

MAIN COOLING RESERVOIR
and
ESSENTIAL COOLING POND
PERFORMANCE DURING AND AFTER FILLING

HOUSTON LIGHTING & POWER COMPANY

DECEMBER 1992

TABLE OF CONTENTS

	<u>Page</u>
1.0 PURPOSE OF REPORT	1
2.0 SITE RESERVOIR MONITORING AND INSPECTION	1
3.0 RESERVOIR DESCRIPTION	1
3.1 Main Cooling Reservoir	1
<u>Site Geology</u>	1
<u>Reservoir Description</u>	1
<u>Embankment and Training Dikes</u>	2
<u>Spillway</u>	2
<u>Reservoir Blow-down</u>	2
<u>Reservoir Make-up and Discharge Structure</u>	3
<u>Circulating Water Intake</u>	3
<u>Circulating Water Discharge</u>	3
<u>Seepage Control</u>	3
3.2 Essential Cooling Pond	4
<u>ECP Description</u>	4
<u>Embankment and Training Dikes</u>	4
<u>Circulating Water Intake and Discharge Structure</u>	5
<u>Seepage Control</u>	5
<u>Design Assumptions</u>	5
4.0 FIRST TIME FILLING	5
4.1 Main Cooling Reservoir	5
<u>Incremental Filling</u>	5
<u>+28 Foot Pool Elevation</u>	6
<u>+35 Foot Pool Elevation</u>	6
<u>+40 Foot Pool Elevation</u>	7
<u>+45 Foot Pool Elevation</u>	7
<u>Reservoir Operating Level</u>	7
4.2 Essential Cooling Pond	8
5.0 RESERVOIR PERFORMANCE DURING AND AFTER FILLING	8
5.1 Main Cooling Reservoir	8
<u>Embankment</u>	8
<u>Embankment Deformation Measurements</u>	8
<u>Embankment Slope Failures</u>	9
<u>Erosion Protection</u>	9

TABLE OF CONTENTS (Continued)

<u>Underseepage Control</u>	10
<u>Piezometer Levels</u>	10
<u>Relief Wells</u>	10
<u>Sand Drains</u>	11
<u>Seepage Filters</u>	11
<u>Spillway and Stilling Basin</u>	11
<u>Seepage Gradient</u>	12
<u>Uplift Pressures</u>	12
<u>Circulating Water Intake Structure</u>	12
 5.2 Essential Cooling Pond	 12
<u>Embankment and Training Dikes</u>	12
<u>ECP Piezometers</u>	13
<u>Erosion Protection</u>	13
<u>Seepage Evaluation</u>	13
<u>Sediment Accumulation</u>	13
<u>Circulating Water Intake and Discharge Structures</u>	13
 6.0 CONCLUSION	 14
 6.1 Main Cooling Reservoir	 14
<u>Underseepage Control</u>	14
<u>Embankment Adjacent to the Plant</u>	14
<u>Appurtenant MCR Structures</u>	14
<u>Reservoir Maintenance</u>	15
<u>Reservoir Operating Level</u>	15
 6.2 Essential Cooling Pond	 15
<u>Embankment and Training Dikes</u>	15
<u>Seepage Measurements</u>	15
<u>ECP Volume Change</u>	15
<u>Circulating Water Structures</u>	15
 Tables and Figures	
Relief Well	Tables 1 thru.-34
MCR Piezometer Profiles	Figures 1 thru.-34
MCR Well Line Piezometer Stations	Figures 35 thru.-69
ECP Piezometers	Figure 70
MCR Inclinometers	Figures 71 thru.-82

1.0 PURPOSE OF REPORT

The purpose of this report is to document the performance of the Main Cooling Reservoir (MCR) and the Essential Cooling Pond (ECP) after the initial filling of both reservoirs to their normal operating levels. This report contains a description of the reservoir monitoring organization, a description of the reservoirs, a summary of the filling operations, an evaluation of observations both during filling and after operating pool elevations were reached, and concluding remarks on the general condition of both reservoirs.

This report is intended to meet the requirements of the South Texas Project SER supplement 2 section 2.5.7, UFSAR section 2.5.6.10 and letter ST-HL-AE-2572, dated March 15, 1988. Although the referenced commitments describe the maximum pool level of +49 feet MSL as the completion criteria for the MCR, plans to test the reservoir at this level have been changed. There are currently no plans to raise the pool elevation above the +45 foot MSL operating level as discussed in section 4.1 of this report.

2.0 SITE ORGANIZATION FOR RESERVOIR MONITORING AND INSPECTION

In accordance with South Texas Project SER Supplement 4 Section 2.5.7 a geotechnical engineer supervises monitoring and inspection of both reservoirs. The geotechnical engineer is supported by a reservoir inspector and a two-man survey crew to assist in monitoring reservoir instrumentation.

The MCR is inspected daily. The ECP is inspected in accordance with Regulatory Guide (RG) 1.127. In addition, embankment and pertinent structure elevations, piezometer levels and relief well flows are measured and recorded as per SER Appendix J Table 1. Monitoring information is stored on a computer database. Reservoir monitoring data is periodically plotted and reviewed.

3.0 RESERVOIR DESCRIPTION

3.1 Main Cooling Reservoir

Site Geology: The near-surface soils at the South Texas Project site belong to the Beaumont formation which is the youngest Pleistocene deposit of the Quaternary coastal plain. The formation in the area of the MCR generally consist of discontinuous interfingering beds that grade laterally in short distances from clays to sands.

Reservoir Description: The MCR is an above-ground reservoir covering about 7000 acres. At the normal operating pool elevation of +45 feet MSL, the reservoir contains about

175,000 acre-feet of water.

Embankment and Training Dikes: The embankment forming the reservoir is 65,507 feet in length with a crest elevation of about +66 MSL feet which is 40 to 50 feet above the ground surface elevation. The interior embankment slope is 2.5:1 and the exterior slope is 3.0:1. The embankment is made of compacted clay with a sand core.

The 10-ft. wide sand core extends from the ground surface to elevation +50 feet MSL. The purpose of the sand core is to prevent piping through the embankment itself. The sand core will act as a filter for any material washed from the upstream half of the embankment. The sand core has no drainage except at isolated locations where a drained horizontal sand blanket intercepts the core. Horizontal sand drainage blankets were installed at three locations where the shallow aquifer does not extend to the relief well line. The sand drainage blankets are to intercept seepage resulting from high uplift pressures under the embankment.

There is a berm at the exterior base of the embankment with a crest elevation of about +35 feet MSL and a width of 33 ft. to 48 ft. The berm provides additional slope stability and effectively increases the seepage path in the foundation soils. An interior berm is present over most of the length of the embankment. The interior berm is 20 ft. wide and provides additional stability.

Erosion protection of the interior slope is a 2.5-ft. thick layer of soil-cement. Grass is used for erosion protection on the exterior embankment slope and berm.

Water circulation within the reservoir is controlled by a series of training dikes. The dikes have a crest elevation of +52 feet MSL with side slopes of 2.5:1 and a 2.5 ft. thick layer of soil-cement for erosion protection.

Spillway: The MCR spillway is located in the south-east corner of the reservoir. Since the only uncontrolled filling of the reservoir is through precipitation, the spillway is relatively small. The spillway is a reinforced concrete structure consisting of an approach channel, four 9.5-ft. tall by 6-ft. wide sliding gates, a spillway chute with a top elevation of +40-foot MSL, a stilling basin, and a discharge channel leading to the Colorado River. Except for an accidental opening of one spillway gate, the spillway has not been used. The stilling basin and the spillway discharge channel have been modified as discussed below. Their basic functions remain unchanged.

Reservoir Blow-down: The blow-down entrance is built into the

south wall of the spillway approach channel. The system consists of a gate with a +29-foot MSL base elevation and a 78-in. diameter pipe leading to seven 3-ft. diameter exit ports located south of the spillway discharge channel on the west bank of the Colorado River. The blow-down system allows circulation of reservoir water to prevent an excessive accumulation of salt in a closed basin. The concentration of salts in the reservoir increased dramatically during the filling from +28 feet MSL to +35 feet MSL. At that time there were no restrictions on make-up water quality. Since then, strict water chemistry requirements have been imposed and the reservoir water quality has steadily improved. The blow-down system has not been used to-date. With a steady reservoir pool elevation, use of the blow-down system will be used to maintain water chemistry standards probably beginning in 1994.

Reservoir Make-up and Discharge Structure: The Reservoir Make-up Pumping Facility (RMPF) is located on the west bank of the Colorado River about one mile upstream from the spillway discharge channel exit. The pumping facility consists of a rotating filter screen structure, forebay and eight pump bays. The RMPF has four 240 cfs pumps and four 60 cfs pumps for a total capacity of 1200 cfs. Water is pumped to the reservoir through two 108-in. diameter pipes exiting at the reservoir discharge structure located at the north-east corner of the reservoir.

The reservoir make-up discharge structure is a reinforced concrete chute with energy dissipators and a submerged rip-rap lined channel.

Circulating Water Intake: The circulating water intake structure is built inside the reservoir embankment opposite the power block on the east side of the north-central training dike. The structure includes a rotating screen filter system and eight (four for each unit) 226,850 gpm pumps. Each pump is connected to a 96-in. diameter pipe. The pipes are supported on columns between the intake structure and the embankment. The 96-in diameter pipes converge into four 108-in. diameter pipes at the outside base of the embankment.

Circulating Water Discharge: The circulating water discharge structure is located just south-west of the power block and west of the north-central training dike. The system consists of four 108-in. diameter pipes leading to a siphon/energy dissipation structure and a rip-rap lined discharge channel.

Seepage Control: Seepage and excess hydrostatic pressure in near surface sand layers are partially controlled by relief wells surrounding the reservoir. The relief wells discharge into the Plant Area Drainage Ditch (PADD) along the north-east side of the reservoir, Relocated Little Robins Slough (RLRS)

along the west side of the reservoir and into concrete-lined collector ditches along the east, south and north-west sides of the reservoir. Relief wells intercept only a fraction of the seepage. A significant amount of seepage flows directly into relief well drainage ditches that surround the reservoir. For this reason, most ditches have some type of filter lining to prevent sand boils from developing.

The effect of the reservoir on hydrostatic pressure in the near surface aquifers and the efficiency of the relief wells in controlling uplift pressures are measured with piezometers at locations around the reservoir. Piezometers are located at the embankment crest, at the top of the outside berm, along the toe of the embankment and along the crest of the relief well drainage ditches.

3.2 Essential Cooling Pond

ECP Description: The ECP is an excavated pond covering about 46.5 acres at the normal operating pool elevation of +25.5 feet MSL to +26.0 feet MSL. Natural grade in the area is about +25 feet MSL. The pond is 8.5 to 9 feet deep depending on the pool elevation. When full, the ECP contains about 388 acre-feet of water. Water make-up is either from the MCR or well water. MCR water was used for the first filling. Replacement water is primarily well water to improve water quality. Excess water is pumped from the ECP into the MCR. There is no spillway.

Embankment and Training Dikes: Unlike the MCR, the ECP is an excavated reservoir. The perimeter embankment is designed to protect the pond from potential flooding caused by the failure of the MCR embankment or flooding due to the failure of dams on the Colorado River. The surrounding embankment is rolled clay with reinforced concrete erosion protection over the category 1 area of the ECP (south half) and a 1.25-ft. thick layer of soil-cement erosion protection over the remaining portion of the embankment. The embankment has a crest elevation of +34 feet MSL and interior and exterior side slopes of 3:1. The excavated portion of the pond has side slopes of 5:1 and soil-cement erosion protection. The embankment is separated from the pond by a 30-ft wide berm at elevation +26 feet MSL.

Water in the ECP circulates around a centralized training dike. The training dike has a crest elevation of +38 feet MSL. Erosion protection is reinforced concrete. The dike is separated from the pond by a 30-ft. wide berm at elevation +26 feet MSL. The dike side slopes are 3:1. The side slope of the excavated portion of the dike is 5:1. Soil-cement provides erosion protection on the dike berm and the excavated

portion of the dike.

Circulating Water Intake and Discharge Structure: The circulating water intake structure includes a rotating screen filter system and six (three for each unit) pump bays. Water is pumped from the pond through 30-in. diameter pipes to the units. The discharge structure is simply a reinforced concrete funnel. Water is discharged above the pond level through six 30-in diameter pipelines.

Seepage Control: Seepage from the ECP is minimal due to the low permeability of the natural soils and compacted clay backfill. Any silty or sandy material encountered during construction was excavated to a depth of 2 feet below design grade and backfilled with compacted clay. Sandy soil was encountered over the east half of the bottom of the ECP excavation. The bottom was over-excavated 2 feet and filled to design grade with compacted clay.

Design Assumptions: A seepage rate of no more than 1.2 cfs is part of the design criteria for the ECP. Seepage in excess of this value along with anticipated evaporative losses would deplete the water in the pond before cool-down of the units is complete under emergency conditions and assuming no make-up to the pond. Actual ECP seepage losses are measured once every five years to verify compliance with this design criteria.

In addition to the seepage criteria described above, the initial volume of water stored in the ECP is critical to the safe shutdown of the plant. The minimum ECP storage capacity is 95% of the design capacity. The required volume of water is maintained by keeping the water level between +25.5 and +26 feet MSL.

Sediment accumulating in the pond will also affect the water storage capacity. The ECP bottom elevation is measured annually to quantify sediment accumulation.

4.0 FIRST TIME FILLING

4.1 Main Cooling Reservoir

Incremental Filling: The soil that supports the reservoir embankment has not been completely characterized. This is due to the extreme length of the embankment, the inability of soil borings to detect every detail of the stratigraphy, and the complex nature of the local geology. Since the foundation configuration is a critical part of the design of a water retaining structure, the incremental fill and observe approach was adopted for the first reservoir filling. Prior to filling

the reservoir, the underseepage control system was constructed to handle all anticipated flow conditions under the embankment. Unexpected conditions observed during reservoir filling were corrected prior to initiating the next increment of filling.

+28 Foot Pool Elevation: Filling began in July, 1983 and stopped November, 1984 at a reservoir pool elevation of +28 feet MSL. The most significant modification at this pool elevation was the change in the circulating pipe penetrations through the embankment. The original design and construction was to bury the pipes in the embankment. However, leaks in the circulating pipes could have degraded the stability of the embankment through underground erosion and by locally elevating the water table. Therefore, instead of penetrating the embankment, the circulating water pipes are now exposed and run over the embankment in concrete saddles. Other work included relief well repairs and replacement.

+35 Foot Pool Elevation: Between August and November, 1985, the reservoir pool elevation was raised from +28 feet MSL to +35 feet MSL.

At this pool elevation, sand boils were noticed in the PADD, RLRS, the east side concrete drainage ditch, and the Spillway Discharge Channel. Sand boils were eliminated at the above locations by placing various types of filter materials in the ditch and spillway channel inverts. The filters consist of filter fabric in areas where little seepage is anticipated to graded granular filters where significant seepage is expected. Rock was placed over the filter materials to prevent erosion.

Chronic seepage into some areas of the embankment toe ditches was also observed. The toe ditches lie between the embankment and the relief well drainage ditches. To eliminate this surface seepage, the toe ditches on the north side east of the units, at the north east corner, and along the west side have been partially filled with sand. Some of the filled ditches have a perforated pipe drain located at the original bottom of the ditch. These ditches were intended to channel rainwater to lateral ditches leading to the PADD, RLRS or lead directly to the concrete collector ditch along the east side of the reservoir. At reaches where drainage is not required, the ditches were completely filled. In areas where drainage is required, enough of the ditch was left to accomplish the design function.

Where the natural clay layer in the relief well drainage ditch invert was thin (five feet or less), sand drains were installed to intercept seepage. These are 6-in. diameter holes drilled on 5-ft. centers through the clay and backfilled with poorly graded fine to coarse sand. Flow measurements

taken in the PADD and the east and south concrete lined drainage ditches indicated a significant increase in seepage flow after installation of the sand drains.

Additional piezometers and relief wells were added as required to measure and control hydrostatic uplift pressures. To improve relief well performance, some of the new wells along RLRS were placed at the outside toe of the embankment and connected to a header pipe that drains into RLRS.

The elevations of the outfalls of all the relief wells surrounding the spillway stilling basin were originally constructed too high. Although these wells were designed to intercept seepage into the stilling basin, they never operated in their original configuration. The well connections to the outfall pipes were lowered to a level just above the level of the stilling basin pond and connected to a header pipe emptying into the stilling basin. These wells are now operating.

Hydrostatic pressures increased significantly between the reservoir and Kelly Lake with a corresponding increase in relief well flows in this area. The original relief wells were drilled next to the drainage ditch between the reservoir and Kelly Lake some 60 ft. away from the embankment toe. New relief wells were installed at the embankment toe. These wells intercept seepage closer to the source and more effectively reduce the uplift pressure.

+40 Foot Pool Elevation: Between March and April 1988, the reservoir pond level was raised to elevation +40 feet MSL. Additional sand boils were observed at the edge of some concrete relief well splash pads in RLRS and the PADD. The affected splash pads were removed and the filter application in the ditch was extended to cover the area.

+45 Foot Pool Elevation: From January 1989 through June 1990, the reservoir level was raised to +45 feet MSL. Additional sand boils were noted at the edge of several relief well pads in RLRS. As before, the pads were removed and filter material placed to eliminate the sand boils.

In 1991, the stilling basin was filled with sand to improve inspectability in this area.

Reservoir Operating Level: In order to optimize reservoir conditions with respect to safety, operability, and water chemistry, a study was undertaken to evaluate reservoir conditions at various operating levels. Completed in 1992, the conclusion was to operate the reservoir at a pool elevation of +45 feet MSL. This will provide sufficient storage capacity to support operations through conditions of

the drought of record, will not adversely impact water chemistry, and will provide an extra margin of safety by operating at a level below the maximum operating level of +49 feet MSL. There are currently no plans to raise the reservoir pool level above +45 feet MSL.

4.2 Essential Cooling Pond

Construction on the ECP was formally completed in March, 1980 when the reservoir was inspected and cleared for filling. Prior to filling the pond, a second inspection of Civil/Structural features was completed in April, 1982. Since the reservoir was not filled to the operating level until August, 1985, a supplementary prefilling inspection was conducted in July, 1985. The first annual inspection after filling was conducted in July, 1986. Since the initial filling, the ECP has been inspected annually in accordance with RG 1.127.

5.0 RESERVOIR PERFORMANCE DURING AND AFTER FILLING

5.1 Main Cooling Reservoir

Embankment: A complete history of embankment settlement and consolidation of embankment materials has not been calculated. Although embankment elevations have been monitored since the beginning of construction, several different control points were used. Since there are no signs of unexpected total or differential settlement based on current surveys and observations, embankment elevation measurements have not been converted to a common datum. Currently, the survey control for the embankment level loop is the same control point used for monitoring other plant facilities. Use of this control point started in 1989. Embankment construction was completed in 1979. Measurements since 1989 indicate a slight settlement of 1 in. to 2 in. through 1992.

Embankment Deformation Measurements: Inclinerometers were installed in the embankment at four locations along the south side of the reservoir. The south side of the reservoir was selected because it is the highest section of the embankment. There are three inclinometers at each location to evaluate lateral movements of the inner slope, the outer slope, and the crest of the embankment (figures 71 through 82). Inclinerometer readings began in 1983. There is no record of embankment deformations between the end of construction in 1979 and the first inclinometer readings.

All of the inside slope inclinometers recorded surface movements of less than an inch in a northerly direction,

toward the reservoir. The crest and outside slope inclinometers recorded surface movements up to 2.5 inches toward the south, away from the reservoir. The depth of significant disturbance, greater than half an inch, is confined to the upper 10 feet in all cases. Reversals in movement trends over the three years shown on the figures may be due to instrument damage by mowing equipment.

The greater movement on the outside slope is most likely due to seasonal moisture changes and corresponding changes in soil volume. The crest inclinometers are also affected by soil volume changes and, as expected, moved toward the slope with the greatest deformation. Although the inside slope is steeper than the outside slope, the inside slope experienced less movement probably because the soil-cement covering prevents significant changes in the soil moisture content. The soil-cement may also provide some structural support for the inside slope.

Embankment Slope Failures: Except for three incidents of shallow slides on the outer slope (embankment stations 16, 20, and 435), inclinometer measurements and observation over the entire embankment reveal no significant deformations. All three slides were repaired soon after they appeared. The slides are most likely a result of weakened surface soils caused by cyclic changes in moisture content and associated soil volume changes. As the soil dries, cracks are formed that inevitably fill to some extent with loose material. When the soil is rehydrated it expands and the cracks close. If the cracks are partially filled, the expanding soil block will move laterally creating a weakened zone at the base of the block.

Erosion Protection: The embankment is protected from erosion by soil-cement on the inside slope and grass on the outside slope. The training dikes are covered with soil-cement. The embankment and dike surfaces are inspected at least annually for signs of erosion.

The soil-cement has minor spalling and frequent lateral cracking. There have been no observed defects that affect the function of the soil-cement. There is currently no noticeable damage to the soil-cement as a result of wave action. Based on these observations, the soil-cement should provide erosion protection for the life of the plant without major repairs.

The grass on the embankment outer slope effectively protects the soil from erosion. The grass is mowed regularly to maintain inspectability, prevent large plants with deep root systems from becoming established and to eliminate shade that inhibits grass growth. The only problems encountered with grass are isolated incidents of wild pigs rooting on the

embankment slope. These areas have been regraded and replanted. There is an ongoing trapping program to control the site pig population.

Underseepage Control: There are currently 428 reservoir piezometers used to evaluate the effect of the reservoir on adjacent near-surface permeable zones. The ground water level just outside the reservoir embankment is a function of the ground surface elevation, recent precipitation, proximity to the effective reservoir seepage entrance, and the reservoir pool elevation. Piezometer readings were used during the first reservoir filling to evaluate the effectiveness of the relief well system. At several locations, additional relief wells were installed to reduce hydrostatic pressures. Piezometers continue to be monitored to evaluate the performance of the relief wells and as an early indication of potential changes in seepage patterns.

Piezometer Levels: Piezometer data are displayed on figures 1 through 69. In addition to the piezometric levels, the reservoir pool elevation is plotted to show the changes in the water table compared with changes in the reservoir pool elevation. Figures 1 through 34 are traverses of three to four piezometers aligned at right angles to the embankment axis and at varying distances from the reservoir. As shown on the plots, the piezometric level fluctuates with the reservoir pool elevation to varying degrees depending on the distance from the piezometer to the reservoir.

In addition to piezometers in the shallow aquifer, each of the 34 traverses includes a piezometer in the embankment sand core. The sand core is only drained in three locations or only at about 10% of the length of the embankment. At the drained locations, the piezometric level in the sand core is relatively low. Where the sand core is undrained, piezometric levels above the reservoir pool elevation were recorded during reservoir filling. As shown on the plots, the water level in the sand core is stable and not affected by changes in the reservoir pool elevation.

Although the origin of the high water table in the sand core is not understood, its existence demonstrates the water retention capabilities of both the upstream and downstream sides of the embankment.

Figures 35 through 69 are plots of the piezometers at the crest of the relief well drainage ditches surrounding the reservoir. The water table near the drainage ditches is of particular interest because the ditches are often the closest seepage exits.

Relief Wells: There are 774 relief wells around the reservoir.

Recent measured relief well flows are recorded on tables 1 through 34. The purpose of the relief wells is to lower uplift pressures and intercept seepage. The relief well flow rates vary from 0 gpm to 25 gpm depending on the local hydraulic gradient and the permeability of the aquifer. The flow rates are measured to evaluate changes in flow that indicate clogging of the well screen or changes in flow patterns.

Relief well flow rates have generally increased as the reservoir pool elevation increased. The relief wells adjacent to the plant are not flowing because the water table is just below the elevation of the well outflow pipe.

Sand Drains: In addition to the relief wells, sand drains have been installed in the ditch bottoms of the PADD, and the concrete-lined ditches on the east and south sides of the reservoir. The drains were installed where the clay layer was five feet thick or less. The drains are designed to lower uplift pressures where the confining clay layer was relatively thin and to intercept seepage. Measurements of ditch flow and relief well flow before and after installation of the sand drains indicate an increase in ditch flow and a decrease in relief well flow. Piezometric levels adjacent to the ditches also decreased.

Seepage Filters: Except for two short sections of the drainage ditch system at the northeast and northwest corners of the MCR, all ditches incorporate some form of filter blanket. The two sections of ditch that do not have any drainage protection are in areas with thick surface clay layers and no apparent seepage. The filters are either graded granular material or filter fabric. The filter application was necessary to prevent the formation of sand boils. Some sand boils still occur in high seepage flow areas either through filter defects or through gaps between the filter material and relief well splash pads. Sand boils in these areas have been eliminated with remedial measures such as increasing the thickness of filter materials or removal of the concrete splash pads.

Spillway and Stilling Basin: The spillway structure is in good condition. Recent modifications to the spillway system include filling the stilling basin with sand and adding a filter and erosion protection to a portion of the spillway discharge channel.

The spillway discharge channel was an area of active sand boils. To eliminate this problem, the bottom and sides of the first 750 feet of the channel were over excavated, backfilled with sand, filter material, and a final layer of rip-rap. This modification eliminated the sand boils and provides erosion protection.

The spillway stilling basin is designed to dissipate the kinetic energy of water flowing down the spillway chute. The stilling basin is lined with a graded granular filter and rip-rap to protect the filter material from erosion. Since the water in the stilling basin was 14 feet deep, the effectiveness of the liner material could not be verified by inspection. Filling the stilling basin with sand increases the flow path from the reservoir to the exit point and allows access to the area by the reservoir inspector. Seepage of 75 gpm was recorded before filling the stilling basin with sand. Seepage of only a few gpm continues on both sides of the stilling basin.

The stilling basin still functions as an energy dissipator. During operation of the emergency spillway the sand filling the basin will be eroded down to the original rip-rap basin lining. Use of the spillway is not anticipated under the present reservoir operating plan.

Seepage Gradient: The seepage gradient was measured at 34 locations around the reservoir where there are three to four piezometers in a line normal to the embankment axis. The seepage gradient around the reservoir is generally between 1% to 2.5%. There are, however, three locations with seepage gradients as high as 8%. Sand and clay borrow pits within the confines of the embankment were not permitted within 800 feet of the embankment centerline. This restriction was to preserve the natural surface clay lining to the extent that lateral head loss from an exposed sand layer in the borrow area would equal the vertical head loss through the surface clay at the inside embankment toe. A permeable layer is probably exposed near the embankment at the three locations with high seepage gradients. The seepage exits at all three areas are monitored closely.

Uplift Pressures: Factors of safety against uplift pressures remain at or below 1.5 at a reservoir pool elevation of +45 feet MSL. In addition to the safety factor, the ditches where the safety factors are the lowest are provided with filters and sand drains.

Circulating Water Intake Structure: Settlement measurements on the intake structure began in 1977. To date, the structure has settled about 0.4 feet on the north side closest to the embankment and about 0.3 feet on the south side.

5.2 Essential Cooling Pond

Embankment and Training Dike: ECP settlement data was first collected in 1979. The survey monuments are located on the inside berm. Measurements to-date indicate a range from

almost no movement to about 0.1 ft. of heave. The heave is probably a combination of expansion of the soil due to increased moisture content as a result of a localized high water table and stress relief due to the excavation of the ECP pond.

ECP Piezometers: The water table elevation around the ECP ranges from about +18 feet MSL to +24 feet MSL. The lower piezometric level closer to the plant is due to the relatively low water table in the category 1 backfill. The piezometer level history is shown on figure 70. Also plotted is the MCR pool elevation. There is a slight correlation with the fluctuation of the MCR reservoir level and ECP piezometer readings.

Erosion Protection: The annual ECP inspections have revealed nothing that would affect or limit the performance of the ECP. Although, cracks in the soil-cement are common, none of the cracks impact the erosion protection function of the soil-cement. The reinforced concrete panels, especially the lower panels, have longitudinal cracks. These cracks are not open and do not affect the erosion protection provided by the reinforced concrete slab.

Seepage Evaluation: ECP seepage evaluation began in 1986. The first seepage measurement was a water balance study. Precipitation, evaporation, make-up, and blow-down quantities were measured. The remaining unaccountable change in volume was attributed to seepage. Measured seepage was 0.3 cubic feet/second (cfs). The design maximum seepage loss is 1.2 cfs.

Seepage measurements remain a continuing commitment. Every five years, a simplified water balance study is conducted. The simplified water balance includes measurements of precipitation and decline in reservoir pool elevation. Make-up and blow-down are not permitted during the evaluation. Evaporative losses are conservatively attributed to seepage loss. The 1990 simplified seepage evaluation revealed a measured water loss rate of 0.975 cfs. Since the total water loss rate was less than the design seepage rate, there is no need to separate seepage and evaporation rates.

Sediment Accumulation: The bottom elevation of the pond is measured annually along five traverses. The measurements are compared with the design elevations to determine the amount of sediment accumulation or scour. To date, there is no significant sedimentation or scour. The capacity of the ECP is essentially at the design value.

Circulating Water Intake and Discharge Structures: ECP intake structure movements through the first quarter of 1992 range

from just over 0.3 inches on the north and west sides to a slight heave of about 0.1 inches on the south and east sides. This produces a tilt of about 0.4 of an inch. The allowable tilt is 0.75 inches.

The discharge structure has settled as much as 0.26 inches on the north and west sides and as little as 0.04 inches on the south side. The maximum tilt across the structure is 0.22 inches. The allowable tilt is again, 0.75 inches.

6.0 CONCLUSION

6.1 Main Cooling Reservoir:

Underseepage Control: During the MCR design phase, underseepage control was recognized as a major element. Two options were considered for controlling seepage and uplift forces. The first option was to construct a positive cutoff wall in the form of a slurry trench that would encircle the reservoir and effectively block the shallow aquifers under the embankment. The second option was to control underseepage by intercepting seepage flow with relief wells. Relief wells were selected as the most cost effective solution. The wells provide pressure relief as well as an engineered seepage exit. Inherent with the relief well approach in a complex geological setting is the need for inspections and modifications during first time filling and over the life of the reservoir.

Although at the end of the reservoir construction phase the relief well system was in place to handle expected seepage conditions at the maximum design reservoir pool level of +49 feet. MSL, significant modifications were required during filling to control unexpected sand boils and uplift pressures. The current good condition of the reservoir and underseepage system demonstrates the effectiveness of the inspection and modification program. The MCR should provide a safe reliable source of cooling water over the life of the plant with the continued use of the inspection program.

Embankment Adjacent to the Plant: Except for shallow embankment slides at stations 16 and 18, there have been no problems with the embankment or underseepage control system adjacent to the plant. This is most likely due to the concentrated attention to this reach of the embankment during the design phase, closely spaced relief wells, and the site grade generally slopes to the south making the reservoir about 8 feet deeper on the south side.

Appurtenant MCR Structures: The circulating water intake and discharge structures, the make-up water discharge structure, and the spillway are all in good condition. The concrete

structures exhibit some cracking, however, these cracks were noted in the preimpoundment report. There is no observable degradation of these facilities.

Reservoir Maintenance: Maintenance on the outside embankment, drainage ditches and the spillway discharge channel is consistent with operating and inspection requirements. The grass from the embankment crest to just past the outside edge of the reservoir drainage ditches is well maintained. All of the drainage ditches and the spillway discharge channel are routinely cleared of weeds to allow flow and inspection of the ditch bottoms.

Reservoir Operating Level: The plan to operate the reservoir at a pool elevation of +45 feet MSL is designed to provide optimum operational flexibility and safety. There are currently no plans to artificially raise the reservoir pool level above +45 feet MSL.

6.2 Essential Cooling Pond:

Embankment and Training Dikes: The embankment and training dikes are in good condition. Minor cracking in the soil-cement and reinforced concrete do not affect erosion protection. There is no significant settlement or deformations of either the embankment or training dikes.

Seepage Measurements: ECP seepage rates are measured every five years to verify design limits on the rate of water loss. The first seepage measurement separated seepage losses and evaporative losses. The results of that measurement was a seepage rate of 0.30 CFS. Subsequent simplified water balance studies attribute all water loss to seepage. The first simplified study was conducted in 1990. The measured water loss was 0.975 cfs. The simplified water balance method will be used to evaluate seepage losses as long as the total water loss is less than the design maximum seepage loss rate. If future measurements reveal a water loss greater than the maximum allowable seepage rate of 1.2 cfs, evaporative losses will be considered.

ECP Volume Change: Sediment accumulation is measured in the ECP annually. To date, there has been no measurable accumulation of sediment in the ECP. The current pond volume is essentially the original design volume.

Circulating Water Structures: The concrete on both the intake and discharge structures are in good condition. Measured settlement and heave of the structures are within allowable differential movements.

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
Page of
Effective Date:

ATTACHMENT OEP-10.03-03
DATA PACKAGE READING REPORT

Sheet 1 of _____

Instrument Type 7: Relief Well

Location Level MD: MCR/Relief Well Line

Package No.: R200

Page 23 of 56

Printed: 05/06/92

KST
6-24-92

Date	INSTRUMENT ID:					CURRENT READING:			INITIAL READING:			LAST READING:		
	No.	Series	Lev	Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/19/92	W1	-01	MD	1.	0+ 0	0.00	C		08/25/89	0.00	0.00	05/17/91	0.00	0.00
02/19/92	W1A	-01	MD	2.	0+50	0.00	C		08/25/89	0.00	0.00	05/17/91	0.00	0.00
02/19/92	W1B	-01	MD	3.	1+ 0	0.00	C		08/25/89	0.00	0.00	05/17/91	0.00	0.00
02/19/92	W1C	-01	MD	4.	1+50	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W2	-01	MD	5.	1+90	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W1D	-01	MD	6.	2+ 0	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W2AA	-01	MD	7.	2+10	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W2B	-01	MD	8.	2+25	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W2A	-01	MD	9.	2+50	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W2C	-01	MD	10.	3+98	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W3	-01	MD	11.	4+ 0	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W3AA	-01	MD	12.	4+50	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W3A	-01	MD	13.	4+75	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W3D	-01	MD	14.	4+95	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W3B	-01	MD	15.	5+ 0	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W3C	-01	MD	16.	5+45	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W3E	-01	MD	17.	5+50	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W4	-01	MD	18.	6+ 0	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W4A	-01	MD	19.	6+50	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W4B	-01	MD	20.	7+ 0	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W4C	-01	MD	21.	7+50	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W5	-01	MD	22.	8+ 0	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W5A	-01	MD	23.	8+50	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00

NOTE: 1. -0- indicates no data available.
2. Reference: -0-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
Page of
Effective Date:

ATTACHMENT OEP-10.03-03
DATA PACKAGE READING REPORT

Sheet 2 of _____

Instrument Type 7: Relief Well

Location Level MD: MCR/Relief Well Line

Package No.: R200

Page 56 of 56

Printed: 05/06/92

6-24-92

Date	INSTRUMENT ID:				CURRENT READING:			INITIAL READING:			LAST READING:		
	No.	Series	Lev Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/19/92	W5AA	-01	MD 24.	9+70	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W5B	-01	MD 25.	9+90	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W6	-01	MD 26.	10+ 0	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W6AA	-01	MD 27.	10+21	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W6A	-01	MD 28.	10+42	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W6D	-01	MD 29.	10+61	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W6B	-01	MD 30.	11+21	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W6C	-01	MD 31.	11+50	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W7	-01	MD 32.	12+ 0	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W7D	-01	MD 33.	12+45	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W7A	-01	MD 34.	12+50	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W7B	-01	MD 35.	13+ 0	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W7C	-01	MD 36.	13+50	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W7E	-01	MD 37.	13+60	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W8	-01	MD 38.	14+ 0	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W9	-01	MD 39.	16+73	0.20	C		-0-	-0-	-0-	05/17/91	0.80	-0.60
02/19/92	W10	-01	MD 40.	18+ 0	7.50	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W11	-01	MD 41.	20+ 0	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W12	-01	MD 42.	22+ 0	0.10	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W12-1	-01	MD 43.	22+ 6	0.20	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W13	-01	MD 44.	24+ 0	0.30	C		-0-	-0-	-0-	05/17/91	0.30	0.00
02/19/92	W14	-01	MD 45.	26+ 0	0.20	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W15	-01	MD 46.	32+ 0	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-

NOTE: 1. -0- indicates no data available.
2. Reference: -0-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION Geotechnical Monitoring Activities Database	Number: OEP-10.03	Rev.No.
	Page of	
	Effective Date:	

ATTACHMENT OEP-10.03-03
 DATA PACKAGE READING REPORT

Sheet 3 of _____

Instrument Type 7: Relief Well

Location Level MD: MCR/Relief Well Line

Package No.: R200

Page 25 of 56

Printed: 05/06/92

6-24-92

Date	INSTRUMENT ID:				CURRENT READING:			INITIAL READING:			LAST READING:		
	No.	Series	Lev Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/19/92	W16	-01	MD 47.	33+50	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W17	-01	MD 48.	35+0	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W18	-01	MD 49.	36+0	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W19	-01	MD 50.	36+0	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W20	-01	MD 51.	37+60	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W21	-01	MD 52.	38+40	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W22	-01	MD 53.	39+20	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W23	-01	MD 54.	40+0	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W24	-01	MD 55.	40+80	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W25	-01	MD 56.	41+60	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W26	-01	MD 57.	42+40	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W27	-01	MD 58.	43+20	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W28	-01	MD 59.	44+0	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W29	-01	MD 60.	44+80	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W30	-01	MD 61.	45+60	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W31	-01	MD 62.	46+40	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W32	-01	MD 63.	47+0	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W33	-01	MD 64.	47+60	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W34	-01	MD 65.	48+20	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W35	-01	MD 66.	48+80	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W36	-01	MD 67.	49+40	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W37	-01	MD 68.	50+0	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W38	-01	MD 69.	50+60	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-

NOTE: 1. -0- indicates no data available.
 2. Reference: -0-

Observer _____

Geotechnical Technician/Checker _____

TABLE 3

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
Page of
Effective Date:

ATTACHMENT OEP-10.03-03
DATA PACKAGE READING REPORT

Sheet 4 of _____

Instrument Type 7: Relief Well

Location Level MD: MCR/Relief Well Line

Package No.: R200

Page 24 of 56

Printed: 05/06/92

657
6-29-92

Date	INSTRUMENT ID:				CURRENT READING:			INITIAL READING:			LAST READING:		
	No.	Series	Lev Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/19/92	W39	-01	MD 70.	51+20	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W40	-01	MD 71.	51+80	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W41	-01	MD 72.	52+30	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W42	-01	MD 73.	52+90	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W43	-01	MD 74.	53+50	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W44	-01	MD 75.	54+10	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W45	-01	MD 76.	54+70	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W46	-01	MD 77.	55+30	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W47	-01	MD 78.	55+90	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W48	-01	MD 79.	56+50	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W49	-01	MD 80.	57+20	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W50	-01	MD 81.	57+90	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W51	-01	MD 82.	58+60	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W52	-01	MD 83.	59+30	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W53	-01	MD 84.	60+ 0	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W54	-01	MD 85.	60+70	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W55	-01	MD 86.	61+40	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W56	-01	MD 87.	62+10	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W57	-01	MD 88.	62+80	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W58	-01	MD 89.	63+50	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W59	-01	MD 90.	64+20	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W60	-01	MD 91.	64+90	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W61	-01	MD 92.	65+60	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-

NOTE: 1. -0- indicates no data available.
2. Reference: -0-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
Page of
Effective Date:

ATTACHMENT OEP-10.03-03
DATA PACKAGE READING REPORT

Sheet 5 of _____

Instrument Type 7: Relief Well

Location Level MD: MCR/Relief Well Line

Package No.: A300

Page 27 of 56

Printed: 05/06/92

EST
6-24-92

Date	INSTRUMENT ID:				CURRENT READING:			INITIAL READING:			LAST READING:		
	No.	Series	Lev Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/19/92	W62	-01	MD 93.	66+30	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W63	-01	MD 94.	67+ 0	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W64	-01	MD 95.	67+70	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W65	-01	MD 96.	68+40	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W66	-01	MD 97.	69+10	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W67	-01	MD 98.	69+80	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W68	-01	MD 99.	70+50	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W69	-01	MD 100.	71+20	2.30	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W70	-01	MD 101.	71+90	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W71	-01	MD 102.	72+60	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W72	-01	MD 103.	73+30	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W73	-01	MD 104.	74+ 0	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W74	-01	MD 105.	74+70	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W75	-01	MD 106.	75+40	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W76	-01	MD 107.	76+10	0.20	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W77	-01	MD 108.	76+80	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W78	-01	MD 109.	77+50	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W79	-01	MD 110.	78+20	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W80	-01	MD 111.	78+90	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W81	-01	MD 112.	79+60	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W82	-01	MD 113.	80+30	4.70	C		-0-	-0-	-0-	05/17/91	5.60	-0.90
02/28/92	W83	-01	MD 114.	81+ 0	3.80	C		-0-	-0-	-0-	05/17/91	0.20	3.60
02/28/92	W84	-01	MD 115.	81+70	1.30	C		-0-	-0-	-0-	05/17/91	-0-	-0-

NOTE: 1. -0- indicates no data available.
2. Reference: -0-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
Page of
Effective Date:

ATTACHMENT OEP-10.03-03
DATA PACKAGE READING REPORT

Sheet 6 of _____

Instrument Type 7: Relief Well

Location Level MD: MCR/Relief Well Line

Package No.: A200

Page 28 of 56

Printed: 05/06/92

EST
6-24-92

Date	INSTRUMENT ID:				CURRENT READING:			INITIAL READING:			LAST READING:		
	No.	Series	Lev Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/28/92	W85	-01	MD 116.	82+40	1.30	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W86	-01	MD 117.	83+10	0.50	C		-0-	-0-	-0-	05/17/91	0.40	0.10
02/28/92	W87	-01	MD 118.	83+80	0.30	C		-0-	-0-	-0-	05/17/91	0.60	-0.30
02/28/92	W88	-01	MD 119.	84+50	0.50	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W89	-01	MD 120.	85+20	0.80	C		-0-	-0-	-0-	05/17/91	0.40	0.40
02/28/92	W90	-01	MD 121.	86+40	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W91	-01	MD 122.	87+60	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W92	-01	MD 123.	88+80	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W93	-01	MD 124.	90+ 0	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W94	-01	MD 125.	91+20	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W94-1	-01	MD 126.	91+26	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W95	-01	MD 127.	92+40	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W96	-01	MD 128.	93+60	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W97	-01	MD 129.	94+20	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W98	-01	MD 130.	94+80	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W99	-01	MD 131.	95+40	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W99A	-01	MD 132.	95+65	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W100	-01	MD 133.	96+ 0	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W101	-01	MD 134.	96+40	0.20	C		-0-	-0-	-0-	05/17/91	0.10	0.10
02/28/92	W102	-01	MD 135.	96+80	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	0.10	-0-
02/28/92	W102A	-01	MD 136.	97+ 0	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W103	-01	MD 137.	97+20	0.10	C		-0-	-0-	-0-	05/17/91	0.30	-0.20
02/28/92	W104	-01	MD 138.	97+60	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-

NOTE: 1. -0- indicates no data available.
2. Reference: -0-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev. No.
Page of
Effective Date:

ATTACHMENT OEP-10.03-03
DATA PACKAGE READING REPORT

Sheet 7 of _____

Instrument Type 7: Relief Well

Location Level MD: MCR/Relief Well Line

Package No.: R200

Page 29 of 56

Printed: 05/06/92

6-24-92

Date	INSTRUMENT ID:				CURRENT READING:			INITIAL READING:			LAST READING:		
	No.	Series	Lev Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/28/92	W105	-01	MD 139.	98+ 0	0.30	C		-0-	-0-	-0-	05/17/91	0.40	-0.10
02/28/92	W106	-01	MD 140.	98+40	0.20	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W107	-01	MD 141.	98+80	0.10	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W108	-01	MD 142.	99+20	0.10	C		-0-	-0-	-0-	05/17/91	0.10	0.00
02/28/92	W109	-01	MD 143.	99+60	0.10	C		-0-	-0-	-0-	05/17/91	0.20	-0.10
02/28/92	W110	-01	MD 144.	100+ 0	0.20	C		-0-	-0-	-0-	05/17/91	0.30	-0.10
02/28/92	W111	-01	MD 145.	100+40	0.20	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W112	-01	MD 146.	100+80	0.10	C		-0-	-0-	-0-	05/17/91	0.20	-0.10
02/28/92	W113	-01	MD 147.	101+20	0.10	C		-0-	-0-	-0-	05/17/91	0.10	0.00
02/28/92	W114	-01	MD 148.	101+60	0.20	C		-0-	-0-	-0-	05/17/91	0.10	0.10
02/28/92	W115	-01	MD 149.	102+ 0	0.10	C		-0-	-0-	-0-	05/17/91	0.10	0.00
02/28/92	W116	-01	MD 150.	102+40	0.10	C		-0-	-0-	-0-	05/17/91	0.30	-0.20
02/28/92	W117	-01	MD 151.	102+80	0.20	C		-0-	-0-	-0-	05/17/91	0.10	0.10
02/28/92	W118	-01	MD 152.	103+20	0.10	C		-0-	-0-	-0-	05/17/91	0.10	0.00
02/28/92	W119	-01	MD 153.	103+60	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/28/92	W119A-G-01		MD 154.	103+65	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	75.00	-0-
02/28/92	W120	-01	MD 155.	104+ 0	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/28/92	W121	-01	MD 156.	104+80	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/28/92	W122	-01	MD 157.	106+ 0	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/19/92	W123	-01	MD 158.	108+ 0	0.20	C		-0-	-0-	-0-	05/17/91	0.20	0.00
02/19/92	W124	-01	MD 159.	123+30	0.10	C		-0-	-0-	-0-	05/17/91	0.20	-0.10
02/19/92	W125	-01	MD 160.	125+ 0	0.20	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W138	-01	MD 161.	162+ 0	0.10	C		-0-	-0-	-0-	05/17/91	0.20	-0.10

NOTE: 1. -0- indicates no data available.
2. Reference: -0-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
Page of
Effective Date:

ATTACHMENT OEP-10.03-03
DATA PACKAGE READING REPORT

Sheet 8 of _____

Instrument Type 7: Relief Well

Location Level MD: MCR/Relief Well Line

Package No.: A200

Page 30 of 56

Printed: 05/06/92

*EST
6.24.92*

Date	INSTRUMENT ID:			CURRENT READING:			INITIAL READING:			LAST READING:		
	No. Series	Lev Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/19/92	W138A -01	MD 162.	162+70	0.30	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W139 -01	MD 163.	164+ 0	0.20	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W139A -01	MD 16.	154+40	0.80	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W140-1 -01	MD 165.	165+44	0.30	C		-0-	-0-	-0-	05/17/91	0.40	-0.10
02/19/92	W140 -01	MD 166.	165+50	0.10	C		-0-	-0-	-0-	05/17/91	0.20	-0.10
02/19/92	W141 -01	MD 167.	166+40	0.50	C		-0-	-0-	-0-	05/17/91	0.50	0.00
02/19/92	W142 -01	MD 168.	167+30	0.60	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W143 -01	MD 169.	168+20	1.00	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/19/92	W144 -01	MD 170.	169+10	1.10	C		-0-	-0-	-0-	05/17/91	0.80	0.30
02/28/92	W145 -01	MD 171.	170+ 0	0.80	C		-0-	-0-	-0-	05/17/91	0.80	0.00
02/28/92	W146 -01	MD 172.	170+90	1.00	C		-0-	-0-	-0-	05/17/91	0.90	0.10
02/28/92	W147 -01	MD 173.	171+80	0.70	C		-0-	-0-	-0-	05/17/91	0.80	-0.10
02/28/92	W148 -01	MD 174.	172+70	0.50	C		-0-	-0-	-0-	05/17/91	0.60	-0.10
02/28/92	W149 -01	MD 175.	173+60	0.30	C		-0-	-0-	-0-	05/17/91	0.30	0.00
02/28/92	W150 -01	MD 176.	174+50	0.20	C		-0-	-0-	-0-	05/17/91	0.50	-0.30
02/28/92	W151 -01	MD 177.	175+40	0.40	C		-0-	-0-	-0-	05/17/91	0.60	-0.20
02/28/92	W152 -01	MD 178.	176+30	0.10	C		-0-	-0-	-0-	05/17/91	0.30	-0.20
02/28/92	W153 -01	MD 179.	177+ 0	0.10	C		-0-	-0-	-0-	05/17/91	0.20	-0.10
02/28/92	W154-1 -01	MD 180.	177+44	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/28/92	W154 -01	MD 181.	177+50	0.10	C		-0-	-0-	-0-	05/17/91	0.10	0.00
02/28/92	W155-1 -01	MD 182.	177+94	0.10	C		-0-	-0-	-0-	05/17/91	0.10	0.00
02/28/92	W155 -01	MD 183.	178+ 0	0.10	C		-0-	-0-	-0-	05/17/91	0.10	0.00
02/28/92	W156-1 -01	MD 184.	178+44	0.10	C		-0-	-0-	-0-	05/17/91	0.10	0.00

NOTE: 1. -0- indicates no data available.
2. Reference: -0-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
Page of
Effective Date:

ATTACHMENT OEP-10.03-03
DATA PACKAGE READING REPORT

Sheet 9 of _____

Instrument Type 7: Relief Well

Location Level MD: MCR/Relief Well Line

Package No.: R200

Page 36 of 56

Printed: 05/06/92

EST
6-24-92

Date	INSTRUMENT ID:			CURRENT READING:			INITIAL READING:			LAST READING:		
	No. Series	Lev Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/28/92	W156	-01	MD 185. 178+50	0.00	C		-0-	-0-	-0-	05/17/91	0.10	-0.10
02/28/92	W157	-01	MD 186. 179+ 0	0.10	C		-0-	-0-	-0-	05/17/91	0.10	0.00
02/28/92	W158-1	-01	MD 187. 179+44	0.10	C		-0-	-0-	-0-	05/17/91	0.00	0.10
02/28/92	W158	-01	MD 188. 179+50	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/28/92	W159-1	-01	MD 189. 179+94	0.10	C		-0-	-0-	-0-	05/17/91	0.10	0.00
02/28/92	W159	-01	MD 190. 180+ 0	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	0.10	-0-
02/28/92	W160-1	-01	MD 191. 180+44	0.70	C		-0-	-0-	-0-	05/17/91	0.20	0.50
02/28/92	W160	-01	MD 192. 180+50	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W161	-01	MD 193. 181+ 0	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	0.20	-0-
02/28/92	W162	-01	MD 194. 181+50	0.10	C		-0-	-0-	-0-	05/17/91	0.30	-0.20
02/28/92	W163	-01	MD 195. 182+ 0	0.60	C		-0-	-0-	-0-	05/17/91	0.60	0.00
02/28/92	W164	-01	MD 196. 182+50	0.50	C		-0-	-0-	-0-	05/17/91	0.40	0.10
02/28/92	W165	-01	MD 197. 183+ 0	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	0.40	-0-
02/28/92	W166	-01	MD 198. 183+50	0.30	C		-0-	-0-	-0-	05/17/91	0.40	-0.10
02/28/92	W167	-01	MD 199. 184+ 0	0.70	C		-0-	-0-	-0-	05/17/91	0.60	0.10
02/28/92	W168	-01	MD 200. 184+50	0.80	C		-0-	-0-	-0-	05/17/91	0.50	0.30
02/28/92	W169	-01	MD 201. 185+ 0	0.20	C		-0-	-0-	-0-	05/17/91	0.30	-0.10
02/28/92	W170	-01	MD 202. 185+50	0.70	C		-0-	-0-	-0-	05/17/91	1.00	-0.30
02/28/92	W171	-01	MD 203. 186+40	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	0.50	-0-
02/28/92	W172	-01	MD 204. 187+30	0.30	C		-0-	-0-	-0-	05/17/91	0.50	-0.20
02/28/92	W173	-01	MD 205. 188+20	0.10	C		-0-	-0-	-0-	05/17/91	0.20	-0.10
02/28/92	W174	-01	MD 206. 189+10	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/28/92	W174-1	-01	MD 207. 189+16	0.10	C		-0-	-0-	-0-	05/17/91	0.20	-0.10

NOTE: 1. -0- indicates no data available.
2. Reference: -0-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
 Page of
 Effective Date:

ATTACHMENT OEP-10.03-03
 DATA PACKAGE READING REPORT

Sheet 10 of _____

Instrument Type 7: Relief Well

Location Level MD: MCR/Relief Well Line

Package No.: R200

Page 72 of 56

Printed: 05/06/92

6-24-92

Date	INSTRUMENT ID:				CURRENT READING:			INITIAL READING:			LAST READING:		
	No.	Series	Lev Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/28/92	W175	-01	MD 208.	190+ 0	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	0.20	-0-
02/28/92	W176	-01	MD 209.	190+90	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	0.00	-0-
02/28/92	W177	-01	MD 210.	191+80	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W177-1	-01	MD 211.	191+86	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/28/92	W178	-01	MD 212.	192+70	0.00	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W179	-01	MD 213.	193+60	0.10	C		-0-	-0-	-0-	05/17/91	0.10	0.00
02/28/92	W180	-01	MD 214.	194+50	0.10	C		-0-	-0-	-0-	05/17/91	0.10	0.00
02/28/92	W181	-01	MD 215.	195+40	0.10	C		-0-	-0-	-0-	05/17/91	0.10	0.00
02/28/92	W182	-01	MD 216.	196+ 0	0.10	C		-0-	-0-	-0-	05/17/91	0.10	0.00
02/28/92	W183	-01	MD 217.	196+40	0.10	C		-0-	-0-	-0-	05/17/91	0.10	0.00
02/28/92	W184	-01	MD 218.	196+80	0.10	C		-0-	-0-	-0-	05/17/91	0.10	0.00
02/28/92	W185	-01	MD 219.	197+20	0.10	C		-0-	-0-	-0-	05/17/91	0.30	-0.20
02/28/92	W186	-01	MD 220.	197+60	0.20	C		-0-	-0-	-0-	05/17/91	0.20	0.00
02/28/92	W187	-01	MD 221.	198+ 0	0.10	C		-0-	-0-	-0-	05/17/91	0.10	0.00
02/28/92	W188	-01	MD 222.	198+40	0.10	C		-0-	-0-	-0-	05/17/91	0.10	0.00
02/28/92	W188A	-01	MD 223.	198+55	0.10	C		-0-	-0-	-0-	05/17/91	0.10	0.00
02/28/92	W189	-01	MD 224.	198+80	0.10	C		-0-	-0-	-0-	05/17/91	0.10	0.00
02/28/92	W190	-01	MD 225.	199+20	0.10	C		-0-	-0-	-0-	05/17/91	0.10	0.00
02/28/92	W191	-01	MD 226.	199+60	0.10	C		-0-	-0-	-0-	05/17/91	0.20	-0.10
02/28/92	W192	-01	MD 227.	200+ 0	0.10	C		-0-	-0-	-0-	05/17/91	0.10	0.00
02/28/92	W193	-01	MD 228.	200+40	0.10	C		-0-	-0-	-0-	05/17/91	0.10	0.00
02/28/92	W194	-01	MD 229.	200+80	0.10	C		-0-	-0-	-0-	05/17/91	0.20	-0.10
02/28/92	W195	-01	MD 230.	201+20	1.00	C		-0-	-0-	-0-	05/17/91	0.50	0.50

NOTE: 1. -0- indicates no data available.
 2. Reference: -0-

Observer

Geotechnical Technician/Checker

TABLE 10

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
Page of
Effective Date:

ATTACHMENT OEP-10.03-03
DATA PACKAGE READING REPORT

Package No.: R200

Page 33 of 56

Printed: 05/06/92

Sheet 11 of _____

Instrument Type 7: Relief Well

Location Level MD: MCR/Relief Well Line

Date	INSTRUMENT ID:				CURRENT READING:			INITIAL READING:			LAST READING:		
	No.	Series	Lev Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/28/92	W196	-01	MD 231.	201+60	0.70	C		-0-	-0-	-0-	05/17/91	0.70	0.00
02/28/92	W197	-01	MD 232.	202+ 0	1.30	C		-0-	-0-	-0-	05/17/91	1.30	0.00
02/28/92	W198	-01	MD 233.	202+40	1.50	C		-0-	-0-	-0-	05/17/91	1.00	0.50
02/28/92	W199	-01	MD 234.	202+80	2.30	C		-0-	-0-	-0-	05/17/91	1.30	1.00
02/28/92	W200	-01	MD 235.	203+20	2.30	C		-0-	-0-	-0-	05/17/91	1.30	1.00
02/28/92	W201	-01	MD 236.	203+60	1.00	C		-0-	-0-	-0-	05/17/91	1.00	0.00
02/28/92	W202	-01	MD 237.	204+ 0	2.80	C		-0-	-0-	-0-	05/17/91	2.30	0.50
02/28/92	W203	-01	MD 238.	204+40	3.30	C		-0-	-0-	-0-	05/17/91	1.80	1.50
02/28/92	W204	-01	MD 239.	204+80	2.30	C		-0-	-0-	-0-	05/17/91	2.30	0.00
02/28/92	W205	-01	MD 240.	205+20	2.80	C		-0-	-0-	-0-	05/17/91	2.30	0.50
02/28/92	W206	-01	MD 241.	205+60	-0-	-0	DAMAGED	-0-	-0-	-0-	05/17/91	2.30	-0-
02/28/92	W207	-01	MD 242.	206+ 0	3.80	C		-0-	-0-	-0-	05/17/91	2.00	1.80
02/28/92	W208	-01	MD 243.	206+40	2.80	C		-0-	-0-	-0-	05/17/91	1.80	1.00
02/28/92	W209	-01	MD 244.	206+80	2.30	C		-0-	-0-	-0-	05/17/91	2.00	0.30
02/28/92	W210	-01	MD 245.	207+20	1.50	C		-0-	-0-	-0-	05/17/91	1.80	-0.30
02/28/92	W211	-01	MD 246.	207+60	2.00	C		-0-	-0-	-0-	05/17/91	2.00	0.80
02/28/92	W212	-01	MD 247.	208+ 0	1.90	C		-0-	-0-	-0-	05/17/91	1.80	0.10
02/28/92	W213	-01	MD 248.	208+40	2.30	C		-0-	-0-	-0-	05/17/91	2.80	-0.50
02/28/92	W214	-01	MD 249.	208+80	1.90	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W215	-01	MD 250.	209+20	2.80	C		-0-	-0-	-0-	05/17/91	1.30	1.50
02/28/92	W216	-01	MD 251.	209+60	1.50	C		-0-	-0-	-0-	05/17/91	1.30	0.20
02/28/92	W217	-01	MD 252.	210+ 0	3.30	C		-0-	-0-	-0-	05/17/91	1.80	1.50
02/28/92	W218	-01	MD 253.	210+40	2.30	C		-0-	-0-	-0-	05/17/91	2.00	0.30

NOTE: 1. -0- indicates no data available.
2. Reference: -0-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
Page of
Effective Date:

ATTACHMENT OEP-10.03-03
DATA PACKAGE READING REPORT

Sheet 12 of _____

Instrument Type 7: Relief Well

Location Level MD: MCR/Relief Well Line

Package No.: R200

Page 34 of 56

Printed: 05/06/92

6-24-92

Date	INSTRUMENT ID:				CURRENT READING:			INITIAL READING:			LAST READING:		
	No.	Series	Lev Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/28/92	W219	-01	MD 254.	210+80	2.30	C		-0-	-0-	-0-	05/17/91	2.00	0.30
02/28/92	W220	-01	MD 255.	211+20	3.30	C		-0-	-0-	-0-	05/17/91	2.30	1.00
02/28/92	W221	-01	MD 256.	211+60	0.10	C		-0-	-0-	-0-	05/17/91	0.20	-0.10
02/28/92	W222	-01	MD 257.	212+ 0	2.80	C		-0-	-0-	-0-	05/17/91	2.30	0.50
02/28/92	W223	-01	MD 258.	212+40	1.90	C		-0-	-0-	-0-	05/17/91	1.30	0.60
02/28/92	W224	-01	MD 259.	212+80	3.30	C		-0-	-0-	-0-	05/17/91	1.80	1.50
02/28/92	W225	-01	MD 260.	213+20	0.10	C		-0-	-0-	-0-	05/17/91	0.30	-0.20
02/28/92	W225A	-01	MD 261.	213+40	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W226	-01	MD 262.	213+60	0.90	C		-0-	-0-	-0-	05/17/91	1.00	-0.10
02/28/92	W227	-01	MD 263.	214+ 0	1.90	C		-0-	-0-	-0-	05/17/91	2.00	-0.10
02/28/92	W228	-01	MD 264.	214+40	2.80	C		-0-	-0-	-0-	05/17/91	1.80	1.00
02/28/92	W229	-01	MD 265.	214+80	3.30	C		-0-	-0-	-0-	05/17/91	2.30	1.00
02/28/92	W230	-01	MD 266.	215+20	0.20	C		-0-	-0-	-0-	05/17/91	0.60	-0.40
02/28/92	W231	-01	MD 267.	215+60	1.90	C		-0-	-0-	-0-	05/17/91	2.00	-0.10
02/28/92	W232	-01	MD 268.	216+ 0	1.50	C		-0-	-0-	-0-	05/17/91	1.30	0.20
02/28/92	W233	-01	MD 269.	216+40	0.70	C		-0-	-0-	-0-	05/17/91	1.00	-0.30
02/28/92	W234	-01	MD 270.	216+80	0.80	C		-0-	-0-	-0-	05/17/91	0.80	0.00
02/28/92	W235	-01	MD 271.	217+20	0.60	C		-0-	-0-	-0-	05/17/91	1.00	-0.40
02/28/92	W236	-01	MD 272.	217+60	3.80	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W237	-01	MD 273.	218+ 0	0.60	C		-0-	-0-	-0-	05/17/91	0.80	-0.20
02/28/92	W238	-01	MD 274.	218+40	0.50	C		-0-	-0-	-0-	05/17/91	1.30	-0.80
02/28/92	W239	-01	MD 275.	218+80	2.80	C		-0-	-0-	-0-	05/17/91	1.30	1.50
02/28/92	W240	-01	MD 276.	219+20	1.90	C		-0-	-0-	-0-	05/17/91	0.80	1.10

NOTE: 1. -0- indicates no data available.
2. Reference: -0-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
Page of
Effective Date:

ATTACHMENT OEP-10.03-03
DATA PACKAGE READING REPORT

Sheet 13 of _____

Instrument Type 7: Relief Well

Location Level MD: MCR/Relief Well Line

Package No.: R200

Page 35 of 56

Printed: 05/06/92

EST
6-24-92

Date	INSTRUMENT ID:				CURRENT READING:			INITIAL READING:			LAST READING:		
	No.	Series	Lev Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/28/92	W241	-01	MD 277.	219+60	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/28/92	W242	-01	MD 278.	220+ 0	1.90	C		-0-	-0-	-0-	05/17/91	1.30	0.60
02/28/92	W243	-01	MD 279.	220+40	0.10	C		-0-	-0-	-0-	05/17/91	0.30	-0.20
02/28/92	W244	-01	MD 280.	220+69	0.20	C		-0-	-0-	-0-	05/17/91	0.50	-0.30
02/28/92	W245	-01	MD 281.	220+98	0.20	C		-0-	-0-	-0-	05/17/91	0.50	-0.30
02/28/92	W246	-01	MD 282.	221+27	0.60	C		-0-	-0-	-0-	05/17/91	0.60	0.00
02/28/92	W247	-01	MD 283.	221+68	0.10	C		-0-	-0-	-0-	05/17/91	0.40	-0.30
02/28/92	W248	-01	MD 284.	221+85	0.20	C		-0-	-0-	-0-	05/17/91	0.20	0.00
02/28/92	W249	-01	MD 285.	222+14	0.10	C		-0-	-0-	-0-	05/17/91	0.30	-0.20
02/28/92	W250	-01	MD 286.	222+43	0.10	C		-0-	-0-	-0-	05/17/91	0.10	0.00
02/28/92	W251	-01	MD 287.	222+72	0.10	C		-0-	-0-	-0-	05/17/91	0.20	-0.10
02/28/92	W252	-01	MD 288.	223+ 1	0.20	C		-0-	-0-	-0-	05/17/91	0.30	-0.10
02/28/92	W253	-01	MD 289.	223+30	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/28/92	W254	-01	MD 290.	223+59	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/28/92	W255	-01	MD 291.	223+88	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/28/92	W256	-01	MD 292.	224+17	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/28/92	W257	-01	MD 293.	224+45	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/28/92	W258	-01	MD 294.	224+69	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00
02/28/92	W259	-01	MD 295.	224+92	20.60	C	W259 - W263	-0-	-0-	-0-	05/17/91	8.40	12.20
02/28/92	W260	-01	MD 296.	225+15	-0-	-0	SEE W259	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W261	-01	MD 297.	225+36	-0-	-0	SEE W259	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W262	-01	MD 298.	225+59	-0-	-0	SEE W259	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W263	-01	MD 299.	225+81	-0-	-0	SEE W259	-0-	-0-	-0-	05/17/91	-0-	-0-

NOTE: 1. -0- indicates no data available.
2. Reference: -0-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
Page of
Effective Date:

ATTACHMENT OEP-10.03-03
DATA PACKAGE READING REPORT

Sheet 14 of _____

Instrument Type 7: Relief Well

Location Level MD: MCR/Relief Well Line

Package No.: R292

Page 36 of 56

Printed: 05/06/92

W27
6-24-92

Date	INSTRUMENT ID:				CURRENT READING:			INITIAL READING:			LAST READING:			
	No.	Series	Lev Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change	
02/28/92	W264	-01	MD 300.	226+15	17.80	C	W264 - W268	-0-	-0-	-0-	05/17/91	7.00	10.80	04
02/28/92	W265	-01	MD 301.	226+41	-0-	-0	SEE W264	-0-	-0-	-0-	05/17/91	-0-	-0-	
02/28/92	W266	-01	MD 302.	226+59	-0-	-0	SEE W264	-0-	-0-	-0-	05/17/91	-0-	-0-	
02/28/92	W267	-01	MD 303.	226+75	-0-	-0	SEE W264	-0-	-0-	-0-	05/17/91	-0-	-0-	
02/28/92	W268	-01	MD 304.	226+99	-0-	-0	SEE W264	-0-	-0-	-0-	05/17/91	-0-	-0-	
02/28/92	W269	-01	MD 305.	227+35	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00	
02/28/92	W270	-01	MD 306.	227+45	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00	
02/28/92	W271	-01	MD 307.	227+69	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00	
02/28/92	W272	-01	MD 308.	227+93	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00	
02/28/92	W273	-01	MD 309.	228+16	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00	
02/28/92	W274	-01	MD 310.	228+50	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00	
02/28/92	W275	-01	MD 311.	228+80	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00	
02/28/92	W276	-01	MD 312.	229+10	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00	
02/28/92	W277	-01	MD 313.	229+40	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00	
02/28/92	W278	-01	MD 314.	229+70	0.00	C		-0-	-0-	-0-	05/17/91	0.00	0.00	
02/28/92	W279	-01	MD 315.	229+94	0.10	C		-0-	-0-	-0-	05/17/91	0.10	0.00	
02/28/92	W280	-01	MD 316.	230+30	0.30	C		-0-	-0-	-0-	05/17/91	0.20	0.10	
02/28/92	W281	-01	MD 317.	230+60	0.00	C		-0-	-0-	-0-	05/17/91	0.30	-0.30	
02/28/92	W282	-01	MD 318.	230+90	0.10	C		-0-	-0-	-0-	05/17/91	1.30	-1.20	
02/28/92	W283	-01	MD 319.	231+20	0.70	C		-0-	-0-	-0-	05/17/91	-0-	-0-	
02/28/92	W284	-01	MD 320.	231+50	0.50	C		-0-	-0-	-0-	05/17/91	0.70	-0.20	
02/28/92	W285-1	-01	MD 321.	231+74	0.00	C		-0-	-0-	-0-	05/17/91	0.10	-0.10	
02/28/92	W285	-01	MD 322.	231+80	0.10	C		-0-	-0-	-0-	05/17/91	0.10	0.00	

NOTE: 1. -0- indicates no data available.
2. Reference: -0-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
 Page of
 Effective Date:

ATTACHMENT OEP-10.03-03
 DATA PACKAGE READING REPORT

Sheet 15 of _____
 Instrument Type 7: Relief Well
 Location Level MD: MCR/Relief Well Line

Package No.: A200
 Page 32 of 56
 Printed: 05/06/92

6.24-92

Date	INSTRUMENT ID:			CURRENT READING:			INITIAL READING:			LAST READING:		
	No. Series	Lev Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/28/92	W286-1 -01	MD 323.	232+14	3.80	C		-0-	-0-	-0-	05/17/91	2.30	1.50
02/28/92	W286 -01	MD 324.	232+20	0.10	C		-0-	-0-	-0-	05/17/91	0.10	0.00
02/28/92	W287 -01	MD 325.	232+60	0.10	C		-0-	-0-	-0-	05/17/91	0.60	-0.50
02/28/92	W288 -01	MD 326.	233+ 0	0.20	C		-0-	-0-	-0-	05/17/91	0.30	-0.10
02/28/92	W289-1 -01	MD 327.	233+34	2.80	C		-0-	-0-	-0-	05/17/91	1.80	1.00
02/28/92	W289 -01	MD 328.	233+40	0.10	C		-0-	-0-	-0-	05/17/91	0.20	-0.10
02/28/92	W290 -01	MD 329.	233+80	1.00	C		-0-	-0-	-0-	05/17/91	1.00	0.00
02/28/92	W291 -01	MD 330.	234+20	0.20	C		-0-	-0-	-0-	05/17/91	0.30	-0.10
02/28/92	W291A -01	MD 331.	234+35	1.00	C		-0-	-0-	-0-	05/17/91	1.00	0.00
02/28/92	W292 -01	MD 332.	234+60	0.20	C		-0-	-0-	-0-	05/17/91	0.30	-0.10
02/28/92	W293 -01	MD 333.	235+ 0	0.60	C		-0-	-0-	-0-	05/17/91	1.00	-0.40
02/28/92	W294 -01	MD 334.	235+40	1.90	C		-0-	-0-	-0-	05/17/91	1.80	0.10
02/28/92	W295 -01	MD 335.	235+80	0.60	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W296 -01	MD 336.	236+20	0.30	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W297 -01	MD 337.	236+60	0.80	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W298 -01	MD 338.	237+ 0	0.30	C		-0-	-0-	-0-	05/17/91	0.60	-0.30
02/28/92	W299 -01	MD 339.	237+40	0.40	C		-0-	-0-	-0-	05/17/91	0.80	-0.40
02/28/92	W300 -01	MD 340.	237+80	1.50	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W301 -01	MD 341.	238+20	1.50	C		-0-	-0-	-0-	05/17/91	1.00	0.50
02/28/92	W302 -01	MD 342.	238+60	0.90	C		-0-	-0-	-0-	05/17/91	1.30	-0.40
02/28/92	W303 -01	MD 343.	239+ 0	1.50	C		-0-	-0-	-0-	05/17/91	1.30	0.20
02/28/92	W304 -01	MD 344.	239+40	2.80	C		-0-	-0-	-0-	05/17/91	1.00	1.80
02/28/92	W305-1 -01	MD 345.	239+70	2.80	C		-0-	-0-	-0-	05/17/91	-0-	-0-

NOTE: 1. -0- indicates no data available.
 2. Reference: -0-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
Page of
Effective Date:

ATTACHMENT OEP-10.03-03
DATA PACKAGE READING REPORT

Sheet 16 of _____

Instrument Type 7: Relief Well

Location Level MD: MCR/Relief Well Line

Package No.: R200

Page 38 of 56

Printed: 05/06/92

6-24-92

Date	INSTRUMENT ID:				CURRENT READING:			INITIAL READING:			LAST READING:		
	No.	Series	Lev Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/28/92	W305	-01	MD 346.	239+74	0.10	C		-0-	-0-	-0-	05/17/91	0.30	-0.20
02/28/92	W306-1	-01	MD 347.	240+14	3.00	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W306	-01	MD 348.	240+20	0.10	C		-0-	-0-	-0-	05/17/91	0.20	-0.10
02/28/92	W307	-01	MD 349.	240+60	0.20	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W307-1	-01	MD 350.	240+65	3.80	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W308	-01	MD 351.	241+ 0	0.50	C		-0-	-0-	-0-	05/17/91	0.40	0.10
02/28/92	W309-1	-01	MD 352.	241+34	3.80	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W309	-01	MD 353.	241+40	0.00	C		-0-	-0-	-0-	05/17/91	0.10	-0.10
02/28/92	W310	-01	MD 354.	241+80	0.60	C		-0-	-0-	-0-	05/17/91	0.80	-0.20
02/28/92	W311	-01	MD 355.	242+20	0.10	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W311-1	-01	MD 356.	242+26	4.70	C		-0-	-0-	-0-	05/17/91	2.30	2.40
02/28/92	W312	-01	MD 357.	242+60	2.30	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W313	-01	MD 358.	243+ 0	1.90	C		-0-	-0-	-0-	05/17/91	2.30	-0.40
02/28/92	W314	-01	MD 359.	243+40	1.90	C		-0-	-0-	-0-	05/17/91	1.30	0.60
02/28/92	W315	-01	MD 360.	243+80	0.70	C		-0-	-0-	-0-	05/17/91	0.80	-0.10
02/28/92	W316	-01	MD 361.	244+20	2.30	C		-0-	-0-	-0-	05/17/91	1.00	1.30
02/28/92	W317-1	-01	MD 362.	244+55	3.80	C		-0-	-0-	-0-	05/17/91	1.30	2.50
02/28/92	W317	-01	MD 363.	244+60	0.30	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W318	-01	MD 364.	245+ 0	0.70	C		-0-	-0-	-0-	05/17/91	1.00	-0.30
02/28/92	W319	-01	MD 365.	245+40	0.90	C		-0-	-0-	-0-	05/17/91	0.30	0.60
02/28/92	W320	-01	MD 366.	245+80	0.60	C		-0-	-0-	-0-	05/17/91	0.80	-0.20
02/28/92	W321-1	-01	MD 367.	246+14	1.50	C		-0-	-0-	-0-	05/17/91	0.80	0.70
02/28/92	W321	-01	MD 368.	246+20	0.10	C		-0-	-0-	-0-	05/17/91	0.10	0.00

NOTE: 1. -0- indicates no data available.
2. Reference: -0-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
 Page of
 Effective Date:

ATTACHMENT OEP-10.03-03
 DATA PACKAGE READING REPORT

Sheet 17 of _____

Instrument Type 7: Relief Well

Location Level MD: MCR/Relief Well Line

Package No.: R200

Page 39 of 56

Printed: 05/06/92

247
6-24-92

Date	INSTRUMENT ID:				CURRENT READING:			INITIAL READING:			LAST READING:		
	No.	Series	Lev Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/28/92	W322	-01	MD 369.	246+60	1.90	C		-0-	-0-	-0-	05/17/91	1.00	0.90
02/28/92	W323	-01	MD 370.	247+ 0	0.80	C		-0-	-0-	-0-	05/17/91	0.70	0.10
02/28/92	W324	-01	MD 371.	247+40	1.00	C		-0-	-0-	-0-	05/17/91	0.70	0.30
02/28/92	W325	-01	MD 372.	247+80	0.20	C		-0-	-0-	-0-	05/17/91	0.10	0.10
02/28/92	W325A	-01	MD 373.	247+95	5.20	C		-0-	-0-	-0-	05/17/91	1.80	3.40
02/28/92	W326	-01	MD 374.	248+20	0.40	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W327	-01	MD 375.	248+60	0.80	C		-0-	-0-	-0-	05/17/91	0.80	0.00
02/28/92	W327A	-01	MD 376.	248+85	3.80	C		-0-	-0-	-0-	05/17/91	1.80	2.00
02/28/92	W328	-01	MD 377.	249+ 0	0.10	C		-0-	-0-	-0-	05/17/91	0.20	-0.10
02/28/92	W329	-01	MD 378.	249+40	0.50	C		-0-	-0-	-0-	05/17/91	0.60	-0.10
02/28/92	W330	-01	MD 379.	249+80	0.40	C		-0-	-0-	-0-	05/17/91	0.60	-0.20
02/28/92	W331	-01	MD 380.	250+20	0.30	C		-0-	-0-	-0-	05/17/91	0.60	-0.30
02/28/92	W331A	-01	MD 381.	250+35	2.30	C		-0-	-0-	-0-	05/17/91	1.30	1.00
02/28/92	W332	-01	MD 382.	250+60	1.50	C		-0-	-0-	-0-	05/17/91	1.00	0.50
02/28/92	W333	-01	MD 383.	251+ 0	0.70	C		-0-	-0-	-0-	05/17/91	0.60	0.10
02/28/92	W334	-01	MD 384.	251+40	0.60	C		-0-	-0-	-0-	05/17/91	0.50	0.10
02/28/92	W335	-01	MD 385.	251+80	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W336	-01	MD 386.	252+20	0.00	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W336A	-01	MD 387.	252+45	4.20	C		-0-	-0-	-0-	05/17/91	1.80	2.40
02/28/92	W337	-01	MD 388.	252+60	0.70	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W338	-01	MD 389.	253+ 0	0.60	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W339	-01	MD 390.	253+40	0.10	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W339-1	-01	MD 391.	253+46	2.80	C		-0-	-0-	-0-	05/17/91	2.30	0.50

NOTE: 1. -0- indicates no data available.
 2. Reference: -0-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
Page of
Effective Date:

ATTACHMENT OEP-10.03-03
DATA PACKAGE READING REPORT

Sheet 18 of _____

Instrument Type 7: Relief Well

Location Level MD: MCR/Relief Well Line

Package No.: 8200

Page 18 of 56

Printed: 05/06/92

DET
6.24.92

Date	INSTRUMENT ID:				CURRENT READING:			INITIAL READING:			LAST READING:		
	No. Series	Lev Seq	Station		Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/28/92	W340	-01	MD 392.	253+80	0.50	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W340A	-01	MD 393.	254+ 5	1.00	C		-0-	-0-	-0-	05/17/91	1.30	-0.30
02/28/92	W341	-01	MD 394.	254+20	0.10	C		-0-	-0-	-0-	05/17/91	0.10	0.00
02/28/92	W341A	-01	MD 395.	254+35	1.50	C		-0-	-0-	-0-	05/17/91	1.30	0.20
02/28/92	W342	-01	MD 396.	254+60	0.20	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W343	-01	MD 397.	255+23	2.30	C		-0-	-0-	-0-	05/17/91	1.00	1.30
02/28/92	W344	-01	MD 398.	255+50	3.30	C		-0-	-0-	-0-	05/17/91	1.30	2.00
02/28/92	W345	-01	MD 399.	256+ 0	0.80	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W345A	-01	MD 400.	256+35	2.80	C		-0-	-0-	-0-	05/17/91	1.80	1.00
02/28/92	W346	-01	MD 401.	256+50	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W347	-01	MD 402.	257+ 0	0.60	C		-0-	-0-	-0-	05/17/91	1.00	-0.40
02/28/92	W348	-01	MD 403.	257+50	0.10	C		-0-	-0-	-0-	05/17/91	0.20	-0.10
02/28/92	W349	-01	MD 404.	258+ 0	0.10	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W349-1	-01	MD 405.	258+ 6	1.00	C		-0-	-0-	-0-	05/17/91	1.00	0.00
02/28/92	W350	-01	MD 406.	258+50	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W351	-01	MD 407.	259+ 0	0.10	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W351-1	-01	MD 408.	259+ 6	0.50	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W352	-01	MD 409.	259+50	0.20	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W353-1	-01	MD 410.	259+94	0.60	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W353	-01	MD 411.	260+ 0	0.10	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W354	-01	MD 412.	260+50	0.40	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W355	-01	MD 413.	261+ 0	0.10	C		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W356	-01	MD 414.	261+50	0.20	C		-0-	-0-	-0-	05/17/91	-0-	-0-

NOTE: 1. -0- indicates no data available.
2. Reference: -0-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
Page of
Effective Date:

ATTACHMENT OEP-10.03-03
DATA PACKAGE READING REPORT

Sheet 19 of _____

Instrument Type 7: Relief Well

Location Level MD: MCR/Relief Well Line

Package No.: R200

Page 41 of 56

Printed: 05/06/92

6-24-92

Date	INSTRUMENT ID:				CURRENT READING:			INITIAL READING:			LAST READING:			
	No.	Series	Lev	Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/28/92	W357	-01	MD 415.	262+ 0	0.30	C			-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W358	-01	MD 416.	262+50	0.20	C			-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W359	-01	MD 417.	263+ 0	-0-	-0	UNDERWATER		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W360	-01	MD 418.	263+50	-0-	-0	UNDERWATER		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W361	-01	MD 419.	264+ 0	-0-	-0	UNDERWATER		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W362	-01	MD 420.	265+ 0	-0-	-0	UNDERWATER		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W363	-01	MD 421.	266+50	-0-	-0	UNDERWATER		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W364	-01	MD 422.	282+60	0.20	C			-0-	-0-	-0-	05/17/91	0.10	0.10
02/28/92	W364A	-01	MD 423.	283+25	0.40	C			-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W365	-01	MD 424.	284+ 0	0.00	C			-0-	-0-	-0-	05/17/91	0.00	0.00
02/28/92	W366	-01	MD 425.	285+ 0	0.10	C			-0-	-0-	-0-	05/17/91	0.10	0.00
02/28/92	W367	-01	MD 426.	285+50	0.10	C			-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W368	-01	MD 427.	286+ 0	0.10	C			-0-	-0-	-0-	05/17/91	0.20	-0.10
02/28/92	W369	-01	MD 428.	286+50	0.30	C			-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W370	-01	MD 429.	287+ 0	-0-	-0	DAMAGED		-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W371	-01	MD 430.	287+50	0.60	C			-0-	-0-	-0-	05/17/91	0.50	0.10
02/28/92	W372	-01	MD 431.	288+ 0	0.30	C			-0-	-0-	-0-	05/17/91	0.40	-0.10
02/28/92	W373	-01	MD 432.	288+50	1.00	C			-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W374	-01	MD 433.	289+ 0	0.80	C			-0-	-0-	-0-	05/17/91	0.30	0.50
02/28/92	W375	-01	MD 434.	289+50	0.70	C			-0-	-0-	-0-	05/17/91	0.50	0.20
02/28/92	W376	-01	MD 435.	290+ 0	1.30	C			-0-	-0-	-0-	05/17/91	0.60	0.70
02/28/92	W377	-01	MD 436.	290+50	1.50	C			-0-	-0-	-0-	05/17/91	0.80	0.70
02/28/92	W378	-01	MD 437.	291+ 0	1.50	C			-0-	-0-	-0-	05/17/91	-0-	-0-

NOTE: 1. -0- indicates no data available.
2. Reference: -0-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
Page of
Effective Date:

ATTACHMENT OEP-10.03-03
DATA PACKAGE READING REPORT

Sheet 20 of _____
Instrument Type 7: Relief Well
Location Level MD: MCR/Relief Well Line

Package No.: R200
Page 42 of 56
Printed: 05/06/92

Date	INSTRUMENT ID:			CURRENT READING:			INITIAL READING:			LAST READING:		
	No. Series	Lev Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/28/92	W379	-01	MD 438.	291+50	0.60	C	-0-	-0-	-0-	05/17/91	0.30	0.30
02/28/92	W380	-01	MD 439.	292+ 0	0.40	C	-0-	-0-	-0-	05/17/91	-0-	-0-
02/28/92	W381	-01	MD 440.	292+50	1.50	C	-0-	-0-	-0-	05/17/91	0.70	0.80
02/28/92	W382	-01	MD 441.	293+ 0	1.50	C	-0-	-0-	-0-	05/17/91	0.80	0.70
02/28/92	W383	-01	MD 442.	293+50	1.90	C	-0-	-0-	-0-	05/17/91	0.80	1.10
02/28/92	W384	-01	MD 443.	294+ 0	0.90	C	-0-	-0-	-0-	05/22/91	-0-	-0-
02/28/92	W385	-01	MD 444.	294+50	0.80	C	-0-	-0-	-0-	05/22/91	0.30	0.50
02/28/92	W386	-01	MD 445.	295+ 0	0.60	C	-0-	-0-	-0-	05/22/91	0.60	0.00
02/28/92	W387	-01	MD 446.	295+40	0.40	C	-0-	-0-	-0-	05/22/91	0.20	0.20
02/28/92	W388	-01	MD 447.	295+80	0.70	C	-0-	-0-	-0-	05/22/91	0.30	0.40
02/28/92	W389	-01	MD 448.	296+20	1.50	C	-0-	-0-	-0-	05/22/91	2.30	-0.80
02/28/92	W390	-01	MD 449.	296+60	1.80	C	-0-	-0-	-0-	05/22/91	1.90	-0.10
02/28/92	W391	-01	MD 450.	297+ 0	2.30	C	-0-	-0-	-0-	05/22/91	2.80	-0.50
02/28/92	W392	-01	MD 451.	297+40	1.90	C	-0-	-0-	-0-	05/22/91	2.30	-0.40
02/28/92	W393	-01	MD 452.	297+80	3.80	C	-0-	-0-	-0-	05/22/91	2.30	1.50
02/28/92	W394	-01	MD 453.	298+20	3.30	C	-0-	-0-	-0-	05/22/91	2.80	0.50
02/28/92	W395	-01	MD 454.	298+60	2.30	C	-0-	-0-	-0-	05/22/91	2.30	0.00
02/28/92	W396	-01	MD 455.	299+ 0	1.00	C	-0-	-0-	-0-	05/22/91	1.00	0.00
02/28/92	W397	-01	MD 456.	299+40	3.80	C	-0-	-0-	-0-	05/22/91	2.80	1.00
02/28/92	W398	-01	MD 457.	299+80	2.00	C	-0-	-0-	-0-	05/22/91	2.30	-0.30
02/28/92	W399	-01	MD 458.	300+20	2.80	C	-0-	-0-	-0-	05/22/91	1.30	1.50
02/19/92	W400	-01	MD 459.	300+60	0.70	C	-0-	-0-	-0-	05/22/91	0.90	-0.20
02/19/92	W401	-01	MD 460.	301+ 0	0.80	C	-0-	-0-	-0-	05/22/91	0.80	0.00

NOTE: 1. -0- indicates no data available.
2. Reference: -0-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
Page of
Effective Date:

ATTACHMENT OEP-10.03-03
DATA PACKAGE READING REPORT

Sheet 21 of _____

Instrument Type 7: Relief Well

Location Level MD: MCR/Relief Well Line

Package No.: R200

Page 43 of 56

Printed: 05/06/92

6-24-92

Date	INSTRUMENT ID:				CURRENT READING:			INITIAL READING:			LAST READING:		
	No.	Series	Lev Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/19/92	W402	-01	MD 461.	301+40	3.80	C		-0-	-0-	-0-	05/22/91	2.80	1.00
02/19/92	W403	-01	MD 462.	301+80	4.30	C		-0-	-0-	-0-	05/22/91	5.20	-0.90
02/19/92	W404	-01	MD 463.	302+20	3.80	C		-0-	-0-	-0-	05/22/91	3.30	0.50
02/19/92	W405	-01	MD 464.	302+60	1.50	C		-0-	-0-	-0-	05/22/91	2.00	-0.50
02/19/92	W406	-01	MD 465.	303+ 0	-0-	-0	DAMAGED	-0-	-0-	-0-	05/22/91	4.70	-0-
02/19/92	W407	-01	MD 466.	303+40	2.30	C		-0-	-0-	-0-	05/22/91	2.30	0.00
02/19/92	W408	-01	MD 467.	303+80	2.30	C		-0-	-0-	-0-	05/22/91	2.00	0.30
02/19/92	W409	-01	MD 468.	304+20	2.80	C		-0-	-0-	-0-	05/22/91	3.30	-0.50
02/19/92	W410	-01	MD 469.	304+60	2.80	C		-0-	-0-	-0-	05/22/91	2.30	0.50
02/19/92	W411	-01	MD 470.	305+ 0	2.30	C		-0-	-0-	-0-	05/22/91	1.80	0.50
02/19/92	W412	-01	MD 471.	305+40	2.80	C		-0-	-0-	-0-	05/22/91	2.50	0.30
02/19/92	W413	-01	MD 472.	305+80	3.30	C		-0-	-0-	-0-	05/22/91	2.80	0.50
02/19/92	W414	-01	MD 473.	306+20	-0-	-0	DAMAGED	-0-	-0-	-0-	05/22/91	2.80	-0-
02/19/92	W415	-01	MD 474.	306+60	2.80	C		-0-	-0-	-0-	05/22/91	3.30	-0.50
02/19/92	W416	-01	MD 475.	307+ 0	2.30	C		-0-	-0-	-0-	05/22/91	2.80	-0.50
02/19/92	W417	-01	MD 476.	307+40	2.30	C		-0-	-0-	-0-	05/22/91	1.80	0.50
02/19/92	W418	-01	MD 477.	307+80	4.20	C		-0-	-0-	-0-	05/22/91	3.80	0.40
02/19/92	W419	-01	MD 478.	308+20	2.80	C		-0-	-0-	-0-	05/22/91	2.00	0.80
02/19/92	W420	-01	MD 479.	308+60	2.00	C		-0-	-0-	-0-	05/22/91	2.30	-0.30
02/19/92	W421	-01	MD 480.	309+ 0	1.00	C		-0-	-0-	-0-	05/22/91	1.30	-0.30
02/19/92	W422	-01	MD 481.	309+40	5.20	C		-0-	-0-	-0-	05/22/91	-0-	-0-
02/19/92	W423	-01	MD 482.	309+80	2.30	C		-0-	-0-	-0-	05/22/91	2.30	0.00
02/19/92	W424	-01	MD 483.	310+20	2.80	C		-0-	-0-	-0-	05/22/91	1.30	1.50

NOTE: 1. -0- indicates no data available.
2. Reference: -0-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
Page of
Effective Date:

ATTACHMENT OEP-10.03-03
DATA PACKAGE READING REPORT

Sheet 22 of _____

Instrument Type 7: Relief Well

Location Level MD: MCR/Relief Well Line

Package No.: R202
Page 44 of 56
Printed: 05/06/92

Date	INSTRUMENT ID:			CURRENT READING:			INITIAL READING:			LAST READING:		
	No. Series	Lev Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/19/92	W425	-01	MD 484. 310+60	2.30	C		-0-	-0-	-0-	05/22/91	2.80	-0.50
02/19/92	W426	-01	MD 485. 311+ 0	2.30	C		-0-	-0-	-0-	05/22/91	2.30	0.00
02/19/92	W427	-01	MD 486. 311+40	3.30	C		-0-	-0-	-0-	05/22/91	5.20	-1.90
02/19/92	W428	-01	MD 487. 311+80	4.20	C		-0-	-0-	-0-	05/22/91	5.20	-1.00
02/19/92	W429	-01	MD 488. 312+20	1.80	C		-0-	-0-	-0-	05/22/91	2.30	-0.50
02/19/92	W430	-01	MD 489. 312+60	2.80	C		-0-	-0-	-0-	05/22/91	4.20	-1.40
02/19/92	W431	-01	MD 490. 313+ 0	2.50	C		-0-	-0-	-0-	05/22/91	2.80	-0.30
02/19/92	W432	-01	MD 491. 313+40	2.30	C		-0-	-0-	-0-	05/22/91	1.80	0.50
02/19/92	W433	-01	MD 492. 313+80	3.30	C		-0-	-0-	-0-	05/22/91	4.70	-1.40
02/19/92	W434	-01	MD 493. 314+20	1.30	C		-0-	-0-	-0-	05/22/91	1.30	0.00
02/19/92	W435	-01	MD 494. 314+60	1.30	C		-0-	-0-	-0-	05/22/91	1.00	0.30
02/19/92	W436	-01	MD 495. 315+18	3.80	C		-0-	-0-	-0-	05/22/91	3.30	0.50
02/19/92	W437	-01	MD 496. 315+40	2.80	C		-0-	-0-	-0-	05/22/91	1.30	1.50
02/19/92	W438	-01	MD 497. 315+80	2.80	C		-0-	-0-	-0-	05/22/91	3.80	-1.00
02/19/92	W439	-01	MD 498. 316+20	4.20	C		-0-	-0-	-0-	05/22/91	4.20	0.00
02/19/92	W440	-01	MD 499. 316+60	1.50	C		-0-	-0-	-0-	05/22/91	1.90	-0.40
02/19/92	W441	-01	MD 500. 317+ 0	3.80	C		-0-	-0-	-0-	05/22/91	-0-	-0-
02/19/92	W442	-01	MD 501. 317+40	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	-0-	-0-
02/19/92	W443	-01	MD 502. 317+80	2.30	C		-0-	-0-	-0-	05/22/91	2.80	-0.50
02/19/92	W444	-01	MD 503. 318+20	0.10	C		-0-	-0-	-0-	05/22/91	-0-	-0-
02/19/92	W445	-01	MD 504. 318+60	5.40	C		-0-	-0-	-0-	05/22/91	5.20	0.20
02/19/92	W446	-01	MD 505. 319+ 0	4.20	C		-0-	-0-	-0-	05/22/91	2.80	1.40
02/19/92	W447	-01	MD 506. 319+40	5.20	C		-0-	-0-	-0-	05/22/91	2.30	2.90

NOTE: 1. -0- indicates no data available.
2. Reference: -0-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
Page of
Effective Date:

ATTACHMENT OEP-10.03-03
DATA PACKAGE READING REPORT

Sheet 23 of _____

Instrument Type 7: Relief Well

Location Level MD: MCR/Relief Well Line

Package No.: R200

Page 45 of 56

Printed: 05/06/92

Date	INSTRUMENT ID:				CURRENT READING:			INITIAL READING:			LAST READING:		
	No.	Series	Lev Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/19/92	W447A	-01	MD 507.	319+60	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	-0-	-0-
02/19/92	W448	-01	MD 508.	319+80	1.90	C		-0-	-0-	-0-	05/22/91	1.80	0.10
02/19/92	W449	-01	MD 509.	320+20	0.80	C		-0-	-0-	-0-	05/22/91	1.00	-0.20
02/19/92	W450	-01	MD 510.	320+60	0.10	C		-0-	-0-	-0-	05/22/91	0.10	0.00
02/19/92	W451	-01	MD 511.	321+ 0	2.00	C		-0-	-0-	-0-	05/22/91	1.30	0.70
02/19/92	W452	-01	MD 512.	321+40	0.70	C		-0-	-0-	-0-	05/22/91	0.70	0.00
02/19/92	W453	-01	MD 513.	321+80	1.90	C		-0-	-0-	-0-	05/22/91	2.00	-0.10
02/19/92	W454	-01	MD 514.	322+20	0.80	C		-0-	-0-	-0-	05/22/91	0.80	0.00
02/19/92	W455	-01	MD 515.	322+60	1.30	C		-0-	-0-	-0-	05/22/91	1.50	-0.20
02/19/92	W456	-01	MD 516.	323+ 0	2.30	C		-0-	-0-	-0-	05/22/91	1.90	0.40
02/19/92	W457	-01	MD 517.	323+40	1.90	C		-0-	-0-	-0-	05/22/91	1.30	0.60
02/19/92	W457A	-01	MD 518.	323+60	1.00	C		-0-	-0-	-0-	05/22/91	-0-	-0-
02/19/92	W458	-01	MD 519.	323+80	0.90	C		-0-	-0-	-0-	05/22/91	0.80	0.10
02/19/92	W459	-01	MD 520.	324+20	1.50	C		-0-	-0-	-0-	05/22/91	1.90	-0.40
02/19/92	W460	-01	MD 521.	324+60	1.30	C		-0-	-0-	-0-	05/22/91	1.50	-0.20
02/19/92	W461	-01	MD 522.	325+ 0	2.20	C		-0-	-0-	-0-	05/22/91	2.00	0.20
02/19/92	W462	-01	MD 523.	325+50	1.00	C		-0-	-0-	-0-	05/22/91	1.00	0.00
02/19/92	W463	-01	MD 524.	326+ 0	0.90	C		-0-	-0-	-0-	05/22/91	0.80	0.10
02/19/92	W464	-01	MD 525.	326+50	0.40	C		-0-	-0-	-0-	05/22/91	0.30	0.10
02/19/92	W464A	-01	MD 526.	326+80	0.90	C		-0-	-0-	-0-	05/22/91	0.30	0.60
02/19/92	W465	-01	MD 527.	327+ 0	0.20	C		-0-	-0-	-0-	05/22/91	0.10	0.10
02/19/92	W466	-01	MD 528.	327+50	1.00	C		-0-	-0-	-0-	05/22/91	0.80	0.20
02/19/92	W467	-01	MD 529.	328+ 0	2.80	C		-0-	-0-	-0-	05/22/91	2.50	0.30

NOTE: 1. -0- indicates no data available.
2. Reference: -0-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
 Page of
 Effective Date:

ATTACHMENT OEP-10.03-03
 DATA PACKAGE READING REPORT

Sheet 1 of _____

Instrument Type 7: Relief Well

Location Level MD: MCR/Relief Well Line

Package No.: 9200
 Page 46 of 56
 Printed: 05/06/92

6-24-92

Date	INSTRUMENT ID:				CURRENT READING:			INITIAL READING:			LAST READING:		
	No.	Series	Lev Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/19/92	W468	-01	MD 530.	328+50	2.50	C		-0-	-0-	-0-	05/22/91	2.80	-0.30
02/19/92	W469	-01	MD 531.	329+ 0	2.30	C		-0-	-0-	-0-	05/22/91	2.30	0.00
02/19/92	W470	-01	MD 532.	329+50	1.30	C		-0-	-0-	-0-	05/22/91	1.00	0.30
02/19/92	W471	-01	MD 533.	330+18	5.60	C		-0-	-0-	-0-	05/22/91	6.10	-0.50
02/19/92	W472	-01	MD 534.	330+50	3.80	C		-0-	-0-	-0-	05/22/91	3.30	0.50
02/19/92	W473	-01	MD 535.	331+ 0	2.80	C		-0-	-0-	-0-	05/22/91	2.30	0.50
02/19/92	W474	-01	MD 536.	331+50	3.80	C		-0-	-0-	-0-	05/22/91	4.70	-0.90
02/19/92	W475	-01	MD 537.	332+ 0	4.20	C		-0-	-0-	-0-	05/22/91	4.70	-0.50
02/19/92	W476	-01	MD 538.	332+50	2.30	C		-0-	-0-	-0-	05/22/91	2.80	-0.50
02/19/92	W477	-01	MD 539.	333+ 0	2.80	C		-0-	-0-	-0-	05/22/91	2.80	0.00
02/19/92	W478	-01	MD 540.	333+50	2.80	C		-0-	-0-	-0-	05/22/91	4.20	-1.40
02/19/92	W479	-01	MD 541.	334+ 0	2.80	C		-0-	-0-	-0-	05/22/91	3.80	-1.00
02/19/92	W480	-01	MD 542.	334+50	-0-	-0	DAMAGED	-0-	-0-	-0-	05/22/91	2.80	-0-
02/19/92	W481	-01	MD 543.	335+ 0	2.80	C		-0-	-0-	-0-	05/22/91	2.80	0.00
02/19/92	W482	-01	MD 544.	336+ 0	1.80	C		-0-	-0-	-0-	05/22/91	1.50	0.30
02/19/92	W483	-01	MD 545.	337+50	4.70	C		-0-	-0-	-0-	05/22/91	2.30	2.40
02/19/92	W483A	-01	MD 546.	338+50	2.00	C		-0-	-0-	-0-	05/22/91	1.30	0.70
02/19/92	W483BB	-01	MD 547.	338+90	2.80	C		-0-	-0-	-0-	05/22/91	2.00	0.80
02/19/92	W483B	-01	MD 548.	339+50	2.50	C		-0-	-0-	-0-	05/22/91	1.90	0.60
02/19/92	W483C	-01	MD 549.	340+50	2.30	C		-0-	-0-	-0-	05/22/91	2.50	-0.20
02/19/92	W483DD	-01	MD 550.	341+10	3.80	C		-0-	-0-	-0-	05/22/91	3.80	0.00
02/19/92	W483D	-01	MD 551.	341+50	2.00	C		-0-	-0-	-0-	05/22/91	1.30	0.70
02/19/92	W483E	-01	MD 552.	342+50	0.10	C		-0-	-0-	-0-	05/22/91	0.10	0.00

NOTE: 1. -0- indicates no data available.
 2. Reference: -0-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
 Page of
 Effective Date:

ATTACHMENT OEP-10.03-03
 DATA PACKAGE READING REPORT

Sheet 2 of _____

Instrument Type 7: Relief Well

Location Level MD: MCR/Relief Well Line

Package No.: R200

Page 47 of 56

Printed: 05/06/92

BY
 5-24-92

Date	INSTRUMENT ID:			CURRENT READING:			INITIAL READING:			LAST READING:		
	No. Series	Lev Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/19/92	W483F -01	MD 553.	343+50	0.10	C		-0-	-0-	-0-	05/22/91	0.10	0.00
02/19/92	W483G -01	MD 554.	344+50	0.20	C		-0-	-0-	-0-	05/22/91	0.20	0.00
02/19/92	W483H -01	MD 555.	345+50	0.20	C		-0-	-0-	-0-	05/22/91	0.10	0.10
02/19/92	W483I -01	MD 556.	346+50	0.20	C		-0-	-0-	-0-	05/22/91	0.50	-0.30
02/19/92	W483J -01	MD 557.	347+50	0.30	C		-0-	-0-	-0-	05/22/91	0.30	0.00
02/19/92	W483K -01	MD 558.	348+50	0.30	C		-0-	-0-	-0-	05/22/91	0.30	0.00
02/19/92	W483L -01	MD 559.	349+50	0.30	C		-0-	-0-	-0-	05/22/91	0.30	0.00
02/19/92	W483M -01	MD 560.	350+50	0.60	C		-0-	-0-	-0-	05/22/91	0.50	0.10
02/19/92	W483N -01	MD 561.	351+50	0.10	C		-0-	-0-	-0-	05/22/91	0.10	0.00
02/19/92	W483O -01	MD 562.	352+50	0.20	C		-0-	-0-	-0-	05/22/91	0.20	0.00
02/19/92	W484-1 -01	MD 563.	353+54	0.20	C		-0-	-0-	-0-	05/22/91	0.20	0.00
02/19/92	W484 -01	MD 564.	353+60	0.10	C		-0-	-0-	-0-	05/22/91	0.10	0.00
02/19/92	W485 -01	MD 565.	354+40	0.20	C		-0-	-0-	-0-	05/22/91	0.20	0.00
02/19/92	W486 -01	MD 566.	355+20	0.30	C		-0-	-0-	-0-	05/22/91	0.50	-0.20
02/19/92	W487 -01	MD 567.	356+ 0	1.30	C		-0-	-0-	-0-	05/22/91	1.50	-0.20
02/19/92	W488 -01	MD 568.	356+80	0.70	C		-0-	-0-	-0-	05/22/91	0.80	-0.10
02/19/92	W489 -01	MD 569.	357+60	0.30	C		-0-	-0-	-0-	05/22/91	0.40	-0.10
02/19/92	W490 -01	MD 570.	358+40	0.80	C		-0-	-0-	-0-	05/22/91	0.70	0.10
02/19/92	W491 -01	MD 571.	359+20	2.80	C		-0-	-0-	-0-	05/22/91	2.80	0.00
02/19/92	W492 -01	MD 572.	360+ 0	2.30	C		-0-	-0-	-0-	05/22/91	2.30	0.00
02/19/92	W493 -01	MD 573.	360+80	1.00	C		-0-	-0-	-0-	05/22/91	2.50	-1.50
02/19/92	W494 -01	MD 574.	361+60	1.00	C		-0-	-0-	-0-	05/22/91	0.90	0.10
02/19/92	W495 -01	MD 575.	362+40	2.80	C		-0-	-0-	-0-	05/22/91	2.80	0.00

NOTE: 1. -0- indicates no data available.
 2. Reference: -0-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
Page of
Effective Date:

ATTACHMENT OEP-10.03-03
DATA PACKAGE READING REPORT

Sheet 3 of _____

Instrument Type 7: Relief Well

Location Level MD: MCR/Relief Well Line

Package No.: R200

Page 26 of 56

Printed: 05/06/92

Date	INSTRUMENT ID:				CURRENT READING:			INITIAL READING:			LAST READING:		
	No.	Series	Lev Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/19/92	W496	-01	MD 576.	363+20	4.70	C		-0-	-0-	-0-	05/22/91	6.10	-1.40
02/19/92	W497	-01	MD 577.	364+ 0	3.80	C		-0-	-0-	-0-	05/22/91	2.80	1.00
02/19/92	W498	-01	MD 578.	365+50	3.80	C		-0-	-0-	-0-	05/22/91	3.30	0.50
02/19/92	W499	-01	MD 579.	367+30	4.70	C		-0-	-0-	-0-	05/22/91	4.70	0.00
02/19/92	W500	-01	MD 580.	369+25	2.30	C		-0-	-0-	-0-	05/22/91	1.90	0.40
02/19/92	W501	-01	MD 581.	371+20	3.80	C		-0-	-0-	-0-	05/22/91	3.80	0.00
02/19/92	W502	-01	MD 582.	373+15	0.00	C		-0-	-0-	-0-	05/22/91	0.00	0.00
02/19/92	W503	-01	MD 583.	375+ 0	0.00	C		-0-	-0-	-0-	05/22/91	1.70	-1.70
02/19/92	W503A	-01	MD 584.	375+10	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	15.00	-0-
02/19/92	W504	-01	MD 585.	377+ 0	12.20	C		-0-	-0-	-0-	05/22/91	11.70	0.50
02/19/92	W505	-01	MD 586.	379+ 0	15.00	C		-0-	-0-	-0-	05/22/91	15.00	0.00
02/20/92	W506	-01	MD 587.	381+ 0	13.60	C		-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W507	-01	MD 588.	383+ 0	3.30	C		-0-	-0-	-0-	05/22/91	2.80	0.50
02/20/92	W507-1	-01	MD 589.	383+ 6	9.40	C		-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W508	-01	MD 590.	385+ 0	8.40	C		-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W509	-01	MD 591.	386+ 0	6.60	C		-0-	-0-	-0-	05/22/91	5.20	1.40
02/20/92	W509A	-01	MD 592.	387+ 0	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W510	-01	MD 593.	388+20	23.40	C		-0-	-0-	-0-	05/22/91	16.00	7.40
02/20/92	W510A	-01	MD 594.	389+60	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W511	-01	MD 595.	390+40	4.70	C		-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W511A	-01	MD 596.	391+20	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W512	-01	MD 597.	392+40	23.40	C		-0-	-0-	-0-	05/22/91	20.60	2.80
02/20/92	W513	-01	MD 598.	394+ 0	5.20	C		-0-	-0-	-0-	05/22/91	4.70	0.50

NOTE: 1. -0- indicates no data available.
2. Reference: -0-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
Page of
Effective Date:

ATTACHMENT OEP-10.03-03
DATA PACKAGE READING REPORT

Sheet 4 of _____

Instrument Type 7: Relief Well

Location Level MD: MCR/Relief Well Line

Package No.: R200
Page 49 of 56
Printed: 05/06/92

Date	INSTRUMENT ID:			CURRENT READING:			INITIAL READING:			LAST READING:		
	No. Series	Lev Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/20/92	W514	-01	MD 599.	396+ 0	2.80	C	-0-	-0-	-0-	05/22/91	2.80	0.00
02/20/92	W515	-01	MD 600.	397+ 0	0.20	C	-0-	-0-	-0-	05/22/91	0.60	-0.40
02/20/92	W515A	-01	MD 601.	397+50	8.00	C	-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W516	-01	MD 602.	398+ 0	0.20	C	-0-	-0-	-0-	05/22/91	0.60	-0.40
02/20/92	W517	-01	MD 603.	399+ 0	0.20	C	-0-	-0-	-0-	05/22/91	0.20	0.00
02/20/92	W518	-01	MD 604.	399+50	4.70	C	-0-	-0-	-0-	05/22/91	4.70	0.00
02/20/92	W519	-01	MD 605.	401+ 0	0.40	C	-0-	-0-	-0-	05/22/91	0.60	-0.20
02/20/92	W520-1	-01	MD 606.	401+40	2.30	C	-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W520	-01	MD 607.	402+ 0	0.10	C	-0-	-0-	-0-	05/22/91	0.60	-0.50
02/20/92	W521	-01	MD 608.	403+ 0	2.80	C	-0-	-0-	-0-	05/22/91	2.80	0.00
02/20/92	W522	-01	MD 609.	404+ 0	2.80	C	-0-	-0-	-0-	05/22/91	2.80	0.00
02/20/92	W523	-01	MD 610.	404+89	6.60	C	-0-	-0-	-0-	05/22/91	6.60	0.00
02/20/92	W524	-01	MD 611.	405+78	7.00	C	-0-	-0-	-0-	05/22/91	6.60	0.40
02/20/92	W525	-01	MD 612.	406+67	0.20	C	-0-	-0-	-0-	05/22/91	2.30	-2.10 OK
02/20/92	W526	-01	MD 613.	408+47	5.60	C	-0-	-0-	-0-	05/22/91	5.60	0.00
02/20/92	W526A	-01	MD 614.	409+40	-0-	-0 UNDERWATER	-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W527	-01	MD 615.	410+27	8.90	C	-0-	-0-	-0-	05/22/91	8.90	0.00
02/20/92	W528	-01	MD 616.	412+ 7	6.60	C	-0-	-0-	-0-	05/22/91	6.60	0.00
02/20/92	W529	-01	MD 617.	413+87	9.40	C	-0-	-0-	-0-	05/22/91	8.40	1.00
02/20/92	W530	-01	MD 618.	415+67	7.50	C	-0-	-0-	-0-	05/22/91	6.60	0.90
02/20/92	W531	-01	MD 619.	417+47	5.60	C	-0-	-0-	-0-	05/22/91	5.60	0.00
02/20/92	W532	-01	MD 620.	419+27	3.30	C	-0-	-0-	-0-	05/22/91	3.30	0.00
02/20/92	W532A	-01	MD 621.	420+50	24.40	C	-0-	-0-	-0-	05/22/91	19.60	4.80 OK

NOTE: 1. -0- indicates no data available.
2. Reference: -0-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
Page of
Effective Date:

ATTACHMENT OEP-10.03-03
DATA PACKAGE READING REPORT

Sheet 5 of _____

Instrument Type 7: Relief Well

Location Level MD: MCR/Relief Well Line

Package No.: R200

Page 50 of 56

Printed: 05/06/92

Date	INSTRUMENT ID:			Station	CURRENT READING:			INITIAL READING:			LAST READING:		
	No.	Series	Lev Seq		Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/20/92	W533	-01	MD 622.	421+ 7	5.20	C		-0-	-0-	-0-	05/22/91	4.20	1.00
02/20/92	W534	-01	MD 623.	422+87	7.00	C		-0-	-0-	-0-	05/22/91	6.10	0.90
02/20/92	W535	-01	MD 624.	424+67	22.60	C		-0-	-0-	-0-	05/22/91	19.60	3.00
02/20/92	W536	-01	MD 625.	426+ 1	8.40	C		-0-	-0-	-0-	05/22/91	8.40	0.00
02/20/92	W537	-01	MD 626.	427+ 3	6.60	C		-0-	-0-	-0-	05/22/91	5.60	1.00
02/20/92	W538	-01	MD 627.	428+ 5	8.90	C		-0-	-0-	-0-	05/22/91	8.90	0.00
02/20/92	W539	-01	MD 628.	429+ 7	6.60	C		-0-	-0-	-0-	05/22/91	5.60	1.00
02/20/92	W540	-01	MD 629.	430+ 9	6.60	C		-0-	-0-	-0-	05/22/91	7.00	-0.40
02/20/92	W541	-01	MD 630.	431+11	6.60	C		-0-	-0-	-0-	05/22/91	6.10	0.50
02/20/92	W542	-01	MD 631.	432+13	2.30	C		-0-	-0-	-0-	05/22/91	0.80	1.50
02/20/92	W542A	-01	MD 632.	432+45	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	15.00	-0-
02/20/92	W543	-01	MD 633.	433+15	2.80	C		-0-	-0-	-0-	05/22/91	2.30	0.50
02/20/92	W544	-01	MD 634.	434+17	5.20	C		-0-	-0-	-0-	05/22/91	4.70	0.50
02/20/92	W545	-01	MD 635.	435+19	3.30	C		-0-	-0-	-0-	05/22/91	2.80	0.50
02/20/92	W546	-01	MD 636.	436+14	2.80	C		-0-	-0-	-0-	05/22/91	2.80	0.00
02/20/92	W547	-01	MD 637.	437+ 9	3.30	C		-0-	-0-	-0-	05/22/91	2.80	0.50
02/20/92	W547A	-01	MD 638.	437+65	7.50	C		-0-	-0-	-0-	05/22/91	7.50	0.00
02/20/92	W548	-01	MD 639.	438+ 4	0.30	C		-0-	-0-	-0-	05/22/91	0.50	-0.20
02/20/92	W548A	-01	MD 640.	438+55	6.60	C		-0-	-0-	-0-	05/22/91	6.60	0.00
02/20/92	W549	-01	MD 641.	438+99	1.00	C		-0-	-0-	-0-	05/22/91	0.70	0.30
02/20/92	W549A	-01	MD 642.	439+35	0.80	C		-0-	-0-	-0-	05/22/91	8.00	-7.20
02/20/92	W550	-01	MD 643.	439+94	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	0.80	-0-
02/20/92	W551-1	-01	MD 644.	440+83	16.00	C		-0-	-0-	-0-	05/22/91	9.40	6.60

NOTE: 1. -0- indicates no data available.
2. Reference: -0-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
 Page of
 Effective Date:

ATTACHMENT OEP-10.03-03
 DATA PACKAGE READING REPORT

Sheet 6 of _____

Instrument Type 7: Relief Well

Location Level MD: MCR/Relief Well Line

Package No.: R260
 Page 51 of 56
 Printed: 05/06/92

Date	INSTRUMENT ID:			Station	CURRENT READING:			INITIAL READING:			LAST READING:		
	No.	Series	Lev Seq		Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/20/92	W551	-01	MD 645.	440+89	0.10	C		-0-	-0-	-0-	05/22/91	0.10	0.00
02/20/92	W552	-01	MD 646.	441+84	0.80	C		-0-	-0-	-0-	05/22/91	0.70	0.10
02/20/92	W552A	-01	MD 647.	442+35	14.10	C		-0-	-0-	-0-	05/22/91	9.40	4.70
02/20/92	W553	-01	MD 648.	442+79	2.30	C		-0-	-0-	-0-	05/22/91	2.80	-0.50
02/20/92	W554	-01	MD 649.	443+74	2.30	C		-0-	-0-	-0-	05/22/91	2.30	0.00
02/20/92	W555	-01	MD 650.	444+69	2.30	C		-0-	-0-	-0-	05/22/91	2.00	0.30
02/20/92	W556	-01	MD 651.	445+58	5.60	C		-0-	-0-	-0-	05/22/91	4.70	0.90
02/20/92	W557	-01	MD 652.	446+47	5.60	C		-0-	-0-	-0-	05/22/91	3.80	1.80
02/20/92	W558	-01	MD 653.	447+36	1.50	C		-0-	-0-	-0-	05/22/91	1.80	-0.30
02/20/92	W559	-01	MD 654.	448+25	4.70	C		-0-	-0-	-0-	05/22/91	4.70	0.00
02/20/92	W560	-01	MD 655.	449+14	5.60	C		-0-	-0-	-0-	05/22/91	10.30	-4.70
02/20/92	W561	-01	MD 656.	450+ 0	9.80	C		-0-	-0-	-0-	05/22/91	8.40	1.40
02/20/92	W562	-01	MD 657.	451+ 0	5.60	C		-0-	-0-	-0-	05/22/91	4.70	0.90
02/20/92	W563	-01	MD 658.	452+ 0	0.80	C		-0-	-0-	-0-	05/22/91	2.80	-2.00
02/20/92	W564	-01	MD 659.	452+50	3.80	C		-0-	-0-	-0-	05/22/91	2.80	1.00
02/20/92	W565	-01	MD 660.	453+70	1.30	C		-0-	-0-	-0-	05/22/91	2.30	-1.00
02/20/92	W566	-01	MD 661.	455+20	1.30	C		-0-	-0-	-0-	05/22/91	0.80	0.50
02/20/92	W566A	-01	MD 662.	456+ 0	29.00	C	566A, 567A, 568A	-0-	-0-	-0-	05/22/91	27.20	1.80
02/20/92	W567	-01	MD 663.	457+15	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	2.30	-0-
02/20/92	W567A	-01	MD 664.	458+ 0	-0-	-0	SEE W566A	-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W568	-01	MD 665.	459+10	2.30	C		-0-	-0-	-0-	05/22/91	1.80	0.50
02/20/92	W568A	-01	MD 666.	460+ 0	-0-	-0	SEE W566A	-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W569	-01	MD 667.	461+20	2.80	C		-0-	-0-	-0-	05/22/91	2.80	0.00

NOTE: 1. -0- indicates no data available.
 2. Reference: -0-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
 Page of
 Effective Date:

ATTACHMENT OEP-10.03-03
DATA PACKAGE READING REPORT

Sheet 7 of _____

Instrument Type 7: **Relief Well**

Location Level MD: MCR/Relief Well Line

Package No.: R200

Page 52 of 56

Printed: 05/06/92

6-24-92

Date	INSTRUMENT ID:				CURRENT READING:			INITIAL READING:			LAST READING:		
	No.	Series	Lev Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/20/92	W570	-01	MD 668.	463+ 0	4.20	C		-0-	-0-	-0-	05/22/91	3.80	0.40
02/20/92	W571	-01	MD 669.	464+75	2.80	C		-0-	-0-	-0-	05/22/91	2.80	0.00
02/20/92	W571A	-01	MD 670.	465+40	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W572	-01	MD 671.	466+50	5.20	C		-0-	-0-	-0-	05/22/91	4.20	1.00
02/20/92	W572A	-01	MD 672.	467+25	18.80	C		-0-	-0-	-0-	05/22/91	17.60	1.20
02/20/92	W573	-01	MD 673.	468+25	0.80	C		-0-	-0-	-0-	05/22/91	1.80	-1.00
02/20/92	W574	-01	MD 674.	470+ 0	16.80	C		-0-	-0-	-0-	05/22/91	19.60	-2.80
02/20/92	W575	-01	MD 675.	471+75	13.60	C		-0-	-0-	-0-	05/22/91	12.20	1.40
02/20/92	W576	-01	MD 676.	473+50	9.80	C		-0-	-0-	-0-	05/22/91	11.70	-1.90
02/20/92	W577	-01	MD 677.	475+25	11.30	C		-0-	-0-	-0-	05/22/91	11.30	0.00
02/20/92	W578	-01	MD 678.	477+ 0	5.20	C		-0-	-0-	-0-	05/22/91	6.10	-0.90
02/20/92	W578A	-01	MD 679.	478+80	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W578B	-01	MD 680.	480+60	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W578C	-01	MD 681.	482+40	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W579	-01	MD 682.	484+ 0	0.70	C		-0-	-0-	-0-	05/22/91	0.30	0.40
02/20/92	W580	-01	MD 683.	486+ 0	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	4.70	-0-
02/20/92	W581	-01	MD 684.	488+ 0	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W582	-01	MD 685.	490+ 0	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W582A	-01	MD 686.	490+55	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W583	-01	MD 687.	492+ 0	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	1.00	-0-
02/20/92	W584	-01	MD 688.	494+ 0	2.30	C		-0-	-0-	-0-	05/22/91	1.80	0.50
02/20/92	W584A	-01	MD 689.	495+45	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W585	-01	MD 690.	496+ 0	0.80	C		-0-	-0-	-0-	05/22/91	0.80	0.00

NOTE: 1. -0- indicates no data available.
 2. Reference: -0-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
Page of
Effective Date:

ATTACHMENT OEP-10.03-03
DATA PACKAGE READING REPORT

Sheet 8 of

Instrument Type 7: Relief Well

Location Level MD: MCR/Relief Well Line

Package No.: R200

Page 53 of 56

Printed: 05/06/92

Date	INSTRUMENT ID:				CURRENT READING:			INITIAL READING:			LAST READING:		
	No.	Series	Lev Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/20/92	W586	-01	MD 691.	498+ 0	3.80	C		-0-	-0-	-0-	05/22/91	2.80	1.00
02/20/92	W609	-01	MD 692.	543+50	5.20	C		-0-	-0-	-0-	05/22/91	4.20	1.00
02/20/92	W610	-01	MD 693.	545+ 0	4.20	C		-0-	-0-	-0-	05/22/91	3.80	0.40
02/20/92	W611	-01	MD 694.	546+ 0	3.30	C		-0-	-0-	-0-	05/22/91	2.80	0.50
02/20/92	W612	-01	MD 695.	547+ 0	5.20	C		-0-	-0-	-0-	05/22/91	5.60	-0.40
02/20/92	W613	-01	MD 696.	548+ 0	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	3.80	-0-
02/20/92	W614	-01	MD 697.	549+ 0	2.80	C		-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W615	-01	MD 698.	550+ 0	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	2.30	-0-
02/20/92	W616	-01	MD 699.	551+ 0	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	12.20	-0-
02/20/92	W617	-01	MD 700.	552+ 0	7.50	C		-0-	-0-	-0-	05/22/91	4.70	2.80
02/20/92	W618	-01	MD 701.	553+ 0	3.30	C		-0-	-0-	-0-	05/22/91	1.30	2.00
02/20/92	W619	-01	MD 702.	554+ 0	1.30	C		-0-	-0-	-0-	05/22/91	1.30	0.00
02/20/92	W619-1	-01	MD 703.	554+ 6	7.50	C		-0-	-0-	-0-	05/22/91	12.20	-4.70
02/20/92	W620	-01	MD 704.	555+ 0	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	4.70	-0-
02/20/92	W621	-01	MD 705.	566+ 0	4.70	C		-0-	-0-	-0-	05/22/91	3.80	0.90
02/20/92	W622	-01	MD 706.	567+ 0	0.10	C		-0-	-0-	-0-	05/22/91	0.10	0.00
02/20/92	W622-1	-01	MD 707.	567+ 6	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W623	-01	MD 708.	568+60	1.80	C		-0-	-0-	-0-	05/22/91	1.50	0.30
02/20/92	W624	-01	MD 709.	569+30	3.80	C		-0-	-0-	-0-	05/22/91	3.80	0.00
02/20/92	W625	-01	MD 710.	570+ 0	1.80	C		-0-	-0-	-0-	05/22/91	1.80	0.00
02/20/92	W625A	-01	MD 711.	570+30	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W626	-01	MD 712.	570+70	2.80	C		-0-	-0-	-0-	05/22/91	2.30	0.50
02/20/92	W627	-01	MD 713.	571+40	4.70	C		-0-	-0-	-0-	05/22/91	4.70	0.00

NOTE: 1. -0- indicates no data available.
2. Reference: -0-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
 Page of
 Effective Date:

ATTACHMENT: OEP-10.03-03
 DATA PACKAGE READING REPORT

Package No.: R200
 Page 54 of 56
 Printed: 05/06/92

Sheet 9 of _____
 Instrument Type 7: **Relief Well**
 Location Level MD: MCR/Relief Well Line

Date	INSTRUMENT ID:			CURRENT READING:			INITIAL READING:			LAST READING:		
	No. Series	Lev Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/20/92	W628	-01	MD 714. 572+10	6.10	C		-0-	-0-	-0-	05/22/91	4.70	1.40
02/20/92	W629	-01	MD 715. 572+80	4.70	C		-0-	-0-	-0-	05/22/91	5.60	-0.90
02/20/92	W630	-01	MD 716. 573+50	4.70	C		-0-	-0-	-0-	05/22/91	3.80	0.90
02/20/92	W631	-01	MD 717. 574+20	1.30	C		-0-	-0-	-0-	05/22/91	1.30	0.00
02/20/92	W632	-01	MD 718. 574+90	3.80	C		-0-	-0-	-0-	05/22/91	1.30	2.50
02/20/92	W633	-01	MD 719. 575+60	4.70	C		-0-	-0-	-0-	05/22/91	1.30	3.40
02/20/92	W634	-01	MD 720. 576+30	0.80	C		-0-	-0-	-0-	05/22/91	0.80	0.00
02/20/92	W635	-01	MD 721. 577+ 0	2.80	C		-0-	-0-	-0-	05/22/91	2.30	0.50
02/20/92	W636	-01	MD 722. 577+70	0.80	C		-0-	-0-	-0-	05/22/91	2.30	-1.50
02/20/92	W637	-01	MD 723. 578+40	7.50	C		-0-	-0-	-0-	05/22/91	5.20	2.30
02/20/92	W638	-01	MD 724. 579+10	3.80	C		-0-	-0-	-0-	05/22/91	3.30	0.50
02/20/92	W639	-01	MD 725. 579+80	5.20	C		-0-	-0-	-0-	05/22/91	4.20	1.00
02/20/92	W640	-01	MD 726. 580+80	16.00	C		-0-	-0-	-0-	05/22/91	13.10	2.90
02/20/92	W641	-01	MD 727. 582+50	16.00	C		-0-	-0-	-0-	05/22/91	11.30	4.70
02/20/92	W642	-01	MD 728. 584+20	9.40	C		-0-	-0-	-0-	05/22/91	11.30	-1.90
02/20/92	W643	-01	MD 729. 585+30	10.30	C		-0-	-0-	-0-	05/22/91	7.50	2.80
02/20/92	W644	-01	MD 730. 586+40	10.30	C		-0-	-0-	-0-	05/22/91	5.60	4.70
02/20/92	W645	-01	MD 731. 587+30	4.70	C		-0-	-0-	-0-	05/22/91	3.30	1.40
02/20/92	W646	-01	MD 732. 588+20	1.80	C		-0-	-0-	-0-	05/22/91	2.80	-1.00
02/20/92	W647	-L1	MD 733. 589+10	9.40	C		-0-	-0-	-0-	05/22/91	7.50	1.90
02/20/92	W648	-01	MD 734. 590+ 0	3.80	C		-0-	-0-	-0-	05/22/91	2.80	1.00
02/20/92	W648A	-01	MD 735. 590+65	1.80	C		-0-	-0-	-0-	05/22/91	1.80	0.00
02/20/92	W649	-01	MD 736. 590+90	0.40	C		-0-	-0-	-0-	05/22/91	0.80	-0.40

NOTE: 1. -0- indicates no data available.
 2. Reference: -U-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
Page of
Effective Date:

ATTACHMENT OEP-10.03-03
DATA PACKAGE READING REPORT

Sheet 10 of _____

Instrument Type 7: Relief Well

Location Level MD: MCR/Relief Well Line

Package No.: R200

Page 55 of 56

Printed: 05/06/92

6-24-92

Date	INSTRUMENT ID:				CURRENT READING:			INITIAL READING:			LAST READING:		
	No.	Series	Lev Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/20/92	W650	-01	MD 737.	591+80	0.80	C		-0-	-0-	-0-	05/22/91	0.70	0.10
02/20/92	W650A	-01	MD 738.	592+25	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W651	-01	MD 739.	592+70	0.40	C		-0-	-0-	-0-	05/22/91	0.80	-0.40
02/20/92	W651A	-01	MD 740.	593+60	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W652	-01	MD 741.	594+20	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W652A	-01	MD 742.	595+10	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W653	-01	MD 743.	596+ 0	0.80	C		-0-	-0-	-0-	05/22/91	0.80	0.00
02/20/92	W653A	-01	MD 744.	597+20	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W654	-01	MD 745.	598+ 0	1.80	C		-0-	-0-	-0-	05/22/91	3.30	-1.50
02/20/92	W654A	-01	MD 746.	599+ 0	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W655	-01	MD 747.	600+ 0	1.30	C		-0-	-0-	-0-	05/22/91	1.00	0.30
02/20/92	W656	-01	MD 748.	602+ 0	20.60	C		-0-	-0-	-0-	05/22/91	18.80	1.80
02/20/92	W657	-01	MD 749.	604+ 0	5.20	C		-0-	-0-	-0-	05/22/91	4.70	0.50
02/20/92	W657A	-01	MD 750.	605+ 5	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W658	-01	MD 751.	606+ 0	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	4.20	-0-
02/20/92	W659	-01	MD 752.	607+60	5.60	C		-0-	-0-	-0-	05/22/91	3.80	1.80
02/20/92	W659A	-01	MD 753.	608+50	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W660	-01	MD 754.	609+20	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	2.80	-0-
02/20/92	W661	-01	MD 755.	610+80	7.50	C		-0-	-0-	-0-	05/22/91	4.20	3.30
02/20/92	W661A	-01	MD 756.	611+50	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W662	-01	MD 757.	612+40	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	-0-	-0-
02/20/92	W663	-01	MD 758.	614+ 0	4.70	C		-0-	-0-	-0-	05/22/91	3.80	0.90
02/20/92	W663A	-01	MD 759.	614+80	-0-	-0	UNDERWATER	-0-	-0-	-0-	05/22/91	-0-	-0-

NOTE: 1. -0- indicates no data available.
2. Reference: -0-

Observer

Geotechnical Technician/Checker

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
Geotechnical Monitoring Activities Database

Number: OEP-10.03 Rev.No.
 Page of
 Effective Date:

ATTACHMENT OEP-10.03-03
DATA PACKAGE READING REPORT

Sheet 11 of _____

Instrument Type 7: **Relief Well**

Location Level MD: MCR/Relief Well Line

Package No.: P-200

Page 36 of 54

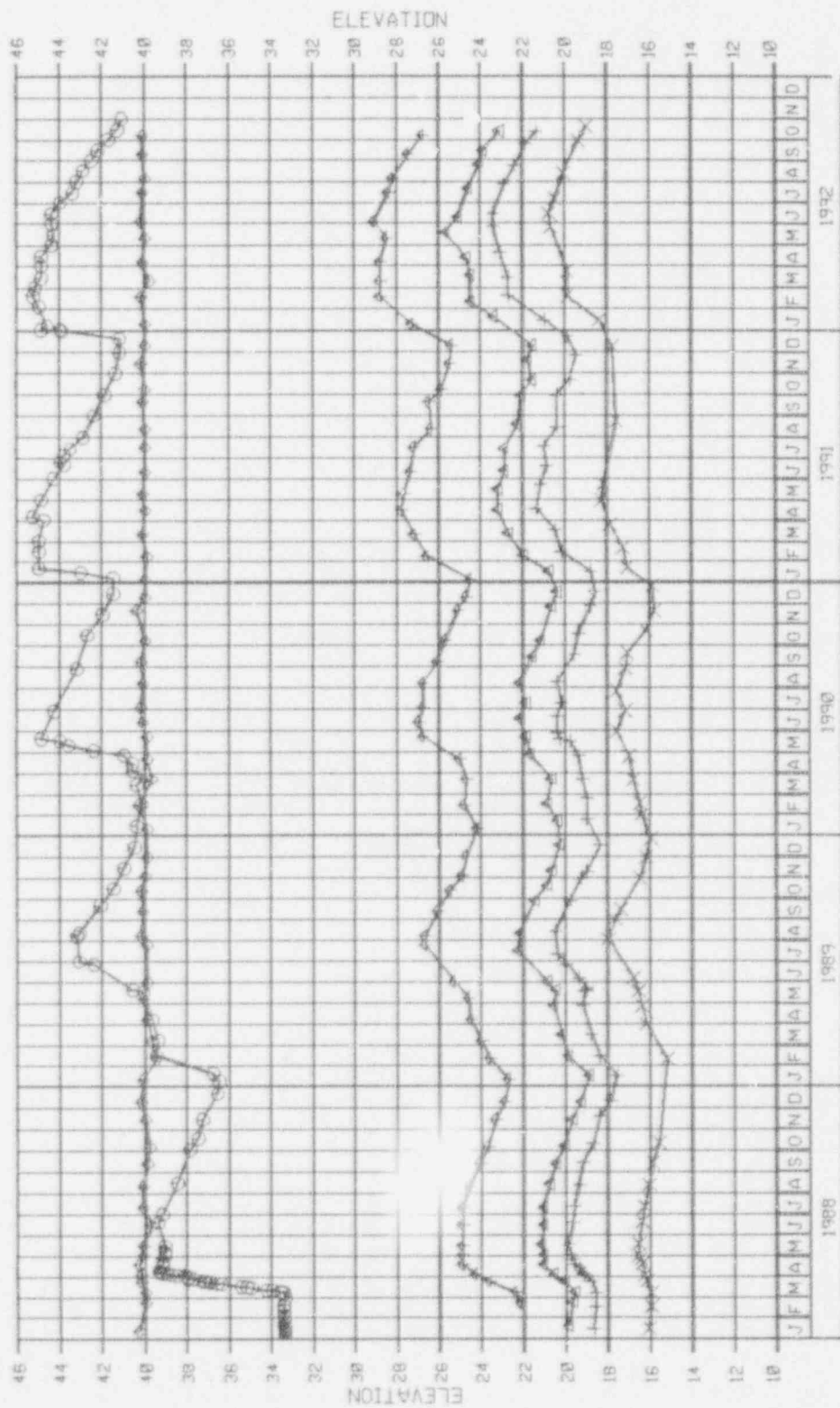
Printed: 05/06/92 6:24 PM

Date	INSTRUMENT ID:			CURRENT READING:			INITIAL READING:			LAST READING:		
	No. Series	Lev Seq	Station	Flow	QA	Comments	Date	Flow	Change	Date	Flow	Change
02/20/92	W664	-01	MD 760. 616+ 0	8.40	C		-0-	-0-	-0-	05/22/91	5.60	2.80
02/20/92	W665	-01	MD 761. 643+ 0	1.30	C		-0-	-0-	-0-	05/22/91	0.30	1.00
02/20/92	W666	-01	MD 762. 645+ 0	0.40	C		-0-	-0-	-0-	05/22/91	0.20	0.20
02/20/92	W667	-01	MD 763. 647+ 0	0.60	C		-0-	-0-	-0-	05/22/91	0.20	0.40
02/20/92	W668	-01	MD 764. 649+ 0	0.80	C		-0-	-0-	-0-	05/22/91	0.20	0.60
02/20/92	W668A	-01	MD 765. 650+45	0.80	C		-0-	-0-	-0-	05/22/91	0.20	0.60
02/20/92	W669	-01	MD 766. 651+ 0	0.30	C		-0-	-0-	-0-	05/22/91	0.00	0.30
02/20/92	W669A	-01	MD 767. 651+80	0.00	C		-0-	-0-	-0-	05/22/91	0.00	0.00
02/20/92	W670	-01	MD 768. 653+ 0	0.10	C		-0-	-0-	-0-	05/22/91	0.00	0.10

NOTE: 1. -0- indicates no data available.
 2. Reference: -0-

Observer

Geotechnical Technician/Checker



LEGEND: **Symbol** **Instrument**

○ Reservoi

△ P6-01

+

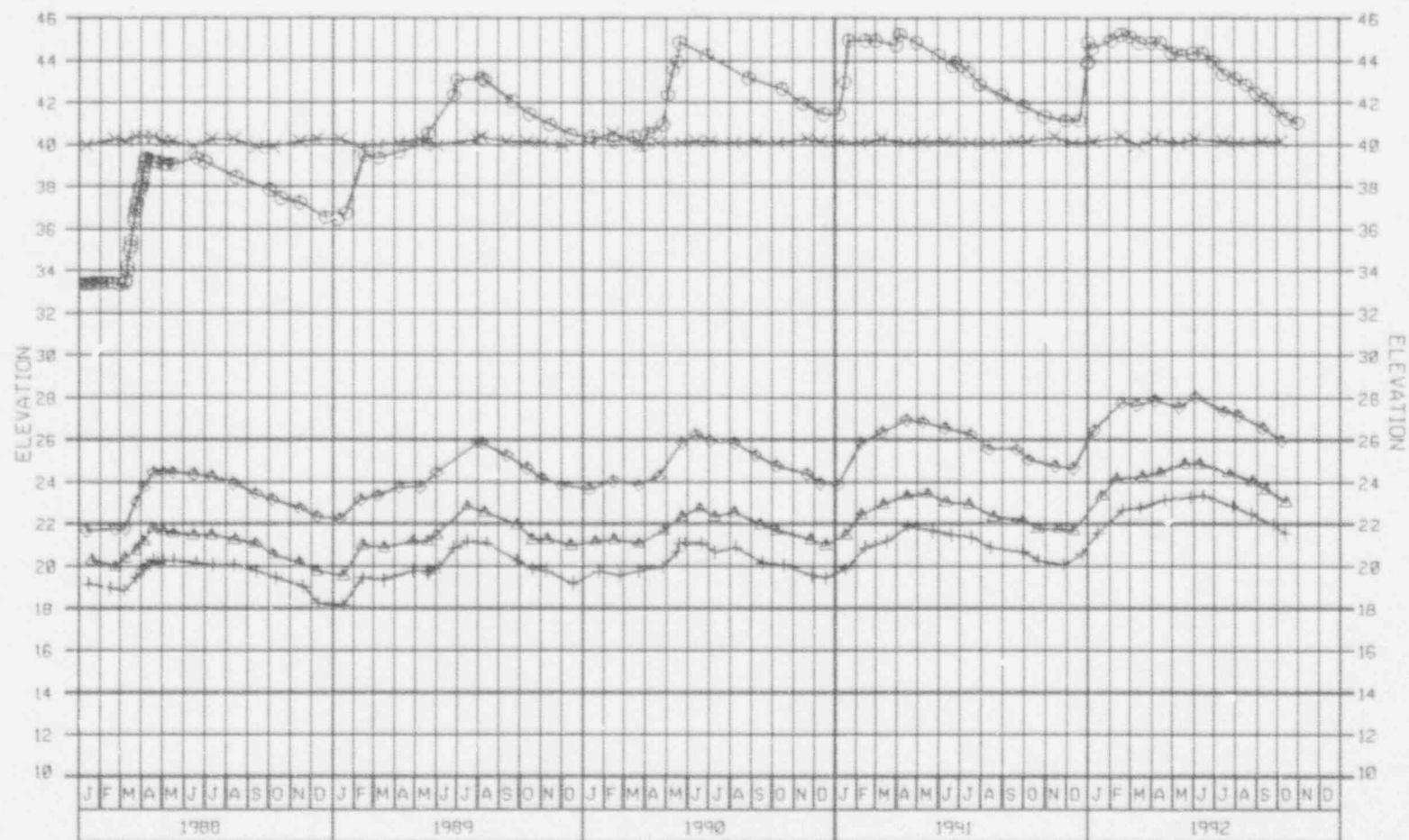
X P7-01

◇ P8-01

◇ P163-01

△ P5-01

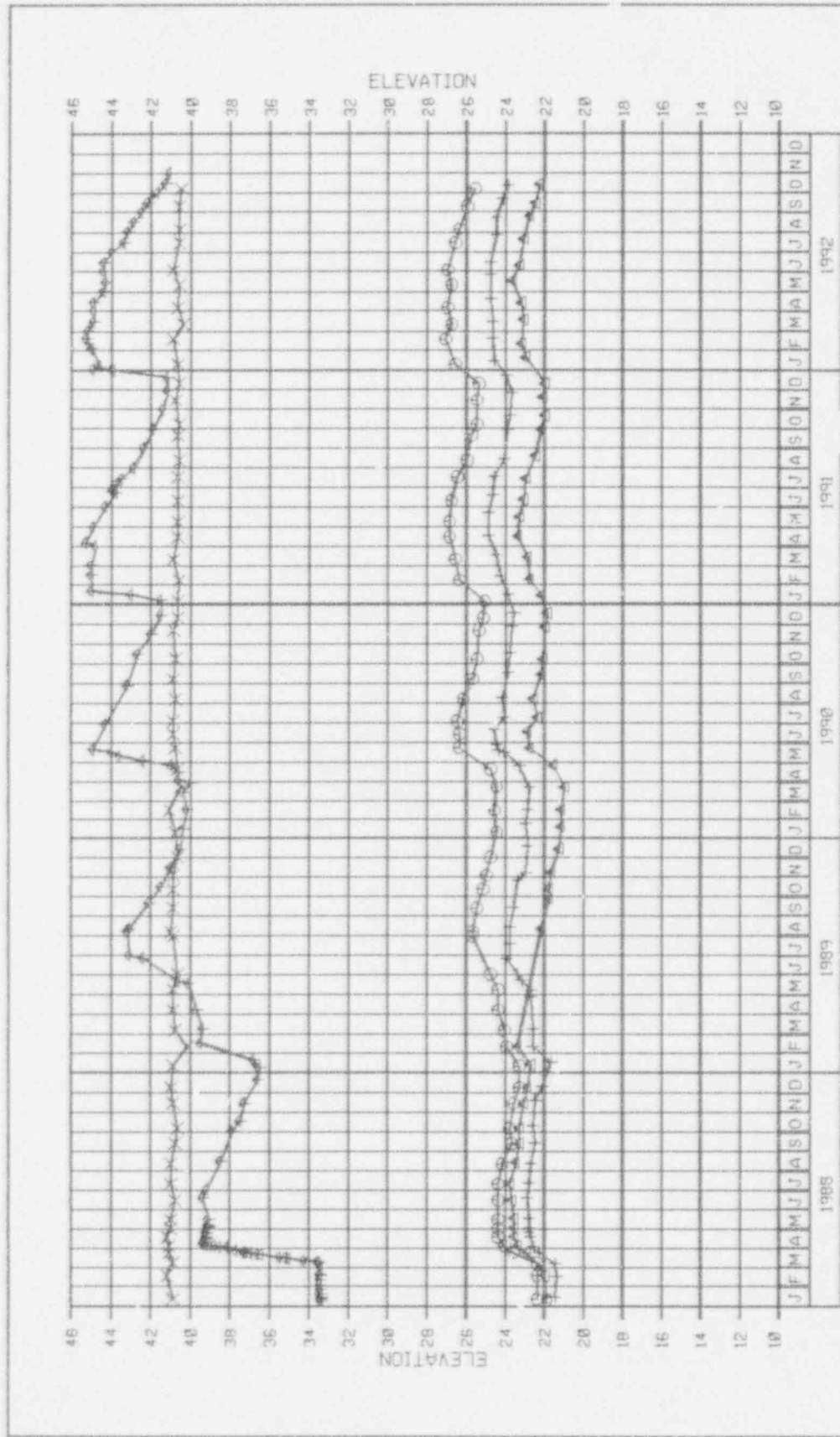
SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
Profile No. 1; Station 7+00	
11-11-92	SHEET OF



LEGEND: Symbol Instrument

○	○	Reservoir
△	△	P10-01
+	+	P11-01
×	×	P165-01
◇	◇	P9-01

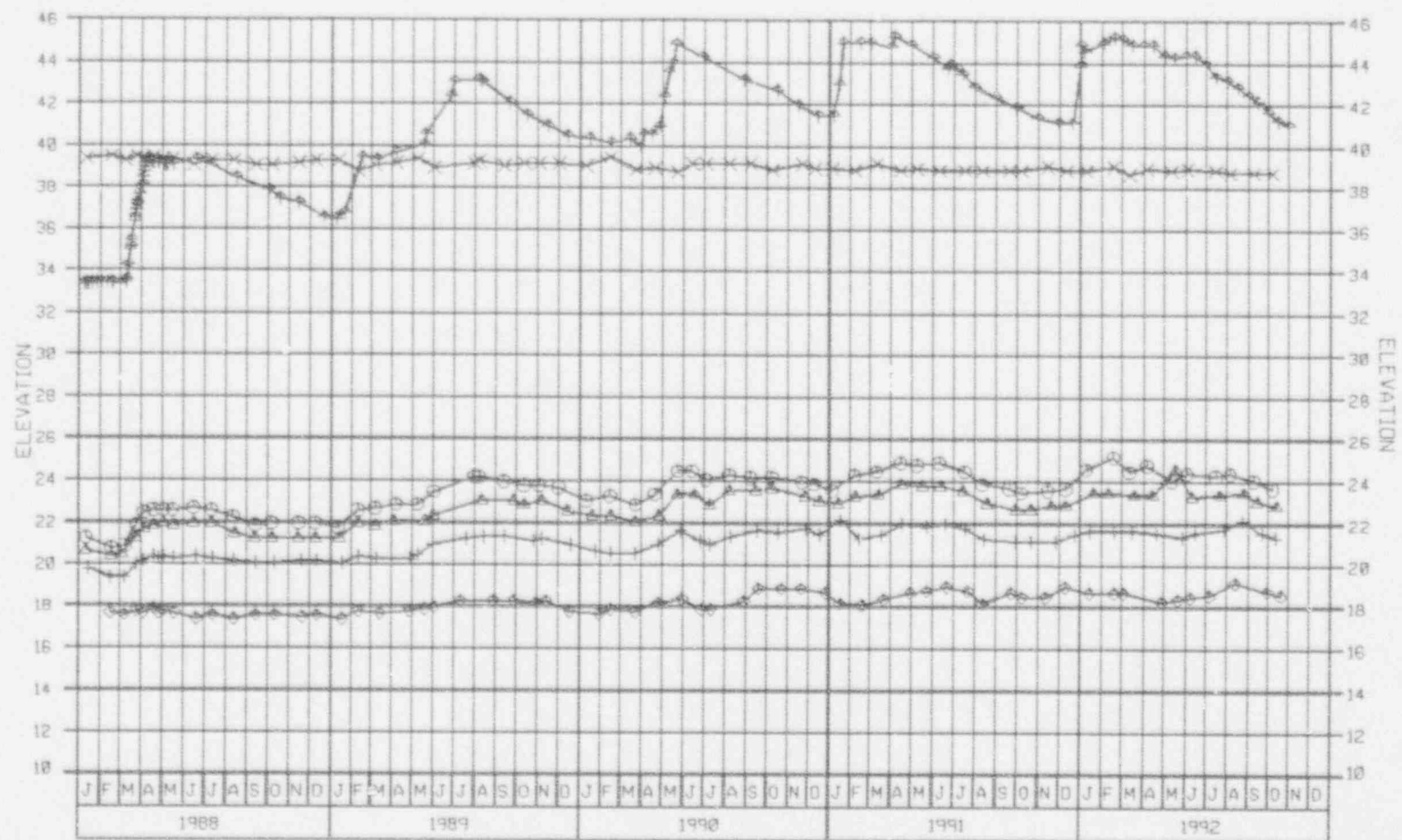
SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
Profile No. 2; Station 11+00	
11-11-92	SHEET OF



LEGEND:

Symbol	Instrument
○	P13-01
△	P14-01
+	P15-01
×	P167-01
↑	Reservoir

SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
Profile No. 3; Station 20+00	
11-11-92	SHEET OF



LEGEND: Symbol Instrument

○	—○	P17-01
△	—△	P18-01
+	—+	P19-01
×	—×	P169-01
●	—●	P395-01
*	—*	Reservoir

SOUTH TEXAS PROJECT
Electric Generating Station

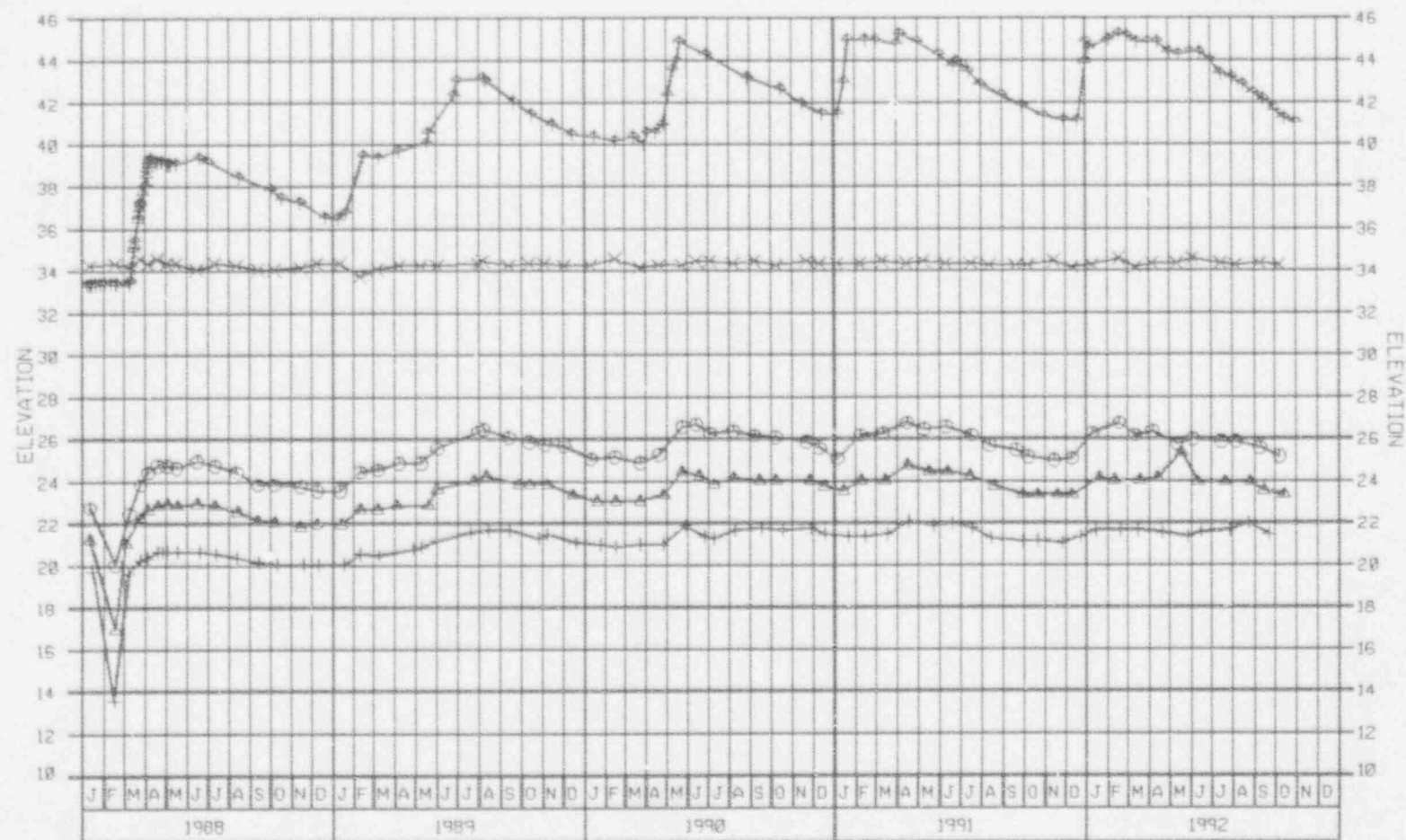
Houston Lighting and Power Company

**TIME HISTORY OF
ELEVATION DATA**

Profile No. 4; Station 40+20

11-11-92

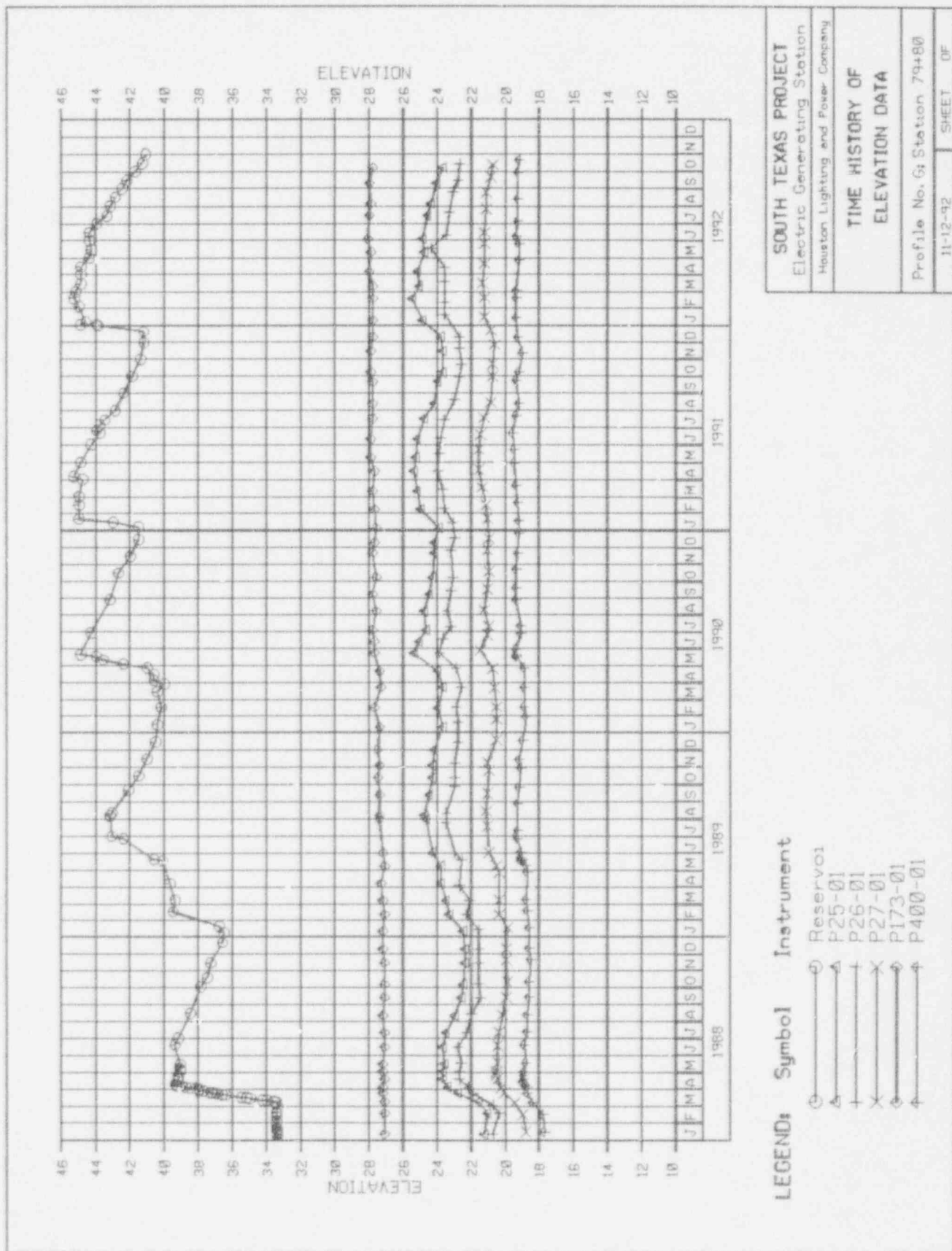
SHEET OF

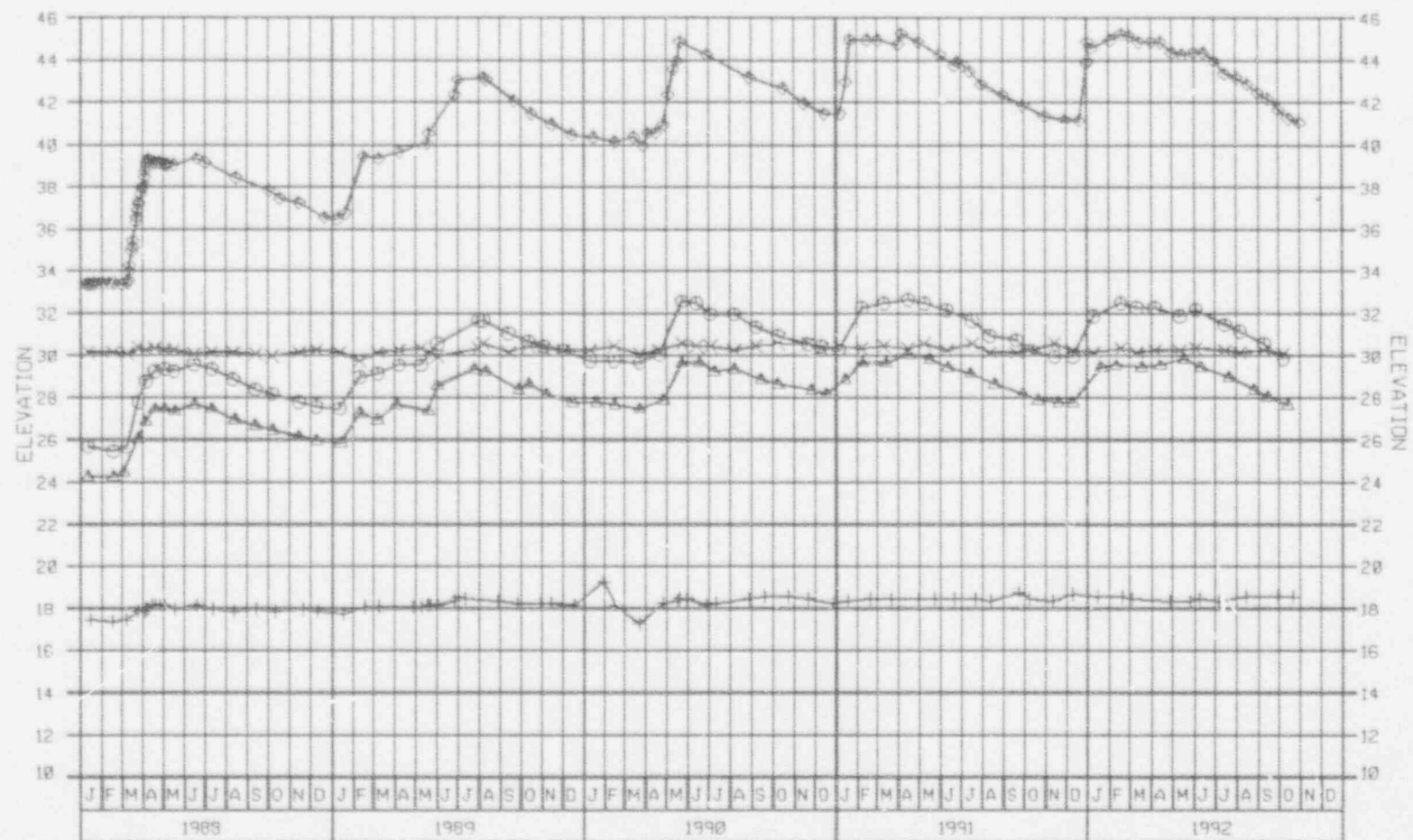


LEGEND: Symbol Instrument

○	—	○	P21-01
△	—	△	P22-01
+	—	+	P23-01
×	—	×	P171-01
*	—	*	Reservoir

SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
Profile No. 5; Station 59+60	
11-11-92	SHEET OF

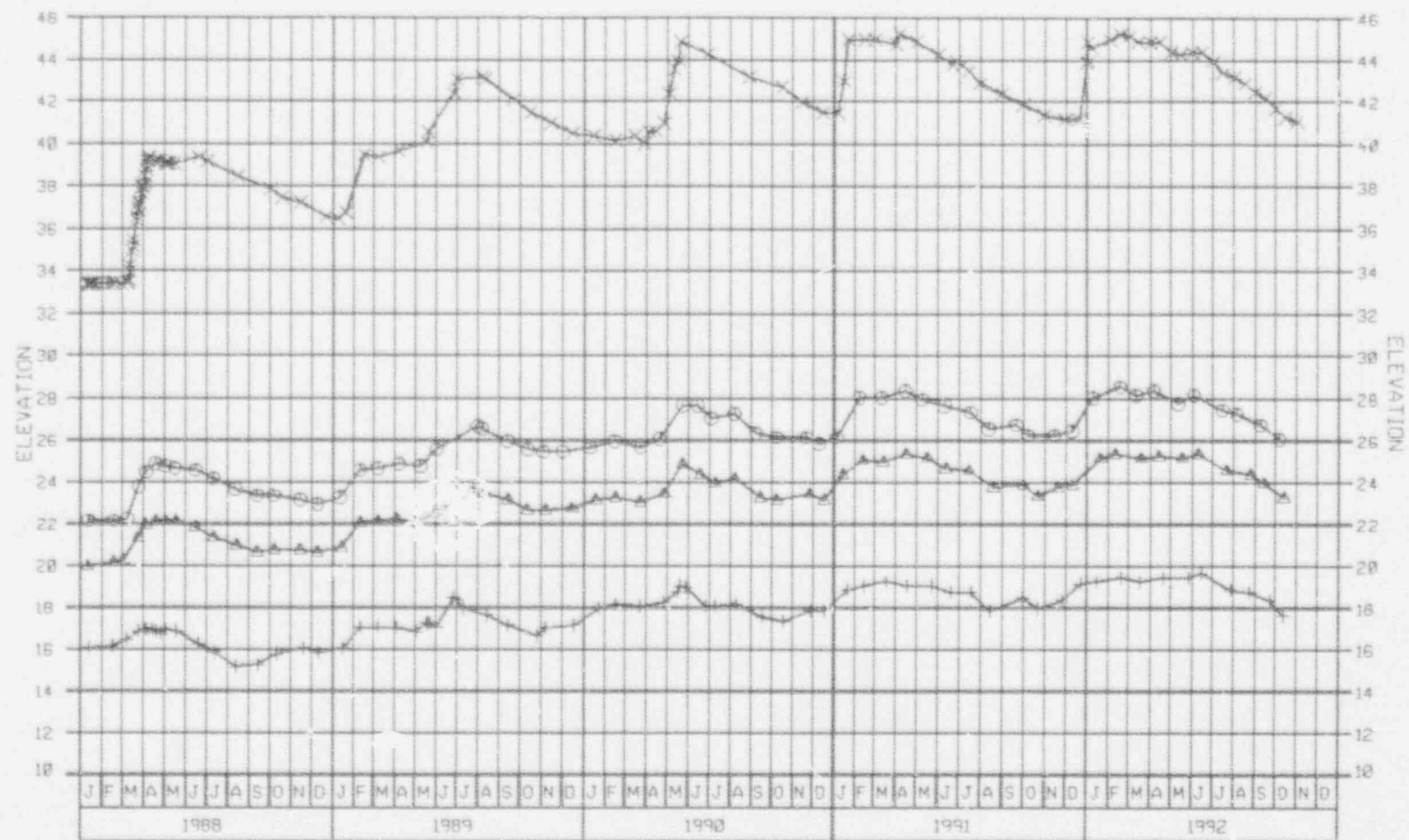




LEGEND: Symbol Instrument

○	—	○	P29-01
△	—	△	P30-01
+	—	+	P31-01
×	—	×	P175-01
◇	—	◇	Reservoir

SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
Profile No. 7; Station 100+20	
11-12-92	SHEET OF



LEGEND: Symbol Instrument

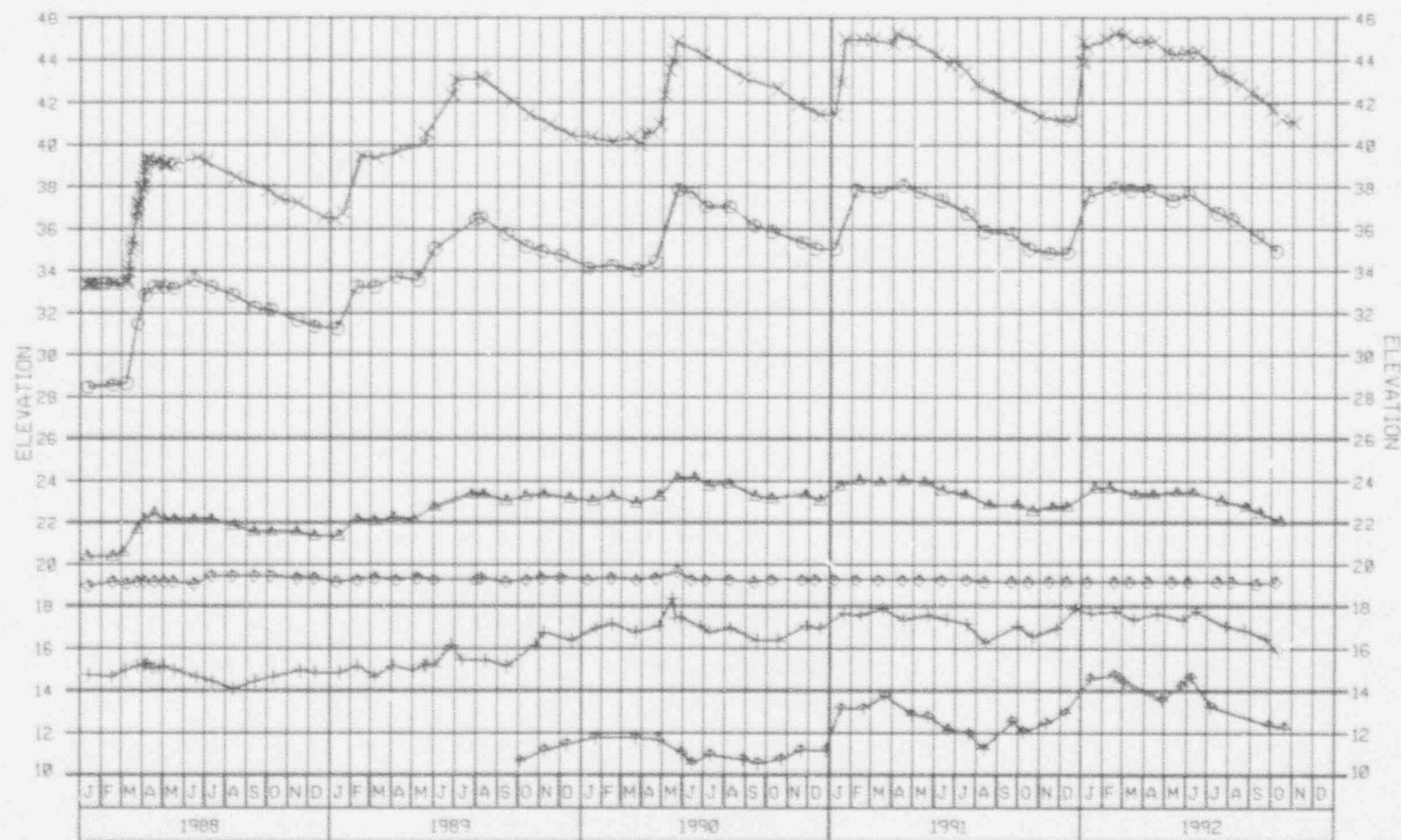
O ——— O P34-01
 Δ ——— Δ P35-01
 + ——— + P36-01
 X ——— X Reservoir

SOUTH TEXAS PROJECT
 Electric Generating Station
 Houston Lighting and Power Company
 TIME HISTORY OF
 ELEVATION DATA

Profile No. 8; Station 130+40

11-12-92

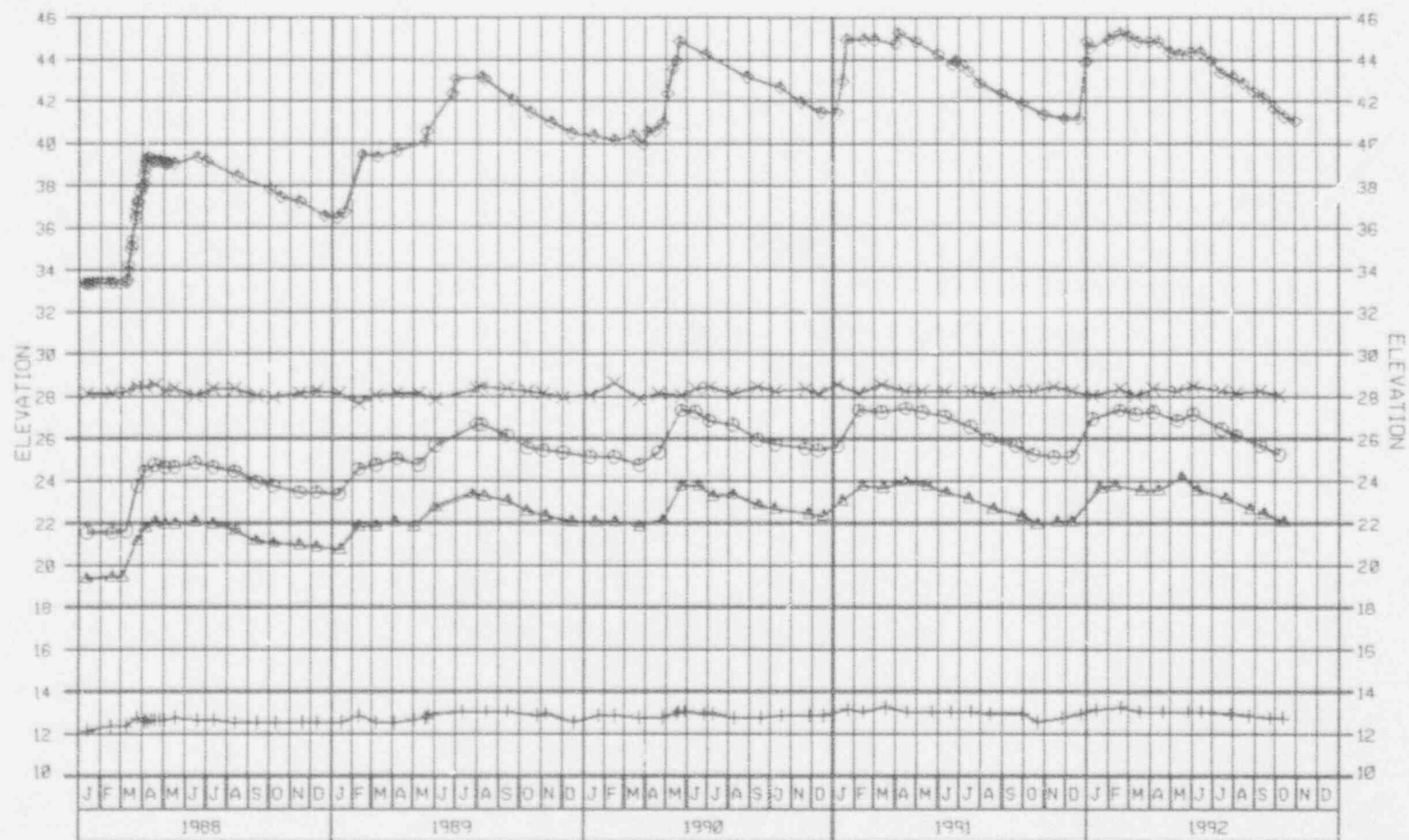
SHEET OF



LEGEND: Symbol Instrument

○	—	○	P38-01
△	—	△	P39-01
+	—	+	P40-01
x	—	x	Reservoir
◇	—	◇	P179-01
⬢	—	⬢	P485-01

SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
Profile No. 9; Station 160+00	
11-12-92	SHEET OF



LEGEND: Symbol Instrument

○	—	○	P42-01
△	—	△	P43-01
+	—	+	P44-01
×	—	×	P181-01
◇	—	◇	Reservoir

SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF	
ELEVATION DATA	
Profile No. 10: Station 180+25	
11-12-92	SHEET OF

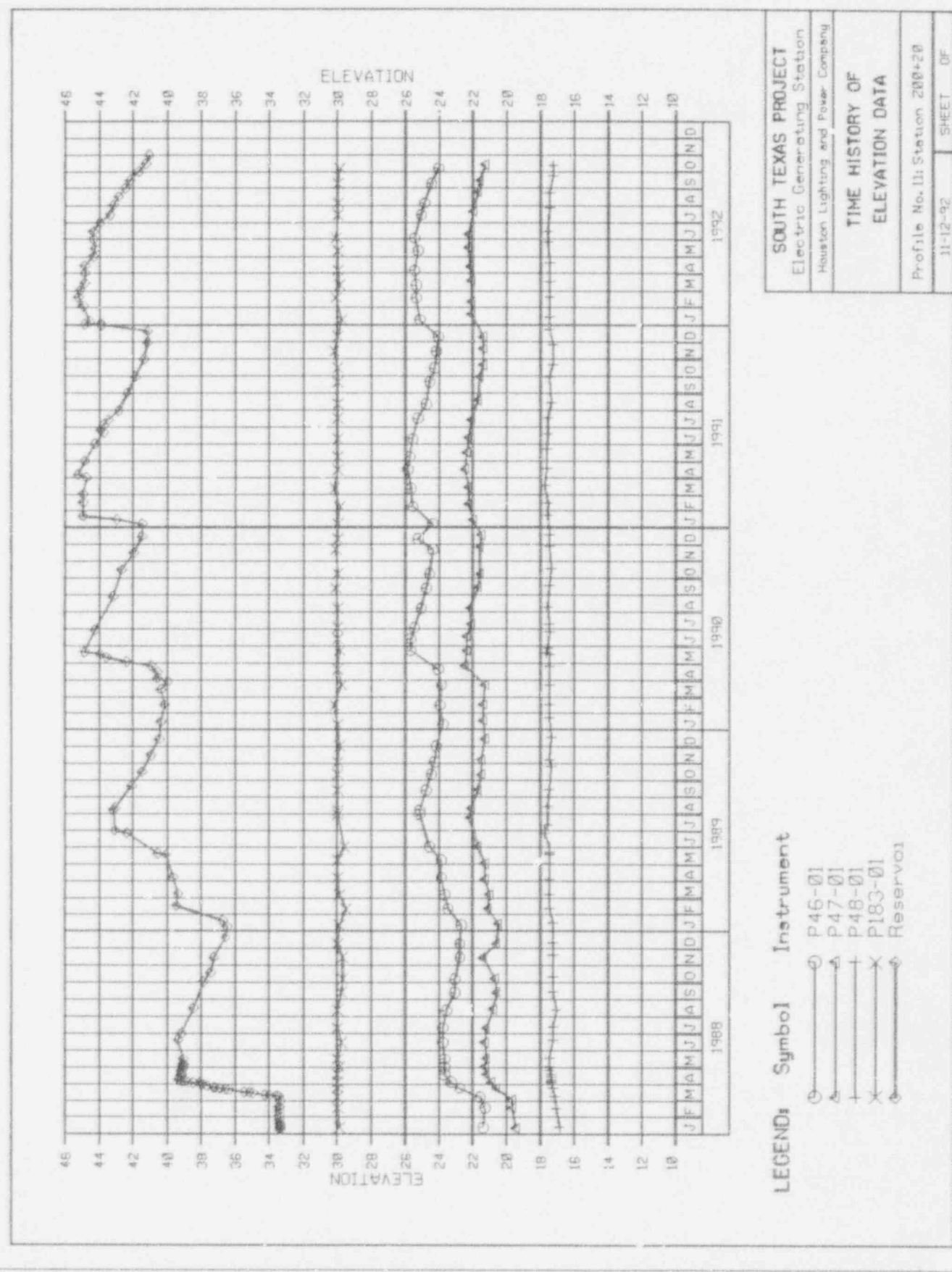


FIGURE 11

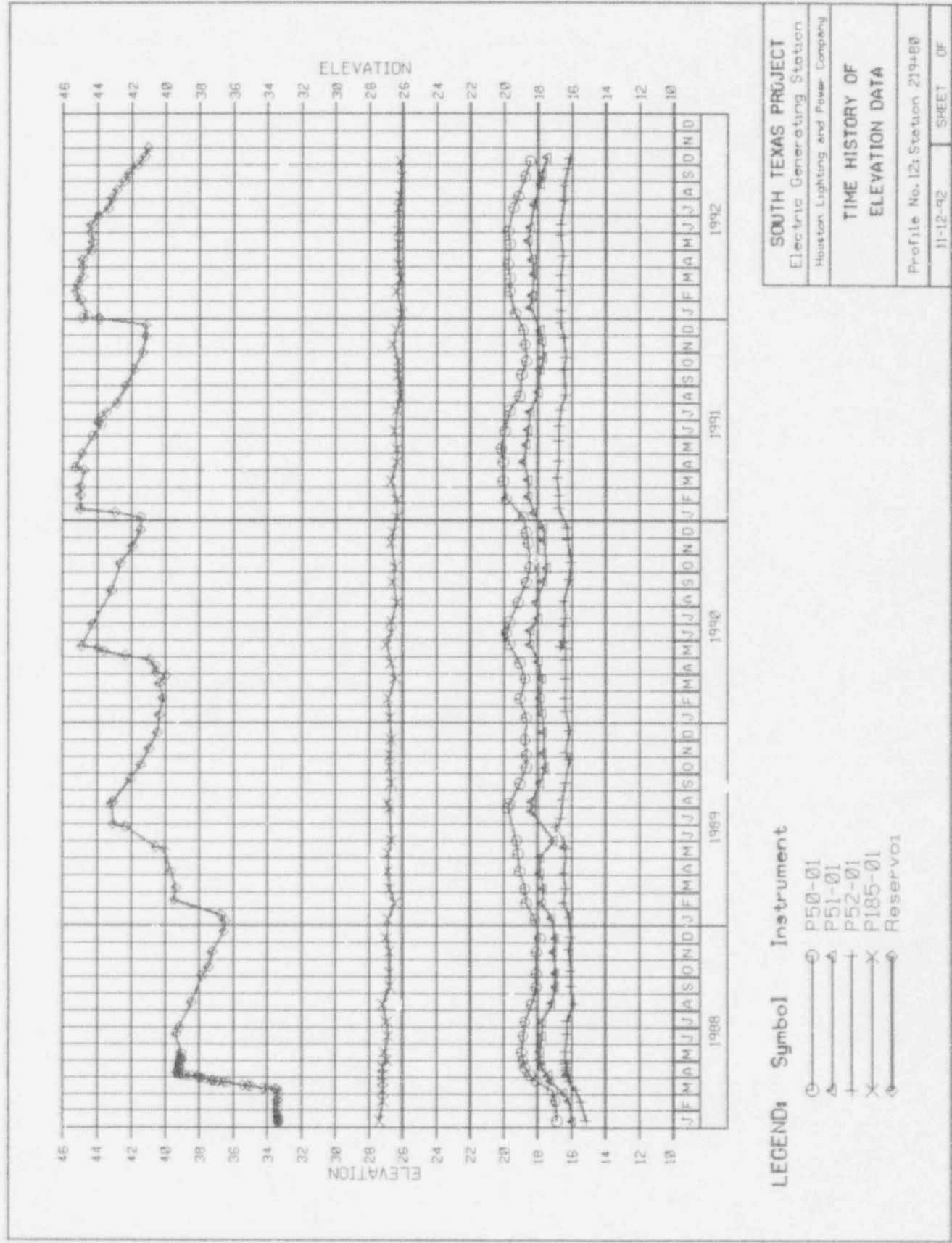


FIGURE 12

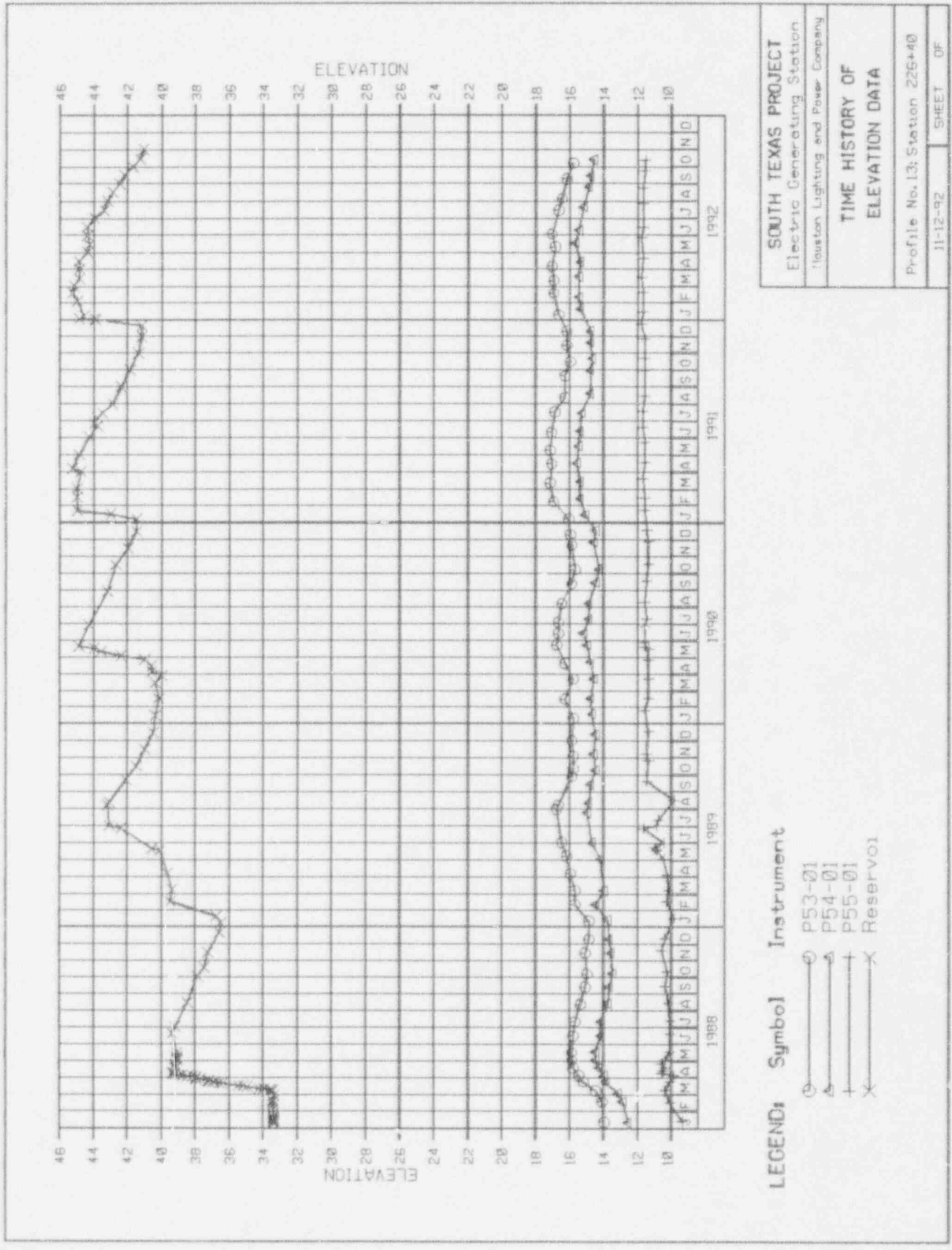
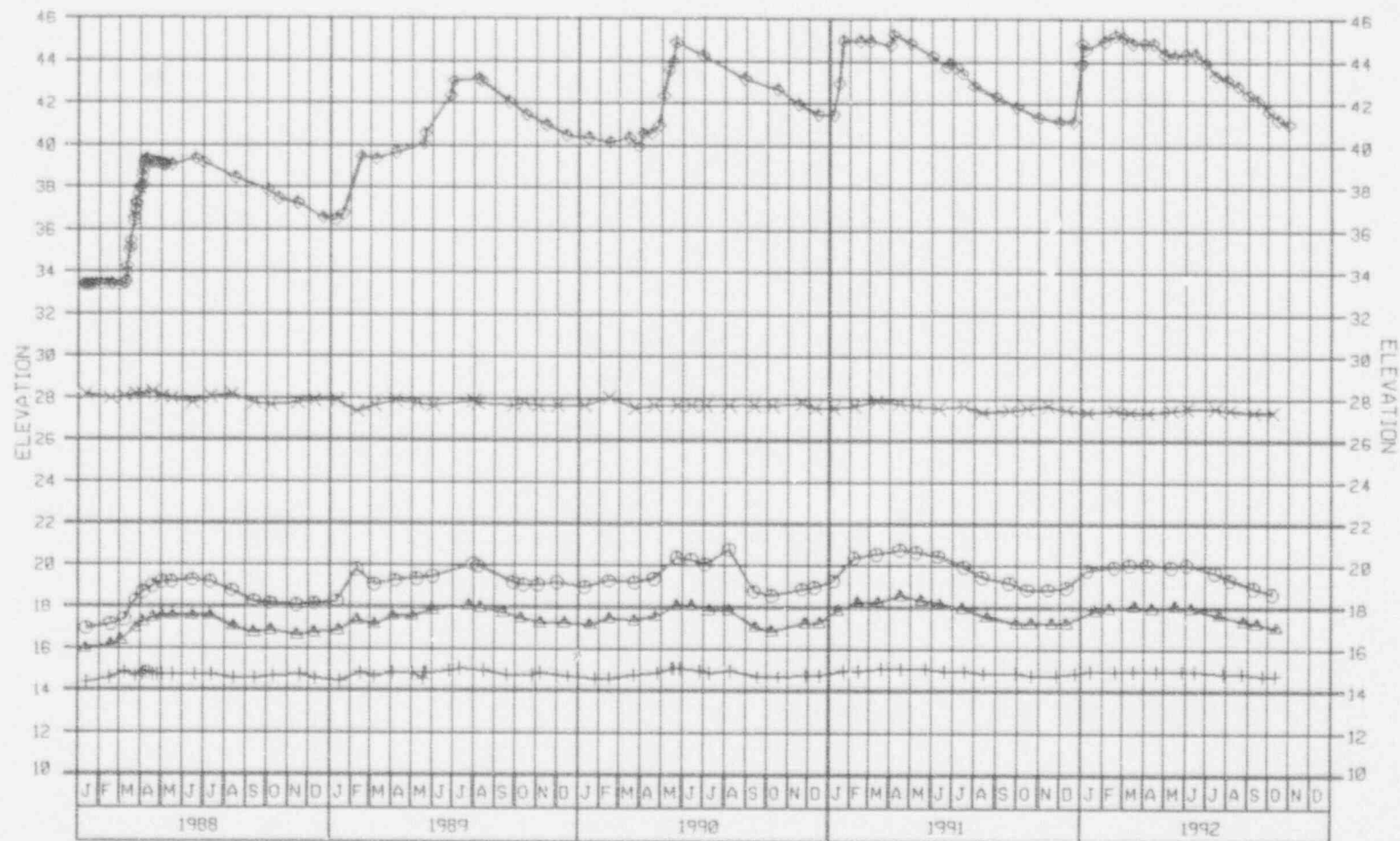


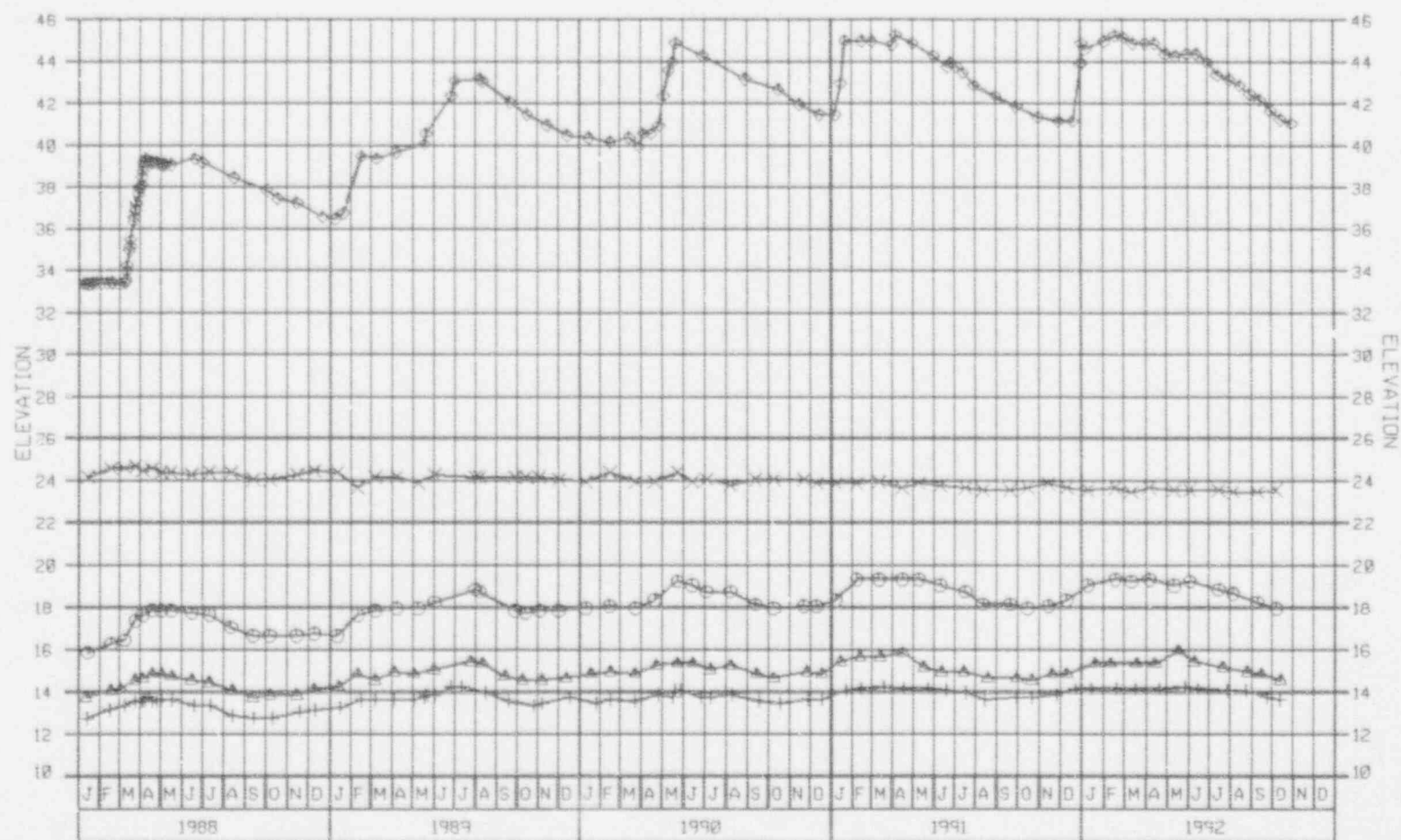
FIGURE 13



LEGEND: Symbol Instrument

○	—	○	P57-01
△	—	△	P58-01
+	—	+	P59-01
×	—	×	P189-01
◇	—	◇	Reservoir

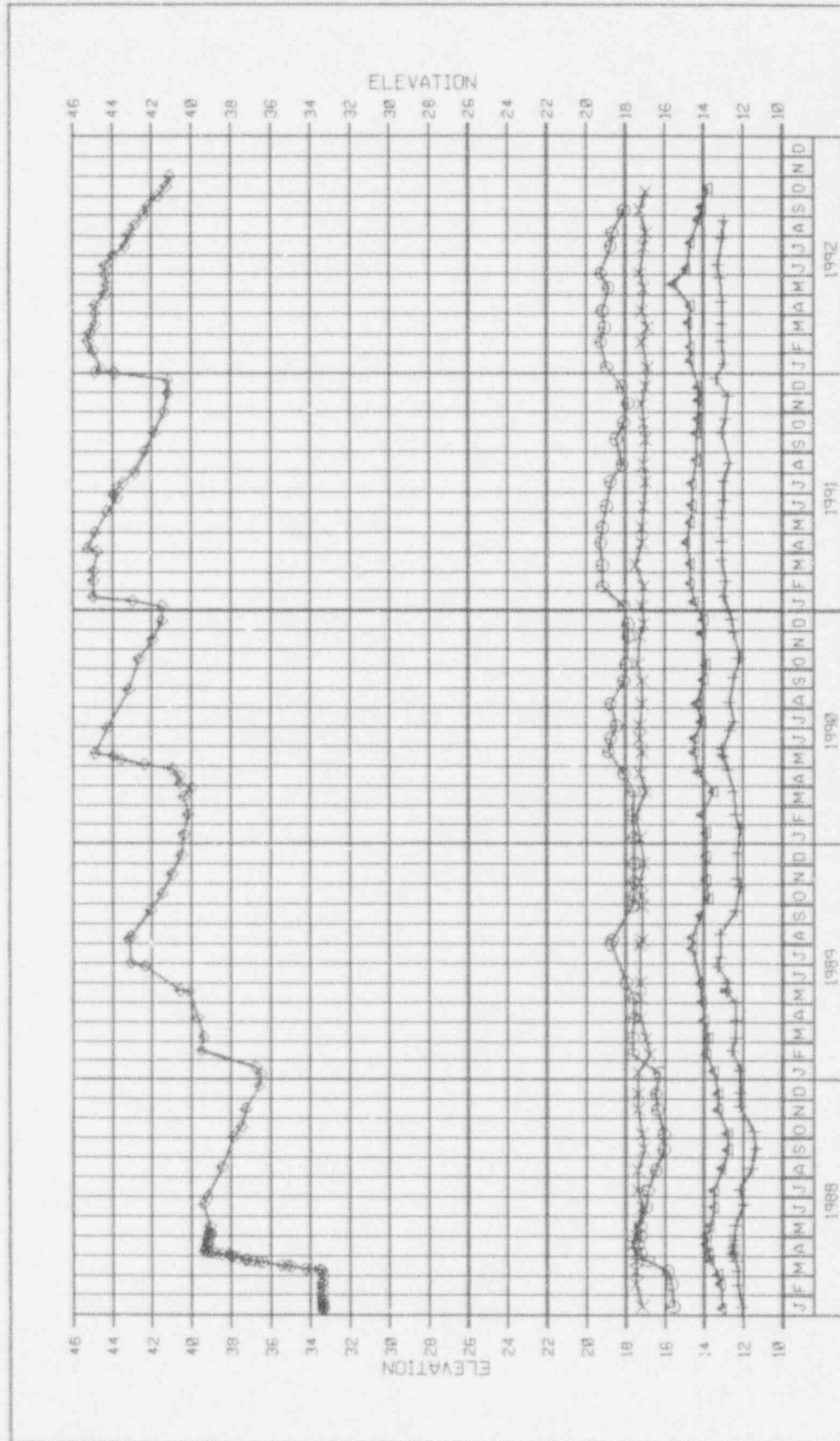
SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
Profile No. 14; Station 240+00	
11-12-92	SHEET OF



LEGEND: Symbol Instrument

⊙	—	⊙	P61-01
△	—	△	P62-01
+	—	+	P63-01
×	—	×	P191-01
◇	—	◇	Reservoir

SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
Profile No. 15: Station 260+25	
11-12-92	SHEET OF



LEGEND: Symbol Instrument

○ P64-01

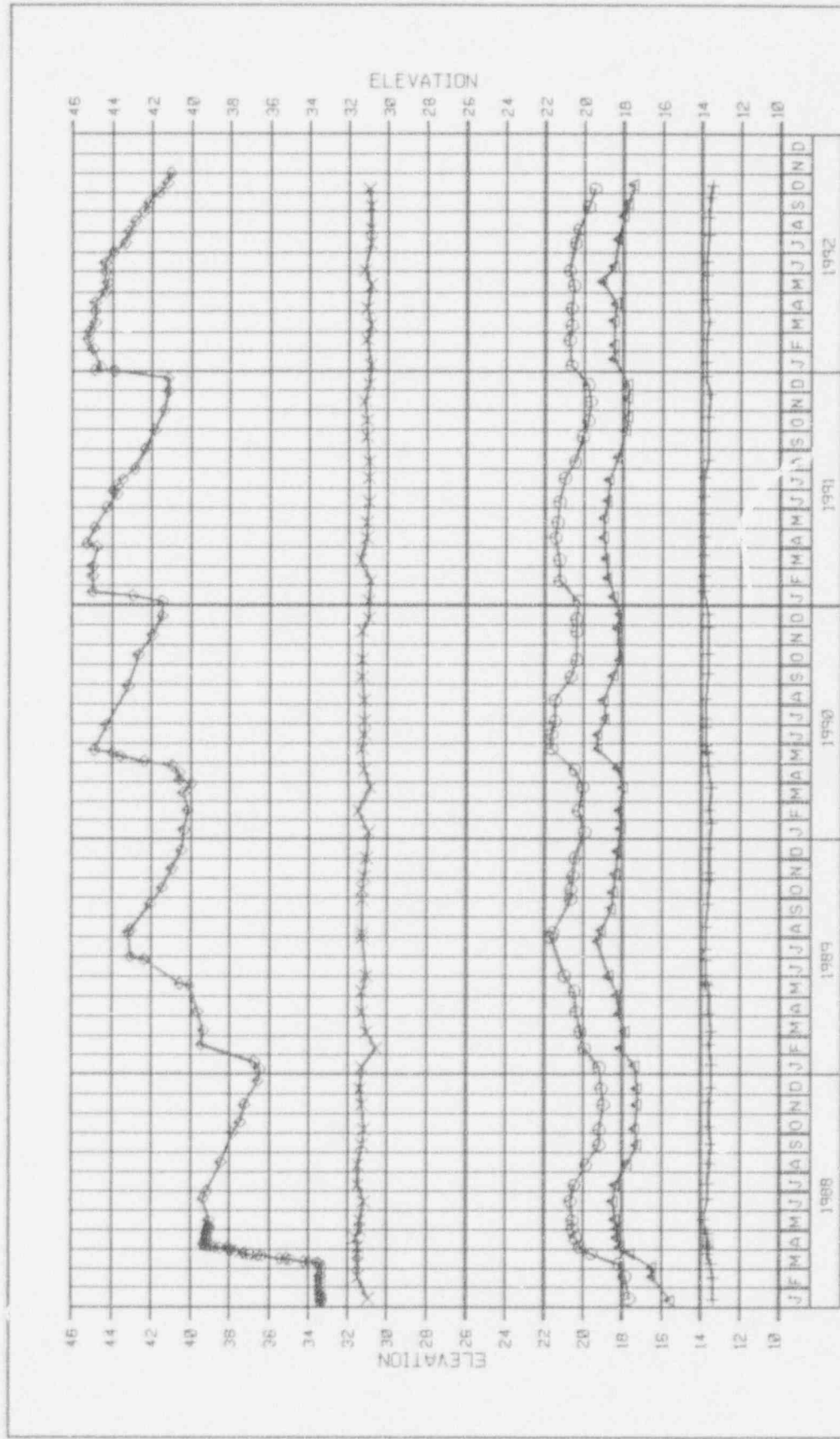
△ P65-01

+ P66-01

× P193-01

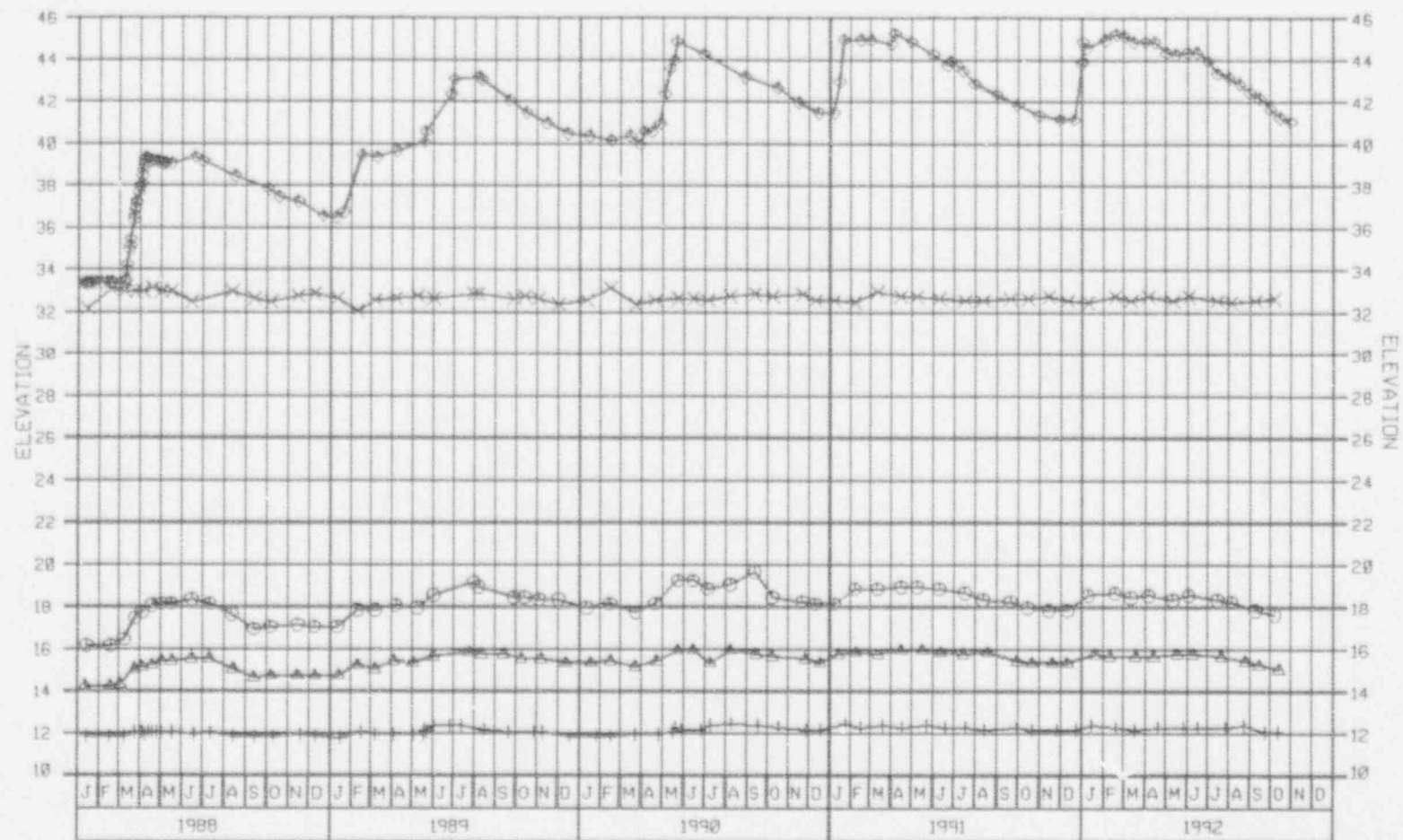
○ Reservoir

SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
Profile No. 16; Station 283+00	
11-12-92	SHEET OF



SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF	
ELEVATION DATA	
Profile No. 17: Station 300+00	
11-12-92	SHEET OF

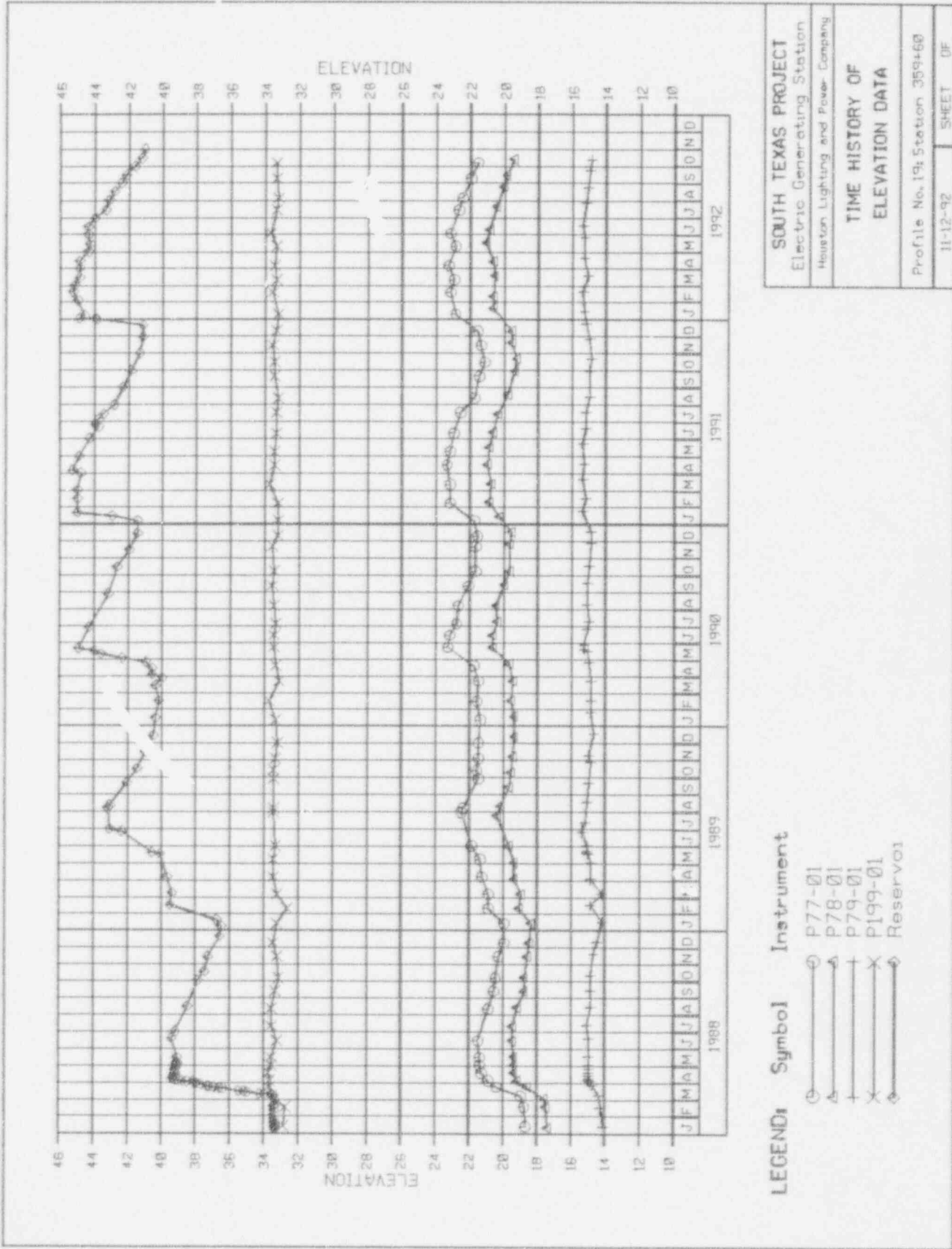
LEGEND:	Symbol	Instrument
	○	P68-01
	△	P69-01
	+	P70-01
	×	P195-01
	◇	Reservoir



LEGEND: Symbol Instrument

○	—	○	P72-01
△	—	△	P73-01
+	—	+	P74-01
×	—	×	P197-01
◇	—	◇	Reservoir

SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
Profile No. 18: Station 320+00	
11-12-92	SHEET OF



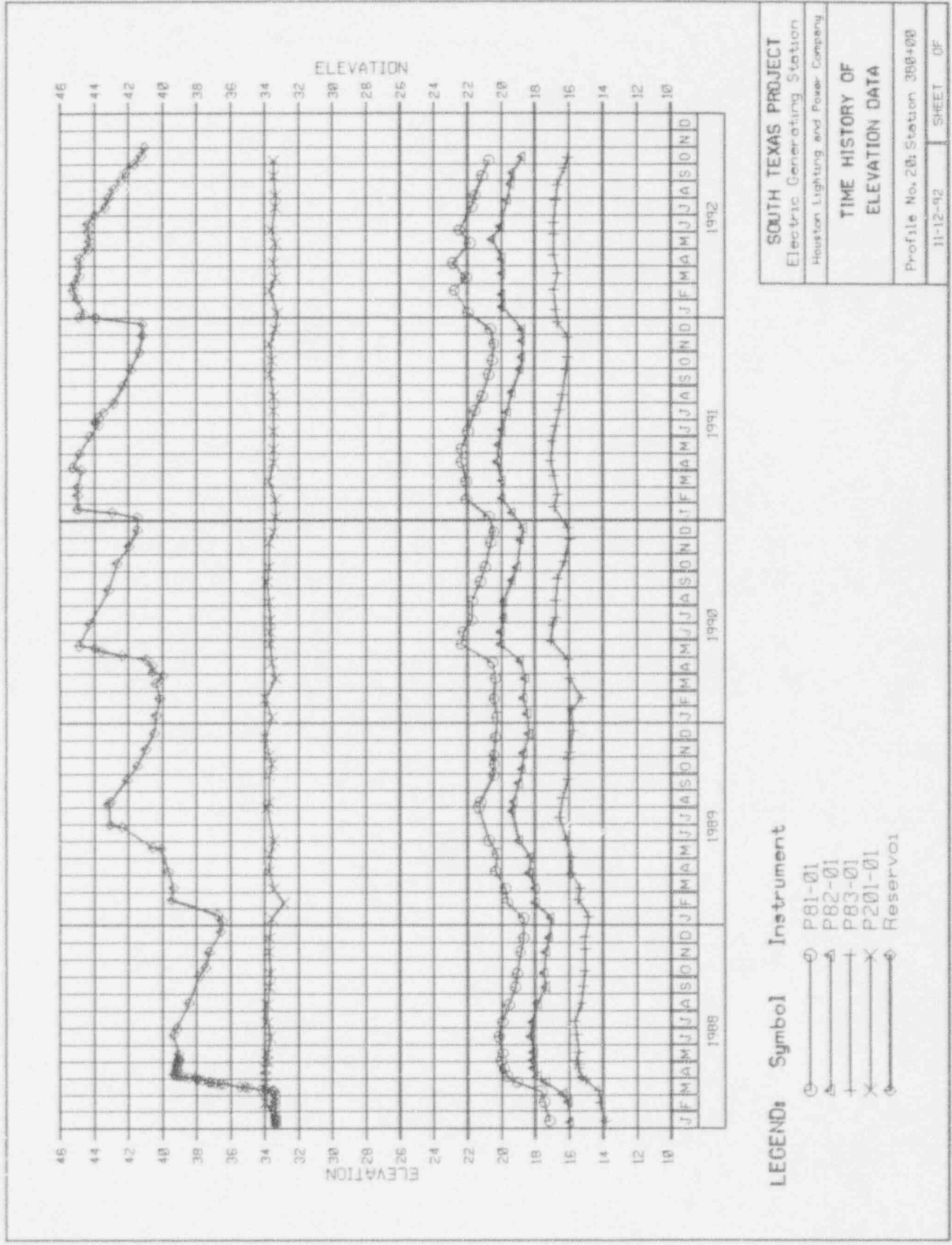
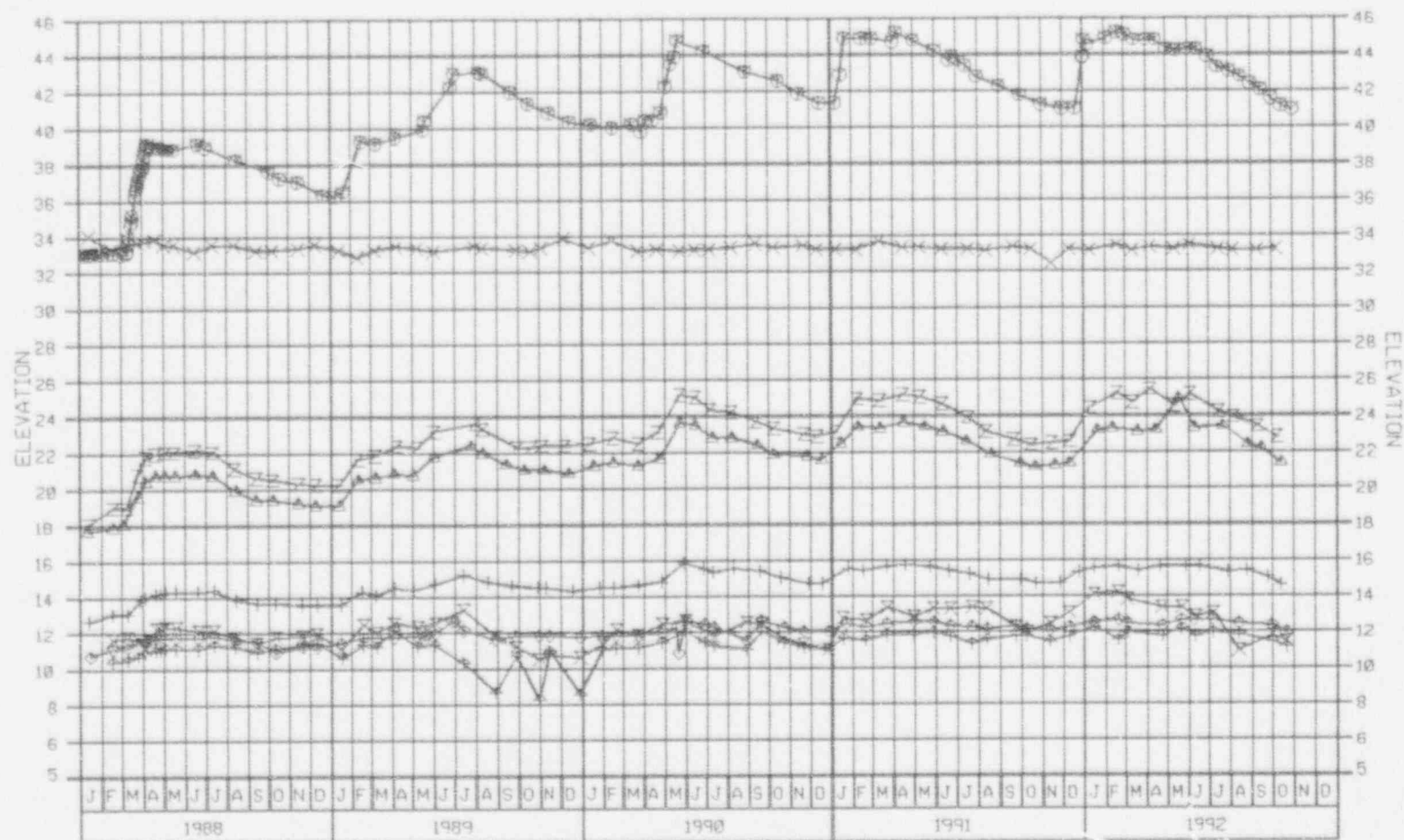


FIGURE 20



LEGEND:	Symbol	Instrument	Symbol	Instrument
	⊙	Reservoir	⌵	P85-01
	△	P86-01	⌴	Reservoir
	+	P87-01		
	×	P203-01		
	⊙	P429-01		
	+	P450-01		
	×	P451-01		

SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
Profile No. 21: Station 400+50	
11-19-92	SHEET OF

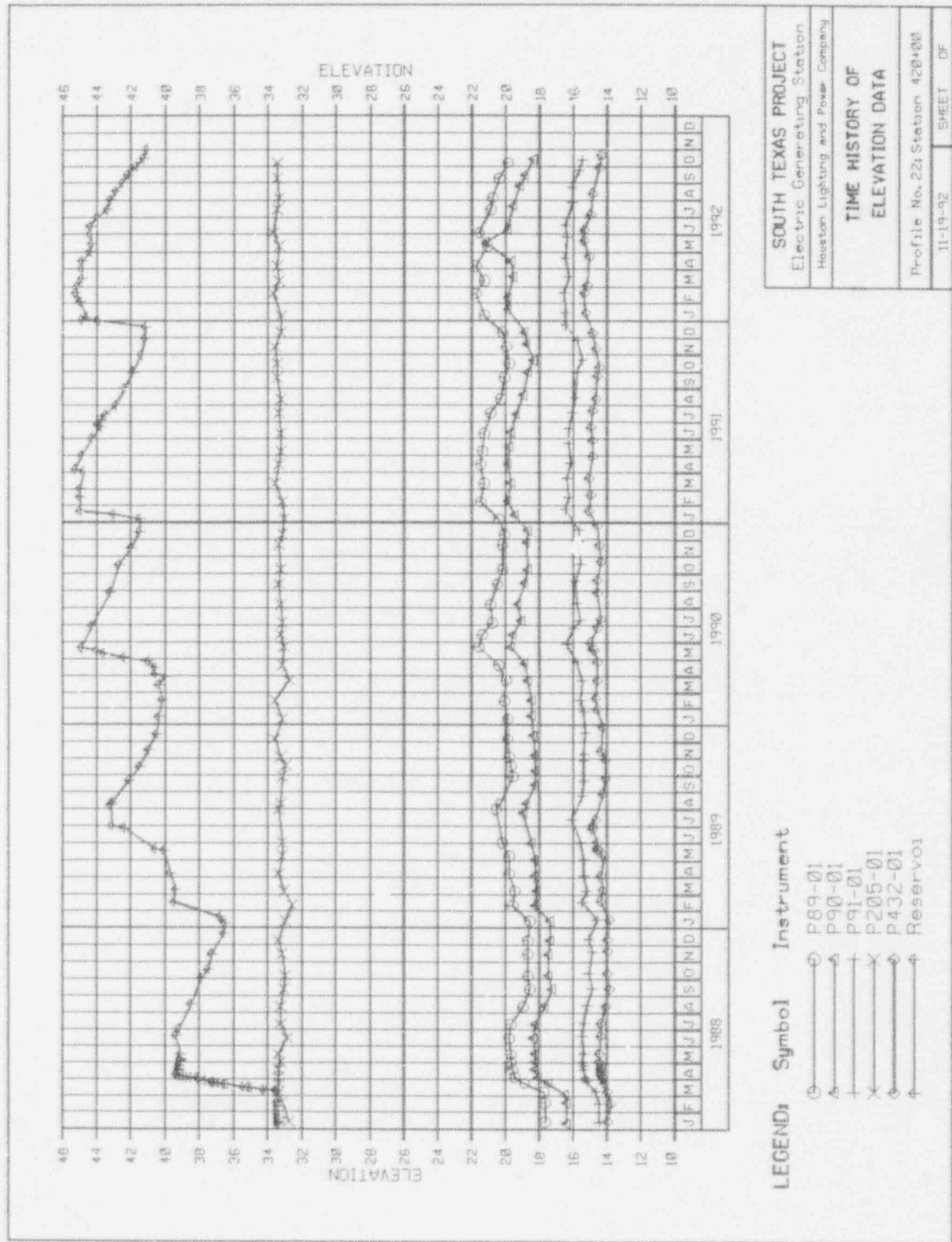


FIGURE 22

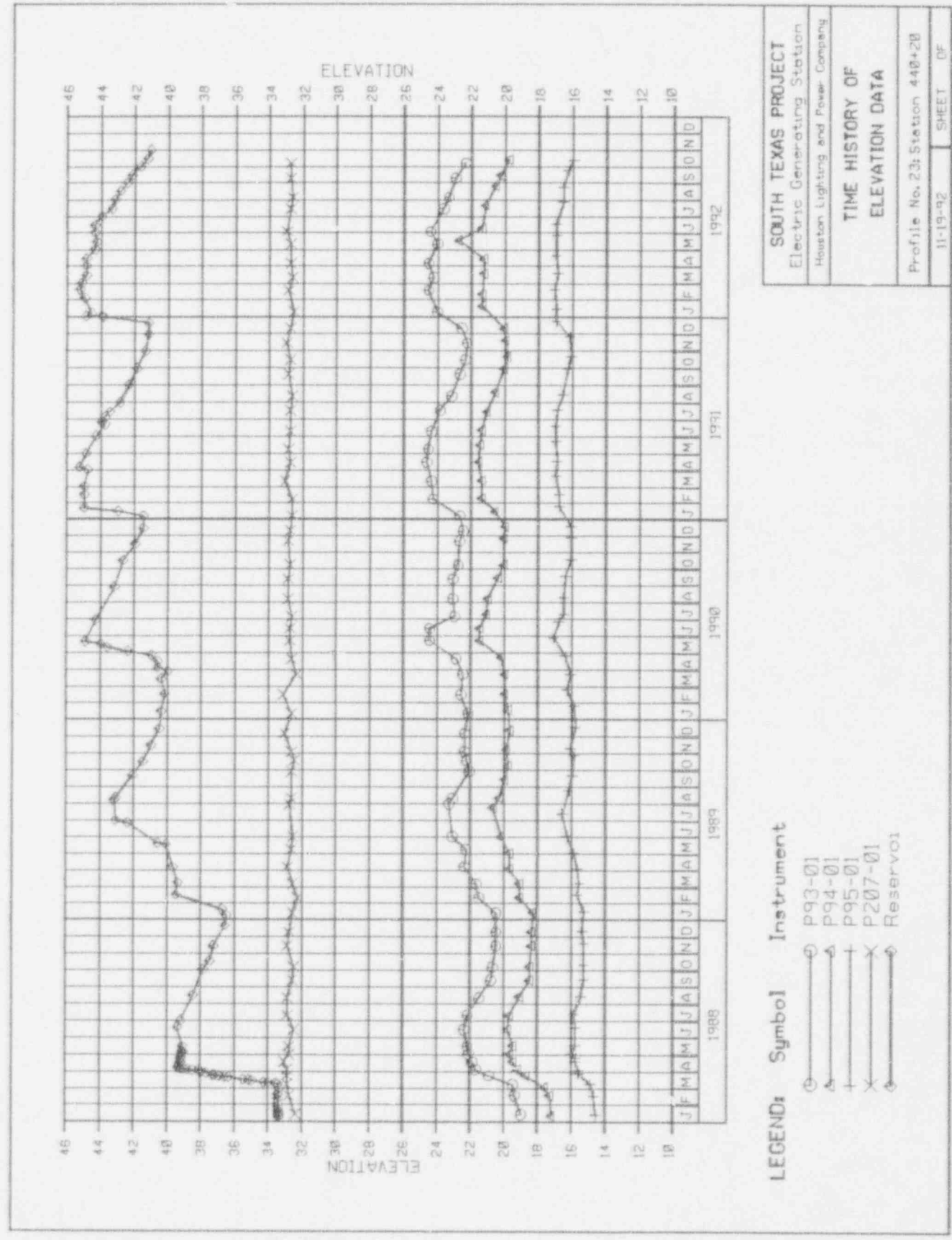
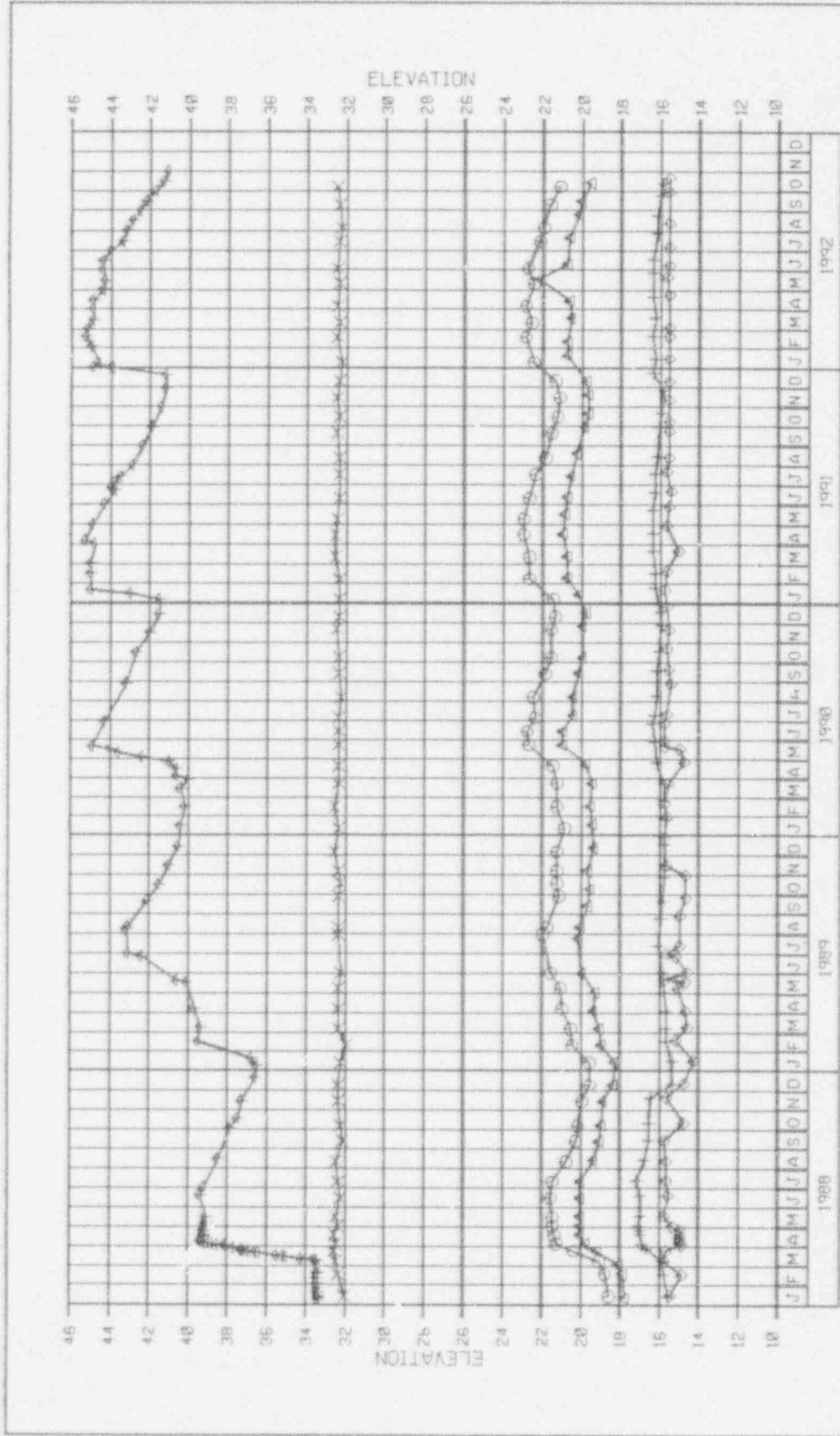


FIGURE 23



SOUTH TEXAS PROJECT

Electric Generating Station

Houston Lighting and Power Company

TIME HISTORY OF

ELEVATION DATA

Profile No. 24; Station 450+18

11-19-92

SHEET

OF

LEGEND:

○

p97-01

△

p98-01

+

p99-01

x

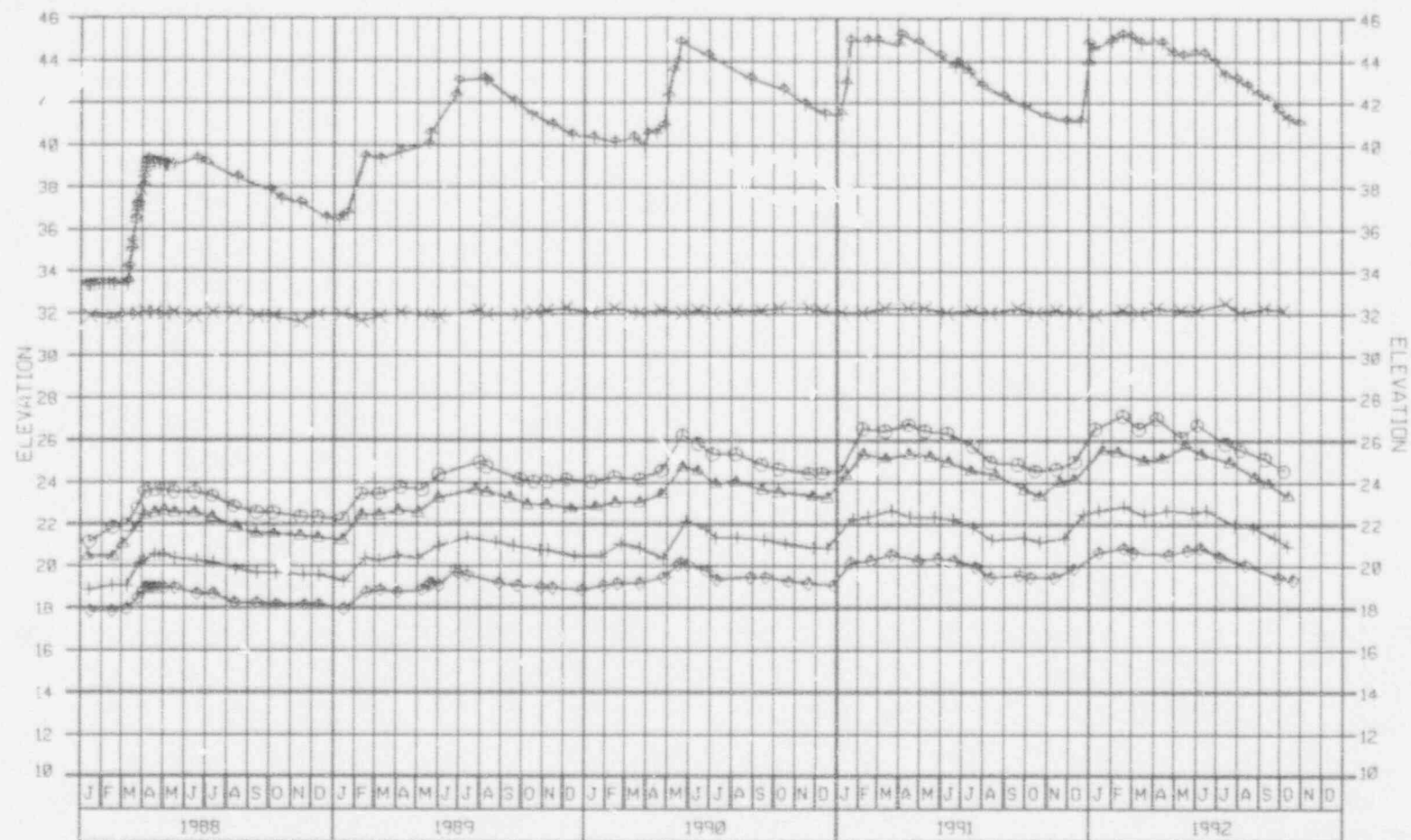
p209-01

◇

p434-01

—

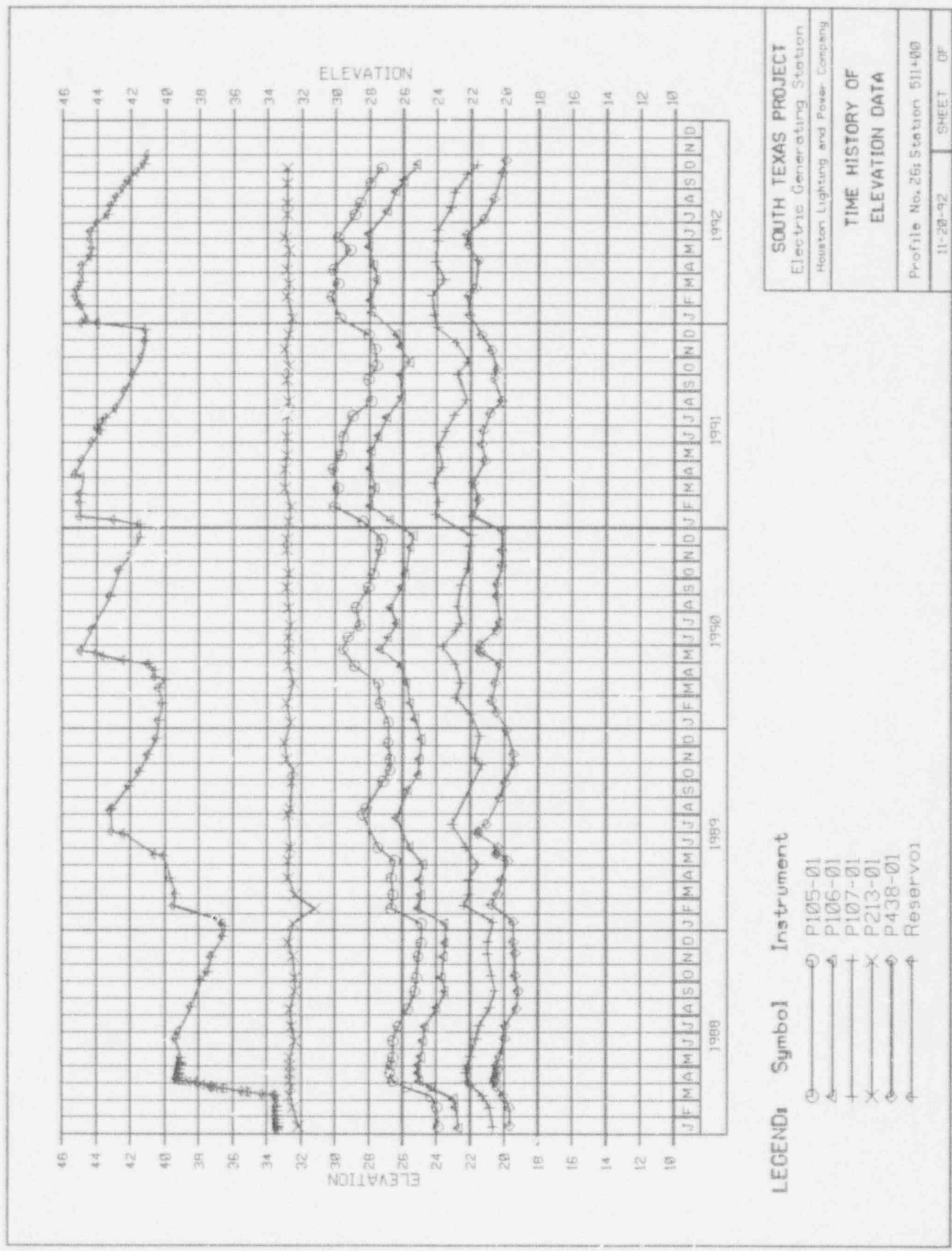
Reservoir

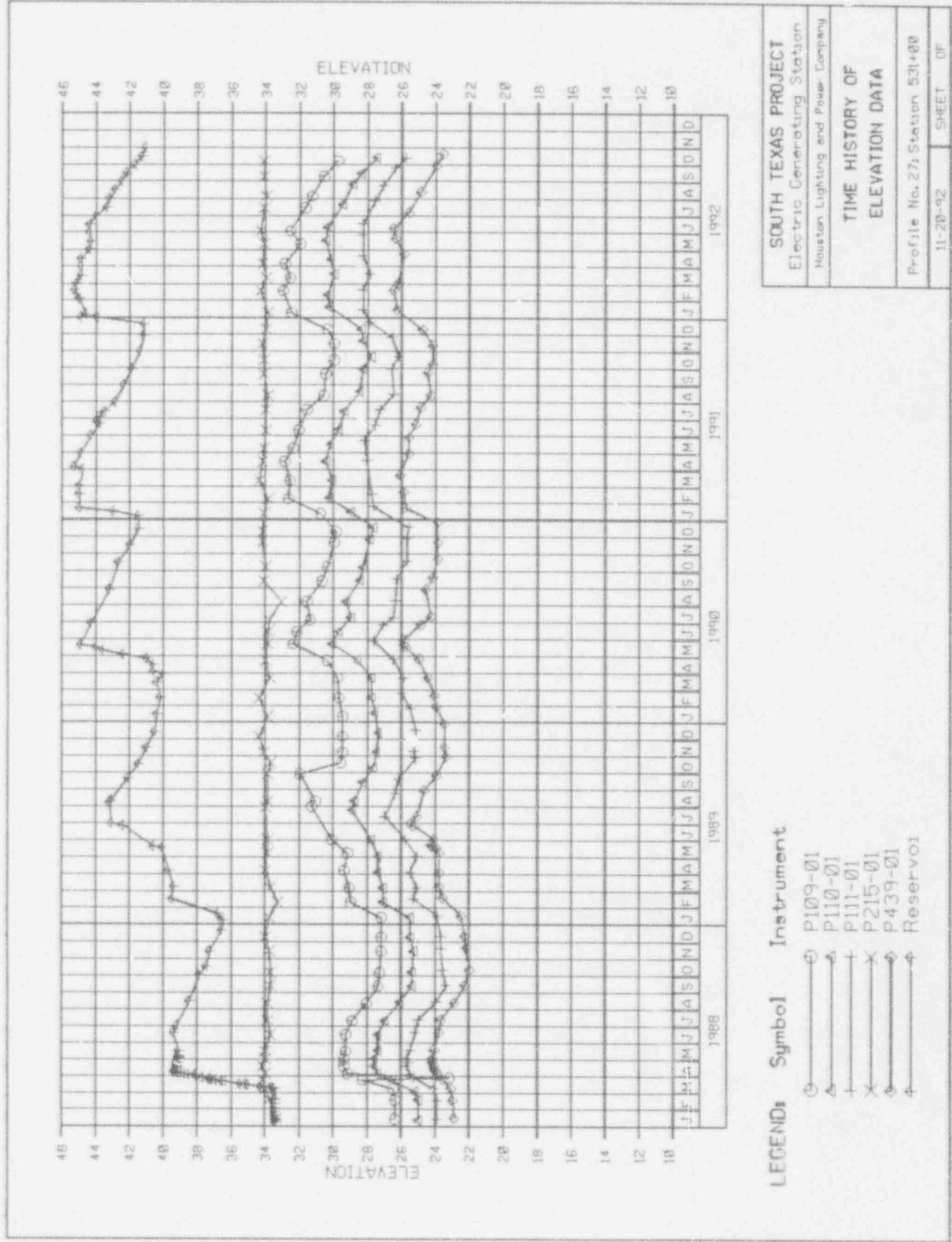


LEGEND: Symbol Instrument

○	—	○	P101-01
△	—	△	P102-01
+	—	+	P103-01
×	—	×	P211-01
◇	—	◇	P437-01
⬆	—	⬆	Reservoir

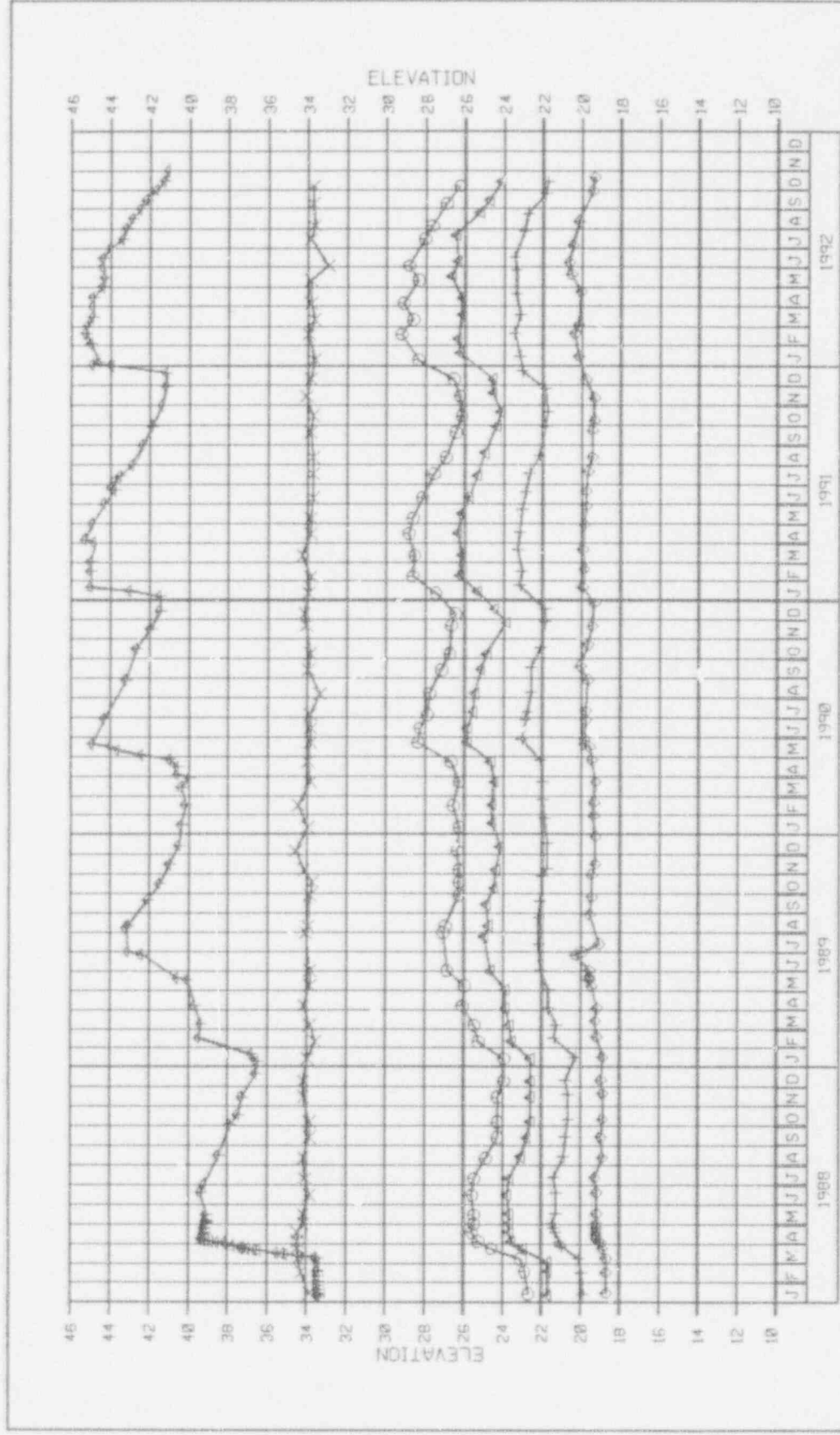
SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
Profile No. 25; Station 491+00	
11-28-92	SHEET OF





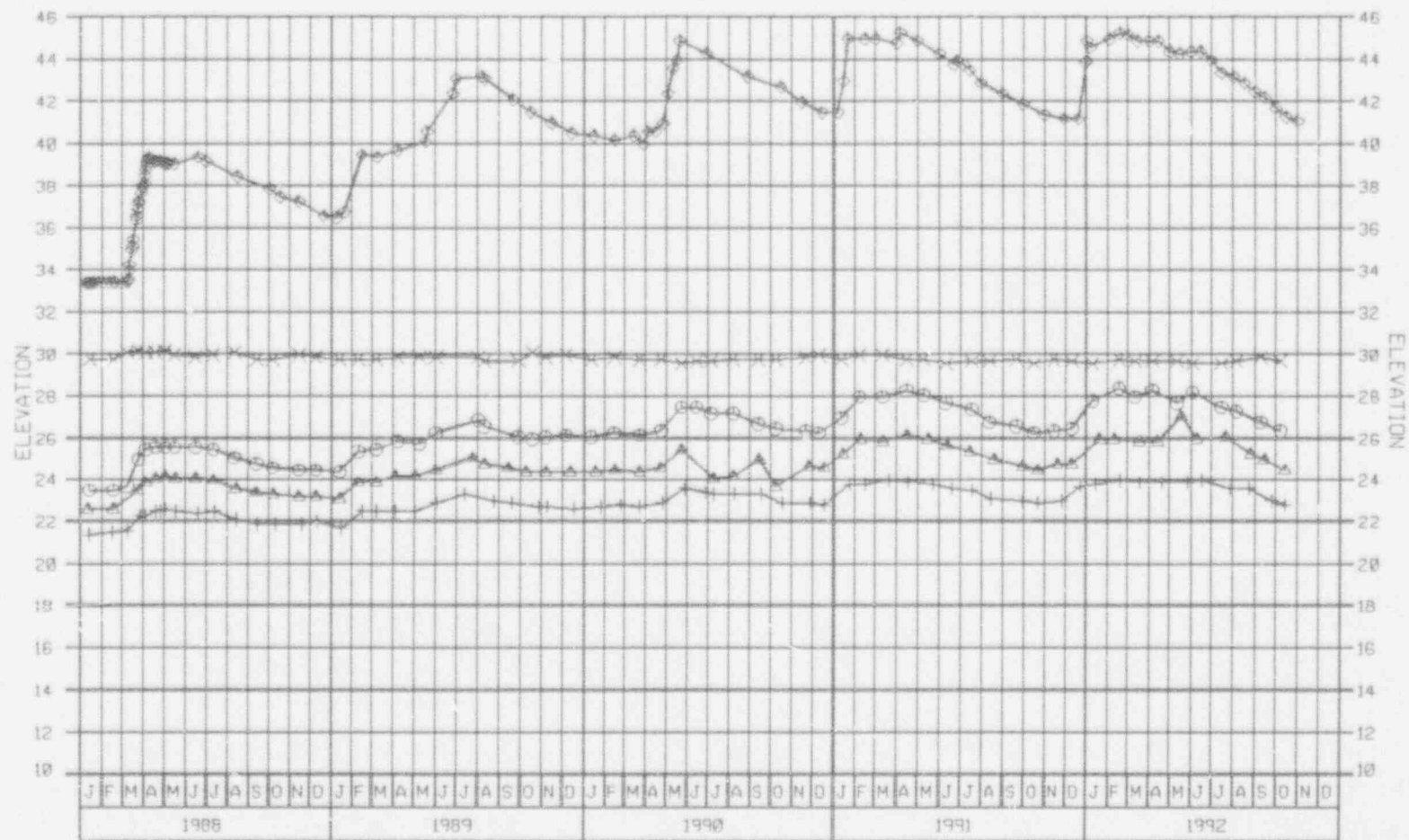
SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
Profile No. 27; Station 531+00	
11-20-92	SHEET OF

FIGURE 27



SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
Profile No. 28; Station 550+50	
11-20-92	SHEET OF

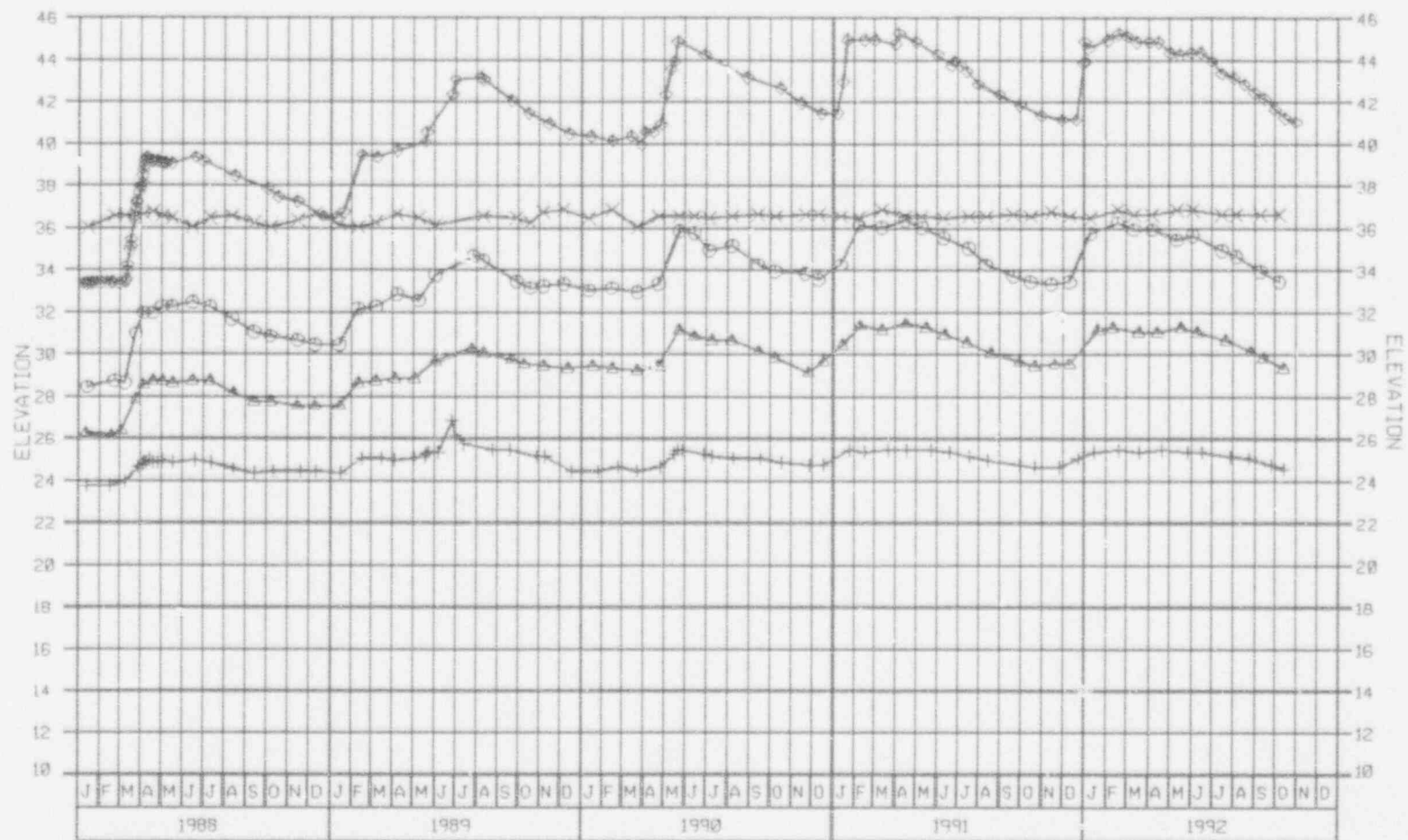
LEGEND:	Symbol	Instrument
	○	P113-01
	△	P114-01
	+	P115-01
	×	P217-01
	◇	P440-01
	△	Reservoir



LEGEND: Symbol Instrument

○	—	○	P116-01
△	—	△	P117-01
+	—	+	P118-01
×	—	×	P219-01
◇	—	◇	Reservoir

SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
Profile No. 29; Station 570+35	
11-20-92	SHEET OF



LEGEND: Symbol Instrument

○	—	○	P120-01
△	—	△	P121-01
+	—	+	P122-01
×	—	×	P221-01
◇	—	◇	Reservoir

SOUTH TEXAS PROJECT
Electric Generating Station
Houston Lighting and Power Company

TIME HISTORY OF
ELEVATION DATA

Profile No. 30: Station 598+40

11-20-92

SHEET OF

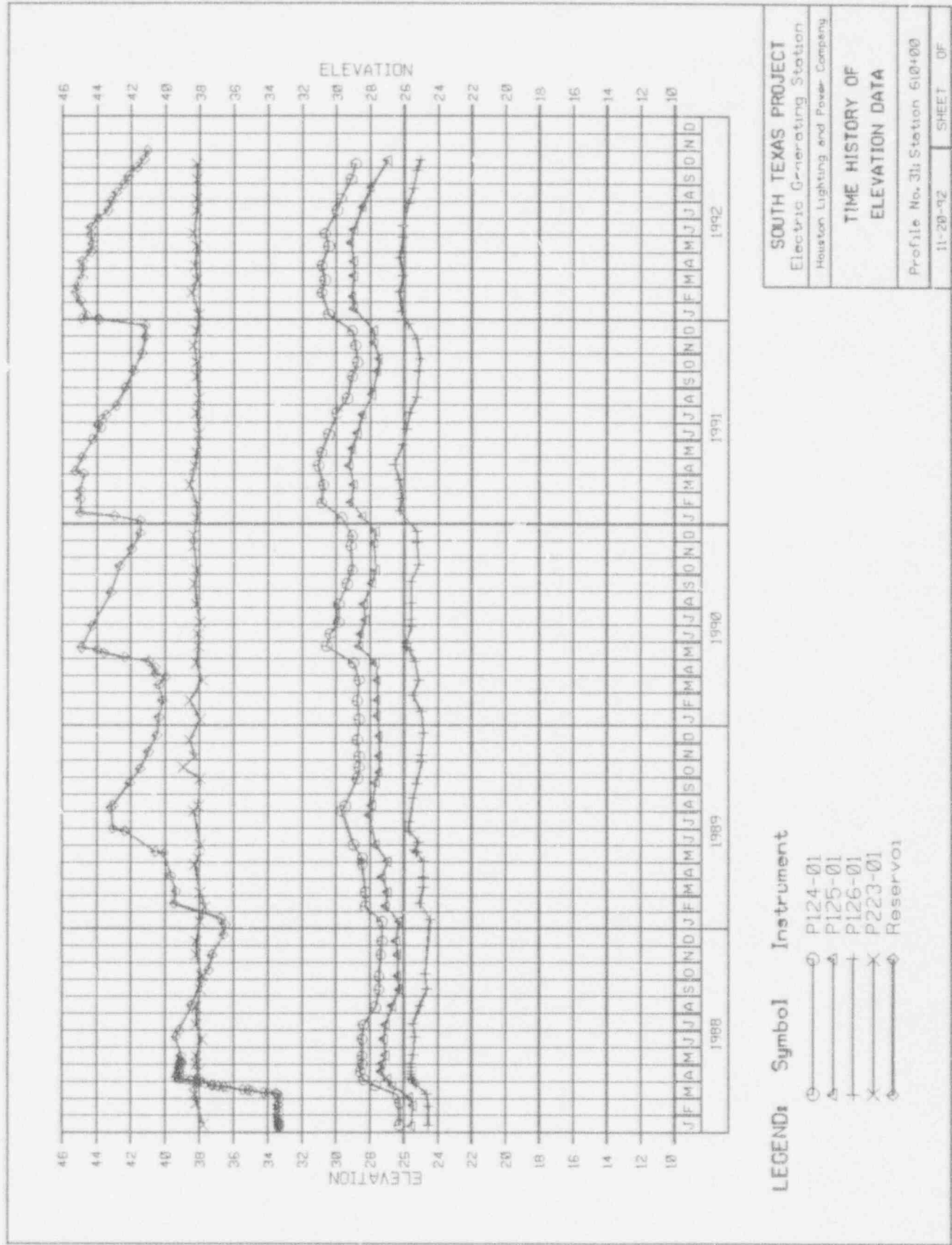
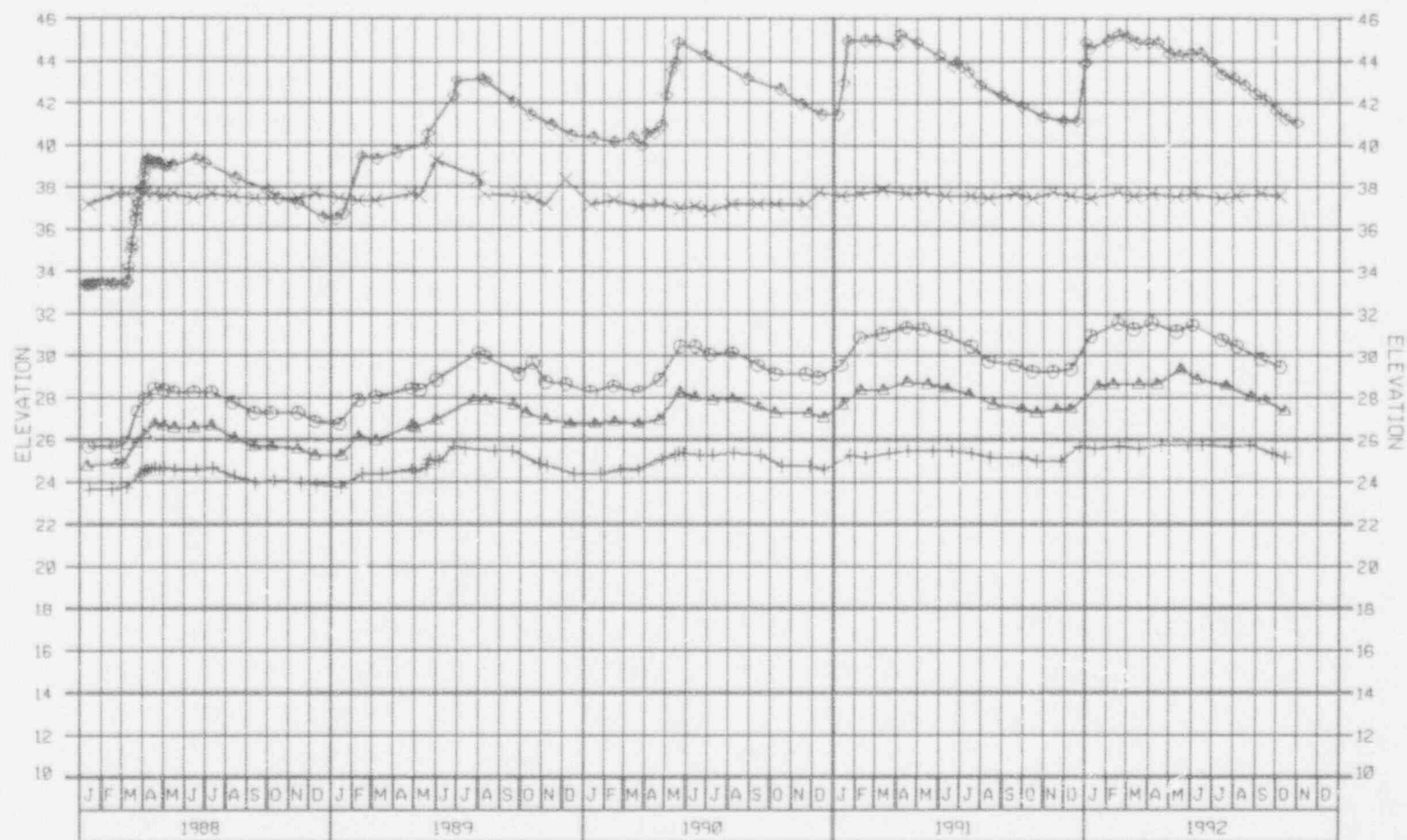


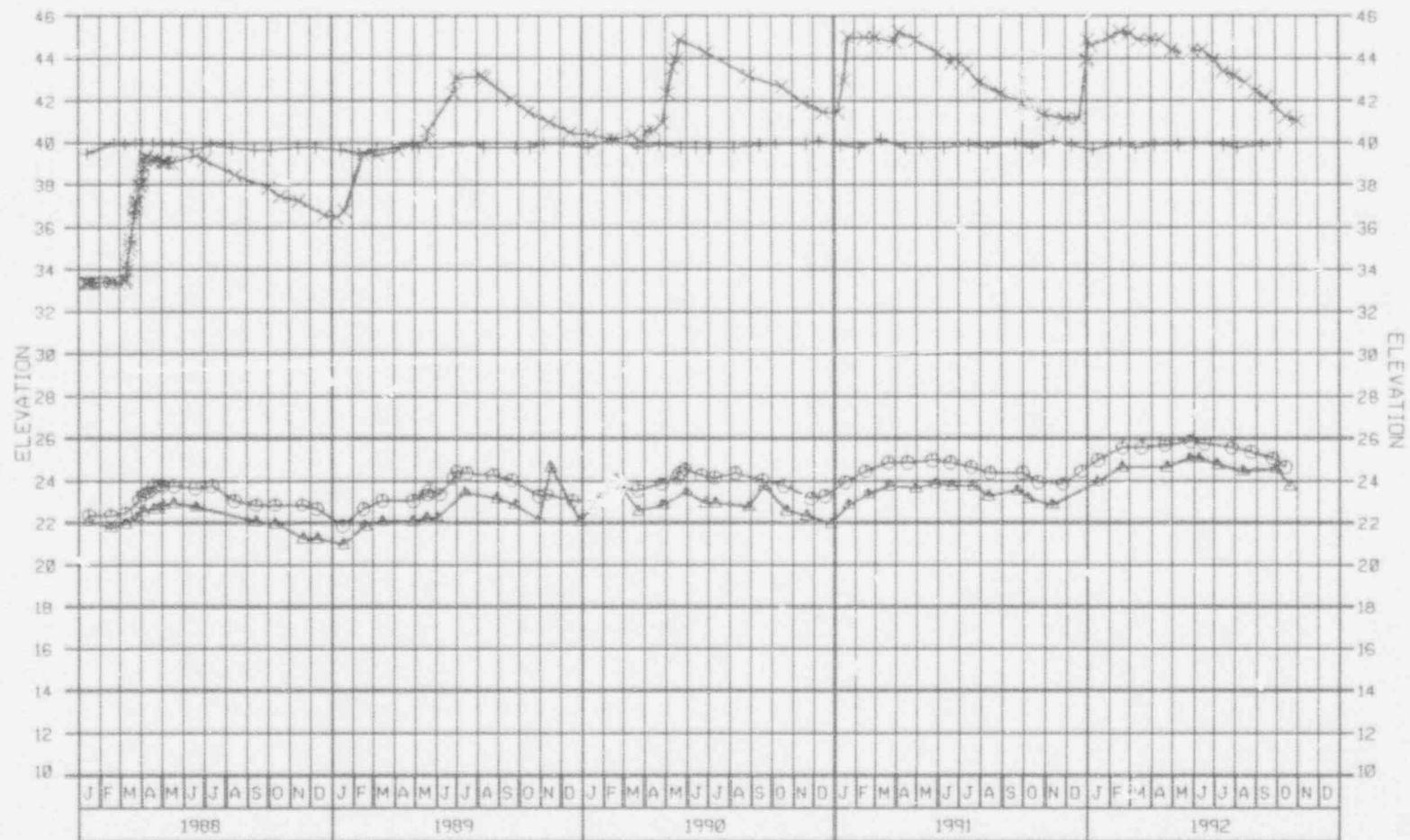
FIGURE 31



LEGEND: Symbol Instrument

○	—	○	P128-01
△	—	△	P129-01
+	—	+	P130-01
×	—	×	P225-01
◇	—	◇	Reservo1

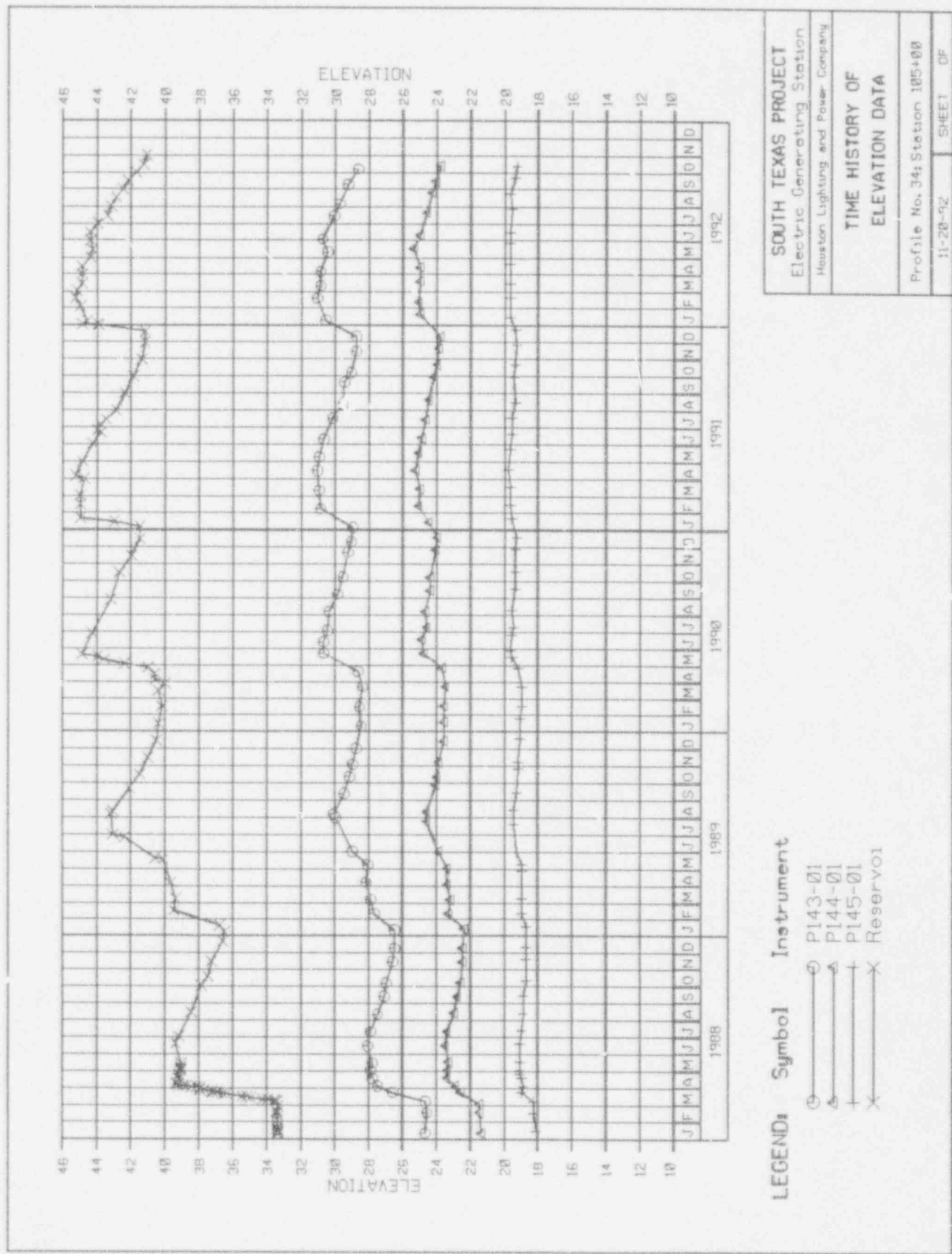
SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
Profile No. 32; Station 629+00	
11-20-92	SHEET OF



LEGEND: Symbol Instrument

⊙	⊙	P134-01
△	△	P135-01
+	+	P227-01
×	×	Reservoir

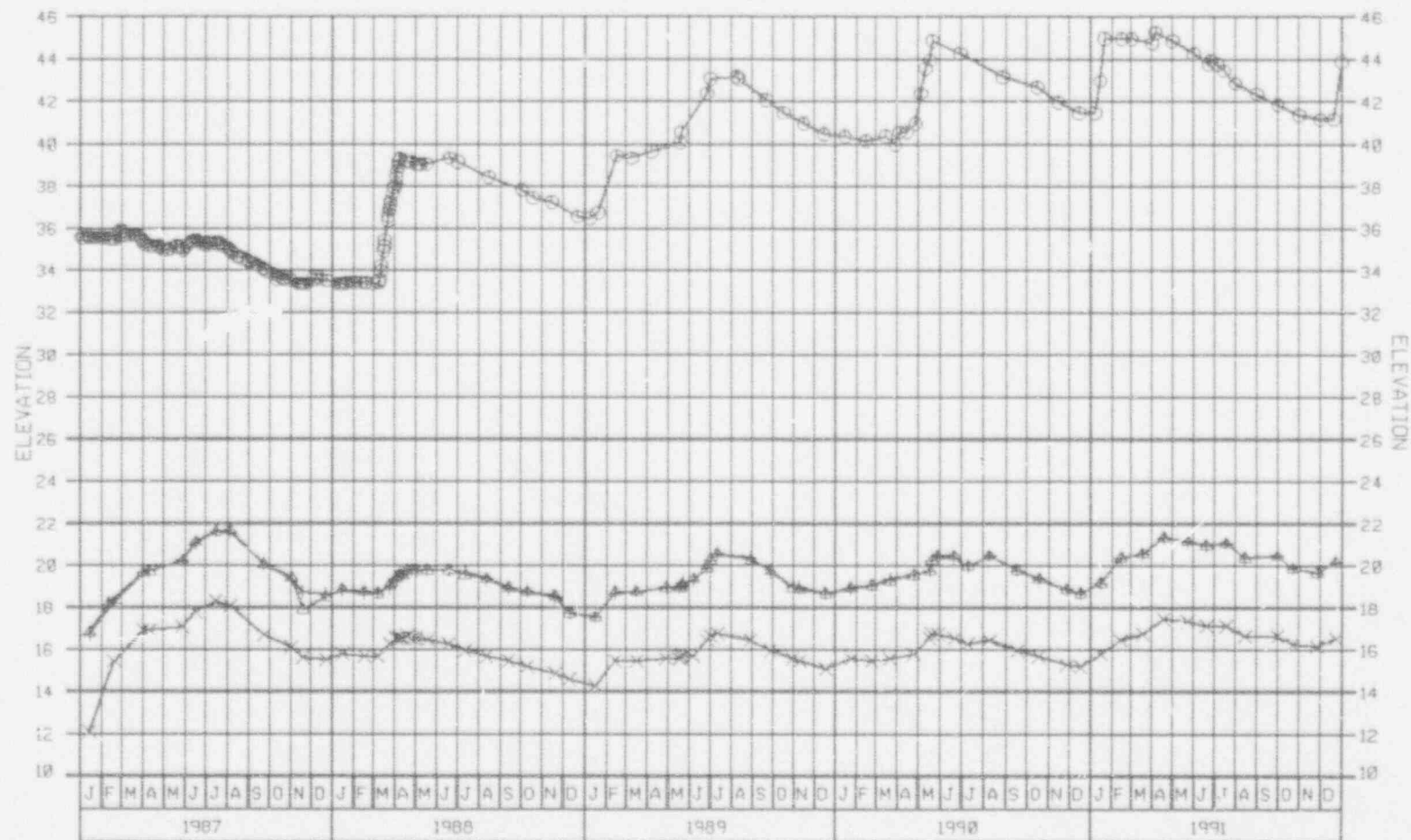
SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
Profile No. 33; Station 625+20	
11-20-92	SHEET OF



SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
Profile No. 34; Station 185+00	
11-28-92	SHEET OF

LEGEND:	Symbol	Instrument
	○	PI43-01
	△	PI44-01
	+	PI45-01
	X	Reservoir

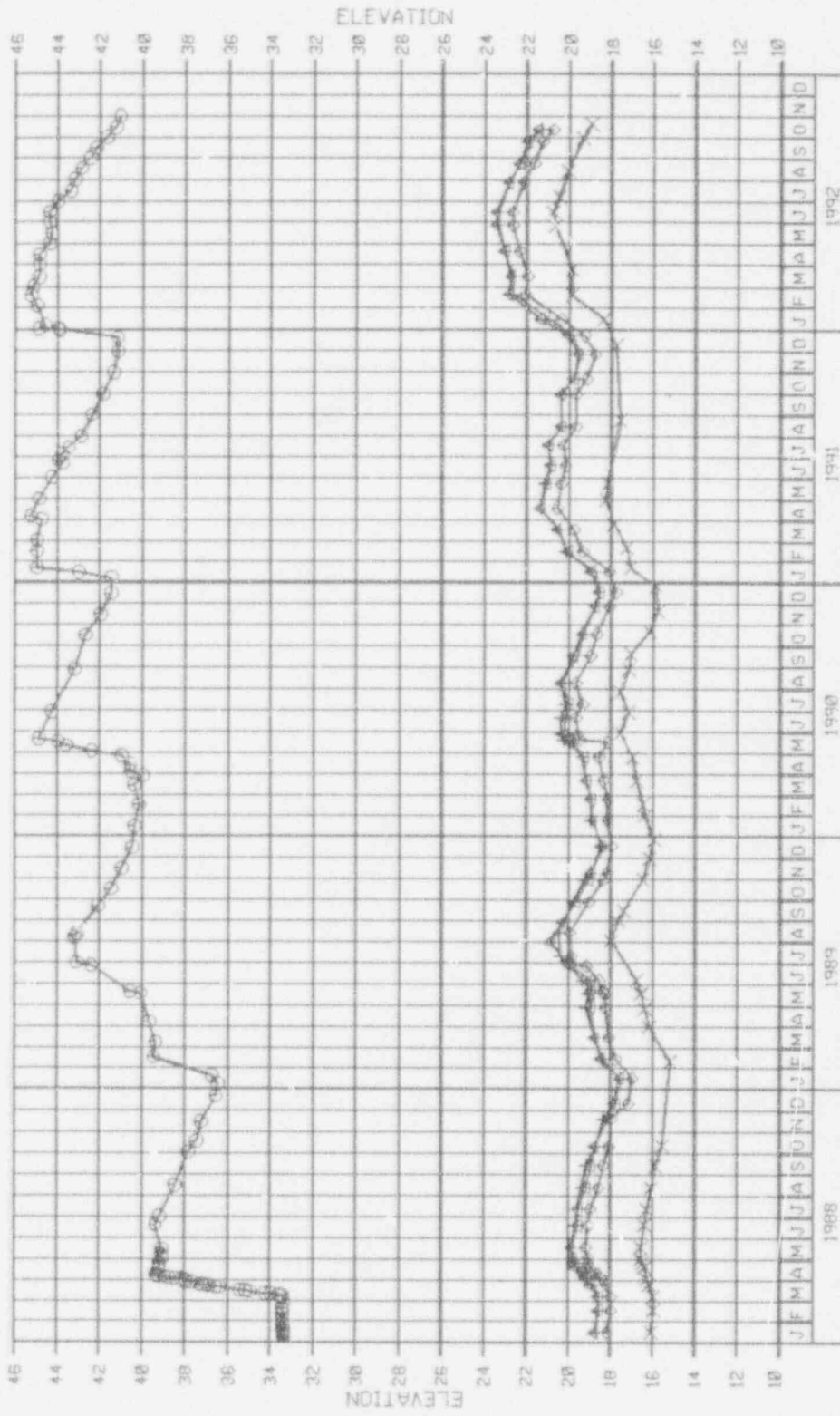
FIGURE 34



LEGEND: Symbol Instrument

○	○	Reservoir
△	△	P2-1-01
+	+	P2-2-01
×	×	P2-3-01

SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF	
ELEVATION DATA	
STATION 2+55 TO 2+65	
11-20-92	SHEET OF



LEGEND: **Symbol** **Instrument**

○ Reservoi

△ P4-01

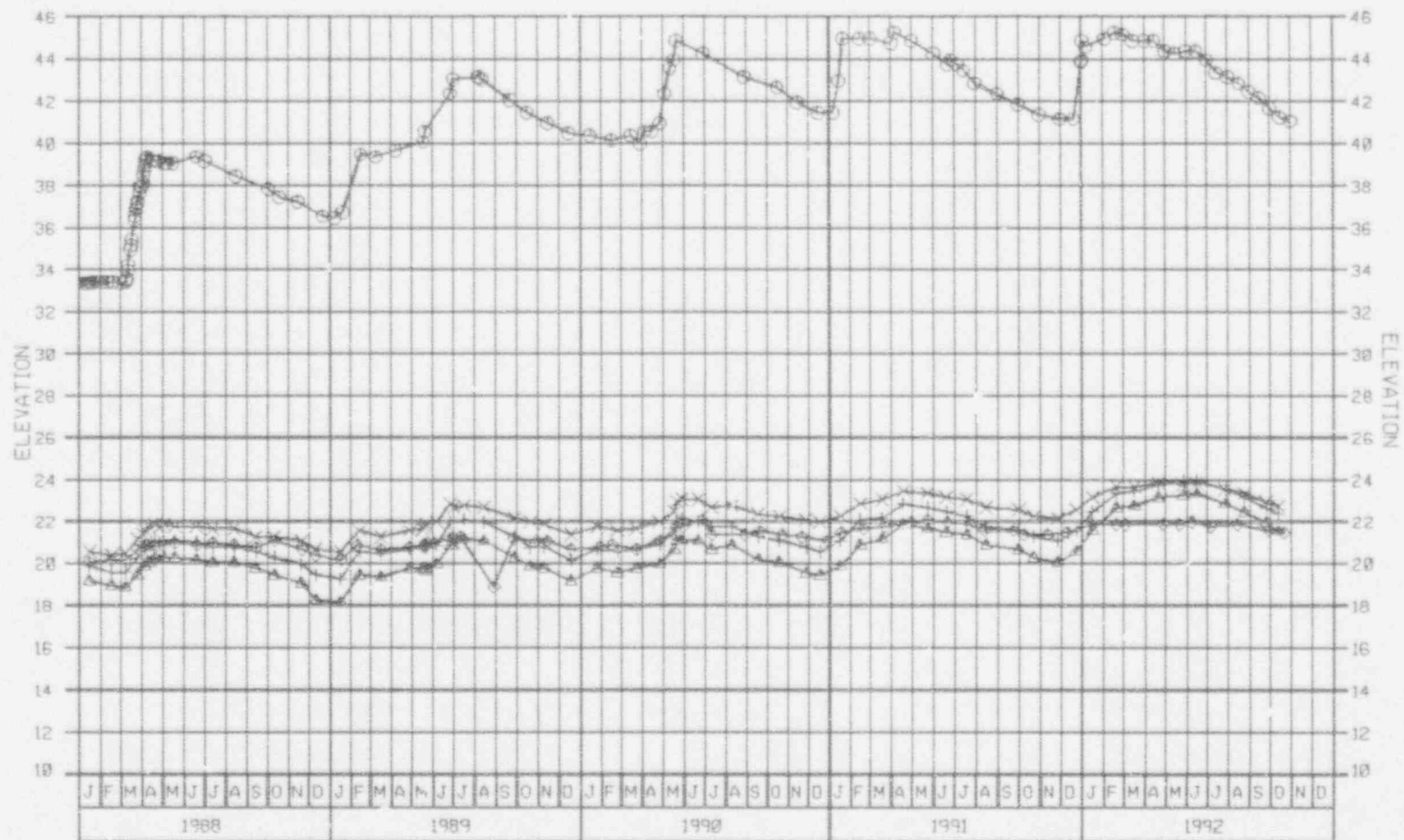
+

×

○ P8-01

○ P298-01

SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
STATION 3+80 TO 9+00	
11-28-92	SHEET OF

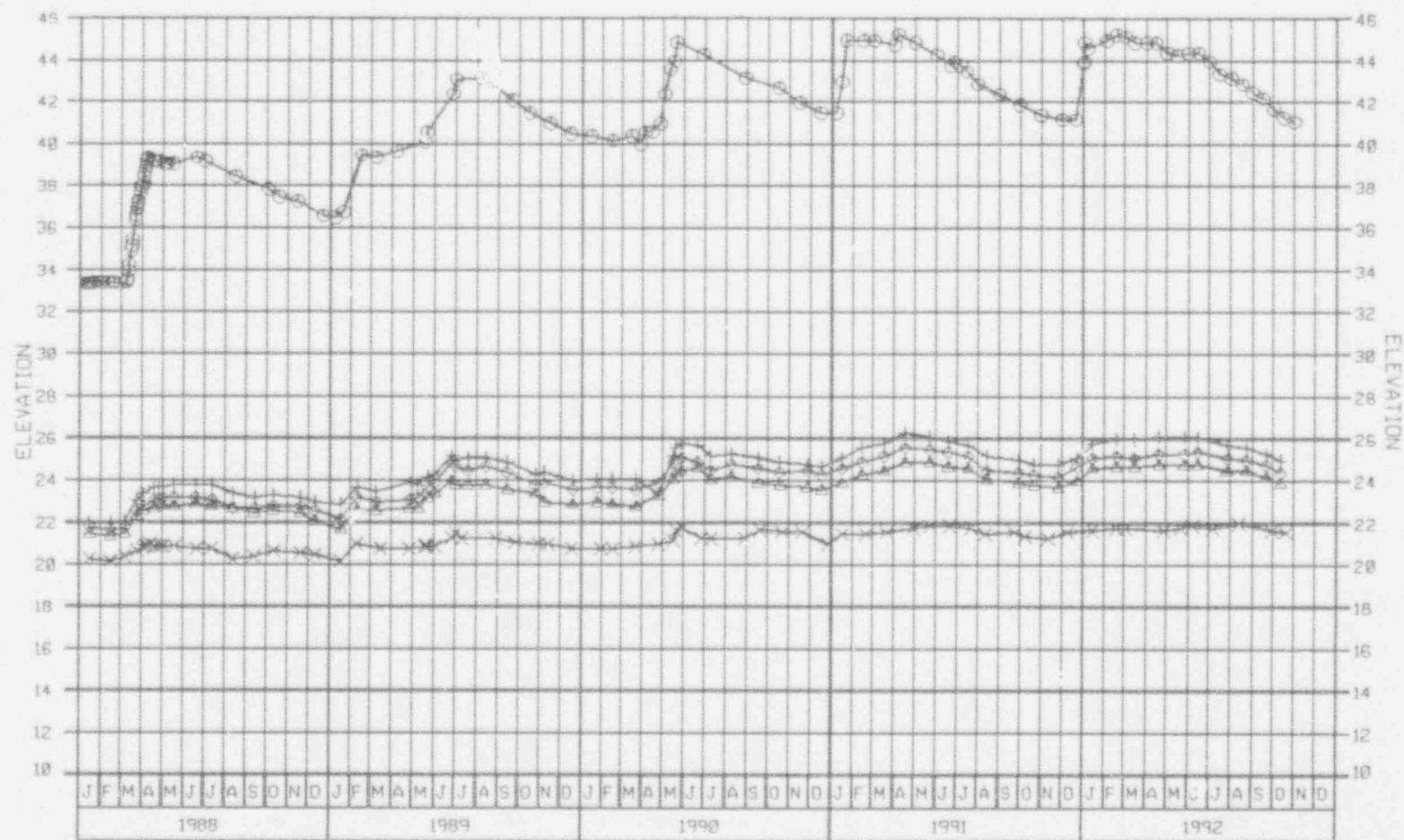


LEGEND: Symbol Instrument

○	Reservoir
△	P11-01
+	P302-01
×	P304-01
◇	P279-01

SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
STATION 11+00 TO 20+00	
11-28-92	SHEET OF

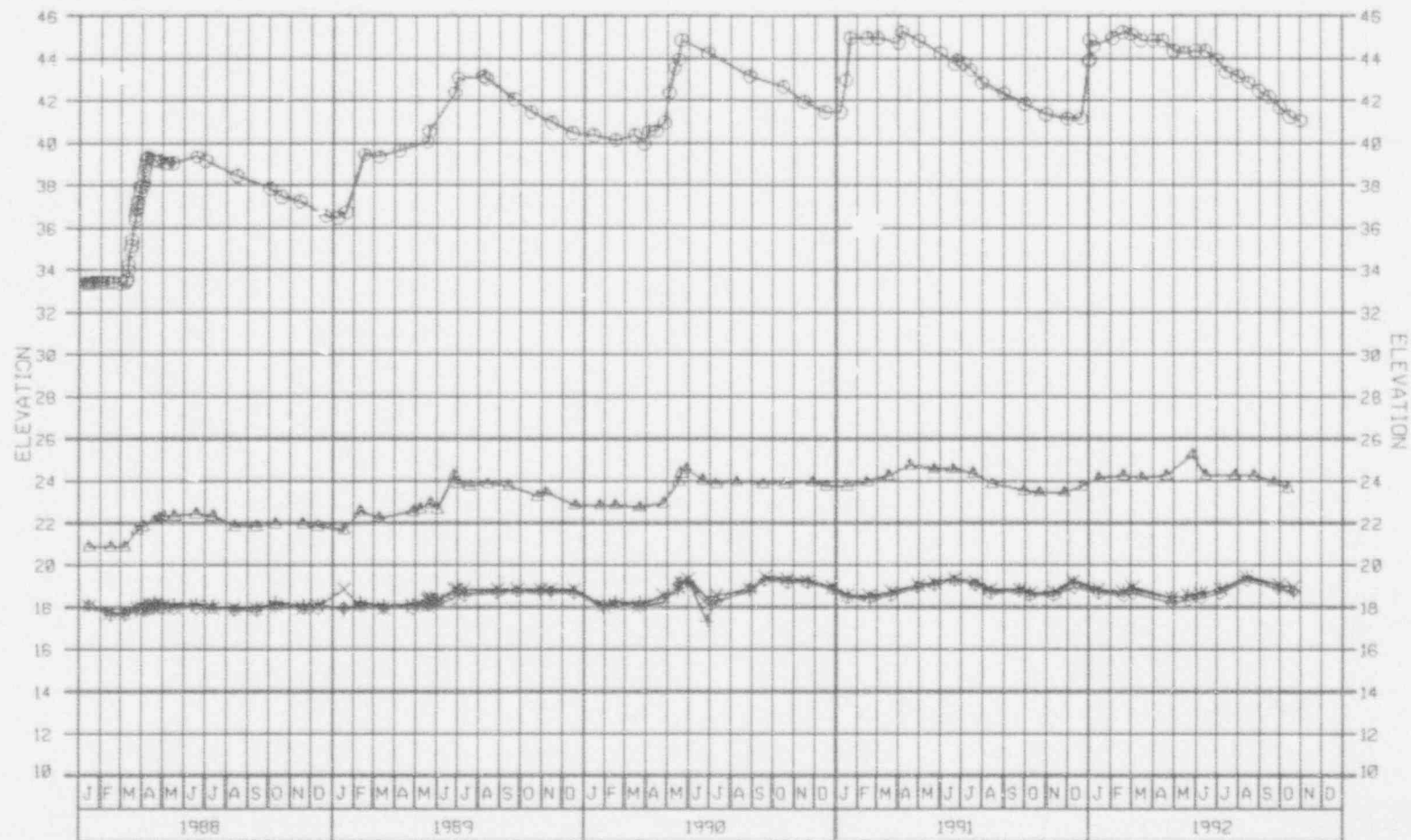
FIGURE 37



LEGEND: Symbol Instrument

○	—	○	Reservoir
△	—	△	P15-01
+	—	+	P308-01
×	—	×	P401-01
◇	—	◇	P312-01

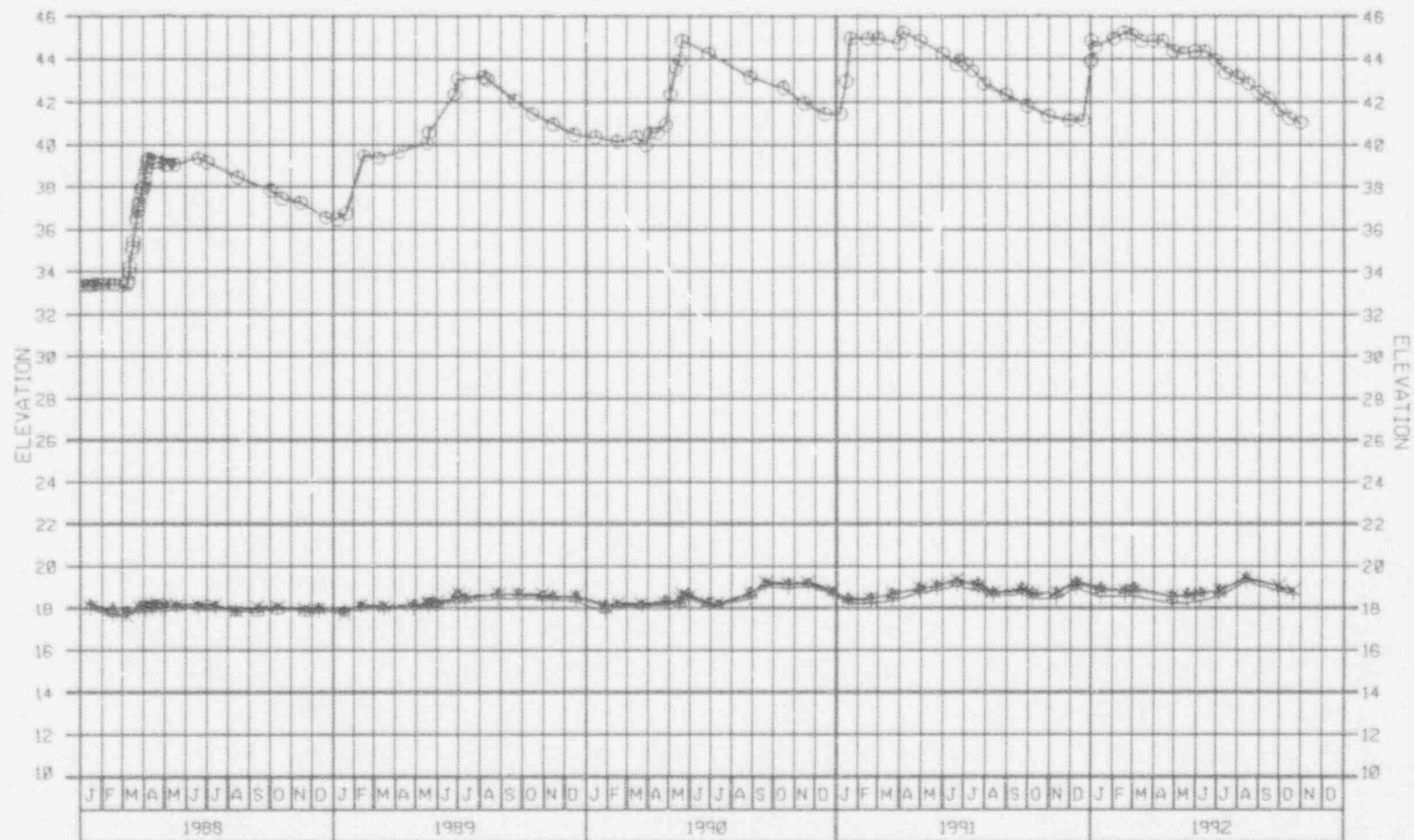
SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
STATION 20+22 TO 30+00	
11-28-92	SHEET OF



LEGEND: Symbol Instrument

○	—	○	Reservoir
△	—	△	P16-01
+	—	+	P321-01
×	—	×	P323-01
◇	—	◇	P325-01

SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
STATION 32+55 TO 35+10	
11-20-92	SHEET OF



LEGEND: Symbol Instrument

○ Reservoir

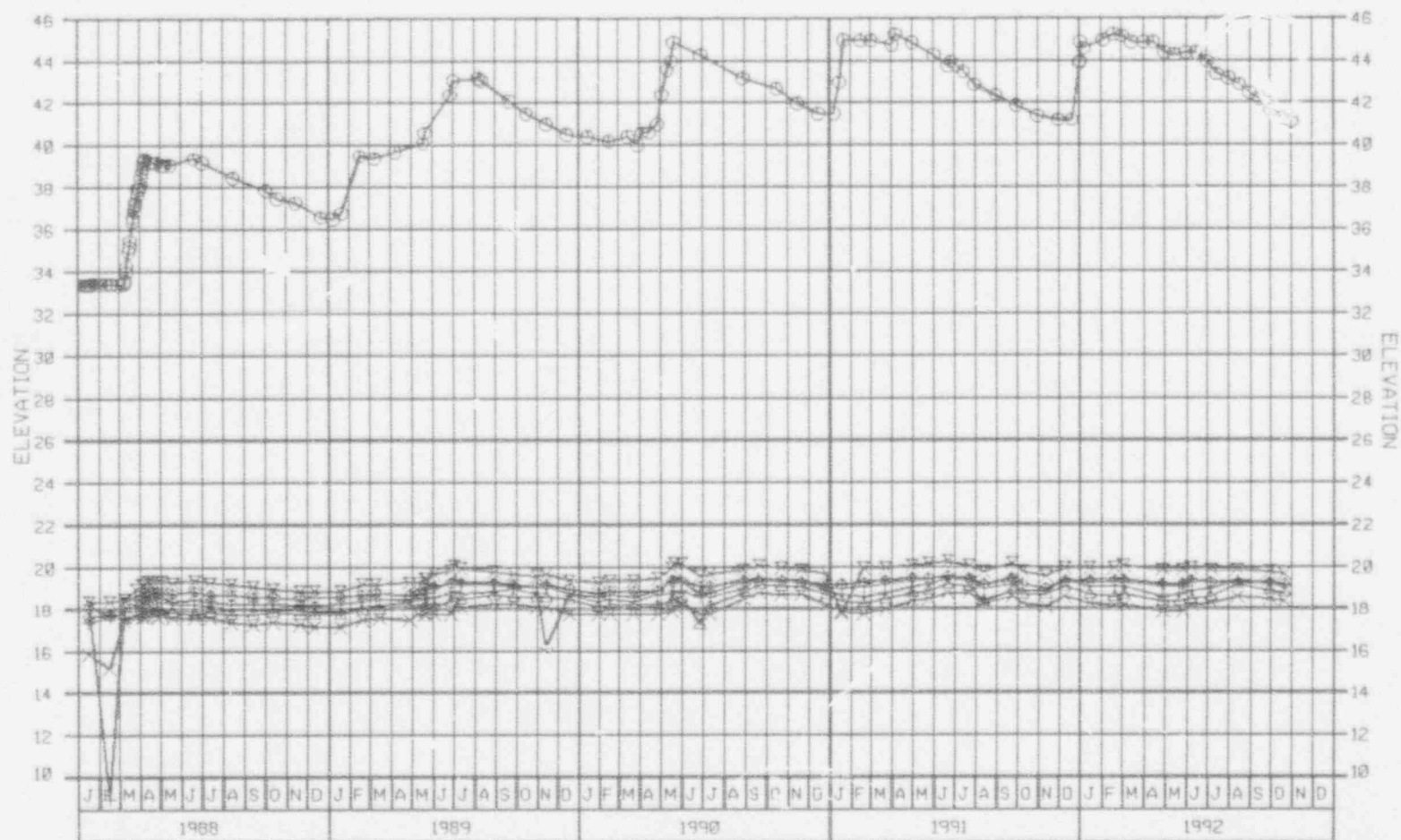
△ P394-01

+ P322-01

× P324-01

SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF	
ELEVATION DATA	
STATION 37+60 TO 40+20	
11-28-92	SHEET OF

FIGURE 40



LEGEND:	Symbol	Instrument	Symbol	Instrument
	○	Reservoir		
	△	P396-01		
	+	P397-01		
	x	P399-01		
	◇	P400-01		
	⋈	P280-01		
	⋈	P402-01		

SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF	
ELEVATION DATA	
STATION 49+80 TO 89+80	
11-28-92	SHEET OF

FIGURE 41

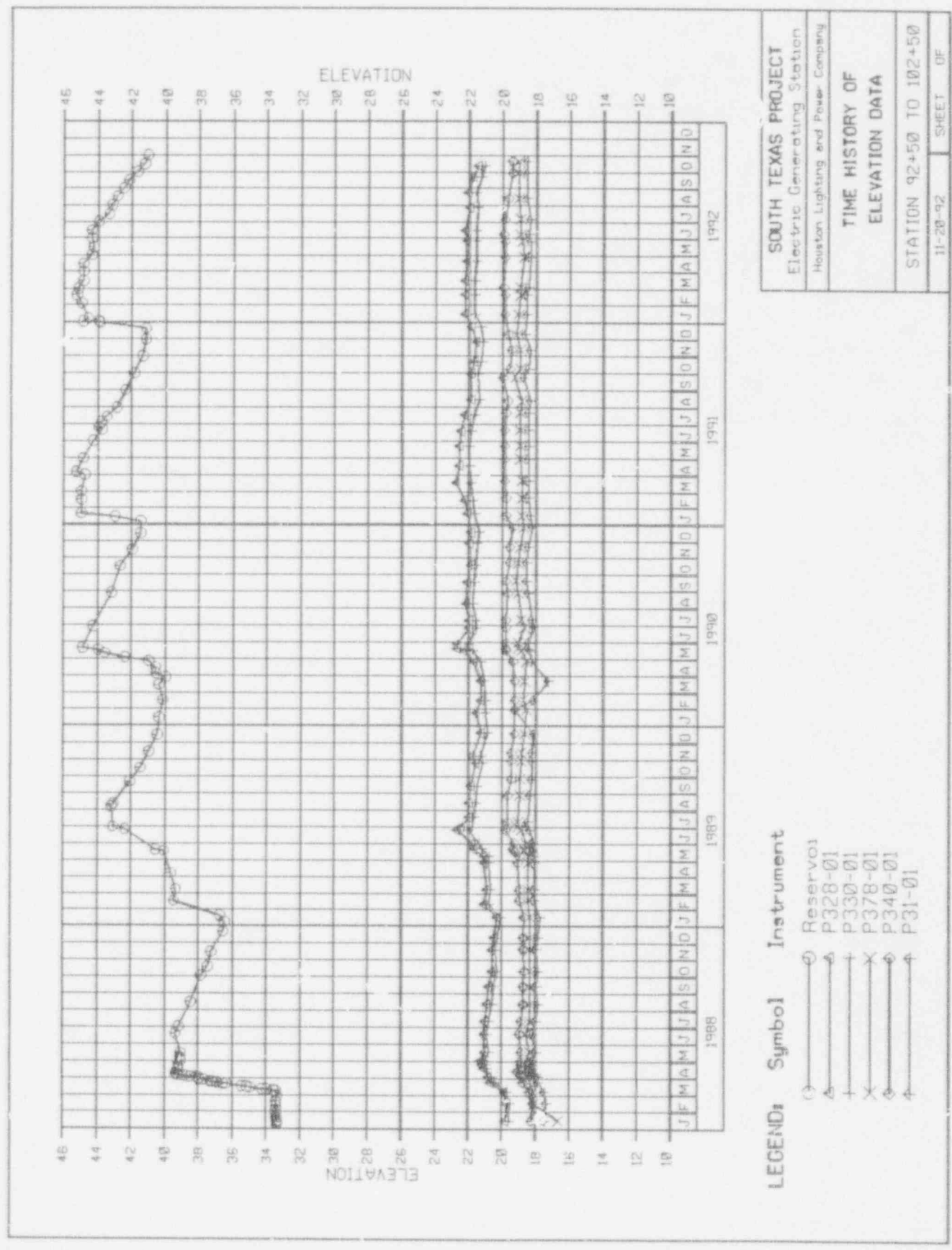
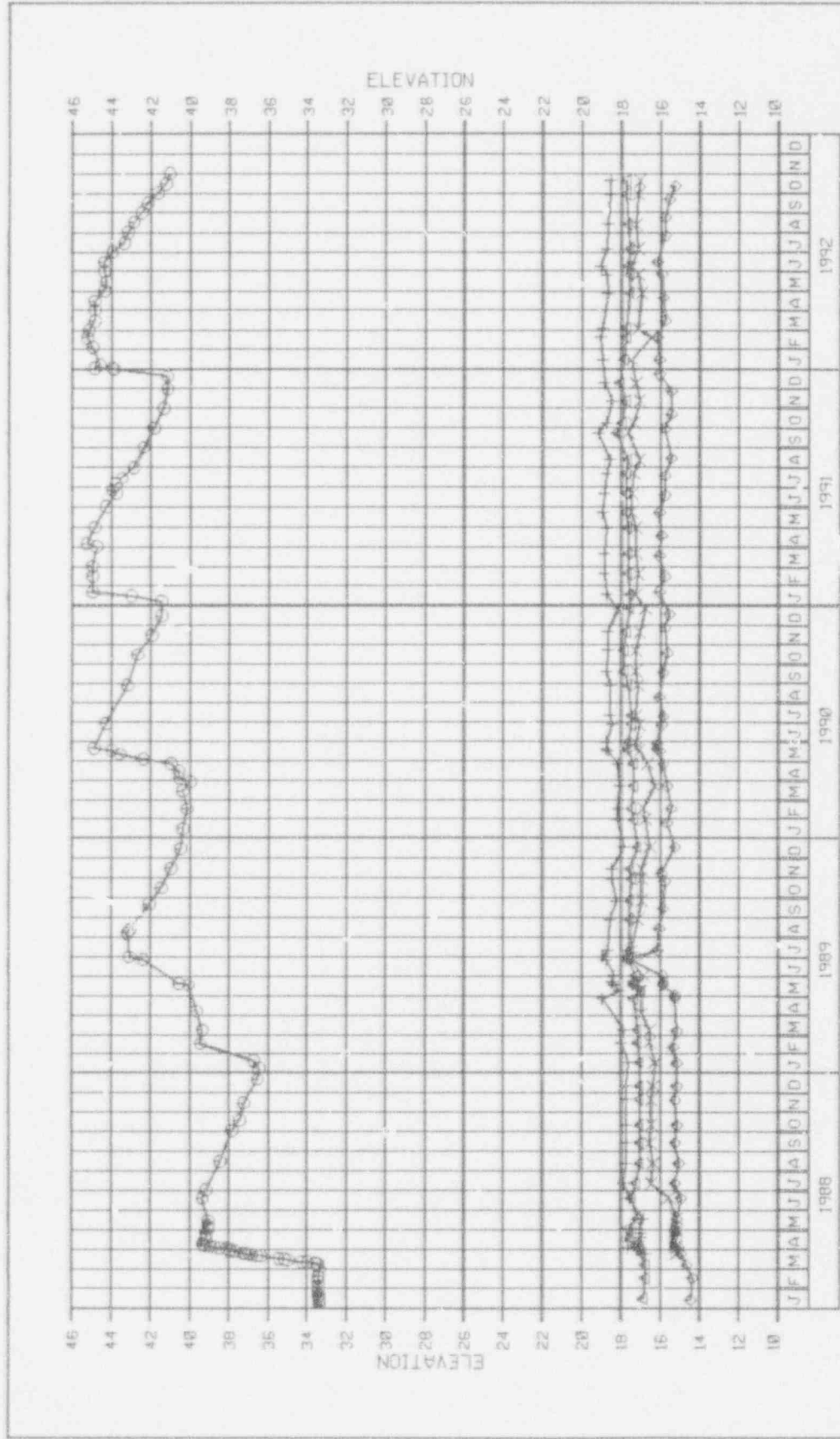


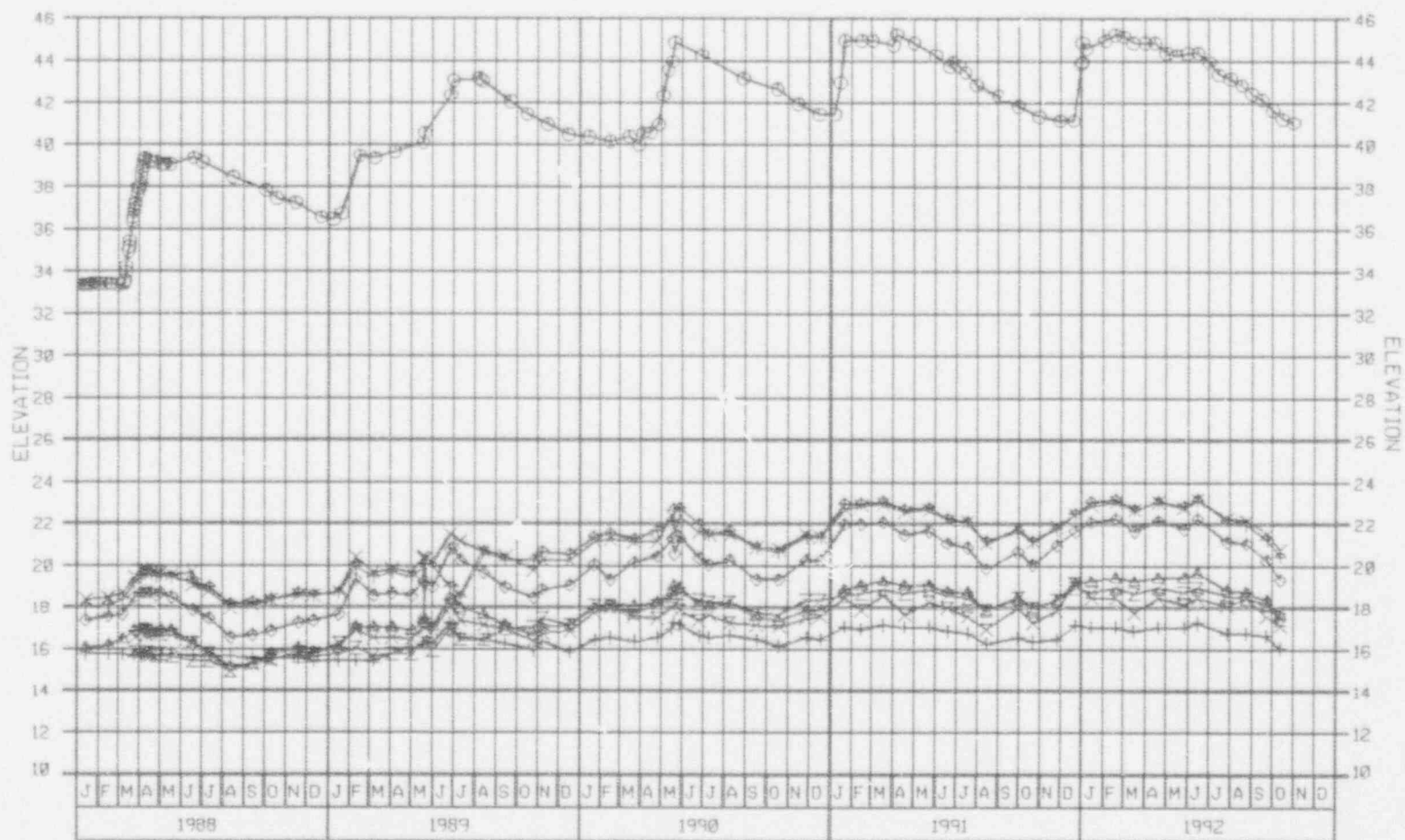
FIGURE 42



SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
STATION 105+25 TO 120+20	
11-24-92	SHEET OF

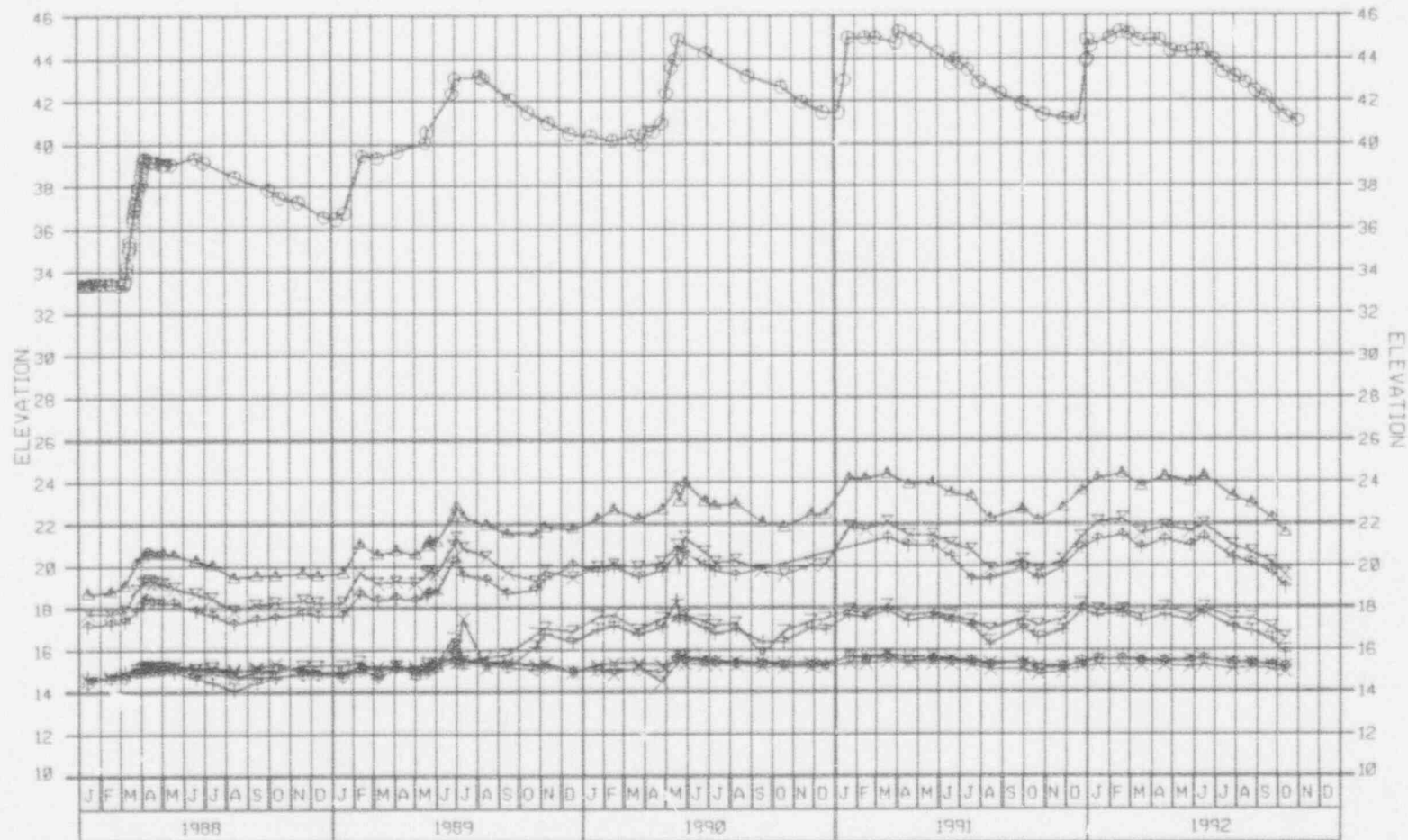
LEGEND:	Symbol	Instrument
	○	Reservoir
	△	P403-01
	+	P471-01
	×	P472-01
	◇	P33-01

FIGURE 43



LEGEND:	Symbol	Instrument	Symbol	Instrument
	○	Reservoir	⋈	P474-01
	△	P36-01		
	+	P235-01		
	×	P236-01		
	◊	P237-01		
	⋈	P238-01		
	⋈	P473-01		

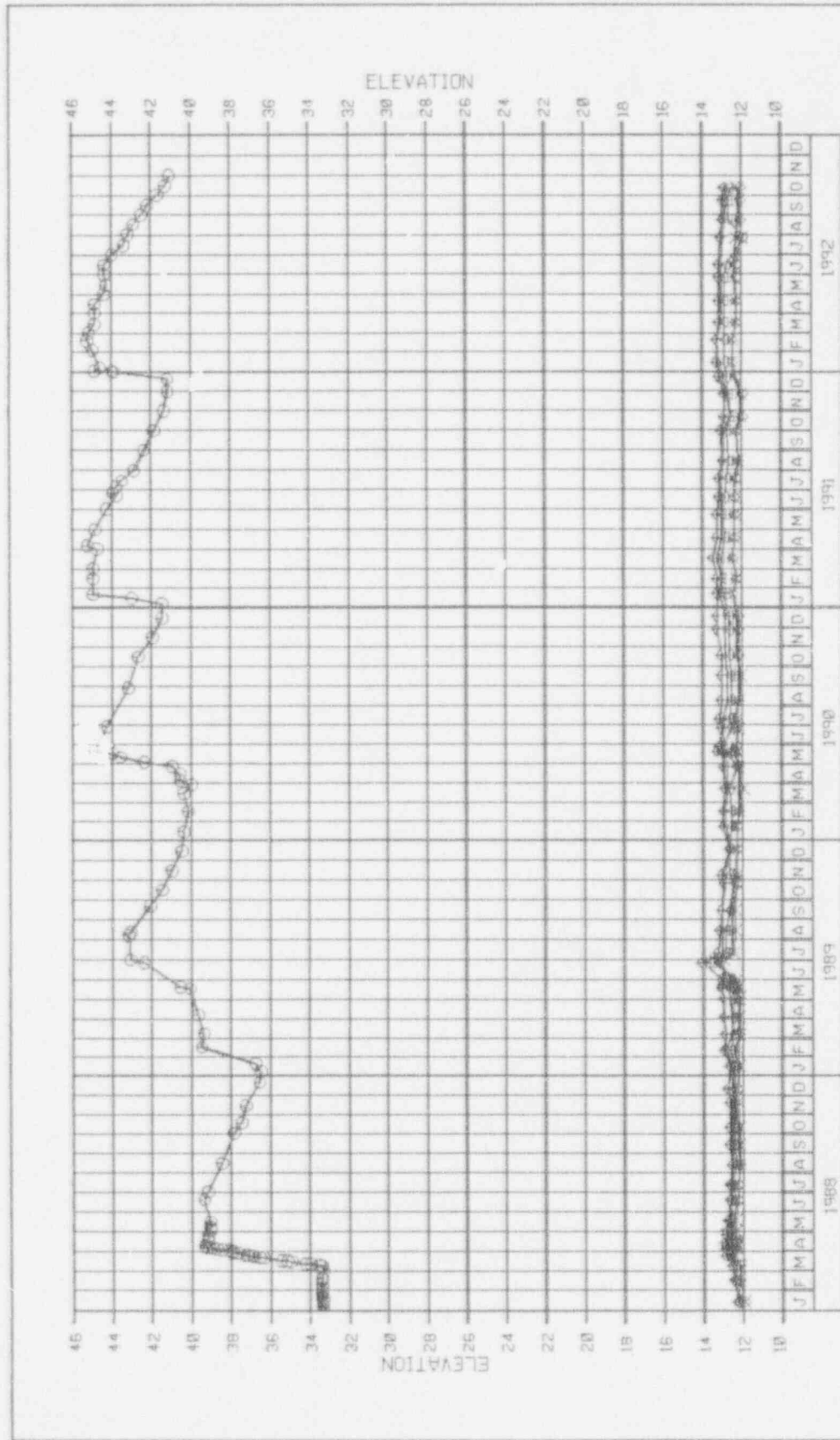
SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF	
ELEVATION DATA	
STATION 125+50 TO 145+00	
11-24-92	SHEET OF



LEGEND:	Symbol	Instrument	Symbol	Instrument
	⊙	Reservoir	⋈	P475-01
	△	P37-01	⋈	P405-01
	+	P40-01		
	×	P404-01		
	⊙	P41-01		
	⋈	P239-01		
	⋈	P240-01		

SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
STATION 150+00 TO 170+40	
11-24-92	SHEET OF

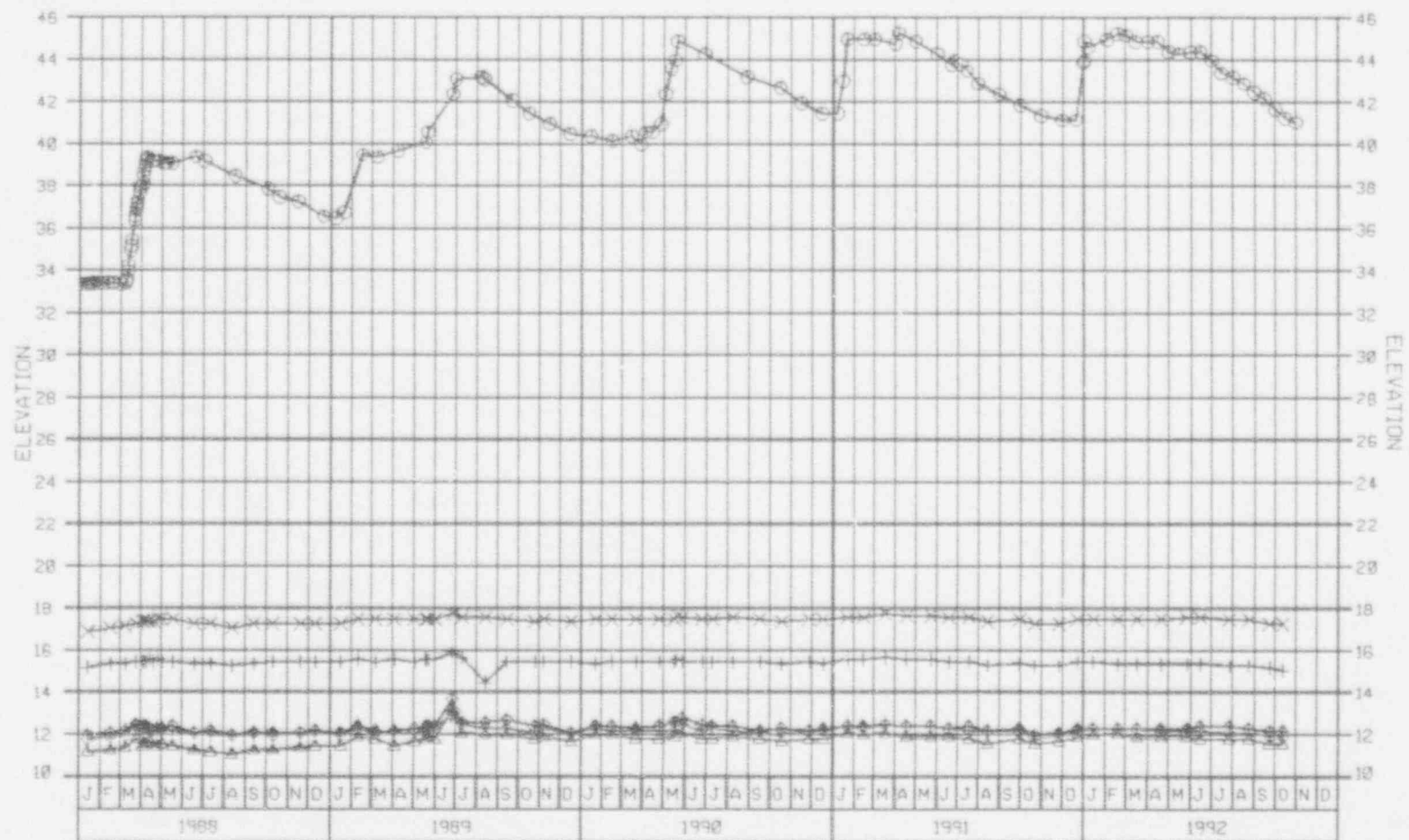
FIGURE 45



SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
STATION 175+00 TO 190+00	
11-24-92	SHEET OF

LEGEND:	Symbol	Instrument
	○	Reservoir
	△	P406-01
	+	P44-01
	X	P379-01
	◇	P380-01
	⋈	P281-01

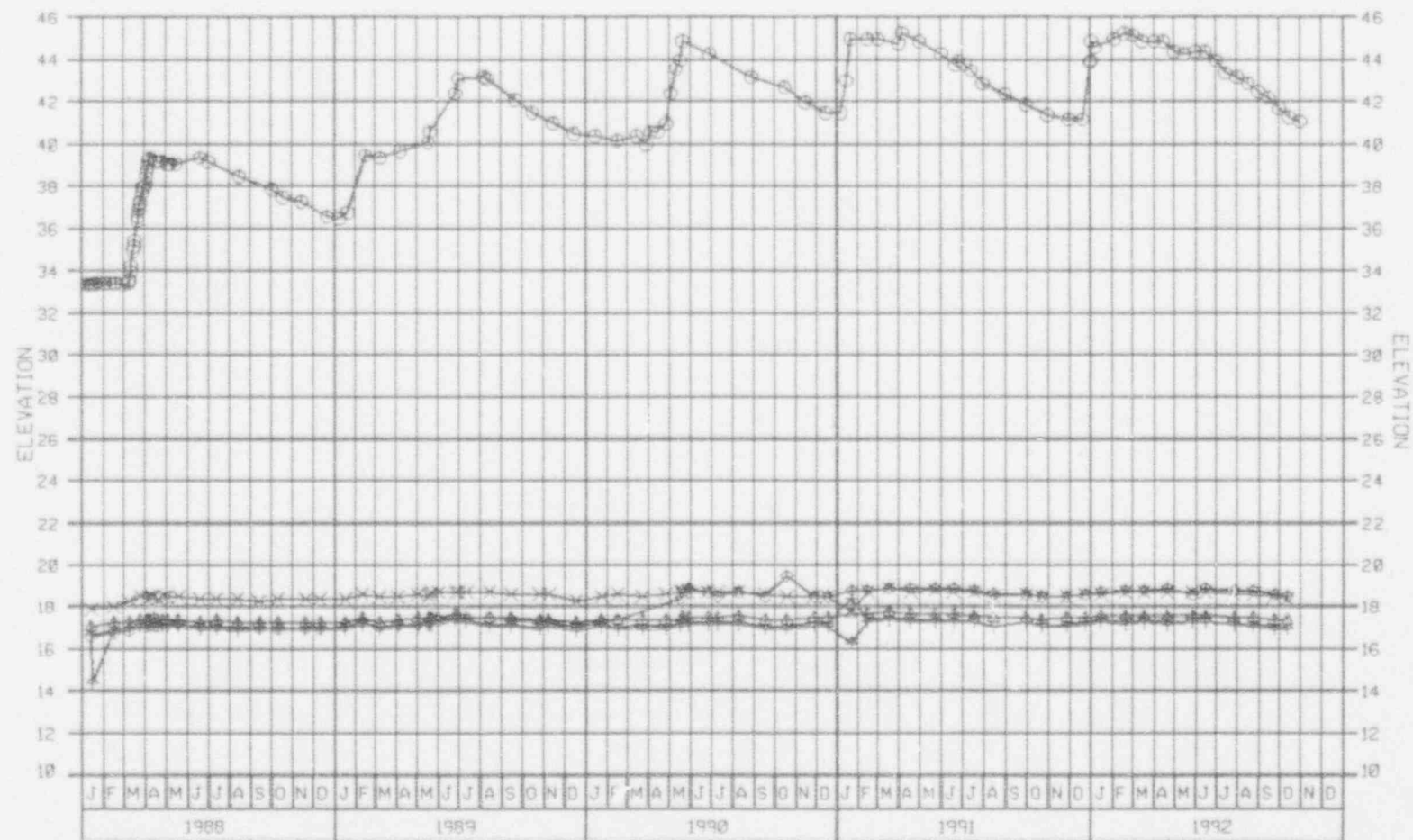
FIGURE 46



LEGEND: Symbol Instrument

○	Reservoir
△	P45-01
+	P407-01
×	P48-01
◇	P282-01
*	P283-01

SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
STATION 190+00 TO 200+20	
11-24-92	SHEET OF

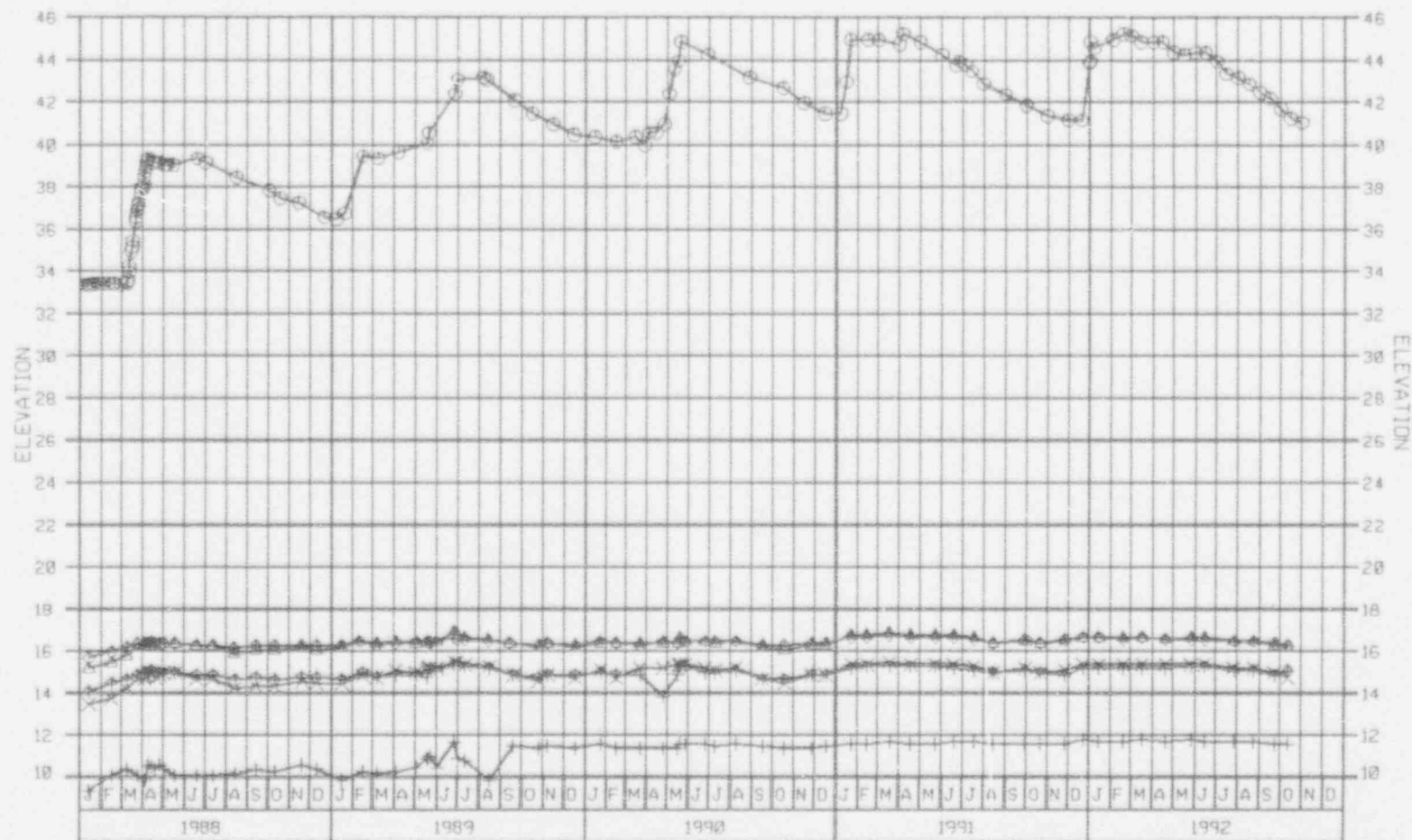


LEGEND: Symbol Instrument

○	—	○	Reservoir
△	—	△	P49-01
+	—	+	P409-01
×	—	×	P284-01
◇	—	◇	P408-01
*	—	*	P285-01

SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
STATION 201+00 TO 215+00	
11-24-92	SHEET OF

FIGURE 4B



LEGEND: Symbol Instrument

○ ——— ○ Reservoir
 ▲ ——— ▲ P52-01
 + ——— + P55-01
 × ——— × P56-01
 ◆ ——— ◆ P286-01
 ♣ ——— ♣ P141-01

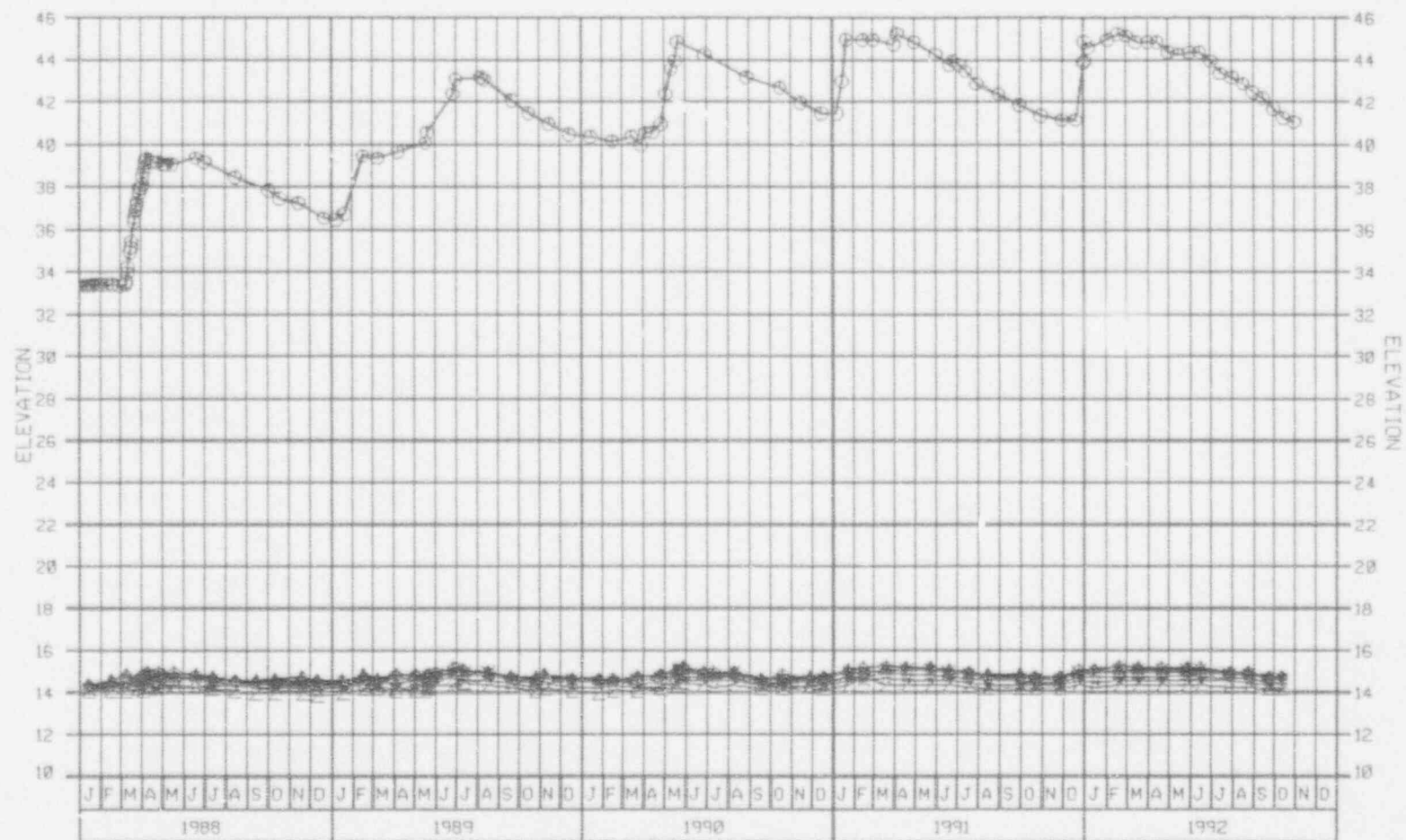
SOUTH TEXAS PROJECT
 Electric Generating Station
 Houston Lighting and Power Company

TIME HISTORY OF
 ELEVATION DATA

STATION 215+00 TO 240+00

11-24-92

SHEET OF



LEGEND:	Symbol	Instrument	Symbol	Instrument
	○ — ○	Reservoir	Z — Z	P257-01
	△ — △	P59-01		
	+ — +	P136-01		
	X — X	P60-01		
	◇ — ◇	P411-01		
	⊕ — ⊕	P137-01		
	⊗ — ⊗	P258-01		

SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
STATION 240+00 TO 255+05	
11-24-92	SHEET OF

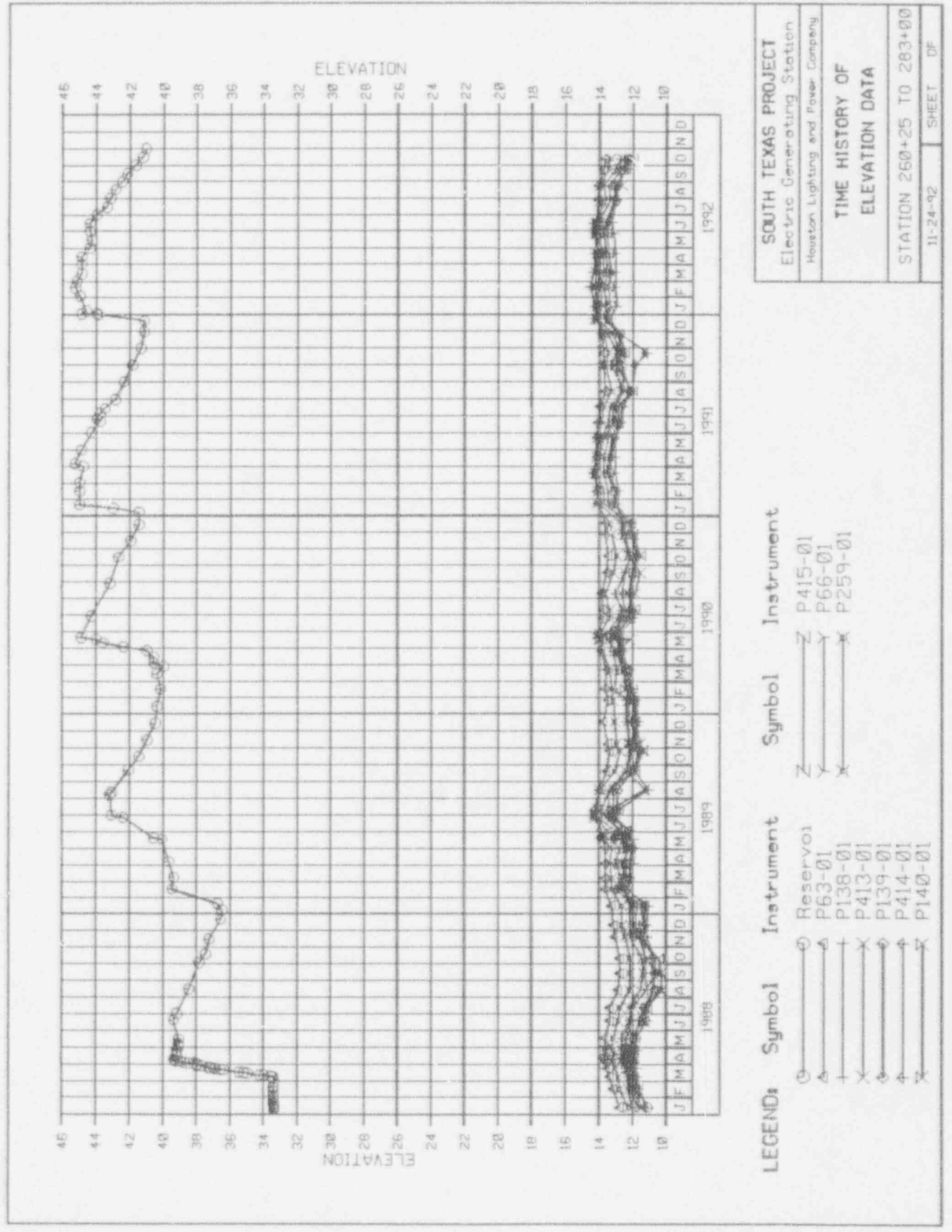
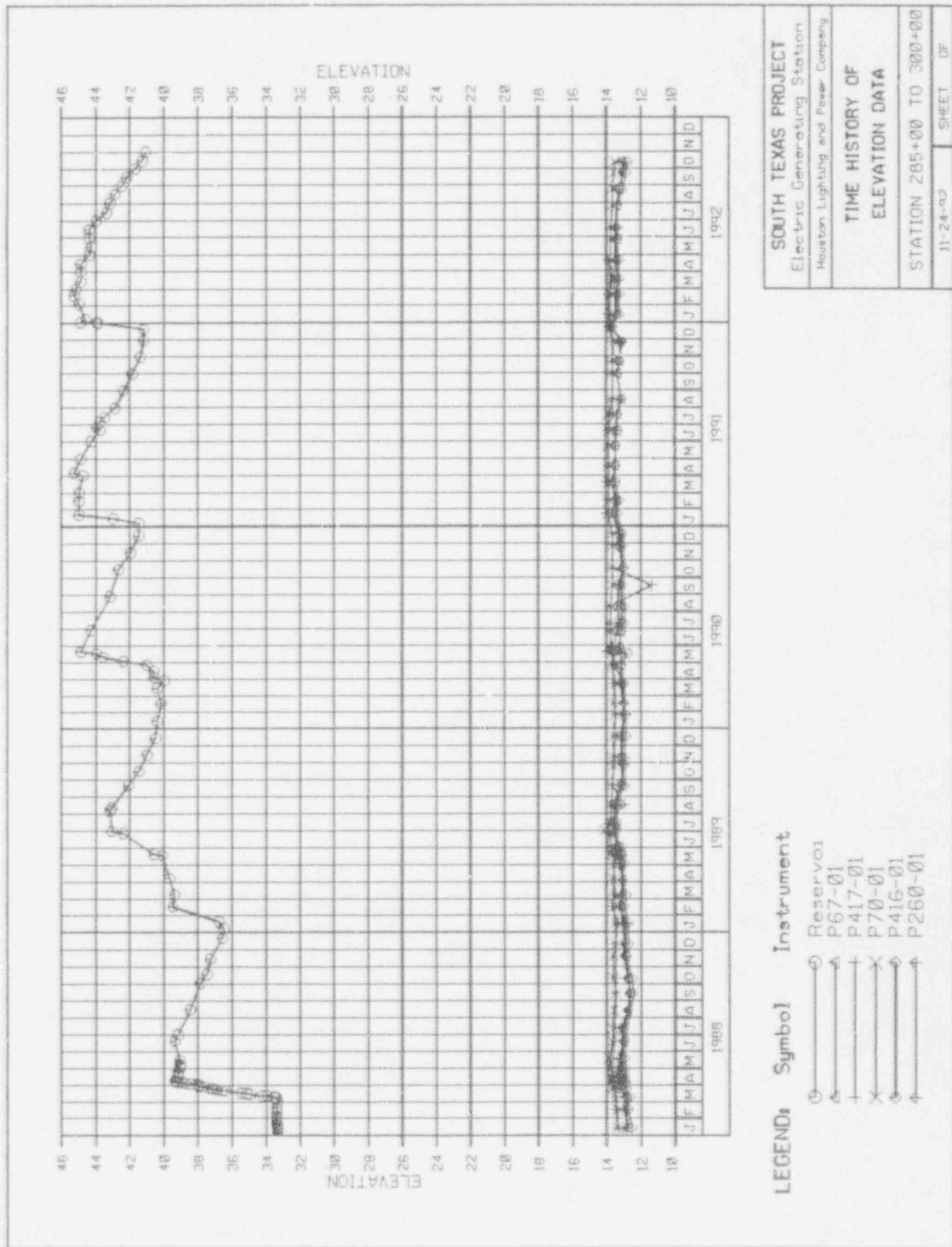
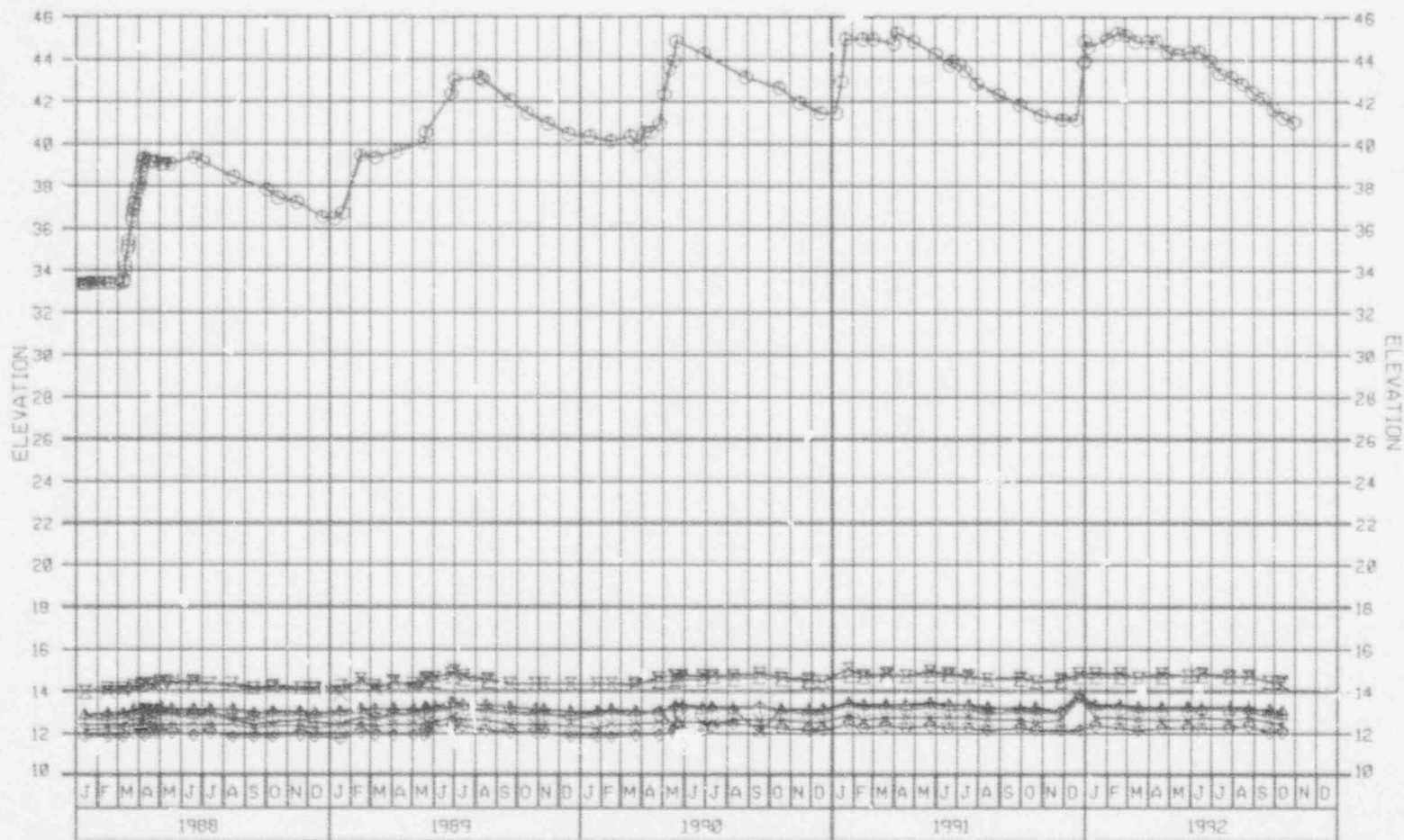


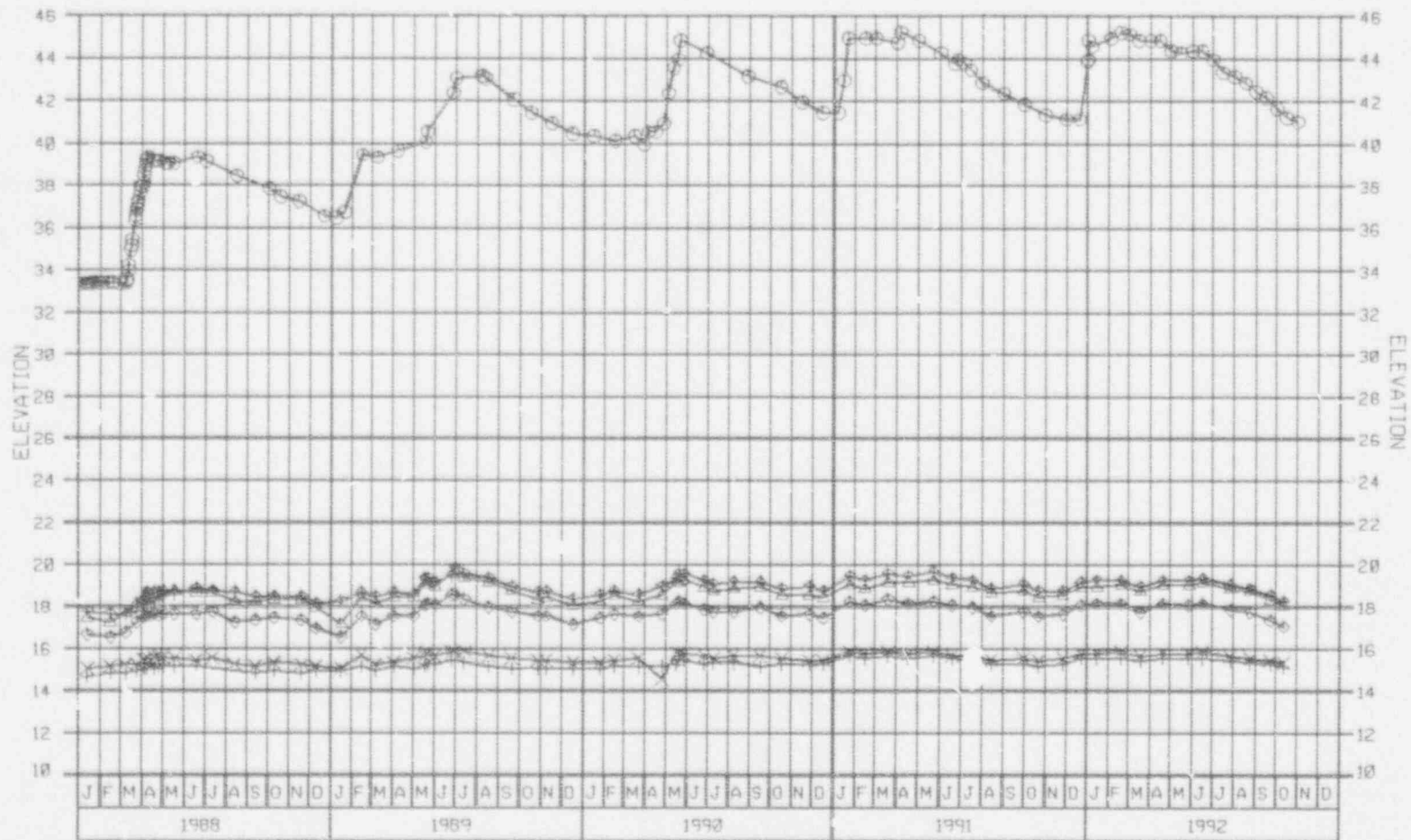
FIGURE 31





LEGEND:	Symbol	Instrument	Symbol	Instrument
	○	Reservoir	—	P75-01
	△	P418-01		
	+	P71-01		
	×	P419-01		
	◇	P74-01		
	⬆	P420-01		
	⌵	P421-01		

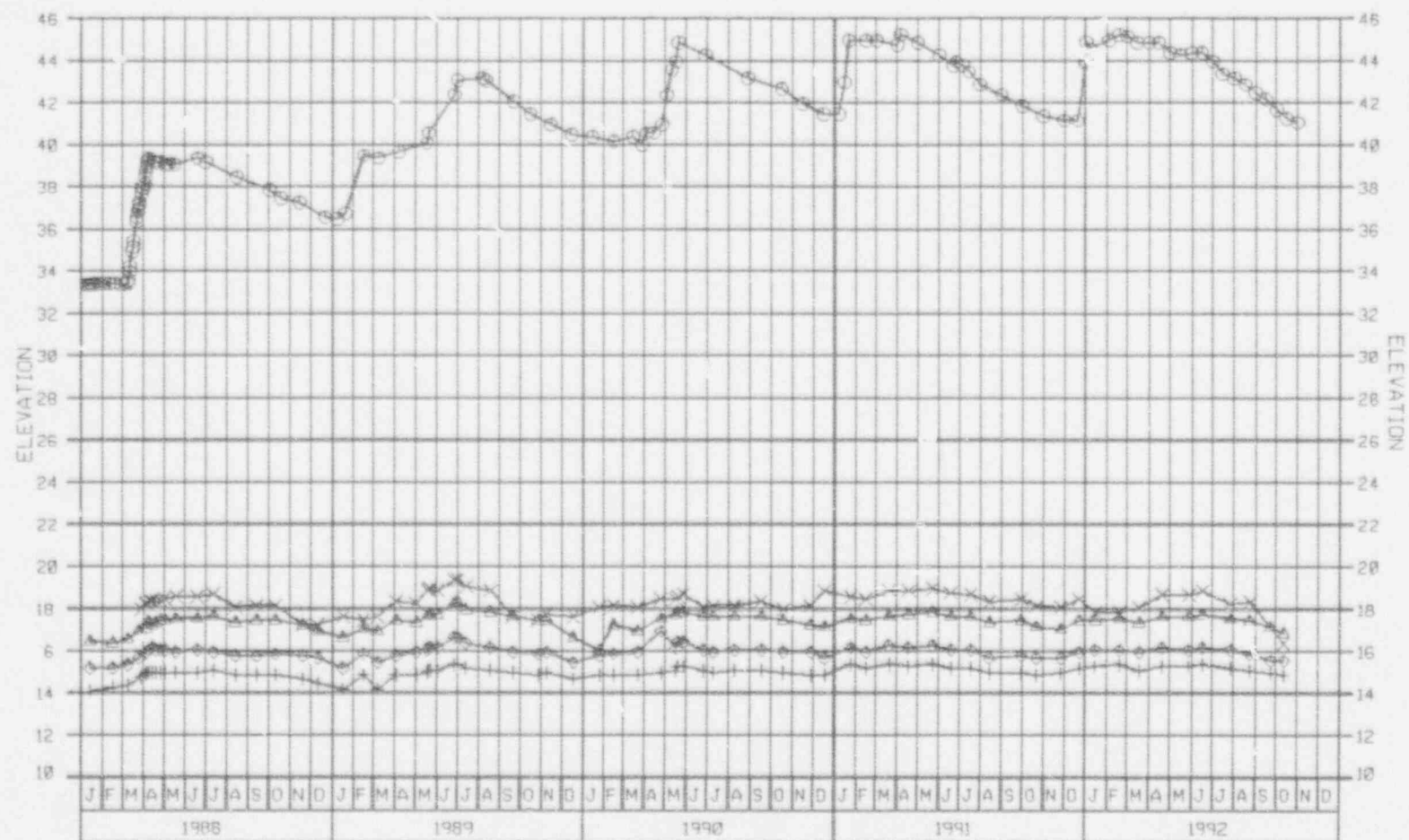
SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF	
ELEVATION DATA	
STATION 300+00 TO 330+25	
11-24-92	SHEET OF



LEGEND: Symbol Instrument

⊕	⊕	Reservoir
△	△	P76-01
+	+	P422-01
×	×	P261-01
◇	◇	P262-01
*	*	P423-01

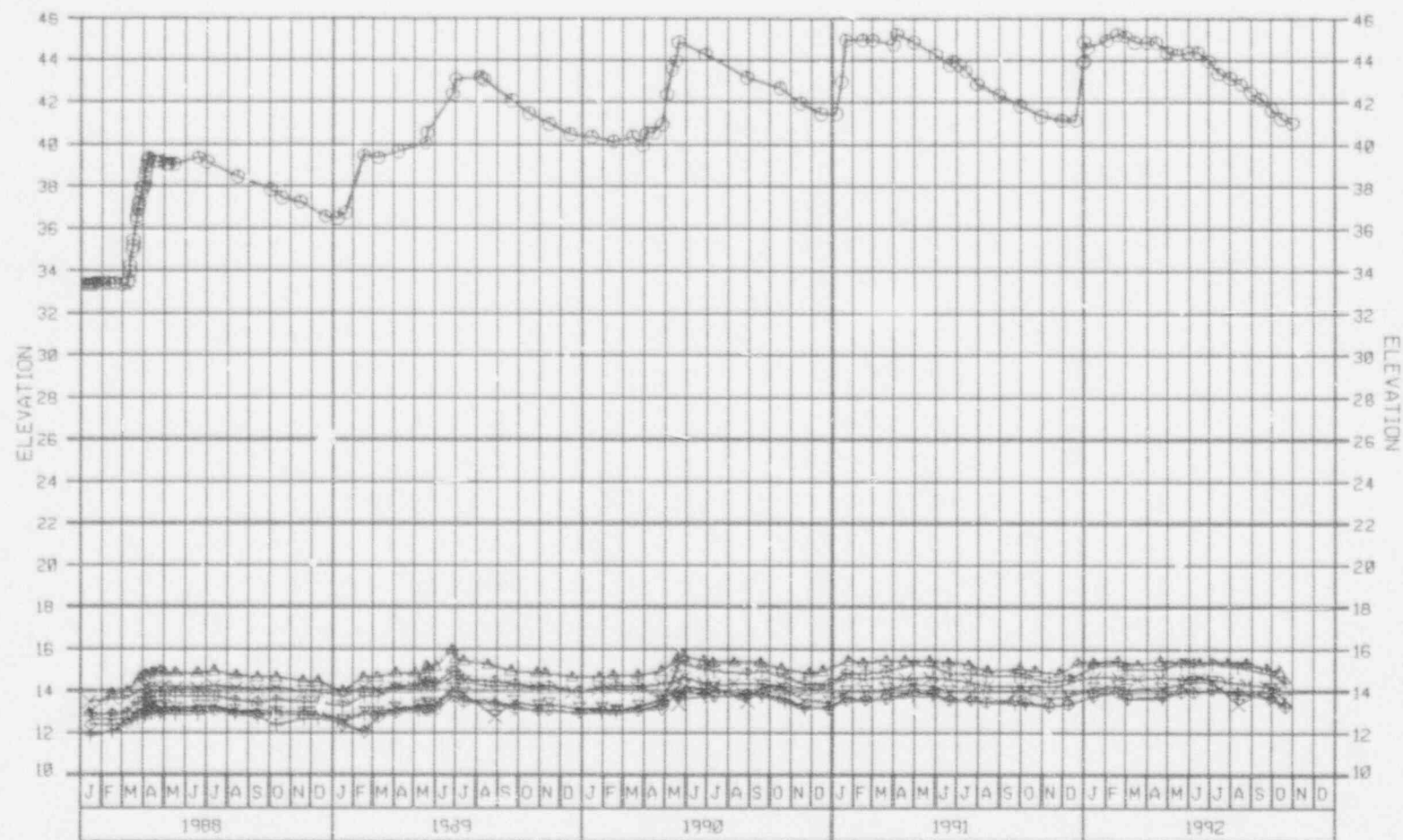
SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
STATION 335+00 TO 350+00	
11-24-92	SHEET OF



LEGEND: Symbol Instrument

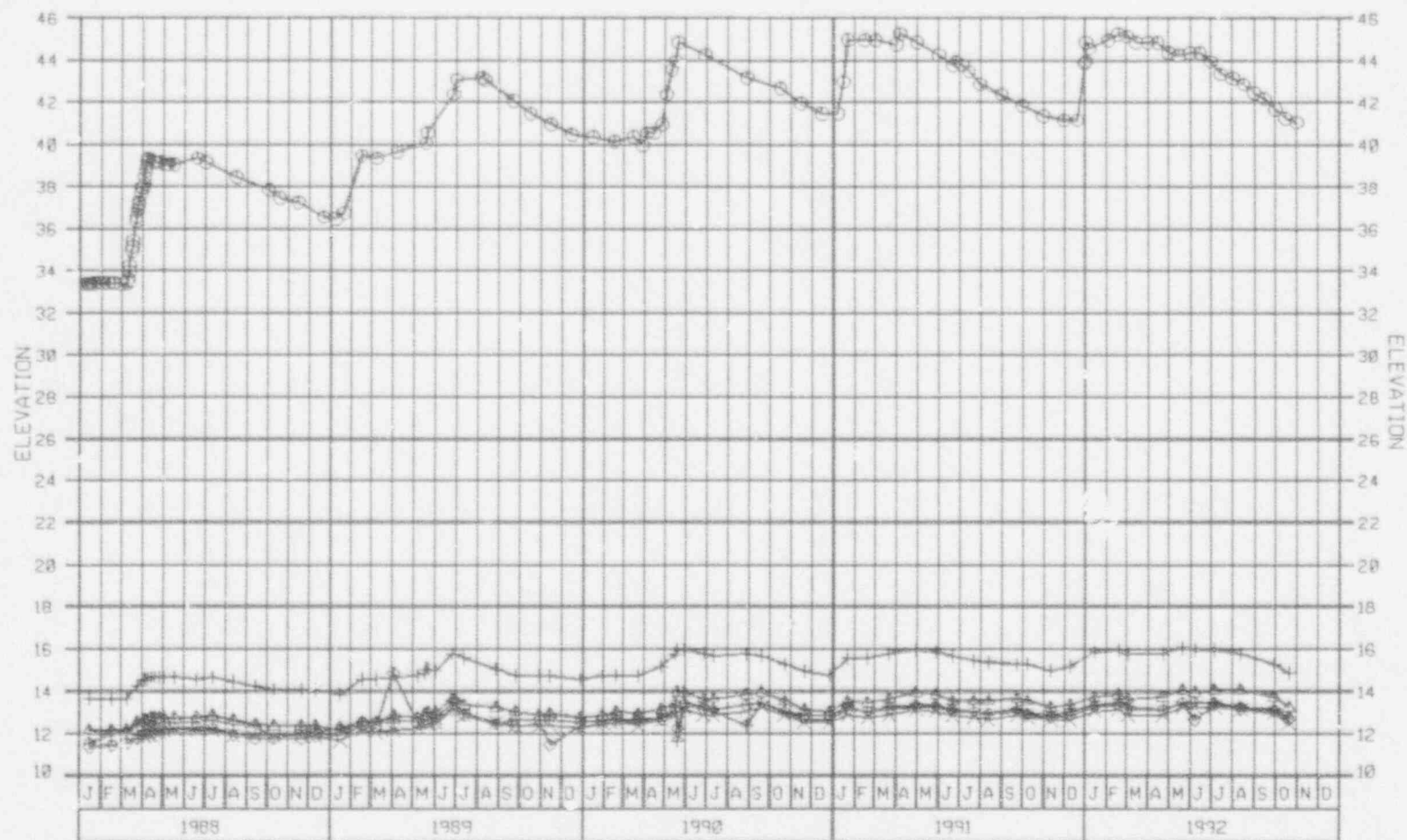
○	—	○	Reservoir
△	—	△	P424-01
+	—	+	P79-01
×	—	×	P476-01
◇	—	◇	P263-01

SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
STATION 350+00 TO 360+00	
11-24-92	SHEET OF



LEGEND:	Symbol	Instrument	Symbol	Instrument
	○	Reservoir		
	△	P80-01		
	+	P425-01		
	×	P264-01		
	⊙	P426-01		
	⊕	P265-01		
	⊗	P427-01		

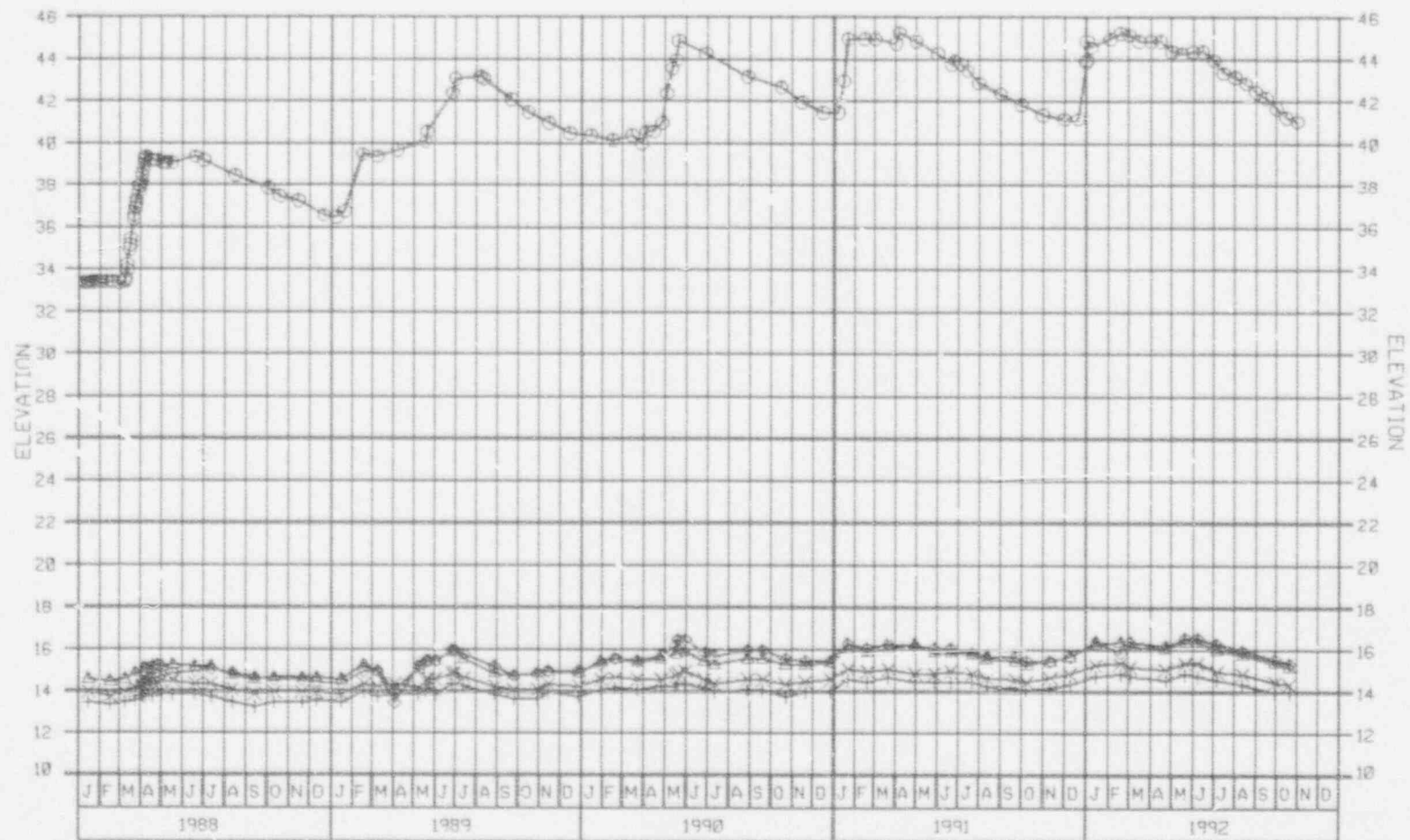
SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF	
ELEVATION DATA	
STATION 360+00 TO 390+00	
11-24-92	SHEET OF



LEGEND: Symbol Instrument

○	—	○	Reservoir
△	—	△	P266-01
+	—	+	P267-01
×	—	×	P428-01
◇	—	◇	P430-01
*	—	*	P429-01

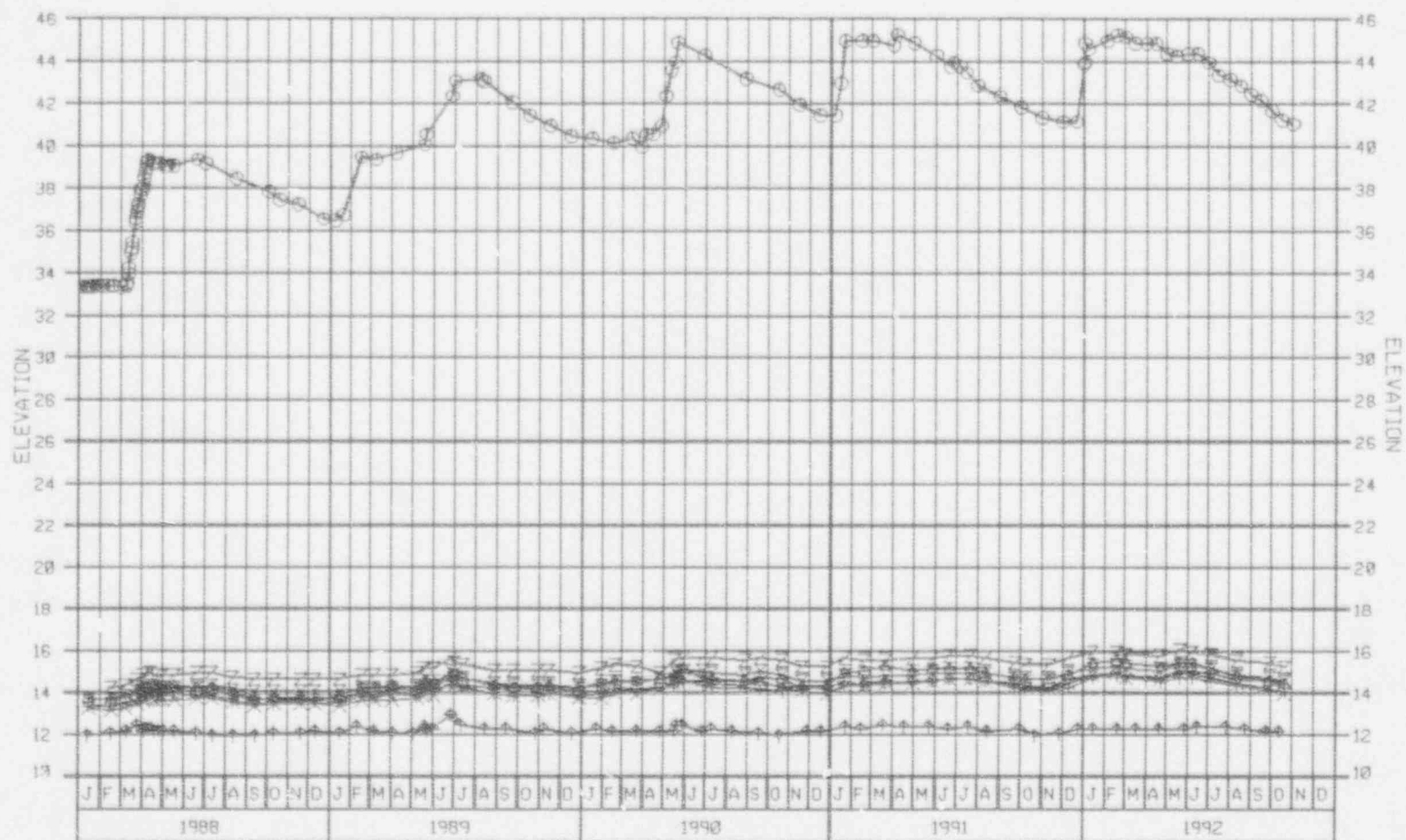
SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF	
ELEVATION DATA	
STATION 390+00 TO 408+00	
11-24-92	SHEET OF



LEGEND: Symbol Instrument

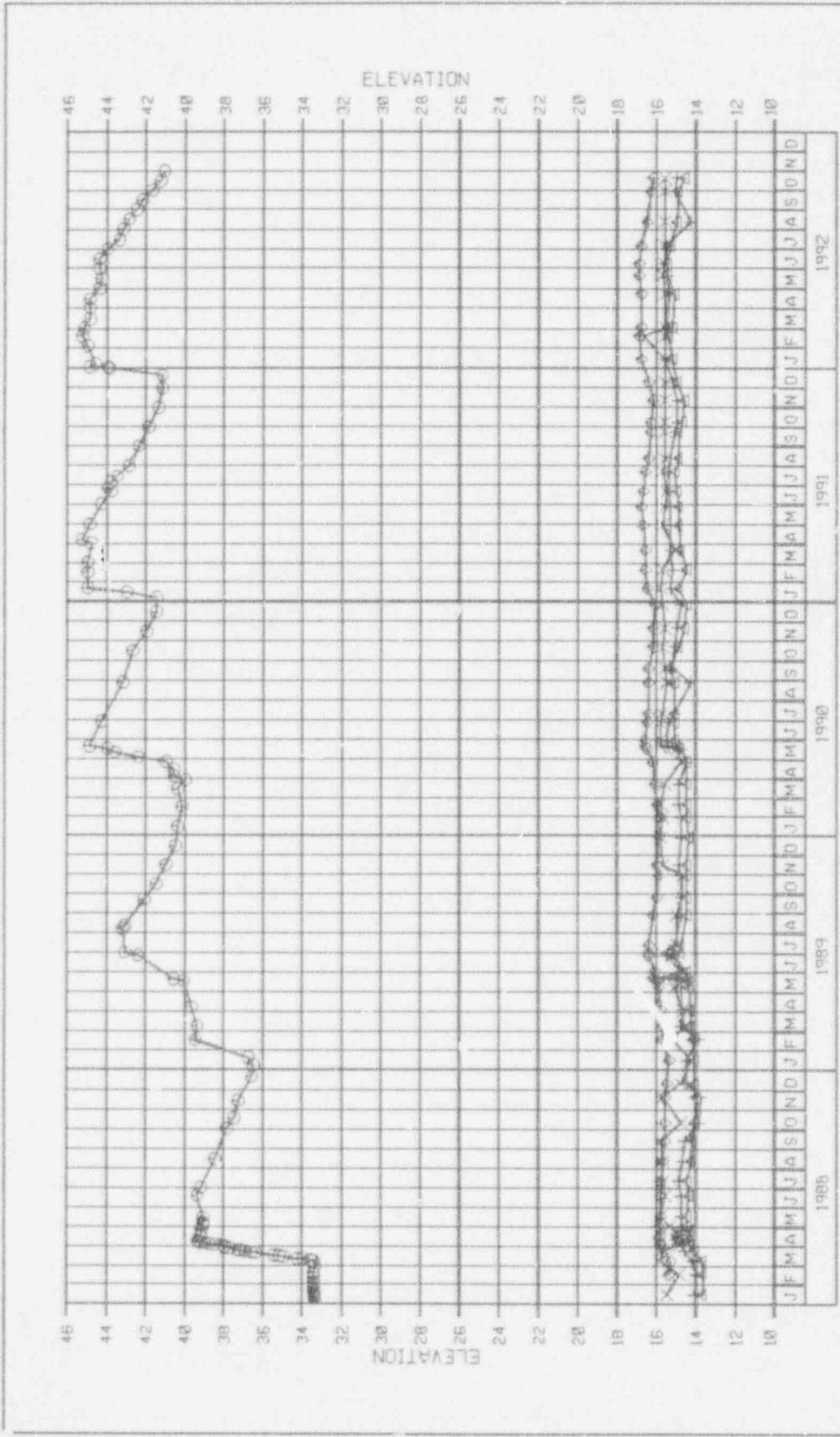
○	—	○	Reservoir
△	—	△	P268-01
+	—	+	P269-01
×	—	×	P432-01
◇	—	◇	P431-01

SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF	
ELEVATION DATA	
STATION 408+00 TO 430+00	
11-25-92	SHEET OF



LEGEND:	Symbol	Instrument	Symbol	Instrument
	⊕	Reservoir	⊕	P385-01
	△	P270-01		
	+	P254-01		
	×	P271-01		
	⊙	P272-01		
	⊕	P283-01		
	×	P384-01		

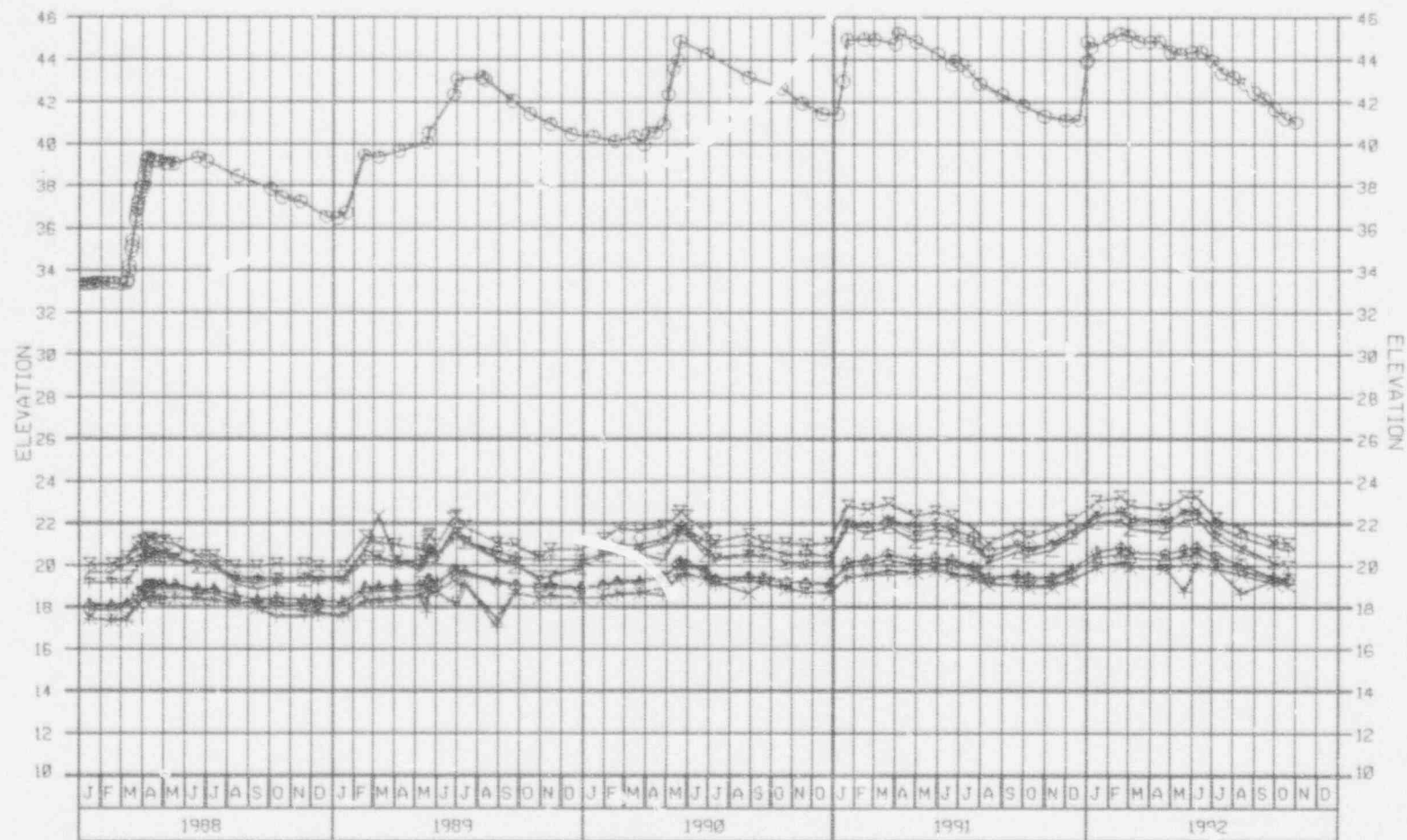
SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF	
ELEVATION DATA	
STATION 430+00 TO 450+00	
11-25-92	SHEET OF



SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
STATION 450+00 TO 455+00	
11-25-92	SHEET OF

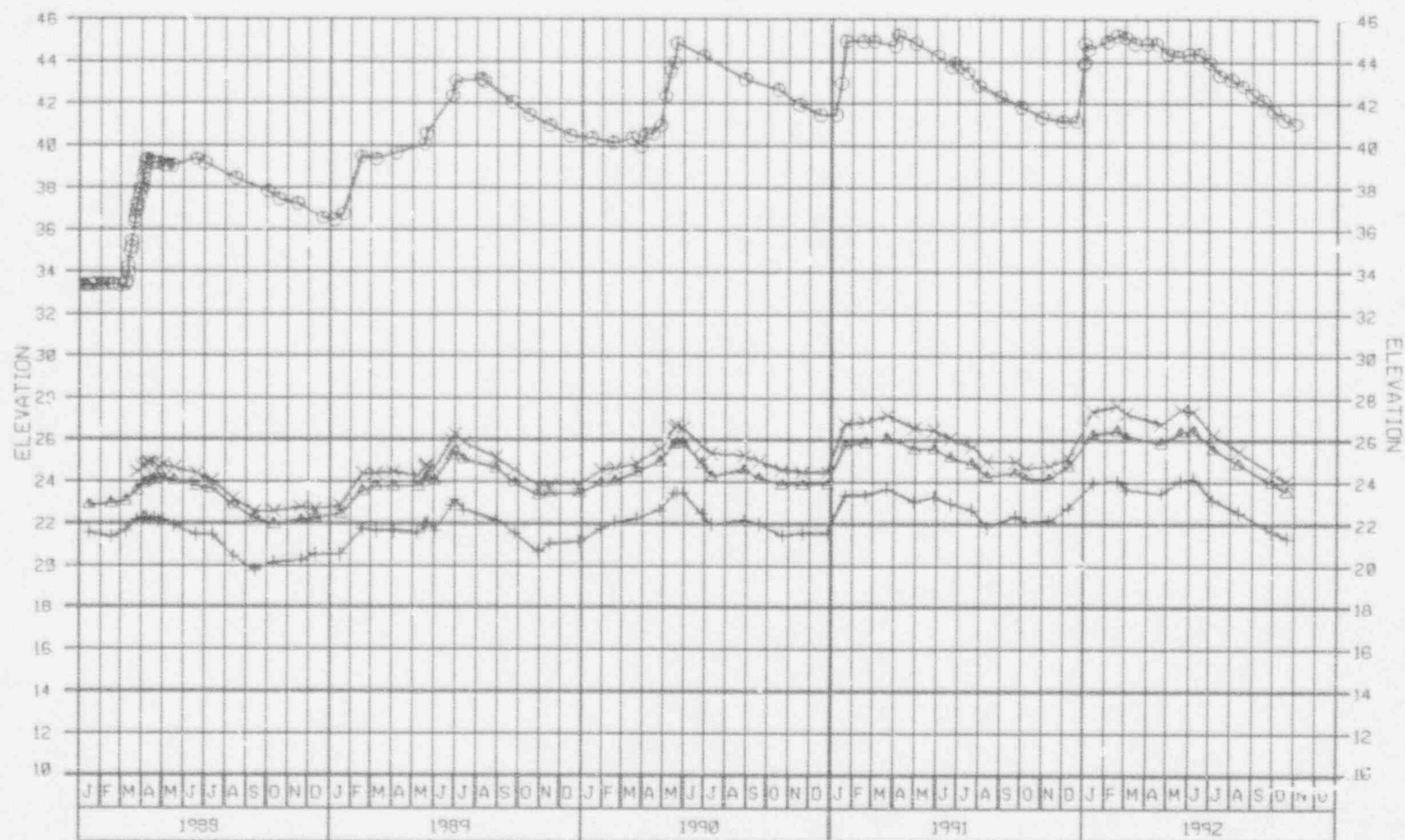
LEGEND:	Symbol	Instrument
	○	Reservoir
	△	P273-01
	+	P433-01
	x	P434-01
	◇	P255-01

FIGURE 60



LEGEND:	Symbol	Instrument	Symbol	Instrument
	⊕	Reservoir	Z	P438-01
	△	P274-01	Y	P244-01
	+	P435-01		
	×	P436-01		
	⊙	P437-01		
	⊕	P242-01		
	×	P243-01		

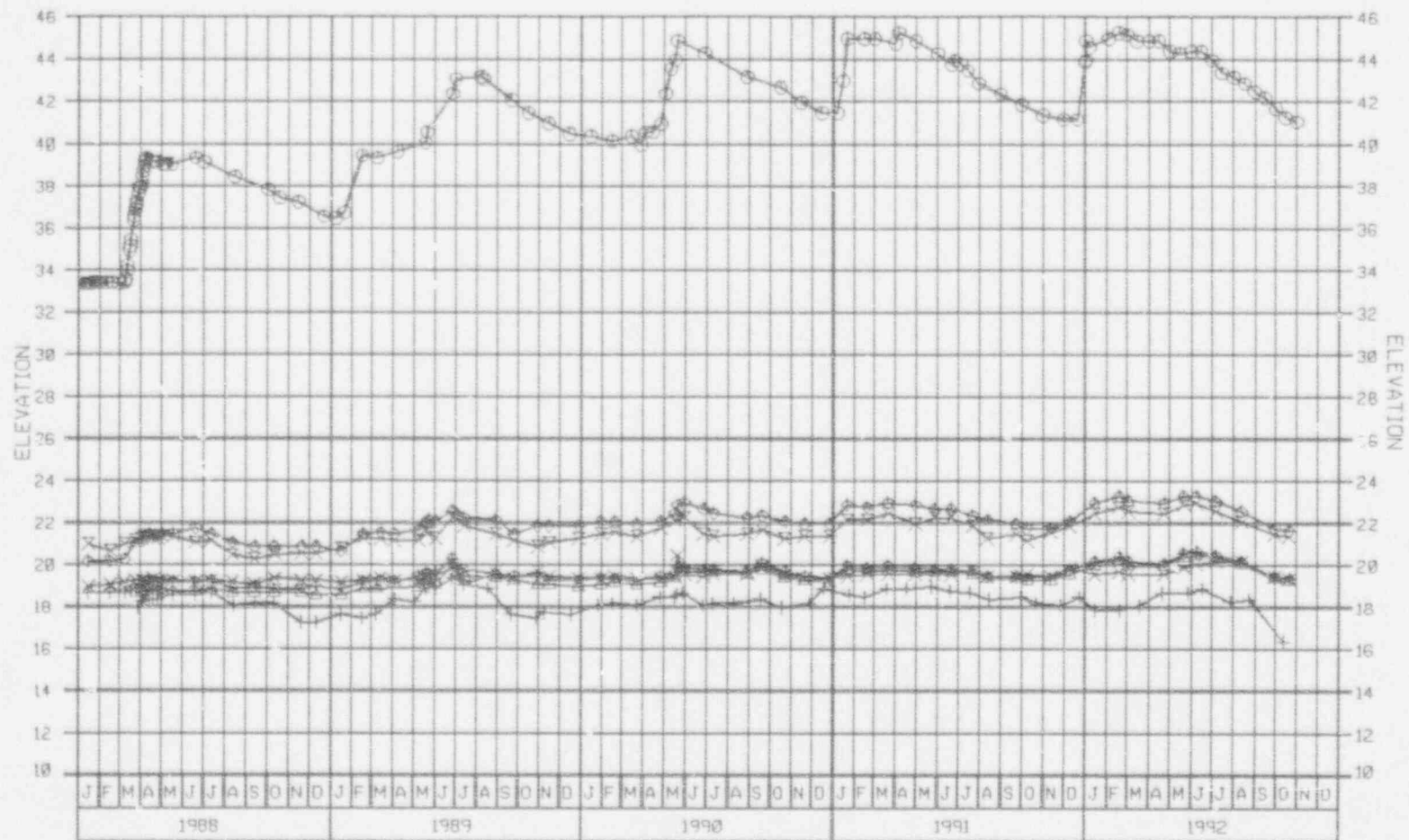
SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
STATION 470+00 TO 516+00	
11-25-92	SHEET OF



LEGEND: Symbol Instrument

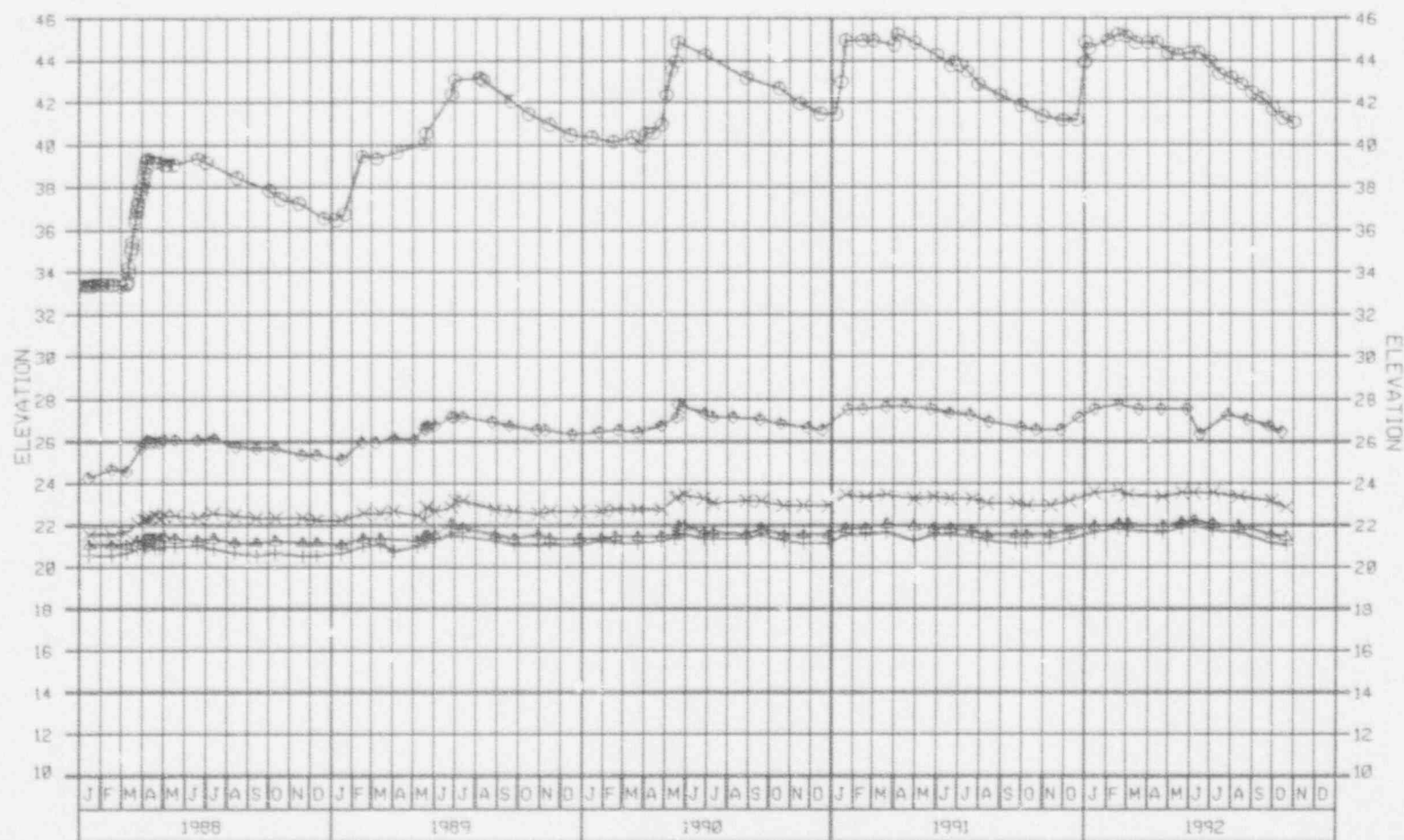
○ ——— ○ Reservoir
 △ ——— △ P439-01
 + ——— + P245-01
 × ——— × P246-01

SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF	
ELEVATION DATA	
STATION 522+00 TO 542+00	
11-25-92	SHEET OF



LEGEND:	Symbol	Instrument	Symbol	Instrument
	⊕	Reservoir		
	△	P256-01		
	+	P476-01		
	×	P386-01		
	⊙	P247-01		
	⊕	P440-01		
	×	P249-01		

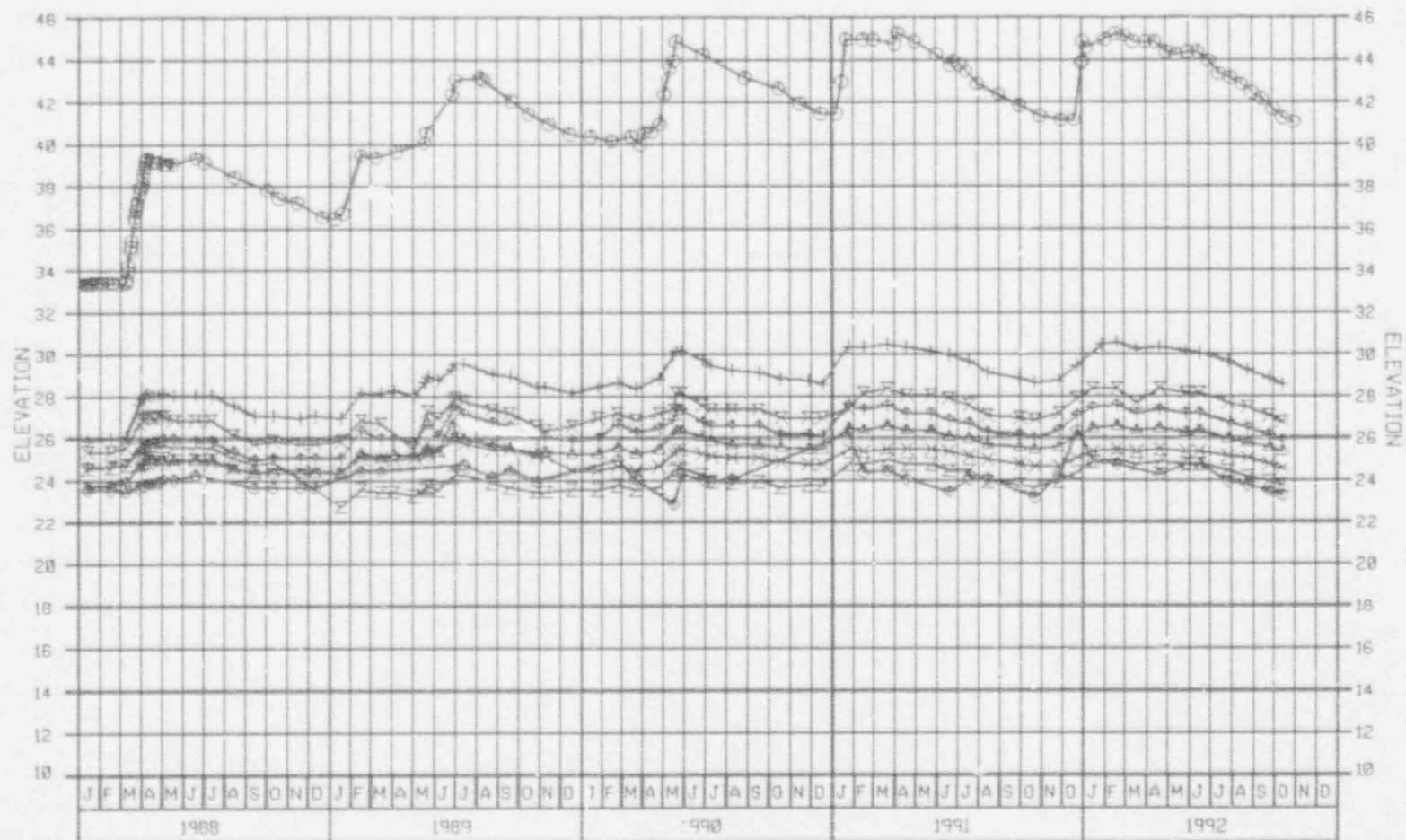
SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF	
ELEVATION DATA	
STATION 545+00 TO 570+00	
11-25-92	SHEET OF



LEGEND: Symbol Instrument

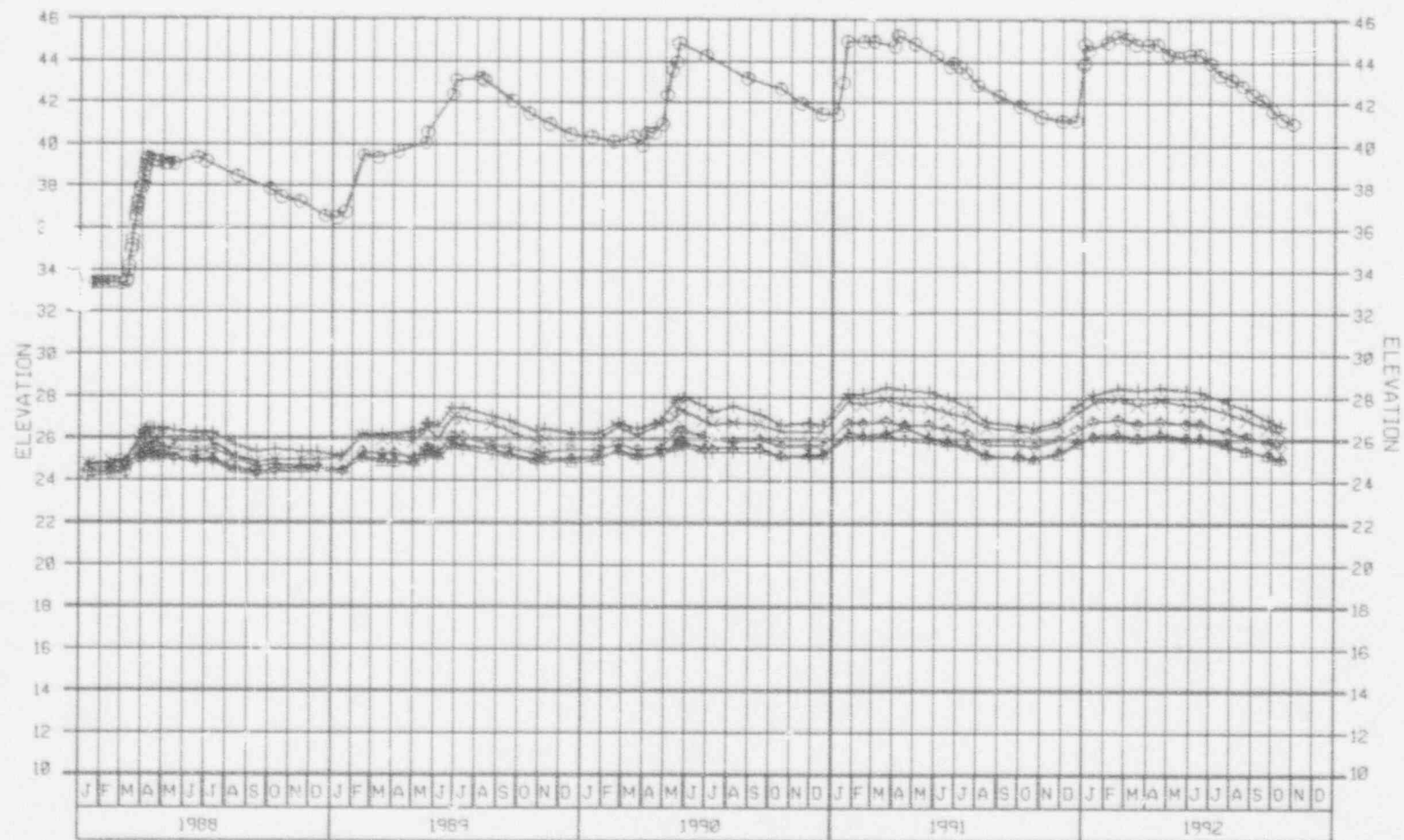
- ⊕ — ⊕ Reservoir
- △ — △ P387-01
- + — + P388-01
- × — × P441-01
- ⊙ — ⊙ P119-01

SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF	
ELEVATION DATA	
STATION 570+00 TO 590+00	
11-25-92	SHEET OF



LEGEND:		Symbol	Instrument	Symbol	Instrument
○	—	○	Reservoir	—	—
△	—	△	P275-01	—	—
+	—	+	P276-01	—	—
×	—	×	P122-01	—	—
◇	—	◇	P442-01	—	—
♣	—	♣	P443-01	—	—
⌘	—	⌘	P444-01	—	—

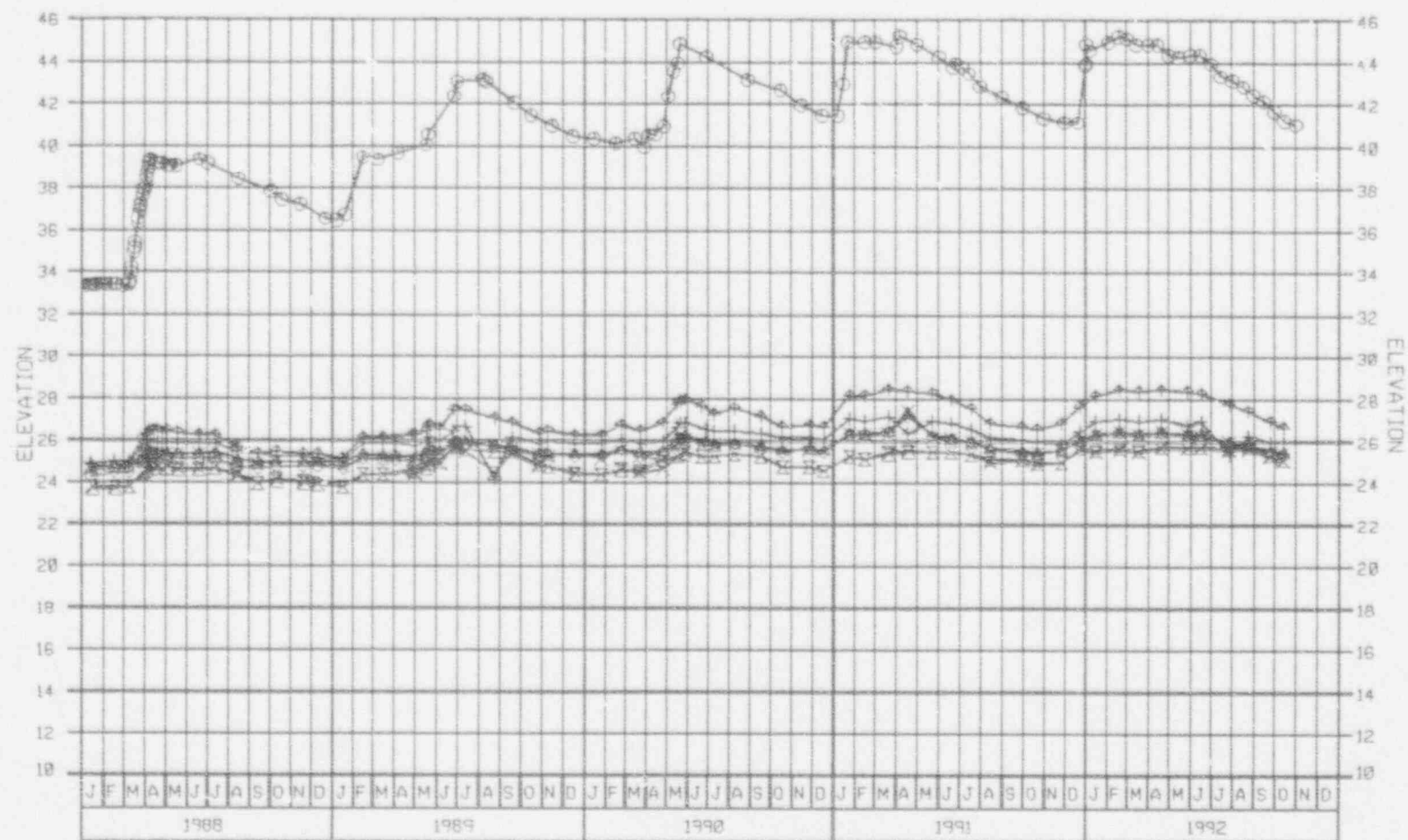
SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF	
ELEVATION DATA	
STATION 590+00 TO 602+00	
11-25-92	SHEET OF



LEGEND: Symbol Instrument

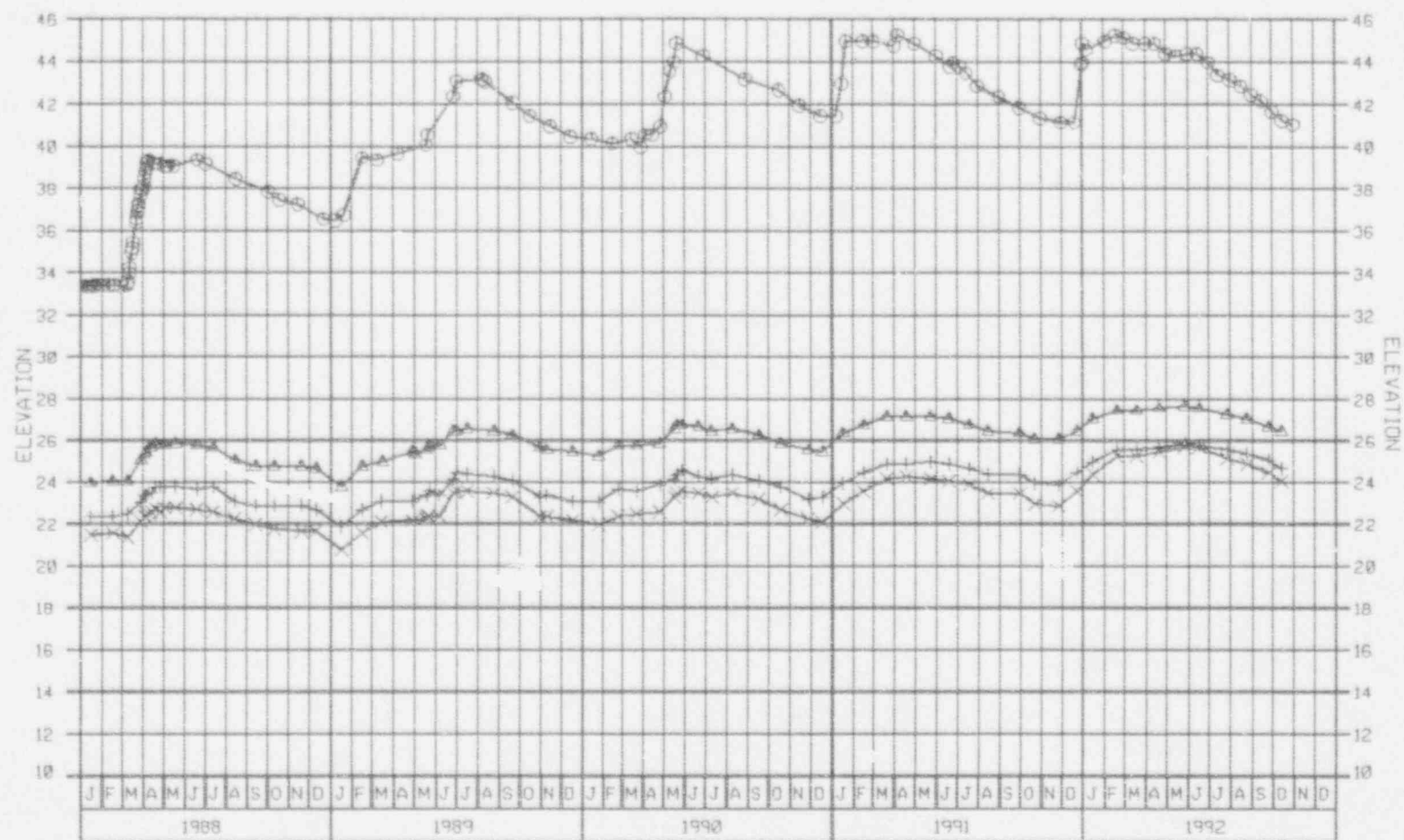
○	○	Reservoir
△	△	P126-01
+	+	P127-01
×	×	P445-01
◇	◇	P277-01
*	*	P446-01

SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF	
ELEVATION DATA	
STATION 602+00 TO 610+00	
11-25-92	SHEET OF



LEGEND:	Symbol	Instrument	Symbol	Instrument
	○	Reservoir	—Z—	P130-01
	△	P447-01		
	+	P448-01		
	×	P449-01		
	◇	P250-01		
	⋈	P127-01		
	⋈	P251-01		

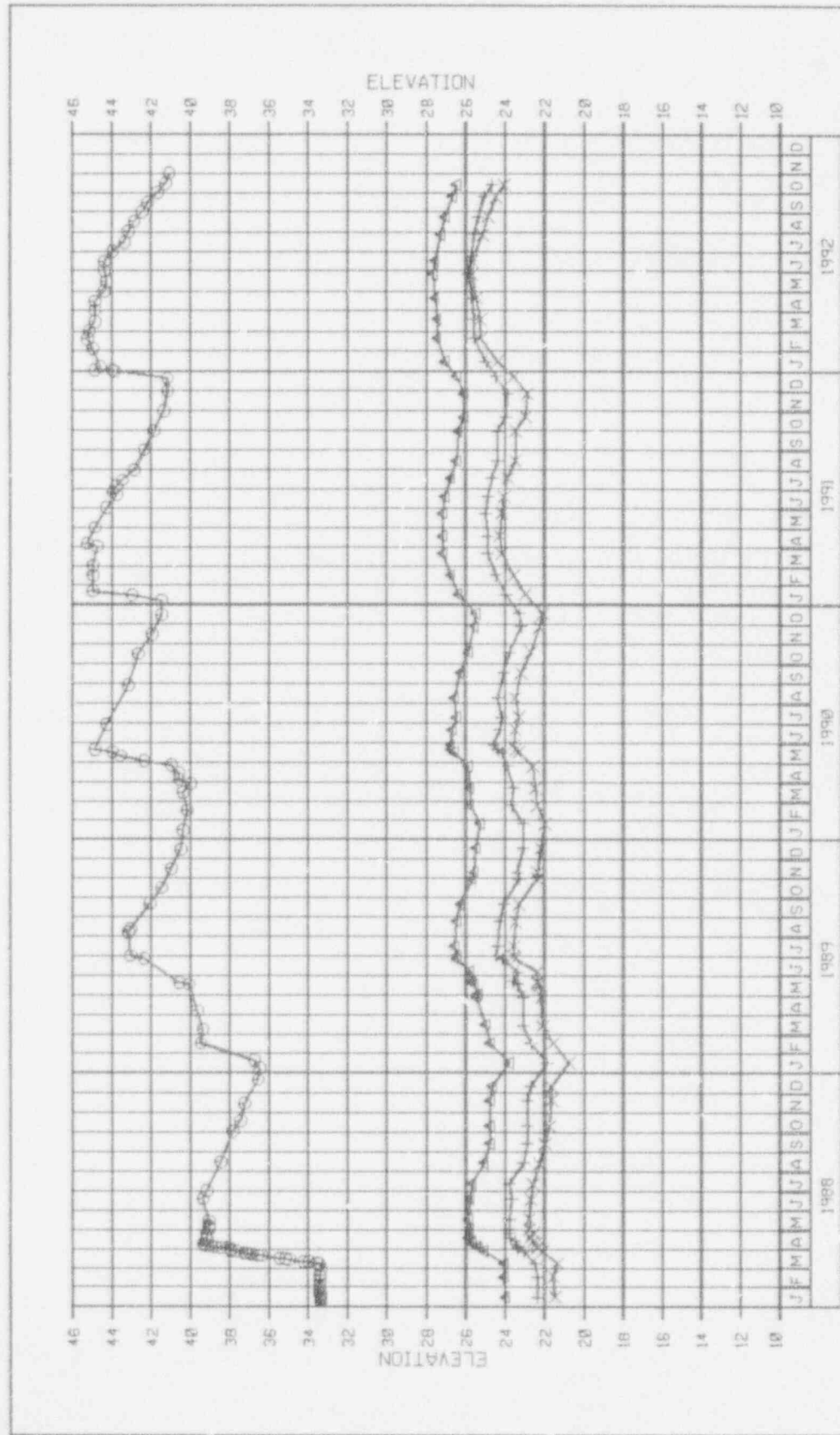
SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
STATION 610+00 TO 629+00	
11-25-92	SHEET OF



LEGEND: Symbol Instrument

○	—	○	Reservoir
△	—	△	P294-01
+	—	+	P134-01
×	—	×	P296-01

SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF	
ELEVATION DATA	
650+00 to 654+28	
11-25-92	SHEET OF



LEGEND: Symbol Instrument

○ Reservoir

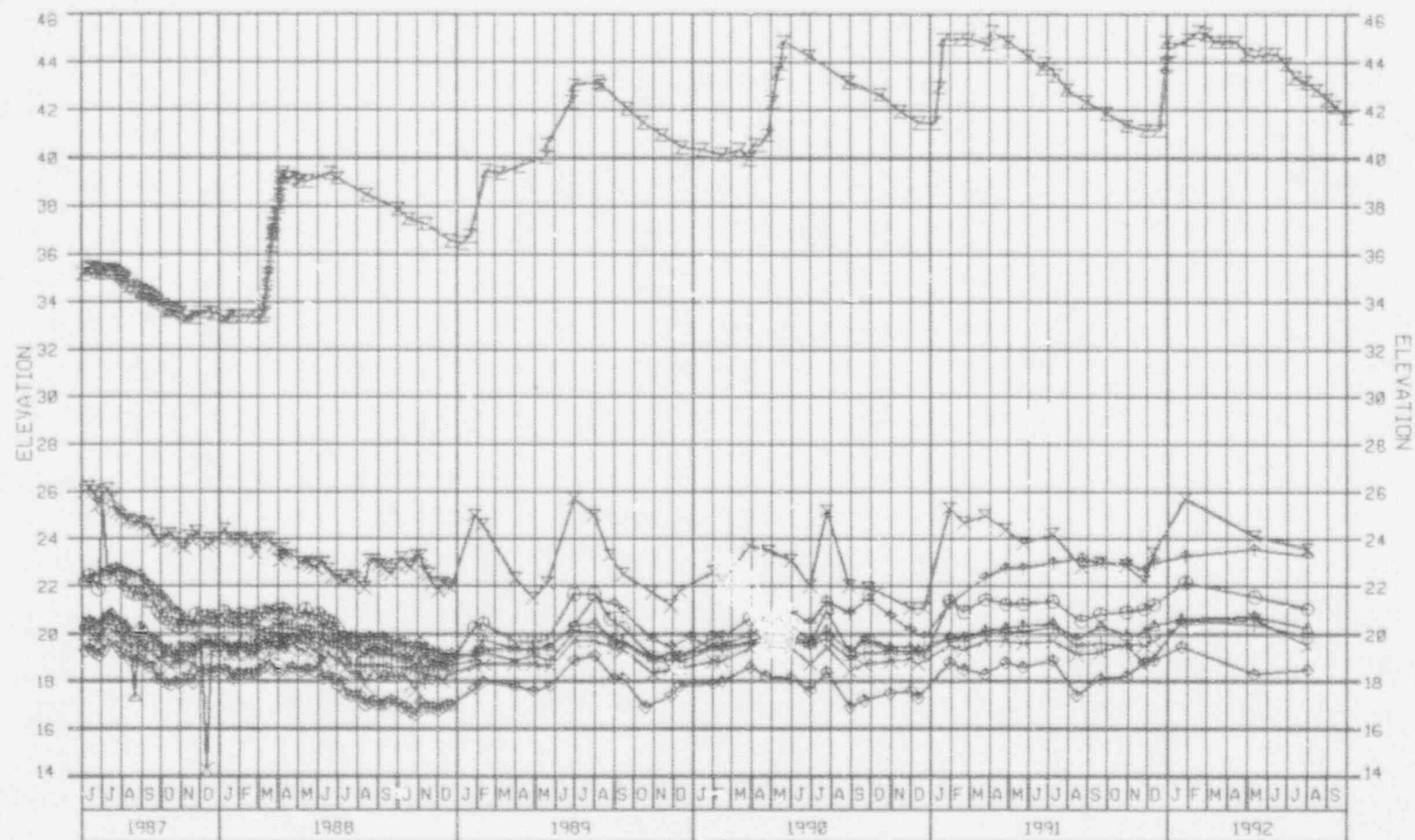
△ P294-01

+ P134-01

× P296-01

SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF ELEVATION DATA	
650+00 to 654+28	
11-25-92	SHEET OF

FIGURE 69

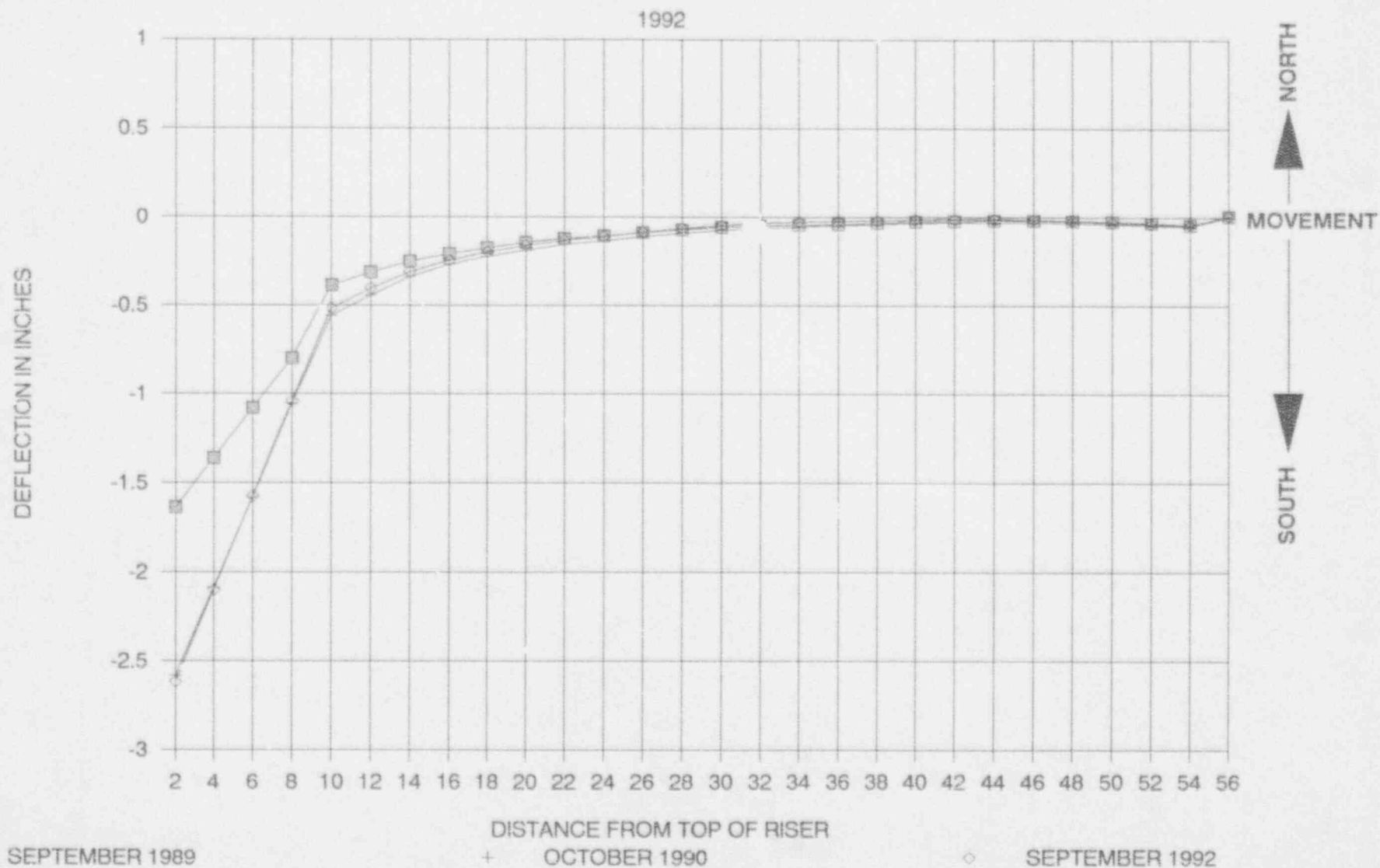


LEGEND:	Symbol	Instrument	Symbol	Instrument
	⊙	263C-01	Z	Reservoir
	△	265-01		
	+	266-01		
	×	267-01		
	⊕	268-01		
	⊕	269B-01		
	×	271B-01		

SOUTH TEXAS PROJECT	
Electric Generating Station	
Houston Lighting and Power Company	
TIME HISTORY OF	
ELEVATION DATA	
ESSENTIAL COOLING POND	
11-10-92	SHEET OF

STATION 262+00
CREST

INCLINOMETER T1 A-AXIS COMPARISON

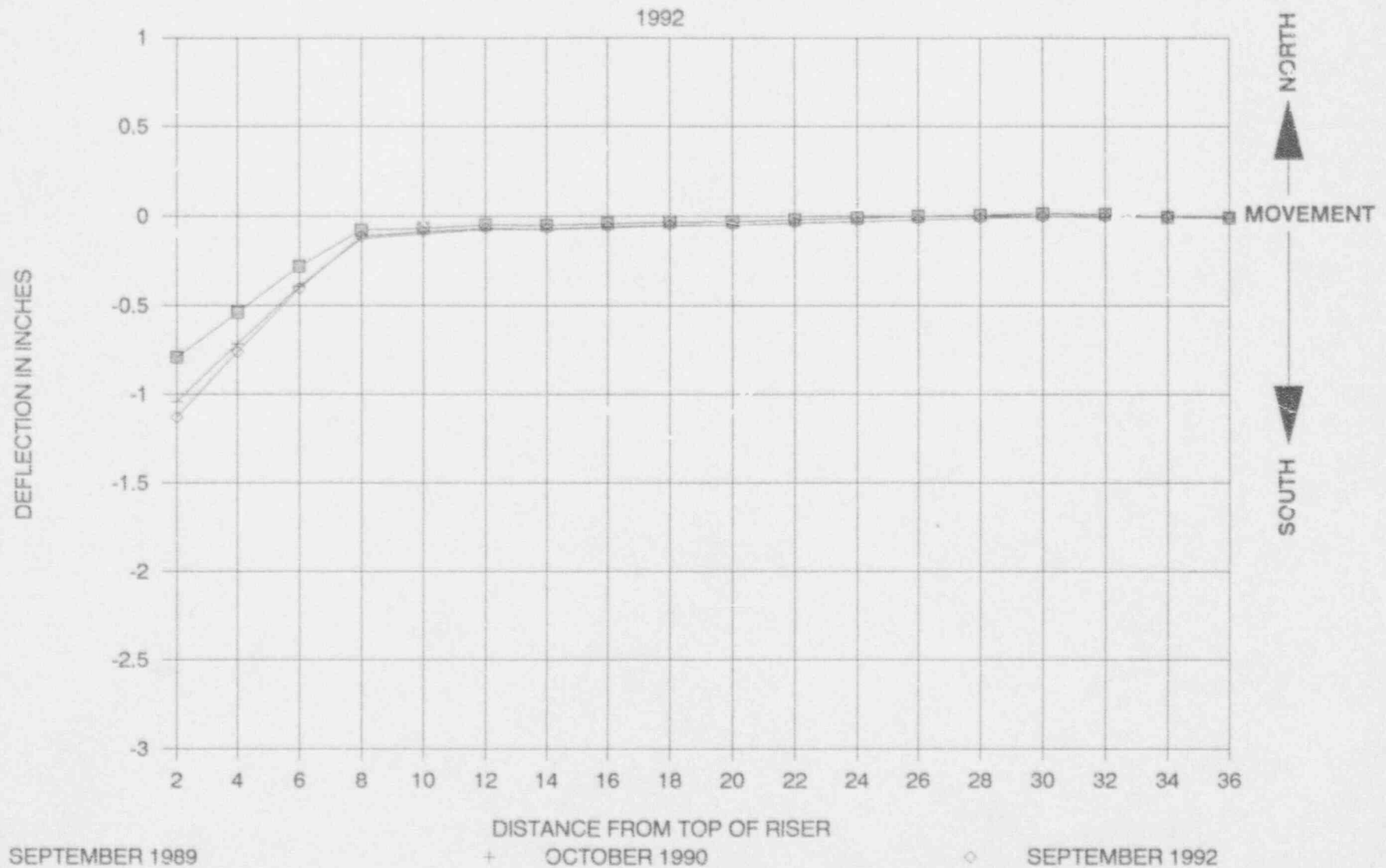


0 REPRESENTS INITIAL READING (JUNE 1984)

FIGURE 71

STATION 262+00
DOWNSTREAM BERM

INCLINOMETER T2 A-AXIS COMPARISON



0 REPRESENTS INITIAL READING (JUNE 1984)

FIGURE 72

STATION 262+00
UPSTREAM SLOPE

INCLINOMETER T3 A-AXIS COMPARISON

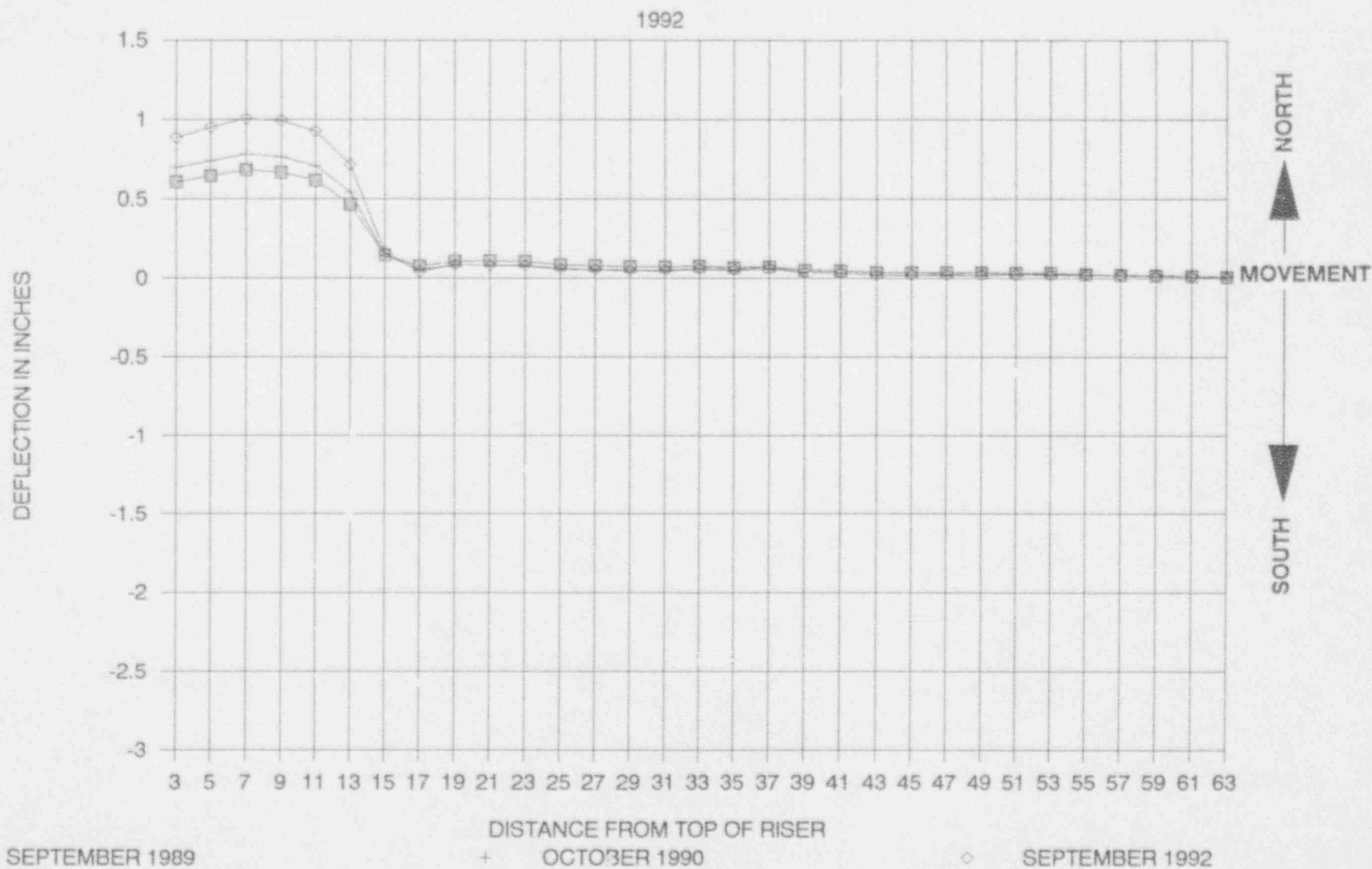


FIGURE 73

STATION 280+00
CREST

INCLINOMETER T4 A-AXIS COMPARISON

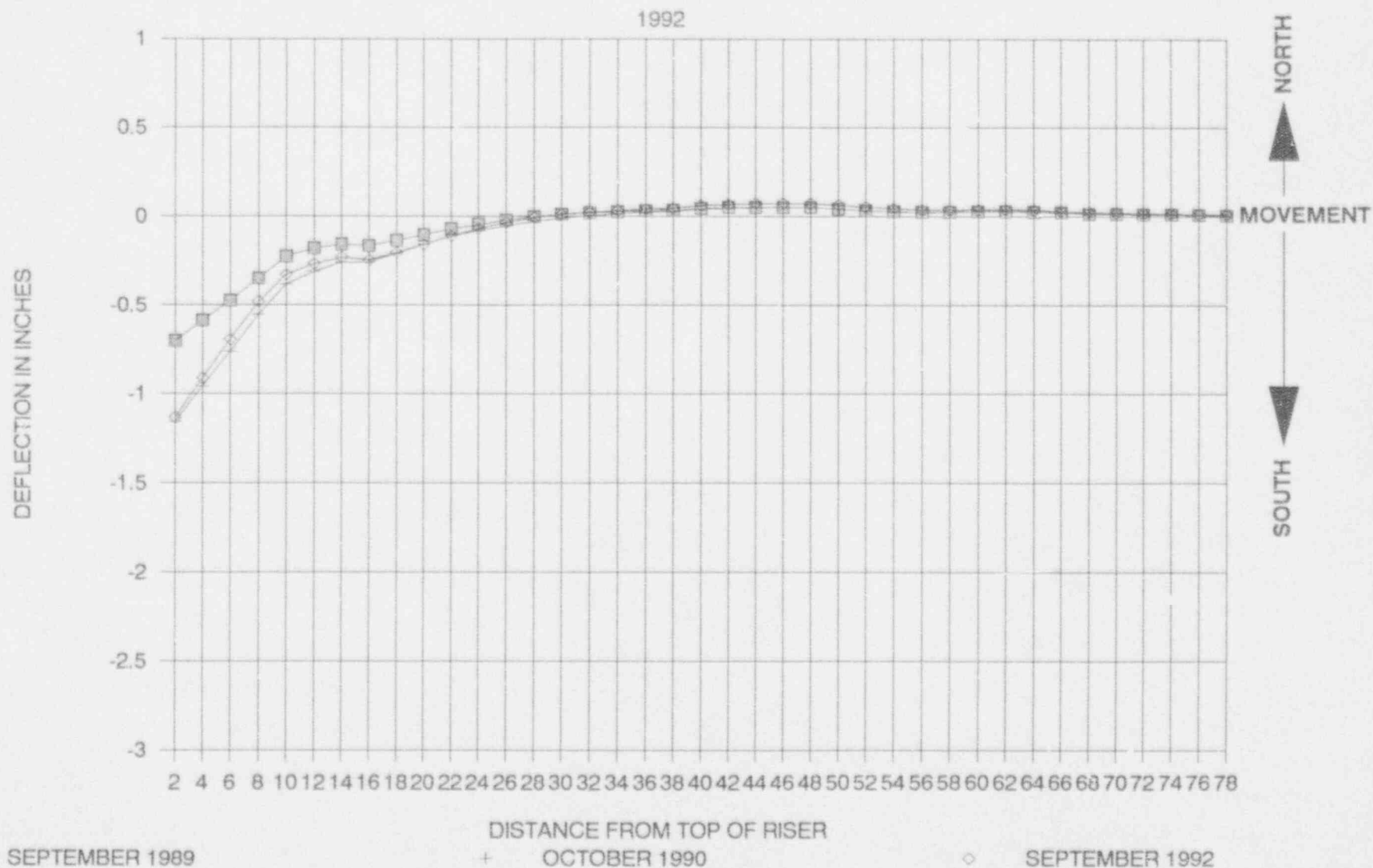
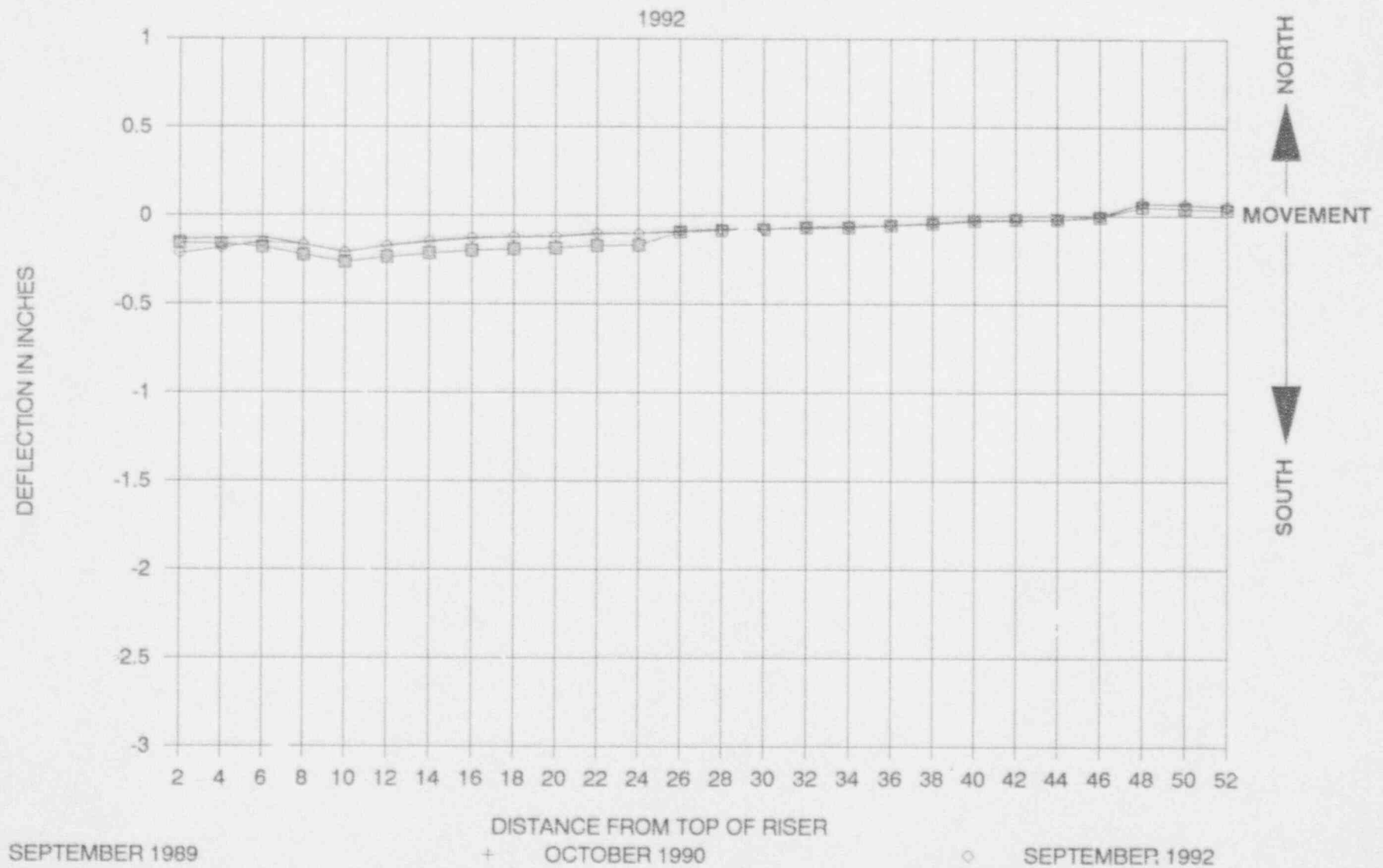


FIGURE 74

STATION 280+00
DOWNSTREAM BERM

INCLINOMETER T5 A-AXIS COMPARISON



0 REPRESENTS INITIAL READING (JUNE 1984)

FIGURE 75

STATION 280+00
UPSTREAM SLOPE

INCLINOMETER T6 A-AXIS COMPARISON

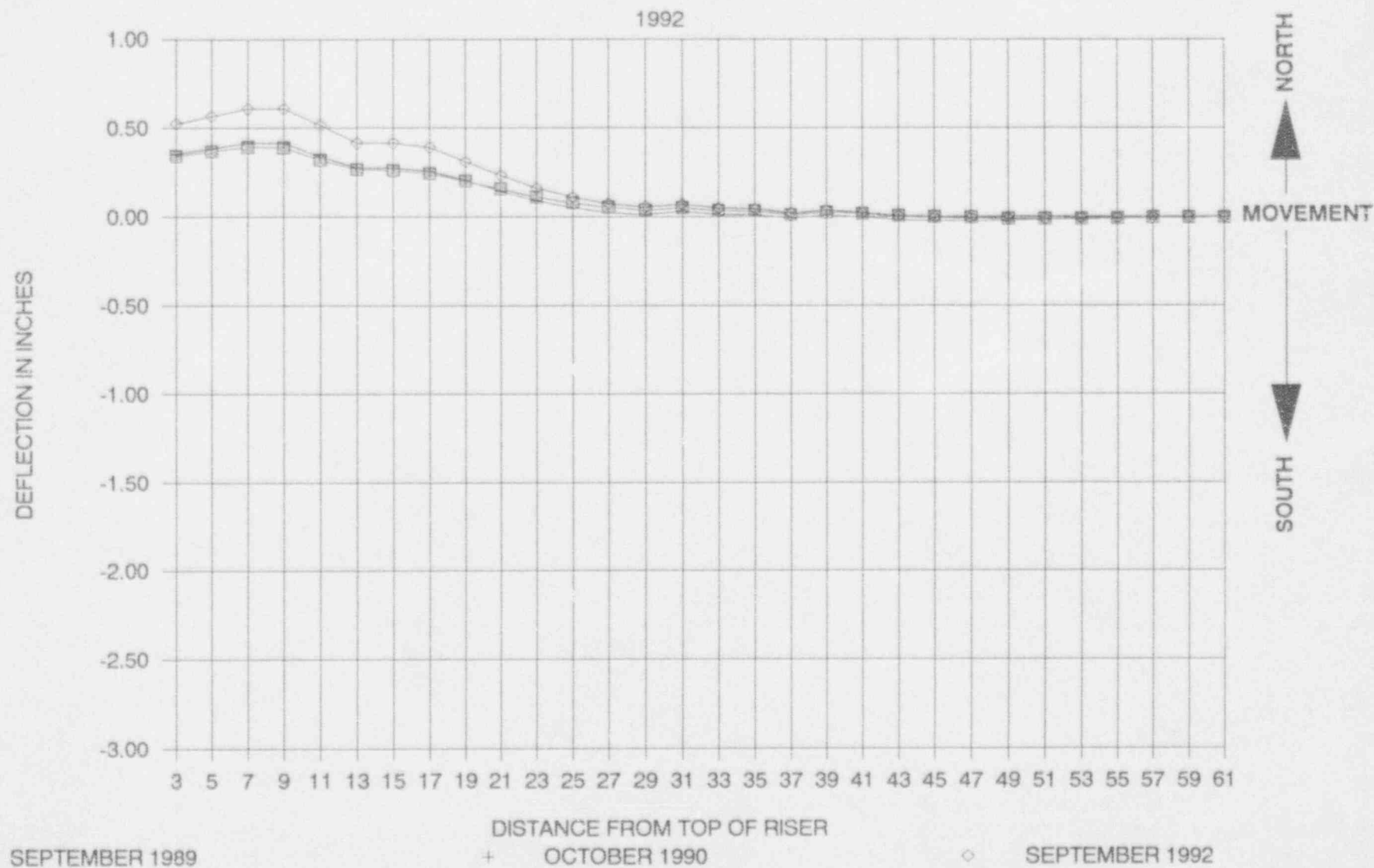
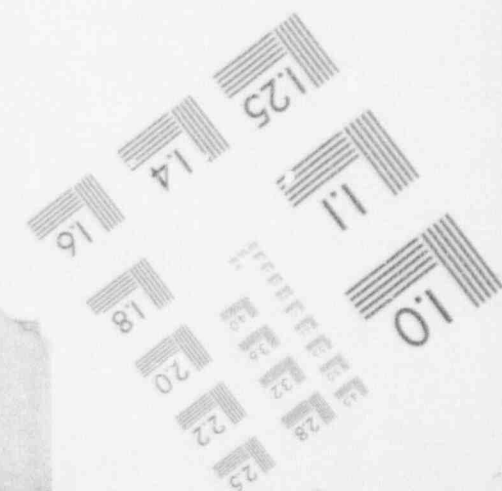
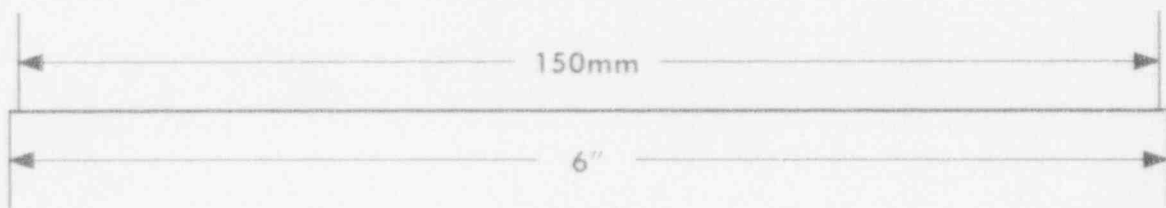
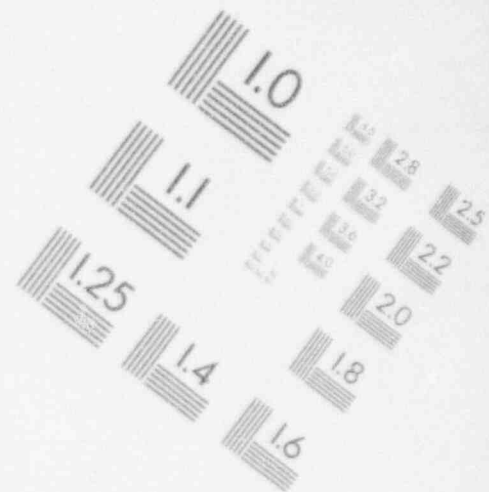
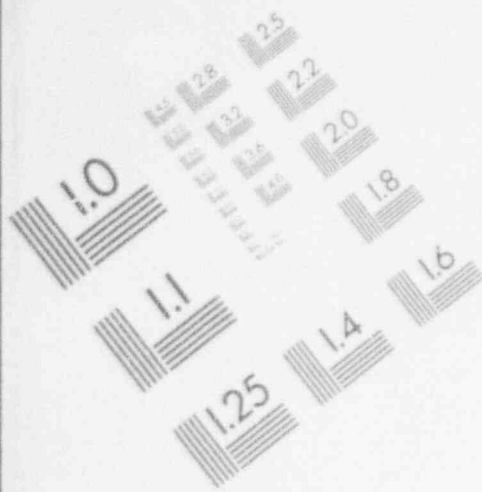


FIGURE 76

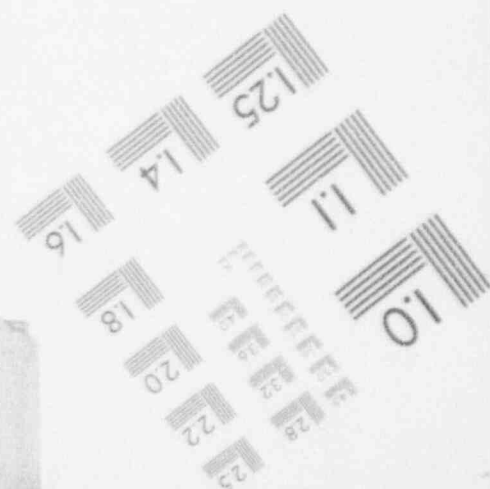
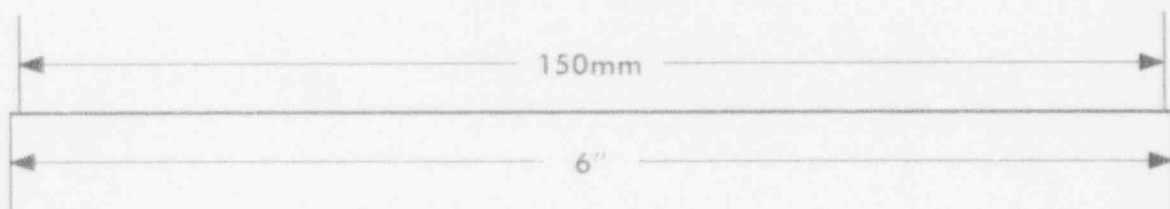
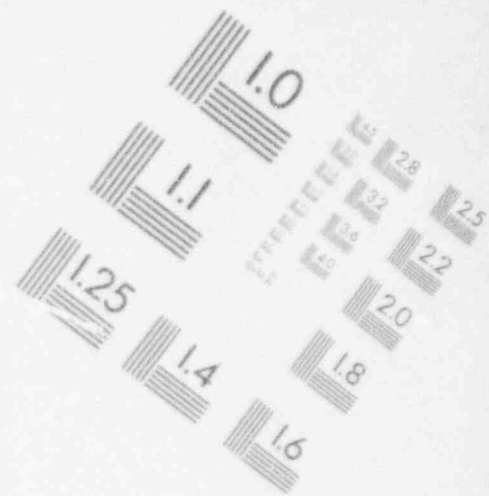
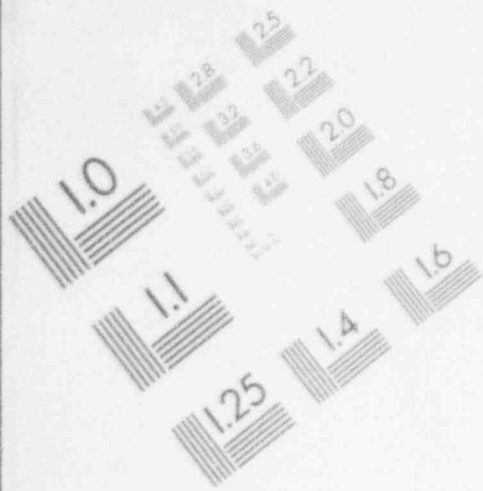
1

IMAGE EVALUATION
TEST TARGET (MT-3)



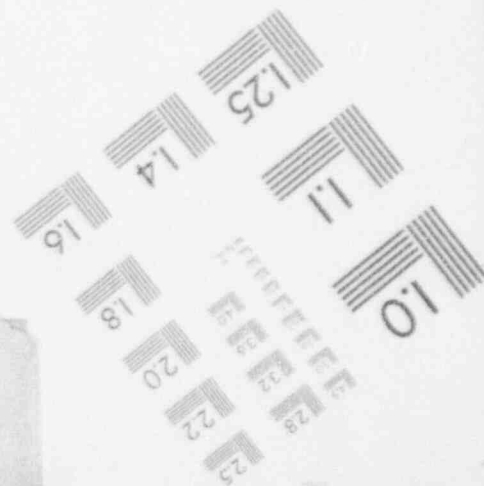
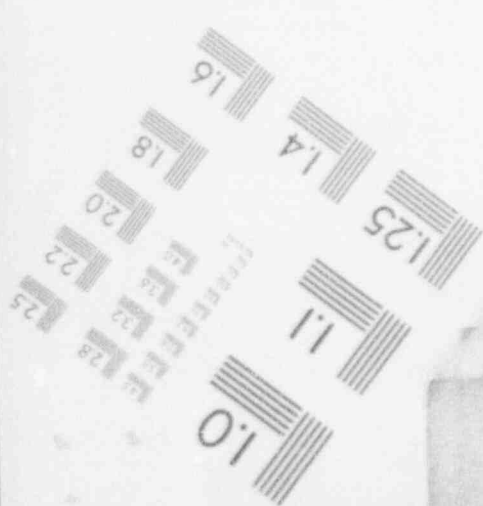
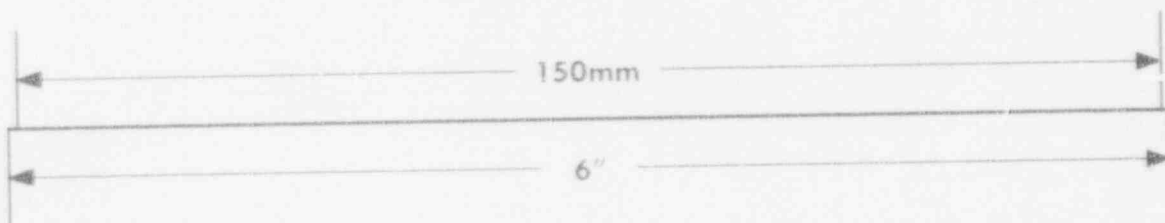
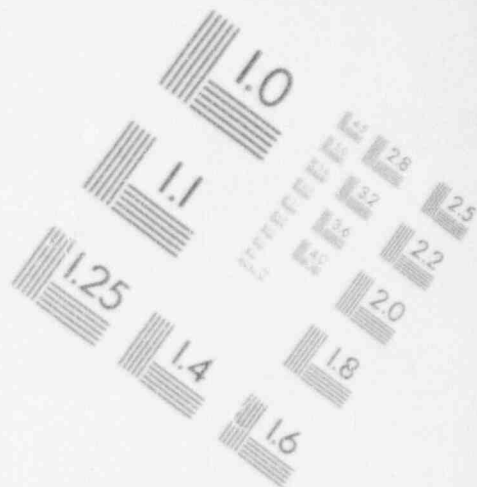
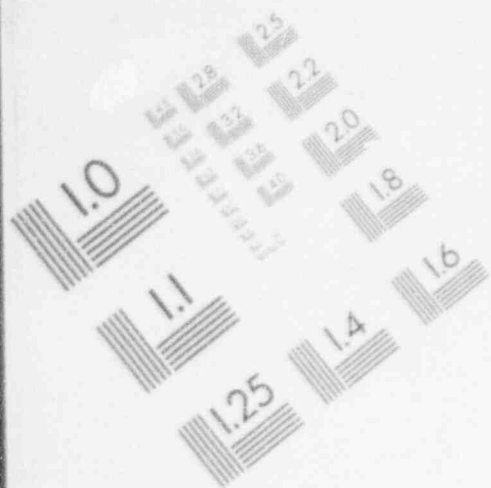
1

IMAGE EVALUATION
TEST TARGET (MT-3)



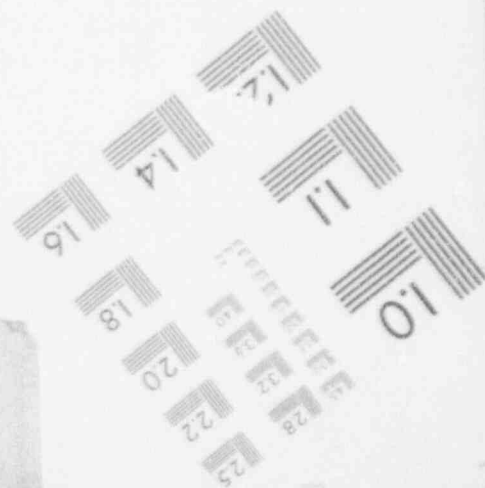
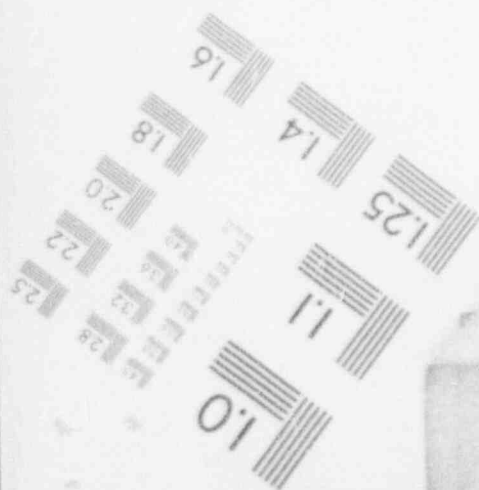
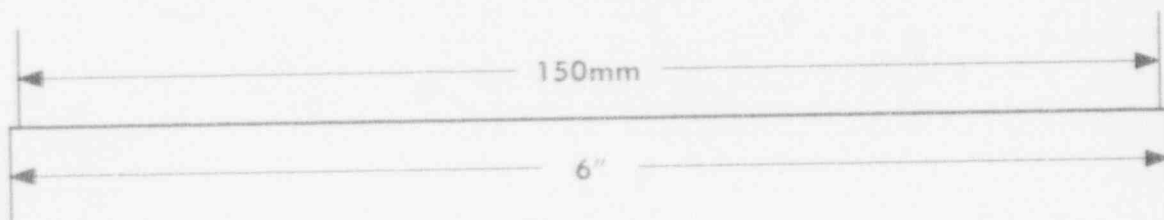
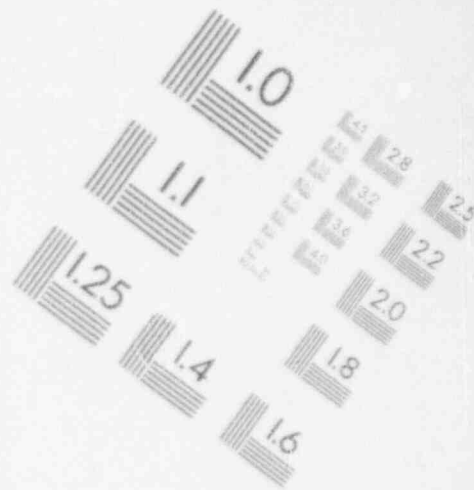
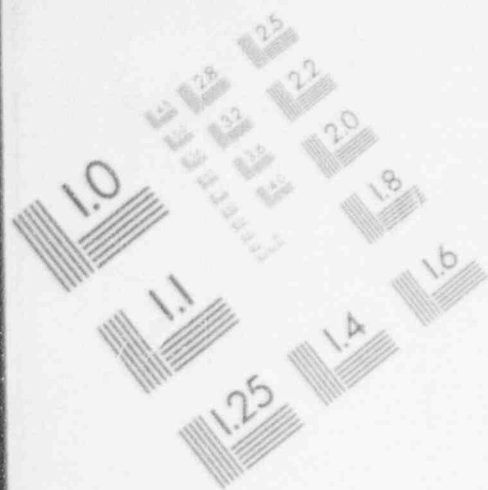
1

IMAGE EVALUATION
TEST TARGET (MT-3)



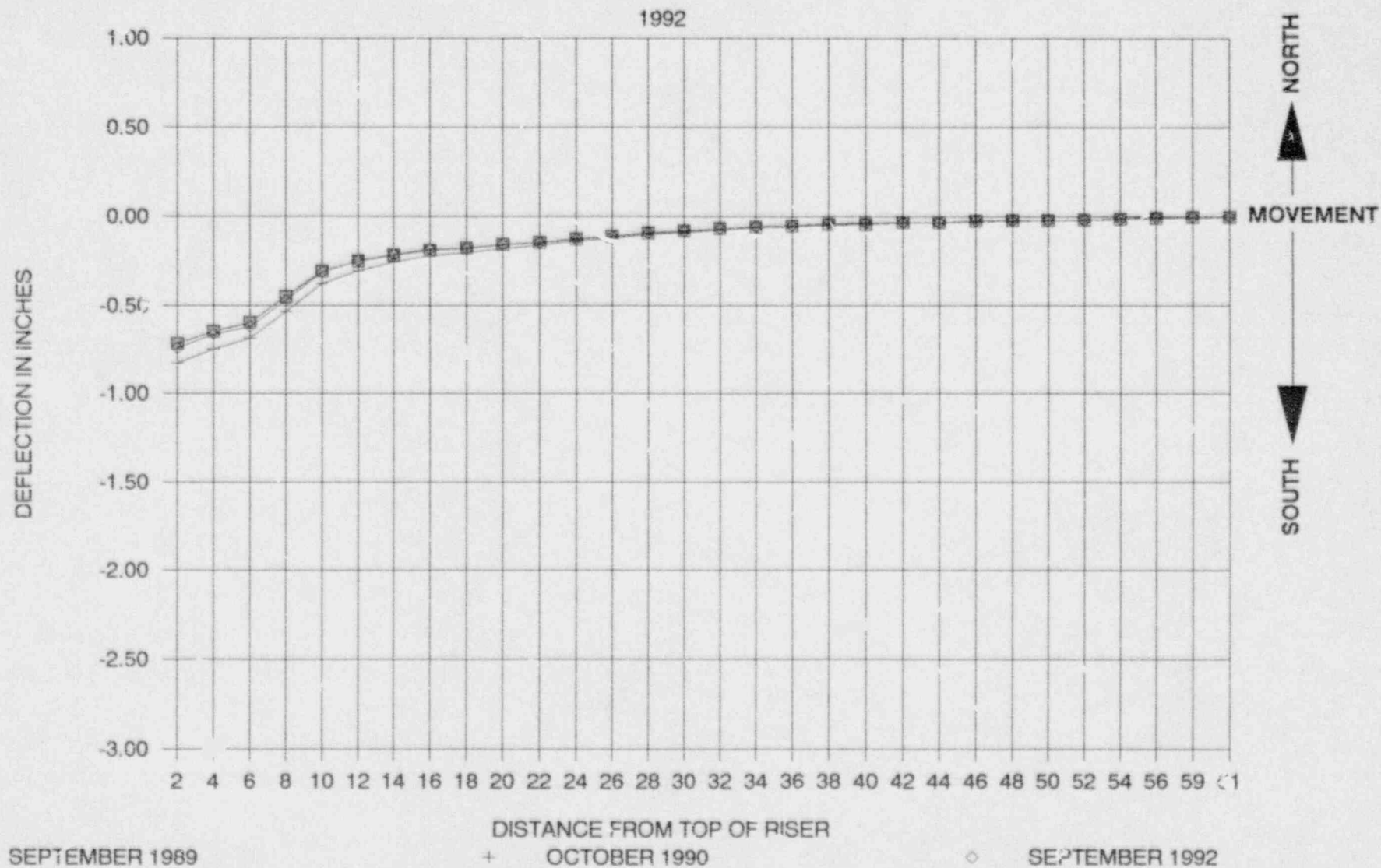
1

IMAGE EVALUATION TEST TARGET (MT-3)



STATION 318+20
DOWNSTREAM BERM

INCLINOMETER T7 A-AXIS COMPARISON



0 REPRESENTS INITIAL READING (JUNE 1984)

FIGURE 77

STATION 315+20
DOWNSTREAM BERM

INCLINOMETER T8 A-AXIS COMPARISON

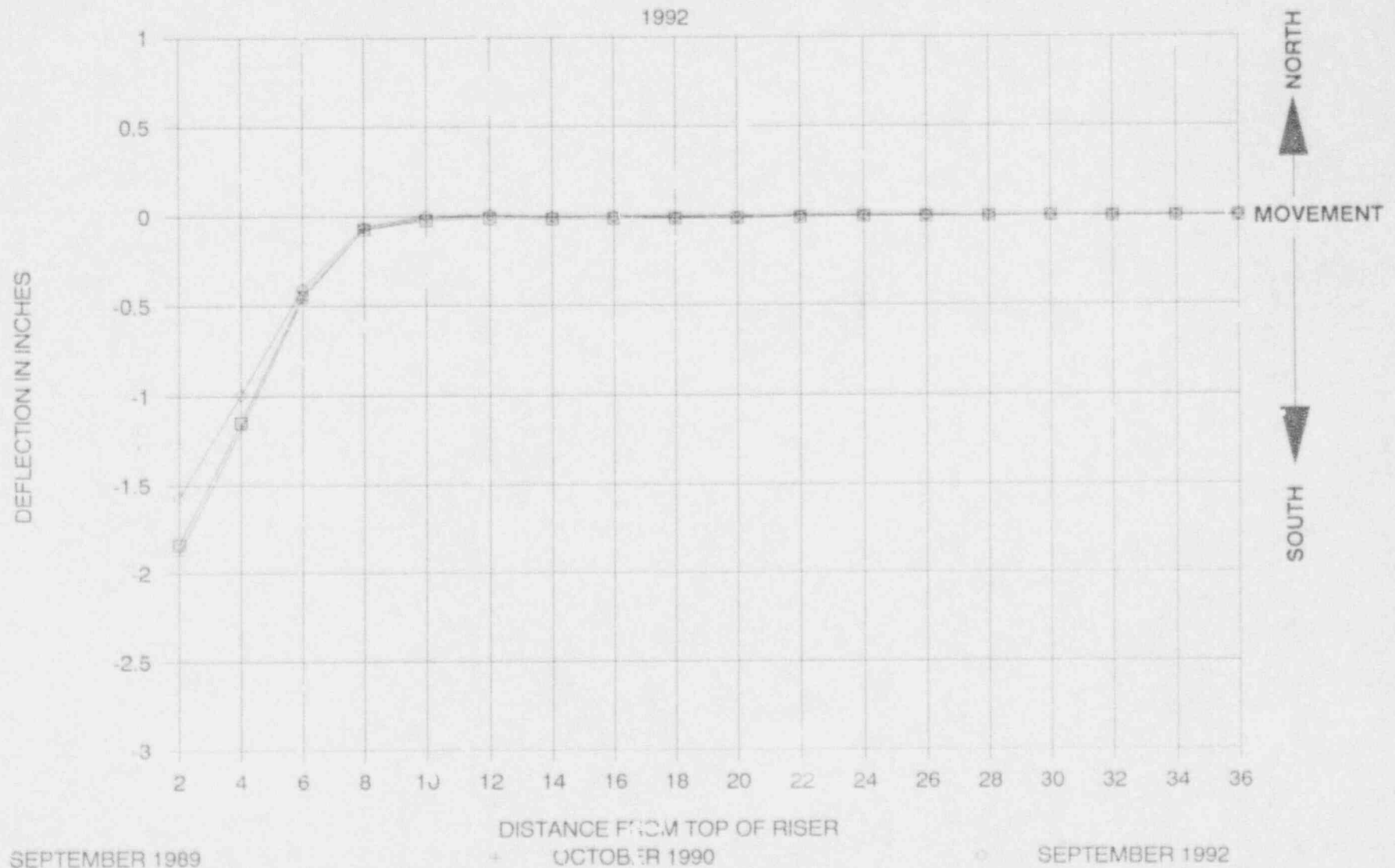
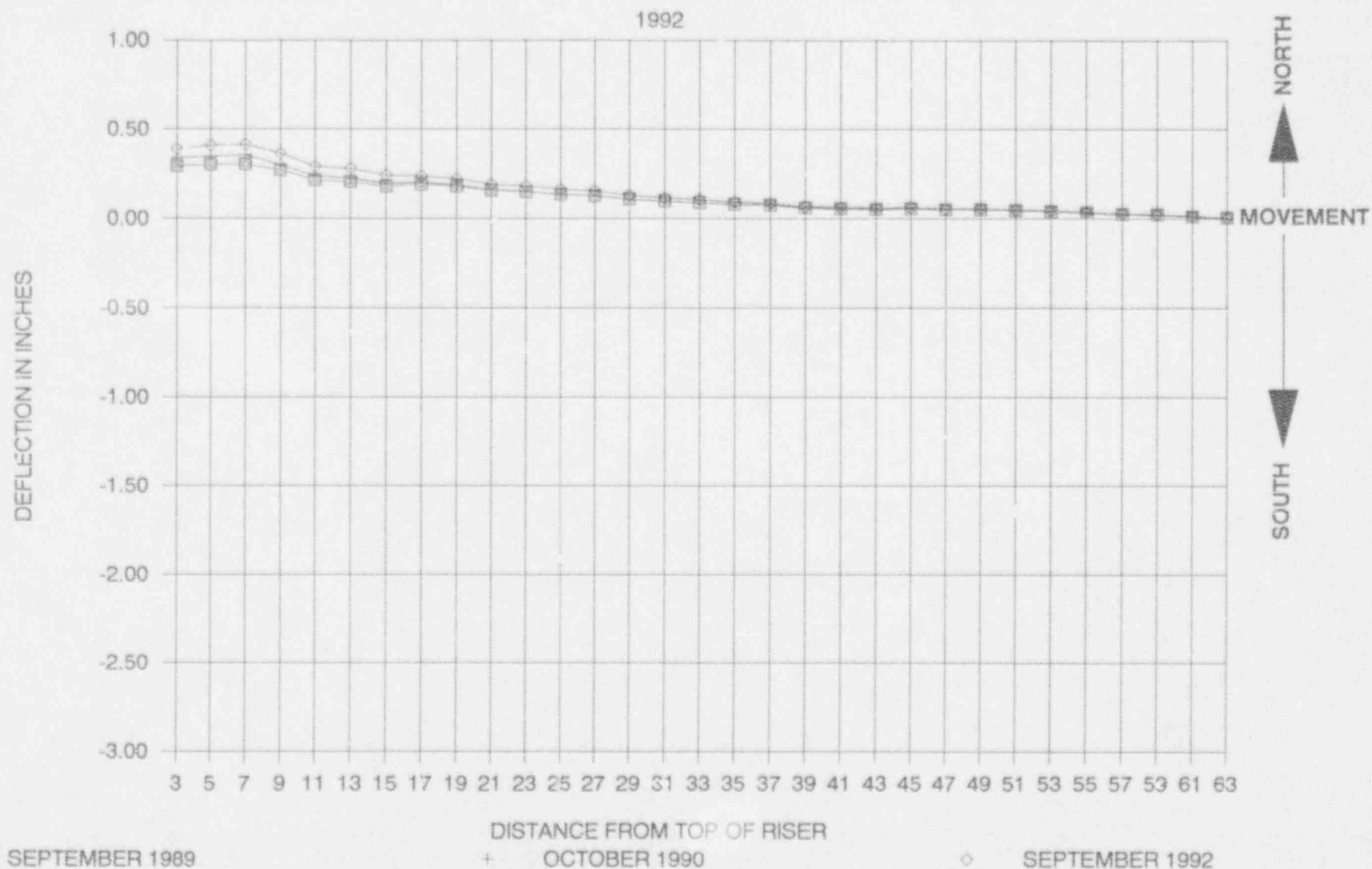


FIGURE 78

STATION 318+20
UPSTREAM SLOPE

INCLINOMETER T9 A-AXIS COMPARISON

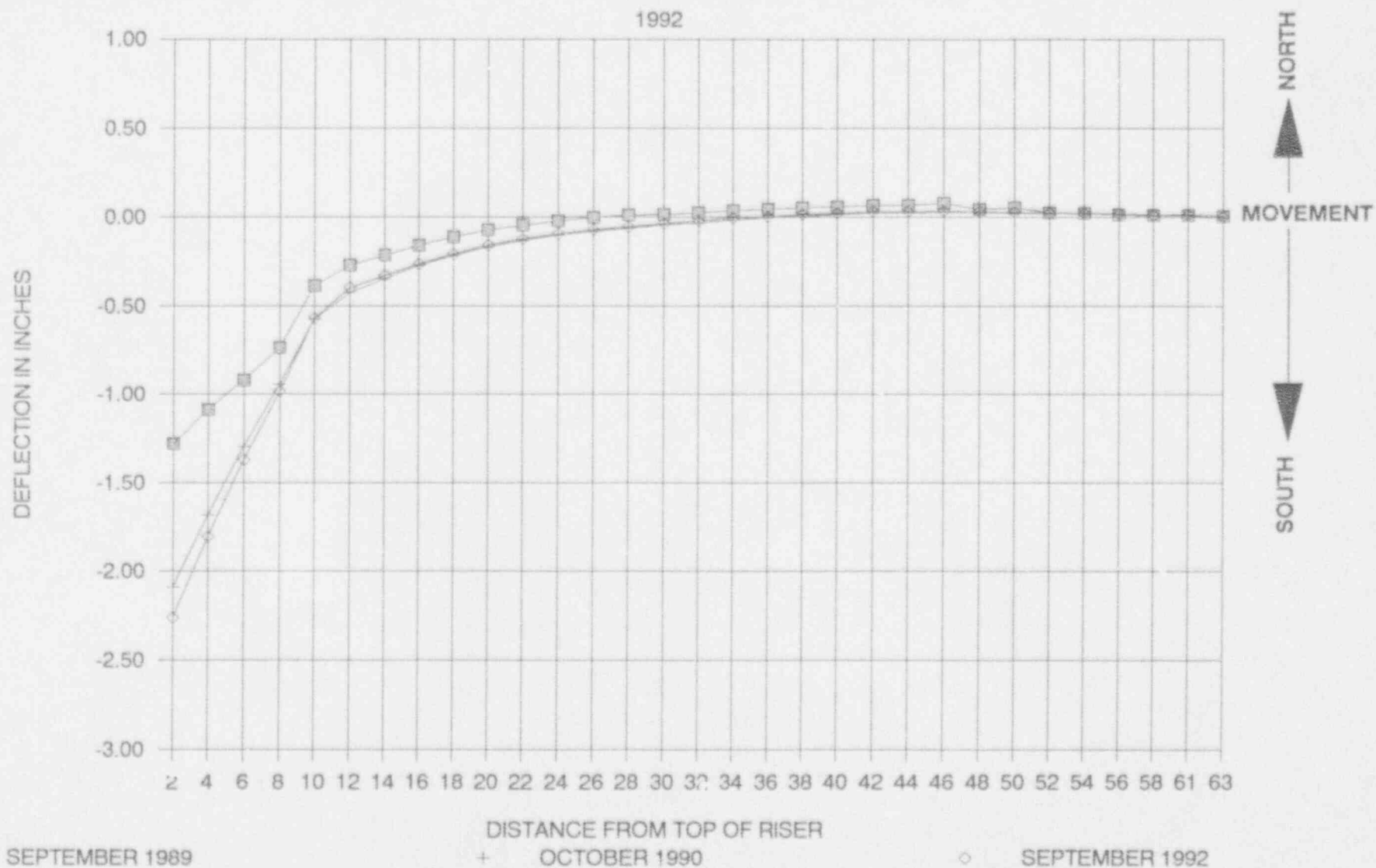


0 REPRESENTS INITIAL READING (JUNE 1984)

FIGURE 79

STATION 340+00
CREST

INCLINOMETER T10 A-AXIS COMPARISON



0 REPRESENTS INITIAL READING (JUNE 1984)

FIGURE 80

STATION 340+00
DOWNSTREAM BERM

INCLINOMETER T11 A-AXIS COMPARISON

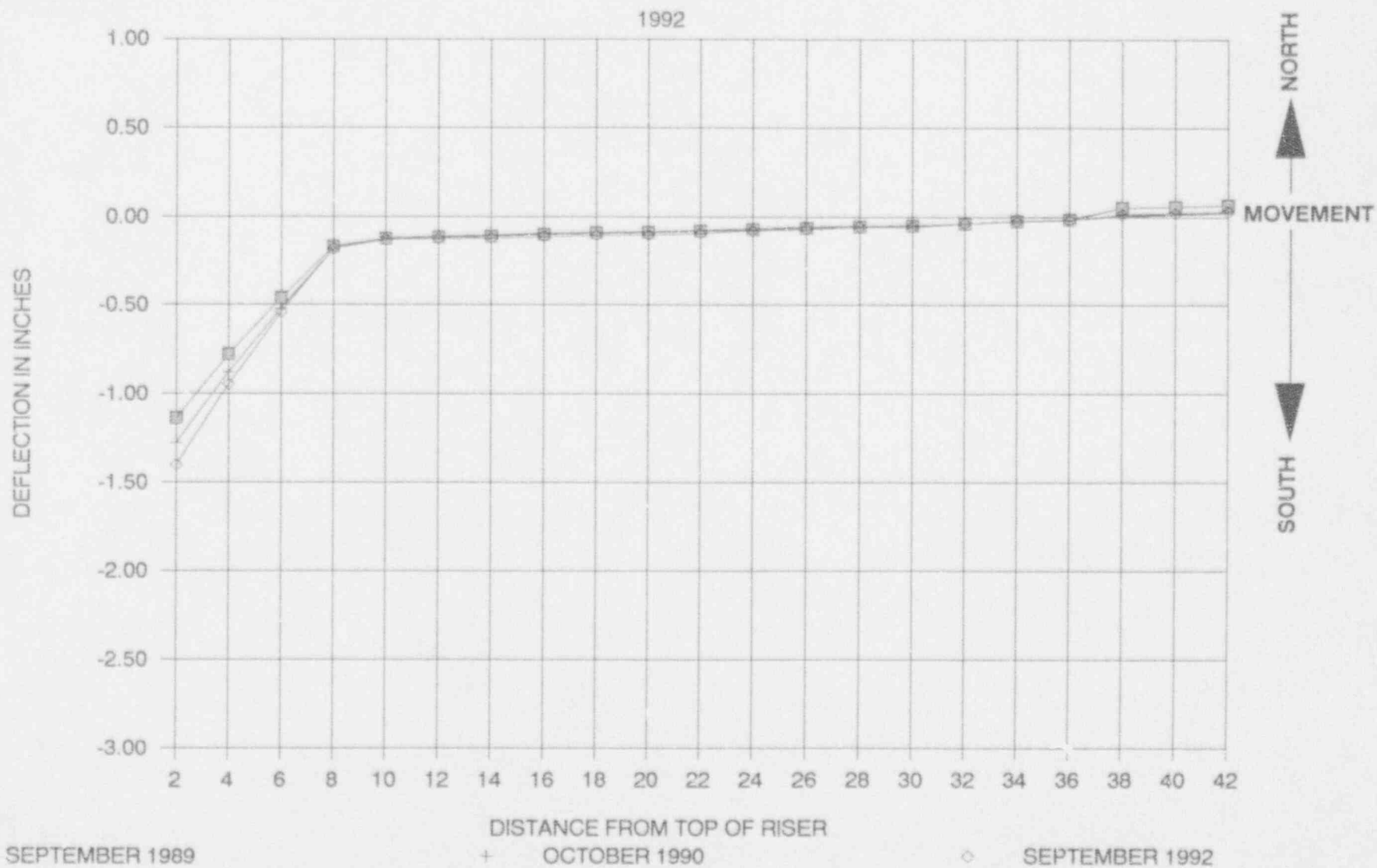


FIGURE 81

STATION 340+00
UPSTREAM SLOPE

INCLINOMETER T12 A-AXIS COMPARISON

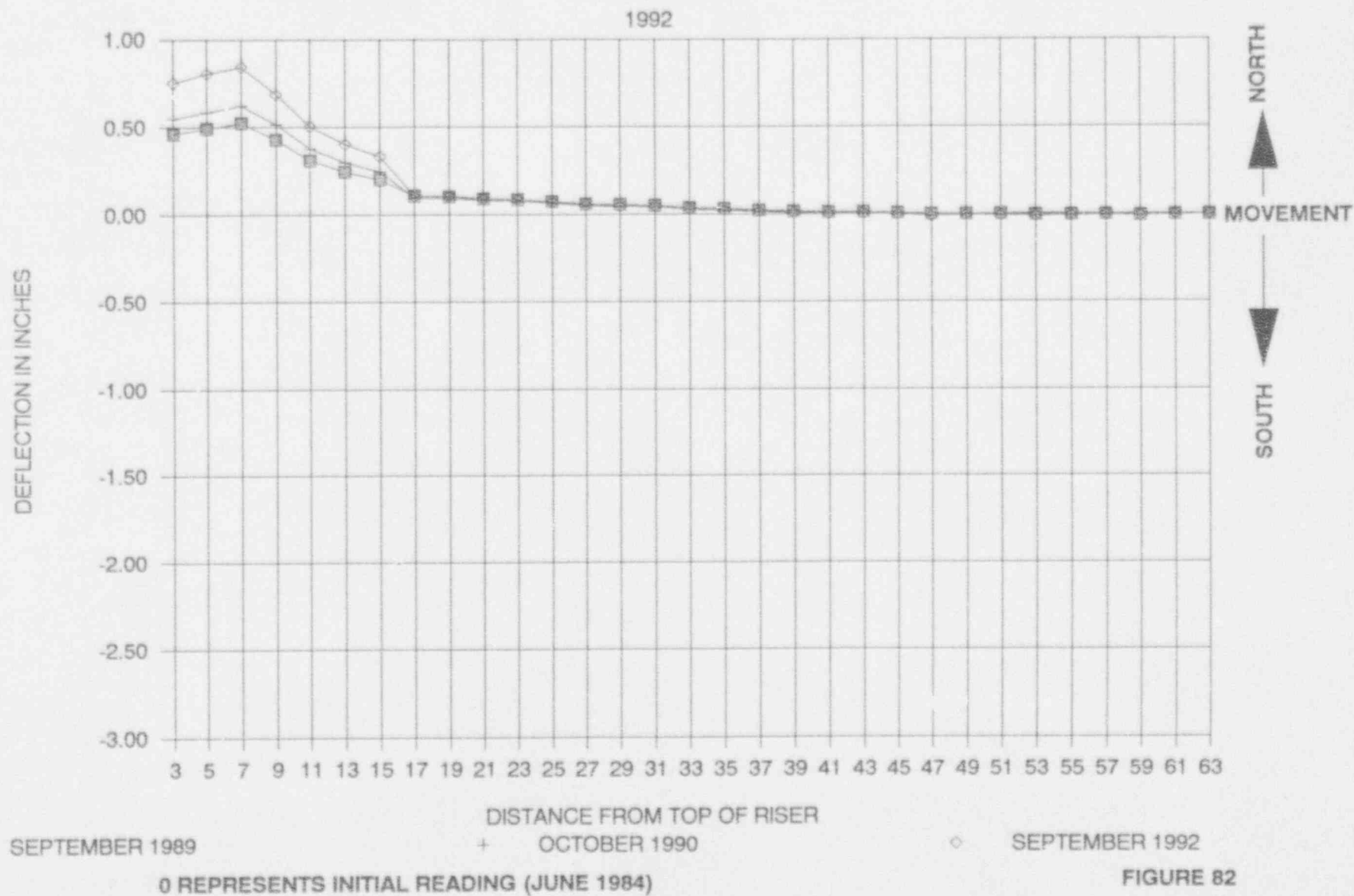


FIGURE 82