATION - APRIL 1988

LOWER HACKENSACK RIVER STUDY RIVER MODEL (MIT-DNM) RESULTS

— OCEAN BOUNDARY AT NEWARK BAY - (R.M. = 1.3)

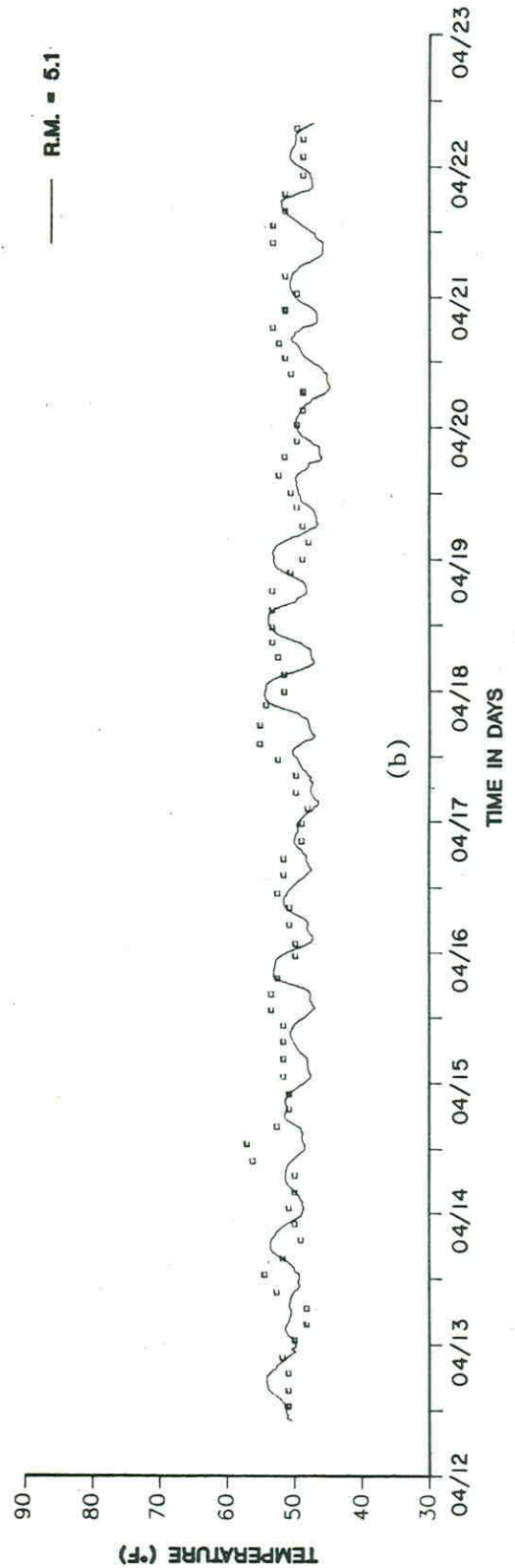
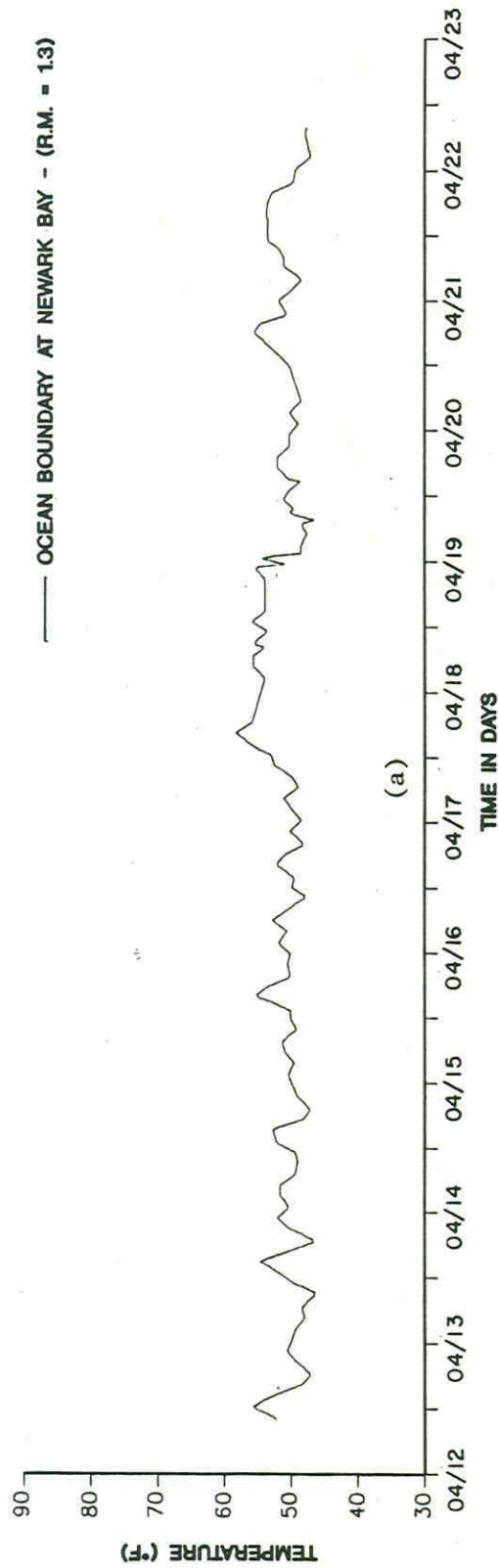


Figure 5.8 WATER QUALITY CALIBRATION - APRIL 1988

LOWER HACKENSACK RIVER STUDY RIVER MODEL (MIT-DNM) RESULTS

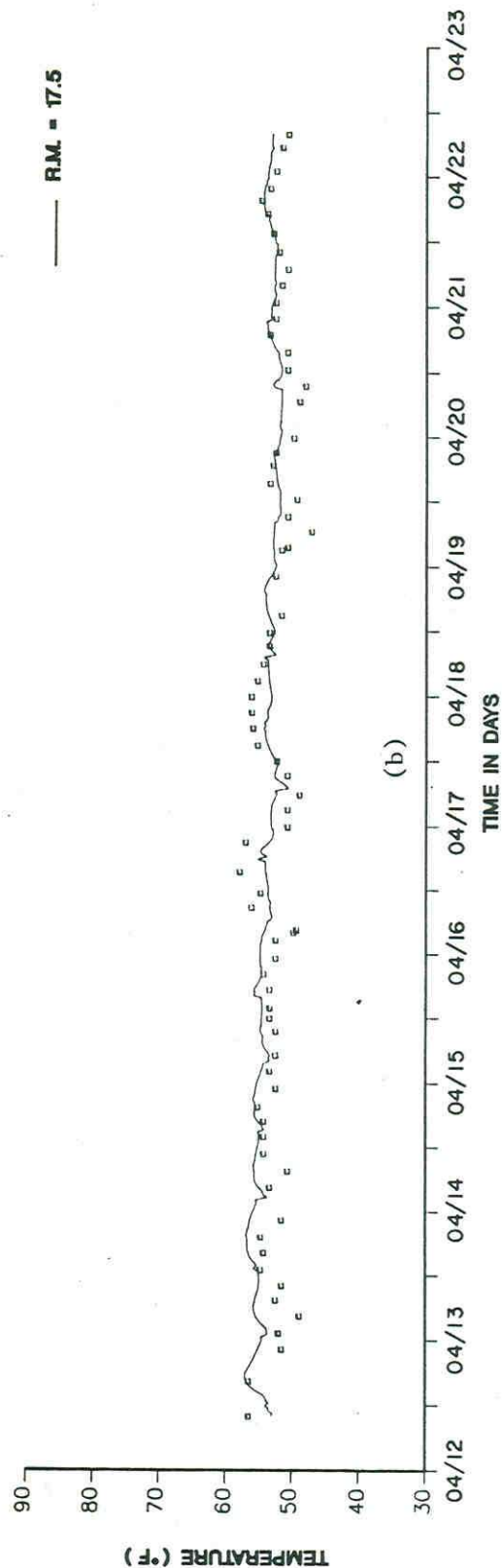
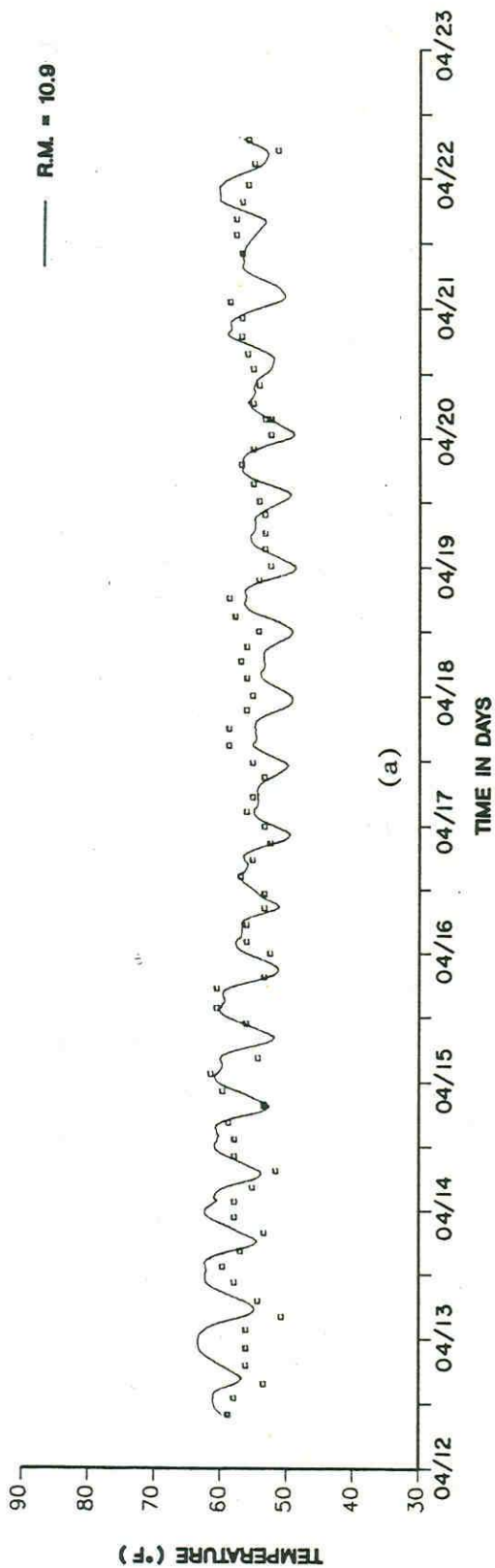


Figure 5.9 WATER QUALITY CALIBRATION - APRIL 1988

OCEAN BOUNDARY AT NEWARK BAY

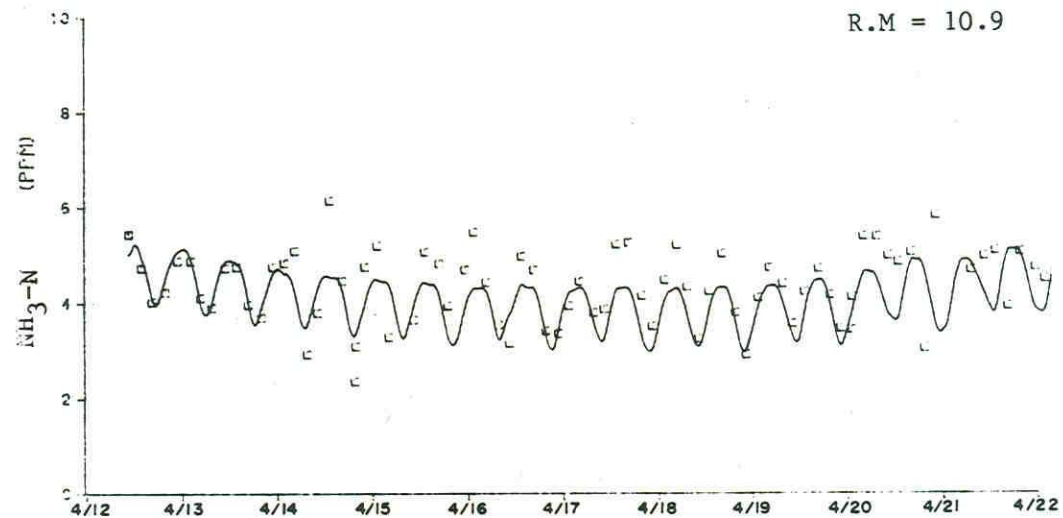
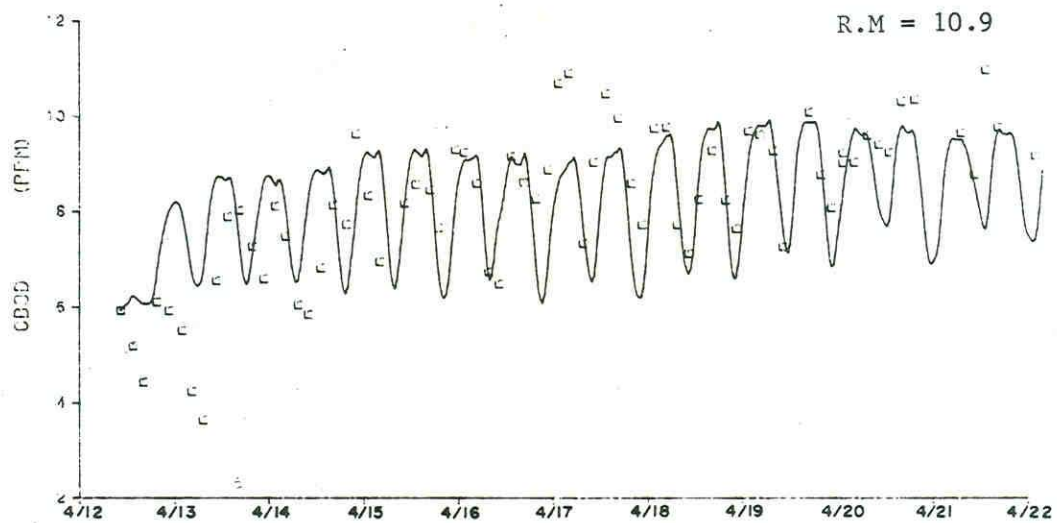
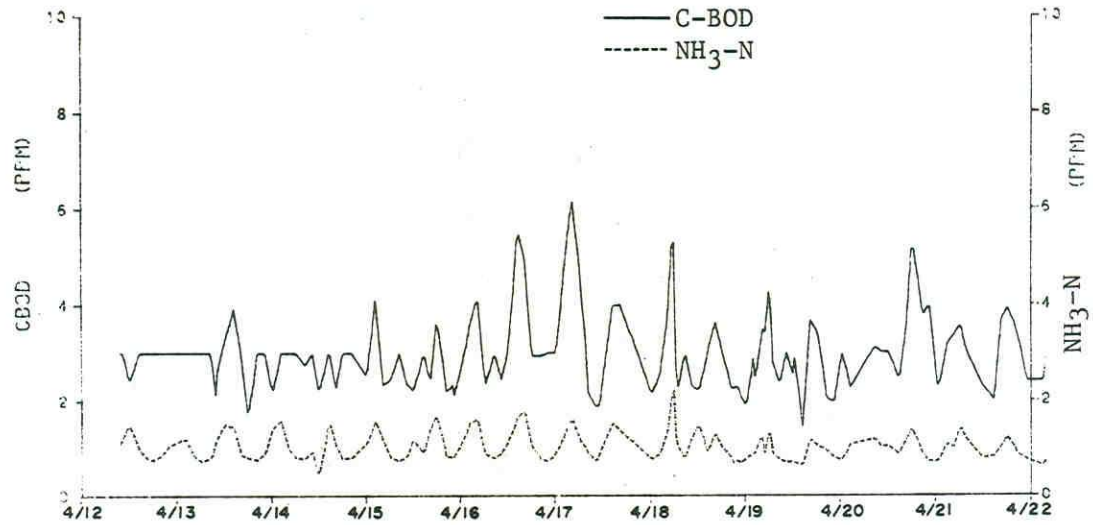


Figure 5.10: Water Quality Calibration, April 1988

LOWER HACKENSACK RIVER STUDY RIVER MODEL (MIT-DNM) RESULTS

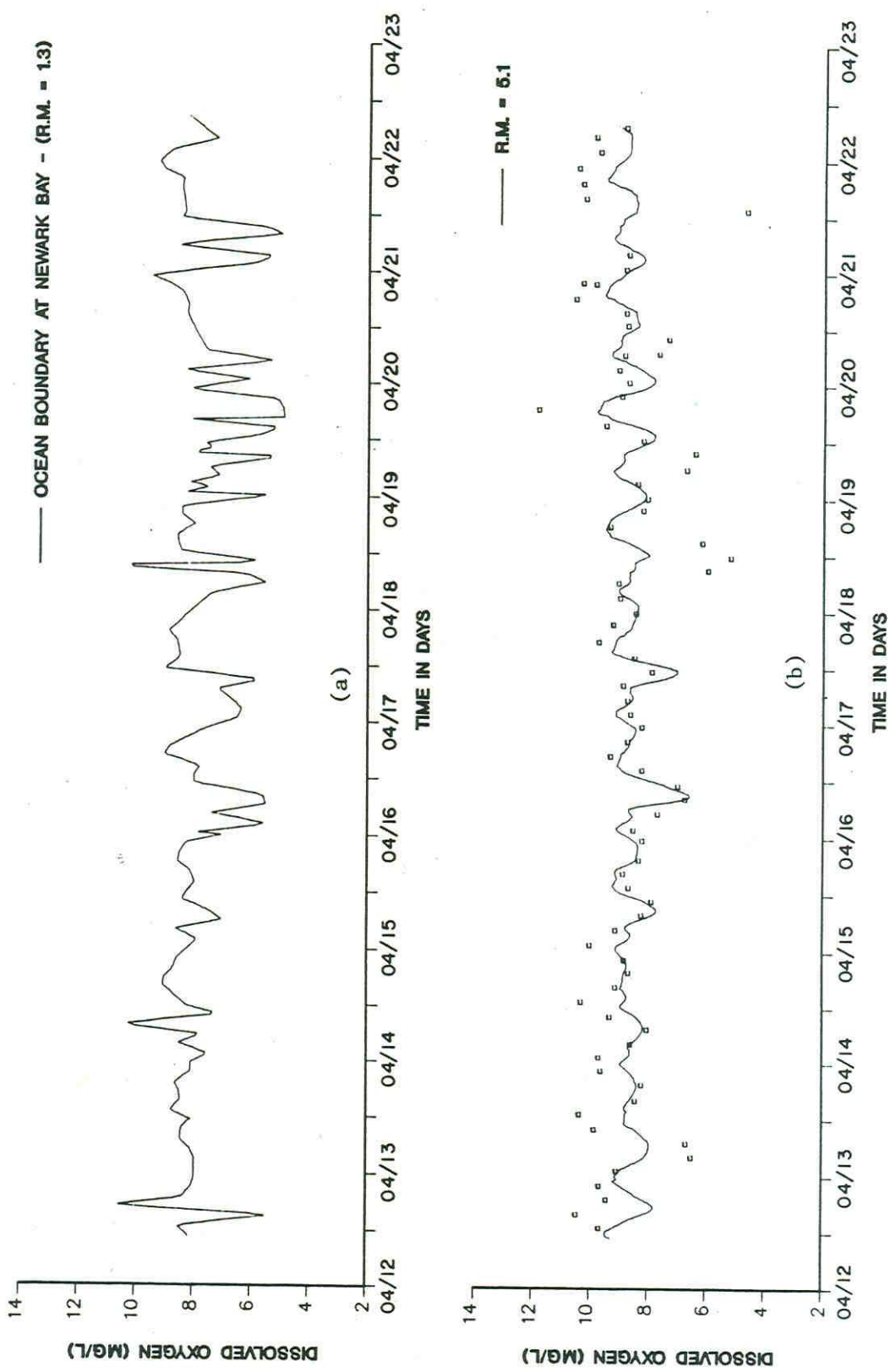


Figure 5.11 WATER QUALITY CALIBRATION - APRIL 1988

LOWER HACKENSACK RIVER STUDY RIVER MODEL (MIT-DNM) RESULTS

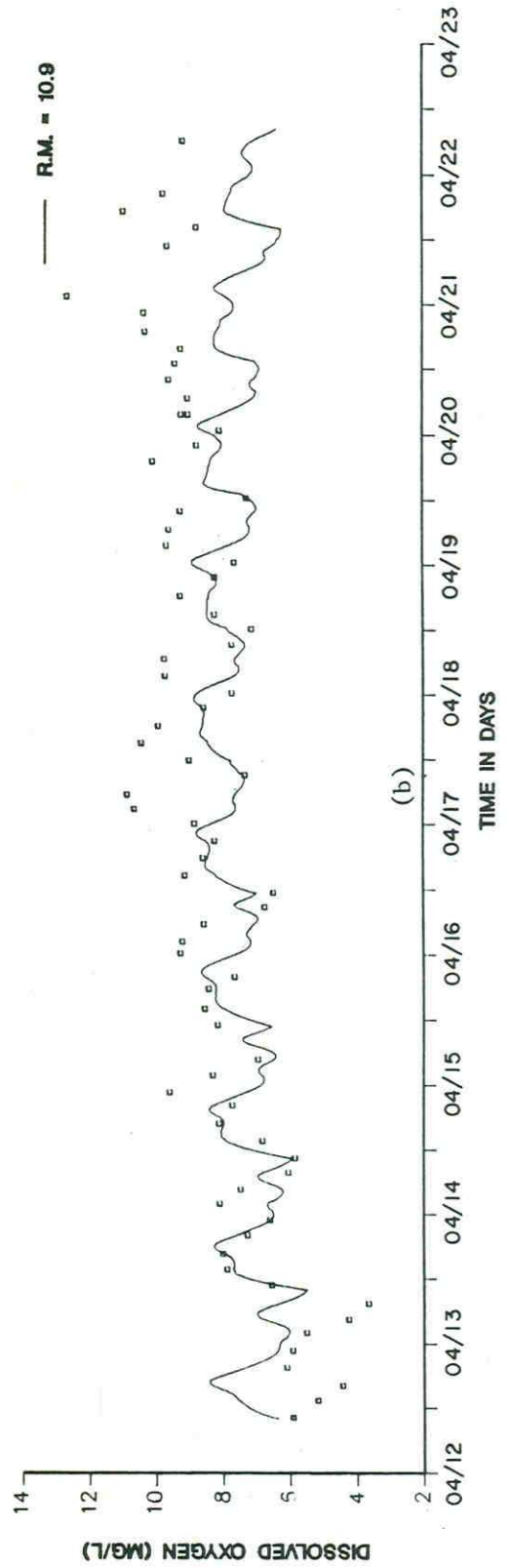
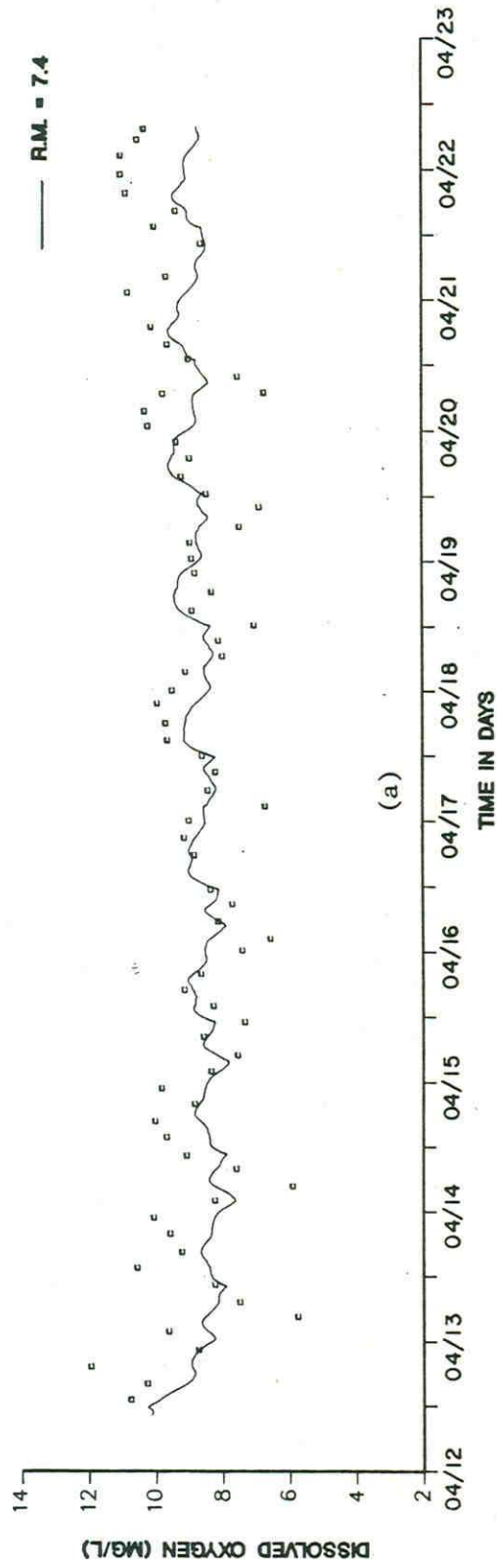
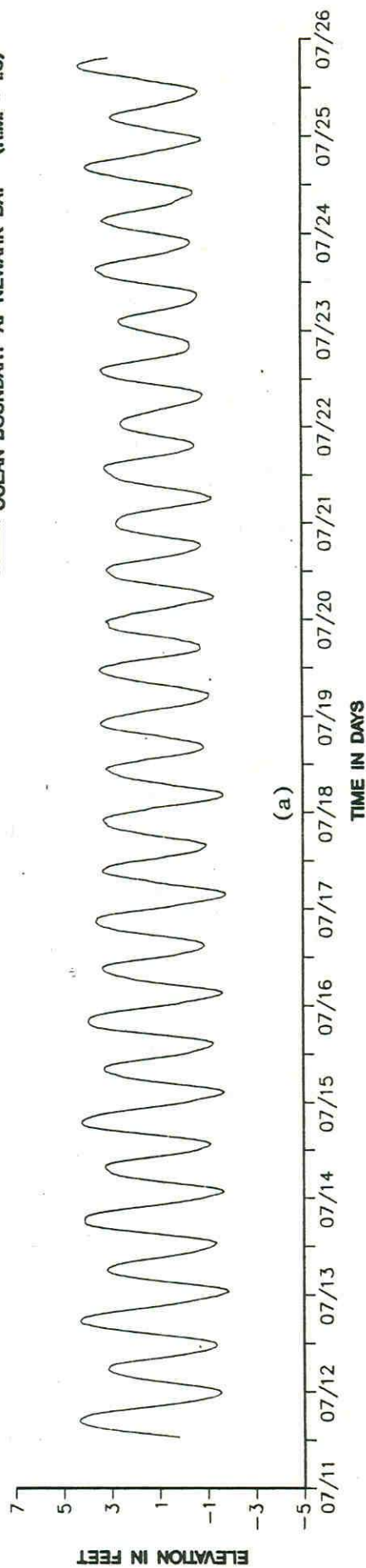


Figure 5.12 WATER QUALITY CALIBRATION - APRIL 1988

LOWER HACKENSACK RIVER STUDY RIVER MODEL (MIT-DNM) RESULTS

— OCEAN BOUNDARY AT NEWARK BAY - (R.M. = 1.3)



— OCEAN BOUNDARY AT NEWARK BAY - (R.M. = 1.3)
 --- (R.M. = 13.8)
 - - - (R.M. = 17.5)

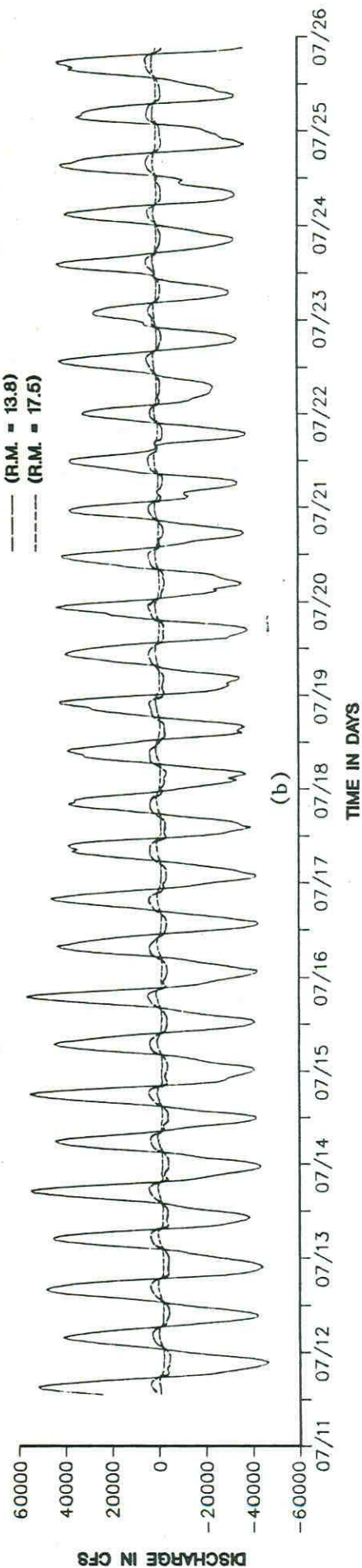


Figure 5.13 HYDRAULIC VERIFICATION - JULY 1988

LOWER HACKENSACK RIVER STUDY RIVER MODEL (MIT-DNM) RESULTS

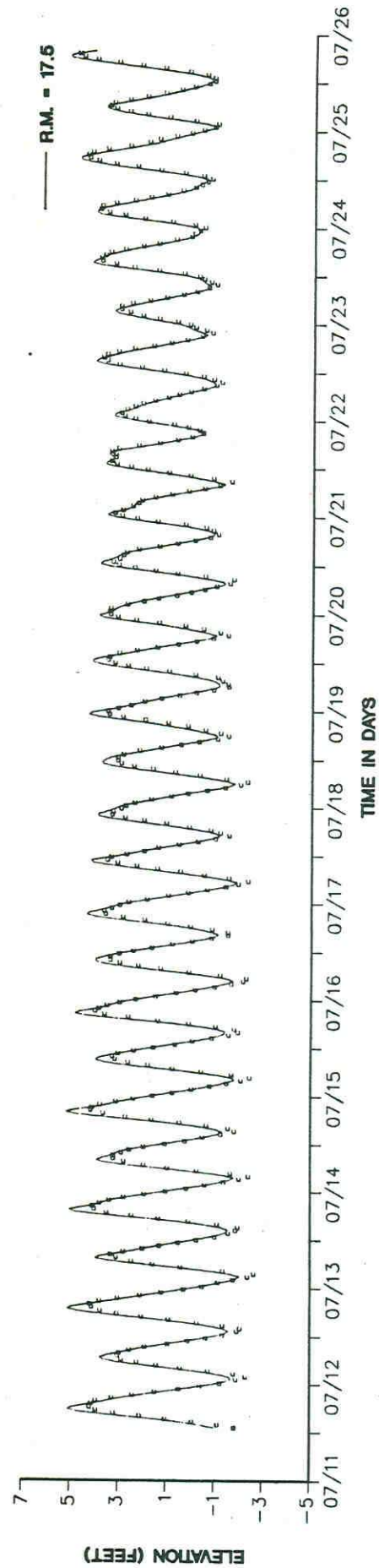
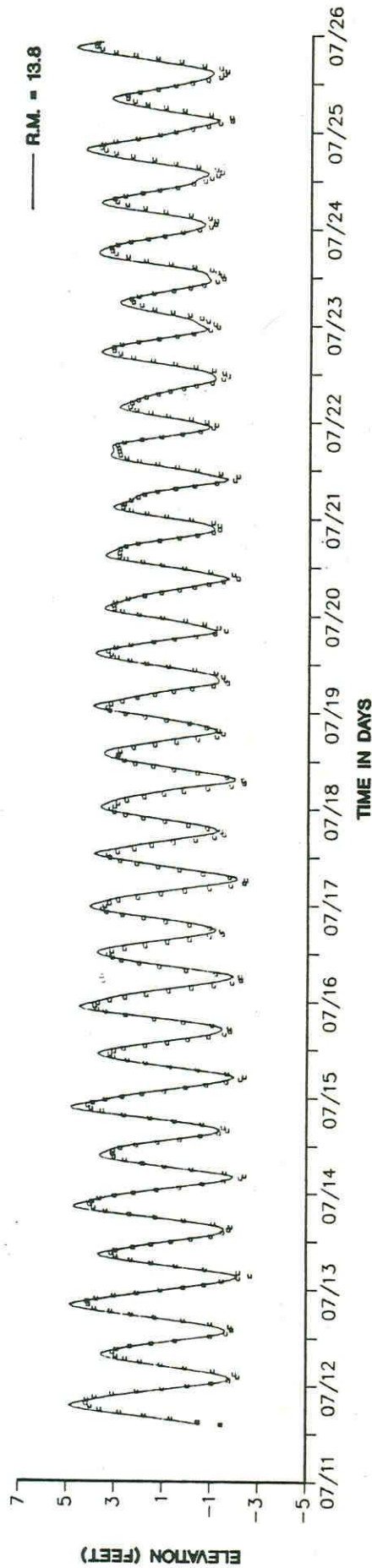


Figure 5.14 HYDRAULIC VERIFICATION - JULY 1988

LOWER HACKENSACK RIVER STUDY RIVER MODEL (MIT-DNM) RESULTS

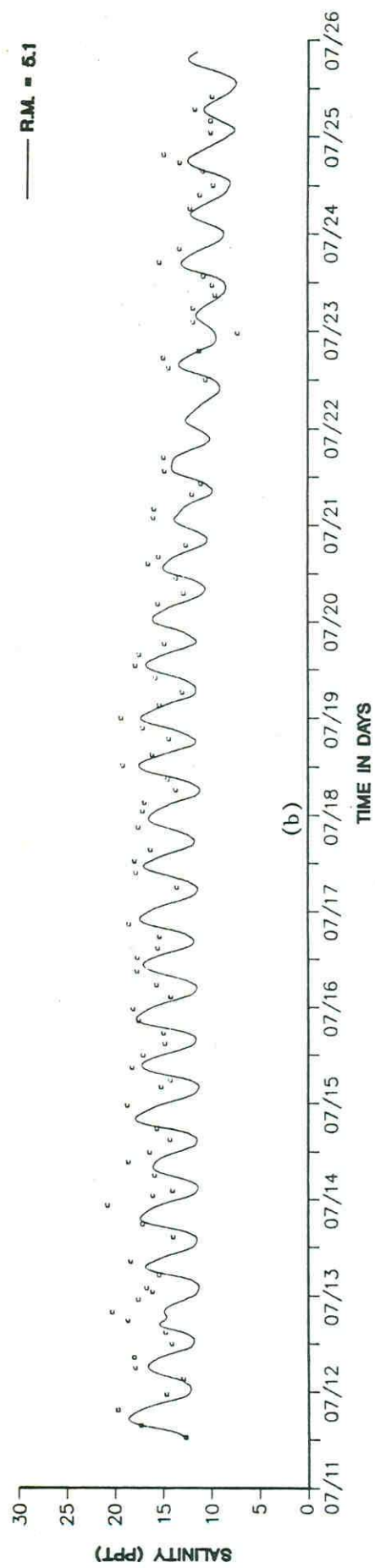
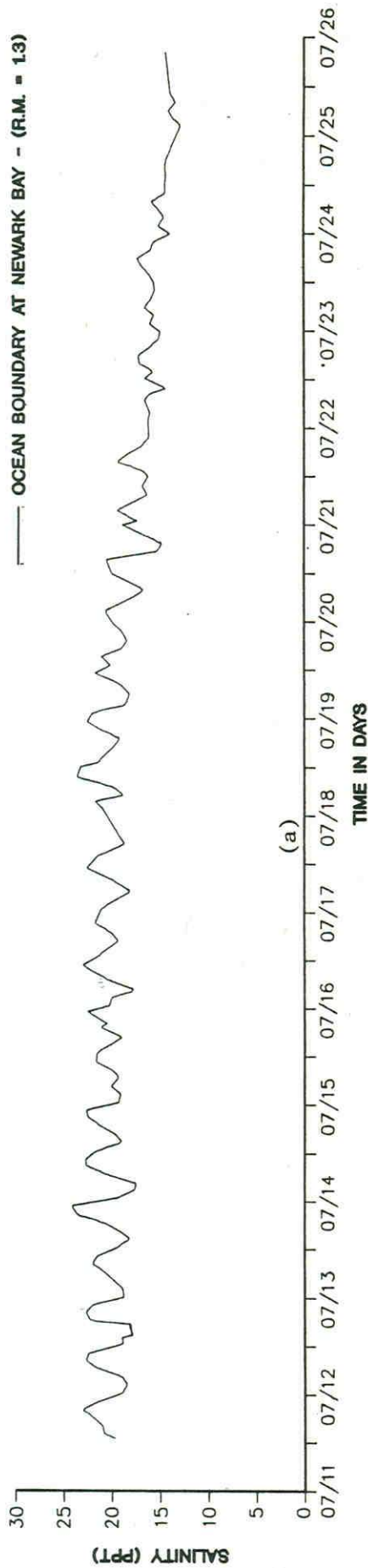


Figure 5.15 WATER QUALITY VERIFICATION - JULY 1988

LOWER HACKENSACK RIVER STUDY RIVER MODEL (MIT-DNM) RESULTS

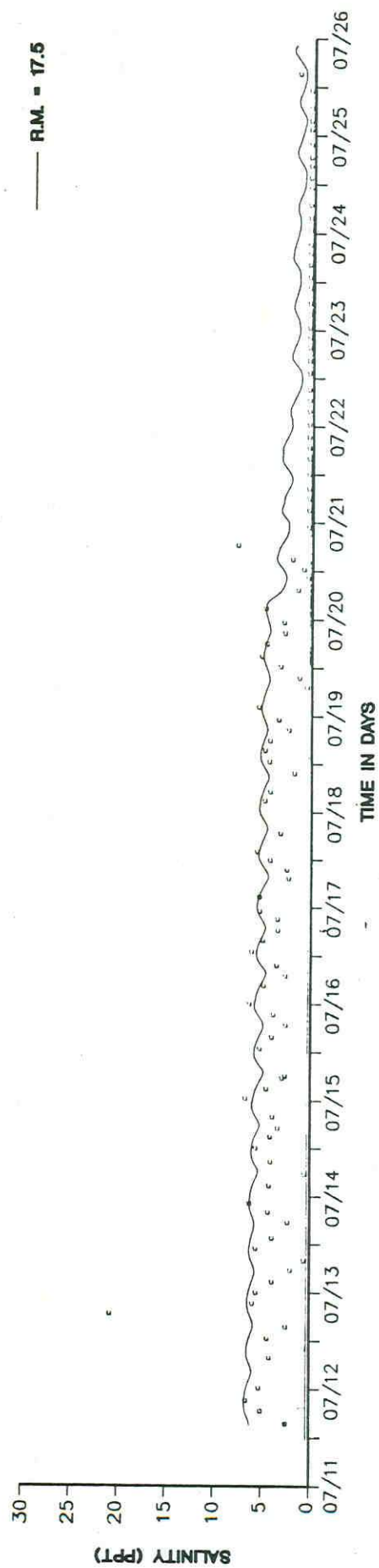
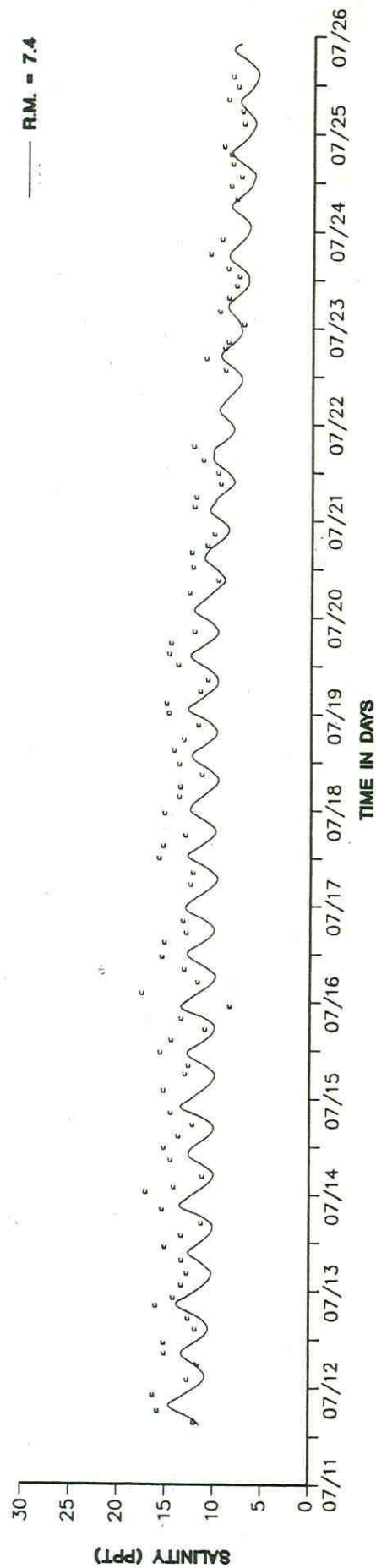


Figure 5.16 WATER QUALITY VERIFICATION - JULY 1988

LOWER HACKENSACK RIVER STUDY RIVER MODEL (MIT-DNM) RESULTS

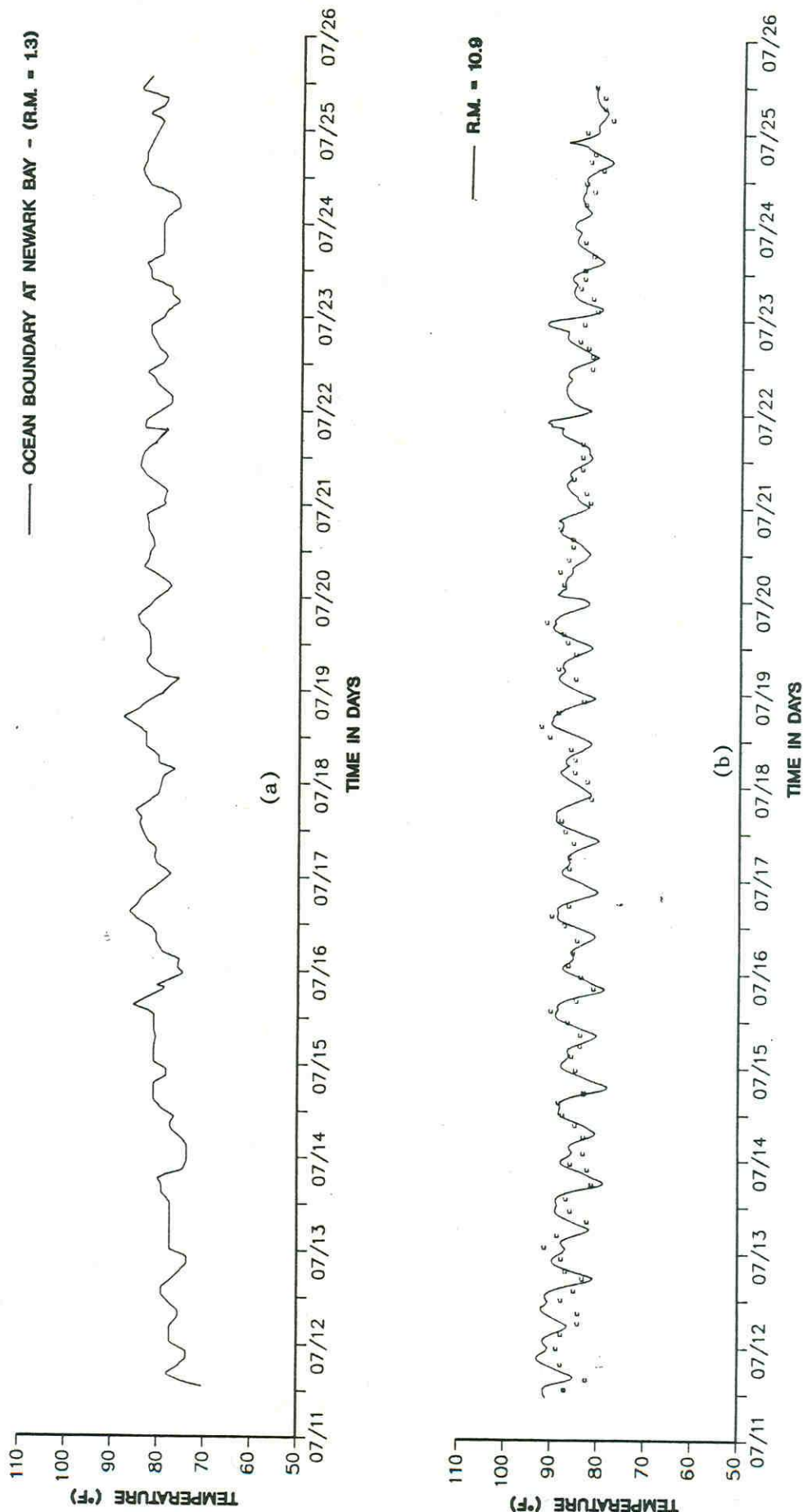


Figure 5.17 WATER QUALITY VERIFICATION - JULY 1988

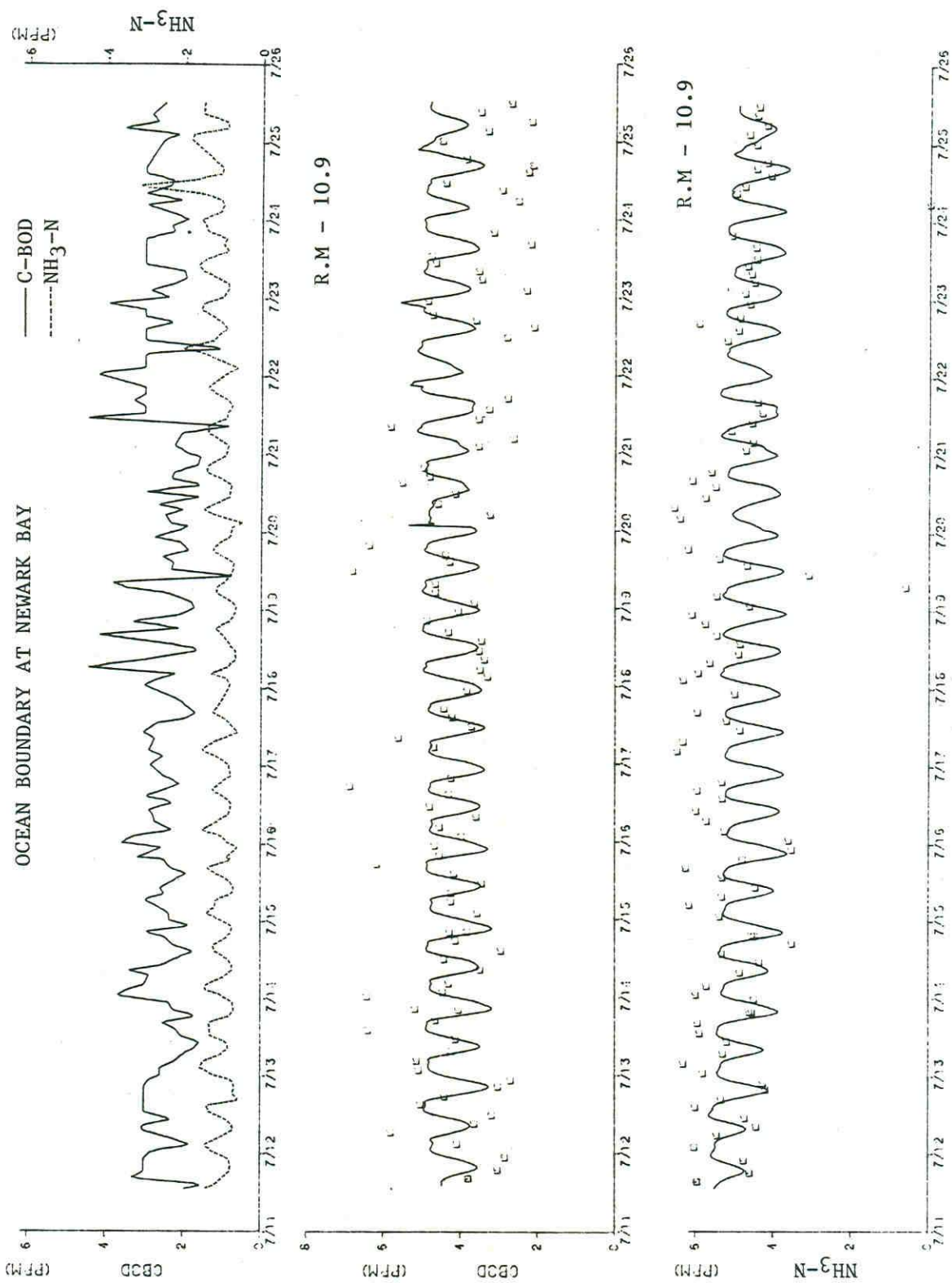


Figure 5.18: Water Quality Verification - July 1988

LOWER HACKENSACK RIVER STUDY RIVER MODEL (MIT-DNM) RESULTS

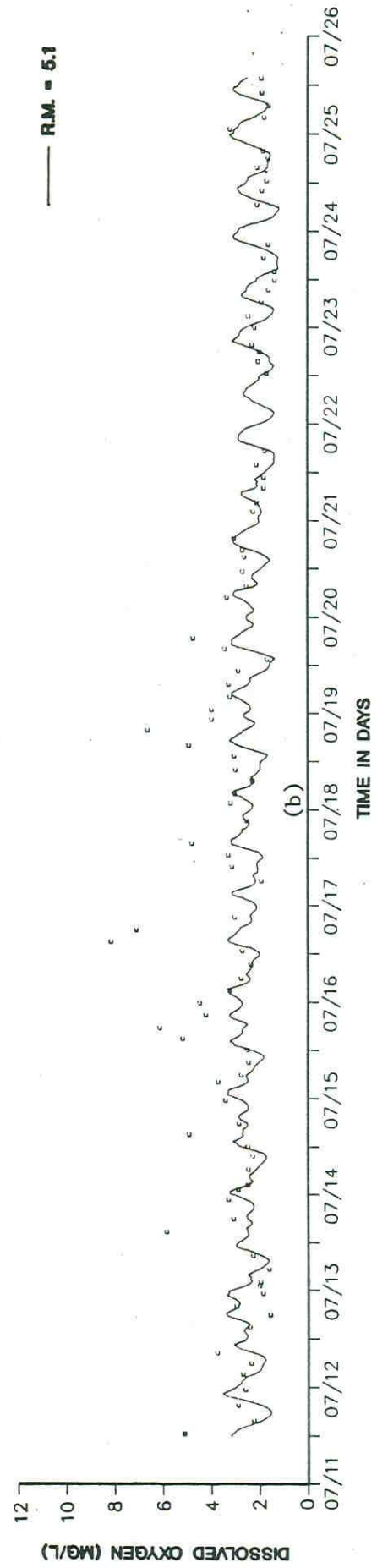
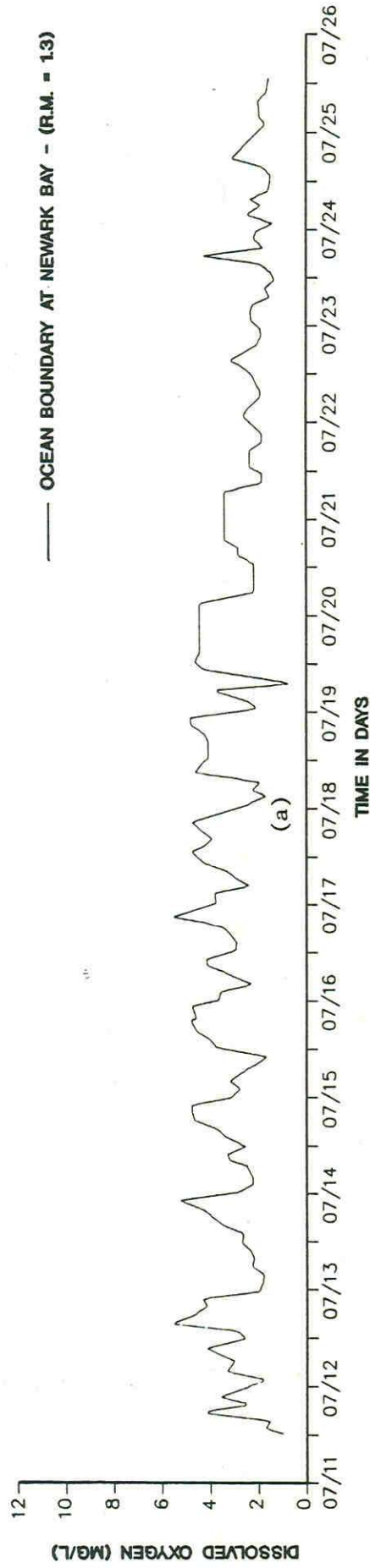


Figure 5.19 WATER QUALITY VERIFICATION - JULY 1988

LOWER HACKENSACK RIVER STUDY RIVER MODEL (MIT-DNM) RESULTS

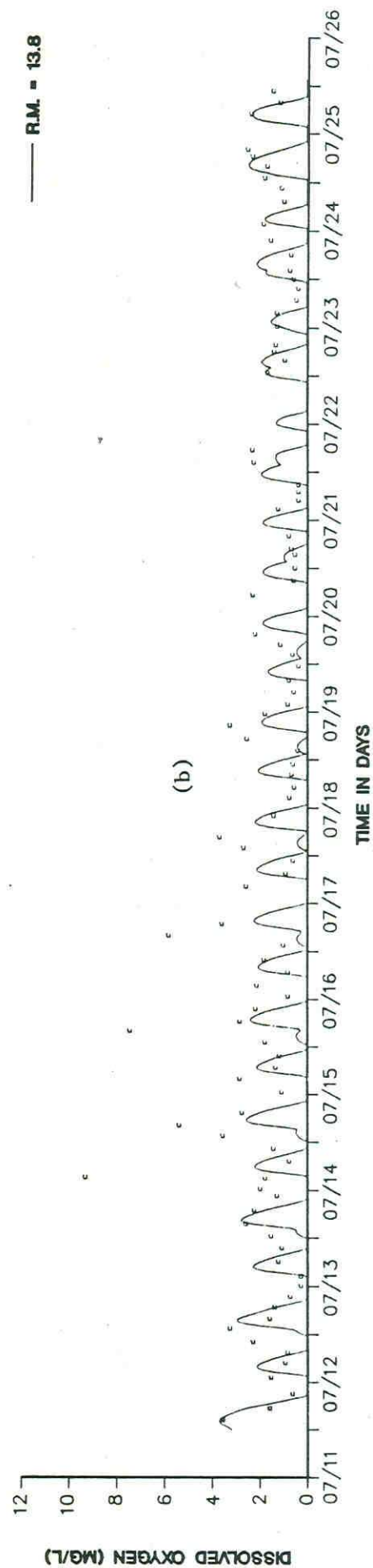
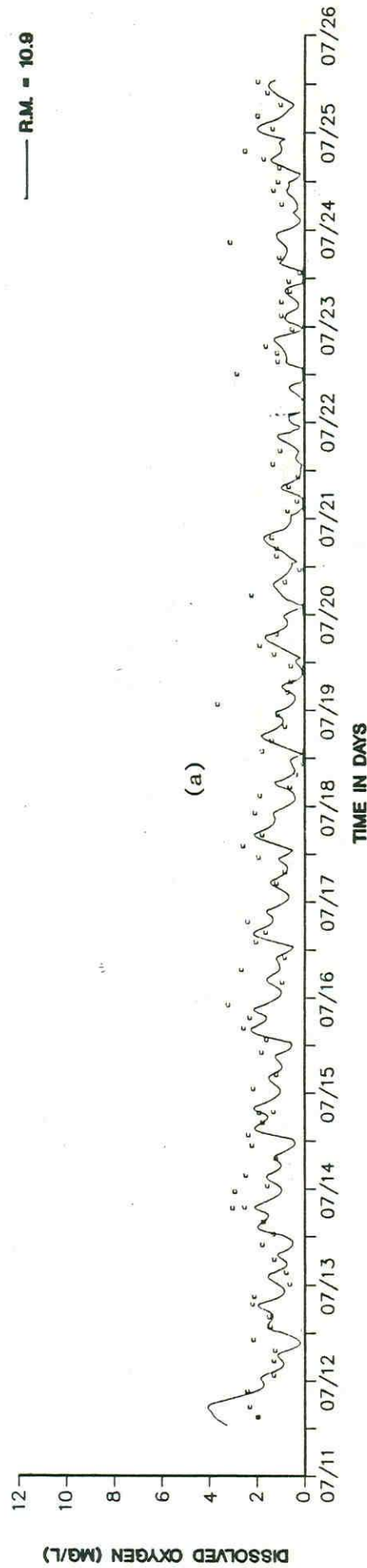


Figure 5.20 WATER QUALITY VERIFICATION - JULY 1988