CITY OF TALLAHASSEE

SITE CERTIFICATION APPLICATION

PURDOM UNIT 8

MARCH 1997

VOLUME 4

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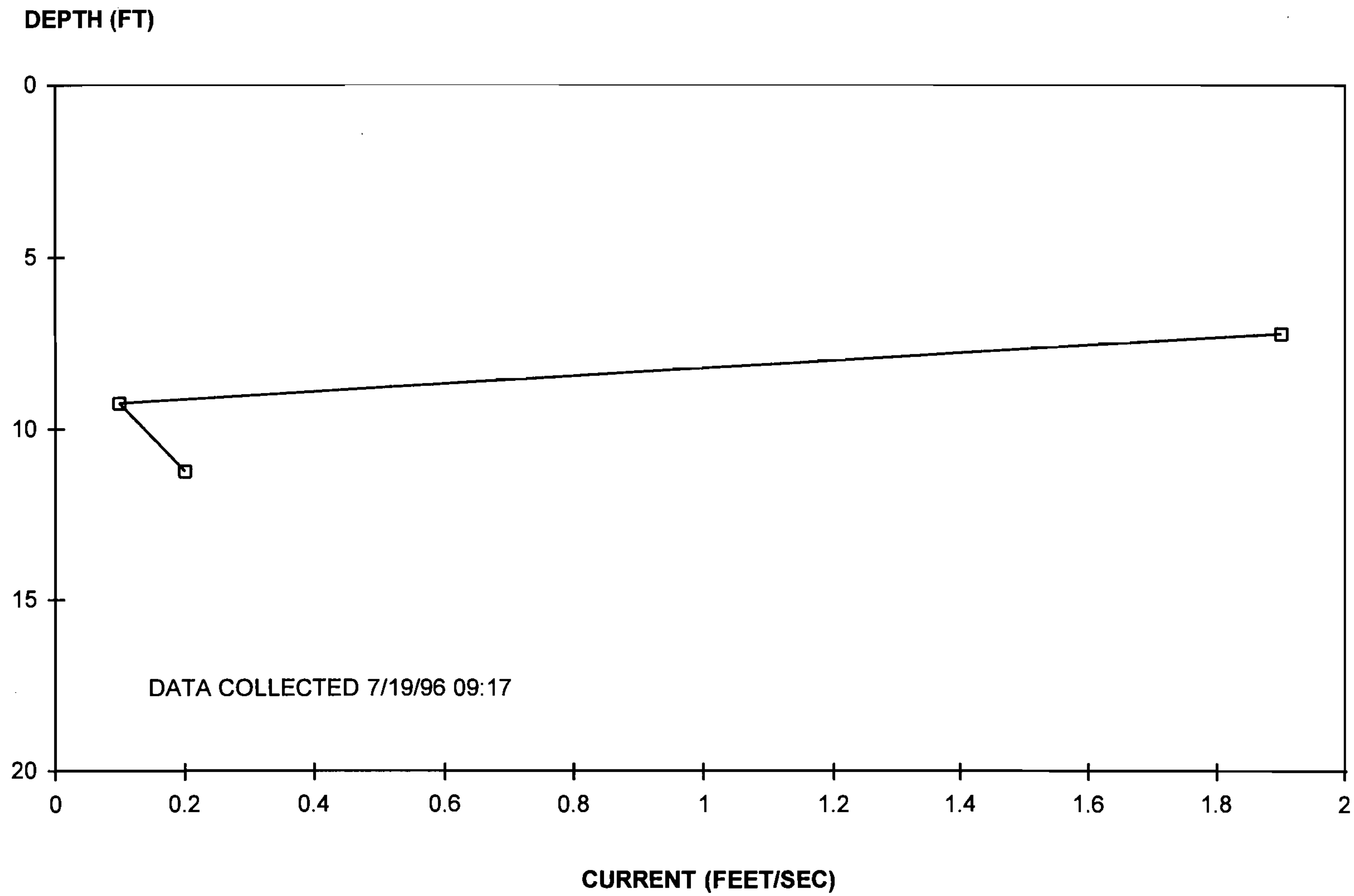
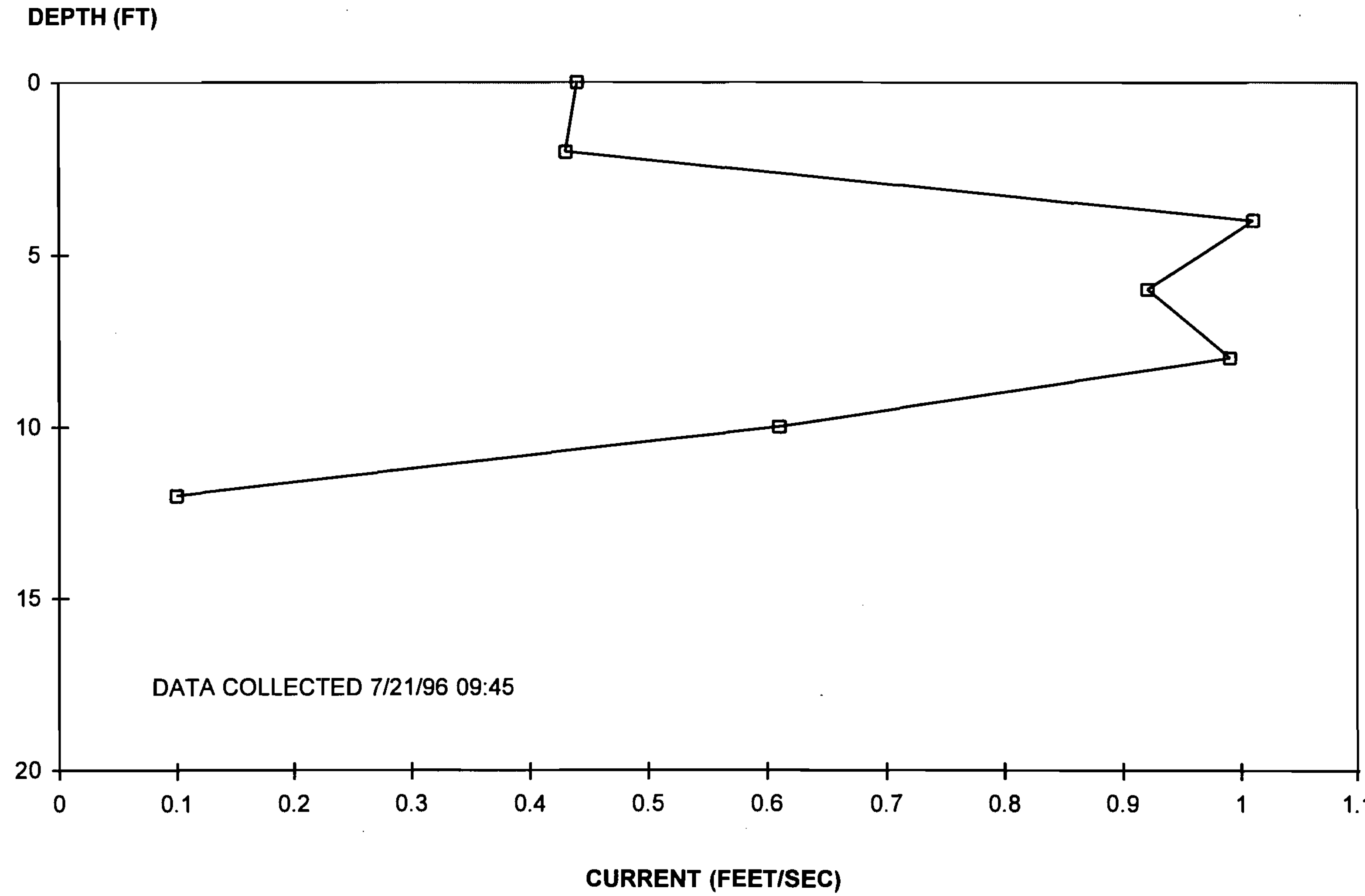


CITY OF TALLAHASSEE

LOCATION 1
WATER COLUMN CURRENT PROFILE
AT ST. MARKS RIVER, UPSTREAM OF PLANT INFLUENCES, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

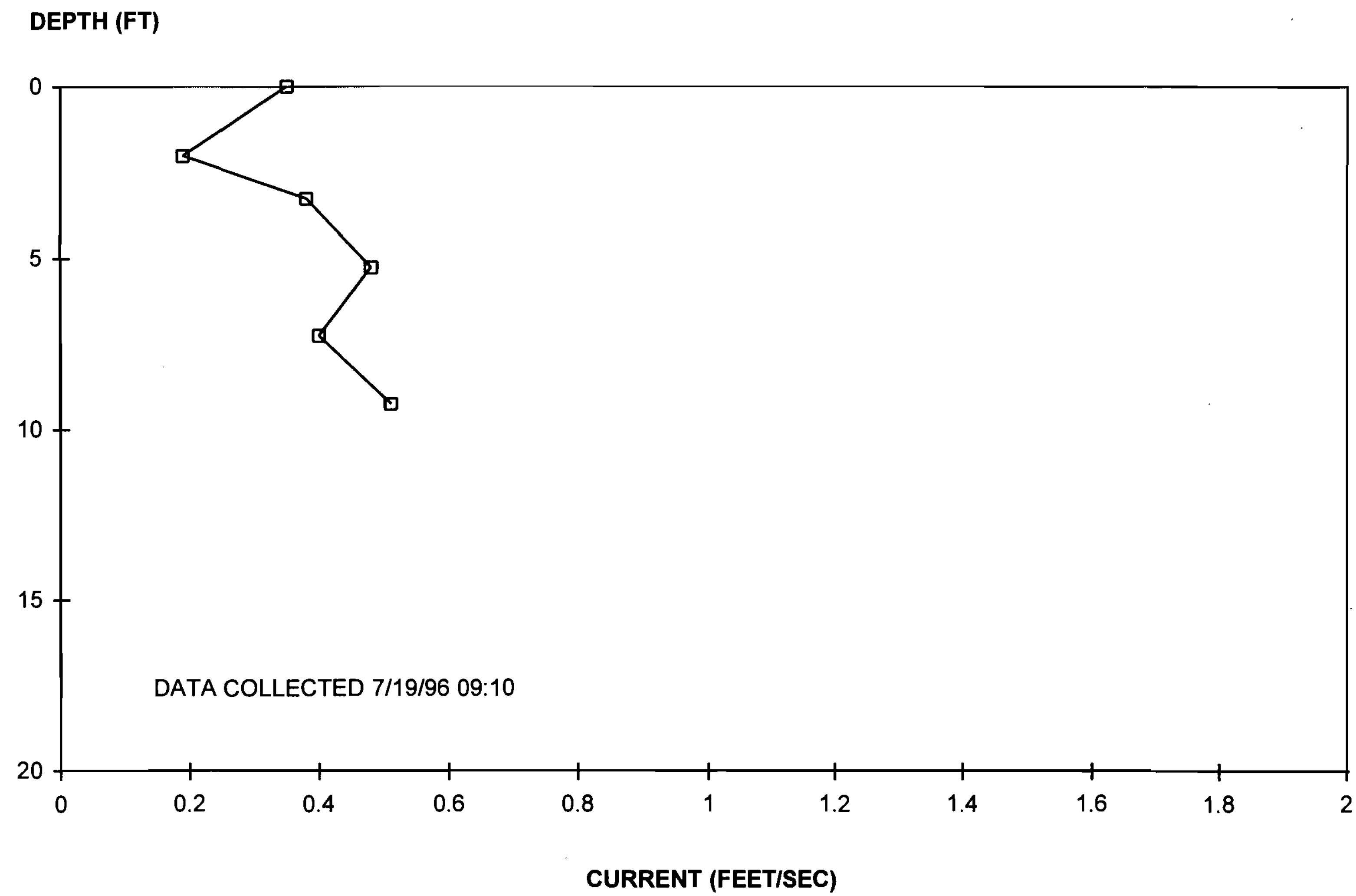
Figure 10.5.4-1



CITY OF TALLAHASSEE

LOCATION 1
WATER COLUMN CURRENT PROFILE
AT ST. MARKS RIVER, UPSTREAM OF PLANT INFLUENCES
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

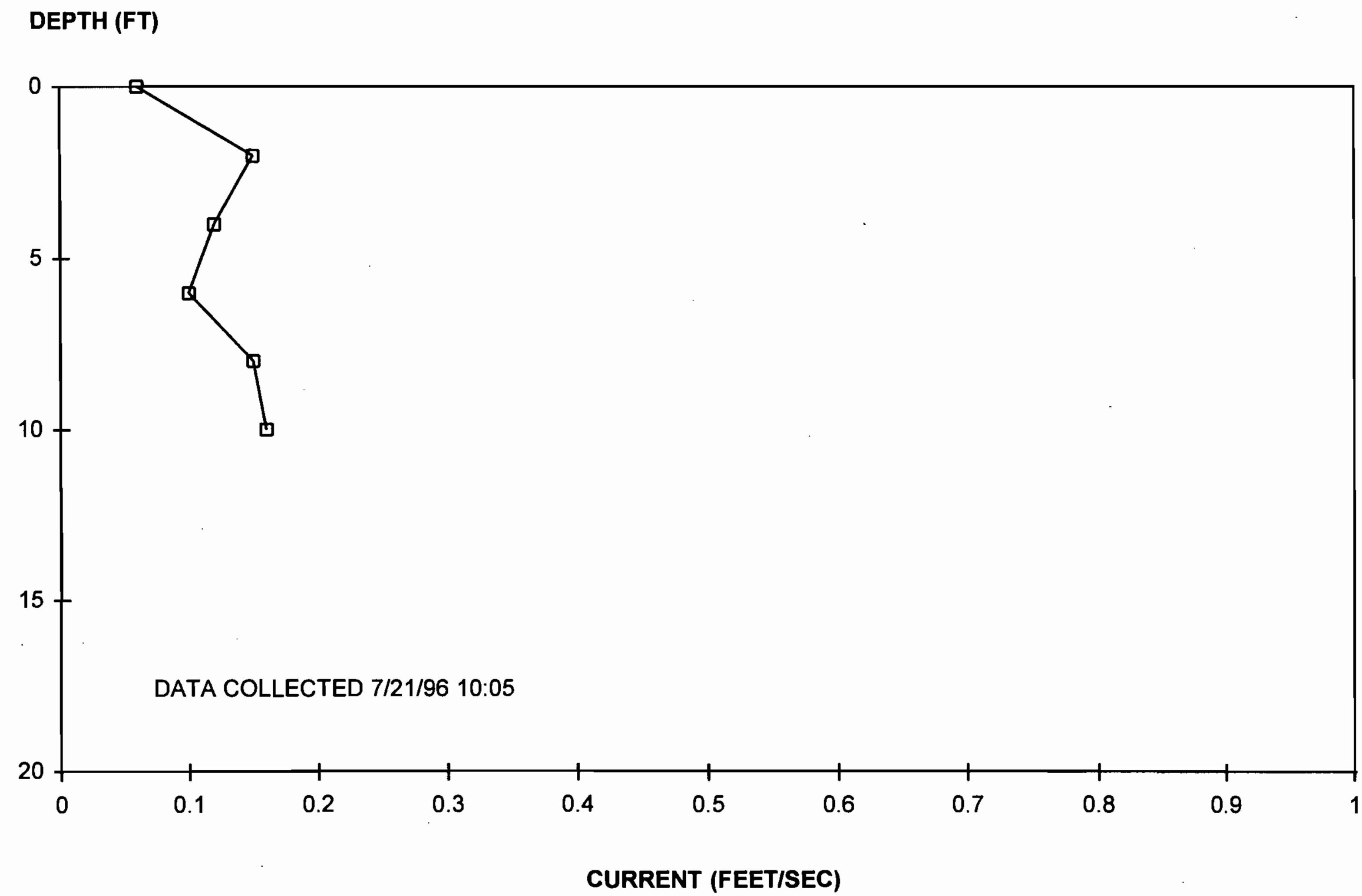
Figure
10.5.4–2



CITY OF TALLAHASSEE

LOCATION 2
WATER COLUMN CURRENT PROFILE
AT UNIT 7 INTAKE STRUCTURE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

Figure
10.5.4-3

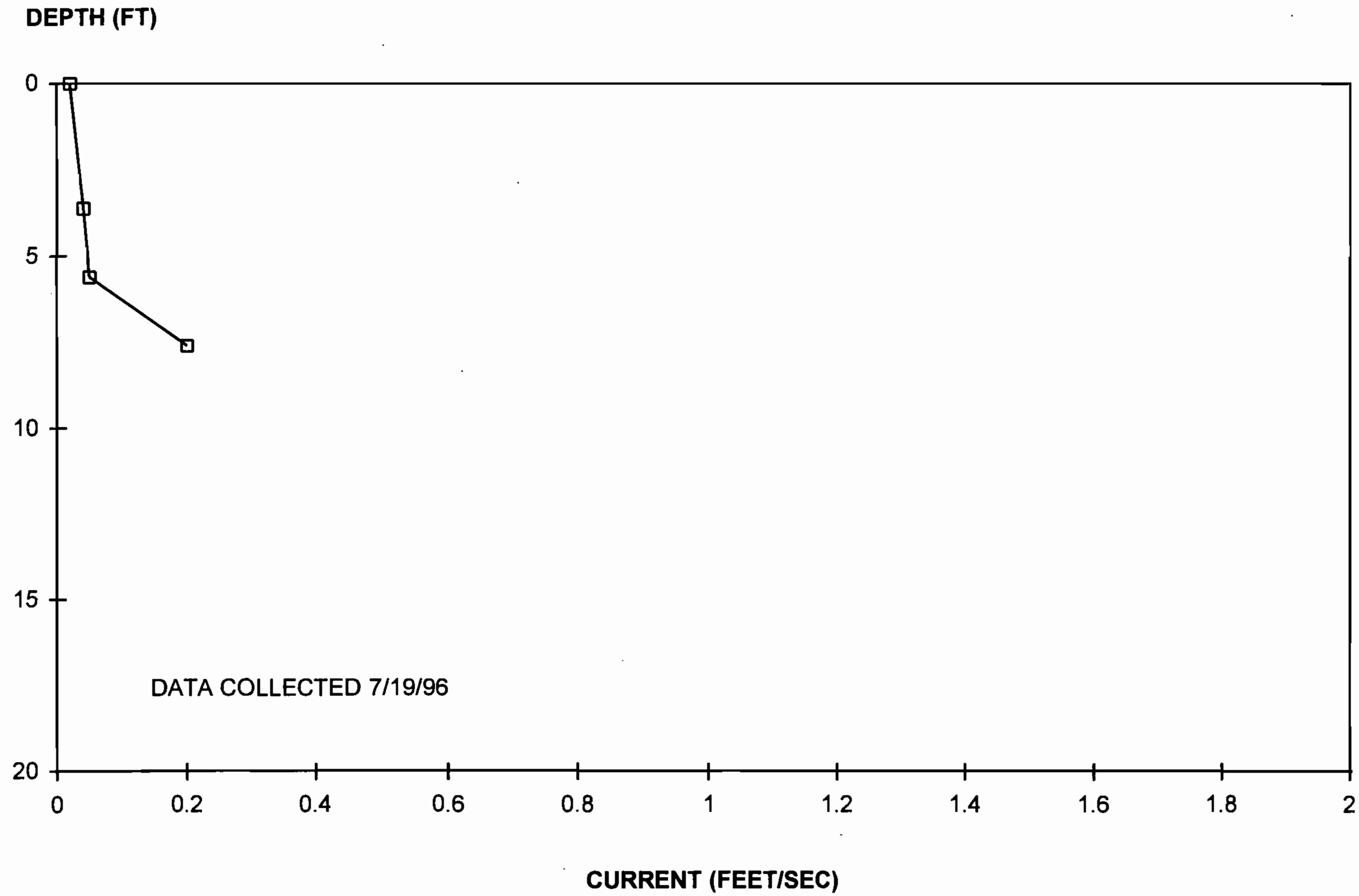


CITY OF TALLAHASSEE

LOCATION 2
WATER COLUMN CURRENT PROFILE
AT UNIT 7 INTAKE

PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

Figure 10.5.4–4



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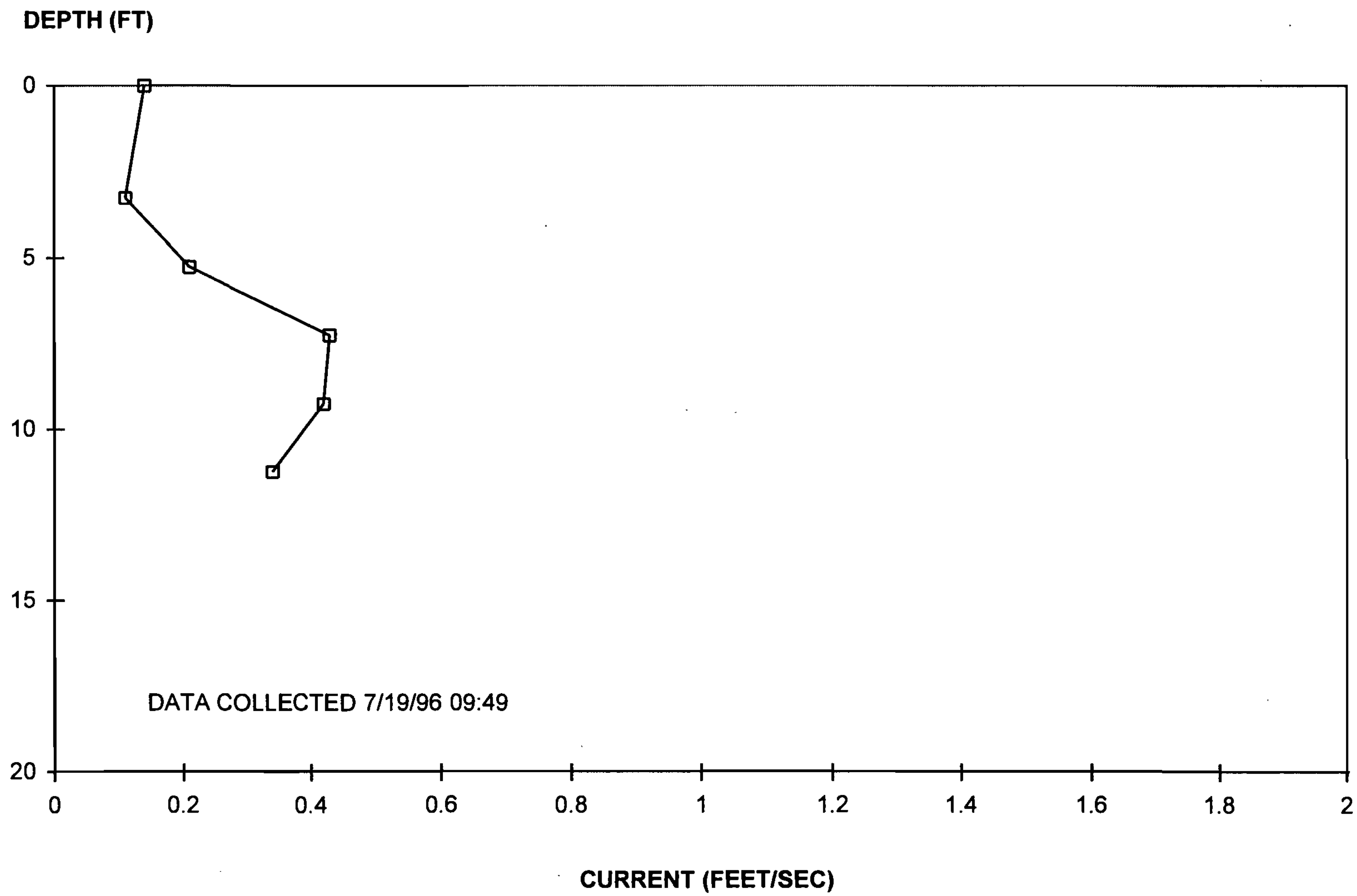
LOCATION 3
WATER COLUMN CURRENT PROFILE
AT OPENING OF INTAKE CANAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

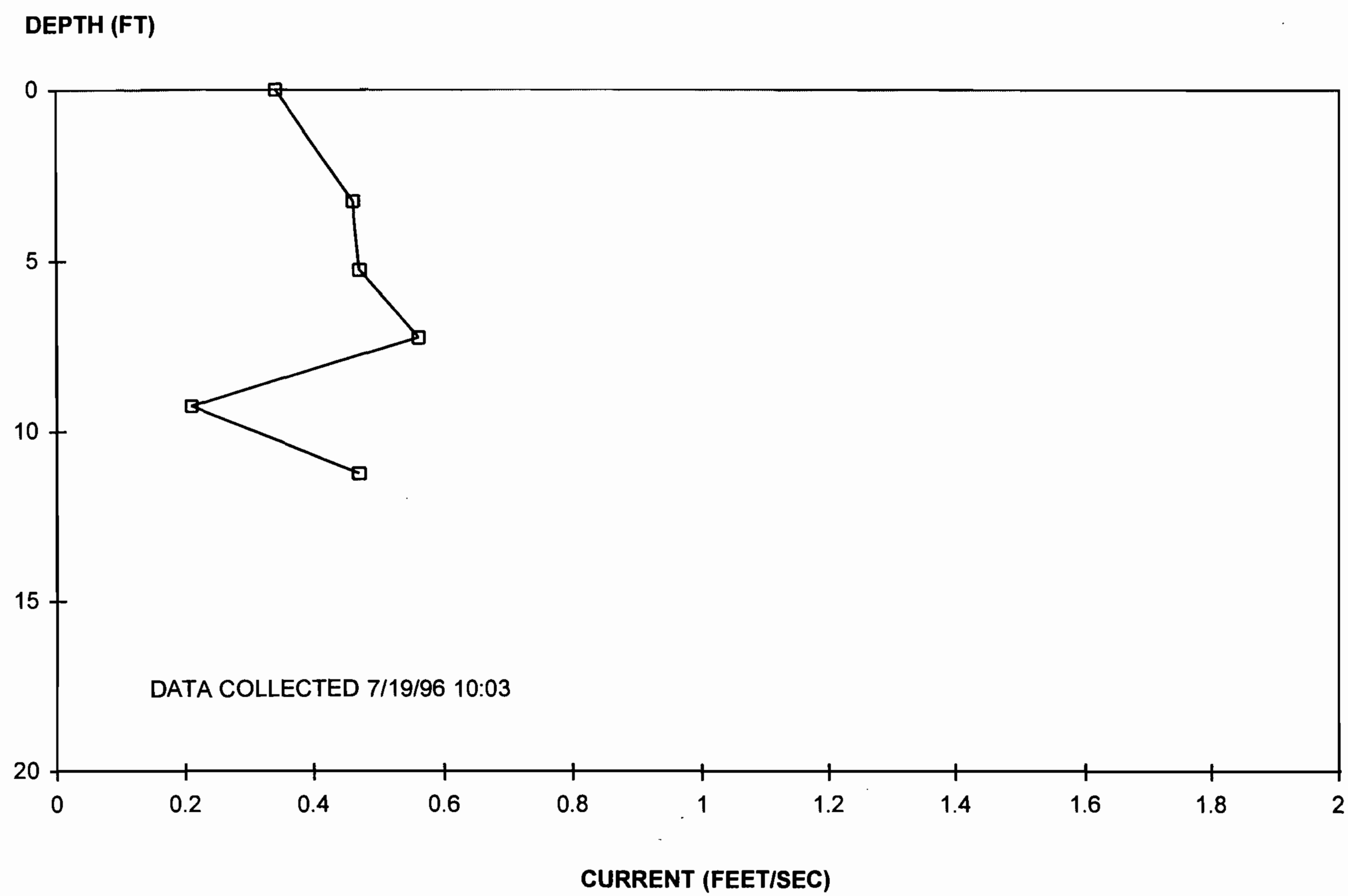
Figure
10.5.4–5



CITY OF TALLAHASSEE

LOCATION 4
WATER COLUMN CURRENT PROFILE
AT ST. MARKS RIVER, AT UNIT 5 INTAKE STRUCTURE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

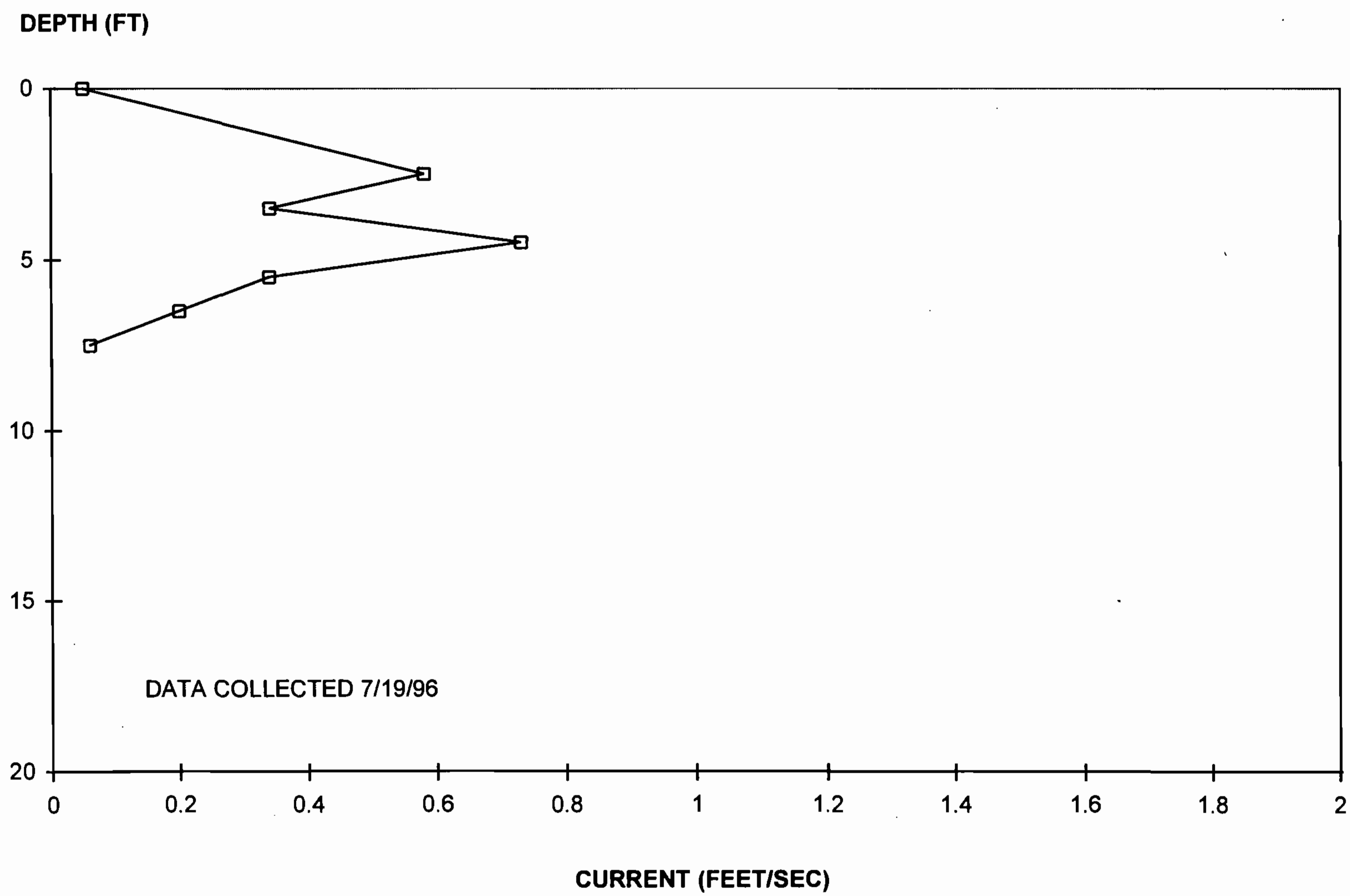
Figure
10.5.4–6



CITY OF TALLAHASSEE

LOCATION 5
WATER COLUMN CURRENT PROFILE
AT ST. MARKS RIVER, BELOW INTAKE CANAL, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

Figure
10.5.4-7

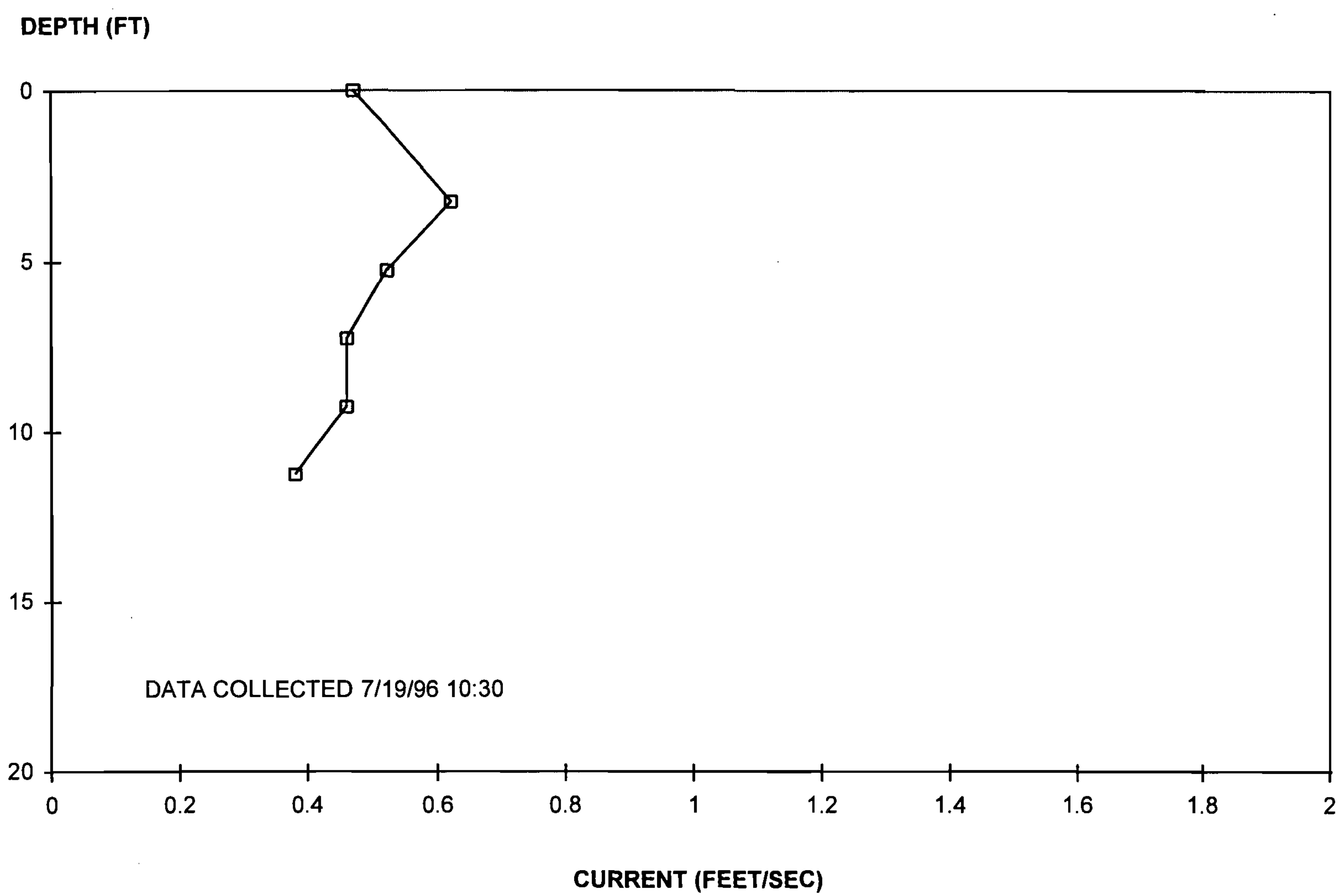


CITY OF TALLAHASSEE

LOCATION 6
WATER COLUMN CURRENT PROFILE
AT UNIT 5 DISCHARGE

PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

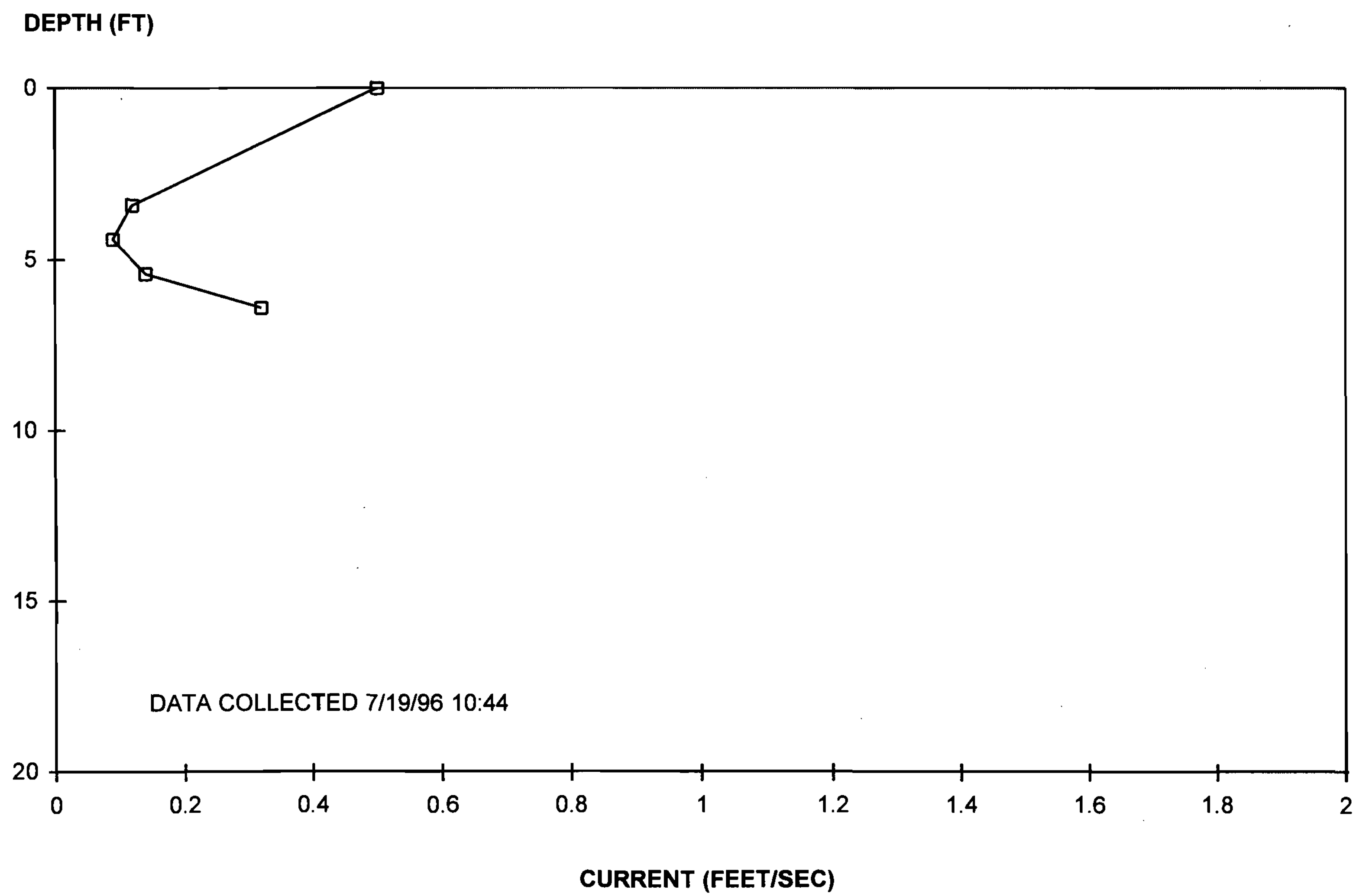
Figure 10.5.4–8



CITY OF TALLAHASSEE

LOCATION 6
WATER COLUMN CURRENT PROFILE
AT ST. MARKS RIVER, AT UNIT 5 DISCHARGE, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

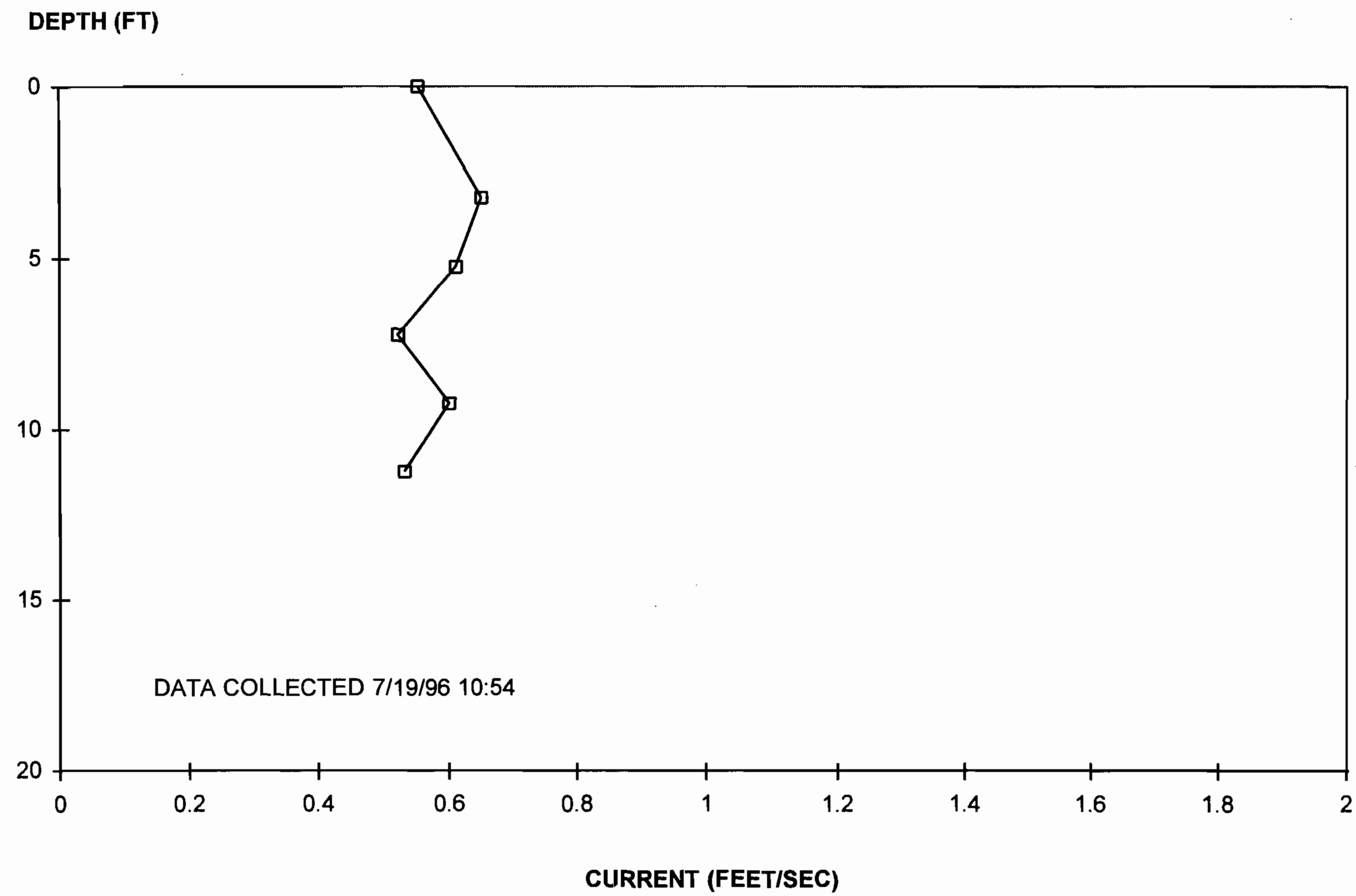
Figure
10.5.4-9



CITY OF TALLAHASSEE

LOCATION 6
WATER COLUMN CURRENT PROFILE
AT ST. MARKS RIVER, AT UNIT 5 DISCHARGE, BETWEEN DISCHARGE/MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

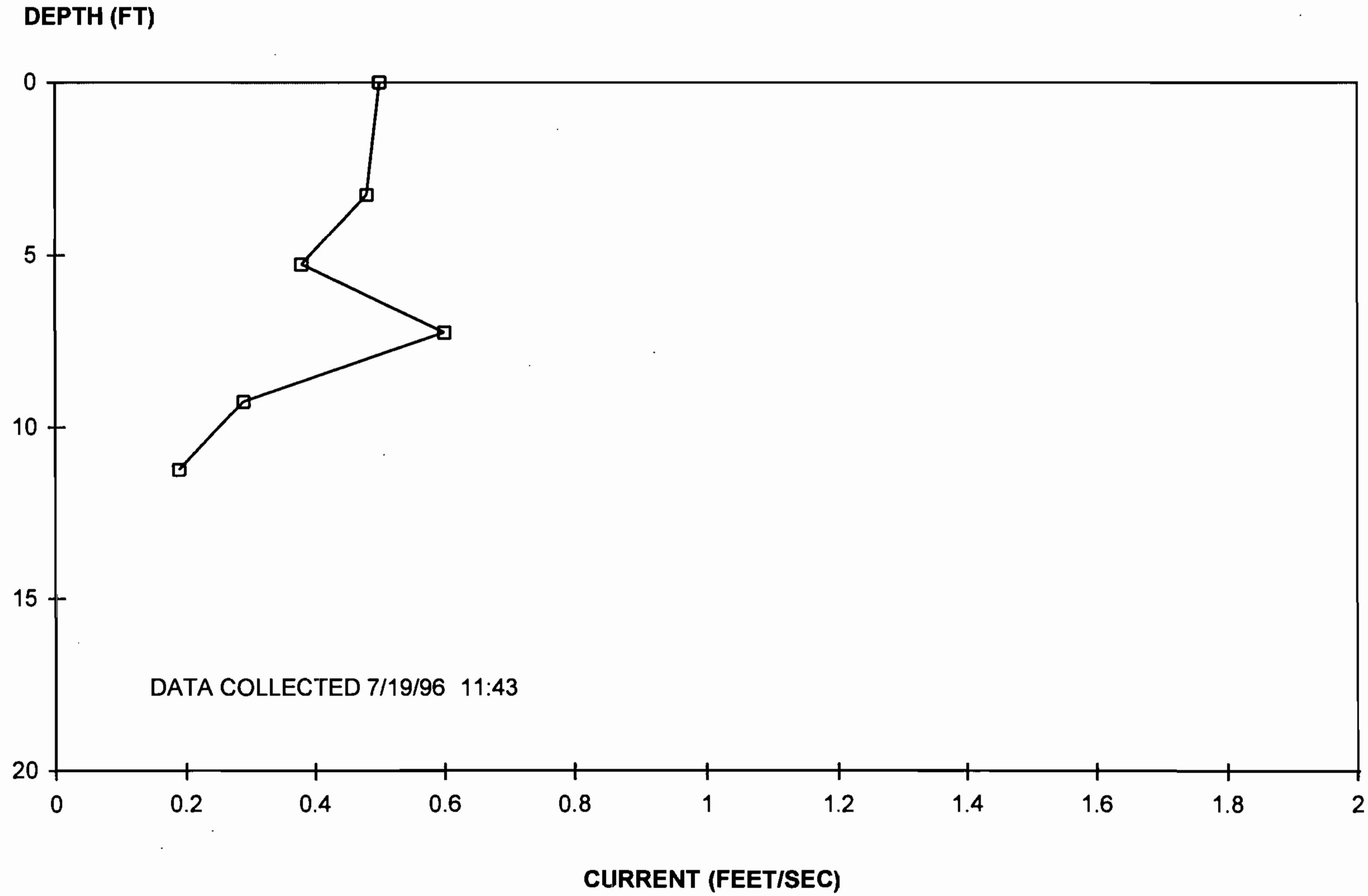
Figure
10.5.4-10



CITY OF TALLAHASSEE

LOCATION 7
WATER COLUMN CURRENT PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF UNIT 5 DISCHARGE, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

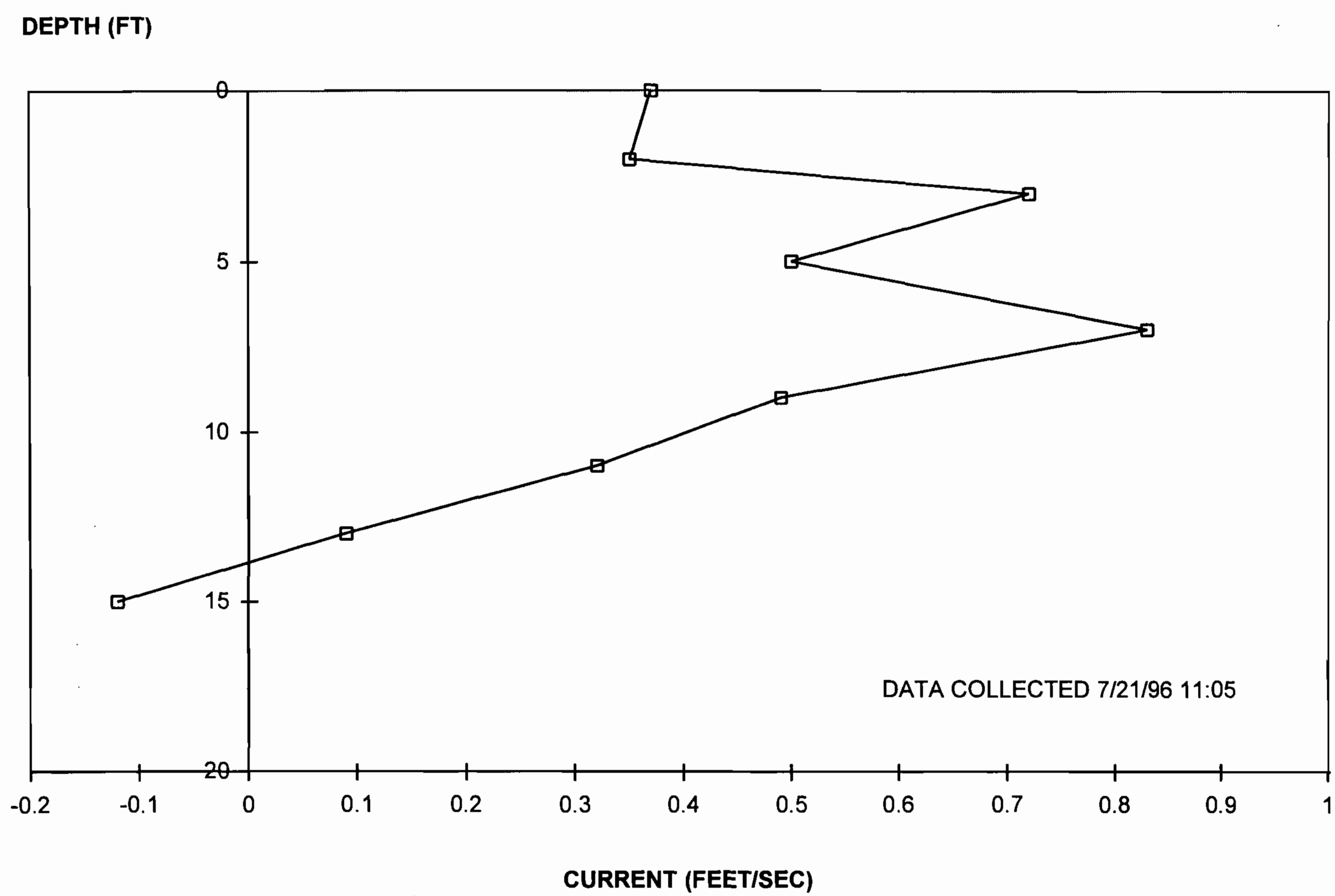
Figure
10.5.4-11



CITY OF TALLAHASSEE

LOCATION 8
WATER COLUMN CURRENT PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF UNIT 6/7 DISCHARGE, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

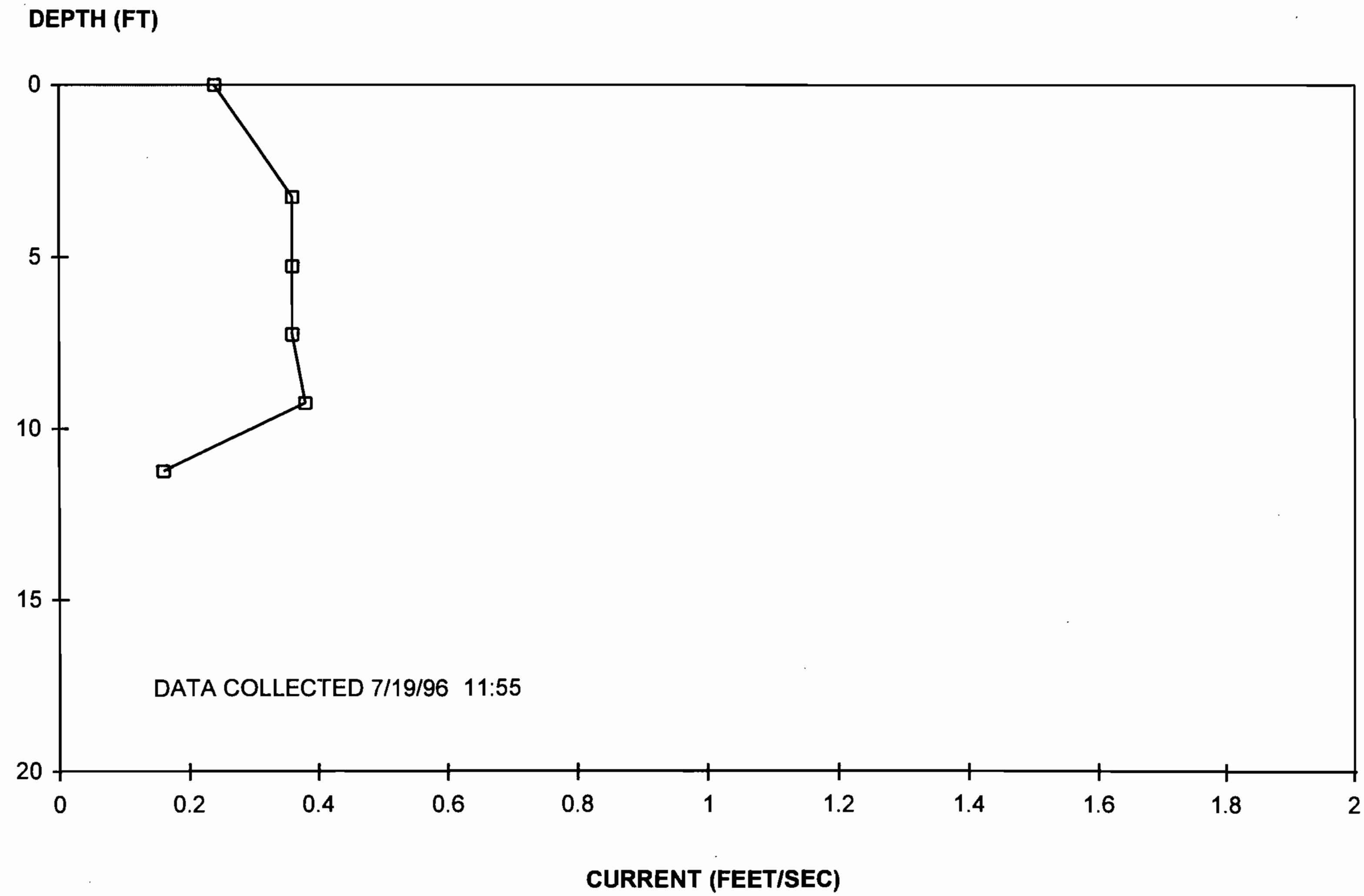
Figure 10.5.4-12



CITY OF TALLAHASSEE

LOCATION 8
WATER COLUMN CURRENT PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF UNIT 6/7 DISCHARGE, MID-RIVER
PURDOM UNIT 8 PROJECT - St MARKS, FLORIDA

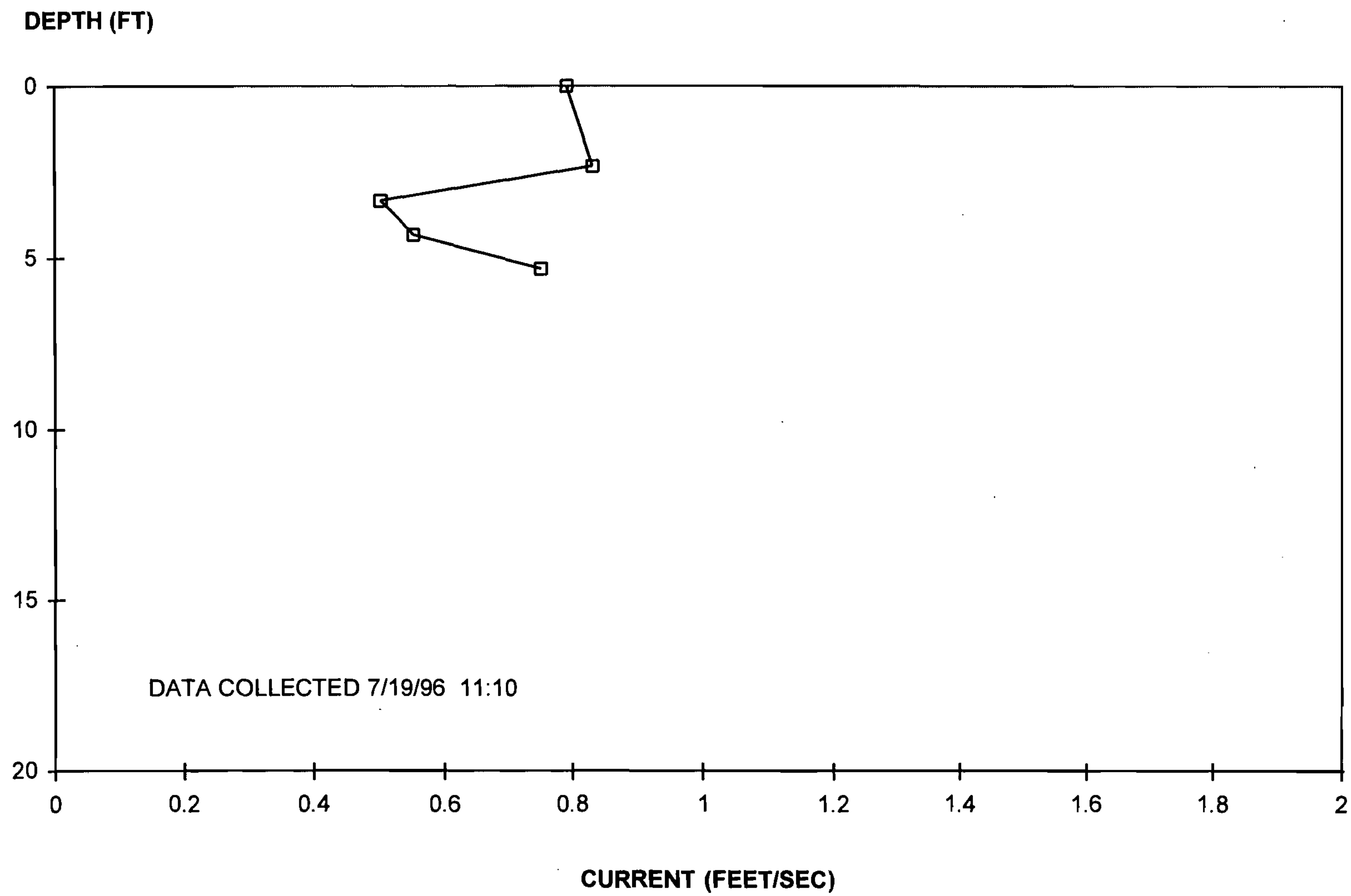
Figure 10.5.4-13



CITY OF TALLAHASSEE

LOCATION 9
WATER COLUMN CURRENT PROFILE
AT ST. MARKS RIVER, SHIELD'S MARINA, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

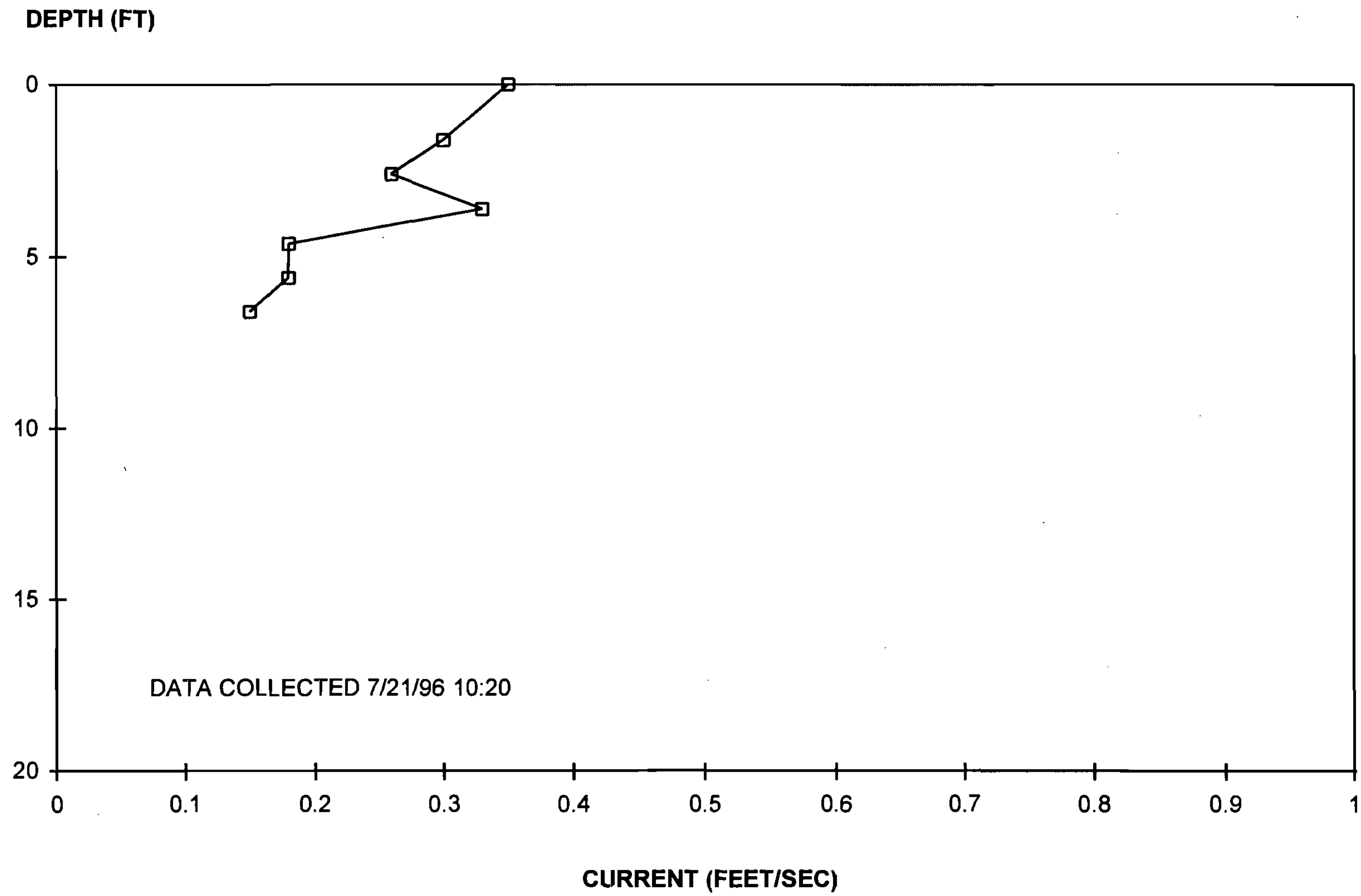
Figure 10.5.4–14



CITY OF TALLAHASSEE

LOCATION 10
WATER COLUMN CURRENT PROFILE
AT UNITS 6/7 DISCHARGE, IMMEDIATELY DOWNSTREAM OF DISCHARGE POINT
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

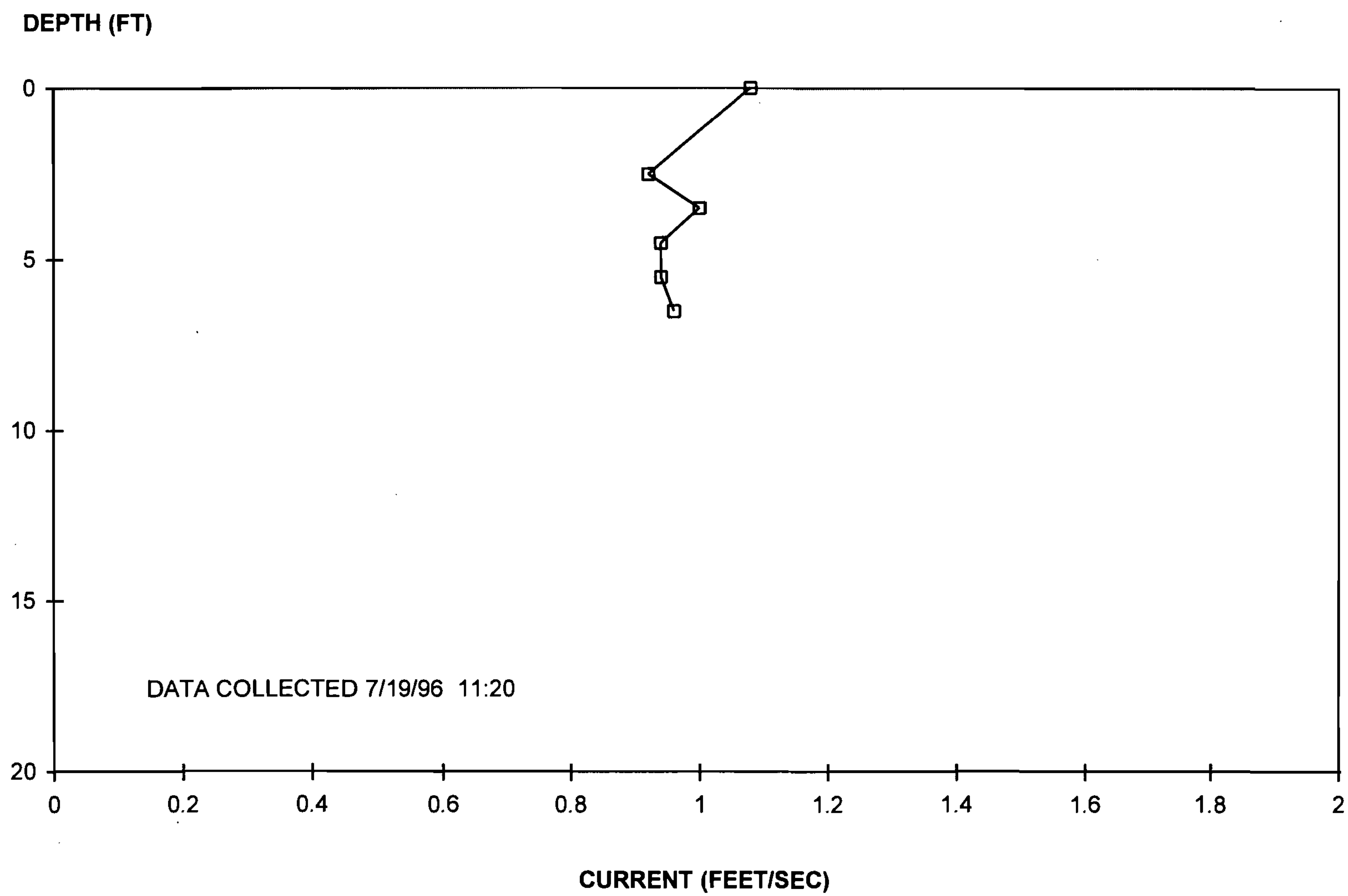
Figure
10.5.4–15



CITY OF TALLAHASSEE

LOCATION 10
WATER COLUMN CURRENT PROFILE
AT UNITS 6/7 DISCHARGE, IMMEDIATELY DOWNSTREAM OF DISCHARGE POINT
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

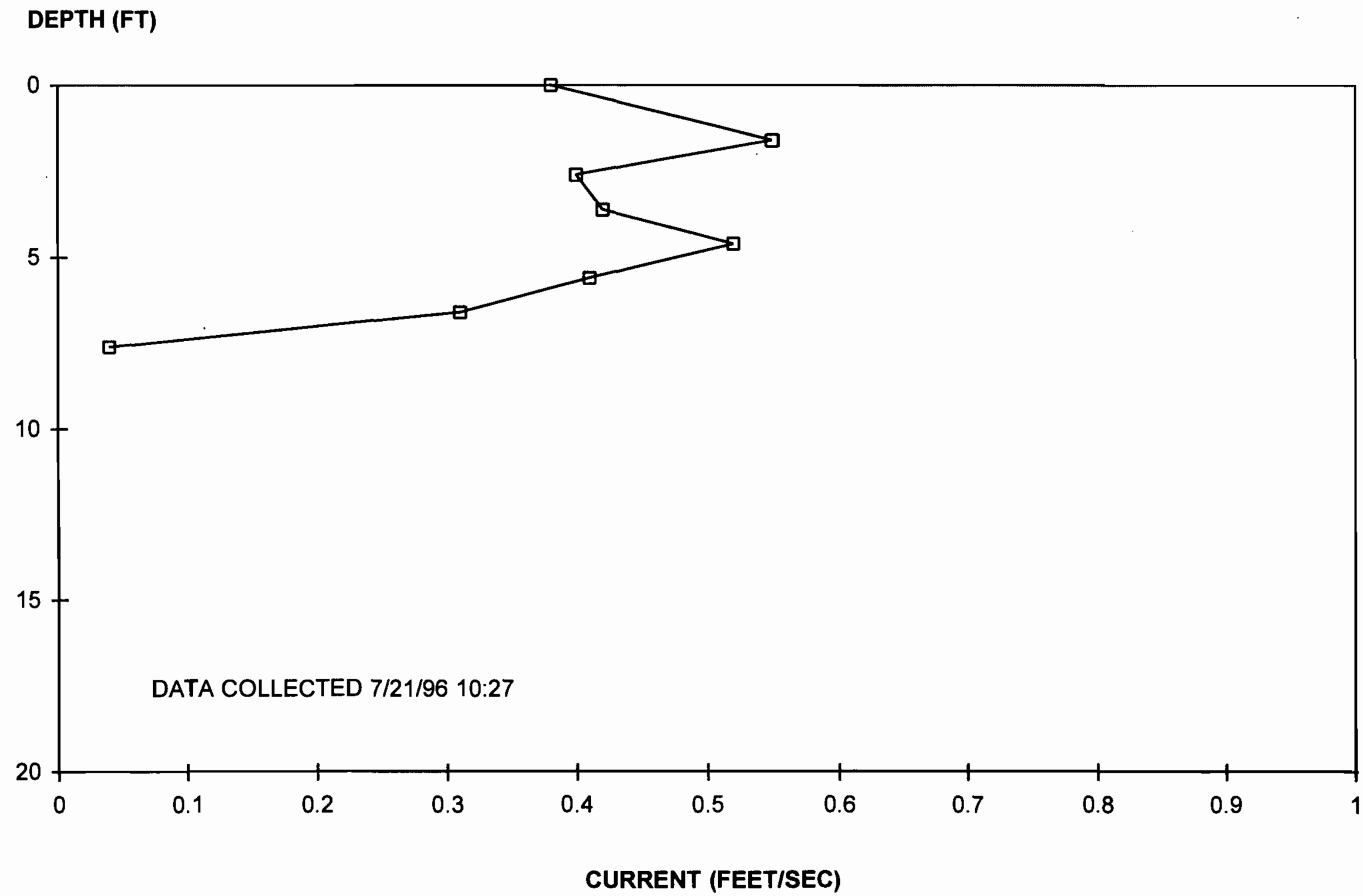
Figure 10.5.4-16



CITY OF TALLAHASSEE

LOCATION 11
WATER COLUMN CURRENT PROFILE
AT UNITS 6/7 DISCHARGE, PRIOR TO BEND IN DISCHARGE CANAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

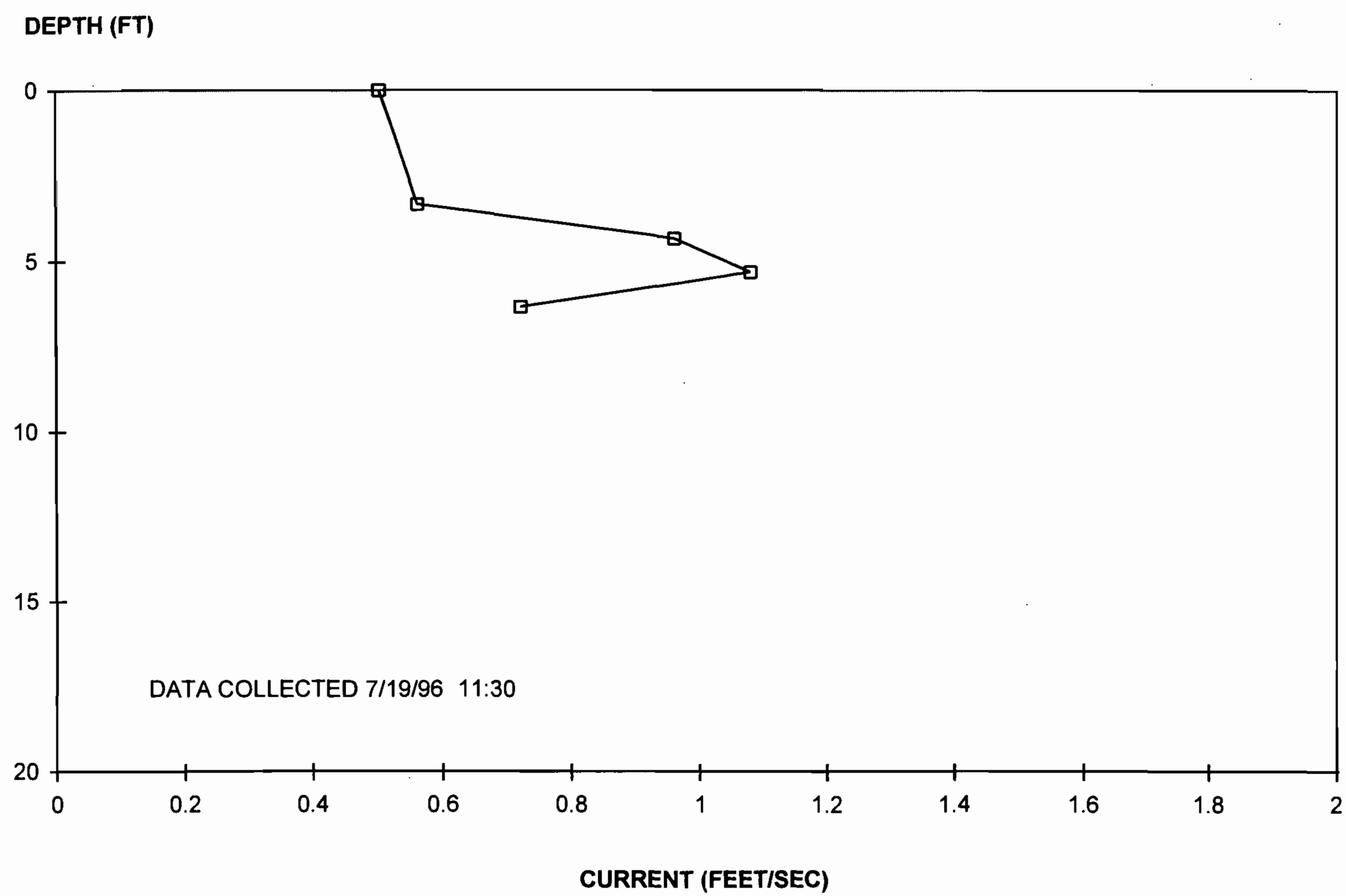
Figure 10.5.4-17



CITY OF TALLAHASSEE

LOCATION 11
WATER COLUMN CURRENT PROFILE
AT UNITS 6/7 DISCHARGE, PRIOR TO BEND IN DISCHARGE CANAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

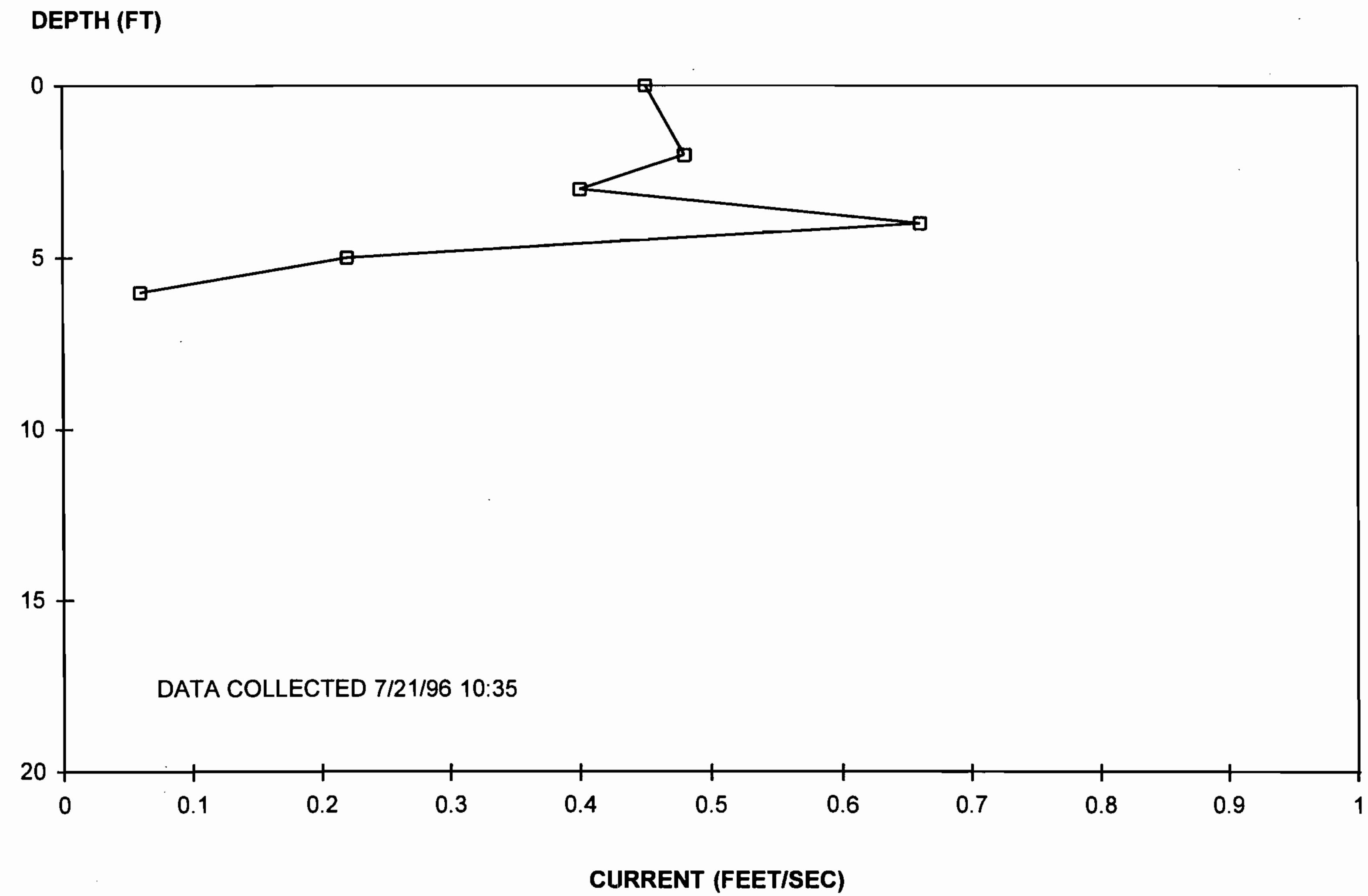
Figure
10.5.4–18



CITY OF TALLAHASSEE

LOCATION 12
WATER COLUMN CURRENT PROFILE
AT UNITS 6/7 DISCHARGE, AFTER BEND IN DISCHARGE CANAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

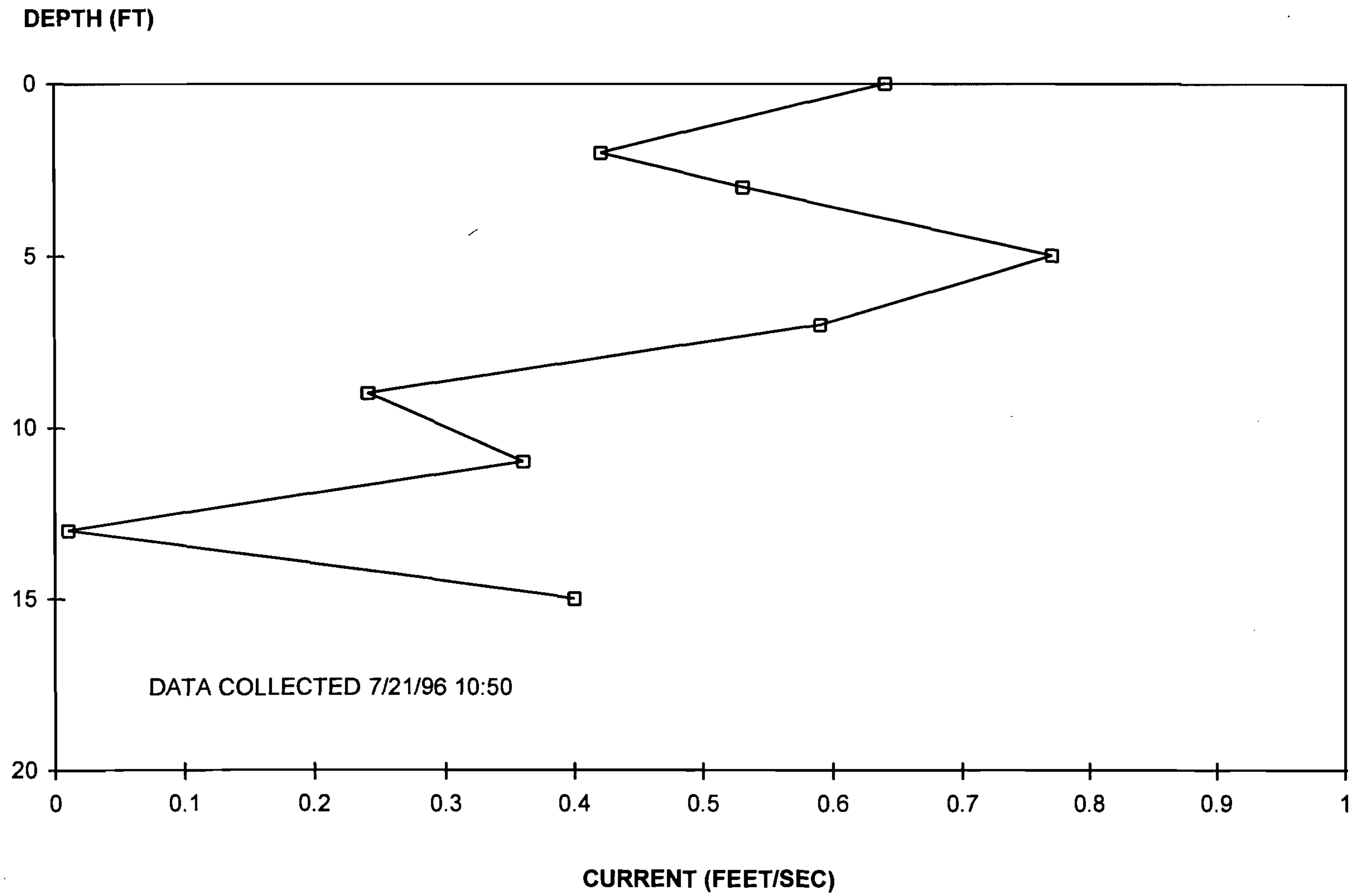
Figure
10.5.4–19



CITY OF TALLAHASSEE

LOCATION 12
WATER COLUMN CURRENT PROFILE
AT UNITS 6/7 DISCHARGE, AFTER BEND IN DISCHARGE CANAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

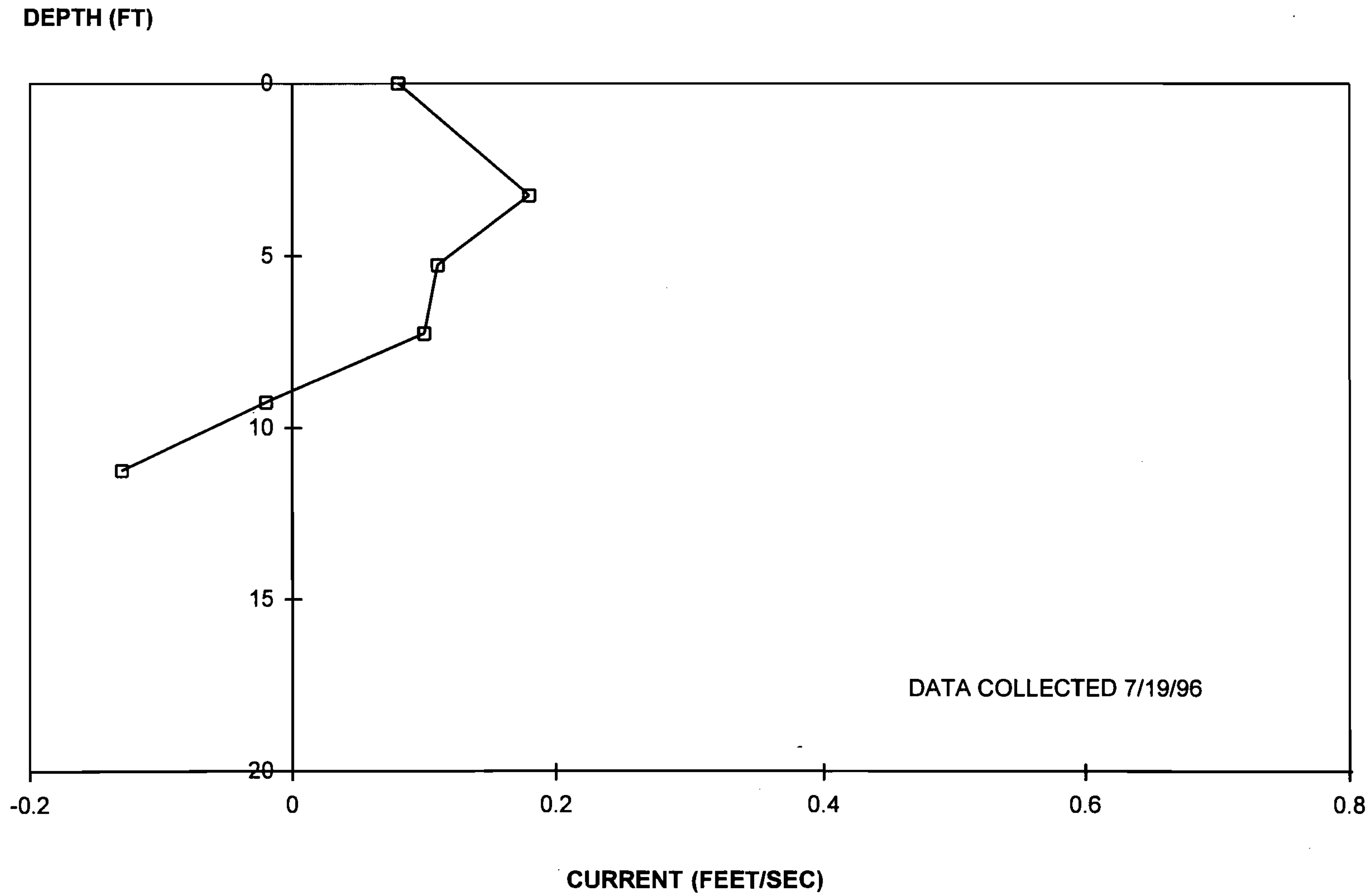
Figure
10.5.4–20



CITY OF TALLAHASSEE

LOCATION 12
WATER COLUMN CURRENT PROFILE
AT UNITS 6/7 DISCHARGE, AFTER BEND IN DISCHARGE CANAL, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

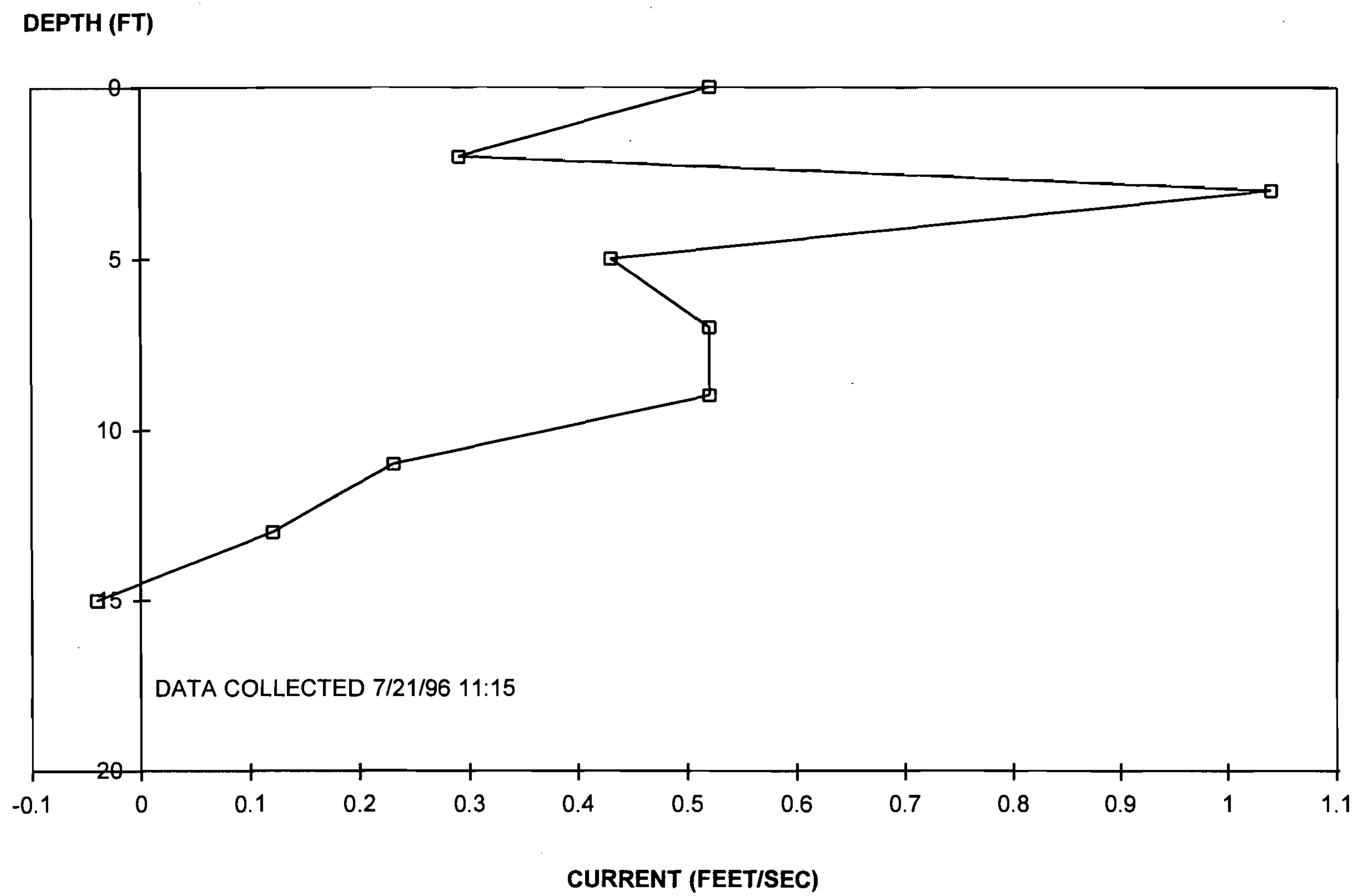
Figure
10.5.4-21



CITY OF TALLAHASSEE

LOCATION 13
WATER COLUMN CURRENT PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF ST. MARKS SEWAGE DISCHARGE, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

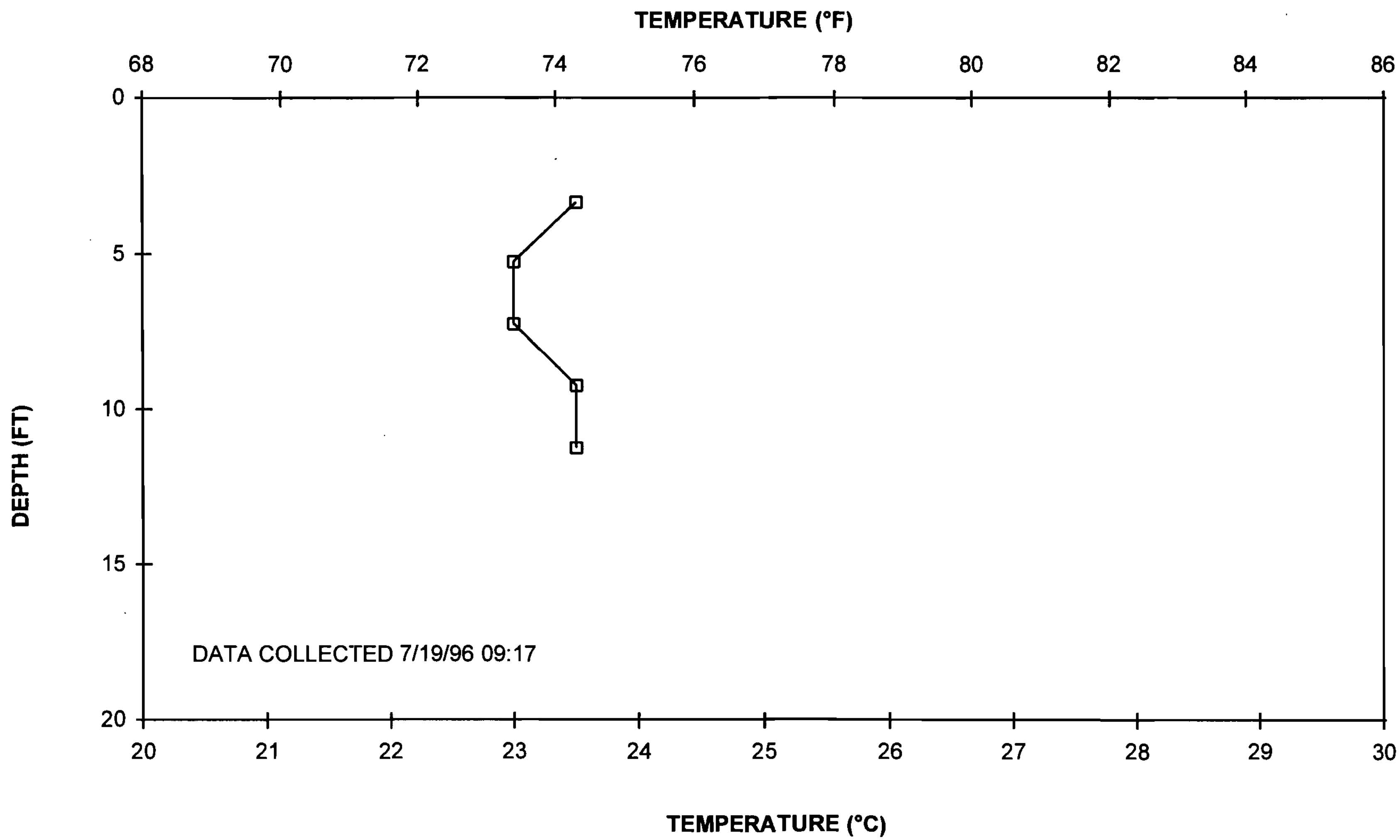
Figure 10.5.4-22



CITY OF TALLAHASSEE

LOCATION 13
WATER COLUMN CURRENT PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF ST. MARKS SEWAGE DISCHARGE, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

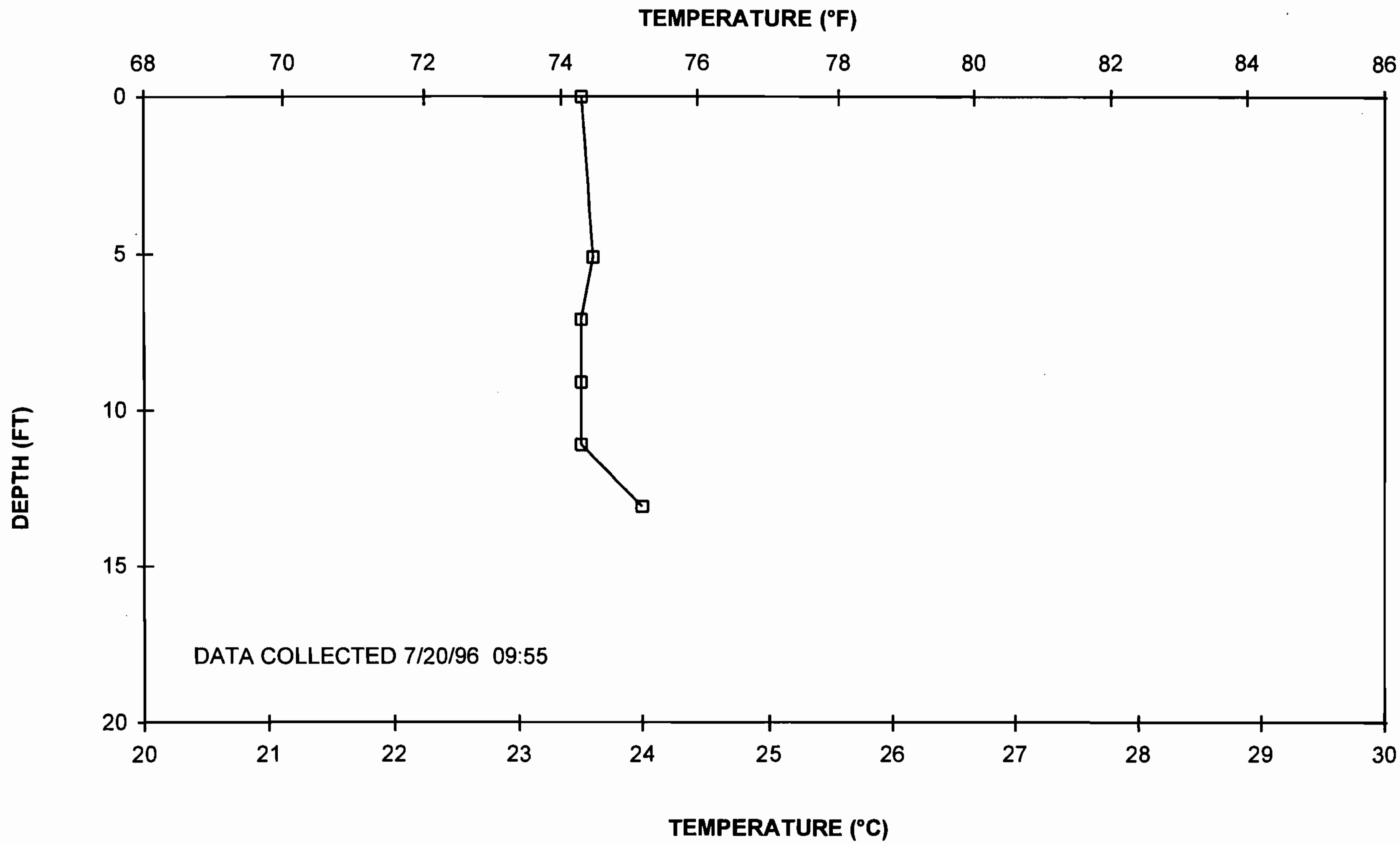
Figure 10.5.4-23



CITY OF TALLAHASSEE

LOCATION 1
WATER COLUMN TEMPERATURE PROFILE
AT ST. MARKS RIVER, UPSTREAM OF PLANT INFLUENCES, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

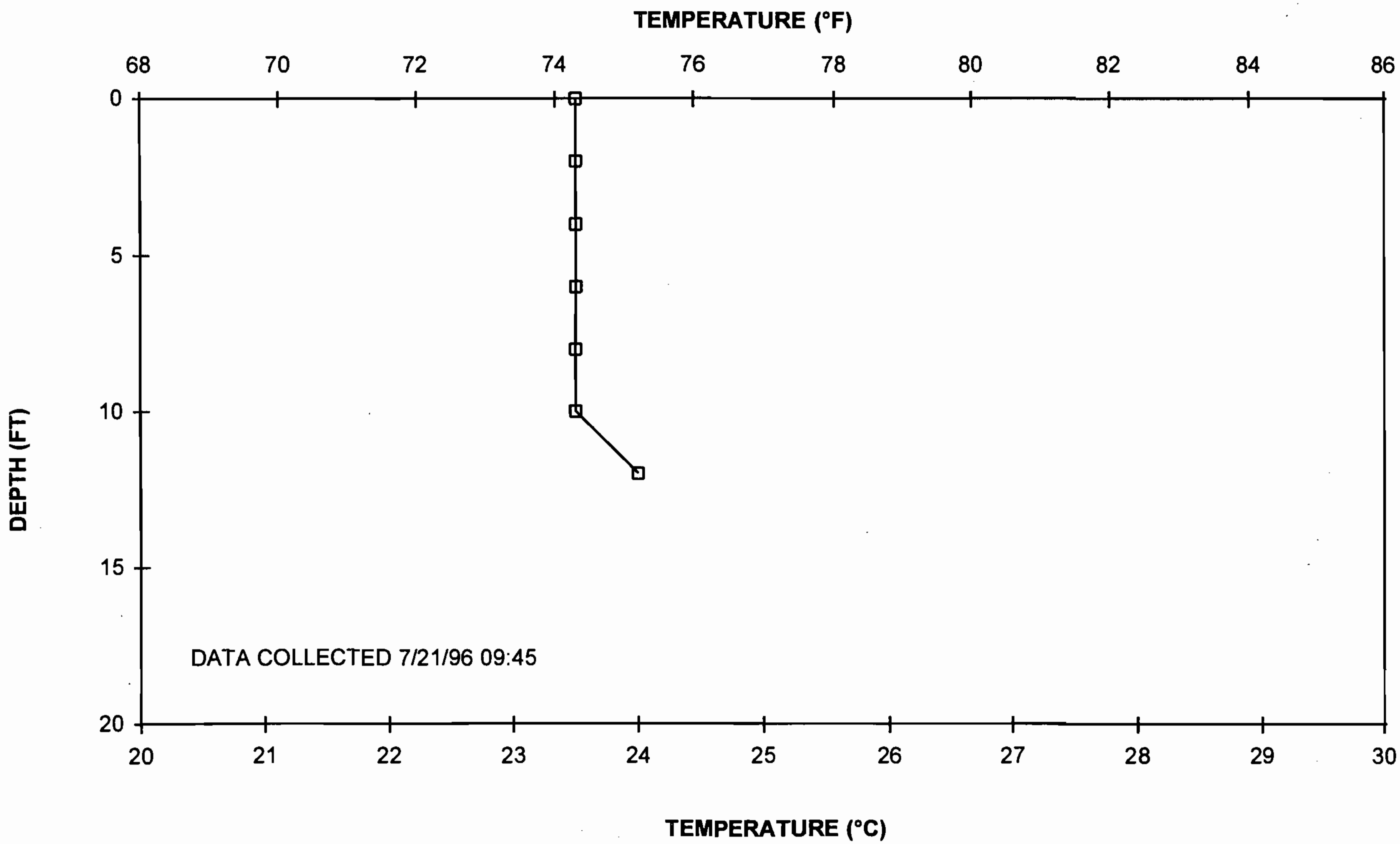
Figure
10.5.4-24



CITY OF TALLAHASSEE

LOCATION 1
WATER COLUMN TEMPERATURE PROFILE
AT ST. MARKS RIVER, UPSTREAM OF PLANT INFLUENCES
PURDOM UNIT 8 PROJECT -- St MARKS, FLORIDA

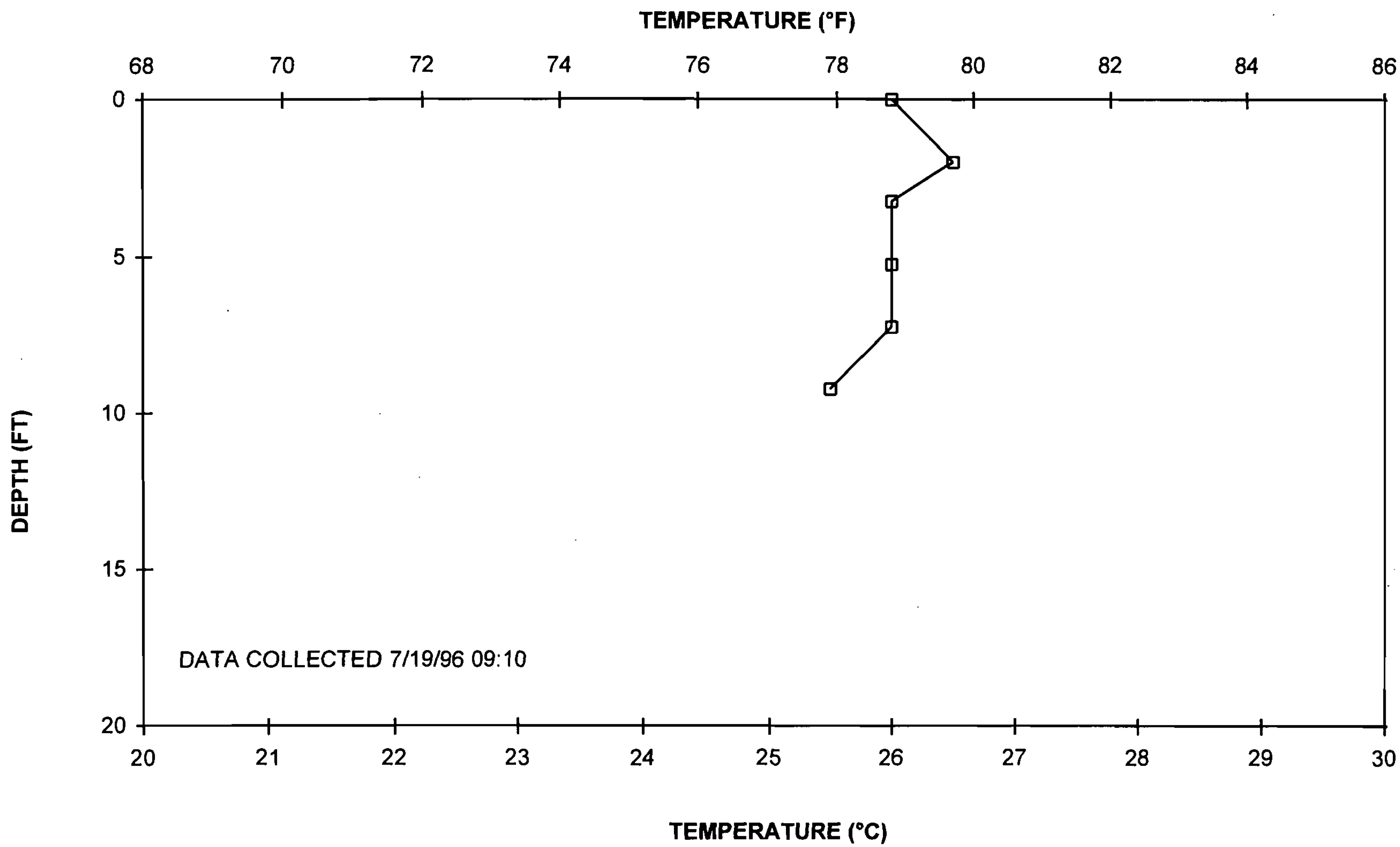
Figure
10.5.4-25



CITY OF TALLAHASSEE

LOCATION 1
WATER COLUMN TEMPERATURE PROFILE
AT ST. MARKS RIVER, UPSTREAM OF PLANT INFLUENCES
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

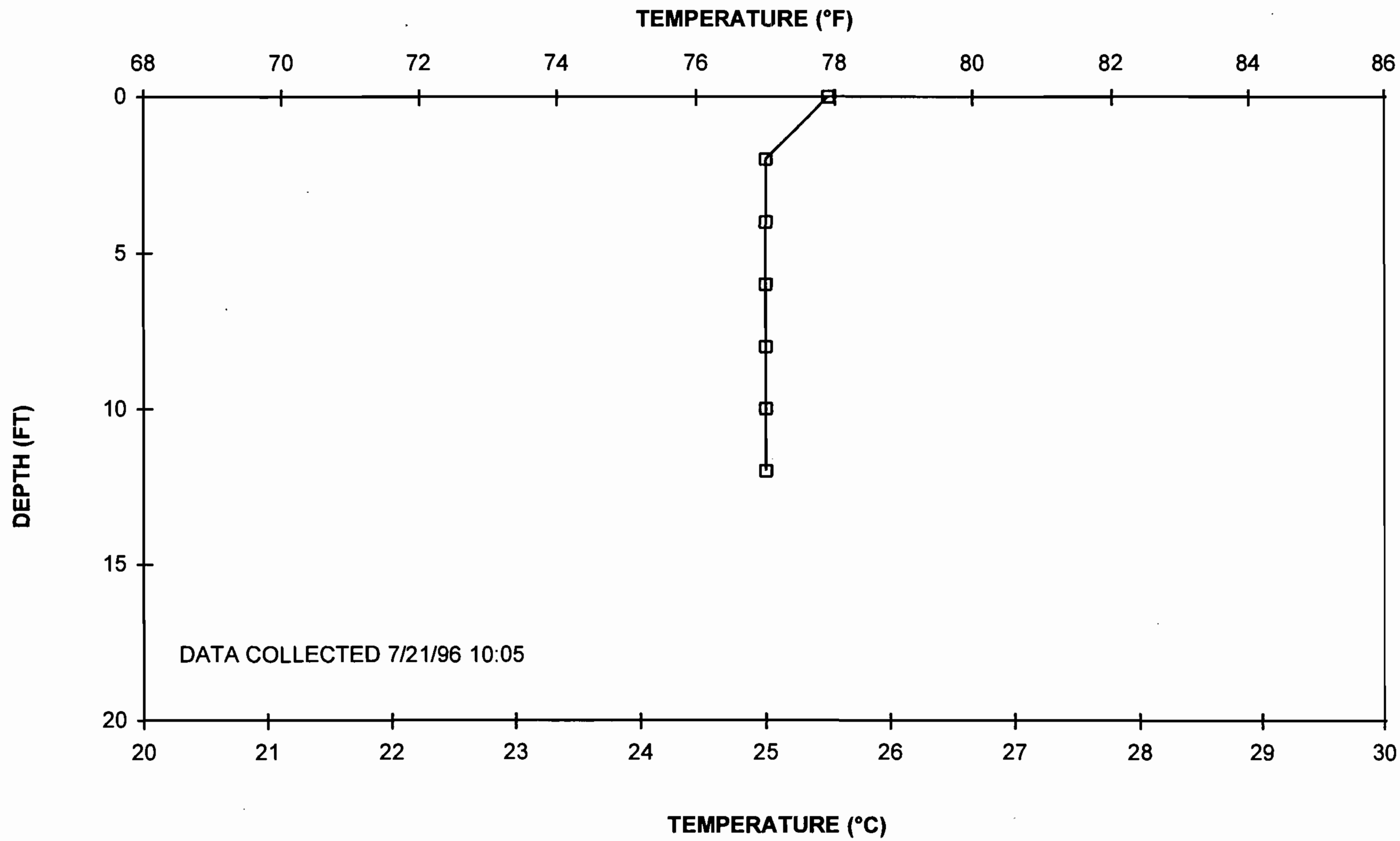
Figure
10.5.4–26



CITY OF TALLAHASSEE

LOCATION 2
WATER COLUMN TEMPERATURE PROFILE
AT UNIT 7 INTAKE STRUCTURE
PURDOM UNIT 8 PROJECT ~ St MARKS, FLORIDA

Figure
10.5.4-27

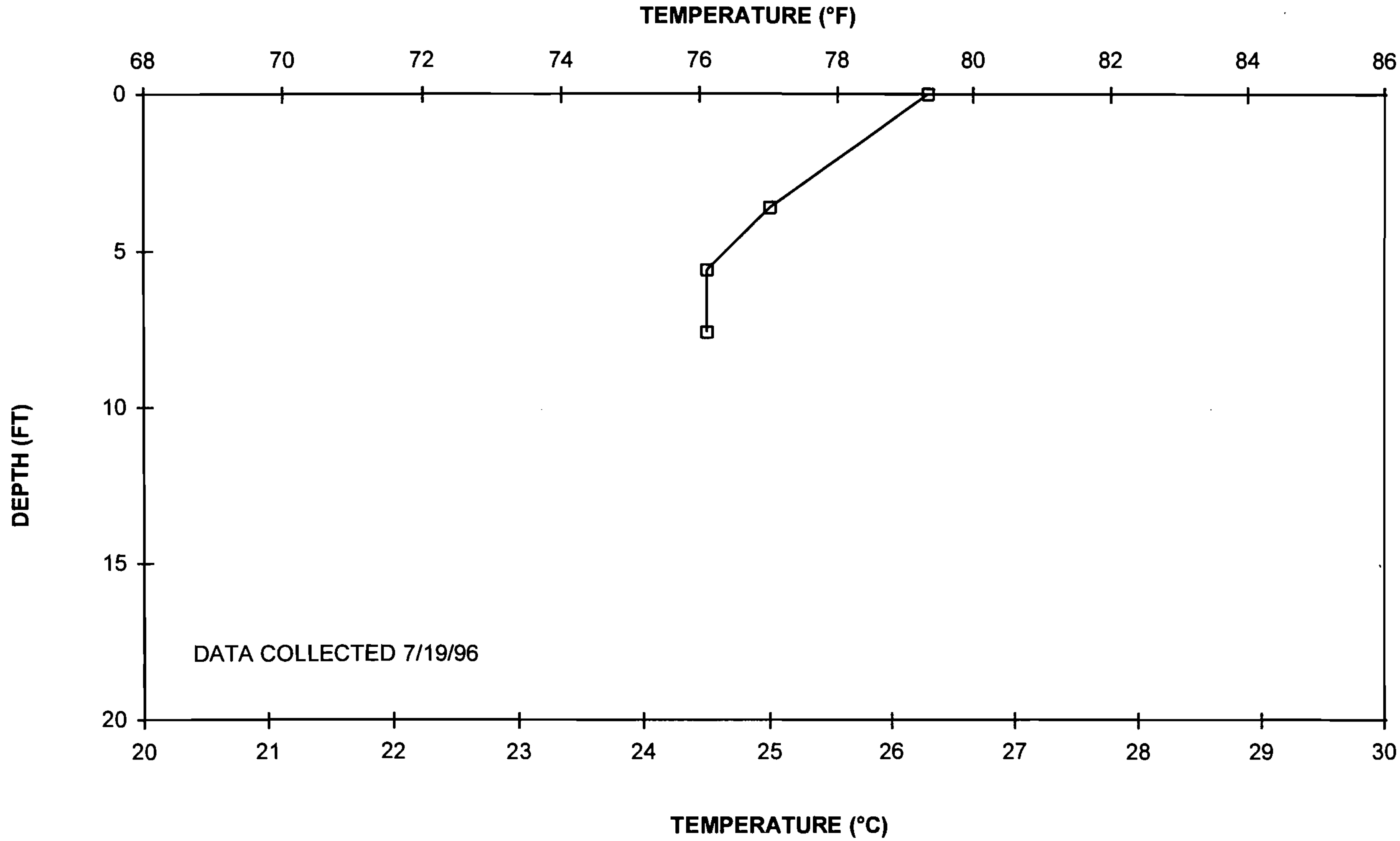


CITY OF TALLAHASSEE

LOCATION 2
WATER COLUMN TEMPERATURE PROFILE
AT UNIT 7 INTAKE

PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

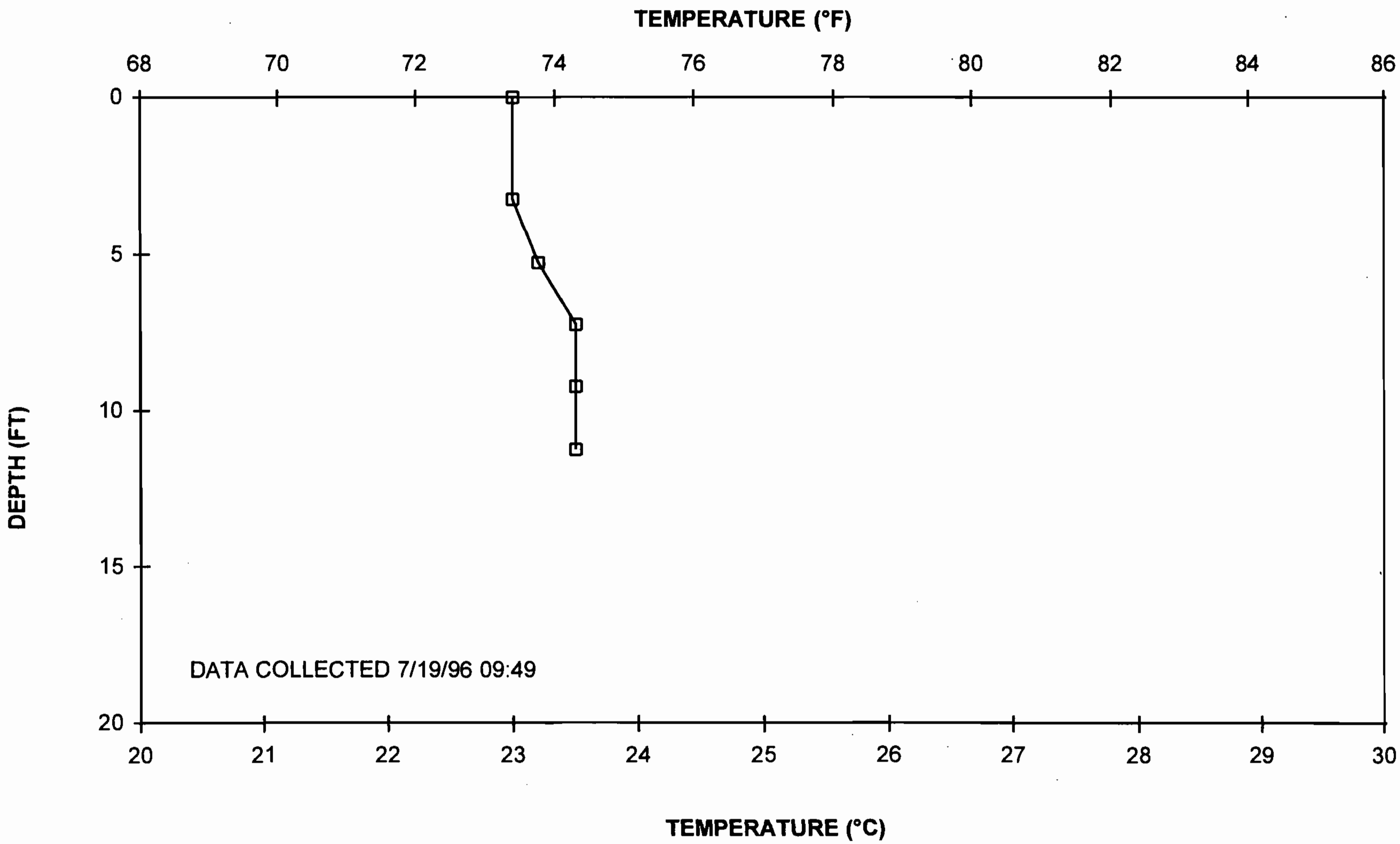
Figure
10.5.4–28



CITY OF TALLAHASSEE

LOCATION 3
WATER COLUMN TEMPERATURE PROFILE
AT OPENING OF INTAKE CANAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

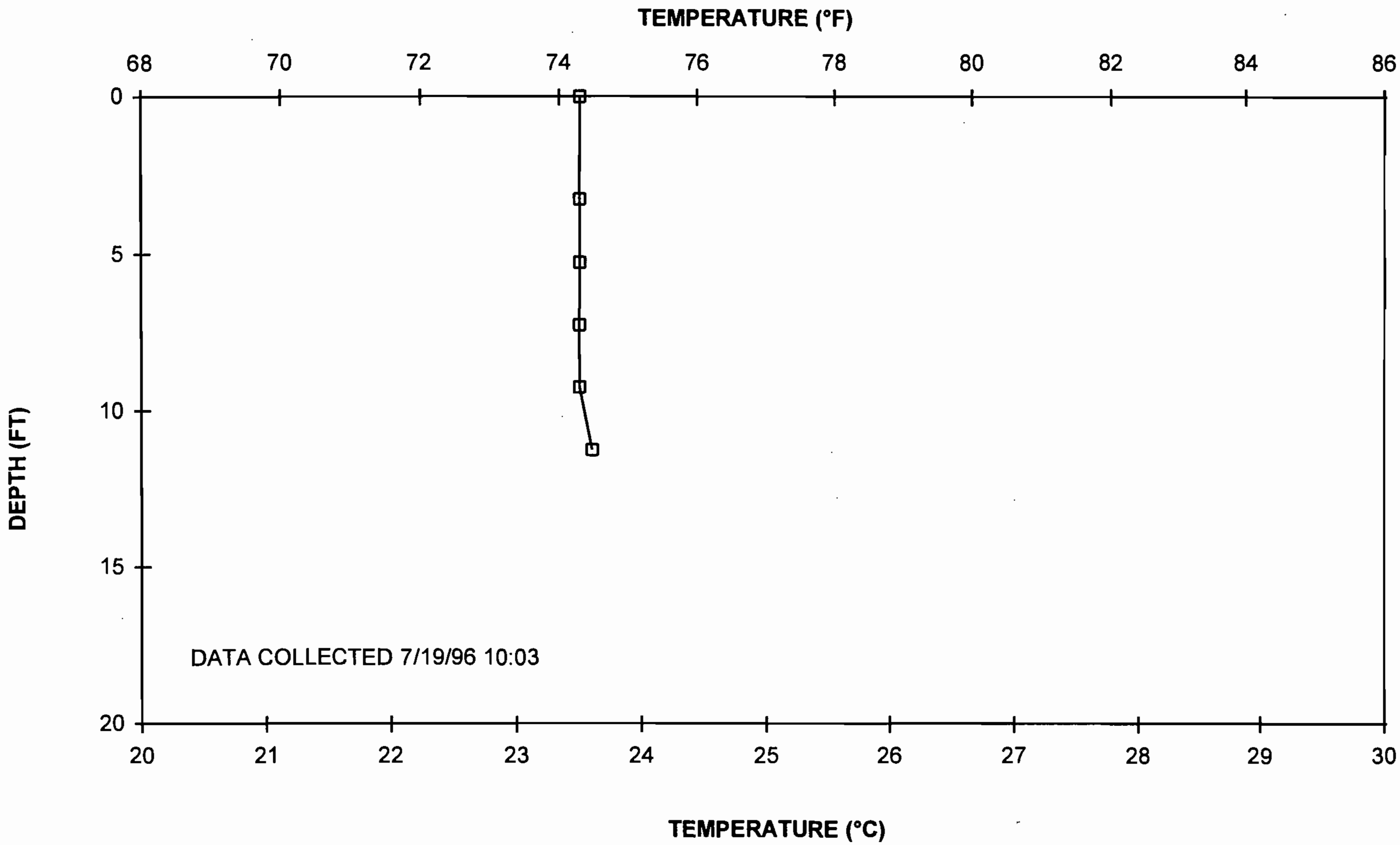
Figure
10.5.4–29



CITY OF TALLAHASSEE

LOCATION 4
WATER COLUMN TEMPERATURE PROFILE
AT ST. MARKS RIVER, AT UNIT 5 INTAKE STRUCTURE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

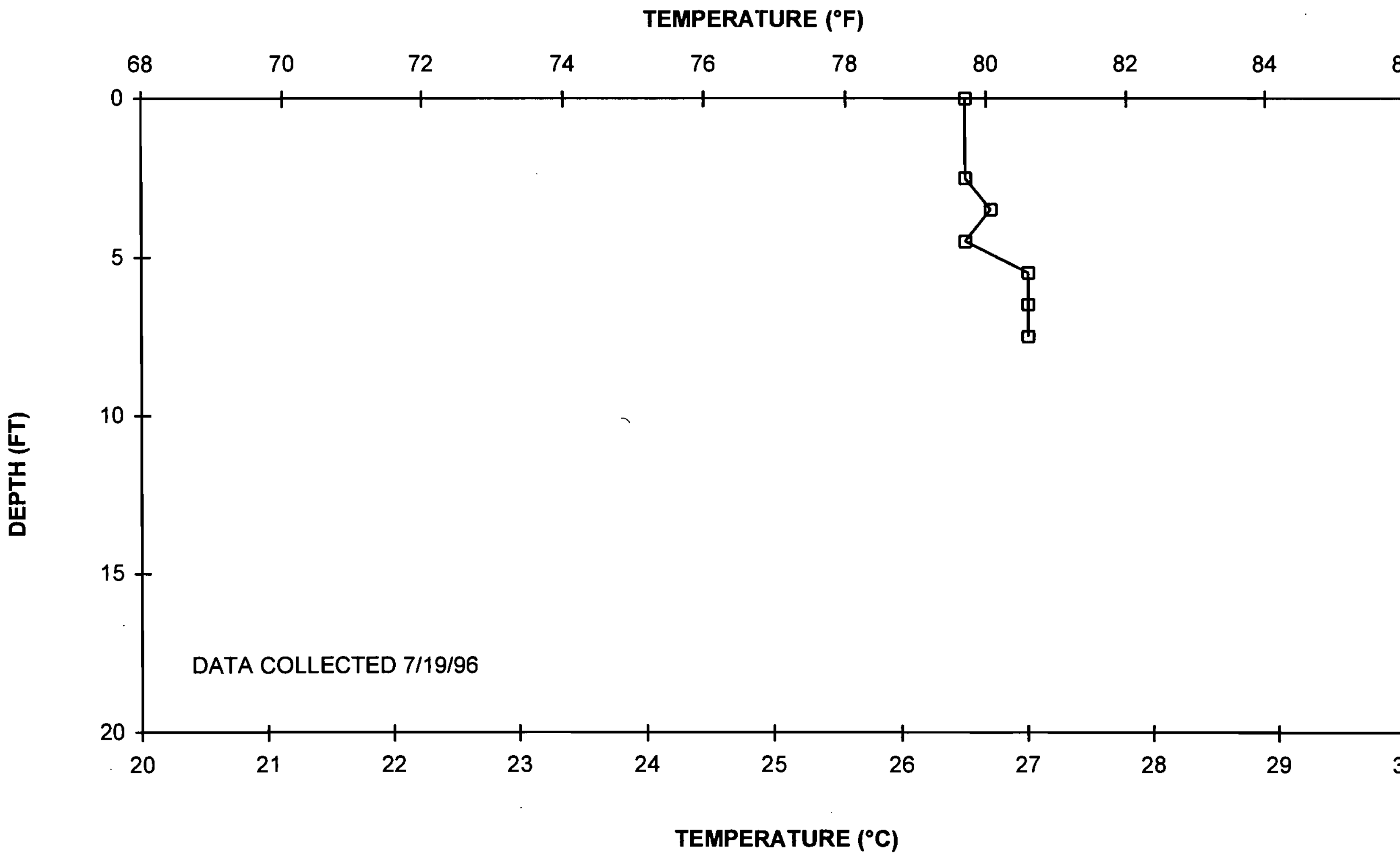
Figure
10.5.4-30



CITY OF TALLAHASSEE

LOCATION 5
WATER COLUMN TEMPERATURE PROFILE
AT ST. MARKS RIVER, BELOW INTAKE CANAL, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

Figure
10.5.4-31

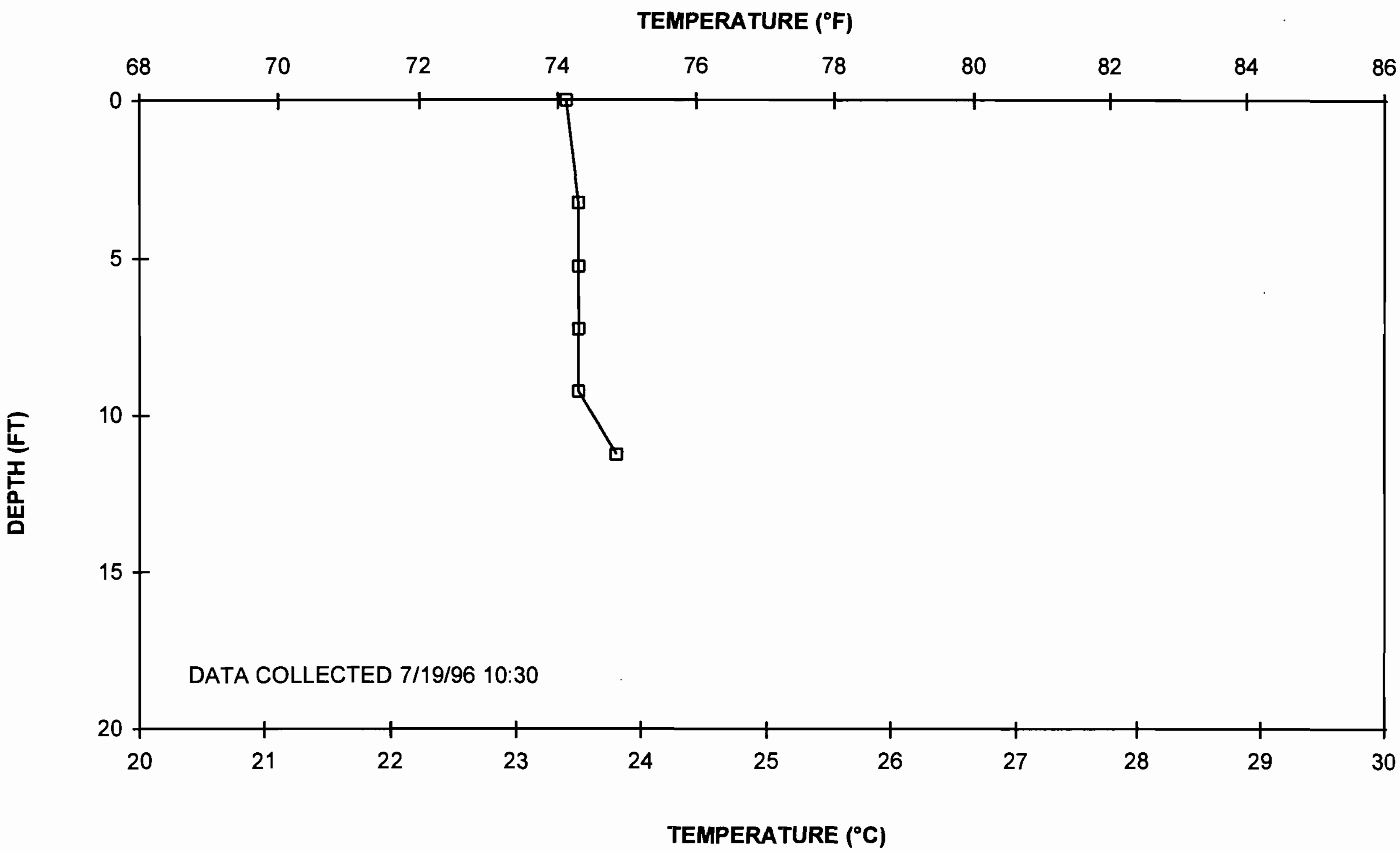


CITY OF TALLAHASSEE

LOCATION 6
WATER COLUMN TEMPERATURE PROFILE
AT UNIT 5 DISCHARGE

PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

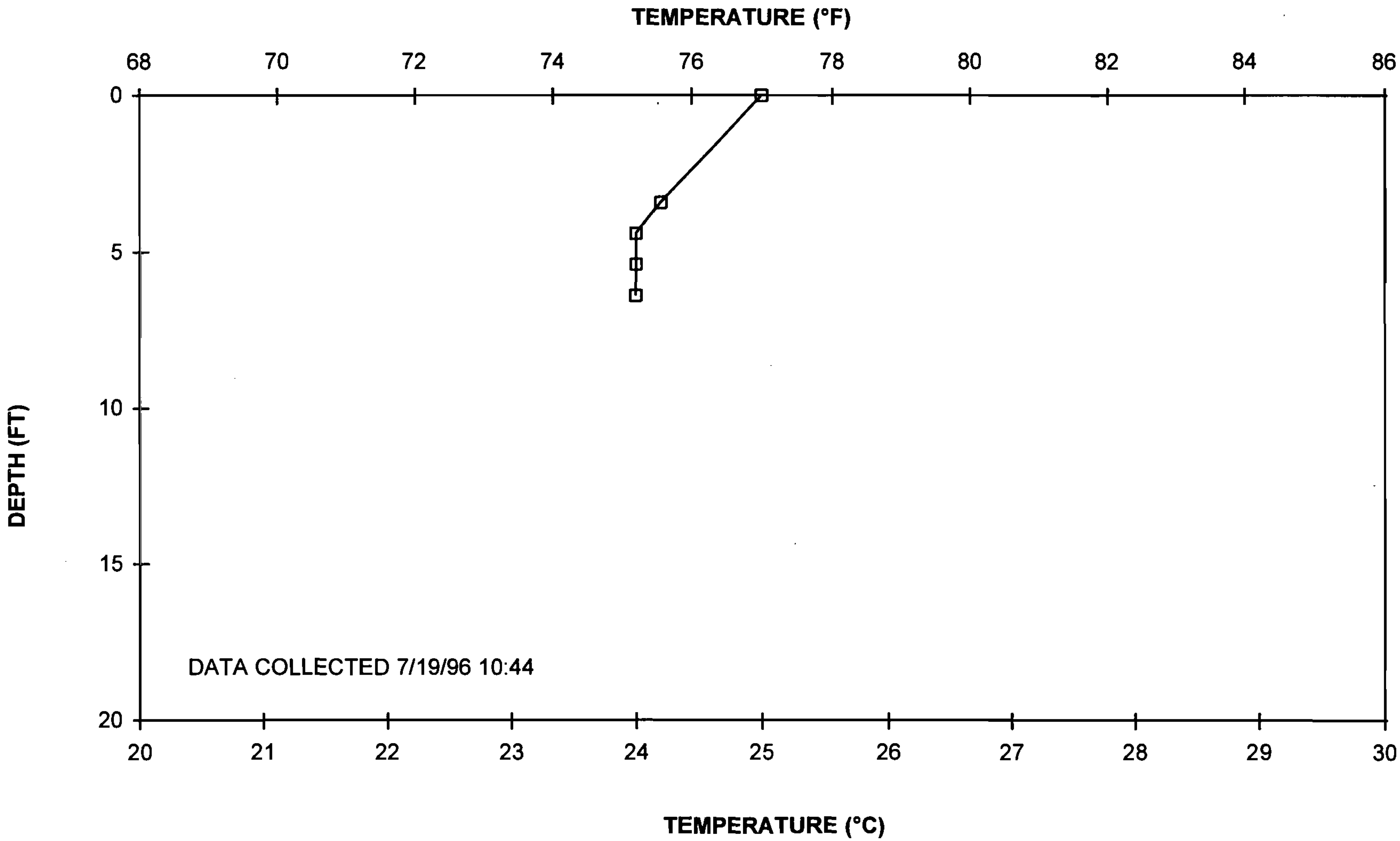
Figure 10.5.4-32



CITY OF TALLAHASSEE

LOCATION 6
WATER COLUMN TEMPERATURE PROFILE
AT ST. MARKS RIVER, AT UNIT 5 DISCHARGE, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

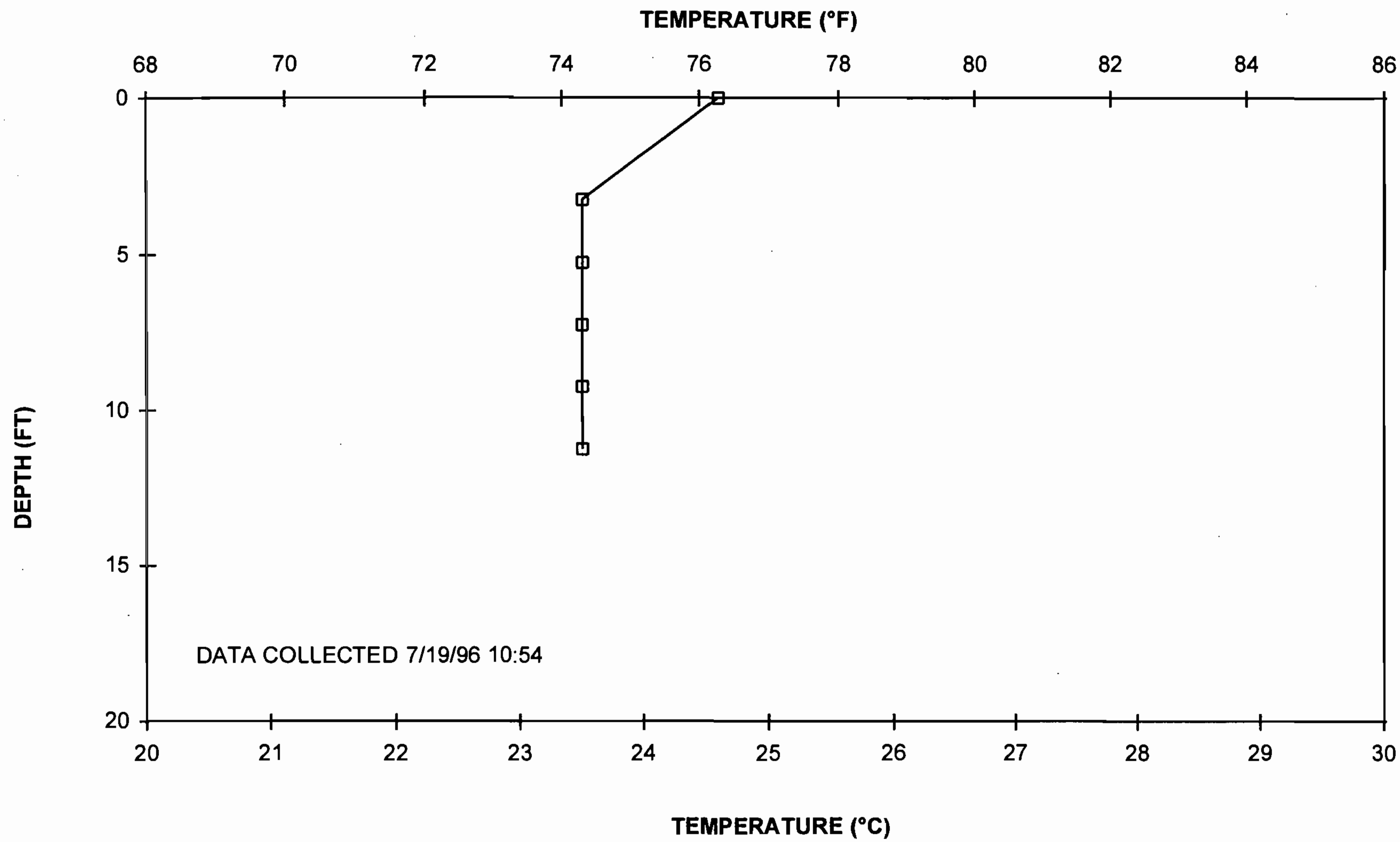
Figure
10.5.4–33



CITY OF TALLAHASSEE

LOCATION 6
WATER COLUMN TEMPERATURE PROFILE
AT ST. MARKS RIVER, AT UNIT 5 DISCHARGE, BETWEEN DISCHARGE/MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

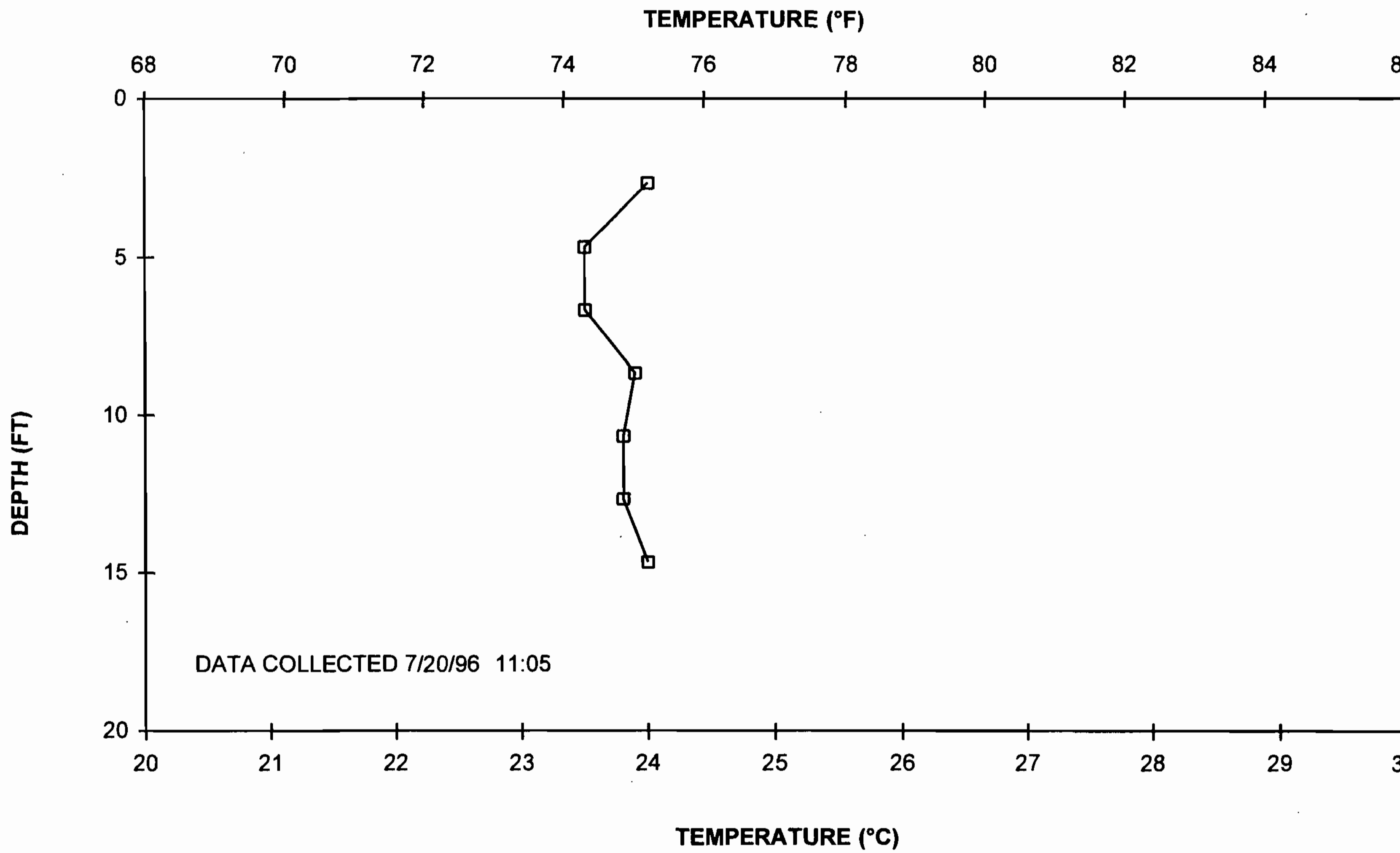
Figure
10.5.4-34



CITY OF TALLAHASSEE

LOCATION 7
WATER COLUMN TEMPERATURE PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF UNIT 5 DISCHARGE, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

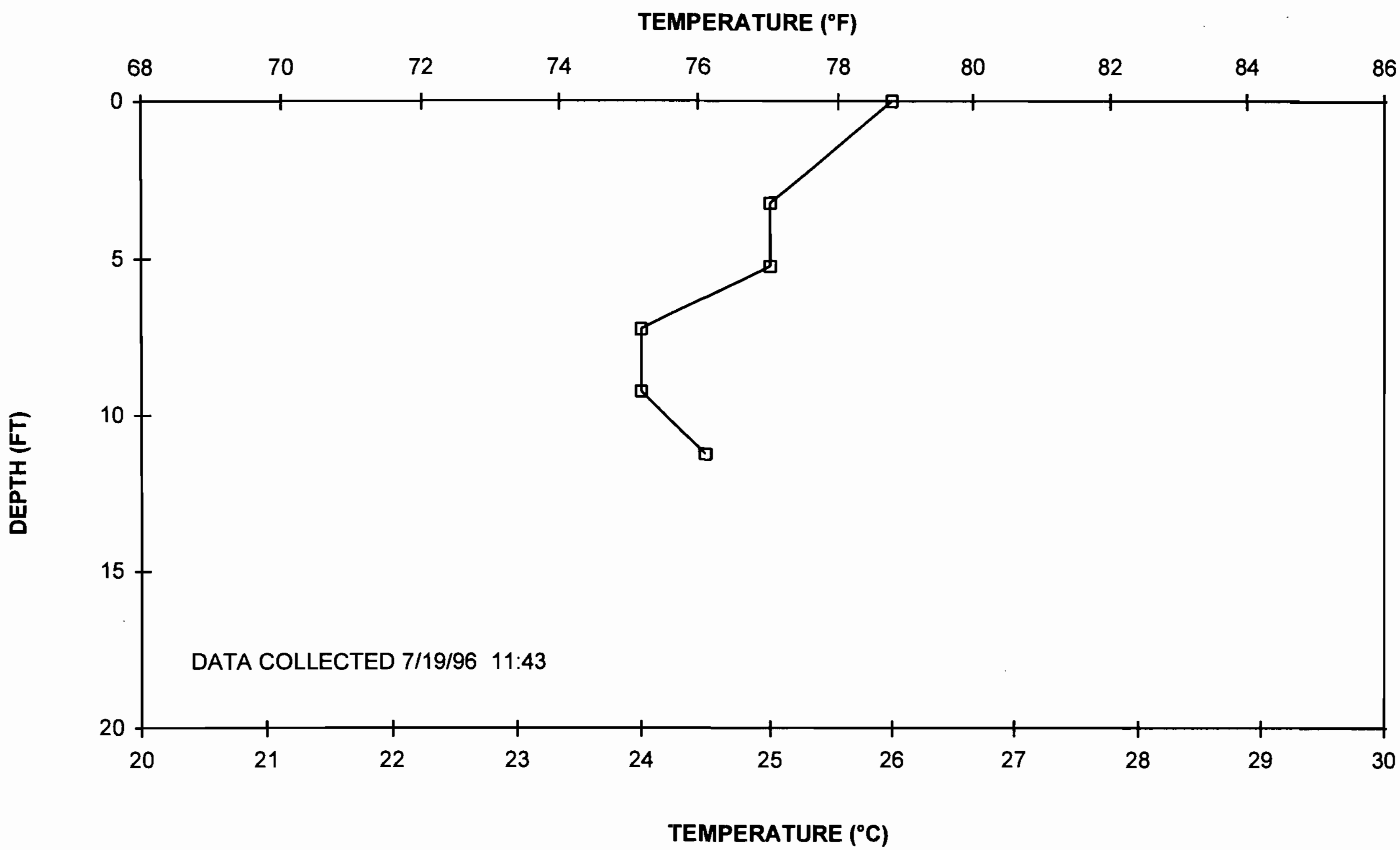
Figure
10.5.4–35



CITY OF TALLAHASSEE

LOCATION 7
WATER COLUMN TEMPERATURE PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF UNIT 5 DISCHARGE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

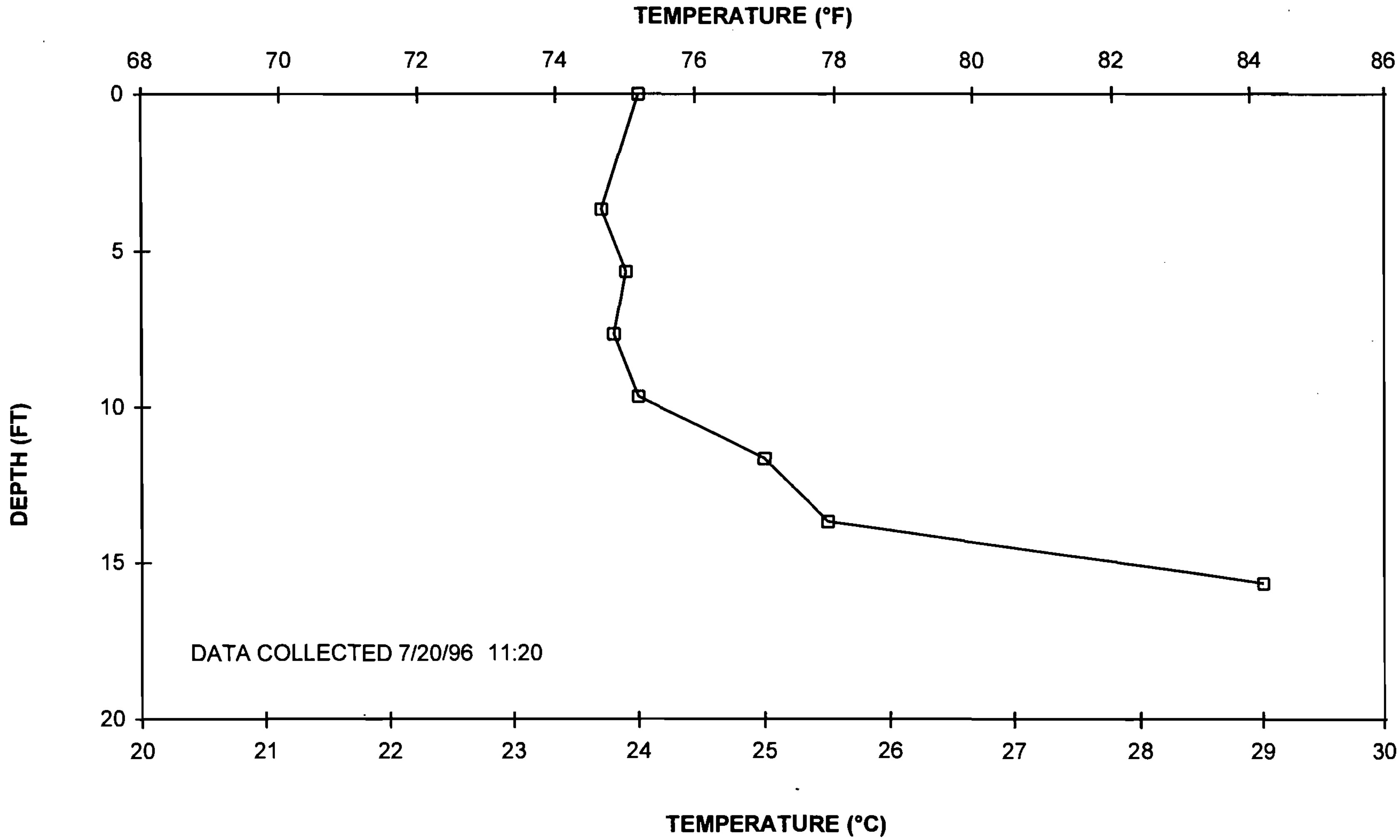
Figure
10.5.4–36



CITY OF TALLAHASSEE

LOCATION 8
WATER COLUMN TEMPERATURE PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF UNIT 6/7 DISCHARGE, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

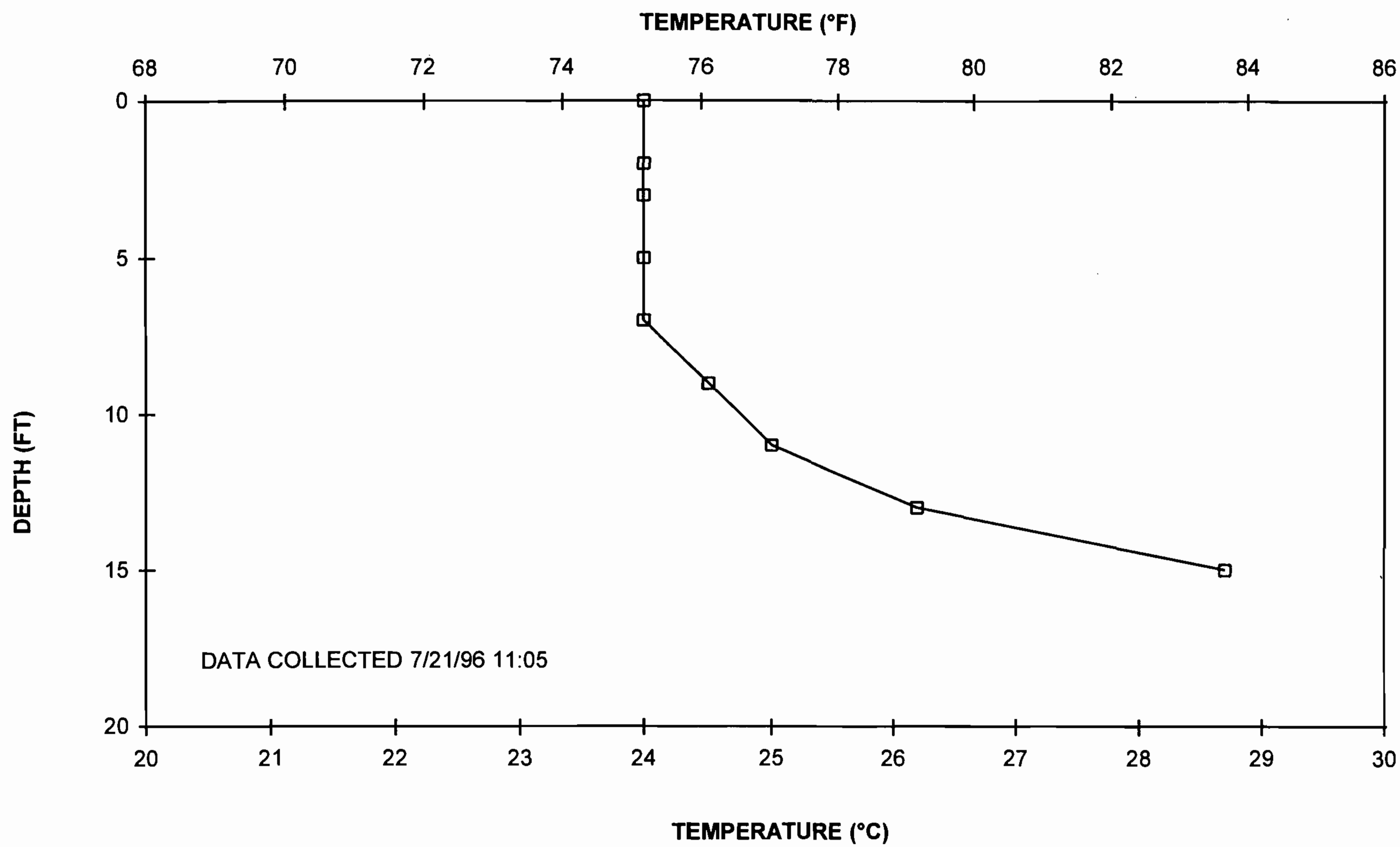
Figure 10.5.4-37



CITY OF TALLAHASSEE

LOCATION 8
WATER COLUMN TEMPERATURE PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF UNIT 6/7 DISCHARGE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

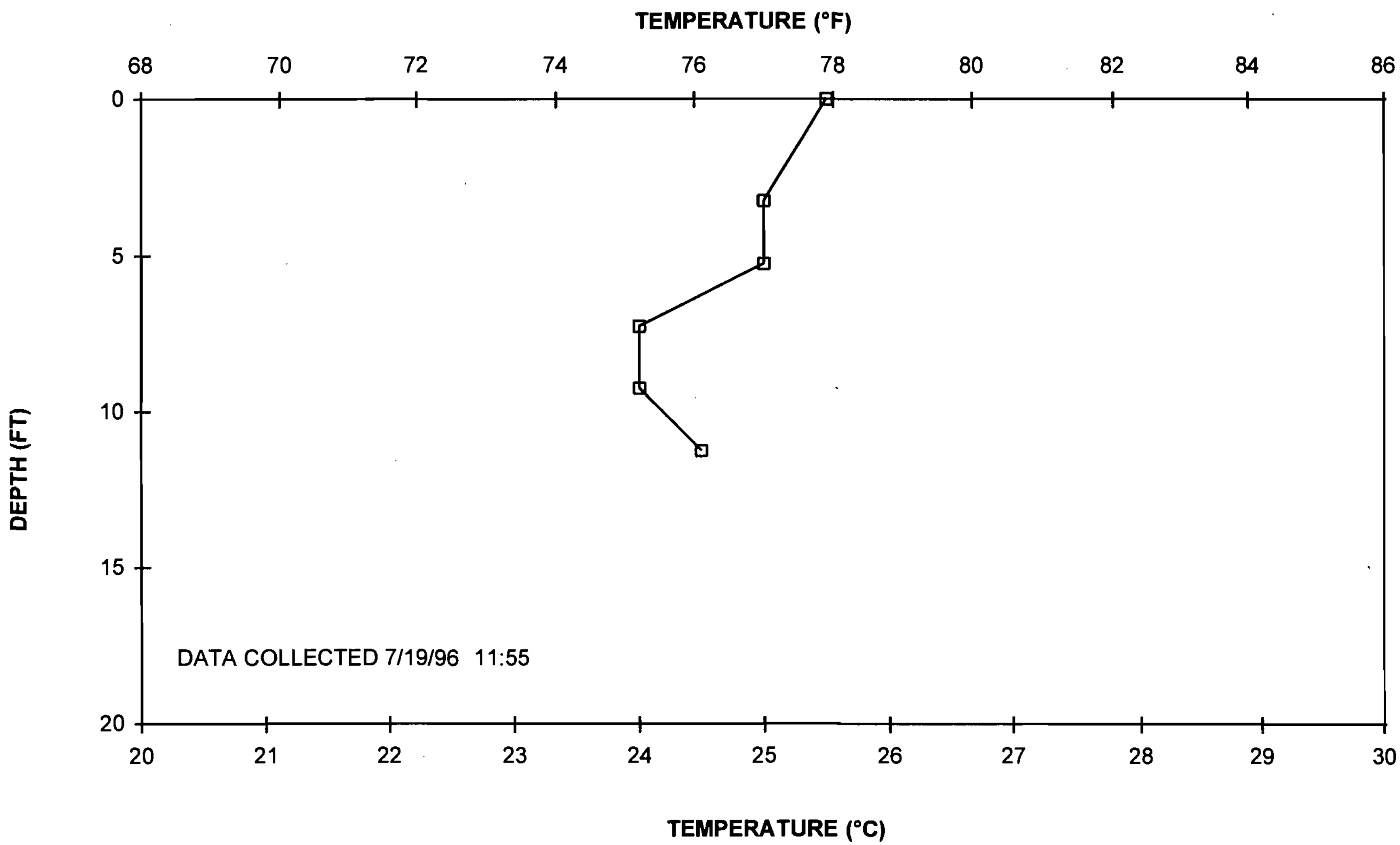
Figure
10.5.4–38



CITY OF TALLAHASSEE

LOCATION 8
WATER COLUMN TEMPERATURE PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF UNIT 6/7 DISCHARGE, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

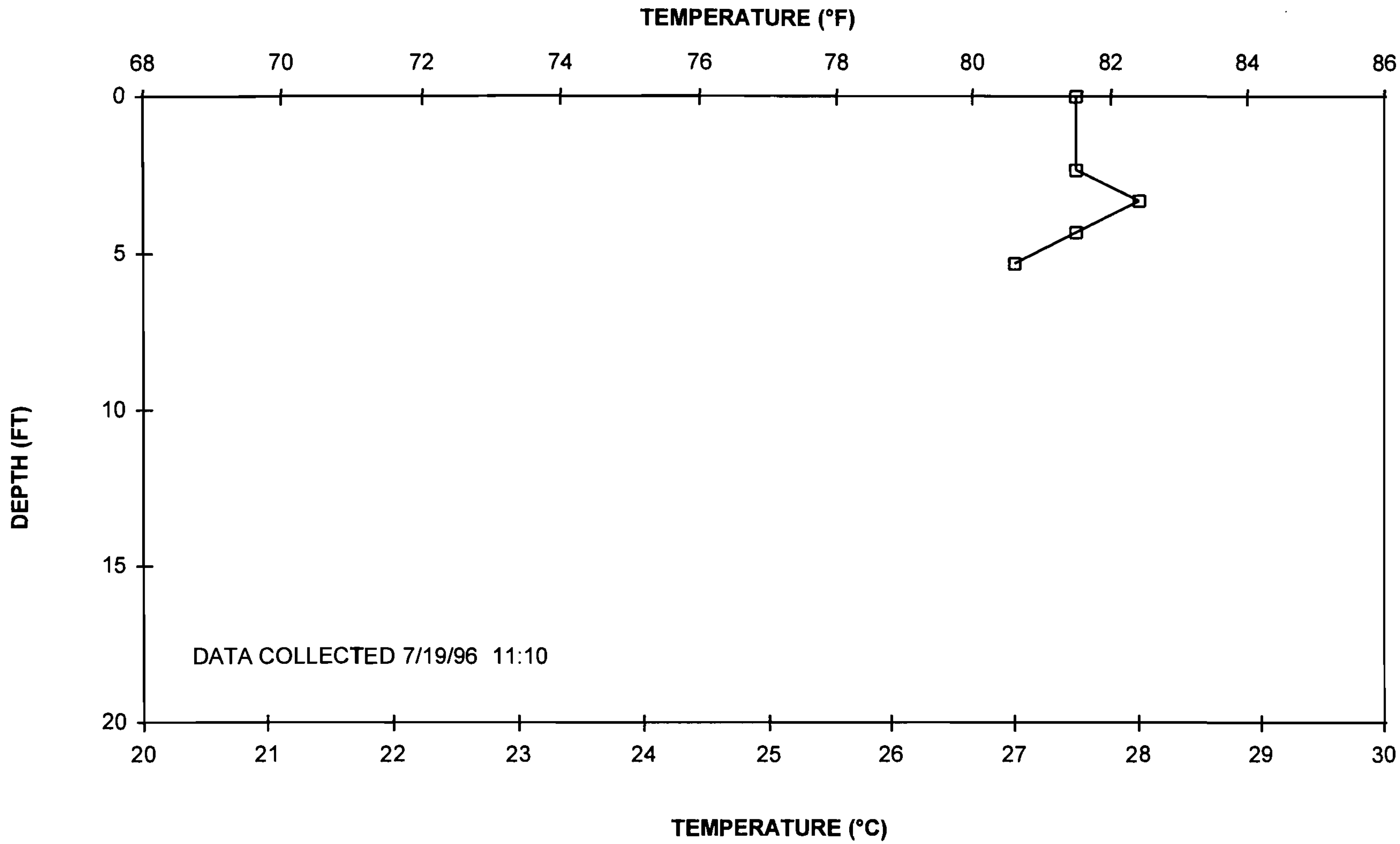
Figure
10.5.4–39



CITY OF TALLAHASSEE

LOCATION 9
WATER COLUMN TEMPERATURE PROFILE
AT ST. MARKS RIVER, SHIELD'S MARINA, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

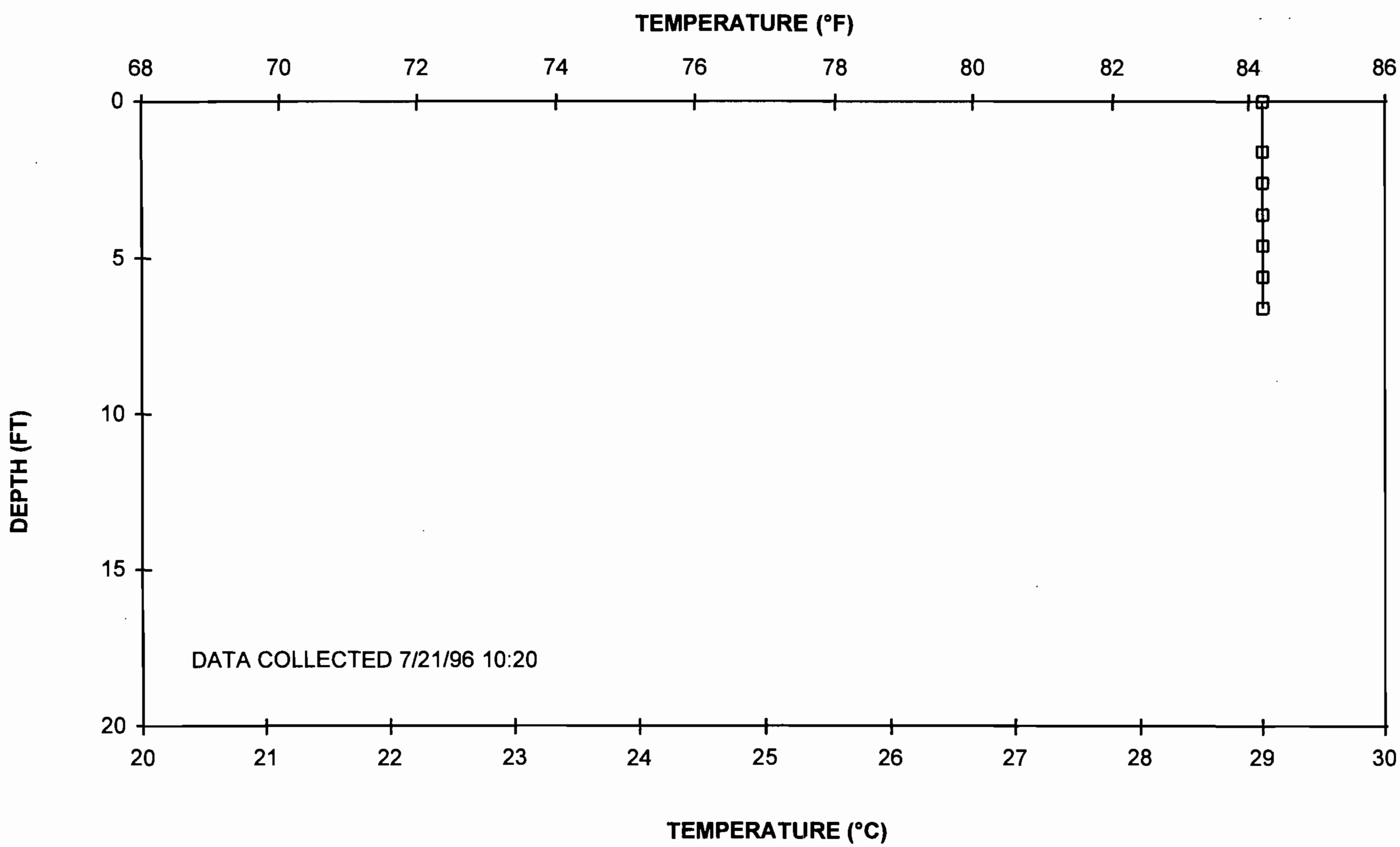
Figure
10.5.4-40



CITY OF TALLAHASSEE

LOCATION 10
WATER COLUMN TEMPERATURE PROFILE
AT UNITS 6/7 DISCHARGE, IMMEDIATELY DOWNSTREAM OF DISCHARGE POINT
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

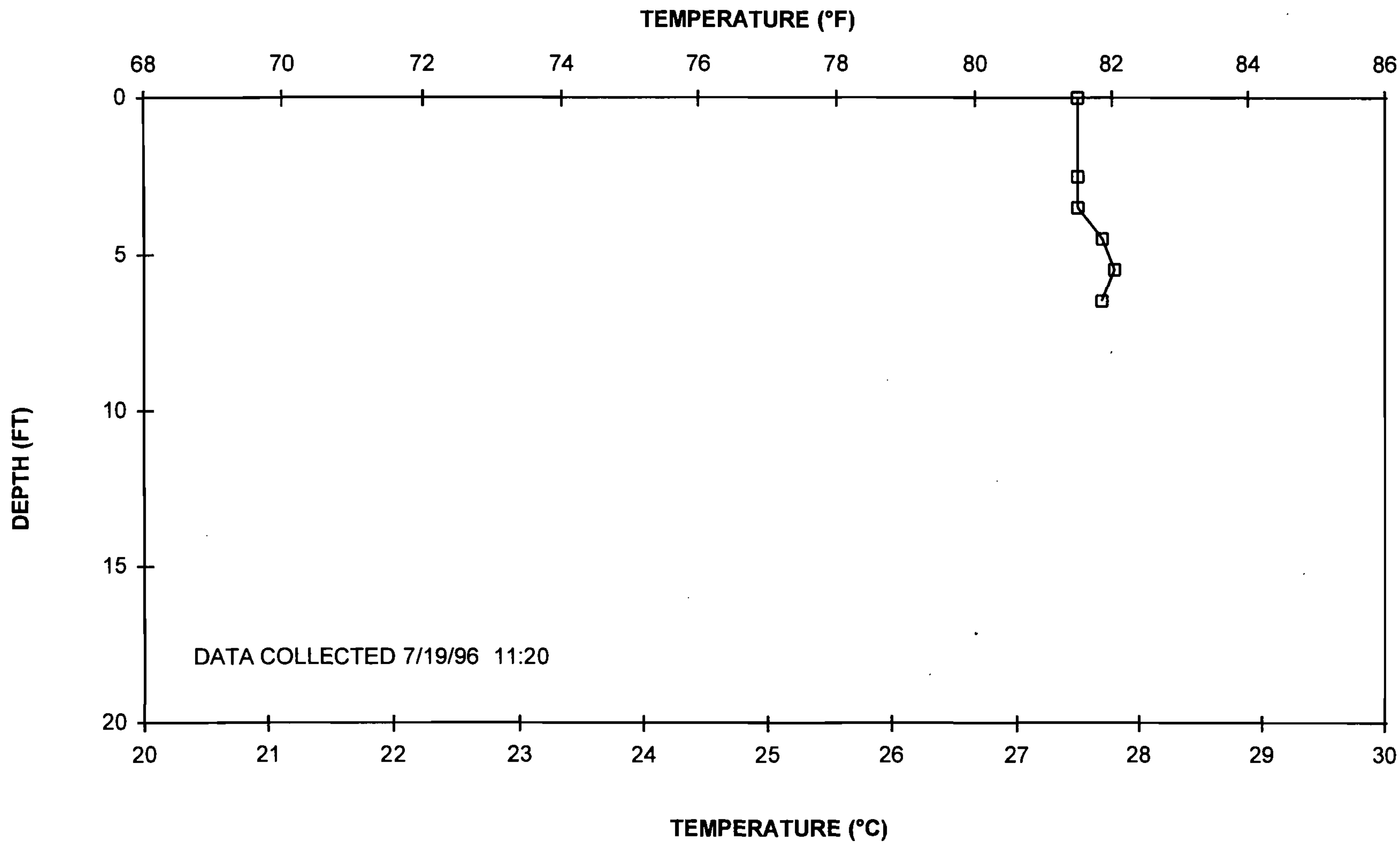
Figure
10.5.4-41



CITY OF TALLAHASSEE

LOCATION 10
WATER COLUMN TEMPERATURE PROFILE
AT UNITS 6/7 DISCHARGE, IMMEDIATELY DOWNSTREAM OF DISCHARGE POINT
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

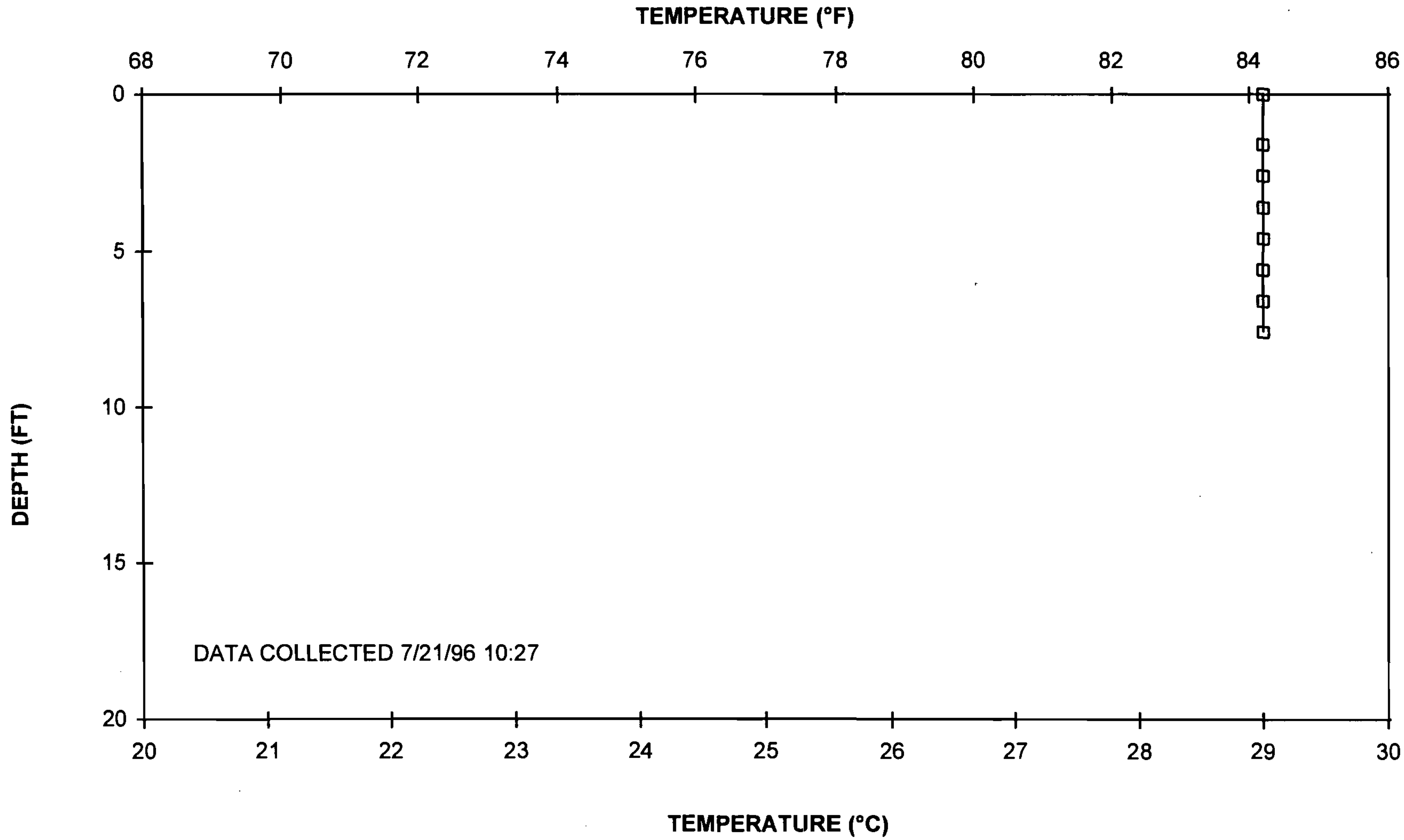
Figure
10.5.4–42



CITY OF TALLAHASSEE

LOCATION 11
WATER COLUMN TEMPERATURE PROFILE
AT UNITS 6/7 DISCHARGE, PRIOR TO BEND IN DISCHARGE CANAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

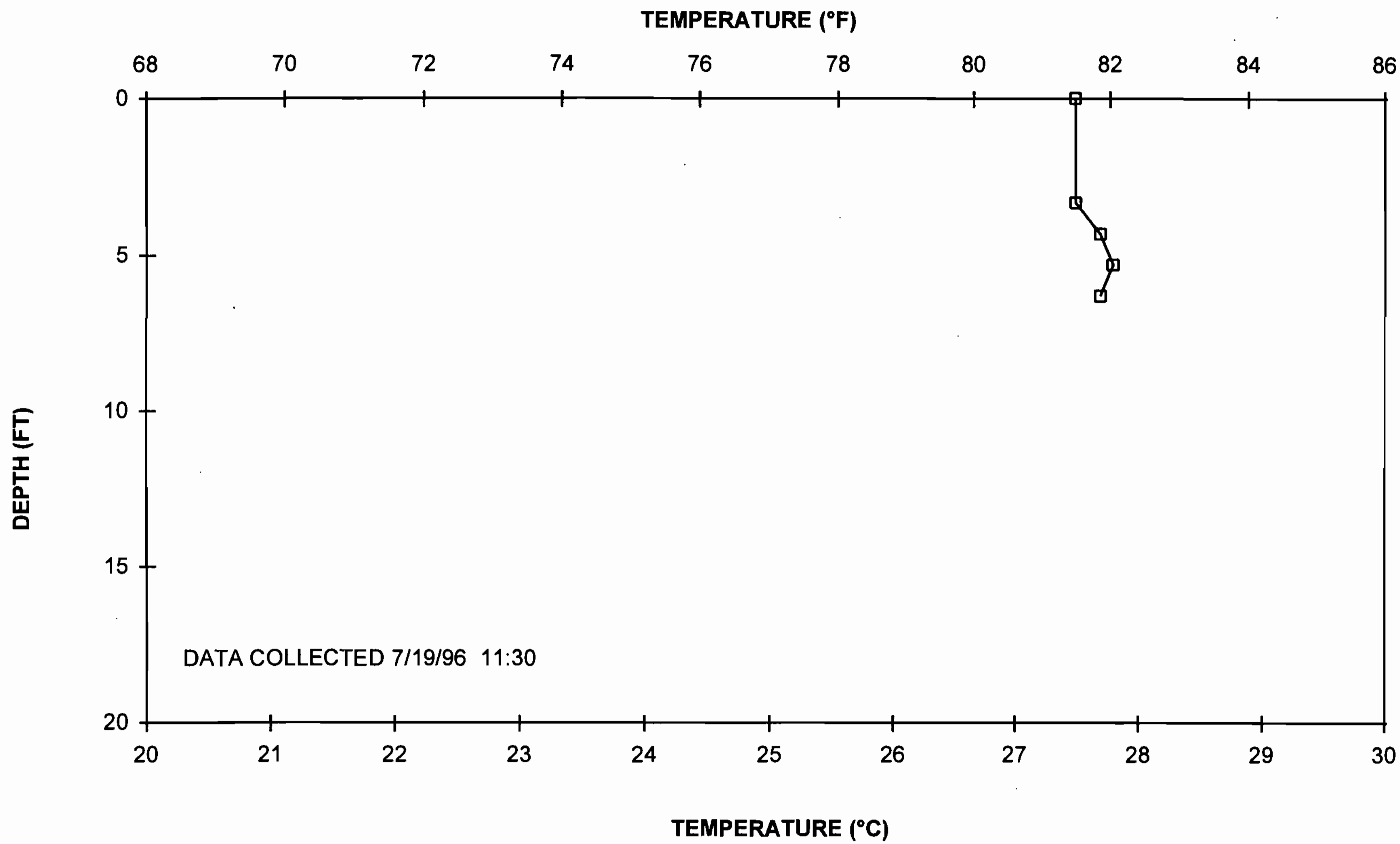
Figure
10.5.4-43



CITY OF TALLAHASSEE

LOCATION 11
WATER COLUMN TEMPERATURE PROFILE
AT UNITS 6/7 DISCHARGE, PRIOR TO BEND IN DISCHARGE CANAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

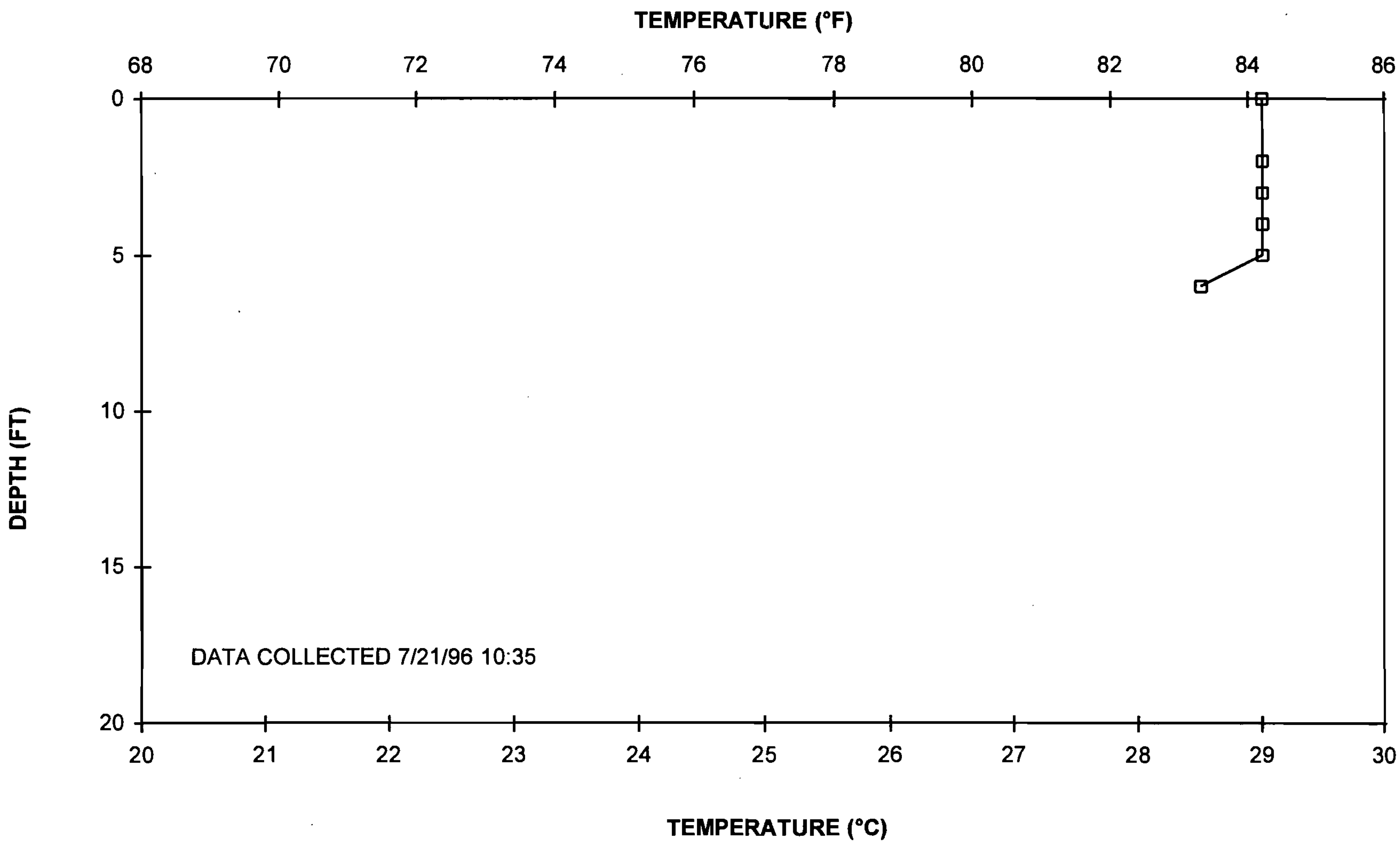
Figure 10.5.4–44



CITY OF TALLAHASSEE

LOCATION 12
WATER COLUMN TEMPERATURE PROFILE
AT UNITS 6/7 DISCHARGE, AFTER BEND IN DISCHARGE CANAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

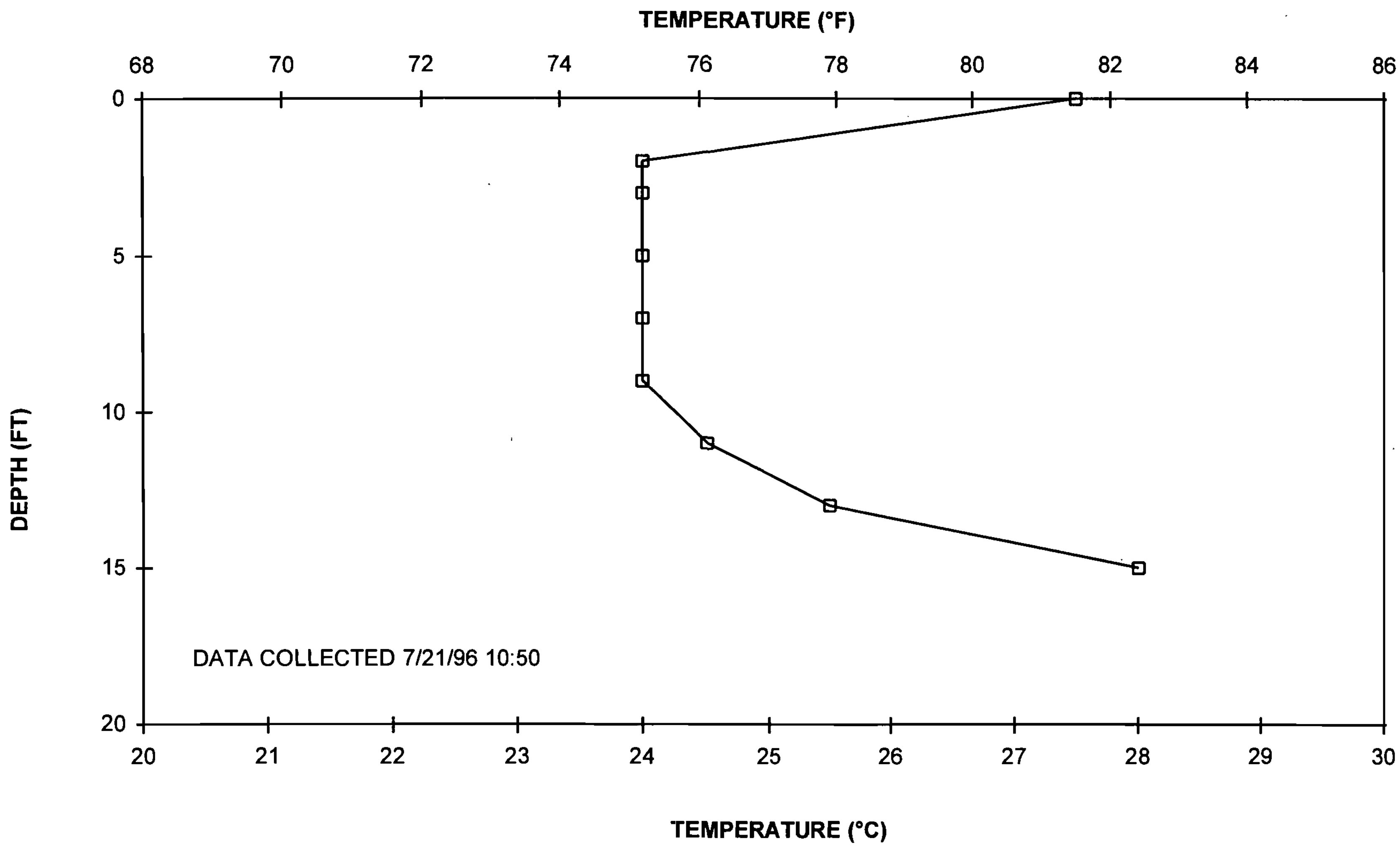
Figure
10.5.4-45



CITY OF TALLAHASSEE

LOCATION 12
WATER COLUMN TEMPERATURE PROFILE
AT UNITS 6/7 DISCHARGE, AFTER BEND IN DISCHARGE CANAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

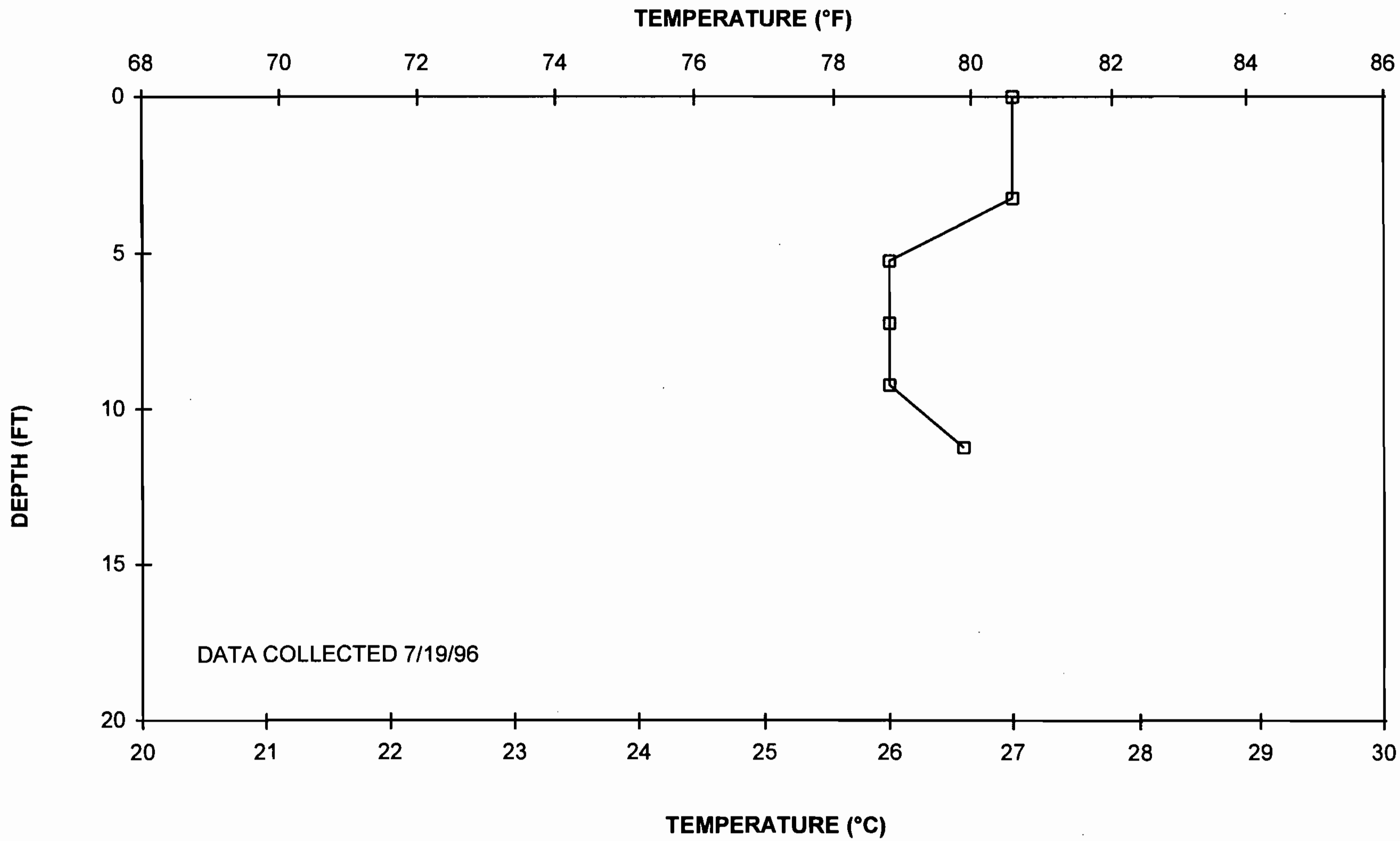
Figure 10.5.4-46



CITY OF TALLAHASSEE

LOCATION 12
WATER COLUMN TEMPERATURE PROFILE
AT UNITS 6/7 DISCHARGE, AFTER BEND IN DISCHARGE CANAL, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

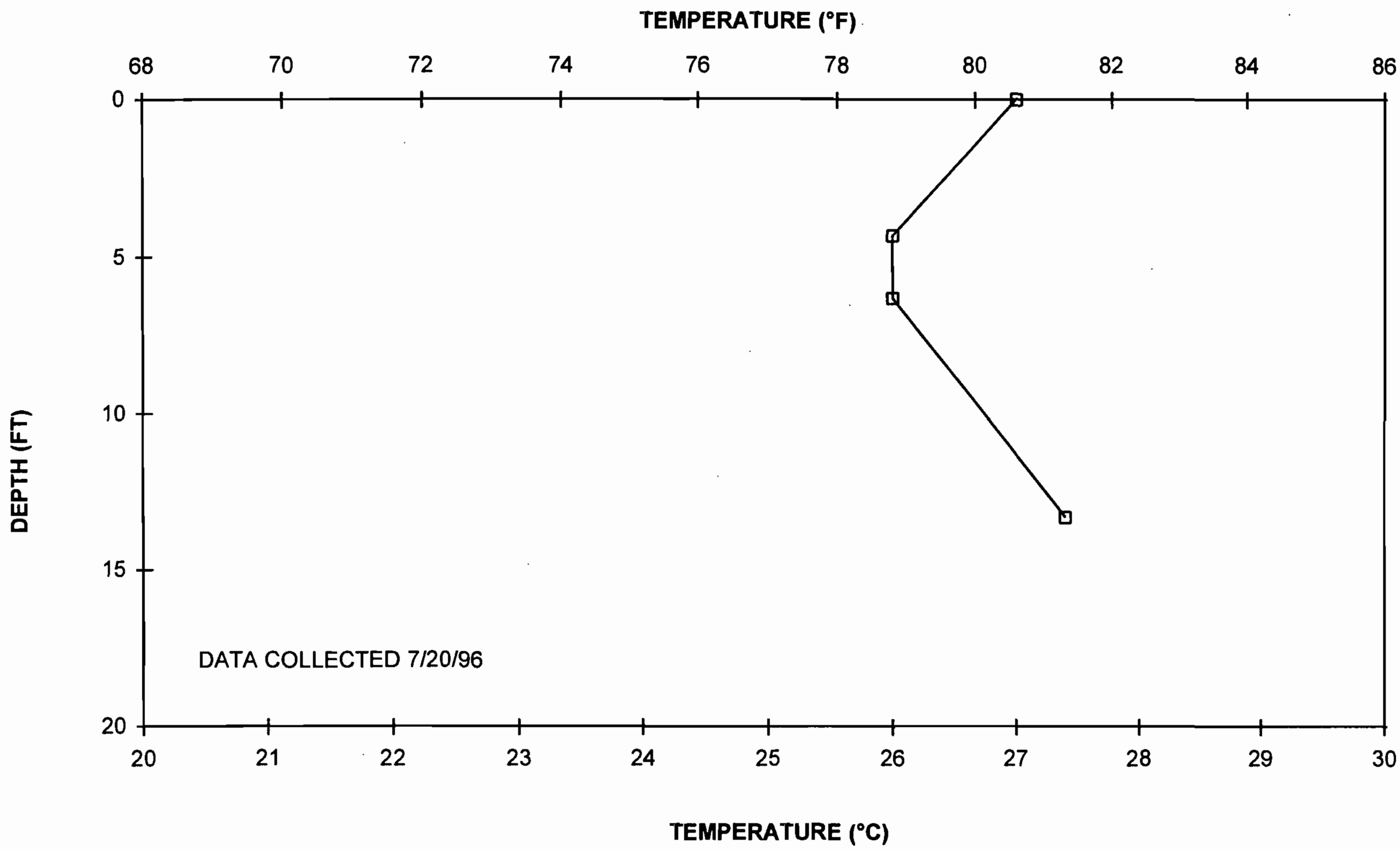
Figure
10.5.4–47



CITY OF TALLAHASSEE

LOCATION 13
WATER COLUMN TEMPERATURE PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF ST. MARKS SEWAGE DISCHARGE, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

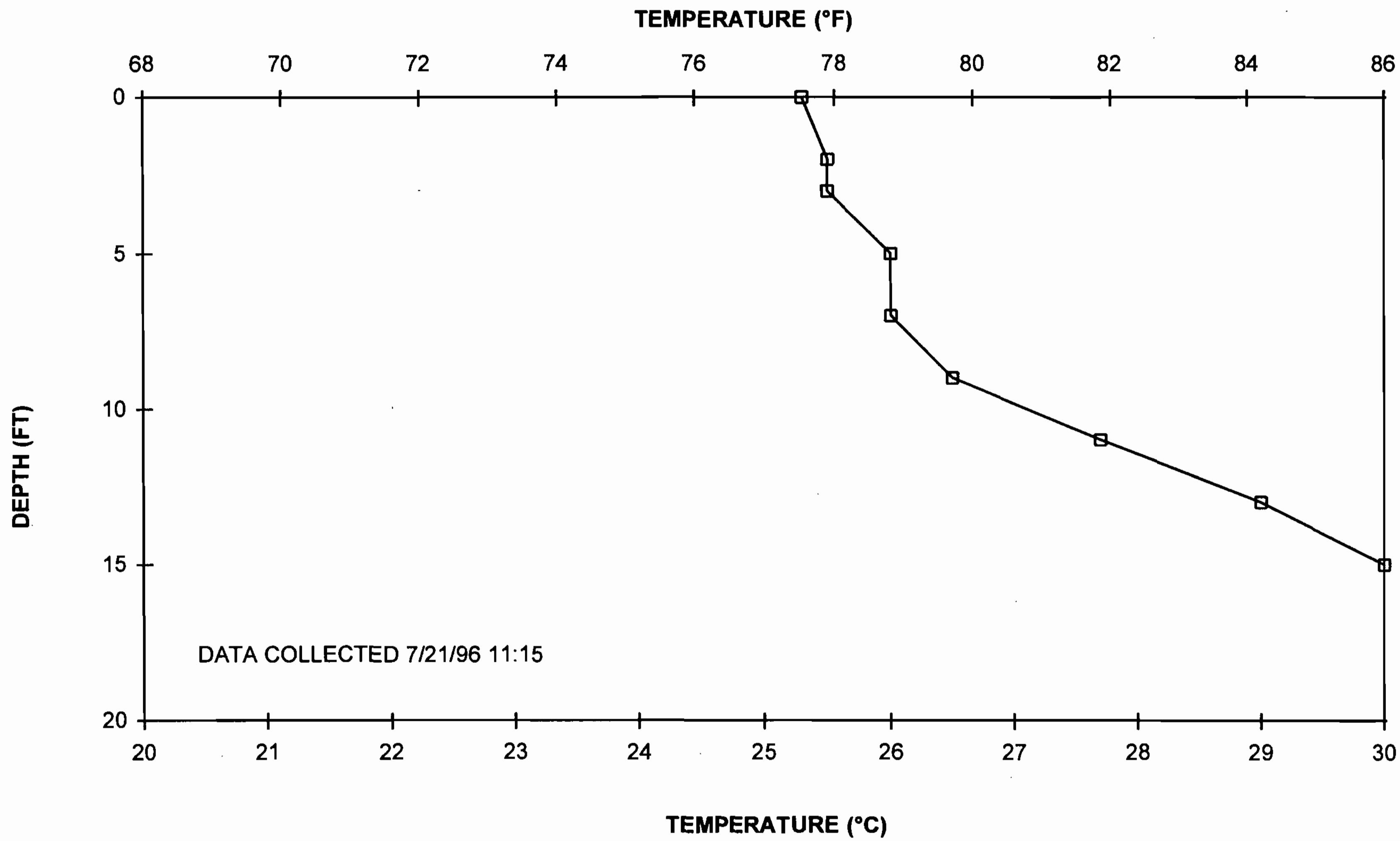
Figure 10.5.4-48



CITY OF TALLAHASSEE

LOCATION 13
WATER COLUMN TEMPERATURE PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF ST. MARKS SEWAGE TREATMENT FACILITY DISCHARGE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

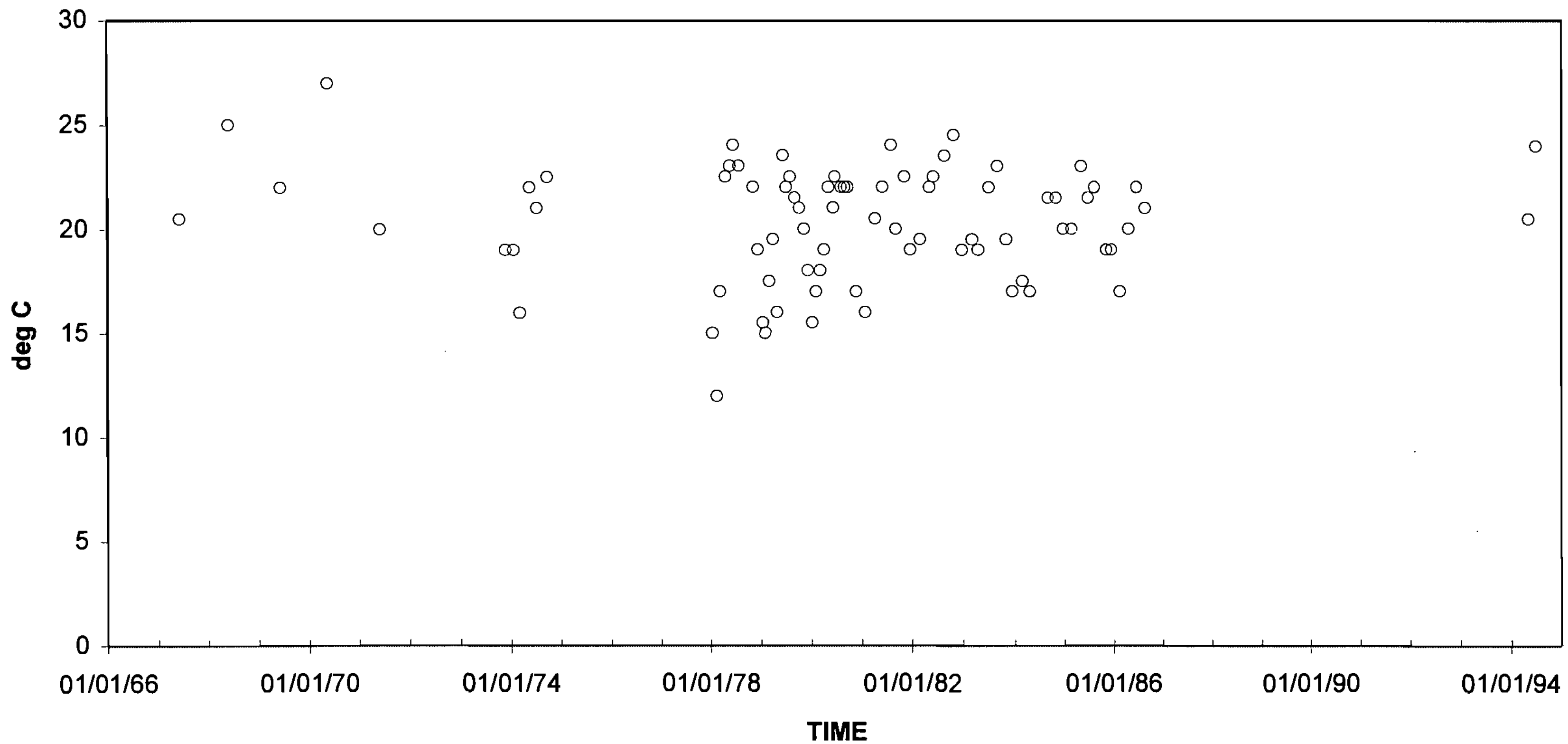
Figure
10.5.4–49



CITY OF TALLAHASSEE

LOCATION 13
WATER COLUMN TEMPERATURE PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF ST. MARKS SEWAGE DISCHARGE, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

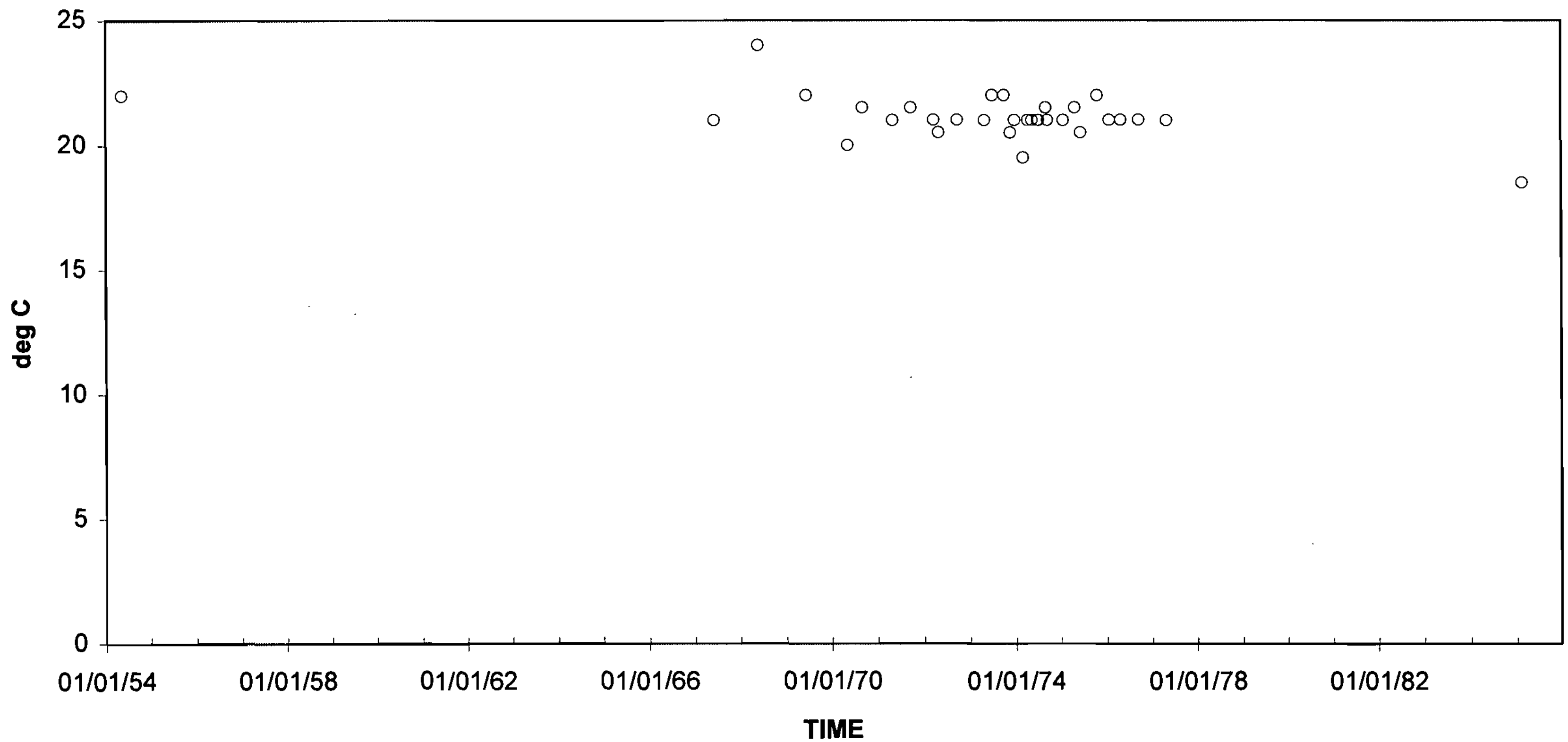
Figure 10.5.4-50



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
TEMPERATURE, WATER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

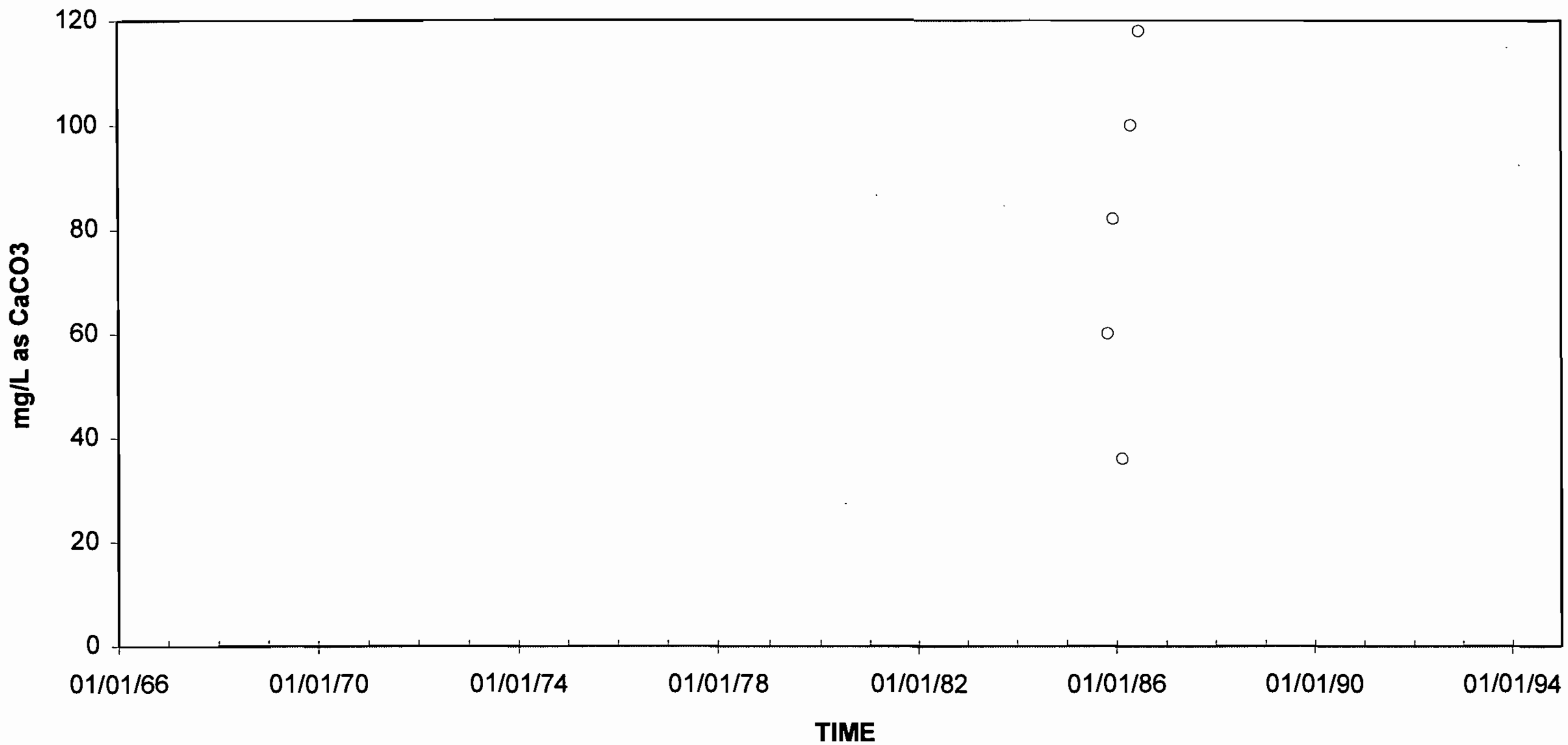
Figure
10.5.4–51



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
TEMPERATURE, WATER
PURDOM UNIT 8 PROJECT - St MARKS, FLORIDA

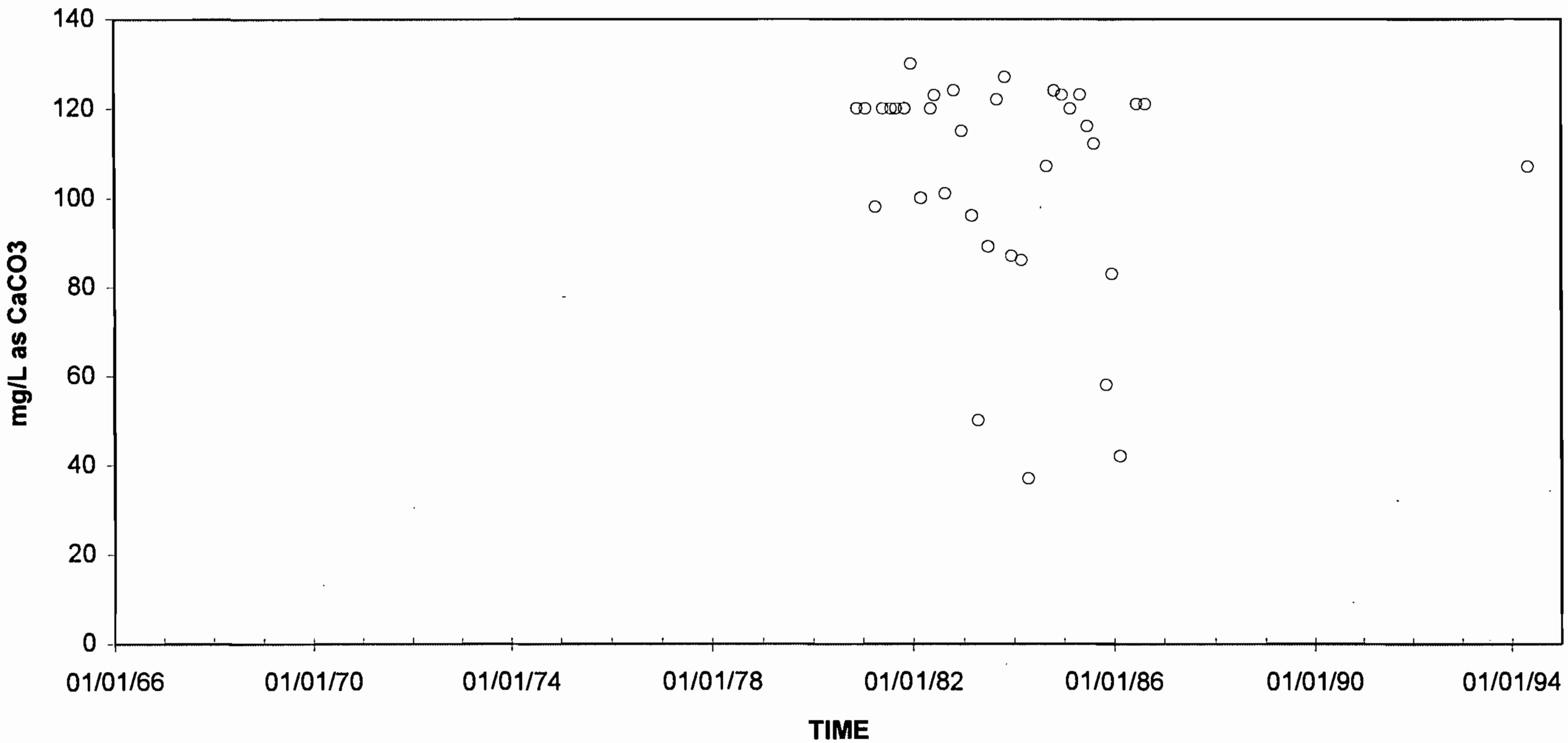
Figure
10.5.4-52



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
ALKALINITY, CARBONATE IT FLD
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

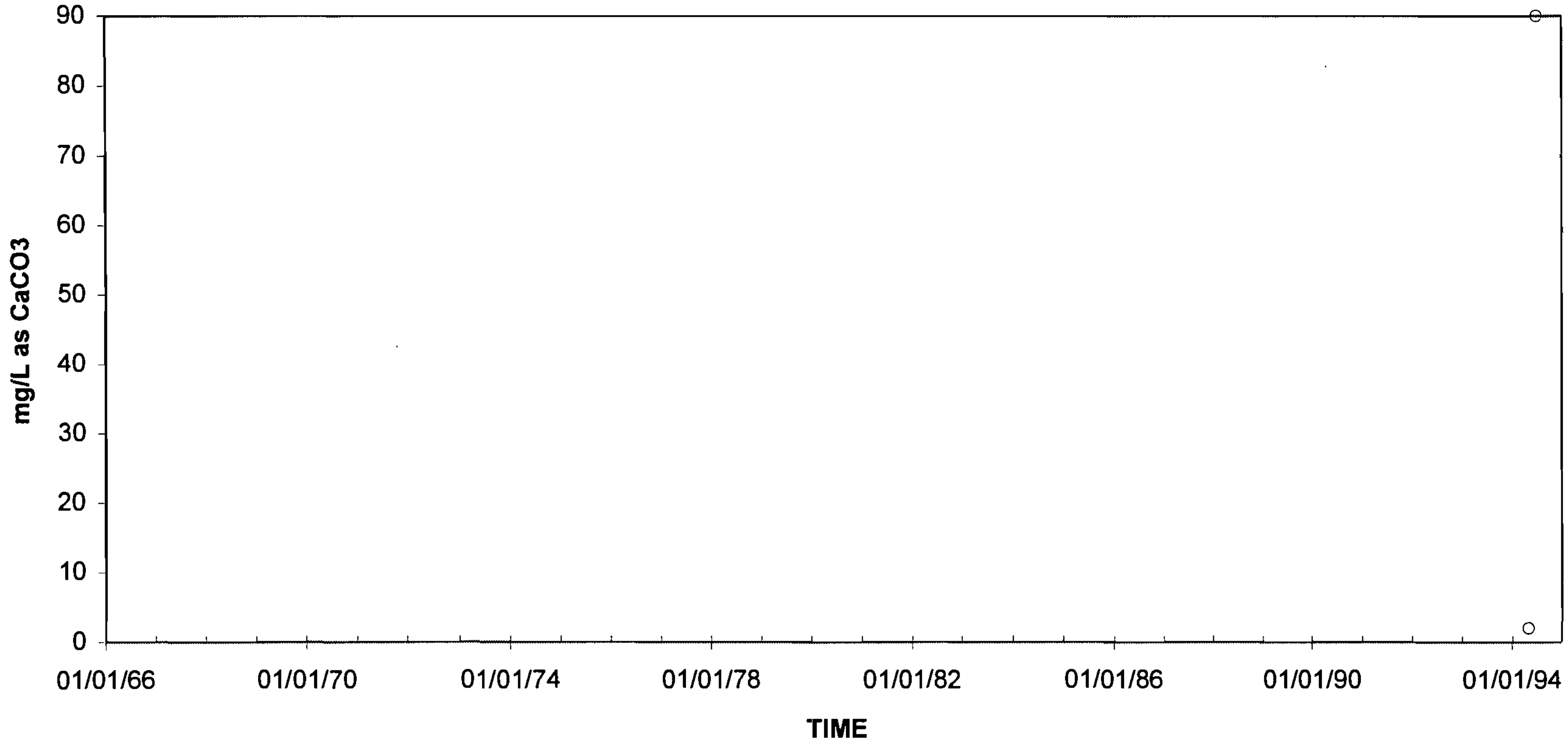
Figure
10.5.4–53



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
ALKALINITY, LAB
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

Figure
10.5.4–54

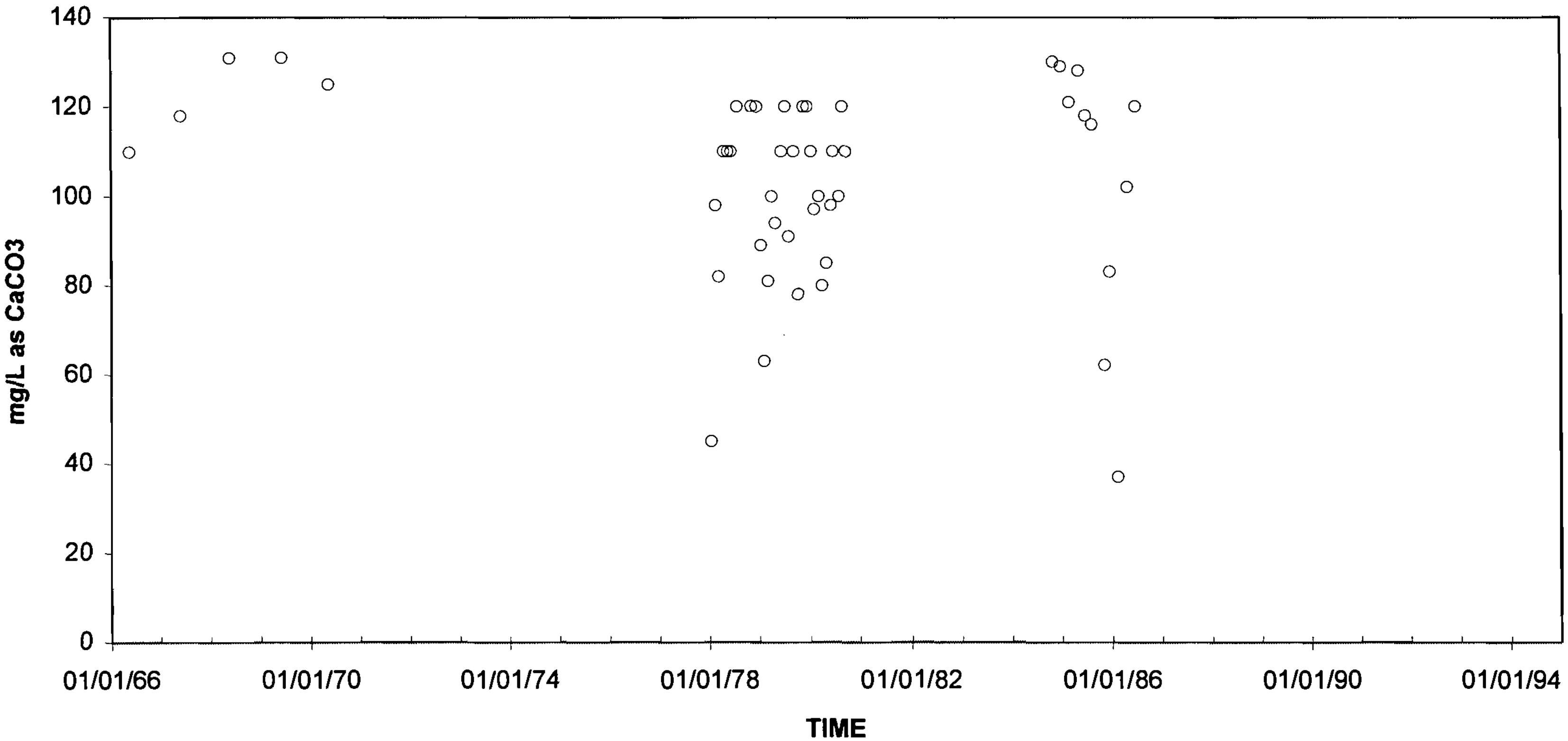


CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
ALKALINITY, WAT DIS TOT IT FIELD

PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

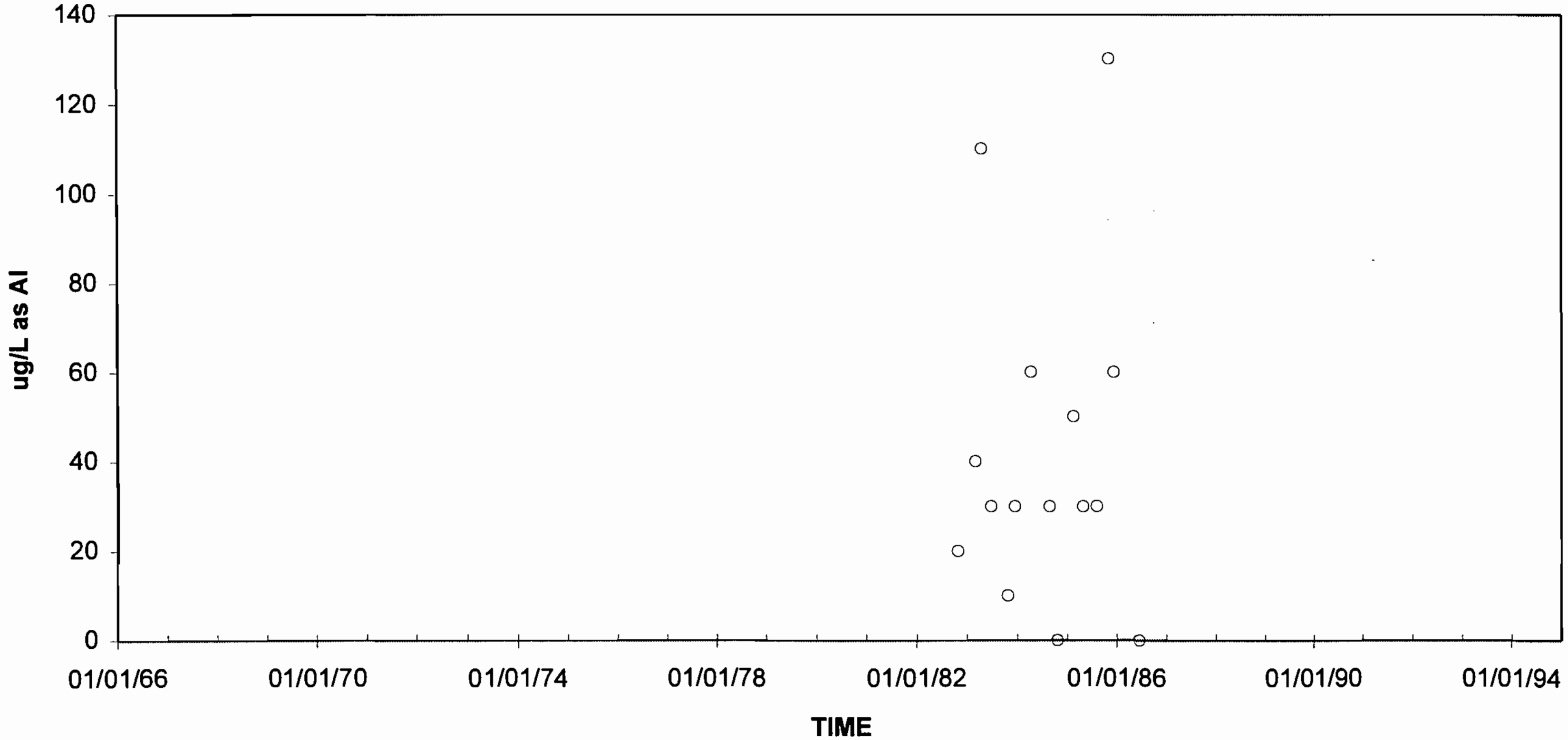
Figure 10.5.4–55



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
ALKALINITY, WAT WH TOT FET FIELD
PURDOM UNIT 8 PROJECT - St MARKS, FLORIDA

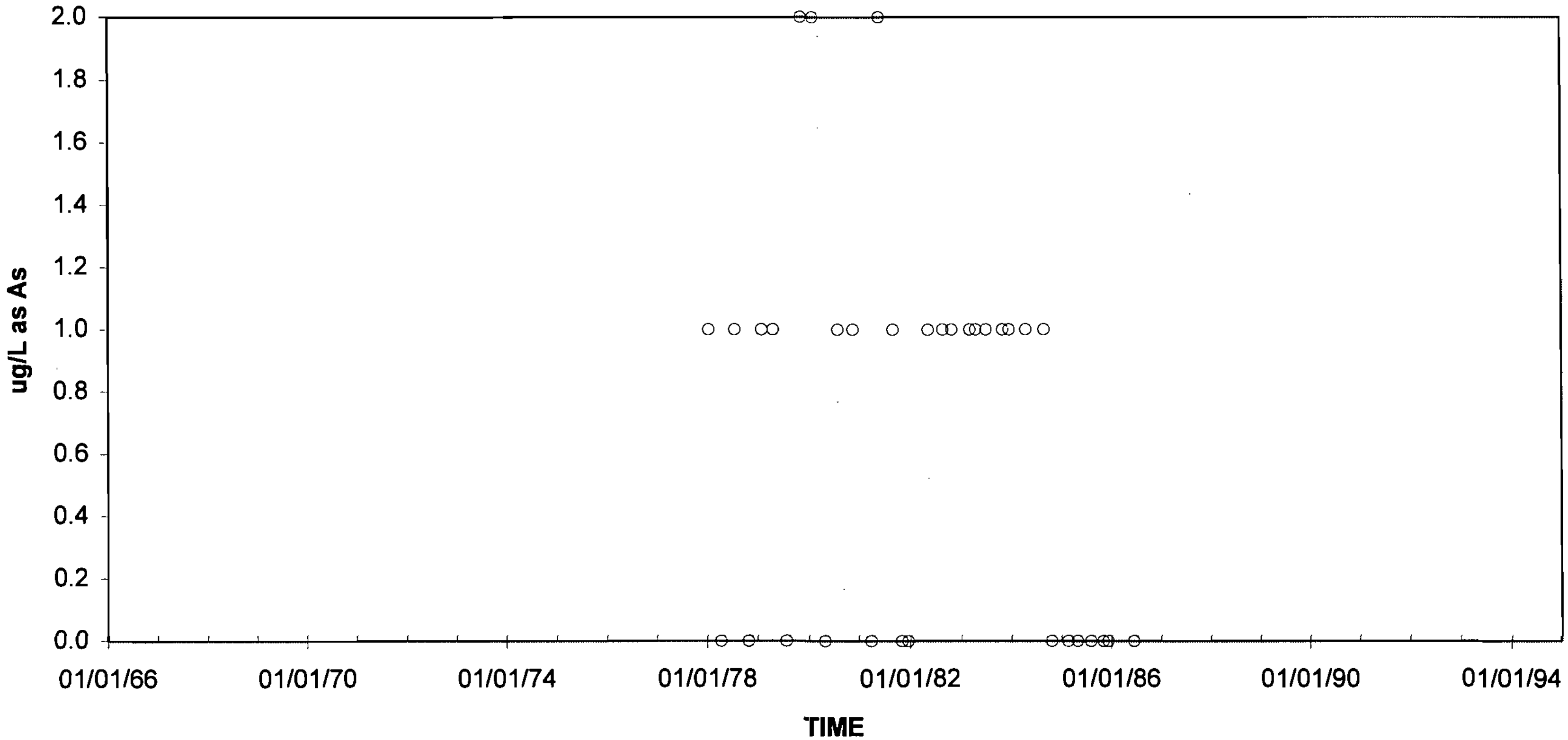
Figure
10.5.4-56



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
ALUMINUM, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

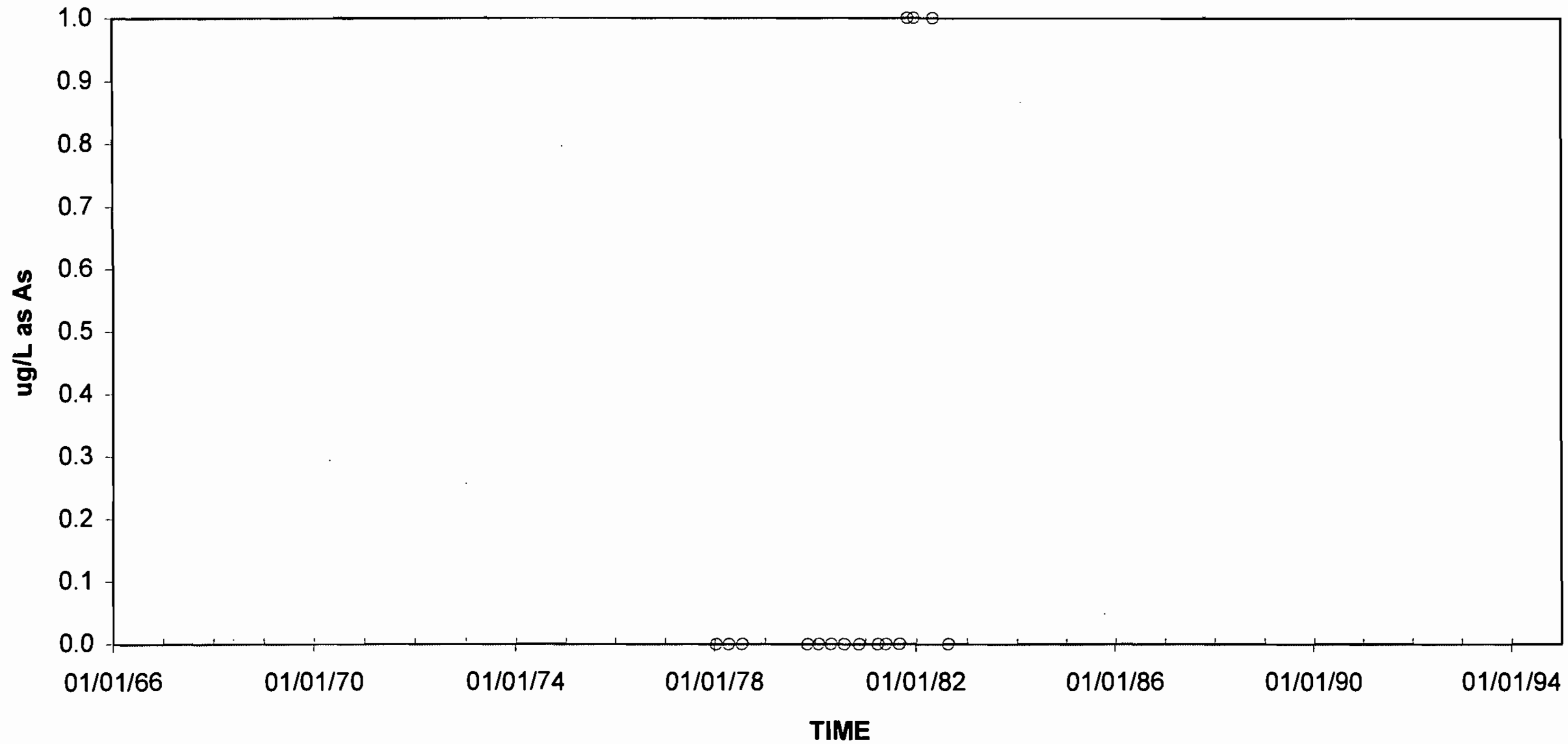
Figure
10.5.4–57



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
ARSENIC, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

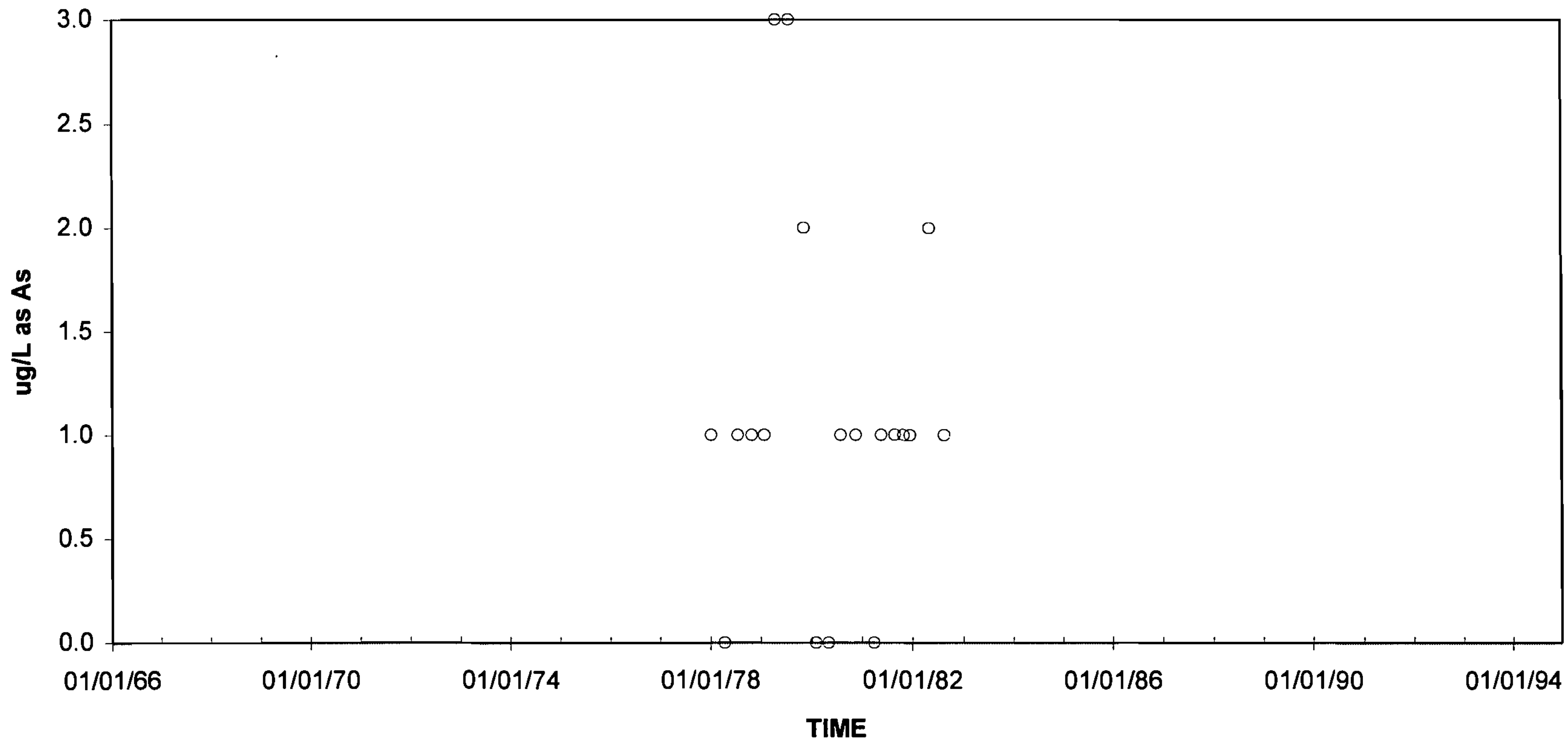
Figure 10.5.4–58



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
ARSENIC, SUSPENDED TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

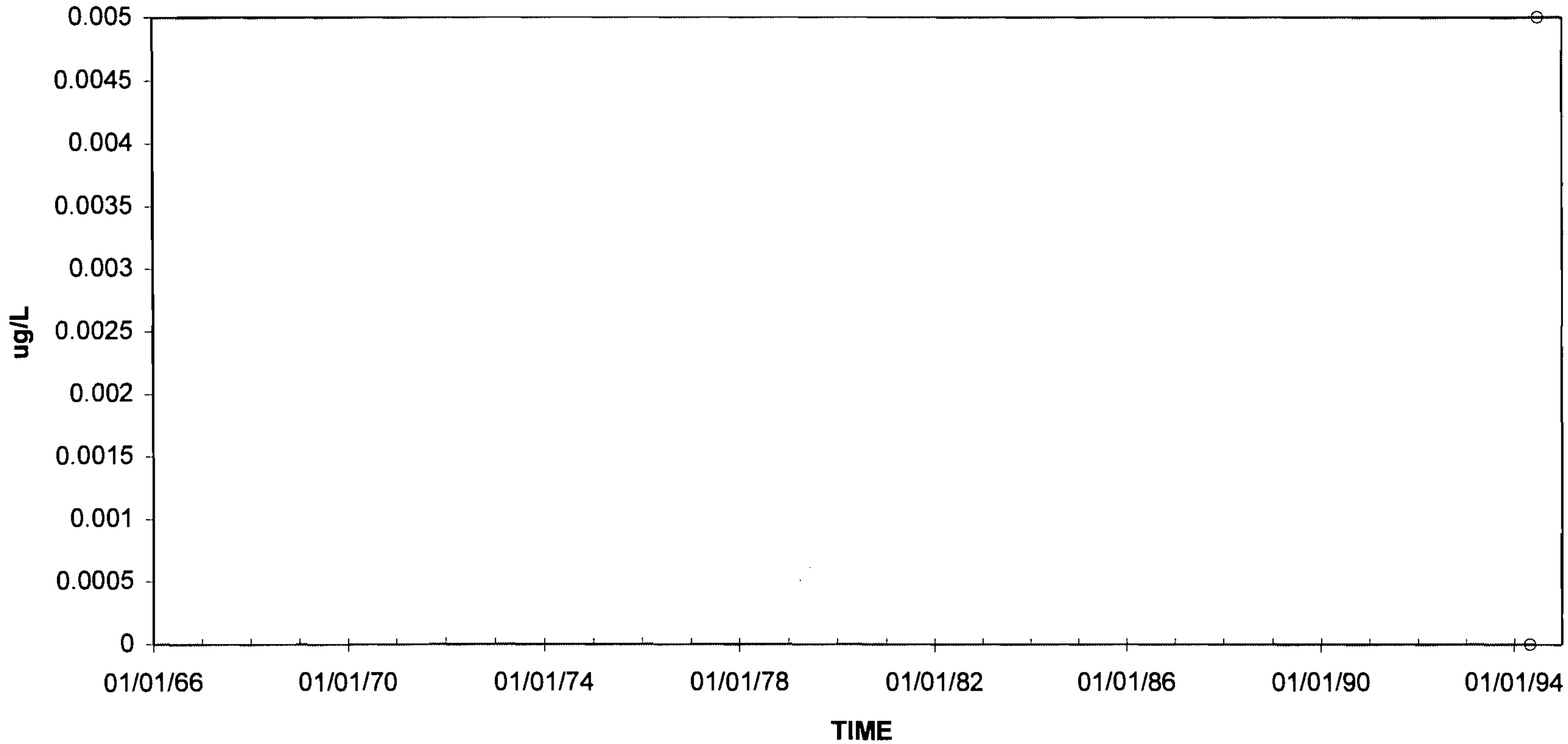
Figure 10.5.4-59



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
ARSENIC, TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

Figure 10.5.4–60

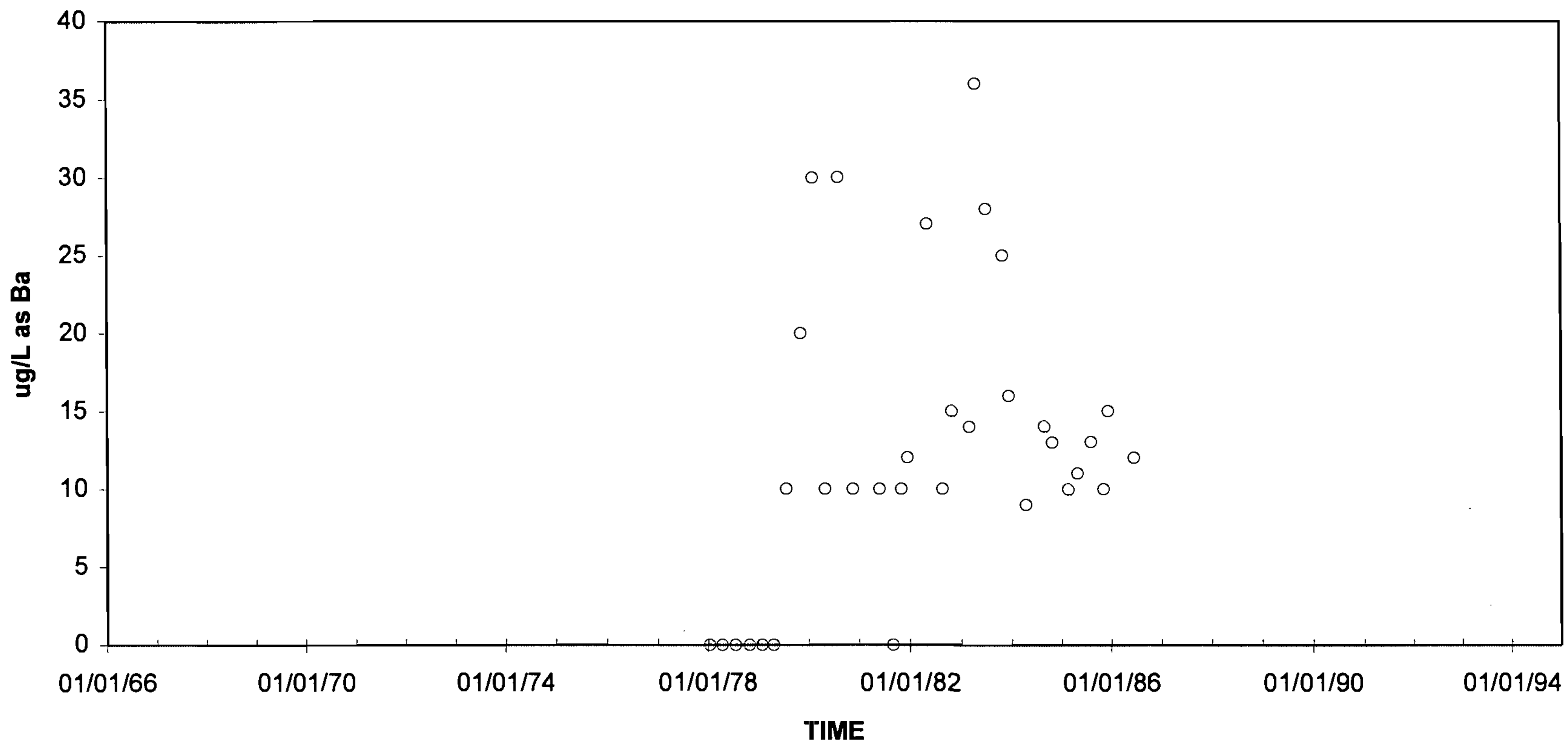


CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
ATRAZINE, WATER DISSOLV

PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

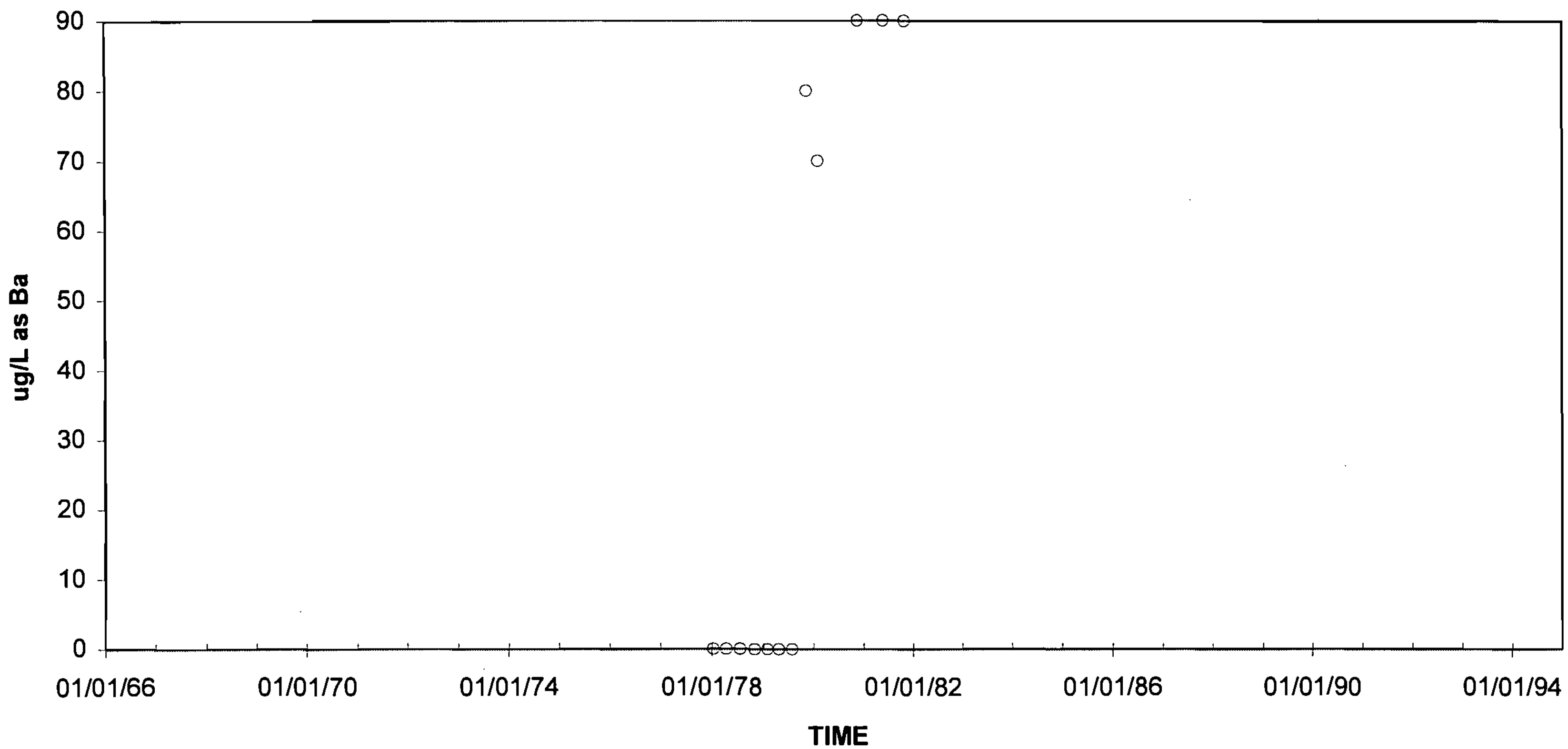
Figure 10.5.4–61



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
BARIUM, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

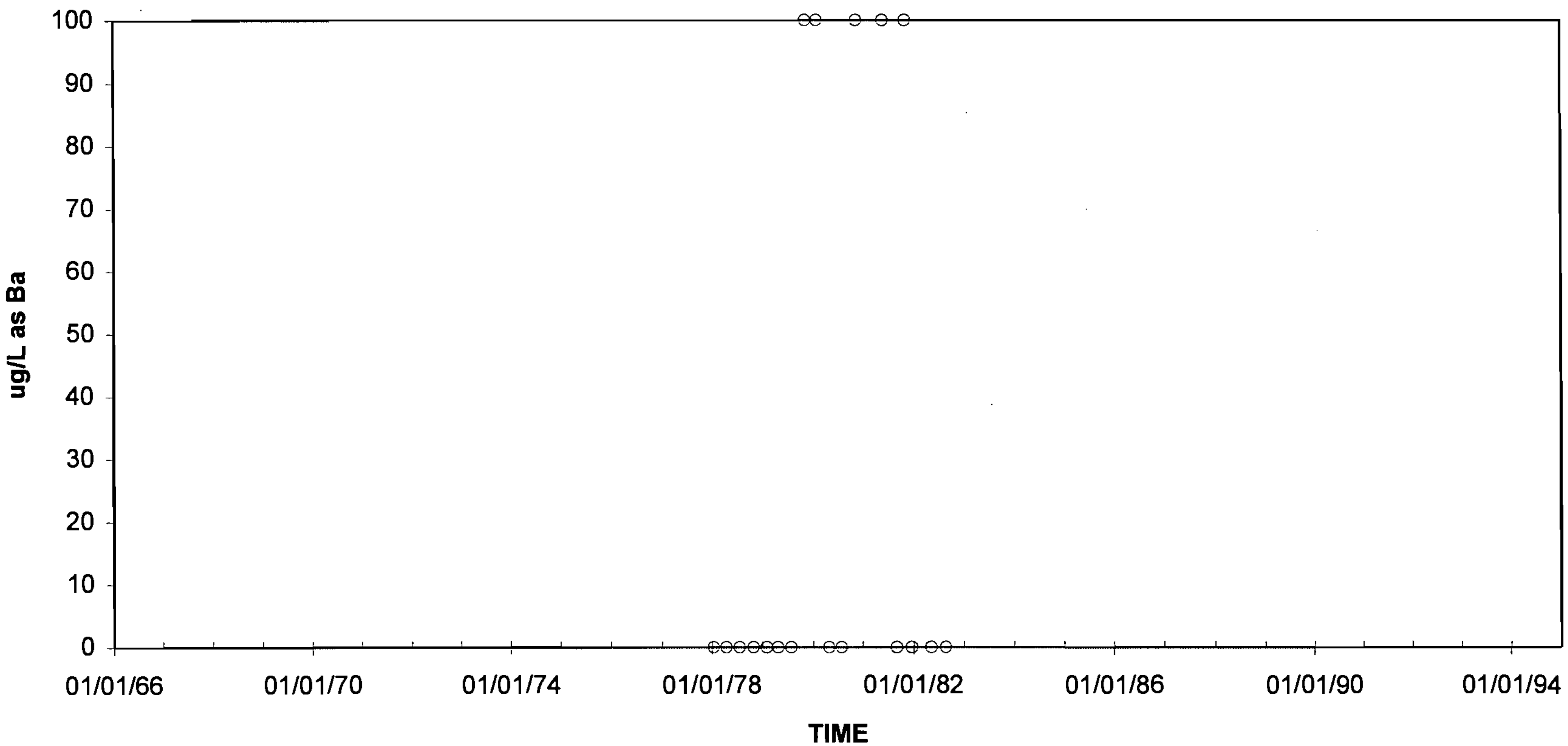
Figure
10.5.4-62



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
BARIUM, SUSPENDED RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

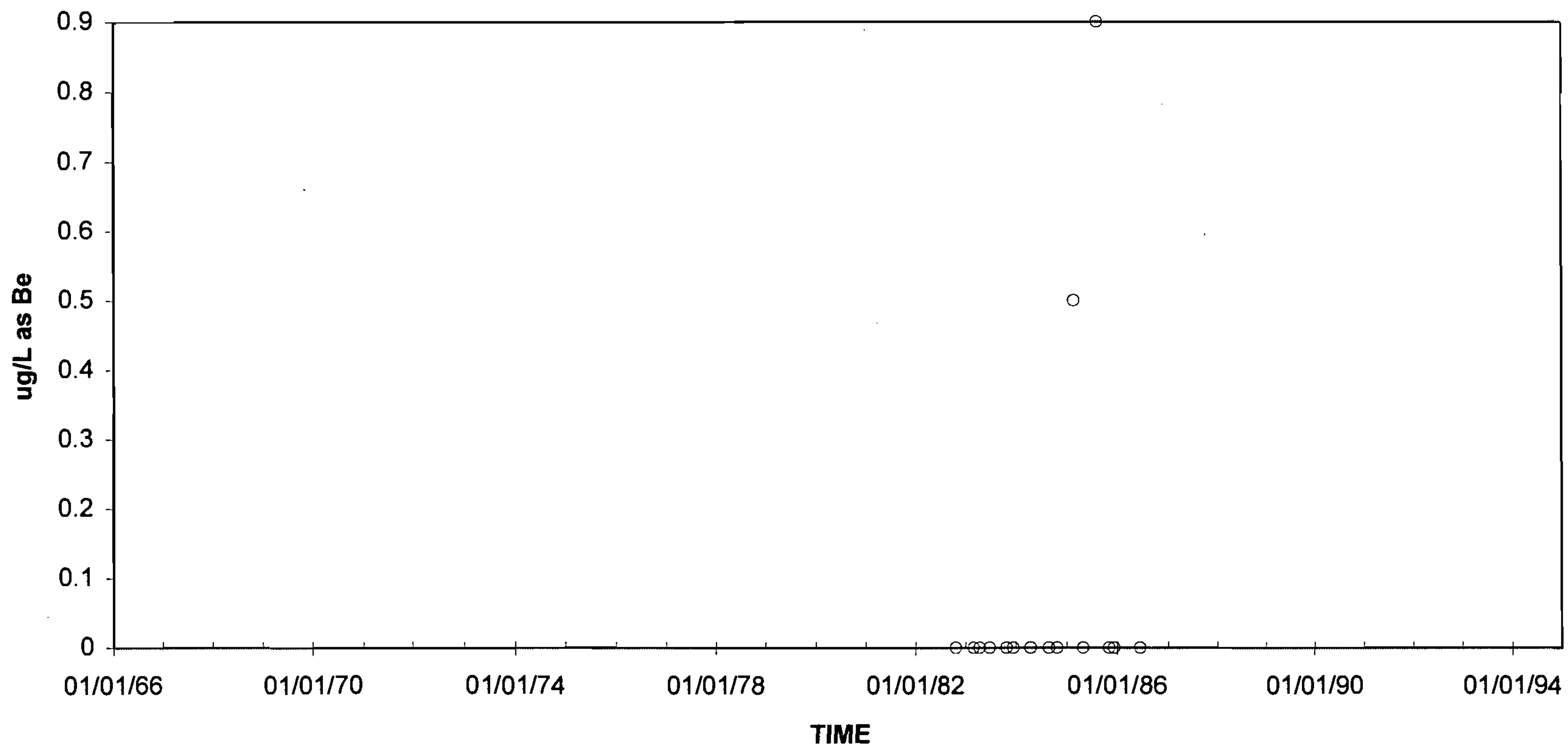
Figure
10.5.4–63



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
BARIUM, TOTAL RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

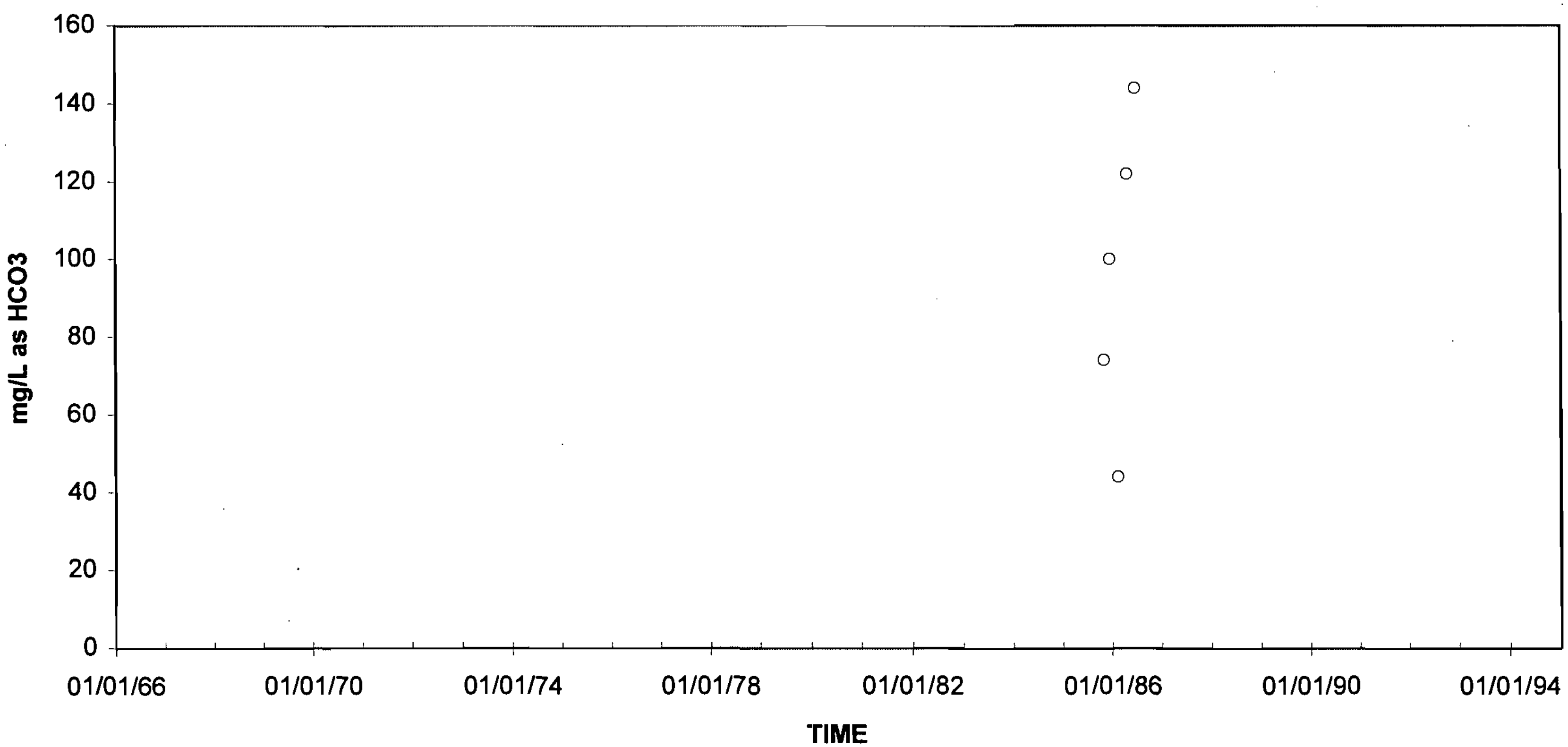
Figure
10.5.4–64



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
BERYLLIUM, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

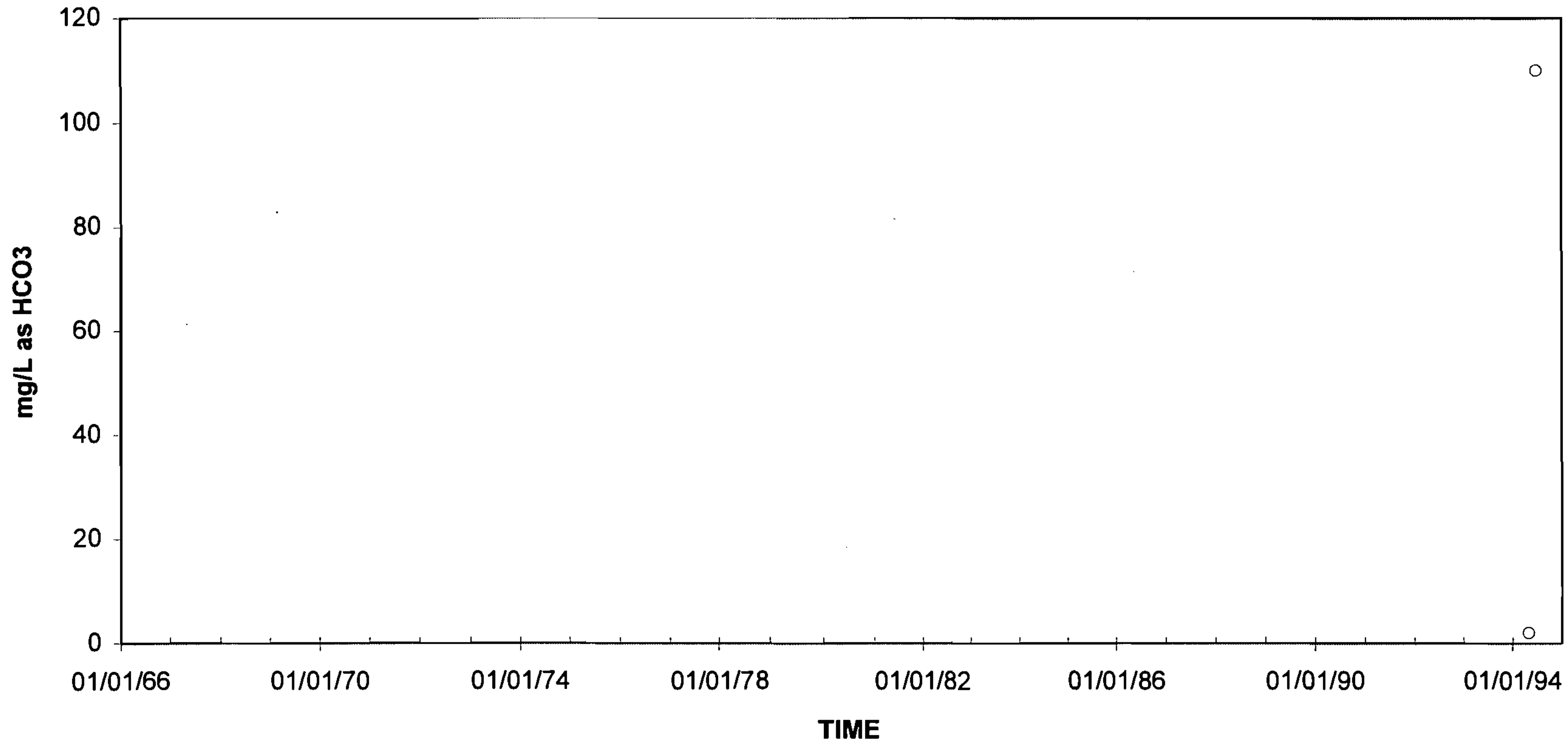
Figure 10.5.4–65



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
BICARBONATE, IT FLD
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

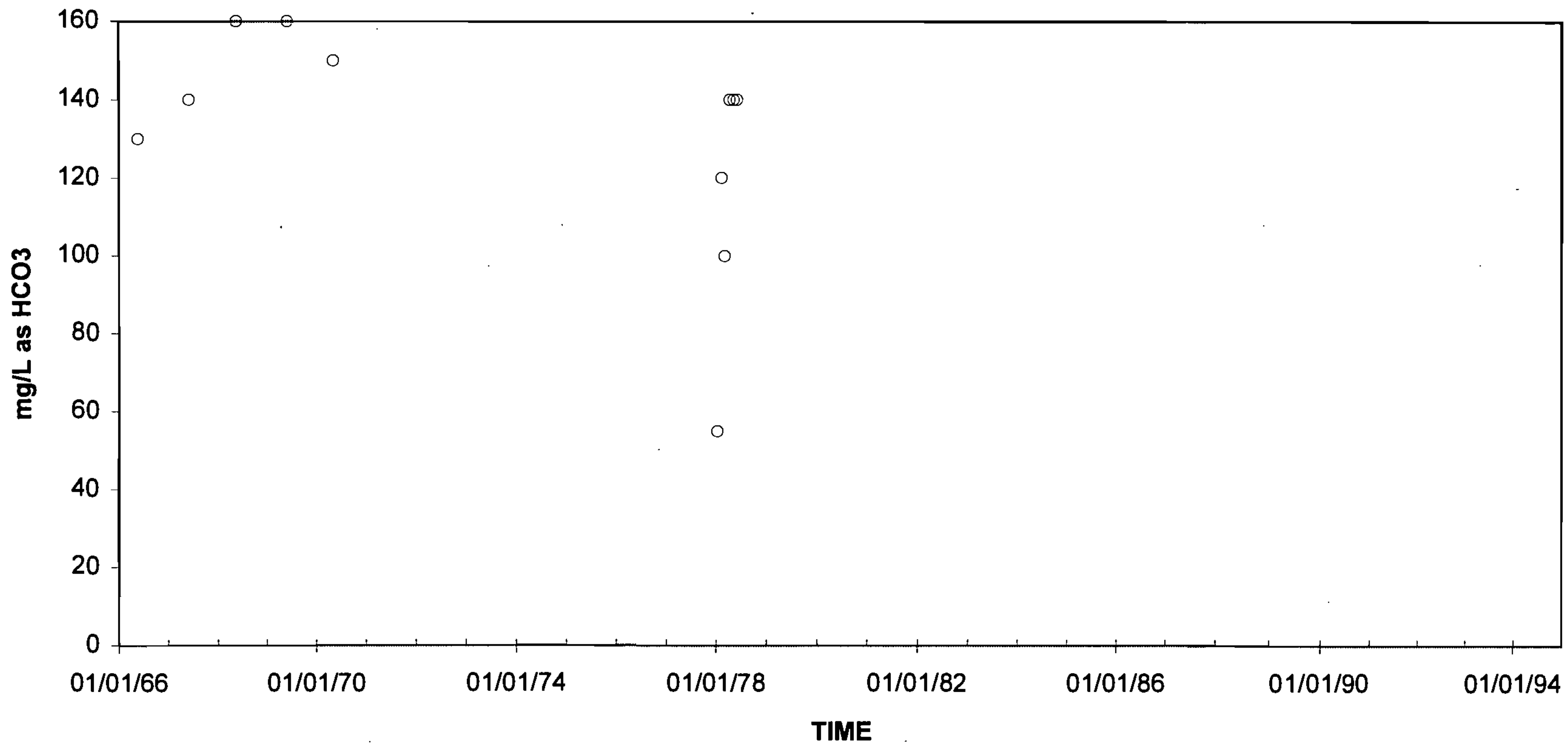
Figure 10.5.4–66



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
BICARBONATE, WAT DIS IT FIELD
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

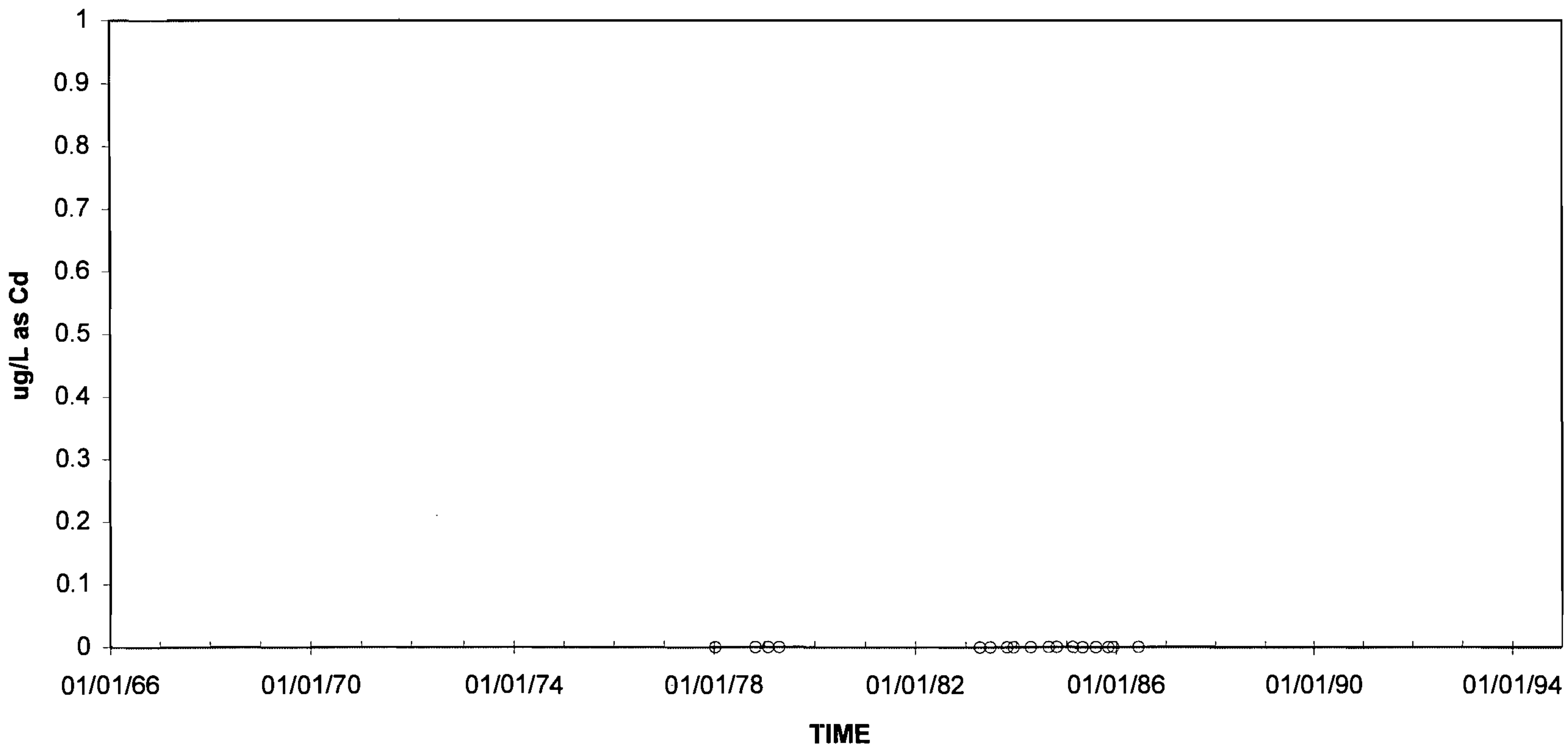
Figure 10.5.4–67



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
BICARBONATE, WAT WH TOT FET FIELD
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

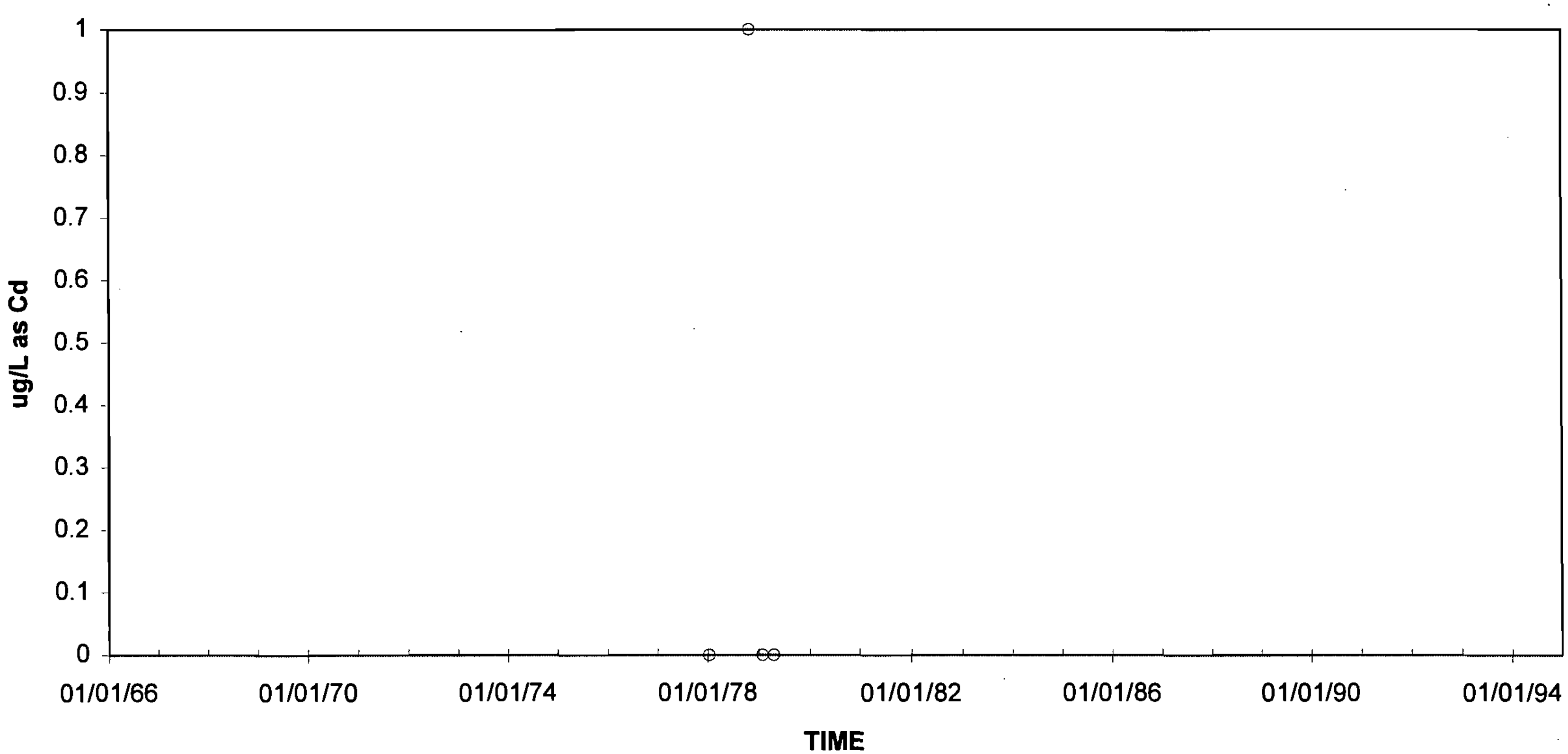
Figure
10.5.4–68



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
CADMIUM, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

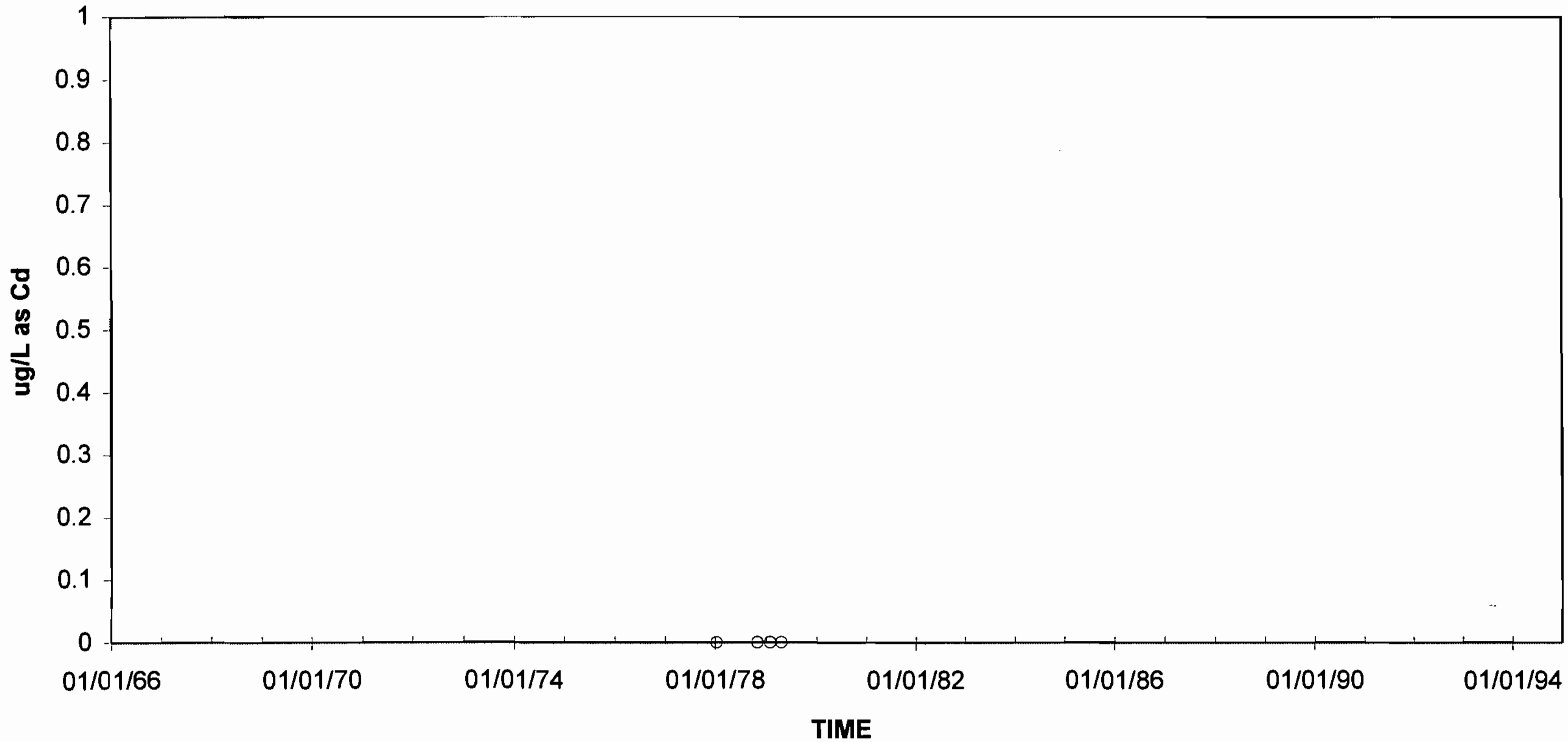
Figure
10.5.4–69



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
CADMIUM, SUSPENDED RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

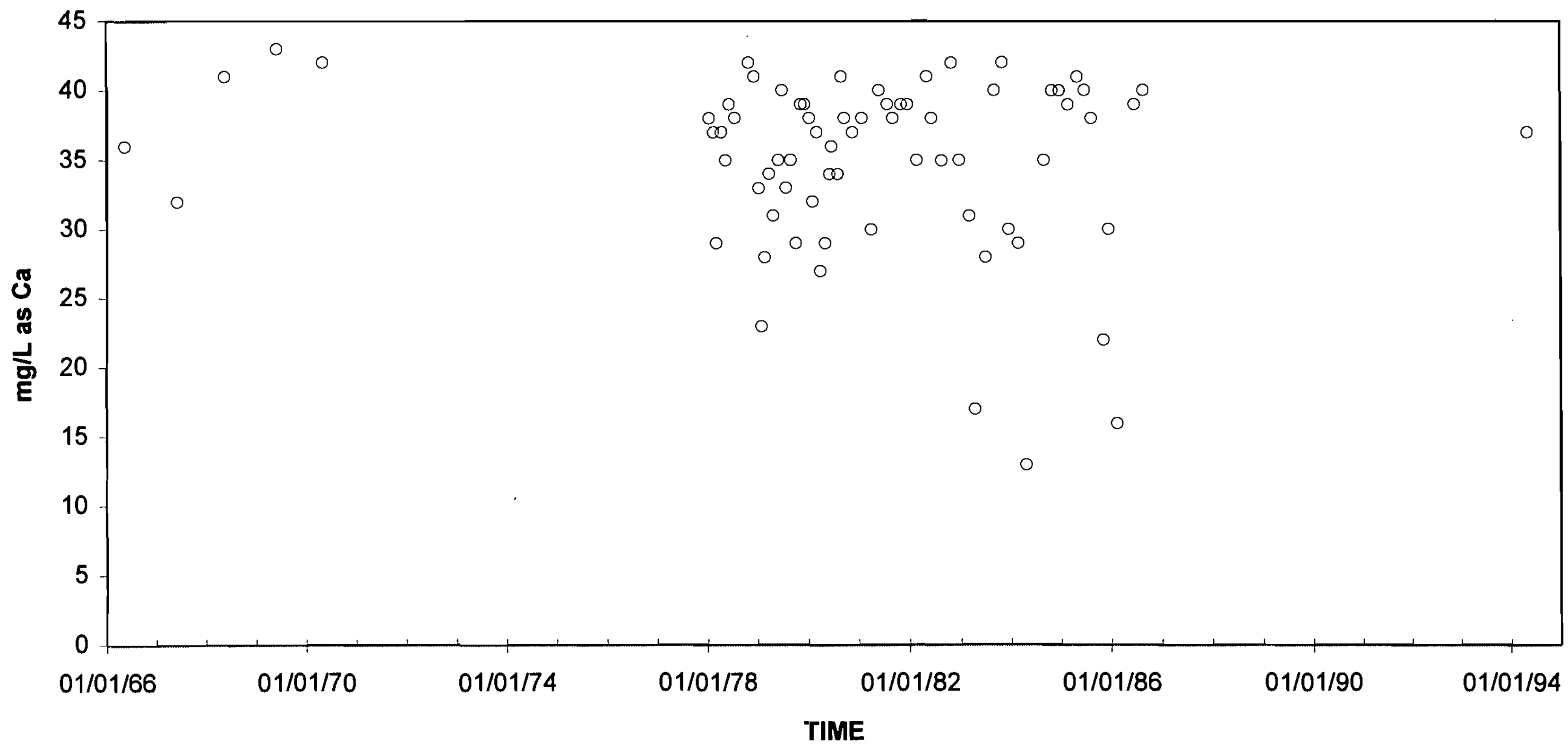
Figure
10.5.4–70



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
CADMIUM, WATER UNFLTRD TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

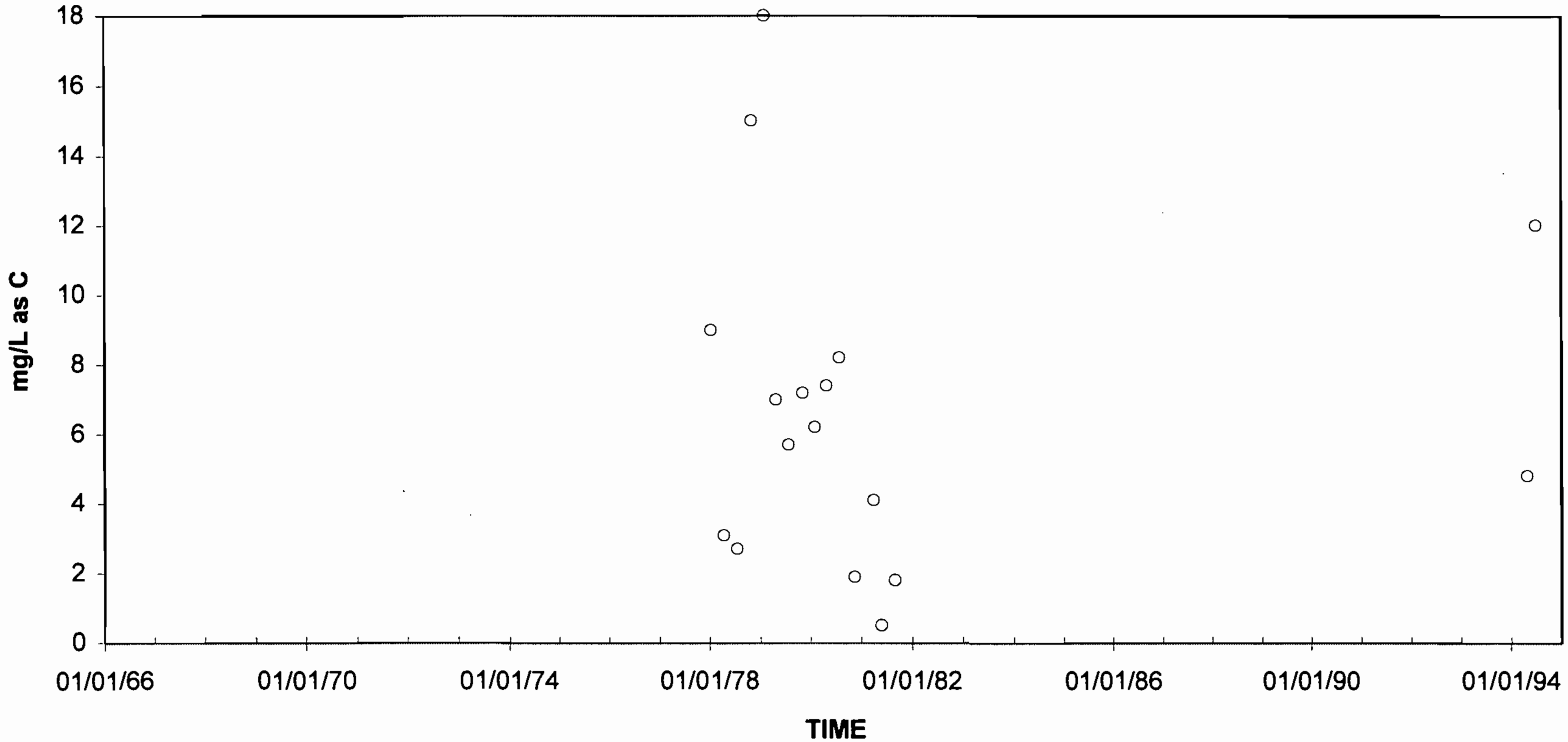
Figure 10.5.4–71



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
CALCIUM, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

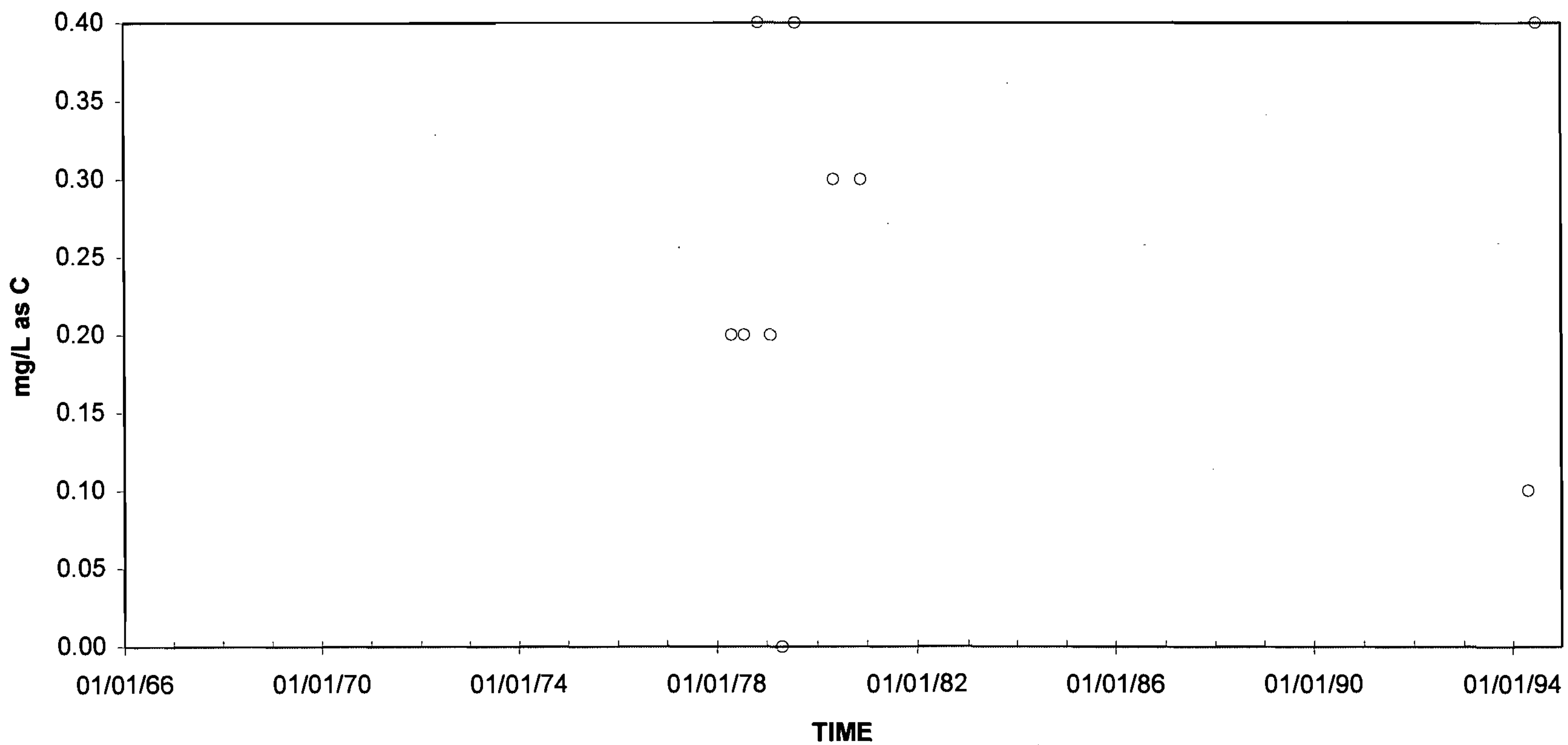
Figure
10.5.4–72



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
CARBON, ORGANIC DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

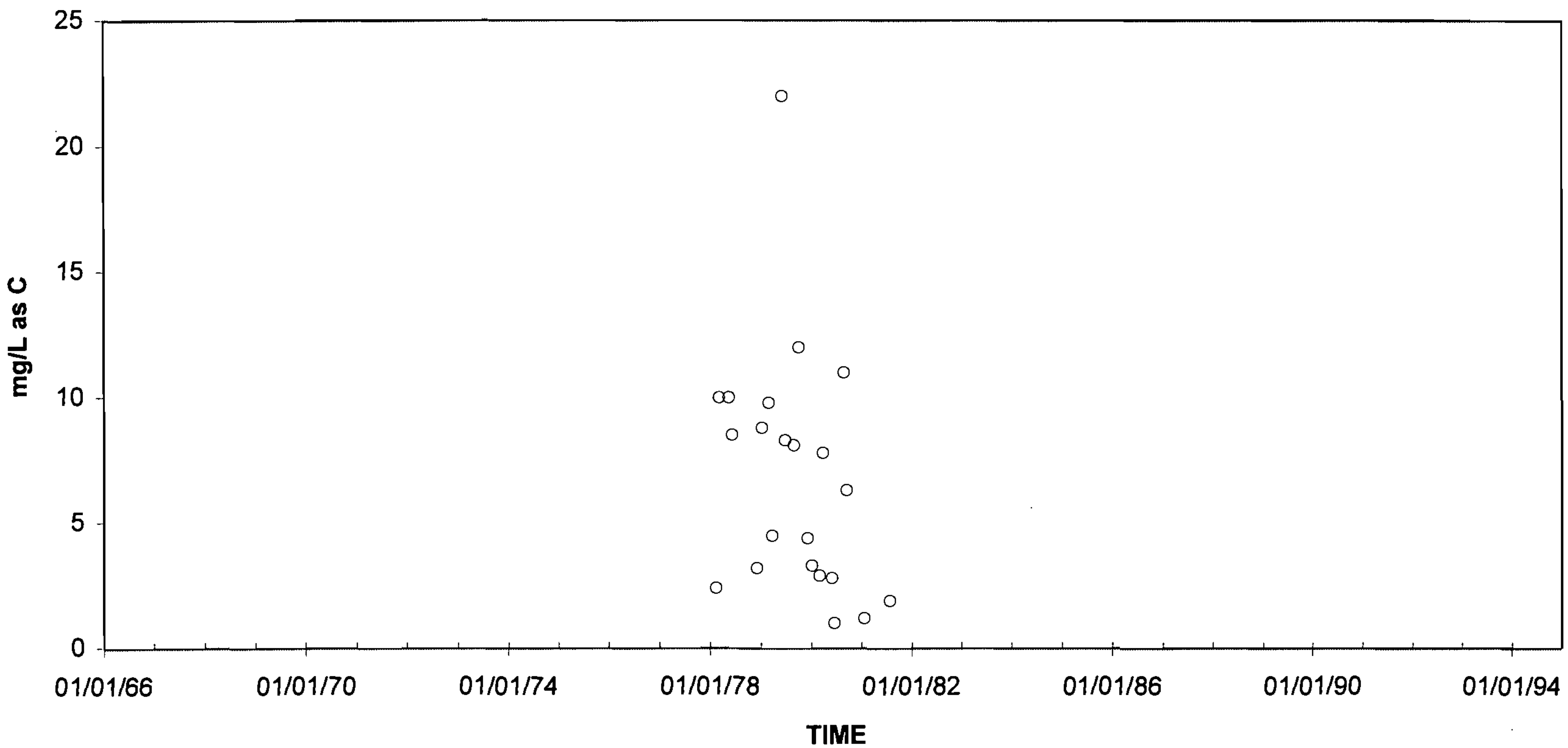
Figure 10.5.4–73



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
CARBON, ORGANIC SUSPENDED TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

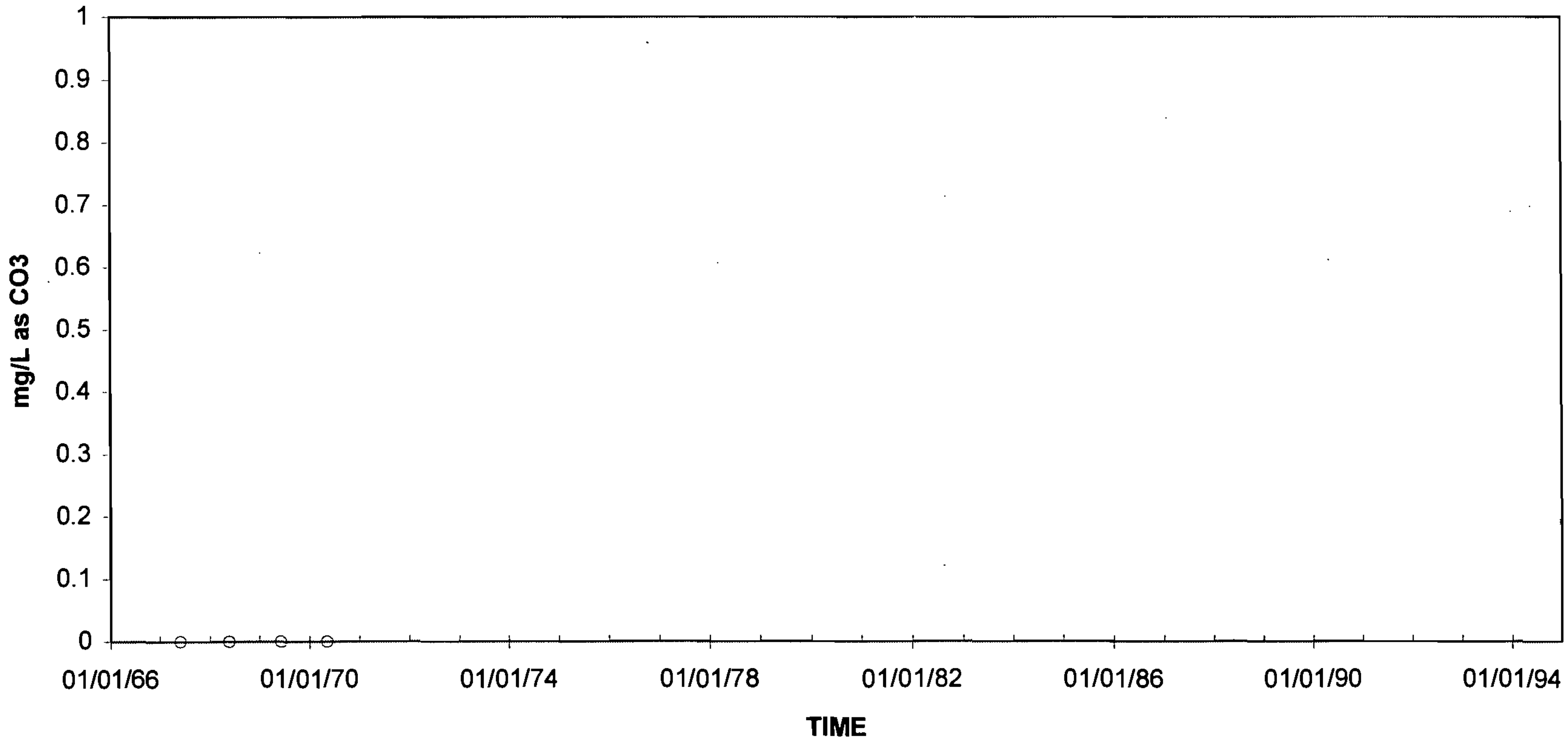
Figure
10.5.4–74



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
CARBON, ORGANIC TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

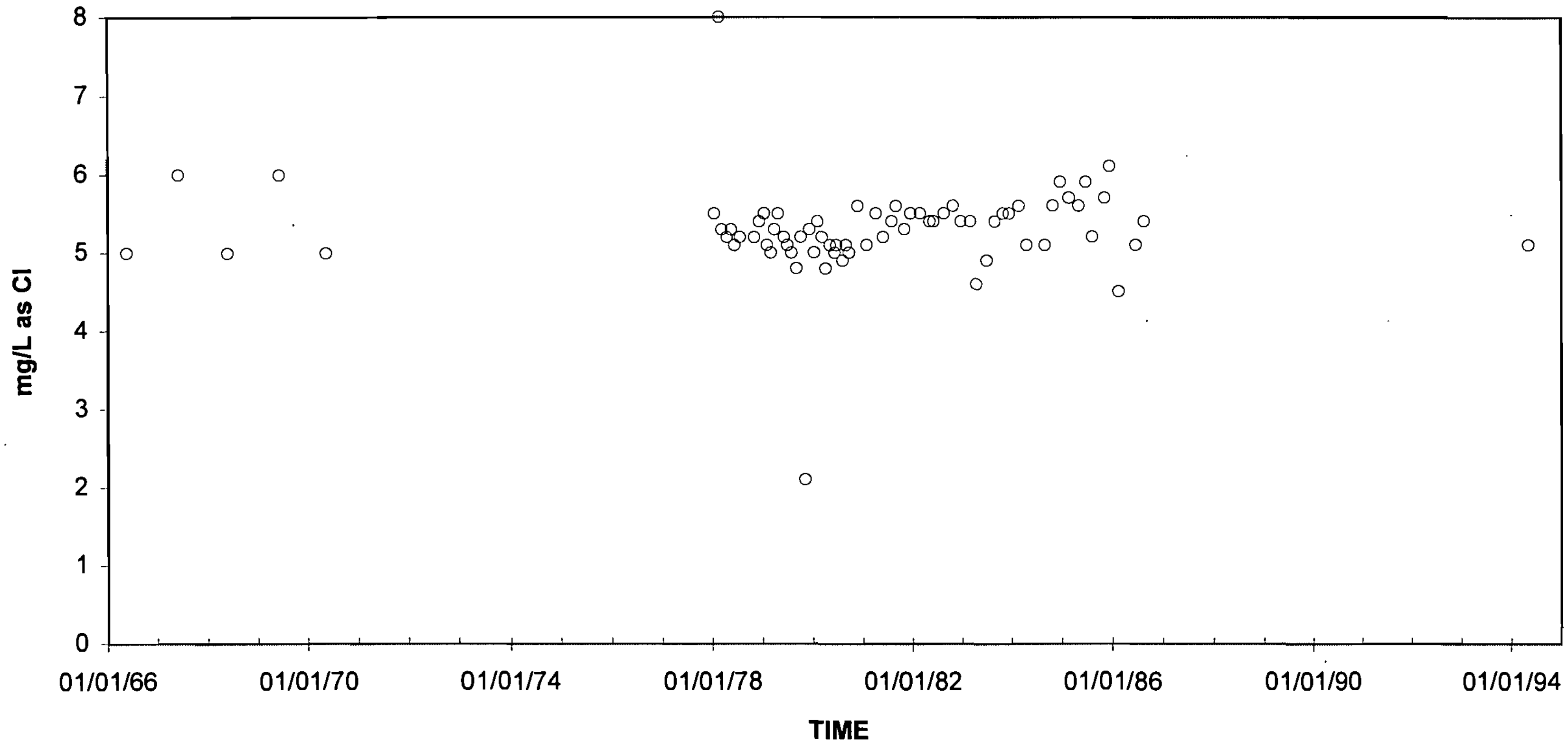
Figure
10.5.4–75



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
CARBONATE, WAT WH TOT FET FIELD
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

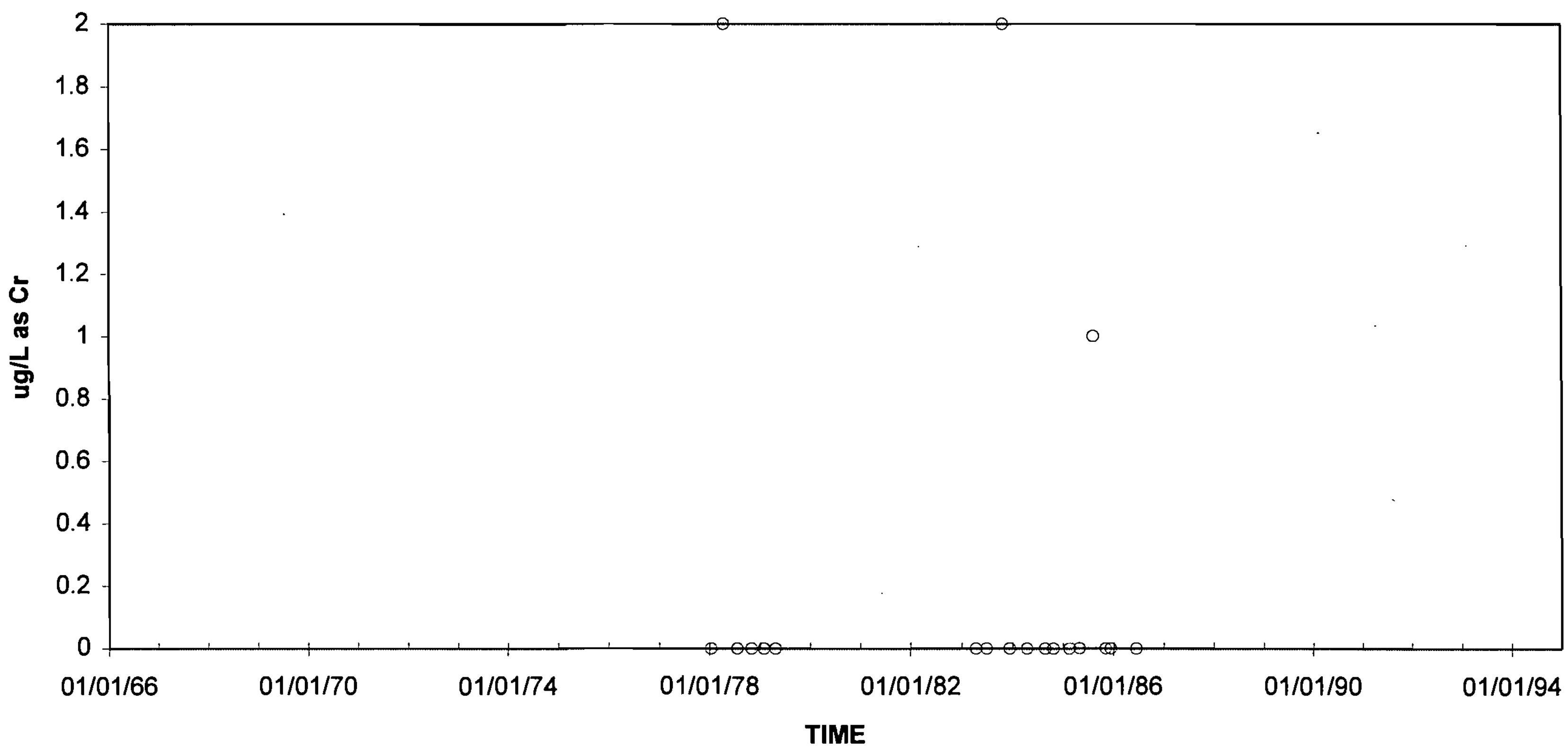
Figure
10.5.4-76



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
CHLORIDE, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

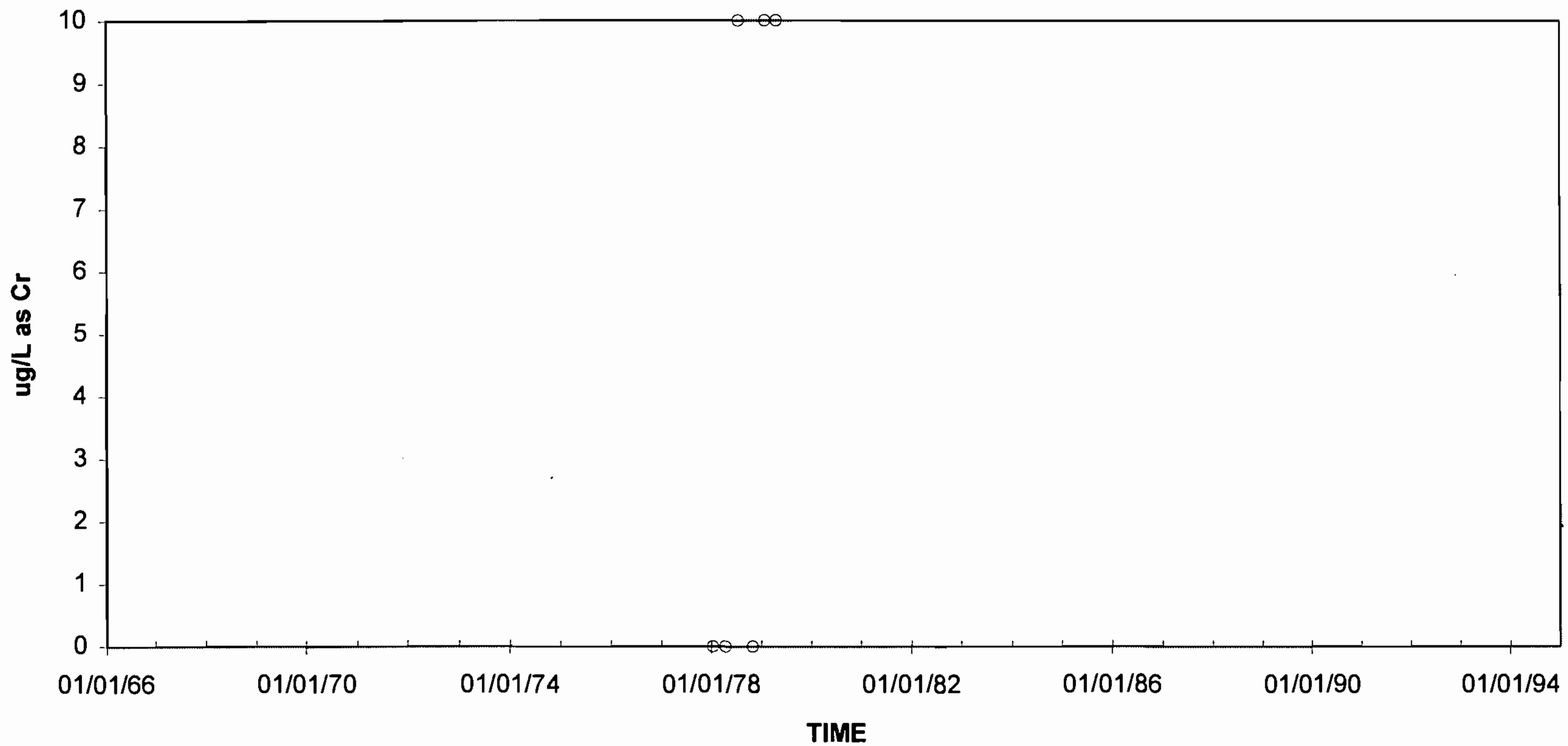
Figure
10.5.4–77



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
CHROMIUM, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

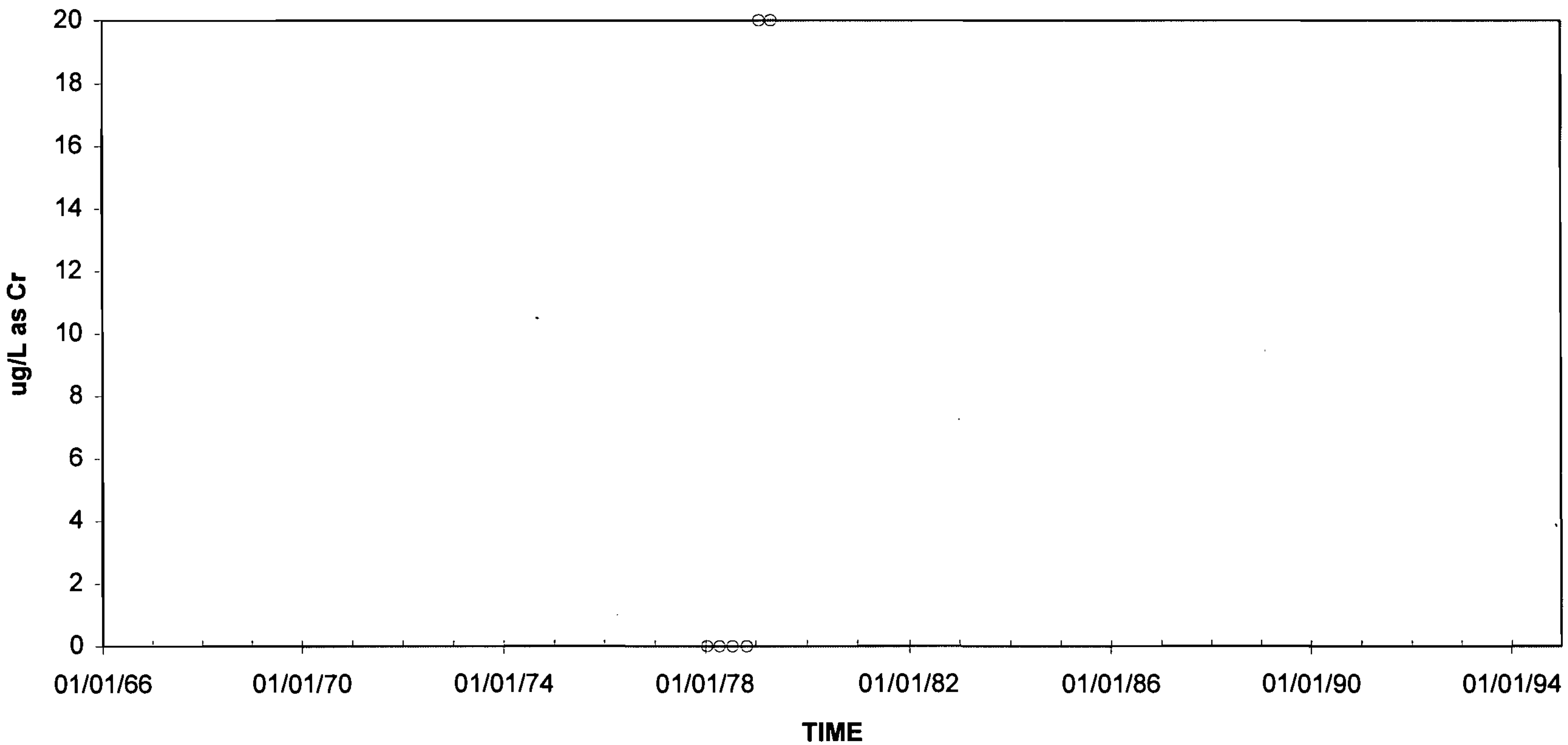
Figure
10.5.4-78



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
CHROMIUM, SUSPENDED RECOV
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

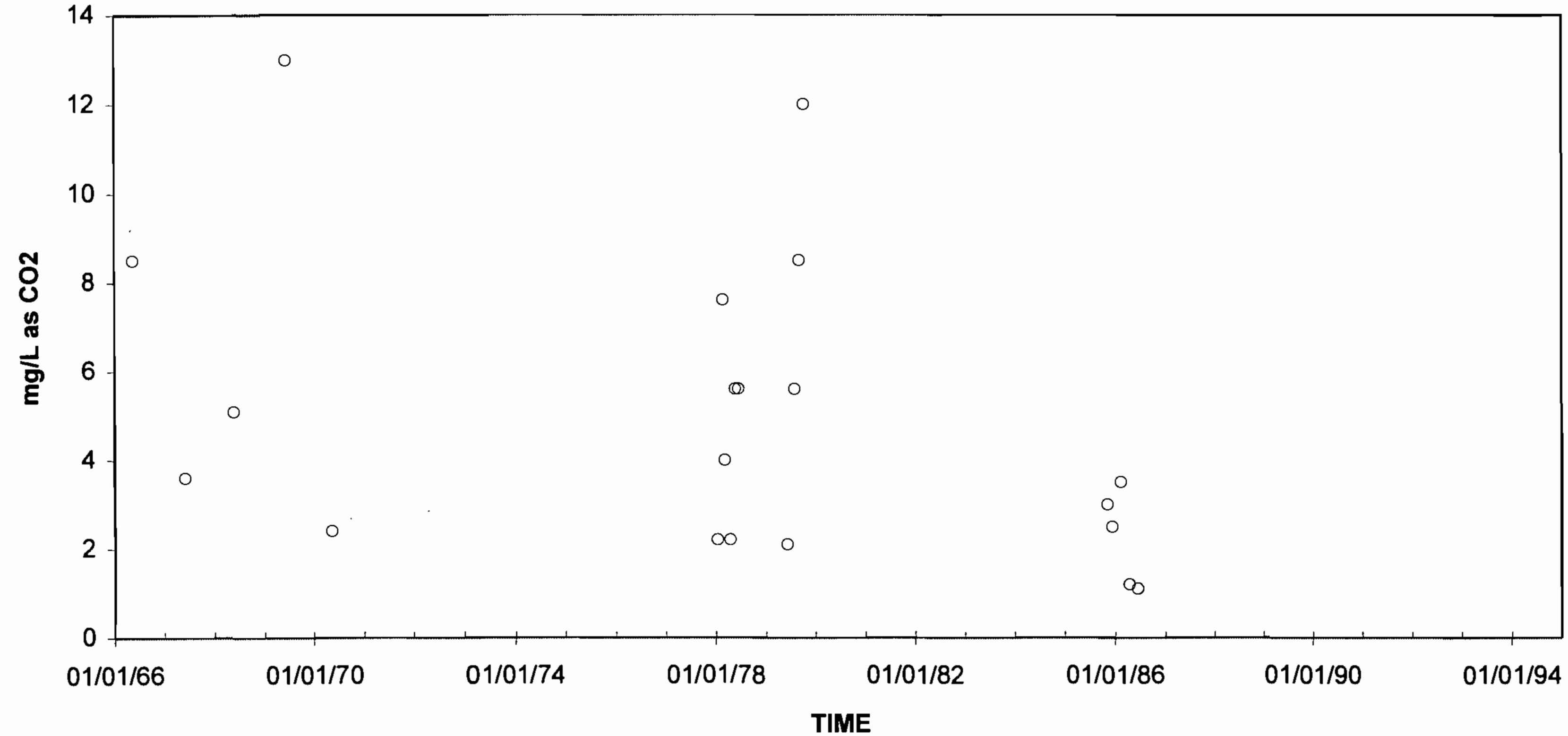
Figure
10.5.4–79



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
CHROMIUM, TOTAL RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

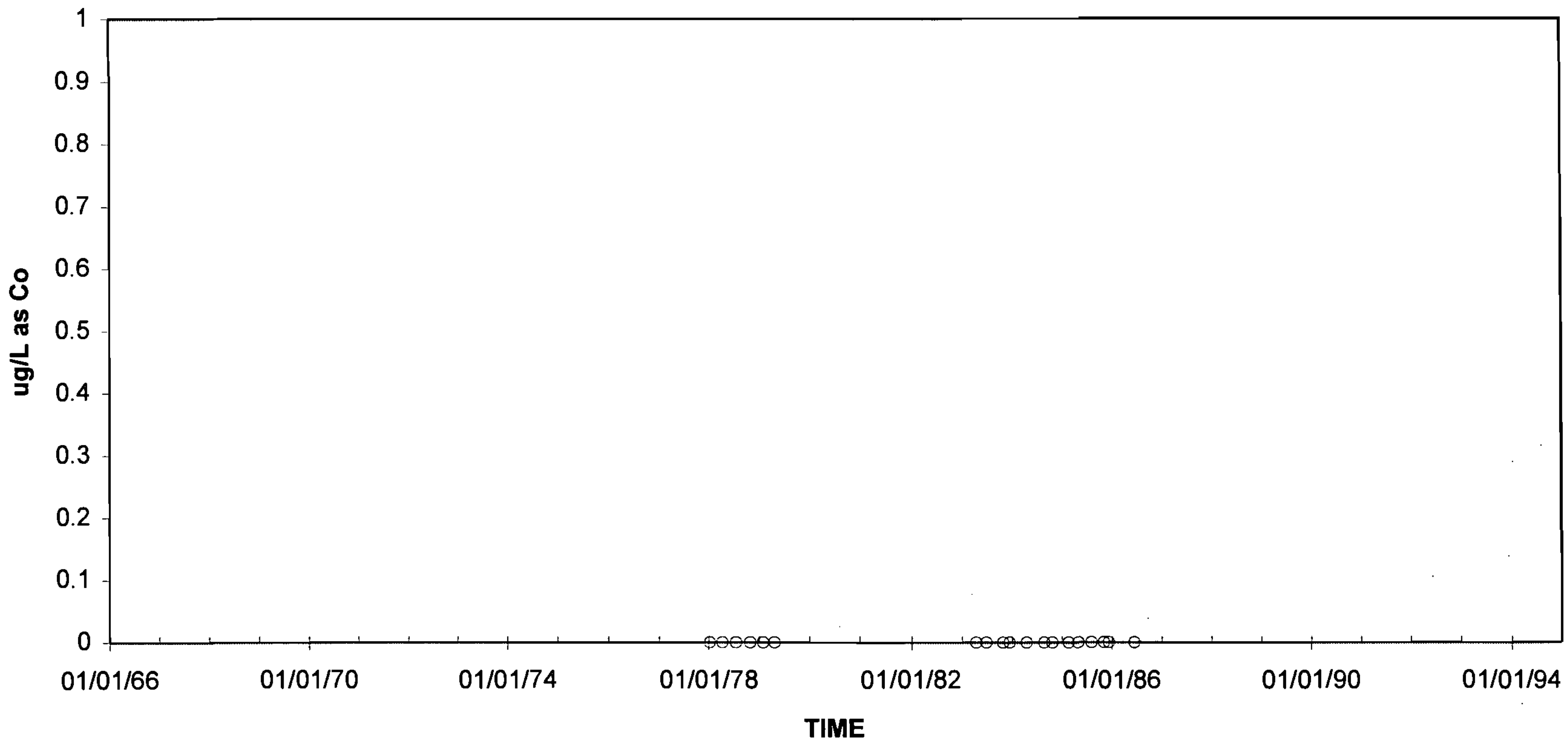
Figure 10.5.4-80



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
CO2, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

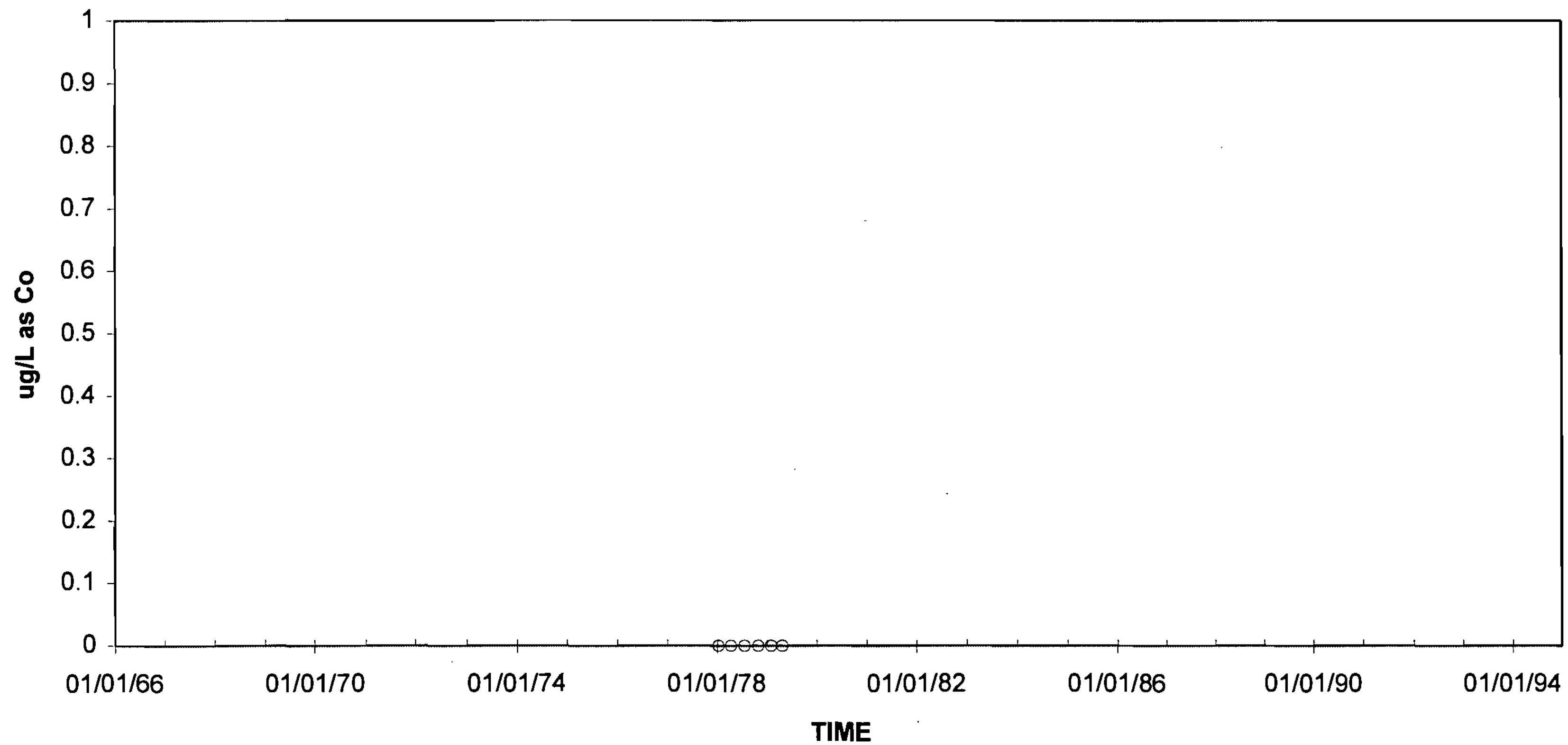
Figure
10.5.4–81



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
COBALT, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

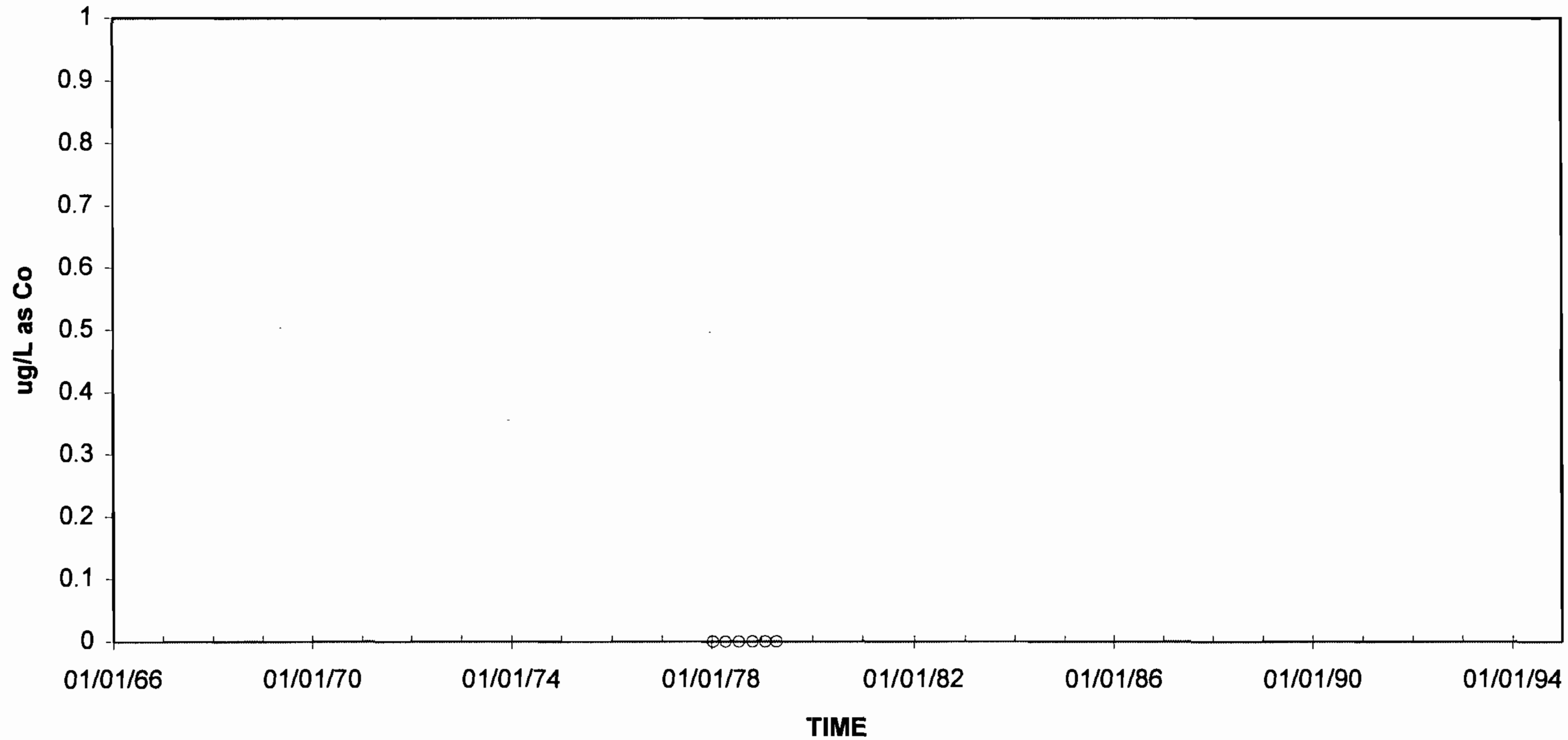
Figure
10.5.4–82



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
COBALT, SUSPENDED RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

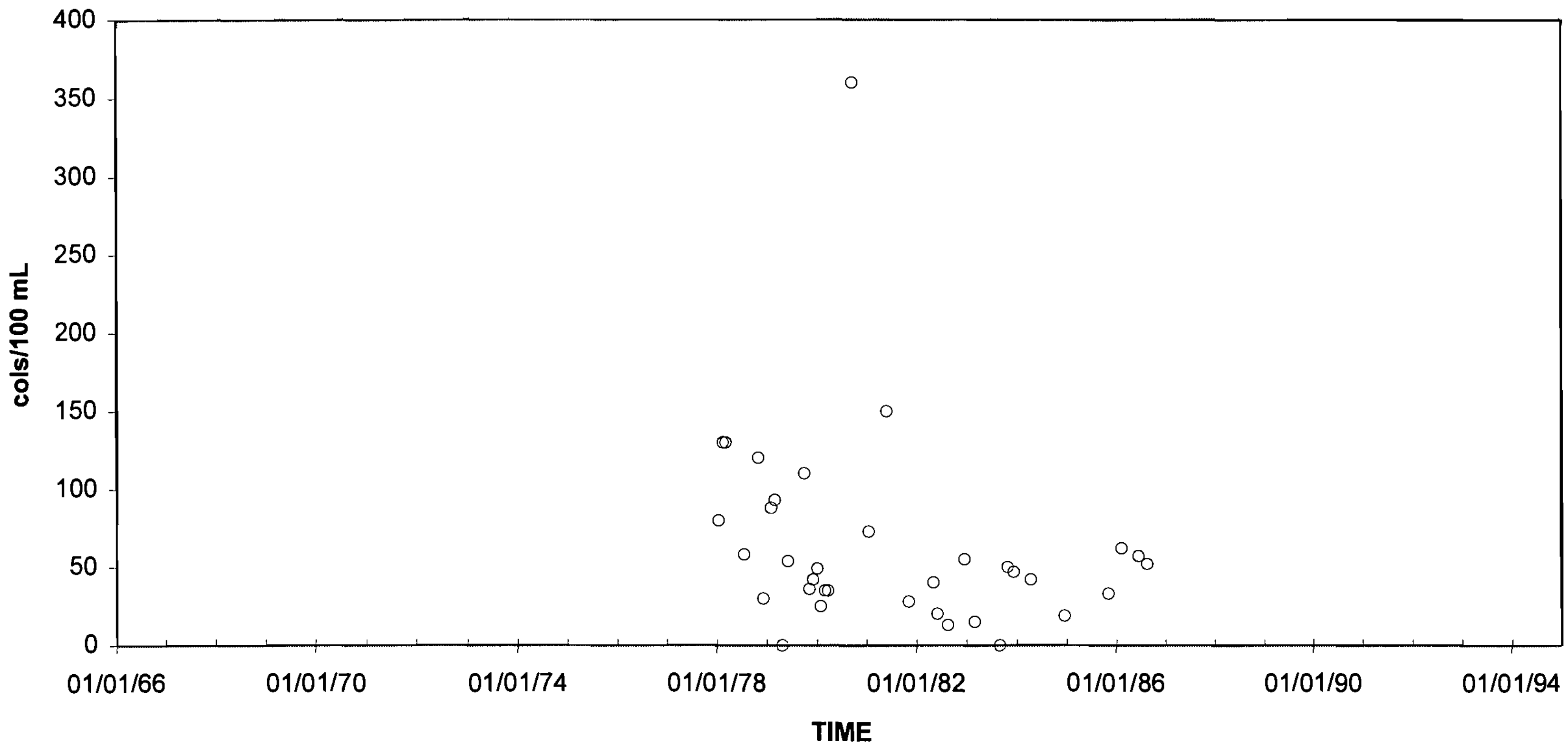
Figure 10.5.4–83



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
COBALT, TOTAL RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

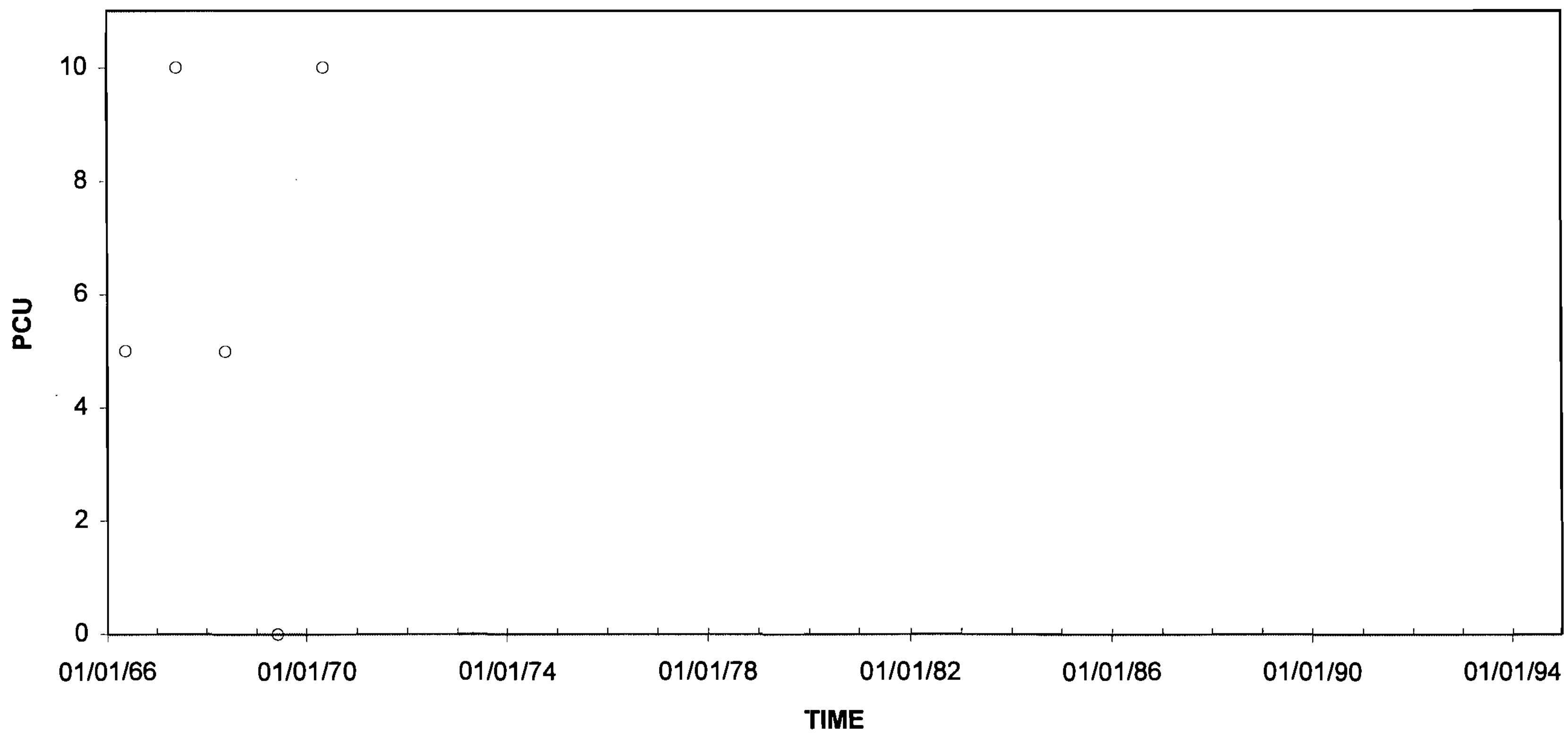
Figure 10.5.4–84



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
COLIFORM, FECAL 0.7 UM-MF
PURDOM UNIT 8 PROJECT - St MARKS, FLORIDA

Figure
10.5.4-85

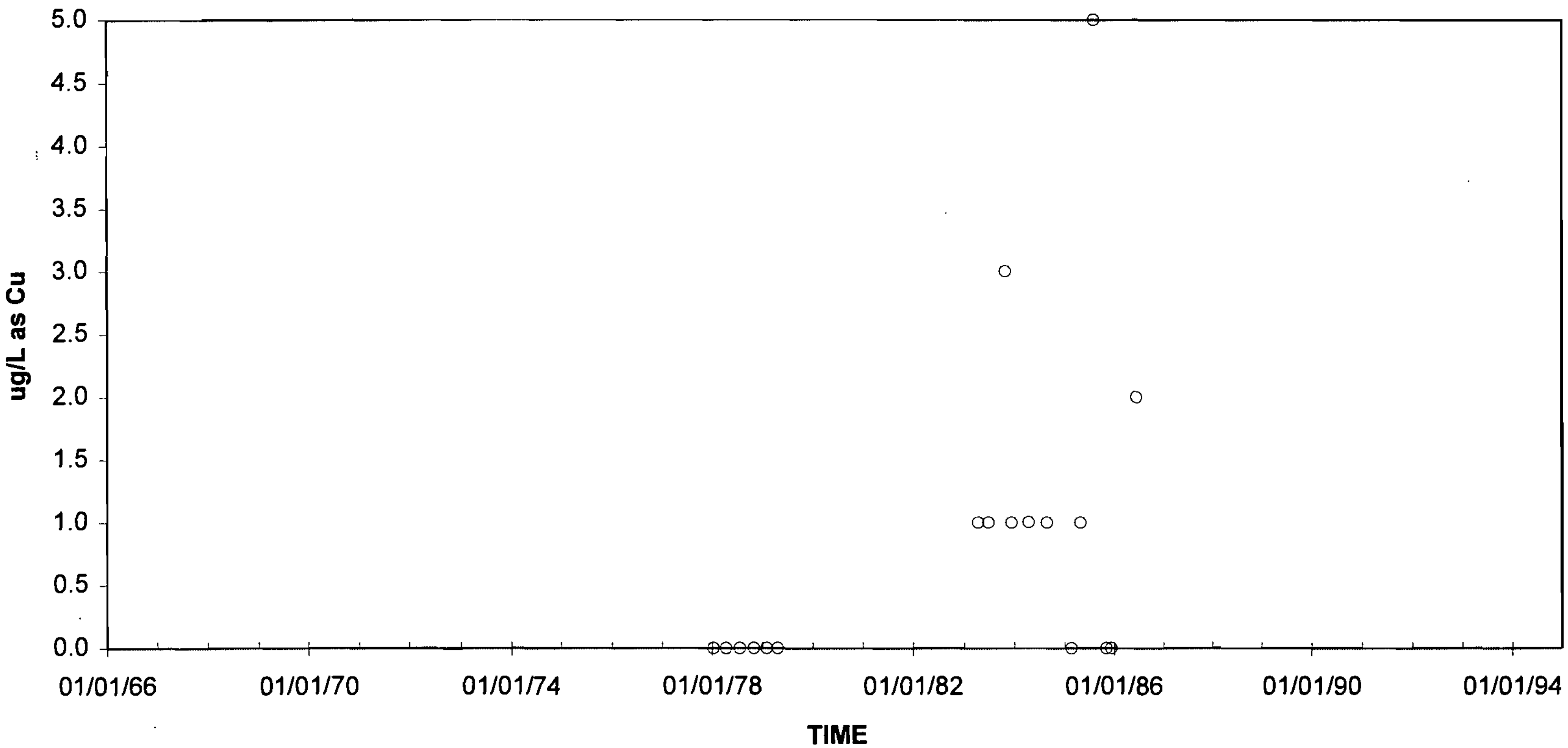


CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
COLOR

PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

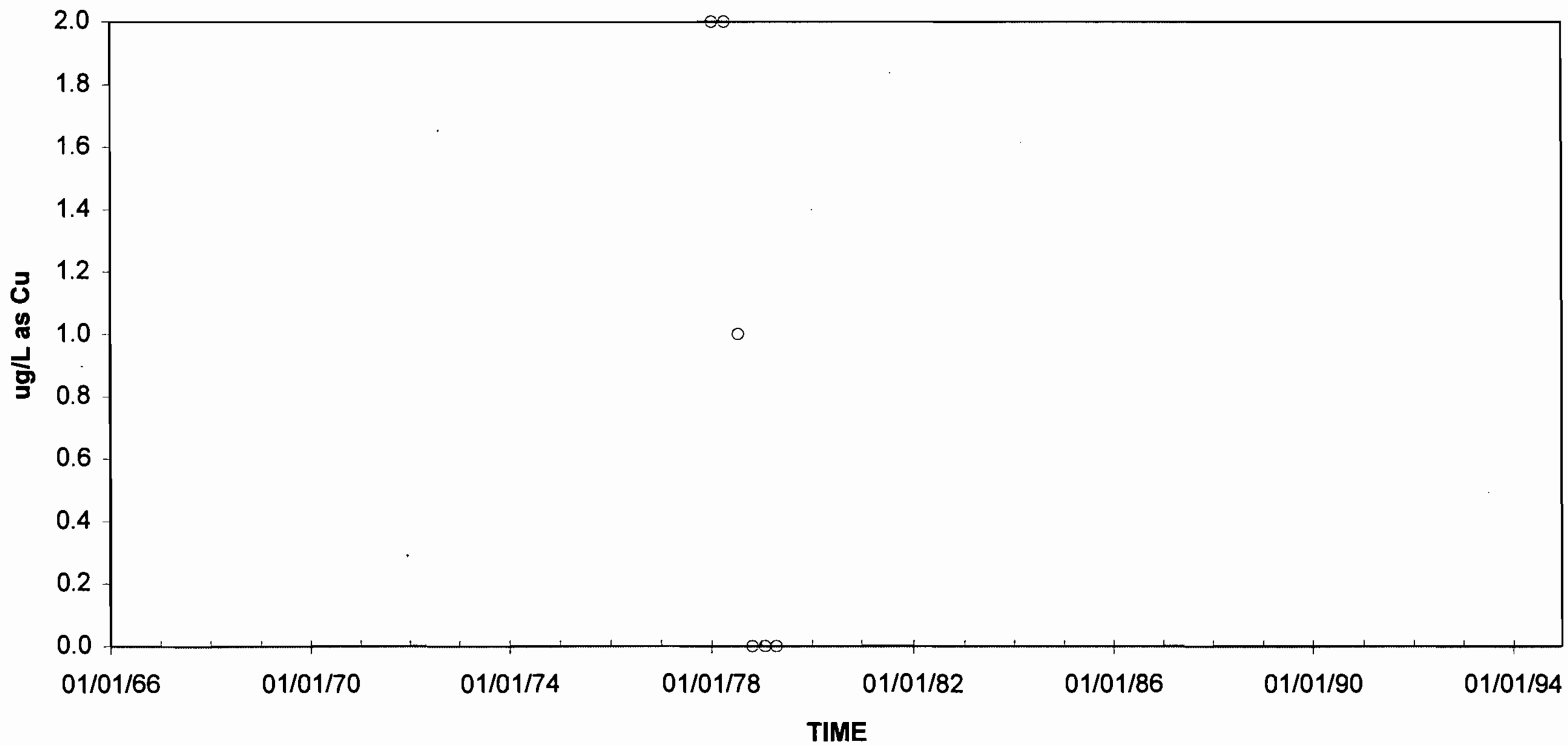
Figure 10.5.4-86



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
COPPER, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

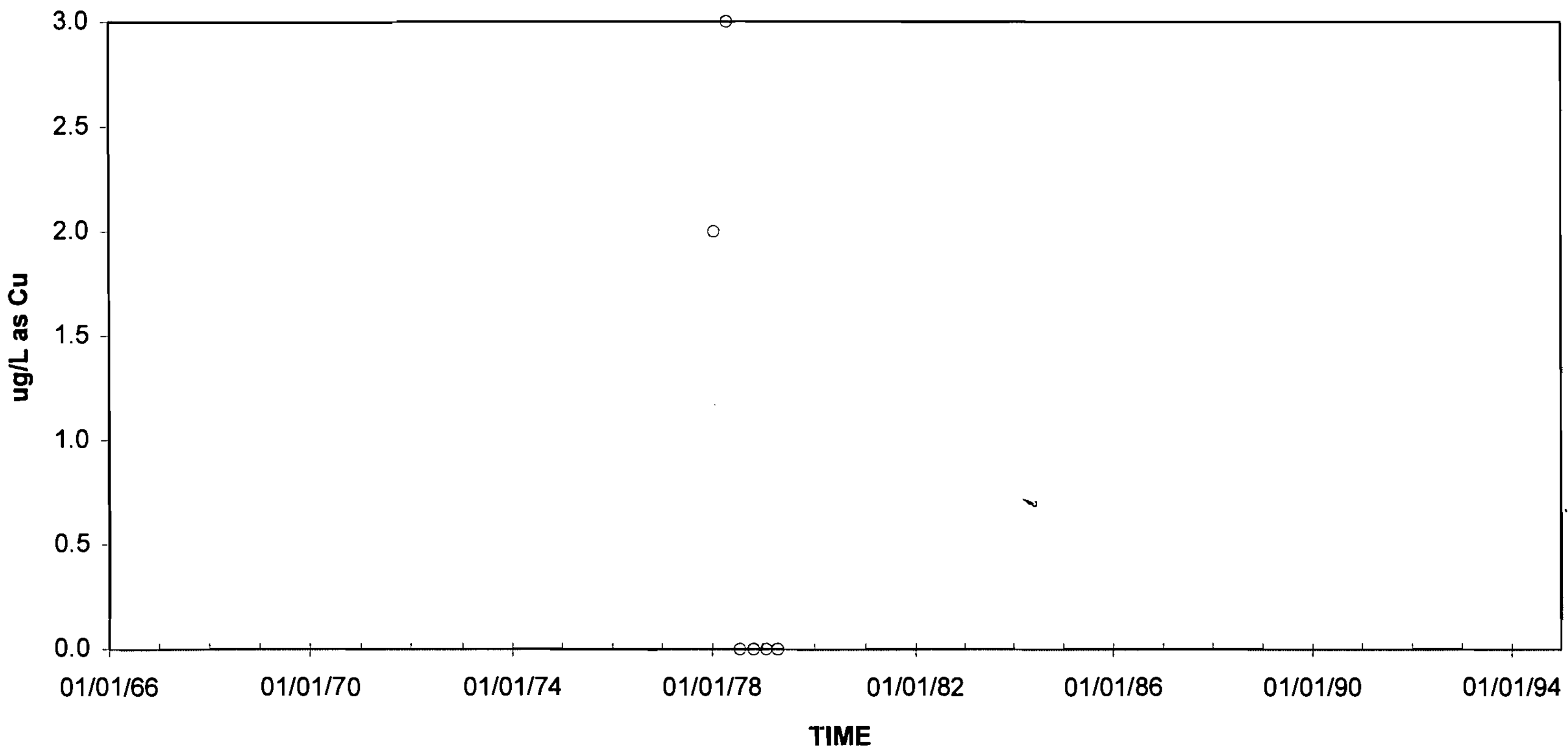
Figure
10.5.4–87



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
COPPER, SUSPENDED RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

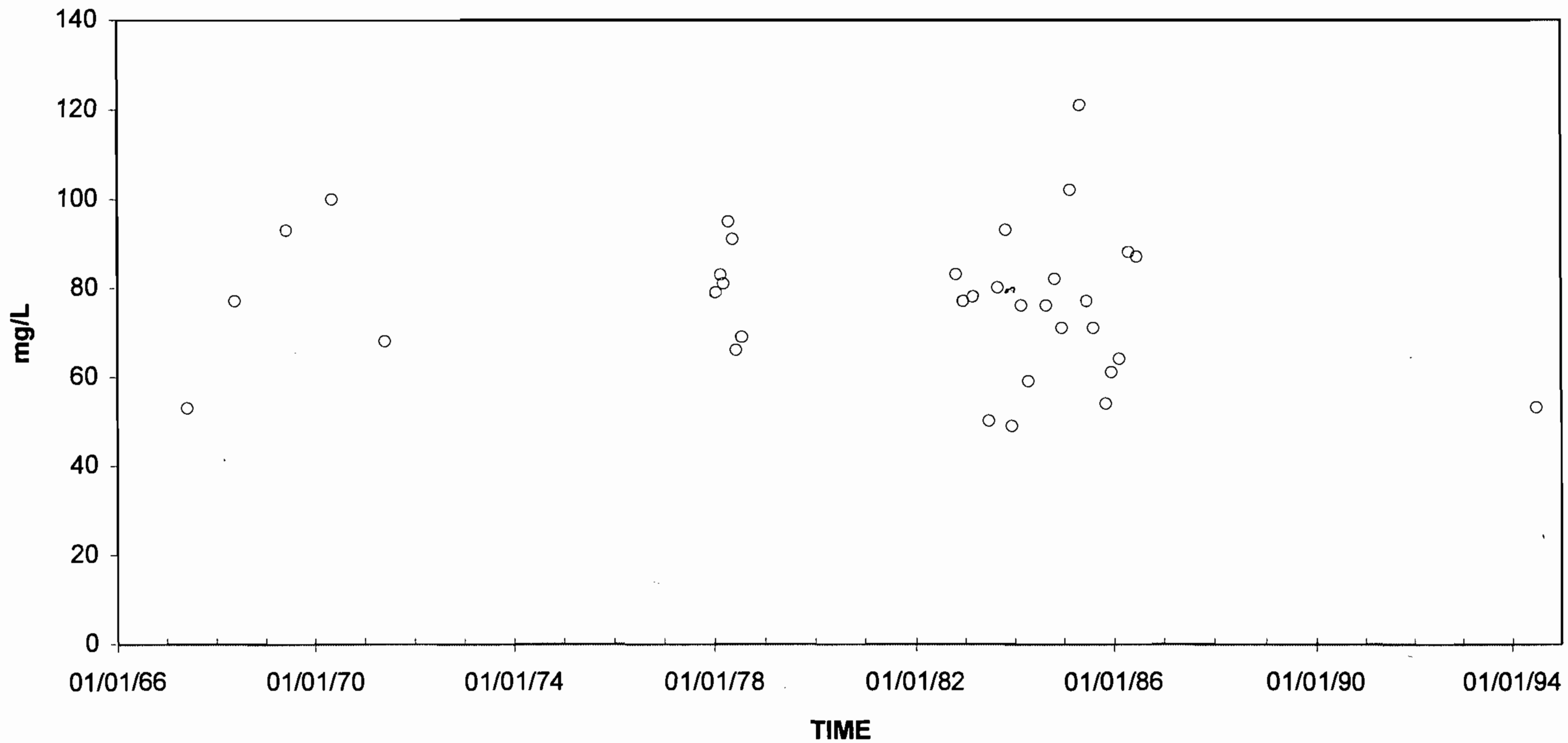
Figure
10.5.4–88



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
COPPER, TOTAL RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

Figure 10.5.4–89



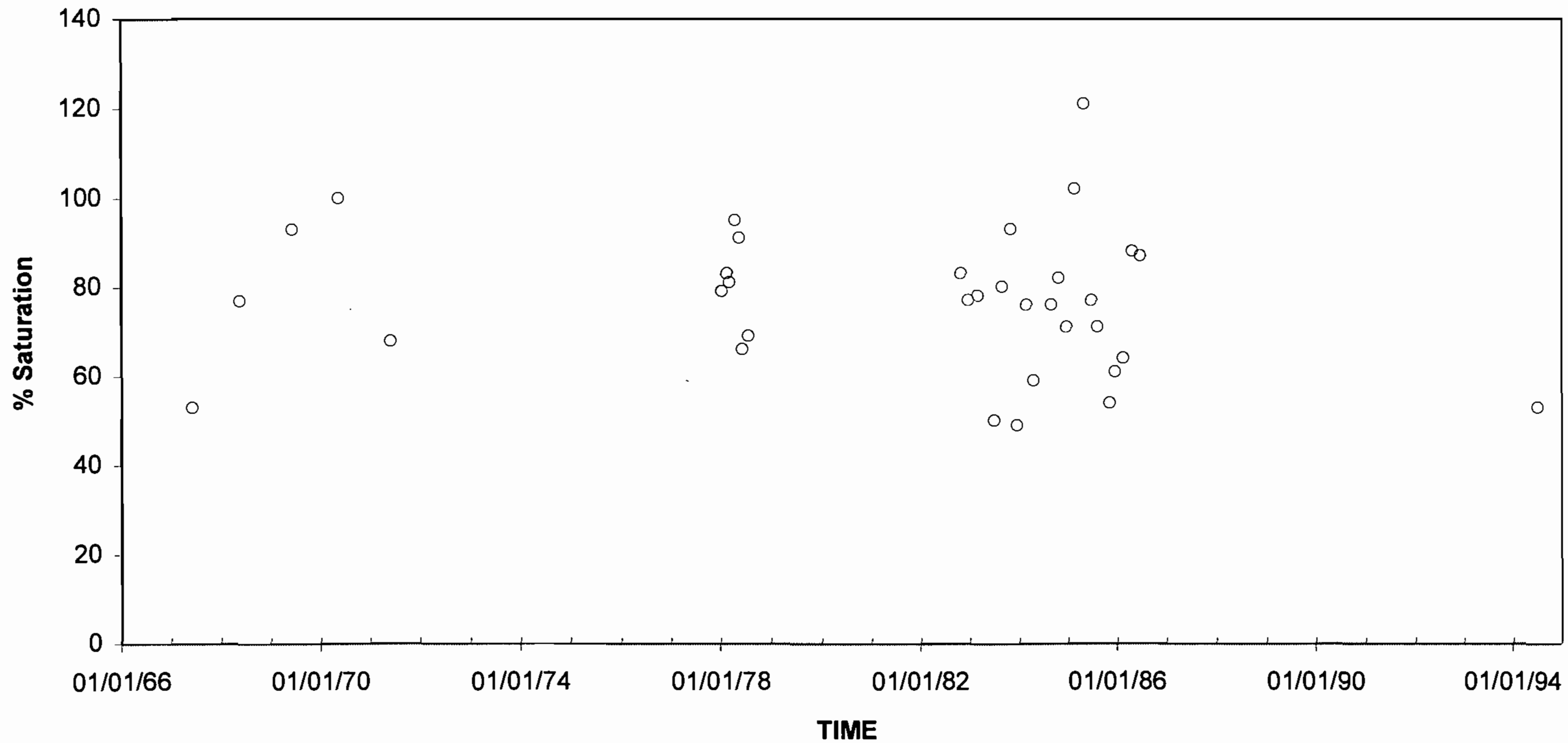
CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
DISSOLVED OXYGEN

PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

Figure

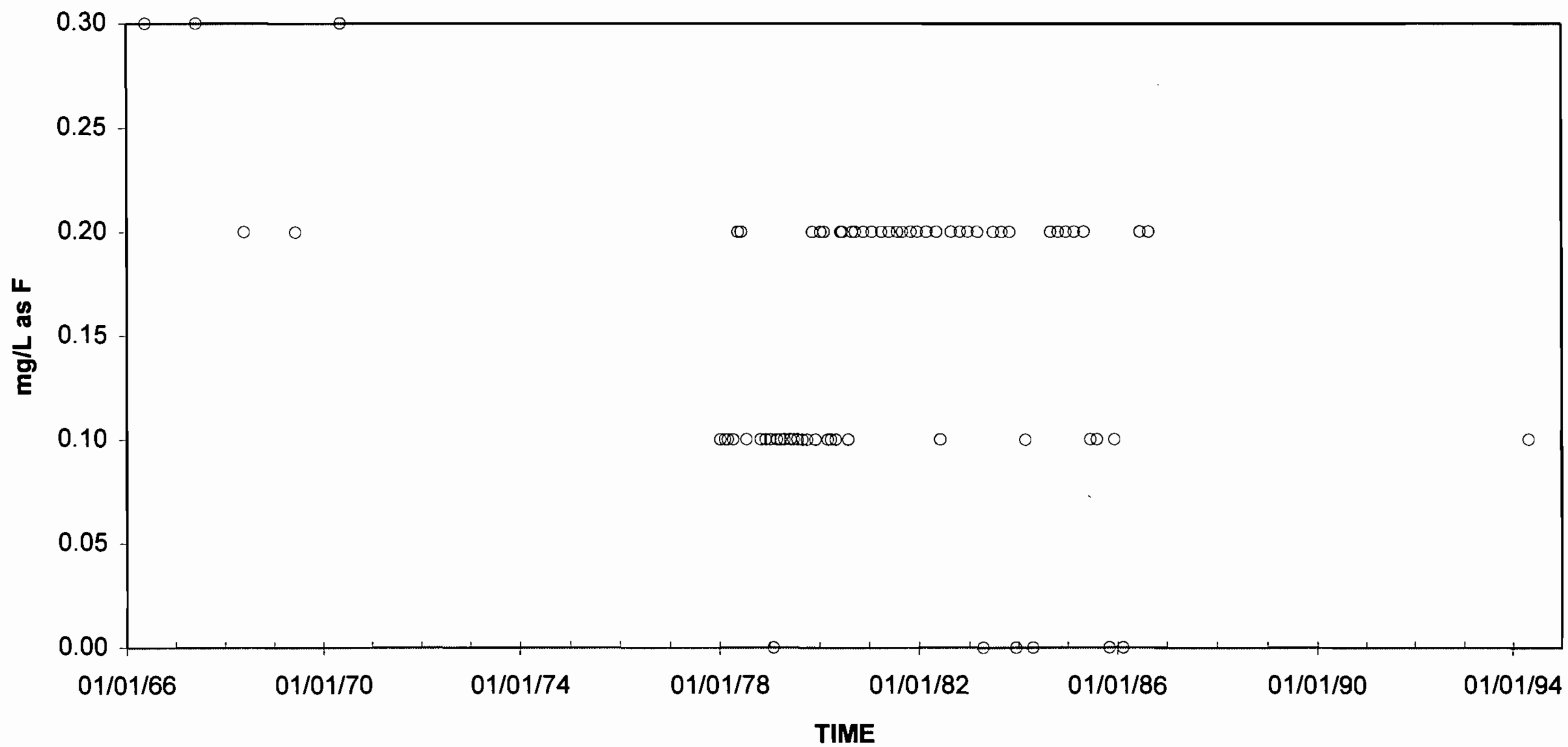
10.5.4–90



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
DISSOLVED OXYGEN
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

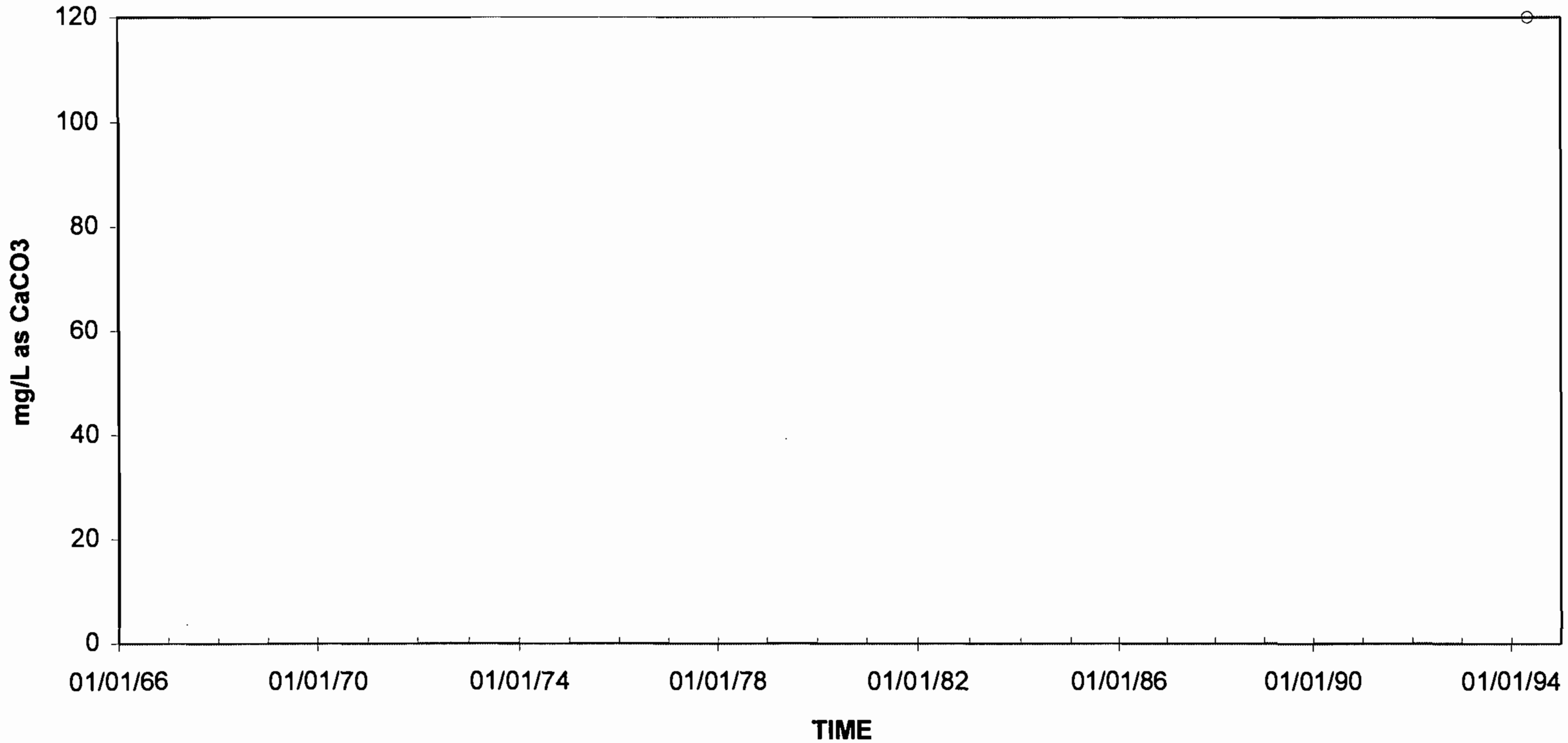
Figure
10.5.4–91



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
FLUORIDE, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

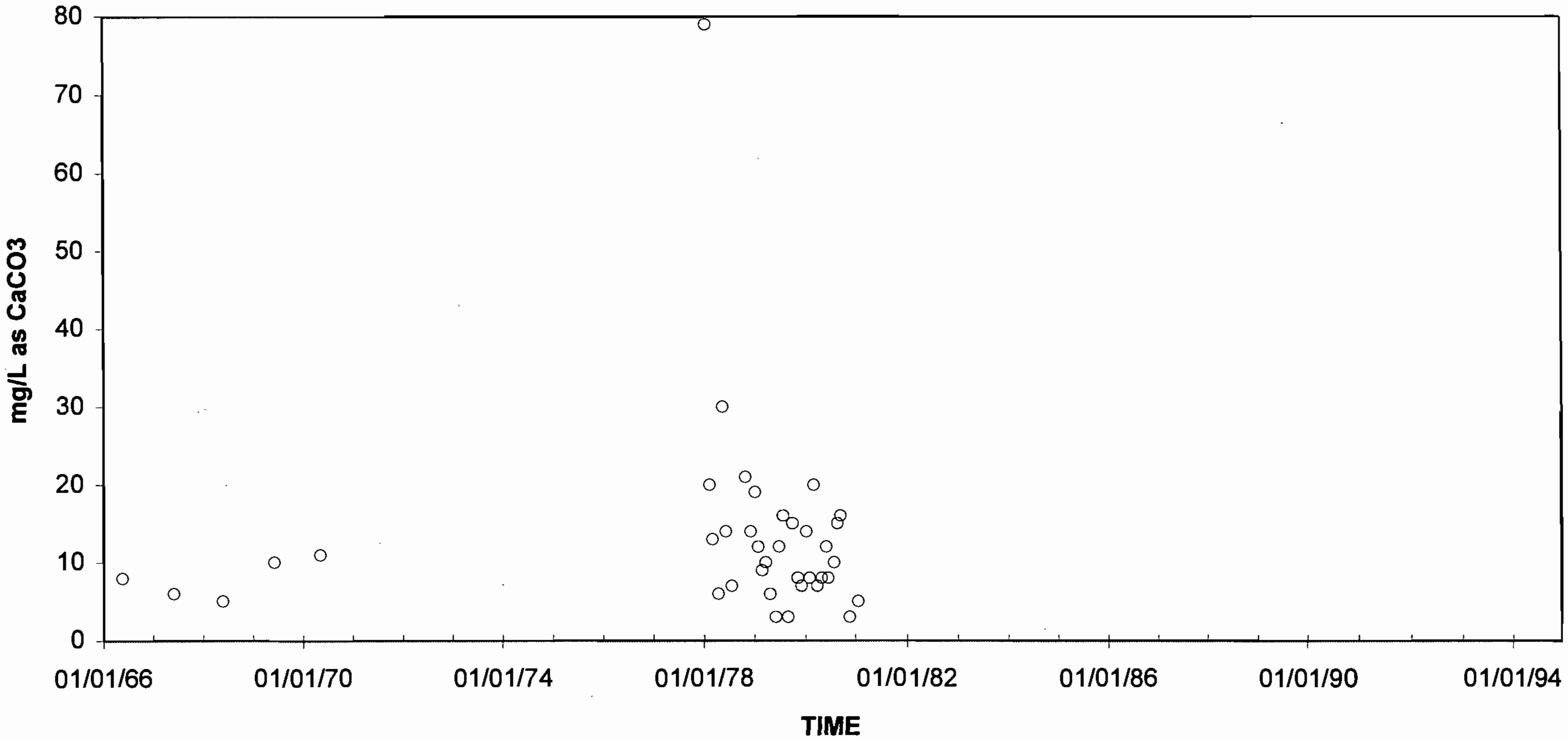
Figure
10.5.4-92



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
HARDNESS, NONCARB DISSOLV FLD
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

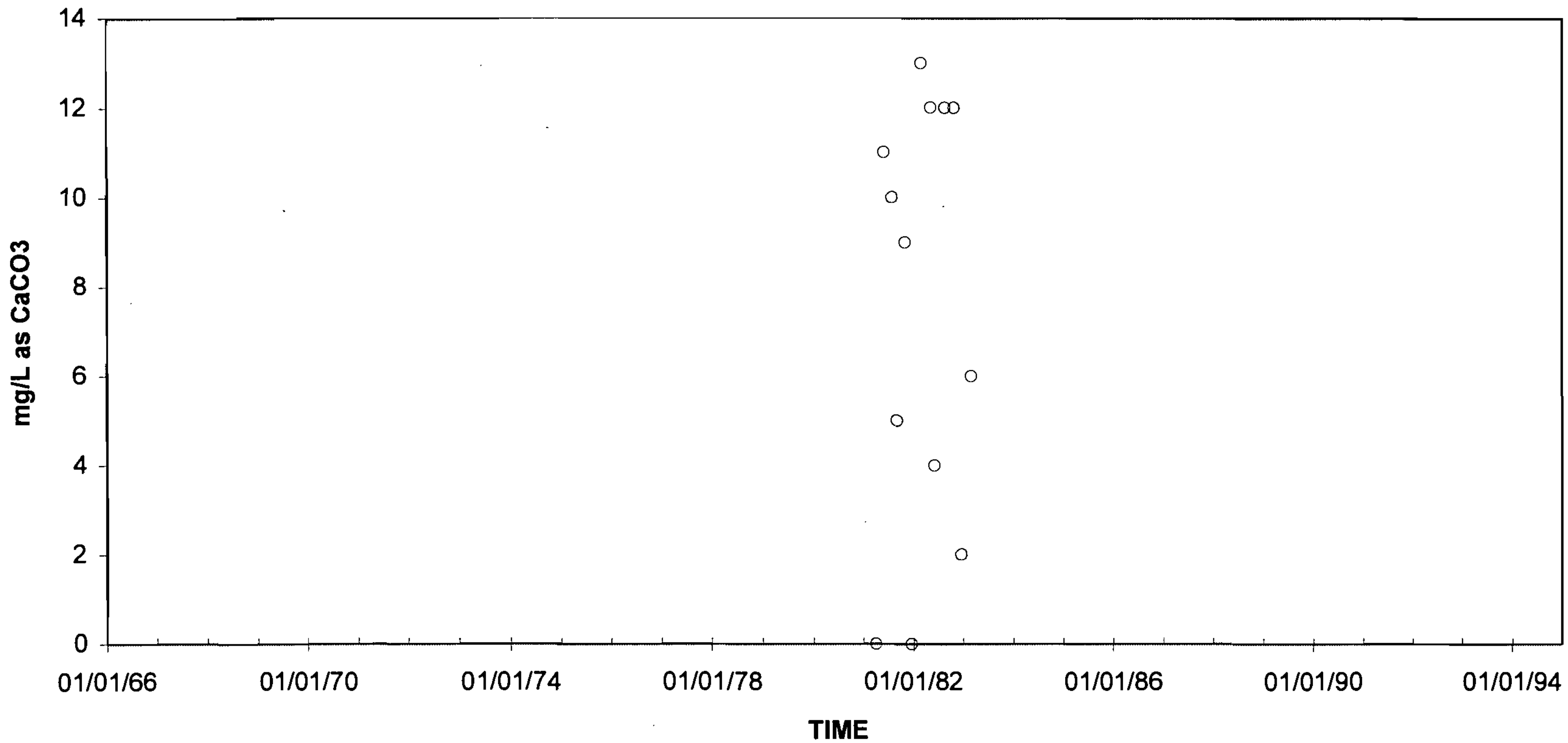
Figure
10.5.4–93



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
HARDNESS, NONCARB WH WAT TOT FLD
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

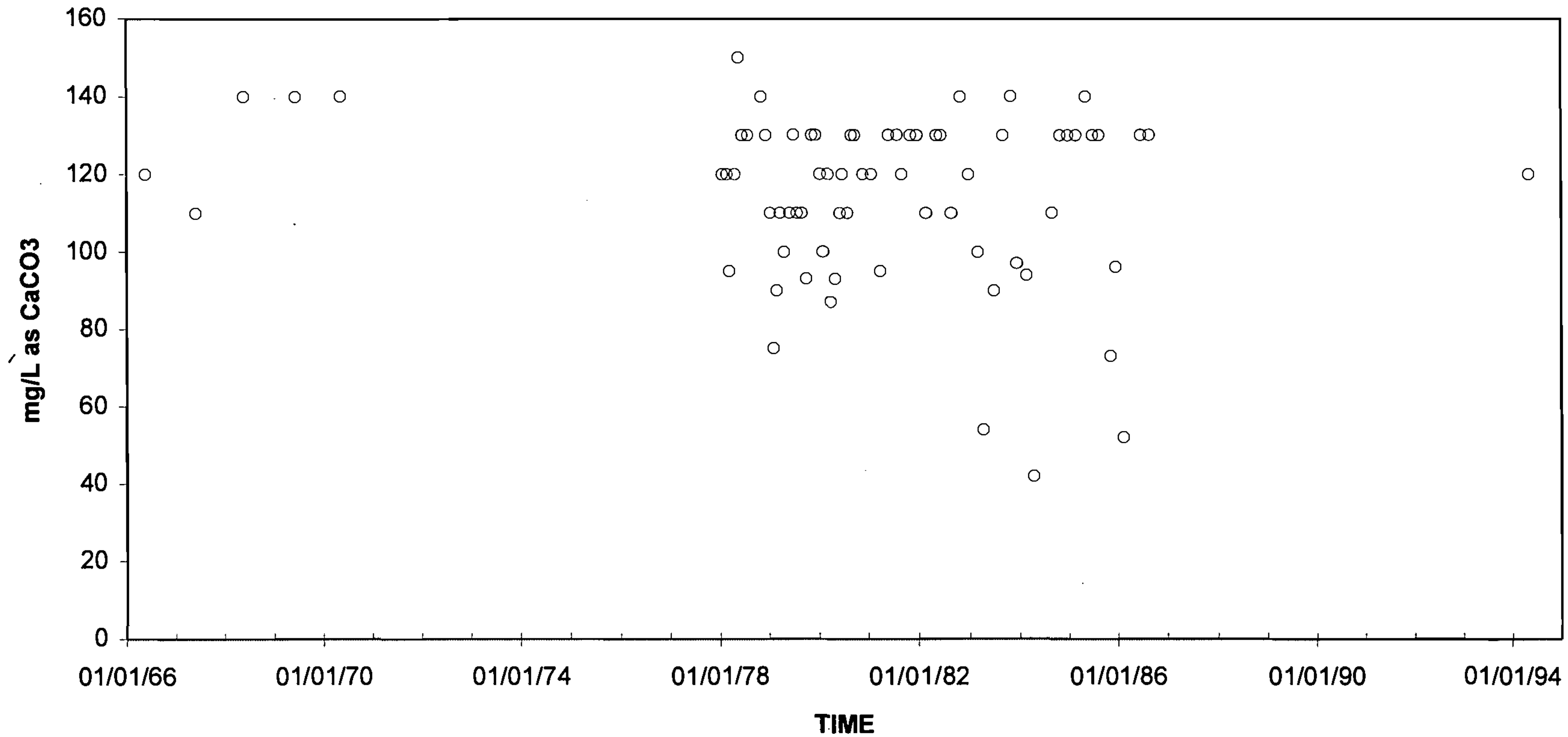
Figure 10.5.4-94



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
HARDNESS, NONCARB WH WAT TOT LAB
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

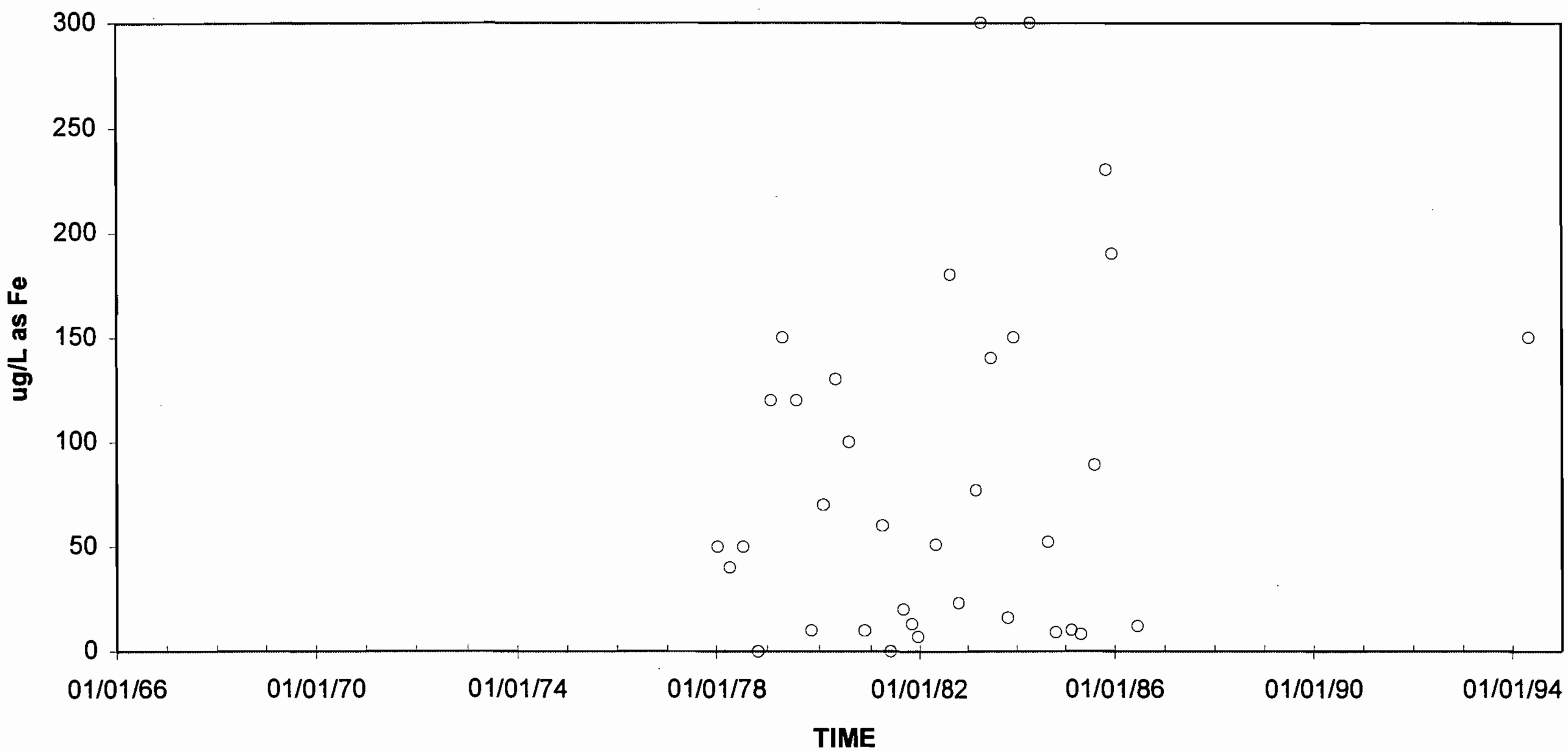
Figure 10.5.4–95



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
HARDNESS, TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

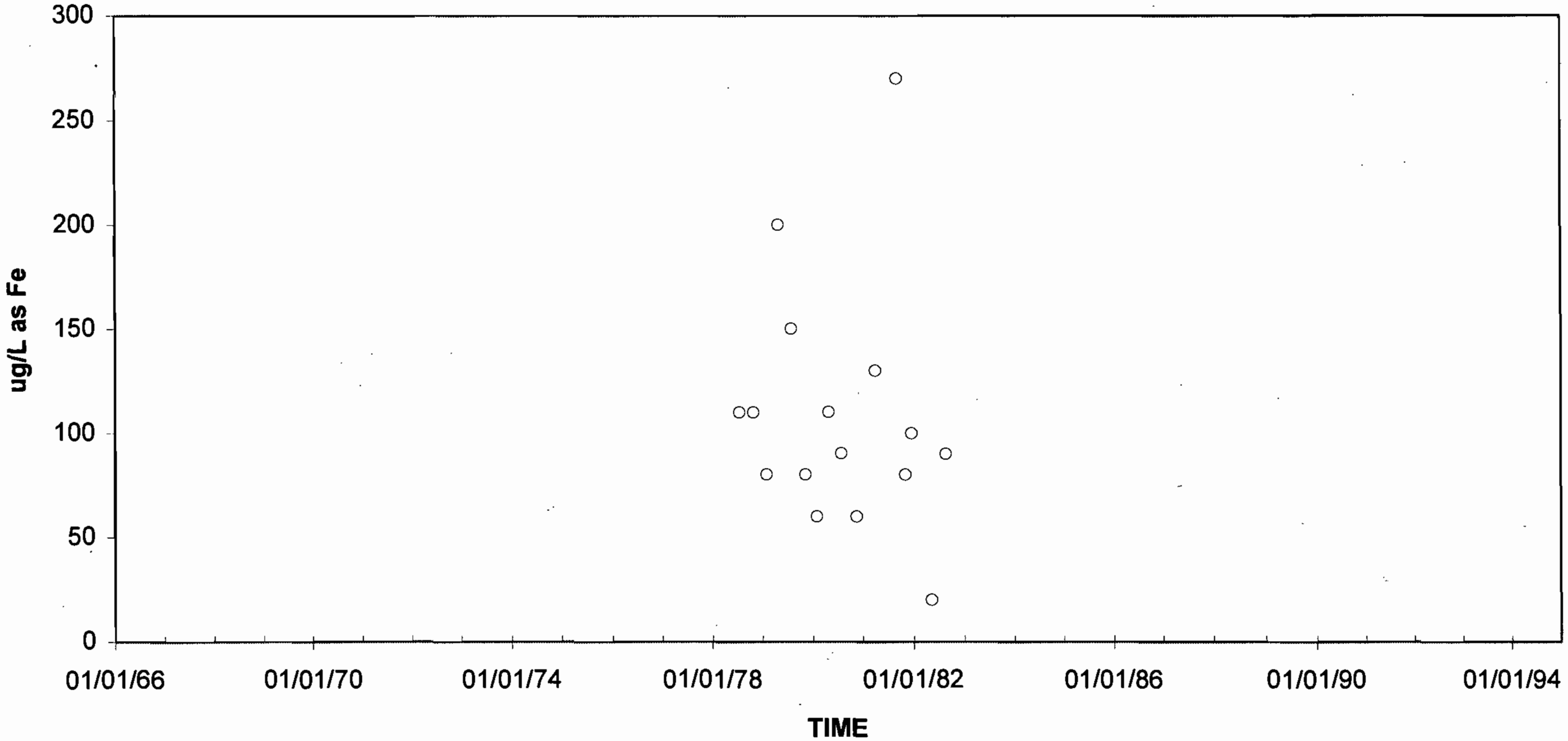
Figure
10.5.4–96



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
IRON, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

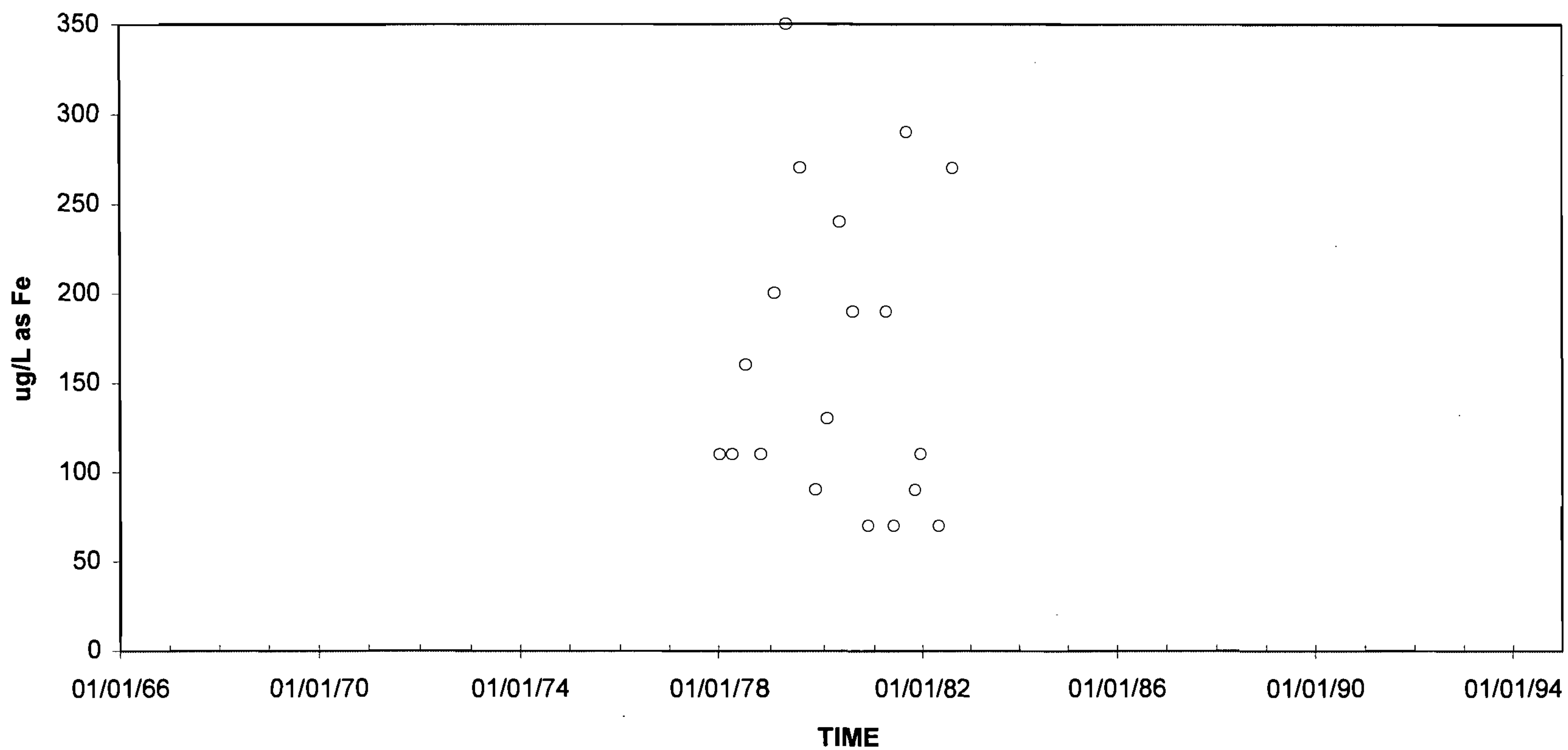
Figure 10.5.4-97



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
IRON, SUSPENDED RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

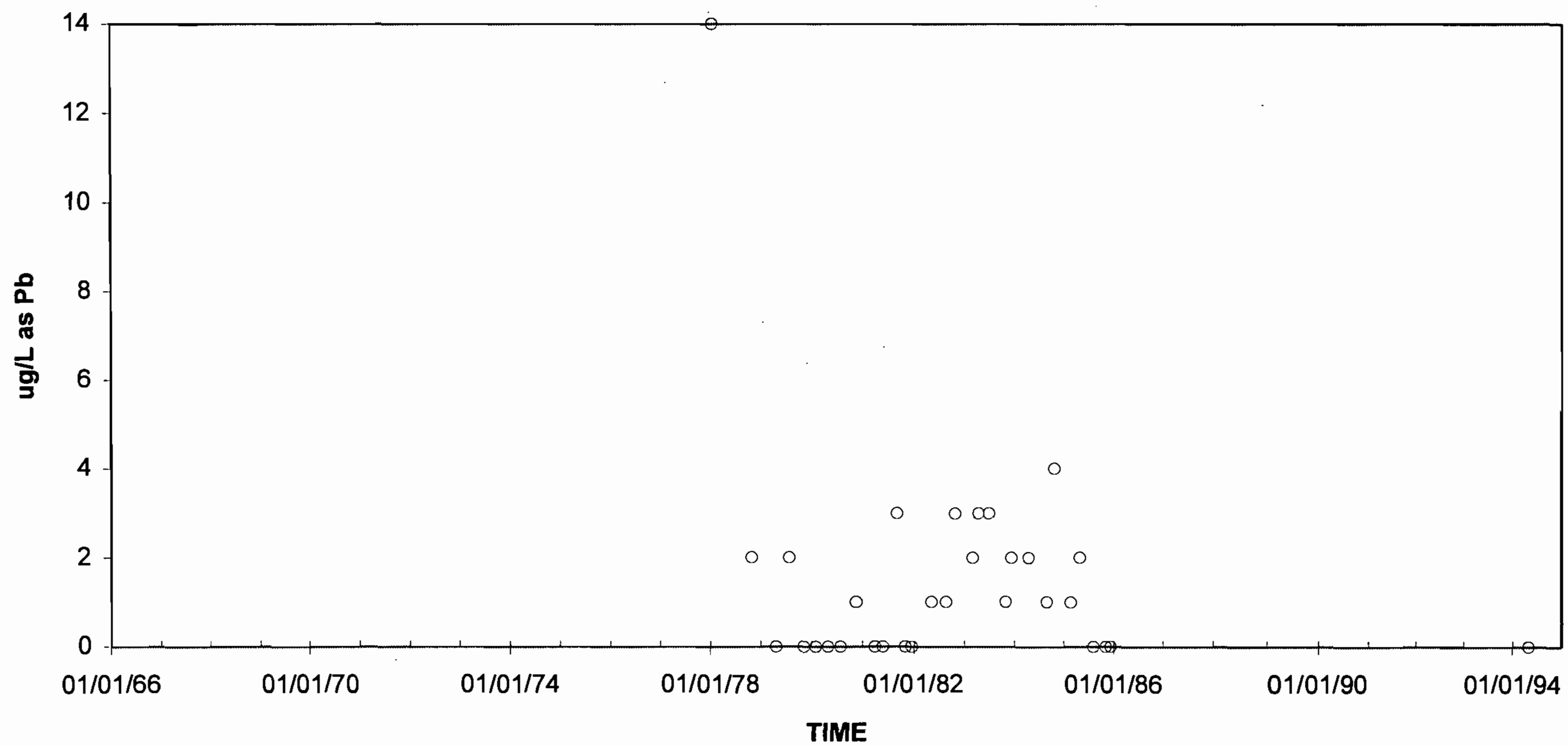
Figure
10.5.4–98



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
IRON, TOTAL RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

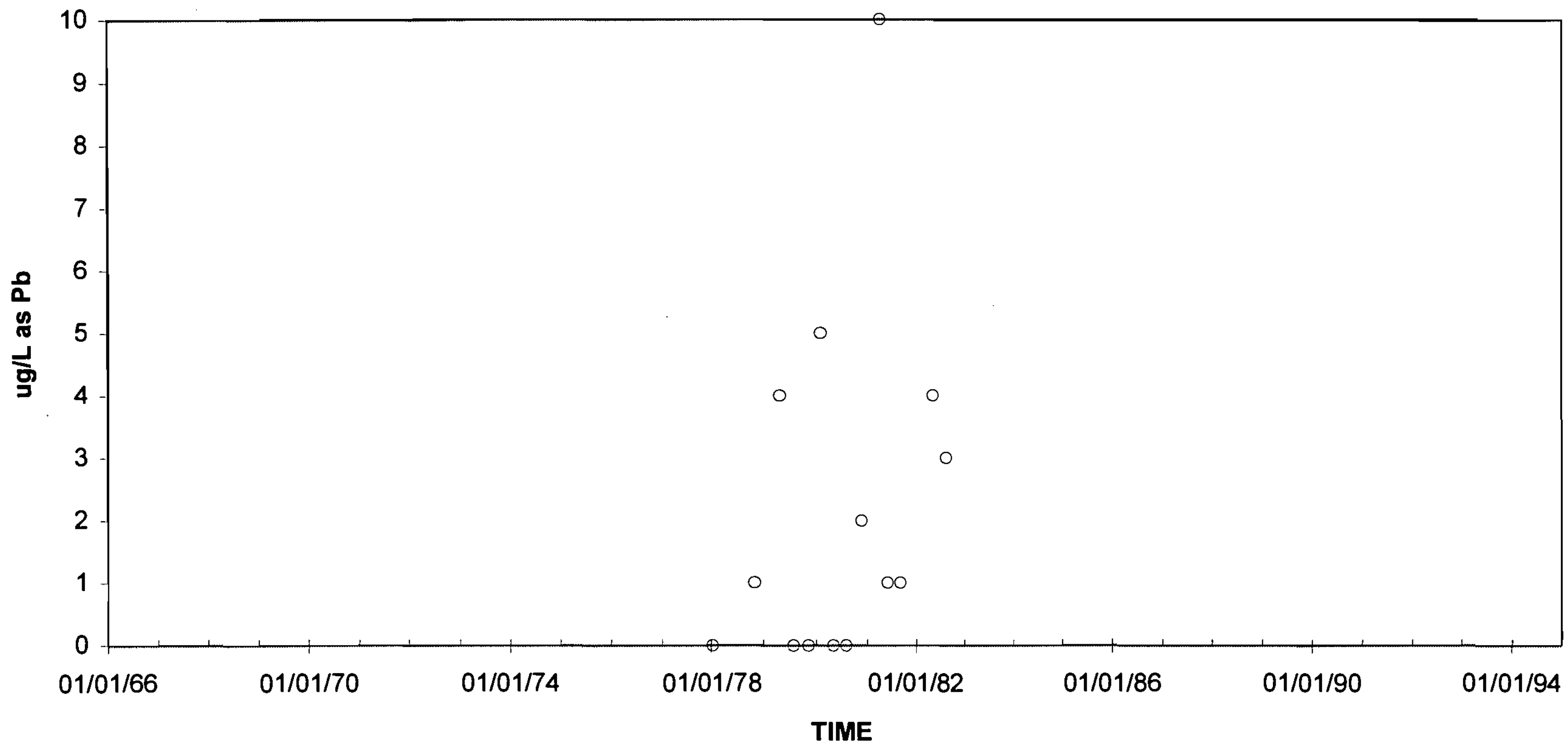
Figure
10.5.4–99



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
LEAD, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

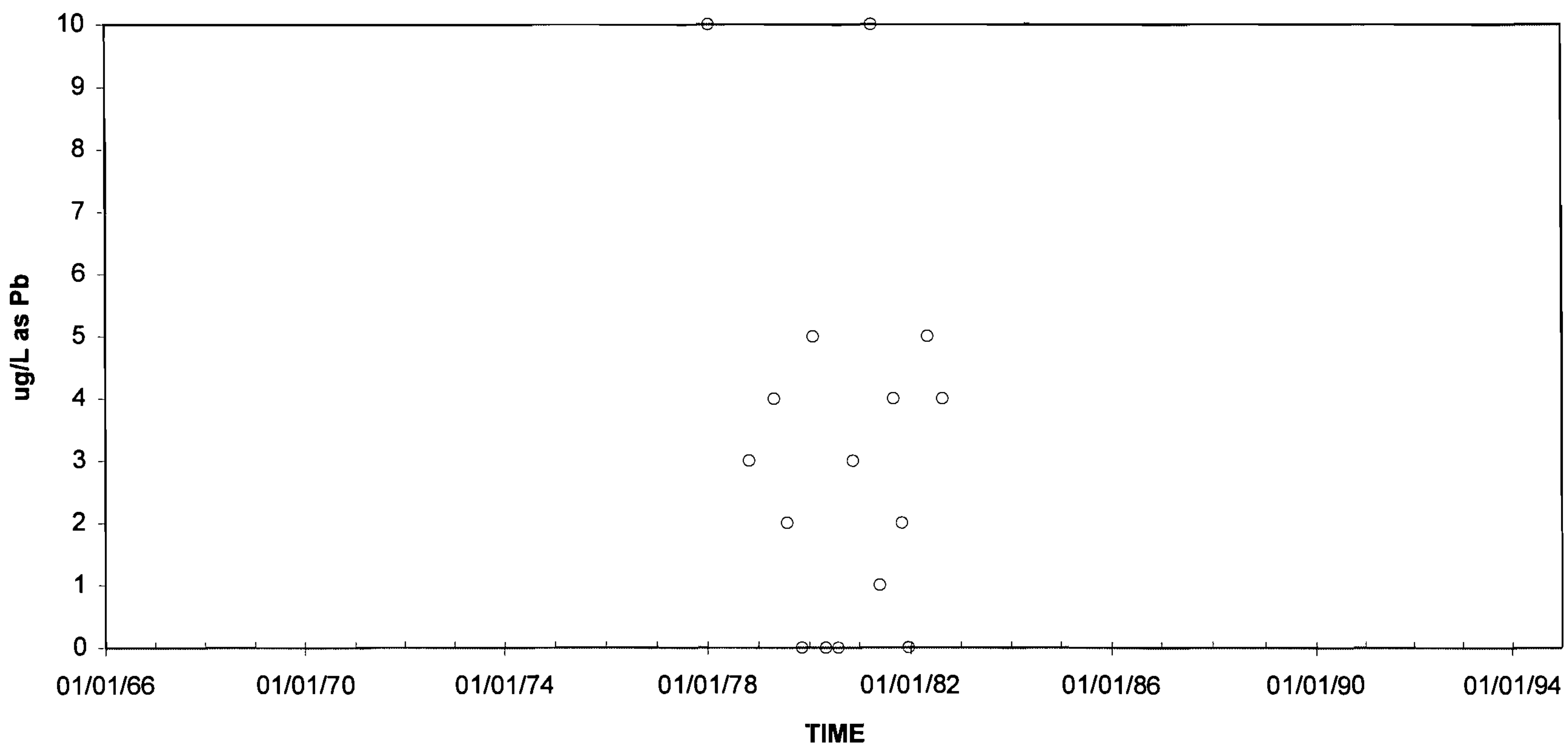
Figure
10.5.4–100



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
LEAD, SUSPENDED RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

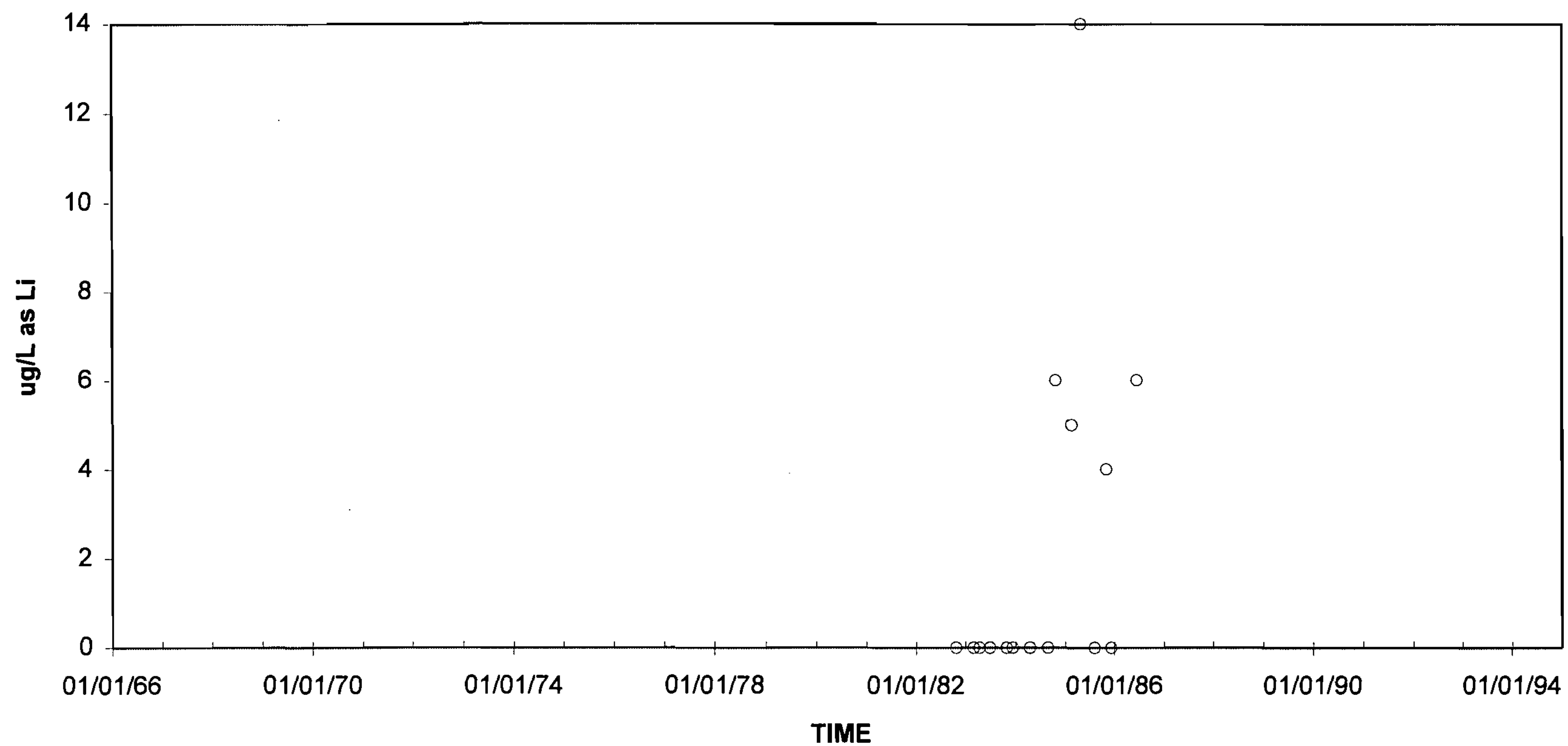
Figure 10.5.4–101



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
LEAD, TOTAL RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

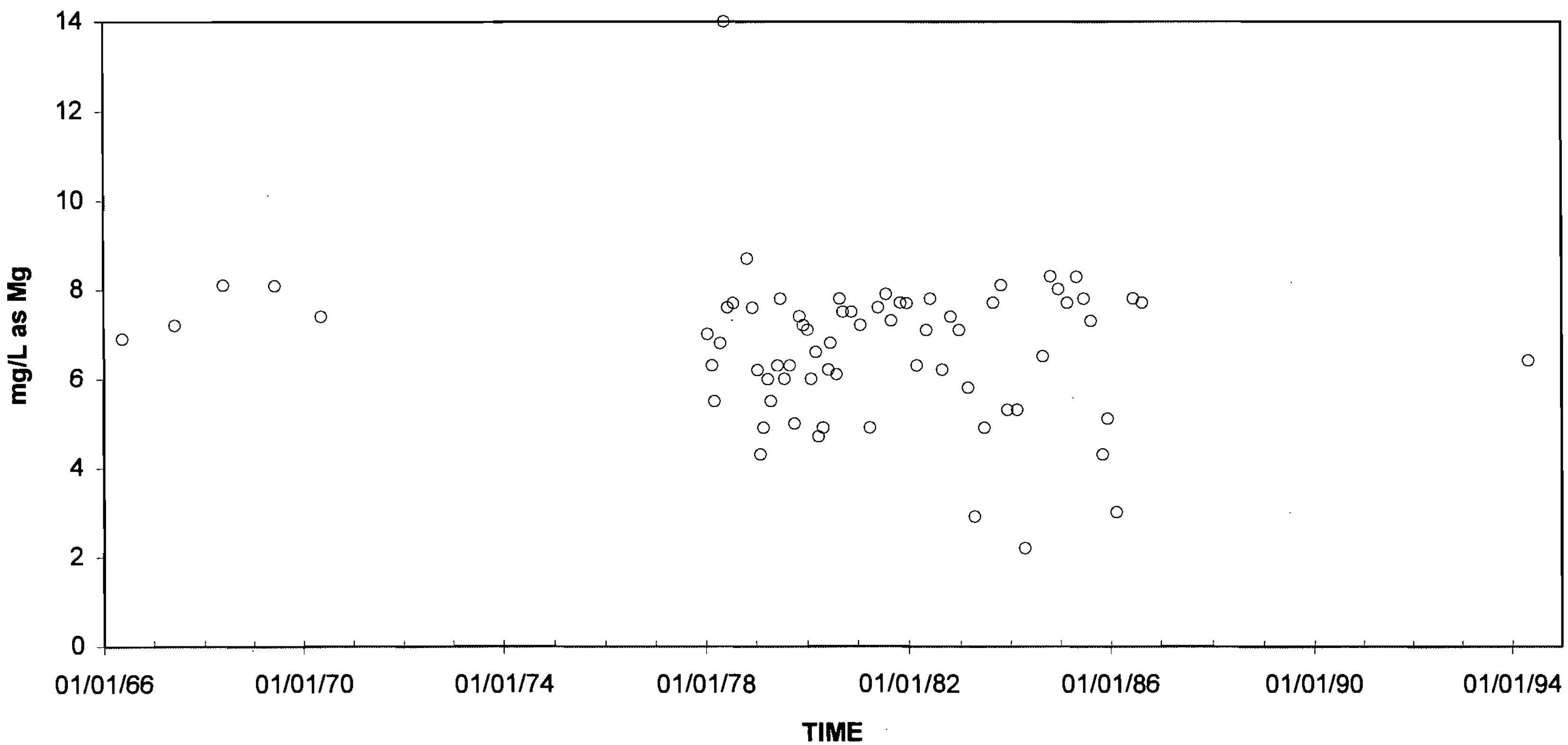
Figure
10.5.4–102



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
LITHIUM, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

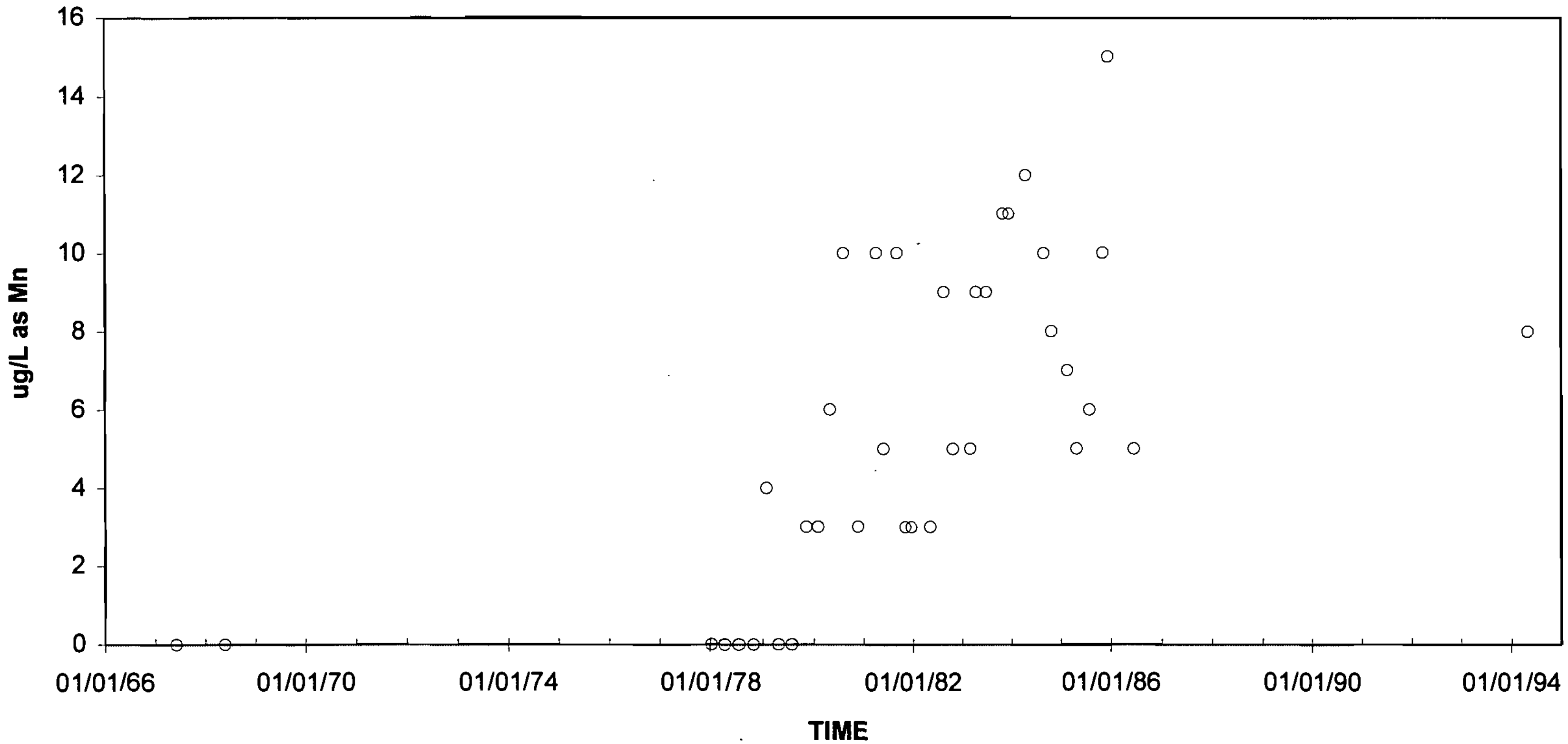
Figure 10.5.4–103



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
MAGNESIUM, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

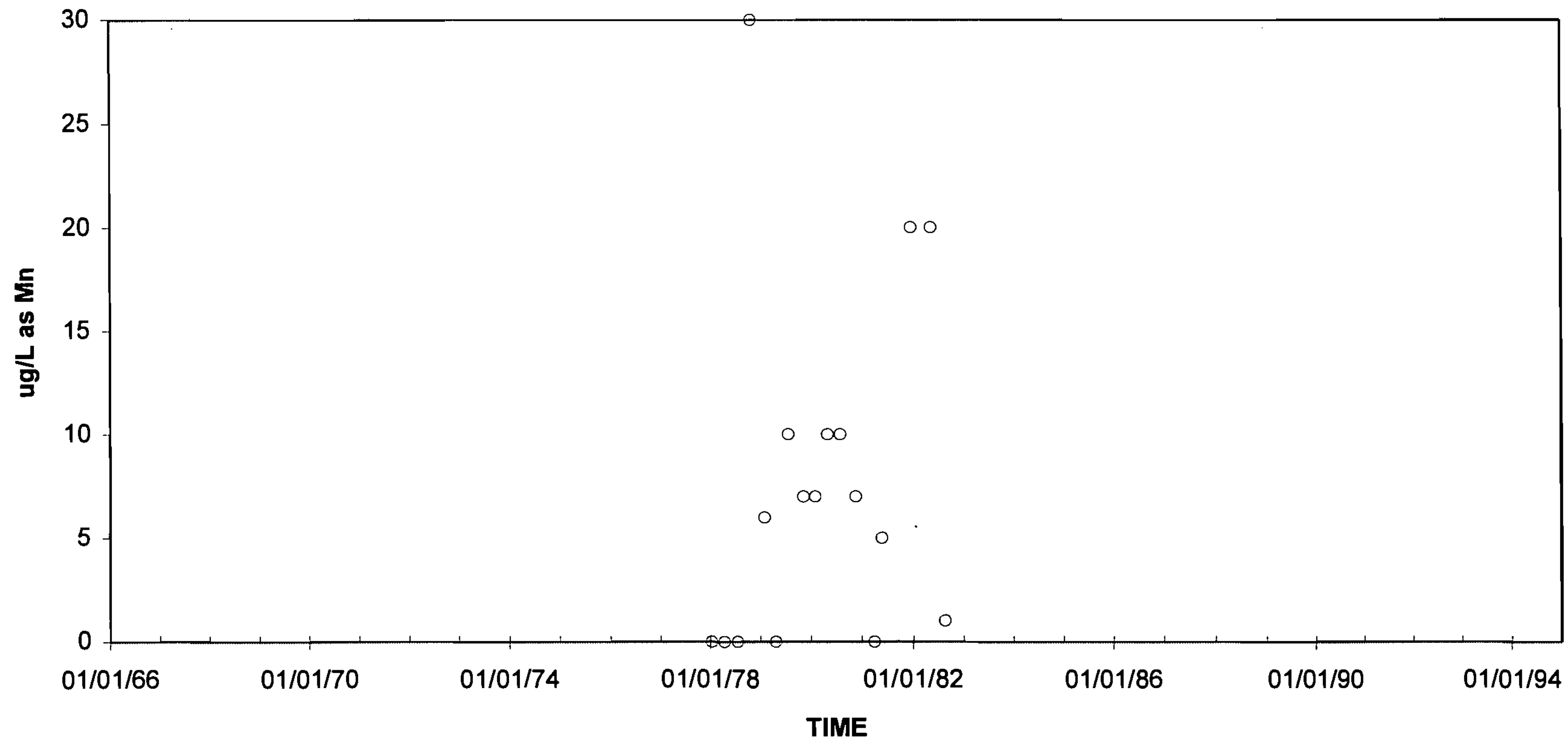
Figure
10.5.4–104



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
MANGANESE, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

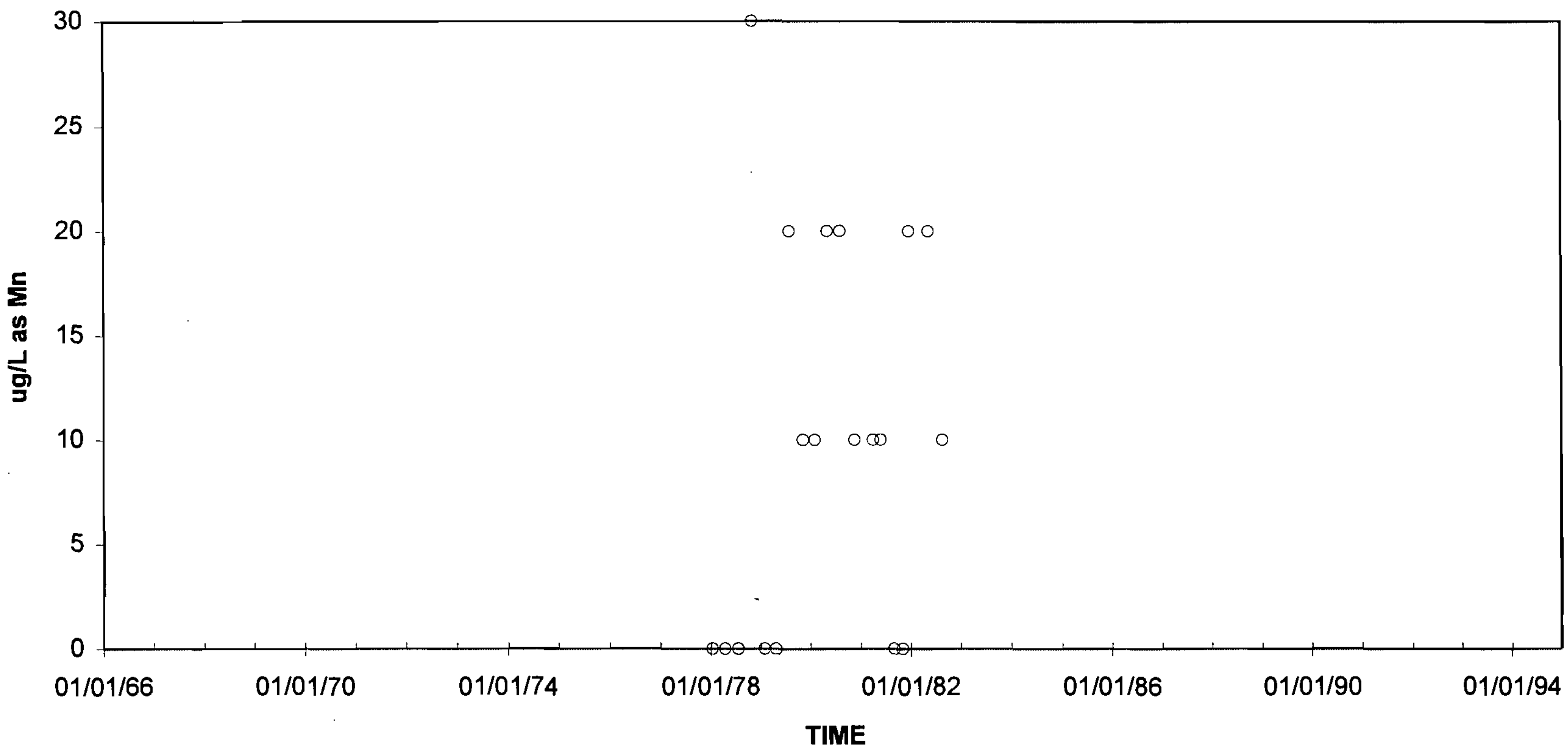
Figure
10.5.4–105



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
MANGANESE, SUSPENDED RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

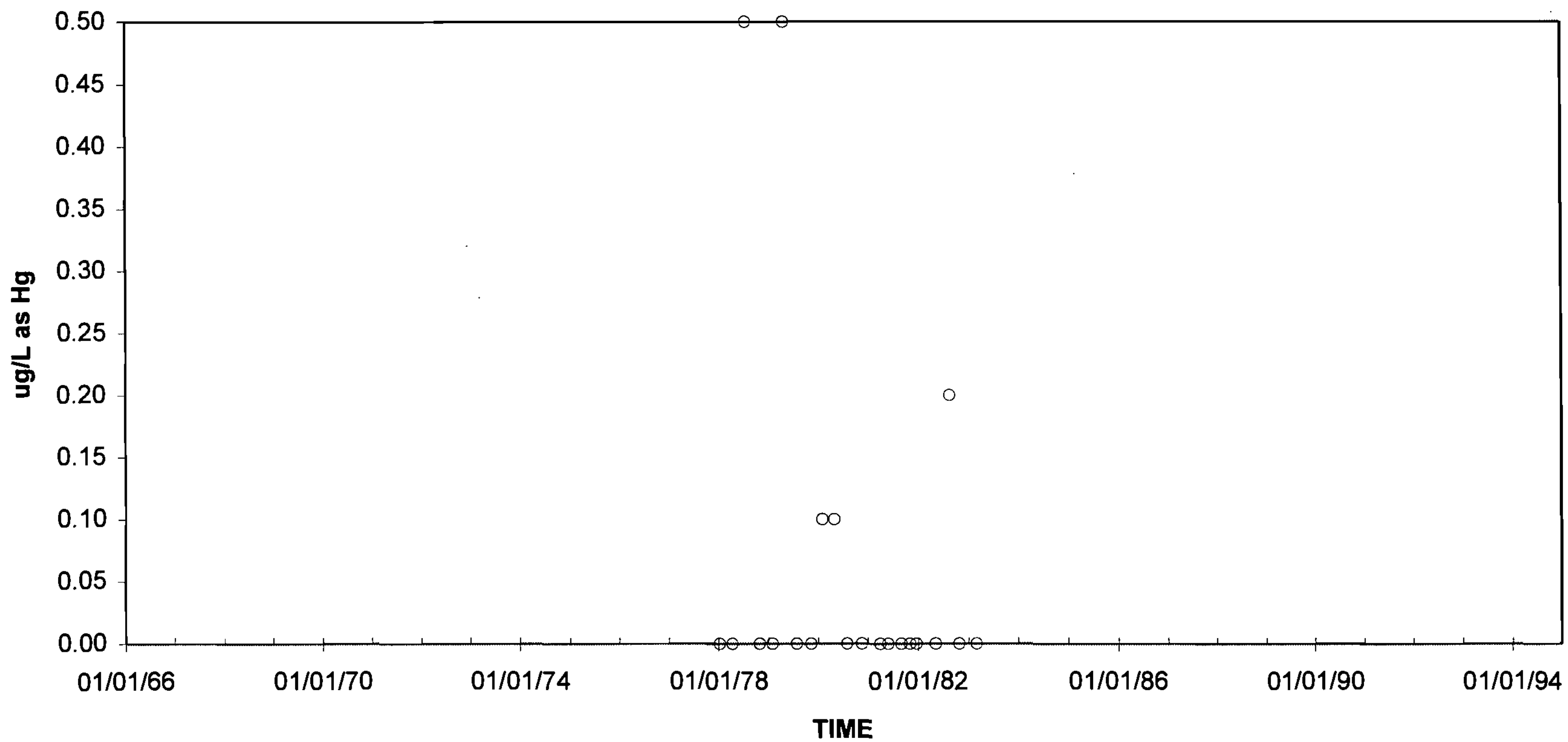
Figure
10.5.4–106



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
MANGANESE, TOTAL RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

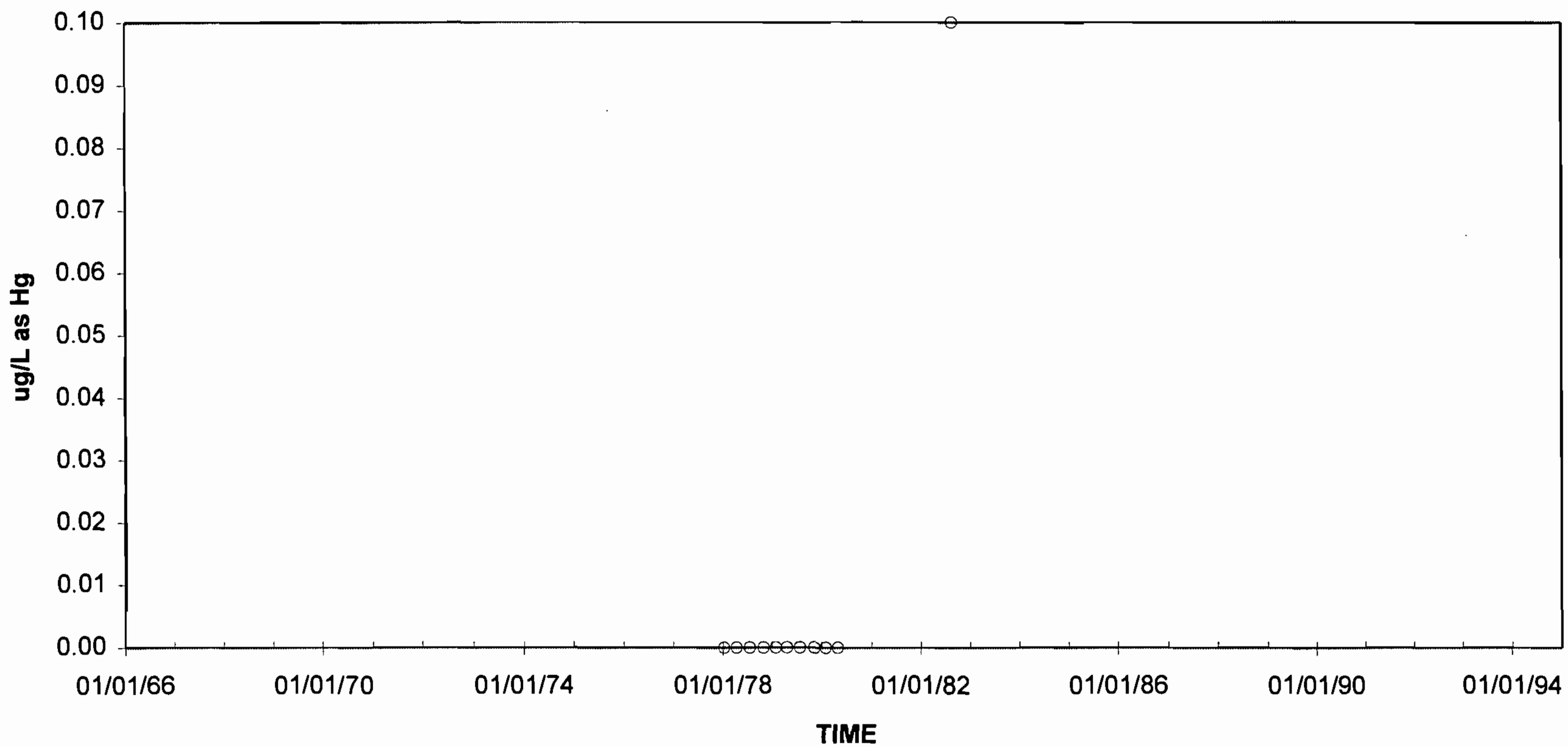
Figure
10.5.4–107



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
MERCURY, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

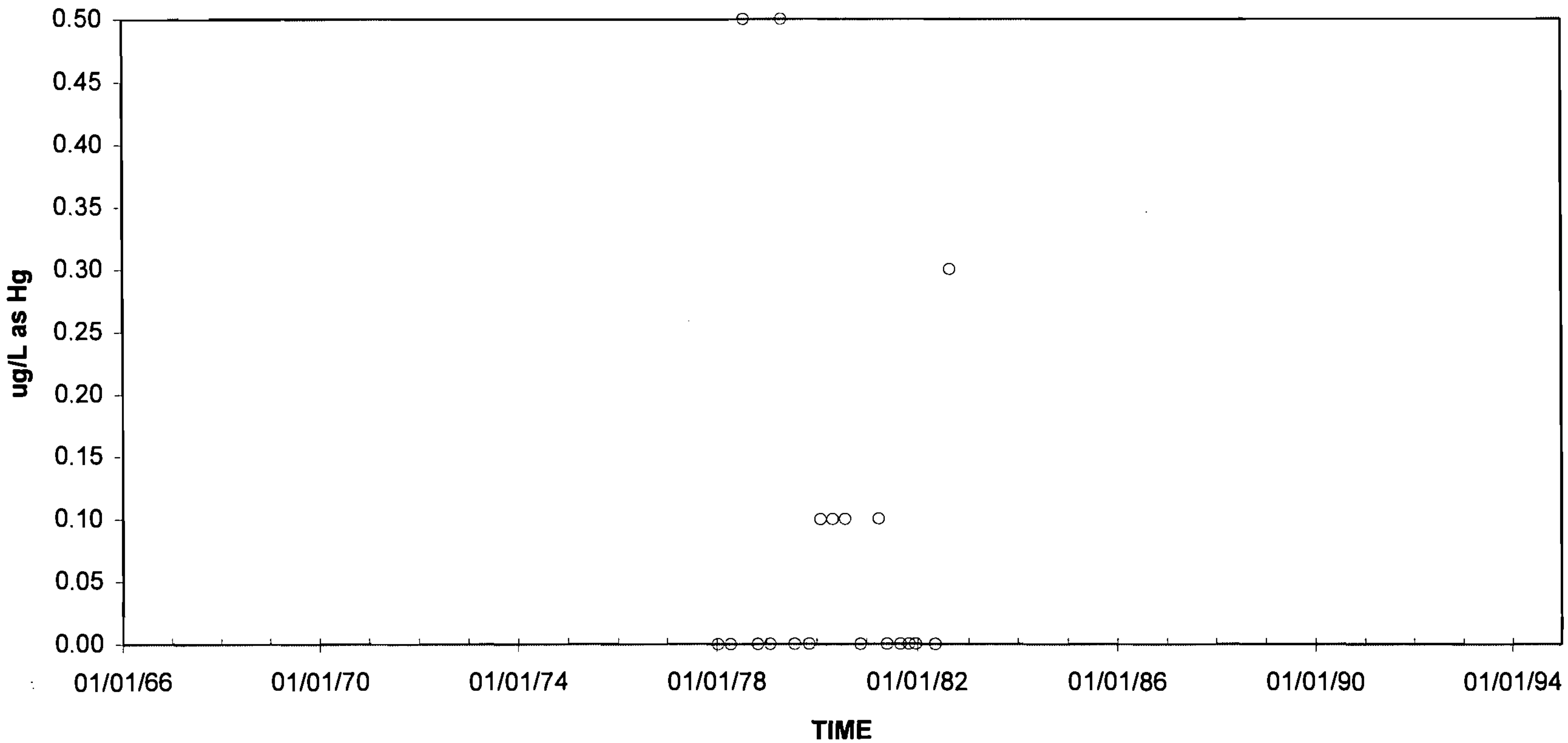
Figure 10.5.4–108



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
MERCURY, SUSPENDED RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

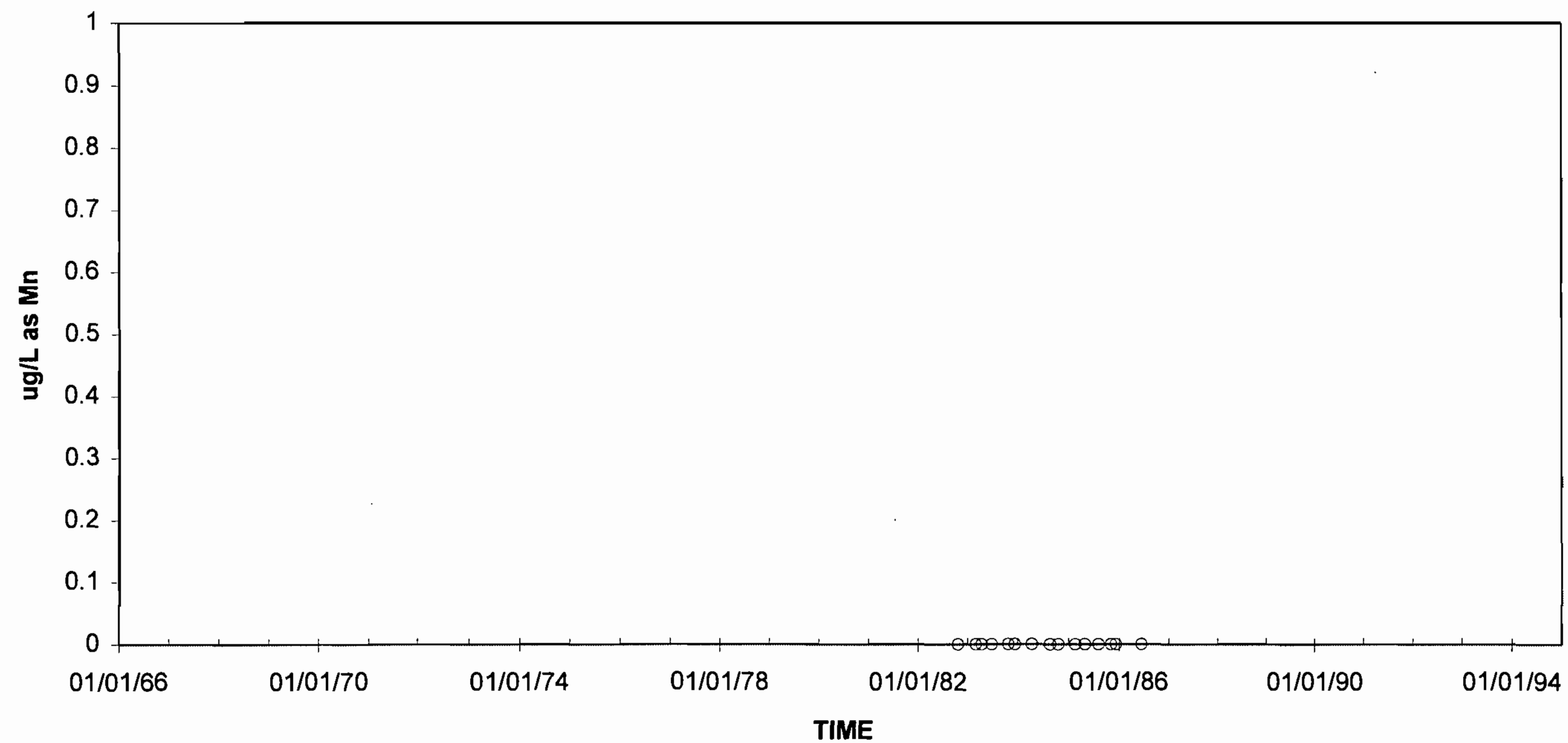
Figure 10.5.4–109



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
MERCURY, TOTAL RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

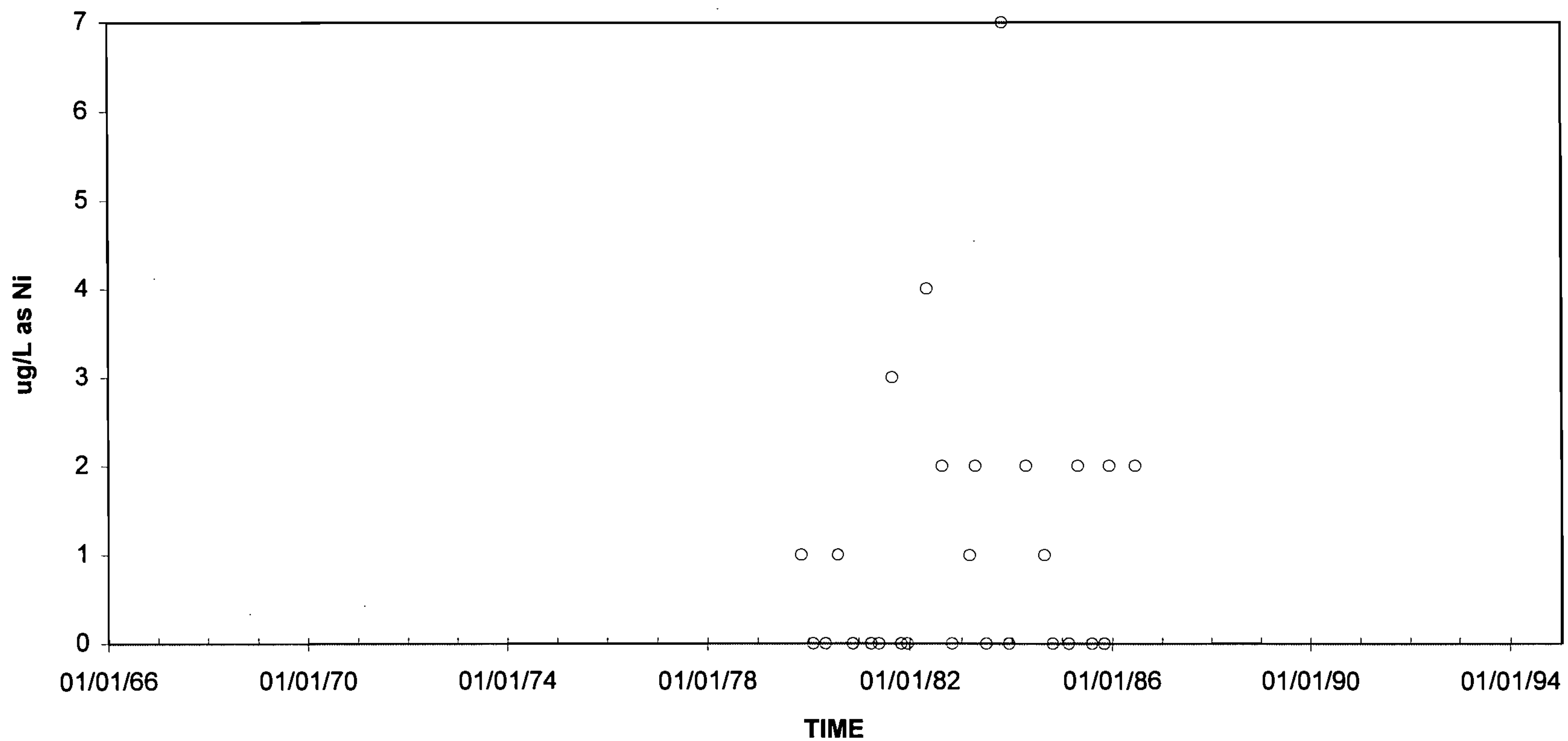
Figure
10.5.4–110



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
MOLYBDENUM, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

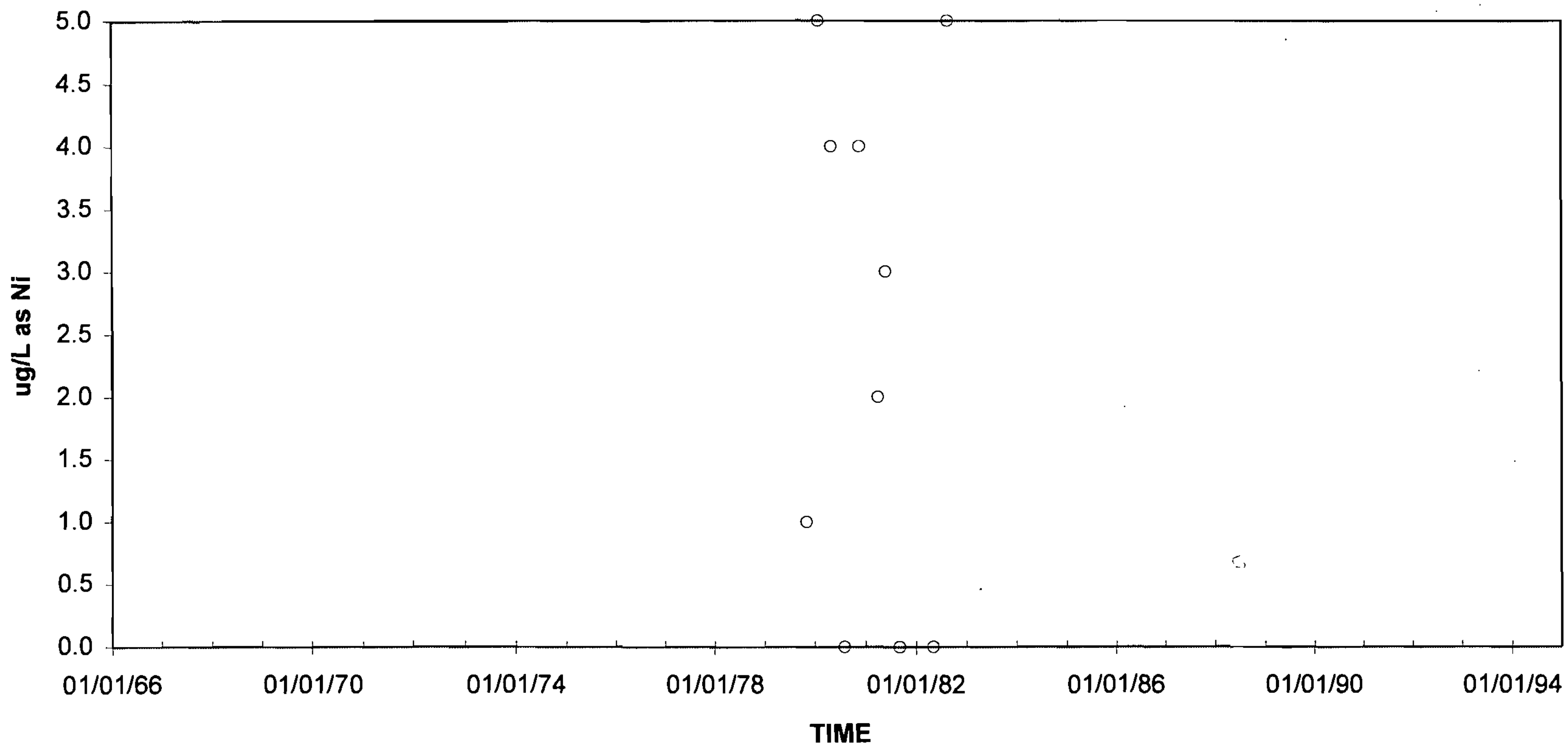
Figure
10.5.4–111



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
NICKEL, DISSOLVED
PURDOM UNIT 8 PROJECT - St MARKS, FLORIDA

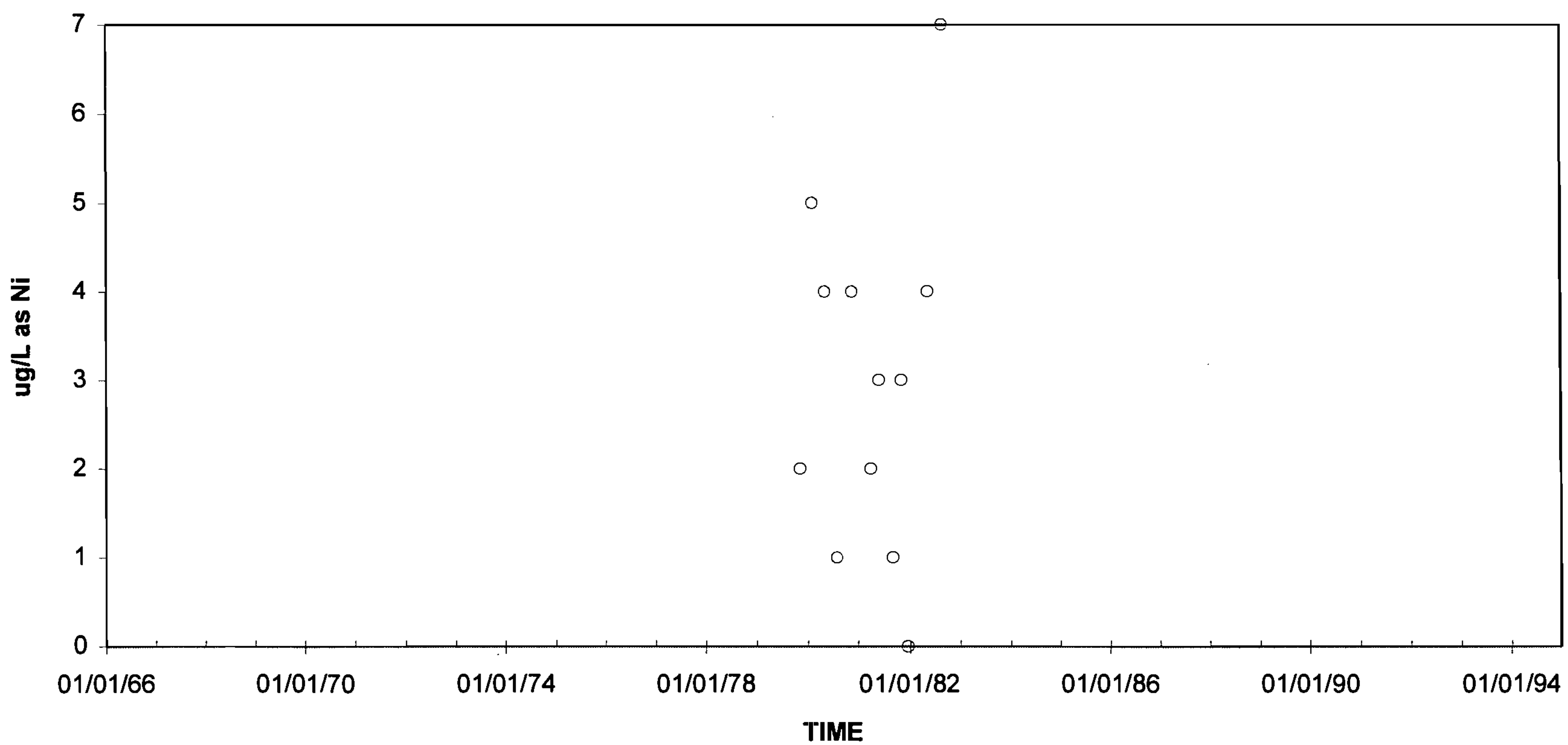
Figure 10.5.4-112



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
NICKEL, SUSPENDED RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

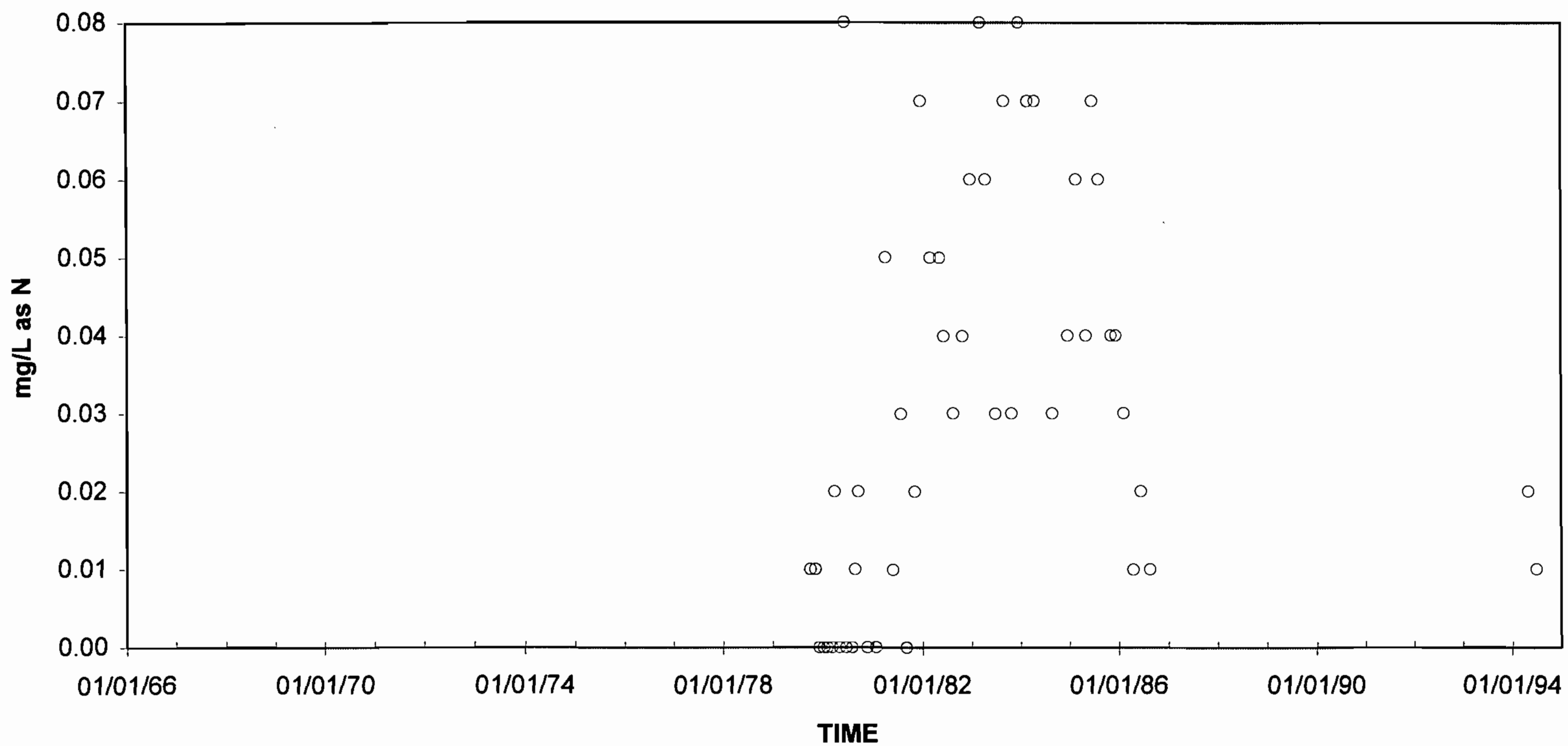
Figure 10.5.4–113



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
NICKEL, TOTAL RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

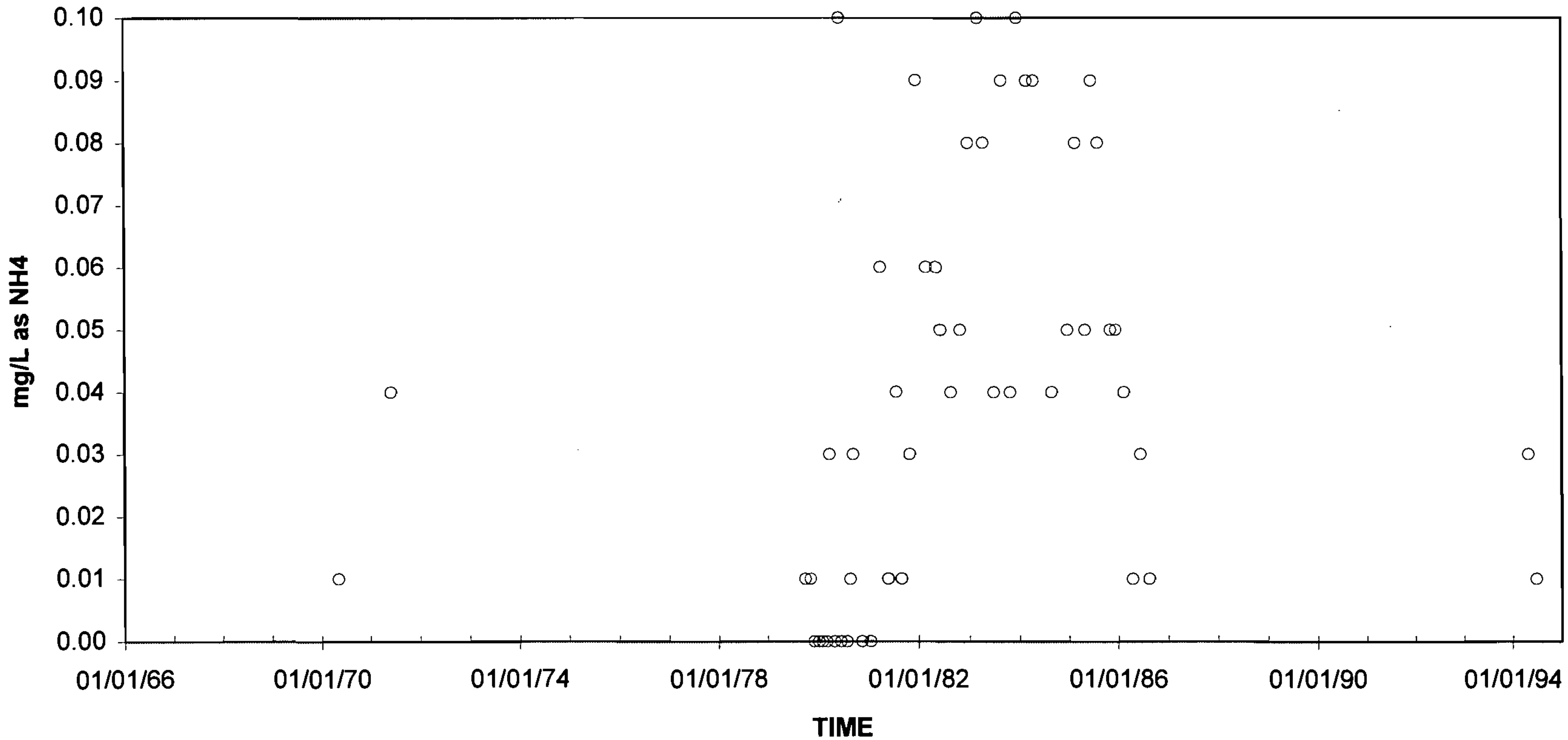
Figure
10.5.4-114



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
NITROGEN, AMMONIA DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

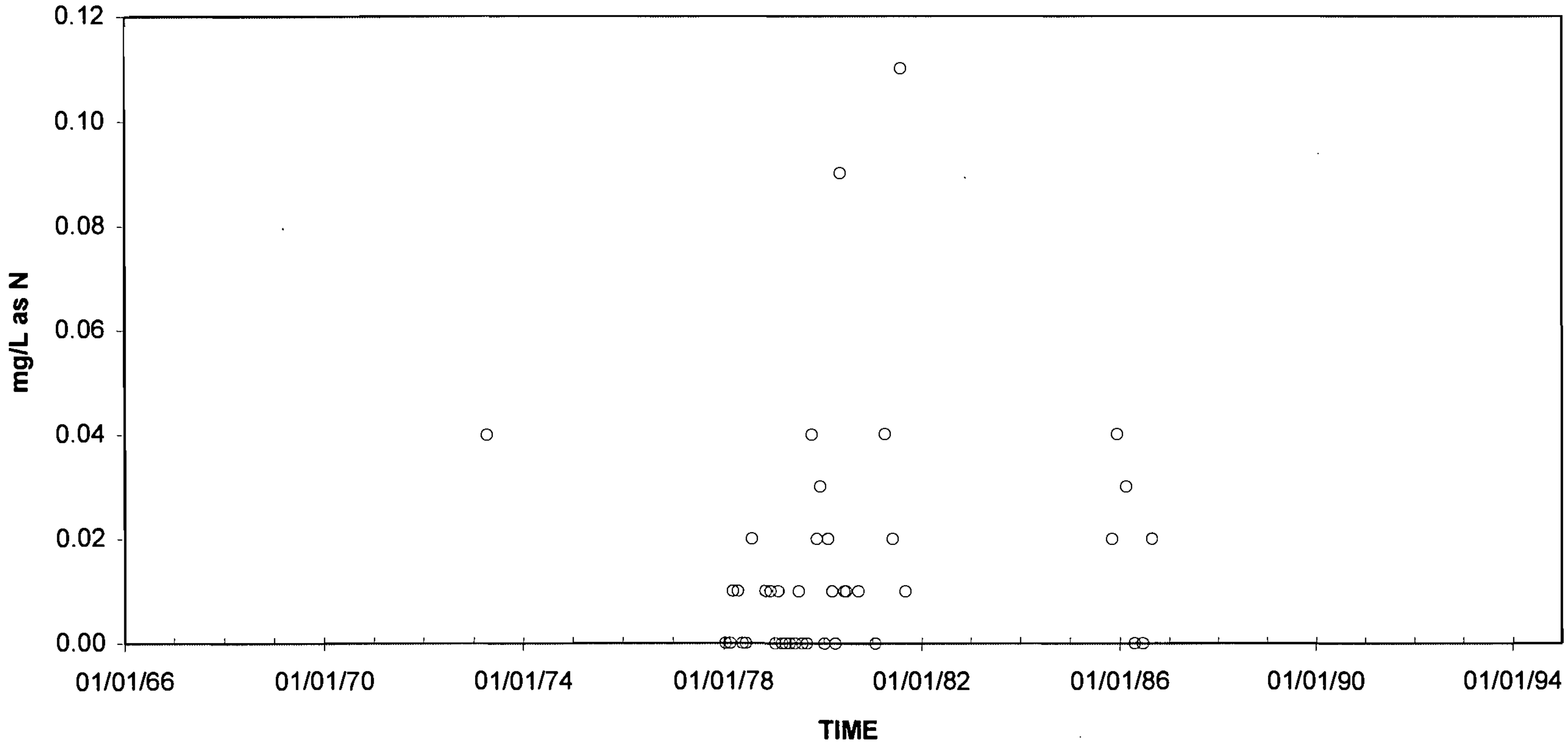
Figure 10.5.4-115



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
NITROGEN, AMMONIA DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

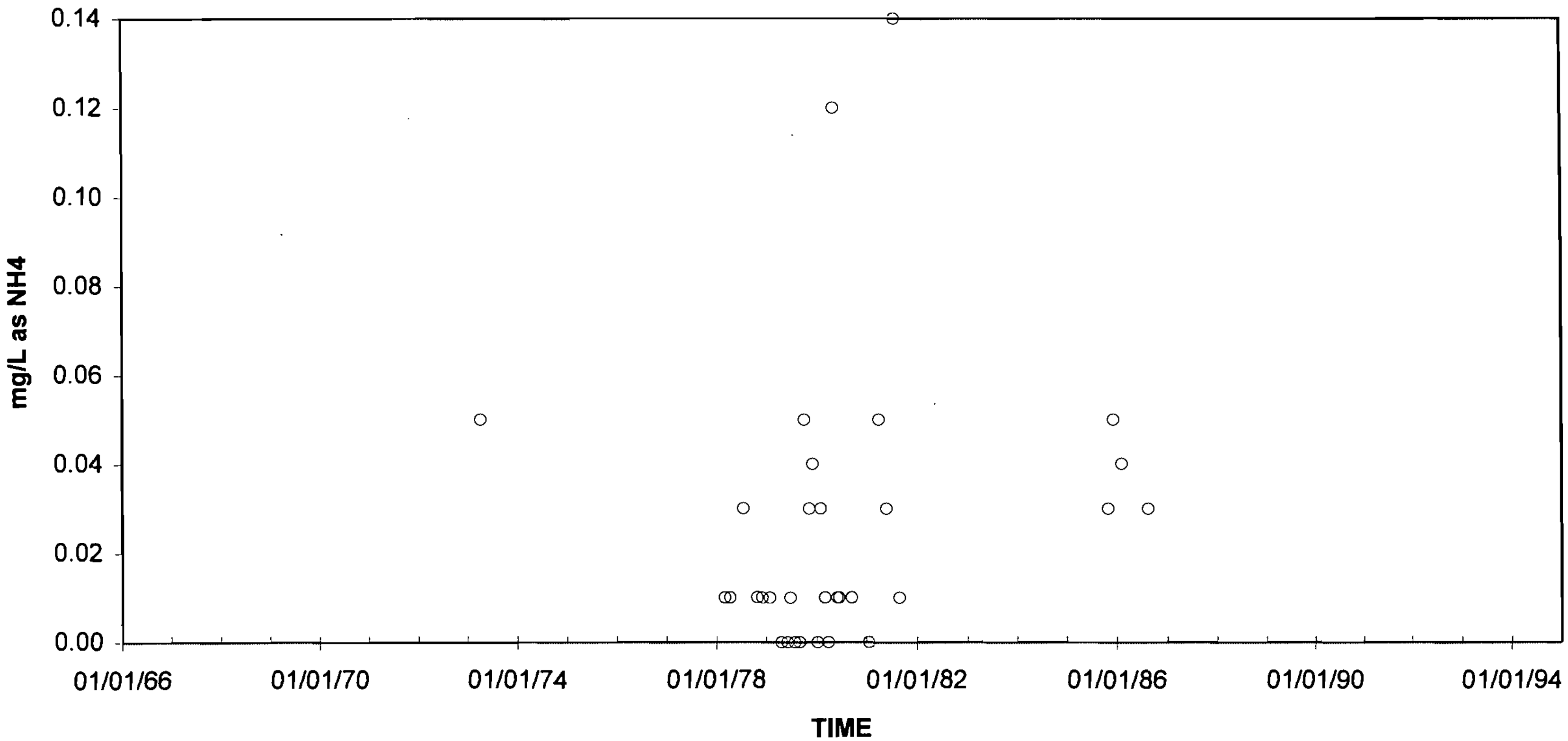
Figure
10.5.4–116



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
NITROGEN, AMMONIA TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

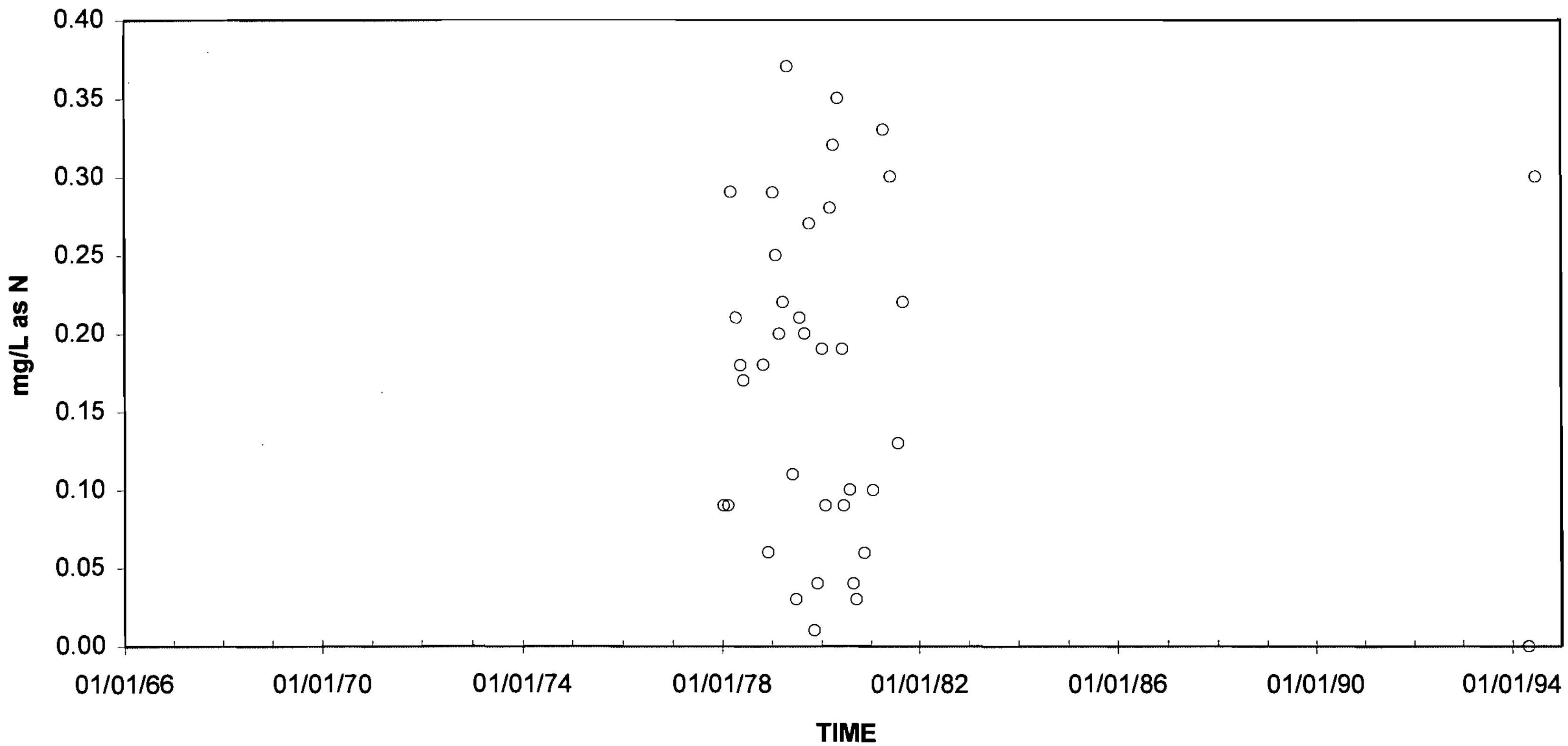
Figure
10.5.4-117



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
NITROGEN, AMMONIA TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

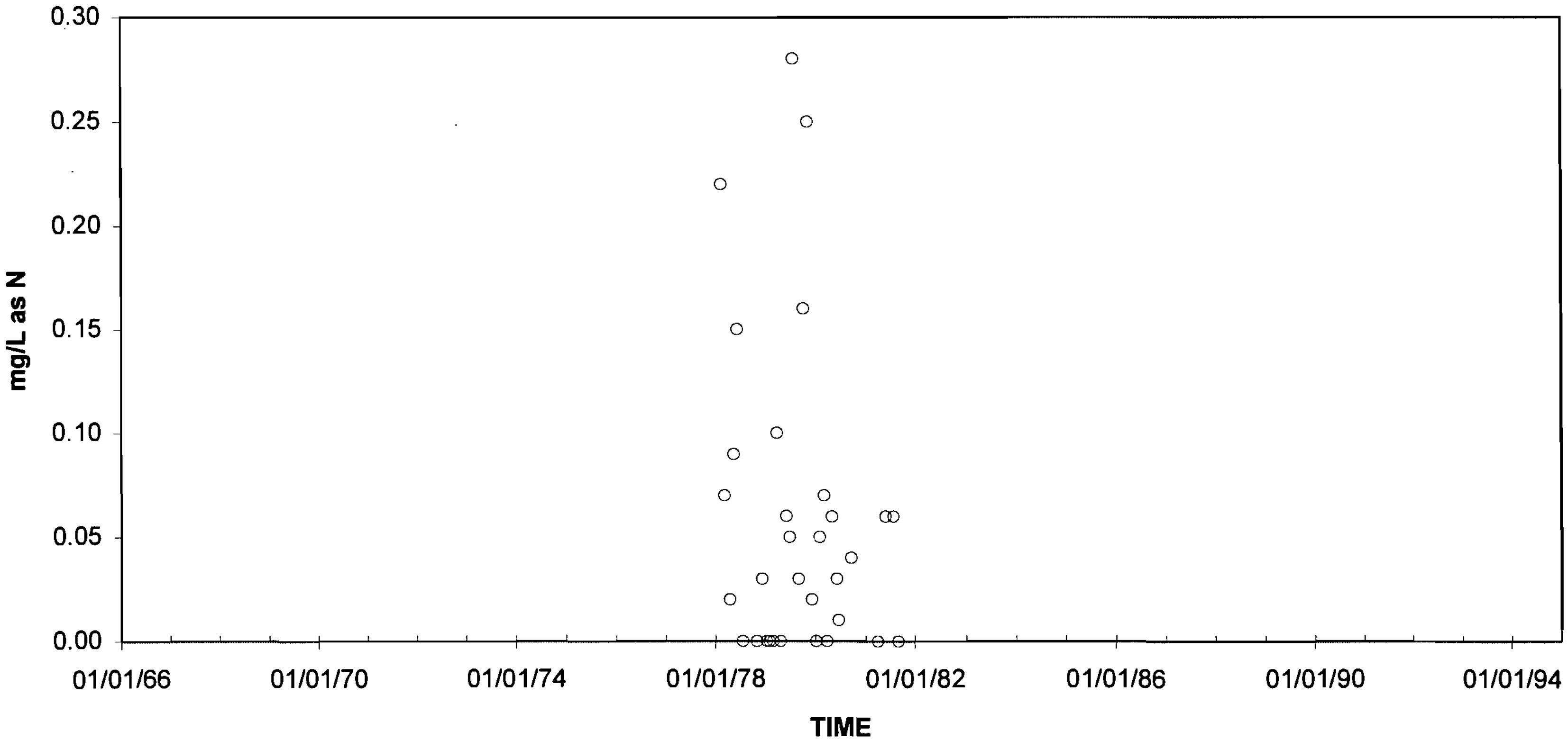
Figure
10.5.4–118



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
NITROGEN, AMMONIA + ORGANIC DIS
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

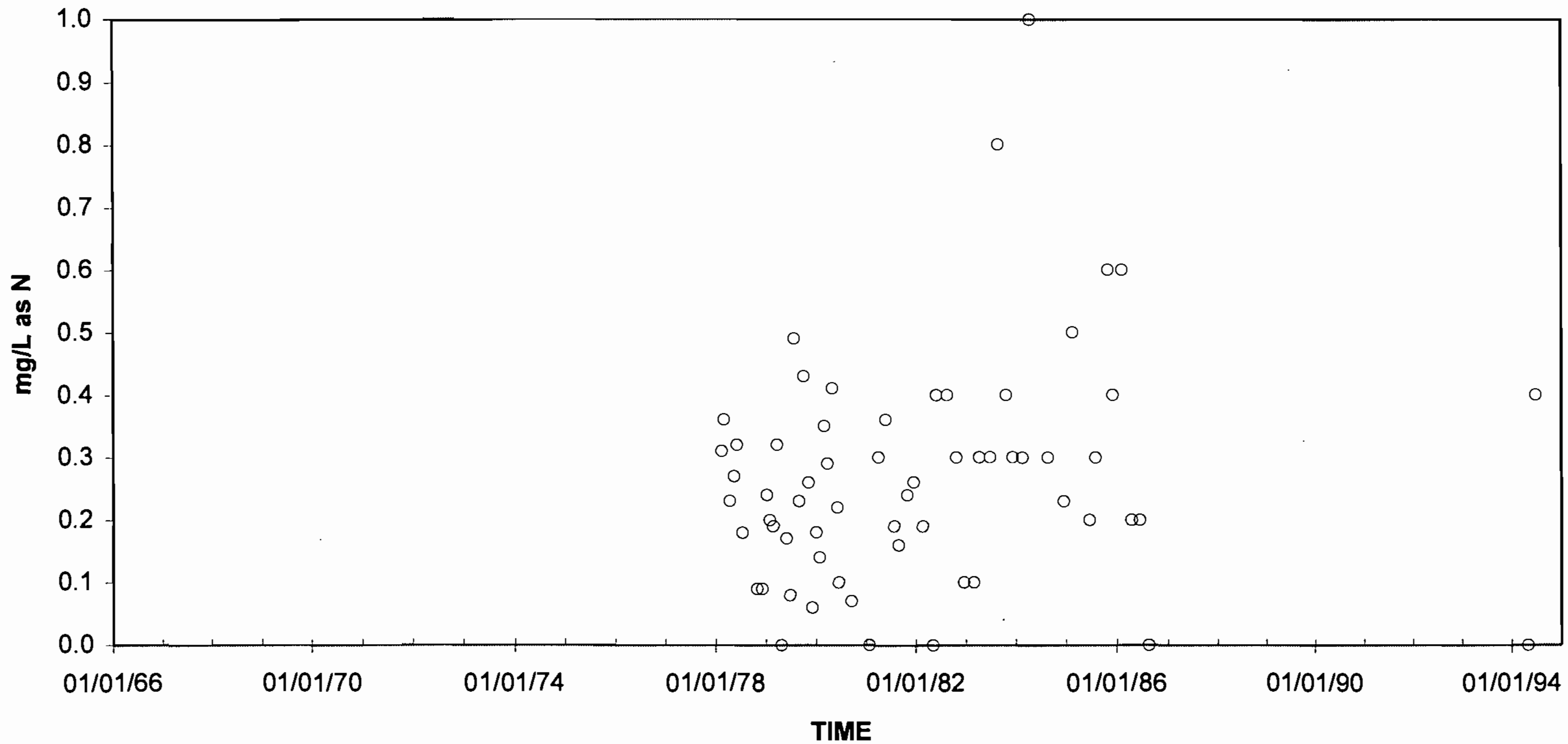
Figure 10.5.4–119



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
NITROGEN, AMMONIA + ORGANIC SUSP TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

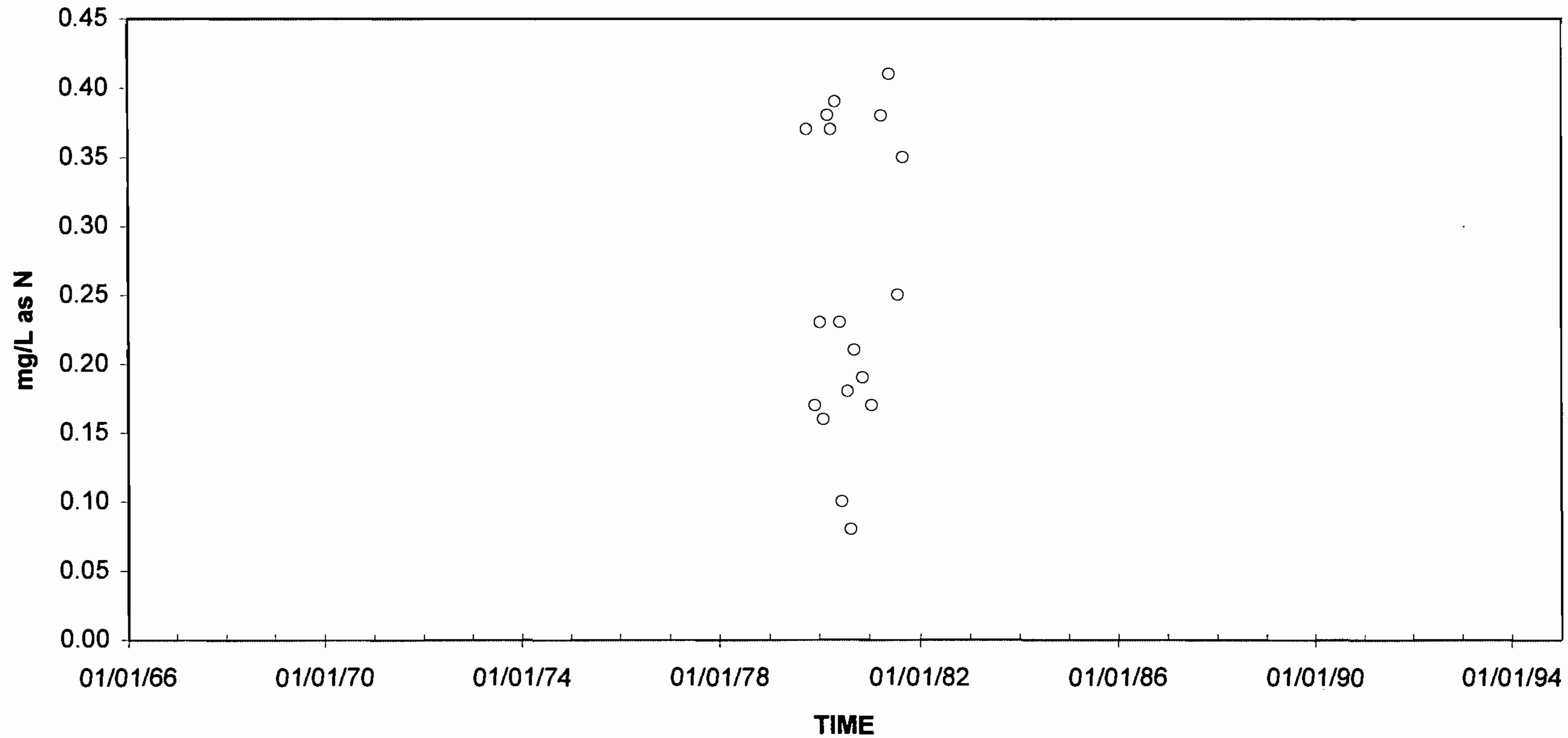
Figure
10.5.4–120



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
NITROGEN, AMMONIA + ORGANIC TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

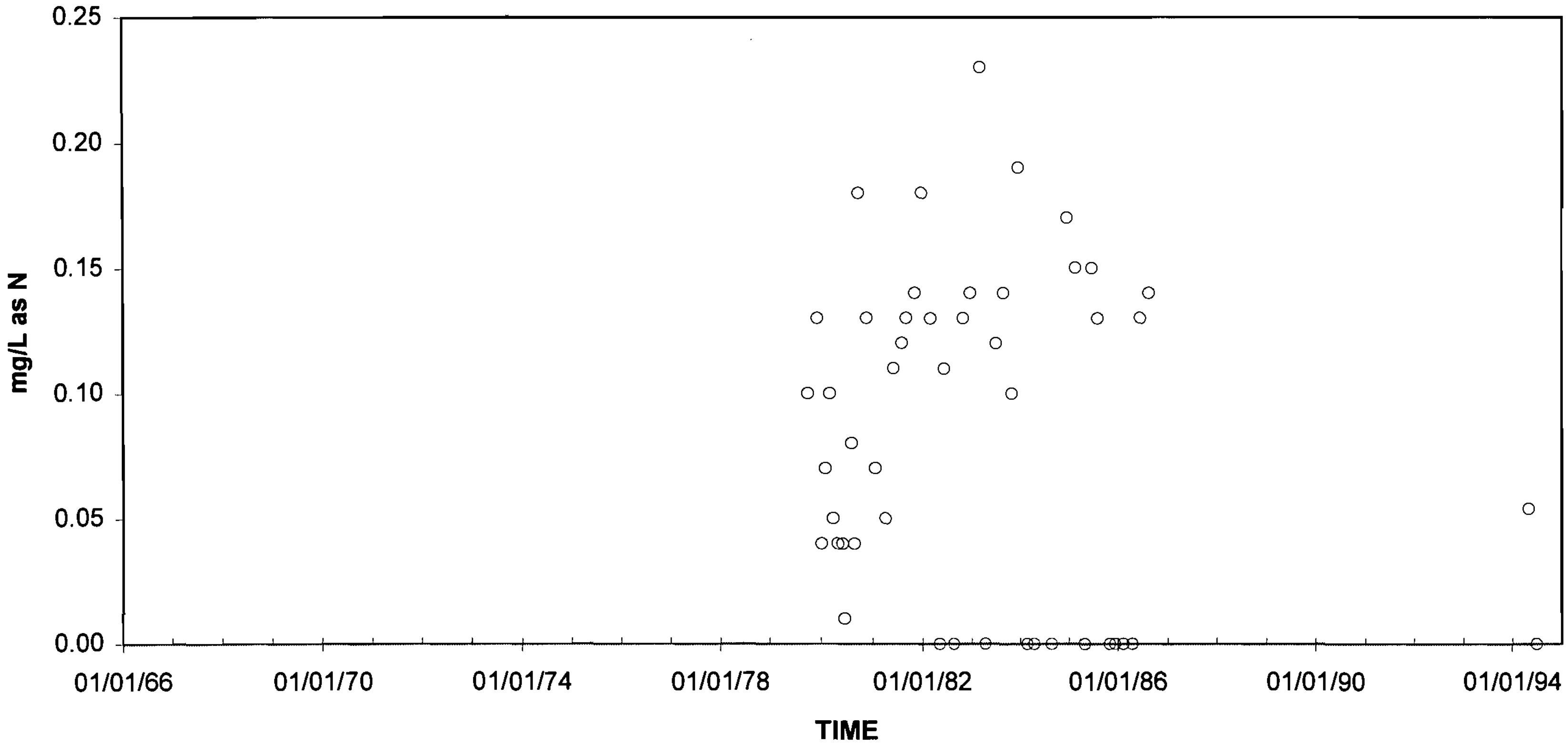
Figure
10.5.4–121



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
NITROGEN, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

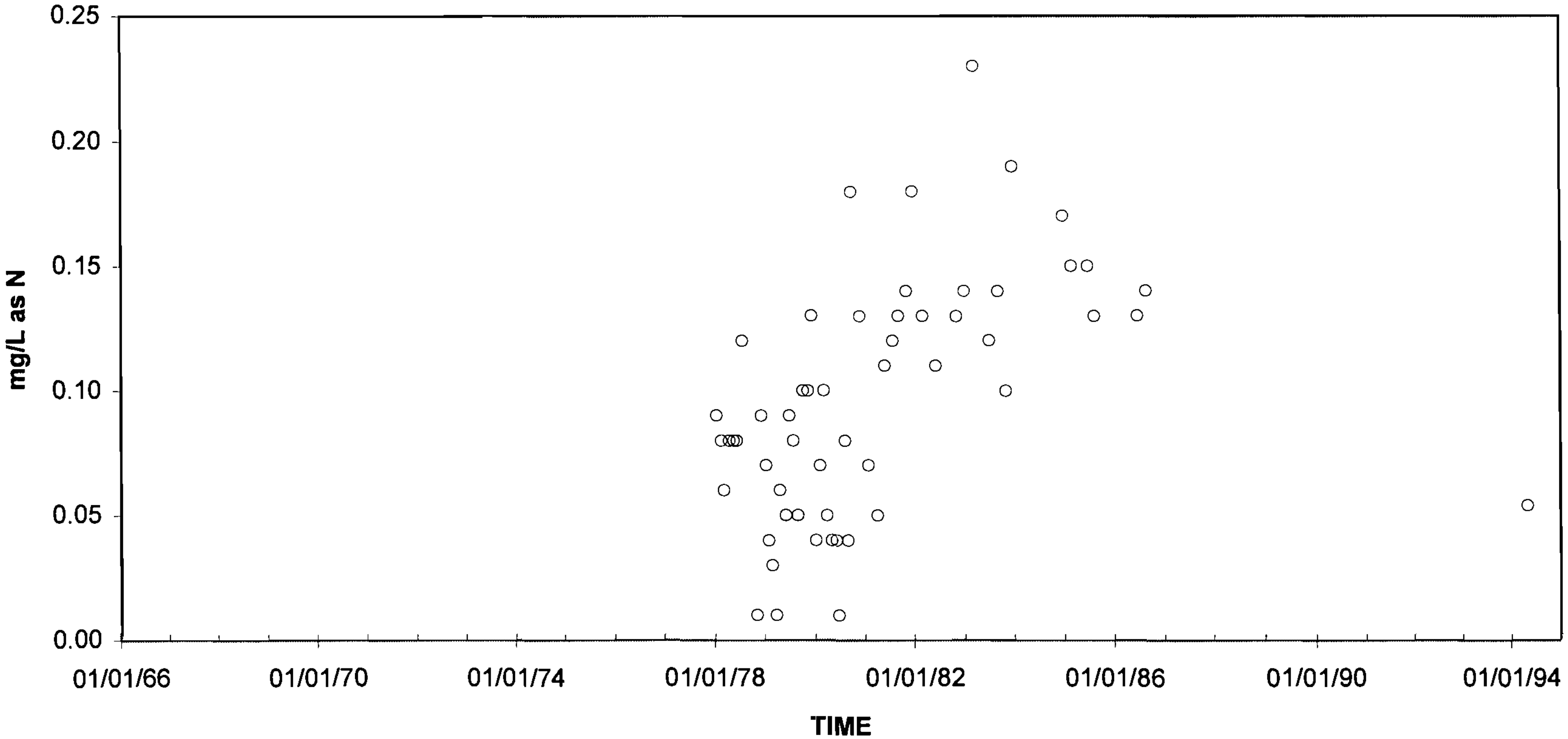
Figure
10.5.4–122



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
NITROGEN, NITRITE + NITRATE DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

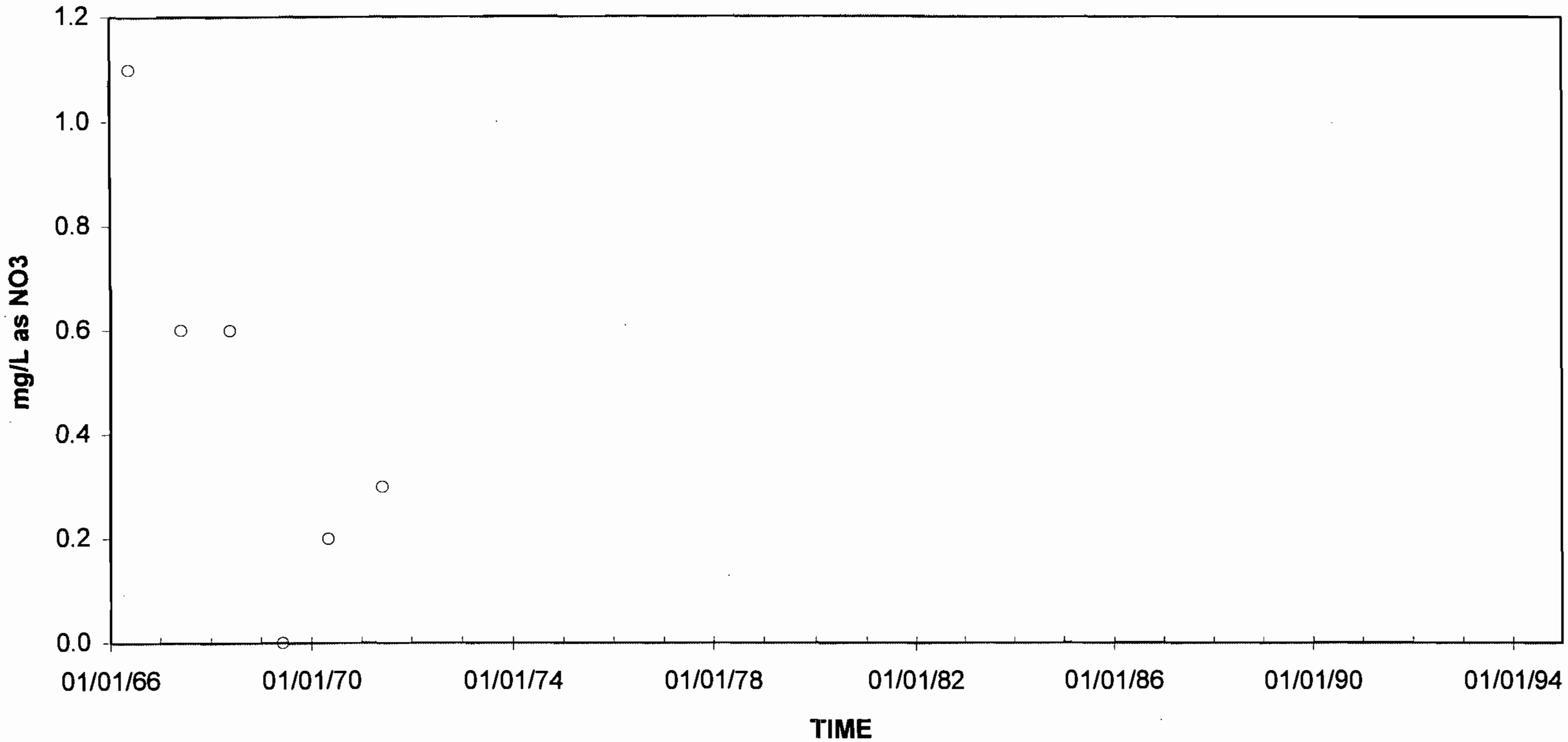
Figure
10.5.4–123



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
NITROGEN, NITRITE + NITRATE TOTAL
PURDOM UNIT 8 PROJECT -- St MARKS, FLORIDA

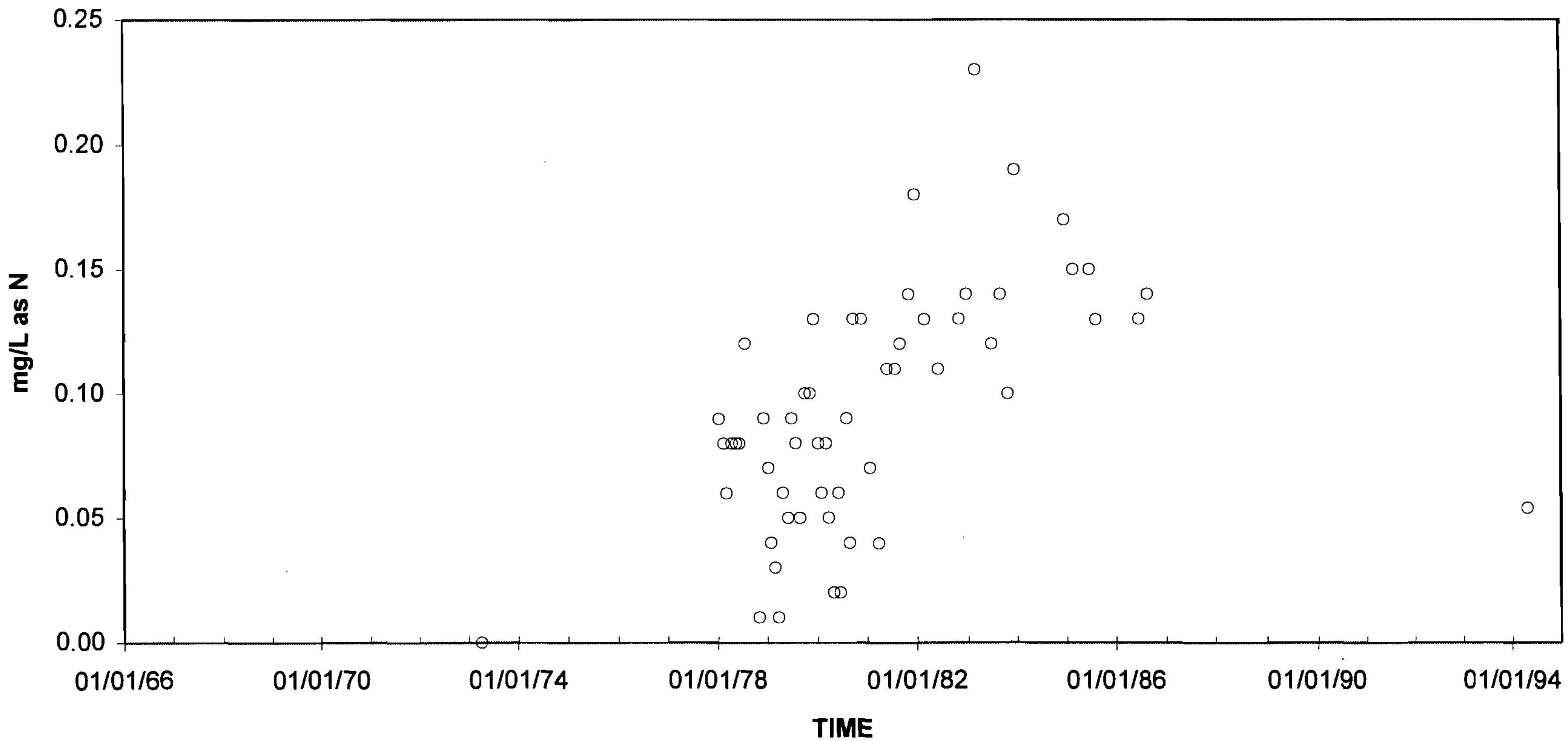
Figure 10.5.4-124



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
NITROGEN, NITRATE DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

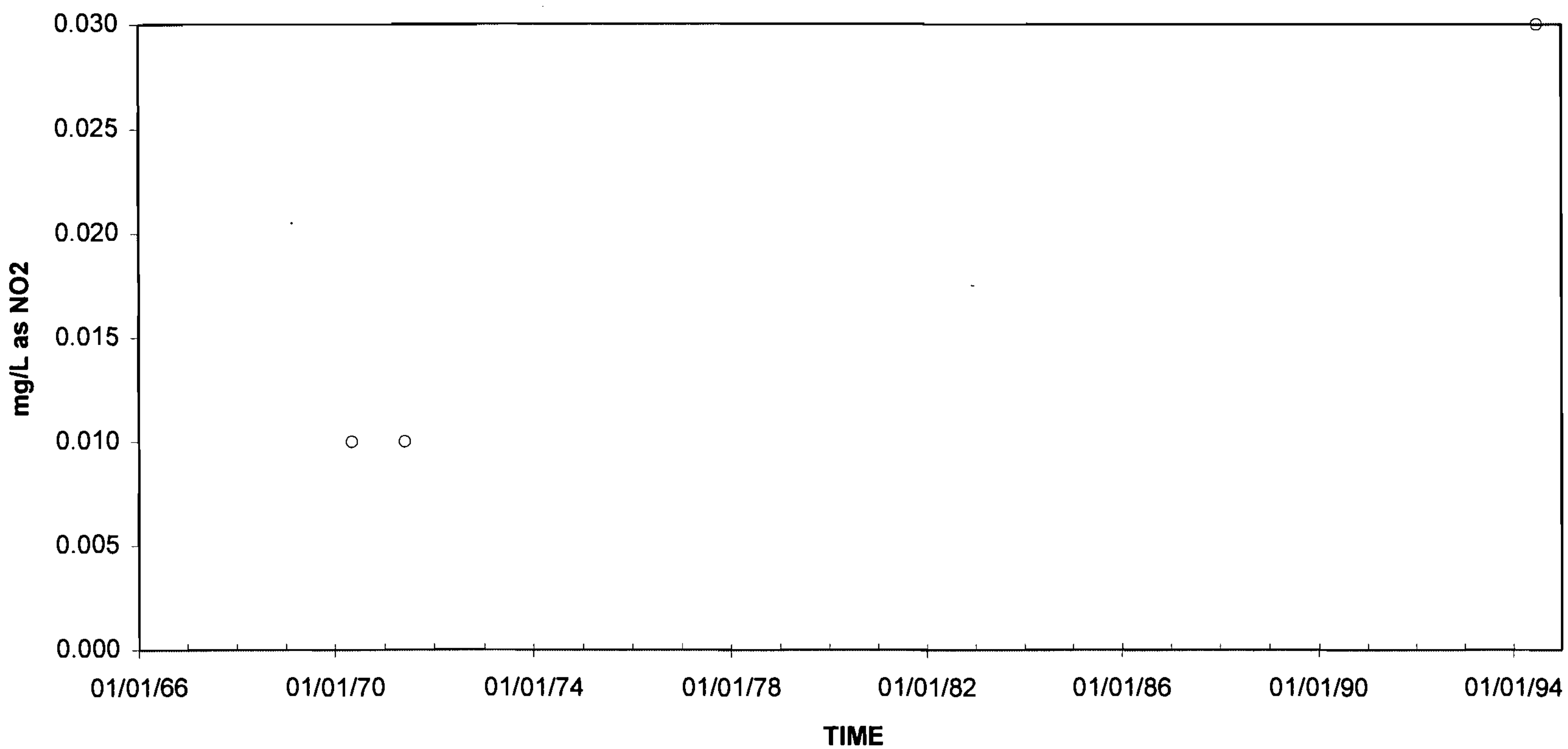
Figure
10.5.4–125



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
NITROGEN, NITRATE TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

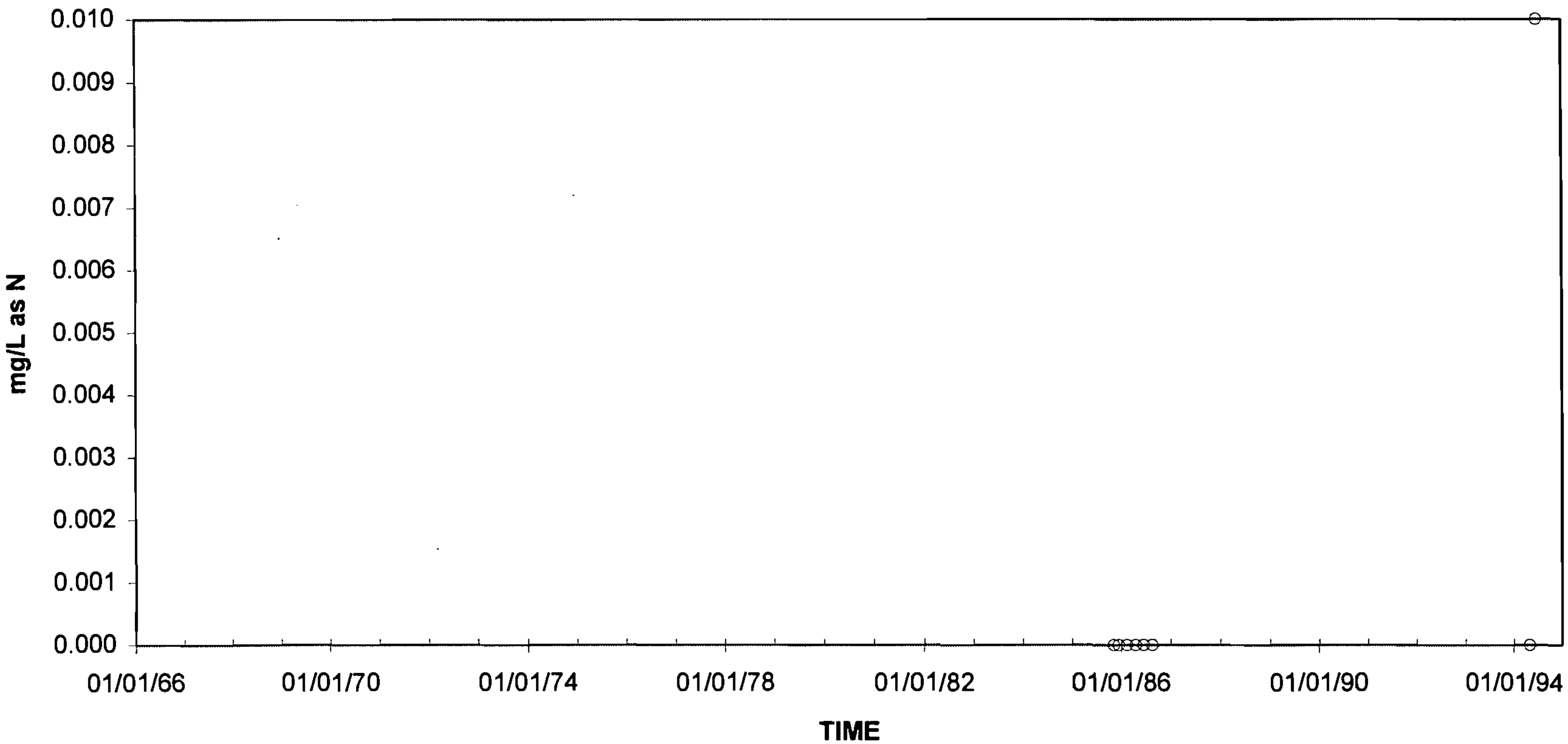
Figure
10.5.4–126



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
NITROGEN, NITRITE DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

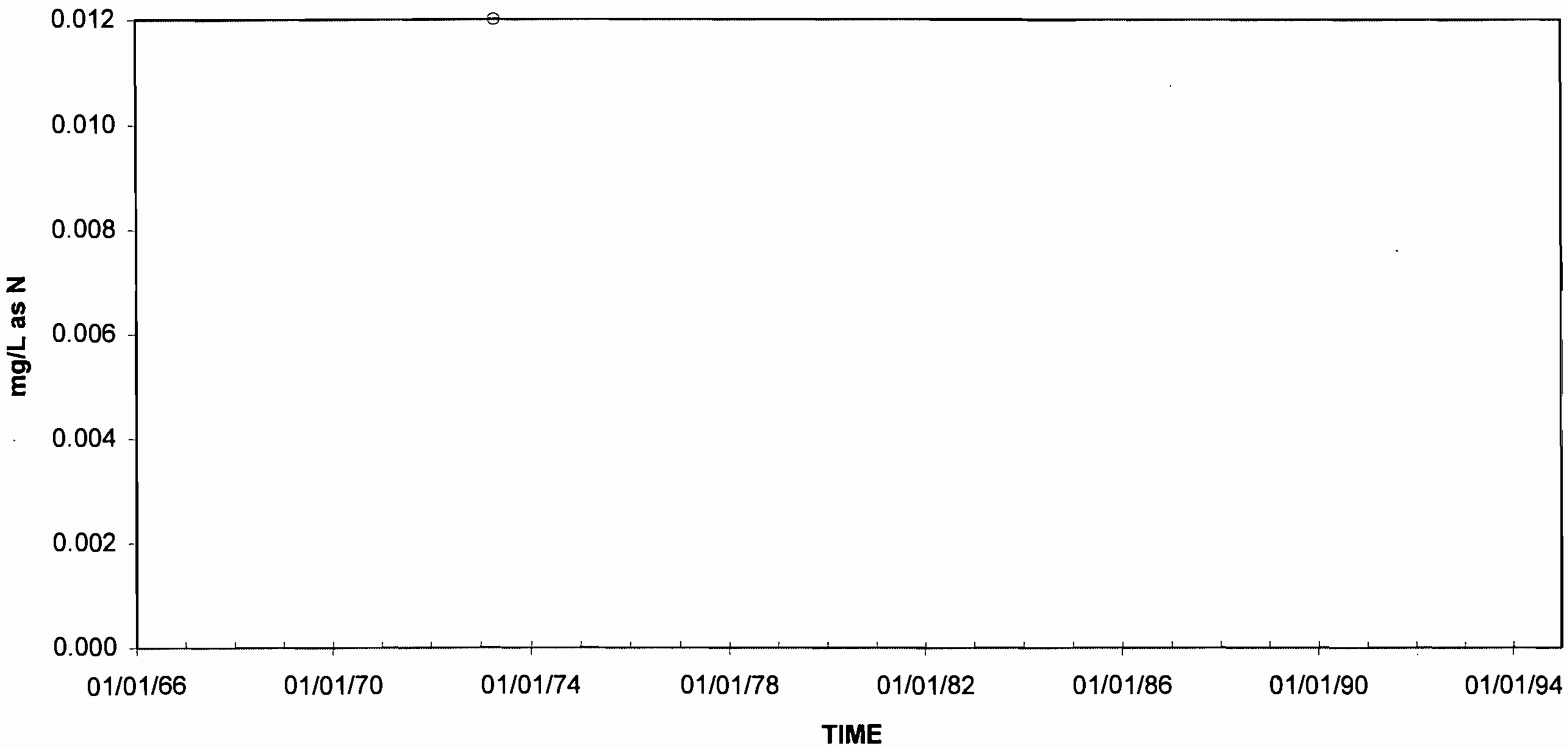
Figure
10.5.4–127



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
NITROGEN, NITRITE DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

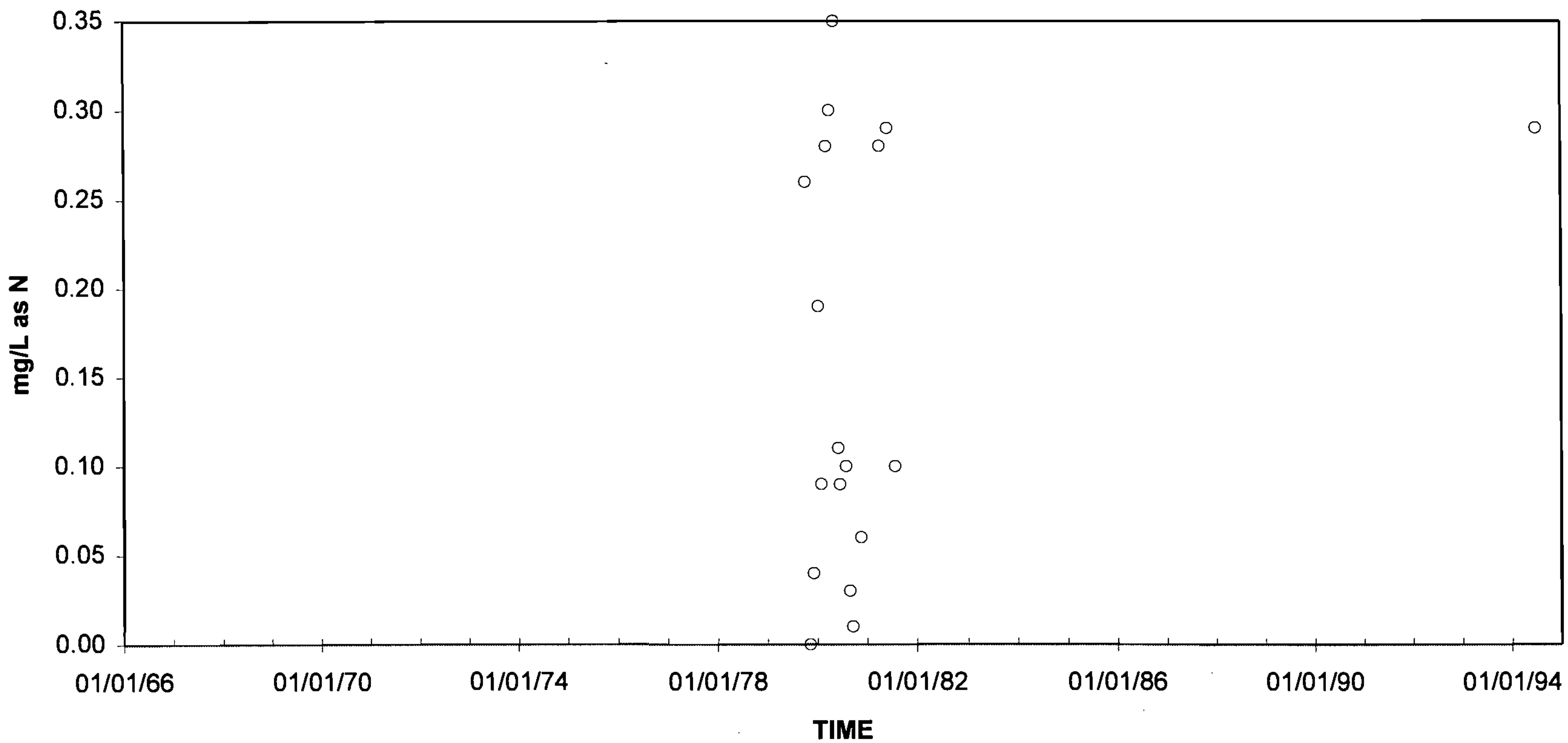
Figure 10.5.4–128



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
NITROGEN, NITRITE TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

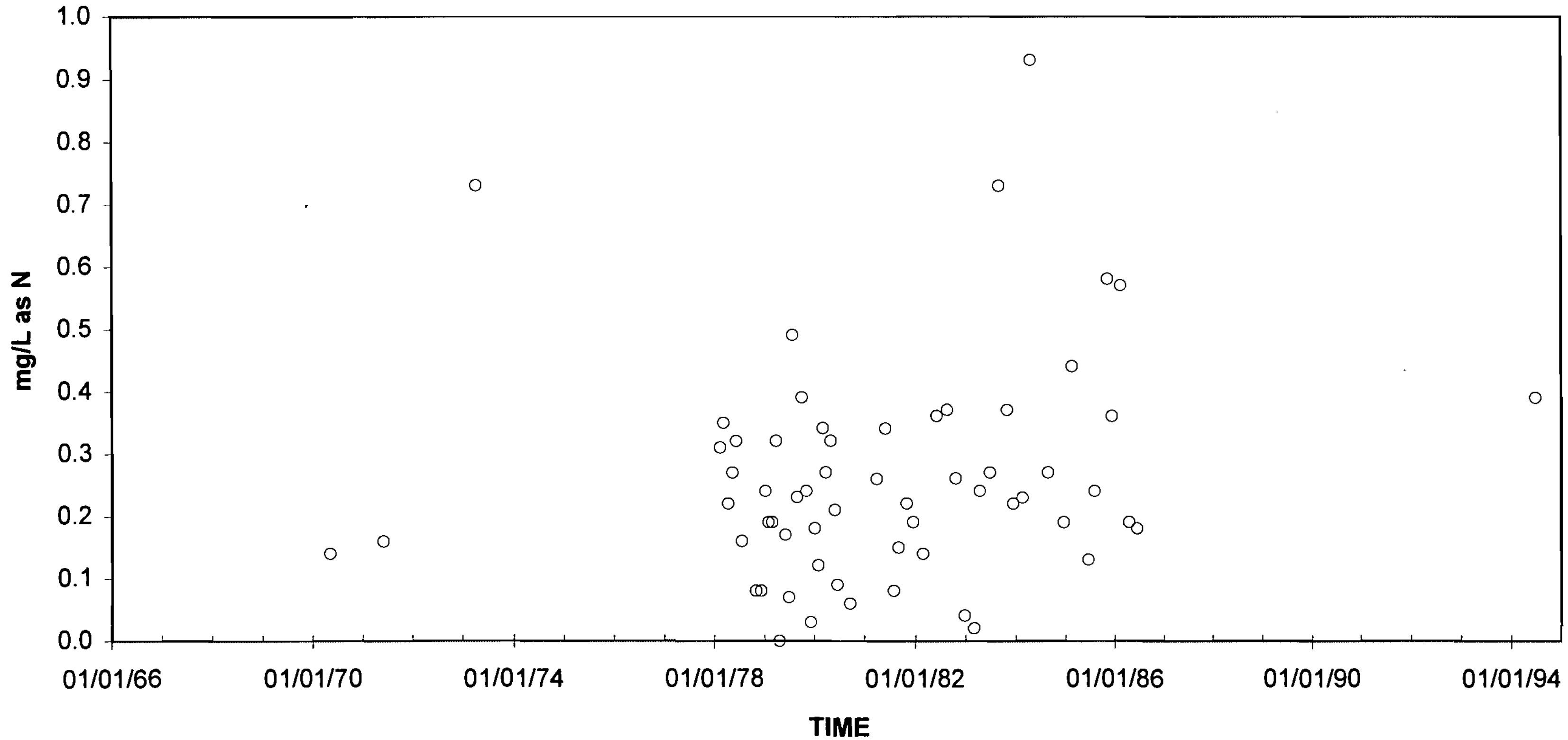
Figure
10.5.4–129



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
NITROGEN, ORGANIC DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

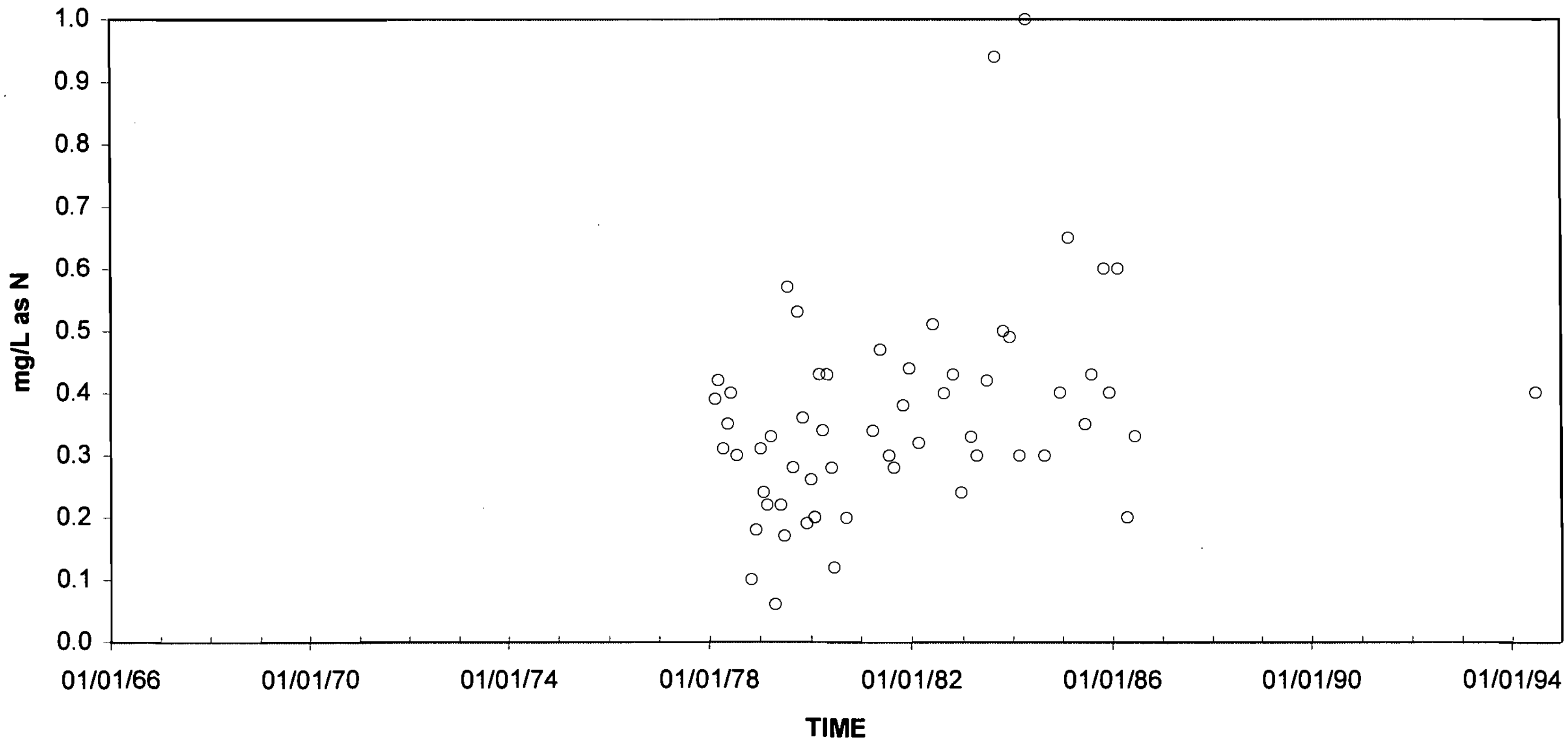
Figure
10.5.4–130



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
NITROGEN, ORGANIC TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

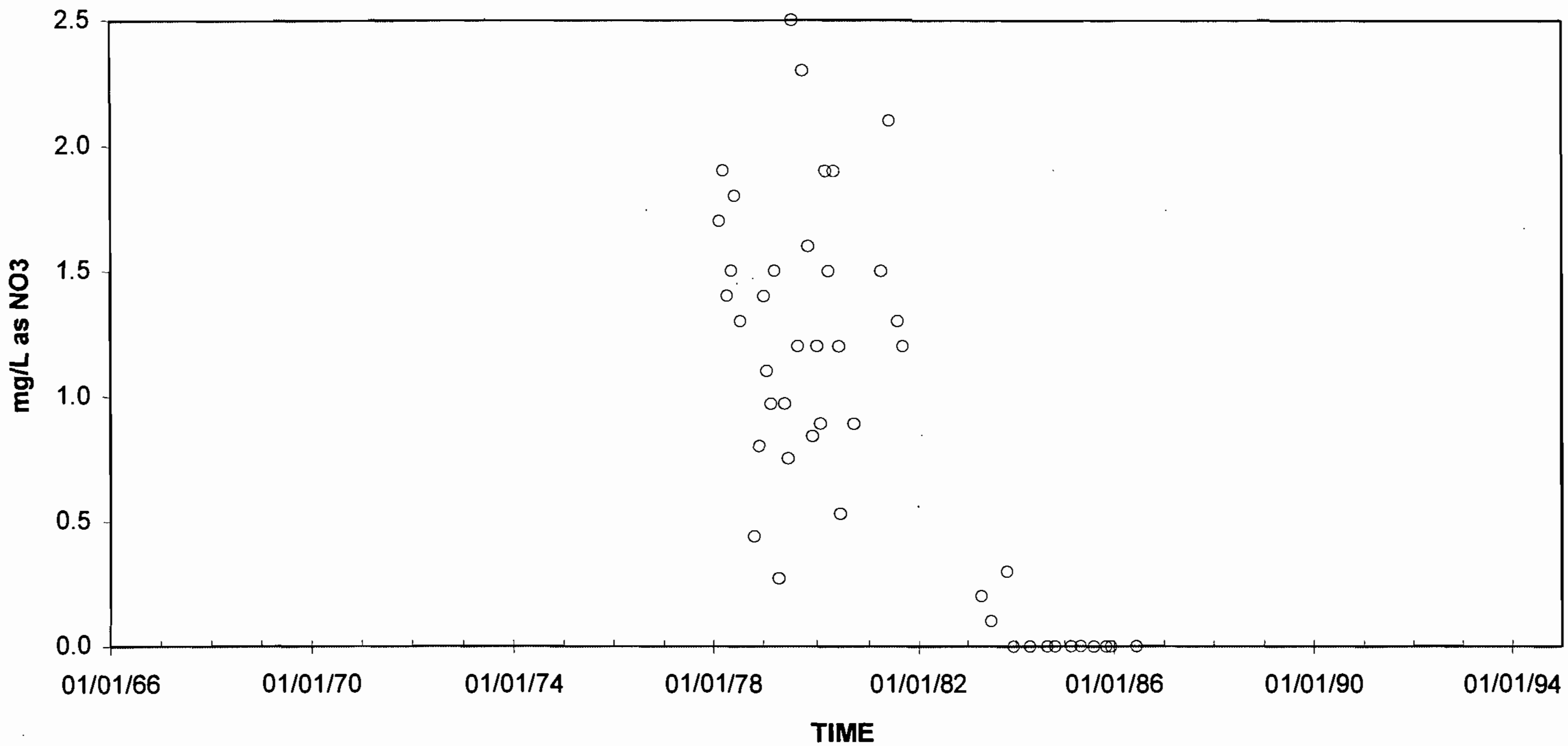
Figure
10.5.4–131



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
NITROGEN, TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

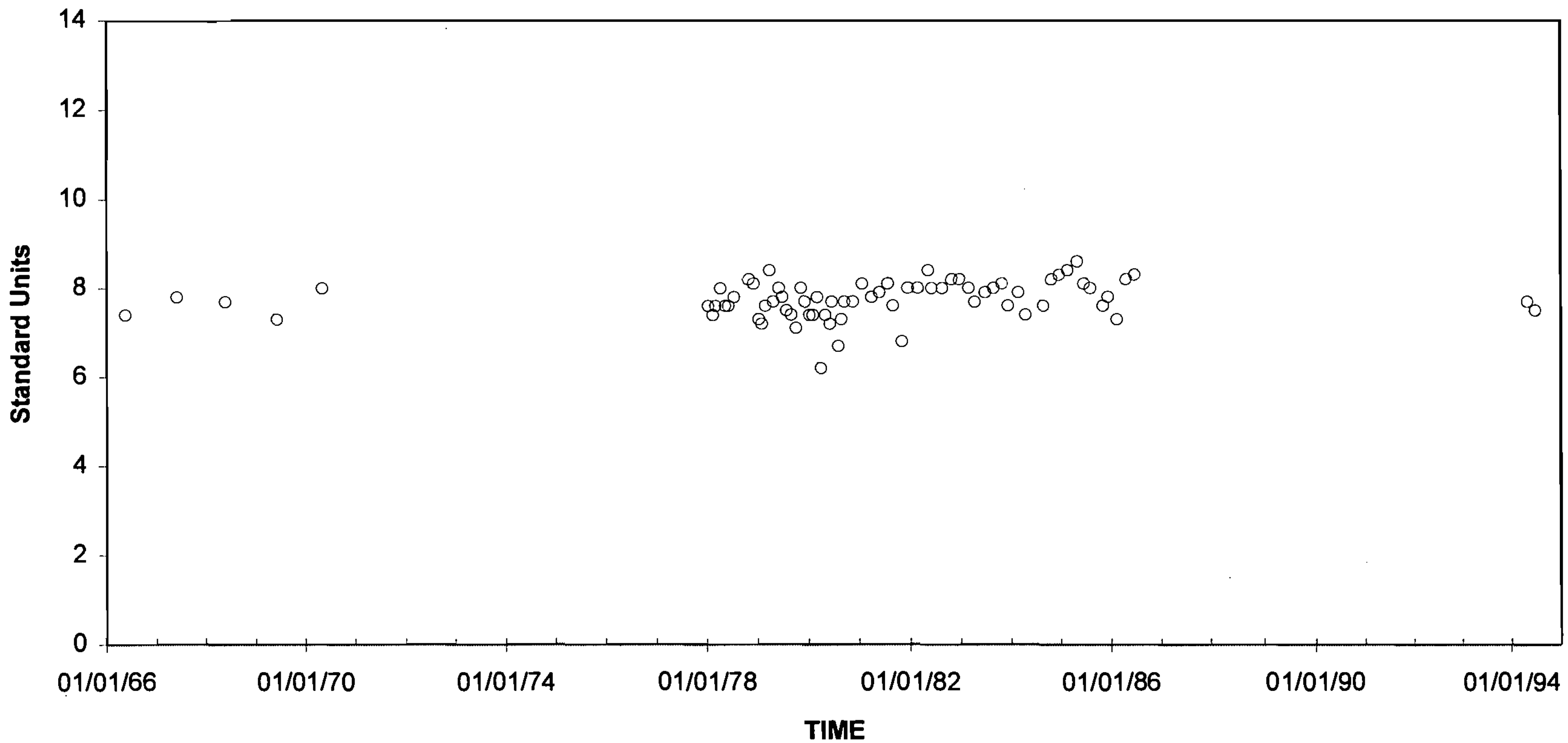
Figure
10.5.4–132



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
NITROGEN, TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

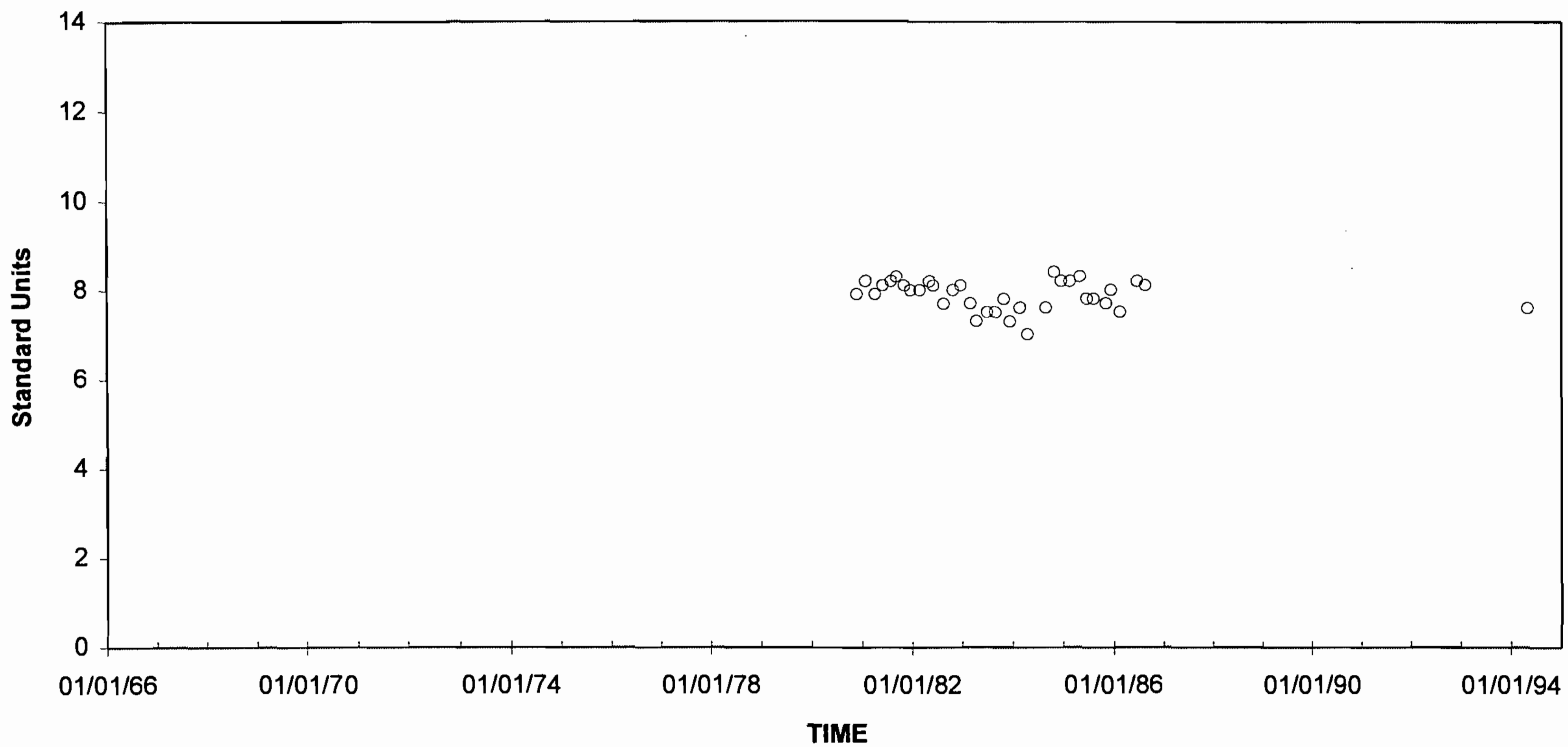
Figure
10.5.4–133



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
pH WATER WHOLE FIELD
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

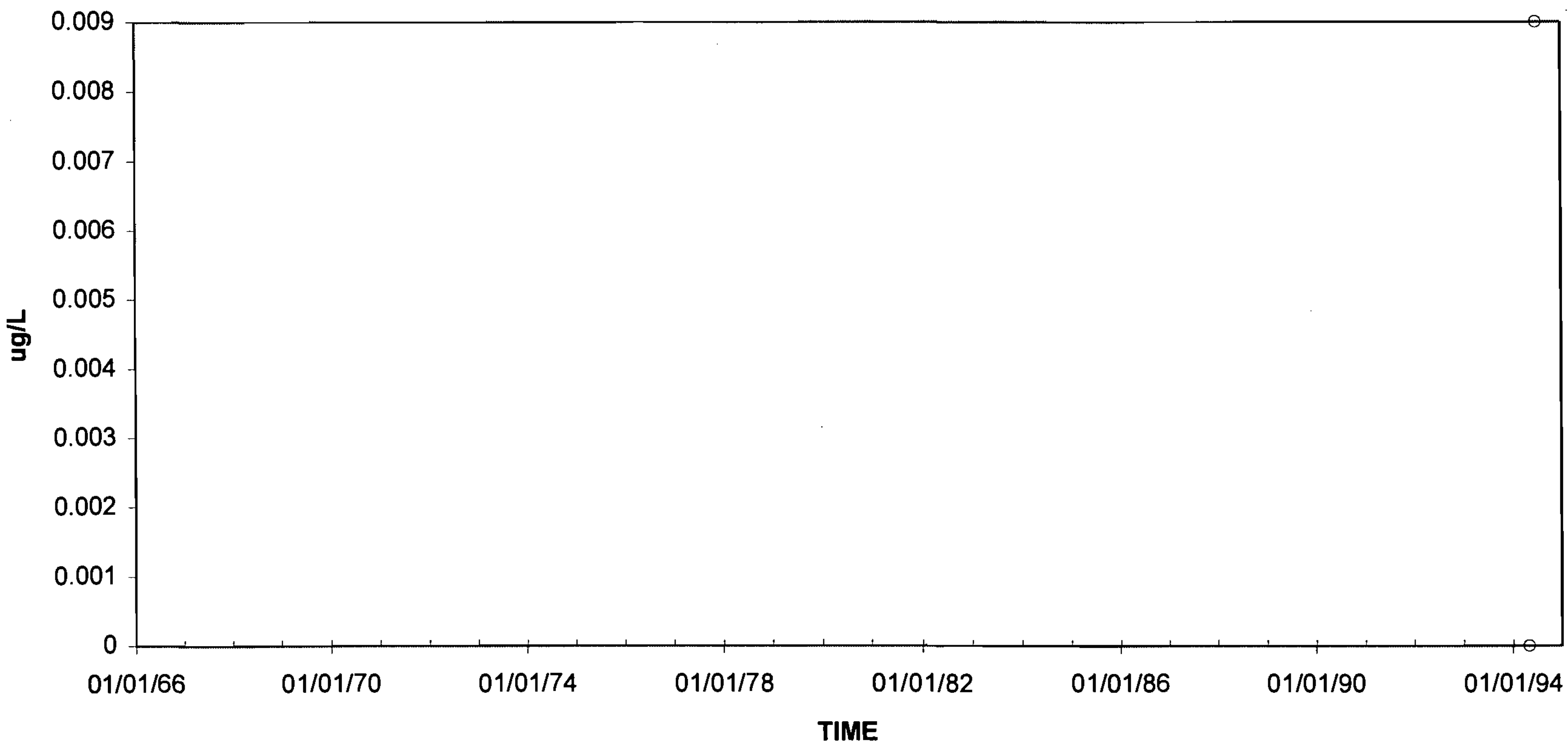
Figure
10.5.4–134



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
pH WATER WHOLE LAB
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

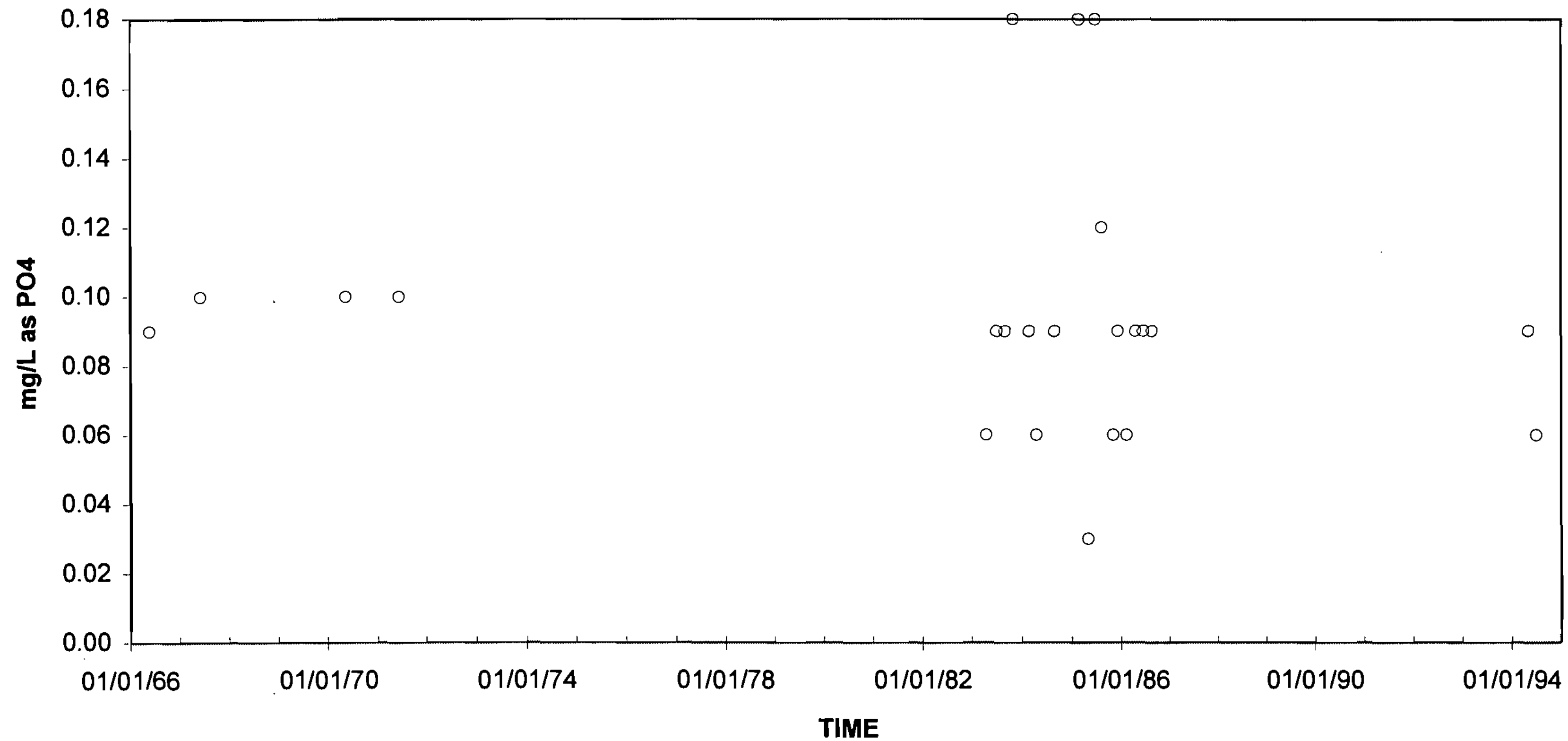
Figure
10.5.4–135



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
PHORATE, WATER FLTRD GF 0.7U REC
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

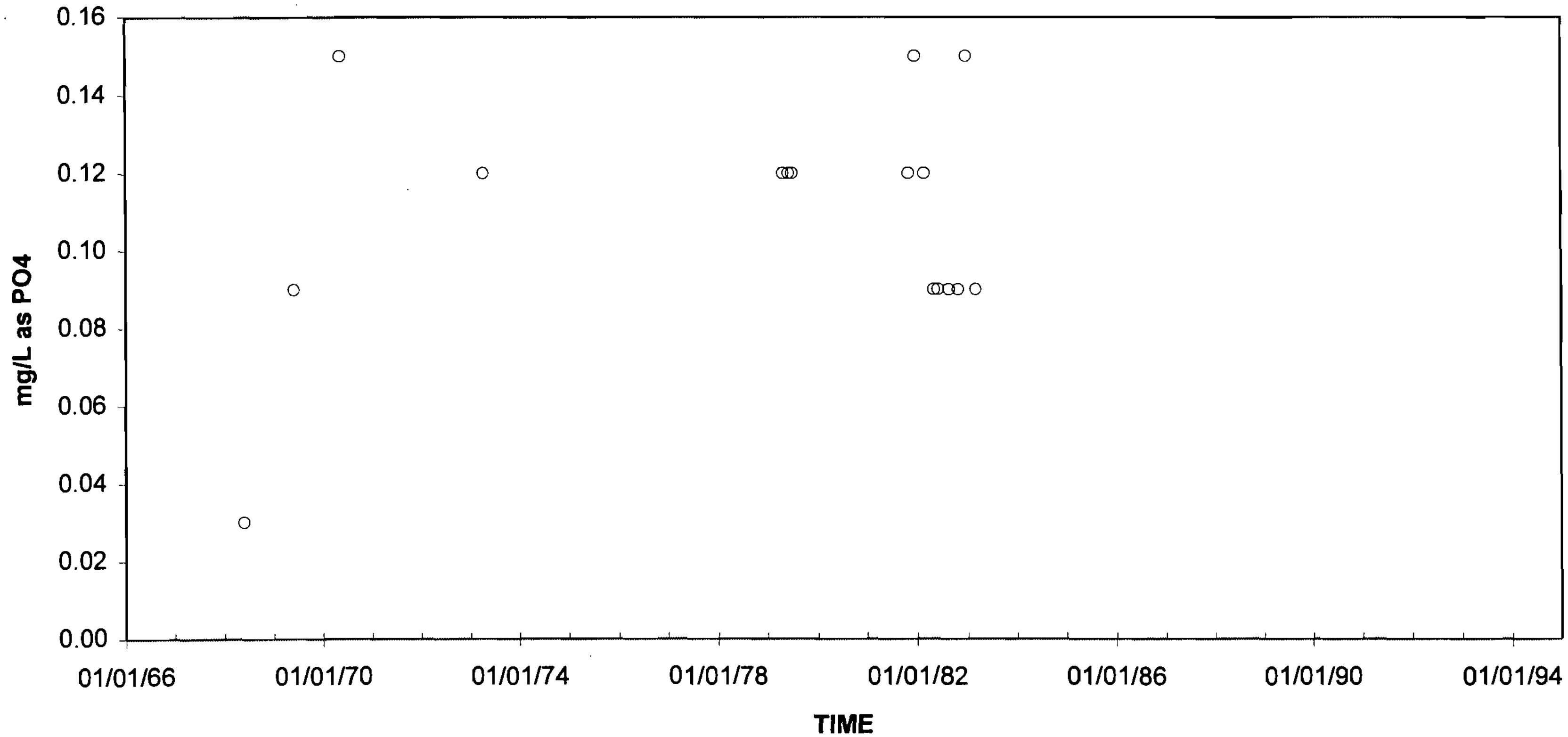
Figure
10.5.4-136



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
PHOSPHATE, ORTHO DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

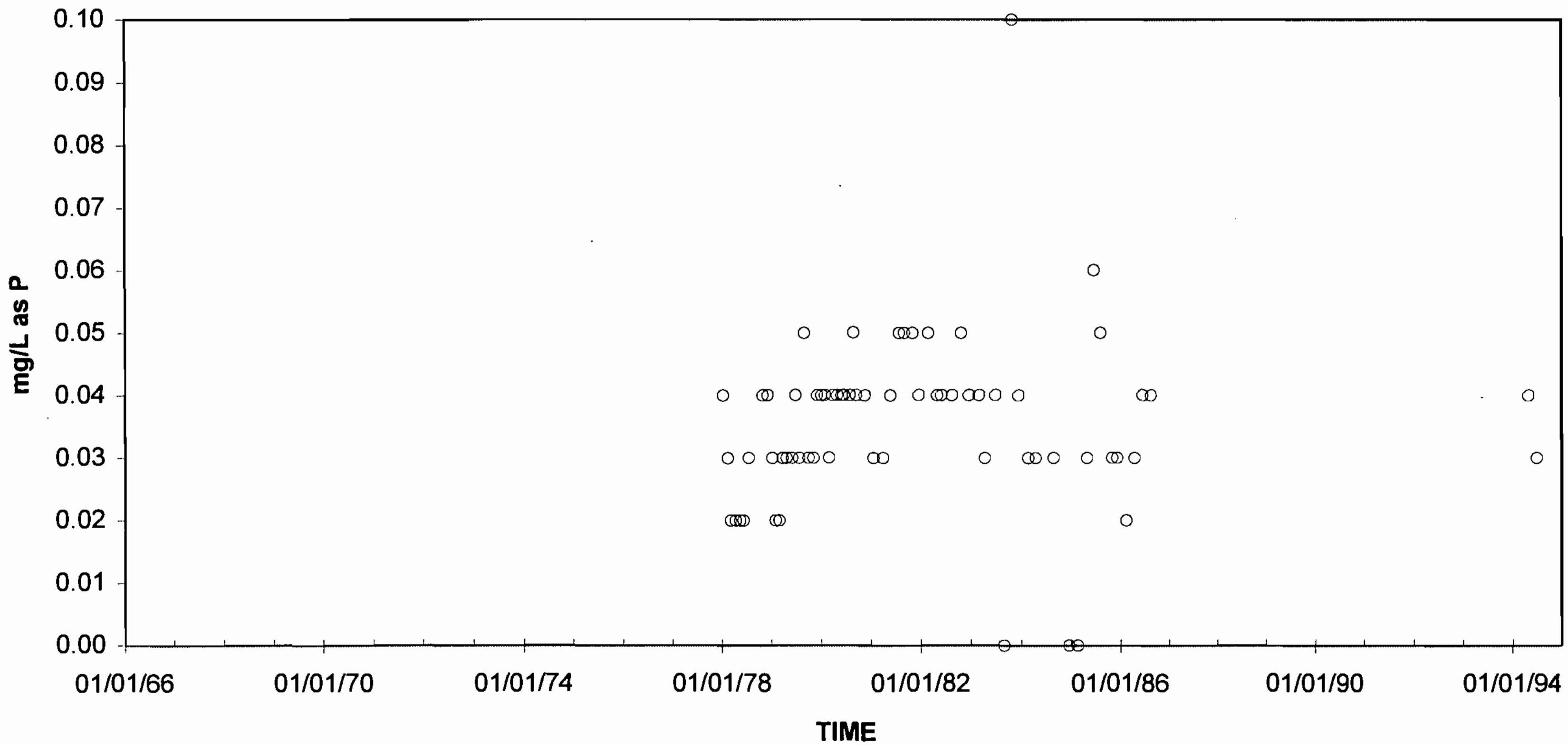
Figure 10.5.4–137



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
PHOSPHATE, TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

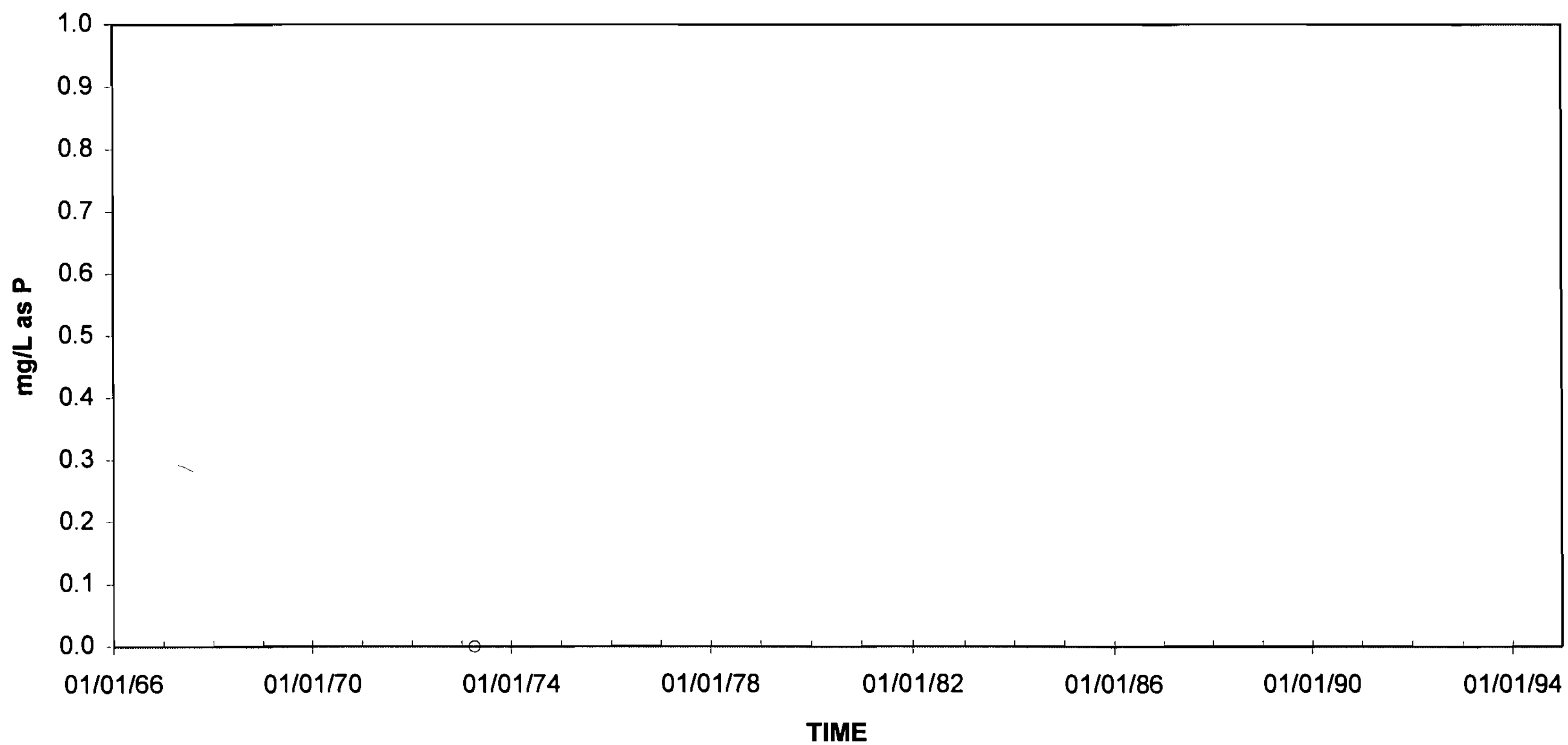
Figure
10.5.4–138



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
PHOSPHORUS, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

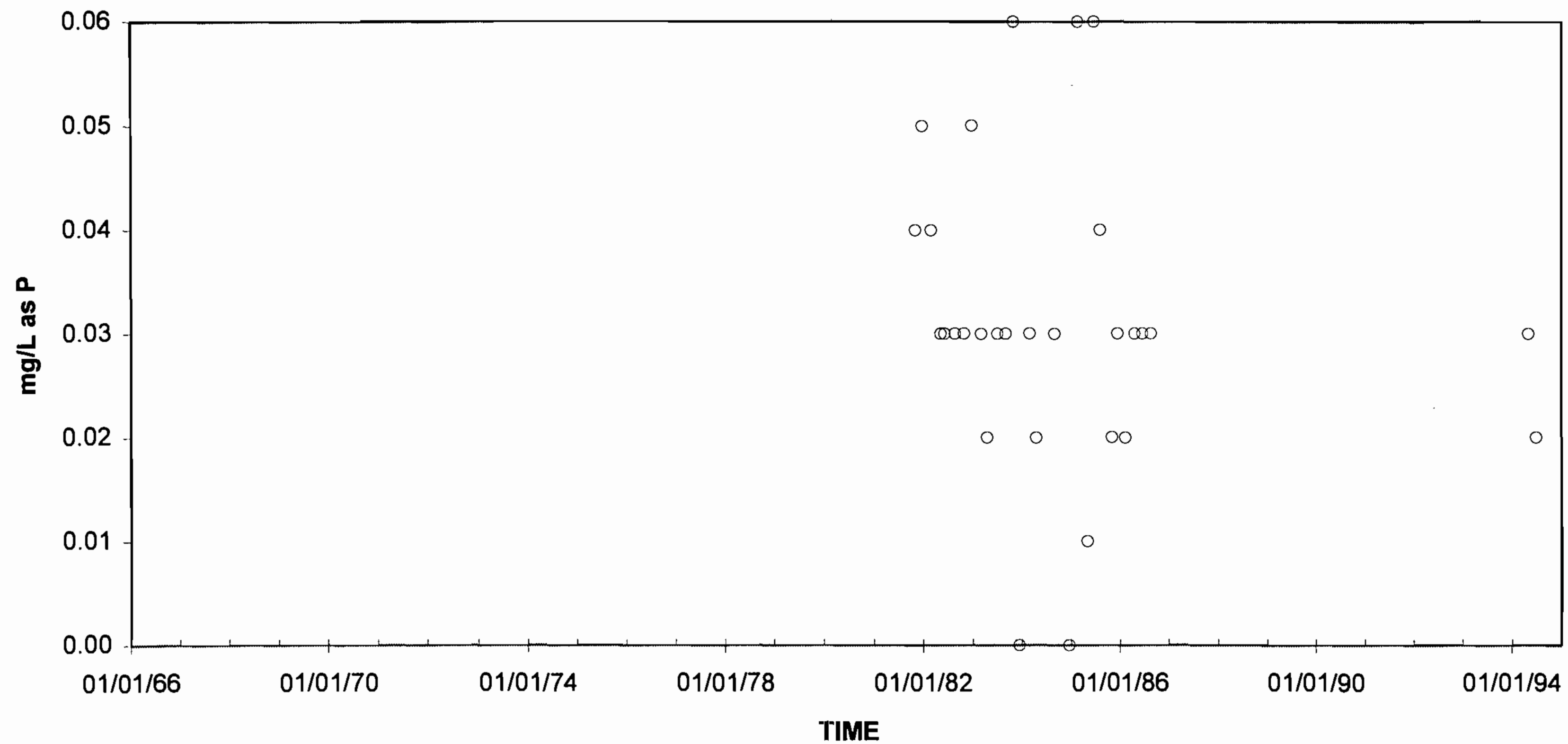
Figure
10.5.4–139



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
PHOSPHORUS, ORGANIC TOTAL
PURDOM UNIT 8 PROJECT -- St MARKS, FLORIDA

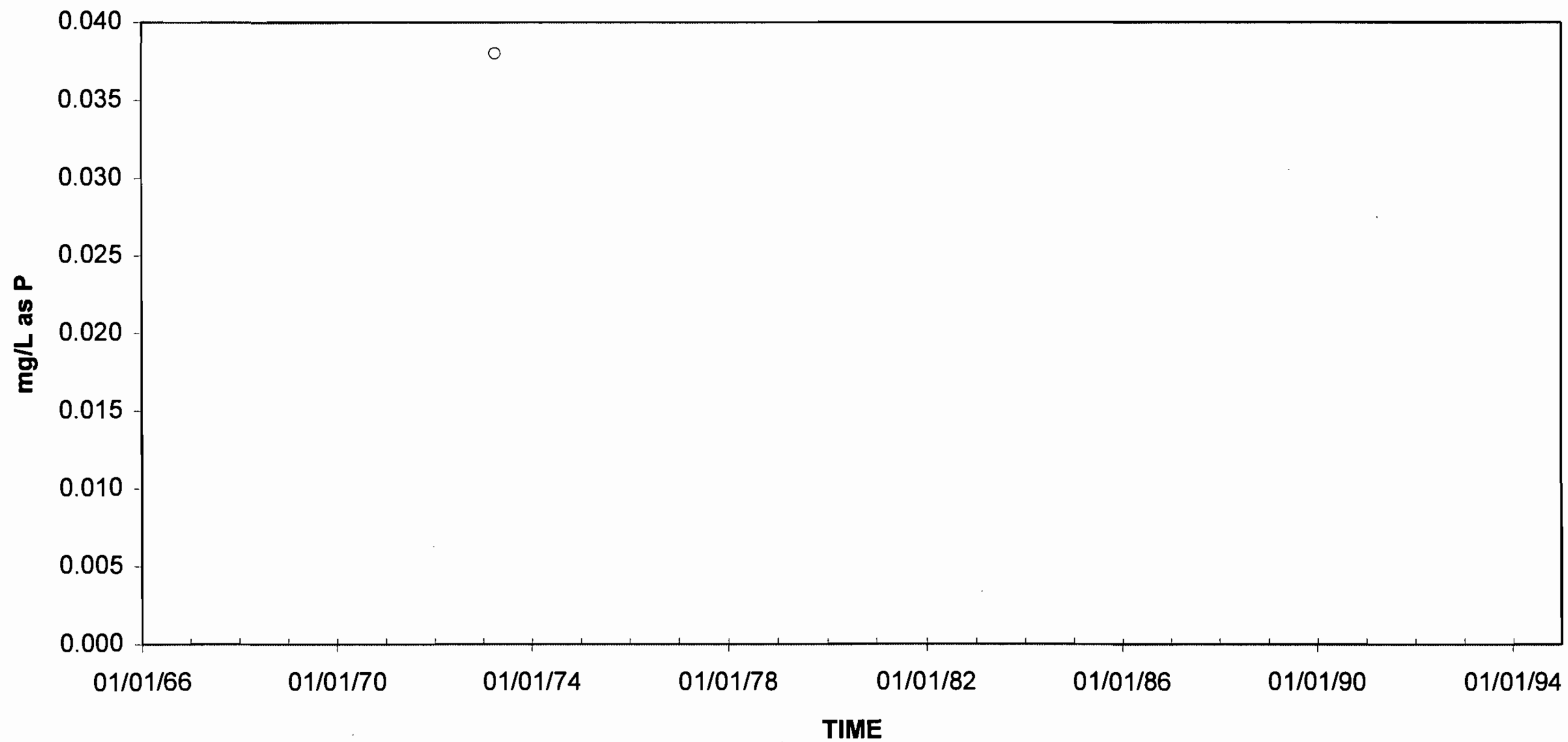
Figure
10.5.4-140



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
PHOSPHORUS, ORTHO DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

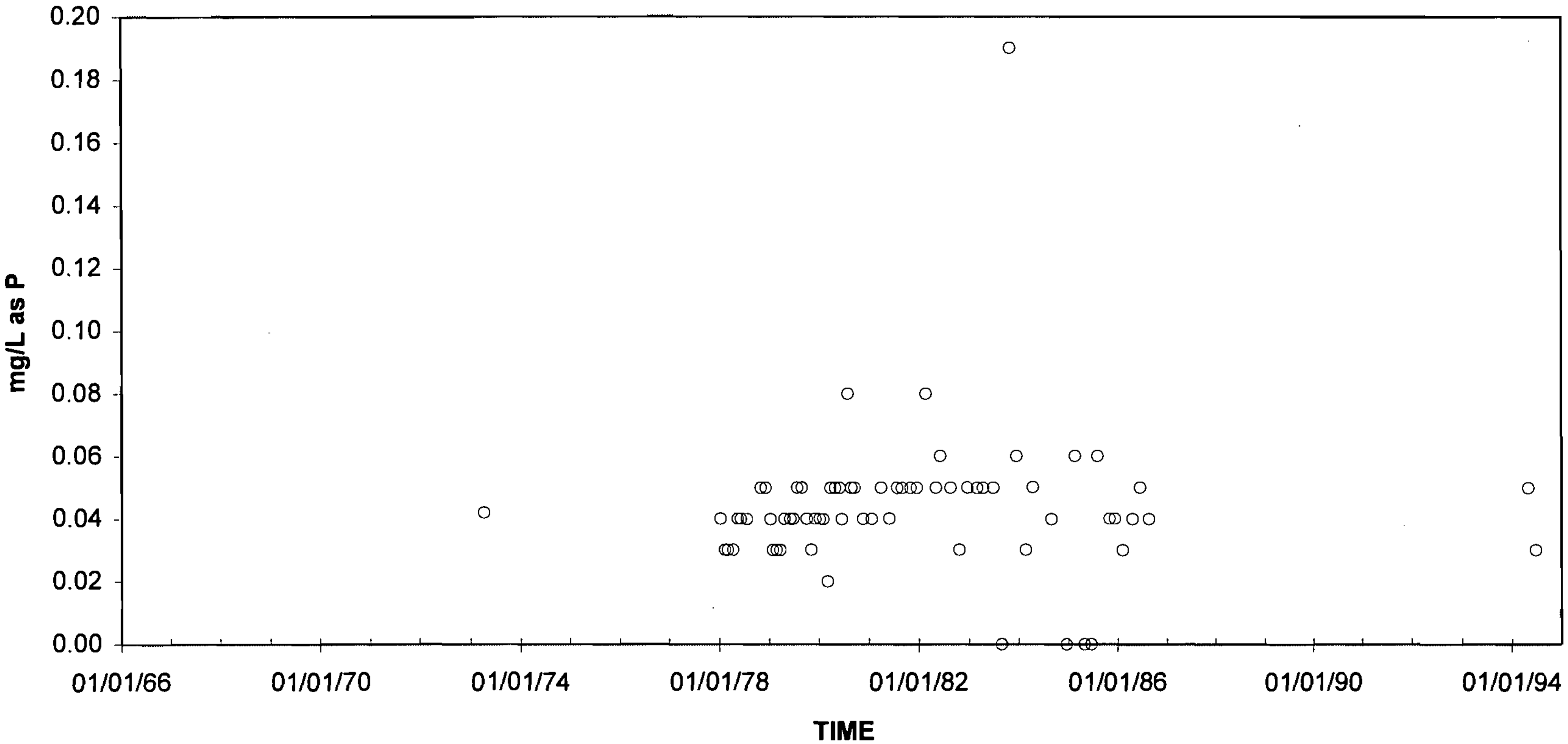
Figure
10.5.4–141



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
PHOSPHORUS, ORTHO TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

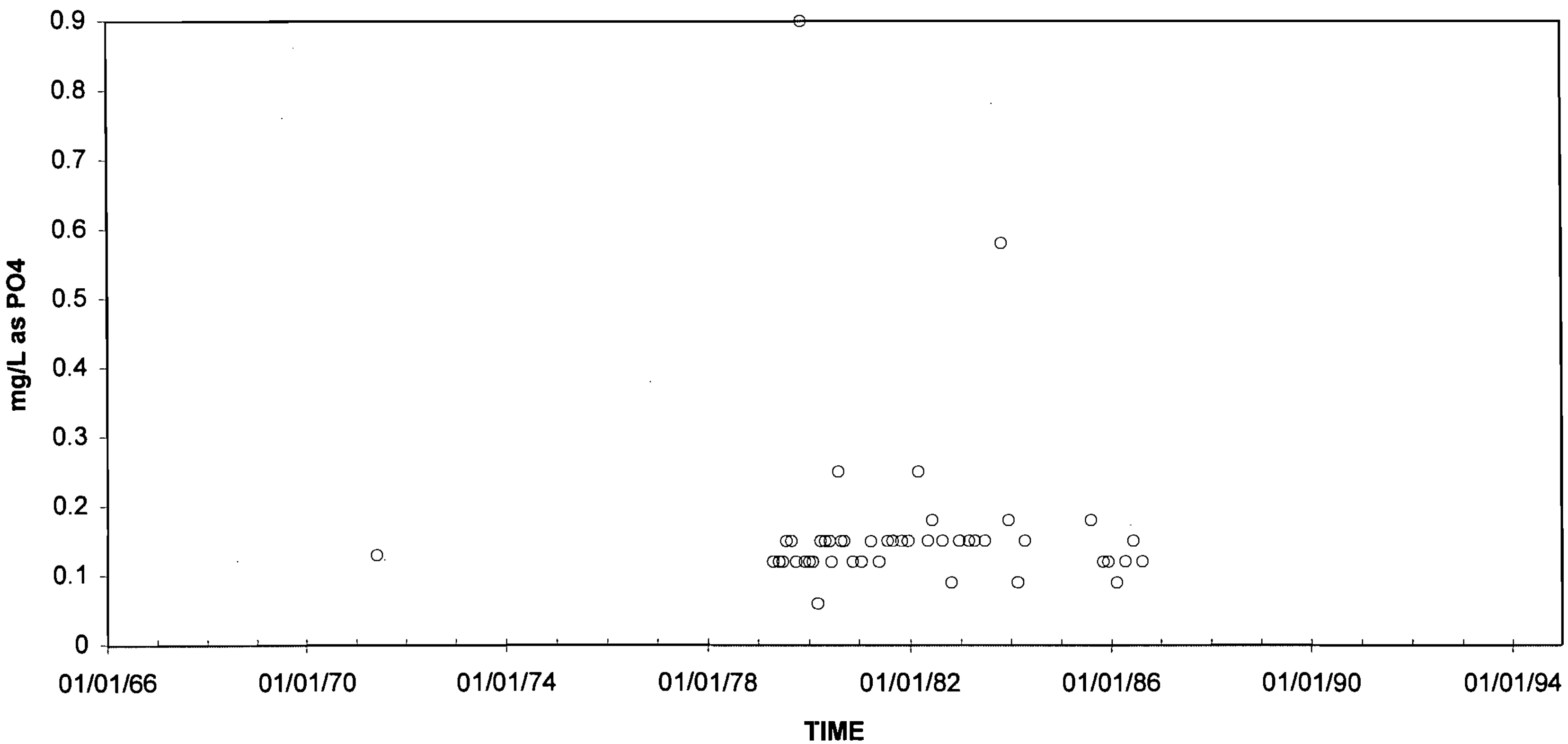
Figure 10.5.4-142



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
PHOSPHORUS, TOTAL
PURDOM UNIT 8 PROJECT - St MARKS, FLORIDA

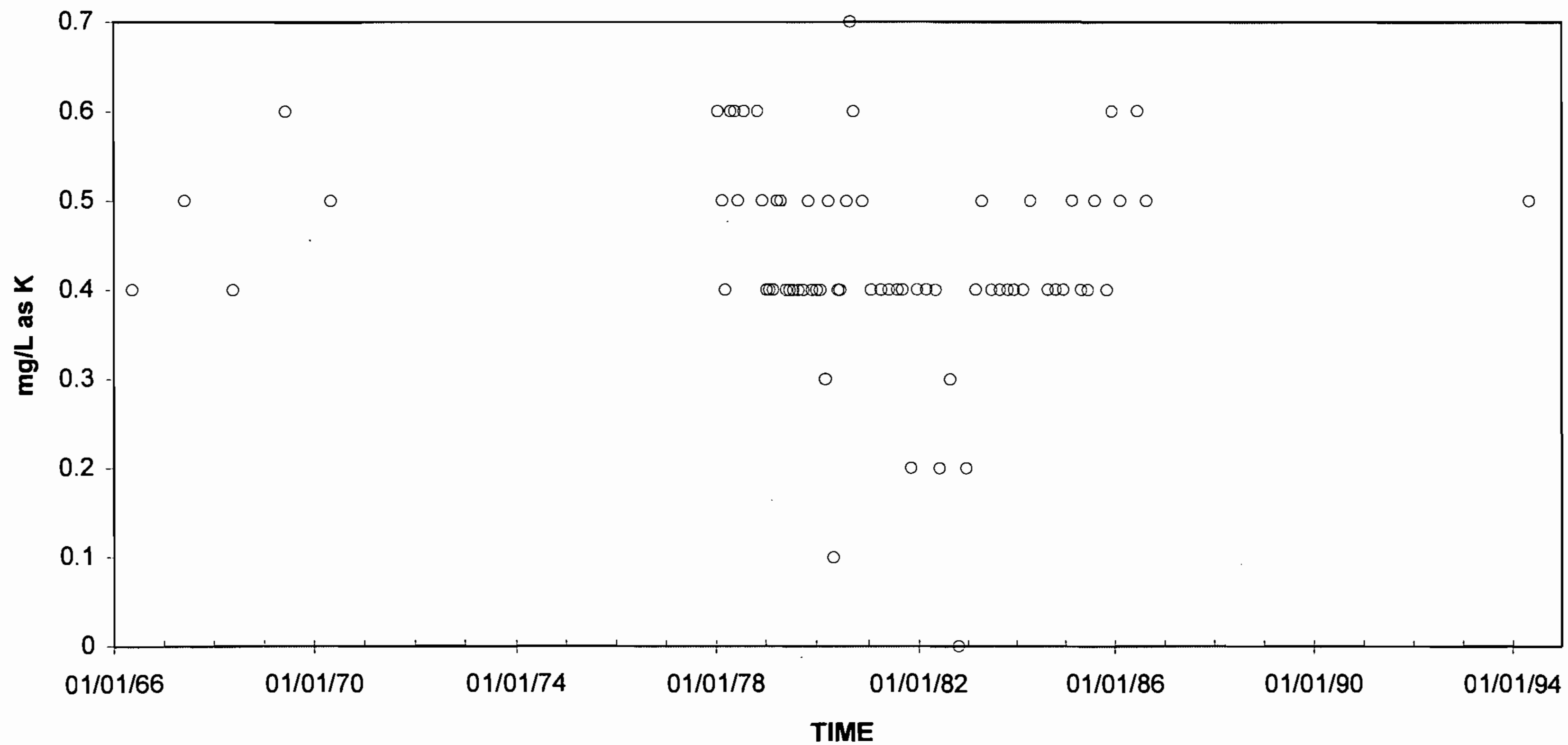
Figure
10.5.4-143



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
PHOSPHORUS, TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

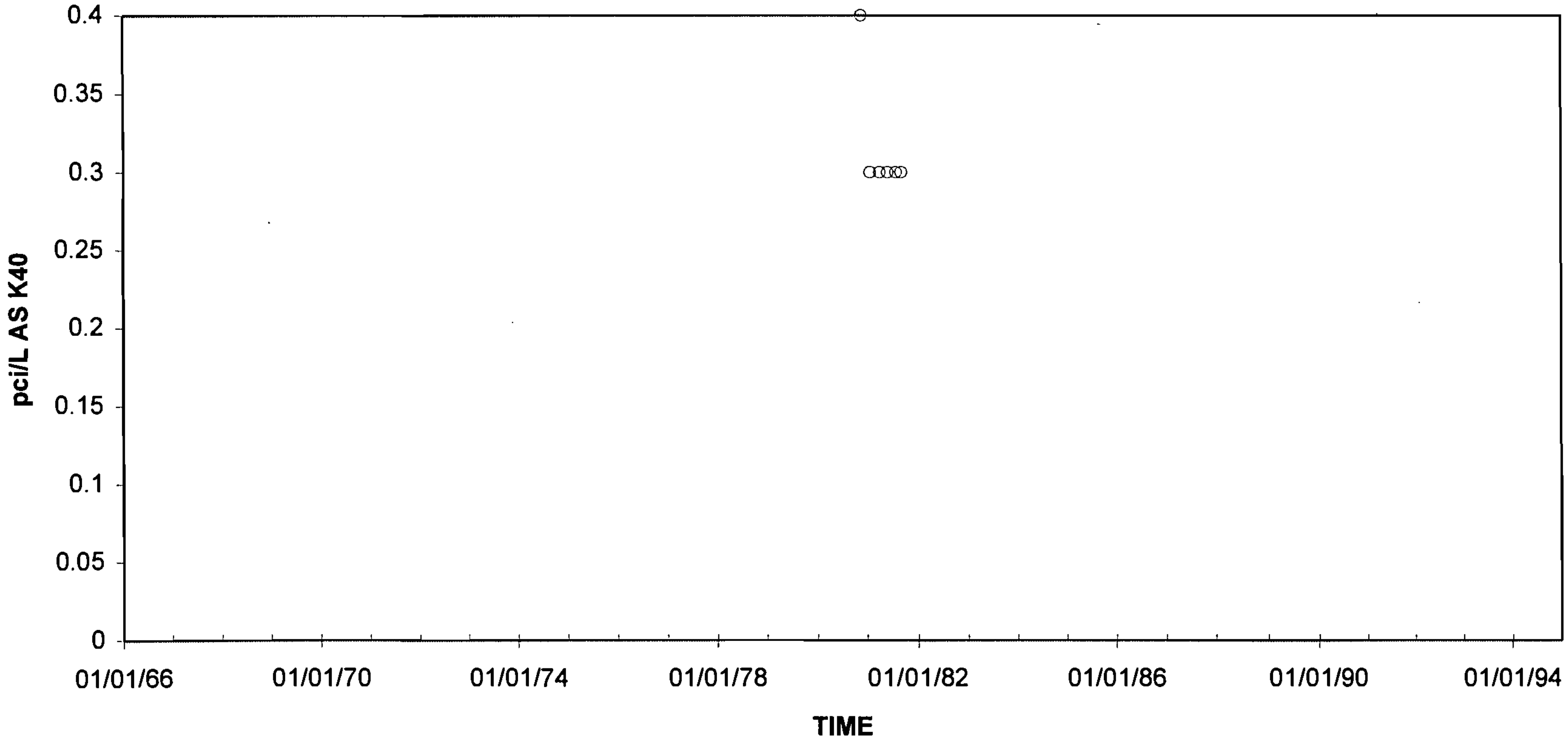
Figure
10.5.4–144



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
POTASSIUM, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

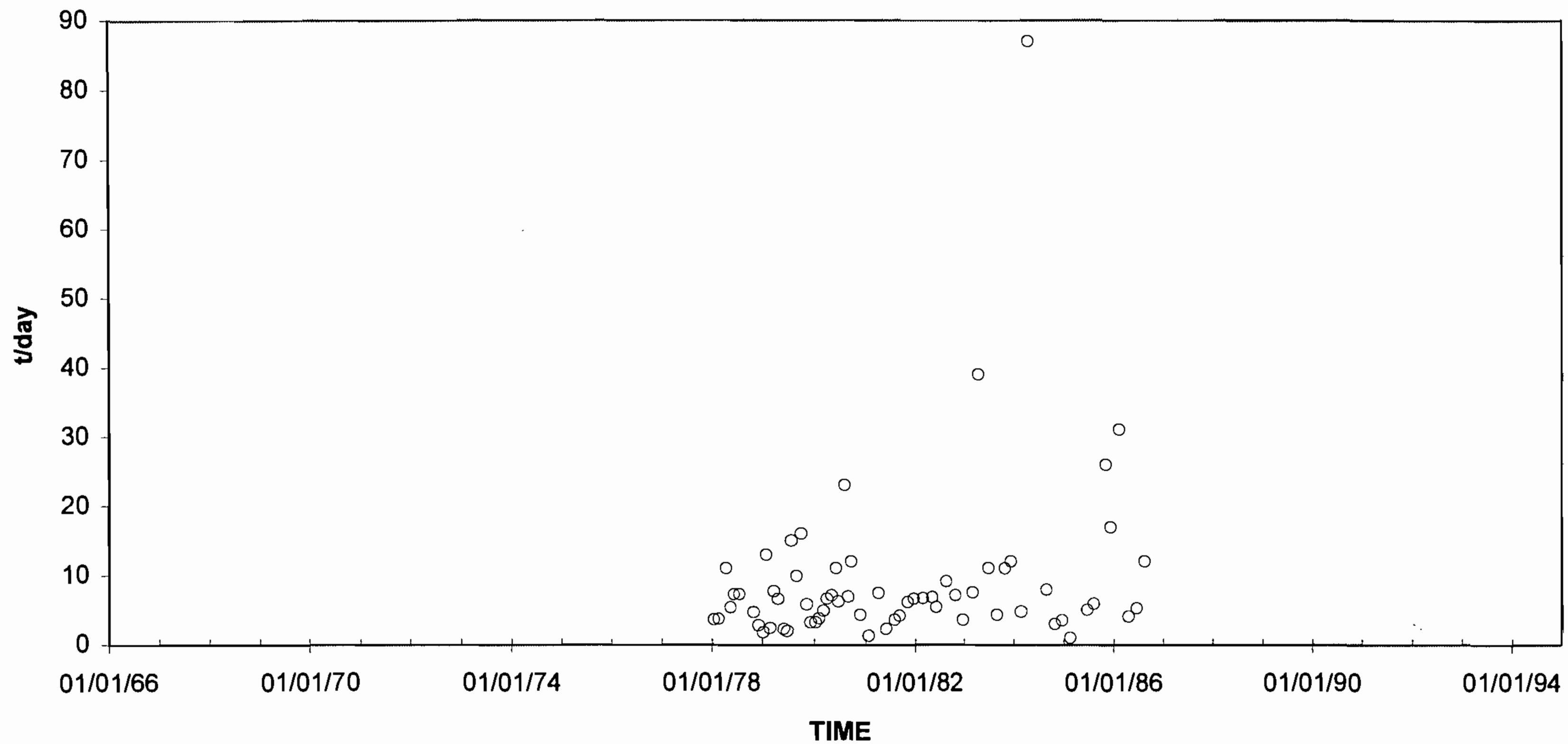
Figure
10.5.4–145



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
POTASSIUM 40, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

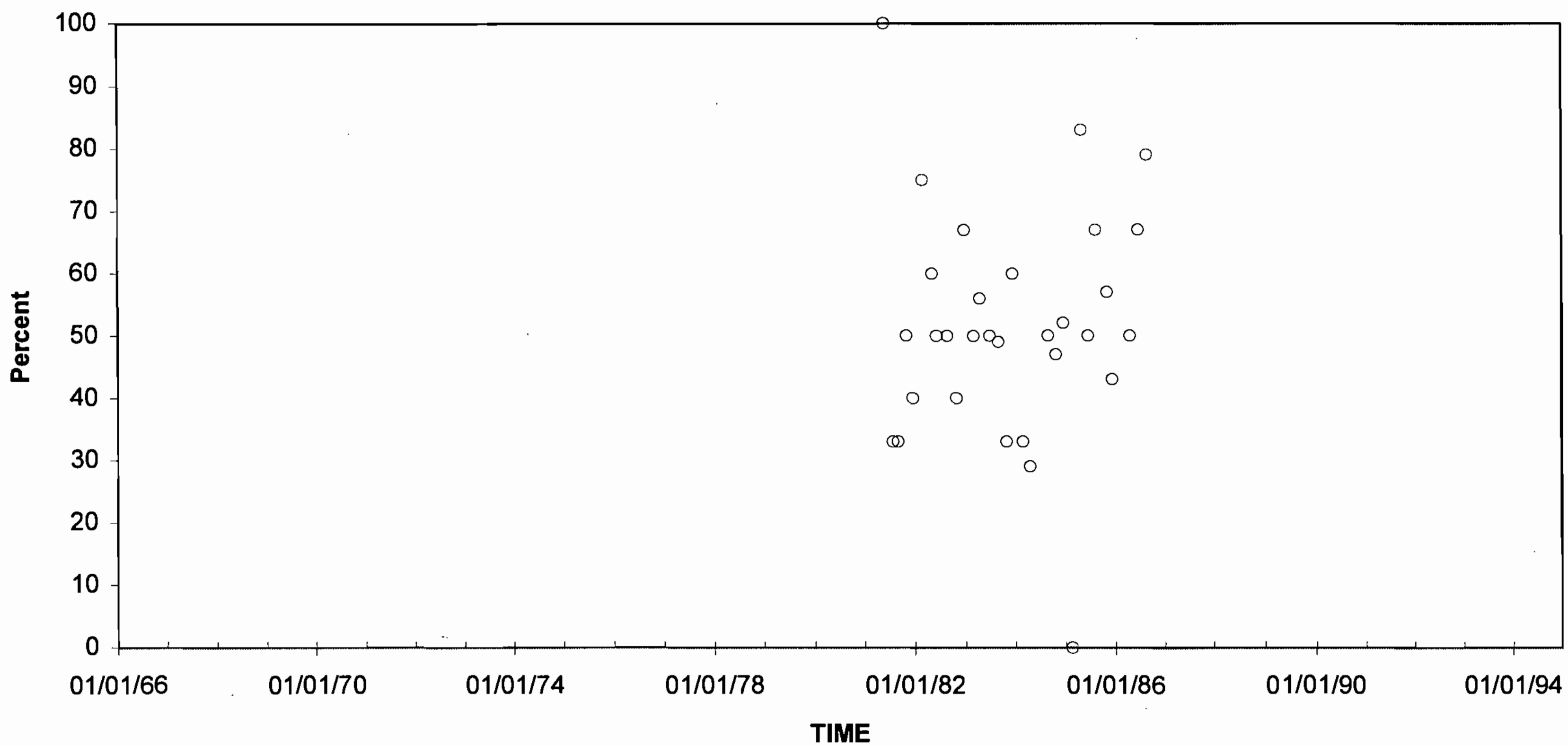
Figure 10.5.4–146



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
SEDIMENT, DISCHARGE SUSPENDED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

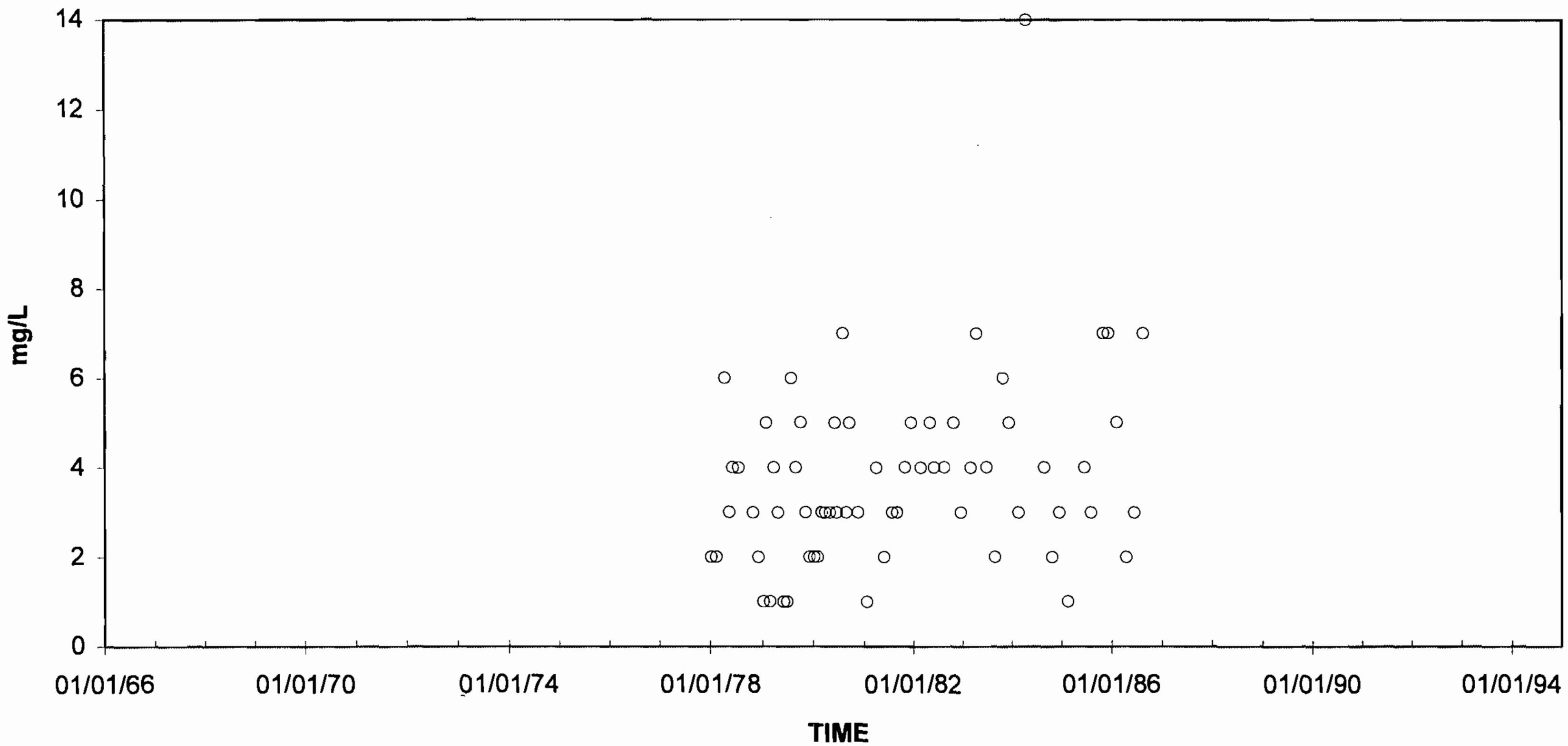
Figure
10.5.4–147



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
SED SUSP SIEVE DIAM % FINER THAN .062MM
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

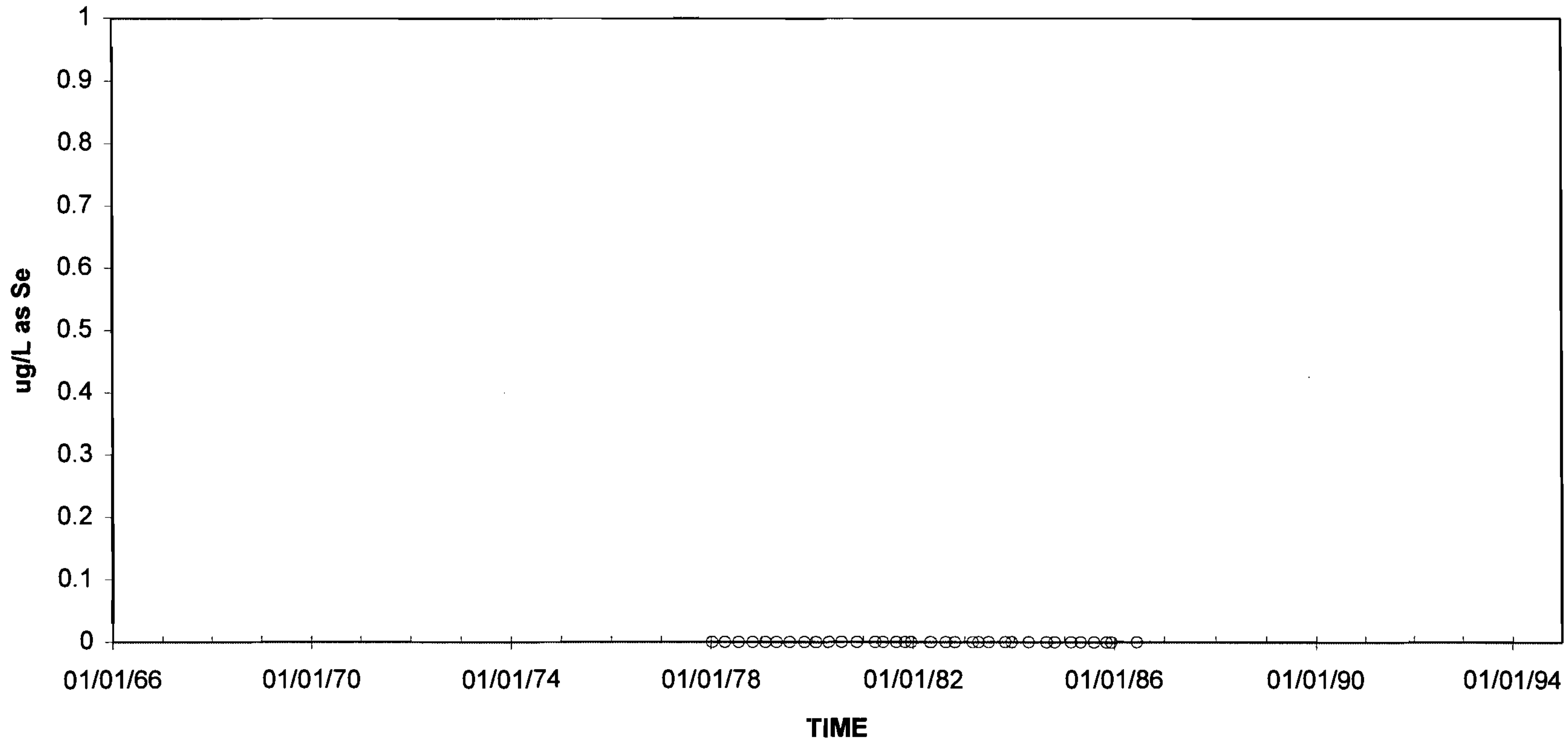
Figure
10.5.4–148



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
SEDIMENT, SUSPENDED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

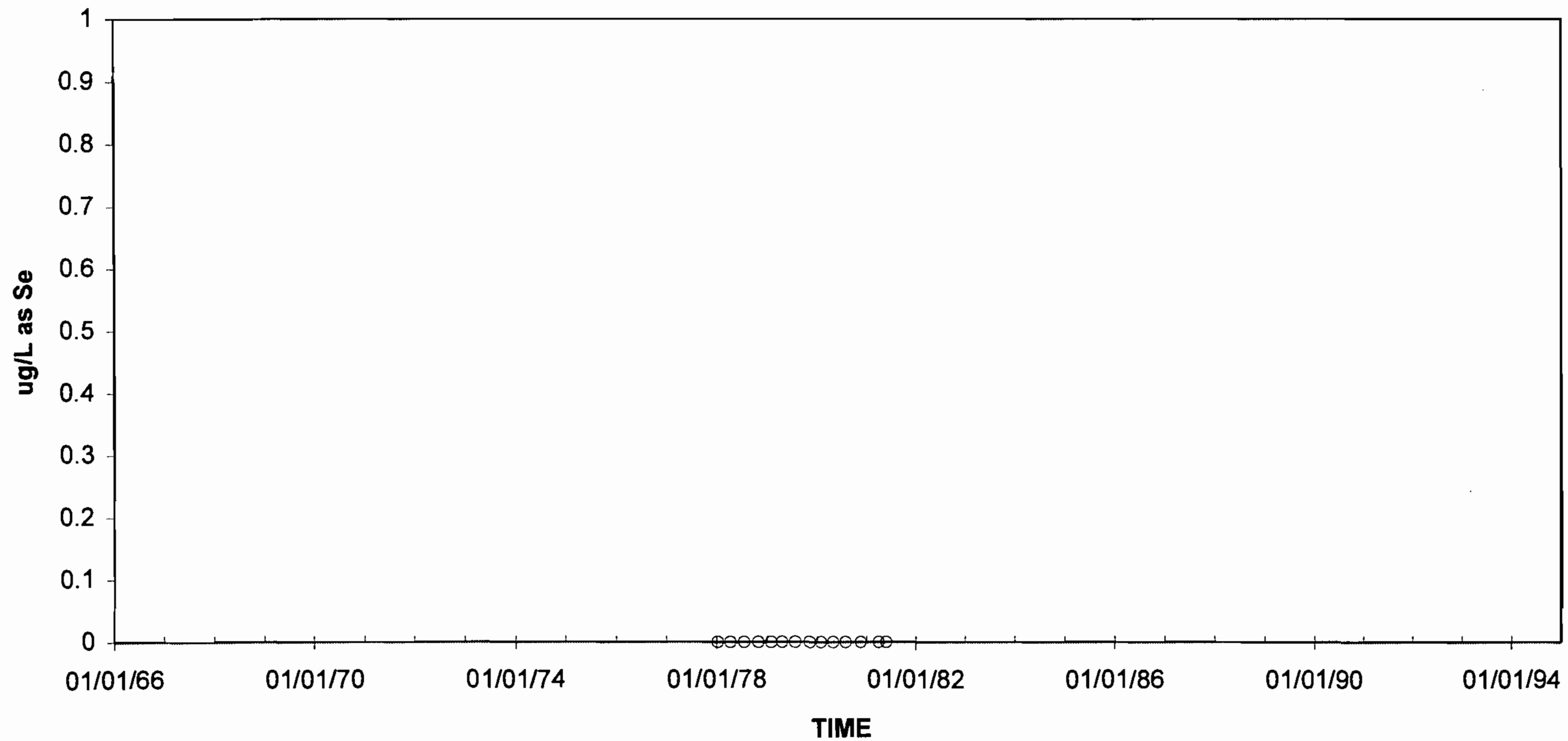
Figure
10.5.4–149



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
SELENIUM, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

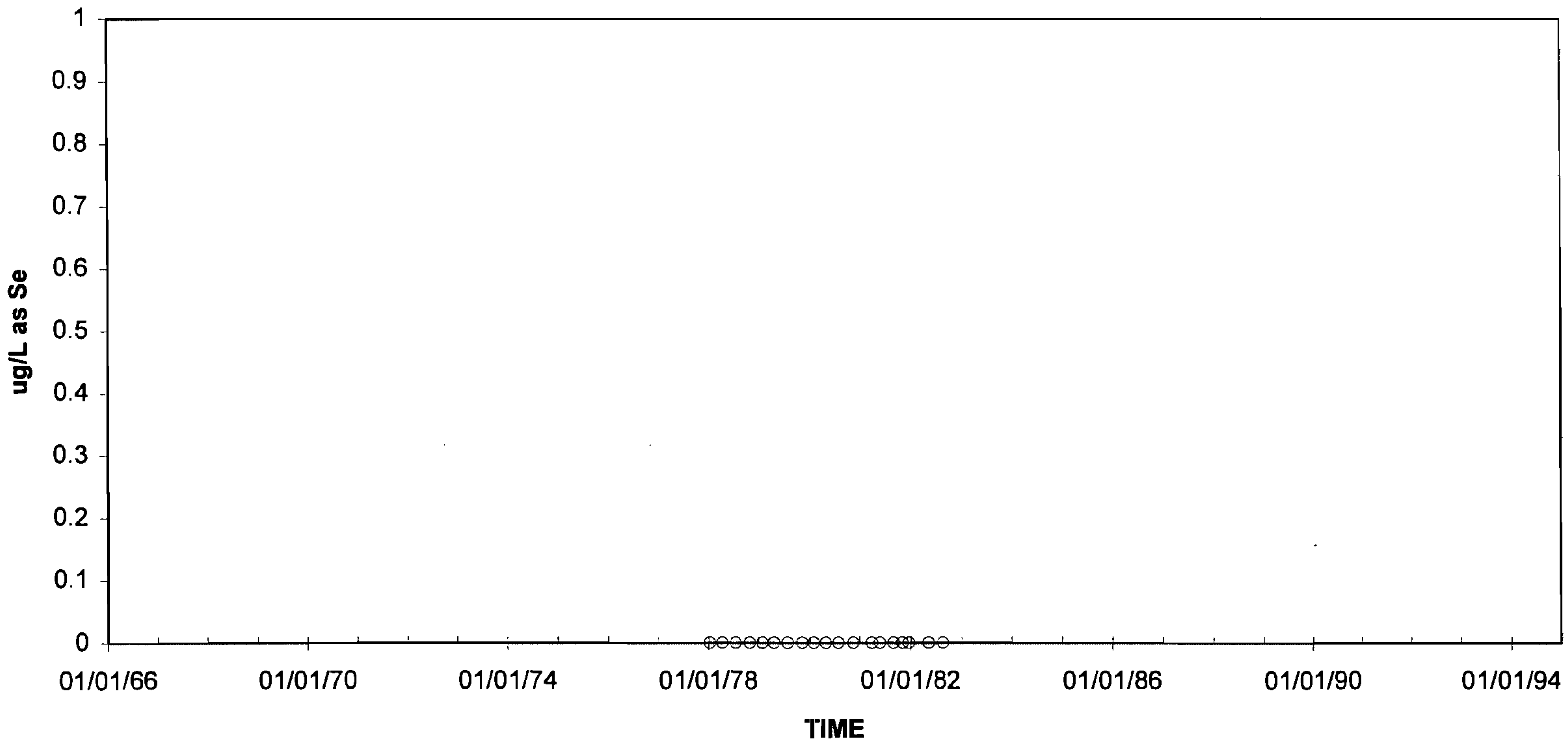
Figure
10.5.4–150



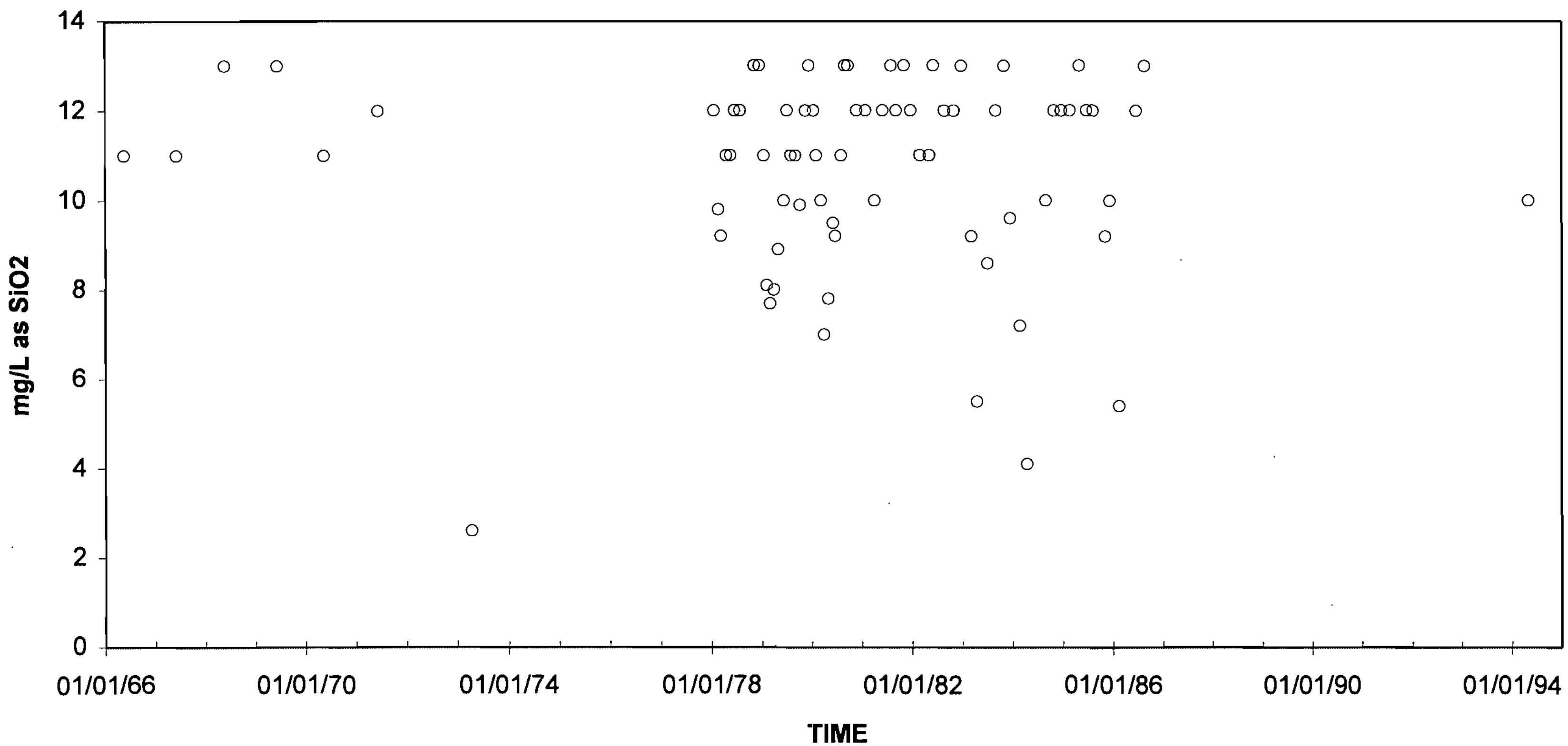
CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
SELENIUM, SUSPENDED TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

Figure 10.5.4–151



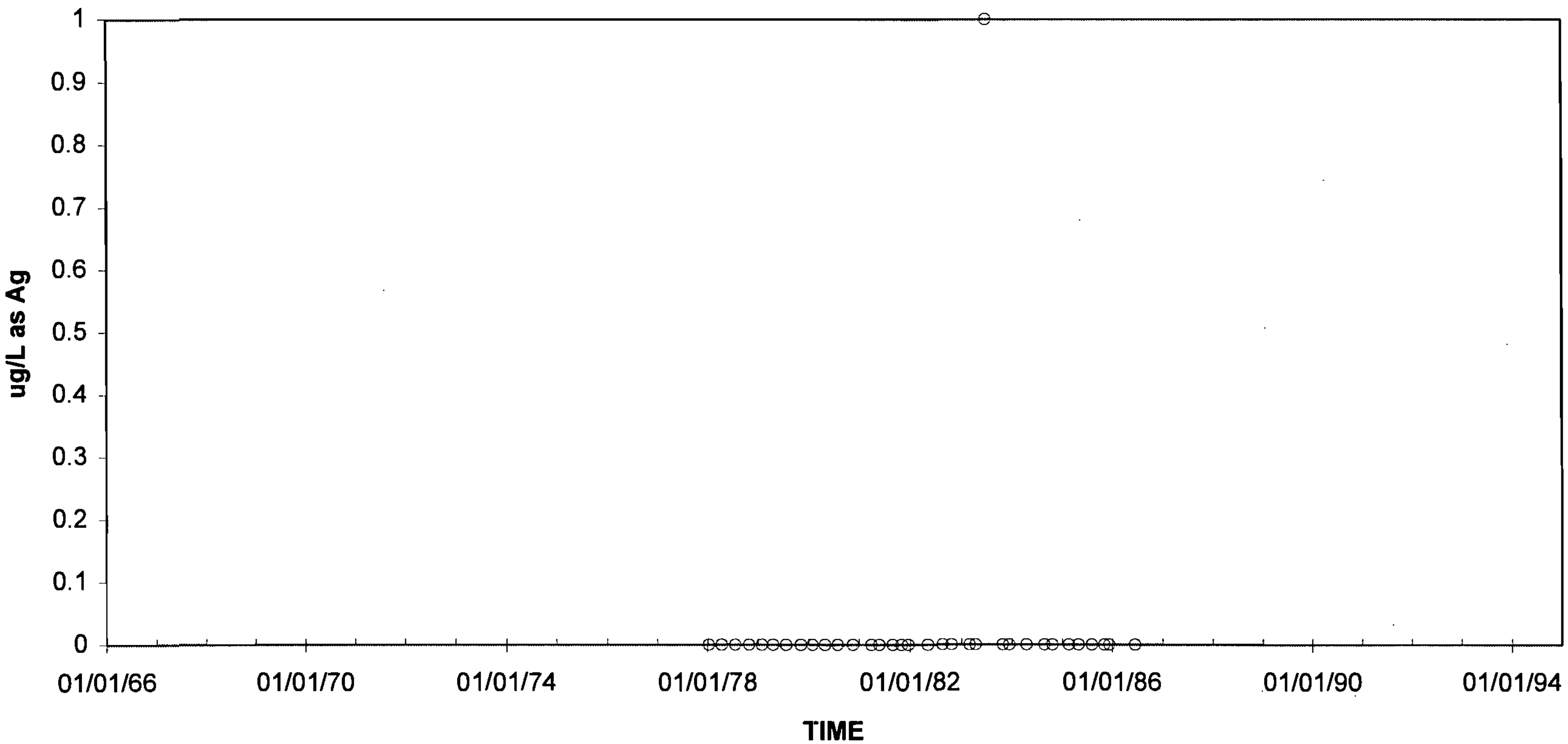
CITY OF TALLAHASSEE	ST. MARKS RIVER NEAR NEWPORT, FLORIDA USGS STATION NUMBER 02326900 SELENIUM, TOTAL PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA	Figure 10.5.4–152



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
SILICA, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

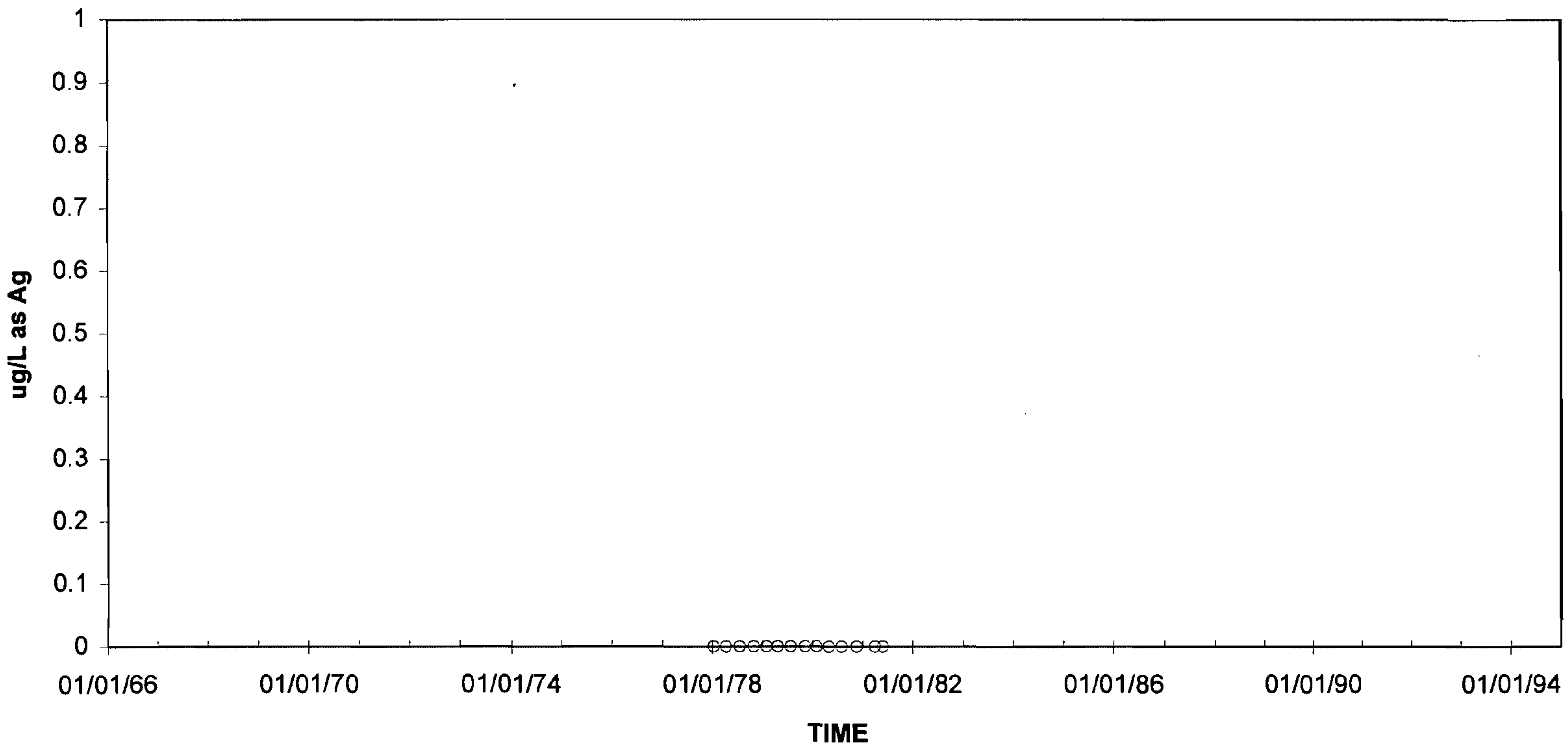
Figure 10.5.4–153



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
SILVER, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

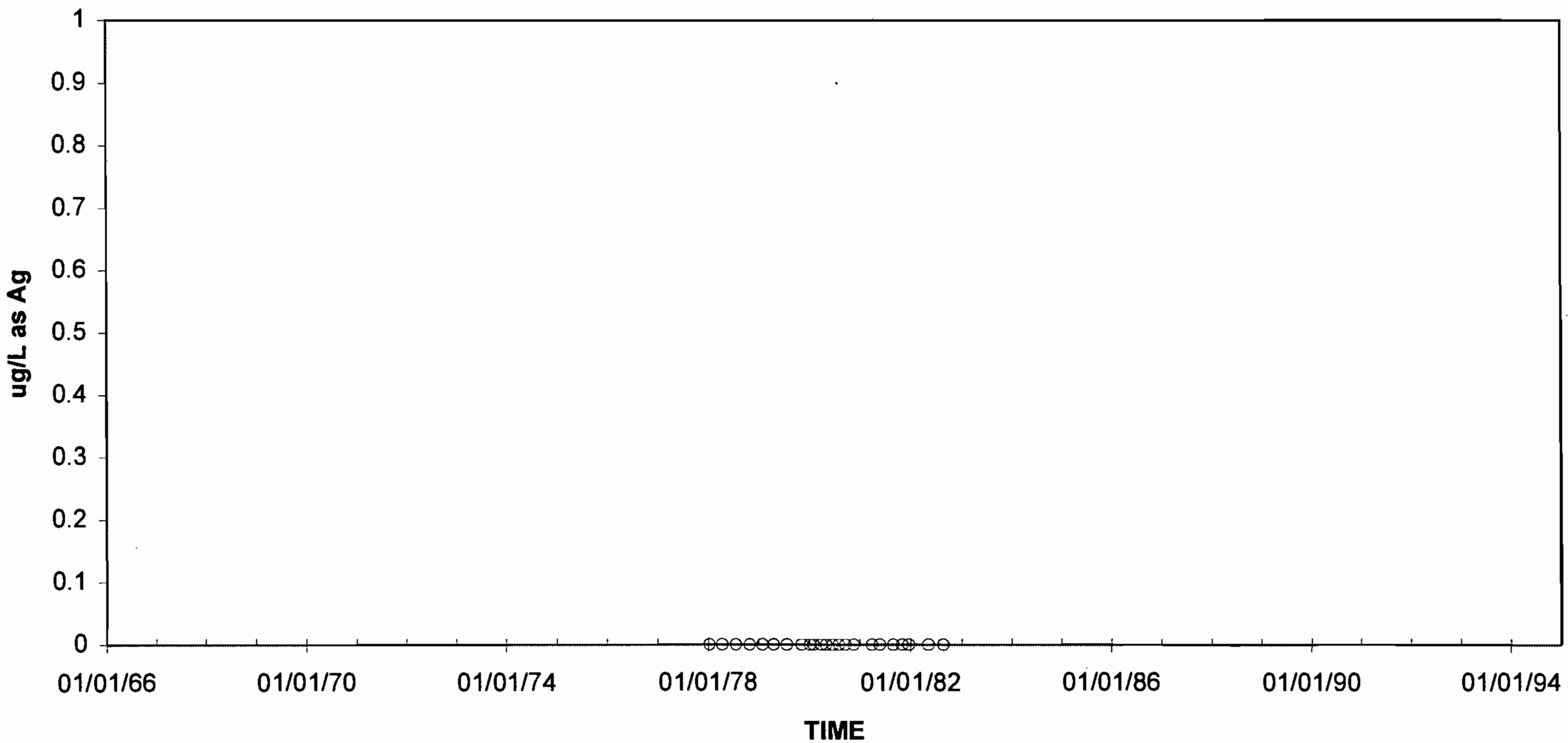
Figure 10.5.4–154



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
SILVER, SUSPENDED RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

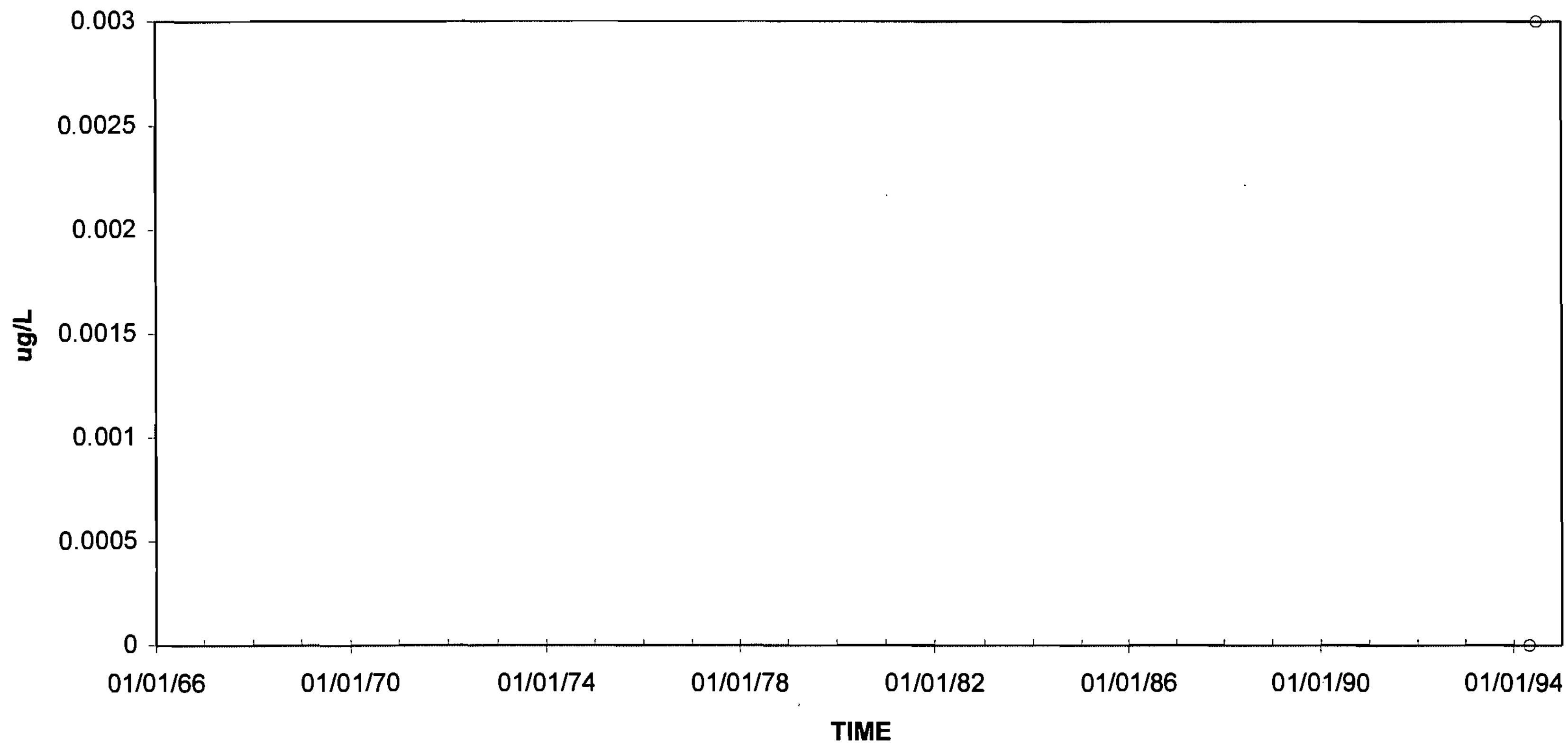
Figure 10.5.4–155



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
SILVER, TOTAL RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

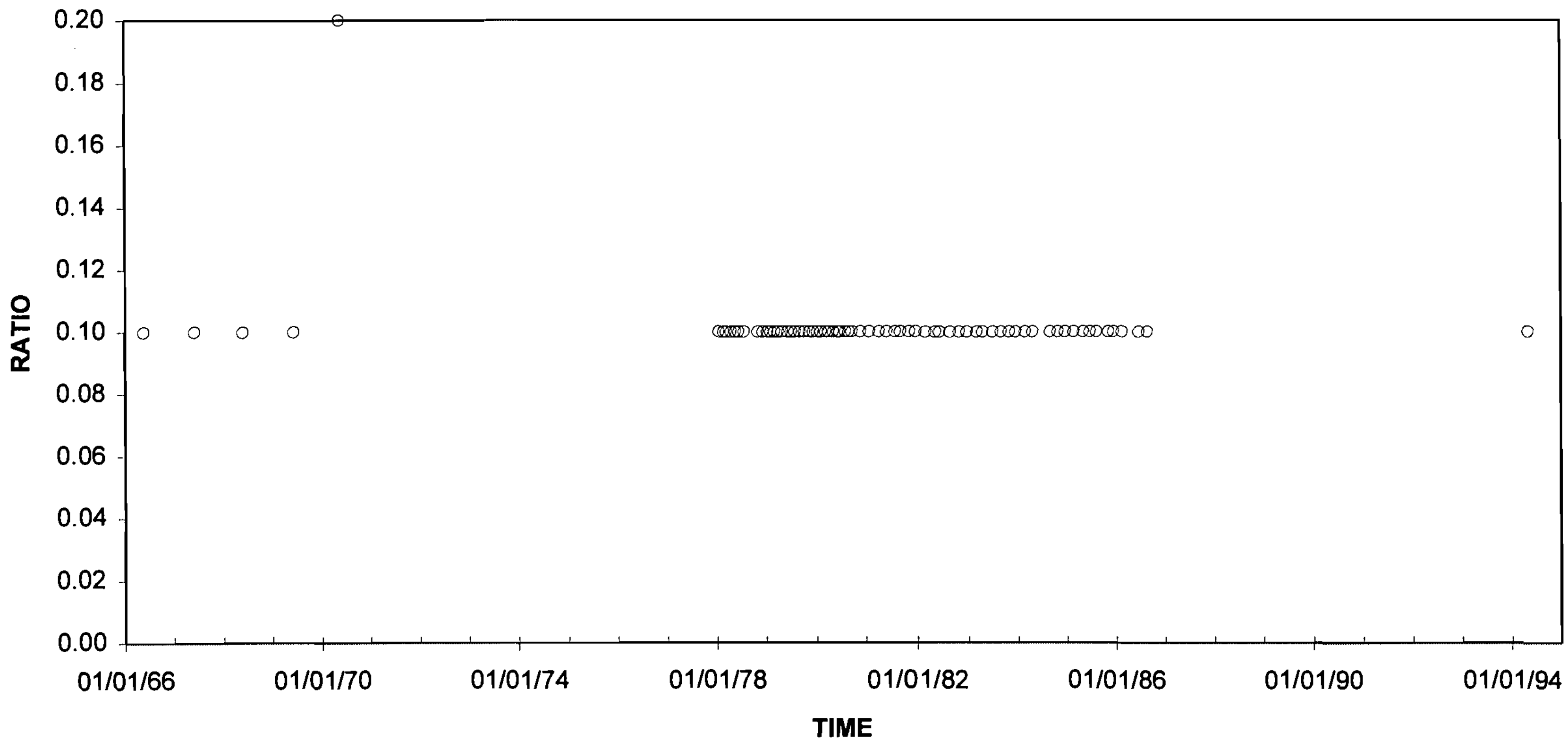
Figure
10.5.4–156



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
SIMAZINE, WATER DISS REC
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

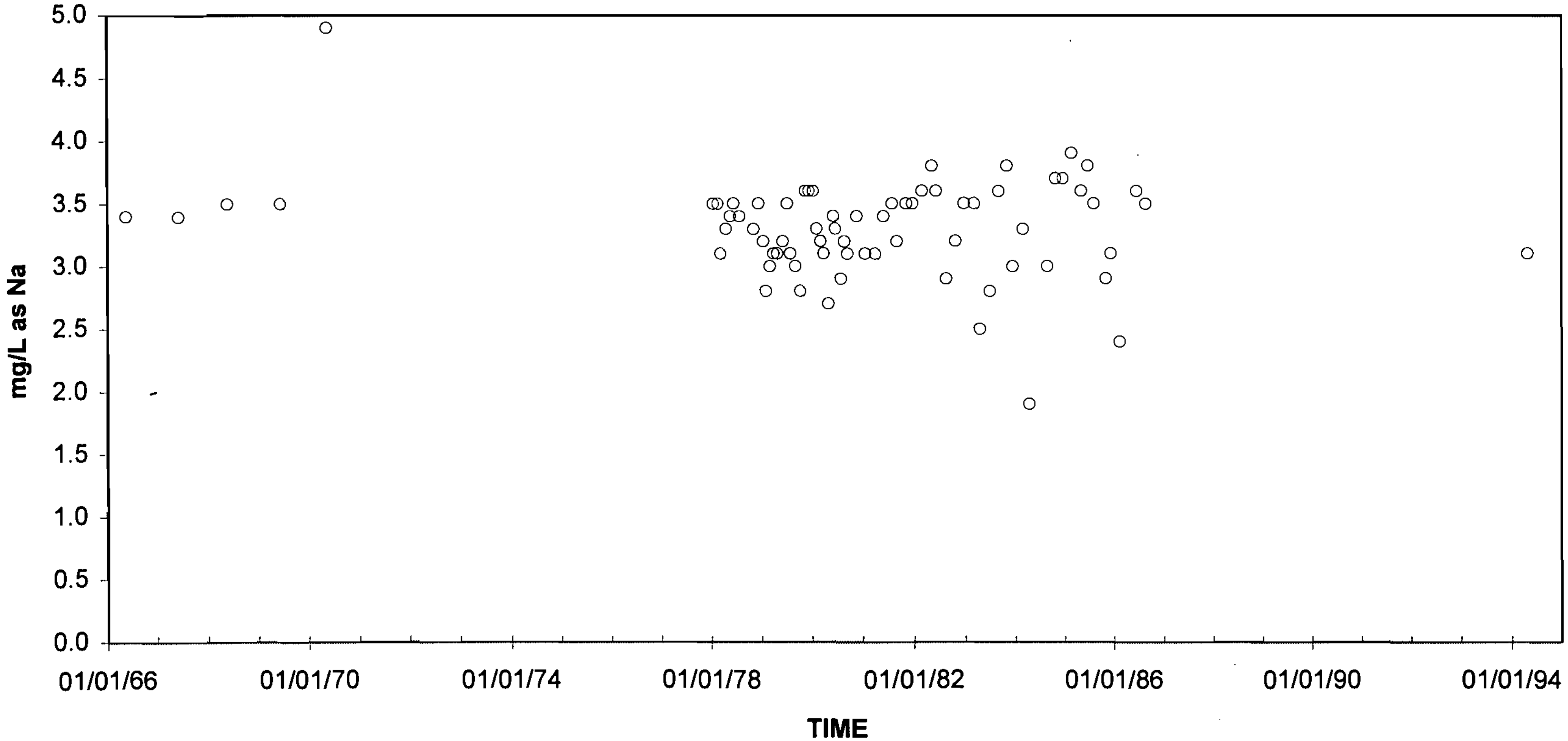
Figure
10.5.4–157



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
SODIUM, ADSORPTION RATIO
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

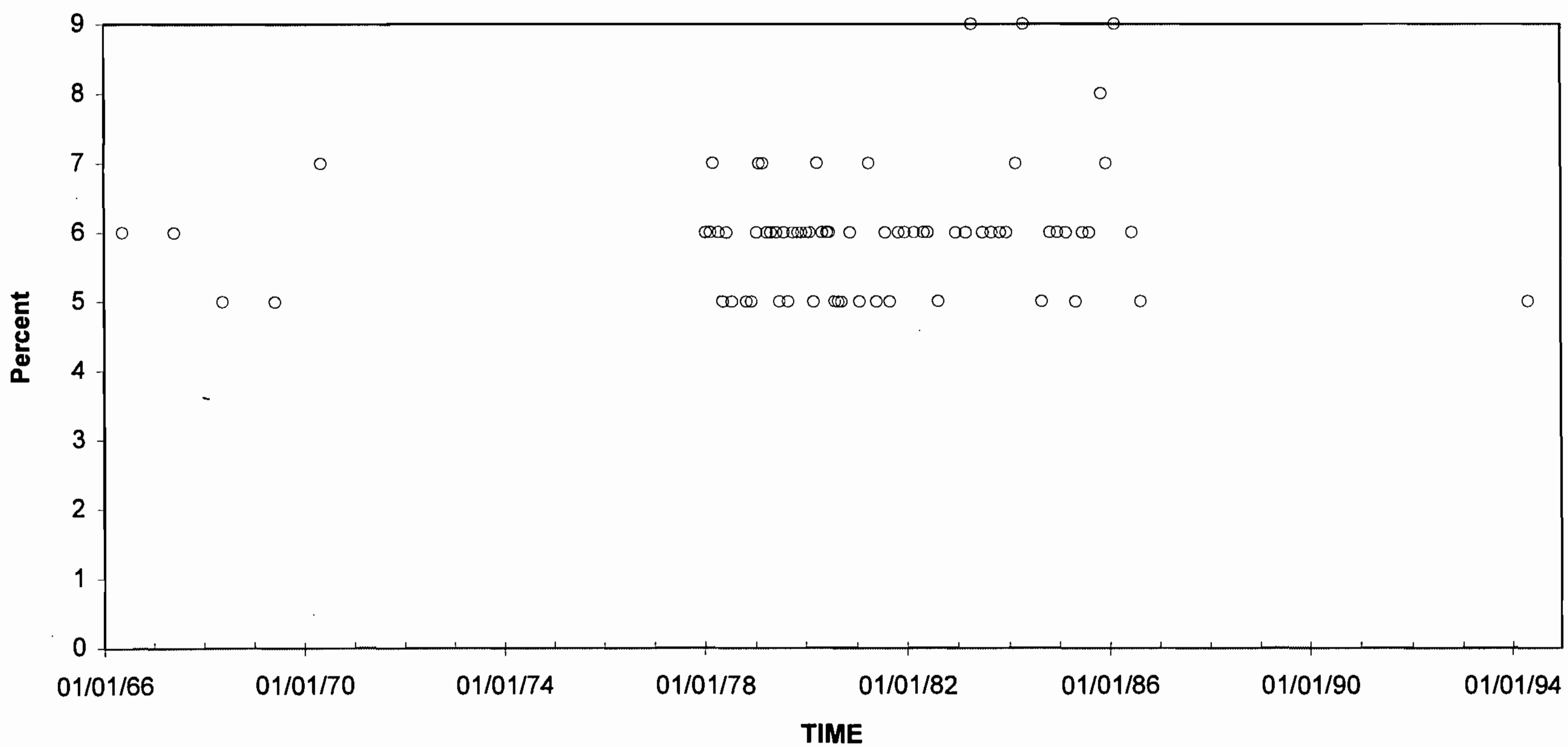
Figure 10.5.4–158



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
SODIUM, DISSOLVED
PURDOM UNIT 8 PROJECT -- St MARKS, FLORIDA

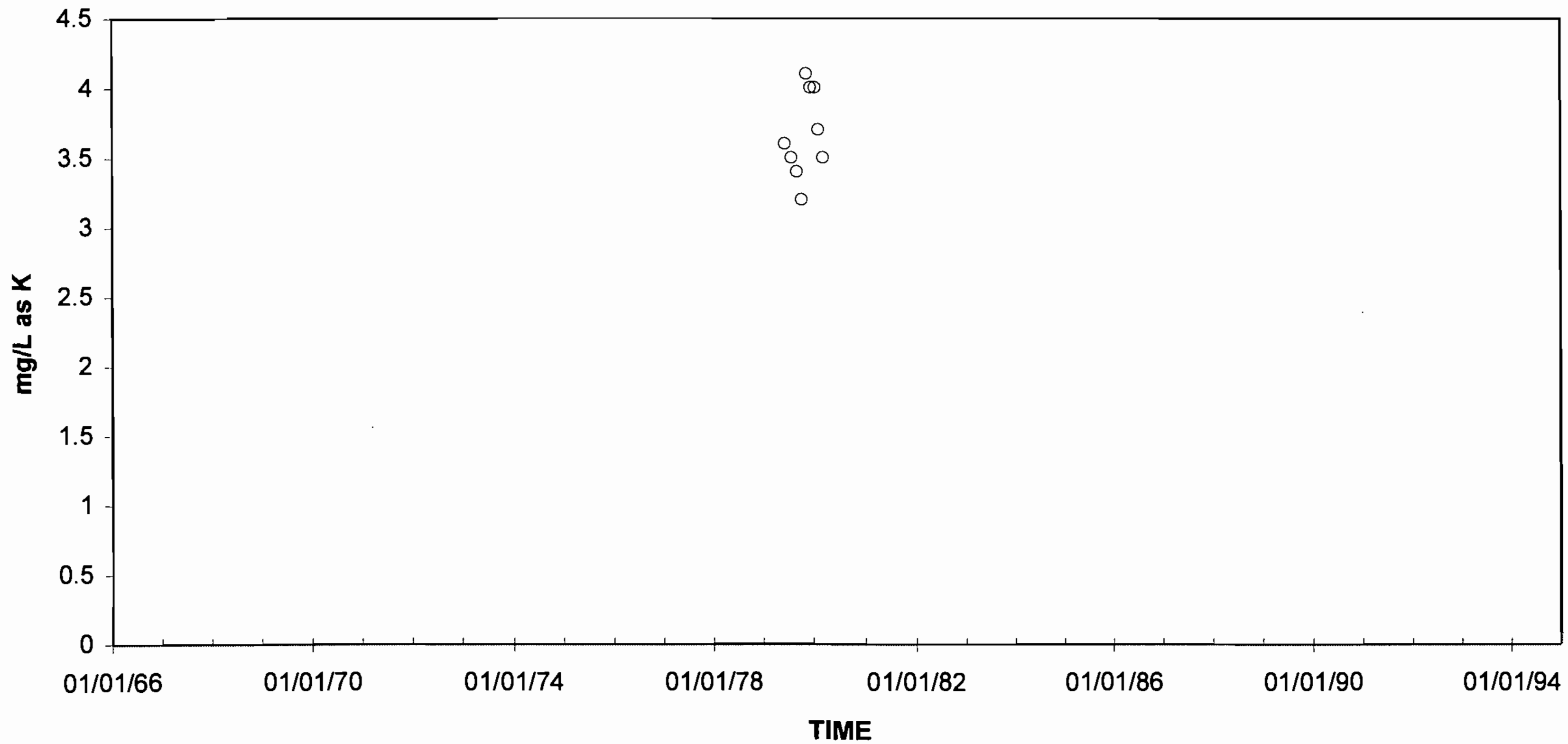
Figure
10.5.4-159



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
SODIUM, PERCENT
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

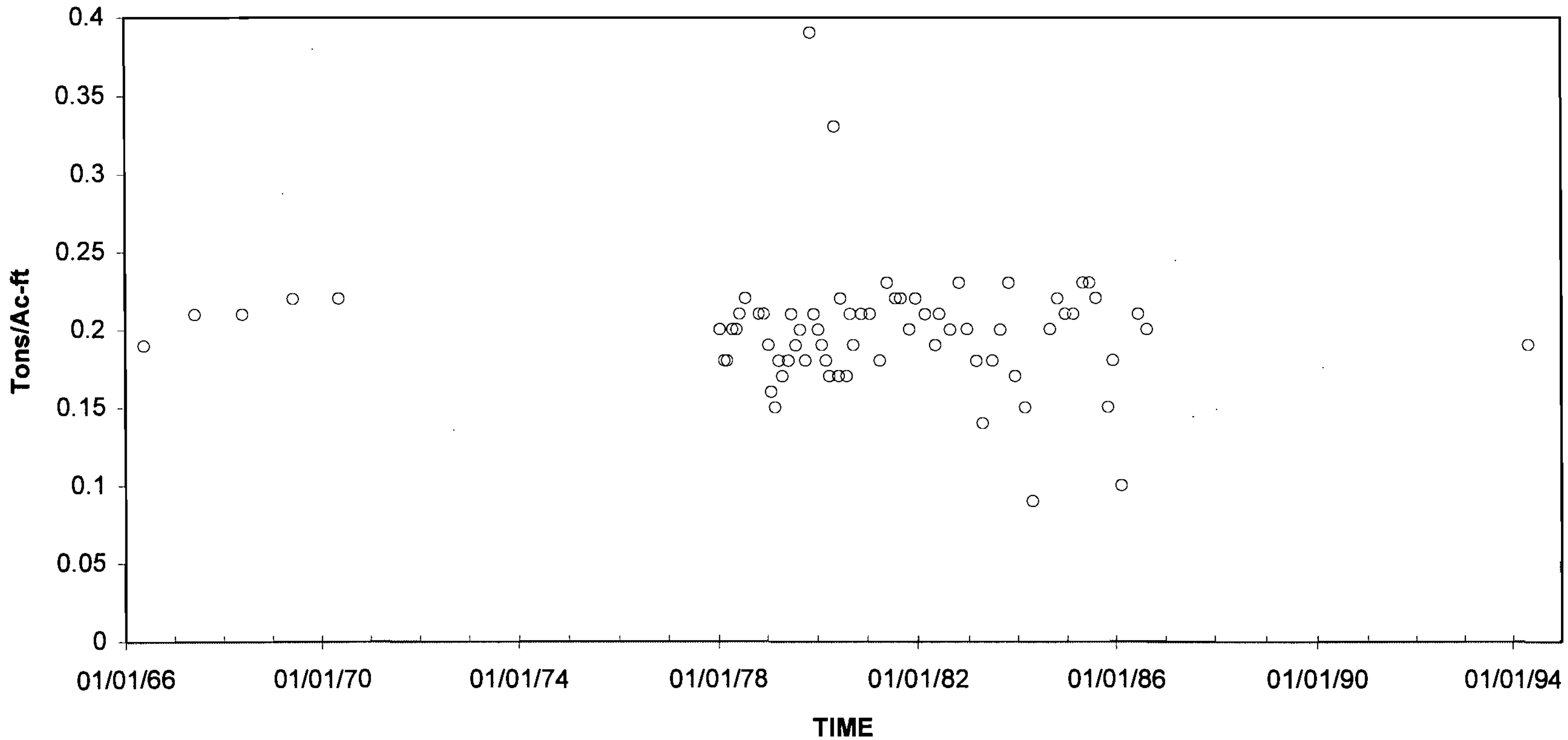
Figure
10.5.4–160



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
SODIUM + POTASSIUM, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

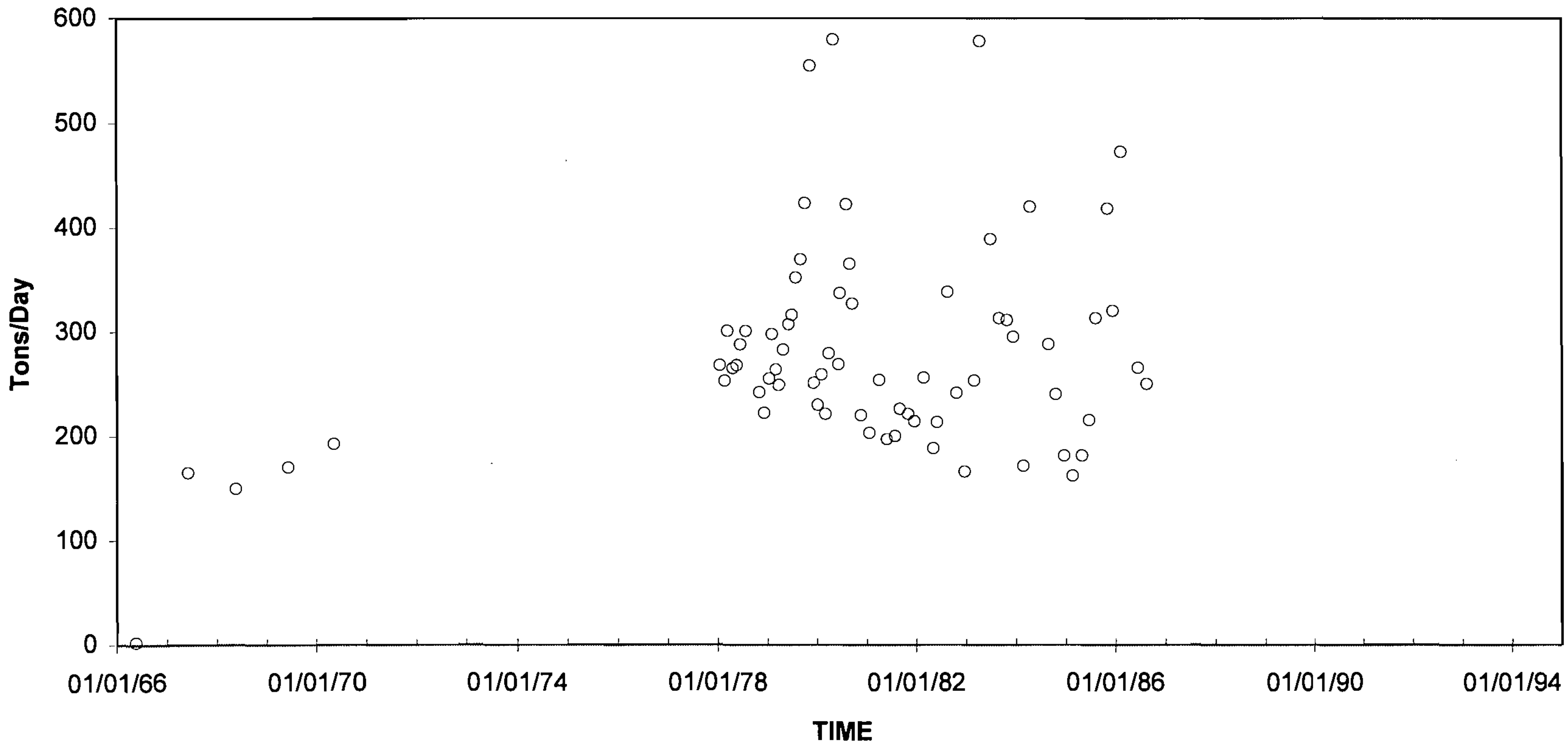
Figure 10.5.4-161



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
SOLIDS, DISSOLVED
PURDOM UNIT 8 PROJECT - St MARKS, FLORIDA

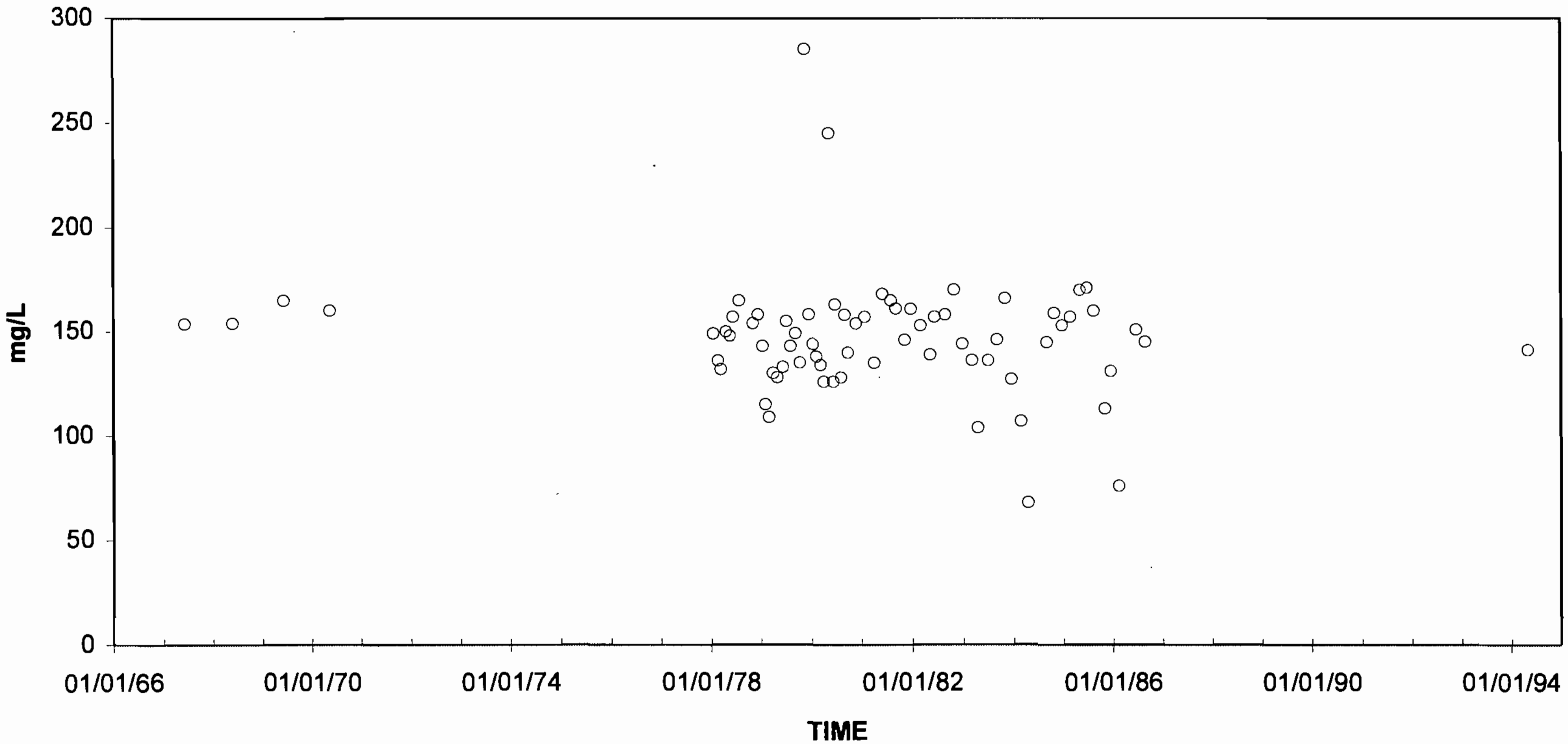
Figure
10.5.4-162



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
SOLIDS, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

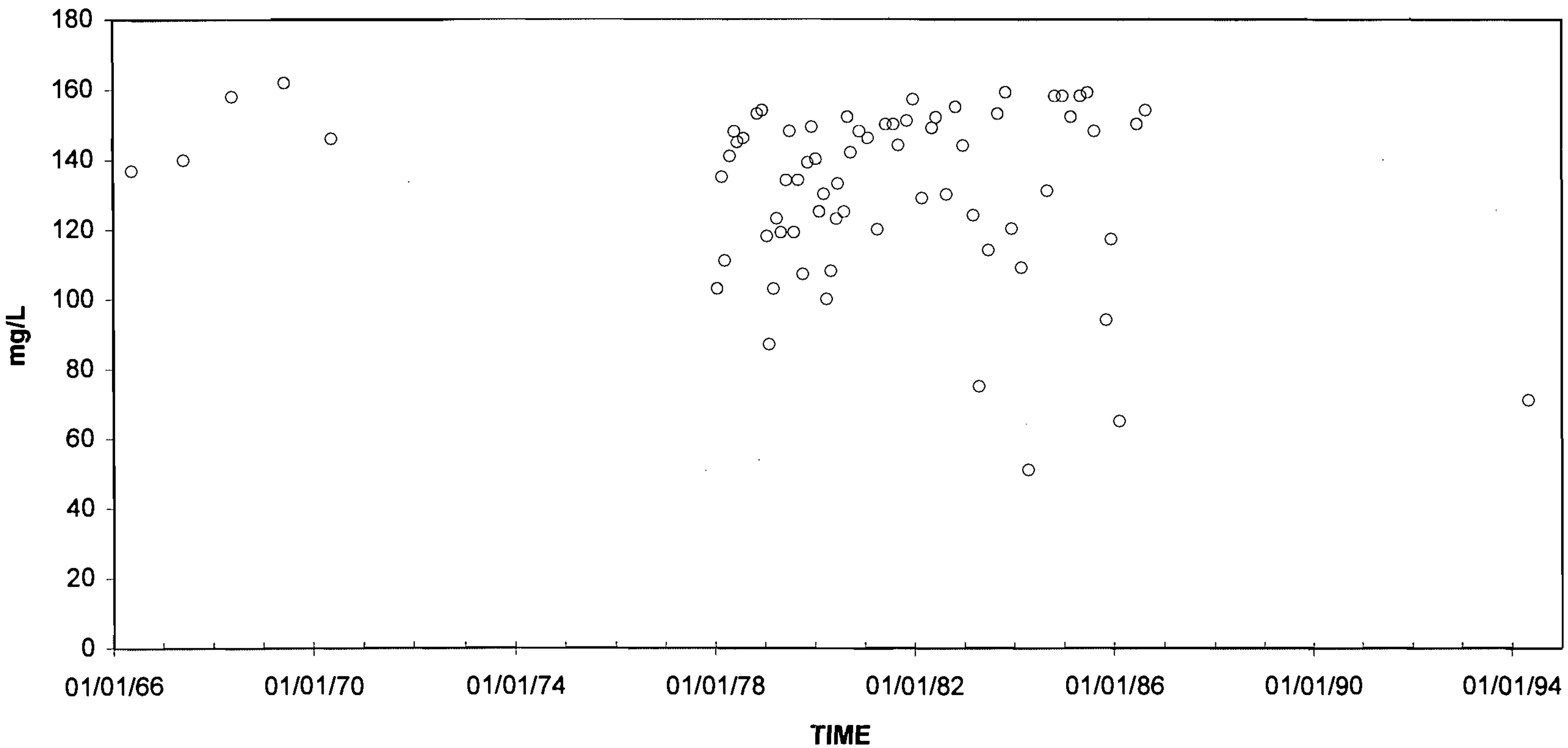
Figure
10.5.4-163



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
SOLIDS, RESIDUE AT 180 DEG C DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

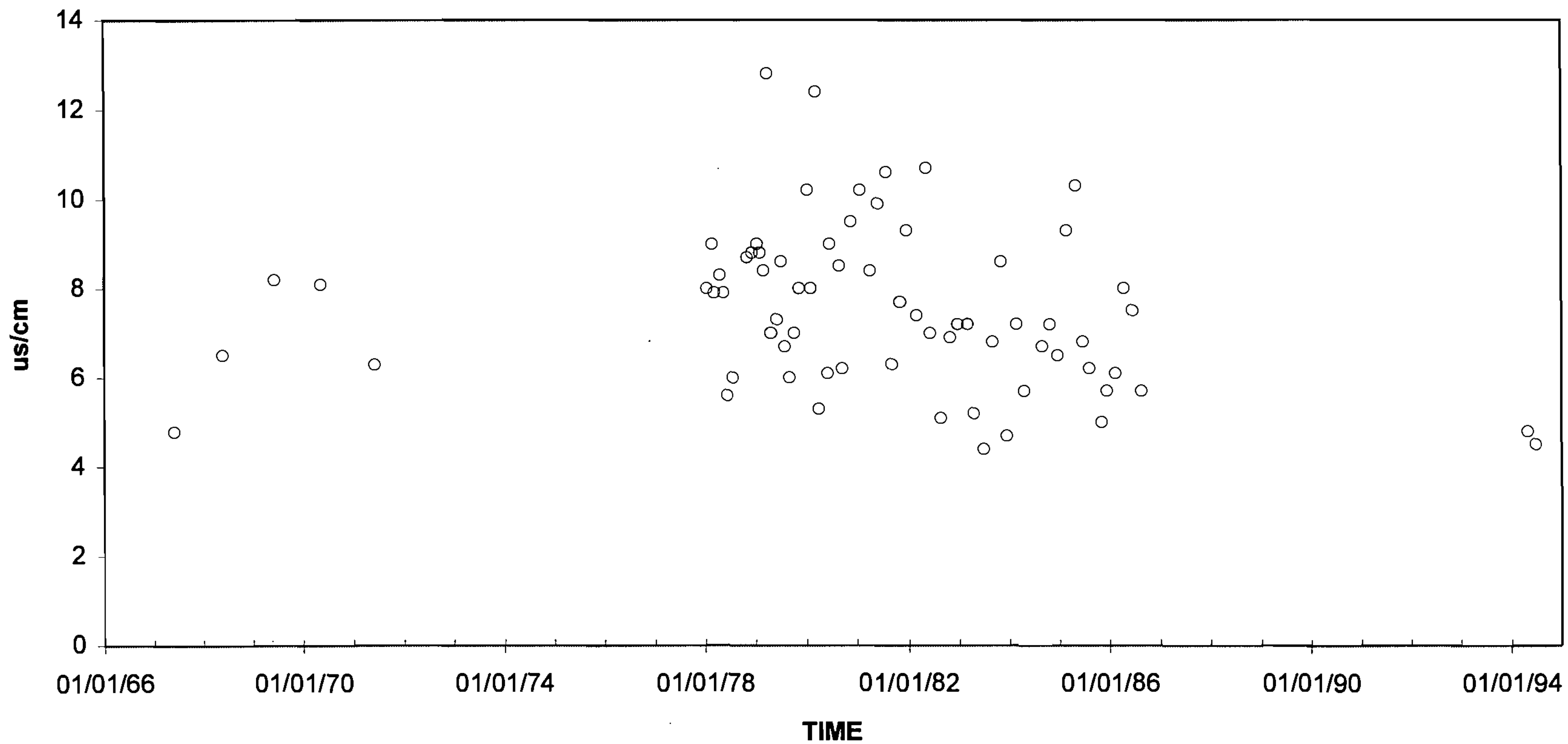
Figure
10.5.4–164



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
SOLIDS, SUM OF CONSTITUENTS DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

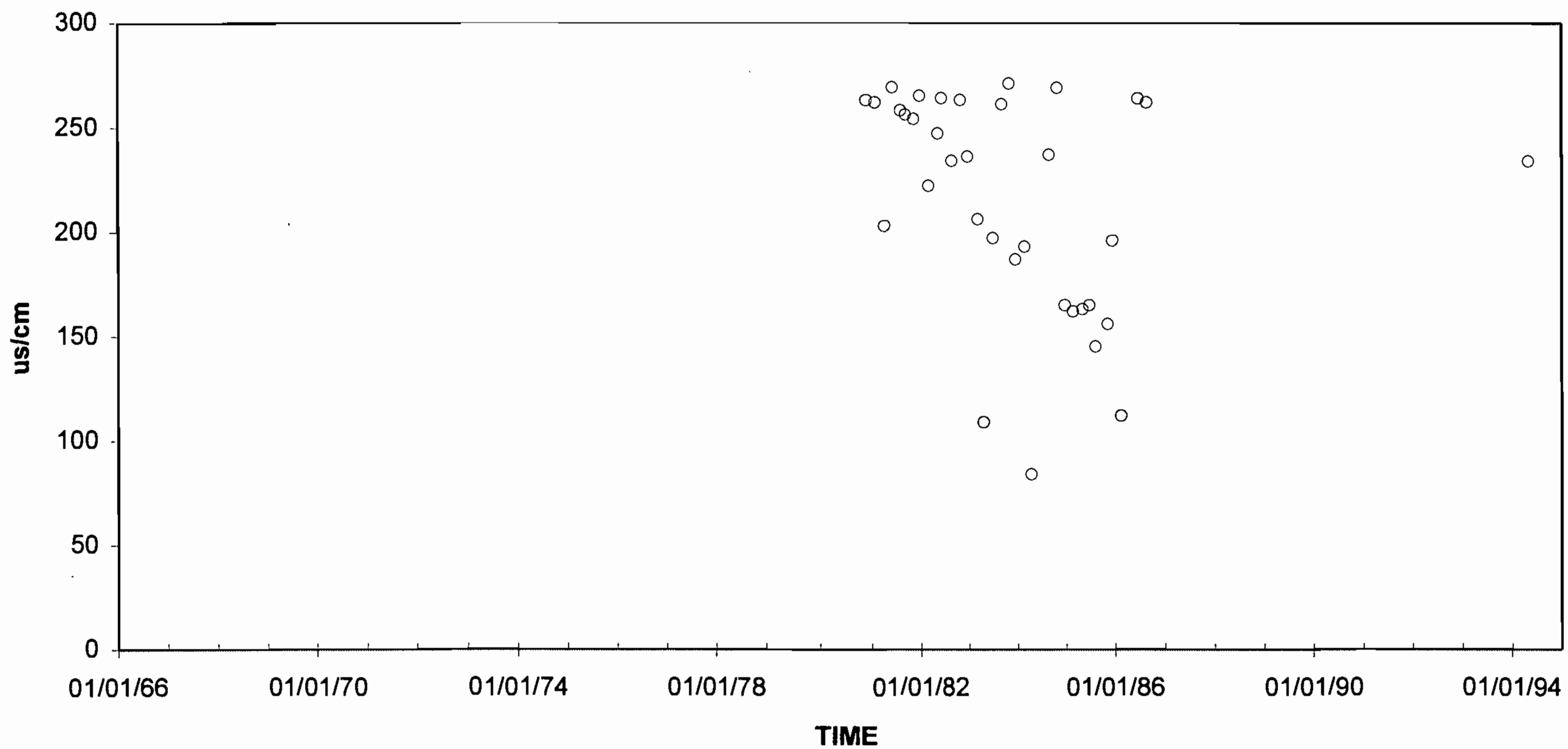
Figure
10.5.4–165



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
SPECIFIC CONDUCTANCE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

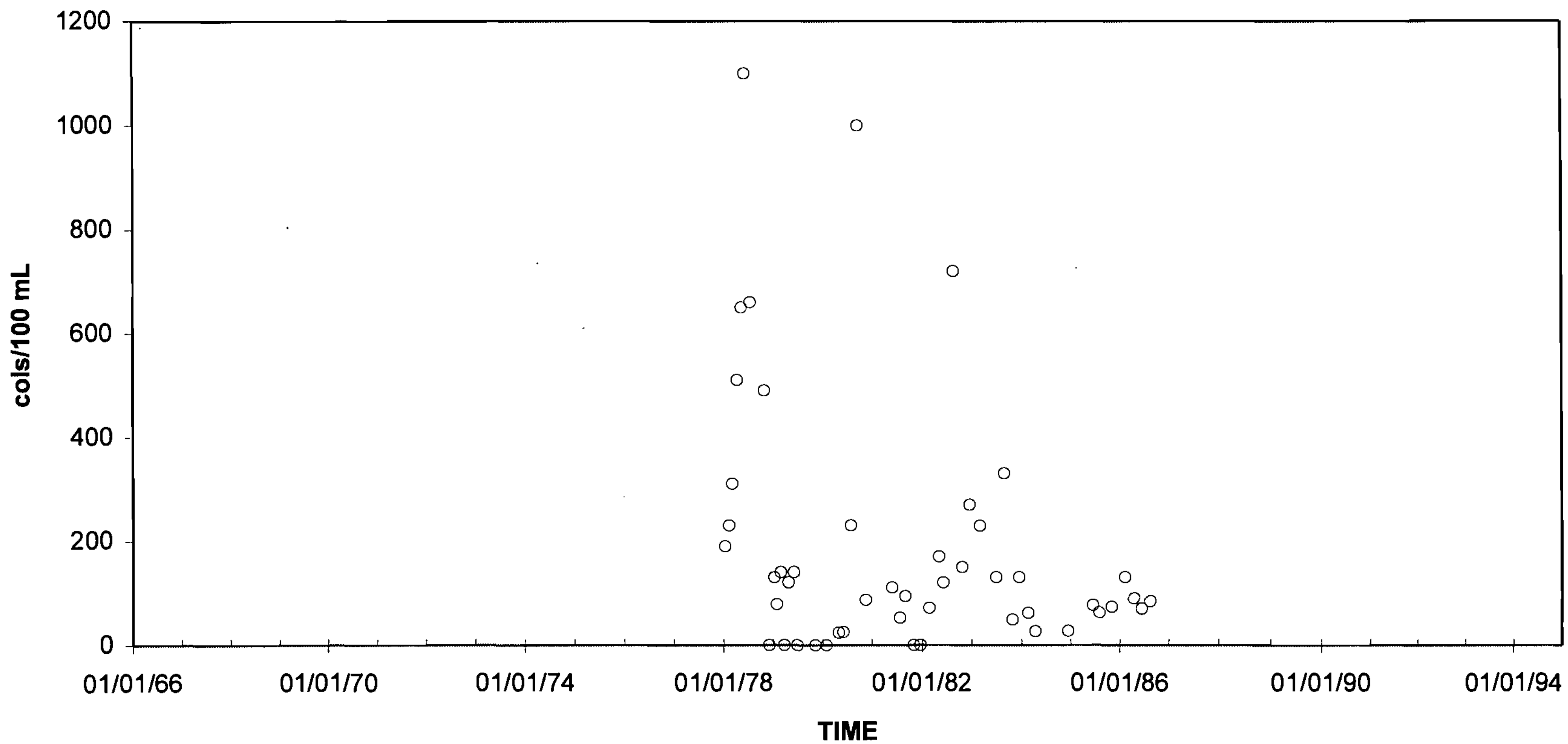
Figure
10.5.4–166



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
SPECIFIC CONDUCTANCE, LAB
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

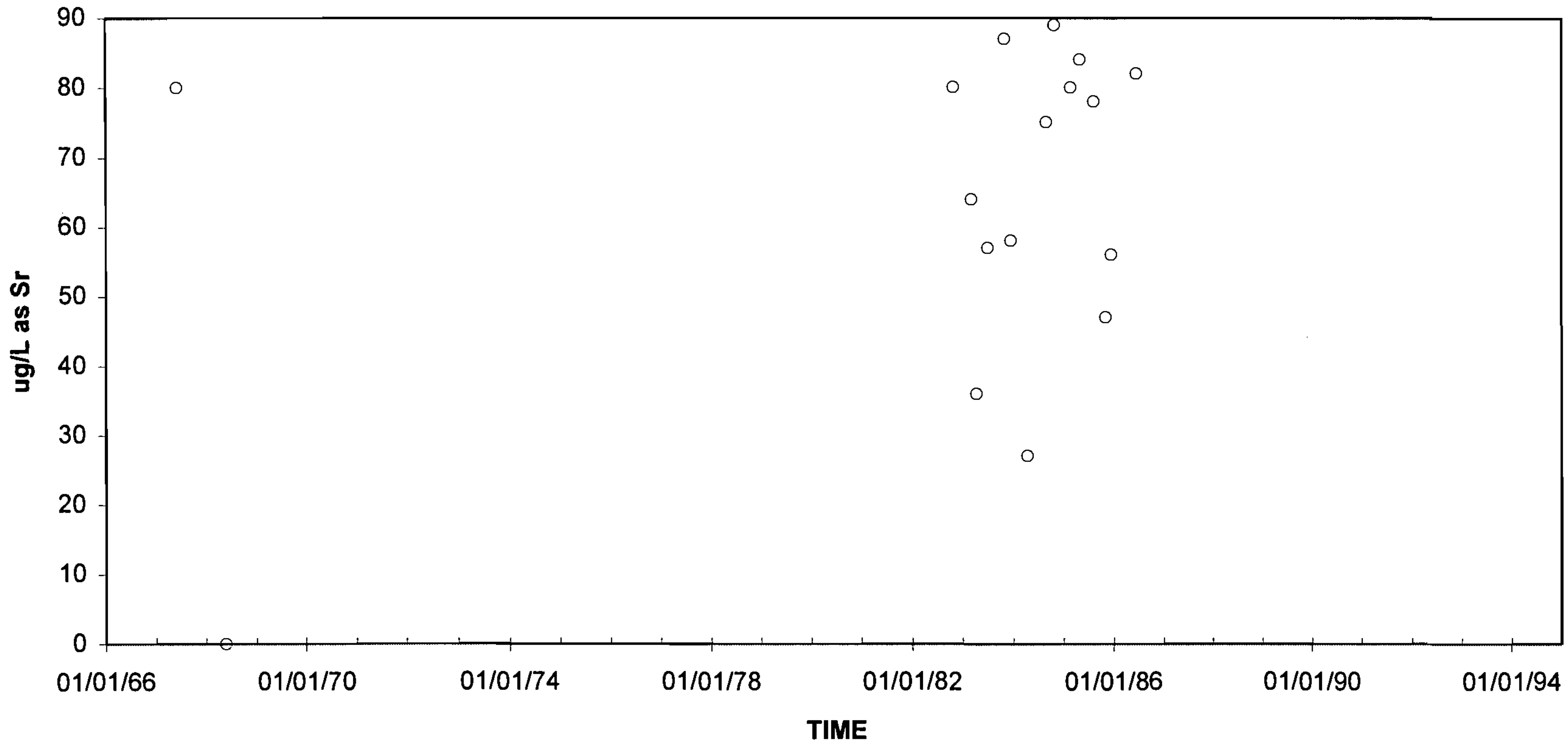
Figure
10.5.4-167



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
STREPTOCOCCI, FECAL KF AGAR
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

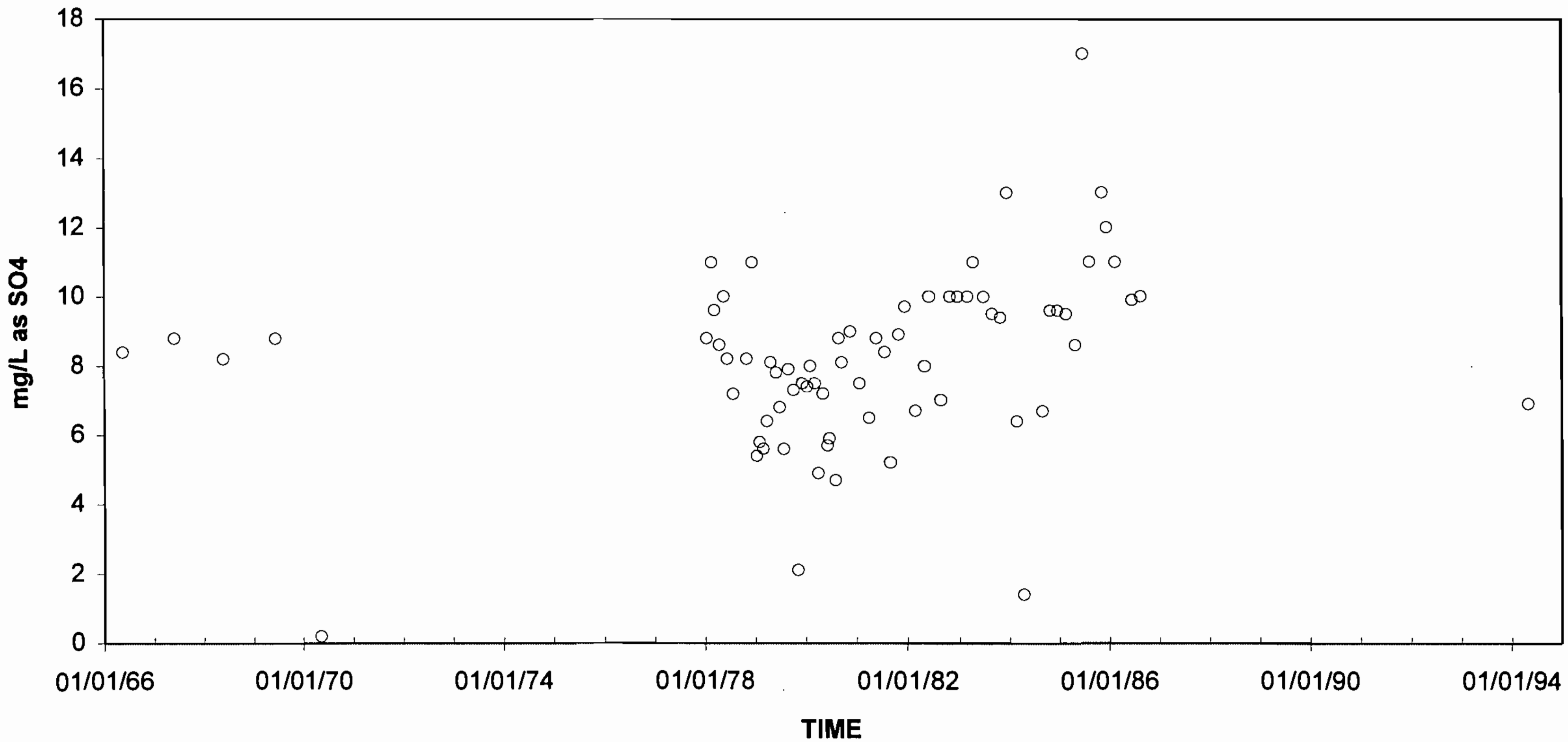
Figure
10.5.4–168



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
STRONTIUM, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

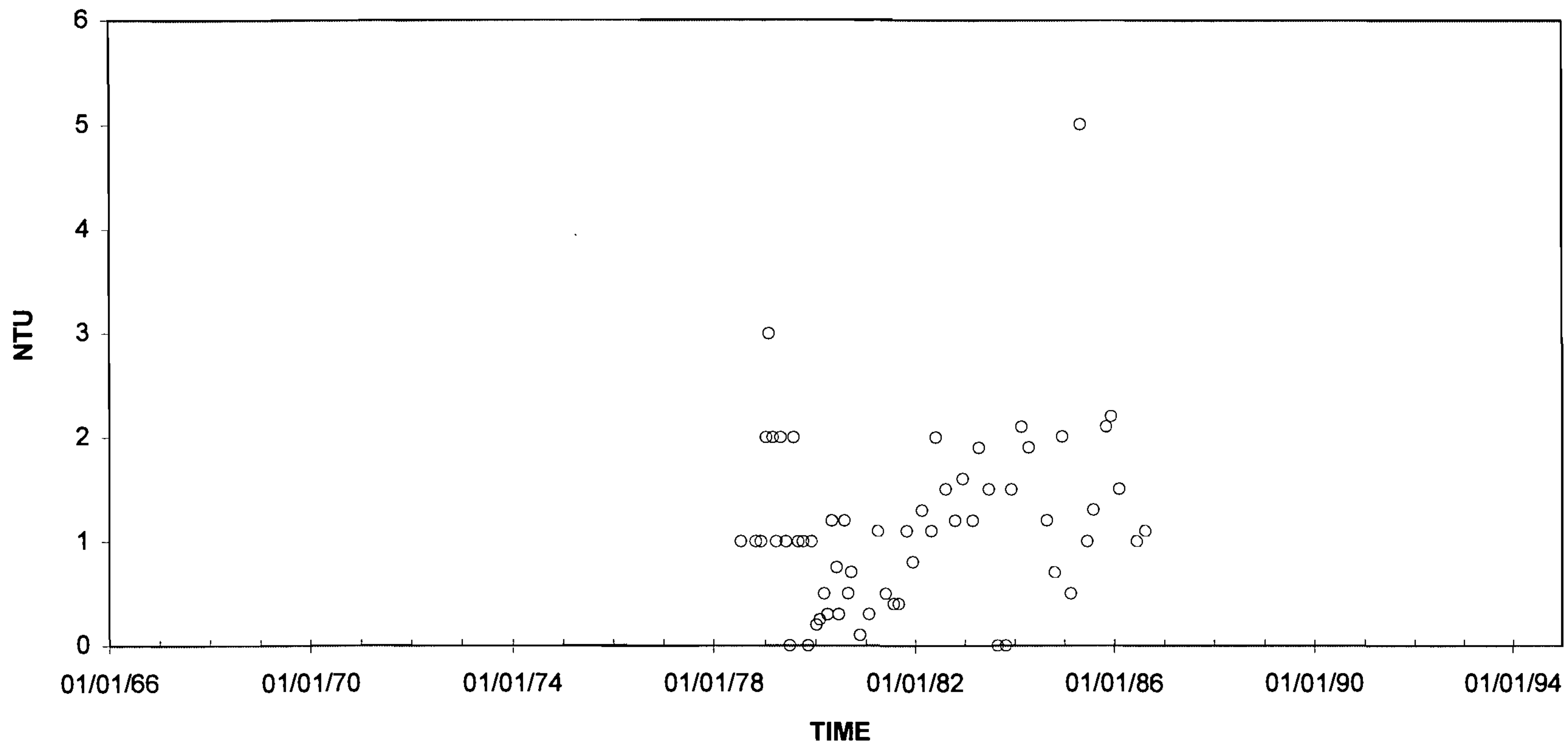
Figure
10.5.4–169



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
SULFATE, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

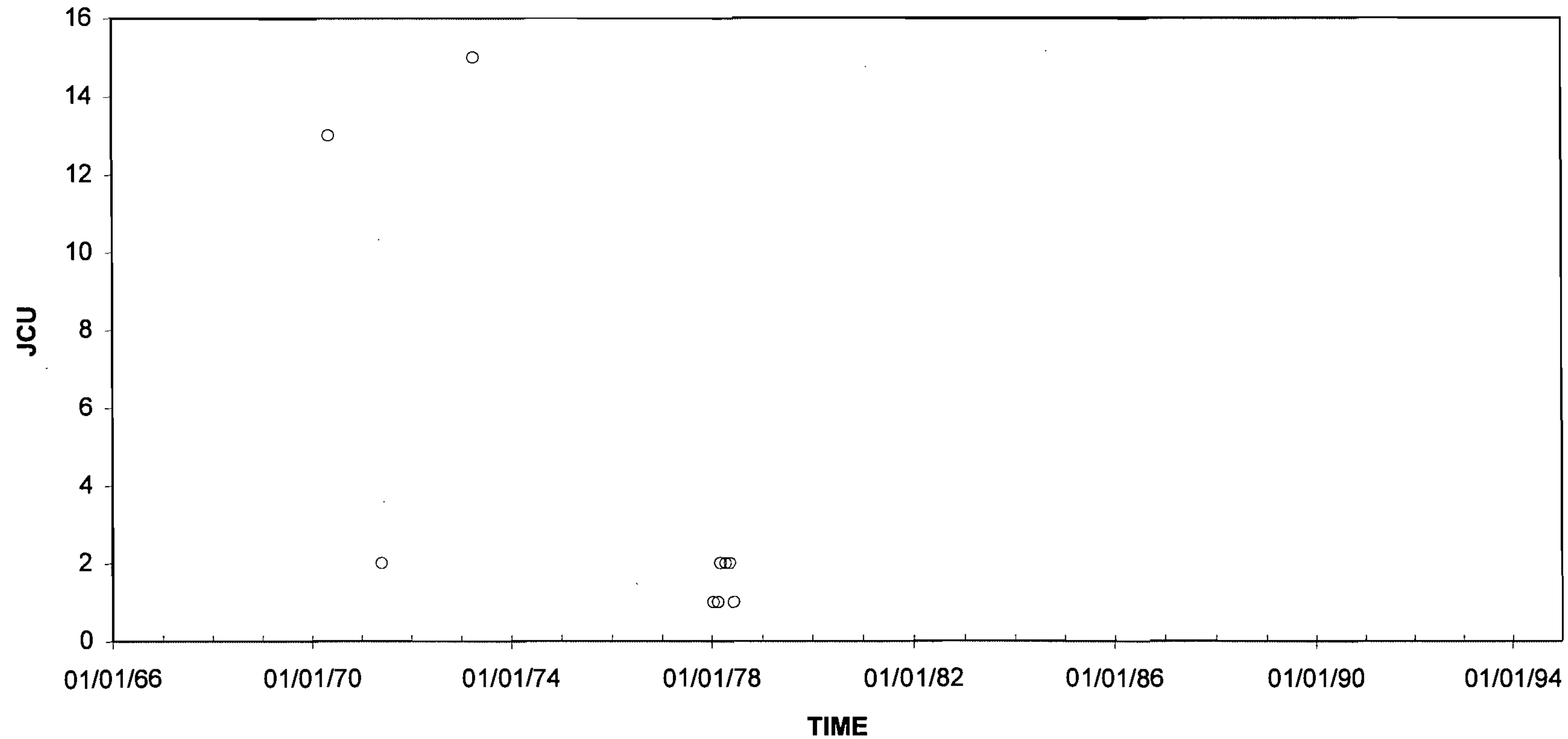
Figure
10.5.4–170



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
TURBIDITY
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

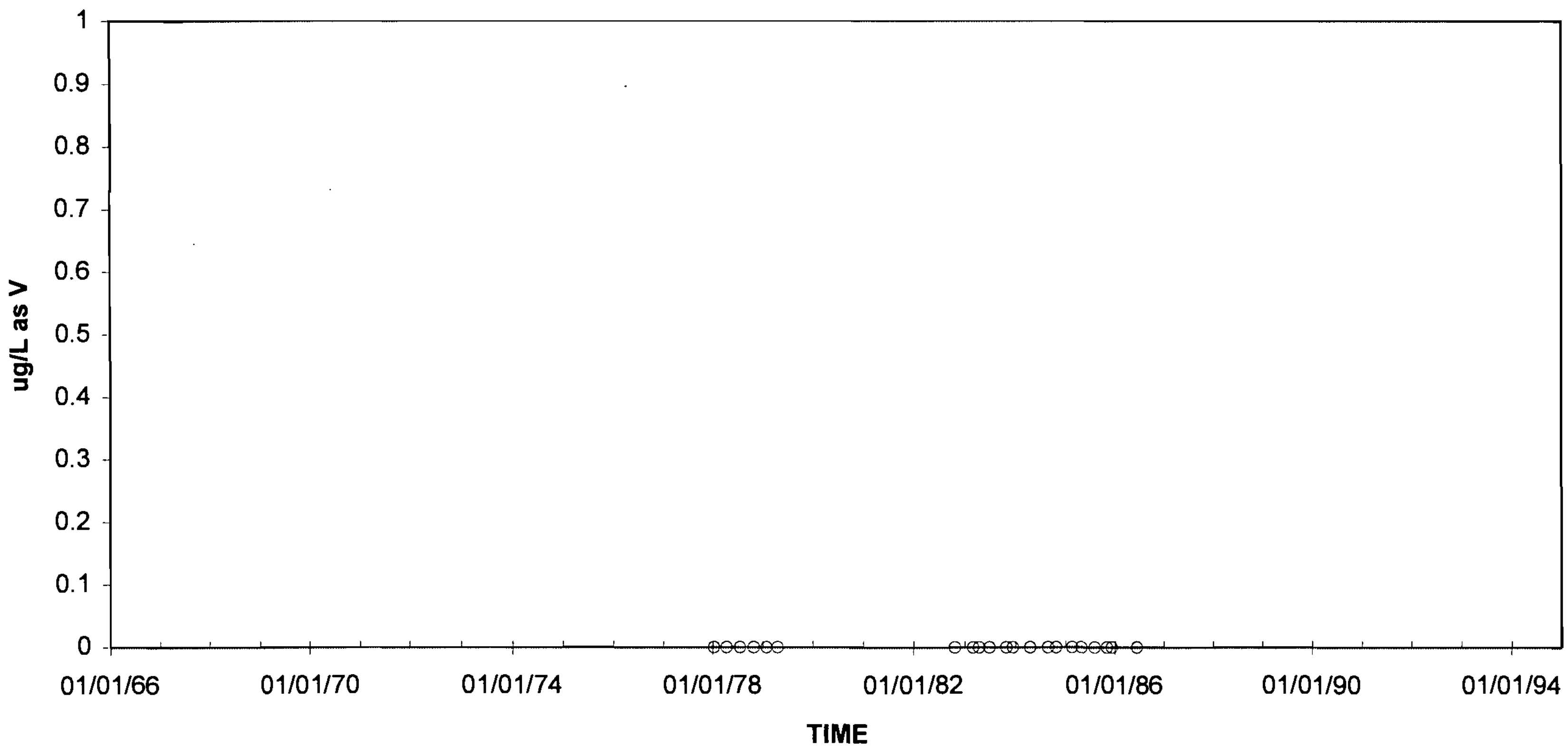
Figure
10.5.4–171



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
TURBIDITY
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

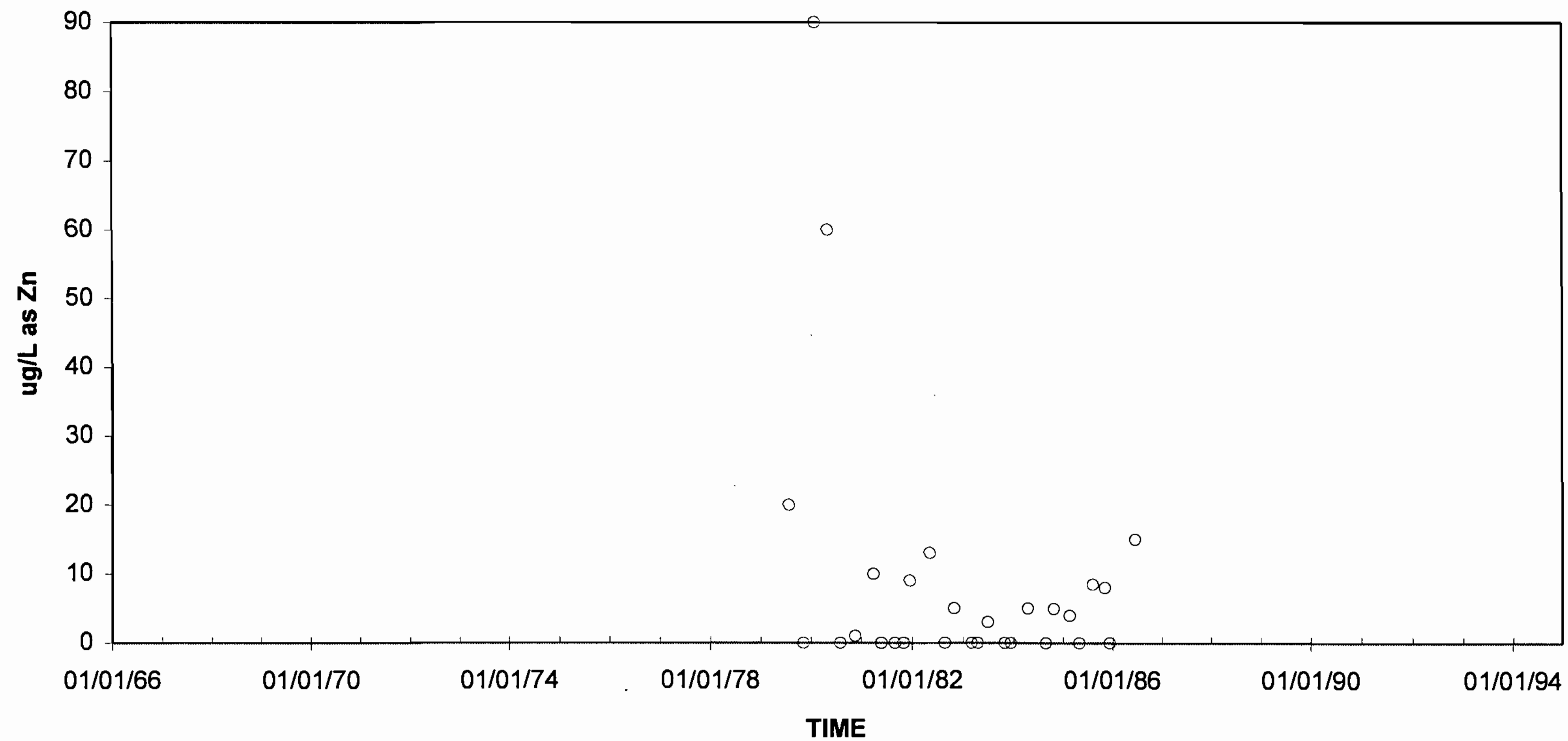
Figure
10.5.4-172



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
VANADIUM, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

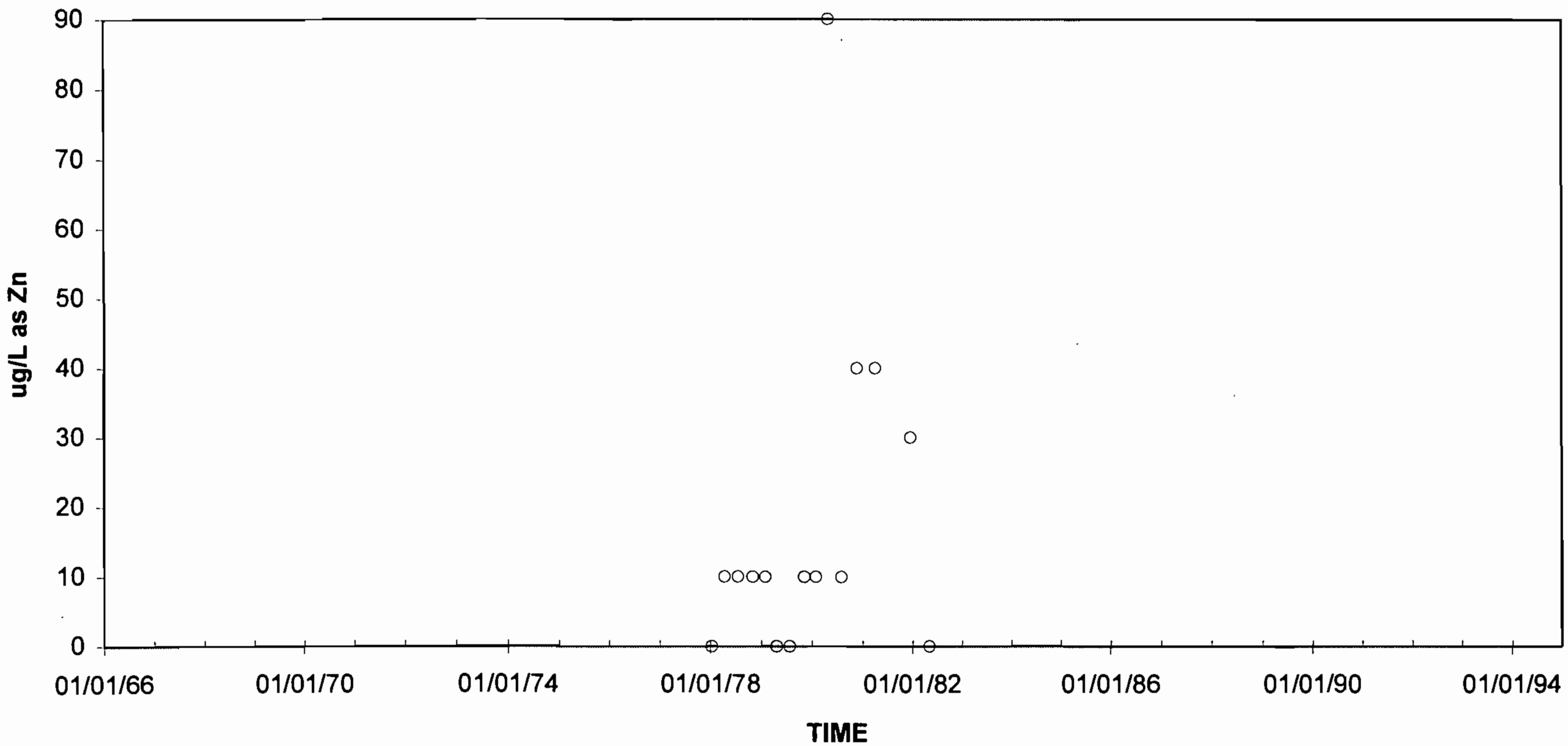
Figure
10.5.4–173



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
ZINC, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

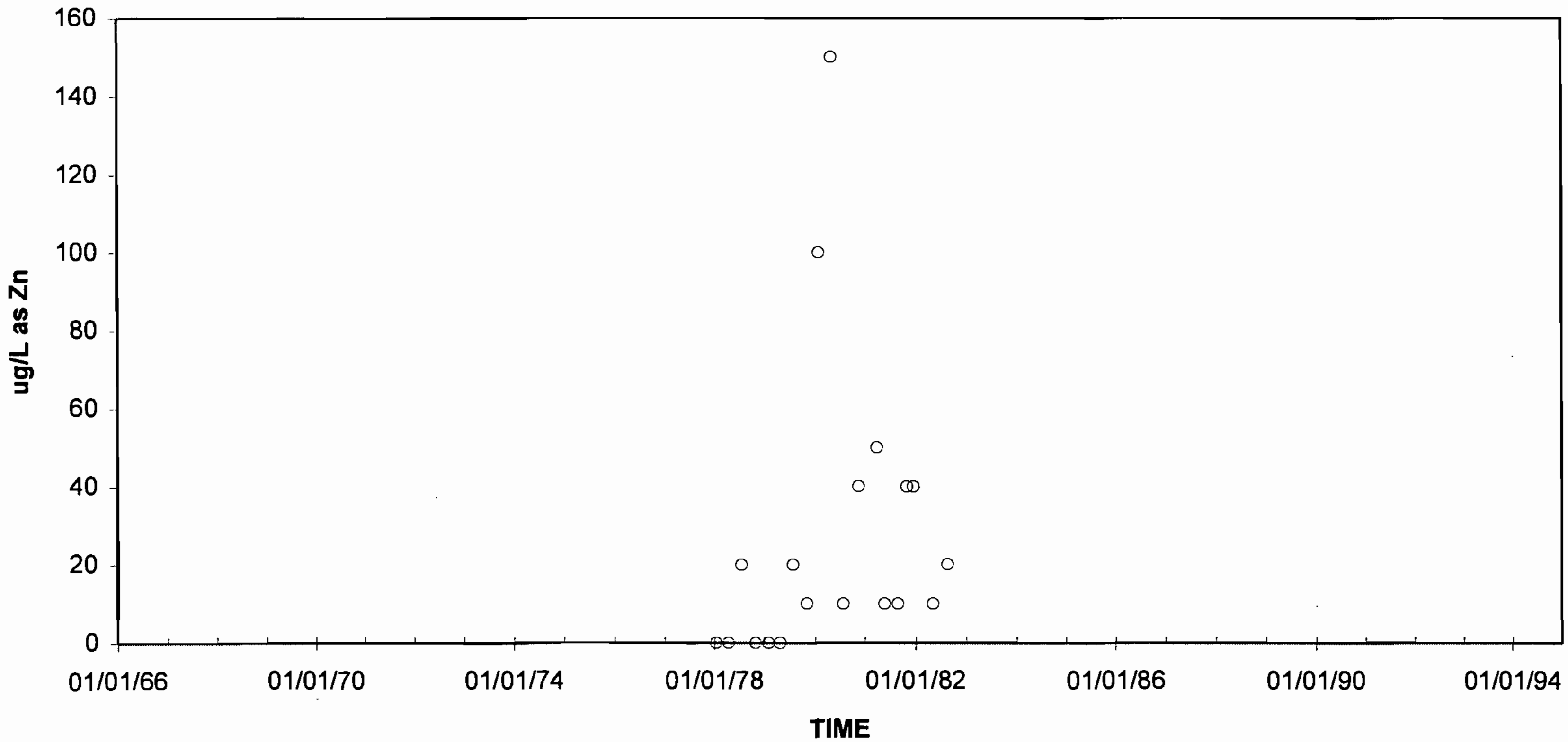
Figure 10.5.4–174



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
ZINC, SUSPENDED RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

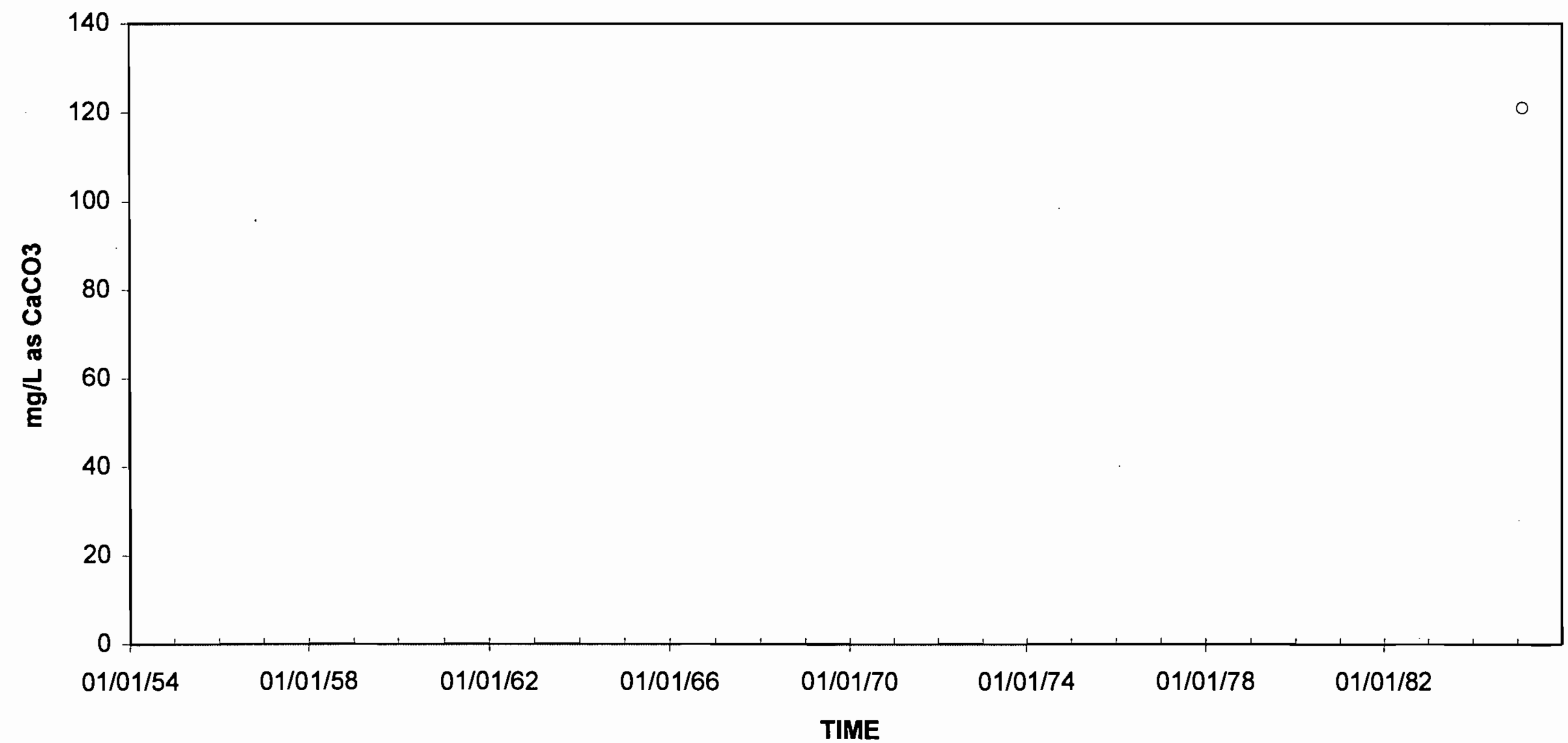
Figure 10.5.4–175



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR NEWPORT, FLORIDA
USGS STATION NUMBER 02326900
ZINC, TOTAL RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

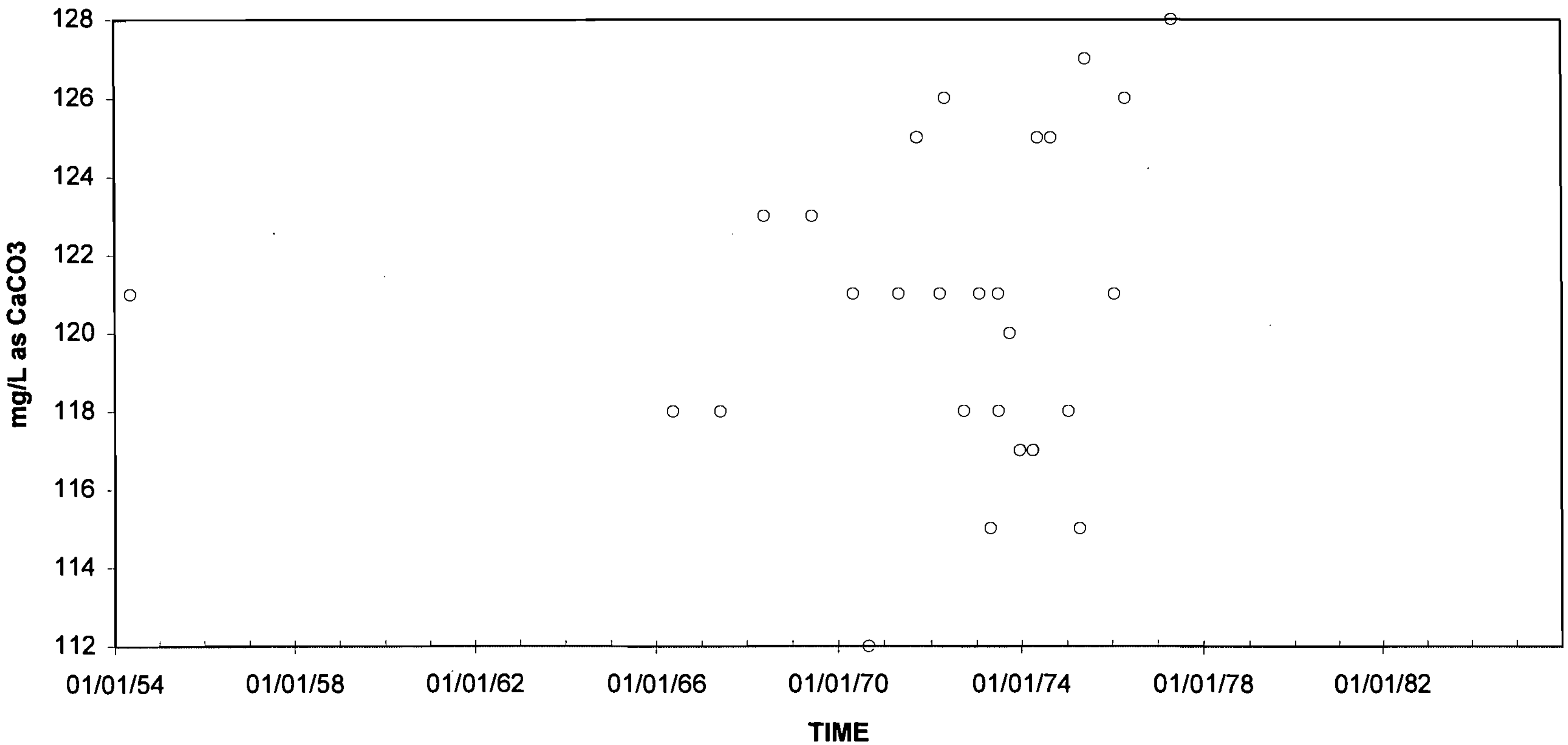
Figure
10.5.4–176



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
ALKALINITY, LAB
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

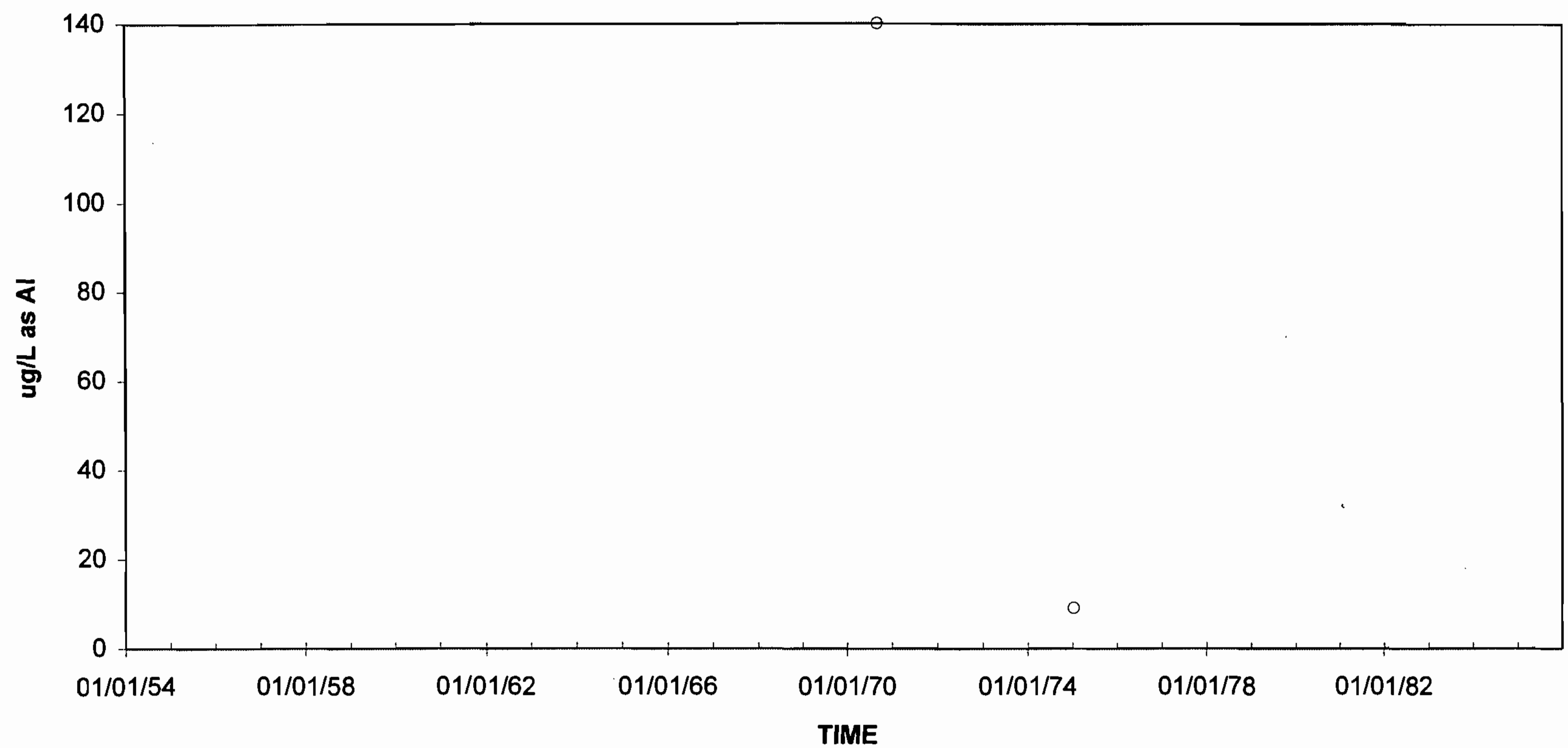
Figure
10.5.4–177



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
ALKALINITY WAT WH TOT FET FIELD
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

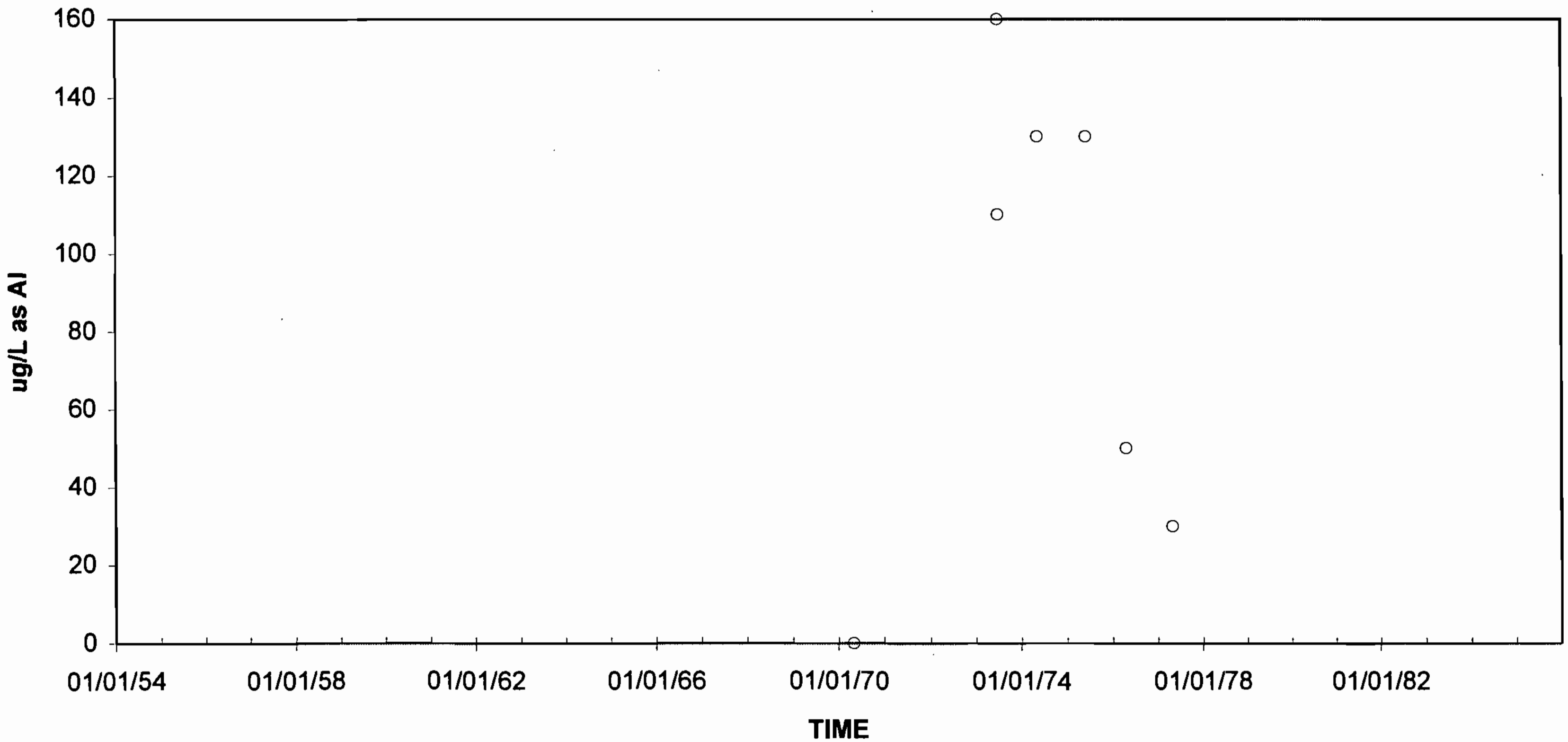
Figure
10.5.4–178



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
ALUMINUM, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

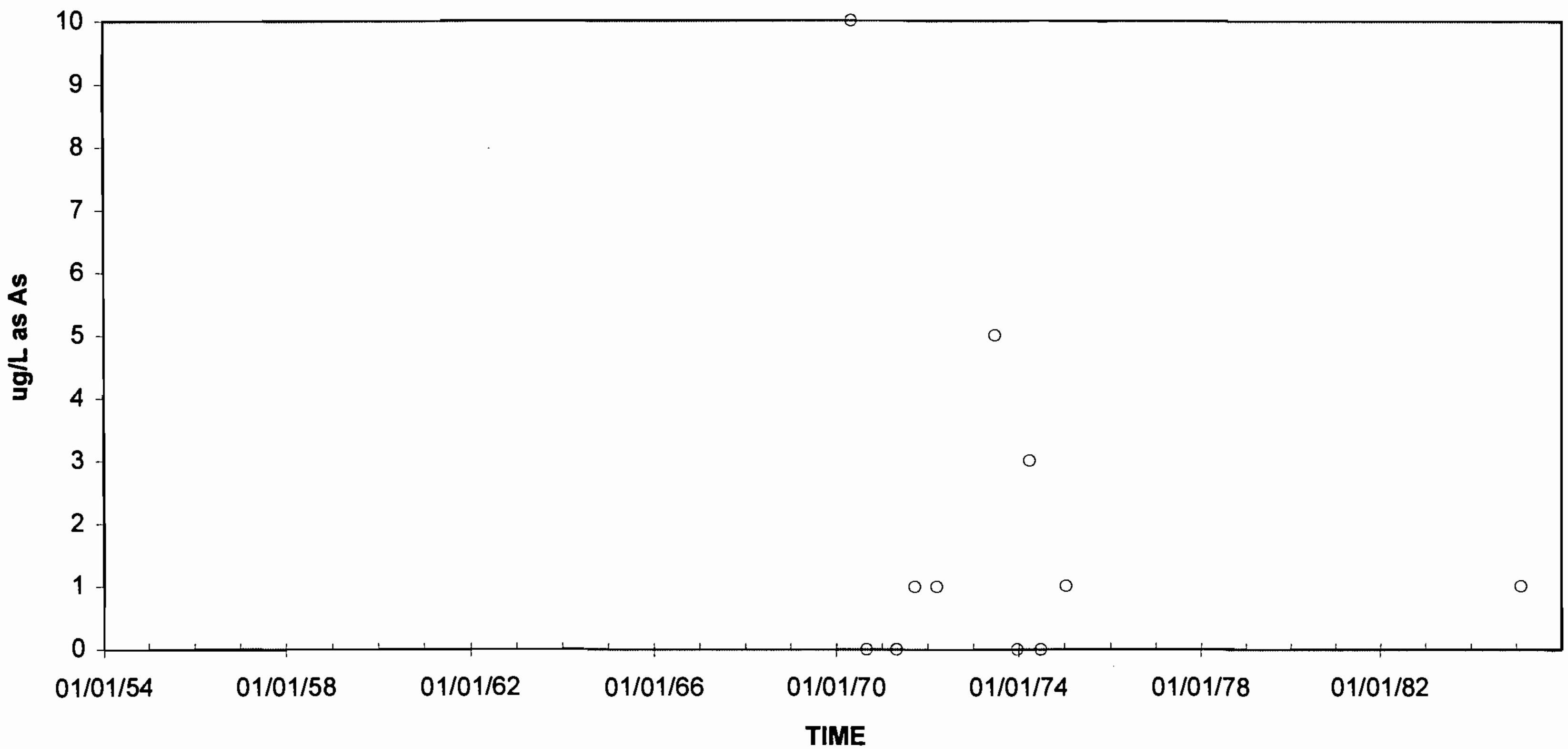
Figure 10.5.4–179



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
ALUMINUM, TOTAL RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

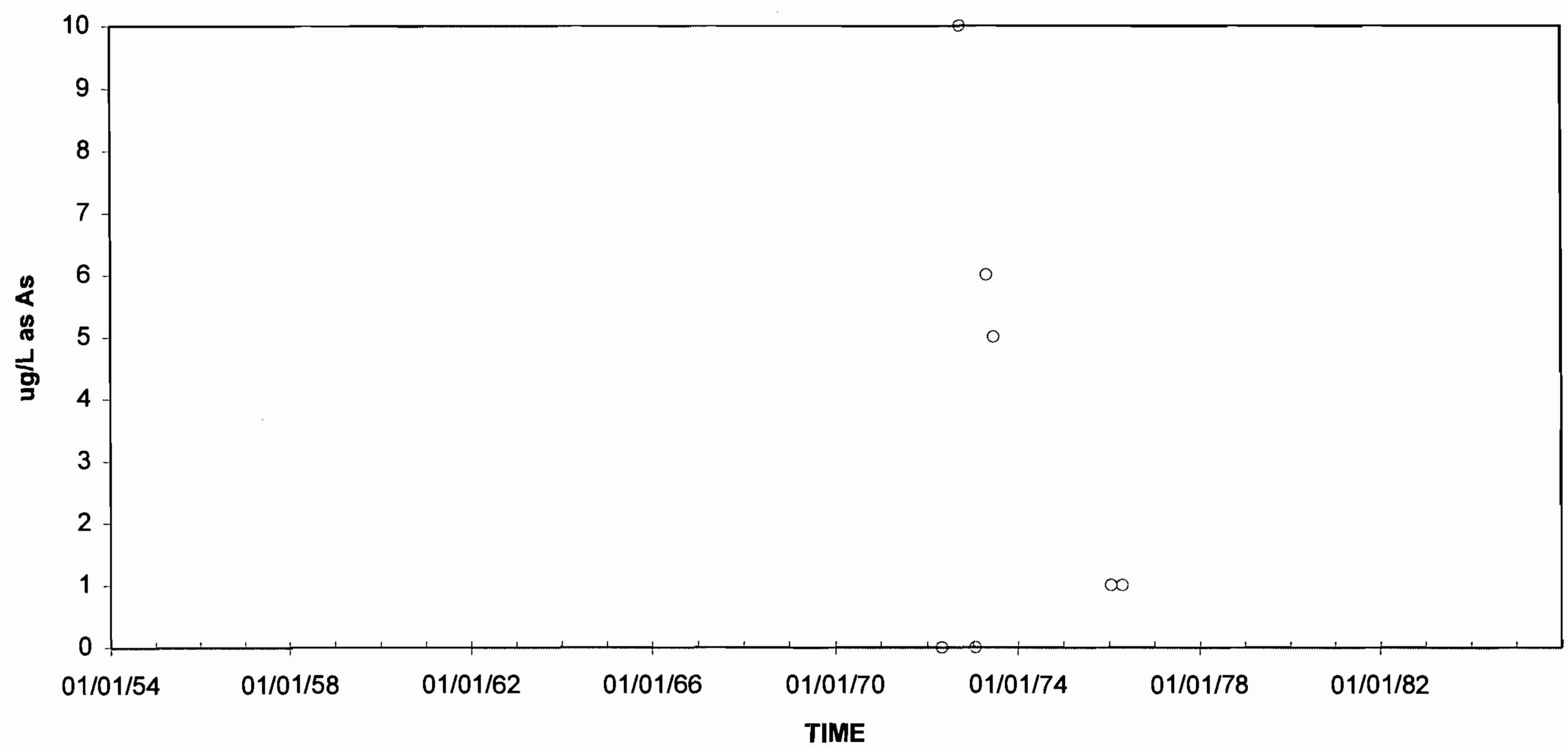
Figure
10.5.4–180



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
ARSENIC, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

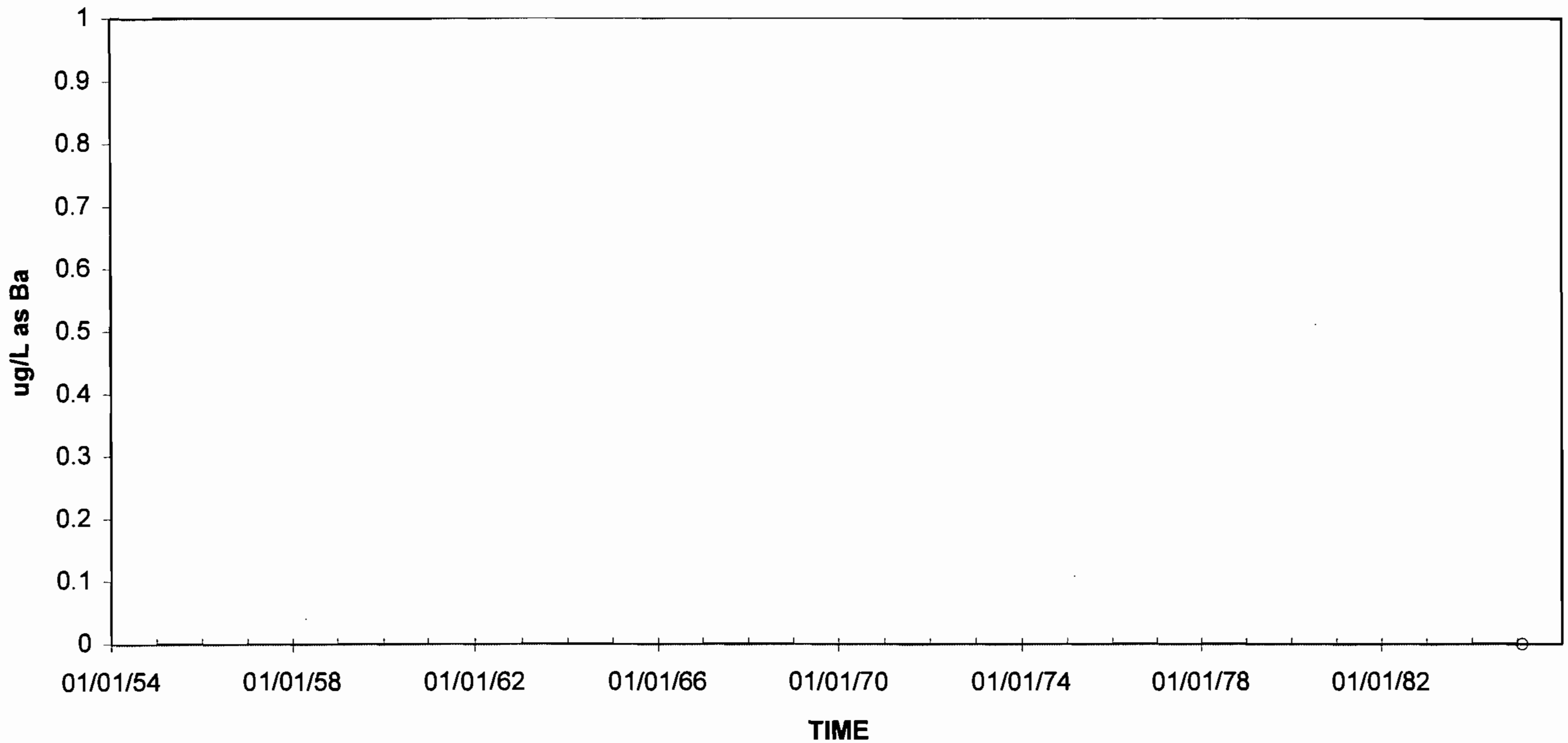
Figure
10.5.4–181



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
ARSENIC, TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

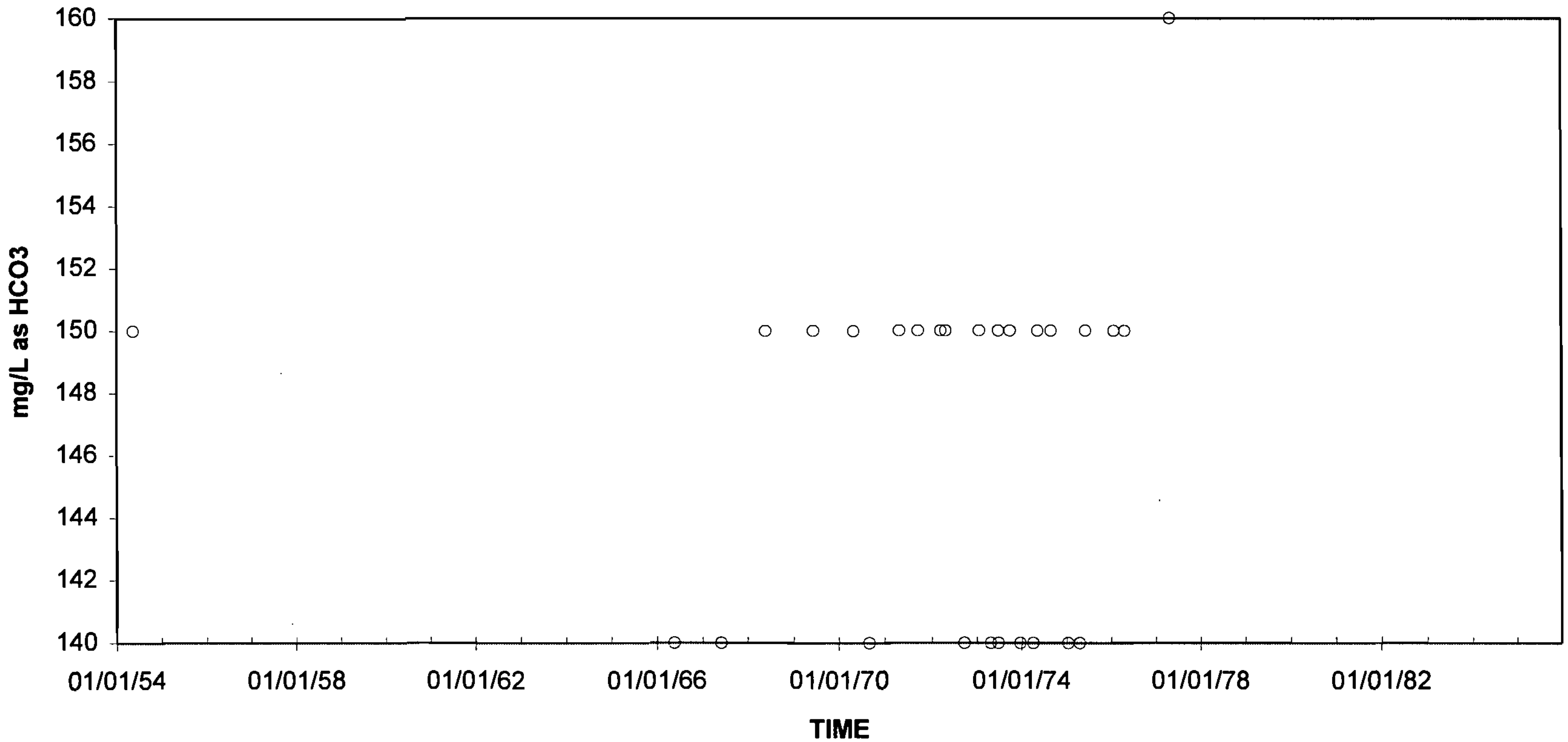
Figure
10.5.4–182



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
BARIUM, TOTAL RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

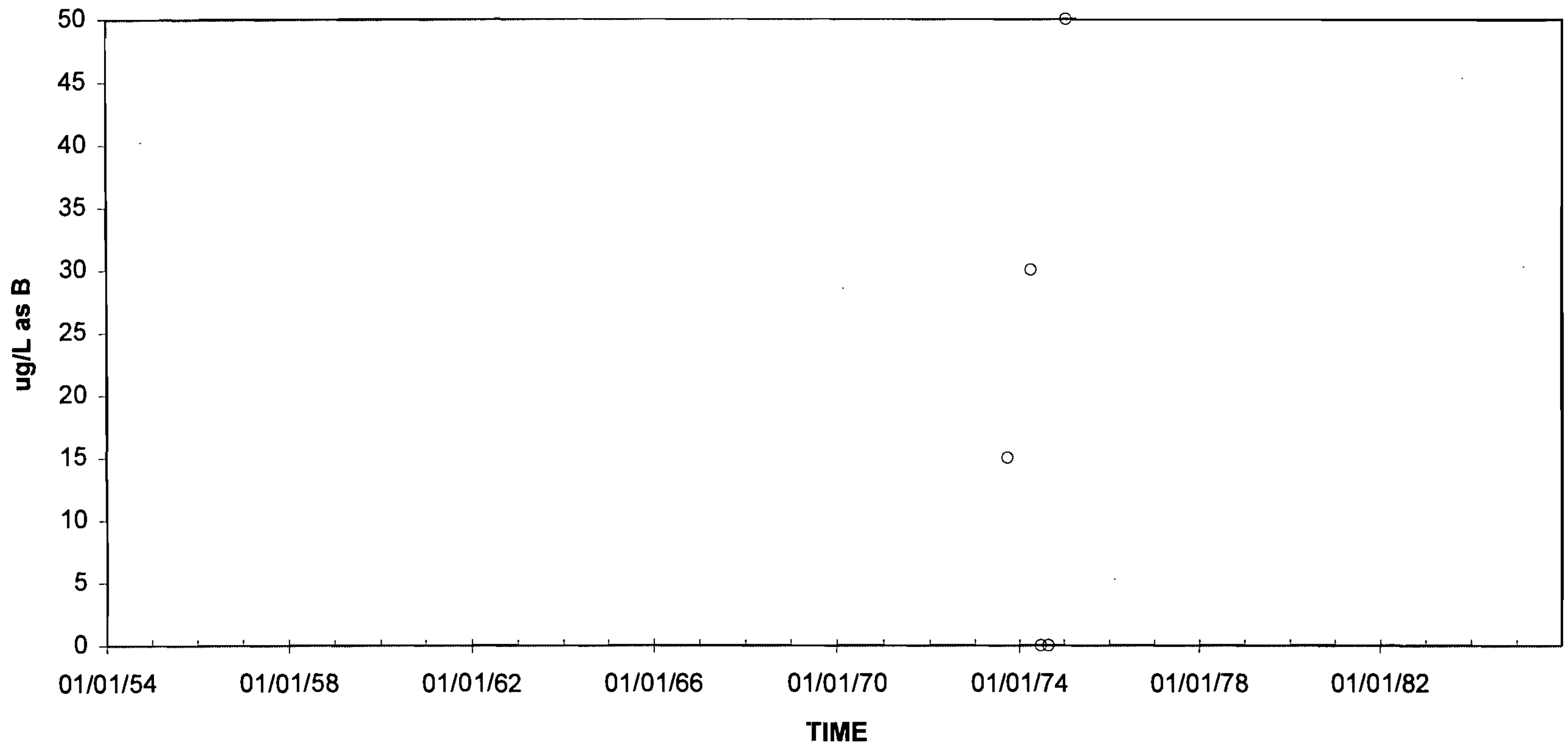
Figure 10.5.4–183



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
BICARBONATE WAT WH TOT FET FIELD
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

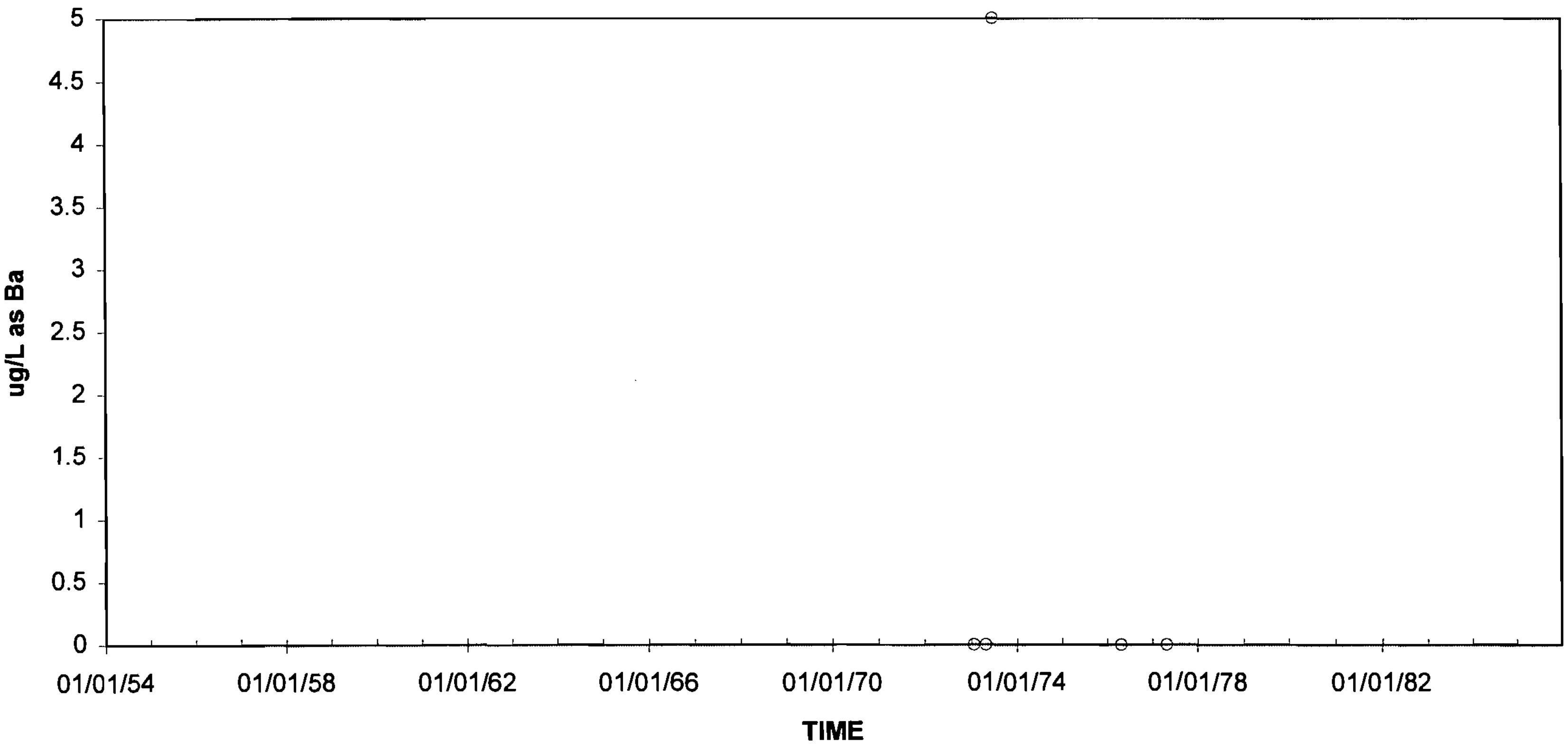
Figure
10.5.4–184



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
BORON, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

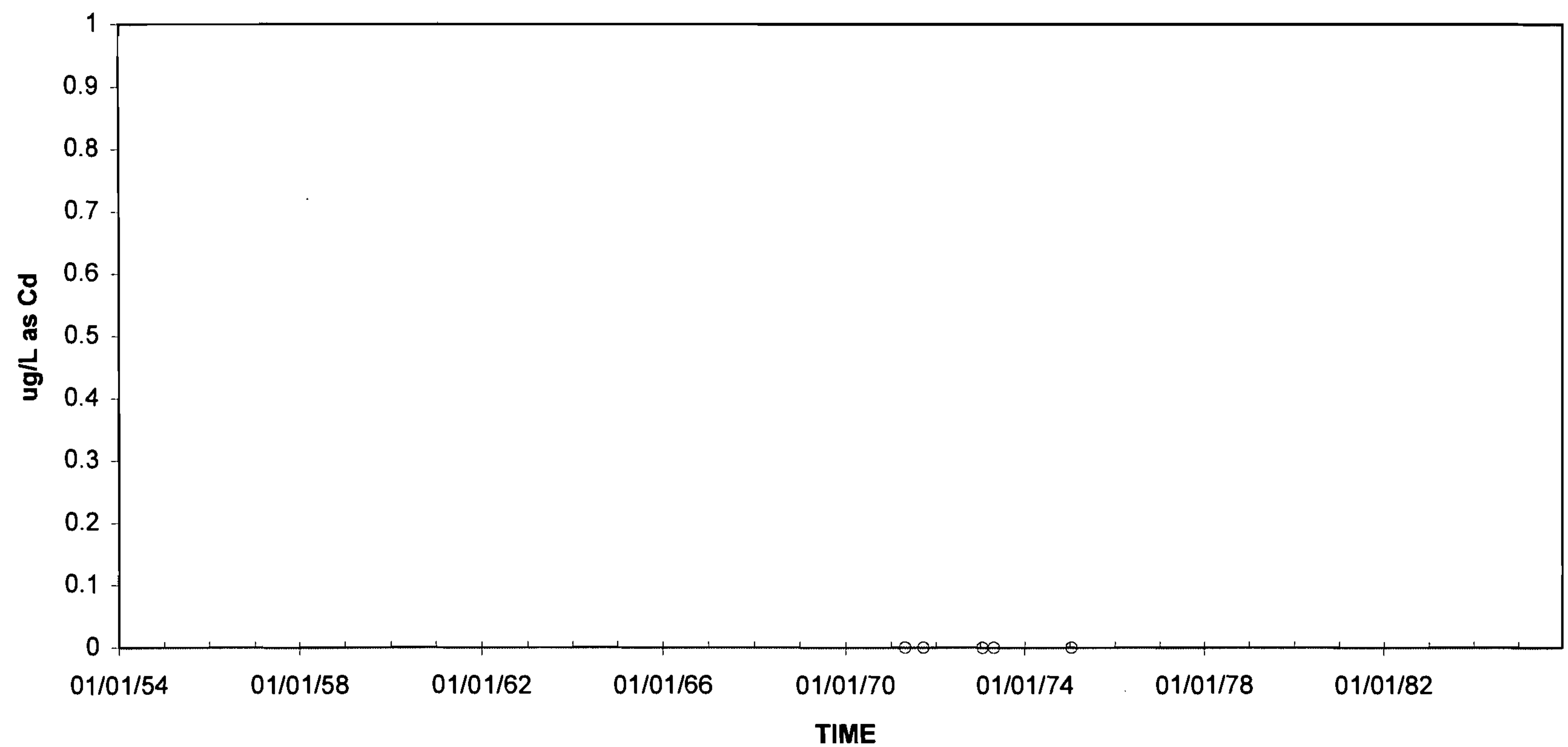
Figure
10.5.4–185



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
BORON, TOTAL RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

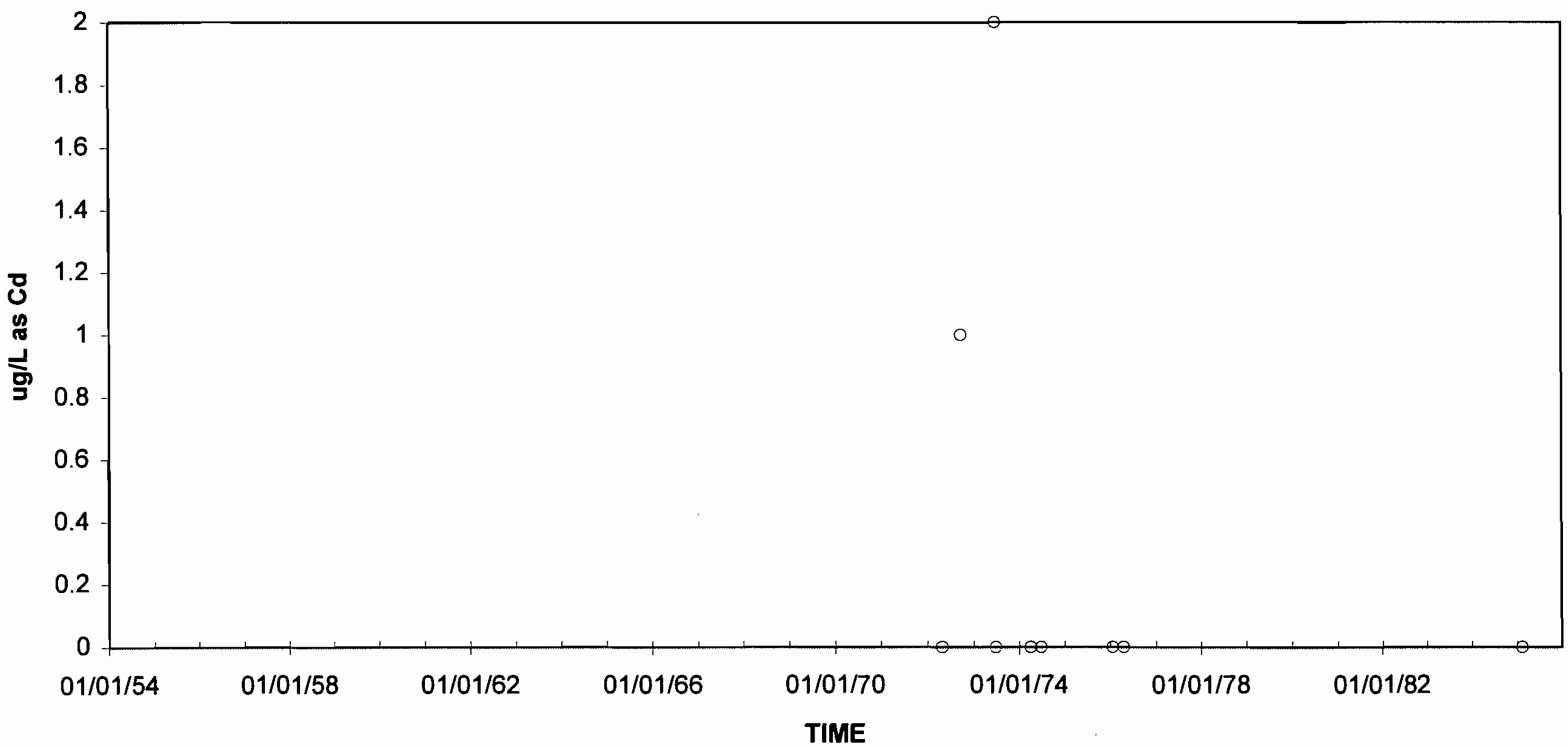
Figure 10.5.4–186



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
CADMIUM, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

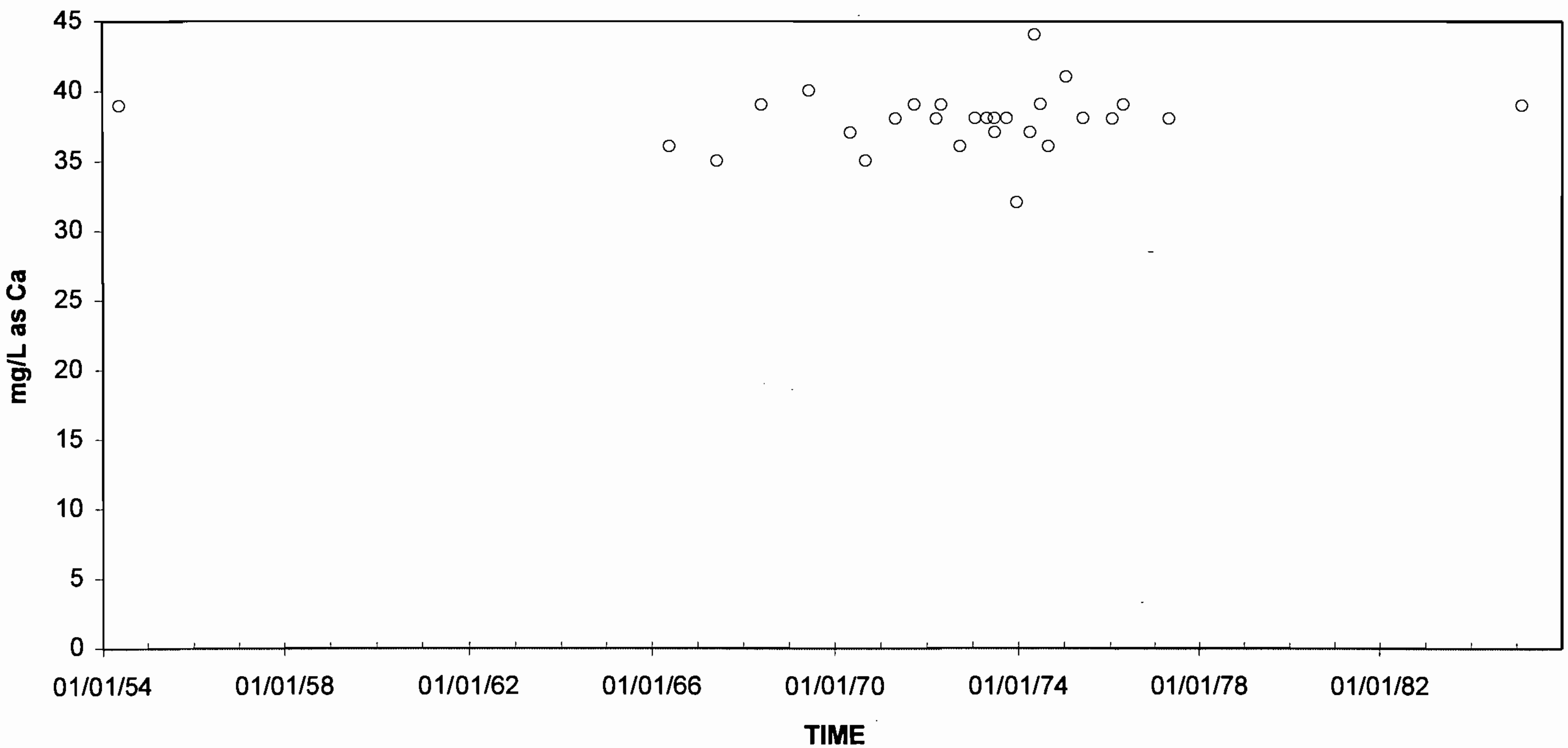
Figure
10.5.4-187



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
CADMIUM, WATER UNFLTRD TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

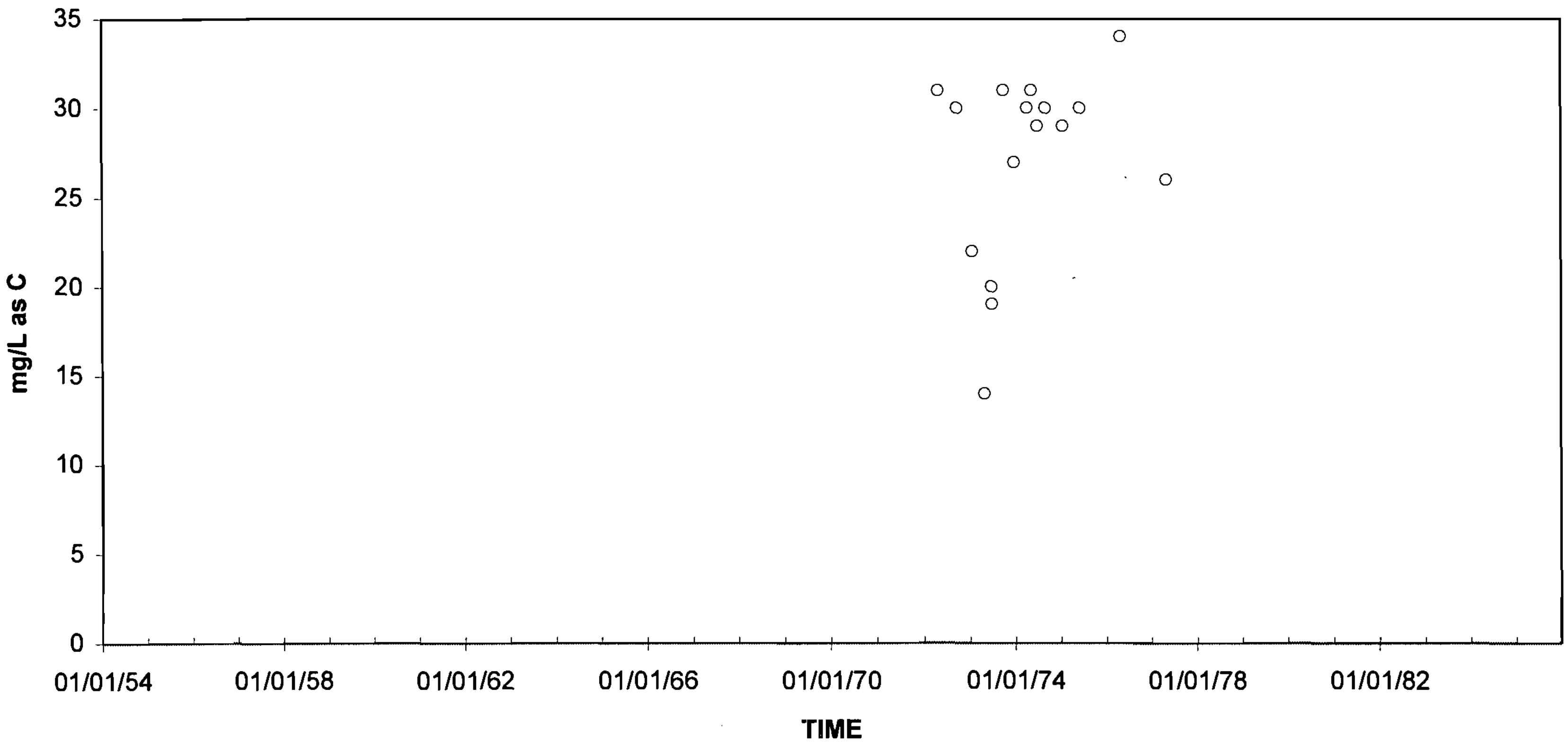
Figure 10.5.4–188



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
CALCIUM, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

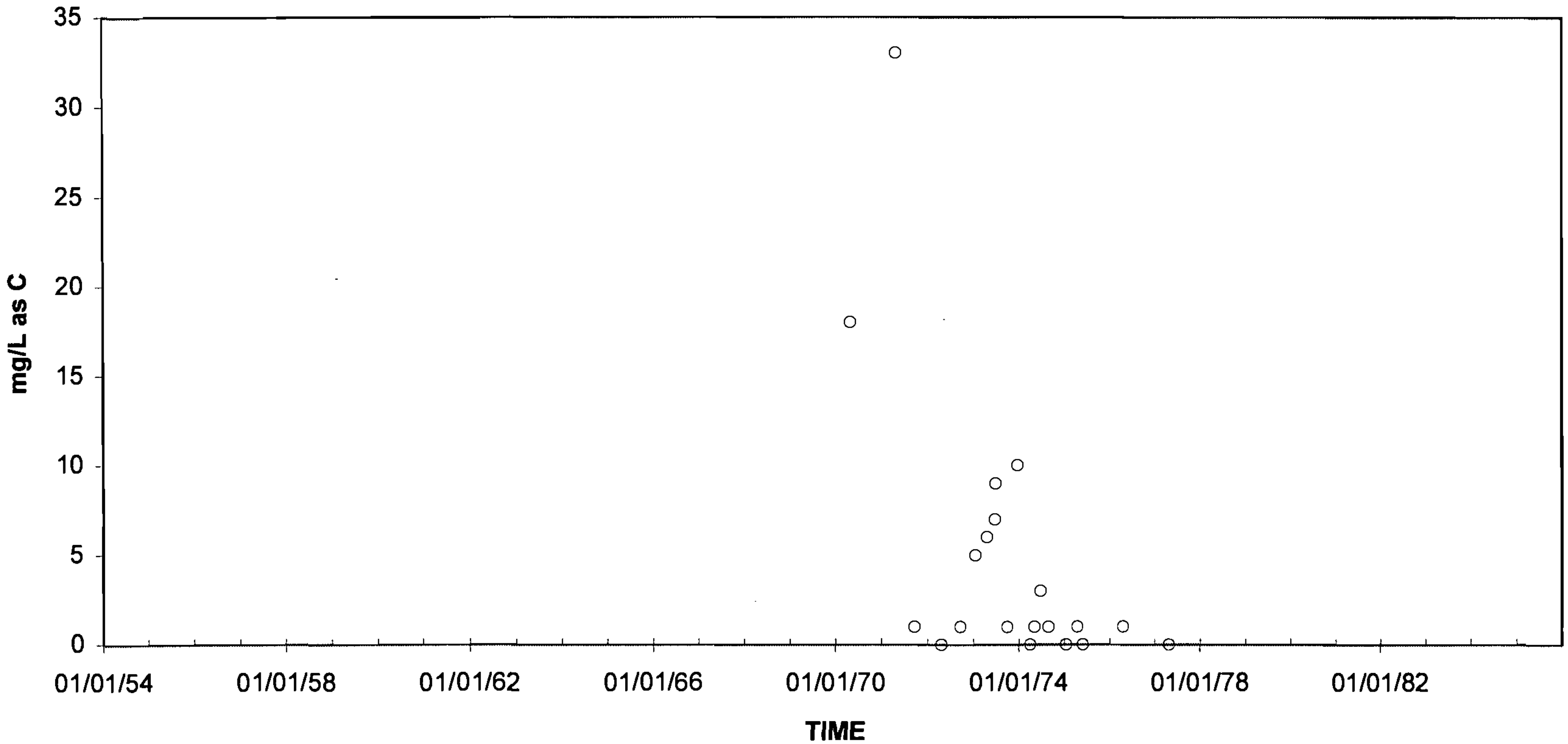
Figure
10.5.4–189



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
CARBON, INORGANIC TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

Figure 10.5.4–190

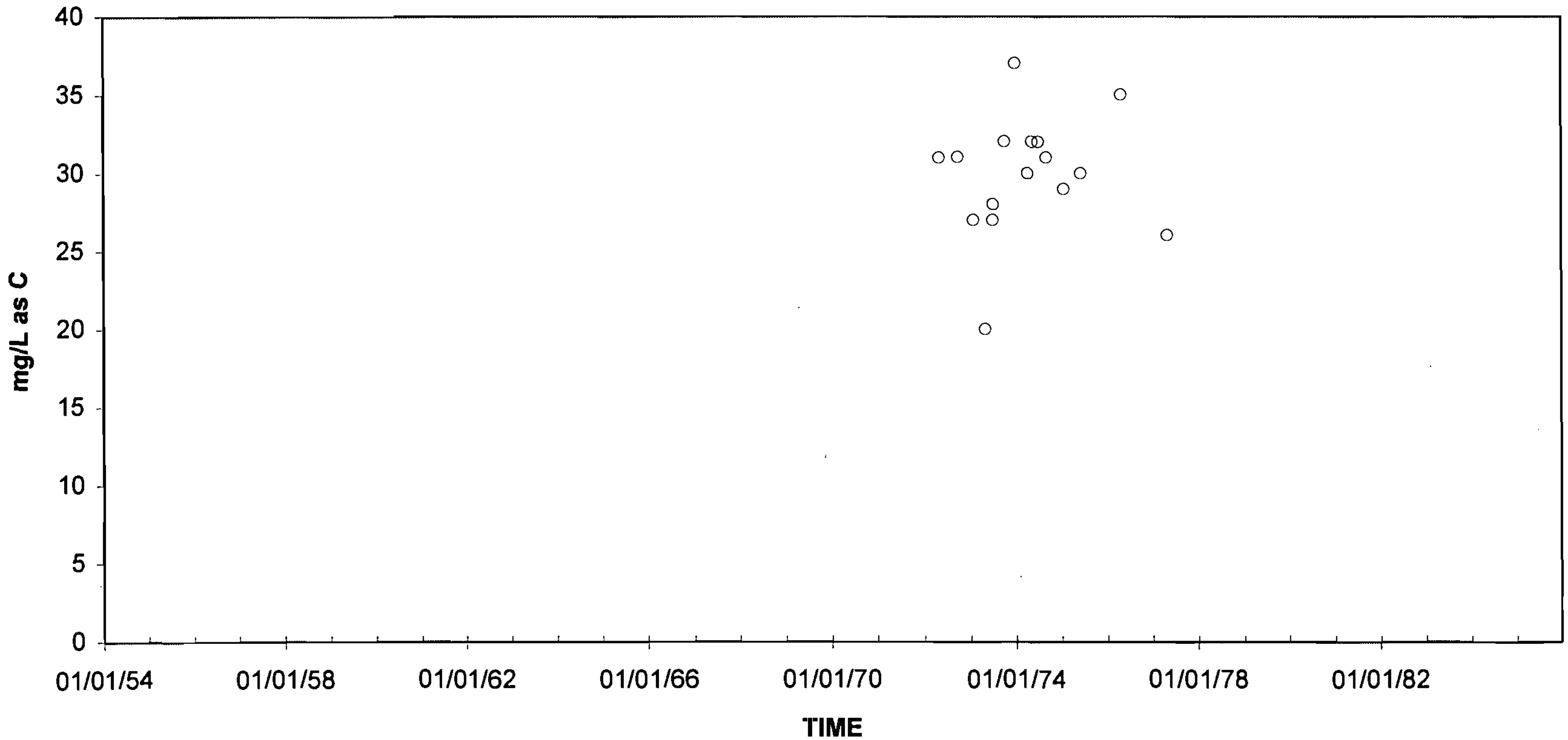


CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
CARBON, ORGANIC TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

Figure

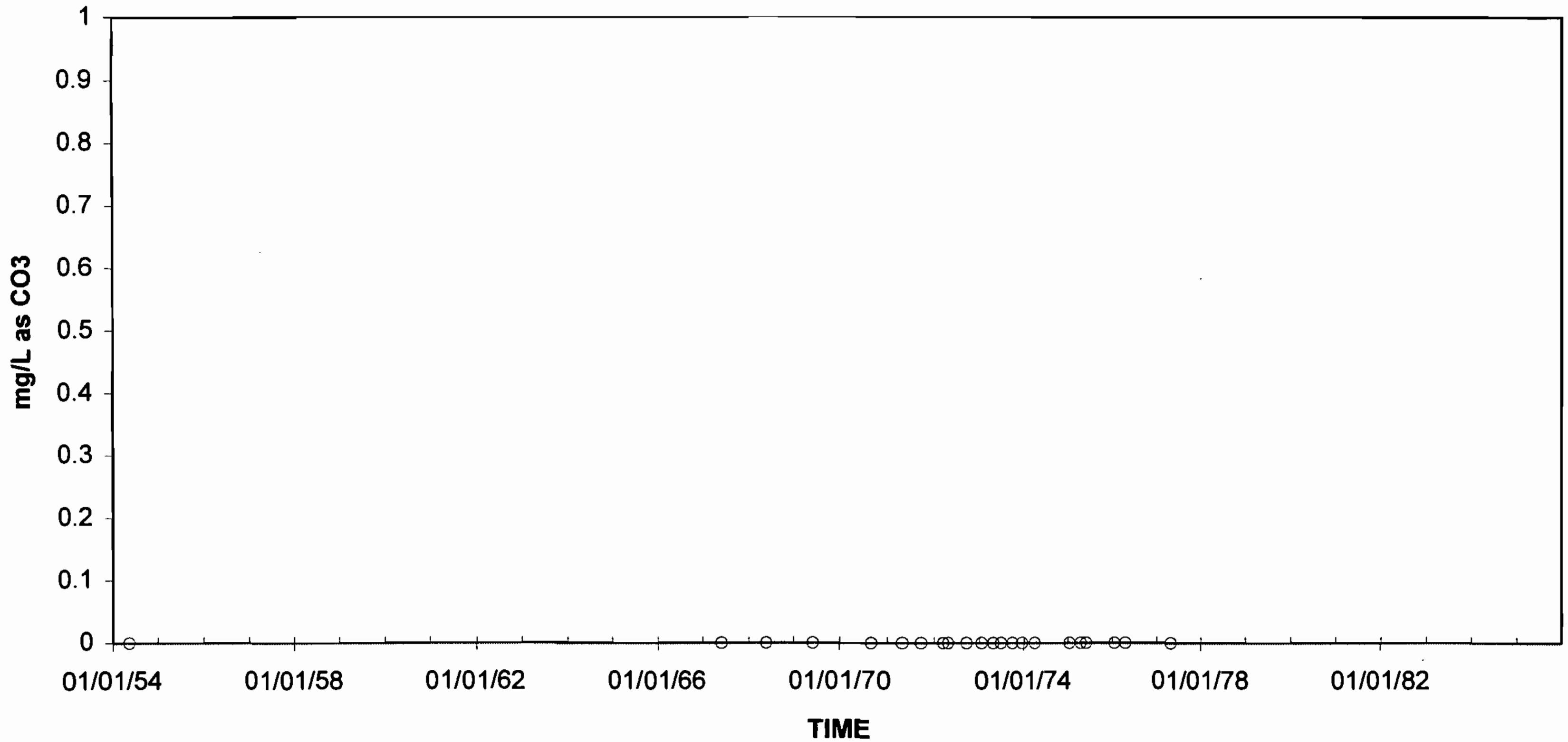
10.5.4–191



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
CARBONM, TOTAL (INORG + ORG)
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

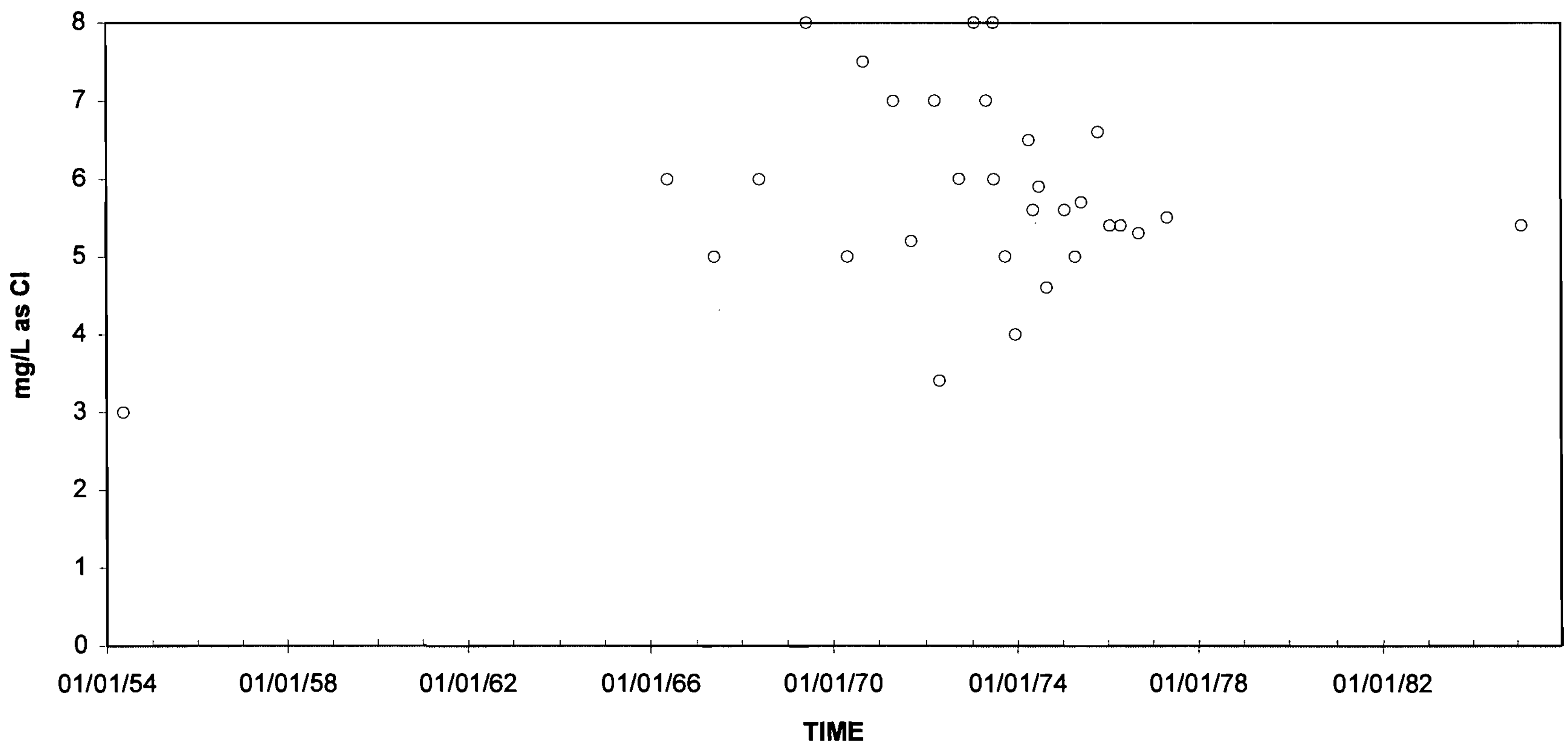
Figure
10.5.4–192



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
CARBONATE WAT WH TOT FET FIELD
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

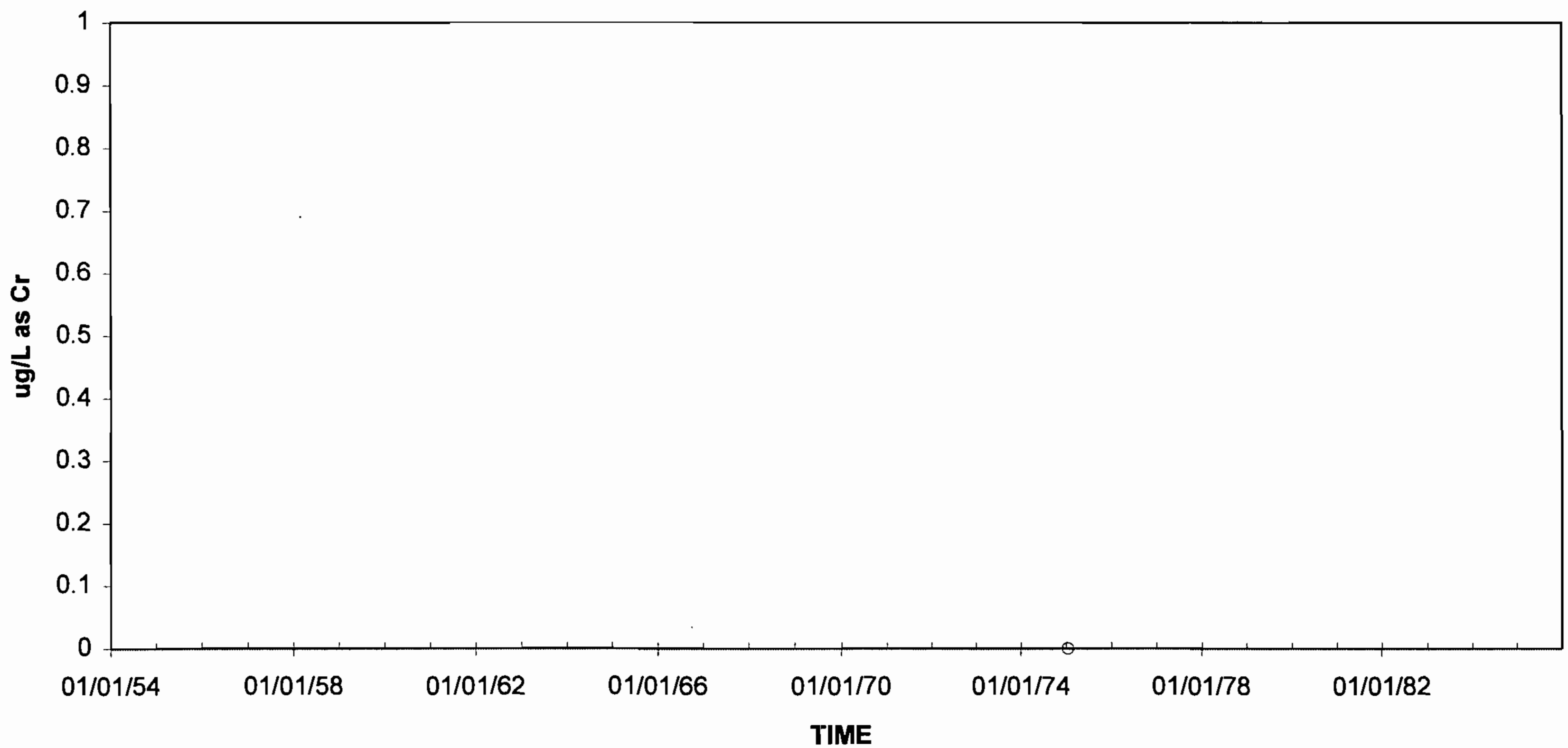
Figure
10.5.4-193



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
CHLORIDE, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

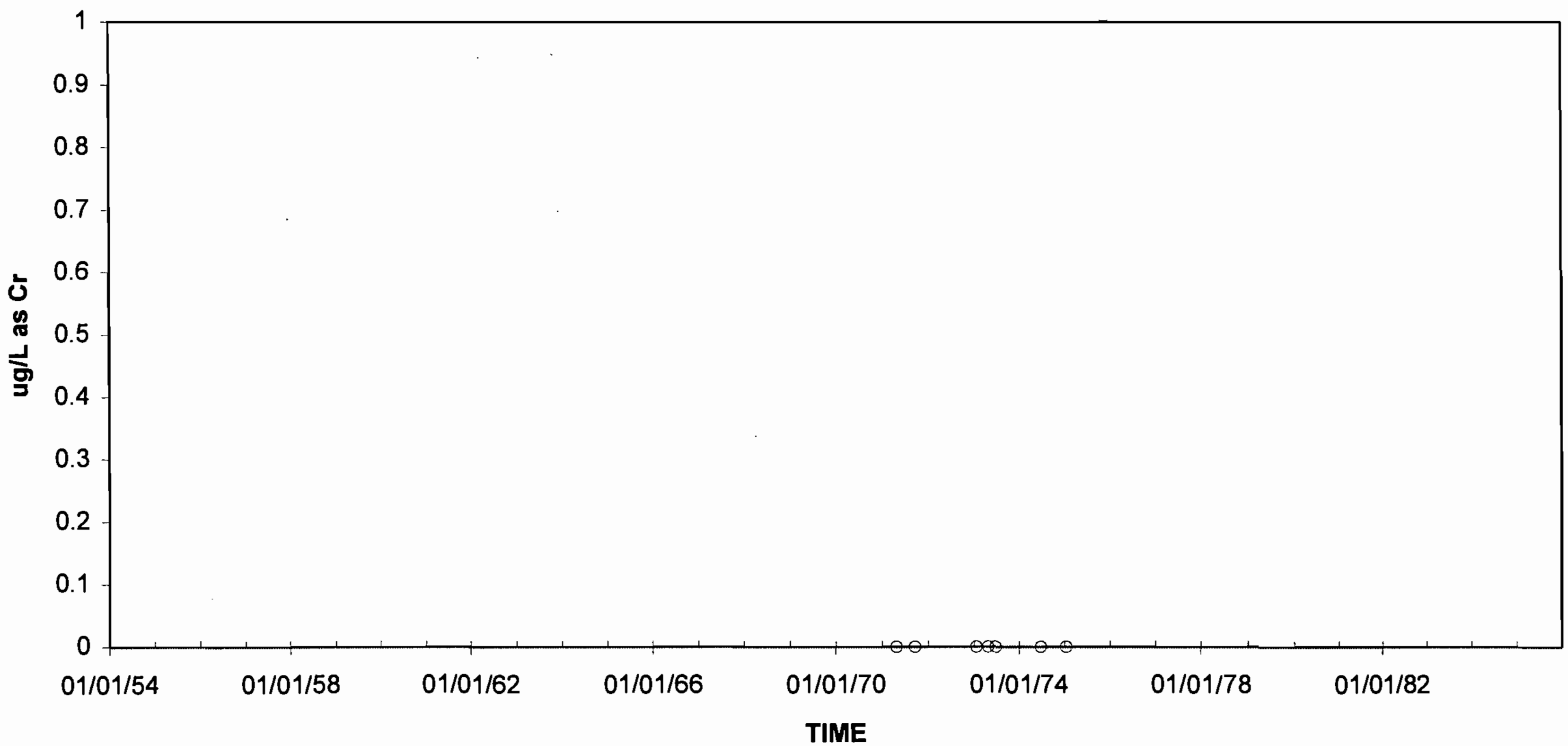
Figure 10.5.4–194



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
CHROMIUM, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

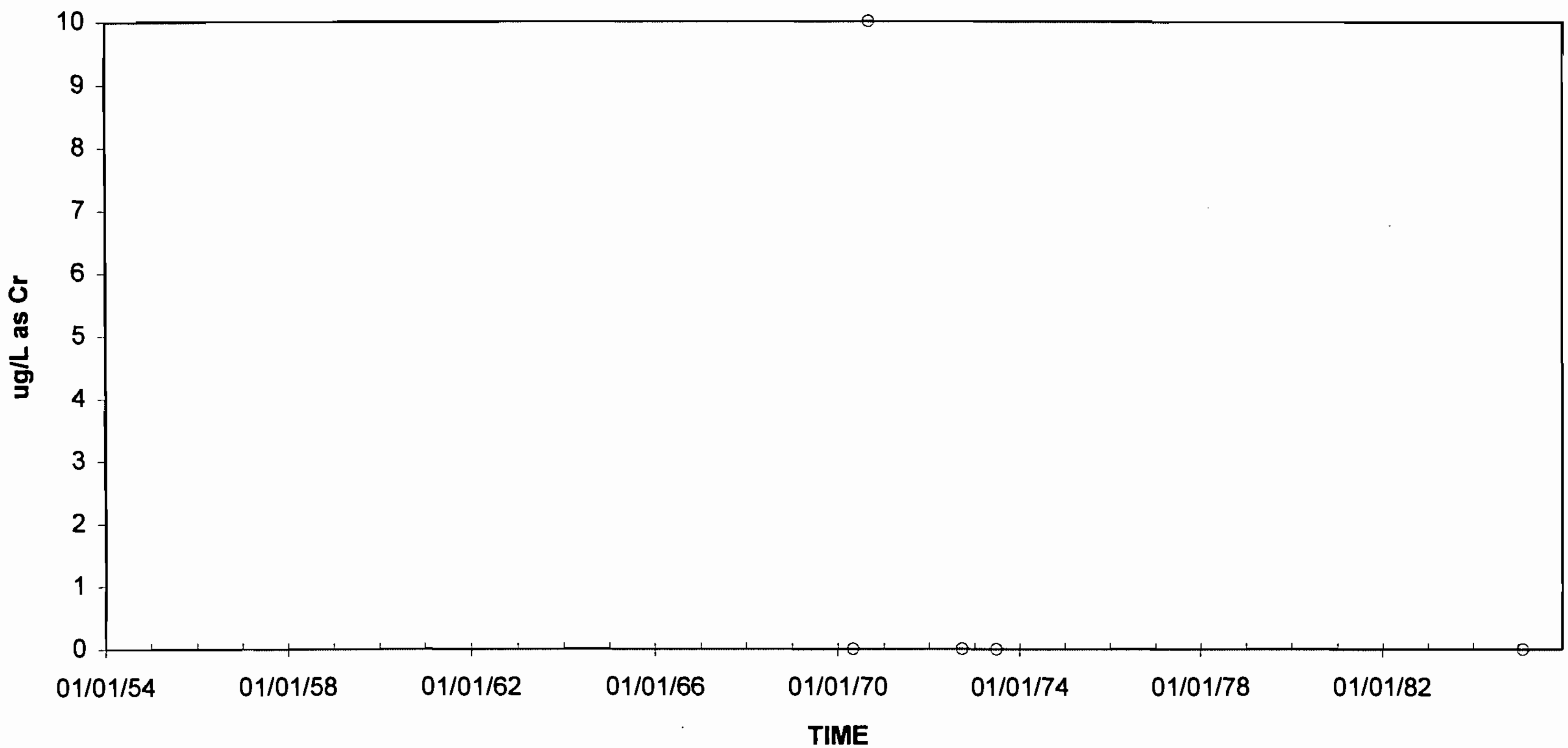
Figure
10.5.4–195



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
CHROMIUM, HEXAVALENT DIS.
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

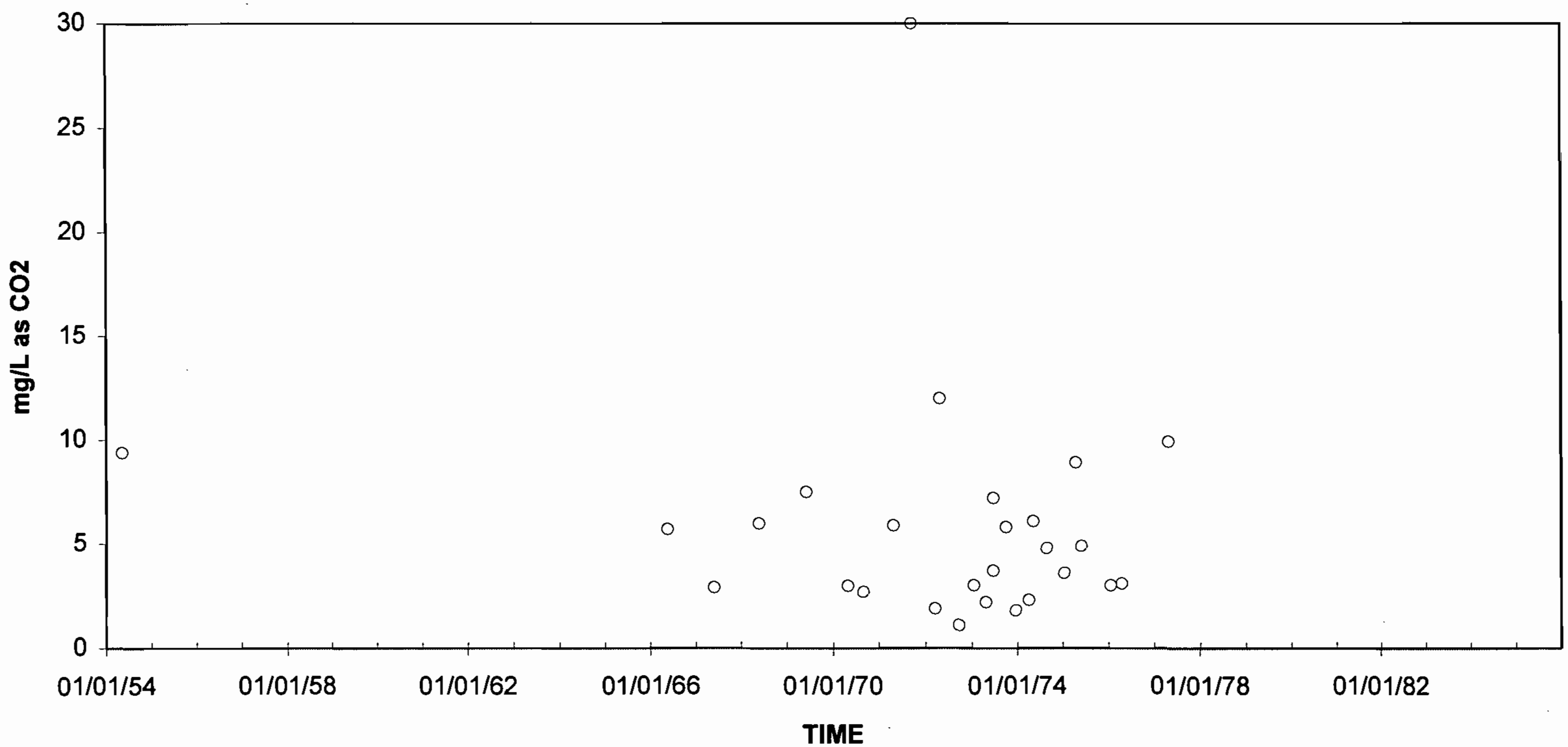
Figure
10.5.4–196



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
CHROMIUM, TOTAL RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

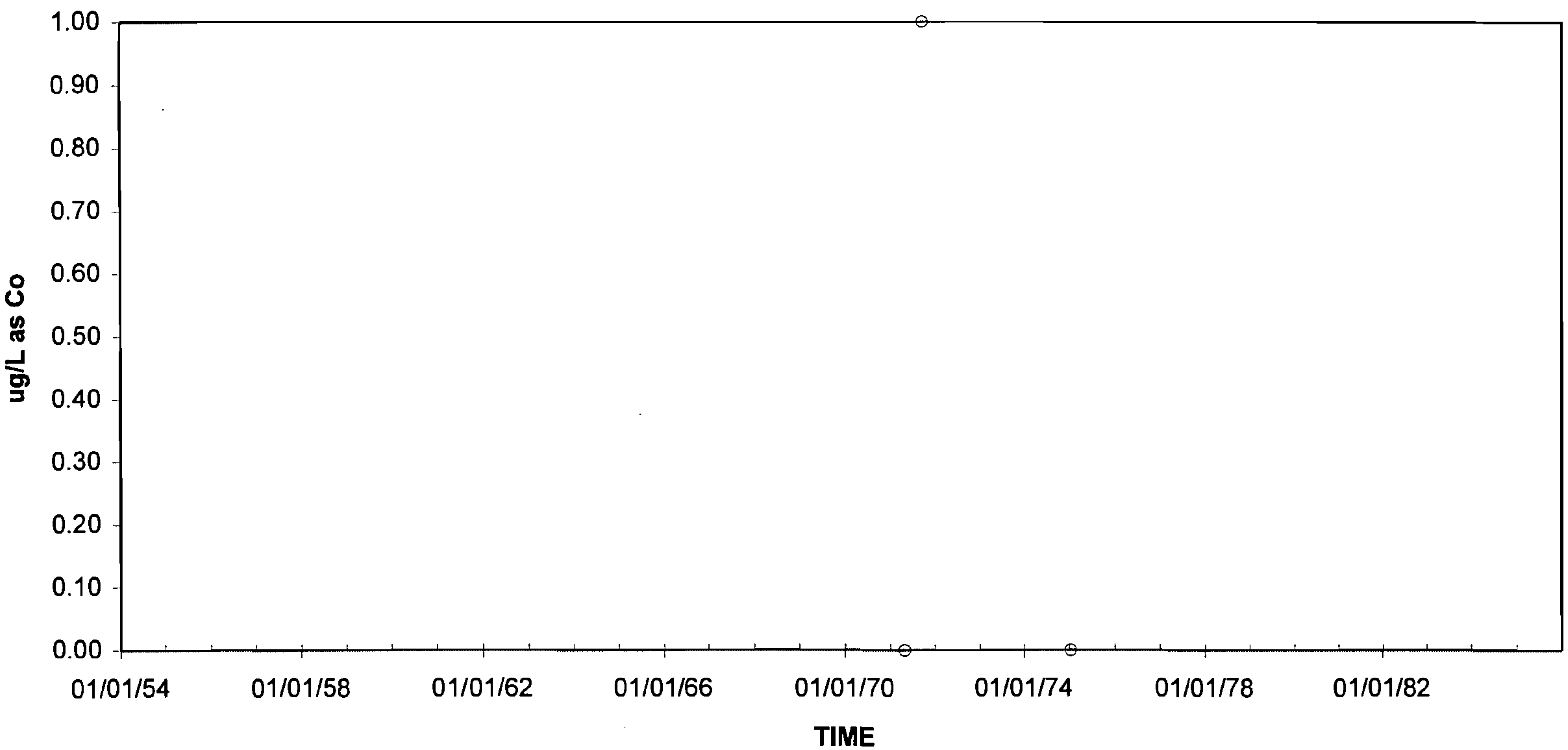
Figure
10.5.4–197



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
CO2 DISS
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

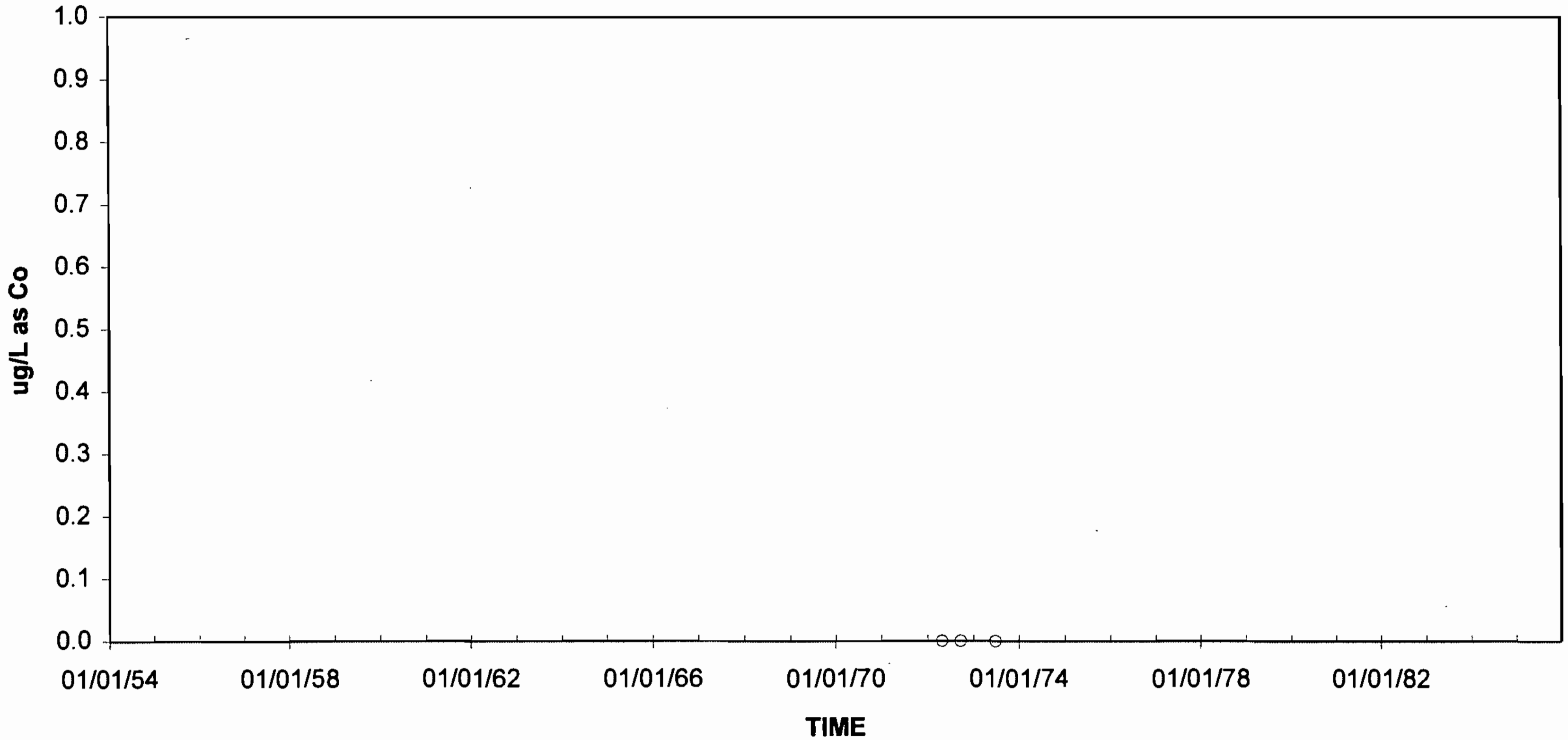
Figure 10.5.4-198



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
COBALT, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

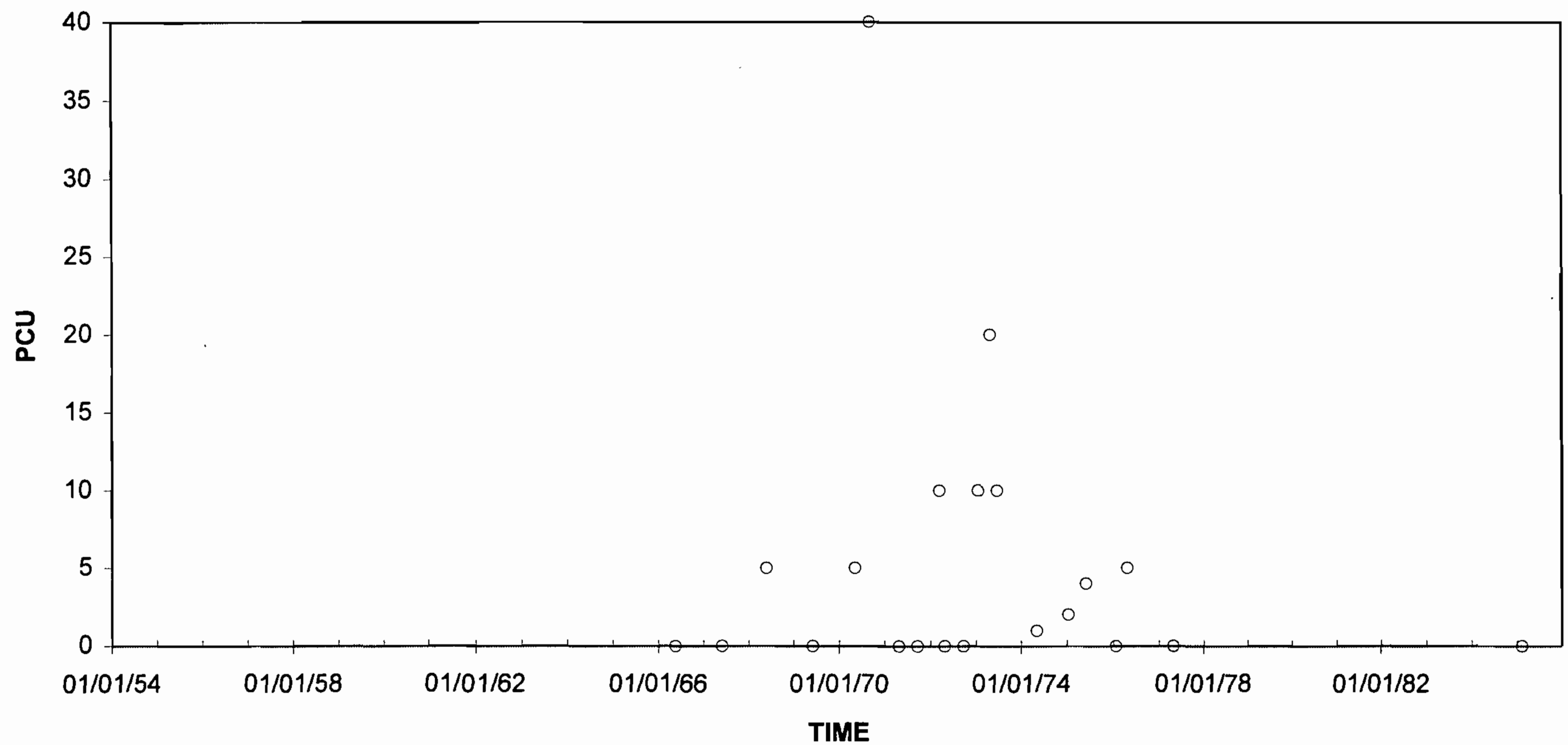
Figure
10.5.4–199



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
COBALT, TOTAL RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

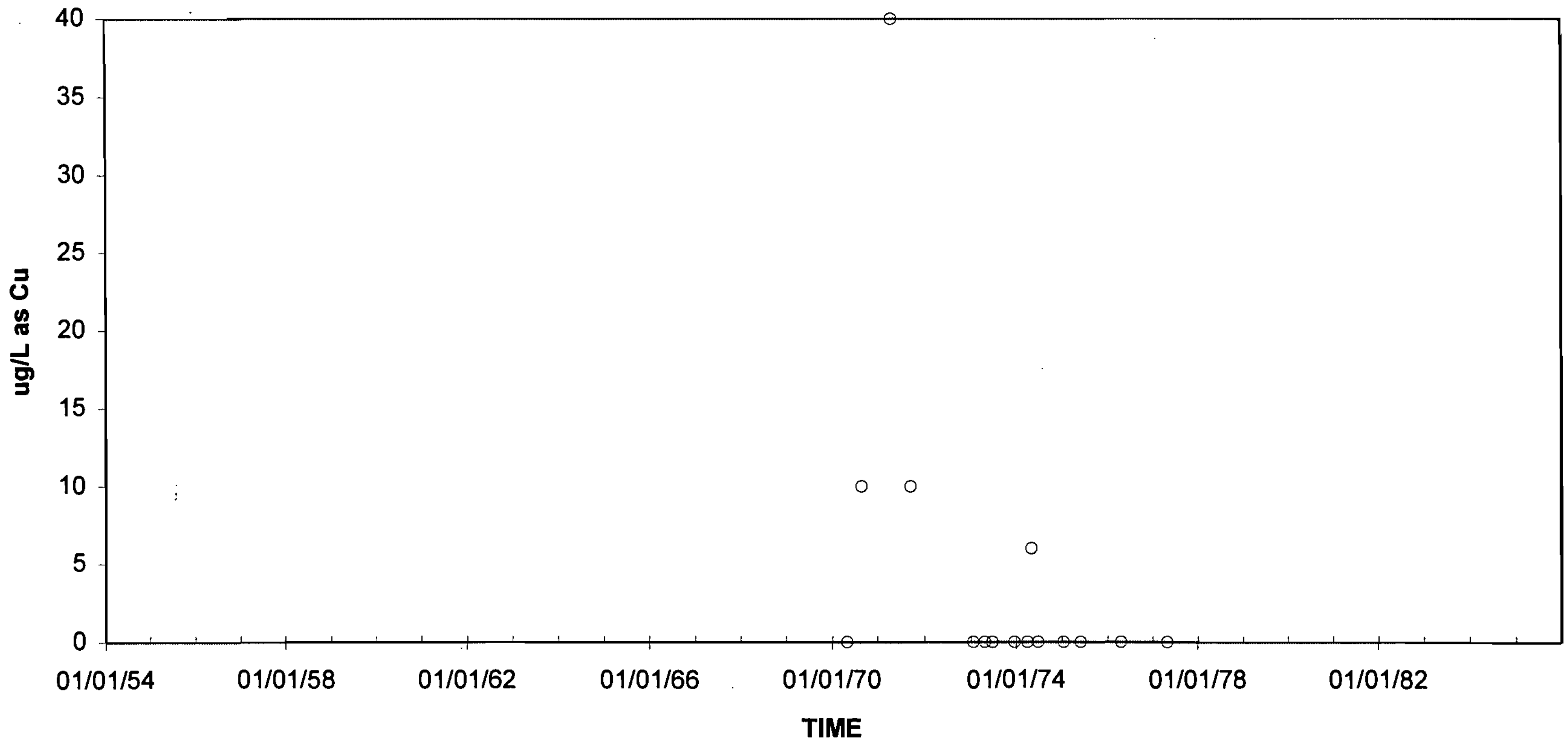
Figure
10.5.4–200



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
COLOR
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

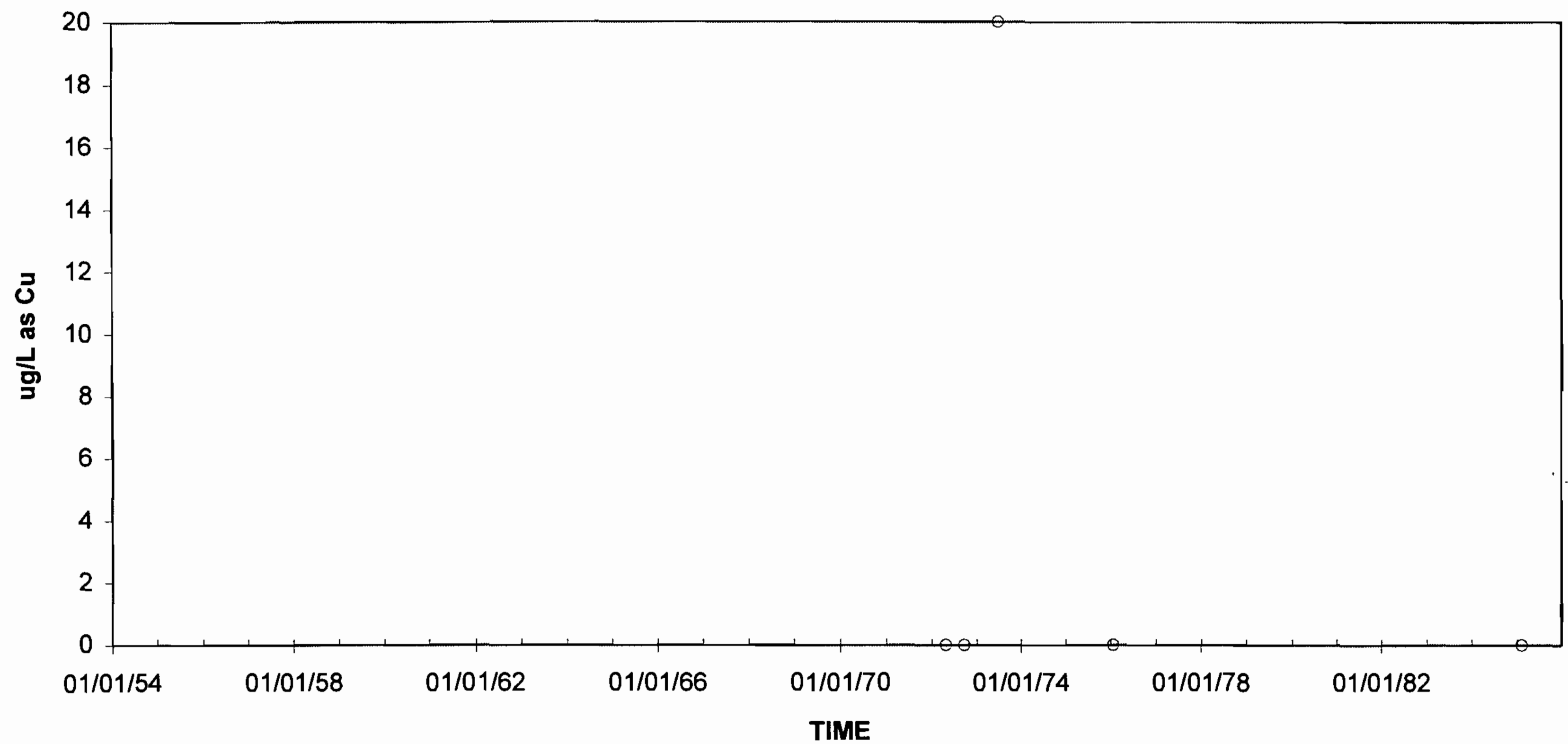
Figure 10.5.4–201



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
COPPER, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

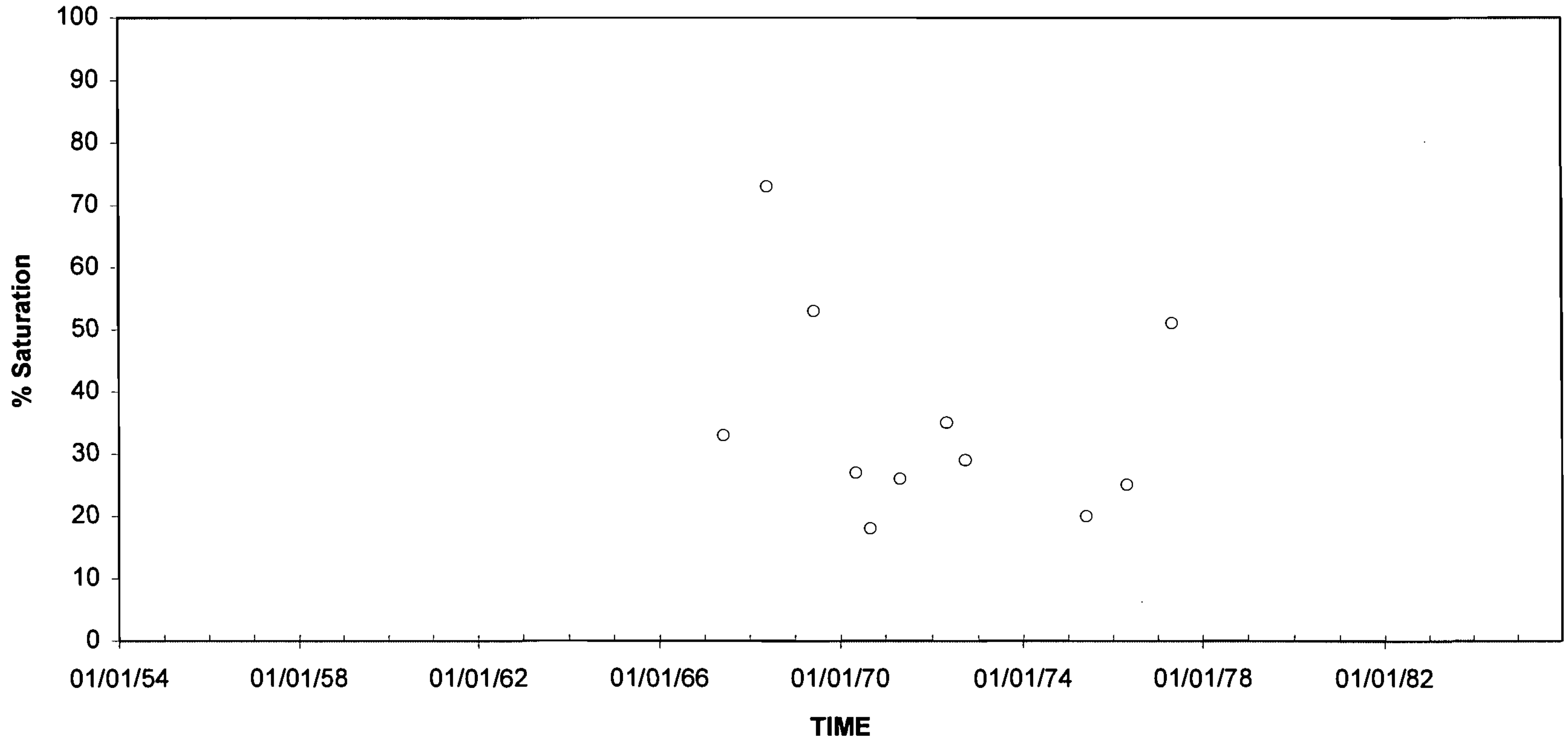
Figure
10.5.4–202



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
COPPER, TOTAL RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

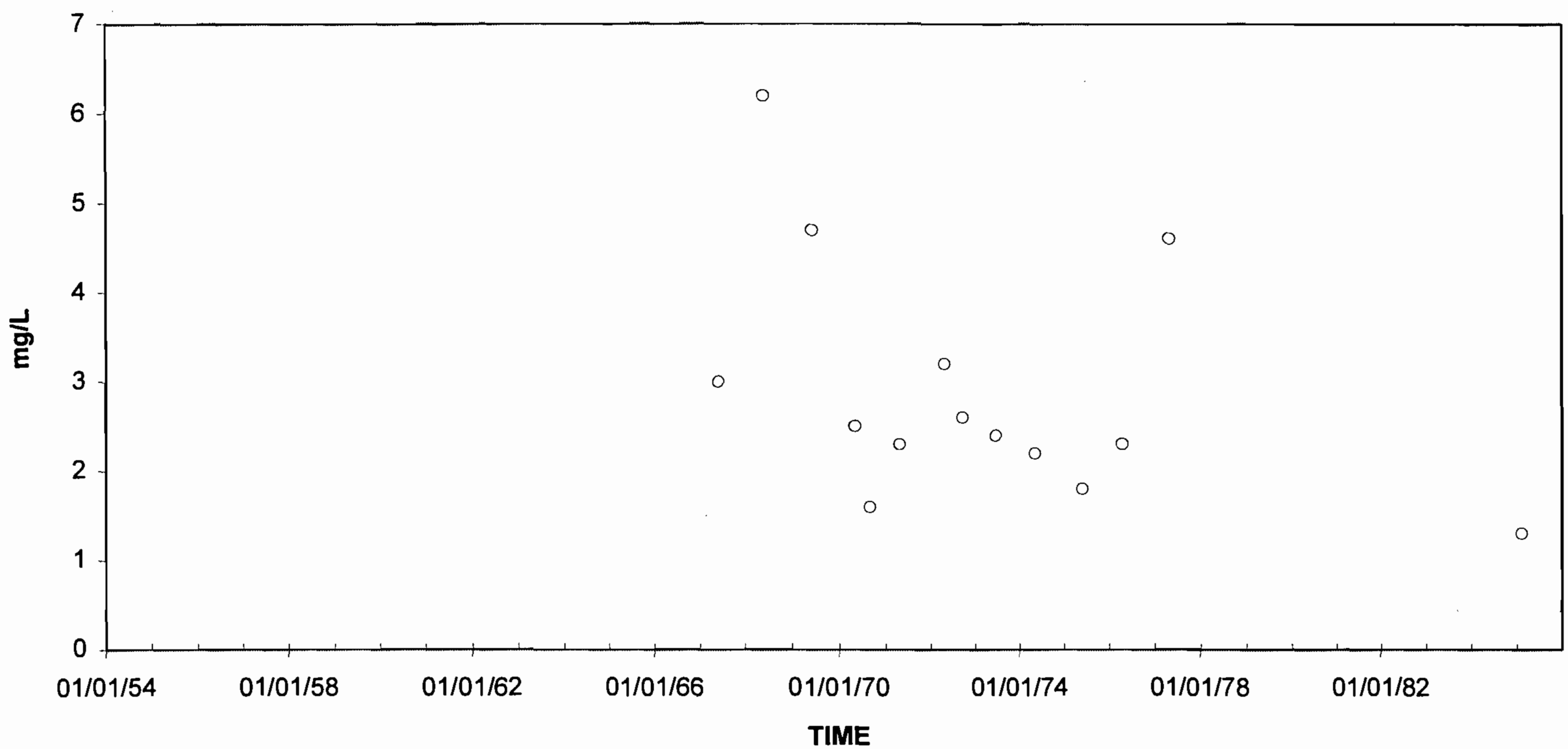
Figure
10.5.4–203



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
DISSOLVED OXYGEN
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

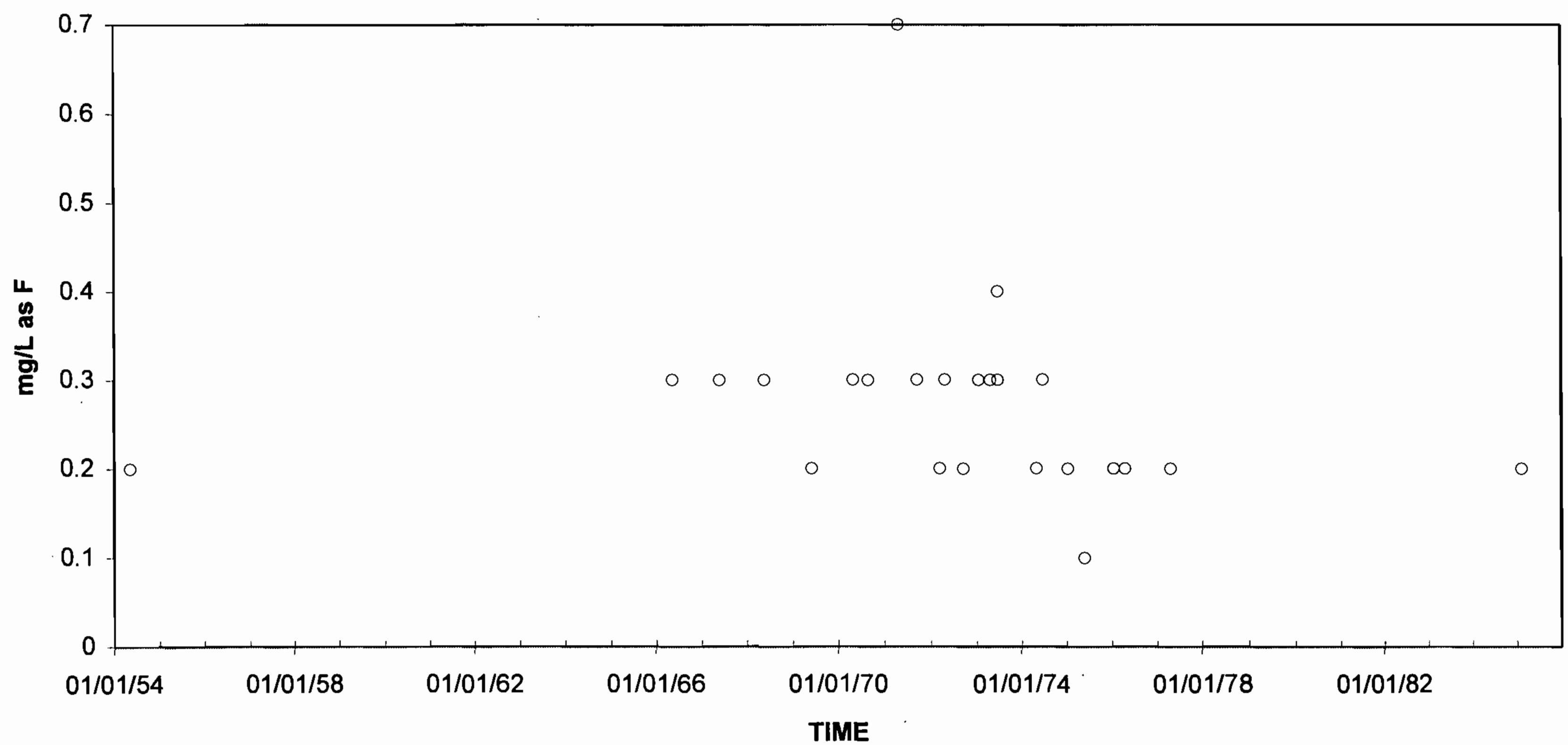
Figure 10.5.4–204



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
DISSOLVED OXYGEN
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

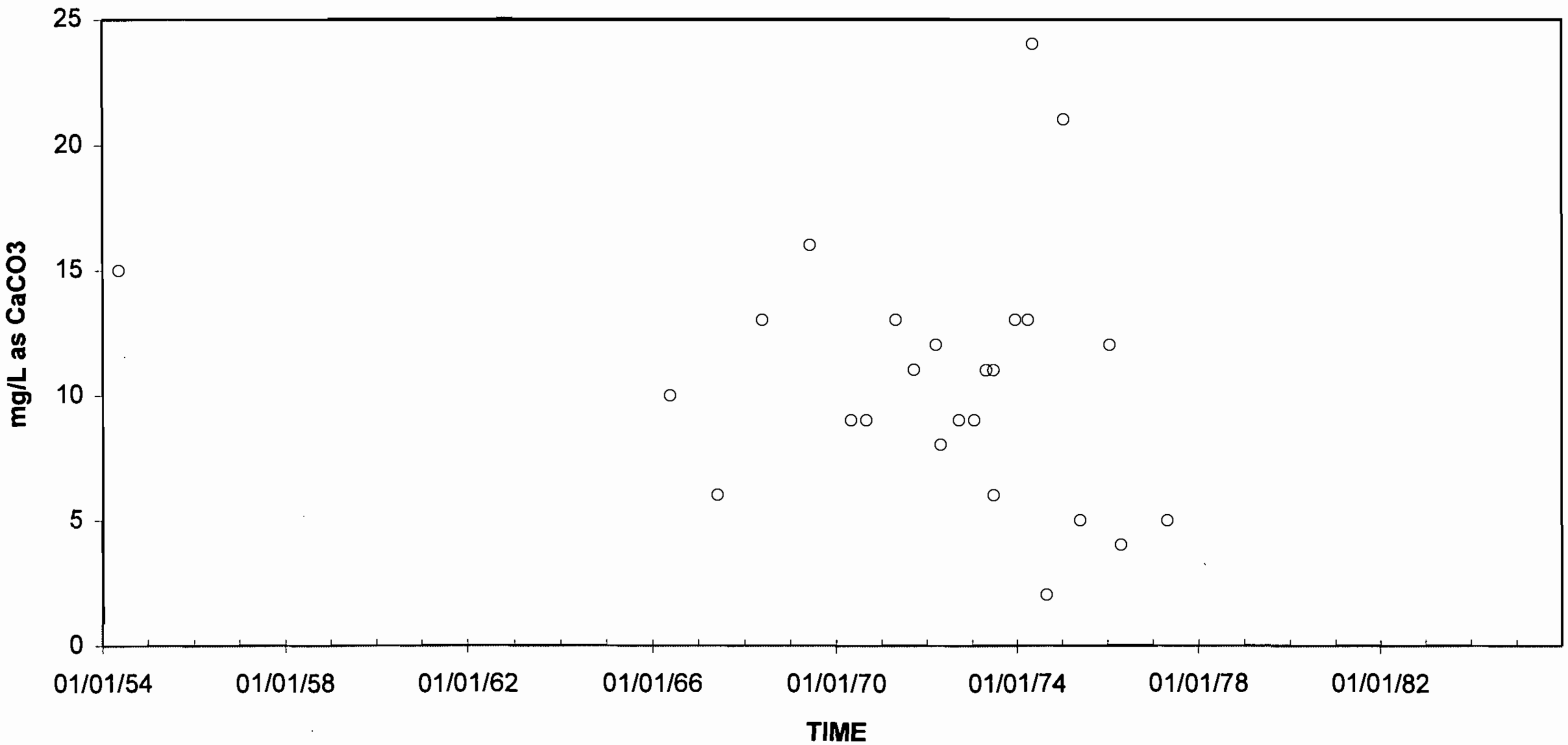
Figure
10.5.4–205



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
FLUORIDE, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

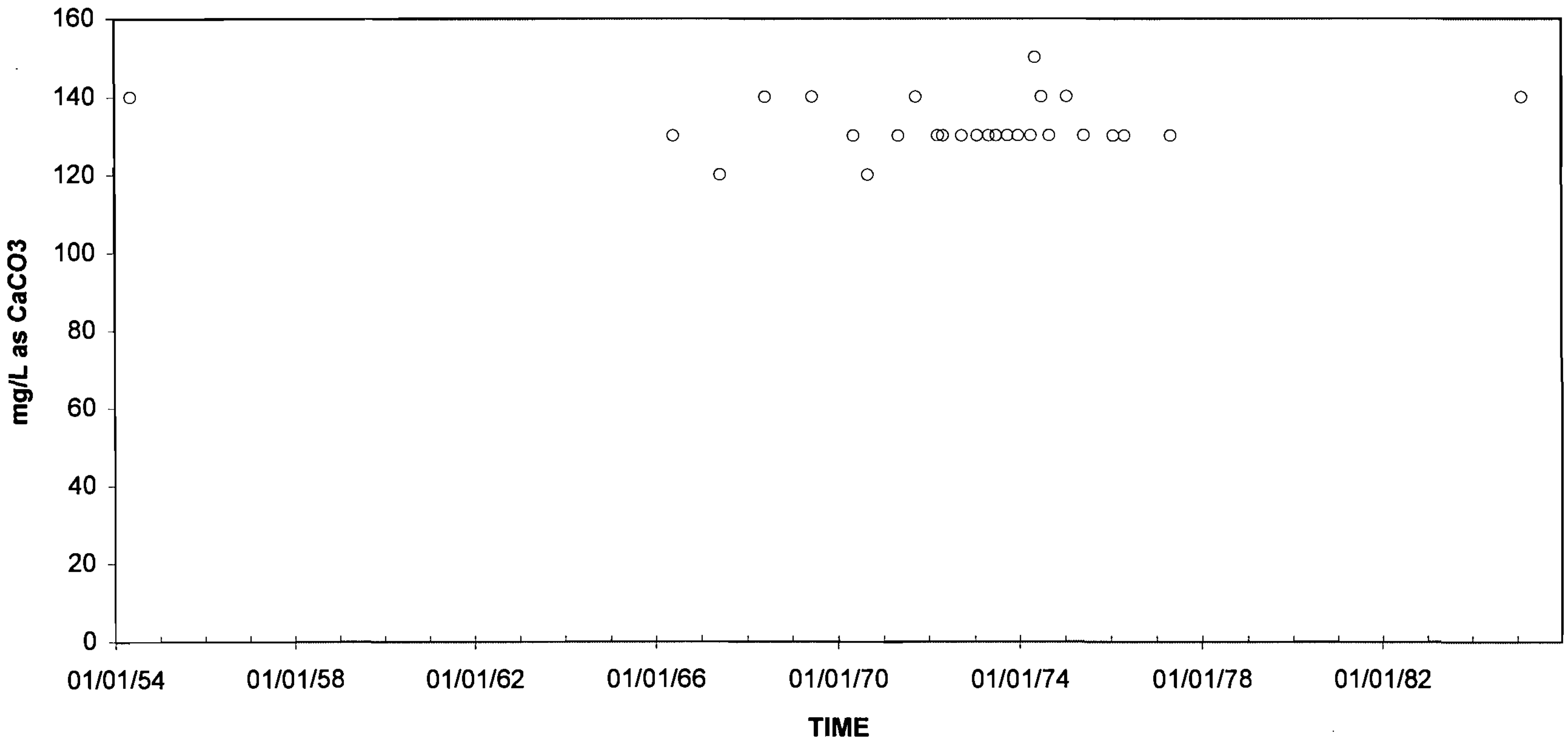
Figure
10.5.4–206



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
HARDNESS, NONCARB WH WAT TOT FLD
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

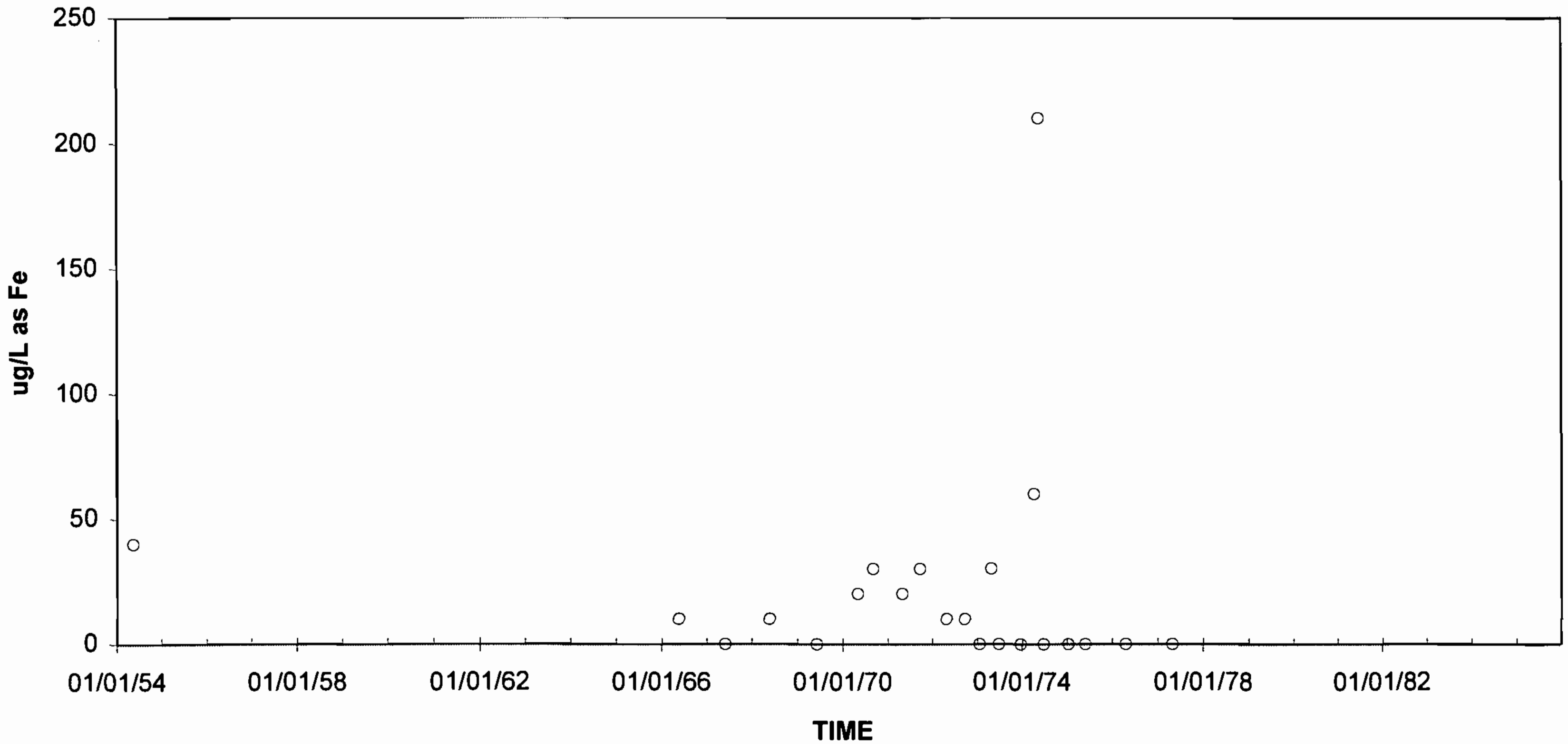
Figure 10.5.4–207



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
HARDNESS, TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

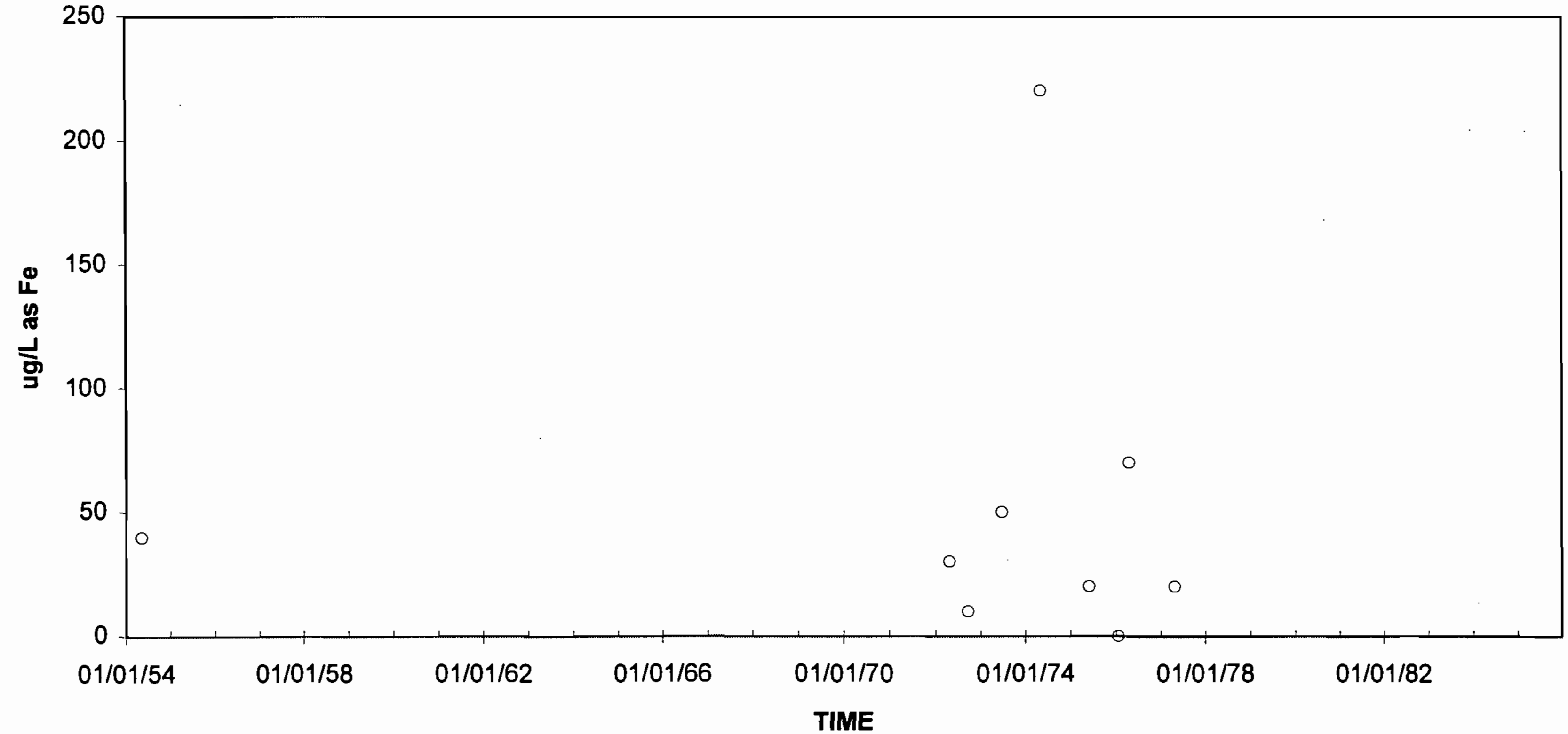
Figure
10.5.4–208



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
IRON, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

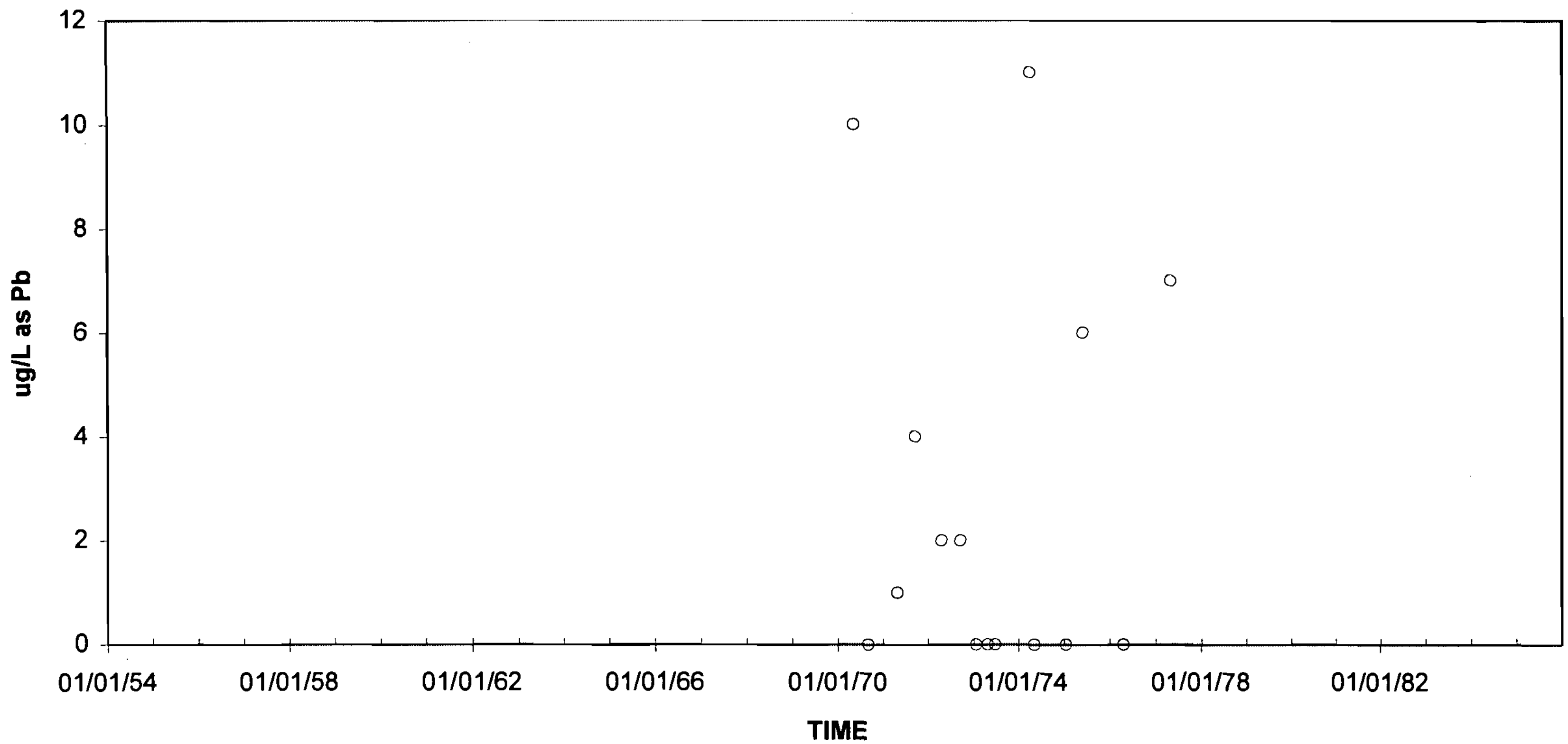
Figure
10.5.4–209



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
IRON, TOTAL RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

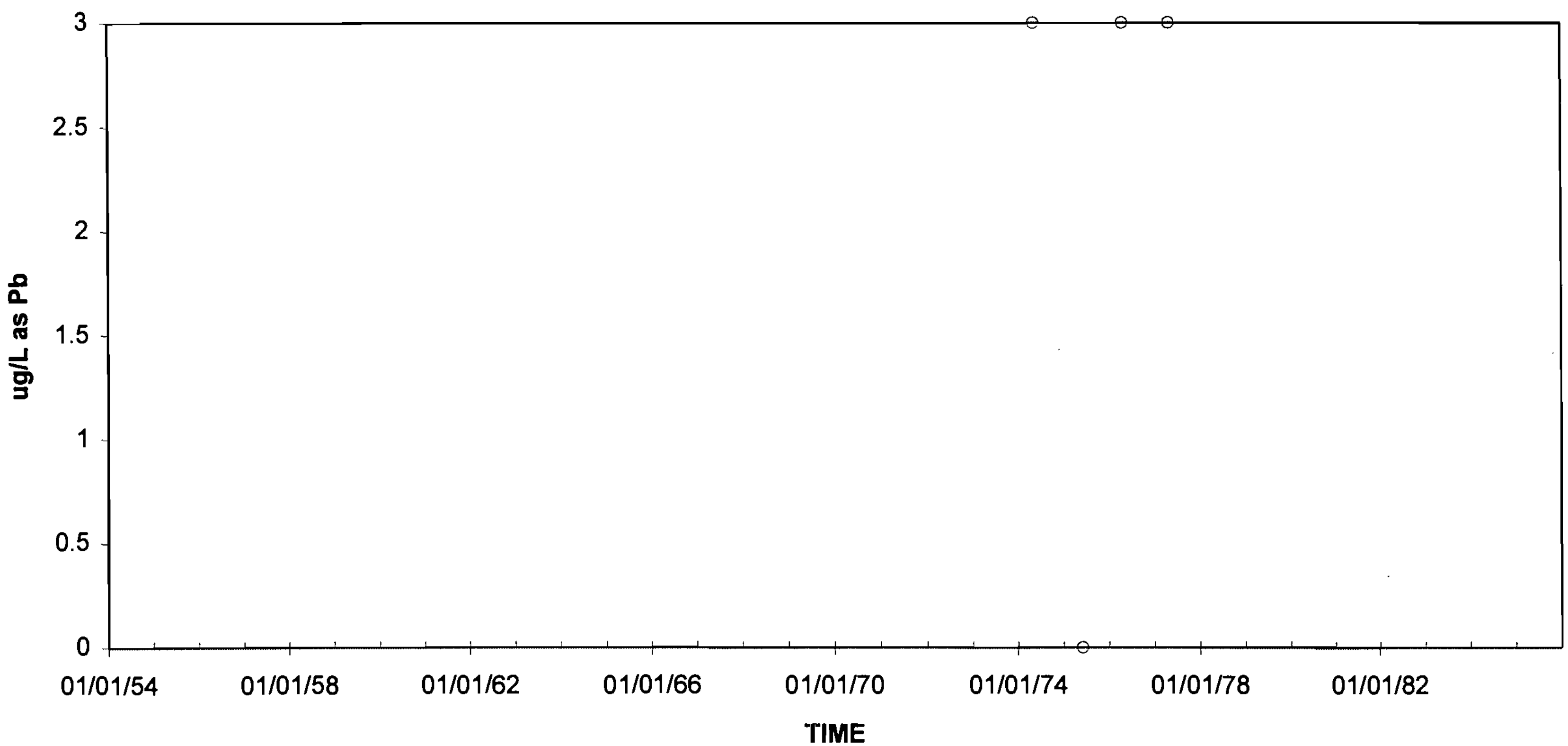
Figure
10.5.4–210



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
LEAD, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

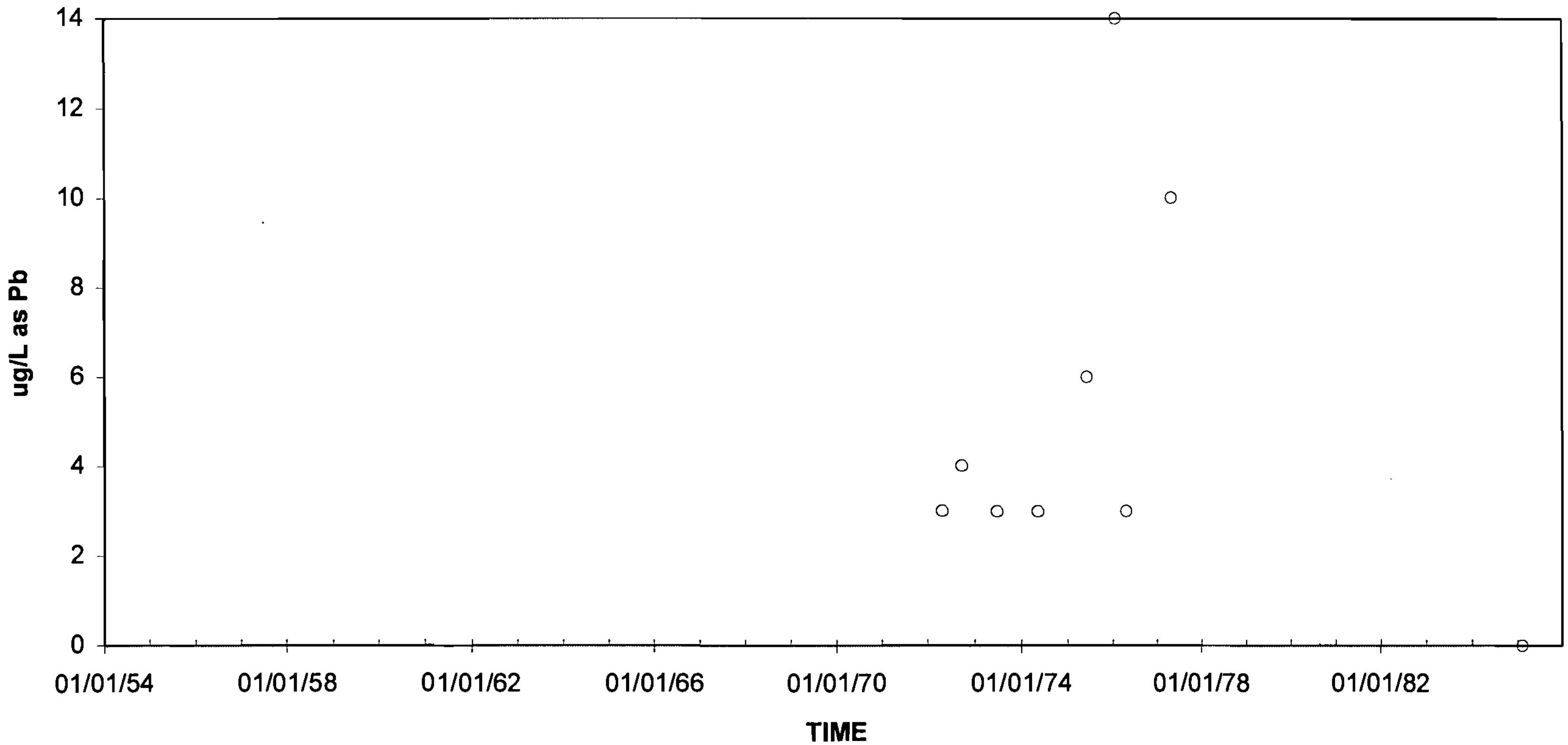
Figure 10.5.4-211



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
LEAD, SUSPENDED RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

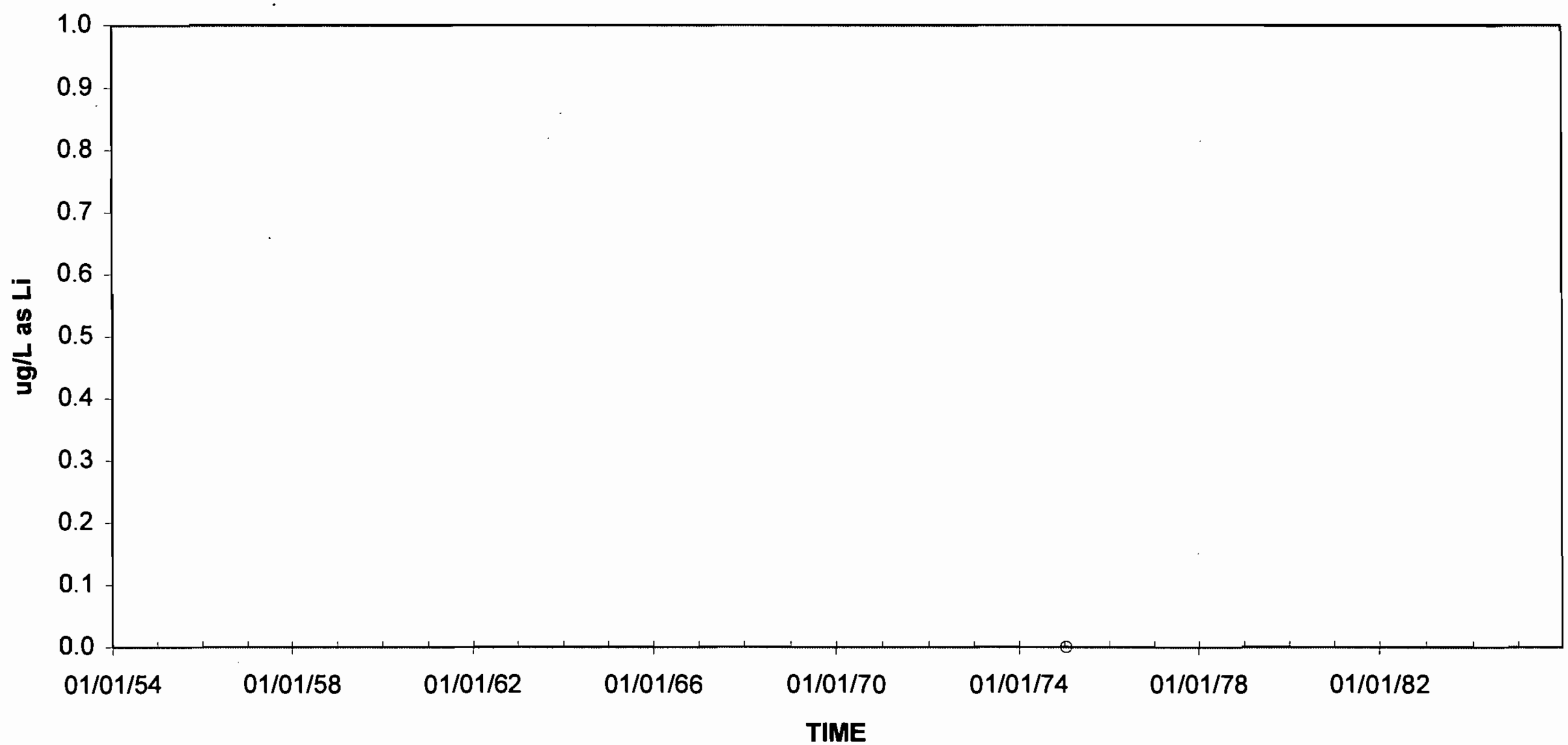
Figure
10.5.4–212



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
LEAD, TOTAL RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

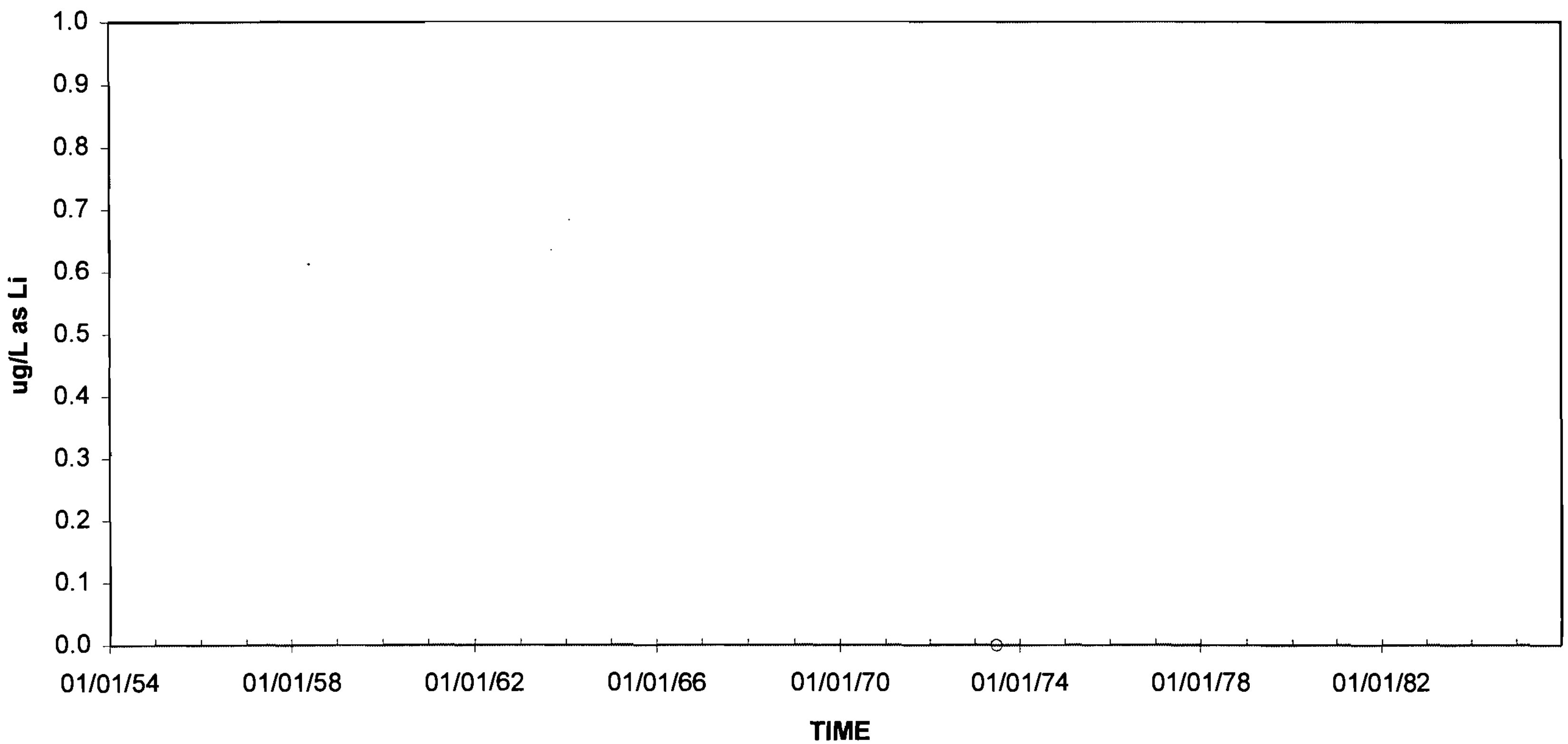
Figure
10.5.4–213



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
LITHIUM, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

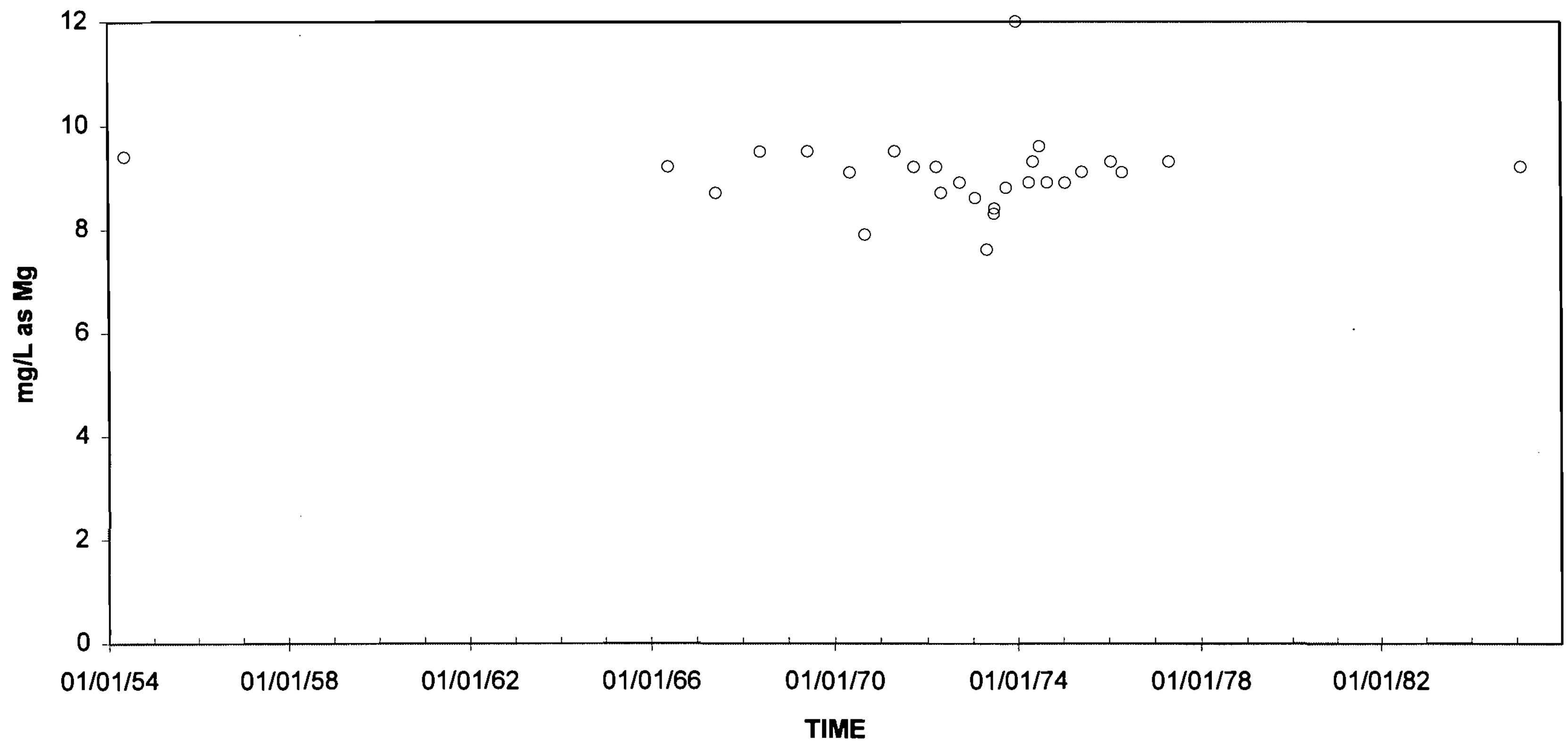
Figure
10.5.4-214



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
LITHIUM, TOTAL RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

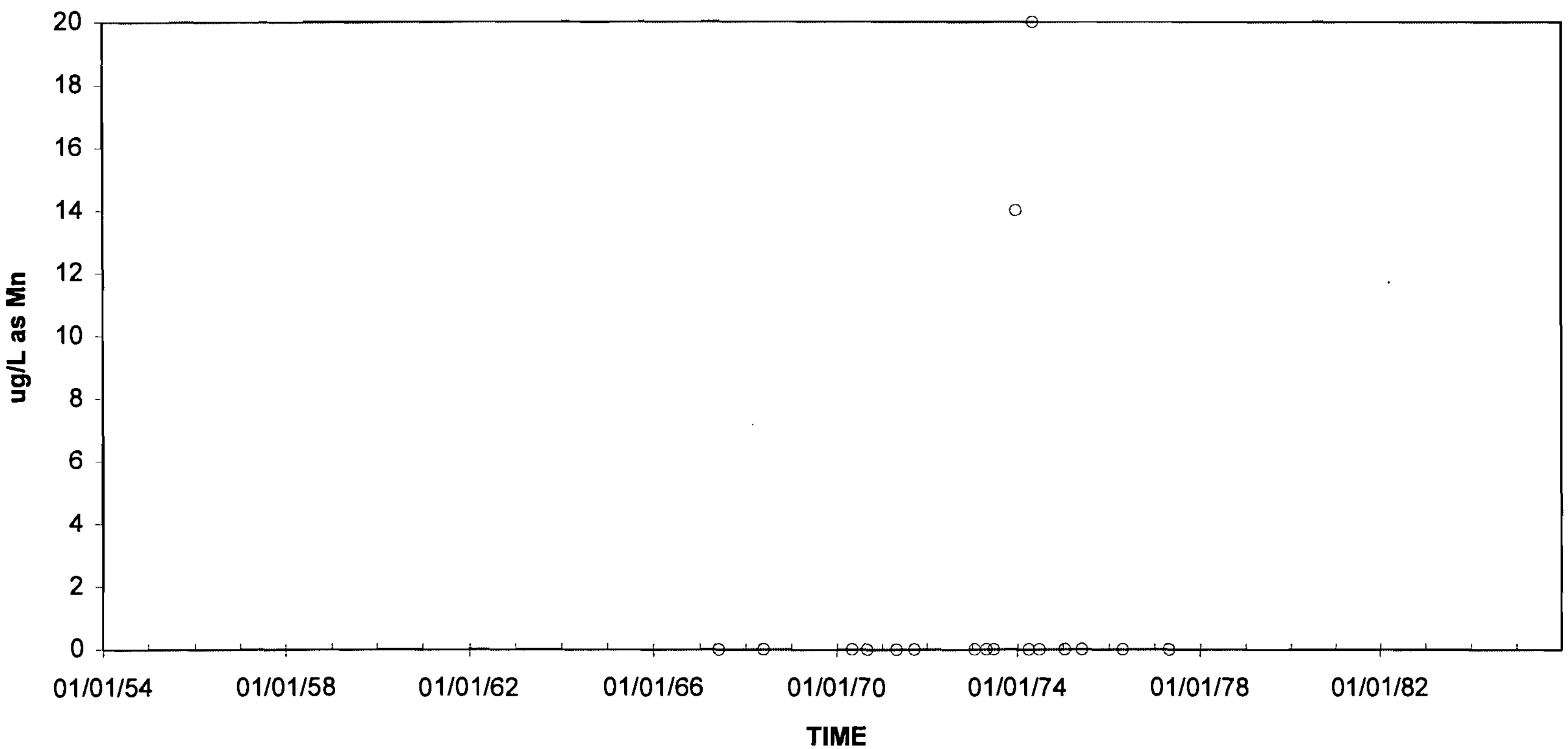
Figure
10.5.4–215



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
MAGNESIUM, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

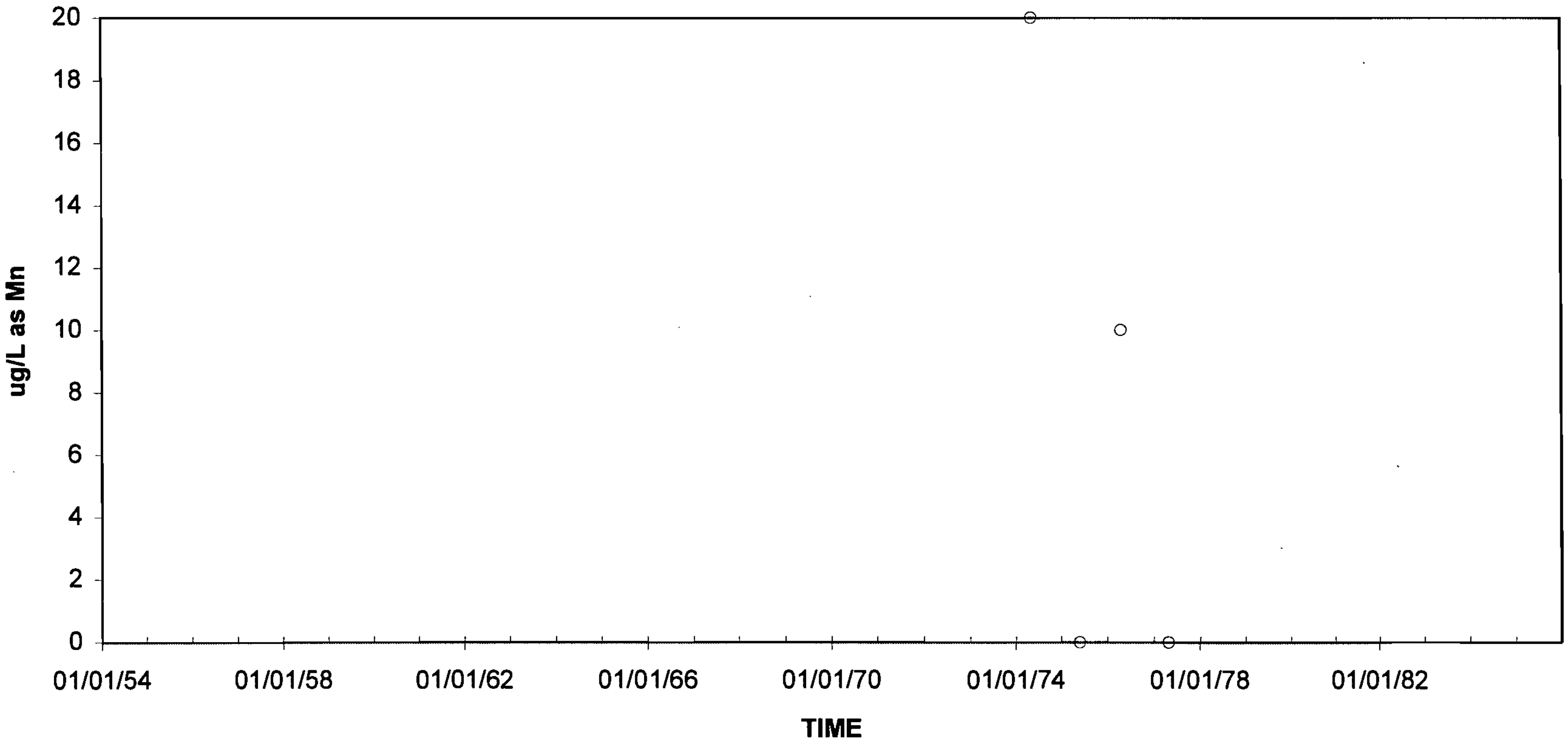
Figure
10.5.4–216



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
MANGANESE, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

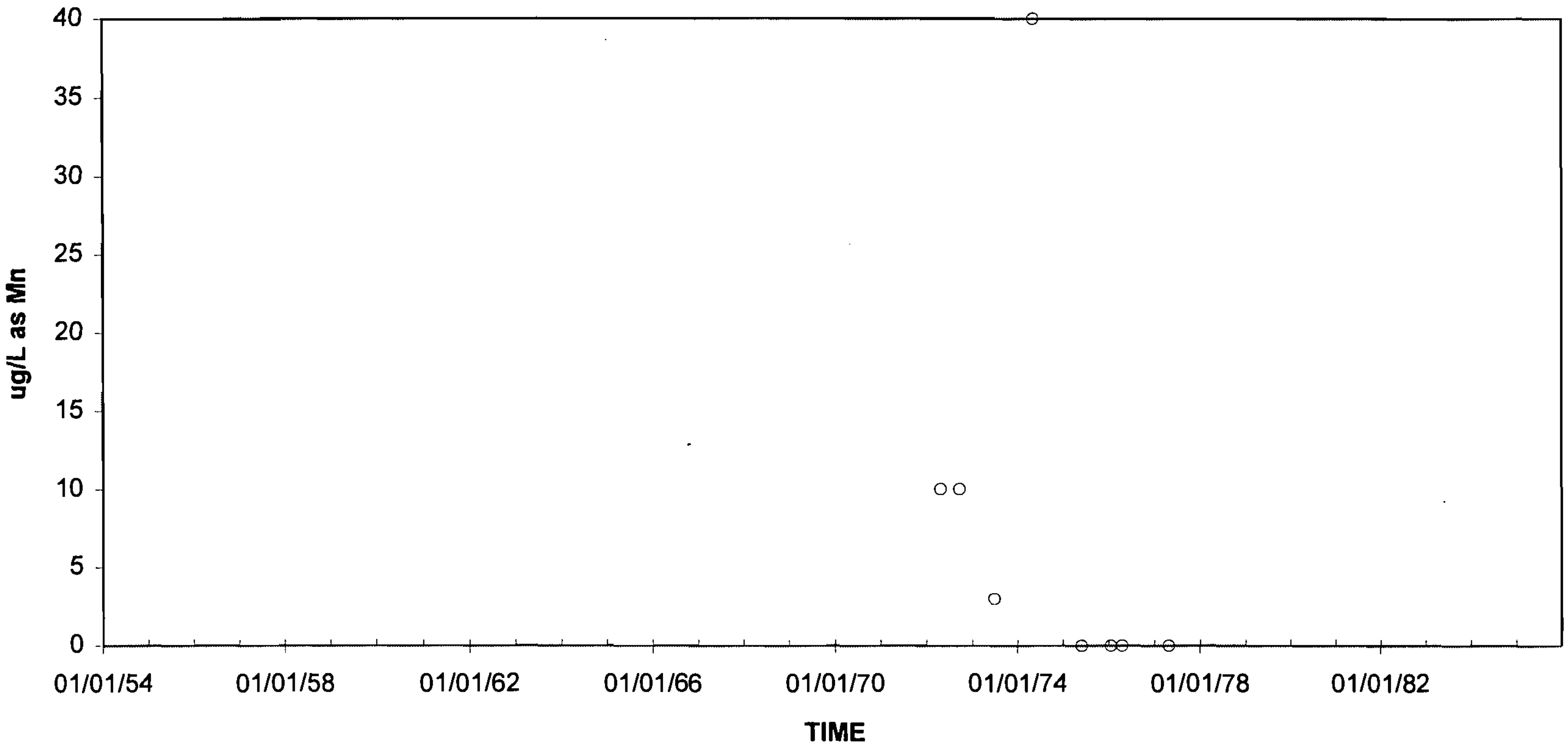
Figure
10.5.4–217



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
MANGANESE, SUSPENDED RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

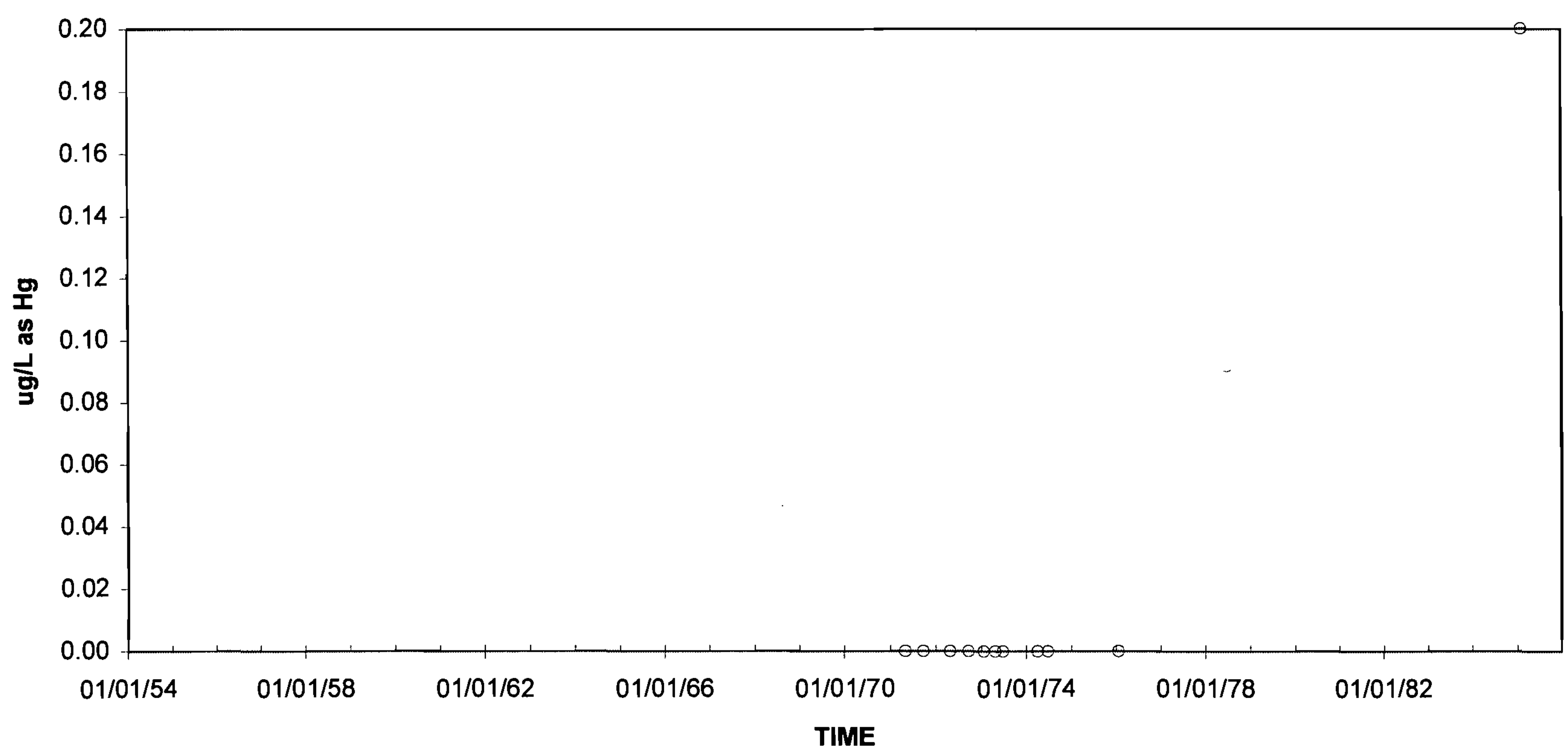
Figure 10.5.4-218



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
MANGANESE, TOTAL RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

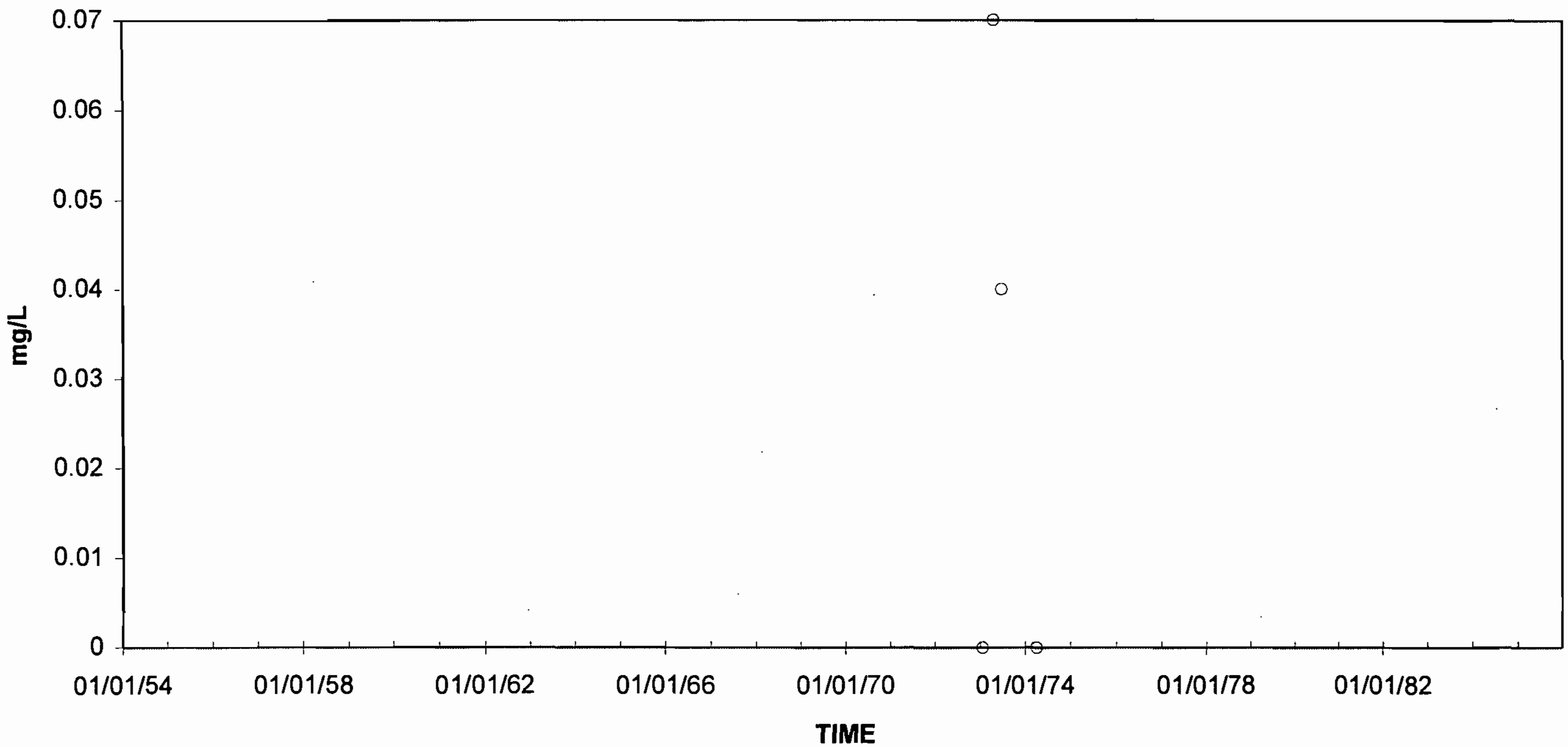
Figure 10.5.4–219



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
MERCURY, TOTAL RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

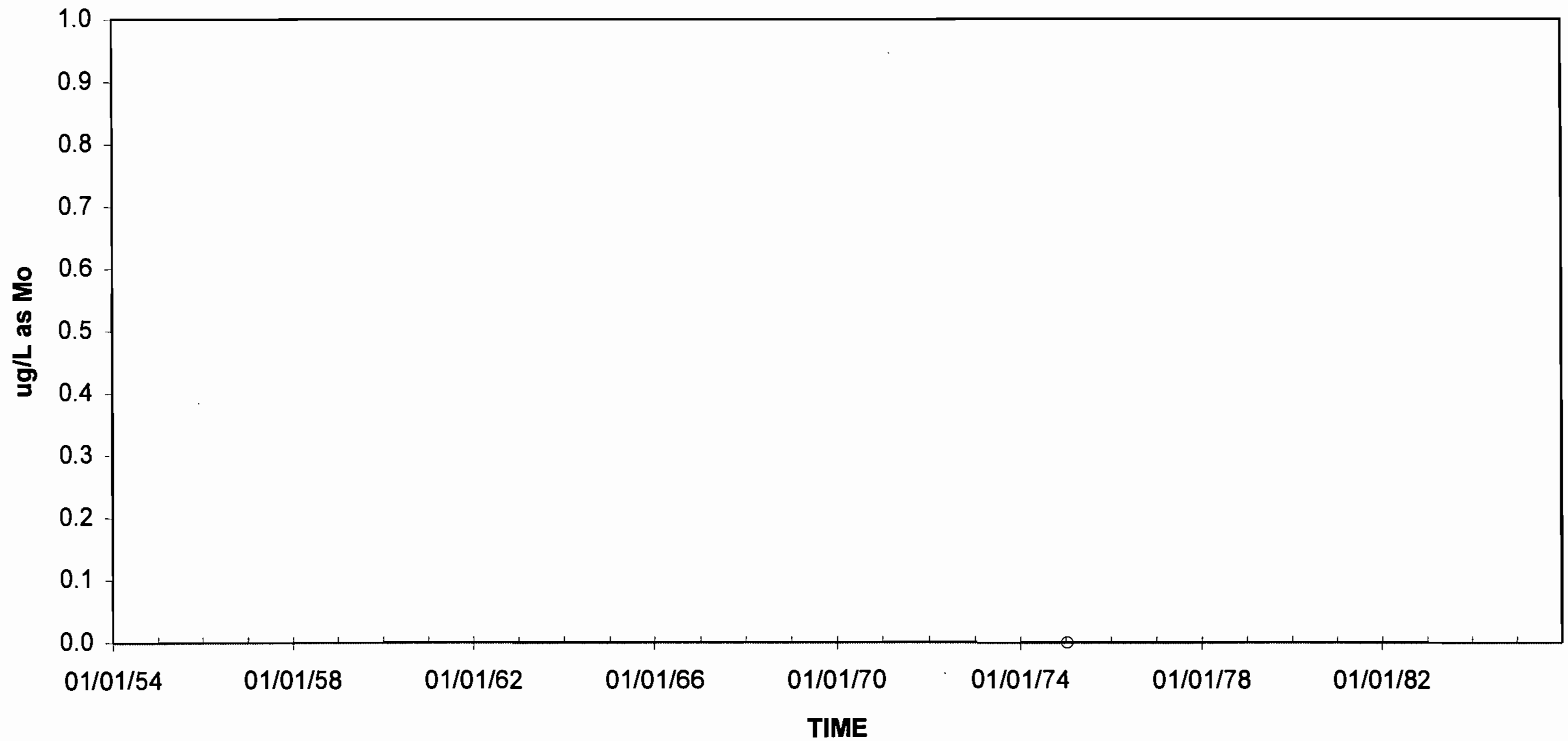
Figure 10.5.4-220



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
METHYLENE BLUE ACTIVE SUBSTANCE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

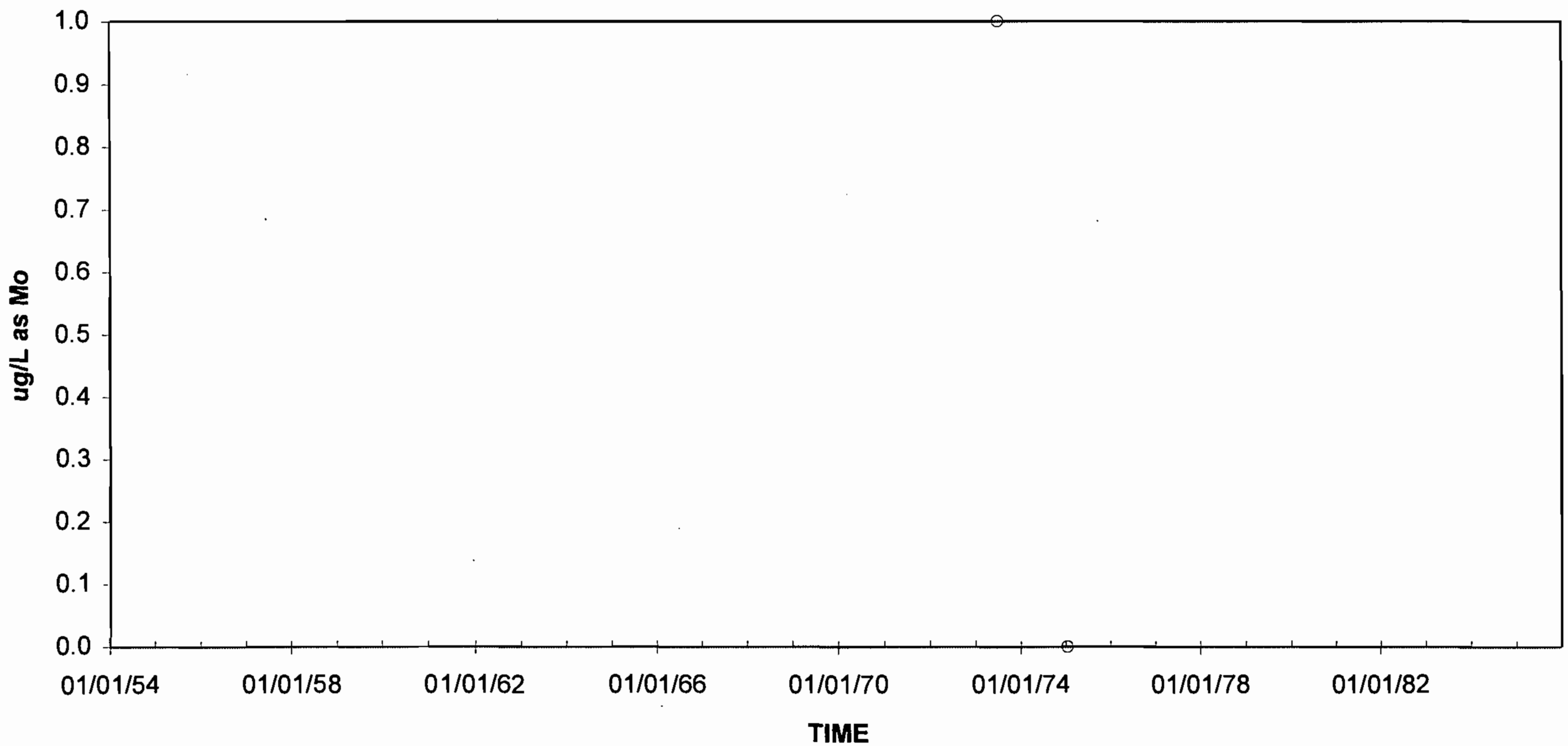
Figure
10.5.4–221



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
MOLYBDENUM, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

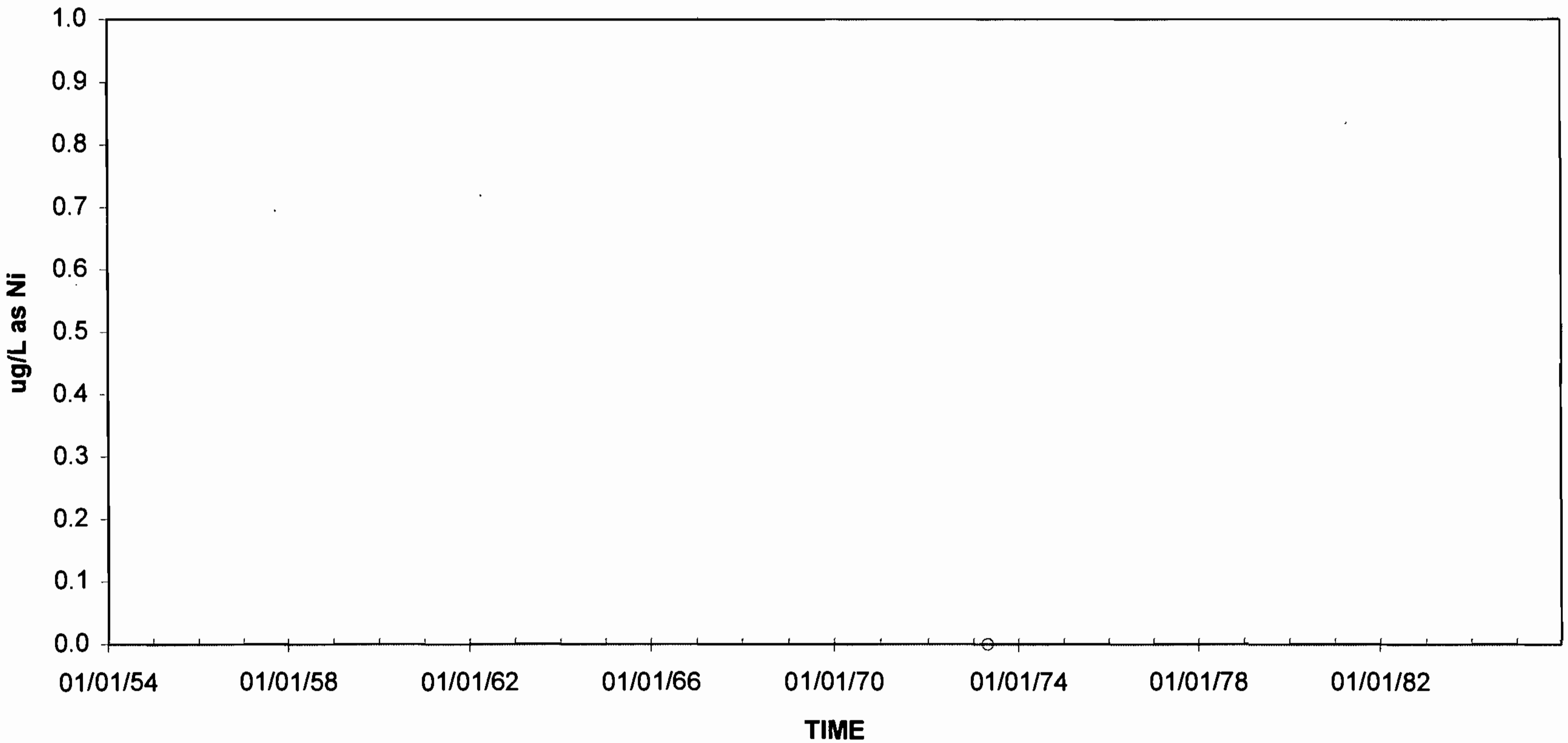
Figure 10.5.4–222



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
MOLYBDENUM, TOTAL RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

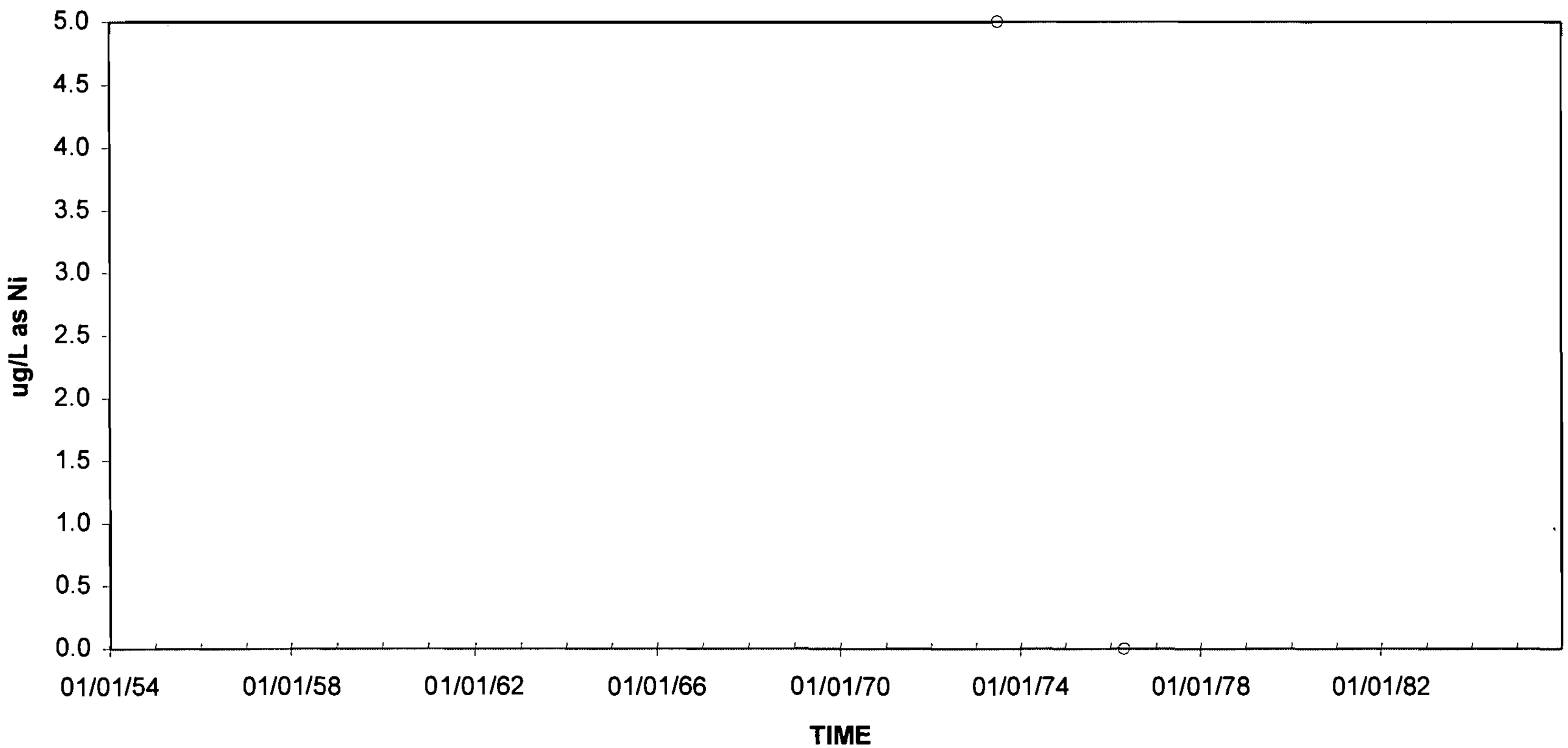
Figure
10.5.4–223



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
NICKEL, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

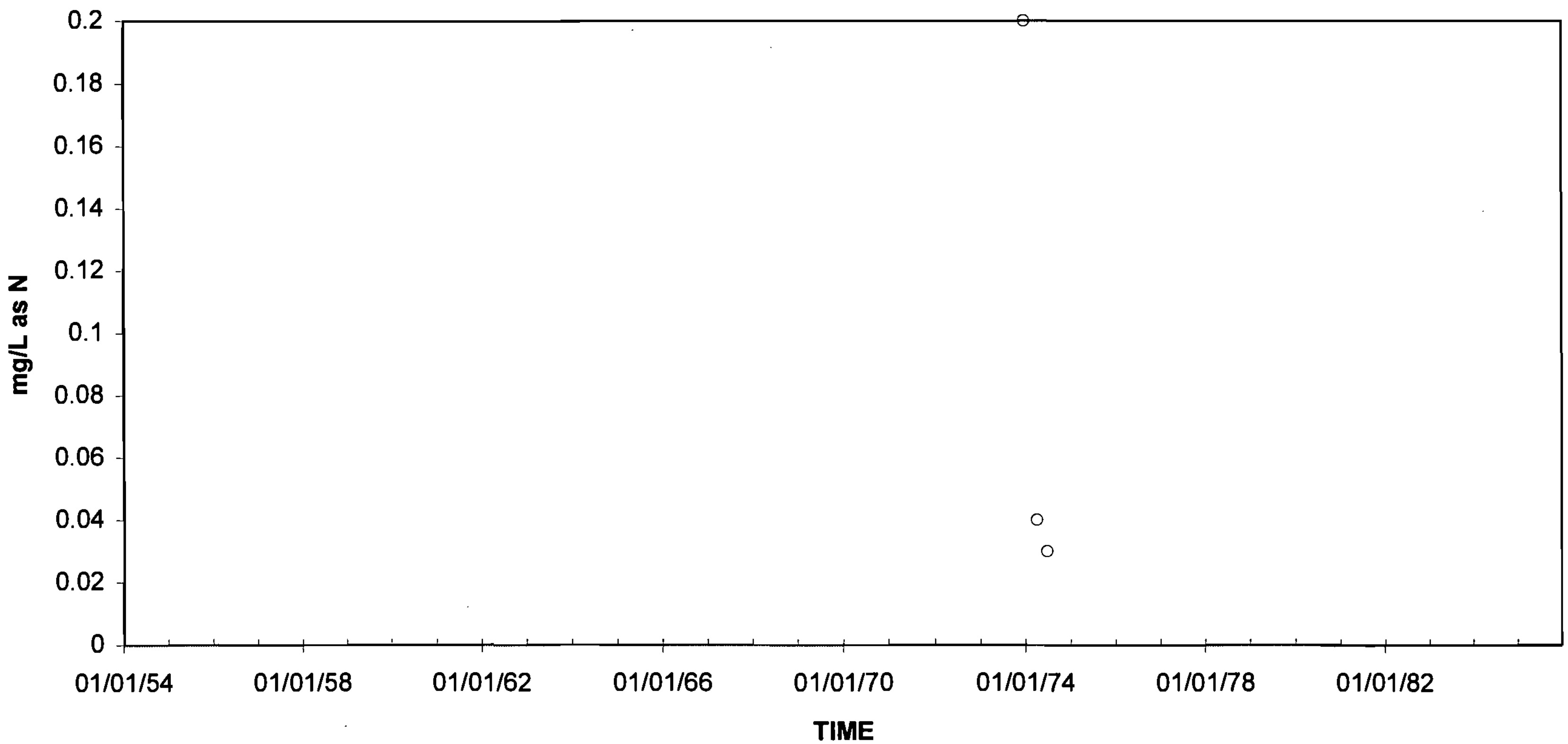
Figure 10.5.4-224



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
NICKEL, TOTAL RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

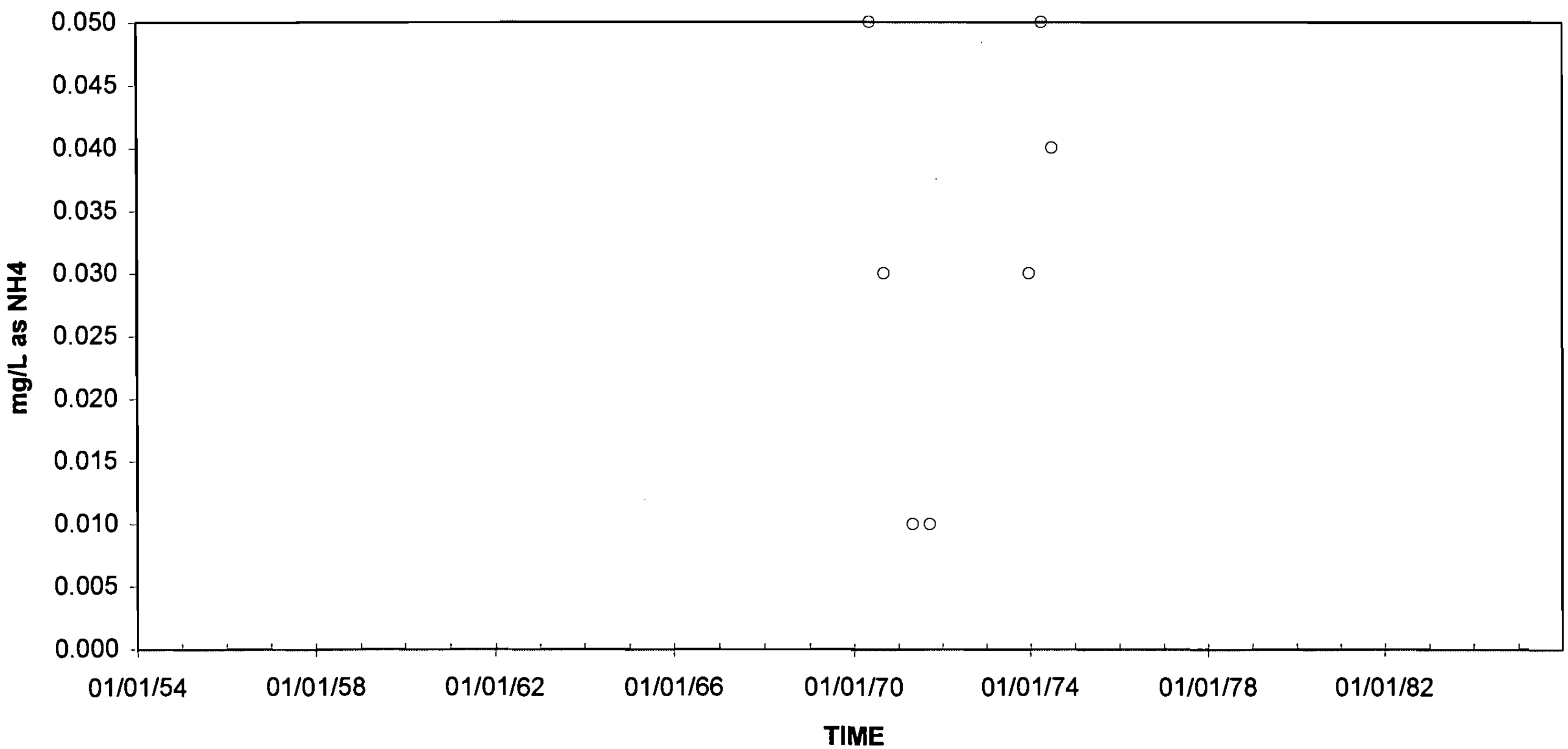
Figure 10.5.4–225



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
NITROGEN, AMMONIA DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

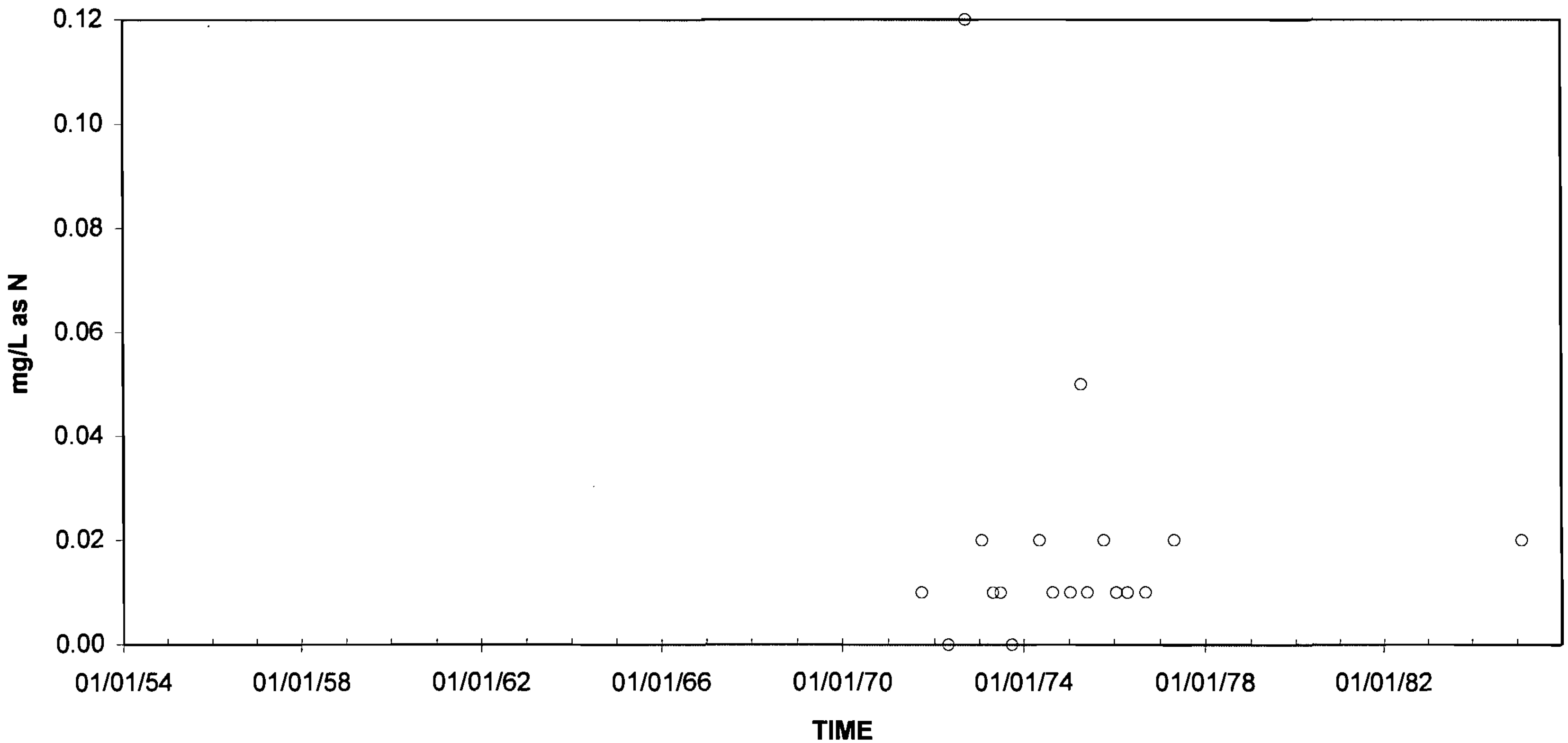
Figure
10.5.4–226



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
NITROGEN, AMMONIA DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

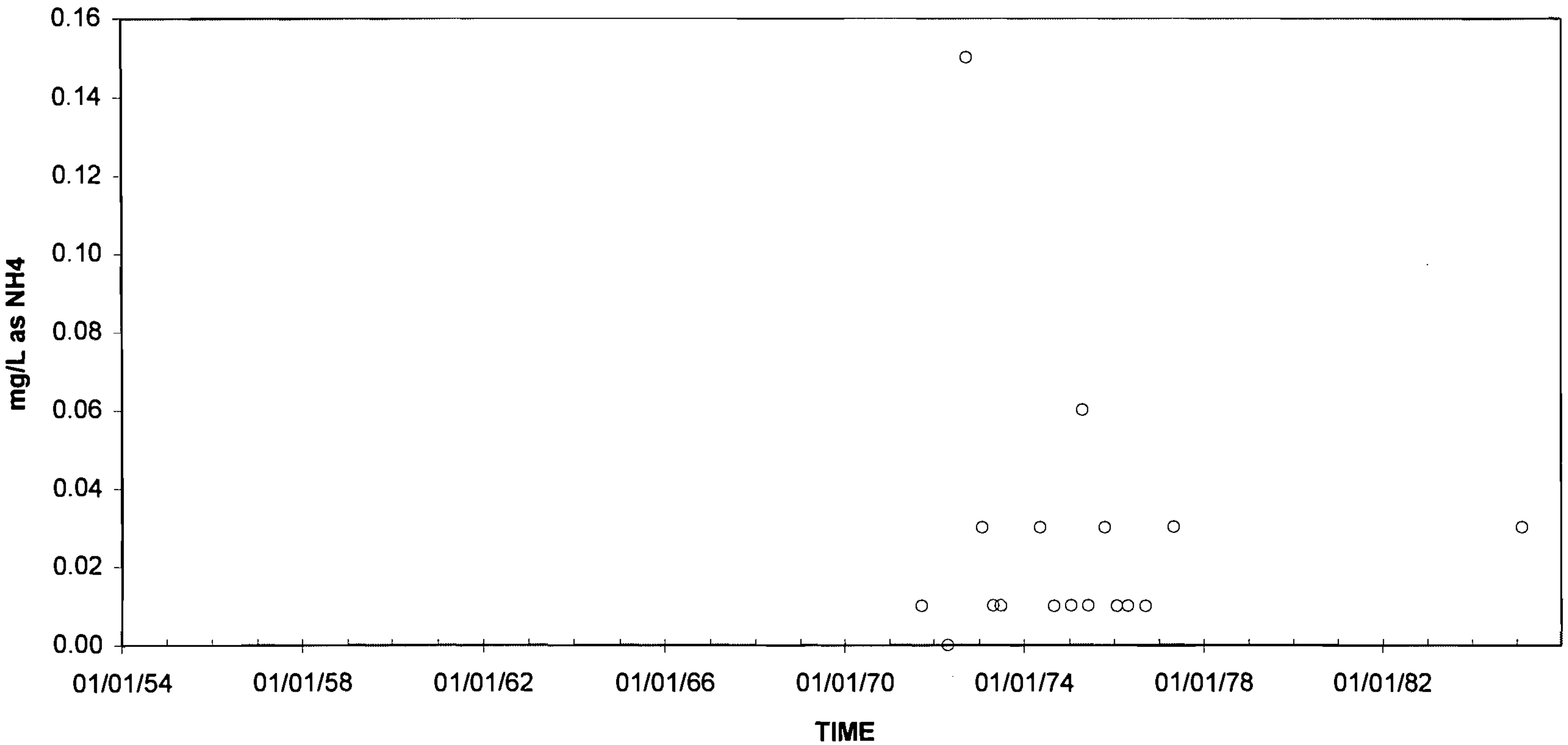
Figure 10.5.4–227



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
NITROGEN, AMMONIA TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

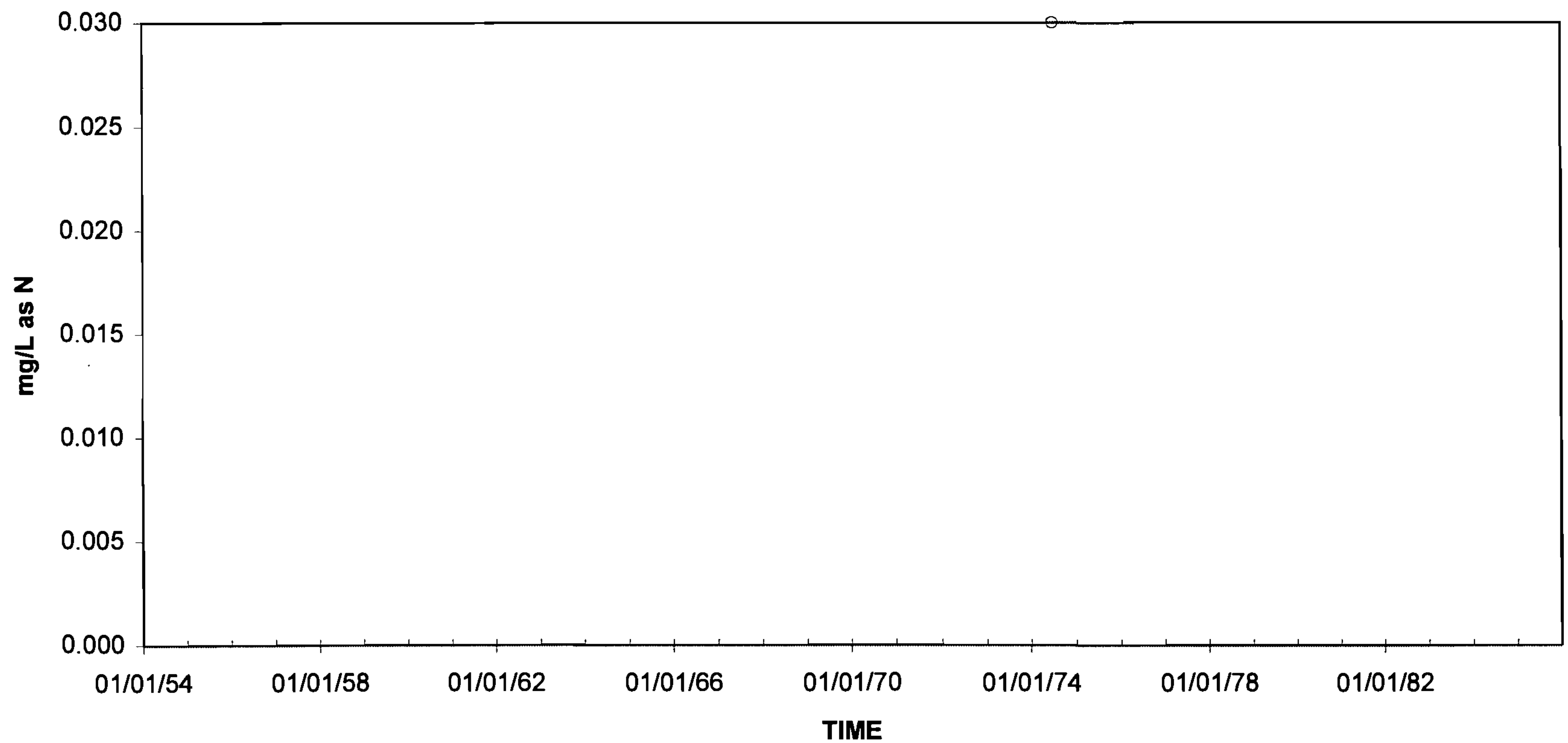
Figure
10.5.4–228



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
NITROGEN, AMMONIA TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

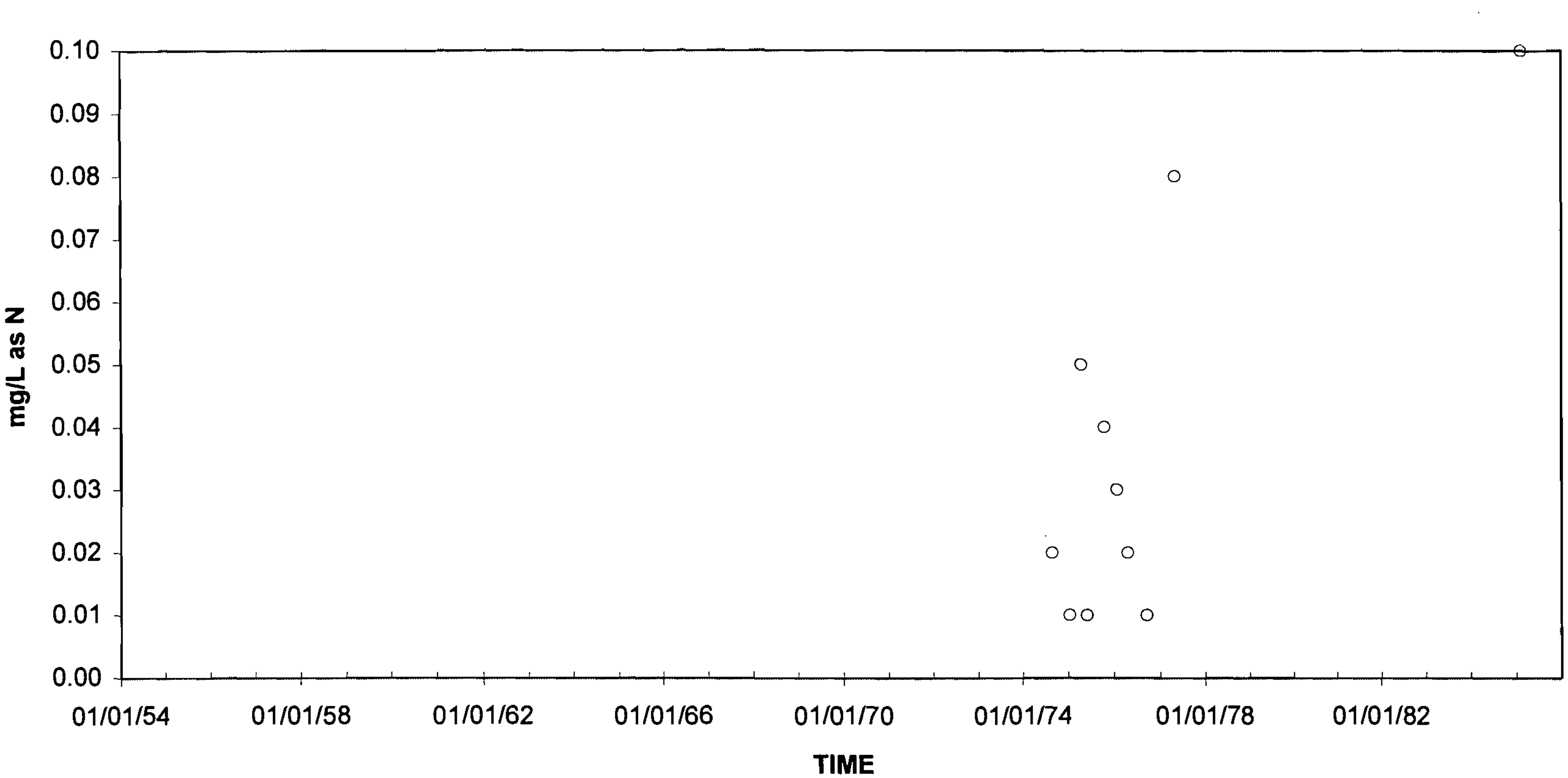
Figure
10.5.4–229



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
NITROGEN, AMMONIA + ORGANIC DIS
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

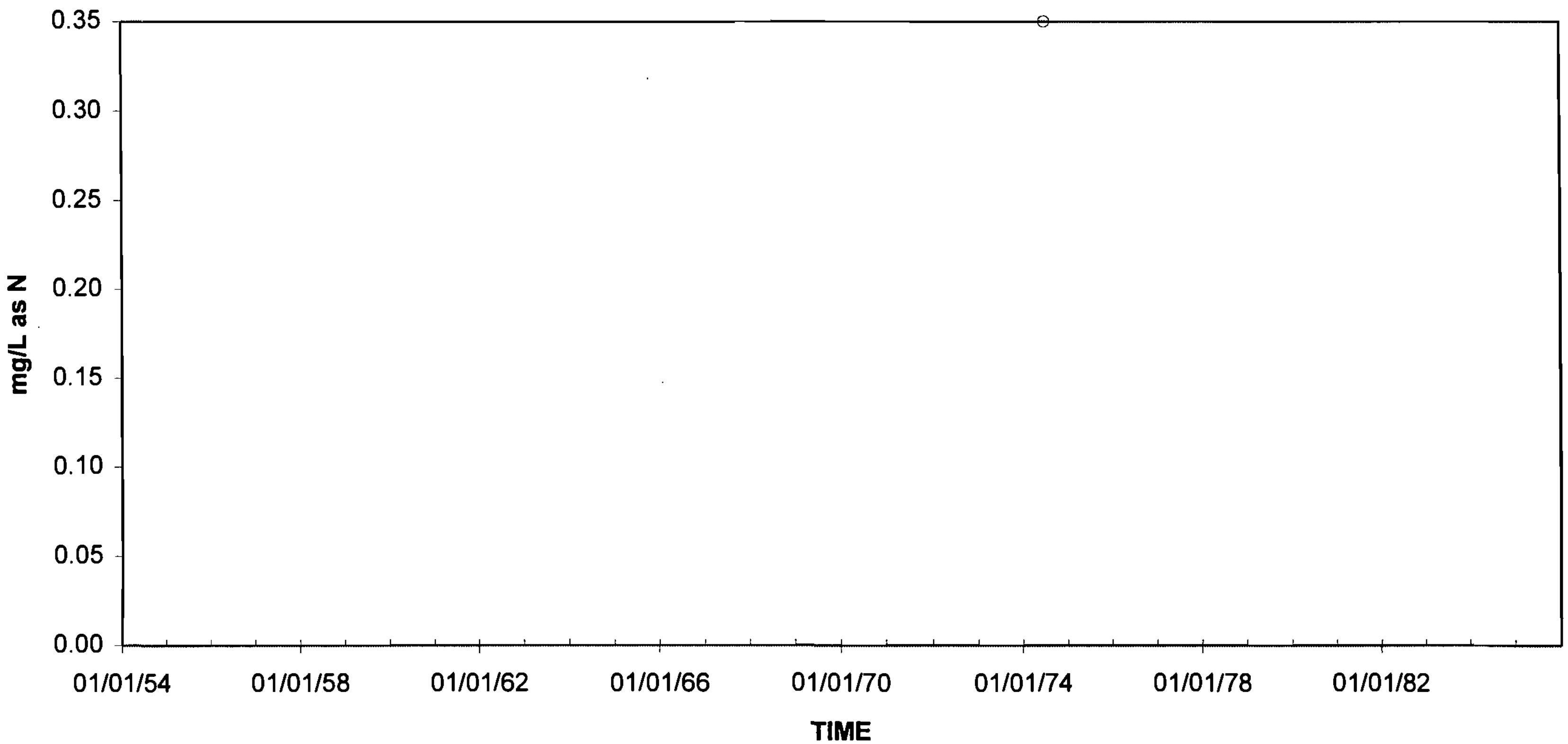
Figure
10.5.4–230



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
NITROGEN, AMMONIA + ORGANIC TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

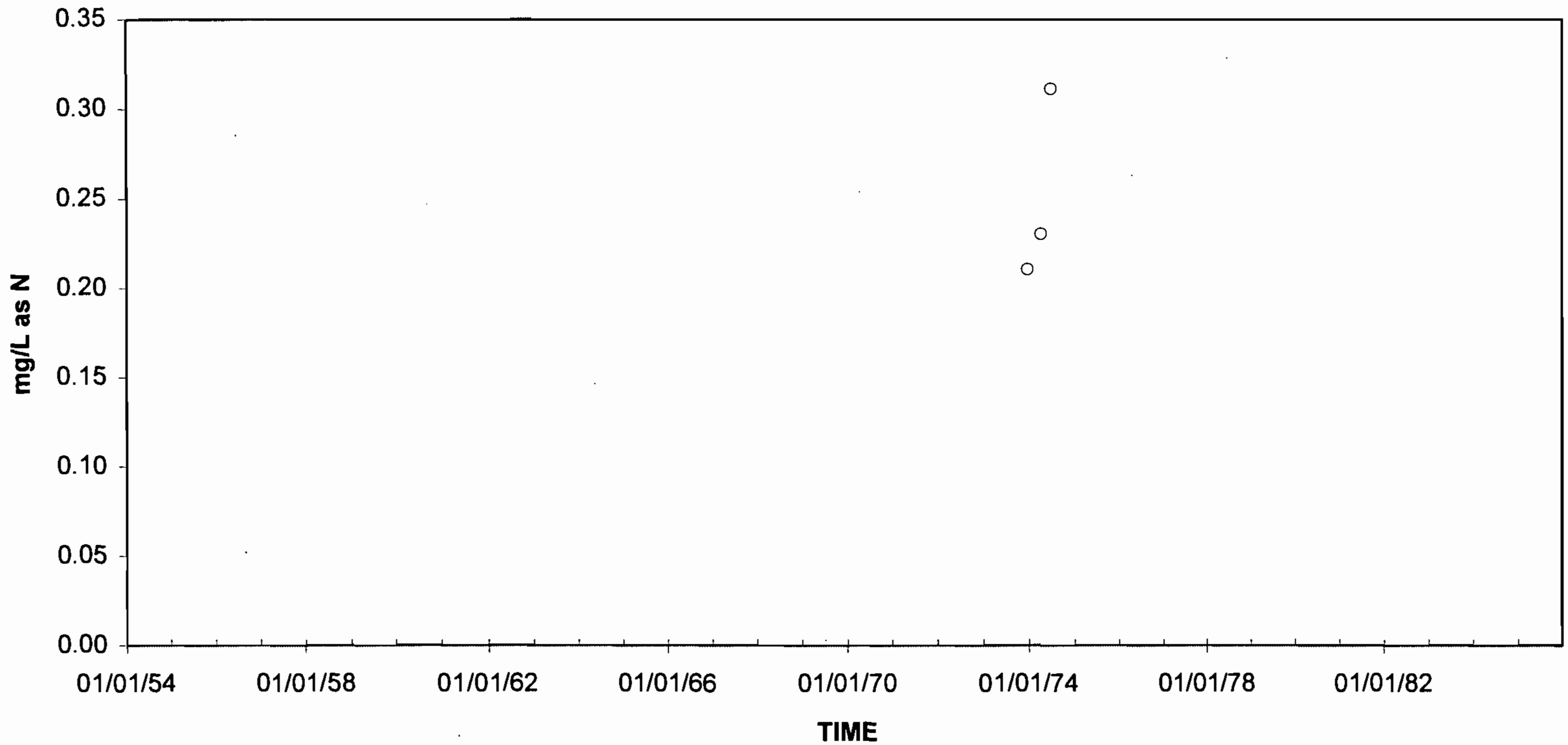
Figure 10.5.4–231



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
NITROGEN, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

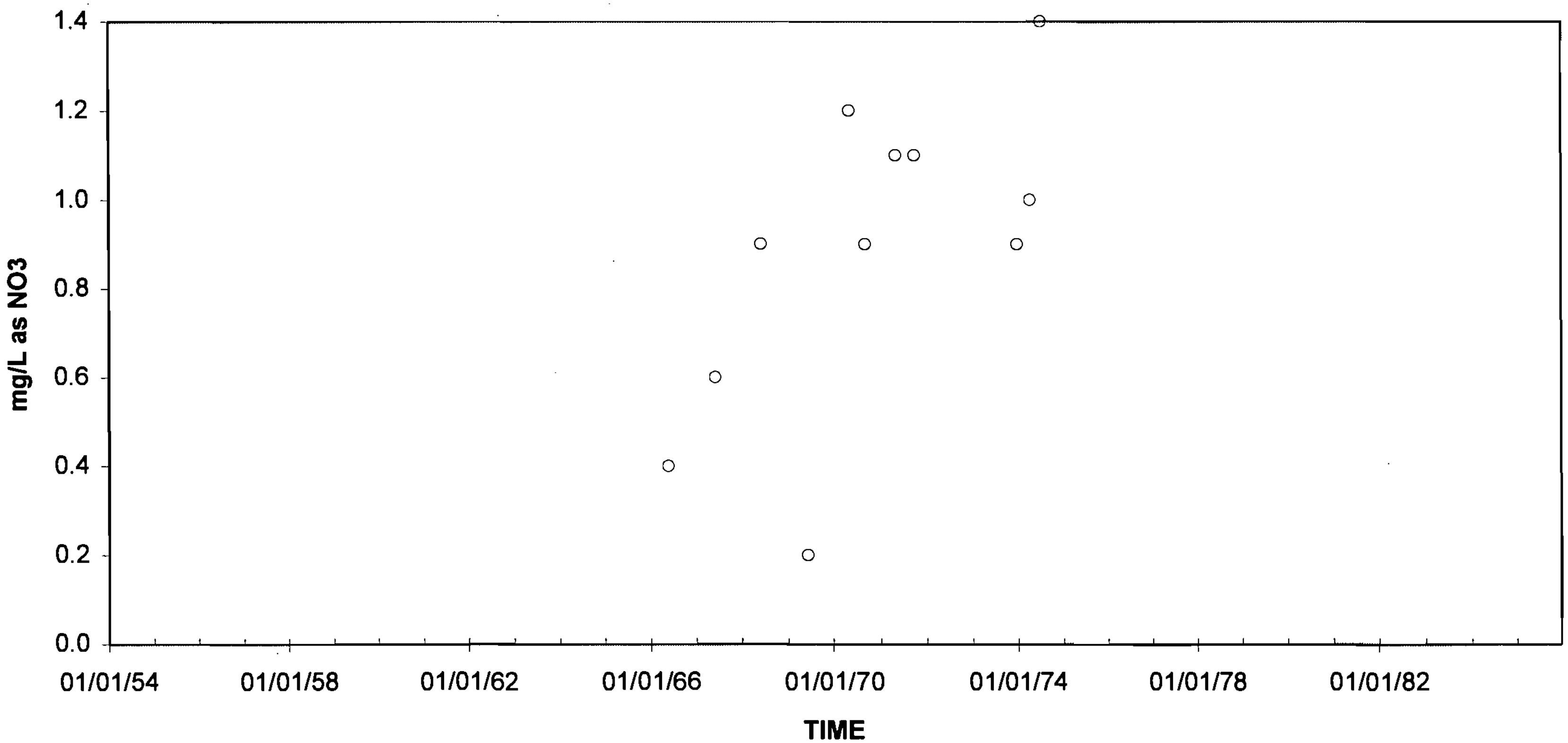
Figure
10.5.4–232



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
NITROGEN, NITRATE DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

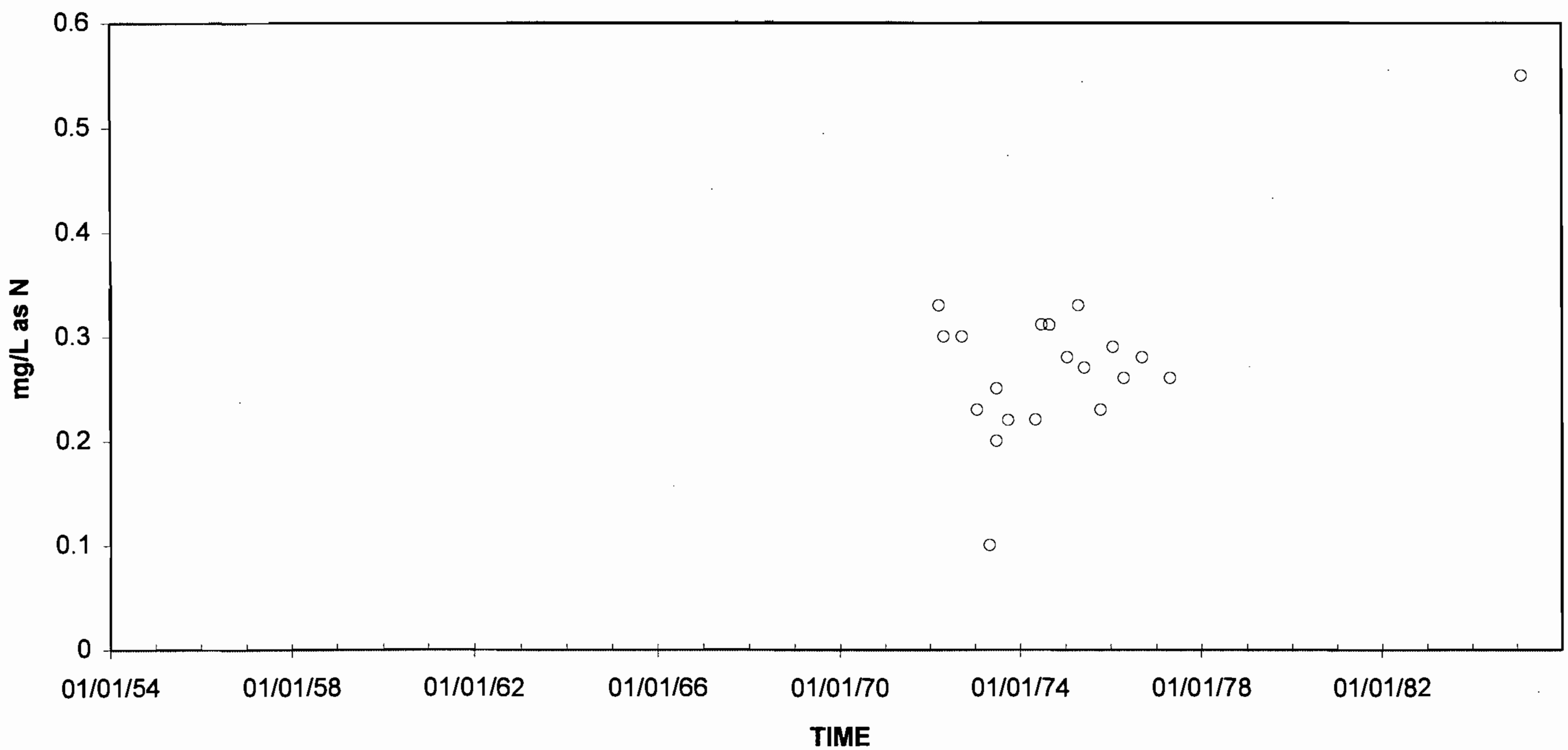
Figure
10.5.4–233



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
NITROGEN, NITRATE DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

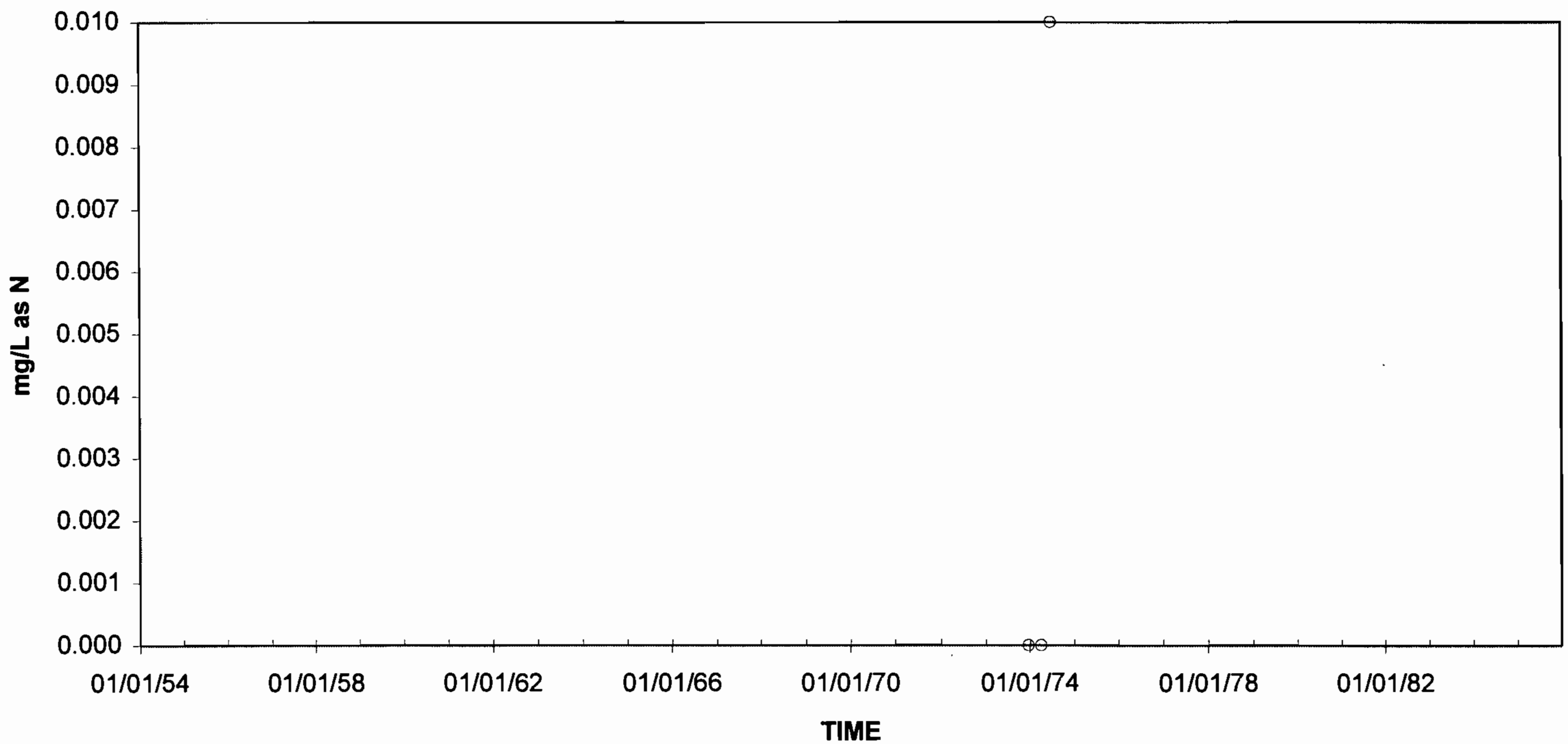
Figure 10.5.4-234



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
NITROGEN, NITRATE TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

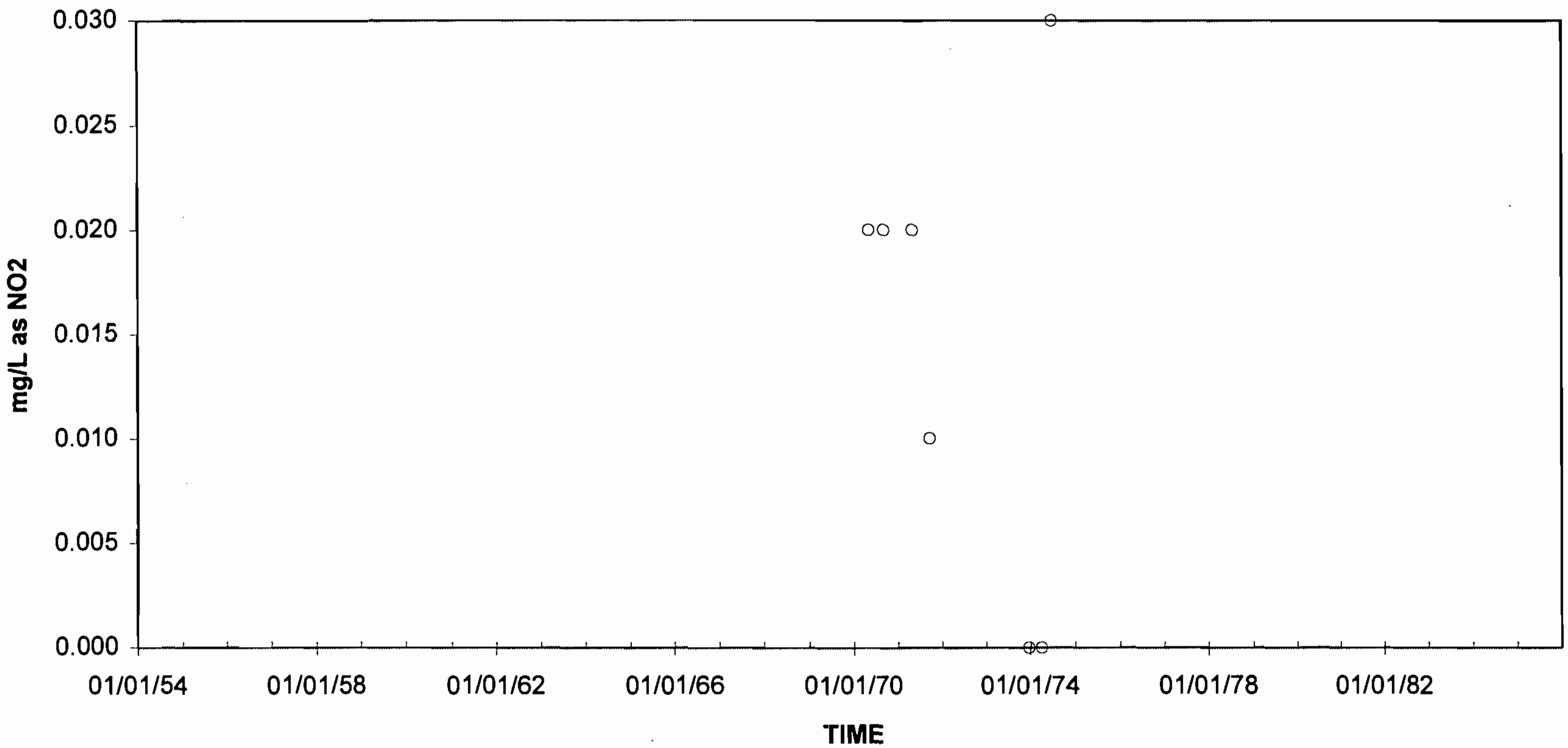
Figure
10.5.4-235



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
NITROGEN, NITRITE DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

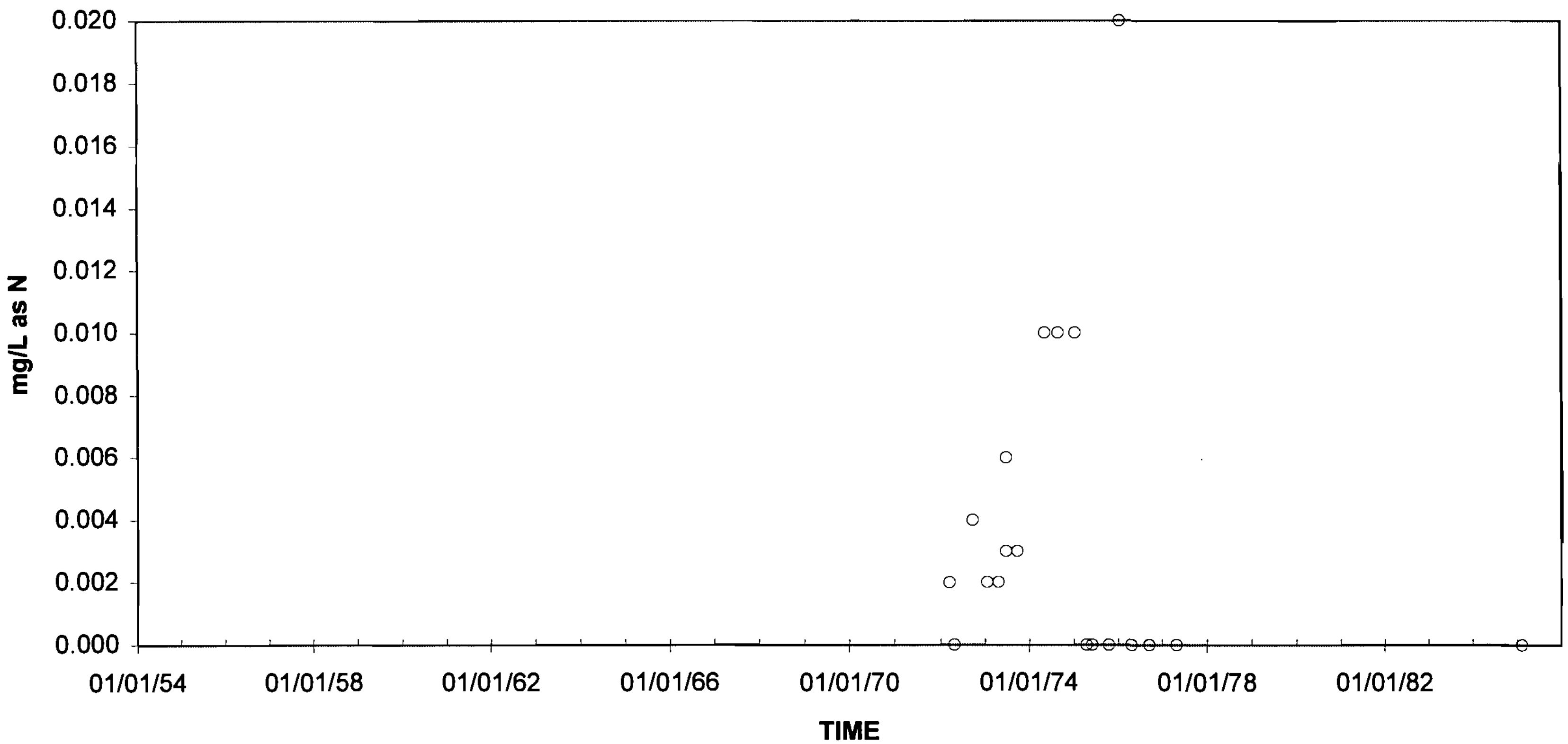
Figure
10.5.4-236



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
NITROGEN, NITRITE DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

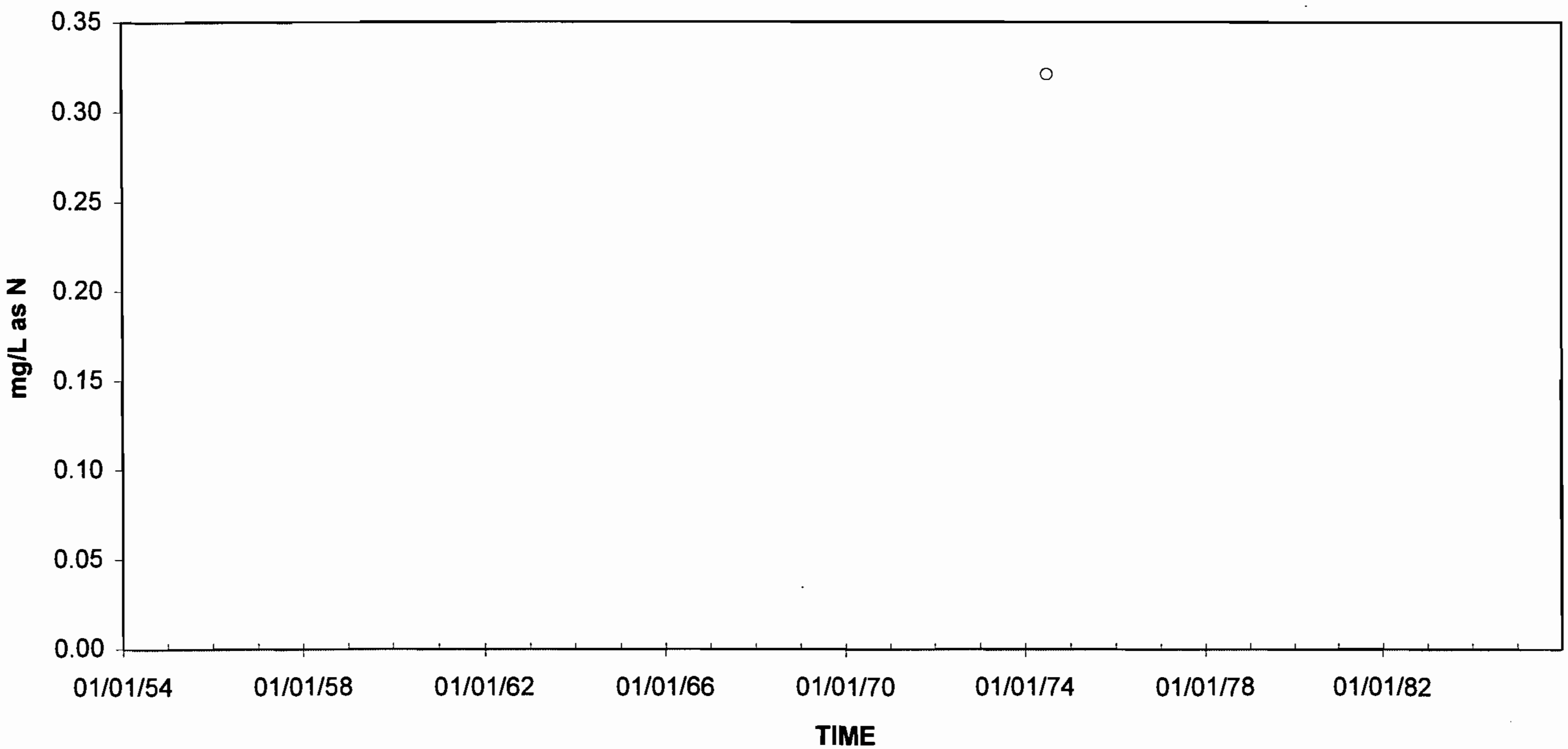
Figure
10.5.4–237



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
NITROGEN, NITRITE TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

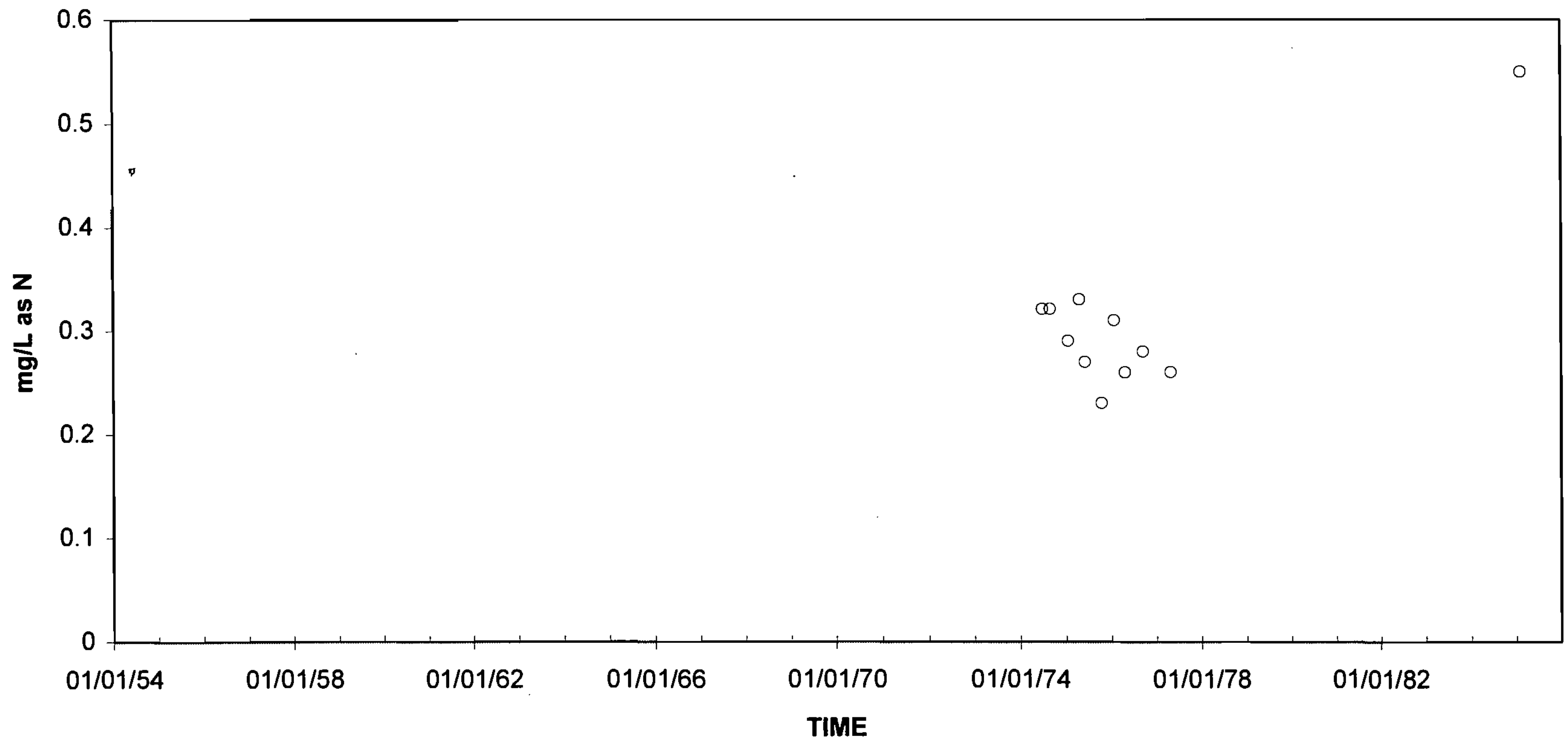
Figure
10.5.4–238



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
NITROGEN, NITRITE + NITRATE DISSOLVED
PURDOM UNIT 8 PROJECT -- St MARKS, FLORIDA

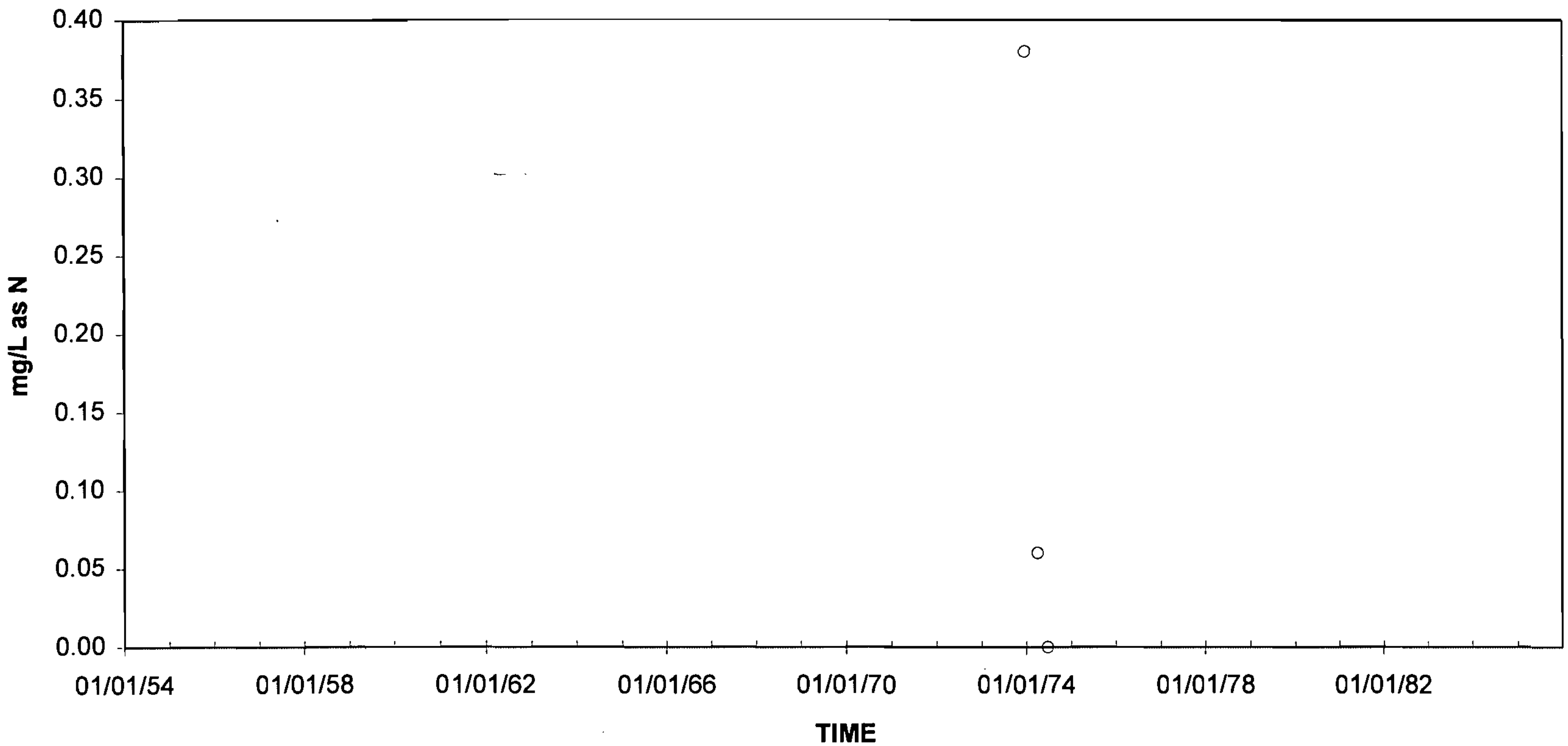
Figure
10.5.4-239



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
NITROGEN, NITRITE + NITRATE TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

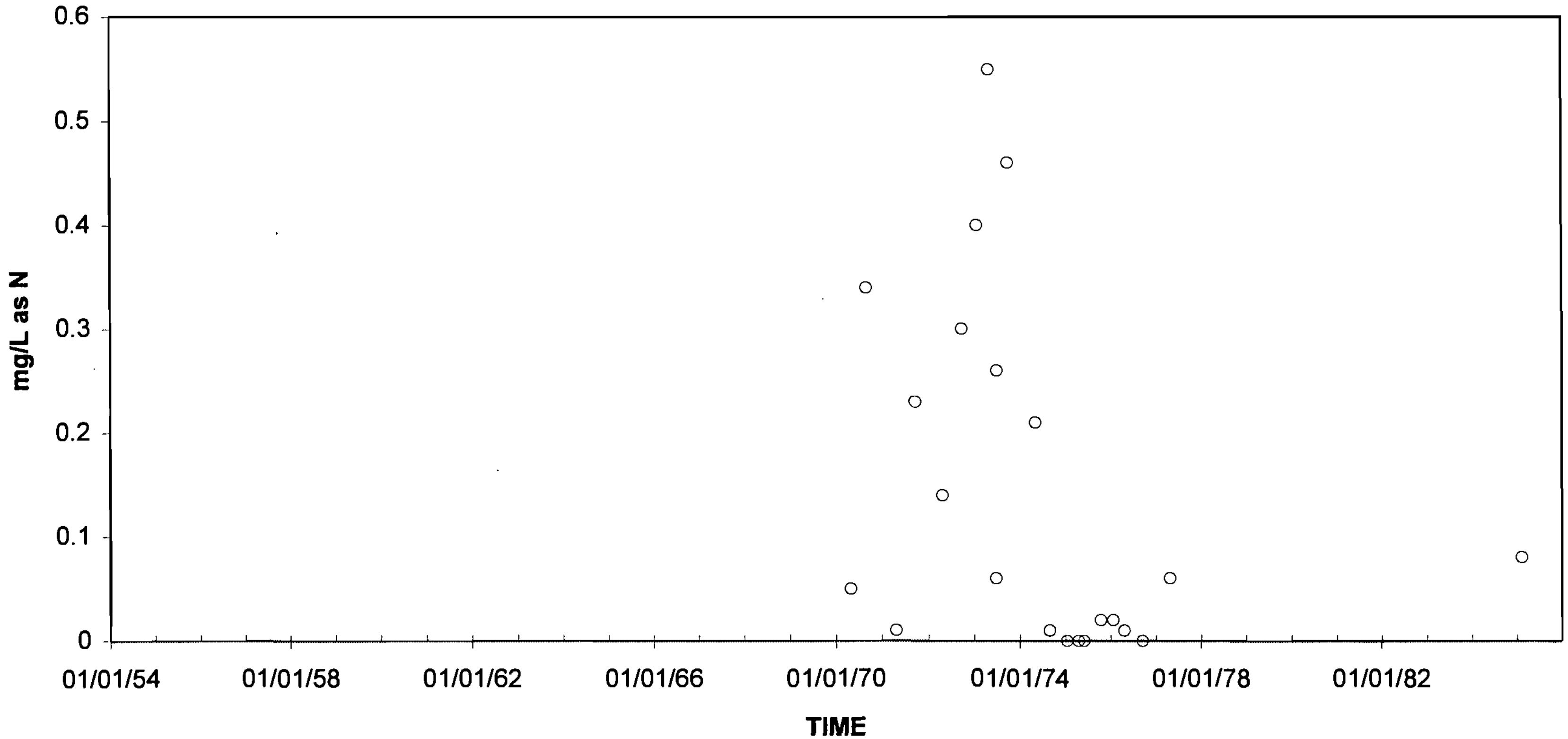
Figure
10.5.4–240



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
NITROGEN, ORGANIC DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

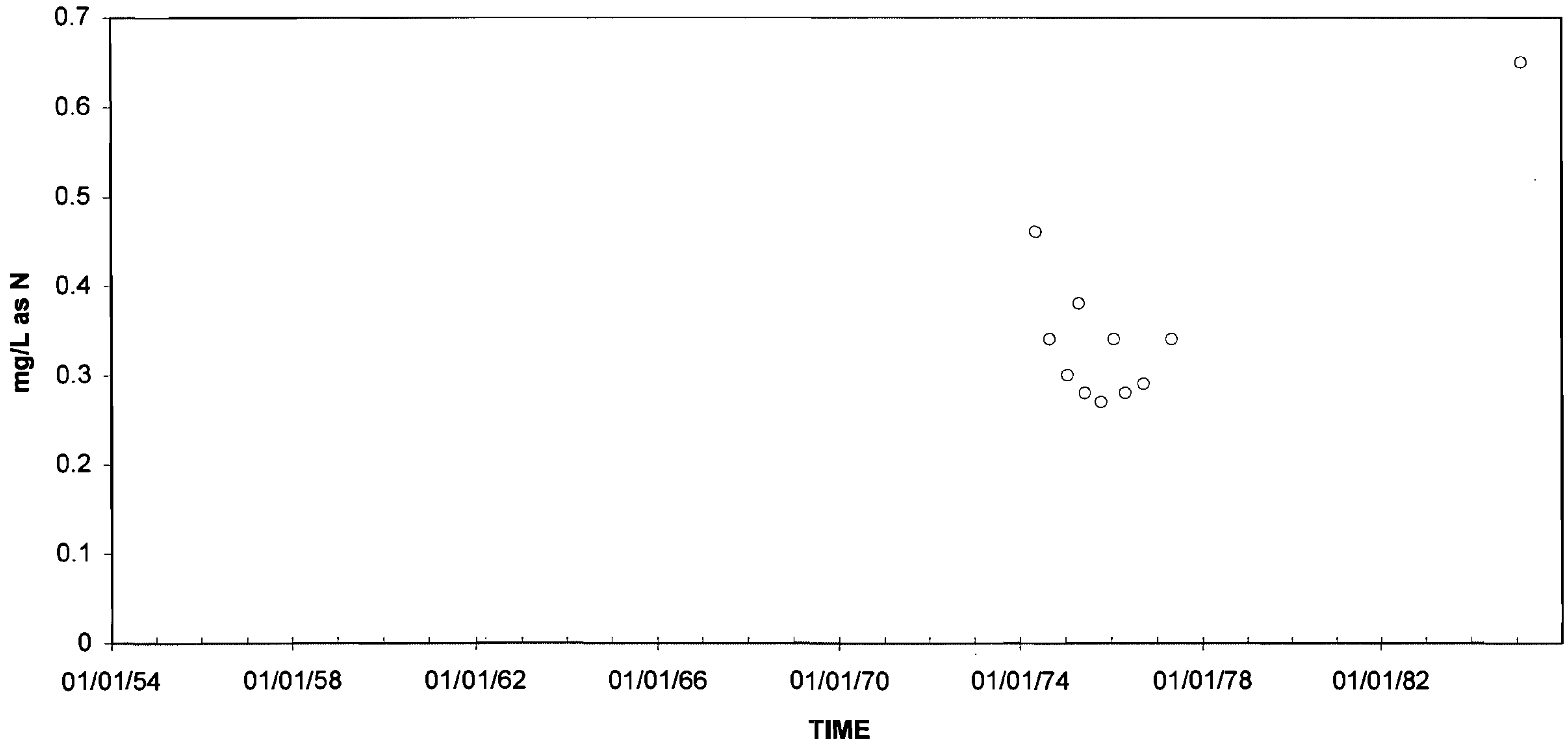
Figure
10.5.4-241



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
NITROGEN, ORGANIC TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

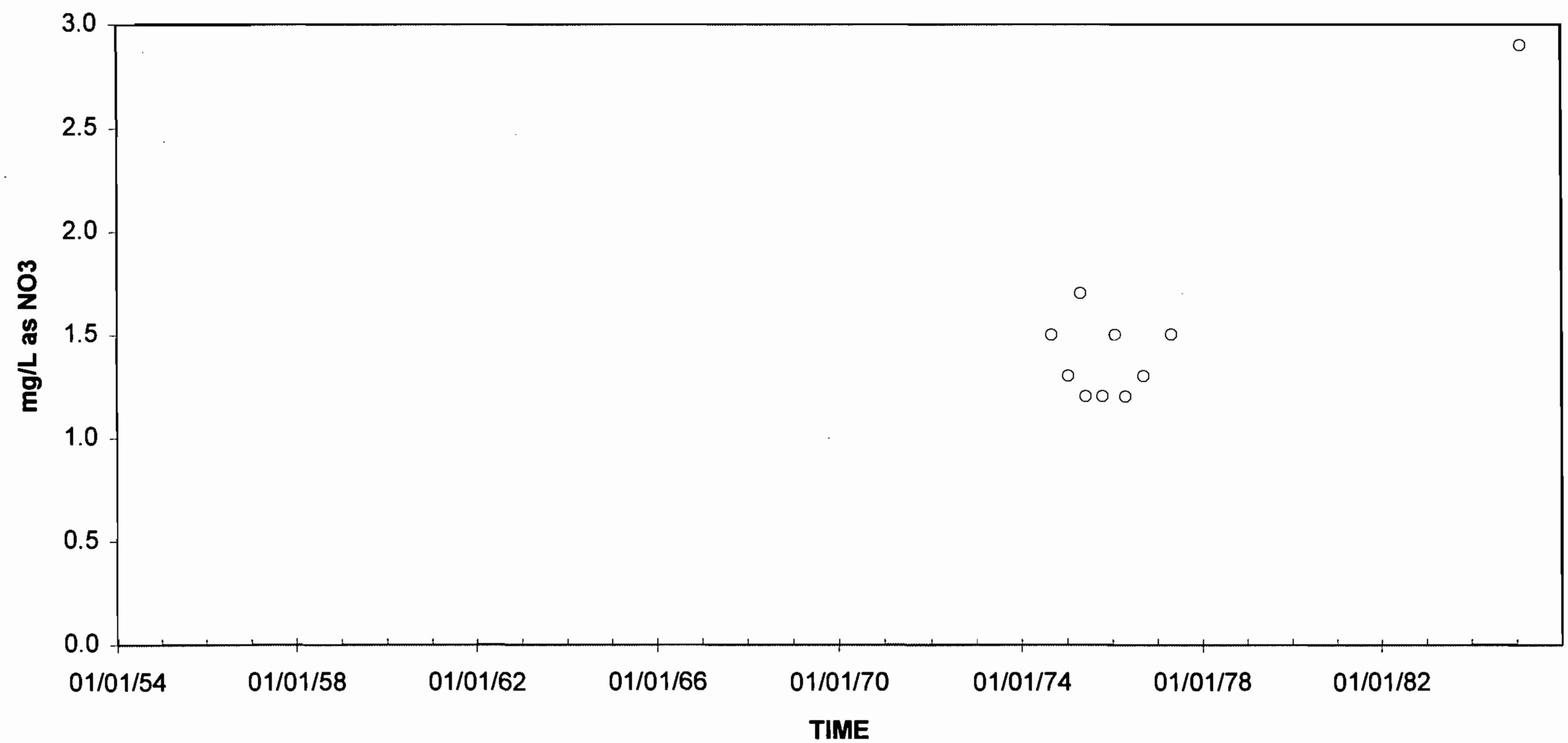
Figure 10.5.4–242



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
NITROGEN, TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

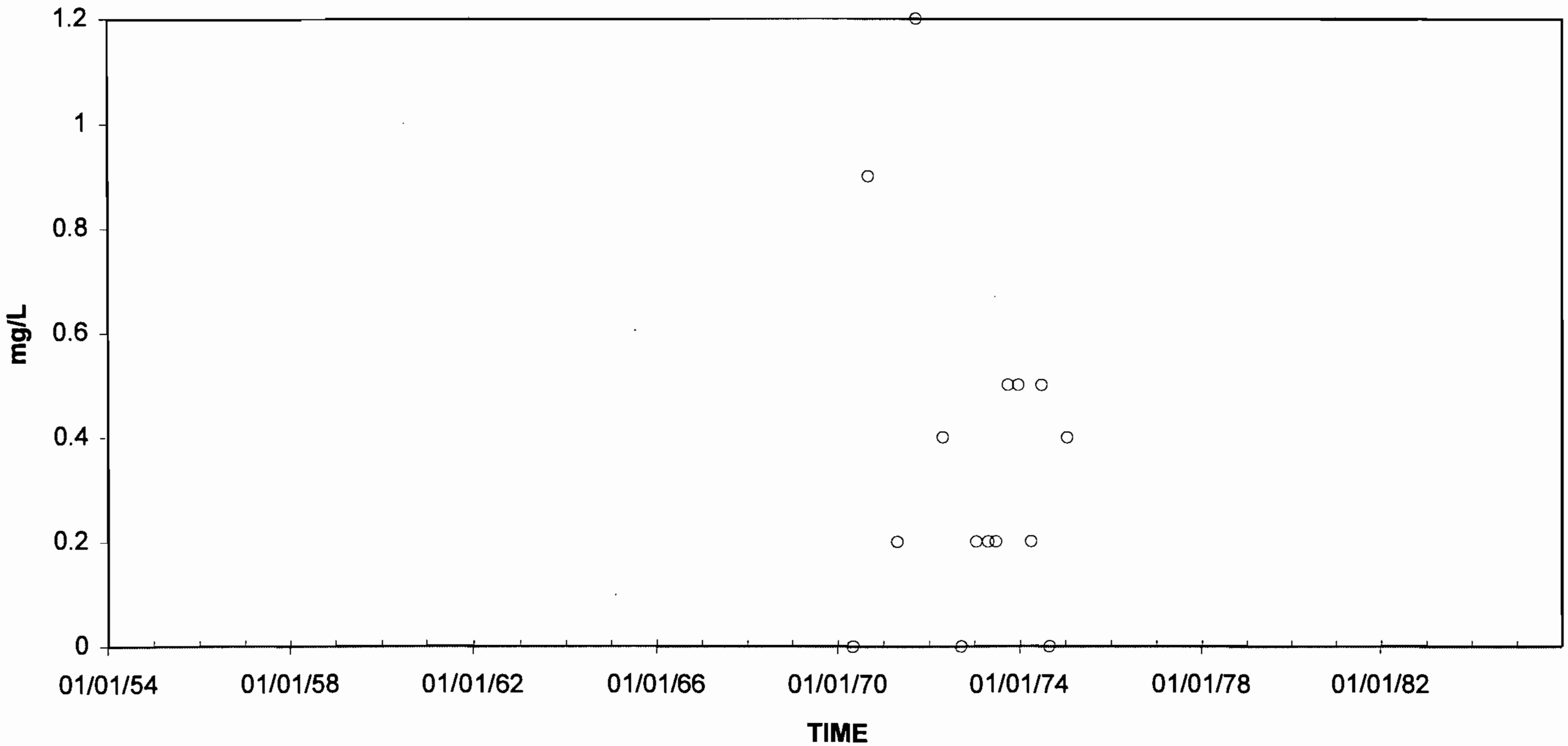
Figure 10.5.4-243



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
NITROGEN, TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

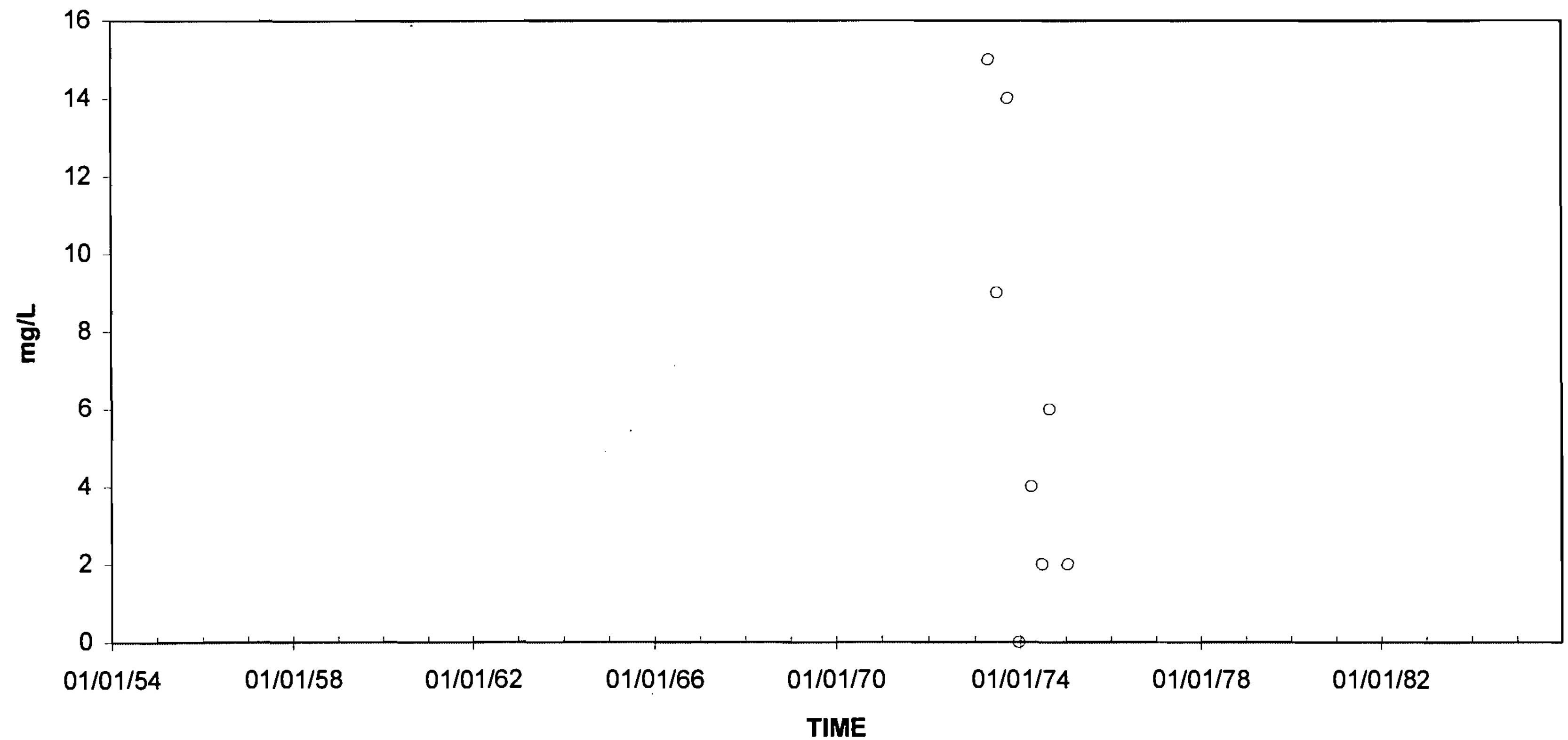
Figure
10.5.4-244



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
OXYGEN DEMAND, BIOCHEMICAL 5 DAY
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

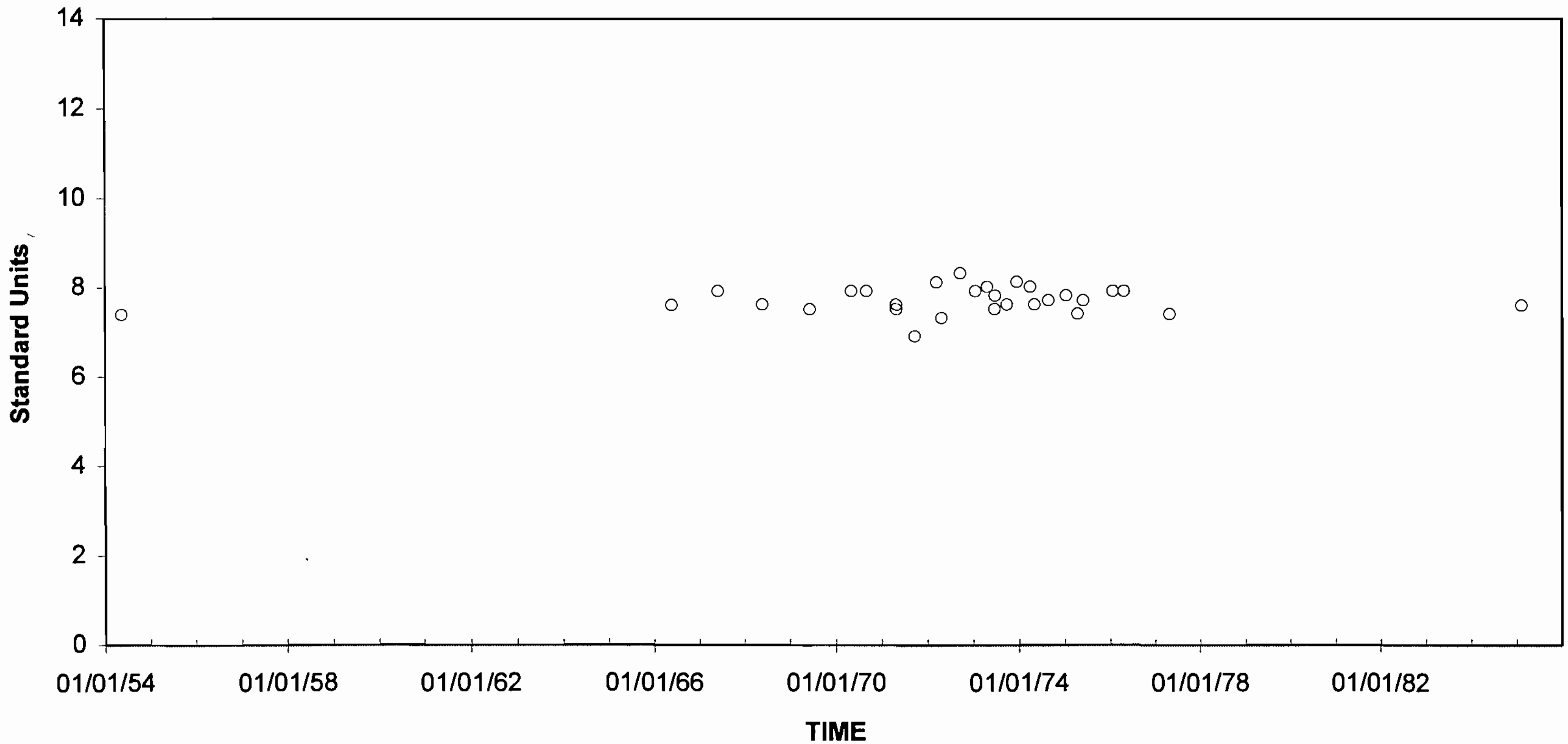
Figure
10.5.4–245



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
OXYGEN DEMAND, CHEMICAL HIGH LEVEL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

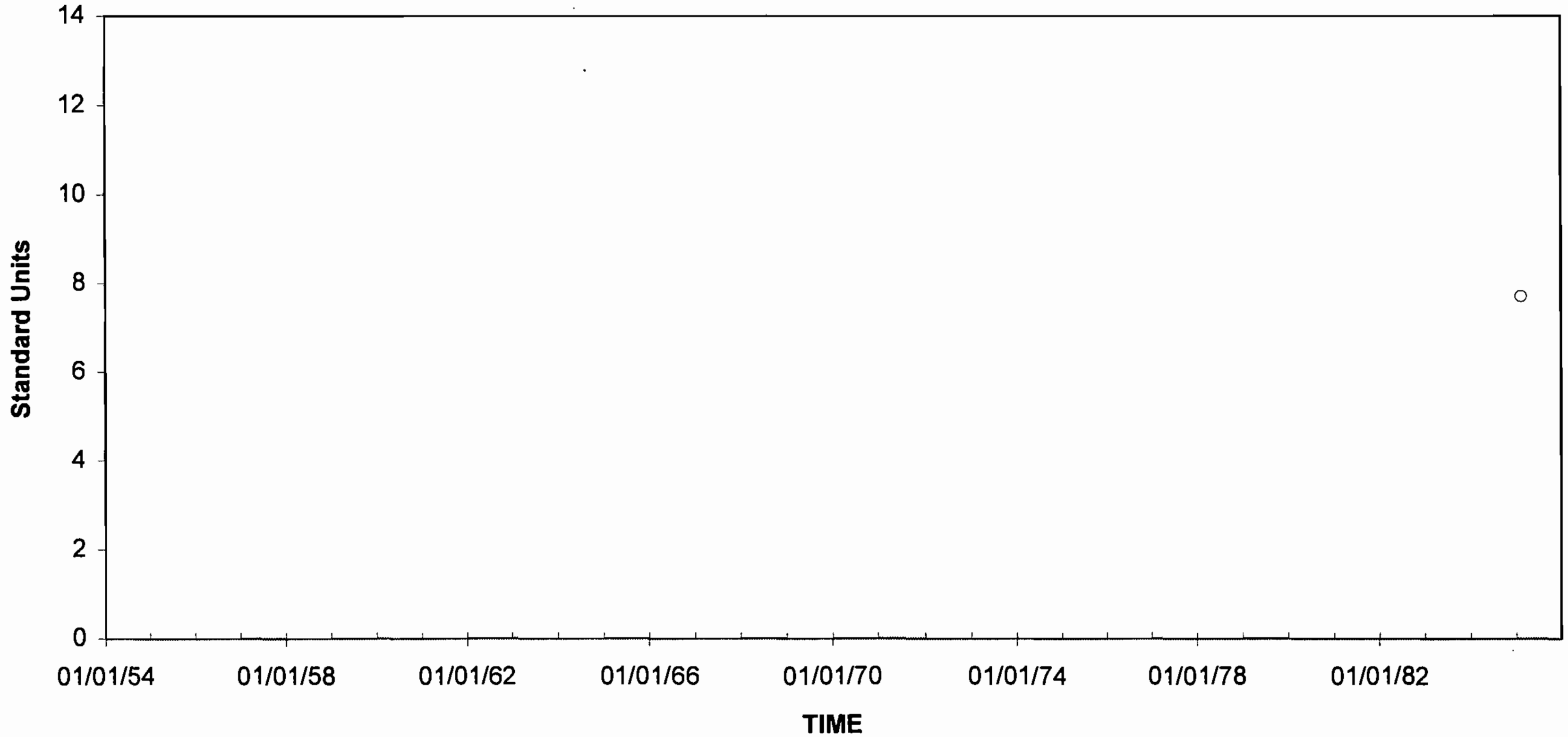
Figure
10.5.4–246



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
pH WATER WHOLE FIELD
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

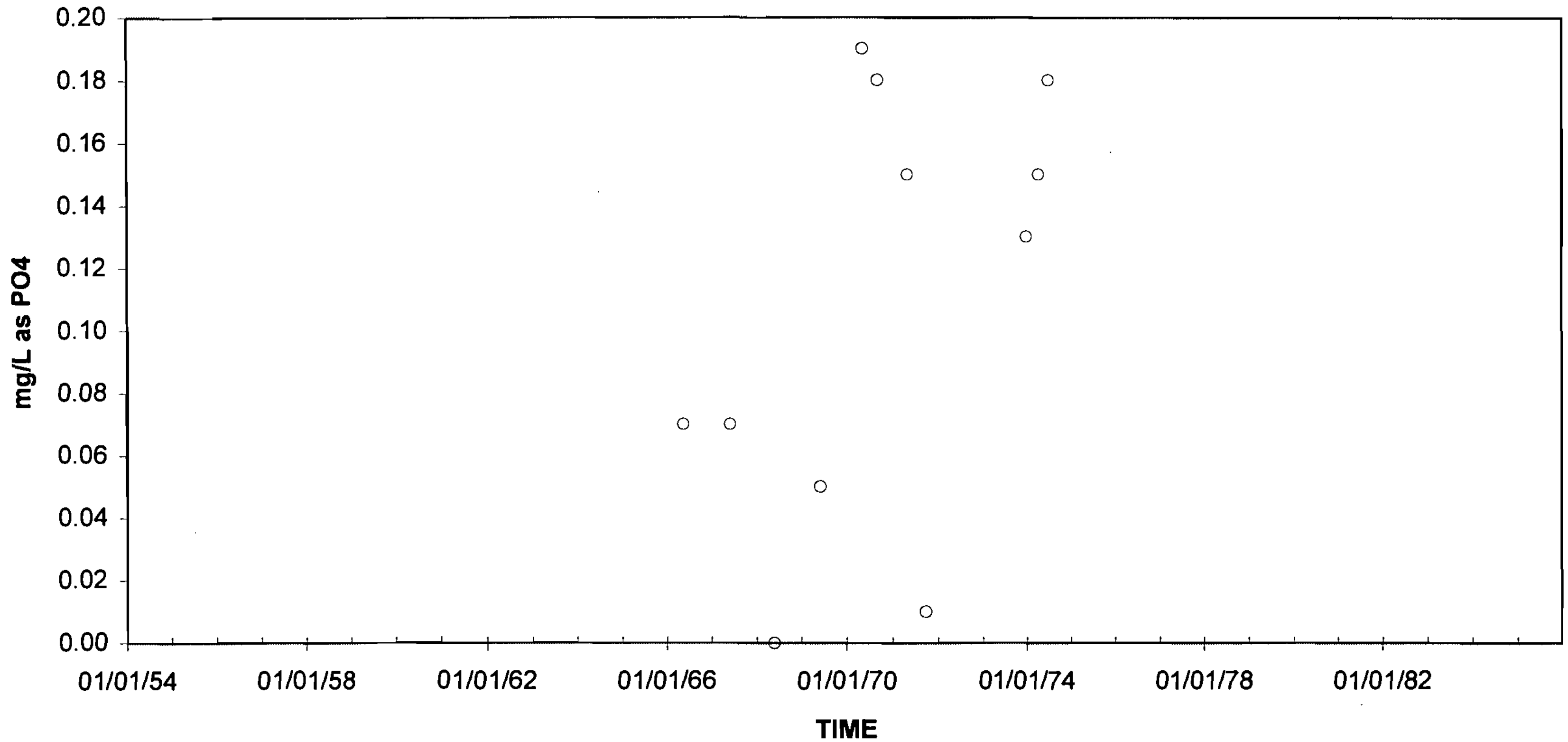
Figure
10.5.4-247



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
pH WATER WHOLE LAB
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

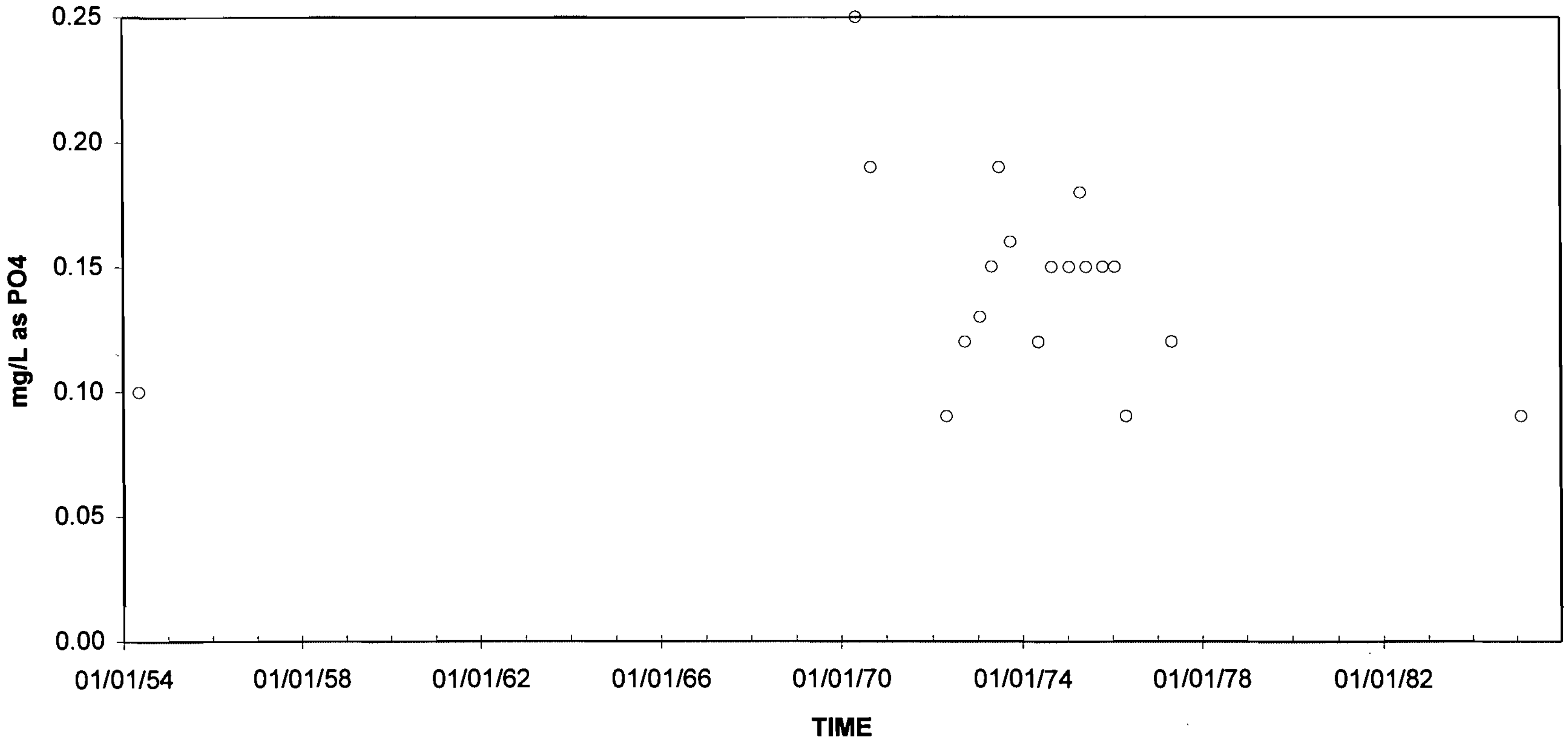
Figure
10.5.4–248



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
PHOSPHATE, ORTHO DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

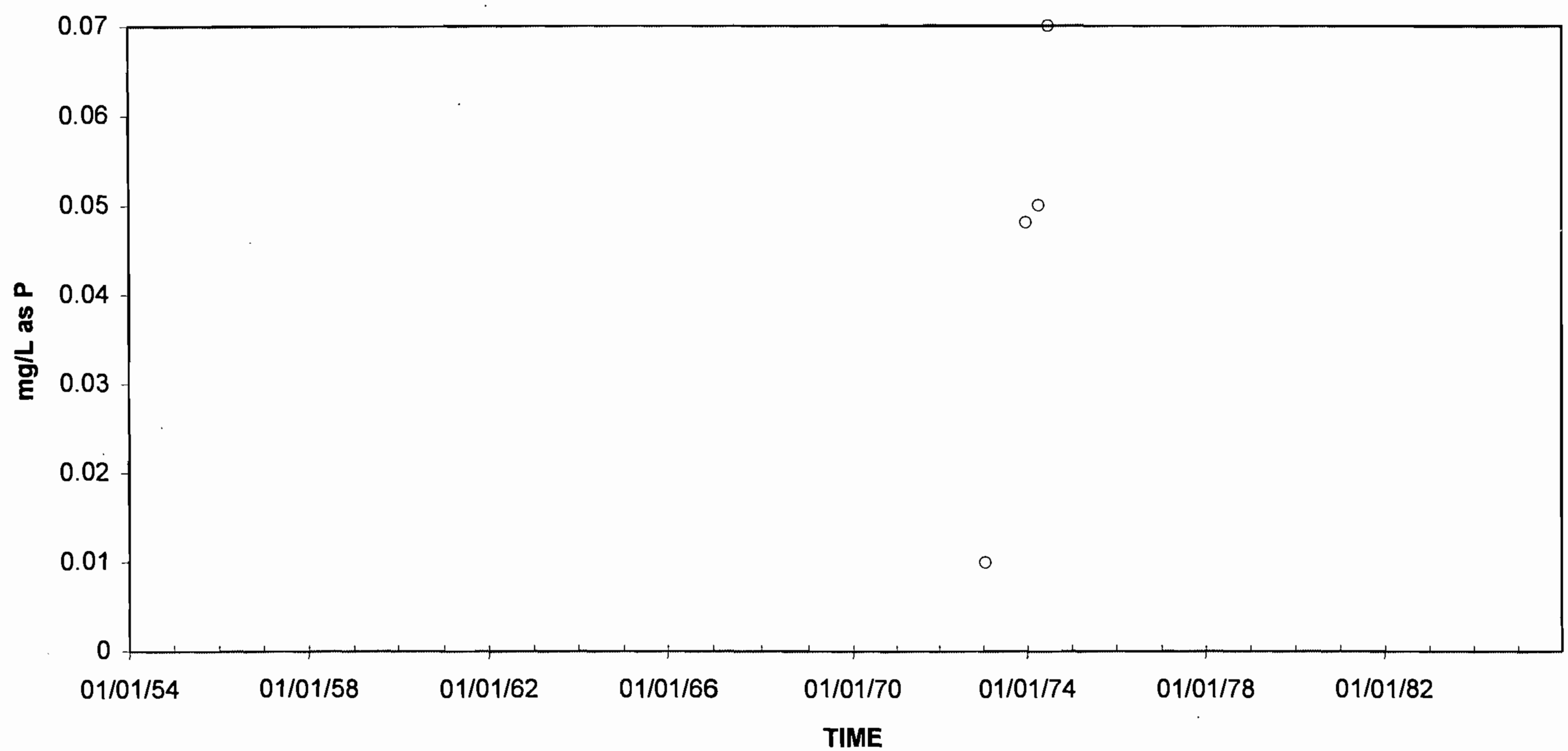
Figure 10.5.4–249



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
PHOSPHATE, TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

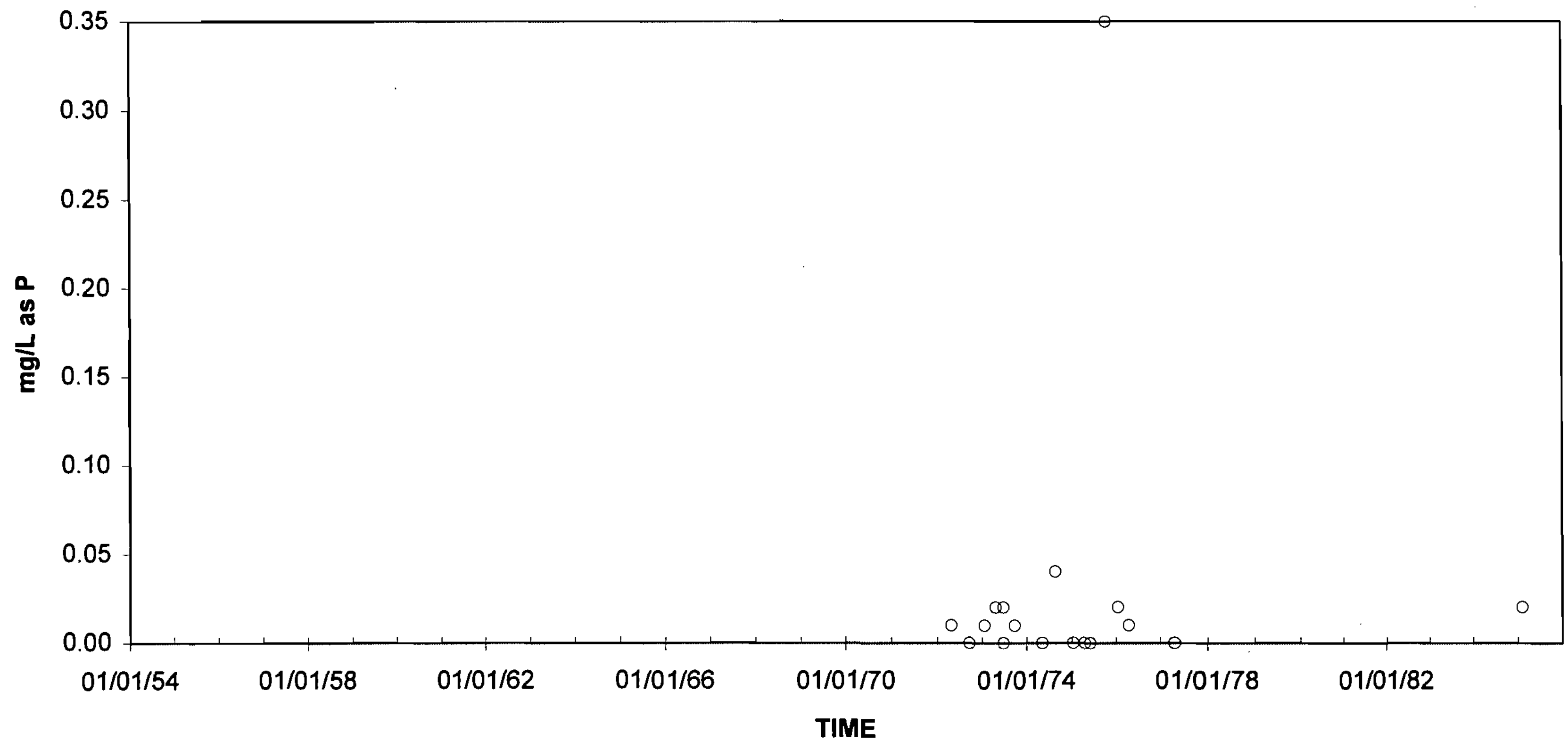
Figure 10.5.4–250



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
PHOSPHORUS, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

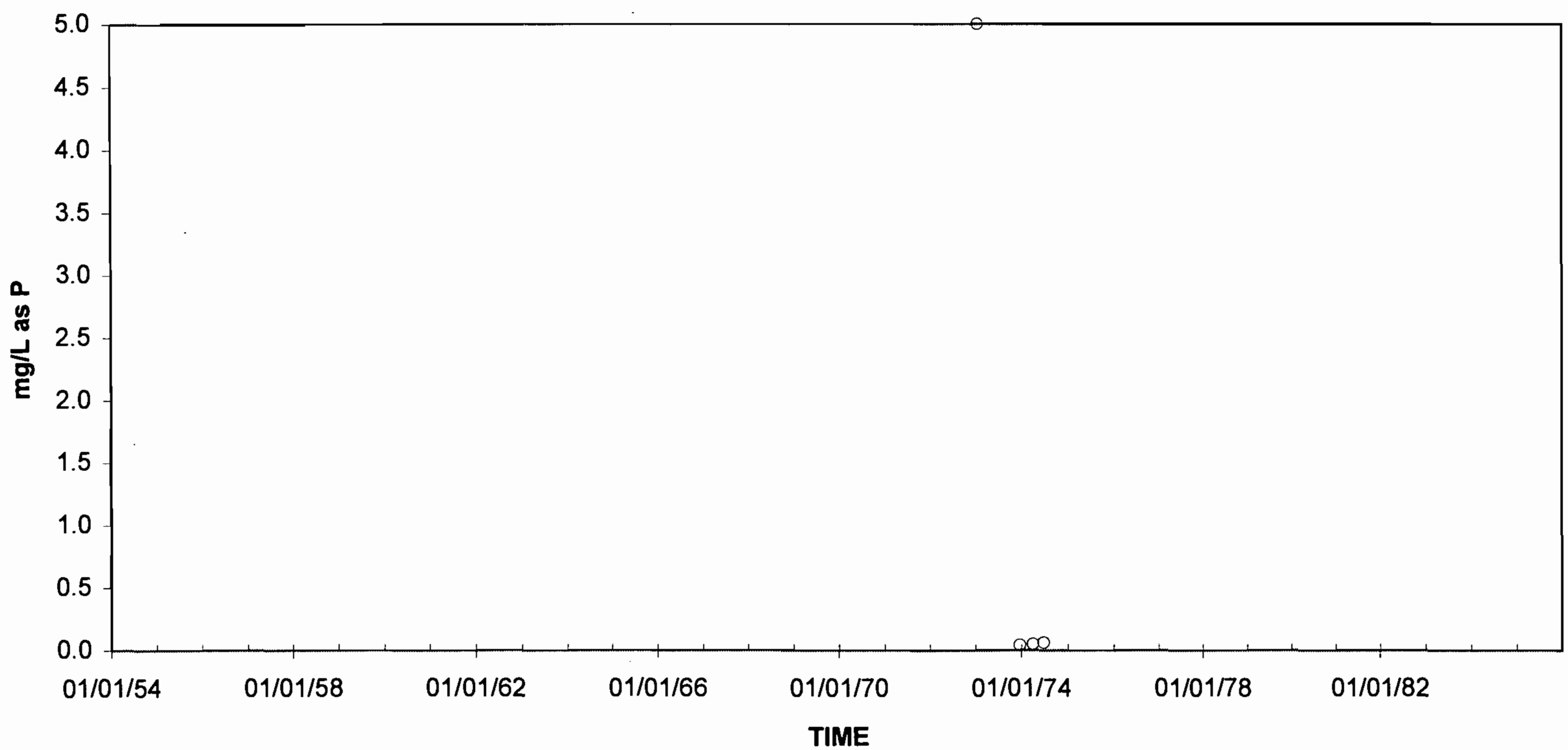
Figure
10.5.4–251



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
PHOSPHORUS, ORGANIC TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

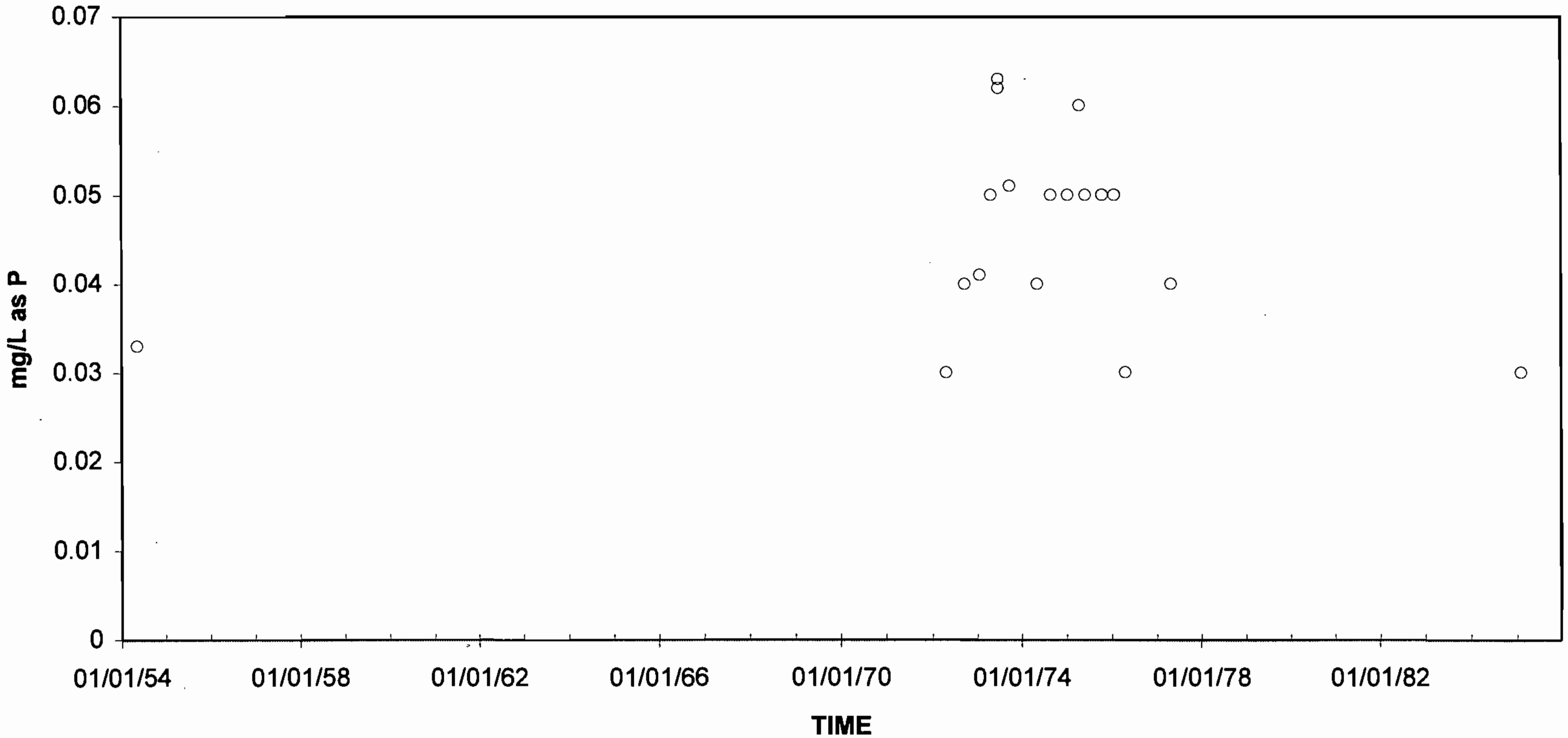
Figure 10.5.4–252



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
PHOSPHORUS, ORTHO DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

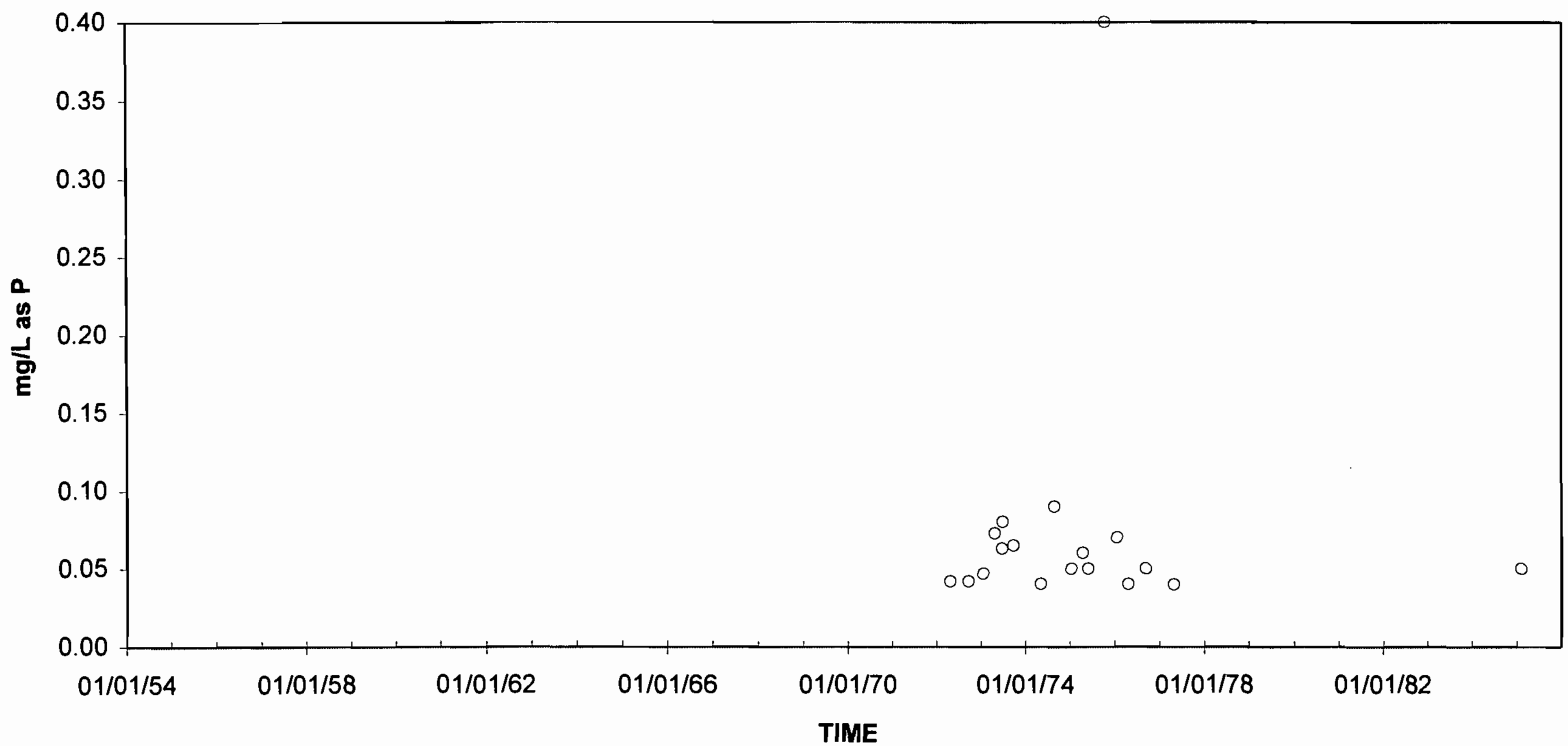
Figure
10.5.4–253



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
PHOSPHORUS, ORTHO TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

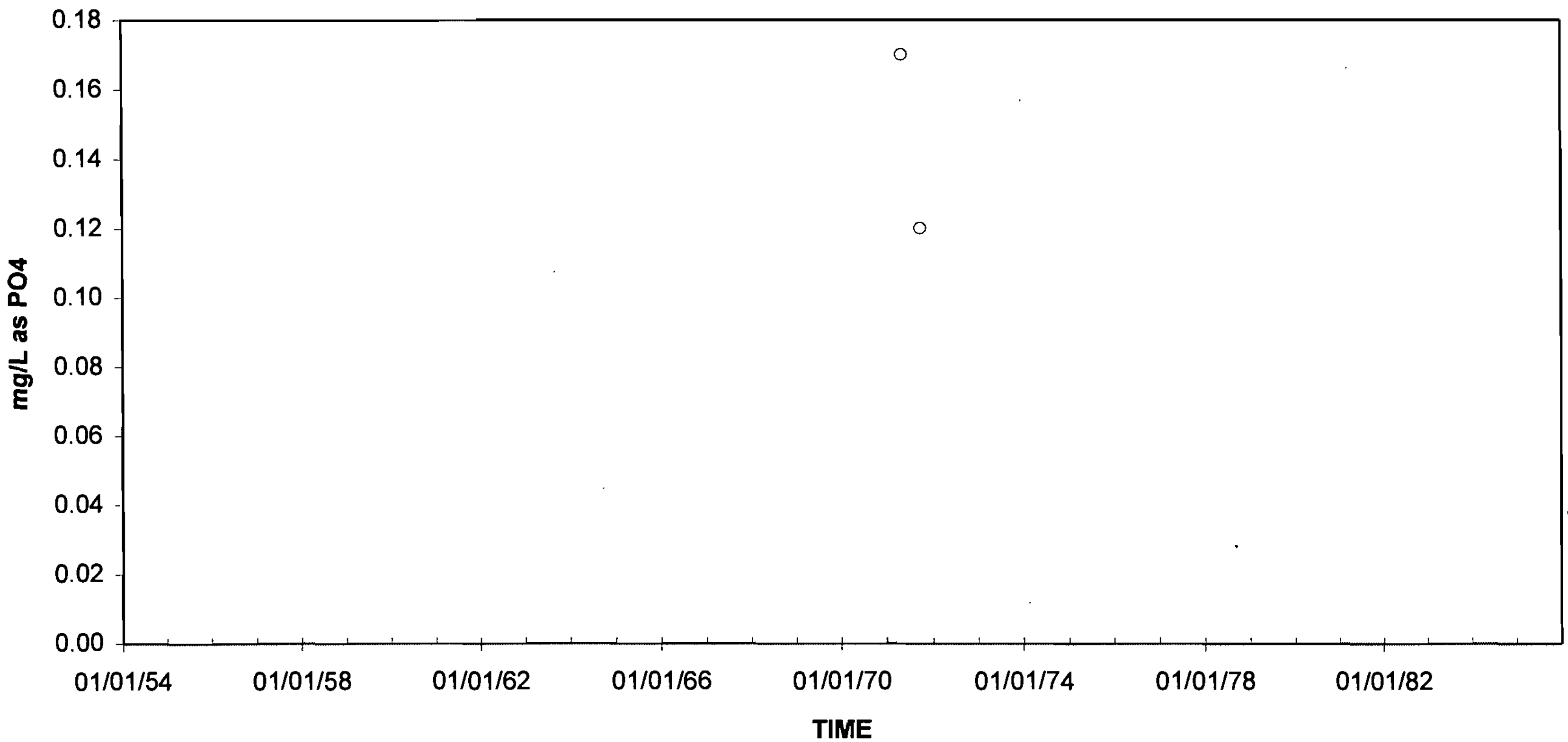
Figure 10.5.4-254



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
PHOSPHORUS, TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

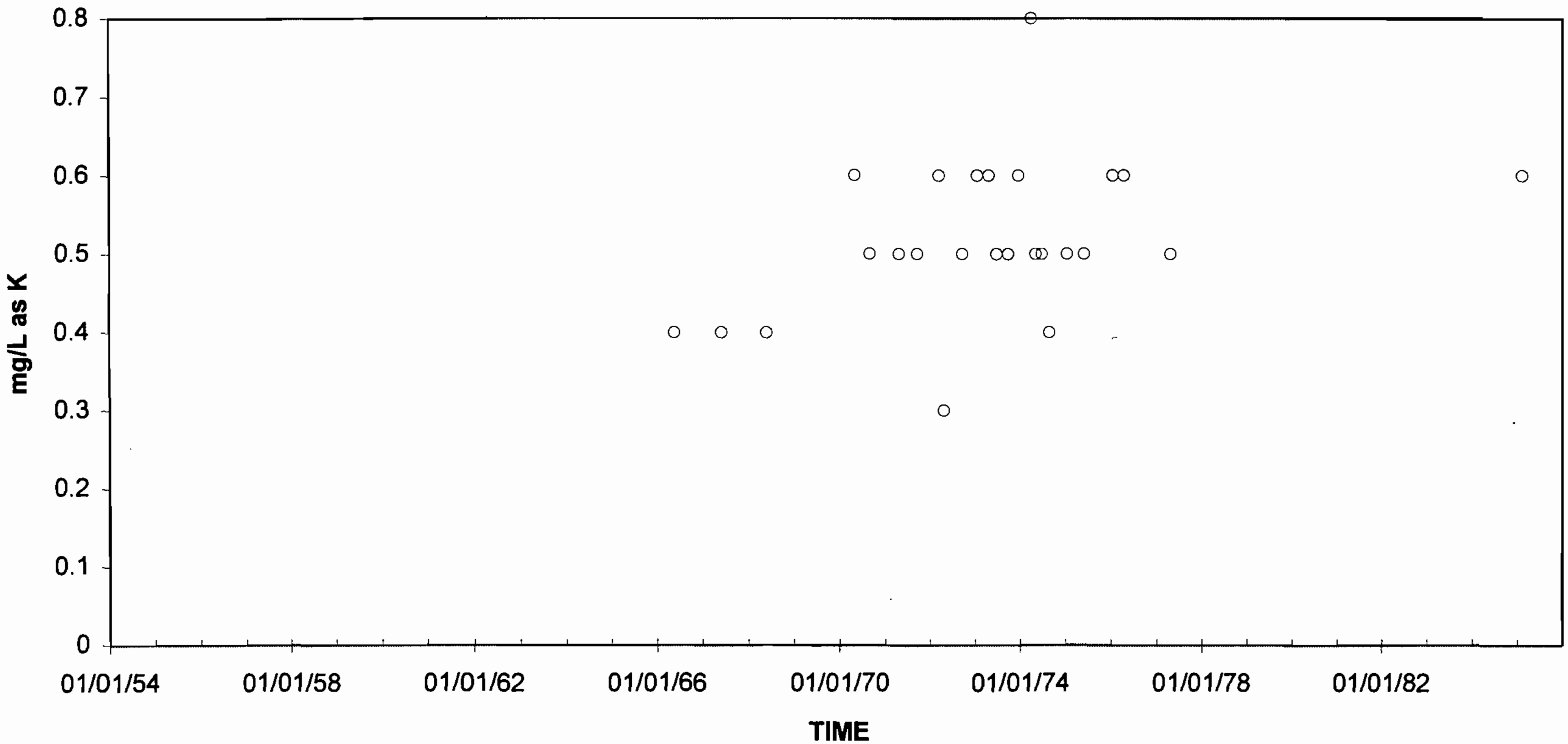
Figure
10.5.4–255



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
PHOSPHORUS, TOTAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

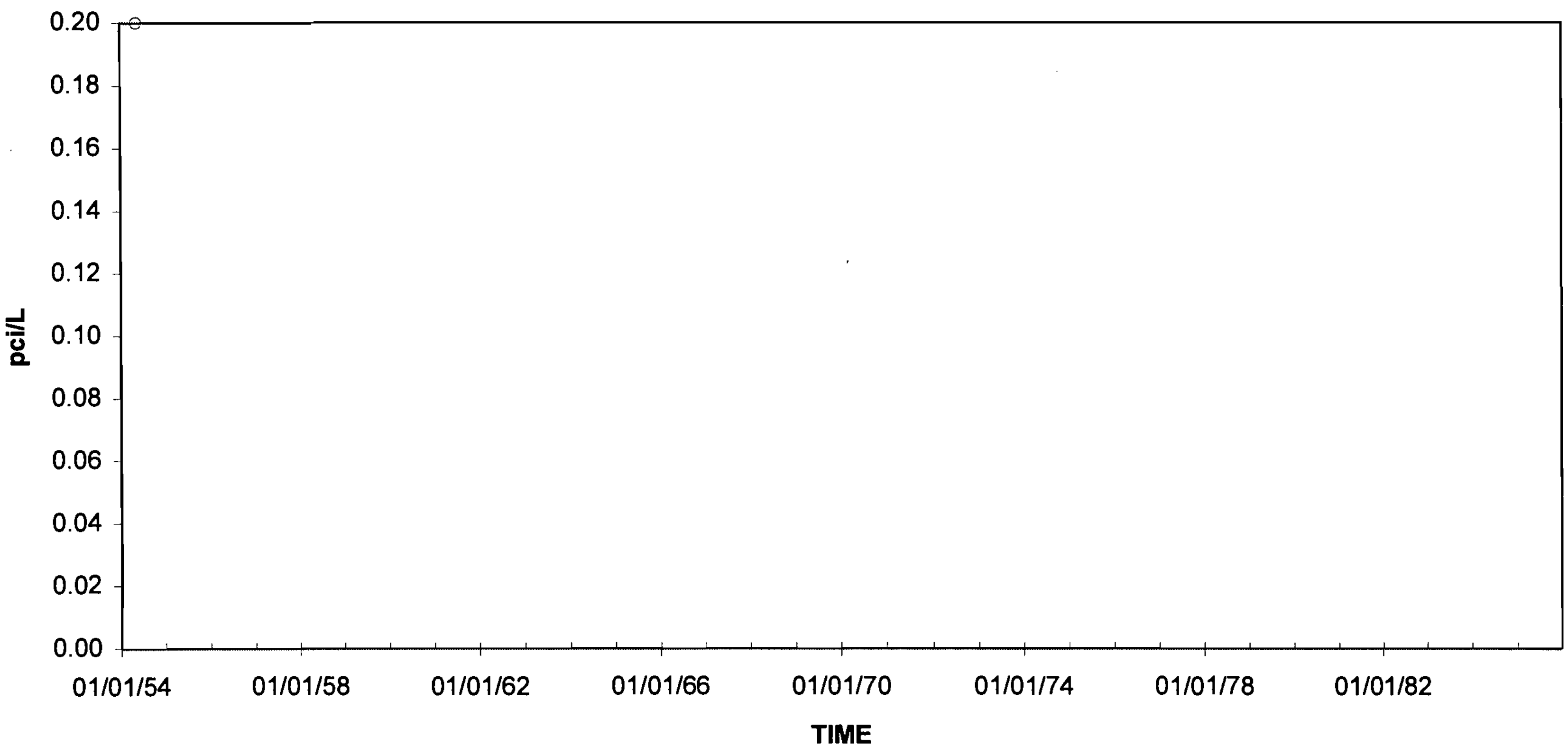
Figure
10.5.4–256



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
POTASSIUM, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

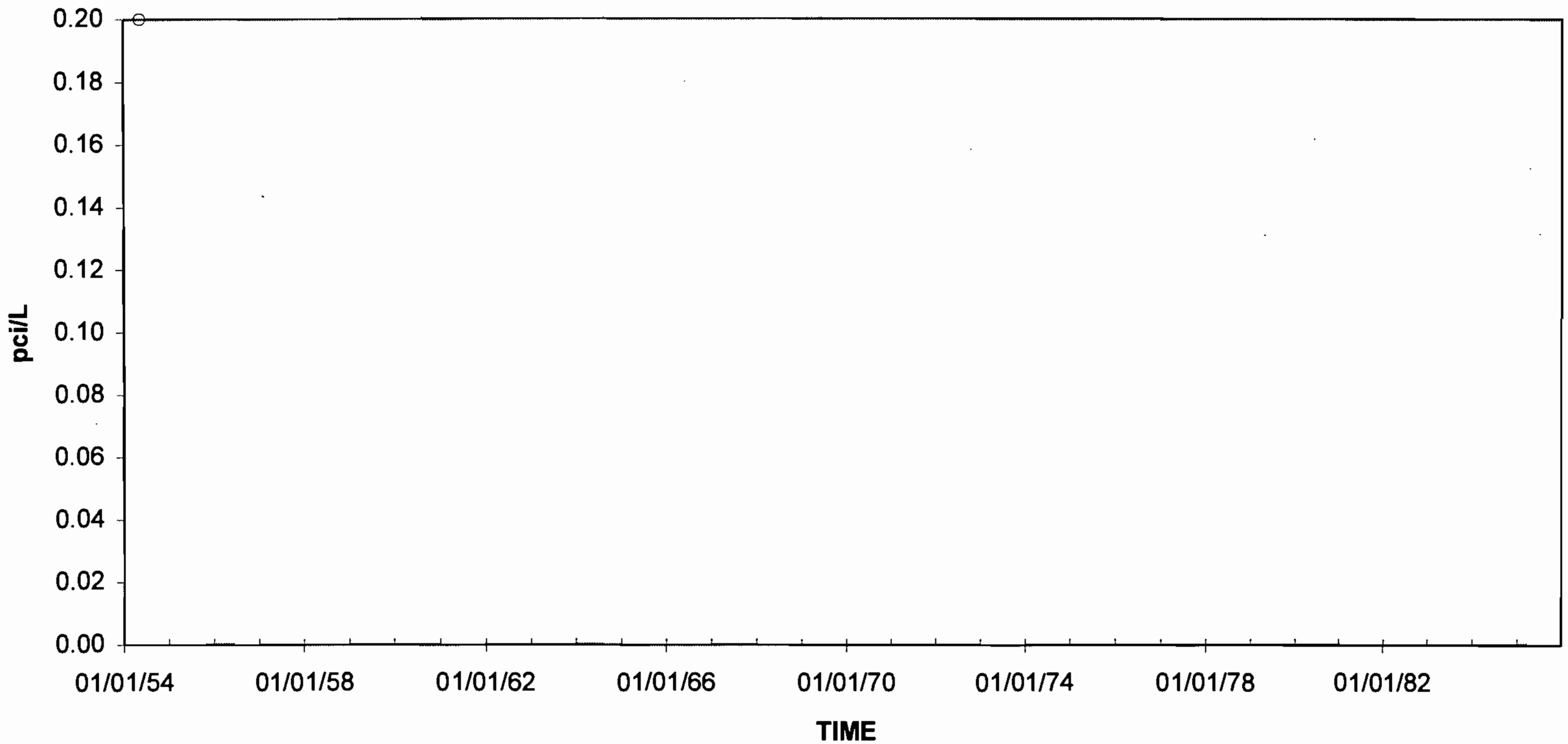
Figure 10.5.4–257



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
RADIUM 226, DISSOLVED PLANCHET COUT
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

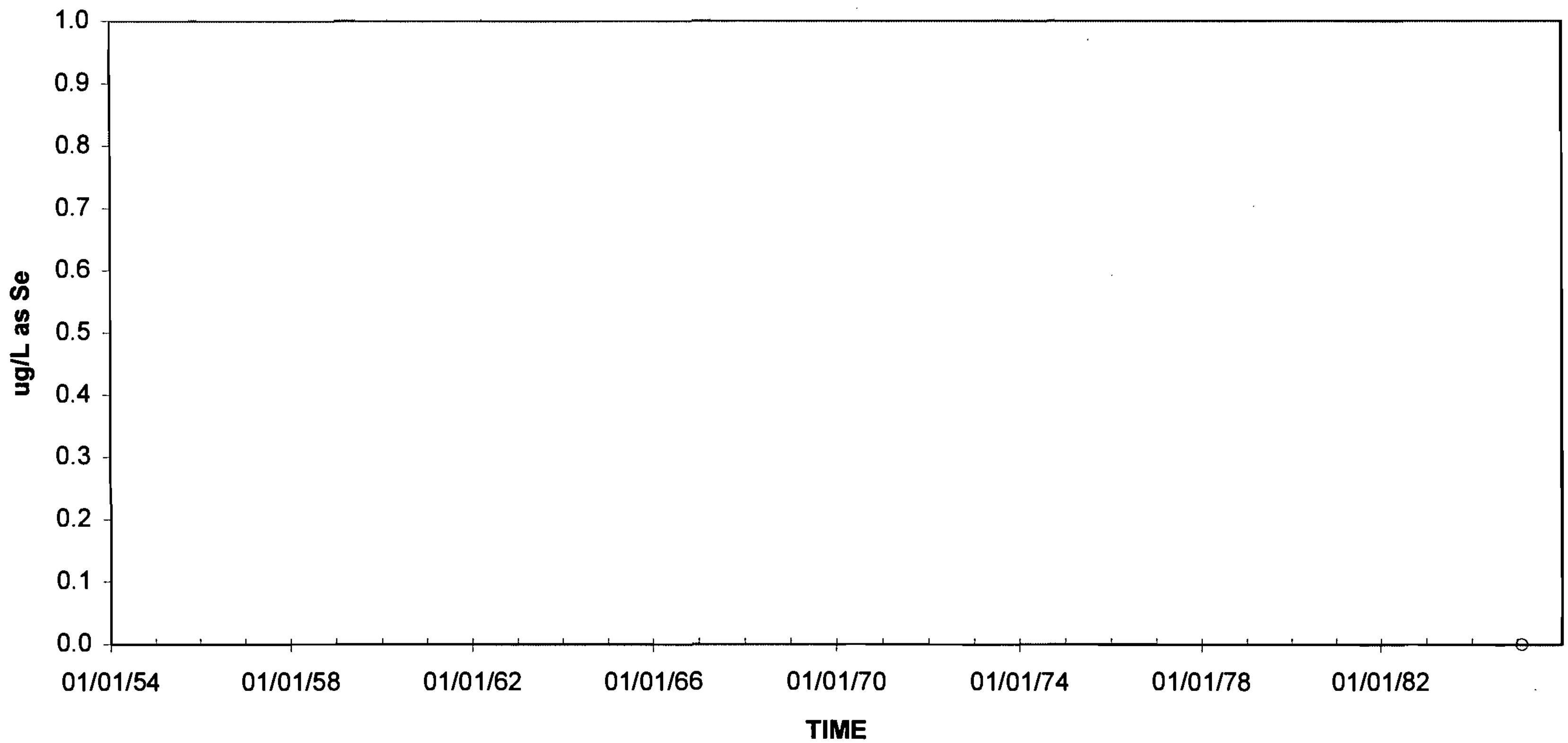
Figure 10.5.4–258



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
RADIUM 226, DISSOLVED RADON METHOD
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

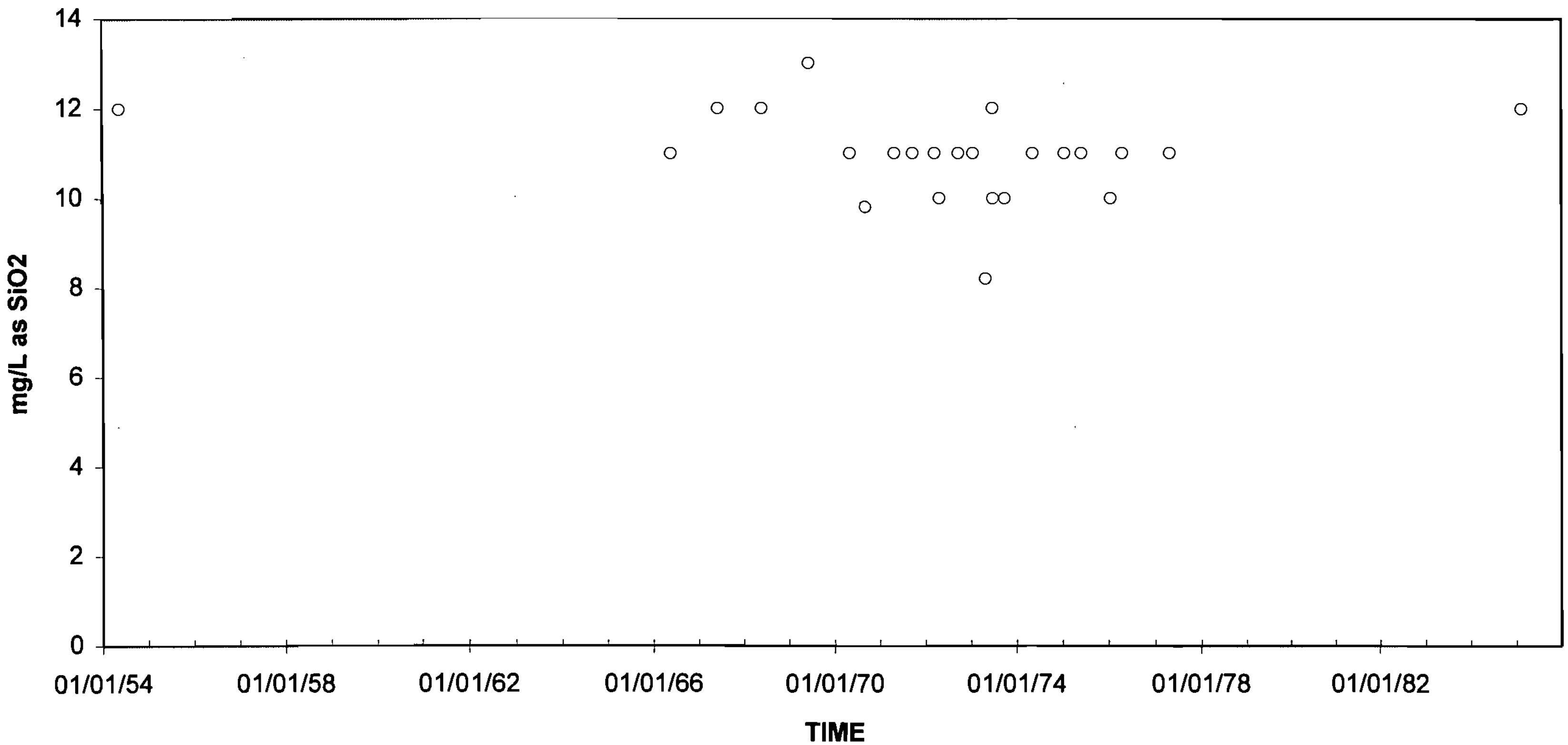
Figure
10.5.4–259



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
SELENIUM, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

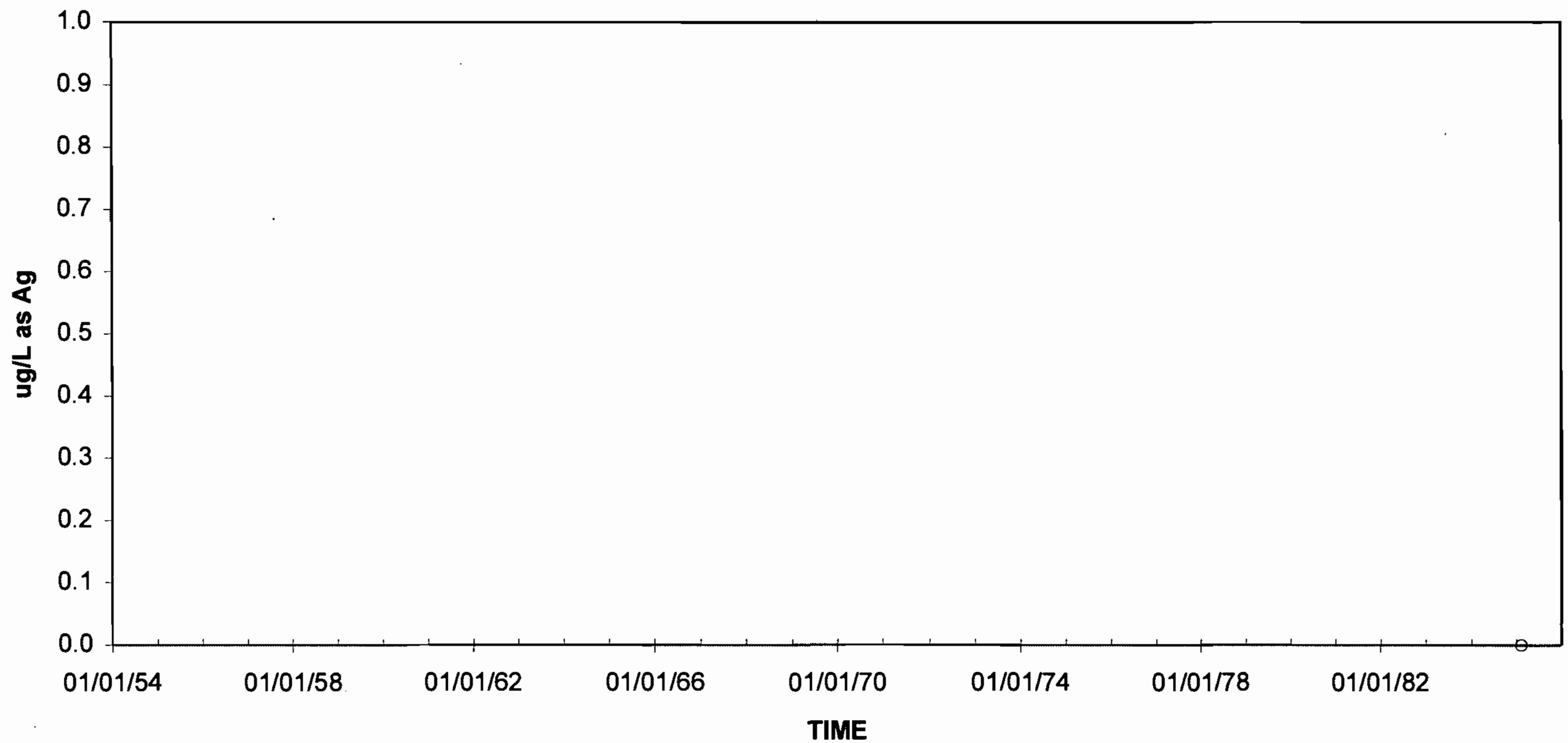
Figure
10.5.4–260



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
SILICA, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

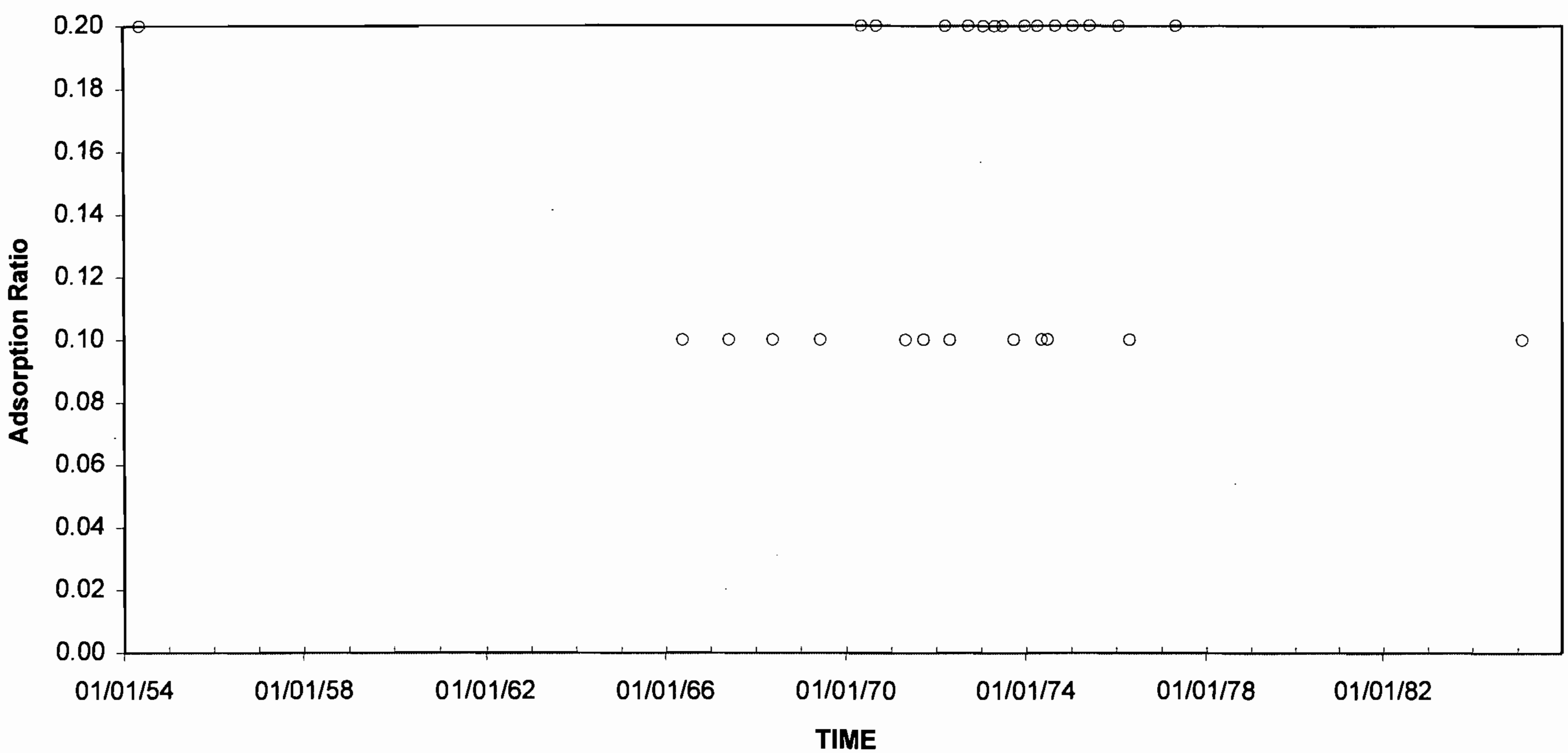
Figure
10.5.4-261



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
SILVER, TOTAL RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

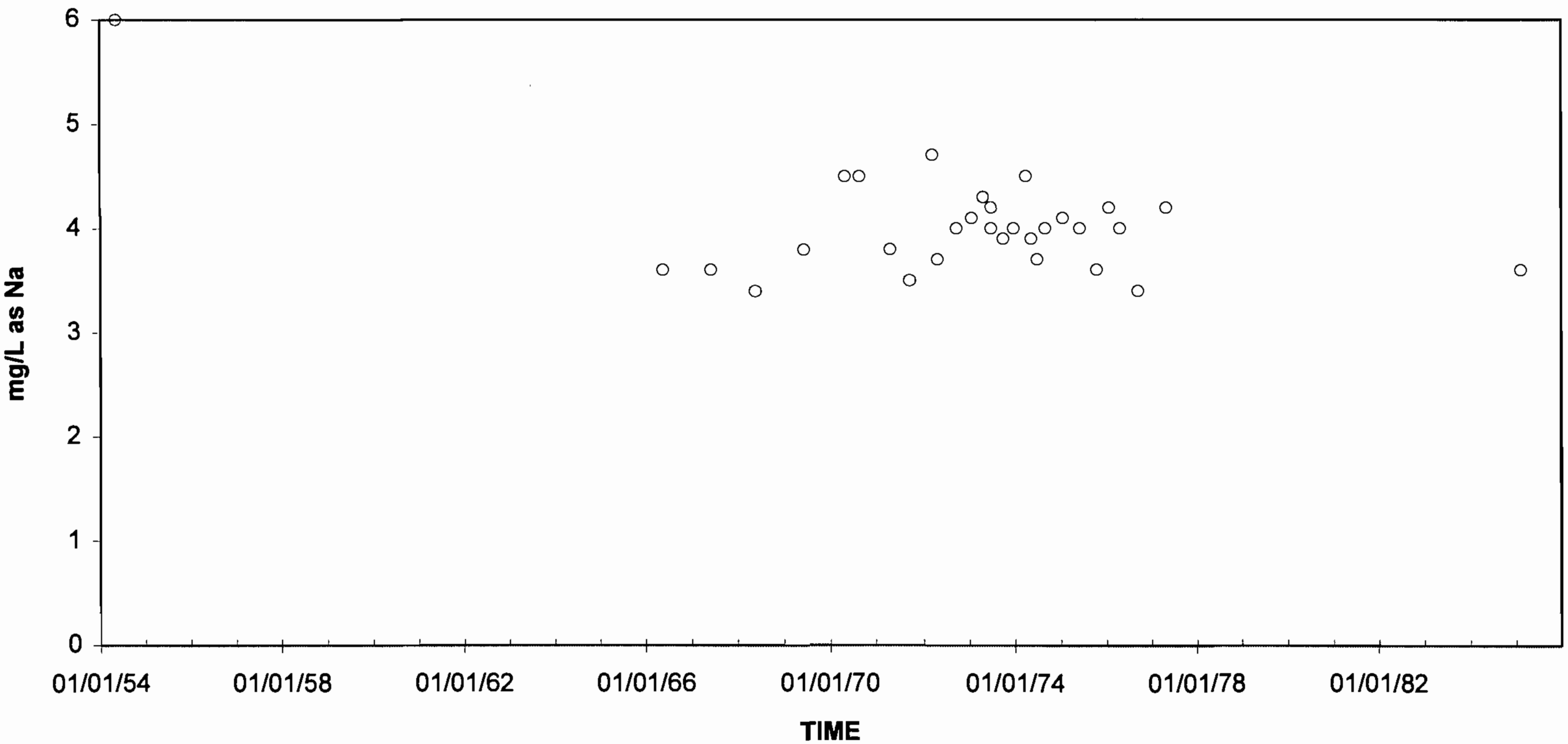
Figure
10.5.4–262



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
SODIUM, ADSORPTION RATIO
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

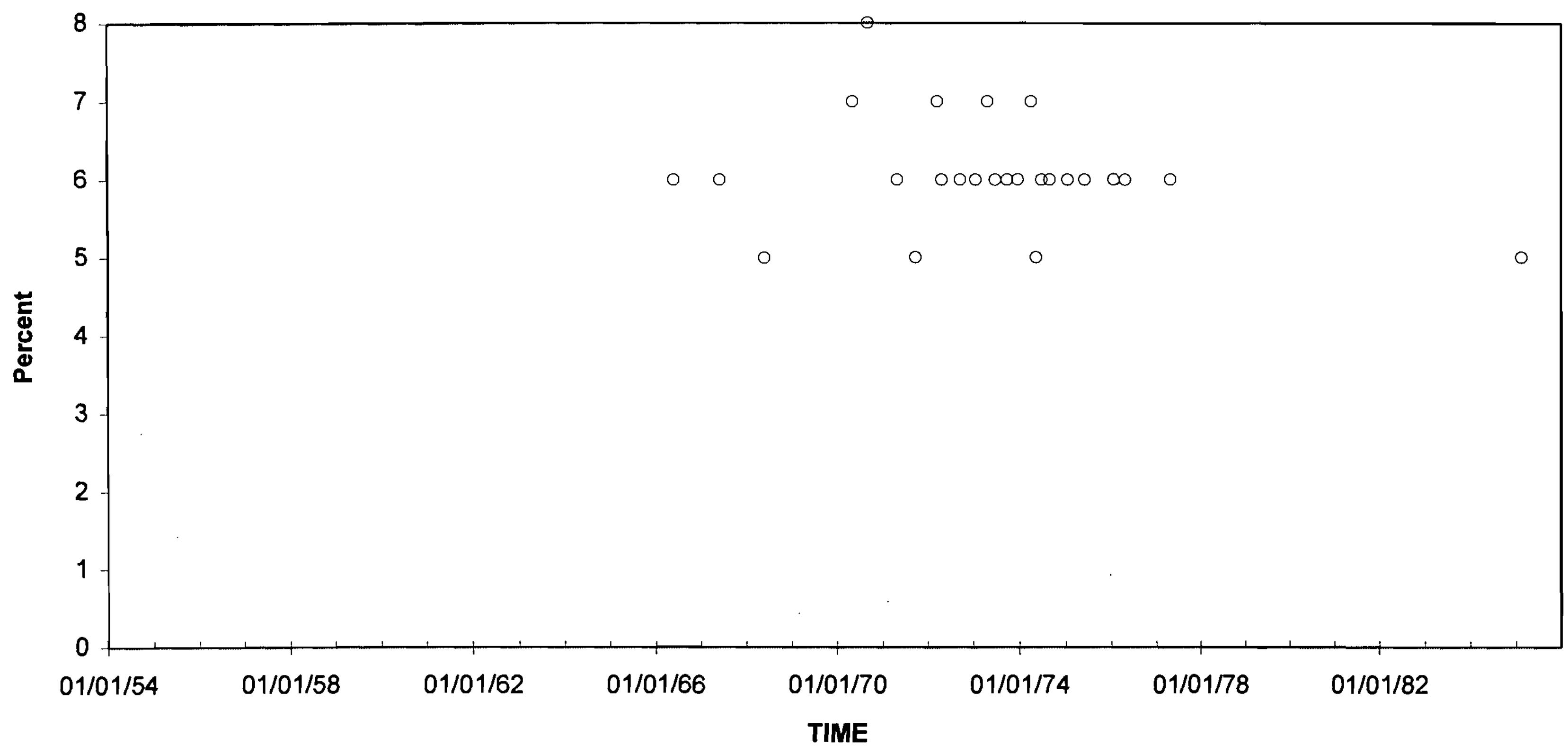
Figure
10.5.4–263



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
SODIUM, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

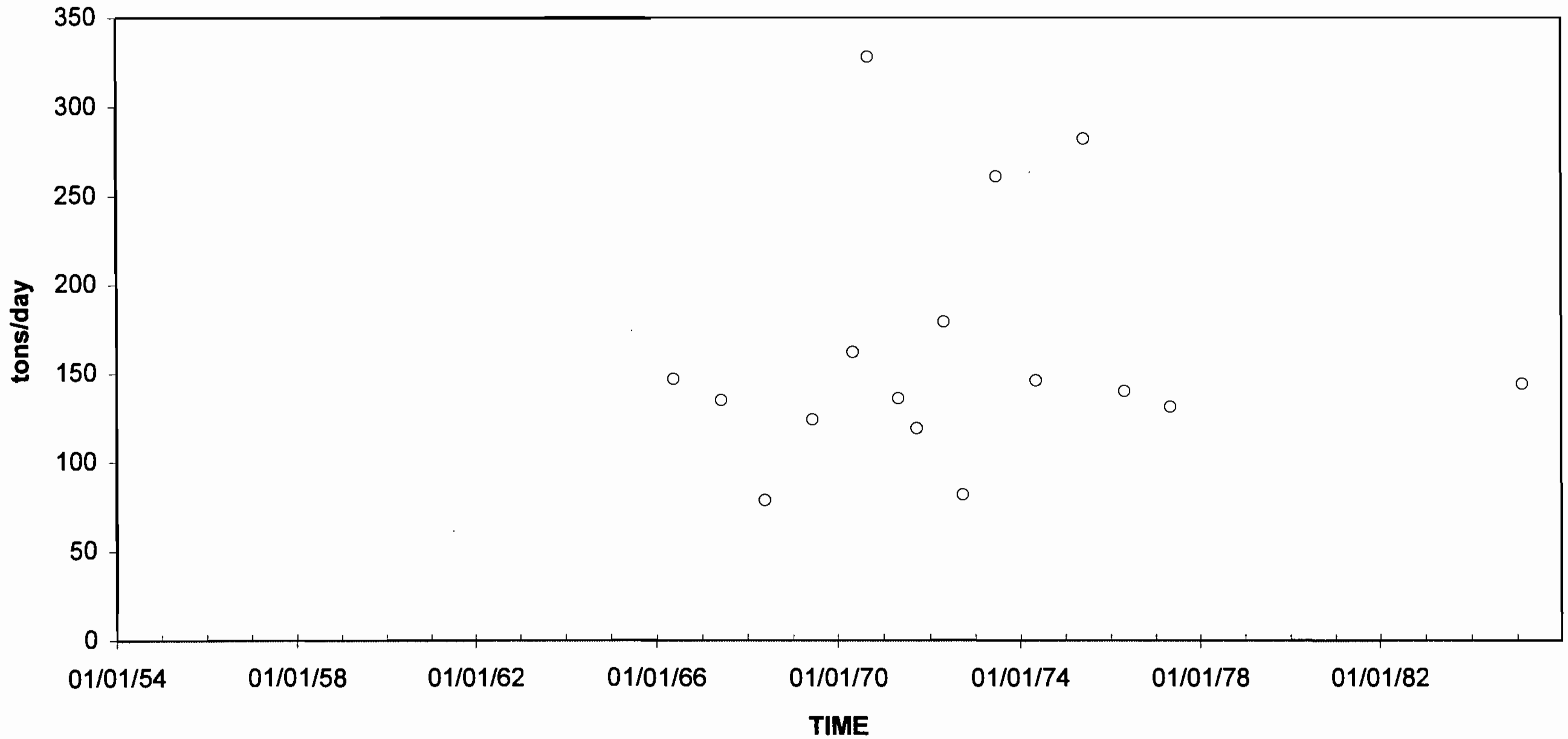
Figure
10.5.4–264



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
SODIUM, PERCENT
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

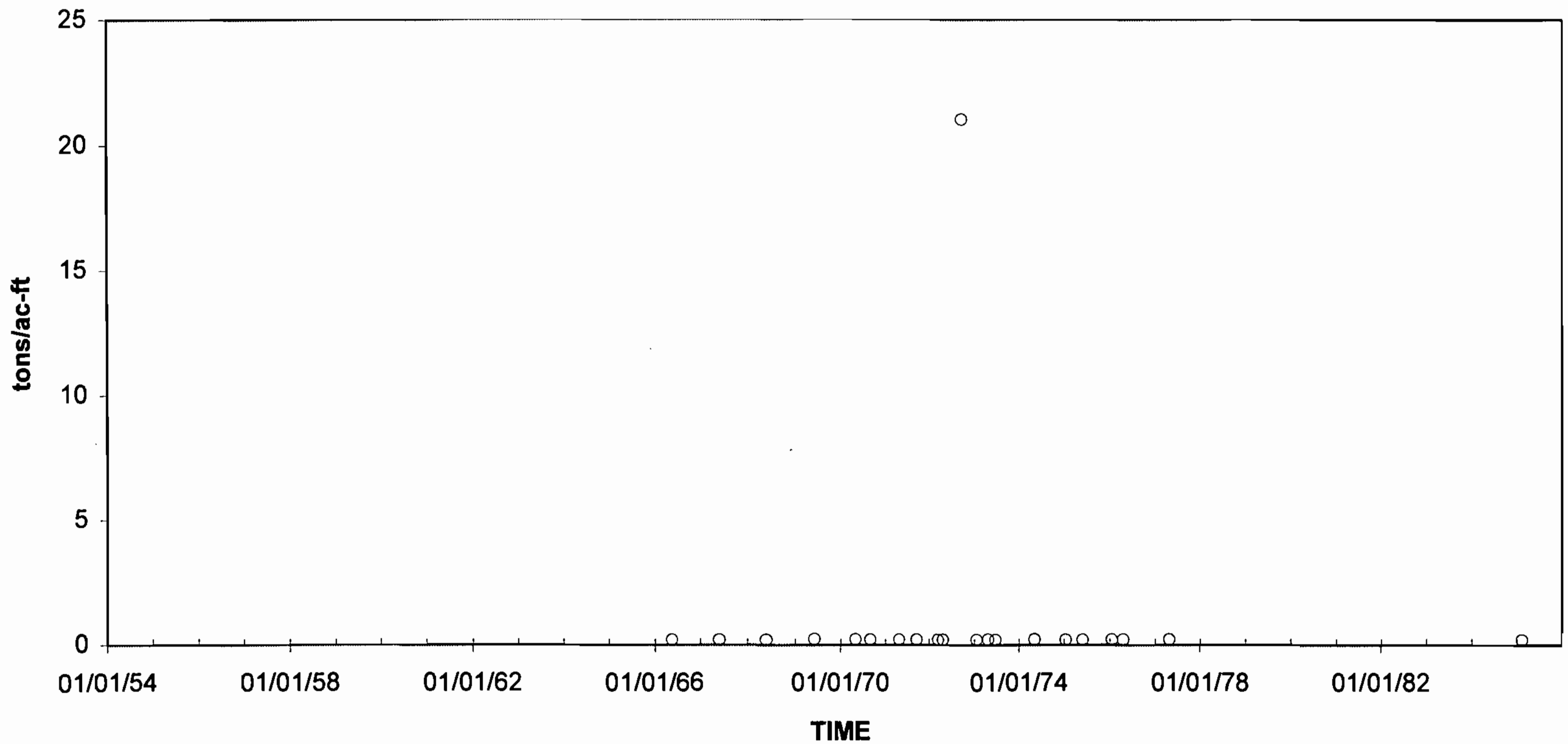
Figure
10.5.4-265



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
SOLIDS, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

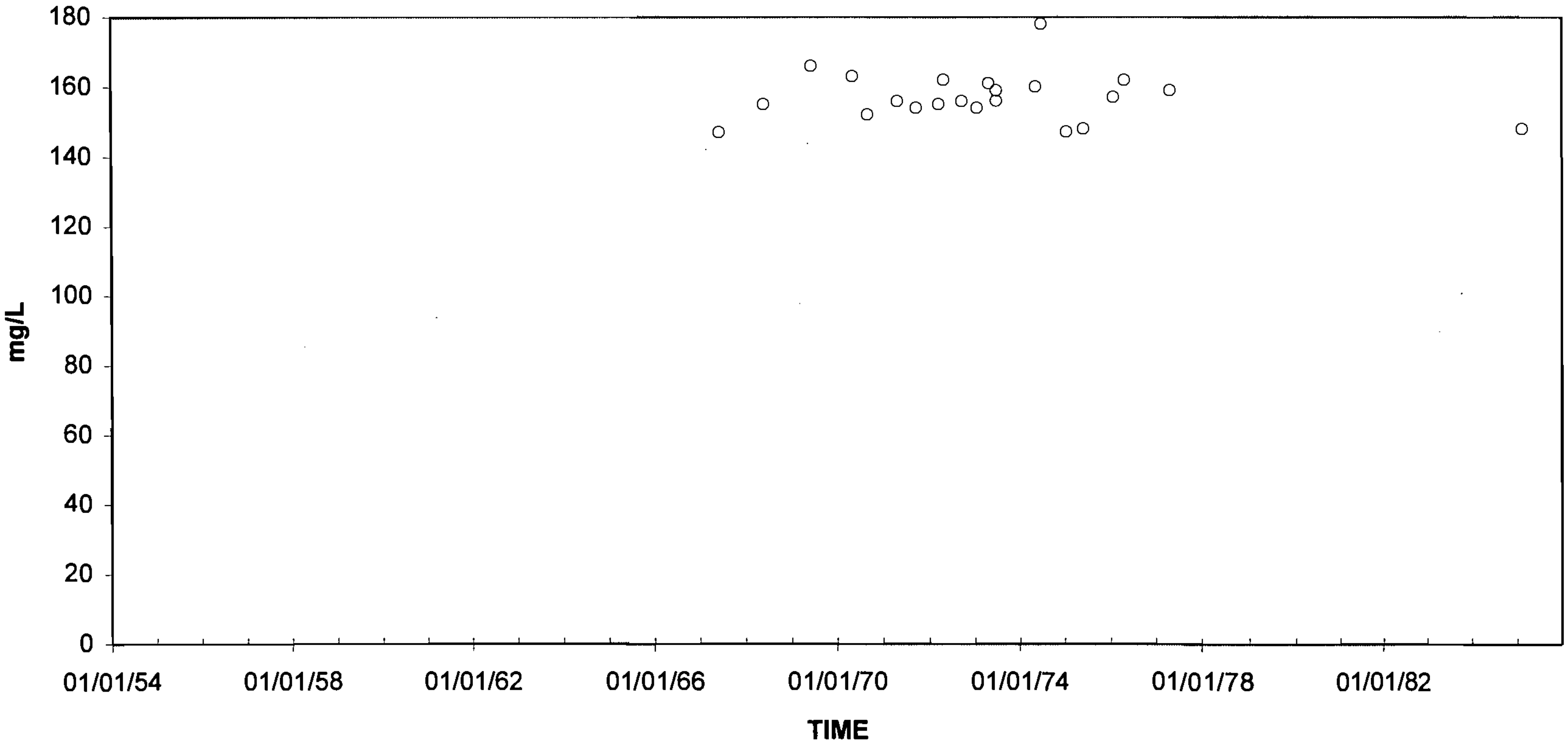
Figure
10.5.4–266



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
SOLIDS, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

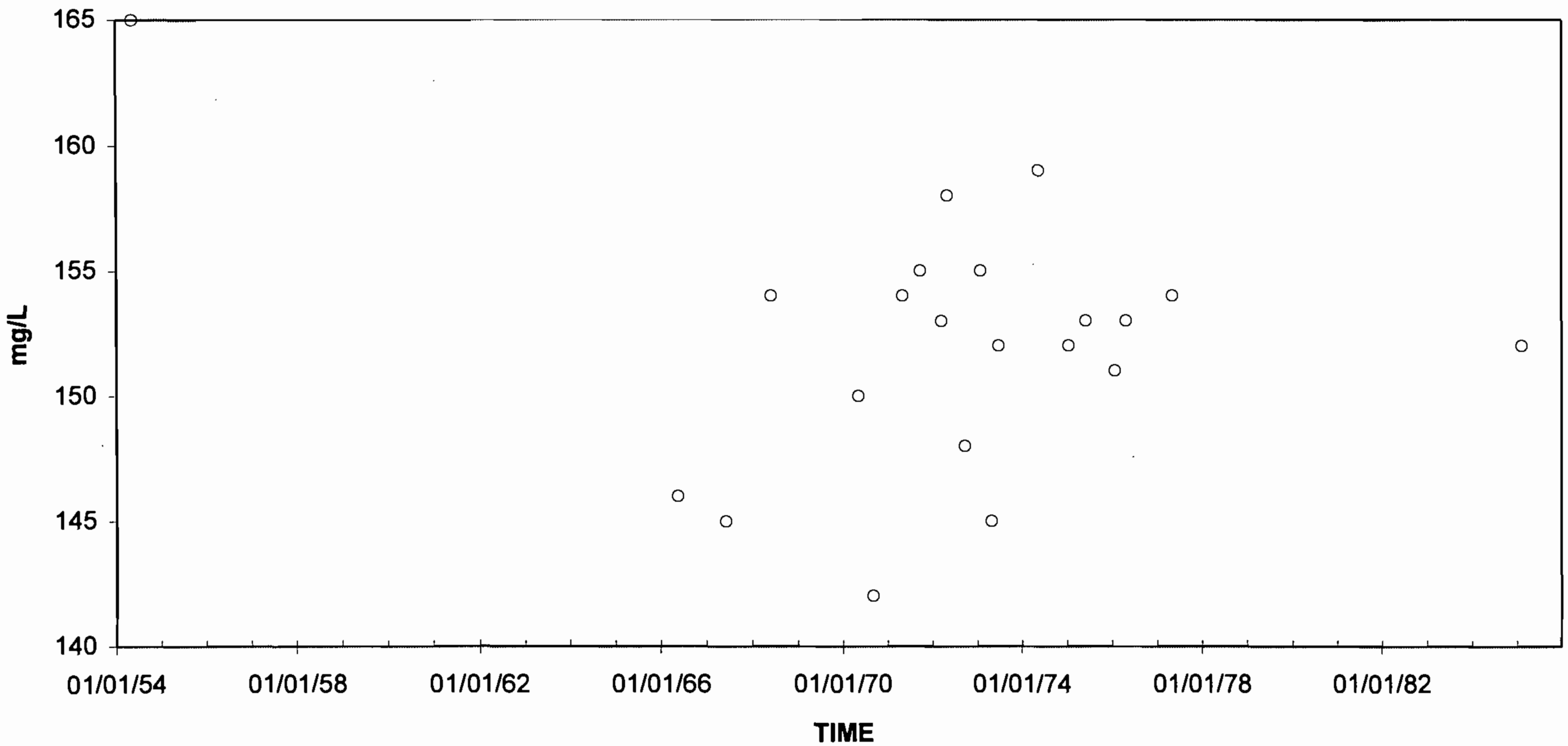
Figure
10.5.4–267



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
SOLIDS, RESIDUE AT 180 DEG C DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

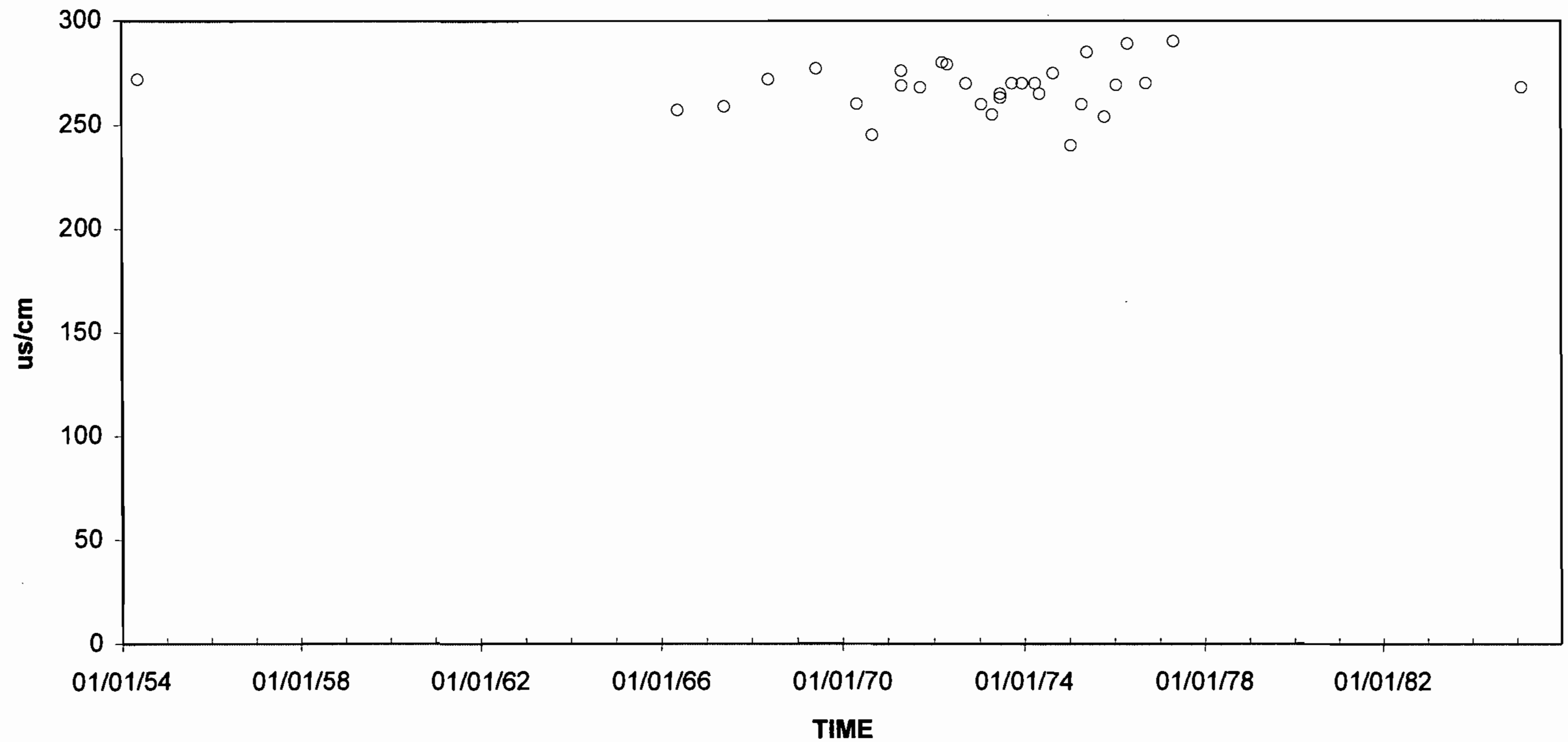
Figure
10.5.4–268



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
SOLIDS, SUM OF CONSTITUENTS DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

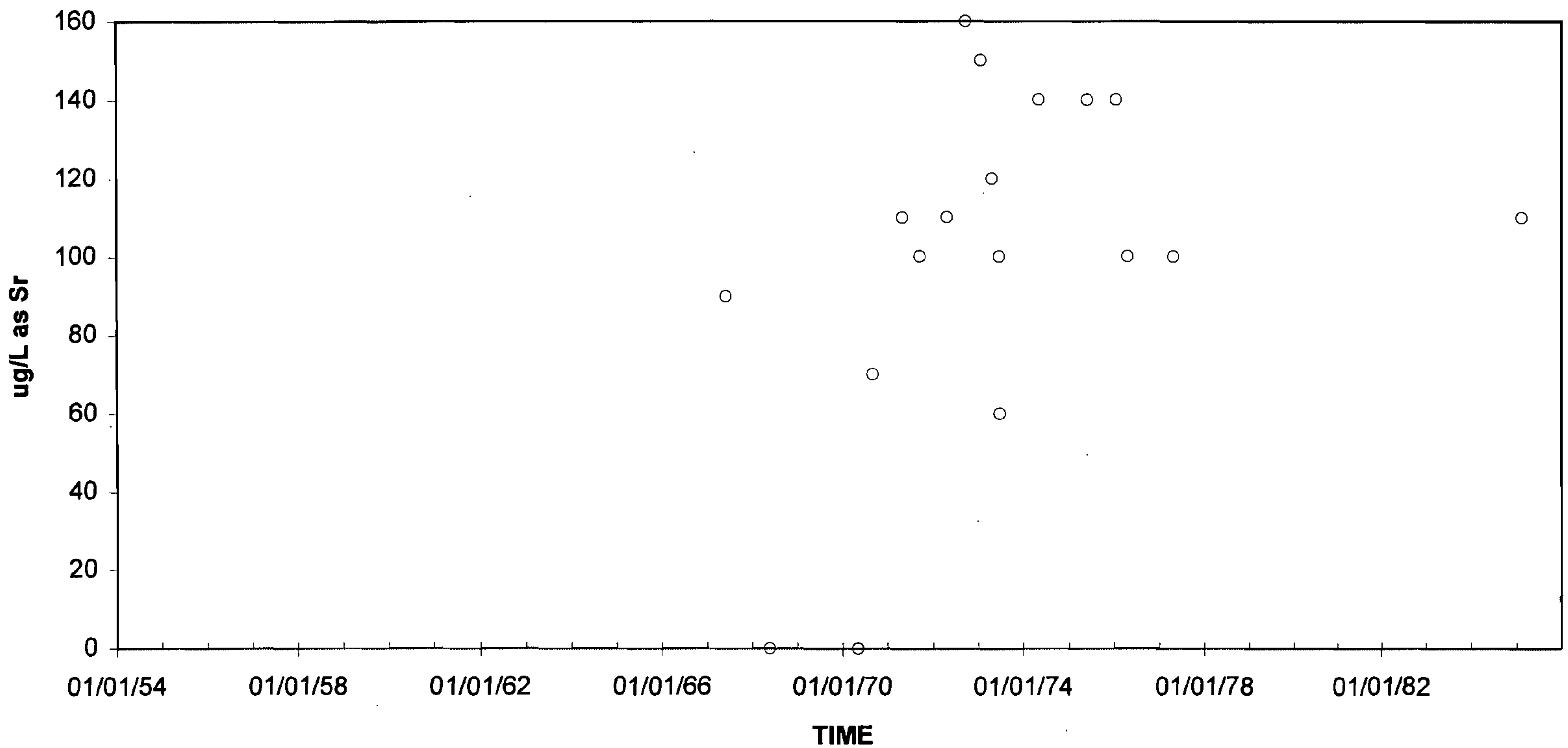
Figure
10.5.4-269



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
SPECIFIC CONDUCTANCE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

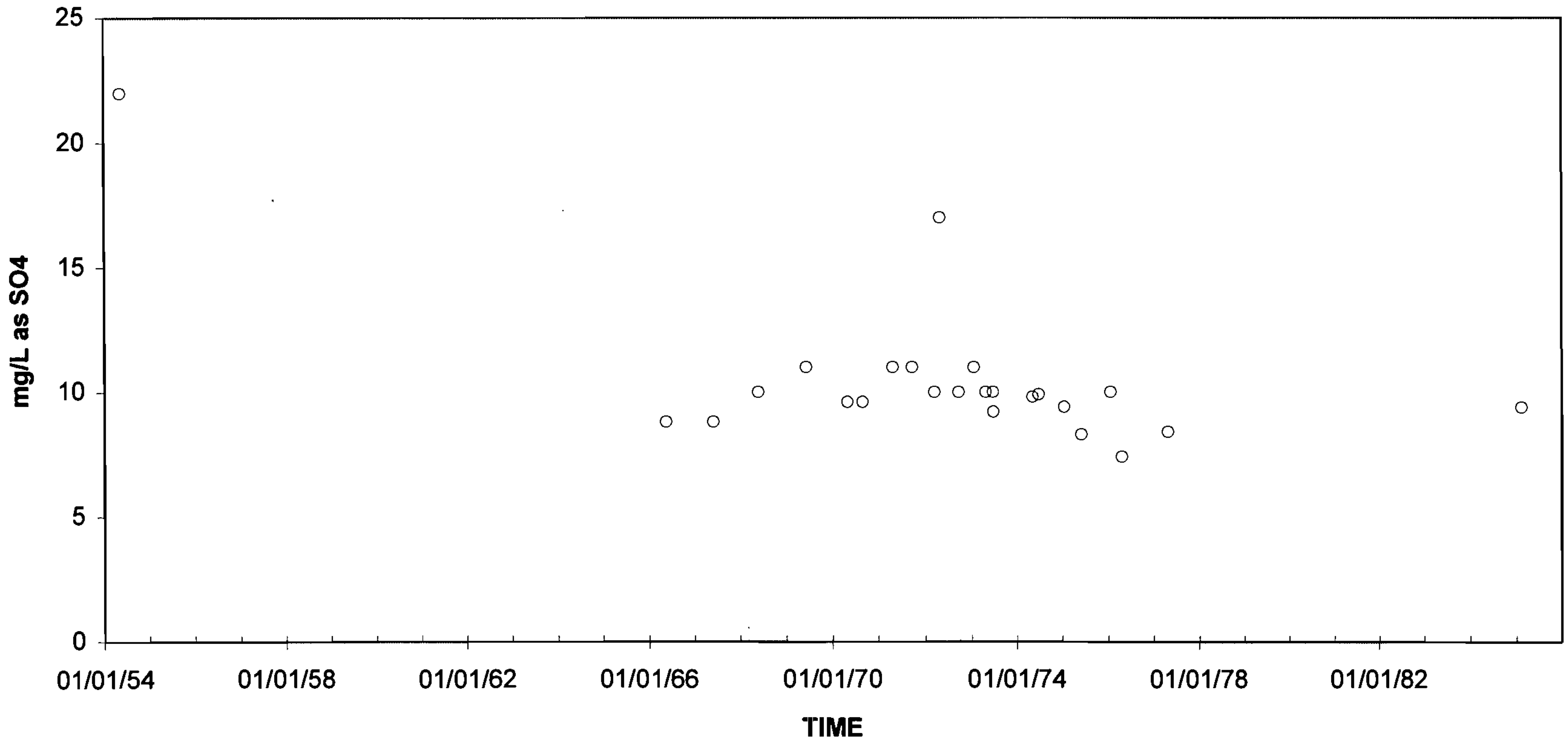
Figure
10.5.4–270



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
STRONTIUM, DISSOLVED
PURDOM UNIT 8 PROJECT - St MARKS, FLORIDA

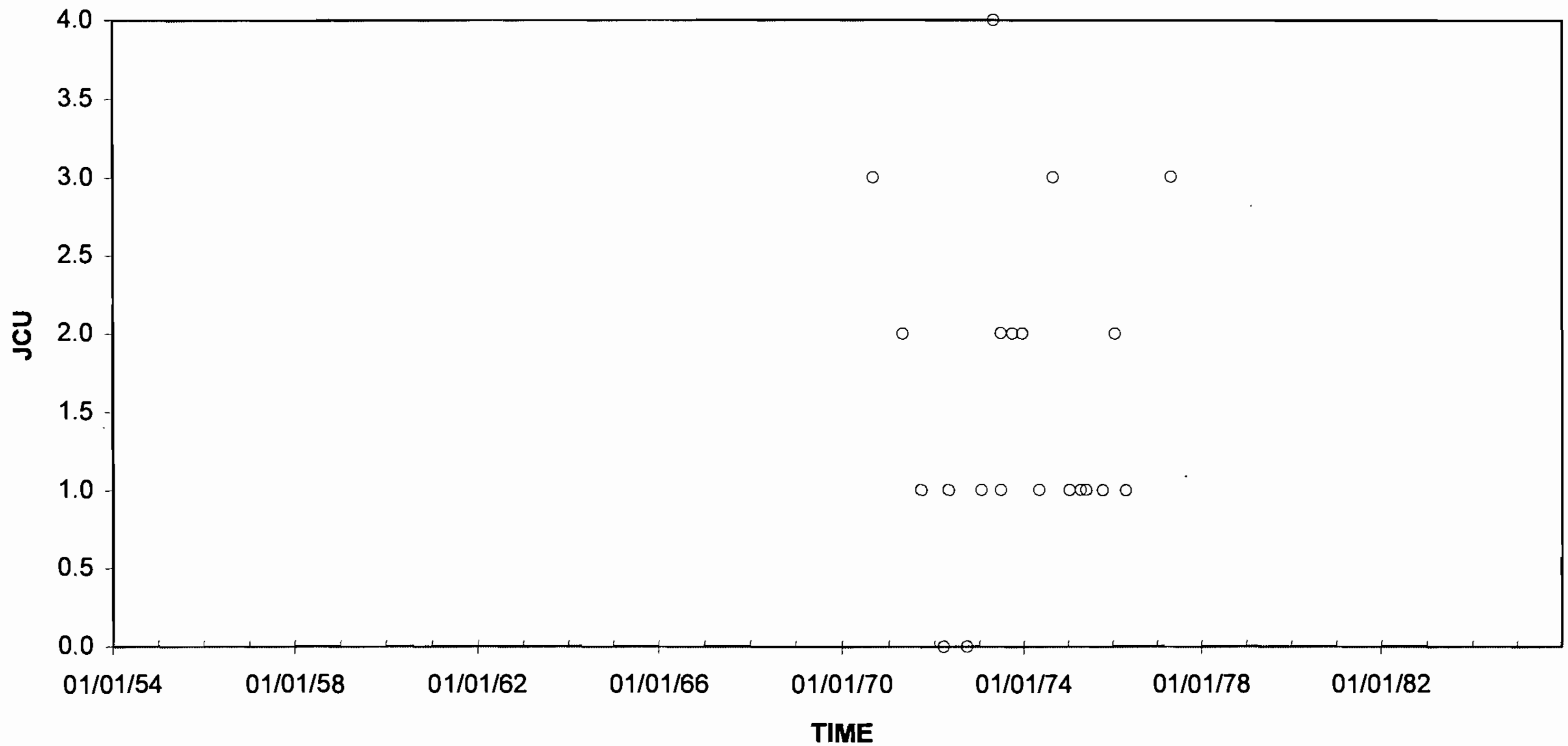
Figure
10.5.4-271



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
SULFATE, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

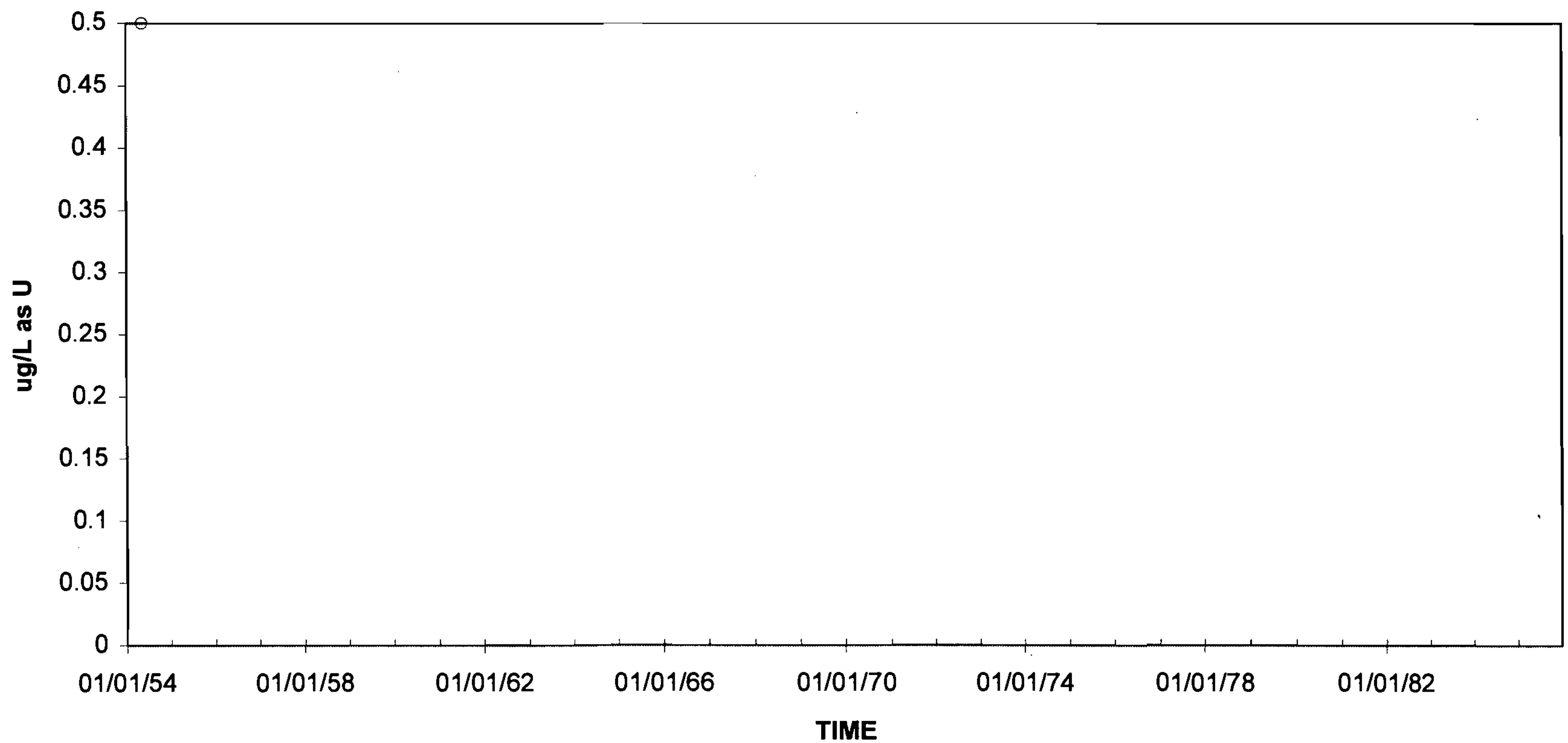
Figure
10.5.4–272



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
TURBIDITY
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

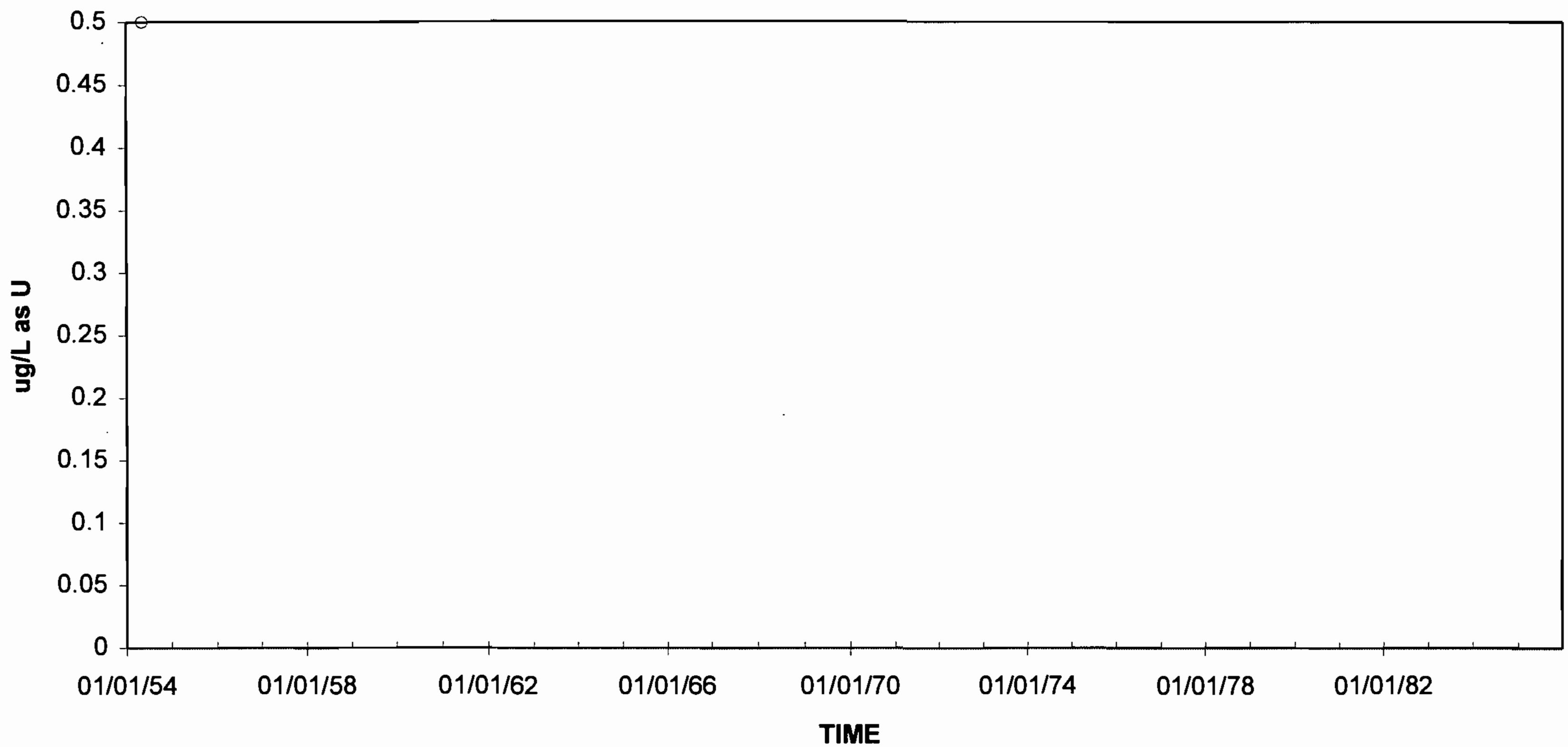
Figure 10.5.4–273



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
URANIUM, DISSOLVED EXTRACTION
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

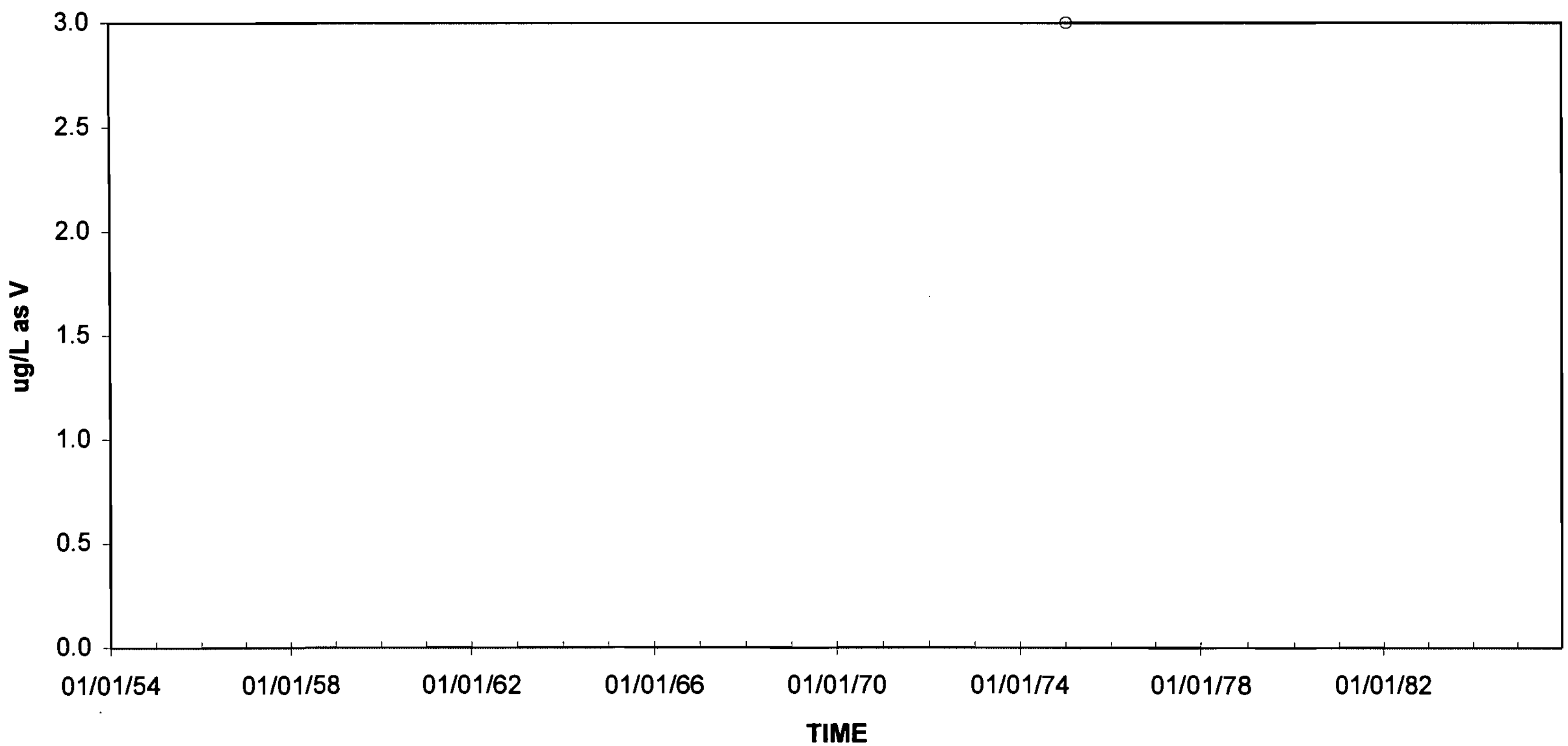
Figure
10.5.4–274



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
URANIUM, NATURAL DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

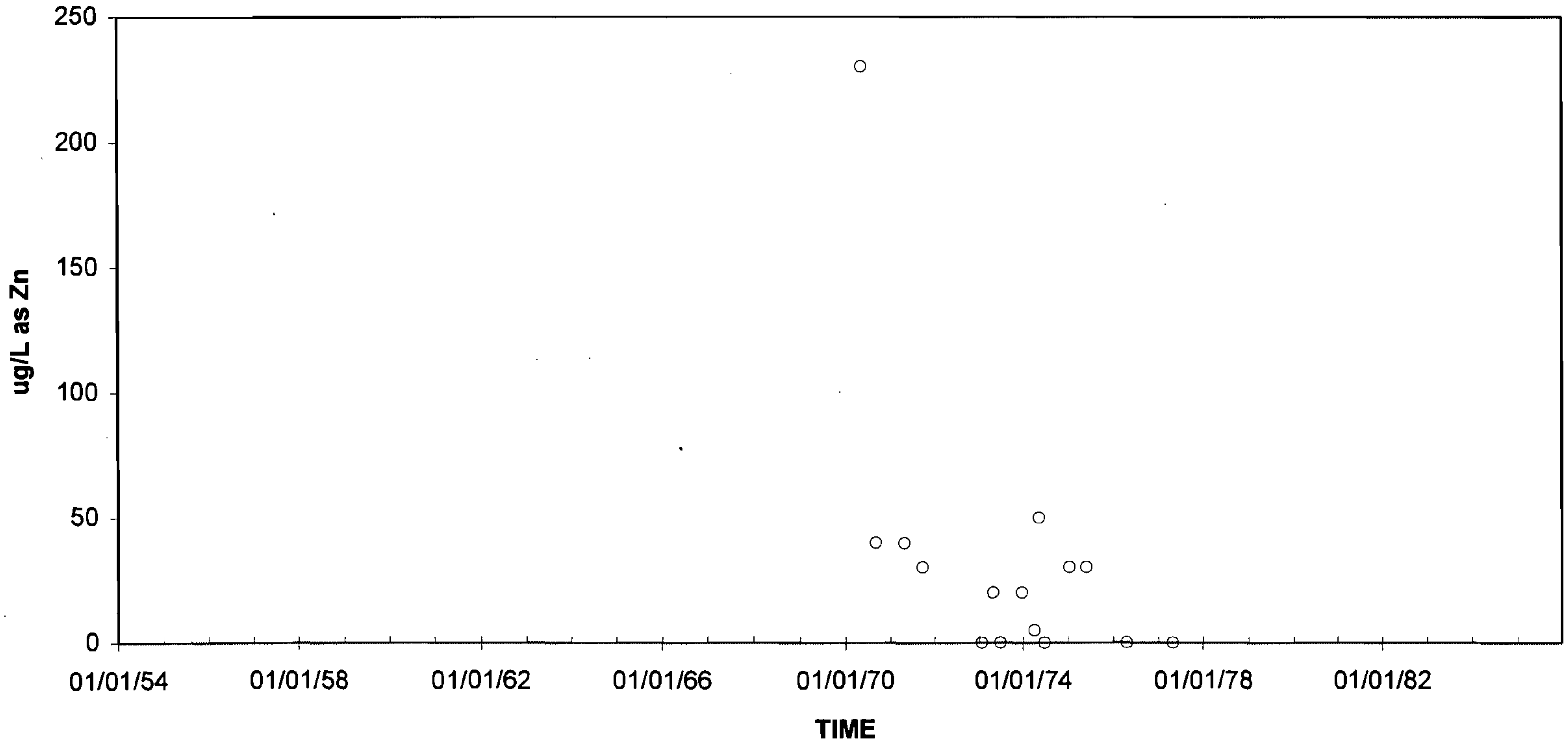
Figure
10.5.4–275



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
VANADIUM, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

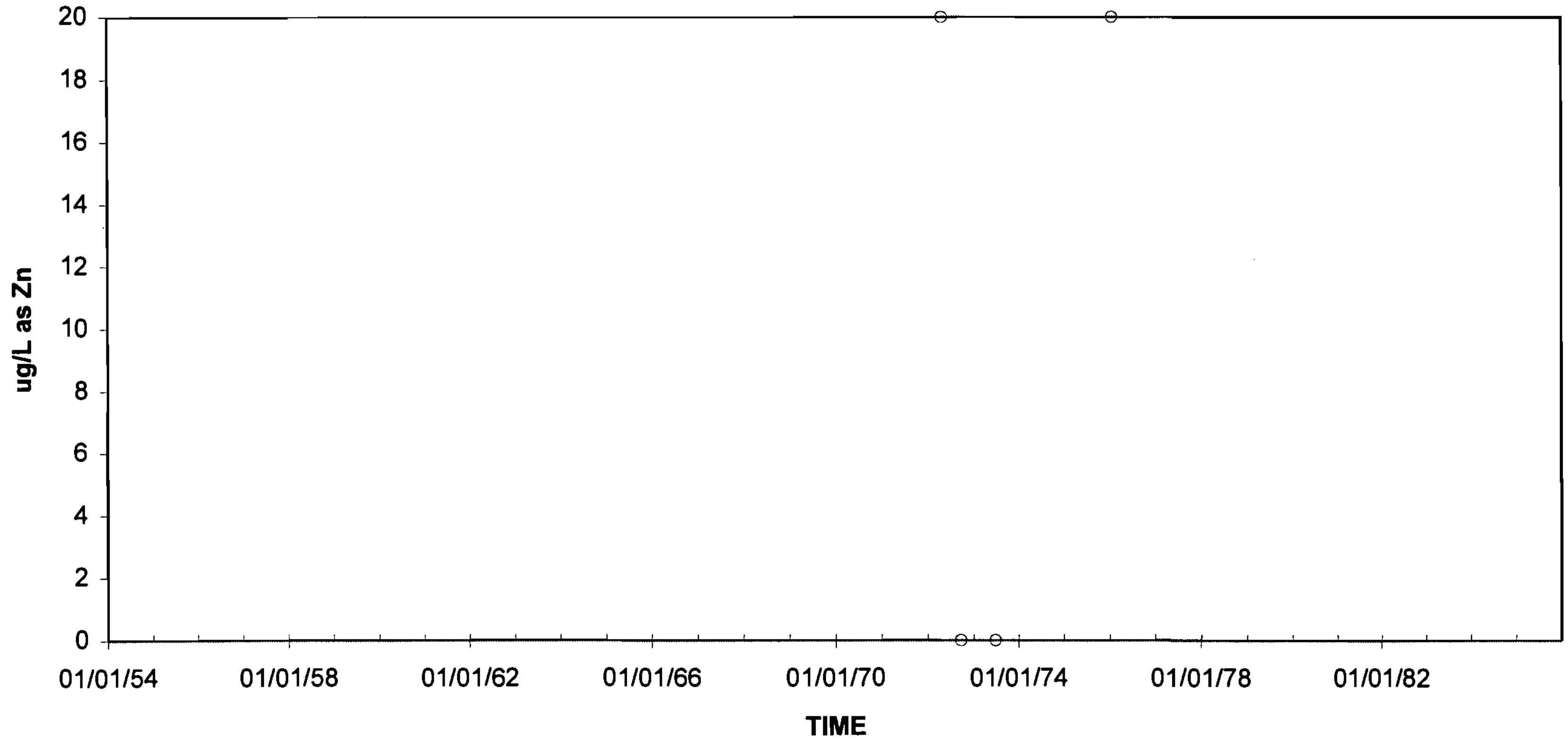
Figure
10.5.4–276



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
ZINC, DISSOLVED
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

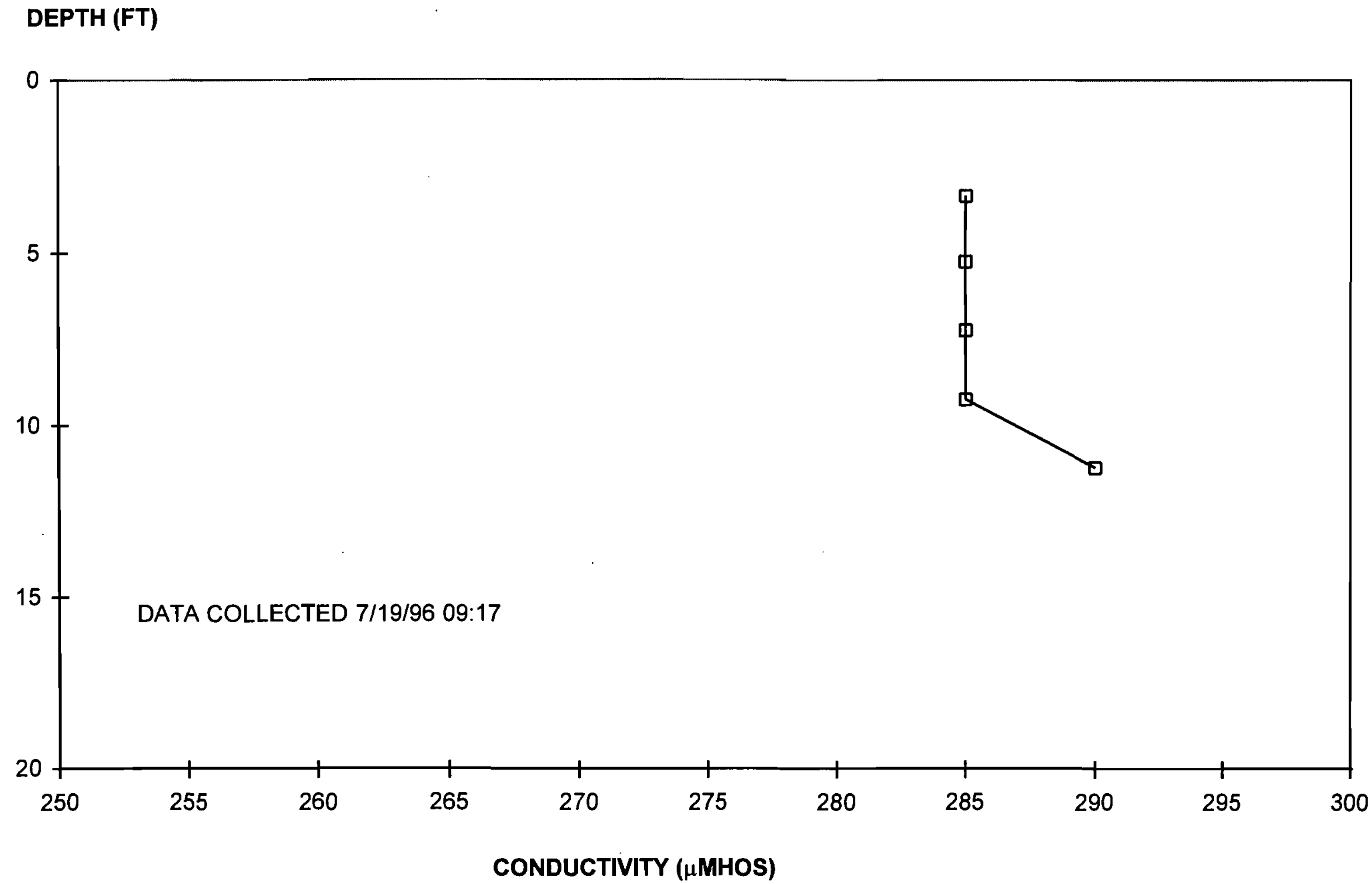
Figure
10.5.4–277



CITY OF TALLAHASSEE

ST. MARKS RIVER NEAR CRAWFORDVILLE, FLORIDA
USGS STATION NUMBER 02327000
ZINC, TOTAL RECOVERABLE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

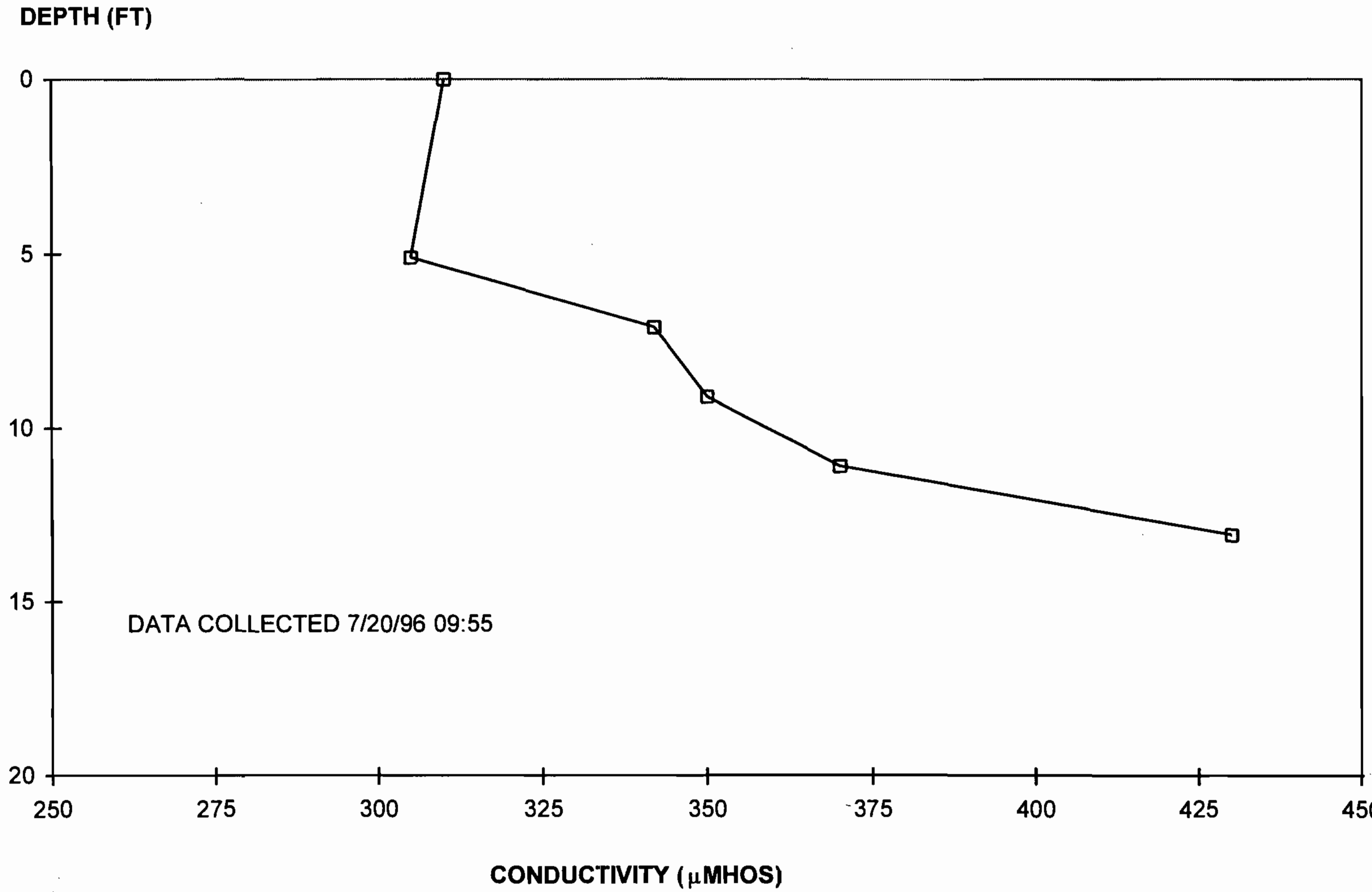
Figure
10.5.4–278



CITY OF TALLAHASSEE

LOCATION 1
WATER COLUMN CONDUCTIVITY PROFILE
AT ST. MARKS RIVER, UPSTREAM OF PLANT INFLUENCES, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

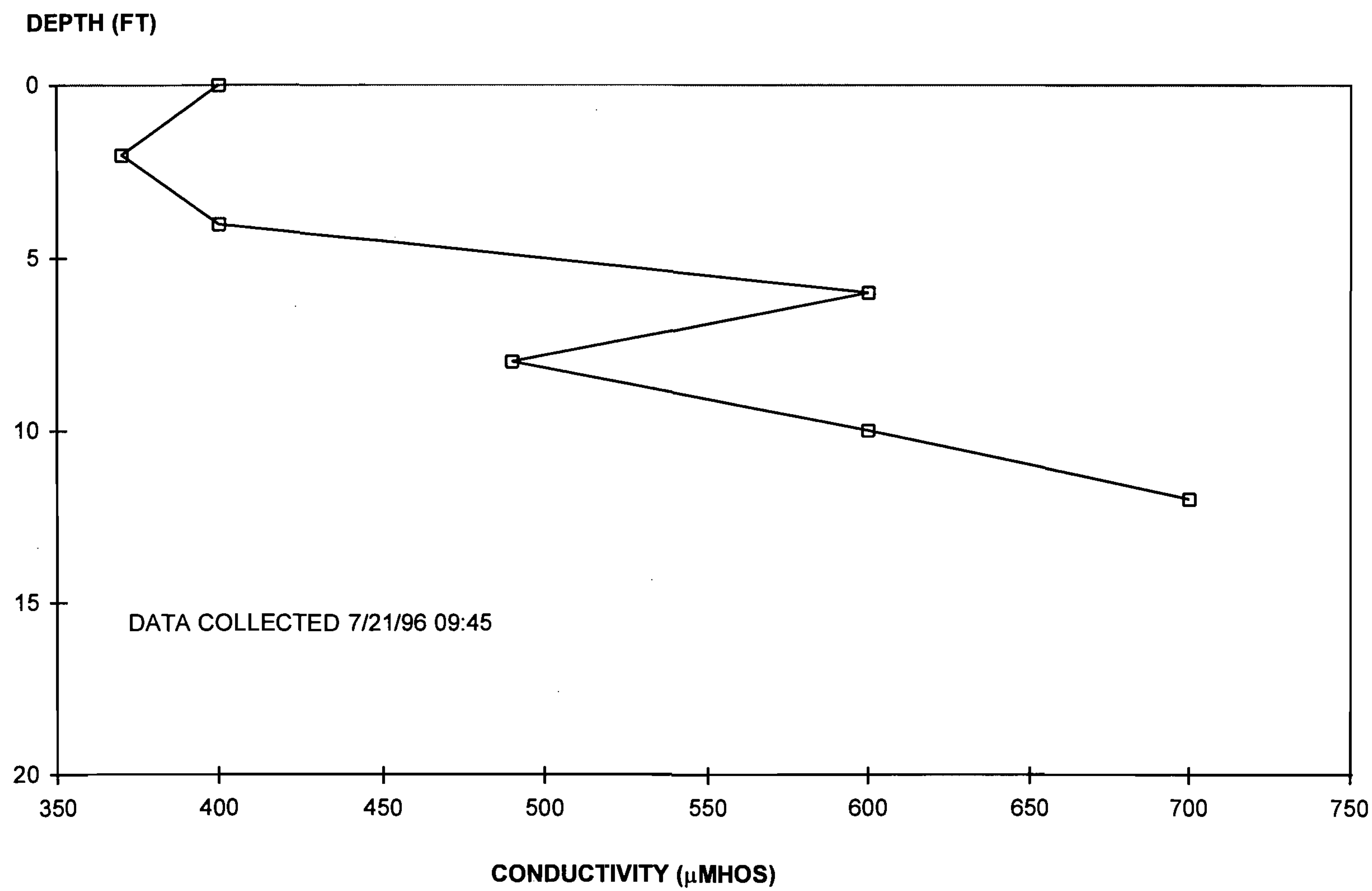
Figure
10.5.4–279



CITY OF TALLAHASSEE

LOCATION 1
WATER COLUMN CONDUCTIVITY PROFILE
AT ST. MARKS RIVER, UPSTREAM OF PLANT INFLUENCES
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

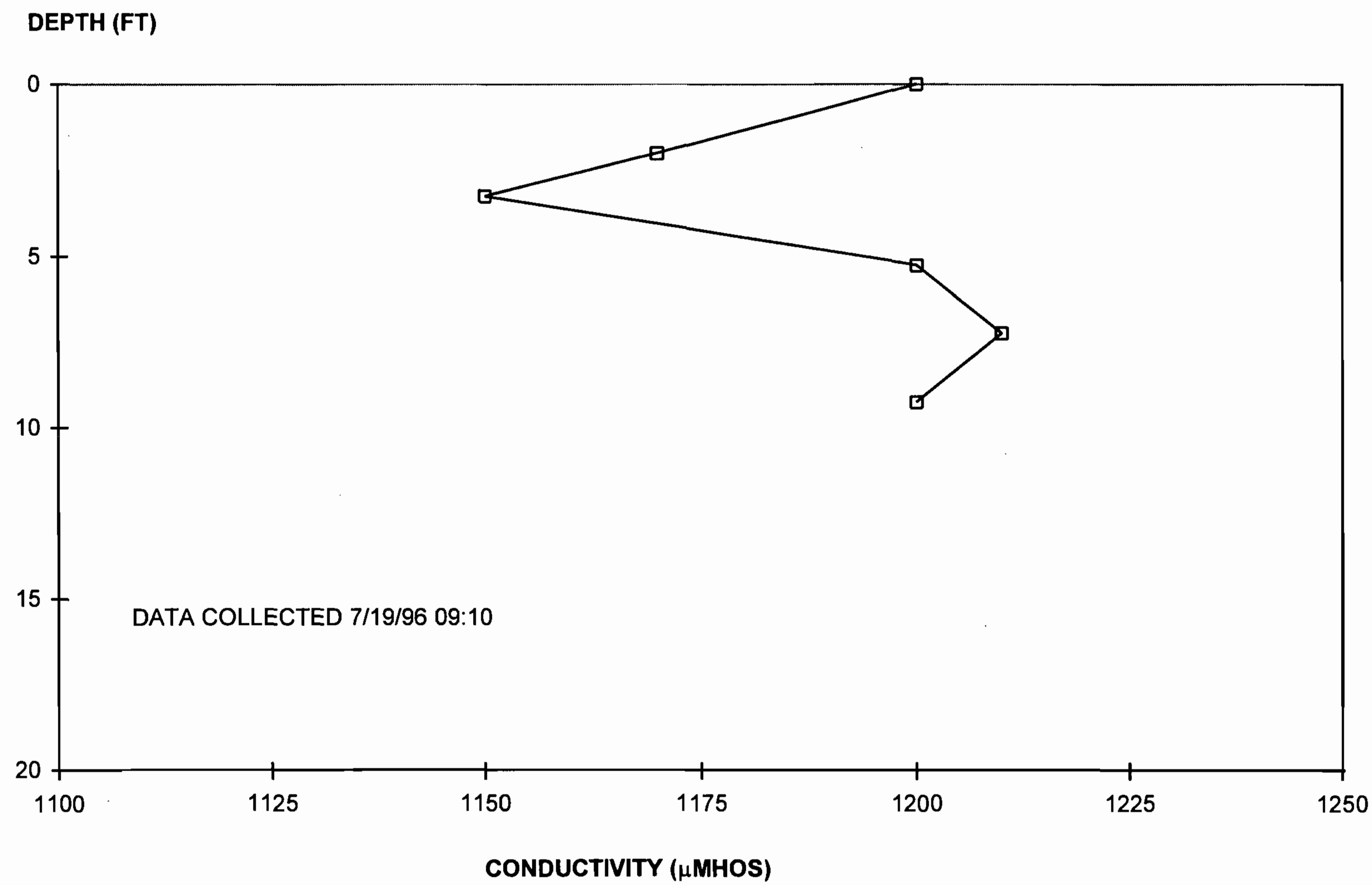
Figure
10.5.4–280



CITY OF TALLAHASSEE

LOCATION 1
WATER COLUMN CONDUCTIVITY PROFILE
AT ST. MARKS RIVER, UPSTREAM OF PLANT INFLUENCES
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

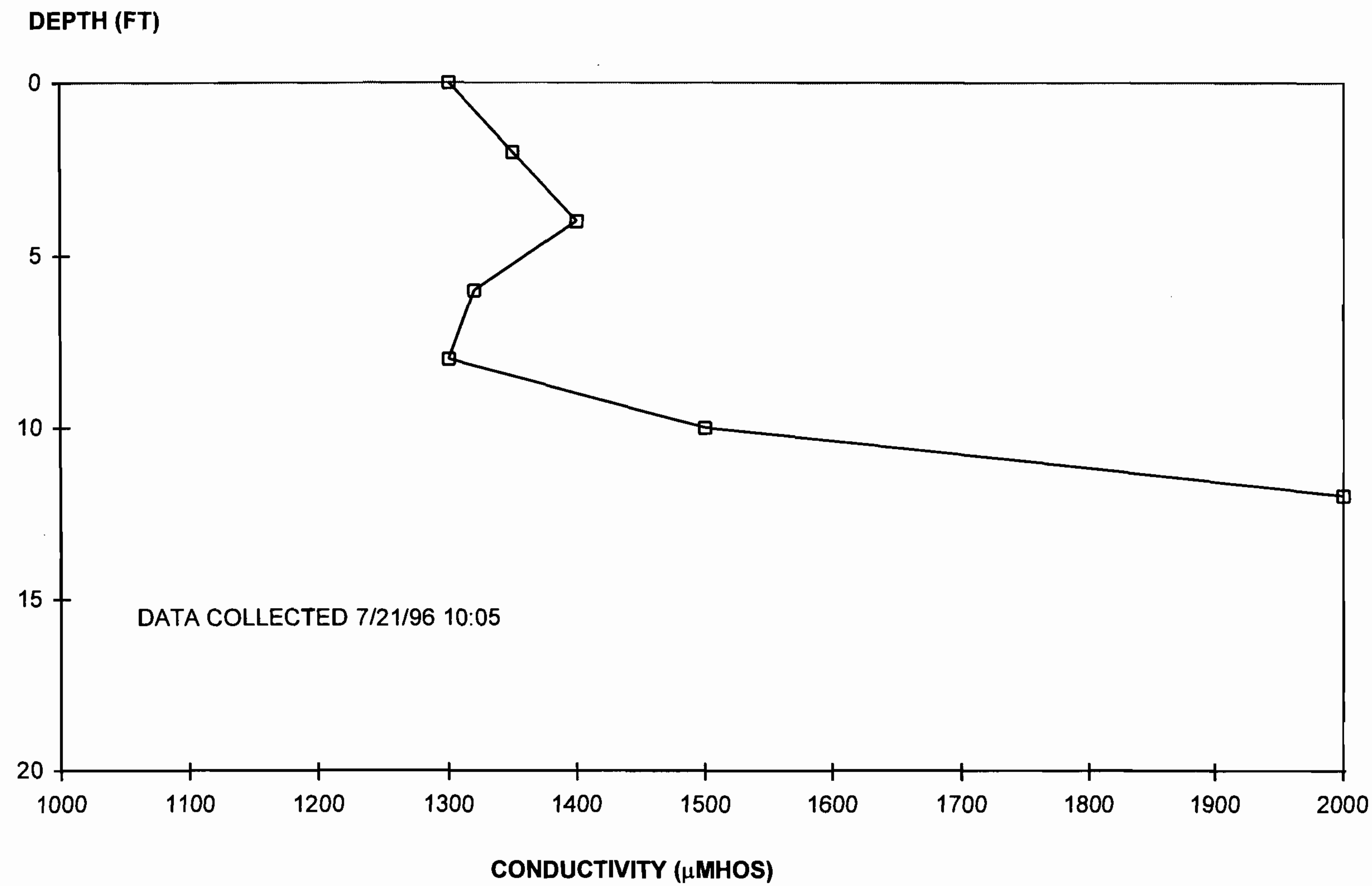
Figure
10.5.4–281



CITY OF TALLAHASSEE

LOCATION 2
WATER COLUMN CONDUCTIVITY PROFILE
AT UNIT 7 INTAKE STRUCTURE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

Figure
10.5.4–282

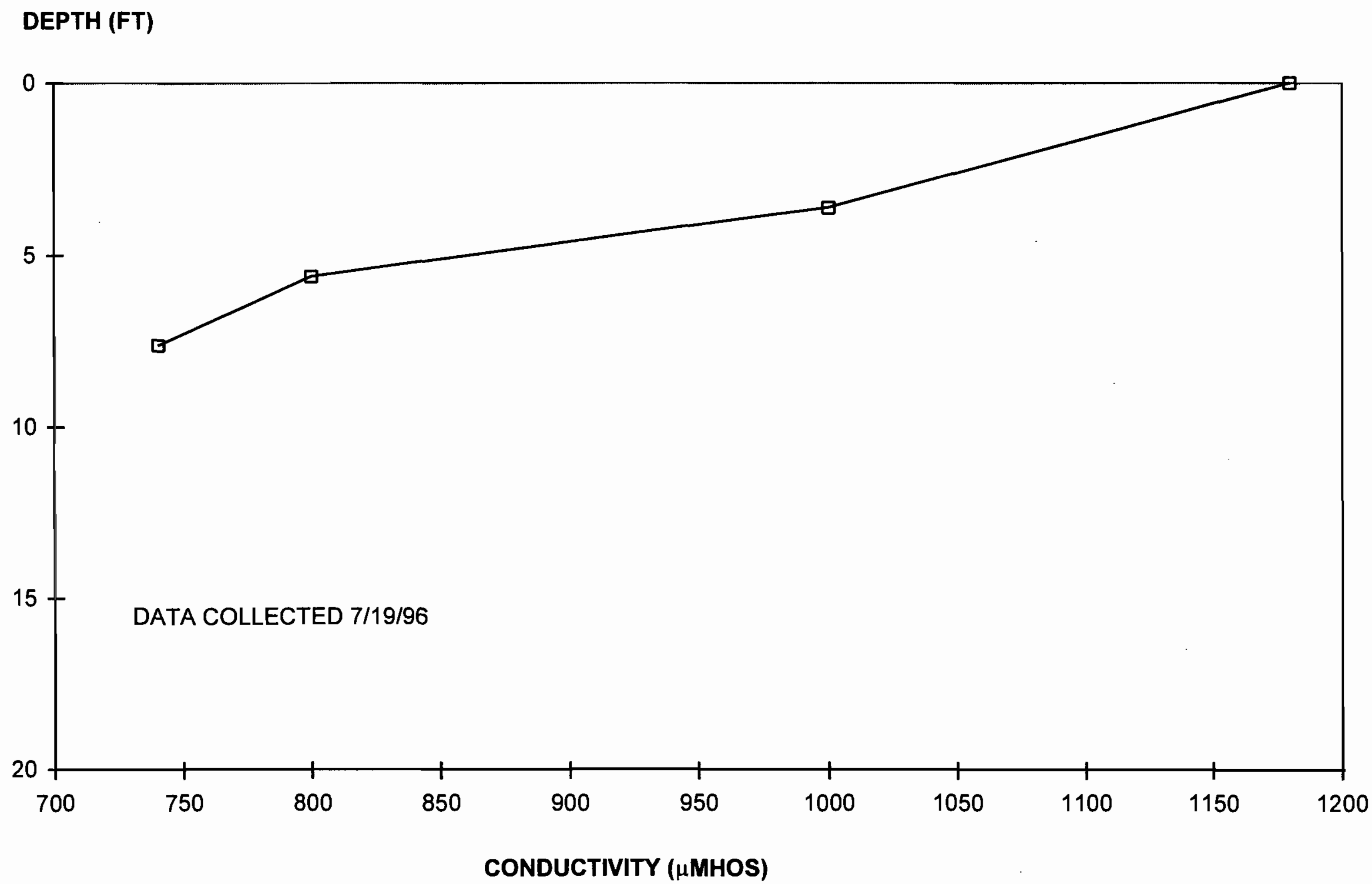


CITY OF TALLAHASSEE

LOCATION 2
WATER COLUMN CONDUCTIVITY PROFILE
AT UNIT 7 INTAKE

PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

Figure 10.5.4–283

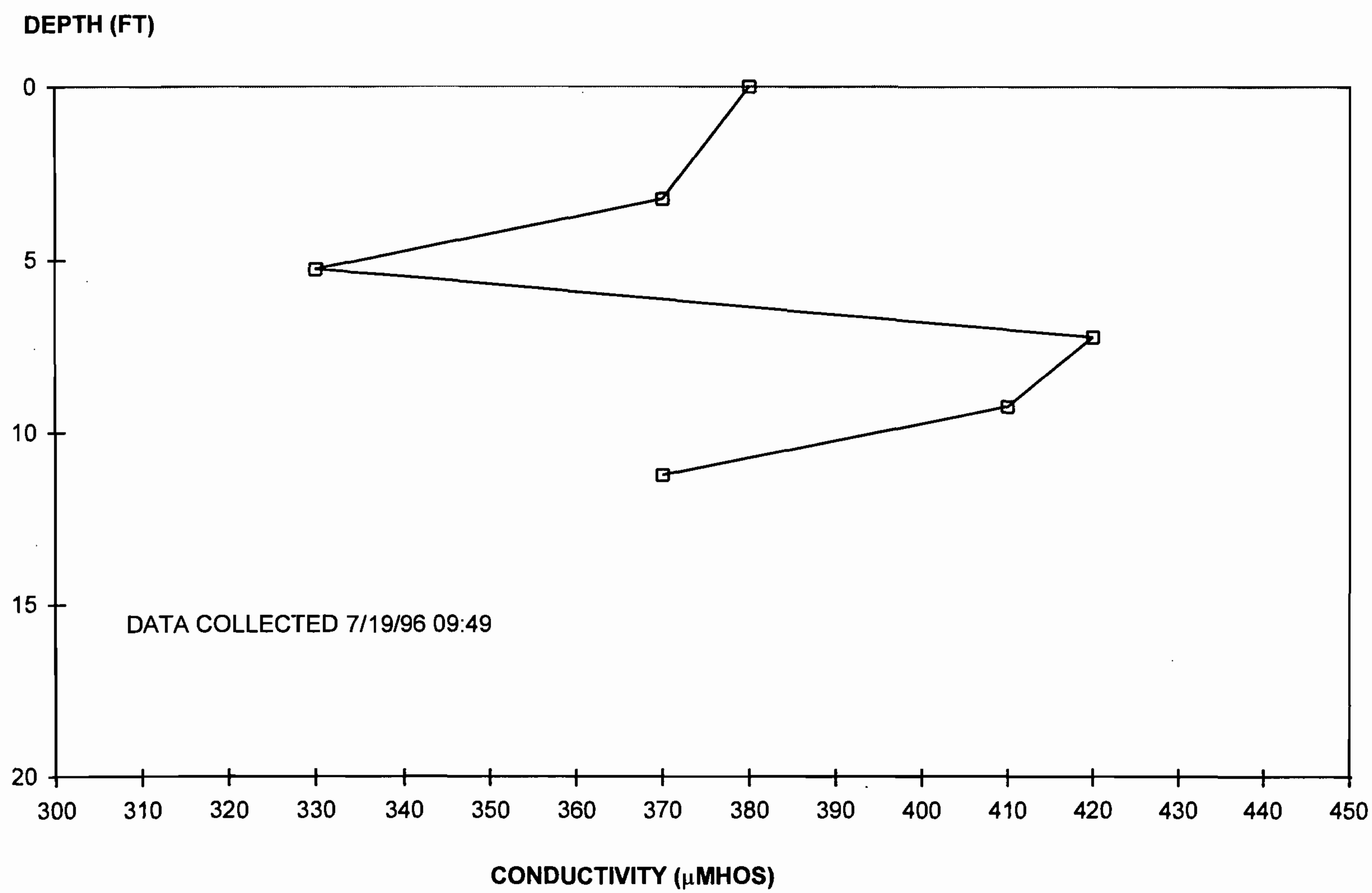


CITY OF TALLAHASSEE

LOCATION 3
WATER COLUMN CONDUCTIVITY PROFILE
AT OPENING OF INTAKE CANAL

PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

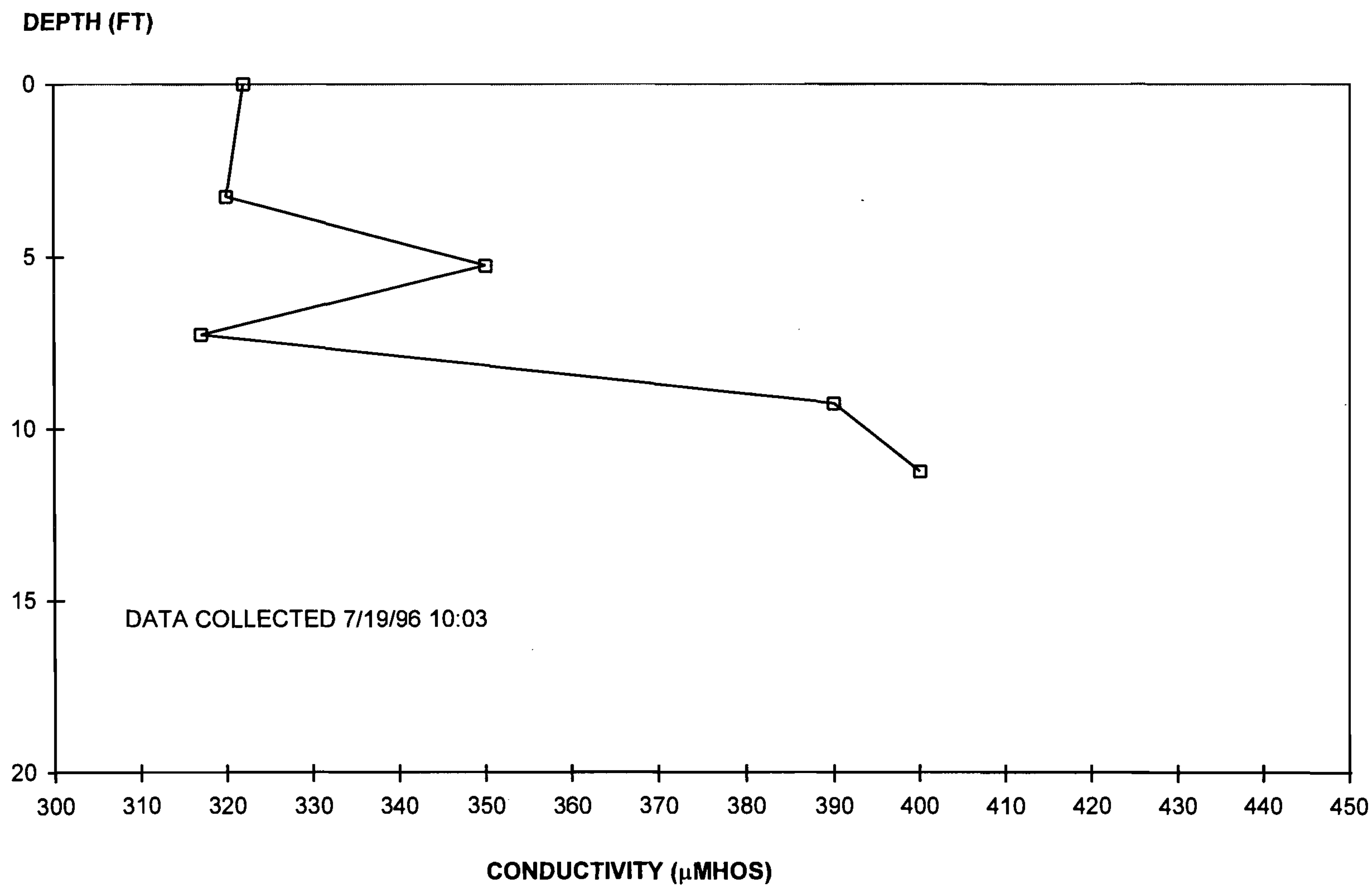
Figure 10.5.4–284



CITY OF TALLAHASSEE

LOCATION 4
WATER COLUMN CONDUCTIVITY PROFILE
AT ST. MARKS RIVER, AT UNIT 5 INTAKE STRUCTURE
PURDOM UNIT 8 PROJECT - St MARKS, FLORIDA

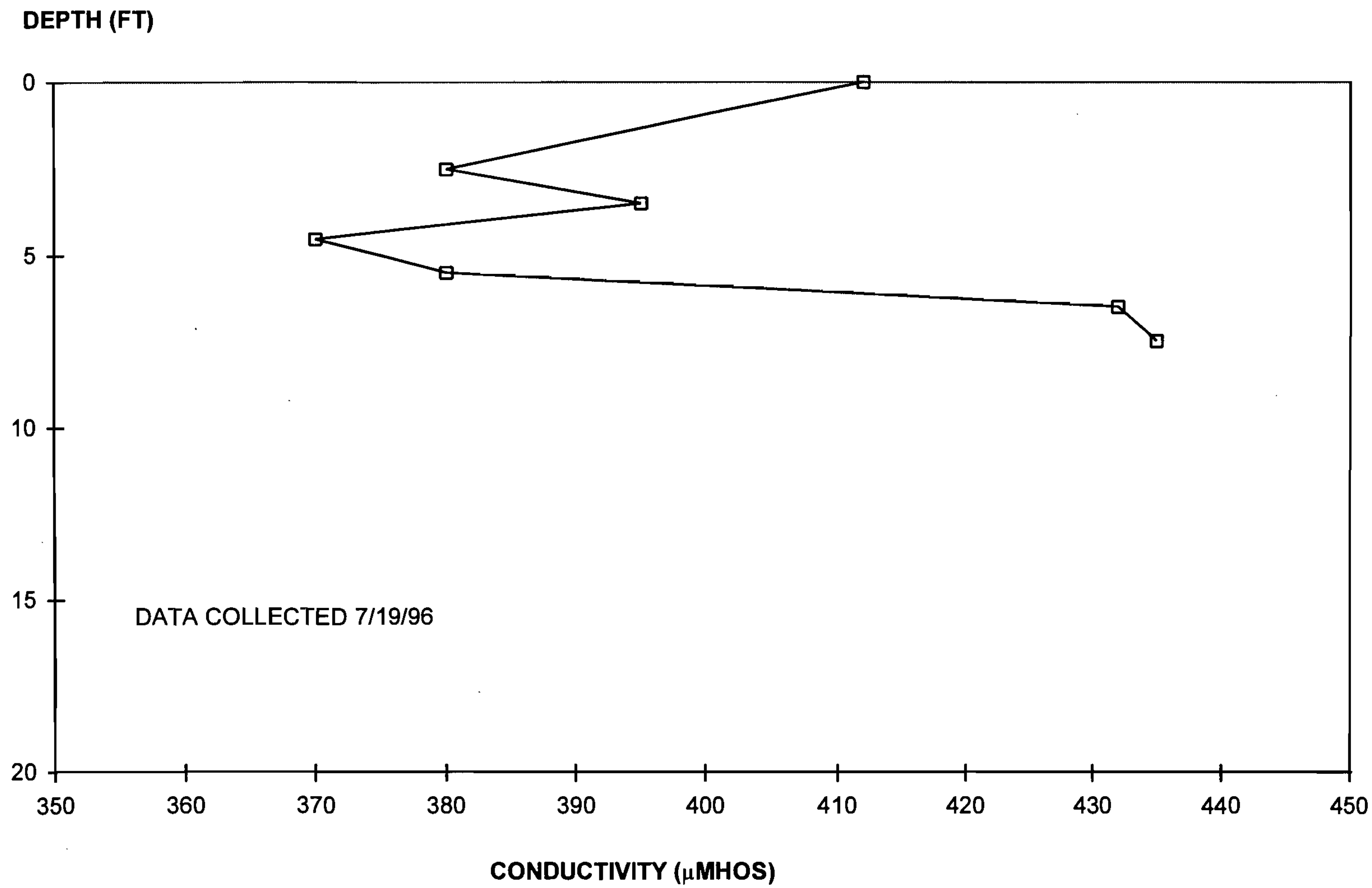
Figure
10.5.4-285



CITY OF TALLAHASSEE

LOCATION 5
WATER COLUMN CONDUCTIVITY PROFILE
AT ST. MARKS RIVER, BELOW INTAKE CANAL, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

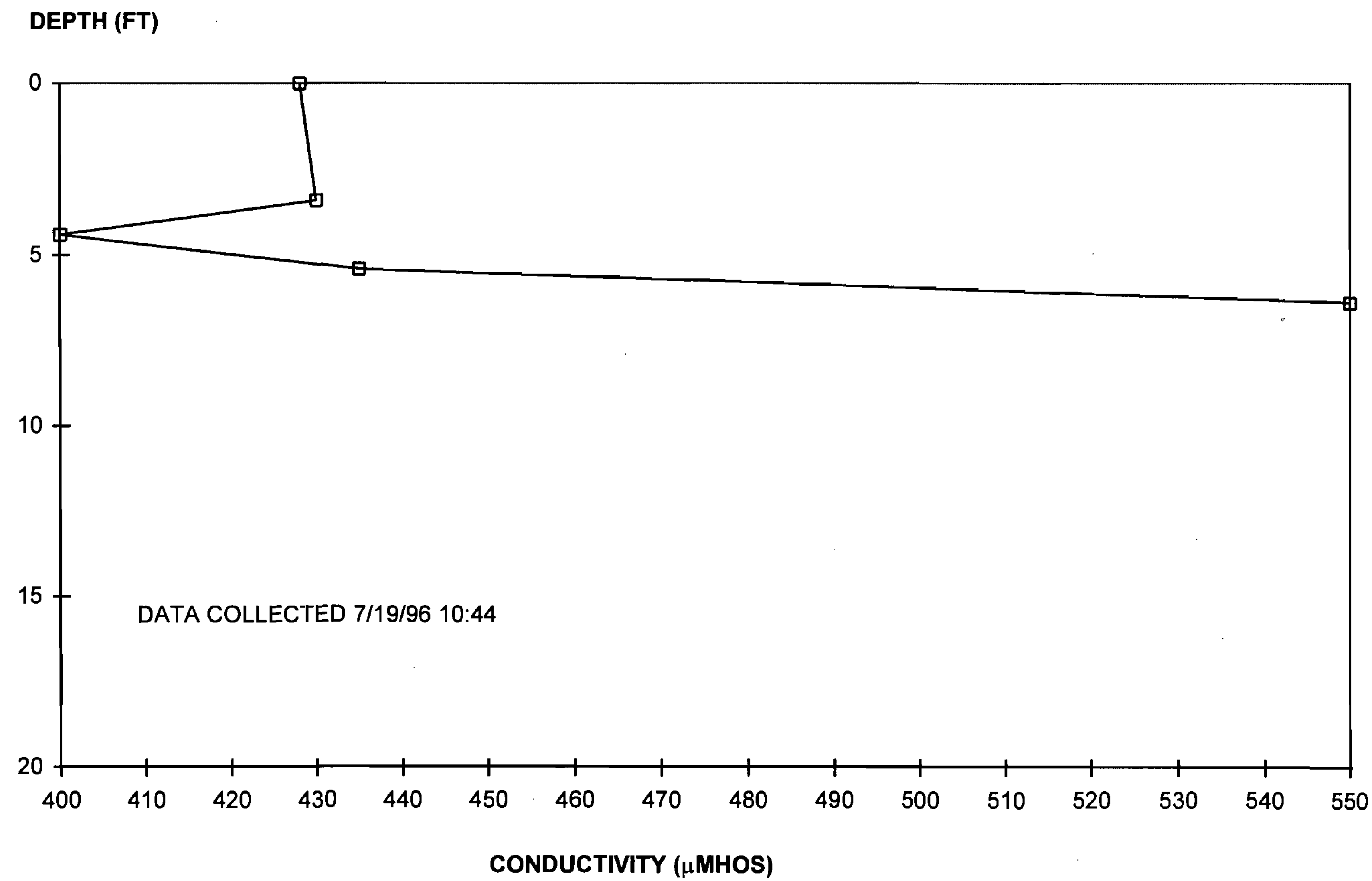
Figure 10.5.4–286



CITY OF TALLAHASSEE

LOCATION 6
WATER COLUMN CONDUCTIVITY PROFILE
AT UNIT 5 DISCHARGE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

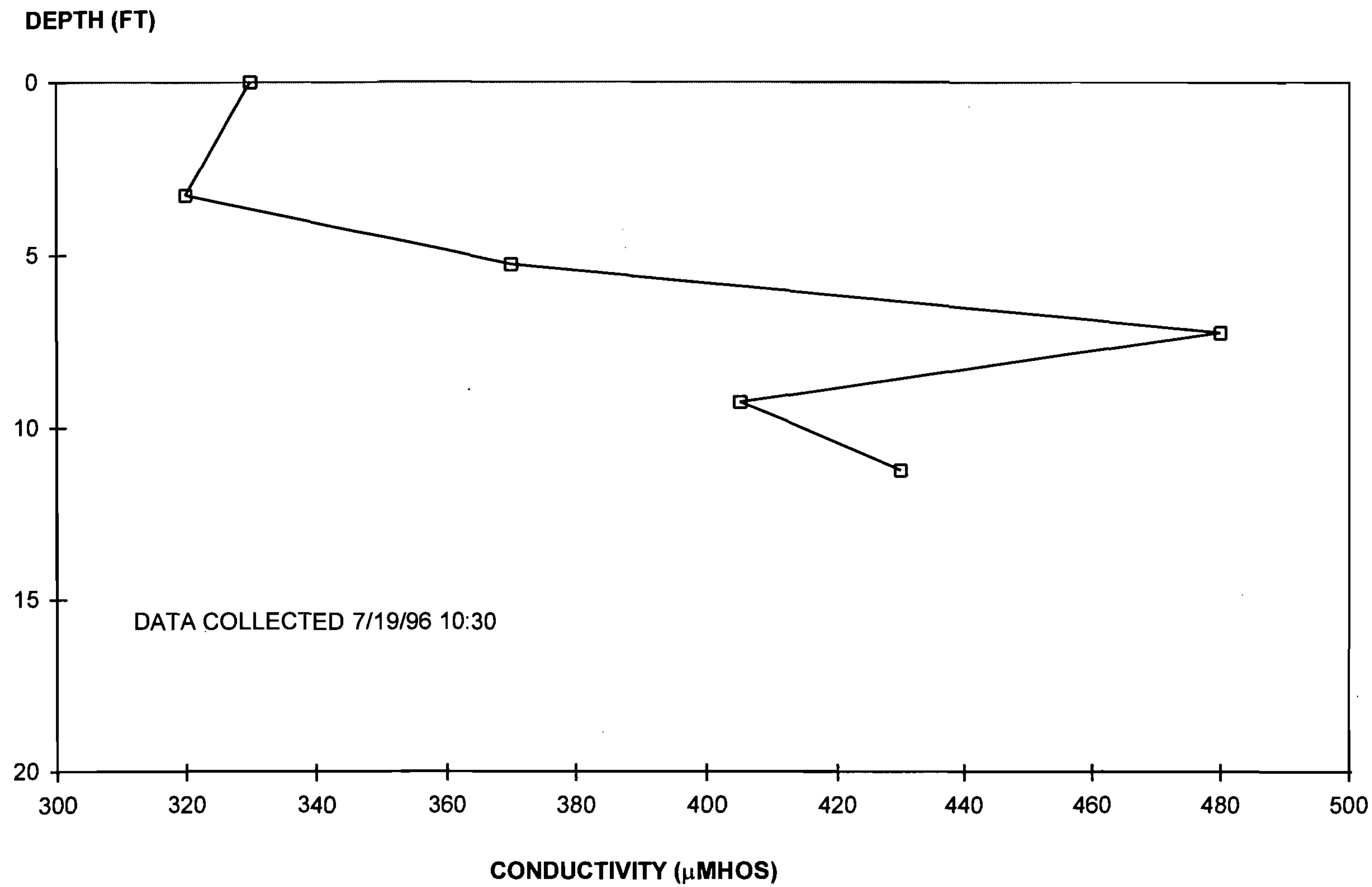
Figure
10.5.4–287



CITY OF TALLAHASSEE

LOCATION 6
WATER COLUMN CONDUCTIVITY PROFILE
AT ST. MARKS RIVER, AT UNIT 5 DISCHARGE, BETWEEN DISCHARGE/MID-RIVER
PURDOM UNIT 8 PROJECT - St MARKS, FLORIDA

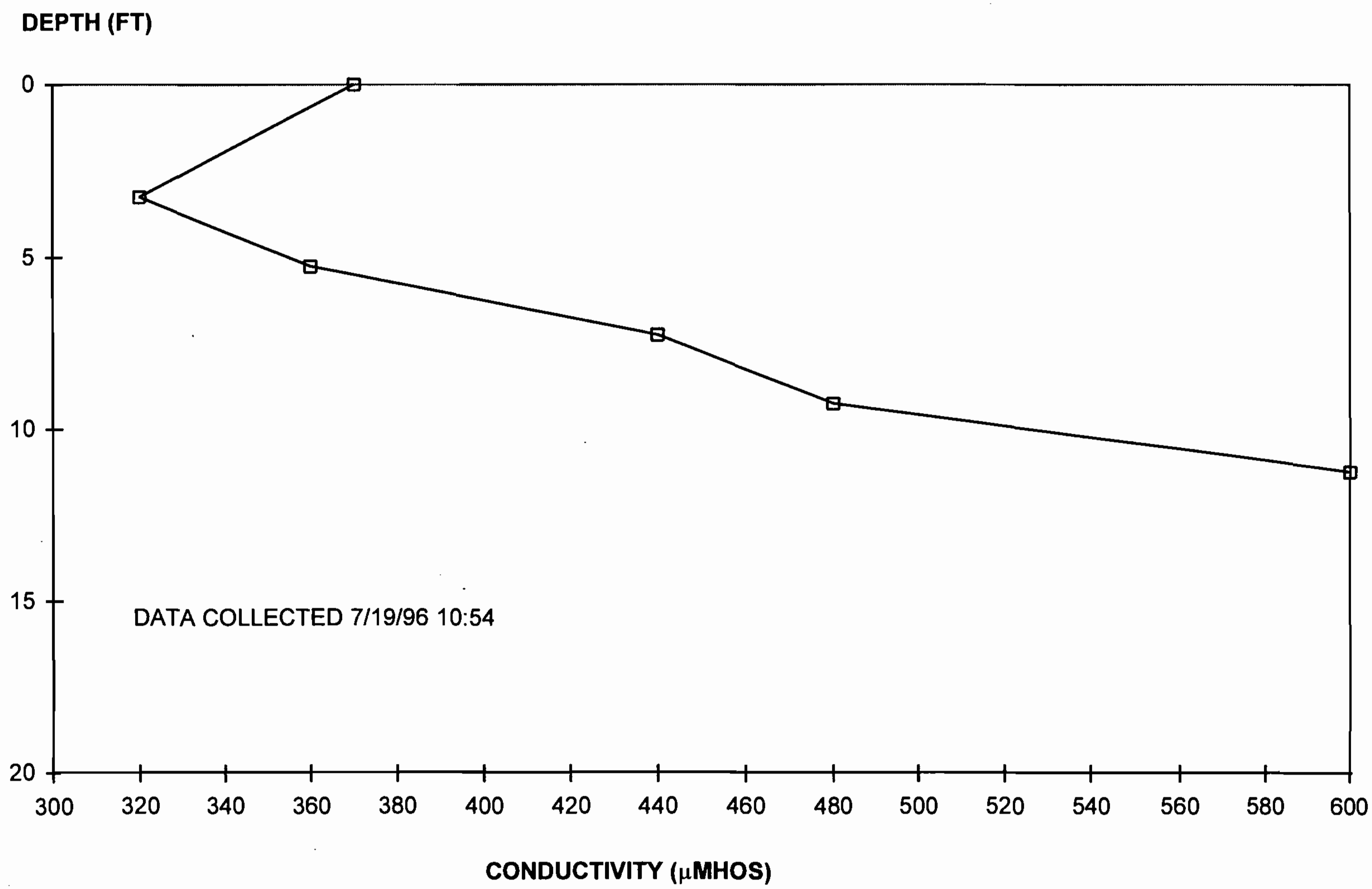
Figure
10.5.4-288



CITY OF TALLAHASSEE

LOCATION 6
WATER COLUMN CONDUCTIVITY PROFILE
AT ST. MARKS RIVER, AT UNIT 5 DISCHARGE, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

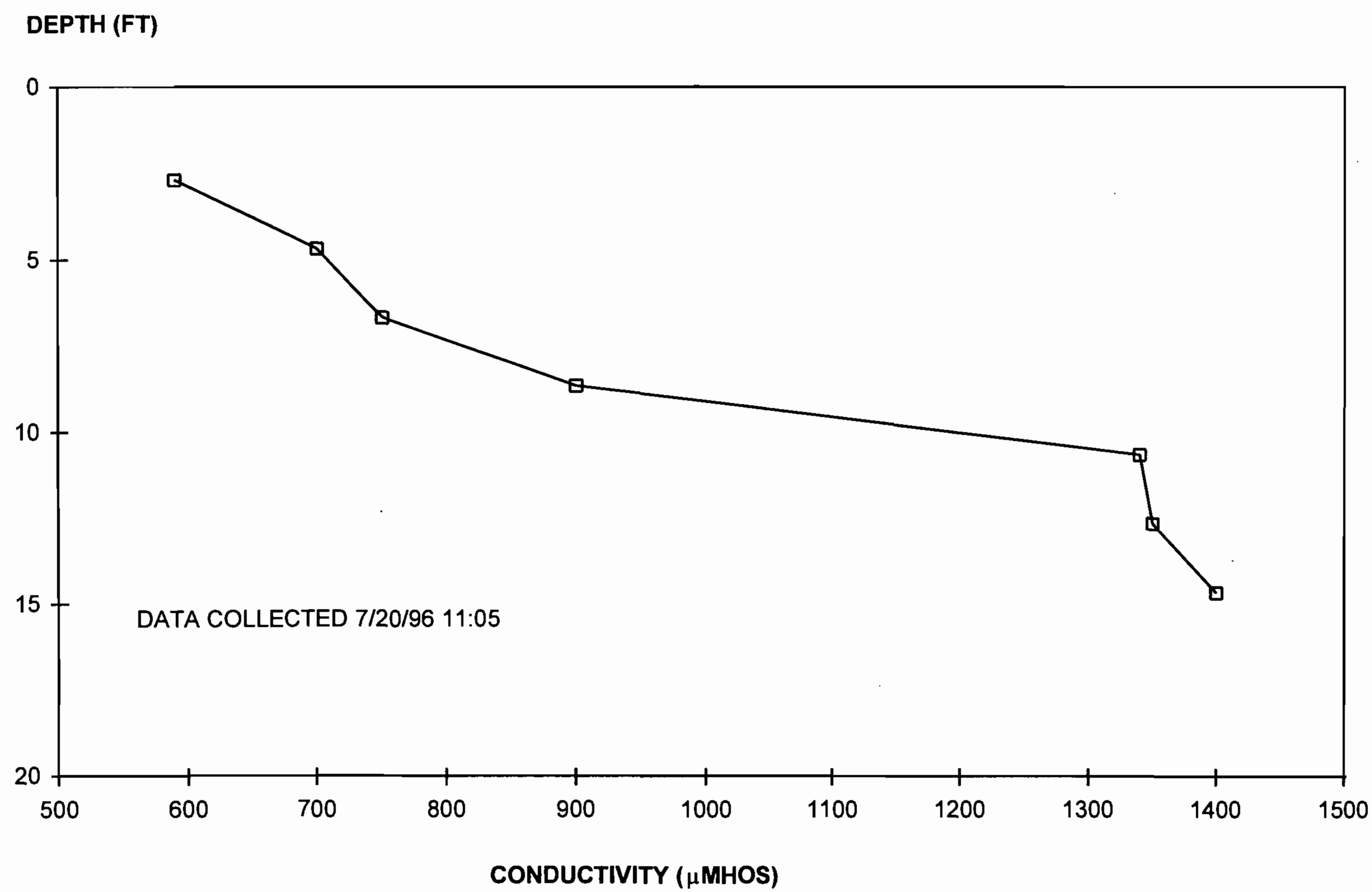
Figure
10.5.4-289



CITY OF TALLAHASSEE

LOCATION 7
WATER COLUMN CONDUCTIVITY PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF UNIT 5 DISCHARGE, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

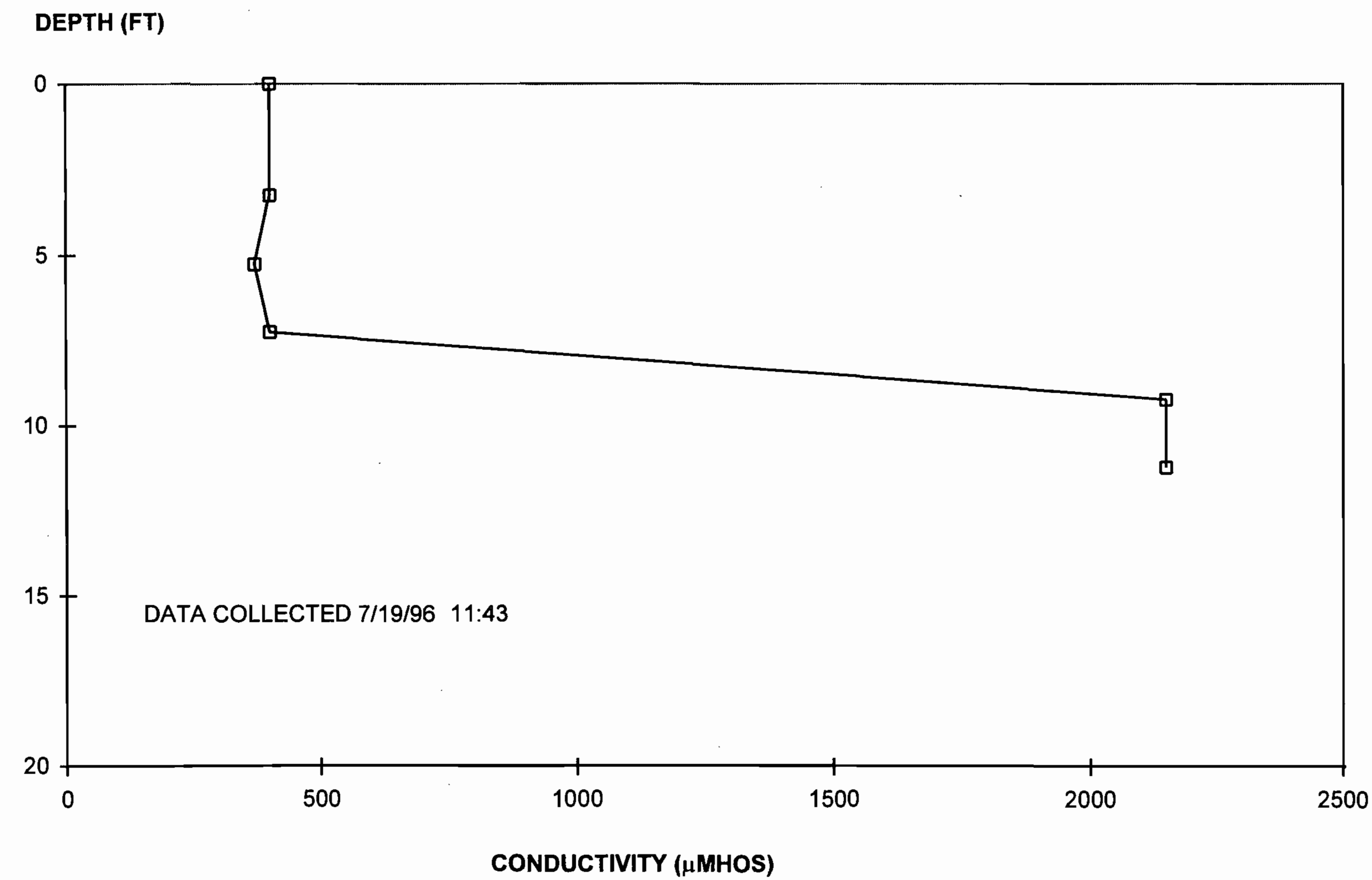
Figure 10.5.4-290



CITY OF TALLAHASSEE

LOCATION 7
WATER COLUMN CONDUCTIVITY PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF UNIT 5 DISCHARGE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

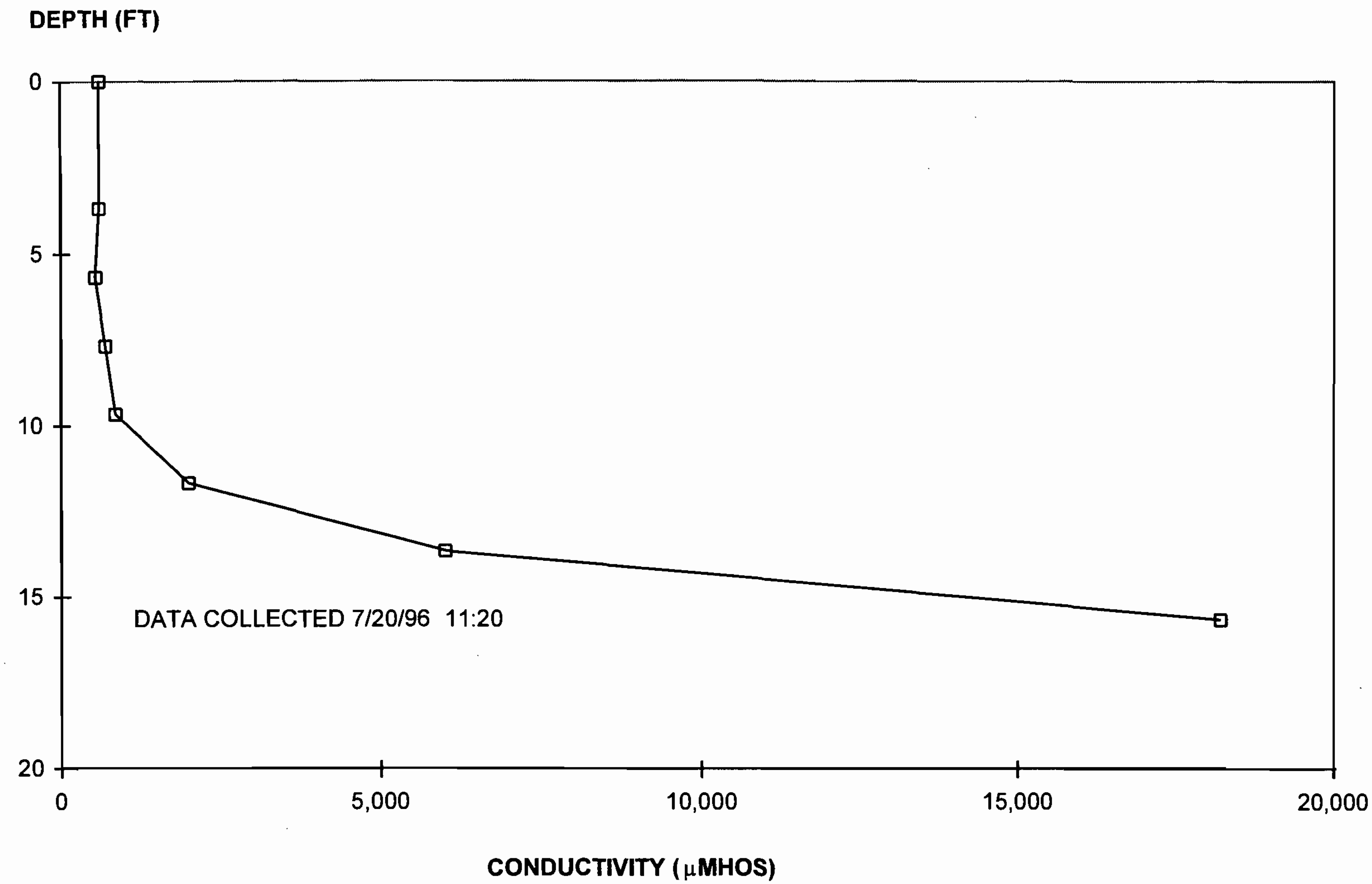
Figure
10.5.4–291



CITY OF TALLAHASSEE

LOCATION 8
WATER COLUMN CONDUCTIVITY PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF UNIT 6/7 DISCHARGE, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

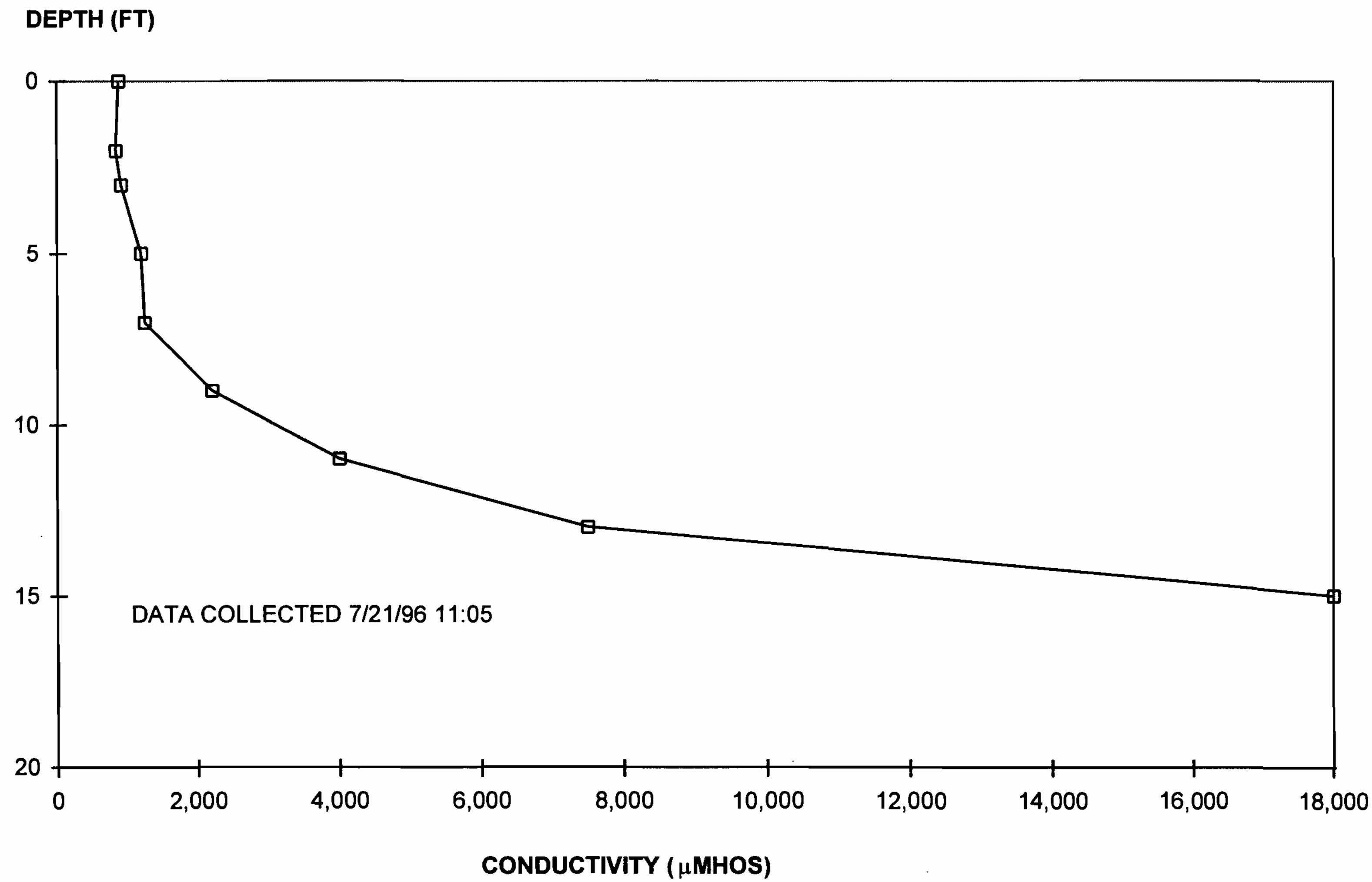
Figure
10.5.4–292



CITY OF TALLAHASSEE

LOCATION 8
WATER COLUMN CONDUCTIVITY PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF UNIT 6/7 DISCHARGE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

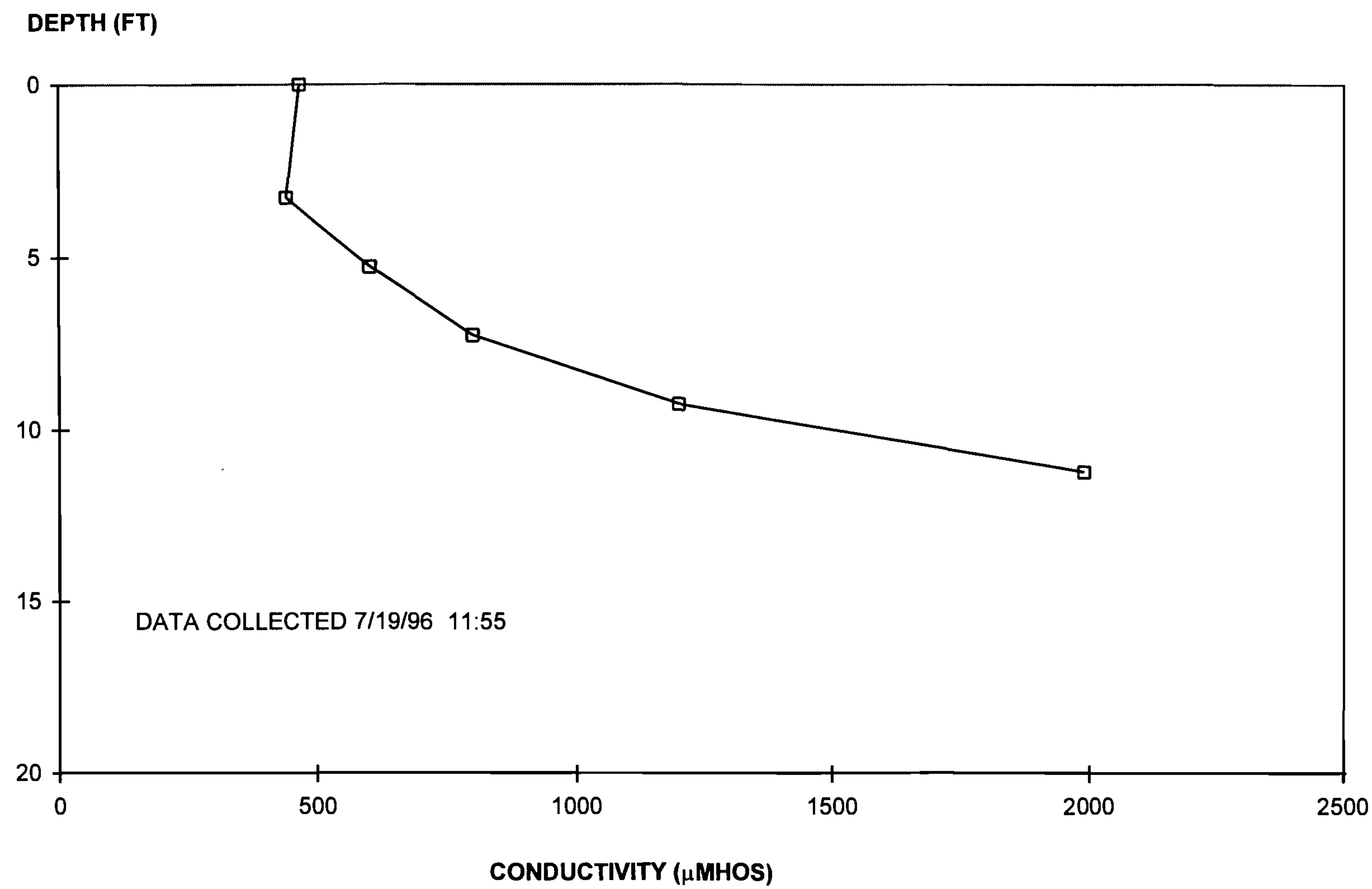
Figure
10.5.4-293



CITY OF TALLAHASSEE

LOCATION 8
WATER COLUMN CONDUCTIVITY PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF UNIT 6/7 DISCHARGE, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

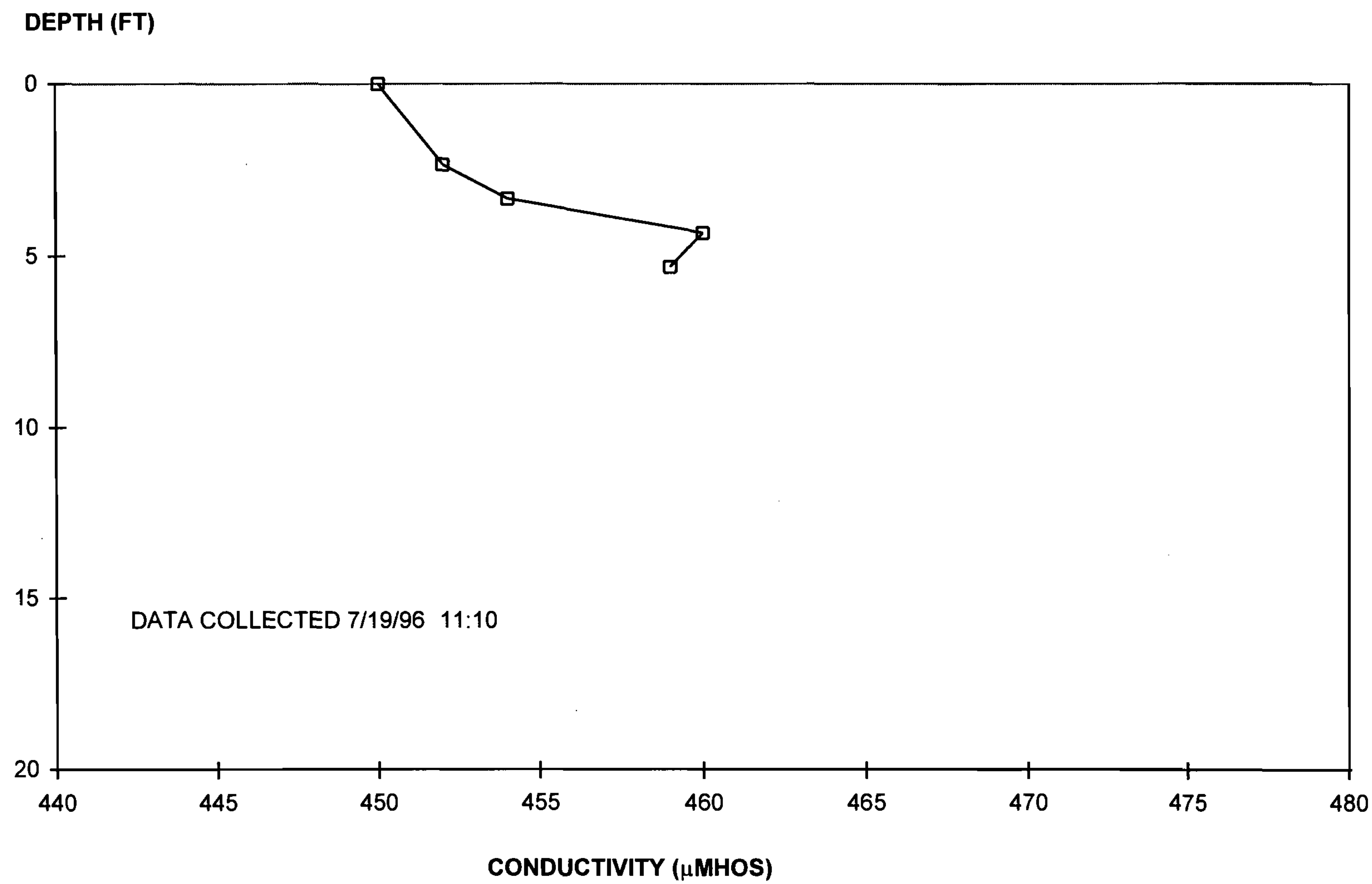
Figure
10.5.4–294



CITY OF TALLAHASSEE

LOCATION 9
WATER COLUMN CONDUCTIVITY PROFILE
AT ST. MARKS RIVER, SHIELD'S MARINA, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

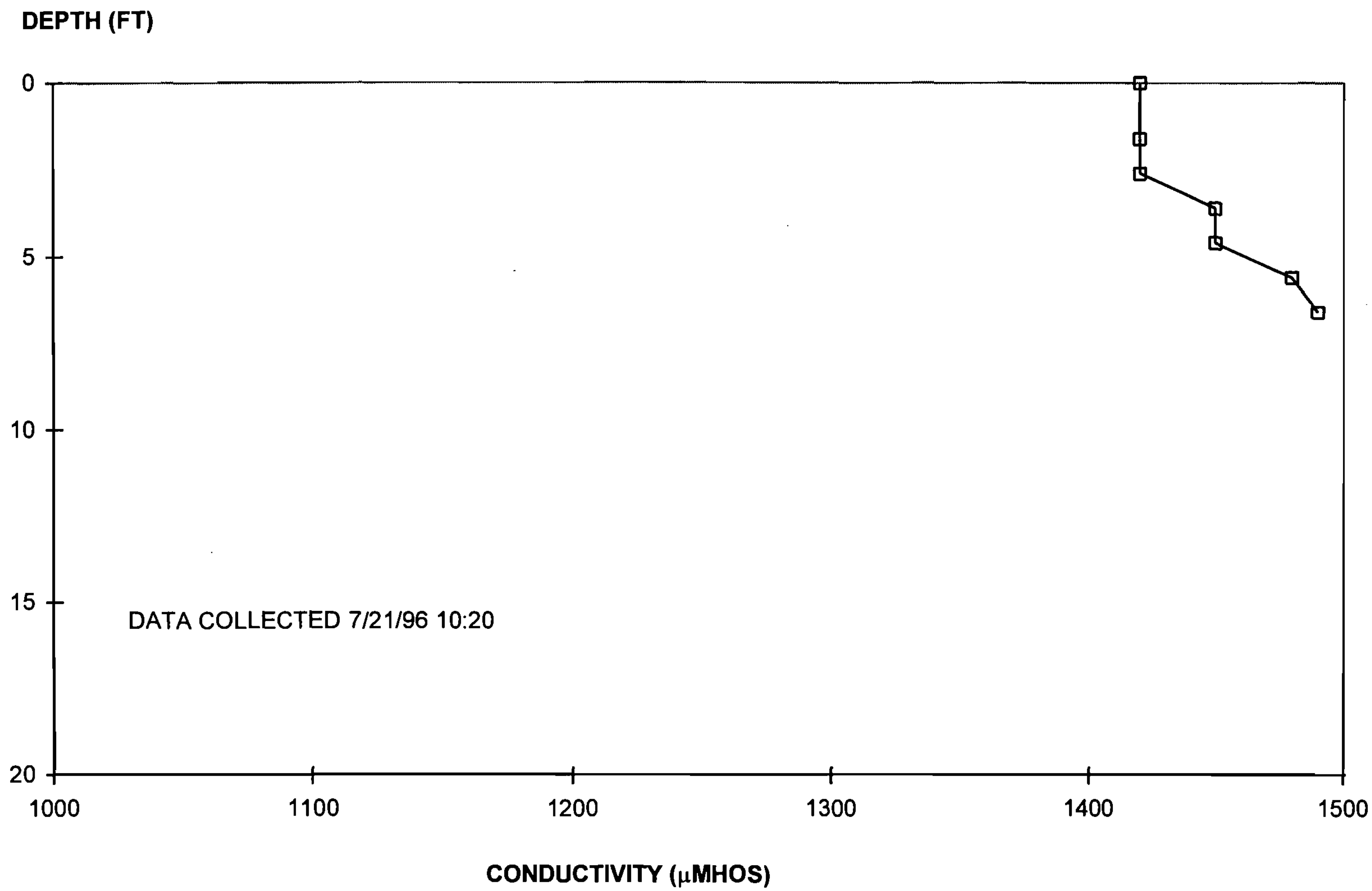
Figure
10.5.4–295



CITY OF TALLAHASSEE

LOCATION 10
WATER COLUMN CONDUCTIVITY PROFILE
AT UNITS 6/7 DISCHARGE, IMMEDIATELY DOWNSTREAM OF DISCHARGE POINT
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

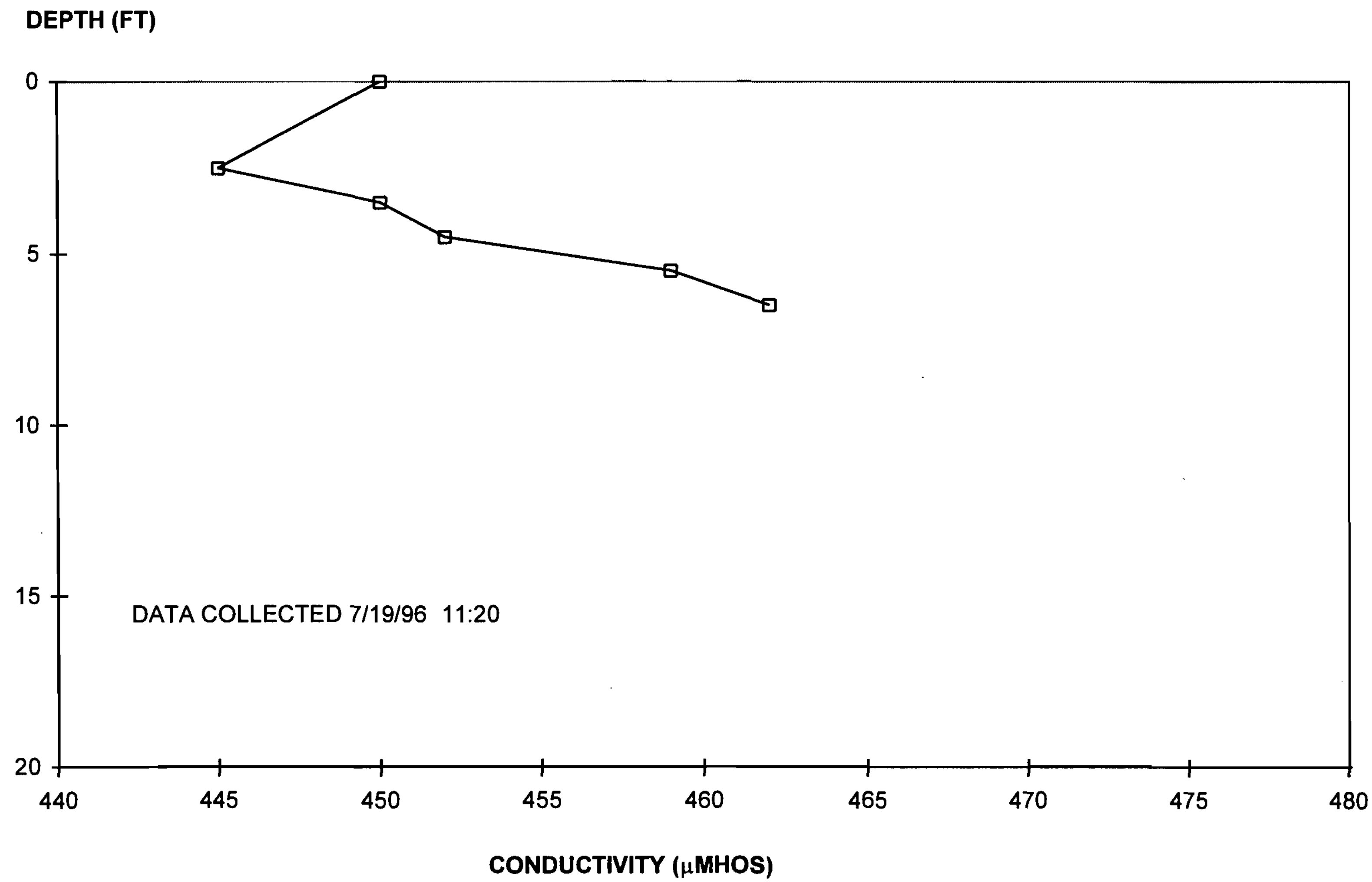
Figure
10.5.4–296



CITY OF TALLAHASSEE

LOCATION 10
WATER COLUMN CONDUCTIVITY PROFILE
AT UNITS 6/7 DISCHARGE, IMMEDIATELY DOWNSTREAM OF DISCHARGE POINT
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

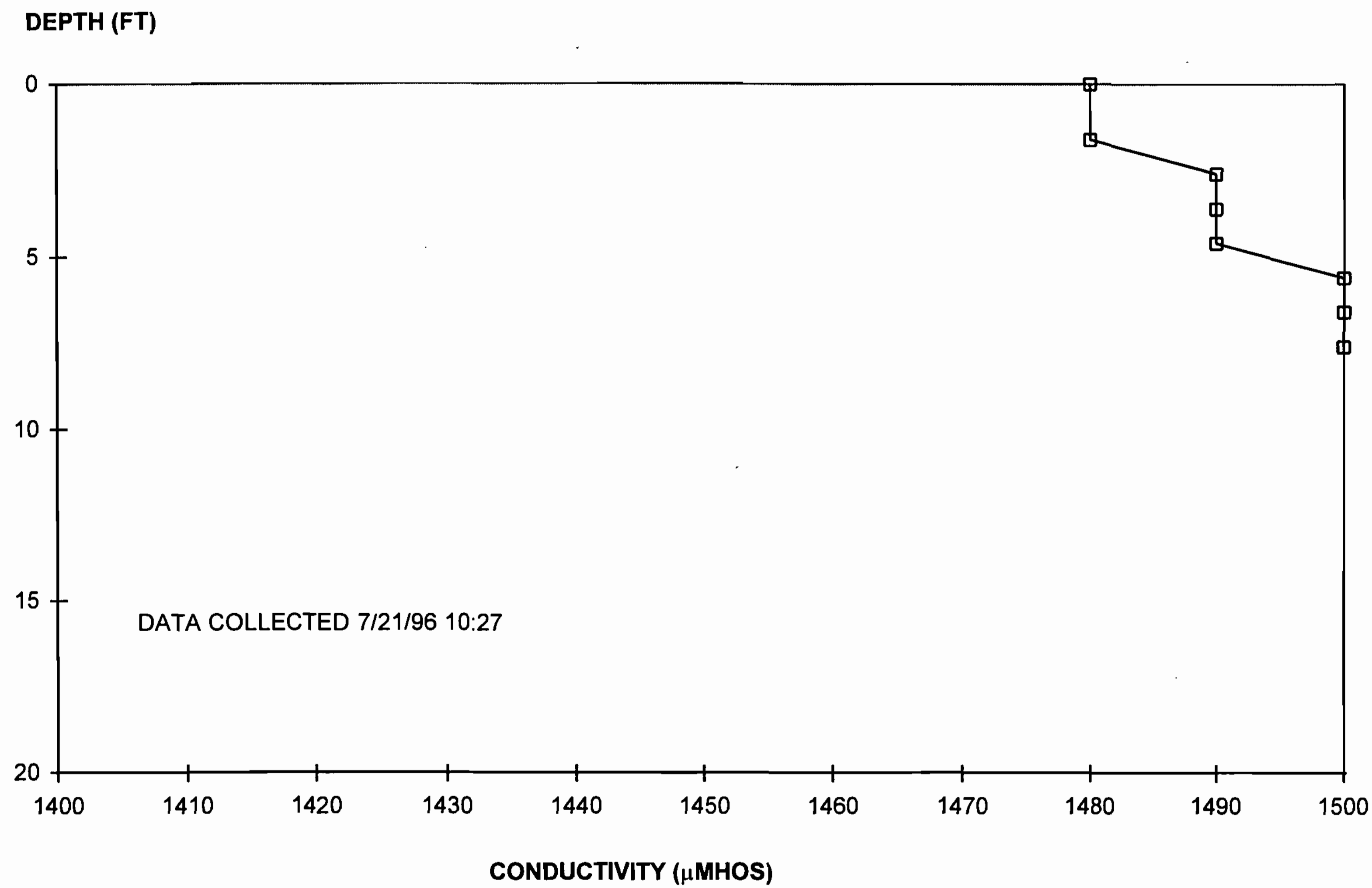
Figure 10.5.4-297



CITY OF TALLAHASSEE

LOCATION 11
WATER COLUMN CONDUCTIVITY PROFILE
AT UNITS 6/7 DISCHARGE, PRIOR TO BEND IN DISCHARGE CANAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

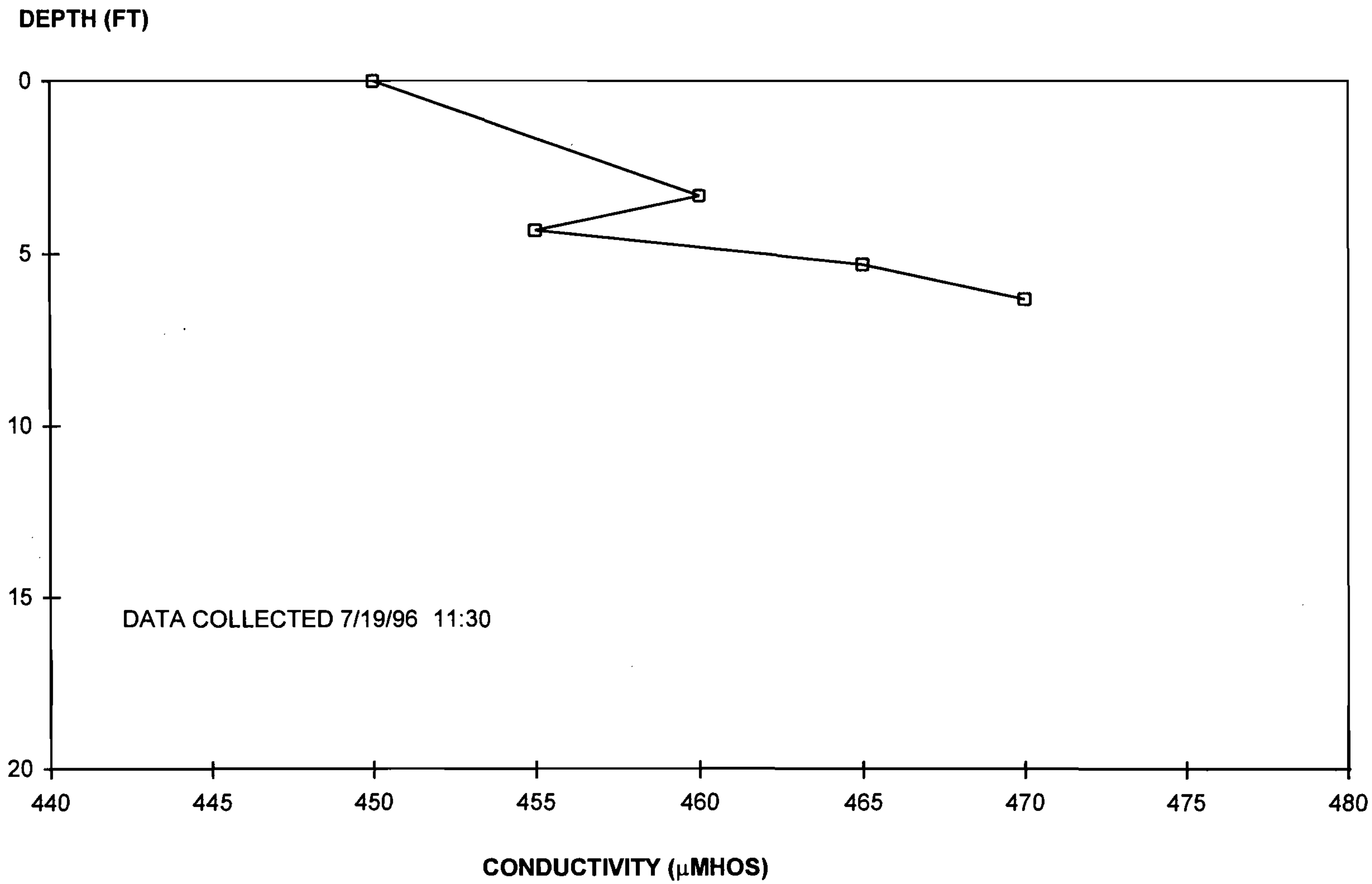
Figure 10.5.4-298



CITY OF TALLAHASSEE

LOCATION 11
WATER COLUMN CONDUCTIVITY PROFILE
AT UNITS 6/7 DISCHARGE, PRIOR TO BEND IN DISCHARGE CANAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

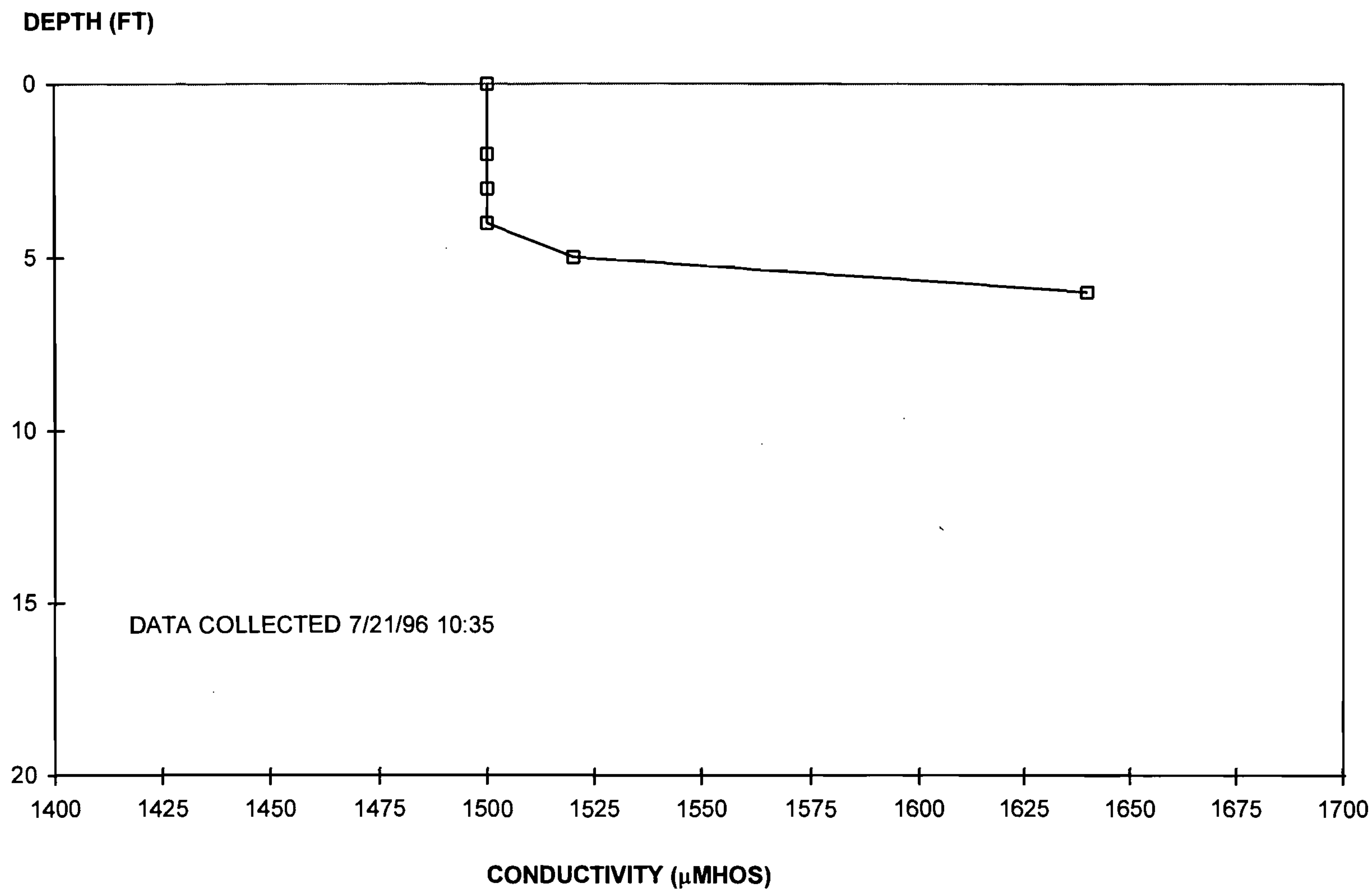
Figure
10.5.4–299



CITY OF TALLAHASSEE

LOCATION 12
WATER COLUMN CONDUCTIVITY PROFILE
AT UNITS 6/7 DISCHARGE, OUTLET OF DISCHARGE CANAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

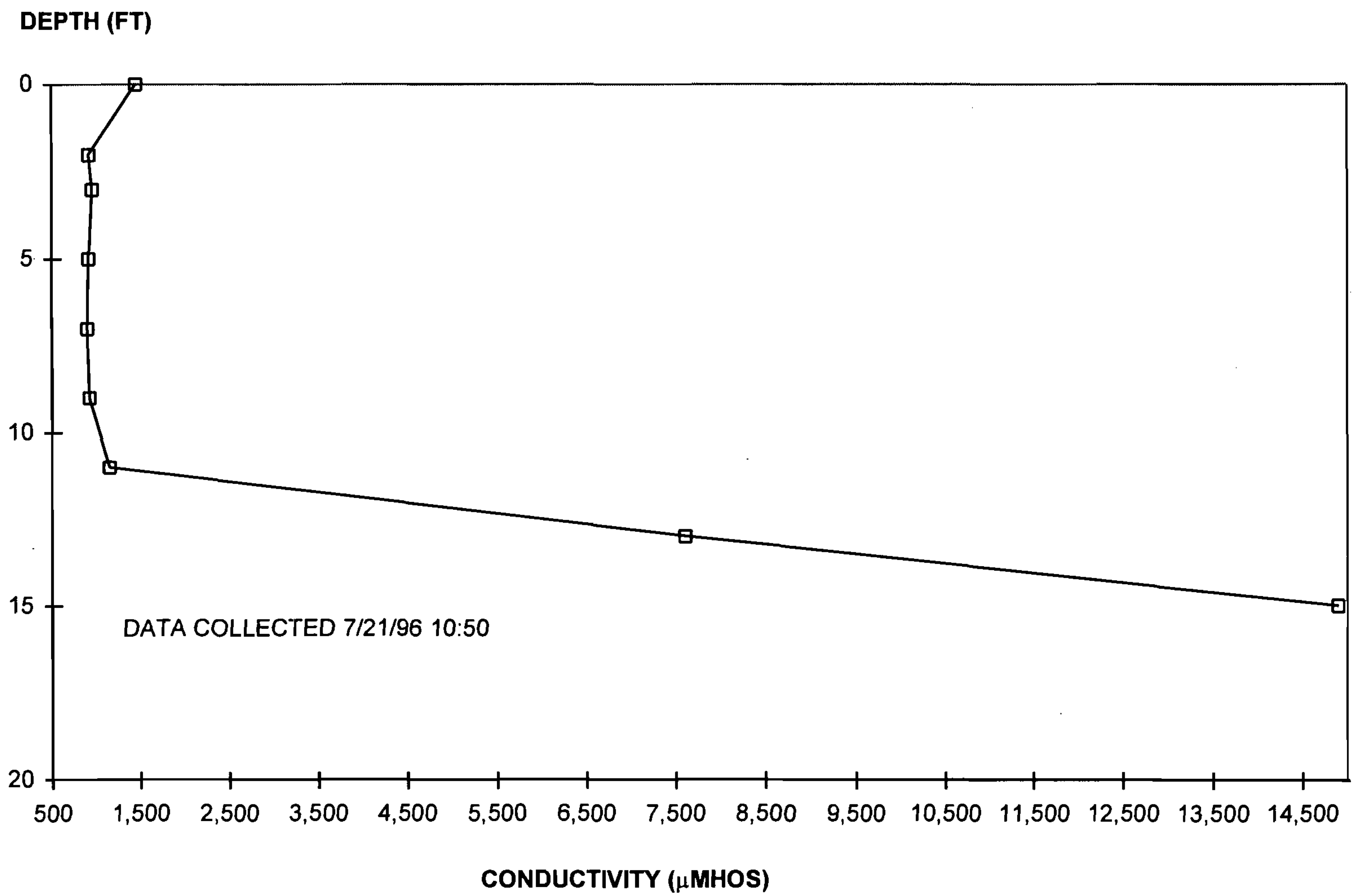
Figure
10.5.4–300



CITY OF TALLAHASSEE

LOCATION 12
WATER COLUMN CONDUCTIVITY PROFILE
AT UNITS 6/7 DISCHARGE, OUTLET OF DISCHARGE CANAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

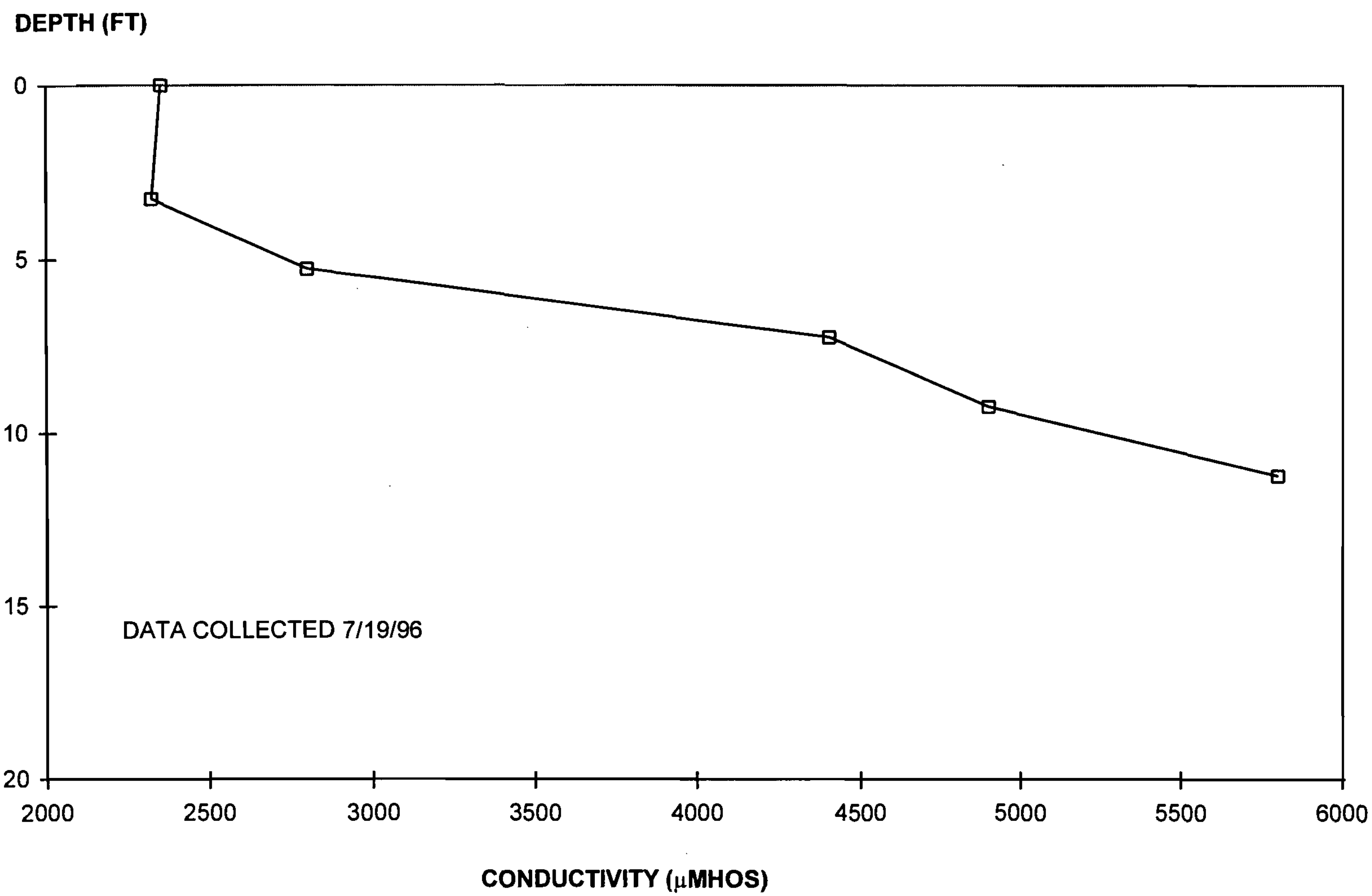
Figure 10.5.4–301



CITY OF TALLAHASSEE

LOCATION 12
WATER COLUMN CONDUCTIVITY PROFILE
AT UNITS 6/7 DISCHARGE, EAST OF DISCHARGE CANAL, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

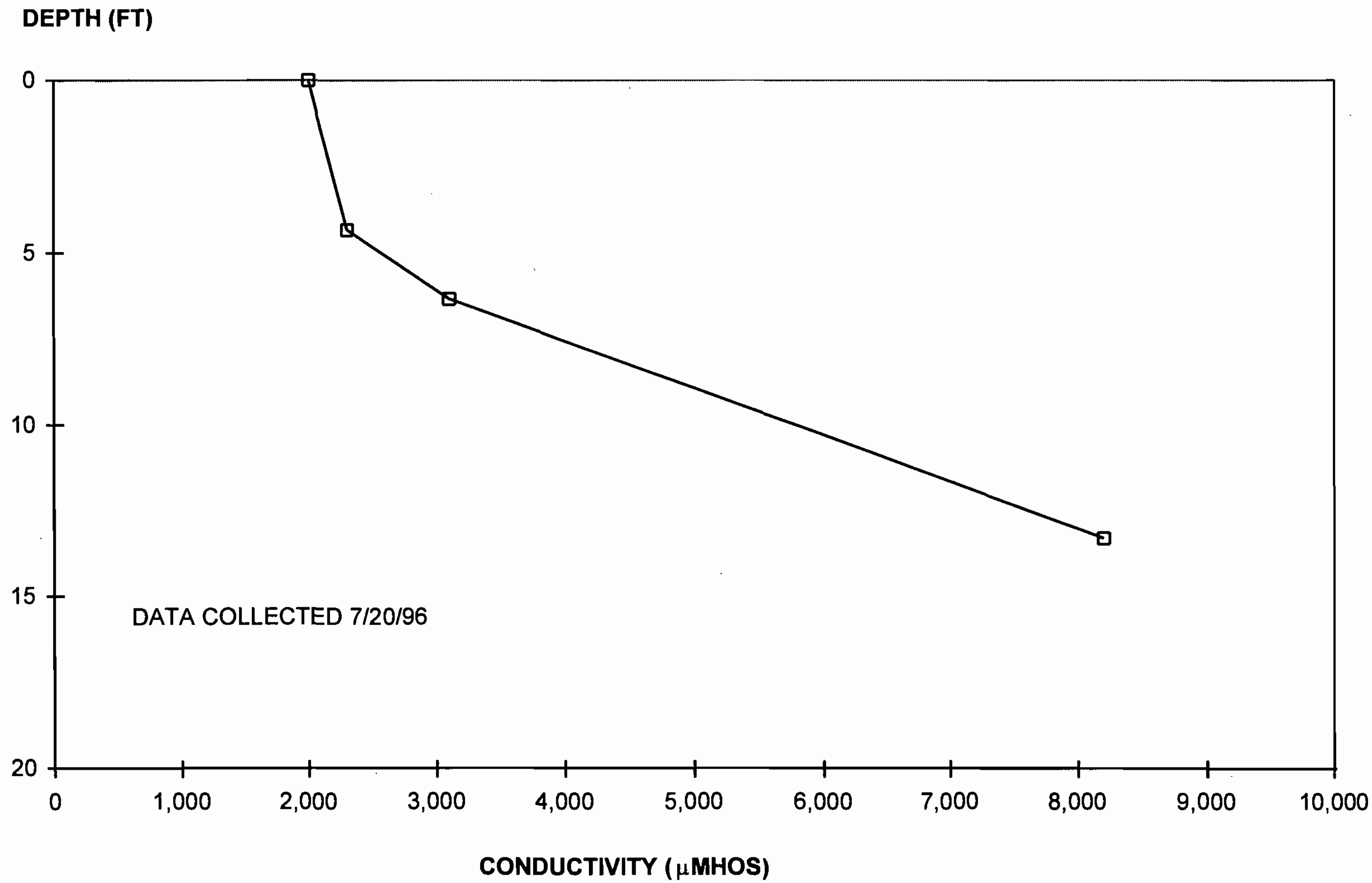
Figure
10.5.4–302



CITY OF TALLAHASSEE

LOCATION 13
WATER COLUMN CONDUCTIVITY PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF ST. MARKS SEWAGE DISCHARGE, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

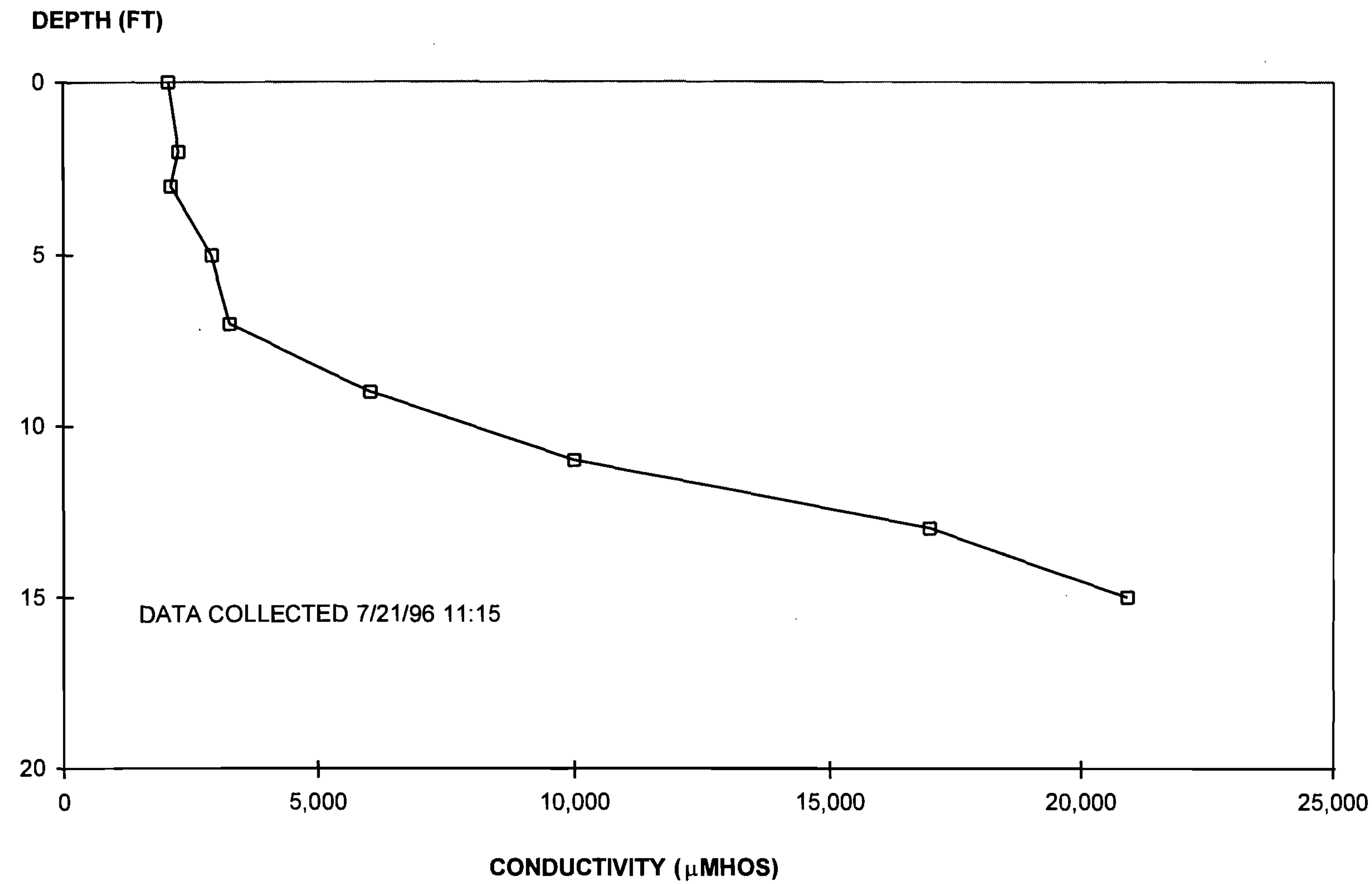
Figure
10.5.4-303



CITY OF TALLAHASSEE

LOCATION 13
WATER COLUMN CONDUCTIVITY PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF ST. MARKS SEWAGE TRTMNT FACILITY DISCHARGE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

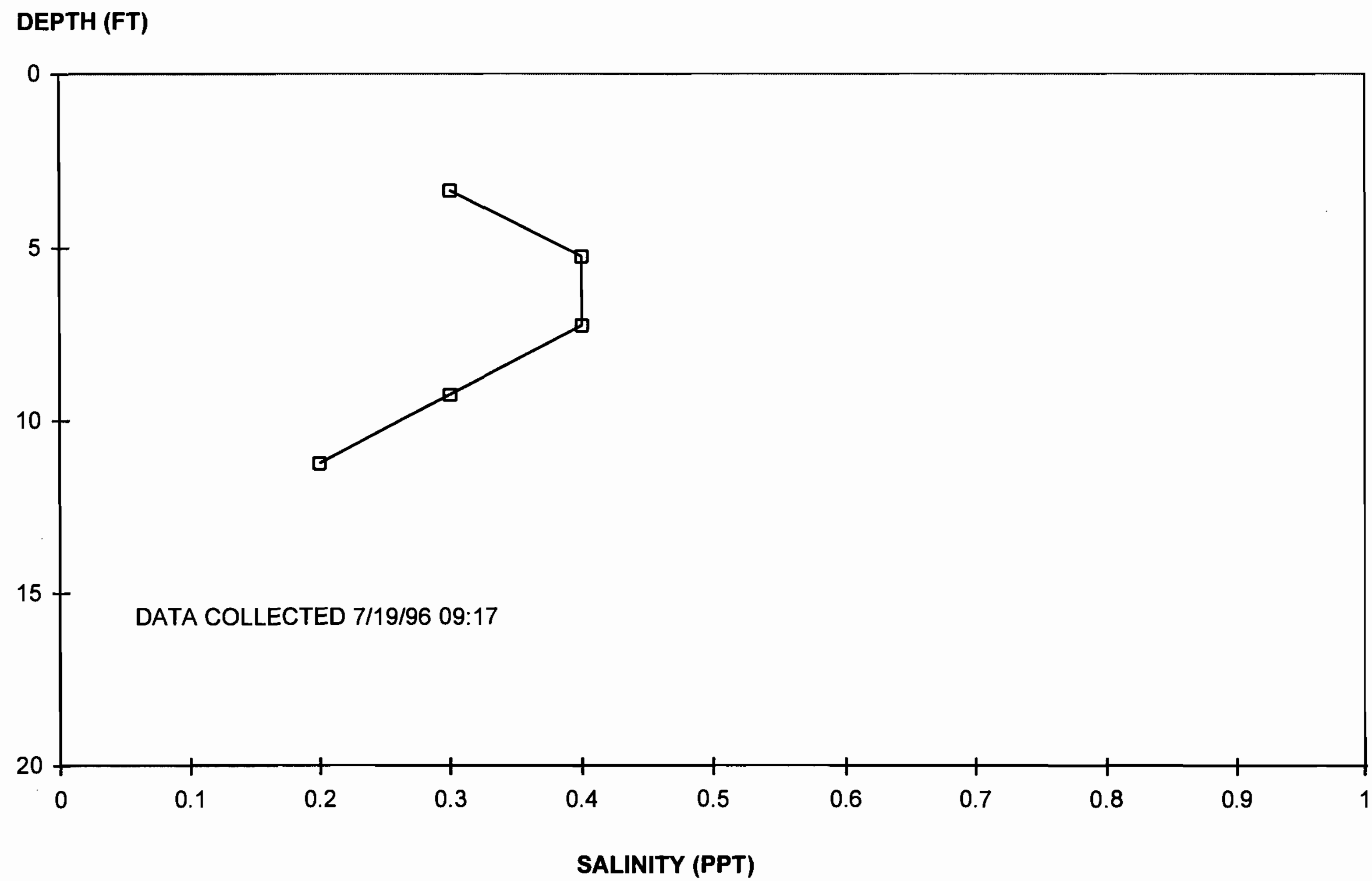
Figure 10.5.4–304



CITY OF TALLAHASSEE

LOCATION 13
WATER COLUMN CONDUCTIVITY PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF ST. MARKS SEWAGE DISCHARGE, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

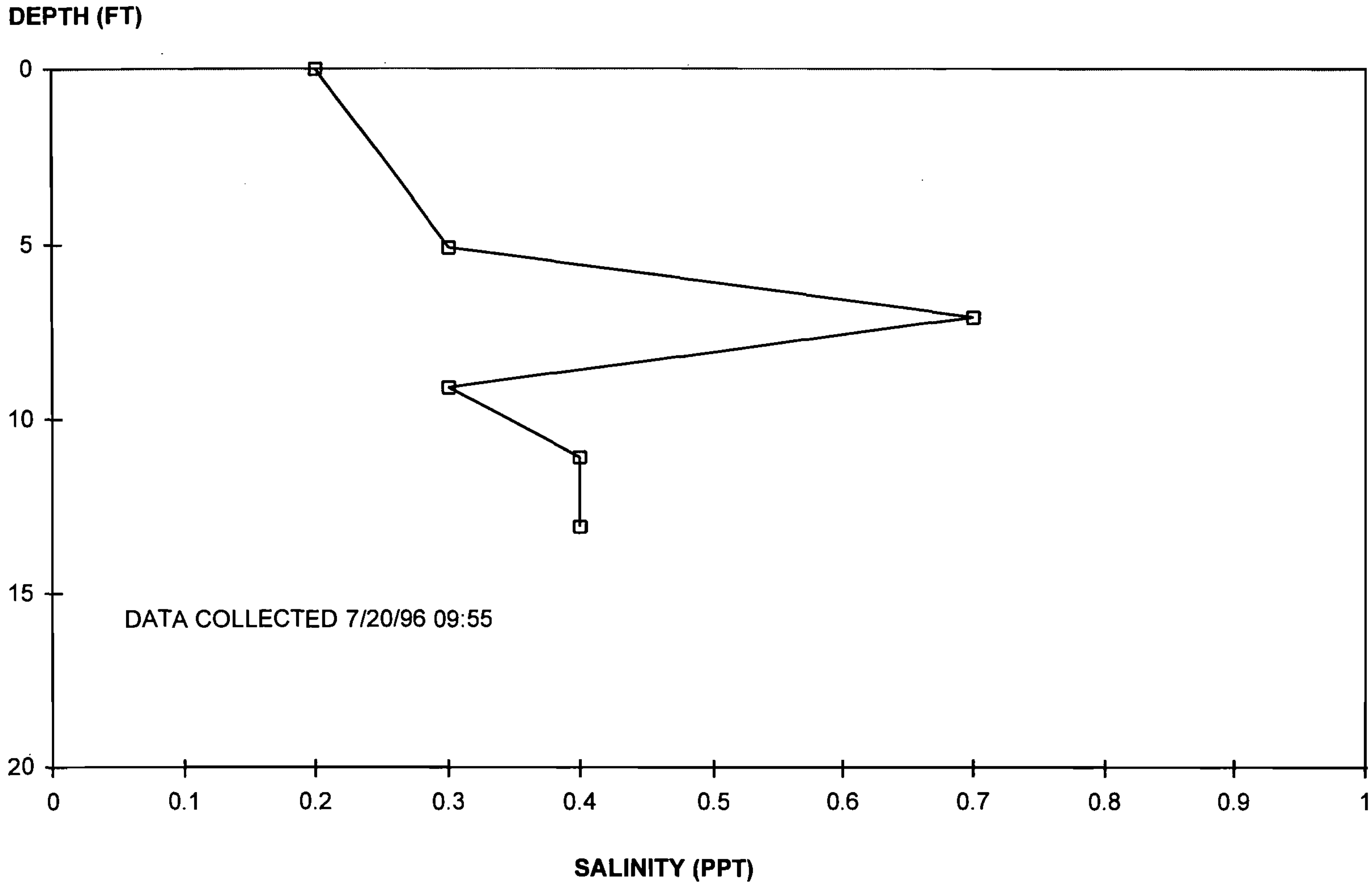
Figure
10.5.4–305



CITY OF TALLAHASSEE

LOCATION 1
WATER COLUMN SALINITY PROFILE
AT ST. MARKS RIVER, UPSTREAM OF PLANT INFLUENCES, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

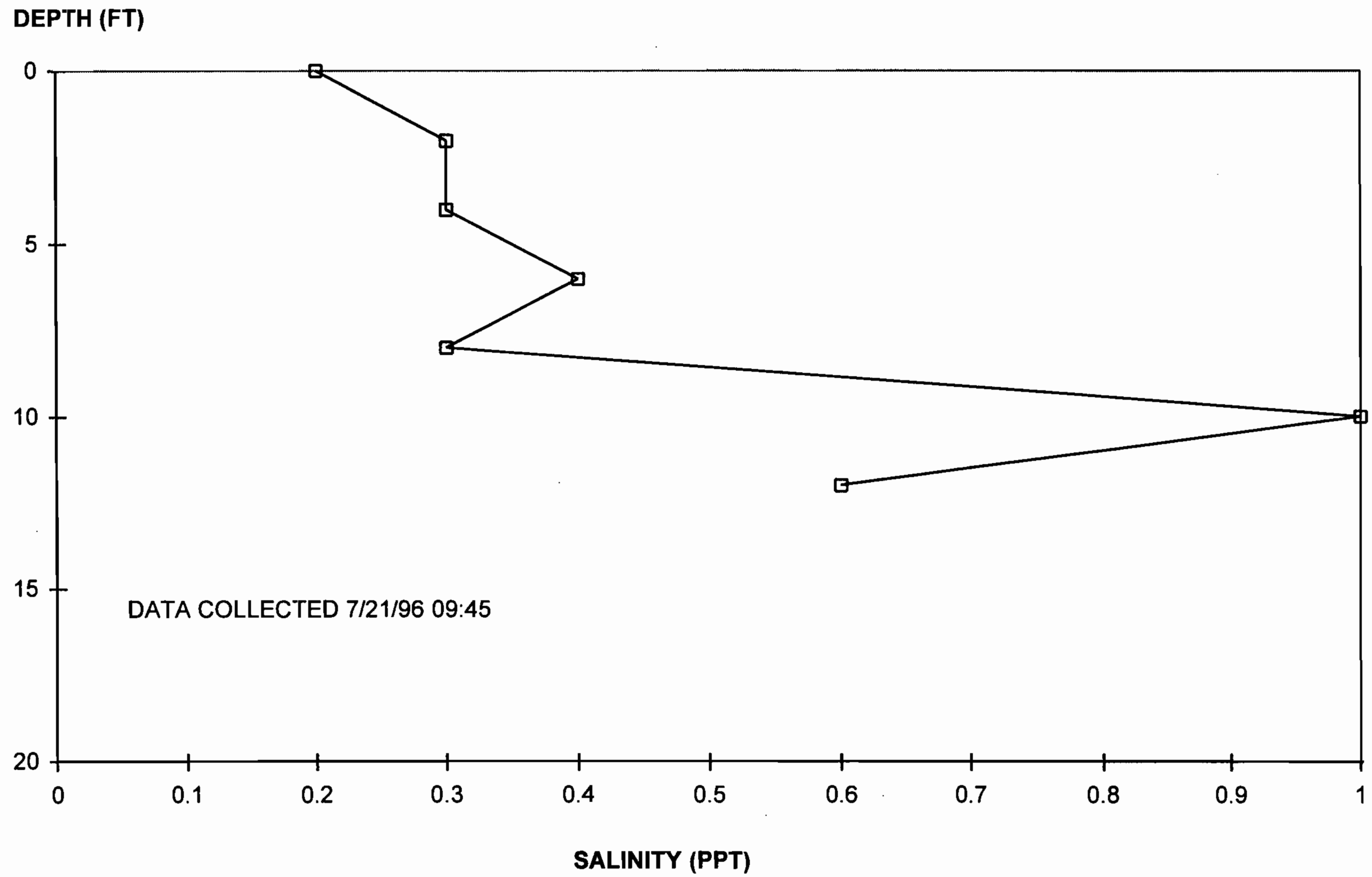
Figure 10.5.4–306



CITY OF TALLAHASSEE

LOCATION 1
WATER COLUMN SALINITY PROFILE
AT ST. MARKS RIVER, UPSTREAM OF PLANT INFLUENCES
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

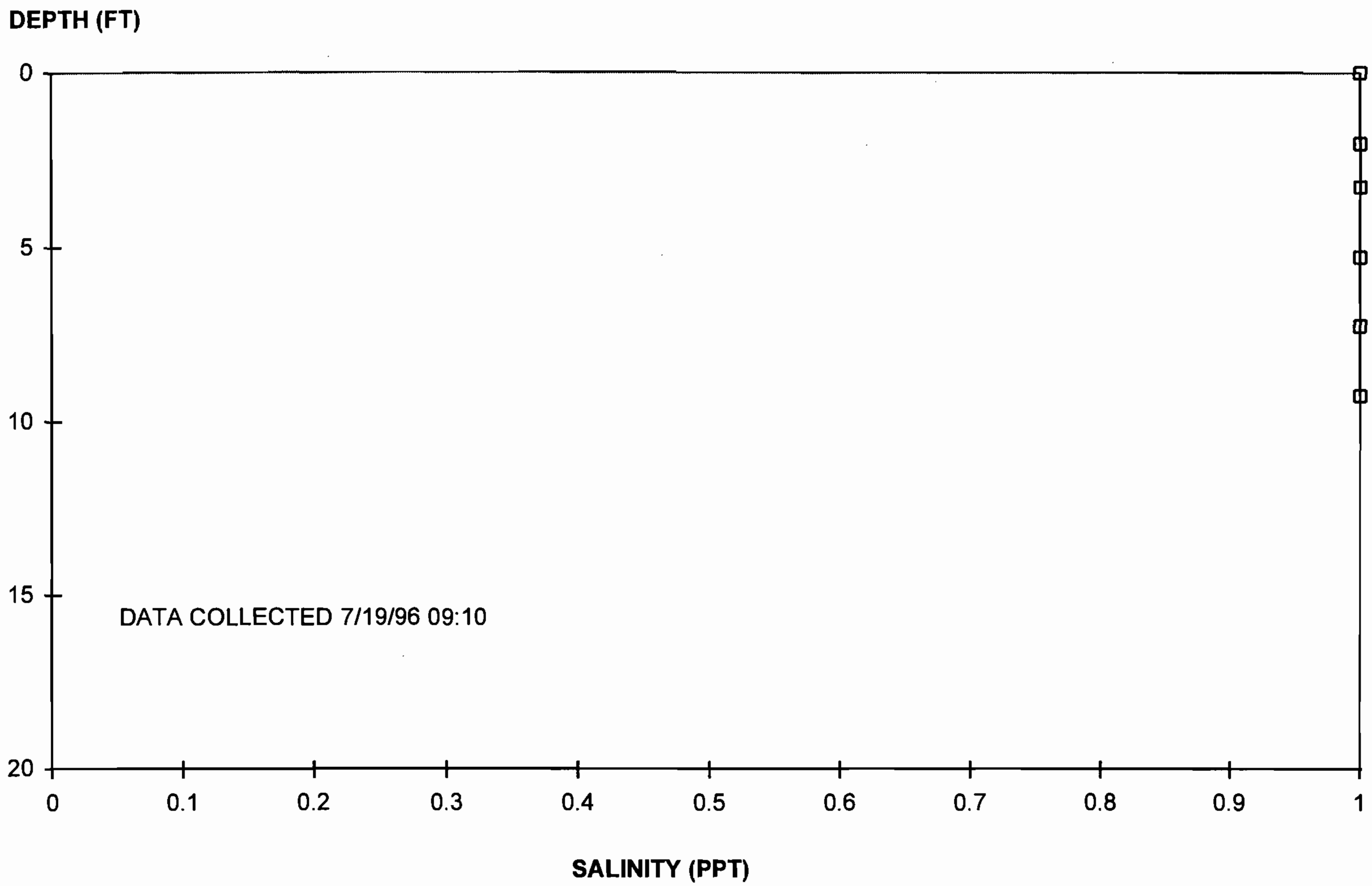
Figure
10.5.4–307



CITY OF TALLAHASSEE

LOCATION 1
WATER COLUMN SALINITY PROFILE
AT ST. MARKS RIVER, UPSTREAM OF PLANT INFLUENCES
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

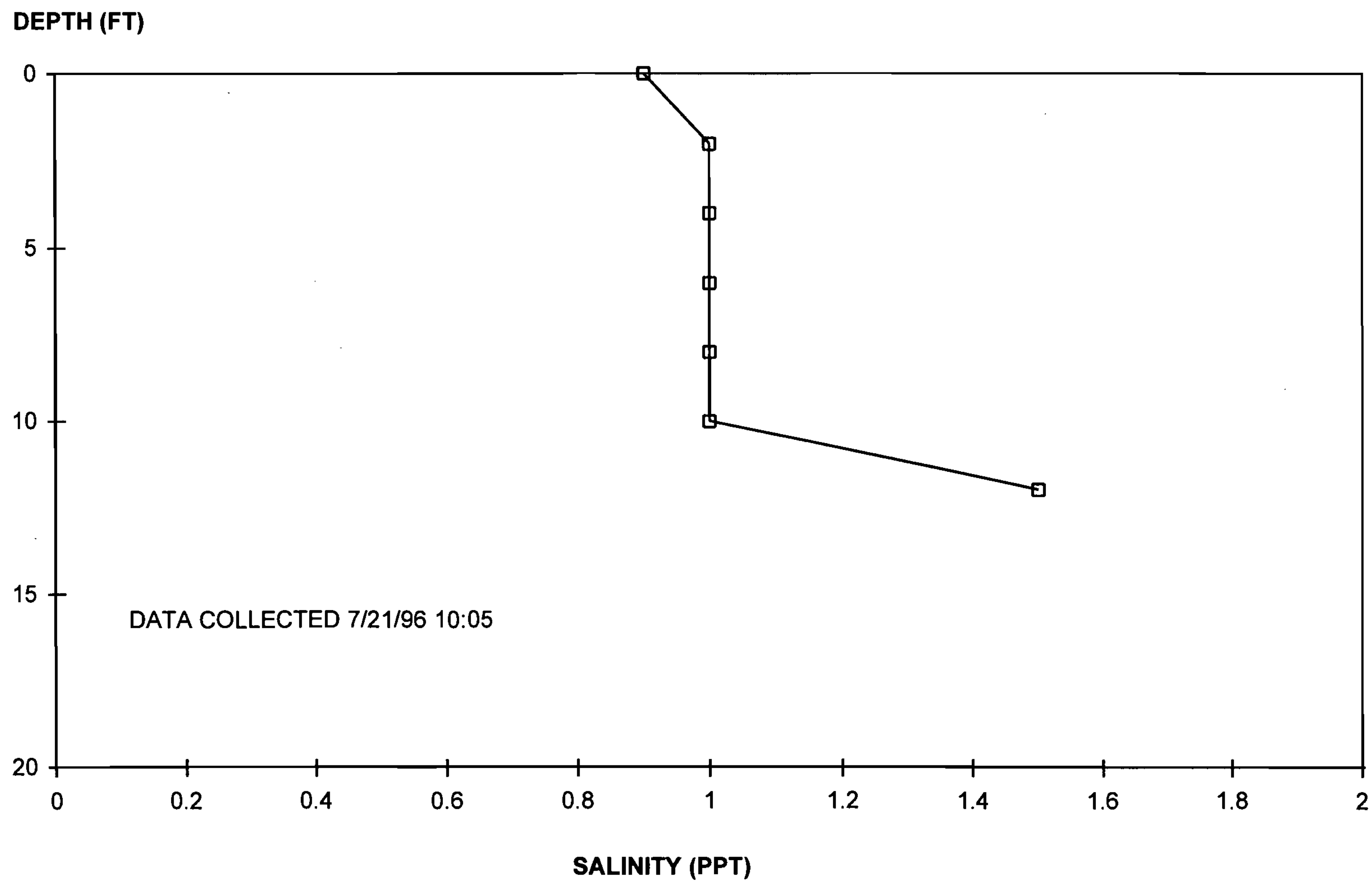
Figure
10.5.4–308



CITY OF TALLAHASSEE

LOCATION 2
WATER COLUMN SALINITY PROFILE
AT UNIT 7 INTAKE STRUCTURE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

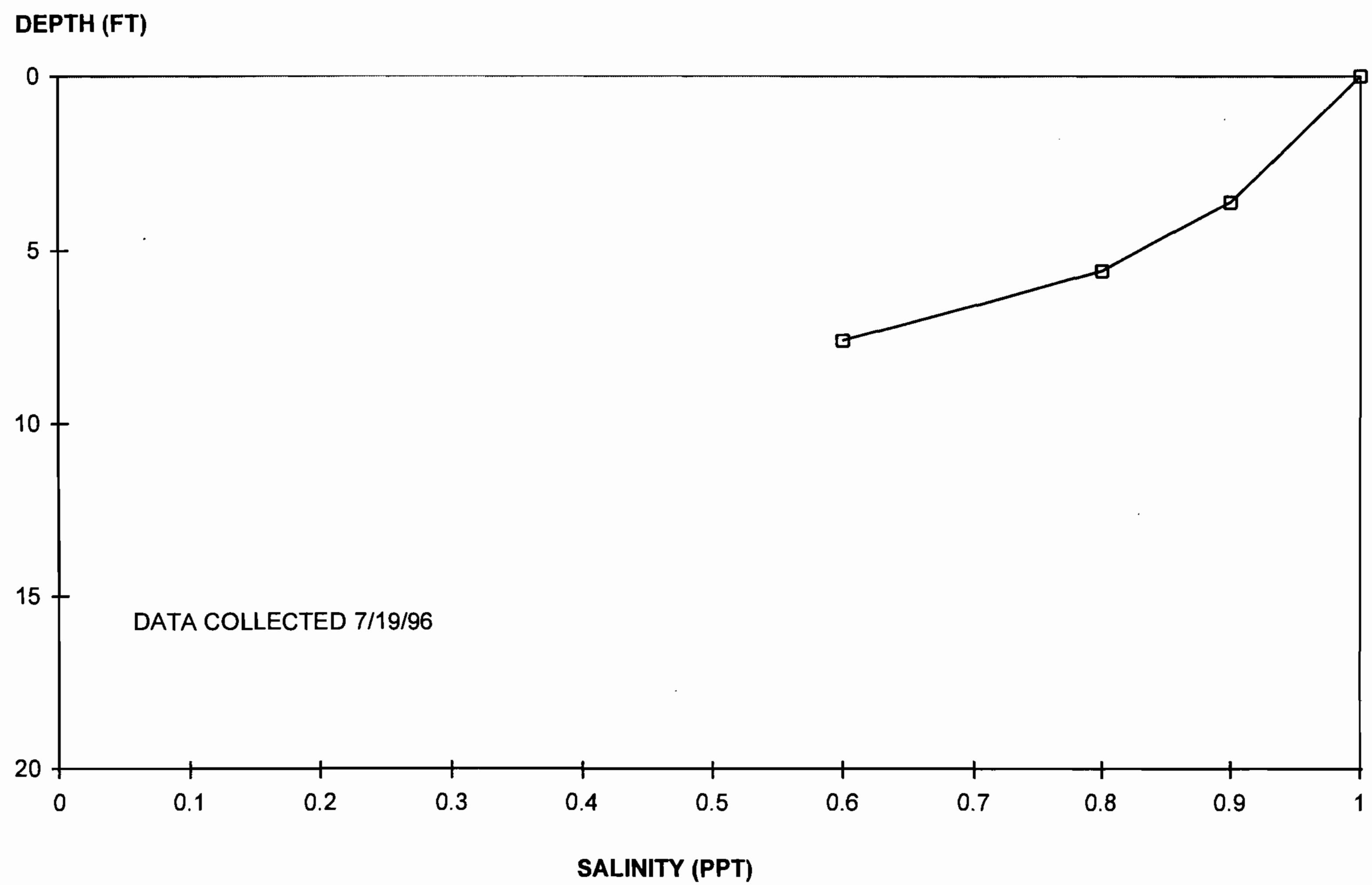
Figure
10.5.4-309



CITY OF TALLAHASSEE

LOCATION 2
WATER COLUMN SALINITY PROFILE
AT UNIT 7 INTAKE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

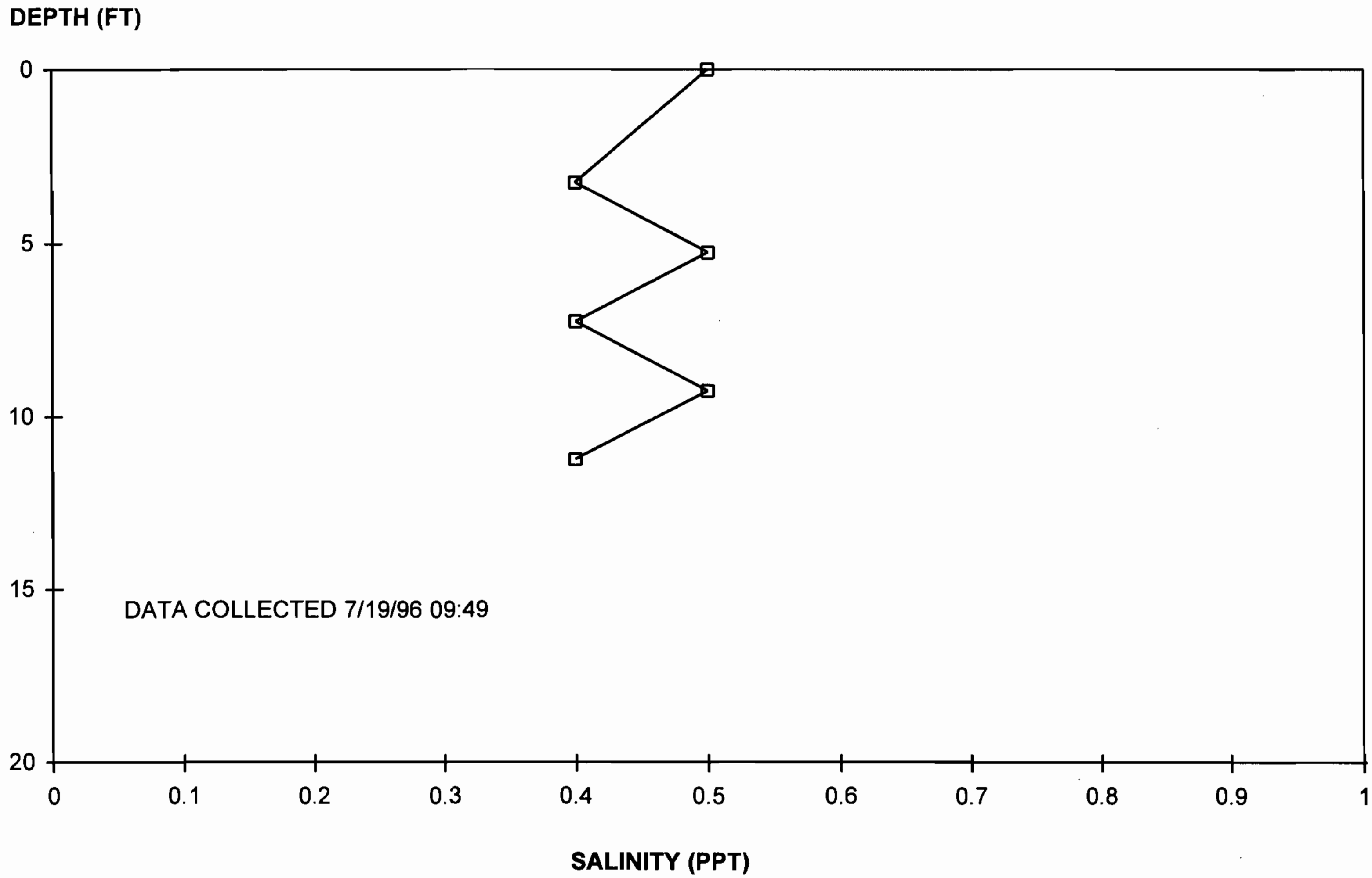
Figure
10.5.4–310



CITY OF TALLAHASSEE

LOCATION 3
WATER COLUMN SALINITY PROFILE
AT OPENING OF INTAKE CANAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

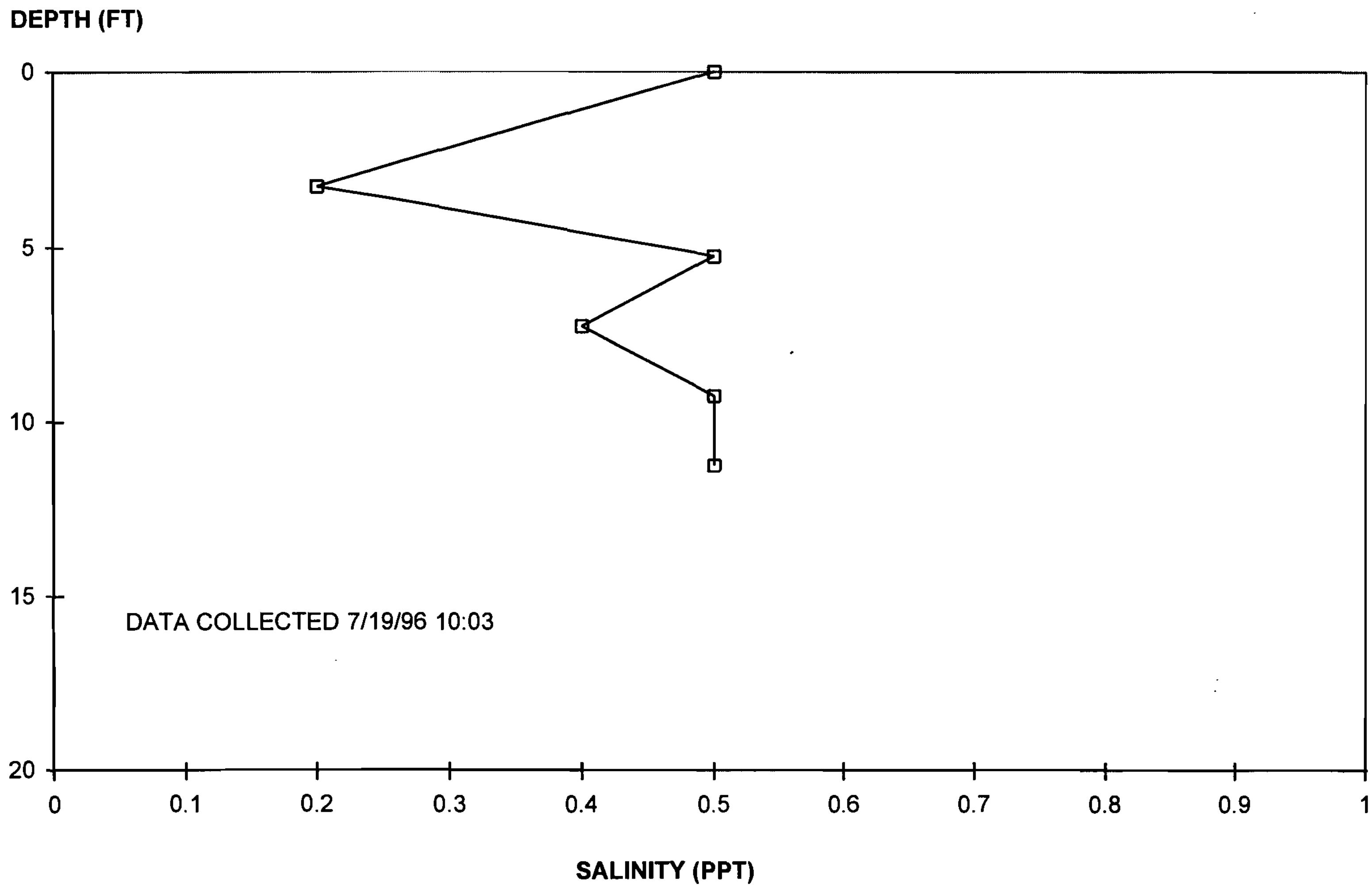
Figure
10.5.4–311



CITY OF TALLAHASSEE

LOCATION 4
WATER COLUMN SALINITY PROFILE
AT ST. MARKS RIVER, AT UNIT 5 INTAKE STRUCTURE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

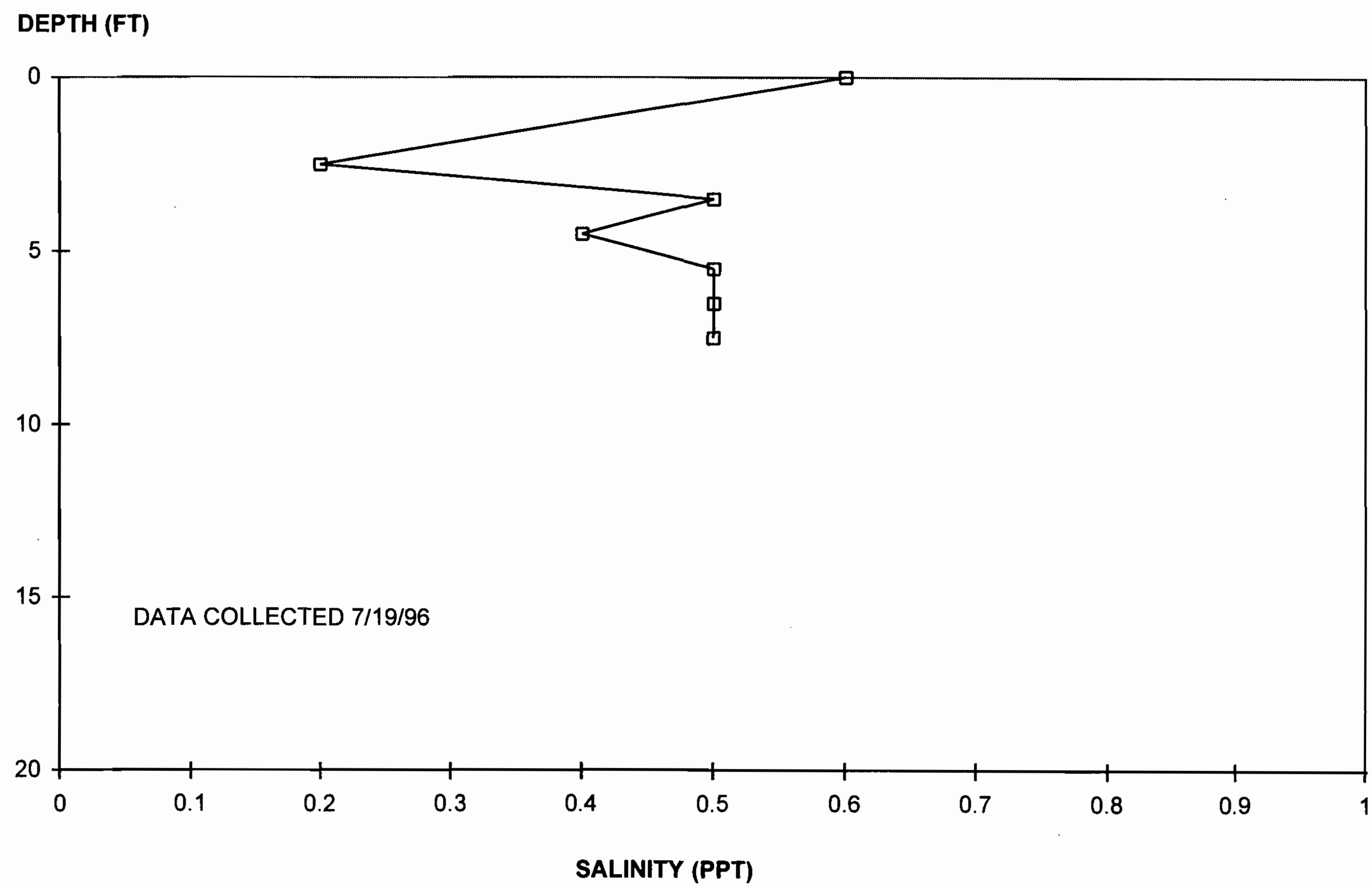
Figure 10.5.4-312



CITY OF TALLAHASSEE

LOCATION 5
WATER COLUMN SALINITY PROFILE
AT ST. MARKS RIVER, BELOW INTAKE CANAL, MID-RIVER
PURDOM UNIT 8 PROJECT - St MARKS, FLORIDA

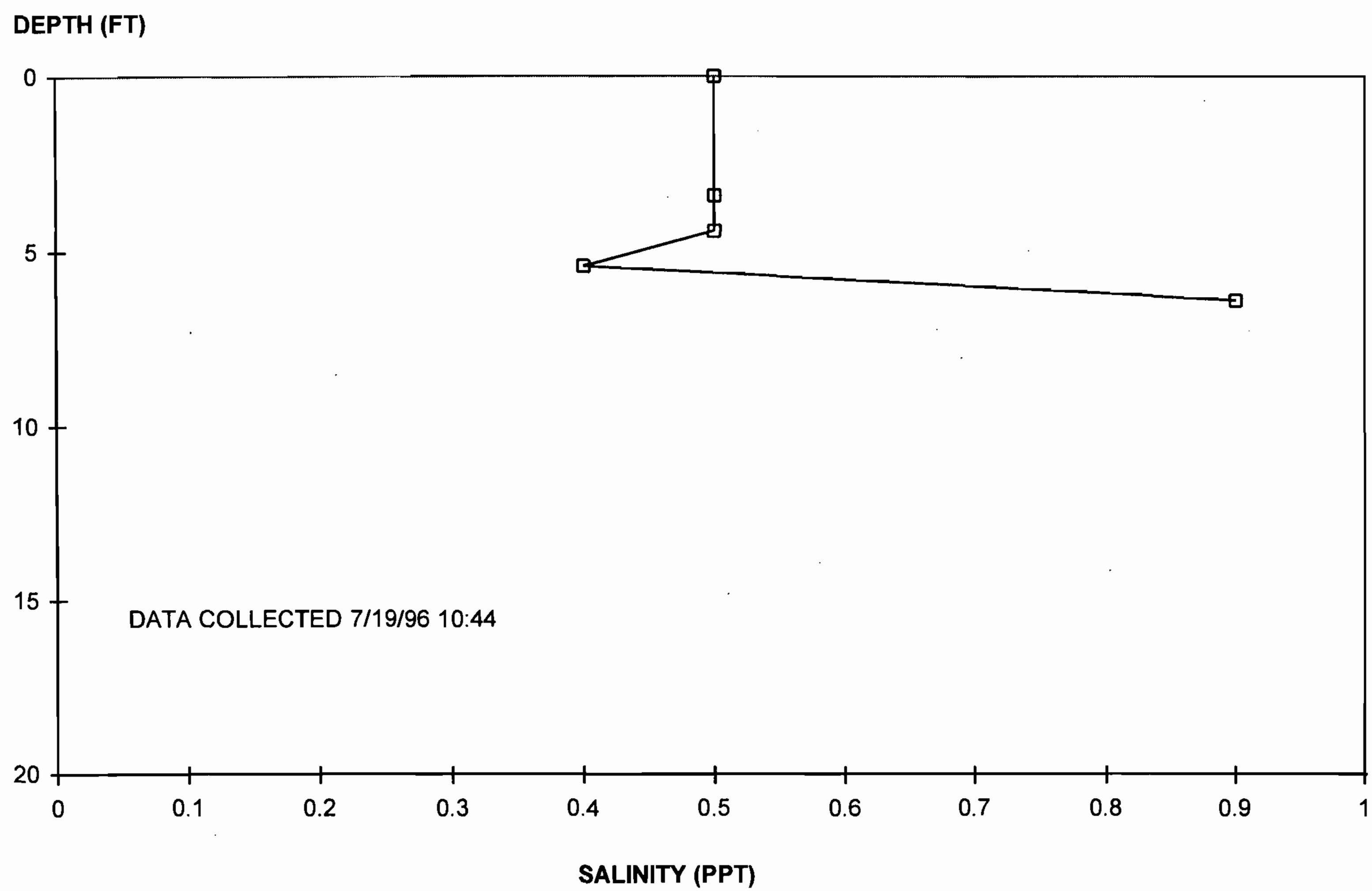
Figure
10.5.4-313



CITY OF TALLAHASSEE

LOCATION 6
WATER COLUMN SALINITY PROFILE
AT UNIT 5 DISCHARGE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

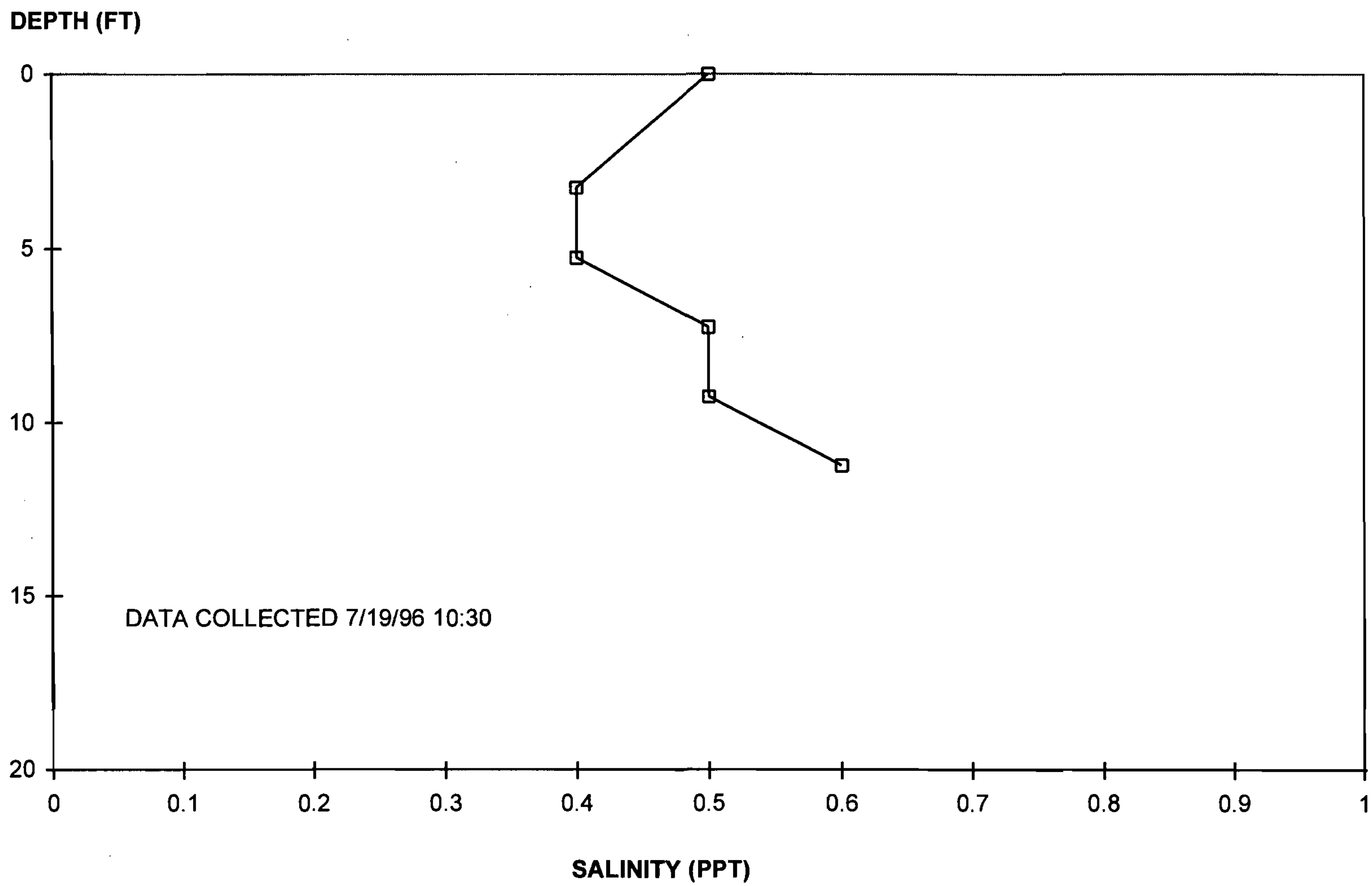
Figure
10.5.4–314



CITY OF TALLAHASSEE

LOCATION 6
WATER COLUMN SALINITY PROFILE
AT ST. MARKS RIVER, AT UNIT 5 DISCHARGE, BETWEEN DISCHARGE/MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

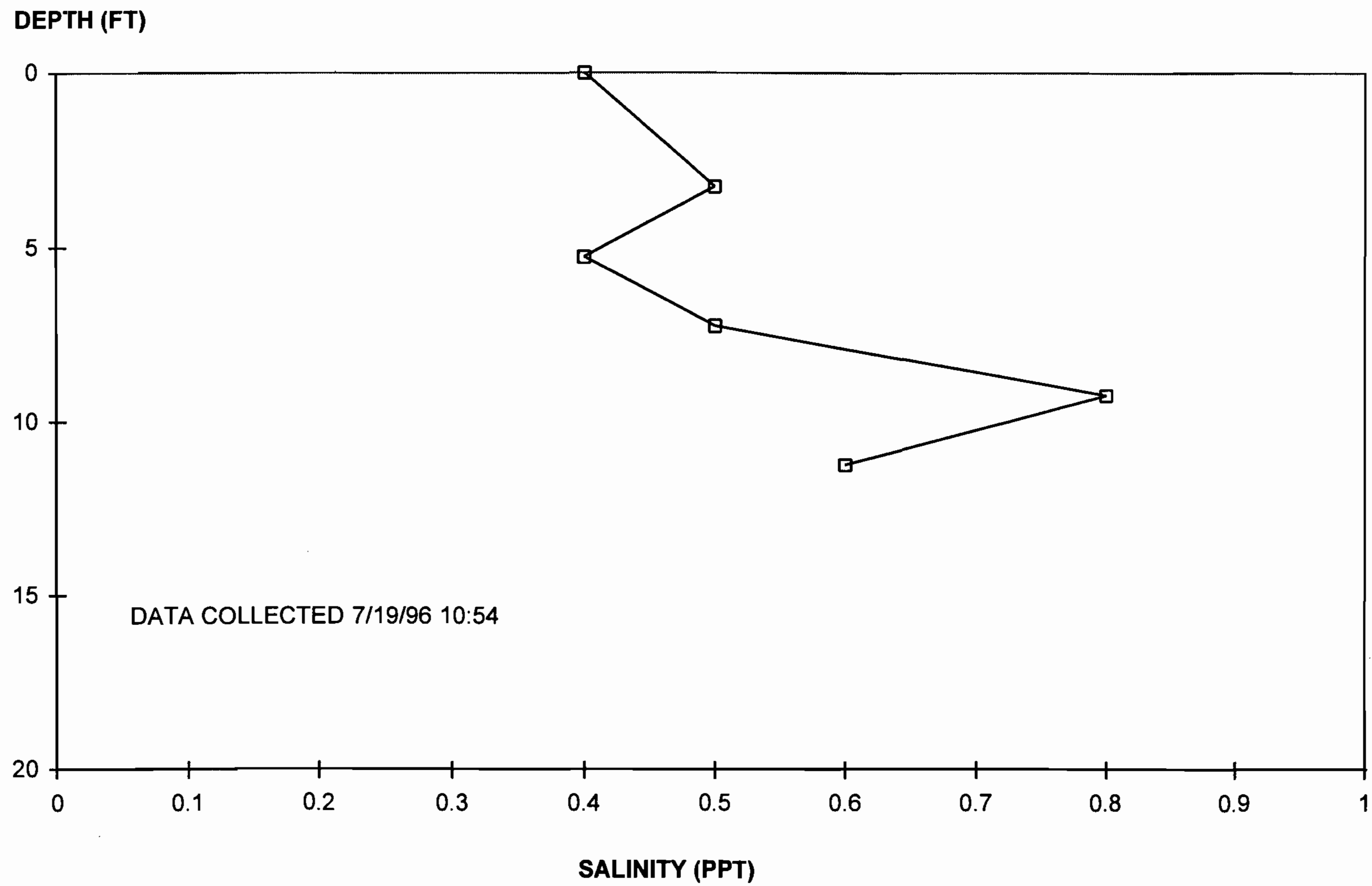
Figure
10.5.4–315



CITY OF TALLAHASSEE

LOCATION 6
WATER COLUMN SALINITY PROFILE
AT ST. MARKS RIVER, AT UNIT 5 DISCHARGE, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

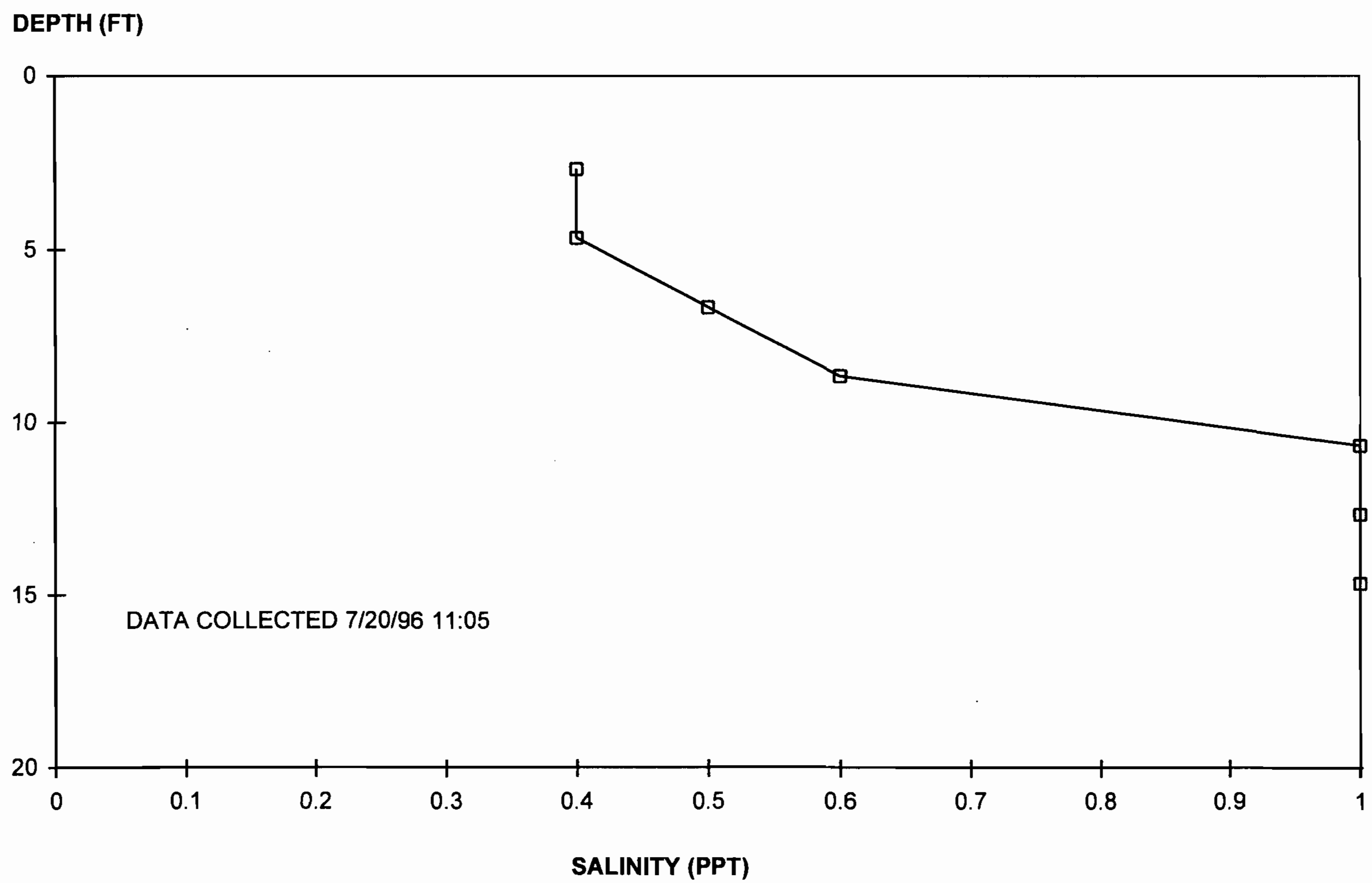
Figure 10.5.4-316



CITY OF TALLAHASSEE

LOCATION 7
WATER COLUMN SALINITY PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF UNIT 5 DISCHARGE, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

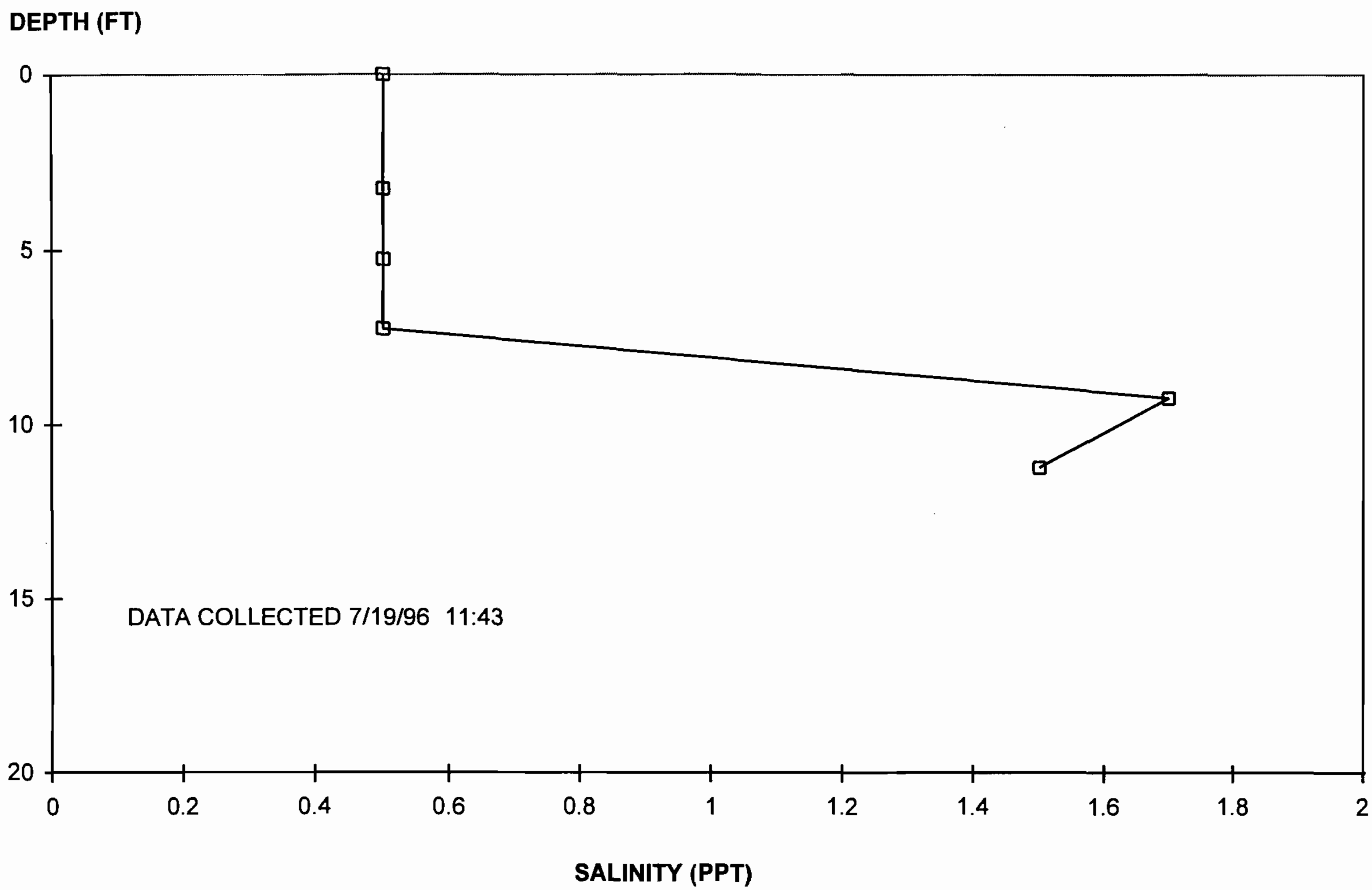
Figure
10.5.4-317



CITY OF TALLAHASSEE

LOCATION 7
WATER COLUMN SALINITY PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF UNIT 5 DISCHARGE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

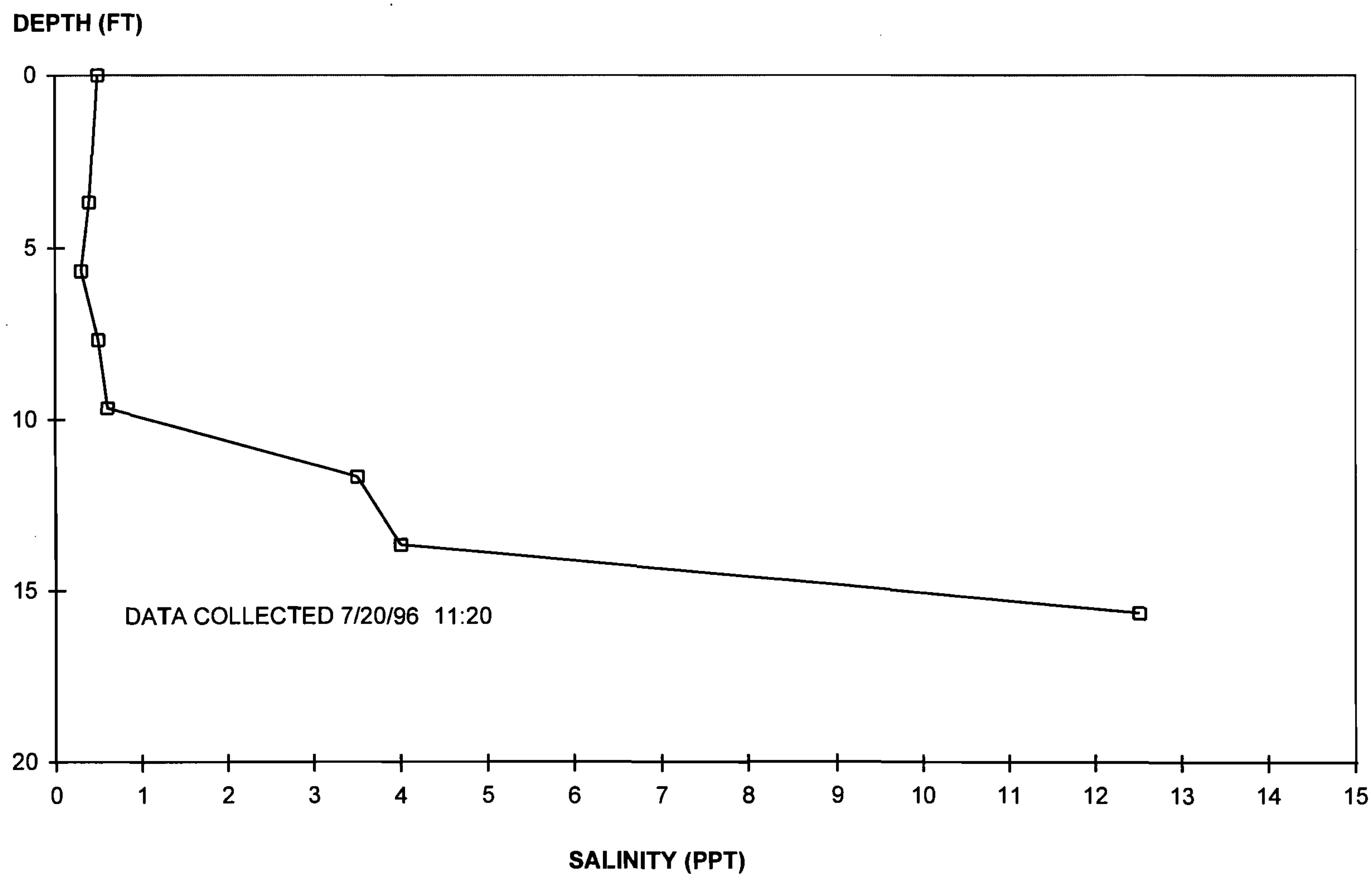
Figure
10.5.4–318



CITY OF TALLAHASSEE

LOCATION 8
WATER COLUMN SALINITY PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF UNIT 6/7 DISCHARGE, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

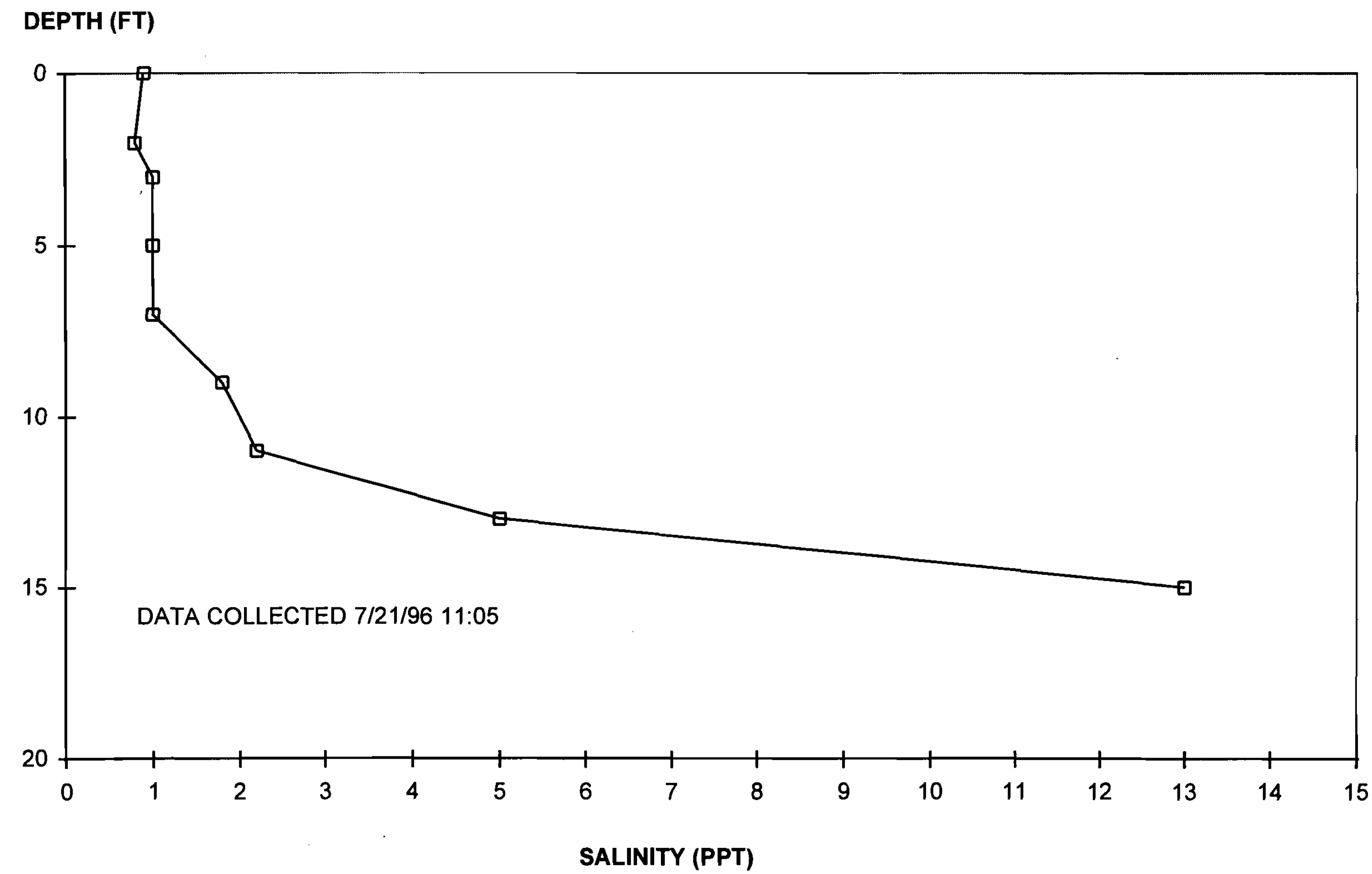
Figure
10.5.4-319



CITY OF TALLAHASSEE

LOCATION 8
WATER COLUMN SALINITY PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF UNIT 6/7 DISCHARGE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

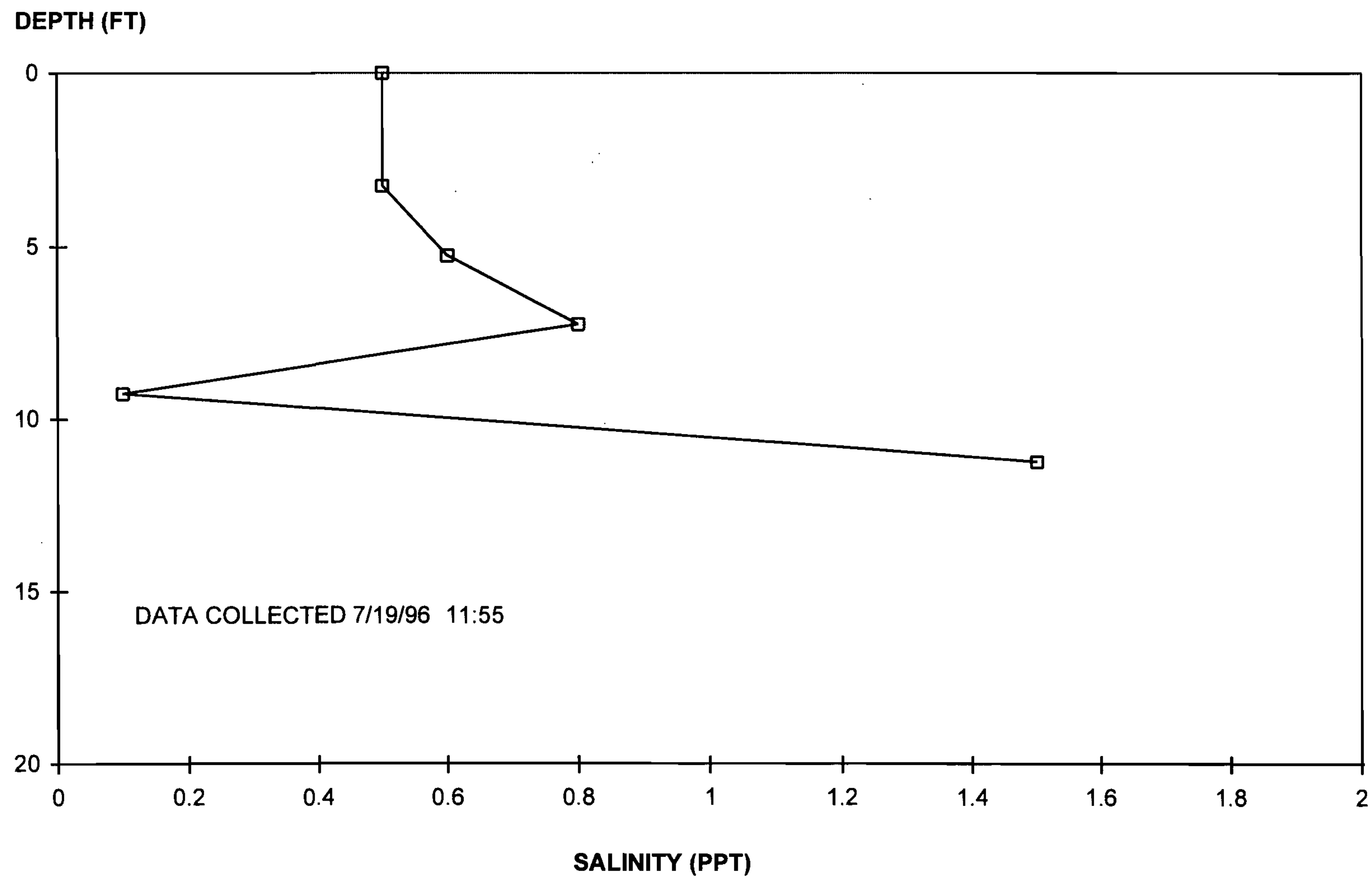
Figure
10.5.4-320



CITY OF TALLAHASSEE

LOCATION 8
WATER COLUMN SALINITY PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF UNIT 6/7 DISCHARGE, MID-RIVER
PURDOM UNIT 8 PROJECT - St MARKS, FLORIDA

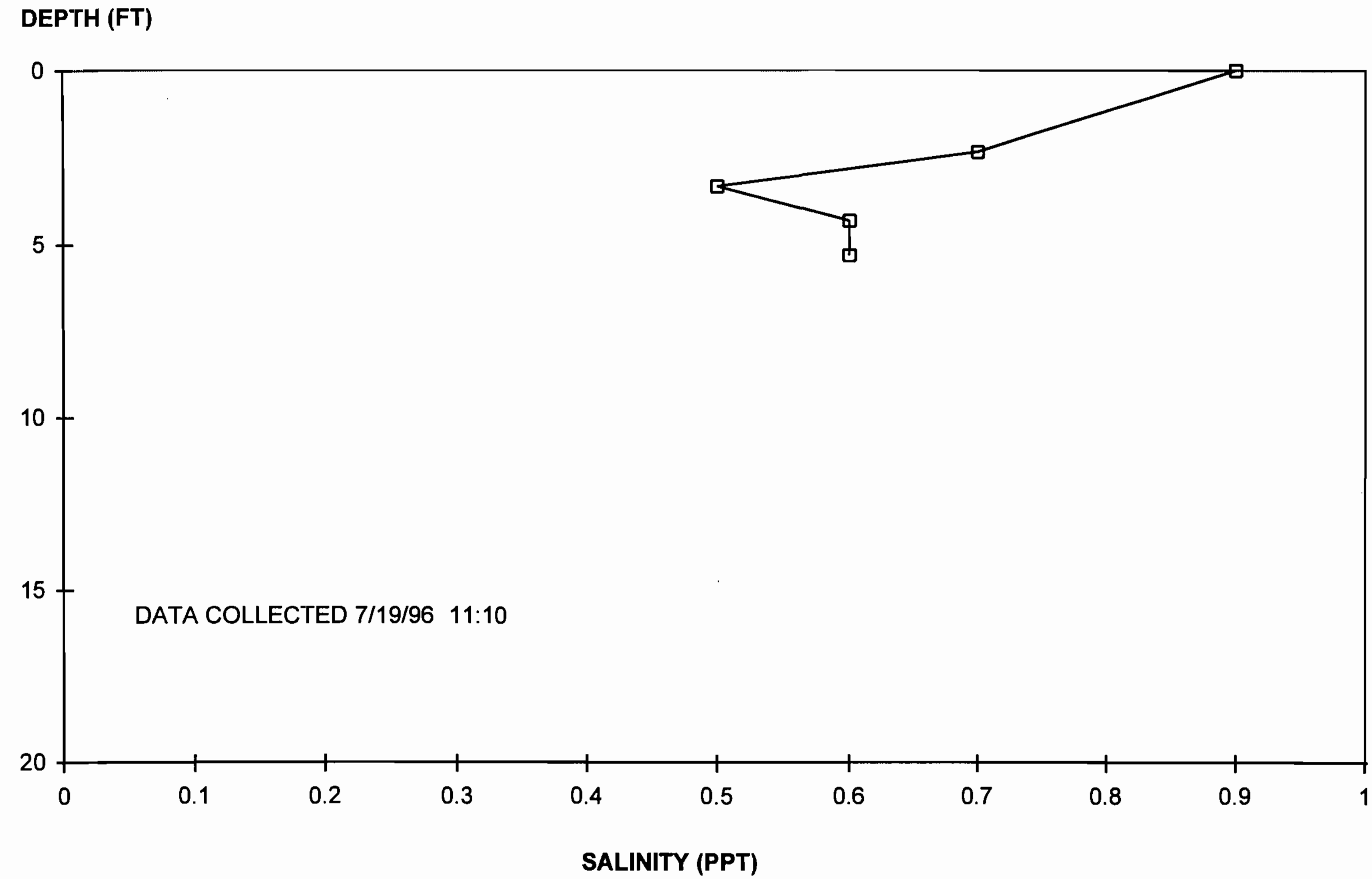
Figure
10.5.4-321



CITY OF TALLAHASSEE

LOCATION 9
WATER COLUMN SALINITY PROFILE
AT ST. MARKS RIVER, SHIELD'S MARINA, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

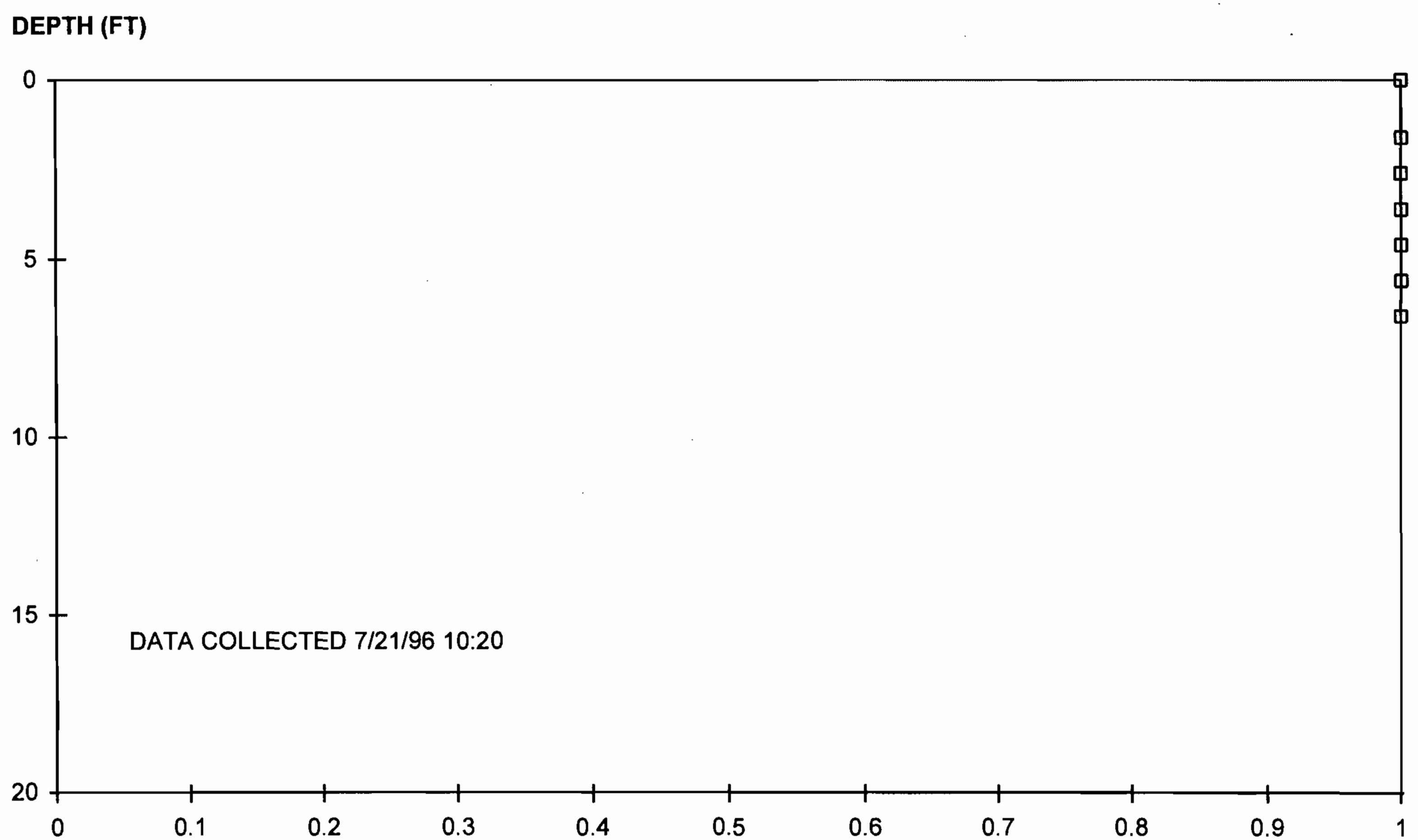
Figure
10.5.4-322



CITY OF TALLAHASSEE

LOCATION 10
WATER COLUMN SALINITY PROFILE
AT UNITS 6/7 DISCHARGE, IMMEDIATELY DOWNSTREAM OF DISCHARGE POINT
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

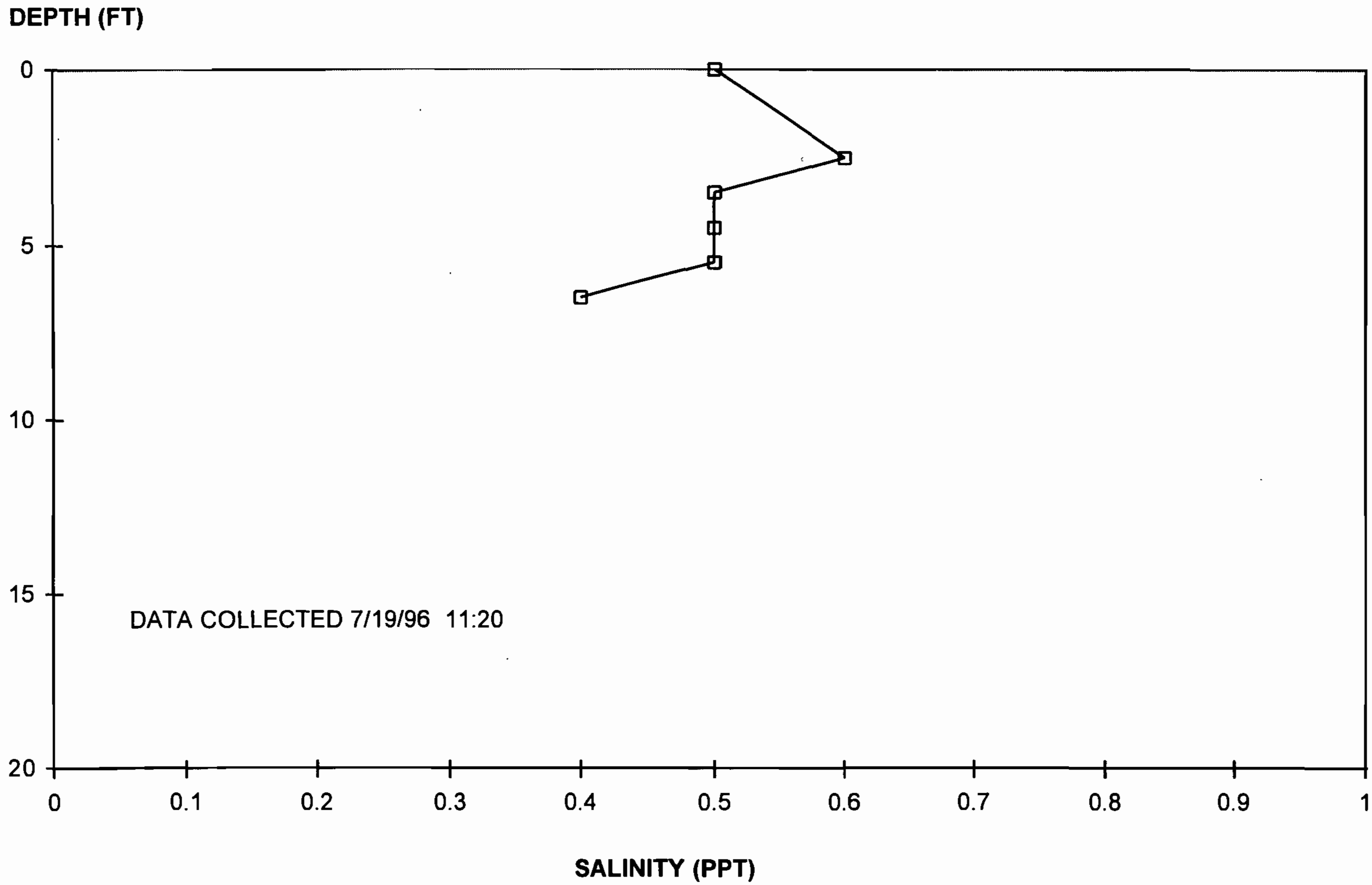
Figure
10.5.4–323



CITY OF TALLAHASSEE

LOCATION 10
WATER COLUMN SALINITY PROFILE
AT UNITS 6/7 DISCHARGE, IMMEDIATELY DOWNSTREAM OF DISCHARGE POINT
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

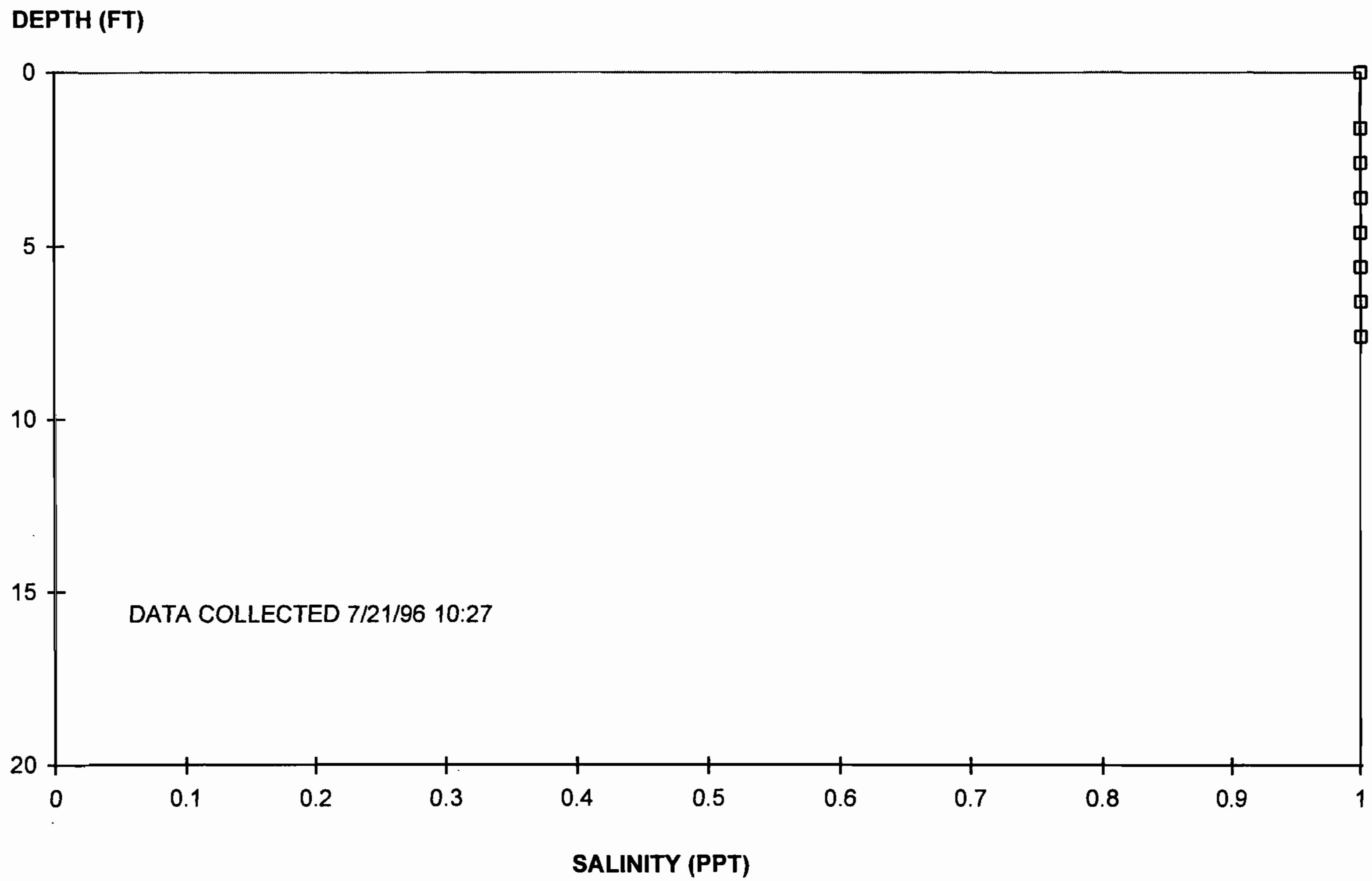
Figure
10.5.4-324



CITY OF TALLAHASSEE

LOCATION 11
WATER COLUMN SALINITY PROFILE
AT UNITS 6/7 DISCHARGE, PRIOR TO BEND IN DISCHARGE CANAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

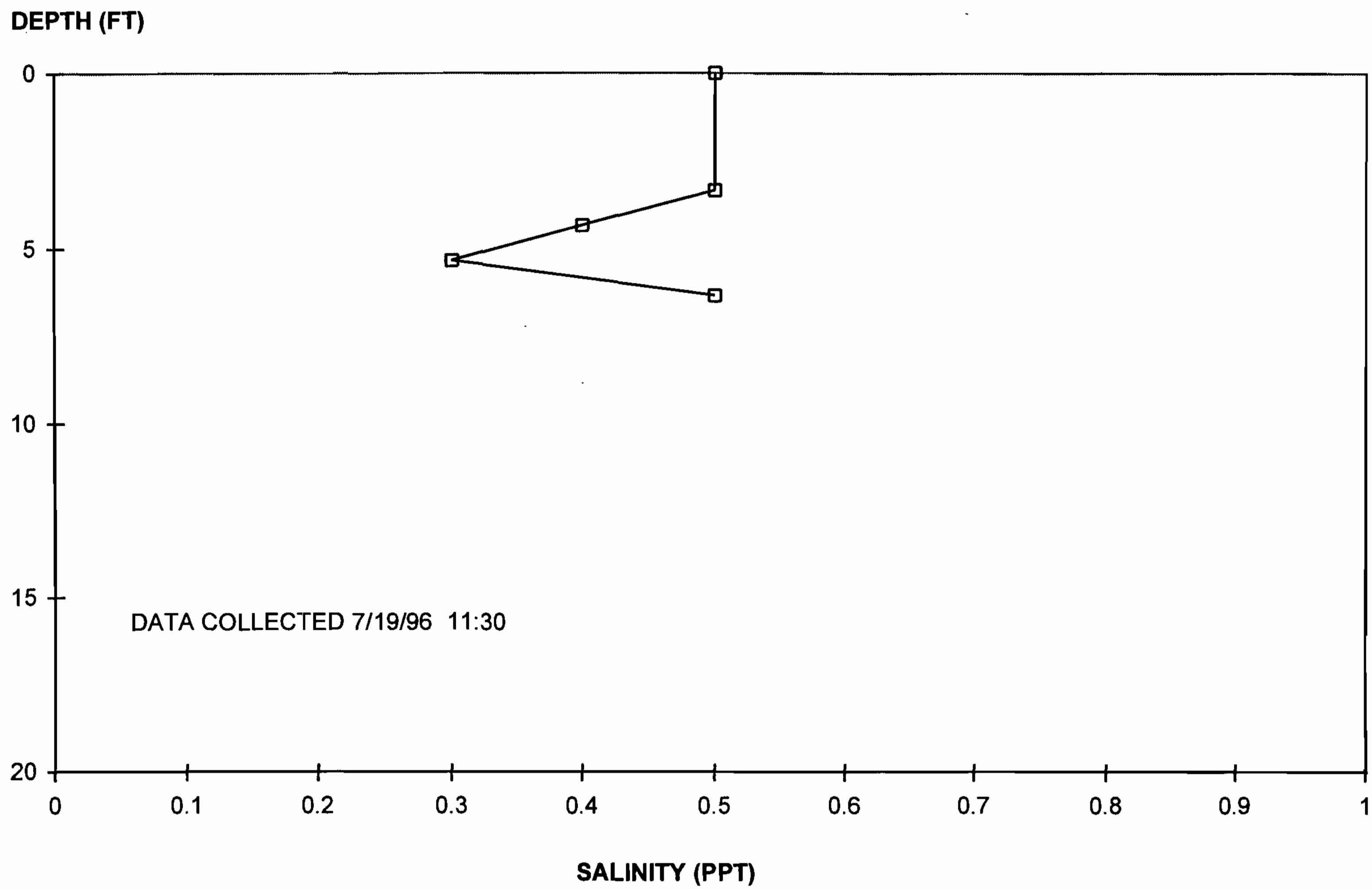
Figure
10.5.4–325



CITY OF TALLAHASSEE

LOCATION 11
WATER COLUMN SALINITY PROFILE
AT UNITS 6/7 DISCHARGE, PRIOR TO BEND IN DISCHARGE CANAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

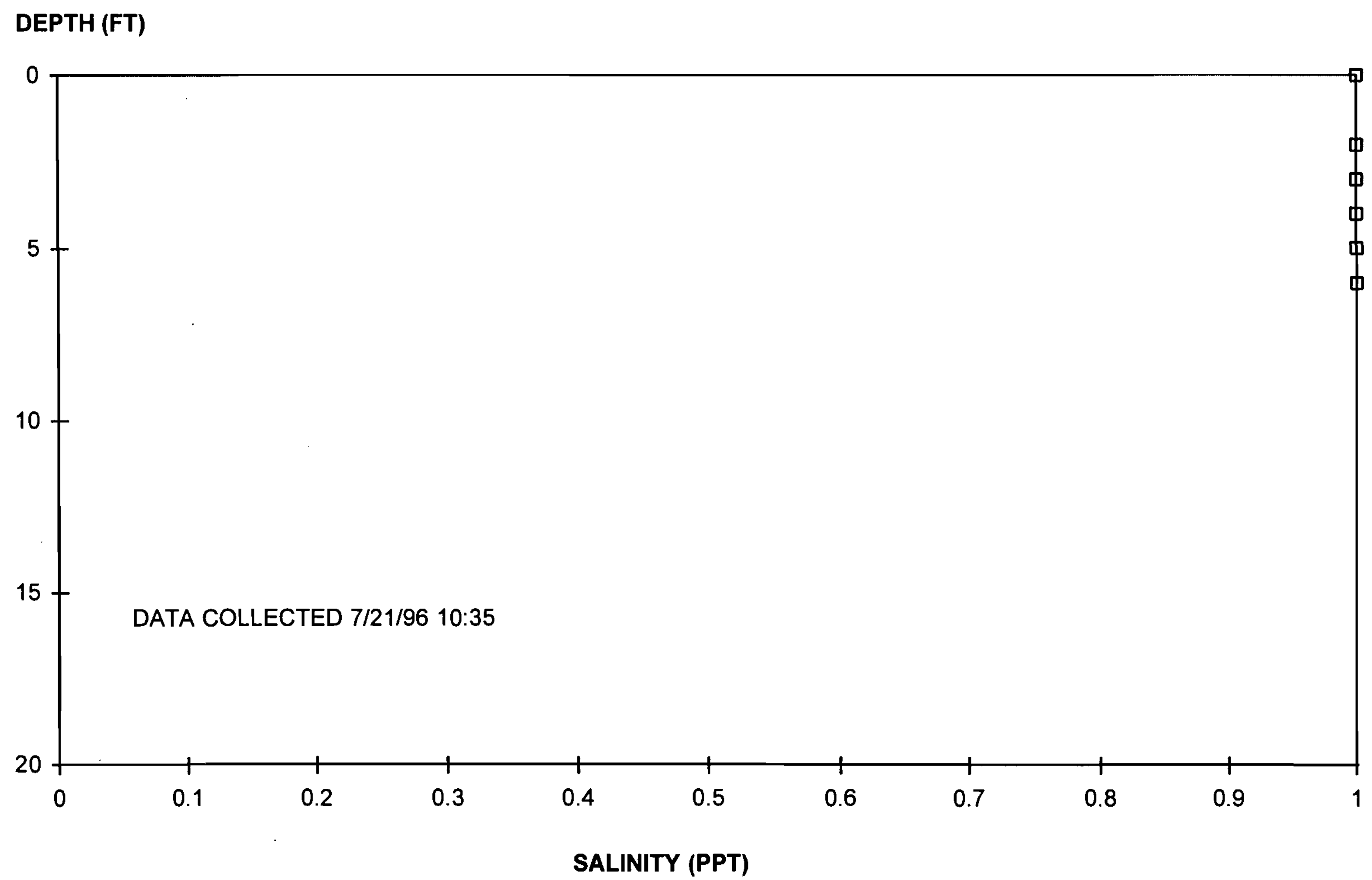
Figure
10.5.4–326



CITY OF TALLAHASSEE

LOCATION 12
WATER COLUMN SALINITY PROFILE
AT UNITS 6/7 DISCHARGE, OUTLET OF DISCHARGE CANAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

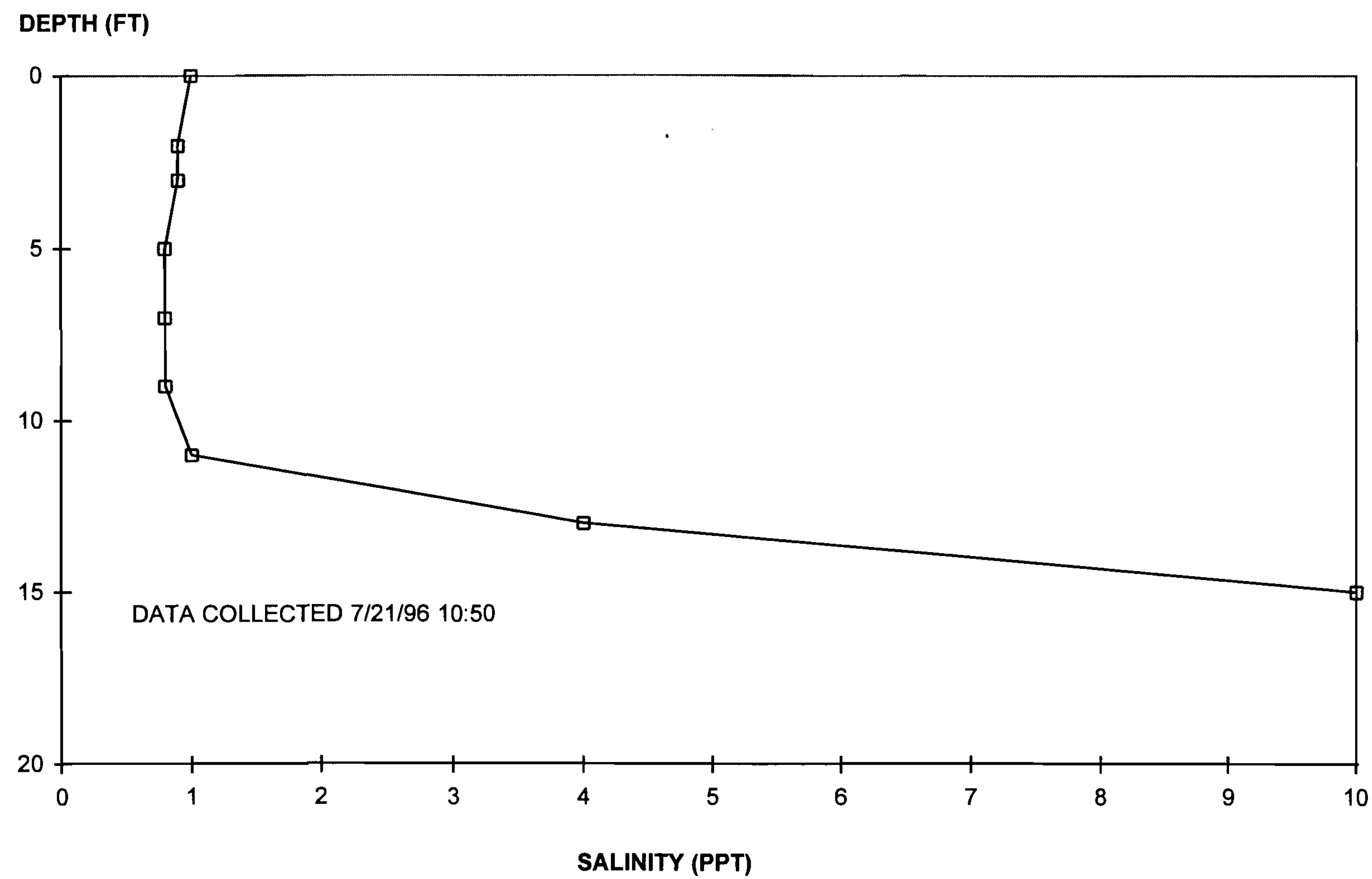
Figure
10.5.4-327



CITY OF TALLAHASSEE

LOCATION 12
WATER COLUMN SALINITY PROFILE
AT UNITS 6/7 DISCHARGE, OUTLET OF DISCHARGE CANAL
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

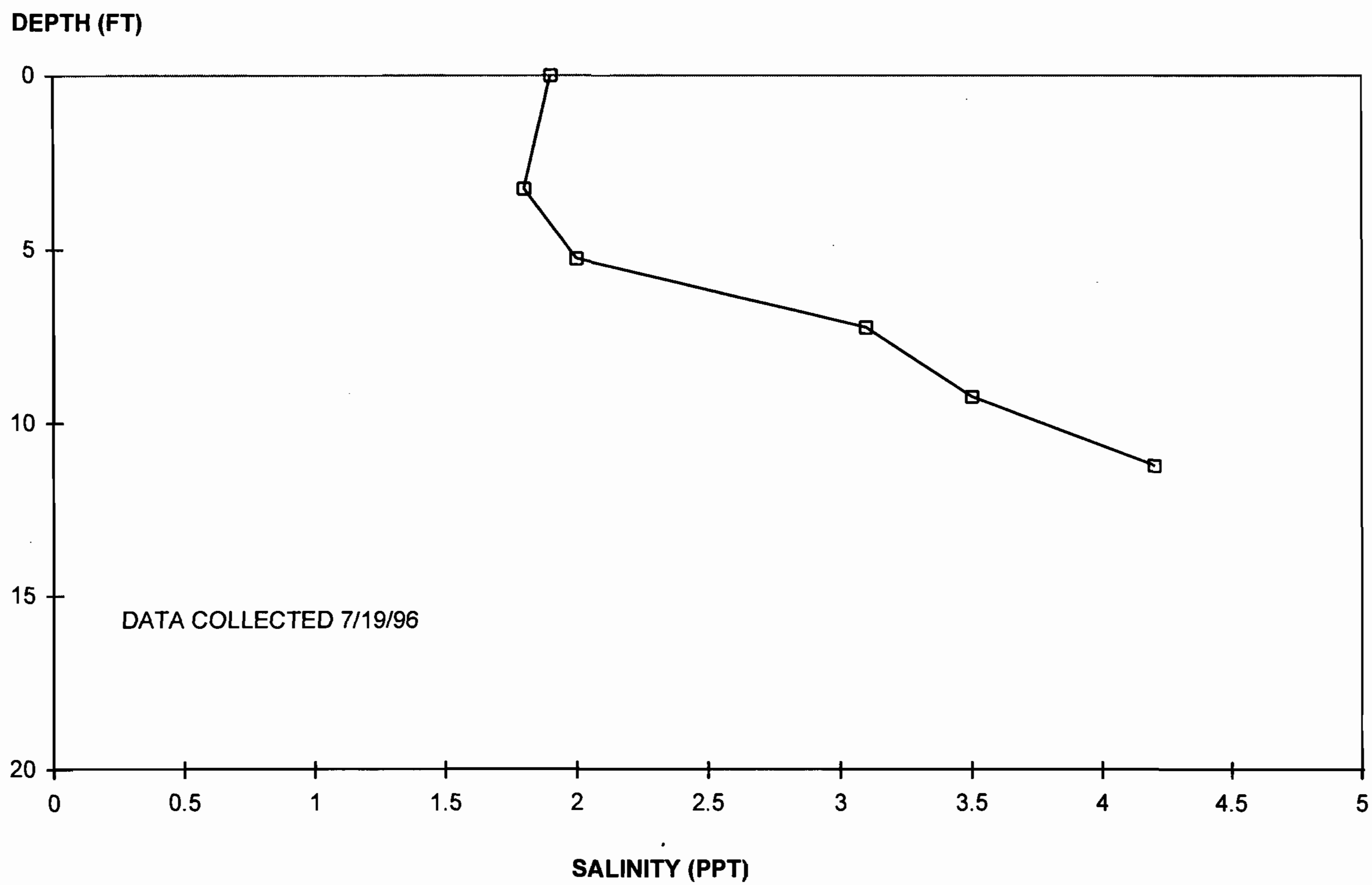
Figure
10.5.4–328



CITY OF TALLAHASSEE

LOCATION 12
WATER COLUMN SALINITY PROFILE
AT UNITS 6/7 DISCHARGE, EAST OF DISCHARGE CANAL, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

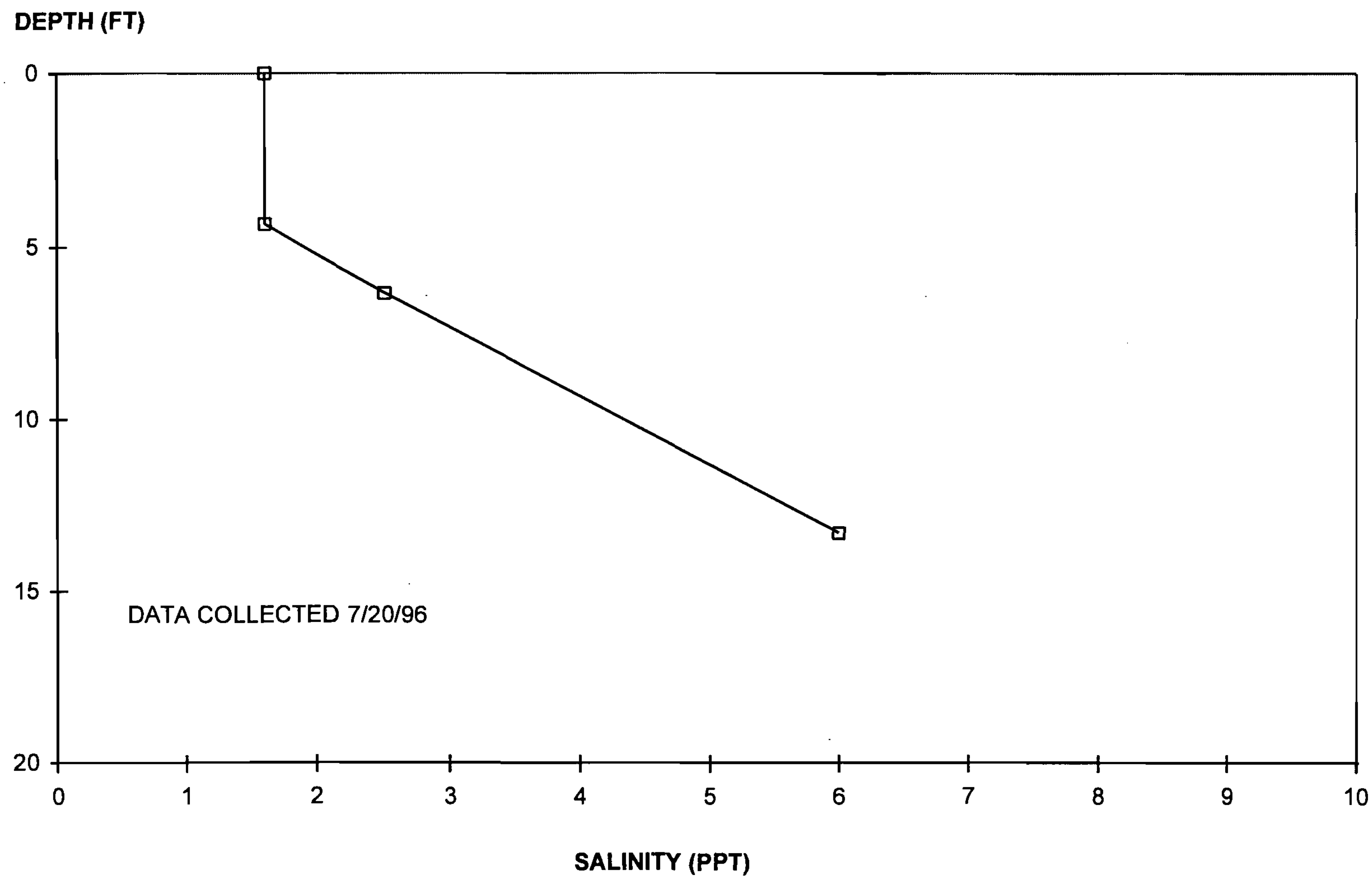
Figure
10.5.4–329



CITY OF TALLAHASSEE

LOCATION 13
WATER COLUMN SALINITY PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF ST. MARKS SEWAGE DISCHARGE, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

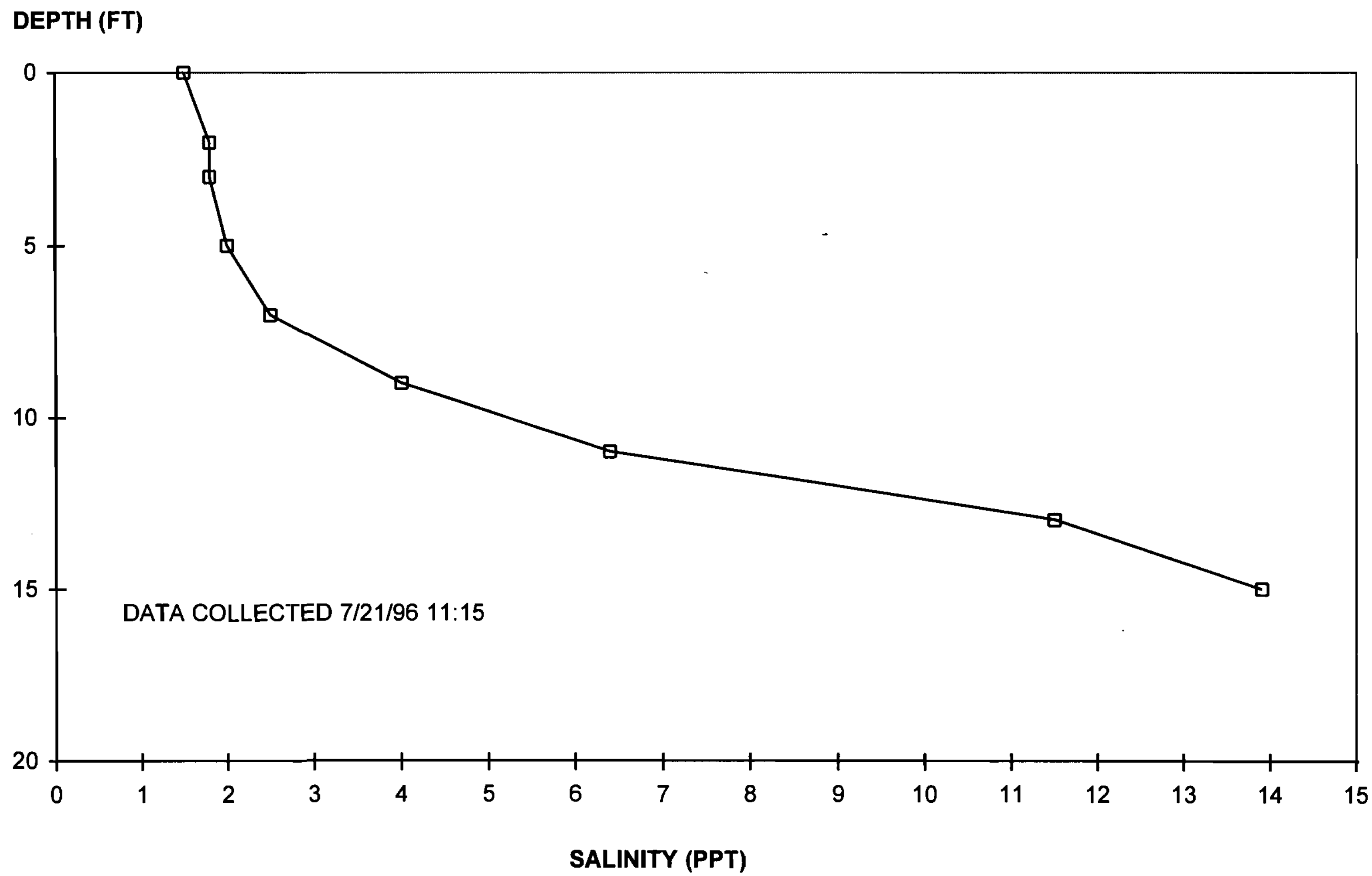
Figure
10.5.4–330



CITY OF TALLAHASSEE

LOCATION 13
WATER COLUMN SALINITY PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF ST. MARKS SEWAGE TRTMNT FACILITY DISCHARGE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

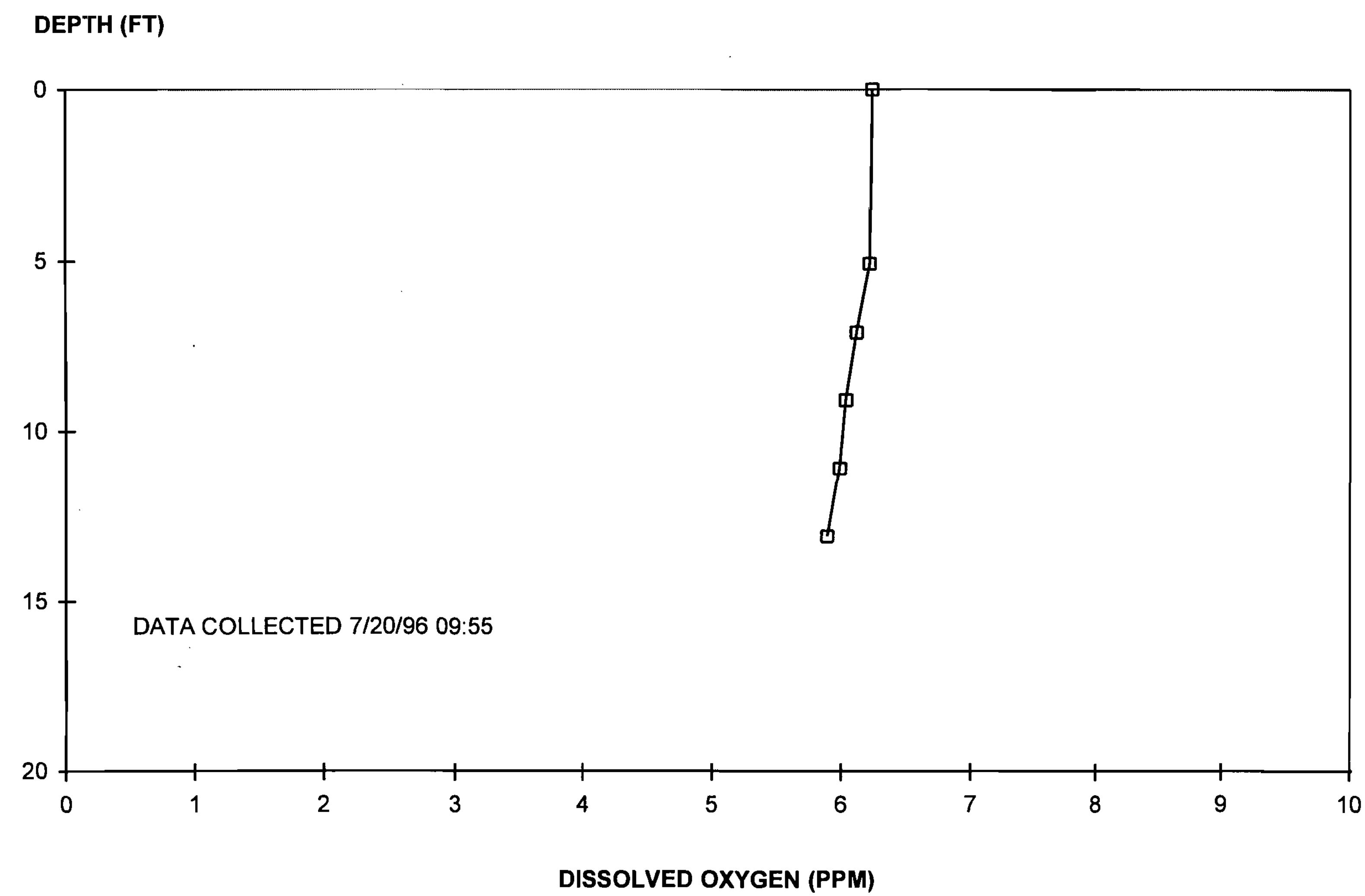
Figure
10.5.4–331



CITY OF TALLAHASSEE

LOCATION 13
WATER COLUMN SALINITY PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF ST. MARKS SEWAGE DISCHARGE, MID-RIVER
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

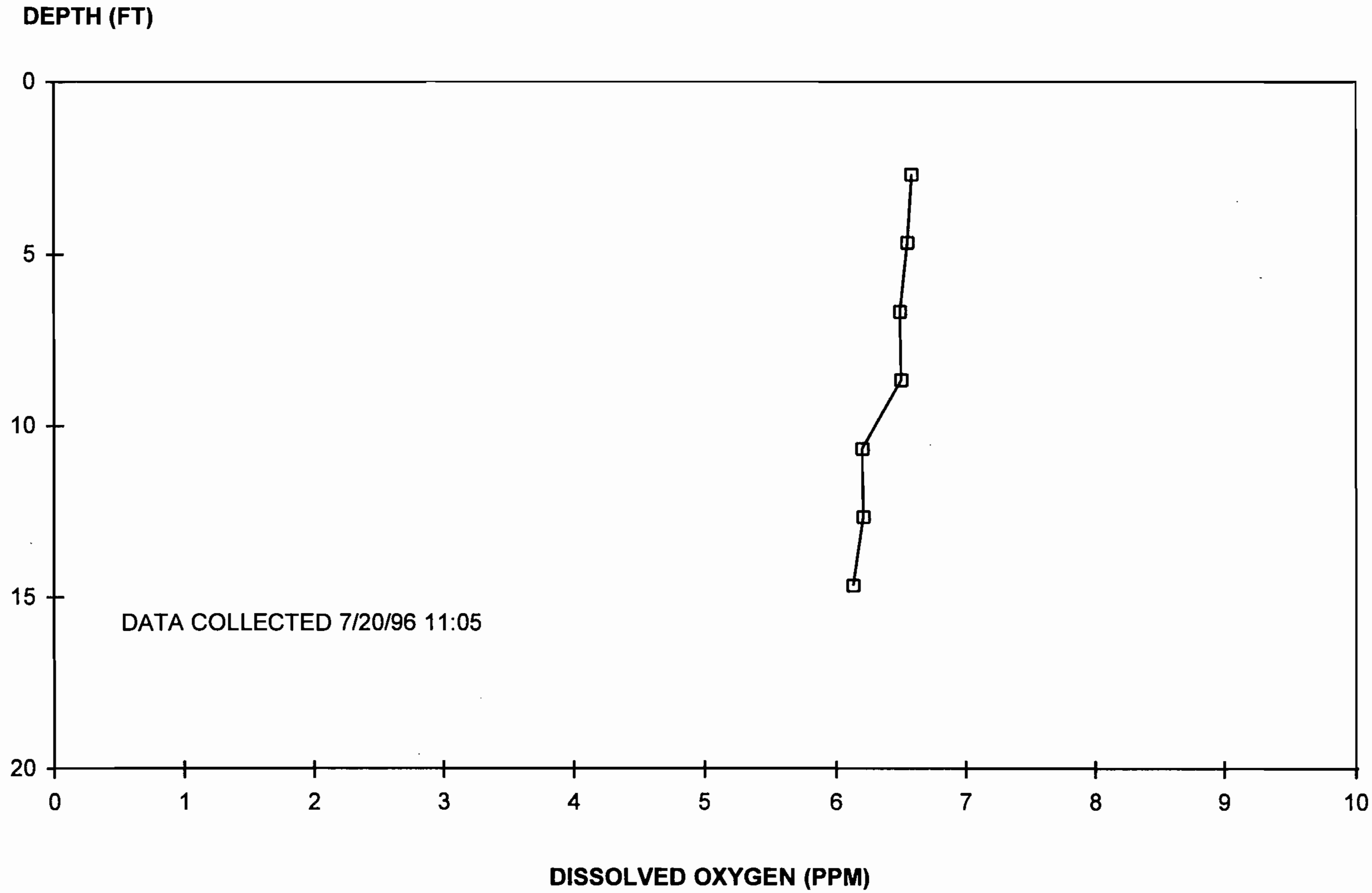
Figure
10.5.4-332



CITY OF TALLAHASSEE

LOCATION 1
WATER COLUMN DO PROFILE
AT ST. MARKS RIVER, UPSTREAM OF PLANT INFLUENCES
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

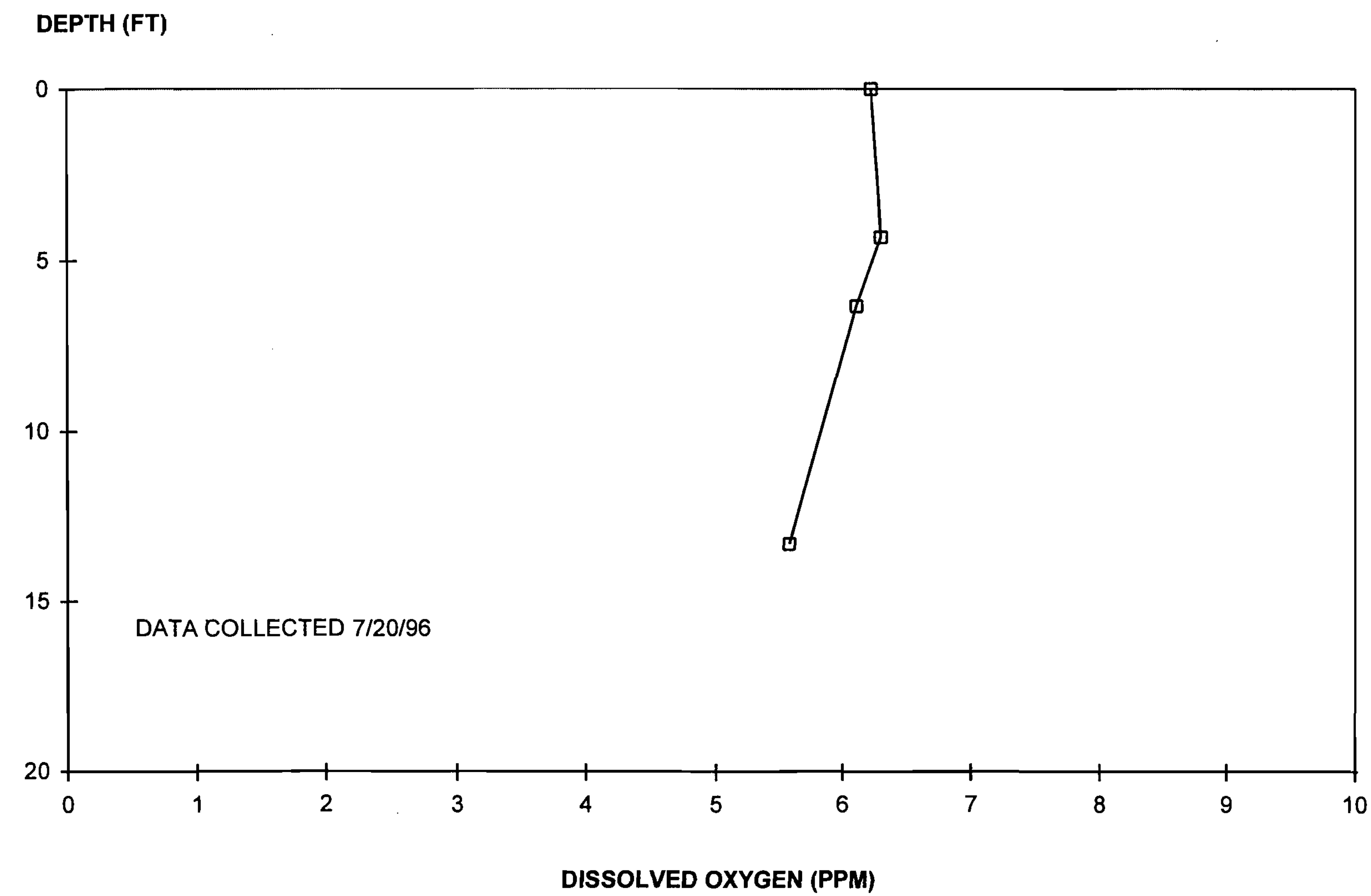
Figure
10.5.4-333



CITY OF TALLAHASSEE

LOCATION 7
WATER COLUMN DO PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF UNIT 5 DISCHARGE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

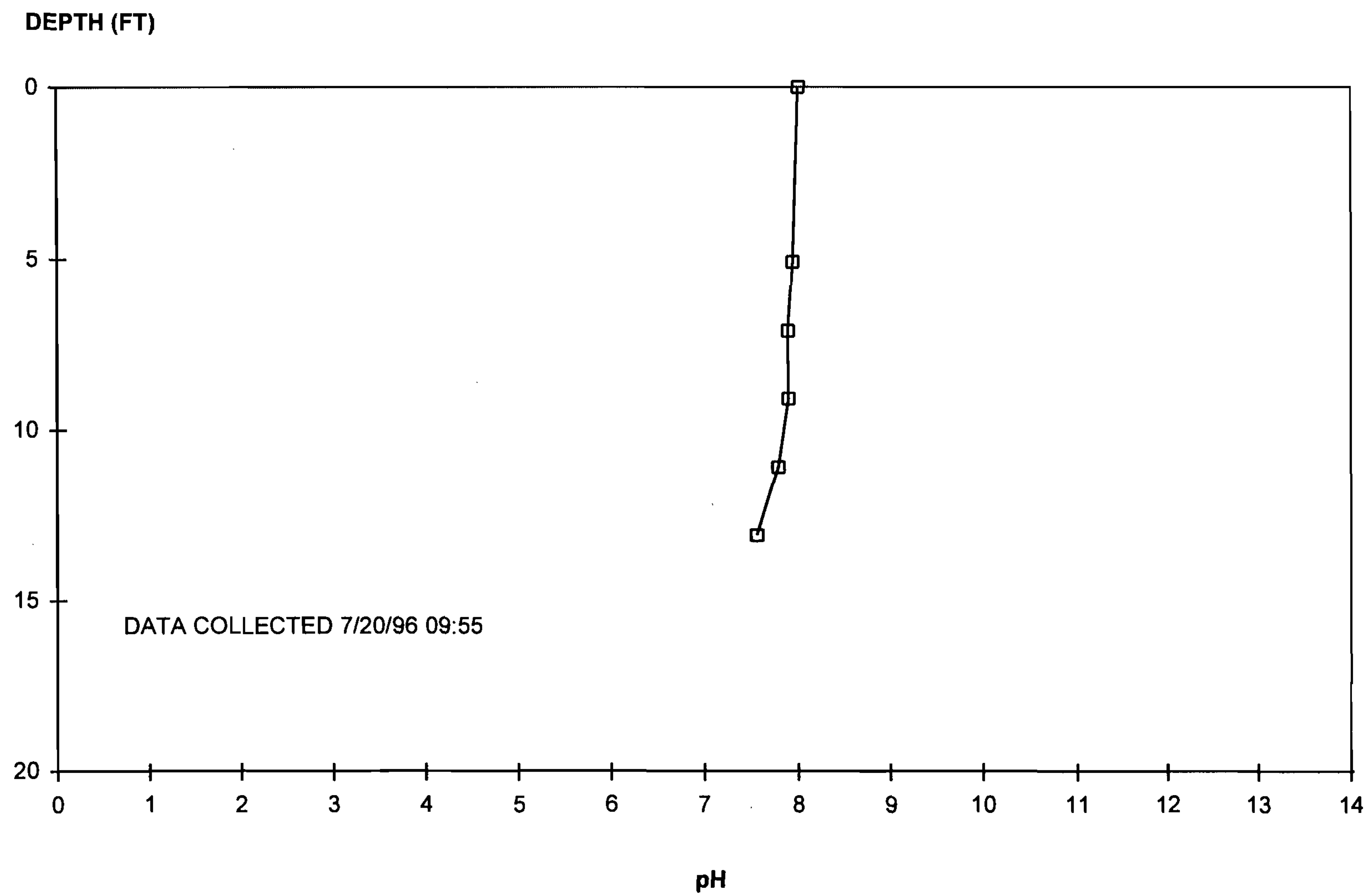
Figure
10.5.4–334



CITY OF TALLAHASSEE

LOCATION 13
WATER COLUMN DO PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF ST. MARKS SEWAGE TRTMNT FACILITY DISCHARGE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

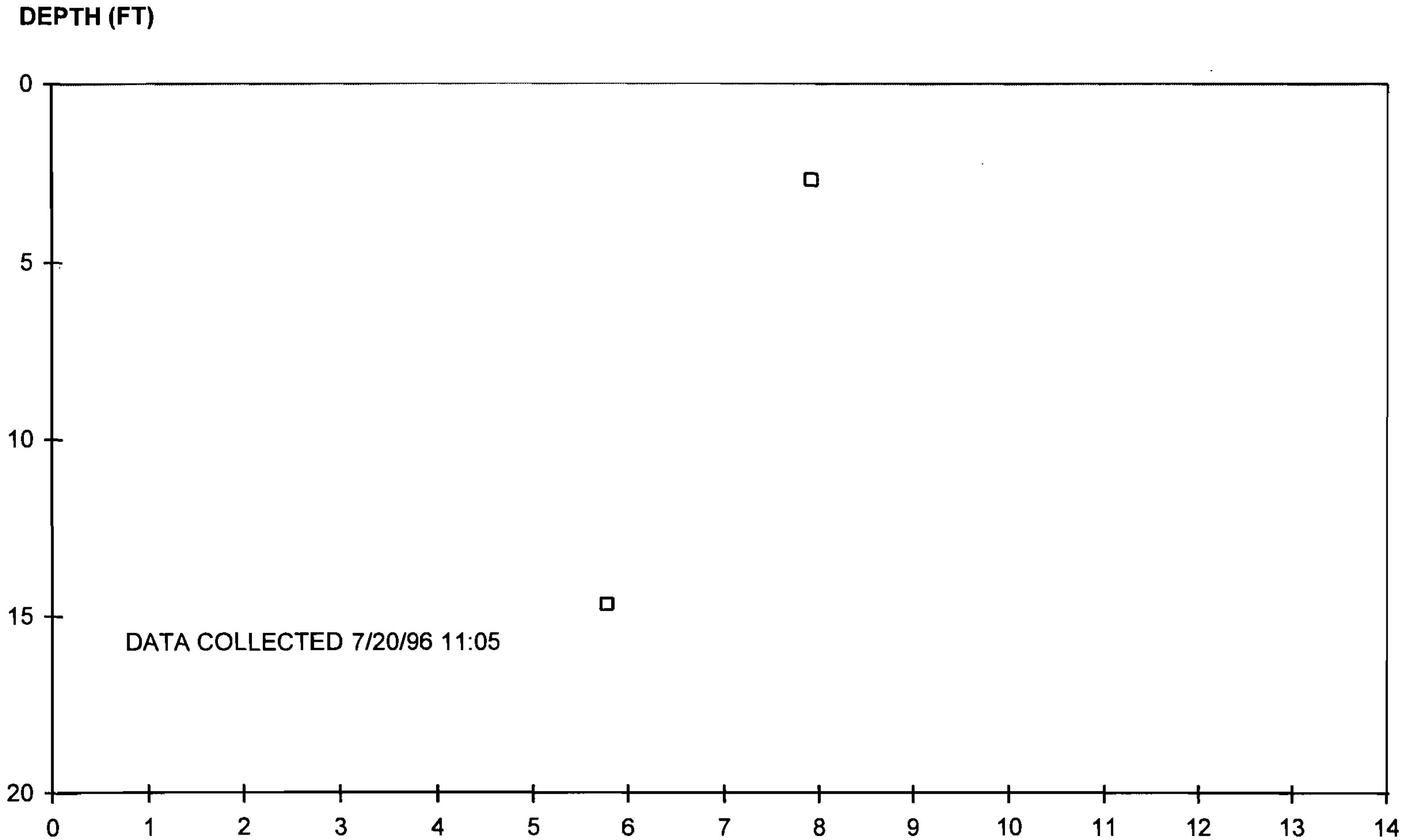
Figure
10.5.4-335



CITY OF TALLAHASSEE

LOCATION 1
WATER COLUMN pH PROFILE
AT ST. MARKS RIVER, UPSTREAM OF PLANT INFLUENCES
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

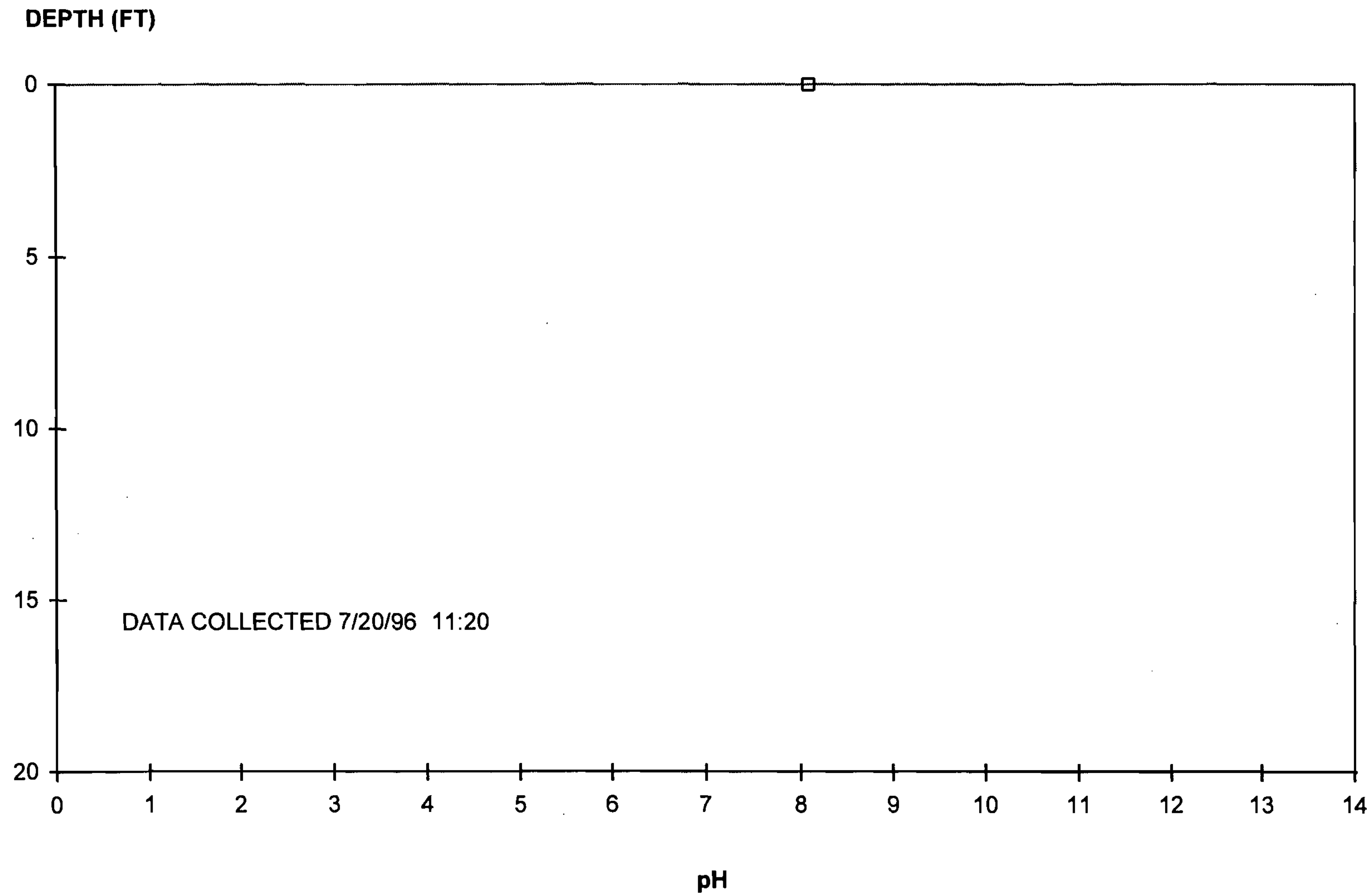
Figure
10.5.4–336



CITY OF TALLAHASSEE

LOCATION 7
WATER COLUMN pH PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF UNIT 5 DISCHARGE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

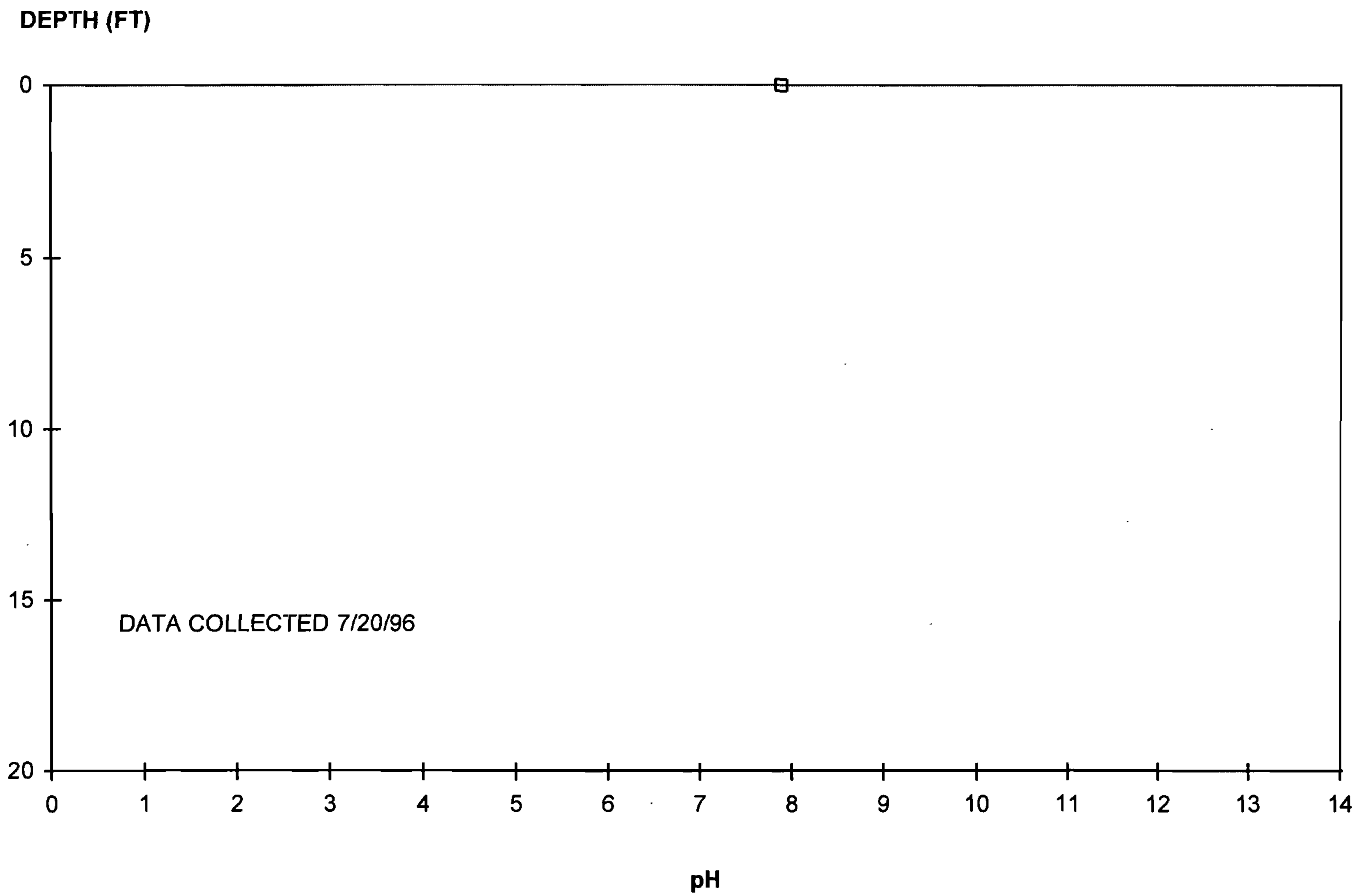
Figure
10.5.4–337



CITY OF TALLAHASSEE

LOCATION 8
WATER COLUMN pH PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF UNIT 6/7 DISCHARGE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

Figure
10.5.4-338



CITY OF TALLAHASSEE

LOCATION 13
WATER COLUMN pH PROFILE
AT ST. MARKS RIVER, DOWNSTREAM OF ST. MARKS SEWAGE TRTMNT FACILITY DISCHARGE
PURDOM UNIT 8 PROJECT – St MARKS, FLORIDA

Figure
10.5.4–339

DATE	STATION NUMBER	DATE	TIME	TEMPERATURE WATER (DEG C) (00010)	LENGTH OF EXPOSURE (DAYS) (00022)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, IN CUBIC FEET PER SECOND (00060)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	TURBIDITY (JCU) (00070)
AUG 1959											
06...	02326900	590806	1230	--	--	1028	1028	--	724	5.51	--
MAY 1966											
19...	02326900	660519	--	--	--	--	--	6.2	--	--	--
JUN 1967											
01...	02326900	670601	--	20.5	--	--	--	396	--	--	--
MAY 1968											
21...	02326900	680521	1600	25.0	--	--	--	360	--	4.83	--
JUN 1969											
05...	02326900	690605	1015	22.0	--	--	--	382	--	4.50	--
MAY 1970											
08...	02326900	700508	1600	27.0	--	--	--	447	--	5.32	13
MAY 1971											
31...	02326900	710531	1020	20.0	--	--	--	406	--	5.12	--
31...	02326900	710531	1020	20.0	--	--	--	406	--	5.12	2
APR 1973											
05...	02326900	730405	1300	--	--	--	--	--	4650	11.74	--
05...	02326900	730405	1300	--	--	--	--	--	4650	11.74	15
NOV											
15...	02326900	731115	1205	19.0	--	--	--	--	--	--	--
JAN 1974											
11...	02326900	740111	0935	19.0	--	--	--	--	--	--	--
FEB											
25...	02326900	740225	1305	16.0	--	--	--	--	--	--	--
MAY											
09...	02326900	740509	1305	22.0	--	--	--	--	--	--	--
JUN											
28...	02326900	740628	1140	21.0	--	--	--	--	--	--	--
SEP											
11...	02326900	740911	1052	22.5	--	--	--	--	--	--	--
JAN 1978											
11...	02326900	780111	1145	15.0	--	--	--	--	667	5.16	1
FEB											
14...	02326900	780214	1050	12.0	--	--	--	--	690	5.27	1
MAR											
07...	02326900	780307	1100	--	--	1028	1028	--	--	--	--
07...	02326900	780307	1100	17.0	--	--	--	--	845	5.63	2
APR											
14...	02326900	780414	1342	22.5	--	--	--	--	655	5.34	2
MAY											
15...	02326900	780515	1500	--	--	1028	1028	--	--	--	--
15...	02326900	780515	1500	23.0	--	--	--	--	670	5.50	2
JUN											
08...	02326900	780608	1130	--	--	1028	1028	--	--	--	--
08...	02326900	780608	1130	24.0	--	--	--	--	680	5.60	1
JUL											
20...	02326900	780720	1220	--	--	1028	1028	--	--	--	--
20...	02326900	780720	1220	23.0	--	--	80010	--	675	5.70	--
OCT											
31...	02326900	781031	1400	--	--	1028	1028	--	--	--	--
31...	02326900	781031	1400	22.0	--	--	80010	--	583	5.25	--
DEC											
06...	02326900	781206	1355	19.0	--	--	80010	--	520	5.10	--
JAN 1979											
10...	02326900	790110	1400	15.5	--	--	80010	--	660	5.41	--
31...	02326900	790131	1345	--	--	1028	1028	--	--	--	--
31...	02326900	790131	1345	15.0	21	--	80010	--	961	6.00	--
FEB											
27...	02326900	790227	1405	17.5	--	--	80010	--	896	5.88	--
MAR											
26...	02326900	790326	1445	19.5	--	--	80010	--	710	5.51	--
APR											
23...	02326900	790423	1345	16.0	--	--	80010	--	820	5.73	--
MAY											
12...	02326900	790512	1300	--	--	1028	1028	--	--	--	--
JUN											
04...	02326900	790604	1535	--	--	1028	1028	--	--	--	--
04...	02326900	790604	1535	23.5	--	--	80010	--	855	5.80	--
28...	02326900	790628	1600	--	--	1028	1028	--	--	--	--
28...	02326900	790628	1600	22.0	--	--	80010	--	755	5.60	--

DISTRICT CODE 12 UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 9-24-96

02326900 - ST. MARKS RIVER NEAR NEWPORT, FLA. WATER-QUALITY DATA

DATE	TUR- BID- ITY (NTU) (00076)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	BICAR- BONATE WATER WH FET FIELD MG/L AS HCO3 (00440)	CAR- BONATE WATER WH FET FIELD MG/L AS CO3 (00445)	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M (00572)	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M (00573)
AUG 1959												
06...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 1966												
19...	--	5	235	--	--	7.4	8.5	110	130	--	--	--
JUN 1967												
01...	--	10	252	4.8	53	7.8	3.6	118	140	0	--	--
MAY 1968												
21...	--	5	271	6.5	77	7.7	5.1	131	160	0	--	--
JUN 1969												
05...	--	0	275	8.2	93	7.3	13	131	160	0	--	--
MAY 1970												
08...	--	10	268	8.1	100	8.0	2.4	125	150	0	--	--
MAY 1971												
31...	--	--	--	6.3	68	--	--	--	--	--	--	--
31...	--	--	270	6.3	68	--	--	--	--	--	--	--
APR 1973												
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
15...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1974												
11...	--	--	--	--	--	--	--	--	--	--	--	--
FEB												
25...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
09...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
28...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
11...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1978												
11...	--	--	250	8.0	79	7.6	2.2	45	55	--	--	--
FEB												
14...	--	--	240	9.0	83	7.4	7.6	98	120	--	--	--
MAR												
07...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	220	7.9	81	7.6	4.0	82	100	--	--	--
APR												
14...	--	--	260	8.3	95	8.0	2.2	110	140	--	--	--
MAY												
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	242	7.9	91	7.6	5.6	110	140	--	--	--
JUN												
08...	--	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	235	5.6	66	7.6	5.6	110	140	--	--	--
JUL												
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	1.0	--	258	6.0	69	7.8	--	120	--	--	--	--
OCT												
31...	--	--	--	--	--	--	--	--	--	--	--	--
31...	1.0	--	285	8.7	--	8.2	--	120	--	--	--	--
DEC												
06...	1.0	--	275	8.8	--	8.1	--	120	--	--	--	--
JAN 1979												
10...	2.0	--	200	9.0	--	7.3	--	89	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--
31...	3.0	--	155	8.8	--	7.2	--	63	--	--	0.080	0.160
FEB												
27...	2.0	--	205	8.4	--	7.6	--	81	--	--	--	--
MAR												
26...	1.0	--	232	12.8	--	8.4	--	100	--	--	--	--
APR												
23...	2.0	--	205	7.0	--	7.7	--	94	--	--	0.470	0.630
MAY												
12...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	1.0	--	220	7.3	--	8.0	2.1	110	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	0.0	--	270	8.6	--	7.8	--	120	--	--	--	--

02326900 - ST. MARKS RIVER NEAR NEWPORT, FLA. WATER-QUALITY DATA

DATE	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N) (00624)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	PHOS-PHATE, TOTAL (MG/L AS PO4) (00650)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
AUG 1959												
06...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 1966												
19...	--	--	--	--	--	--	--	--	--	--	0.09	--
JUN 1967												
01...	--	--	--	--	--	--	--	--	--	--	0.10	--
MAY 1968												
21...	--	--	--	--	--	--	--	--	--	0.03	--	--
JUN 1969												
05...	--	--	--	--	--	--	--	--	--	0.09	--	--
MAY 1970												
08...	--	0.14	--	--	--	--	--	--	--	0.15	0.10	--
MAY 1971												
31...	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	0.16	--	--	--	--	--	--	--	--	0.10	--
APR 1973												
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	0.73	0.040	0.012	0.00	--	--	--	--	0.12	--	0.042
NOV												
15...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1974												
11...	--	--	--	--	--	--	--	--	--	--	--	--
FEB												
25...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
09...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
28...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
11...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1978												
11...	--	--	<0.010	--	0.090	0.09	--	--	0.090	--	--	0.040
FEB												
14...	0.39	0.31	<0.010	--	0.080	0.09	0.22	0.31	0.080	--	--	0.030
MAR												
07...	--	--	--	--	--	--	--	--	--	--	--	--
07...	0.42	0.35	0.010	--	0.060	0.29	0.07	0.36	0.060	--	--	0.030
APR												
14...	0.31	0.22	0.010	--	0.080	0.21	0.02	0.23	0.080	--	--	0.030
MAY												
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	0.35	0.27	<0.010	--	0.080	0.18	0.09	0.27	0.080	--	--	0.040
JUN												
08...	--	--	--	--	--	--	--	--	--	--	--	--
08...	0.40	0.32	<0.010	--	0.080	0.17	0.15	0.32	0.080	--	--	0.040
JUL												
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	0.30	0.16	0.020	--	0.120	--	0.0	0.18	0.120	--	--	0.040
OCT												
31...	--	--	--	--	--	--	--	--	--	--	--	--
31...	0.10	0.08	0.010	--	0.010	0.18	0.0	0.09	0.010	--	--	0.050
DEC												
06...	0.18	0.08	0.010	--	0.090	0.06	0.03	0.09	0.090	--	--	0.050
JAN 1979												
10...	0.31	0.24	<0.010	--	0.070	0.29	0.0	0.24	0.070	--	--	0.040
31...	--	--	--	--	--	--	--	--	--	--	--	--
31...	0.24	0.19	0.010	--	0.040	0.25	0.0	0.20	0.040	--	--	0.030
FEB												
27...	0.22	0.19	<0.010	--	0.030	0.20	0.0	0.19	0.030	--	--	0.030
MAR												
26...	0.33	0.32	<0.010	--	0.010	0.22	0.10	0.32	0.010	--	--	0.030
APR												
23...	0.06	0.0	<0.010	--	0.060	0.37	0.0	<0.10	0.060	0.12	--	0.040
MAY												
12...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	0.22	0.17	<0.010	--	0.050	0.11	0.06	0.17	0.050	0.12	--	0.040
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	0.17	0.07	0.010	--	0.090	0.03	0.05	0.08	0.090	0.12	--	0.040

DATE	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORGANIC TOTAL (MG/L AS P) (00670)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)
AUG 1959											
06...	--	--	--	--	--	--	--	--	--	--	--
MAY 1966											
19...	--	--	--	--	--	120	8	36	6.9	3.4	0.1
JUN 1967											
01...	--	--	--	--	--	110	6	32	7.2	3.4	0.1
MAY 1968											
21...	--	--	--	--	--	140	5	41	8.1	3.5	0.1
JUN 1969											
05...	--	--	--	--	--	140	10	43	8.1	3.5	0.1
MAY 1970											
08...	--	--	--	--	--	140	11	42	7.4	4.9	0.2
MAY 1971											
31...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
APR 1973											
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	0.00	--	--	--	--	--	--	--	--	--
NOV											
15...	--	--	--	--	--	--	--	--	--	--	--
JAN 1974											
11...	--	--	--	--	--	--	--	--	--	--	--
FEB											
25...	--	--	--	--	--	--	--	--	--	--	--
MAY											
09...	--	--	--	--	--	--	--	--	--	--	--
JUN											
28...	--	--	--	--	--	--	--	--	--	--	--
SEP											
11...	--	--	--	--	--	--	--	--	--	--	--
JAN 1978											
11...	0.040	--	--	9.0	--	120	79	38	7.0	3.5	0.1
FEB											
14...	0.030	--	2.4	--	--	120	20	37	6.3	3.5	0.1
MAR											
07...	--	--	--	--	--	--	--	--	--	--	--
07...	0.020	--	10	--	--	95	13	29	5.5	3.1	0.1
APR											
14...	0.020	--	--	3.1	0.20	120	6	37	6.8	3.3	0.1
MAY											
15...	--	--	--	--	--	--	--	--	--	--	--
15...	0.020	--	10	--	--	150	30	35	14	3.4	0.1
JUN											
08...	--	--	--	--	--	--	--	--	--	--	--
08...	0.020	--	8.5	--	--	130	14	39	7.6	3.5	0.1
JUL											
20...	--	--	--	--	--	--	--	--	--	--	--
20...	0.030	--	--	2.7	0.20	130	7	38	7.7	3.4	0.1
OCT											
31...	--	--	--	--	--	--	--	--	--	--	--
31...	0.040	--	--	15	0.40	140	21	42	8.7	3.3	0.1
DEC											
06...	0.040	--	3.2	--	--	130	14	41	7.6	3.5	0.1
JAN 1979											
10...	0.030	--	8.8	--	--	110	19	33	6.2	3.2	0.1
31...	--	--	--	--	--	--	--	--	--	--	--
31...	0.020	--	--	18	0.20	75	12	23	4.3	2.8	0.1
FEB											
27...	0.020	--	9.8	--	--	90	9	28	4.9	3.0	0.1
MAR											
26...	0.030	--	4.5	--	--	110	10	34	6.0	3.1	0.1
APR											
23...	0.030	--	--	7.0	0.0	100	6	31	5.5	3.1	0.1
MAY											
12...	--	--	--	--	--	--	--	--	--	--	--
JUN											
04...	--	--	--	--	--	--	--	--	--	--	--
04...	0.030	--	22	--	--	110	3	35	6.3	3.2	0.1
28...	--	--	--	--	--	--	--	--	--	--	--
28...	0.040	--	8.3	--	--	130	12	40	7.8	3.5	0.1

L

DATE	SODIUM PERCENT (00932)	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA) (00933)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	ARSENIC SUS- PENDED TOTAL (UG/L AS AS) (01001)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)
AUG 1959											
06...	--	--	--	--	--	--	--	--	--	--	--
MAY 1966											
19...	6	--	0.40	5.0	8.4	0.30	11	--	--	--	--
JUN 1967											
01...	6	--	0.50	6.0	8.8	0.30	11	--	--	--	--
MAY 1968											
21...	5	--	0.40	5.0	8.2	0.20	13	--	--	--	--
JUN 1969											
05...	5	--	0.60	6.0	8.8	0.20	13	--	--	--	--
MAY 1970											
08...	7	--	0.50	5.0	0.20	0.30	11	--	--	--	--
MAY 1971											
31...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	12	--	--	--	--
APR 1973											
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	2.6	--	--	--	--
NOV											
15...	--	--	--	--	--	--	--	--	--	--	--
JAN 1974											
11...	--	--	--	--	--	--	--	--	--	--	--
FEB											
25...	--	--	--	--	--	--	--	--	--	--	--
MAY											
09...	--	--	--	--	--	--	--	--	--	--	--
JUN											
28...	--	--	--	--	--	--	--	--	--	--	--
SEP											
11...	--	--	--	--	--	--	--	--	--	--	--
JAN 1978											
11...	6	--	0.60	5.5	8.8	0.10	12	1	<1	1	<100
FEB											
14...	6	--	0.50	8.0	11	0.10	9.8	--	--	--	--
MAR											
07...	--	--	--	--	--	--	--	--	--	--	--
07...	7	--	0.40	5.3	9.6	0.10	9.2	--	--	--	--
APR											
14...	6	--	0.60	5.2	8.6	0.10	11	<1	<1	<1	<100
MAY											
15...	--	--	--	--	--	--	--	--	--	--	--
15...	5	--	0.60	5.3	10	0.20	11	--	--	--	--
JUN											
08...	--	--	--	--	--	--	--	--	--	--	--
08...	6	--	0.50	5.1	8.2	0.20	12	--	--	--	--
JUL											
20...	--	--	--	--	--	--	--	--	--	--	--
20...	5	--	0.60	5.2	7.2	0.10	12	1	<1	1	<100
OCT											
31...	--	--	--	--	--	--	--	--	--	--	--
31...	5	--	0.60	5.2	8.2	0.10	13	<1	--	1	<100
DEC											
06...	5	--	0.50	5.4	11	0.10	13	--	--	--	--
JAN 1979											
10...	6	--	0.40	5.5	5.4	0.10	11	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
31...	7	--	0.40	5.1	5.8	<0.10	8.1	1	--	1	<100
FEB											
27...	7	--	0.40	5.0	5.6	0.10	7.7	--	--	--	--
MAR											
26...	6	--	0.50	5.3	6.4	0.10	8.0	--	--	--	--
APR											
23...	6	--	0.50	5.5	8.1	0.10	8.9	1	--	3	<100
MAY											
12...	--	--	--	--	--	--	--	--	--	--	--
JUN											
04...	--	--	--	--	--	--	--	--	--	--	--
04...	6	3.6	0.40	5.2	7.8	0.10	10	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	5	--	0.40	5.1	6.8	0.10	12	--	--	--	--

DATE	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA) (01006)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD) (01026)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR) (01031)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO) (01036)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)
AUG 1959											
06...	--	--	--	--	--	--	--	--	--	--	--
MAY 1966											
19...	--	--	--	--	--	--	--	--	--	--	--
JUN 1967											
01...	--	--	--	--	--	--	--	--	--	--	--
MAY 1968											
21...	--	--	--	--	--	--	--	--	--	--	--
JUN 1969											
05...	--	--	--	--	--	--	--	--	--	--	--
MAY 1970											
08...	--	--	--	--	--	--	--	--	--	--	--
MAY 1971											
31...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
APR 1973											
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
NOV											
15...	--	--	--	--	--	--	--	--	--	--	--
JAN 1974											
11...	--	--	--	--	--	--	--	--	--	--	--
FEB											
25...	--	--	--	--	--	--	--	--	--	--	--
MAY											
09...	--	--	--	--	--	--	--	--	--	--	--
JUN											
28...	--	--	--	--	--	--	--	--	--	--	--
SEP											
11...	--	--	--	--	--	--	--	--	--	--	--
JAN 1978											
11...	0.0	<100	<2.0	0	ND	ND	<10	<20	ND	0	ND
FEB											
14...	--	--	--	--	--	--	--	--	--	--	--
MAR											
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
APR											
14...	0.0	<100	--	--	--	2.0	<8	<20	ND	0	ND
MAY											
15...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
JUN											
08...	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
JUL											
20...	--	--	--	--	--	--	--	--	--	--	--
20...	0.0	<100	--	--	--	ND	10	<20	ND	0	ND
OCT											
31...	--	--	--	--	--	--	--	--	--	--	--
31...	0.0	<100	ND	1	<2	ND	10	<20	ND	0	ND
DEC											
06...	--	--	--	--	--	--	--	--	--	--	--
JAN 1979											
10...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
31...	0.0	<100	<2.0	0	<2	<20	10	20	ND	0	ND
FEB											
27...	--	--	--	--	--	--	--	--	--	--	--
MAR											
26...	--	--	--	--	--	--	--	--	--	--	--
APR											
23...	0.0	<100	ND	0	ND	<20	10	20	ND	0	ND
MAY											
12...	--	--	--	--	--	--	--	--	--	--	--
JUN											
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--

DATE	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU) (01041)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE) (01044)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB) (01050)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN) (01054)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)
AUG 1959											
06...	--	--	--	--	--	--	--	--	--	--	--
MAY 1966											
19...	--	--	--	--	--	20	--	--	--	--	--
JUN 1967											
01...	--	--	--	--	--	30	--	--	--	--	--
MAY 1968											
21...	--	--	--	--	--	10	--	--	--	--	--
JUN 1969											
05...	--	--	--	--	--	0	--	--	--	--	--
MAY 1970											
08...	--	--	--	--	--	--	--	--	--	--	--
MAY 1971											
31...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
APR 1973											
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
NOV											
15...	--	--	--	--	--	--	--	--	--	--	--
JAN 1974											
11...	--	--	--	--	--	--	--	--	--	--	--
FEB											
25...	--	--	--	--	--	--	--	--	--	--	--
MAY											
09...	--	--	--	--	--	--	--	--	--	--	--
JUN											
28...	--	--	--	--	--	--	--	--	--	--	--
SEP											
11...	--	--	--	--	--	--	--	--	--	--	--
JAN 1978											
11...	ND	2	2	--	110	50	14	0	10	0	<10
FEB											
14...	--	--	--	--	--	--	--	--	--	--	--
MAR											
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
APR											
14...	<2.0	2	3	--	110	40	--	--	--	0	<10
MAY											
15...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
JUN											
08...	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
JUL											
20...	--	--	--	--	--	--	--	--	--	--	--
20...	ND	1	<2	110	160	50	--	--	--	0	<10
OCT											
31...	--	--	--	--	--	--	--	--	--	--	--
31...	<2.0	0	<2	110	110	<10	2.0	1	3	30	30
DEC											
06...	--	--	--	--	--	--	--	--	--	--	--
JAN 1979											
10...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
31...	ND	0	ND	80	200	120	--	--	--	6	<10
FEB											
27...	--	--	--	--	--	--	--	--	--	--	--
MAR											
26...	--	--	--	--	--	--	--	--	--	--	--
APR											
23...	<2.0	0	ND	200	350	150	ND	4	4	0	<10
MAY											
12...	--	--	--	--	--	--	--	--	--	--	--
JUN											
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG) (01076)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN) (01091)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE) (01146)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)
AUG 1959											
06...	--	--	--	--	--	--	--	--	--	--	--
MAY 1966											
19...	--	--	--	--	--	--	--	--	--	--	--
JUN 1967											
01...	0	--	--	--	80	--	--	--	--	--	--
MAY 1968											
21...	0	--	--	--	0	--	--	--	--	--	--
JUN 1969											
05...	--	--	--	--	--	--	--	--	--	--	--
MAY 1970											
08...	--	--	--	--	--	--	--	--	--	--	--
MAY 1971											
31...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
APR 1973											
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
NOV											
15...	--	--	--	--	--	--	--	--	--	--	--
JAN 1974											
11...	--	--	--	--	--	--	--	--	--	--	--
FEB											
25...	--	--	--	--	--	--	--	--	--	--	--
MAY											
09...	--	--	--	--	--	--	--	--	--	--	--
JUN											
28...	--	--	--	--	--	--	--	--	--	--	--
SEP											
11...	--	--	--	--	--	--	--	--	--	--	--
JAN 1978											
11...	<10	ND	0	ND	--	<20	0	<20	<1	0	<1
FEB											
14...	--	--	--	--	--	--	--	--	--	--	--
MAR											
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
APR											
14...	<10	ND	0	ND	--	ND	10	<20	<1	0	<1
MAY											
15...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
JUN											
08...	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
JUL											
20...	--	--	--	--	--	--	--	--	--	--	--
20...	<10	ND	0	ND	--	<20	10	20	<1	0	<1
OCT											
31...	--	--	--	--	--	--	--	--	--	--	--
31...	<10	ND	0	ND	--	ND	10	<20	<1	0	<1
DEC											
06...	--	--	--	--	--	--	--	--	--	--	--
JAN 1979											
10...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
31...	4.0	ND	0	ND	--	ND	10	<20	<1	0	<1
FEB											
27...	--	--	--	--	--	--	--	--	--	--	--
MAR											
26...	--	--	--	--	--	--	--	--	--	--	--
APR											
23...	<10	ND	0	ND	--	ND	0	ND	<1	0	<1
MAY											
12...	--	--	--	--	--	--	--	--	--	--	--
JUN											
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--

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DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	PHYTO-PLANK-TON, TOTAL (CELLS PER ML) (60050)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	BIOMASS CHLORO-PHYLL RATIO PERI-PHYTON (UNITS) (70950)	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2) (70957)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2) (70958)
AUG 1959											
06...	--	--	--	--	--	--	--	--	--	--	--
MAY 1966											
19...	--	--	--	--	137	2.30	0.19	--	--	--	--
JUN 1967											
01...	--	--	--	154	140	165	0.21	--	--	--	--
MAY 1968											
21...	--	--	--	154	158	150	0.21	--	--	--	--
JUN 1969											
05...	--	--	--	165	162	170	0.22	--	--	--	--
MAY 1970											
08...	--	--	--	160	146	193	0.22	--	--	--	--
MAY 1971											
31...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
APR 1973											
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	0.038	--	--	--
NOV											
15...	--	--	--	--	--	--	--	--	--	--	--
JAN 1974											
11...	--	--	--	--	--	--	--	--	--	--	--
FEB											
25...	--	--	--	--	--	--	--	--	--	--	--
MAY											
09...	--	--	--	--	--	--	--	--	--	--	--
JUN											
28...	--	--	--	--	--	--	--	--	--	--	--
SEP											
11...	--	--	--	--	--	--	--	--	--	--	--
JAN 1978											
11...	80	190	--	149	103	268	0.20	--	--	--	--
FEB											
14...	130	230	--	136	135	253	0.18	--	--	--	--
MAR											
07...	--	--	--	--	--	--	--	--	--	--	--
07...	130	310	250	132	111	301	0.18	--	--	--	--
APR											
14...	K17	510	--	150	141	265	0.20	--	--	--	--
MAY											
15...	--	--	--	--	--	--	--	--	--	--	--
15...	K18	650	340	148	148	268	0.20	--	--	--	--
JUN											
08...	--	--	--	--	--	--	--	--	--	--	--
08...	K35	1100	0	157	145	288	0.21	--	--	--	--
JUL											
20...	--	--	--	--	--	--	--	--	--	--	--
20...	58	660	290	165	146	301	0.22	--	--	--	--
OCT											
31...	--	--	--	--	--	--	--	--	--	--	--
31...	120	490	110	154	153	242	0.21	--	--	--	--
DEC											
06...	30	<2	--	158	154	222	0.21	--	--	--	--
JAN 1979											
10...	K53	130	--	143	118	255	0.19	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
31...	88	78	160	115	87	298	0.16	--	11.6	6.92	0.00
FEB											
27...	93	140	--	109	103	264	0.15	--	--	--	--
MAR											
26...	K15	>200	--	130	123	249	0.18	--	--	--	--
APR											
23...	<1	120	--	128	119	283	0.17	--	17.6	9.07	0.750
MAY											
12...	--	--	--	--	--	--	--	--	--	--	--
JUN											
04...	--	--	--	--	--	--	--	--	--	--	--
04...	54	140	860	133	134	307	0.18	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	K8	>200	0	155	148	316	0.21	--	--	--	--

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DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS NH4) (71845)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	PHOS-PHORUS TOTAL (MG/L AS PO4) (71886)	NITRO-GEN, TOTAL (MG/L AS NO3) (71887)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG) (71895)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	SEDI-MENT, SUS-PENDED (MG/L) (80154)
AUG 1959											
06...	--	--	--	--	--	--	--	--	--	3.5	--
MAY 1966											
19...	--	--	1.1	--	--	--	--	--	--	3.5	--
JUN 1967											
01...	--	--	0.60	--	--	--	--	--	--	3.5	--
MAY 1968											
21...	--	--	0.60	--	--	--	--	--	--	3.5	--
JUN 1969											
05...	--	--	0.0	--	--	--	--	--	--	3.5	--
MAY 1970											
08...	--	0.01	0.20	0.01	--	--	--	--	--	3.5	--
MAY 1971											
31...	--	--	--	--	--	--	--	--	--	3.5	--
31...	--	0.04	0.30	0.01	0.13	--	--	--	--	3.5	--
APR 1973											
05...	--	--	--	--	--	--	--	--	--	3.5	--
05...	0.05	--	--	--	--	--	--	--	--	3.5	--
NOV											
15...	--	--	--	--	--	--	--	--	--	3.5	--
JAN 1974											
11...	--	--	--	--	--	--	--	--	--	3.5	--
FEB											
25...	--	--	--	--	--	--	--	--	--	3.5	--
MAY											
09...	--	--	--	--	--	--	--	--	--	3.5	--
JUN											
28...	--	--	--	--	--	--	--	--	--	3.5	--
SEP											
11...	--	--	--	--	--	--	--	--	--	3.5	--
JAN 1978											
11...	--	--	--	--	--	--	<0.5	0	<0.50	3.5	2
FEB											
14...	--	--	--	--	--	1.7	--	--	--	3.5	2
MAR											
07...	--	--	--	--	--	--	--	--	--	3.5	--
07...	0.01	--	--	--	--	1.9	--	--	--	3.5	--
APR											
14...	0.01	--	--	--	--	1.4	<0.5	0	<0.50	3.5	6
MAY											
15...	--	--	--	--	--	--	--	--	--	3.5	--
15...	--	--	--	--	--	1.5	--	--	--	3.5	3
JUN											
08...	--	--	--	--	--	--	--	--	--	3.5	--
08...	--	--	--	--	--	1.8	--	--	--	3.5	4
JUL											
20...	--	--	--	--	--	--	--	--	--	3.5	--
20...	0.03	--	--	--	--	1.3	0.5	0	0.50	3.5	4
OCT											
31...	--	--	--	--	--	--	--	--	--	3.5	--
31...	0.01	--	--	--	--	0.44	<0.5	0	<0.50	3.5	3
DEC											
06...	0.01	--	--	--	--	0.80	--	--	--	3.5	2
JAN 1979											
10...	--	--	--	--	--	1.4	--	--	--	3.5	1
31...	--	--	--	--	--	--	--	--	--	3.5	--
31...	0.01	--	--	--	--	1.1	<0.5	0	<0.50	3.5	5
FEB											
27...	--	--	--	--	--	0.97	--	--	--	3.5	1
MAR											
26...	--	--	--	--	--	1.5	--	--	--	3.5	4
APR											
23...	0.0	--	--	--	0.12	0.27	0.5	0	0.50	3.5	3
MAY											
12...	--	--	--	--	--	--	--	--	--	3.5	--
JUN											
04...	--	--	--	--	--	--	--	--	--	3.5	--
04...	0.0	--	--	--	0.12	0.97	--	--	--	3.5	1
28...	--	--	--	--	--	--	--	--	--	3.5	--
28...	0.01	--	--	--	0.12	0.75	--	--	--	3.5	1

DATE	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	DRAIN-AGE AREA (SQ. MI.) (81024)	SAM-PLING METHOD, CODES (82398)	CONVER-TION FACTOR (95100)	TOTAL COUNT (CELLS/ ML) (95200)	CHLAMY DOMONAS (96014)	KIRCHNE RIELLA (96215)	EUGLENA (96387)	CYCLO TELLA (96706)	MELO SIRA (96707)	SKELE TONEMA (96709)
AUG 1959											
06...	--	535	--	--	--	--	--	--	--	--	--
MAY 1966											
19...	--	535	--	--	--	--	--	--	--	--	--
JUN 1967											
01...	--	535	--	--	--	--	--	--	--	--	--
MAY 1968											
21...	--	535	--	--	--	--	--	--	--	--	--
JUN 1969											
05...	--	535	--	--	--	--	--	--	--	--	--
MAY 1970											
08...	--	535	--	--	--	--	--	--	--	--	--
MAY 1971											
31...	--	535	--	--	--	--	--	--	--	--	--
31...	--	535	--	--	--	--	--	--	--	--	--
APR 1973											
05...	--	535	--	--	--	--	--	--	--	--	--
05...	--	535	--	--	--	--	--	--	--	--	--
NOV											
15...	--	535	--	--	--	--	--	--	--	--	--
JAN 1974											
11...	--	535	--	--	--	--	--	--	--	--	--
FEB											
25...	--	535	--	--	--	--	--	--	--	--	--
MAY											
09...	--	535	--	--	--	--	--	--	--	--	--
JUN											
28...	--	535	--	--	--	--	--	--	--	--	--
SEP											
11...	--	535	--	--	--	--	--	--	--	--	--
JAN 1978											
11...	3.6	535	--	--	--	--	--	--	--	--	--
FEB											
14...	3.7	535	--	--	--	--	--	--	--	--	--
MAR											
07...	--	535	8010	4.6	250	5	--	D46	--	--	--
07...	--	535	--	--	--	--	--	--	--	--	--
APR											
14...	11	535	--	--	--	--	--	--	--	--	--
MAY											
15...	--	535	8010	13.6	340	--	--	--	--	--	--
15...	5.4	535	--	--	--	--	--	--	--	--	--
JUN											
08...	--	535	8010	22.3	0	--	--	--	--	--	--
08...	7.3	535	--	--	--	--	--	--	--	--	--
JUL											
20...	--	535	8010	22.2	290	--	22	--	--	--	--
20...	7.3	535	--	--	--	--	--	--	--	--	--
OCT											
31...	--	535	8010	14.4	110	--	--	--	14	D29	--
31...	4.7	535	--	--	--	--	--	--	--	--	--
DEC											
06...	2.8	535	--	--	--	--	--	--	--	--	--
JAN 1979											
10...	1.8	535	--	--	--	--	--	--	--	--	--
31...	--	535	8010	5.0	160	--	--	--	D120	10	--
31...	13	535	--	--	--	--	--	--	--	--	--
FEB											
27...	2.4	535	--	--	--	--	--	--	--	--	--
MAR											
26...	7.7	535	--	--	--	--	--	--	--	--	--
APR											
23...	6.6	535	--	--	--	--	--	--	--	--	--
MAY											
12...	--	535	8010	1.2	52	--	--	--	--	--	1
JUN											
04...	--	535	8010	12.9	860	--	--	--	13	--	--
04...	2.3	535	--	--	--	--	--	--	--	--	--
28...	--	535	8010	12.9	0	--	--	--	--	--	--
28...	2.0	535	--	--	--	--	--	--	--	--	--

DATE	FRAGILA RIA (96764)	SYNE DRA (96765)	COCCO NEIS (96778)	RHOCO SPHENIA (96779)	NAVI CULA (96791)	GOMPHO NEMA (96802)	AMPHORA (96805)	NITZ SCHIA (96812)	SURI RELLA (96817)	ANA CYSTIS (98082)	OSCIL LATORIA (98136)
AUG 1959											
06...	--	--	--	--	--	--	--	--	--	--	--
MAY 1966											
19...	--	--	--	--	--	--	--	--	--	--	--
JUN 1967											
01...	--	--	--	--	--	--	--	--	--	--	--
MAY 1968											
21...	--	--	--	--	--	--	--	--	--	--	--
JUN 1969											
05...	--	--	--	--	--	--	--	--	--	--	--
MAY 1970											
08...	--	--	--	--	--	--	--	--	--	--	--
MAY 1971											
31...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
APR 1973											
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
NOV											
15...	--	--	--	--	--	--	--	--	--	--	--
JAN 1974											
11...	--	--	--	--	--	--	--	--	--	--	--
FEB											
25...	--	--	--	--	--	--	--	--	--	--	--
MAY											
09...	--	--	--	--	--	--	--	--	--	--	--
JUN											
28...	--	--	--	--	--	--	--	--	--	--	--
SEP											
11...	--	--	--	--	--	--	--	--	--	--	--
JAN 1978											
11...	--	--	--	--	--	--	--	--	--	--	--
FEB											
14...	--	--	--	--	--	--	--	--	--	--	--
MAR											
07...	--	19	D93	5	28	23	5	23	9	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
APR											
14...	--	--	--	--	--	--	--	--	--	--	--
MAY											
15...	27	--	D310	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
JUN											
08...	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
JUL											
20...	--	--	D240	--	22	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
OCT											
31...	--	--	D43	--	--	--	--	--	--	D29	--
31...	--	--	--	--	--	--	--	--	--	--	--
DEC											
06...	--	--	--	--	--	--	--	--	--	--	--
JAN 1979											
10...	--	--	--	--	--	--	--	--	--	--	--
31...	5	--	D25	--	5	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
FEB											
27...	--	--	--	--	--	--	--	--	--	--	--
MAR											
26...	--	--	--	--	--	--	--	--	--	--	--
APR											
23...	--	--	--	--	--	--	--	--	--	--	--
MAY											
12...	--	--	D41	--	5	--	--	5	--	--	--
JUN											
04...	--	39	39	--	--	--	--	--	--	--	D770
04...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--

02326900 - ST. MARKS RIVER NEAR NEWPORT, FLA. WATER-QUALITY DATA

DATE	STATION NUMBER	DATE	TIME	TEMPERATURE WATER (DEG C) (00010)	LENGTH OF EXPOSURE (DAYS) (00022)	BAROMETRIC PRESSURE (MM OF HG) (00025)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	TURBIDITY (NTU) (00076)
JUL 1979											
27...	02326900	790727	1400	--	--	--	1028	1028	--	--	--
27...	02326900	790727	1400	22.5	29	--	--	80010	912	5.91	2.0
AUG											
30...	02326900	790830	0815	--	--	--	1028	1028	--	--	--
30...	02326900	790830	0815	21.5	--	--	--	80010	917	5.92	1.0
OCT											
03...	02326900	791003	0930	--	--	--	1028	1028	--	--	--
03...	02326900	791003	0930	21.0	--	--	--	80010	1160	6.35	1.0
NOV											
08...	02326900	791108	1110	20.0	36	--	--	80010	720	5.53	0.0
DEC											
05...	02326900	791205	1300	18.0	--	--	--	80010	588	5.26	1.0
JAN 1980											
06...	02326900	800106	1100	15.5	--	--	--	80010	592	5.27	0.20
31...	02326900	800131	0915	17.0	27	--	--	80010	695	5.48	0.25
MAR											
04...	02326900	800304	1330	18.0	--	--	--	80010	610	5.30	0.50
27...	02326900	800327	1130	--	--	--	1028	1028	--	--	--
27...	02326900	800327	1130	19.0	--	--	--	80010	820	5.73	0.30
APR											
30...	02326900	800430	1510	22.0	34	--	--	80010	875	5.84	1.2
JUN											
04...	02326900	800604	0930	--	--	--	1028	1028	--	--	--
04...	02326900	800604	0930	21.0	--	--	--	80010	790	5.67	0.75
17...	02326900	800617	1315	--	--	--	1028	1028	--	--	--
17...	02326900	800617	1315	22.5	--	--	--	80010	765	5.62	0.30
AUG											
01...	02326900	800801	1045	--	--	--	1028	1028	--	--	--
01...	02326900	800801	1045	22.0	--	--	--	80010	1220	6.47	1.2
26...	02326900	800826	1350	--	--	--	1028	1028	--	--	--
26...	02326900	800826	1350	22.0	--	--	--	80010	855	5.80	0.50
SEP											
18...	02326900	800918	1315	--	--	--	1028	1028	--	--	--
18...	02326900	800918	1315	22.0	--	--	--	80010	865	5.82	0.70
NOV											
19...	02326900	801119	0930	--	--	--	1028	1028	--	--	--
19...	02326900	801119	0930	17.0	--	--	--	80010	528	5.29	0.10
JAN 1981											
22...	02326900	810122	1230	16.0	--	--	--	80010	480	5.08	0.30
APR											
02...	02326900	810402	1300	--	--	--	1028	1028	--	--	--
02...	02326900	810402	1300	20.5	--	--	--	80010	696	5.64	1.1
MAY											
28...	02326900	810528	1245	--	--	--	1028	1028	--	--	--
28...	02326900	810528	1245	22.0	--	--	--	80010	434	5.15	0.50
JUL											
28...	02326900	810728	1430	--	--	--	1028	1028	--	--	--
28...	02326900	810728	1430	24.0	--	--	--	80010	450	5.05	0.40
SEP											
02...	02326900	810902	0945	--	--	--	1028	1028	--	--	--
02...	02326900	810902	0945	20.0	--	--	--	80010	520	5.21	0.40
NOV											
03...	02326900	811103	1750	22.5	--	--	80010	80010	561	5.20	1.1
DEC											
18...	02326900	811218	1400	19.0	--	--	80010	80010	492	5.03	0.80
FEB 1982											
24...	02326900	820224	1210	19.5	--	--	80010	80010	620	5.22	1.3
MAY											
05...	02326900	820505	1245	22.0	--	--	81312	81312	500	5.24	1.1
JUN											
03...	02326900	820603	1300	22.5	--	--	80010	80010	503	5.18	2.0
AUG											
20...	02326900	820820	1330	23.5	--	--	80010	80010	845	5.65	1.5
OCT											
25...	02326900	821025	1400	24.5	--	765	1028	80010	524	5.11	1.2
DEC											
21...	02326900	821221	1330	19.0	--	767	1028	81213	426	4.86	1.6
MAR 1983											
03...	02326900	830303	1330	19.5	--	770	1028	80010	690	5.37	1.2

02326900 - ST. MARKS RIVER NEAR NEWPORT, FLA. WATER-QUALITY DATA

DATE	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	PH WATER WHOLE LAB (STAND-ARD UNITS) (00403)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M (00572)	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M (00573)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)
JUL 1979												
27...	--	--	--	--	--	--	--	--	--	--	--	--
27...	215	6.7	--	7.5	--	5.6	91	--	--	0.57	--	0.49
AUG												
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	240	6.0	--	7.4	--	8.5	110	--	--	0.28	--	0.23
OCT												
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	200	7.0	--	7.1	--	12	78	--	--	0.53	0.37	0.39
NOV												
08...	269	8.0	--	8.0	--	--	120	0.550	0.630	0.36	--	0.24
DEC												
05...	228	--	--	7.7	--	--	120	--	--	0.19	0.17	0.03
JAN 1980												
06...	260	10.2	--	7.4	--	--	110	--	--	0.26	0.23	0.18
31...	195	8.0	--	7.4	--	--	97	0.160	0.240	0.20	0.16	0.12
MAR												
04...	242	12.4	--	7.8	--	--	100	--	--	0.43	0.38	0.34
27...	--	--	--	--	--	--	--	--	--	--	--	--
27...	220	5.3	--	6.2	--	--	80	--	--	0.34	0.37	0.27
APR												
30...	205	--	--	7.4	--	--	85	0.315	0.709	0.43	0.39	0.32
JUN												
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	235	6.1	--	7.2	--	--	98	--	--	0.28	0.23	0.21
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	240	9.0	--	7.7	--	--	110	--	--	0.12	0.10	0.09
AUG												
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	223	--	--	6.7	--	--	100	--	--	--	0.18	--
26...	--	--	--	--	--	--	--	--	--	--	--	--
26...	270	8.5	--	7.3	--	--	120	--	--	--	0.08	--
SEP												
18...	--	--	--	--	--	--	--	--	--	--	--	--
18...	250	6.2	--	7.7	--	--	110	--	--	0.20	0.21	0.06
NOV												
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	270	9.5	--	7.7	7.9	--	--	--	--	--	0.19	--
JAN 1981												
22...	260	10.2	--	8.1	8.2	--	--	--	--	--	0.17	--
APR												
02...	--	--	--	--	--	--	--	--	--	--	--	--
02...	215	8.4	--	7.8	7.9	--	--	--	--	0.34	0.38	0.26
MAY												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	272	9.9	--	7.9	8.1	--	--	--	--	0.47	0.41	0.34
JUL												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	272	10.6	--	8.1	8.2	--	--	--	--	0.30	0.25	0.08
SEP												
02...	--	--	--	--	--	--	--	--	--	--	--	--
02...	270	6.3	--	7.6	8.3	--	--	--	--	0.28	0.35	0.15
NOV												
03...	281	7.7	--	6.8	8.1	--	--	--	--	0.38	--	0.22
DEC												
18...	275	9.3	--	8.0	8.0	--	--	--	--	0.44	--	0.19
FEB 1982												
24...	--	7.4	--	8.0	8.0	--	--	--	--	0.32	--	0.14
MAY												
05...	264	10.7	--	8.4	8.2	--	--	--	--	--	--	--
JUN												
03...	270	7.0	--	8.0	8.1	--	--	--	--	0.51	--	0.36
AUG												
20...	248	5.1	--	8.0	7.7	--	--	--	--	0.40	--	0.37
OCT												
25...	320	6.9	83	8.2	8.0	--	--	--	--	0.43	--	0.26
DEC												
21...	200	7.2	77	8.2	8.1	--	--	--	--	0.24	--	0.04
MAR 1983												
03...	220	7.2	78	8.0	7.7	--	--	--	--	0.33	--	0.02

DATE	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N) (00624)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
JUL 1979												
27...	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	<0.010	0.080	0.21	0.28	0.49	0.080	--	--	0.050	0.030
AUG												
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	<0.010	0.050	0.20	0.03	0.23	0.050	--	--	0.050	0.050
OCT												
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	0.26	0.010	0.040	0.100	0.27	0.16	0.43	0.100	0.100	--	0.040	0.030
NOV												
08...	0.0	0.010	0.020	0.100	0.01	0.25	0.26	0.100	--	--	0.030	0.030
DEC												
05...	0.04	0.00	0.030	0.130	0.04	0.02	0.06	0.130	0.130	--	0.040	0.040
JAN 1980												
06...	0.19	0.00	0.00	0.080	0.19	0.0	0.18	0.040	0.040	--	0.040	0.040
31...	0.09	0.00	0.020	0.060	0.09	0.05	0.14	0.070	0.070	--	0.040	0.040
MAR												
04...	0.28	0.00	0.010	0.080	0.28	0.07	0.35	0.100	0.100	--	0.020	0.030
27...	--	--	--	--	--	--	--	--	--	--	--	--
27...	0.30	0.020	0.00	0.050	0.32	0.0	0.29	0.050	0.050	--	0.050	0.040
APR												
30...	0.35	0.00	0.090	0.020	0.35	0.06	0.41	0.040	0.040	--	0.050	0.040
JUN												
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	0.11	0.080	0.010	0.060	0.19	0.03	0.22	0.040	0.040	--	0.050	0.040
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	0.09	0.00	0.010	0.020	0.09	0.01	0.10	0.010	0.010	--	0.040	0.040
AUG												
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	0.10	0.00	--	0.090	0.10	--	--	0.080	0.080	--	0.080	0.040
26...	--	--	--	--	--	--	--	--	--	--	--	--
26...	0.03	0.010	--	0.040	0.04	--	--	0.040	0.040	--	0.050	0.050
SEP												
18...	--	--	--	--	--	--	--	--	--	--	--	--
18...	0.01	0.020	0.010	0.130	0.03	0.04	0.07	0.180	0.180	--	0.050	0.040
NOV												
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	0.06	0.00	--	0.130	0.06	--	--	0.130	0.130	--	0.040	0.040
JAN 1981												
22...	--	<0.010	<0.010	0.070	0.10	--	<0.10	0.070	0.070	--	0.040	0.030
APR												
02...	--	--	--	--	--	--	--	--	--	--	--	--
02...	0.28	0.050	0.040	0.040	0.33	0.0	0.30	0.050	0.050	--	0.050	0.030
MAY												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	0.29	0.010	0.020	0.110	0.30	0.06	0.36	0.110	0.110	--	0.040	0.040
JUL												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	0.10	0.030	0.110	0.110	0.13	0.06	0.19	0.120	0.120	--	0.050	0.050
SEP												
02...	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	<0.010	0.010	0.120	0.22	0.0	0.16	0.130	0.130	--	0.050	0.050
NOV												
03...	--	0.020	--	0.140	--	--	0.24	0.140	0.140	0.12	0.050	0.050
DEC												
18...	--	0.070	--	0.180	--	--	0.26	0.180	0.180	0.15	0.050	0.040
FEB 1982												
24...	--	0.050	--	0.130	--	--	0.19	0.130	0.130	0.12	0.080	0.050
MAY												
05...	--	0.050	--	--	--	--	<0.10	--	<0.100	0.09	0.050	0.040
JUN												
03...	--	0.040	--	0.110	--	--	0.40	0.110	0.110	0.09	0.060	0.040
AUG												
20...	--	0.030	--	--	--	--	0.40	--	<0.100	0.09	0.050	0.040
OCT												
25...	--	0.040	--	0.130	--	--	0.30	0.130	0.130	0.09	0.030	0.050
DEC												
21...	--	0.060	--	0.140	--	--	0.10	0.140	0.140	0.15	0.050	0.040
MAR 1983												
03...	--	0.080	--	0.230	--	--	0.10	0.230	0.230	0.09	0.050	0.040

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM PERCENT (00932)	SODIUM+ POTAS-SIUM DIS-SOLVED (MG/L AS NA) (00933)
JUL 1979												
27...	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	5.7	0.40	110	16	33	6.0	3.1	0.1	6	3.5
AUG												
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	8.1	--	--	110	3	35	6.3	3.0	0.1	5	3.4
OCT												
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	12	--	--	93	15	29	5.0	2.8	0.1	6	3.2
NOV												
08...	--	--	7.1	--	130	8	39	7.4	3.6	0.1	6	4.1
DEC												
05...	--	4.4	--	--	130	7	39	7.2	3.6	0.1	6	4.0
JAN 1980												
06...	--	3.3	--	--	120	14	38	7.1	3.6	0.1	6	4.0
31...	--	--	6.2	--	100	8	32	6.0	3.3	0.1	6	3.7
MAR												
04...	--	2.9	--	--	120	20	37	6.6	3.2	0.1	5	3.5
27...	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	7.8	--	--	87	7	27	4.7	3.1	0.1	7	--
APR												
30...	--	--	7.4	0.30	93	8	29	4.9	2.7	0.1	6	--
JUN												
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	2.8	--	--	110	12	34	6.2	3.4	0.1	6	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	1.0	--	--	120	8	36	6.8	3.3	0.1	6	--
AUG												
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	8.2	--	110	10	34	6.1	2.9	0.1	5	--
26...	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	11	--	--	130	15	41	7.8	3.2	0.1	5	--
SEP												
18...	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	6.3	--	--	130	16	38	7.5	3.1	0.1	5	--
NOV												
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	1.9	0.30	120	3	37	7.5	3.4	0.1	6	--
JAN 1981												
22...	--	1.2	--	--	120	5	38	7.2	3.1	0.1	5	--
APR												
02...	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	4.1	--	95	--	30	4.9	3.1	0.1	7	--
MAY												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	0.50	--	130	--	40	7.6	3.4	0.1	5	--
JUL												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	1.9	--	--	130	--	39	7.9	3.5	0.1	6	--
SEP												
02...	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	1.8	--	120	--	38	7.3	3.2	0.1	5	--
NOV												
03...	0.040	--	--	--	130	--	39	7.7	3.5	0.1	6	--
DEC												
18...	0.050	--	--	--	130	--	39	7.7	3.5	0.1	6	--
FEB 1982												
24...	0.040	--	--	--	110	--	35	6.3	3.6	0.1	6	--
MAY												
05...	0.030	--	--	--	130	--	41	7.1	3.8	0.1	6	--
JUN												
03...	0.030	--	--	--	130	--	38	7.8	3.6	0.1	6	--
AUG												
20...	0.030	--	--	--	110	--	35	6.2	2.9	0.1	5	--
OCT												
25...	0.030	--	--	--	140	--	42	7.4	3.2	0.1	--	--
DEC												
21...	0.050	--	--	--	120	--	35	7.1	3.5	0.1	6	--
MAR 1983												
03...	0.030	--	--	--	100	--	31	5.8	3.2	0.1	6	--

DATE	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	ARSENIC SUSPENDED TOTAL (UG/L AS AS) (01001)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA) (01006)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)
JUL 1979												
27...	--	--	--	--	--	--	--	--	--	--	--	--
27...	0.40	5.0	5.6	0.10	11	<1	--	3	10	0.0	<100	--
AUG												
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	0.40	4.8	7.9	0.10	11	--	--	--	--	--	--	--
OCT												
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	0.40	5.2	7.3	0.10	9.9	--	--	--	--	--	--	--
NOV												
08...	0.50	2.1	2.1	0.20	12	2	0	2	20	80	100	--
DEC												
05...	0.40	5.3	7.5	0.10	13	--	--	--	--	--	--	--
JAN 1980												
06...	0.40	5.0	7.4	0.20	12	--	--	--	--	--	--	--
31...	0.40	5.4	8.0	0.20	11	2	0	0	30	70	100	--
MAR												
04...	0.30	5.2	7.5	0.10	10	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--
27...	0.50	4.8	4.9	0.10	7.0	--	--	--	--	--	--	--
APR												
30...	0.10	5.1	7.2	0.10	7.8	0	0	0	10	--	<50	--
JUN												
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	0.40	5.0	5.7	0.20	9.5	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	0.40	5.1	5.9	0.20	9.2	--	--	--	--	--	--	--
AUG												
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	0.50	4.9	4.7	0.10	11	1	0	1	30	--	<50	--
26...	--	--	--	--	--	--	--	--	--	--	--	--
26...	0.70	5.1	8.8	0.20	13	--	--	--	--	--	--	--
SEP												
18...	--	--	--	--	--	--	--	--	--	--	--	--
18...	0.60	5.0	8.1	0.20	13	--	--	--	--	--	--	--
NOV												
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	0.50	5.6	9.0	0.20	12	1	0	1	10	90	100	--
JAN 1981												
22...	0.40	5.1	7.5	0.20	12	--	--	--	--	--	--	--
APR												
02...	--	--	--	--	--	--	--	--	--	--	--	--
02...	0.40	5.5	6.5	0.20	10	0	0	0	--	--	--	--
MAY												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	0.40	5.2	8.8	0.20	12	2	0	1	10	90	100	--
JUL												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	0.40	5.4	8.4	0.20	13	--	--	--	--	--	--	--
SEP												
02...	--	--	--	--	--	--	--	--	--	--	--	--
02...	0.40	5.6	5.2	0.20	12	1	0	1	<50	--	<50	--
NOV												
03...	0.20	5.3	8.9	0.20	13	0	1	1	10	90	100	--
DEC												
18...	0.40	5.5	9.7	0.20	12	0	1	1	12	--	<100	--
FEB 1982												
24...	0.40	5.5	6.7	0.20	11	--	--	--	--	--	--	--
MAY												
05...	0.40	5.4	8.0	0.20	11	1	1	2	27	--	<100	--
JUN												
03...	0.20	5.4	10	0.10	13	--	--	--	--	--	--	--
AUG												
20...	0.30	5.5	7.0	0.20	12	1	0	1	10	--	<100	--
OCT												
25...	<0.10	5.6	10	0.20	12	1	--	--	15	--	--	<1.0
DEC												
21...	0.20	5.4	10	0.20	13	--	--	--	--	--	--	--
MAR 1983												
03...	0.40	5.4	10	0.20	9.2	1	--	--	14	--	--	<1.0

DATE	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CADMIUM SUS- PENDED RECOV- ERABLE (UG/L AS CD) (01026)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	CHRO- MIUM, SUS- PENDED RECOV. (UG/L AS CR) (01031)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COBALT, SUS- PENDED RECOV- ERABLE (UG/L AS CO) (01036)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO) (01037)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	COPPER, SUS- PENDED RECOV- ERABLE (UG/L AS CU) (01041)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)
JUL 1979												
27...	--	--	--	--	--	--	--	--	--	--	--	--
27...	2.0	0	<2	<20	<0	<20	ND	1	<2	ND	3	3
AUG												
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--
OCT												
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
08...	0	0	0	20	0	20	0	0	0	1.0	0	1
DEC												
05...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1980												
06...	--	--	--	--	--	--	--	--	--	--	--	--
31...	3.0	0	0	10	0	10	1.0	2	3	1.0	0	1
MAR												
04...	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
30...	0	0	0	<10	--	<10	0	0	0	0	1	1
JUN												
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	3.0	0	0	<10	--	20	0	0	0	2.0	0	0
26...	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
18...	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	0	0	0	10	10	20	3.0	0	3	0	2	2
JAN 1981												
22...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
02...	--	--	--	--	--	--	--	--	--	--	--	--
02...	0	0	0	<10	--	<10	0	0	0	0	1	1
MAY												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	<1.0	--	1	<10	--	10	2.0	0	1	1.0	1	2
JUL												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
02...	--	--	--	--	--	--	--	--	--	--	--	--
02...	<1.0	--	<1	10	0	10	<1.0	--	<1	1.0	--	--
NOV												
03...	<1.0	--	<1	10	0	10	1.0	0	1	<1.0	--	5
DEC												
18...	<1.0	--	<1	10	10	20	1.0	--	<1	2.0	4	6
FEB 1982												
24...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
05...	<1.0	--	<1	<10	--	20	<1.0	--	<1	2.0	6	8
JUN												
03...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
20...	2.0	0	2	10	0	10	1.0	1	2	1.0	4	5
OCT												
25...	<1.0	--	--	<1.0	--	--	<3.0	--	--	1.0	--	--
DEC												
21...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 1983												
03...	<1.0	--	--	<1.0	--	--	<3.0	--	--	1.0	--	--

02326900 - ST. MARKS RIVER NEAR NEWPORT, FLA. WATER-QUALITY DATA

DATE	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE) (01044)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB) (01050)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN) (01054)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI) (01066)
JUL 1979												
27...	--	--	--	--	--	--	--	--	--	--	--	--
27...	150	270	120	2.0	0	2	10	20	<10	--	--	--
AUG												
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--
OCT												
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
08...	80	90	10	0	0	0	7	10	3.0	--	1.0	1
DEC												
05...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1980												
06...	--	--	--	--	--	--	--	--	--	--	--	--
31...	60	130	70	0	5	5	7	10	3.0	--	0	5
MAR												
04...	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
30...	110	240	130	0	0	0	10	20	6.0	--	0	4
JUN												
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	90	190	100	0	0	0	10	20	10	--	1.0	0
26...	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
18...	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	60	70	10	1.0	2	3	7	10	3.0	--	0	4
JAN 1981												
22...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
02...	--	--	--	--	--	--	--	--	--	--	--	--
02...	130	190	60	0	10	10	0	10	10	--	0	2
MAY												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	70	<10	0	1	1	5	10	5.0	--	0	3
JUL												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
02...	--	--	--	--	--	--	--	--	--	--	--	--
02...	270	290	20	3.0	1	4	--	<10	10	--	3.0	0
NOV												
03...	80	90	13	<1.0	--	2	--	<10	3.0	--	<1.0	--
DEC												
18...	100	110	7.0	<1.0	--	<1	20	20	3.0	--	<1.0	--
FEB 1982												
24...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
05...	20	70	51	1.0	4	5	20	20	3.0	--	4.0	0
JUN												
03...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
20...	90	270	180	1.0	3	4	1	10	9.0	--	2.0	5
OCT												
25...	--	--	23	3.0	--	--	--	--	5.0	<10	<1.0	--
DEC												
21...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 1983												
03...	--	--	77	2.0	--	--	--	--	5.0	<10	1.0	--

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG) (01076)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN) (01091)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)
JUL 1979												
27...	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	ND	0	ND	--	--	20	0	20	--	--	<1
AUG												
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--
OCT												
03...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
08...	2	0	0	0	--	--	0	10	10	--	--	0
DEC												
05...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1980												
06...	--	--	--	0	--	--	--	--	--	--	--	--
31...	5	0	0	0	--	--	90	10	100	--	--	0
MAR												
04...	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	0	--	--	--	--	--	--	--	--
APR												
30...	4	0	0	0	--	--	60	90	150	--	--	0
JUN												
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	0	--	--	--	--	--	--	--	--
AUG												
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	1	0	0	0	--	--	0	10	10	--	--	0
26...	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
18...	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	0	--	--	--	--	--	--	--	--
NOV												
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	4	0	0	0	--	--	1.0	40	40	--	--	0
JAN 1981												
22...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
02...	--	--	--	--	--	--	--	--	--	--	--	--
02...	2	0	0	0	--	--	10	40	50	--	--	0
MAY												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	3	0	0	0	--	--	<4.0	--	10	--	--	0
JUL												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
02...	--	--	--	--	--	--	--	--	--	--	--	--
02...	1	<1.0	--	<1	--	--	<10	--	10	--	--	<1
NOV												
03...	3	<1.0	--	<1	--	--	<4.0	--	40	--	--	<1
DEC												
18...	<1	<1.0	--	<1	--	--	9.0	30	40	--	--	<1
FEB 1982												
24...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
05...	4	<1.0	--	<1	--	--	13	0	10	--	--	<1
JUN												
03...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
20...	7	<1.0	--	<1	--	--	<4.0	--	20	--	--	<1
OCT												
25...	--	<1.0	--	--	80	<6	5.0	--	--	20	<4	<1
DEC												
21...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 1983												
03...	--	<1.0	--	--	64	<6	<3.0	--	--	40	<4	<1

02326900 - ST. MARKS RIVER NEAR NEWPORT, FLA. WATER-QUALITY DATA

DATE	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE) (01146)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	PHYTO-PLANK-TON, TOTAL (CELLS PER ML) (60050)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	BIOMASS CHLORO-PHYLL RATIO PERI-PHYTON (UNITS) (70950)
JUL 1979											
27...	--	--	--	--	--	--	--	--	--	--	--
27...	0	<1	K26	K24	380	143	119	352	0.19	--	--
AUG											
30...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	K40	K30	470	149	134	369	0.20	--	--
OCT											
03...	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	110	K20	52	135	107	423	0.18	--	--
NOV											
08...	0	0	36	<1	--	285	139	554	0.39	--	4.08
DEC											
05...	--	--	42	K16	52	158	149	251	0.21	--	--
JAN 1980											
06...	--	--	49	K15	--	144	140	230	0.20	--	--
31...	0	0	25	>100	--	138	125	259	0.19	--	16.9
MAR											
04...	--	--	35	K2	--	134	130	221	0.18	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	35	K23	130	126	100	279	0.17	--	--
APR											
30...	0	0	K14	24	--	245	108	579	0.33	--	34.3
JUN											
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	K19	25	26	126	123	269	0.17	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	K9	--	340	163	133	337	0.22	--	--
AUG											
01...	--	--	--	--	--	--	--	--	--	--	--
01...	0	0	K40	230	90	128	125	422	0.17	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	280	158	152	365	0.21	--	--
SEP											
18...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	360	1000	--	140	142	327	0.19	--	--
NOV											
19...	--	--	--	--	--	--	--	--	--	--	--
19...	0	0	K67	86	160	154	148	220	0.21	--	--
JAN 1981											
22...	--	--	73	--	--	157	146	203	0.21	--	--
APR											
02...	--	--	--	--	--	--	--	--	--	--	--
02...	0	0	K12	K31	90	135	120	254	0.18	--	--
MAY											
28...	--	--	--	--	--	--	--	--	--	--	--
28...	0	0	150	110	77	168	150	197	0.23	100	--
JUL											
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	K16	52	100	165	150	200	0.22	33	--
SEP											
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	<1	K32	94	42	161	144	226	0.22	33	--
NOV											
03...	--	<1	28	>200	--	146	151	221	0.20	50	--
DEC											
18...	--	<1	K8	>20	--	161	157	214	0.22	40	--
FEB 1982											
24...	--	--	K11	71	--	153	129	256	0.21	75	--
MAY											
05...	--	<1	40	170	--	139	149	188	0.19	60	--
JUN											
03...	--	--	20	120	--	157	152	213	0.21	50	--
AUG											
20...	--	<1	13	720	--	148	130	338	0.20	50	--
OCT											
25...	--	--	K7	150	--	170	155	241	0.23	40	--
DEC											
21...	--	--	55	270	--	144	144	166	0.20	67	--
MAR 1983											
03...	--	--	15	230	--	136	124	253	0.18	50	--

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02326900 - ST. MARKS RIVER NEAR NEWPORT, FLA. WATER-QUALITY DATA

DATE	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2) (70957)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2) (70958)	NITRO-GEN, AMMONIA TOTAL (MG/L AS NH4) (71845)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	PHOS-PHORUS TOTAL (MG/L AS PO4) (71886)	NITRO-GEN, TOTAL (MG/L AS NO3) (71887)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MERCURY SUS-MPENDED RECOV-ERABLE (UG/L AS HG) (71895)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	SEDI-MENT, SUS-PENDED (MG/L) (80154)
JUL 1979											
27...	--	--	--	--	--	--	--	--	--	3.5	--
27...	--	--	0.0	--	0.15	2.5	<0.5	<0	<0.50	3.5	6
AUG											
30...	--	--	--	--	--	--	--	--	--	3.5	--
30...	--	--	0.0	--	0.15	1.2	--	--	--	3.5	4
OCT											
03...	--	--	--	--	--	--	--	--	--	3.5	--
03...	--	--	0.05	0.01	0.12	2.3	--	--	--	3.5	5
NOV											
08...	19.6	0.00	0.03	0.01	0.09	1.6	<0.1	<0	<0.10	3.5	3
DEC											
05...	--	--	0.04	0.0	0.12	0.84	--	--	--	3.5	2
JAN 1980											
06...	--	--	0.0	0.0	0.12	1.2	--	--	--	3.5	2
31...	4.74	0.700	0.03	0.0	0.12	0.89	0.1	0	0.10	3.5	2
MAR											
04...	--	--	0.01	0.0	0.06	1.9	--	--	--	3.5	3
27...	--	--	--	--	--	--	--	--	--	3.5	--
27...	--	--	0.0	0.03	0.15	1.5	--	--	--	3.5	3
APR											
30...	11.5	1.11	0.12	0.0	0.15	1.9	0.1	0	0.10	3.5	3
JUN											
04...	--	--	--	--	--	--	--	--	--	3.5	--
04...	--	--	0.01	0.10	0.15	1.2	--	--	--	3.5	5
17...	--	--	--	--	--	--	--	--	--	3.5	--
17...	--	--	0.01	0.0	0.12	0.53	--	--	--	3.5	3
AUG											
01...	--	--	--	--	--	--	--	--	--	3.5	--
01...	--	--	--	0.0	0.25	--	<0.1	--	0.10	3.5	7
26...	--	--	--	--	--	--	--	--	--	3.5	--
26...	--	--	--	0.01	0.15	--	--	--	--	3.5	3
SEP											
18...	--	--	--	--	--	--	--	--	--	3.5	--
18...	--	--	0.01	0.03	0.15	0.89	--	--	--	3.5	5
NOV											
19...	--	--	--	--	--	--	--	--	--	3.5	--
19...	--	--	--	0.0	0.12	--	<0.1	--	<0.10	3.5	3
JAN 1981											
22...	--	--	<0.01	<0.01	0.12	--	--	--	--	3.5	1
APR											
02...	--	--	--	--	--	--	--	--	--	3.5	--
02...	--	--	0.05	0.06	0.15	1.5	<0.1	--	0.10	3.5	4
MAY											
28...	--	--	--	--	--	--	--	--	--	3.5	--
28...	--	--	0.03	0.01	0.12	2.1	<0.1	--	<0.10	3.5	2
JUL											
28...	--	--	--	--	--	--	--	--	--	3.5	--
28...	--	--	0.14	0.04	0.15	1.3	--	--	--	3.5	3
SEP											
02...	--	--	--	--	--	--	--	--	--	3.5	--
02...	--	--	0.01	0.01	0.15	1.2	<0.1	--	<0.10	3.5	3
NOV											
03...	--	--	--	0.03	0.15	--	<0.1	--	<0.10	3.5	4
DEC											
18...	--	--	--	0.09	0.15	--	<0.1	--	<0.10	3.5	5
FEB 1982											
24...	--	--	--	0.06	0.25	--	--	--	--	3.5	4
MAY											
05...	--	--	--	0.06	0.15	--	<0.1	--	<0.10	3.5	5
JUN											
03...	--	--	--	0.05	0.18	--	--	--	--	3.5	4
AUG											
20...	--	--	--	0.04	0.15	--	0.2	0.1	0.30	3.5	4
OCT											
25...	--	--	--	0.05	0.09	--	<0.1	--	--	3.5	5
DEC											
21...	--	--	--	0.08	0.15	--	--	--	--	3.5	3
MAR 1983											
03...	--	--	--	0.10	0.15	--	<0.1	--	--	3.5	4

DATE	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	DRAIN-AGE AREA (SQ. MI.) (81024)	POTAS-SIUM 40 DIS-SOLVED (PCI/L AS K40) (82068)	SAM-PLING METHOD, CODES (82398)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	CONVER-TION FACTOR (95100)	TOTAL COUNT (CELLS/ ML) (95200)	HARD-NESS NONCARB WH WAT TOT LAB MG/L AS CACO3 (95902)	CHLAMY DOMONAS (96014)	ANKIS TRODES MUS (96202)
JUL 1979											
27...	--	535	--	8010	--	--	5.1	380	--	--	--
27...	15	535	--	--	--	--	--	--	--	--	--
AUG											
30...	--	535	--	8010	--	--	5.0	470	--	--	--
30...	9.9	535	--	--	--	--	--	--	--	--	--
OCT											
03...	--	535	--	8010	--	--	12.9	52	--	--	--
03...	16	535	--	--	--	--	--	--	--	--	--
NOV											
08...	5.8	535	--	--	--	--	--	--	--	--	--
DEC											
05...	3.2	535	--	--	--	--	--	--	--	--	--
JAN 1980											
06...	3.2	535	--	--	--	--	--	--	--	--	--
31...	3.8	535	--	--	--	--	--	--	--	--	--
MAR											
04...	4.9	535	--	--	--	--	--	--	--	--	--
27...	--	535	--	8010	--	--	5.0	130	--	--	--
27...	6.6	535	--	--	--	--	--	--	--	--	--
APR											
30...	7.1	535	--	--	--	--	--	--	--	--	--
JUN											
04...	--	535	--	8010	--	--	12.9	26	--	--	--
04...	11	535	--	--	--	--	--	--	--	--	--
17...	--	535	--	8010	--	--	12.9	340	--	26	13
17...	6.2	535	--	--	--	--	--	--	--	--	--
AUG											
01...	--	535	--	8010	--	--	12.9	90	--	--	--
01...	23	535	--	--	--	--	--	--	--	--	--
26...	--	535	--	8010	--	--	12.9	280	--	13	--
26...	6.9	535	--	--	--	--	--	--	--	--	--
SEP											
18...	--	535	--	8010	--	--	12.9	220	--	--	--
18...	12	535	--	--	--	--	--	--	--	--	--
NOV											
19...	--	535	--	8010	--	--	13.7	160	--	D55	--
19...	4.3	535	0.40	--	263	120	--	--	--	--	--
JAN 1981											
22...	1.3	535	0.30	--	262	120	--	--	--	--	--
APR											
02...	--	535	--	8010	--	--	12.9	90	--	--	--
02...	7.5	535	0.30	--	203	98	--	--	0	--	--
MAY											
28...	--	535	--	8010	--	--	12.9	77	--	D13	--
28...	2.3	535	0.30	--	269	120	--	--	11	--	--
JUL											
28...	--	535	--	8010	--	--	12.9	100	--	13	--
28...	3.6	535	0.30	--	258	120	--	--	10	--	--
SEP											
02...	--	535	--	8010	--	--	13.9	42	--	--	--
02...	4.2	535	0.30	--	256	120	--	--	5	--	--
NOV											
03...	6.1	535	--	--	254	120	--	--	9	--	--
DEC											
18...	6.6	535	--	--	265	130	--	--	0	--	--
FEB 1982											
24...	6.7	535	--	--	222	100	--	--	13	--	--
MAY											
05...	6.8	535	--	--	247	120	--	--	12	--	--
JUN											
03...	5.4	535	--	--	264	123	--	--	4	--	--
AUG											
20...	9.1	535	--	--	234	101	--	--	12	--	--
OCT											
25...	7.1	535	--	--	263	124	--	--	12	--	--
DEC											
21...	3.5	535	--	--	236	115	--	--	2	--	--
MAR 1983											
03...	7.5	535	--	--	206	96	--	--	6	--	--

DATE	CHLOREL LA (96205)	SCENE DESMUS (96243)	MICRACT INIUM (96254)	CRYPTO MONAS (96430)	GLENO DINIUM (96484)	CYCLO TELLA (96706)	MELO SIRA (96707)	DIATOMA (96759)	FRAGILA RIA (96764)	SYNE DRA (96765)	ACHNAN THES (96777)
JUL 1979											
27...	15	--	--	--	--	--	31	--	10	5	D82
27...	--	--	--	--	--	--	--	--	--	--	--
AUG											
30...	--	--	--	20	--	5	35	--	--	5	D96
30...	--	--	--	--	--	--	--	--	--	--	--
OCT											
03...	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--
NOV											
08...	--	--	--	--	--	--	--	--	--	--	--
DEC											
05...	--	--	--	--	--	--	--	--	--	--	--
JAN 1980											
06...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
MAR											
04...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
APR											
30...	--	--	--	--	--	--	--	--	--	--	--
JUN											
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
AUG											
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	26	--	--	--	13	--
26...	--	--	--	--	--	--	--	--	--	--	--
SEP											
18...	--	--	13	--	--	13	--	13	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
NOV											
19...	--	--	--	--	--	14	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
JAN 1981											
22...	--	--	--	--	--	--	--	--	--	--	--
APR											
02...	--	D26	--	13	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
MAY											
28...	--	--	--	D13	--	--	--	--	--	--	D13
28...	--	--	--	--	--	--	--	--	--	--	--
JUL											
28...	--	--	--	--	13	13	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
SEP											
02...	--	--	--	--	--	--	--	--	--	D14	--
02...	--	--	--	--	--	--	--	--	--	--	--
NOV											
03...	--	--	--	--	--	--	--	--	--	--	--
DEC											
18...	--	--	--	--	--	--	--	--	--	--	--
FEB 1982											
24...	--	--	--	--	--	--	--	--	--	--	--
MAY											
05...	--	--	--	--	--	--	--	--	--	--	--
JUN											
03...	--	--	--	--	--	--	--	--	--	--	--
AUG											
20...	--	--	--	--	--	--	--	--	--	--	--
OCT											
25...	--	--	--	--	--	--	--	--	--	--	--
DEC											
21...	--	--	--	--	--	--	--	--	--	--	--
MAR 1983											
03...	--	--	--	--	--	--	--	--	--	--	--

DATE	COCCO NEIS (96778)	RHOCO SPHENIA (96779)	NAVI CULA (96791)	GOMPHO NEMA (96802)	CYMBEL LA (96806)	NITZ SCHIA (96812)	SURI RELLA (96817)	ANA CYSTIS (98082)	OSCIL LATORIA (98136)	SCHIZO THRIX (98150)	ANABAE NA (98165)
JUL 1979											
27...	D110	--	51	10	--	5	5	--	--	--	56
27...	--	--	--	--	--	--	--	--	--	--	--
AUG											
30...	D110	--	D100	20	5	D71	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
OCT											
03...	D13	--	D39	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--
NOV											
08...	--	--	--	--	--	--	--	--	--	--	--
DEC											
05...	--	--	--	--	--	--	--	--	--	--	--
JAN 1980											
06...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
MAR											
04...	--	--	--	--	--	--	--	--	--	--	--
27...	D25	--	5	5	--	5	--	--	--	D86	--
27...	--	--	--	--	--	--	--	--	--	--	--
APR											
30...	--	--	--	--	--	--	--	--	--	--	--
JUN											
04...	D13	--	D13	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	13	13	--	13	--	26	D230	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
AUG											
01...	D52	--	--	--	--	D39	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	26	--	--	D210	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
SEP											
18...	26	--	26	--	--	--	--	--	--	--	D130
18...	--	--	--	--	--	--	--	--	--	--	--
NOV											
19...	D41	--	14	--	--	--	--	D41	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
JAN 1981											
22...	--	--	--	--	--	--	--	--	--	--	--
APR											
02...	D26	13	--	13	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
MAY											
28...	D13	--	--	--	--	D26	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
JUL											
28...	D51	--	--	--	--	13	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
SEP											
02...	--	--	D14	--	--	D14	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
NOV											
03...	--	--	--	--	--	--	--	--	--	--	--
DEC											
18...	--	--	--	--	--	--	--	--	--	--	--
FEB 1982											
24...	--	--	--	--	--	--	--	--	--	--	--
MAY											
05...	--	--	--	--	--	--	--	--	--	--	--
JUN											
03...	--	--	--	--	--	--	--	--	--	--	--
AUG											
20...	--	--	--	--	--	--	--	--	--	--	--
OCT											
25...	--	--	--	--	--	--	--	--	--	--	--
DEC											
21...	--	--	--	--	--	--	--	--	--	--	--
MAR 1983											
03...	--	--	--	--	--	--	--	--	--	--	--

DATE	STATION	NUMBER	DATE	TIME	TEMPER-ATURE WATER (DEG C) (00010)	TEMPER-ATURE AIR (DEG C) (00020)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	TUR-BID-ITY (NTU) (00076)
APR 1983												
15...	02326900		830415	1800	19.0	--	--	1028	80010	2060	7.49	1.9
JUN												
29...	02326900		830629	1415	22.0	--	762	81213	80010	1060	6.17	1.5
AUG												
30...	02326900		830830	1515	23.0	--	759	1028	80010	795	5.68	<1.0
OCT												
28...	02326900		831028	1630	19.5	--	770	1028	80010	695	5.48	<1.0
DEC												
14...	02326900		831214	1715	17.0	--	754	1028	81213	860	5.89	1.5
FEB 1984												
24...	02326900		840224	1245	17.5	--	760	1028	80010	593	5.61	2.1
APR												
17...	02326900		840417	1355	17.0	--	756	1028	80010	2290	8.24	1.9
AUG												
27...	02326900		840827	1130	21.5	23.0	764	1028	80010	735	5.56	1.2
OCT												
24...	02326900		841024	1630	21.5	--	762	1028	80010	560	5.11	0.70
DEC												
18...	02326900		841218	1115	20.0	--	765	1028	80010	438	4.75	2.0
FEB 1985												
19...	02326900		850219	1530	20.0	--	765	1028	80010	383	4.58	0.50
APR												
30...	02326900		850430	1400	23.0	--	760	1028	80010	395	4.62	5.0
JUN												
20...	02326900		850620	1745	21.5	--	760	1028	80010	465	4.83	1.0
AUG												
06...	02326900		850806	1230	22.0	--	760	1028	80010	724	5.51	1.3
NOV												
04...	02326900		851104	1630	19.0	--	755	1028	80020	1370	6.83	2.1
DEC												
11...	02326900		851211	1415	19.0	--	762	1028	80020	905	5.92	2.2
FEB 1986												
11...	02326900		860211	1200	17.0	--	754	1028	80020	2300	8.28	1.5
APR												
18...	02326900		860418	1130	20.0	--	760	1028	80020	758	5.59	--
AUG												
19...	02326900		860819	1645	21.0	--	--	1028	80020	638	5.30	1.1
JUN												
16...	02326900		860616	1415	22.0	--	752	1028	80020	650	5.33	1.0
MAY 1994												
02...	02326900		940502	1330	205.0	--	762	1028	80020	--	6.02	--
JUN												
30...	02326900		940630	1300	24.0	--	763	1028	80020	--	--	--
30...	02326900		940630	1301	--	--	--	1028	80020	--	--	--

02326900 - ST. MARKS RIVER NEAR NEWPORT, FLA. WATER-QUALITY DATA

DATE	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	PH WATER WHOLE LAB (STAND-ARD UNITS) (00403)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
APR 1983												
15...	117	5.2	--	7.7	7.3	--	--	--	0.30	0.24	--	0.060
JUN												
29...	195	4.4	50	7.9	7.5	--	--	--	0.42	0.27	--	0.030
AUG												
30...	272	6.8	80	8.0	7.5	--	--	--	0.94	0.73	--	0.070
OCT												
28...	247	8.6	93	8.1	7.8	--	--	--	0.50	0.37	--	0.030
DEC												
14...	188	4.7	49	7.6	7.3	--	--	--	0.49	0.22	--	0.080
FEB 1984												
24...	189	7.2	76	7.9	7.6	--	--	--	0.30	0.23	--	0.070
APR												
17...	90	5.7	59	7.4	7.0	--	--	--	1.0	0.93	--	0.070
AUG												
27...	260	6.7	76	7.6	7.6	--	--	--	0.30	0.27	--	0.030
OCT												
24...	275	7.2	82	8.2	8.4	--	130	--	--	--	--	--
DEC												
18...	272	6.5	71	8.3	8.2	--	129	--	0.40	0.19	--	0.040
FEB 1985												
19...	268	9.3	102	8.4	8.2	--	121	--	0.65	0.44	--	0.060
APR												
30...	270	10.3	121	8.6	8.3	--	128	--	--	--	--	0.040
JUN												
20...	272	6.8	77	8.1	7.8	--	118	--	0.35	0.13	--	0.070
AUG												
06...	258	6.2	71	8.0	7.8	--	116	--	0.43	0.24	--	0.060
NOV												
04...	148	5.0	54	7.6	7.7	3.0	62	--	0.60	0.58	--	0.040
DEC												
11...	190	5.7	61	7.8	8.0	2.5	83	--	0.40	0.36	--	0.040
FEB 1986												
11...	110	6.1	64	7.3	7.5	3.5	37	--	0.60	0.57	--	0.030
APR												
18...	215	8.0	88	8.2	--	1.2	102	--	0.20	0.19	--	0.010
AUG												
19...	--	5.7	--	--	8.1	--	--	--	--	--	--	0.010
JUN												
16...	260	7.5	87	8.3	8.2	1.1	120	--	0.33	0.18	--	0.020
MAY 1994												
02...	233	4.8	--	7.7	7.6	--	--	2	--	--	--	0.020
JUN												
30...	192	4.5	53	7.5	--	--	--	110	0.40	0.39	0.29	0.010
30...	--	--	--	--	--	--	--	--	--	--	--	--

02326900 - ST. MARKS RIVER NEAR NEWPORT, FLA. WATER-QUALITY DATA

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)
APR 1983												
15...	--	--	--	--	0.30	--	<0.100	0.06	0.050	0.030	0.020	--
JUN												
29...	--	--	0.120	--	0.30	0.120	0.120	0.09	0.050	0.040	0.030	--
AUG												
30...	--	--	0.140	--	0.80	0.140	0.140	0.09	<0.010	<0.010	0.030	--
OCT												
28...	--	--	0.100	--	0.40	0.100	0.100	0.18	0.190	0.100	0.060	--
DEC												
14...	--	--	0.190	--	0.30	0.190	0.190	--	0.060	0.040	<0.010	--
FEB 1984												
24...	--	--	--	--	0.30	--	<0.100	0.09	0.030	0.030	0.030	--
APR												
17...	--	--	--	--	1.0	--	<0.100	0.06	0.050	0.030	0.020	--
AUG												
27...	--	--	--	--	0.30	--	<0.100	0.09	0.040	0.030	0.030	--
OCT												
24...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
18...	--	--	0.170	--	0.23	0.170	0.170	--	<0.010	<0.010	<0.030	--
FEB 1985												
19...	--	--	0.150	--	0.50	0.150	0.150	0.18	0.060	<0.010	0.060	--
APR												
30...	--	--	--	--	--	--	<0.100	0.03	<0.010	0.030	0.010	--
JUN												
20...	--	--	0.150	--	0.20	0.150	0.150	0.18	<0.010	0.060	0.060	--
AUG												
06...	--	--	0.130	--	0.30	0.130	0.130	0.12	0.060	0.050	0.040	--
NOV												
04...	0.020	<0.010	--	--	0.60	--	<0.100	0.06	0.040	0.030	0.020	--
DEC												
11...	0.040	<0.010	--	--	0.40	--	<0.100	0.09	0.040	0.030	0.030	--
FEB 1986												
11...	0.030	<0.010	--	--	0.60	--	<0.100	0.06	0.030	0.020	0.020	--
APR												
18...	<0.010	<0.010	--	--	0.20	--	<0.100	0.09	0.040	0.030	0.030	--
AUG												
19...	0.020	<0.010	0.140	--	<0.20	0.140	0.140	0.09	0.040	0.040	0.030	--
JUN												
16...	<0.010	<0.010	0.130	--	0.20	0.130	0.130	0.09	0.050	0.040	0.030	--
MAY 1994												
02...	--	<0.010	0.054	<0.20	<0.20	0.054	0.054	0.09	0.050	0.040	0.030	4.8
JUN												
30...	--	0.010	--	0.30	0.40	--	<0.050	0.06	0.030	0.030	0.020	12
30...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
APR 1983												
15...	--	54	--	17	2.9	2.5	0.1	9	0.50	4.6	11	<0.10
JUN												
29...	--	90	--	28	4.9	2.8	0.1	6	0.40	4.9	10	0.20
AUG												
30...	--	130	--	40	7.7	3.6	0.1	6	0.40	5.4	9.5	0.20
OCT												
28...	--	140	--	42	8.1	3.8	0.1	6	0.40	5.5	9.4	0.20
DEC												
14...	--	97	--	30	5.3	3.0	0.1	6	0.40	5.5	13	<0.10
FEB 1984												
24...	--	94	--	29	5.3	3.3	0.1	7	0.40	5.6	6.4	0.10
APR												
17...	--	42	--	13	2.2	1.9	0.1	9	0.50	5.1	1.4	<0.10
AUG												
27...	--	110	--	35	6.5	3.0	0.1	5	0.40	5.1	6.7	0.20
OCT												
24...	--	130	--	40	8.3	3.7	0.1	6	0.40	5.6	9.6	0.20
DEC												
18...	--	130	--	40	8.0	3.7	0.1	6	0.40	5.9	9.6	0.20
FEB 1985												
19...	--	130	--	39	7.7	3.9	0.1	6	0.50	5.7	9.5	0.20
APR												
30...	--	140	--	41	8.3	3.6	0.1	5	0.40	5.6	8.6	0.20
JUN												
20...	--	130	--	40	7.8	3.8	0.1	6	0.40	5.9	17	0.10
AUG												
06...	--	130	--	38	7.3	3.5	0.1	6	0.50	5.2	11	0.10
NOV												
04...	--	73	--	22	4.3	2.9	0.1	8	0.40	5.7	13	<0.10
DEC												
11...	--	96	--	30	5.1	3.1	0.1	7	0.60	6.1	12	0.10
FEB 1986												
11...	--	52	--	16	3.0	2.4	0.1	9	0.50	4.5	11	<0.10
APR												
18...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
19...	--	130	--	40	7.7	3.5	0.1	5	0.50	5.4	10	0.20
JUN												
16...	--	130	--	39	7.8	3.6	0.1	6	0.60	5.1	9.9	0.20
MAY 1994												
02...	0.10	120	120	37	6.4	3.1	0.1	5	0.50	5.1	6.9	0.10
JUN												
30...	0.40	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--

02326900 - ST. MARKS RIVER NEAR NEWPORT, FLA. WATER-QUALITY DATA

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)
APR 1983												
15...	5.5	1	36	<0.50	<1.0	<1.0	<3.0	1.0	300	3.0	9.0	<10
JUN												
29...	8.6	1	28	<0.50	<1.0	<1.0	<3.0	1.0	140	3.0	9.0	<10
AUG												
30...	12	--	--	--	--	--	--	--	--	--	--	--
OCT												
28...	13	1	25	<0.50	<1.0	2.0	<3.0	3.0	16	1.0	11	<10
DEC												
14...	9.6	1	16	<0.50	<1.0	<1.0	<3.0	1.0	150	2.0	11	<10
FEB 1984												
24...	7.2	--	--	--	--	--	--	--	--	--	--	--
APR												
17...	4.1	1	9.0	<0.50	<1.0	<1.0	<3.0	1.0	300	2.0	12	<10
AUG												
27...	10	1	14	<0	<1.0	<1.0	<3.0	1.0	52	1.0	10	<10
OCT												
24...	12	<1	13	<0	<1.0	<1.0	<3.0	--	9.0	4.0	8.0	<10
DEC												
18...	12	--	--	--	--	--	--	--	--	--	--	--
FEB 1985												
19...	12	<1	10	0.50	<1.0	<1.0	<3.0	<1.0	10	1.0	7.0	<10
APR												
30...	13	<1	11	<0.50	<1.0	<1.0	<3.0	1.0	8.0	2.0	5.0	<10
JUN												
20...	12	--	--	--	--	--	--	--	--	--	--	--
AUG												
06...	12	<1	13	0.90	<1.0	1.0	<3.0	5.0	89	<1.0	6.0	<10
NOV												
04...	9.2	<1	10	<0.50	<1.0	<1.0	<3.0	<1.0	230	<1.0	10	<10
DEC												
11...	10	<1	15	<0.50	<1.0	<1.0	<3.0	<1.0	190	<1.0	15	<10
FEB 1986												
11...	5.4	--	--	--	--	--	--	--	--	--	--	--
APR												
18...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
19...	13	--	--	--	--	--	--	--	--	--	--	--
JUN												
16...	12	<1	12	<0.50	<1.0	<1.0	<3.0	2.0	12	<5.0	5.0	<10
MAY 1994												
02...	10	--	--	--	--	--	--	--	150	--	8.0	--
JUN												
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--

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02326900 - ST. MARKS RIVER NEAR NEWPORT, FLA. WATER-QUALITY DATA

DATE	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	PROP- CHLOR, WATER, DISS, REC (UG/L) (04024)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	BRO- MACIL, WATER, DISS, REC (UG/L) (04029)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)
APR 1983												
15...	2.0	<1.0	36	<6	<3.0	110	<4	<1	--	--	--	--
JUN												
29...	<1.0	1.0	57	<6	3.0	30	<4	<1	--	--	--	--
AUG												
30...	--	--	--	--	--	--	--	--	--	--	--	--
OCT												
28...	7.0	<1.0	87	<6	<3.0	10	<4	<1	--	--	--	--
DEC												
14...	<1.0	<1.0	58	<6	<3.0	30	<4	<1	--	--	--	--
FEB 1984												
24...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
17...	2.0	<1.0	27	<6	5.0	60	<4	<1	--	--	--	--
AUG												
27...	1.0	<1.0	75	<6	<3.0	30	<4	<1	--	--	--	--
OCT												
24...	<1.0	<1.0	89	<6	5.0	<10	6	<1	--	--	--	--
DEC												
18...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 1985												
19...	<1.0	<1.0	80	<6	4.0	50	5	<1	--	--	--	--
APR												
30...	2.0	<1.0	84	<6	<3.0	30	14	<1	--	--	--	--
JUN												
20...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
06...	<1.0	<1.0	78	<6	8.5	30	<4	<1	--	--	--	--
NOV												
04...	<1.0	<1.0	47	<6	8.0	130	4	<1	--	--	--	--
DEC												
11...	2.0	<1.0	56	<6	<3.0	60	<4	<1	--	--	--	--
FEB 1986												
11...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
18...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
19...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
16...	2.0	<1.0	82	<7	15	<10	6	<1	--	--	--	--
MAY 1994												
02...	--	--	--	--	--	--	--	--	<0.015	<0.008	<0.050	<0.008
JUN												
30...	--	--	--	--	--	--	--	--	<0.015	<0.008	<0.050	0.003
30...	--	--	--	--	--	--	--	--	0.130	0.120	--	0.110

DISTRICT CODE 12 UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 9-24-96

02326900 - ST. MARKS RIVER NEAR NEWPORT, FLA. WATER-QUALITY DATA

DATE	PRO-METON, WATER, DISS, REC (UG/L) (04037)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	FONOFOS WATER DISS REC (UG/L) (04095)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	P,P' DDE DISSOLV (UG/L) (34653)	DICAMBA WATER, FLTRD, GF 0.7U REC (UG/L) (38442)	LINURON WATER, FLTRD, GF 0.7U REC (UG/L) (38478)	MCPA, WATER, FLTRD, GF 0.7U REC (UG/L) (38482)
APR 1983											
15...	--	--	--	--	--	--	--	--	--	--	--
JUN											
29...	--	--	--	--	K40	130	--	--	--	--	--
AUG											
30...	--	--	--	--	>400	330	--	--	--	--	--
OCT											
28...	--	--	--	--	50	49	--	--	--	--	--
DEC											
14...	--	--	--	--	47	130	--	--	--	--	--
FEB 1984											
24...	--	--	--	--	K21	62	--	--	--	--	--
APR											
17...	--	--	--	--	42	27	--	--	--	--	--
AUG											
27...	--	--	--	--	K10	K200	--	--	--	--	--
OCT											
24...	--	--	--	--	K10	K7	--	--	--	--	--
DEC											
18...	--	--	--	--	19	27	--	--	--	--	--
FEB 1985											
19...	--	--	--	--	K4	K1	--	--	--	--	--
APR											
30...	--	--	--	--	K100	K16	--	--	--	--	--
JUN											
20...	--	--	--	--	K9	76	--	--	--	--	--
AUG											
06...	--	--	--	--	K9	63	--	--	--	--	--
NOV											
04...	--	--	--	--	33	74	--	--	--	--	--
DEC											
11...	--	--	--	--	K24	K15	--	--	--	--	--
FEB 1986											
11...	--	--	--	--	62	130	--	--	--	--	--
APR											
18...	--	--	--	--	K8	90	--	--	--	--	--
AUG											
19...	--	--	--	--	52	84	--	--	--	--	--
JUN											
16...	--	--	--	--	57	70	--	--	--	--	--
MAY 1994											
02...	<0.008	<0.005	<0.013	<0.008	--	--	<0.007	<0.010	<0.050	<0.050	<0.050
JUN											
30...	<0.008	<0.005	<0.013	<0.008	--	--	<0.007	<0.010	<0.050	<0.050	<0.050
30...	0.110	0.046	0.120	0.120	--	--	0.130	0.094	--	--	--

DATE	MCPB, WATER, FLTRD, GF 0.7U REC (UG/L) (38487)	METHIO-CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (38501)	PRO-POXUR, WATER, FLTRD, GF 0.7U REC (UG/L) (38538)	BENTA-ZON, WATER, FLTRD, GF 0.7U REC (UG/L) (38711)	2,4-DB WATER, FLTRD, GF 0.7U REC (UG/L) (38746)	FLUO-METURON WATER, FLTRD, GF 0.7U REC (UG/L) (38811)	OXAMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (38866)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	LINDANE DIS-SOLVED (UG/L) (39341)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)
APR 1983											
15...	--	--	--	--	--	--	--	--	--	--	--
JUN											
29...	--	--	--	--	--	--	--	--	--	--	--
AUG											
30...	--	--	--	--	--	--	--	--	--	--	--
OCT											
28...	--	--	--	--	--	--	--	--	--	--	--
DEC											
14...	--	--	--	--	--	--	--	--	--	--	--
FEB 1984											
24...	--	--	--	--	--	--	--	--	--	--	--
APR											
17...	--	--	--	--	--	--	--	--	--	--	--
AUG											
27...	--	--	--	--	--	--	--	--	--	--	--
OCT											
24...	--	--	--	--	--	--	--	--	--	--	--
DEC											
18...	--	--	--	--	--	--	--	--	--	--	--
FEB 1985											
19...	--	--	--	--	--	--	--	--	--	--	--
APR											
30...	--	--	--	--	--	--	--	--	--	--	--
JUN											
20...	--	--	--	--	--	--	--	--	--	--	--
AUG											
06...	--	--	--	--	--	--	--	--	--	--	--
NOV											
04...	--	--	--	--	--	--	--	--	--	--	--
DEC											
11...	--	--	--	--	--	--	--	--	--	--	--
FEB 1986											
11...	--	--	--	--	--	--	--	--	--	--	--
APR											
18...	--	--	--	--	--	--	--	--	--	--	--
AUG											
19...	--	--	--	--	--	--	--	--	--	--	--
JUN											
16...	--	--	--	--	--	--	--	--	--	--	--
MAY 1994											
02...	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.008	2	<0.011	<0.008
JUN											
30...	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.008	90	<0.011	<0.008
30...	--	--	--	--	--	--	--	0.150	--	0.140	0.140

2.

DATE	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	MALA-THION, DIS-SOLVED (UG/L) (39532)	PARA-THION, DIS-SOLVED (UG/L) (39542)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	2,4-D, DIS-SOLVED (UG/L) (39732)	2,4,5-T DIS-SOLVED (UG/L) (39742)	SILVEX, DIS-SOLVED (UG/L) (39762)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	TRI-CLOPYR, WATER, FLTRD, GF 0.7U REC (UG/L) (49235)	PRO-PHAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49236)
APR 1983											
15...	--	--	--	--	--	--	--	--	--	--	--
JUN											
29...	--	--	--	--	--	--	--	--	--	--	--
AUG											
30...	--	--	--	--	--	--	--	--	--	--	--
OCT											
28...	--	--	--	--	--	--	--	--	--	--	--
DEC											
14...	--	--	--	--	--	--	--	--	--	--	--
FEB 1984											
24...	--	--	--	--	--	--	--	--	--	--	--
APR											
17...	--	--	--	--	--	--	--	--	--	--	--
AUG											
27...	--	--	--	--	--	--	--	--	--	--	--
OCT											
24...	--	--	--	--	--	--	--	--	--	--	--
DEC											
18...	--	--	--	--	--	--	--	--	--	--	--
FEB 1985											
19...	--	--	--	--	--	--	--	--	--	--	--
APR											
30...	--	--	--	--	--	--	--	--	--	--	--
JUN											
20...	--	--	--	--	--	--	--	--	--	--	--
AUG											
06...	--	--	--	--	--	--	--	--	--	--	--
NOV											
04...	--	--	--	--	--	--	--	--	--	--	--
DEC											
11...	--	--	--	--	--	--	--	--	--	--	--
FEB 1986											
11...	--	--	--	--	--	--	--	--	--	--	--
APR											
18...	--	--	--	--	--	--	--	--	--	--	--
AUG											
19...	--	--	--	--	--	--	--	--	--	--	--
JUN											
16...	--	--	--	--	--	--	--	--	--	--	--
MAY 1994											
02...	<0.009	<0.014	<0.022	<0.008	<0.017	<0.050	<0.050	<0.050	<0.009	<0.050	<0.050
JUN											
30...	<0.009	<0.014	<0.022	<0.008	0.005	<0.050	<0.050	<0.050	<0.009	<0.050	<0.050
30...	0.130	0.150	0.180	0.096	0.120	--	--	--	0.130	--	--

DATE	PIC-LORAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49291)	ORY-ZALIN, WATER, FLTRD, GF 0.7U REC (UG/L) (49292)	NORFLUR AZON, WATER, FLTRD, GF 0.7U REC (UG/L) (49293)	NEB-URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49294)	1-NAPH THOL, WATER, FLTRD, GF 0.7U REC (UG/L) (49295)	METH-OMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49296)	FEN-URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49297)	ESFEN-VAL-ERATE, WAT,FLT GF 0.7U REC (UG/L) (49298)	DNOC WAT,FLT GF 0.7U REC (UG/L) (49299)	DIURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49300)	DINOSEB WATER, FLTRD, GF 0.7U REC (UG/L) (49301)
APR 1983											
15...	--	--	--	--	--	--	--	--	--	--	--
JUN											
29...	--	--	--	--	--	--	--	--	--	--	--
AUG											
30...	--	--	--	--	--	--	--	--	--	--	--
OCT											
28...	--	--	--	--	--	--	--	--	--	--	--
DEC											
14...	--	--	--	--	--	--	--	--	--	--	--
FEB 1984											
24...	--	--	--	--	--	--	--	--	--	--	--
APR											
17...	--	--	--	--	--	--	--	--	--	--	--
AUG											
27...	--	--	--	--	--	--	--	--	--	--	--
OCT											
24...	--	--	--	--	--	--	--	--	--	--	--
DEC											
18...	--	--	--	--	--	--	--	--	--	--	--
FEB 1985											
19...	--	--	--	--	--	--	--	--	--	--	--
APR											
30...	--	--	--	--	--	--	--	--	--	--	--
JUN											
20...	--	--	--	--	--	--	--	--	--	--	--
AUG											
06...	--	--	--	--	--	--	--	--	--	--	--
NOV											
04...	--	--	--	--	--	--	--	--	--	--	--
DEC											
11...	--	--	--	--	--	--	--	--	--	--	--
FEB 1986											
11...	--	--	--	--	--	--	--	--	--	--	--
APR											
18...	--	--	--	--	--	--	--	--	--	--	--
AUG											
19...	--	--	--	--	--	--	--	--	--	--	--
JUN											
16...	--	--	--	--	--	--	--	--	--	--	--
MAY 1994											
02...	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
JUN											
30...	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
30...	--	--	--	--	--	--	--	--	--	--	--

DATE	DICHLOR PROP, WATER, FLTRD, GF 0.7U REC (UG/L) (49302)	DICHLO-BENIL, WATER, FLTRD, GF 0.7U REC (UG/L) (49303)	DACTHAL MONO-ACID, WAT,FLT GF 0.7U REC (UG/L) (49304)	CLOPYR-ALID, WATER, FLTRD, GF 0.7U REC (UG/L) (49305)	CHLORO-THALO-NIL, WAT,FLT GF 0.7U REC (UG/L) (49306)	CHLOR-AMBEN, WATER, FLTRD, GF 0.7U REC (UG/L) (49307)	3HYDRXY CARBO-FURAN WAT,FLT GF 0.7U REC (UG/L) (49308)	CARBO-FURAN, WATER, FLTRD, GF 0.7U REC (UG/L) (49309)	CAR-BARYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49310)	BRO-MOXYNIL WATER, FLTRD, GF 0.7U REC (UG/L) (49311)	ALDI-CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (49312)
APR 1983											
15...	--	--	--	--	--	--	--	--	--	--	--
JUN											
29...	--	--	--	--	--	--	--	--	--	--	--
AUG											
30...	--	--	--	--	--	--	--	--	--	--	--
OCT											
28...	--	--	--	--	--	--	--	--	--	--	--
DEC											
14...	--	--	--	--	--	--	--	--	--	--	--
FEB 1984											
24...	--	--	--	--	--	--	--	--	--	--	--
APR											
17...	--	--	--	--	--	--	--	--	--	--	--
AUG											
27...	--	--	--	--	--	--	--	--	--	--	--
OCT											
24...	--	--	--	--	--	--	--	--	--	--	--
DEC											
18...	--	--	--	--	--	--	--	--	--	--	--
FEB 1985											
19...	--	--	--	--	--	--	--	--	--	--	--
APR											
30...	--	--	--	--	--	--	--	--	--	--	--
JUN											
20...	--	--	--	--	--	--	--	--	--	--	--
AUG											
06...	--	--	--	--	--	--	--	--	--	--	--
NOV											
04...	--	--	--	--	--	--	--	--	--	--	--
DEC											
11...	--	--	--	--	--	--	--	--	--	--	--
FEB 1986											
11...	--	--	--	--	--	--	--	--	--	--	--
APR											
18...	--	--	--	--	--	--	--	--	--	--	--
AUG											
19...	--	--	--	--	--	--	--	--	--	--	--
JUN											
16...	--	--	--	--	--	--	--	--	--	--	--
MAY 1994											
02...	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
JUN											
30...	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
30...	--	--	--	--	--	--	--	--	--	--	--

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DATE	ALDI-CARB SULFONE WAT,FLT GF 0.7U REC (UG/L) (49313)	ALDICA-RB SUL-FOXIDE, WAT,FLT GF 0.7U REC (UG/L) (49314)	ACIFL-UORFEN WATER, FLTRD, GF 0.7U REC (UG/L) (49315)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	NITRO-GEN, AMMONIA TOTAL (MG/L AS NH4) (71845)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)
APR 1983											
15...	--	--	--	104	75	578	0.14	56	--	0.08	--
JUN											
29...	--	--	--	136	114	389	0.18	50	--	0.04	--
AUG											
30...	--	--	--	146	153	313	0.20	49	--	0.09	--
OCT											
28...	--	--	--	166	159	311	0.23	33	--	0.04	--
DEC											
14...	--	--	--	127	120	295	0.17	60	--	0.10	--
FEB 1984											
24...	--	--	--	107	109	171	0.15	33	--	0.09	--
APR											
17...	--	--	--	68	51	420	0.09	29	--	0.09	--
AUG											
27...	--	--	--	145	131	288	0.20	50	--	0.04	--
OCT											
24...	--	--	--	159	158	240	0.22	47	--	--	--
DEC											
18...	--	--	--	153	158	181	0.21	52	--	0.05	--
FEB 1985											
19...	--	--	--	157	152	162	0.21	<1	--	0.08	--
APR											
30...	--	--	--	170	158	181	0.23	83	--	0.05	--
JUN											
20...	--	--	--	171	159	215	0.23	50	--	0.09	--
AUG											
06...	--	--	--	160	148	313	0.22	67	--	0.08	--
NOV											
04...	--	--	--	113	94	418	0.15	57	0.03	0.05	--
DEC											
11...	--	--	--	131	117	320	0.18	43	0.05	0.05	--
FEB 1986											
11...	--	--	--	76	65	472	0.10	--	0.04	0.04	--
APR											
18...	--	--	--	--	--	--	--	50	--	0.01	--
AUG											
19...	--	--	--	145	154	250	0.20	79	0.03	0.01	--
JUN											
16...	--	--	--	151	150	265	0.21	67	--	0.03	--
MAY 1994											
02...	<0.050	<0.050	<0.050	141	71	--	0.19	--	--	0.03	--
JUN											
30...	<0.050	<0.050	<0.050	--	--	--	--	--	--	0.01	0.03
30...	--	--	--	--	--	--	--	--	--	--	--

DATE	PHOS-PHORUS TOTAL (MG/L AS PO4) (71886)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SAMPLE PURPOSE CODE (71999)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	DRAIN-AGE AREA (SQ. MI.) (81024)	SAM-PLING METHOD, CODES (82398)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
APR 1983											
15...	0.15	0.2	--	3.5	7	39	535	--	--	--	--
JUN											
29...	0.15	0.1	--	3.5	4	11	535	--	--	--	--
AUG											
30...	--	--	--	3.5	2	4.3	535	--	--	--	--
OCT											
28...	0.58	0.3	--	3.5	6	11	535	--	--	--	--
DEC											
14...	0.18	<0.1	--	3.5	5	12	535	--	--	--	--
FEB 1984											
24...	0.09	--	--	3.5	3	4.8	535	--	--	--	--
APR											
17...	0.15	<0.1	--	3.5	14	87	535	--	--	--	--
AUG											
27...	--	<0.1	--	3.5	4	7.9	535	--	--	--	--
OCT											
24...	--	<0.1	--	3.5	2	3.0	535	20	--	--	--
DEC											
18...	--	--	--	3.5	3	3.5	535	20	--	--	--
FEB 1985											
19...	--	<0.1	--	3.5	1	1.0	535	20	--	--	--
APR											
30...	--	<0.1	--	3.5	--	--	535	20	--	--	--
JUN											
20...	--	--	--	3.5	4	5.0	535	20	--	--	--
AUG											
06...	0.18	<0.1	--	3.5	3	5.9	535	20	--	--	--
NOV											
04...	0.12	<0.1	--	3.5	7	26	535	20	--	--	--
DEC											
11...	0.12	<0.1	--	3.5	7	17	535	20	--	--	--
FEB 1986											
11...	0.09	--	--	3.5	5	31	535	20	--	--	--
APR											
18...	0.12	--	--	3.5	2	4.1	535	--	--	--	--
AUG											
19...	0.12	--	--	3.5	7	12	535	20	--	--	--
JUN											
16...	0.15	<0.1	--	3.5	3	5.3	535	--	--	--	--
MAY 1994											
02...	--	--	15.00	3.5	--	--	535	40	<0.012	<0.006	<0.012
JUN											
30...	--	--	15.00	3.5	--	--	535	40	<0.012	<0.006	<0.012
30...	--	--	--	3.5	--	--	535	--	0.140	0.099	0.130

DATE	DIMETH-OATE WATER FLTRD 0.7 U GG, REC (UG/L) (82662)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)
APR 1983											
15...	--	--	--	--	--	--	--	--	--	--	--
JUN											
29...	--	--	--	--	--	--	--	--	--	--	--
AUG											
30...	--	--	--	--	--	--	--	--	--	--	--
OCT											
28...	--	--	--	--	--	--	--	--	--	--	--
DEC											
14...	--	--	--	--	--	--	--	--	--	--	--
FEB 1984											
24...	--	--	--	--	--	--	--	--	--	--	--
APR											
17...	--	--	--	--	--	--	--	--	--	--	--
AUG											
27...	--	--	--	--	--	--	--	--	--	--	--
OCT											
24...	--	--	--	--	--	--	--	--	--	--	--
DEC											
18...	--	--	--	--	--	--	--	--	--	--	--
FEB 1985											
19...	--	--	--	--	--	--	--	--	--	--	--
APR											
30...	--	--	--	--	--	--	--	--	--	--	--
JUN											
20...	--	--	--	--	--	--	--	--	--	--	--
AUG											
06...	--	--	--	--	--	--	--	--	--	--	--
NOV											
04...	--	--	--	--	--	--	--	--	--	--	--
DEC											
11...	--	--	--	--	--	--	--	--	--	--	--
FEB 1986											
11...	--	--	--	--	--	--	--	--	--	--	--
APR											
18...	--	--	--	--	--	--	--	--	--	--	--
AUG											
19...	--	--	--	--	--	--	--	--	--	--	--
JUN											
16...	--	--	--	--	--	--	--	--	--	--	--
MAY 1994											
02...	<0.02	<0.013	<0.011	<0.030	<0.039	<0.035	<0.005	<0.009	<0.015	<0.007	<0.012
JUN											
30...	<0.02	<0.013	0.009	<0.030	<0.039	<0.035	<0.005	<0.009	<0.015	<0.007	<0.012
30...	0.03	0.160	0.130	0.120	0.057	0.170	0.120	0.120	0.100	0.130	0.140

DATE	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
APR 1983											
15...	--	--	--	--	--	--	--	--	--	--	--
JUN											
29...	--	--	--	--	--	--	--	--	--	--	--
AUG											
30...	--	--	--	--	--	--	--	--	--	--	--
OCT											
28...	--	--	--	--	--	--	--	--	--	--	--
DEC											
14...	--	--	--	--	--	--	--	--	--	--	--
FEB 1984											
24...	--	--	--	--	--	--	--	--	--	--	--
APR											
17...	--	--	--	--	--	--	--	--	--	--	--
AUG											
27...	--	--	--	--	--	--	--	--	--	--	--
OCT											
24...	--	--	--	--	--	--	--	--	--	--	--
DEC											
18...	--	--	--	--	--	--	--	--	--	--	--
FEB 1985											
19...	--	--	--	--	--	--	--	--	--	--	--
APR											
30...	--	--	--	--	--	--	--	--	--	--	--
JUN											
20...	--	--	--	--	--	--	--	--	--	--	--
AUG											
06...	--	--	--	--	--	--	--	--	--	--	--
NOV											
04...	--	--	--	--	--	--	--	--	--	--	--
DEC											
11...	--	--	--	--	--	--	--	--	--	--	--
FEB 1986											
11...	--	--	--	--	--	--	--	--	--	--	--
APR											
18...	--	--	--	--	--	--	--	--	--	--	--
AUG											
19...	--	--	--	--	--	--	--	--	--	--	--
JUN											
16...	--	--	--	--	--	--	--	--	--	--	--
MAY 1994											
02...	<0.013	<0.013	<0.012	<0.009	<0.060	<0.008	<0.016	<0.046	<0.008	<0.004	<0.018
JUN											
30...	<0.013	<0.013	<0.012	<0.009	<0.060	<0.008	<0.016	<0.046	<0.008	<0.004	<0.018
30...	0.120	0.130	0.160	0.130	0.190	0.120	0.130	0.150	0.140	0.160	0.170

02326900 - ST. MARKS RIVER NEAR NEWPORT, FLA. WATER-QUALITY DATA

DATE	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	SAMPLER TYPE (CODE) (84164)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	DIAZ- INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	TERBUTH YLAZINE SURROGT WAT FLT 0.7 U GF, REC PERCENT (91064)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (91065)	REF- ERENCE MA- TERIAL/ SPIKE SOURCE (CODE) (99104)
APR 1983											
15...	--	--	--	--	--	109	50	--	--	--	--
JUN											
29...	--	--	--	--	--	197	89	--	--	--	--
AUG											
30...	--	--	--	--	--	261	122	--	--	--	--
OCT											
28...	--	--	--	--	--	271	127	--	--	--	--
DEC											
14...	--	--	--	--	--	187	87	--	--	--	--
FEB 1984											
24...	--	--	--	--	--	193	86	--	--	--	--
APR											
17...	--	--	--	--	--	84	37	--	--	--	--
AUG											
27...	--	--	--	--	--	237	107	--	--	--	--
OCT											
24...	--	--	--	--	--	269	124	--	--	--	--
DEC											
18...	--	--	--	--	--	265	123	--	--	--	--
FEB 1985											
19...	--	--	--	--	--	262	120	--	--	--	--
APR											
30...	--	--	--	--	--	263	123	--	--	--	--
JUN											
20...	--	--	--	--	--	265	116	--	--	--	--
AUG											
06...	--	--	--	--	--	245	112	--	--	--	--
NOV											
04...	--	--	--	--	--	156	58	--	--	--	--
DEC											
11...	--	--	--	--	--	196	83	--	--	--	--
FEB 1986											
11...	--	--	--	--	--	112	42	--	--	--	--
APR											
18...	--	--	--	--	--	--	--	--	--	--	--
AUG											
19...	--	--	--	--	--	262	121	--	--	--	--
JUN											
16...	--	--	--	--	--	264	121	--	--	--	--
MAY 1994											
02...	<0.010	<0.008	<0.050	<0.016	3060	234	107	100	110	90.0	--
JUN											
30...	<0.010	<0.008	<0.050	<0.016	3060	--	--	100	107	90.0	--
30...	0.140	0.140	0.150	0.021	--	--	--	90.0	122	100	39362

WATER-QUALITY DATA

DATE	SPIKE TYPE (CODE) (99106)	SPIKE SOURCE (CODE) (99107)	SPIKE VOLUME (ML) (99108)	QUALITY ASSURANCE DATA INDICATOR CODE (99111)	ALKALINITY, CARBONATE IT-FLD (MG/L - CACO3) (99430)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	SET NUMBER SCHEDULE 2001 (NO.) (99818)	SET NUMBER SCHEDULE 2051 (NO.) (99821)	BDMC, SURROG, WATER, UNFLTRD REC PERCENT (99835)	SAMPLE VOLUME, SCHEDULE 2051 (ML) (99847)	SAMPLE VOLUME SCHEDULE 2010 (ML) (99857)
APR 1983											
15...	--	--	--	--	--	--	--	--	--	--	--
JUN											
29...	--	--	--	--	--	--	--	--	--	--	--
AUG											
30...	--	--	--	--	--	--	--	--	--	--	--
OCT											
28...	--	--	--	--	--	--	--	--	--	--	--
DEC											
14...	--	--	--	--	--	--	--	--	--	--	--
FEB 1984											
24...	--	--	--	--	--	--	--	--	--	--	--
APR											
17...	--	--	--	--	--	--	--	--	--	--	--
AUG											
27...	--	--	--	--	--	--	--	--	--	--	--
OCT											
24...	--	--	--	--	--	--	--	--	--	--	--
DEC											
18...	--	--	--	--	--	--	--	--	--	--	--
FEB 1985											
19...	--	--	--	--	--	--	--	--	--	--	--
APR											
30...	--	--	--	--	--	--	--	--	--	--	--
JUN											
20...	--	--	--	--	--	--	--	--	--	--	--
AUG											
06...	--	--	--	--	--	--	--	--	--	--	--
NOV											
04...	--	--	--	--	60	74	--	--	--	--	--
DEC											
11...	--	--	--	--	82	100	--	--	--	--	--
FEB 1986											
11...	--	--	--	--	36	44	--	--	--	--	--
APR											
18...	--	--	--	--	100	122	--	--	--	--	--
AUG											
19...	--	--	--	--	--	--	--	--	--	--	--
JUN											
16...	--	--	--	--	118	144	--	--	--	--	--
MAY 1994											
02...	--	--	--	--	--	--	--	<0.0	54.0	881	879
JUN											
30...	--	--	--	40	--	--	--	<0.0	42.0	921	894
30...	10.00	10.00	0.100	--	--	--	<0.0	--	--	--	913

DATE	STATION NUMBER	DATE	TEMPER- ATURE WATER (DEG C) (00010)	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)
DEC 1951										
05...	02327000	511205	--	--	587	2.80	--	--	--	--
JAN 1952										
18...	02327000	520118	--	--	264	2.02	--	--	--	--
FEB										
29...	02327000	520229	--	--	539	2.70	--	--	--	--
APR										
11...	02327000	520411	--	--	375	2.12	--	--	--	--
MAY										
22...	02327000	520522	--	--	257	2.02	--	--	--	--
JUL										
01...	02327000	520701	--	--	194	1.42	--	--	--	--
AUG										
12...	02327000	520812	--	--	212	1.44	--	--	--	--
SEP										
25...	02327000	520925	--	--	577	--	--	--	--	--
NOV										
06...	02327000	521106	--	--	404	1.91	--	--	--	--
DEC										
18...	02327000	521218	--	--	456	1.96	--	--	--	--
JAN 1953										
27...	02327000	530127	--	--	275	1.26	--	--	--	--
MAR										
12...	02327000	530312	--	--	551	1.93	--	--	--	--
APR										
23...	02327000	530423	--	--	689	2.37	--	--	--	--
JUN										
04...	02327000	530604	--	--	290	1.68	--	--	--	--
JUL										
16...	02327000	530716	--	--	514	1.88	--	--	--	--
AUG										
26...	02327000	530826	--	--	584	1.96	--	--	--	--
SEP										
29...	02327000	530929	--	--	596	2.46	--	--	--	--
NOV										
17...	02327000	531117	--	--	513	2.18	--	--	--	--
JAN 1954										
05...	02327000	540105	--	--	512	2.28	--	--	--	--
FEB										
11...	02327000	540211	--	--	284	1.66	--	--	--	--
MAR										
25...	02327000	540325	--	--	323	1.39	--	--	--	--
MAY										
04...	02327000	540504	--	--	217	1.46	--	--	--	--
12...	02327000	540512	22.0	282	--	--	272	7.4	9.4	121
JUN										
14...	02327000	540614	--	--	215	1.76	--	--	--	--
JUL										
26...	02327000	540726	--	--	232	1.89	--	--	--	--
SEP										
07...	02327000	540907	--	--	201	1.46	--	--	--	--
OCT										
18...	02327000	541018	--	--	216	1.28	--	--	--	--
DEC										
06...	02327000	541206	--	--	475	2.25	--	--	--	--
JAN 1955										
10...	02327000	550110	--	--	314	1.90	--	--	--	--
FEB										
21...	02327000	550221	--	--	182	1.59	--	--	--	--
APR										
04...	02327000	550404	--	--	243	1.86	--	--	--	--
MAY										
16...	02327000	550516	--	--	96	1.22	--	--	--	--
JUN										
27...	02327000	550627	--	--	551	2.50	--	--	--	--
AUG										
09...	02327000	550809	--	--	202	1.85	--	--	--	--
SEP										
22...	02327000	550922	--	--	224	2.27	--	--	--	--

WAKULLA

DATE	BICAR-BONATE WATER WH FET FIELD MG/L AS HCO3 (00440)	CAR-BONATE WATER WH FET FIELD MG/L AS CO3 (00445)	PHOS-PHATE, TOTAL (MG/L AS PO4) (00650)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
DEC 1951											
05...	--	--	--	--	--	--	--	--	--	--	--
JAN 1952											
18...	--	--	--	--	--	--	--	--	--	--	--
FEB											
29...	--	--	--	--	--	--	--	--	--	--	--
APR											
11...	--	--	--	--	--	--	--	--	--	--	--
MAY											
22...	--	--	--	--	--	--	--	--	--	--	--
JUL											
01...	--	--	--	--	--	--	--	--	--	--	--
AUG											
12...	--	--	--	--	--	--	--	--	--	--	--
SEP											
25...	--	--	--	--	--	--	--	--	--	--	--
NOV											
06...	--	--	--	--	--	--	--	--	--	--	--
DEC											
18...	--	--	--	--	--	--	--	--	--	--	--
JAN 1953											
27...	--	--	--	--	--	--	--	--	--	--	--
MAR											
12...	--	--	--	--	--	--	--	--	--	--	--
APR											
23...	--	--	--	--	--	--	--	--	--	--	--
JUN											
04...	--	--	--	--	--	--	--	--	--	--	--
JUL											
16...	--	--	--	--	--	--	--	--	--	--	--
AUG											
26...	--	--	--	--	--	--	--	--	--	--	--
SEP											
29...	--	--	--	--	--	--	--	--	--	--	--
NOV											
17...	--	--	--	--	--	--	--	--	--	--	--
JAN 1954											
05...	--	--	--	--	--	--	--	--	--	--	--
FEB											
11...	--	--	--	--	--	--	--	--	--	--	--
MAR											
25...	--	--	--	--	--	--	--	--	--	--	--
MAY											
04...	--	--	--	--	--	--	--	--	--	--	--
12...	150	0	0.10	140	15	39	9.4	6.0	0.2	3.0	22
JUN											
14...	--	--	--	--	--	--	--	--	--	--	--
JUL											
26...	--	--	--	--	--	--	--	--	--	--	--
SEP											
07...	--	--	--	--	--	--	--	--	--	--	--
OCT											
18...	--	--	--	--	--	--	--	--	--	--	--
DEC											
06...	--	--	--	--	--	--	--	--	--	--	--
JAN 1955											
10...	--	--	--	--	--	--	--	--	--	--	--
FEB											
21...	--	--	--	--	--	--	--	--	--	--	--
APR											
04...	--	--	--	--	--	--	--	--	--	--	--
MAY											
16...	--	--	--	--	--	--	--	--	--	--	--
JUN											
27...	--	--	--	--	--	--	--	--	--	--	--
AUG											
09...	--	--	--	--	--	--	--	--	--	--	--
SEP											
22...	--	--	--	--	--	--	--	--	--	--	--

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	RA-226, DIS-SOLVED, PLAN-CHET COUNT (PCI/L) (09510)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L) (09511)	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L) (80020)
DEC 1951										
05...	--	--	--	--	--	--	--	--	--	--
JAN 1952										
18...	--	--	--	--	--	--	--	--	--	--
FEB										
29...	--	--	--	--	--	--	--	--	--	--
APR										
11...	--	--	--	--	--	--	--	--	--	--
MAY										
22...	--	--	--	--	--	--	--	--	--	--
JUL										
01...	--	--	--	--	--	--	--	--	--	--
AUG										
12...	--	--	--	--	--	--	--	--	--	--
SEP										
25...	--	--	--	--	--	--	--	--	--	--
NOV										
06...	--	--	--	--	--	--	--	--	--	--
DEC										
18...	--	--	--	--	--	--	--	--	--	--
JAN 1953										
27...	--	--	--	--	--	--	--	--	--	--
MAR										
12...	--	--	--	--	--	--	--	--	--	--
APR										
23...	--	--	--	--	--	--	--	--	--	--
JUN										
04...	--	--	--	--	--	--	--	--	--	--
JUL										
16...	--	--	--	--	--	--	--	--	--	--
AUG										
26...	--	--	--	--	--	--	--	--	--	--
SEP										
29...	--	--	--	--	--	--	--	--	--	--
NOV										
17...	--	--	--	--	--	--	--	--	--	--
JAN 1954										
05...	--	--	--	--	--	--	--	--	--	--
FEB										
11...	--	--	--	--	--	--	--	--	--	--
MAR										
25...	--	--	--	--	--	--	--	--	--	--
MAY										
04...	--	--	--	--	--	--	--	--	--	--
12...	0.20	12	40	40	0.2	0.20	0.50	165	0.033	0.50
JUN										
14...	--	--	--	--	--	--	--	--	--	--
JUL										
26...	--	--	--	--	--	--	--	--	--	--
SEP										
07...	--	--	--	--	--	--	--	--	--	--
OCT										
18...	--	--	--	--	--	--	--	--	--	--
DEC										
06...	--	--	--	--	--	--	--	--	--	--
JAN 1955										
10...	--	--	--	--	--	--	--	--	--	--
FEB										
21...	--	--	--	--	--	--	--	--	--	--
APR										
04...	--	--	--	--	--	--	--	--	--	--
MAY										
16...	--	--	--	--	--	--	--	--	--	--
JUN										
27...	--	--	--	--	--	--	--	--	--	--
AUG										
09...	--	--	--	--	--	--	--	--	--	--
SEP										
22...	--	--	--	--	--	--	--	--	--	--

DATE	STATION NUMBER	DATE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)
NOV 1955				
01...	02327000	551101	236	2.12
DEC				
15...	02327000	551215	278	2.17
JAN 1956				
27...	02327000	560127	562	2.82
MAR				
06...	02327000	560306	257	1.96
APR				
27...	02327000	560427	226	1.60
MAY				
31...	02327000	560531	109	1.49
JUL				
12...	02327000	560712	379	2.30
AUG				
24...	02327000	560824	262	1.86
OCT				
04...	02327000	561004	403	2.23
NOV				
15...	02327000	561115	525	2.53
DEC				
20...	02327000	561220	283	1.86
FEB 1957				
14...	02327000	570214	249	1.42
APR				
11...	02327000	570411	549	2.25
JUN				
06...	02327000	570606	447	2.09
JUL				
18...	02327000	570718	430	2.39
AUG				
29...	02327000	570829	470	2.52
OCT				
08...	02327000	571008	1730	5.32
NOV				
28...	02327000	571128	508	2.92
JAN 1958				
20...	02327000	580120	466	2.48
MAR				
20...	02327000	580320	743	3.28
MAY				
12...	02327000	580512	450	2.76
JUL				
07...	02327000	580707	622	3.58
AUG				
25...	02327000	580825	343	--
OCT				
26...	02327000	581026	319	2.59
DEC				
08...	02327000	581208	159	2.10
FEB 1959				
02...	02327000	590202	277	1.94
MAR				
30...	02327000	590330	855	3.59
MAY				
25...	02327000	590525	1010	4.40
JUL				
20...	02327000	590720	624	3.74
SEP				
15...	02327000	590915	735	3.92
NOV				
09...	02327000	591109	461	3.73
JAN 1960				
04...	02327000	600104	174	2.84
FEB				
22...	02327000	600222	536	3.38
APR				
18...	02327000	600418	685	3.78
JUN				
13...	02327000	600613	118	2.36

DATE	STATION	NUMBER	DATE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)
AUG 1960					
08...	02327000		600808	447	2.96
OCT					
03...	02327000		601003	1120	4.40
NOV					
28...	02327000		601128	333	2.54
JAN 1961					
16...	02327000		610116	350	2.21
MAR					
13...	02327000		610313	405	3.47
MAY					
08...	02327000		610508	285	2.07
JUN					
26...	02327000		610626	530	2.64
AUG					
30...	02327000		610830	517	2.22
OCT					
16...	02327000		611016	345	2.00
DEC					
04...	02327000		611204	553	2.48
JAN 1962					
29...	02327000		620129	310	1.81
MAR					
21...	02327000		620321	468	2.14
MAY					
16...	02327000		620516	315	1.78
JUL					
11...	02327000		620711	244	1.70
AUG					
29...	02327000		620829	341	1.81
OCT					
17...	02327000		621017	430	1.74
DEC					
11...	02327000		621211	395	1.83
JAN 1963					
29...	02327000		630129	369	2.11
MAR					
27...	02327000		630327	397	2.10
MAY					
14...	02327000		630514	231	1.53
JUN					
25...	02327000		630625	345	1.91
AUG					
13...	02327000		630813	402	2.22
SEP					
26...	02327000		630926	137	1.78
OCT					
30...	02327000		631030	340	2.36
DEC					
17...	02327000		631217	141	1.50
FEB 1964					
12...	02327000		640212	350	2.37
APR					
08...	02327000		640408	348	2.74
JUN					
02...	02327000		640602	287	2.31
JUL					
29...	02327000		640729	1000	4.07
SEP					
14...	02327000		640914	890	4.11
NOV					
04...	02327000		641104	394	2.83
DEC					
03...	02327000		641203	323	2.78
06...	02327000		641206	1490	5.18
JAN 1965					
21...	02327000		650121	342	2.95
MAR					
03...	02327000		650303	1050	4.64

DATE	STATION NUMBER	DATE	TIME	TEMPER-ATURE WATER (DEG C) (00010)	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)
APR 1965									
22...	02327000	650422	--	--	--	439	2.86	--	--
JUN									
08...	02327000	650608	--	--	--	311	2.37	--	--
JUL									
27...	02327000	650727	--	--	--	657	3.19	--	--
AUG									
31...	02327000	650831	--	--	--	387	3.04	--	--
OCT									
19...	02327000	651019	--	--	--	373	2.85	--	--
DEC									
01...	02327000	651201	--	--	--	239	2.18	--	--
MAR 1966									
11...	02327000	660311	--	--	--	1160	4.30	--	--
APR									
22...	02327000	660422	--	--	--	381	2.58	--	--
MAY									
19...	02327000	660519	--	--	380	373	2.36	0	257
JUL									
06...	02327000	660706	--	--	--	416	2.34	--	--
AUG									
24...	02327000	660824	--	--	--	557	2.76	--	--
OCT									
03...	02327000	661003	--	--	--	570	2.71	--	--
NOV									
04...	02327000	661104	--	--	--	273	2.02	--	--
DEC									
19...	02327000	661219	--	--	--	407	2.33	--	--
JAN 1967									
27...	02327000	670127	--	--	--	537	2.36	--	--
MAR									
10...	02327000	670310	--	--	--	257	2.04	--	--
APR									
17...	02327000	670417	--	--	--	250	1.75	--	--
JUN									
01...	02327000	670601	--	21.0	331	340	2.01	0	259
JUL									
14...	02327000	670714	--	--	--	521	2.70	--	--
AUG									
25...	02327000	670825	--	--	--	1160	4.12	--	--
OCT									
06...	02327000	671006	--	--	--	267	2.14	--	--
NOV									
17...	02327000	671117	--	--	--	344	2.15	--	--
DEC									
19...	02327000	671219	--	--	--	349	2.06	--	--
FEB 1968									
08...	02327000	680208	--	--	--	192	1.60	--	--
MAR									
29...	02327000	680329	--	--	--	200	1.44	--	--
MAY									
24...	02327000	680524	--	--	--	188	1.30	--	--
24...	02327000	680524	0950	24.0	188	--	--	5	272
JUL									
19...	02327000	680719	--	--	--	190	1.67	--	--
SEP									
13...	02327000	680913	--	--	--	361	1.94	--	--
OCT									
30...	02327000	681030	--	--	--	295	1.63	--	--
DEC									
20...	02327000	681220	--	--	--	314	1.60	--	--
FEB 1969									
14...	02327000	690214	--	--	--	253	1.53	--	--
APR									
11...	02327000	690411	--	--	--	312	1.68	--	--
JUN									
06...	02327000	690606	--	--	--	276	1.38	--	--
06...	02327000	690606	1330	22.0	276	--	1.38	0	277
AUG									
06...	02327000	690806	--	--	--	948	2.72	--	--

DATE	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	BICAR- BONATE WATER WH FET FIELD MG/L AS HCO3 (00440)	CAR- BONATE WATER WH FET FIELD MG/L AS CO3 (00445)	PHOS- PHATE, TOTAL (MG/L AS PO4) (00650)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
APR 1965 22...	--	--	--	--	--	--	--	--	--	--
JUN 08...	--	--	--	--	--	--	--	--	--	--
JUL 27...	--	--	--	--	--	--	--	--	--	--
AUG 31...	--	--	--	--	--	--	--	--	--	--
OCT 19...	--	--	--	--	--	--	--	--	--	--
DEC 01...	--	--	--	--	--	--	--	--	--	--
MAR 1966 11...	--	--	--	--	--	--	--	--	--	--
APR 22...	--	--	--	--	--	--	--	--	--	--
MAY 19...	--	--	7.6	5.7	118	140	--	--	0.07	130
JUL 06...	--	--	--	--	--	--	--	--	--	--
AUG 24...	--	--	--	--	--	--	--	--	--	--
OCT 03...	--	--	--	--	--	--	--	--	--	--
NOV 04...	--	--	--	--	--	--	--	--	--	--
DEC 19...	--	--	--	--	--	--	--	--	--	--
JAN 1967 27...	--	--	--	--	--	--	--	--	--	--
MAR 10...	--	--	--	--	--	--	--	--	--	--
APR 17...	--	--	--	--	--	--	--	--	--	--
JUN 01...	3.0	33	7.9	2.9	118	140	0	--	0.07	120
JUL 14...	--	--	--	--	--	--	--	--	--	--
AUG 25...	--	--	--	--	--	--	--	--	--	--
OCT 06...	--	--	--	--	--	--	--	--	--	--
NOV 17...	--	--	--	--	--	--	--	--	--	--
DEC 19...	--	--	--	--	--	--	--	--	--	--
FEB 1968 08...	--	--	--	--	--	--	--	--	--	--
MAR 29...	--	--	--	--	--	--	--	--	--	--
MAY 24...	--	--	--	--	--	--	--	--	--	--
24...	6.2	73	7.6	6.0	123	150	0	0.0	--	140
JUL 19...	--	--	--	--	--	--	--	--	--	--
SEP 13...	--	--	--	--	--	--	--	--	--	--
OCT 30...	--	--	--	--	--	--	--	--	--	--
DEC 20...	--	--	--	--	--	--	--	--	--	--
FEB 1969 14...	--	--	--	--	--	--	--	--	--	--
APR 11...	--	--	--	--	--	--	--	--	--	--
JUN 06...	--	--	--	--	--	--	--	--	--	--
06...	4.7	53	7.5	7.5	123	150	0	0.05	--	140
AUG 06...	--	--	--	--	--	--	--	--	--	--

DATE	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
APR 1965										
22...	--	--	--	--	--	--	--	--	--	--
JUN										
08...	--	--	--	--	--	--	--	--	--	--
JUL										
27...	--	--	--	--	--	--	--	--	--	--
AUG										
31...	--	--	--	--	--	--	--	--	--	--
OCT										
19...	--	--	--	--	--	--	--	--	--	--
DEC										
01...	--	--	--	--	--	--	--	--	--	--
MAR 1966										
11...	--	--	--	--	--	--	--	--	--	--
APR										
22...	--	--	--	--	--	--	--	--	--	--
MAY										
19...	10	36	9.2	3.6	0.1	6	0.40	6.0	8.8	0.30
JUL										
06...	--	--	--	--	--	--	--	--	--	--
AUG										
24...	--	--	--	--	--	--	--	--	--	--
OCT										
03...	--	--	--	--	--	--	--	--	--	--
NOV										
04...	--	--	--	--	--	--	--	--	--	--
DEC										
19...	--	--	--	--	--	--	--	--	--	--
JAN 1967										
27...	--	--	--	--	--	--	--	--	--	--
MAR										
10...	--	--	--	--	--	--	--	--	--	--
APR										
17...	--	--	--	--	--	--	--	--	--	--
JUN										
01...	6	35	8.7	3.6	0.1	6	0.40	5.0	8.8	0.30
JUL										
14...	--	--	--	--	--	--	--	--	--	--
AUG										
25...	--	--	--	--	--	--	--	--	--	--
OCT										
06...	--	--	--	--	--	--	--	--	--	--
NOV										
17...	--	--	--	--	--	--	--	--	--	--
DEC										
19...	--	--	--	--	--	--	--	--	--	--
FEB 1968										
08...	--	--	--	--	--	--	--	--	--	--
MAR										
29...	--	--	--	--	--	--	--	--	--	--
MAY										
24...	--	--	--	--	--	--	--	--	--	--
24...	13	39	9.5	3.4	0.1	5	0.40	6.0	10	0.30
JUL										
19...	--	--	--	--	--	--	--	--	--	--
SEP										
13...	--	--	--	--	--	--	--	--	--	--
OCT										
30...	--	--	--	--	--	--	--	--	--	--
DEC										
20...	--	--	--	--	--	--	--	--	--	--
FEB 1969										
14...	--	--	--	--	--	--	--	--	--	--
APR										
11...	--	--	--	--	--	--	--	--	--	--
JUN										
06...	--	--	--	--	--	--	--	--	--	--
06...	16	40	9.5	3.8	0.1	--	--	8.0	11	0.20
AUG										
06...	--	--	--	--	--	--	--	--	--	--

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)
APR 1965									
22...	--	--	--	--	--	--	--	--	--
JUN									
08...	--	--	--	--	--	--	--	--	--
JUL									
27...	--	--	--	--	--	--	--	--	--
AUG									
31...	--	--	--	--	--	--	--	--	--
OCT									
19...	--	--	--	--	--	--	--	--	--
DEC									
01...	--	--	--	--	--	--	--	--	--
MAR 1966									
11...	--	--	--	--	--	--	--	--	--
APR									
22...	--	--	--	--	--	--	--	--	--
MAY									
19...	11	10	--	--	--	146	147	0.20	0.40
JUL									
06...	--	--	--	--	--	--	--	--	--
AUG									
24...	--	--	--	--	--	--	--	--	--
OCT									
03...	--	--	--	--	--	--	--	--	--
NOV									
04...	--	--	--	--	--	--	--	--	--
DEC									
19...	--	--	--	--	--	--	--	--	--
JAN 1967									
27...	--	--	--	--	--	--	--	--	--
MAR									
10...	--	--	--	--	--	--	--	--	--
APR									
17...	--	--	--	--	--	--	--	--	--
JUN									
01...	12	0	0	90	147	145	135	0.20	0.60
JUL									
14...	--	--	--	--	--	--	--	--	--
AUG									
25...	--	--	--	--	--	--	--	--	--
OCT									
06...	--	--	--	--	--	--	--	--	--
NOV									
17...	--	--	--	--	--	--	--	--	--
DEC									
19...	--	--	--	--	--	--	--	--	--
FEB 1968									
08...	--	--	--	--	--	--	--	--	--
MAR									
29...	--	--	--	--	--	--	--	--	--
MAY									
24...	--	--	--	--	--	--	--	--	--
24...	12	10	0	0	155	154	78.7	0.21	0.90
JUL									
19...	--	--	--	--	--	--	--	--	--
SEP									
13...	--	--	--	--	--	--	--	--	--
OCT									
30...	--	--	--	--	--	--	--	--	--
DEC									
20...	--	--	--	--	--	--	--	--	--
FEB 1969									
14...	--	--	--	--	--	--	--	--	--
APR									
11...	--	--	--	--	--	--	--	--	--
JUN									
06...	--	--	--	--	--	--	--	--	--
06...	13	0	--	--	166	--	124	0.23	0.20
AUG									
06...	--	--	--	--	--	--	--	--	--

DATE	STATION NUMBER	DATE	TIME	SAMPLING DEPTH (FEET) (00003)	TEMPERATURE WATER (DEG C) (00010)	DISCHARGE, IN CUBIC FEET PER SECOND (00060)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	TURBIDITY (JCU) (00070)	COLOR (PLATINUM-COBALT UNITS) (00080)	SPECIFIC CONDUCTANCE (US/CM) (00095)
SEP 1969											
26...	02327000	690926	--	--	--	--	1870	4.64	--	--	--
NOV											
21...	02327000	691121	--	--	--	--	342	1.20	--	--	--
JAN 1970											
30...	02327000	700130	--	--	--	--	557	1.67	--	--	--
MAR											
25...	02327000	700325	--	--	--	--	588	1.96	--	--	--
MAY											
04...	02327000	700504	--	--	--	--	367	1.56	--	--	--
04...	02327000	700504	0945	--	20.0	367	--	1.56	--	5	260
JUL											
03...	02327000	700703	--	--	--	--	280	1.23	--	--	--
AUG											
24...	02327000	700824	--	--	--	--	654	2.54	--	--	--
SEP											
02...	02327000	700902	1425	--	21.5	800	--	2.92	3	40	245
OCT											
20...	02327000	701020	--	--	--	--	487	2.10	--	--	--
DEC											
17...	02327000	701217	--	--	--	--	507	2.10	--	--	--
FEB 1971											
11...	02327000	710211	--	--	--	--	459	1.80	--	--	--
APR											
06...	02327000	710406	--	--	--	--	357	1.58	--	--	--
28...	02327000	710428	--	--	--	--	322	1.58	--	--	--
28...	02327000	710428	0930	--	21.0	322	--	1.58	--	--	276
28...	02327000	710428	0930	--	21.0	322	--	1.58	2	0	269
MAY											
31...	02327000	710531	--	--	--	--	216	1.31	--	--	--
JUL											
30...	02327000	710730	--	--	--	--	416	2.02	--	--	--
SEP											
21...	02327000	710921	--	--	--	--	307	1.72	--	--	--
21...	02327000	710921	1340	--	21.5	285	--	1.72	1	0	268
NOV											
12...	02327000	711112	--	--	--	--	406	2.07	--	--	--
JAN 1972											
17...	02327000	720117	--	--	--	--	302	1.79	--	--	--
MAR											
02...	02327000	720302	--	--	--	--	514	2.48	--	--	--
16...	02327000	720316	1530	40.0	21.0	--	--	--	0	10	280
APR											
25...	02327000	720425	--	--	--	--	409	2.13	--	--	--
25...	02327000	720425	0930	14.0	20.5	409	--	2.13	1	0	279
JUN											
26...	02327000	720626	--	--	--	--	405	2.36	--	--	--
AUG											
09...	02327000	720809	--	--	--	--	243	1.63	--	--	--
SEP											
21...	02327000	720921	--	--	--	--	194	2.01	--	--	--
21...	02327000	720921	1500	--	21.0	194	--	2.01	0	0	270
NOV											
30...	02327000	721130	--	--	--	--	779	2.96	--	--	--
JAN 1973											
21...	02327000	730121	0900	--	--	--	--	--	1	10	260
FEB											
02...	02327000	730202	--	--	--	--	776	2.58	--	--	--
APR											
11...	02327000	730411	--	--	--	--	1910	5.07	--	--	--
25...	02327000	730425	0900	--	21.0	--	--	--	4	20	255
JUN											
25...	02327000	730625	--	--	--	--	624	2.80	--	--	--
25...	02327000	730625	1500	--	22.0	--	620	2.80	2	10	263
27...	02327000	730627	1400	--	--	--	--	--	1	10	265
AUG											
03...	02327000	730803	--	--	--	--	764	3.32	--	--	--
SEP											
28...	02327000	730928	1300	--	22.0	--	--	--	2	--	270

DATE	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	BICAR-BONATE WATER WH FET FIELD MG/L AS HCO3 (00440)	CAR-BONATE WATER WH FET FIELD MG/L AS CO3 (00445)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)
SEP 1969												
26...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
21...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1970												
30...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
25...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	2.5	27	0	--	7.9	3.0	121	150	--	0.05	--	--
JUL												
03...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
24...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
02...	1.6	18	0.9	--	7.9	2.7	112	140	0	0.34	--	--
OCT												
20...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
17...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 1971												
11...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
06...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	2.3	26	--	--	7.5	--	--	--	--	--	--	--
28...	2.3	26	0.2	--	7.6	5.9	121	150	0	0.01	--	--
MAY												
31...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
30...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	1.2	--	6.9	30	125	150	0	0.23	0.010	--
NOV												
12...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1972												
17...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
02...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	8.1	1.9	121	150	0	--	--	0.002
APR												
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	3.2	35	0.4	--	7.3	12	126	150	0	0.14	0.00	0.00
JUN												
26...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
09...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	2.6	29	0	--	8.3	1.1	118	140	0	0.30	0.120	0.004
NOV												
30...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1973												
21...	--	--	0.2	--	7.9	3.0	121	150	0	0.40	0.020	0.002
FEB												
02...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
11...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	0.2	15	8.0	2.2	115	140	0	0.55	0.010	0.002
JUN												
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	2.4	--	0.2	--	7.5	7.2	118	140	0	0.06	0.010	0.003
27...	--	--	--	9	7.8	3.7	121	150	0	0.26	0.010	0.006
AUG												
03...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
28...	--	--	0.5	14	7.6	5.8	120	150	0	0.46	<0.010	0.003

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	PHOS-PHATE, TOTAL (MG/L AS PO4) (00650)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORGANIC TOTAL (MG/L AS P) (00670)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, INOR-GANIC, TOTAL (MG/L AS C) (00685)	CARBON, TOTAL (INORG + ORG) (MG/L AS C) (00690)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
SEP 1969												
26...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
21...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1970												
30...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
25...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	0.25	0.19	--	--	18	--	--	130	9	37	9.1
JUL												
03...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
24...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
02...	--	0.19	0.18	--	--	--	--	--	120	9	35	7.9
OCT												
20...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
17...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 1971												
11...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
06...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	0.15	--	--	33	--	--	130	13	38	9.5
MAY												
31...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
30...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	0.01	--	--	1.0	--	--	140	11	39	9.2
NOV												
12...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1972												
17...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
02...	--	--	--	--	--	--	--	--	--	--	--	--
16...	0.330	--	--	--	--	--	--	--	130	12	38	9.2
APR												
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	0.300	0.09	--	0.042	0.01	0.0	31	31	130	8	39	8.7
JUN												
26...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
09...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	0.300	0.12	--	0.042	0.00	1.0	30	31	130	9	36	8.9
NOV												
30...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1973												
21...	0.230	0.13	--	0.047	0.01	5.0	22	27	130	9	38	8.6
FEB												
02...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
11...	--	--	--	--	--	--	--	--	--	--	--	--
25...	0.100	0.15	--	0.073	0.02	6.0	14	20	130	11	38	7.6
JUN												
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	0.200	0.19	--	0.063	0.0	7.0	20	27	130	11	38	8.3
27...	0.250	0.19	--	0.080	0.02	9.0	19	28	130	6	37	8.4
AUG												
03...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
28...	0.220	0.16	--	0.065	0.01	1.0	31	32	130	--	38	8.8

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	ARSENIC TOTAL (UG/L AS AS) (01002)	BORON, DIS-SOLVED (UG/L AS B) (01020)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)
SEP 1969												
26...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
21...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1970												
30...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
25...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	4.5	0.2	7	0.60	5.0	9.6	0.30	11	10	--	--	--
JUL												
03...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
24...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
02...	4.5	0.2	8	0.50	7.5	9.6	0.30	9.8	0	--	--	--
OCT												
20...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
17...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 1971												
11...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
06...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	3.8	0.1	6	0.50	7.0	11	0.70	11	0	--	--	--
MAY												
31...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
30...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	3.5	0.1	5	0.50	5.2	11	0.30	11	1	--	--	--
NOV												
12...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1972												
17...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
02...	--	--	--	--	--	--	--	--	--	--	--	--
16...	4.7	0.2	7	0.60	7.0	10	0.20	11	--	--	--	--
APR												
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	3.7	0.1	6	0.30	3.4	17	0.30	10	--	0	--	--
JUN												
26...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
09...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	4.0	0.2	6	0.50	6.0	10	0.20	11	--	10	--	--
NOV												
30...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1973												
21...	4.1	0.2	6	0.60	8.0	11	0.30	11	--	<1	--	<20
FEB												
02...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
11...	--	--	--	--	--	--	--	--	--	--	--	--
25...	4.3	0.2	7	0.60	7.0	10	0.30	8.2	--	6	--	<20
JUN												
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	4.0	0.2	6	0.50	8.0	10	0.40	12	--	5	--	--
27...	4.2	0.2	--	--	6.0	9.2	0.30	10	5	5	--	5
AUG												
03...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
28...	3.9	0.1	6	0.50	5.0	--	--	10	--	--	15	--

DATE	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR) (01032)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)
SEP 1969												
26...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
21...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1970												
30...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
25...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	0	--	--	0	--	--	20	10	--
JUL												
03...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
24...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
02...	--	--	--	10	--	--	10	--	--	30	0	--
OCT												
20...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
17...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 1971												
11...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
06...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	0	--	0	--	0	--	40	--	--	20	1.0	--
MAY												
31...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
30...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	0	--	0	--	1.0	--	10	--	--	30	4.0	--
NOV												
12...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1972												
17...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
02...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	0	--	--	--	0	--	0	30	10	2.0	3
JUN												
26...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
09...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	1	--	0	--	0	--	0	10	10	2.0	4
NOV												
30...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1973												
21...	ND	--	0	--	--	--	ND	--	--	<10	<2.0	--
FEB												
02...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
11...	--	--	--	--	--	--	--	--	--	--	--	--
25...	ND	--	0	--	--	--	ND	--	--	30	<2.0	--
JUN												
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	<2	--	--	--	--	ND	--	50	<10	ND	--
27...	--	2	0	2	--	ND	--	20	50	--	--	3
AUG												
03...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
28...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI) (01132)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L) (38260)
SEP 1969												
26...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
21...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1970												
30...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
25...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	0	--	--	--	0	230	--	0	--	--	--
JUL												
03...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
24...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
02...	--	0	--	--	--	70	40	--	--	140	--	--
OCT												
20...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
17...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 1971												
11...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
06...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	0	--	--	--	110	40	--	--	--	--	--
MAY												
31...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
30...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	0	--	--	--	100	30	--	--	--	--	--
NOV												
12...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1972												
17...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
02...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	10	--	--	--	--	110	--	20	--	--	--	--
JUN												
26...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
09...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	10	--	--	--	--	160	--	0	--	--	--	--
NOV												
30...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1973												
21...	--	<10	--	--	--	150	<20	--	--	--	--	0.0
FEB												
02...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
11...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	<10	--	ND	--	120	20	--	--	--	--	0.07
JUN												
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	<10	--	--	--	60	<20	--	160	--	--	--
27...	3	--	1	--	5	100	--	<20	110	--	<10	0.04
AUG												
03...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
28...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	CHLOR-DANE, TECH-NICAL TOTAL (UG/L) (39350)	P,P'-DDD UNFILT RECOVER (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	P,P'-DDT UNFILT RECOVER (UG/L) (39370)	DI-ELDRIN TOTAL (UG/L) (39380)	ENDRIN WATER UNFLTRD REC (UG/L) (39390)	ETHION, TOTAL (UG/L) (39398)	TOX-APHENE, TOTAL (UG/L) (39400)	HEPTA-CHLOR, TOTAL (UG/L) (39410)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)
SEP 1969												
26...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
21...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1970												
30...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
25...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
03...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
24...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
02...	--	--	--	--	--	--	--	--	--	--	--	--
OCT												
20...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
17...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 1971												
11...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
06...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
31...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
30...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
12...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1972												
17...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
02...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JUN												
26...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
09...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
30...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1973												
21...	--	--	--	--	--	--	--	--	--	--	--	--
FEB												
02...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
11...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
03...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
28...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	PCB, TOTAL (UG/L) (39516)	MALA-THION, TOTAL (UG/L) (39530)	PARA-THION, TOTAL (UG/L) (39540)	DI-AZINON, TOTAL (UG/L) (39570)	METHYL PARA-THION, TOTAL (UG/L) (39600)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	SILVEX, TOTAL (UG/L) (39760)	TOTAL TRI-THION (UG/L) (39786)	METHYL TRI-THION, TOTAL (UG/L) (39790)	SOLIDS, SUSP. TOTAL, RESIDUE AT 110 DEG. C (MG/L) (70299)
SEP 1969											
26...	--	--	--	--	--	--	--	--	--	--	--
NOV											
21...	--	--	--	--	--	--	--	--	--	--	--
JAN 1970											
30...	--	--	--	--	--	--	--	--	--	--	--
MAR											
25...	--	--	--	--	--	--	--	--	--	--	--
MAY											
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
JUL											
03...	--	--	--	--	--	--	--	--	--	--	--
AUG											
24...	--	--	--	--	--	--	--	--	--	--	--
SEP											
02...	--	--	--	--	--	--	--	--	--	--	--
OCT											
20...	--	--	--	--	--	--	--	--	--	--	--
DEC											
17...	--	--	--	--	--	--	--	--	--	--	--
FEB 1971											
11...	--	--	--	--	--	--	--	--	--	--	--
APR											
06...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
MAY											
31...	--	--	--	--	--	--	--	--	--	--	--
JUL											
30...	--	--	--	--	--	--	--	--	--	--	--
SEP											
21...	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--
NOV											
12...	--	--	--	--	--	--	--	--	--	--	--
JAN 1972											
17...	--	--	--	--	--	--	--	--	--	--	--
MAR											
02...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
APR											
25...	--	--	--	--	--	--	--	--	--	--	--
25...	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	--
JUN											
26...	--	--	--	--	--	--	--	--	--	--	--
AUG											
09...	--	--	--	--	--	--	--	--	--	--	--
SEP											
21...	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--
NOV											
30...	--	--	--	--	--	--	--	--	--	--	--
JAN 1973											
21...	--	--	--	--	--	--	--	--	--	--	--
FEB											
02...	--	--	--	--	--	--	--	--	--	--	--
APR											
11...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
JUN											
25...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	0
27...	--	--	--	--	--	--	--	--	--	--	--
AUG											
03...	--	--	--	--	--	--	--	--	--	--	--
SEP											
28...	--	--	--	--	--	--	--	--	--	--	--

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	NITRO-GEN, AMMONIA TOTAL (MG/L AS NH4) (71845)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	PHOS-PHORUS TOTAL (MG/L AS PO4) (71886)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)
SEP 1969											
26...	--	--	--	--	--	--	--	--	--	--	--
NOV											
21...	--	--	--	--	--	--	--	--	--	--	--
JAN 1970											
30...	--	--	--	--	--	--	--	--	--	--	--
MAR											
25...	--	--	--	--	--	--	--	--	--	--	--
MAY											
04...	--	--	--	--	--	--	--	--	--	--	--
04...	163	150	162	0.22	--	--	0.05	1.2	0.02	--	--
JUL											
03...	--	--	--	--	--	--	--	--	--	--	--
AUG											
24...	--	--	--	--	--	--	--	--	--	--	--
SEP											
02...	152	142	328	0.21	--	--	0.03	0.90	0.02	--	--
OCT											
20...	--	--	--	--	--	--	--	--	--	--	--
DEC											
17...	--	--	--	--	--	--	--	--	--	--	--
FEB 1971											
11...	--	--	--	--	--	--	--	--	--	--	--
APR											
06...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	156	154	136	0.21	--	--	0.01	1.1	0.02	0.17	0.0
MAY											
31...	--	--	--	--	--	--	--	--	--	--	--
JUL											
30...	--	--	--	--	--	--	--	--	--	--	--
SEP											
21...	--	--	--	--	--	--	--	--	--	--	--
21...	154	155	119	0.21	--	0.01	0.01	1.1	0.01	0.12	0.0
NOV											
12...	--	--	--	--	--	--	--	--	--	--	--
JAN 1972											
17...	--	--	--	--	--	--	--	--	--	--	--
MAR											
02...	--	--	--	--	--	--	--	--	--	--	--
16...	155	153	--	0.21	--	--	--	--	--	--	--
APR											
25...	--	--	--	--	--	--	--	--	--	--	--
25...	162	158	179	0.22	0.030	0.0	--	--	--	--	0.0
JUN											
26...	--	--	--	--	--	--	--	--	--	--	--
AUG											
09...	--	--	--	--	--	--	--	--	--	--	--
SEP											
21...	--	--	--	--	--	--	--	--	--	--	--
21...	156	148	81.7	0.21	0.040	0.15	--	--	--	--	<0.50
NOV											
30...	--	--	--	--	--	--	--	--	--	--	--
JAN 1973											
21...	154	155	--	0.21	0.041	0.03	--	--	--	--	<0.50
FEB											
02...	--	--	--	--	--	--	--	--	--	--	--
APR											
11...	--	--	--	--	--	--	--	--	--	--	--
25...	161	145	--	0.22	0.050	0.01	--	--	--	--	<0.50
JUN											
25...	--	--	--	--	--	--	--	--	--	--	--
25...	156	152	261	0.21	0.063	0.01	--	--	--	--	--
27...	159	--	--	--	0.062	0.01	--	--	--	--	<0.50
AUG											
03...	--	--	--	--	--	--	--	--	--	--	--
SEP											
28...	--	--	--	--	0.051	--	--	--	--	--	--

DATE	STATION NUMBER	DATE	TIME	TEMPER-ATURE WATER (DEG C) (00010)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	TUR-BID-ITY (JCU) (00070)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)
NOV 1973											
15...	02327000	731115	--	--	--	--	589	2.54	--	--	--
15...	02327000	731115	1525	20.5	--	--	--	--	--	--	--
DEC											
21...	02327000	731221	1230	21.0	--	--	--	--	2	--	270
FEB 1974											
25...	02327000	740225	--	--	--	--	404	2.00	--	--	--
25...	02327000	740225	1650	19.5	--	--	--	--	--	--	--
APR											
04...	02327000	740404	1030	21.0	--	--	--	--	--	--	270
MAY											
09...	02327000	740509	--	--	--	--	337	1.76	--	--	--
09...	02327000	740509	1015	21.0	--	--	337	1.76	1	1	265
JUN											
26...	02327000	740626	1300	21.0	--	--	--	--	--	--	--
JUL											
01...	02327000	740701	--	--	--	--	268	1.62	--	--	--
01...	02327000	740701	1040	21.0	--	--	--	--	--	--	--
AUG											
28...	02327000	740828	1000	21.5	--	--	--	--	3	--	275
SEP											
09...	02327000	740909	--	--	--	--	1520	4.50	--	--	--
09...	02327000	740909	1700	21.0	--	--	--	--	--	--	--
JAN 1975											
16...	02327000	750116	1100	21.0	--	--	--	--	1	2	240
APR											
18...	02327000	750418	1240	21.5	--	--	--	--	1	--	260
JUN											
02...	02327000	750602	1330	20.5	--	--	705	2.90	1	4	285
OCT											
16...	02327000	751016	1130	22.0	--	--	--	--	1	--	254
JAN 1976											
22...	02327000	760122	1330	21.0	--	--	--	--	2	0	269
APR											
22...	02327000	760422	1415	21.0	--	--	320	1.83	1	5	289
SEP											
15...	02327000	760915	1200	21.0	--	--	--	--	--	--	270
APR 1977											
28...	02327000	770428	1145	21.0	--	--	304	2.16	3	0	290
FEB 1985											
11...	02327000	850211	1030	18.5	1028	80010	360	--	--	<5	268

WATER-QUALITY DATA

DATE	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	PH WATER WHOLE LAB (STAND-ARD UNITS) (00403)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	BICAR-BONATE WATER WH FET FIELD MG/L AS HCO3 (00440)	CAR-BONATE WATER WH FET FIELD MG/L AS CO3 (00445)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)
NOV 1973												
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
21...	--	--	0.5	0	8.1	--	1.8	117	140	0	--	--
FEB 1974												
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
04...	--	--	0.2	4	8.0	--	2.3	117	140	0	--	--
MAY												
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	2.2	--	--	--	7.6	--	6.1	125	150	--	0.46	--
JUN												
26...	--	--	0.5	2	--	--	--	--	--	--	--	0.35
JUL												
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
28...	--	--	0	6	7.7	--	4.8	125	150	--	0.34	--
SEP												
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1975												
16...	--	--	0.4	2	7.8	--	3.6	118	140	0	0.30	--
APR												
18...	--	--	--	--	7.4	--	8.9	115	140	0	0.38	--
JUN												
02...	1.8	20	--	--	7.7	--	4.9	127	150	0	0.28	--
OCT												
16...	--	--	--	--	--	--	--	--	--	--	0.27	--
JAN 1976												
22...	--	--	--	--	7.9	--	3.0	121	150	0	0.34	--
APR												
22...	2.3	25	--	--	7.9	--	3.1	126	150	0	0.28	--
SEP												
15...	--	--	--	--	--	--	--	--	--	--	0.29	--
APR 1977												
28...	4.6	51	--	--	7.4	--	9.9	128	160	0	0.34	--
FEB 1985												
11...	1.3	--	--	--	7.6	7.7	--	--	--	--	0.65	--

WATER-QUALITY DATA

DATE	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
NOV 1973												
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
21...	--	0.38	0.020	--	<0.010	--	0.210	--	--	--	--	--
FEB 1974												
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
04...	--	0.06	0.040	--	<0.010	--	0.230	--	--	--	--	--
MAY												
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	0.21	--	--	0.020	--	0.010	--	0.220	--	--	--	--
JUN												
26...	--	0.0	0.030	--	0.010	--	0.311	0.311	0.03	--	0.321	0.321
JUL												
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
28...	0.01	--	--	0.010	--	0.010	--	0.311	--	0.02	0.321	--
SEP												
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1975												
16...	0.0	--	--	0.010	--	0.010	--	0.280	--	0.01	0.290	--
APR												
18...	0.0	--	--	0.050	--	<0.010	--	0.330	--	0.05	0.330	--
JUN												
02...	0.0	--	--	0.010	--	<0.010	--	0.270	--	0.01	0.270	--
OCT												
16...	0.02	--	--	0.020	--	<0.010	--	0.230	--	0.04	0.230	--
JAN 1976												
22...	0.02	--	--	0.010	--	0.020	--	0.290	--	0.03	0.310	--
APR												
22...	0.01	--	--	0.010	--	<0.010	--	0.260	--	0.02	0.260	--
SEP												
15...	0.0	--	--	0.010	--	<0.010	--	0.280	--	0.01	0.280	--
APR 1977												
28...	0.06	--	--	0.020	--	<0.010	--	0.260	--	0.08	0.260	--
FEB 1985												
11...	0.08	--	--	0.020	--	<0.010	--	0.550	--	0.10	0.550	--

WATER-QUALITY DATA

DATE	PHOS-PHATE, TOTAL (MG/L AS PO4) (00650)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORGANIC TOTAL (MG/L AS P) (00670)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, INOR-GANIC, TOTAL (MG/L AS C) (00685)	CARBON, TOTAL (INORG + ORG) (MG/L AS C) (00690)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV 1973												
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
21...	--	0.13	--	0.048	--	0.042	10	27	37	130	13	32
FEB 1974												
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
04...	--	0.15	--	0.050	--	0.050	0.0	30	30	130	13	37
MAY												
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	0.12	--	0.040	--	0.0	--	1.0	31	32	150	24	44
JUN												
26...	--	0.18	--	0.070	--	0.060	3.0	29	32	140	--	39
JUL												
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
28...	0.15	--	0.090	--	0.04	--	1.0	30	31	130	2	36
SEP												
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1975												
16...	0.15	--	0.050	--	0.0	--	0.0	29	29	140	21	41
APR												
18...	0.18	--	0.060	--	0.0	--	1.0	--	--	--	--	--
JUN												
02...	0.15	--	0.050	--	0.0	--	0.0	30	30	130	5	38
OCT												
16...	0.15	--	0.400	--	0.35	--	--	--	--	--	--	--
JAN 1976												
22...	0.15	--	0.070	--	0.02	--	--	--	--	130	12	38
APR												
22...	0.09	--	0.040	--	0.01	--	1.0	34	35	130	4	39
SEP												
15...	--	--	0.050	--	--	--	--	--	--	--	--	--
APR 1977												
28...	0.12	--	0.040	--	0.0	--	0.0	26	26	130	5	38
FEB 1985												
11...	0.09	--	0.050	--	0.02	--	--	--	--	140	--	39

WATER-QUALITY DATA

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	SODIUM PERCENT (00932)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)
NOV 1973												
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
21...	12	4.0	0.2	6	0.60	4.0	--	--	--	<1	--	--
FEB 1974												
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
04...	8.9	4.5	0.2	7	0.80	6.5	--	--	--	3	--	--
MAY												
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	9.3	3.9	0.1	5	0.50	5.6	9.8	0.20	11	--	--	--
JUN												
26...	9.6	3.7	0.1	6	0.50	5.9	9.9	0.30	--	<1	--	--
JUL												
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
28...	8.9	4.0	0.2	6	0.40	4.6	--	--	--	--	--	--
SEP												
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1975												
16...	8.9	4.1	0.2	6	0.50	5.6	9.4	0.20	11	1	--	--
APR												
18...	--	--	--	--	--	5.0	--	--	--	--	--	--
JUN												
02...	9.1	4.0	0.2	6	0.50	5.7	8.3	0.10	11	--	--	--
OCT												
16...	--	3.6	--	--	--	6.6	--	--	--	--	--	--
JAN 1976												
22...	9.3	4.2	0.2	6	0.60	5.4	10	0.20	10	--	1	--
APR												
22...	9.1	4.0	0.1	6	0.60	5.4	7.4	0.20	11	--	1	--
SEP												
15...	--	3.4	--	--	--	5.3	--	--	--	--	--	--
APR 1977												
28...	9.3	4.2	0.2	6	0.50	5.5	8.4	0.20	11	--	--	--
FEB 1985												
11...	9.2	3.6	0.1	5	0.60	5.4	9.4	0.20	12	1	--	<100

WATER-QUALITY DATA

DATE	BORON, DIS-SOLVED (UG/L AS B) (01020)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR) (01032)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
NOV 1973												
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
21...	--	--	--	--	--	--	--	--	<2.0	--	--	<10
FEB 1974												
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
04...	30	--	--	ND	--	--	--	--	<2.0	--	--	60
MAY												
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	6.0	--	220	210
JUN												
26...	<20	--	--	ND	--	0	--	--	ND	--	--	<10
JUL												
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
28...	<20	--	--	--	--	--	--	--	--	--	--	--
SEP												
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1975												
16...	50	--	ND	--	ND	0	--	ND	ND	--	--	<10
APR												
18...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
02...	--	--	--	--	--	--	--	--	ND	--	20	<10
OCT												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1976												
22...	--	--	--	<2	--	--	--	--	--	<2	<10	--
APR												
22...	--	<20	--	ND	--	--	--	--	ND	--	70	<10
SEP												
15...	--	--	--	--	--	--	--	--	--	--	--	--
APR 1977												
28...	--	<20	--	--	--	--	--	--	ND	--	20	<10
FEB 1985												
11...	--	--	--	<1	--	--	<1	--	--	<1	--	--

WATER-QUALITY DATA

DATE	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB) (01050)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN) (01054)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)
NOV 1973												
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
21...	--	--	--	--	--	14	--	--	--	--	--	--
FEB 1974												
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
04...	11	--	--	--	--	<10	--	--	--	--	--	--
MAY												
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	ND	3	3	20	40	20	--	--	--	--	140	--
JUN												
26...	ND	--	--	--	--	<10	--	--	--	--	--	--
JUL												
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
28...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1975												
16...	<2.0	--	--	--	--	<10	<1.0	ND	--	--	--	3
APR												
18...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
02...	6.0	0	6	0	<10	<10	--	--	--	--	140	--
OCT												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1976												
22...	--	--	14	--	<10	--	--	--	--	--	140	--
APR												
22...	ND	3	3	10	<10	<10	--	--	ND	--	100	--
SEP												
15...	--	--	--	--	--	--	--	--	--	--	--	--
APR 1977												
28...	7.0	3	10	0	<10	<10	--	--	--	--	100	--
FEB 1985												
11...	--	--	<1	--	--	--	--	--	--	<1	110	--

WATER-QUALITY DATA

DATE	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L) (32102)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	BROMO-FORM TOTAL (UG/L) (32104)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)
NOV 1973												
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
21...	20	--	--	--	--	--	--	--	--	--	--	--
FEB 1974												
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
04...	5.0	--	--	--	--	--	--	--	--	--	--	--
MAY												
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	50	--	130	--	--	--	--	--	--	--	--	--
JUN												
26...	ND	--	--	--	--	--	--	--	--	--	--	--
JUL												
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
28...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1975												
16...	30	--	--	9.0	<10	--	--	--	--	--	--	--
APR												
18...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
02...	30	--	130	--	--	--	--	--	--	--	--	--
OCT												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1976												
22...	--	20	--	--	--	--	--	--	--	--	--	--
APR												
22...	ND	--	50	--	--	--	--	--	--	--	--	--
SEP												
15...	--	--	--	--	--	--	--	--	--	--	--	--
APR 1977												
28...	ND	--	30	--	--	--	--	--	--	--	--	--
FEB 1985												
11...	--	--	--	--	--	<1	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00

WATER-QUALITY DATA

DATE	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-ETHANE TOTAL (UG/L) (34311)	ETHYL-BENZENE TOTAL (UG/L) (34371)	METHYL-BROMIDE TOTAL (UG/L) (34413)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)
NOV 1973												
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
21...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 1974												
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
04...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
26...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
28...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1975												
16...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
18...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
02...	--	--	--	--	--	--	--	--	--	--	--	--
OCT												
16...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 1976												
22...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
22...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
15...	--	--	--	--	--	--	--	--	--	--	--	--
APR 1977												
28...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 1985												
11...	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00

WATER-QUALITY DATA

DATE	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L) (34511)	ETHANE, 1,1,2,2 TETRA-CHLORO-WAT UNF REC (UG/L) (34516)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	1,2-TRANSDI CHLORO-ETHENE TOTAL (UG/L) (34546)	1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34561)	2-CHLORO-ETHYL-VINYL-ETHER TOTAL (UG/L) (34576)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L) (38260)	PER-THANE TOTAL (UG/L) (39034)	VINYL CHLO-RIDE TOTAL (UG/L) (39175)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)
NOV 1973											
15...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
DEC											
21...	--	--	--	--	--	--	--	--	--	--	--
FEB 1974											
25...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
APR											
04...	--	--	--	--	--	--	--	0.0	--	--	--
MAY											
09...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
JUN											
26...	--	--	--	--	--	--	--	--	--	--	--
JUL											
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
AUG											
28...	--	--	--	--	--	--	--	--	--	--	--
SEP											
09...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
JAN 1975											
16...	--	--	--	--	--	--	--	--	--	--	--
APR											
18...	--	--	--	--	--	--	--	--	--	--	--
JUN											
02...	--	--	--	--	--	--	--	--	--	--	--
OCT											
16...	--	--	--	--	--	--	--	--	--	--	--
JAN 1976											
22...	--	--	--	--	--	--	--	--	--	--	--
APR											
22...	--	--	--	--	--	--	--	--	--	--	--
SEP											
15...	--	--	--	--	--	--	--	--	--	--	--
APR 1977											
28...	--	--	--	--	--	--	--	--	--	--	--
FEB 1985											
11...	<3.00	<3.00	<3.00	<3.00	<3.0	<3.00	<3.00	--	<0.100	<3.00	<3.00

WATER-QUALITY DATA

DATE	PCNS UNFILT RECOVER (UG/L) (39250)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	CHLOR-DANE, TECH-NICAL TOTAL (UG/L) (39350)	P,P'-DDD UNFILT RECOVER (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	P,P'-DDT UNFILT RECOVER (UG/L) (39370)	DI-ELDRIN TOTAL (UG/L) (39380)	ENDO-SULFAN, I TOTAL (UG/L) (39388)	ENDRIN WATER UNFLTRD REC (UG/L) (39390)	TOX-APHENE, TOTAL (UG/L) (39400)
NOV 1973											
15...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
DEC											
21...	--	--	--	--	--	--	--	--	--	--	--
FEB 1974											
25...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
APR											
04...	--	--	--	--	--	--	--	--	--	--	--
MAY											
09...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
JUN											
26...	--	--	--	--	--	--	--	--	--	--	--
JUL											
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
AUG											
28...	--	--	--	--	--	--	--	--	--	--	--
SEP											
09...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
JAN 1975											
16...	--	--	--	--	--	--	--	--	--	--	--
APR											
18...	--	--	--	--	--	--	--	--	--	--	--
JUN											
02...	--	--	--	--	--	--	--	--	--	--	--
OCT											
16...	--	--	--	--	--	--	--	--	--	--	--
JAN 1976											
22...	--	--	--	--	--	--	--	--	--	--	--
APR											
22...	--	--	--	--	--	--	--	--	--	--	--
SEP											
15...	--	--	--	--	--	--	--	--	--	--	--
APR 1977											
28...	--	--	--	--	--	--	--	--	--	--	--
FEB 1985											
11...	<0.100	<0.010	<0.010	<0.100	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<1.00

WATER-QUALITY DATA

DATE	HEPTA-CHLOR, TOTAL (UG/L) (39410)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	METH-OXY-CHLOR, TOTAL (UG/L) (39480)	PCB, TOTAL (UG/L) (39516)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T TOTAL (UG/L) (39740)	MIREX, TOTAL (UG/L) (39755)	SILVEX, TOTAL (UG/L) (39760)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)
NOV 1973											
15...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
DEC											
21...	--	--	--	--	--	--	--	--	--	--	--
FEB 1974											
25...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
APR											
04...	--	--	--	--	--	--	--	--	--	--	--
MAY											
09...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	160	159	146
JUN											
26...	--	--	--	--	--	--	--	--	178	--	--
JUL											
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
AUG											
28...	--	--	--	--	--	--	--	--	--	--	--
SEP											
09...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
JAN 1975											
16...	--	--	--	--	--	--	--	--	147	152	--
APR											
18...	--	--	--	--	--	--	--	--	--	--	--
JUN											
02...	--	--	--	--	--	--	--	--	148	153	282
OCT											
16...	--	--	--	--	--	--	--	--	--	--	--
JAN 1976											
22...	--	--	--	--	--	--	--	--	157	151	--
APR											
22...	--	--	--	--	--	--	--	--	162	153	140
SEP											
15...	--	--	--	--	--	--	--	--	--	--	--
APR 1977											
28...	--	--	--	--	--	--	--	--	159	154	131
FEB 1985											
11...	<0.010	<0.010	<0.010	<0.100	<0.010	<0.010	<0.010	<0.010	148	152	144

?

WATER-QUALITY DATA

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	NITRO-GEN, AMMONIA TOTAL (MG/L AS NH4) (71845)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, TOTAL (MG/L AS NO3) (71887)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	2, 4-DP TOTAL (UG/L) (82183)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)
NOV 1973											
15...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
DEC											
21...	--	--	--	0.03	0.90	0.0	--	--	--	--	--
FEB 1974											
25...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
APR											
04...	--	--	--	0.05	1.0	0.0	--	--	<0.50	--	--
MAY											
09...	--	--	--	--	--	--	--	--	--	--	--
09...	0.22	0.040	0.03	--	--	--	--	--	--	--	--
JUN											
26...	--	--	--	0.04	1.4	0.03	--	--	<0.50	--	--
JUL											
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
AUG											
28...	--	0.050	0.01	--	--	--	1.5	--	--	--	--
SEP											
09...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
JAN 1975											
16...	0.20	0.050	0.01	--	--	--	1.3	<0.5	--	--	--
APR											
18...	--	0.060	0.06	--	--	--	1.7	--	--	--	--
JUN											
02...	0.20	0.050	0.01	--	--	--	1.2	--	--	--	--
OCT											
16...	--	0.050	0.03	--	--	--	1.2	--	--	--	--
JAN 1976											
22...	0.21	0.050	0.01	--	--	--	1.5	--	<0.50	--	--
APR											
22...	0.22	0.030	0.01	--	--	--	1.2	--	--	--	--
SEP											
15...	--	--	0.01	--	--	--	1.3	--	--	--	--
APR 1977											
28...	0.22	0.040	0.03	--	--	--	1.5	--	--	--	--
FEB 1985											
11...	0.20	0.030	0.03	--	--	--	2.9	--	0.20	<0.010	121

Laboratory Report

for

Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee , FL 32302

Attention: Phil Bucci

JAM

Report#: 15696

Electric Production & Env.Affairs COT290101	S.O.Purdom Generating Station
Electric Department	
City of Tallahassee	Sampled by : fondo
Tallahassee ,FL 32302	
ATTN. Buddy Revells	

Sample # 96-11312 Sample ID ST.MARKS RIVER-PURDOM PLANT
Group # 15696 Sample Site
Sample Type WATER Sampled 10/17/96 09:45

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Silver, Total	(EPA 272.2)	ug/L	<0.00				0.9500			10/30/96	mike
Aluminum, Total	(EPA 202.2)	ug/L	218.				9.5000			10/29/96	mike
Alkalinity	(EPA 310.1)	mg/L CaCO3	77.1				1.970			10/18/96	sharon
Arsenic, Total by Furnace	(EPA 206.2)	ug/L	<0.65				1.20			10/28/96	mike
Beryllium, Total	(EPA 210.2)	ug/L	<0.00				0.140			10/29/96	mike
Bicarbonate ion by Calculation	(SM4500-CO2D)	mg/L HCO3	76.96				3.100			10/18/96	sharon
Calcium, Total	(EPA 215.1)	mg/L	25.8				0.450			11/06/96	mike
Carbonate ion, by calculation	(SM4500-CO2D)	mg/L CO3	<0.1286				3.100			10/18/96	sharon
Cadmium, Total	(EPA 213.2)	ug/L	<0.10				0.290			10/22/96	mike
Chloride	(EPA 325.2)	mg/L	5.58				0.370			10/25/96	christy
Cyanide, Total	(EPA 335.4)	mg/L	0.017				0.00500			10/30/96	christy
Specific Conductance,25C,field	(EPA 120.1)	umhos/cm	163				1.870			10/17/96	sharon
Copper, Total	(EPA 220.2)	ug/L	<0.0				0.8000			10/21/96	mike
Oxygen, Membrane Dissolved	(EPA 360.1)	mg/L	3.67				0.100			10/17/96	sharon
Fecal Coliform MF	(600/8-78/017)	#/100 ml	154				1.000			10/18/96	karen
Iron, Total	(EPA 236.2)	ug/L	314.				5.560			10/29/96	mike
Hardness	(EPA 130.2)	mg/L CaCO3	93.0				2.17			10/25/96	sharon
Mercury, Total	(EPA 245.1)	ug/L	<0.20				0.520			11/01/96	mike
Potassium, Total	(EPA 258.1)	mg/L	0.51				0.0700			10/18/96	mike
Magnesium, Total	(EPA 242.1)	mg/L	4.42				0.810			11/06/96	mike
Sodium, Total	(EPA 273.1)	mg/L	3.19				0.140			10/18/96	mike
Nitrogen, Ammonia	(EPA 350.1)	mg/L	0.014				0.0140			10/25/96	christy
Nickel, Total	(EPA 249.2)	ug/L	<0.15				0.9600			10/24/96	mike
Nitrogen, Nitrite	(EPA 353.2)	mg/L	<0.003				0.005000			10/18/96	christy
Nitrogen, Nitrite plus Nitrate	(EPA 353.2)	mg/L	<0.000				0.0110			10/17/96	christy
Nitrogen,Nitrate by difference	(EPA 353.2)	mg/L	<0.000				0.0110			10/18/96	christy
Parathion-methyl	(EPA 505)	ug/L	BDl				0.369			10/29/96	andy
Parathion-ethyl	(EPA 505)	ug/L	BDL				0.328			10/29/96	andy
Malathion	(EPA 505)	ug/L	BDL				0.561			10/29/96	andy
Guthionn	(EPA 505)	ug/L	BDL				2.39			10/29/96	andy
Demeton	(EPA 505)	ug/L	BDL				32.1			10/29/96	andy
Lead, Total	(EPA 239.2)	ug/L	<0.23				0.5000			10/18/96	mike
Field, Hydrogen ion conc.	(EPA 150.1)	pH units	7.25				0.0800			10/17/96	sharon
Antimony, Total	(EPA 204.2)	ug/L	<0.48				0.860			10/30/96	mike
Selenium, Total by Furnace	(EPA 270.2)	ug/L	<0.43				1.800			10/28/96	mike
Silica, Dissolved	(SM4500-Si-D)	mg/L	8.58				0.102			10/28/96	christy
Sulfate, Total	(EPA 375.2)	mg/L	7.15				0.846			10/23/96	christy
Sulfide, Total	(EPA 376.1)	mg/L	<0.0				1.00			10/17/96	ron
Total Coliform MF	(600/8-78-017)	#/100 ml	533				1.00			10/18/96	karen
Residue,Total Filterable @180C	(EPA 160.1)	mg/L	124				13.60			10/18/96	sharon
Temperature	(EPA 170.1)	Celsius	21.2				0.0200			10/17/96	sharon
Thallium, Total	(EPA 279.2)	ug/L	<0.07				0.620			10/18/96	mike
Chlorine, Total Residual	(EPA 330.1)	mg/L	0.0				0.00			10/17/96	june
Phosphorus, Total	(EPA 365.4)	mg/L	0.049				0.0410			10/23/96	christy
Residue,Total Nonfilt @103-105	(EPA 160.2)	mg/L	3				1.000			10/22/96	sharon
Zinc, Total	(EPA 289.1)	ug/L	<9.				10.000			10/31/96	mike

Group # 15696

Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Buddy Revells

S.O.Purdom Generating Station

Sampled by : fondo

Sample # 96-11312
Group # 15696
Sample Type WATER

Sample ID ST.MARKS RIVER-PURDOM PLANT
Sample Site
Sampled 10/17/96 09:45

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Acenaphthene	(EPA8270/625)	ug/L	BDL				3.52	10/22/96	joe	10/29/96	andy
Acenaphthylene	(EPA 8270/625)	ug/L	BDL				3.76	10/22/96	joe	10/29/96	andy
Anthracene	(EPA 8270/625)	ug/L	BDL				2.67	10/22/96	joe	10/29/96	andy
Benzo(a)anthracene	(EPA 8270/625)	ug/L	BDL				2.56	10/22/96	joe	10/29/96	andy
Benzo(b)fluoranthene	(EPA 8270/625)	ug/L	BDL				4.80	10/22/96	joe	10/29/96	andy
Benzo(k)fluoranthene	(EPA 8270/625)	ug/L	BDL				2.50	10/22/96	joe	10/29/96	andy
Benzo(ghi)perylene	(EPA 8270/625)	ug/L	BDL				4.10	10/22/96	joe	10/29/96	andy
Benzo(a)pyrene	(EPA 8270/625)	ug/L	BDL				2.50	10/22/96	joe	10/29/96	andy
Chrysene	(EPA 8270/625)	ug/L	BDL				2.72	10/22/96	joe	10/29/96	andy
Dibenzo(ah)anthracene	(EPA 8270/625)	ug/L	BDL				2.50	10/22/96	joe	10/29/96	andy
Fluoranthene	(EPA 8270/625)	ug/L	BDL				2.18	10/22/96	joe	10/29/96	andy
Fluorene	(EPA 8270/625)	ug/L	BDL				4.10	10/22/96	joe	10/29/96	andy
Indeno(123cd)pyrene	(EPA 8270/625)	ug/L	BDL				3.70	10/22/96	joe	10/29/96	andy
Naphthalene	(EPA 8270/625)	ug/L	BDL				1.28	10/22/96	joe	10/29/96	andy
Phenanthrene	(EPA 8270/625)	ug/L	BDL				2.82	10/22/96	joe	10/29/96	andy
Pyrene	(EPA 8270/625)	ug/L	BDL				9.25	10/22/96	joe	10/29/96	andy
Benzidine	(EPA 8270/625)	ug/L	BDL				44.0	10/22/96	joe	10/29/96	andy
3,3-Dichlorbenzidine	(EPA 8270/625)	ug/L	BDL				16.5	10/22/96	joe	10/29/96	andy
Butylbenzylphthalate	(EPA 8270/625)	ug/L	BDL				1.98	10/22/96	joe	10/29/96	andy
Bis(2-ethylhexyl)phthalate	(EPA 8270/625)	ug/L	BDL				4.80	10/22/96	joe	10/29/96	andy
Di-n-butylphthalate	(EPA 8270/625)	ug/L	BDL				2.77	10/22/96	joe	10/29/96	andy
Diethylphthalate	(EPA 8270/625)	ug/L	BDL				5.81	10/22/96	joe	10/29/96	andy
Dimethylphthalate	(EPA 8270/625)	ug/L	BDL				3.10	10/22/96	joe	10/29/96	andy
Di-n-octylphthalate	(EPA 8270/625)	ug/L	BDL				2.50	10/22/96	joe	10/29/96	andy
Bis(2-chloroethoxy)methane	(EPA 8270/625)	ug/L	BDL				1.68	10/22/96	joe	10/29/96	andy
Bis(2-chloroethyl)ether	(EPA 8270/625)	ug/L	BDL				5.70	10/22/96	joe	10/29/96	andy
Bis(2-chloroisopropyl)ether	(EPA 8270/625)	ug/L	BDL				5.70	10/22/96	joe	10/29/96	andy
1,2-Dichlorobenzene	(EPA 8270/625)	ug/L	BDL				2.04	10/22/96	joe	10/29/96	andy
1,3-Dichlorobenzene	(EPA 8270/625)	ug/L	BDL				1.92	10/22/96	joe	10/29/96	andy
1,4-Dichlorobenzene	(EPA 8270/625)	ug/L	BDL				1.95	10/22/96	joe	10/29/96	andy
4-Bromophenylphenyl ether	(EPA 8270/625)	ug/L	BDL				2.36	10/22/96	joe	10/29/96	andy
4-Chlorophenylphenyl ether	(EPA 8270/625)	ug/L	BDL				3.44	10/22/96	joe	10/29/96	andy
2-chloronaphthalene	(EPA 8270/625)	ug/L	BDL				3.41	10/22/96	joe	10/29/96	andy
2,4-dinitrotoluene	(EPA 8270/625)	ug/L	BDL				5.70	10/22/96	joe	10/29/96	andy
2,6-dinitrotoluene	(EPA 8270/625)	ug/L	BDL				3.74	10/22/96	joe	10/29/96	andy
Hexachlorobenzene	(EPA 8270/625)	ug/L	BDL				0.0310	10/22/96	joe	10/29/96	andy
Hexachlorobutadiene	(EPA 8270/625)	ug/L	BDL				1.00	10/22/96	joe	10/29/96	andy
Hexachlorocyclopentadiene	(EPA 8270/625)	ug/L	BDL				0.0190	10/22/96	joe	10/29/96	andy
Hexachloroethane	(EPA 8270/625)	ug/L	BDL				0.530	10/22/96	joe	10/29/96	andy
Isophorone	(EPA 8270/625)	ug/L	BDL				0.970	10/22/96	joe	10/29/96	andy
Nitrobenzene	(EPA 8270/625)	ug/L	BDL				2.01	10/22/96	joe	10/29/96	andy
N-nitroso-di-n-propylamine	(EPA 8270/625)	ug/L	BDL				11.0	10/22/96	joe	10/29/96	andy
N-nitrosodiphenylamine	(EPA 8270/625)	ug/L	BDL				4.37	10/22/96	joe	10/29/96	andy
1,2,4-trichlorobenzene	(EPA 8270/625)	ug/L	BDL				1.43	10/22/96	joe	10/29/96	andy
N-nitrosodimethylamine	(EPA 8270/625)	ug/L	BDL				10.0	10/22/96	joe	10/29/96	andy
Dioxin(2378-TCDD)	(EPA 8270/625)	ug/L	BDL				0.0500	10/22/96	joe	10/29/96	andy

Group # 15696

Electric Production & Env.Affairs COT290101 S.O.Purdom Generating Station
Electric Department
City of Tallahassee Sampled by : fondo

Tallahassee ,FL 32302
ATTN. Buddy Revells

Sample # 96-11312 Sample ID ST.MARKS RIVER-PURDOM PLANT
Group # 15696 Sample Site ____________
Sample Type WATER Sampled 10/17/96 09:45

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Bis(2-ethylhexyl)adipate	(EPA 8270/625)	ug/L	BDL				4.90	10/22/96	joe	10/29/96	andy

Group # 15696

Electric Production & Env.Affairs COT290101 S.O.Purdom Generating Station
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Sample # 96-11312 Sample ID ST.MARKS RIVER-PURDOM PLANT
Group # 15696 Sample Site ____________
Sample Type WATER Sampled 10/17/96 09:45

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Alachlor	(EPA 508)	ug/L	BDL				0.270	10/23/96	joe	10/25/96	andy
Aldrin	(EPA 508)	ug/L	BDL				0.0210	10/23/96	joe	10/25/96	andy
A-BHC	(EPA 508)	ug/L	BDL				0.0120	10/23/96	joe	10/25/96	andy
B-BHC	(EPA 508)	ug/L	BDL				0.0510	10/23/96	joe	10/25/96	andy
D-BHC	(EPA 508)	ug/L	BDL				0.0130	10/23/96	joe	10/25/96	andy
G-BHC(lindane)	(EPA 508)	ug/L	BDL				0.0120	10/23/96	joe	10/25/96	andy
Dieldrin	(EPA 508)	ug/L	BDL				0.0240	10/23/96	joe	10/25/96	andy
4,4'-DDD	(EPA 508)	ug/L	BDL				0.0630	10/23/96	joe	10/25/96	andy
4,4'-DDE	(EPA 508)	ug/L	BDL				0.0350	10/23/96	joe	10/25/96	andy
4,4'-DDT	(EPA 508)	ug/L	BDL				0.0410	10/23/96	joe	10/25/96	andy
Endosulfan I	(EPA 508)	ug/L	BDL				0.0200	10/23/96	joe	10/25/96	andy
Endosulfan II	(EPA 508)	ug/L	BDL				0.0370	10/23/96	joe	10/25/96	andy
Endrin	(EPA 508)	ug/L	BDL				0.0470	10/23/96	joe	10/25/96	andy
Endrin Aldehyde	(EPA 508)	ug/L	BDL				0.0540	10/23/96	joe	10/25/96	andy
Heptachlor	(EPA 508)	ug/L	BDL				0.0210	10/23/96	joe	10/25/96	andy
Heptachlor epoxide	(EPA 508)	ug/L	BDL				0.0210	10/23/96	joe	10/25/96	andy
Methoxychlor	(EPA 508)	ug/L	BDL				0.178	10/23/96	joe	10/25/96	andy
Hexachlorobenzene	(EPA 508)	ug/L	BDL				0.0310	10/23/96	joe	10/25/96	andy
Hexachlorocyclopentadiene	(EPA 508)	ug/L	BDL				0.0190	10/23/96	joe	10/25/96	andy
Trifluralin	(EPA 508)	ug/L	BDL				0.0480	10/23/96	joe	10/25/96	andy
Propachlor	(EPA 508)	ug/L	BDL				0.500	10/23/96	joe	10/25/96	andy
Chlordane	(EPA 508)	ug/L	BDL				0.192	10/23/96	joe	10/25/96	andy
Decachlorobiphenyl	(EPA 508)	ug/L	BDL				0.100	10/23/96	joe	10/25/96	andy
Toxaphene	(EPA 508)	ug/L	BDL				0.176	10/23/96	joe	10/25/96	andy

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Electric Production & Env.Affairs COT290101 S.O.Purdom Generating Station
Electric Department
City of Tallahassee Sampled by : fondo

Tallahassee ,FL 32302
ATTN. Buddy Revells

Sample # 96-11312 Sample ID ST.MARKS RIVER-PURDOM PLANT
Group # 15696 Sample Site
Sample Type WATER Sampled 10/17/96 09:45

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Dichlorodifluoromethane	(502.2)	ug/L	0				0.0500000			11/07/96	alan
Chloromethane	(502.2)	ug/L	0				0.0700000			11/07/96	alan
Vinyl chloride	(502.2)	ug/L	0				0.0500000			11/07/96	alan
Bromomethane	(502.2)	ug/L	0				0.0400000			11/07/96	alan
Chloroethane	(502.2)	ug/L	0				0.0400000			11/07/96	alan
Trichlorofluoromethane	(502.2)	ug/L	0				0.0600000			11/07/96	alan
1,1-Dichloroethylene	(502.2)	ug/L	0				0.0400000			11/07/96	alan
Methylene chloride	(502.2)	ug/L	0				0.0800000			11/07/96	alan
trans-1,2-Dichloroethylene	(502.2)	ug/L	0				0.0500000			11/07/96	alan
1,1-Dichloroethane	(502.2)	ug/L	0				0.0600000			11/07/96	alan
2,2-Dichloropropane	(502.2)	ug/L	0				0.140000			11/07/96	alan
cis-1,2-Dichloroethylene	(502.2)	ug/L	0				0.0600000			11/07/96	alan
Bromochloromethane	(502.2)	ug/L	0				0.0700000			11/07/96	alan
Chloroform	(502.2)	ug/L	0				0.0700000			11/07/96	alan
1,1,1-Trichloroethane	(502.2)	ug/L	0				0.0600000			11/07/96	alan
Carbon tetrachloride	(502.2)	ug/L	0				0.0600000			11/07/96	alan
1,1-Dichloropropene	(502.2)	ug/L	0				0.0300000			11/07/96	alan
Benzene	(502.2)	ug/L	0				0.0200000			11/07/96	alan
1,2-Dichloroethane	(502.2)	ug/L	0				0.220000			11/07/96	alan
Trichloroethylene	(502.2)	ug/L	0				0.0800000			11/07/96	alan
1,2-Dichloropropane	(502.2)	ug/L	0				0.0900000			11/07/96	alan
Dibromomethane	(502.2)	ug/L	0				0.0700000			11/07/96	alan
Bromodichloromethane	(502.2)	ug/L	0				0.100000			11/07/96	alan
cis-1,3-Dichloropropylene	(502.2)	ug/L	0				0.120000			11/07/96	alan
Toluene	(502.2)	ug/L	0				0.0500000			11/07/96	alan
trans-1,3-Dichloropropylene	(502.2)	ug/L	0				0.100000			11/07/96	alan
1,1,2-Trichloroethane	(502.2)	ug/L	0				0.0300000			11/07/96	alan
Tetrachloroethylene	(502.2)	ug/L	0				0.0400000			11/07/96	alan
1,3-Dichloropropane	(502.2)	ug/L	0				0.0500000			11/07/96	alan
Dibromochloromethane	(502.2)	ug/L	0				0.0500000			11/07/96	alan
1,2-Dibromoethane	(502.2)	ug/L	0				0.0400000			11/07/96	alan
Chlorobenzene	(502.2)	ug/L	0				0.0300000			11/07/96	alan
1,1,1,2-Tetrachloroethane	(502.2)	ug/L	0				0.0700000			11/07/96	alan
Ethylbenzene	(502.2)	ug/L	0				0.0200000			11/07/96	alan
m-Xylene	(502.2)	ug/L	0				0.0500000			11/07/96	alan
p-Xylene	(502.2)	ug/L	0				0.0500000			11/07/96	alan
o-Xylene	(502.2)	ug/L	0				0.0300000			11/07/96	alan
Styrene	(502.2)	ug/L	0				0.0300000			11/07/96	alan
Bromoform	(502.2)	ug/L	0				0.180000			11/07/96	alan
Isopropylbenzene	(502.2)	ug/L	0				0.0300000			11/07/96	alan
Bromobenzene	(502.2)	ug/L	0				0.0300000			11/07/96	alan
1,2,3-Trichloropropane	(502.2)	ug/L	0				0.0600000			11/07/96	alan
1,1,2,2-Tetrachloroethane	(502.2)	ug/L	0				0.0400000			11/07/96	alan
n-Propylbenzene	(502.2)	ug/L	0				0.0300000			11/07/96	alan
2-Chlorotoluene	(502.2)	ug/L	0				0.0500000			11/07/96	alan
4-Chlorotoluene	(502.2)	ug/L	0				0.0800000			11/07/96	alan

Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Buddy Revells

S.O.Purdom Generating Station

Sampled by : fondo

Sample # 96-11312
Group # 15696
Sample Type WATER

Sample ID ST.MARKS RIVER-PURDOM PLANT
Sample Site
Sampled 10/17/96 09:45

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
1,3,5-Trimethylbenzene	(502.2)	ug/L	0				0.0200000			11/07/96	alan
t-Butylbenzene	(502.2)	ug/L	0				0.0300000			11/07/96	alan
1,2,4-Trimethylbenzene	(502.2)	ug/L	0				0.0300000			11/07/96	alan
s-Butylbenzene	(502.2)	ug/L	0				0.0300000			11/07/96	alan
1,3-Dichlorobenzene	(502.2)	ug/L	0				0.0500000			11/07/96	alan
1,4-Dichlorobenzene	(502.2)	ug/L	0				0.0700000			11/07/96	alan
p-Isopropyltoluene	(502.2)	ug/L	0				0.0300000			11/07/96	alan
1,2-Dichlorobenzene	(502.2)	ug/L	0				0.0400000			11/07/96	alan
n-Butylbenzene	(502.2)	ug/L	0				0.0200000			11/07/96	alan
1,2-Dibromo-3-chloropropane	(502.2)	ug/L	0				0.120000			11/07/96	alan
1,2,4-Trichlorobenzene	(502.2)	ug/L	0				0.0800000			11/07/96	alan
Hexachlorobutadiene	(502.2)	ug/L	0				0.110000			11/07/96	alan
Naphthalene	(502.2)	ug/L	0				0.0600000			11/07/96	alan
1,2,3-Trichlorobenzene	(502.2)	ug/L	0				0.0800000			11/07/96	alan
MTBE	(502.2)	ug/L	0				5.00000			11/07/96	alan

Report 15696 Comment Page

Sample# 96-11312
Source: ST.MARKS RIVER-PURDOM PLANT

Data Entry Comments

Sampled, but not analyzed. (@VOC8021)

CITY OF TALLAHASSEE
Water Quality Division
3805 Springhill Rd.
Tallahassee, Fl. 32310-6502
(904) 891-1200
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Laboratory Report

for

Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee , FL 32302

Attention: Phil Bucci

JAM

Report#: 16036

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Electric Production & Env.Affairs COT290101 S.O.Purdom Generating Station
Electric Department
City of Tallahassee Sampled by : S MCCLURE

Tallahassee ,FL 32302
ATTN. Buddy Revells

Sample # 96-12565 Sample ID ST MARKS RIVER-PURDOM PLANT
Group # 16036 Sample Site
Sample Type WATER Sampled 11/21/96 09:20

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Silver, Total	(272.2/ 7761)	ug/L	<0.11				0.9500			11/22/96	mike
Aluminum, Total	(EPA 202.2)	ug/L	29.1				9.5000			12/16/96	mike
Alkalinity	(EPA310.1/2320B)	mg/L CaCO3	119				1.970			11/21/96	sharon
Arsenic, Total by Furnace	(206.2/ 7060)	ug/L	<0.52				1.20			12/04/96	mike
Beryllium, Total	(EPA 210.2)	ug/L	<0.01				0.140			11/26/96	mike
Bicarbonate ion by Calculation	(SM4500-CO2D)	mg/L CaCO3	118.8				3.100			11/22/96	sharon
Calcium, Total	(EPA 215.1)	mg/L	40.4				0.450			12/09/96	mike
Carbonate ion, by calculation	(SM4500-CO2D)	mg/L CaCO3	<0.1690				3.100			11/22/96	sharon
Cadmium, Total	(213.2/ 7131)	ug/L	<0.07				0.290			12/05/96	mike
Chloride	(EPA 325.2)	mg/L	93.0				0.370			11/26/96	christy
Cyanide, Total	(EPA 335.4)	mg/L	<0.000				0.00500			11/25/96	christy
Specific Conductance,25C,field	(EPA 120.1)	umhos/cm	583				1.870			11/21/96	ron
Copper, Total	(EPA 220.2)	ug/L	<0.5				0.8000			12/02/96	mike
Oxygen, Membrane Dissolved	(EPA 360.1)	mg/L	3.88				0.100			11/21/96	ron
Fecal Coliform MF	(600/8-78/017)	#/100 ml	170				1.000			11/22/96	karen
Iron, Total	(EPA 236.2)	ug/L	65.6				5.560			11/21/96	mike
Hardness	(EPA130.2/2340C)	mg/L CaCO3	162				2.17			11/26/96	sharon
Mercury, Total	(245.1/ 7471)	ug/L	<0.04				0.520			12/05/96	mike
Potassium, Total	(EPA 258.1)	mg/L	2.32				0.0700			12/17/96	mike
Magnesium, Total	(EPA 242.1)	mg/L	13.4				0.810			12/09/96	mike
Sodium, Total	(EPA 273.1)	mg/L	53.8				0.140			12/17/96	mike
Nitrogen, Ammonia	(EPA 350.1)	mg/L	0.016				0.0140			11/26/96	christy
Nickel, Total	(EPA 249.2)	ug/L	1.7				0.9600			12/06/96	mike
Nitrogen, Nitrite	(EPA 353.2)	mg/L	<0.000				0.005000			11/22/96	christy
Nitrogen, Nitrite plus Nitrate	(EPA 353.2)	mg/L	0.124				0.0110			11/22/96	christy
Nitrogen,Nitrate by difference	(EPA 353.2)	mg/L	0.124				0.0110			11/22/96	christy
Parathion-methyl	(EPA 505)	ug/L	BDL				0.369			11/27/96	andy
Parathion-ethyl	(EPA 505)	ug/L	BDL				0.328			11/27/96	andy
Malathion	(EPA 505)	ug/L	BDL				0.561			11/27/96	andy
Guthionn	(EPA 505)	ug/L	BDL				2.39			11/27/96	andy
Demeton	(EPA 505)	ug/L	BDL				32.1			11/27/96	andy
Lead, Total	(239.2/ 7421)	ug/L	<0.46				0.5000			11/21/96	mike
Field, Hydrogen ion conc.	(EPA 150.1)	pH units	7.18				0.0800			11/21/96	christy
Antimony, Total	(EPA 204.2)	ug/L	<0.27				0.860			11/25/96	mike
Selenium, Total by Furnace	(270.2/ 7440)	ug/L	<0.00				1.800			11/26/96	mike
Silica, Dissolved	(SM4500-Si-D)	mg/L	11.6				0.102			11/21/96	jam
Sulfate, Total	(EPA 375.2)	mg/L	21.7				0.846			12/04/96	christy
Sulfide, Total	(EPA 376.1)	mg/L	<0.0				1.00			11/21/96	ron
Total Coliform MF	(600/8-78-017)	#/100 ml	324				1.00			11/22/96	karen
Residue,Total Filterable @180C	(EPA 160.1)	mg/L	346				13.60			11/22/96	sharon
Temperature	(170.1/2550 B)	Celsius	20.3				0.0200			11/21/96	ron
Thallium, Total	(EPA 279.2)	ug/L	<0.12				0.620			11/27/96	mike
Chlorine, Total Residual	(EPA 330.1)	mg/L	0.0				0.00			11/21/96	karen
Phosphorus, Total	(EPA 365.4)	mg/L	<0.000				0.0410			12/03/96	christy
Residue,Total Nonfilt @103-105	(EPA 160.2)	mg/L	2				1.000			11/25/96	sharon
Zinc, Total	(EPA 289.1)	ug/L	<8.				10.000			12/16/96	mike

Group # 16036

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Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Buddy Revells

S.O.Purdom Generating Station

Sampled by : S MCCLURE

Sample # 96-12565
Group # 16036
Sample Type WATER

Sample ID ST MARKS RIVER-PURDOM PLANT
Sample Site
Sampled 11/21/96 09:20

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Acenaphthene	(EPA8270/625)	ug/L	BDL				3.52	11/26/96	joe	11/27/96	andy
Acenaphthylene	(EPA 8270/625)	ug/L	BDL				3.76	11/26/96	joe	11/27/96	andy
Anthracene	(EPA 8270/625)	ug/L	BDL				2.67	11/26/96	joe	11/27/96	andy
Benzo(a)anthracene	(EPA 8270/625)	ug/L	BDL				2.56	11/26/96	joe	11/27/96	andy
Benzo(b)fluoranthene	(EPA 8270/625)	ug/L	BDL				4.80	11/26/96	joe	11/27/96	andy
Benzo(k)fluoranthene	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	11/27/96	andy
Benzo(ghi)perylene	(EPA 8270/625)	ug/L	BDL				4.10	11/26/96	joe	11/27/96	andy
Benzo(a)pyrene	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	11/27/96	andy
Chrysene	(EPA 8270/625)	ug/L	BDL				2.72	11/26/96	joe	11/27/96	andy
Dibenzo(ah)anthracene	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	11/27/96	andy
Fluoranthene	(EPA 8270/625)	ug/L	BDL				2.18	11/26/96	joe	11/27/96	andy
Fluorene	(EPA 8270/625)	ug/L	BDL				4.10	11/26/96	joe	11/27/96	andy
Indeno(123cd)pyrene	(EPA 8270/625)	ug/L	BDL				3.70	11/26/96	joe	11/27/96	andy
Naphthalene	(EPA 8270/625)	ug/L	BDL				1.28	11/26/96	joe	11/27/96	andy
Phenanthrene	(EPA 8270/625)	ug/L	BDL				2.82	11/26/96	joe	11/27/96	andy
Pyrene	(EPA 8270/625)	ug/L	BDL				9.25	11/26/96	joe	11/27/96	andy
Benzidine	(EPA 8270/625)	ug/L	BDL				44.0	11/26/96	joe	11/27/96	andy
3,3-Dichlorbenzidine	(EPA 8270/625)	ug/L	BDL				16.5	11/26/96	joe	11/27/96	andy
Butylbenzylphthalate	(EPA 8270/625)	ug/L	BDL				1.98	11/26/96	joe	11/27/96	andy
Bis(2-ethylhexyl)phthalate	(EPA 8270/625)	ug/L	BDL				4.80	11/26/96	joe	11/27/96	andy
Di-n-butylphthalate	(EPA 8270/625)	ug/L	BDL				2.77	11/26/96	joe	11/27/96	andy
Diethylphthalate	(EPA 8270/625)	ug/L	BDL				5.81	11/26/96	joe	11/27/96	andy
Dimethylphthalate	(EPA 8270/625)	ug/L	BDL				3.10	11/26/96	joe	11/27/96	andy
Di-n-octylphthalate	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	11/27/96	andy
Bis(2-chloroethoxy)methane	(EPA 8270/625)	ug/L	BDL				1.68	11/26/96	joe	11/27/96	andy
Bis(2-chloroethyl)ether	(EPA 8270/625)	ug/L	BDL				5.70	11/26/96	joe	11/27/96	andy
Bis(2-chloroisopropyl)ether	(EPA 8270/625)	ug/L	BDL				5.70	11/26/96	joe	11/27/96	andy
1,2-Dichlorobenzene	(EPA 8270/625)	ug/L	BDL				2.04	11/26/96	joe	11/27/96	andy
1,3-Dichlorobenzene	(EPA 8270/625)	ug/L	BDL				1.92	11/26/96	joe	11/27/96	andy
1,4-Dichlorobenzene	(EPA 8270/625)	ug/L	BDL				1.95	11/26/96	joe	11/27/96	andy
4-Bromophenylphenyl ether	(EPA 8270/625)	ug/L	BDL				2.36	11/26/96	joe	11/27/96	andy
4-Chlorophenylphenyl ether	(EPA 8270/625)	ug/L	BDL				3.44	11/26/96	joe	11/27/96	andy
2-chloronaphthalene	(EPA 8270/625)	ug/L	BDL				3.41	11/26/96	joe	11/27/96	andy
2,4-dinitrotoluene	(EPA 8270/625)	ug/L	BDL				5.70	11/26/96	joe	11/27/96	andy
2,6-dinitrotoluene	(EPA 8270/625)	ug/L	BDL				3.74	11/26/96	joe	11/27/96	andy
Hexachlorobenzene	(EPA 8270/625)	ug/L	BDL				0.0310	11/26/96	joe	11/27/96	andy
Hexachlorobutadiene	(EPA 8270/625)	ug/L	BDL				1.00	11/26/96	joe	11/27/96	andy
Hexachlorocyclopentadiene	(EPA 8270/625)	ug/L	BDL				0.0190	11/26/96	joe	11/27/96	andy
Hexachloroethane	(EPA 8270/625)	ug/L	BDL				0.530	11/26/96	joe	11/27/96	andy
Isophorone	(EPA 8270/625)	ug/L	BDL				0.970	11/26/96	joe	11/27/96	andy
Nitrobenzene	(EPA 8270/625)	ug/L	BDL				2.01	11/26/96	joe	11/27/96	andy
N-nitroso-di-n-propylamine	(EPA 8270/625)	ug/L	BDL				11.0	11/26/96	joe	11/27/96	andy
N-nitrosodiphenylamine	(EPA 8270/625)	ug/L	BDL				4.37	11/26/96	joe	11/27/96	andy
1,2,4-trichlorobenzene	(EPA 8270/625)	ug/L	BDL				1.43	11/26/96	joe	11/27/96	andy
N-nitrosodimethylamine	(EPA 8270/625)	ug/L	BDL				10.0	11/26/96	joe	11/27/96	andy
Dioxin(2378-TCDD)	(EPA 8270/625)	ug/L	BDL				0.0500	11/26/96	joe	11/27/96	andy

Group # 16036

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Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Buddy Revells

S.O.Purdom Generating Station

Sampled by : S MCCLURE

Sample # 96-12565
Group # 16036
Sample Type WATER

Sample ID ST MARKS RIVER-PURDOM PLANT
Sample Site
Sampled 11/21/96 09:20

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Bis(2-ethylhexyl)adipate	(EPA 8270/625)	ug/L	BDL				4.90	11/26/96	joe	11/27/96	andy

Group # 16036

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ATTN. Buddy Revells

S.O.Purdom Generating Station

Sampled by : S MCCLURE

Sample # 96-12565
Group # 16036
Sample Type WATER

Sample ID ST MARKS RIVER-PURDOM PLANT
Sample Site
Sampled 11/21/96 09:20

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Aldrin	(EPA 625)	ug/L	BDL				4.00	11/26/96	joe	12/02/96	andy
A-BHC	(EPA 625)	ug/L	BDL				4.00	11/26/96	joe	12/02/96	andy
B-BHC	(EPA 625)	ug/L	BDL				4.30	11/26/96	joe	12/02/96	andy
D-BHC	(EPA 625)	ug/L	BDL				3.10	11/26/96	joe	12/02/96	andy
G-BHC(lindane)	(EPA 562)	ug/L	BDL				4.00	11/26/96	joe	12/02/96	andy
Chlordane	(EPA 625)	ug/L	BDL				10.0	11/26/96	joe	12/02/96	andy
Dieldrin	(EPA 625)	ug/L	BDL				2.50	11/26/96	joe	12/02/96	andy
4,4'-DDD	(EPA 625)	ug/L	BDL				2.80	11/26/96	joe	12/02/96	andy
4,4'-DDE	(EPA 625)	ug/L	BDL				5.60	11/26/96	joe	12/02/96	andy
4,4'-DDT	(EPA 625)	ug/L	BDL				2.80	11/26/96	joe	12/02/96	andy
Endosulfan I	(EPA 625)	ug/L	BDL				5.00	11/26/96	joe	12/02/96	andy
Endosulfan II	(EPA 625)	ug/L	BDL				5.00	11/26/96	joe	12/02/96	andy
Endosulfan Sulfate	(EPA 625)	ug/L	BDL				5.60	11/26/96	joe	12/02/96	andy
Endrin	(EPA 625)	ug/L	BDL				5.00	11/26/96	joe	12/02/96	andy
Endrin Aldehyde	(EPA 625)	ug/L	BDL				5.00	11/26/96	joe	12/02/96	andy
Heptachlor	(EPA 625)	ug/L	BDL				1.90	11/26/96	joe	12/02/96	andy
Heptachlor epoxide	(EPA 625)	ug/L	BDL				2.20	11/26/96	joe	12/02/96	andy
Methoxychlor	(EPA 625)	ug/L	BDL				5.00	11/26/96	joe	12/02/96	andy
Toxaphene	(EPA 625)	ug/L	BDL				10.0	11/26/96	joe	12/02/96	andy
Aroclor 1016	(EPA 625)	ug/L	BDL				10.0	11/26/96	joe	12/02/96	andy
Aroclor 1221	(EPA 625)	ug/L	BDL				10.0	11/26/96	joe	12/02/96	andy
Aroclor 1232	(EPA 625)	ug/L	BDL				10.0	11/26/96	joe	12/02/96	andy
Aroclor 1242	(EPA 625)	ug/L	BDL				10.0	11/26/96	joe	12/02/96	andy
Aroclor 1248	(EPA 625)	ug/L	BDL				10.0	11/26/96	joe	12/02/96	andy
Aroclor 1254	(EPA 625)	ug/L	BDL				10.0	11/26/96	joe	12/02/96	andy
Aroclor 1260	(EPA 625)	ug/L	BDL				10.0	11/26/96	joe	12/02/96	andy

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Electric Production & Env.Affairs COT290101 S.O.Purdom Generating Station
Electric Department
City of Tallahassee Sampled by : S MCCLURE

Tallahassee ,FL 32302
ATTN. Buddy Revells

Sample # 96-12565 Sample ID ST MARKS RIVER-PURDOM PLANT
Group # 16036 Sample Site
Sample Type WATER Sampled 11/21/96 09:20

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Dichlorodifluoromethane	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
Chloromethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Vinyl chloride	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
Bromomethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Chloroethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Trichlorofluoromethane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,1-Dichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Methylene chloride	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan
trans-1,2-Dichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
1,1-Dichloroethane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
2,2-Dichloropropane	(502.2/ 8021)	ug/L	BDL				0.140000			12/05/96	alan
cis-1,2-Dichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
Bromochloromethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Chloroform	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
1,1,1-Trichloroethane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
Carbon tetrachloride	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,1-Dichloropropene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Benzene	(502.2/ 8021)	ug/L	BDL				0.0200000			12/05/96	alan
1,2-Dichloroethane	(502.2/ 8021)	ug/L	BDL				0.220000			12/05/96	alan
Trichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan
1,2-Dichloropropane	(502.2/ 8021)	ug/L	BDL				0.0900000			12/05/96	alan
Dibromomethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Bromodichloromethane	(502.2/ 8021)	ug/L	BDL				0.100000			12/05/96	alan
cis-1,3-Dichloropropylene	(502.2/ 8021)	ug/L	BDL				0.120000			12/05/96	alan
Toluene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
trans-1,3-Dichloropropylene	(502.2/ 8021)	ug/L	BDL				0.100000			12/05/96	alan
1,1,2-Trichloroethane	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Tetrachloroethylene	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
1,3-Dichloropropane	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
Dibromochloromethane	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
1,2-Dibromoethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Chlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,1,1,2-Tetrachloroethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Ethylbenzene	(502.2/ 8021)	ug/L	BDL				0.0200000			12/05/96	alan
m-Xylene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
p-Xylene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
o-Xylene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Styrene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Bromoform	(502.2/ 8021)	ug/L	BDL				0.180000			12/05/96	alan
Isopropylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Bromobenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,2,3-Trichloropropane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,1,2,2-Tetrachloroethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
n-Propylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
2-Chlorotoluene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
4-Chlorotoluene	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan

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Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Buddy Revells

S.O.Purdom Generating Station

Sampled by : S MCCLURE

Sample # 96-12565
Group # 16036
Sample Type WATER

Sample ID ST MARKS RIVER-PURDOM PLANT
Sample Site
Sampled 11/21/96 09:20

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
1,3,5-Trimethylbenzene	(502.2/ 8021)	ug/L	BDL				0.0200000			12/05/96	alan
t-Butylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,2,4-Trimethylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
s-Butylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,3-Dichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
1,4-Dichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
p-Isopropyltoluene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,2-Dichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
n-Butylbenzene	(502.2/ 8021)	ug/L	BDL				0.0200000			12/05/96	alan
1,2-Dibromo-3-chloropropane	(502.2/ 8021)	ug/L	BDL				0.120000			12/05/96	alan
1,2,4-Trichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan
Hexachlorobutadiene	(502.2/ 8021)	ug/L	BDL				0.110000			12/05/96	alan
Naphthalene	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,2,3-Trichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan
MTBE	(502.2/ 8021)	ug/L	BDL				5.00000			12/05/96	alan

Group # 16036

Report 16036 Comment Page

10.5.5 Ecology

10.5.5.1 Data Search/Literature Survey

This section includes descriptions of the data resources and methods used to provide the baseline ecological information presented in Sections 2.3.5 and 2.3.6.

Aquatic Ecology

The focus of aquatic studies was on important species which are designated as follows:

- Listed as endangered or threatened by the USFWS
- Listed as endangered, threatened, or species of special concern by the FGFWFC
- Listed as game or fish in the Florida Administrative Code (F.A.C.) Chapter 39-1
- Species which are indicators of, endemic to, or are otherwise unique to specific plant communities and habitat types

Terrestrial And Wetlands Ecology

The objective of the literature review was to obtain varied types of ecological information to be used to develop an understanding of the status of these ecological resources on and in the vicinity of the site. This information focused on the following:

- Regional vegetation descriptions, including wetlands
- Plant species lists and ecological reports for the area
- Lists and ecological reports of birds, mammals, reptiles, and amphibians common to the area
- Species checklists, reports of sightings, or abundance estimates
- Interspecific relationships and food chains of important species
- Locations of rare, threatened, or endangered species or critical habitats for these species in the region
- Occurrence of potential pre-existing stresses

Several data sources were used in the preparation of the impact assessment as related specifically to wetlands, important species, and plant communities. These were:

- Natural Resources Conservation Service soils maps
- Site inspections
- Aerial photographs

A description of potential ecological resources at the site of the station and its associated facilities was developed from a data base including information from available literature. Information sources reviewed for relevant ecological data were:

- In-house computer search utilizing the appropriate biological data bases
- Contacts with the FNAI

The information identified during the literature review included:

- Regional vegetation descriptions, including successional patterns
- Lists of birds, mammals, reptiles, and amphibians common to the vicinity of the proposed site
- Species checklists, reports of sightings, or abundance estimates
- Locations of rare, threatened or endangered species or critical habitats for these species
- Occurrence of pre-existing stresses or perturbations such as insect infestations, fires, flooding and severe weather

Vegetation/Land Use

The objective of this task was to collect and organize text and mapping data to provide the following:

- A 1:4,800 scale land use and vegetation map of the site and associated facilities
- Dominant or indicator vegetation species in vegetation communities
- An assessment of the quality or condition of site vegetation communities

10.5.5.2 Field And Data Collection Program

Aquatic Ecology

Water Quality Characterization. Measurements for water quality characteristics were made at the same point at each sampling station at the time of sampling for aquatic investigations, as follows:

- pH
- Dissolved oxygen (DO)
- Temperature (air and water)
- Conductivity
- Physical characteristics

Four of the stations utilized for water quality sampling stations were also used to collect aquatic ecology data presented in Section 2.3.4.

An Orion Model 230A pH Meter was used for pH measurements. The pH meter was calibrated and operated according to the manufacturer's specifications using pH 4.00 and pH 7.00 buffers for calibration.

Water and air temperatures were measured using an American Society for Testing and Materials (ASTM) thermometer calibrated against a National Bureau of Standards traceable thermometer. The data and time of day of sampling were recorded.

Dissolved oxygen was taken directly using a YSI Model 50B dissolved oxygen meter. The probe was hand agitated in the water, with sufficient time allowed for the probe to stabilize before readings were taken. Prior to field calibration, the probe membrane was inspected for damage and underlying bubbles; the membrane and potassium chloride solution were replaced, as necessary. Instrument calibration and operation were performed according to the manufacturer's instructions.

Conductivity, water temperature, and salinity were measured using a YSI Model 33 Salinity-Conductivity-Temperature Meter. The instrument was calibrated and operated according to the manufacturer's instructions. Calibration information was documented and any factors, such as weather conditions or unusual habitat conditions which could have resulted in unusual readings were described on the field data sheets.

Physical characteristics, depth, and light transmission were determined at each station. Depths were measured directly to the nearest 0.1 meter. Light transmission was recorded using a Secchi Disc and recorded to the nearest 0.1 m (0.3 foot).

Benthic Macroinvertebrate Sampling. Benthic macroinvertebrates are defined as being "benthic or substrate dwelling organisms visible to the unaided eye and are retained on a U.S. Standard No. 30 sieve" (ASTM, 1989). They represent an important link in the food chain of many fish species. The majority of these organisms are juvenile or mature life stages of five classes or subclasses: Oligochaeta, Crustacea, Insecta, Gastropoda, and Pelecypoda. Larger individuals or species of several other classes may also be considered macroinvertebrates. Benthic macroinvertebrate communities are often used as indicators of stress on an aquatic system because they are relatively immobile and their composition and density are largely determined by substrate types and local environmental conditions.

Hester-Dendy Artificial Substrate Sampling. Hester-Dendy artificial substrate samplers were placed at each station for a 4-week period once during the study. The artificial substrate samples were used to supplement the grab samples.

Hester-Dendy or multiple samplers consist of 14 tempered hardwood plates which serve as artificial substrates to be colonized by benthic macroinvertebrates. Each plate has a diameter of 7.5 cm and has a smooth surface on one side and a rough surface on the other. The sampler plates are held in place by a 0.63 cm diameter eyebolt. The first nine plates are separated by a single 2.5 cm diameter spacer which separates each plate approximately 3 mm. The tenth plate is separated by two spacers, plates 11 and 12 by three spacers and plates 13 and 14 by four spacers. Each sampler provides an efficient sampling surface area of 0.13 m^2 and the variable spacing of the plates allows for variable spaced habitats for colonization.

Three samplers were placed at each station. The samplers were floated at a depth of approximately four feet in deep water areas to insure the samplers were exposed in the euphotic zone to allow for the maximum abundance and diversity of macroinvertebrates to colonize the plates. Samplers were suspended in such a way as to prevent the samplers from contacting the substrates which may allow for excess silting of the sample, inhibiting colonization of the artificial substrates. Each sampler was anchored to the bottom to prevent relocation of the samplers by currents.

Samplers remained in place for four weeks, after which they were retrieved. To prevent the loss of organisms during sample retrieval, the samples were collected in a Wildco Standard No. 30 mesh wash bucket before being removed from the water. After being removed from the water, each sampler was disassembled and each plate and spacer was scrubbed with a toothbrush to remove the colonized organisms, which were collected in the wash bucket. Care was taken to insure that all of the organisms were removed from the plates and the spacers. Each sample was transferred from the wash bucket to an appropriately sized sample container and a sufficient amount of 70 to 80 percent ethanol was added to the sample to prevent decomposition. Each sample was labeled inside and out with the following information: station number, sampling date, sample number (composed of the station number, sample time, sampling date and replicate number), type of sample and collectors' names. All samples were promptly returned to the laboratory for analysis.

Immediately upon arrival in the laboratory, each sample was logged in on a sample status log and temporarily stored prior to processing. Each sampler was disassembled and each part cleaned to remove the organisms which colonized the artificial substrates. The washed samples were concentrated through a standard No. 30 mesh sieve in order to standardize the organism size and placed in an appropriate sized container before the identifications were conducted. After all of the samplers were disassembled and the samples concentrated, the organisms were identified.

All macroinvertebrates were identified to the lowest practicable taxonomic level (genus or species in most cases) and enumerated using stereo microscopes with appropriate magnification capabilities within the range of 6.4x to 80x. Identifications were made using the following primary keys: Merritt and Cummins (1984), Bringham et al. (1982), Pennak (1978), Parrish (1975), Hobbs (1981), and Wiggins (1977). Data sheets containing the taxa, number collected, and sample number were maintained during the identification. Each identified group of organisms was placed into a separate vial and preserved in 70 to 80 percent ethanol; glycerin was added to each sample to prevent desiccation. Each vial was labeled internally with the taxonomic information (order, family, genus, and species), project name, species number (a combination of the sample number and individual number to indicate species), date collected, date identified and the identifier's name. After each sample was identified, an entry was made in the sample status log indicating the date and the identifier's name.

All of the identified specimens were stored and their storage location noted in the sample status log. The samples will be inspected periodically to insure that the levels of preservative remain sufficient and that the samples are in good condition.

Data Analysis. All data were presented in tabular form to best document the established environmental conditions at each sampling area. Separate tables were developed for each sampling parameter. In addition to merely reporting numbers of organisms collected, selected biotic indices were computed including total number of taxa, percentage of dominant taxa, percentage diptera, Etheroptera/Pleucoptera/Trichoptera (EPT) taxa, Shannon-Weaver Diversity Index [Shannon, 1948] and Florida Index; as appropriate for the specific sampling parameter.

Fisheries Data. Fisheries populations potentially occurring within the St. Marks River Drainage were determined through literature review (Carr and Goin, 1959; Hocutt and Wiley, 1986; Stowe, 1976; Cherr, 1976; Lee et al., 1980), contacts with state universities (Florida State

University), and agency correspondence. Correspondence with FGFWFC and Florida Department of Environmental Protection, Marine Resources Division (FDEP-MRD) indicated that no state collections had been conducted on the St. Marks River.

Terrestrial And Wetlands Ecology

The objective of the field inspection program was to investigate the predominant vegetation and wildlife communities of the proposed site and directly associated facilities. This was done to document important botanical, wetland, and zoological features, such as the presence of rare, threatened or endangered biota, for characterization of existing site conditions.

Field inspections to characterize existing conditions were performed in the wetlands, forest lands, and disturbed areas encompassing the proposed project and associated facilities.

Threatened and endangered plant species surveys were made to record their presence or absence. The protected status of plant species was determined using the 1996 Official Lists of Endangered and Potentially Endangered Fauna and Flora in Florida (Wood, 1996).

The terrestrial and wetlands field program:

- Described plant communities of the site area
- Described the habitats and wildlife populations at the site, including mammals, birds, amphibians, and reptiles
- Determined the presence and habitat of state or federally protected plant and animal species that could occur in the site area
- Described the occurrence status of significant wildlife populations in the area

Surveying of existing terrestrial habitats for wildlife, botanical species and habitat types began in 1992.

Wildlife Studies - Mammals. Medium and large mammal studies were performed during the winter and summer. Documentation of game mammal and furbearer presence was accomplished through:

- Observation of mammals incidental to other programs
- Observation of signs, such as tracks and scat, encountered

Nongame mammal data were derived from agency contacts and literature searches. Sightings of species incidental to other sampling programs were incorporated into this data base.

Wildlife Studies - Birds. Data regarding bird species occurrences at the site were derived from site inspections.

Wildlife Studies - Reptiles and Amphibians. The occurrence of reptiles and amphibians was determined through observations made while conducting other terrestrial and aquatic field studies. These observations included species and numbers seen or heard by habitat type and locations. Tables were prepared providing amphibian and reptile species, occurrence at the site, special protected status, and preferred habitat types.

Vegetation/Land Use

A preliminary vegetation/land cover map of the site was prepared from 1994 aerial photography using FLUCCS Level II classifications. This map was taken to the site and checked for accuracy in the field. Cover areas greater than 2 acres in size were mapped. Input from ecological field studies was used to identify dominant or indicator species in plant communities.

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TABLE 10.5.5-1 FISH SPECIES POTENTIALLY FOUND WITHIN THE WAKULLA/ST. MARKS RIVER DRAINAGE AND SURROUNDING COASTAL AREA						
Taxa	Common Name	Ecological Significance(1)	Hocutt/ Wiley(2)	Stowe(3)	Cherr(4)	Lee, et al(5)
Petromyzontidae						
Ichthyomyzon gagei	Southern brook lamprey	F				P (OR)
Carcharhinidae						
Carcharhinus leucas	bull shark	M				P (AR)
Dasyatidae						
Dasyatis sayi	Say's sting ray	M			1	
Acipenseridae						
Acipenser oxyrhychus	Atlantic sturgeon	A	?			P (CW)
Lepisosteidae						
Lepisosteus osseus	longnose gar	F	Ma	X		P (AR, OR)
Lepisosteus platyrhincus	Florida gar	F, E	N	L		P (AR, OR)
Amiidae						
Amia calva	bowfin	F	N	X		P (AR, OR)
Elopidae						
Elops saurus	ladyfish	M, SF				P (CW)
Megalops atlanticus	tarpon	M, SF				P (CW)
Anguillidae						
Anguilla rostrata	American eel	C	Ma	X		P (OR)
Ophichthidae						
Myrophis punctatus	speckeled worm eel	M			1	
Clupeidae						
Alosa alabamae	Alabama shad	A	?	PL (OR)		P (OR)
Alosa chrysochloris	slipjack herring	F				P (OR, CW)
Dorosoma cepedianum	gizzard shad	F, FF	Ma	PL (OR)		P (ND)
Dorosoma petenense	threadfin shad	F, FF	Ma	PL (OR)		P (OR, CW)
Engraulidae						
Anchoa mitchilli	bay anchovy	B, FF			5	P (CW)
Umbridae						
Umbra pygmaea	Eastern mudminnow	F	N	PX (AR)		P (OR)
Esocidae						
Esox americanus	redfin pickeral	F	N	X		X
Esox niger	chain pickeral	F, SF	?	L		P (OR)
Cyprinidae						
Hybopsis winchelli	clear chub	F				P (OR)
Notemigonus crysoleucas	golden shiner	F, FF	N	L		P (AR, OR)
Notropis chalybaeus	ironcolor shiner	F	N	L		P (AR, OR)
Notropis cummingsae	dusky shiner	F	N	X		X
Notropis emiliae	pugnose shiner	F	N	X		X
Notropis harperi	redeye chub	F	N	X		X
Notropis hypselopterus	sailfin shiner	F	N	X		X
Notropis leedsi	bannerfin shiner	F		PL (OR)		P (OR)
Notropis maculatus	taillight shiner	F	N	PL (AR, OR)		P (AR, OR)
Notropis petersoni	coastal shiner	F	N	X		X
Notropis texanus	weed shiner	F	N	PX (AR) L (OR)		P (OR)
Notropis venustus	blacktail shiner	F	?	PL (OR)		P (OR)
Semotilus atromaculatus	creek chub	F	?	PL (OR)		
Catostomidae						
Erimyzon sucetta	lake chubsucker	F	N	X		X
Minytrema melanops	spotted sucker	F	N	X		X

TABLE 10.5.5-1
FISH SPECIES POTENTIALLY FOUND WITHIN THE WAKULLA/ST. MARKS RIVER DRAINAGE AND SURROUNDING COASTAL AREA

Taxa	Common Name	Ecological Significance(1)	Hocutt/ Wiley(2)	Stowe(3)	Cherr(4)	Lee, et al(5)
Ictaluridae						
Ictalurus catus	white catfish	F, CF	N	L		P (ND)
Ictalurus natalis	yellow bullhead	F, SF	N	L		P (ND)
Ictalurus nebulosus	brown bullhead	F, SF		L		P (ND)
Ictalurus platycephalus	flat bullhead	F	?			
Ictalurus punctatus	channel catfish	F, CF	N	L		P (ND)
Ictalurus serracanthus	spotted bullhead	F	N	L		X
Noturus gyrinus	tadpole madtom	F	N	X		X
Noturus leptacanthus	speckled madtom	F	N	X		X
Aphredoderidae						
Aphredoderus sayanus	pirate perch	F	N	X		X
Synodontidae						
Synodus foetens	lizard fish	M			2	
Belonidae						
Strongylura marina	Atlantic needlefish	M	Ma		1	X
Strongylura notata	needlefish	M			490	
Strongylura timicu	needlefish	M			19	
Hemiramphidae						
Hemiramphus brasiliensis	balao	M			1	
Hyporhamphus unifasciatus	halfbeak	M			4	
Cyprinodontidae						
Adinia xenica	diamond killifish	M			4	
Cyprinodon variegatus	sheepshead minnow	F, B	Ma		125	X
Floridichthys carpio	gold-spotted killifish	M			227	
Fundulus chrysotus	golden topminnow	F	N	L		P (AR, OR)
Fundulus cingulatus	banded topminnow	F	N	L		P (OR)
Fundulus confluentus	marsh killifish	F, E	N	X		X
Fundulus escambiae	Eastern starhead topminnow	F	N			X
Fundulus grandis	gulf killifish	F, B			135	P (CW)
Fundulus lineolatus	lined topminnow	F	N	X		X
Fundulus notti	starhead topminnow	F		X		
Fundulus seminolis	Seminole killifish	F, E	N	X		X
Fundulus similis	longnose killifish	M			1285	
Jordanella floridae	flagfish	F, E	N	X		X
Leptolucania ommata	pygmy killifish	F	N	L		X
Lucania goodei	bluefin killifish	F, E	N	X		X
Lucania parva	rainwater killifish	F			22	X
Poecillidae						
Gambusia affinis	mosquitofish	F	N	X		X
Heterandria formosa	least killifish	F	N	X		X
Poecilia latipinna	sailfin molly	F	N	X	6	X
Syngnathidae						
Hippocampus zosterae	Southern sea horse	M			1	
Micro gnathus crinigerus	fringed pipefish	M			4	
Syngnathus floridae	Florida pipefish	M			11	
Syngnathus scovelli	gulf pipefish	B	?		6	P (OR, CW)
Mugilidae						
Mugil cephalus	striped mullet	M, FF, CF, B	Ma		2	X
Mugil curema	white mullet	M, FF			3	
Sphyraenodae						
Sphyraena barracuda	great baracuda	M, SF			4	
Polynemoidei						
Polydactylus octonemus	Atlantic threadfin	M			469	

TABLE 10.5.5-1
FISH SPECIES POTENTIALLY FOUND WITHIN THE WAKULLA/ST. MARKS RIVER DRAINAGE AND SURROUNDING COASTAL AREA

Taxa	Common Name	Ecological Significance(1)	Hocutt/ Wiley(2)	Stowe(3)	Cherr(4)	Lee, et al(5)
Atherinidae						
Labidesthes sicculus	brook silverside	F	N			X
Membras martinica	Northern silverside	M, B			2	
Menudua beryllina	tidewater silverside	F, B	Ma		2222	X
Centropomidae						
Centropomus undecimalis	snook	M, B, SF				P (CW)
Percichthyidae						
Morone saxatilis	striped bass	A, SF	Ma	L		X
Centrarchidae						
Acantharchus pomotis	mud sunfish	F	N	L		X
Centrarchus macropterus	flier	F	N	X		X
Elassoma evergladei	Everglades pygmy sunfish	F	N	L		X
Elassoma okefenokee	Okefenokee pygmy sunfish	F	N	X		X
Elassoma zonatum	banded pygmy sunfish	F	N			X
Enneacanthus chaetodon	blackbanded sunfish	F	N	PL (AR)		P (AR)
Enneacanthus gloriosus	bluespotted sunfish	F	N	L		P (AR, OR)
Enneacanthus obesus	banded sunfish	F	?	L		P (OR)
Lepomis auritus	redbreast sunfish	F, SF	N	X		P (ND)
Lepomis gulosus	warmouth	F, SF	N	L		X
Lepomis macrochirus	bluegill	F, SF	N	X		X
Lepomis marginatus	dollar sunfish	F	N	L		X
Lepomis microlophus	redear sunfish	F, SF	N	X		X
Lepomis punctatus	spotted sunfish	F	N	X		X
Micropterus notius	Suwannee bass	F, SF		PL (OR)		P (OR)
Micropterus salmoides	largemouth bass	F, SF	N	X		P (ND)
Pomoxis nigromaculatus	black crappie	F, SF	N	L		X
Percidae						
Etheostoma edwini	brown darter	F		PL (OR)		P (OR)
Etheostoma fusiforme	swamp darter	F	N	L		X
Etheostoma swaini	gulf darter	F		PL (OR)		P (OR)
Percina nigrofasciata	blackbanded darter	F	N	X		X
Carangidae						
Chloroscembrus chrysurus	bumper	M			5	
Oligoplites saurus	leatherjacket	M			60	
Selene vomer	lookdown	M			4	
Trachinotus falcatus	rough shad	M			29	
Gerreidae						
Eucinostomus argenteus	spotfin mojarra	M, B			511	X
Eucinostomus gulosus	silver jenny	M			92	
Pomadasyidae						
Orthopristis chrysoptera	pigfish	M			3	X
Sparidae						
Archosargus probatocephalus	sheepshead	M, SF				X
Lagodon rhomboides	pinfish	M, B			117	X
Sciaenidae						
Leiostomus xanthurus	spot	M, SF, CF			265	
Epihippidae						
Chaetodipterus faber	Atlantic spadefish	M			6	P (CW)
Blenniidae						
Chasmodes saburrae	Florida blenny	M			3	
Gobiidae						
Gobionellus boleosoma	darter goby	B				P (CW)
Gobiosoma bosci	naked goby	B				X

TABLE 10.5.5-1
FISH SPECIES POTENTIALLY FOUND WITHIN THE WAKULLA/ST. MARKS RIVER DRAINAGE AND SURROUNDING COASTAL AREA

Taxa	Common Name	Ecological Significance(1)	Hocutt/ Wiley(2)	Stowe(3)	Cherr(4)	Lee, et al(5)
Gobiosoma robustum	Code goby	B			8	X
Microgobius gulosus	clown goby	B			10	X
Monacanthidae						
Aluterus schoepfi	orange filefish	M			32	
Monacanthus hispidus	planehead (common) filefish	M			408	
Tetraodontidae						
Sphoeroides nephelus	Southern puffer	M			72	
Bothidae						
Paralichthys albigutta	gulf flounder	M, CF			11	
Paralichthys lethostigma	Southern flounder	M, CF				P (OR)
Soleidae						
Achirus lineatus	lined sole	M			19	
Trinectes maculatus	hogchoker	M, B, CF	Ma	X		X
Cynoglossidae						
Symphurus plagiusa	tonguefish	M			9	
Triglidae						
Prionotus scitulus	leopard searobin	M			2	
Batrachoididae						
Opsanus beta	gulf toadfish	M			14	

(1) Ecological Significance:
- F - Freshwater species
- M - Marine speices
- B - Brackishwater (euyhaline) species
- C - Catrodromous species, inhabits freshwater spwans in saltwater
- A - Anadromous species, inhabits saltwater, spawns in freshwater
- E - Species endimic to Florida
- CF - Commercial fish species
- SF - Sport (recreational) fish species

(2)
- Ma - Euryhaline species (anadromous, catadromous, estuarine, or other marine species which frequent freshwater)
- N - Native freshwater fish species
- ? - Suspected records without known museum records or other substantiation

(3)
- X - Indicates species collected by Stowe from the St. Marks drainage
- L - Indicates a record from literature or catalogue records or fishermen's reports
- P - Species not found in study area, but occur in one of both boundary rivers, the Aucilla River (AR) or Ochlockonee River (OR)

(4) Number indicates the total number of individuals collected during day and night collections for the duration of this study.

(5)
- X - Indicates that a record of that species exists for the Wakulla/St. Marks Drainage
- P - Indicates that that species potentially occurs in the Wakulla/St. Marks Drainage and has confirmed records in the following:
  - Aucilla River Drainage (AR)
  - Ochlockonee River Drainage (OR)
  - Coastal waters adjacent to the mouth of the Wakulla/St. Marks (CW)
  - St. Marks drainage is within the native distribution for species, but Lee et al. did not provide individual collection sites for these species on the distribution maps (ND)

Source: Hocutt/Wiley, 1986
Stowe, 1976
Cherr, 1974
Lee, et al., 1980

10.5.6 Meteorology/Air Quality

10.5.6.1 Joint Frequency Distribution of Wind Direction and Speed by Atmospheric Stability Class (Star Program Output) Tallahassee Regional Airport 1985-1989

TALLAHASSEE FLORIDA 1985 - 1989 STAR DECK (ISCST3)
FREQUENCY DISTRIBUTION A STABILITY

SPEED (MPH)

DIRECTION	1 - 3	4 - 7	8 - 12	13 - 18	19 - 24	GREATER THAN 24	TOTAL
N	.001072	.002259	.000000	.000000	.000000	.000000	.003331
NNE	.000502	.001164	.000000	.000000	.000000	.000000	.001666
NE	.000561	.000890	.000000	.000000	.000000	.000000	.001451
ENE	.000221	.000639	.000000	.000000	.000000	.000000	.000860
E	.000456	.000753	.000000	.000000	.000000	.000000	.001209
ESE	.000320	.000593	.000000	.000000	.000000	.000000	.000913
SE	.000324	.000616	.000000	.000000	.000000	.000000	.000940
SSE	.000452	.000730	.000000	.000000	.000000	.000000	.001182
S	.000789	.001118	.000000	.000000	.000000	.000000	.001907
SSW	.000239	.000593	.000000	.000000	.000000	.000000	.000833
SW	.000272	.000319	.000000	.000000	.000000	.000000	.000591
WSW	.000277	.000502	.000000	.000000	.000000	.000000	.000779
W	.000252	.000662	.000000	.000000	.000000	.000000	.000913
WNW	.000218	.000319	.000000	.000000	.000000	.000000	.000537
NW	.000190	.000616	.000000	.000000	.000000	.000000	.000806
NNW	.000475	.000707	.000000	.000000	.000000	.000000	.001182
TOTAL	.006618	.012482	.000000	.000000	.000000	.000000	

FREQUENCY OF OCCURENCE OF A STABILITY = .019100
FREQUENCY OF CALMS DISTRIBUTED ABOVE WITH A STABILITY = .002875

TALLAHASSEE FLORIDA 1985 - 1989 STAR DECK (ISCST3)
FREQUENCY DISTRIBUTION B STABILITY

SPEED(MPH)

DIRECTION	1 - 3	4 - 7	8 - 12	13 - 18	19 - 24	GREATER THAN 24	TOTAL
N	.004790	.010634	.007416	.000000	.000000	.000000	.022840
NNE	.002620	.005887	.004085	.000000	.000000	.000000	.012592
NE	.001680	.004062	.002579	.000000	.000000	.000000	.008320
ENE	.001568	.002738	.001643	.000000	.000000	.000000	.005949
E	.002357	.002967	.002168	.000000	.000000	.000000	.007492
ESE	.001803	.003103	.001232	.000000	.000000	.000000	.006139
SE	.001692	.002510	.001757	.000000	.000000	.000000	.005959
SSE	.001793	.002852	.001483	.000000	.000000	.000000	.006129
S	.001989	.004039	.002807	.000000	.000000	.000000	.008835
SSW	.001003	.001894	.001073	.000000	.000000	.000000	.003969
SW	.001254	.001826	.000981	.000000	.000000	.000000	.004061
WSW	.000931	.001575	.000593	.000000	.000000	.000000	.003099
W	.001117	.001780	.001004	.000000	.000000	.000000	.003901
WNW	.000813	.001301	.000822	.000000	.000000	.000000	.002935
NW	.001127	.002031	.001232	.000000	.000000	.000000	.004390
NNW	.001852	.003081	.001962	.000000	.000000	.000000	.006895
TOTAL	.028388	.052280	.032837	.000000	.000000	.000000	

FREQUENCY OF OCCURENCE OF B STABILITY = .113505
FREQUENCY OF CALMS DISTRIBUTED ABOVE WITH B STABILITY = .010132

TALLAHASSEE FLORIDA 1985 - 1989 STAR DECK (ISCST3)
FREQUENCY DISTRIBUTION C STABILITY

SPEED(MPH)

DIRECTION	1 - 3	4 - 7	8 - 12	13 - 18	19 - 24	GREATER THAN 24	TOTAL
N	.002595	.010337	.018781	.001871	.000000	.000000	.033584
NNE	.000984	.004016	.008694	.001095	.000000	.000000	.014790
NE	.000566	.002601	.004997	.000822	.000000	.000000	.008987
ENE	.000568	.002077	.004244	.000525	.000000	.000000	.007413
E	.000828	.002601	.004769	.000616	.000023	.000000	.008838
ESE	.000604	.002145	.003263	.000593	.000000	.000000	.006605
SE	.000499	.002145	.003240	.000662	.000000	.000000	.006546
SSE	.000712	.002168	.005043	.000981	.000023	.000000	.008927
S	.000900	.003446	.006777	.001711	.000000	.000000	.012835
SSW	.000583	.001826	.002328	.000456	.000000	.000000	.005193
SW	.000586	.001666	.002031	.000251	.000000	.000000	.004533
WSW	.000463	.001187	.001415	.000251	.000000	.000000	.003315
W	.000582	.001460	.001620	.000183	.000000	.000000	.003845
WNW	.000582	.001460	.001506	.000160	.000000	.000000	.003708
NW	.000459	.002054	.001826	.000137	.000000	.000000	.004476
NNW	.000950	.002716	.003857	.000274	.000000	.000000	.007795
TOTAL	.012459	.043905	.074392	.010588	.000046	.000000	

FREQUENCY OF OCCURENCE OF C STABILITY = .141390
FREQUENCY OF CALMS DISTRIBUTED ABOVE WITH C STABILITY = .007234

TALLAHASSEE FLORIDA 1985 - 1989 STAR DECK (ISCST3)
FREQUENCY DISTRIBUTION D STABILITY

SPEED(MPH)

DIRECTION	1 - 3	4 - 7	8 - 12	13 - 18	19 - 24	GREATER THAN 24	TOTAL
N	.006319	.019465	.022044	.011478	.000274	.000000	.059580
NNE	.002505	.009447	.015175	.004746	.000114	.000000	.031987
NE	.002317	.006869	.008535	.002442	.000251	.000000	.020413
ENE	.001388	.005112	.006093	.001620	.000046	.000091	.014350
E	.002055	.006298	.006412	.001643	.000160	.000046	.016614
ESE	.001646	.005203	.004769	.001415	.000205	.000000	.013238
SE	.001718	.005157	.005294	.003560	.000251	.000068	.016049
SSE	.002283	.005614	.008352	.004906	.000342	.000023	.021520
S	.003376	.009516	.012459	.009219	.000456	.000046	.035073
SSW	.001514	.003240	.003560	.001552	.000068	.000023	.009957
SW	.001222	.002807	.002807	.000799	.000023	.000000	.007657
WSW	.000957	.001917	.001415	.000525	.000000	.000000	.004813
W	.001246	.002487	.001392	.000548	.000023	.000000	.005696
WNW	.001199	.001917	.001826	.000525	.000000	.000000	.005466
NW	.001084	.002784	.001848	.000844	.000000	.000000	.006560
NNW	.001965	.004427	.003491	.001620	.000023	.000000	.011527
TOTAL	.032792	.092260	.105472	.047442	.002236	.000297	

FREQUENCY OF OCCURENCE OF D STABILITY = .280498

FREQUENCY OF CALMS DISTRIBUTED ABOVE WITH D STABILITY = .018803

TALLAHASSEE FLORIDA 1985 - 1989 STAR DECK (ISCST3)
FREQUENCY DISTRIBUTION E STABILITY

SPEED(MPH)

DIRECTION	1 - 3	4 - 7	8 - 12	13 - 18	19 - 24	GREATER THAN 24	TOTAL
N	.000000	.014217	.007439	.000000	.000000	.000000	.021656
NNE	.000000	.005112	.002967	.000000	.000000	.000000	.008078
NE	.000000	.005385	.001848	.000000	.000000	.000000	.007234
ENE	.000000	.003674	.001552	.000000	.000000	.000000	.005226
E	.000000	.005226	.001392	.000000	.000000	.000000	.006618
ESE	.000000	.003172	.000662	.000000	.000000	.000000	.003834
SE	.000000	.002921	.000525	.000000	.000000	.000000	.003446
SSE	.000000	.003583	.000822	.000000	.000000	.000000	.004404
S	.000000	.005773	.001780	.000000	.000000	.000000	.007553
SSW	.000000	.002693	.000525	.000000	.000000	.000000	.003218
SW	.000000	.001643	.000662	.000000	.000000	.000000	.002305
WSW	.000000	.001324	.000205	.000000	.000000	.000000	.001529
W	.000000	.001004	.000228	.000000	.000000	.000000	.001232
WNW	.000000	.000958	.000319	.000000	.000000	.000000	.001278
NW	.000000	.001232	.000570	.000000	.000000	.000000	.001803
NNW	.000000	.002624	.001575	.000000	.000000	.000000	.004199
TOTAL	.000000	.060540	.023071	.000000	.000000	.000000	

FREQUENCY OF OCCURENCE OF E STABILITY = .083611
FREQUENCY OF CALMS DISTRIBUTED ABOVE WITH E STABILITY = .000000

TALLAHASSEE FLORIDA 1985 - 1989 STAR DECK (ISCST3)
FREQUENCY DISTRIBUTION F STABILITY

SPEED(MPH)

DIRECTION	1 - 3	4 - 7	8 - 12	13 - 18	19 - 24	GREATER THAN 24	TOTAL
N	.079293	.021154	.000000	.000000	.000000	.000000	.100447
NNE	.014046	.004861	.000000	.000000	.000000	.000000	.018907
NE	.013762	.004495	.000000	.000000	.000000	.000000	.018257
ENE	.009621	.003309	.000000	.000000	.000000	.000000	.012929
E	.014763	.004404	.000000	.000000	.000000	.000000	.019167
ESE	.008461	.002259	.000000	.000000	.000000	.000000	.010720
SE	.006320	.001346	.000000	.000000	.000000	.000000	.007667
SSE	.008765	.001826	.000000	.000000	.000000	.000000	.010590
S	.020512	.003788	.000000	.000000	.000000	.000000	.024300
SSW	.015507	.002556	.000000	.000000	.000000	.000000	.018062
SW	.014806	.002282	.000000	.000000	.000000	.000000	.017088
WSW	.011427	.001438	.000000	.000000	.000000	.000000	.012865
W	.013924	.001734	.000000	.000000	.000000	.000000	.015658
WNW	.013889	.002419	.000000	.000000	.000000	.000000	.016308
NW	.017366	.003035	.000000	.000000	.000000	.000000	.020401
NNW	.032071	.006458	.000000	.000000	.000000	.000000	.038529
TOTAL	.294532	.067363	.000000	.000000	.000000	.000000	

FREQUENCY OF OCCURENCE OF F STABILITY = .361896
FREQUENCY OF CALMS DISTRIBUTED ABOVE WITH F STABILITY = .234791

10.5.7 Noise

There are no monitoring programs associated with this technical discipline.

10.5.8 Site Screening Assessment for Proposed Unit 8

Included in this Appendix is the Site Screening Assessment for Proposed Unit 8 prepared by Foster Wheeler Environmental Corporation. Based on the results of the study, the City has initiated activities at the Purdom Unit 8 construction site to remove surface soils believed to contain low-level petroleum constituents and asbestos. Low-level petroleum constituents were identified based on laboratory analyses of soil samples that exhibited elevated OVA-FID headspace readings which could be the result of past vehicle staging and parking in the area. The presence of asbestos is believed to be the result of storage of materials from long term maintenance and repair activities at the Purdom Station. Asbestos clean-up operations were initiated by the City and performed by Laidlaw Environmental Services in 1992.

As this SCA goes to press, the City is in the process of selecting industrial hygiene and hydrogeological consultants who will be responsible for delineation of the affected area, and subsequent soil removal and disposal at licensed disposal facilities.

SITE SCREENING ASSESSMENT FOR PROPOSED UNIT 8

for
CITY OF TALLAHASSEE
SAM O. PURDOM GENERATING STATION
ST. MARKS, FLORIDA

February 1997

Prepared for the
City of Tallahassee

Prepared by
Foster Wheeler Environmental Corporation
Stuart, FL

SITE SCREENING ASSESSMENT FOR PROPOSED UNIT 8

for
CITY OF TALLAHASSEE
SAM O. PURDOM GENERATING STATION
ST. MARKS, FLORIDA

February 1997

SIGNATURE PAGE
Foster Wheeler Environmental Corporation

Douglas J. Fulle Foster Wheeler Project Manager	Signature	2/28/97 Date
Gregory H. New, P.G. Foster Wheeler Task Manager	Signature	2/25/97 Date

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Executive Summary

The City of Tallahassee (City) is in the process of licensing the Sam O. Purdom Generating Station located at 667 Port Leon Drive, St. Marks, Wakulla County, Florida 32355 to construct a new generating unit: Purdom Unit 8. Purdom Unit 8 will be constructed in an open parcel of land located near the south-central portion of the City's property. As part of the Site Certification Application (SCA) for the Purdom Generating Station, the City of Tallahassee conducted a Site Screening Assessment of this site because of its prior industrial usage.

The Site Screening Assessment included screening of shallow soil samples from borings in the field with an organic vapor analyzer (OVA), laboratory analyses of surface soils and groundwater analyses.

While the soil assessment did detect some positive results, none of the results from the OVA headspace screening or laboratory analyses of soil samples from the site indicate exceedances of any applicable standards.

The results of the laboratory analyses of groundwater samples collected from one temporary monitoring well showed questionable elevated results for toluene and cadmium. This sample had an undesirably high turbidity which could have affected the results. Based on these questionable results, additional assessment of shallow groundwater in this vicinity was initiated as a supplemental activity. The results of a supplemental groundwater sample collected from a properly developed permanent monitoring well at this location did not duplicate the initial suspect toluene or cadmium results found in the previous sample, confirming the unreliability of the previous results.

Low levels of organic constituents were detected in some of the groundwater samples from the other temporary wells; however, none of these groundwater results were above FDEP regulatory or guidance concentrations. The City has undertaken to remove soil in several small areas of the site: one with low-level petroleum constituents based on soil OVA-FID headspace screening data and in two other areas where asbestos was found in surface soil samples. This material will be managed and disposed of in accordance with applicable requirements.

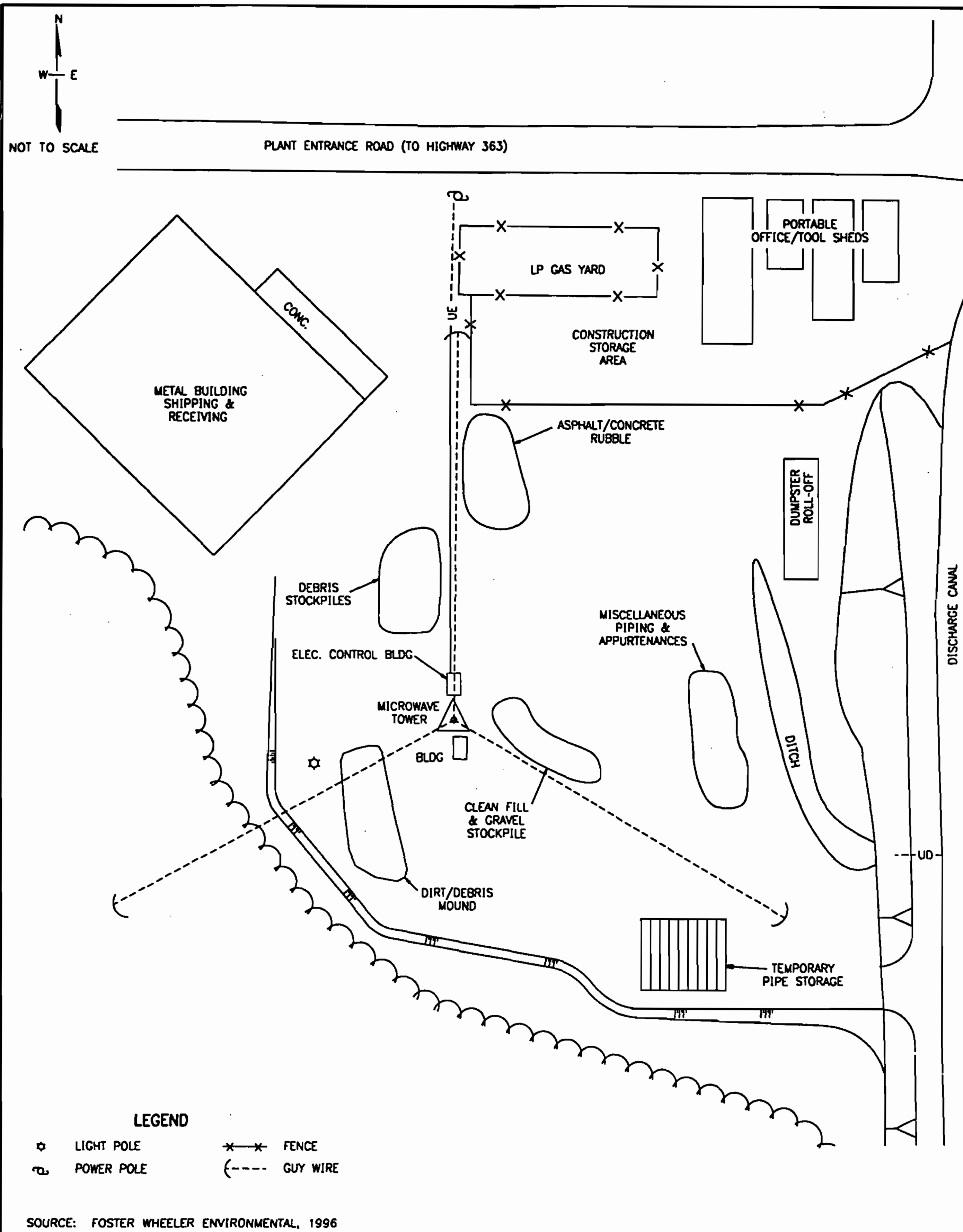
1. INTRODUCTION

Foster Wheeler Environmental Corporation (Foster Wheeler Environmental) conducted a Site Screening Assessment (Assessment) on the proposed location for Purdom Unit 8 at the City of Tallahassee's (City) Sam O. Purdom Generating Station located at 667 Port Leon Drive, St. Marks, Wakulla County, Florida 32355. The location of the assessment activities is shown on Figure 1. This Assessment was conducted as part of the Site Certification Application (SCA) for the Purdom Generating Station. This report presents the results of the Assessment which was conducted November 19 through 22, 1996. Supplemental activities were conducted by Woodward-Clyde Consultants on February 21, 1997. The supplemental activities were conducted in order to provide confirmation of the Assessment results from two groundwater samples in which the data were questionable or results were inconclusive, and to provide groundwater data at a location where a well could not be installed during the Assessment.

The findings and conclusions for the site described in this report were prepared in accordance with the Assessment Work Plan dated November 15, 1996. These environmental assessment methods were used to provide the City with information regarding apparent environmental conditions. This report is based on review of the limited data, as described therein, in accordance with generally accepted professional practices, applicable to work of similar nature and complexity of similar localities, at the time the services were performed. In order to conduct the investigation for this report, Foster Wheeler Environmental relied upon readily available information from the City, field sampling, and laboratory results as discussed in the report and unless explicitly included in our scope included no verification of the accuracy or completeness of documentation or data or possible withholding of information by the interviewees, agencies, or other parties. This report is prepared for the sole use of the City.

The Assessment report is organized as follows:

- **Section 1.** provides an introduction to the Assessment.
- **Section 2.** presents the site background, and includes the site description, history, geology, and hydrogeology.
- **Section 3.** describes the field investigation performed as part of the Assessment and supplemental activities.
- **Section 4.** describes the soil and ground water quality based upon the field and laboratory results of the soil and ground water samples collected during the Assessment and subsequent supplemental activities.
- **Section 5.** presents a summary and conclusions derived from the Assessment and supplemental activities.
- **Section 6.** contains references.



CITY OF TALLAHASSEE

ASSESSMENT AREA

PURDOM UNIT 8 PROJECT - ST MARKS, FLORIDA

Figure

1

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2. SITE BACKGROUND, DESCRIPTION, AND HISTORY

The City is in the process of licensing Purdom Unit 8. The information presented in the following paragraphs was provided by the City.

The existing Purdom Station consists of nine electric generating units and associated facilities which were placed into operation between 1952 and 1966. The facility is located on a parcel of land in the northeast portion of the City of St. Marks adjacent to the St. Marks River. Units 1 through 4, located in the eastern portion of the property, are retired and are in the process of being dismantled. Of the five remaining operational generating units, three are gas/oil fired steam boilers and two are gas/oil fired combustion turbines. Fuel for the oil fired units is stored in several large aboveground oil storage tanks located in the southeast portion of the property. Natural gas is conveyed to the site via an underground pipeline which is owned and maintained by Florida Gas Transmission Corporation.

The new Purdom Unit 8 will be constructed on an open parcel of land located near the south-central portion of the City's property. A portion of this area is presently occupied by a radio tower and a small warehouse facility which stores plant supplies. Previously, this portion of the property had been used to store insulation material containing asbestos from older generating units which were dismantled. An asbestos removal contractor (Laidlaw) conducted an asbestos removal operation that disposed of asbestos contaminated soil and debris from this activity.

The City conducted this Assessment because this is an industrial site.

2.1 GEOLOGY AND HYDROGEOLOGY

A thorough discussion of the regional geology and hydrogeology of this area is provided in Section 2.3 of the SCA.

3. FIELD INVESTIGATIVE METHODOLOGY

This section describes the field investigation for the Assessment performed by Foster Wheeler Environmental on November 19 through 22, 1996 and summarizes the supplemental activities performed by Woodward-Clyde Consultants on February 21, 1997 for Purdom Unit 8.

After laboratory analyses were completed and peer review was accomplished, supplemental activities were initiated in February 1997 to provide confirmational data because: poor reproducibility for cadmium may have been due to high turbidity in the samples from one well, possible laboratory cross contamination and poor reproducibility in sample duplicates indicated questionable results for toluene in the same sample, and hard subsurface materials prevented the installation of a temporary monitoring well in the location of the soil boring with the highest soil OVA-FID headspace screening results during the Assessment.

3.1 QUALITY ASSURANCE

Field activities conducted by Foster Wheeler Environmental and by Woodward-Clyde Consultants were performed in accordance with their respective approved Comprehensive Quality Assurance Plans (Foster Wheeler Environmental CompQAP No. 880983G and Woodward-Clyde Consultants CompQAP No. 890701T) which are on file with the Florida

Department of Environmental Protection (FDEP). The CompQAP states that the field procedures shall follow the Standard Operating Procedures (SOPs) presented in Chapter 62-160, Florida Administrative Code (F.A.C.) and the FDEP SOP manual DER-QA-001/92. The CompQAP specifies sampling methodologies, equipment, laboratory analyses, and decontamination protocols which were followed during the course of the Assessment and supplemental activities. Field investigation and sampling equipment was pre-cleaned at an approved location (such as: Foster Wheeler Environmental's warehouse) prior to being transported to the jobsite for use.

Bound, weatherproof site logbooks were maintained by the Field Operations Leaders (FOL) throughout the field investigations. These logbooks document on-site activities associated with the field investigation, including (but not limited to) the use of sampling equipment, sampling and sample locations, safety issues, and other pertinent information.

Sample container preparation, shipment, and analyses was conducted in accordance with the FDEP SOPs. Prior to being shipped to the field, all applicable sample containers were pre-preserved by the analytical laboratory, except sample containers for volatile organic analyses; which were pre-preserved during the Assessment by the sampling team using concentrated hydrochloric acid and an eyedropper provided by the laboratory. Upon sample collection, the filled sample containers were sealed in ziploc bags and placed in a cooler with sufficient ice to maintain a temperature of 4° centigrade (C) inside the sample cooler, until the samples were delivered to the laboratory by the sampling team.

All samples sent for chemical analysis were documented with sample labels and chain-of-custody (C-O-C) forms. Proper C-O-C procedures were followed from the time of sample collection to the reporting of sample results by the analytical laboratory. Chain-of-custody forms listing each sample, sample collection date and time, sample matrices, etc. accompanied the samples from the time of collection until their arrival at the laboratory. Copies of these forms are included in Attachment B.

In addition to the soil and groundwater samples that were collected during the Assessment, soil and groundwater duplicate samples were collected. Field-cleaned equipment blank samples were also prepared from the soil and groundwater sampling equipment after it was decontaminated in the field. Both of these sets of quality assurance samples were analyzed by the laboratory in conjunction with the other routine sample analyses.

3.2 SOIL HEADSPACE SCREENING

Sixteen soil borings were completed in ten locations using stainless-steel hand augers during the Assessment between November 19 and 22, 1996. Soil boring locations were based on a grid of the proposed Purdom Unit 8 construction area. Soil samples were collected at 1- to 2-ft intervals from each boring and screened for volatile organic compounds with an organic vapor analyzer (OVA) equipped with a flame ionization detector (FID) in accordance with the procedure outlined in Rule 62-770.200 F.A.C. (This procedure was established by the FDEP for use at petroleum sites and was used during this assessment as general guidance.) Because the OVA-FID instrument is sensitive to methane, a naturally occurring gas, both methane (charcoal) filtered and unfiltered OVA-FID headspace screening measurements were conducted on each soil sample. The charcoal filter absorbs volatile organics in the sample before it enters the OVA-FID's detector, except methane which passes through to the detector. Thus, the difference between the unfiltered and filtered results gives an indication of the amount of volatile organics present in the sample.

The locations of the soil borings where OVA-FID soil headspace measurements were conducted during the Assessment are shown on Figure 2. From one to three soil samples were collected and screened from each boring until the depth of the water table was encountered by the boring. Some borings were aborted before the water table was encountered because debris such as broken concrete, masonry, and metal was encountered which prevented advancing the boring to a greater depth. Subsequent borings were initiated in each of these cases from a nearby location (within a few feet of the original location) and advanced to the water table. The first soil boring collected at each location is designated PG-XXSB-1, where XX denotes the sample location (sample locations were numbered one through ten). The last digit of the sample number designates the sequential soil boring number from each location. Subsequent borings from the same approximate location were numbered -2, -3, etc.

During the supplemental assessment performed on February 21, 1997, OVA-FID soil headspace screening was performed on soils retrieved from the auger flights while drilling the borings for two permanent monitoring wells.

In addition to OVA-FID screening, each boring was logged and visually classified using the Unified Soil Classification System (USCS) ASTM D2488. Obvious staining or disturbed substrate were noted in the boring logs. The results of the OVA-FID soil headspace screening data are presented and discussed in Section 4. Copies of the boring log for each soil boring are presented in Attachment A.

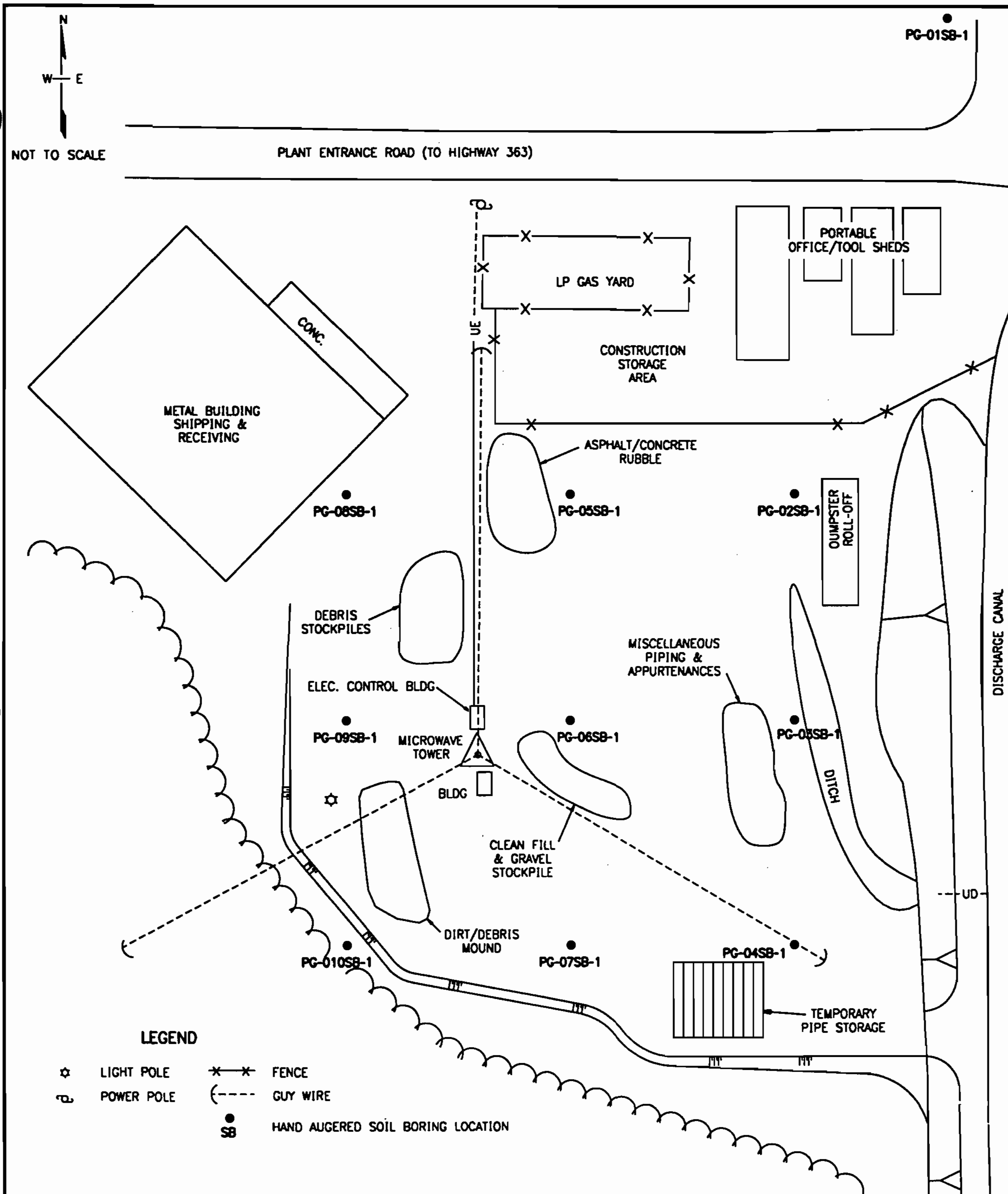
3.3 SURFACE SOIL SAMPLING

Based on a review of the OVA-FID soil screening data from the Assessment, four boring locations were selected to collect surface soil samples for laboratory analyses. Surface soil sample locations are shown on Figure 3. Surface soil samples for laboratory analyses were collected as composites from depths of 0 to 1 ft. Although the surface soil samples have the same sample numbers as the borings which were used to conduct the OVA-FID soil screening, each surface soil sample for laboratory analyses was collected from a separate boring at a unique location within a relatively small radius (1 to 5 ft) of the borings which were used to conduct the OVA-FID screening and soil classification. Before collecting the soil samples for laboratory analyses, any material that appeared to be foreign from the chosen sample interval (i.e., material that caved or fell into the borings) was discarded.

3.4 MONITORING WELL INSTALLATION

3.4.1 Temporary Monitoring Well Installation

Four shallow temporary 8 to 10-ft deep groundwater monitoring wells were installed at locations based on the results of the OVA-FID soil screening data during the Assessment conducted



NOTES

SAMPLE LOCATIONS DENOTE SOIL BORINGS SCREENED WITH AN OVA-FID FOR VOLATILE ORGANIC COMPOUNDS.

SOURCE: FOSTER WHEELER ENVIRONMENTAL, 1996

CITY OF TALLAHASSEE

HAND AUGERED SOIL BORING LOCATION MAP

PURDOM UNIT 8 PROJECT - ST MARKS, FLORIDA

Figure 2

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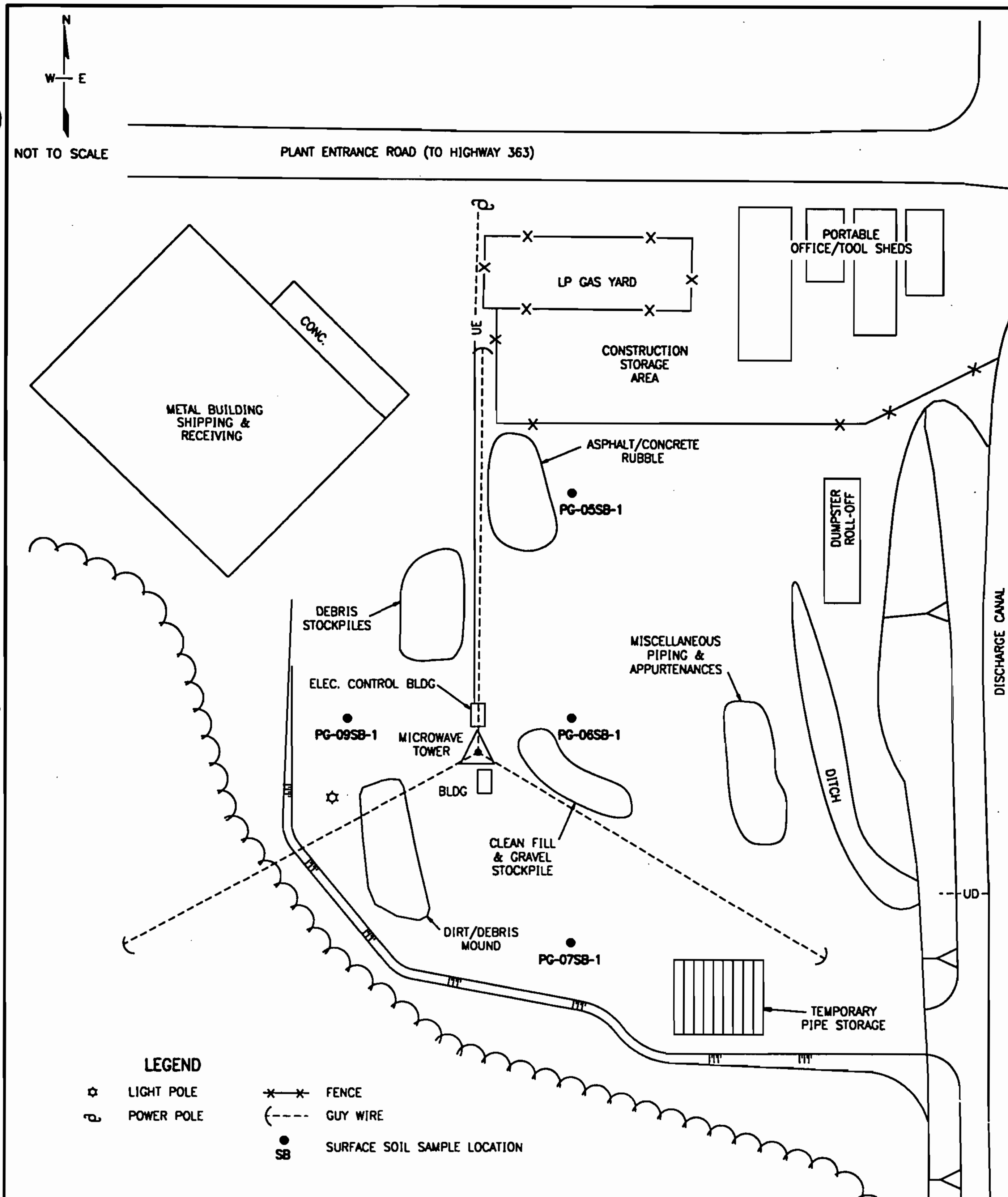


NOTES

SAMPLE LOCATIONS DENOTE SOIL BORINGS WHERE SURFACE SOIL SAMPLES WERE COLLECTED FROM 0-1 FT DEPTH FOR LABORATORY ANLYSIS.

SOURCE: FOSTER WHEELER ENVIRONMENTAL, 1996

CITY OF TALLAHASSEE

SURFACE SOIL SAMPLE LOCATION MAP

PURDOM UNIT 8 PROJECT - ST MARKS, FLORIDA

Figure 3

PLOT DATE FE. 1997 C:\15840002\---\00000-18.DWG between November 19 and 22, 1996. The wells were installed to provide for the collection of groundwater samples for laboratory analyses. The completed well locations are provided on Figure 4.

Temporary monitoring wells were constructed of 2-inch diameter, Type 316, stainless steel well riser and screen, encased in filter sock material, and backfilled with native soils. One 5-ft section of stainless steel well riser was used for the upper portion of each well. This upper section was threaded and coupled onto one 5-ft section of 0.010-inch wire-wrap, stainless steel well screen and placed into the borehole. The stainless steel well materials were decontaminated on-site between each temporary monitoring well location according to the provisions of the FDEP SOPs. The temporary well borings extended approximately 2-3 ft below the depth of the water table in each monitoring well location. This allowed groundwater samples to be obtained for screening purposes from each temporary monitoring well.

3.4.2 Permanent Monitoring Well Installation

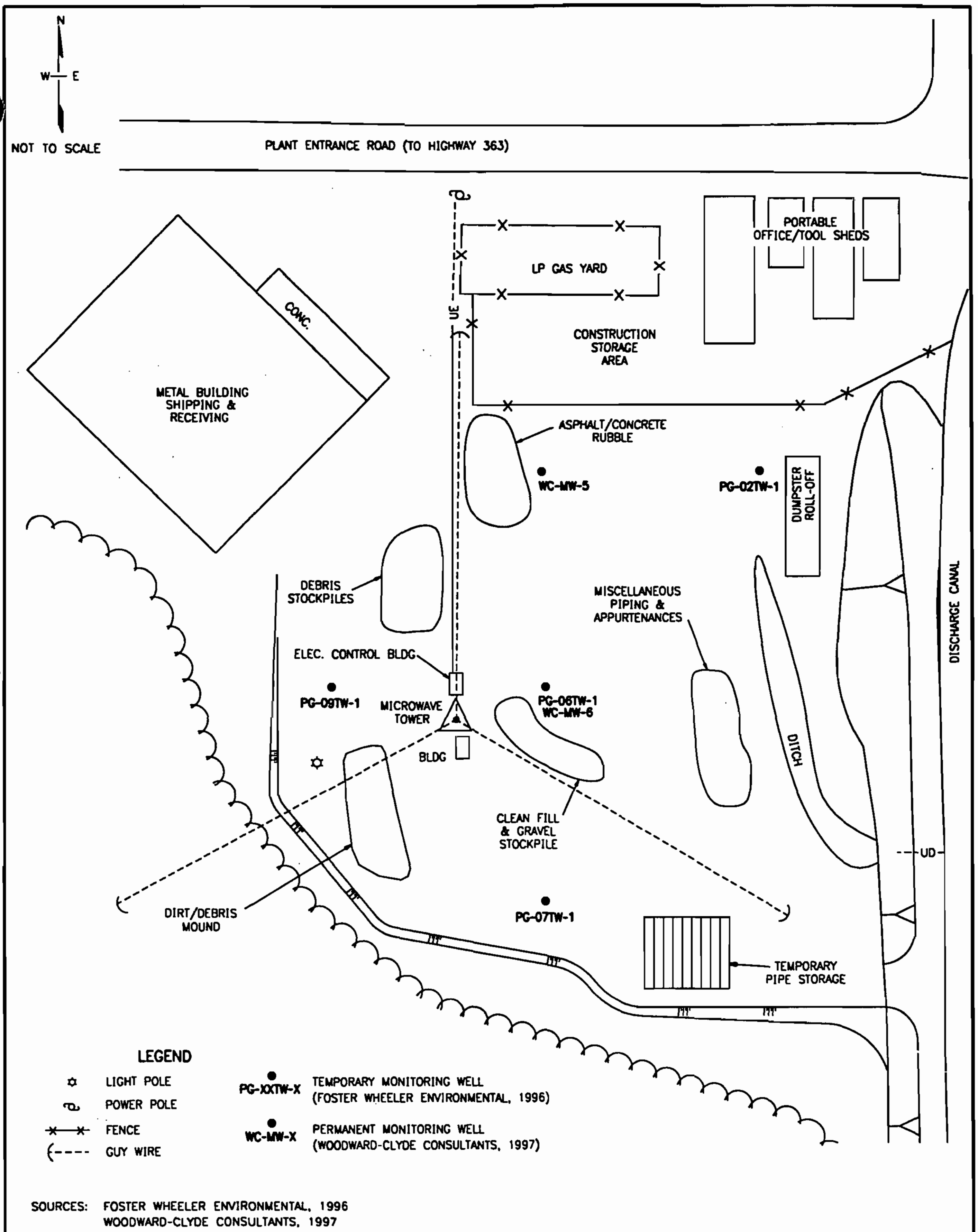
Two permanent shallow 12- to 13-ft deep groundwater monitoring wells were installed on February 21, 1997 at the same approximate locations as soil boring PG-05SB-1 and temporary monitoring well PG-06TW-1 completed during the Assessment. The wells were installed to provide for the collection of additional groundwater samples for laboratory analyses. The completed well locations are shown on Figure 4.

Permanent monitoring wells were constructed with 10 feet of 2-inch diameter 0.01-inch slot, Schedule 40 polyvinyl chloride (PVC) screen threaded and coupled to 2-inch diameter PVC riser pipe. A 20/30 grain size, filter pack was placed in the annular space around the screen from the bottom of the well to within about 1 to 2 ft above the screen. A nominal 1-ft thick bentonite seal was placed on top of the sand pack. Each well was grouted and sealed to the surface with a 3 to 5 percent mixture of bentonite and Portland cement. The wells were completed and finished above-grade with a watertight, locking well cap. Each well was developed by pumping until relatively clear, sediment-free discharge water was obtained (Woodward-Clyde Consultants, 1997).

3.5 GROUNDWATER SAMPLING

On November 22, 1996, groundwater samples were collected from the four temporary monitoring wells in accordance with the FDEP SOPs. Prior to groundwater sampling, each monitoring well was purged with new tubing and a peristaltic pump to remove standing water and to obtain representative samples of the surficial aquifer. Each well was purged dry prior to sampling.

Samples for volatile organic analyses were collected with decontaminated inert Teflon® bailers utilizing new cotton lanyards. Separate bailers which had been decontaminated prior to being transported to the field were used for sampling volatile organic compounds in each well. These samples were transferred immediately from the bailers to the sample container bottles, and were then placed on wet ice in preparation for shipment to the analytical laboratory.



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CITY OF TALLAHASSEE

TEMPORARY AND PERMANENT MONITORING WELL LOCATION MAP

PURDOM UNIT 8 PROJECT - ST MARKS, FLORIDA

Figure 4

Samples for other analyses were collected from the discharge line of the peristaltic pump. During sample collection activities, field measurements of sample pH, temperature, specific conductance, and turbidity were recorded. Field measurements are summarized in Table 3, which is located in Section 4.4.

Supplemental activities conducted on February 21, 1997, included the collection of groundwater samples from the two permanent monitoring wells. Prior to groundwater sampling, each monitoring well was purged to obtain representative samples of the surficial aquifer. During sample collection activities field measurements of sample pH, temperature, specific conductance, and turbidity were recorded. Field measurements data are summarized in Table 3, located in Section 4.4. Groundwater samples were collected for analyses with Teflon® bailers.

3.6 LABORATORY ANALYSIS

3.6.1 Assessment Activities

The soil and groundwater samples collected during the Assessment were analyzed for Volatile Organic Aromatics/Purgeable Halocarbons (EPA 8021), Petroleum Range Organics (FL-PRO), eight RCRA metals (EPA Methods: 206.2/7060, 208.2/7081, 213.2/7191, 218.2/7191, 239.2/7421, 245.1/7471, 270.2/7440, and 272.2/7761), Base/Neutral Acid extractables, pesticides and PCBs (EPA 8270) in November 1996. In addition, the soil samples were analyzed for friable asbestos materials. Samples were analyzed by the City of Tallahassee Water Quality Division Laboratory, Savannah Laboratories and Environmental Services, Inc. and Micro Analytical Laboratories, Inc. Attachment C provides a list of the analyses performed by each laboratory.

3.6.2 Supplemental Activities

Two additional groundwater samples were collected for analyses from permanent monitoring wells in February 1997. One groundwater sample from well WC-MW-5, was analyzed for Volatile Organics (EPA 8010 and 8020), Polynuclear Aromatic Hydrocarbons (EPA 8100), and Petroleum Range Organics (FL-PRO). A second groundwater sample from well WC-MW-6 was analyzed for Purgeable Aromatics (EPA 8020) and Cadmium (EPA 213.2). Method 8100 provides results for a specific list of analytes which are related to hydrocarbon fuels and which are a subset of those found in EPA method 8270. Samples collected during the supplemental activities were analyzed by Savannah Laboratories and Environmental Services, Inc. A discussion of the analytical results is provided in Section 4.

3.6.3 Laboratory Data Validation

Attachment C presents the results of data validation performed on the Assessment data provided by the analytical laboratories. The data validation indicates that the results from the analytical laboratories are of acceptable quality. As a result of the data validation, some laboratory results are qualified as estimated values designated by the letter J in the analytical results summary table. Tables in Attachment C also provide a summary of the results of Quality Assurance samples (duplicates, equipment blanks, and trip blank samples) that were collected and analyzed as part of the Assessment.

4. RESULTS AND DISCUSSION OF THE SITE ASSESSMENT

This section presents the results of the soil and groundwater sample collection and analyses conducted during the Assessment and supplemental activities.

4.1 SITE SPECIFIC GEOLOGY

The surficial geology of the site was characterized using soil samples obtained from hand auger cuttings during the installation of the shallow soil borings and temporary monitoring wells conducted during the Assessment.

The shallow lithology, as described from the soil borings and temporary well logs, consists of the following general characterization in descending order. Discontinuous or mixed layers of topsoil, limerock fill, construction demolition debris, clayey sand, quartz beach sand, and marly or limey clays were encountered to a depth of approximately seven ft below land surface. From 7 to 9 ft below land surface a single unit of greenish-bluish gray to off-white or yellow, fat, marly clay was encountered. At a depth between nine and ten ft below land surface hard, dense limestone material (tentatively named St. Marks Formation) was encountered in all four temporary monitoring well borings.

4.2 SOIL OVA-FID HEADSPACE SCREENING RESULTS

During the Assessment and supplemental activities, 18 soil borings from ten locations were completed and screened with an OVA-FID in accordance with the methodology described in Rule 62-770.200(2), F.A.C.. The two borings completed during supplemental activities were located approximately in the same location as two of the previous borings conducted during the Assessment. Table 1 and Figure 5 present a summary of the soil OVA-FID headspace screening data. The results of the headspace screening of soil samples found six samples with results that were above 50 ppm. The results range from below the detection limit 0 parts per million (ppm) to greater than 1000 ppm in one sample.

The FDEP has established soil OVA-FID headspace screening standards under Rule 62-770, F.A.C. of 50 ppm for sites contaminated with products related to the kerosene or mixed product analytical group and 500 ppm for sites contaminated with products in the gasoline analytical group. However these standards are not applicable to the site which is the subject of this Assessment because it has not been used to store petroleum fuels or other related products and because no constituents which are indicative of these analytical groups were found in the surface soil or groundwater samples that were collected for laboratory analyses.

4.3 SURFACE SOIL ANALYTICAL RESULTS

During the Assessment, five surface soil samples including one duplicate were collected from four locations for laboratory analyses. Table 2 and Figure 6 each present a summary of the analytical results. Attachment B includes a complete copy of the laboratory analytical report. Surface soil samples were analyzed for Volatile Organic Aromatics/Purgeable Halocarbons,

TABLE 1
SOIL ORGANIC VAPOR HEADSPACE SCREENING RESULTS

NOVEMBER 1996

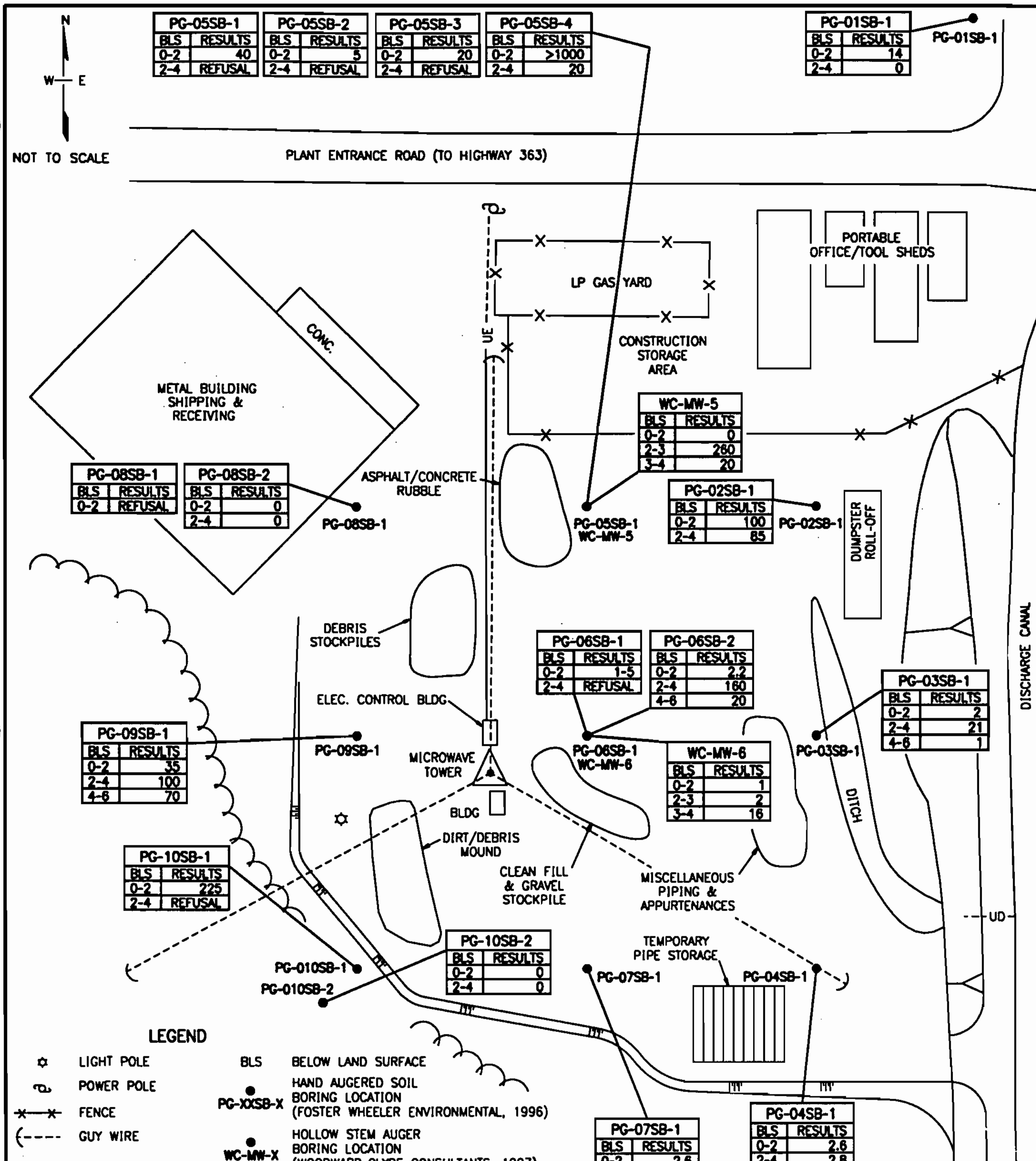
Boring No.	OVA Measurements (ppm) 0 - 2 feet Unfiltered	Filtered	Difference	2 - 4 feet Unfiltered	Filtered	Difference	4 - 6 feet Unfiltered	Filtered	Difference
PG-01SB-1	60	46	14	30	38	<0	N/A	N/A	N/A
PG-02SB-1	300	200	100	300	215	85	N/A	N/A	N/A
PG-03SB-1	2.0	0.0	2.0	36.0	15.0	21	4.0	3.0	1.0
PG-04SB-1	2.6	N/A	N/A	2.8	N/A	N/A	N/A	N/A	N/A
PG-05SB-1	240	200	40	Refusal			N/A	N/A	N/A
PG-05SB-2	35	30	5	Refusal			N/A	N/A	N/A
PG-05SB-3	100	80	20	Refusal			N/A	N/A	N/A
PG-05SB-4	>1000	>1000	>1000	380	360	20	N/A	N/A	N/A
PG-06SB-1	1.5	N/A	N/A	Refusal			N/A	N/A	N/A
PG-06SB-2	2.2	N/A	N/A	340	180	160	320	300	20
PG-07SB-1	2.6	N/A	N/A	200	150	50	280	220	60
PG-08SB-1	Refusal			N/A	N/A	N/A	N/A	N/A	N/A
PG-08SB-2	0	N/A	N/A	0	N/A	N/A	N/A	N/A	N/A
PG-09SB-1	50	15	35	200	100	100	340	270	70
PG-10SB-1	425	200	225	Refusal			N/A	N/A	N/A
PG-10SB-2	0	N/A	N/A	0	N/A	N/A	N/A	N/A	N/A

Source: Foster Wheeler Environmental November 20-21, 1996.
N/A - Not analyzed.

FEBRUARY 1997

Boring No.	OVA Measurements (ppm) 2 feet Unfiltered	Filtered	Difference	3 feet Unfiltered	Filtered	Difference	4 feet Unfiltered	Filtered	Difference
WC-MW-5	0	0	0	350	90	260	70	50	20
WC-MW-6	3	2	1	8	6	1	78	62	16

Source: Woodward-Clyde Consultants February 21, 1997.



NOTES

SAMPLE DATES: 11/20/96 - 11/22/96 AND 2/21/97

RESULTS ARE REPORTED IN PARTS PER MILLION (ppm).

SOIL SAMPLES WERE SCREENED AT 1 OR 2 FT. INTERVALS FROM LAND SURFACE TO THE WATERTABLE WITH AN OVA-FID IN ACCORDANCE WITH CHAPTER 62-770.200 F.A.C.

SOIL SCREENING DATA IS REPORTED AS THE DIFFERENCE OF UNFILTERED OVA-FID RESULTS MINUS METHANE FILTERED SAMPLE RESULTS.

SOURCES: FOSTER WHEELER ENVIRONMENTAL, 1996
WOODWARD-CLYDE CONSULTANTS, 1997

CITY OF TALLAHASSEE

OVA-FID SOIL SCREENING DATA SUMMARY

PURDOM UNIT 8 PROJECT - ST MARKS, FLORIDA

Figure 5

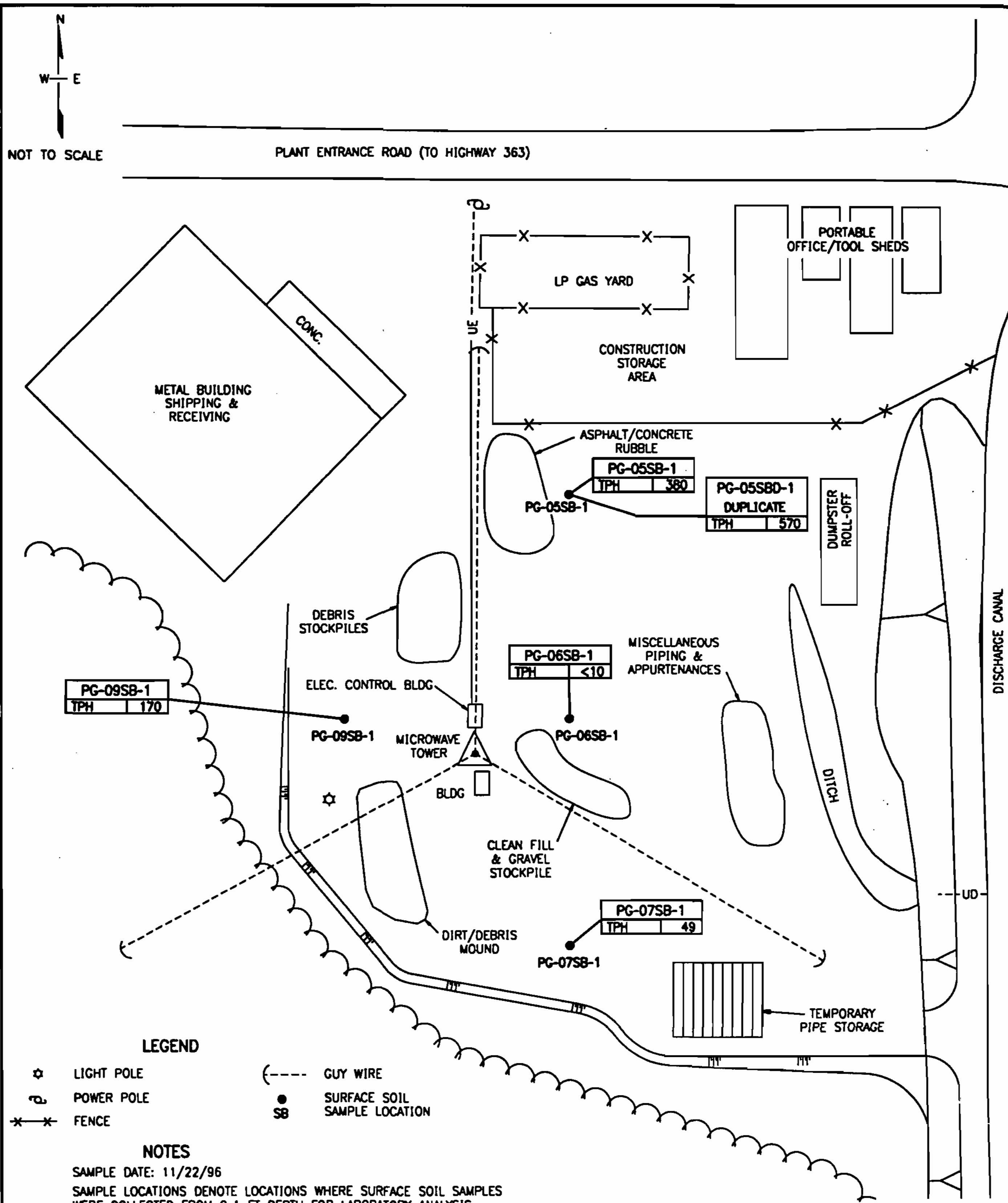
PLOT DATE FE..., 1997 C:\15840002\---\00000-20.DWG

TABLE 2
SURFACE SOIL SAMPLE ANALYTICAL RESULTS SUMMARY - NOVEMBER 1996

ANALYTE	PG-05SB-1	PG-05SBD-1	PG-06SB-1	PG-07SB-1	PG-09SB-1
ORGANICS					
EPA 8270 Constituents	BDL(1)	BDL(1)	BDL(1)	BDL(1)	BDL(1)
Benzo(K)-fluoranthene(2)	0.30	0.48	BD(1)L	0.18	0.50
Benzo(a)-pyrene(2)	0.37	0.18	BDL(1)	0.13	0.90
Benzo(g,h,i)-perlene(2)	0.55	0.40	BDL(1)	BDL(1)	0.78
Chrysene(2)	0.82	0.52	BDL(1)	BDL(1)	1.14
Fluoranthene(2)	0.22	0.14	BDL(1)	0.21	0.69
Indeno (123-cd) pyrene(2)	0.52	0.33	BDL(1)	BDL(1)	0.66
Phenanthrene(2)	0.17	0.16	BDL(1)	0.09	0.51
Pyrene(2)	0.87	0.51	BDL(1)	0.18	BDL(1)
EPA 8021 Constituents	BDL(1)	BDL(1)	BDL(1)	BDL(1)	BDL(1)
PCBs	<0.34	<0.34	<0.34	<0.34	<0.34
FL Pro	380	570	<10	49	170
INORGANICS					
Asbestos	3-5% J	5-8% J	None	None	3-5%
Arsenic	2.85	3.49	<0.84	1.48	1.75
Barium	46	56	<5.14	18.6	18
Cadmium	0.48	0.4	<0.06	<0.12	0.68
Chromium	27.2	28.8	5.07	8.19	16.6
Mercury	<0.28	<0.19	<0.06	<0.03	5.26
Lead	64.8	57.2	4.14	9.6	57.5
Selenium	<0.18	<0.12	<0.16	<0	<0.01
Silver	<0.16	<0.21	<0.03	<0.03	<0.07

Notes:
Only results which are above the laboratory reporting limits are shown on this table.
All results are reported in mg/kg except asbestos, which is reported as a percent of the total sample volume.
J - Estimated value. The results for asbestos are estimated because of poor reproducibility between sample duplicates.
NL - Not Listed.

(1) BDL - Below laboratory reporting limit. Laboratory reporting limits vary by sample for each analytical method or analyte see Attachment C.
(2) Reported results were estimated by the laboratory and are below the quantitation limit of the sample.



LEGEND

- LIGHT POLE
- POWER POLE
- FENCE
- GUY WIRE
- SB SURFACE SOIL SAMPLE LOCATION

NOTES

SAMPLE DATE: 11/22/96

SAMPLE LOCATIONS DENOTE LOCATIONS WHERE SURFACE SOIL SAMPLES WERE COLLECTED FROM 0-1 FT DEPTH FOR LABORATORY ANALYSIS.

ALL RESULTS ARE REPORTED IN mg/kg.

FIGURE SHOWS RESULTS FOR FL-PRO PETROLEUM RANGE ORGANICS (TPH)

SOURCE: FOSTER WHEELER ENVIRONMENTAL, 1996

PLOT DATE FE... 1997 C:\15840002\---\00000-21.DWG

CITY OF TALLAHASSEE

SURFACE SOIL SAMPLE
PETROLEUM RANGE ORGANICS RESULTS SUMMARY

PURDOM UNIT 8 PROJECT - ST MARKS, FLORIDA

Figure 6

Petroleum Range Organics, eight RCRA metals, Base/Neutral Acid Extractables (including pesticides and PCBs), and friable asbestos. None of the surface soil samples found concentrations of organic or inorganic compounds which are above regulatory or guidance concentration limits. This section discusses the results of each analytical method separately.

4.3.1 Purgeable Aromatics and Halocarbons (EPA 8021)

Volatile aromatics and halocarbons were not detected above the laboratory reporting limits or regulatory guidance concentrations in any of the surface soil samples collected for analyses.

4.3.2 Base Neutral/Acid Extractables and Pesticide/PCBs (EPA 8270)

Base Neutral/Acid Extractables and Pesticide/PCBs were not detected above the laboratory reporting limits in the surface soil samples collected for analyses. The results are summarized in Table 2. Low levels of some of the Polynuclear aromatic compounds (PAHs) were found in four of the samples. None of the results is above any regulatory standards or guidance concentrations.

4.3.3 Petroleum Range Organics (FL-PRO)

Petroleum range organics were detected in four of the surface soil samples collected for laboratory analyses. The highest results were found in samples PG-05SB-1 (380 mg/kg) and the duplicate of this sample PG-05SBD-1 (570 mg/kg). There are no established applicable standards or guidance concentrations for petroleum range organics in soil.

4.3.4 Asbestos

Asbestos was found in three of the surface soil samples which were analyzed. The results ranged from 3 to 5 percent in samples PG-05SB-1 and PG-09SB-1 at the low range, to 5 to 8 percent in duplicate sample PG-05SBD-1 at the high end. The FDEP has not established applicable standards or guidance concentrations for asbestos minerals in soil.

4.3.5 RCRA Metals

Analyses of surface soil samples were conducted for eight RCRA metals (arsenic, barium, cadmium, chromium, mercury, lead, selenium, and silver). All of the results are within the expected range for U.S. soils.

4.4 GROUNDWATER ANALYTICAL RESULTS

During the Assessment, five groundwater samples including one duplicate were collected from four temporary monitoring wells for laboratory analyses. Supplemental activities included the collection of two additional groundwater samples for selected laboratory analyses from two permanent monitoring wells. A summary of the field measurements that were recorded during well purging and sampling is presented as Table 3. The results of sample analyses are discussed separately for each analytical method in this section. Table 4 presents a summary of the analytical results from the Assessment and Table 5 summarizes the analytical results from the supplemental activities. Figure 7 provides a graphic summary of groundwater analytical results.

TABLE 3
GROUNDWATER SAMPLE FIELD MEASUREMENT DATA

NOVEMBER 1996

Sample ID	Temperature (°F)	pH (Standard Units)	Specific Conductance (μmhos)	Turbidity (NTU.)
PG-02TW-1	72.1	8.0	515	130.1
PG-06TW-1	62.0	7.2	1210	68.1
PG-07TW-1	68.1	7.1	1666	55.2
PG-09TW-1	72.5	7.1	1049	77.1

Source: Foster Wheeler Environmental November 22, 1996.

FEBRUARY 1997

Sample ID	Temperature (°F)	pH (Standard Units)	Specific Conductance (μmhos)	Turbidity (NTU.)
WC-MW-5	67.5	6.7	780	31
WC-MW-6	68	6.5	1400	31

Source: Woodward-Clyde Consultants February 21, 1997.

TABLE 4
GROUND WATER SAMPLE ANALYTICAL RESULTS SUMMARY - NOVEMBER 1996

Analyte	PG-02TW-1	PG-06TW-1	PG-06TWD-1	PG-07TW-1	PG-09TW-1
ORGANICS					
EPA 8270					
Diethylphthalate	6.77	<5.81	<5.81	<5.81	<5.81
EPA 8021					
Toluene	2.33 J	1.68 J	679 J	<0.05	2.72 JB
PCBs	<10	<10	<10	<10	<10
FL Pro	<300	860 J	<300 J	4100	<600[2]
INORGANICS[1]					
Arsenic	6.77	19.3	20.2	30	25.4
Barium	23.1	39.6	49.3	21	94.2
Cadmium	<0.11	10.7 J	1.04 J	0.62	4.86
Chromium	8.59	5.73	6.97	11.6	17.3
Mercury	<0.09	<0.26	<0.18	<0.07	<0.13
Lead	8.08	2.97	2.46	3.37	12.7
Selenium	20.9	20.3 J	12 J	2.88	3.95
Silver	<0.13	<0.09	<0.11	<0.11	<0.31

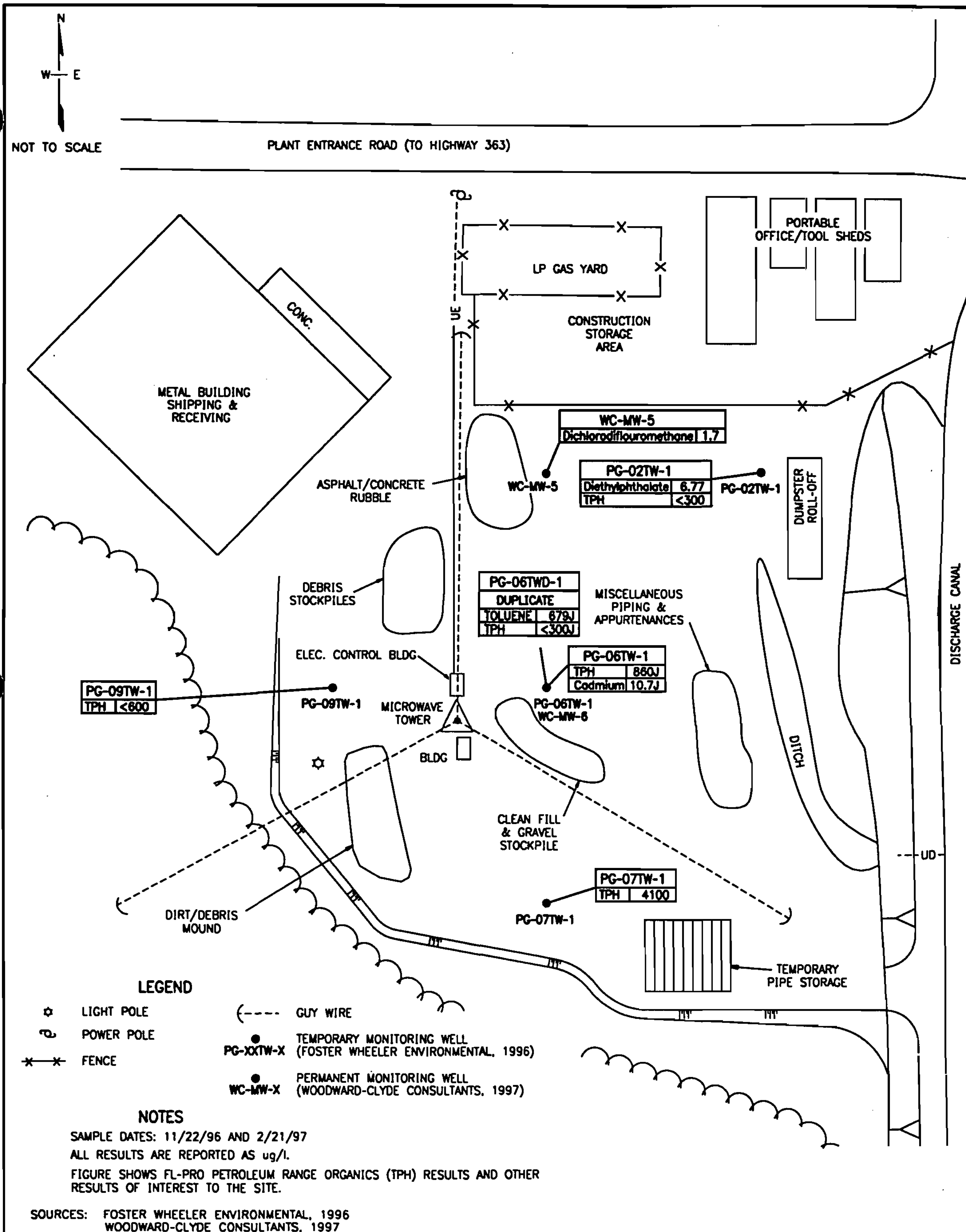
Notes:
Only results which are above the laboratory reporting limits are shown on this table.
All results are reported in μg/l.
J - Estimated value. Toluene results are "estimated" because the concentration in the samples is similar to the concentration found in the equipment blank samples; or, in the case of PG-06TW-1 and PG-06TWD-1, poor reproducibility between sample duplicates. In the case of the results for cadmium and FL-PRO, these results are also "estimated" because of poor reproducibility between sample duplicates.

(1) Excessive sample turbidity (>50 NTUs) likely affected the results of the inorganic analysis.
(2) Reporting limit raised due to limited sample volume.

TABLE 5 GROUND WATER SAMPLES ANALYTICAL RESULTS SUMMARY - FEBRUARY 1997		
Analyte	WC-MW-5	WC-MW-6
ORGANICS		
EPA 8020 Constituents	N/A	BDL[1]
EPA 8010 and 8021		
Dichlorodifluoromethane (Freon 12)	1.7	<1.0
EPA 8100	<10	N/A
FL Pro	<300	N/A
INORGANICS		
Cadmium	N/A	<1.0

Notes:
Only results which are above the laboratory reporting limits are shown on this table.
All results are reported in μg/l.
N/A - Not analyzed.

(1) BDL - Below laboratory reporting limit. Laboratory reporting limits vary by sample for each analytical method or analyte see Attachment C..



PLOT DATE F... 1997 C:\15840002\---\00000-22.DWG

CITY OF TALLAHASSEE

GROUNDWATER SAMPLE ANALYTICAL RESULTS SUMMARY

PURDOM UNIT 8 PROJECT - ST MARKS, FLORIDA

Figure 7

4.4.1 Volatile Organics (EPA 8010 and 8020), Purgeable Aromatics (EPA 8020), and Volatile Organic Aromatics/ Purgeable Halocarbons (EPA 8021)

The Assessment results are summarized in Table 4. Toluene was reported in four groundwater samples collected during the Assessment. Each sample was analyzed for Volatile Organic Aromatics/Purgeable Halocarbons (EPA 8021). The highest concentration of toluene was 679 µg/l which was reported in sample PG-06TWD-1 (a duplicate sample). However, the toluene result for the other sample in this duplicate sample pair was only 1.68 µg/l. Toluene was also reported in the trip blank and both equipment blank samples at concentrations below 1 µg/l. Due to the occurrence of similar low levels of toluene in the sample blanks and in site groundwater samples, and the disparity in the toluene levels reported in the duplicate samples, the toluene results were questionable. No other volatile organic aromatics or purgeable halocarbons were detected above the laboratory reporting limits in the groundwater samples collected for analyses during the Assessment.

During the supplemental activities, two groundwater samples were collected for confirmational analyses. Results from the supplemental activities are summarized in Table 7. One sample was collected from a permanent monitoring well (WC-MW-6) located at the same approximate location as the sample mentioned above. Samples from this well were analyzed for volatile organics using two laboratory methods both of which provide results for toluene (EPA 8010 and 8020) and Purgeable Aromatics (EPA 8020). The results for toluene in both of these two different analyses were below the laboratory reporting limits of 1.0 µg/l which confirms the unreliability of suspect high toluene results in the previous sample.

A second groundwater sample was collected from a new location near soil boring PG-05SB-1 and analyzed for volatile organics (EPA 8010 and 8020). The only positive result from this sample was for dichlorodiflouromethane (Freon 12) at 1.7 µg/l, which is well below the FDEP guidance concentration level of concern of 1,400 µg/l.

All of the other results from these two supplemental samples were below the laboratory reporting limits. These analyses indicate that volatile organics are not present above regulatory standards in groundwater samples collected from this location.

4.4.2 Base Neutral/Acid, Pesticide, and PCB Extractables (EPA 8270)

Five groundwater samples were analyzed for Base Neutral/Acid, Pesticide, and PCB Extractables (EPA 8270) during the Assessment. The results are summarized in Table 4. Diethylphthalate was found in one sample PG-02TW-1 at 6.77 µg/l, which is well below the FDEP guidance concentration level of concern of 5,600 µg/l. Diethylphthalate is a common plasticizer compound which can result from contact with sampling and laboratory equipment. No other compounds from this analytical suite were detected above the laboratory reporting limits or regulatory guidance concentrations in any of the groundwater samples collected for analyses.

PCB results were reported as less than 10 µg/l by the laboratory. The laboratory also reported that PCBs were not seen on the chromatagrams at concentrations between 10 and 2 µg/l (telecon with Jeff Nielsen, City of Tallahassee Laboratory on 1/17/97). PCBs have very low aqueous solubilities and they were not found in soil samples from the site; therefore, it is unlikely that PCBs are present in these groundwater samples at concentrations above the FDEP Primary Drinking Water Standard.

4.4.3 Polynuclear Aromatic Compounds (EPA 8100)

One groundwater sample was collected from monitoring well WC-MW-5 and analyzed for polynuclear aromatics (EPA 8100) during supplemental activities. These results are summarized in Table 5. This analytical method includes analytes which are a subset of the EPA 8270 list of analytes and primarily includes hydrocarbon fuel-related compounds. A sample was collected from this well for EPA 8100 analyses because of the elevated OVA-FID soil headspace screening measurement found in samples from a boring at this location during the Assessment. It was speculated that this elevated result may have resulted in hydrocarbon impacts to the groundwater. None of the compounds from this analytical suite were detected above the laboratory reporting limits in the groundwater sample collected for analysis.

4.4.4 Petroleum Range Organics (FL-PRO)

Groundwater samples were collected from four temporary monitoring wells during the Assessment and analyzed for petroleum range organics. Table 4 provides a summary of the results. Petroleum range organics were detected above the laboratory reporting limits in two of the samples. Sample PG-06TW-1 detected 860 J µg/l of petroleum range organics. However, the results from a duplicate of this sample (PG-06TWD-1) were below the laboratory reporting limit making these results questionable. Sample PG-07TW-1 found 4100 µg/l of petroleum hydrocarbons, below the FDEP Target Level of 5,000 µg/l (Rule 62-770, F.A.C). None of the other groundwater sample results had detectable levels of petroleum range organics.

During the supplemental activities, one groundwater sample was collected from a permanent monitoring well located near the former location of soil boring PG-05SB-1 and analyzed for petroleum range organics. The results from this sample analysis were below the laboratory reporting limit of the sample. These results are summarized in Table 5.

4.4.5 RCRA Metals

Analyses of groundwater samples collected during the Assessment were conducted for eight RCRA metals (arsenic, barium, cadmium, chromium, mercury, lead, selenium, and silver). These results are summarized in Table 4. Suspect cadmium results (10.7 µg/l) were found in one sample collected from temporary monitoring well PG-06TW-1. The results from the duplicate sample (PG-06TWD-1) collected from the same well were an order of magnitude lower (1.07 µg/l). Turbidity in this sample was 68.1 NTUs, higher than ideal value for groundwater samples of less than 50 NTUs. This high turbidity result may be indicative of high suspended solids which could have affected the results for cadmium. Difficulties were experienced in collecting adequate sample volume from each of the four initial temporary monitoring wells and all of the samples appeared opaque, apparently due to high levels of suspended solids which may have affected all of the results for RCRA metals analyses.

A permanent monitoring well (WC-MW-6) was installed at the approximate location of temporary monitoring well PG-06TW-1 during the supplemental activities. A sample was also collected from this well for cadmium analysis. The field turbidity measurement of 31 NTUs obtained from this properly installed and developed well is within the range of acceptable turbidity values. The cadmium results from this sample were below the laboratory reporting limit of 1.0 µg/l, thereby confirming the unreliability of the suspect cadmium result obtained in November.

5. SUMMARY AND CONCLUSIONS

None of the soil or groundwater data collected during the Site Screening Assessment and supplemental activities indicate exceedances of applicable regulatory standards or guidance concentrations established by the FDEP. However, the City has undertaken to remove soil from several small areas of the site: one with low level petroleum constituents based on soil OVA-FID headspace screening data and in two other areas where asbestos was found in surface soil samples. This material will be managed and disposed of in accordance with any applicable requirements.

5.1 SOIL OVA-FID HEADSPACE SCREENING

None of the results from the OVA-FID headspace screening of soil samples from the site indicate exceedances of applicable standards.

5.2 SURFACE SOIL SAMPLING

Although low levels of polynuclear aromatics (below normal laboratory reporting limits) and petroleum range organics were found in some surface soil samples collected during the Assessment, none of the results was above FDEP regulatory or guidance standards.

5.3 GROUNDWATER SAMPLING

The results of laboratory analyses of groundwater samples collected from the temporary monitoring wells installed in November found one questionable result for toluene with a concentration of 679 µg/l in a duplicate sample. Toluene was not found above the level found in the equipment blanks in the other sample from this duplicate pair. A cadmium concentration of 10.7 µg/l was also found in a sample from this well which exhibited high turbidity. Analysis of a duplicate sample from this well indicated a cadmium concentration of 1.04 mg/l. Based on these results, additional sampling of groundwater in this vicinity was performed in February. The results of this confirmational groundwater sample collected from a properly developed permanent monitoring well did not duplicate the initial toluene or cadmium results found in November, which confirms the unreliability of those results.

None of the other results for groundwater samples collected during the Assessment or subsequent supplemental activities were above FDEP regulatory or guidance concentrations.

6. REFERENCES

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Florida Administrative Code, 1996. Title 62-Department of Environmental Protection, Chapter 62-770 Petroleum Contamination Site Cleanup Criteria, Tallahassee, Florida.

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Woodward-Clyde Consultants, 1997, Letter Report to: Mr. Hal Avery, City of Tallahassee Purdom Power Plant; RE: Monitoring Well Installation and Groundwater Sampling Proposed Location of Unit 8 - Sam O. Purdom Generating Station 667 Port Leon Drive - St. Marks, Florida.

ATTACHMENT A

SOIL BORING LOGS

BORING LOG

PROJECT: Limited site Assessment
PROJECT NO: 1584.005.009
LOCATION: Purdom Power Plant
GEOLOGIST: G. H. New
DRILLER: N/A
DRILLING/SAMPLING METHOD: Hand Auger

BORING NUMBER: PG-01SB-1
DATE STARTED: 21-Nov-96
DATE COMPLETED: 21-Nov-96
TIME: 855
GROUNDWATER DEPTH: Approx. 3.5 ft.
ELEVATION: Approx. 10 ft.

SAMPLE ID	DEPTH (feet) 0	USCS CLASS.	MATERIAL DESCRIPTION	Unfiltered OVA (ppm)	Filtered OVA (ppm)	Diff. OVA (ppm)
	1					
	2	SC	Clayey Sand, dark brown, organic.	60.0	46.0	14.0
	3	SC	Clayey sand, dark brown.			
	4		Wet @ 3.5 ft.	30.0	38.0	<0.0
	5					
	6					
	7					
	8					
	9					
	10					
	11					
	12					
	13					
	14					
	15					

NOTES:

BORING LOG

PROJECT: **Limited site Assessment**
PROJECT NO: 1584.005.009
LOCATION: Purdom Power Plant
GEOLOGIST: G. H. New
DRILLER: N/A
DRILLING/SAMPLING METHOD: Hand Auger

BORING NUMBER: **PG-02SB-1**
DATE STARTED: 21-Nov-96
DATE COMPLETED: 21-Nov-96
TIME: 800
GROUNDWATER DEPTH: Approx. 4.5 ft.
ELEVATION: Approx. 10 ft.

SAMPLE ID	DEPTH (feet) 0	USCS CLASS.	MATERIAL DESCRIPTION	Unfiltered OVA (ppm)	Filtered OVA (ppm)	Diff. OVA (ppm)
	1		Topsoil, dark brown, humus.			
	2	ML	Limestone fragments and Clay, light gray, fat clay.	300.0	200.0	100.0
	3		Limestone, light gray.			
	4	CH	Marl, light gray, clay and limestone.	300.0	215.0	85.0
			Saturated Quartz Sand @ 4.5 ft.			
	5					
	6					
	7					
	8					
	9					
	10					
	11					
	12					
	13					
	14					
	15					

NOTES:

Foster Wheeler Environmental Corporation

SB_02LOG.XLS

BORING LOG

PROJECT: Limited site Assessment
PROJECT NO: 1584.005.009
LOCATION: Purdom Power Plant
GEOLOGIST: G. H. New
DRILLER: N/A
DRILLING/SAMPLING METHOD: Hand Auger

BORING NUMBER: PG-03SB-1
DATE STARTED: 20-Nov-96
DATE COMPLETED: 20-Nov-96
TIME: 1010
GROUNDWATER DEPTH: Approx. 7 ft.
ELEVATION: Approx. 10 ft.

SAMPLE ID	DEPTH (feet) 0	USCS CLASS.	MATERIAL DESCRIPTION	Unfiltered OVA (ppm)	Filtered OVA (ppm)	Diff. OVA (ppm)
	1		Limerock fill.			
		SC	Clayey Sand, light gray.			
	2	ML	Clay, gray, limey.	2.0	0.0	2.0
	3					
	4	SP	Quartz Sand, light gray to white, fine to medium, damp.	36.0	15.0	21.0
	5					
	6	SP	Sand, light gray, damp.	4.0	3.0	1.0
	7	SP	Quartz Sand, light gray, saturated.	N/A	N/A	N/A
			Boring terminated.			
	8					
	9					
	10					
	11					
	12					
	13					
	14					
	15					

NOTES:

BORING LOG

PROJECT:	Limited site Assessment	BORING NUMBER:	PG-04SB-1
PROJECT NO:	1584.005.009	DATE STARTED:	20-Nov-96
LOCATION:	Purdom Power Plant	DATE COMPLETED:	20-Nov-96
GEOLOGIST:	G. H. New	TIME:	1514
DRILLER:	N/A	GROUNDWATER DEPTH:	Approx. 4 ft.
DRILLING/SAMPLING METHOD:	Hand Auger	ELEVATION:	Approx. 10 ft.

SAMPLE ID	DEPTH (feet) 0	USCS CLASS.	MATERIAL DESCRIPTION	Unfiltered OVA (ppm)	Filtered OVA (ppm)	Diff. OVA (ppm)
	1	SC	Clayey Quartz Sand, light brown.			
	2	ML	Limestone gravel and Marly Clay, tan.	2.6	N/A	2.6
	3					
	4	ML	Clay, light gray, marly, saturated @ 4 ft.	2.8	N/A	2.8
	5					
	6					
	7					
	8					
	9					
	10					
	11					
	12					
	13					
	14					
	15					

NOTES:

Foster Wheeler Environmental Corporation

SB_04LOG.XLS

BORING LOG

PROJECT: Limited site Assessment
PROJECT NO: 1584.005.009
LOCATION: Purdom Power Plant
GEOLOGIST: G. H. New
DRILLER: N/A
DRILLING/SAMPLING METHOD: Hand Auger

BORING NUMBER: PG-05SB-1
DATE STARTED: 20-Nov-96
DATE COMPLETED: 20-Nov-96
TIME: 1715
GROUNDWATER DEPTH: Unk.
ELEVATION: Approx. 10 ft.

SAMPLE ID	DEPTH (feet) 0	USCS CLASS.	MATERIAL DESCRIPTION	Unfiltered OVA (ppm)	Filtered OVA (ppm)	Diff. OVA (ppm)
	1	SC	Clayey Sand, dark brown organic.			
			Light			
	2		Aborted concrete.	240.0	200.0	40.0
	3					
	4					
	5					
	6					
	7					
	8					
	9					
	10					
	11					
	12					
	13					
	14					
	15					

NOTES:

Foster Wheeler Environmental Corporation

SB_05LOG.XLS

BORING LOG

PROJECT:	Limited site Assessment	BORING NUMBER:	PG-05SB-2
PROJECT NO:	1584.005.009	DATE STARTED:	21-Nov-96
LOCATION:	Purdom Power Plant	DATE COMPLETED:	21-Nov-96
GEOLOGIST:	G. H. New	TIME:	1050
DRILLER:	N/A	GROUNDWATER DEPTH:	Unk.
DRILLING/SAMPLING METHOD:	Hand Auger	ELEVATION:	Approx. 10 ft.

SAMPLE ID	DEPTH (feet) 0	USCS CLASS.	MATERIAL DESCRIPTION	Unfiltered OVA (ppm)	Filtered OVA (ppm)	Diff. OVA (ppm)
	1					
	2	SM	Sandy Soil, black, organic.	35.0	30.0	5.0
	3		Aborted @ 2 ft. concrete.			
	4					
	5					
	6					
	7					
	8					
	9					
	10					
	11					
	12					
	13					
	14					
	15					

NOTES:

BORING LOG

PROJECT: **Limited site Assessment**
PROJECT NO: 1584.005.009
LOCATION: Purdom Power Plant
GEOLOGIST: G. H. New
DRILLER: N/A
DRILLING/SAMPLING METHOD: Hand Auger

BORING NUMBER: **PG-05SB-3**
DATE STARTED: 21-Nov-96
DATE COMPLETED: 21-Nov-96
TIME: 1120
GROUNDWATER DEPTH: Unk.
ELEVATION: Approx. 10 ft.

SAMPLE ID	DEPTH (feet) 0	USCS CLASS.	MATERIAL DESCRIPTION	Unfiltered OVA (ppm)	Filtered OVA (ppm)	Diff. OVA (ppm)
	1					
	2	SM	Sandy Soil, black, organic. Strong HC odor.	100.0	80.0	20.0
	3		Aborted @ 2 ft. concrete.			
	4					
	5					
	6					
	7					
	8					
	9					
	10					
	11					
	12					
	13					
	14					
	15					

NOTES:

BORING LOG

PROJECT:	Limited site Assessment	BORING NUMBER:	PG-05SB-4
PROJECT NO:	1584.005.009	DATE STARTED:	21-Nov-96
LOCATION:	Purdom Power Plant	DATE COMPLETED:	21-Nov-96
GEOLOGIST:	G. H. New	TIME:	1140
DRILLER:	N/A	GROUNDWATER DEPTH:	Approx. 5 ft.
DRILLING/SAMPLING METHOD:	Hand Auger	ELEVATION:	Approx. 10 ft.

SAMPLE ID	DEPTH (feet) 0	USCS CLASS.	MATERIAL DESCRIPTION	Unfiltered OVA (ppm)	Filtered OVA (ppm)	Diff. OVA (ppm)
	1					
		SC	Clayey Sand, dark gray brown, organic.			
	2		Strong HC odor.	>1000	>1000	>1000
	3	CH	Clay, dark gray.			
	4	ML	Limestone, light gray, weathered, sandy, damp.	380.0	360.0	20.0
	5					
	6					
	7					
	8					
	9					
	10					
	11					
	12					
	13					
	14					
	15					

NOTES:

PAGE 1 OF 1

BORING LOG

PROJECT: Limited site Assessment
PROJECT NO: 1584.005.009
LOCATION: Purdom Power Plant
GEOLOGIST: G. H. New
DRILLER: N/A
DRILLING/SAMPLING METHOD: Hand Auger

BORING NUMBER: PG-06SB-1
DATE STARTED: 20-Nov-96
DATE COMPLETED: 20-Nov-96
TIME: 1047
GROUNDWATER DEPTH: N/A
ELEVATION: Approx. 10 ft.

SAMPLE ID	DEPTH (feet) 0	USCS CLASS.	MATERIAL DESCRIPTION	Unfiltered OVA (ppm)	Filtered OVA (ppm)	Diff. OVA (ppm)
	1		Limerock and sand fill.			
	2	CH	Clay, light gray and tan, stiff, fat.	1.5	N/A	N/A
	3					
	4					
	5					
	6					
	7					
	8					
	9					
	10					
	11					
	12					
	13					
	14					
	15					

NOTES:

PAGE 1 OF 1

BORING LOG

PROJECT: **Limited site Assessment**
PROJECT NO: 1584.005.009
LOCATION: Purdom Power Plant
GEOLOGIST: G. H. New
DRILLER: N/A
DRILLING/SAMPLING METHOD: Hand Auger

BORING NUMBER: **PG-06SB-2**
DATE STARTED: 20-Nov-96
DATE COMPLETED: 20-Nov-96
TIME: 1430
GROUNDWATER DEPTH: Approx. 8 ft.
ELEVATION: Approx. 10 ft.

SAMPLE ID	DEPTH (feet) 0	USCS CLASS.	MATERIAL DESCRIPTION	Unfiltered OVA (ppm)	Filtered OVA (ppm)	Diff. OVA (ppm)
	1					
	2	ML	Limestone and Clay, white to dark gray, soft, marly.	2.2	N/A	N/A
	3					
	4	OH	Clay, black, organic.	340.0	180.0	160.0
	5					
	6	SM	Quartz Sand, dark gray, fine-medium.	320.0	300.0	20.0
	7					
	8		Watertable @ 8 ft.			
	9					
	10					
	11					
	12					
	13					
	14					
	15					

NOTES:

Foster Wheeler Environmental Corporation

SB_062OG.XLS

BORING LOG

PROJECT: **Limited site Assessment**
PROJECT NO: 1584.005.009
LOCATION: Purdom Power Plant
GEOLOGIST: G. H. New
DRILLER: N/A
DRILLING/SAMPLING METHOD: Hand Auger

BORING NUMBER: **PG-07SB-1**
DATE STARTED: 20-Nov-96
DATE COMPLETED: 20-Nov-96
TIME: 1540
GROUNDWATER DEPTH: Approx. 5.5 ft.
ELEVATION: Approx. 10 ft.

SAMPLE ID	DEPTH (feet) 0	USCS CLASS.	MATERIAL DESCRIPTION	Unfiltered OVA (ppm)	Filtered OVA (ppm)	Diff. OVA (ppm)
	1					
	2	ML	Limestone and Clay, gray, sandy, marly, soft.	2.6	N/A	N/A
	3	CH	Clay, dark brown to black, marly.			
	4	CL	Clayey Sand, dark gray, damp.	200.0	150.0	50.0
	5	SM	Sand, dark gray, wet.	280.0	220.0	60.0
	6					
	7					
	8					
	9					
	10					
	11					
	12					
	13					
	14					
	15					

NOTES:

BORING LOG

PROJECT: **Limited site Assessment**
PROJECT NO: 1584.005.009
LOCATION: Purdom Power Plant
GEOLOGIST: G. H. New
DRILLER: N/A
DRILLING/SAMPLING METHOD: Hand Auger

BORING NUMBER: **PG-08SB-1**
DATE STARTED: 20-Nov-96
DATE COMPLETED: 20-Nov-96
TIME: 1650
GROUNDWATER DEPTH: N/A
ELEVATION: Approx. 10 ft.

SAMPLE ID	DEPTH (feet) 0	USCS CLASS.	MATERIAL DESCRIPTION	Unfiltered OVA (ppm)	Filtered OVA (ppm)	Diff. OVA (ppm)
	1	ML	Limestone and Marl, brown.			
	2		Aborted concrete.	N/A	N/A	N/A
	3					
	4					
	5					
	6					
	7					
	8					
	9					
	10					
	11					
	12					
	13					
	14					
	15					

NOTES:

PAGE 1 OF 1

BORING LOG

PROJECT: **Limited site Assessment**
PROJECT NO: 1584.005.009
LOCATION: Purdom Power Plant
GEOLOGIST: G. H. New
DRILLER: N/A
DRILLING/SAMPLING METHOD: Hand Auger

BORING NUMBER: **PG-08SB-2**
DATE STARTED: 21-Nov-96
DATE COMPLETED: 21-Nov-96
TIME: 930
GROUNDWATER DEPTH: Approx. 3.5 ft.
ELEVATION: Approx. 10 ft.

SAMPLE ID	DEPTH (feet) 0	USCS CLASS.	MATERIAL DESCRIPTION	Unfiltered OVA (ppm)	Filtered OVA (ppm)	Diff. OVA (ppm)
	1	ML	Limestone, tan.			
	2	ML	Limestone, tan, fill material.	0.0	N/A	N/A
	3	ML	Limestone			
		CL	Clay, gray, wet, sandy.			
	4		Wet @ 3.5 ft.	0.0	N/A	N/A
	5					
	6					
	7					
	8					
	9					
	10					
	11					
	12					
	13					
	14					
	15					

NOTES:

Foster Wheeler Environmental Corporation

SB_82LOG.XLS

BORING LOG

PROJECT: **Limited site Assessment**
PROJECT NO: 1584.005.009
LOCATION: Purdom Power Plant
GEOLOGIST: G. H. New
DRILLER: N/A
DRILLING/SAMPLING METHOD: Hand Auger

BORING NUMBER: **PG-09SB-1**
DATE STARTED: 20-Nov-96
DATE COMPLETED: 20-Nov-96
TIME: 1115
GROUNDWATER DEPTH: Approx. 8 ft.
ELEVATION: Approx. 10 ft.

SAMPLE ID	DEPTH (feet) 0	USCS CLASS.	MATERIAL DESCRIPTION	Unfiltered OVA (ppm)	Filtered OVA (ppm)	Diff. OVA (ppm)
	1	OH	Silty Clay and limerock fill.			
	2	ML	Limerock, Clay, and trash, tan to gray.	50.0	15.0	35.0
	3					
	4	ML	Sandy Marl, tan to cream, limey, soft. buried wood @ 4 ft.	200.0	100.0	100.0
	5					
		SM/SC	Quartz Sand and Muck, black organic humus			
	6		underlain by dark gray sand.	340.0	270.0	70.0
	7					
	8	CH/OH	Clay, gray to green, wet, plastic, semi-waxy.			
	9					
	10					
	11					
	12					
	13					
	14					
	15					

NOTES:

BORING LOG

PROJECT: Limited site Assessment	BORING NUMBER: PG-10SB-1
PROJECT NO: 1584.005.009	DATE STARTED: 20-Nov-96
LOCATION: Purdom Power Plant	DATE COMPLETED: 20-Nov-96
GEOLOGIST: G. H. New	TIME: 1600
DRILLER: N/A	GROUNDWATER DEPTH: N/A
DRILLING/SAMPLING METHOD: Hand Auger	ELEVATION: Approx. 10 ft.

SAMPLE ID	DEPTH (feet) 0	USCS CLASS.	MATERIAL DESCRIPTION	Unfiltered OVA (ppm)	Filtered OVA (ppm)	Diff. OVA (ppm)
	1 2	SC	Clayey Sand, dark gray brown, organic, marl.	425.0	200.0	225.0
	3 4		Aborted @ 2 ft. due to concrete. Two more adjacent locations were also aborted @2 ft because of buried concrete.			
	5 6					
	7 8					
	9 10					
	11 12					
	13 14					
	15					

NOTES:

BORING LOG

PROJECT: **Limited site Assessment**
PROJECT NO: 1584.005.009
LOCATION: Purdom Power Plant
GEOLOGIST: G. H. New
DRILLER: N/A
DRILLING/SAMPLING METHOD: Hand Auger

BORING NUMBER: **PG-10SB-2**
DATE STARTED: 21-Nov-96
DATE COMPLETED: 21-Nov-96
TIME: 1215
GROUNDWATER DEPTH: Approx. 5 ft.
ELEVATION: Approx. 10 ft.

SAMPLE ID	DEPTH (feet) 0	USCS CLASS.	MATERIAL DESCRIPTION	Unfiltered OVA (ppm)	Filtered OVA (ppm)	Diff. OVA (ppm)
	1					
	2	SC	Clayey Sand, light gray.	0.0	N/A	N/A
	3					
	4	OL	Clay, gray.	0.0	N/A	N/A
	5	SC	Clayey Sand, wet, saturated.	N/A	N/A	N/A
	6					
	7					
	8					
	9					
	10					
	11					
	12					
	13					
	14					
	15					

NOTES:

PAGE 1 OF 1

ATTACHMENT B

LABORATORY ANALYTICAL DATA REPORT AND CHAIN OF CUSTODY

CITY OF TALLAHASSEE

CITY HALL
300 S. ADAMS ST.
TALLAHASSEE, FL
32301-1731
904/891-8100
TDD 1-800/955-8771

January 16, 1997

Mr. Greg New
Foster Wheeler
759 South Federal Highway
Suite 100
Stuart, Florida 34994-2936

Greg

As per our phone conversation, I am sending you the following information regarding analysis done on the Purdom Plant samples.

--Methylene chloride and chloroform are commonly found in VOC samples as a result of laboratory contamination.

--The toluene values found in the sample duplicates are valid. I don't know why there is a discrepancy in their values.

--The reported MDL for aroclors is 10 ppb using EPA 8270. Actually, the method allows us to see levels as low as 2 ppb.

Also enclosed is the bench sheet for the 8270/solids analysis. I've highlighted PAH hits that were below reportable levels, that might be of interest to you.

If you have any questions, please contact me at (904) 891-1200.

Sincerely,

Jeff Nielsen

jn/vf

Enclosures

Facsimile Cover Sheet

To: Greg New
Company: Foster Wheeler
Phone:
Fax: 561 781 3461

From: Jeff Nielsen
Company: Water Quality Division
City of Tallahassee
Phone: 904-891-1200
Fax: 904-891-1062

Date: 1/17/97
Pages including this cover page: 4

Comments:.

25Nov96-8270

EPA 8270/625

Date: 11/25/96
Analyst: A Randall

Samples:	lab blk	LFB	96-12591	96-12591 MS	96-12591 MSD	96-12592	96-12593	96-12594	96-12595
SURROGATES (%rec.)									
2-Fluorophenol	117%	105%	93%	77%	74%	108%	140%	139%	117%
d5-Phenol	115%	105%	97%	78%	88%	109%	144%	146%	120%
d5-Nitrobenzene	98%	102%	83%	77%	76%	98%	119%	109%	101%
2-Fluorobiphenyl	102%	106%	101%	89%	87%	105%	112%	114%	103%
2,4,6-Tribromophenol	107%	119%	114%	117%	105%	87%	118%	118%	99%
d14-Terphenyl	119%	116%	125%	120%	97%	88%	143%	137%	126%

COMPOUNDS	lab blk	LFB	96-12591	96-12591 MS	96-12591 MSD	96-12592	96-12593	96-12594	96-12595
Phenol	BDL	103%	BDL	86%	87%	BDL	BDL	BDL	BDL
2-Chlorophenol	BDL	100%	BDL	76%	74%	BDL	BDL	BDL	BDL
Bis(2-chloroethyl)ether	BDL		BDL			BDL	BDL	BDL	BDL
1,3-Dichlorobenzene	BDL		BDL			BDL	BDL	BDL	BDL
1,4-Dichlorobenzene	BDL	86%	BDL	55%	52%	BDL	BDL	BDL	BDL
1,2-Dichlorobenzene	BDL		BDL			BDL	BDL	BDL	BDL
Bis(2-chloroisopropyl)ether	BDL		BDL			BDL	BDL	BDL	BDL
N-Nitrosodi-n-propyl amine	BDL	97%	BDL	79%	72%	BDL	BDL	BDL	BDL
Hexachloroethane	BDL		BDL			BDL	BDL	BDL	BDL
Nitrobenzene	BDL		BDL			BDL	BDL	BDL	BDL
Isophorone	BDL		BDL			BDL	BDL	BDL	BDL
2-Nitrophenol	BDL		BDL			BDL	BDL	BDL	BDL
2,4-Dimethylphenol	BDL		BDL			BDL	BDL	BDL	BDL
Bis(2-chloroethoxy)methane	BDL		BDL			BDL	BDL	BDL	BDL
2,4-Dichlorophenol	BDL		BDL			BDL	BDL	BDL	BDL
1,2,4-Trichlorobenzene	BDL	96%	BDL	69%	68%	BDL	BDL	BDL	BDL
Naphthalene	BDL		BDL			BDL	BDL	BDL	BDL
Hexachlorobutadiene	BDL		BDL			BDL	BDL	BDL	BDL
4-Chloro-3-methylphenol	BDL	113%	BDL	100%	97%	BDL	BDL	BDL	BDL
Hexachlorocyclopentadiene	BDL		BDL			BDL	BDL	BDL	BDL
2,4,6-Trichlorophenol	BDL		BDL			BDL	BDL	BDL	BDL
2-Chloronaphthalene	BDL		BDL			BDL	BDL	BDL	BDL
Dimethylphthalate	BDL		BDL			BDL	BDL	BDL	BDL
Acenaphthylene	BDL		BDL			BDL	BDL	BDL	BDL
2,6-Dinitrotoluene	BDL		BDL			BDL	BDL	BDL	BDL
Acenaphthene	BDL	99%	BDL	81%	80%	BDL	BDL	BDL	BDL
2,4-Dinitrophenol	BDL		BDL			BDL	BDL	BDL	BDL
4-Nitrophenol	BDL	80%	BDL	68%	83%	BDL	BDL	BDL	BDL
2,4-Dinitrotoluene	BDL	92%	BDL	85%	82%	BDL	BDL	BDL	BDL
Fluorene	BDL		BDL			BDL	BDL	BDL	BDL
Diethylphthalate	BDL		BDL			BDL	BDL	BDL	BDL
4-Chlorophenyl phenyl ether	BDL		BDL			BDL	BDL	BDL	BDL
2-Methyl-4,6-dinitrophenol	BDL		BDL			BDL	BDL	BDL	BDL
N-Nitrosodiphenylamine	BDL		BDL			BDL	BDL	BDL	BDL
1,2-Diphenylhydrazine	BDL		BDL			BDL	BDL	BDL	BDL
4-Bromophenylphenylether	BDL		BDL			BDL	BDL	BDL	BDL
Hexachlorobenzene	BDL		BDL			BDL	BDL	BDL	BDL
Pentachlorophenol	BDL	94%	BDL	91%	89%	BDL	BDL	BDL	BDL
Phenanthrene	BDL		0.16			0.09	BDL	0.17	BDL
Anthracene	BDL		BDL			BDL	BDL	BDL	BDL
Di-n-Butylphthalate	BDL		BDL			BDL	BDL	BDL	BDL
Fluoranthene	BDL		0.14			0.21	0.51	0.22	BDL
Benzidine	BDL		BDL			BDL	BDL	BDL	BDL
Pyrene	BDL	117%	0.51	117%	89%	0.18	0.69	0.67	BDL
Bis(2-ethylhexyl)adipate	BDL		BDL			BDL	BDL	BDL	BDL
Butylbenzylphthalate	BDL		BDL			BDL	BDL	BDL	BDL
Benzo[a]anthracene	BDL		BDL			BDL	BDL	BDL	BDL
3,3'-Dichlorobenzidine	BDL		BDL			BDL	BDL	BDL	BDL
Chrysene	BDL		0.52			BDL	1.14	0.82	BDL
Bis(2-ethylhexyl)phthalate	BDL		0.48			BDL	BDL	0.30	BDL
Di-n-octylphthalate	BDL		BDL			BDL	BDL	BDL	BDL
Benzo[b]fluoranthene	BDL		BDL			BDL	BDL	BDL	BDL
Benzo[k]fluoranthene	BDL		0.18			0.18	0.50	0.37	BDL
Benzo[a]pyrene	BDL		0.34			0.13	0.90	0.62	BDL
Indeno(1,2,3-c,d)pyrene	BDL		BDL			BDL	0.66	0.66	BDL
Dibenzo[a,h]anthracene	BDL		BDL			BDL	BDL	BDL	BDL
Benzo[g,h,i]perylene	BDL		BDL			BDL	0.78	0.55	BDL
N-nitrosodimethlamine	BDL		BDL			BDL	BDL	BDL	BDL

City of Tallahassee WQL PAH Data (mg/Kg dry wt.)

	PG-05530-1 96-12591	PG-07513-1 96-12592	PG-09513-1 96-12593	PG-05513-1 96-12594
Phenanthrene	0.164	0.086	0.514	0.168
Fluoranthene	0.136	0.211	0.690	0.219
Pyrene	0.505	0.181		0.872
Chrysene	0.520		1.140	0.817
Benzo(k)fluoranthene	0.475	0.178	0.504	0.297
Benzo(a)pyrene	0.177	0.126	0.900	0.370
Indeno(123-cd)pyrene	0.335		0.660	0.520
Benzo(ghi)perylene	0.402		0.780	0.554

0.9
BAP
0.5

27Nov96-8270

EPA 8270/625

Date: 11/27/96 and 12/06/9

Analyst: A Randall

Samples:	lab blk	96-12565	96-12565 MS	96-12565 MSD	96-12596 PG-01SDE-1	96-12597 PG-01TWE-1	96-12598 12/06/9 PG-02TW-1	96-12599 12/06/9 PG-06TW-1	96-12600 12/06/9 PG-06TWD-1	96-12601 12/06/9 PG-07TW-1	96-12602 12/06/96 PG-09TW-1
SURROGATES (%rec.)											
2-Fluorophenol	28%	34%	30%	31%	29%	26%	22%	32%	32%	35%	32%
d5-Phenol	17%	21%	20%	19%	16%	14%	9%	17%	17%	21%	16%
d5-Nitrobenzene	133%	133%	135%	140%	131%	65%	96%	118%	117%	62%	61%
2-Fluorobiphenyl	136%	137%	131%	144%	137%	66%	125%	134%	127%	61%	66%
2,4,6-Tribromophenol	130%	117%	135%	131%	136%	128%	94%	116%	117%	118%	87%
d14-Terphenyl	136%	135%	146%	148%	144%	60%	117%	112%	117%	52%	52%
COMPOUNDS											
Phenol	BDL	BDL	20%	19%	BDL	BDL	BDL	BDL	BDL	BDL	BDL
2-Chlorophenol	BDL	BDL	92%	90%	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Bis(2-chloroethyl)ether	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,3-Dichlorobenzene	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,4-Dichlorobenzene	BDL	BDL	106%	112%	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2-Dichlorobenzene	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
Bis(2-chloroisopropyl)ether	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
N-Nitrosodi-n-propyl amine	BDL	BDL	118%	116%	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Hexachloroethane	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
Nitrobenzene	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
Isophorone	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
2-Nitrophenol	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
2,4-Dimethylphenol	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
Bis(2-chloroethoxy)methane	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
2,4-Dichlorophenol	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2,4-Trichlorobenzene	BDL	BDL	118%	123%	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Naphthalene	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
Hexachlorobutadiene	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
4-Chloro-3-methylphenol	BDL	BDL	114%	108%	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Hexachlorocyclopentadiene	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
2,4,6-Trichlorophenol	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
2-Chloronaphthalene	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
Dimethylphthalate	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
Acenaphthylene	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
2,6-Dinitrotoluene	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
Acenaphthene	BDL	BDL	114%	121%	BDL	BDL	BDL	BDL	BDL	BDL	BDL
2,4-Dinitrophenol	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
4-Nitrophenol	BDL	BDL	6%	1%	BDL	BDL	BDL	BDL	BDL	BDL	BDL
2,4-Dinitrotoluene	BDL	BDL	115%	109%	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Fluorene	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
Diethylphthalate	BDL	BDL			BDL	BDL	6.77	BDL	BDL	BDL	BDL
4-Chlorophenyl phenyl ether	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
2-Methyl-4,6-dinitrophenol	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
N-Nitrosodiphenylamine	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2-Diphenylhydrazine	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
4-Bromophenylphenylether	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
Hexachlorobenzene	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
Pentachlorophenol	BDL	BDL	37%	32%	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Phenanthrene	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
Anthracene	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
Di-n-Butylphthalate	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
Fluoranthene	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
Benzidine	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
Pyrene	BDL	BDL	138%	137%	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Bis(2-ethylhexyl)adipate	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
Butylbenzylphthalate	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
Benzo[a]anthracene	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
3,3'-Dichlorobenzidine	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
Chrysene	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
Bis(2-ethylhexyl)phthalate	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
Di-n-octylphthalate	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
Benzo[b]fluoranthene	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
Benzo[k]fluoranthene	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
Benzo[a]pyrene	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
Indeno(1,2,3-c,d)pyrene	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
Dibenzo[a,h]anthracene	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
Benzo[g,h,i]perylene	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL
N-nitrosodimethlamine	BDL	BDL			BDL	BDL	BDL	BDL	BDL	BDL	BDL

27Nov96-8270

@CP8270

EPA 8270/625

Date: 11/27/96
Analyst: A Randall

Samples:	Lab Blk	96-12565	96-12565 MS	96-12565 MSD
SURROGATES (%rec.)				
2-Fluorophenol	28%	34%	30%	31%
d5-Phenol	17%	21%	20%	19%
d5-Nitrobenzene	133%	133%	135%	140%
2-Fluorobiphenyl	136%	137%	131%	144%
2,4,6-Tribromophenol	130%	117%	135%	131%
d14-Terphenyl	136%	135%	146%	148%
COMPOUNDS				
Aldrin	BDL	BDL	101%	101%
Alpha-BHC	BDL	BDL		
Beta-BHC	BDL	BDL		
Delta-BHC	BDL	BDL		
Gamma-BHC	BDL	BDL	102%	100%
Chlordane	BDL	BDL		
Dieldrin	BDL	BDL	158%	154%
4,4'-DDD	BDL	BDL		
4,4'-DDE	BDL	BDL		
4,4'-DDT	BDL	BDL	120%	106%
Endosulfan I	BDL	BDL		
Endosulfan II	BDL	BDL		
Endosulfan sulfate	BDL	BDL		
Endrin	BDL	BDL	117%	111%
Endrin Aldehyde	BDL	BDL		
Heptachlor	BDL	BDL	103%	101%
Heptachlor Epoxide	BDL	BDL		
Methoxychlor	BDL	BDL		
Toxaphene	BDL	BDL		
Aroclor 1016	BDL	BDL		
Aroclor 1221	BDL	BDL		
Aroclor 1232	BDL	BDL		
Aroclor 1242	BDL	BDL		
Aroclor 1248	BDL	BDL		
Aroclor 1254	BDL	BDL		
Aroclor 1260	BDL	BDL		

also scanned for

Ethyl Parathion	BDL	BDL
Methyl Parathion	BDL	BDL
Azinophos Methyl	BDL	BDL
Malathion	BDL	BDL
Demeton	BDL	BDL
Dioxin	BDL	BDL

CITY OF TALLAHASSEE

CITY HALL
300 S. ADAMS ST.
TALLAHASSEE, FL
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904/891-8100
TDD 1-800/955-8771

RON WEAVER
Mayor
SCOTT MADDOX
Mayor Pro Tem

JOHN PAUL BAILEY
Commissioner
DEBBIE LIGHTSEY
Commissioner
STEVE MEISBURG
Commissioner

STEVEN C. BURKETT
City Manager
ROBERT B. INZER
City Treasurer-Clerk

JAMES R. ENGLISH
City Attorney
RICARDO FERNANDEZ
City Auditor

Greg New
Foster Wheeler Env.
759 S. Federal Hwy, Suite 100
Stuart, Fl. 34994

Dec. 19, 1996

Greg,

I talked with Jeff about sending the quality assurance data for volatile and semi-volatiles. There will be no problems in getting the information to you for your report. Jeff will send you that information sometime next week.

The aroclor data is attached. If you have any questions Jeff will be able to help.

Sincerely

Jamie J. Shakar
City of Tallahassee
water Quality Division
3805 Springhill Rd.
Tallahassee , Fl. 32310
(904) 891-1200
(904) 891-1062 fax

cc: William G. Leseman
Jeff Nielsen

Water Quality Division
3805 Springhill Rd.
Tallahassee, Fl. 32310-6502
(904) 891-1200
CITY OF TALLAHASSEE Cert. #51097 & E51259

Laboratory Report

Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee, FL 32302
ATTN: GREG NEW

Sample # 96-12591 Sample ID PG-05SBD-1 FOSTER WHEELER Project FOSTER WHEEL
Sample Type Soils/ Sol Sampled 22-nov-1996 Received 23-nov-1996 Reported 19-dec-1996

Base/Neutral Method (EPA 8270)

Parameter	Units	Result	Conc.	Dilution	Det.Limit	Prepared	By	Analyzed	By
Aldrin	mg/kg	BDL			0.0600	25-nov-1996	joe	27-nov-1996	andy
a-BHC	mg/kg	BDL			0.0400	25-nov-1996	joe	27-nov-1996	andy
b-BHC	mg/kg	BDL			0.0700	25-nov-1996	joe	27-nov-1996	andy
d-BHC	mg/kg	BDL			0.0300	25-nov-1996	joe	27-nov-1996	andy
g-BHC	mg/kg	BDL			0.0100	25-nov-1996	joe	27-nov-1996	andy
Chlordane	mg/kg	BDL			0.130	25-nov-1996	joe	27-nov-1996	andy
Dieldrin	mg/kg	BDL			0.0500	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDD	mg/kg	BDL			0.0700	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDE	mg/kg	BDL			0.0700	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDT	mg/kg	BDL			0.0800	25-nov-1996	joe	27-nov-1996	andy
Endosulfan I	mg/kg	BDL			0.0900	25-nov-1996	joe	27-nov-1996	andy
Endosulfan II	mg/kg	BDL			0.0900	25-nov-1996	joe	27-nov-1996	andy
Endosulfan sulfate	mg/kg	BDL			0.0200	25-nov-1996	joe	27-nov-1996	andy
Endrin	mg/kg	BDL			0.00400	25-nov-1996	joe	27-nov-1996	andy
Endrin Aldehyde	mg/kg	BDL			0.0200	25-nov-1996	joe	27-nov-1996	andy
Heptachlor	mg/kg	BDL			0.0300	25-nov-1996	joe	27-nov-1996	andy
Heptachlor Epoxide	mg/kg	BDL			0.0300	25-nov-1996	joe	27-nov-1996	andy
Methoxychlor	mg/kg	BDL			0.00600	25-nov-1996	joe	27-nov-1996	andy
Toxaphene	mg/kg	BDL			0.180	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1016	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1221	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1232	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1242	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1248	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1254	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1260	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy

Report #: 16052

Water Quality Division
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Laboratory Report

Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee, FL 32302
ATTN: GREG NEW

Sample # 96-12592 Sample ID PG-07SB-1 FOSTER WHEELER Project FOSTER WHEEL
Sample Type Soils/ Sol Sampled 22-nov-1996 Received 23-nov-1996 Reported 19-dec-1996

Base/Neutral Method (EPA 8270)

Parameter	Units	Result	Conc.	Dilution	Det.Limit	Prepared	By	Analyzed	By
Aldrin	mg/kg	BDL			0.0600	25-nov-1996	joe	27-nov-1996	andy
a-BHC	mg/kg	BDL			0.0400	25-nov-1996	joe	27-nov-1996	andy
b-BHC	mg/kg	BDL			0.0700	25-nov-1996	joe	27-nov-1996	andy
d-BHC	mg/kg	BDL			0.0300	25-nov-1996	joe	27-nov-1996	andy
g-BHC	mg/kg	BDL			0.0100	25-nov-1996	joe	27-nov-1996	andy
Chlordane	mg/kg	BDL			0.130	25-nov-1996	joe	27-nov-1996	andy
Dieldrin	mg/kg	BDL			0.0500	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDD	mg/kg	BDL			0.0700	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDE	mg/kg	BDL			0.0700	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDT	mg/kg	BDL			0.0800	25-nov-1996	joe	27-nov-1996	andy
Endosulfan I	mg/kg	BDL			0.0900	25-nov-1996	joe	27-nov-1996	andy
Endosulfan II	mg/kg	BDL			0.0900	25-nov-1996	joe	27-nov-1996	andy
Endosulfan sulfate	mg/kg	BDL			0.0200	25-nov-1996	joe	27-nov-1996	andy
Endrin	mg/kg	BDL			0.00400	25-nov-1996	joe	27-nov-1996	andy
Endrin Aldehyde	mg/kg	BDL			0.0200	25-nov-1996	joe	27-nov-1996	andy
Heptachlor	mg/kg	BDL			0.0300	25-nov-1996	joe	27-nov-1996	andy
Heptachlor Epoxide	mg/kg	BDL			0.0300	25-nov-1996	joe	27-nov-1996	andy
Methoxychlor	mg/kg	BDL			0.00600	25-nov-1996	joe	27-nov-1996	andy
Toxaphene	mg/kg	BDL			0.180	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1016	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1221	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1232	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1242	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1248	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1254	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1260	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy

Report #: 16052

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Laboratory Report

Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee, FL 32302
ATTN: GREG NEW

Sample # 96-12593 Sample ID PG-09SB-1 FOSTER WHEELER Project FOSTER WHEEL
Sample Type Soils/ Sol Sampled 22-nov-1996 Received 23-nov-1996 Reported 19-dec-1996

Base/Neutral Method (EPA 8270)

Parameter	Units	Result	Conc.	Dilution	Det.Limit	Prepared	By	Analyzed	By
Aldrin	mg/kg	BDL			0.0600	25-nov-1996	joe	27-nov-1996	andy
a-BHC	mg/kg	BDL			0.0400	25-nov-1996	joe	27-nov-1996	andy
b-BHC	mg/kg	BDL			0.0700	25-nov-1996	joe	27-nov-1996	andy
d-BHC	mg/kg	BDL			0.0300	25-nov-1996	joe	27-nov-1996	andy
g-BHC	mg/kg	BDL			0.0100	25-nov-1996	joe	27-nov-1996	andy
Chlordane	mg/kg	BDL			0.130	25-nov-1996	joe	27-nov-1996	andy
Dieldrin	mg/kg	BDL			0.0500	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDD	mg/kg	BDL			0.0700	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDE	mg/kg	BDL			0.0700	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDT	mg/kg	BDL			0.0800	25-nov-1996	joe	27-nov-1996	andy
Endosulfan I	mg/kg	BDL			0.0900	25-nov-1996	joe	27-nov-1996	andy
Endosulfan II	mg/kg	BDL			0.0900	25-nov-1996	joe	27-nov-1996	andy
Endosulfan sulfate	mg/kg	BDL			0.0200	25-nov-1996	joe	27-nov-1996	andy
Endrin	mg/kg	BDL			0.00400	25-nov-1996	joe	27-nov-1996	andy
Endrin Aldehyde	mg/kg	BDL			0.0200	25-nov-1996	joe	27-nov-1996	andy
Heptachlor	mg/kg	BDL			0.0300	25-nov-1996	joe	27-nov-1996	andy
Heptachlor Epoxide	mg/kg	BDL			0.0300	25-nov-1996	joe	27-nov-1996	andy
Methoxychlor	mg/kg	BDL			0.00600	25-nov-1996	joe	27-nov-1996	andy
Toxaphene	mg/kg	BDL			0.180	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1016	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1221	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1232	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1242	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1248	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1254	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1260	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy

Report #: 16052

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Laboratory Report

Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee, FL 32302
ATTN: GREG NEW

Sample # 96-12594 Sample ID PG-05SB-1 FOSTER WHEELER Project FOSTER WHEEL
Sample Type Soils/ Sol Sampled 22-nov-1996 Received 23-nov-1996 Reported 19-dec-1996

Base/Neutral Method (EPA 8270)

Parameter	Units	Result	Conc.	Dilution	Det.Limit	Prepared	By	Analyzed	By
Aldrin	mg/kg	BDL			0.0600	25-nov-1996	joe	27-nov-1996	andy
a-BHC	mg/kg	BDL			0.0400	25-nov-1996	joe	27-nov-1996	andy
b-BHC	mg/kg	BDL			0.0700	25-nov-1996	joe	27-nov-1996	andy
d-BHC	mg/kg	BDL			0.0300	25-nov-1996	joe	27-nov-1996	andy
g-BHC	mg/kg	BDL			0.0100	25-nov-1996	joe	27-nov-1996	andy
Chlordane	mg/kg	BDL			0.130	25-nov-1996	joe	27-nov-1996	andy
Dieldrin	mg/kg	BDL			0.0500	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDD	mg/kg	BDL			0.0700	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDE	mg/kg	BDL			0.0700	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDT	mg/kg	BDL			0.0800	25-nov-1996	joe	27-nov-1996	andy
Endosulfan I	mg/kg	BDL			0.0900	25-nov-1996	joe	27-nov-1996	andy
Endosulfan II	mg/kg	BDL			0.0900	25-nov-1996	joe	27-nov-1996	andy
Endosulfan sulfate	mg/kg	BDL			0.0200	25-nov-1996	joe	27-nov-1996	andy
Endrin	mg/kg	BDL			0.00400	25-nov-1996	joe	27-nov-1996	andy
Endrin Aldehyde	mg/kg	BDL			0.0200	25-nov-1996	joe	27-nov-1996	andy
Heptachlor	mg/kg	BDL			0.0300	25-nov-1996	joe	27-nov-1996	andy
Heptachlor Epoxide	mg/kg	BDL			0.0300	25-nov-1996	joe	27-nov-1996	andy
Methoxychlor	mg/kg	BDL			0.00600	25-nov-1996	joe	27-nov-1996	andy
Toxaphene	mg/kg	BDL			0.180	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1016	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1221	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1232	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1242	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1248	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1254	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1260	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy

Report #: 16052

Water Quality Division
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Laboratory Report

Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee, FL 32302
ATTN: GREG NEW

Sample # 96-12595 Sample ID PG-06SB-1 FOSTER WHEELER Project FOSTER WHEEL
Sample Type Soils/ Sol Sampled 22-nov-1996 Received 23-nov-1996 Reported 20-dec-1996

Base/Neutral Method (EPA 8270)

Parameter	Units	Result	Conc.	Dilution	Det.Limit	Prepared	By	Analyzed	By
Aldrin	mg/kg	BDL			0.0600	25-nov-1996	joe	27-nov-1996	andy
a-BHC	mg/kg	BDL			0.0400	25-nov-1996	joe	27-nov-1996	andy
b-BHC	mg/kg	BDL			0.0700	25-nov-1996	joe	27-nov-1996	andy
d-BHC	mg/kg	BDL			0.0300	25-nov-1996	joe	27-nov-1996	andy
g-BHC	mg/kg	BDL			0.0100	25-nov-1996	joe	27-nov-1996	andy
Chlordane	mg/kg	BDL			0.130	25-nov-1996	joe	27-nov-1996	andy
Dieldrin	mg/kg	BDL			0.0500	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDD	mg/kg	BDL			0.0700	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDE	mg/kg	BDL			0.0700	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDT	mg/kg	BDL			0.0800	25-nov-1996	joe	27-nov-1996	andy
Endosulfan I	mg/kg	BDL			0.0900	25-nov-1996	joe	27-nov-1996	andy
Endosulfan II	mg/kg	BDL			0.0900	25-nov-1996	joe	27-nov-1996	andy
Endosulfan sulfate	mg/kg	BDL			0.0200	25-nov-1996	joe	27-nov-1996	andy
Endrin	mg/kg	BDL			0.00400	25-nov-1996	joe	27-nov-1996	andy
Endrin Aldehyde	mg/kg	BDL			0.0200	25-nov-1996	joe	27-nov-1996	andy
Heptachlor	mg/kg	BDL			0.0300	25-nov-1996	joe	27-nov-1996	andy
Heptachlor Epoxide	mg/kg	BDL			0.0300	25-nov-1996	joe	27-nov-1996	andy
Methoxychlor	mg/kg	BDL			0.00600	25-nov-1996	joe	27-nov-1996	andy
Toxaphene	mg/kg	BDL			0.180	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1016	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1221	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1232	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1242	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1248	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1254	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1260	mg/kg	BDL			0.340	25-nov-1996	joe	27-nov-1996	andy

Report #: 16052

Water Quality Division
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Laboratory Report

Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee, FL 32302
ATTN: GREG NEW

Sample # 96-12596 Sample ID PG-01SBE-1 FOSTER WHEELER Project FOSTER WHEEL
Sample Type Water Sampled 22-nov-1996 Received 23-nov-1996 Reported 19-dec-1996

Chorinated Pests by GC/MS (EPA 8270/625)

Parameter	Units	Result	Conc.	Dilution	Det.Limit	Prepared	By	Analyzed	By
Aldrin	ug/L	BDL			4.00	25-nov-1996	joe	27-nov-1996	andy
A-BHC	ug/L	BDL			4.00	25-nov-1996	joe	27-nov-1996	andy
B-BHC	ug/L	BDL			4.30	25-nov-1996	joe	27-nov-1996	andy
D-BHC	ug/L	BDL			3.10	25-nov-1996	joe	27-nov-1996	andy
G-BHC(lindane)	ug/L	BDL			4.00	25-nov-1996	joe	27-nov-1996	andy
Chlordane	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Dieldrin	ug/L	BDL			2.50	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDD	ug/L	BDL			2.80	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDE	ug/L	BDL			5.60	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDT	ug/L	BDL			2.80	25-nov-1996	joe	27-nov-1996	andy
Endosulfan I	ug/L	BDL			5.00	25-nov-1996	joe	27-nov-1996	andy
Endosulfan II	ug/L	BDL			5.00	25-nov-1996	joe	27-nov-1996	andy
Endosulfan Sulfate	ug/L	BDL			5.60	25-nov-1996	joe	27-nov-1996	andy
Endrin	ug/L	BDL			5.00	25-nov-1996	joe	27-nov-1996	andy
Endrin Aldehyde	ug/L	BDL			5.00	25-nov-1996	joe	27-nov-1996	andy
Heptachlor	ug/L	BDL			1.90	25-nov-1996	joe	27-nov-1996	andy
Heptachlor epoxide	ug/L	BDL			2.20	25-nov-1996	joe	27-nov-1996	andy
Methoxychlor	ug/L	BDL			5.00	25-nov-1996	joe	27-nov-1996	andy
Toxaphene	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1016	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1221	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1232	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1242	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1248	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1254	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1260	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy

Report #: 16052

Water Quality Division
3805 Springhill Rd.
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(904) 891-1200
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Laboratory Report

Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee, FL 32302
ATTN: GREG NEW

Sample # 96-12597 Sample ID PG-01TWE-1 FOSTER WHEELER Project FOSTER WHEEL
Sample Type Water Sampled 22-nov-1996 Received 23-nov-1996 Reported 19-dec-1996

Chorinated Pests by GC/MS (EPA 8270/625)

Parameter	Units	Result	Conc.	Dilution	Det.Limit	Prepared	By	Analyzed	By
Aldrin	ug/L	BDL			4.00	25-nov-1996	joe	27-nov-1996	andy
A-BHC	ug/L	BDL			4.00	25-nov-1996	joe	27-nov-1996	andy
B-BHC	ug/L	BDL			4.30	25-nov-1996	joe	27-nov-1996	andy
D-BHC	ug/L	BDL			3.10	25-nov-1996	joe	27-nov-1996	andy
G-BHC(lindane)	ug/L	BDL			4.00	25-nov-1996	joe	27-nov-1996	andy
Chlordane	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Dieldrin	ug/L	BDL			2.50	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDD	ug/L	BDL			2.80	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDE	ug/L	BDL			5.60	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDT	ug/L	BDL			2.80	25-nov-1996	joe	27-nov-1996	andy
Endosulfan I	ug/L	BDL			5.00	25-nov-1996	joe	27-nov-1996	andy
Endosulfan II	ug/L	BDL			5.00	25-nov-1996	joe	27-nov-1996	andy
Endosulfan Sulfate	ug/L	BDL			5.60	25-nov-1996	joe	27-nov-1996	andy
Endrin	ug/L	BDL			5.00	25-nov-1996	joe	27-nov-1996	andy
Endrin Aldehyde	ug/L	BDL			5.00	25-nov-1996	joe	27-nov-1996	andy
Heptachlor	ug/L	BDL			1.90	25-nov-1996	joe	27-nov-1996	andy
Heptachlor epoxide	ug/L	BDL			2.20	25-nov-1996	joe	27-nov-1996	andy
Methoxychlor	ug/L	BDL			5.00	25-nov-1996	joe	27-nov-1996	andy
Toxaphene	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1016	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1221	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1232	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1242	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1248	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1254	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1260	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy

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Cert. #51097 & E51259

Laboratory Report

Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee, FL 32302
ATTN: GREG NEW

Sample # 96-12598 Sample ID PG-02TW-1 FOSTER WHEELER Project FOSTER WHEEL
Sample Type Water Sampled 22-nov-1996 Received 23-nov-1996 Reported 19-dec-1996

Chorinated Pests by GC/MS (EPA 8270/625)

Parameter	Units	Result	Conc.	Dilution	Det.Limit	Prepared	By	Analyzed	By
Aldrin	ug/L	BDL			4.00	25-nov-1996	joe	27-nov-1996	andy
A-BHC	ug/L	BDL			4.00	25-nov-1996	joe	27-nov-1996	andy
B-BHC	ug/L	BDL			4.30	25-nov-1996	joe	27-nov-1996	andy
D-BHC	ug/L	BDL			3.10	25-nov-1996	joe	27-nov-1996	andy
G-BHC(lindane)	ug/L	BDL			4.00	25-nov-1996	joe	27-nov-1996	andy
Chlordane	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Dieldrin	ug/L	BDL			2.50	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDD	ug/L	BDL			2.80	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDE	ug/L	BDL			5.60	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDT	ug/L	BDL			2.80	25-nov-1996	joe	27-nov-1996	andy
Endosulfan I	ug/L	BDL			5.00	25-nov-1996	joe	27-nov-1996	andy
Endosulfan II	ug/L	BDL			5.00	25-nov-1996	joe	27-nov-1996	andy
Endosulfan Sulfate	ug/L	BDL			5.60	25-nov-1996	joe	27-nov-1996	andy
Endrin	ug/L	BDL			5.00	25-nov-1996	joe	27-nov-1996	andy
Endrin Aldehyde	ug/L	BDL			5.00	25-nov-1996	joe	27-nov-1996	andy
Heptachlor	ug/L	BDL			1.90	25-nov-1996	joe	27-nov-1996	andy
Heptachlor epoxide	ug/L	BDL			2.20	25-nov-1996	joe	27-nov-1996	andy
Methoxychlor	ug/L	BDL			5.00	25-nov-1996	joe	27-nov-1996	andy
Toxaphene	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1016	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1221	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1232	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1242	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1248	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1254	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1260	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy

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Laboratory Report

Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee, FL 32302
ATTN: GREG NEW

Sample # 96-12599 Sample ID PG-06TW-1 FOSTER WHEELER Project FOSTER WHEEL
Sample Type Water Sampled 22-nov-1996 Received 23-nov-1996 Reported 19-dec-1996

Chorinated Pests by GC/MS (EPA 8270/625)

Parameter	Units	Result	Conc.	Dilution	Det.Limit	Prepared	By	Analyzed	By
Aldrin	ug/L	BDL			4.00	25-nov-1996	joe	27-nov-1996	andy
A-BHC	ug/L	BDL			4.00	25-nov-1996	joe	27-nov-1996	andy
B-BHC	ug/L	BDL			4.30	25-nov-1996	joe	27-nov-1996	andy
D-BHC	ug/L	BDL			3.10	25-nov-1996	joe	27-nov-1996	andy
G-BHC(lindane)	ug/L	BDL			4.00	25-nov-1996	joe	27-nov-1996	andy
Chlordane	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Dieldrin	ug/L	BDL			2.50	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDD	ug/L	BDL			2.80	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDE	ug/L	BDL			5.60	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDT	ug/L	BDL			2.80	25-nov-1996	joe	27-nov-1996	andy
Endosulfan I	ug/L	BDL			5.00	25-nov-1996	joe	27-nov-1996	andy
Endosulfan II	ug/L	BDL			5.00	25-nov-1996	joe	27-nov-1996	andy
Endosulfan Sulfate	ug/L	BDL			5.60	25-nov-1996	joe	27-nov-1996	andy
Endrin	ug/L	BDL			5.00	25-nov-1996	joe	27-nov-1996	andy
Endrin Aldehyde	ug/L	BDL			5.00	25-nov-1996	joe	27-nov-1996	andy
Heptachlor	ug/L	BDL			1.90	25-nov-1996	joe	27-nov-1996	andy
Heptachlor epoxide	ug/L	BDL			2.20	25-nov-1996	joe	27-nov-1996	andy
Methoxychlor	ug/L	BDL			5.00	25-nov-1996	joe	27-nov-1996	andy
Toxaphene	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1016	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1221	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1232	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1242	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1248	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1254	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1260	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy

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Laboratory Report

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Electric Department
City of Tallahassee

Tallahassee, FL 32302
ATTN: GREG NEW

Sample # 96-12600 Sample ID PG-06TWD-1 FOSTER WHEELER Project FOSTER WHEEL
Sample Type Water Sampled 22-nov-1996 Received 23-nov-1996 Reported 19-dec-1996

Chorinated Pests by GC/MS (EPA 8270/625)

Parameter	Units	Result	Conc.	Dilution	Det.Limit	Prepared	By	Analyzed	By
Aldrin	ug/L	BDL			4.00	25-nov-1996	joe	27-nov-1996	andy
A-BHC	ug/L	BDL			4.00	25-nov-1996	joe	27-nov-1996	andy
B-BHC	ug/L	BDL			4.30	25-nov-1996	joe	27-nov-1996	andy
D-BHC	ug/L	BDL			3.10	25-nov-1996	joe	27-nov-1996	andy
G-BHC(Lindane)	ug/L	BDL			4.00	25-nov-1996	joe	27-nov-1996	andy
Chlordane	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Dieldrin	ug/L	BDL			2.50	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDD	ug/L	BDL			2.80	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDE	ug/L	BDL			5.60	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDT	ug/L	BDL			2.80	25-nov-1996	joe	27-nov-1996	andy
Endosulfan I	ug/L	BDL			5.00	25-nov-1996	joe	27-nov-1996	andy
Endosulfan II	ug/L	BDL			5.00	25-nov-1996	joe	27-nov-1996	andy
Endosulfan Sulfate	ug/L	BDL			5.60	25-nov-1996	joe	27-nov-1996	andy
Endrin	ug/L	BDL			5.00	25-nov-1996	joe	27-nov-1996	andy
Endrin Aldehyde	ug/L	BDL			5.00	25-nov-1996	joe	27-nov-1996	andy
Heptachlor	ug/L	BDL			1.90	25-nov-1996	joe	27-nov-1996	andy
Heptachlor epoxide	ug/L	BDL			2.20	25-nov-1996	joe	27-nov-1996	andy
Methoxychlor	ug/L	BDL			5.00	25-nov-1996	joe	27-nov-1996	andy
Toxaphene	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1016	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1221	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1232	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1242	ug/L	BDL			10.0	25-nov-1996	joc	27-nov-1996	andy
Aroclor 1248	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1254	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1260	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy

Report #: 16052

Water Quality Division
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Laboratory Report

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Electric Department
City of Tallahassee

Tallahassee, FL 32302
ATTN: GREG NEW

Sample # 96-12601 Sample ID PG-07TW-1 FOSTER WHEELER Project FOSTER WHEEL
Sample Type Water Sampled 22-nov-1996 Received 23-nov-1996 Reported 19-dec-1996

Chorinated Pests by GC/MS (EPA 8270/625)

Parameter	Units	Result	Conc.	Dilution	Det.Limit	Prepared	By	Analyzed	By
Aldrin	ug/L	BDL			4.00	25-nov-1996	joe	19-dec-1996	andy
A-BHC	ug/L	BDL			4.00	25-nov-1996	joe	19-dec-1996	andy
B-BHC	ug/L	BDL			4.30	25-nov-1996	joe	19-dec-1996	andy
D-BHC	ug/L	BDL			3.10	25-nov-1996	joe	19-dec-1996	andy
G-BHC(lindane)	ug/L	BDL			4.00	25-nov-1996	joe	19-dec-1996	andy
Chlordane	ug/L	BDL			10.0	25-nov-1996	joe	19-dec-1996	andy
Dieldrin	ug/L	BDL			2.50	25-nov-1996	joe	19-dec-1996	andy
4,4'-DDD	ug/L	BDL			2.80	25-nov-1996	joe	19-dec-1996	andy
4,4'-DDE	ug/L	BDL			5.60	25-nov-1996	joe	19-dec-1996	andy
4,4'-DDT	ug/L	BDL			2.80	25-nov-1996	joe	19-dec-1996	andy
Endosulfan I	ug/L	BDL			5.00	25-nov-1996	joe	19-dec-1996	andy
Endosulfan II	ug/L	BDL			5.00	25-nov-1996	joe	19-dec-1996	andy
Endosulfan Sulfate	ug/L	BDL			5.60	25-nov-1996	joe	19-dec-1996	andy
Endrin	ug/L	BDL			5.00	25-nov-1996	joe	19-dec-1996	andy
Endrin Aldehyde	ug/L	BDL			5.00	25-nov-1996	joe	19-dec-1996	andy
Heptachlor	ug/L	BDL			1.90	25-nov-1996	joe	19-dec-1996	andy
Heptachlor epoxide	ug/L	BDL			2.20	25-nov-1996	joe	19-dec-1996	andy
Methoxychlor	ug/L	BDL			5.00	25-nov-1996	joe	19-dec-1996	andy
Toxaphene	ug/L	BDL			10.0	25-nov-1996	joe	19-dec-1996	andy
Aroclor 1016	ug/L	BDL			10.0	25-nov-1996	joe	19-dec-1996	andy
Aroclor 1221	ug/L	BDL			10.0	25-nov-1996	joe	19-dec-1996	andy
Aroclor 1232	ug/L	BDL			10.0	25-nov-1996	joe	19-dec-1996	andy
Aroclor 1242	ug/L	BDL			10.0	25-nov-1996	joe	19-dec-1996	andy
Aroclor 1248	ug/L	BDL			10.0	25-nov-1996	joe	19-dec-1996	andy
Aroclor 1254	ug/L	BDL			10.0	25-nov-1996	joe	19-dec-1996	andy
Aroclor 1260	ug/L	BDL			10.0	25-nov-1996	joe	19-dec-1996	andy

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Water Quality Division
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Laboratory Report

Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee, FL 32302
ATTN: GREG NEW

Sample # 96-12602 Sample ID PG-09TW-1 FOSTER WHEELER Project FOSTER WHEEL
Sample Type Water Sampled 22-nov-1996 Received 23-nov-1996 Reported 19-dec-1996

Chorinated Pests by GC/MS (EPA 8270/625)

Parameter	Units	Result	Conc.	Dilution	Det.Limit	Prepared	By	Analyzed	By
Aldrin	ug/L	BDL			4.00	25-nov-1996	joe	27-nov-1996	andy
A-BHC	ug/L	BDL			4.00	25-nov-1996	joe	27-nov-1996	andy
B-BHC	ug/L	BDL			4.30	25-nov-1996	joe	27-nov-1996	andy
D-BHC	ug/L	BDL			3.10	25-nov-1996	joe	27-nov-1996	andy
G-BHC(lindane)	ug/L	BDL			4.00	25-nov-1996	joe	27-nov-1996	andy
Chlordane	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Dieldrin	ug/L	BDL			2.50	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDD	ug/L	BDL			2.80	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDE	ug/L	BDL			5.60	25-nov-1996	joe	27-nov-1996	andy
4,4'-DDT	ug/L	BDL			2.80	25-nov-1996	joe	27-nov-1996	andy
Endosulfan I	ug/L	BDL			5.00	25-nov-1996	joe	27-nov-1996	andy
Endosulfan II	ug/L	BDL			5.00	25-nov-1996	joe	27-nov-1996	andy
Endosulfan Sulfate	ug/L	BDL			5.60	25-nov-1996	joe	27-nov-1996	andy
Endrin	ug/L	BDL			5.00	25-nov-1996	joe	27-nov-1996	andy
Endrin Aldehyde	ug/L	BDL			5.00	25-nov-1996	joe	27-nov-1996	andy
Heptachlor	ug/L	BDL			1.90	25-nov-1996	joe	27-nov-1996	andy
Heptachlor epoxide	ug/L	BDL			2.20	25-nov-1996	joe	27-nov-1996	andy
Methoxychlor	ug/L	BDL			5.00	25-nov-1996	joe	27-nov-1996	andy
Toxaphene	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1016	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1221	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1232	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1242	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1248	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1254	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy
Aroclor 1260	ug/L	BDL			10.0	25-nov-1996	joe	27-nov-1996	andy

Report #: 16052

Greg New
Foster Wheeler Env.
759 S. Federal Hwy, Suite 100
Stuart, Fl. 34994

Dec. 13, 1996

Greg,

Per our discussion, I have included the results for the samples collected at the Purdom site. After review let me know if you have any questions or would like further analysis done.

Sincerely

Jamie J. Shakar
City of Tallahassee
Water Quality Division
3805 Springhill Rd.
Tallahassee, Fl. 32310
(904) 891-1200
(904) 891-1062 fax

sample#	sample_id	matrix_c
96-12591	PG-05SBD-1 FOSTER WHEELER	SOLIDS
96-12592	PG-07SB-1 FOSTER WHEELER	SOLIDS
96-12593	PG-09SB-1 FOSTER WHEELER	SOLIDS
96-12594	PG-05SB-1 FOSTER WHEELER	SOLIDS
96-12595	PG-06SB-1 FOSTER WHEELER	SOLIDS
96-12596	PG-01SBE-1 FOSTER WHEELER	WATER
96-12597	PG-01TWE-1 FOSTER WHEELER	WATER
96-12598	PG-02TW-1 FOSTER WHEELER	WATER
96-12599	PG-06TW-1 FOSTER WHEELER	WATER
96-12600	PG-06TWD-1 FOSTER WHEELER	WATER
96-12601	PG-07TW-1 FOSTER WHEELER	WATER
96-12602	PG-09TW-1 FOSTER WHEELER	WATER
96-13286	TB-01 FOSTER WHEELER	WATER

MICRO ANALYTICAL LABORATORIES, INC.
3618 NW 97th BOULEVARD
GAINESVILLE, FL 32606
352/332-1701 Fax: 352/332-3572

NIST BULK ACCREDITATION #101151

Samples Containing Less Than 10% ACM will be Point Counted at the Request of the Client for an Additional Fee.

PLM ASBESTOS ANALYSIS REPORT

MAL LOG: 15579
Client Ref.: T613359
PAGE NO: 1

Contact: LaDonna
Company: Savannah Laboratories
Address: 2846 Industrial Plaza Drive
Tallahassee, FL 32301
Phone/Fax: 904/878-3994 FX904/878-9504

Date Received: 12/11/96
Date Analyzed: 12/11/96
Microscopist: P.N.
Reviewed By: ____________

M. A. L. Sample No.	Client Sample No.	Homogeneity	Asbestos (+/-)	Asbestos Type	Estimated % Asbestos	Sample Color	Other Fibers	Estimated % Other	Matrix
15579-1	T613359-1 96-12594	+	+	Amosite	3-5%	Brown	Misc. Organics	8-10%	Dirt
			Total Asbestos in Sample = 3-5%						
15579-2	T613359-2 96-12595	+	-	None		Brown	Misc. Organics	5-8%	Dirt
15579-3	T613359-3 96-12592	+	-	None		Brown	Misc. Organics	5-8%	Dirt
15579-4	T613359-4 96-12593	+	+	Chrysotile	3-5%	Brown	Misc. Organics	5-8%	Dirt
				Amosite	<1%		Fiberglass	<1%	
			Total Asbestos in Sample = 3-5%						
15579-5	T613359-5 96-12591	+	+	Chrysotile	3-5%	Brown	Misc. Organics	5-8%	Dirt
				Amosite	3-5%				
			Total Asbestos in Sample = 5-8%						

ANALYSIS METHOD USED: EPA 600/M4-82/020. Procedures described in EPA 600/R-93/116 have been incorporated where applicable. This report must not be reproduced except in full and with the approval of the laboratory. This report is not endorsed by NVLAP or any agency of the U.S. Government. The EPA has no approved test method for the identification of asbestos in vinyl tile. Often the asbestos was milled to a fiber size below the detection limit of PLM analysis. Therefore, a "None" reading on vinyl floor tiles does not necessarily exclude the presence of asbestos. Transmission electron microscopy provides a more conclusive form of analysis for vinyl floor tiles. The results of this test pertain only to the sample submitted by the client and designated in this report.

Nancy Dehgan, Laboratory Director

CITY OF TALLAHASSEE
Water Quality Division
3805 Springhill Rd.
Tallahassee, Fl. 32310-6502
(904) 891-1200
Cert. #51097 & E51259

Laboratory Report

for

Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee , FL 32302

Attention: GREG NEW

JAM

Report#: 16052

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Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12591 Sample ID PG-05SBD-1 FOSTER WHEELER
Group # 16052 Sample Site
Sample Type SOLIDS Sampled 11/22/96 10:35

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Silver, Total	(272.2/ 7761)	mg/kg	<0.21				0.95000	11/27/96	mike	12/10/96	mike
Arsenic, Total by Furnace	(206.2/ 7060)	mg/kg	3.49				1.20			12/04/96	mike
Asbestos in Soils	(EPA600/4-83-42)	Struct/lit	+ATTACHED				0.000			12/12/96	savannah
Barium, Total	(208.2/ 7081)	mg/kg	56.0				9.0000	11/27/96	mike	12/11/96	mike
Cadmium, Total	(213.2/ 7131)	mg/kg	0.40				0.2900	11/27/96	mike	12/05/96	mike
Chromium, Total	(218.2/ 7191)	mg/kg	28.8				0.7800	11/27/96	mike	12/04/96	mike
Fla Pro petroleum Hydrocarb	(FLPro(418.1))	mg/kg	570				10.000			12/11/96	savannah
Mercury, Total	(245.1/ 7471)	mg/kg	<0.19				0.520			12/11/96	mike
Lead, Total	(239.2/ 7421)	mg/kg	57.2				0.5000	11/27/96	mike	12/06/96	mike
Selenium, Total by Furnace	(270.2/ 7440)	mg/kg	<0.12				1.80			12/11/96	mike
Residue,Total @ 103-105 C	(EPA 160.3)	ppm	920823				5.600000			11/26/96	sharon

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Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12592
Group # 16052
Sample Type SOLIDS

Sample ID PG-07SB-1 FOSTER WHEELER
Sample Site ____________
Sampled 11/22/96 09:00

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Silver, Total	(272.2/ 7761)	mg/kg	<0.03				0.95000	11/27/96	mike	12/10/96	mike
Arsenic, Total by Furnace	(206.2/ 7060)	mg/kg	1.48				1.20			12/04/96	mike
Asbestos in Soils	(EPA600/4-83-42)	Struct/Lit	ATTACHED				0.000			12/12/96	savannah
Barium, Total	(208.2/ 7081)	mg/kg	18.6				9.0000	11/27/96	mike	12/11/96	mike
Cadmium, Total	(213.2/ 7131)	mg/kg	<0.12				0.2900	11/27/96	mike	12/05/96	mike
Chromium, Total	(218.2/ 7191)	mg/kg	8.19				0.7800	11/27/96	mike	12/04/96	mike
Fla Pro petroleum Hydrocarb	(FLPro(418.1))	mg/kg	49				10.000			12/11/96	savannah
Mercury, Total	(245.1/ 7471)	mg/kg	<0.03				0.520			12/11/96	mike
Lead, Total	(239.2/ 7421)	mg/kg	9.60				0.5000	11/27/96	mike	12/06/96	mike
Selenium, Total by Furnace	(270.2/ 7440)	mg/kg	<0.00				1.80			12/11/96	mike
Residue,Total @ 103-105 C	(EPA 160.3)	ppm	920650				5.600000			11/26/96	sharon

Group # 16052

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Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12593
Group # 16052
Sample Type SOLIDS

Sample ID PG-09SB-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 10:00

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Silver, Total	(272.2/ 7761)	mg/kg	<0.07				0.95000	11/27/96	mike	12/10/96	mike
Arsenic, Total by Furnace	(206.2/ 7060)	mg/kg	1.75				1.20			12/04/96	mike
Asbestos in Soils	(EPA600/4-83-42)	Struct/lit	+ATTACHED				0.000			12/12/96	savannah
Barium, Total	(208.2/ 7081)	mg/kg	18.0				9.0000	11/27/96	mike	12/11/96	mike
Cadmium, Total	(213.2/ 7131)	mg/kg	0.68				0.2900	11/27/96	mike	12/05/96	mike
Chromium, Total	(218.2/ 7191)	mg/kg	16.6				0.7800	11/27/96	mike	12/04/96	mike
Fla Pro petroleum Hydrocarb	(FLPro(418.1))	mg/kg	170				10.000			12/11/96	savannah
Mercury, Total	(245.1/ 7471)	mg/kg	5.26				0.520			12/11/96	mike
Lead, Total	(239.2/ 7421)	mg/kg	57.5				0.5000	11/27/96	mike	12/06/96	mike
Selenium, Total by Furnace	(270.2/ 7440)	mg/kg	<0.01				1.80			12/11/96	mike
Residue,Total @ 103-105 C	(EPA 160.3)	ppm	858913				5.600000			11/26/96	sharon

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Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12594
Group # 16052
Sample Type SOLIDS

Sample ID PG-05SB-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 10:30

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Silver, Total	(272.2/ 7761)	mg/kg	<0.16				0.95000	11/27/96	mike	12/10/96	mike
Arsenic, Total by Furnace	(206.2/ 7060)	mg/kg	2.85				1.20			12/04/96	mike
Asbestos in Soils	(EPA600/4-83-42)	Struct/lit	+ATTACHED				0.000			12/12/96	savannah
Barium, Total	(208.2/ 7081)	mg/kg	46.0				9.0000	11/27/96	mike	12/11/96	mike
Cadmium, Total	(213.2/ 7131)	mg/kg	0.48				0.2900	11/27/96	mike	12/05/96	mike
Chromium, Total	(218.2/ 7191)	mg/kg	27.2				0.7800	11/27/96	mike	12/04/96	mike
Fla Pro petroleum Hydrocarb	(FLPro(418.1))	mg/kg	380				10.000			12/11/96	savannah
Mercury, Total	(245.1/ 7471)	mg/kg	<0.28				0.520			12/11/96	mike
Lead, Total	(239.2/ 7421)	mg/kg	64.8				0.5000	11/27/96	mike	12/06/96	mike
Selenium, Total by Furnace	(270.2/ 7440)	mg/kg	<0.18				1.80			12/11/96	mike
Residue,Total @ 103-105 C	(EPA 160.3)	ppm	842503				5.600000			11/26/96	sharon

Group # 16052

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Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12595
Group # 16052
Sample Type SOLIDS

Sample ID PG-06SB-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 09:25

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Silver, Total	(272.2/ 7761)	mg/kg	<0.03				0.95000	11/27/96	mike	12/10/96	mike
Arsenic, Total by Furnace	(206.2/ 7060)	mg/kg	<0.84				1.20			12/04/96	mike
Asbestos in Soils	(EPA600/4-83-42)	Struct/lit	ATTACHED				0.000			12/12/96	savannah
Barium, Total	(208.2/ 7081)	mg/kg	<5.14				9.0000	11/27/96	mike	12/11/96	mike
Cadmium, Total	(213.2/ 7131)	mg/kg	<0.06				0.2900	11/27/96	mike	12/05/96	mike
Chromium, Total	(218.2/ 7191)	mg/kg	5.07				0.7800	11/27/96	mike	12/04/96	mike
Fla Pro petroleum Hydrocarb	(FLPro(418.1))	mg/kg	<10				10.000			12/11/96	savannah
Mercury, Total	(245.1/ 7471)	mg/kg	<0.06				0.520			12/11/96	mike
Lead, Total	(239.2/ 7421)	mg/kg	4.14				0.5000	11/27/96	mike	12/06/96	mike
Selenium, Total by Furnace	(270.2/ 7440)	mg/kg	<0.16				1.80			12/11/96	mike
Residue,Total @ 103-105 C	(EPA 160.3)	ppm	930502				5.600000			11/26/96	sharon

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Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12596
Group # 16052
Sample Type WATER

Sample ID PG-01SBE-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 08:30

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Silver, Total	(272.2/ 7761)	ug/L	<0.28				0.9500			12/10/96	mike
Arsenic, Total by Furnace	(206.2/ 7060)	ug/L	<0.69				1.20			12/04/96	mike
Barium, Total	(208.2/ 7081)	ug/L	<0.44				9.000			12/11/96	mike
Cadmium, Total	(213.2/ 7131)	ug/L	<0.00				0.290			12/05/96	mike
Chromium, Total	(218.2/ 7191)	ug/L	3.10				0.7800			12/04/96	mike
Fla Pro petroleum Hydrocarb	(FLPro(418.1))	ppm	<0.30				0.30000			12/12/96	savannah
Mercury, Total	(245.1/ 7471)	ug/L	<0.00				0.520			12/05/96	mike
Lead, Total	(239.2/ 7421)	ug/L	<0.02				0.5000			12/06/96	mike
Selenium, Total by Furnace	(270.2/ 7440)	ug/L	<0.20				1.800			12/11/96	mike

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Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12597
Group # 16052
Sample Type WATER

Sample ID PG-01TWE-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 08:45

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Silver, Total	(272.2/ 7761)	ug/L	<0.38				0.9500			12/10/96	mike
Arsenic, Total by Furnace	(206.2/ 7060)	ug/L	<0.62				1.20			12/04/96	mike
Barium, Total	(208.2/ 7081)	ug/L	<0.00				9.000			12/11/96	mike
Cadmium, Total	(213.2/ 7131)	ug/L	<0.00				0.290			12/05/96	mike
Chromium, Total	(218.2/ 7191)	ug/L	2.33				0.7800			12/04/96	mike
Fla Pro petroleum Hydrocarb	(FLPro(418.1))	ppm	<0.30				0.30000			12/12/96	savannah
Mercury, Total	(245.1/ 7471)	ug/L	<0.04				0.520			12/05/96	mike
Lead, Total	(239.2/ 7421)	ug/L	<0.00				0.5000			12/06/96	mike
Selenium, Total by Furnace	(270.2/ 7440)	ug/L	<0.00				1.800			12/11/96	mike

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City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12598 Sample ID PG-02TW-1 FOSTER WHEELER
Group # 16052 Sample Site
Sample Type WATER Sampled 11/22/96 12:00

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Silver, Total	(272.2/ 7761)	ug/L	<0.13				0.9500			12/10/96	mike
Arsenic, Total by Furnace	(206.2/ 7060)	ug/L	6.77				1.20			12/04/96	mike
Barium, Total	(208.2/ 7081)	ug/L	23.1				9.000			12/11/96	mike
Cadmium, Total	(213.2/ 7131)	ug/L	<0.11				0.290			12/05/96	mike
Chromium, Total	(218.2/ 7191)	ug/L	8.59				0.7800			12/04/96	mike
Fla Pro petroleum Hydrocarb	(FLPro(418.1))	ppm	<0.30				0.30000			12/12/96	savannah
Mercury, Total	(245.1/ 7471)	ug/L	<0.09				0.520			12/05/96	mike
Lead, Total	(239.2/ 7421)	ug/L	8.08				0.5000			12/06/96	mike
Selenium, Total by Furnace	(270.2/ 7440)	ug/L	20.9				1.800			12/11/96	mike

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City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12599 Sample ID PG-06TW-1 FOSTER WHEELER
Group # 16052 Sample Site
Sample Type WATER Sampled 11/22/96 09:35

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Silver, Total	(272.2/ 7761)	ug/L	<0.09				0.9500			12/10/96	mike
Arsenic, Total by Furnace	(206.2/ 7060)	ug/L	19.3				1.20			12/04/96	mike
Barium, Total	(208.2/ 7081)	ug/L	39.6				9.000			12/11/96	mike
Cadmium, Total	(213.2/ 7131)	ug/L	10.7				0.290			12/05/96	mike
Chromium, Total	(218.2/ 7191)	ug/L	5.73				0.7800			12/04/96	mike
Fla Pro petroleum Hydrocarb	(FLPro(418.1))	ppm	0.86				0.30000			12/12/96	savannah
Mercury, Total	(245.1/ 7471)	ug/L	<0.26				0.520			12/05/96	mike
Lead, Total	(239.2/ 7421)	ug/L	2.97				0.5000			12/06/96	mike
Selenium, Total by Furnace	(270.2/ 7440)	ug/L	20.3				1.800			12/11/96	mike

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Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12600
Group # 16052
Sample Type WATER

Sample ID PG-06TWD-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 09:35

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Silver, Total	(272.2/ 7761)	ug/L	<0.11				0.9500			12/10/96	mike
Arsenic, Total by Furnace	(206.2/ 7060)	ug/L	20.2				1.20			12/04/96	mike
Barium, Total	(208.2/ 7081)	ug/L	49.3				9.000			12/11/96	mike
Cadmium, Total	(213.2/ 7131)	ug/L	1.04				0.290			12/05/96	mike
Chromium, Total	(218.2/ 7191)	ug/L	6.97				0.7800			12/04/96	mike
Fla Pro petroleum Hydrocarb	(FLPro(418.1))	ppm	<0.30				0.30000			12/12/96	savannah
Mercury, Total	(245.1/ 7471)	ug/L	<0.18				0.520			12/05/96	mike
Lead, Total	(239.2/ 7421)	ug/L	2.46				0.5000			12/06/96	mike
Selenium, Total by Furnace	(270.2/ 7440)	ug/L	12.0				1.800			12/11/96	mike

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City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12601
Group # 16052
Sample Type WATER

Sample ID PG-07TW-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 11:00

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Silver, Total	(272.2/ 7761)	ug/L	<0.11				0.9500			12/10/96	mike
Arsenic, Total by Furnace	(206.2/ 7060)	ug/L	30.0				1.20			12/04/96	mike
Barium, Total	(208.2/ 7081)	ug/L	21.0				9.000			12/11/96	mike
Cadmium, Total	(213.2/ 7131)	ug/L	0.62				0.290			12/05/96	mike
Chromium, Total	(218.2/ 7191)	ug/L	11.6				0.7800			12/04/96	mike
Fla Pro petroleum Hydrocarb	(FLPro(418.1))	ppm	4.1				0.30000			12/12/96	savannah
Mercury, Total	(245.1/ 7471)	ug/L	<0.07				0.520			12/05/96	mike
Lead, Total	(239.2/ 7421)	ug/L	3.37				0.5000			12/06/96	mike
Selenium, Total by Furnace	(270.2/ 7440)	ug/L	2.88				1.800			12/11/96	mike

Group # 16052

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City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12602
Group # 16052
Sample Type WATER

Sample ID PG-09TW-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 12:45

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Silver, Total	(272.2/ 7761)	ug/L	<0.31				0.9500			12/10/96	mike
Arsenic, Total by Furnace	(206.2/ 7060)	ug/L	25.4				1.20			12/04/96	mike
Barium, Total	(208.2/ 7081)	ug/L	94.2				9.000			12/11/96	mike
Cadmium, Total	(213.2/ 7131)	ug/L	4.86				0.290			12/05/96	mike
Chromium, Total	(218.2/ 7191)	ug/L	17.3				0.7800			12/04/96	mike
Fla Pro petroleum Hydrocarb	(FLPro(418.1))	ppm	<0.60				0.60000			12/12/96	savannah
Mercury, Total	(245.1/ 7471)	ug/L	<0.13				0.520			12/05/96	mike
Lead, Total	(239.2/ 7421)	ug/L	12.7				0.5000			12/06/96	mike
Selenium, Total by Furnace	(270.2/ 7440)	ug/L	3.95				1.800			12/11/96	mike

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(904) 891-1200
CITY OF TALLAHASSEE Cert. #51097 & E51259

Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12591 Sample ID PG-05SBD-1 FOSTER WHEELER
Group # 16052 Sample Site
Sample Type SOLIDS Sampled 11/22/96 10:35

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Acenaphthene	(EPA 8270)	mg/kg	BDL			12.3	8.118	11/25/96	joe	11/25/96	andy
Acenaphthylene	(EPA 8270)	mg/kg	BDL			12.3	8.118	11/25/96	joe	11/25/96	andy
Anthracene	(EPA 8270)	mg/kg	BDL			12.3	8.118	11/25/96	joe	11/25/96	andy
Benzo(a)anthracene	(EPA 8270)	mg/kg	BDL			12.3	8.118	11/25/96	joe	11/25/96	andy
Benzo(b)fluoranthene	(EPA 8270)	mg/kg	BDL			12.3	8.118	11/25/96	joe	11/25/96	andy
Benzo(k)fluoranthene	(EPA 8270)	mg/kg	BDL			12.3	8.118	11/25/96	joe	11/25/96	andy
Benzo(ghi)perylene	(EPA 8270)	mg/kg	BDL			12.3	8.118	11/25/96	joe	11/25/96	andy
Benzo(a)pyrene	(EPA 8270)	mg/kg	BDL			12.3	8.118	11/25/96	joe	11/25/96	andy
Chrysene	(EPA 8270)	mg/kg	BDL			12.3	8.118	11/25/96	joe	11/25/96	andy
Dibenzo(ah)anthracene	(EPA 8270)	mg/kg	BDL			12.3	8.118	11/25/96	joe	11/25/96	andy
Fluoranthene	(EPA 8270)	mg/kg	BDL			12.3	8.118	11/25/96	joe	11/25/96	andy
Fluorene	(EPA 8270)	mg/kg	BDL			12.3	8.118	11/25/96	joe	11/25/96	andy
Indeno(123cd)pyrene	(EPA 8270)	mg/kg	BDL			12.3	8.118	11/25/96	joe	11/25/96	andy
Naphthalene	(EPA 8270)	mg/kg	BDL			12.3	8.118	11/25/96	joe	11/25/96	andy
Phenanthrene	(EPA 8270)	mg/kg	BDL			12.3	8.118	11/25/96	joe	11/25/96	andy
Pyrene	(EPA 8270)	mg/kg	BDL			12.3	8.118	11/25/96	joe	11/25/96	andy
Benzidine	(EPA 8270)	mg/kg	BDL			12.3	16.7	11/25/96	joe	11/25/96	andy
3,3'-Dichlorobenzidine	(EPA 8270)	mg/kg	BDL			12.3	16.0	11/25/96	joe	11/25/96	andy
Butylbenzylphthalate	(EPA 8270)	mg/kg	BDL			12.3	8.12	11/25/96	joe	11/25/96	andy
Bis(2-ethylhexyl)phthalate	(EPA 8270)	mg/kg	BDL			12.3	8.12	11/25/96	joe	11/25/96	andy
Di-n-butylphthalate	(EPA 8270)	mg/kg	BDL			12.3	8.12	11/25/96	joe	11/25/96	andy
Diethylphthalate	(EPA 8270)	mg/kg	BDL			12.3	8.12	11/25/96	joe	11/25/96	andy
Dimethylphthalate	(EPA 8270)	mg/kg	BDL			12.3	8.12	11/25/96	joe	11/25/96	andy
Di-n-octylphthalate	(EPA 8270)	mg/kg	BDL			12.3	8.12	11/25/96	joe	11/25/96	andy
Bis(2-chloroethoxy)methane	(EPA 8270)	mg/kg	BDL			12.3	8.12	11/25/96	joe	11/25/96	andy
Bis(2-chloroethyl)ether	(EPA 8270)	mg/kg	BDL			12.3	8.12	11/25/96	joe	11/25/96	andy
Bis(2-chloroisopropyl)ether	(EPA 8270)	mg/kg	BDL			12.3	8.12	11/25/96	joe	11/25/96	andy
1,2-Dichlorobenzene	(EPA 8270)	mg/kg	BDL			12.3	8.12	11/25/96	joe	11/25/96	andy
1,3-Dichlorobenzene	(EPA 8270)	mg/kg	BDL			12.3	8.12	11/25/96	joe	11/25/96	andy
1,4-Dichlorobenzene	(EPA 8270)	mg/kg	BDL			12.3	8.12	11/25/96	joe	11/25/96	andy
4-Bromophenylphenyl ether	(EPA 8270)	mg/kg	BDL			12.3	8.12	11/25/96	joe	11/25/96	andy
4-Chlorophenylphenyl ether	(EPA 8270)	mg/kg	BDL			12.3	8.12	11/25/96	joe	11/25/96	andy
2-Chloronaphthalene	(EPA 8270)	mg/kg	BDL			12.3	8.12	11/25/96	joe	11/25/96	andy
2,4-Dinitrotoluene	(EPA 8270)	mg/kg	BDL			12.3	8.12	11/25/96	joe	11/25/96	andy
2,6-Dinitrotoluene	(EPA 8270)	mg/kg	BDL			12.3	8.12	11/25/96	joe	11/25/96	andy
Hexachlorobenzene	(EPA 8270)	mg/kg	BDL			12.3	8.12	11/25/96	joe	11/25/96	andy
Hexachlorobutadiene	(EPA 8270)	mg/kg	BDL			12.3	8.12	11/25/96	joe	11/25/96	andy
Hexachlorocyclopentadiene	(EPA 8270)	mg/kg	BDL			12.3	8.12	11/25/96	joe	11/25/96	andy
Hexachloroethane	(EPA 8270)	mg/kg	BDL			12.3	8.12	11/25/96	joe	11/25/96	andy
Isophorone	(EPA 8270)	mg/kg	BDL			12.3	8.12	11/25/96	joe	11/25/96	andy
Nitrobenzene	(EPA 8270)	mg/kg	BDL			12.3	8.12	11/25/96	joe	11/25/96	andy
N-nitroso-di-n-propylamine	(EPA 8270)	mg/kg	BDL			12.3	8.12	11/25/96	joe	11/25/96	andy
N-nitrosodiphenylamine	(EPA 8270)	mg/kg	BDL			12.3	8.12	11/25/96	joe	11/25/96	andy
1,2,4-Trichlorobenzene	(EPA 8270)	mg/kg	BDL			12.3	8.12	11/25/96	joe	11/25/96	andy
N-nitrosodimethylamine	(EPA 8270)	mg/kg	BDL			12.3	8.12	11/25/96	joe	11/25/96	andy
Dioxin(2,3,7,8-TCDD)	(EPA 8270)	mg/kg	BDL			12.3	8.12	11/25/96	joe	11/25/96	andy

Group # 16052

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CITY OF TALLAHASSEE

Water Quality Division
3805 Springhill Rd.
Tallahassee, Fl. 32310-6502
(904) 891-1200
Cert. #51097 & E51259

Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12591
Group # 16052
Sample Type SOLIDS

Sample ID PG-05SBD-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 10:35

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Bis(2-ethylhexyl)adipate	(EPA 8270)	mg/kg	BDL			12.3	8.12	11/25/96	joe	11/25/96	andy

Group # 16052

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CITY OF TALLAHASSEE

Water Quality Division
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Tallahassee, Fl. 32310-6502
(904) 891-1200
Cert. #51097 & E51259

Electric Production & Env.Affairs COT290101 — Purdom Generating Site Assess
Electric Department
City of Tallahassee — Sampled by : GREG NEW

Tallahassee ,FL 32302
ATTN. Greg New

Sample # 96-12592 — Sample ID PG-07SB-1 FOSTER WHEELER
Group # 16052 — Sample Site
Sample Type SOLIDS — Sampled 11/22/96 09:00

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Acenaphthene	(EPA 8270)	mg/kg	BDL			9.911	6.541	11/25/96	joe	11/25/96	andy
Acenaphthylene	(EPA 8270)	mg/kg	BDL			9.911	6.541	11/25/96	joe	11/25/96	andy
Anthracene	(EPA 8270)	mg/kg	BDL			9.911	6.541	11/25/96	joe	11/25/96	andy
Benzo(a)anthracene	(EPA 8270)	mg/kg	BDL			9.911	6.541	11/25/96	joe	11/25/96	andy
Benzo(b)fluoranthene	(EPA 8270)	mg/kg	BDL			9.911	6.541	11/25/96	joe	11/25/96	andy
Benzo(k)fluoranthene	(EPA 8270)	mg/kg	BDL			9.911	6.541	11/25/96	joe	11/25/96	andy
Benzo(ghi)perylene	(EPA 8270)	mg/kg	BDL			9.911	6.541	11/25/96	joe	11/25/96	andy
Benzo(a)pyrene	(EPA 8270)	mg/kg	BDL			9.911	6.541	11/25/96	joe	11/25/96	andy
Chrysene	(EPA 8270)	mg/kg	BDL			9.911	6.541	11/25/96	joe	11/25/96	andy
Dibenzo(ah)anthracene	(EPA 8270)	mg/kg	BDL			9.911	6.541	11/25/96	joe	11/25/96	andy
Fluoranthene	(EPA 8270)	mg/kg	BDL			9.911	6.541	11/25/96	joe	11/25/96	andy
Fluorene	(EPA 8270)	mg/kg	BDL			9.911	6.541	11/25/96	joe	11/25/96	andy
Indeno(123cd)pyrene	(EPA 8270)	mg/kg	BDL			9.911	6.541	11/25/96	joe	11/25/96	andy
Naphthalene	(EPA 8270)	mg/kg	BDL			9.911	6.541	11/25/96	joe	11/25/96	andy
Phenanthrene	(EPA 8270)	mg/kg	BDL			9.911	6.541	11/25/96	joe	11/25/96	andy
Pyrene	(EPA 8270)	mg/kg	BDL			9.911	6.541	11/25/96	joe	11/25/96	andy
Benzidine	(EPA 8270)	mg/kg	BDL			9.911	13.5	11/25/96	joe	11/25/96	andy
3,3'-Dichlorobenzidine	(EPA 8270)	mg/kg	BDL			9.911	12.9	11/25/96	joe	11/25/96	andy
Butylbenzylphthalate	(EPA 8270)	mg/kg	BDL			9.911	6.54	11/25/96	joe	11/25/96	andy
Bis(2-ethylhexyl)phthalate	(EPA 8270)	mg/kg	BDL			9.911	6.54	11/25/96	joe	11/25/96	andy
Di-n-butylphthalate	(EPA 8270)	mg/kg	BDL			9.911	6.54	11/25/96	joe	11/25/96	andy
Diethylphthalate	(EPA 8270)	mg/kg	BDL			9.911	6.54	11/25/96	joe	11/25/96	andy
Dimethylphthalate	(EPA 8270)	mg/kg	BDL			9.911	6.54	11/25/96	joe	11/25/96	andy
Di-n-octylphthalate	(EPA 8270)	mg/kg	BDL			9.911	6.54	11/25/96	joe	11/25/96	andy
Bis(2-chloroethoxy)methane	(EPA 8270)	mg/kg	BDL			9.911	6.54	11/25/96	joe	11/25/96	andy
Bis(2-chloroethyl)ether	(EPA 8270)	mg/kg	BDL			9.911	6.54	11/25/96	joe	11/25/96	andy
Bis(2-chloroisopropyl)ether	(EPA 8270)	mg/kg	BDL			9.911	6.54	11/25/96	joe	11/25/96	andy
1,2-Dichlorobenzene	(EPA 8270)	mg/kg	BDL			9.911	6.54	11/25/96	joe	11/25/96	andy
1,3-Dichlorobenzene	(EPA 8270)	mg/kg	BDL			9.911	6.54	11/25/96	joe	11/25/96	andy
1,4-Dichlorobenzene	(EPA 8270)	mg/kg	BDL			9.911	6.54	11/25/96	joe	11/25/96	andy
4-Bromophenylphenyl ether	(EPA 8270)	mg/kg	BDL			9.911	6.54	11/25/96	joe	11/25/96	andy
4-Chlorophenylphenyl ether	(EPA 8270)	mg/kg	BDL			9.911	6.54	11/25/96	joe	11/25/96	andy
2-Chloronaphthalene	(EPA 8270)	mg/kg	BDL			9.911	6.54	11/25/96	joe	11/25/96	andy
2,4-Dinitrotoluene	(EPA 8270)	mg/kg	BDL			9.911	6.54	11/25/96	joe	11/25/96	andy
2,6-Dinitrotoluene	(EPA 8270)	mg/kg	BDL			9.911	6.54	11/25/96	joe	11/25/96	andy
Hexachlorobenzene	(EPA 8270)	mg/kg	BDL			9.911	6.54	11/25/96	joe	11/25/96	andy
Hexachlorobutadiene	(EPA 8270)	mg/kg	BDL			9.911	6.54	11/25/96	joe	11/25/96	andy
Hexachlorocyclopentadiene	(EPA 8270)	mg/kg	BDL			9.911	6.54	11/25/96	joe	11/25/96	andy
Hexachloroethane	(EPA 8270)	mg/kg	BDL			9.911	6.54	11/25/96	joe	11/25/96	andy
Isophorone	(EPA 8270)	mg/kg	BDL			9.911	6.54	11/25/96	joe	11/25/96	andy
Nitrobenzene	(EPA 8270)	mg/kg	BDL			9.911	6.54	11/25/96	joe	11/25/96	andy
N-nitroso-di-n-propylamine	(EPA 8270)	mg/kg	BDL			9.911	6.54	11/25/96	joe	11/25/96	andy
N-nitrosodiphenylamine	(EPA 8270)	mg/kg	BDL			9.911	6.54	11/25/96	joe	11/25/96	andy
1,2,4-Trichlorobenzene	(EPA 8270)	mg/kg	BDL			9.911	6.54	11/25/96	joe	11/25/96	andy
N-nitrosodimethylamine	(EPA 8270)	mg/kg	BDL			9.911	6.54	11/25/96	joe	11/25/96	andy
Dioxin(2,3,7,8-TCDD)	(EPA 8270)	mg/kg	BDL			9.911	6.54	11/25/96	joe	11/25/96	andy

Group # 16052

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Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12592 Sample ID PG-07SB-1 FOSTER WHEELER
Group # 16052 Sample Site
Sample Type SOLIDS Sampled 11/22/96 09:00

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Bis(2-ethylhexyl)adipate	(EPA 8270)	mg/kg	BDL			9.911	6.54	11/25/96	joe	11/25/96	andy

Group # 16052

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Water Quality Division
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Cert. #51097 & E51259

Electric Production & Env.Affairs COT290101 Purdom Generating Site Assess
Electric Department
City of Tallahassee Sampled by : GREG NEW

Tallahassee ,FL 32302
ATTN. Greg New

Sample # 96-12593 Sample ID PG-09SB-1 FOSTER WHEELER
Group # 16052 Sample Site
Sample Type SOLIDS Sampled 11/22/96 10:00

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Acenaphthene	(EPA 8270)	mg/kg	BDL			14.55	9.603	11/25/96	joe	11/25/96	andy
Acenaphthylene	(EPA 8270)	mg/kg	BDL			14.55	9.603	11/25/96	joe	11/25/96	andy
Anthracene	(EPA 8270)	mg/kg	BDL			14.55	9.603	11/25/96	joe	11/25/96	andy
Benzo(a)anthracene	(EPA 8270)	mg/kg	BDL			14.55	9.603	11/25/96	joe	11/25/96	andy
Benzo(b)fluoranthene	(EPA 8270)	mg/kg	BDL			14.55	9.603	11/25/96	joe	11/25/96	andy
Benzo(k)fluoranthene	(EPA 8270)	mg/kg	BDL			14.55	9.603	11/25/96	joe	11/25/96	andy
Benzo(ghi)perylene	(EPA 8270)	mg/kg	BDL			14.55	9.603	11/25/96	joe	11/25/96	andy
Benzo(a)pyrene	(EPA 8270)	mg/kg	BDL			14.55	9.603	11/25/96	joe	11/25/96	andy
Chrysene	(EPA 8270)	mg/kg	BDL			14.55	9.603	11/25/96	joe	11/25/96	andy
Dibenzo(ah)anthracene	(EPA 8270)	mg/kg	BDL			14.55	9.603	11/25/96	joe	11/25/96	andy
Fluoranthene	(EPA 8270)	mg/kg	BDL			14.55	9.603	11/25/96	joe	11/25/96	andy
Fluorene	(EPA 8270)	mg/kg	BDL			14.55	9.603	11/25/96	joe	11/25/96	andy
Indeno(123cd)pyrene	(EPA 8270)	mg/kg	BDL			14.55	9.603	11/25/96	joe	11/25/96	andy
Naphthalene	(EPA 8270)	mg/kg	BDL			14.55	9.603	11/25/96	joe	11/25/96	andy
Phenanthrene	(EPA 8270)	mg/kg	BDL			14.55	9.603	11/25/96	joe	11/25/96	andy
Pyrene	(EPA 8270)	mg/kg	BDL			14.55	9.603	11/25/96	joe	11/25/96	andy
Benzidine	(EPA 8270)	mg/kg	BDL			14.55	19.8	11/25/96	joe	11/25/96	andy
3,3'-Dichlorobenzidine	(EPA 8270)	mg/kg	BDL			14.55	18.9	11/25/96	joe	11/25/96	andy
Butylbenzylphthalate	(EPA 8270)	mg/kg	BDL			14.55	9.60	11/25/96	joe	11/25/96	andy
Bis(2-ethylhexyl)phthalate	(EPA 8270)	mg/kg	BDL			14.55	9.60	11/25/96	joe	11/25/96	andy
Di-n-butylphthalate	(EPA 8270)	mg/kg	BDL			14.55	9.60	11/25/96	joe	11/25/96	andy
Diethylphthalate	(EPA 8270)	mg/kg	BDL			14.55	9.60	11/25/96	joe	11/25/96	andy
Dimethylphthalate	(EPA 8270)	mg/kg	BDL			14.55	9.60	11/25/96	joe	11/25/96	andy
Di-n-octylphthalate	(EPA 8270)	mg/kg	BDL			14.55	9.60	11/25/96	joe	11/25/96	andy
Bis(2-chloroethoxy)methane	(EPA 8270)	mg/kg	BDL			14.55	9.60	11/25/96	joe	11/25/96	andy
Bis(2-chloroethyl)ether	(EPA 8270)	mg/kg	BDL			14.55	9.60	11/25/96	joe	11/25/96	andy
Bis(2-chloroisopropyl)ether	(EPA 8270)	mg/kg	BDL			14.55	9.60	11/25/96	joe	11/25/96	andy
1,2-Dichlorobenzene	(EPA 8270)	mg/kg	BDL			14.55	9.60	11/25/96	joe	11/25/96	andy
1,3-Dichlorobenzene	(EPA 8270)	mg/kg	BDL			14.55	9.60	11/25/96	joe	11/25/96	andy
1,4-Dichlorobenzene	(EPA 8270)	mg/kg	BDL			14.55	9.60	11/25/96	joe	11/25/96	andy
4-Bromophenylphenyl ether	(EPA 8270)	mg/kg	BDL			14.55	9.60	11/25/96	joe	11/25/96	andy
4-Chlorophenylphenyl ether	(EPA 8270)	mg/kg	BDL			14.55	9.60	11/25/96	joe	11/25/96	andy
2-Chloronaphthalene	(EPA 8270)	mg/kg	BDL			14.55	9.60	11/25/96	joe	11/25/96	andy
2,4-Dinitrotoluene	(EPA 8270)	mg/kg	BDL			14.55	9.60	11/25/96	joe	11/25/96	andy
2,6-Dinitrotoluene	(EPA 8270)	mg/kg	BDL			14.55	9.60	11/25/96	joe	11/25/96	andy
Hexachlorobenzene	(EPA 8270)	mg/kg	BDL			14.55	9.60	11/25/96	joe	11/25/96	andy
Hexachlorobutadiene	(EPA 8270)	mg/kg	BDL			14.55	9.60	11/25/96	joe	11/25/96	andy
Hexachlorocyclopentadiene	(EPA 8270)	mg/kg	BDL			14.55	9.60	11/25/96	joe	11/25/96	andy
Hexachloroethane	(EPA 8270)	mg/kg	BDL			14.55	9.60	11/25/96	joe	11/25/96	andy
Isophorone	(EPA 8270)	mg/kg	BDL			14.55	9.60	11/25/96	joe	11/25/96	andy
Nitrobenzene	(EPA 8270)	mg/kg	BDL			14.55	9.60	11/25/96	joe	11/25/96	andy
N-nitroso-di-n-propylamine	(EPA 8270)	mg/kg	BDL			14.55	9.60	11/25/96	joe	11/25/96	andy
N-nitrosodiphenylamine	(EPA 8270)	mg/kg	BDL			14.55	9.60	11/25/96	joe	11/25/96	andy
1,2,4-Trichlorobenzene	(EPA 8270)	mg/kg	BDL			14.55	9.60	11/25/96	joe	11/25/96	andy
N-nitrosodimethylamine	(EPA 8270)	mg/kg	BDL			14.55	9.60	11/25/96	joe	11/25/96	andy
Dioxin(2,3,7,8-TCDD)	(EPA 8270)	mg/kg	BDL			14.55	9.60	11/25/96	joe	11/25/96	andy

Group # 16052

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Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12593
Group # 16052
Sample Type SOLIDS

Sample ID PG-09SB-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 10:00

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Bis(2-ethylhexyl)adipate	(EPA 8270)	mg/kg	BDL			14.55	9.60	11/25/96	joe	11/25/96	andy

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CITY OF TALLAHASSEE
Water Quality Division
3805 Springhill Rd.
Tallahassee, Fl. 32310-6502
(904) 891-1200
Cert. #51097 & E51259

Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12594 Sample ID PG-05SB-1 FOSTER WHEELER
Group # 16052 Sample Site
Sample Type SOLIDS Sampled 11/22/96 10:30

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Acenaphthene	(EPA 8270)	mg/kg	BDL			12.89	8.507	11/25/96	joe	11/25/96	andy
Acenaphthylene	(EPA 8270)	mg/kg	BDL			12.89	8.507	11/25/96	joe	11/25/96	andy
Anthracene	(EPA 8270)	mg/kg	BDL			12.89	8.507	11/25/96	joe	11/25/96	andy
Benzo(a)anthracene	(EPA 8270)	mg/kg	BDL			12.89	8.507	11/25/96	joe	11/25/96	andy
Benzo(b)fluoranthene	(EPA 8270)	mg/kg	BDL			12.89	8.507	11/25/96	joe	11/25/96	andy
Benzo(k)fluoranthene	(EPA 8270)	mg/kg	BDL			12.89	8.507	11/25/96	joe	11/25/96	andy
Benzo(ghi)perylene	(EPA 8270)	mg/kg	BDL			12.89	8.507	11/25/96	joe	11/25/96	andy
Benzo(a)pyrene	(EPA 8270)	mg/kg	BDL			12.89	8.507	11/25/96	joe	11/25/96	andy
Chrysene	(EPA 8270)	mg/kg	BDL			12.89	8.507	11/25/96	joe	11/25/96	andy
Dibenzo(ah)anthracene	(EPA 8270)	mg/kg	BDL			12.89	8.507	11/25/96	joe	11/25/96	andy
Fluoranthene	(EPA 8270)	mg/kg	BDL			12.89	8.507	11/25/96	joe	11/25/96	andy
Fluorene	(EPA 8270)	mg/kg	BDL			12.89	8.507	11/25/96	joe	11/25/96	andy
Indeno(123cd)pyrene	(EPA 8270)	mg/kg	BDL			12.89	8.507	11/25/96	joe	11/25/96	andy
Naphthalene	(EPA 8270)	mg/kg	BDL			12.89	8.507	11/25/96	joe	11/25/96	andy
Phenanthrene	(EPA 8270)	mg/kg	BDL			12.89	8.507	11/25/96	joe	11/25/96	andy
Pyrene	(EPA 8270)	mg/kg	BDL			12.89	8.507	11/25/96	joe	11/25/96	andy
Benzidine	(EPA 8270)	mg/kg	BDL			12.89	17.5	11/25/96	joe	11/25/96	andy
3,3'-Dichlorobenzidine	(EPA 8270)	mg/kg	BDL			12.89	16.8	11/25/96	joe	11/25/96	andy
Butylbenzylphthalate	(EPA 8270)	mg/kg	BDL			12.89	8.51	11/25/96	joe	11/25/96	andy
Bis(2-ethylhexyl)phthalate	(EPA 8270)	mg/kg	BDL			12.89	8.51	11/25/96	joe	11/25/96	andy
Di-n-butylphthalate	(EPA 8270)	mg/kg	BDL			12.89	8.51	11/25/96	joe	11/25/96	andy
Diethylphthalate	(EPA 8270)	mg/kg	BDL			12.89	8.51	11/25/96	joe	11/25/96	andy
Dimethylphthalate	(EPA 8270)	mg/kg	BDL			12.89	8.51	11/25/96	joe	11/25/96	andy
Di-n-octylphthalate	(EPA 8270)	mg/kg	BDL			12.89	8.51	11/25/96	joe	11/25/96	andy
Bis(2-chloroethoxy)methane	(EPA 8270)	mg/kg	BDL			12.89	8.51	11/25/96	joe	11/25/96	andy
Bis(2-chloroethyl)ether	(EPA 8270)	mg/kg	BDL			12.89	8.51	11/25/96	joe	11/25/96	andy
Bis(2-chloroisopropyl)ether	(EPA 8270)	mg/kg	BDL			12.89	8.51	11/25/96	joe	11/25/96	andy
1,2-Dichlorobenzene	(EPA 8270)	mg/kg	BDL			12.89	8.51	11/25/96	joe	11/25/96	andy
1,3-Dichlorobenzene	(EPA 8270)	mg/kg	BDL			12.89	8.51	11/25/96	joe	11/25/96	andy
1,4-Dichlorobenzene	(EPA 8270)	mg/kg	BDL			12.89	8.51	11/25/96	joe	11/25/96	andy
4-Bromophenylphenyl ether	(EPA 8270)	mg/kg	BDL			12.89	8.51	11/25/96	joe	11/25/96	andy
4-Chlorophenylphenyl ether	(EPA 8270)	mg/kg	BDL			12.89	8.51	11/25/96	joe	11/25/96	andy
2-Chloronaphthalene	(EPA 8270)	mg/kg	BDL			12.89	8.51	11/25/96	joe	11/25/96	andy
2,4-Dinitrotoluene	(EPA 8270)	mg/kg	BDL			12.89	8.51	11/25/96	joe	11/25/96	andy
2,6-Dinitrotoluene	(EPA 8270)	mg/kg	BDL			12.89	8.51	11/25/96	joe	11/25/96	andy
Hexachlorobenzene	(EPA 8270)	mg/kg	BDL			12.89	8.51	11/25/96	joe	11/25/96	andy
Hexachlorobutadiene	(EPA 8270)	mg/kg	BDL			12.89	8.51	11/25/96	joe	11/25/96	andy
Hexachlorocyclopentadiene	(EPA 8270)	mg/kg	BDL			12.89	8.51	11/25/96	joe	11/25/96	andy
Hexachloroethane	(EPA 8270)	mg/kg	BDL			12.89	8.51	11/25/96	joe	11/25/96	andy
Isophorone	(EPA 8270)	mg/kg	BDL			12.89	8.51	11/25/96	joe	11/25/96	andy
Nitrobenzene	(EPA 8270)	mg/kg	BDL			12.89	8.51	11/25/96	joe	11/25/96	andy
N-nitroso-di-n-propylamine	(EPA 8270)	mg/kg	BDL			12.89	8.51	11/25/96	joe	11/25/96	andy
N-nitrosodiphenylamine	(EPA 8270)	mg/kg	BDL			12.89	8.51	11/25/96	joe	11/25/96	andy
1,2,4-Trichlorobenzene	(EPA 8270)	mg/kg	BDL			12.89	8.51	11/25/96	joe	11/25/96	andy
N-nitrosodimethylamine	(EPA 8270)	mg/kg	BDL			12.89	8.51	11/25/96	joe	11/25/96	andy
Dioxin(2,3,7,8-TCDD)	(EPA 8270)	mg/kg	BDL			12.89	8.51	11/25/96	joe	11/25/96	andy

Group # 16052

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Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12594
Group # 16052
Sample Type SOLIDS

Sample ID PG-05SB-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 10:30

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Bis(2-ethylhexyl)adipate	(EPA 8270)	mg/kg	BDL			12.89	8.51	11/25/96	joe	11/25/96	andy

Group # 16052

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Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12595
Group # 16052
Sample Type SOLIDS

Sample ID PG-06SB-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 09:25

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Acenaphthene	(EPA 8270)	mg/kg	BDL			11.95	7.887	11/25/96	joe	11/25/96	andy
Acenaphthylene	(EPA 8270)	mg/kg	BDL			11.95	7.887	11/25/96	joe	11/25/96	andy
Anthracene	(EPA 8270)	mg/kg	BDL			11.95	7.887	11/25/96	joe	11/25/96	andy
Benzo(a)anthracene	(EPA 8270)	mg/kg	BDL			11.95	7.887	11/25/96	joe	11/25/96	andy
Benzo(b)fluoranthene	(EPA 8270)	mg/kg	BDL			11.95	7.887	11/25/96	joe	11/25/96	andy
Benzo(k)fluoranthene	(EPA 8270)	mg/kg	BDL			11.95	7.887	11/25/96	joe	11/25/96	andy
Benzo(ghi)perylene	(EPA 8270)	mg/kg	BDL			11.95	7.887	11/25/96	joe	11/25/96	andy
Benzo(a)pyrene	(EPA 8270)	mg/kg	BDL			11.95	7.887	11/25/96	joe	11/25/96	andy
Chrysene	(EPA 8270)	mg/kg	BDL			11.95	7.887	11/25/96	joe	11/25/96	andy
Dibenzo(ah)anthracene	(EPA 8270)	mg/kg	BDL			11.95	7.887	11/25/96	joe	11/25/96	andy
Fluoranthene	(EPA 8270)	mg/kg	BDL			11.95	7.887	11/25/96	joe	11/25/96	andy
Fluorene	(EPA 8270)	mg/kg	BDL			11.95	7.887	11/25/96	joe	11/25/96	andy
Indeno(123cd)pyrene	(EPA 8270)	mg/kg	BDL			11.95	7.887	11/25/96	joe	11/25/96	andy
Naphthalene	(EPA 8270)	mg/kg	BDL			11.95	7.887	11/25/96	joe	11/25/96	andy
Phenanthrene	(EPA 8270)	mg/kg	BDL			11.95	7.887	11/25/96	joe	11/25/96	andy
Pyrene	(EPA 8270)	mg/kg	BDL			11.95	7.887	11/25/96	joe	11/25/96	andy
Benzidine	(EPA 8270)	mg/kg	BDL			11.95	16.3	11/25/96	joe	11/25/96	andy
3,3'-Dichlorobenzidine	(EPA 8270)	mg/kg	BDL			11.95	15.5	11/25/96	joe	11/25/96	andy
Butylbenzylphthalate	(EPA 8270)	mg/kg	BDL			11.95	7.89	11/25/96	joe	11/25/96	andy
Bis(2-ethylhexyl)phthalate	(EPA 8270)	mg/kg	BDL			11.95	7.89	11/25/96	joe	11/25/96	andy
Di-n-butylphthalate	(EPA 8270)	mg/kg	BDL			11.95	7.89	11/25/96	joe	11/25/96	andy
Diethylphthalate	(EPA 8270)	mg/kg	BDL			11.95	7.89	11/25/96	joe	11/25/96	andy
Dimethylphthalate	(EPA 8270)	mg/kg	BDL			11.95	7.89	11/25/96	joe	11/25/96	andy
Di-n-octylphthalate	(EPA 8270)	mg/kg	BDL			11.95	7.89	11/25/96	joe	11/25/96	andy
Bis(2-chloroethoxy)methane	(EPA 8270)	mg/kg	BDL			11.95	7.89	11/25/96	joe	11/25/96	andy
Bis(2-chloroethyl)ether	(EPA 8270)	mg/kg	BDL			11.95	7.89	11/25/96	joe	11/25/96	andy
Bis(2-chloroisopropyl)ether	(EPA 8270)	mg/kg	BDL			11.95	7.89	11/25/96	joe	11/25/96	andy
1,2-Dichlorobenzene	(EPA 8270)	mg/kg	BDL			11.95	7.89	11/25/96	joe	11/25/96	andy
1,3-Dichlorobenzene	(EPA 8270)	mg/kg	BDL			11.95	7.89	11/25/96	joe	11/25/96	andy
1,4-Dichlorobenzene	(EPA 8270)	mg/kg	BDL			11.95	7.89	11/25/96	joe	11/25/96	andy
4-Bromophenylphenyl ether	(EPA 8270)	mg/kg	BDL			11.95	7.89	11/25/96	joe	11/25/96	andy
4-Chlorophenylphenyl ether	(EPA 8270)	mg/kg	BDL			11.95	7.89	11/25/96	joe	11/25/96	andy
2-Chloronaphthalene	(EPA 8270)	mg/kg	BDL			11.95	7.89	11/25/96	joe	11/25/96	andy
2,4-Dinitrotoluene	(EPA 8270)	mg/kg	BDL			11.95	7.89	11/25/96	joe	11/25/96	andy
2,6-Dinitrotoluene	(EPA 8270)	mg/kg	BDL			11.95	7.89	11/25/96	joe	11/25/96	andy
Hexachlorobenzene	(EPA 8270)	mg/kg	BDL			11.95	7.89	11/25/96	joe	11/25/96	andy
Hexachlorobutadiene	(EPA 8270)	mg/kg	BDL			11.95	7.89	11/25/96	joe	11/25/96	andy
Hexachlorocyclopentadiene	(EPA 8270)	mg/kg	BDL			11.95	7.89	11/25/96	joe	11/25/96	andy
Hexachloroethane	(EPA 8270)	mg/kg	BDL			11.95	7.89	11/25/96	joe	11/25/96	andy
Isophorone	(EPA 8270)	mg/kg	BDL			11.95	7.89	11/25/96	joe	11/25/96	andy
Nitrobenzene	(EPA 8270)	mg/kg	BDL			11.95	7.89	11/25/96	joe	11/25/96	andy
N-nitroso-di-n-propylamine	(EPA 8270)	mg/kg	BDL			11.95	7.89	11/25/96	joe	11/25/96	andy
N-nitrosodiphenylamine	(EPA 8270)	mg/kg	BDL			11.95	7.89	11/25/96	joe	11/25/96	andy
1,2,4-Trichlorobenzene	(EPA 8270)	mg/kg	BDL			11.95	7.89	11/25/96	joe	11/25/96	andy
N-nitrosodimethylamine	(EPA 8270)	mg/kg	BDL			11.95	7.89	11/25/96	joe	11/25/96	andy
Dioxin(2,3,7,8-TCDD)	(EPA 8270)	mg/kg	BDL			11.95	7.89	11/25/96	joe	11/25/96	andy

Group # 16052

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Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12595
Group # 16052
Sample Type SOLIDS

Sample ID PG-06SB-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 09:25

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Bis(2-ethylhexyl)adipate	(EPA 8270)	mg/kg	BDL			11.95	7.89	11/25/96	joe	11/25/96	andy

Group # 16052

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City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12596 Sample ID PG-01SBE-1 FOSTER WHEELER
Group # 16052 Sample Site
Sample Type WATER Sampled 11/22/96 08:30

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Acenaphthene	(EPA8270/625)	ug/L	BDL				3.52	11/26/96	joe	11/27/96	andy
Acenaphthylene	(EPA 8270/625)	ug/L	BDL				3.76	11/26/96	joe	11/27/96	andy
Anthracene	(EPA 8270/625)	ug/L	BDL				2.67	11/26/96	joe	11/27/96	andy
Benzo(a)anthracene	(EPA 8270/625)	ug/L	BDL				2.56	11/26/96	joe	11/27/96	andy
Benzo(b)fluoranthene	(EPA 8270/625)	ug/L	BDL				4.80	11/26/96	joe	11/27/96	andy
Benzo(k)fluoranthene	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	11/27/96	andy
Benzo(ghi)perylene	(EPA 8270/625)	ug/L	BDL				4.10	11/26/96	joe	11/27/96	andy
Benzo(a)pyrene	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	11/27/96	andy
Chrysene	(EPA 8270/625)	ug/L	BDL				2.72	11/26/96	joe	11/27/96	andy
Dibenzo(ah)anthracene	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	11/27/96	andy
Fluoranthene	(EPA 8270/625)	ug/L	BDL				2.18	11/26/96	joe	11/27/96	andy
Fluorene	(EPA 8270/625)	ug/L	BDL				4.10	11/26/96	joe	11/27/96	andy
Indeno(123cd)pyrene	(EPA 8270/625)	ug/L	BDL				3.70	11/26/96	joe	11/27/96	andy
Naphthalene	(EPA 8270/625)	ug/L	BDL				1.28	11/26/96	joe	11/27/96	andy
Phenanthrene	(EPA 8270/625)	ug/L	BDL				2.82	11/26/96	joe	11/27/96	andy
Pyrene	(EPA 8270/625)	ug/L	BDL				9.25	11/26/96	joe	11/27/96	andy
Benzidine	(EPA 8270/625)	ug/L	BDL				44.0	11/26/96	joe	11/27/96	andy
3,3-Dichlorbenzidine	(EPA 8270/625)	ug/L	BDL				16.5	11/26/96	joe	11/27/96	andy
Butylbenzylphthalate	(EPA 8270/625)	ug/L	BDL				1.98	11/26/96	joe	11/27/96	andy
Bis(2-ethylhexyl)phthalate	(EPA 8270/625)	ug/L	BDL				4.80	11/26/96	joe	11/27/96	andy
Di-n-butylphthalate	(EPA 8270/625)	ug/L	BDL				2.77	11/26/96	joe	11/27/96	andy
Diethylphthalate	(EPA 8270/625)	ug/L	BDL				5.81	11/26/96	joe	11/27/96	andy
Dimethylphthalate	(EPA 8270/625)	ug/L	BDL				3.10	11/26/96	joe	11/27/96	andy
Di-n-octylphthalate	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	11/27/96	andy
Bis(2-chloroethoxy)methane	(EPA 8270/625)	ug/L	BDL				1.68	11/26/96	joe	11/27/96	andy
Bis(2-chloroethyl)ether	(EPA 8270/625)	ug/L	BDL				5.70	11/26/96	joe	11/27/96	andy
Bis(2-chloroisopropyl)ether	(EPA 8270/625)	ug/L	BDL				5.70	11/26/96	joe	11/27/96	andy
1,2-Dichlorobenzene	(EPA 8270/625)	ug/L	BDL				2.04	11/26/96	joe	11/27/96	andy
1,3-Dichlorobenzene	(EPA 8270/625)	ug/L	BDL				1.92	11/26/96	joe	11/27/96	andy
1,4-Dichlorobenzene	(EPA 8270/625)	ug/L	BDL				1.95	11/26/96	joe	11/27/96	andy
4-Bromophenylphenyl ether	(EPA 8270/625)	ug/L	BDL				2.36	11/26/96	joe	11/27/96	andy
4-Chlorophenylphenyl ether	(EPA 8270/625)	ug/L	BDL				3.44	11/26/96	joe	11/27/96	andy
2-chloronaphthalene	(EPA 8270/625)	ug/L	BDL				3.41	11/26/96	joe	11/27/96	andy
2,4-dinitrotoluene	(EPA 8270/625)	ug/L	BDL				5.70	11/26/96	joe	11/27/96	andy
2,6-dinitrotoluene	(EPA 8270/625)	ug/L	BDL				3.74	11/26/96	joe	11/27/96	andy
Hexachlorobenzene	(EPA 8270/625)	ug/L	BDL				0.0310	11/26/96	joe	11/27/96	andy
Hexachlorobutadiene	(EPA 8270/625)	ug/L	BDL				1.00	11/26/96	joe	11/27/96	andy
Hexachlorocyclopentadiene	(EPA 8270/625)	ug/L	BDL				0.0190	11/26/96	joe	11/27/96	andy
Hexachloroethane	(EPA 8270/625)	ug/L	BDL				0.530	11/26/96	joe	11/27/96	andy
Isophorone	(EPA 8270/625)	ug/L	BDL				0.970	11/26/96	joe	11/27/96	andy
Nitrobenzene	(EPA 8270/625)	ug/L	BDL				2.01	11/26/96	joe	11/27/96	andy
N-nitroso-di-n-propylamine	(EPA 8270/625)	ug/L	BDL				11.0	11/26/96	joe	11/27/96	andy
N-nitrosodiphenylamine	(EPA 8270/625)	ug/L	BDL				4.37	11/26/96	joe	11/27/96	andy
1,2,4-trichlorobenzene	(EPA 8270/625)	ug/L	BDL				1.43	11/26/96	joe	11/27/96	andy
N-nitrosodimethylamine	(EPA 8270/625)	ug/L	BDL				10.0	11/26/96	joe	11/27/96	andy
Dioxin(2378-TCDD)	(EPA 8270/625)	ug/L	BDL				0.0500	11/26/96	joe	11/27/96	andy

Group # 16052

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City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12596 Sample ID PG-01SBE-1 FOSTER WHEELER
Group # 16052 Sample Site
Sample Type WATER Sampled 11/22/96 08:30

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Bis(2-ethylhexyl)adipate	(EPA 8270/625)	ug/L	BDL				4.90	11/26/96	joe	11/27/96	andy

Group # 16052

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CITY OF TALLAHASSEE
Water Quality Division
3805 Springhill Rd.
Tallahassee, Fl. 32310-6502
(904) 891-1200
Cert. #51097 & E51259

Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12597
Group # 16052
Sample Type WATER

Sample ID PG-01TWE-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 08:45

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Acenaphthene	(EPA8270/625)	ug/L	BDL				3.52	11/26/96	joe	11/27/96	andy
Acenaphthylene	(EPA 8270/625)	ug/L	BDL				3.76	11/26/96	joe	11/27/96	andy
Anthracene	(EPA 8270/625)	ug/L	BDL				2.67	11/26/96	joe	11/27/96	andy
Benzo(a)anthracene	(EPA 8270/625)	ug/L	BDL				2.56	11/26/96	joe	11/27/96	andy
Benzo(b)fluoranthene	(EPA 8270/625)	ug/L	BDL				4.80	11/26/96	joe	11/27/96	andy
Benzo(k)fluoranthene	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	11/27/96	andy
Benzo(ghi)perylene	(EPA 8270/625)	ug/L	BDL				4.10	11/26/96	joe	11/27/96	andy
Benzo(a)pyrene	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	11/27/96	andy
Chrysene	(EPA 8270/625)	ug/L	BDL				2.72	11/26/96	joe	11/27/96	andy
Dibenzo(ah)anthracene	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	11/27/96	andy
Fluoranthene	(EPA 8270/625)	ug/L	BDL				2.18	11/26/96	joe	11/27/96	andy
Fluorene	(EPA 8270/625)	ug/L	BDL				4.10	11/26/96	joe	11/27/96	andy
Indeno(123cd)pyrene	(EPA 8270/625)	ug/L	BDL				3.70	11/26/96	joe	11/27/96	andy
Naphthalene	(EPA 8270/625)	ug/L	BDL				1.28	11/26/96	joe	11/27/96	andy
Phenanthrene	(EPA 8270/625)	ug/L	BDL				2.82	11/26/96	joe	11/27/96	andy
Pyrene	(EPA 8270/625)	ug/L	BDL				9.25	11/26/96	joe	11/27/96	andy
Benzidine	(EPA 8270/625)	ug/L	BDL				44.0	11/26/96	joe	11/27/96	andy
3,3-Dichlorbenzidine	(EPA 8270/625)	ug/L	BDL				16.5	11/26/96	joe	11/27/96	andy
Butylbenzylphthalate	(EPA 8270/625)	ug/L	BDL				1.98	11/26/96	joe	11/27/96	andy
Bis(2-ethylhexyl)phthalate	(EPA 8270/625)	ug/L	BDL				4.80	11/26/96	joe	11/27/96	andy
Di-n-butylphthalate	(EPA 8270/625)	ug/L	BDL				2.77	11/26/96	joe	11/27/96	andy
Diethylphthalate	(EPA 8270/625)	ug/L	BDL				5.81	11/26/96	joe	11/27/96	andy
Dimethylphthalate	(EPA 8270/625)	ug/L	BDL				3.10	11/26/96	joe	11/27/96	andy
Di-n-octylphthalate	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	11/27/96	andy
Bis(2-chloroethoxy)methane	(EPA 8270/625)	ug/L	BDL				1.68	11/26/96	joe	11/27/96	andy
Bis(2-chloroethyl)ether	(EPA 8270/625)	ug/L	BDL				5.70	11/26/96	joe	11/27/96	andy
Bis(2-chloroisopropyl)ether	(EPA 8270/625)	ug/L	BDL				5.70	11/26/96	joe	11/27/96	andy
1,2-Dichlorobenzene	(EPA 8270/625)	ug/L	BDL				2.04	11/26/96	joe	11/27/96	andy
1,3-Dichlorobenzene	(EPA 8270/625)	ug/L	BDL				1.92	11/26/96	joe	11/27/96	andy
1,4-Dichlorobenzene	(EPA 8270/625)	ug/L	BDL				1.95	11/26/96	joe	11/27/96	andy
4-Bromophenylphenyl ether	(EPA 8270/625)	ug/L	BDL				2.36	11/26/96	joe	11/27/96	andy
4-Chlorophenylphenyl ether	(EPA 8270/625)	ug/L	BDL				3.44	11/26/96	joe	11/27/96	andy
2-chloronaphthalene	(EPA 8270/625)	ug/L	BDL				3.41	11/26/96	joe	11/27/96	andy
2,4-dinitrotoluene	(EPA 8270/625)	ug/L	BDL				5.70	11/26/96	joe	11/27/96	andy
2,6-dinitrotoluene	(EPA 8270/625)	ug/L	BDL				3.74	11/26/96	joe	11/27/96	andy
Hexachlorobenzene	(EPA 8270/625)	ug/L	BDL				0.0310	11/26/96	joe	11/27/96	andy
Hexachlorobutadiene	(EPA 8270/625)	ug/L	BDL				1.00	11/26/96	joe	11/27/96	andy
Hexachlorocyclopentadiene	(EPA 8270/625)	ug/L	BDL				0.0190	11/26/96	joe	11/27/96	andy
Hexachloroethane	(EPA 8270/625)	ug/L	BDL				0.530	11/26/96	joe	11/27/96	andy
Isophorone	(EPA 8270/625)	ug/L	BDL				0.970	11/26/96	joe	11/27/96	andy
Nitrobenzene	(EPA 8270/625)	ug/L	BDL				2.01	11/26/96	joe	11/27/96	andy
N-nitroso-di-n-propylamine	(EPA 8270/625)	ug/L	BDL				11.0	11/26/96	joe	11/27/96	andy
N-nitrosodiphenylamine	(EPA 8270/625)	ug/L	BDL				4.37	11/26/96	joe	11/27/96	andy
1,2,4-trichlorobenzene	(EPA 8270/625)	ug/L	BDL				1.43	11/26/96	joe	11/27/96	andy
N-nitrosodimethylamine	(EPA 8270/625)	ug/L	BDL				10.0	11/26/96	joe	11/27/96	andy
Dioxin(2378-TCDD)	(EPA 8270/625)	ug/L	BDL				0.0500	11/26/96	joe	11/27/96	andy

Group # 16052

Water Quality Division
3805 Springhill Rd.
Tallahassee, Fl. 32310-6502
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Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12597
Group # 16052
Sample Type WATER

Sample ID PG-01TWE-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 08:45

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Bis(2-ethylhexyl)adipate	(EPA 8270/625)	ug/L	BDL				4.90	11/26/96	joe	11/27/96	andy

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Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12598 Sample ID PG-02TW-1 FOSTER WHEELER
Group # 16052 Sample Site
Sample Type WATER Sampled 11/22/96 12:00

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Acenaphthene	(EPA8270/625)	ug/L	BDL				3.52	11/26/96	joe	12/06/96	andy
Acenaphthylene	(EPA 8270/625)	ug/L	BDL				3.76	11/26/96	joe	12/06/96	andy
Anthracene	(EPA 8270/625)	ug/L	BDL				2.67	11/26/96	joe	12/06/96	andy
Benzo(a)anthracene	(EPA 8270/625)	ug/L	BDL				2.56	11/26/96	joe	12/06/96	andy
Benzo(b)fluoranthene	(EPA 8270/625)	ug/L	BDL				4.80	11/26/96	joe	12/06/96	andy
Benzo(k)fluoranthene	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	12/06/96	andy
Benzo(ghi)perylene	(EPA 8270/625)	ug/L	BDL				4.10	11/26/96	joe	12/06/96	andy
Benzo(a)pyrene	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	12/06/96	andy
Chrysene	(EPA 8270/625)	ug/L	BDL				2.72	11/26/96	joe	12/06/96	andy
Dibenzo(ah)anthracene	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	12/06/96	andy
Fluoranthene	(EPA 8270/625)	ug/L	BDL				2.18	11/26/96	joe	12/06/96	andy
Fluorene	(EPA 8270/625)	ug/L	BDL				4.10	11/26/96	joe	12/06/96	andy
Indeno(123cd)pyrene	(EPA 8270/625)	ug/L	BDL				3.70	11/26/96	joe	12/06/96	andy
Naphthalene	(EPA 8270/625)	ug/L	BDL				1.28	11/26/96	joe	12/06/96	andy
Phenanthrene	(EPA 8270/625)	ug/L	BDL				2.82	11/26/96	joe	12/06/96	andy
Pyrene	(EPA 8270/625)	ug/L	BDL				9.25	11/26/96	joe	12/06/96	andy
Benzidine	(EPA 8270/625)	ug/L	BDL				44.0	11/26/96	joe	12/06/96	andy
3,3-Dichlorbenzidine	(EPA 8270/625)	ug/L	BDL				16.5	11/26/96	joe	12/06/96	andy
Butylbenzylphthalate	(EPA 8270/625)	ug/L	BDL				1.98	11/26/96	joe	12/06/96	andy
Bis(2-ethylhexyl)phthalate	(EPA 8270/625)	ug/L	BDL				4.80	11/26/96	joe	12/06/96	andy
Di-n-butylphthalate	(EPA 8270/625)	ug/L	BDL				2.77	11/26/96	joe	12/06/96	andy
Diethylphthalate	(EPA 8270/625)	ug/L	6.77				5.81	11/26/96	joe	12/06/96	andy
Dimethylphthalate	(EPA 8270/625)	ug/L	BDL				3.10	11/26/96	joe	12/06/96	andy
Di-n-octylphthalate	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	12/06/96	andy
Bis(2-chloroethoxy)methane	(EPA 8270/625)	ug/L	BDL				1.68	11/26/96	joe	12/06/96	andy
Bis(2-chloroethyl)ether	(EPA 8270/625)	ug/L	BDL				5.70	11/26/96	joe	12/06/96	andy
Bis(2-chloroisopropyl)ether	(EPA 8270/625)	ug/L	BDL				5.70	11/26/96	joe	12/06/96	andy
1,2-Dichlorobenzene	(EPA 8270/625)	ug/L	BDL				2.04	11/26/96	joe	12/06/96	andy
1,3-Dichlorobenzene	(EPA 8270/625)	ug/L	BDL				1.92	11/26/96	joe	12/06/96	andy
1,4-Dichlorobenzene	(EPA 8270/625)	ug/L	BDL				1.95	11/26/96	joe	12/06/96	andy
4-Bromophenylphenyl ether	(EPA 8270/625)	ug/L	BDL				2.36	11/26/96	joe	12/06/96	andy
4-Chlorophenylphenyl ether	(EPA 8270/625)	ug/L	BDL				3.44	11/26/96	joe	12/06/96	andy
2-chloronaphthalene	(EPA 8270/625)	ug/L	BDL				3.41	11/26/96	joe	12/06/96	andy
2,4-dinitrotoluene	(EPA 8270/625)	ug/L	BDL				5.70	11/26/96	joe	12/06/96	andy
2,6-dinitrotoluene	(EPA 8270/625)	ug/L	BDL				3.74	11/26/96	joe	12/06/96	andy
Hexachlorobenzene	(EPA 8270/625)	ug/L	BDL				0.0310	11/26/96	joe	12/06/96	andy
Hexachlorobutadiene	(EPA 8270/625)	ug/L	BDL				1.00	11/26/96	joe	12/06/96	andy
Hexachlorocyclopentadiene	(EPA 8270/625)	ug/L	BDL				0.0190	11/26/96	joe	12/06/96	andy
Hexachloroethane	(EPA 8270/625)	ug/L	BDL				0.530	11/26/96	joe	12/06/96	andy
Isophorone	(EPA 8270/625)	ug/L	BDL				0.970	11/26/96	joe	12/06/96	andy
Nitrobenzene	(EPA 8270/625)	ug/L	BDL				2.01	11/26/96	joe	12/06/96	andy
N-nitroso-di-n-propylamine	(EPA 8270/625)	ug/L	BDL				11.0	11/26/96	joe	12/06/96	andy
N-nitrosodiphenylamine	(EPA 8270/625)	ug/L	BDL				4.37	11/26/96	joe	12/06/96	andy
1,2,4-trichlorobenzene	(EPA 8270/625)	ug/L	BDL				1.43	11/26/96	joe	12/06/96	andy
N-nitrosodimethylamine	(EPA 8270/625)	ug/L	BDL				10.0	11/26/96	joe	12/06/96	andy
Dioxin(2378-TCDD)	(EPA 8270/625)	ug/L	BDL				0.0500	11/26/96	joe	12/06/96	andy

Group # 16052

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Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12598
Group # 16052
Sample Type WATER

Sample ID PG-02TW-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 12:00

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Bis(2-ethylhexyl)adipate	(EPA 8270/625)	ug/L	BDL				4.90	11/26/96	joe	12/06/96	andy

Group # 16052

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Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12599
Group # 16052
Sample Type WATER

Sample ID PG-06TW-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 09:35

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Acenaphthene	(EPA8270/625)	ug/L	BDL				3.52	11/26/96	joe	12/06/96	andy
Acenaphthylene	(EPA 8270/625)	ug/L	BDL				3.76	11/26/96	joe	12/06/96	andy
Anthracene	(EPA 8270/625)	ug/L	BDL				2.67	11/26/96	joe	12/06/96	andy
Benzo(a)anthracene	(EPA 8270/625)	ug/L	BDL				2.56	11/26/96	joe	12/06/96	andy
Benzo(b)fluoranthene	(EPA 8270/625)	ug/L	BDL				4.80	11/26/96	joe	12/06/96	andy
Benzo(k)fluoranthene	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	12/06/96	andy
Benzo(ghi)perylene	(EPA 8270/625)	ug/L	BDL				4.10	11/26/96	joe	12/06/96	andy
Benzo(a)pyrene	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	12/06/96	andy
Chrysene	(EPA 8270/625)	ug/L	BDL				2.72	11/26/96	joe	12/06/96	andy
Dibenzo(ah)anthracene	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	12/06/96	andy
Fluoranthene	(EPA 8270/625)	ug/L	BDL				2.18	11/26/96	joe	12/06/96	andy
Fluorene	(EPA 8270/625)	ug/L	BDL				4.10	11/26/96	joe	12/06/96	andy
Indeno(123cd)pyrene	(EPA 8270/625)	ug/L	BDL				3.70	11/26/96	joe	12/06/96	andy
Naphthalene	(EPA 8270/625)	ug/L	BDL				1.28	11/26/96	joe	12/06/96	andy
Phenanthrene	(EPA 8270/625)	ug/L	BDL				2.82	11/26/96	joe	12/06/96	andy
Pyrene	(EPA 8270/625)	ug/L	BDL				9.25	11/26/96	joe	12/06/96	andy
Benzidine	(EPA 8270/625)	ug/L	BDL				44.0	11/26/96	joe	12/06/96	andy
3,3-Dichlorbenzidine	(EPA 8270/625)	ug/L	BDL				16.5	11/26/96	joe	12/06/96	andy
Butylbenzylphthalate	(EPA 8270/625)	ug/L	BDL				1.98	11/26/96	joe	12/06/96	andy
Bis(2-ethylhexyl)phthalate	(EPA 8270/625)	ug/L	BDL				4.80	11/26/96	joe	12/06/96	andy
Di-n-butylphthalate	(EPA 8270/625)	ug/L	BDL				2.77	11/26/96	joe	12/06/96	andy
Diethylphthalate	(EPA 8270/625)	ug/L	BDL				5.81	11/26/96	joe	12/06/96	andy
Dimethylphthalate	(EPA 8270/625)	ug/L	BDL				3.10	11/26/96	joe	12/06/96	andy
Di-n-octylphthalate	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	12/06/96	andy
Bis(2-chloroethoxy)methane	(EPA 8270/625)	ug/L	BDL				1.68	11/26/96	joe	12/06/96	andy
Bis(2-chloroethyl)ether	(EPA 8270/625)	ug/L	BDL				5.70	11/26/96	joe	12/06/96	andy
Bis(2-chloroisopropyl)ether	(EPA 8270/625)	ug/L	BDL				5.70	11/26/96	joe	12/06/96	andy
1,2-Dichlorobenzene	(EPA 8270/625)	ug/L	BDL				2.04	11/26/96	joe	12/06/96	andy
1,3-Dichlorobenzene	(EPA 8270/625)	ug/L	BDL				1.92	11/26/96	joe	12/06/96	andy
1,4-Dichlorobenzene	(EPA 8270/625)	ug/L	BDL				1.95	11/26/96	joe	12/06/96	andy
4-Bromophenylphenyl ether	(EPA 8270/625)	ug/L	BDL				2.36	11/26/96	joe	12/06/96	andy
4-Chlorophenylphenyl ether	(EPA 8270/625)	ug/L	BDL				3.44	11/26/96	joe	12/06/96	andy
2-chloronaphthalene	(EPA 8270/625)	ug/L	BDL				3.41	11/26/96	joe	12/06/96	andy
2,4-dinitrotoluene	(EPA 8270/625)	ug/L	BDL				5.70	11/26/96	joe	12/06/96	andy
2,6-dinitrotoluene	(EPA 8270/625)	ug/L	BDL				3.74	11/26/96	joe	12/06/96	andy
Hexachlorobenzene	(EPA 8270/625)	ug/L	BDL				0.0310	11/26/96	joe	12/06/96	andy
Hexachlorobutadiene	(EPA 8270/625)	ug/L	BDL				1.00	11/26/96	joe	12/06/96	andy
Hexachlorocyclopentadiene	(EPA 8270/625)	ug/L	BDL				0.0190	11/26/96	joe	12/06/96	andy
Hexachloroethane	(EPA 8270/625)	ug/L	BDL				0.530	11/26/96	joe	12/06/96	andy
Isophorone	(EPA 8270/625)	ug/L	BDL				0.970	11/26/96	joe	12/06/96	andy
Nitrobenzene	(EPA 8270/625)	ug/L	BDL				2.01	11/26/96	joe	12/06/96	andy
N-nitroso-di-n-propylamine	(EPA 8270/625)	ug/L	BDL				11.0	11/26/96	joe	12/06/96	andy
N-nitrosodiphenylamine	(EPA 8270/625)	ug/L	BDL				4.37	11/26/96	joe	12/06/96	andy
1,2,4-trichlorobenzene	(EPA 8270/625)	ug/L	BDL				1.43	11/26/96	joe	12/06/96	andy
N-nitrosodimethylamine	(EPA 8270/625)	ug/L	BDL				10.0	11/26/96	joe	12/06/96	andy
Dioxin(2378-TCDD)	(EPA 8270/625)	ug/L	BDL				0.0500	11/26/96	joe	12/06/96	andy

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City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12599
Group # 16052
Sample Type WATER

Sample ID PG-06TW-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 09:35

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Bis(2-ethylhexyl)adipate	(EPA 8270/625)	ug/L	BDL				4.90	11/26/96	joe	12/06/96	andy

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Tallahassee, Fl. 32310-6502
(904) 891-1200
CITY OF TALLAHASSEE Cert. #51097 & E51259

Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating.Site Assess

Sampled by : GREG NEW

Sample # 96-12600
Group # 16052
Sample Type WATER

Sample ID PG-06TWD-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 09:35

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Acenaphthene	(EPA8270/625)	ug/L	BDL				3.52	11/26/96	joe	12/06/96	andy
Acenaphthylene	(EPA 8270/625)	ug/L	BDL				3.76	11/26/96	joe	12/06/96	andy
Anthracene	(EPA 8270/625)	ug/L	BDL				2.67	11/26/96	joe	12/06/96	andy
Benzo(a)anthracene	(EPA 8270/625)	ug/L	BDL				2.56	11/26/96	joe	12/06/96	andy
Benzo(b)fluoranthene	(EPA 8270/625)	ug/L	BDL				4.80	11/26/96	joe	12/06/96	andy
Benzo(k)fluoranthene	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	12/06/96	andy
Benzo(ghi)perylene	(EPA 8270/625)	ug/L	BDL				4.10	11/26/96	joe	12/06/96	andy
Benzo(a)pyrene	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	12/06/96	andy
Chrysene	(EPA 8270/625)	ug/L	BDL				2.72	11/26/96	joe	12/06/96	andy
Dibenzo(ah)anthracene	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	12/06/96	andy
Fluoranthene	(EPA 8270/625)	ug/L	BDL				2.18	11/26/96	joe	12/06/96	andy
Fluorene	(EPA 8270/625)	ug/L	BDL				4.10	11/26/96	joe	12/06/96	andy
Indeno(123cd)pyrene	(EPA 8270/625)	ug/L	BDL				3.70	11/26/96	joe	12/06/96	andy
Naphthalene	(EPA 8270/625)	ug/L	BDL				1.28	11/26/96	joe	12/06/96	andy
Phenanthrene	(EPA 8270/625)	ug/L	BDL				2.82	11/26/96	joe	12/06/96	andy
Pyrene	(EPA 8270/625)	ug/L	BDL				9.25	11/26/96	joe	12/06/96	andy
Benzidine	(EPA 8270/625)	ug/L	BDL				44.0	11/26/96	joe	12/06/96	andy
3,3-Dichlorbenzidine	(EPA 8270/625)	ug/L	BDL				16.5	11/26/96	joe	12/06/96	andy
Butylbenzylphthalate	(EPA 8270/625)	ug/L	BDL				1.98	11/26/96	joe	12/06/96	andy
Bis(2-ethylhexyl)phthalate	(EPA 8270/625)	ug/L	BDL				4.80	11/26/96	joe	12/06/96	andy
Di-n-butylphthalate	(EPA 8270/625)	ug/L	BDL				2.77	11/26/96	joe	12/06/96	andy
Diethylphthalate	(EPA 8270/625)	ug/L	BDL				5.81	11/26/96	joe	12/06/96	andy
Dimethylphthalate	(EPA 8270/625)	ug/L	BDL				3.10	11/26/96	joe	12/06/96	andy
Di-n-octylphthalate	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	12/06/96	andy
Bis(2-chloroethoxy)methane	(EPA 8270/625)	ug/L	BDL				1.68	11/26/96	joe	12/06/96	andy
Bis(2-chloroethyl)ether	(EPA 8270/625)	ug/L	BDL				5.70	11/26/96	joe	12/06/96	andy
Bis(2-chloroisopropyl)ether	(EPA 8270/625)	ug/L	BDL				5.70	11/26/96	joe	12/06/96	andy
1,2-Dichlorobenzene	(EPA 8270/625)	ug/L	BDL				2.04	11/26/96	joe	12/06/96	andy
1,3-Dichlorobenzene	(EPA 8270/625)	ug/L	BDL				1.92	11/26/96	joe	12/06/96	andy
1,4-Dichlorobenzene	(EPA 8270/625)	ug/L	BDL				1.95	11/26/96	joe	12/06/96	andy
4-Bromophenylphenyl ether	(EPA 8270/625)	ug/L	BDL				2.36	11/26/96	joe	12/06/96	andy
4-Chlorophenylphenyl ether	(EPA 8270/625)	ug/L	BDL				3.44	11/26/96	joe	12/06/96	andy
2-chloronaphthalene	(EPA 8270/625)	ug/L	BDL				3.41	11/26/96	joe	12/06/96	andy
2,4-dinitrotoluene	(EPA 8270/625)	ug/L	BDL				5.70	11/26/96	joe	12/06/96	andy
2,6-dinitrotoluene	(EPA 8270/625)	ug/L	BDL				3.74	11/26/96	joe	12/06/96	andy
Hexachlorobenzene	(EPA 8270/625)	ug/L	BDL				0.0310	11/26/96	joe	12/06/96	andy
Hexachlorobutadiene	(EPA 8270/625)	ug/L	BDL				1.00	11/26/96	joe	12/06/96	andy
Hexachlorocyclopentadiene	(EPA 8270/625)	ug/L	BDL				0.0190	11/26/96	joe	12/06/96	andy
Hexachloroethane	(EPA 8270/625)	ug/L	BDL				0.530	11/26/96	joe	12/06/96	andy
Isophorone	(EPA 8270/625)	ug/L	BDL				0.970	11/26/96	joe	12/06/96	andy
Nitrobenzene	(EPA 8270/625)	ug/L	BDL				2.01	11/26/96	joe	12/06/96	andy
N-nitroso-di-n-propylamine	(EPA 8270/625)	ug/L	BDL				11.0	11/26/96	joe	12/06/96	andy
N-nitrosodiphenylamine	(EPA 8270/625)	ug/L	BDL				4.37	11/26/96	joe	12/06/96	andy
1,2,4-trichlorobenzene	(EPA 8270/625)	ug/L	BDL				1.43	11/26/96	joe	12/06/96	andy
N-nitrosodimethylamine	(EPA 8270/625)	ug/L	BDL				10.0	11/26/96	joe	12/06/96	andy
Dioxin(2378-TCDD)	(EPA 8270/625)	ug/L	BDL				0.0500	11/26/96	joe	12/06/96	andy

Group # 16052

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Water Quality Division
3805 Springhill Rd.
Tallahassee, Fl. 32310-6502
(904) 891-1200
CITY OF TALLAHASSEE Cert. #51097 & E51259

Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12600
Group # 16052
Sample Type WATER

Sample ID PG-06TWD-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 09:35

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Bis(2-ethylhexyl)adipate	(EPA 8270/625)	ug/L	BDL				4.90	11/26/96	joe	12/06/96	andy

Group # 16052

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Tallahassee, Fl. 32310-6502
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Electric Production & Env.Affairs COT290101 — Purdom Generating Site Assess
Electric Department
City of Tallahassee — Sampled by : GREG NEW

Tallahassee ,FL 32302
ATTN. Greg New

Sample # 96-12601 — Sample ID PG-07TW-1 FOSTER WHEELER
Group # 16052 — Sample Site ____________
Sample Type WATER — Sampled 11/22/96 11:00

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Acenaphthene	(EPA8270/625)	ug/L	BDL				3.52	11/26/96	joe	12/06/96	andy
Acenaphthylene	(EPA 8270/625)	ug/L	BDL				3.76	11/26/96	joe	12/06/96	andy
Anthracene	(EPA 8270/625)	ug/L	BDL				2.67	11/26/96	joe	12/06/96	andy
Benzo(a)anthracene	(EPA 8270/625)	ug/L	BDL				2.56	11/26/96	joe	12/06/96	andy
Benzo(b)fluoranthene	(EPA 8270/625)	ug/L	BDL				4.80	11/26/96	joe	12/06/96	andy
Benzo(k)fluoranthene	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	12/06/96	andy
Benzo(ghi)perylene	(EPA 8270/625)	ug/L	BDL				4.10	11/26/96	joe	12/06/96	andy
Benzo(a)pyrene	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	12/06/96	andy
Chrysene	(EPA 8270/625)	ug/L	BDL				2.72	11/26/96	joe	12/06/96	andy
Dibenzo(ah)anthracene	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	12/06/96	andy
Fluoranthene	(EPA 8270/625)	ug/L	BDL				2.18	11/26/96	joe	12/06/96	andy
Fluorene	(EPA 8270/625)	ug/L	BDL				4.10	11/26/96	joe	12/06/96	andy
Indeno(123cd)pyrene	(EPA 8270/625)	ug/L	BDL				3.70	11/26/96	joe	12/06/96	andy
Naphthalene	(EPA 8270/625)	ug/L	BDL				1.28	11/26/96	joe	12/06/96	andy
Phenanthrene	(EPA 8270/625)	ug/L	BDL				2.82	11/26/96	joe	12/06/96	andy
Pyrene	(EPA 8270/625)	ug/L	BDL				9.25	11/26/96	joe	12/06/96	andy
Benzidine	(EPA 8270/625)	ug/L	BDL				44.0	11/26/96	joe	12/06/96	andy
3,3-Dichlorbenzidine	(EPA 8270/625)	ug/L	BDL				16.5	11/26/96	joe	12/06/96	andy
Butylbenzylphthalate	(EPA 8270/625)	ug/L	BDL				1.98	11/26/96	joe	12/06/96	andy
Bis(2-ethylhexyl)phthalate	(EPA 8270/625)	ug/L	BDL				4.80	11/26/96	joe	12/06/96	andy
Di-n-butylphthalate	(EPA 8270/625)	ug/L	BDL				2.77	11/26/96	joe	12/06/96	andy
Diethylphthalate	(EPA 8270/625)	ug/L	BDL				5.81	11/26/96	joe	12/06/96	andy
Dimethylphthalate	(EPA 8270/625)	ug/L	BDL				3.10	11/26/96	joe	12/06/96	andy
Di-n-octylphthalate	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	12/06/96	andy
Bis(2-chloroethoxy)methane	(EPA 8270/625)	ug/L	BDL				1.68	11/26/96	joe	12/06/96	andy
Bis(2-chloroethyl)ether	(EPA 8270/625)	ug/L	BDL				5.70	11/26/96	joe	12/06/96	andy
Bis(2-chloroisopropyl)ether	(EPA 8270/625)	ug/L	BDL				5.70	11/26/96	joe	12/06/96	andy
1,2-Dichlorobenzene	(EPA 8270/625)	ug/L	BDL				2.04	11/26/96	joe	12/06/96	andy
1,3-Dichlorobenzene	(EPA 8270/625)	ug/L	BDL				1.92	11/26/96	joe	12/06/96	andy
1,4-Dichlorobenzene	(EPA 8270/625)	ug/L	BDL				1.95	11/26/96	joe	12/06/96	andy
4-Bromophenylphenyl ether	(EPA 8270/625)	ug/L	BDL				2.36	11/26/96	joe	12/06/96	andy
4-Chlorophenylphenyl ether	(EPA 8270/625)	ug/L	BDL				3.44	11/26/96	joe	12/06/96	andy
2-chloronaphthalene	(EPA 8270/625)	ug/L	BDL				3.41	11/26/96	joe	12/06/96	andy
2,4-dinitrotoluene	(EPA 8270/625)	ug/L	BDL				5.70	11/26/96	joe	12/06/96	andy
2,6-dinitrotoluene	(EPA 8270/625)	ug/L	BDL				3.74	11/26/96	joe	12/06/96	andy
Hexachlorobenzene	(EPA 8270/625)	ug/L	BDL				0.0310	11/26/96	joe	12/06/96	andy
Hexachlorobutadiene	(EPA 8270/625)	ug/L	BDL				1.00	11/26/96	joe	12/06/96	andy
Hexachlorocyclopentadiene	(EPA 8270/625)	ug/L	BDL				0.0190	11/26/96	joe	12/06/96	andy
Hexachloroethane	(EPA 8270/625)	ug/L	BDL				0.530	11/26/96	joe	12/06/96	andy
Isophorone	(EPA 8270/625)	ug/L	BDL				0.970	11/26/96	joe	12/06/96	andy
Nitrobenzene	(EPA 8270/625)	ug/L	BDL				2.01	11/26/96	joe	12/06/96	andy
N-nitroso-di-n-propylamine	(EPA 8270/625)	ug/L	BDL				11.0	11/26/96	joe	12/06/96	andy
N-nitrosodiphenylamine	(EPA 8270/625)	ug/L	BDL				4.37	11/26/96	joe	12/06/96	andy
1,2,4-trichlorobenzene	(EPA 8270/625)	ug/L	BDL				1.43	11/26/96	joe	12/06/96	andy
N-nitrosodimethylamine	(EPA 8270/625)	ug/L	BDL				10.0	11/26/96	joe	12/06/96	andy
Dioxin(2378-TCDD)	(EPA 8270/625)	ug/L	BDL				0.0500	11/26/96	joe	12/06/96	andy

Group # 16052

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Water Quality Division
3805 Springhill Rd.
Tallahassee, Fl. 32310-6502
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Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12601
Group # 16052
Sample Type WATER

Sample ID PG-07TW-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 11:00

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Bis(2-ethylhexyl)adipate	(EPA 8270/625)	ug/L	BDL				4.90	11/26/96	joe	12/06/96	andy

Group # 16052

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Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12602 Sample ID PG-09TW-1 FOSTER WHEELER
Group # 16052 Sample Site
Sample Type WATER Sampled 11/22/96 12:45

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Acenaphthene	(EPA8270/625)	ug/L	BDL				3.52	11/26/96	joe	12/06/96	andy
Acenaphthylene	(EPA 8270/625)	ug/L	BDL				3.76	11/26/96	joe	12/06/96	andy
Anthracene	(EPA 8270/625)	ug/L	BDL				2.67	11/26/96	joe	12/06/96	andy
Benzo(a)anthracene	(EPA 8270/625)	ug/L	BDL				2.56	11/26/96	joe	12/06/96	andy
Benzo(b)fluoranthene	(EPA 8270/625)	ug/L	BDL				4.80	11/26/96	joe	12/06/96	andy
Benzo(k)fluoranthene	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	12/06/96	andy
Benzo(ghi)perylene	(EPA 8270/625)	ug/L	BDL				4.10	11/26/96	joe	12/06/96	andy
Benzo(a)pyrene	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	12/06/96	andy
Chrysene	(EPA 8270/625)	ug/L	BDL				2.72	11/26/96	joe	12/06/96	andy
Dibenzo(ah)anthracene	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	12/06/96	andy
Fluoranthene	(EPA 8270/625)	ug/L	BDL				2.18	11/26/96	joe	12/06/96	andy
Fluorene	(EPA 8270/625)	ug/L	BDL				4.10	11/26/96	joe	12/06/96	andy
Indeno(123cd)pyrene	(EPA 8270/625)	ug/L	BDL				3.70	11/26/96	joe	12/06/96	andy
Naphthalene	(EPA 8270/625)	ug/L	BDL				1.28	11/26/96	joe	12/06/96	andy
Phenanthrene	(EPA 8270/625)	ug/L	BDL				2.82	11/26/96	joe	12/06/96	andy
Pyrene	(EPA 8270/625)	ug/L	BDL				9.25	11/26/96	joe	12/06/96	andy
Benzidine	(EPA 8270/625)	ug/L	BDL				44.0	11/26/96	joe	12/06/96	andy
3,3-Dichlorbenzidine	(EPA 8270/625)	ug/L	BDL				16.5	11/26/96	joe	12/06/96	andy
Butylbenzylphthalate	(EPA 8270/625)	ug/L	BDL				1.98	11/26/96	joe	12/06/96	andy
Bis(2-ethylhexyl)phthalate	(EPA 8270/625)	ug/L	BDL				4.80	11/26/96	joe	12/06/96	andy
Di-n-butylphthalate	(EPA 8270/625)	ug/L	BDL				2.77	11/26/96	joe	12/06/96	andy
Diethylphthalate	(EPA 8270/625)	ug/L	BDL				5.81	11/26/96	joe	12/06/96	andy
Dimethylphthalate	(EPA 8270/625)	ug/L	BDL				3.10	11/26/96	joe	12/06/96	andy
Di-n-octylphthalate	(EPA 8270/625)	ug/L	BDL				2.50	11/26/96	joe	12/06/96	andy
Bis(2-chloroethoxy)methane	(EPA 8270/625)	ug/L	BDL				1.68	11/26/96	joe	12/06/96	andy
Bis(2-chloroethyl)ether	(EPA 8270/625)	ug/L	BDL				5.70	11/26/96	joe	12/06/96	andy
Bis(2-chloroisopropyl)ether	(EPA 8270/625)	ug/L	BDL				5.70	11/26/96	joe	12/06/96	andy
1,2-Dichlorobenzene	(EPA 8270/625)	ug/L	BDL				2.04	11/26/96	joe	12/06/96	andy
1,3-Dichlorobenzene	(EPA 8270/625)	ug/L	BDL				1.92	11/26/96	joe	12/06/96	andy
1,4-Dichlorobenzene	(EPA 8270/625)	ug/L	BDL				1.95	11/26/96	joe	12/06/96	andy
4-Bromophenylphenyl ether	(EPA 8270/625)	ug/L	BDL				2.36	11/26/96	joe	12/06/96	andy
4-Chlorophenylphenyl ether	(EPA 8270/625)	ug/L	BDL				3.44	11/26/96	joe	12/06/96	andy
2-chloronaphthalene	(EPA 8270/625)	ug/L	BDL				3.41	11/26/96	joe	12/06/96	andy
2,4-dinitrotoluene	(EPA 8270/625)	ug/L	BDL				5.70	11/26/96	joe	12/06/96	andy
2,6-dinitrotoluene	(EPA 8270/625)	ug/L	BDL				3.74	11/26/96	joe	12/06/96	andy
Hexachlorobenzene	(EPA 8270/625)	ug/L	BDL				0.0310	11/26/96	joe	12/06/96	andy
Hexachlorobutadiene	(EPA 8270/625)	ug/L	BDL				1.00	11/26/96	joe	12/06/96	andy
Hexachlorocyclopentadiene	(EPA 8270/625)	ug/L	BDL				0.0190	11/26/96	joe	12/06/96	andy
Hexachloroethane	(EPA 8270/625)	ug/L	BDL				0.530	11/26/96	joe	12/06/96	andy
Isophorone	(EPA 8270/625)	ug/L	BDL				0.970	11/26/96	joe	12/06/96	andy
Nitrobenzene	(EPA 8270/625)	ug/L	BDL				2.01	11/26/96	joe	12/06/96	andy
N-nitroso-di-n-propylamine	(EPA 8270/625)	ug/L	BDL				11.0	11/26/96	joe	12/06/96	andy
N-nitrosodiphenylamine	(EPA 8270/625)	ug/L	BDL				4.37	11/26/96	joe	12/06/96	andy
1,2,4-trichlorobenzene	(EPA 8270/625)	ug/L	BDL				1.43	11/26/96	joe	12/06/96	andy
N-nitrosodimethylamine	(EPA 8270/625)	ug/L	BDL				10.0	11/26/96	joe	12/06/96	andy
Dioxin(2378-TCDD)	(EPA 8270/625)	ug/L	BDL				0.0500	11/26/96	joe	12/06/96	andy

Group # 16052

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Water Quality Division
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Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12602
Group # 16052
Sample Type WATER

Sample ID PG-09TW-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 12:45

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Bis(2-ethylhexyl)adipate	(EPA 8270/625)	ug/L	BDL				4.90	11/26/96	joe	12/06/96	andy

Group # 16052

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Electric Production & Env.Affairs COT290101 Purdom Generating Site Assess
Electric Department
City of Tallahassee Sampled by : GREG NEW

Tallahassee ,FL 32302
ATTN. Greg New

Sample # 96-12591 Sample ID PG-05SBD-1 FOSTER WHEELER
Group # 16052 Sample Site
Sample Type SOLIDS Sampled 11/22/96 10:35

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Dichlorodifluoromethane	(5030/ 8021)	mg/kg	BDL				0.0800	11/26/96	alan	12/05/96	alan
Chloromethane	(5030/ 8021)	mg/kg	BDL				0.00300	11/26/96	alan	12/05/96	alan
Vinylchloride	(5030/8021)	mg/kg	BDL				0.00300	11/26/96	alan	12/05/96	alan
Bromomethane	(5030/ 8021)	mg/kg	BDL				0.0300	11/26/96	alan	12/05/96	alan
Chloroethane	(5030/ 8021)	mg/kg	BDL				0.0300	11/26/96	alan	12/05/96	alan
Trichlorofluoromethane	(5030/ 8021)	mg/kg	BDL				0.0100	11/26/96	alan	12/05/96	alan
1,1-Dichloroethylene	(5030/ 8021)	mg/kg	BDL				0.00600	11/26/96	alan	12/05/96	alan
Methylenechloride	(5030/ 8021)	mg/kg	BDL				0.00700	11/26/96	alan	12/05/96	alan
t-1,2-Dichloroethylene	(5030/ 8021)	mg/kg	BDL				0.00300	11/26/96	alan	12/05/96	alan
1,1-Dichlroethane	(5030/ 8021)	mg/kg	BDL				0.00800	11/26/96	alan	12/05/96	alan
2,2-Dichloropropane	(5030/ 8021)	mg/kg	BDL				0.0100	11/26/96	alan	12/05/96	alan
c-1,2-Dichloroethylene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
Bromochloromethane	(5030/ 8021)	mg/kg	BDL				0.0120	11/26/96	alan	12/05/96	alan
Chloroform	(5030/ 8021)	mg/kg	BDL				0.00500	11/26/96	alan	12/05/96	alan
1,1,1-Trichloroethane	(5030/ 8021)	mg/kg	BDL				0.00400	11/26/96	alan	12/05/96	alan
Carbontetrachloride	(5030/ 8021)	mg/kg	BDL				0.00400	11/26/96	alan	12/05/96	alan
1,1-Dichloropropene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
Benzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2-Dichloroethane	(5030/ 8021)	mg/kg	BDL				0.00300	11/26/96	alan	12/05/96	alan
Trichloroethylenee	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2-Dichloropropane	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
Dibromomethane	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
Bromodichloromethane	(5030/ 8021)	mg/kg	BDL				0.00600	11/26/96	alan	12/05/96	alan
c-1,3-Dichloropropylene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
Toluene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
t-1,3-Dichloropropylene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
1,1,2-Trichloroethane	(5030/ 8021)	mg/kg	BDL				0.00400	11/26/96	alan	12/05/96	alan
Tetrachloroethylenene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,3-Dichloropropane	(5030/ 8021)	mg/kg	BDL				0.00300	11/26/96	alan	12/05/96	alan
Dibromochloromethane	(5030/ 8021)	mg/kg	BDL				0.00600	11/26/96	alan	12/05/96	alan
1,2-Dibromoethane	(5030/ 8021)	mg/kg	BDL				0.0130	11/26/96	alan	12/05/96	alan
Chlorobenzene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
1,1,1,2-Tetrachloroethane	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
Ethylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
m-Xylene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
p-Xylene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
O-Xylene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
total Xylenes	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
Styrene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
Bromoform	(5030/ 8021)	mg/kg	BDL				0.170	11/26/96	alan	12/05/96	alan
Isopropylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
Bromobenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2,3-Trichloropropane	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,1,2,2-Tetrachloroethane	(5030/ 8021)	mg/kg	BDL				0.0130	11/26/96	alan	12/05/96	alan
n-Propylbenzene	(5030/ 8021)	mg/kg	BDL				0.00300	11/26/96	alan	12/05/96	alan
2-Chlorotoluene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan

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Water Quality Division
3805 Springhill Rd.
Tallahassee, Fl. 32310-6502
(904) 891-1200
Cert. #51097 & E51259

Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12591
Group # 16052
Sample Type SOLIDS

Sample ID PG-05SBD-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 10:35

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
4-Chlorotoluene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
1,3,5-Trimethylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
tert-Butylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2,4-Trimethylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
sec-Butylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,3-Dichlorobenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,4-Dichlorobenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
p-Isopropyltoluene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2-Dichlorobenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
n-Butylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2-Dibromo-3-chloropropane	(5030/ 8021)	mg/kg	BDL				0.00700	11/26/96	alan	12/05/96	alan
1,2,4-Trichlorobenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1Hexachlorobutadiene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
Naphthalene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2,3-Trichlorobenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
Acetone	(5030/ 8021)	mg/kg	BDL				0.0500	11/26/96	alan	12/05/96	alan
MTBE	(5030/ 8021)	mg/kg	BDL				0.0500	11/26/96	alan	12/05/96	alan

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Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12592
Group # 16052
Sample Type SOLIDS

Sample ID PG-07SB-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 09:00

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Dichlorodifluoromethane	(5030/ 8021)	mg/kg	BDL				0.0800	11/26/96	alan	12/05/96	alan
Chloromethane	(5030/ 8021)	mg/kg	BDL				0.00300	11/26/96	alan	12/05/96	alan
Vinylchloride	(5030/8021)	mg/kg	BDL				0.00300	11/26/96	alan	12/05/96	alan
Bromomethane	(5030/ 8021)	mg/kg	BDL				0.0300	11/26/96	alan	12/05/96	alan
Chloroethane	(5030/ 8021)	mg/kg	BDL				0.0300	11/26/96	alan	12/05/96	alan
Trichlorofluoromethane	(5030/ 8021)	mg/kg	BDL				0.0100	11/26/96	alan	12/05/96	alan
1,1-Dichloroethylene	(5030/ 8021)	mg/kg	BDL				0.00600	11/26/96	alan	12/05/96	alan
Methylenechloride	(5030/ 8021)	mg/kg	BDL				0.00700	11/26/96	alan	12/05/96	alan
t-1,2-Dichloroethylene	(5030/ 8021)	mg/kg	BDL				0.00300	11/26/96	alan	12/05/96	alan
1,1-Dichlroethane	(5030/ 8021)	mg/kg	BDL				0.00800	11/26/96	alan	12/05/96	alan
2,2-Dichloropropane	(5030/ 8021)	mg/kg	BDL				0.0100	11/26/96	alan	12/05/96	alan
c-1,2-Dichloroethylene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
Bromochloromethane	(5030/ 8021)	mg/kg	BDL				0.0120	11/26/96	alan	12/05/96	alan
Chloroform	(5030/ 8021)	mg/kg	BDL				0.00500	11/26/96	alan	12/05/96	alan
1,1,1-Trichloroethane	(5030/ 8021)	mg/kg	BDL				0.00400	11/26/96	alan	12/05/96	alan
Carbontetrachloride	(5030/ 8021)	mg/kg	BDL				0.00400	11/26/96	alan	12/05/96	alan
1,1-Dichloropropene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
Benzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2-Dichloroethane	(5030/ 8021)	mg/kg	BDL				0.00300	11/26/96	alan	12/05/96	alan
Trichloroethylenee	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2-Dichloropropane	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
Dibromomethane	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
Bromodichloromethane	(5030/ 8021)	mg/kg	BDL				0.00600	11/26/96	alan	12/05/96	alan
c-1,3-Dichloropropylene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
Toluene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
t-1,3-Dichloropropylene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
1,1,2-Trichloroethane	(5030/ 8021)	mg/kg	BDL				0.00400	11/26/96	alan	12/05/96	alan
Tetrachloroethylenene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,3-Dichloropropane	(5030/ 8021)	mg/kg	BDL				0.00300	11/26/96	alan	12/05/96	alan
Dibromochloromethane	(5030/ 8021)	mg/kg	BDL				0.00600	11/26/96	alan	12/05/96	alan
1,2-Dibromoethane	(5030/ 8021)	mg/kg	BDL				0.0130	11/26/96	alan	12/05/96	alan
Chlorobenzene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
1,1,1,2-Tetrachloroethane	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
Ethylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
m-Xylene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
p-Xylene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
O-Xylene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
total Xylenes	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
Styrene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
Bromoform	(5030/ 8021)	mg/kg	BDL				0.170	11/26/96	alan	12/05/96	alan
Isopropylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
Bromobenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2,3-Trichloropropane	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,1,2,2-Tetrachloroethane	(5030/ 8021)	mg/kg	BDL				0.0130	11/26/96	alan	12/05/96	alan
n-Propylbenzene	(5030/ 8021)	mg/kg	BDL				0.00300	11/26/96	alan	12/05/96	alan
2-Chlorotoluene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan

Group # 16052

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Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12592 Sample ID PG-07SB-1 FOSTER WHEELER
Group # 16052 Sample Site
Sample Type SOLIDS Sampled 11/22/96 09:00

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
4-Chlorotoluene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
1,3,5-Trimethylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
tert-Butylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2,4-Trimethylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
sec-Butylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,3-Dichlorobenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,4-Dichlorobenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
p-Isopropyltoluene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2-Dichlorobenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
n-Butylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2-Dibromo-3-chloropropane	(5030/ 8021)	mg/kg	BDL				0.00700	11/26/96	alan	12/05/96	alan
1,2,4-Trichlorobenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1Hexachlorobutadiene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
Naphthalene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2,3-Trichlorobenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
Acetone	(5030/ 8021)	mg/kg	BDL				0.0500	11/26/96	alan	12/05/96	alan
MTBE	(5030/ 8021)	mg/kg	BDL				0.0500	11/26/96	alan	12/05/96	alan

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Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12593 Sample ID PG-09SB-1 FOSTER WHEELER
Group # 16052 Sample Site
Sample Type SOLIDS Sampled 11/22/96 10:00

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Dichlorodifluoromethane	(5030/ 8021)	mg/kg	BDL				0.0800	11/26/96	alan	12/05/96	alan
Chloromethane	(5030/ 8021)	mg/kg	BDL				0.00300	11/26/96	alan	12/05/96	alan
Vinylchloride	(5030/8021)	mg/kg	BDL				0.00300	11/26/96	alan	12/05/96	alan
Bromomethane	(5030/ 8021)	mg/kg	BDL				0.0300	11/26/96	alan	12/05/96	alan
Chloroethane	(5030/ 8021)	mg/kg	BDL				0.0300	11/26/96	alan	12/05/96	alan
Trichlorofluoromethane	(5030/ 8021)	mg/kg	BDL				0.0100	11/26/96	alan	12/05/96	alan
1,1-Dichloroethylene	(5030/ 8021)	mg/kg	BDL				0.00600	11/26/96	alan	12/05/96	alan
Methylenechloride	(5030/ 8021)	mg/kg	BDL				0.00700	11/26/96	alan	12/05/96	alan
t-1,2-Dichloroethylene	(5030/ 8021)	mg/kg	BDL				0.00300	11/26/96	alan	12/05/96	alan
1,1-Dichlroethane	(5030/ 8021)	mg/kg	BDL				0.00800	11/26/96	alan	12/05/96	alan
2,2-Dichloropropane	(5030/ 8021)	mg/kg	BDL				0.0100	11/26/96	alan	12/05/96	alan
c-1,2-Dichloroethylene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
Bromochloromethane	(5030/ 8021)	mg/kg	BDL				0.0120	11/26/96	alan	12/05/96	alan
Chloroform	(5030/ 8021)	mg/kg	BDL				0.00500	11/26/96	alan	12/05/96	alan
1,1,1-Trichloroethane	(5030/ 8021)	mg/kg	BDL				0.00400	11/26/96	alan	12/05/96	alan
Carbontetrachloride	(5030/ 8021)	mg/kg	BDL				0.00400	11/26/96	alan	12/05/96	alan
1,1-Dichloropropene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
Benzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2-Dichloroethane	(5030/ 8021)	mg/kg	BDL				0.00300	11/26/96	alan	12/05/96	alan
Trichloroethylenee	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2-Dichloropropane	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
Dibromomethane	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
Bromodichloromethane	(5030/ 8021)	mg/kg	BDL				0.00600	11/26/96	alan	12/05/96	alan
c-1,3-Dichloropropylene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
Toluene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
t-1,3-Dichloropropylene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
1,1,2-Trichloroethane	(5030/ 8021)	mg/kg	BDL				0.00400	11/26/96	alan	12/05/96	alan
Tetrachloroethylenene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,3-Dichloropropane	(5030/ 8021)	mg/kg	BDL				0.00300	11/26/96	alan	12/05/96	alan
Dibromochloromethane	(5030/ 8021)	mg/kg	BDL				0.00600	11/26/96	alan	12/05/96	alan
1,2-Dibromoethane	(5030/ 8021)	mg/kg	BDL				0.0130	11/26/96	alan	12/05/96	alan
Chlorobenzene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
1,1,1,2-Tetrachloroethane	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
Ethylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
m-Xylene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
p-Xylene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
O-Xylene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
total Xylenes	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
Styrene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
Bromoform	(5030/ 8021)	mg/kg	BDL				0.170	11/26/96	alan	12/05/96	alan
Isopropylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
Bromobenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2,3-Trichloropropane	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,1,2,2-Tetrachloroethane	(5030/ 8021)	mg/kg	BDL				0.0130	11/26/96	alan	12/05/96	alan
n-Propylbenzene	(5030/ 8021)	mg/kg	BDL				0.00300	11/26/96	alan	12/05/96	alan
2-Chlorotoluene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan

Group # 16052

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Water Quality Division
3805 Springhill Rd.
Tallahassee, Fl. 32310-6502
(904) 891-1200
CITY OF TALLAHASSEE Cert. #51097 & E51259

Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12593
Group # 16052
Sample Type SOLIDS

Sample ID PG-09SB-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 10:00

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
4-Chlorotoluene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
1,3,5-Trimethylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
tert-Butylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2,4-Trimethylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
sec-Butylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,3-Dichlorobenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,4-Dichlorobenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
p-Isopropyltoluene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2-Dichlorobenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
n-Butylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2-Dibromo-3-chloropropane	(5030/ 8021)	mg/kg	BDL				0.00700	11/26/96	alan	12/05/96	alan
1,2,4-Trichlorobenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1Hexachlorobutadiene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
Naphthalene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2,3-Trichlorobenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
Acetone	(5030/ 8021)	mg/kg	BDL				0.0500	11/26/96	alan	12/05/96	alan
MTBE	(5030/ 8021)	mg/kg	BDL				0.0500	11/26/96	alan	12/05/96	alan

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Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12594
Group # 16052
Sample Type SOLIDS

Sample ID PG-05SB-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 10:30

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Dichlorodifluoromethane	(5030/ 8021)	mg/kg	BDL				0.0800	11/26/96	alan	12/05/96	alan
Chloromethane	(5030/ 8021)	mg/kg	BDL				0.00300	11/26/96	alan	12/05/96	alan
Vinylchloride	(5030/8021)	mg/kg	BDL				0.00300	11/26/96	alan	12/05/96	alan
Bromomethane	(5030/ 8021)	mg/kg	BDL				0.0300	11/26/96	alan	12/05/96	alan
Chloroethane	(5030/ 8021)	mg/kg	BDL				0.0300	11/26/96	alan	12/05/96	alan
Trichlorofluoromethane	(5030/ 8021)	mg/kg	BDL				0.0100	11/26/96	alan	12/05/96	alan
1,1-Dichloroethylene	(5030/ 8021)	mg/kg	BDL				0.00600	11/26/96	alan	12/05/96	alan
Methylenechloride	(5030/ 8021)	mg/kg	BDL				0.00700	11/26/96	alan	12/05/96	alan
t-1,2-Dichloroethylene	(5030/ 8021)	mg/kg	BDL				0.00300	11/26/96	alan	12/05/96	alan
1,1-Dichlroethane	(5030/ 8021)	mg/kg	BDL				0.00800	11/26/96	alan	12/05/96	alan
2,2-Dichloropropane	(5030/ 8021)	mg/kg	BDL				0.0100	11/26/96	alan	12/05/96	alan
c-1,2-Dichloroethylene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
Bromochloromethane	(5030/ 8021)	mg/kg	BDL				0.0120	11/26/96	alan	12/05/96	alan
Chloroform	(5030/ 8021)	mg/kg	BDL				0.00500	11/26/96	alan	12/05/96	alan
1,1,1-Trichloroethane	(5030/ 8021)	mg/kg	BDL				0.00400	11/26/96	alan	12/05/96	alan
Carbontetrachloride	(5030/ 8021)	mg/kg	BDL				0.00400	11/26/96	alan	12/05/96	alan
1,1-Dichloropropene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
Benzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2-Dichloroethane	(5030/ 8021)	mg/kg	BDL				0.00300	11/26/96	alan	12/05/96	alan
Trichloroethylenee	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2-Dichloropropane	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
Dibromomethane	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
Bromodichloromethane	(5030/ 8021)	mg/kg	BDL				0.00600	11/26/96	alan	12/05/96	alan
c-1,3-Dichloropropylene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
Toluene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
t-1,3-Dichloropropylene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
1,1,2-Trichloroethane	(5030/ 8021)	mg/kg	BDL				0.00400	11/26/96	alan	12/05/96	alan
Tetrachloroethylenene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,3-Dichloropropane	(5030/ 8021)	mg/kg	BDL				0.00300	11/26/96	alan	12/05/96	alan
Dibromochloromethane	(5030/ 8021)	mg/kg	BDL				0.00600	11/26/96	alan	12/05/96	alan
1,2-Dibromoethane	(5030/ 8021)	mg/kg	BDL				0.0130	11/26/96	alan	12/05/96	alan
Chlorobenzene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
1,1,1,2-Tetrachloroethane	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
Ethylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
m-Xylene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
p-Xylene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
O-Xylene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
total Xylenes	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
Styrene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
Bromoform	(5030/ 8021)	mg/kg	BDL				0.170	11/26/96	alan	12/05/96	alan
Isopropylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
Bromobenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2,3-Trichloropropane	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,1,2,2-Tetrachloroethane	(5030/ 8021)	mg/kg	BDL				0.0130	11/26/96	alan	12/05/96	alan
n-Propylbenzene	(5030/ 8021)	mg/kg	BDL				0.00300	11/26/96	alan	12/05/96	alan
2-Chlorotoluene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan

Group # 16052

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(904) 891-1200
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Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12594
Group # 16052
Sample Type SOLIDS

Sample ID PG-05SB-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 10:30

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
4-Chlorotoluene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
1,3,5-Trimethylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
tert-Butylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2,4-Trimethylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
sec-Butylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,3-Dichlorobenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,4-Dichlorobenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
p-Isopropyltoluene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2-Dichlorobenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
n-Butylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2-Dibromo-3-chloropropane	(5030/ 8021)	mg/kg	BDL				0.00700	11/26/96	alan	12/05/96	alan
1,2,4-Trichlorobenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1Hexachlorobutadiene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
Naphthalene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2,3-Trichlorobenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
Acetone	(5030/ 8021)	mg/kg	BDL				0.0500	11/26/96	alan	12/05/96	alan
MTBE	(5030/ 8021)	mg/kg	BDL				0.0500	11/26/96	alan	12/05/96	alan

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Water Quality Division
3805 Springhill Rd.
Tallahassee, Fl. 32310-6502
(904) 891-1200
CITY OF TALLAHASSEE Cert. #51097 & E51259

Electric Production & Env.Affairs COT290101 Purdom Generating Site Assess
Electric Department
City of Tallahassee Sampled by : GREG NEW

Tallahassee ,FL 32302
ATTN. Greg New

Sample # 96-12595 Sample ID PG-06SB-1 FOSTER WHEELER
Group # 16052 Sample Site
Sample Type SOLIDS Sampled 11/22/96 09:25

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Dichlorodifluoromethane	(5030/ 8021)	mg/kg	BDL				0.0800	11/26/96	alan	12/05/96	alan
Chloromethane	(5030/ 8021)	mg/kg	BDL				0.00300	11/26/96	alan	12/05/96	alan
Vinylchloride	(5030/8021)	mg/kg	BDL				0.00300	11/26/96	alan	12/05/96	alan
Bromomethane	(5030/ 8021)	mg/kg	BDL				0.0300	11/26/96	alan	12/05/96	alan
Chloroethane	(5030/ 8021)	mg/kg	BDL				0.0300	11/26/96	alan	12/05/96	alan
Trichlorofluoromethane	(5030/ 8021)	mg/kg	BDL				0.0100	11/26/96	alan	12/05/96	alan
1,1-Dichloroethylene	(5030/ 8021)	mg/kg	BDL				0.00600	11/26/96	alan	12/05/96	alan
Methylenechloride	(5030/ 8021)	mg/kg	BDL				0.00700	11/26/96	alan	12/05/96	alan
t-1,2-Dichloroethylene	(5030/ 8021)	mg/kg	BDL				0.00300	11/26/96	alan	12/05/96	alan
1,1-Dichlroethane	(5030/ 8021)	mg/kg	BDL				0.00800	11/26/96	alan	12/05/96	alan
2,2-Dichloropropane	(5030/ 8021)	mg/kg	BDL				0.0100	11/26/96	alan	12/05/96	alan
c-1,2-Dichloroethylene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
Bromochloromethane	(5030/ 8021)	mg/kg	BDL				0.0120	11/26/96	alan	12/05/96	alan
Chloroform	(5030/ 8021)	mg/kg	BDL				0.00500	11/26/96	alan	12/05/96	alan
1,1,1-Trichloroethane	(5030/ 8021)	mg/kg	BDL				0.00400	11/26/96	alan	12/05/96	alan
Carbontetrachloride	(5030/ 8021)	mg/kg	BDL				0.00400	11/26/96	alan	12/05/96	alan
1,1-Dichloropropene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
Benzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2-Dichloroethane	(5030/ 8021)	mg/kg	BDL				0.00300	11/26/96	alan	12/05/96	alan
Trichloroethylenee	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2-Dichloropropane	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
Dibromomethane	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
Bromodichloromethane	(5030/ 8021)	mg/kg	BDL				0.00600	11/26/96	alan	12/05/96	alan
c-1,3-Dichloropropylene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
Toluene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
t-1,3-Dichloropropylene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
1,1,2-Trichloroethane	(5030/ 8021)	mg/kg	BDL				0.00400	11/26/96	alan	12/05/96	alan
Tetrachloroethylenene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,3-Dichloropropane	(5030/ 8021)	mg/kg	BDL				0.00300	11/26/96	alan	12/05/96	alan
Dibromochloromethane	(5030/ 8021)	mg/kg	BDL				0.00600	11/26/96	alan	12/05/96	alan
1,2-Dibromoethane	(5030/ 8021)	mg/kg	BDL				0.0130	11/26/96	alan	12/05/96	alan
Chlorobenzene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
1,1,1,2-Tetrachloroethane	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
Ethylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
m-Xylene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
p-Xylene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
O-Xylene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
total Xylenes	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
Styrene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
Bromoform	(5030/ 8021)	mg/kg	BDL				0.170	11/26/96	alan	12/05/96	alan
Isopropylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
Bromobenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2,3-Trichloropropane	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,1,2,2-Tetrachloroethane	(5030/ 8021)	mg/kg	BDL				0.0130	11/26/96	alan	12/05/96	alan
n-Propylbenzene	(5030/ 8021)	mg/kg	BDL				0.00300	11/26/96	alan	12/05/96	alan
2-Chlorotoluene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan

Group # 16052

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Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12595
Group # 16052
Sample Type SOLIDS

Sample ID PG-06SB-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 09:25

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
4-Chlorotoluene	(5030/ 8021)	mg/kg	BDL				0.00200	11/26/96	alan	12/05/96	alan
1,3,5-Trimethylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
tert-Butylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2,4-Trimethylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
sec-Butylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,3-Dichlorobenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,4-Dichlorobenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
p-Isopropyltoluene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2-Dichlorobenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
n-Butylbenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2-Dibromo-3-chloropropane	(5030/ 8021)	mg/kg	BDL				0.00700	11/26/96	alan	12/05/96	alan
1,2,4-Trichlorobenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1Hexachlorobutadiene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
Naphthalene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
1,2,3-Trichlorobenzene	(5030/ 8021)	mg/kg	BDL				0.00100	11/26/96	alan	12/05/96	alan
Acetone	(5030/ 8021)	mg/kg	BDL				0.0500	11/26/96	alan	12/05/96	alan
MTBE	(5030/ 8021)	mg/kg	BDL				0.0500	11/26/96	alan	12/05/96	alan

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Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12596 Sample ID PG-01SBE-1 FOSTER WHEELER
Group # 16052 Sample Site
Sample Type WATER Sampled 11/22/96 08:30

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Dichlorodifluoromethane	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
Chloromethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Vinyl chloride	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
Bromomethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Chloroethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Trichlorofluoromethane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,1-Dichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Methylene chloride	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan
trans-1,2-Dichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
1,1-Dichloroethane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
2,2-Dichloropropane	(502.2/ 8021)	ug/L	BDL				0.140000			12/05/96	alan
cis-1,2-Dichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
Bromochloromethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Chloroform	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
1,1,1-Trichloroethane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
Carbon tetrachloride	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,1-Dichloropropene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Benzene	(502.2/ 8021)	ug/L	BDL				0.0200000			12/05/96	alan
1,2-Dichloroethane	(502.2/ 8021)	ug/L	BDL				0.220000			12/05/96	alan
Trichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan
1,2-Dichloropropane	(502.2/ 8021)	ug/L	BDL				0.0900000			12/05/96	alan
Dibromomethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Bromodichloromethane	(502.2/ 8021)	ug/L	BDL				0.100000			12/05/96	alan
cis-1,3-Dichloropropylene	(502.2/ 8021)	ug/L	BDL				0.120000			12/05/96	alan
Toluene	(502.2/ 8021)	ug/L	0.94				0.0500000			12/05/96	alan
trans-1,3-Dichloropropylene	(502.2/ 8021)	ug/L	BDL				0.100000			12/05/96	alan
1,1,2-Trichloroethane	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Tetrachloroethylene	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
1,3-Dichloropropane	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
Dibromochloromethane	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
1,2-Dibromoethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Chlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,1,1,2-Tetrachloroethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Ethylbenzene	(502.2/ 8021)	ug/L	BDL				0.0200000			12/05/96	alan
m-Xylene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
p-Xylene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
o-Xylene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Styrene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Bromoform	(502.2/ 8021)	ug/L	BDL				0.180000			12/05/96	alan
Isopropylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Bromobenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,2,3-Trichloropropane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,1,2,2-Tetrachloroethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
n-Propylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
2-Chlorotoluene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
4-Chlorotoluene	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan

Group # 16052

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Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12596
Group # 16052
Sample Type WATER

Sample ID PG-01SBE-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 08:30

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
1,3,5-Trimethylbenzene	(502.2/ 8021)	ug/L	BDL				0.0200000			12/05/96	alan
t-Butylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,2,4-Trimethylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
s-Butylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,3-Dichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
1,4-Dichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
p-Isopropyltoluene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,2-Dichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
n-Butylbenzene	(502.2/ 8021)	ug/L	BDL				0.0200000			12/05/96	alan
1,2-Dibromo-3-chloropropane	(502.2/ 8021)	ug/L	BDL				0.120000			12/05/96	alan
1,2,4-Trichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan
Hexachlorobutadiene	(502.2/ 8021)	ug/L	BDL				0.110000			12/05/96	alan
Naphthalene	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,2,3-Trichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan
MTBE	(502.2/ 8021)	ug/L	BDL				5.00000			12/05/96	alan

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Electric Department
City of Tallahassee Sampled by : GREG NEW

Tallahassee ,FL 32302
ATTN. Greg New

Sample # 96-12597 Sample ID PG-01TWE-1 FOSTER WHEELER
Group # 16052 Sample Site
Sample Type WATER Sampled 11/22/96 08:45

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Dichlorodifluoromethane	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
Chloromethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Vinyl chloride	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
Bromomethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Chloroethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Trichlorofluoromethane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,1-Dichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Methylene chloride	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan
trans-1,2-Dichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
1,1-Dichloroethane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
2,2-Dichloropropane	(502.2/ 8021)	ug/L	BDL				0.140000			12/05/96	alan
cis-1,2-Dichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
Bromochloromethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Chloroform	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
1,1,1-Trichloroethane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
Carbon tetrachloride	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,1-Dichloropropene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Benzene	(502.2/ 8021)	ug/L	BDL				0.0200000			12/05/96	alan
1,2-Dichloroethane	(502.2/ 8021)	ug/L	BDL				0.220000			12/05/96	alan
Trichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan
1,2-Dichloropropane	(502.2/ 8021)	ug/L	BDL				0.0900000			12/05/96	alan
Dibromomethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Bromodichloromethane	(502.2/ 8021)	ug/L	BDL				0.100000			12/05/96	alan
cis-1,3-Dichloropropylene	(502.2/ 8021)	ug/L	BDL				0.120000			12/05/96	alan
Toluene	(502.2/ 8021)	ug/L	0.92				0.0500000			12/05/96	alan
trans-1,3-Dichloropropylene	(502.2/ 8021)	ug/L	BDL				0.100000			12/05/96	alan
1,1,2-Trichloroethane	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Tetrachloroethylene	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
1,3-Dichloropropane	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
Dibromochloromethane	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
1,2-Dibromoethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Chlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,1,1,2-Tetrachloroethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Ethylbenzene	(502.2/ 8021)	ug/L	BDL				0.0200000			12/05/96	alan
m-Xylene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
p-Xylene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
o-Xylene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Styrene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Bromoform	(502.2/ 8021)	ug/L	BDL				0.180000			12/05/96	alan
Isopropylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Bromobenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,2,3-Trichloropropane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,1,2,2-Tetrachloroethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
n-Propylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
2-Chlorotoluene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
4-Chlorotoluene	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan

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Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12597
Group # 16052
Sample Type WATER

Sample ID PG-01TWE-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 08:45

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
1,3,5-Trimethylbenzene	(502.2/ 8021)	ug/L	BDL				0.0200000			12/05/96	alan
t-Butylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,2,4-Trimethylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
s-Butylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,3-Dichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
1,4-Dichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
p-Isopropyltoluene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,2-Dichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
n-Butylbenzene	(502.2/ 8021)	ug/L	BDL				0.0200000			12/05/96	alan
1,2-Dibromo-3-chloropropane	(502.2/ 8021)	ug/L	BDL				0.120000			12/05/96	alan
1,2,4-Trichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan
Hexachlorobutadiene	(502.2/ 8021)	ug/L	BDL				0.110000			12/05/96	alan
Naphthalene	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,2,3-Trichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan
MTBE	(502.2/ 8021)	ug/L	BDL				5.00000			12/05/96	alan

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Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12598
Group # 16052
Sample Type WATER

Sample ID PG-02TW-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 12:00

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Dichlorodifluoromethane	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
Chloromethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Vinyl chloride	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
Bromomethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Chloroethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Trichlorofluoromethane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,1-Dichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Methylene chloride	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan
trans-1,2-Dichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
1,1-Dichloroethane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
2,2-Dichloropropane	(502.2/ 8021)	ug/L	BDL				0.140000			12/05/96	alan
cis-1,2-Dichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
Bromochloromethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Chloroform	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
1,1,1-Trichloroethane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
Carbon tetrachloride	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,1-Dichloropropene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Benzene	(502.2/ 8021)	ug/L	BDL				0.0200000			12/05/96	alan
1,2-Dichloroethane	(502.2/ 8021)	ug/L	BDL				0.220000			12/05/96	alan
Trichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan
1,2-Dichloropropane	(502.2/ 8021)	ug/L	BDL				0.0900000			12/05/96	alan
Dibromomethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Bromodichloromethane	(502.2/ 8021)	ug/L	BDL				0.100000			12/05/96	alan
cis-1,3-Dichloropropylene	(502.2/ 8021)	ug/L	BDL				0.120000			12/05/96	alan
Toluene	(502.2/ 8021)	ug/L	2.33				0.0500000			12/05/96	alan
trans-1,3-Dichloropropylene	(502.2/ 8021)	ug/L	BDL				0.100000			12/05/96	alan
1,1,2-Trichloroethane	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Tetrachloroethylene	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
1,3-Dichloropropane	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
Dibromochloromethane	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
1,2-Dibromoethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Chlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,1,1,2-Tetrachloroethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Ethylbenzene	(502.2/ 8021)	ug/L	BDL				0.0200000			12/05/96	alan
m-Xylene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
p-Xylene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
o-Xylene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Styrene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Bromoform	(502.2/ 8021)	ug/L	BDL				0.180000			12/05/96	alan
Isopropylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Bromobenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,2,3-Trichloropropane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,1,2,2-Tetrachloroethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
n-Propylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
2-Chlorotoluene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
4-Chlorotoluene	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan

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Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12598 Sample ID PG-02TW-1 FOSTER WHEELER
Group # 16052 Sample Site
Sample Type WATER Sampled 11/22/96 12:00

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
1,3,5-Trimethylbenzene	(502.2/ 8021)	ug/L	BDL				0.0200000			12/05/96	alan
t-Butylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,2,4-Trimethylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
s-Butylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,3-Dichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
1,4-Dichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
p-Isopropyltoluene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,2-Dichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
n-Butylbenzene	(502.2/ 8021)	ug/L	BDL				0.0200000			12/05/96	alan
1,2-Dibromo-3-chloropropane	(502.2/ 8021)	ug/L	BDL				0.120000			12/05/96	alan
1,2,4-Trichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan
Hexachlorobutadiene	(502.2/ 8021)	ug/L	BDL				0.110000			12/05/96	alan
Naphthalene	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,2,3-Trichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan
MTBE	(502.2/ 8021)	ug/L	BDL				5.00000			12/05/96	alan

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Electric Production & Env.Affairs COT290101 Purdom Generating Site Assess
Electric Department
City of Tallahassee Sampled by : GREG NEW

Tallahassee ,FL 32302
ATTN. Greg New

Sample # 96-12599 Sample ID PG-06TW-1 FOSTER WHEELER
Group # 16052 Sample Site
Sample Type WATER Sampled 11/22/96 09:35

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Dichlorodifluoromethane	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
Chloromethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Vinyl chloride	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
Bromomethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Chloroethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Trichlorofluoromethane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,1-Dichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Methylene chloride	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan
trans-1,2-Dichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
1,1-Dichloroethane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
2,2-Dichloropropane	(502.2/ 8021)	ug/L	BDL				0.140000			12/05/96	alan
cis-1,2-Dichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
Bromochloromethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Chloroform	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
1,1,1-Trichloroethane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
Carbon tetrachloride	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,1-Dichloropropene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Benzene	(502.2/ 8021)	ug/L	BDL				0.0200000			12/05/96	alan
1,2-Dichloroethane	(502.2/ 8021)	ug/L	BDL				0.220000			12/05/96	alan
Trichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan
1,2-Dichloropropane	(502.2/ 8021)	ug/L	BDL				0.0900000			12/05/96	alan
Dibromomethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Bromodichloromethane	(502.2/ 8021)	ug/L	BDL				0.100000			12/05/96	alan
cis-1,3-Dichloropropylene	(502.2/ 8021)	ug/L	BDL				0.120000			12/05/96	alan
Toluene	(502.2/ 8021)	ug/L	1.68				0.0500000			12/05/96	alan
trans-1,3-Dichloropropylene	(502.2/ 8021)	ug/L	BDL				0.100000			12/05/96	alan
1,1,2-Trichloroethane	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Tetrachloroethylene	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
1,3-Dichloropropane	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
Dibromochloromethane	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
1,2-Dibromoethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Chlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,1,1,2-Tetrachloroethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Ethylbenzene	(502.2/ 8021)	ug/L	BDL				0.0200000			12/05/96	alan
m-Xylene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
p-Xylene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
o-Xylene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Styrene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Bromoform	(502.2/ 8021)	ug/L	BDL				0.180000			12/05/96	alan
Isopropylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Bromobenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,2,3-Trichloropropane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,1,2,2-Tetrachloroethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
n-Propylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
2-Chlorotoluene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
4-Chlorotoluene	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan

Group # 16052

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Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12599
Group # 16052
Sample Type WATER

Sample ID PG-06TW-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 09:35

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
1,3,5-Trimethylbenzene	(502.2/ 8021)	ug/L	BDL				0.0200000			12/05/96	alan
t-Butylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,2,4-Trimethylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
s-Butylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,3-Dichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
1,4-Dichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
p-Isopropyltoluene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,2-Dichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
n-Butylbenzene	(502.2/ 8021)	ug/L	BDL				0.0200000			12/05/96	alan
1,2-Dibromo-3-chloropropane	(502.2/ 8021)	ug/L	BDL				0.120000			12/05/96	alan
1,2,4-Trichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan
Hexachlorobutadiene	(502.2/ 8021)	ug/L	BDL				0.110000			12/05/96	alan
Naphthalene	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,2,3-Trichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan
MTBE	(502.2/ 8021)	ug/L	BDL				5.00000			12/05/96	alan

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Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12600 Sample ID PG-06TWD-1 FOSTER WHEELER
Group # 16052 Sample Site
Sample Type WATER Sampled 11/22/96 09:35

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Dichlorodifluoromethane	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
Chloromethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Vinyl chloride	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
Bromomethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Chloroethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Trichlorofluoromethane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,1-Dichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Methylene chloride	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan
trans-1,2-Dichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
1,1-Dichloroethane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
2,2-Dichloropropane	(502.2/ 8021)	ug/L	BDL				0.140000			12/05/96	alan
cis-1,2-Dichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
Bromochloromethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Chloroform	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
1,1,1-Trichloroethane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
Carbon tetrachloride	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,1-Dichloropropene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Benzene	(502.2/ 8021)	ug/L	BDL				0.0200000			12/05/96	alan
1,2-Dichloroethane	(502.2/ 8021)	ug/L	BDL				0.220000			12/05/96	alan
Trichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan
1,2-Dichloropropane	(502.2/ 8021)	ug/L	BDL				0.0900000			12/05/96	alan
Dibromomethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Bromodichloromethane	(502.2/ 8021)	ug/L	BDL				0.100000			12/05/96	alan
cis-1,3-Dichloropropylene	(502.2/ 8021)	ug/L	BDL				0.120000			12/05/96	alan
Toluene	(502.2/ 8021)	ug/L	679				0.0500000			12/05/96	alan
trans-1,3-Dichloropropylene	(502.2/ 8021)	ug/L	BDL				0.100000			12/05/96	alan
1,1,2-Trichloroethane	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Tetrachloroethylene	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
1,3-Dichloropropane	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
Dibromochloromethane	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
1,2-Dibromoethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Chlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,1,1,2-Tetrachloroethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Ethylbenzene	(502.2/ 8021)	ug/L	BDL				0.0200000			12/05/96	alan
m-Xylene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
p-Xylene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
o-Xylene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Styrene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Bromoform	(502.2/ 8021)	ug/L	BDL				0.180000			12/05/96	alan
Isopropylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Bromobenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,2,3-Trichloropropane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,1,2,2-Tetrachloroethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
n-Propylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
2-Chlorotoluene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
4-Chlorotoluene	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan

Group # 16052

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Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12600
Group # 16052
Sample Type WATER

Sample ID PG-06TWD-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 09:35

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
1,3,5-Trimethylbenzene	(502.2/ 8021)	ug/L	BDL				0.0200000			12/05/96	alan
t-Butylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,2,4-Trimethylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
s-Butylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,3-Dichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
1,4-Dichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
p-Isopropyltoluene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,2-Dichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
n-Butylbenzene	(502.2/ 8021)	ug/L	BDL				0.0200000			12/05/96	alan
1,2-Dibromo-3-chloropropane	(502.2/ 8021)	ug/L	BDL				0.120000			12/05/96	alan
1,2,4-Trichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan
Hexachlorobutadiene	(502.2/ 8021)	ug/L	BDL				0.110000			12/05/96	alan
Naphthalene	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,2,3-Trichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan
MTBE	(502.2/ 8021)	ug/L	BDL				5.00000			12/05/96	alan

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Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12601
Group # 16052
Sample Type WATER

Sample ID PG-07TW-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 11:00

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Dichlorodifluoromethane	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
Chloromethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Vinyl chloride	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
Bromomethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Chloroethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Trichlorofluoromethane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,1-Dichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Methylene chloride	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan
trans-1,2-Dichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
1,1-Dichloroethane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
2,2-Dichloropropane	(502.2/ 8021)	ug/L	BDL				0.140000			12/05/96	alan
cis-1,2-Dichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
Bromochloromethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Chloroform	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
1,1,1-Trichloroethane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
Carbon tetrachloride	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,1-Dichloropropene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Benzene	(502.2/ 8021)	ug/L	BDL				0.0200000			12/05/96	alan
1,2-Dichloroethane	(502.2/ 8021)	ug/L	BDL				0.220000			12/05/96	alan
Trichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan
1,2-Dichloropropane	(502.2/ 8021)	ug/L	BDL				0.0900000			12/05/96	alan
Dibromomethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Bromodichloromethane	(502.2/ 8021)	ug/L	BDL				0.100000			12/05/96	alan
cis-1,3-Dichloropropylene	(502.2/ 8021)	ug/L	BDL				0.120000			12/05/96	alan
Toluene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
trans-1,3-Dichloropropylene	(502.2/ 8021)	ug/L	BDL				0.100000			12/05/96	alan
1,1,2-Trichloroethane	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Tetrachloroethylene	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
1,3-Dichloropropane	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
Dibromochloromethane	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
1,2-Dibromoethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Chlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,1,1,2-Tetrachloroethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Ethylbenzene	(502.2/ 8021)	ug/L	BDL				0.0200000			12/05/96	alan
m-Xylene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
p-Xylene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
o-Xylene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Styrene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Bromoform	(502.2/ 8021)	ug/L	BDL				0.180000			12/05/96	alan
Isopropylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Bromobenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,2,3-Trichloropropane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,1,2,2-Tetrachloroethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
n-Propylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
2-Chlorotoluene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
4-Chlorotoluene	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan

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Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12601
Group # 16052
Sample Type WATER

Sample ID PG-07TW-1 FOSTER WHEELER
Sample Site
Sampled 11/22/96 11:00

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
1,3,5-Trimethylbenzene	(502.2/ 8021)	ug/L	BDL				0.0200000			12/05/96	alan
t-Butylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,2,4-Trimethylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
s-Butylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,3-Dichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
1,4-Dichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
p-Isopropyltoluene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,2-Dichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
n-Butylbenzene	(502.2/ 8021)	ug/L	BDL				0.0200000			12/05/96	alan
1,2-Dibromo-3-chloropropane	(502.2/ 8021)	ug/L	BDL				0.120000			12/05/96	alan
1,2,4-Trichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan
Hexachlorobutadiene	(502.2/ 8021)	ug/L	BDL				0.110000			12/05/96	alan
Naphthalene	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,2,3-Trichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan
MTBE	(502.2/ 8021)	ug/L	BDL				5.00000			12/05/96	alan

Group # 16052

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Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12602 Sample ID PG-09TW-1 FOSTER WHEELER
Group # 16052 Sample Site
Sample Type WATER Sampled 11/22/96 12:45

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Dichlorodifluoromethane	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
Chloromethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Vinyl chloride	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
Bromomethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Chloroethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Trichlorofluoromethane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,1-Dichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Methylene chloride	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan
trans-1,2-Dichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
1,1-Dichloroethane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
2,2-Dichloropropane	(502.2/ 8021)	ug/L	BDL				0.140000			12/05/96	alan
cis-1,2-Dichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
Bromochloromethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Chloroform	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
1,1,1-Trichloroethane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
Carbon tetrachloride	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,1-Dichloropropene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Benzene	(502.2/ 8021)	ug/L	BDL				0.0200000			12/05/96	alan
1,2-Dichloroethane	(502.2/ 8021)	ug/L	BDL				0.220000			12/05/96	alan
Trichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan
1,2-Dichloropropane	(502.2/ 8021)	ug/L	BDL				0.0900000			12/05/96	alan
Dibromomethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Bromodichloromethane	(502.2/ 8021)	ug/L	BDL				0.100000			12/05/96	alan
cis-1,3-Dichloropropylene	(502.2/ 8021)	ug/L	BDL				0.120000			12/05/96	alan
Toluene	(502.2/ 8021)	ug/L	2.72				0.0500000			12/05/96	alan
trans-1,3-Dichloropropylene	(502.2/ 8021)	ug/L	BDL				0.100000			12/05/96	alan
1,1,2-Trichloroethane	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Tetrachloroethylene	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
1,3-Dichloropropane	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
Dibromochloromethane	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
1,2-Dibromoethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
Chlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,1,1,2-Tetrachloroethane	(502.2/ 8021)	ug/L	BDL				0.0700000			12/05/96	alan
Ethylbenzene	(502.2/ 8021)	ug/L	BDL				0.0200000			12/05/96	alan
m-Xylene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
p-Xylene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
o-Xylene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Styrene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Bromoform	(502.2/ 8021)	ug/L	BDL				0.180000			12/05/96	alan
Isopropylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
Bromobenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
1,2,3-Trichloropropane	(502.2/ 8021)	ug/L	BDL				0.0600000			12/05/96	alan
1,1,2,2-Tetrachloroethane	(502.2/ 8021)	ug/L	BDL				0.0400000			12/05/96	alan
n-Propylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			12/05/96	alan
2-Chlorotoluene	(502.2/ 8021)	ug/L	BDL				0.0500000			12/05/96	alan
4-Chlorotoluene	(502.2/ 8021)	ug/L	BDL				0.0800000			12/05/96	alan

Group # 16052

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Electric Production & Env.Affairs COT290101
Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-12602 Sample ID PG-09TW-1 FOSTER WHEELER
Group # 16052 Sample Site
Sample Type WATER Sampled 11/22/96 12:45

Parameter	Method		Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
1,3,5-Trimethylbenzene	(502.2/ 8021	)	ug/L	BDL				0.0200000			12/05/96	alan
t-Butylbenzene	(502.2/ 8021	)	ug/L	BDL				0.0300000			12/05/96	alan
1,2,4-Trimethylbenzene	(502.2/ 8021	)	ug/L	BDL				0.0300000			12/05/96	alan
s-Butylbenzene	(502.2/ 8021	)	ug/L	BDL				0.0300000			12/05/96	alan
1,3-Dichlorobenzene	(502.2/ 8021	)	ug/L	BDL				0.0500000			12/05/96	alan
1,4-Dichlorobenzene	(502.2/ 8021	)	ug/L	BDL				0.0700000			12/05/96	alan
p-Isopropyltoluene	(502.2/ 8021	)	ug/L	BDL				0.0300000			12/05/96	alan
1,2-Dichlorobenzene	(502.2/ 8021	)	ug/L	BDL				0.0400000			12/05/96	alan
n-Butylbenzene	(502.2/ 8021	)	ug/L	BDL				0.0200000			12/05/96	alan
1,2-Dibromo-3-chloropropane	(502.2/ 8021	)	ug/L	BDL				0.120000			12/05/96	alan
1,2,4-Trichlorobenzene	(502.2/ 8021	)	ug/L	BDL				0.0800000			12/05/96	alan
Hexachlorobutadiene	(502.2/ 8021	)	ug/L	BDL				0.110000			12/05/96	alan
Naphthalene	(502.2/ 8021	)	ug/L	BDL				0.0600000			12/05/96	alan
1,2,3-Trichlorobenzene	(502.2/ 8021	)	ug/L	BDL				0.0800000			12/05/96	alan
MTBE	(502.2/ 8021	)	ug/L	BDL				5.00000			12/05/96	alan

Group # 16052

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Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-13286
Group # 16052
Sample Type WATER

Sample ID TB-01 FOSTER WHEELER
Sample Site ____________
Sampled 11/22/96 12:45

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
Dichlorodifluoromethane	(502.2/ 8021)	ug/L	BDL				0.0500000			11/25/96	alan
Chloromethane	(502.2/ 8021)	ug/L	BDL				0.0700000			11/25/96	alan
Vinyl chloride	(502.2/ 8021)	ug/L	BDL				0.0500000			11/25/96	alan
Bromomethane	(502.2/ 8021)	ug/L	BDL				0.0400000			11/25/96	alan
Chloroethane	(502.2/ 8021)	ug/L	BDL				0.0400000			11/25/96	alan
Trichlorofluoromethane	(502.2/ 8021)	ug/L	BDL				0.0600000			11/25/96	alan
1,1-Dichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0400000			11/25/96	alan
Methylene chloride	(502.2/ 8021)	ug/L	0.80				0.0800000			11/25/96	alan
trans-1,2-Dichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0500000			11/25/96	alan
1,1-Dichloroethane	(502.2/ 8021)	ug/L	BDL				0.0600000			11/25/96	alan
2,2-Dichloropropane	(502.2/ 8021)	ug/L	BDL				0.140000			11/25/96	alan
cis-1,2-Dichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0600000			11/25/96	alan
Bromochloromethane	(502.2/ 8021)	ug/L	BDL				0.0700000			11/25/96	alan
Chloroform	(502.2/ 8021)	ug/L	0.30				0.0700000			11/25/96	alan
1,1,1-Trichloroethane	(502.2/ 8021)	ug/L	BDL				0.0600000			11/25/96	alan
Carbon tetrachloride	(502.2/ 8021)	ug/L	BDL				0.0600000			11/25/96	alan
1,1-Dichloropropene	(502.2/ 8021)	ug/L	BDL				0.0300000			11/25/96	alan
Benzene	(502.2/ 8021)	ug/L	BDL				0.0200000			11/25/96	alan
1,2-Dichloroethane	(502.2/ 8021)	ug/L	BDL				0.220000			11/25/96	alan
Trichloroethylene	(502.2/ 8021)	ug/L	BDL				0.0800000			11/25/96	alan
1,2-Dichloropropane	(502.2/ 8021)	ug/L	BDL				0.0900000			11/25/96	alan
Dibromomethane	(502.2/ 8021)	ug/L	BDL				0.0700000			11/25/96	alan
Bromodichloromethane	(502.2/ 8021)	ug/L	BDL				0.100000			11/25/96	alan
cis-1,3-Dichloropropylene	(502.2/ 8021)	ug/L	BDL				0.120000			11/25/96	alan
Toluene	(502.2/ 8021)	ug/L	0.87				0.0500000			11/25/96	alan
trans-1,3-Dichloropropylene	(502.2/ 8021)	ug/L	BDL				0.100000			11/25/96	alan
1,1,2-Trichloroethane	(502.2/ 8021)	ug/L	BDL				0.0300000			11/25/96	alan
Tetrachloroethylene	(502.2/ 8021)	ug/L	BDL				0.0400000			11/25/96	alan
1,3-Dichloropropane	(502.2/ 8021)	ug/L	BDL				0.0500000			11/25/96	alan
Dibromochloromethane	(502.2/ 8021)	ug/L	BDL				0.0500000			11/25/96	alan
1,2-Dibromoethane	(502.2/ 8021)	ug/L	BDL				0.0400000			11/25/96	alan
Chlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			11/25/96	alan
1,1,1,2-Tetrachloroethane	(502.2/ 8021)	ug/L	BDL				0.0700000			11/25/96	alan
Ethylbenzene	(502.2/ 8021)	ug/L	BDL				0.0200000			11/25/96	alan
m-Xylene	(502.2/ 8021)	ug/L	BDL				0.0500000			11/25/96	alan
p-Xylene	(502.2/ 8021)	ug/L	BDL				0.0500000			11/25/96	alan
o-Xylene	(502.2/ 8021)	ug/L	BDL				0.0300000			11/25/96	alan
Styrene	(502.2/ 8021)	ug/L	BDL				0.0300000			11/25/96	alan
Bromoform	(502.2/ 8021)	ug/L	BDL				0.180000			11/25/96	alan
Isopropylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			11/25/96	alan
Bromobenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			11/25/96	alan
1,2,3-Trichloropropane	(502.2/ 8021)	ug/L	BDL				0.0600000			11/25/96	alan
1,1,2,2-Tetrachloroethane	(502.2/ 8021)	ug/L	BDL				0.0400000			11/25/96	alan
n-Propylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			11/25/96	alan
2-Chlorotoluene	(502.2/ 8021)	ug/L	BDL				0.0500000			11/25/96	alan
4-Chlorotoluene	(502.2/ 8021)	ug/L	BDL				0.0800000			11/25/96	alan

Group # 16052

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Electric Department
City of Tallahassee

Tallahassee ,FL 32302
ATTN. Greg New

Purdom Generating Site Assess

Sampled by : GREG NEW

Sample # 96-13286
Group # 16052
Sample Type WATER

Sample ID TB-01 FOSTER WHEELER
Sample Site
Sampled 11/22/96 12:45

Parameter	Method	Units	Results	Conc	%Rec.	Dilution	Det. Limit	Prep.	By	Analyzed	By
1,3,5-Trimethylbenzene	(502.2/ 8021)	ug/L	BDL				0.0200000			11/25/96	alan
t-Butylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			11/25/96	alan
1,2,4-Trimethylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			11/25/96	alan
s-Butylbenzene	(502.2/ 8021)	ug/L	BDL				0.0300000			11/25/96	alan
1,3-Dichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0500000			11/25/96	alan
1,4-Dichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0700000			11/25/96	alan
p-Isopropyltoluene	(502.2/ 8021)	ug/L	BDL				0.0300000			11/25/96	alan
1,2-Dichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0400000			11/25/96	alan
n-Butylbenzene	(502.2/ 8021)	ug/L	BDL				0.0200000			11/25/96	alan
1,2-Dibromo-3-chloropropane	(502.2/ 8021)	ug/L	BDL				0.120000			11/25/96	alan
1,2,4-Trichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0800000			11/25/96	alan
Hexachlorobutadiene	(502.2/ 8021)	ug/L	BDL				0.110000			11/25/96	alan
Naphthalene	(502.2/ 8021)	ug/L	BDL				0.0600000			11/25/96	alan
1,2,3-Trichlorobenzene	(502.2/ 8021)	ug/L	BDL				0.0800000			11/25/96	alan
MTBE	(502.2/ 8021)	ug/L	BDL				5.00000			11/25/96	alan

Report 16052 Comment Page

Sample# 96-12591
Source: PG-05SBD-1 FOSTER WHEELER

Data Entry Comments

Results are mg/kgdw 2.65g extracted 92% dry weight (@BN8270)

Sample# 96-12592
Source: PG-07SB-1 FOSTER WHEELER

Data Entry Comments

Results are mg/kgdw 3.29g extracted 92% dry weight (@BN8270)

Sample# 96-12593
Source: PG-09SB-1 FOSTER WHEELER

Data Entry Comments

Results are mg/kgdw 2.40g extracted 85.9% dry weight (@BN8270)

Sample# 96-12594
Source: PG-05SB-1 FOSTER WHEELER

Data Entry Comments

Results are mg/kgdw 2.76g extracted 84.3% dry weight (@BN8270)

Sample# 96-12595
Source: PG-06SB-1 FOSTER WHEELER

Data Entry Comments

Results are mg/kgdw 2.70g extracted 93% dry weight (@BN8270)

Sample# 96-12596
Source: PG-01SBE-1 FOSTER WHEELER

Data Entry Comments

TRIP BLANK HAD 0.87ppb TOLUENE. (@VOC8021)

Sample# 96-12597
Source: PG-01TWE-1 FOSTER WHEELER

Report 16052 Comment Page

Data Entry Comments

TRIP BLANK HAD 0.87ppb TOLUENE. (@VOC8021)

Sample# 96-12598
Source: PG-02TW-1 FOSTER WHEELER

Data Entry Comments

TRIP BLANK HAD 0.87ppb TOLUENE. (@VOC8021)

Sample# 96-12600
Source: PG-06TWD-1 FOSTER WHEELER

Data Entry Comments

TRIP BLANK HAD 0.87ppb TOLUENE. (@VOC8021)

Sample# 96-12601
Source: PG-07TW-1 FOSTER WHEELER

Data Entry Comments

TRIP BLANK HAD 0.87ppb TOLUENE. (@VOC8021)

Sample# 96-12602
Source: PG-09TW-1 FOSTER WHEELER

Data Entry Comments

TRIP BLANK HAD 0.87ppb TOLUENE. (@VOC8021)

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- [ ] 5102 LaRoche Avenue, Savannah, GA 31404 Phone: (912) 354-7858 Fax (912) 352-0165
- [ ] 2846 Industrial Plaza Drive, Tallahassee, FL 32301 Phone: (904) 878-3994 Fax (904) 878-9504
- [ ] 414 Southwest 12th Avenue, Deerfield Beach, FL 33442 Phone: (305) 421-7400 Fax (305) 421-2584
- [ ] 900 Lakeside Drive, Mobile, AL 36693 Phone: (205) 666-6633 Fax (205) 666-6696
- [ ] 6712 Benjamin Road, Suite 100, Tampa, FL 33634 Phone: (813) 885-7427 Fax (813) 885-7049

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

P.O. NUMBER:
PROJECT NUMBER: 1584.0009
PROJECT NAME: Pardon Electric Plant
CLIENT NAME: Foster Wheeler Env.
TELEPHONE/FAX NO.: 561-781-3402
CLIENT ADDRESS: 759 S. Federal Hwy, Suite 100
CITY, STATE, ZIP CODE: Stuart, FL 34994
SAMPLER(S) NAME(S): C. Monaco, G. New
CLIENT PROJECT MANAGER: Greg New

PAGE 1 OF 1

- [x] STANDARD TAT
- [ ] EXPEDITED TAT *

REPORT DUE DATE ______

* SUBJECT TO RUSH FEES

REQUIRED ANALYSES: FL PRO

NUMBER OF CONTAINERS SUBMITTED

SAMPLING DATE	SAMPLING TIME	SAMPLE IDENTIFICATION	AQUEOUS MATRIX	NONAQUEOUS MATRIX	OIL MATRIX	AIR MATRIX	FL PRO
1/22/96	1200	PG-02TW-1	1				2
	0935	PG-06TW-1	1				2
	1100	PG-07TW-1	1				2
	1245	PG-09TW-1	1				2
	0935	PG-06TWD-1	1				2
	0845	PG-01TWE-1	1				2
1/22/96	0830	PG-01SBE-1	1				2

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
			[signature]	1/19/96	1400	[signature]	1/22/96	1500
RECEIVED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

FOR SAVANNAH LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SL LOG NO.	LABORATORY REMARKS
			[ ] YES [ ] NO			

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- ☐ 2846 Industrial Plaza Drive, Tallahassee, FL 32301 Phone: (904) 878-3994 Fax (904) 878-9504
- ☐ 414 Southwest 12th Avenue, Deerfield Beach, FL 33442 Phone: (305) 421-7400 Fax (305) 421-2584
- ☐ 900 Lakeside Drive, Mobile, AL 36693 Phone: (205) 666-6633 Fax (205) 666-6696
- ☐ 8712 Benjamin Road, Suite 100, Tampa, FL 33634 Phone: (813) 885-7427 Fax (813) 885-7049

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

P.O. NUMBER:
PROJECT NUMBER: 1584.0009
PROJECT NAME: Purdom Electric Plant
CLIENT NAME: Foster Wheeler Env.
TELEPHONE/FAX NO.: 561-781-3402
CLIENT ADDRESS: 759 S Federal Hwy, ~~Stuart~~ Suite 100
CITY, STATE, ZIP CODE: Stuart, FL 34994
SAMPLER(S) NAME(S): C Monaco, G New
CLIENT PROJECT MANAGER: Greg New

PAGE 1 OF 1

REQUIRED ANALYSES: Asbestos; FL PRO; RCRA Metals* As, Cd, Cr, Hg, Ag, Se, Pb

☑ STANDARD TAT
☐ EXPEDITED TAT *
REPORT DUE DATE
* SUBJECT TO RUSH FEES

MATRIX TYPE: AQUEOUS MATRIX / NONAQUEOUS MATRIX / OIL MATRIX / AIR MATRIX

NUMBER OF CONTAINERS SUBMITTED

DATE	TIME	SAMPLE IDENTIFICATION	AQUEOUS	NONAQUEOUS	OIL	AIR	Asbestos	FL PRO	RCRA Metals*	
11/22/96	1030	PG-05SB-1		/			1	1	N/A	*Use same container as asbestos sample
↓	0925	PG-06SB-1		/			1	1	↓	
↓	0900	PG-07SB-1		/			1	1	↓	
↓	1000	PG-09SB-1		/			1	1	↓	
11/22/96	1035	PG-05SBD-1		/			1	1	N/A	

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME

RECEIVED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
[signature]	11/19/96	1400	[signature]	11/22/96	1500			

FOR SAVANNAH LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SL LOG NO.	LABORATORY REMARKS
			☐ YES ☐ NO			

CLIENT'S FIELD COPY

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☐ 2846 Industrial Plaza Drive, Tallahassee, FL 32301 Phone: (904) 878-3994 Fax (904) 878-9504
☐ 414 Southwest 12th Avenue, Deerfield Beach, FL 33442 Phone: (305) 421-7400 Fax (305) 421-2584
☐ 900 Lakeside Drive, Mobile, AL 36693 Phone: (205) 666-6633 Fax (205) 666-6696
☐ 6712 Benjamin Road, Suite 100, Tampa, FL 33634 Phone: (813) 885-7427 Fax (813) 885-7049

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

P.O. NUMBER:
PROJECT NUMBER: 1584.0009
PROJECT NAME: Purdom Electric Plant
PAGE 1 OF 1

CLIENT NAME: Foster Wheeler Env.
TELEPHONE/FAX NO.: 561-781-3402
CLIENT ADDRESS: 759 S Federal Hwy, Suite 100
CITY, STATE, ZIP CODE: Stuart, FL 34994
SAMPLER(S) NAME(S): C Monaco, G New
CLIENT PROJECT MANAGER: Greg New

☑ STANDARD TAT
☐ EXPEDITED TAT *
REPORT DUE DATE
* SUBJECT TO RUSH FEES

REQUIRED ANALYSES — NUMBER OF CONTAINERS SUBMITTED

SAMPLING DATE	SAMPLING TIME	SAMPLE IDENTIFICATION	AQUEOUS MATRIX	NONAQUEOUS MATRIX	OIL MATRIX	AIR MATRIX	8010/8020	8100/8080 (PCBs only)	RCRA Metals As, Ag, Se, Cd, Cr, Se, Pb, Hg
11/22/96	1200	PG-02TW-1	1				2	1	1
	0935	PG-06TW-1	1				2	1	1
	1100	PG-07TW-1	1				2	1	1
	1245	PG-09TW-1	1				2	1	1
	0935	PG- TWD-1	1				2	1	1
	0845	PG-01TWE-1	1				2	1	1
11/22/96	0830	PG-01SBE-1	1				2	1	1
N/A		TB-01	1				1		

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
			[signature]	11/19/96	1400	[signature]	11/22/96	1506
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RELINQUISHED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**

FOR SAVANNAH LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	S.L. LOG NO.	LABORATORY REMARKS
			☐ YES ☐ NO			

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☐ 6712 Benjamin Road, Suite 100, Tampa, FL 33634 Phone: (813) 885-7427 Fax (813) 885-7049

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

P.O. NUMBER:
PROJECT NUMBER: 1584-0009
PROJECT NAME: Purdom Electric Plant
PAGE 1 OF 1

CLIENT NAME: Foster Wheeler Env.
TELEPHONE/FAX NO.: 561-781-3402
CLIENT ADDRESS: 759 S Federal Hwy, Suite 100
CITY, STATE, ZIP CODE: Stuart, FL 34994
SAMPLER(S) NAME(S): C Monaco, G New
CLIENT PROJECT MANAGER: Greg New

☑ STANDARD TAT
☐ EXPEDITED TAT *
REPORT DUE DATE
* SUBJECT TO RUSH FEES

MATRIX TYPE / REQUIRED ANALYSES / NUMBER OF CONTAINERS SUBMITTED

SAMPLING DATE	SAMPLING TIME	SAMPLE IDENTIFICATION	AQUEOUS MATRIX	NONAQUEOUS MATRIX	OIL MATRIX	AIR MATRIX	8010, 8020 8080 (PCBs only) 8100
11/22/96	1030	PG-05SB-1		1			1
↓	0925	PG-06SB-1		1			1
	0900	PG-07SB-1		1			1
	1000	PG-09SB-1		1			1
11/22/96	1035	PG-05SBD-1		1			1

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
			[signature]	11/19/96	1400	[signature]	11/22/96	1500

RECEIVED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

FOR SAVANNAH LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	S.L. LOG NO.	LABORATORY REMARKS
			☐ YES ☐ NO			

ATTACHMENT C

DATA VALIDATION MEMORANDUM

ATTACHMENT C - Data Validation Report for the Assessment Conducted During November 1996

Introduction

This data set consisted of 8 water and 5 soil samples collected on November 22, 1996. The Foster Wheeler Environmental Field Team hand delivered the samples to the City of Tallahassee Water Quality Division Laboratory on November 22, 1996, in sealed coolers with Chain-of-Custody documentation. All of the samples were analyzed by the City of Tallahassee Water Quality Division Laboratory (City), Savannah Laboratories, Inc. (Savannah) and Micro Analytical Laboratories, Inc. (Micro). Table A provides a list of the analyses performed by each laboratory.

TABLE A
ANALYSES BY LABORATORY - NOVEMBER 1996

Analyses	City of Tallahassee Water Quality Division Laboratory	Savannah Laboratories, Inc.	Micro Analytical Laboratories, Inc.
Soil			
Asbestos	—	—	X
RCRA Metals	—	X	—
FL Pro	—	X	—
8270	X	—	—
8021	X	—	—
Water			
RCRA Metals	—	X	—
FL Pro	—	X	—
8270	X	—	—
8021	X	—	—

Table Legend:
— Analyses not performed by this laboratory.
X Analysis performed in this laboratory.

Laboratory Holding Times

All of the samples were extracted and/or analyzed within the required holding times by the analytical laboratories.

Blank Results

The results for the analytes in the trip, and equipment blank samples analyses were below detection limits except as noted. Table B provides a summary of the Quality Assurance sample results.

TABLE B QUALITY ASSURANCE SAMPLES ANALYTICAL RESULTS SUMMARY - NOVEMBER 1996			
Analyte	PG-01SBE-1	PG-01TWE-1	TB-01
ORGANICS			
EPA 8270 Constituents	BDL(1)	BDL(1)	BDL(1)
EPA 8021			
Methylene Chloride	<0.08	<0.08	0.8 B
Chloroform	<0.07	<0.07	0.3 B
Toluene	0.94 J	0.92 J	0.87 J
PCBs	<10.0	<10.0	NA
FL Pro	<300	<300	NA
INORGANICS			
Arsenic	<0.69	<0.62	NA
Barium	<0.44	<0.00	NA
Cadmium	<0.00	<0.00	NA
Chromium	3.1	2.33	NA
Mercury	<0.00	<0.04	NA
Lead	<0.02	<0.00	NA
Selenium	<0.2	<0.00	NA
Silver	<0.28	<0.38	NA

Notes:
Only results which are above the laboratory reporting limits are shown on this table.
All results are reported as µg/l.
B - Analyte is present in the laboratory blank(s).
J - Estimated value.
TB - Trip Blank.

(1) BDL - Below laboratory reporting limit. Laboratory reporting limits vary by sample for each analytical method or analyte see Attachment C

8021 Analyses - Toluene was found at 0.94 µg/l in the soil equipment blank sample (PG-01SBE-1), at 0.92 µg/l in the water equipment blank sample (PG-01TWE-1), and at 0.87 µg/l in the trip blank sample. All of the results for toluene which are less than 9 µg/l should be flagged with a "J" as these are estimated results. In addition, the trip blank sample (TB-01) also contained methylene chloride (0.80 µg/l) and chloroform (0.30 µg/l). Per the City laboratory (memo dated January 16, 1997) methylene chloride and chloroform show up periodically in sample blanks from the laboratory and are considered "laboratory contamination". Therefore, these results should be flagged as "B" to denote blank contamination.

8270 Analyses - The results for all of the analytes in the 8270 laboratory blank sample were below method detection limits.

Surrogate Recoveries

All of the surrogate recoveries, matrix spike (MS), and matrix spike duplicate (MSD) sample results from the 8270 analyses were within laboratory control limits. Surrogate results from the other analyses were not provided by the laboratory to Foster Wheeler Environmental.

Relative Percent Difference (RPD) Results for Duplicates

All of the results for sample duplicates met the 25 percent (%) RPD criteria for liquid sample analyses and the 50% RPD for solid sample analyses except as noted below:

Soil

Asbestos: Sample PG-05SBD-1 reportedly contained chrysotile asbestos fibers (3-5%) but the duplicate sample (PG-05SB-1), did not contain chrysotile. Both samples contained similar levels of amosite asbestos fibers. Sample results for both samples should be noted as J or estimated values.

Water

RCRA Metals Groundwater samples PG-06TW-1 and PG-06TWD-1 (duplicate). The RPDs for cadmium (164%) and selenium (51%) exceed the 25% RPD criteria for liquid sample analyses. These results should be noted as J or estimated values.

FL Pro: The RPD for groundwater samples PG-06TW-1 and PG-06TWD-1 (duplicate) was 96%. These results should be noted as J or estimated values.

Matrix Spike/Matrix Spike Duplicate Results

Matrix spike/matrix spike duplicate samples were not analyzed as part of this sample data set.

Conclusions

The data presented in these analytical reports is of acceptable quality and the laboratories experienced no problems (except as noted herein) during the analyses which might affect the quality of the results.

10.6 MATHEMATICAL CALCULATIONS

COMPUTERIZED TRAFFIC DATA, INC.
14444 BEACH BLVD. SUITE 18-332 JACKSONVILLE, FL. 32250
Volume Report with 24 Hour Totals

****

Data File : D0909001.PRN
Station : 000000001262
Identification : 000000001262 Interval : 15 minutes
Start date : Sep 9, 96 Start time : 00:00
Stop date : Sep 9, 96 Stop time : 24:00
City/Town : LN#2 WEST County : WAKULLA
Location : PURDOM POWER PLANT EAST OF SR 363

****

Sep 9 Eastbound Volume for Lane 1 (IN)

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	0	0	0	0	0	0	4	17	0	3	0	1
30	0	0	0	0	0	0	2	3	0	4	0	0
45	0	0	0	0	0	0	1	1	0	3	2	3
00	0	0	0	0	0	1	7	1	1	1	2	1
Hr Total	0	0	0	0	0	1	14	22	1	11	4	5

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	2	2	3	4	0	2	3	0	0	0	0	0
30	4	1	1	0	0	1	0	0	1	0	0	0
45	2	1	1	0	0	0	6	0	0	0	0	0
00	2	1	1	1	0	1	0	0	0	0	0	0
Hr Total	10	5	6	5	0	4	9	0	1	0	0	0

24 Hour Total : 98
AM peak hour begins : 06:30 AM peak volume : 28 Peak hour factor : 0.41
PM peak hour begins : 12:00 PM peak volume : 10 Peak hour factor : 0.63

****

Sep 9 WEST [redacted]bound Volume for Lane 2 (OUT)

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	0	0	0	0	0	0	1	1	0	0	1	0
30	0	0	0	0	0	0	2	0	0	2	0	1
45	0	0	0	0	0	0	1	0	3	0	0	2
00	0	0	0	0	0	1	1	0	1	2	1	1
Hr Total	0	0	0	0	0	1	5	1	4	4	2	4

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	6	2	1	2	3	2	4	0	0	1	0	0
30	5	4	2	0	0	1	0	0	1	1	0	0
45	2	0	2	15	1	11	0	0	0	0	0	0
00	5	0	1	0	2	5	0	0	0	0	0	0
Hr Total	18	6	6	17	6	19	4	0	1	2	0	0

24 Hour Total : 100
AM peak hour begins : 11:30 AM peak volume : 14 Peak hour factor : 0.58
PM peak hour begins : 17:15 PM peak volume : 21 Peak hour factor : 0.48

****

COMPUTERIZED TRAFFIC DATA, INC.
14444 BEACH BLVD. SUITE 18-332 JACKSONVILLE, FL. 32250
Volume Report with 24 Hour Totals

Data File : D0909001.PRN
Station : 000000001262
Identification : 000000001262 Interval : 15 minutes
Start date : Sep 9, 96 Start time : 00:00
Stop date : Sep 9, 96 Stop time : 24:00
City/Town : LN#2 WEST County : WAKULLA
Location : PURDOM POWER PLANT EAST OF SR 363

Sep 9 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	0	0	0	0	0	0	5	18	0	3	1	1
30	0	0	0	0	0	0	4	3	0	6	0	1
45	0	0	0	0	0	0	2	1	3	3	2	5
00	0	0	0	0	0	2	8	1	2	3	3	2
Hr Total	0	0	0	0	0	2	19	23	5	15	6	9

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	8	4	4	6	3	4	7	0	0	1	0	0
30	9	5	3	0	0	2	0	0	2	1	0	0
45	4	1	3	15	1	11	6	0	0	0	0	0
00	7	1	2	1	2	6	0	0	0	0	0	0
Hr Total	28	11	12	22	6	23	13	0	2	2	0	0

24 Hour Total : 198
AM peak hour begins : 06:15 AM peak volume : 32 Peak hour factor : 0.44
PM peak hour begins : 12:00 PM peak volume : 28 Peak hour factor : 0.78

COMPUTERIZED TRAFFIC DATA, INC.
14444 BEACH BLVD. SUITE 18-332 JACKSONVILLE, FL. 32250
Volume Report with 24 Hour Totals

****

Data File	:	D0909005.PRN			
Station	:	000000000701			
Identification	:	000000001266	Interval	:	15 minutes
Start date	:	Sep 9, 96	Start time	:	00:00
Stop date	:	Sep 9, 96	Stop time	:	24:00
City/Town	:	LN2 EAST	County	:	WAKULLA
Location	:	US 98 WEST OF SR 363			

****

Sep 9 Westbound Volume for Lane 1

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	0	0	3	1	7	1	13	36	36	29	16	31
30	1	1	0	2	5	5	14	58	18	15	26	27
45	1	6	5	6	7	10	36	52	22	23	22	25
00	7	0	1	0	9	12	33	24	32	39	21	30
Hr Total	9	7	9	9	28	28	96	170	108	106	85	113

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	41	52	45	41	83	44	24	14	11	11	15	12
30	31	31	27	43	58	40	46	16	14	12	18	5
45	39	44	40	83	39	35	29	14	60	12	5	5
00	31	29	40	64	34	49	19	17	12	5	6	3
Hr Total	142	156	152	231	214	168	118	61	97	40	44	25

24 Hour Total : 2216
AM peak hour begins : 06:45 AM peak volume : 179 Peak hour factor : 0.77
PM peak hour begins : 15:30 PM peak volume : 288 Peak hour factor : 0.87

****

Sep 9 East [redacted]bound Volume for Lane 2

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	3	2	0	2	3	13	29	66	31	19	20	19
30	2	4	1	2	4	21	54	57	25	22	24	34
45	1	0	0	1	4	20	68	39	27	35	28	49
00	0	1	1	5	3	19	45	28	27	22	20	52
Hr Total	6	7	2	10	14	73	196	190	110	98	92	154

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	40	29	33	31	38	39	42	19	12	11	8	9
30	35	34	33	46	41	32	27	18	10	11	8	6
45	28	23	43	40	48	41	20	22	9	53	7	7
00	32	36	31	36	41	40	21	30	11	11	10	2
Hr Total	135	122	140	153	168	152	110	89	42	86	33	24

24 Hour Total : 2206
AM peak hour begins : 06:30 AM peak volume : 236 Peak hour factor : 0.87
PM peak hour begins : 16:15 PM peak volume : 169 Peak hour factor : 0.88

****

COMPUTERIZED TRAFFIC DATA, INC.
14444 BEACH BLVD. SUITE 18-332 JACKSONVILLE, FL. 32250
Volume Report with 24 Hour Totals

****

Data File : D0909005.PRN
Station : 000000000701
Identification : 000000001266 Interval : 15 minutes
Start date : Sep 9, 96 Start time : 00:00
Stop date : Sep 9, 96 Stop time : 24:00
City/Town : LN2 EAST County : WAKULLA
Location : US 98 WEST OF SR 363

****

Sep 9 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	3	2	3	3	10	14	42	102	67	48	36	50
30	3	5	1	4	9	26	68	115	43	37	50	61
45	2	6	5	7	11	30	104	91	49	58	50	74
00	7	1	2	5	12	31	78	52	59	61	41	82
Hr Total	15	14	11	19	42	101	292	360	218	204	177	267

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	81	81	78	72	121	83	66	33	23	22	23	21
30	66	65	60	89	99	72	73	34	24	23	26	11
45	67	67	83	123	87	76	49	36	69	65	12	12
00	63	65	71	100	75	89	40	47	23	16	16	5
Hr Total	277	278	292	384	382	320	228	150	139	126	77	49

24 Hour Total : 4422
AM peak hour begins : 06:30 AM peak volume : 399 Peak hour factor : 0.87
PM peak hour begins : 15:30 PM peak volume : 443 Peak hour factor : 0.90

****

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14444 BEACH BLVD. SUITE 18-332 JACKSONVILLE, FL. 32250
Volume Report with 24 Hour Totals Page

****

Data File	: D0909007.PRN				
Station	: 000000000704				
Identification	: 000000001269		Interval	: 15 minutes
Start date	: Sep 9, 96		Start time	: 00:00
Stop date	: Sep 9, 96		Stop time	: 24:00
City/Town	: LN2 WEST		County	: WAKULLA
Location	: US 98 EAST OF SR 363			

****

Sep 9 Eastbound Volume for Lane 1

End Time	00	01	02	03	04	05	06	07	08	09	10
15	0	5	0	6	5	6	4	11	17	22	25
30	0	0	2	0	12	17	13	25	11	25	15
45	0	1	0	6	10	12	10	3	24	33	13
00	0	0	0	2	20	1	23	20	5	33	29
Hr Total	0	6	2	14	47	36	50	59	57	113	82

End Time	12	13	14	15	16	17	18	19	20	21	22
15	14	17	23	14	37	11	17	11	24	4	4
30	18	23	15	10	24	26	13	19	6	2	2
45	29	39	13	29	25	13	12	3	10	1	7
00	21	19	26	34	29	20	10	6	5	1	0
Hr Total	82	98	77	87	115	70	52	39	45	8	13

24 Hour Total : 1237
AM peak hour begins : 09:15 AM peak volume : 116 Peak hour factor : 0.
PM peak hour begins : 15:30 PM peak volume : 124 Peak hour factor : 0.

****

Sep 9 WEST~~North~~bound Volume for Lane 2

End Time	00	01	02	03	04	05	06	07	08	09	10
15	3	2	0	0	0	2	10	12	14	19	28
30	3	0	2	3	3	1	11	13	8	21	9
45	2	2	0	4	4	3	11	10	16	14	12
00	2	3	1	3	8	9	30	22	9	8	15
Hr Total	10	7	3	10	15	15	62	57	47	62	64

End Time	12	13	14	15	16	17	18	19	20	21	22
15	18	20	16	23	25	31	18	4	7	5	1
30	25	14	27	18	18	22	11	11	5	8	7
45	18	27	16	29	16	21	20	8	8	2	2
00	28	16	18	19	21	14	7	8	5	5	5
Hr Total	89	77	77	89	80	88	56	31	25	20	15

24 Hour Total : 1067
AM peak hour begins : 11:30 AM peak volume : 84 Peak hour factor : 0.
PM peak hour begins : 16:45 PM peak volume : 95 Peak hour factor : 0.

****

COMPUTERIZED TRAFFIC DATA, INC.
14444 BEACH BLVD. SUITE 18-332 JACKSONVILLE, FL. 32250
Volume Report with 24 Hour Totals

****

Data File	: D0909007.PRN			
Station	: 000000000704			
Identification	: 000000001269	Interval	:	15 minutes
Start date	: Sep 9, 96	Start time	:	00:00
Stop date	: Sep 9, 96	Stop time	:	24:00
City/Town	: LN2 WEST	County	:	WAKULLA
Location	: US 98 EAST OF SR 363			

****

Sep 9 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	3	7	0	6	5	8	14	23	31	41	53	25
30	3	0	4	3	15	18	24	38	19	46	24	43
45	2	3	0	10	14	15	21	13	40	47	25	22
00	2	3	1	5	28	10	53	42	14	41	44	42
Hr Total	10	13	5	24	62	51	112	116	104	175	146	132

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	32	37	39	37	62	42	35	15	31	9	5	11
30	43	37	42	28	42	48	24	30	11	10	9	0
45	47	66	29	58	41	34	32	11	18	3	9	6
00	49	35	44	53	50	34	17	14	10	6	5	4
Hr Total	171	175	154	176	195	158	108	70	70	28	28	21

24 Hour Total : 2304
AM peak hour begins : 09:15 AM peak volume : 187 Peak hour factor : 0.88
PM peak hour begins : 15.30 PM peak volume : 215 Peak hour factor : 0.87

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COMPUTERIZED TRAFFIC DATA, INC.
14444 BEACH BLVD. SUITE 18-332 JACKSONVILLE, FL. 32250
Volume Report with 24 Hour Totals

Data File : D0909006.PRN
Station : 000000000705
Identification : 000000001268
Interval : 15 minutes
Start date : Sep 9, 96
Start time : 00:00
Stop date : Sep 9, 96
Stop time : 24:00
City/Town : LN2 NORTH
County : WAKULLA
Location : SR 363 NORTH OF US 98

Sep 9 — Southbound Volume for Lane 1

End Time	00	01	02	03	04	05	06	07	08	09	10	1[illegible]
15	2	0	0	0	2	4	9	47	27	16	16	[illegible]
30	1	0	0	1	2	2	11	50	20	12	24	1[illegible]
45	0	2	2	0	3	8	25	72	23	14	15	1[illegible]
00	0	4	0	1	7	10	39	16	17	18	16	1[illegible]
Hr Total	3	6	2	2	14	24	84	185	87	60	71	5[illegible]
End Time	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**2[illegible]**
15	18	19	18	16	21	33	37	17	15	12	7	[illegible]
30	29	24	15	19	34	37	35	18	5	7	4	[illegible]
45	15	20	12	17	26	34	25	11	17	8	5	[illegible]
00	18	23	21	27	23	43	22	12	8	13	7	[illegible]
Hr Total	80	86	66	79	104	147	119	58	45	40	23	1[illegible]

24 Hour Total : 1452
AM peak hour begins : 06:45 AM peak volume : 208 Peak hour factor : 0.7[illegible]
PM peak hour begins : 17:15 PM peak volume : 151 Peak hour factor : 0.8[illegible]

Sep 9 — Northbound Volume for Lane 2

End Time	00	01	02	03	04	05	06	07	08	09	10	1[illegible]
15	0	1	0	6	1	5	12	27	28	28	12	1[illegible]
30	0	0	0	1	0	9	18	27	17	12	16	2[illegible]
45	1	0	1	1	1	4	21	33	23	22	18	1[illegible]
00	5	0	1	1	0	17	24	27	18	18	17	2[illegible]
Hr Total	6	1	2	9	2	35	75	114	86	80	63	7[illegible]
End Time	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**2[illegible]**
15	17	25	28	13	35	30	13	20	8	16	1	[illegible]
30	10	16	25	22	83	27	18	16	13	4	13	1[illegible]
45	13	14	28	52	39	26	18	12	13	9	9	[illegible]
00	11	15	26	47	32	30	20	24	9	10	4	[illegible]
Hr Total	51	70	107	134	189	113	69	72	43	39	27	1[illegible]

24 Hour Total : 1478
AM peak hour begins : 07:15 AM peak volume : 115 Peak hour factor : 0.87
PM peak hour begins : 15:30 PM peak volume : 217 Peak hour factor : 0.65

COMPUTERIZED TRAFFIC DATA, INC.
14444 BEACH BLVD. SUITE 18-332 JACKSONVILLE, FL. 32250
Volume Report with 24 Hour Totals

Data File : D0909006.PRN
Station : 000000000705
Identification : 000000001268 Interval : 15 minutes
Start date : Sep 9, 96 Start time : 00:00
Stop date : Sep 9, 96 Stop time : 24:00
City/Town : LN2 NORTH County : WAKULLA
Location : SR 363 NORTH OF US 98

Sep 9 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	2	1	0	6	3	9	21	74	55	44	28	23
30	1	0	0	2	2	11	29	77	37	24	40	37
45	1	2	3	1	4	12	46	105	46	36	33	26
00	5	4	1	2	7	27	63	43	35	36	33	42
Hr Total	9	7	4	11	16	59	159	299	173	140	134	128

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	35	44	46	29	56	63	50	37	23	28	8	6
30	39	40	40	41	117	64	53	34	18	11	17	15
45	28	34	40	69	65	60	43	23	30	17	14	6
00	29	38	47	74	55	73	42	36	17	23	11	3
Hr Total	131	156	173	213	293	260	188	130	88	79	50	30

24 Hour Total : 2930
AM peak hour begins : 06:45 AM peak volume : 319 Peak hour factor : 0.76
PM peak hour begins : 15:30 PM peak volume : 316 Peak hour factor : 0.68

Sta: 000000000702 Id: 000000660596 CId: 01 Fmt: 200 Int: 15 Min.
Start: Mon - Sep 09, 1996 at 19:00 End: Tue - Sep 10, 1996 at 19:00
City/Town: County: WAKULLA
Location: SR 363 SOUTH OF US 98 File: D0909010.PRN
Ln1-North

Mon - Sep 9, 1996

Type	Cycle	Cars	2A-4T	Buses	2A-SU	3A-SU	4A-SU	4A-ST	5A-ST	6A-ST	5A-MT	6A-MT	7A-MT	None	Other	Total
19:15	1	6	1	0	0	0	0	0	2	0	0	0	0	0	1	11
19:30	0	3	1	0	0	0	0	1	0	0	0	0	0	0	0	5
19:45	0	10	3	0	1	0	0	0	0	0	0	0	0	0	0	14
20:00	0	8	1	1	0	0	0	0	1	0	0	0	0	0	0	11
Hourly Totals	1	27	6	1	1	0	0	1	3	0	0	0	0	0	1	41
20:15	0	9	1	0	0	0	0	0	0	0	0	0	0	0	0	10
20:30	0	10	2	0	0	0	0	0	0	0	0	0	0	0	0	12
20:45	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
21:00	1	7	4	0	0	0	0	0	0	0	0	0	0	0	0	12
Hourly Totals	1	35	7	0	0	0	0	0	0	0	0	0	0	0	0	43
21:15	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
21:30	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	6
21:45	0	4	0	0	0	0	0	1	0	0	0	0	0	0	0	5
22:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hourly Totals	0	11	2	0	0	0	0	1	0	0	0	0	0	0	0	14
22:15	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
22:30	0	1	2	0	0	0	0	0	0	0	0	0	0	0	1	4
22:45	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
23:00	0	3	1	0	0	0	0	0	1	0	0	0	0	0	0	5
Hourly Totals	0	10	3	0	0	0	0	0	1	0	0	0	0	0	1	15
23:15	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	2
23:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hourly Totals	0	4	0	0	0	0	0	0	0	1	0	0	0	0	0	5
Daily Totals	2	87	18	1	1	0	0	2	4	1	0	0	0	0	2	118
Percentages	1.69	73.73	15.25	0.85	0.85	0.00	0.00	1.69	3.39	0.85	0.00	0.00	0.00	0.00	1.69	

Sta: 000000000702 Id: 000000660596 CId: 01 Fmt: 200 Int: 15 Min.
Start: Mon - Sep 09, 1996 at 19:00 End: Tue - Sep 10, 1996 at 19:
City/Town: County: WAKULLA
Location: SR 363 SOUTH OF US 98 File: D0909010.PR
Ln1-North

Tue - Sep 10, 1996

Type	Cycle	Cars	2A-4T	Buses	2A-SU	3A-SU	4A-SU	4A-ST	5A-ST	6A-ST	5A-MT	6A-MT	7A-MT	None	Other	Total
Tue - Sep 10, 1996																
00:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
00:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
00:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Totals	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	3
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hourly Totals	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
Hourly Totals	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	3
03:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Totals	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
04:15	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
04:30	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	3
04:45	0	1	0	0	0	0	0	1	2	0	0	0	0	0	0	4
05:00	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2
Hourly Totals	0	1	0	0	0	0	0	6	4	0	0	0	0	0	0	11
05:15	1	2	0	0	0	0	0	2	2	0	0	0	0	0	0	7
05:30	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
05:45	0	5	0	0	0	0	0	0	1	0	0	0	0	0	0	6
06:00	0	2	1	0	0	0	0	0	1	0	0	0	0	0	0	4
Hourly Totals	1	10	2	0	0	0	0	2	4	0	0	0	0	0	0	19

Sta: 000000000702 Id: 000000660596 Cld: 01 Fmt: 200 Int: 15 Min.
Start: Mon - Sep 09, 1996 at 19:00 End: Tue - Sep 10, 1996 at 19:0
City/Town: County: WAKULLA
Location: SR 363 SOUTH OF US 98 File: D0909010.PRN
Ln1-North

Tue - Sep 10, 1996

Type	Cycle	Cars	2A-4T	Buses	2A-SU	3A-SU	4A-SU	4A-ST	5A-ST	6A-ST	5A-MT	6A-MT	7A-MT	None	Other	Total
06:15	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	8
06:30	0	5	2	1	0	0	0	0	1	0	0	0	0	0	0	9
06:45	0	10	1	1	0	0	0	0	1	1	0	0	0	0	0	14
07:00	0	12	2	0	0	0	0	1	0	0	0	0	0	0	0	15
Hourly Totals	0	31	9	2	0	0	0	1	2	1	0	0	0	0	0	46
07:15	0	12	1	1	0	0	0	0	1	0	0	0	0	0	0	15
07:30	0	5	1	0	1	0	0	0	3	0	0	0	0	0	0	10
07:45	0	10	2	1	0	0	0	0	0	1	0	0	0	0	0	14
08:00	0	7	0	0	0	1	0	0	2	0	0	0	0	0	0	10
Hourly Totals	0	34	4	2	1	1	0	0	6	1	0	0	0	0	0	49
08:15	0	14	1	0	0	0	0	0	0	0	0	0	0	0	0	15
08:30	0	9	2	1	0	0	0	0	4	0	0	0	0	0	0	16
08:45	0	5	6	0	0	0	0	0	0	0	0	0	0	0	0	11
09:00	0	6	2	0	0	0	0	1	2	0	0	0	0	0	0	11
Hourly Totals	0	34	11	1	0	0	0	1	6	0	0	0	0	0	0	53
09:15	0	2	0	0	0	0	0	0	5	0	0	0	0	0	0	7
09:30	0	7	0	0	0	1	0	0	1	0	0	0	0	0	0	9
09:45	0	9	2	0	1	0	0	0	3	0	0	0	0	0	0	15
10:00	0	7	2	0	0	0	0	0	1	0	0	0	0	0	0	10
Hourly Totals	0	25	4	0	1	1	0	0	10	0	0	0	0	0	0	41
10:15	1	9	1	1	1	0	0	0	0	0	0	0	0	0	1	14
10:30	0	10	3	0	0	1	0	0	2	0	0	0	0	0	0	16
10:45	0	11	0	0	0	0	0	0	2	0	0	0	0	0	0	13
11:00	0	7	0	0	0	0	0	1	2	0	0	0	0	0	0	10
Hourly Totals	1	37	4	1	1	1	0	1	6	0	0	0	0	0	1	53
11:15	0	2	1	0	1	0	0	0	1	0	0	0	0	0	0	5
11:30	0	5	1	0	0	0	0	0	0	0	0	0	0	0	1	7
11:45	1	15	4	1	0	0	0	2	0	0	0	0	0	0	0	23
12:00	0	15	4	0	0	0	0	1	0	0	0	0	0	0	1	21
Hourly Totals	1	37	10	1	1	0	0	3	1	0	0	0	0	0	2	56

Sta: 000000000702 Id: 000000660596 CId: 01 Fmt: 200 Int: 15 Min.
Start: Mon - Sep 09, 1996 at 19:00 End: Tue - Sep 10, 1996 at 19:(
City/Town: County: WAKULLA
Location: SR 363 SOUTH OF US 98 File: D0909010.PR
Ln1-North

Tue - Sep 10, 1996

Type	Cycle	Cars	2A-4T	Buses	2A-SU	3A-SU	4A-SU	4A-ST	5A-ST	6A-ST	5A-MT	6A-MT	7A-MT	None	Other	Total
12:15	0	13	3	0	1	0	0	0	1	0	0	0	0	0	0	18
12:30	0	12	3	0	1	0	0	0	0	0	0	0	0	0	0	16
12:45	0	7	5	0	2	1	0	1	1	0	0	0	0	0	0	17
13:00	0	7	2	0	0	0	0	1	2	0	0	0	0	0	0	12
Hourly Totals	0	39	13	0	4	1	0	2	4	0	0	0	0	0	0	63
13:15	0	6	2	0	1	0	0	1	3	0	0	0	0	0	0	13
13:30	0	7	1	1	1	0	0	0	2	0	0	0	0	0	0	12
13:45	0	12	3	0	0	0	0	0	2	0	0	0	0	0	0	17
14:00	0	7	1	2	1	1	0	0	1	0	0	0	0	0	1	14
Hourly Totals	0	32	7	3	3	1	0	1	8	0	0	0	0	0	1	56
14:15	0	5	3	0	0	1	0	1	1	0	0	0	0	0	3	14
14:30	0	11	1	0	0	1	0	0	0	0	0	0	0	0	4	17
14:45	0	9	6	2	1	1	0	0	0	0	0	0	0	0	6	25
15:00	0	12	5	4	0	2	0	0	1	0	0	0	0	0	6	30
Hourly Totals	0	37	15	6	1	5	0	1	2	0	0	0	0	0	19	86
15:15	0	6	5	5	1	0	0	0	0	1	0	0	0	0	5	23
15:30	1	21	4	0	2	1	0	0	1	0	0	0	0	0	5	35
15:45	0	17	4	0	2	0	0	1	1	0	0	0	0	0	0	25
16:00	0	16	5	0	0	0	0	0	1	0	0	0	0	0	0	22
Hourly Totals	1	60	18	5	5	1	0	1	3	1	0	0	0	0	10	105
16:15	0	11	4	1	0	1	0	1	1	1	0	0	0	0	0	20
16:30	0	9	5	1	0	0	0	0	1	0	0	0	0	0	1	17
16:45	1	12	7	0	1	1	0	0	2	0	0	0	0	0	1	25
17:00	1	14	3	1	0	0	0	0	1	0	0	0	0	0	0	20
Hourly Totals	2	46	19	3	1	2	0	1	5	1	0	0	0	0	2	82
17:15	0	17	4	0	0	0	0	0	1	0	0	0	0	0	0	22
17:30	1	16	7	0	1	0	0	1	0	0	0	0	0	0	0	26
17:45	0	14	5	0	1	0	0	2	0	0	0	0	0	0	0	22
18:00	0	9	1	0	0	0	0	0	0	0	0	0	0	0	0	10
Hourly Totals	1	56	17	0	2	0	0	3	1	0	0	0	0	0	0	80

COMPUTERIZED TRAFFIC DATA, INC.
14444 BEACH BLVD. SUITE 18-332 JACKSONVILLE, FL. 32250

Sta: 000000000702 Id: 000000660596 CId: 01 Fmt: 200 Int: 15 Min.
Start: Mon - Sep 09, 1996 at 19:00 End: Tue - Sep 10, 1996 at 19
City/Town: County: WAKULLA
Location: SR 363 SOUTH OF US 98 File: D0909010.P
Ln1-North

Tue - Sep 10, 1996

Type	Cycle	Cars	2A-4T	Buses	2A-SU	3A-SU	4A-SU	4A-ST	5A-ST	6A-ST	5A-MT	6A-MT	7A-MT	None	Other	Total
18:15	0	7	6	0	0	0	0	3	1	1	0	0	0	0	0	18
18:30	0	12	3	0	0	0	0	0	0	0	0	0	0	0	0	15
18:45	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
19:00	0	4	2	0	0	0	0	0	0	1	0	0	0	0	0	7
Hourly Totals	0	31	11	0	0	0	0	3	1	2	0	0	0	0	0	48
Daily Totals	7	514	144	24	20	13	0	26	67	6	0	0	0	0	35	856
Percentages	0.82	60.05	16.82	2.80	2.34	1.52	0.00	3.04	7.83	0.70	0.00	0.00	0.00	0.00	4.09	

Station Data Summary

Type	Cycle	Cars	2A-4T	Buses	2A-SU	3A-SU	4A-SU	4A-ST	5A-ST	6A-ST	5A-MT	6A-MT	7A-MT	None	Other	Total
Grand Totals	9	601	162	25	21	13	0	28	71	7	0	0	0	0	37	974
Percentages	0.92	61.70	16.63	2.57	2.16	1.33	0.00	2.87	7.29	0.72	0.00	0.00	0.00	0.00	3.80	

Am/Pm Peak Hour Totals

Type	Cycle	Cars	2A-4T	Buses	2A-SU	3A-SU	4A-SU	4A-ST	5A-ST	6A-ST	5A-MT	6A-MT	7A-MT	None	Other	Total
Am Hour 11-12	1	37	10	1	1	0	0	3	1	0	0	0	0	0	2	56
Percentages	11.11	6.16	6.17	4.00	4.76	0.00	0.00	10.71	1.41	0.00	0.00	0.00	0.00	0.00	5.41	5.75
Pm Hour 15-16	1	60	18	5	5	1	0	1	3	1	0	0	0	0	10	105
Percentages	11.11	9.98	11.11	20.00	23.81	7.69	0.00	3.57	4.23	14.29	0.00	0.00	0.00	0.00	27.03	10.78

COMPUTERIZED TRAFFIC DATA, INC.
14444 BEACH BLVD. SUITE 18-332 JACKSONVILLE, FL. 32250

09-11-1996 Volume by Type Report - D0909009.PRN 10:15 Pg 1

Sta: 000000000703 Id: 000000709257 CId: 01 Fmt: 200 Int: 15 Min.
Start: Mon - Sep 09, 1996 at 19:00 End: Tue - Sep 10, 1996 at 19:
City/Town: County: WAKULLA
Location: SR 363 SOUTH OF US 98 File: D0909009.Pi
Ln1-South

Mon - Sep 9, 1996

Type	Cycle	Cars	2A-4T	Buses	2A-SU	3A-SU	4A-SU	4A-ST	5A-ST	6A-ST	5A-MT	6A-MT	7A-MT	None	Other	Total
19:15	0	6	1	0	0	0	0	0	1	0	0	0	1	0	0	9
19:30	1	7	0	0	1	0	0	0	0	0	0	0	0	0	1	10
19:45	0	7	2	0	0	0	0	0	0	0	0	0	0	0	1	10
20:00	0	11	1	0	0	0	0	0	0	0	0	0	0	0	0	12
Hourly Totals	1	31	4	0	1	0	0	0	1	0	0	0	1	0	2	41
20:15	0	5	1	0	0	0	0	0	1	0	0	0	0	0	0	7
20:30	0	10	2	0	0	0	0	0	0	0	0	0	0	0	0	12
20:45	0	5	0	0	0	0	0	1	0	0	0	0	1	0	0	7
21:00	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
Hourly Totals	0	24	4	0	0	0	0	1	1	0	0	0	1	0	0	31
21:15	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	6
21:30	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
21:45	0	8	1	0	0	0	0	1	0	0	0	0	0	0	0	10
22:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hourly Totals	0	18	2	0	0	0	0	1	0	0	0	0	0	0	0	21
22:15	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	3
22:30	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	3
22:45	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
23:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	3
Hourly Totals	0	7	2	1	0	0	0	0	0	1	0	0	0	0	1	12
23:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
23:30	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
23:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
24:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hourly Totals	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	6
Daily Totals	1	85	13	1	1	0	0	2	2	1	0	0	2	0	3	111
Percentages	0.90	76.58	11.71	0.90	0.90	0.00	0.00	1.80	1.80	0.90	0.00	0.00	1.80	0.00	2.70	

Sta: 000000000703 Id: 000000709257 CId: 01 Fmt: 200 Int: 15 Min.
Start: Mon - Sep 09, 1996 at 19:00 End: Tue - Sep 10, 1996 at 19
City/Town: County: WAKULLA
Location: SR 363 SOUTH OF US 98 File: D0909009.P
Ln1-South

Tue - Sep 10, 1996

Type	Cycle	Cars	2A-4T	Buses	2A-SU	3A-SU	4A-SU	4A-ST	5A-ST	6A-ST	5A-MT	6A-MT	7A-MT	None	Other	Total
Tue - Sep 10, 1996																
00:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Totals	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
01:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
01:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
01:45	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Totals	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
02:15	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
02:30	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
02:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Totals	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	5
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
03:45	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
Hourly Totals	0	6	1	1	0	0	0	0	0	0	0	0	0	0	0	8
04:15	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
04:30	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
04:45	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	3
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Totals	0	6	1	0	0	0	0	1	0	0	0	0	0	0	0	8
05:15	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
05:30	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
05:45	0	5	0	1	0	0	0	0	0	0	0	0	0	0	0	6
06:00	0	3	2	0	0	0	1	0	0	0	0	0	0	0	1	7
Hourly Totals	0	11	4	1	0	0	1	0	0	0	0	0	0	0	1	18

Sta: 000000000703 Id: 000000709257 CId: 01 Fmt: 200 Int: 15 Min.
Start: Mon - Sep 09, 1996 at 19:00 End: Tue - Sep 10, 1996 at 19:0
City/Town: County: WAKULLA
Location: SR 363 SOUTH OF US 98 File: D0909009.PRN
Ln1-South

Tue - Sep 10, 1996

Type	Cycle	Cars	2A-4T	Buses	2A-SU	3A-SU	4A-SU	4A-ST	5A-ST	6A-ST	5A-MT	6A-MT	7A-MT	None	Other	Total
06:15	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
06:30	0	5	2	1	0	0	0	0	0	0	0	0	0	0	0	8
06:45	0	12	4	1	0	0	1	0	0	0	0	0	0	0	0	18
07:00	0	19	5	0	0	1	0	0	0	0	0	0	0	0	0	25
Hourly Totals	0	40	12	2	0	1	1	0	0	0	0	0	0	0	0	56
07:15	0	12	3	0	0	1	1	0	0	0	0	0	0	0	1	18
07:30	0	7	2	0	0	0	0	0	0	0	0	0	0	0	0	9
07:45	0	8	3	1	0	0	0	0	1	0	0	0	0	0	0	13
08:00	0	10	1	0	0	0	0	1	1	0	0	0	0	0	0	13
Hourly Totals	0	37	9	1	0	1	1	1	2	0	0	0	0	0	1	53
08:15	0	6	2	0	0	0	0	1	0	0	0	0	0	0	1	10
08:30	0	8	4	0	0	2	0	0	2	1	0	0	1	0	0	18
08:45	0	9	1	0	0	0	0	2	1	0	0	0	1	0	0	14
09:00	0	9	2	0	0	0	0	1	2	0	0	0	0	0	1	15
Hourly Totals	0	32	9	0	0	2	0	4	5	1	0	0	2	0	2	57
09:15	0	9	1	0	0	0	0	1	3	0	0	0	0	0	0	14
09:30	1	9	4	0	2	0	0	0	0	0	0	0	0	0	0	16
09:45	0	9	1	0	0	0	0	0	1	0	0	0	0	0	0	11
10:00	0	11	3	1	0	0	2	1	1	0	0	0	0	0	0	19
Hourly Totals	1	38	9	1	2	0	2	2	5	0	0	0	0	0	0	60
10:15	0	7	2	2	0	0	0	1	0	0	0	0	0	0	0	12
10:30	0	5	1	0	0	0	0	0	2	0	1	0	0	0	0	9
10:45	0	7	0	0	0	0	0	2	1	0	0	0	1	0	0	11
11:00	0	2	2	0	0	0	0	0	2	0	0	0	0	0	1	7
Hourly Totals	0	21	5	2	0	0	0	3	5	0	1	0	1	0	1	39
11:15	0	6	3	1	0	0	1	1	5	0	0	0	0	0	0	17
11:30	0	16	6	0	1	0	0	0	2	0	0	0	0	0	0	25
11:45	0	13	4	0	0	0	0	1	0	0	0	0	0	0	1	19
12:00	0	16	5	0	0	1	0	0	1	0	0	0	0	0	0	23
Hourly Totals	0	51	18	1	1	1	1	2	8	0	0	0	0	0	1	84

COMPUTERIZED TRAFFIC DATA, INC.
14444 BEACH BLVD. SUITE 18-332 JACKSONVILLE, FL. 32250

09-11-1996 Volume by Type Report - D0909009.PRN 10:15 Pg

Sta: 000000000703 Id: 000000709257 CId: 01 Fmt: 200 Int: 15 Min.
Start: Mon - Sep 09, 1996 at 19:00 End: Tue - Sep 10, 1996 at 1
City/Town: County: WAKULLA
Location: SR 363 SOUTH OF US 98 File: D0909009.
Ln1-South

Tue - Sep 10, 1996

Type	Cycle	Cars	2A-4T	Buses	2A-SU	3A-SU	4A-SU	4A-ST	5A-ST	6A-ST	5A-MT	6A-MT	7A-MT	None	Other	Total
12:15	0	18	7	1	0	0	0	2	2	0	0	0	0	0	10	40
12:30	0	8	3	0	0	0	1	0	3	0	0	0	0	0	0	15
12:45	0	8	2	0	0	0	0	1	0	0	0	0	0	0	1	12
13:00	0	13	5	0	1	0	0	0	2	0	0	0	0	0	1	22
Hourly Totals	0	47	17	1	1	0	1	3	7	0	0	0	0	0	12	89
13:15	0	9	2	0	0	0	0	2	4	0	0	0	0	0	1	18
13:30	0	9	4	1	0	1	0	0	0	0	0	0	0	0	0	15
13:45	0	11	3	1	1	0	0	0	2	0	0	0	0	0	0	18
14:00	0	10	3	0	1	1	0	2	2	0	0	0	0	0	0	19
Hourly Totals	0	39	12	2	2	2	0	4	8	0	0	0	0	0	1	70
14:15	0	8	1	1	0	0	0	1	1	0	0	0	0	0	0	12
14:30	0	7	3	0	1	0	0	0	0	0	0	0	0	0	1	12
14:45	0	4	2	0	0	0	0	2	4	0	0	0	0	0	0	12
15:00	0	8	2	1	1	0	0	0	3	0	0	0	0	0	1	16
Hourly Totals	0	27	8	2	2	0	0	3	8	0	0	0	0	0	2	52
15:15	0	9	3	1	0	0	0	1	3	0	0	0	0	0	0	17
15:30	0	7	1	1	0	0	0	0	3	0	0	0	0	0	0	12
15:45	0	11	4	0	0	1	0	0	0	0	0	0	0	0	1	17
16:00	0	14	2	0	0	0	0	0	2	0	0	0	1	0	1	20
Hourly Totals	0	41	10	2	0	1	0	1	8	0	0	0	1	0	2	66
16:15	0	21	3	0	0	2	0	2	0	1	0	0	0	0	1	30
16:30	0	6	1	0	0	0	0	0	1	0	0	0	0	0	0	8
16:45	0	9	4	1	0	0	0	1	1	0	0	0	1	0	0	17
17:00	0	13	2	0	0	1	1	0	0	0	1	0	1	0	0	19
Hourly Totals	0	49	10	1	0	3	1	3	2	1	1	0	2	0	1	74
17:15	1	15	5	0	0	0	0	1	0	0	0	0	0	0	0	22
17:30	0	8	2	0	0	0	0	0	2	0	0	0	1	0	0	13
17:45	0	22	3	1	0	0	0	1	0	0	0	0	0	0	1	28
18:00	0	15	3	0	0	0	0	0	1	0	0	0	0	0	1	20
Hourly Totals	1	60	13	1	0	0	0	2	3	0	0	0	1	0	2	83

Sta: 000000000703 Id: 000000709257 CId: 01 Fmt: 200 Int: 15 Min.
Start: Mon - Sep 09, 1996 at 19:00 End: Tue - Sep 10, 1996 at 19:
City/Town: County: WAKULLA
Location: SR 363 SOUTH OF US 98 File: D0909009.PR
Ln1-South

Tue - Sep 10, 1996

Type	Cycle	Cars	2A-4T	Buses	2A-SU	3A-SU	4A-SU	4A-ST	5A-ST	6A-ST	5A-MT	6A-MT	7A-MT	None	Other	Total
18:15	1	8	1	0	0	0	0	0	1	0	0	0	0	0	0	11
18:30	0	10	1	0	0	0	0	0	0	0	0	0	2	0	0	13
18:45	0	8	0	2	0	1	0	0	0	0	0	0	1	0	0	12
19:00	0	9	2	0	0	0	0	0	0	0	0	0	1	0	0	12
Hourly Totals	1	35	4	2	0	1	0	0	1	0	0	0	4	0	0	48
Daily Totals	3	548	146	20	8	12	8	29	62	2	2	0	11	0	26	877
Percentages	0.34	62.49	16.65	2.28	0.91	1.37	0.91	3.31	7.07	0.23	0.23	0.00	1.25	0.00	2.96	

Station Data Summary

Type	Cycle	Cars	2A-4T	Buses	2A-SU	3A-SU	4A-SU	4A-ST	5A-ST	6A-ST	5A-MT	6A-MT	7A-MT	None	Other	Total
Grand Totals	4	633	159	21	9	12	8	31	64	3	2	0	13	0	29	988
Percentages	0.40	64.07	16.09	2.13	0.91	1.21	0.81	3.14	6.48	0.30	0.20	0.00	1.32	0.00	2.94	

Am/Pm Peak Hour Totals

Type	Cycle	Cars	2A-4T	Buses	2A-SU	3A-SU	4A-SU	4A-ST	5A-ST	6A-ST	5A-MT	6A-MT	7A-MT	None	Other	Total
Am Hour 11-12	0	51	18	1	1	1	1	2	8	0	0	0	0	0	1	84
Percentages	0.00	8.06	11.32	4.76	11.11	8.33	12.50	6.45	12.50	0.00	0.00	0.00	0.00	0.00	3.45	8.50
Pm Hour 12-13	0	47	17	1	1	0	1	3	7	0	0	0	0	0	12	89
Percentages	0.00	7.42	10.69	4.76	11.11	0.00	12.50	9.68	10.94	0.00	0.00	0.00	0.00	0.00	41.38	9.01

Type Vehicle Classification Count
Location: SR 363, South of US 98; Southbound
Date: 9-Sep-96

Period	Vehicle Classification														
Starting time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	total
6:00 AM	0	40	12	2	0	1	1	0	0	0	0	0	0	0	0	56
7:00 AM	0	37	9	1	0	1	1	1	2	0	0	0	0	0	1	53
8:00 AM	0	32	9	0	0	2	0	4	5	1	0	0	2	0	2	57
9:00 AM	1	38	9	1	2	0	2	2	5	0	0	0	0	0	0	60
10:00 AM	0	21	5	2	0	0	0	3	5	0	1	0	1	0	1	39
11:00 AM	0	51	18	1	1	1	1	2	8	0	0	0	0	0	1	84
12:00 PM	0	47	17	1	1	0	1	3	7	0	0	0	0	0	12	89
13:00 PM	0	39	12	2	2	2	0	4	8	0	0	0	0	0	1	70
14:00 PM	0	27	8	2	2	0	0	3	8	0	0	0	0	0	2	52
15:00 PM	0	41	10	2	0	1	0	1	8	0	0	0	1	0	2	66
16:00 PM	0	49	10	1	0	3	1	3	2	1	1	0	2	0	1	74
17:00 PM	1	60	13	1	0	0	0	2	3	0	0	0	1	0	2	83
Totals																
6:00-17:00	2	482	132	16	8	11	7	28	61	2	2	0	7	0	25	783
0:00-24:00	4	633	159	21	9	12	8	31	64	3	2	0	13	0	29	988

Type Vehicle Classification Count
Location: SR 363, South of US 98; Northbound
Date: 9-Sep-96

Period	Vehicle Classification														
Starting time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	total
6:00 AM	0	31	9	2	0	0	0	1	2	1	0	0	0	0	0	46
7:00 AM	0	34	4	2	1	1	0	0	6	1	0	0	0	0	0	49
8:00 AM	0	34	11	1	0	0	0	1	6	0	0	0	0	0	0	53
9:00 AM	0	25	4	0	1	1	0	0	10	0	0	0	0	0	0	41
10:00 AM	1	37	4	1	1	1	0	1	6	0	0	0	0	0	1	53
11:00 AM	1	37	10	1	1	0	0	3	1	0	0	0	0	0	2	56
12:00 PM	0	39	13	0	4	1	0	2	4	0	0	0	0	0	0	63
13:00 PM	0	32	7	3	3	1	0	1	8	0	0	0	0	0	1	56
14:00 PM	0	37	15	6	1	5	0	1	2	0	0	0	0	0	19	86
15:00 PM	1	60	18	5	5	1	0	1	3	1	0	0	0	0	10	105
16:00 PM	2	46	19	3	1	2	0	1	5	1	0	0	0	0	2	82
17:00 PM	1	56	17	0	2	0	0	3	1	0	0	0	0	0	0	80
Totals																
6:00-17:00	6	468	131	24	20	13	0	15	54	4	0	0	0	0	35	770
0:00-24:00	9	601	162	25	21	13	0	28	71	7	0	0	0	0	37	974

Type Vehicle Classification Count
Location: SR 363, South of US 98; Both Directions
Date: 9-Sep-96

Period	Vehicle Classification														
Starting time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	total
6:00 AM	0	71	21	4	0	1	1	1	2	1	0	0	0	0	0	102
7:00 AM	0	71	13	3	1	2	1	1	8	1	0	0	0	0	1	102
8:00 AM	0	66	20	1	0	2	0	5	11	1	0	0	2	0	2	110
9:00 AM	1	63	13	1	3	1	2	2	15	0	0	0	0	0	0	101
10:00 AM	1	58	9	3	1	1	0	4	11	0	1	0	1	0	2	92
11:00 AM	1	88	28	2	2	1	1	5	9	0	0	0	0	0	3	140
12:00 PM	0	86	30	1	5	1	1	5	11	0	0	0	0	0	12	152
13:00 PM	0	71	19	5	5	3	0	5	16	0	0	0	0	0	2	126
14:00 PM	0	64	23	8	3	5	0	4	10	0	0	0	0	0	21	138
15:00 PM	1	101	28	7	5	2	0	2	11	1	0	0	1	0	12	171
16:00 PM	2	95	29	4	1	5	1	4	7	2	1	0	2	0	3	156
17:00 PM	2	116	30	1	2	0	0	5	4	0	0	0	1	0	2	163
Totals																
6:00-17:00	8	950	263	40	28	24	7	43	115	6	2	0	7	0	60	1553
0:00-24:00	13	1234	321	46	30	25	8	59	135	10	2	0	13	0	66	1962

Type Vehicle Classification Projection
Location: SR 363, South of US 98; Southbound
Date: 1999

Period	Vehicle Classification															
Starting time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	total
6:00 AM	0	44	13	2	0	1	1	0	0	0	0	0	0	0	0	62
7:00 AM	0	41	10	1	0	1	1	1	2	0	0	0	0	0	1	58
8:00 AM	0	35	10	0	0	2	0	4	6	1	0	0	2	0	2	63
9:00 AM	1	42	10	1	2	0	2	2	6	0	0	0	0	0	0	66
10:00 AM	0	23	6	2	0	0	0	3	6	0	1	0	1	0	1	43
11:00 AM	0	56	20	1	1	1	1	2	9	0	0	0	0	0	1	93
12:00 PM	0	52	19	1	1	0	1	3	8	0	0	0	0	0	13	98
13:00 PM	0	43	13	2	2	2	0	4	9	0	0	0	0	0	1	77
14:00 PM	0	30	9	2	2	0	0	3	9	0	0	0	0	0	2	57
15:00 PM	0	45	11	2	0	1	0	1	9	0	0	0	1	0	2	73
16:00 PM	0	54	11	1	0	3	1	3	2	1	1	0	2	0	1	82
17:00 PM	1	66	14	1	0	0	0	2	3	0	0	0	1	0	2	92
Totals																
6:00-17:00	2	532	146	18	9	12	8	31	67	2	2	0	8	0	28	864
0:00-24:00	4	699	175	23	10	13	9	34	71	3	2	0	14	0	32	1090

Total truck traffic (Class 4 - 13):	
6:00-17:00	157
0:00-24:00	180

Type Vehicle Classification Projection
Location: SR 363, South of US 98; Northbound
Date: 1999

Period	Vehicle Classification															
Starting time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	total
6:00 AM	0	34	10	2	0	0	0	1	2	1	0	0	0	0	0	51
7:00 AM	0	38	4	2	1	1	0	0	7	1	0	0	0	0	0	54
8:00 AM	0	38	12	1	0	0	0	1	7	0	0	0	0	0	0	58
9:00 AM	0	28	4	0	1	1	0	0	11	0	0	0	0	0	0	45
10:00 AM	1	41	4	1	1	1	0	1	7	0	0	0	0	0	1	58
11:00 AM	1	41	11	1	1	0	0	3	1	0	0	0	0	0	2	62
12:00 PM	0	43	14	0	4	1	0	2	4	0	0	0	0	0	0	70
13:00 PM	0	35	8	3	3	1	0	1	9	0	0	0	0	0	1	62
14:00 PM	0	41	17	7	1	6	0	1	2	0	0	0	0	0	21	95
15:00 PM	1	66	20	6	6	1	0	1	3	1	0	0	0	0	11	116
16:00 PM	2	51	21	3	1	2	0	1	6	1	0	0	0	0	2	90
17:00 PM	1	62	19	0	2	0	0	3	1	0	0	0	0	0	0	88
Totals																
6:00-17:00	7	517	145	26	22	14	0	17	60	4	0	0	0	0	39	850
0:00-24:00	10	663	179	28	23	14	0	31	78	8	0	0	0	0	41	1075

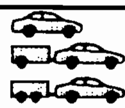
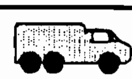
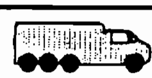
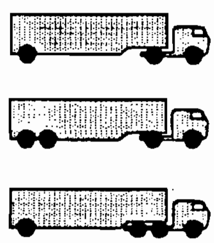
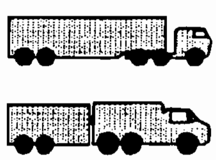
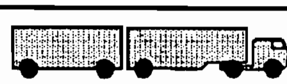
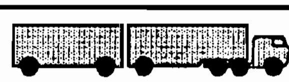
Total truck traffic (Class 4 - 13):	
6:00-17:00	143
0:00-24:00	182

Type Vehicle Classification Projection
Location: SR 363, South of US 98; Both Directions
Date: 1999

Period	Vehicle Classification															
Starting time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	total
6:00 AM	0	78	23	4	0	1	1	1	2	1	0	0	0	0	0	113
7:00 AM	0	78	14	3	1	2	1	1	9	1	0	0	0	0	1	113
8:00 AM	0	73	22	1	0	2	0	6	12	1	0	0	2	0	2	121
9:00 AM	1	70	14	1	3	1	2	2	17	0	0	0	0	0	0	111
10:00 AM	1	64	10	3	1	1	0	4	12	0	1	0	1	0	2	102
11:00 AM	1	97	31	2	2	1	1	6	10	0	0	0	0	0	3	155
12:00 PM	0	95	33	1	6	1	1	6	12	0	0	0	0	0	13	168
13:00 PM	0	78	21	6	6	3	0	6	18	0	0	0	0	0	2	139
14:00 PM	0	71	25	9	3	6	0	4	11	0	0	0	0	0	23	152
15:00 PM	1	111	31	8	6	2	0	2	12	1	0	0	1	0	13	189
16:00 PM	2	105	32	4	1	6	1	4	8	2	1	0	2	0	3	172
17:00 PM	2	128	33	1	2	0	0	6	4	0	0	0	1	0	2	180
Totals																
6:00-17:00	9	1048	290	44	31	26	8	47	127	7	2	0	8	0	66	1714
0:00-24:00	14	1362	354	51	33	28	9	65	149	11	2	0	14	0	73	2165

Total truck traffic (Class 4 - 13):	
6:00-17:00	300
0:00-24:00	362

FHWA CLASSIFICATION

CLASS GROUP		DESCRIPTION	NO. OF AXLES
1		MOTORCYCLES	2
2		ALL CARS CARS W/ 1-AXLE TRAILER CARS W/ 2-AXLE TRAILER	2 3 4
3		PICK-UPS & VANS 1 & 2 AXLE TRAILERS	2, 3, & 4
4		BUSES	2 & 3
5		2-AXLE, SINGLE UNIT	2
6		3-AXLE, SINGLE UNIT	3
7		4-AXLE, SINGLE UNIT	4
8		2-AXLE, TRACTOR, 1-AXLE TRAILER (2S1) 2-AXLE, TRACTOR, 2-AXLE TRAILER (2S2) 3-AXLE, TRACTOR, 1-AXLE TRAILER (3S1)	3 4 4
9		3-AXLE, TRACTOR, 2-AXLE TRAILER (3S2) 3-AXLE, TRUCK, W/ 2-AXLE TRAILER	5 5
10		TRACTOR W/ SINGLE TRAILER	6 & 7
11		5-AXLE MULTI-TRAILER	5
12		6-AXLE MULTI-TRAILER	6
13	ANY 7 OR MORE AXLE		7 or more
14	NOT USED		
15	UNKNOWN VEHICLE TYPE		

SOURCE: HALL PLANNING AND ENGINEERING, 1997

CITY OF TALLAHASSEE

VEHICLE CLASSIFICATIONS

PURDOM UNIT 8 PROJECT - ST MARKS, FLORIDA

Figure 1

10.6.2 Cultural Resources Modelling

There is no modelling associated with this technical discipline.

10.6.3 Groundwater Modeling

10.6.3.1 Introduction

Simulation of ground water flow in the vicinity of the Purdom Station was performed using the U.S. Geological Survey's Modular Three-Dimensional Finite-Difference Ground Water Flow Model (MODFLOW) to simulate the Upper Floridan aquifer system (McDonald and Harbaugh, 1988). The construction of the model and inputs for aquifer parameters were based on a recent USGS publication "Hydrogeologic Investigation and Simulation of Ground-Water flow in the Upper Floridan Aquifer of North-Central Florida and Southwestern Georgia and Delineation of Contributing Areas for Selected City of Tallahassee, Florida Water Supply Wells" which provides details on a similar MODFLOW model (Davis, 1996). This recently published USGS model covers a much broader geographic range than the model used for this study. Because of the broad, regional perspective of the USGS model it is difficult to discern the impacts of localized pumping withdrawals near the Purdom Station. The model which was constructed for the Purdom Station only covers a small portion of Wakulla County focusing on impacts from local withdrawal wells.

10.6.3.2 Model Input Parameter Selection

The model consisted of two layers each composed of 66 rows and 66 columns of cells which are 400 ft square. The entire model area encompasses approximately 25 square miles (66 x 400 ft = 26,400 ft). The model area was selected to include a 2.5 mile diameter area around the City of Tallahassee's four Purdom production wells in the wellfield which is located approximately 2 miles northwest of the Purdom Station. The thickness of the two model layers were input as 230 ft for the upper layer and 1970 ft for the lower layer. The total thickness of these two layers equals the estimated thickness of Upper Floridan aquifer in this region (230 + 1970 = 2200 ft estimated Upper Floridan aquifer thickness). The aquifer transmissivity was input as 10,000 ft^2/day (10,000 ft^2/day divided by 2200 ft [aquifer thickness] = 4.55 ft/day; the hydraulic conductivity of the aquifer). The aquifer porosity was input as 0.25 percent for both layers. The input values for aquifer thickness, transmissivity, and porosity in the Purdom model match the input values used in the USGS model (Davis, 1996).

Initial potentiometric heads in each model cell varied from 4 ft above mean sea level (MSL) to 0 ft MSL. The highest heads were established as model inputs in the cells along the top (northernmost) row of the model and the potentiometric head input values were gradually decreased from 4 ft to 0 ft toward the bottom (southernmost) row of the model to create a gradient in the Purdom model of 1 ft/mile approximately matching the regional gradient of the USGS model.

The USGS model separated the Upper Floridan aquifer unit into two model layers with the same hydraulic properties because nearly all of the withdrawal wells in the area are less than 230 ft in total depth. Pumping from the withdrawal wells is modeled exclusively in the upper model layer by assigning wells only to cells in the upper layers. Studies of the Upper Floridan aquifer in this area have shown that the majority of groundwater flow from the aquifer to pumping wells is provided by horizontal flow through more permeable zones in the upper aquifer materials.

Putting the withdrawal wells exclusively in the upper model layer forces the model to act in a similar fashion to the physical environment by providing water for the withdrawal wells predominately via horizontal flow through the upper model layer. In addition, the second model layer below the upper layer which has identical hydraulic properties as the upper layer allows some upward flow to occur in the model near large withdrawals as is thought to be the case in the physical environment. This arrangement of model layers is consistent in both models.

Recharge to the entire model area was adjusted experimentally during early model simulations and held constant throughout the later model simulations at 2.2 inches per year. Larger values of recharge resulted in excessive mounding throughout the model and no recharge resulted in excessively low potentiometric heads being derived by the model because recharge is one of only two sources of groundwater inflow available to the model (the only other potential source of groundwater inflow in the model were river cells). Recharge rates in the USGS model varied from 20 inches to less than 1 inch per year and were adjusted during model calibration. The exact recharge rate for the area of the Purdom model was not specified in the USGS modeling report. Local recharge to the aquifer near the Purdom site is thought to be highly variable as some areas near the site have thin layers of clayey soils at the surface (above the limestone aquifer materials) which limit recharge in those areas and other areas near the site have limestone essentially at ground surface. The most significant groundwater flows in the immediate area of the Purdom model are discharges in springs and rivers. Locally, springs are fed by lateral flow from northern (upgradient) recharge areas in the aquifer.

Cells in the model area which correspond to the two local rivers (Wakulla and St. Marks) were created using the MODFLOW River package option which allows them to act as either recharge or discharge cells depending on the stage of the river cells and the water level in the surrounding aquifer cells. When the potentiometric head in an aquifer cell adjacent to a river cell exceeds the river cell's stage the aquifer discharges to the river and when the river cell's stage exceeds the aquifer cell's head the river recharges the aquifer. The initial values of head in the river cells for the Purdom model were input as 1-2 ft below the initial head of the surrounding aquifer cells to simulate spring discharges into the rivers reported by the USGS and other sources. Actual values of river stage at various points within the model domain were not available for use as inputs to the model. Intuitively, the initial head of the river cells were gradually decreased from the north to the south (within the model) along the axis of the river channel cells matching the approximate gradient of the aquifer. This gradient allowed the model to simulate flow in the river to the south toward the mouths of the rivers. In the physical environment, both rivers discharge into a bay south of the area included in the model. The USGS reported in their model that the average discharge from the Wakulla River was 350 cubic ft/sec and the average discharge from the St. Marks River was 602 cubic ft/sec (Davis, 1996). These values were based on data collected in the field. Both of these rivers are fed by springs which discharge from the Upper Floridan aquifer. The USGS model domain includes the entire area of the drainage basins for both rivers and their total cumulative basin discharges are included in the reported flows. The area used for the Purdom model only includes a small portion of each river's basin. Consequently, it would not be realistic to match the USGS model's river discharges rates in the Purdom model because most of the flow to these rivers is contributed by sources outside of the model domain. However, because the entire river channel acts as a sink or discharge point for the Upper Floridan aquifer whenever the water levels in the aquifer exceed the river stage; it was important to include these discharge cells in the model. The effect of the river cells on the model is that they help to create contours in the potentiometric surface generated from the Purdom model which are similar to those generated by the USGS model. This is achieved by river cells which provide recharge to the aquifer at points nearest large withdrawal wells and which also accept discharge from the aquifer at other points in order to maintain their pre-set stage provided as a model input value.

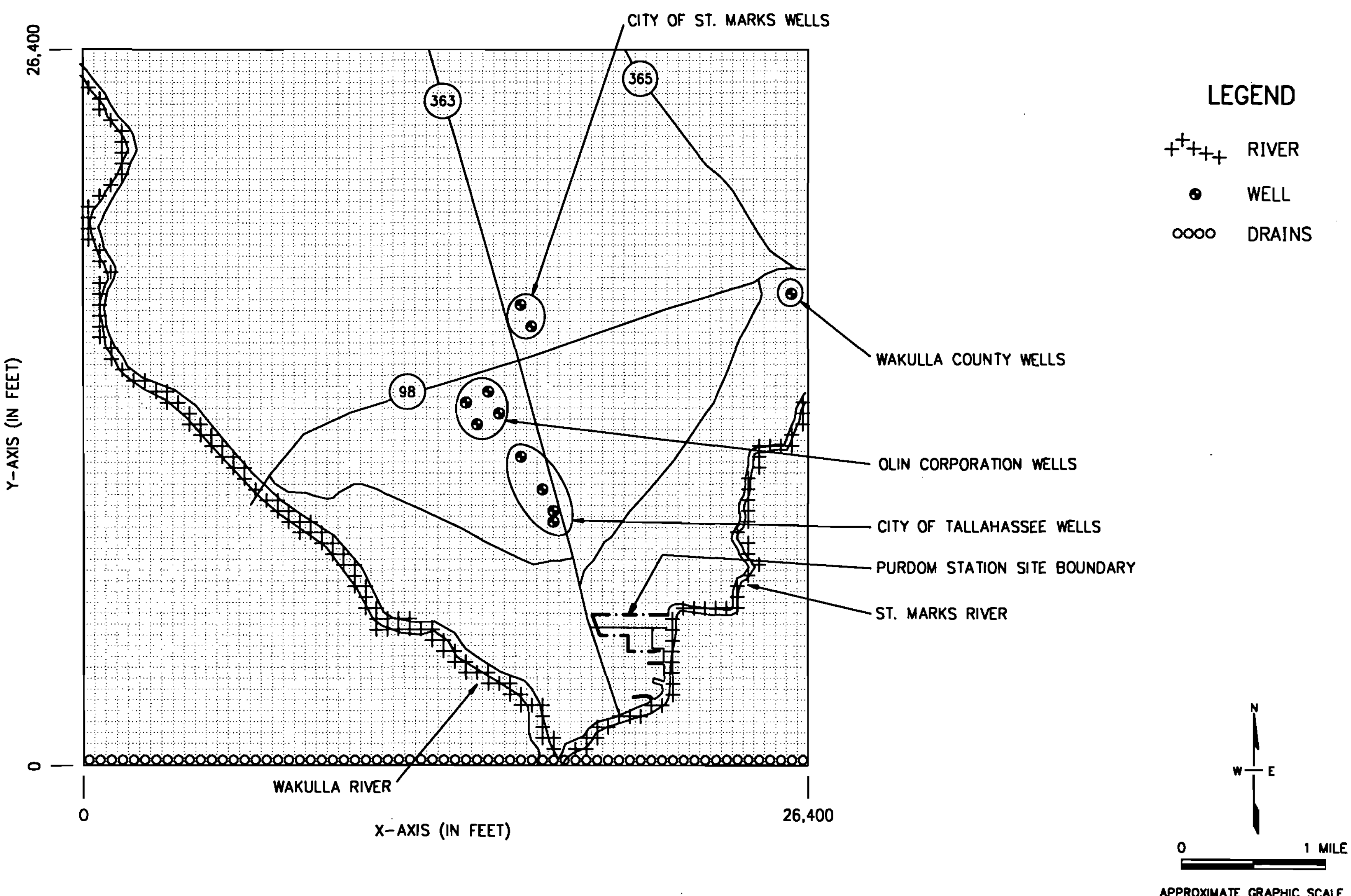
Drains were created in the cells along the southern edge of the model and experimentally adjusted along with recharge rates in the early model simulations until a potentiometric head and gradient was created throughout the model area which approximately matched the regional gradient shown by the USGS model. This adjustment was done when all of the existing local pumping wells were active in the early runs of the baseline simulation. This arrangement is very similar to the arrangement used in the USGS model which also used a combination of areal recharge, rivers, and drains to establish a regional flow gradient in their aquifer simulation model. The inputs for the drains were arbitrarily pre-set to the same elevation as the bottom of the upper model layer (-230 ft).Their flow was adjusted by changing the hydraulic conductivity of the drains. The hydraulic conductivity value used for the drains in all of the model simulations was 4.55 ft/day; which matched the reported hydraulic conductivity of the aquifer. This arrangement was necessary to create a regional flow in the aquifer from north to south (toward the Gulf of Mexico) matching the real conditions found in the area. This flow regime became the basis for all of the pumping and non-pumping withdrawal simulations run with the model to predict local impacts.

10.6.3.3 Model Simulations

Figure 10.6.3-1 depicts the model layout and the arrangement of the model cells including the locations of those which represent rivers, drains, and withdrawal wells. Two model simulations were executed corresponding to the two groundwater withdrawal scenarios which apply to the Purdom Station.

Pumping wells were created in the two model simulations as shown in Table 10.6.3-1. The individual well withdrawal rates in each of the two simulations were based on data provided in water use permits from the Northwest Florida Water Management District (NWFWMD) and from data in the USGS report. The City of Tallahassee has four operational wells in their Purdom wellfield, but they normally operate only two at a time; either wells 6 and 8 or wells 7 and 9 are pumped in tandem to provide a combined average withdrawal rate of 200 gpm. For simplicity, only one version of this pumping arrangement was simulated by the model because the impact to the model of withdrawing water from either pair of wells is essentially the same. For the purposes of the model simulation all of the City of Tallahassee's withdrawals were modeled as being pumped from the two northernmost wells. Primex Technologies (formerly Olin Corporation) has four wells, but no data was available regarding the usage of each individual well. The City of St. Marks has two wells which are both operated continuously (personal communication, Robert George, David H. Melvin & Associates, Inc., Tallahassee, Florida, January 3, 1997). Wakulla County only has one permitted withdrawal well.

PLOT DATE FEB 20, 1997 C:\15840002\----\00000-26.DWG



10.6.3-4

SOURCE: FOSTER WHEELER ENVIRONMENTAL, 1997

CITY OF TALLAHASSEE

GROUNDWATER MODEL
GRID LAYOUT

PURDOM UNIT 8 PROJECT - ST MARKS, FLORIDA

Figure 10.6.3-1

TABLE 10.6.3-1 MODEL DATA			
Owner	**No. Wells**	**Pumping Rate/Well (gpm)[1]**	**Simulation No.**
City of Tallahassee	2	100	1
Primex Technologies (formerly Olin)	4	158	1
City of St. Marks	2	29	1
Wakulla County	1	1.3	1
City of Tallahassee	2	0	2
Primex (formerly Olin)	4	158	2
City of St. Marks	2	29	2
Wakulla County	1	1.3	2

[1] Permitted Average Daily Pumping Rates:
City of Tallahassee = 288,000 gpd
Primex Technologies(formerly Olin) = 910,000 gpd
City of St. Marks = 84,000 gpd
Wakulla County = 1,900 gpd.

Source: NWFWMD

The model simulations were executed in the transient mode for a time period of 10 years which approximates a steady-state condition. The 10-year simulation period was derived experimentally by interactively executing the model changing only the length of the simulation time and reviewing the output results until a time period was found after which measurable changes were not observed in the potentiometric head of the model results.

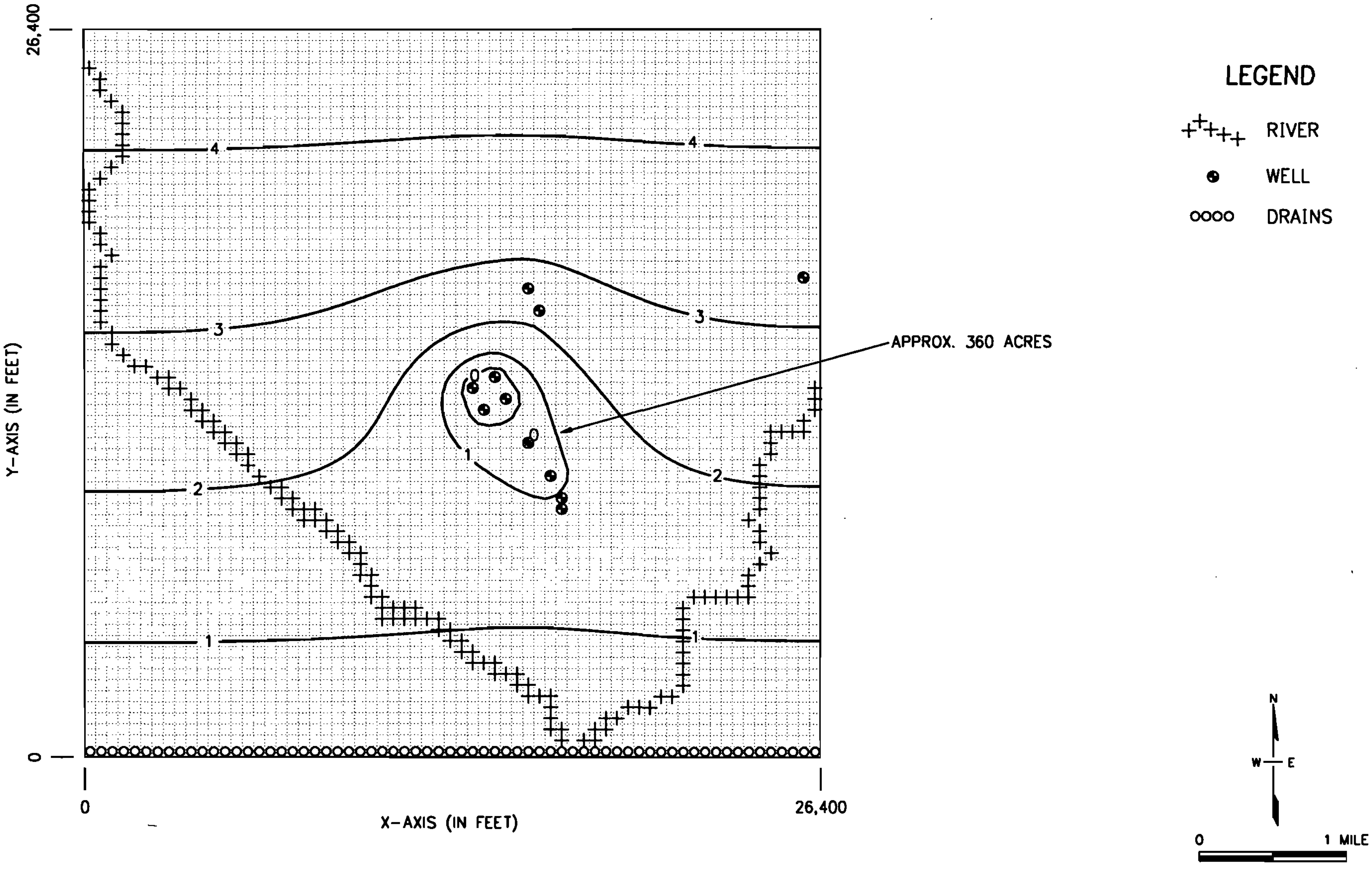
The model was not executed in the steady-state mode because this mode ignores aquifer storage. Aquifer storage plays an important role in the model and in the physical world because the change in aquifer storage created by various pumping scenarios controls the potentiometric surface of the aquifer. The Upper Floridan aquifer has an effective porosity or storage in the range of 25 percent. Water in the pore spaces of the aquifer is drained in response to increased pumping. As this stored water is removed it creates a cone of depression around pumping wells it causes an increase in aquifer recharge by reducing the volume of water which discharges to the area rivers.

The first model simulation depicts the baseline which corresponds to the existing conditions at the Plant. In this simulation, the Purdom wellfield withdraws 200 gpm from 2 wells operated in tandem. Other nearby withdrawals which are large enough potentially to impact the modeled region include withdrawals by Primex Technologies(formerly Olin Corporation), City of St. Marks, and Wakulla County. The second model simulation depicts the anticipated positive results from the cessation of pumping at the Purdom wellfield, planned when Purdom Unit 8 comes on line and is operated on natural gas fuel.

10.6.3.4 Model Results

Figure 10.6.3-2 from the first model simulation, depicts the potentiometric surface of the Upper Floridan aquifer for the baseline with the City of Tallahassee Purdom wells actively pumping.

PLOT DATE FEB 20, 1997 C:\15840002\----\00000-24.DWG



SOURCE: FOSTER WHEELER ENVIRONMENTAL, 1997

CITY OF TALLAHASSEE

GROUNDWATER MODEL
EXISTING CONDITIONS - BASELINE SIMULATION

PURDOM UNIT 8 PROJECT - ST MARKS, FLORIDA

Figure 10.6.3-2

This figure represents the existing conditions in the Upper Floridan aquifer near the Purdom Station. The figure shows an elliptical shaped cone of depression area which encompasses the four Primex Technologies (formerly Olin Corporation) wells and the two active City of Tallahassee Purdom wells. This area of depressed potentiometric heads is approximately 5800 ft long by 4000 ft wide and includes approximately 360 acres. There is also a less pronounced depressed potentiometric area near the City of St. Marks two wells.

Figure 10.6.3-3 depicts the results of a predictive model simulation which was executed to model the expected impact resulting from removing the City of Tallahassee's Purdom wellfield from service. Figure 10.6.3-3 depicts a much smaller cone of depression around the Primex Technologies (formerly Olin Corporation) wells which will remain after the City of Tallahassee's Purdom wells are removed from service. This cone of depression is circular approximately 2800 ft in diameter and covers approximately 180 acres.

10.6.3.5 Model Conclusions

The results of the model simulations indicate that removing the City of Tallahassee's Purdom wellfield from service will be beneficial to groundwater resources in this area of Wakulla County. Cessation of pumping from this wellfield will reduce the diameter of the localized cone of depression caused by groundwater withdrawals and diminish the threat of saltwater intrusion to the area.

10.6.3.6 References

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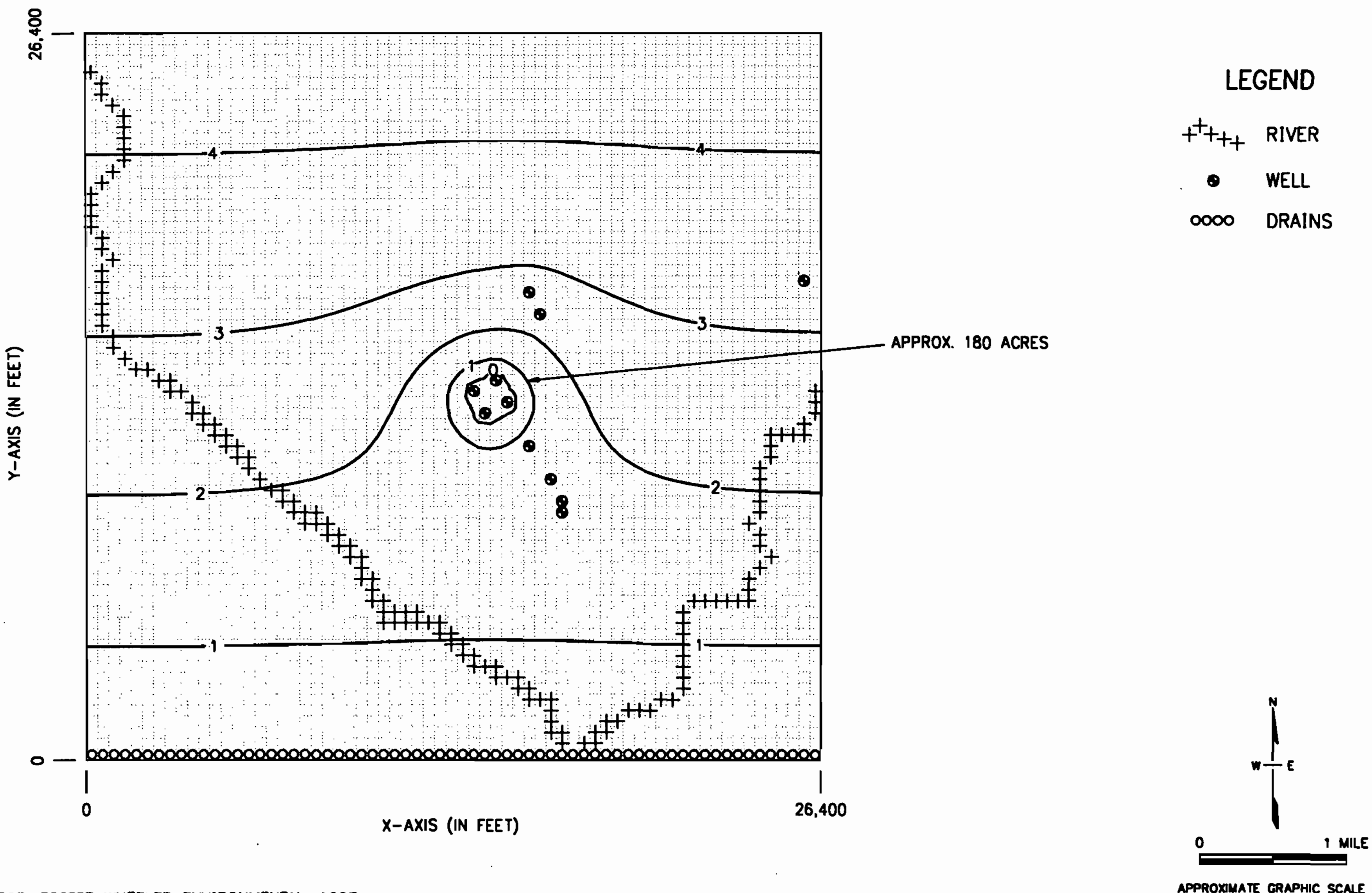
PLOT DATE FEB 20, 1997 C:\15840002\----\00000-25.DWG



SOURCE: FOSTER WHEELER ENVIRONMENTAL, 1997

CITY OF TALLAHASSEE

GROUNDWATER MODEL
FUTURE CONDITIONS - OPERATION OF PURDOM UNIT 8

PURDOM UNIT 8 PROJECT - ST MARKS, FLORIDA

Figure
10.6.3-3

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10.6.4 Surface Water Modelling

No surface water modelling required for this zero discharge facility.

10.6.5 Ecology Modelling

There is no modelling associated with this technical discipline.

10.6.6 Meteorology /Air Quality Modelling

Air Quality Models and Related Programs

Several models and associated programs were used in the air quality analysis presented in this application. These models and programs were downloaded from the EPA Office of Air Quality Planning and Standards (OAQPS) Technology Transfer Network (TNN).

The models and programs as well as the version number of each is presented in the table below.

Model / Program	Version
SCREEN3	96043
Industrial Source Complex (ISC3)	96113
Building Profile Input Program (BPIP)	95086

The cover page of the users guide is included in this appendix as well as excerpts from the users guides / modelling guidance documents which briefly describe each model / program.

EPA-454/B-95-004

SCREEN3 Model User's Guide

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Emissions, Monitoring, and Analysis Division
Research Triangle Park, North Carolina 27711

September 1995

EPA-454/R-92-019

Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Air and Radiation
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

October 1992

1. INTRODUCTION

This document is an update and revision of an earlier guideline[1,2] for applying screening techniques to estimate the air quality impact of stationary sources. The application of screening techniques is addressed in Section 4.2.1 of the Guideline on Air Quality Models (Revised).[3] The current document incorporates changes and additions to the technical approach. The techniques are applicable to chemically stable, gaseous or fine particulate pollutants. An important advantage of the current document is that the single source, short-term techniques can be easily executed on an IBM® - PC (personal computer) compatible microcomputer with at least 256K of RAM using the SCREEN2 computer code. As with the earlier versions, however, many of the techniques can be applied with a pocket or desk calculator.

The techniques described in this document can be used to evaluate the air quality impact of sources pursuant to the requirements of the Clean Air Act,[4] such as those sources subject to the prevention of significant deterioration (PSD) regulation, addressed in 40 CFR 52.21. The techniques can also be used, where appropriate, for new major or minor sources or modifications subject to new source review regulations, and existing sources of air pollutants, including toxic air pollutants. This document presents a three-phase approach that is applicable to the air quality analysis:

Phase 1. Apply a simple screening procedure (Section 4.1) to determine if either (1) the source clearly poses no air quality problem or (2) the potential for an air quality problem exists.

Phase 2. If the simplified screening results indicate a potential threat to air quality, further analysis is warranted, and the detailed screening (basic modeling) procedures described in Sections 4.2 through 4.5 should be applied.

Phase 3. If the detailed screening results or other factors indicate that a more refined analysis is necessary, refer to the Guideline on Air Quality Models (Revised).[3]

The simple screening procedure (Phase 1) is applied to determine if the source poses a potential threat to air quality. The purpose of first applying a simple screening procedure is to conserve resources by eliminating from further analysis those sources that clearly will not cause or contribute to ambient concentrations in excess of short-term air quality standards or allowable concentration increments. A relatively large degree of "conservatism" is incorporated in that screening procedure to provide reasonable assurance that maximum concentrations will not be underestimated.

If the results of the simple screening procedure indicate a potential to exceed allowable concentrations, then a detailed screening analysis is conducted (Phase 2). The Phase 2 analysis will yield a somewhat conservative first approximation (albeit less conservative than the simple screening estimate) of the source's maximum impact on air quality. If the Phase 2 analysis indicates that the new source does not pose an air quality problem, further modeling may not be necessary. However, there are situations in which analysis beyond the scope of this document (Phase 3) may be required; for example when:

1. A more accurate estimate of the concentrations is needed (e.g., if the results of the Phase 2 analysis indicate a potential air quality problem).
2. The source configuration is complex.
3. Emission rates are highly variable.
4. Pollutant dispersion is significantly affected by nearby terrain features or large bodies of water.

In most of those situations, more refined analytical techniques, such as computer-based dispersion models,[3] can be of considerable help in estimating air quality impact.

EXCERPT FROM EPA-454/R-92-019-454/R-92-019

EPA-454/B-95-003a

USER'S GUIDE FOR THE INDUSTRIAL SOURCE COMPLEX (ISC3) DISPERSION MODELS

VOLUME I - USER INSTRUCTIONS

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Emissions, Monitoring, and Analysis Division
Research Triangle Park, North Carolina 27711

September 1995

A.5 INDUSTRIAL SOURCE COMPLEX MODEL (ISC3)

Reference

Environmental Protection Agency, 1995. User's Guide for the Industrial Source Complex (ISC3) Dispersion Models, Volumes 1 and 2. EPA Publication Nos. EPA-454/B-95-003a & b. Environmental Protection Agency, Research Triangle Park, NC. (NTIS Nos. PB 95-222741 and PB 95-222758, respectively)

Availability

The model code is available on the Support Center for Regulatory Air Models Bulletin Board System. ISCST3 (as PB 96-502000) and ISCLT3 (as PB 96-502018) are also available on diskette from the National Technical Information Service (see Section A.0).

Abstract

The ISC3 model is a steady-state Gaussian plume model which can be used to assess pollutant concentrations from a wide variety of sources associated with an industrial source complex. This model can account for the following: settling and dry deposition of particles; downwash; area, line and volume sources; plume rise as a function of downwind distance; separation of point sources; and limited terrain adjustment. ISC3 operates in both long-term and short-term modes.

a. Recommendations for Regulatory Use

ISC3 is appropriate for the following applications:

- Industrial source complexes;
- Rural or urban areas;
- Flat or rolling terrain;
- Transport distances less than 50 kilometers;
- 1-hour to annual averaging times; and
- Continuous toxic air emissions.

The following options should be selected for regulatory applications: For short term or long term modeling, set the regulatory "default option"; i.e., use the keyword *DFAULT*, which automatically selects stack tip downwash, final plume rise, buoyancy induced dispersion (BID), the vertical potential temperature gradient, a treatment for calms, the appropriate wind profile exponents, the appropriate value for pollutant half-life, and a revised building wake effects algorithm; set the "rural option" (use the keyword *RURAL*) or "urban option" (use the keyword *URBAN*); and set the "concentration option" (use the keyword *CONC*).

b. Input Requirements

Source data: location, emission rate, physical stack height, stack gas exit velocity, stack inside diameter, and stack gas temperature. Optional inputs include source elevation, building dimensions, particle size distribution with corresponding settling velocities, and surface reflection coefficients.

Meteorological data: ISCST3 requires hourly surface weather data from the preprocessor program RAMMET, which provides hourly stability class,wind direction, wind speed, temperature, and mixing height. For ISCLT3, input includes stability wind rose (STAR deck), average afternoon mixing height, average morning mixing height, and average air temperature.

Receptor data: coordinates and optional ground elevation for each receptor.

c. Output

Printed output options include:

- Program control parameters, source data, and receptor data;
- Tables of hourly meteorological data for each specified day;
- "N"-day average concentration or total deposition calculated at each receptor for any desired source combinations;
- Concentration or deposition values calculated for any desired source combinations at all receptors for any specified day or time period within the day;
- Tables of highest and second highest concentration or deposition values calculated at each receptor for each specified time period during a(n) "N"-day period for any desired source combinations, and tables of the maximum 50 concentration or deposition values calculated for any desired source combinations for each specified time period.

d. Type of Model

ISC3 is a Gaussian plume model. It has been revised to perform a double integration of the Gaussian plume kernel for area sources.

e. Pollutant Types

ISC3 may be used to model primary pollutants and continuous releases of toxic and hazardous waste pollutants. Settling and deposition are treated.

f. Source-Receptor Relationships

ISC3 applies user-specified locations for point, line, area and volume sources, and user-specified receptor locations or receptor rings.

User input topographic evaluation for each receptor is used. Elevations above stack top are reduced to the stack top elevation, i.e., "terrain chopping".

User input height above ground level may be used when necessary to simulate impact at elevated or "flag pole" receptors, e.g., on buildings.

Actual separation between each source-receptor pair is used.

g. Plume Behavior

ISC3 uses Briggs (1969, 1971, 1975) plume rise equations for final rise.

Stack tip downwash equation from Briggs (1974) is used.

Revised building wake effects algorithm is used. For stacks higher than building height plus one-half the lesser of the building height or building width, the building wake algorithm of Huber and Snyder (1976) is used. For lower stacks, the building wake algorithm of Schulman and Scire (Schulman and Hanna, 1986) is used, but stack tip downwash and BID are not used.

For rolling terrain (terrain not above stack height), plume centerline is horizontal at height of final rise above source.

Fumigation is not treated.

h. Horizontal Winds

Constant, uniform (steady-state) wind is assumed for each hour.

Straight line plume transport is assumed to all downwind distances.

Separate wind speed profile exponents (Irwin, 1979; EPA, 1980) for both rural and urban cases are used.

An optional treatment for calm winds is included for short term modeling.

i. Vertical Wind Speed

Vertical wind speed is assumed equal to zero.

j. Horizontal Dispersion

Rural dispersion coefficients from Turner (1969) are used, with no adjustments for surface roughness or averaging time.

Urban dispersion coefficients from Briggs (Gifford, 1976) are used.

Buoyancy induced dispersion (Pasquill, 1976) is included.

Six stability classes are used.

k. Vertical Dispersion

Rural dispersion coefficients from Turner (1969) are used, with no adjustments for surface roughness.

Urban dispersion coefficients from Briggs (Gifford, 1976) are used.

Buoyancy induced dispersion (Pasquill, 1976) is included.

Six stability classes are used.

Mixing height is accounted for with multiple reflections until the vertical plume standard deviation equals 1.6 times the mixing height; uniform vertical mixing is assumed beyond that point.

Perfect reflection is assumed at the ground.

l. Chemical Transformation

Chemical transformations are treated using exponential decay. Time constant is input by the user.

m. Physical Removal

Dry deposition effects for particles are treated using a resistance formulation in which the deposition velocity is the sum of the resistances to pollutant transfer within the surface layer of the atmosphere, plus a gravitational settling term (EPA, 1994), based on the modified surface depletion scheme of Horst (1983).

n. Evaluation Studies

Bowers, J.F. and A.J. Anderson, 1981. An Evaluation Study for the Industrial Source Complex (ISC) Dispersion Model, EPA Publication No. EPA-450/4-81-002. U.S. Environmental Protection Agency, Research Triangle Park, NC.

Bowers, J.F., A.J. Anderson and W.R. Hargraves, 1982. Tests of the Industrial Source Complex (ISC) Dispersion Model at the Armco Middletown, Ohio Steel Mill. EPA Publication No. EPA-450/4-82-006. U.S. Environmental Protection Agency, Research Triangle Park, NC.

Environmental Protection Agency, 1992. Comparison of a Revised Area Source Algorithm for the Industrial Source Complex Short Term Model and Wind Tunnel Data. EPA Publication No. EPA-454/R-92-014. U.S. Environmental Protection Agency, Research Triangle Park, NC. (NTIS No. PB 93-226751)

Environmental Protection Agency, 1992. Sensitivity Analysis of a Revised Area Source Algorithm for the Industrial Source Complex Short Term Model. EPA Publication No. EPA-454/R-92-015. U.S. Environmental Protection Agency, Research Triangle Park, NC. (NTIS No. PB 93-226769)

Environmental Protection Agency, 1992. Development and Evaluation of a Revised Area Source Algorithm for the Industrial Source Complex Long Term Model. EPA Publication No. EPA-454/R-92-016. U.S. Environmental Protection Agency, Research Triangle Park, NC. (NTIS No. PB 93-226777)

Environmental Protection Agency, 1994. Development and Testing of a Dry Deposition Algorithm (Revised). EPA Publication No. EPA-454/R-94-015. U.S. Environmental Protection Agency, Research Triangle Park, NC. (NTIS No. PB 94-183100)

Scire, J.S. and L.L. Schulman, 1981. Evaluation of the BLP and ISC Models with SF_6 Tracer Data and SO_2 Measurements at Aluminum Reduction Plants. Air Pollution Control Association Specialty Conference on Dispersion Modeling for Complex Sources, St. Louis, MO.

Schulman, L.L. and S.R. Hanna, 1986. Evaluation of Downwash Modification to the Industrial Source Complex Model. *Journal of the Air Pollution Control Association*, 36: 258-264.

EPA-454/R-93-038
(Revised Februrary 8, 1995)
(Electronic copy only)

USER'S GUIDE TO THE BUILDING PROFILE INPUT PROGRAM

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Technical Support Division
Research Triangle Park, North Carolina 27711

October 1993

2.0 BPIP PROGRAM TECHNICAL DESCRIPTION

The Building Profile Input Program (BPIP) was designed to incorporate the concepts and procedures expressed in the GEP technical support document (see Reference 1), the Building Downwash guidance (References 2 through 4), and other related documents referenced below into a program that correctly calculates building heights (BH's) and projected building widths (PBW's). A copy of the source code is attached in Appendix A.

Other documents that relate directly to GEP and building downwash guidance can be found in Section 4. Among the documents are procedures and guidelines for: 1) when and how to use building downwash (See References 5, 6, and 7), 2) how to format the BH and PBW values for input to the ISC2 models (See Reference 6), and 3) questions and answers on implementing GEP stack height regulations (See Reference 8).

BPIP is divided into two parts. The first part is based solely on the GEP technical support document and is designed to determine whether or not a stack is being subjected to wake effects from a structure or structures. Several values are determined such as the GEP stack height, GEP related BH's and PBW's. Flags are set to indicate which stacks are being affected by which structure wake effects.

The second part calculates building downwash BH's and PBW's based on References 2 through 4 which can lead to different BH and PBW values than those calculated for GEP. This part performs the calculations only if a stack is being influenced by structure wake effects. Output is formatted for editing into either the ISCST2 or ISCLT2 model input runstream (See Reference 6).

Excertpt from EPA-454/R-93-038

EPA-454/R-92-023

VISCREEN USERS GUIDE

Revised October 1992

2 GENERAL CONCEPTS

In this section we present a brief overview of the concepts required to understand the technical approach used in plume visual impact screening and analysis. More detailed background information can be obtained from the references cited in the back of this document.

First, we discuss what makes a plume visible. Then, we present an overview of light scattering and absorption in the atmosphere and the emissions that are responsible. Next we describe the specific geometries assumed for plume visual impact analysis and present the basic formulas describing plume visual impact. Finally, we discuss plume perceptibility screening criteria.

WHAT MAKES A PLUME VISIBLE

The objective of plume visual impact screening and analysis is to determine whether or not a plume is visible as an object itself. To understand what makes a plume visible, we first ask what makes any object visible. Any viewed object is visually perceptible to a human observer if the light emanating from the object and impinging on the retina of the eye is sufficiently different from light emanating from other objects so that the difference or contrast between the given object and surrounding objects (its viewing background) produces a perceptible signal to the optic nerve and the brain. Visual perception requires contrast. Contrast can be large as in the case of this black type on white paper, or contrast can be small as in the case of touch-up paint that doesn't quite match.

Since the human eye responds differently to different wavelengths of light, the eye responds to color as well as brightness. The range of wavelengths to which the human eye responds is called the visible spectrum and ranges from the short-wavelength (0.4 micrometer, μm) blue to the middle-wavelength (0.55 μm) green to the long-wavelength (0.7 μm) red. Contrast can be defined at any wavelength as the relative difference in the intensity (called spectral radiance) between the viewed object and its background:

$$C = (I_{obj} - I_{back})/I_{back} \quad ,$$

where C is the contrast and I_{obj} and I_{back} are the light intensities (or spectral radiances) of the object and its background.

If the viewed object is brighter than its background, it will have a positive contrast. For example, a white cloud viewed against a dark blue sky will have a positive contrast. If the object is darker than the background, its contrast is negative. For example, a distant mountain is usually visible because of a negative contrast against the horizon sky (unless the mountain is snow-covered, in which case its contrast is generally positive).

Figure 2 illustrates the concept of contrast at different wavelengths with four hypothetical objects. Object 1 has spectral radiance distribution defined by I_1 over the visible spectrum. Because Object 1's spectral radiance is uniform over all visible wavelengths, it is nominally white. Object 2 is darker than Object 1 because spectral radiances at all wavelengths are lower than those for Object 1. In addition, Object 2 is a different color because there is relatively more light at the red end of the visible spectrum than at the blue end. The contrast of Object 2 against Object 1 is negative at all wavelengths, but blue contrasts are more negative than both green and red wavelengths. As a result Object 2 would appear dark red (brown) compared to Object 1. Similarly, Object 3 would appear as a dark blue, and Object 4 would appear as an even darker gray (or black). If Object 3 were the viewing background for Object 2, its contrast at the blue end of the visible spectrum would be negative, while its contrast at the red end would be positive. Thus, contrasts at all wavelengths in the visible spectrum characterize the brightness and color of a viewed object (such as a visible plume) relative to its viewing background.

In the plume visual impact screening model VISCREEN, contrasts at three wavelengths (0.45, 0.55, and 0.65 μm) are used to characterize blue, green, and red regions of the visible spectrum. In the plume visibility model PLUVUE II, calculations are performed for 39 wavelengths. Thus, we can ascertain whether a plume will be brighter or darker or discolored compared to its viewing background by evaluating its contrasts in the blue, green, and red portions of the visible spectrum. If plume contrast is positive, the plume is brighter than its viewing background; if negative, the plume is darker. If contrasts are different at different wavelengths, the plume is discolored. If contrasts are all zero, the plume is indistinguishable from its background (i.e., imperceptible).

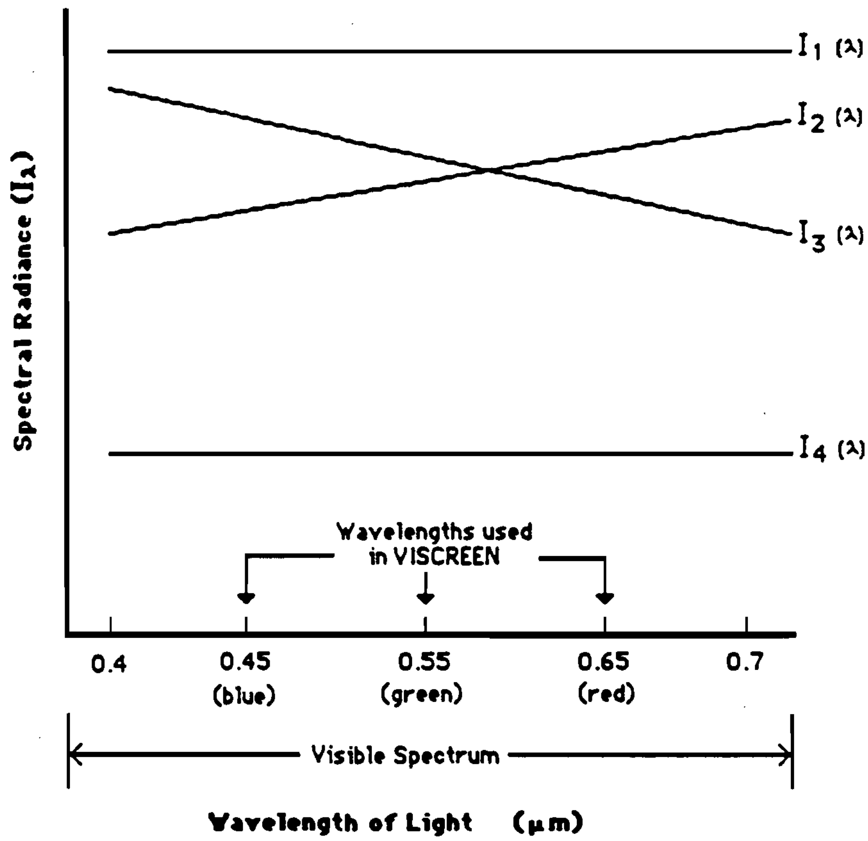

FIGURE 2. Example distributions of light intensity of four objects.

WHAT CAUSES PLUME CONTRAST

The contrast of this black text against the white paper is caused by differences in the amount of light reflected from the page. Almost all of the light impinging on the white paper is reflected, and almost none of the light impinging on the black ink is reflected; hence, the text has a large negative contrast ($C = -1$). Plume contrast is caused by a somewhat different set of physical processes: plume contrast results from an increase or decrease in light transmitted from the viewing background through the plume to the observer.

This increase or decrease in light intensity (spectral radiance) is caused by plume constituents that scatter and/or absorb light. There are only two common plume constituents that scatter or absorb light. Particulates, depending on their nature, can scatter light or both scatter and absorb light. Nitrogen dioxide (NO_2) absorbs light of all wavelengths in the visible spectrum but it is a stronger absorber at the blue end of the spectrum.

We can characterize the atmospheric optical properties of a plume in a manner analogous to the way plume concentrations are characterized. Instead of using mass concentration ($\mu g/m^3$), which is the mass of a given species per unit volume of ambient air, we use parameters called the light scattering coefficient (b_{scat}), the light absorption coefficient (b_{abs}), and their sum, the light extinction coefficient (b_{ext}). These coefficients are essentially the concentrations of the equivalent light scattering, absorption, and extinction cross-sectional area. They are cross-sectional area per unit volume of air; hence, their units are m^2/m^3 or m^{-1}.

These coefficients are similar to concentration in that they are proportional to the mass concentrations of the particulates and NO_2 that scatter and/or absorb light; however, since different chemical species have different light extinction efficiencies, there is no simple one-to-one relationship between mass concentration and light extinction. For example, submicron particles between 0.1 and 1 μm are much more effective in scattering light per unit mass than are either smaller or larger particles. Soot is a stronger light absorber than NO_2 per unit mass. Table 1 shows the light extinction efficiency of several common constituents of plumes and background atmospheres. Light extinction coefficient (b_{ext}) is the product of the mass concentration and the light extinction efficiency of the given species.

Plume visual impact models account for the concentrations of various species in a plume (e.g., NO_2, submicron particulate, coarse particulate, and soot) and their light scattering and absorption properties at various visible wavelengths (e.g., blue, green, red).

TABLE 1. Typical light extinction efficiencies for constituents of plumes and background atmospheres.

Constituent	Light Extinction Efficiency at $\lambda = 0.55$ μm (m^2/g)
Soot	13
Hygroscopic fine particles including ($SO_4^=$) and nitrates (NO_3^-)	4-8
Fine particles ($0.1 < D < 1$ μm)	3
Coarse particles ($1 < D < 10$ μm)	0.4
Nitrogen dioxide (NO_2)	0.17
Giant particles ($D > 10$ μm)	< 0.04

Sources: Latimer et al., 1978, 1985; Latimer and Ireson, 1980

PLUME EFFECTS ON LIGHT TRANSMISSION

Figure 3 shows a schematic of the viewing situation that is mathematically represented in a plume visual impact model. A plume of limited dimensions is embedded in an otherwise uniform background atmosphere. The observer's line of sight intersects the center of the plume at distance r_p from the observer and it intersects a viewing background object (e.g., a mountain) at distance r_o. The direct rays from the sun are at angle θ with respect to the line of sight. The change in the spectral light intensity at any point along the line of sight (either inside or outside the plume) as a function of distance r along the line of sight is:

$$\frac{dI(\lambda)}{dr} = -b_{ext}(\lambda)I(\lambda) + \frac{\overline{p}(\lambda,\theta)}{4\pi} b_{scat}(\lambda)F_s(\lambda) \quad , \tag{1}$$

where

r = the distance along the line of sight from the object to the observer;

$\overline{p}(\lambda, \theta)$ = the scattering distribution or phase function for scattering angle θ (see Figure 3 for definition of θ) modified to account for multiple, as well as single, light scattering;

$F_s(\lambda)$ = the solar flux (watt/m^2/μm) incident on the atmosphere,

b_{scat} (λ) = the light scattering coefficient, which is the sum of the Rayleigh scattering (due to air molecules), b_R, and the scattering due to particles, b_{sp}:

$$b_{scat}(\lambda) = b_R(\lambda) + b_{sp}(\lambda) \quad ; \tag{2}$$

b_{ext} (λ) = the light extinction coefficient, which is the sum of the scattering, $b_{scat}(\lambda)$, and absorption, (λ) b_{abs}, coefficients:

$$b_{ext}(\lambda) = b_{scat}(\lambda) + b_{abs}(\lambda) \quad . \tag{3}$$

On the right-hand side of Equation (1), the first term represents light absorbed and scattered out of the line of sight; the second term represents light scattered into the line of sight. The values of b_{scat} and b_{abs} can be evaluated if the aerosol and NO_2 concentrations and such characteristics as the refractive index and the size distribution of the

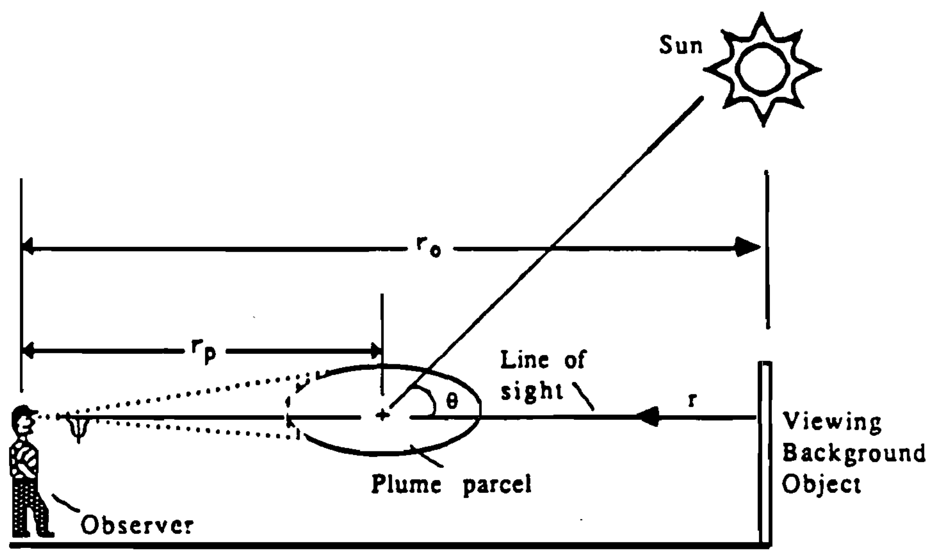

FIGURE 3. Geometry of plume, observer, viewing background, and sun.

aerosol are known. Except in the cleanest atmospheres, b_{scat} is dominated by b_{sp}; also, unless soot is present, b_{abs} is dominated by the absorption coefficient due to NO_2. Scattering and absorption are wavelength-dependent, and effects are greatest at the blue end (λ = 0.4 μm) of the visible spectrum ($0.4 < \lambda \leq 0.7$ μm). The Rayleigh scattering coefficient b_R is proportional to λ^{-4}; the scattering coefficient caused by particles is generally proportional to λ^{-n}, where $0 < n < 2$. Also, NO_2 absorption is greatest at the blue end. This wavelength dependence causes the natural blue sky coloration as well as discoloration of the atmosphere.

For a uniform atmosphere, without inhomogeneities caused by plumes (where b_{scat} and b_{ext} do not vary with distance r along the line of sight), Equation (1) can be solved to find the intensity and coloration of the horizon sky:

$$I_h(\lambda) = \frac{\bar{p}(\lambda,\theta)}{4\pi} \frac{b_{scat}(\lambda)}{b_{ext}(\lambda)} F_s(\lambda) \quad . \qquad (4)$$

The perceived intensity of distant bright and dark objects will approach this intensity as an asymptote, as illustrated by Figure 4.

Atmospheric coloration is determined by the wavelength-dependent scattering and absorption in the atmosphere. The spectral distribution of $I(\lambda)$ for λ over the visible spectrum determines the perceived color and light intensity of the viewed object. The relative contributions of scattering (aerosols plus air) and absorption (NO_2) to coloration can be illustrated by rearranging Equation (1):

$$\frac{1}{I(\lambda)} \frac{dI(\lambda)}{dr} = b_{scat}(\lambda) \left(\frac{\frac{\bar{p}(\lambda,\theta)}{4\pi} F_s(\lambda)}{I(\lambda)} - 1 \right) - b_{abs}(\lambda) \quad . \qquad (5)$$

Note from Equation (4) that when light absorption is negligible compared with light scattering (i.e., $b_{scat} \approx b_{ext}$), the clear horizon intensity, $I_{ho}(\lambda)$, is simply:

$$I_{h0}(\lambda) = \frac{\bar{p}(\lambda,\theta) F_s(\lambda)}{4\pi} \quad . \qquad (6)$$

We now can rewrite Equation (5):

$$\frac{1}{I(\lambda)} \frac{dI(\lambda)}{dr} = b_{scat}(\lambda) \left[\frac{I_{h0}(\lambda)}{I(\lambda)} - 1 \right] - b_{abs}(\lambda) \quad . \qquad (7)$$

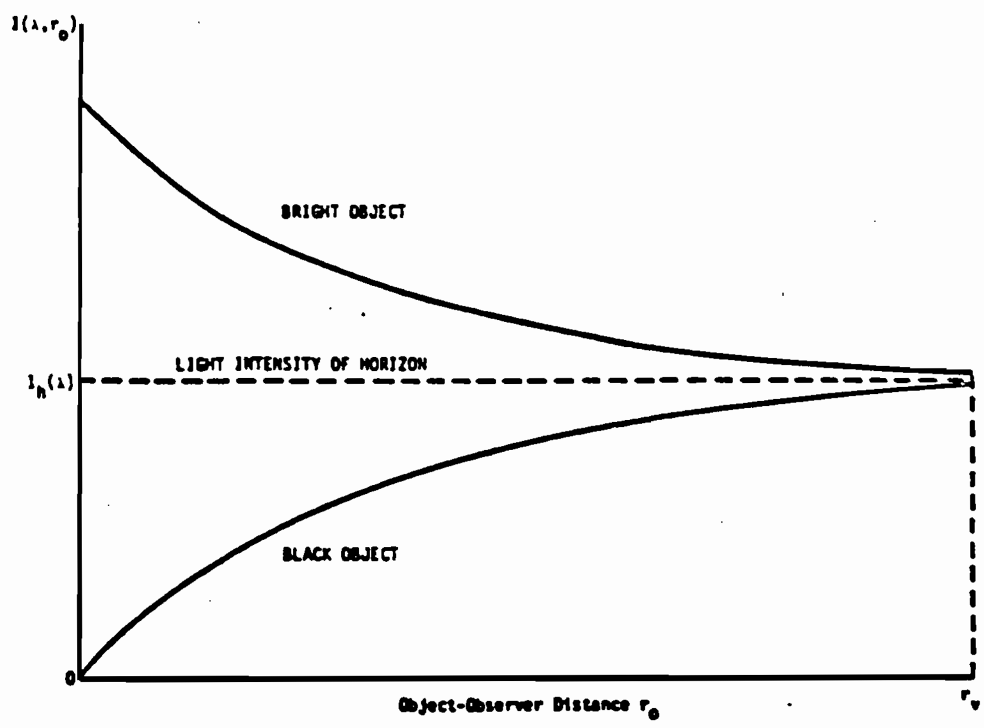

FIGURE 4. Effect of an atmosphere on the perceived light intensity of objects.

Equation (7) is thus an expression relating the effects of light scattering and light absorption to the change in spectral light intensity with distance along a sight path. On the right-hand side of Equation (7), the first term is the effect of light scattering, and the second term is the effect of light absorption (NO_2). As noted previously, since b_{scat} and b_{abs} (due to NO_2) are strong functions of wavelength and are greater at the blue end (λ = 0.4 μm), atmospheric coloration can result.

Equation (7) makes clear that NO_2 always tends to cause a decrease in light intensity since the second term in Equation (7) is always negative. However, particles may brighten or darken a plume, depending on whether the first term in Equation (7) is positive or negative. If, at a given point along the sight path, $I(\lambda)$ is greater than the clean horizon sky intensity $I_{h0}(\lambda)$, then the quantity in brackets in the first term on the right-hand side of Equation (7) will be negative, which means that the net effect of scattering will be to remove light from the line of sight. This effect would occur if a bright, white cloud or distant snowbank were observed through an aerosol that did not contain NO_2. If, however, $I(\lambda)$ is less than $I_{h0}(\lambda)$, then the quantity in brackets in Equation (7) will be positive, which means that the net effect of scattering will be to add light to the line of sight. This effect would occur if a distant, dark mountain were observed through an aerosol that did not contain NO_2; scattering would cause the mountain to appear lighter. Only light absorption can cause $I(\lambda)$ to be less than $I_{h0}(\lambda)$, and whenever $I(\lambda) < I_{h0}(\lambda)$, scattering will add light to the sight path, thereby masking the coloration caused by NO_2 light absorption.

The mathematical expressions used in this document and the plume visual impact screening model VISCREEN are simply solutions to Equation (1) for different boundary conditions and for different values of b_{scat}, b_{ext}, $\overline{p}(\theta)$ and F_s as they are affected by natural and man-made light scatterers and absorbers. The plume visibility models use similar formulations, but most account for multiple scattering effects.*

Now a plume (either ground-based or elevated) may be visible because it contrasts with a sky viewing background as shown in Figure 5(a) or it contrasts with a terrain feature as shown in Figure 5(b). The plume visual impact screening model VISCREEN evaluates both of these possible viewing backgrounds.

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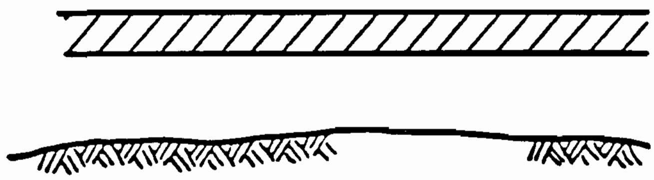
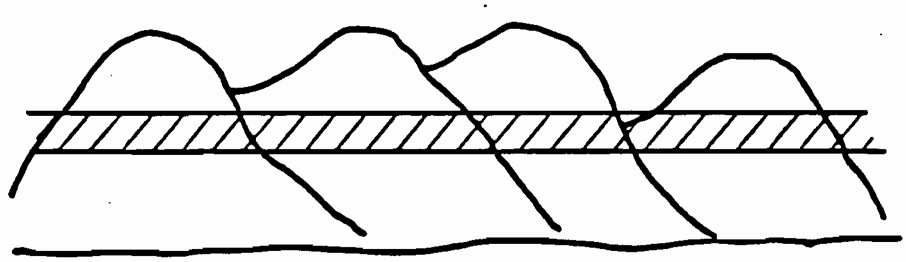
* Multiple scattering is light scattered into the line of sight after previous scattering (i.e., light reflected from terrain features and light scattered from other portions of the atmosphere).



(a) Plume Visible Against the Sky



(b) Plume Visible Against Terrain

FIGURE 5. Two viewing situations in which plumes may be visible.

Formulas for contrasts representative of both types of viewing situations can be derived by solving Equation (1) for appropriate boundary conditions.

Plume Contrast Against the Sky

Let us consider now the geometry shown in Figure 3, namely, the case of a plume embedded in an otherwise uniform background atmosphere. If we ignore the effects of multiple scattering, Equation (1) can be solved for the contrast between the plume and the horizon sky background (see Figure 5a) as observed at distance r_p from the plume as follows (Latimer and Ireson, 1980):

$$C_{plume} = \frac{I_{h\text{-}plume} - I_h}{I_h} = \left[\frac{(\bar{p}\,\bar{\omega})_{plume}}{(\bar{p}\,\bar{\omega})_{background}} - 1 \right] \left[1 - \exp(-\tau_{plume})\right] \exp(-b_{ext}\, r_p) \quad , \tag{8}$$

where

I_h = spectral radiance of horizon sky (without plume present)

$I_{h\text{-plume}}$ = spectral radiance of plume viewed in front of horizon sky

$\bar{p}$ = average phase function for the plume constituents and the background atmosphere

$\bar{\omega}$ = average albedo of plume and background, where albedo is the ratio of light scattering to total light extinction

τ_{plume} = plume optical thickness along the line of sight (increment above background) = $\int_{plume} b_{ext}\, dr$

b_{ext} = background atmosphere's light extinction coefficient

r_p = distance between plume centerline and observer

Note that, depending on whether the product of the phase function and the albedo ($\bar{p}\tilde{\omega}$) for the plume is larger or smaller than that for the background, the plume will be brighter ($C > 0$) or darker ($C < 0$) than the background horizon sky. Also note that the contrast is dependent on the plume optical thickness (τ_{plume}); as τ_{plume} approaches zero, C_{plume} approaches zero. Plume contrast also diminishes as the plume-observer distance r_p increases.

Plume Contrast Against Terrain

To characterize the types of visibility impairment represented in Figure 5(b), we need to calculate a change in sky/terrain contrast caused by a plume:

$$\Delta C_r = C_r\Big|_{\text{with plume}} - C_r\Big|_{\text{without plume}}$$

where

$$C_r\Big|_{\text{with plume}} = \frac{I_{t\text{-plume}} - I_{h\text{-plume}}}{I_{h\text{-plume}}}$$

$$C_r\Big|_{\text{without plume}} = \frac{I_t - I_h}{I_h} \quad .$$

C_r = the sky-terrain contrast of a terrain feature at distance r from an observer

I_t, I_h = the spectral radiances of a terrain feature and the horizon sky (unaffected by plume)

$I_{t\text{-plume}}$, $I_{h\text{-plume}}$ = the spectral radiances of plumes viewed in front of horizon sky and terrain

For simplicity we assume that the terrain that is viewed behind the plume has an intrinsic radiance, I_{obj}, which is a function of the horizon sky radiance I_h, namely, $I_{obj} = (1 + C_0)I_h$. C_0 is the intrinsic contrast. If the terrain were black, C_0 would equal -1.

Again solving Equation (1) and ignoring multiple light scattering, we can derive the following expression for the change in terrain contrast caused by the plume (Latimer and Ireson, 1980):

$$\Delta C_r = -C_0 \ \exp(-b_{ext} r_o) \left[1 - \left(\frac{1}{1 + C_{plume}} \right) \exp(-\tau_{plume}) \right] \quad , \qquad (9)$$

where r_o = distance between the terrain object and the observer.

Equations (8) and (9) are the analytical expressions at the heart of the plume visual impact screening model VISCREEN. Careful examination of these two equations illustrates the following sensitivities:

1. Plume contrasts (against both the sky and terrain) increase with increasing plume light extinction (i.e., as concentrations of particulates and NO_2 in a plume increase).

2. Plume contrasts increase if the line of sight is oriented to intersect a larger amount of plume material (i.e., the line of sight is along the plume centerline).

3. Plume contrasts increase for sun angles and for particle size distributions that tend to maximize the difference (both positive and negative) between the phase functions for the background atmosphere and for the plume.

4. Plume contrasts increase if the plume is moved closer to the observer.

5. Plume contrasts increase with decreasing light extinction of the background atmosphere (i.e., with increasing background visual range).

6. Plume contrasts against terrain are maximum if the terrain object is relatively close to the observer and the terrain's intrinsic contrast is maximum (e.g., if it were black).

Since screening calculations are designed to be conservative estimates of worst-case conditions, situations are selected to (1) maximize the concentrations and light scattering efficiencies of optically active plume constituents, the intersection of the line of sight and the plume, the background visual range, the intrinsic contrast of terrain objects, and the difference between background and plume phase functions; and (2) minimize the distance between the observer and the plume. Once conservative estimates of worst-case conditions are specified, the plume visual impact screening model VISCREEN uses Equations (8) and (9) to calculate plume contrasts. If such contrast values are larger than screening criteria, the possibility that the plume will cause significant visual impact cannot be ruled out, and less conservative, more realistic estimates would be required.

PLUME PERCEPTIBILITY

The perceptibility of a plume depends on the plume contrast at all visible wavelengths. At a single wavelength, the contrast between the plume and its surroundings is determined by the difference in the intensity of the light reaching the observer from each. Therefore a single measure, intensity, could be used to quantify contrast if visible light were composed of a single wavelength. With a range of wavelengths, a measure of contrast must recognize both "overall" intensity, and perceived color, and so perceptibility is really a function of changes in both brightness and color. To address the added dimension of color as well as brightness, the color contrast parameter, ΔE, was chosen for use as the primary basis for determining the perceptibility of plume visual impacts in screening analyses. ΔE provides a single measure of the difference between two arbitrary colors as perceived by humans. This parameter allows us to make quantitative comparisons of the perceptibility of two plumes, even though one may be a reddish discoloration viewed against a blue sky while the other may be a white plume viewed against a dark green forest canopy.

Contrasting surfaces are detected by human vision using three types of visual information (cues). The trichromatic theory of Helson (1938) and Judd (1940) predicts colors perceived by human subjects based on the visual qualities described as brightness (intensity), lightness (saturation), and color (hue). Perceived brightness of a colored surface is dependent upon the intensity of the applied illumination. For example, the brightness of the white of a daisy is larger for a daisy in direct sunlight than for a daisy in the shade. The color or hue of a surface is dependent on the ratio of the intensity of red to green light that is reflected. The lightness of a color is the strength or density of a color and is often called the saturation. An example of this cue comes from photography: a properly or slightly underexposed color is said to be more saturated than an overexposed color which appears to be washed out by the addition of white. Color contrast is therefore made up of differences in these three visual qualities (cues).

As implied by its name, the trichromatic theory of color assumes that all shades of color are composed of three primary colors: red, green, and blue. These primary colors are not single wavelengths, but rather an envelope of wavelengths, whose peak intensities occur at frequencies we associate with each of the primary colors. The purely chromatic characteristics of a perceived color are then described by three numbers (X=red, Y=green, Z=blue) that represent the intensity of each color in the "mix". (These are computed as the integration over the visible spectrum of the product of the intensity of the illumination and the trichromatic weighting function for each primary color.)

The amounts of red, green, and blue (X,Y,Z) can be used to approximate the three cues used to quantify the contrast between colored objects. Three empirical mathematical functions of (X,Y,Z) were defined which quantitatively best capture the qualitative features of the three cues: brightness, hue, and saturation. Each of these three mathematical functions is defined relative to the one or more components of chromaticity of a reference white card under direct sunlight (X_o,Y_o,Z_o). For brightness, only a single chromatic component is needed, and since the eye is most sensitive to intensity changes in green, the function for brightness, L^*, is defined in terms of Y. Since hue depends on the red/green reflected intensity ratio, the function describing hue, a^*, is defined in terms of X and Y. The mathematical function describing the amount of saturation, b^*, is defined in terms of Y and Z (see equations in Appendix B).

For each of the three visual cues, the contrast between two surfaces is simply a difference between the values of the mathematical functions for each surface. For example, contrast due to changes in brightness is defined as the difference in the function for brightness, ΔL^*. The total color contrast, ΔE, is taken to be the sum

$$\Delta E = \left[(\Delta L^*)^2 + (\Delta a^*)^2 + (\Delta b^*)^2\right]^{1/2}$$

This formulation is based on the following assumptions:

(1) ΔE depends only on ΔL, Δa, and Δb;

(2) Differences in contrast cues ΔL^*, Δa^*, and Δb^* are independent of one another.

Although a ΔE of 1 and a contrast of 0.02 have been traditionally assumed to be the threshold of perceptibility, a survey of the literature (see Appendix A) suggests a broad range of perceptibility thresholds. The most sensitive observers are able to detect contrasts or color changes one-half this magnitude, and the casual observer may require contrast or color changes more than two times larger than these "traditional" values. In addition, the literature suggests that perceptibility thresholds increase for very wide and for very narrow plumes, with plumes less than 0.02° being essentially imperceptible. Figure 6 summarizes the range of perceptibility thresholds supported in the literature.

The plume visual impact screening model VISCREEN is designed to ascertain whether the plume from a facility has the potential to be perceptible to untrained observers under "reasonable worst case" conditions. If either of two screening criteria is exceeded, more comprehensive (and realistic) analyses should be carried out. The first criterion is a ΔE value of 2.0; the second is a green (0.55 μm) contrast value of 0.05. In the case of sufficiently narrow or broad plumes, the higher perception thresholds (for diffuse-edged plumes) are used instead of the above criteria.

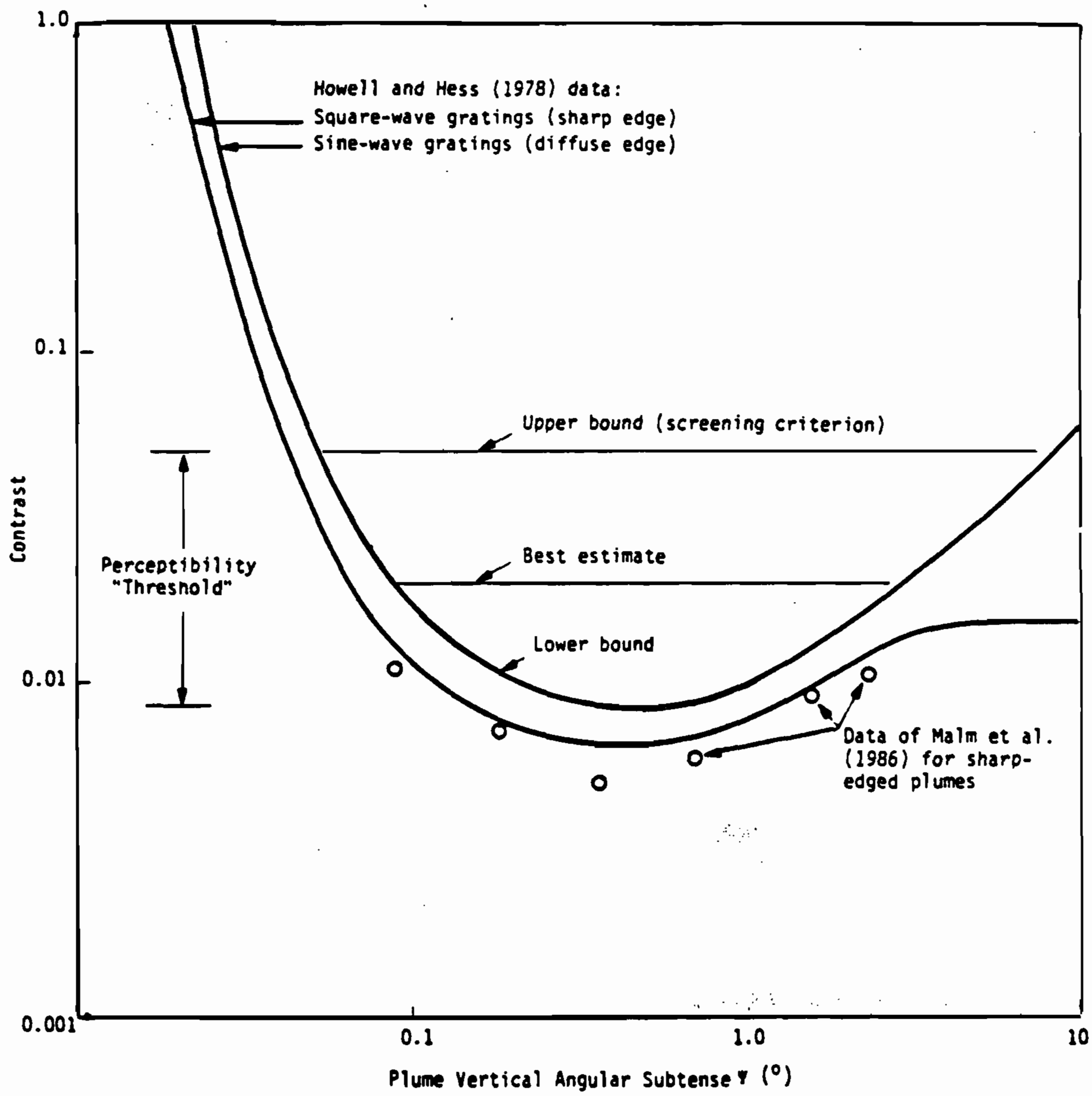


FIGURE 6. Plume perceptibility threshold as a function of plume thickness (Ψ). See definition of Ψ in the Glossary in the front of this workbook and in Figure 3.

10.6.7 Noise Modelling

NOISECALC: A Computer Program for Sound Propagation Calculations*

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NOISECALC is a general purpose, menu driven program for IBM-PC compatible computers that takes the tedium out of sound propagation calculations. Source data is entered as octave band sound pressure levels (or sound power levels). The program handles barriers, atmospheric attenuation, excess attenuation, and source directionality. The choice of program outputs ranges from a simple summary of sound levels to a detailed breakdown of major contributing sources for each receiver. Copies of the program on 5¼" diskettes may be obtained from the author for the cost of reproduction and mailing.

Sound propagation calculations are not difficult, but they are tedious and time-consuming. The calculations must be done individually for each of the octave bands, incorporating different amounts of excess attenuation to account for atmospheric absorption, ground cover, enclosures, reflectors, barriers, etc. It may be necessary to consider source directionality and to combine the sound from several sources. Then all of the calculations must be redone for the next receiver, and the next. It is precisely this repetitive nature of the calculations that makes the use of a digital computer program ideal for sound propagation problems. NOISECALC, the IBM-PC compatible program described in this article will not decide what calculations are needed for a particular problem (it is not an "expert" program), but once the problem has been specified, it will do the tedious calculations.

The program was developed at the New York State Department of Public Service to assist with noise calculations for major power projects, primarily electric power plants and gas compressor stations. It was written in BASIC on the department's PRIME computer (PRIME Computer, Inc.). In order that the program could be converted easily for use on personal computers, the program was written using primarily simple BASIC commands common to most versions of the BASIC language. The completed program was then downloaded to a COMPAQ computer (COMPAQ Computer Corp.), an IBM-PC compatible, and modified to use various features of COMPAQ Portable Computer BASIC Version 1.13. The completed program, whose 1140 program lines use about 32K bytes of memory, has also been run without modification on the AT&T, IBM-PC, IBM-PC-Jr, Tandy 1200, and Chameleon Plus computers. Extensive documentation within the program will permit individuals familiar with BASIC to understand and modify the program for special applications.

The program is menu driven, so it is very easy to use. But because the program is so easy to use, it is possible for an inexperienced person to generate pages of very impressive looking but erroneous results; as Peter Baade observed, "it is not *whether or not* we use [computer] tools, but how well we use them."[1] The program must be used intelligently; the noise control engineer must understand the calculation procedures used by the program so that the proper alternatives can be chosen from the many program options offered. This article describes the computational procedures used in the program and presents a typical application of the program. An appendix explains how to use the options offered by the program.

Computational Procedures

NOISECALC offers seven options in its main menu. Four of the options create disk data files using source, receiver, barrier or path-specific attenuation data entered by the user. The fifth option uses the data files and computational options specified by the user to create a report giving the resulting sound level at each receiver location (and, if desired, the octave band sound pressure levels at each receiver and a ranking of major contributing sources). The remaining options are a barrier utility (to solve a single source/single barrier/single receiver problem) and a utility to add or subtract sound levels or to combine octave band sound pressure levels.

Data input. The program only handles point sources; line sources must be approximated as a series of point sources. Octave band data for each source may be entered as sound pressure levels or sound power levels; the data is converted if necessary and stored in the disk file as sound power levels; the conversion from sound pressure level to sound power level assumes that the source is at ground level (hemispherical propagation). Similarly, dimensions may be entered in feet or metres, but the data is stored in the disk file in metres. The data files are easily read and edited, if desired, by a system editor; the file formats are documented in the program.

Sound propagation. The only attenuation automatically included in the sound propagation calculations is that due to hemispherical divergence; that is, all sources are assumed to be located at ground level, the most common assumption in industrial noise control. If a source is located significantly above the ground, it may be appropriate to reduce the source sound power by one-half (the sound power level or sound pressure level is reduced by 3 dB) and to add an image source below the ground plane.

Several attenuation options are offered by the program. Atmospheric attenuation can be included; if it is, the program uses the American National Standard Method for the Calculation of the Absorption of Sound by the Atmosphere.[2] Non-path-specific attenuations (specified by the user) can be used to include the insertion loss of an enclosure and the symmetrical propagation effects or to scale (increase or decrease) all source sound power levels.

Path-specific attenuations can be used for a variety of purposes.[3] They can be used to include the effects of vegetation, foliage and wind (shadow zones). They can also be used to incorporate directional source characteristics and reflectors (a negative attenuation will increase the sound in a specified direction). They can be used to modify the barrier attenuations calculated by the program to account for source images, insufficient barrier width, and the effects of wind. In addition, path-specific attenuations can be used to incorporate the results of recent sound propagation research.[4]

Barrier attenuation. The barrier calculation procedure used assumes an infinitely long barrier perpendicular to the source-receiver path. If this assumption is correct (or nearly so), the barrier can be completely specified by giving the coordinates of the top of the barrier at the point where the barrier intersects the source-receiver path. Acceptable accuracy is obtained even if the coordinates are not exact, so a single set of barrier coordinates can sometimes be used for more than one source-receiver path. During the barrier calculations, the program checks to be sure the barrier coordinates are not too far from the source-receiver path, and the user is warned if the horizontal bending angle from source to barrier to receiver is 10 degrees or more.

More precisely, the barrier calculation procedure assumes a semi-infinite barrier in free space as described by Maekawa.[5] The program uses the closed-form approximation to Maekawa's data shown by Beranek;[3] the maximum barrier attenuation in any octave band is limited to 24 dB. The attenuation is 5 dB when the Fresnel number is zero, and 0 dB when the Fresnel number is negative.

In practice, the free space assumption means that the source and receiver must be "well above" the ground.[6] For a particular source/barrier/receiver combination, the validity of the free space assumption can be tested easily using the program's barrier calculation utility. Assume a source at height z_s, a barrier at height z_b and a receiver at height z_r; then calculate the levels at the receiver for the following four cases: the source at z_s and the receiver at z_r, the image source at $-z_s$ and the receiver at z_r, the source at z_s and the image receiver at $-z_r$, and the image source at $-z_s$ and the image receiver at $-z_r$ (the barrier height is always z_b). If the sum of all four levels differs significantly from the level for the source at z_s and the receiver at z_r, then the free space assumption is invalid and the sum of all four levels is the correct level.

If the source and receiver are both at ground level, this procedure will yield a level which is 6 dB greater than the free space calculation. The correct level is only about 5 dB greater than the free space calculation, since Maekawa's data allow for the reflection of some sound energy from the ground.[4] Also, because the barrier attenuation is artificially limited to 24 dB, this procedure will erroneously show some reduction in barrier attenuation even when the source and receiver are "well above" the ground. As shown in Table 1, this error can be significant when the barrier attenuation is large.

TABLE 1
ERRONEOUS REDUCTION IN BARRIER ATTENUATION OBSERVED DURING CHECK OF GROUND REFLECTIONS

	Free Space Attenuation	Reduction in Attenuation
	5	0.2
	10	0.5
dB	15	1.4
	20	3.4
	24	6.0

The barrier attenuation utility can also be used to evaluate a barrier which does not satisfy the semi-infinite assumption. The procedure is described by Maekawa.[5]

Application of the Program

The program has been applied to a variety of energy-related projects. The impetus for writing the program was a complaint about the noise from a large gas compressor station in a rural area of western New York. The five gas compressors, driven by internal combustion gas engines totaling more than 2000 horsepower, exceeded the regulatory noise limit (40 dBA at any residence) by 9 dB. The program was used to evaluate the effect of a 20-foot high, 500-foot long barrier which was proposed to solve the problem. The barrier, a combination earthen berm and prefabricated concrete structure, was found to be adequate and is under construction.

One of the more interesting applications of the program was a proposed wind farm in the Catskill Mountains where seventy-one 300 kW vertical axis wind turbines are planned. The following example is a simplification of that application. Although background noise is obviously an important consideration,—turbines only operate when the wind is blowing—the background noise is omitted from the example to simplify the presentation.

The example (Fig. 1) employs five 300 kW vertical axis wind turbines in a linear array with 200-foot spacing. Each turbine produces 61 dB(A) at 100 feet. The octave band sound pressure levels for one turbine are given in Table 2; the source height is 56 feet. The terrain is hard and relatively flat except for a densely wooded area shielding Receiver 1 from Turbines 1 through 4, and a long, low hill shielding Receiver 2 from all turbines.

The barrier coordinates shown in Fig. 1 identify the point on the crest of the hill where the ridge line intersects the path from Turbine 3 to Receiver 2. That point is used in the barrier calculations for the paths from all turbines to Receiver 2. As a result, when the calculations for the paths from Turbines 1 and 5 to Receiver 2 are performed, the program cautions the user that the barrier lies 12 and 14 degrees off the paths respectively.

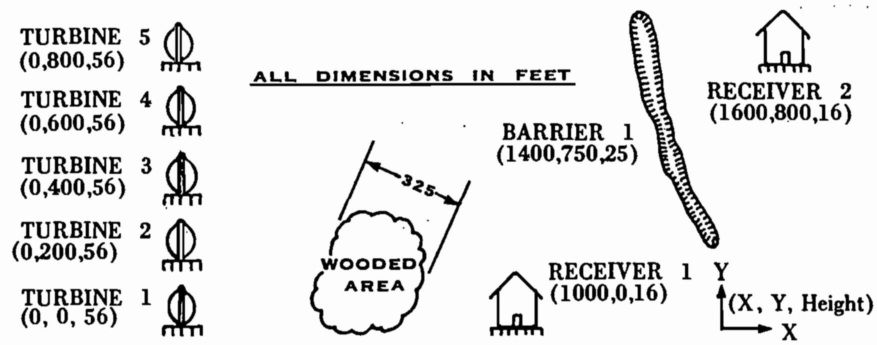

Figure 1—Vertical axis wind turbine example

Path-specific attenuations were used to include the effect of the wooded area in the propagation calculations for the paths from Turbines 1 through 4 to Receiver 1. The octave band attenuations are shown in Table 2. The atmospheric absorption for standard-day conditions was also included in the calculations.

The results of the program calculations for the example are also shown in Table 2. The sound levels at Receivers 1 and 2 are 39 dB(A) and 35 dB(A) respectively; the program identifies Turbine 5 as the major contributing source for both receivers.

Conclusion

People who have used NOISECALC have found it helpful and easy to use. The program is copyrighted, but copies of the program may be obtained for personal use or for use within a firm by sending a check for $10.00, payable to the New York State Department of Public Service, to:

Daniel A. Driscoll
NYS Department of Public Service
Three Empire State Plaza
Albany, NY 12223

The $10.00 is estimated to cover the cost of a 5¼″ diskette, copying, postage and handling. If someone outside of your firm would like a copy, please have them obtain it from the author so distribution of the program can be controlled.

TABLE 2
DATA AND RESULTS FOR THE VERTICAL AXIS WIND TURBINE EXAMPLE

	31.5	63	125	250	500	1K	2K	4K	8K	Lin	A
Each Turbine at 100 feet (dB)	73	70	63	60	55	57	52	45	42	75	61
Excess Attenuation of Woods (dB)	4	4	5	7	9	11	13	17	21	—	—
Result at Receiver 1 (dB)	56	53	45	41	34	35	28	14	0	58	39
Result at Receiver 2 (dB)	51	47	40	37	31	31	23	6	0	53	35

References

1. P.K. Baade, "To Compute or Not to Compute, That is NOT the Question," *Noise Control Engineering Journal*, 24,1 (1985), p. 3.
2. *American National Standard Method for the Calculation of the Absorption of Sound by the Atmosphere*, ANSI S1.26 - 1978 (ASA 23-1978) Section 4.5 and Appendix D.
3. L.L. Beranek, *Noise and Vibration Control* (McGraw-Hill, New York, 1971), pp. 169-191.
4. T.F.W. Embleton, "Sound Propagation Outdoors—Improved Prediction Schemes for the '80s," *Noise Control Engineering Journal*, 18, 1 (1982), pp. 30-39.
5. Z. Maekawa, "Noise Reduction by Screens," *Applied Acoustics*, 1 (1968), pp. 157-173.
6. C.M. Harris, *Handbook of Noise Control*, 2nd Ed., (McGraw-Hill, New York, 1979), pp. 3-6.

Appendix

Starting NOISECALC. To begin using NOISECALC, depress the "Caps

Lock" key, if necessary, to shift the computer to upper case, then load and run BASIC, and load and run NC (COMPAQ Command: BASICA NC). The screen clears and the main menu appears.

The main menu offers the following choices:

1. Input Source Data
2. Input Receiver Coordinates
3. Input Barrier Coordinates
4. Input Path-specific Attenuations
5. Sound Propagation Calculations
6. Barrier Calculation Utility
7. Combine Sound Levels
8. Quit

The menu items are in the approximate order that the features would be used for a new project. Press "1" to input source data, "2" to input receiver coordinates, etc. After each portion of the program is used, the program returns to the main menu. The following paragraphs describe each menu choice in order.

Input Source Data. The program first asks for a project name. Because the project name is used as the source data file name, it is helpful to append a "-S" to the name of the project. Type the name, press "enter" (or "return"), and the program creates a disk file using the specified name.

The program then asks for the number of sources to be used; type the number and press "enter." If the number of sources is greater than 10, the DIMension statements at the beginning of the program must first be modified; list program lines 10 through 190 for instructions.

The user is then asked whether distances (and coordinate dimensions) will be in metres or feet, whether a rectangular (x,y,z) or cylindrical (r, Θ, z) coordinate system will be used, and whether source levels will be sound power levels or sound pressure levels (the source levels can also be entered in a different form for each source). If the sound pressure level option is chosen, the program will ask for the reference distance. Source directional characteristics can be accommodated through the use of path-specific attenuations as described below.

For each source, the program then prompts the user to enter a source name (or a brief description), the source location (three coordinates separated by commas and followed by "enter") and the octave band data for the source (ten sound pressure levels separated by commas and followed by "enter").

On many computers the keys "shift" and "PrtSc" may be pressed to "print the screen." If this feature is available on your computer, it may be used to make a printed copy of the data input form at any time during data entry.

Input Receiver Coordinates. The procedure is similar to source data entry except no octave band data is entered. A convenient receiver data file name is the project name with a "-R" appended. If the user chooses to enter ambient data for each receiver location, only sound pressure level and A-weighted sound level are used. Again, if the number of receiver points is greater than 10, the DIMension statements at the beginning of the program must be changed.

Input Barrier Coordinates. After asking for the barrier data file name (e.g. "project name" -B), the program asks for the number of barrier locations to be entered (if more than 10, the DIMension statements must be changed), and the number of sources and receivers in the source data file and receiver data file to be used with this barrier data file. The program uses the number of sources and receivers to perform several checks to validate the data.

Next, the program offers the various distance and coordinate options described earlier, and then, for each barrier, asks you to enter the barrier coordinates and a list of the source-receiver paths affected by the barrier. For example, if a barrier near receiver #2 will attenuate the sound from sources #1, #2 and #3, the user would type "1, 2 enter 2, 2 enter 3, 2 enter," or, if sources #1, #2 and #3 were the only sources, the user can simply type "0,2 enter." Only one barrier is permitted on any source-receiver path.

Input Path-specific Attenuations. The program begins by asking for the path-specific attenuation data file name (e.g. "project name" -P), the number of path-specific attenuations to be entered, and the number of sources and receivers in the source data file and receiver data file to be used with this path-specific attenuation data file. The user is then asked whether the attenuations are to be entered in dB, dB/100 metres, or dB/1000 feet; or, the choice can be different for each attenuation. Finally, for each attenuation, the user is asked to enter the octave band sound pressure level reductions and the source-receiver paths affected by the attenuation. Each path can have one attenuation in dB and a second in either dB/100 metres or dB/1000 feet.

Sound Propagation Calculations. From the main menu, sound propagation calculations can be chosen by pressing either "5" or "enter."

The program first asks for the project name (the source data file name assigned during source data input); the program then reads the source data file and prints on the screen the name and sound power level of each source. Next the user is asked to enter the receiver data file name.

The program then offers a series of options. Atmospheric attenuation can be included or not: the user can choose standard conditions (15°C and 70 percent relative humidity) or specify the temperature and relative humidity to be used.

If the project involves barriers and/or path-specific attenuations, the program asks for the appropriate data file names. The user is also given the opportunity to enter additional non-path-specific attenuations in dB and/or dB/100 metres or dB/1000 feet.

Next, the program asks for the type of output report desired: the "results summary" lists only the sound pressure level and sound level at each receiver location; the "results with and without background noise" option adds the octave band sound pressure levels at each receiver; the third alternative, in addition, identifies and ranks major contributing sources (sources whose contributions are within 10 dB of the total sound level) for each receiver location.

Finally, the program asks whether a printed report is desired. If so, the user can enter a report heading of up to ten lines; this permits the user to note the source locations and sound levels used, receiver locations, and the various calculation options chosen. As the report is produced, the program pauses periodically to permit the user to record results from the screen or adjust the paper in the printer. An output data file is not created.

Barrier Calculation Utility. The barrier calculation utility calculates the sound pressure level, the sound level, and the octave band sound pressure levels at one receiver location for a single source and a single barrier. The program first asks whether atmospheric absorption is to be considered; it then asks for the barrier, receiver, and source data (with the same options described earlier), and whether the user wants a printed report. The report gives the resulting sound pressure level and sound level at the receiver location with and without the barrier, the octave band sound pressure levels at the receiver location with the barrier, and the barrier attenuations.

Combine Sound Levels. Two options are offered in this utility. One permits the user to add or subtract sound levels; the other sums octave band sound pressure levels to give total sound pressure level and A-weighted sound level.

Quit. Quit returns control to BASIC.

Case Histories and Technical Notes

The *Noise Control Engineering Journal* encourages the submission of case histories of noise control: articles which discuss the application of well-known principles in the control of industrial, machinery, vehicle, and other noise. Case histories can be brief and do not necessarily have to include new or original information. We also encourage the submission of technical notes: brief contributions which do contain new information.

10.7 PUBLIC PARTICIPATION PROGRAM COMMENTS/PLAN OF STUDY CROSS REFERENCE

10.7.1 Plan of Study Issues

APPENDIX 10.7.1 - PLAN OF STUDY ISSUES/SCA SECTION ADDRESSING ISSUES

Plan of Study Issue	SCA Section Addressing Issue
ST. MARKS RIVER	
• Barge traffic - current and future	SCA Section 3.3.3
• General health and well-being of lower St. Marks River and how it relates to wildlife and fisheries habitat and population	SCA Section 2.3.6
• Minimum flows and levels in St. Marks River	SCA Section 2.3.4
• What happens if permitting process gets bogged down? Is there a back-up plan for the City of St., Marks effluent disposal?	SCA Section 5.2 & Section 5.5
• Entrainment and impingement of biological resources in water intake - current vs. future (316B)	SCA Section 5.1.3
• Baseline water quality data for St. Marks River	SCA Section 2.3.4
• Past and future maintenance dredging schedules for canals on-site and changes/impacts	SCA Section 10.1.4
• Any emergency discharges?	SCA Section 3.5.1, 3.2, 5.1, 5.2, & 5.5
• Impact of any new intake structure on recreational use of river	SCA Section 2.3 & 7.2
MANATEES	
• Evaluation of manatee habitat impacts year-round	SCA Section 5.1.2
• Collection of manatee sighting data in adjacent waters	SCA Section 2.3.6
• Manatee winter population impact	SCA Section 5.1.2
• Closure of discharge canal from boat traffic	SCA Section 5.1.2
AIR QUALITY	
• Air impacts on Class I Air Quality Related Values	SCA Section 5.6
• Air quality impacts at St. Marks refuge and 17,700 acre wilderness area	SCA Section 5.6
• Air quality improvement over existing plant	SCA Section 5.6
• Past actual emissions vs. permitted emission limits	SCA Section 5.6.1 & 10.1.5
• Continuous low load operation on the turbine - air emissions under this condition	SCA Section 3.4 & 5.6.1

APPENDIX 10.7.1 - PLAN OF STUDY ISSUES/SCA SECTION ADDRESSING ISSUES

Plan of Study Issue	SCA Section Addressing Issue
• Will it be .05% sulfur content in the secondary fuel?	SCA Section 3.1 & 3.4
• Quantity of particulates in the emissions	SCA Section 5.6.1 & 10.1.5
• Applicability of "bubbling"	SCA Section 3.4, 5.6.2, & 10.1.5
• Flame stability problems on some low NOx burners	SCA Section 3.4 & 10.1.5
• Compliance by CEMS for NOx	SCA Section 5.6.2 & 10.1.5
• Conditioning of turbine inlet air	SCA Section 3.4
LINEAR FACILITIES	
• State highway, lands and right-of-way crossings during renovation of pipeline	SCA Section 6.1.8
• Land use and environmental impacts from corridors for associated facilities	SCA Sections 3.1, 6.1.6, & 6.1.7
• Will change in conductor require additional clearing or new structures?	SCA Section 3.1 & 6.2.3
• Current maintenance practices for the transmission line	SCA Section 6.2.4.2
TRAFFIC	
• Trips generated during construction and operation by vehicle type	SCA Section 2.3.6, 4.6.1, & 4.6.2
• Any roadway improvements planned for entrance to plant?	SCA Section 3.9
• Commercial deliveries planned?	SCA Section 4.6.2
HABITAT & IMPORTANT SPECIES	
• General listed species impacts from plant construction, operation and linear facilities	SCA Section 4.4, 5.6.1, 6.1, & 6.2
• Baseline bio criteria monitoring data - environmental health indicators, e.g. Shannon Weaver diversity index	SCA Section 2.3.6 & 10.5.5
• Quantify wetland impact from construction of associated facilities	SCA Section 3.1, 4.1, 4.4, & 6.3.4

APPENDIX 10.7.1 - PLAN OF STUDY ISSUES/SCA SECTION ADDRESSING ISSUES

Plan of Study Issue	SCA Section Addressing Issue
• Delineation of wetlands at plant site and along linear facility ROWs	SCA Section 2.3.5 & 6.3.4
DRAINAGE	
• Impacts of flooding and impacts of hurricane • Stormwater design, including retrofit of existing plant • Turbidity control measures for plant construction and linear facility construction	SCA Section 2.1.5 & 4.1.3 SCA Section 3.2, 3.8, & 5.3 SCA Section 4.1.1, 4.2, & 4.4
LAND USE COMPATIBILITY	
• Noise in dB's at night - want to see reduction • Compliance with local land development regulations and consistency with local, regional, and state plans • Aesthetic impacts now compared with future including the height of structures	SCA Section 2.3.8 & 5.7 SCA Section 2.2, 2.3.8, & 5.7 SCA Section 3.1, 4.6, & 7.2.2
WASTE MANAGEMENT	
• Any waste products being transported out? • Storage and disposal of waste	SCA Section 4.1 & 5.4 SCA Section 4.1 & 5.4
ECONOMIC IMPACT	
• Will there always be shift work?	SCA Section 5.9.1
PUBLIC SERVICES AND FACILITIES	
• What are proposed fire control and safety measures? Any increased need for fire protection?	SCA Section 3.10.1 SCA Section 7.2
AVIATION	
• Any impact on aviation due to facility height?	SCA Section 7.2 & 10.1.7
FUEL HANDLING & STORAGE	
• Back-up fuel delivery and storage • Do safety measures for exiting fuel storage meet existing current standards? Any increase in fuel storage?	SCA Section 3.3 SCA Section 3.3 & 3.3.4

APPENDIX 10.7.1 - PLAN OF STUDY ISSUES/SCA SECTION ADDRESSING ISSUES

Plan of Study Issue	SCA Section Addressing Issue
CULTURAL RESOURCES	
• Impacts on archeological and historical sites	SCA Section 2.2.6, 4.8, & 5.10

10.7.2 Plan of Study Comments

APPENDIX 10.7.2
PLAN OF STUDY COMMENTS/RESPONSES/SCA SECTION REFERENCES

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION - AIR QUALITY

Comment:

The Bureau of Air Regulation has conducted a preliminary review of the Proposed Plan of Study (POS) and Air Quality Modelling Protocol for the planned Purdom Unit 8 Project Site Certification and PSD Permit application. Based on the information received, it appears that the POS insures that all of the key concerns which we foresee will be addressed.

Response:

No response or changes to the POS required.

SCA Section Reference:

Not applicable.

Comment

The approach to a determination of Best Available Control Technology (BACT) for nitrogen oxides (NO_x) from the combustion turbine appears sound. Our most recent BACT emission limits have ranged from 12-15 parts per million. We understand that the City is working with the turbine manufacturer to achieve even lower emissions. This will result in relatively low NO_x emissions, which are less than the emissions from the existing units during recent years, and will establish limits where there are presently none. Similarly, with respect to sulfur dioxide (SO_2), the use of clean fuels will insure that emissions remain below those of recent years and will reduce the permitted limits by roughly 99 percent. Our view of the project with respect to the rest of the pollutants is similar although we understand that emissions of carbon monoxide and particulate matter will increase but will be permitted at levels well below existing limits.

Response:

No response or changes to the POS required.

SCA Section Reference:

SCA Section 3.4 discusses BACT.

Comment:

We recommend that the City include in the POS a review of requirements under the Title IV Federal Acid Rain Program. These are given in Rule 62-214, F.A.C. and 40 CFR 72. In reviewing the POS, we also note that the request to set emission limits for SO_2 at 1.3 pounds per million Btu heat input (lb/10^6 Btu) for existing Units 5 and 6 cannot be accomplished under Title V.

Response:

The City has revised the POS to include a review of Title IV requirements. It is the City's intent to file a Title IV Acid Rain Permit application together with the SCA. With respect to the Title V requested SO_2 emission limit of 1.3 lbs/mmBtu, it is understood, based on a 10/15/96 meeting with DEP, that the emission limit can be accomplished through the Title V process.

SCA Section Reference:

SCA Section 10.1.5 contains the Title V and Title IV permit applications.

Comment:

Attached are comments that we received from the Department of Interior Fish and Wildlife Service following the September 25 meeting and their review of the POS. These are consistent with what their representative from the Denver office stated at the meeting. We consider the Modelling Protocol to be acceptable following incorporation of those comments into a revised POS.

Response:

Please see the attached responses to the individual comments from the U.S. Fish and Wildlife Services. As the City has addressed all of their comments, it is understood that the Modelling Protocol is now acceptable to the DEP.

SCA Section Reference:

Not applicable.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION - SITING

Comment:

Information on the length and location of the FGT natural gas line that has to be upgraded to serve the plant should be provided. While this work is not included in the siting application, the impacts of this work will be secondary impacts of the Purdom project and therefore needs to be identified and reviewed.

Response:

Expansion of the existing natural gas line will be permitted by the Florida Gas Transmission Company. SCA Section 6.1 will provide a general description of the anticipated pipeline expansion and its impacts including information, to the extent available, on the length and location of the line to be upgraded. No revision to the POS is required.

SCA Section Reference:

SCA Section 6.3 addresses the Natural Gas Lateral and its environmental effects.

Comment:

The water quality standards identified to be used in the baseline survey included the freshwater standards for heavy metals. Sampling for heavy metals in the water column is usually done one foot above the bottom, which may be within the saltwater wedge in the river. Salinity should be checked at the same time and depth that the heavy metal samples are taken. Which standard to use for the data should be determined on the bases of the salinity.

If the salt wedge proves to be a distinct and relatively constant feature in the river, the applicant should consider doing baseline sampling both above and within the wedge.

Response:

The permitting history of the Purdom Station and F.A.C. 62-302.200(20) are quite consistent and clear that the "receiving" body of water is considered to be fresh water. As the intake will be near the surface, the sampling will be near the surface as well. Also, as a result of the zero discharge design, we expect to have no impact on the salt wedge. Thus, there is no need to revise the POS.

SCA Section Reference:

SCA Section 10.5.4 contains surface water sampling results.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION - WATER QUALITY

Comment:

I see they are planning to use Hester-Dendy (HDs) samplers instead of the 20-dip net sweeps that we developed, this is probably because HDs are still in the rule. However, they might want to consider using the dip nets since we are moving to this gear type. We should check with Russ. I am not familiar with this kind of permitting scenario, but I wanted my comment to be put forth in case it proves relevant to the ones managing this project.

Response:

HD samples were collected during August 1996. At that time, no dip net sweeps were conducted and, due to the depths of the channel, there are only limited habitats available in which to conduct sweeps. Benthic macronivertebrates studies were based on studies previously conducted at the Purdom Plant and the St. Marks River by the FDEP, Dames & Moore and others. Typically, these studies did not include dip net sweeps. Currently, HD sample collections are required by the rule as the appropriate method for sampling benthic macroinvertebrates. As a result, there are no plans to include dip net sweeps in the Foster Wheeler Work Plan. If, at a later date, the State should require that dip net sweeps be conducted, these samples can be collected by field personnel at the site and shipped to us. No changes in the POS are required.

SCA Section Reference:

SCA Section 10.5.5 contains the results of the HD sampling. Section 2.3.6.1 discusses sampling methods..

Comment:

I looked briefly at the Tallahassee proposal from the perspective of reuse. It probably will come as no surprise but I strongly support the use of reclaimed water for cooling purposes at the power plant.

Please note, that Part VII of Chapter 62-610, F.A.C. regulates industrial uses of reclaimed water from domestic wastewater sources. Current rules require only basic disinfection and secondary treatment for such a reuse activity. We are proposing to add the full Part III requirements (including filtration high-level disinfection, Class I reliability, minimum size, and others) for use of reclaimed water in open cooling towers. This will be part of the Phase II rulemaking which should be completed in early 1998. If this change is made in Phase II, it would apply to wastewater projects having complete permit applications submitted after the effective date of the Phase II revisions.

Response:

Should Part VII of Rule 62-610 F.A.C. be modified in the future, and should the modified rule be applicable to the project, the City would expect to be able to demonstrate that equivalent or superior treatment is being applied. For instance, discontinuance of dechlorination at the St. Marks Treatment Plant would result in greater disinfection than is currently achieved. In any case, no change to the POS appears warranted.

SCA Section Reference:

SCA Section 3.5 discusses the use of reclaimed water at Purdom Station.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION - SOLID WASTE

No comments.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION - PROTECTED SPECIES

No comments.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION - MARINE RESOURCES

No comments.

U.S. FISH AND WILDLIFE SERVICE - AIR QUALITY BRANCH

Comment:

Place modelling receptors at 75-meter intervals along the nearest Class I area boundary (boundary length approximately 1.8 km) for all analyses. After initial screening identifies the receptor with the maximum concentration value, bracket this receptor with additional receptors at 15-meter intervals (four on each side) to pinpoint the maximum concentration value. We recommend this because of the proximity of the source to the Class I area boundary and the need, therefore, for ensuring the maximum concentration value and its location are identified.

Response:

The POS will be revised to include receptors at 75-meter intervals along the northern most boundary of the St. Marks Wilderness Area. Additional receptors will be placed around the receptor with the maximum impact (determined during the screening level modelling). These receptors will be spaced at 15-meter intervals (four on each side of the maximum impact receptor).

SCA Section Reference:

SCA Section 5.6 discusses Air Quality Impacts. The PSD application contained in SCA Section 10.1.5 contains further discussion, along with modelling results.

Comment:

Employ the FWS/National Park Service (NPS) significant impact levels to assess contribution to Class I increment consumption. FDEP has routinely required PSD applicants to apply these levels.

Response:

The City of Tallahassee does not agree that the FWS/NPS Significant Impact Levels (SILs) are the appropriate values to use for determining whether the project will have a significant impact on any Class I areas. The City believes that the Class I SILs proposed by the U.S. Environmental Protection Agency (EPA) in the July 23, 1996, Federal Register are more appropriate especially since it is understood that DEP has decided to use these EPA values in the ongoing Chassahowitzka Study. However, since the City plans to do multiple source modelling of Class I area impacts regardless of whether the project's impact are considered "significant", the importance of the question of which set of SILs to use is considerably diminished. Therefore, the POS has been modified to indicate that project impacts will be compared to both sets of SILs.

SCA Section Reference:

The PSD application contained in SCA Section 10.1.5 contains a discussion of the modelling approach along with air quality modelling results. Both EPA and FLM-approved significant impact levels are addressed.

Comment:

Conduct a visible plume impact analysis using a background visual range at 65 km. When emissions estimates are finalized, consult with our office on the need for a regional haze analysis.

Response:

The visibility screen impact analysis will be conducted using VISCREEN and a background visual range of 65 km. The FWS will be provided with the final emission estimates when available.

SCA Section Reference:

The PSD application contained in SCA Section 10.1.5 contains a discussion of the modelling approach along with air quality modelling results.

Comment:

Consult with our office on the need for additional air quality related values analyses if final emissions estimates indicate that PSD review is required for pollutants besides PM and CO (i.e., sulfur dioxide, nitrogen oxides).

Response:

Although projected emission rates are not yet finalized, it is still the City's intent to "net out" for SO_2 and NO_x. However, for purposes of general understanding, the City would like to know the AQRVs which the Fish and Wildlife Service deems significant vis-à-vis SO_2 and NO_x emissions for the St. Marks Wilderness Area.

SCA Section Reference:

The PSD application contained in SCA Section 10.1.5 contains a discussion of the modelling approach along with air quality modelling results.

U.S. FISH & WILDLIFE SERVICE - ST. MARKS NWR

Comment:

As you know, the Purdom facility is not immediately connected to lands and waters of the St. Marks National Wildlife Refuge. The connection is only through air and water flow. The water connector, the St. Marks River, is State of Florida waters, so I will not presume to provide comments on the State's jurisdiction. I am comfortable that if the Purdom Unit 8 Project meets the State of Florida requirements for clean water, then the Refuge's interest through this water way will be protected. The same is basically true with Ellen Porter's clean air comments. If the Purdom Unit 8 Project satisfies Ms. Porter's clean air concerns/feedback, then St. Marks NW Refuge's concerns will have been addressed.

Other than clean air and water concerns, the Purdom Unit 8 project appears to be a neutral factor as far as St. Marks NW Refuge's concerned, and the Refuge will neither benefit or lose by its presence.

Response:

The project's zero discharge wastewater design will ensure that the State of Florida clean water requirements will be met. In fact, several wastewater streams currently discharging to the St. Marks River will be eliminated thus enhancing water quality. As indicated in other responses, the City has addressed Ellen Porter's [U.S. Fish & Wildlife Service air Quality Branch] clean air comments. No additional changes in the POS are required.

SCA Section Reference:

SCA Section 3.5 discusses the project's zero discharge wastewater design. SCA references for the clean air comments follow the individual comments.

U.S. FOREST SERVICE

Comment:

As discussed earlier, the air quality related values (AQRV) of Bradwell Bay Wilderness, a CAA Class I area under Forest Service management, are fresh air (lack of odor) and vegetation. Upon learning that preliminary emission estimates project no net increase in emissions of sulfur or nitrogen, our concern regarding impacts on these values (AQRVs) diminished greatly.

Response:

No response or changes in the POS required.

SCA Section Reference:

The PSD application contained in SCA Section 10.1.5 addresses AQRVs.

Comment:

Even though visibility (regional haze) need not be considered as a Bradwell Bay AQRV, there is some concern regarding possible impacts of a plume from Purdom No. 8 that might be visible near the Wilderness. In as much as plume visual impact screening analysis must be done, regardless of the presence of a Class I area, I'd appreciate it if you would include a viewpoint within the Wilderness when you run the screening model. During the meeting, representatives of the USDA Fish and Wildlife Service said their data showed that a background visual range of 65 km should be used in these screening models. We agree with that determination.

Response:

The Air Quality Modelling Protocol has been modified to indicate the use of a 65 km background visual range for visual plume screening. The visibility analyses will include a viewpoint in the Bradwell Bay Wilderness Area for your information.

SCA Section Reference:

The PSD application contained in SCA Section 10.1.5 contains the visibility analyses.

Comment:

With earlier correspondence, we sent a copy of *Foliar Ozone Injury Surveys (1995) In National Forests in Alabama, Florida and Mississippi* (Chappelka, 1996). It reported only slight injury at Bradwell Bay, typical of the five years over which this inventory was repeated. During discussion of this topic, the presence of an ozone monitor, managed by the National Dry Deposition Network, near the town of Sumatra was mentioned. Data from this monitor may be helpful in evaluating rural ozone conditions in the Florida panhandle. Information from this ozone monitor may be obtained from Mr. Ralph Baumgardner, US-EPA, Office of Research & Development (919-541-4625).

Response:

The search for background air quality data will include a call to Mr. Baumgardner regarding the availability of ozone data from the Sumatra Area.

SCA Section Reference:

The PSD application contained in SCA Section 10.1.5 contains an evaluation of ozone conditions in the Purdom Station area.

FLORIDA GAME AND FRESH WATER FISH COMMISSION

Comment:

The Office of Environmental Services of the Florida Game and Fresh Water Fish Commission has reviewed the referenced POS and finds that it adequately addresses fish and wildlife issues of interest to our agency.

Response:

No response or changes in the POS required.

SCA Section Reference:

Not applicable.

APALACHEE REGIONAL PLANNING COUNCIL

Comment:

The Council staff has several issues of concern which should be addressed in the final study. First, it is the understanding of Council staff that the project is located in the floodplain of the St. Marks River. Discussion should be added concerning what will happen in the event of a flood. Similarly, the facility is located in a hurricane evacuation zone. The continued operation of the facility during and after a major storm should be addressed. For instance, are there circumstances in which the facility would close? What happens if access roads are unusable?

Response:

SCA Section 2.1.5 will address the 100-year flood levels at the site which is located in the flood plain. Section 3.8 will address the on-site drainage system and its performance during floods. The ability of the facility to operate during storms and/or floods will also be addressed in this section. Section 4.1.3 will discuss project impacts on flooding levels.

SCA Section Reference:

The above-mentioned SCA Sections 2.1.5, 3.8, and 4.1.3 address these flooding/major storm concerns.

Comment:

Second, there is no discussion of what happens if there is a fire onsite. Will the town of St. Marks fire department need additional equipment? Will other area departments be called? Are there any special risks involved? Please add discussion of this concern to the study.

Response:

Since the Purdom Generating Station is an existing power plant, fire protection measures and equipment are already in place. Existing practices for fire protection and fire fighting at the plant will be described in Section 2 of the SCA. In addition, any further needs for equipment, cooperative service arrangements, etc. that could involve local governments or volunteer fire departments in the area will be identified and discussed in the SCA in Section 7.

SCA Section Reference:

SCA Section 2.2.7 discusses existing public services, Section 3.10 discusses Purdom Station systems, and SCA Sections 7.1 and 7.2 discuss further needs.

Comment:

Council staff has already had discussions with Hall Planning and Engineering concerning the traffic study for this project. The proposed POS appears adequate. It also appears that sufficient information is proposed concerning potential impacts to the water quality of the St. Marks River and the air quality within the St. Marks National Wildlife Refuge.

Response:

No response or changes to the POS required.

SCA Section Reference:

SCA Sections 4.6 and 5.9 discuss traffic impacts; Sections 4.2 and 5.3 discuss impacts on surface water bodies; and SCA Sections 4.5 and 5.6 discuss air quality impacts.

FLORIDA DEPARTMENT OF TRANSPORTATION

Comment:

Map(s) showing the location of the Florida Gas Transmission Pipeline relative to the State Highway System (SHS), including locations where the pipeline will be enlarged, locations where the pipeline will cross the roadways and roadway rights-of-way and any locations where the pipeline will be replaced.

Response:

The existing gas pipeline system will be upgraded and will be permitted by the Florida Gas Transmission Company. Although not required, the SCA Section 6.1 will provide a general description of the anticipated pipeline expansion (which is expected to occur within the existing right-of-way) and its associated impacts including, to the extent available, the maps requested. No changes in the POS are required.

SCA Section Reference:

SCA Section 6.3 discusses the natural gas pipeline.

Comment:

If there are any SHS roadway or associated right-of-way crossings by the pipeline, please identify the method which will be used to install the pipeline in these locations. In addition, the traffic management plans to be used during this construction should be outlined.

Response:

Permitting of the natural gas pipeline upgrade will be handled by Florida Gas Transmission through the normal permitting procedures of the Florida Department of Transportation (FDOT), including submittal (as normally required by FDOT) of drawings and/or a description of pipeline installation methods and Traffic Control Plans called for in this comment. Florida Gas Transmission is the best source of this information since they are quite experienced at pipeline construction in relation to road rights-of-way in Florida and will be directly responsible for the work. To the extent available from FGT at the time of SCA preparation, the requested information will be provided in the SCA.

With regard to the water reuse pipeline connecting the City of St. Marks' treatment plant to the Purdom Generating Station, it is expected that the pipeline will cross or use primarily local road rights-of-way within the City of St. Marks. Any state highway system, county or city road rights-of-way to be used or crossed for water reuse pipeline construction will be identified in the SCA. The SCA will also include a description of pipeline installation methods. Pipeline installation methods and traffic control plans will be in conformance with FDOT Traffic Control Plan Standards for state highway system road rights-of-way, if any are crossed or used. For local road rights-of-way crossed or used, construction plans will implement local permit requirements to ensure public safety and convenience.

SCA Section Reference:

SCA Section 6.3 discusses the natural gas pipeline and SCA Section 6.1 discusses issues related to the water reuse pipeline.

Comment:

The height of the Unit and any attendant structures should be indicated in the description of the Unit and the relationship of these structures to the flight paths of any published approach to the Tallahassee Regional Airport should be defined.

Response:

The height of the Unit has been added to the description. The project is not expected to pose a hazard to air navigation and this will be addressed in the Site Certification Application. If necessary, a "Notice of Proposed Construction or Alteration" will be filed with the FAA.

SCA Section Reference:

SCA Section 10.1.7 addresses Federal Aviation Administration concerns.

NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT

Comment:

The District's primary concerns with this project will be its potential impacts to surface water resources (St. Marks River) and associated biota. We expect the study to fully address net loss of water in the system relative to low flow and any impacts which might result under such conditions. Such impacts would likely be related to an increase in the extent of saltwater intrusion up the river, among other possibilities. Although details concerning number and locations of samples or river profile stations are not provided in the POS, we feel that the proposed study (assuming appropriate sample sizes and locations are used) will provide information appropriate for our review needs.

We found some of the statements concerning reduction of water withdrawals and "zero discharge" to be somewhat confusing in terms of the overall changes in water use which will result from construction of Unit 8. Although actual withdrawals may be reduced, a net loss of water would occur in the St. Marks River because the discharge of once-through cooling water would be eliminated. It would be helpful if you could prepare some simple graphics showing the current and proposed water budget for the Purdom Plant so one can easily be compared to the other. This would help reviewers and interested citizens to better understand the water use impacts of the proposed changes.

Response:

The SCA will fully address the potential project impacts to surface water resources including the minor net loss of water in the system relative to low flow and associated impacts. This results from the selection of Best Conventional Pollutant Control Technology (closed cycle cooling towers) for cooling at Unit 8. These minor impacts will be included in Chapter 5, Sections 5.1.2 and 5.3.1. Simplified flow diagrams for the Purdom Station water use will be presented as part of SCA Sections 2.3.3 and 2.3.4 for the existing station, and 3.5.1 and 3.5.4 for conditions with the proposed project. No changes to the POS are required.

SCA Section Reference:

Impacts to surface water resources will be included in Chapter 5, Sections 5.1 and 5.3.1. Simplified flow diagrams for the Purdom Station water use will be presented as part of SCA Sections 2.3.3 and 2.3.4 for the existing station, and 3.5.1 and 3.5.4 for conditions with the proposed project.

FLORIDA DEPARTMENT OF STATE - DIVISION OF HISTORICAL RESOURCES

Comment:

A review of the Florida Site File indicates that no significant archaeological or historical sites are recorded for or likely to be present within the area of the proposed Purdom Unit 8. We also note that a new pipeline, constructed along existing streets, will be necessary to delivery fuel to the new unit. The new pipeline may proceed without further involvement from our agency if project activities do not entail construction of lines that are located outside existing road prisms (the ditch-to-ditch or curb-to-curb area). Therefore, conditioned upon the construction of the new pipeline within existing road prisms, it is the opinion of this office that the proposed project will have no effect on historic properties listed, or eligible for listing, in the *National Register of Historic Places*, or otherwise of historical or architectural value.

Response:

The City of Tallahassee contacted DHR again in 1996. DHR confirmed their earlier evaluation and stated that a "review of the Florida Site File indicates that no significant archaeological or historical sites are recorded for or likely to be present within the area of the proposed Purdom Unit 8." The DER also concluded the project will have no effect on historic properties, provided that any new off-site pipelines (i.e., the water reuse pipeline) which may be part of the project be constructed within the limits of existing road prisms. Therefore, no changes to the POS are required.

SCA Section Reference:

SCA Section 4.8 discusses impacts on archeological and historical sites.

FLORIDA DEPARTMENT OF COMMUNITY AFFAIRS

No comments.

WAKULLA COUNTY

No comments.

LEON COUNTY

No comments.

CITY OF ST. MARKS

No comments.

FLORIDA PUBLIC SERVICE COMMISSION

No comments.

10.7.3 Public Comments

10.7.3.1 September 12, 1996 Briefing for Environmental Groups

Comment Summary

Follow-up Correspondence

City of Tallahassee Purdom Unit 8
Briefing/Workshop for Environmental Groups
Comment Summary
September 12, 1996

Attendance List

Gail Kamaras	Legal Environmental Assistance Foundation
Debra Swim	Legal Environmental Assistance Foundation
Ze Ferreira	Project for an Energy Efficient Florida

Comment Summary

- Concerned about the decision already made to build this unit
- There may be some additional opportunities to purchase power that will come up. With competition other utilities will be trying to make sure they stay in business.
- Your gas prices are at odds with forecasts from EIA. Skeptical about those numbers.
- Landscaping would be good from public standpoint
- What are the City's intentions with regard to energy conservation and demand-side management programs? Will City meet PSC's goals, or exceed PSC's, or try to get PSC's goals lowered?
- City doesn't appear to have aimed demand-side management at new construction - missing opportunities that are arising because of growth
- Even with unit cost of $440/kw can achieve savings cheaper than can generate -- conservation is part of a pollution prevention strategy
- Noticed your mission is to provide electricity rather than provide energy services - should use efficiency improvement as a customer retention tool e.g. FSU Law School like a meat locker
- City's concerns about competition are real; know they need the revenue
- Project looks to be well-thought out from an environmental management standpoint

Sent to 3 attendees

CITY OF TALLAHASSEE

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Commissioner

STEVEN C. BURKETT
City Manager
ROBERT B. INZER
City Treasurer-Clerk

JAMES R. ENGLISH
City Attorney
RICARDO FERNANDEZ
City Auditor

25 October 1996

Ms. Debra Swim
Legal Environmental Assistance Foundation
1115 N. Gadsden Street
Tallahassee, FL 32303-6327

Dear Ms. Swim:

Thank you for attending our recent briefing on the proposed new natural gas-fired electric generating unit at the Purdom Generating Station in St. Marks. Enclosed are summaries of your comments plus others with whom we have met, including regulatory agency representatives, who were briefed on September 10, 1996, and members of the public who attended the project open houses held between September 17 and 19, 1996.

There were a few questions that came up during the briefing that the staff members and consultants who were there were unable to answer. Attached are the responses to your comments.

Your name will be maintained on the project mailing list so that we can continue to keep you informed of our progress through the permitting process. In the meantime, if you have further questions or comments on the project, please feel free to write to me at the following address or call the project voice mail at (904) 891-5585. You may also contact us via E mail at purdom8@sc.ci.tlh.fl.us.

City of Tallahassee Electric Department
2602 Jackson Bluff Road
Tallahassee, FL 32304

Thank you for your interest in the Purdom Unit 8 Project.

Sincerely,

Rob McGarrah
Project Manager

ENVIRONMENTAL GROUP MEETING

RESPONSES TO COMMENTS

1. **Concerned about the decision already being made to build this unit. There may be some additional opportunities to purchase power that will come up. With competition, other utilities will be trying to make sure they stay in business.**

The Capacity and Energy RFP was structured so that proposals would be evaluated for both purchased power options as well as new units. The timing of the RFP was based upon the time needed to license and build a new unit as well as the time needed to complete the RFP process and evaluation.

In addition to the initial RFP providing opportunities for purchased power, Electric Operations continues to monitor the changing electric market in order to capitalize on changes that will result in a more beneficial option for the City's customers. Electric Operations has also committed to conduct a final market review prior to the final release of the procurement and construction activities. This market review will be intended to determine whether the construction of Purdom Unit 8 is still the best option for the City's customers.

2. **Your gas prices are at odds with forecasts from EIA. Skeptical about those numbers.**

The natural gas pricing contained in the Purdom Unit 8 alternative was not based on a fuel forecast but rather on competitive bids for firm supplies obtained by the City's Fuel Management Division. Fuel Management issued a competitive solicitation for natural gas for the period 1996 - 2020. A number of proposals were received by the City, including two proposals for the period 2000 - 2020. Since the time of the receipt of the natural gas proposals, both fuel vendors who provided the 2000 - 2020 natural gas pricing have provided updated pricing information that showed the prices continuing to move downward. These offers are priced below some gas forecasts for the same period because the offers are for firm quantities over a fixed term, allowing for more flexible pricing.

3. **What are the City's intentions with regard to energy conservation and demand side management programs? Will City meet or exceed PSC goals or will the City try to get the PSC goals lowered? The City doesn't appear to have aimed demand side management at new construction -- missing opportunities that are arising because of growth. Even with unit cost of $440/kW -- savings can be achieved cheaper than generation. Conservation is a part of pollution prevention program.**

The City continues to be committed to conservation and demand side management programs. The integrated resource planning (IRP) process utilized during the recent planning process included analysis of conservation and demand side management alternatives. The City's DSM portfolio is broad-based and the mix of residential and commercial measures has been promoted since 1984. The City's recent program is projected to meet or exceed the goals approved by the PSC in February of this year. The City's new construction efforts work in concert with state building codes to ensure that buildings are as energy cost efficient as practical. While these efforts, on a unit-cost basis, may sometimes be less expensive than new generation, there is not enough conservation potential to offset the need for this new unit. From an overall environmental perspective, the addition of this new unit has a positive pollution reduction benefit due to its lower emissions, on a per MW basis, and the ability for the City to retire early two older, less efficient generating units.

4. **Noticed your mission is to provide electricity rather than provide energy services -- should use efficiency improvement as a customer retention tool. For example -- FSU Law School is like a meat locker.**

The mission of the City's Electric utility is to be the preferred provider of electric services in this community. This includes exploring possibilities to provide efficiency programs that make sense. The City devotes significant resources to this effort through the Energy Services function within Utility Services. Towards that end, the City is continuing to pursue opportunities in its energy conservation effort to design commercial programs that are mutually beneficial to the customer, the utility and the environment. Currently these programs include loans for HVAC changeouts, lightening changeouts, fuel switching, and building envelope enhancements and commercial demonstrations of energy conservation, advanced technology, and customer control of energy use projects.

Best Available Copy

Sent 76 to those invited but did not attend environmental group briefing

CITY OF TALLAHASSEE

CITY HALL
300 S. ADAMS ST
TALLAHASSEE, FL
32301-1731
904/891-8100
TDD 1-800/955-8771

RON WEAVER
Mayor

SCOTT MADDOX
Mayor Pro Tem

JOHN PAUL BAILEY
Commissioner

DEBBIE LIGHTSEY
Commissioner

STEVE MEISBURG
Commissioner

STEVEN C. [illegible]
City Manager

ROBERT B. INZER
City Treasurer-Clerk

JAMES R. [illegible]
City Attorney

RICARDO [illegible]
City Auditor

8 October 1996

Mr. Martin Costello
Florida Department of Environmental Protection
Twin Towers, MS 3550
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Dear Mr. Costello:

We missed seeing you at the September 12th briefing for environmental groups on the proposed new natural gas-fired electric generating unit at the Purdom Generating Station in St. Marks. Enclosed is some information on the project that you might find helpful. Also enclosed are summaries of the comments we received from the few people who did attend the briefing plus others with whom we have met, including regulatory agency representatives, who were briefed on September 10, 1996, and members of the public who attended the project open houses held between September 17 and 19, 1996.

Your name will be maintained on the project mailing list so that we can continue to keep you informed of our progress through the permitting process. In the meantime, if you have any questions or comments on the project, or wish to have your name removed from the mailing list, please feel free to write to me at the following address or call the project voice mail at (904) 891-5585. You may also contact us via E mail at purdom8@sc.ci.tlh.fl.us.

City of Tallahassee Electric Department
2602 Jackson Bluff Road
Tallahassee, FL 32304

Thank you for your interest in the Purdom Unit 8 Project.

Sincerely,

Rob McGarrah
Project Manager

CITY OF TALLAHASSEE

CITY HALL
300 S. ADAMS ST.
TALLAHASSEE, FL
32301-1731
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RON WEAVER
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Commissioner

STEVE MEISBURG
Commissioner

STEVEN C. BURKETT
City Manager

ROBERT B. INZER
City Treasurer-Clerk

JAMES R. ENGLISH
City Attorney

RICARDO FERNANDEZ
City Auditor

RECEIVED

JAN 4 REC'D

MOORE-BOWERS GROUP

January 3, 1997

Mr. & Mrs Rudloe
P. O. 428
Panacea, FL 32346

Re: City of Tallahassee -- Purdom Unit 8

Dear Mr. & Ms. Rudloe:

Jennette Curtis of the City of Tallahassee environmental staff recently contacted you concerning the proposed new natural gas fired unit at the existing Purdom Generating Station in St. Marks. During the phone conversation, a number of issues were raised dealing with the potential environmental impact of this facility. Based on these comments, I believe that there may be some misunderstanding as to what the City of Tallahassee is proposing. I wanted to take a moment to recap some of the project highlights and provide you with some project briefing materials.

The proposed Purdom Unit 8 is a state-of-the art natural gas fired electric generating unit. It is being sited at the City's Sam O. Purdom Generating station located in St. Marks Florida. In conjunction with the addition of Unit 8, the City will be early retiring two of the existing Purdom units, units 5 & 6. The decision to pursue the addition of Unit 8 was made by the Tallahassee City Commission after a competitive process to determine the least cost, most environmentally friendly method to meet the City's electric customers needs in the year 2000 and beyond.

The City has made a number of design commitments associated with this unit. These commitments were not driven by regulation but rather by a desire to provide the City's customers with the most environmentally responsible project. Some of the highlights are:

- The addition of a cooling tower and zero discharge water treatment facility that allows for Unit 8 to have no water discharge to the St. Marks River. The addition of this equipment will allow for:
  - ⇒ The reuse of the City of St. Marks treated sewage effluent and two existing permitted treated effluent streams from the Purdom facility. This will eliminate three permitted discharges that currently go to the St. Marks River, and
  - ⇒ The elimination of groundwater withdrawals from the existing Purdom deep wells.

- With the early retirement of Purdom Units 5 & 6, approximately 50% of the current Purdom cooling water requirements from the St. Marks River will be eliminated. This will result in a reduction of thermal loading on the St. Marks River by approximately 50%.
- As a result of the technology improvements associated with Unit 8, the early retirement of Units 5 & 6 and the reduced utilization of Unit 7, the annual air emissions of sulfur dioxide (SO_2) and Oxides of Nitrogen (NO_x) will not increase over the ***actual*** average emissions of these pollutants during the previous two years even though the facility capacity will increase by over 200 megawatts. (one megawatt provides electricity to 1 home for approximately 1 month)
- Unit 8 will be located on the existing plant site in an area that is currently cleared. Based on the current unit layout, we do not expect to encroach into any existing wetlands on the site nor do we expect to perform any dredge or fill activities on any water body.

I have enclosed copies of the project brochure and a background information section from the project's plan of study. These documents have been submitted to the regulatory and governmental agencies, and local environmental groups and distributed at several public meetings previously help to inform the public about the project..

I would certainly be interested in having the opportunity to sit down with you and discuss this project. If you would like to have this discussion, please contact me at 904-891-5534.

Yours truly,

Rob McGarrah
Production Superintendent
Purdom Unit 8 Project Manager

Enclosures (2)

cc: Purdom Unit 8 Project Team

10.7.3.2 September 17 - 19, 1996 Open Houses

Comment Summary

Follow-up Correspondence

City of Tallahassee Purdom Unit 8
Open Houses Comment Summary
September 17-19, 1996

Tallahassee Locations

Attendance List

Paco de la Fuente	UAG
Stan Derzypolski	
Lyn Doby-Stanfield	United Way
Edward J. Malo	
Sherri Braddy	Florida Trail Assoc., Apalachee Chapter
Norene Chase	Big Bend Group of the Sierra Club
Charles A Cyrus, Sr.	Capital City Chamber of Commerce
John Whitton	Sierra Club
Bob Fulford	CONA
Edwin Thorpe	
Mike McBee	

Comment Summary

- Wanted details of capacity bidding process
- Asked about reconductoring of transmission lines
- Interested in the transmission line conductor. Wondered whether the structures could take the extra weight and what they were made of.
- Asked about the use of the St. Marks effluent for cooling.
- Asked several questions on retail wheeling
- St. Marks and Wakulla County issues/concerns
- General discussion of decision-making process and why there was some citizen concern.
- How is Purdom 8 project funded? Should structure rates so higher users fund more of project because of their impact on load. (Lower users pay less)
- We need more load management
- General interest in overall process and unit. Very interested in engineering and construction phases. Requested information on Minority Business Enterprise participation on project.
- General interest to provide other members of Sierra Club with information. Not opposed.
- Concerned that Tallahassee cannot compete with larger companies if retail competition becomes a reality. Wants to be sure Tallahassee continues to pursue conservation. Concerned about what will happen to the City's smaller customer if there's retail competition.
- Interested in our public involvement process/format.
- How are we going to pay for this project? Was told that money was coming from municipal bonds not taxes. Owns other City bonds as investments.

St. Marks

Attendance List

Mike Reffitt	Local 592 Plumbers & Pipefitters
George Tillman	Located 100 feet from property
Marie & Hugh Williams	
John Cooksey	

City of Tallahassee Purdom Unit 8
Open Houses Comment Summary
September 17-19, 1996

David Field	
Micky Cantner	
Allen Hobbs	Shell Island Marina
Alex Hobbs	Shell Island Marina
Chuck Shields	Shields Marina & City of St. Marks
Jennifer Young	
Carlene Daggett	
Charles Daggett	St. Marks City Commissioner
Dave Hedrick	Wave 94 FM
Robert Seidler	
Irvine Leonard	Local 592 Plumbers & Pipefitters
Jack Butler	I.B.E.W.
Joan Hoover	
J. Peterman	City of Tallahassee

Comment Summary

- Will you be putting rope across intake canal to keep boaters out?
- Have you cut down bushes in front of manatee sign?
- Will new unit have heated discharge?
- Will you be handling storm water?
- Will residual from zero discharge plant be landfilled?
- Concerned about manatees - wants to block off Unit 6/7 discharge canal
- Concerned about noise from hogging during start up. Asked about noise level from new unit.
- Positive interest in Unit 8. She is an engineer at Olin. Asked about our flood design. Interested in learning about what's planned.
- Interested in noise from new unit. Complained about noise from hoggers during startup. Asked if existing plant is about or below 55 dba. Asked about storm water treatment and keeping spills out of the river
- Interested in water demand from St. Marks water system for use in designing their system.
- Will electric and magnetic fields (EMF) increase with reconductoring of transmission lines? Lives adjacent to line being upgraded. Issue of tax exemption - wants to look up statute. General information on size of unit.
- Concerned about impact on St. Marks. What are local benefits? Any expansion of site? Any opposition?
- Support for project. Has lived in St. Marks for 18 years. Wishes us the best.
- What is existing transmission EMFcompared to reconductored EMF?
- What if any additional revenue will come in for St. Marks? Will the water tower bring any increased costs to City of St. Marks?
- Will the wells also be for St. Marks? Will the existing gas turbines run more or less? Jet engines are noisy. How will this be quiet? Will the gas line have to be upgraded?
- Noise. Said noise increased about one year ago. Wondered why. Thought trees were cut down.
- Where is nearest similar unit?
- Issue of tax exemption

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Sent 254 to those invited to open houses but did not attend

CITY OF TALLAHASSEE

CITY HALL
300 S. ADAMS ST.
TALLAHASSEE, FL
32301-1731
904/891-8100
TDD 1-800/955-8771

3 October 1996

Mr. Leslie Fusaro
NationsBank
122 East Jefferson Street
Tallahassee, Florida 32301

Dear Mr. Fusaro:

We missed seeing you at our recent open houses on the proposed new natural gas-fired electric generating unit at the Purdom Generating Station in St. Marks. Enclosed is some information on the project that you might find helpful. Also enclosed is a summary of the comments we received from everyone who attended the open houses.

Your name will be maintained on the project mailing list so that we can continue to keep you informed of our progress through the permitting process. In the meantime, if you have any questions or comments on the project, or wish to have your name removed from the mailing list, please feel free to write to me at the following address or call the project voice mail at (904) 891-5585. You may also contact us via E mail at purdom8@sc.ci.tlh.fl.us.

City of Tallahassee Electric Department
2602 Jackson Bluff Road
Tallahassee, FL 32304

Thank you for your interest in the Purdom Unit 8 Project.

Sincerely,

Rob McGarrah
Project Manager

Sent 20 to those who attended open houses
with no need for follow up

CITY OF TALLAHASSEE

CITY HALL
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STEVEN C. BURKETT
City Manager
ROBERT B. INZER
City Treasurer-Clerk

JAMES R. ENGLISH
City Attorney
RICARDO FERNANDEZ
City Auditor

October 17, 1996

Mr. Paco de la Fuente
1317 Dillard Street
Tallahassee, FL 32312

Dear Mr. de la Fuente:

Thank you for attending our recent open house on the proposed new natural gas-fired electric generating unit at the Purdom Generating Station in St. Marks. We appreciate your taking the time to come and find out about the project and tell us your concerns. We hope you found the information helpful. Enclosed is a summary of the comments and questions we received from everyone who attended the open houses.

We will continue to keep you informed of our progress through the permitting process. In the meantime, if you have any questions or comments on the project, please feel free to write to me at the following address or call the project voice mail at (904) 891-5585. You may also contact us via e-mail at purdom8 @sc.ci.tlh.fl.us.

City of Tallahassee Electric Department
2602 Jackson Bluff Road
Tallahassee, FL 32304

Thanks again for your interest in the Purdom Unit 8 Project.

Sincerely,

Rob McGarrah
Project Manager

CITY OF TALLAHASSEE

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City Manager
ROBERT B. INZER
City Treasurer-Clerk

JAMES R. ENGLISH
City Attorney
RICARDO FERNANDEZ
City Auditor

25 October 1996

Mr. Stan Derzypolski
Growth & Environmental Group of
Public Agenda
1830 Myrick Road
Tallahassee, FL 32303

Dear Mr. Derzypolski:

Thank you for attending our recent open house on the proposed new natural gas-fired electric generating unit at the Purdom Generating Station in St. Marks. We appreciate your taking the time to come and find out about the project and tell us your concerns. Enclosed is a summary of the comments and questions we received from everyone who attended the open houses.

According to our records you had a question about how the Purdom Unit 8 generating station would be funded. Here's what we were able to find out:

> The final decision of how to finance the Purdom Unit 8 project will be made in the Spring of 1998 based on recommendations from the City's financial management specialist and the City Treasurer-Clerk. Currently plans are to utilize Municipal Electric Revenue bonds for the financing of the project.
>
> The financing costs associated with Unit 8 will be allocated across the City's electric customers based on Florida Public Service Commission approved rate tariffs. These rate tariffs allocate the electric system costs to the differing customer classes based on the cost of servicing these differing customer classes. Therefore, to some extent, there is a spreading of the financing costs based on use.

You also had a question about demand side management programs. Here's what we were able to find out about that:

> The City continues to be committed to conservation and demand side management programs. The integrated resource planning (IRP) process utilized during the recent planning process included analysis of conservation and demand side management alternatives. The City's DSM portfolio is broad-based and the mix of residential and commercial measures has been promoted since 1984. The City's recent program is projected to meet or exceed the goals approved by the PSC in February of this year. The City's new construction efforts work in concert with state building codes to ensure that buildings are as energy cost efficient as practical. While these efforts, on a unit-cost basis, may sometimes be less expensive than new generation, there is not enough conservation potential to offset the need for this new unit. From an overall environmental perspective, the addition of this new unit has a positive pollution reduction benefit due to its lower emissions, on a per MW basis, and the ability for the City to retire early two older, less efficient generating units.

Thanks again for your interest in the Purdom Unit 8 Project. If you have further questions, please write to me at the following address or call the project voice mail at (904) 891-5585. You may also contact us via E mail at purdom8@sc.ci.tlh.fl.us.

City of Tallahassee Electric Department
2602 Jackson Bluff Road
Tallahassee, FL 32304

Sincerely,

Rob McGarrah
Project Manager

CITY OF TALLAHASSEE

CITY HALL
300 S. ADAMS ST.
TALLAHASSEE, FL
32301-1731
904/891-8100
TDD 1-800/955-8771

25 October 1996

Mr. Mickey Canter
HuManatee
Post Office Box 338
St. Marks, FL 32355

Dear Mr. Canter:

Thank you for attending our recent open house on the proposed new natural gas-fired electric generating unit at the Purdom Generating Station in St. Marks. We appreciate your taking the time to come and find out about the project and tell us your concerns. Enclosed is a summary of the comments and questions we received from everyone who attended the open houses.

According to our records you had a series of questions that were similar to others who attended the open houses. Attached is a consolidated list of questions and concerns with our comments. I trust that you find this information helpful.

Thanks again for your interest in the Purdom Unit 8 Project. If you have further questions, please write to me at the following address or call the project voice mail at (904) 891-5585. You may also contact us via E mail at purdom8@sc.ci.tlh.fl.us.

City of Tallahassee Electric Department
2602 Jackson Bluff Road
Tallahassee, FL 32304

Sincerely,

Rob McGarrah
Project Manager

1. **Will the City be putting a rope across intake canal to keep boaters out?**

The City has been approached by Florida Department of Environmental Protection (DEP) personnel who are responsible for manatee protection. They have requested that the City consider placing a cable across the existing Units 6 & 7 discharge canal to keep boaters from entering the canal. The City is working with DEP to determine the process required to accomplish this activity.

2. **Will the new unit have heated discharge?**

No. Purdom Unit 8 will have a zero discharge water treatment facility to prevent any heated discharge from Unit 8. This zero discharge facility will also allow for the reuse of two existing waste streams from the Purdom facility as well as the existing City of St. Marks sewage effluent. The existing Purdom Units 5 & 6 will be retired in conjunction with the installation of Unit 8. This will result in the elimination of the heated discharges from these two units to the St. Marks River. However, since Purdom Unit 7 will remain in operation, although at a reduced level, some heated water discharge from this unit will remain.

3. **Will the residual from the zero discharge facility be landfilled?**

The current plans are to landfill the zero discharge filter cake at an approved landfill. This is the currently accepted disposal method for this material. There has been some interest raised as to possible commercial reuse of this material. The City is exploring this opportunity.

4. **What is the noise level from Unit 8? There has been an increase in noise from he Purdom Plant during the past year or so. Concerned about the noise from the hoggers. Is the noise from the existing plant at or below 55 dBa? Will the existing gas turbines be run more or less? Jet engines are noisy.**

The current U.S. Environmental Protection Agency noise guidelines provide for the annual average day/night noise levels to be at or below 55 dBa at the nearest residence. Unit 8 is being designed in a manner that the noise level from the Purdom site, during normal operations, will meet this level at the nearest residence. (This design is based on existing resident locations.) It is important to note that there will be some abnormal operating conditions (start-ups, emergency trips, etc.) that will result in short term noise levels at or above the 55 dBa.

A noise study was completed for the Purdom facility in 1994. Based on actual test data, the facility average annual day/night noise level was below 55 dBa at the nearest residence. There were some short term noise levels that were above 55 dBa during the operation of the existing gas turbines. However, these short term levels did not exceed the 65 dBa which are generally acceptable during the day. Since the existing gas turbines are utilized for peaking and emergency conditions, they operate on an infrequent basis and rarely during nighttime periods. The future use of these gas turbines is not expected to change materially.

There have been no operational changes in the Purdom facility that would have resulted in additional noise being generated. The hoggers are utilized only during start-up of the units. The facility has installed silencers on these hoggers within the past 5 years to reduce their noise level. In order to reduce the noise associated with the existing plant PA system, the facility has increased the use of radios and reduced the number of external speakers that are in operation.

5. **What are the plans for stormwater? What about spills to the river?**

The construction of Unit 8 will include stormwater retention/detention facilities to meet the local land development guidelines and water management district criteria.

The addition of Unit 8 will result in a reduction in the amount of heavy oil stored at the Purdom facility. This is due to one of the existing heavy fuel oil storage tanks being converted from oil storage to water storage. Unit 8 will utilize diesel as its backup fuel. The existing diesel storage tank will be utilized for this backup fuel supply.

The City currently participates in the St. Marks Spill Co-op. This Co-op pools resources to protect the St. Marks River in the event of an oil spill. The City will continue to participate in this effort.

25 October 1996

Ms. Carlene Daggett
Post Office Box 202
St. Marks, FL 32355

Dear Ms. Daggett:

Thank you for attending our recent open house on the proposed new natural gas-fired electric generating unit at the Purdom Generating Station in St. Marks. We appreciate your taking the time to come and find out about the project and tell us your concerns. Enclosed is a summary of the comments and questions we received from everyone who attended the open houses.

According to our records you had a question about the noise from hoggers and if the existing plant is at or below 55 dBa. Here's what we were able to find out:

> The current U.S. Environmental Protection Agency noise guidelines provide for the annual average day/night noise levels to be at or below 55 dBa at the nearest residence. Unit 8 is being designed in a manner that the noise level from the Purdom site, during normal operations, will meet this level at the nearest residence. (This design is based on existing resident locations.) It is important to note that there will be some abnormal operating conditions (start-ups, emergency trips, etc.) that will result in short term noise levels at or above the 55dBa.
>
> A noise study was completed for the Purdom facility in 1994. Based on actual test data, the facility average annual day/night noise level was below 55 dBa at the nearest residence. There were some short term noise levels that were above 55 dBa during the operation of the existing gas turbines. However, these short term levels did not exceed the 65 dBa which are generally acceptable during the day. Since the existing gas turbines are utilized for peaking and emergency conditions, they operate on an infrequent basis and rarely during nighttime periods. The future use of these gas turbines is not expected to change materially.
>
> There have been no operational changes in the Purdom facility that would have resulted in additional noise being generated. The hoggers are utilized only during start-up of the units. The facility has installed silencers on these hoggers within the past 5 years to reduce their noise level. In order to reduce the noise associated with the existing plant PA system, the facility has increased the use of radios and reduced the number of external speakers that are in operation.

You had also inquired about storm water treatment and keeping spills out of the river. Here's what we were able to find out:

> The construction of Unit 8 will include stormwater retention/detention facilities to meet the local land development guidelines and water management district criteria.
>
> The addition of Unit 8 will result in a reduction in the amount of heavy oil stored at the Purdom facility. This is due to one of the existing heavy fuel oil storage tanks being converted from oil storage to water storage. Unit 8 will utilize diesel as its backup fuel. The existing diesel storage tank will be utilized for this backup fuel supply.

The City currently participates in the St. Marks Spill Co-op. This Co-op pools resources to protect the St. Marks River in the event of an oil spill. The City will continue to participate in this effort.

Thanks again for your interest in the Purdom Unit 8 Project. If you have further questions, please write to me at the following address or call the project voice mail at (904) 891-5585. You may also contact us via E mail at purdom8@sc.ci.tlh.fl.us.

City of Tallahassee Electric Department
2602 Jackson Bluff Road
Tallahassee, FL 32304

Sincerely,

Rob McGarrah
Project Manager

CITY OF TALLAHASSEE

CITY HALL
300 S. ADAMS ST.
TALLAHASSEE, FL
32301-1731
904/891-8100
TDD 1-800/955-8771

25 October 1996

The Honorable Charles Daggett
City of St. Marks
Post Office Box 296
St. Marks, FL 32355

Dear Commissioner Daggett:

Thank you for attending our recent open house on the proposed new natural gas-fired electric generating unit at the Purdom Generating Station in St. Marks. We appreciate your taking the time to come and find out about the project and tell us your concerns. Enclosed is a summary of the comments and questions we received from everyone who attended the open houses.

According to our records you had a question about water demand on the St. Marks water system. Here's what we were able to find out:

> Other than the drinking water for plant personnel, Unit 8 will require additional water from the St. Marks potable water system only during certain periods where Unit 8 is burning the diesel back-up fuel for extended periods of time. The maximum demand is approximately 80 GPM. During the development of the Unit 8 alternative, the Unit 8 project team provided this information to the engineering firm that is designing the City of St. Marks water system modifications.

Thanks again for your interest in the Purdom Unit 8 Project. If you have further questions, please write to me at the following address or call the project voice mail at (904) 891-5585. You may also contact us via E mail at purdom8@sc.ci.tlh.fl.us.

City of Tallahassee Electric Department
2602 Jackson Bluff Road
Tallahassee, FL 32304

Sincerely,

Rob McGarrah
Project Manager

CITY OF TALLAHASSEE

CITY HALL
300 S. ADAMS ST.
TALLAHASSEE, FL
32301-1731
904/891-8100
TDD 1-800/955-8771

RON WEAVER
Mayor
SCOTT MADDOX
Mayor Pro Tem

JOHN PAUL BAILEY
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STEVE MEISBURG
Commissioner

STEVEN C. BURKETT
City Manager
ROBERT B. INZER
City Treasurer-Clerk

JAMES R. ENGLISH
City Attorney
RICARDO FERNANDEZ
City Auditor

25 October 1996

Mr. Mike Reffitt
46 Big White Oaklane
Crawfordville, FL 32327

Dear Mr. Reffitt:

Thank you for attending our recent open house on the proposed new natural gas-fired electric generating unit at the Purdom Generating Station in St. Marks. We appreciate your taking the time to come and find out about the project and tell us your concerns. Enclosed is a summary of the comments and questions we received from everyone who attended the open houses.

According to our records you had a question about the existing EMF levels compared to reconductored EMF levels. Here's what we were able to find out:

> EMF is a function of the amount of current a transmission lines carries as well as the physical layout and height of the lines and the distance from the lines. In the case of the City's transmission lines, there are two types of structures used, H-frame and single pole, and varying right-of-way configurations. As a result the information outlined below is generic to the "typical" arrangement of each type of structure and the "typical" right-of-way. If there is a specific location that is of interest, a specific review of that location can be accomplished by the City. For reference purposes, the Florida standard on EMF requires that the EMF at the edge of the right-of-way be at or below 150 milligauss.
>
> Currently two of the three transmission lines utilize 4/0 copper wire. These lines will be upgraded with 477ACSR wire to accommodate the increased capacity at the Purdom facility. The 477ACSR wire has an increased current rating as compared to the 4/0 copper wire. Preliminary modeling has been conducted to determine the EMF values for the existing 4/0 copper, at its maximum current rating, and the 477ACSR, at its maximum current rating. This modeling has been conducted for both types of structures utilized in the City. The results of this preliminary modeling are outlined below:
>
> ☞ The EMF levels, both current and future, at the centerline of both types of structures are between 37% and 83% of the EMF limit at the edge of the right-of-way, which is the point at which the EMF standard applies.
>
> ☞ For a typical 100 foot right-of-way, with the structures at the center of the right-of-way, the EMF levels, both current and future, are between 6% and 17% of the EMF limit at the edge of the right-of-way.
>
> ☞ For a typical 100 foot right-of-way, with the structures at the center of the right-of-way, the worst case EMF level change from current to future is from 11% (current) to 17% (future) of the EMF limit at the edge of the right-of-way.

Thanks again for your interest in the Purdom Unit 8 Project. If you have further questions, please write to me at the following address or call the project voice mail at (904) 891-5585. You may also contact us via E mail at purdom8@sc.ci.tlh.fl.us.

City of Tallahassee Electric Department
2602 Jackson Bluff Road
Tallahassee, FL 32304

Sincerely,

Rob McGarrah
Project Manager

CITY OF TALLAHASSEE

CITY HALL
300 S. ADAMS ST.
TALLAHASSEE, FL
32301-1731
904/891-8100
TDD 1-800/955-8771

RON WEAVER
Mayor
SCOTT MADDOX
Mayor Pro Tem

JOHN PAUL BAILEY
Commissioner
DEBBIE LIGHTSEY
Commissioner
STEVE MEISBURG
Commissioner

STEVEN C. BURKETT
City Manager
ROBERT B. INZER
City Treasurer-Clerk

JAMES R. ENGLISH
City Attorney
RICARDO FERNANDEZ
City Auditor

25 October 1996

Mr. George Tillman
Post Office Box 386
St. Marks, FL 32355

Dear Mr. Tillman:

Thank you for attending our recent open house on the proposed new natural gas-fired electric generating unit at the Purdom Generating Station in St. Marks. We appreciate your taking the time to come and find out about the project and tell us your concerns. Enclosed is a summary of the comments and questions we received from everyone who attended the open houses.

According to our records you had a question about the noise level from Unit 8. Here's what we were able to find out:

The current U.S. Environmental Protection Agency noise guidelines provide for the annual average day/night noise levels to be at or below 55 dBa at the nearest residence. Unit 8 is being designed in a manner that the noise level from the Purdom site, during normal operations, will meet this level at the nearest residence. (This design is based on existing resident locations) It is important to note that there will be some abnormal operating conditions (start-ups, emergency trips, etc.) that will result in short term noise levels at or above the 55 dBa.

A noise study was completed for the Purdom facility in 1994. Based on actual test data, the facility average annual day/night noise level was below 55 dBa at the nearest residence. There were some short term noise levels that were above 55 dBa during the operation of the existing gas turbines. However, these short term levels did not exceed the 65 dBa which are generally acceptable during the day. Since the existing gas turbines are utilized for peaking and emergency conditions, they operate on an infrequent basis and rarely during nighttime periods. The future use of these gas turbines is not expected to change materially.

There have been no operational changes in the Purdom facility that would have resulted in additional noise being generated. The hoggers are utilized only during start-up of the units. The facility has installed silencers on these hoggers within the past 5 years to reduce their noise level. In order to reduce the noise associated with the existing plant PA system, the facility has increased the use of radios and reduced the number of external speakers that are in operation.

Thanks again for your interest in the Purdom Unit 8 Project. If you have further questions, please write to me at the following address or call the project voice mail at (904) 891-5585. You may also contact us via E mail at purdom8@sc.ci.tlh.fl.us.

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25 October 1996

Mr. John Cooksey
Post Office Box 5
Lloyd, FL 32337

Dear Mr. Cooksey:

Thank you for attending our recent open house on the proposed new natural gas-fired electric generating unit at the Purdom Generating Station in St. Marks. We appreciate your taking the time to come and find out about the project and tell us your concerns. Enclosed is a summary of the comments and questions we received from everyone who attended the open houses.

According to our records you had a question about where the nearest similar unit is located. Here's what we were able to find out:

> Within Florida, there are two locations where there are similar General Electric units. These are: Florida Power & Light's Martin plant located in Martin County near Indiantown and Florida Power Corporation's Polk County Power Plant located near Fort Meade, Florida.

Thanks again for your interest in the Purdom Unit 8 Project. If you have further questions, please write to me at the following address or call the project voice mail at (904) 891-5585. You may also contact us via E mail at purdom8@sc.ci.tlh.fl.us.

City of Tallahassee Electric Department
2602 Jackson Bluff Road
Tallahassee, FL 32304

Sincerely,

Rob McGarrah
Project Manager

10.7.3.3 Telephone and E-mail Inquiries

PURDOM UNIT 8
ANSWER LINE

CITY OF TALLAHASSEE

CITY OF TALLAHASSEE

FROM: Rob McGarrah, Purdom 8 Project Manager

TO: Cal Cameron
3115 O'brien Drive
Tallahassee, FL 32308

We appreciate your interest in the Purdom Unit 8 project. I hope that the answer provided below answers your question fully. If it does not, please call our answer line again at 891-5585.

QUESTION: Has the City reviewed the possibility of utilizing purchase power in lieu of expanding the City's facilities in an arrangement similar to what Portland Oregon recently entered into with LG&E.

ANSWER: The City continually looks at the economics of purchased power versus utilization and/or expansion of existing facilities. In the case of the proposed Purdom Unit 8 expansion, the City issued a request for proposals (RFP) in August of 1995 requesting proposals to meet our customers needs in the year 2000 and beyond. This RFP was structured such that external firms could provide proposals for purchased power, new generating facilities or a combination. An evaluation was conducted comparing these external proposals against the self-build alternatives. This evaluation found that the proposed expansion of the Purdom facility was the least cost method of meeting our customers needs. The Purdom Unit 8 expansion was evaluated to be 16%, or approximately $80 million (on a net present value basis for the 20 year planning period) less expensive than the next closest external proposal. An additional market test will be performed by the City just prior to the City Commission issuing the final notice to proceed for the procurement and construction activities for Purdom Unit 8 to begin.

I have also enclosed a copy of the project brochure as well as the background information from the permitting plan of study. These documents go into more detail about the project itself and the efficiencies the City's customers will benefit from.

PURDOM UNIT 8
ANSWER LINE

CITY OF TALLAHASSEE

CITY OF TALLAHASSEE

FROM: Rob McGarrah, Purdom 8 Project Manager

TO: W. L. Brubaker
3713 Foxford Circle
Tallahassee, FL 32308

We appreciate your interest in the Purdom Unit 8 project. I hope that the answer provided below answers your question fully. If it does not, please call our answer line again at 891-5585.

QUESTION: Please send me copies of your informational brochure on the planned expansion.

ANSWER: Enclosed you will find the Purdom Unit 8 project brochure. I have also enclosed a copy of the background information section of the permitting plan of study.

PURDOM UNIT 8
ANSWER LINE

CITY OF TALLAHASSEE

CITY OF TALLAHASSEE

FROM: Rob McGarrah, Purdom 8 Project Manager

TO: Jerry Harrington
128 Teal Lane
Tallahassee, FL 32308

We appreciate your interest in the Purdom Unit 8 project. I hope that the answer provided below answers your question fully. If it does not, please call our answer line again at 891-5585.

QUESTION: At least a percentage of solar power should be phased in over a period of time. If done incrementally consistent with budget constraints, power would be available at more reasonable prices and better for ecology in the long run.

ANSWER: Solar power is an end user technology and is dependent upon the owner of the occupant to install. It is for this reason that the City continues to support solar and other alternative energy technologies primarily as a part of the energy efficiency and conservation programs we have promoted over the past 10 years. One of these programs include the City's 5% loan program the City has offered since 1983 for customers who desire to make solar upgrades. In addition, the City is currently participating in a solar demonstration project where a number of homes and business have had solar upgrades installed and the performance and cost is being monitored.

PURDOM 8 CONTACT FORM

<table>
<tr><td>DATE: 9-9-96</td><td>TIME: am</td><td>LOCATION: Telephone</td></tr>
<tr><td colspan="2">COT PERSONNEL

Rob McGarrah</td><td>OTHERS:

Ray Boyette</td></tr>
<tr><td colspan="3">DISCUSSION: My Boyette had previously called into the voice mail line concerning whether the transmission line easement would be expanded. We responded with the information that it would not require expansion. He called again recently because he had received conflicting information that the easement was being surveyed for expansion.

I explained again that we were not planning on expanding the easement and reviewed the work to be completed. He was happy with this information.

During the course of the conversation, he indicated that he was going to build on his property adjacent to the easement in Wakulla County and planned on using a portion of the easement for his crushed stone driveway. He asked if there was a problem with this. I told him that I would pass this on to the appropriate person within our Utility.</td></tr>
<tr><td colspan="3">TO DO ITEMS:
Determine whether the use of the easement would be a problem.</td></tr>
</table>

PURDOM 8 CONTACT FORM

DATE: 9/16/96	TIME: 5:00 PM	LOCATION: Telephone
COT PERSONNEL Rob McGarrah		OTHERS: Martha Bell 5088 Tallow Point Road Tallahassee, FL 668-0452

DISCUSSION:

Ms. Bell had called the PP8 voice mail line and asked that someone call her to answer her questions.

Her first question was what were we doing? I explained the City's need and the IRP and RFP processes. I also explained how we had a self build team and an evaluation team and the separation we had set up. I explained how the PP8 project had been selected as the least cost best project and what it entailed. I also explained the PP8 team makeup and how the experience that was on the team.

Ms. Bell then asked who in the City had the knowledge and ability to make the decision on this. I explained the make up of the evaluation committee, the oversight committee, and the involvement of Stone & Webster as well as R. W. Beck.

She seemed to be comfortable with the process and the folks involved. She did ask where Stone & Webster and Beck were headquartered. I told her that I would have to get back to her on that.

Ms. Bell then went into a long discussion of problems she has encountered with her electric service (constant failure of major appliances like hot water heaters (4 have failed) and microwaves (3 have failed)), stormwater runoff, sewer service and water service. She indicated that she has talked to many people within the City, including Dan Kleman and Jim English, and those she talked to did not give her the right answer. She also indicated that she had a large electric bill this year while she was on vacation even through her power had been turned off. (She indicated that we had reduced her bill after she had called and complained) She expressed some concerns about someone stealing electricity from her.

I ended the call by telling her that I would pass on her concerns and someone would get back to her.

TO DO ITEMS:

Pass on Ms. Bell's concerns to energy services.

SUBSEQUENT TO THIS DICUSSION, WE HAVE BEEN ADVISED THAT ALL CONTACT WITH MS. BELL SHOULD BE REFRRED TO THE CITY ATTORNEY'S OFFICE FOR HANDLING.

PURDOM 8 CONTACT FORM

DATE: 10/2/96	TIME: 1330	LOCATION: Telcon
COT PERSONNEL Ben A. Cowart		**OTHERS:** Gail Kamaras, LEAF

DISCUSSION:

Received telephone from Gail Kamaras of Leaf. She wanted to come over and look through our files on Purdom Unit 8. She stated that this was a follow-up call to a request that she made earlier to Rob McGarrah. I told her to let me check with Rob and the Treasure Clerk's office to see if anything had been done on her request. I called her back to say that she needed to make a formal request to the T/C's office and to be specific in her request. I explained that the records are not kept in a central location. She stated that she was interested in looking at the gas pricing and the RFP on gas. I explained that the alternative submittal had the gas pricing and the gas RFP was performed by the fuels department. She stated that she was not interested in having a lot of copying done, she just wanted to look.

I told her that these records were easy to send to City Hall to keep her from coming out to Jackson Bluff. She stated that she would file the request and did not mind coming out.

She stated that she went to the Library to find the copy of the submittal, but the person at the reference desk had no knowledge of the book. I told her I would follow-up and see what happened to the book.

TO DO ITEMS:

Ben will contact Roger McDonald to pull together the gas RFP and results. I will forward my copy of the submittal to T/C office for the request.

Ben will follow-up on the Library copy.

PURDOM 8 CONTACT FORM

DATE: 10-15-96	TIME: 8:30 am	LOCATION: Phone
COT PERSONNEL Rob McGarrah		OTHERS: Kim Barfield -- 488-9169
DISCUSSION: Asked if there was a new power plant being built in Tallahassee. I explained the PP8 project. She then asked when employment applications would be taken and I told her that we would be using the standard City process for any employment opportunities associated with this project.		
TO DO ITEMS:		

PURDOM 8 CONTACT FORM

DATE: 11/5/96	TIME: 6:10 pm	LOCATION: Telephone
COT PERSONNEL Rob McGarrah		**OTHERS:** Cynthia Hollis 222-5869

Ms. Hollis called the PP8 voice mail line on 11/4/96 and asked for a call from us to discuss the project. I returned her call this evening. This is a recap of the conversation.

- **What type of generation is currently begin produced at the St. Marks facility?**
  I reviewed the existing natural gas fired steam and combustion turbine units as well as the combined-cycle design of the new unit. The focus was on the natural gas and enhanced efficiency.
- **What is the water usage and impacts from the plant?**
  I reviewed the once through and ground water usage for the existing facility. I also reviewed the PP8 enhancements including cooling towers, zero discharge facility, retirement of Units 5 & 6 and the reuse of existing discharges. She was pleased with this information
- **Has an environmental impact study been done concerning the hot water discharge impacts from the current facility on the river, especially during the cold months?**
  I reviewed that the existing facility permits are periodically renewed. During this renewal process, a review is made as to the facilities impacts and our compliance with all applicable requirements.
- **Can cooling towers be added to existing units to eliminate the heated discharge?**
  I explained that while technically feasible, the City's reliance on the existing units following PP8's commercial operation would decrease. This would result in additional reductions in water discharge.

Ms. Hollis thanked me for the information and ended the call.

TO DO ITEMS:

none

PURDOM 8 CONTACT FORM

DATE: 11/6/96	TIME: 1330	LOCATION: Telcon
COT PERSONNEL Ben A. Cowart		**OTHERS:** Hugh Williams Marpan Supply

DISCUSSION:

Mr. Williams is a former City of Tallahassee Commissioner, who served during the construction of Units 5,6 & 7. He has lived in St. Marks for the past 19 years and still owns Marpan Supply, a mill supply, in Tallahassee. He is very much in favor of the project and is offering any support that the City may required. This support is for both the Wakulla County/ St. Marks area and with the City of Tallahassee area.

He attended the open house in St. Marks and was impressed with the presentation.

Mr. Williams is a very pleasant talking gentleman and it was enjoyable to talk with him.

TO DO ITEMS:

Wants to have lunch with me, Rob and Kevin (or any combination) at Nick's Rest. (a local establishment with assigned seating for the regulars) any day between 12 and 2. This is his usual dinning spot.

PURDOM 8 CONTACT FORM

DATE: 11/25/96	TIME: 6:30 pm	LOCATION: Telephone
COT PERSONNEL Rob McGarrah		**OTHERS:** W. L. Brubaker

{Mr. Brubaker had previously called the answer line and requested information on the project. This information was mailed to him today.}

Mr. Brubaker called this afternoon and I returned his call. He started by saying that he had been watching CNBC today where there were discussions about the utility buy-outs that were going to go on in the country. He stated that he did not believe that we should be trying to get into the utility business when there were so many changes on the horizon. I explained that we were not "getting into" the utility business but that we had been in the electric utility business since 1902. I explained that we were the 4th largest municipal in Florida and the 2nd largest municipal system in the US.

He stated that we should just buy the electricity we needed from one of the large producers who would dominate the market. He say no reason for us to make the investment we were going to make when we could get the electricity without the investment. I reviewed the RFP process with Mr. Brubaker and explained that we had solicited offers for supplying the capacity we needed. I explained that he was correct that we could buy the capacity without making the investment, but that our customers would have to pay an additional 16% over the cost of the self-build alternative.

He asked how we stood with FP&L and other utilities on a wholesale basis. I told him that I did not have the numbers in front of me, but that we competed daily in the wholesale market and generally generated several million in revenues for our customers from this market. We also talked about fuel being the single biggest expense for a utility and that the efficiency of Unit 8 was 40% better thus allowing for a significant fuel cost reduction. I also explained that Unit 8 was the most efficient unit commercially available today.

Mr. Brubaker asked who made the decision on the plant. I explained that the City Commission made the ultimate decision. He was concerned that the City Commission did not have the knowledge to make such a decision. I reviewed the evaluation process, the involvement of Stone & Webster, and the Oversight Committee. I also explained the process review conducted by R. W. Beck and the Auditor. Mr. Brubaker did not feel the Auditor added to the process since he did not have detail knowledge of power generation. I also explained that we would have to go before the Public Service Commission as well as the financial community prior to the project receiving final approval. Mr. Brubaker indicated that the financial community would be easy since the project would be backed with taxes. I explained that the project would be financed with electric system revenue bonds and that these were not guaranteed with City taxes.

Mr. Brubaker asked how we could compete with the folks who were in the business of generating electricity. I explained the project team make-up and the teaming concept with Raytheon. I pointed out that Raytheon is the #2 EPC firm in the world and they brought their market presence to our project. I also explained the financial advantages we as a municipality brought to he table. (taxes, financing, profit, etc.)

He raised the issue of retail wheeling and the potential loss of customers. I explained that the evaluation team tested for this in the evaluation. I pointed out that if we were to lose some of our major customers, that we would be able to retire older less efficient units and reduce our costs. He suggested that we go ahead and let these customers go now to reduce our costs. I pointed out that we would also lose the revenue, and the general fund transfer opportunities, if we were to lose these customers and that this would result in reduced service levels within the City.

As we ended the call, I asked Mr. Brubaker to review the materials I had sent him and asked him to call us back if he had additional questions. I told him that while we realized that we would not convince all of our customers that we were doing the right thing, we did want to take every opportunity to answer our customers questions.

TO DO ITEMS:

NONE

PURDOM 8 CONTACT FORM

DATE: 12/05/96	TIME: 1300	LOCATION: Telcon
COT PERSONNEL Ben Cowart		OTHERS: David Zimmer 3886 Paddrick Road Tallahassee, Fl 32308 893-1809

DISCUSSION:

Mr. Zimmer originally called into the System Planning Group with questions about the PP8 project. Joe Ging took the call, then forwarded him to me. Mr. Zimmer stated that he follows futures and the market and found that electrical energy began trading on Monday, 12/1 at $11.25/MW or approx. 1 1/12/kW. He wanted to know how could we possibly compete against those prices and why did we not look to purchase the power instead of building. I explained that when we conducted our energy and capacity RFP, it was designed to test the market for the best available prices. I explained about our partnership with Raytheon and their market presence. I then explained that a company could be offering energy at the prices quoted on the market but once you added wheeling charges, the price could double. I then had to explain about wheeling charges and how systems are monitored for energy flow, system demand and sales.

He then asked me to explain in further detail the sales aspect. I told him that the City, like other utilities has a system broker that can on an hourly basis make sales and purchases for energy. I told him that it could be very possible that the City is buying this $11.25/MW energy, but again when the transportation charges are added, the cost is not that low. Once he understood that we act like the market he was happy and his concerns went away. He stated that no further follow-up would be required.

We then got into a discussion about our electric rates and the "taxes" that are added on top of our energy and capacity charges. It might be good if someone followed up with him that can better explain our rate system. (He did say that the follow-up was not necessary).

He ended the conversation by stating that he originally planned to write a "Butt Blistering" letter to the editor about the City and the project, but decided to try to talk to someone for some answers first. He stated that he would not be writing the letter.

TO DO ITEMS:

Consider writing him a letter thanking him for getting the facts first before he wrote his letter.

Follow-up with him on the rate structure and make-up.