APPENDIX D-2 – AREA 5 WEST AND AREA 5 SOUTH MODELING

FINAL FEASIBILITY STUDY
CASMALIA RESOURCES SUPERFUND SITE
CASMALIA, CALIFORNIA

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TABLE OF CONTENTS

1.0 INTRODUCTION D2-1
2.0 MODEL DESIGN D2-1
2.1 Model Grid D2-1
2.2 Model Grid Layers D2-1
2.3 Flow Conditions D2-2
2.4 Flow Boundaries and Initial Flow Conditions D2-2
2.5 Transport Boundaries and Initial Transport Conditions D2-2
2.6 Porous Matrix Parameters D2-3
2.7 Fracture Parameters D2-4
2.8 Other Non-Varying Physical Parameters D2-4
3.0 SIMULATION RESULTS D2-4
3.1 Area 5 West Modeling Results D2-4
3.1.1 Area 5 West Arsenic D2-4
3.1.2 Area 5 West Nickel D2-5
3.1.3 Area 5 West Selenium D2-6
3.2 Area 5 South Modeling Results D2-6
3.2.1 Area 5 South Arsenic D2-6
3.2.2 Area 5 South Cadmium D2-7
3.2.3 Area 5 South Nickel D2-7
3.2.4 Area 5 South Selenium D2-8
4.0 SUMMARY D2-8
5.0 REFERENCES D2-9

LIST OF TABLES

Table D2-1 Porous Matrix, Fracture and Chemical Parameters; Area 5 West and Area 5 South Fracture Flow and Transport Models

LIST OF FIGURES

Figure D2-1 Area 5 West and Area 5 South Fracture Flow and Transport Model Design
Figure D2-2 Area 5 West Arsenic Source Simulation Time - 30 Years
Figure D2-3 Area 5 West Arsenic Source Removed Simulation Time - 30 Years After Source Removal
Figure D2-4 Area 5 West Arsenic Source Removed Simulation Time - 220 Years After Source Removal
Figure D2-5 Area 5 West Nickel Source Simulation Time - 30 Years
Figure D2-6 Area 5 West Nickel Source Removed Simulation Time - 30 Years After Source Removal
Figure D2-7 Area 5 West Nickel Source Removed Simulation Time - 90 Years After Source Removal
Figure D2-8 Area 5 West Selenium Source Simulation Time - 30 Years
Figure D2-9 Area 5 West Selenium Source Removed Simulation Time - 30 Years After Source Removal
Figure D2-10 Area 5 West Selenium Source Removed Simulation Time - 120 Years After Source Removal
Figure D2-11 Area 5 South Arsenic Source Simulation Time - 30 Years
Figure D2-12 Area 5 South Arsenic Source Removed Simulation Time - 30 Years After Source Removal
Figure D2-13 Area 5 South Arsenic Source Removed Simulation Time - 260 Years After Source Removal
Figure D2-14 Area 5 South Cadmium Source Simulation Time - 30 Years
Figure D2-15 Area 5 South Cadmium Source Removed Simulation Time - 30 Years After Source Removal
Figure D2-16 Area 5 South Cadmium Source Removed Simulation Time - 180 Years After Source Removal
Figure D2-17 Area 5 South Nickel Source Simulation Time - 30 Years
Figure D2-18 Area 5 South Nickel Source Removed Simulation Time - 30 Years After Source Removal
Figure D2-19 Area 5 South Nickel Source Removed Simulation Time - 80 Years After Source Removal
Figure D2-20 Area 5 South Selenium Source Simulation Time - 30 Years
Figure D2-21 Area 5 South Selenium Source Removed Simulation Time - 30 Years After Source Removal
Figure D2-22 Area 5 South Selenium Source Removed Simulation Time - 210 Years After Source Removal

LIST OF ATTACHMENTS

Attachment D2-1 Historical Dissolved Arsenic Concentrations in Groundwater
Attachment D2-2 Historical Dissolved Cadmium Concentrations in Groundwater
Attachment D2-3 Historical Dissolved Nickel Concentrations in Groundwater
Attachment D2-4 Historical Dissolved Selenium Concentrations in Groundwater

LIST OF ACRONYMS

µg/L	Micrograms per liter
CSC	Casmalia Resources Superfund Site Steering Committee
HSU	Hydrostratigraphic Unit
MCL	Maximum Contaminant Level
RI	Remedial Investigation

1.0 Introduction

The remediation time frames for Area 5 West and Area 5 South to achieve Regional Screening Levels were evaluated using the numerical model code FRACTRAN. FRACTRAN is a two-dimensional, finite-element, solute transport model code developed by the University of Waterloo (Sudicky and McLaren, 1997). Federal and state Maximum Contaminant Levels (MCLs) were used as the remediation goals. The model simulates combined steady-state groundwater flow and transient solute transport in porous or discretely-fractured porous media. FRACTRAN has been verified to analytical solutions and has been peer-reviewed in technical journals (Sudicky, 1989; Sudicky and McLaren, 1992; Harrison, et al., 1992).

For this remedial time frame analysis, simplified conceptual vertical profile models were constructed with FRACTRAN for Area 5 West and Area 5 South. The design and construction of the models and the results of the simulations are described in the following subsections. The simulated timeframes to achieve the MCLs are considered to be an order-of-magnitude approximation because of the spatial and temporal variability of the initial concentrations of metals in groundwater and the uncertainty in the accuracy of the other input parameters required by the model.

2.0 Model Design

This subsection describes the principal design elements of the FRACTRAN model. These design elements include the model grid and layering, the flow and transport boundary conditions, the porous matrix and fracture parameters, and other physical parameters used in the model simulations.

2.1 Model Grid

The model grid constructed for the FRACTRAN model is a variably spaced, finite-element grid composed of linear rectangular elements. The model grid is approximately 980 feet (300 meters) in length and 160 feet (50 meters) in depth (Figure D2-1).

2.2 Model Grid Layers

The shallow groundwater flow systems at the Casmalia Resources Superfund Site (site) are represented in the model as six layers (Figure D2-1). The upper three layers (layers 1 through-3) represent the weathered claystones in the Upper Hydrostratigraphic Unit (HSU). The lower three layers (layers 4 through 6) represent the unweathered claystones in the Lower HSU. These six layers correspond to the upper six layers of the sitewide groundwater flow model that was developed for the Remedial Investigation (RI) (Casmalia Resources Superfund Site Steering Committee [CSC], 2011).

2.3 Flow Conditions

Flow conditions in the FRACTRAN models are simulated as confined as a simplifying assumption in model design. FRACTRAN is limited to simulating confined flow conditions (Sudicky and McLaren, 1997).

2.4 Flow Boundaries and Initial Flow Conditions

The flow boundaries of a groundwater model define the head elevation or groundwater flow rate along the boundaries of the model domain. These boundary conditions represent the effects of hydrogeologic conditions outside the model domain.

Constant-head (also known as Dirichlet or first-type) boundaries were used along the top, bottom, left and right boundaries of the model grid. These constant-head boundaries simulate the horizontal and vertical hydraulic gradients observed in Area 5 West and Area 5 South. For the Area 5 West model, the elevations of the constant-head boundaries were set to simulate a uniform horizontal gradient of 0.10 foot/foot and uniform vertical gradient of 0.07 foot/foot, the average horizontal and vertical hydraulic gradients in Area 5 West (CSC, 2011). Similarly, the elevations of the constant-head boundaries of the Area 5 South model were set to simulate uniform horizontal and vertical gradients of 0.06 foot/foot and 0.12 foot/foot, respectively, based on the average horizontal and vertical hydraulic gradients in Area 5 South (CSC, 2011).

2.5 Transport Boundaries and Initial Transport Conditions

The transport boundary conditions define the solute concentrations or solute flux along the boundaries of the model domain. They also simulate hydrogeologic and source conditions that control the migration of dissolved contaminants in groundwater flow systems.

A third-type concentration (also known as Cauchy or mixed-type) boundary was used in the FRACTRAN models to simulate conceptual dissolved sources of arsenic, cadmium, nickel, and selenium along the top of the model grids (Figure D2-1). The boundary concentrations used in the model for the arsenic, cadmium, nickel, and selenium sources are summarized in Table D2-1 and were set at the representative concentrations of these metals in Area 5 West and Area 5 South during the RI (CSC, 2011).

The initial concentrations were as follows, as determined by review of concentration contour maps (Appendix A, Figures A-16 to A-23) and time-series charts (Attachments D2-1 to D2-4) to demonstrate that the starting concentrations of metals are representative of both spatial and temporal conditions:

Metal	Estimated Initial Concentrations		MCL
	Area 5 West	Area 5 South	
Arsenic	175 µg/L	150 µg/L	10 µg/L
Cadmium	--	150 µg/L	5 µg/L
Nickel	220 µg/L	180 µg/L	100 µg/L
Selenium	300 µg/L	500 µg/L	50 µg/L

These concentration values were selected based on the spatially average metals concentrations shown on the concentration contour maps and the more recent concentration trends in the monitoring wells. Professional judgment was used in selecting these concentration values rather than statistical methods, which did not yield concentrations that were consistently representative of spatial and temporal conditions.

2.6 Porous Matrix Parameters

The parameters for the unfractured porous matrix used in the FRACTRAN model are summarized in Table D2-1. A hydraulic conductivity of 3.4 x 10^{-8} centimeters per second was used for the unfractured porous matrix of the unweathered claystones in the Lower HSU (layers 4 through 6) based on the results of packer tests of unfractured or poorly fractured claystone intervals (CSC, 2011). Since there are no measured values for hydraulic conductivity of the unfractured porous matrix of the weathered claystones in the Upper HSU, a hydraulic conductivity of 3.4 x 10^{-7} centimeters per second was assumed for the unfractured porous matrix of layers 1 through 3 (Upper HSU), a value an order of magnitude higher than the value used for the Lower HSU claystones based on the measured hydraulic conductivities of poorly fractured weathered claystones at the site (CSC, 2011). The hydraulic conductivities of unfractured clays are typically one to two orders of magnitude lower than fractured clays and these hydraulic conductivity values are consistent with the mean conductivity values of the conductivities of the fractured clays in the HSUs, which are one to two orders of magnitude higher (Section 4.5.2.2). Uniform values of hydraulic conductivity were used for the model layers representing the Upper and Lower HSUs as a simplifying assumption in the design of the model.

A porosity of 0.48 was used for the Upper HSU claystones (layers 1 through 3) and a porosity of 0.44 was used for the Lower HSU claystones (layers 4 through 6) based on results of laboratory measurements of core samples (CSC, 2011). Uniform values of porosity were used for the model layers representing the Upper and Lower HSUs as a simplifying assumption in the design of the model.

Because hydrodynamic dispersion due to mechanical mixing is likely to be negligible in low permeability claystones where groundwater velocities are very small (Harrison, et al., 1992),

longitudinal and transverse dispersivity values are assumed to equal zero in the model layers representing the Upper and Lower HSUs.

The free-solution diffusion coefficients used for the chemicals in the transport simulations are from published values and are summarized in Table D2-1. Uniform apparent tortuosities of 0.02 and 0.03 were used for the Upper and Lower HSUs, respectively, to estimate the effective diffusion coefficients of the chemicals in the model simulations based on diffusion testing of core samples from the site (Golder Associates Ltd., 2005 and 2007). A retardation factor of 1.0 (no sorption of chemicals to the organic or inorganic fractions of the porous matrix) was used in the as a conservative assumption in the model simulations.

2.7 Fracture Parameters

The fracture parameters used in the FRACTRAN model are summarized in Table D2-1. These parameters represent the properties of the interconnected fracture network in the Upper and Lowers HSUs. A fracture density of 0.1 was used in layers 4 through 6 (Lower HSU) to produce an approximate fracture spacing of 6 feet (2.0 meters), the median fracture spacing measured in the RI well borings (CSC, 2011). A uniform fracture aperture of 33 microns was used for the Lower HSU claystones (layers 4 through 6) based on results of packer tests (CSC, 2011). There are no reliable measured values for the fracture spacing and aperture in the Upper HSU claystones because the fracturing is highly variable and the result of physical and diagenetic alteration of the surface exposure of the claystone (CSC, 2011). Therefore, conservative values for the fracture spacing and aperture in the Upper HSU claystones were used in the model simulations. A vertical fracture density of 0.8, which produced an approximate fracture spacing of 3 feet (1.0 meter), and a uniform fracture aperture of 60 microns were used as conservative assumptions for the Upper HSU claystones (layers 1 through 3). A uniform spacing, aperture, and dispersivity were used in each layer as a simplifying assumption in the design of the model.

2.8 Other Non-Varying Physical Parameters

Other non-varying physical parameters used in the FRACTRAN simulations are:

- Fluid (water) density - 1000 kilograms/meter^3 (1.0 gram/centimeter^3);
- Fluid (water) viscosity - 86.4 kilograms/day-meter (0.01 poise);
- Gravitational acceleration - 7.3223 x 10^{10} meters/day^2 (9.81 meters/second^2).

3.0 Simulation Results

3.1 Area 5 West Modeling Results

This section provides the modeling results for Area 5 West.

3.1.1 Area 5 West Arsenic

3.1.1.1 Area 5 West Arsenic Source

The dissolved arsenic model for Area 5 West was first solved for a simulation time of 30 years, the approximate time since the landfill construction at the site was completed (CSC, 2011), with a third-type concentration boundary representing a conceptual dissolved arsenic source area along the top of the model grid. The results of the simulation are shown in Figure D2-2. This simulation shows the dissolved arsenic concentrations downgradient of the source area 30 years after release to the groundwater flow system. The dissolved metals modeling result figures do not show the conceptual locations of the Perimeter Source Control Trench and Perimeter Control Trenches because the sources of the dissolved metals do not appear to be localized. Showing a conceptual distance from a diffuse source to a site feature is not relevant.

3.1.1.2 Area 5 West Arsenic Source Removed

To simulate arsenic source removal for Area 5 West, the third-type concentration boundary representing the conceptual arsenic source area was removed from the model and the model was solved for future conditions at a simulation time of 30 years and at a simulation time required to achieve cleanup standards using the concentration solution from the arsenic source simulation (Section 3.1.1.1) as the initial concentration condition. The results of these simulations are shown in Figures D2-3 and D2-4.

These simulations indicate that the time frame for achieving groundwater concentrations at the cleanup standard (federal MCL of 10 micrograms per liter [µg/L]) if the dissolved arsenic sources were completely removed would be approximately 220 years. Given the fact that the arsenic sources cannot be completely removed from Area 5 West, the groundwater concentrations would probably remain above cleanup levels for a longer period of time than shown in the model simulations.

3.1.2 Area 5 West Nickel

3.1.2.1 Area 5 West Nickel Source

The dissolved nickel model for Area 5 West was first solved for a simulation time of 30 years, the approximate time since the landfill construction at the site was completed (CSC, 2011), with the third-type concentration boundary representing a conceptual dissolved nickel source area along the top of the model grid. The results of this model simulation are shown in Figure D2-5. This simulation shows the dissolved nickel concentrations downgradient of the source area 30 years after release to the groundwater flow system.

3.1.2.2 Area 5 West Nickel Source Removed

To simulate nickel source removal for Area 5 West, the third-type concentration boundary representing the conceptual nickel source area was removed from the model and the model was solved for future conditions at a simulation time of 30 years and at a simulation time required to achieve cleanup standards, using the concentration solutions from the nickel source simulation as the initial concentration condition (Section 3.1.2.1). The results of these simulations are shown in Figures D2-6 and D2-7.

These simulations indicate that the time frame for achieving groundwater concentrations at the cleanup standard (100 µg/L) if the dissolved nickel sources were completely removed would be approximately 90 years. Given the fact that the nickel sources cannot be completely removed from Area 5 West, the groundwater concentrations would probably remain above cleanup levels for a longer period of time than shown in the model simulations.

3.1.3 Area 5 West Selenium

3.1.3.1 Area 5 West Selenium Source

The dissolved selenium model for Area 5 West was first solved for a simulation time of 30 years, the approximate time since the landfill construction at the site was completed (CSC, 2011), with the third-type concentration boundary representing a conceptual dissolved selenium source area along the top of the model grid. The results of the simulation are shown in Figure D2-8. This simulation shows the dissolved selenium concentrations downgradient of the source area 30 years after release to the groundwater flow system.

3.1.3.2 Area 5 West Selenium Source Removed

To simulate selenium source removal for Area 5 West, the third-type concentration boundary representing the conceptual selenium source area was removed from the model and the model was solved for future conditions at a simulation time of 30 years and at a simulation time required to achieve cleanup standards using the concentration solution from the selenium source simulation (Section 3.1.3.1) as the initial concentration condition. The results of these simulations are shown in Figures D2-9 and D2-10.

These simulations indicate that the time frame for achieving groundwater concentrations at the cleanup standard (state and federal MCL of 50 µg/L) if the dissolved selenium sources were completely removed would be approximately 120 years. Given the fact that the selenium sources cannot be completely removed from Area 5 West, the groundwater concentrations would probably remain above cleanup levels for a longer period of time than shown in the model simulations.

3.2 Area 5 South Modeling Results

This section provides the modeling results for Area 5 South.

3.2.1 Area 5 South Arsenic

3.2.1.1 Area 5 South Arsenic Source

The dissolved arsenic model for Area 5 South was first solved for a simulation time of 30 years, the approximate time since the landfill construction at the site was completed (CSC, 2011), with the third-type concentration boundary representing the conceptual dissolved arsenic source area along the top of the model grid. The results of the simulation are shown in Figure D2-11. This simulation shows the dissolved arsenic concentrations downgradient of the source area 30 years after release to the groundwater flow system.

3.2.1.2 Area 5 South Arsenic Source Removed

To simulate arsenic source removal for Area 5 South, the third-type concentration boundary representing the conceptual arsenic source area was removed from the model and the model was solved for future conditions at a simulation time of 30 years and at a simulation time required to achieve cleanup standards using the concentration solution from the arsenic source simulation (Section 3.2.1.1) as the initial concentration condition. The results of these simulations are shown in Figures D2-12 and D2-13.

These simulations indicate that the time frame for achieving groundwater concentrations at the cleanup standard (federal MCL of 10 µg/L) if the dissolved arsenic sources were completely removed would be approximately 260 years. Given the fact that the arsenic sources cannot be completely removed from Area 5 South, the groundwater concentrations would probably remain above cleanup levels for a longer period of time than shown in the model simulations.

3.2.2 Area 5 South Cadmium

3.2.2.1 Area 5 South Cadmium Source

The dissolved cadmium model for Area 5 South was first solved for a simulation time of 30 years, the approximate time since the landfill construction at the site was completed (CSC, 2011), with the third-type concentration boundary representing the conceptual dissolved cadmium source area along the top of the model grid. The results of the simulation are shown in Figure D2-14. This simulation shows the dissolved cadmium concentrations downgradient of the source area 30 years after release to the groundwater flow system.

3.2.2.2 Area 5 South Cadmium Source Removed

To simulate cadmium source removal for Area 5 South, the third-type concentration boundary representing the conceptual cadmium source area was removed from the model and the model was solved for future conditions at a simulation time of 30 years and at a simulation time required to achieve cleanup standards using the concentration solution from the cadmium source simulation (Section 3.2.2.1) as the initial concentration condition. The results of these simulations are shown in Figures D2-15 and D2-16.

These simulations indicate that the time frame for achieving groundwater concentrations at the cleanup standard (state and federal MCL of 5 µg/L) if the dissolved cadmium sources were completely removed would be approximately 180 years. Given the fact that the cadmium sources cannot be completely removed from Area 5 South, the groundwater concentrations would probably remain above cleanup levels for a longer period of time than shown in the model simulations.

3.2.3 Area 5 South Nickel

3.2.3.1 Area 5 South Nickel Source

The dissolved nickel model for Area 5 South was first solved for a simulation time of 30 years, the approximate time since the landfill construction at the site was completed (CSC, 2011), with the third-type concentration boundary representing the conceptual dissolved nickel source area

along the top of the model grid. The results of the simulation are shown in Figure D2-17. This simulation shows the dissolved nickel concentrations downgradient of the source area 30 years after release to the groundwater flow system.

3.2.3.2 Area 5 South Nickel Source Removed

To simulate nickel source removal for Area 5 South, the third-type concentration boundary representing the conceptual nickel source area was removed from the model and the model was solved for future conditions at a simulation time of 30 years and at a simulation time required to achieve cleanup standards, using the concentration solution from the nickel source simulation (Section 3.2.3.1) as the initial concentration condition. The results of these simulations are shown in Figures D2-18 and D2-19.

These simulations indicate that the time frame for achieving groundwater concentrations at the cleanup standard (100 µg/L) if the dissolved nickel sources were completely removed would be approximately 80 years. Given the fact that the nickel sources cannot be completely removed from Area 5 South, the groundwater concentrations would probably remain above cleanup levels for a longer period of time than shown in the model simulations.

3.2.4 Area 5 South Selenium

3.2.4.1 Area 5 South Selenium Source

The dissolved selenium model for Area 5 South was first solved for a simulation time of 30 years, the approximate time since the landfill construction at the site was completed (CSC, 2011), with the third-type concentration boundary representing the conceptual dissolved selenium source area along the top of the model grid. The results of the simulation are shown in Figure D2-20. This simulation shows the dissolved selenium concentrations downgradient of the source area 30 years after release to the groundwater flow system.

3.2.4.2 Area 5 South Selenium Source Removed

To simulate selenium source removal for Area 5 South, the third-type concentration boundary representing the conceptual selenium source area was removed from the model and the model was solved for future conditions at a simulation time of 30 years and at a simulation time required to achieve cleanup standards using the concentration solution from the selenium source simulation (Section 3.2.4.1) as the initial concentration condition. The results of these simulations are shown in Figures D2-21 and D2-22.

These simulations indicate that the time frame for achieving groundwater concentrations at the cleanup standard (state and federal MCL of 50 µg/L) if the dissolved selenium sources were completely removed would be approximately 210 years. Given the fact that the selenium sources cannot be completely removed from Area 5 South, the groundwater concentrations would probably remain above cleanup levels for a longer period of time than shown in the model simulations.

4.0 Summary

Groundwater model simulations were performed to estimate the remediation time frame required to achieve federal and state MCLs for metals in Area 5 West and Area 5 South. The model simulations for Area 5 West indicate that the time frames for achieving groundwater cleanup standards would range from 90 years (nickel) to 220 years (arsenic) after complete source removal. The model simulations for Area 5 South indicate that the time frames for achieving groundwater cleanup standards would range from 80 years (nickel) to 260 years (arsenic) after complete source removal.

The simulated timeframes are summarized as follows:

	Estimated Initial Concentration		Simulated Time to Achieve MCLs		
Metal	Area 5 West	Area 5 South	Area 5 West	Area 5 South	MCL
Arsenic	175 µg/L	150 µg/L	220 years	260 years	10 µg/L
Cadmium	--	150 µg/L	--	180 years	5 µg/L
Nickel	220 µg/L	180 µg/L	90 years	80 years	100 µg/L
Selenium	300 µg/L	500 µg/L	120 years	210 years	50 µg/L

The simulated timeframes to achieve the MCLs are considered to be an order-of-magnitude approximation because of the spatial and temporal variability of the initial concentrations of metals in groundwater and the uncertainty in the accuracy of the other input parameters required by the model.

5.0 References

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Tables

Table D2-1
Porous Matrix, Fracture and Chemical Parameters
Area 5 West and Area 5 South Fracture Flow and Transport Models
Casmalia Resources Superfund Site
Casmalia, CA

Porous Matrix

Hydrostratigraphic Unit	*Layer Number*	*Thickness*	*Hydraulic Conductivity*[1]		*Porosity*[2]	*Bulk Density*[3]	*Dispersivity*[4]		*Apparent Tortosity*[5]	*Effective Dispersion Coefficient*[6]				*Retardation Factor*[7]
							Logitudinal	*Transverse*		*Arsenic*	*Cadmium*	*Nickel*	*Selenium*	
		b	K_h	K_v	n	ρ_b	α_L	α_T	τ	D_e	D_e	D_e	D_e	R
		(ft)	*(cm/sec)*	*(cm/sec)*	*(%)*	*(gm/cm^3)*	*(m)*	*(m)*		*(cm^2/sec)*	*(cm^2/sec)*	*(cm^2/sec)*	*(cm^2/sec)*	
Upper	1	5	3.40E-07	3.40E-07	0.48	1.884	0	0	0.02	2.60E-07	1.43E-07	1.32E-07	2.60E-07	1.0
	2	5	3.40E-07	3.40E-07	0.48	1.884	0	0	0.02	2.60E-07	1.43E-07	1.32E-07	2.60E-07	1.0
	3	5	3.40E-07	3.40E-07	0.48	1.884	0	0	0.02	2.60E-07	1.43E-07	1.32E-07	2.60E-07	1.0
Lower	4	25	3.40E-08	3.40E-08	0.44	1.952	0	0	0.03	3.90E-07	2.15E-07	1.98E-07	3.90E-07	1.0
	5	50	3.40E-08	3.40E-08	0.44	1.952	0	0	0.03	3.90E-07	2.15E-07	1.98E-07	3.90E-07	1.0
	6	75	3.40E-08	3.40E-08	0.44	1.952	0	0	0.03	3.90E-07	2.15E-07	1.98E-07	3.90E-07	1.0

Fractures

Hydrostratigraphic Unit	*Layer Number*	*Thickness*	*Aperture*[8]	*Fracture Density*	*Length Range*	*Logitudinal Dispersivity*[9]	*Retardation Factor*[7]
		b				α_L	R
		(ft)	*(microns)*		*(m)*	*(m)*	
Upper	1	5	60	0.8	0.5 - 1.0	0.1	1.0
	2	5	60	0.8	0.5 - 1.0	0.1	1.0
	3	5	60	0.8	0.5 - 1.0	0.1	1.0
Lower	4	25	33	0.1	1.0 - 2.0	0.1	1.0
	5	50	33	0.1	1.0 - 2.0	0.1	1.0
	6	75	33	0.1	1.0 - 2.0	0.1	1.0

Chemicals

Chemical	*Initial Concentration*[10]		*Free-Solution Dispersion Coefficient*[11]
	Area 5 West	*Area 5 South*	
	C_0	C_0	D_0
			(cm^2/sec)
Arsenic	175 µg/L	150 µg/L	1.30E-05
Cadmium	--	150 µg/L	7.17E-06
Nickel	220 µg/L	180 µg/L	6.61E-06
Selenium	300 µg/L	500 µg/L	1.30E-05

Notes:
[1]Average value for Lower HSU matrix for intervals with no fractures from Table 4-5, Casmalia Resources Site Steering Committee (CSC), *Final Remedial Investigation Report, Casmalia Resources Superfund Site* (RI; CSC, 2011). Upper HSU estimated (no values available for unfractured Upper HSU).
[2]Average values from RI Section 4.5.2.4, (CSC, 2011)
[3]$\rho b = \rho s - [n \times (\rho s - \rho w)]$, where $\rho s = 2.7$ gm/cm^3 and $\rho w = 1.0$ gm/cm^3
[4]Hydrodynamic dispersion negligible in low permeability claystones where groundwater velocities are very small (Harrison et. al., 1992)
[5]*Diffusion Testing on Core Samples, Casmalia, California* (Golder Associates Ltd, 2005 and 2007)
[6]$D_e = D_0 \times \tau$
[7]No sorption of chemicals onto porous matrix assumed as conservative assumption in model simulations
[8]Lower HSU median value from Table 4-5 (CSC, 2011). Conservative estimate used for Upper HSU (no values available).
[9]Typical value for fractured clays (Sudicky and McLaren, 1992)
[10]Representative concentrations (CSC, 2011)
[11]Cadmium (Foose et al., 2002), nickel (CRC Press, 2000), arsenic and selenium estimated based on Shackelford and Daniel (1991)
Full reference citations provided in Section 5.0 of Appendix D-2
ft = feet
cm/sec = centimeters per second
gm/cm^3 = grams per cubic centimeter
m = meters
cm^2/sec = square centimeters per second
µg/L = micrograms per liter

Figures

FOR ALL APPENDIX D-2 FIGURES, PLEASE REFER TO:

Appendix D-2 Figures.pdf.

ATTACHMENT D2-1 – HISTORICAL DISSOLVED ARSENIC CONCENTRATIONS IN GROUNDWATER

FINAL FEASIBILITY STUDY
CASMALIA RESOURCES SUPERFUND SITE
CASMALIA, CALIFORNIA

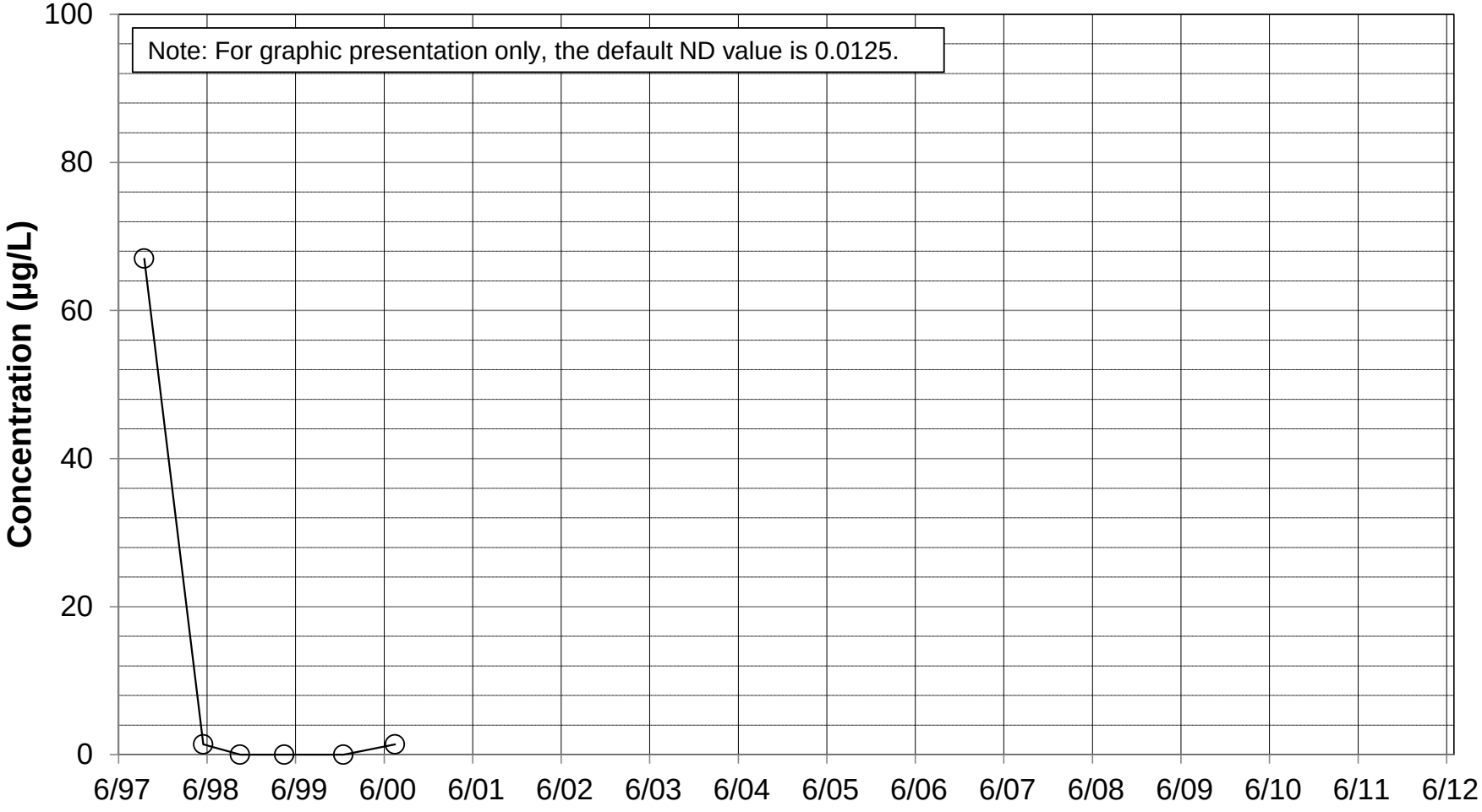
Prepared by: ERM

LIST OF CHARTS

A2B
A-Series Pond
B3B
B3M
B-5
C3M
C-5
DB-1
Gallery Well
MW-18C
MW-7BU
MW-7C
MW-7D
Pond 13
Pond 18
Pond A-5
PSCT-1
PSCT-2
PSCT-3
PSCT-4
PZ-P18-5
RAP-1A
RAP-1B
RAP-1C
RAP-3A
RCF Pond
RG-10B
RG-1B
RG-1C
RG-3B
RG-4B
RG-5B
RG-6B
RG-7B
RG-8B
RG-9B
RIMW-1
RIMW-10
RIMW-11
RIMW-2
RIMW-3
RIMW-5
RIMW-7
RIMW-8
RIMW-9
RIPZ-8
RP-100A
RP-101C
RP-103B
RP-107D
RP-109B

RP-109D
RP-13B
RP-17B
RP-1D
RP-20B
RP-28B
RP-41B
RP-4D
RP-53C
RP-54C
RP-55C-2
RP-59B
RP-61B
RP-62B-1
RP-62D
RP-63C
RP-65B
RP-72A
RP-72D
RP-75A
RP-75B
RP-75C
RP-76A
RP-94D
RP-96C-2
RP-98C
Sump 9B
SW-17
SW-29
SW-31
SW-44
SW-46
SW-47
TP-4
WP-3D
WP-3S
WP-7D
WP-7S
WP-8D
WP-8S
WS-1
WS-4

A2B


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
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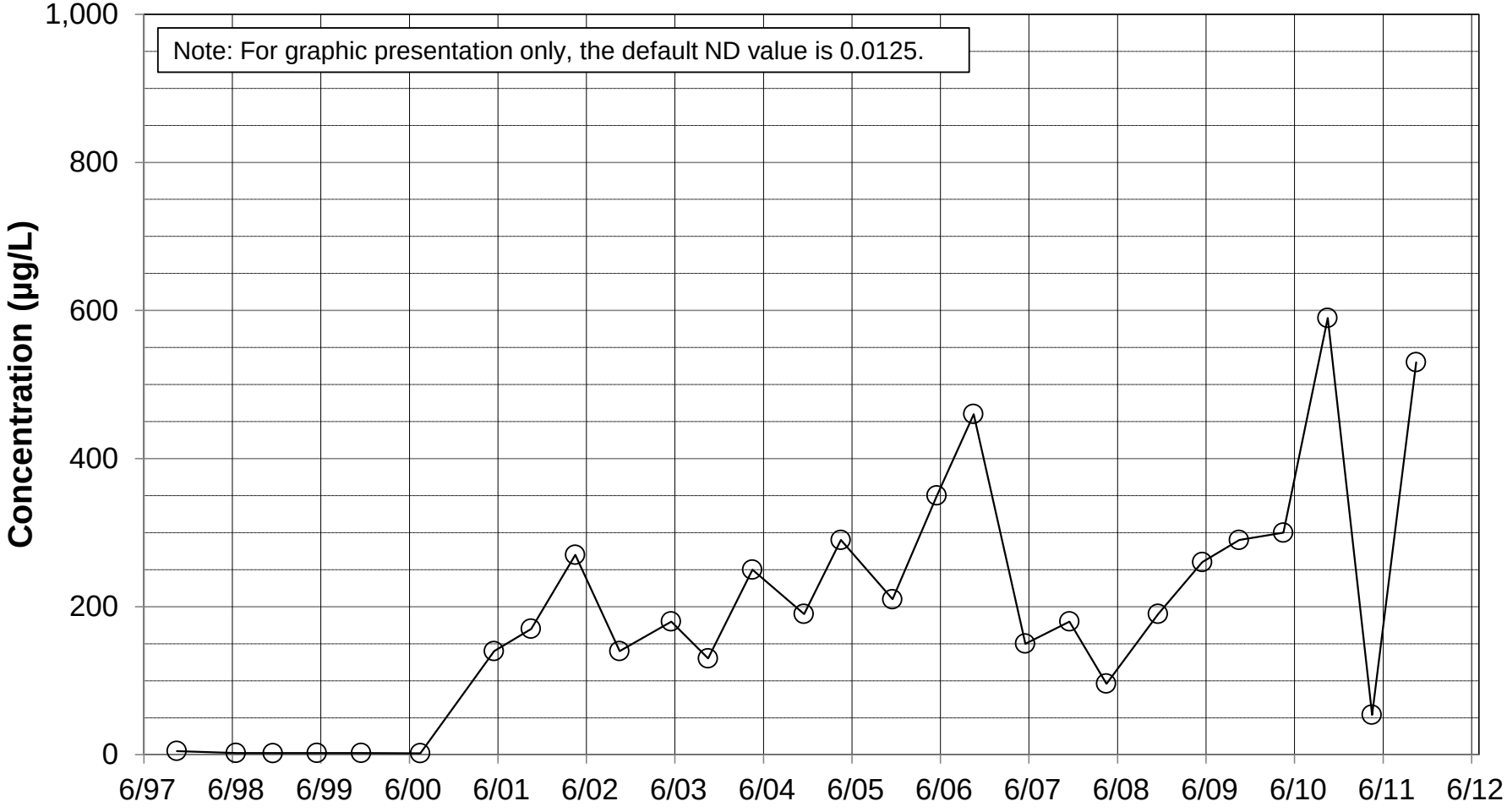
6/10
6/11
6/12

A-Series Pond



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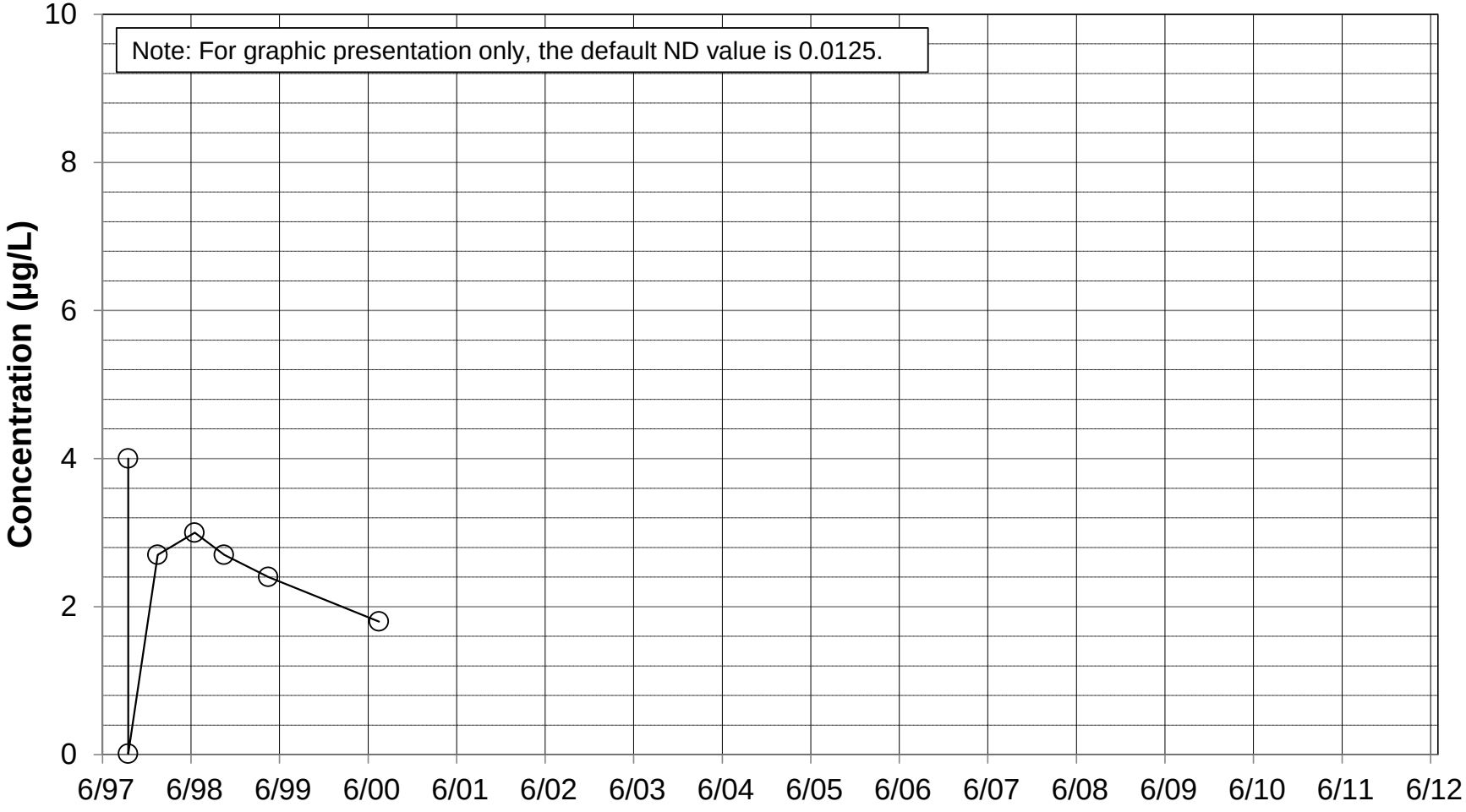
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
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8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
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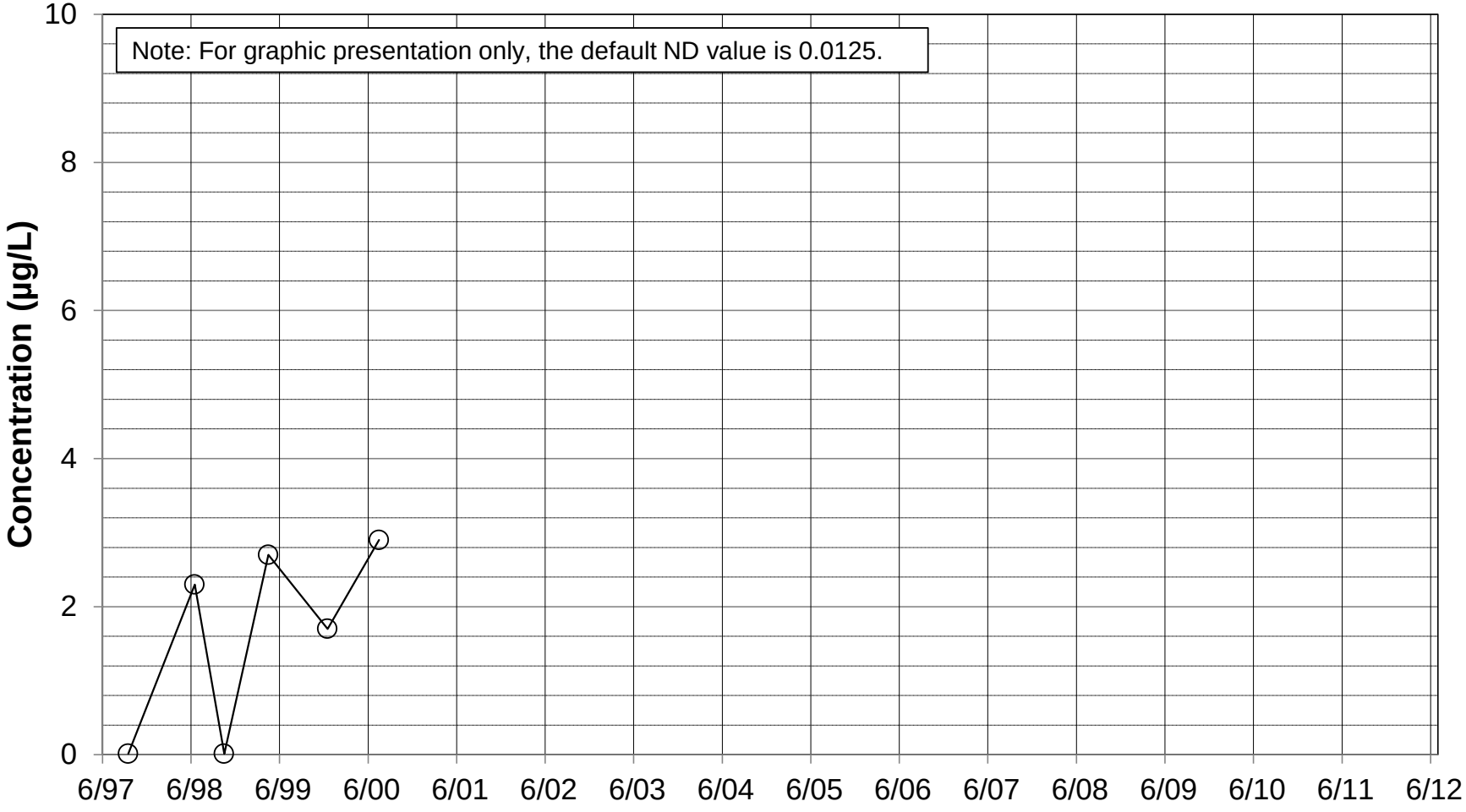
6/12

B3M


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
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8
6
4
2
0
6/97
6/98
6/99
6/00
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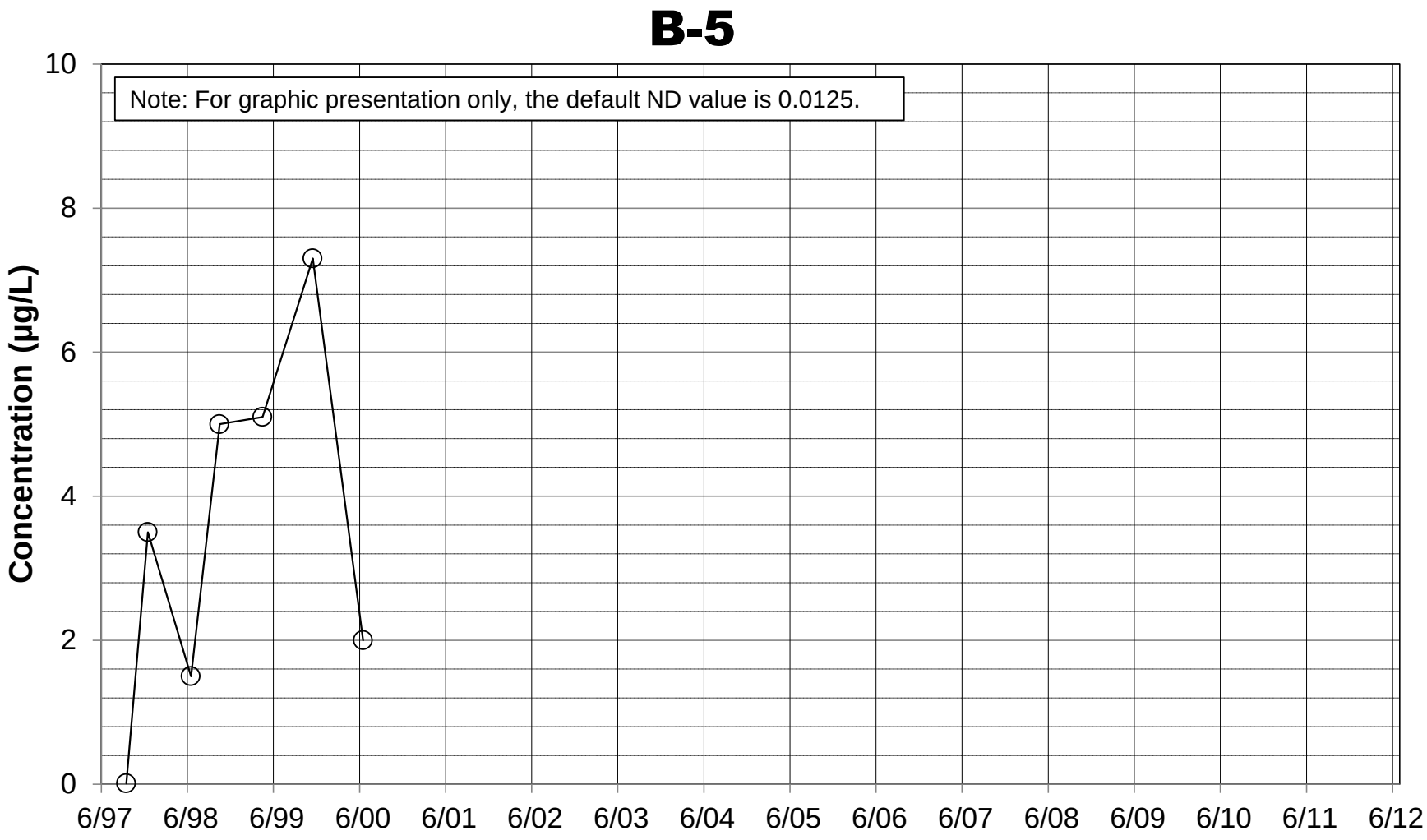
6/12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Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
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8
6
4
2
0
6/97
6/98
6/99
6/00
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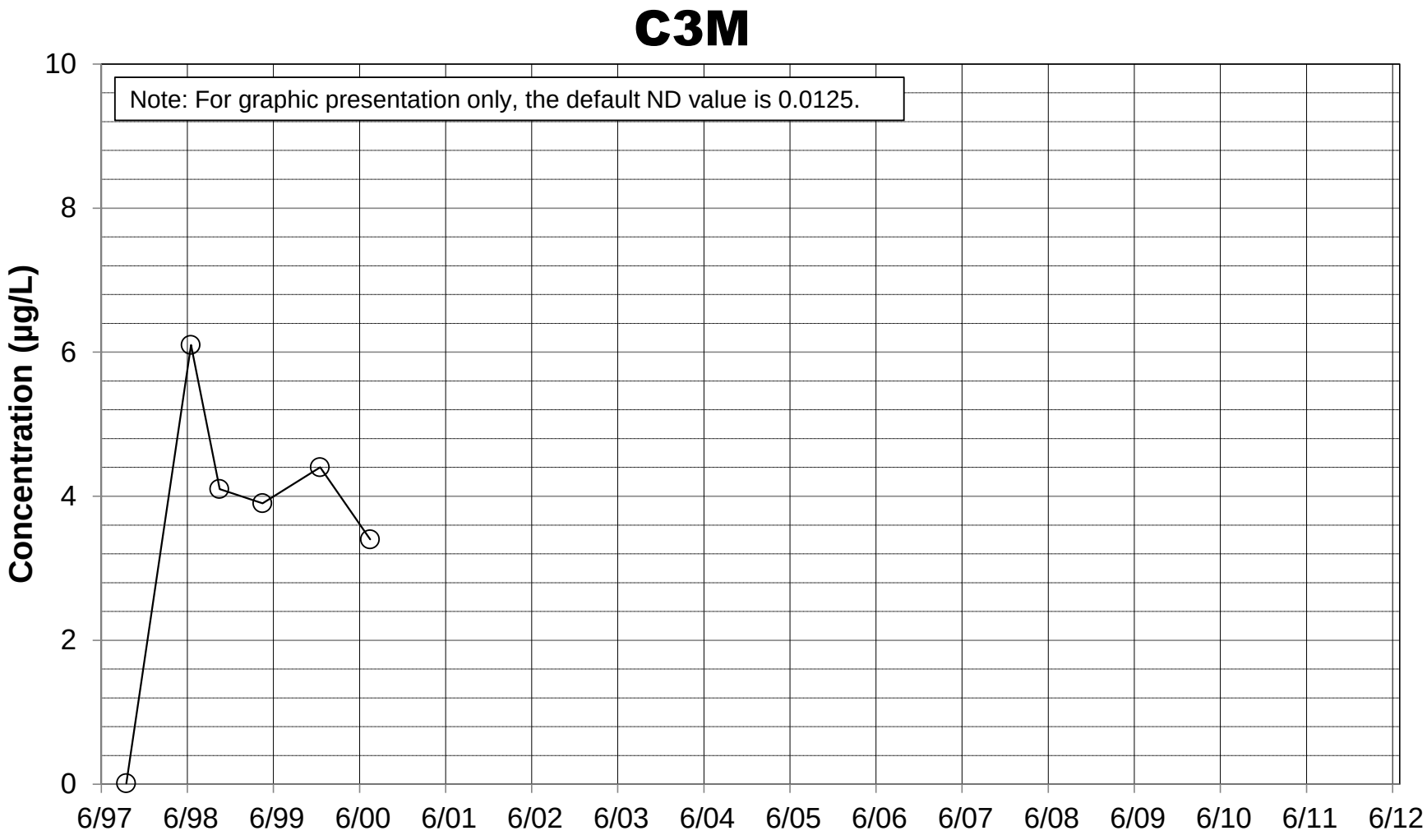
6/11
6/12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Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
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8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
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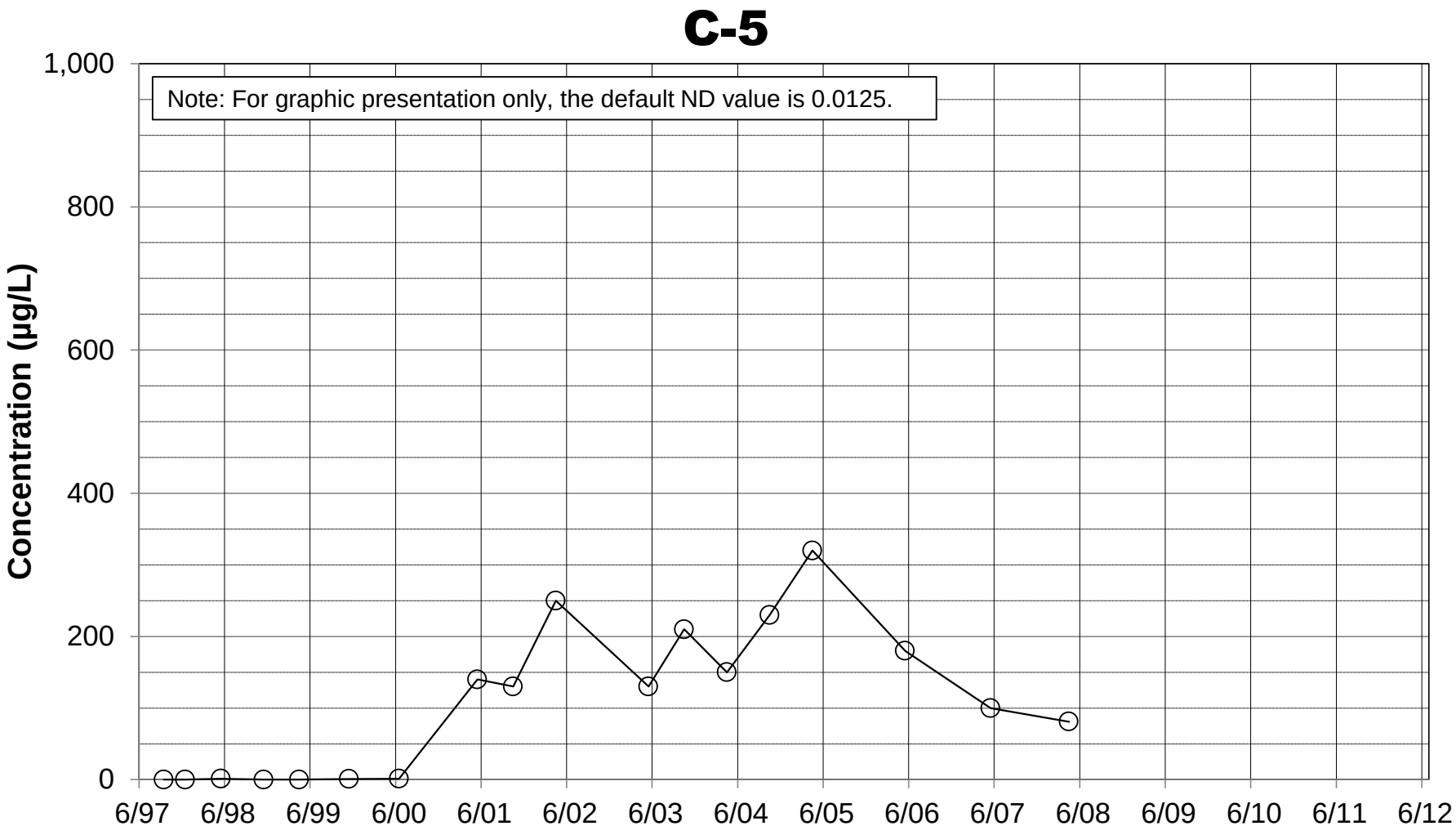
6/09
6/10
6/11
6/12


C-5
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
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6/11
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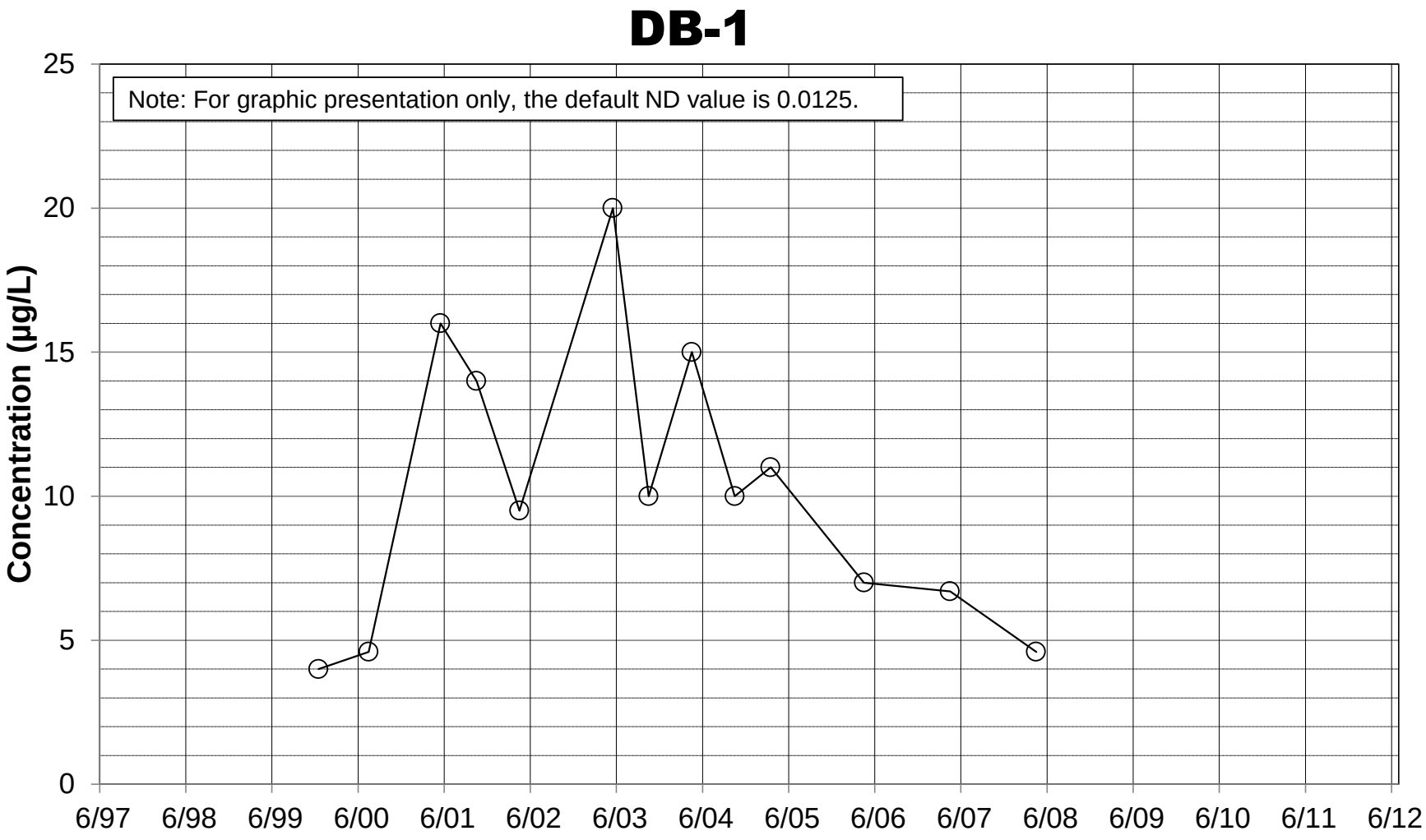
DB-1
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
25
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
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6/04
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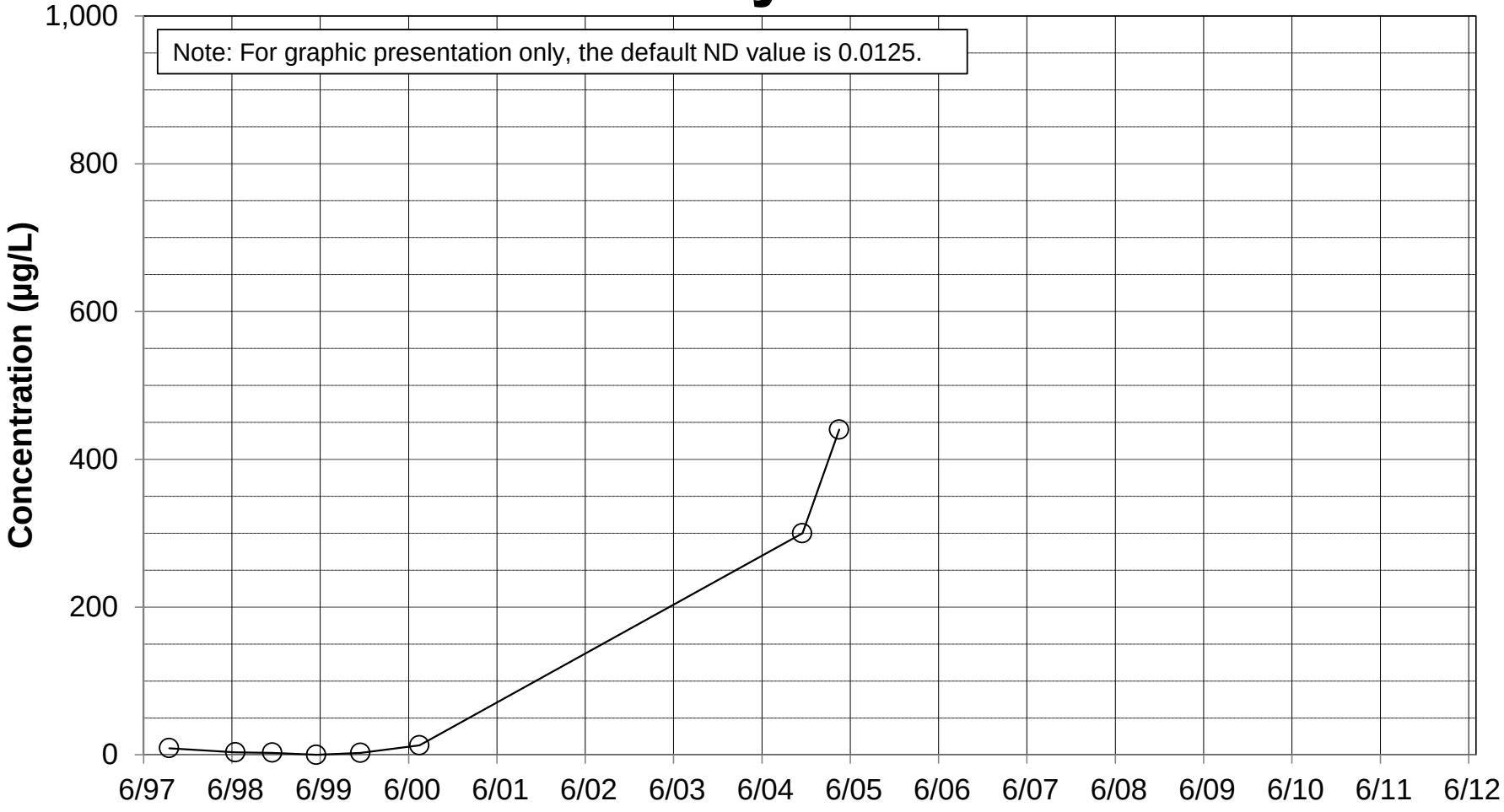
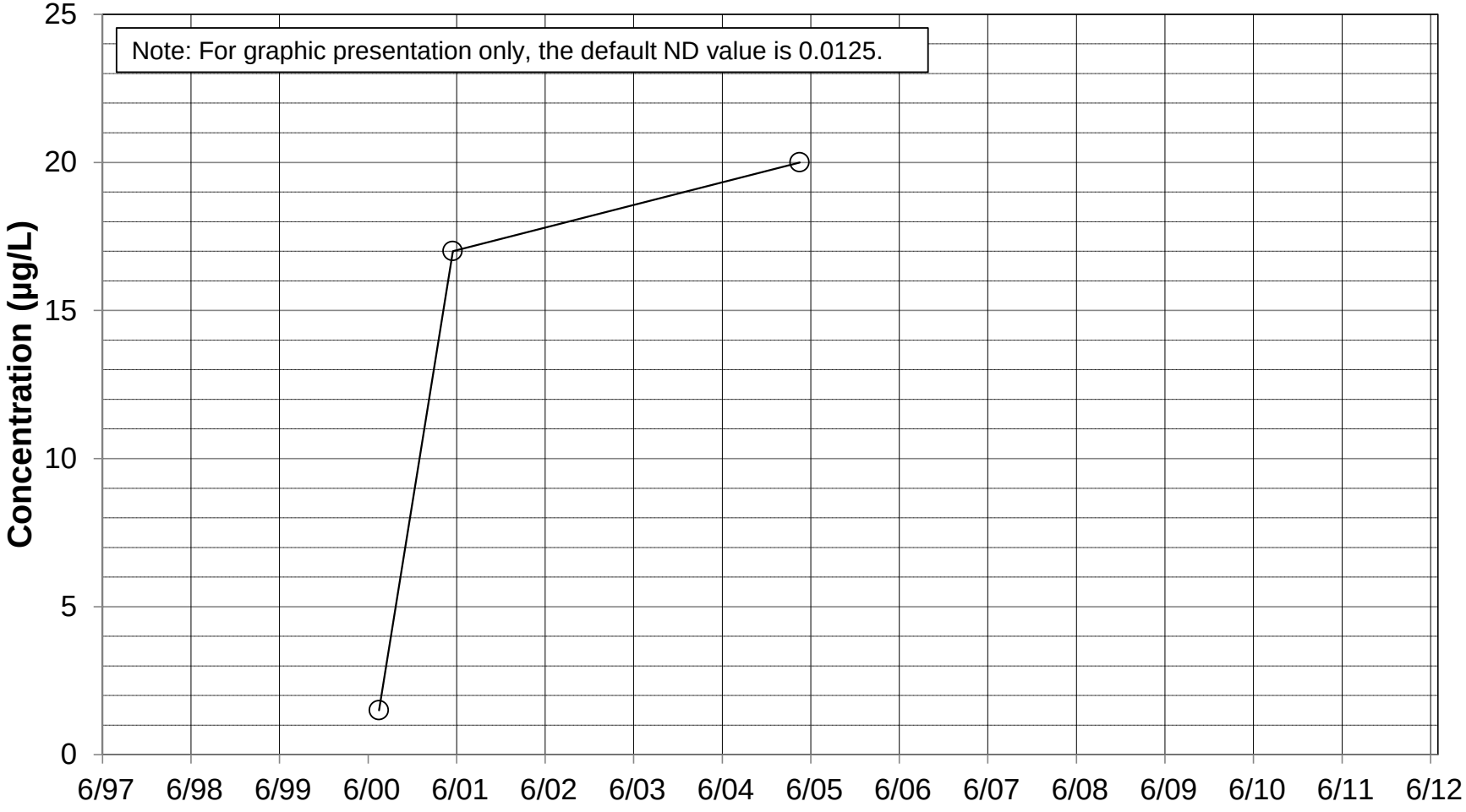
6/10
6/11
6/12

Gallery Well



MW-18C


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
25
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
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6/06
6/07
6/08
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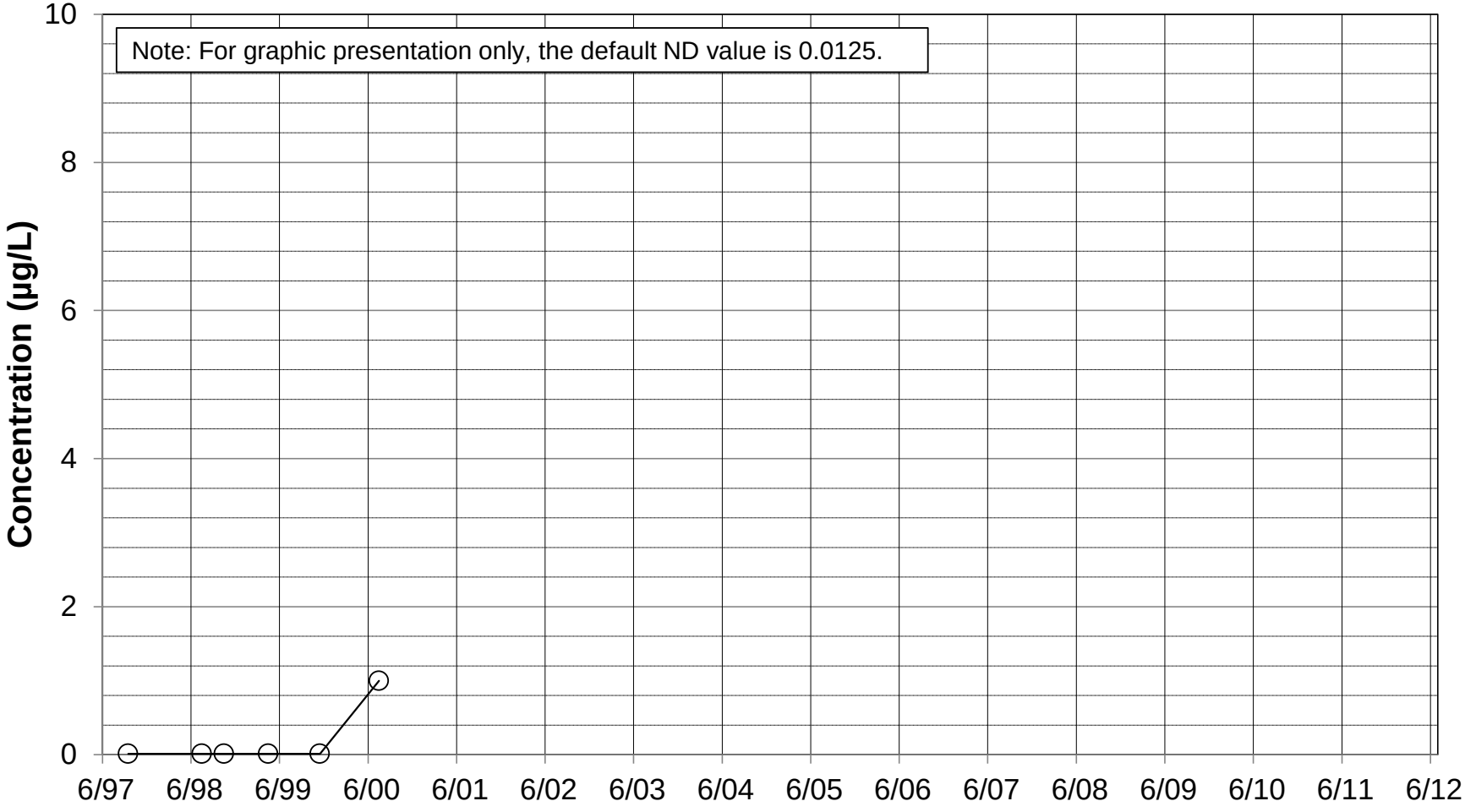
6/10
6/11
6/12

MW-7BU


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
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6/05
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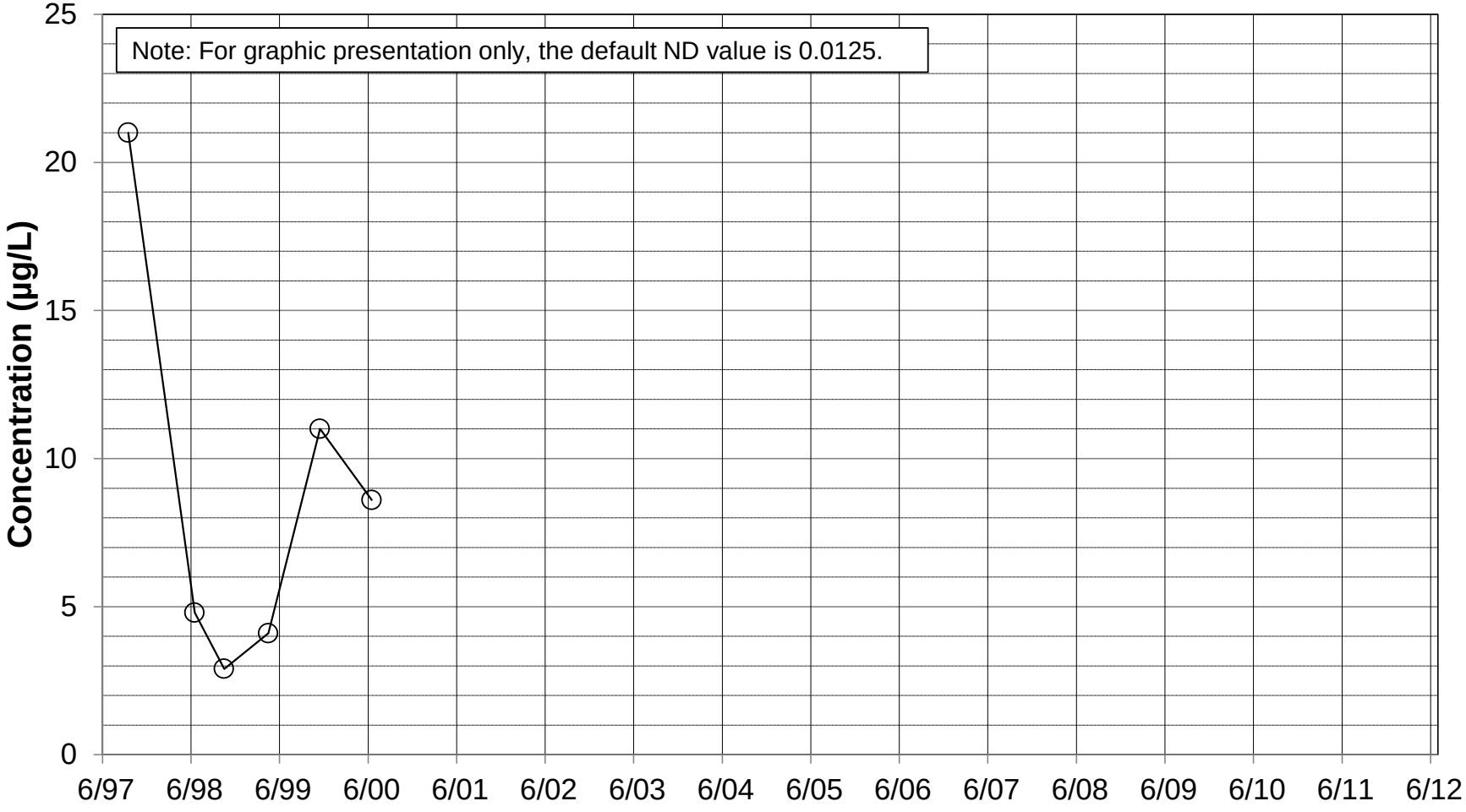
6/10
6/11
6/12

MW-7C


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
25
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
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6/06
6/07
6/08
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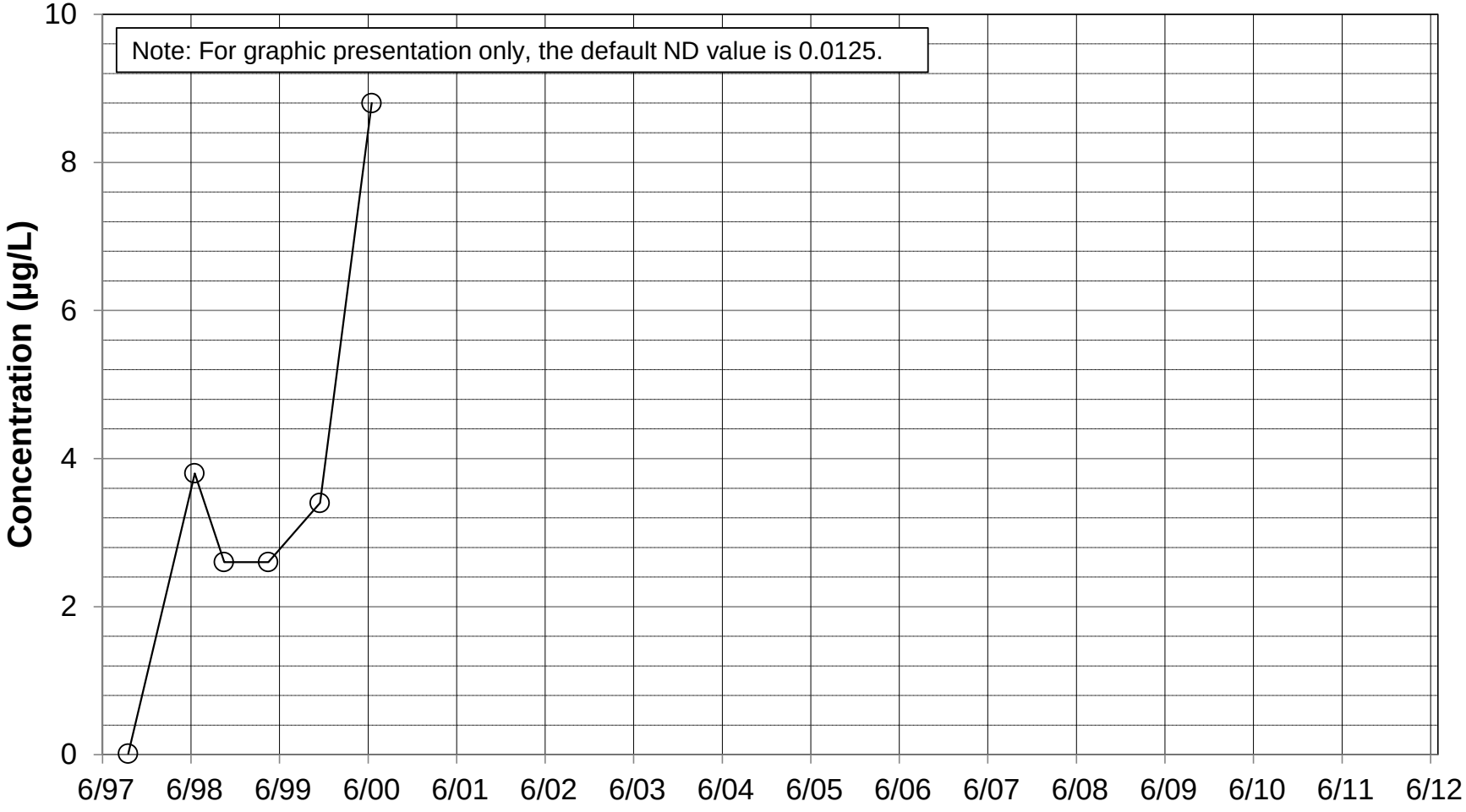
6/10
6/11
6/12

MW-7D


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
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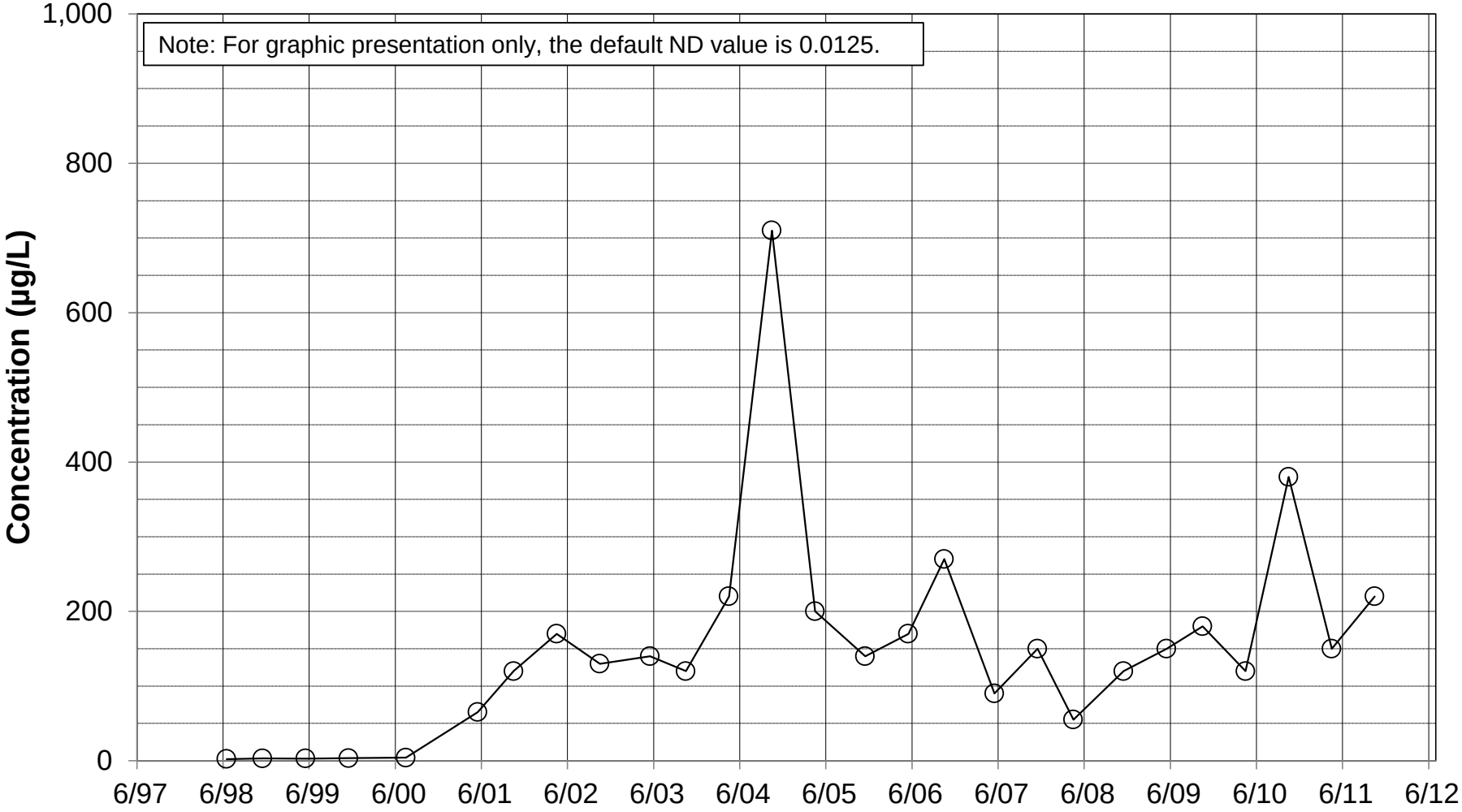
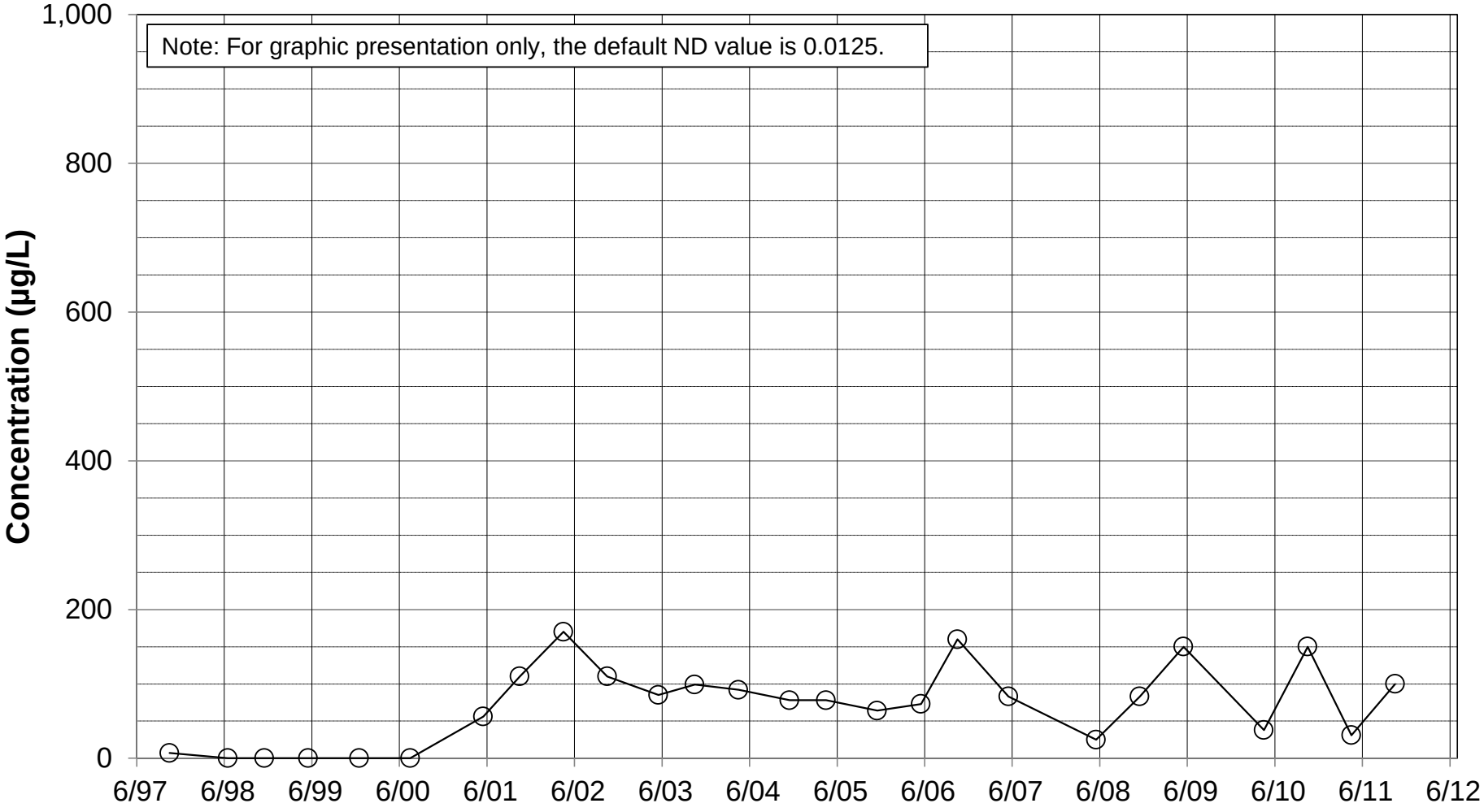
6/09
6/10
6/11
6/12

Pond 13


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

Pond 18


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
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6/05
6/06
6/07
6/08
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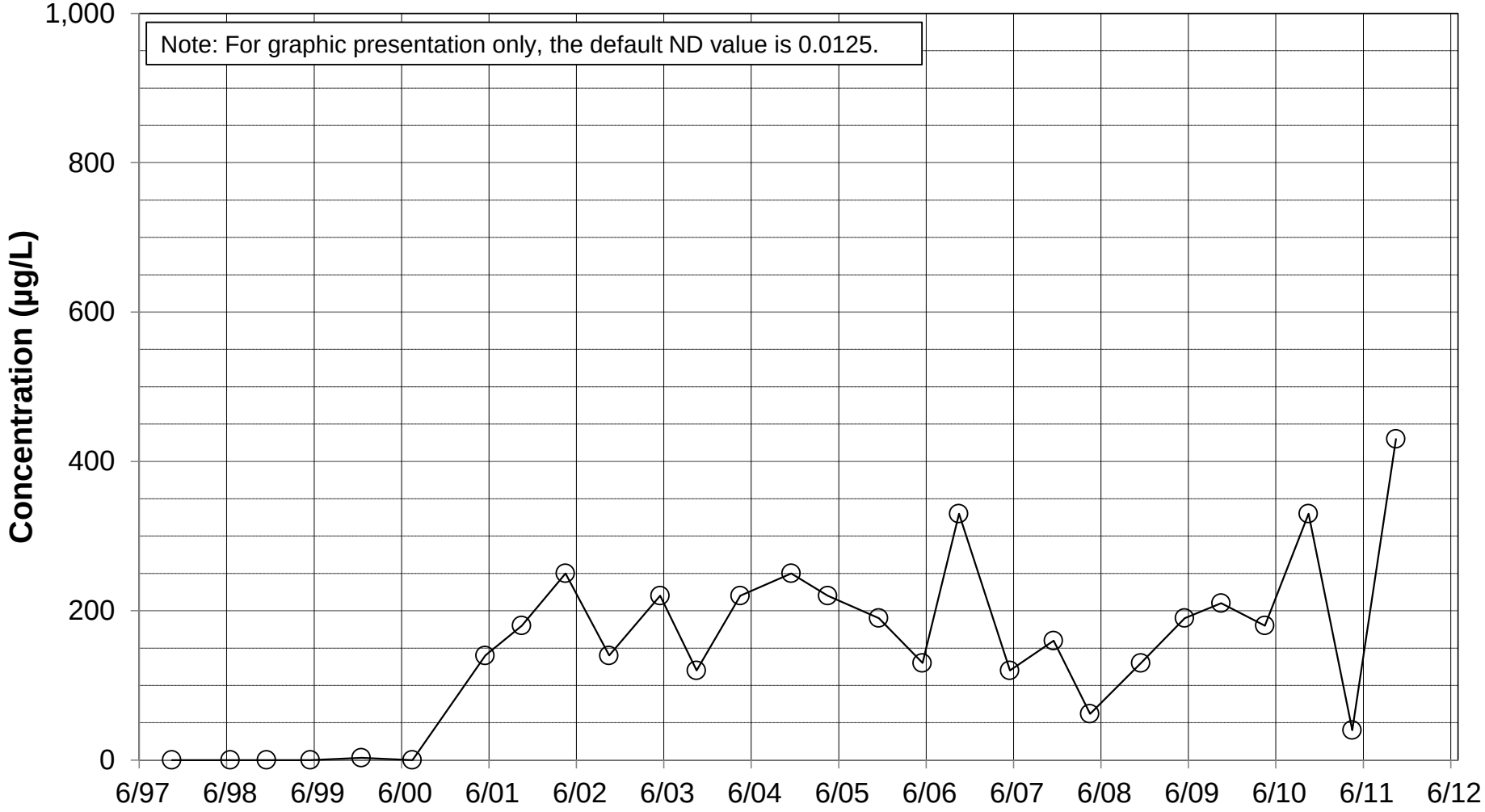
6/10
6/11
6/12

Pond A-5


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
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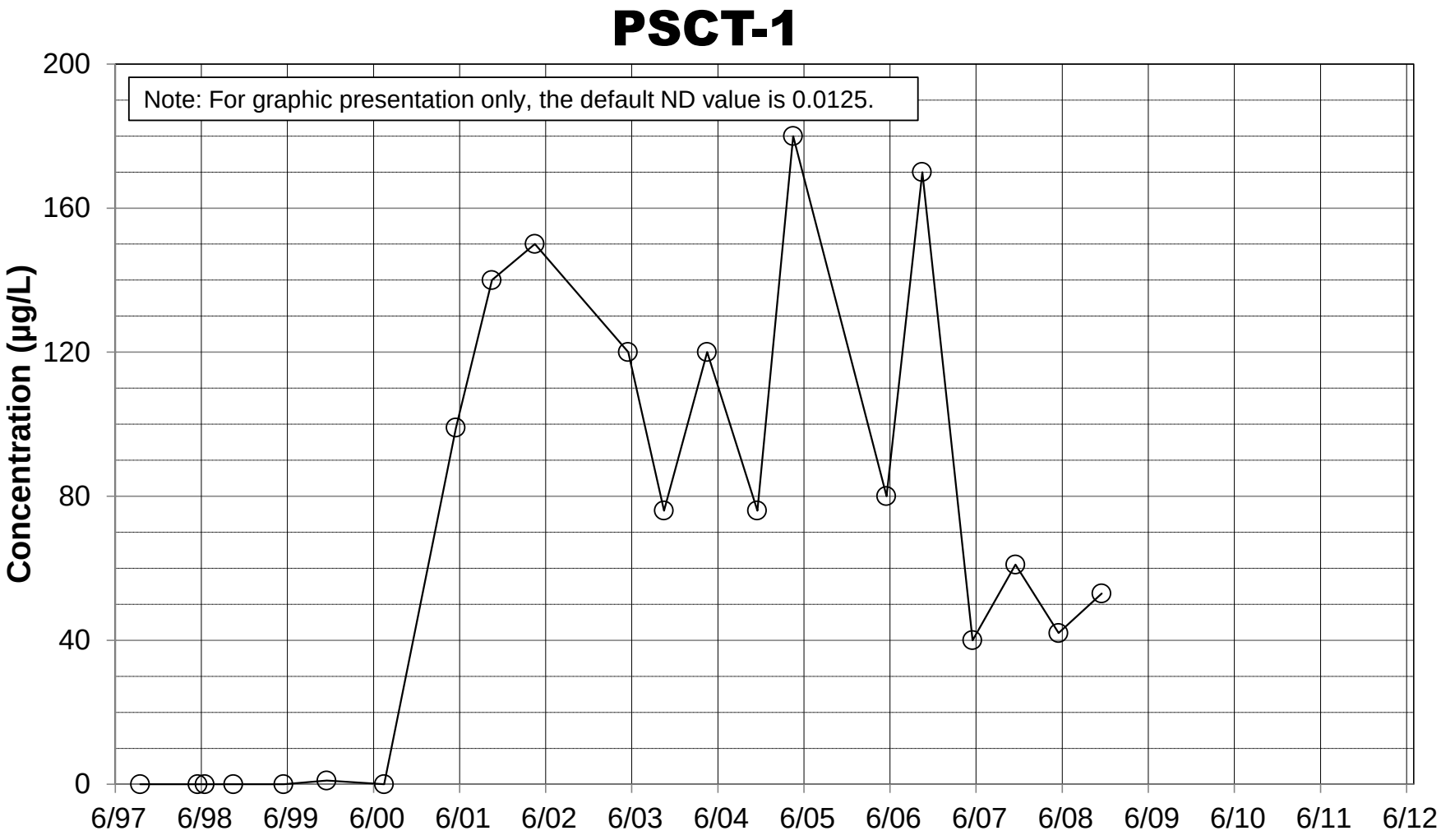
6/12


PSCT-1
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
200
160
120
80
40
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
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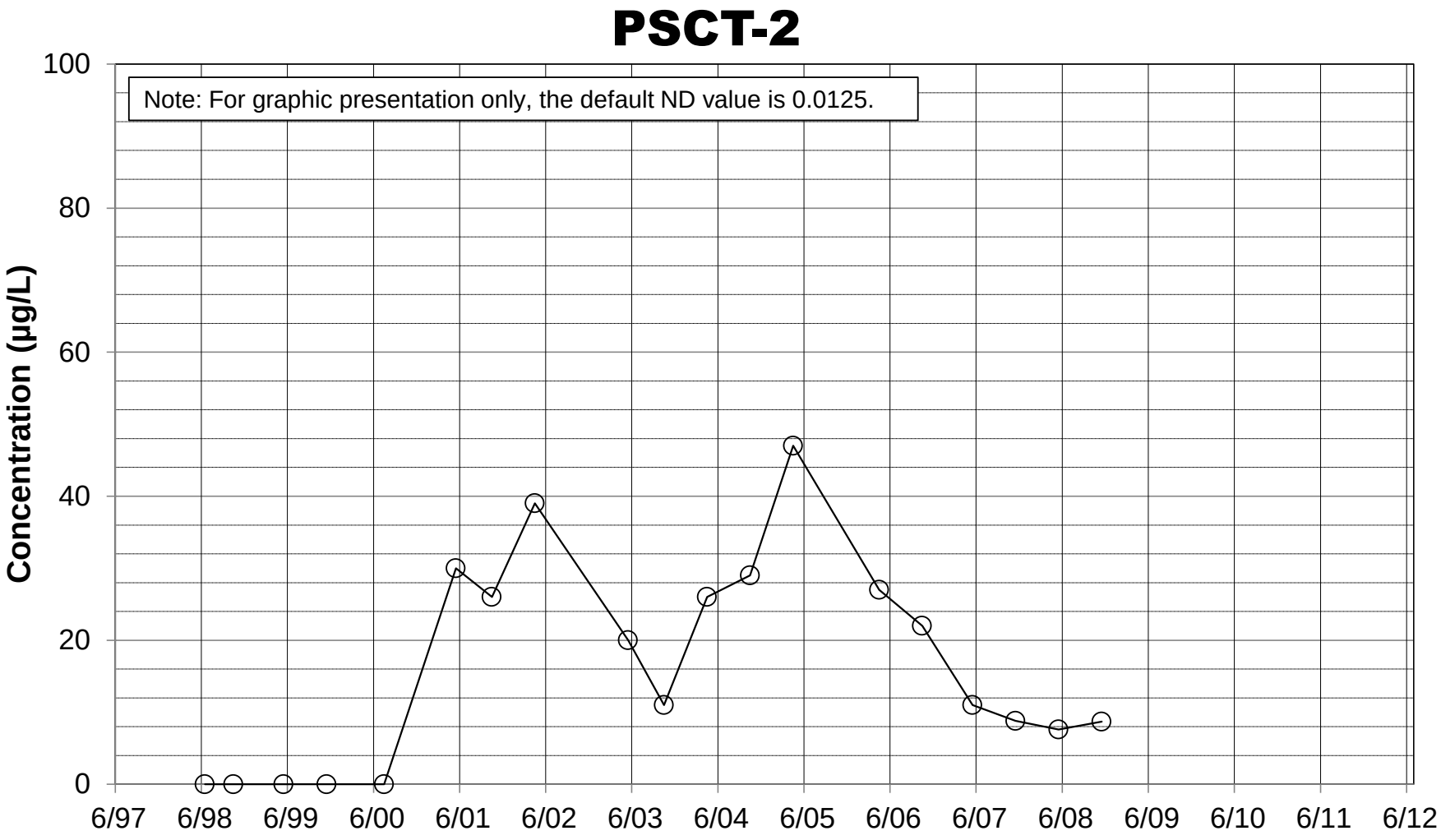
6/12


PSCT-2
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
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80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
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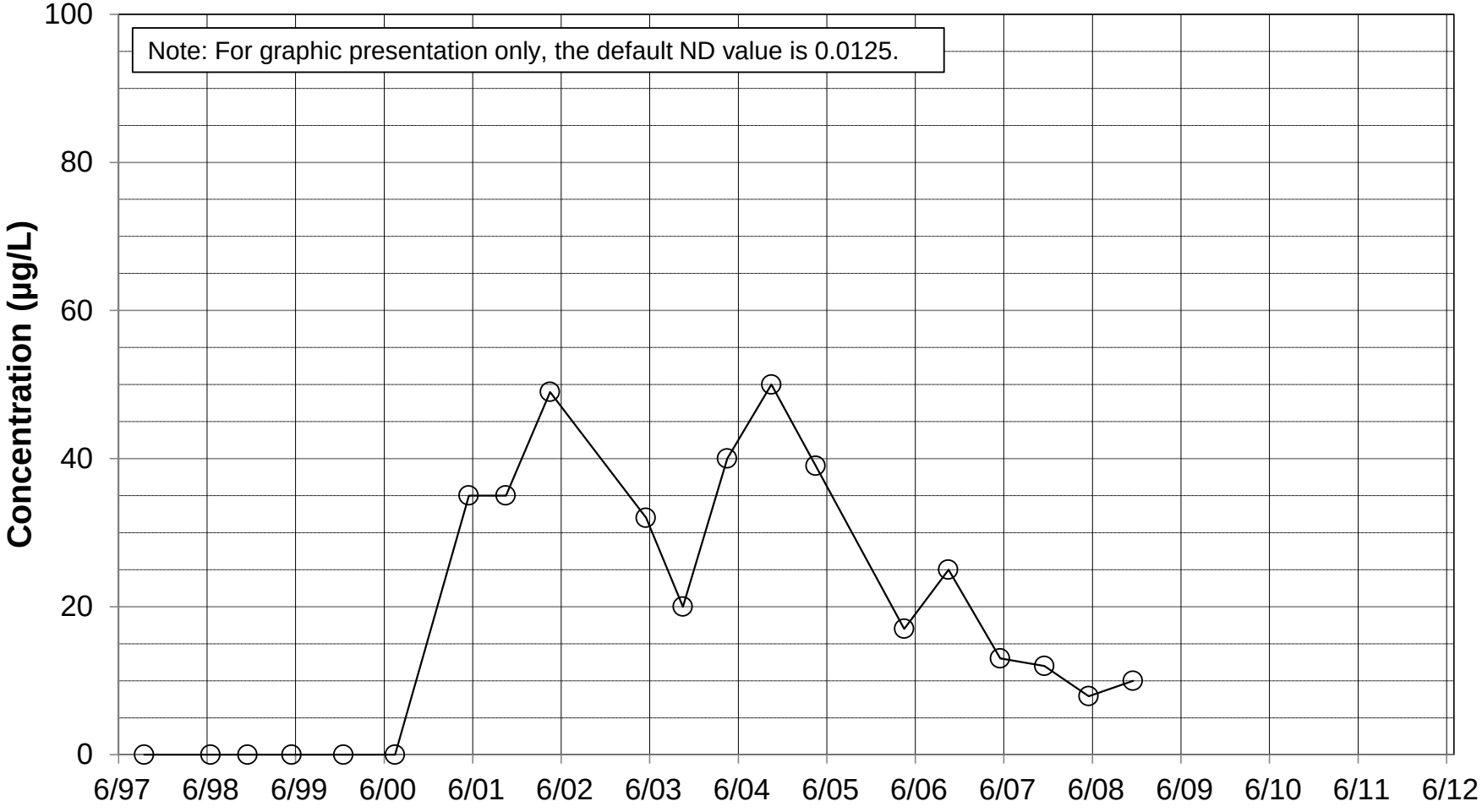
6/11
6/12

PSCT-3


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
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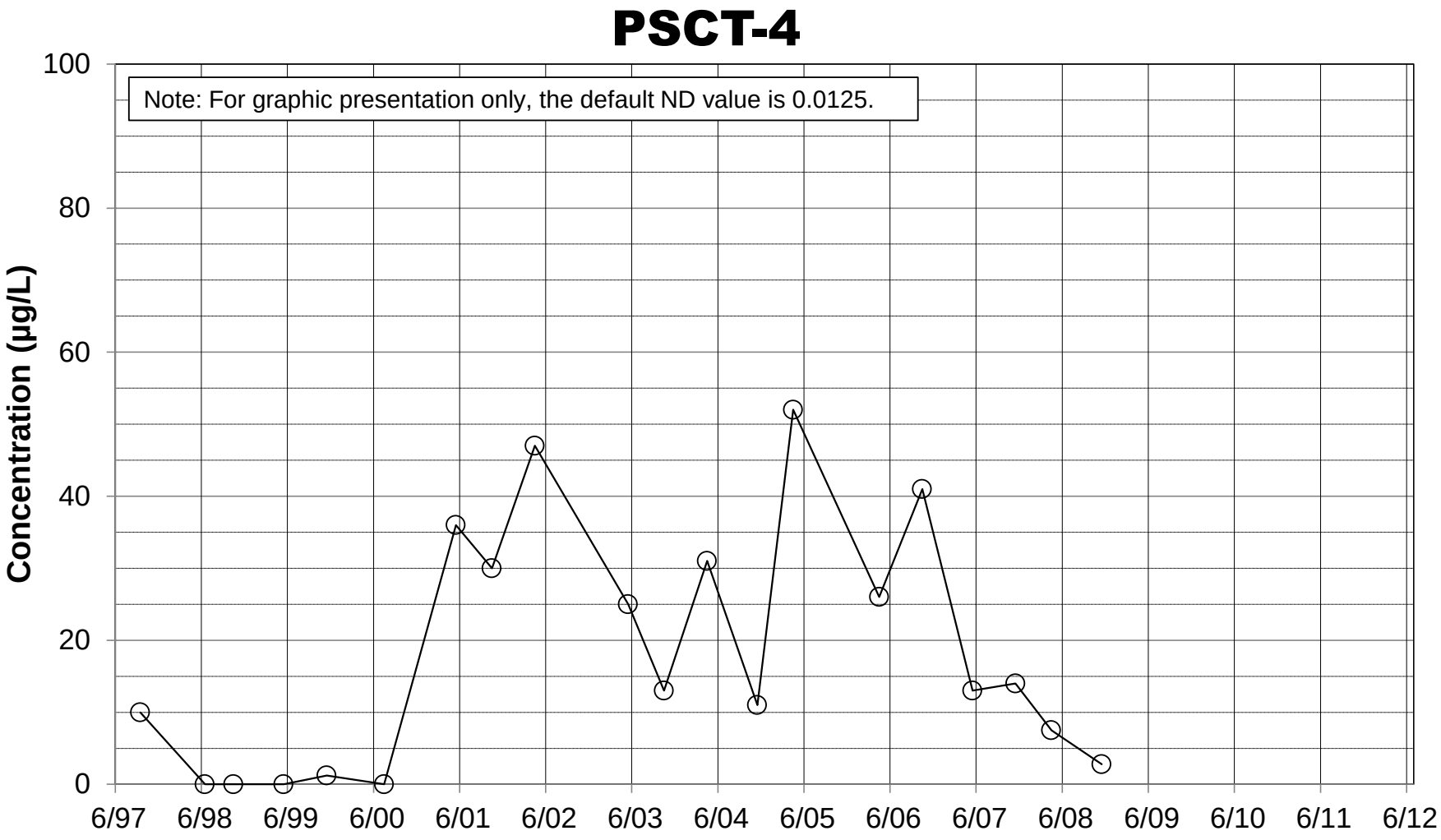
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Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
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80
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40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
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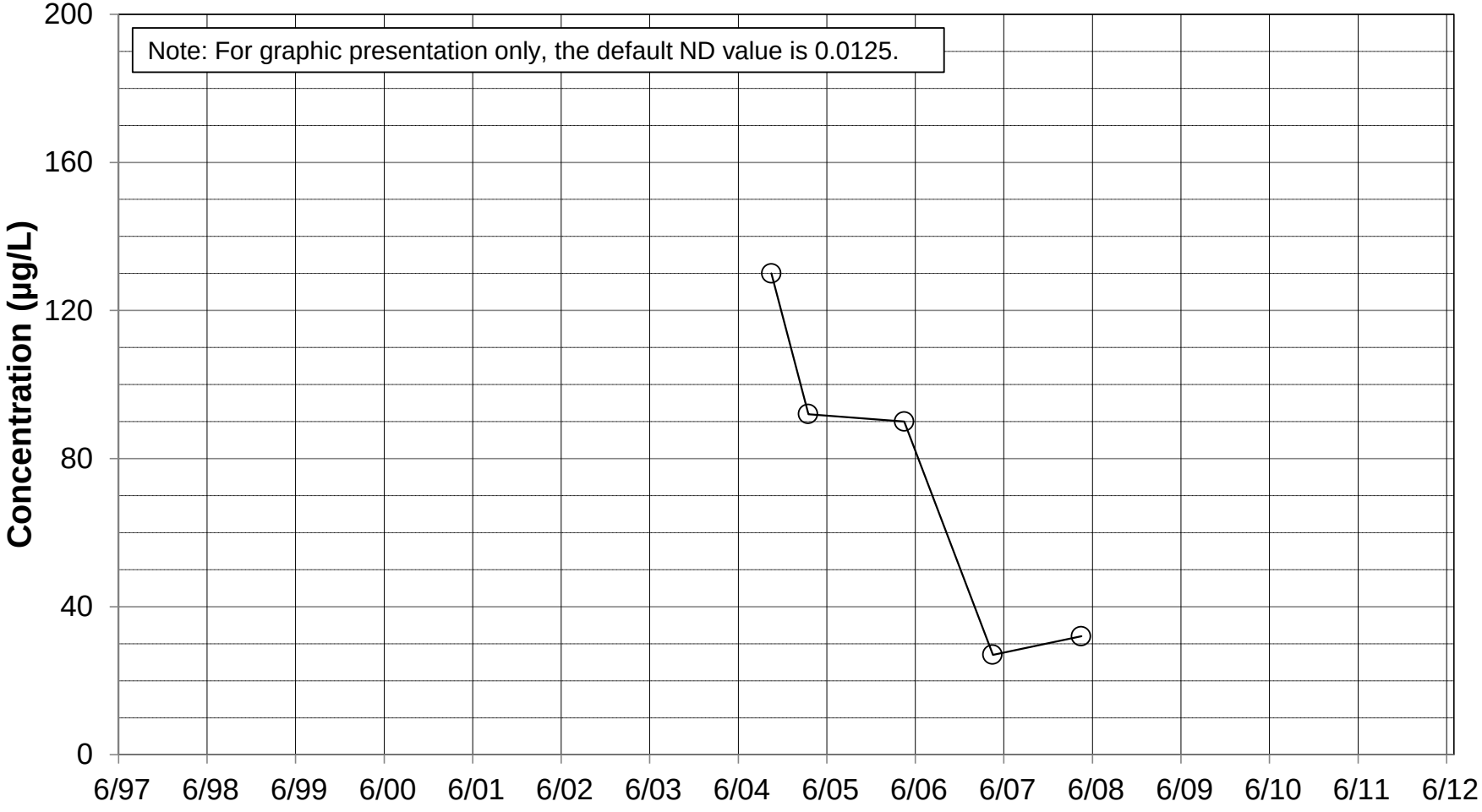
6/11
6/12

PZ-P18-5


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
200
160
120
80
40
0
6/97
6/98
6/99
6/00
6/01
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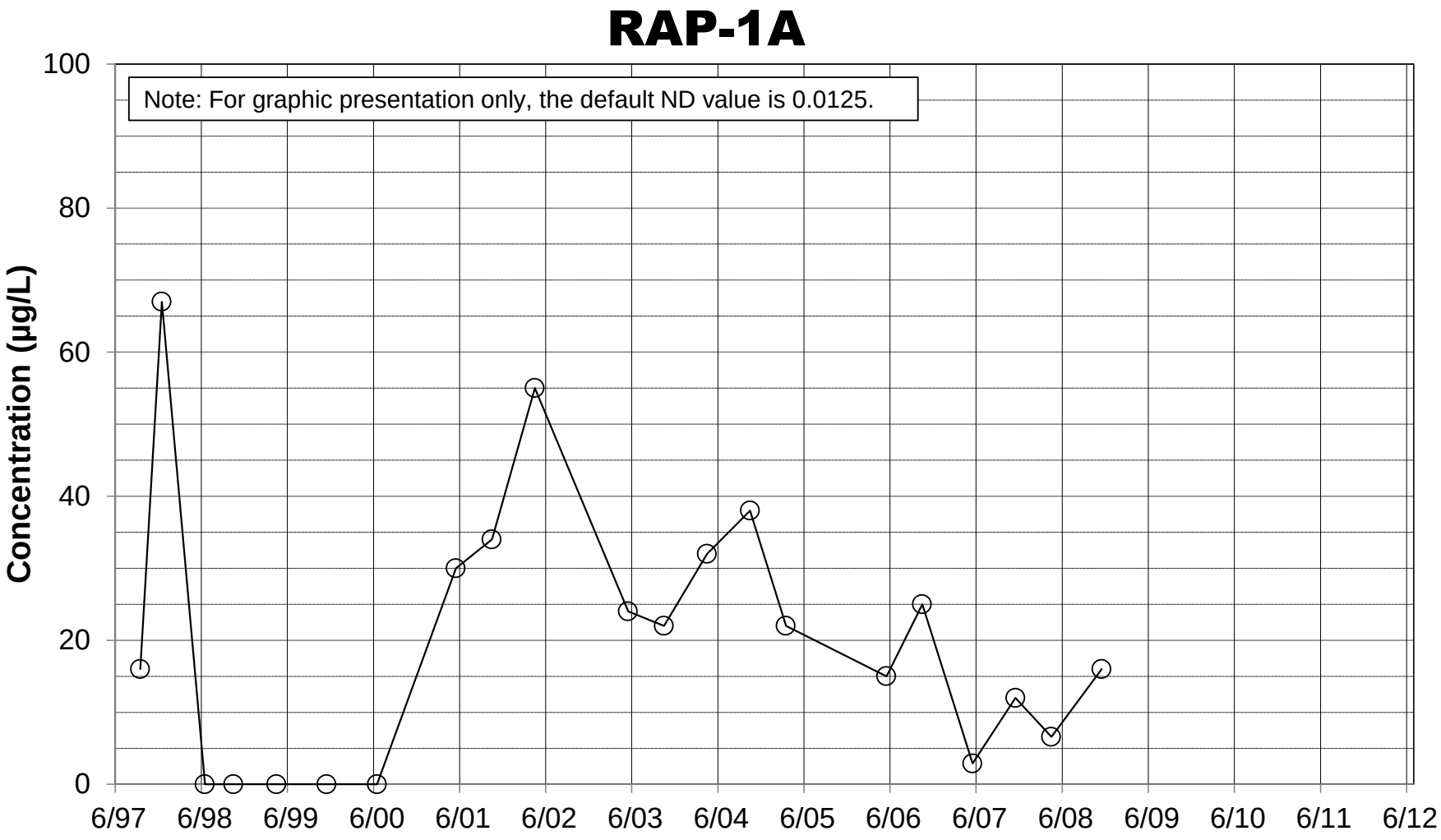
RAP-1A
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
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80
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40
20
0
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6/98
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6/00
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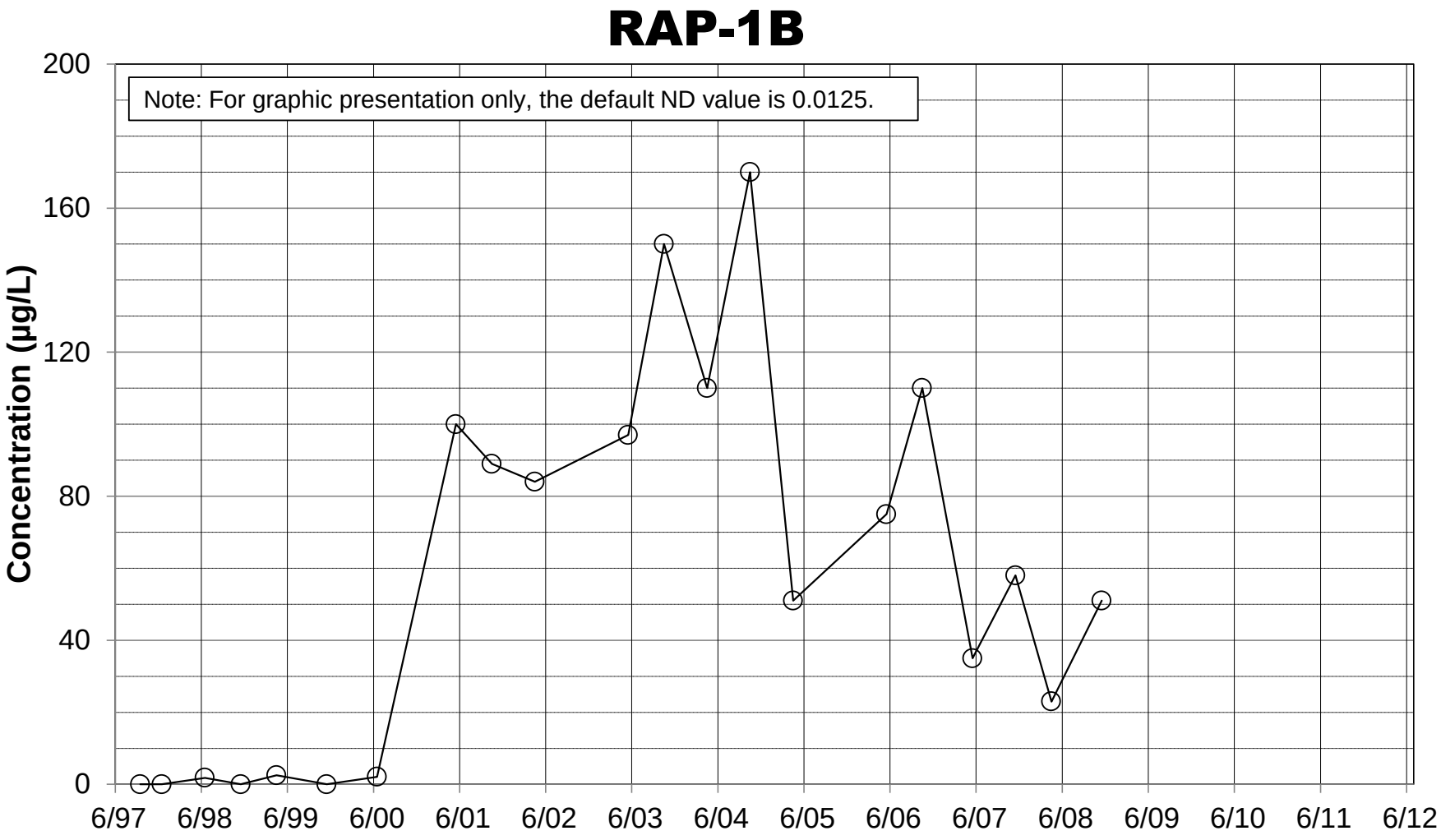
RAP-1B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
200
160
120
80
40
0
6/97
6/98
6/99
6/00
6/01
6/02
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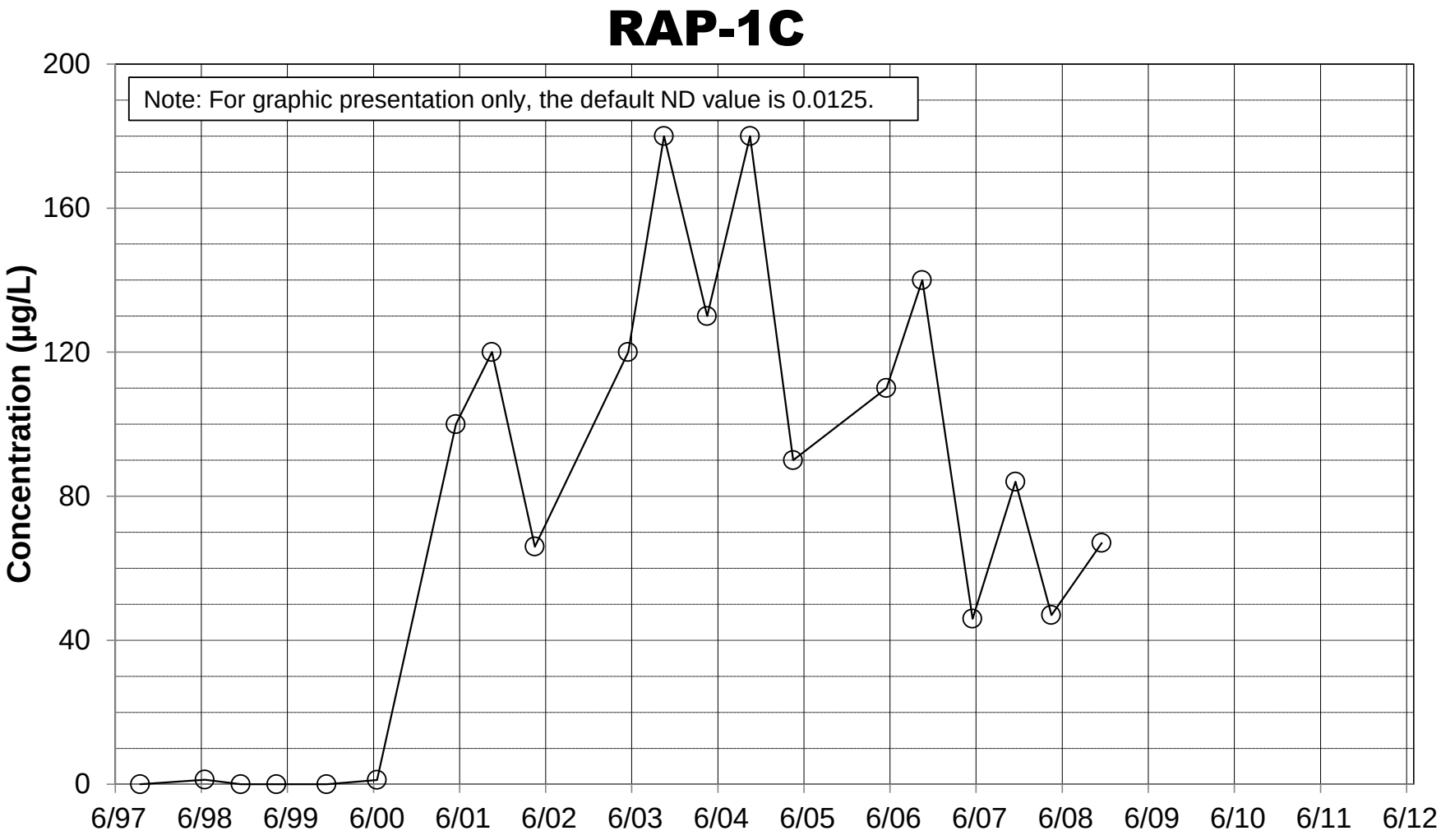
6/12


RAP-1C
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
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160
120
80
40
0
6/97
6/98
6/99
6/00
6/01
6/02
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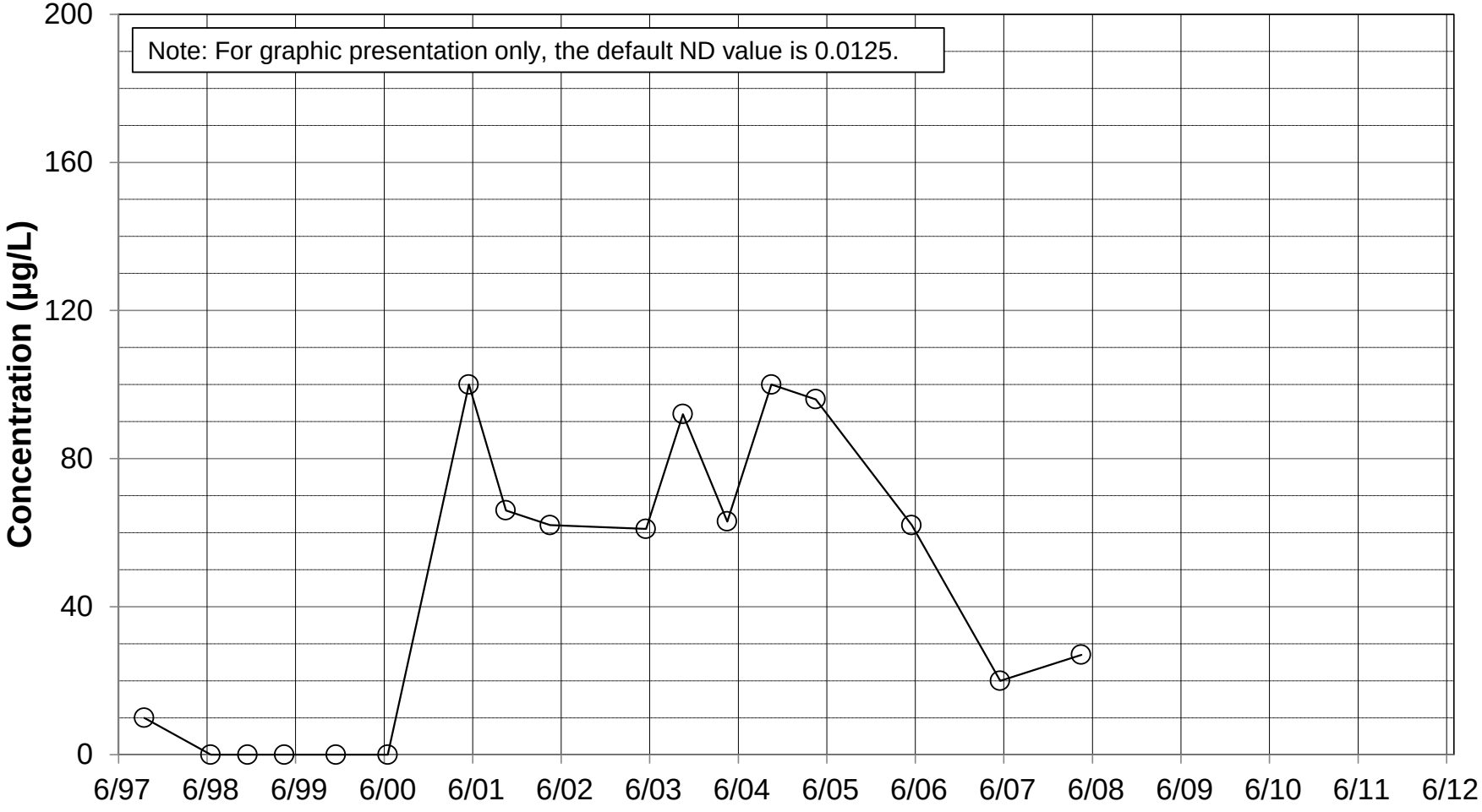
6/12

RAP-3A


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
200
160
120
80
40
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
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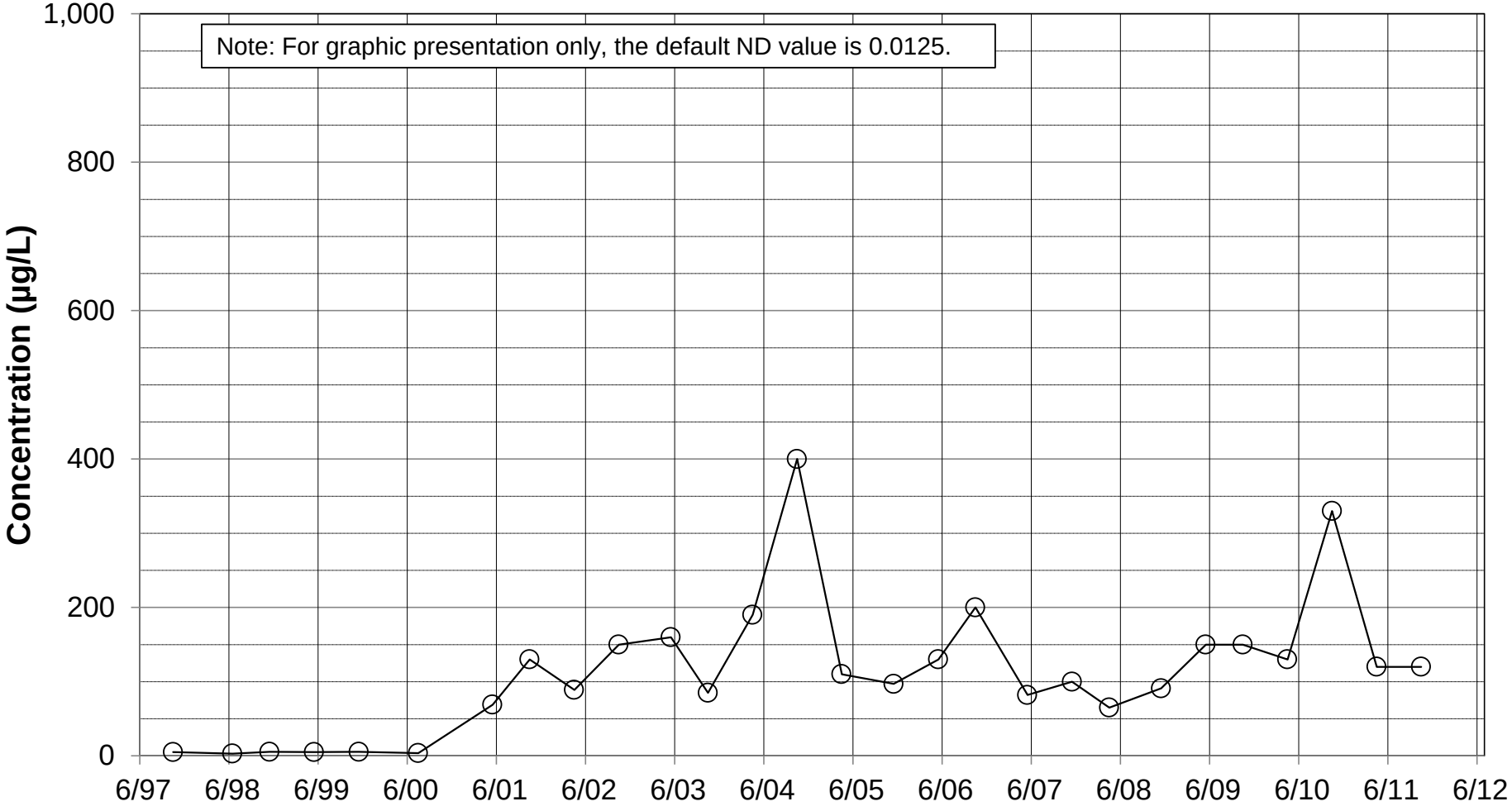
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

RCF Pond


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
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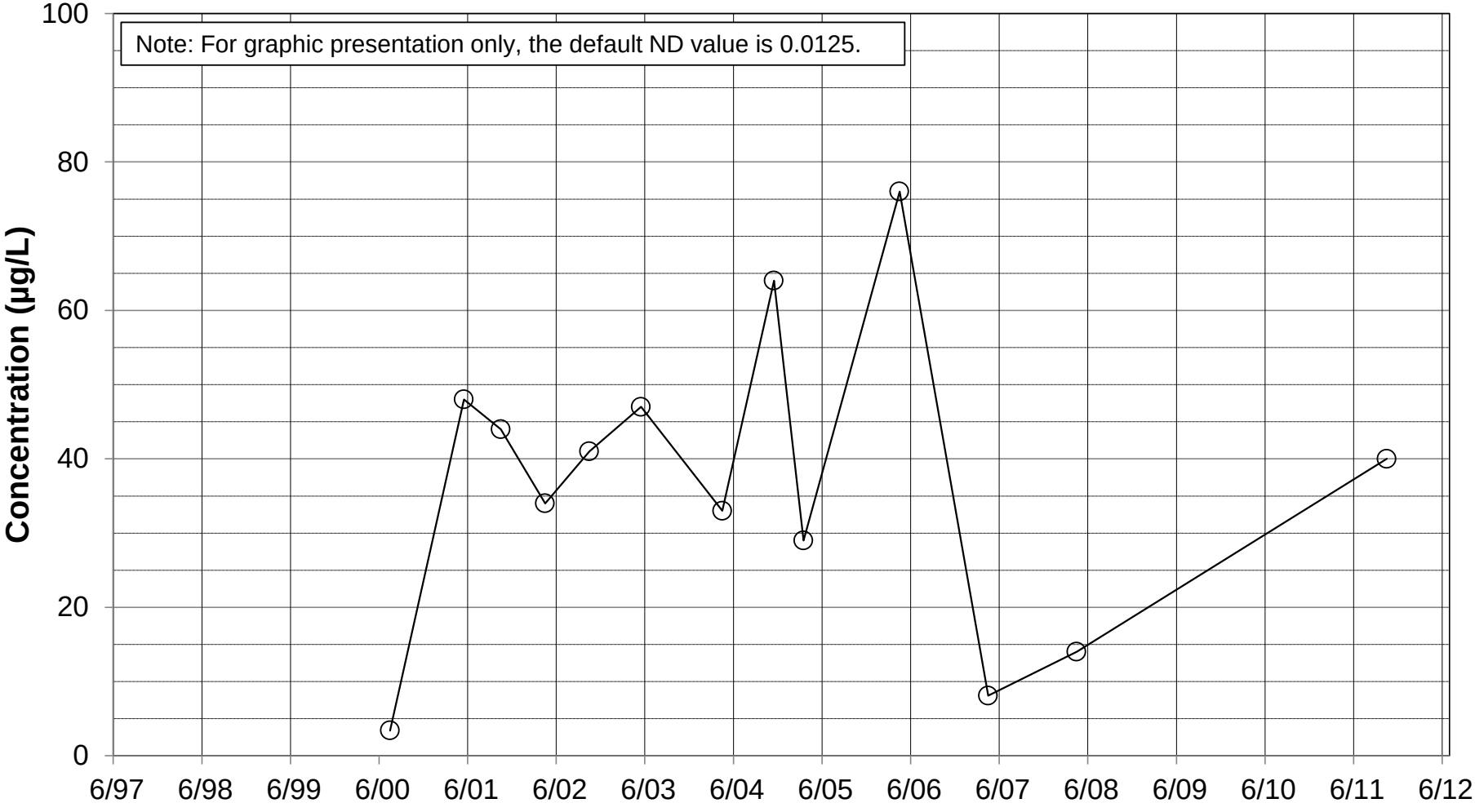
6/12

RG-10B


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
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6/00
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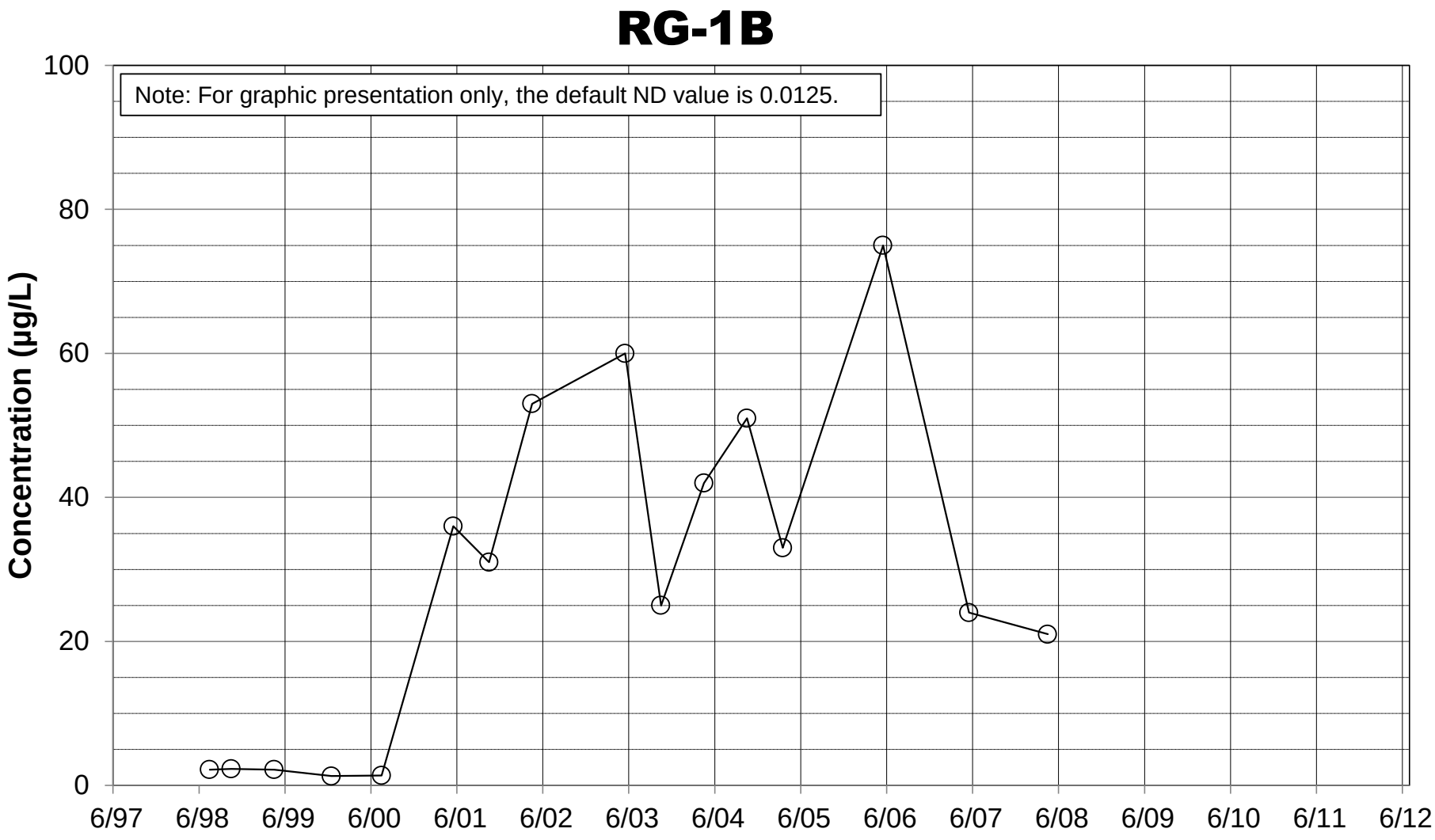
RG-1B
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Concentration (µg/L)
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40
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0
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6/01
6/02
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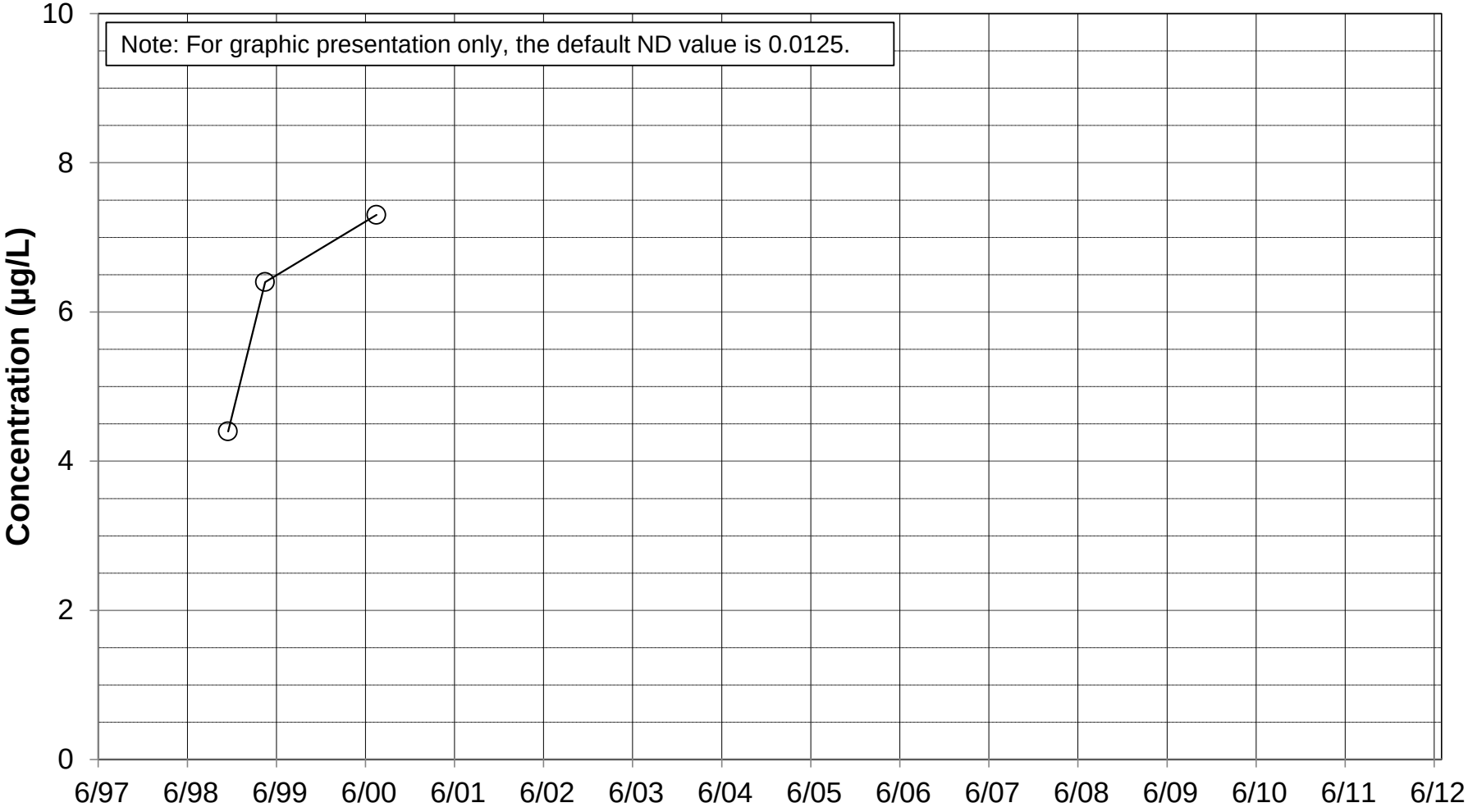
6/11
6/12

RG-1C


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
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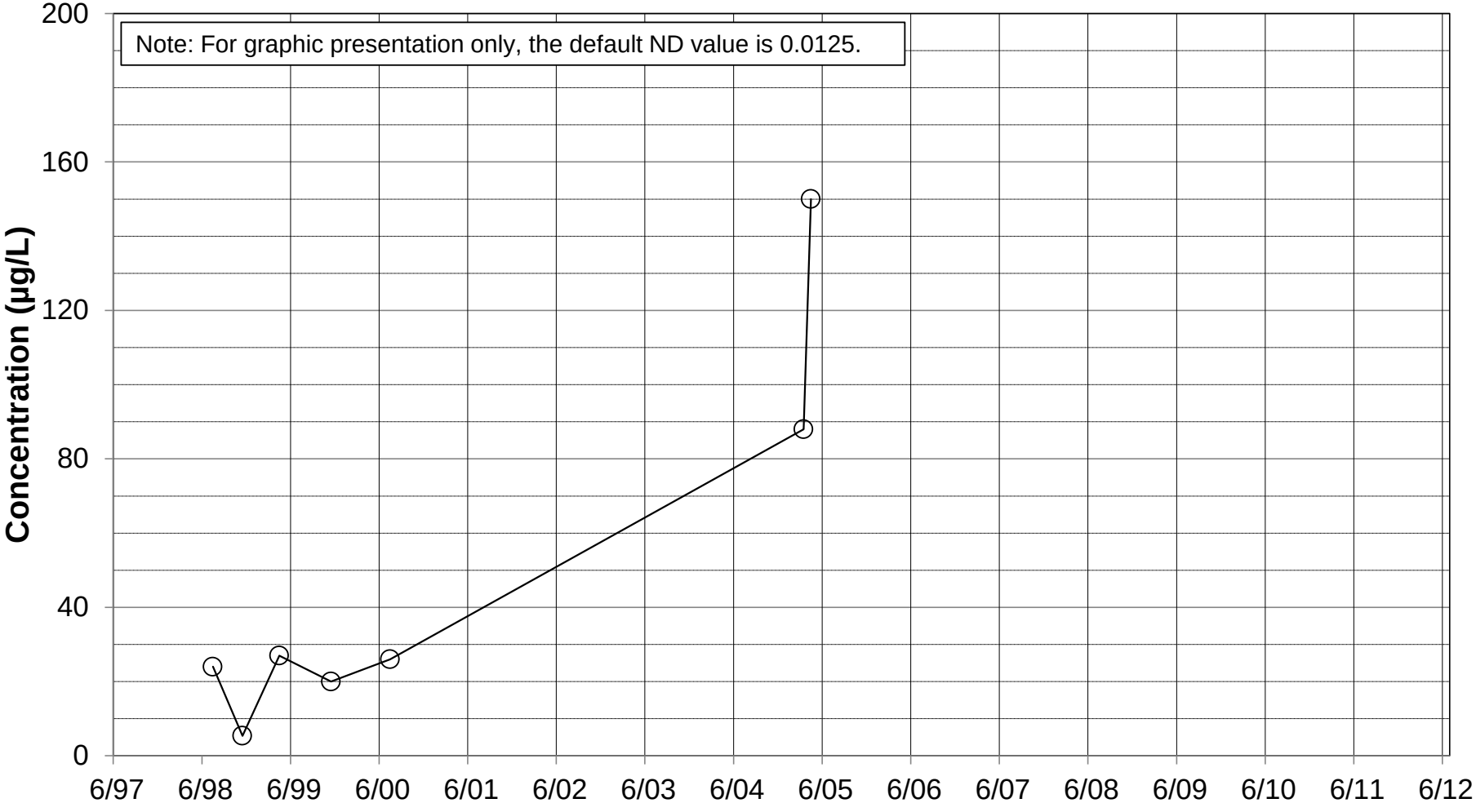
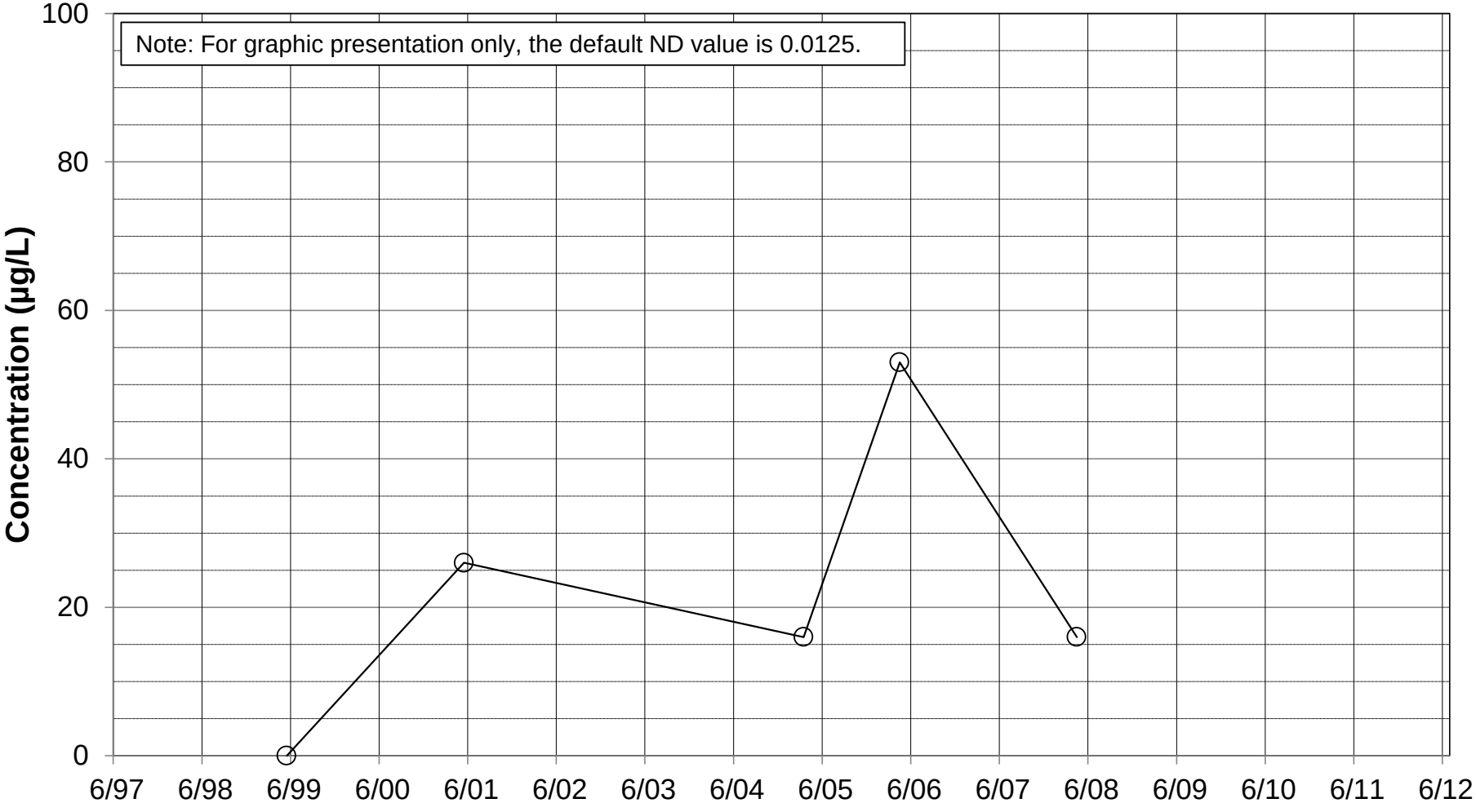
6/10
6/11
6/12

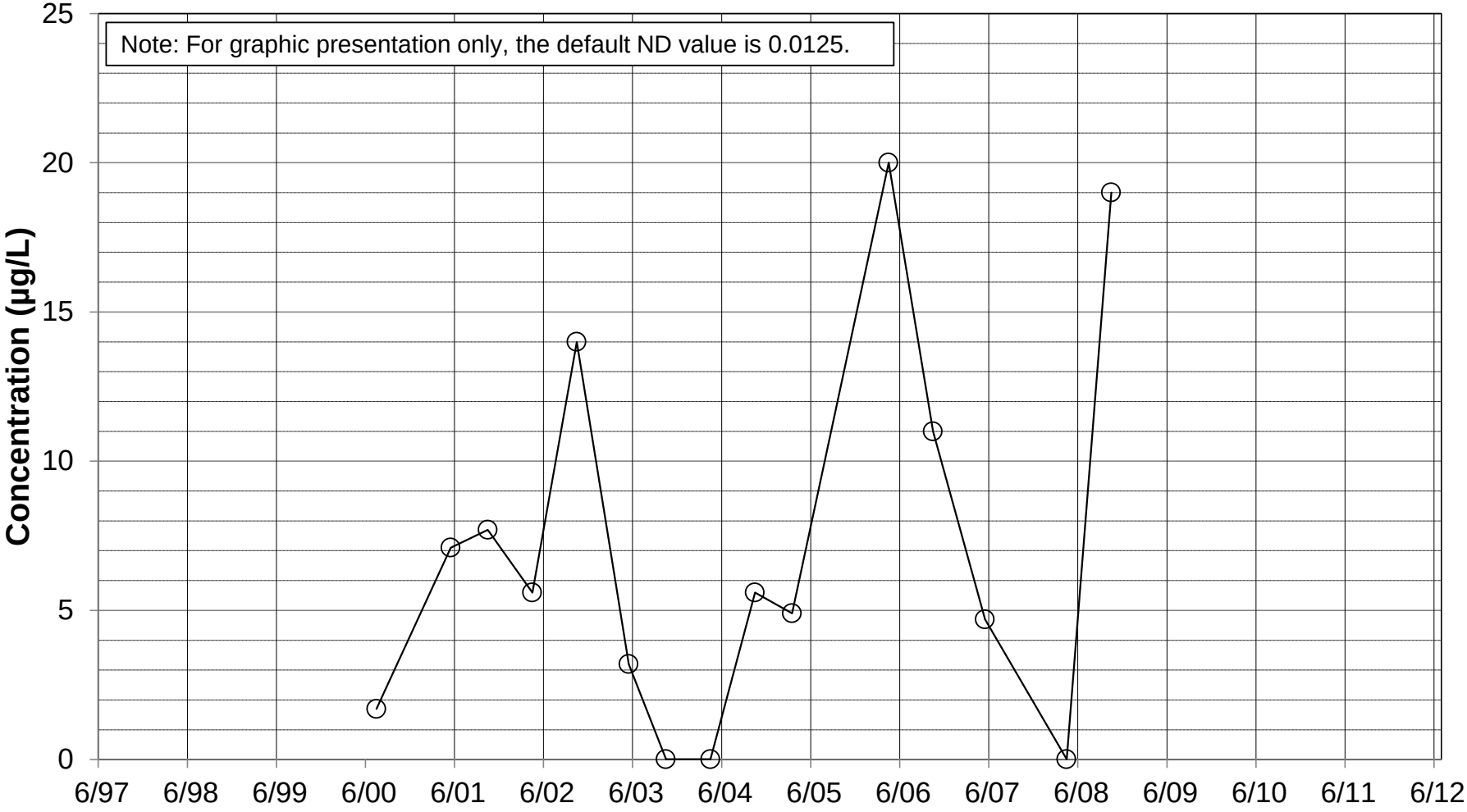
RG-3B


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
200
160
120
80
40
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

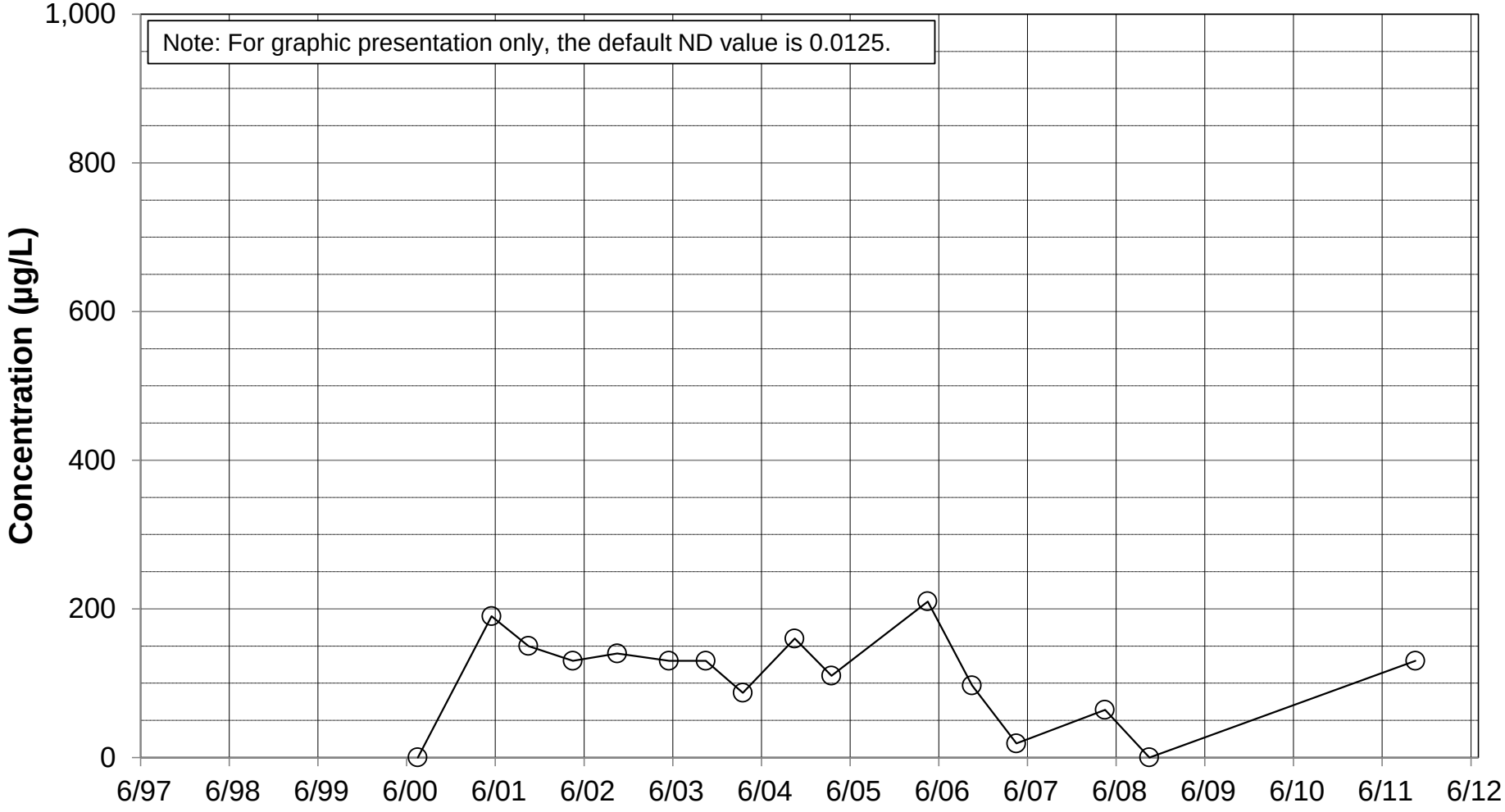
RG-4B


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

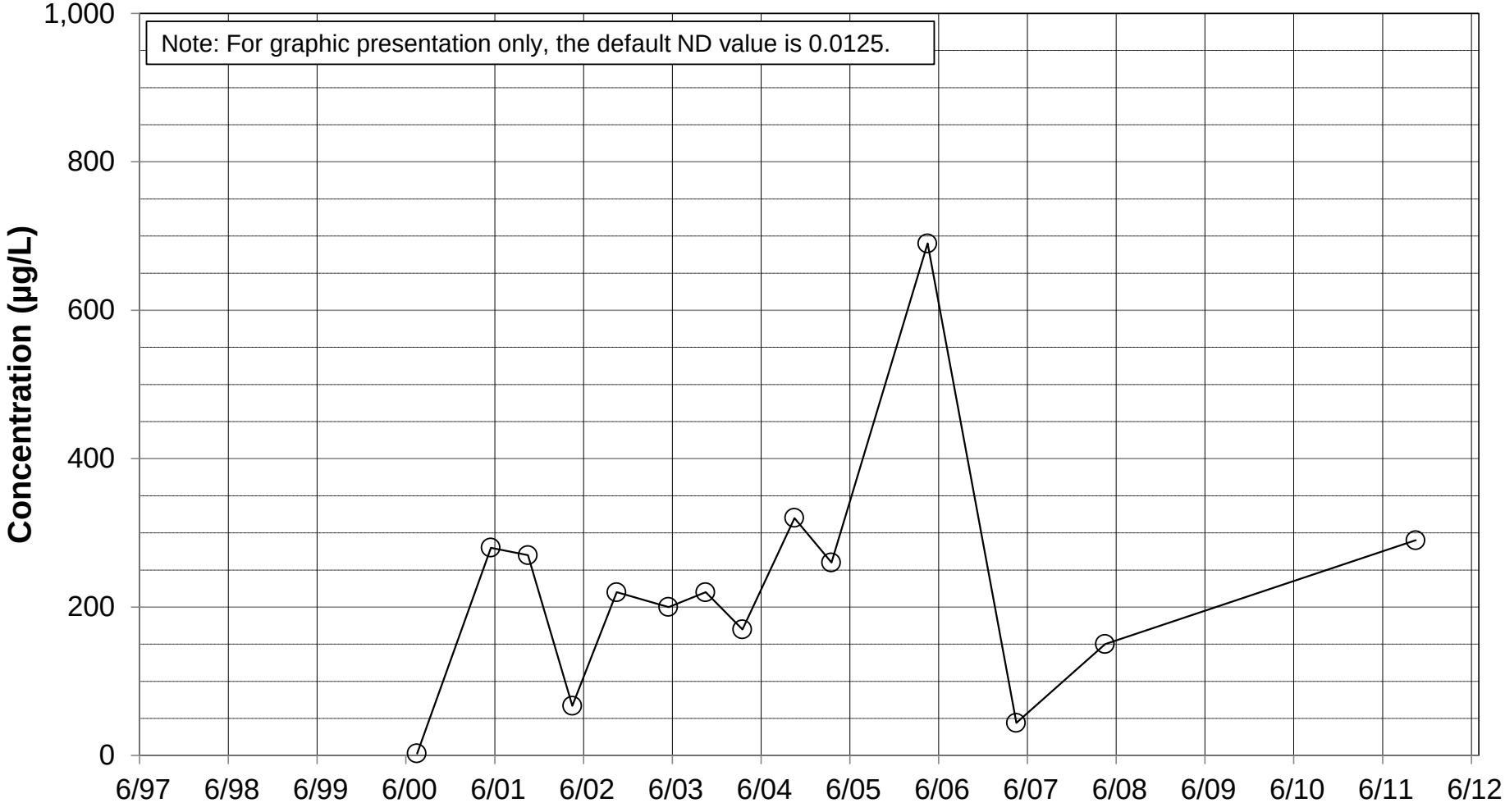
RG-5B


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
25
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

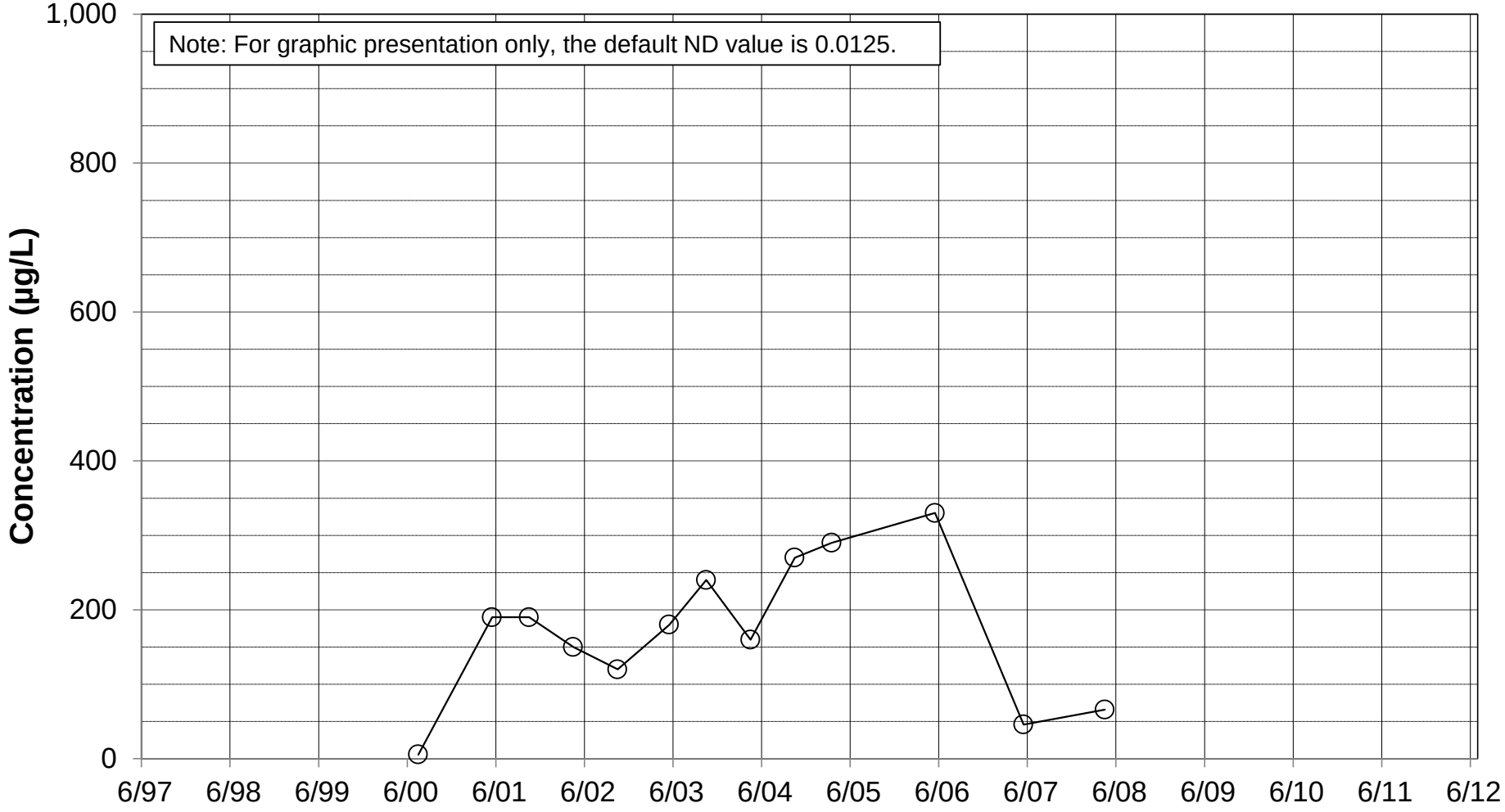
RG-6B


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

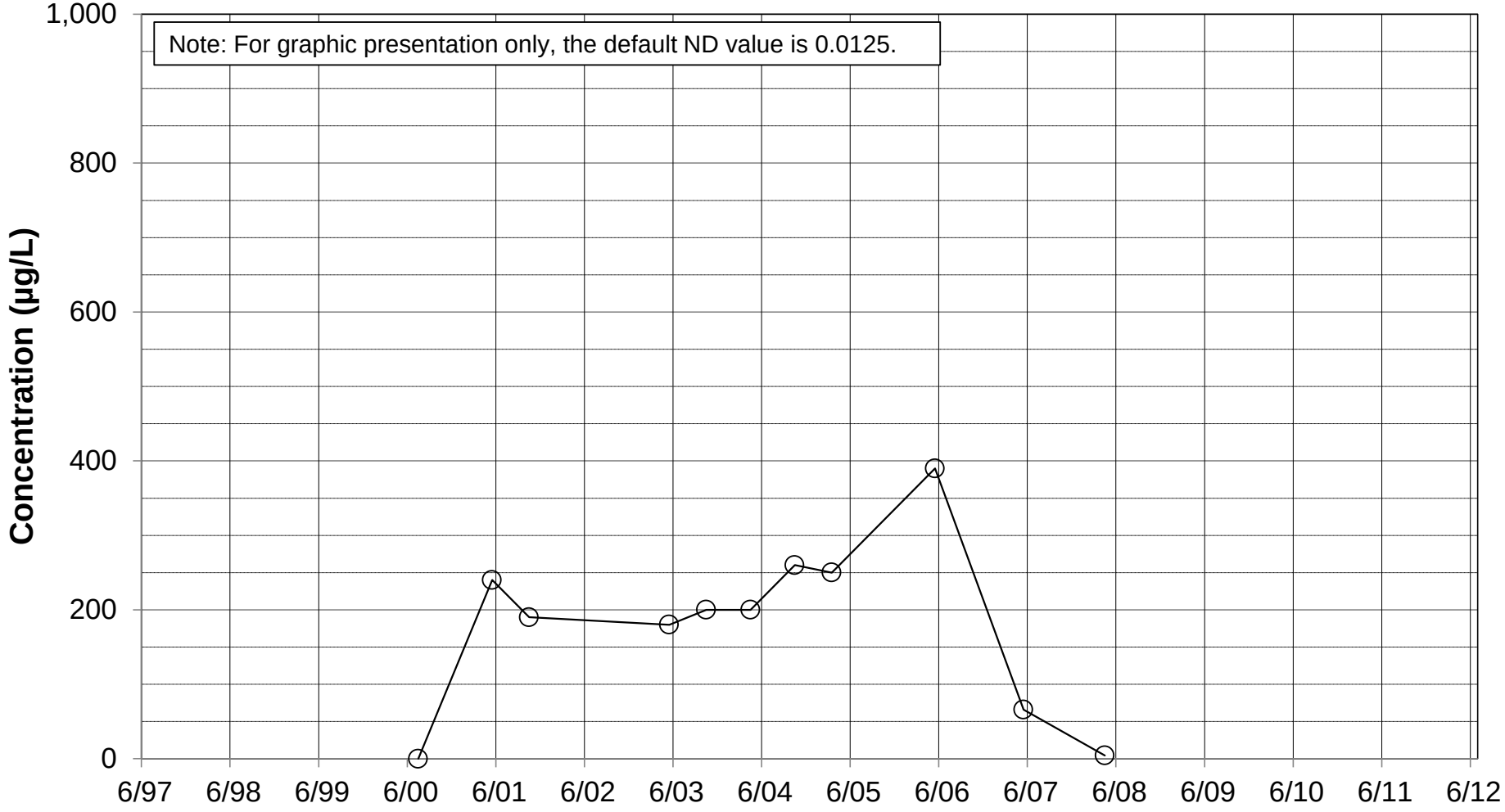
RG-7B


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

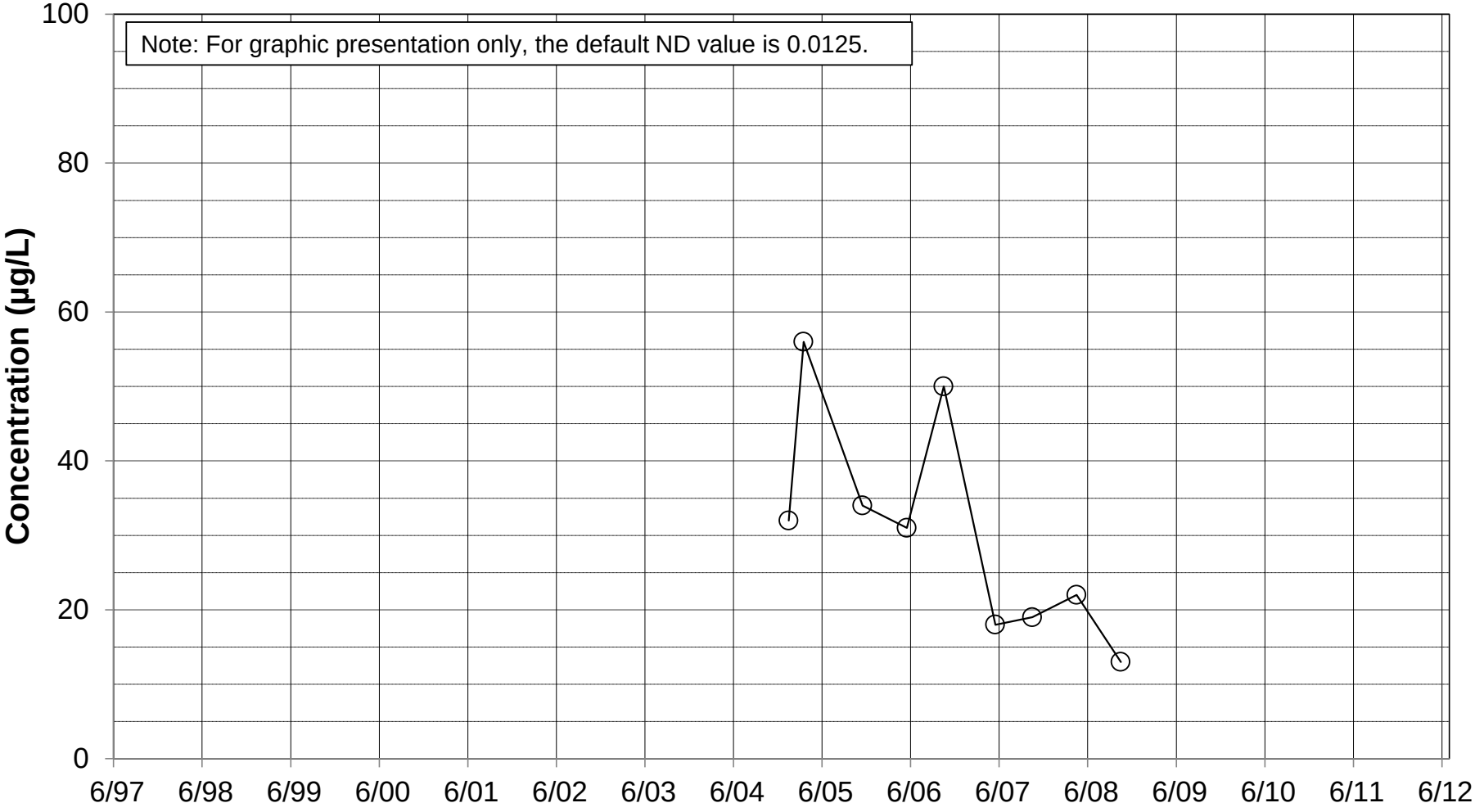
RG-8B


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

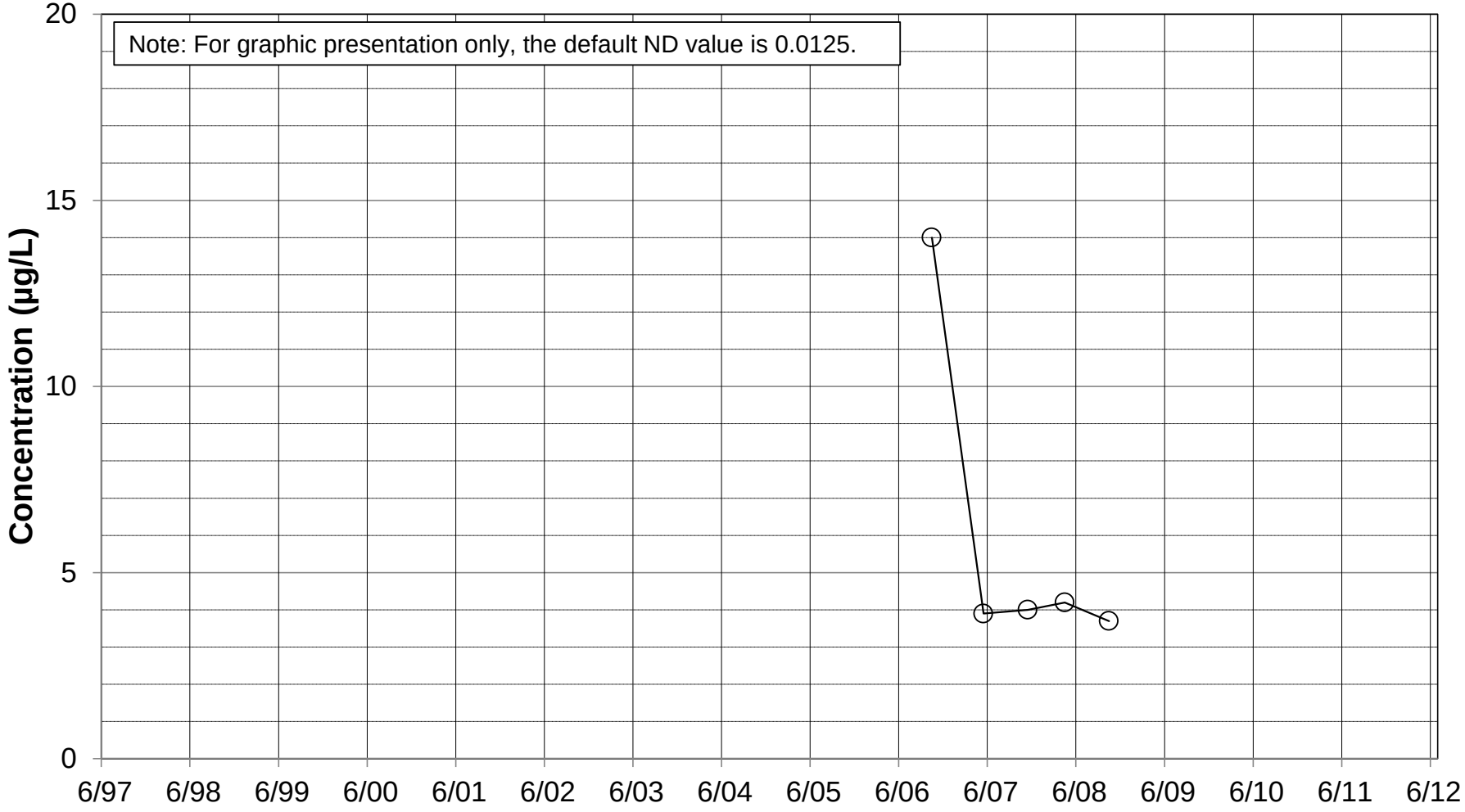
RG-9B


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

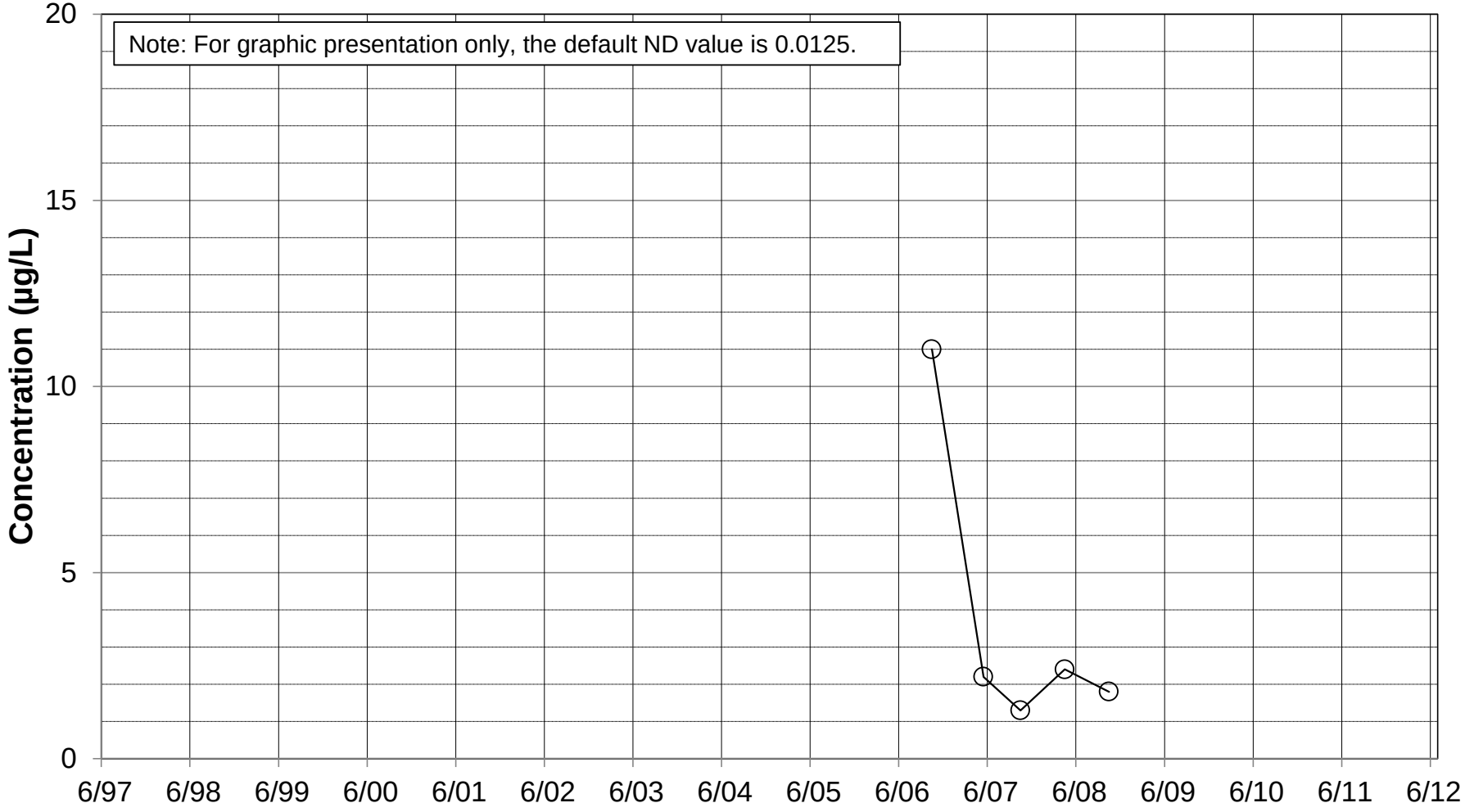
RIMW-1


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

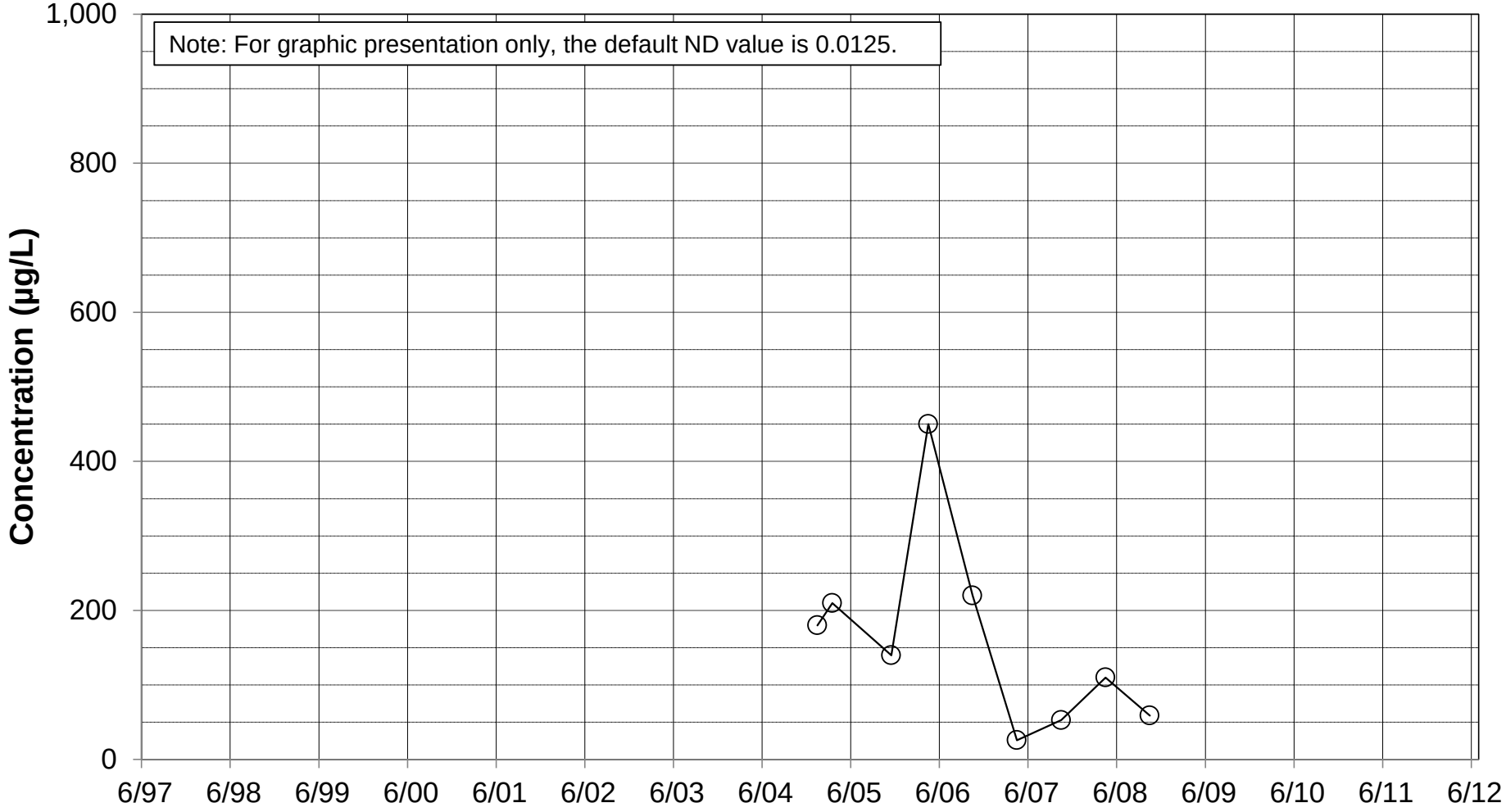
RIMW-10


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

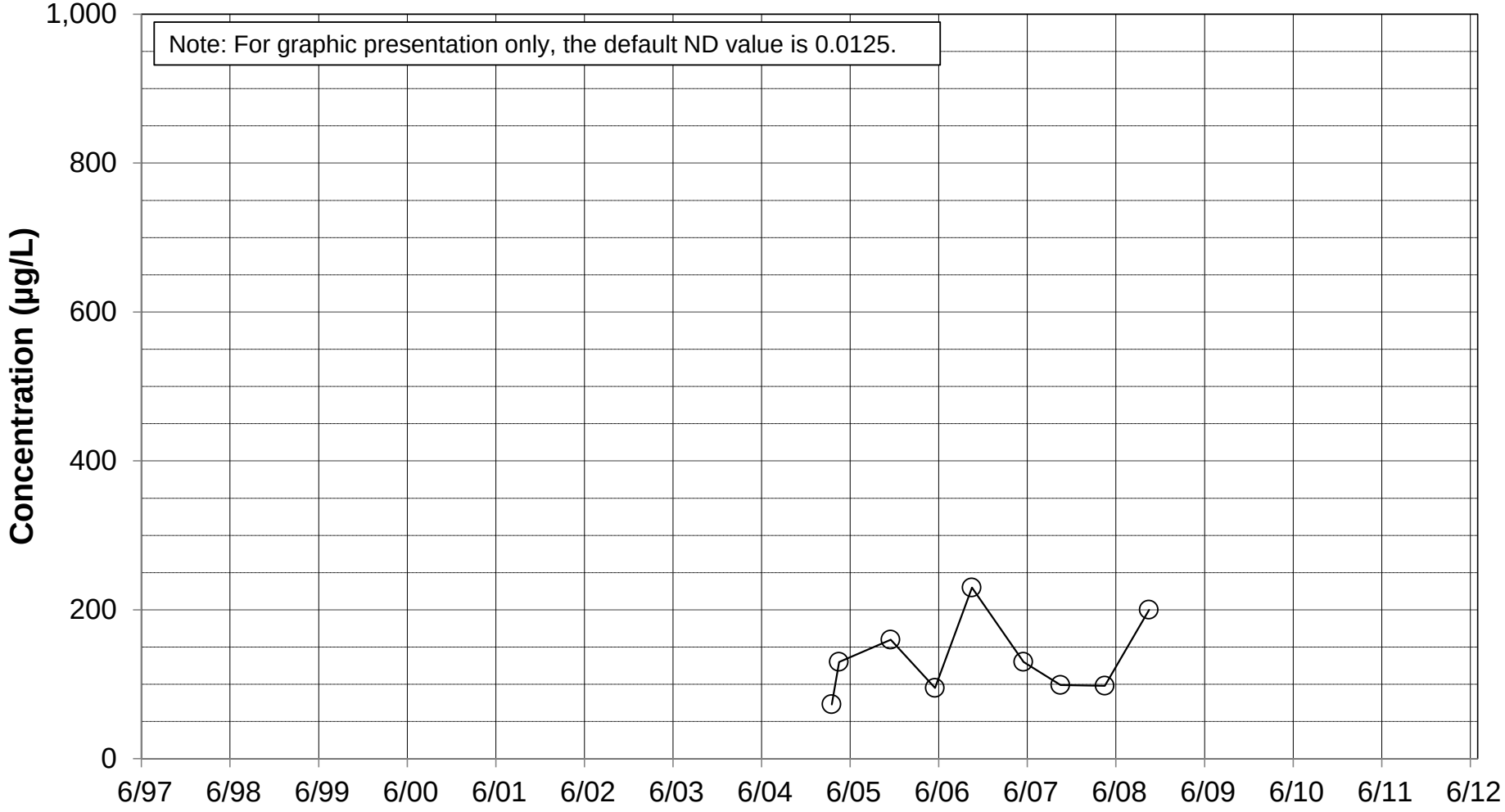
RIMW-11


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

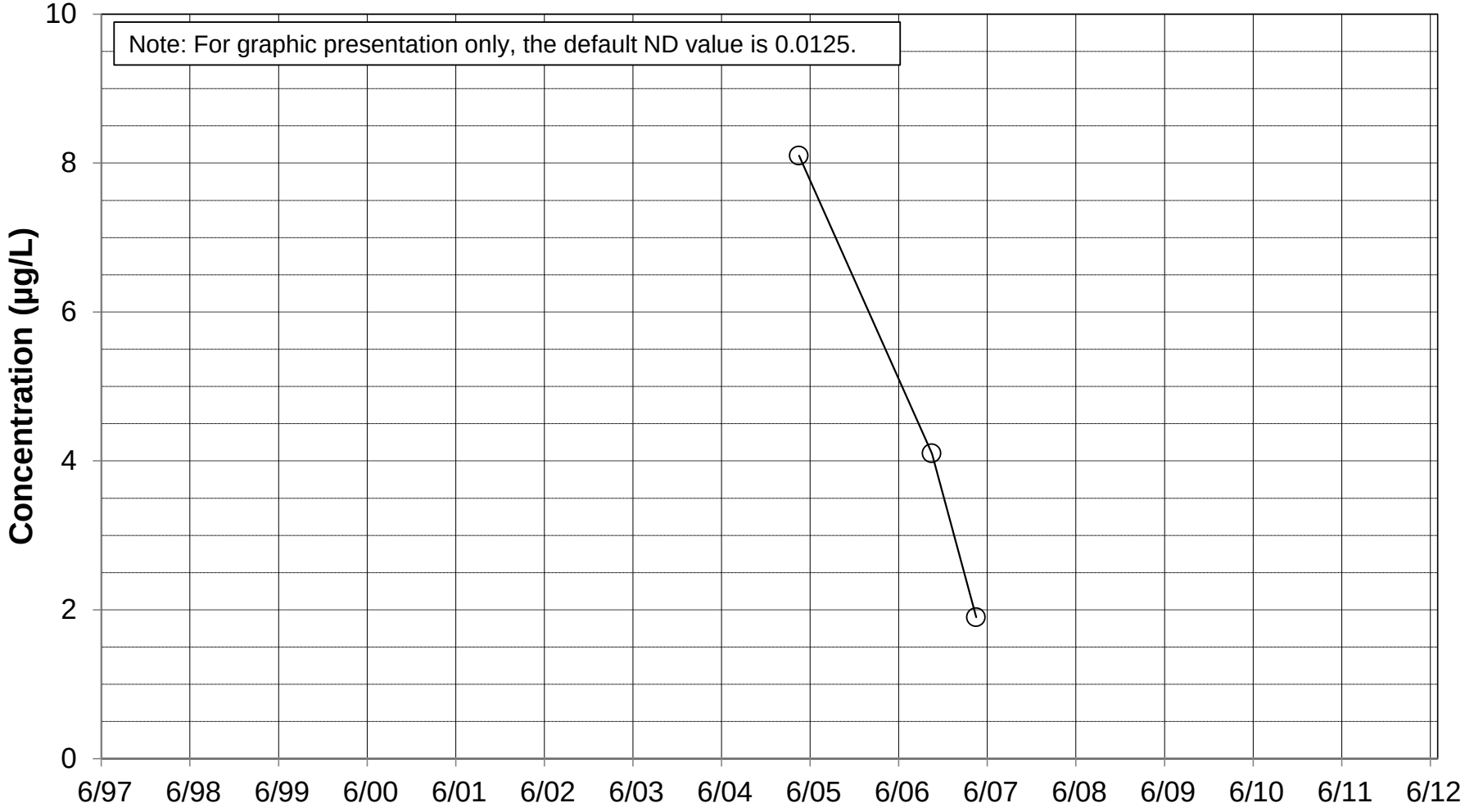
RIMW-2


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

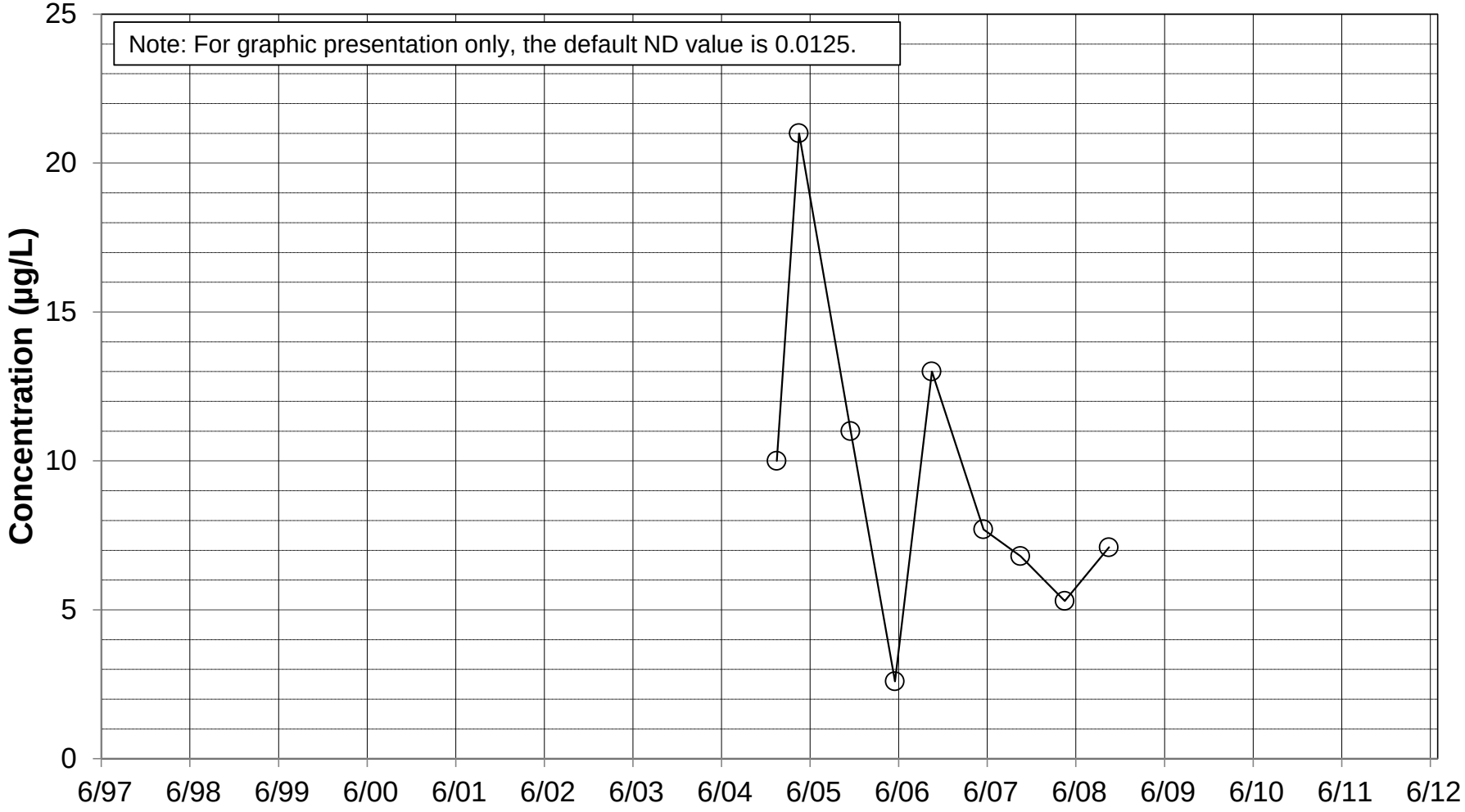
RIMW-3


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

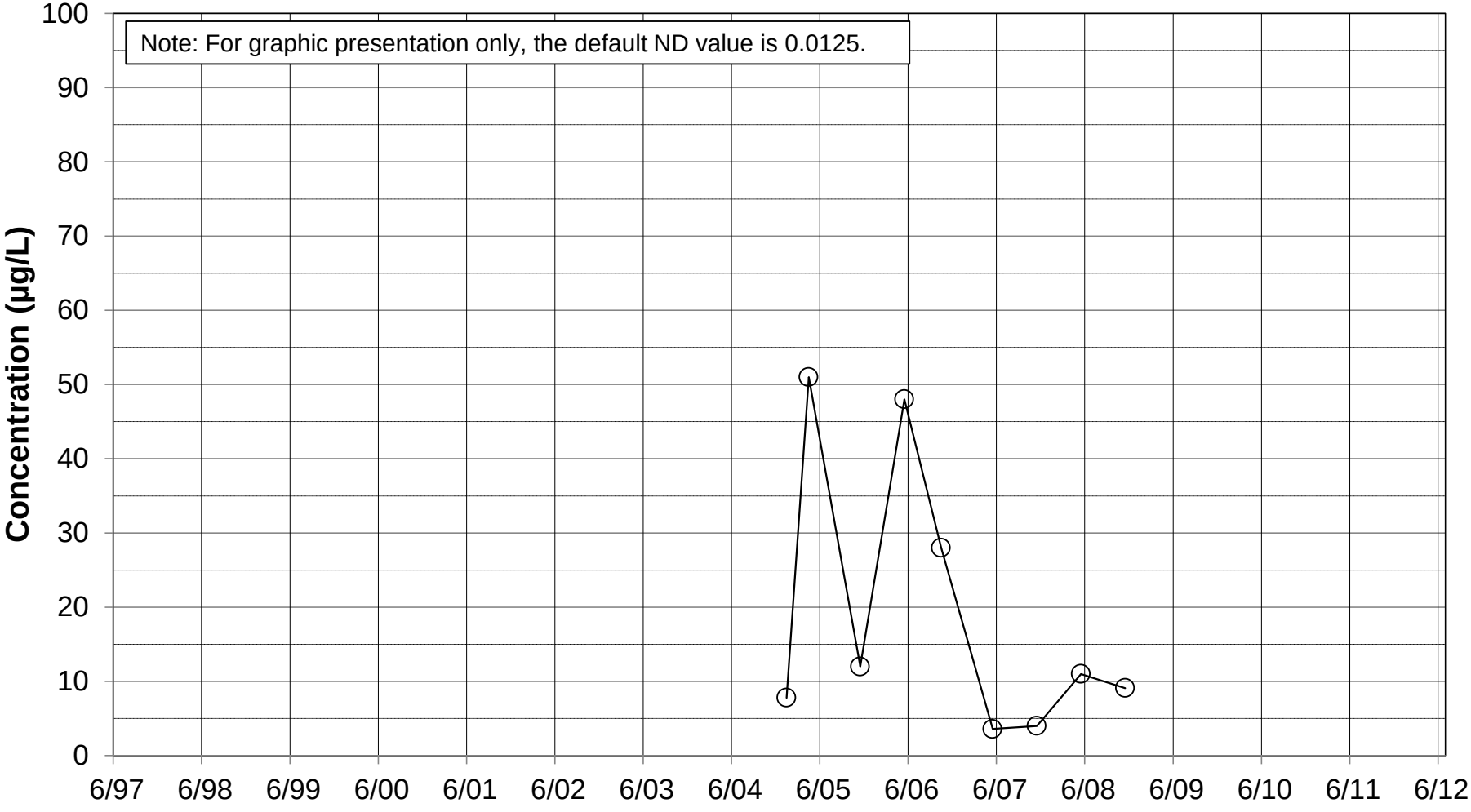
RIMW-5


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

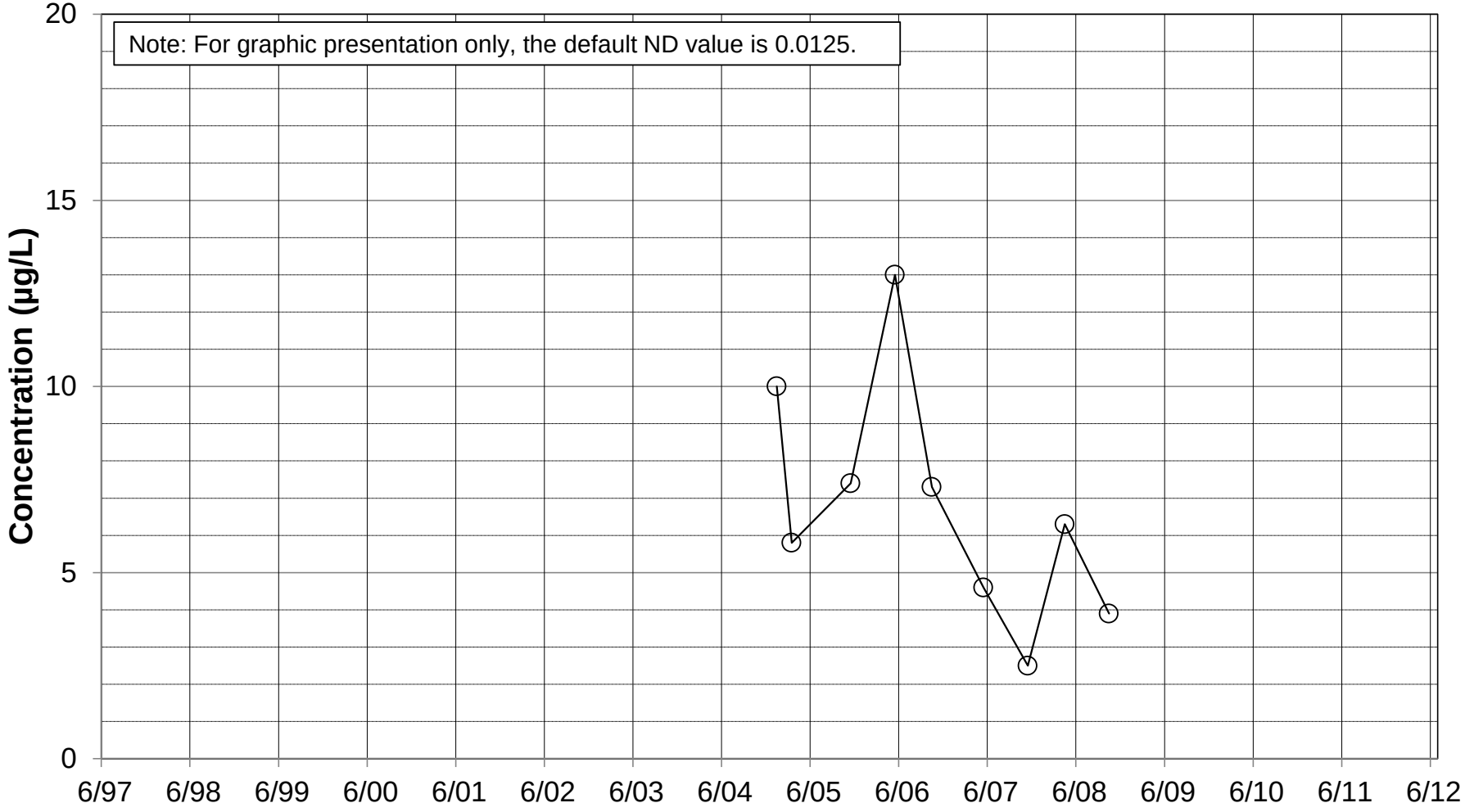
RIMW-7


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
25
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

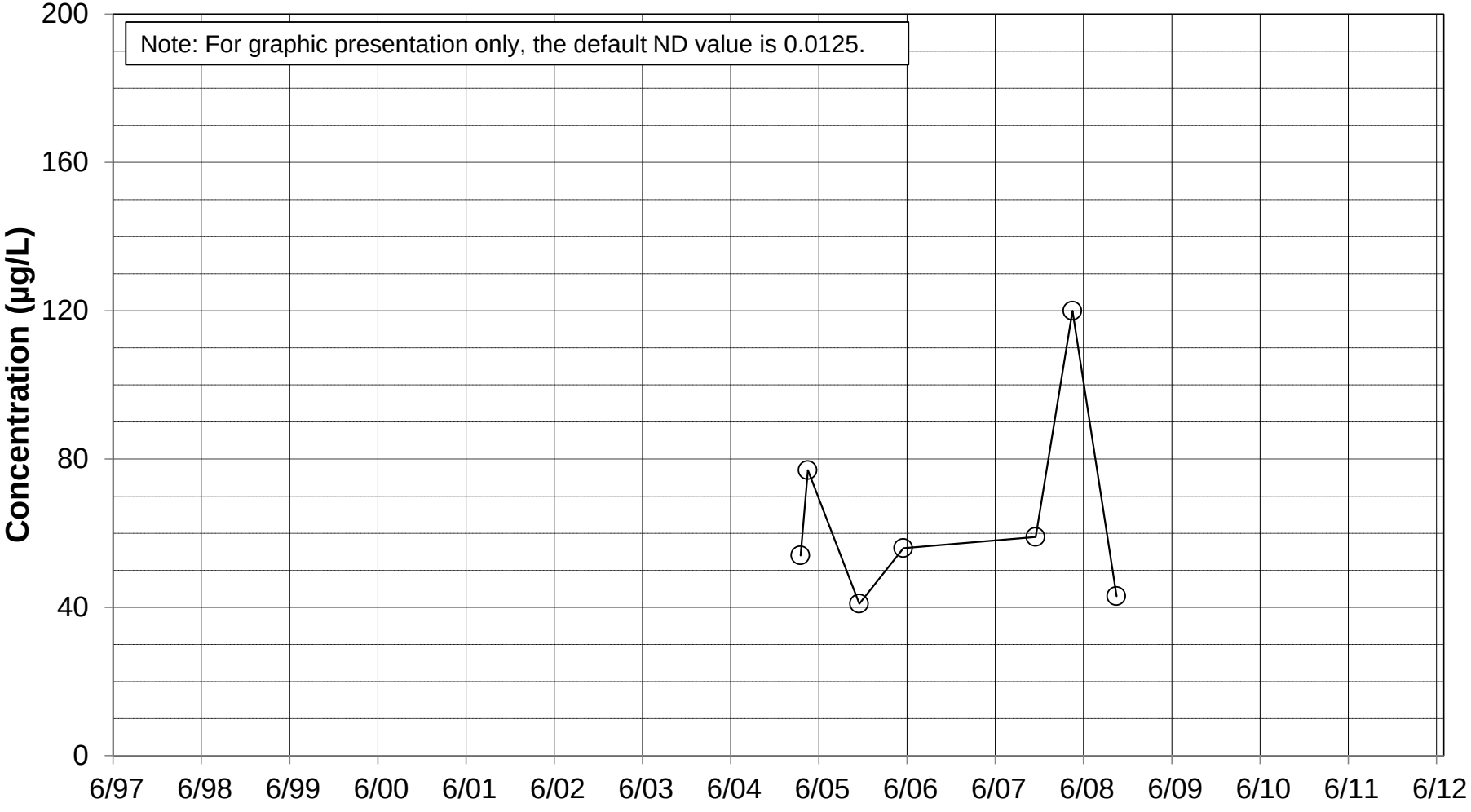
RIMW-8


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
90
80
70
60
50
40
30
20
10
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

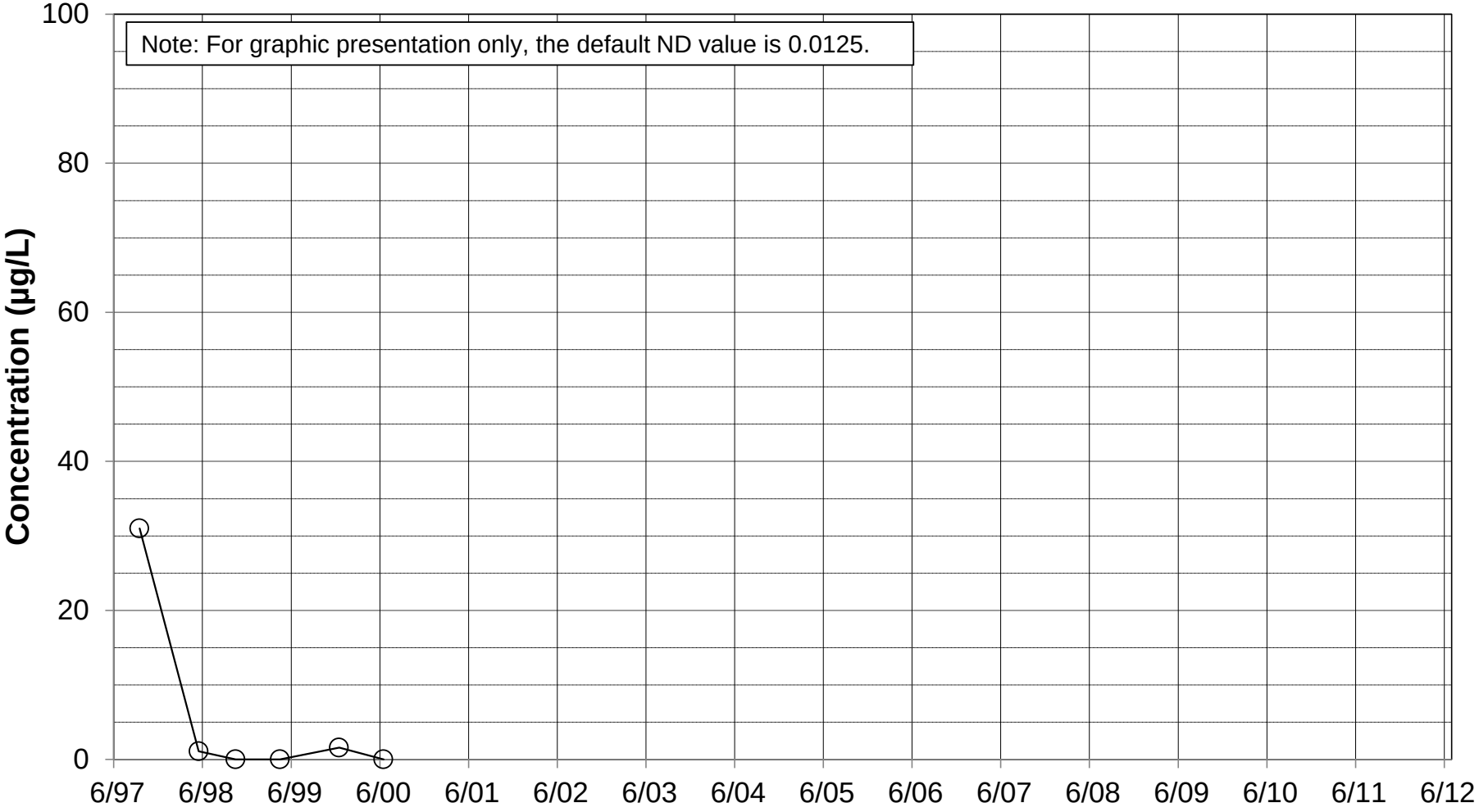
RIMW-9


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

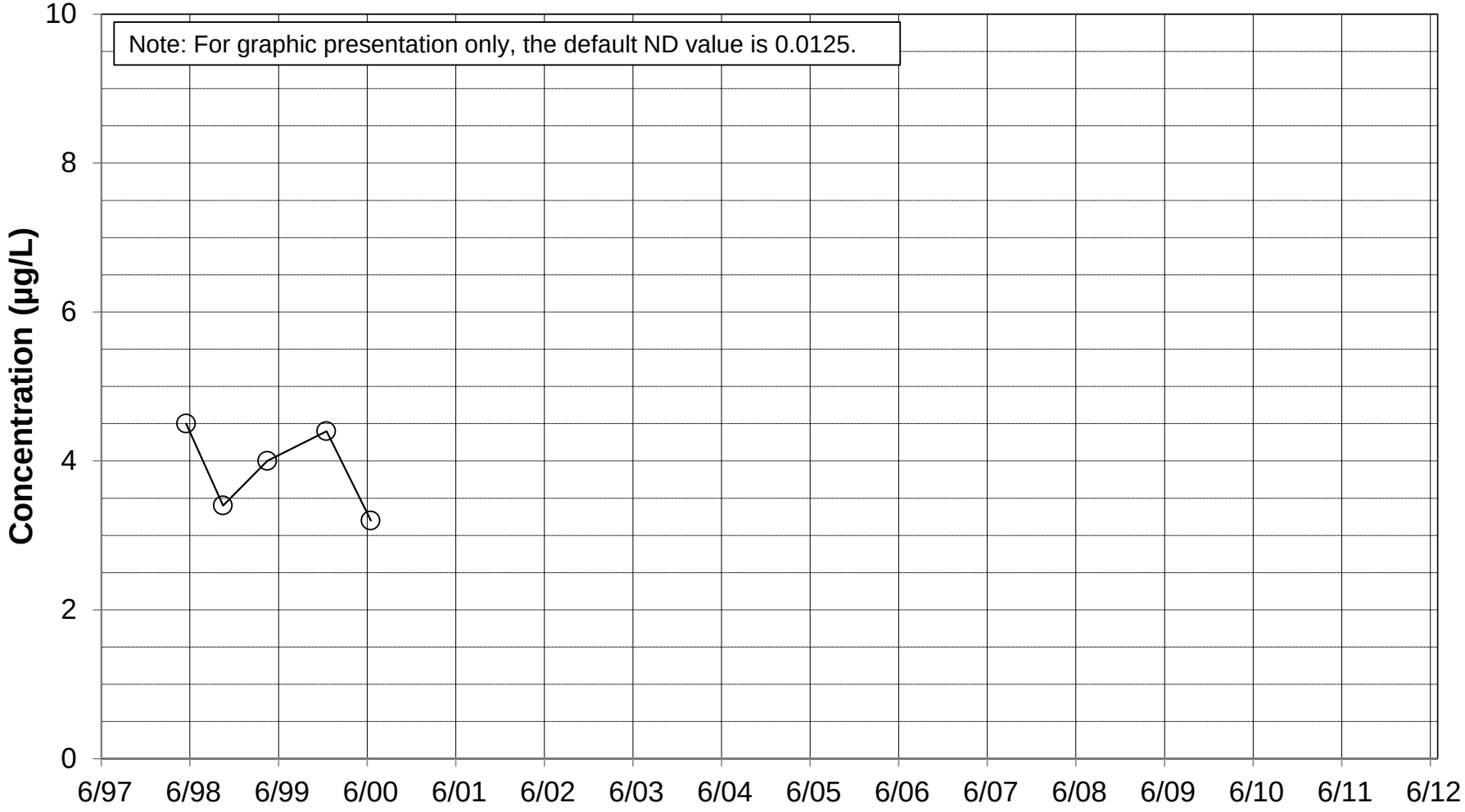
RIPZ-8


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
200
160
120
80
40
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

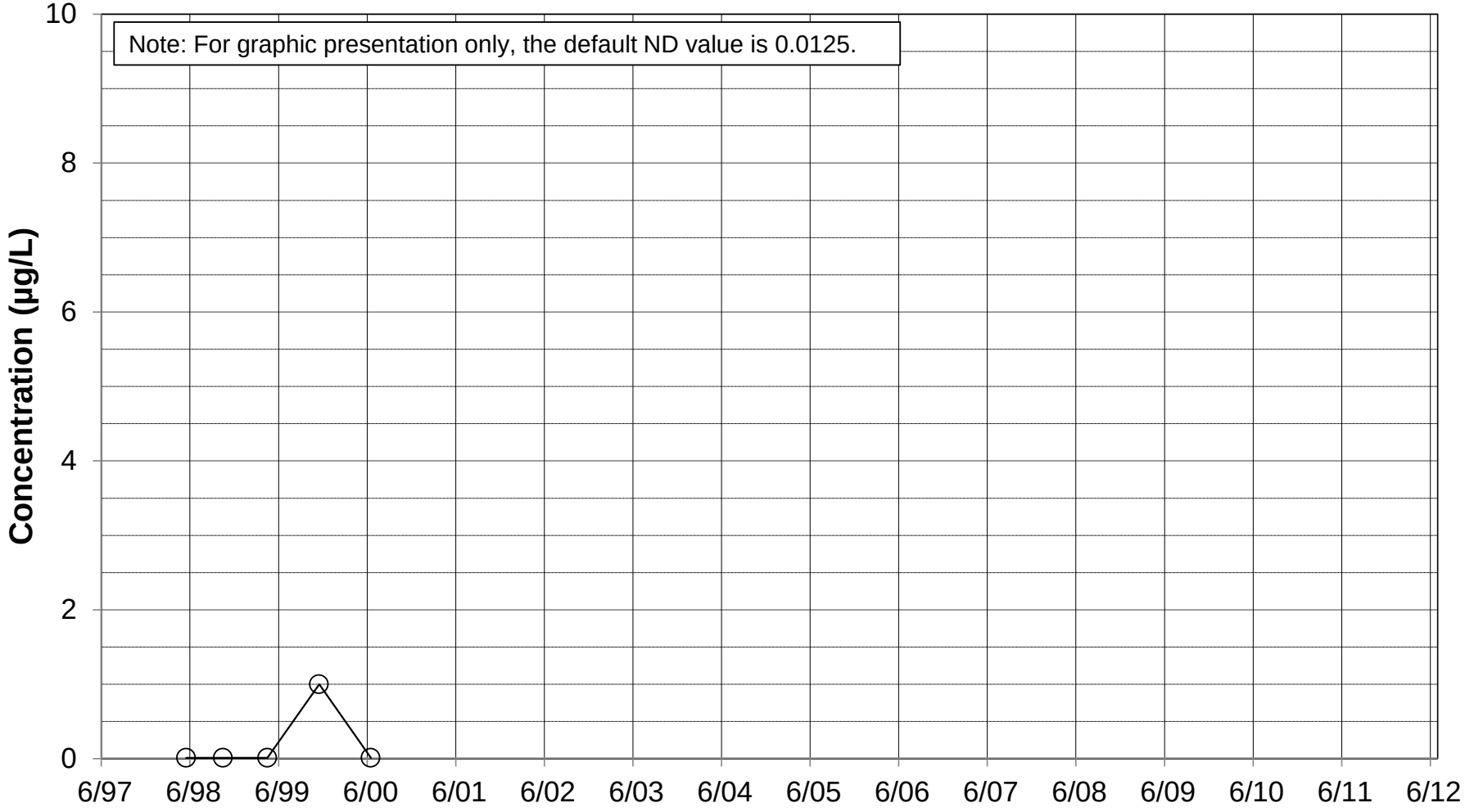
RP-100A


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

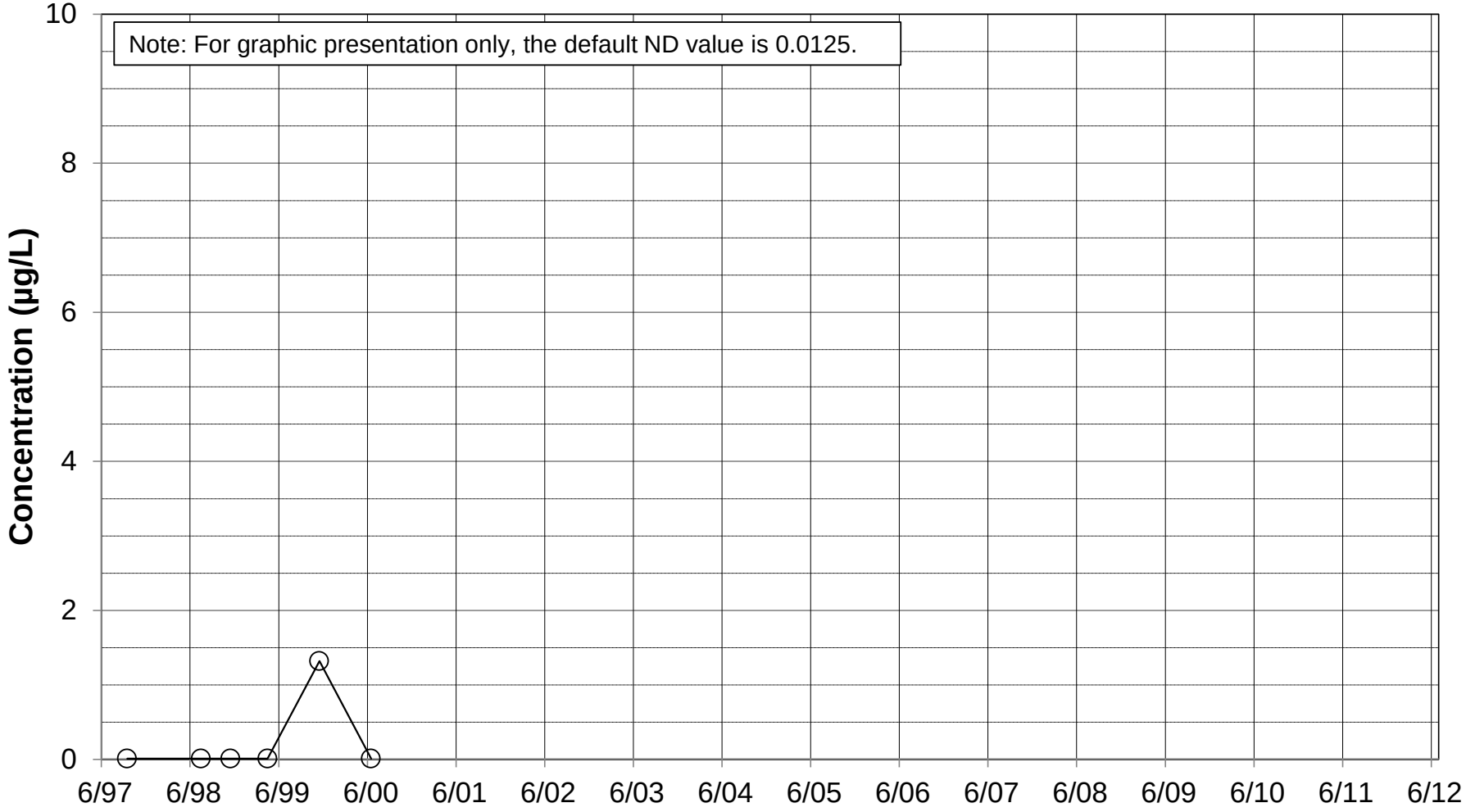
RP-101C


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

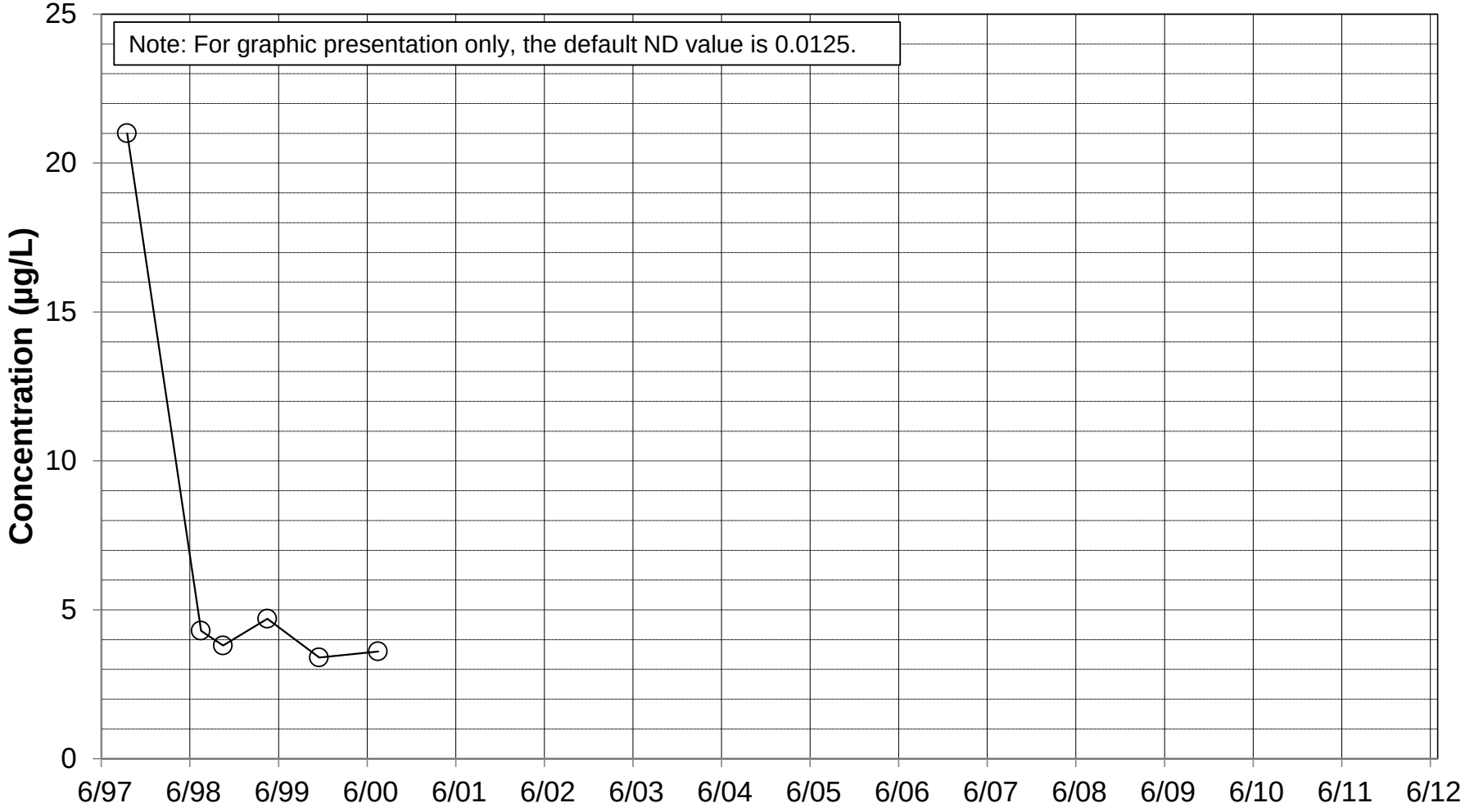
RP-103B


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

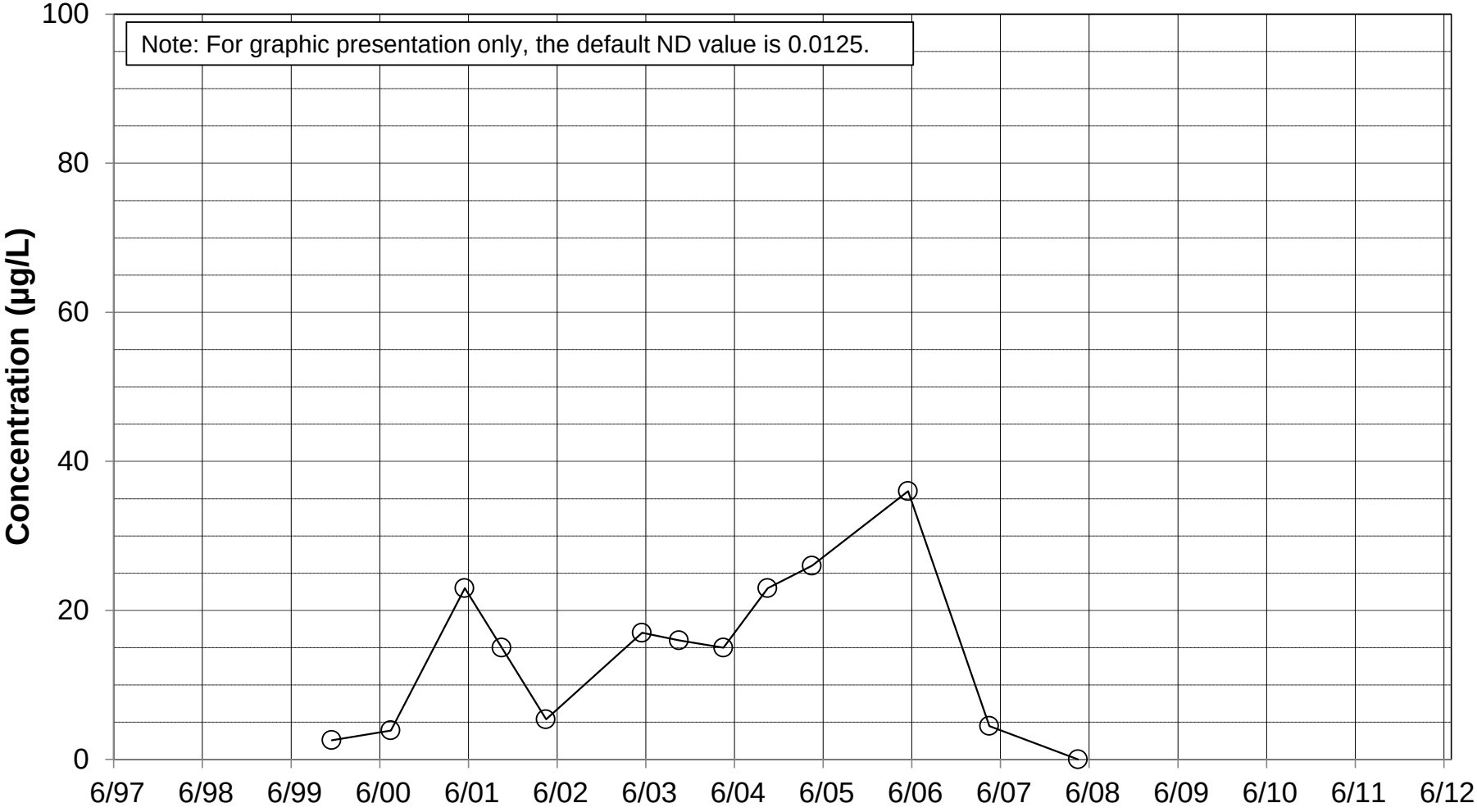
RP-107D


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

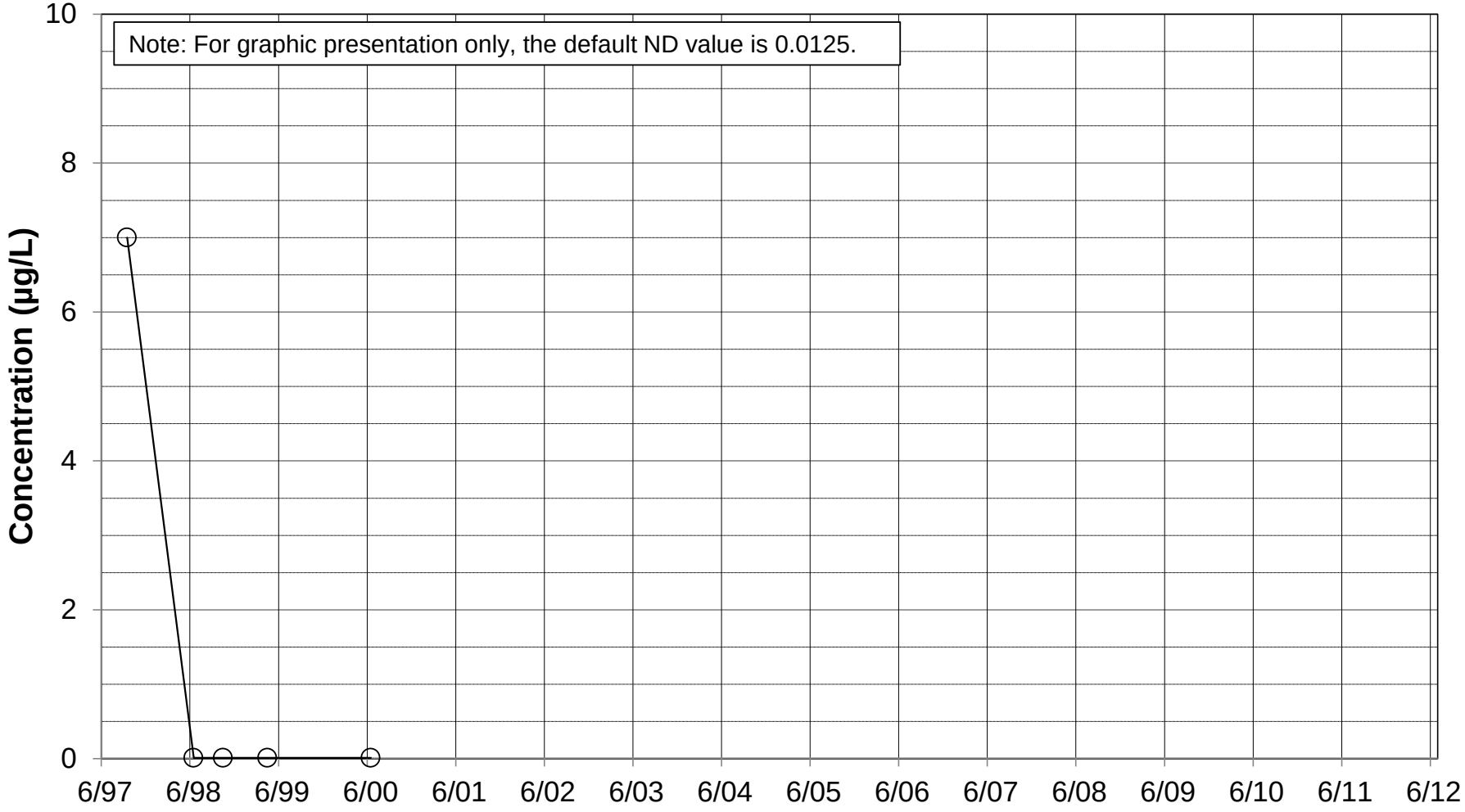
RP-109B


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
25
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

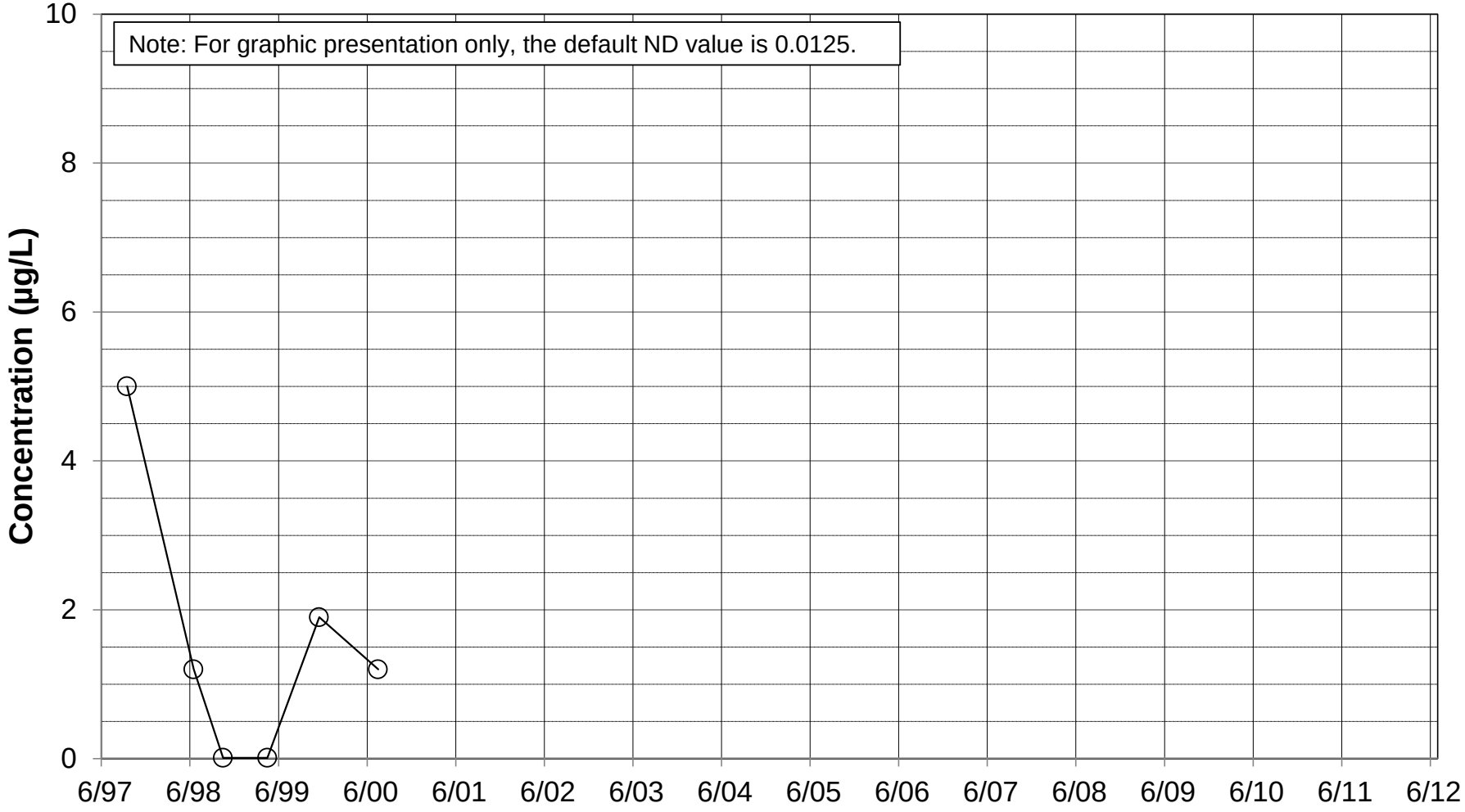
RP-109D


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

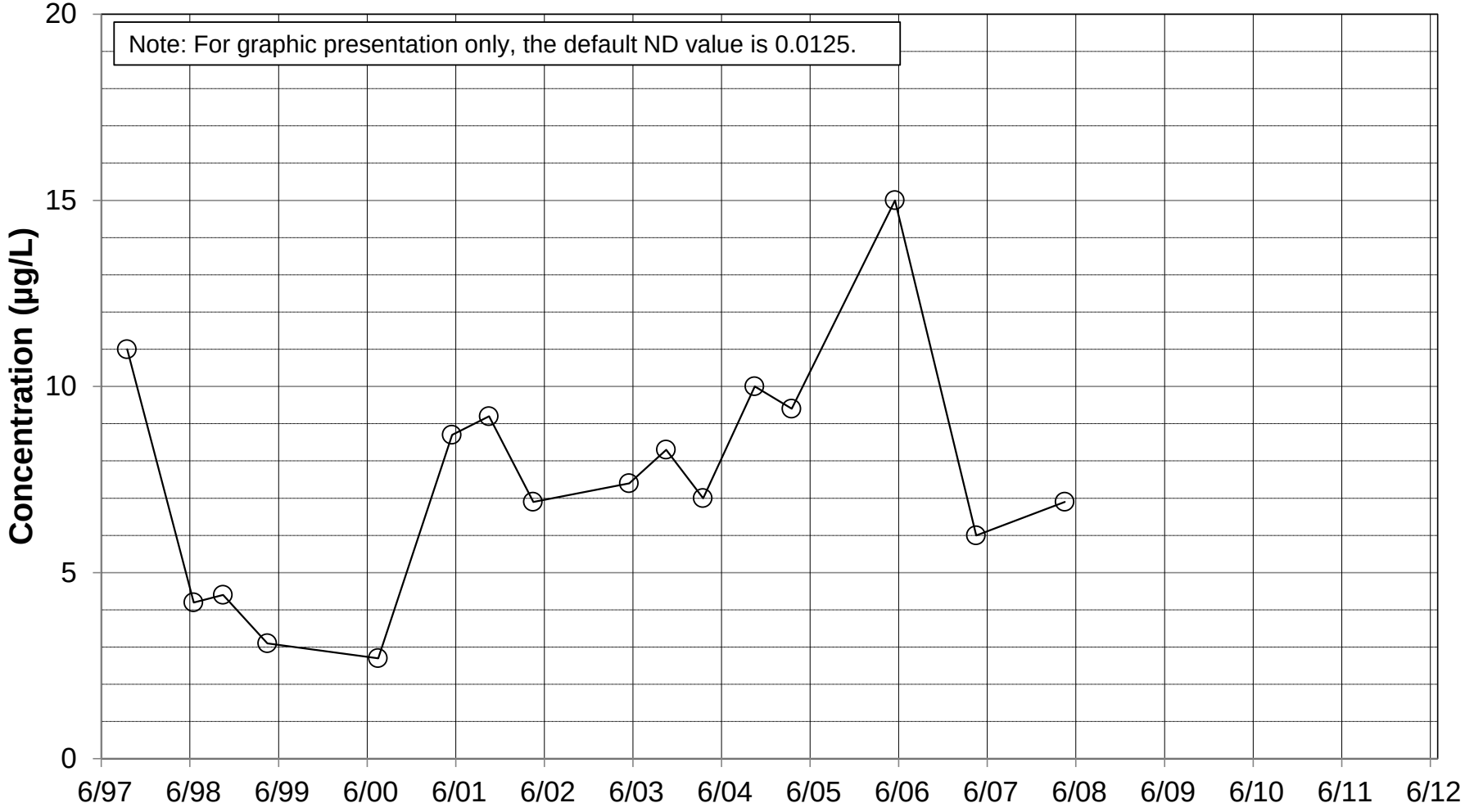
RP-13B


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

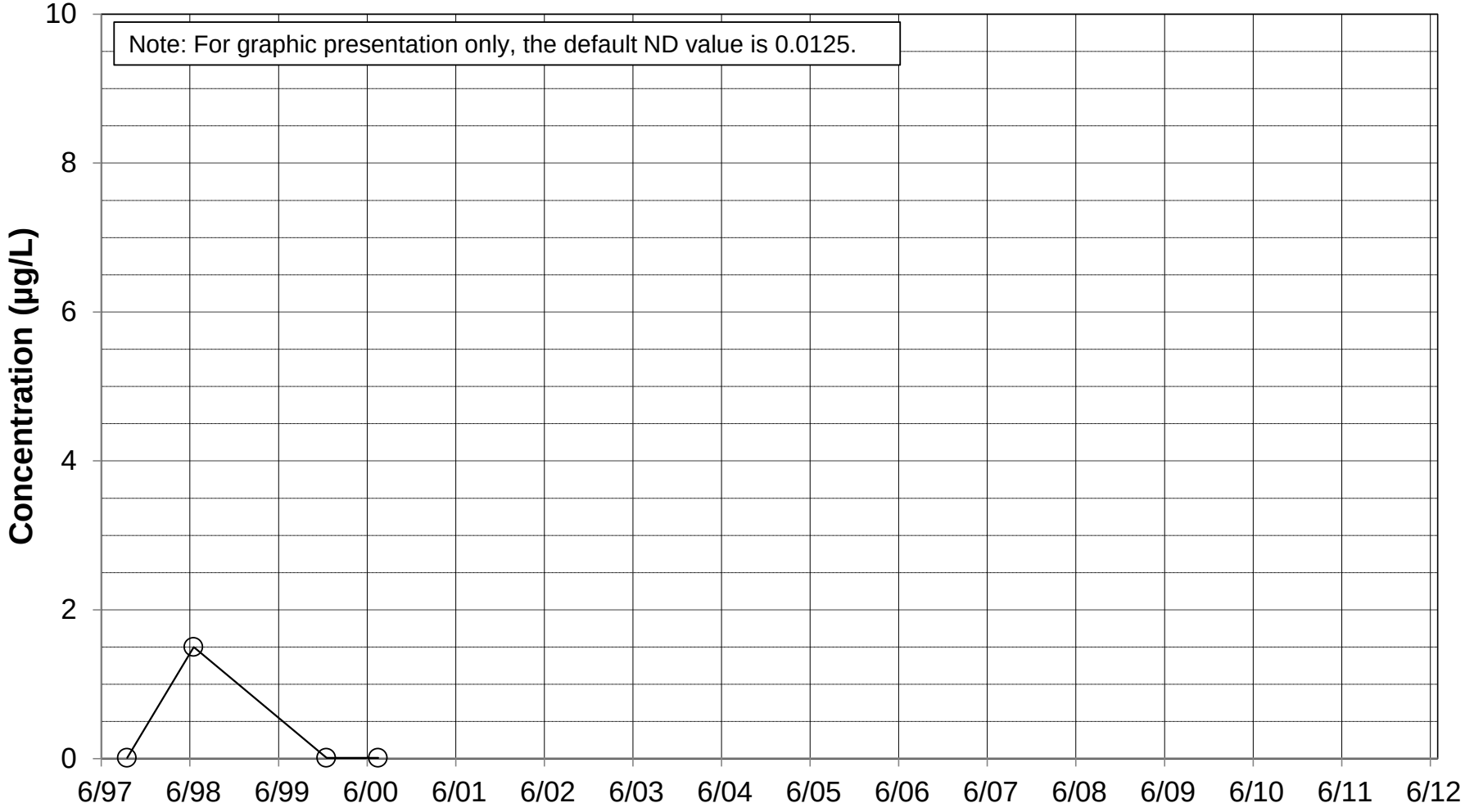
RP-17B


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

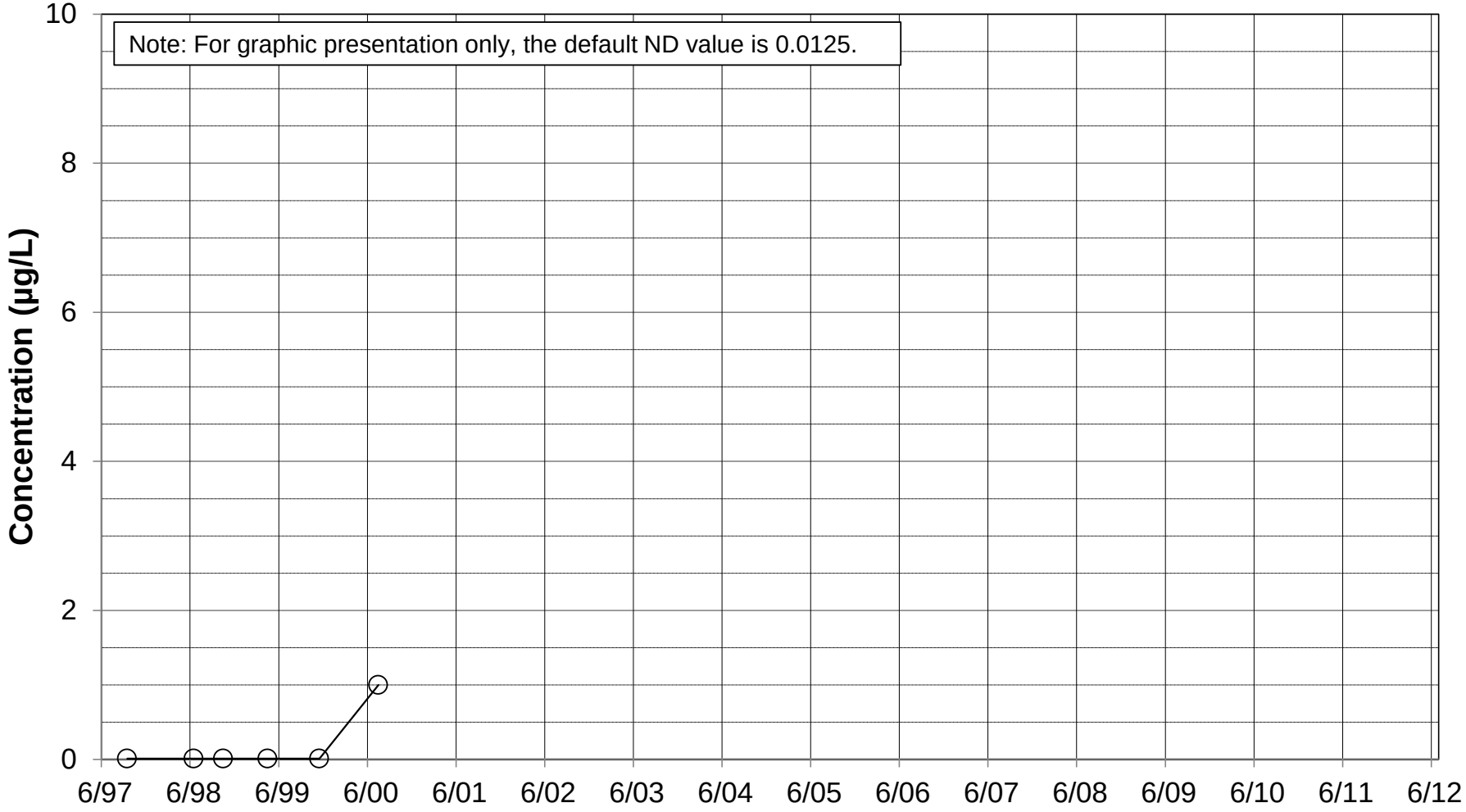
RP-1D


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

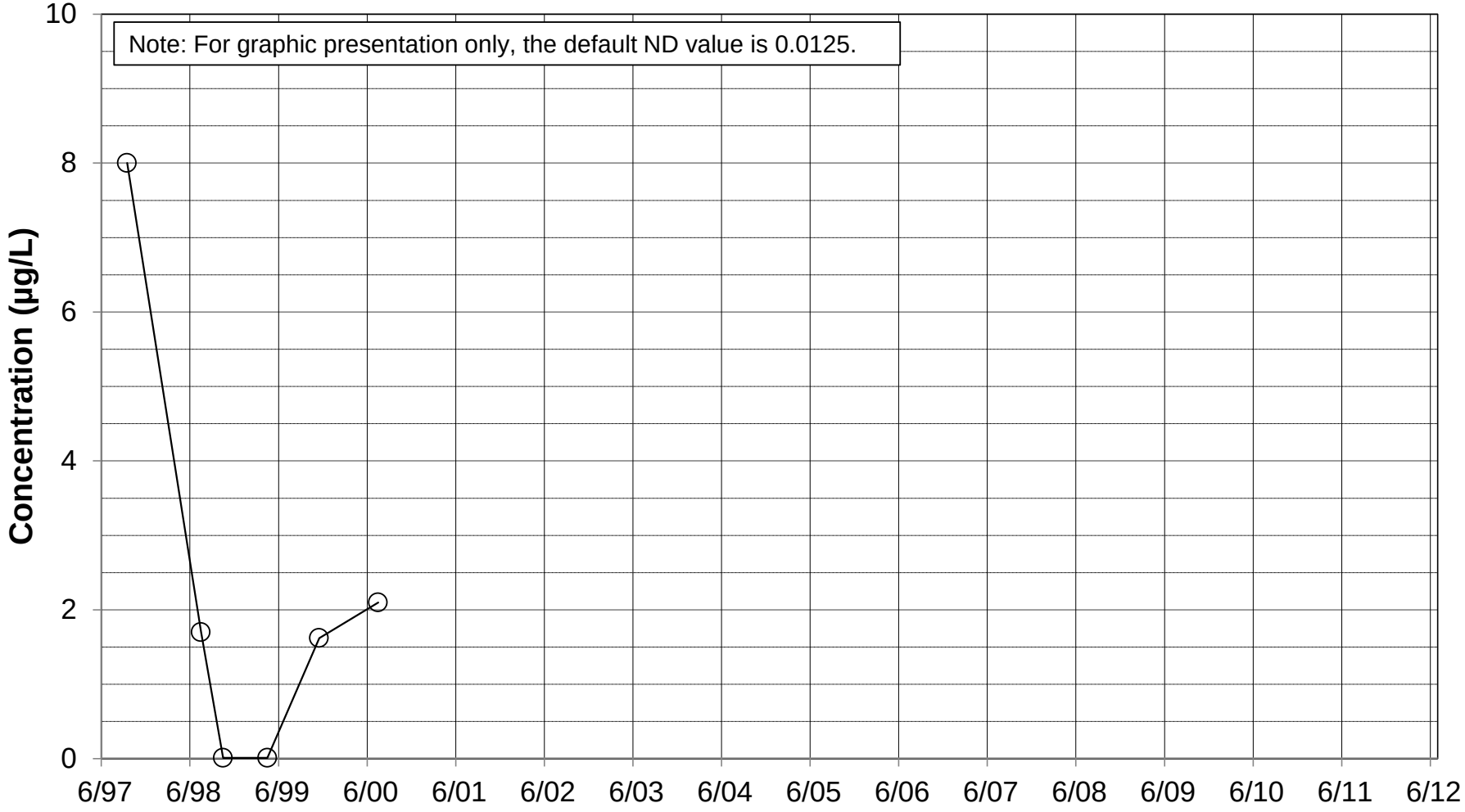
RP-20B


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

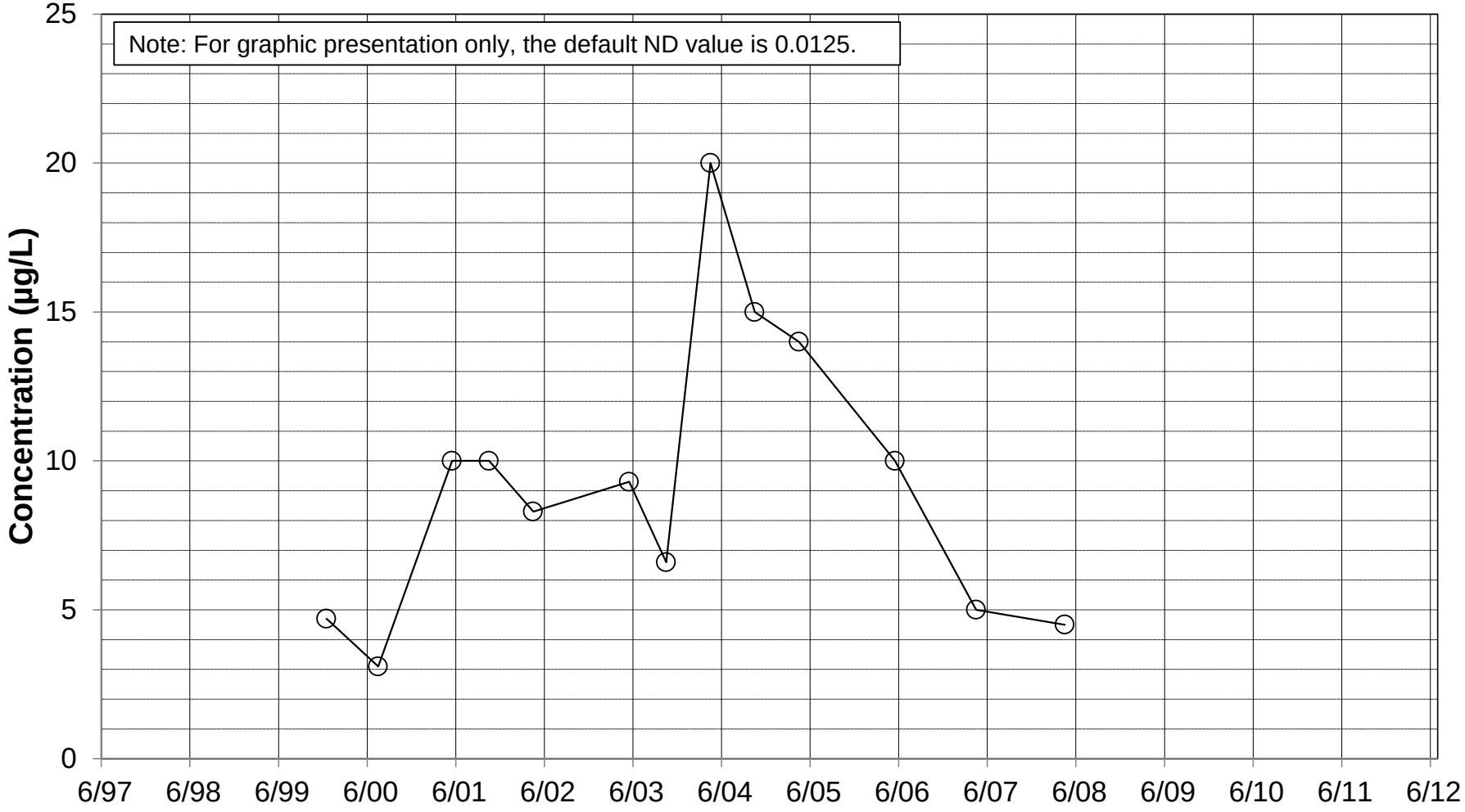
RP-28B


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

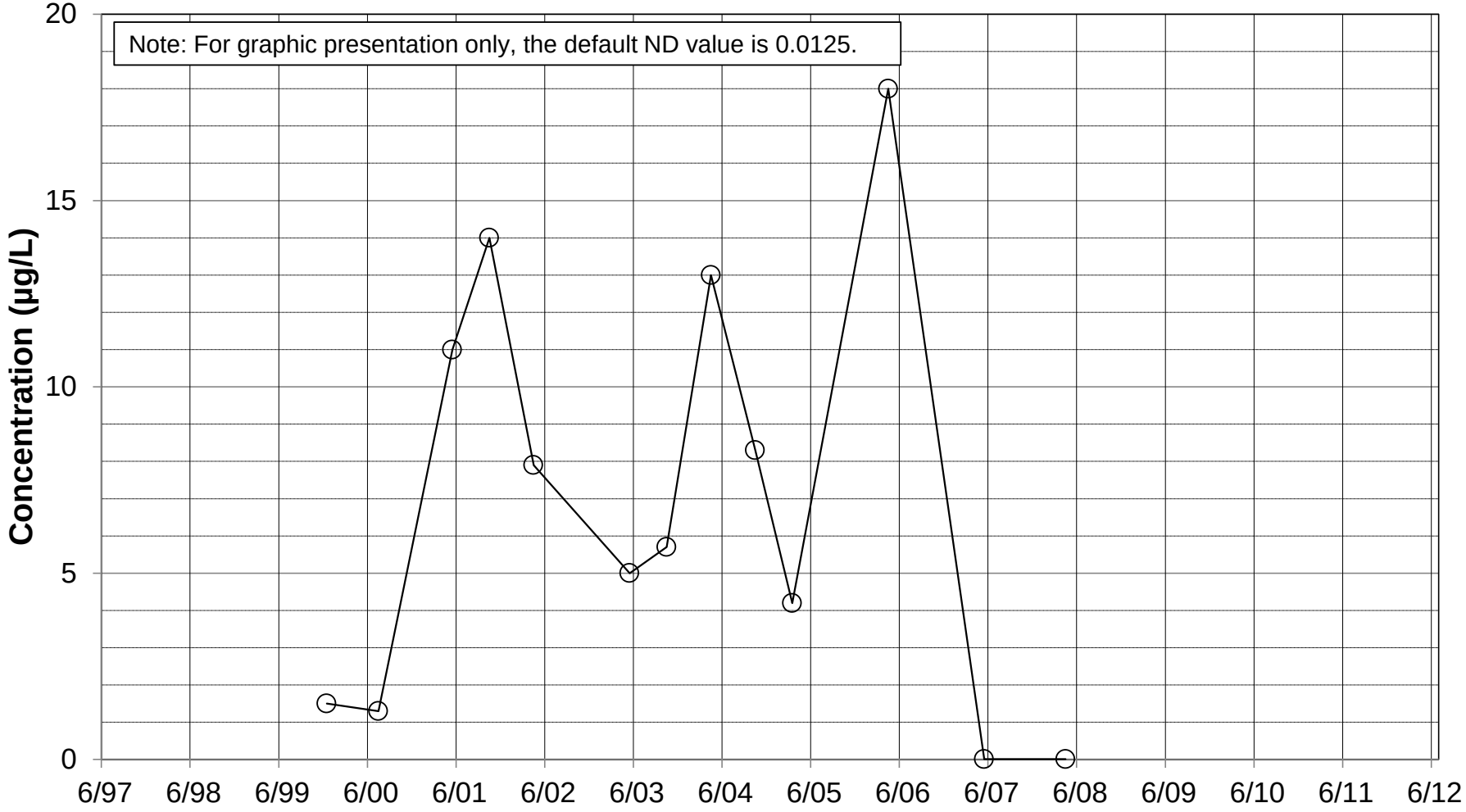
RP-41B


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

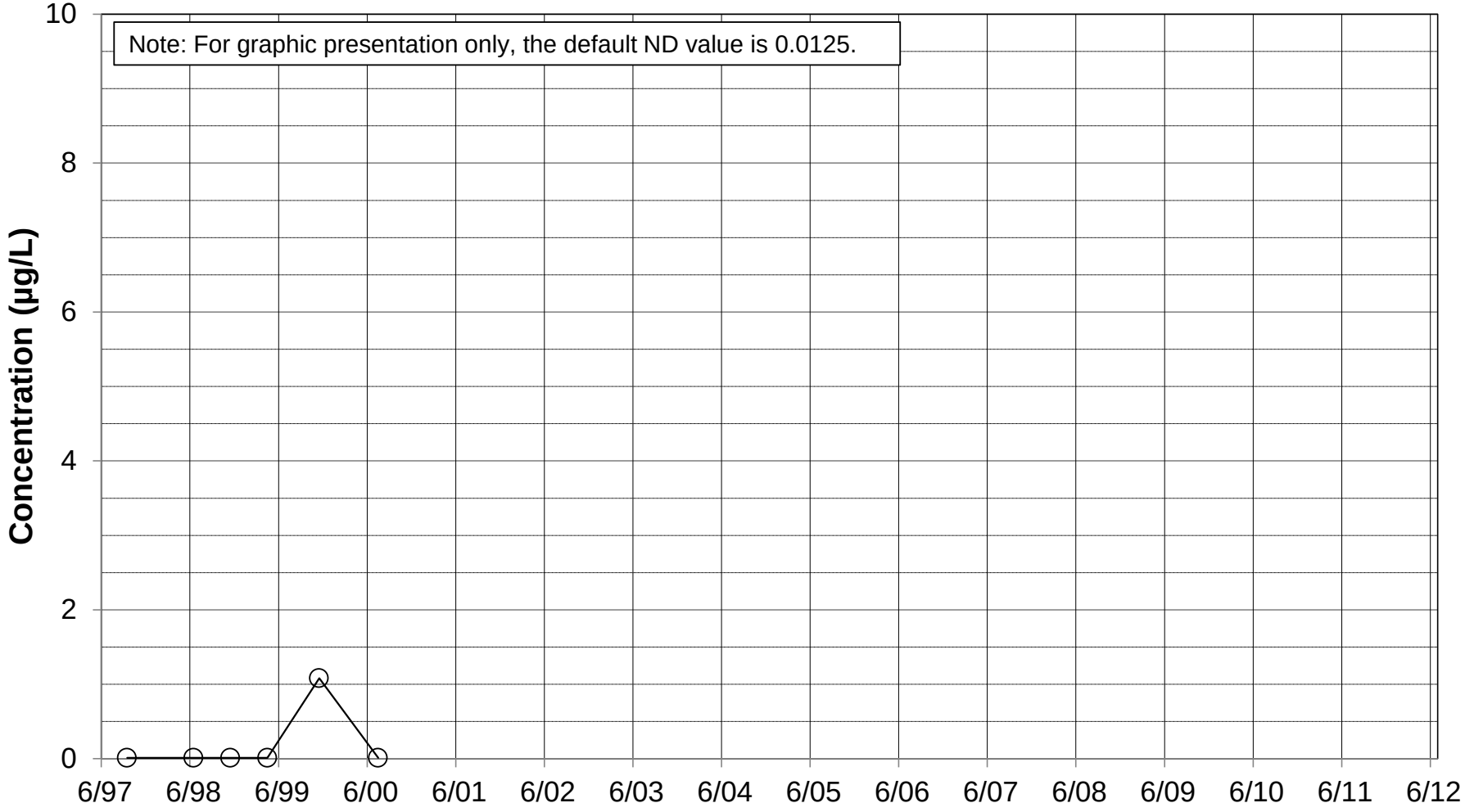
RP-4D


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
25
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

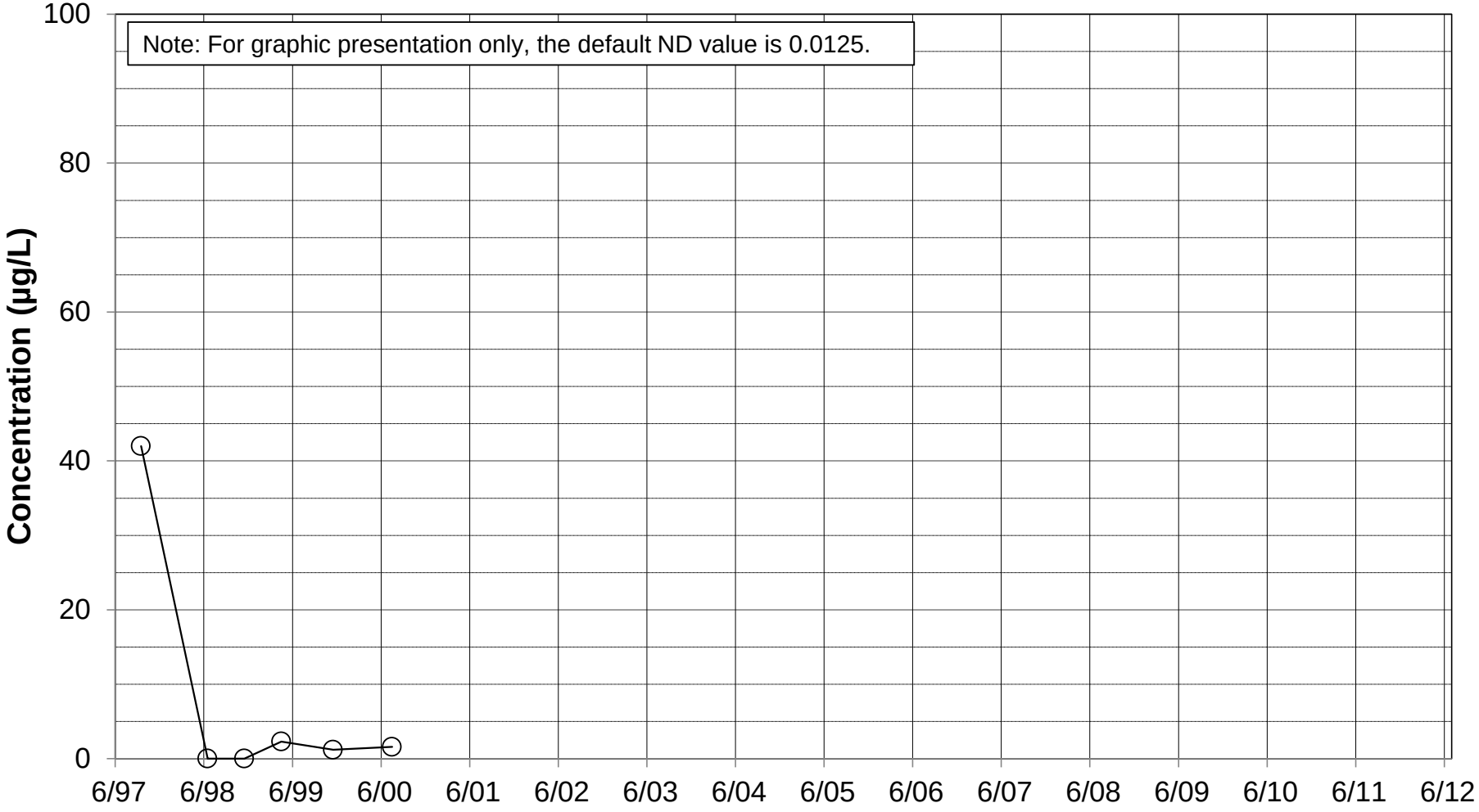
RP-53C


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

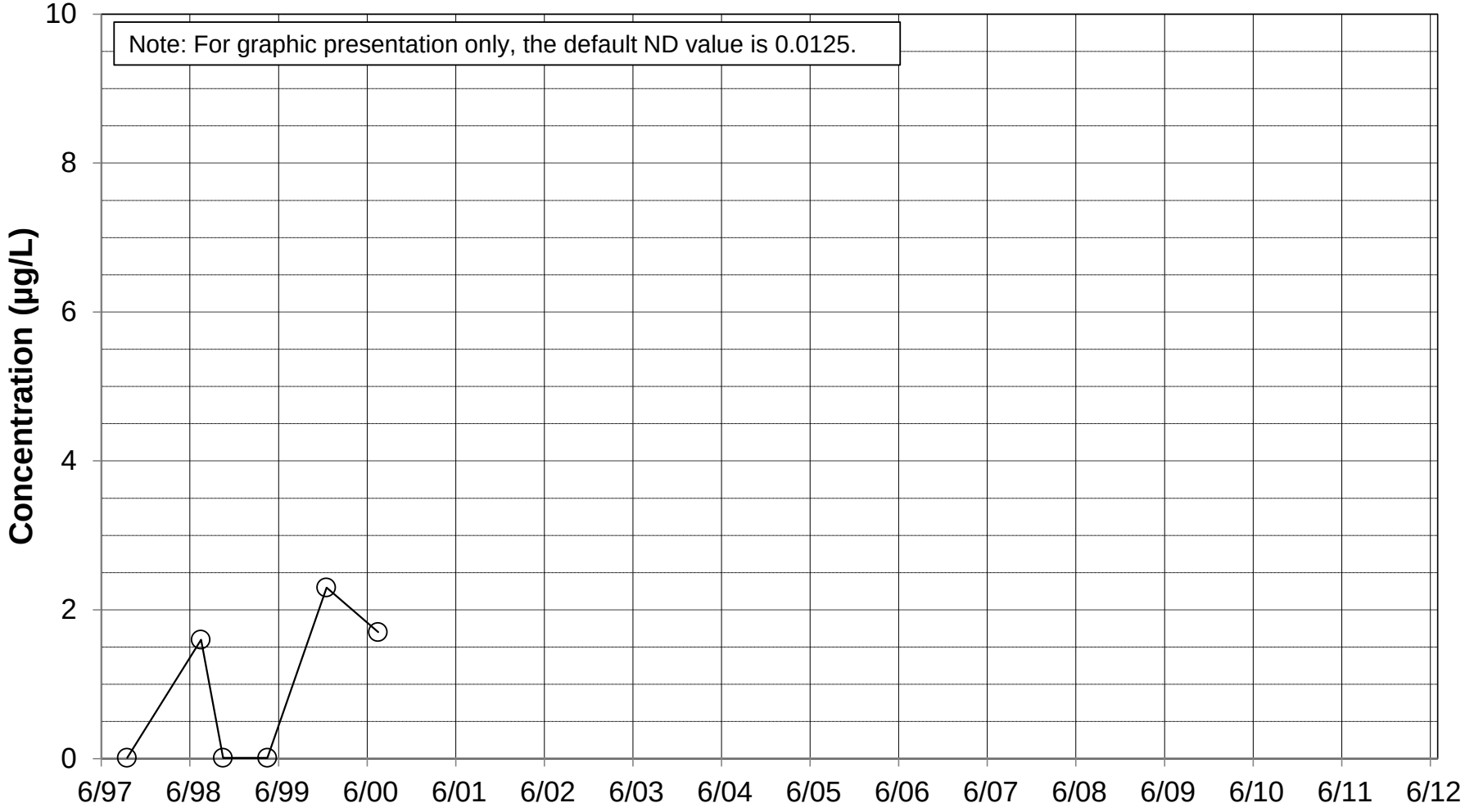
RP-54C


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

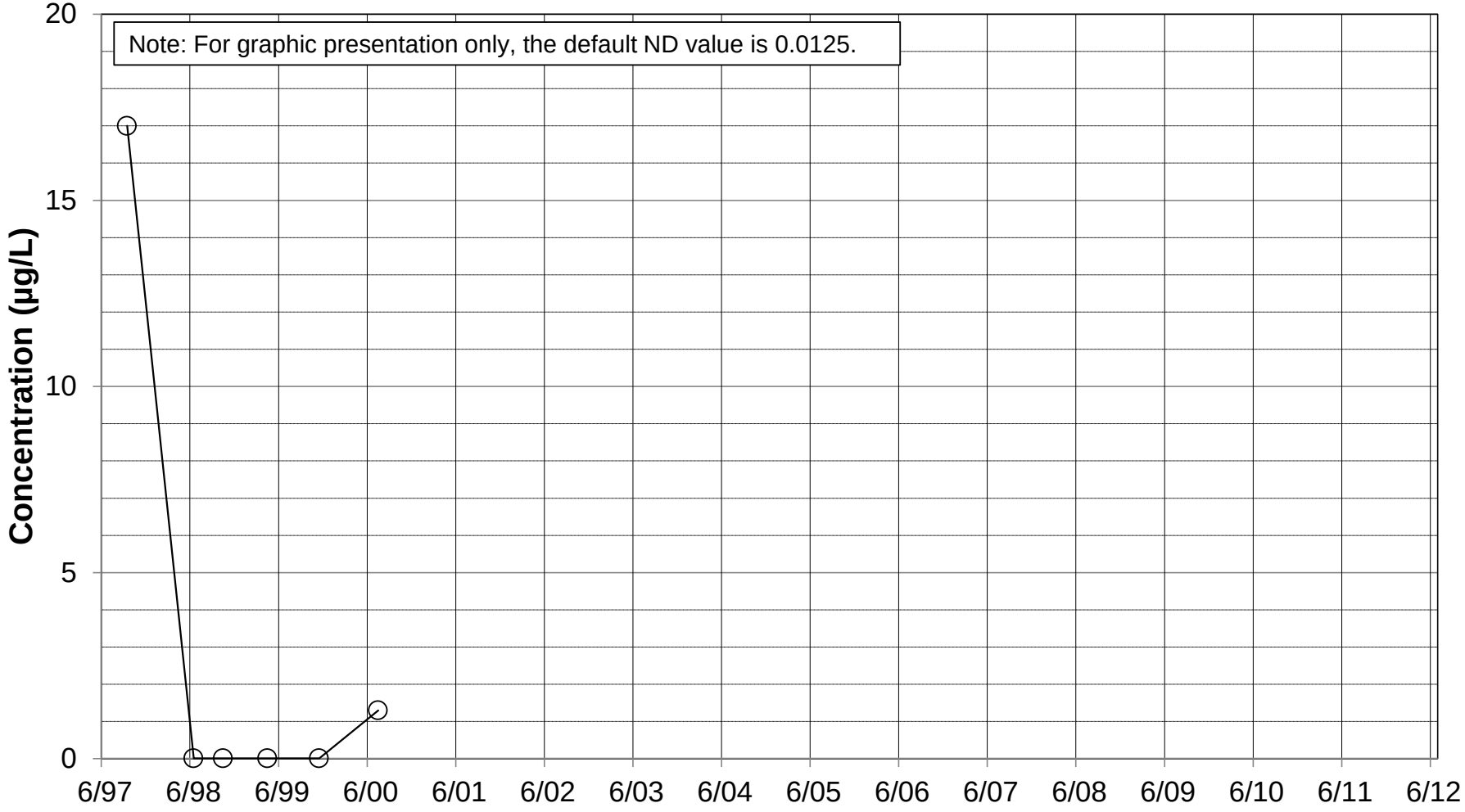
RP-55C-2


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

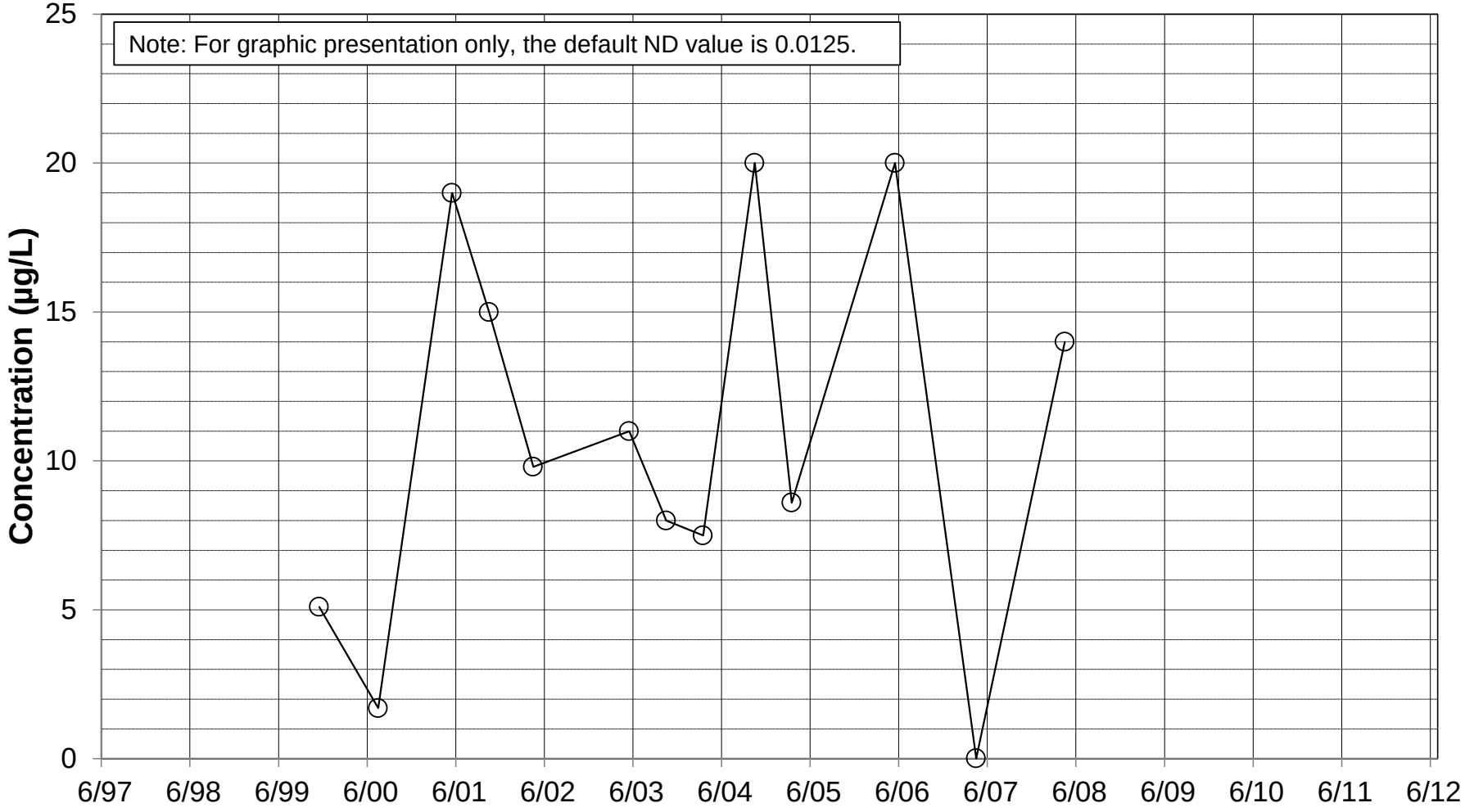
RP-59B


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

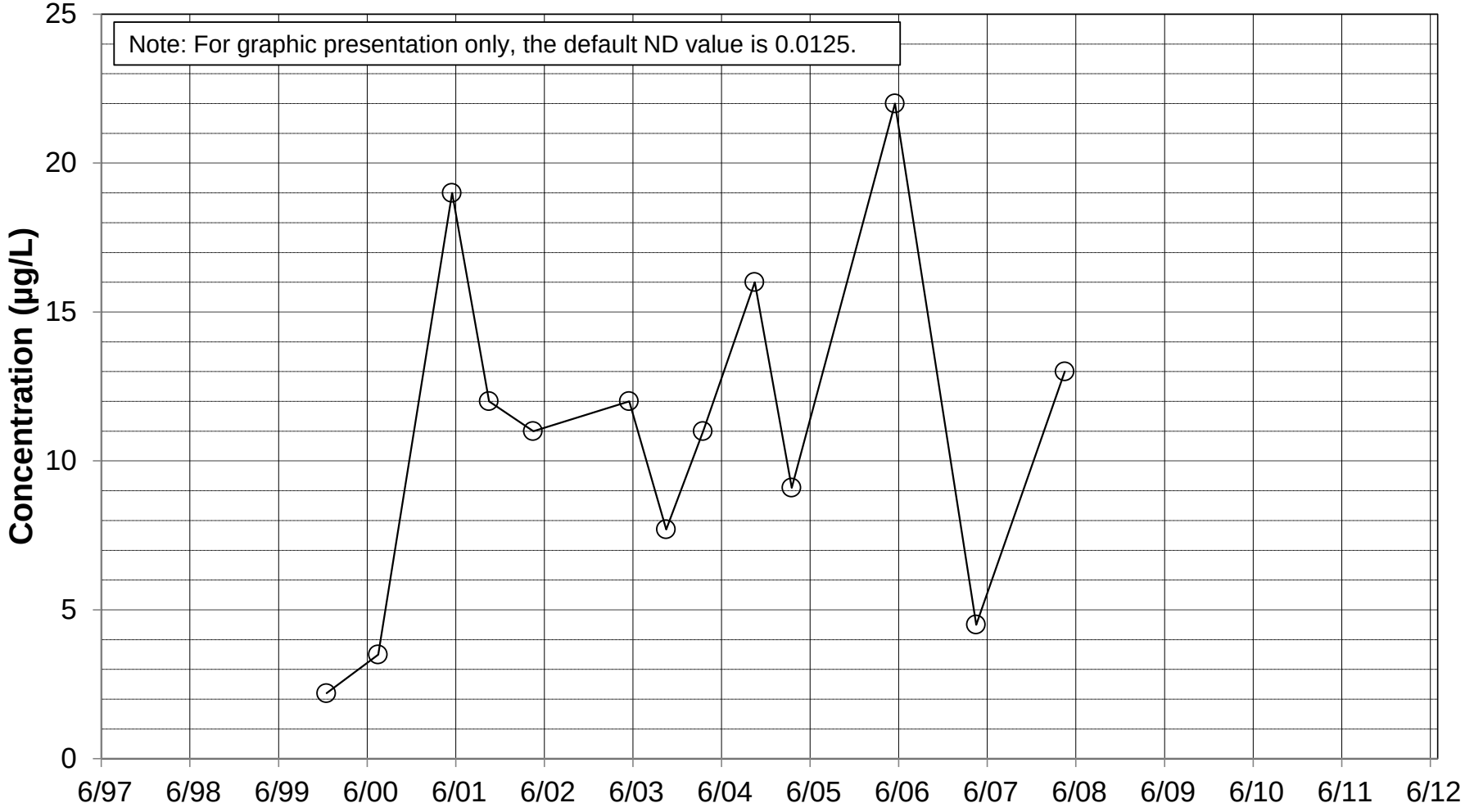
RP-61B


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

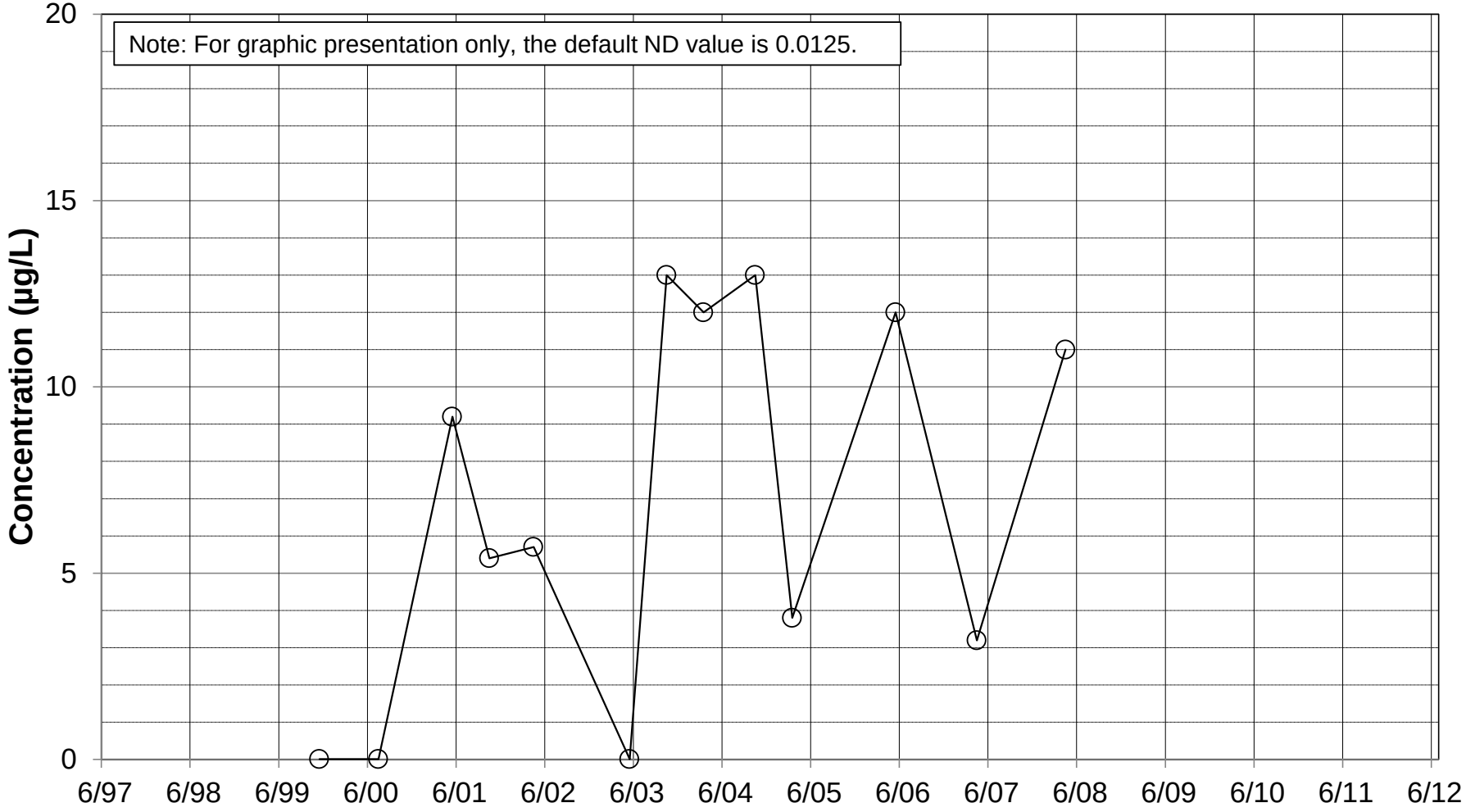
RP-62B-1


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
25
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

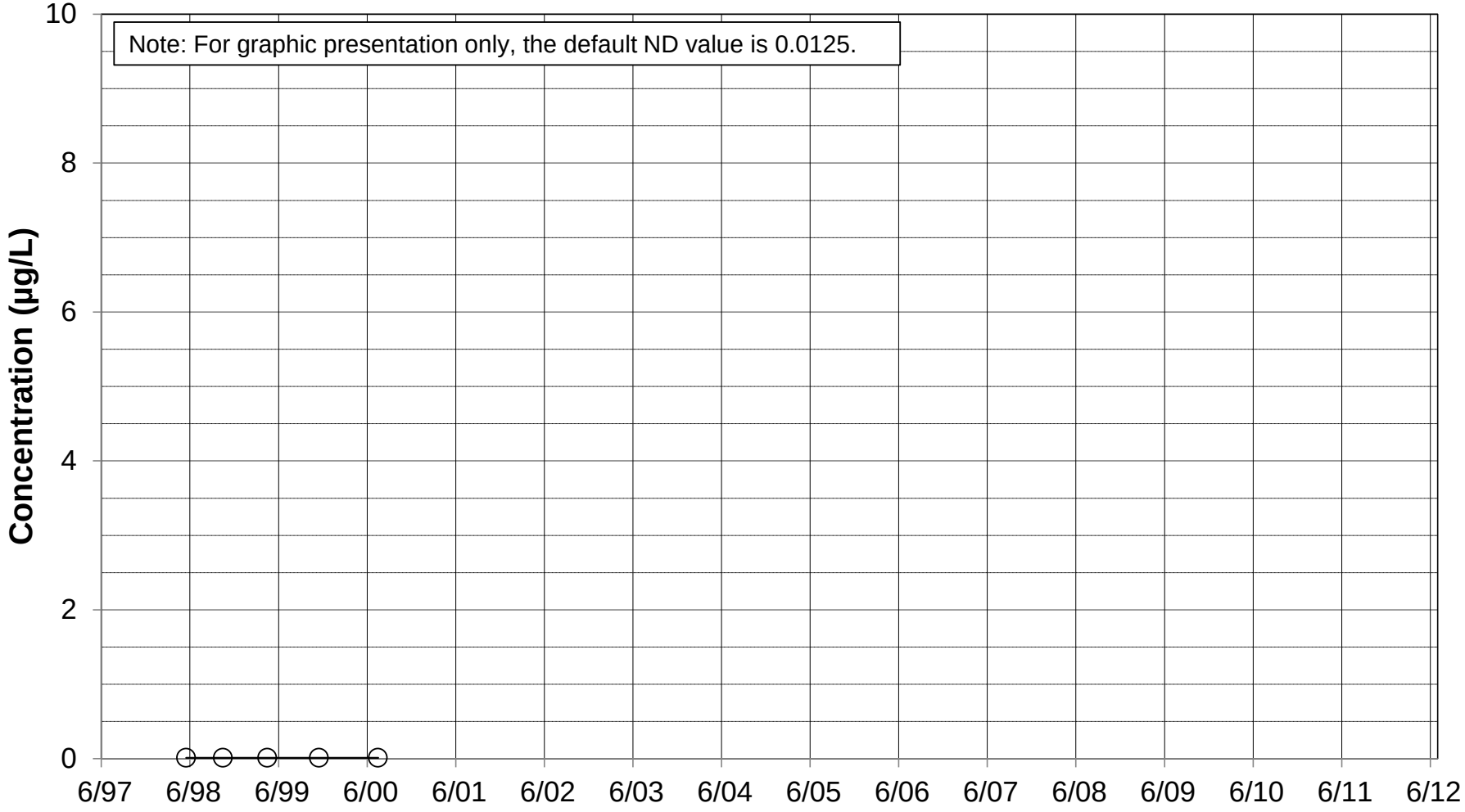
RP-62D


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
25
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

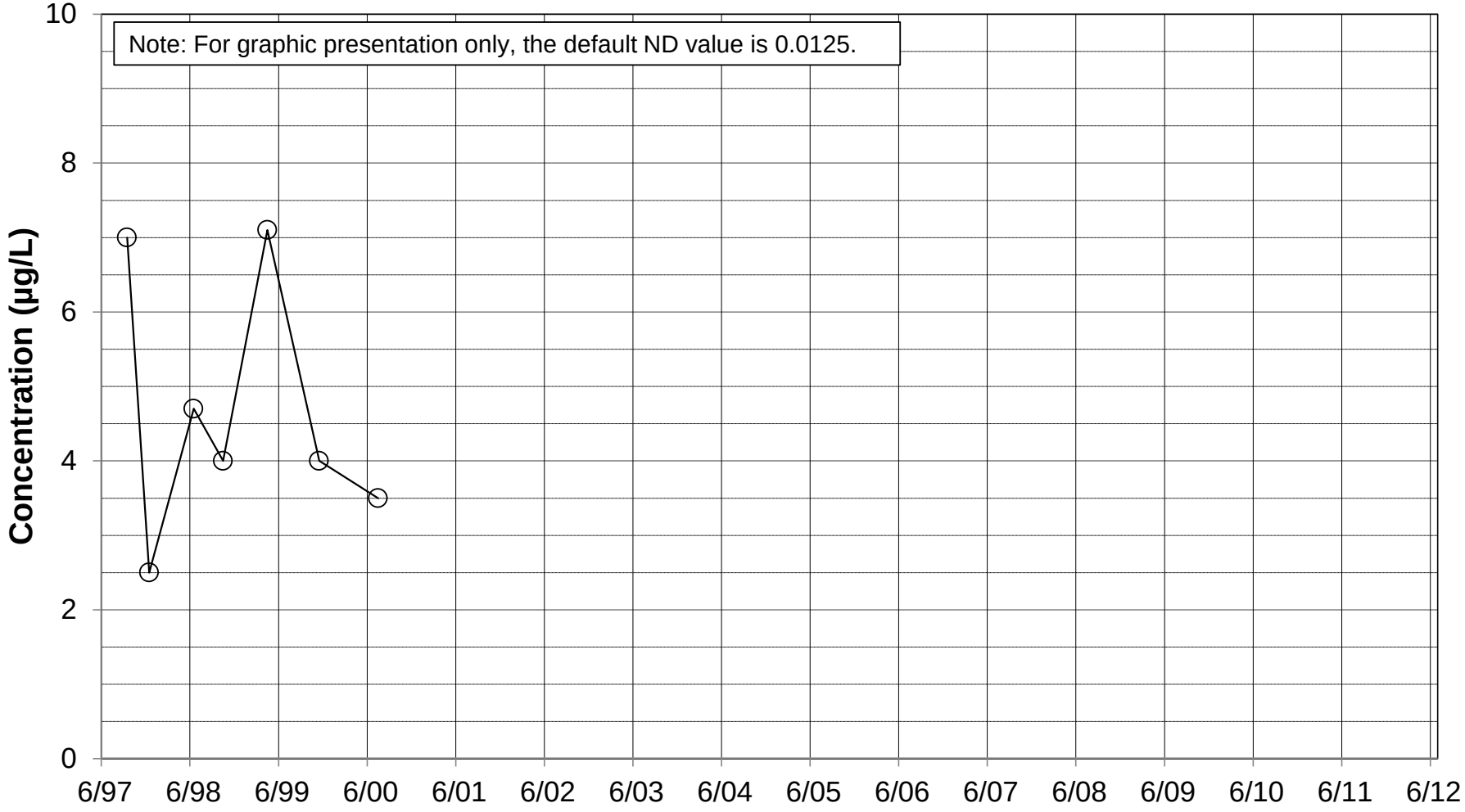
RP-63C


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

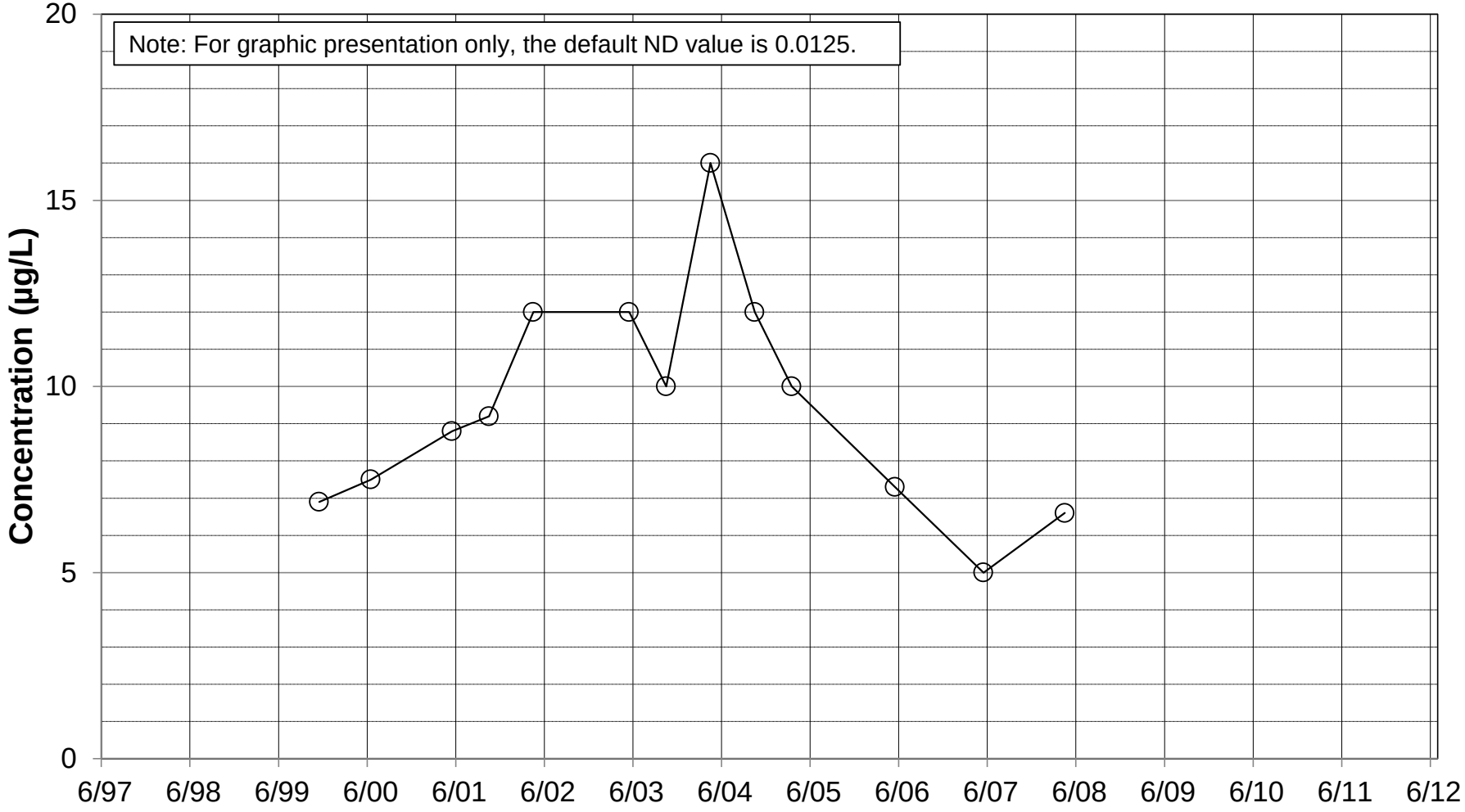
RP-65B


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

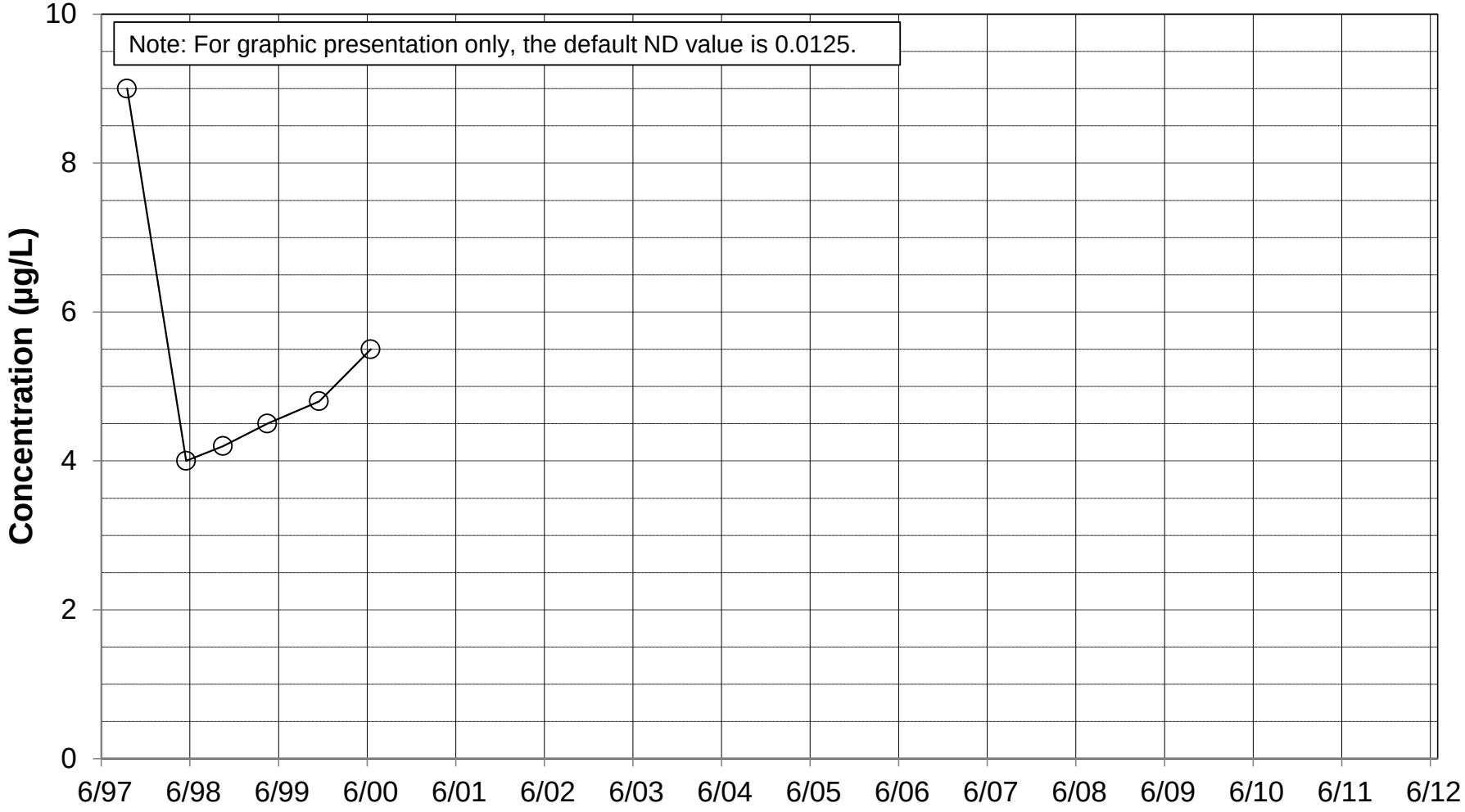
RP-72A


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

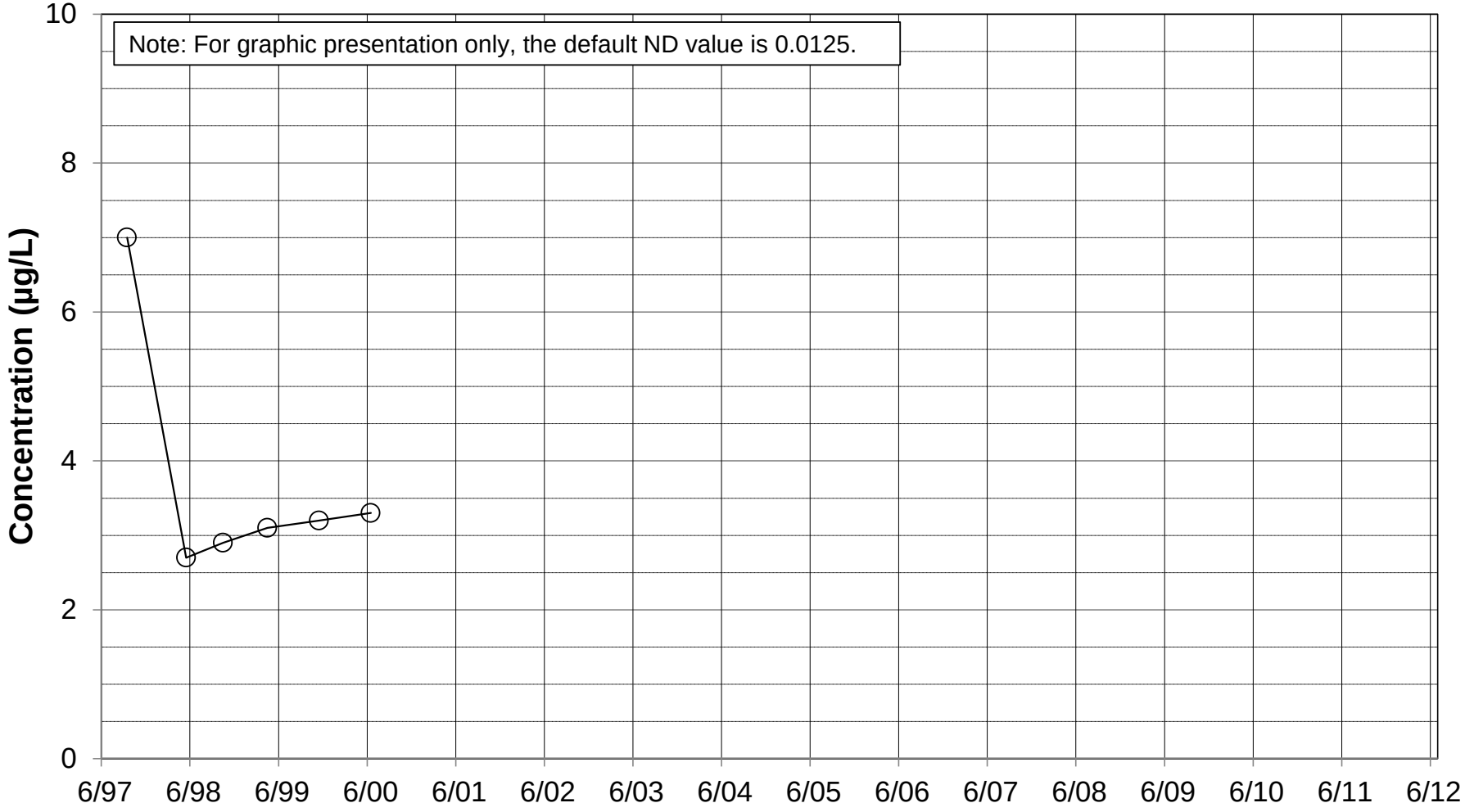
RP-72D


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

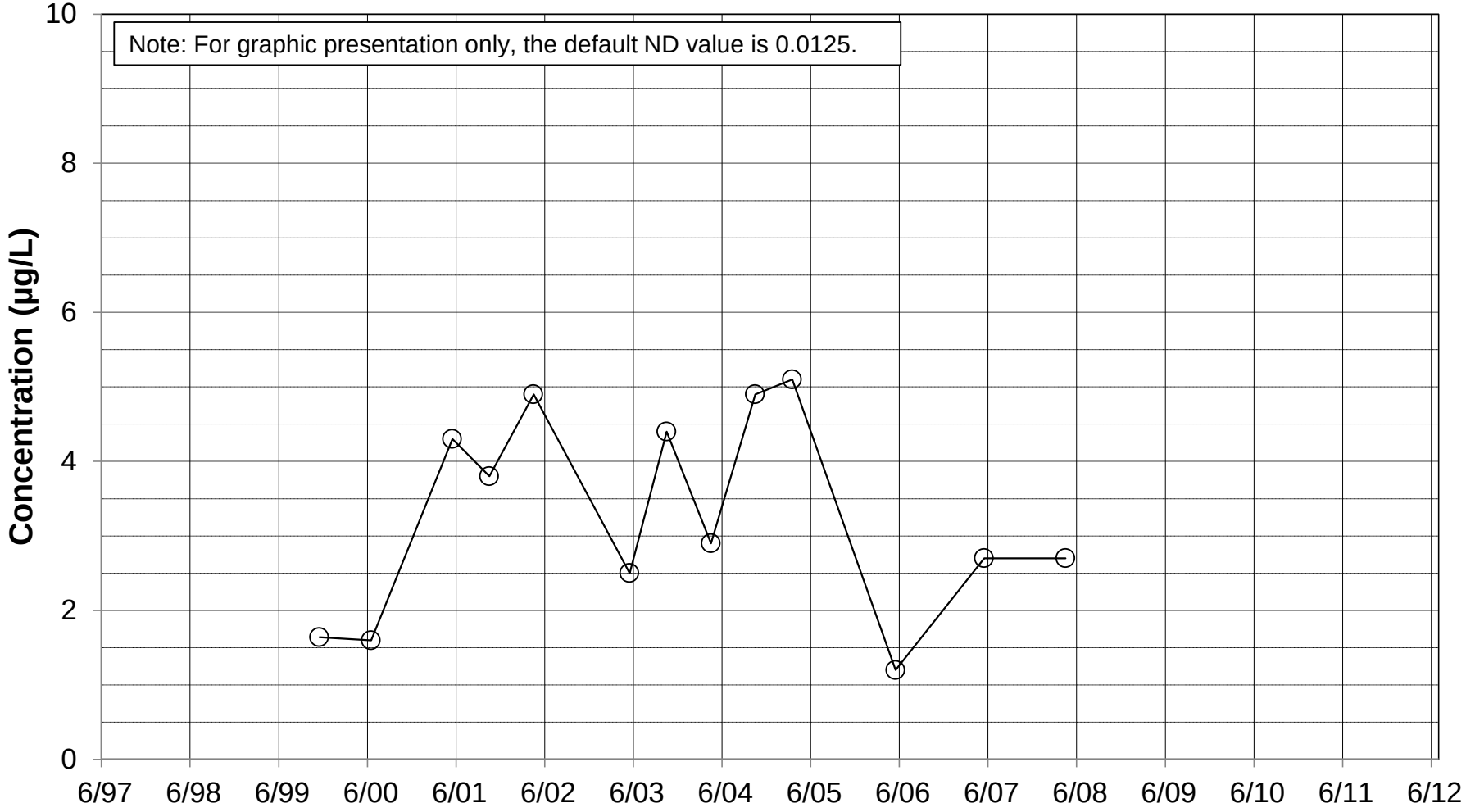
RP-75A


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

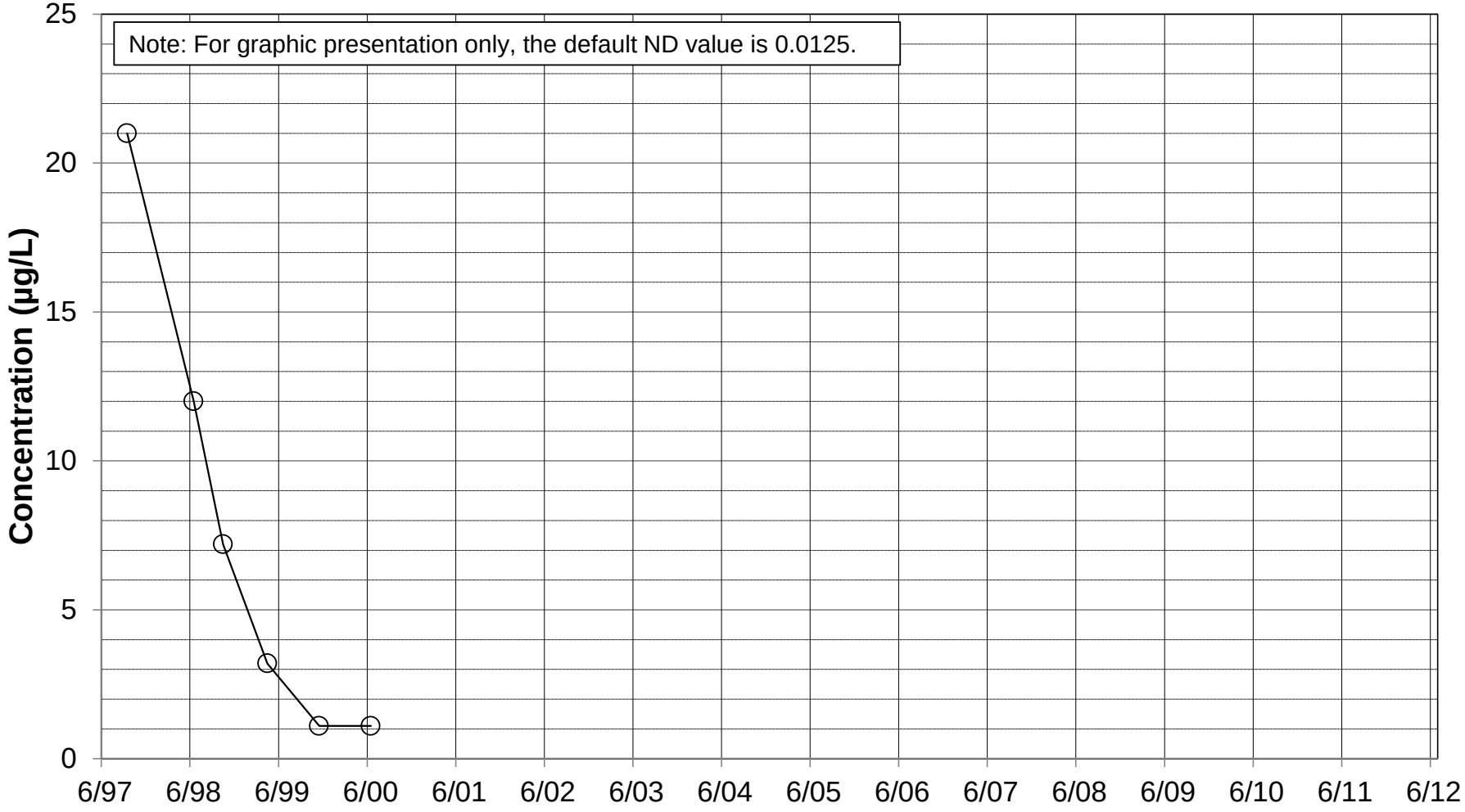
RP-75B


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

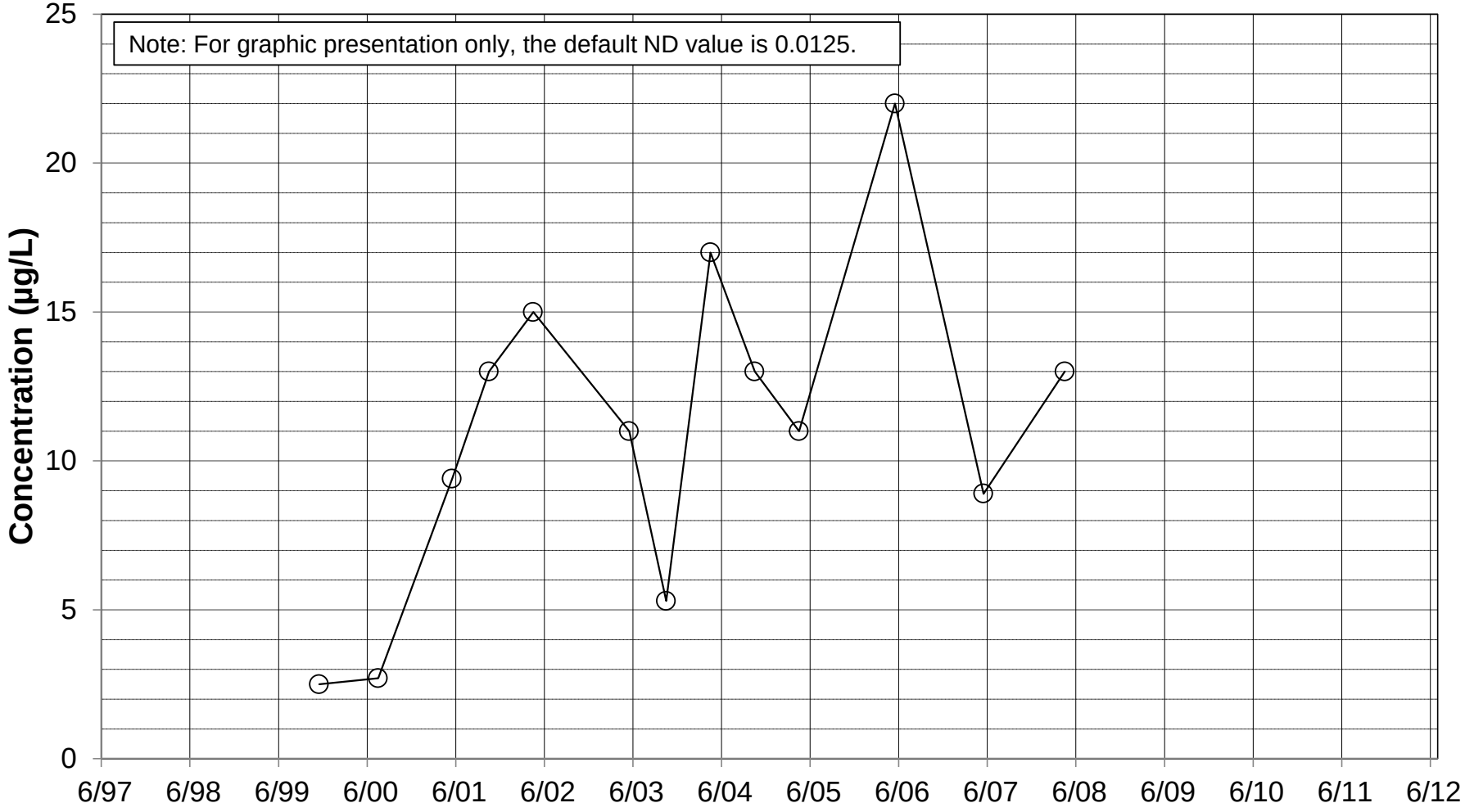
RP-75C


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

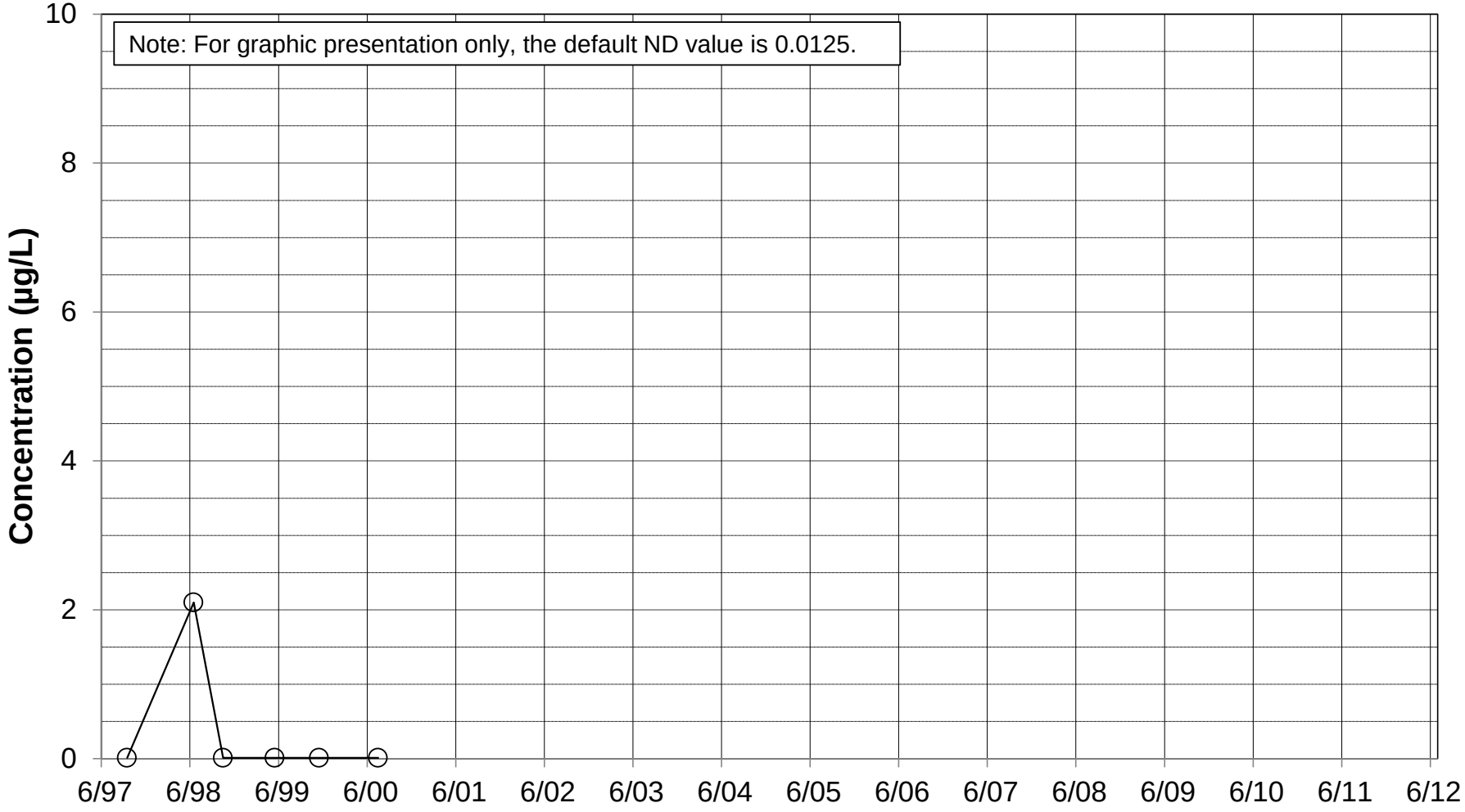
RP-76A


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
25
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

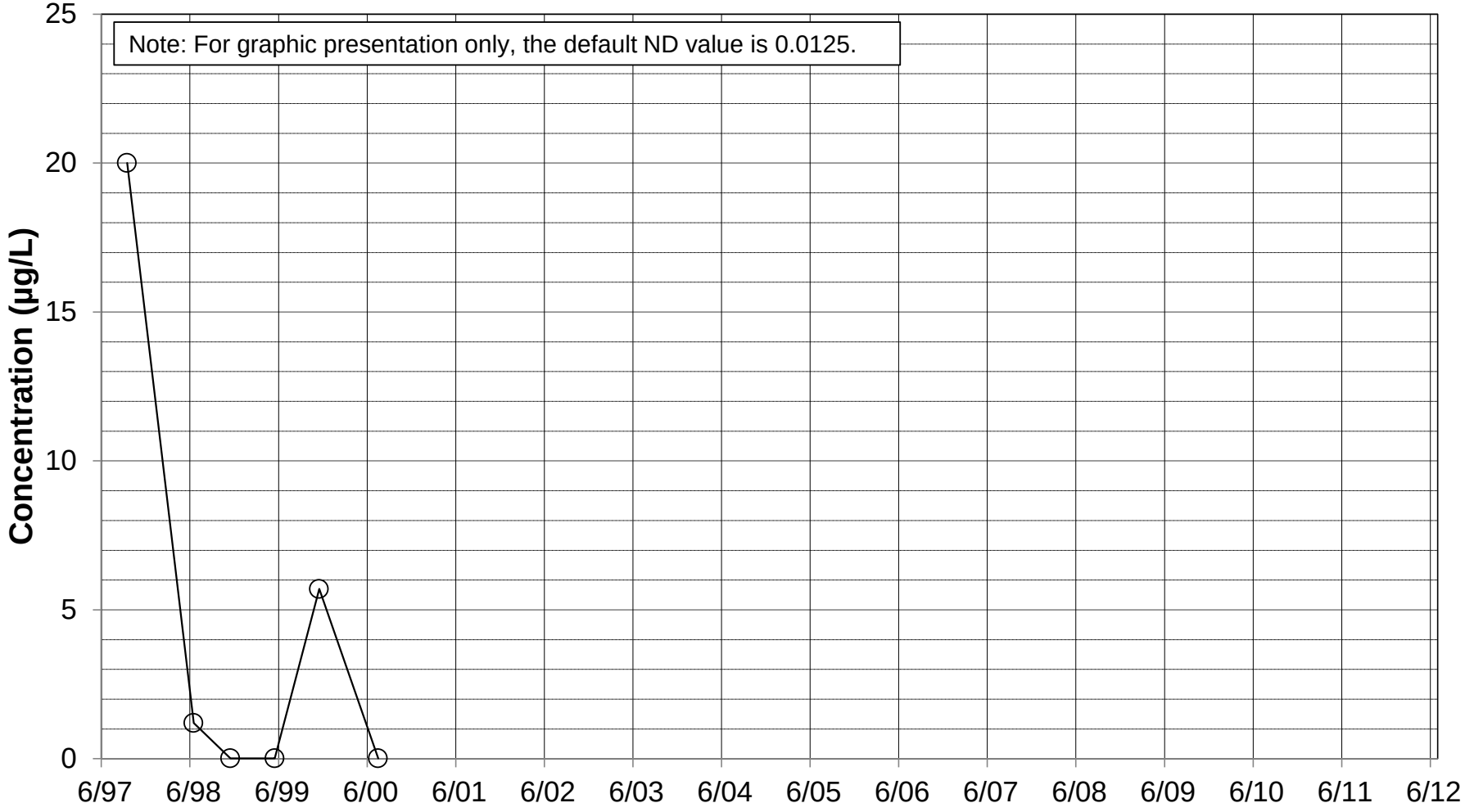
RP-94D


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
25
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

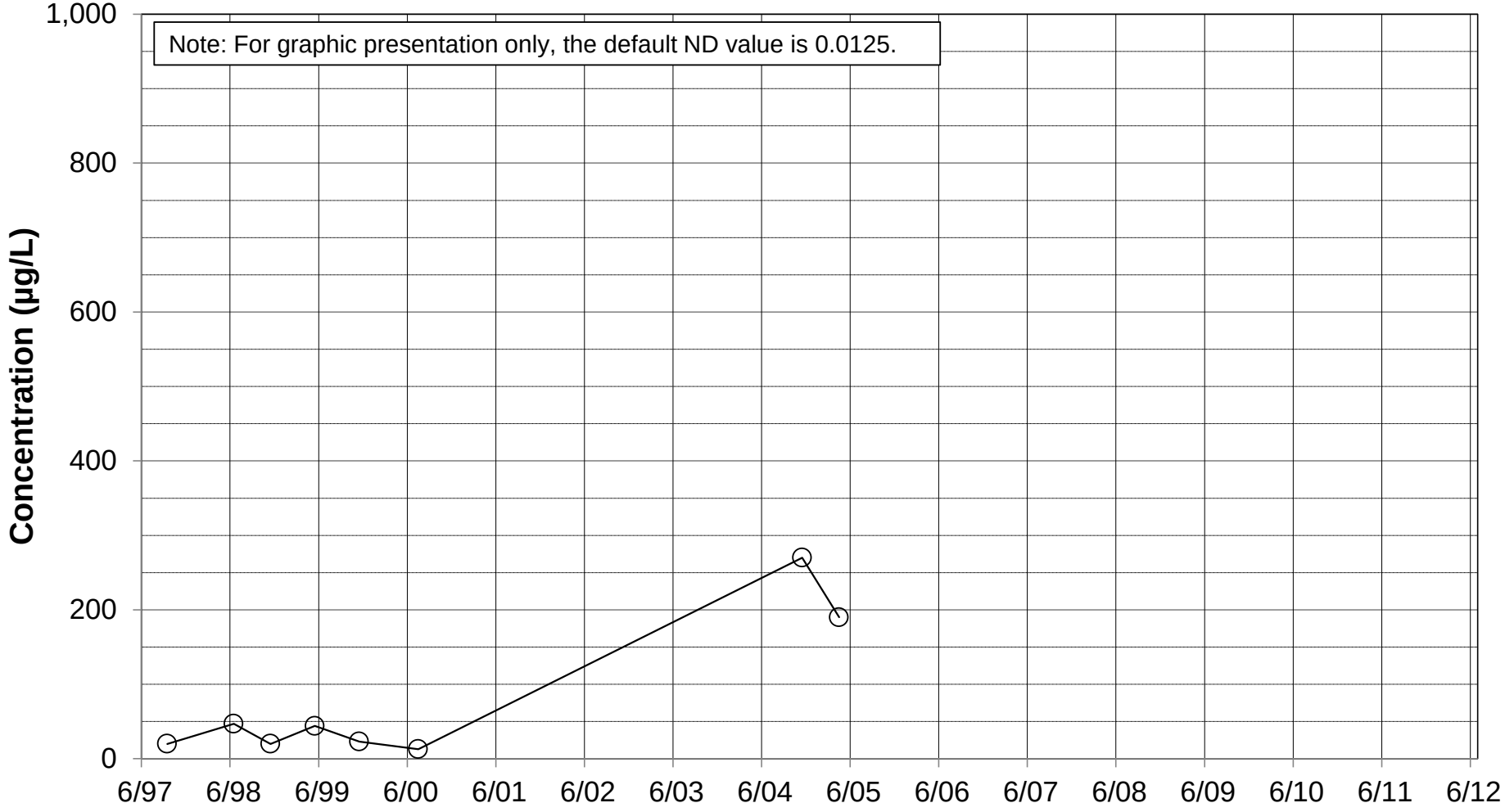
RP-96C-2


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

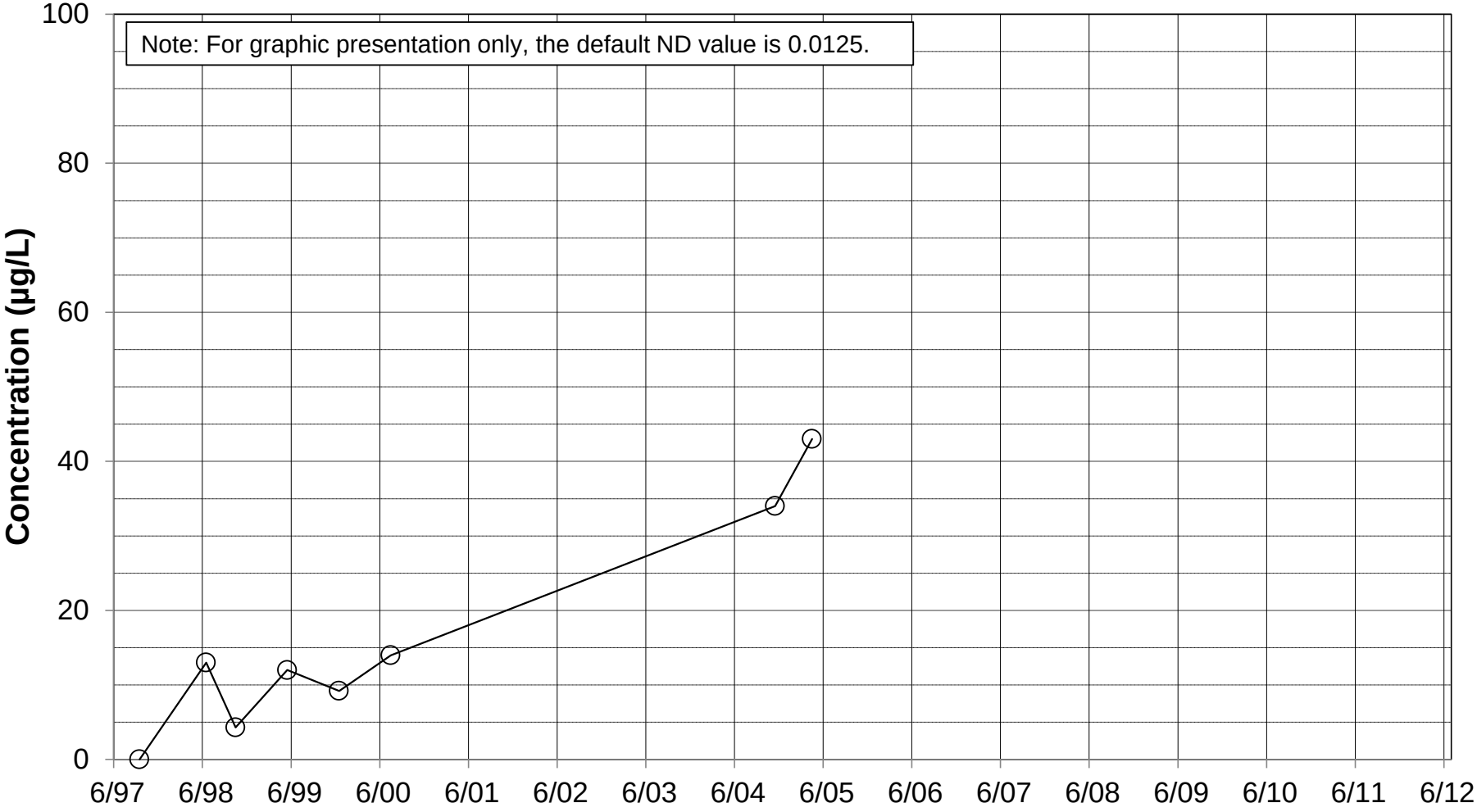
RP-98C


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
25
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

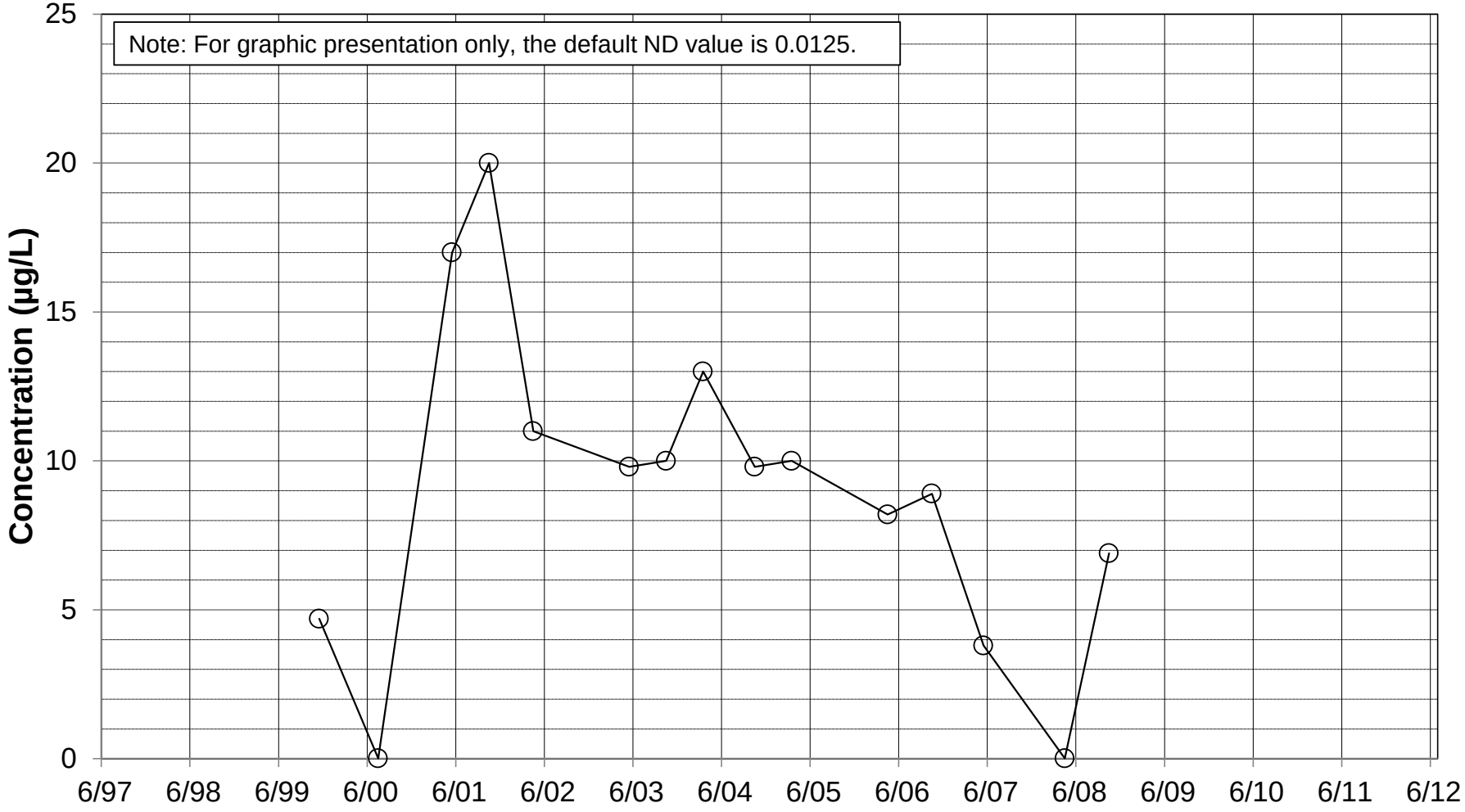
Sump 9B


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

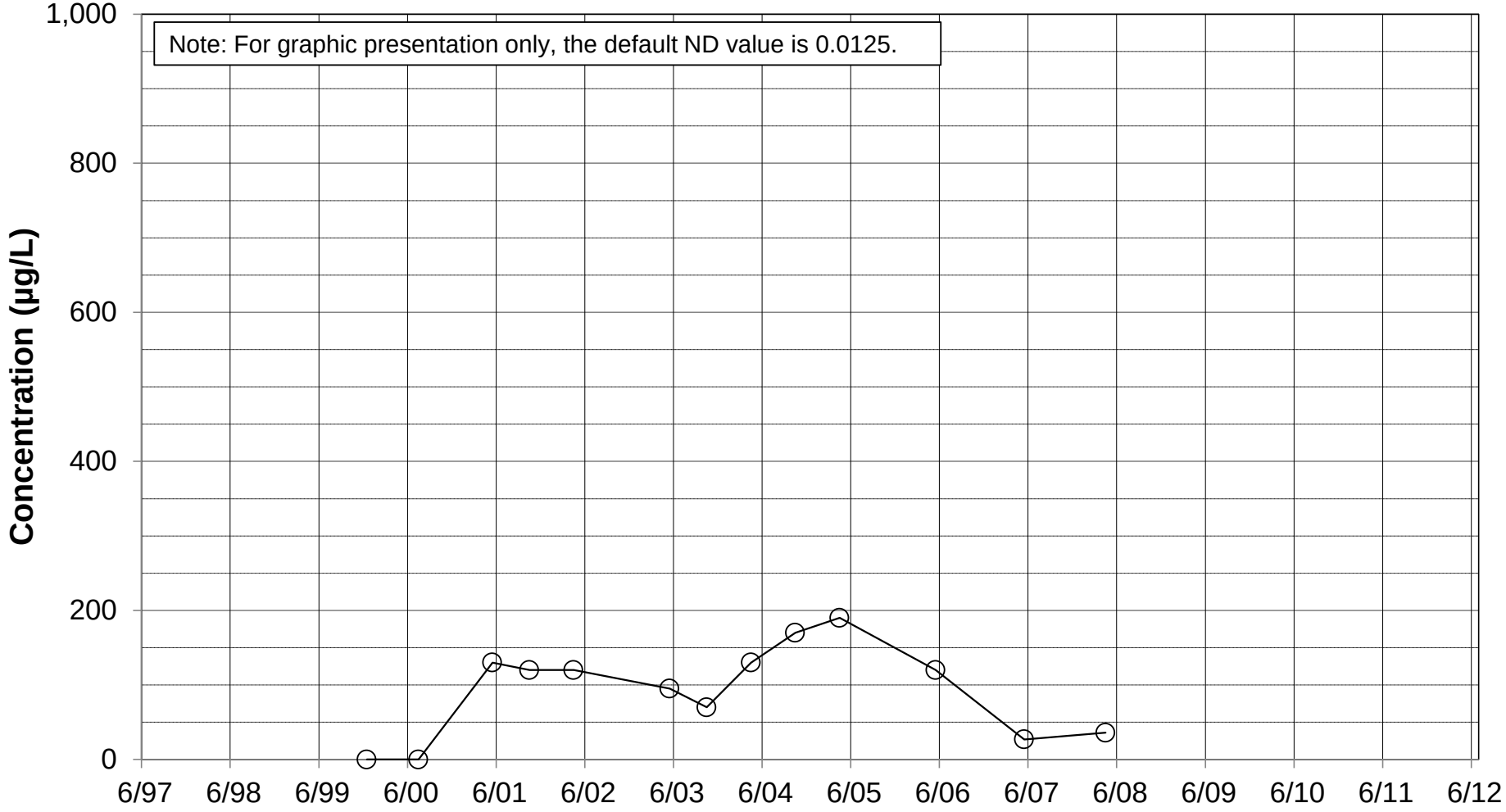
SW-17


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

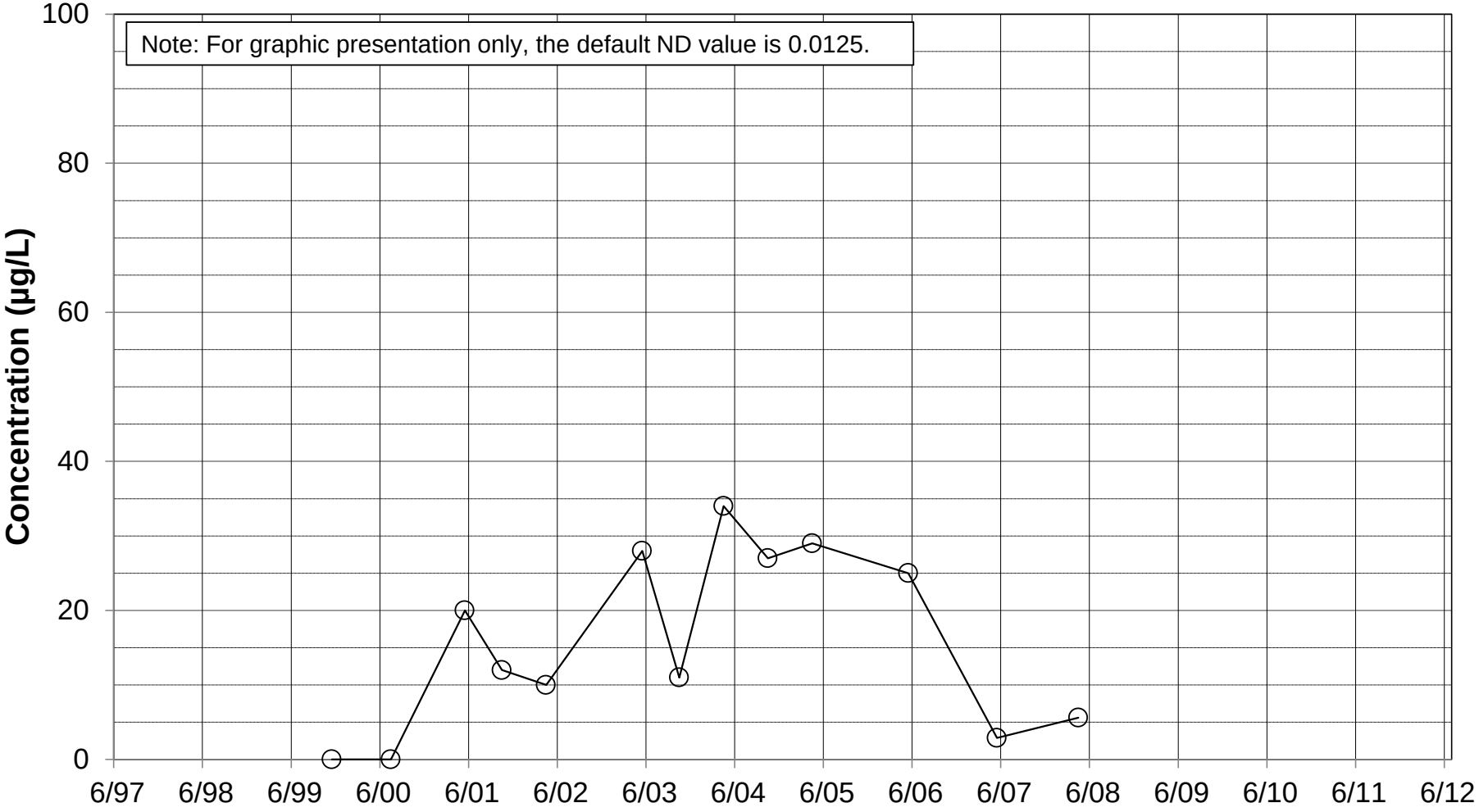
SW-29


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
25
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

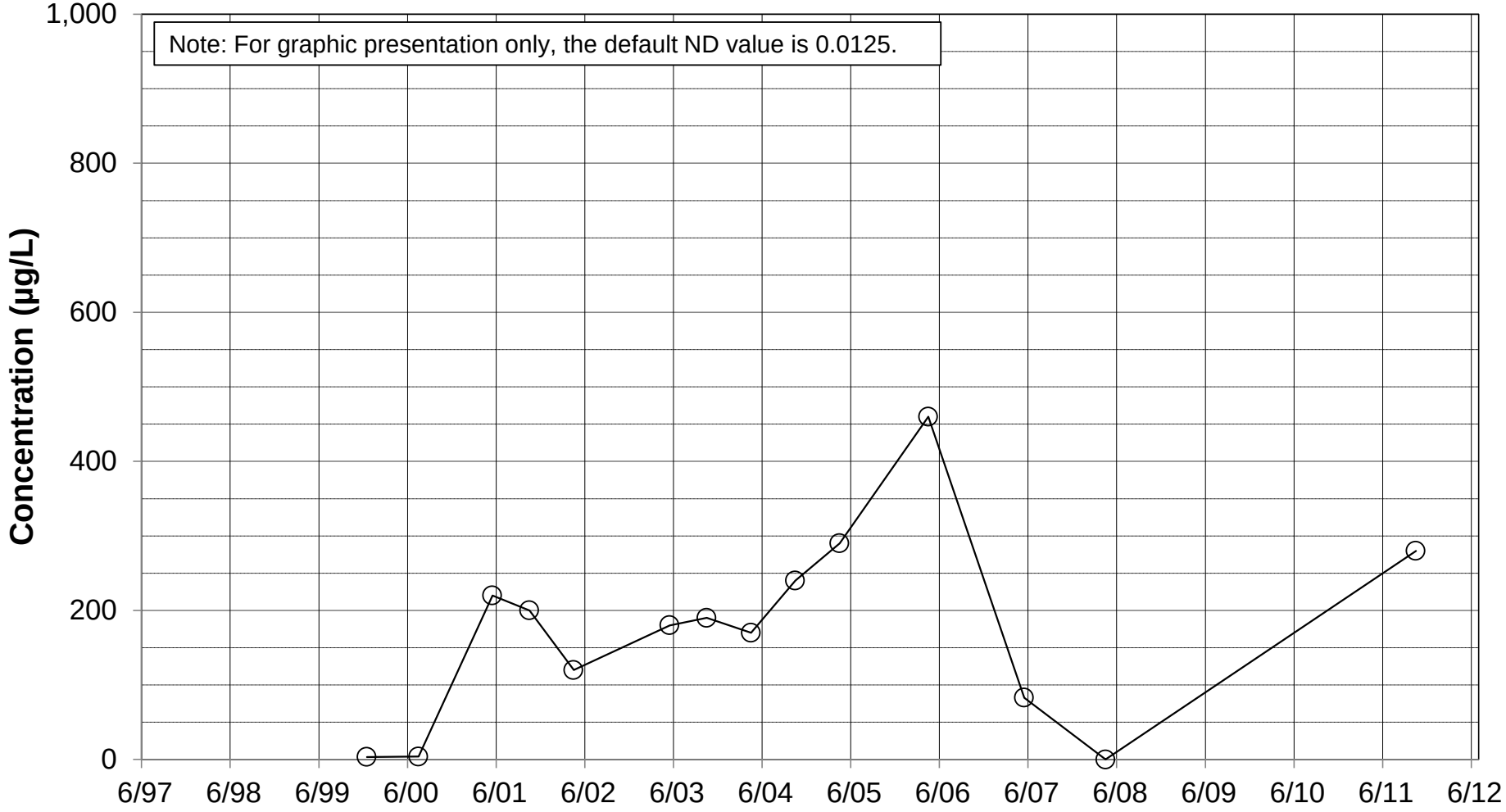
SW-31


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

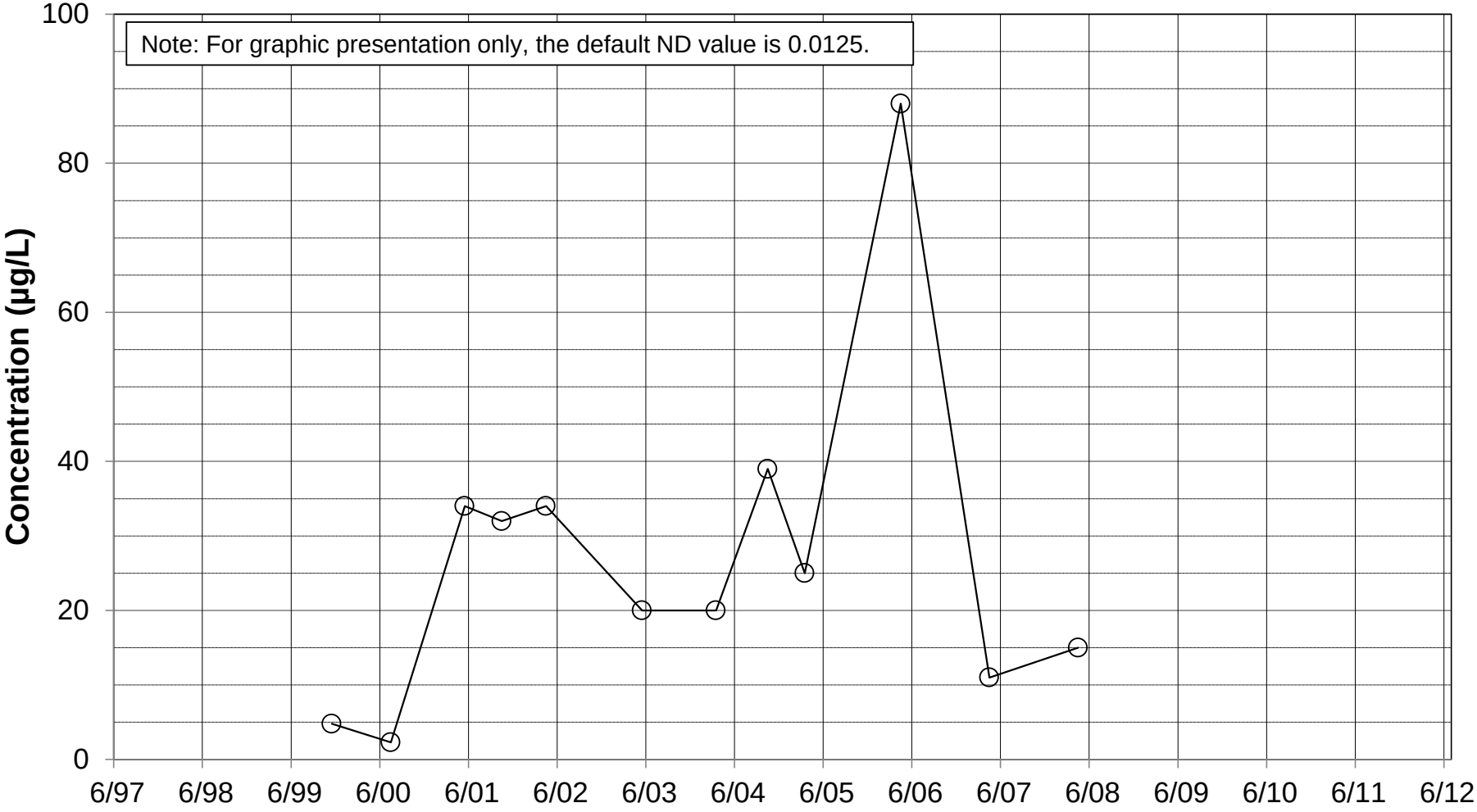
SW-44


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

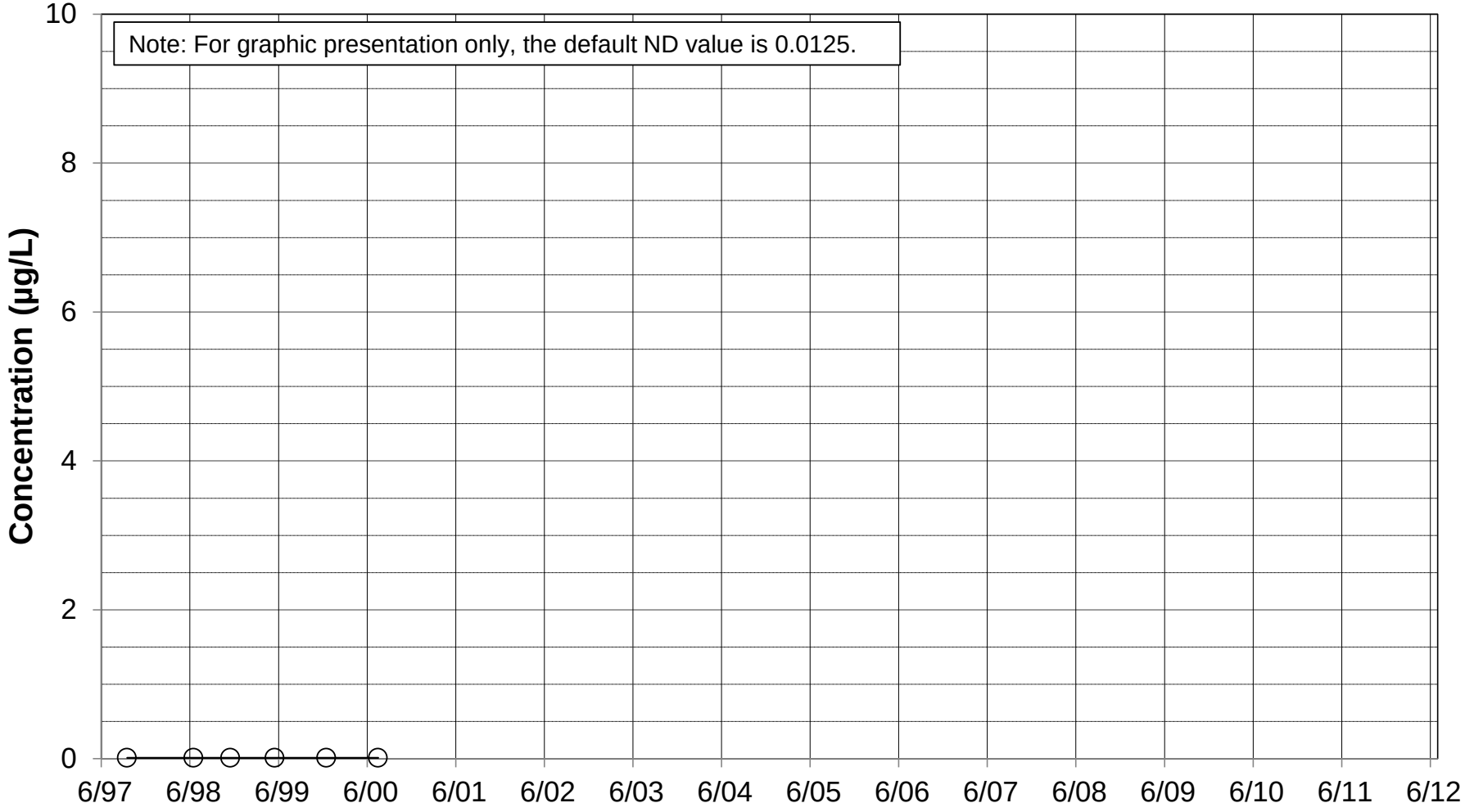
SW-46


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

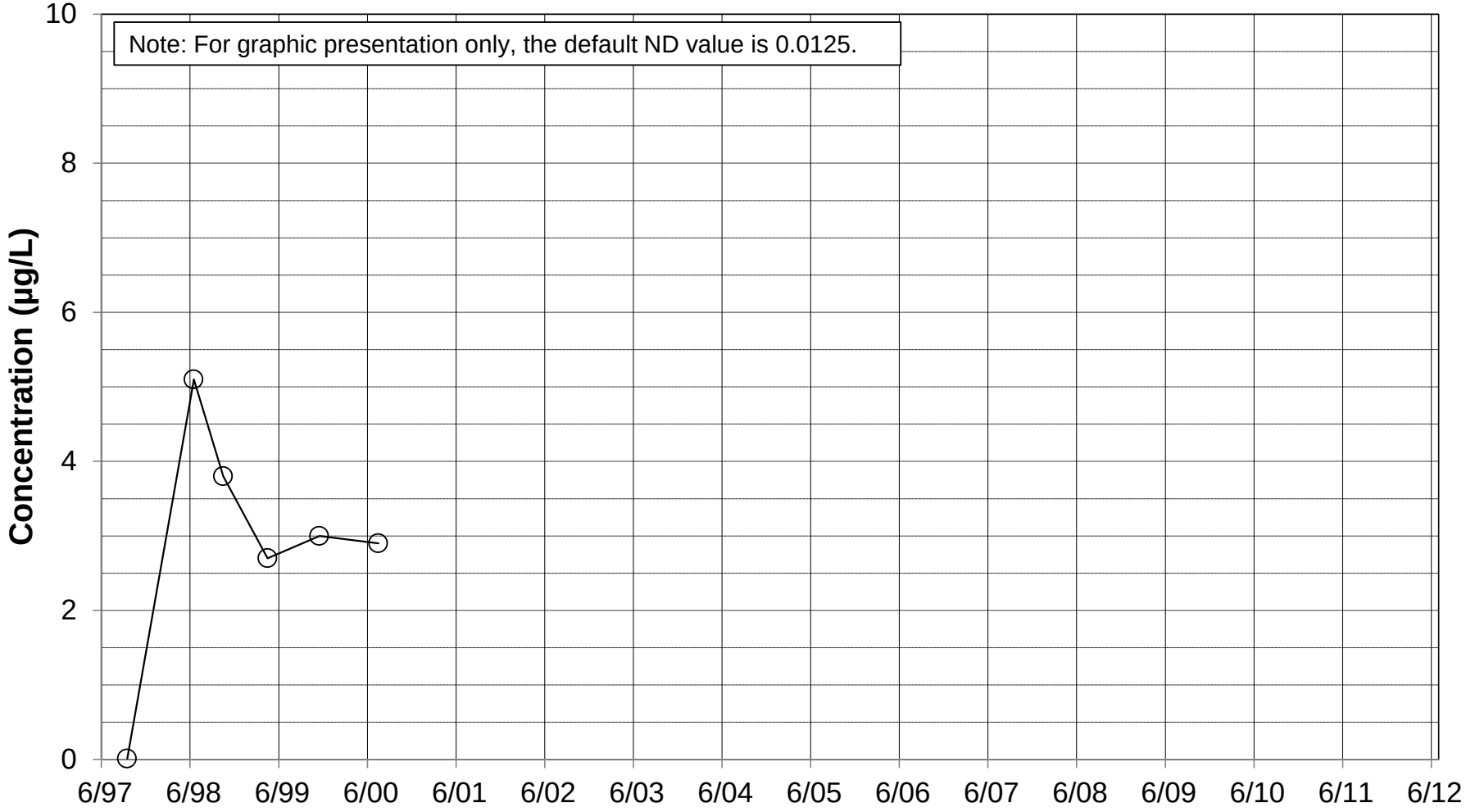
SW-47


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

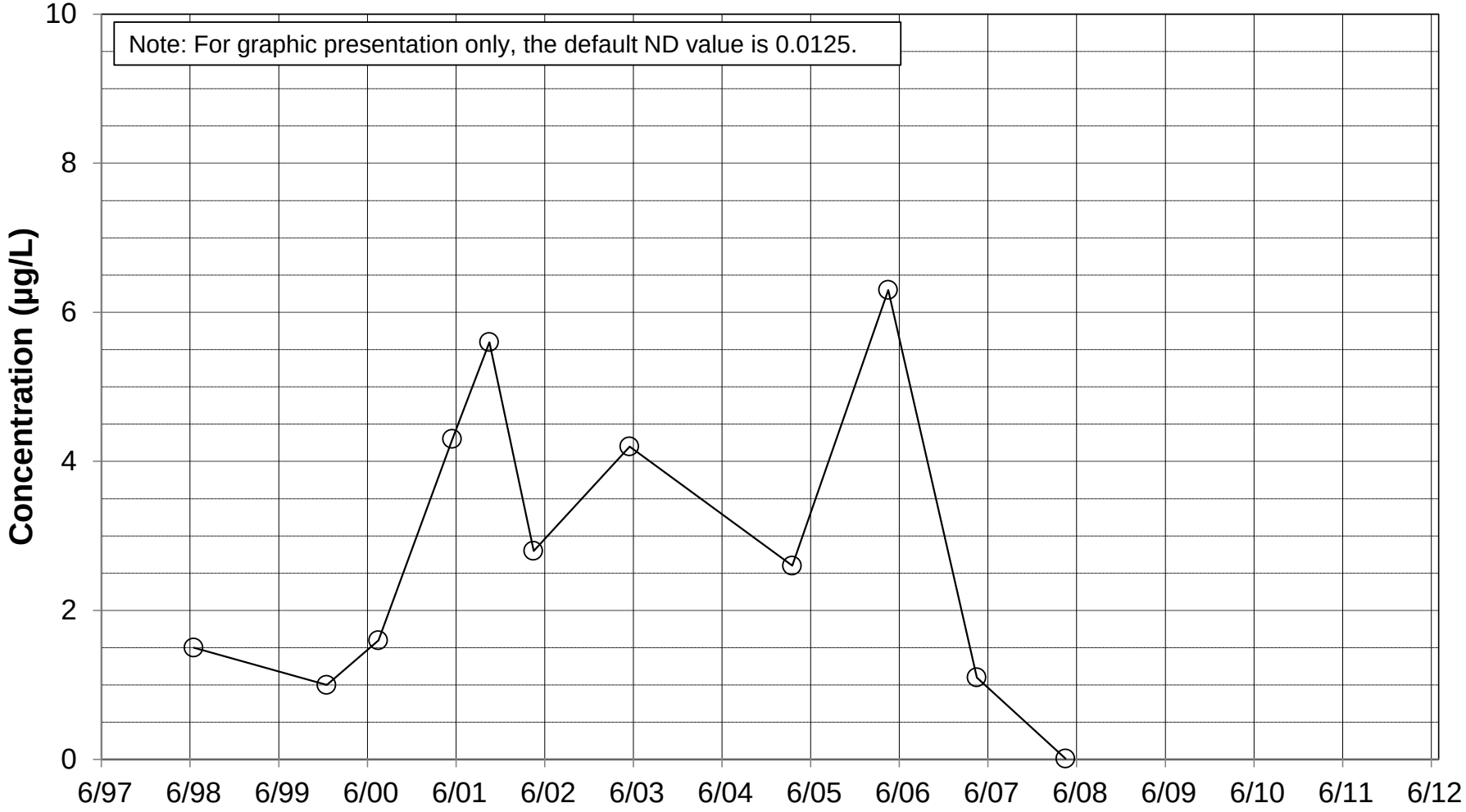
TP-4


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

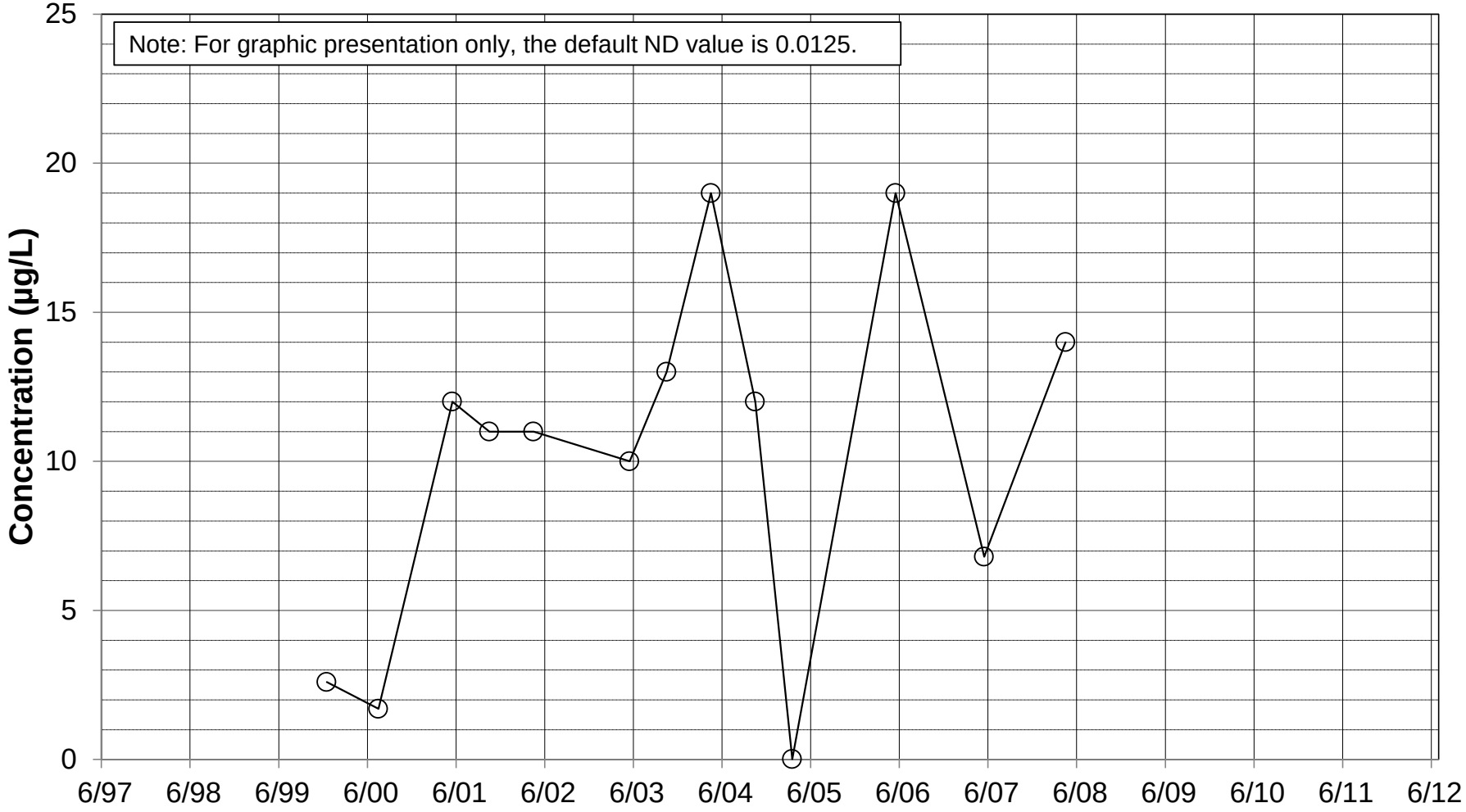
WP-3D


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

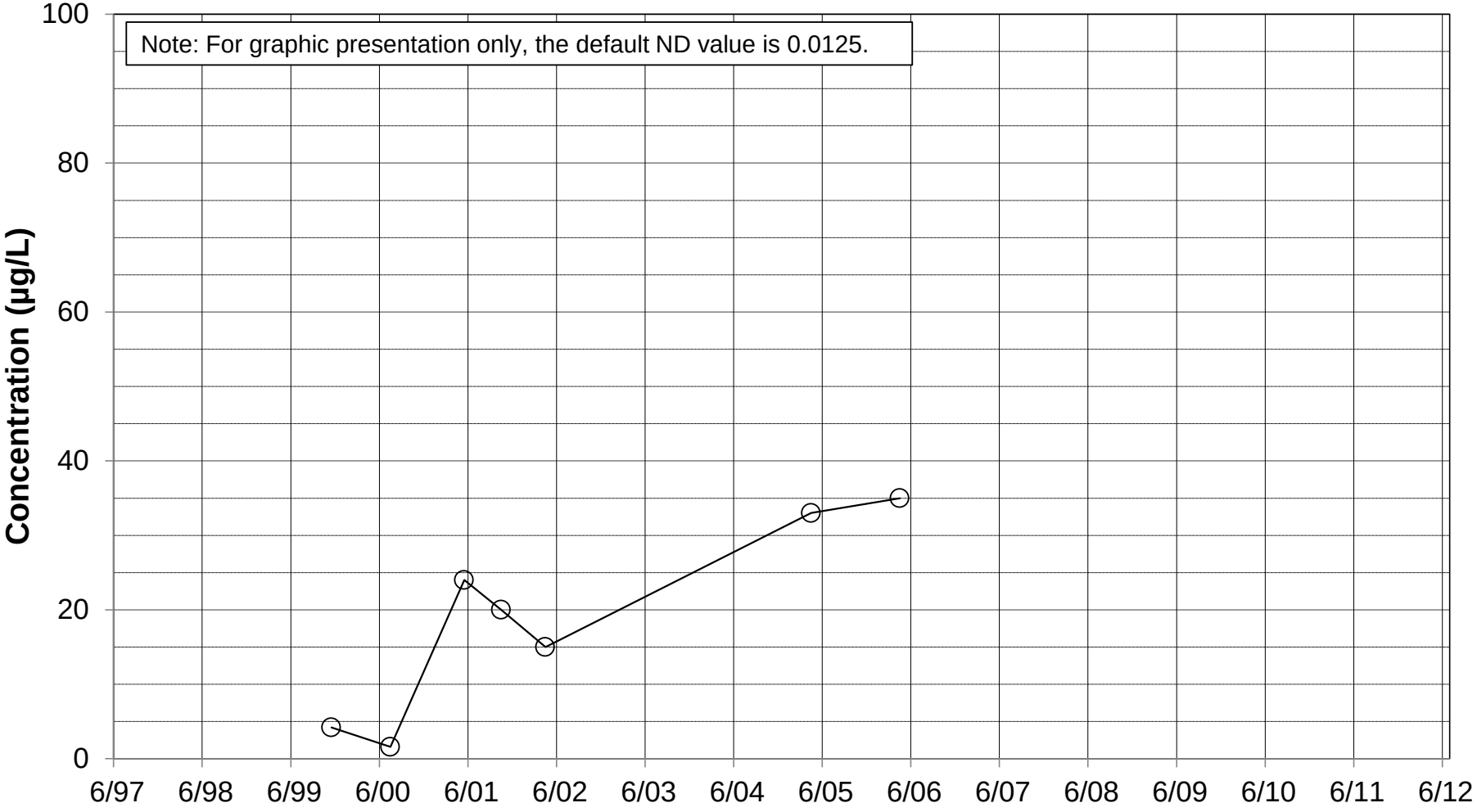
WP-3S


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

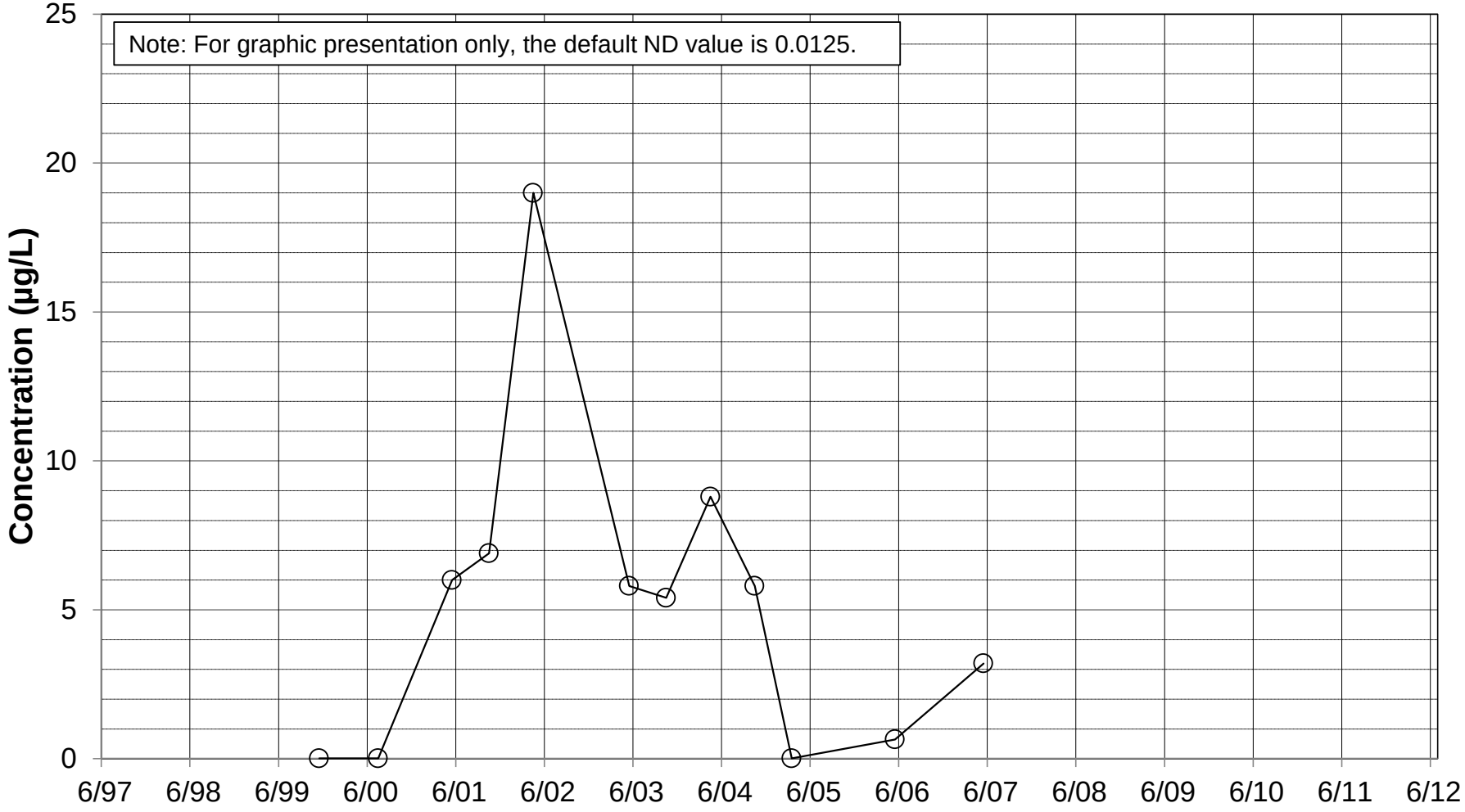
WP-7D


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
25
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

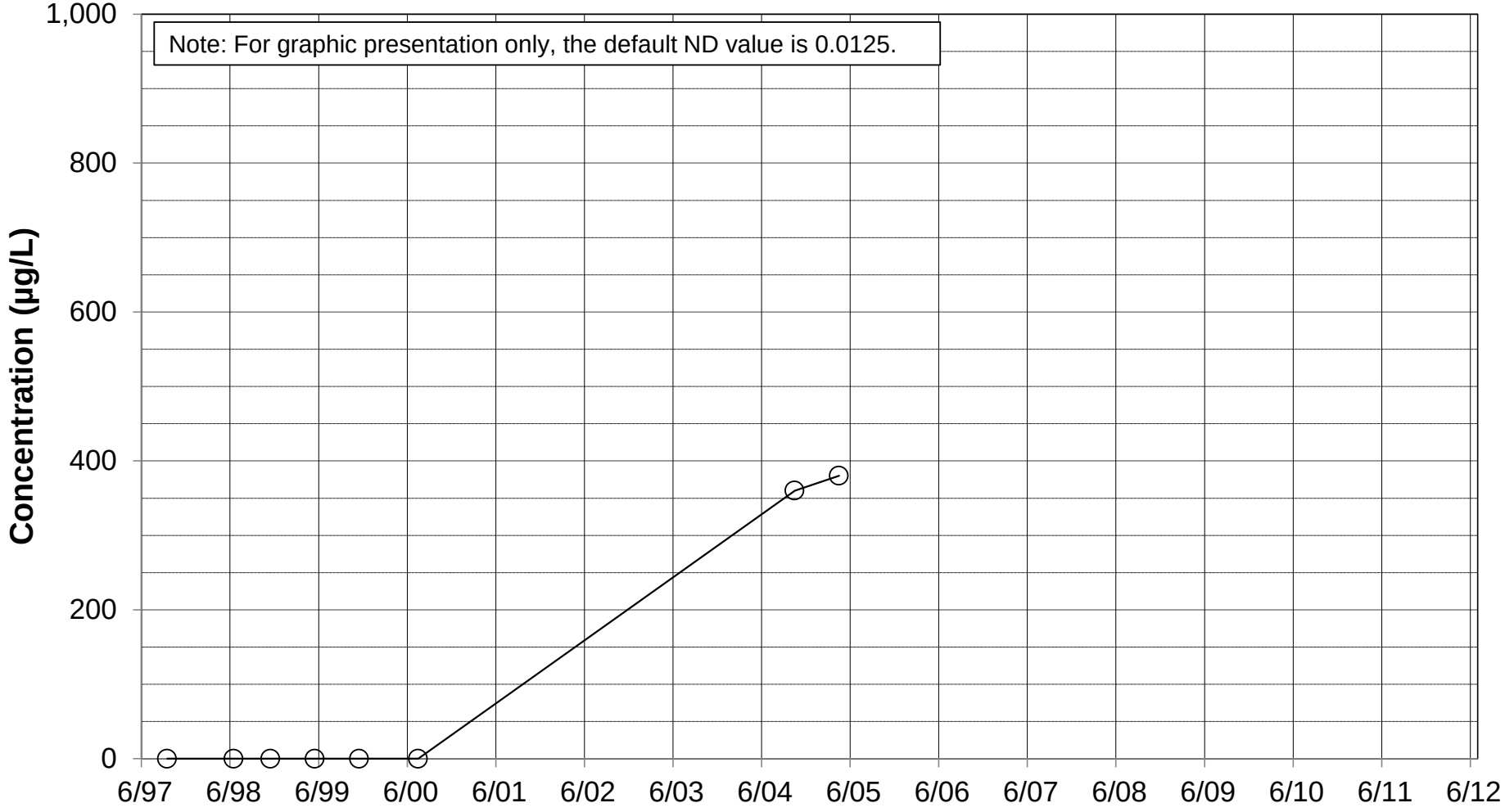
WP-7S


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

WP-8D


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
25
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

WP-8S


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
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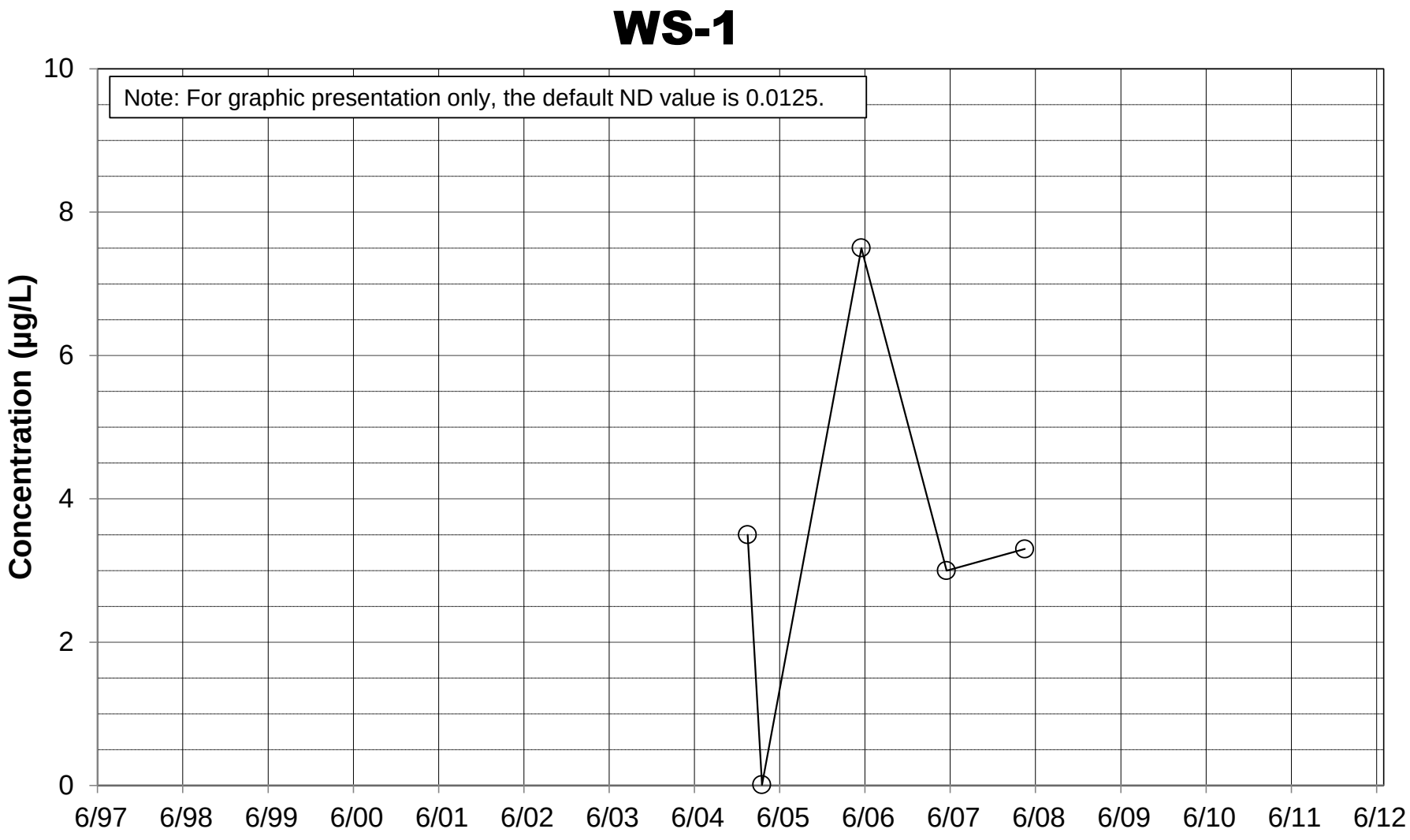
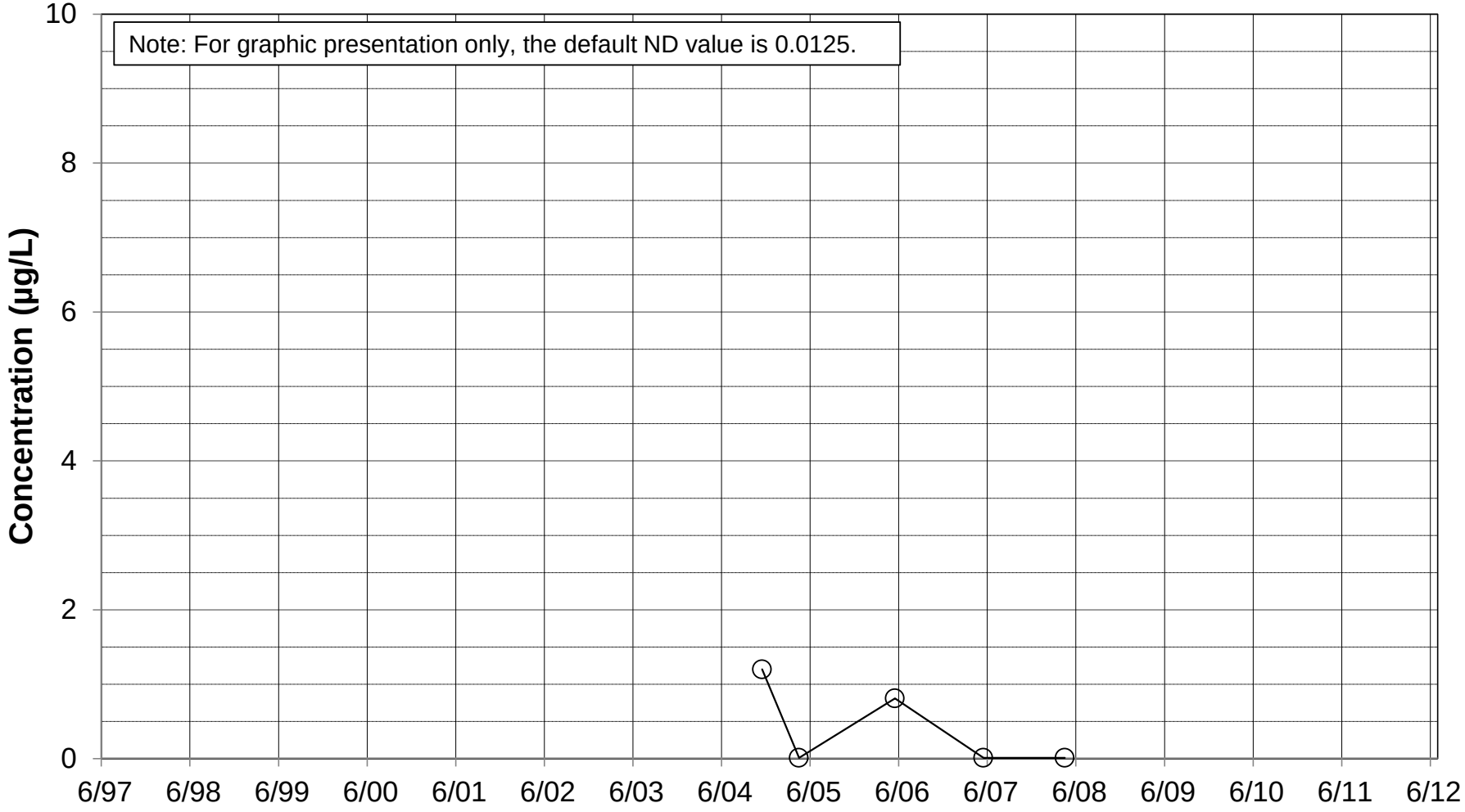
6/08
6/09
6/10
6/11
6/12


WS-1
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

WS-4


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

ATTACHMENT D2-2 – HISTORICAL DISSOLVED CADMIUM CONCENTRATIONS IN GROUNDWATER

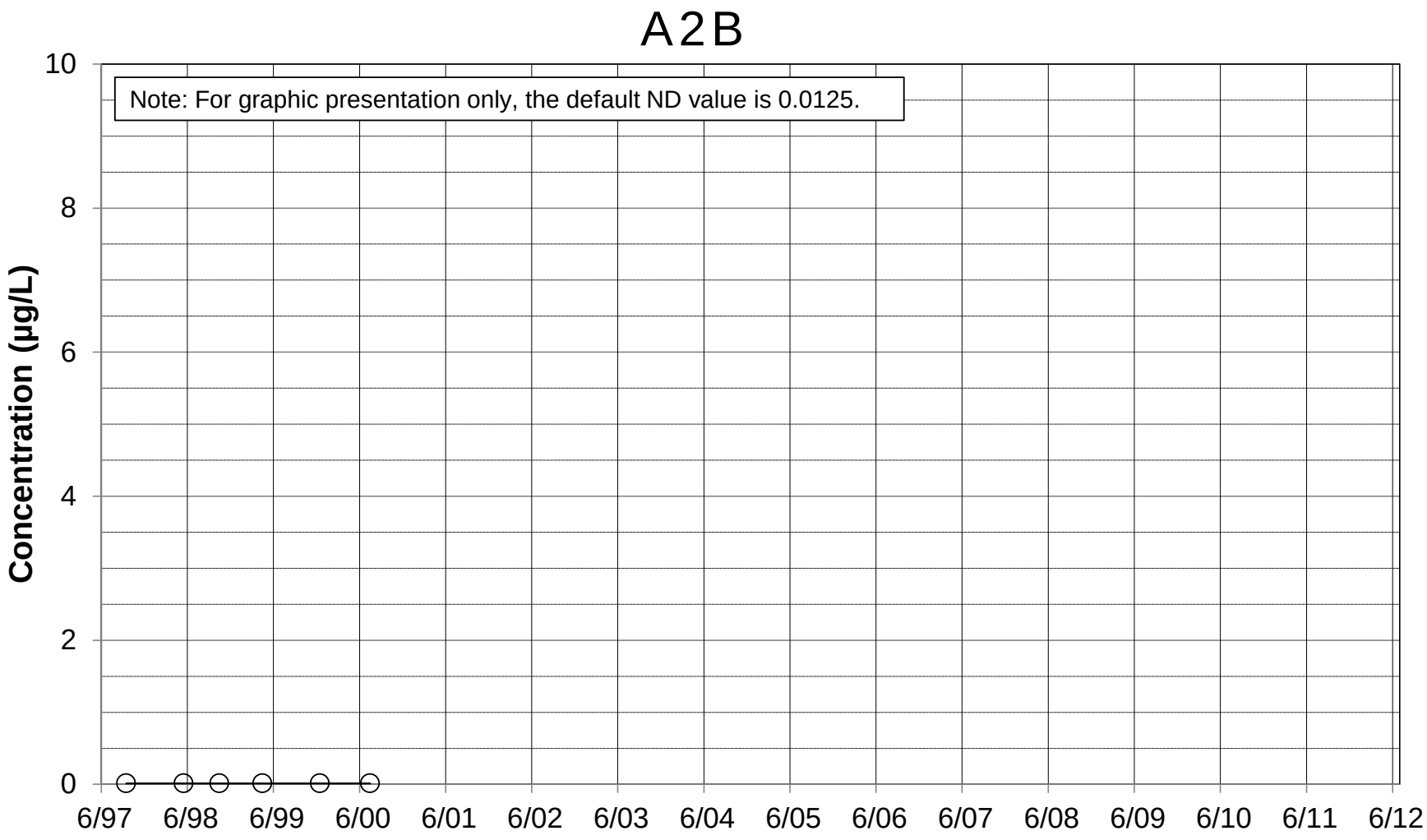
FINAL FEASIBILITY STUDY
CASMALIA RESOURCES SUPERFUND SITE
CASMALIA, CALIFORNIA

Prepared by: ERM

LIST OF CHARTS

A2B
A-Series Pond
B3B
B3M
B-5
C3M
C-5
DB-1
Gallery Well
MW-18C
MW-7BU
MW-7C
MW-7D
Pond 13
Pond 18
Pond A-5
PSCT-1
PSCT-2
PSCT-3
PSCT-4
PZ-P18-5
RAP-1A
RAP-1B
RAP-1C
RAP-3A
RCF Pond
RG-10B
RG-1B
RG-1C
RG-3B
RG-4B
RG-5B
RG-6B
RG-7B
RG-8B
RG-9B
RIMW-1
RIMW-10
RIMW-11
RIMW-2
RIMW-3
RIMW-5
RIMW-7
RIMW-8
RIMW-9

RIPZ-8
RP-100A
RP-101C
RP-103B
RP-107D
RP-109B
RP-109D
RP-13B
RP-17B
RP-1D
RP-20B
RP-28B
RP-41B
RP-4D
RP-53C
RP-54C
RP-55C-2
RP-59B
RP-61B
RP-62B-1
RP-62D
RP-63C
RP-65B
RP-72A
RP-72D
RP-75A
RP-75B
RP-75C
RP-76A
RP-94D
RP-96C-2
RP-98C
Sump 9B
SW-17
SW-29
SW-31
SW-44
SW-46
SW-47
TP-4
WP-3D
WP-3S
WP-7D
WP-7S
WP-8D
WP-8S
WS-1
WS-4


A2B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
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6/04
6/05
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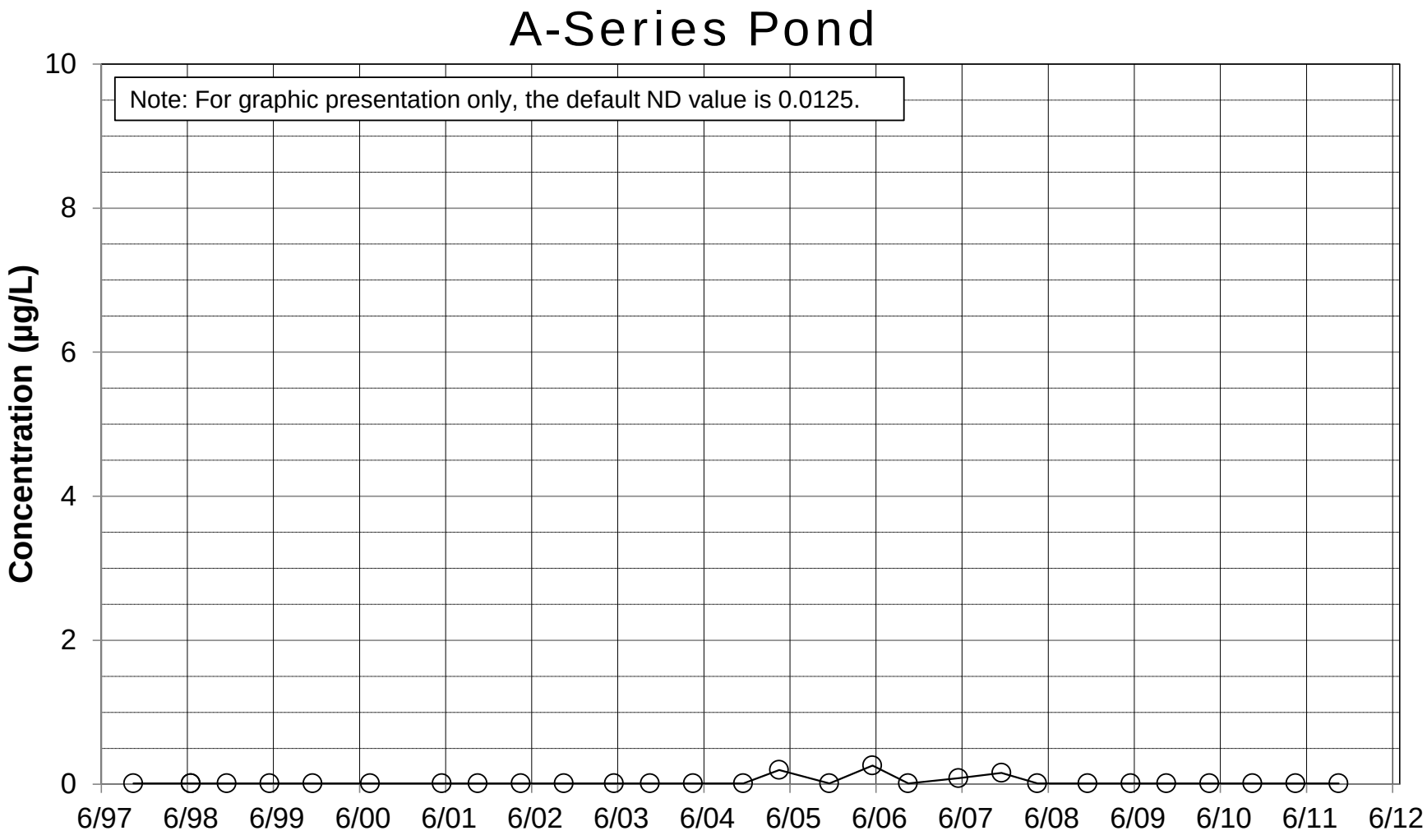
6/11
6/12


A-Series Pond
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
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6/03
6/04
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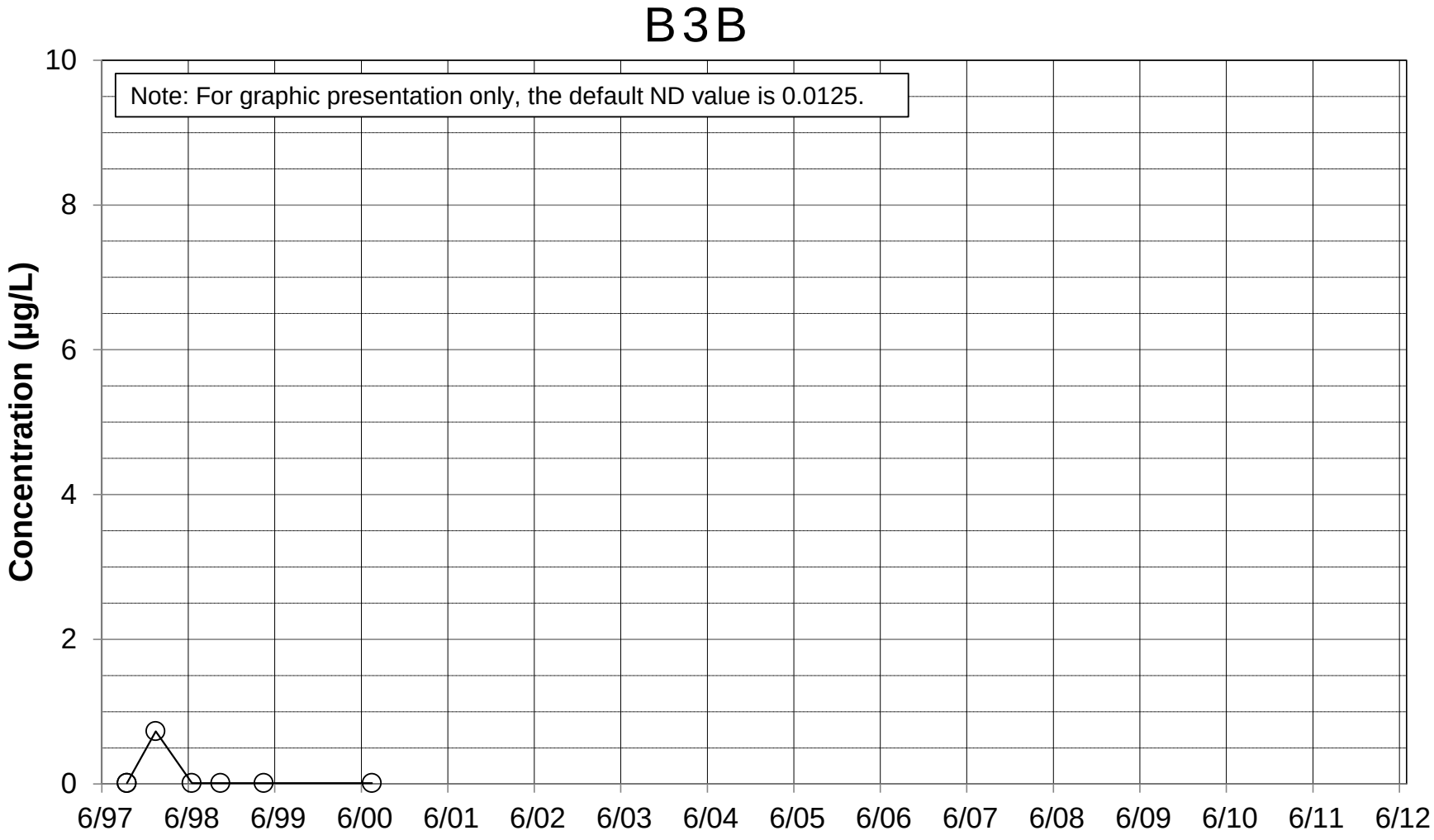
6/08
6/09
6/10
6/11
6/12


B3B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
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6/03
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6/06
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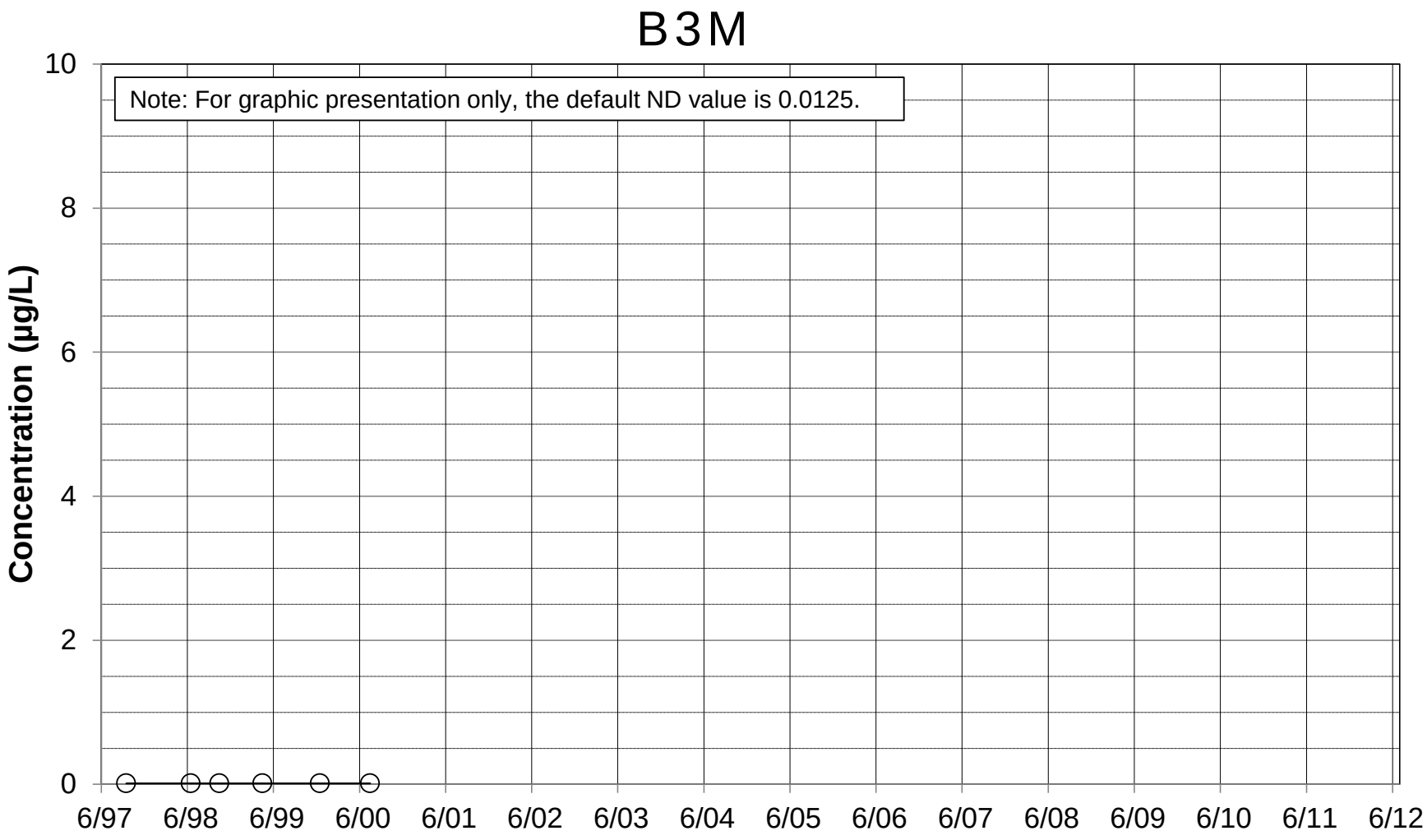
6/11
6/12


B3M
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
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8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
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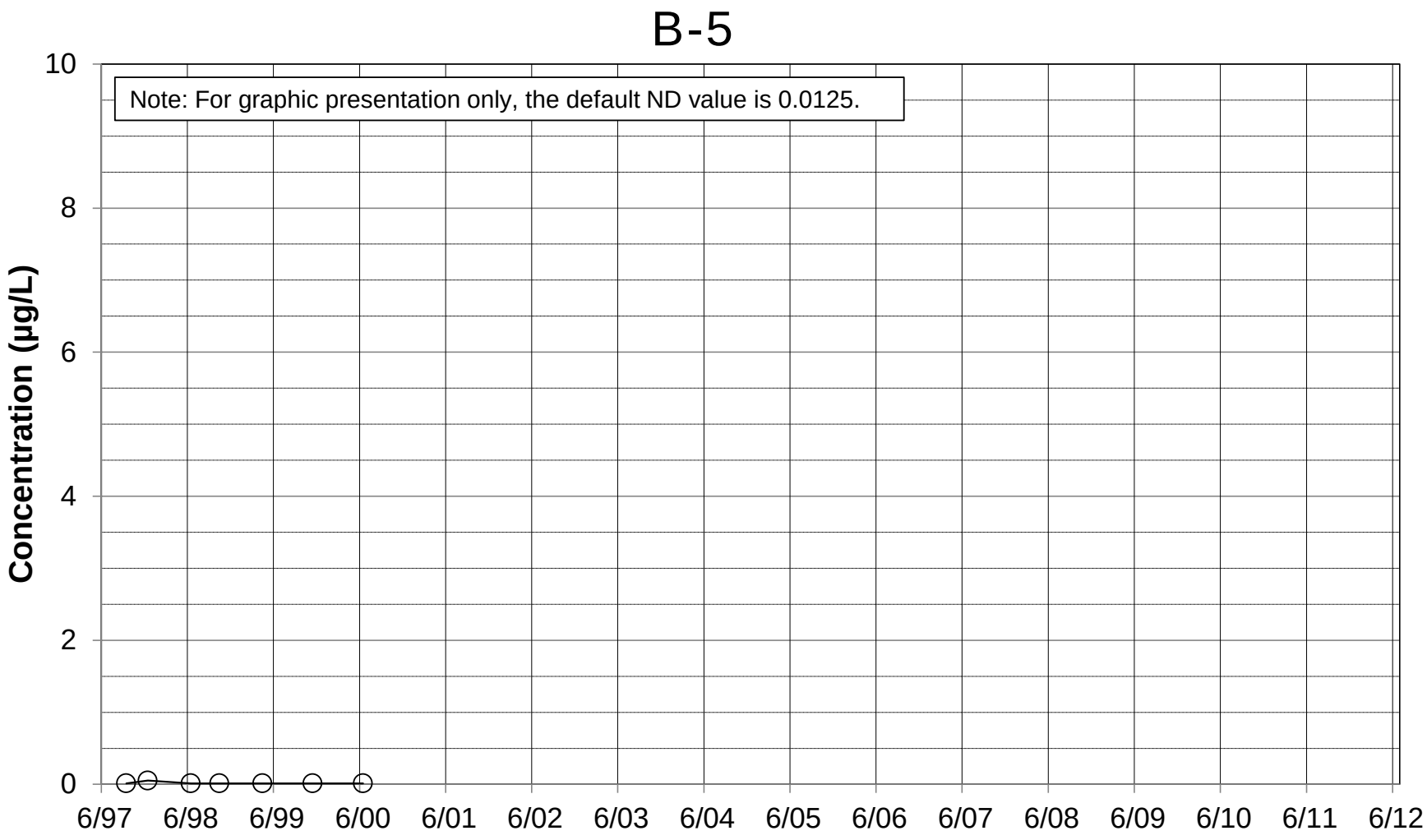
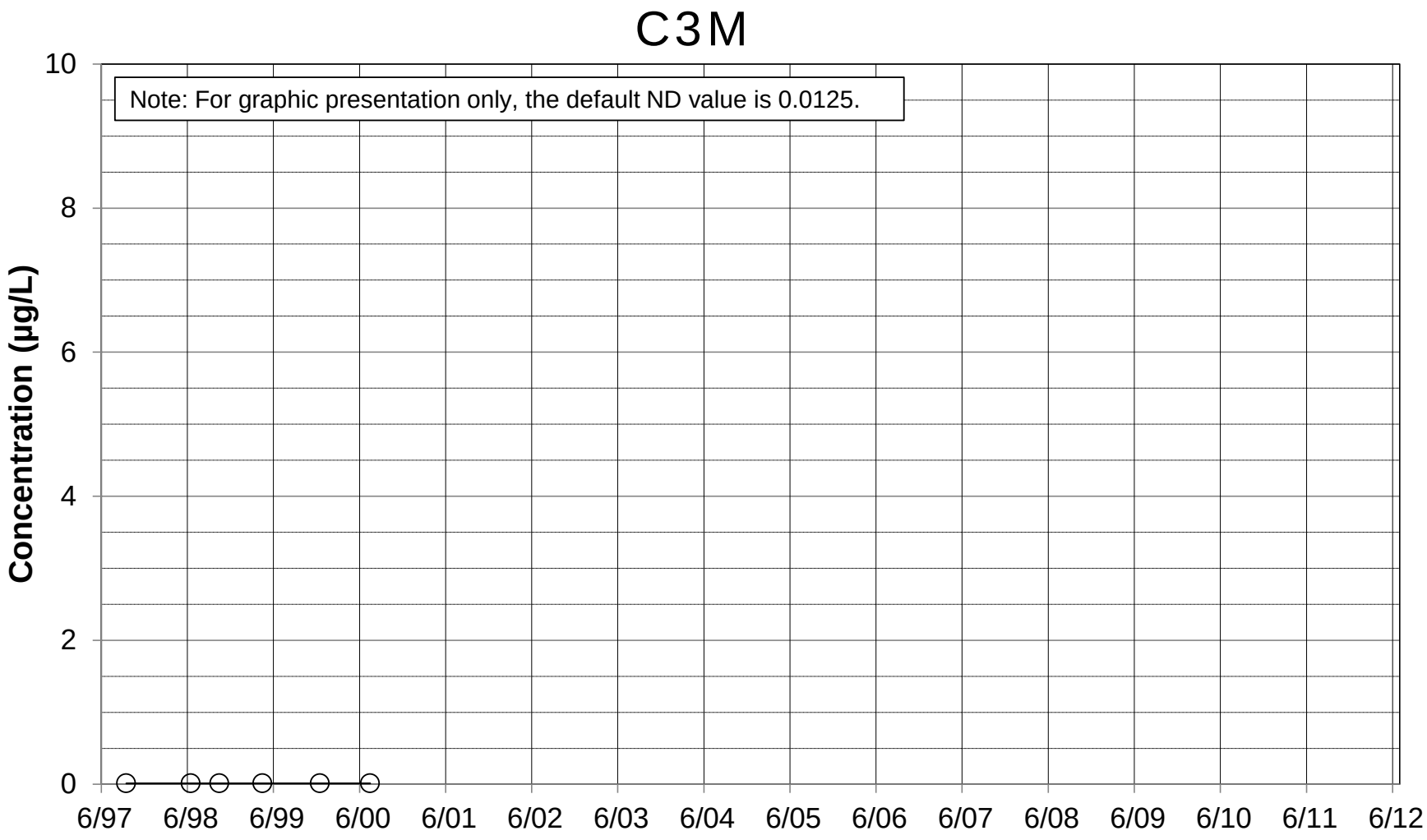
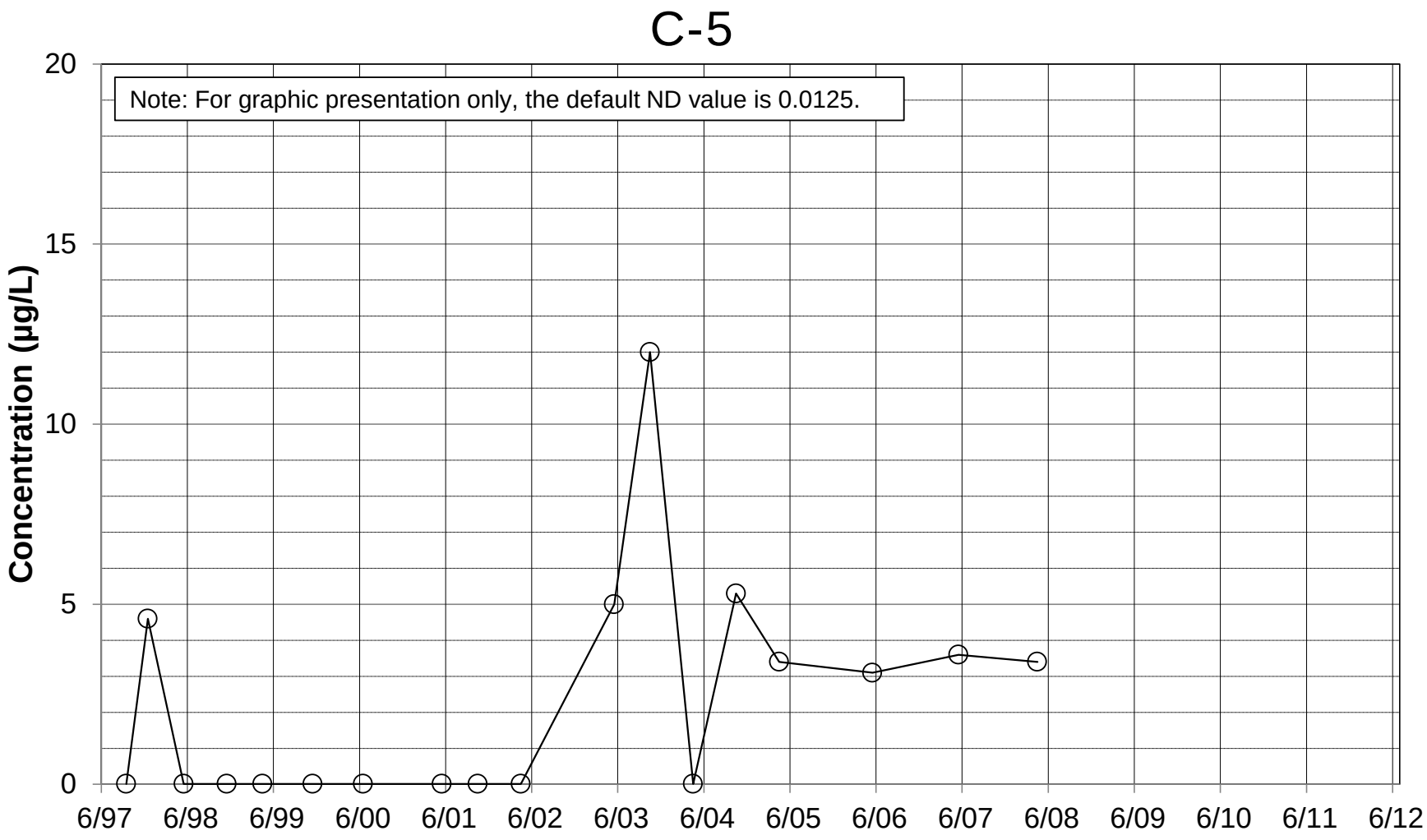
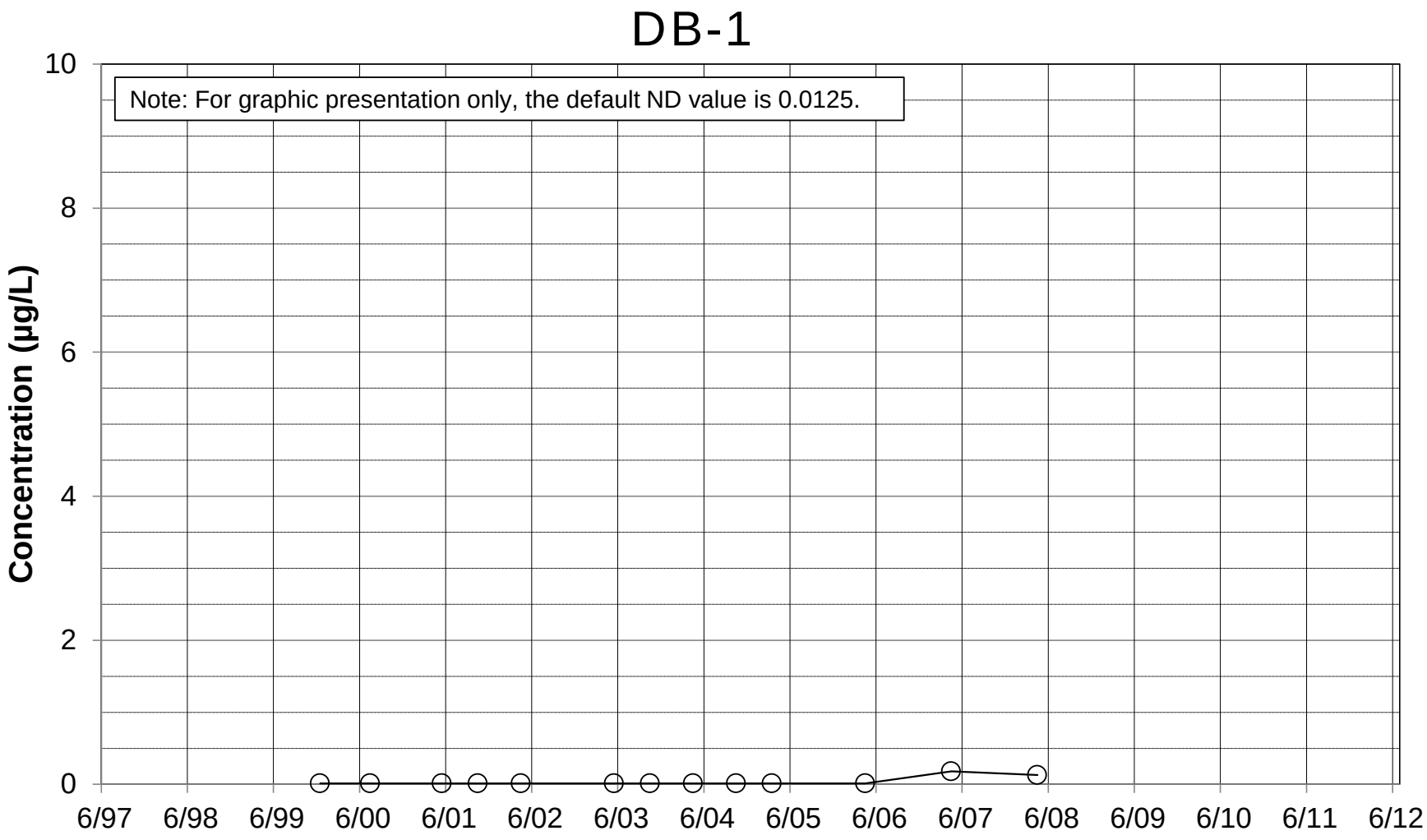
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


B-5
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


C3M
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


C-5
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


DB-1
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
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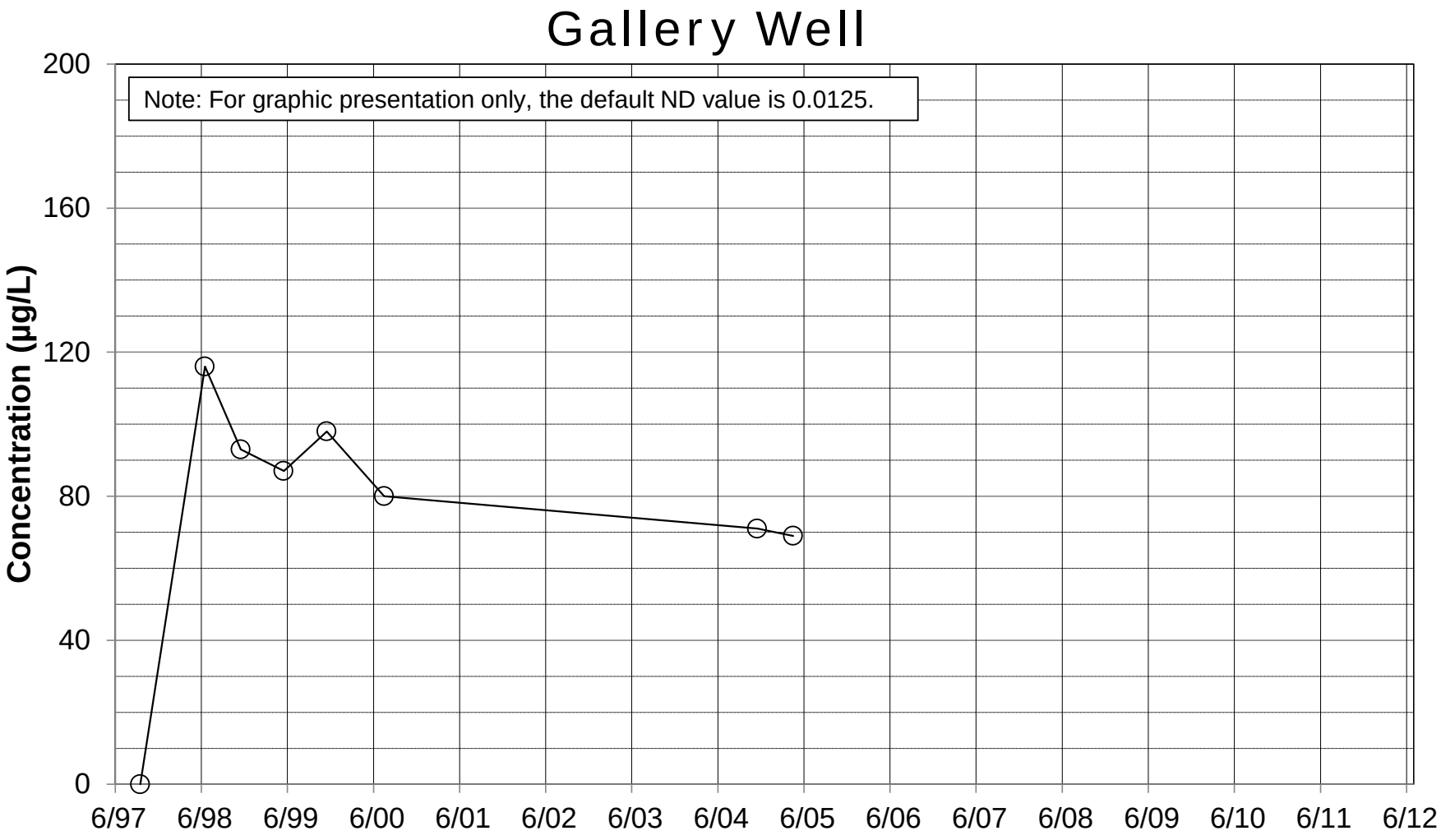
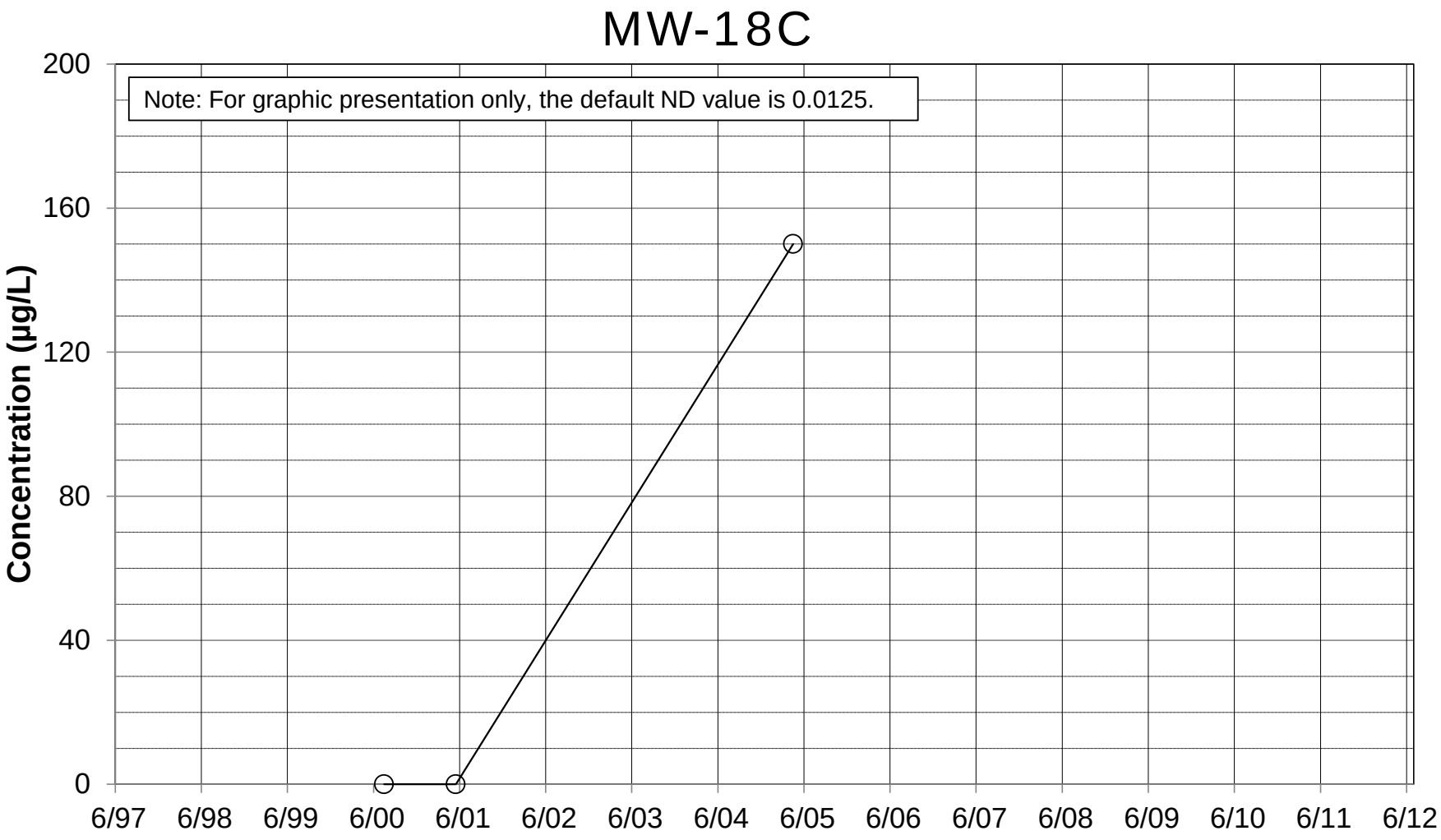
6/09
6/10
6/11
6/12


Gallery Well
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
200
160
120
80
40
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


MW-18C
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
200
160
120
80
40
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
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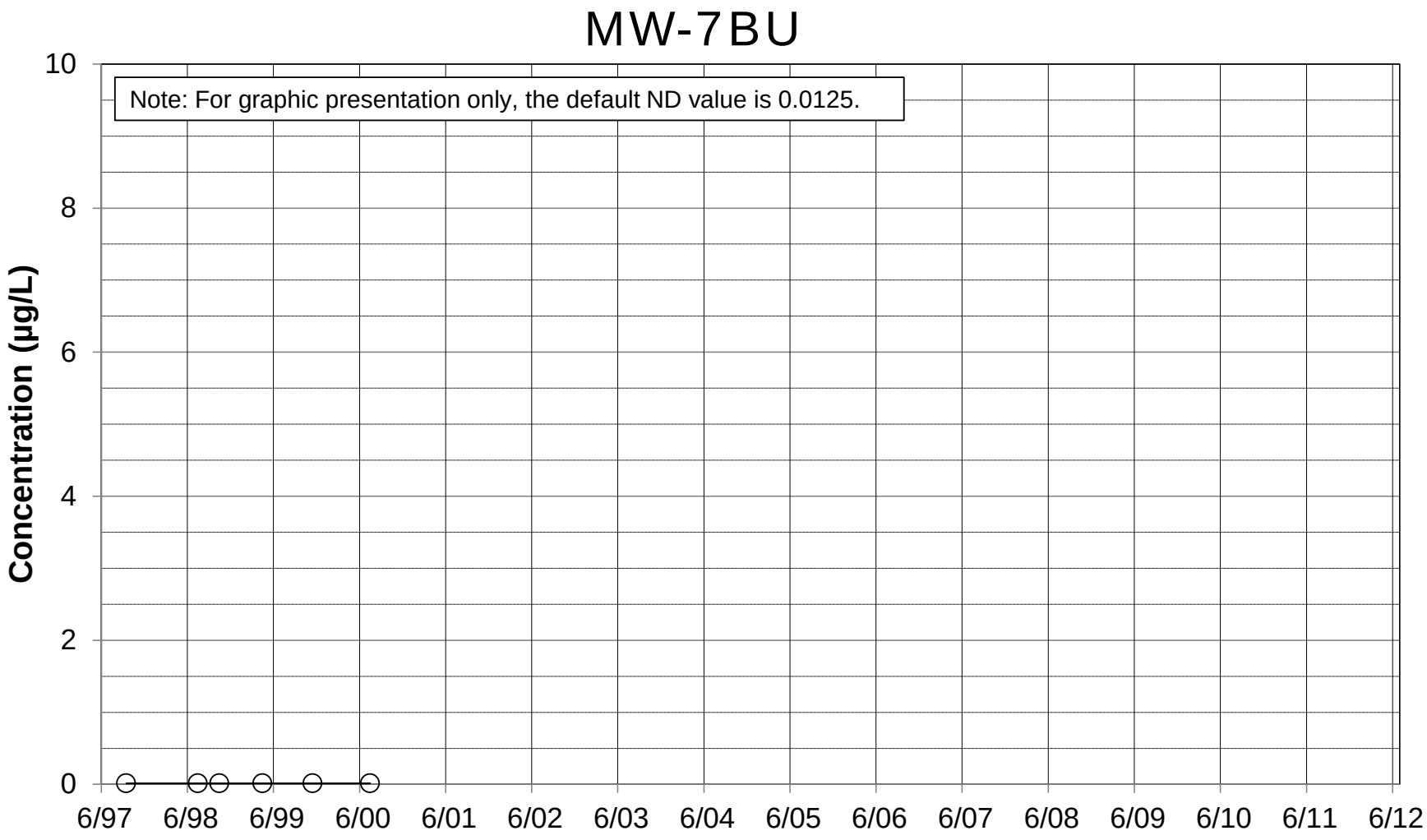
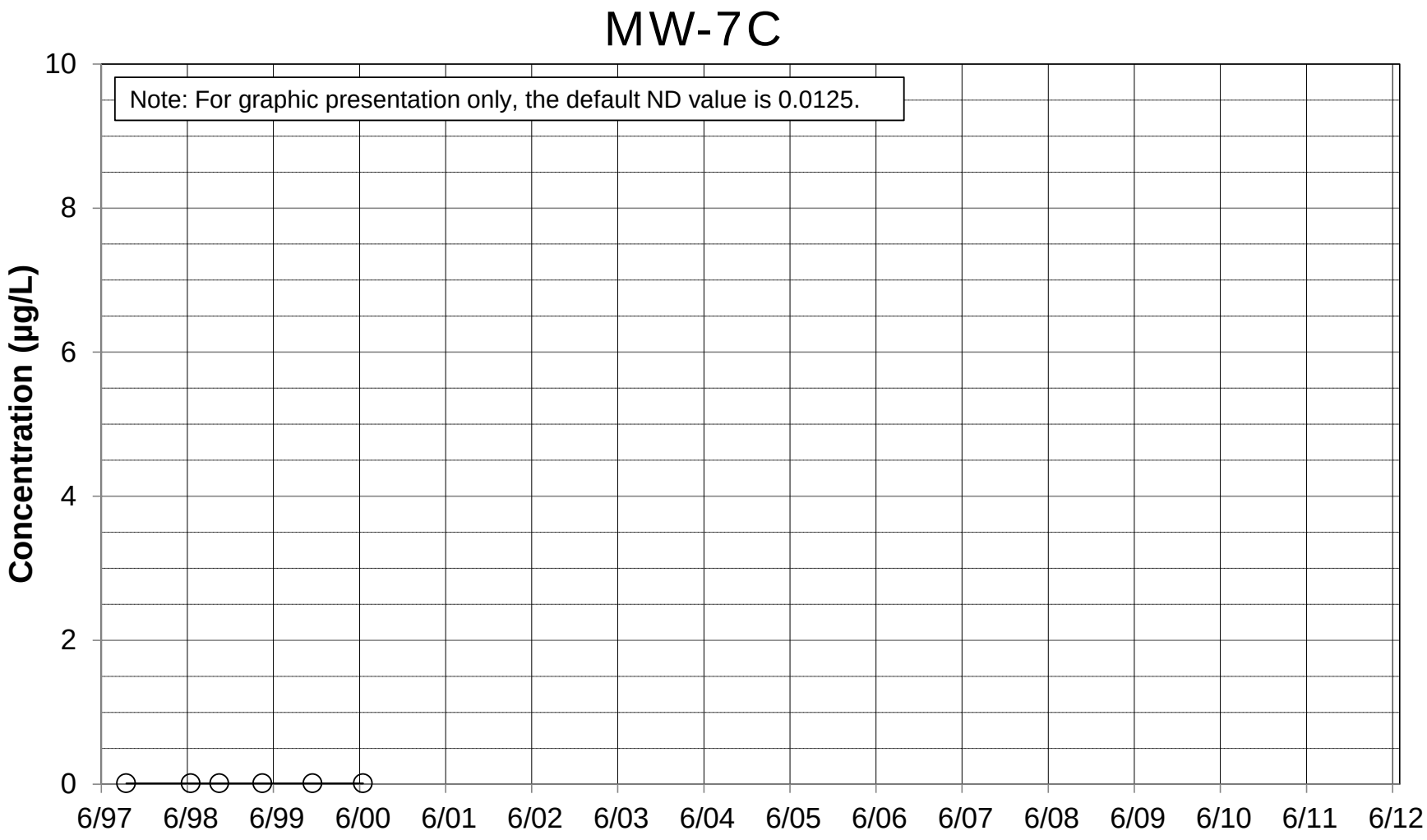
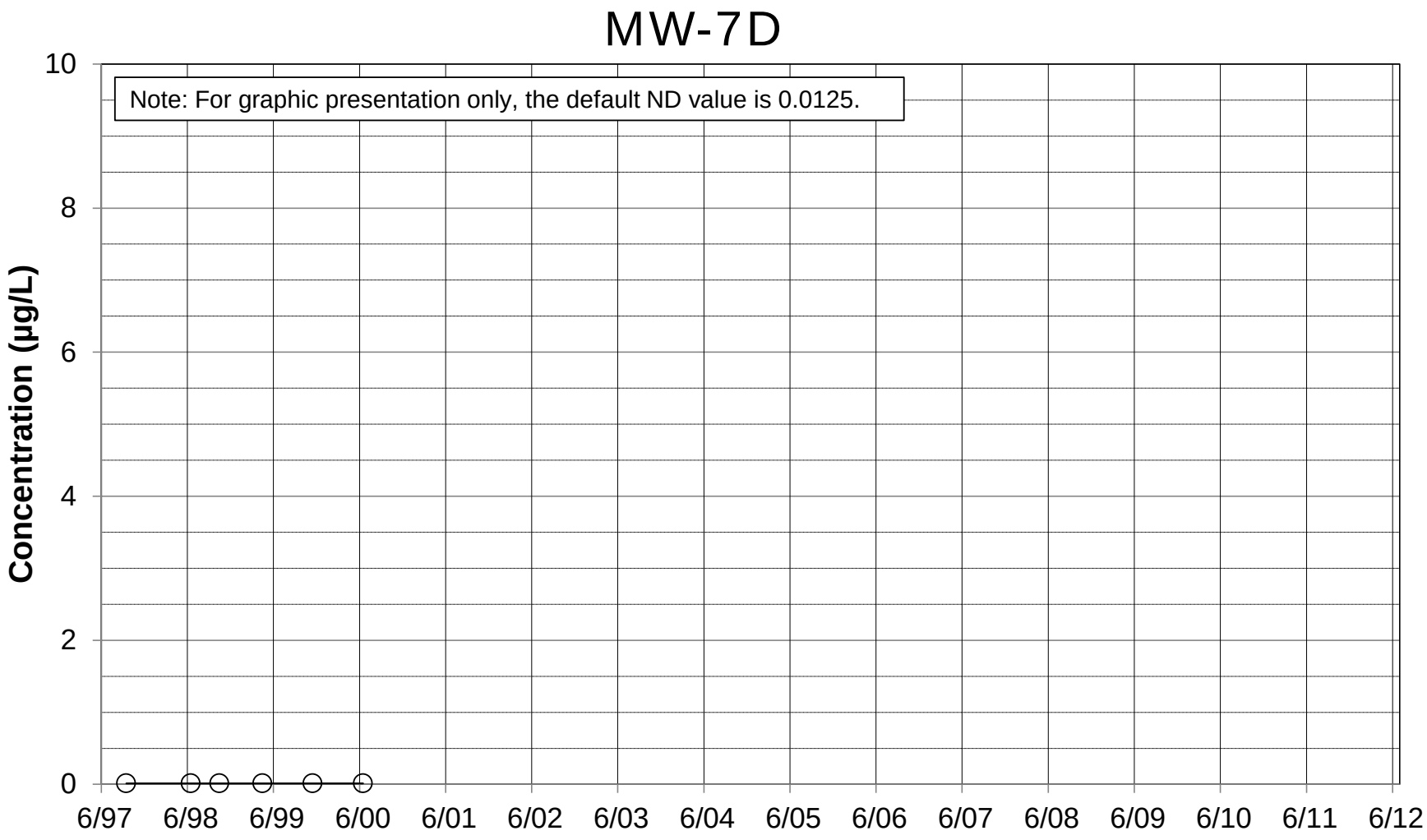
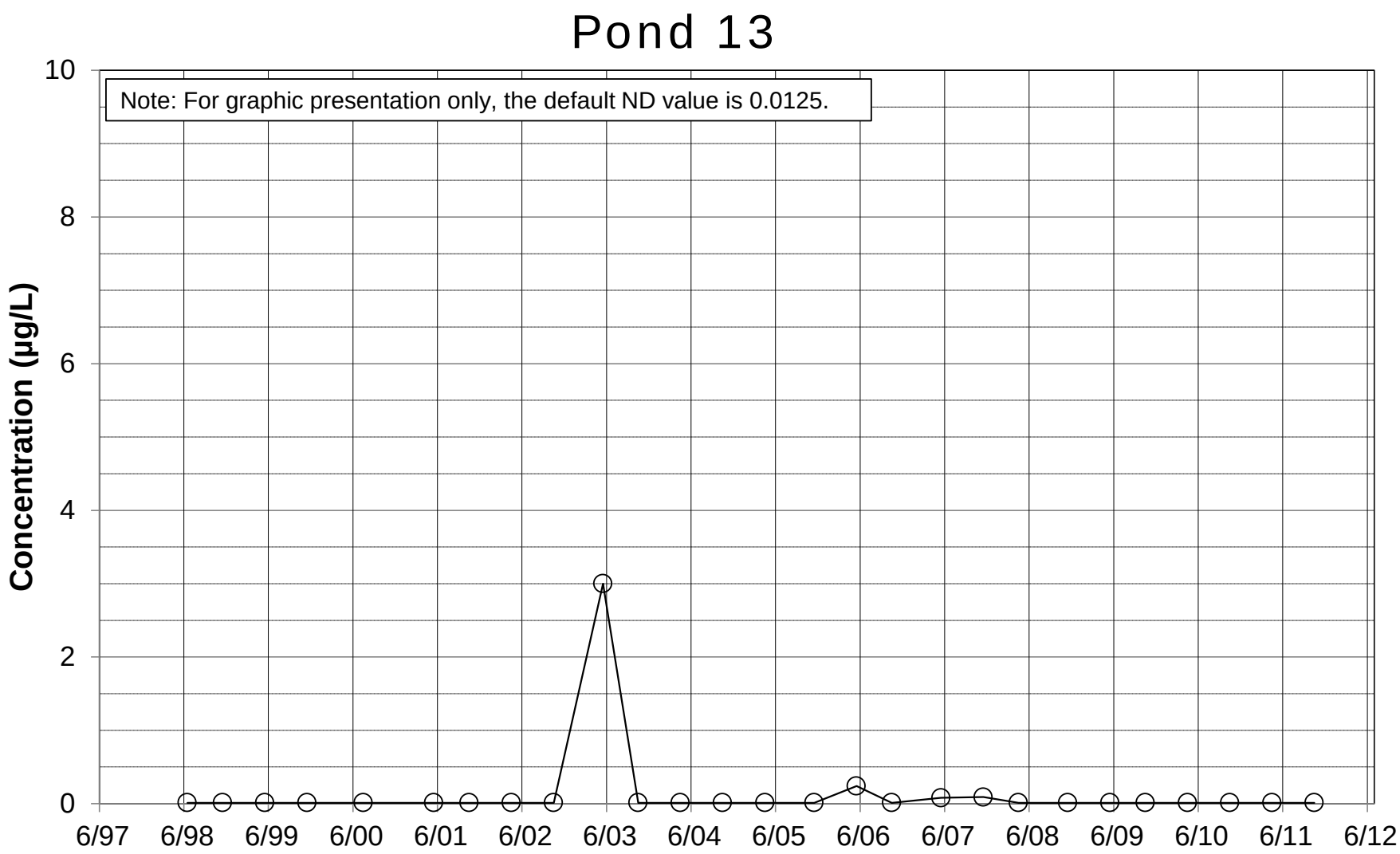
6/09
6/10
6/11
6/12

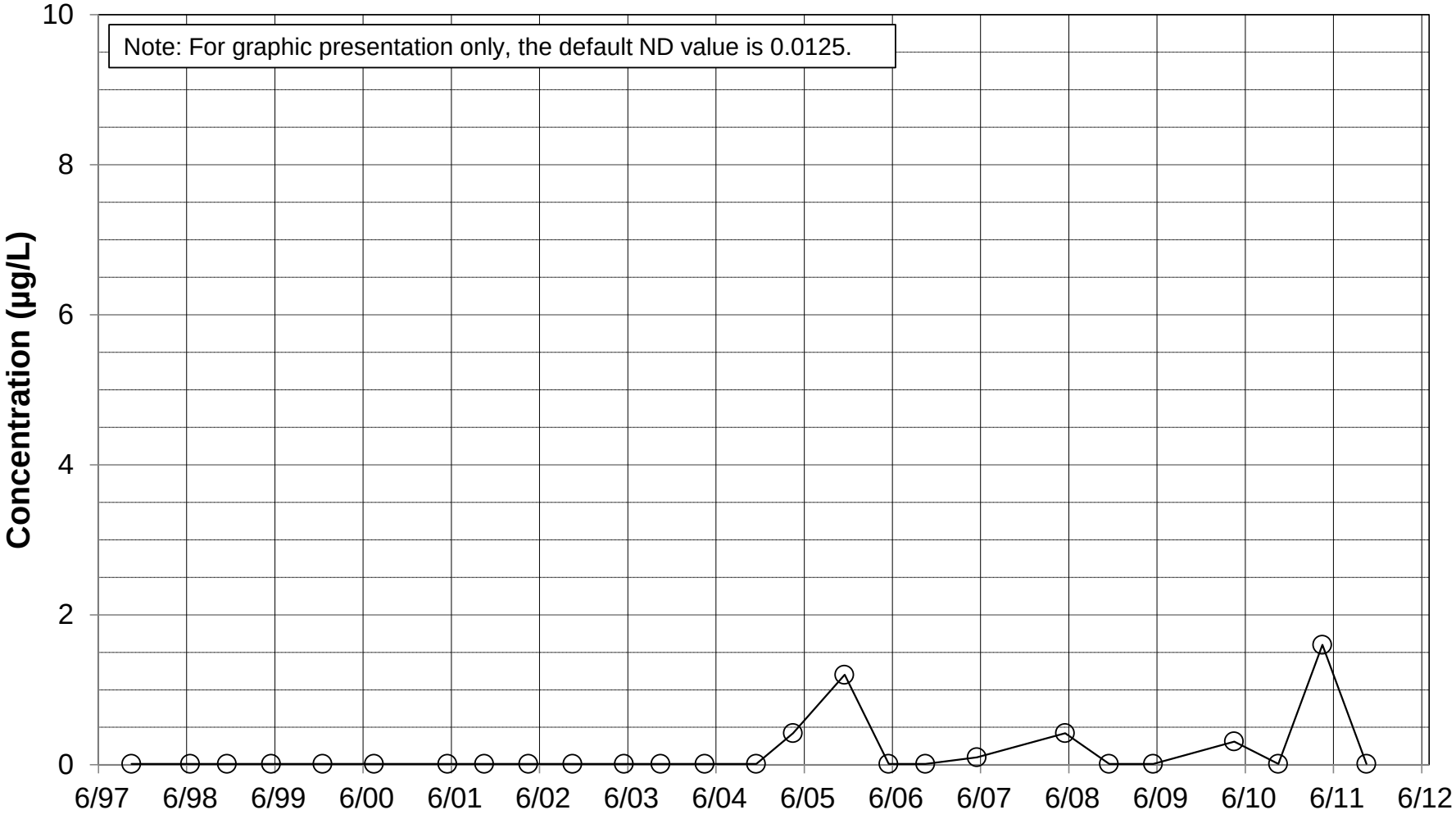

MW-7BU
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

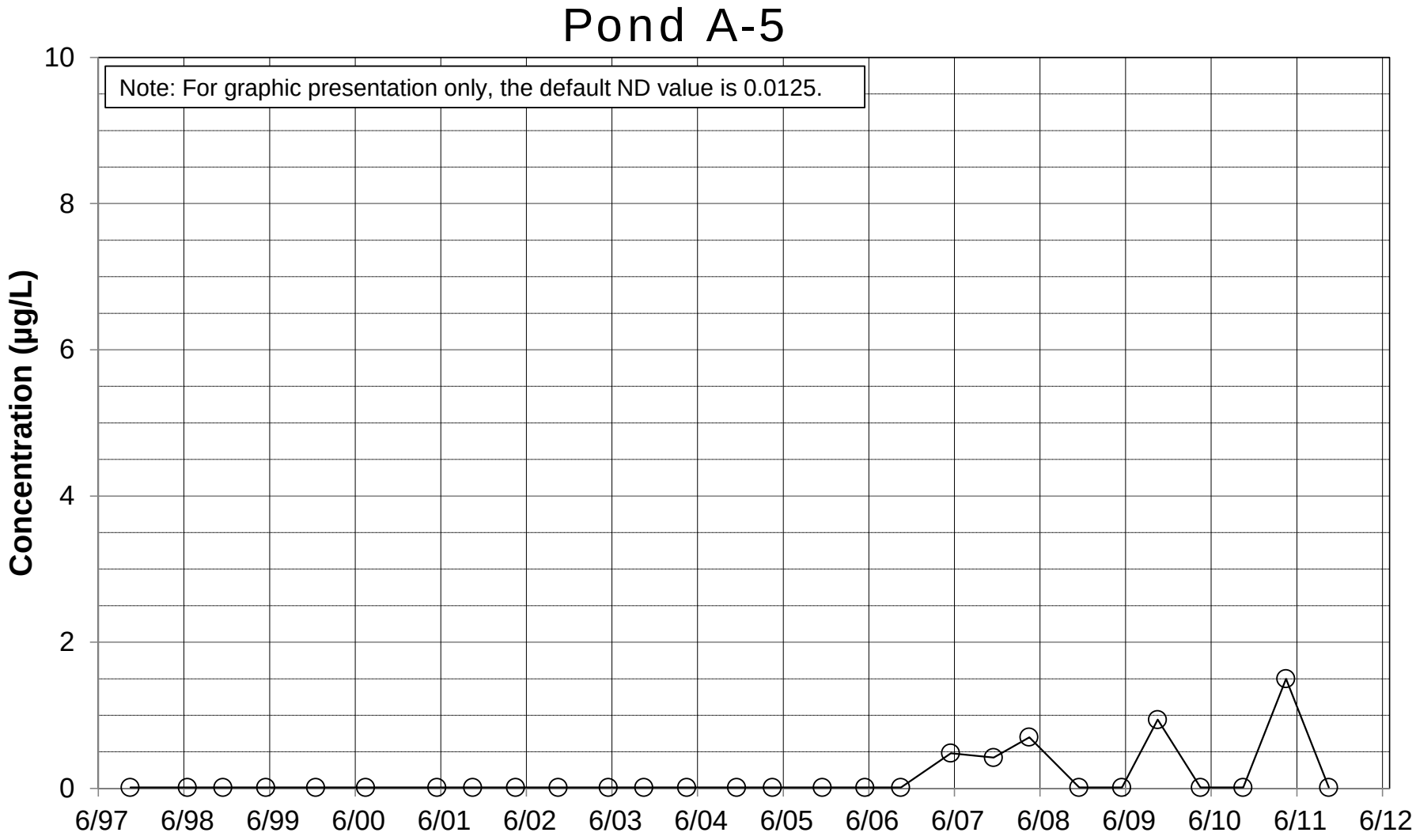

MW-7C
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

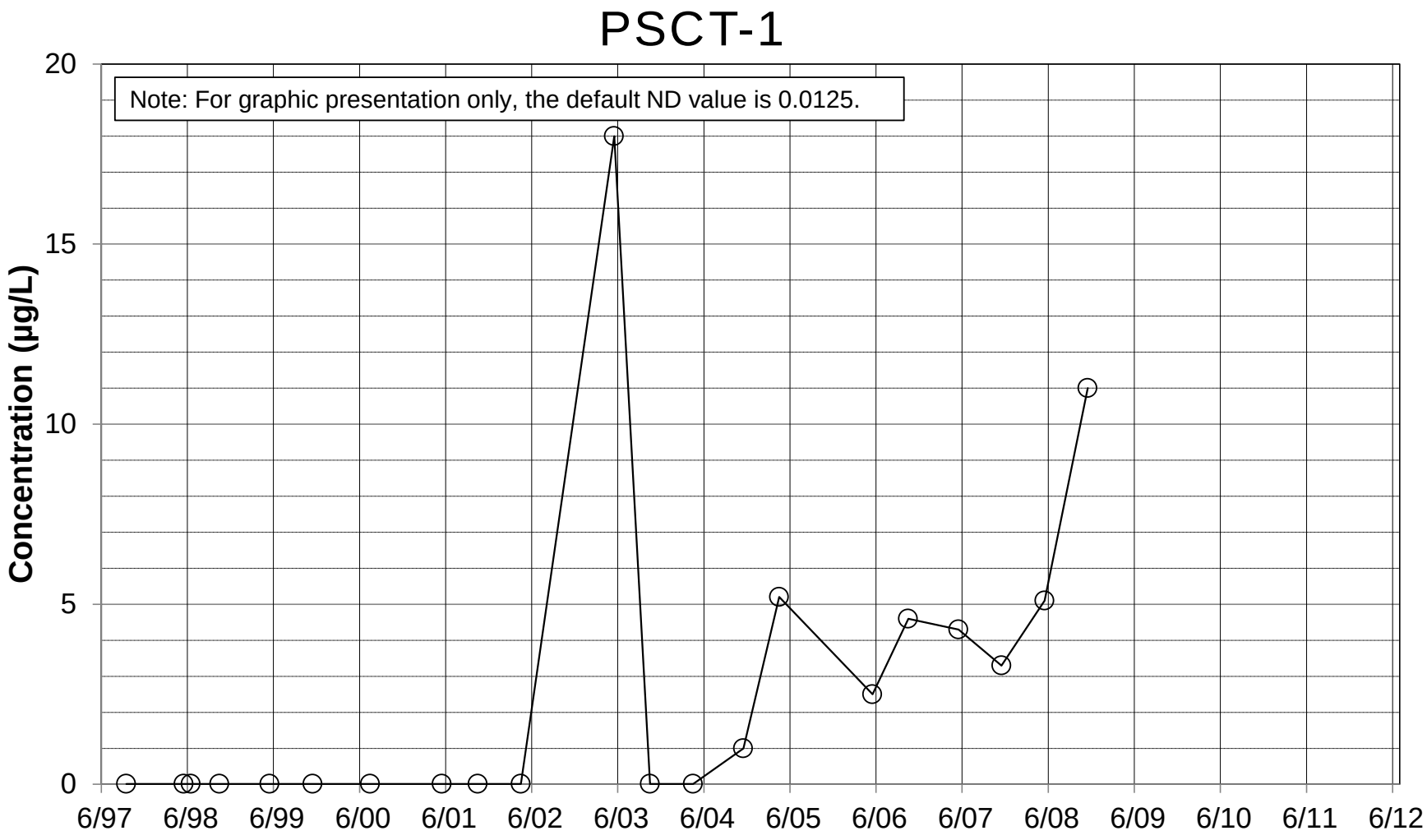

MW-7D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

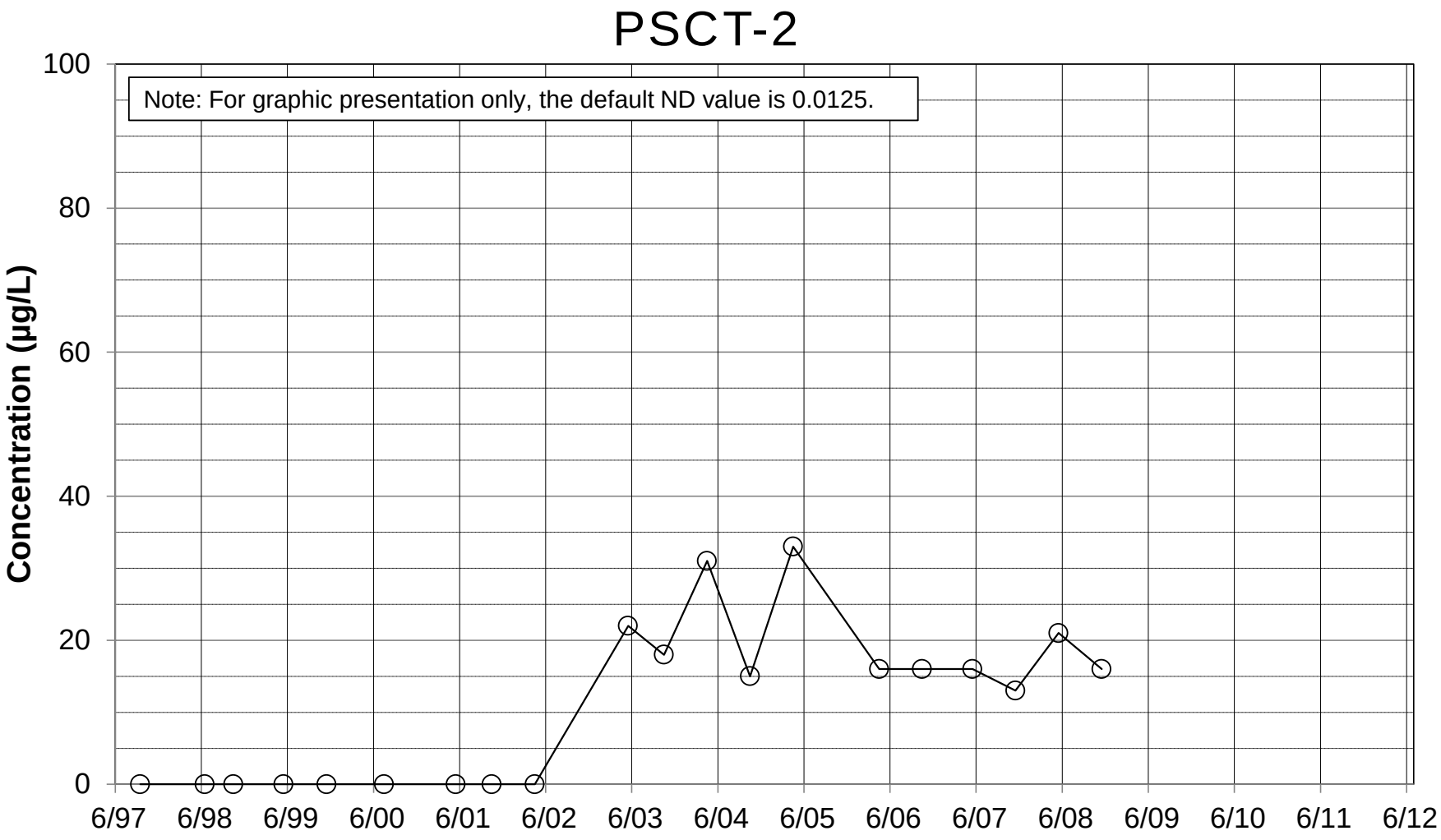

Pond 13
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

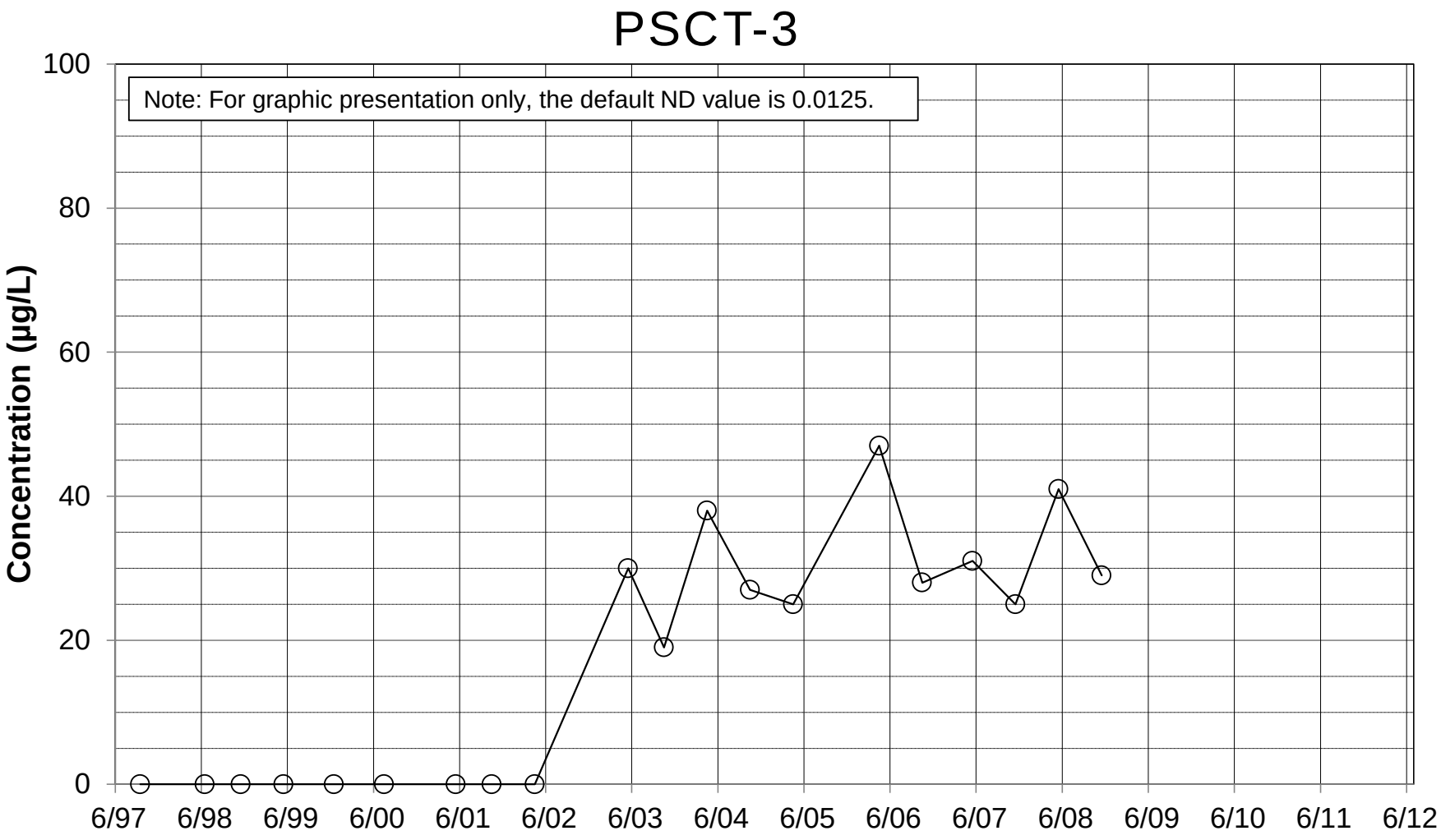
Pond 18

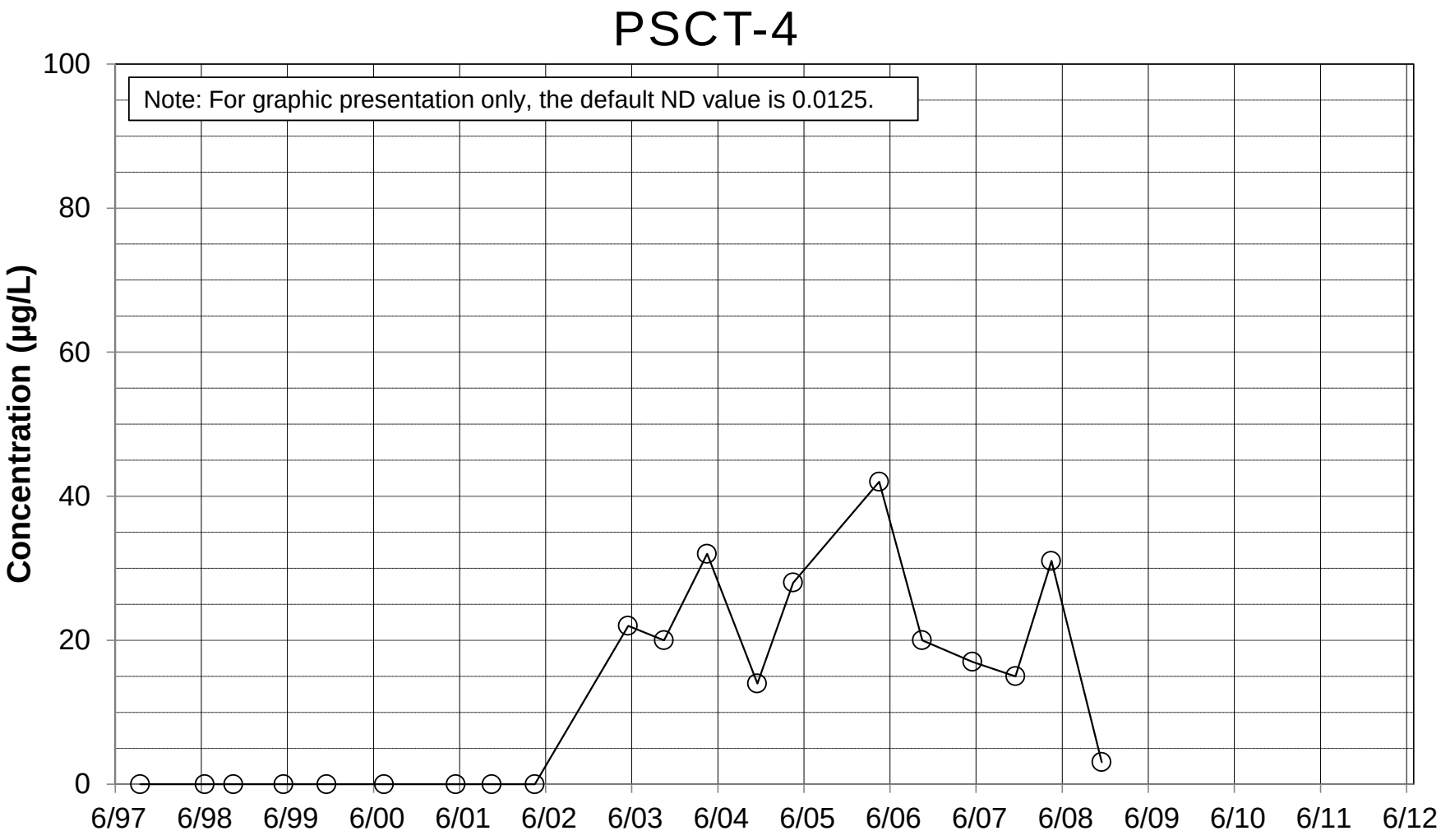

Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


Pond A-5
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


PSCT-1
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


PSCT-2
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


PSCT-3
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


PSCT-4
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
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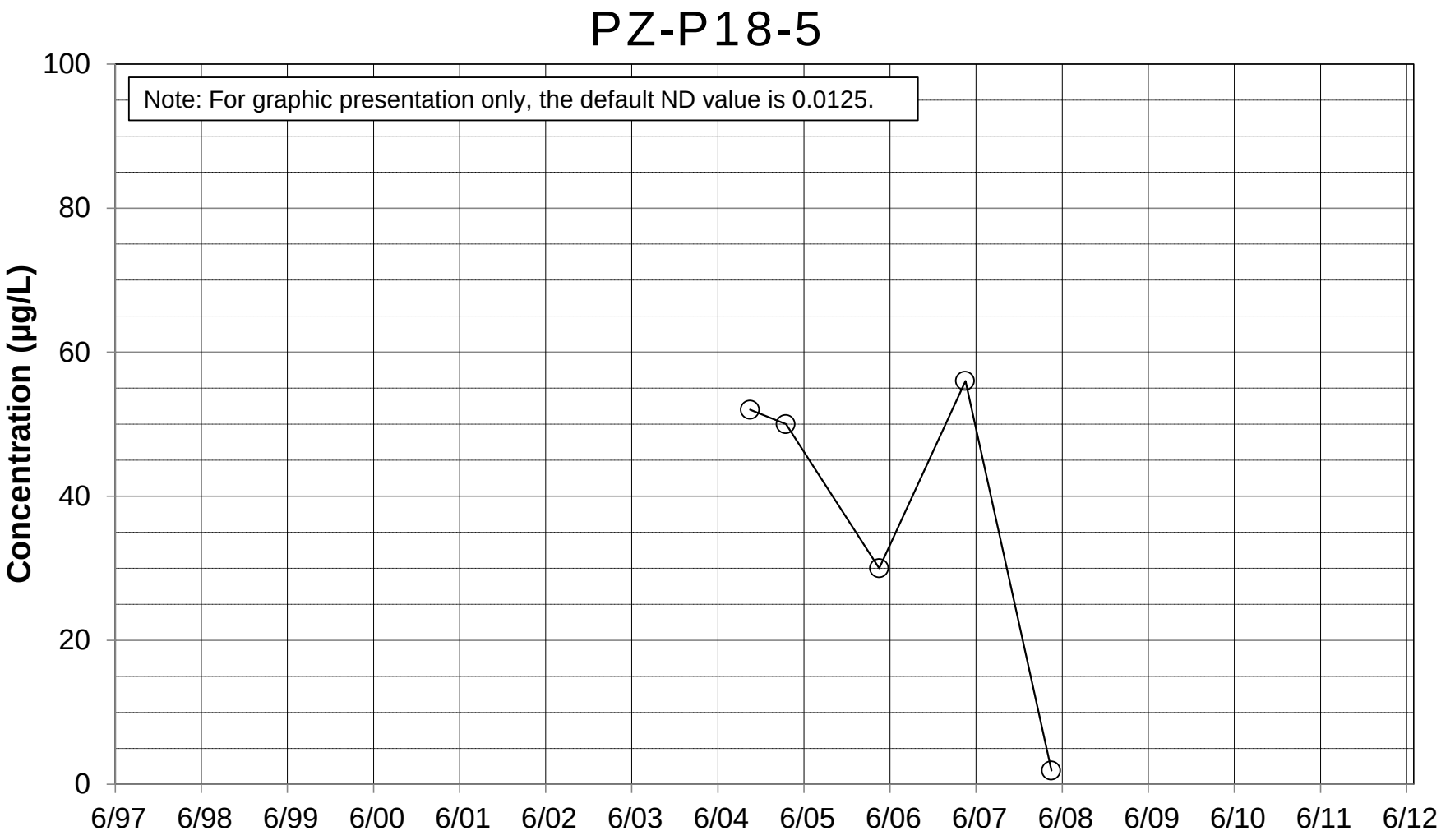
6/09
6/10
6/11
6/12


PZ-P18-5
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
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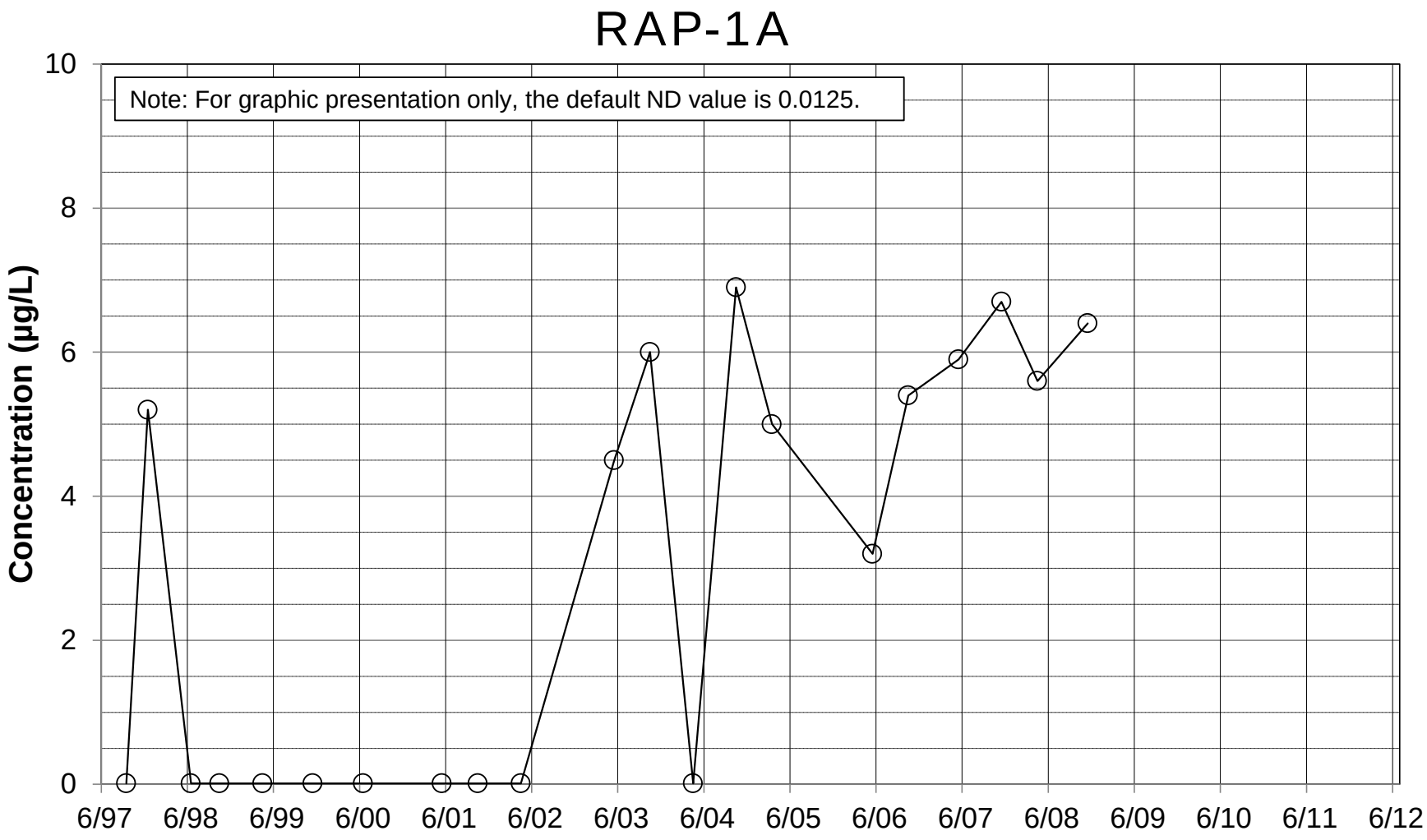
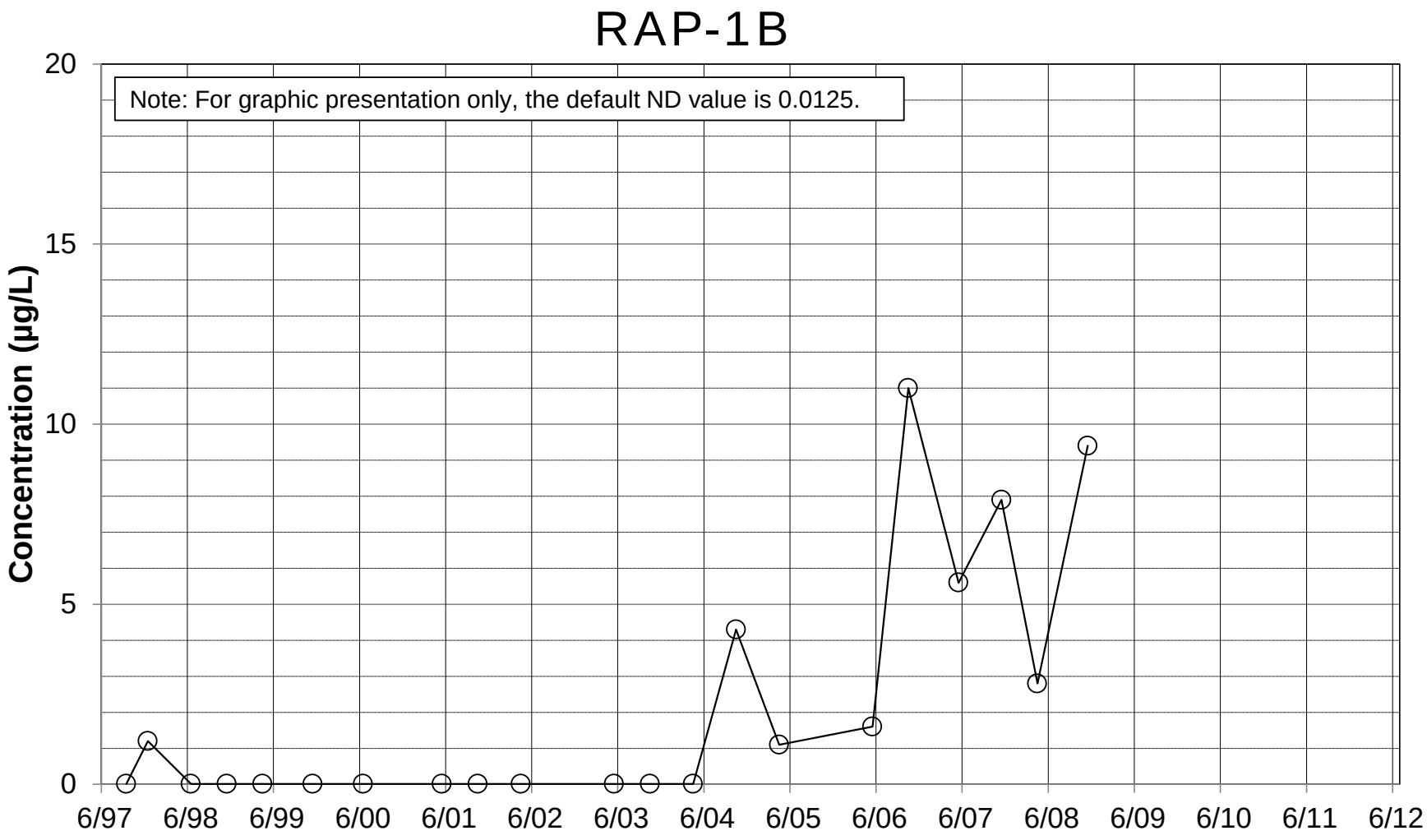
6/09
6/10
6/11
6/12


RAP-1A
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RAP-1B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
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6/06
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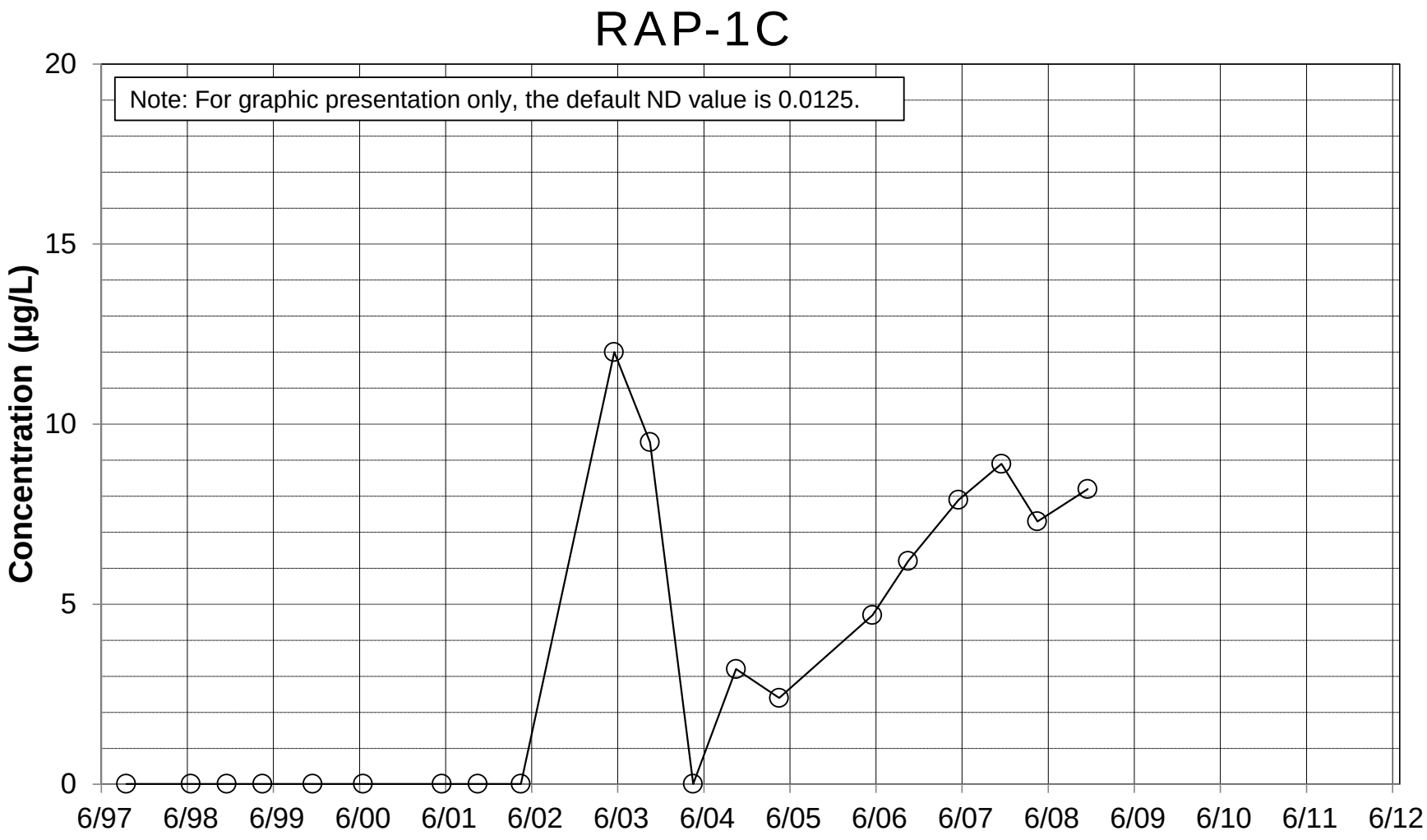
6/09
6/10
6/11
6/12


RAP-1C
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
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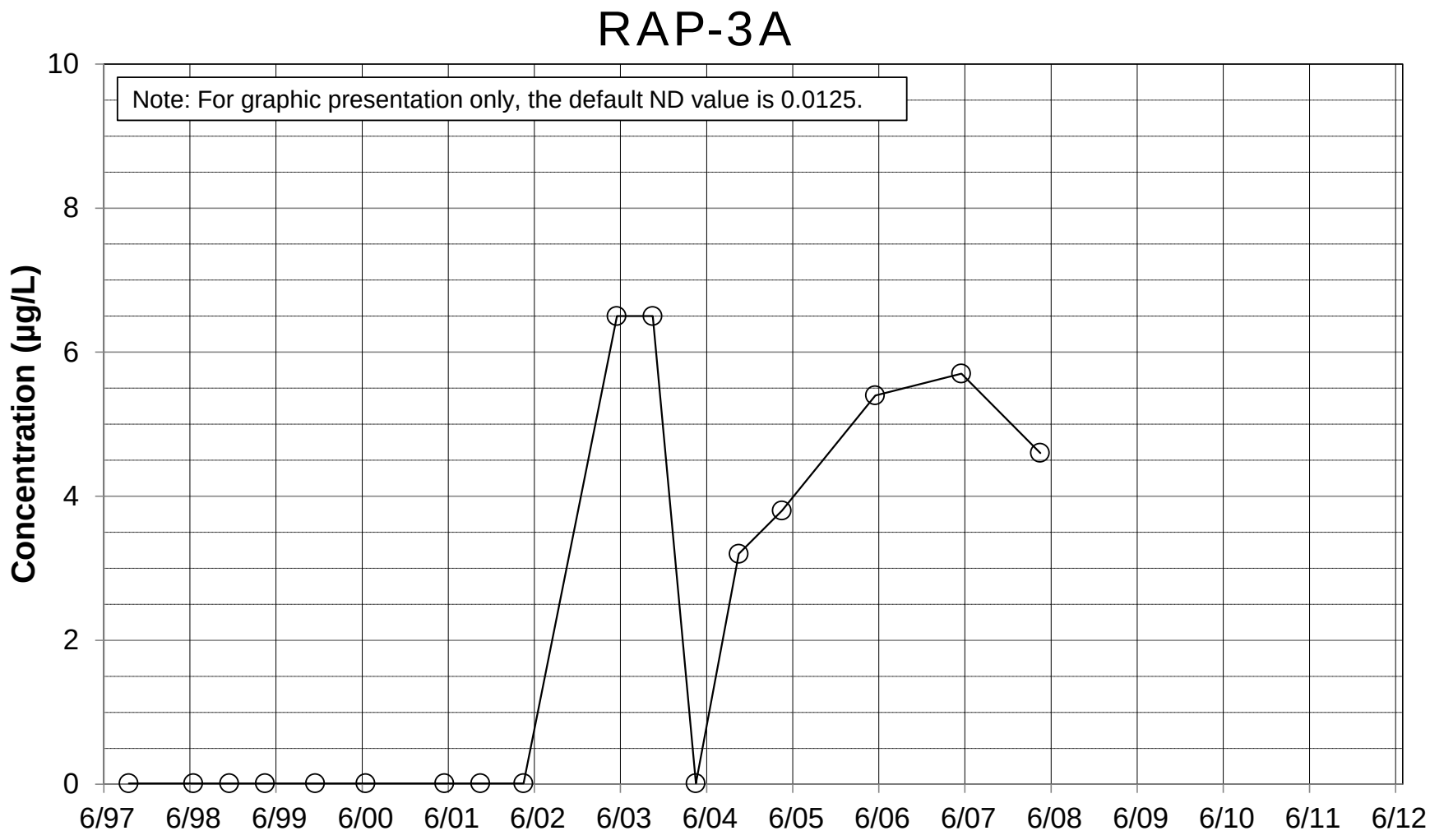
6/08
6/09
6/10
6/11
6/12


RAP-3A
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
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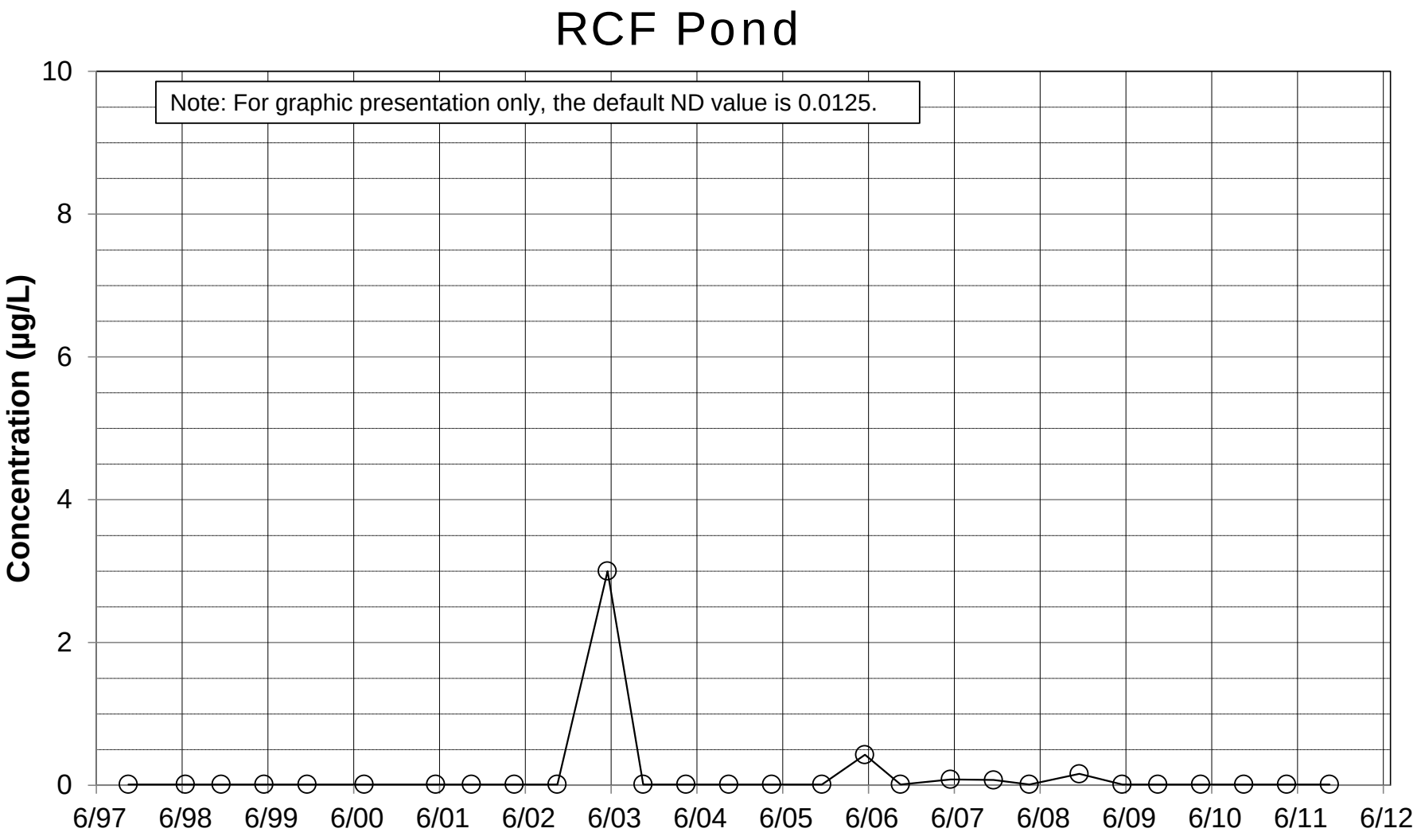
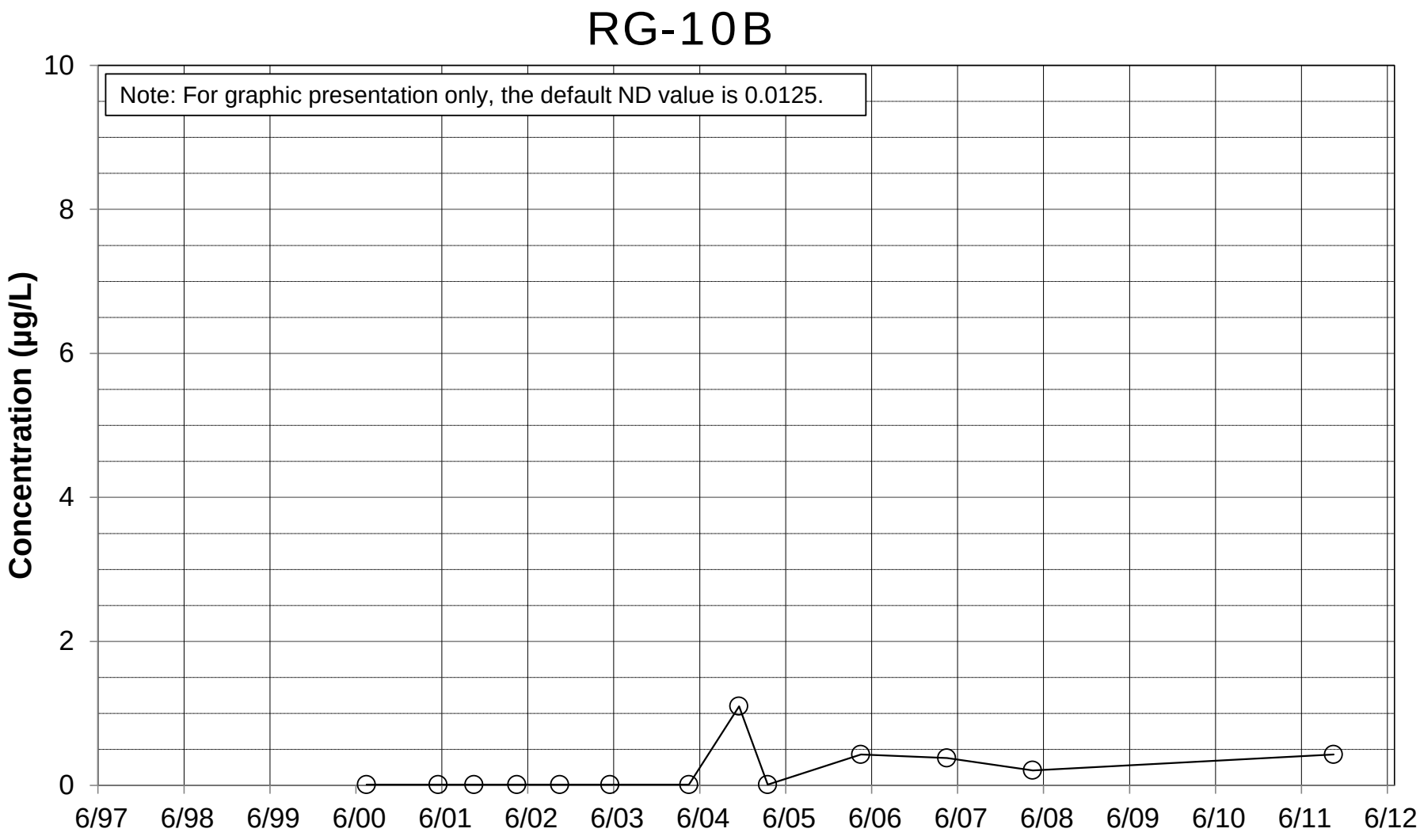
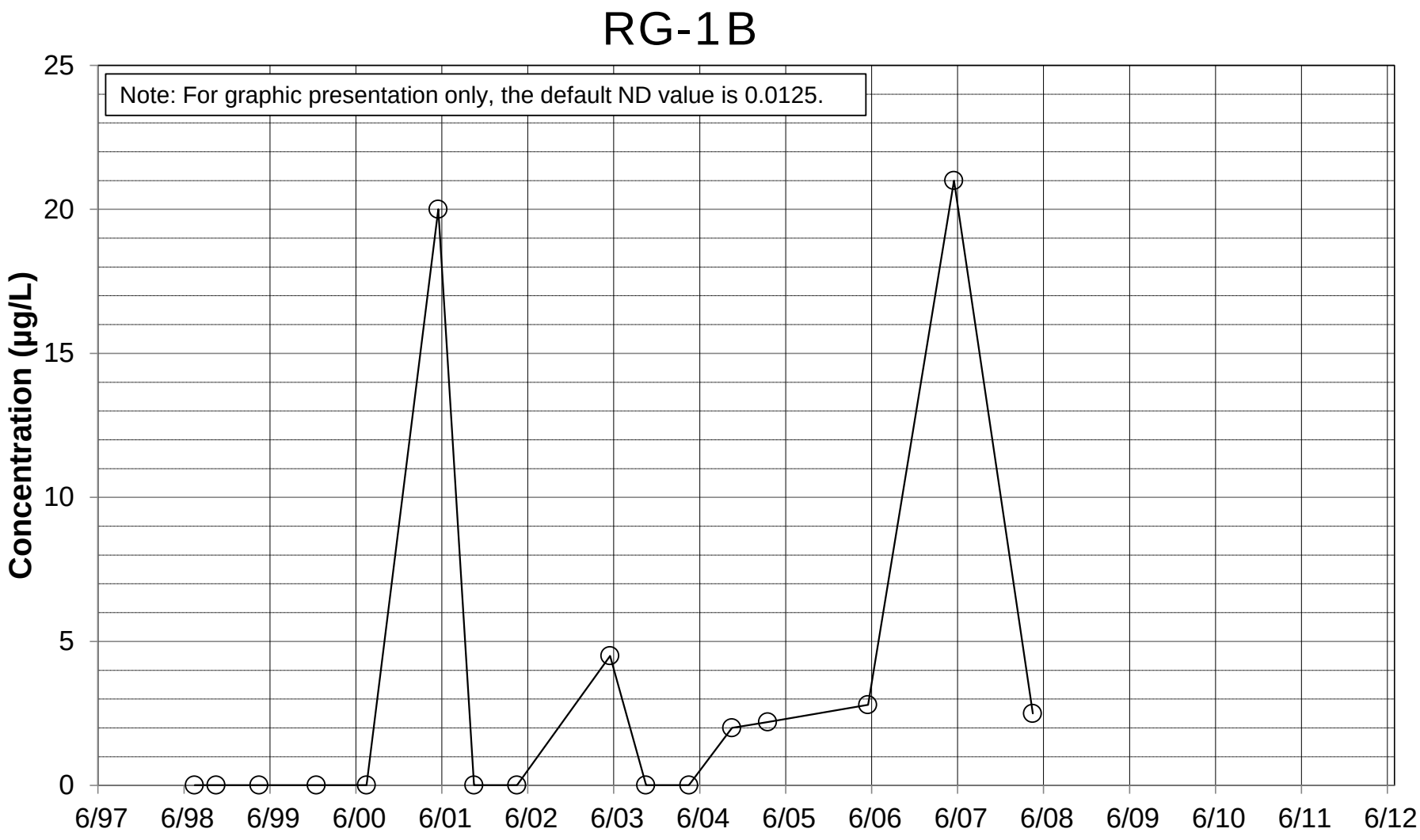
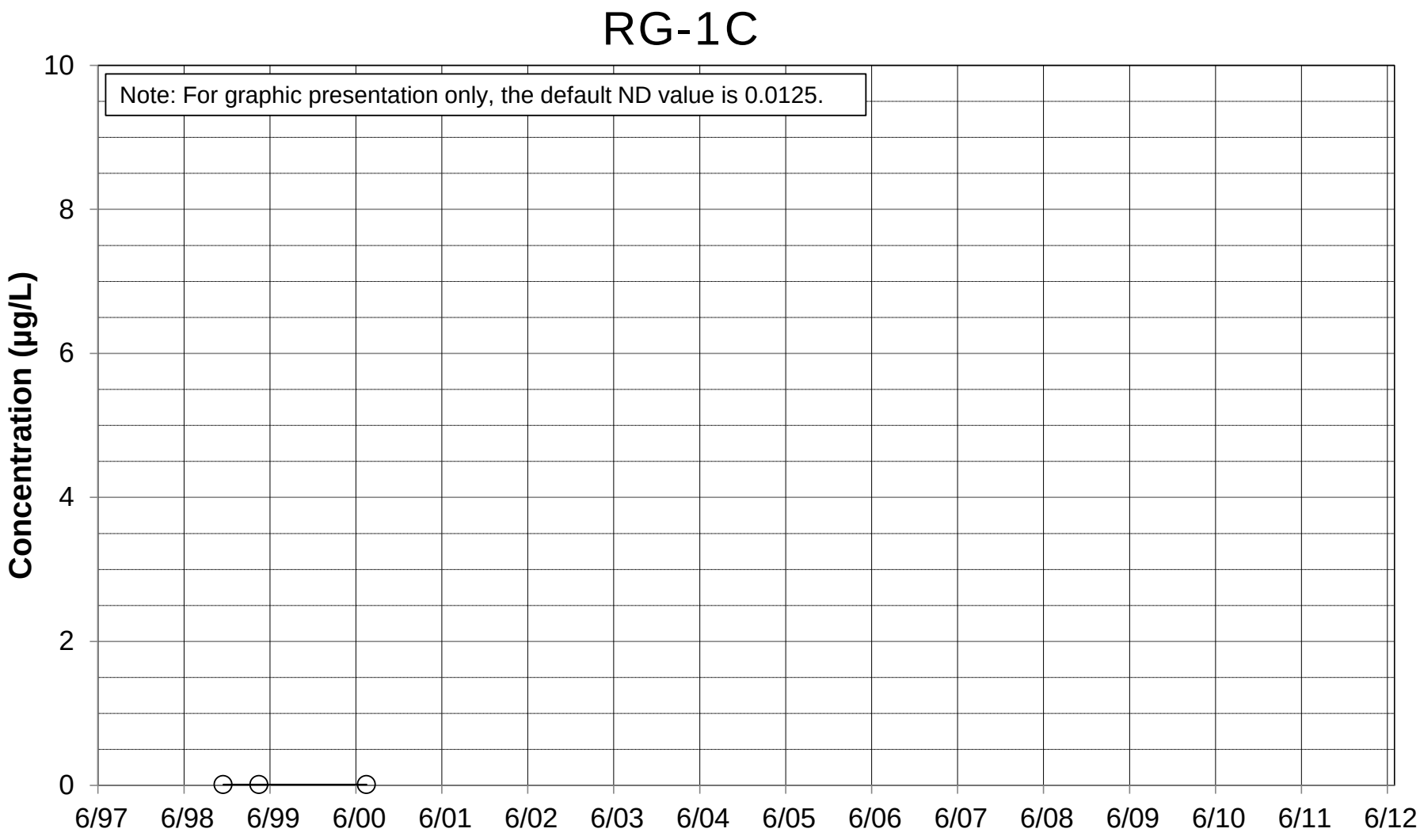
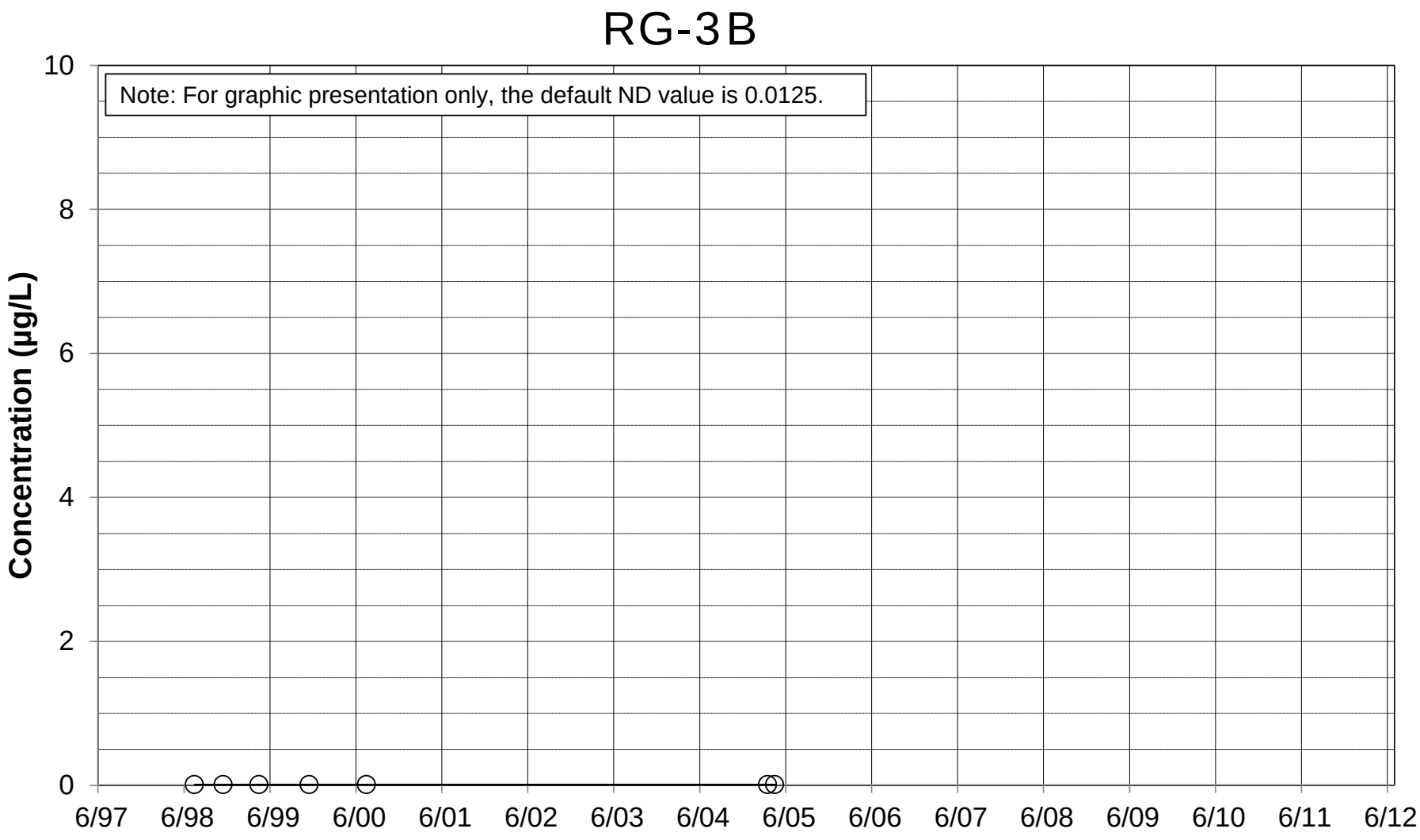
6/08
6/09
6/10
6/11
6/12

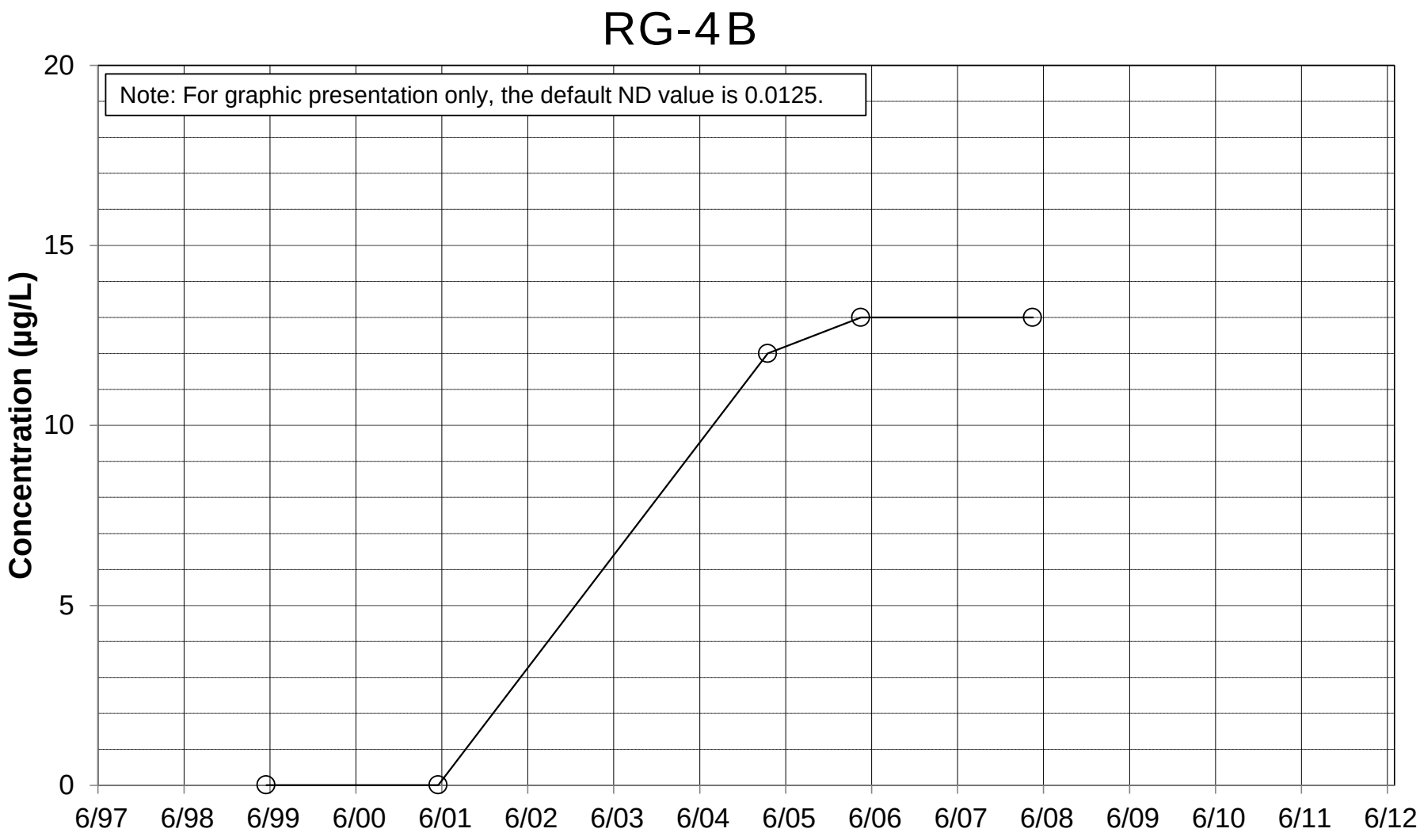

RCF Pond
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

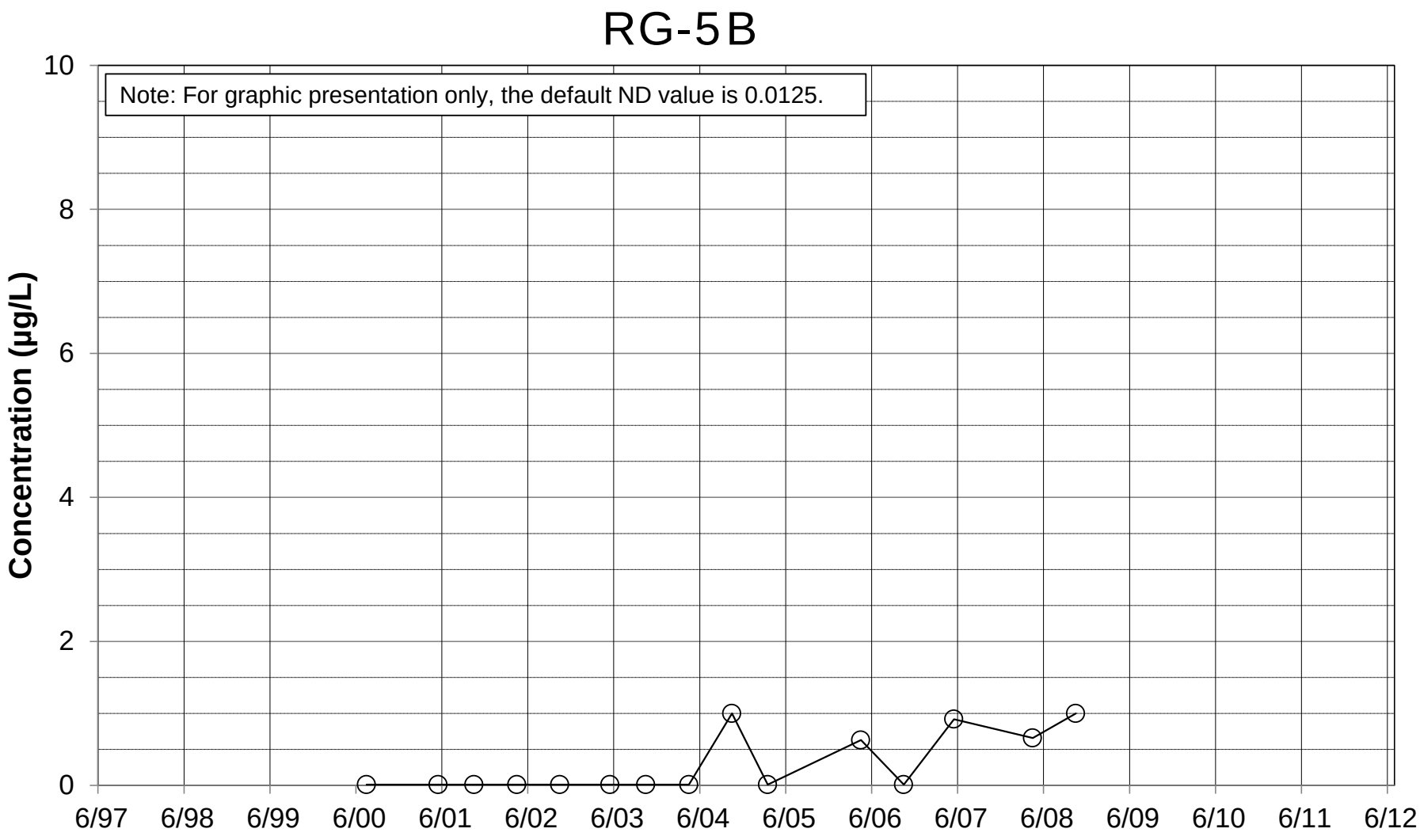

RG-10B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

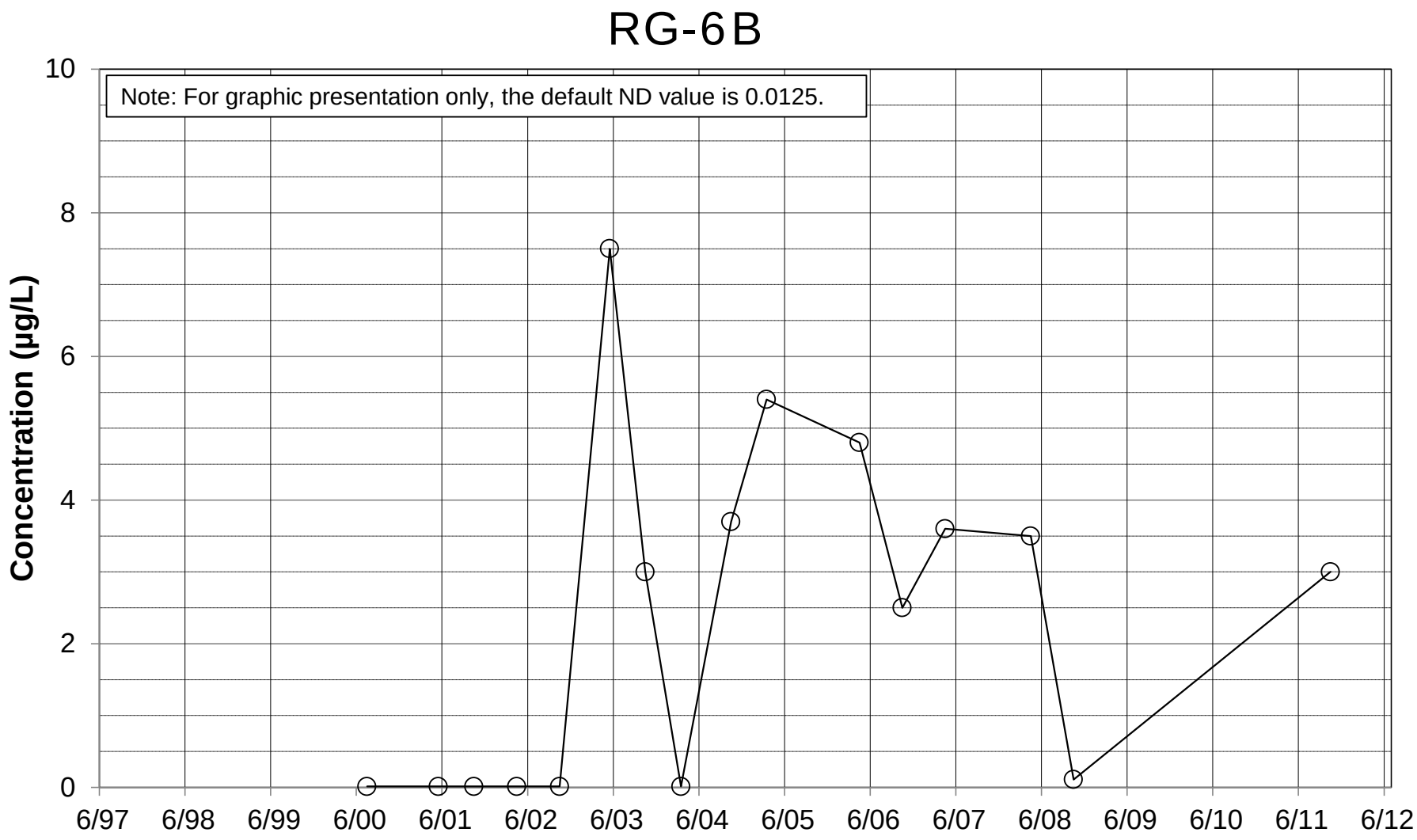

RG-1B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
25
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

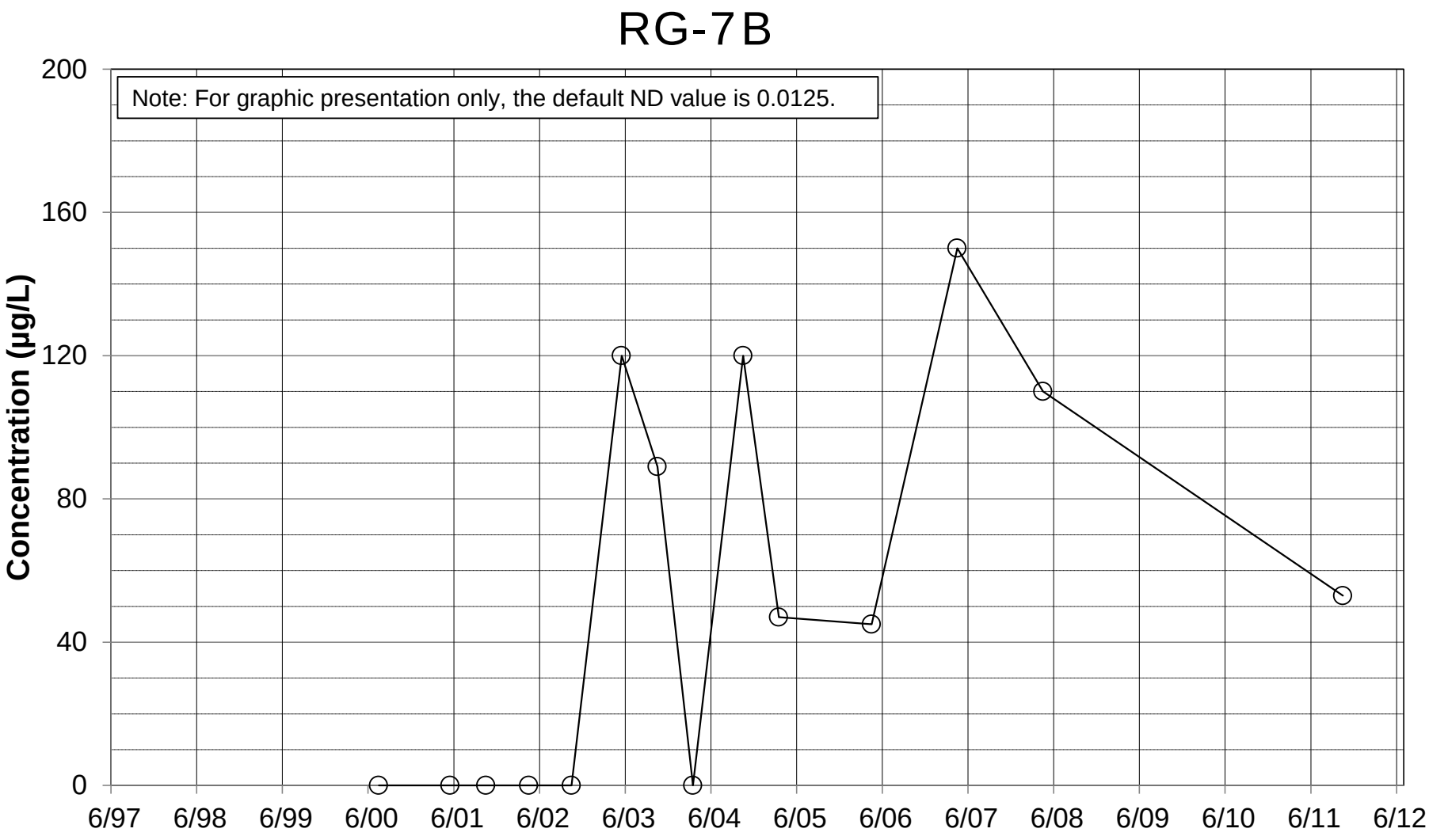

RG-1C
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

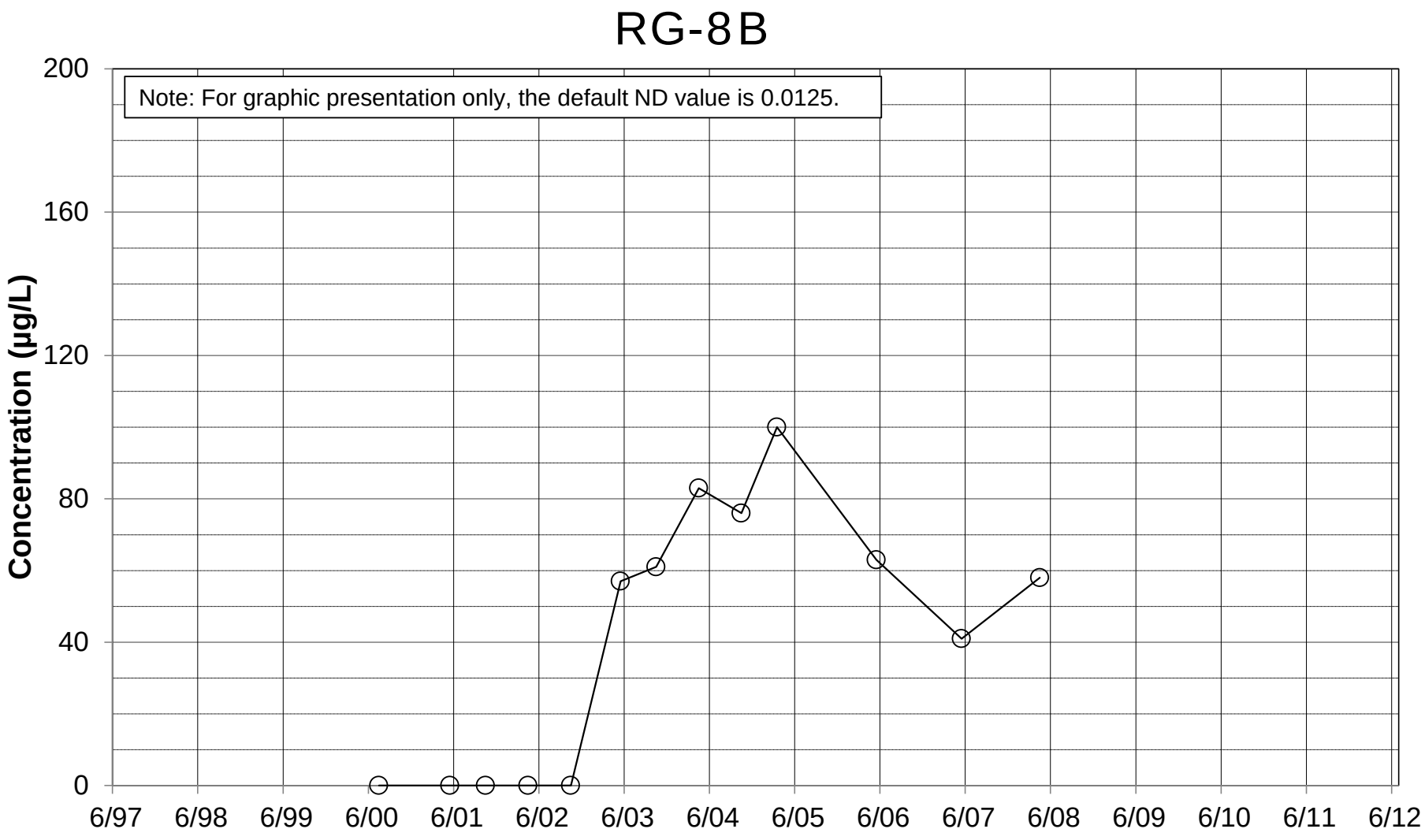

RG-3B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

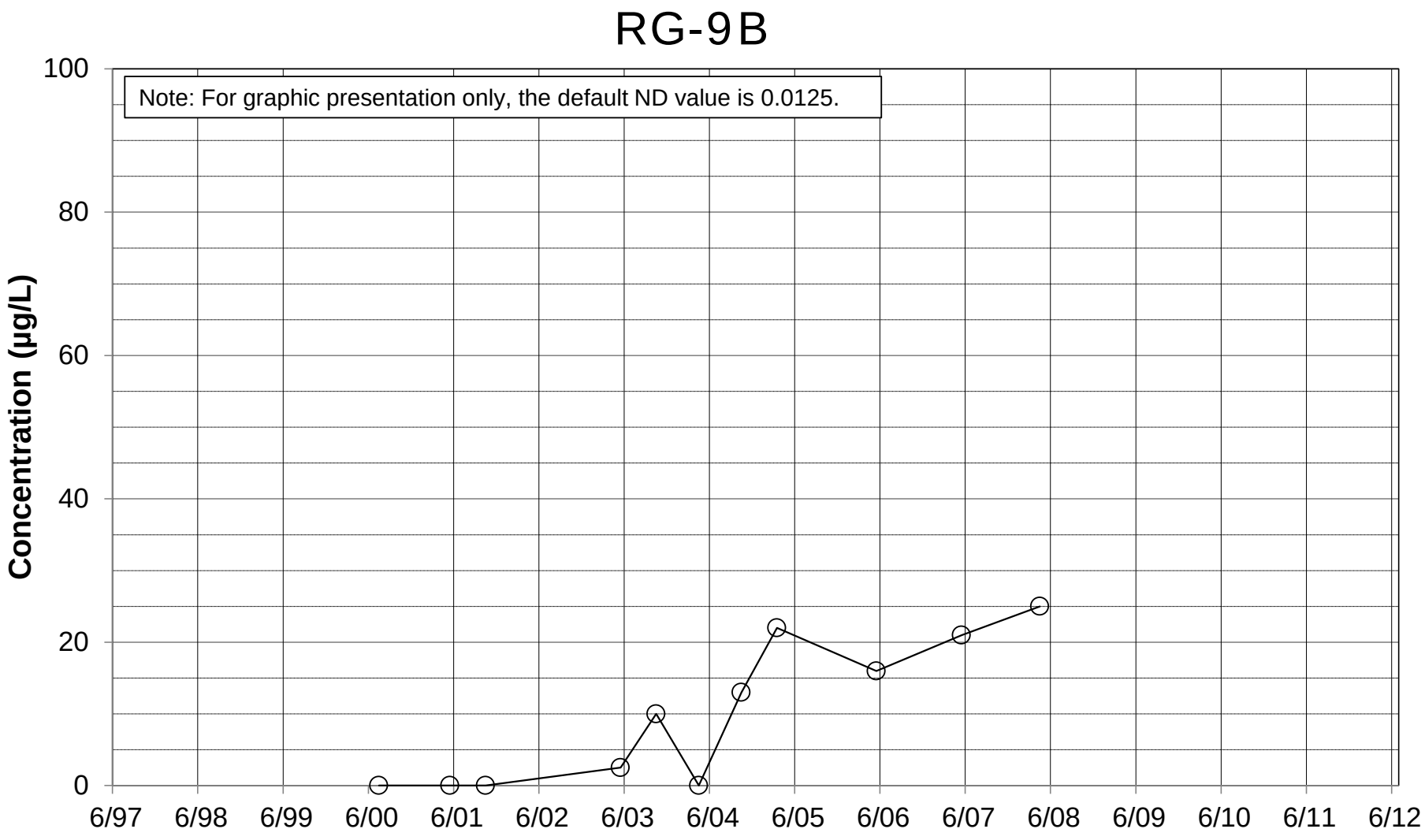

RG-4B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

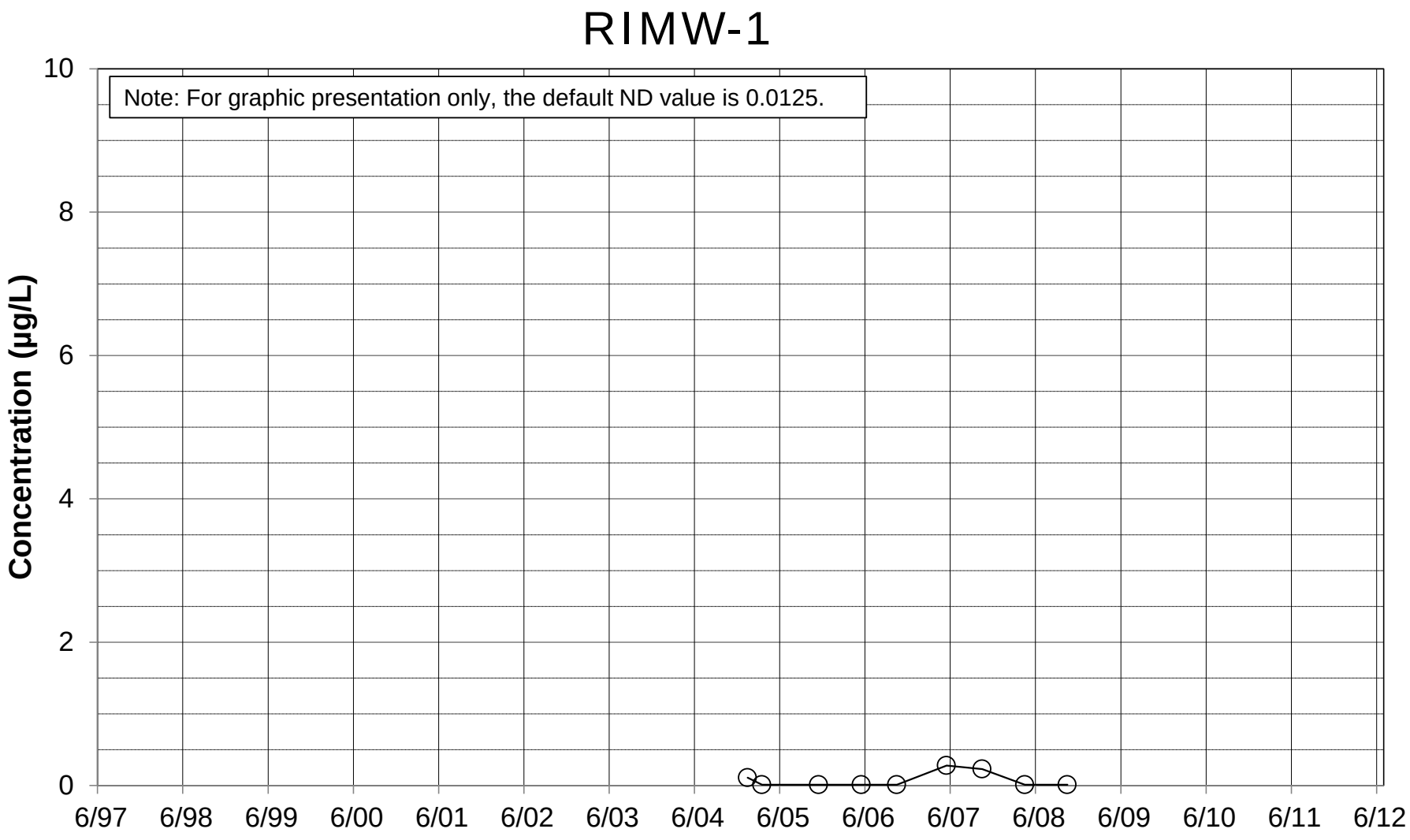

RG-5B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

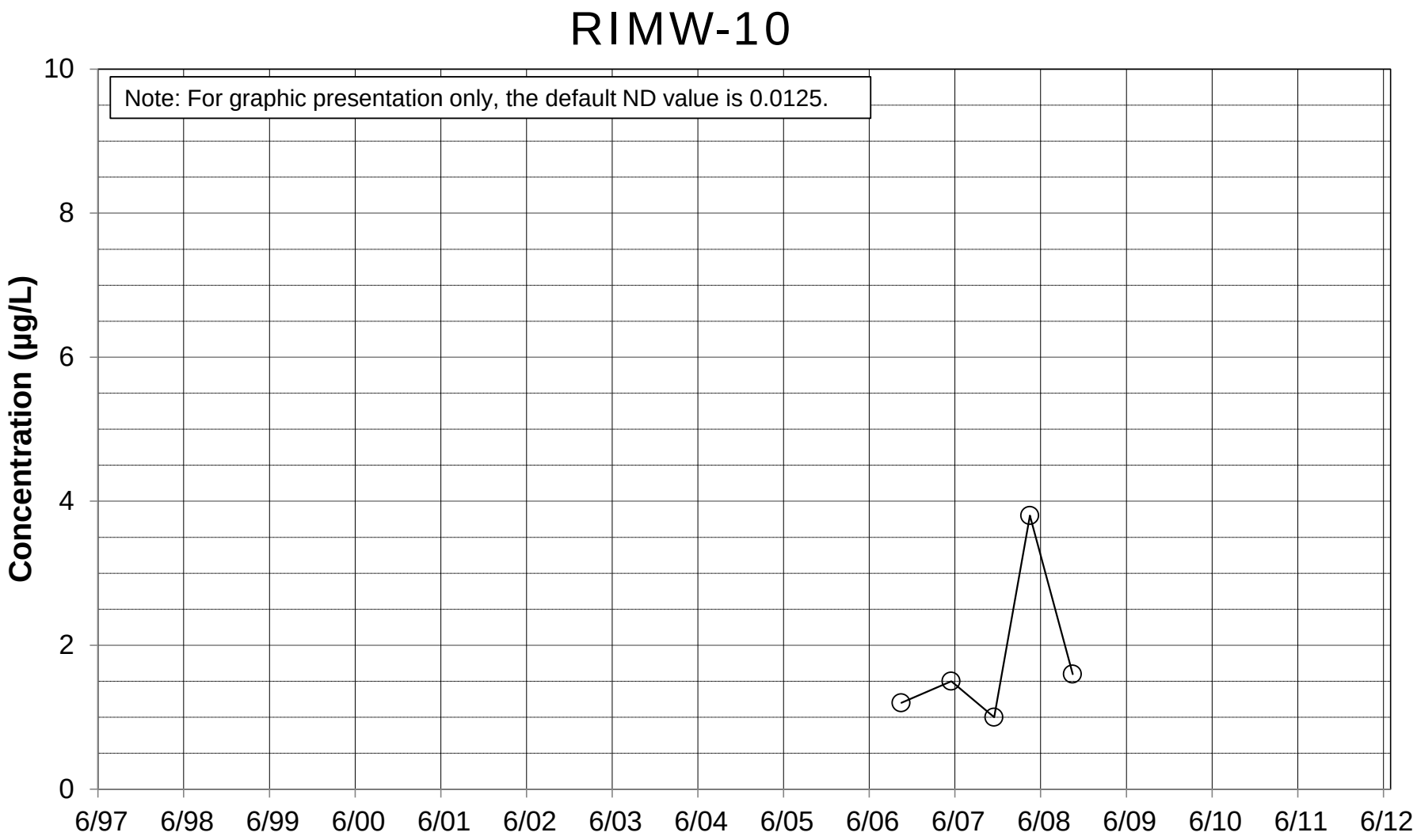

RG-6B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

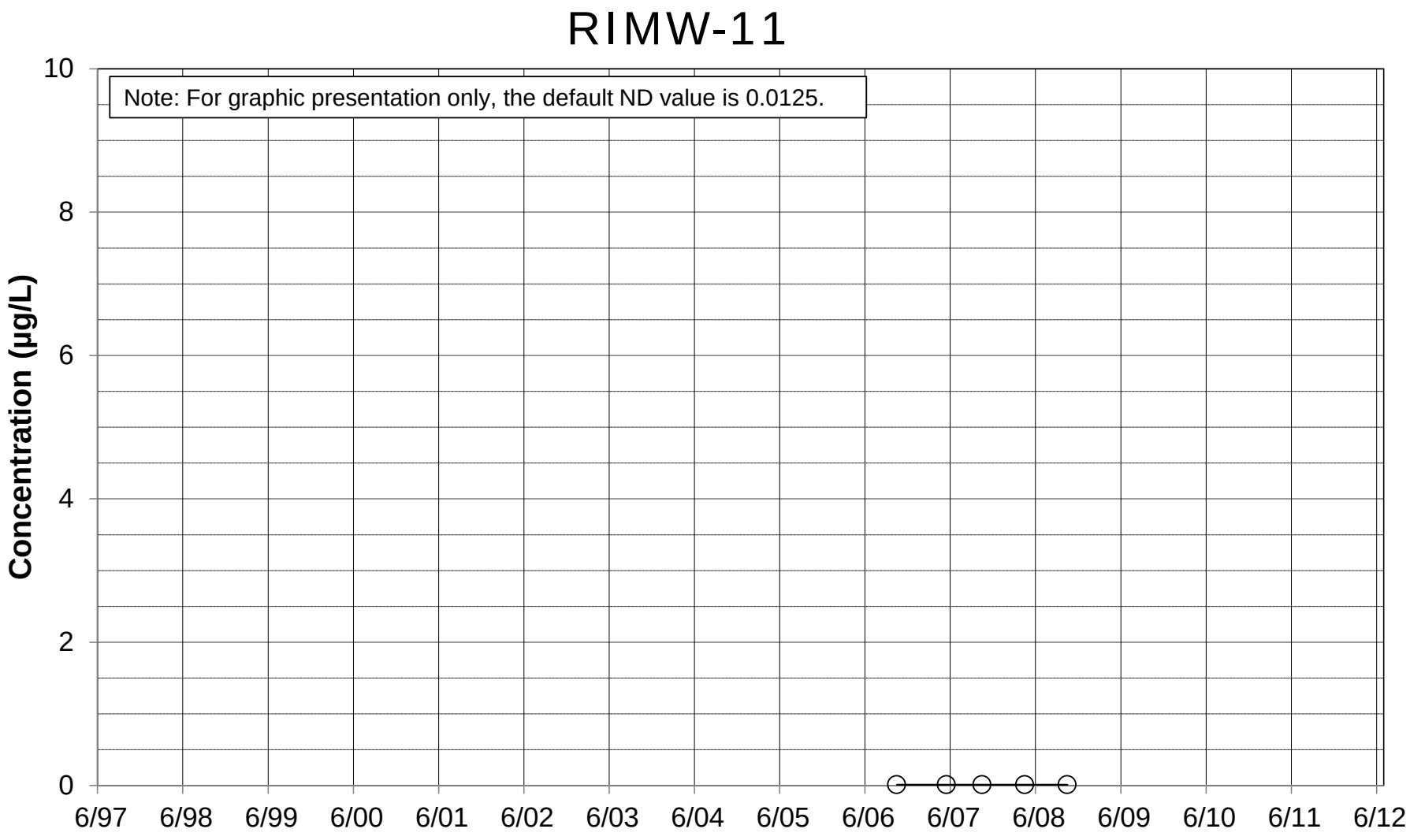

RG-7B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
200
160
120
80
40
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

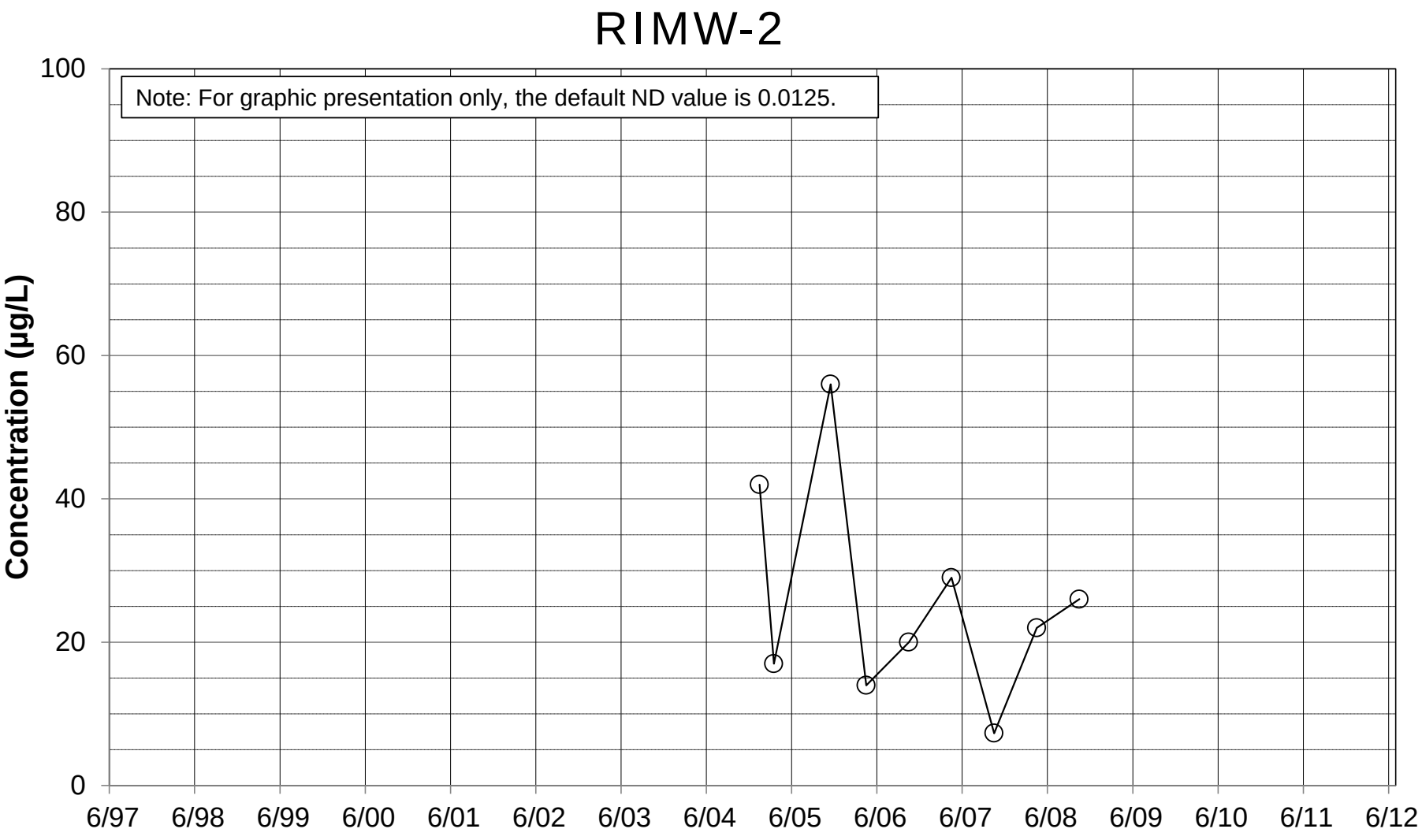

RG-8B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
200
160
120
80
40
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

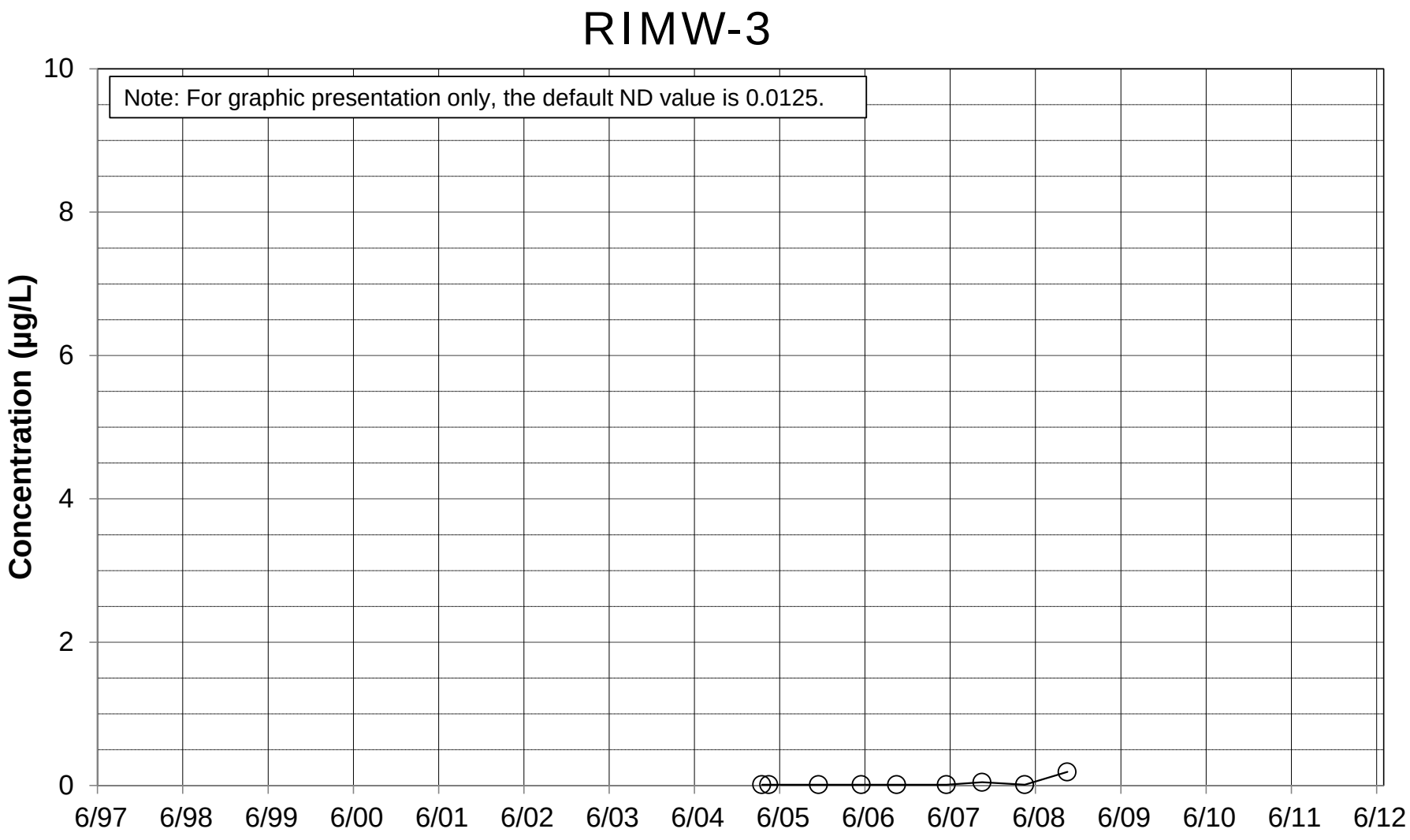

RG-9B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

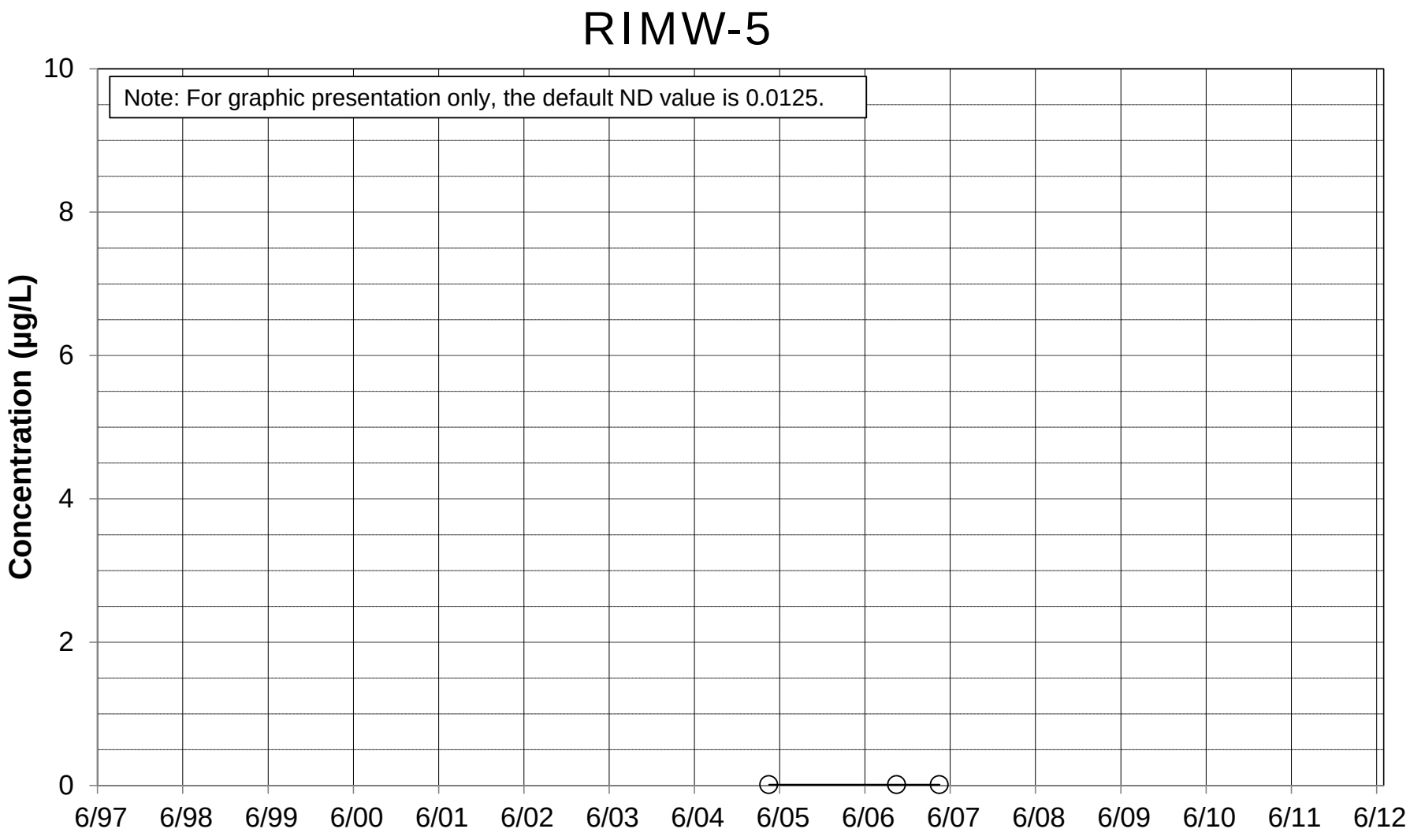

RIMW-1
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

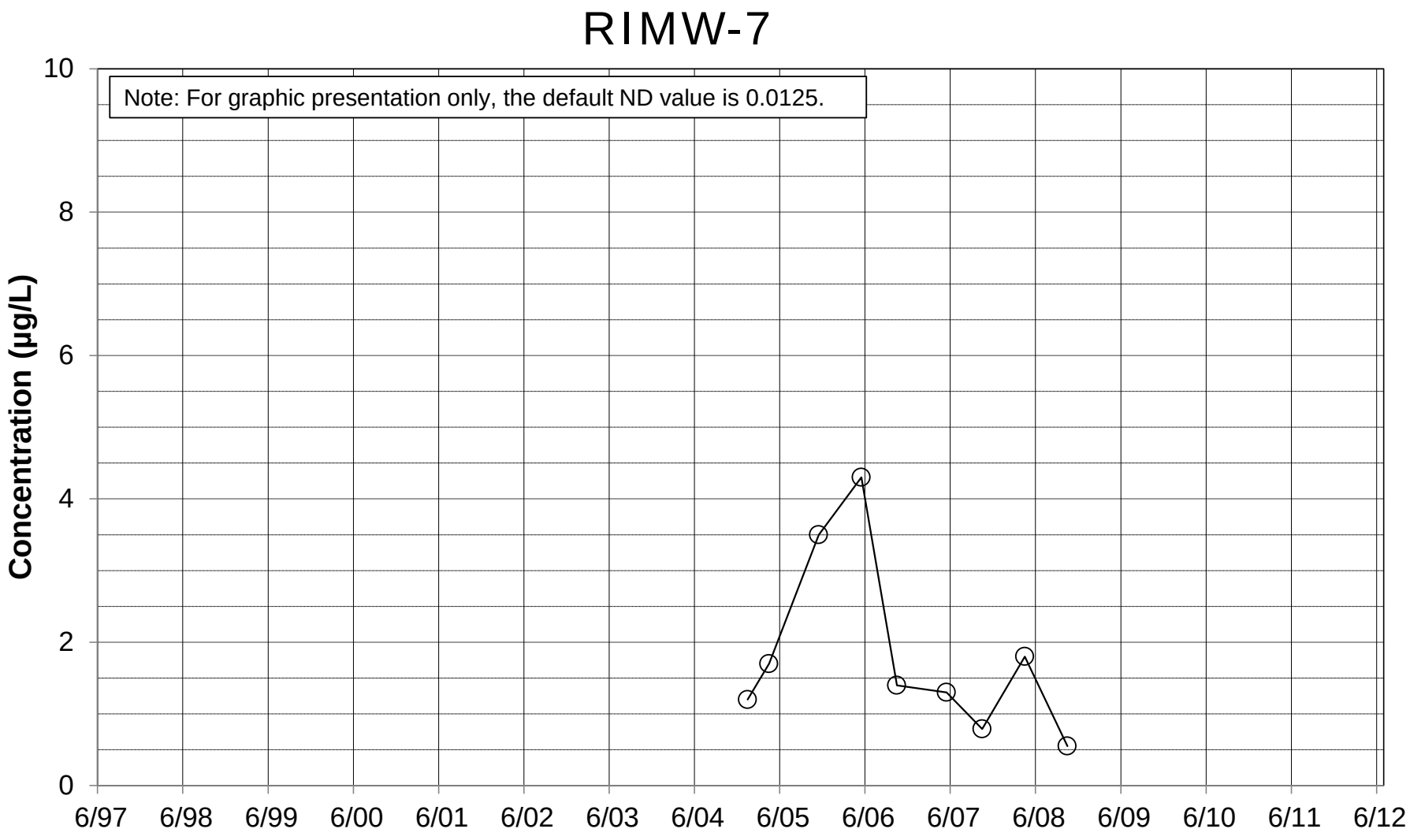

RIMW-10
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

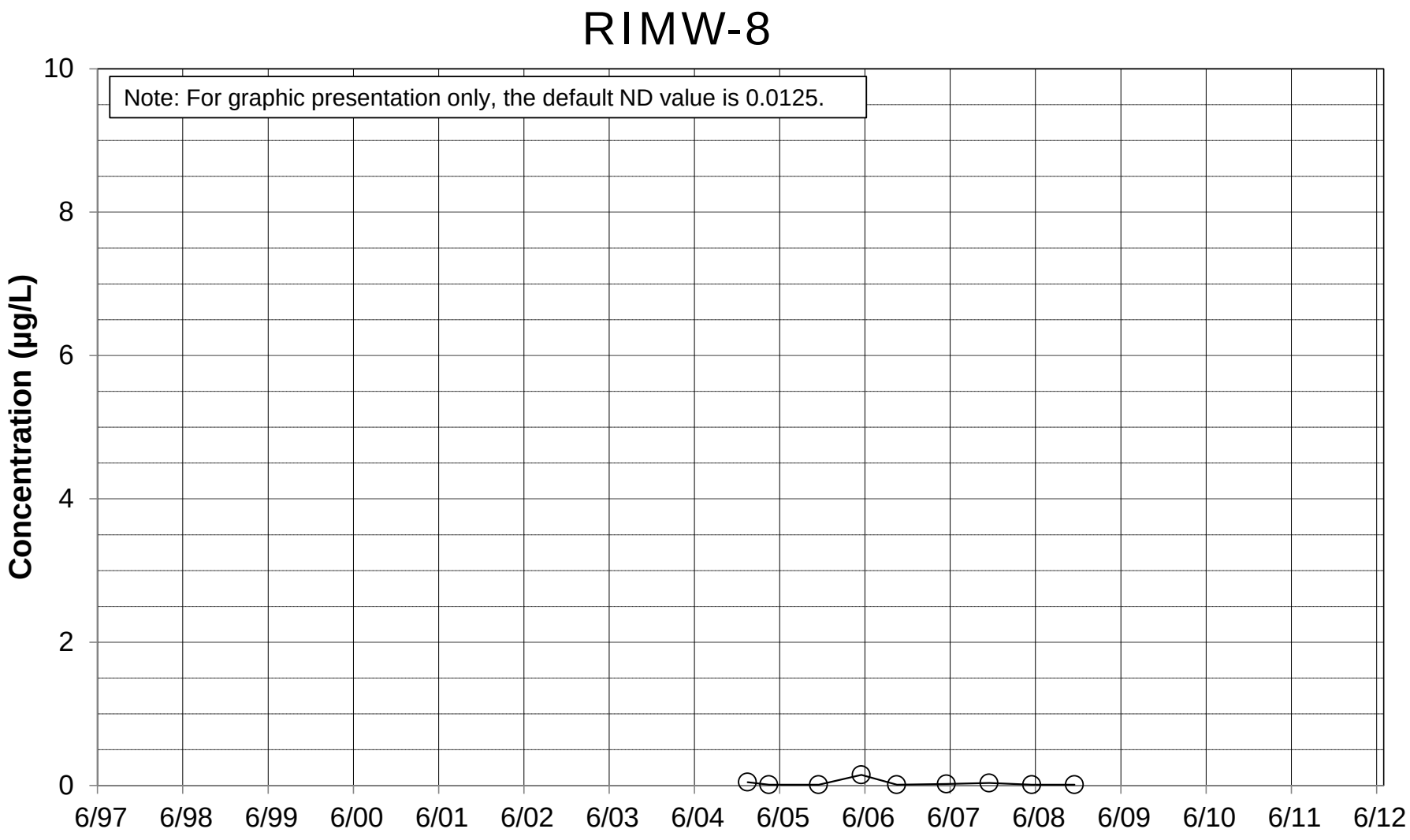

RIMW-11
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

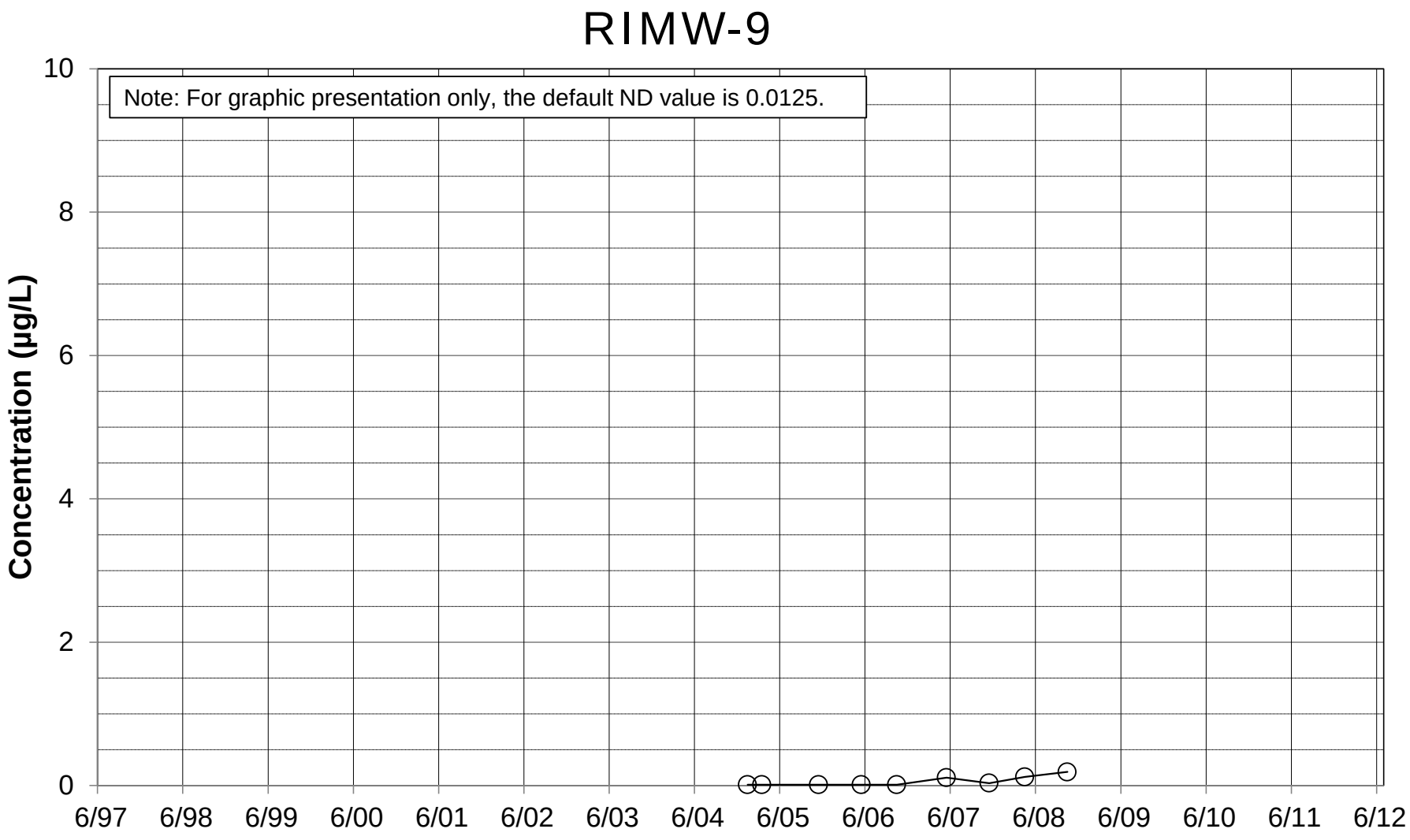

RIMW-2
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

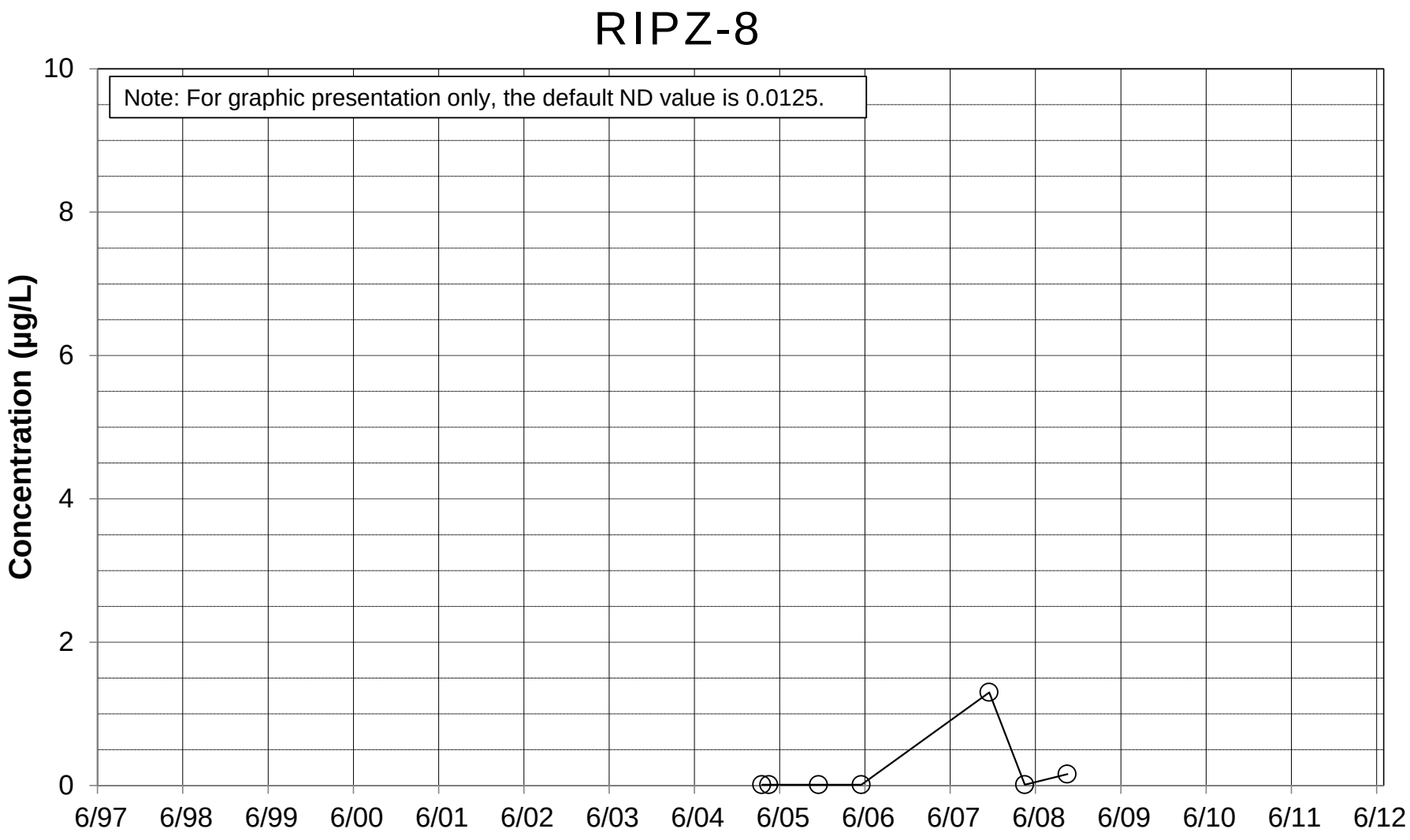

RIMW-3
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

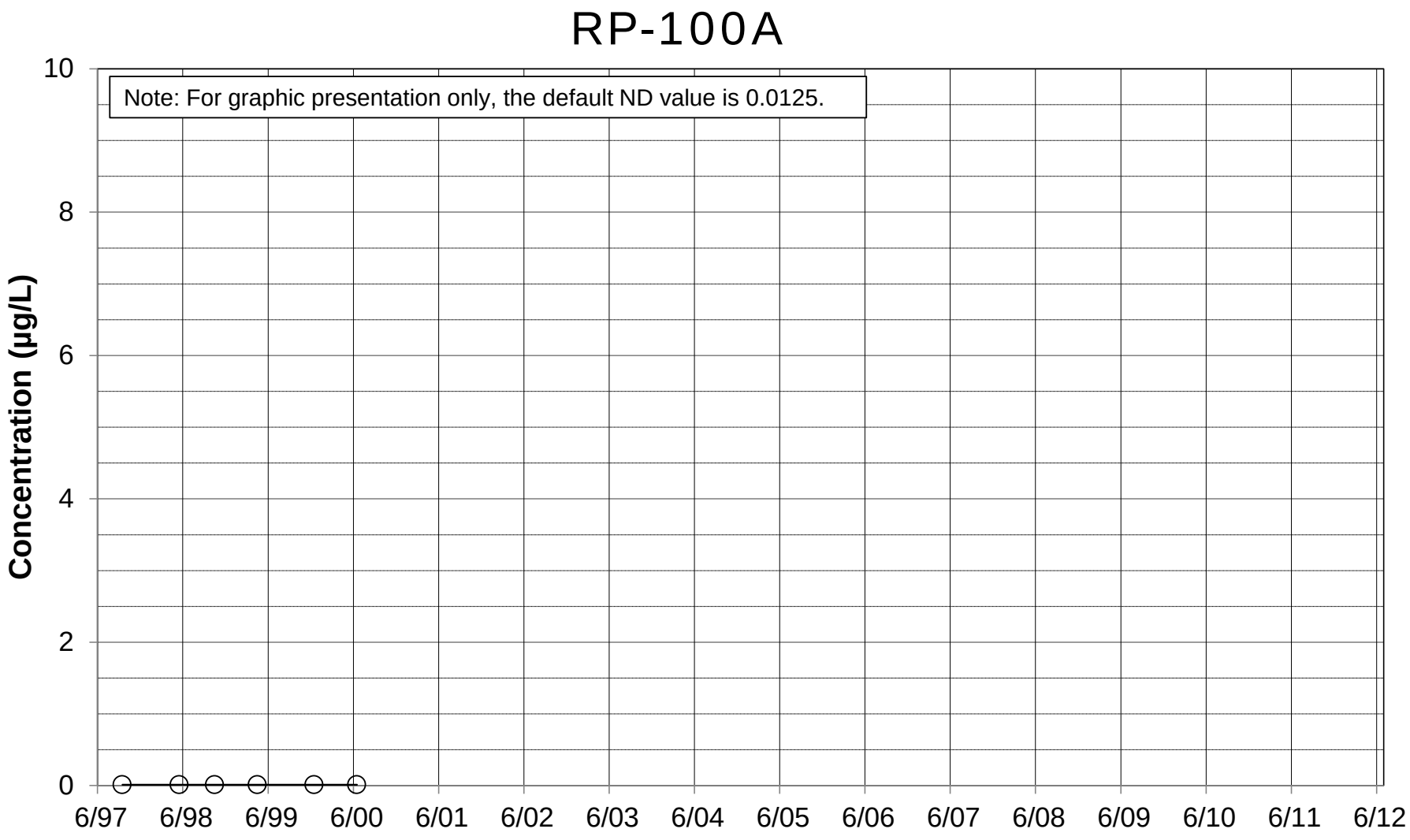

RIMW-5
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

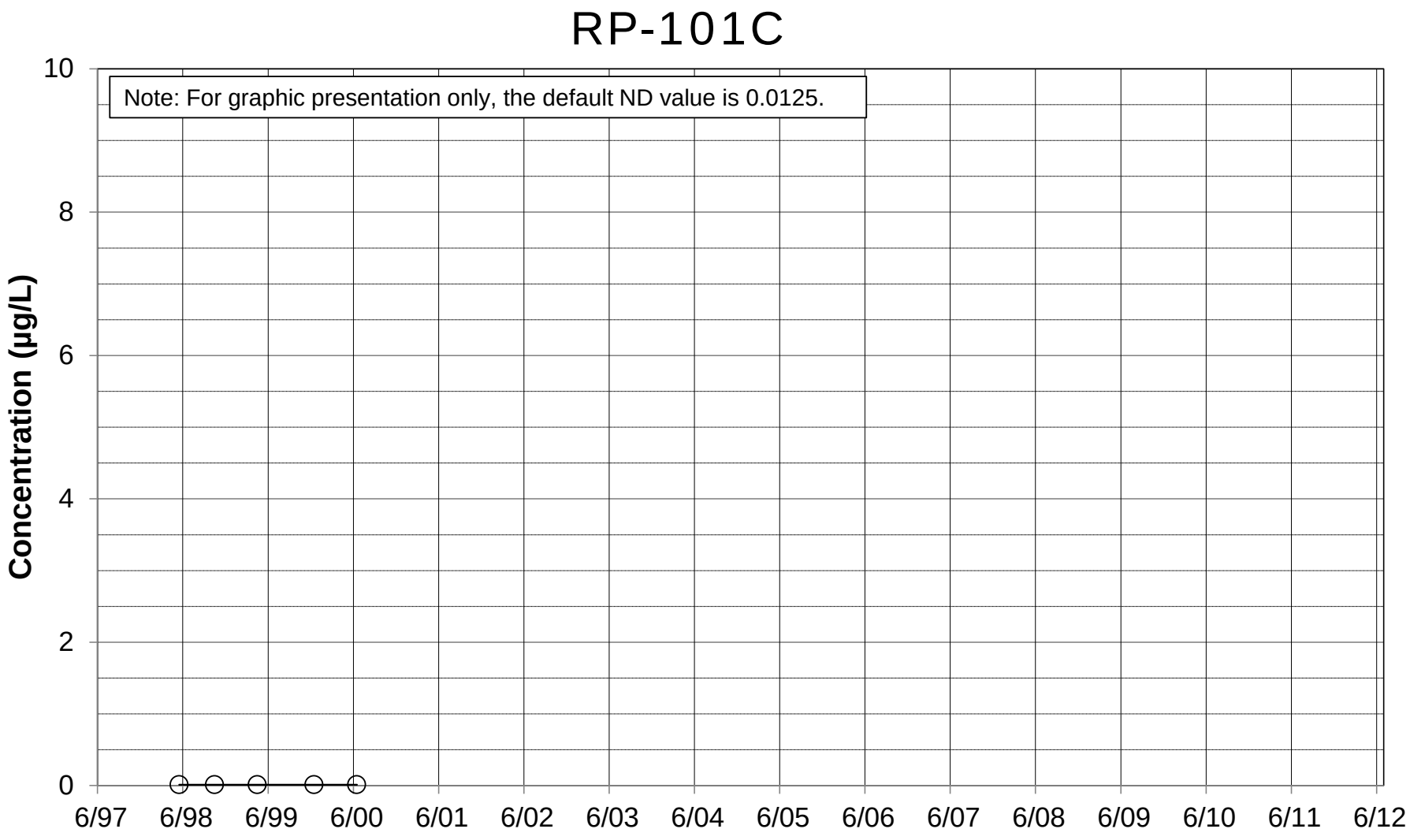

RIMW-7
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RIMW-8
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

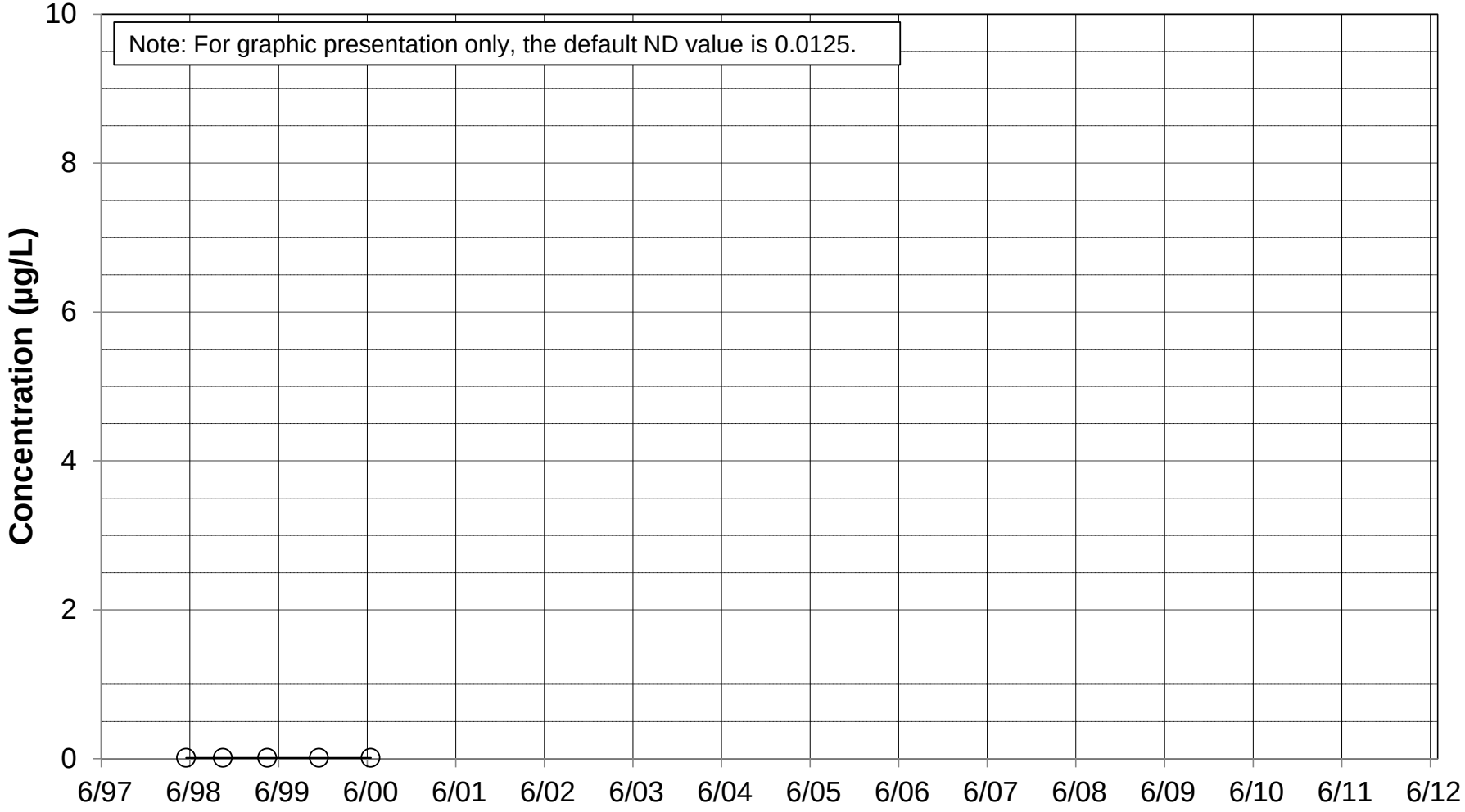

RIMW-9
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

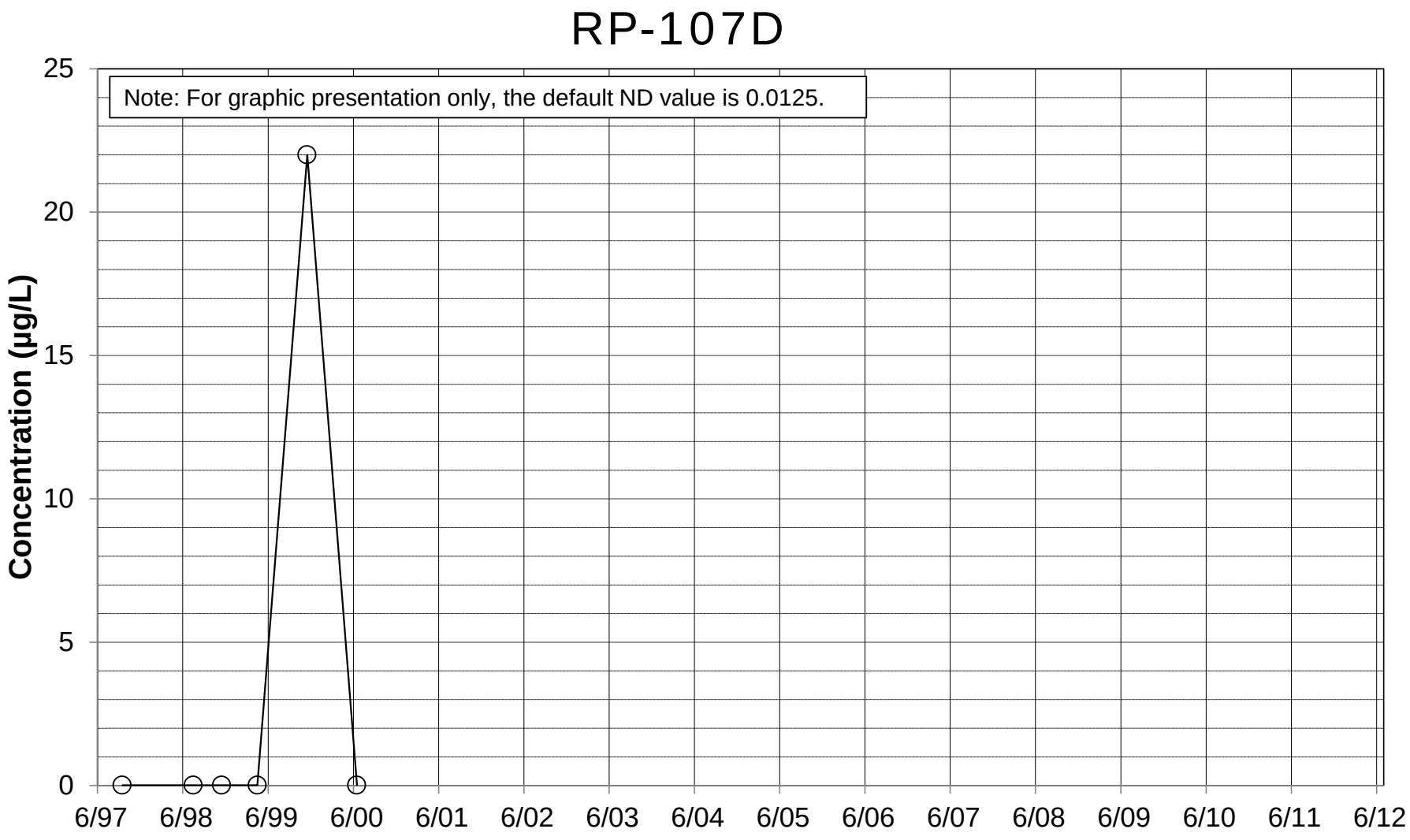

RIPZ-8
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RP-100A
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

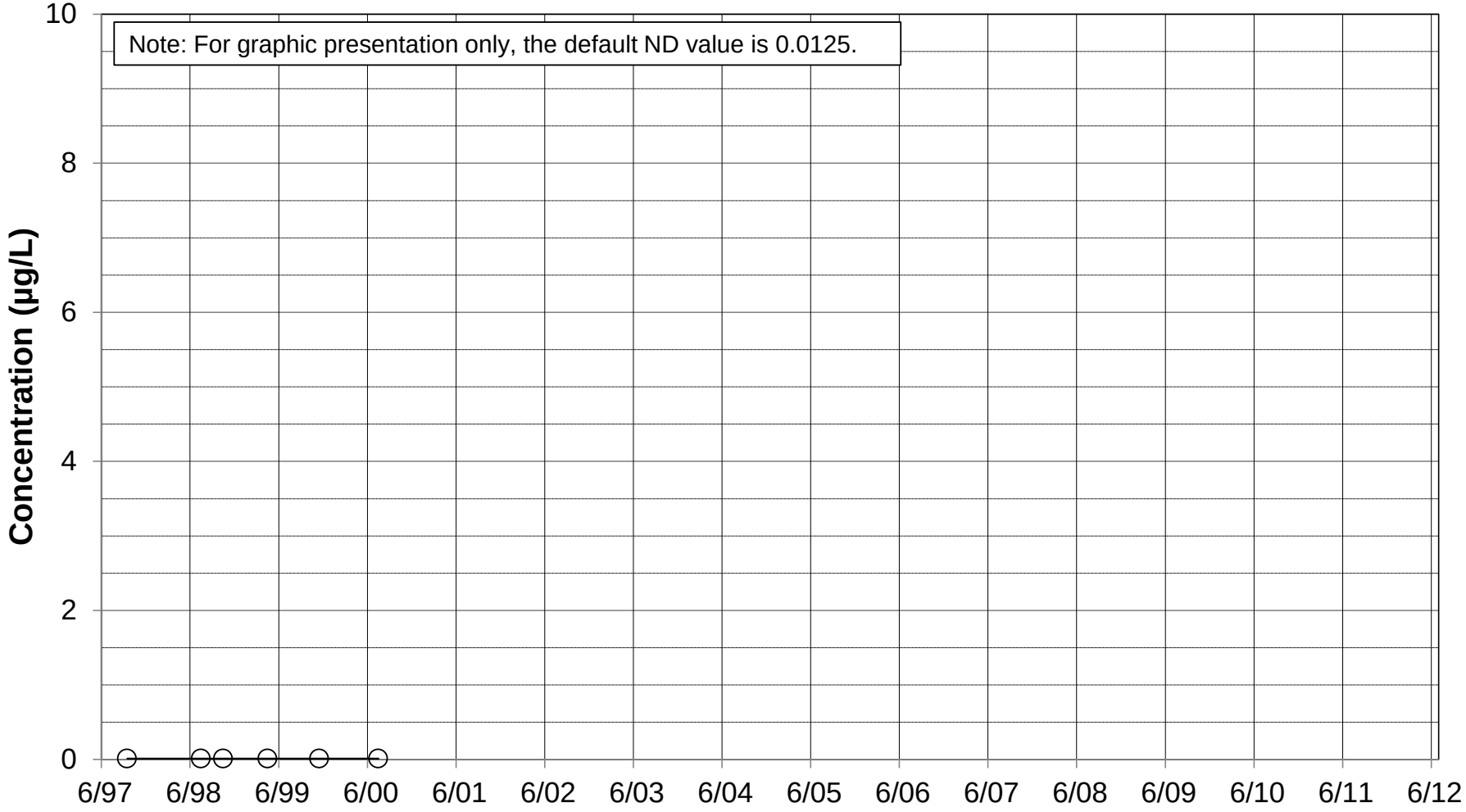

RP-101C
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

RP-103B

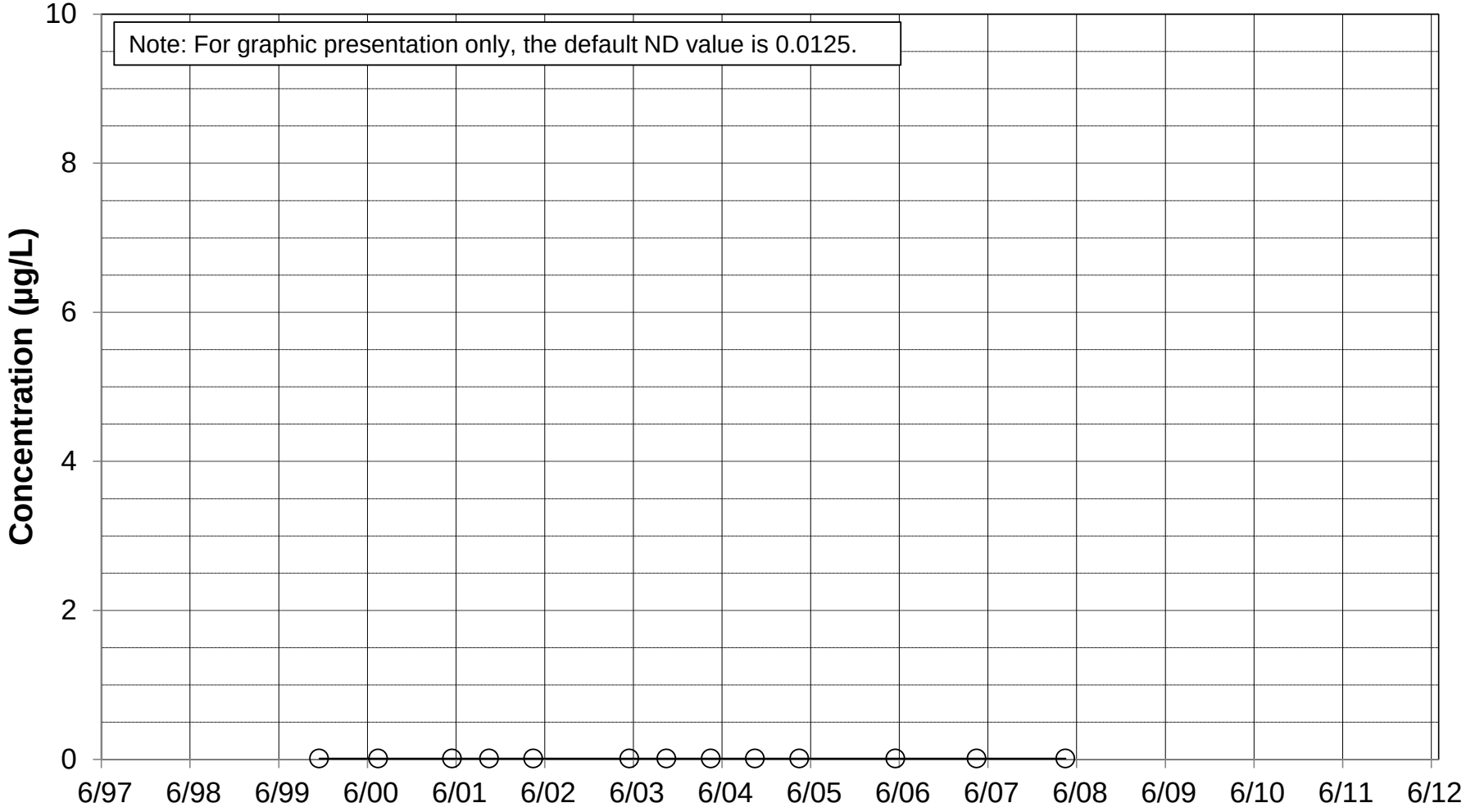

Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RP-107D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
25
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

RP-109B


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

RP-109D


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
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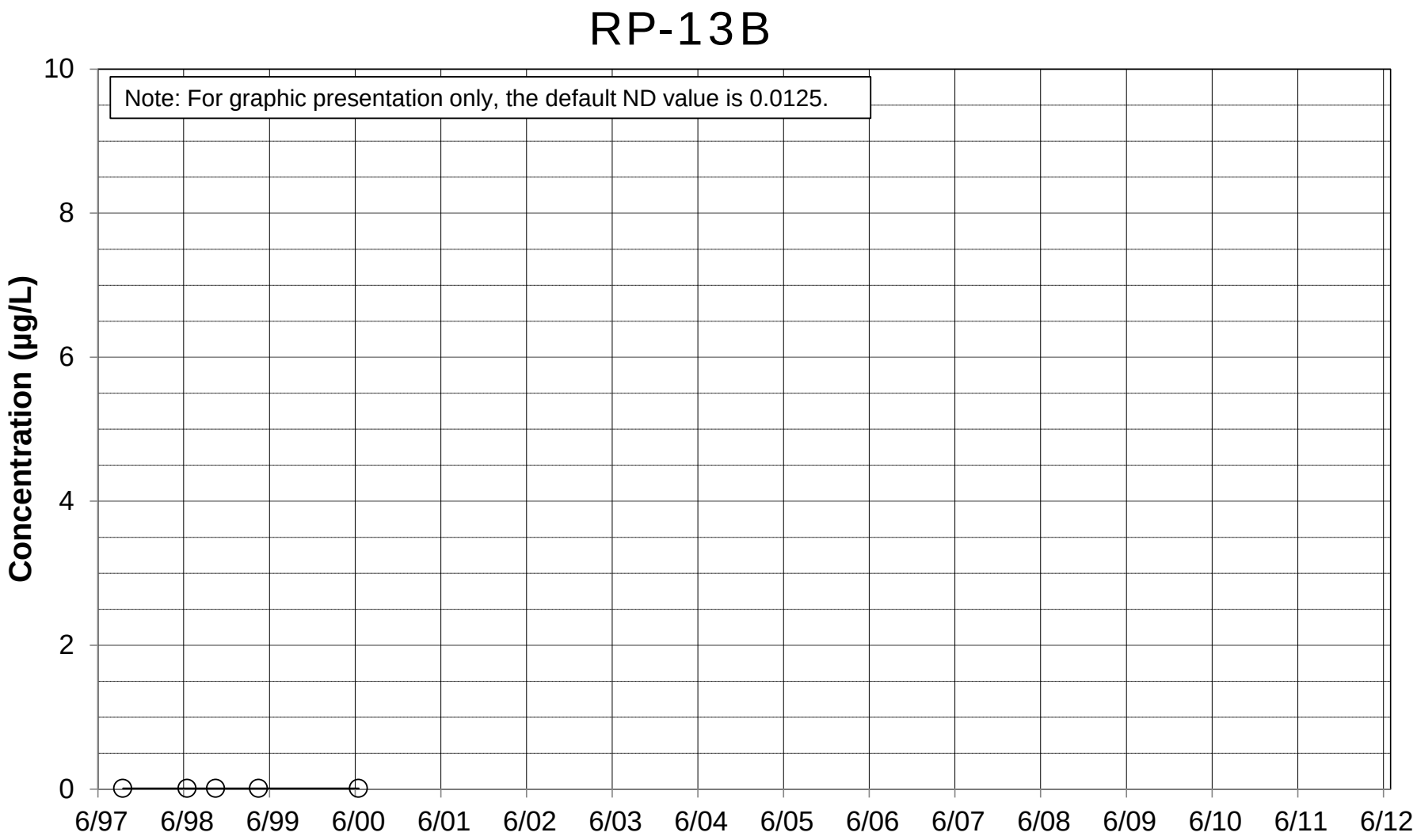
6/08
6/09
6/10
6/11
6/12


RP-13B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
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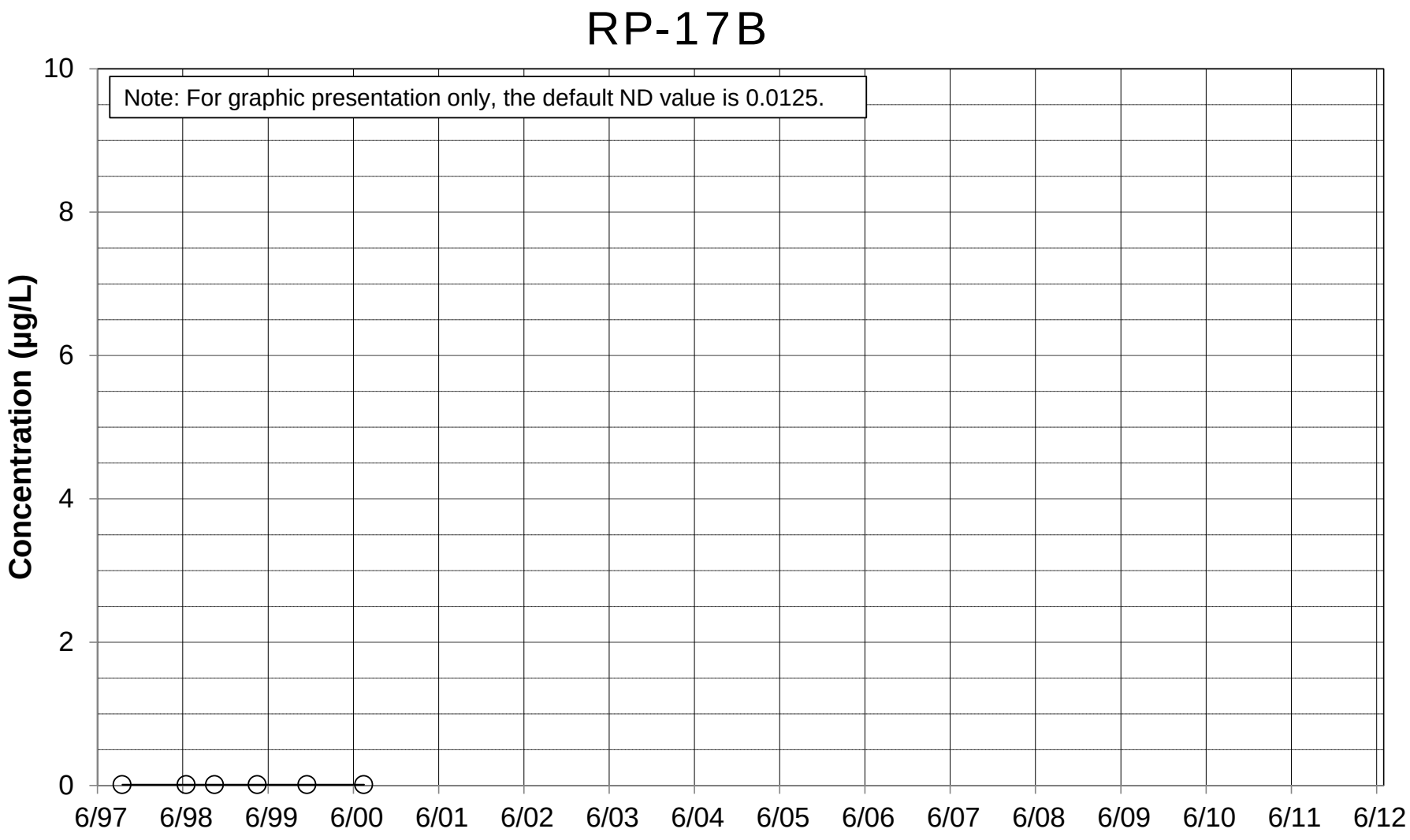
6/09
6/10
6/11
6/12


RP-17B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
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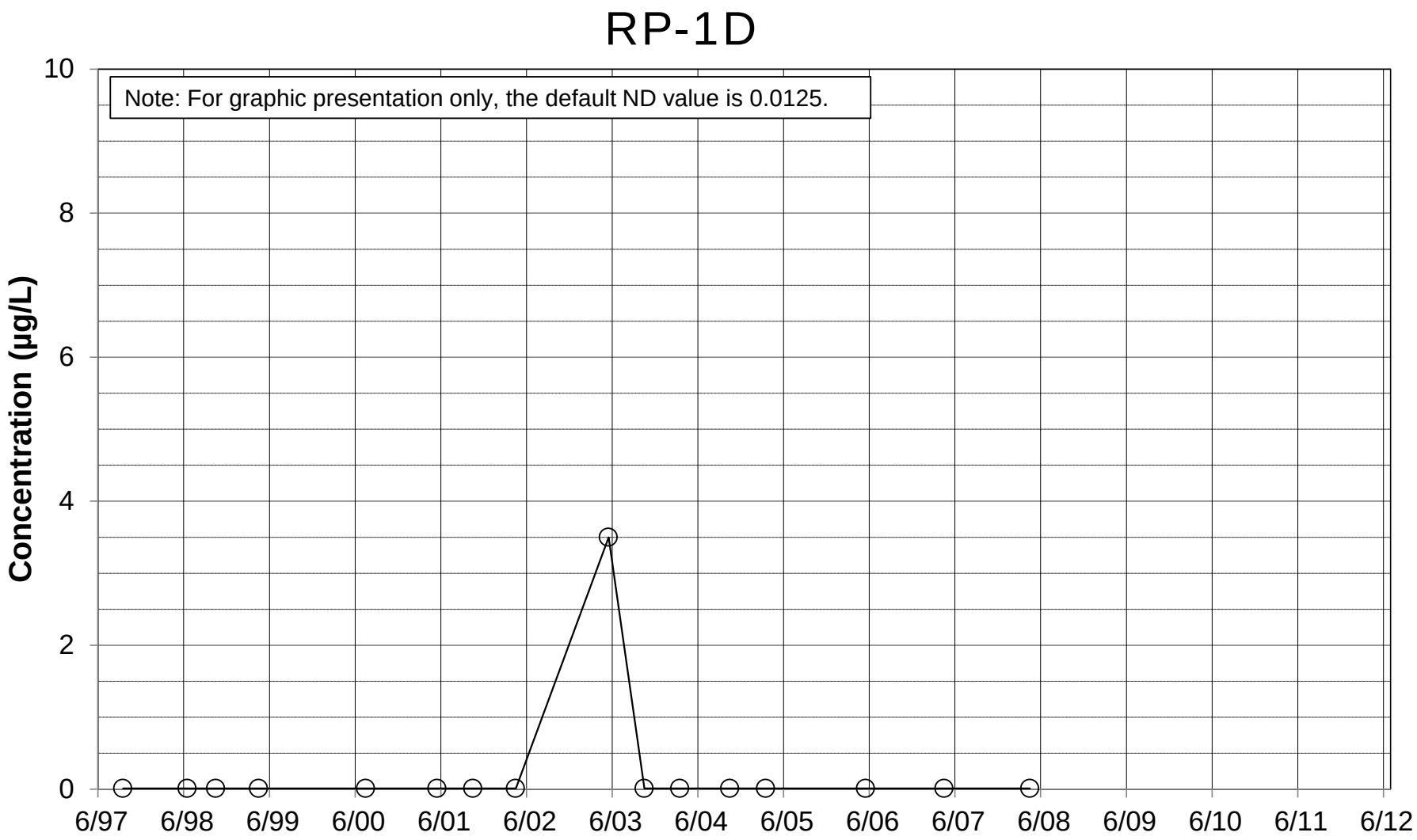
6/08
6/09
6/10
6/11
6/12


RP-1D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
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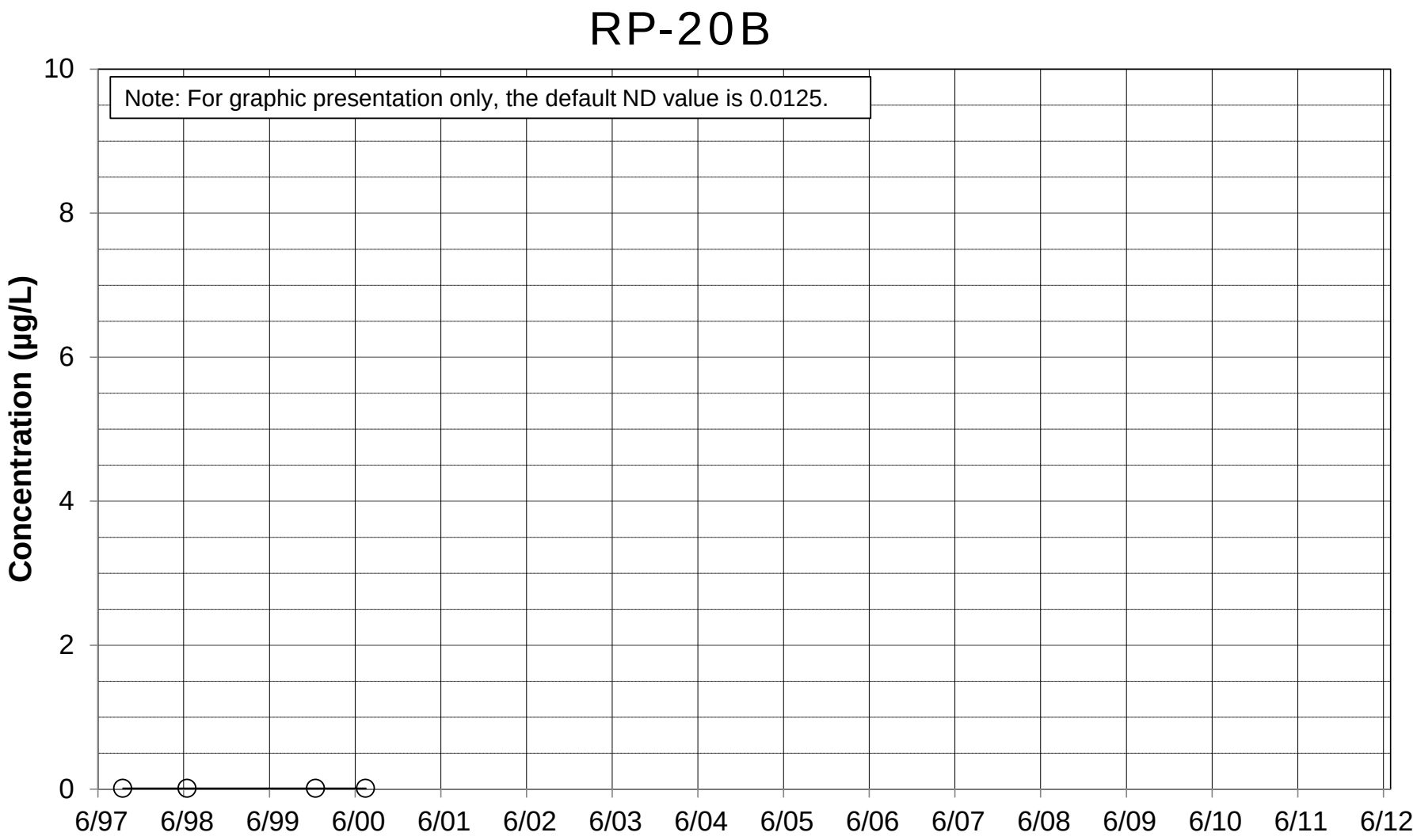
6/08
6/09
6/10
6/11
6/12


RP-20B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
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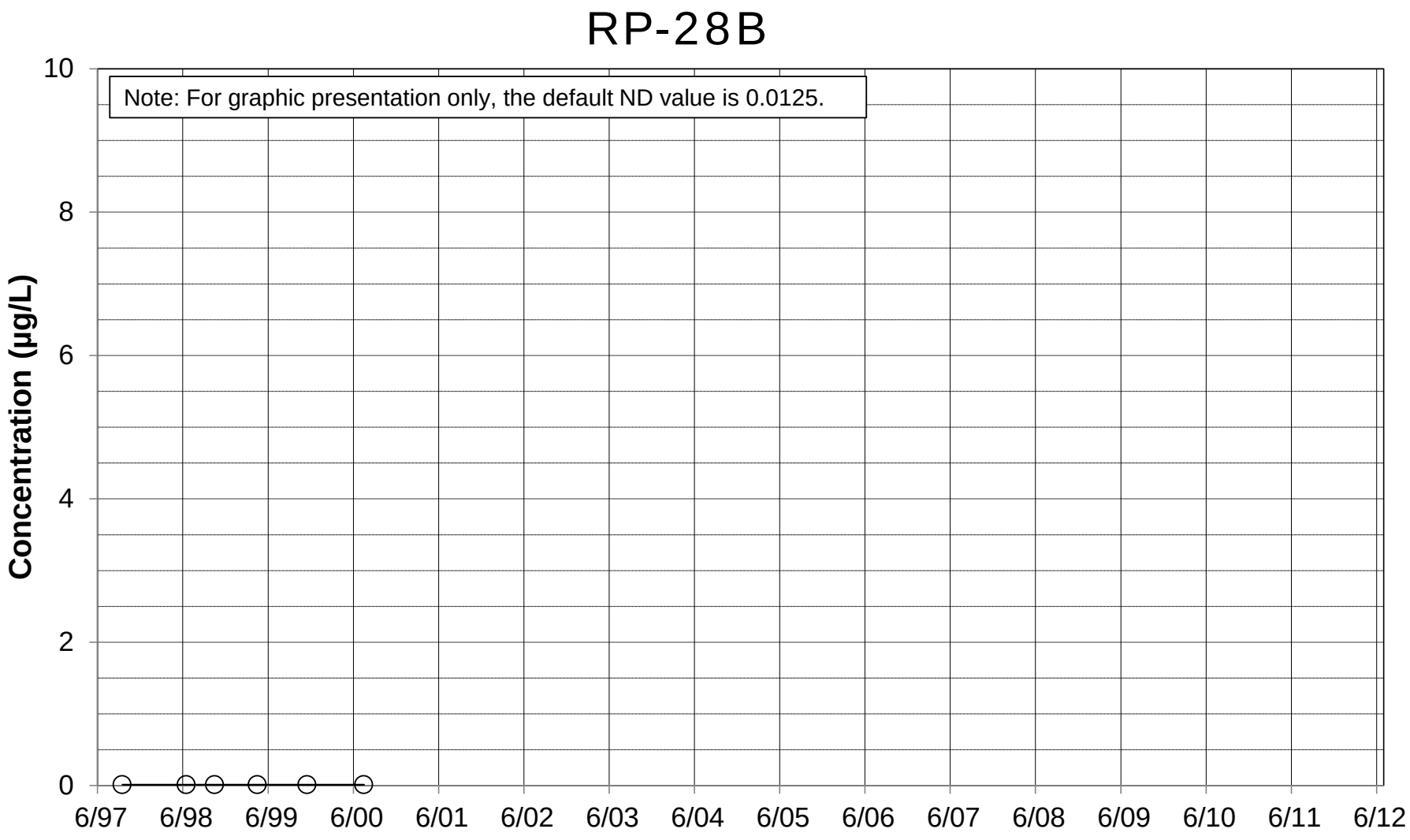
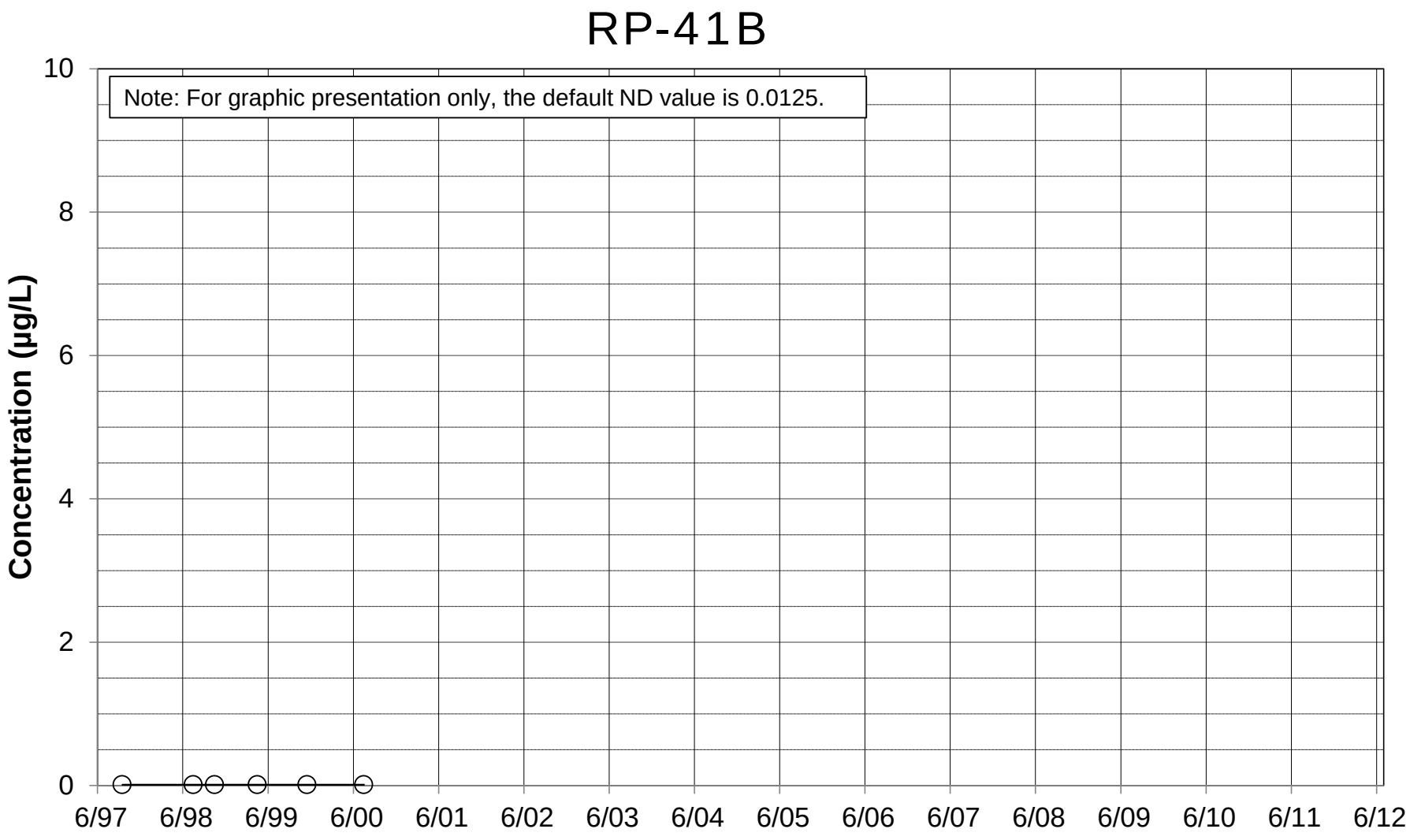
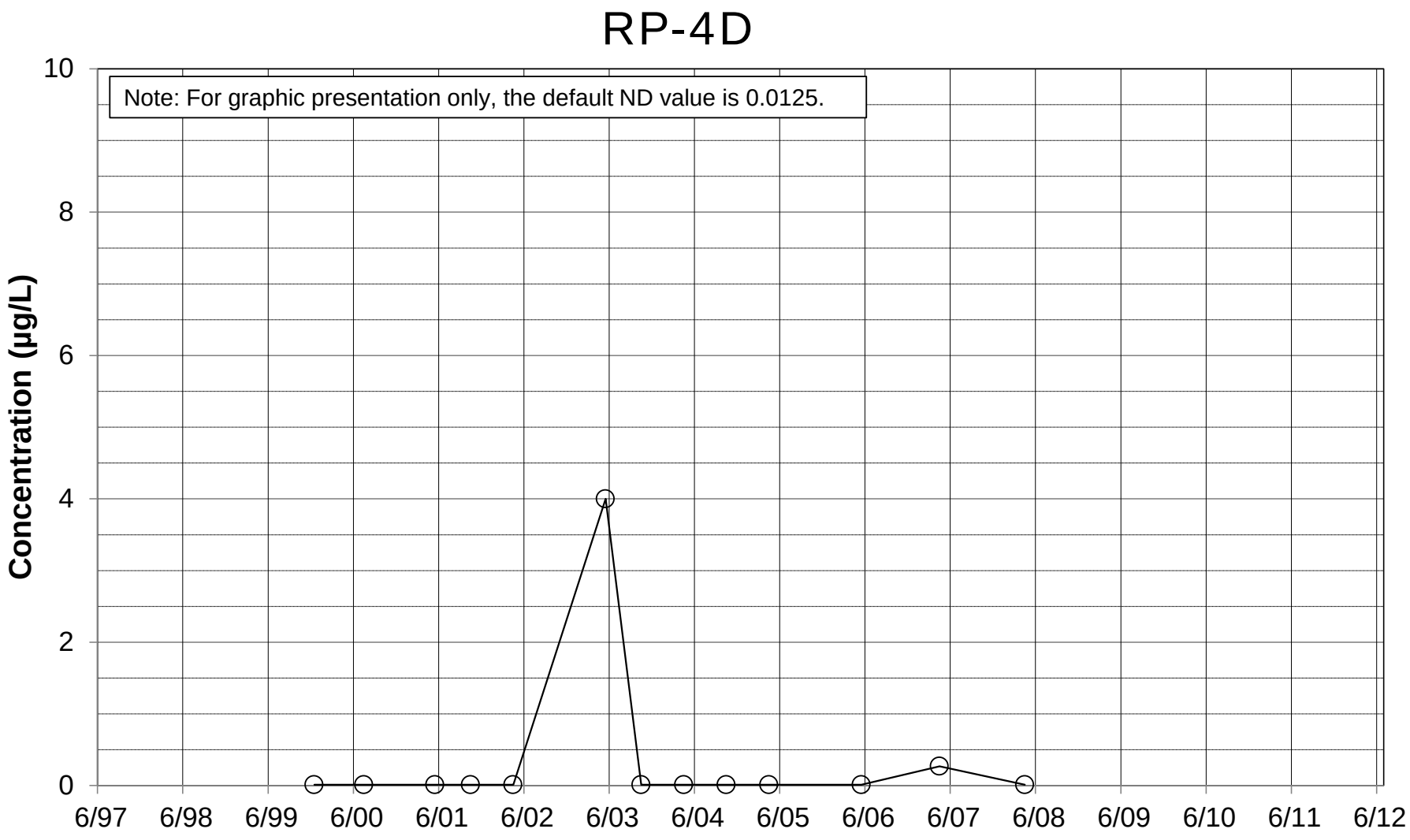
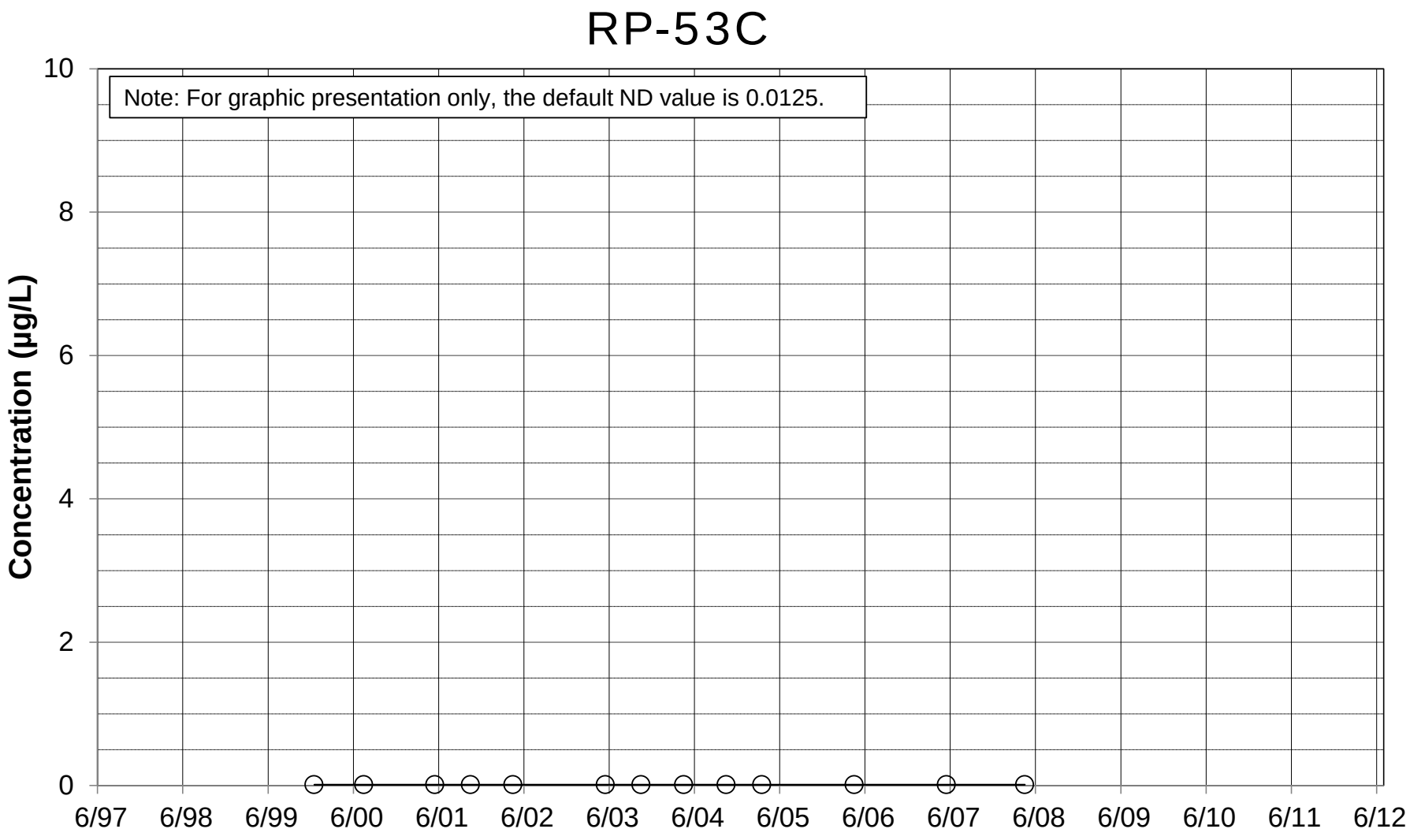
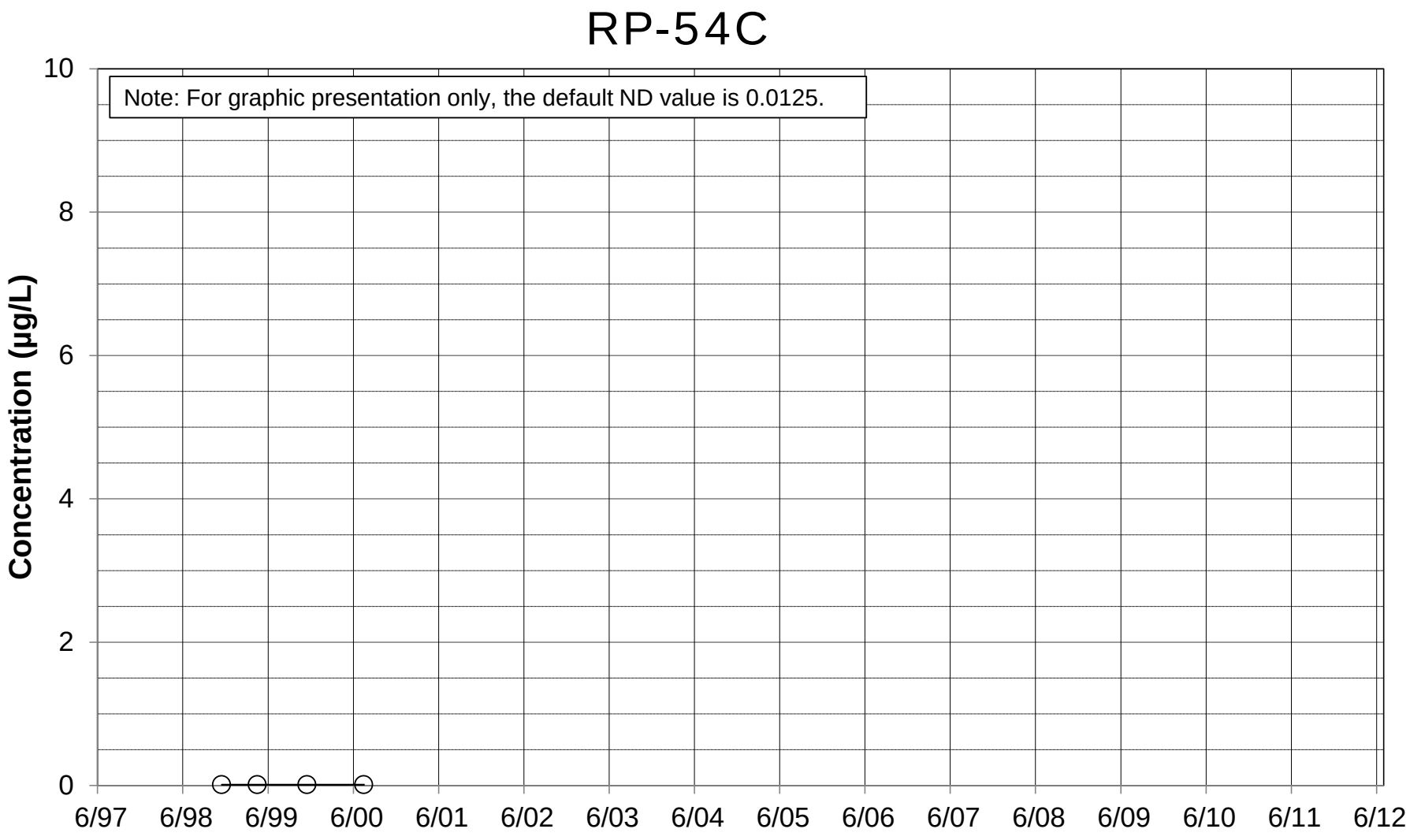
6/08
6/09
6/10
6/11
6/12

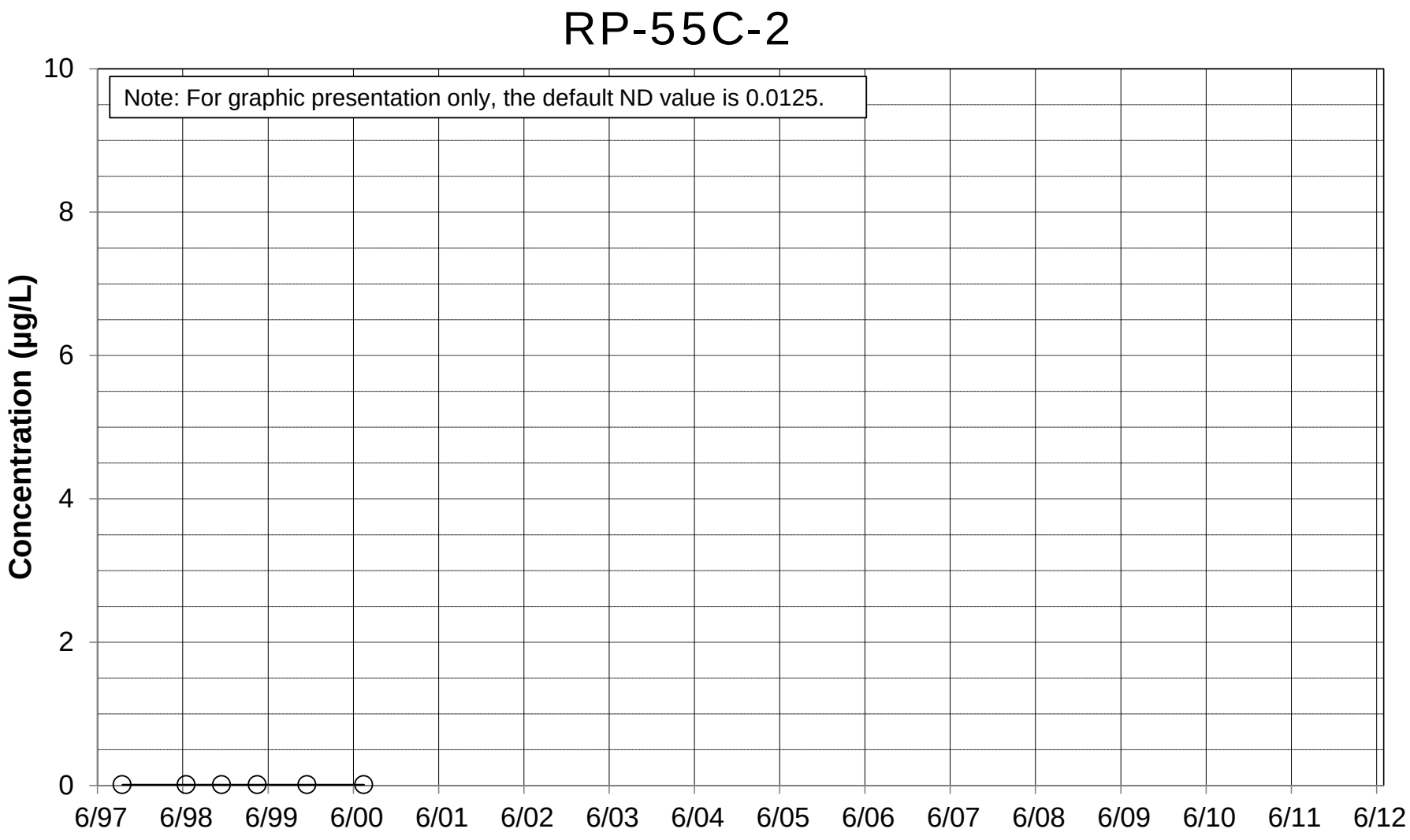

RP-28B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

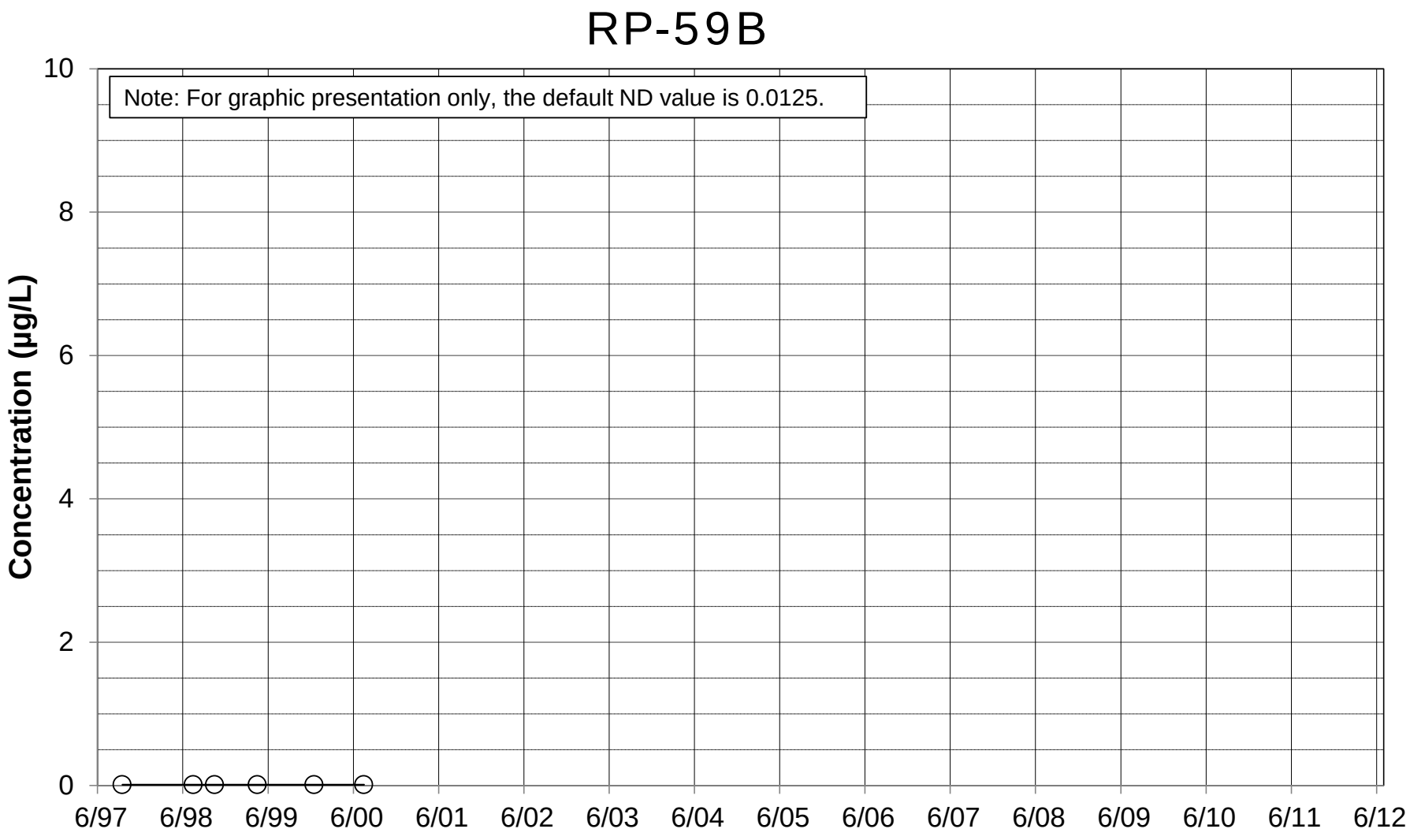

RP-41B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

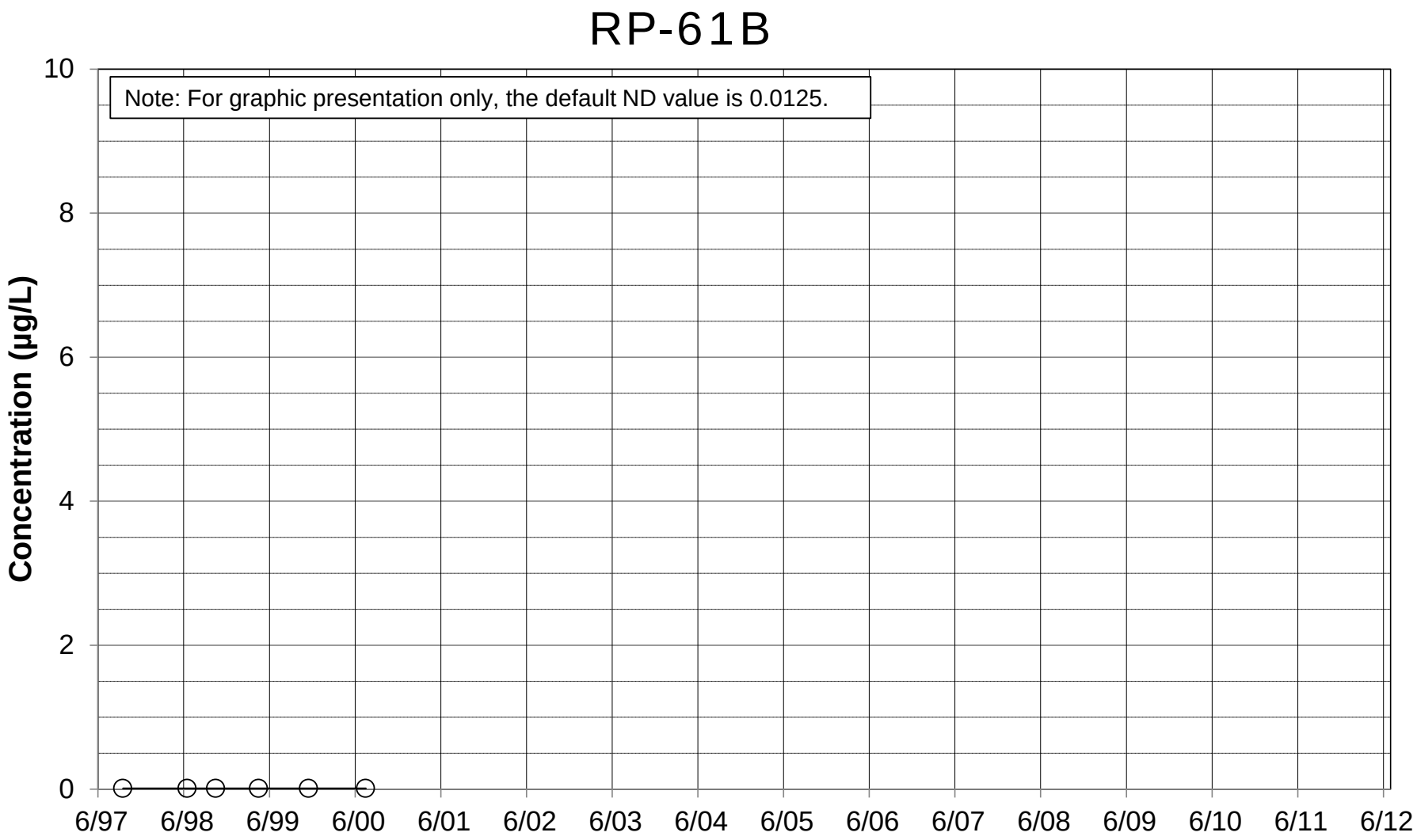

RP-4D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

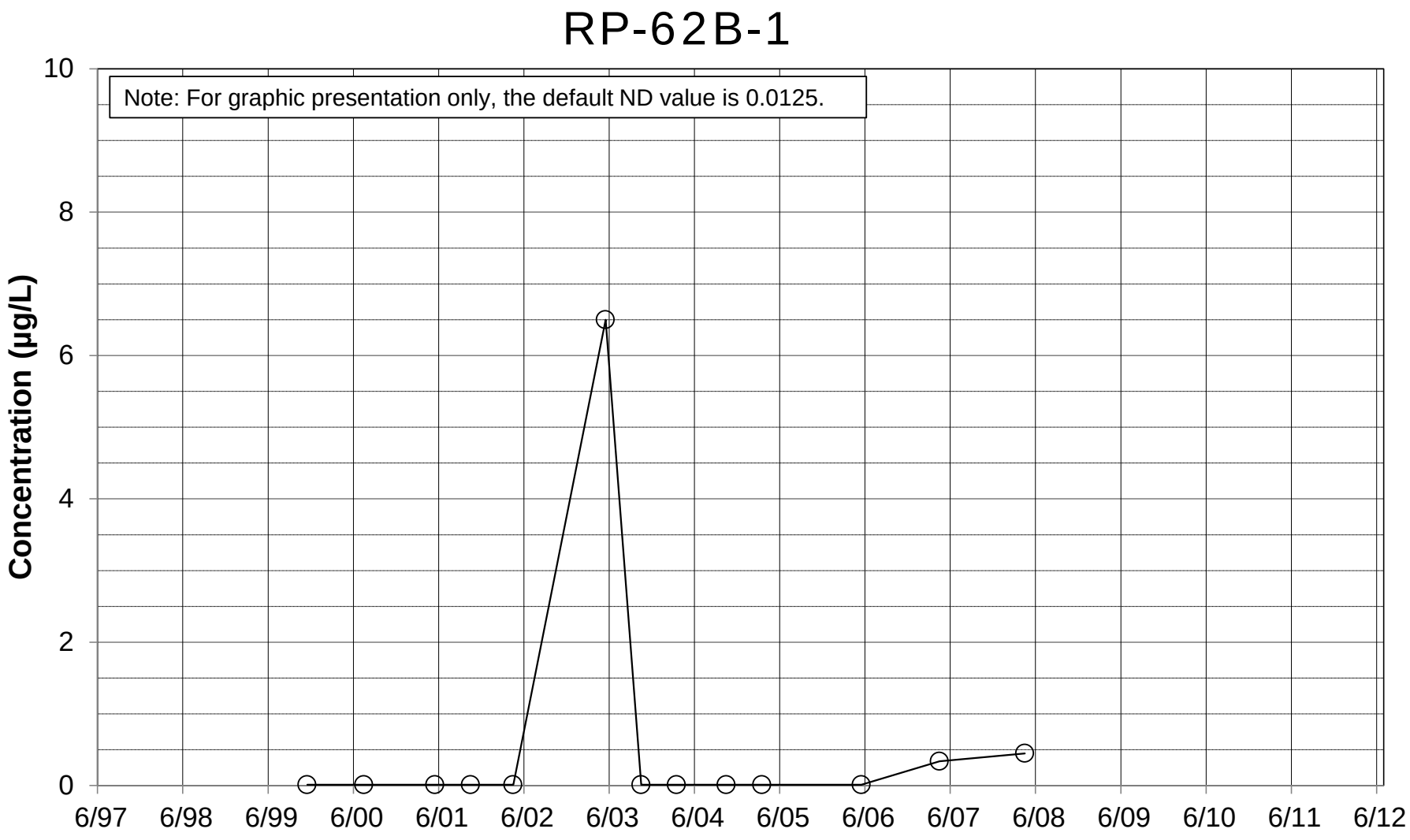

RP-53C
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

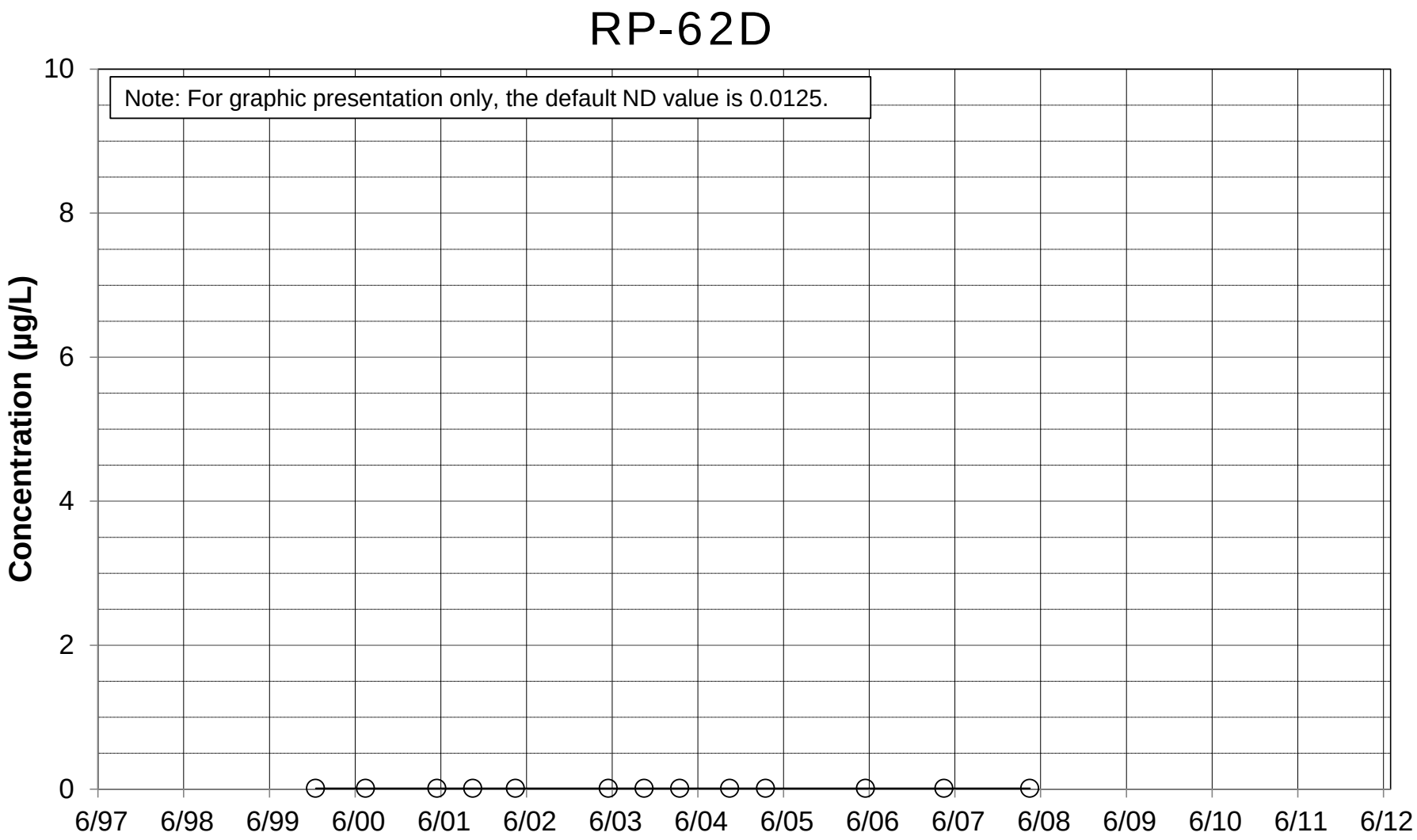

RP-54C
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

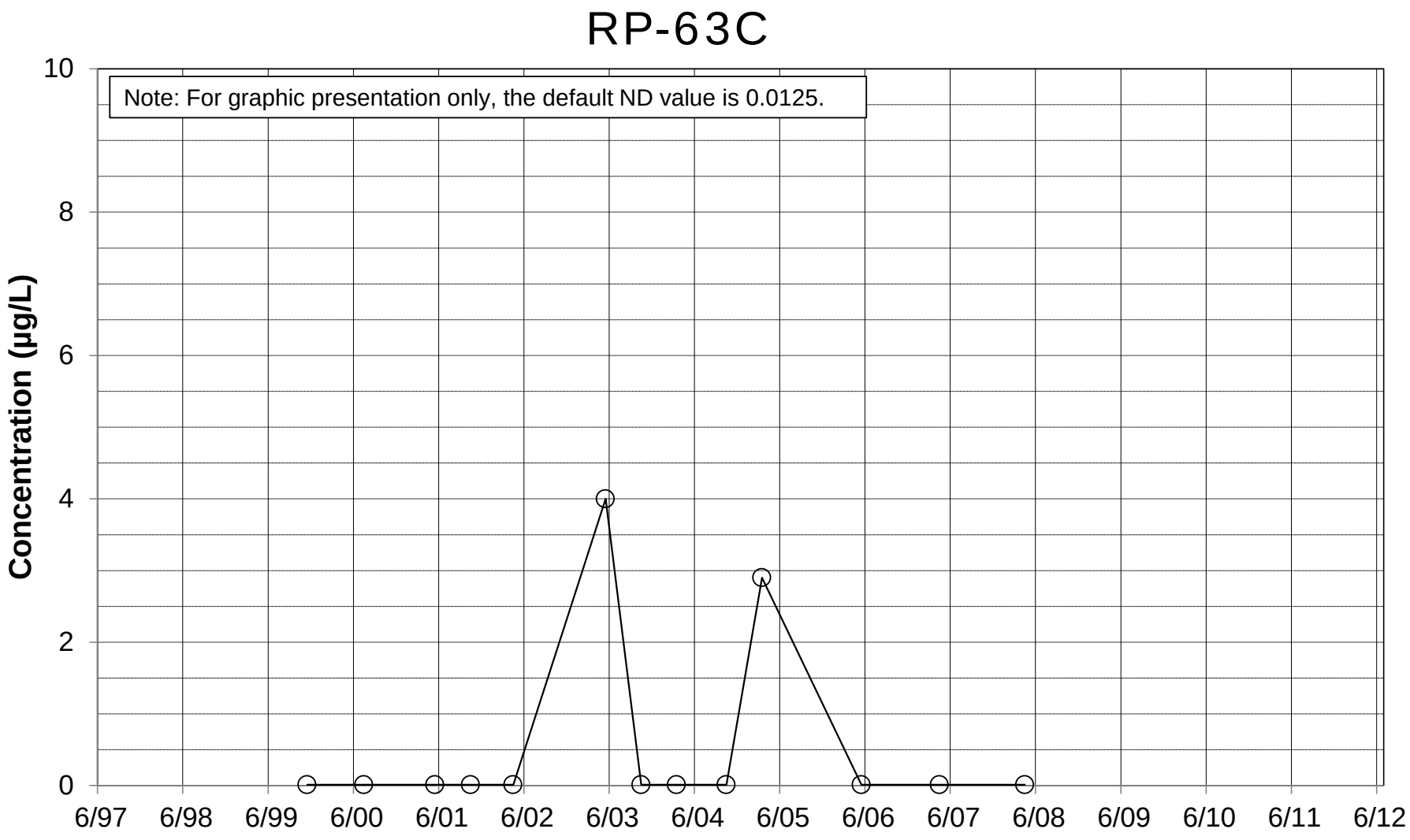

RP-55C-2
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

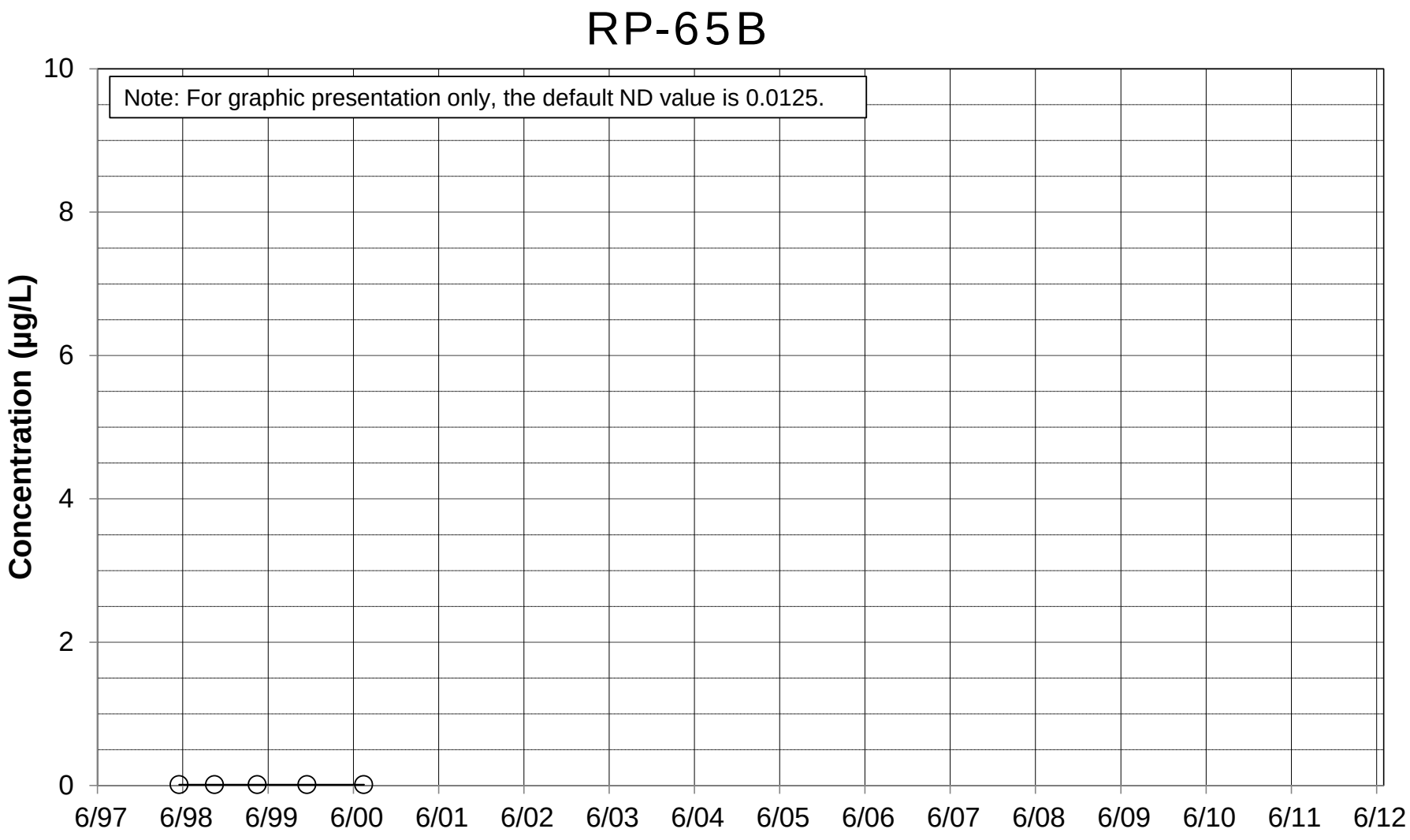

RP-59B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

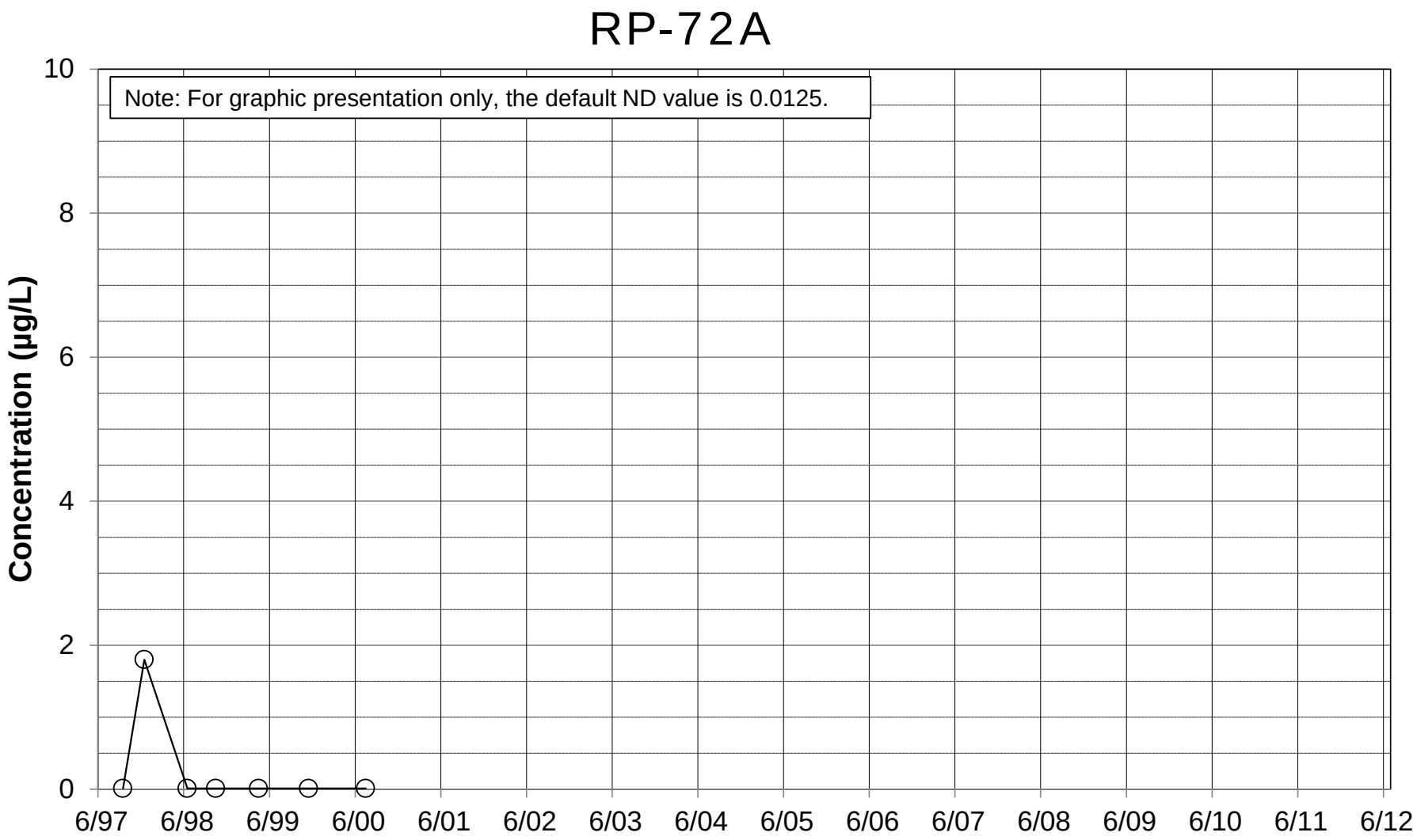

RP-61B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

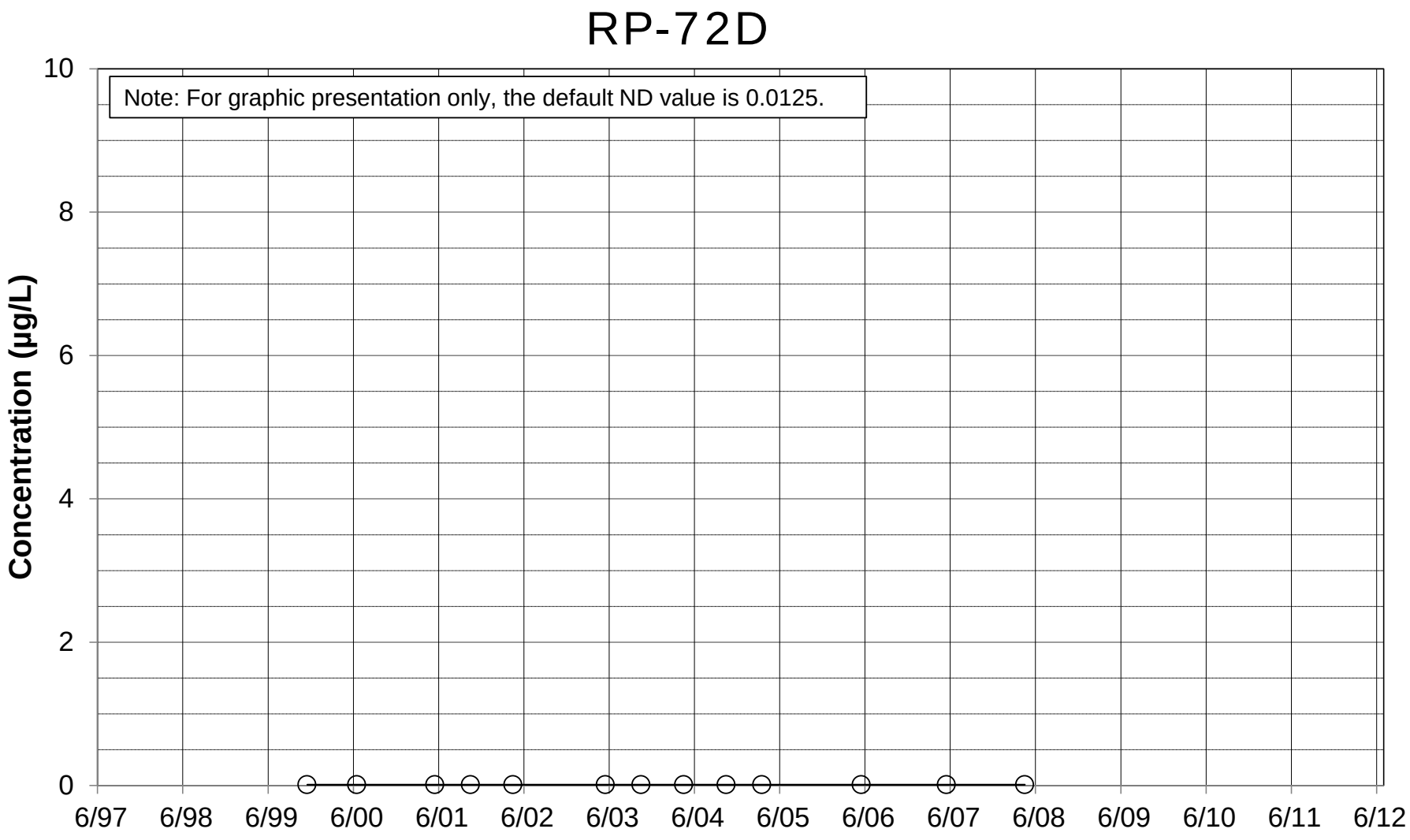

RP-62B-1
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

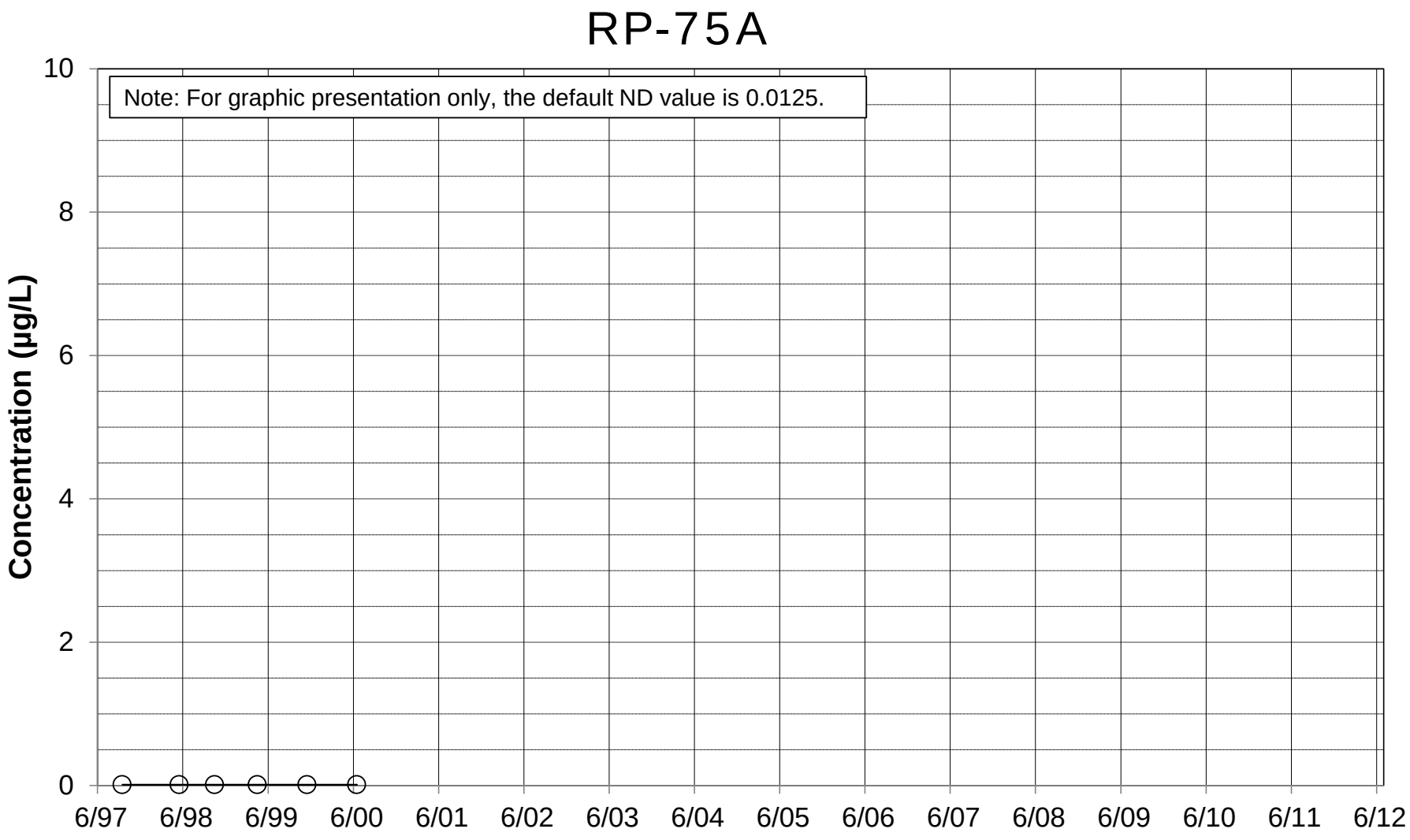

RP-62D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

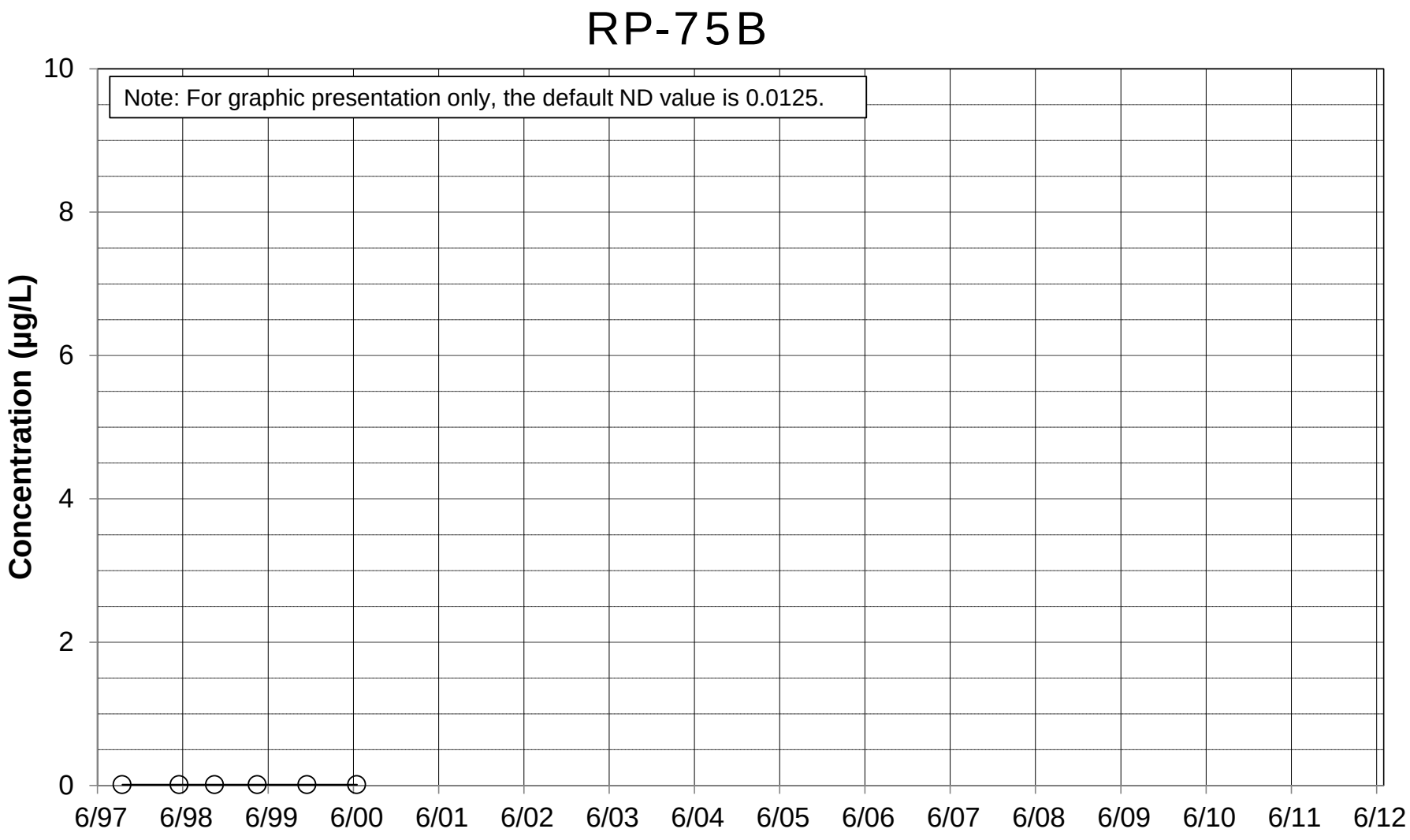

RP-63C
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

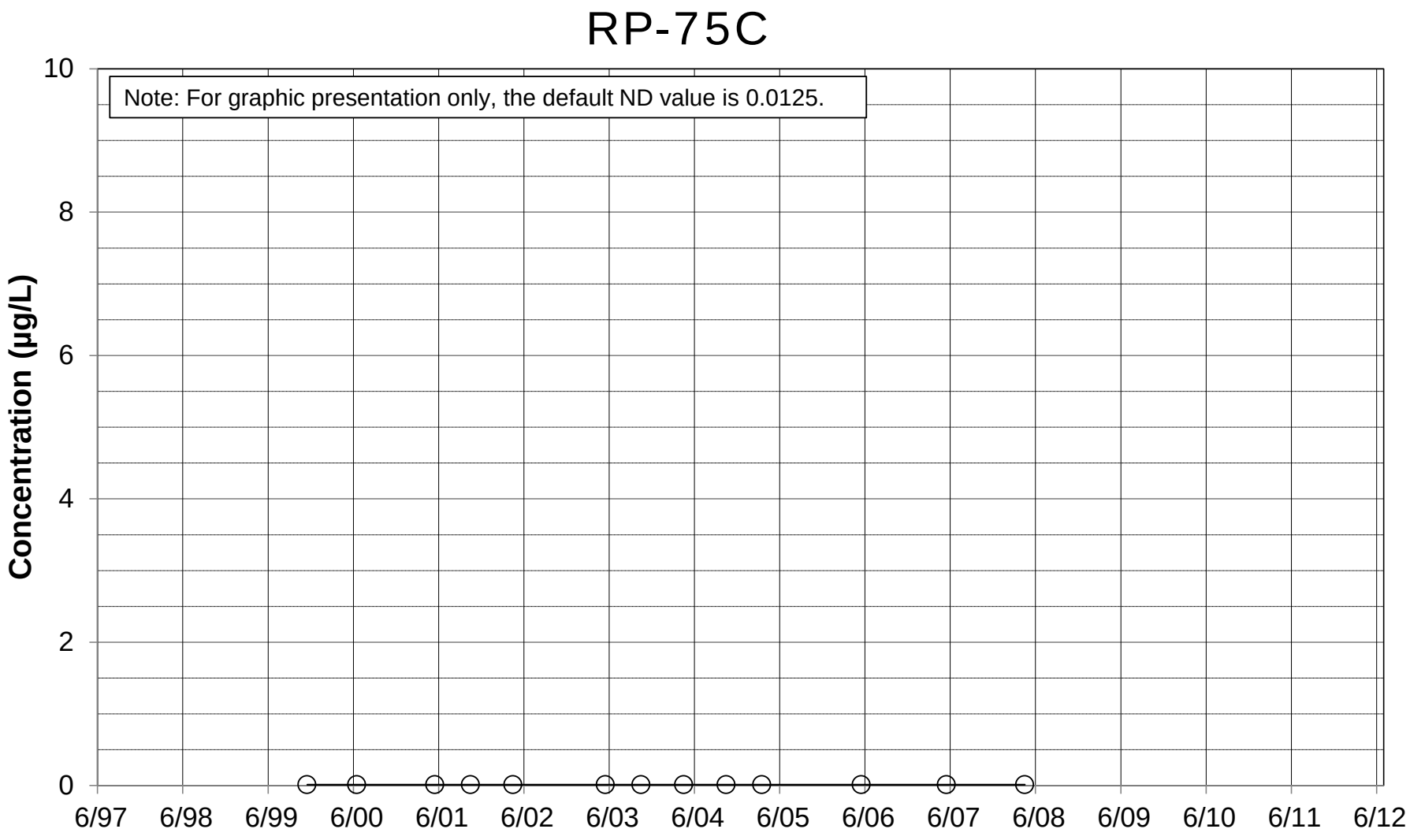

RP-65B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

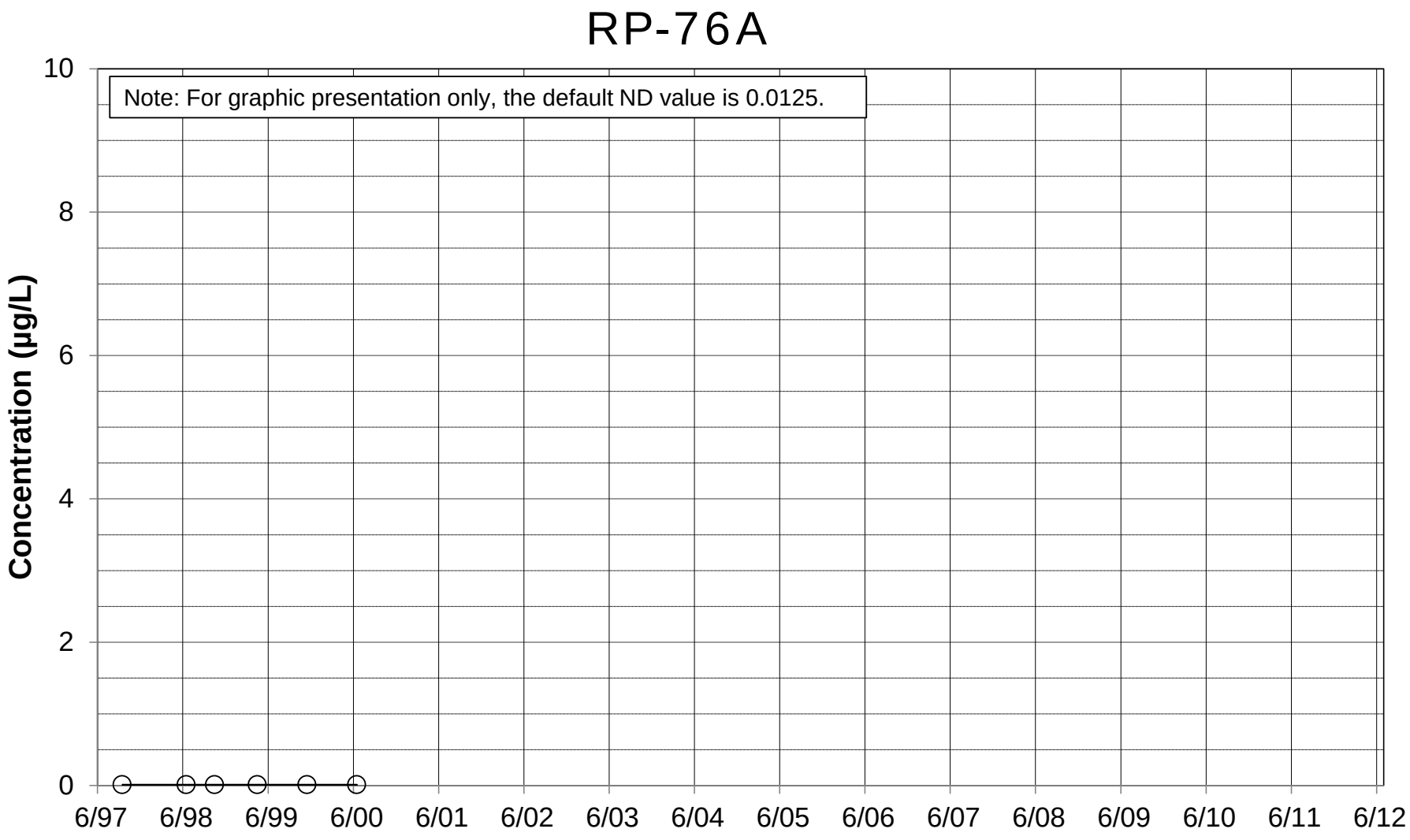

RP-72A
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

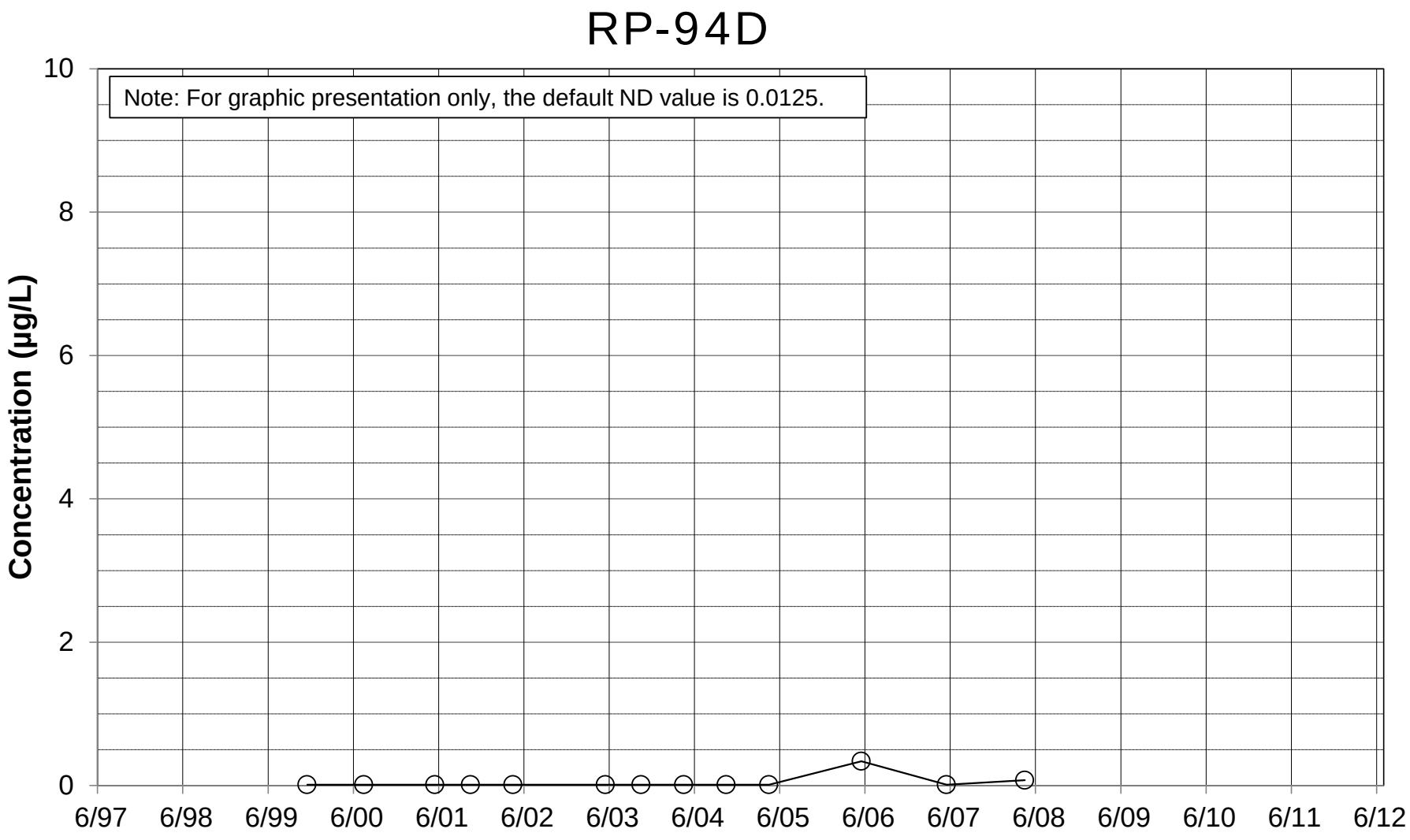

RP-72D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

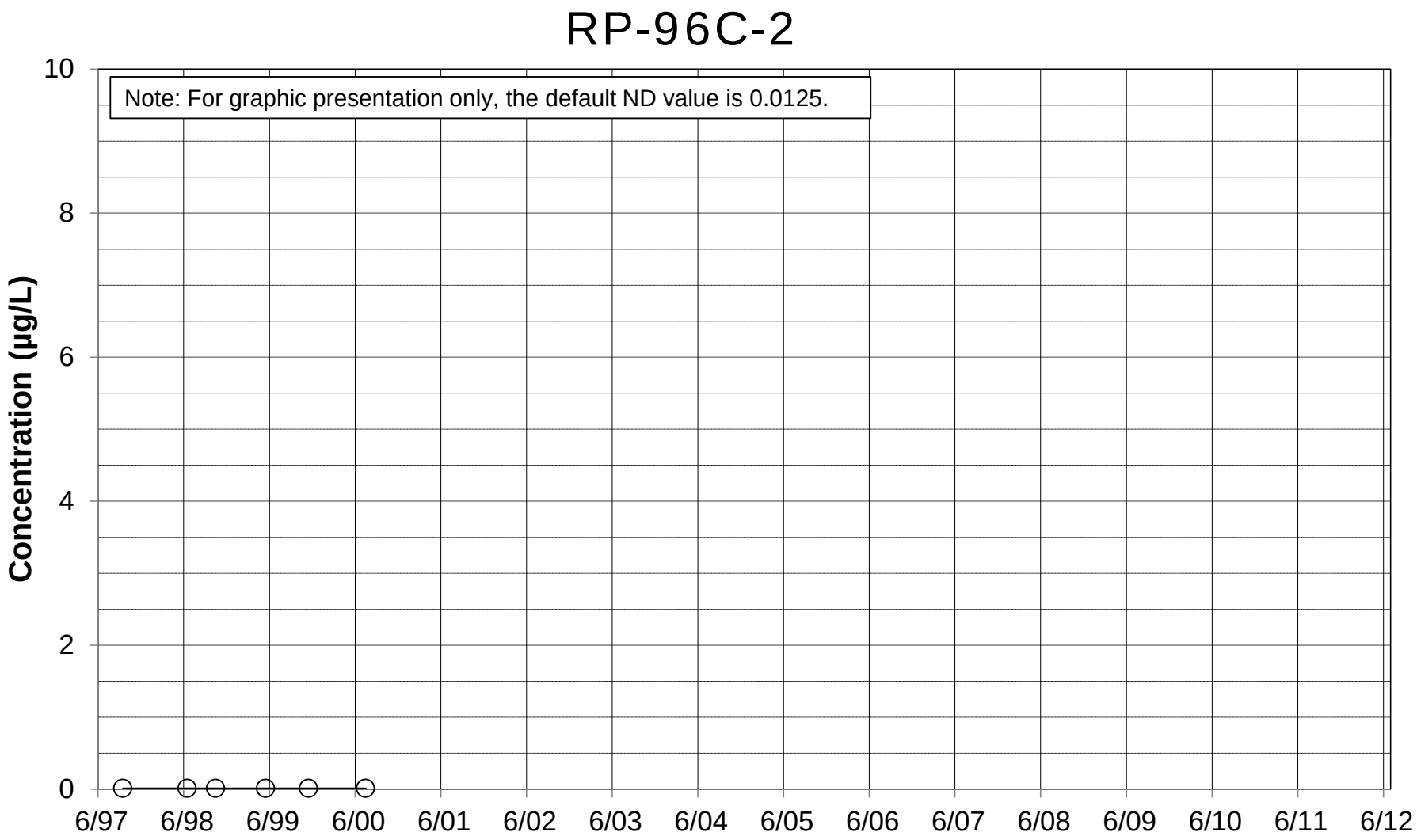

RP-75A
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

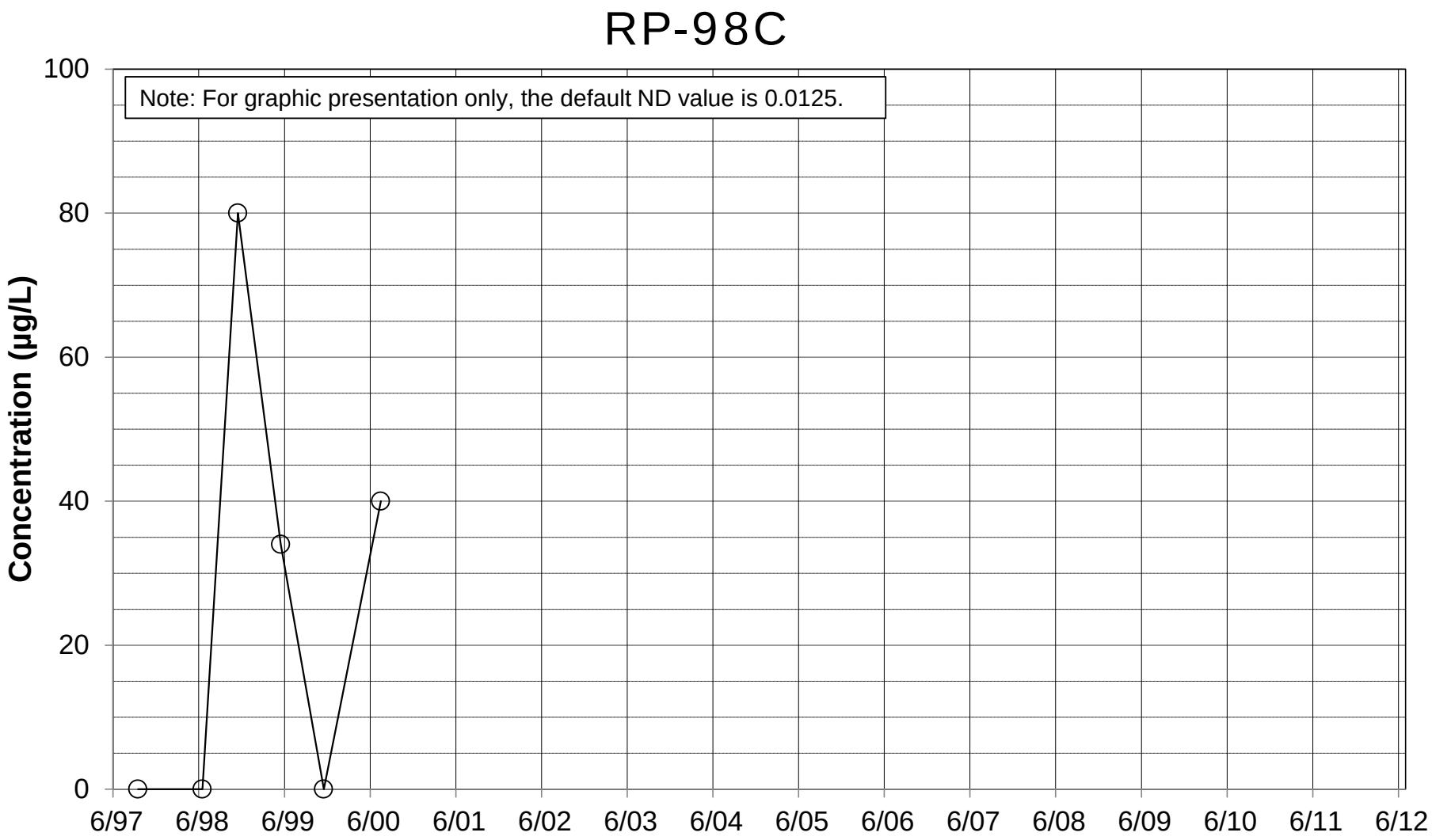

RP-75B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

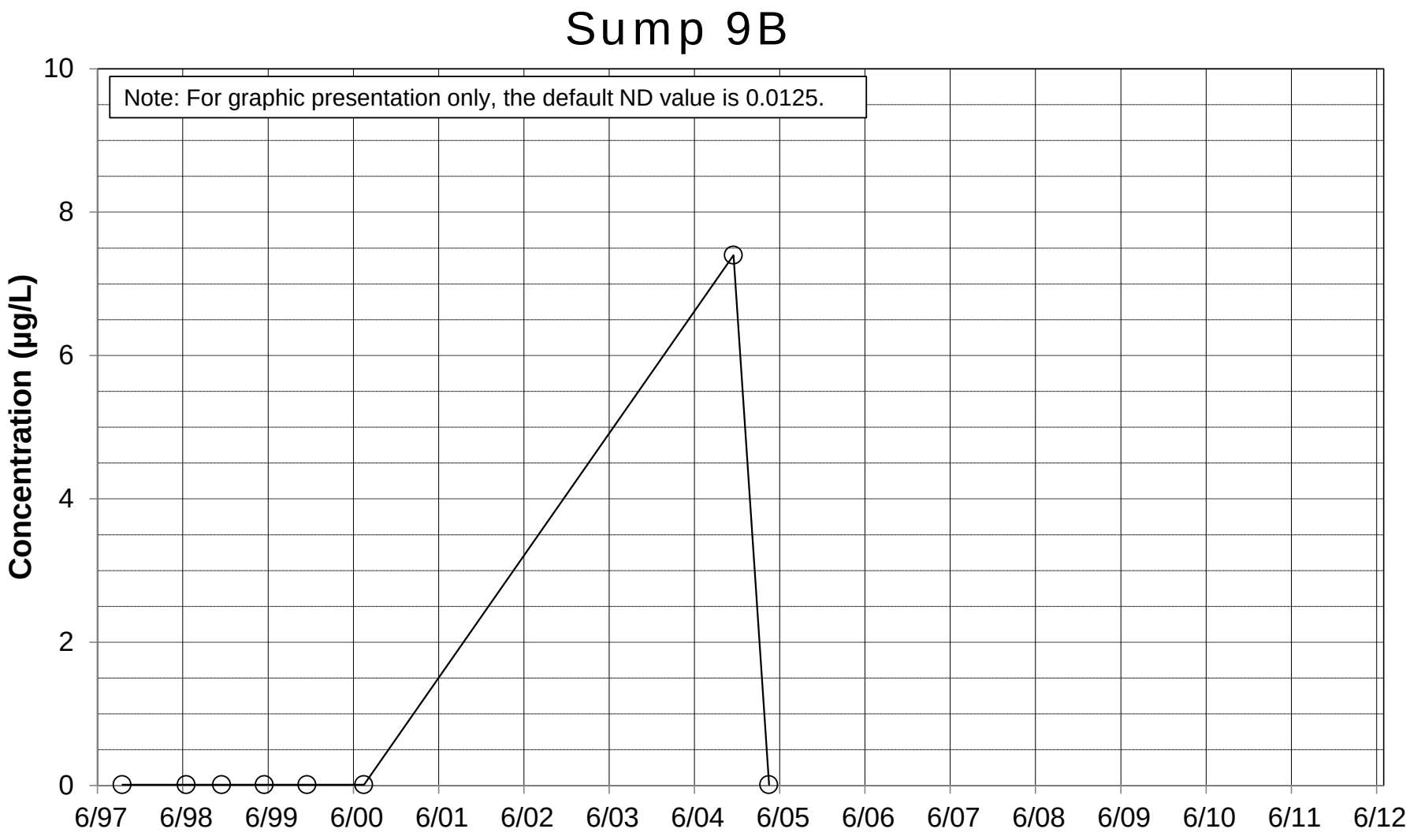

RP-75C
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

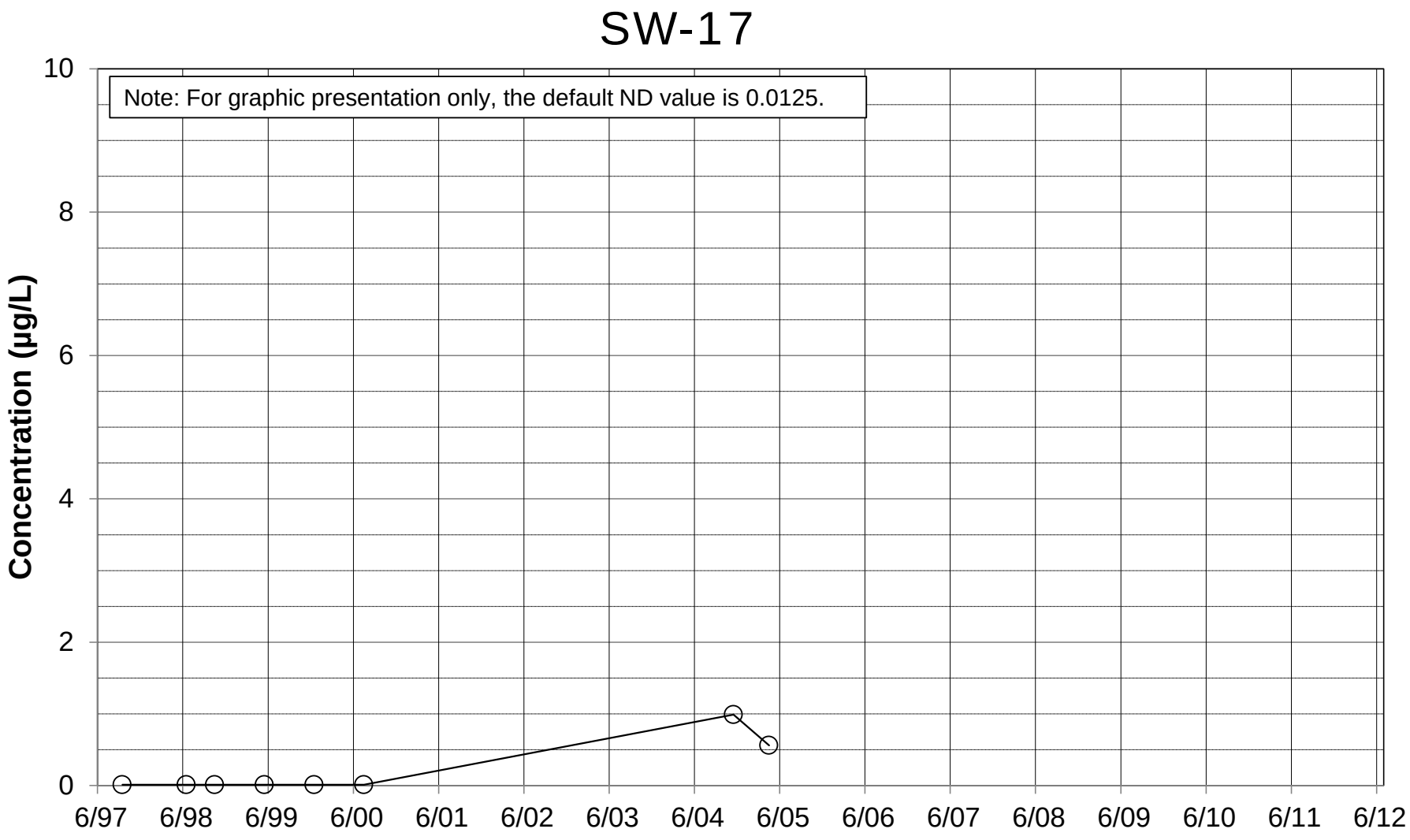

RP-76A
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

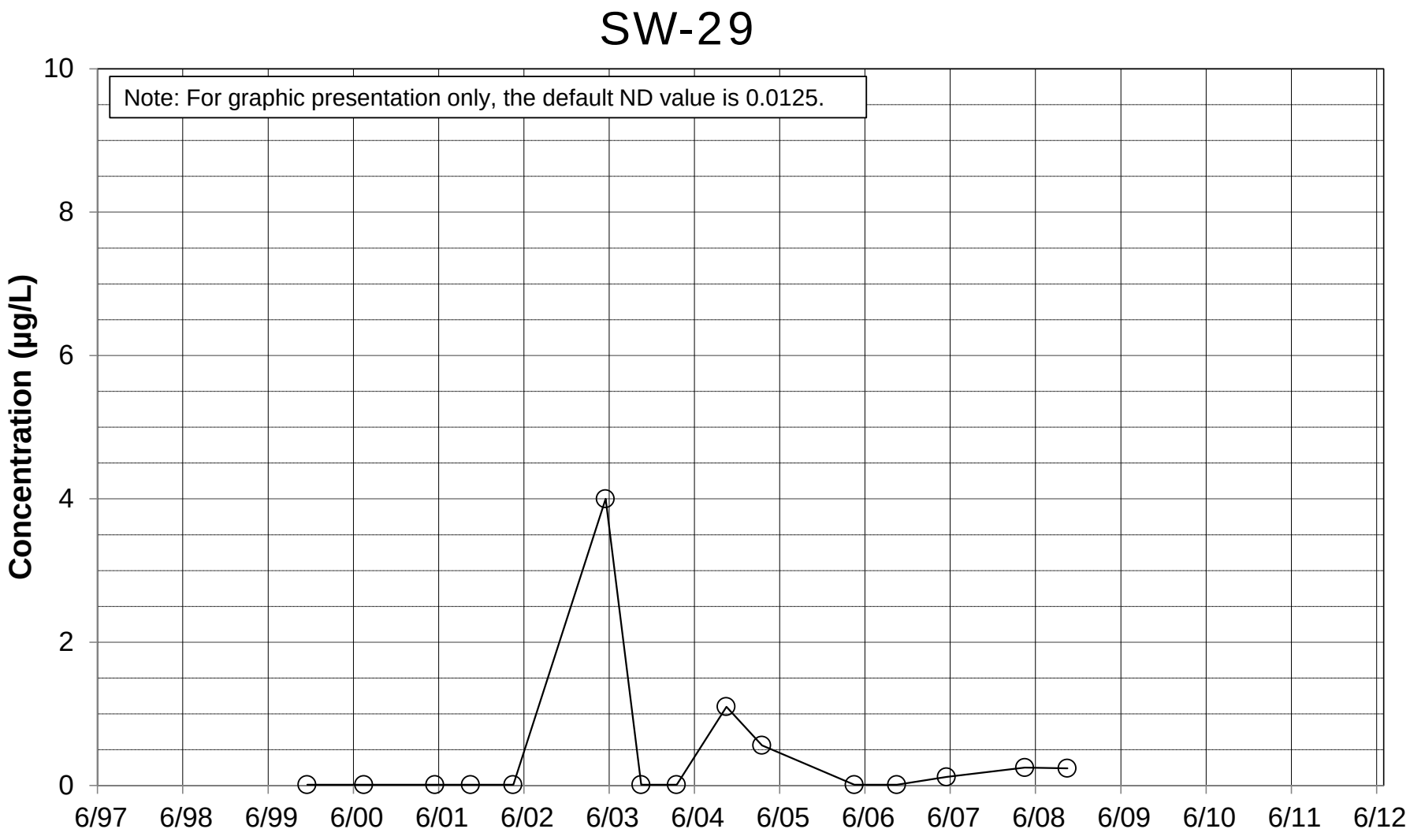

RP-94D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

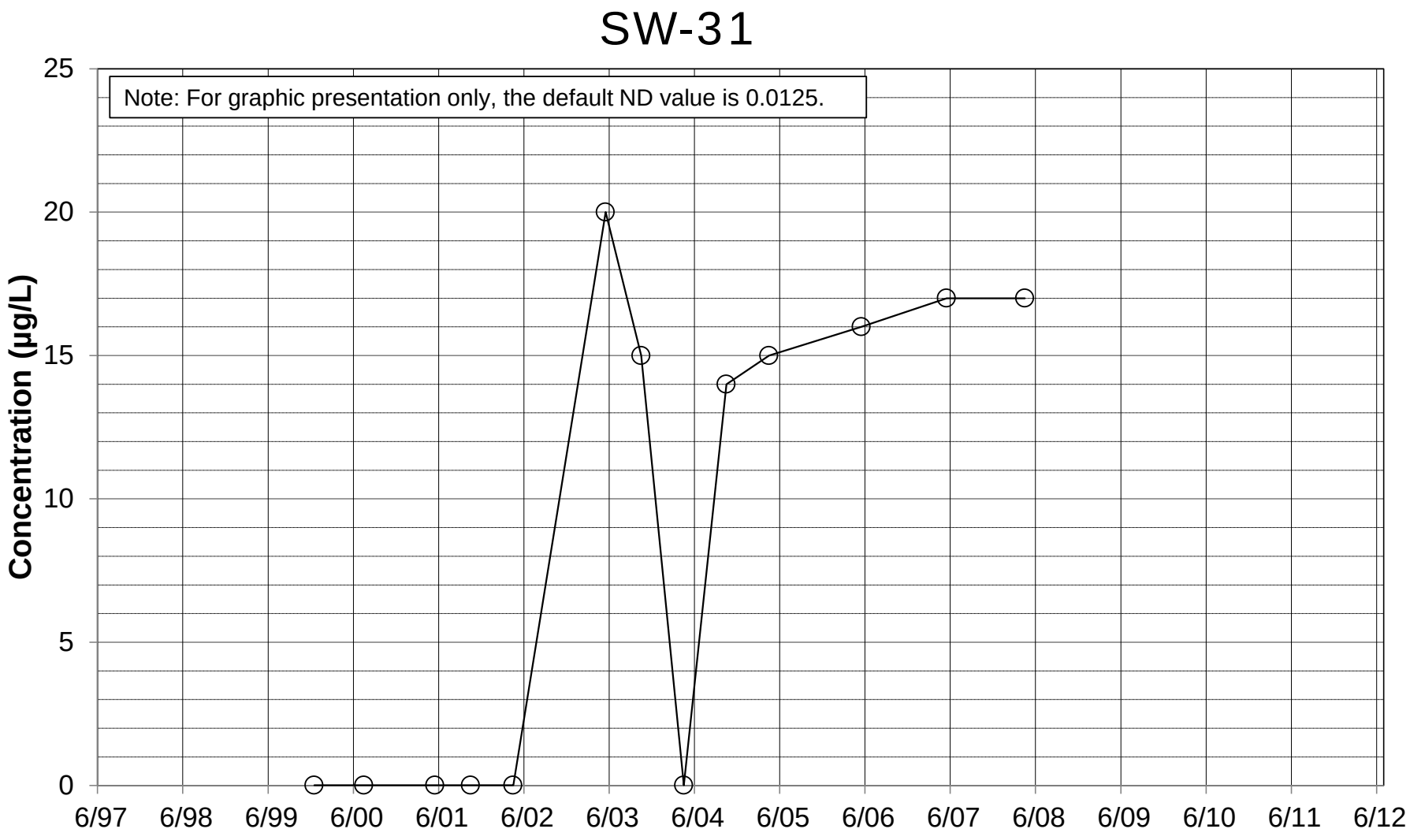

RP-96C-2
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

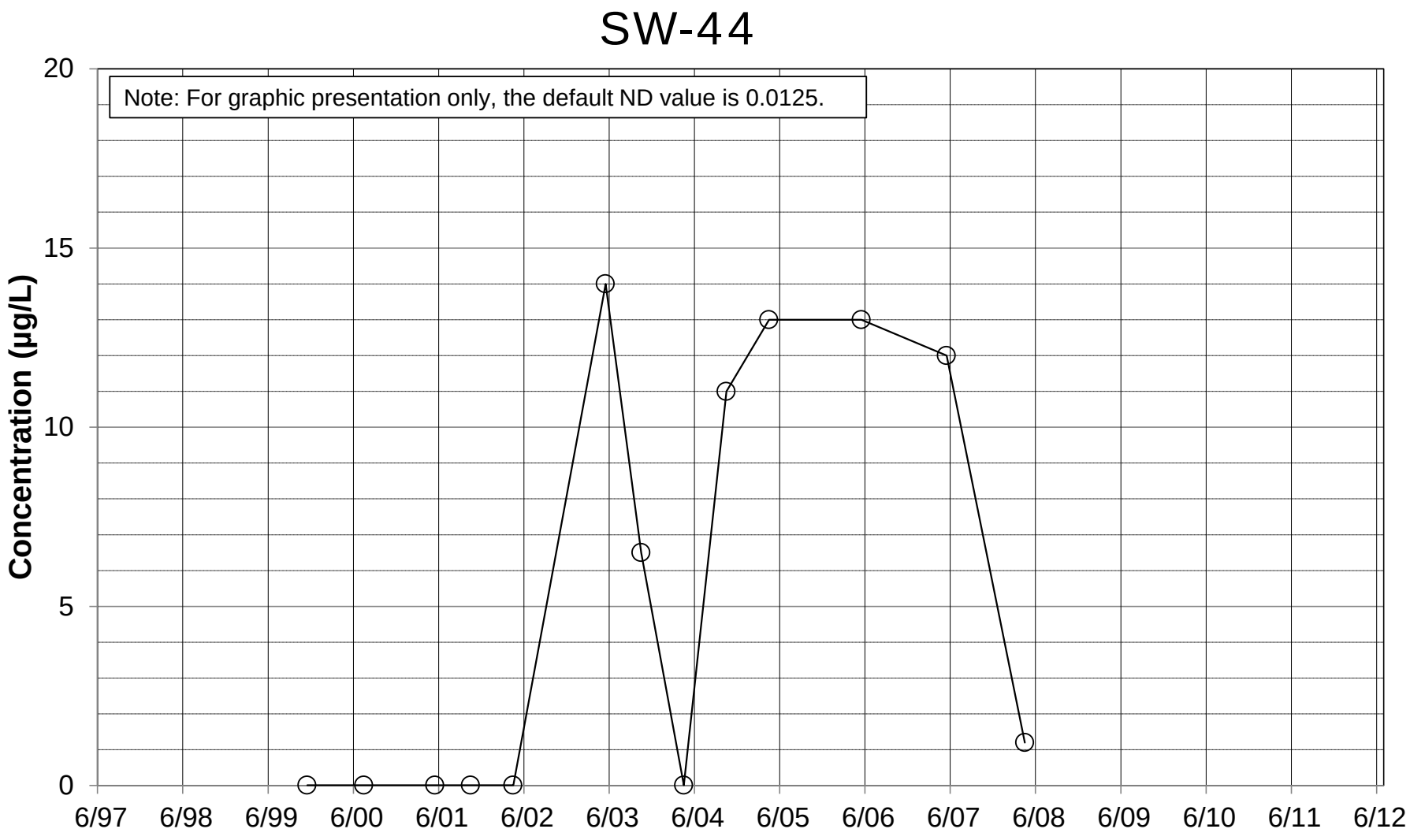

RP-98C
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

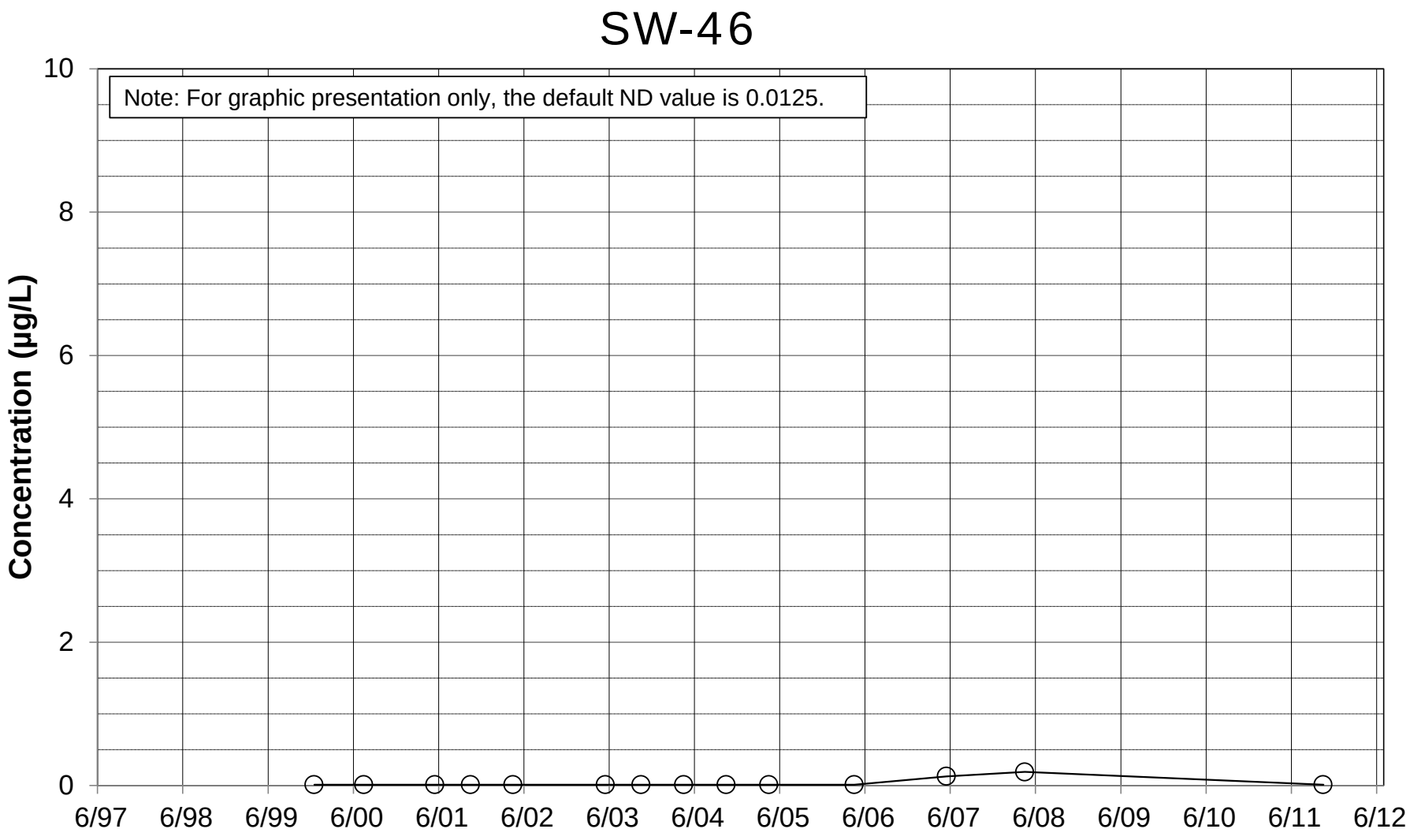

Sump 9B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

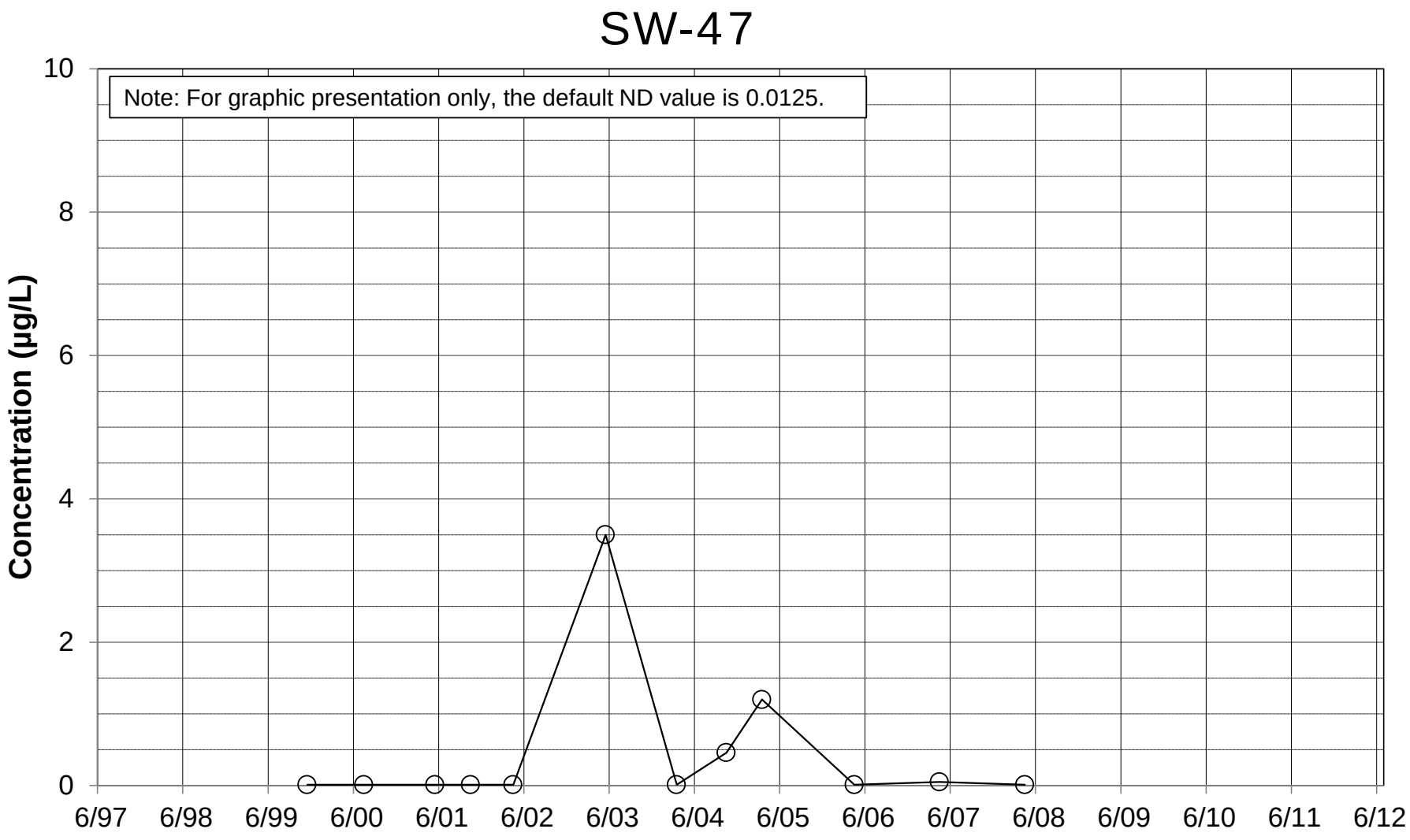

SW-17
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

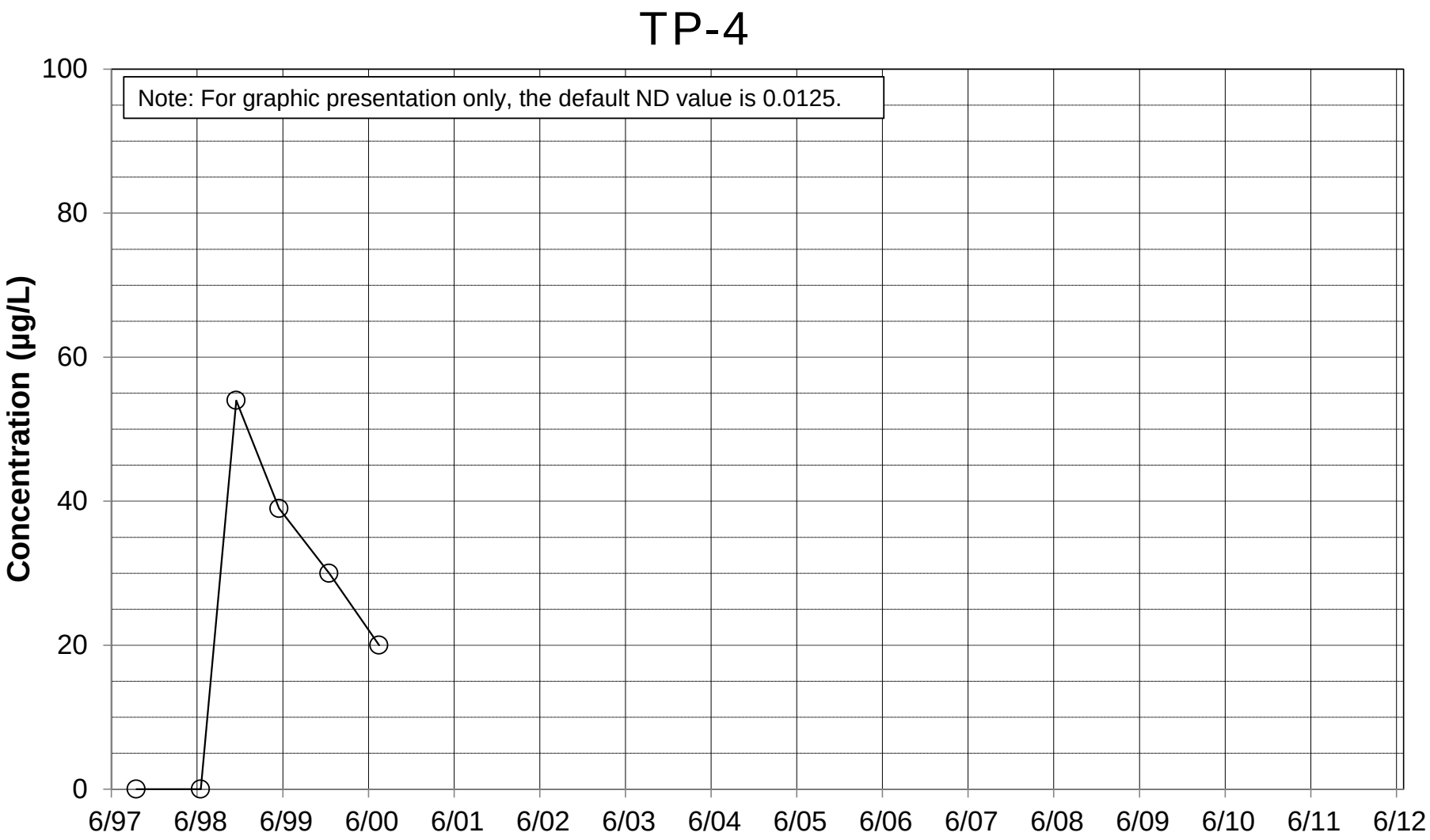

SW-29
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

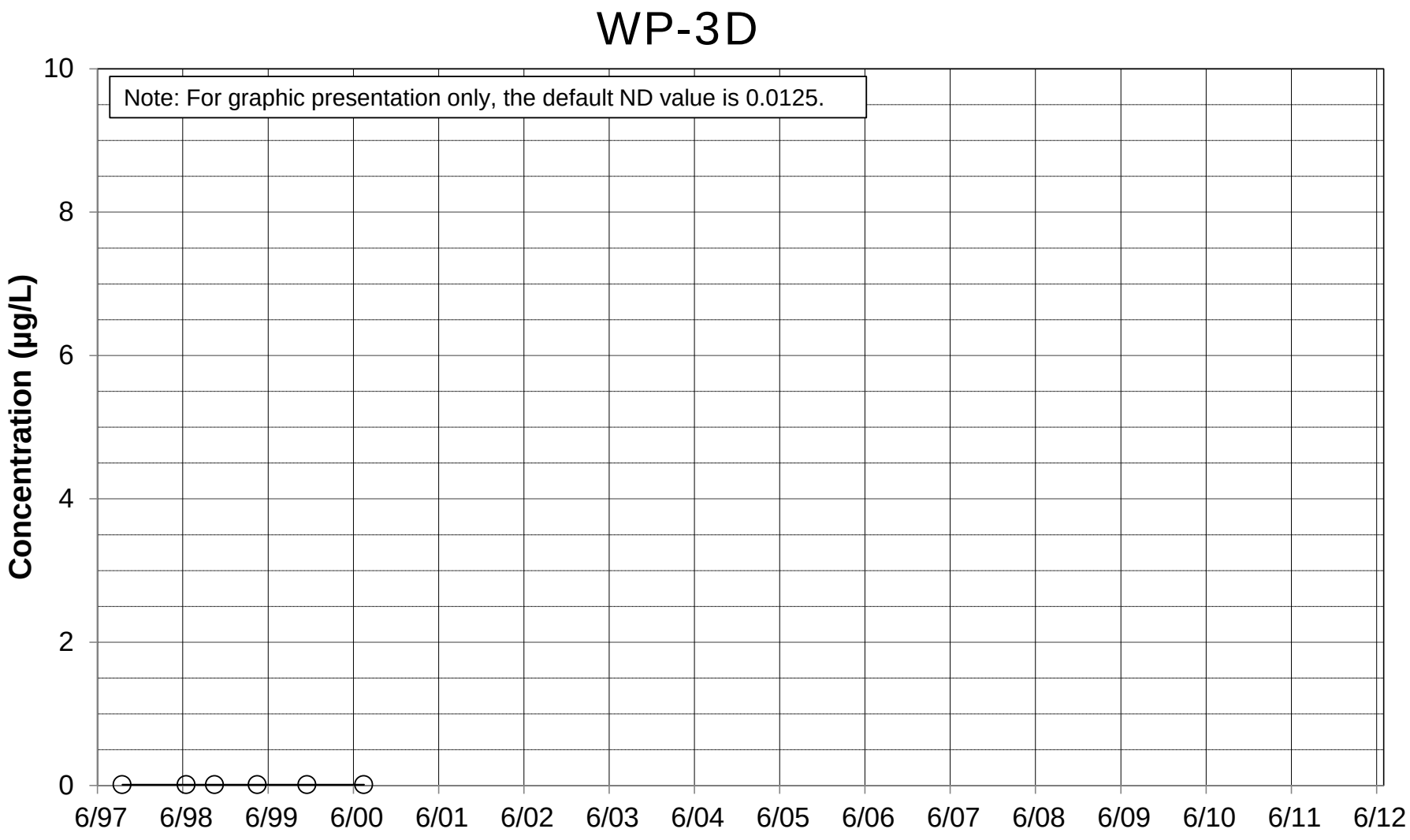

SW-31
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
25
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


SW-44
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


SW-46
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


SW-47
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


TP-4
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


WP-3D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
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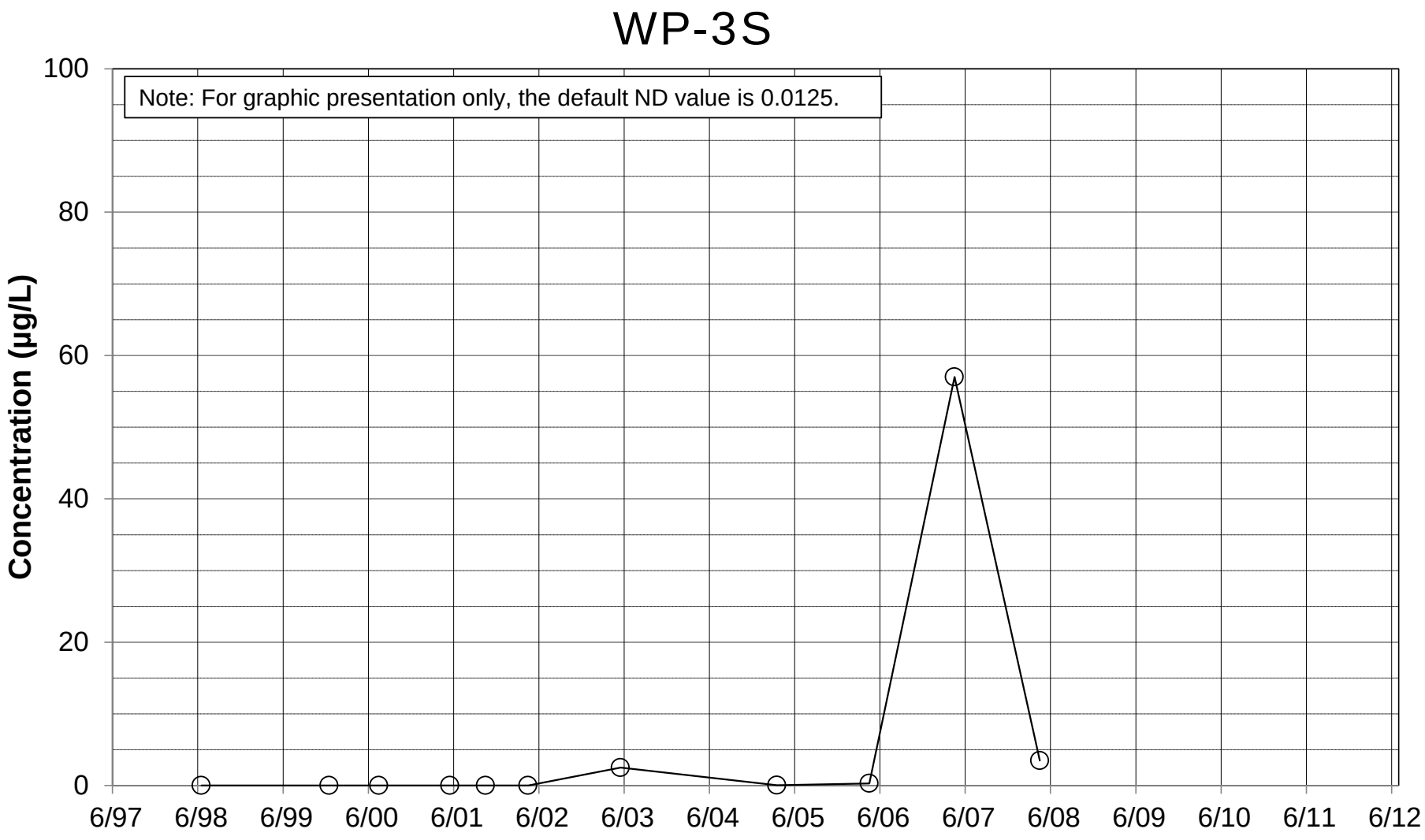
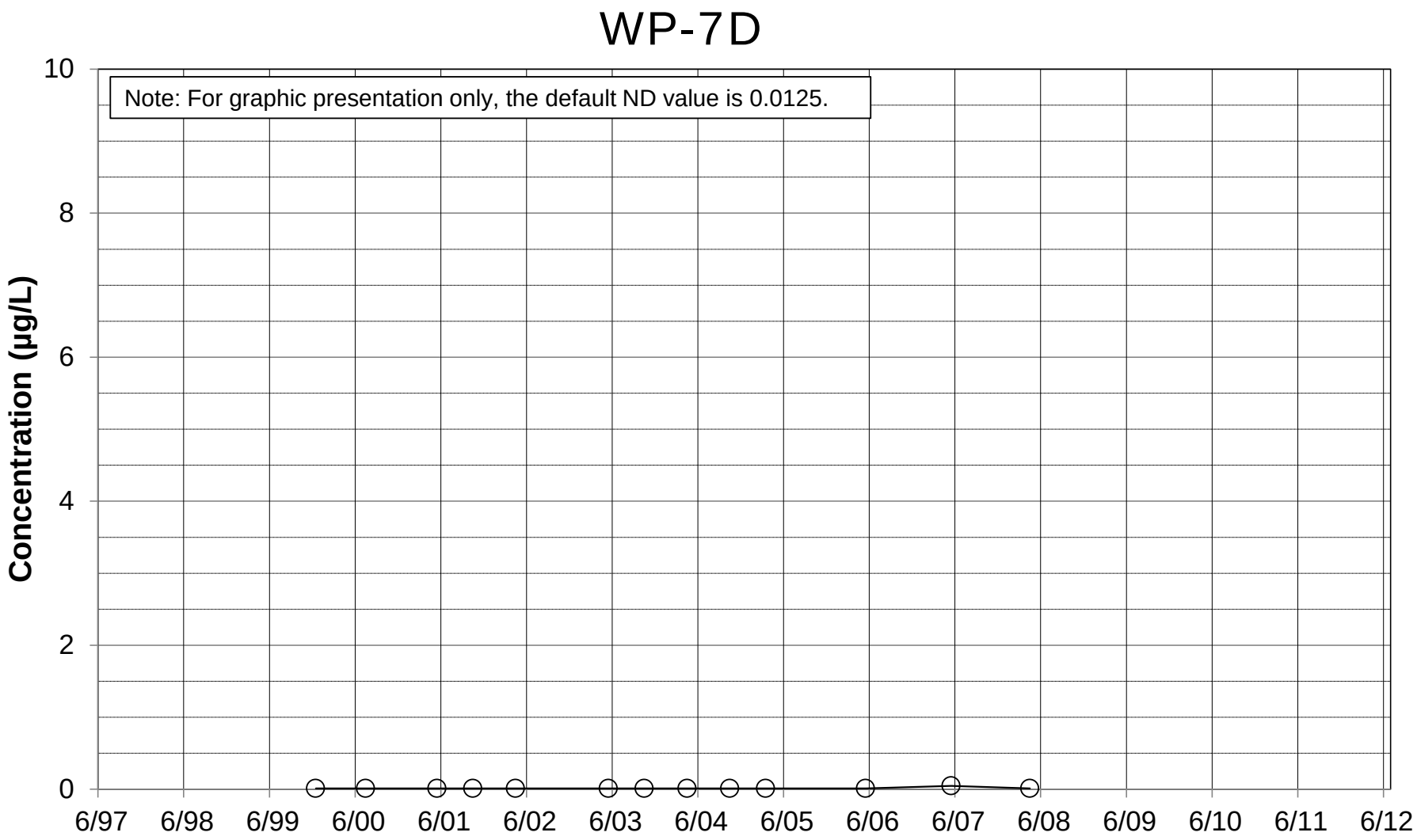
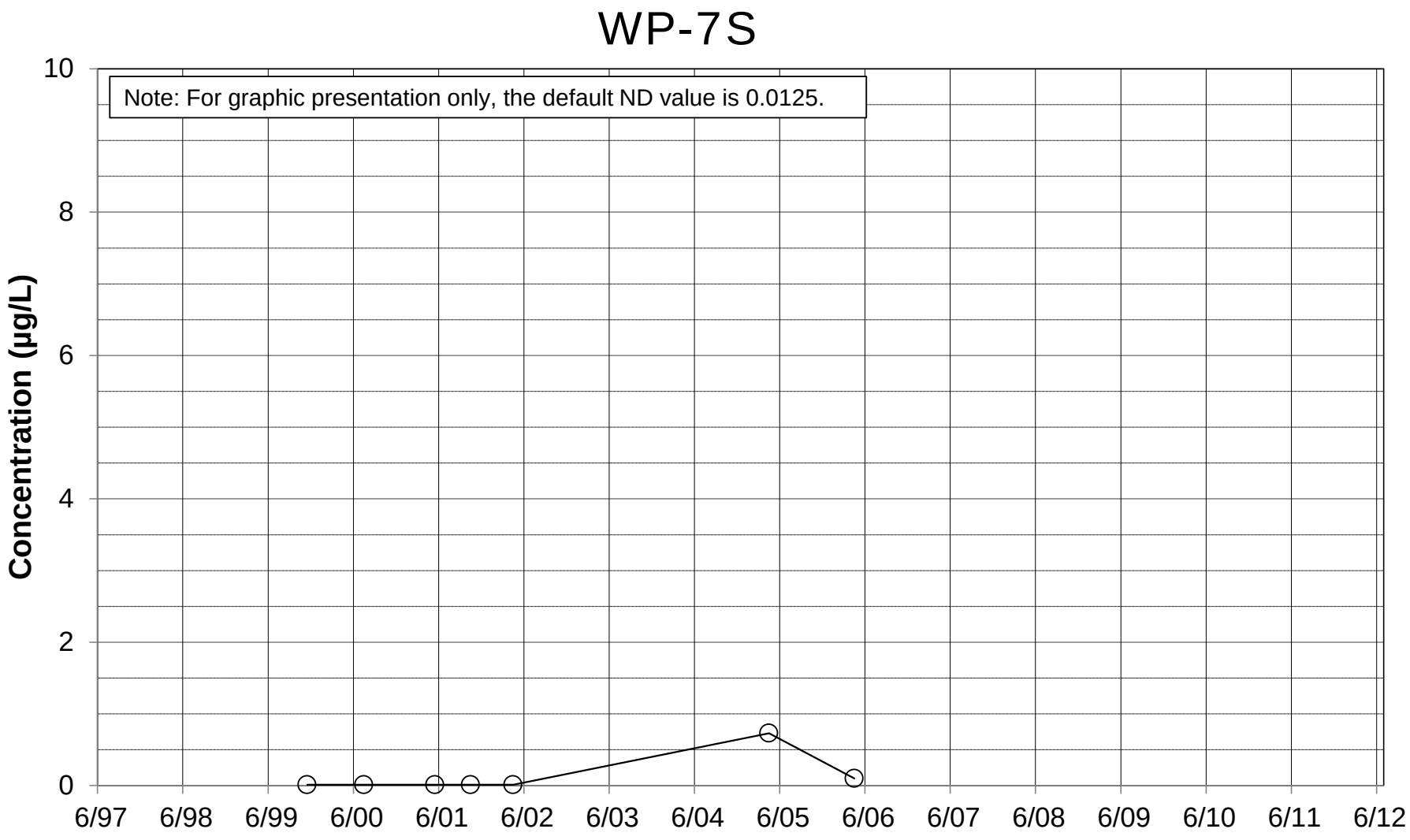
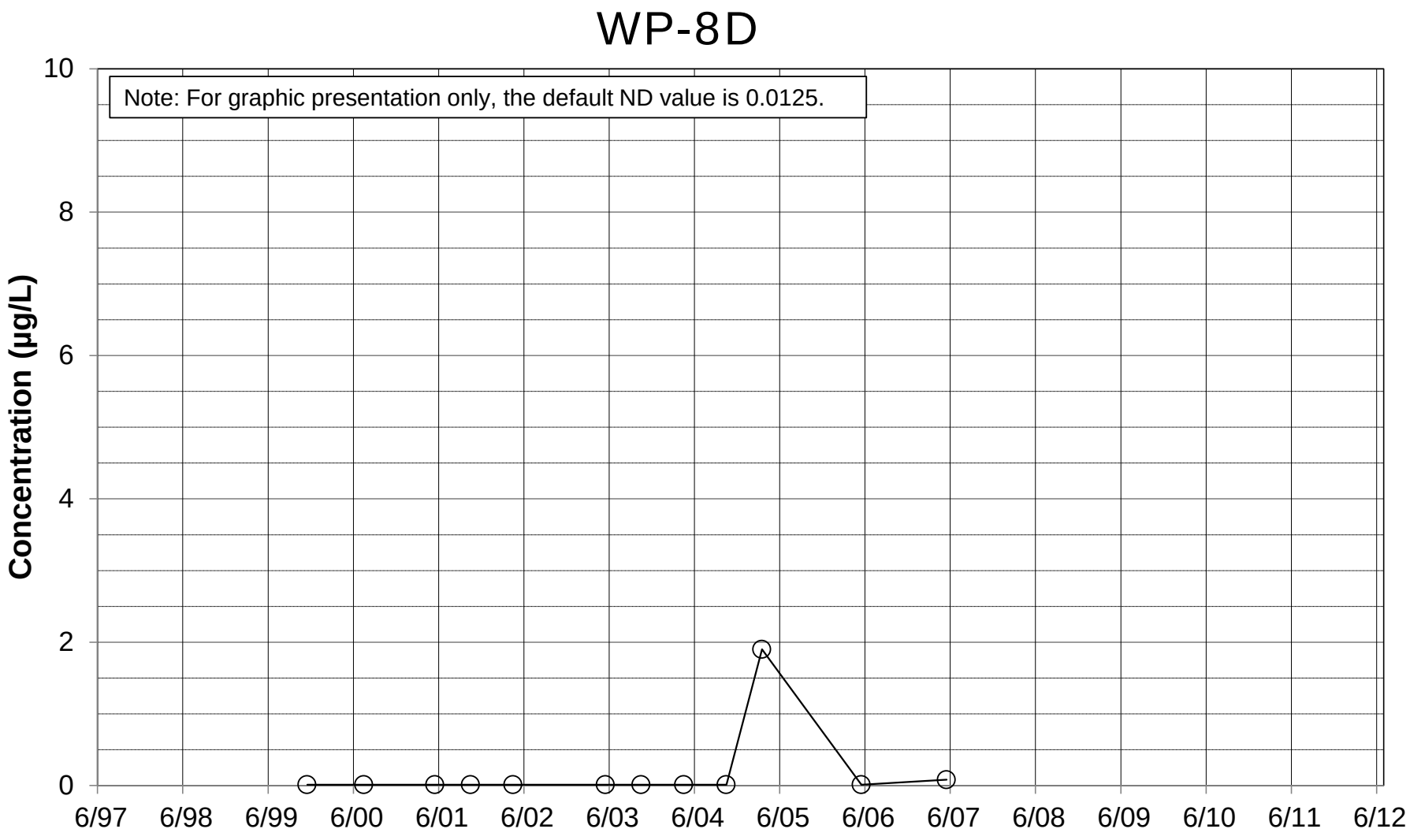
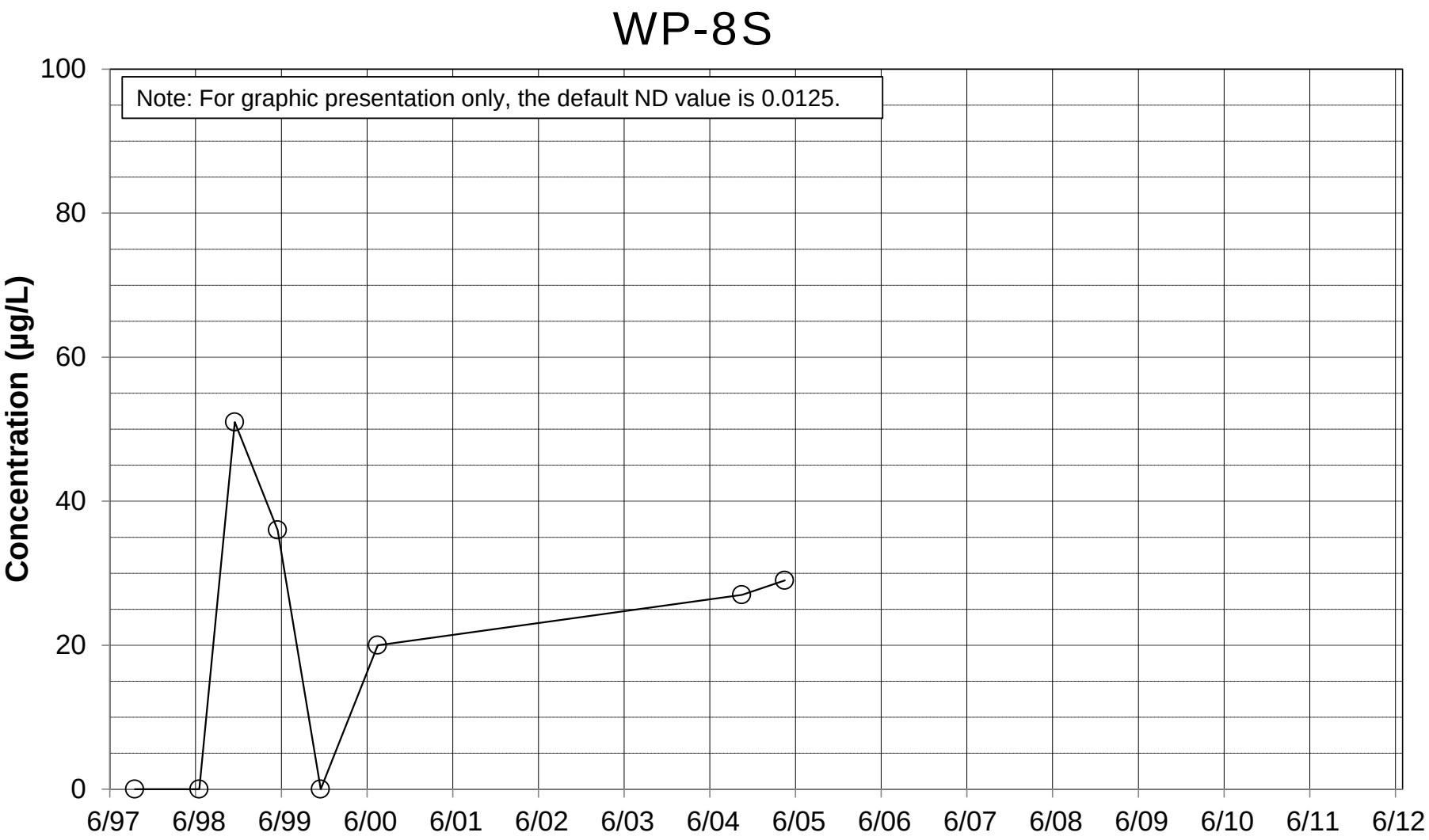
6/08
6/09
6/10
6/11
6/12

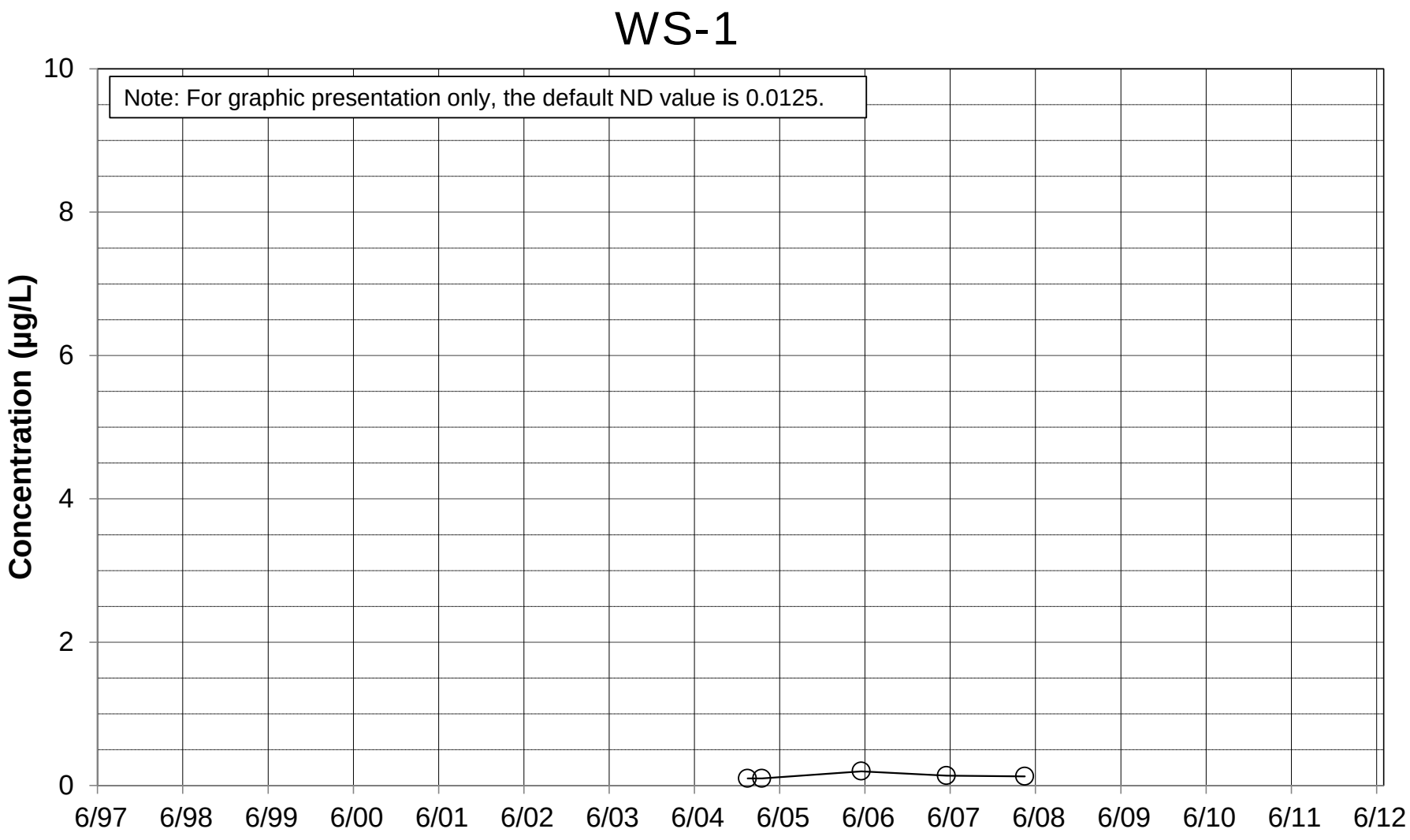

WP-3S
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

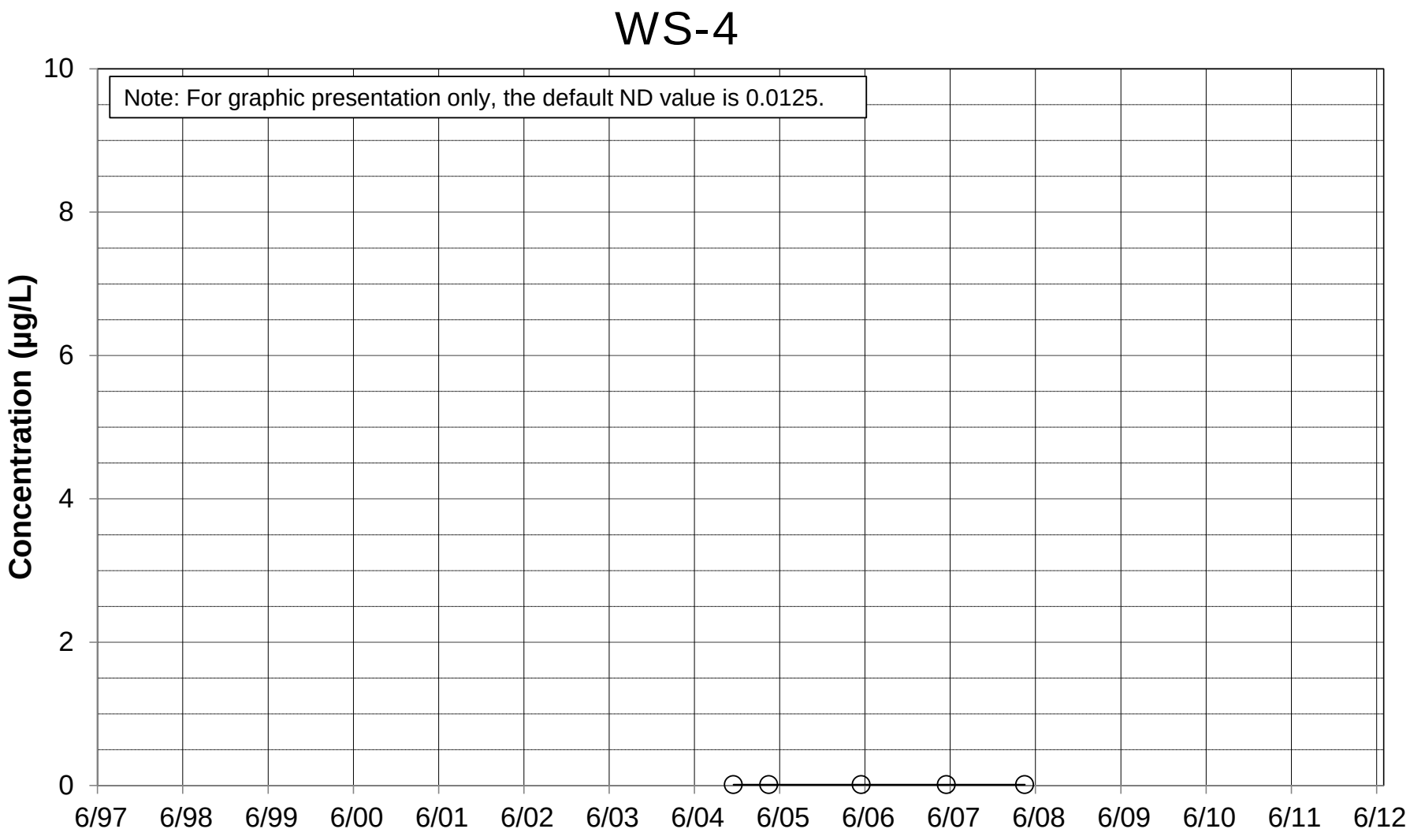

WP-7D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


WP-7S
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


WP-8D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


WP-8S
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


WS-1
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


WS-4
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

ATTACHMENT D2-3 – HISTORICAL DISSOLVED NICKEL CONCENTRATIONS IN GROUNDWATER

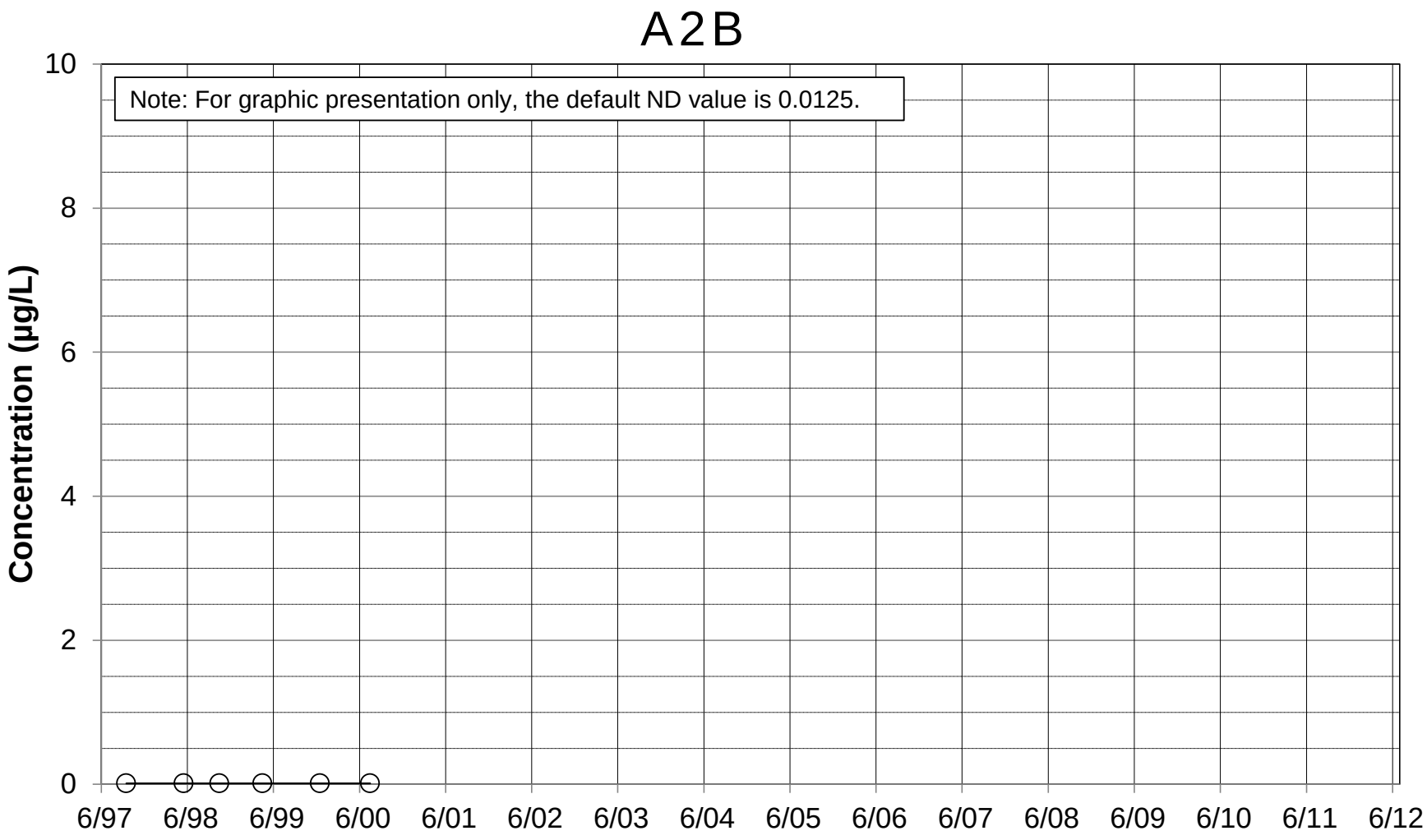
FINAL FEASIBILITY STUDY
CASMALIA RESOURCES SUPERFUND SITE
CASMALIA, CALIFORNIA

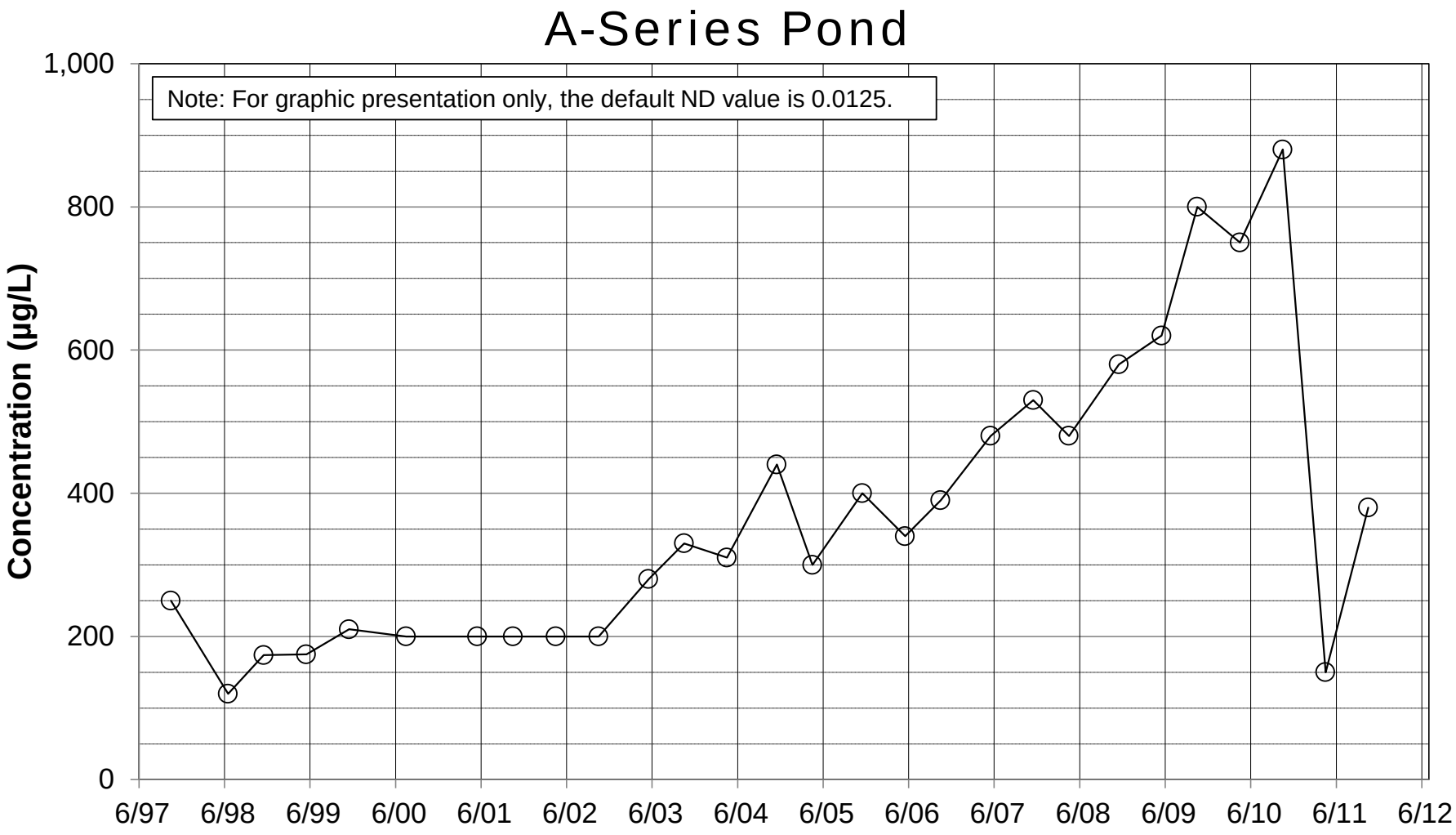
Prepared by: ERM

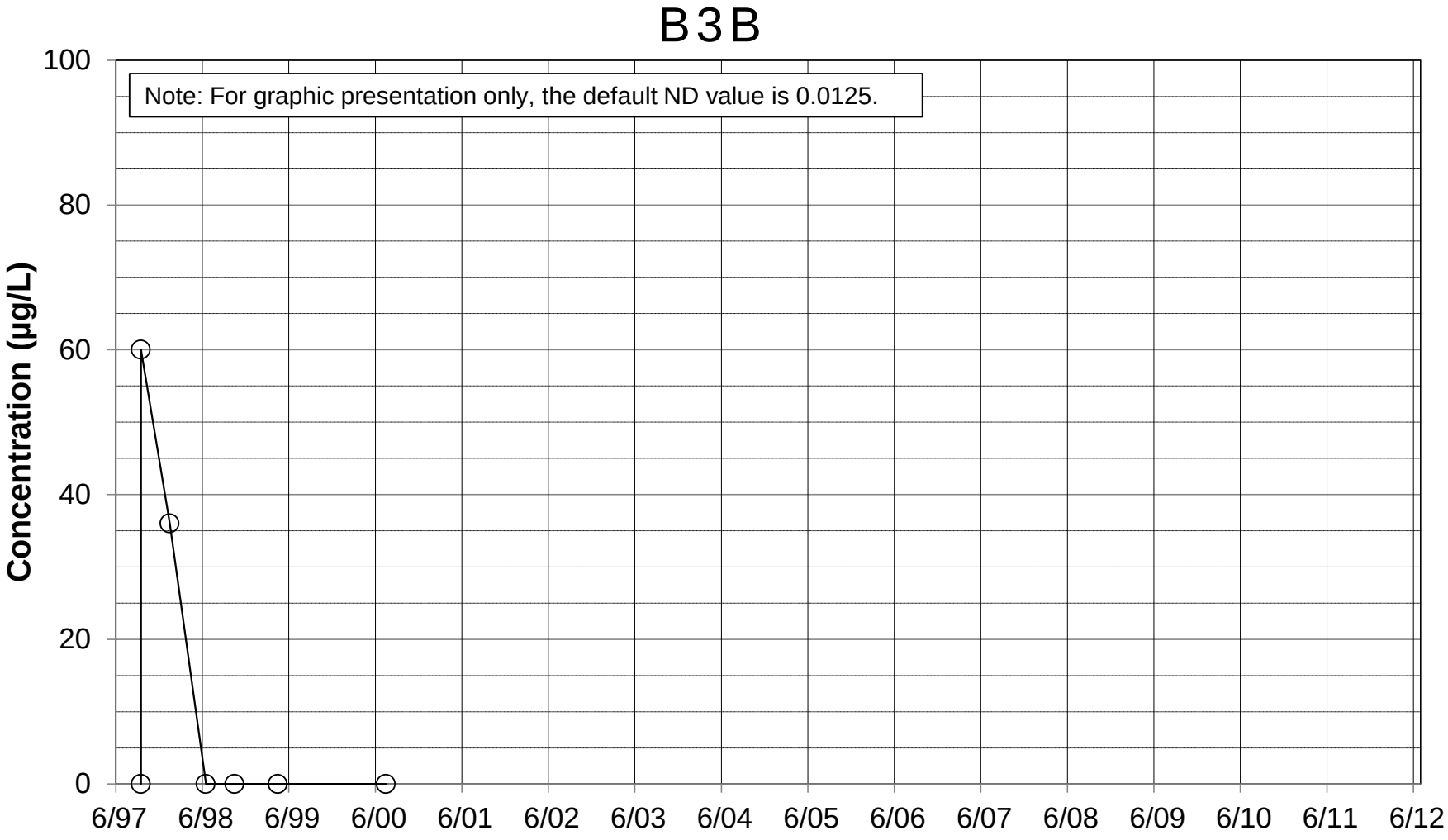
LIST OF CHARTS

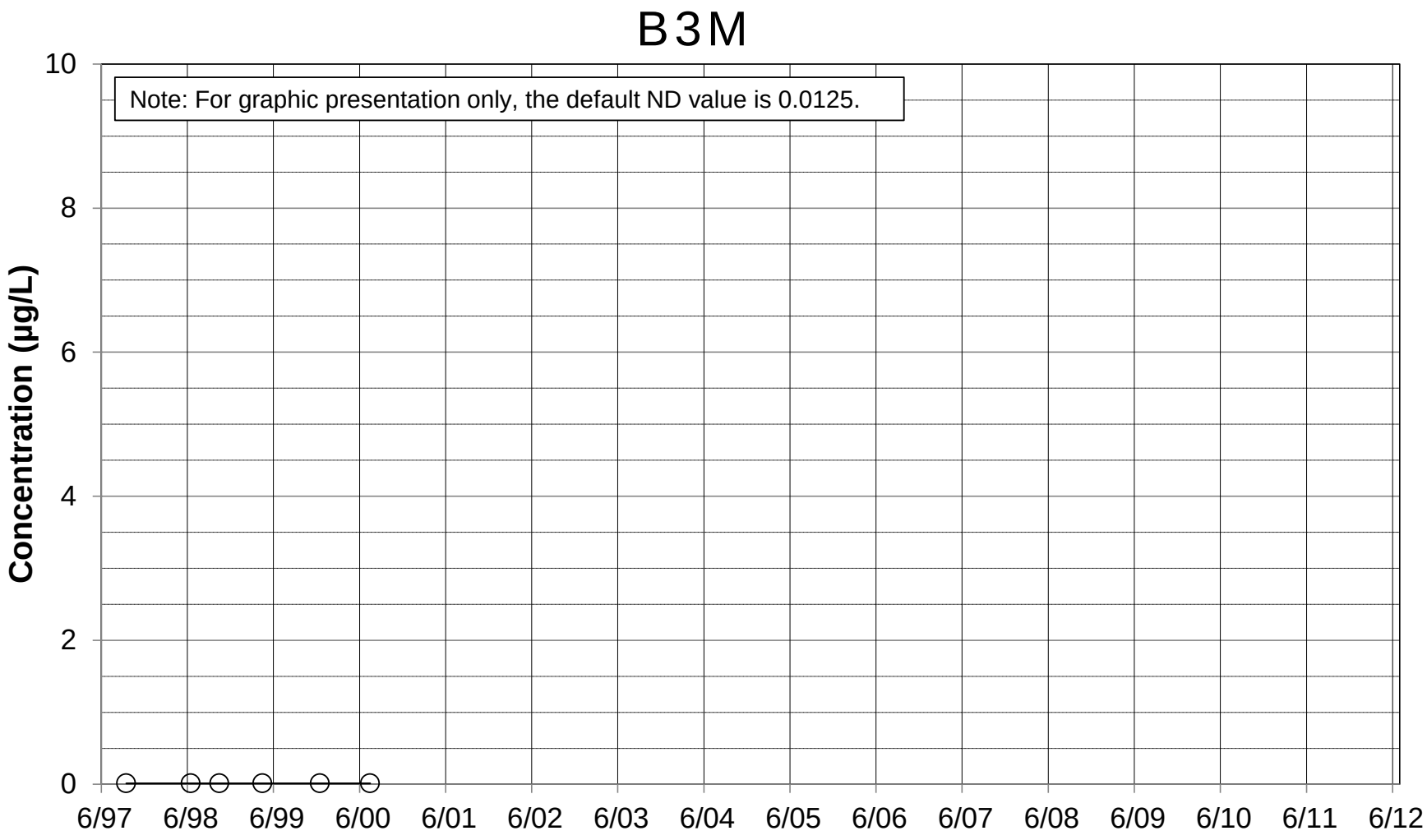
A2B
A-Series Pond
B3B
B3M
B-5
C3M
C-5
DB-1
Gallery Well
MW-18C
MW-7BU
MW-7C
MW-7D
Pond 13
Pond 18
Pond A-5
PSCT-1
PSCT-2
PSCT-3
PSCT-4
PZ-P18-5
RAP-1A
RAP-1B
RAP-1C
RAP-3A
RCF Pond
RG-10B
RG-1B
RG-1C
RG-3B
RG-4B
RG-5B
RG-6B
RG-7B
RG-8B
RG-9B
RIMW-1
RIMW-10
RIMW-11
RIMW-2
RIMW-3
RIMW-5
RIMW-7
RIMW-8
RIMW-9

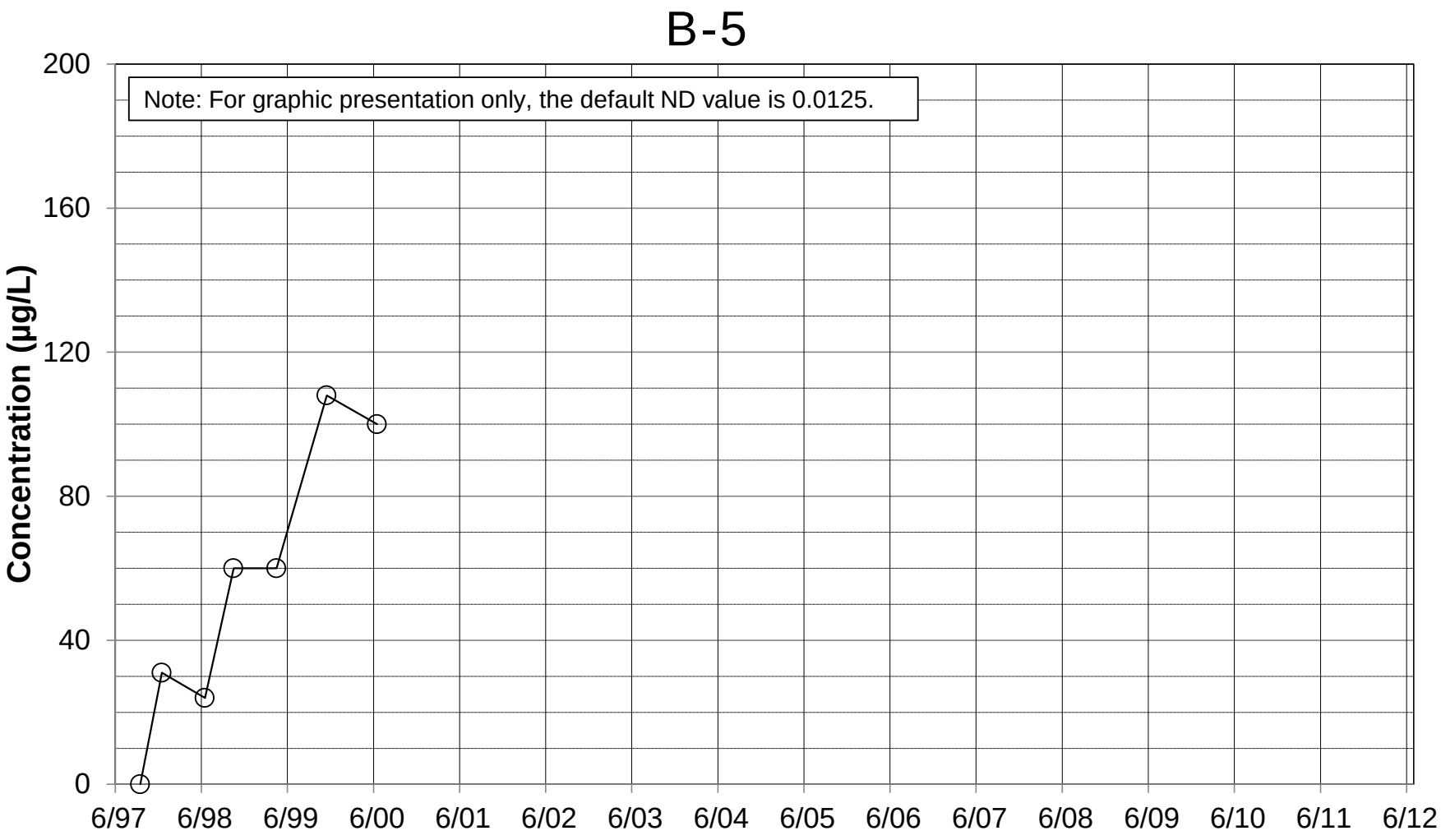
RIPZ-8
RP-100A
RP-101C
RP-103B
RP-107D
RP-109B
RP-109D
RP-13B
RP-17B
RP-1D
RP-20B
RP-28B
RP-41B
RP-4D
RP-53C
RP-54C
RP-55C-2
RP-59B
RP-61B
RP-62B-1
RP-62D
RP-63C
RP-65B
RP-72A
RP-72D
RP-75A
RP-75B
RP-75C
RP-76A
RP-94D
RP-96C-2
RP-98C
Sump 9B
SW-17
SW-29
SW-31
SW-44
SW-46
SW-47
TP-4
WP-3D
WP-3S
WP-7D
WP-7S
WP-8D
WP-8S
WS-1
WS-4

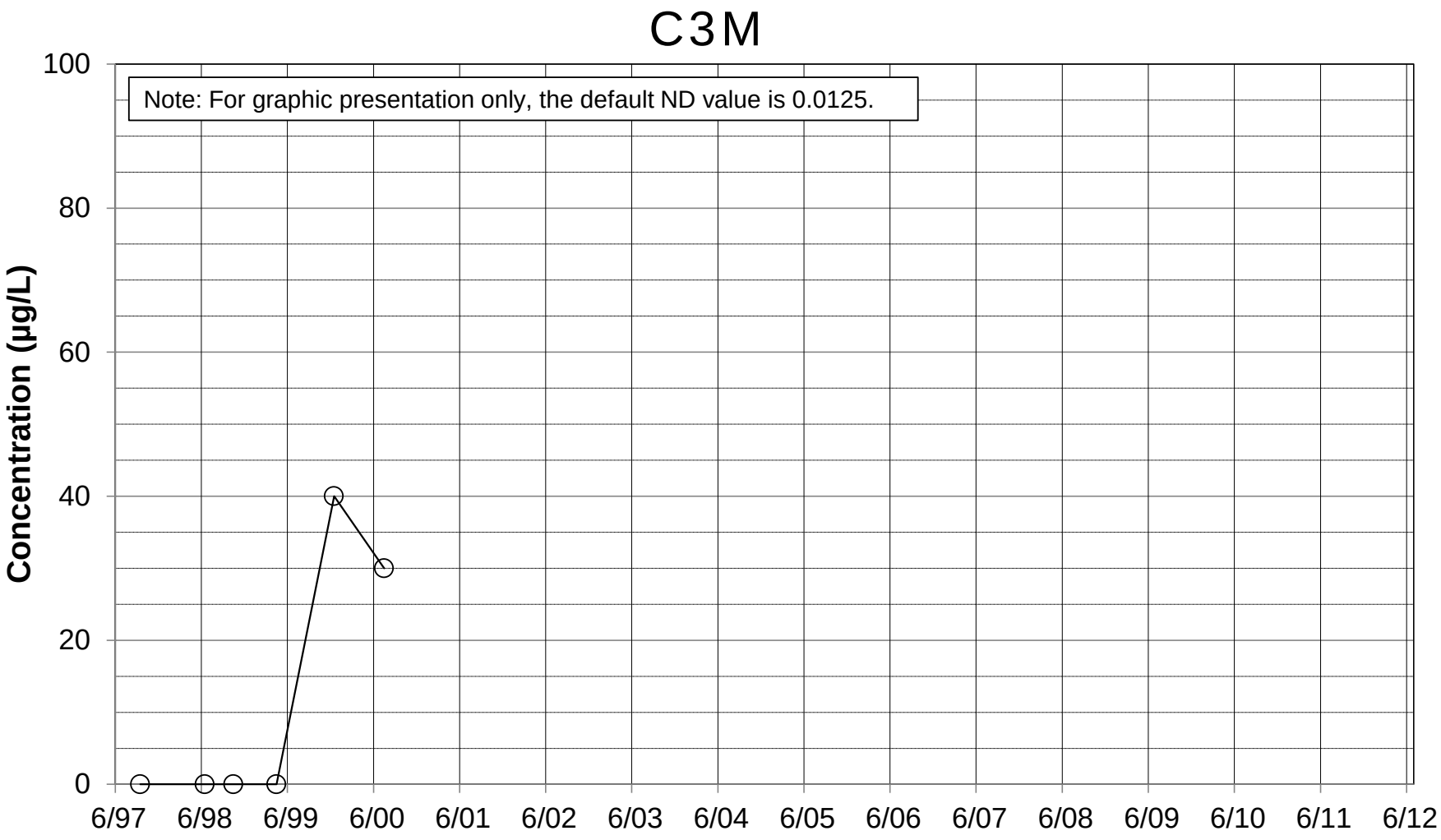

A2B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

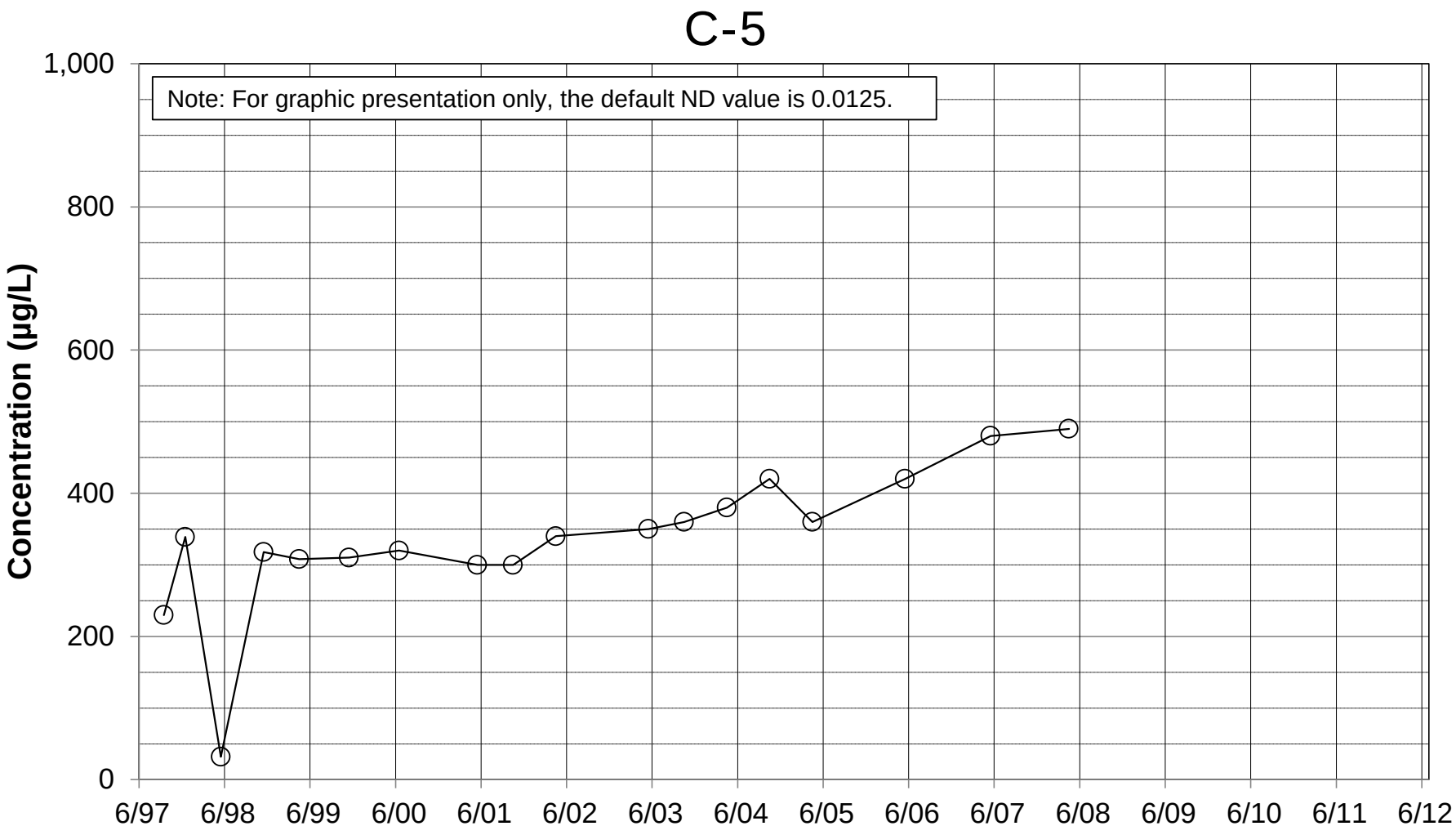

A-Series Pond
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

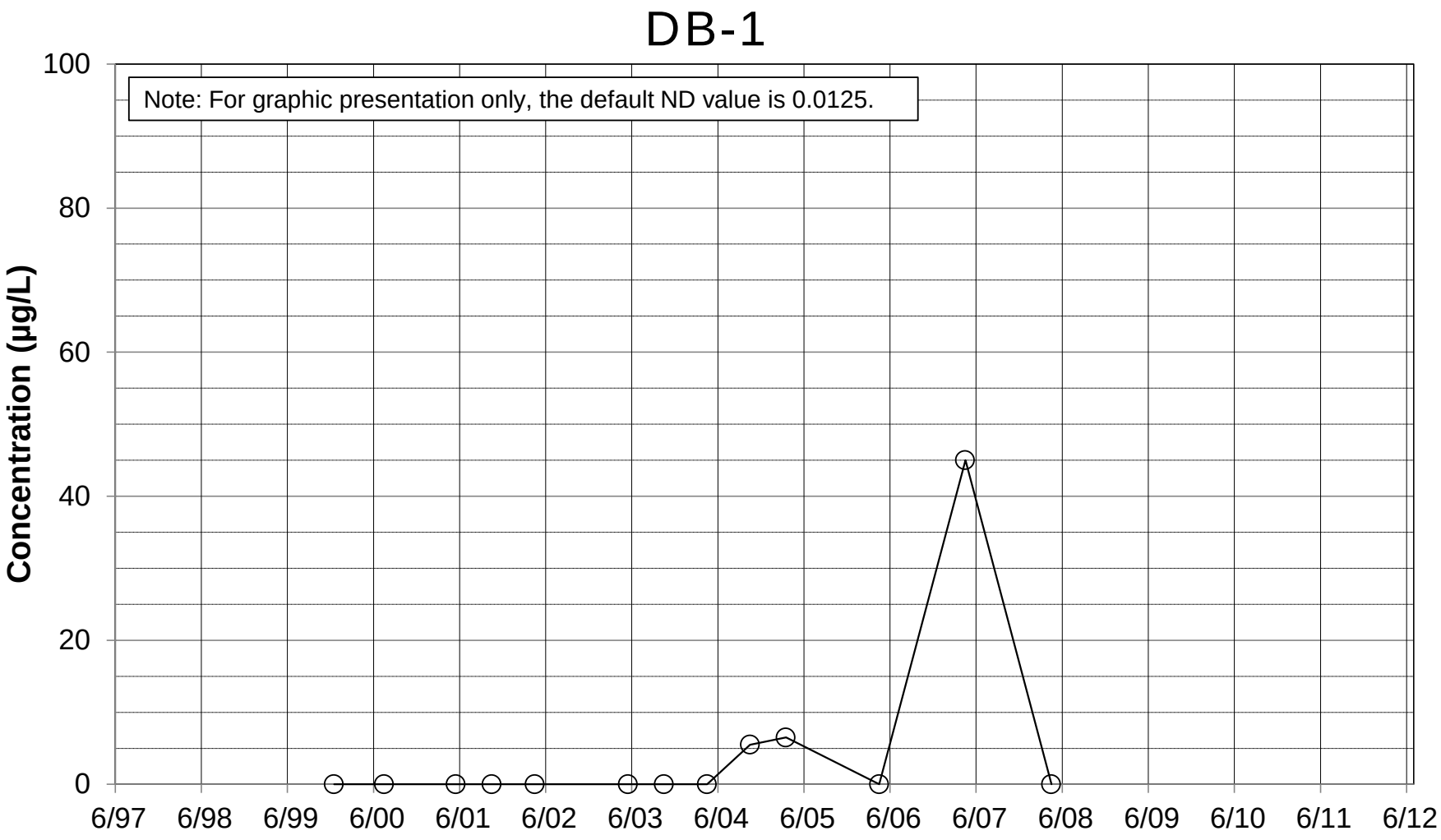

B3B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

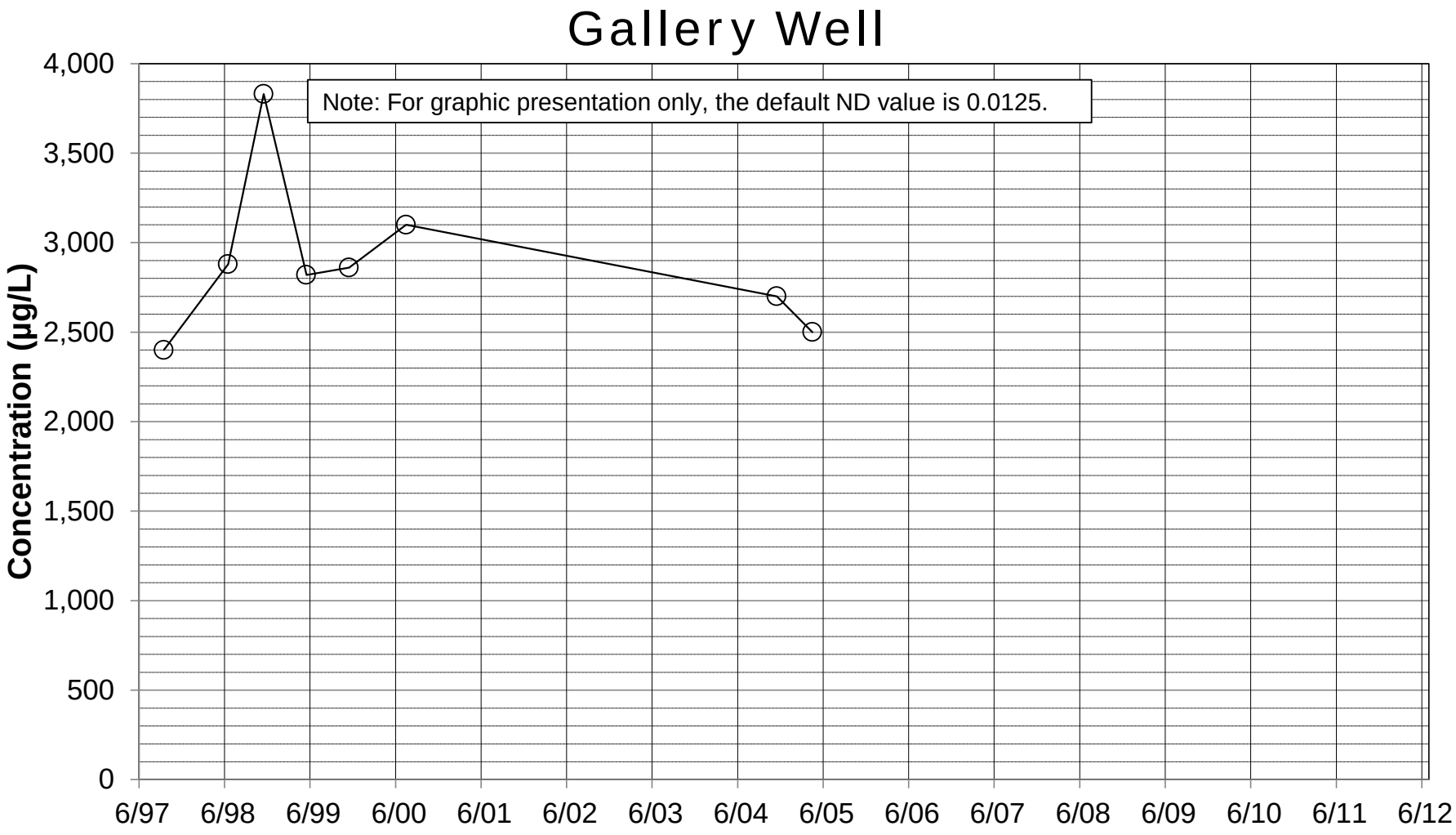

B3M
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

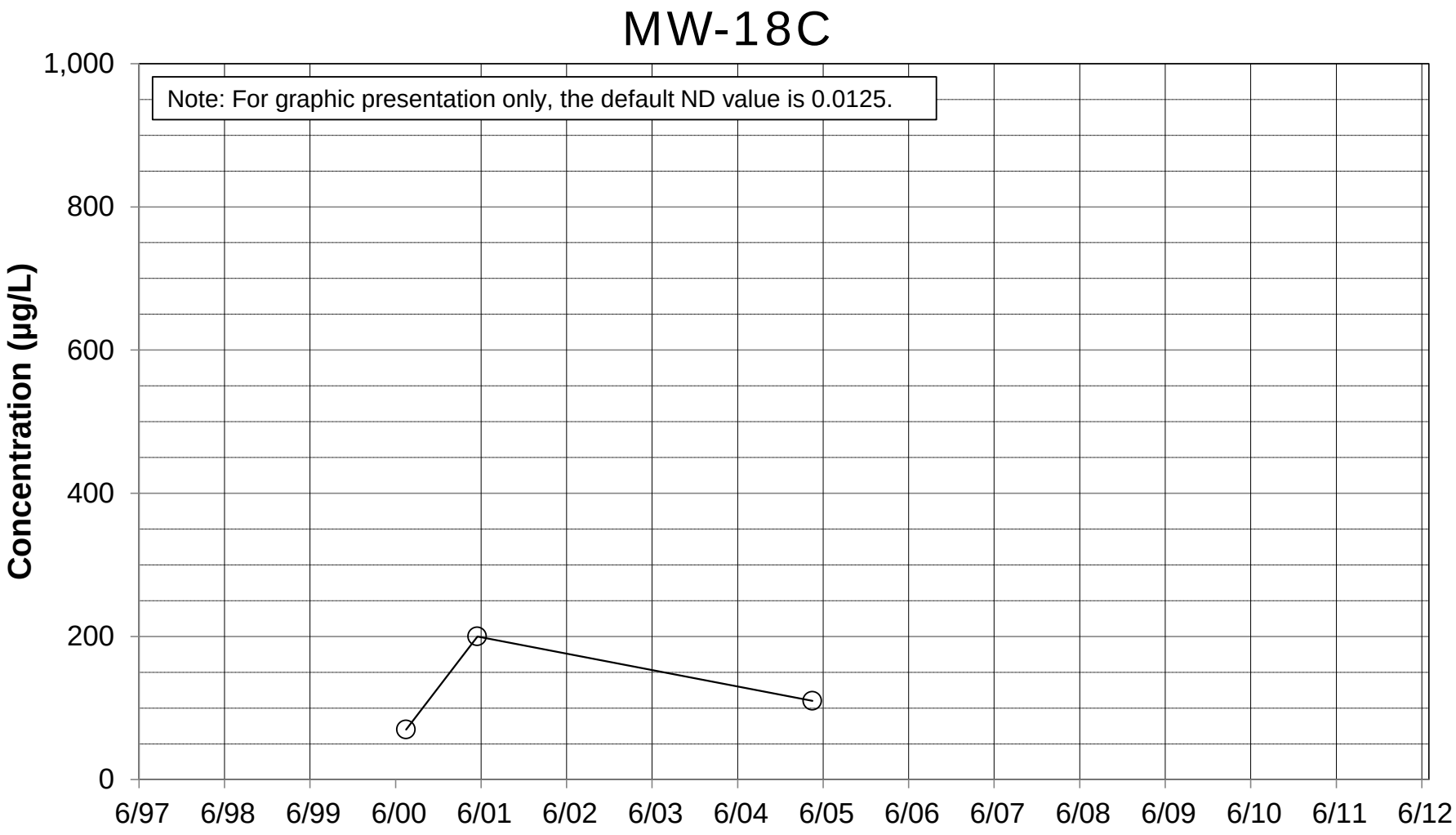

B-5
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
200
160
120
80
40
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

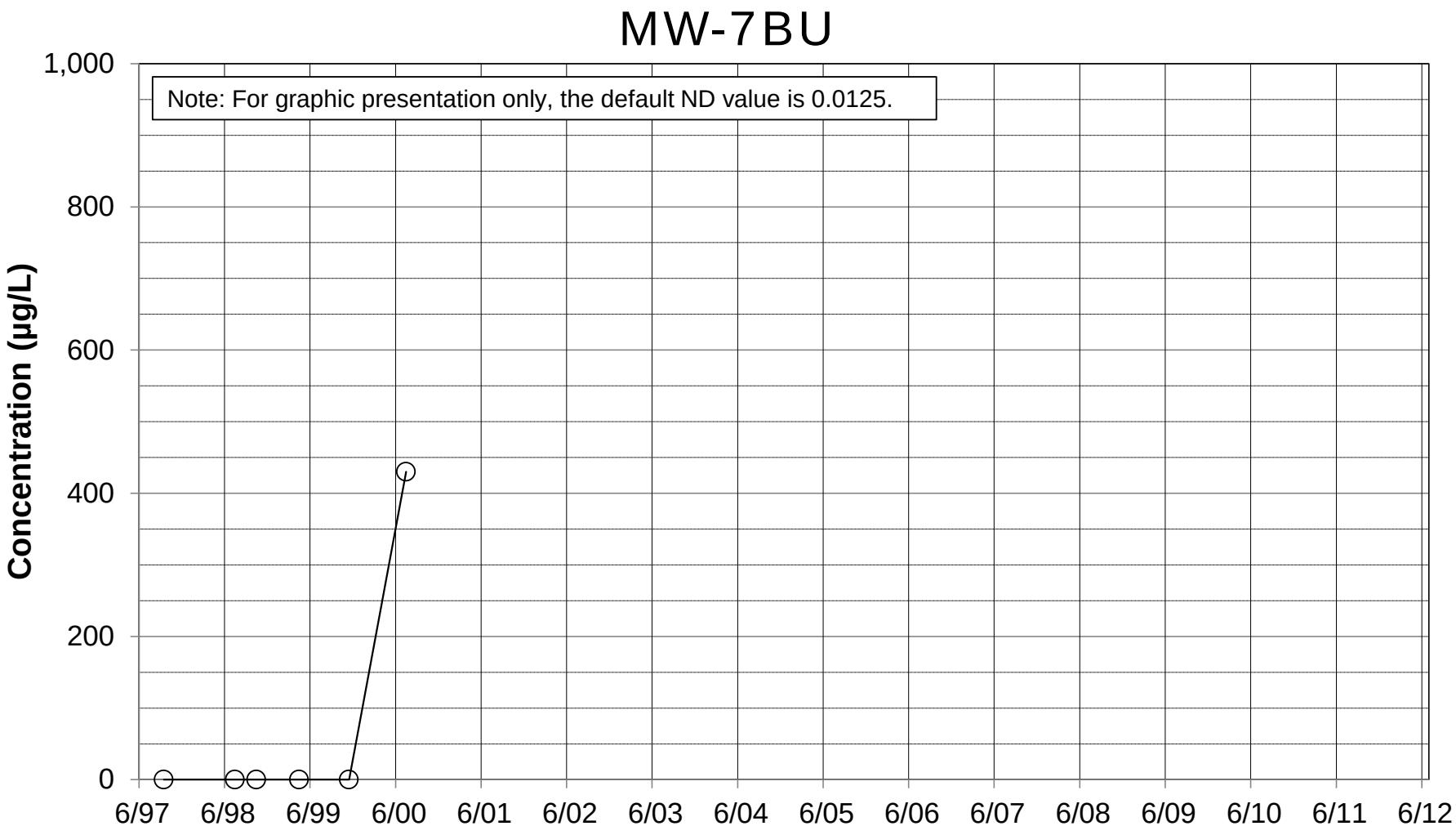

C3M
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

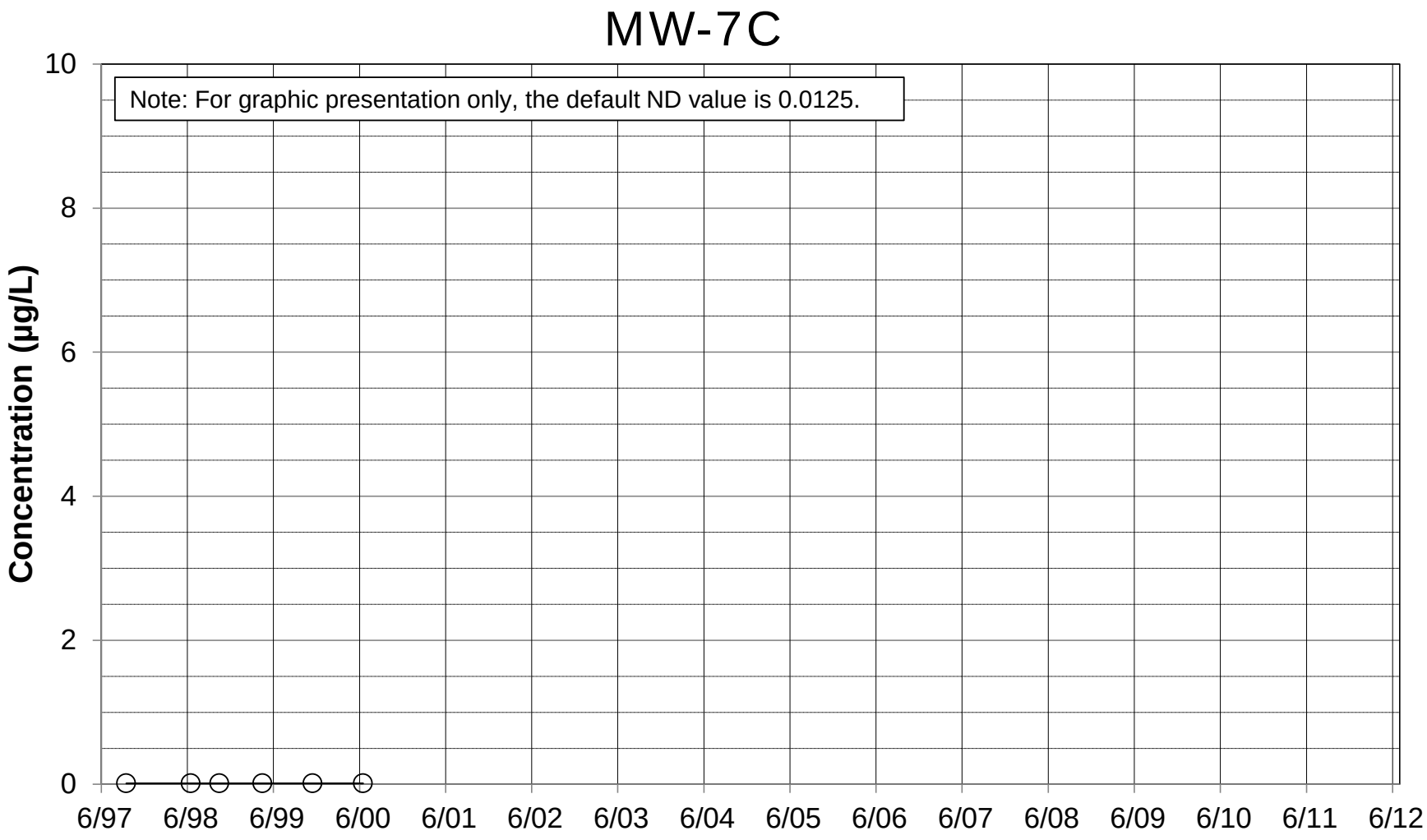

C-5
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

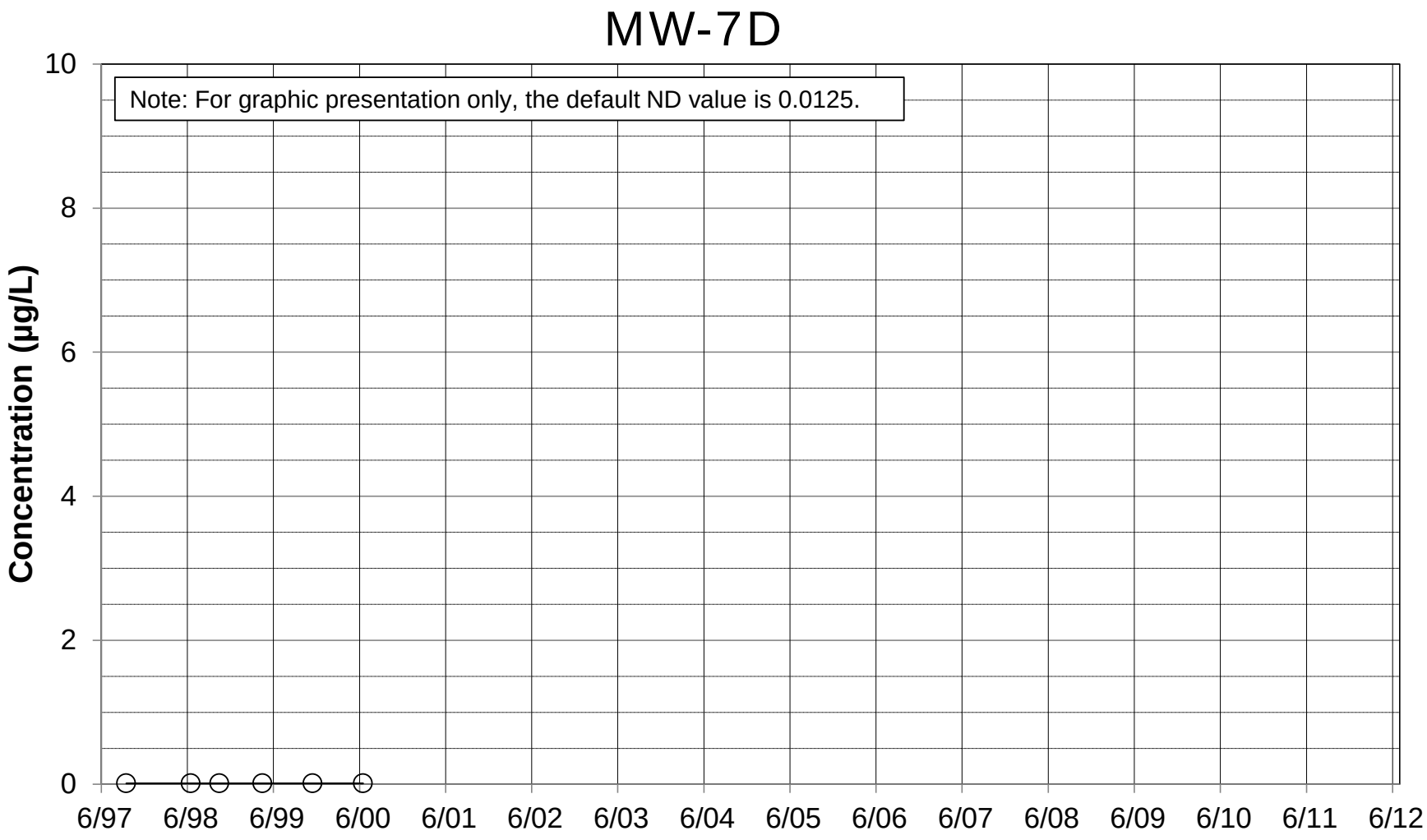

DB-1
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


Gallery Well
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

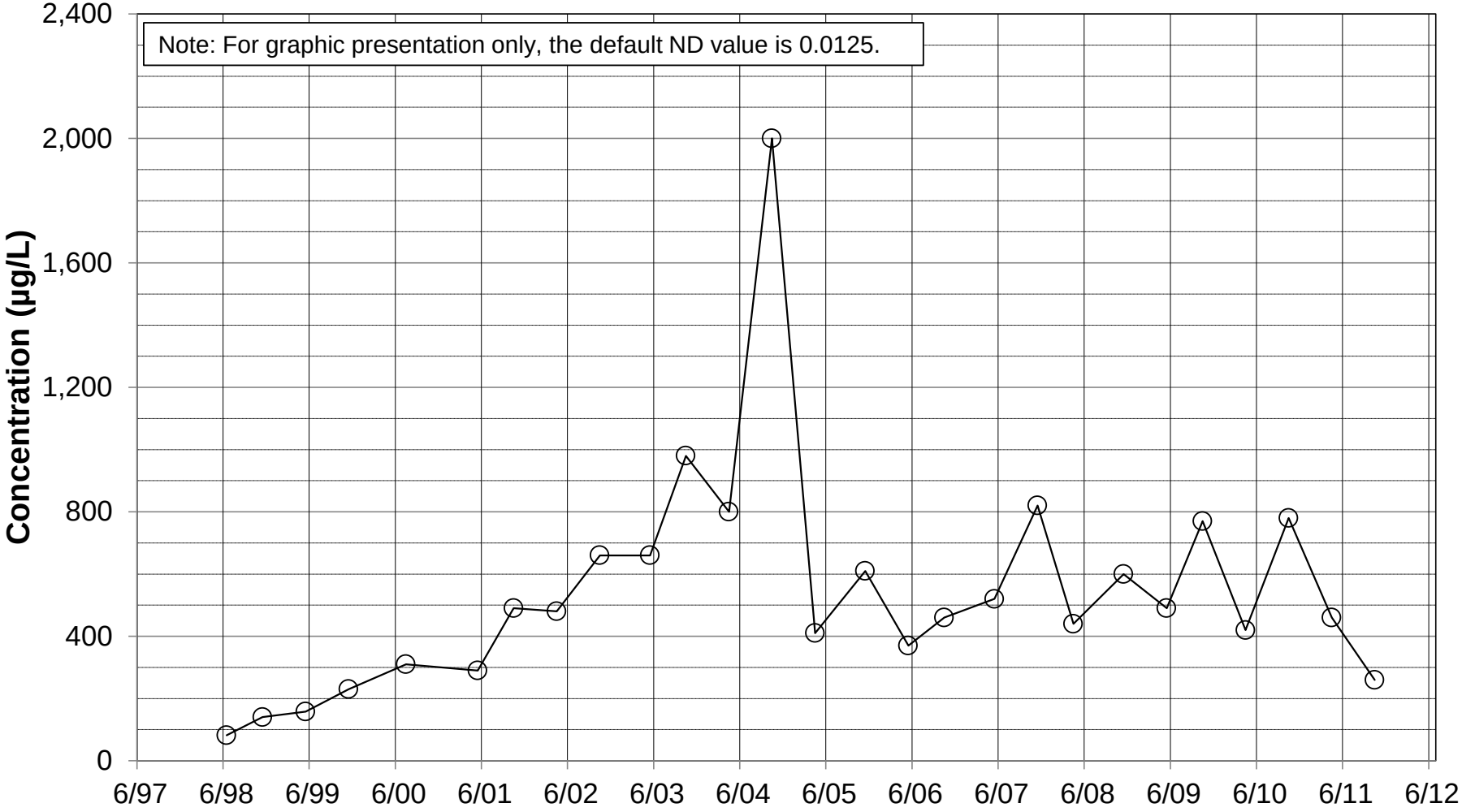

MW-18C
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


MW-7BU
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

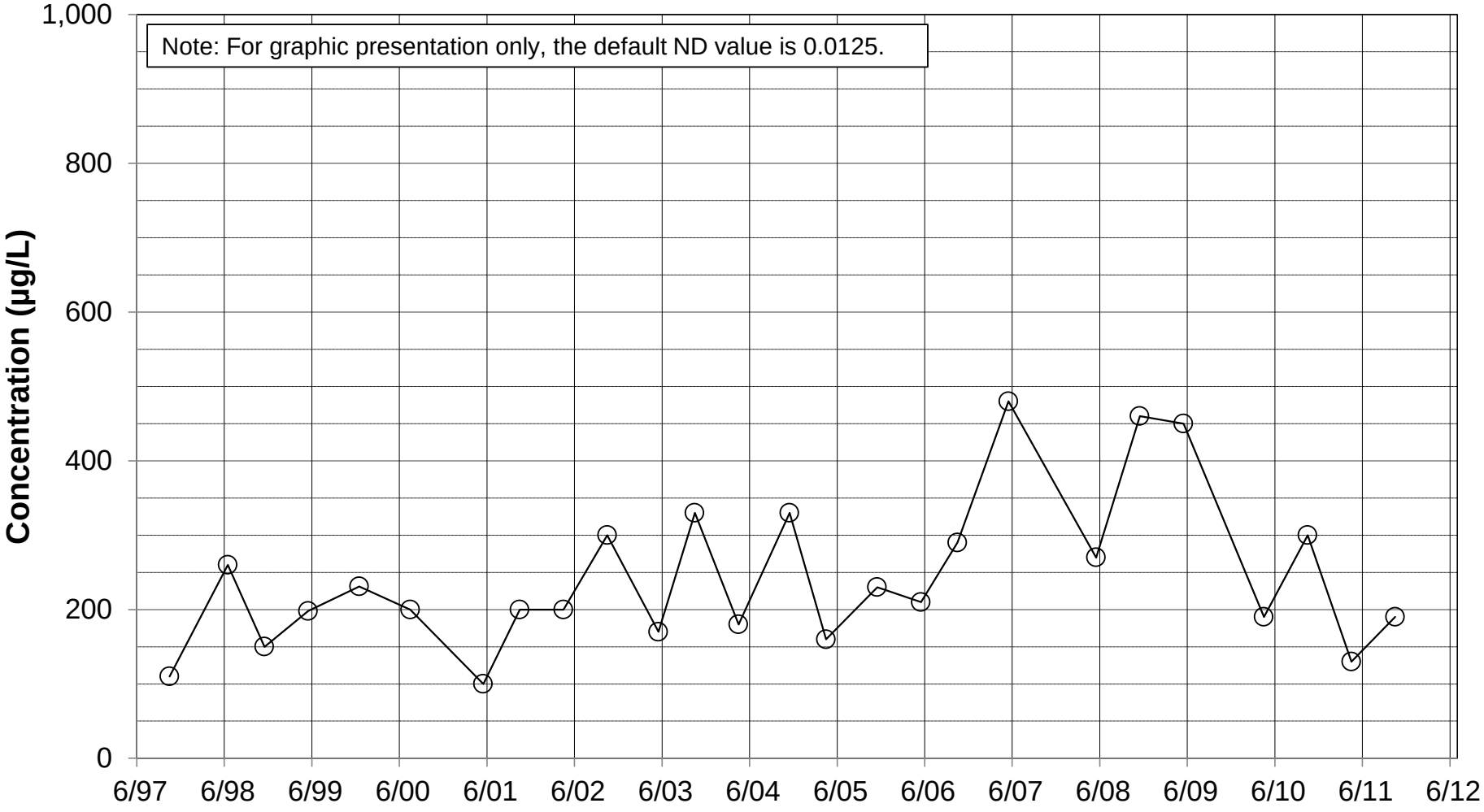

MW-7C
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

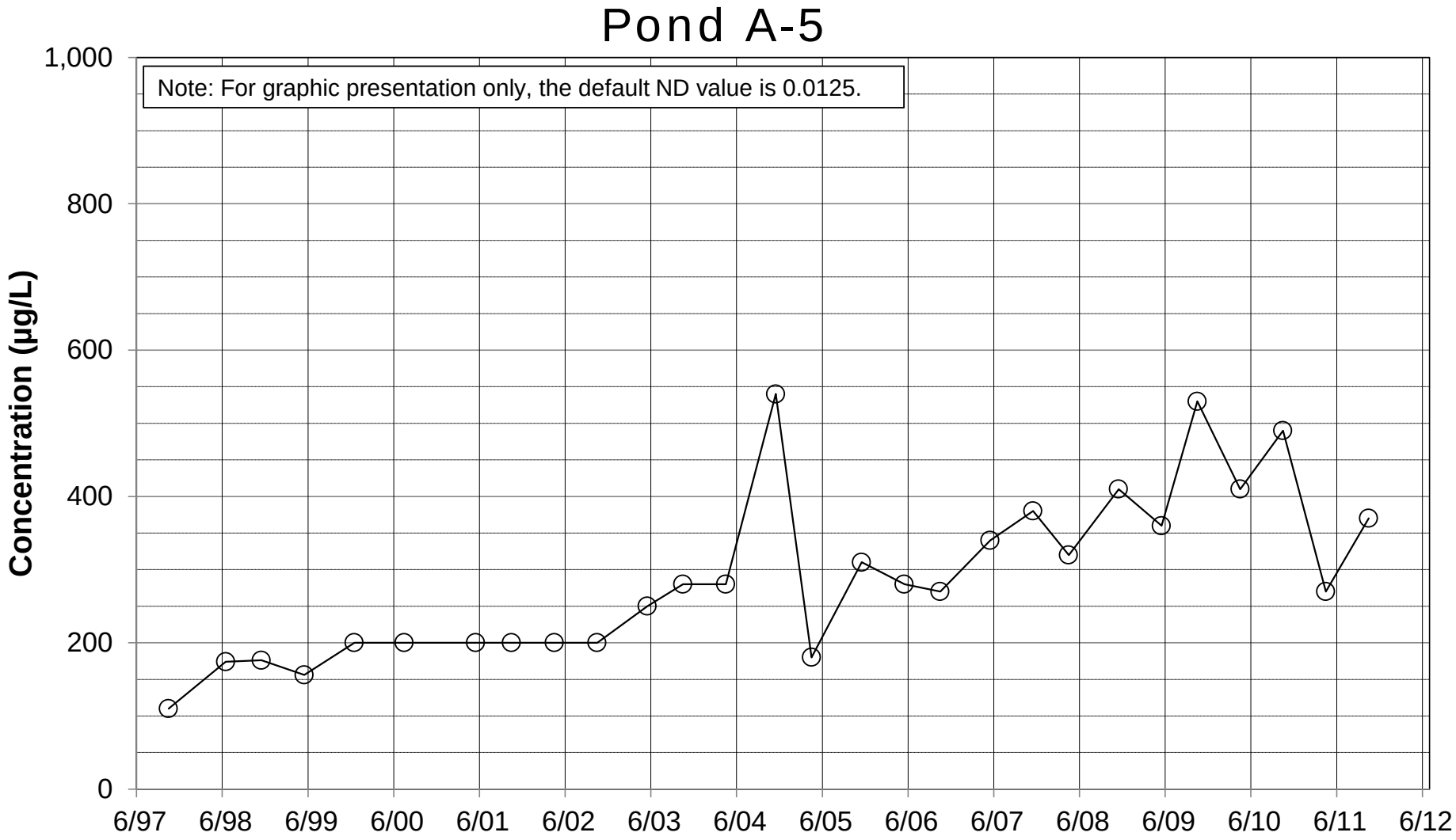

MW-7D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

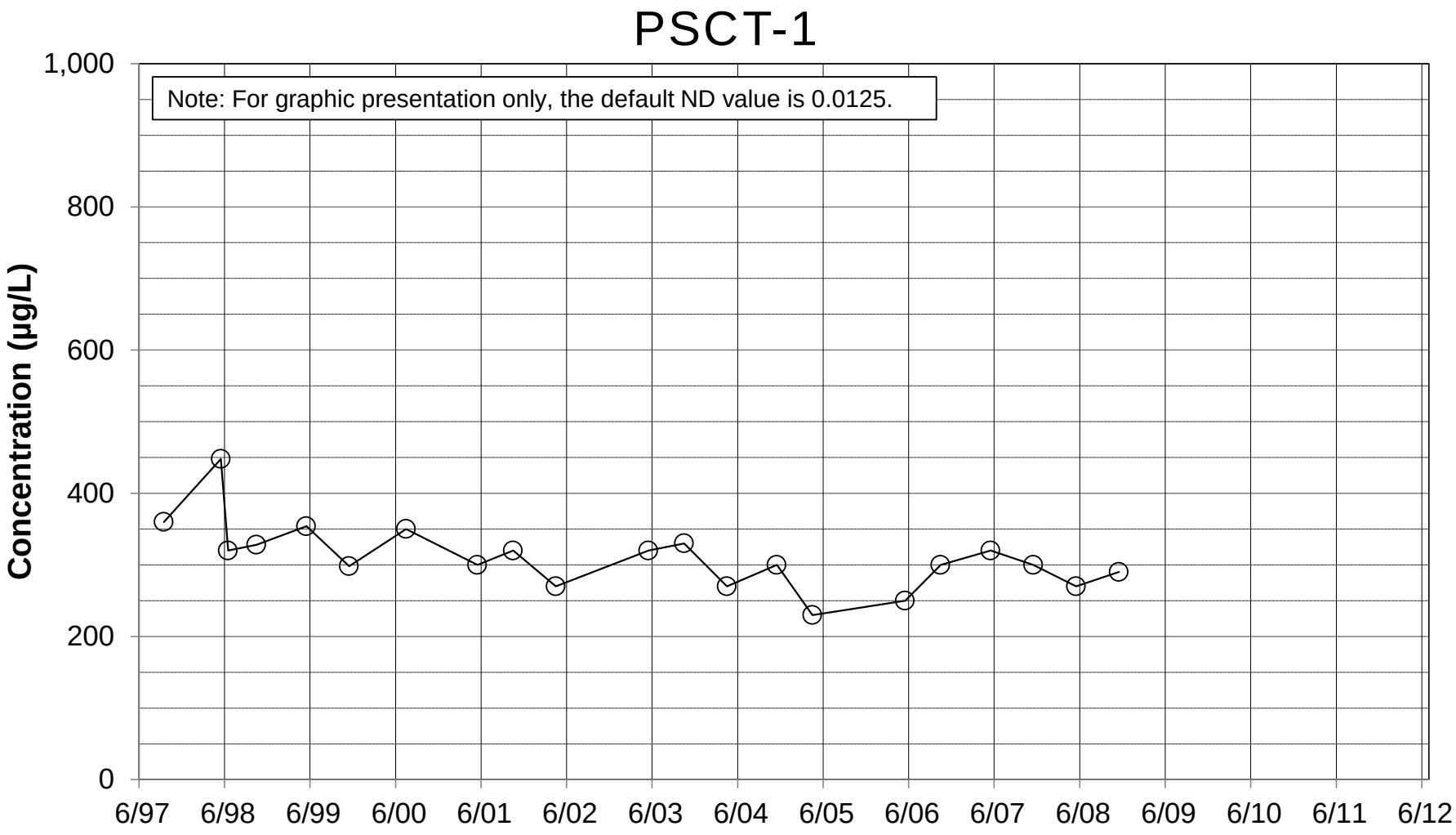
Pond 13

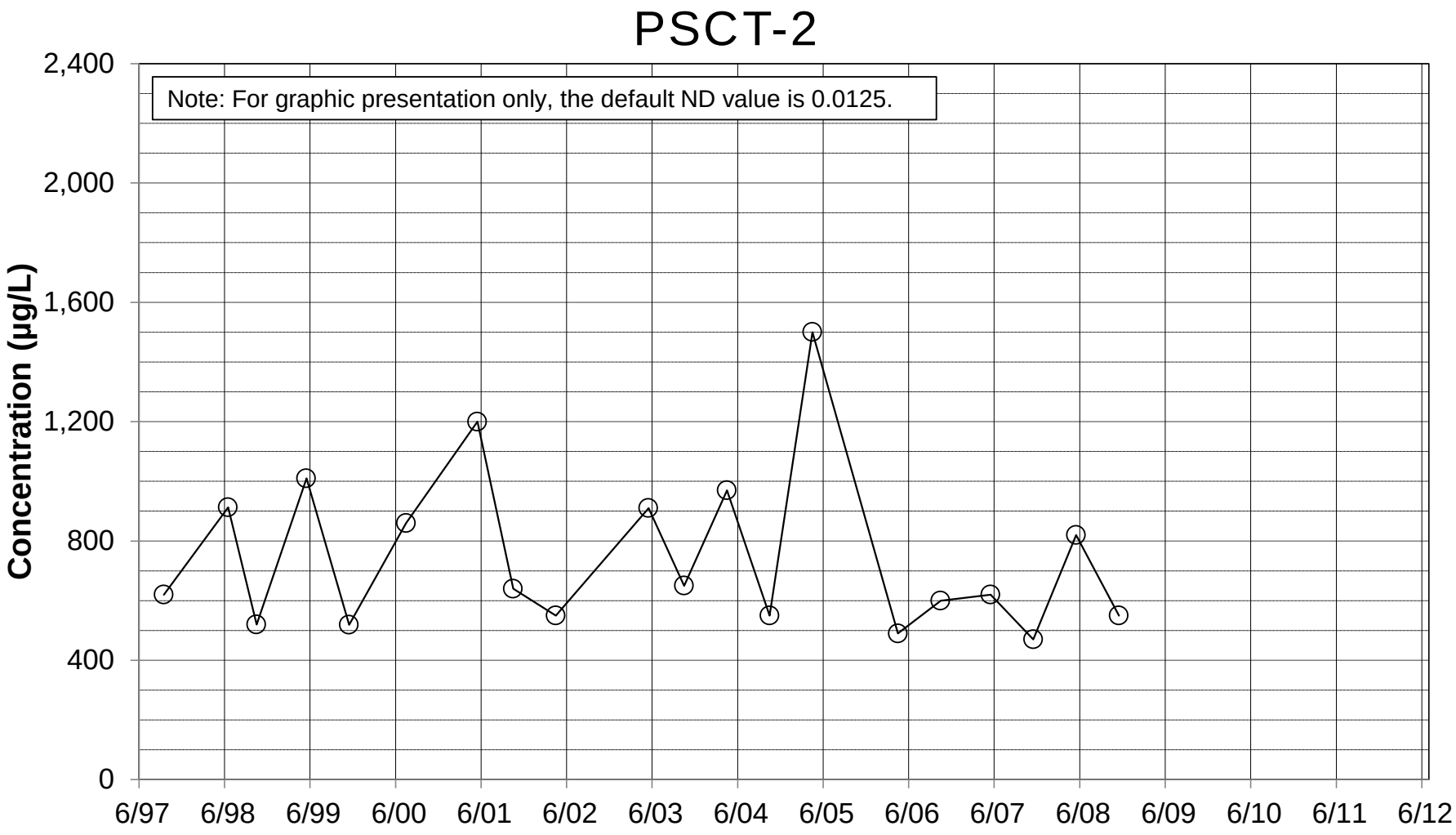

Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
2,400
2,000
1,600
1,200
800
400
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

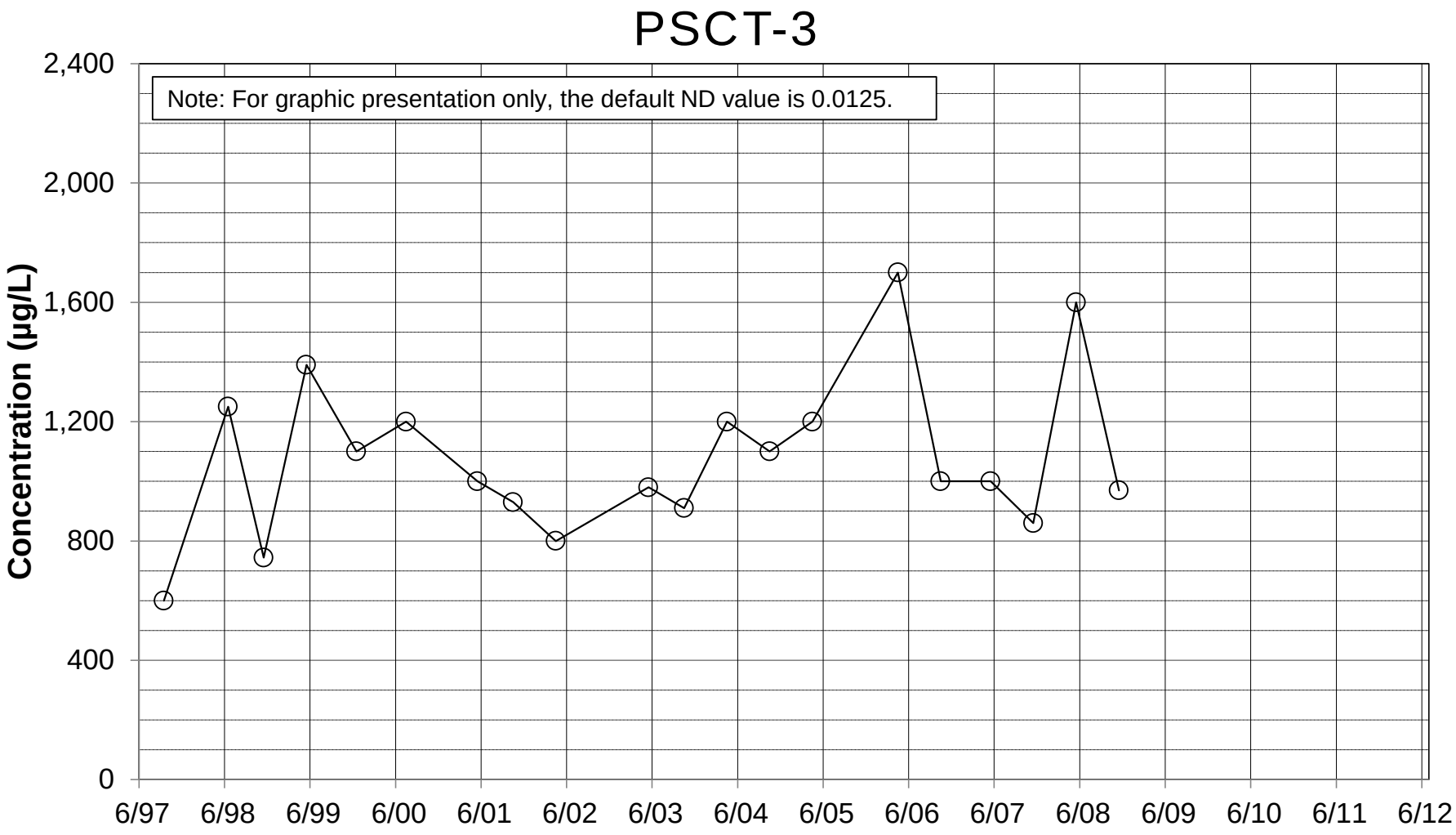
Pond 18

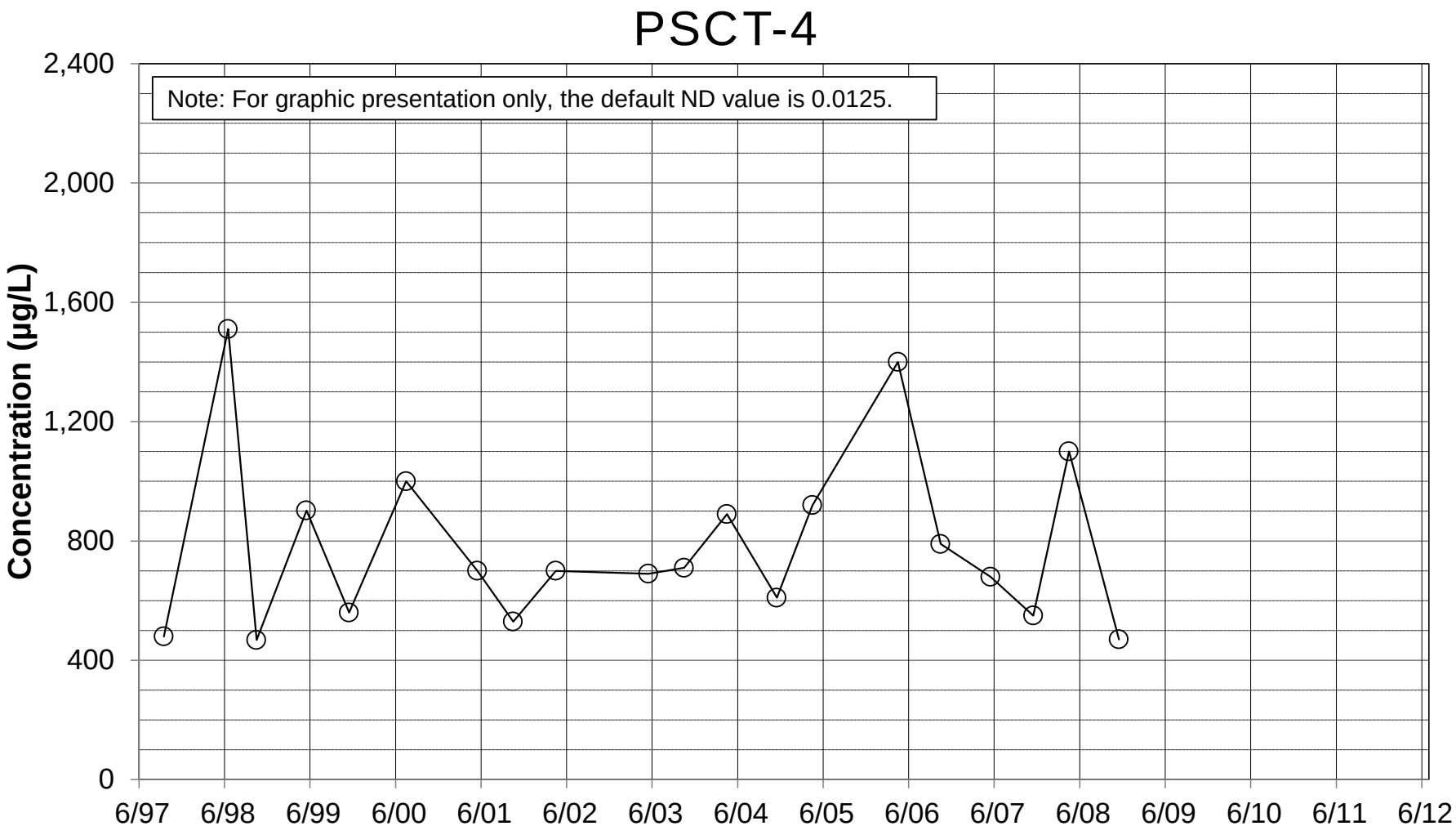

Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

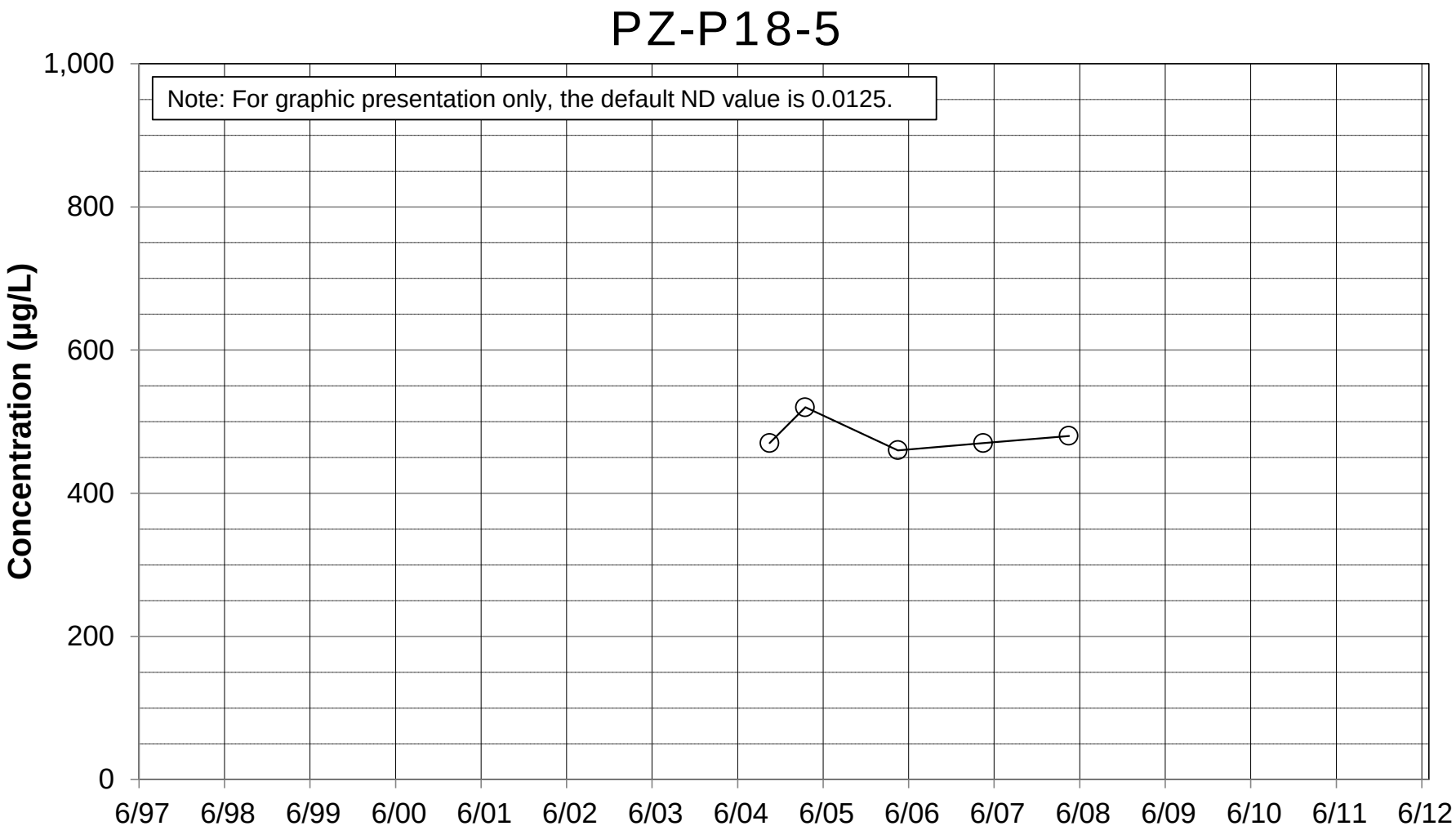

Pond A-5
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

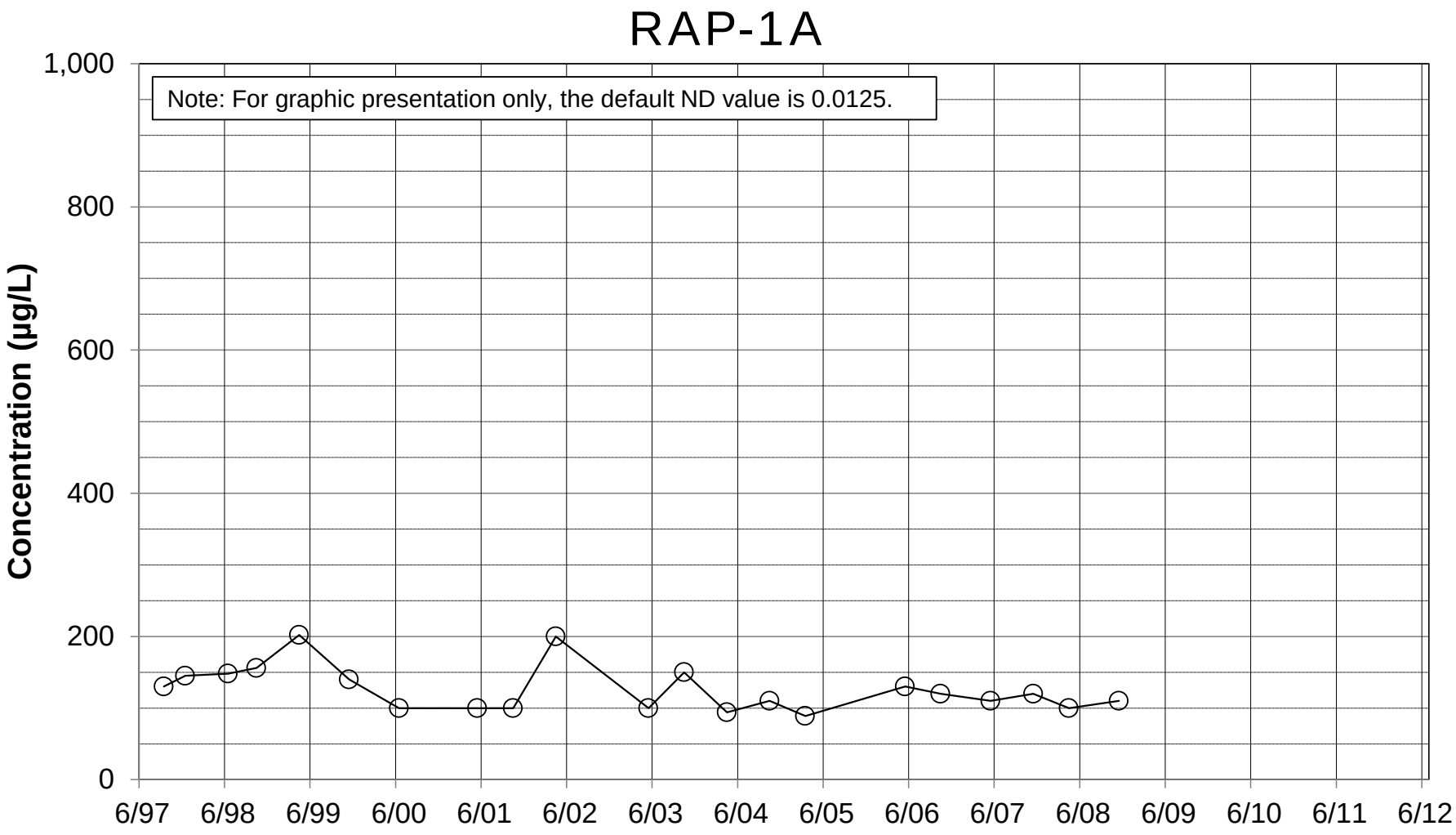

PSCT-1
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

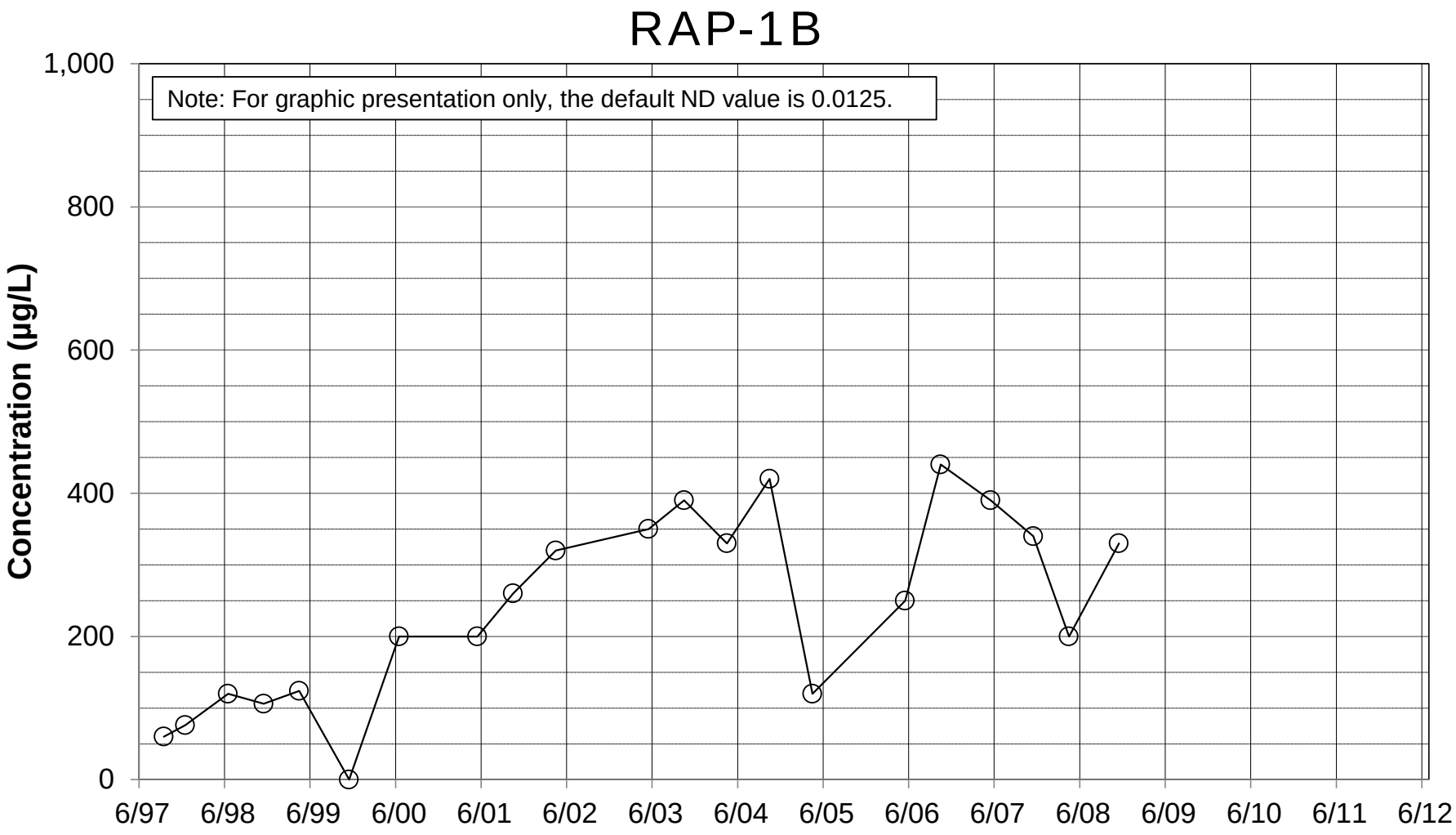

PSCT-2
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
2,400
2,000
1,600
1,200
800
400
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

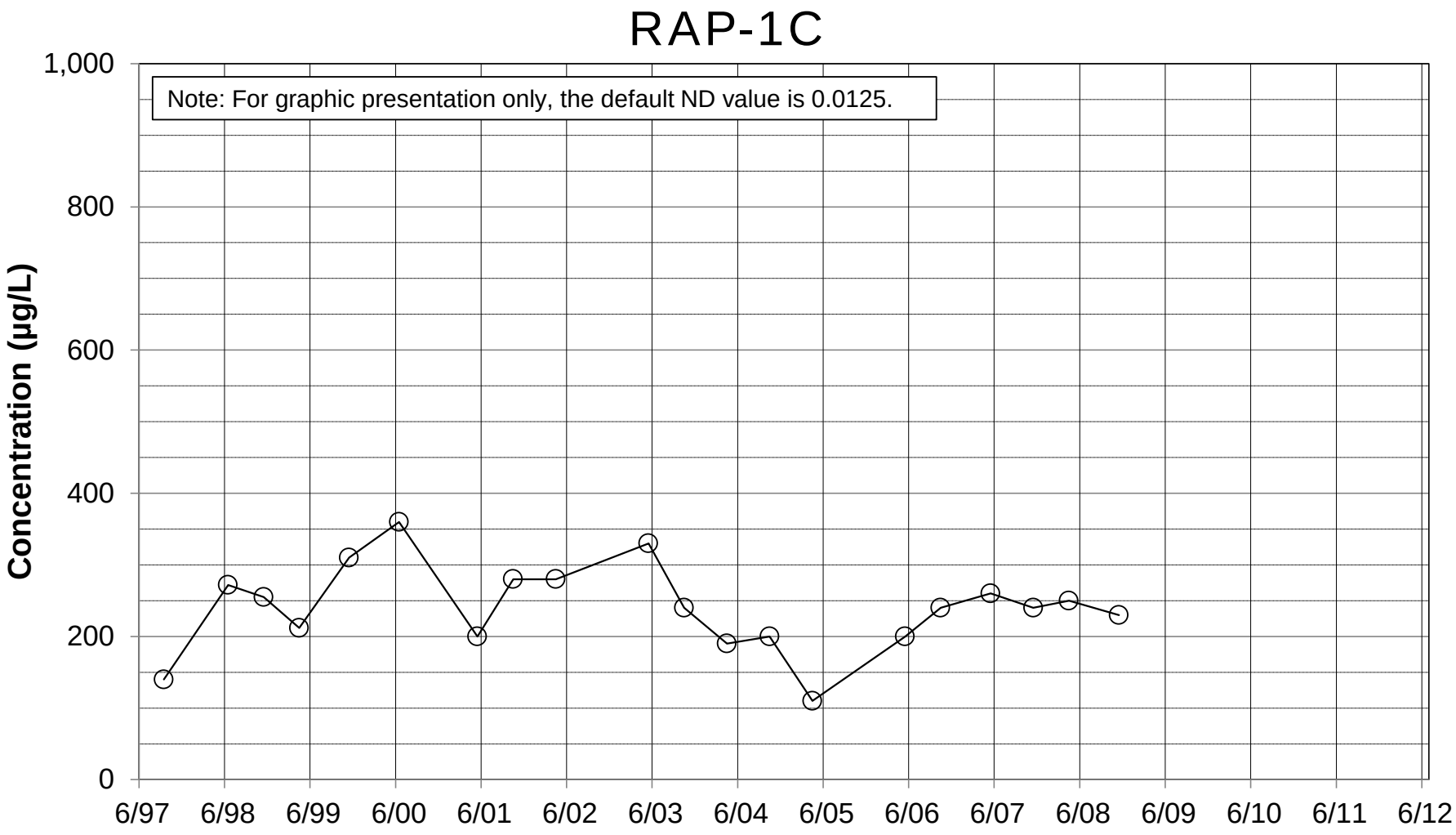

PSCT-3
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
2,400
2,000
1,600
1,200
800
400
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

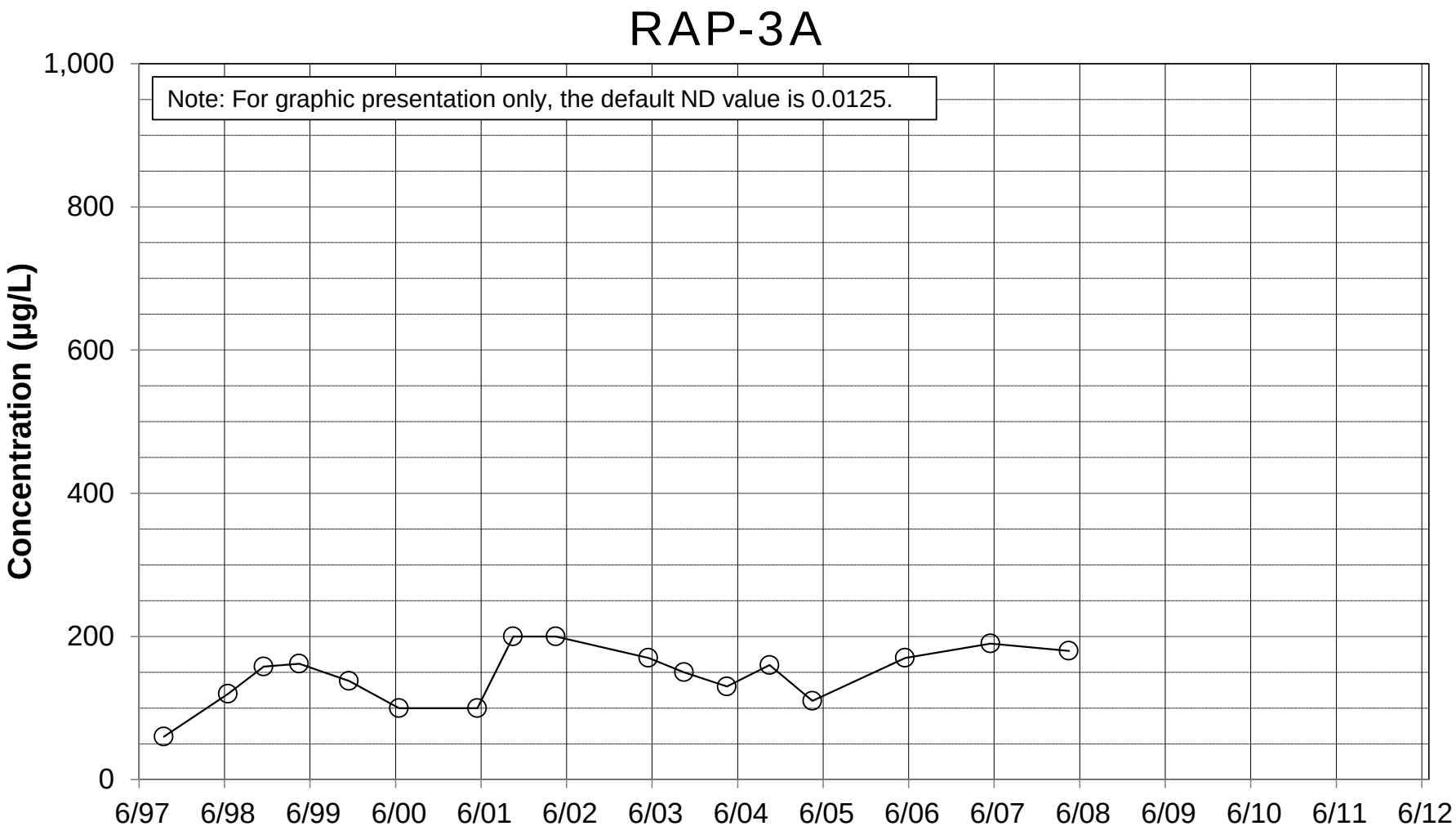

PSCT-4
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
2,400
2,000
1,600
1,200
800
400
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

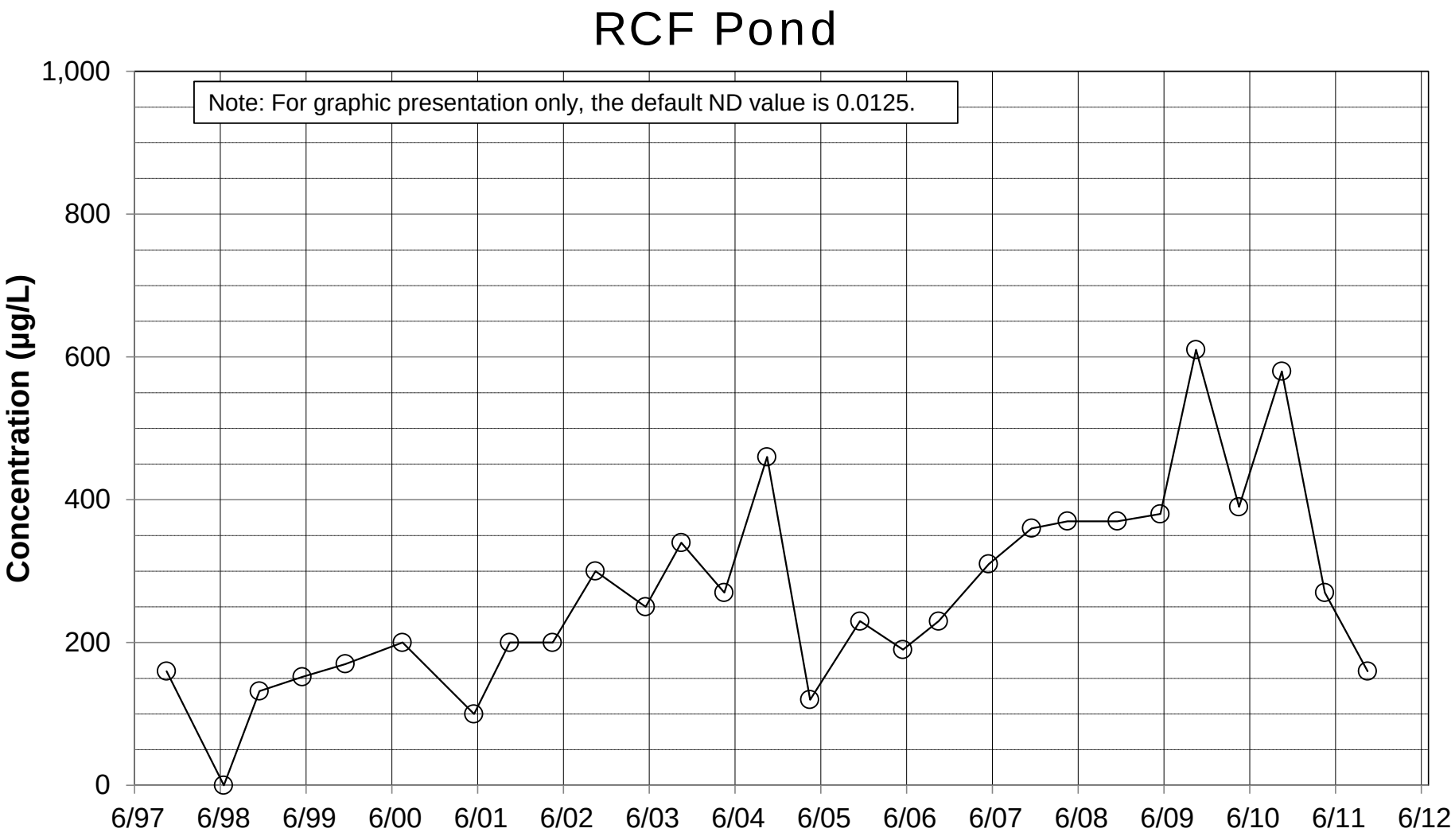

PZ-P18-5
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

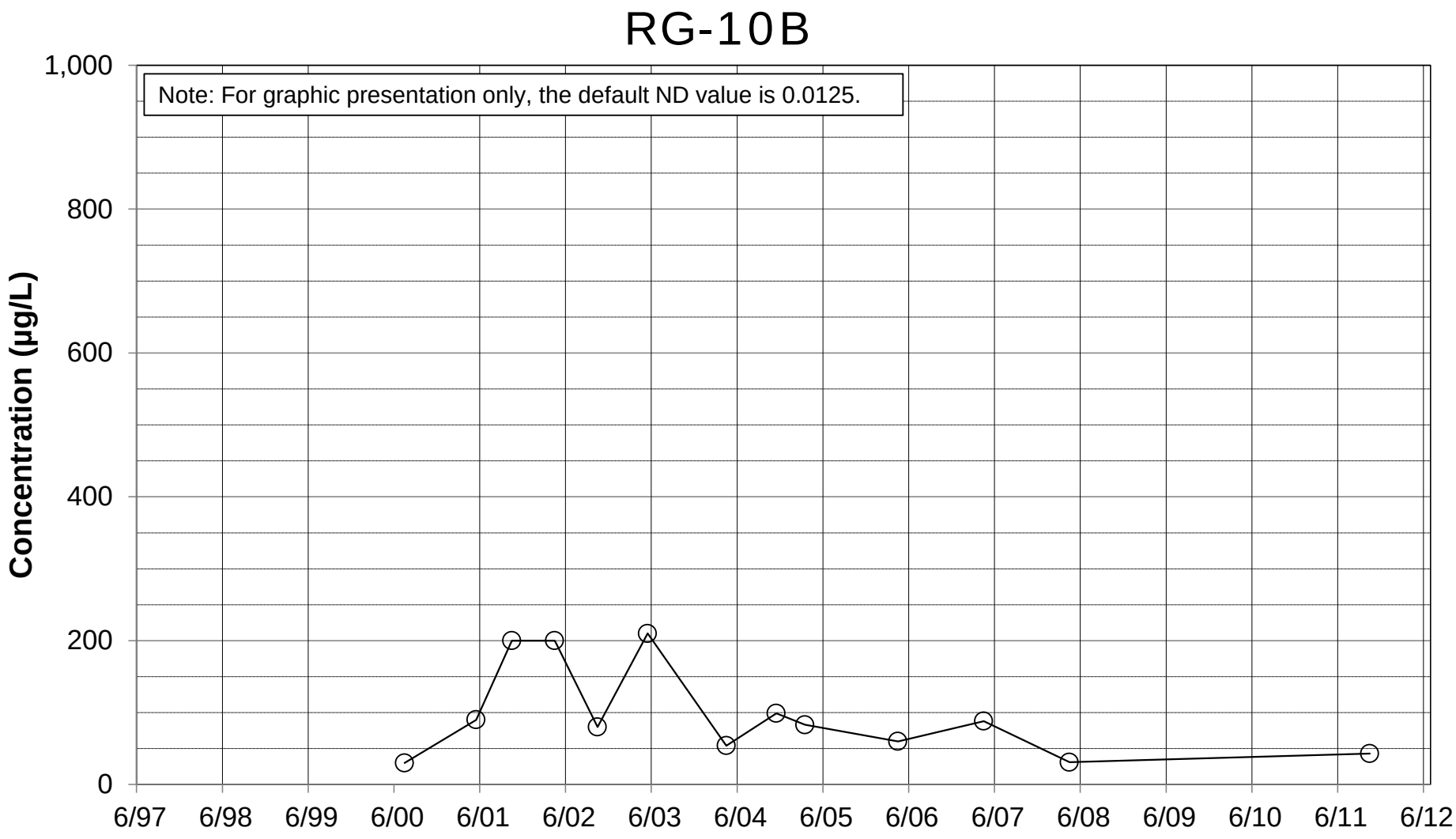

RAP-1A
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

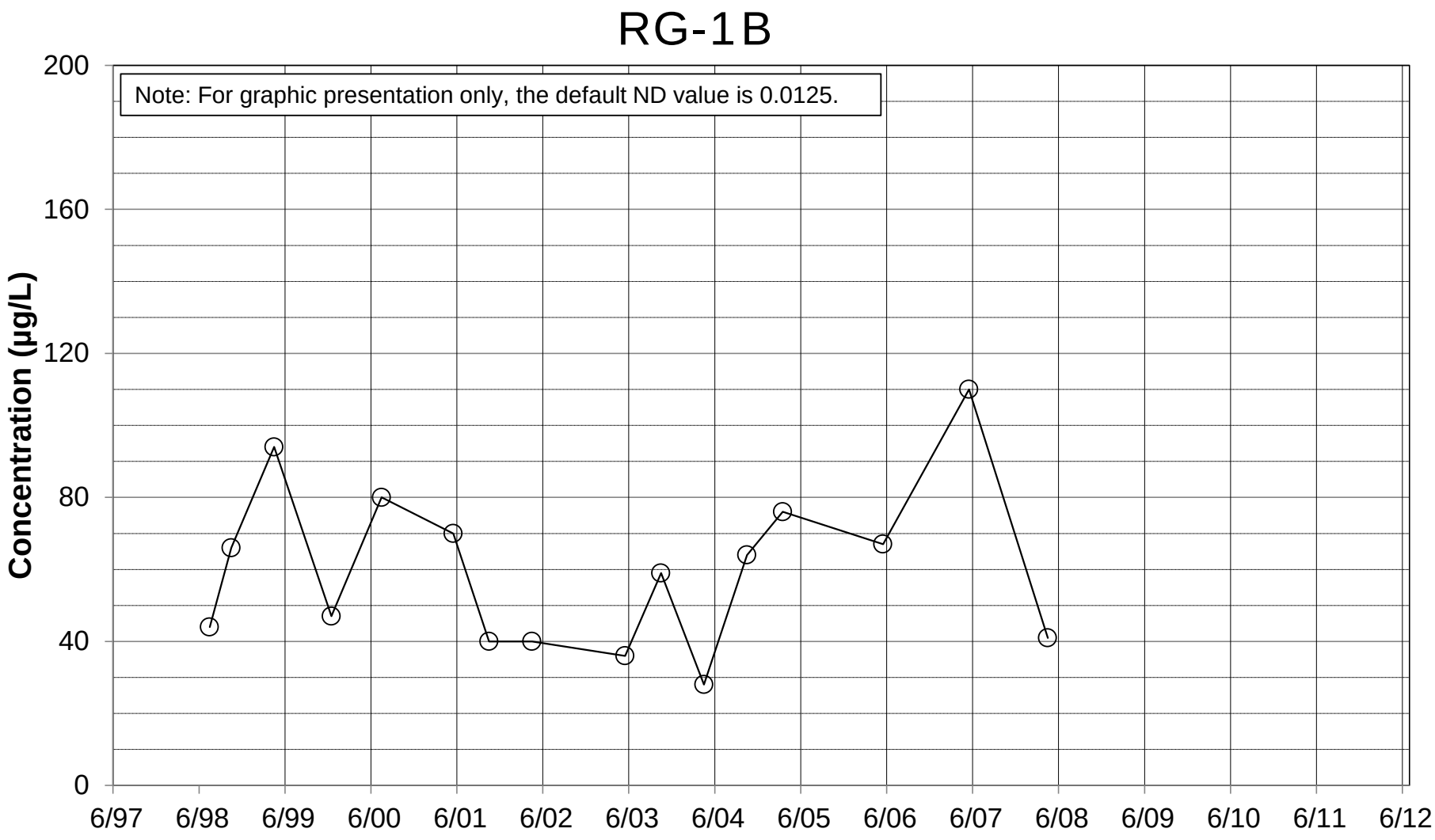

RAP-1B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

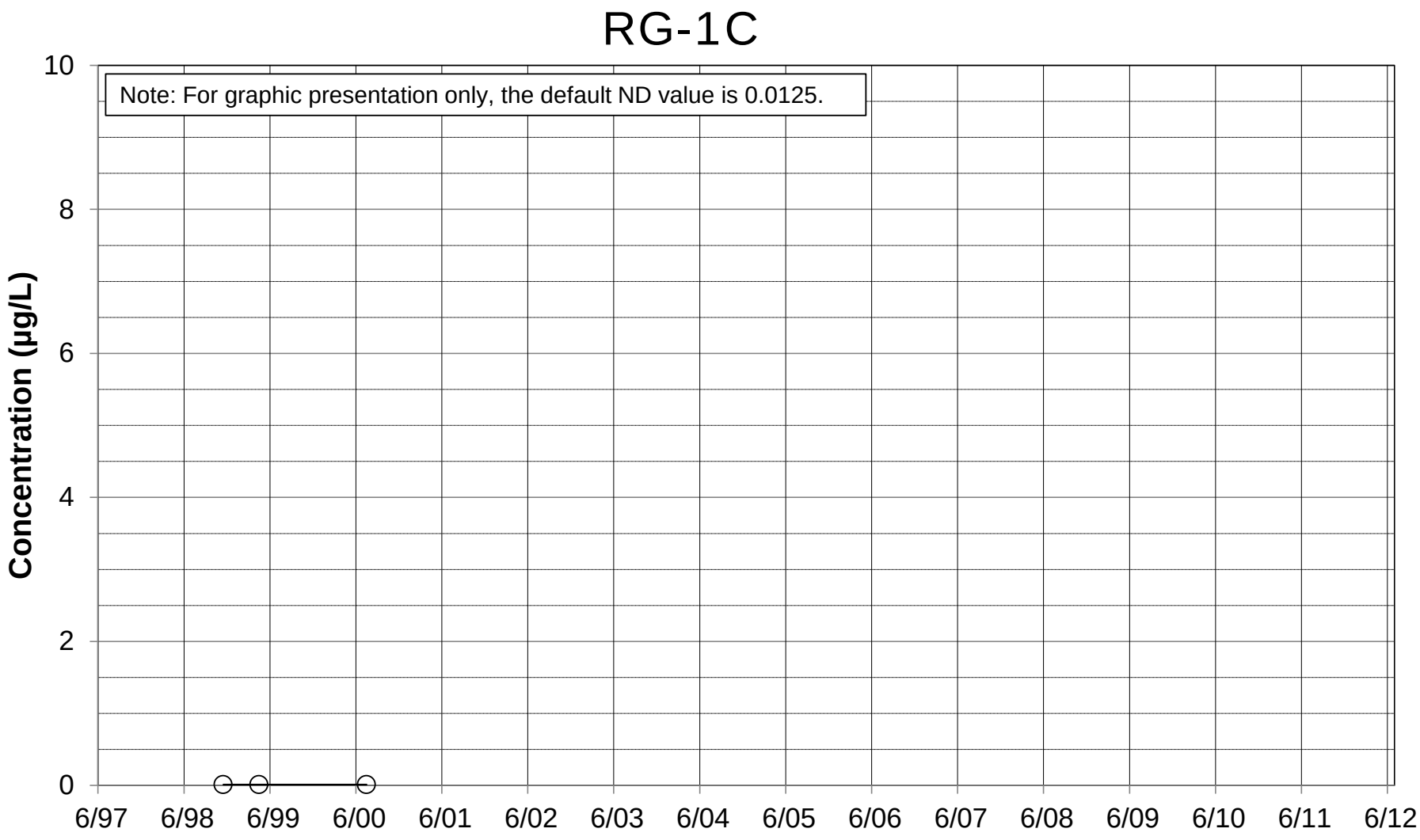

RAP-1C
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

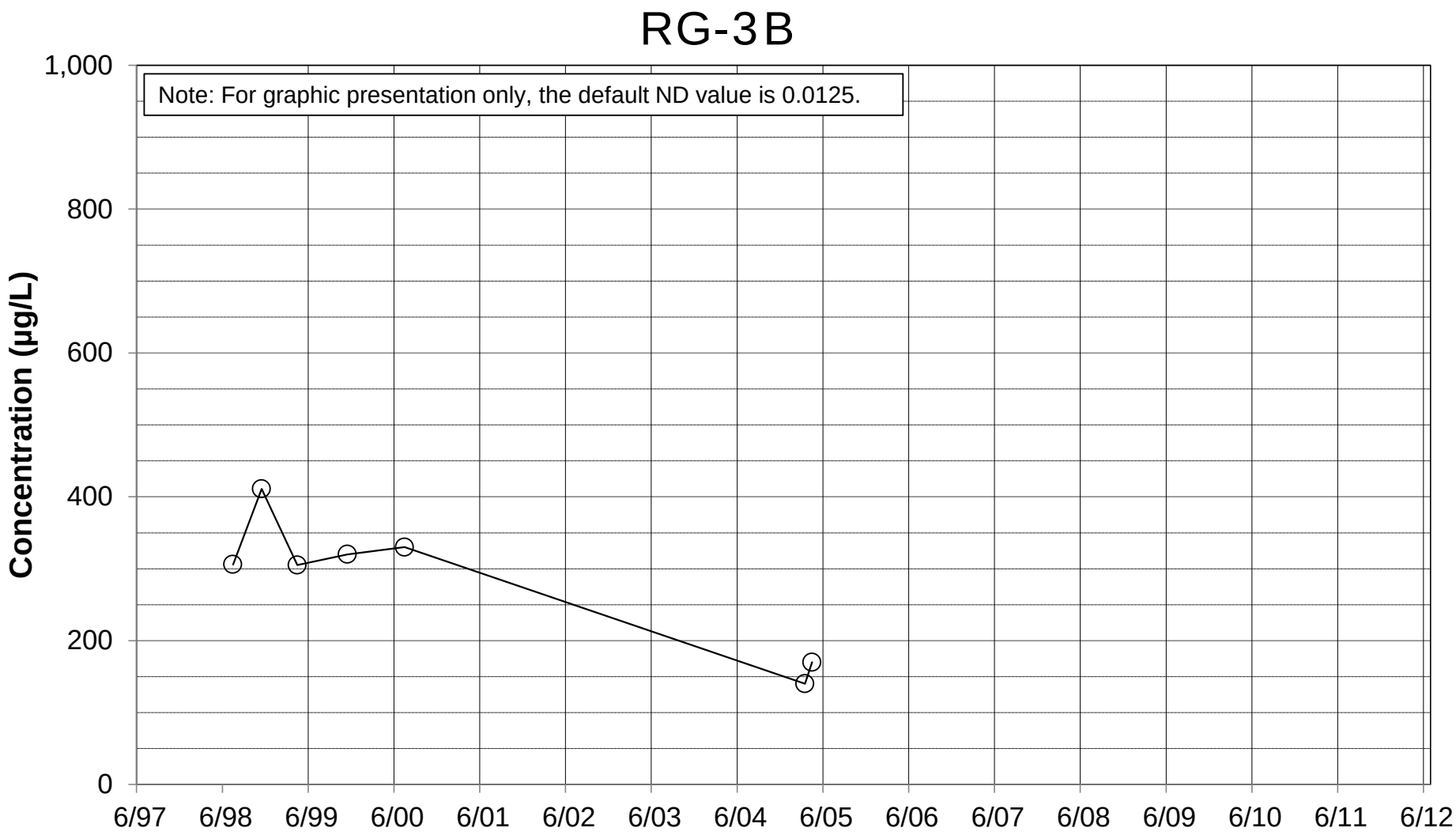

RAP-3A
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

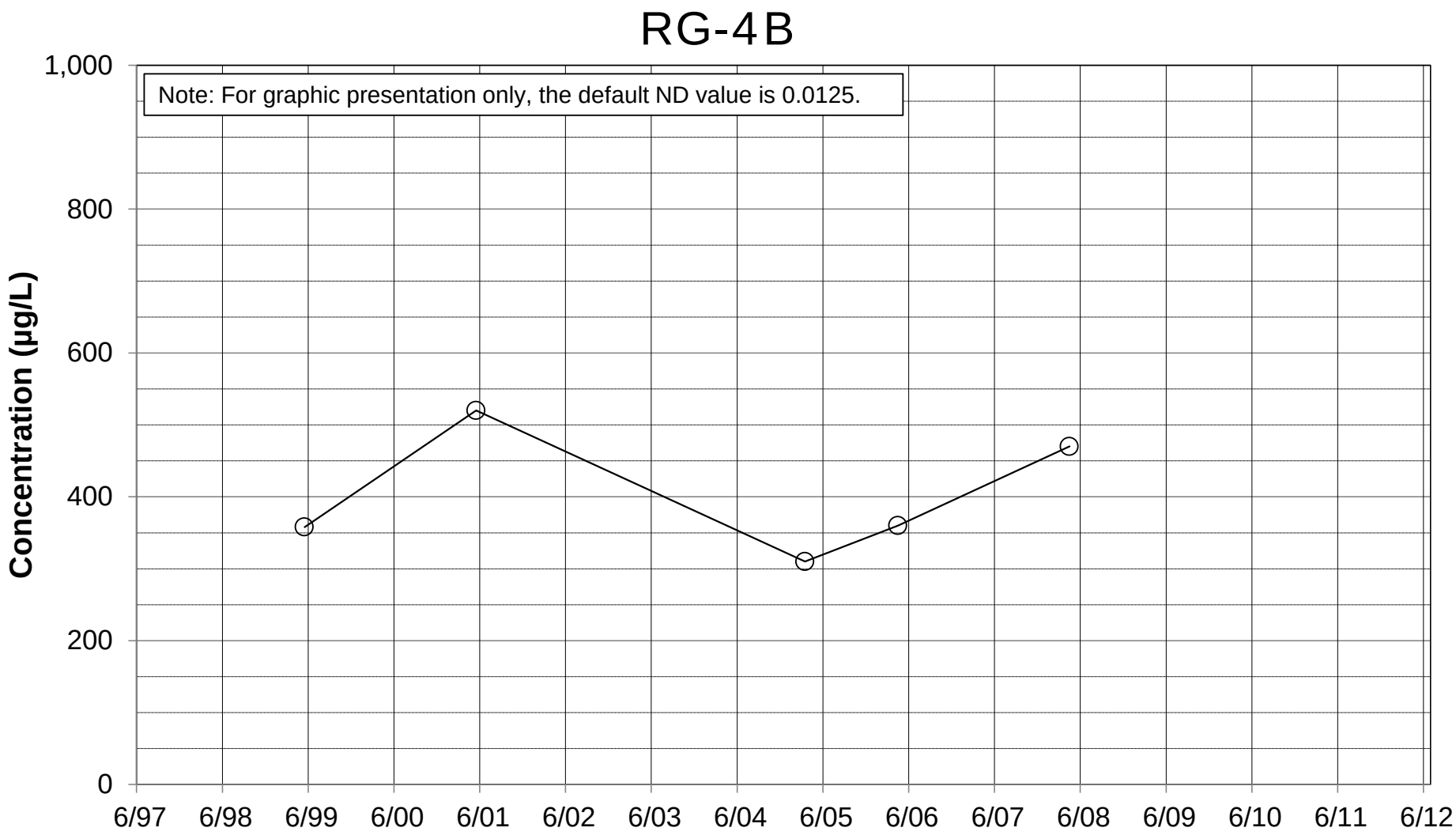

RCF Pond
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

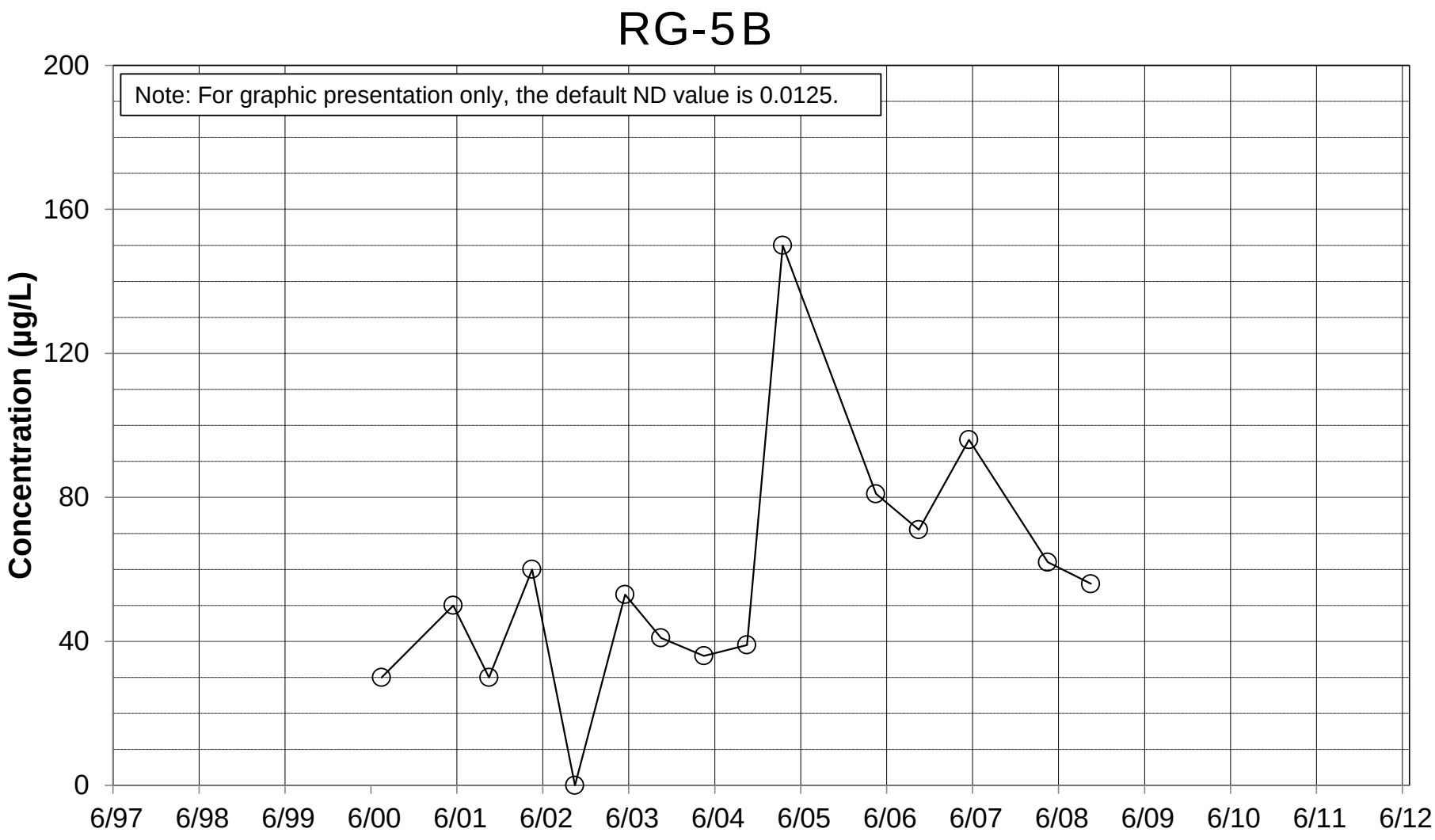

RG-10B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

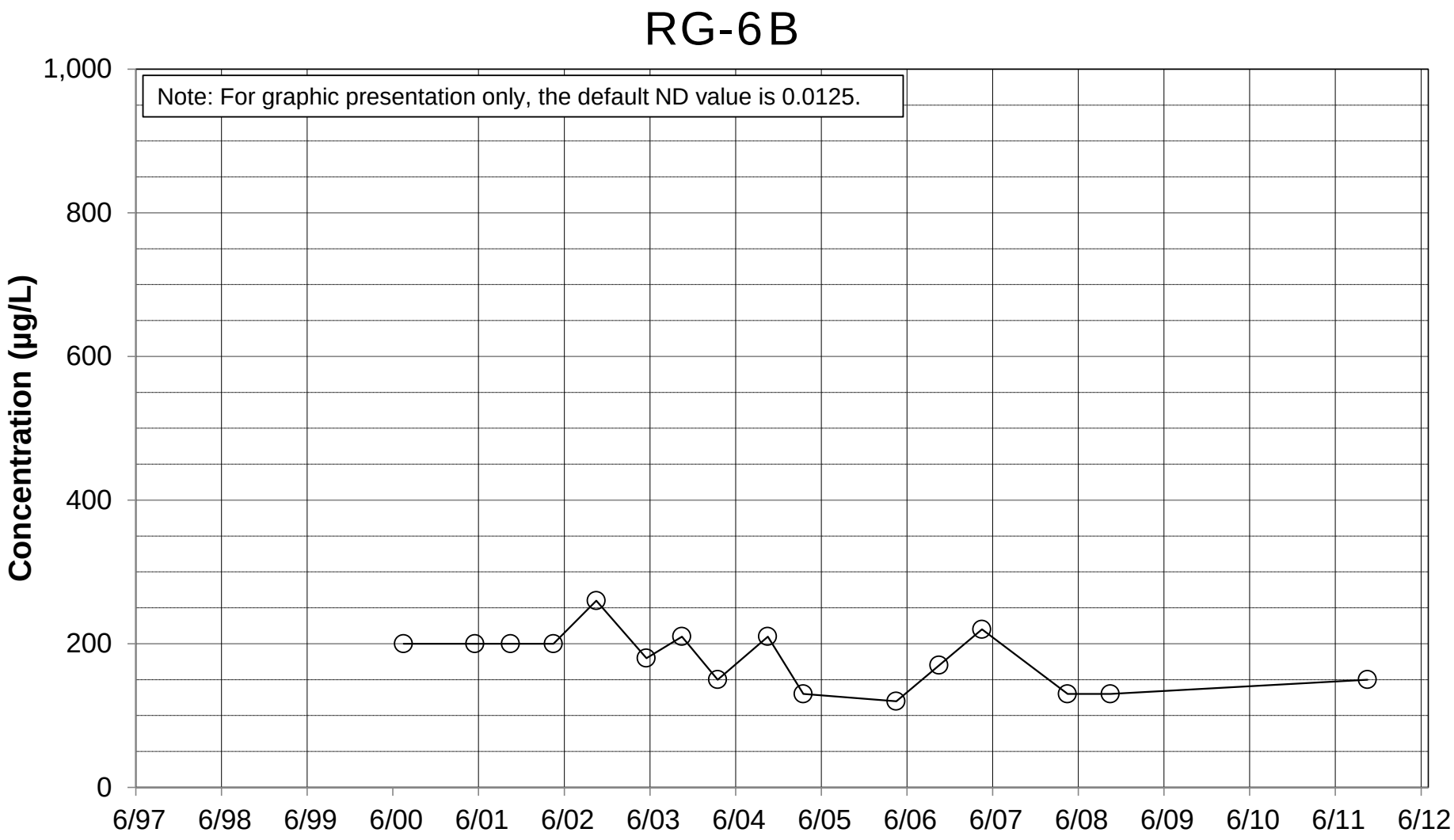

RG-1B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
200
160
120
80
40
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

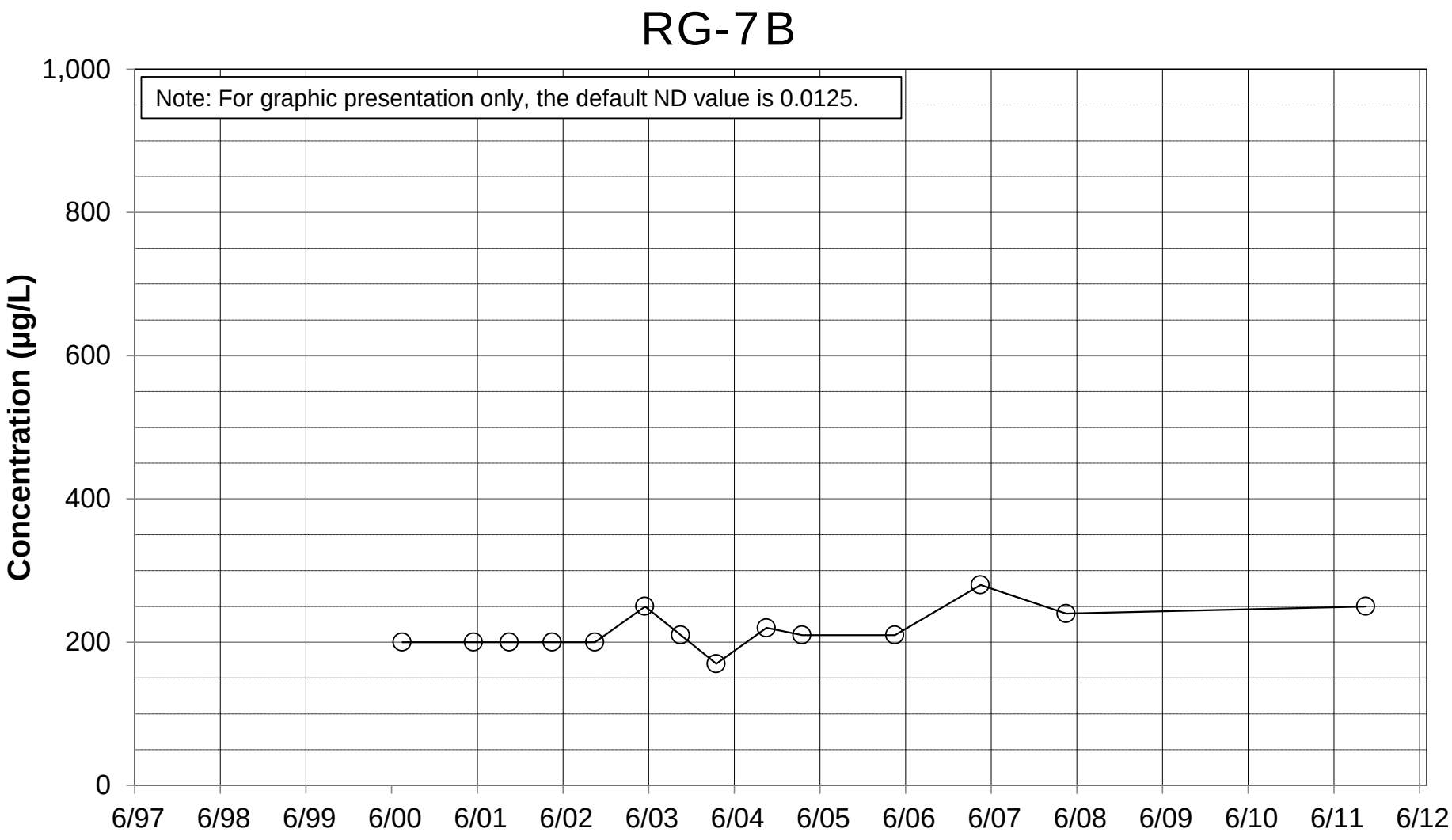

RG-1C
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

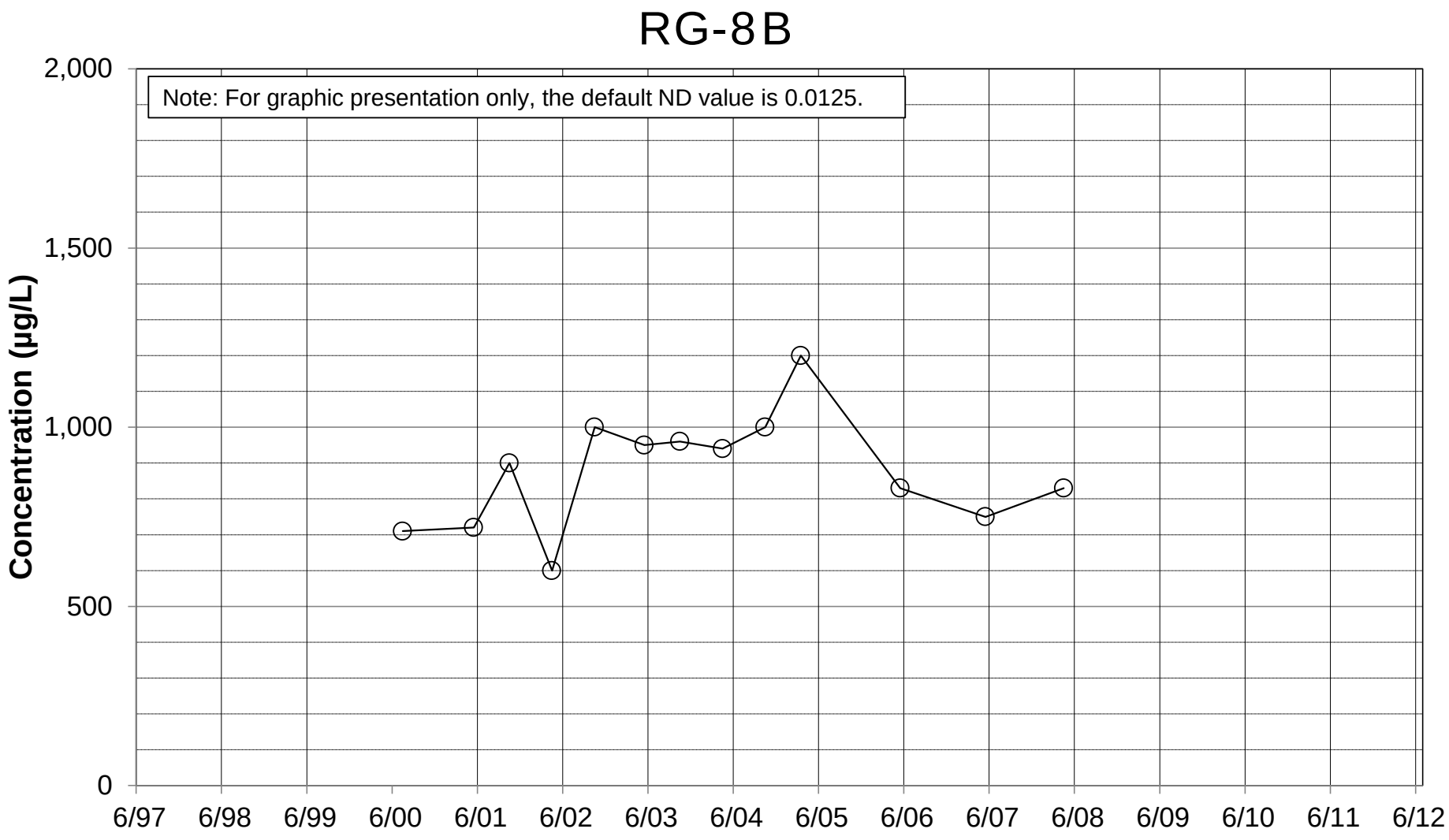

RG-3B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

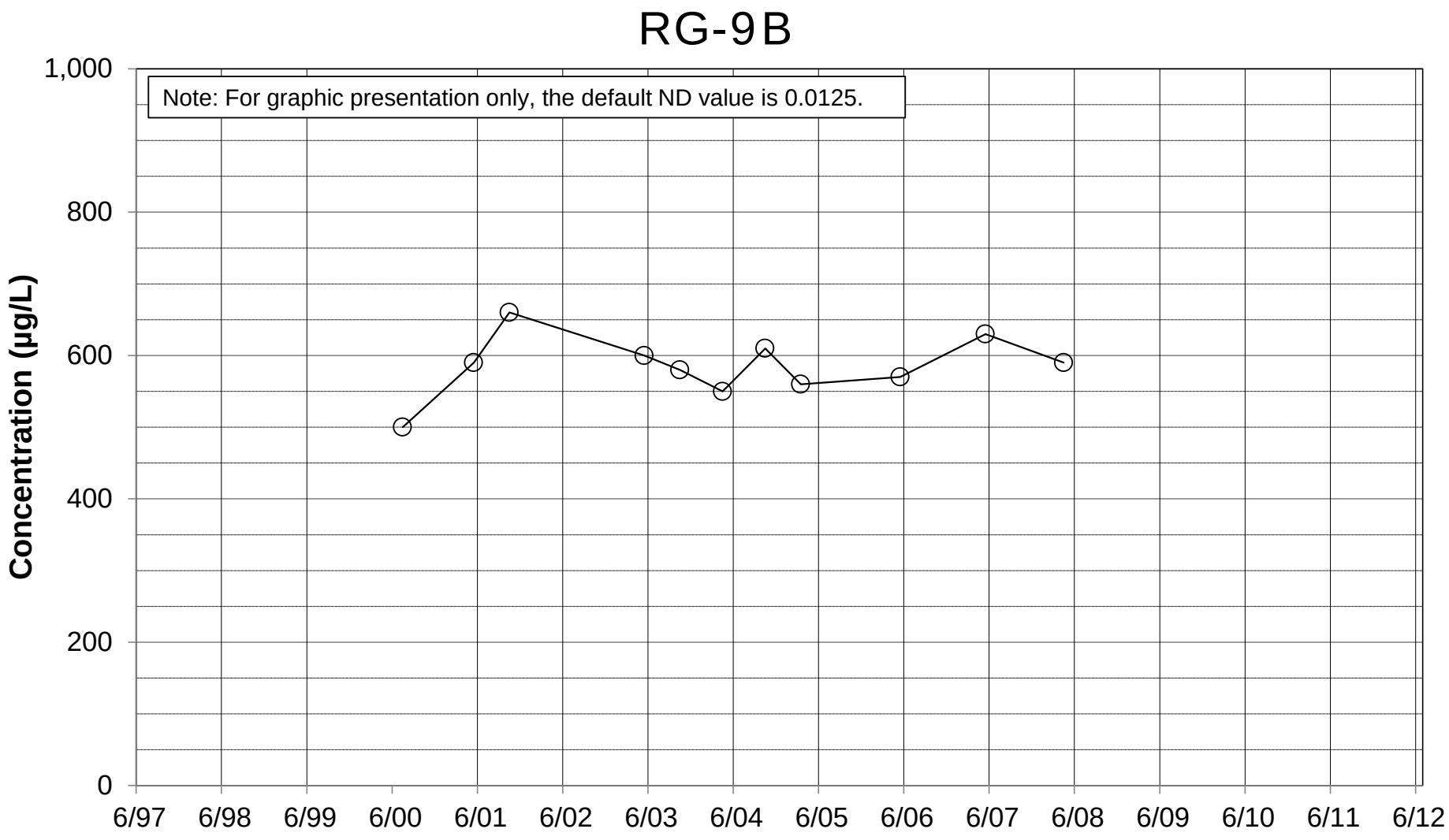

RG-4B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

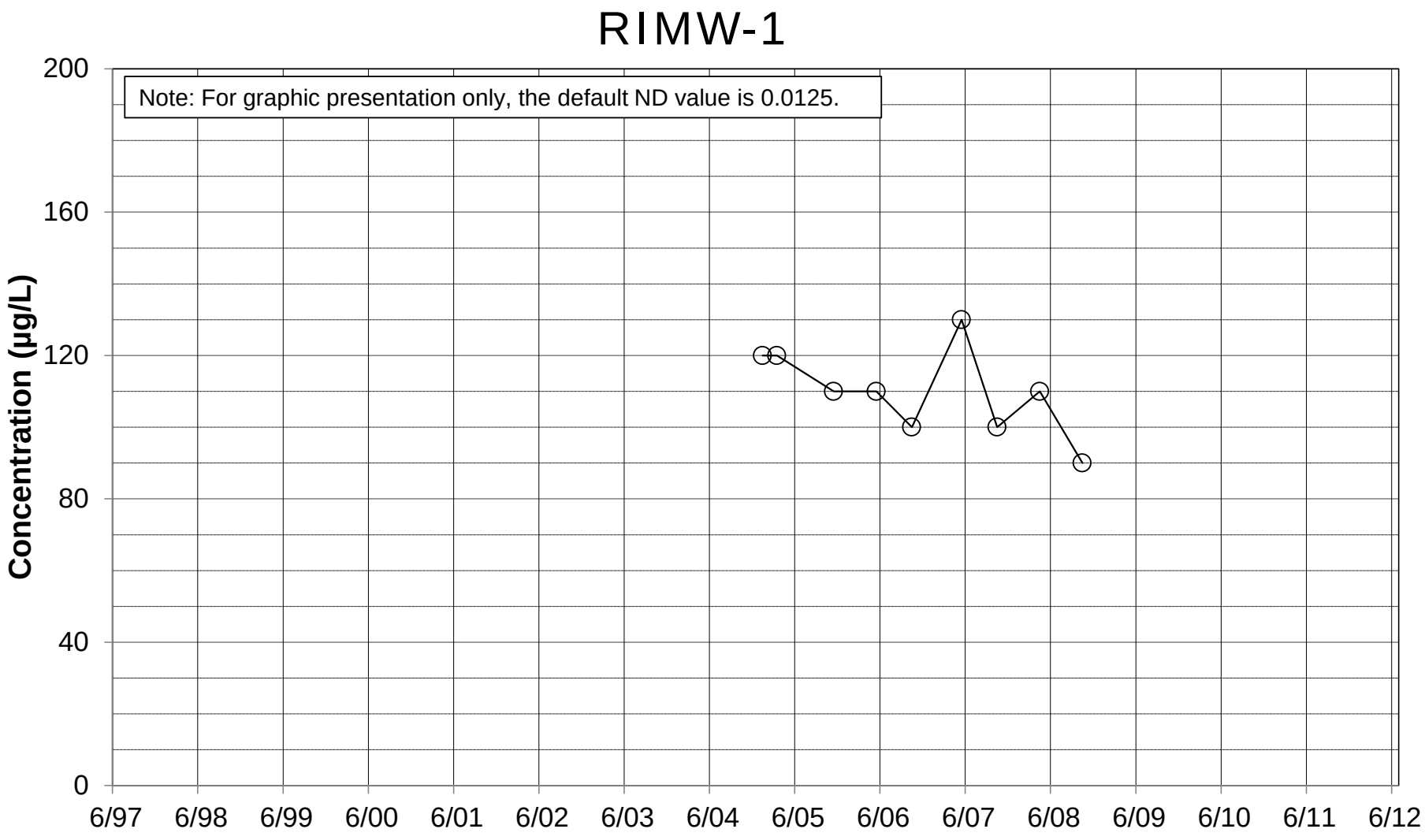

RG-5B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
200
160
120
80
40
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

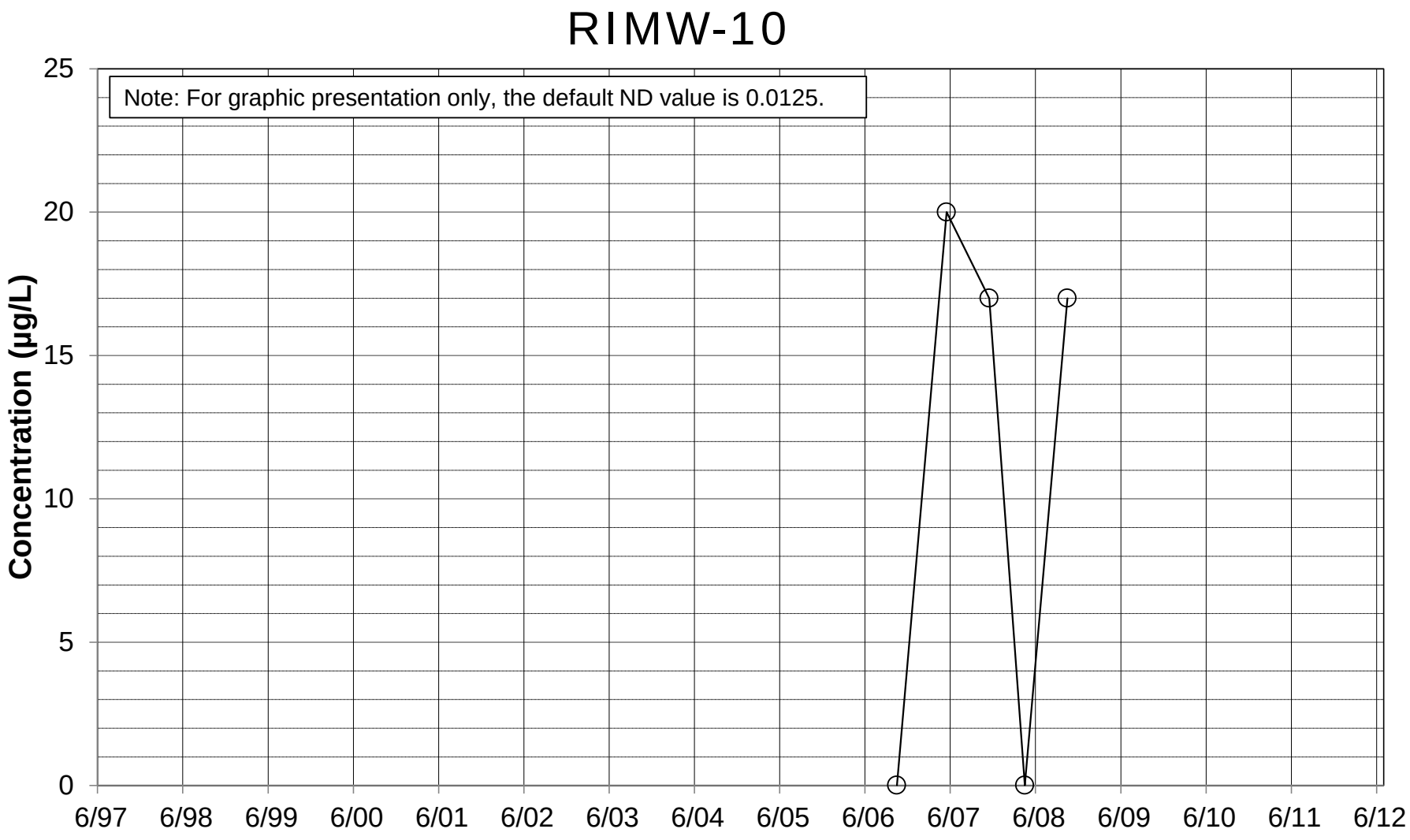

RG-6B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

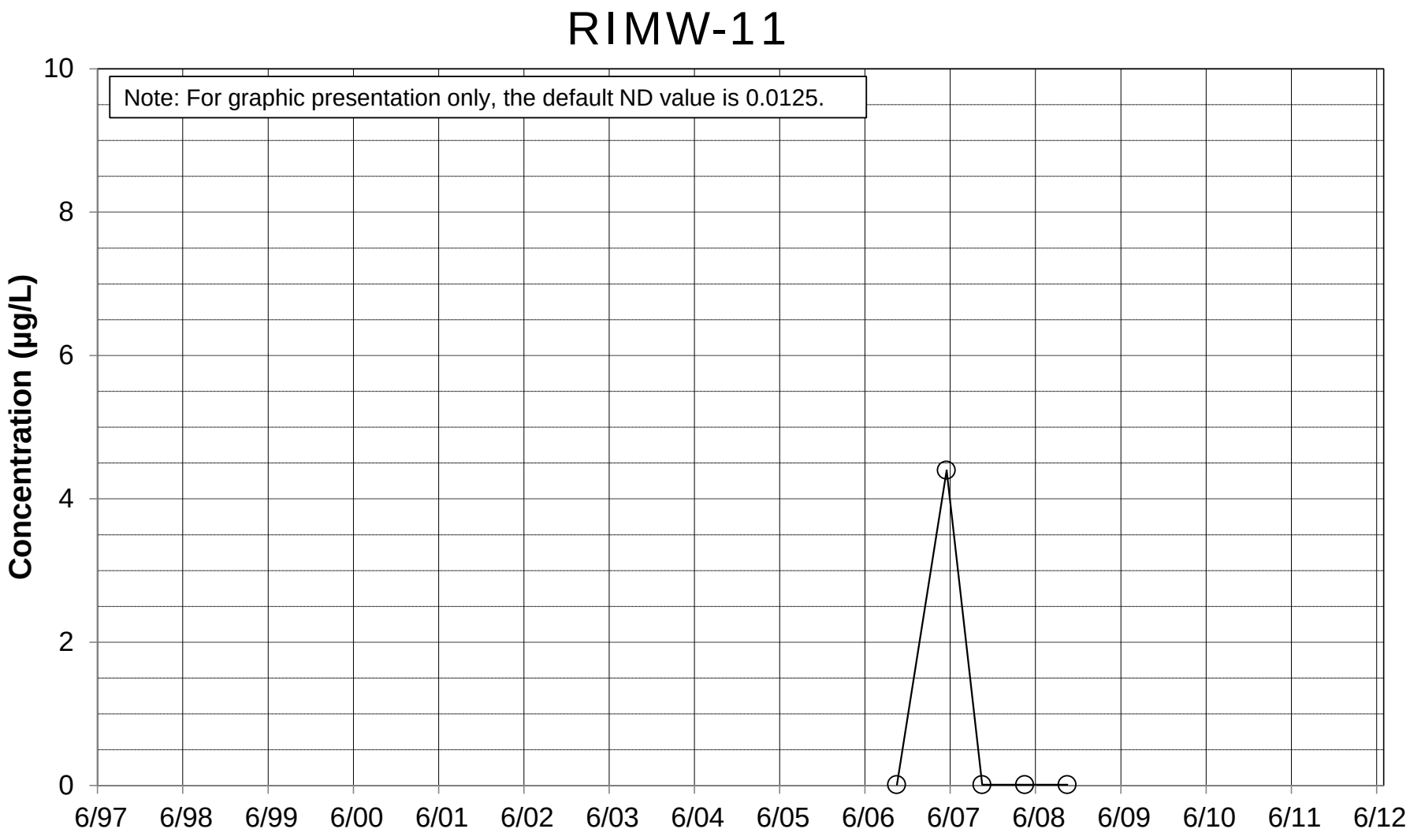

RG-7B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RG-8B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
2,000
1,500
1,000
500
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RG-9B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RIMW-1
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
200
160
120
80
40
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RIMW-10
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
25
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RIMW-11
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
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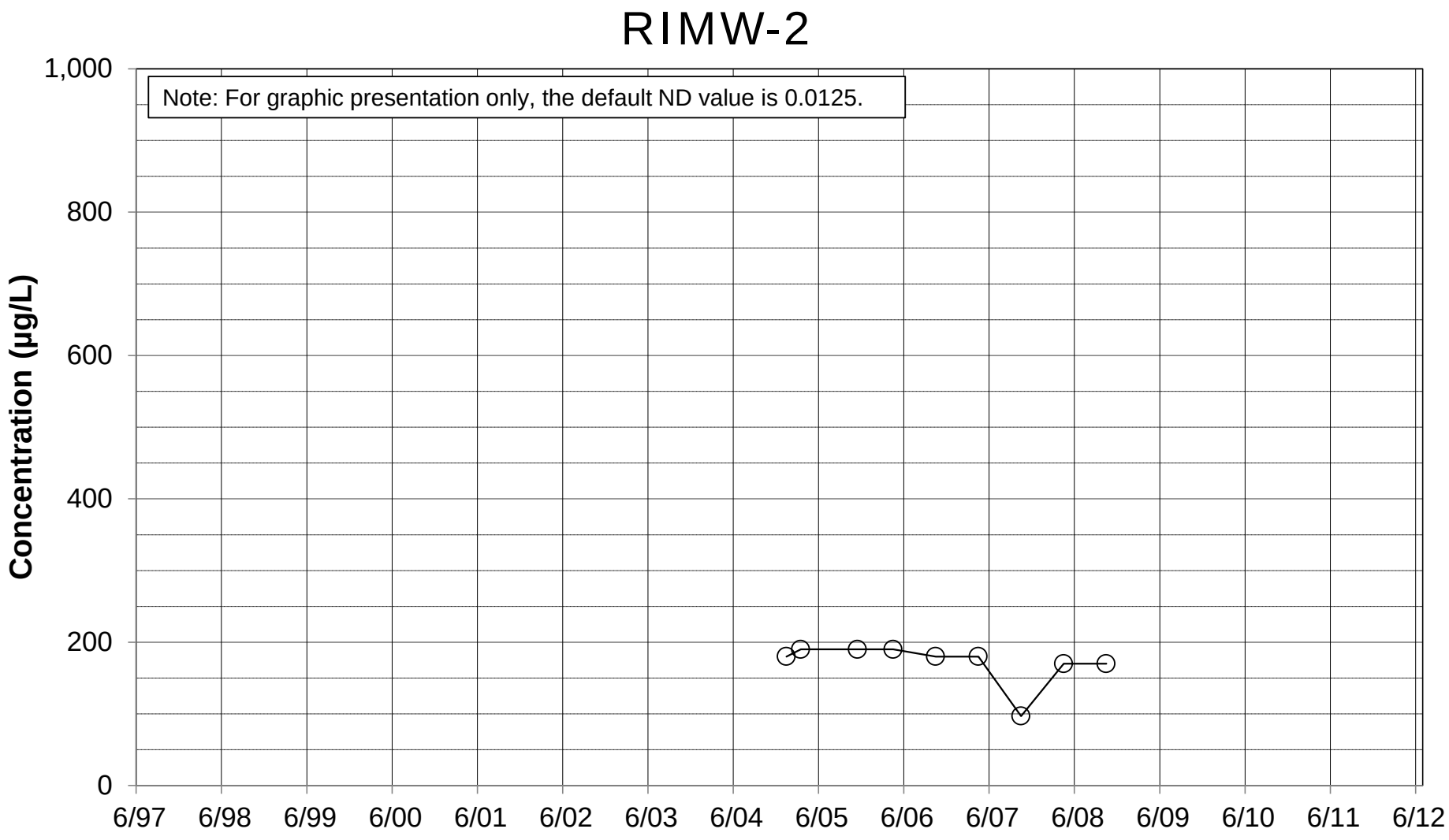
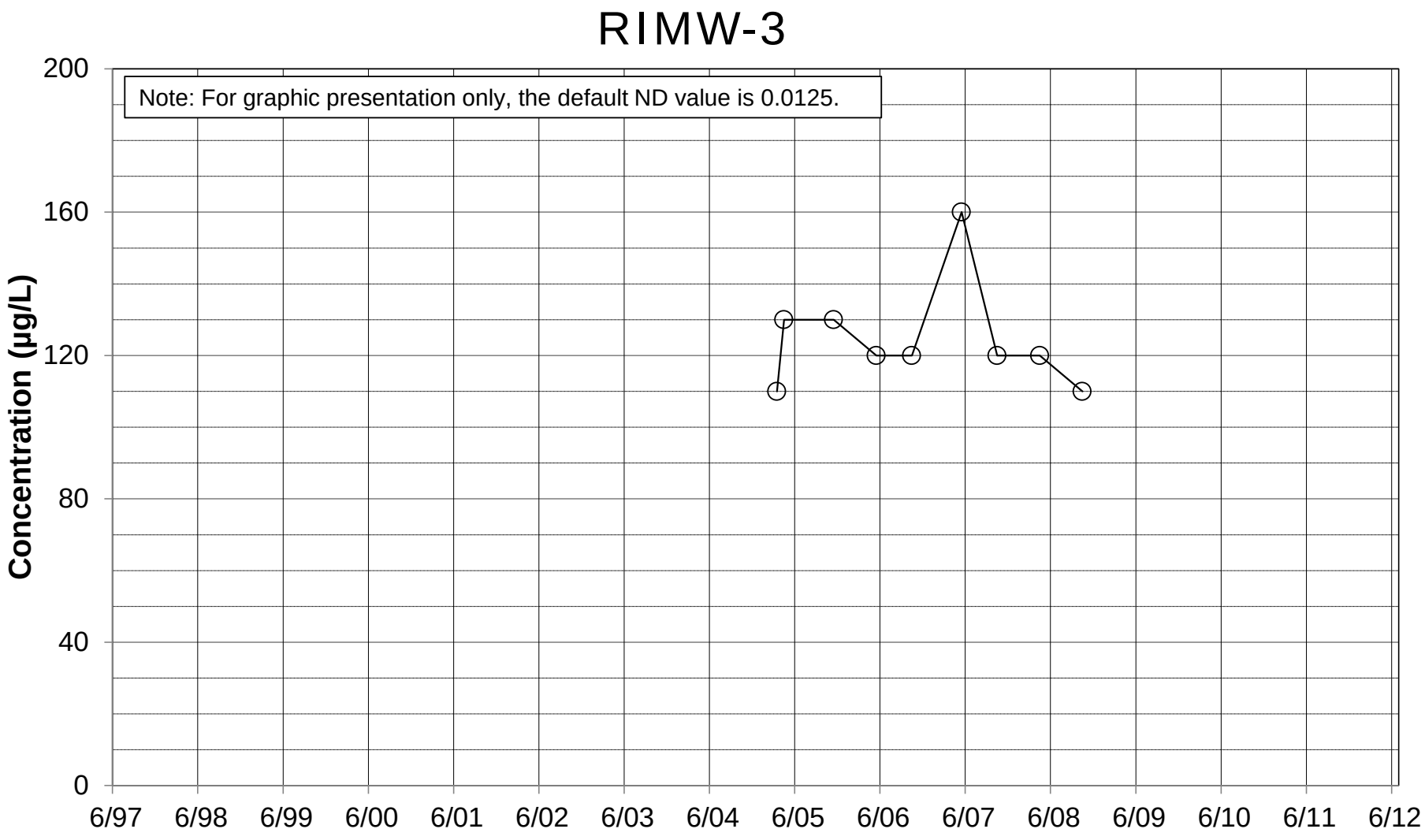
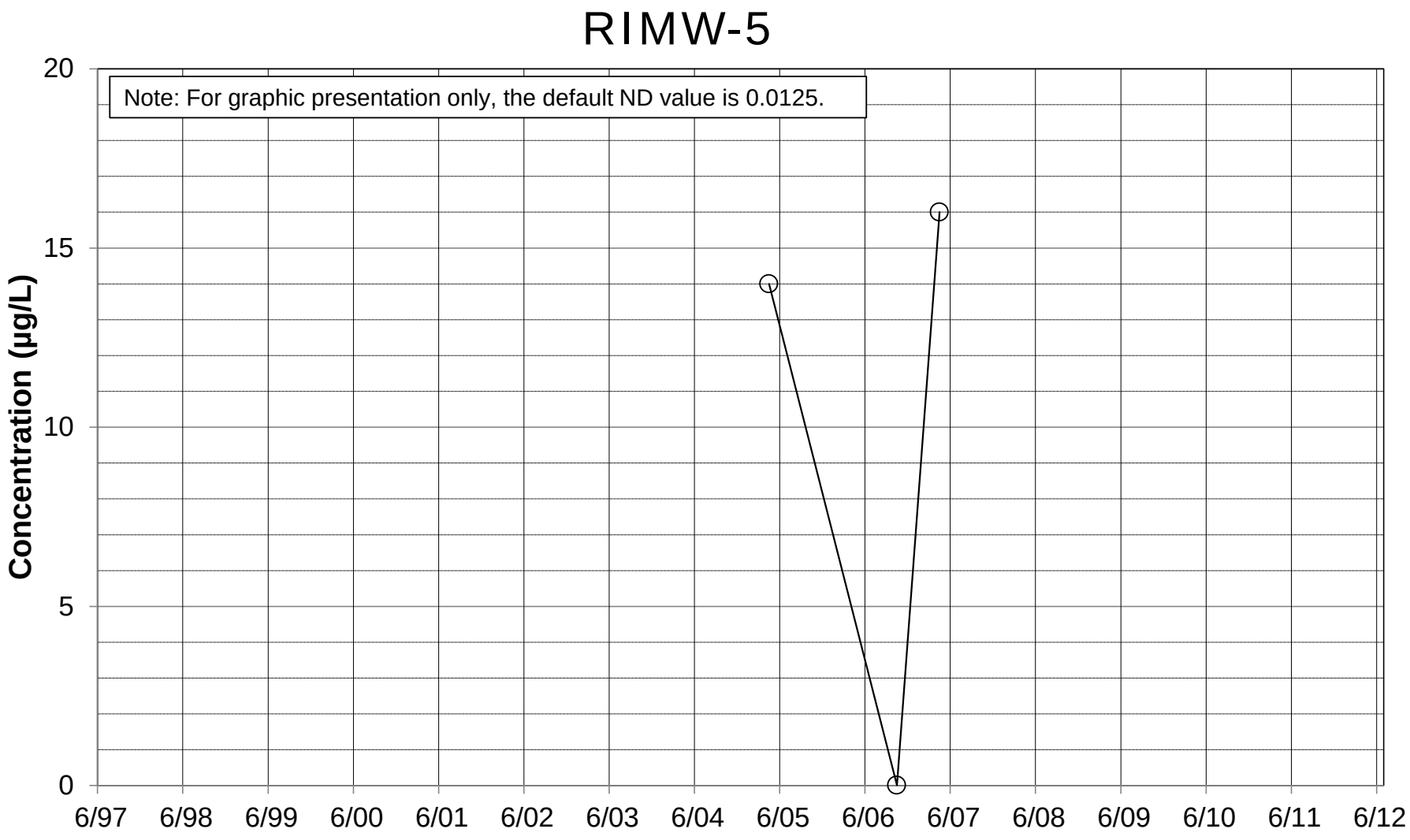
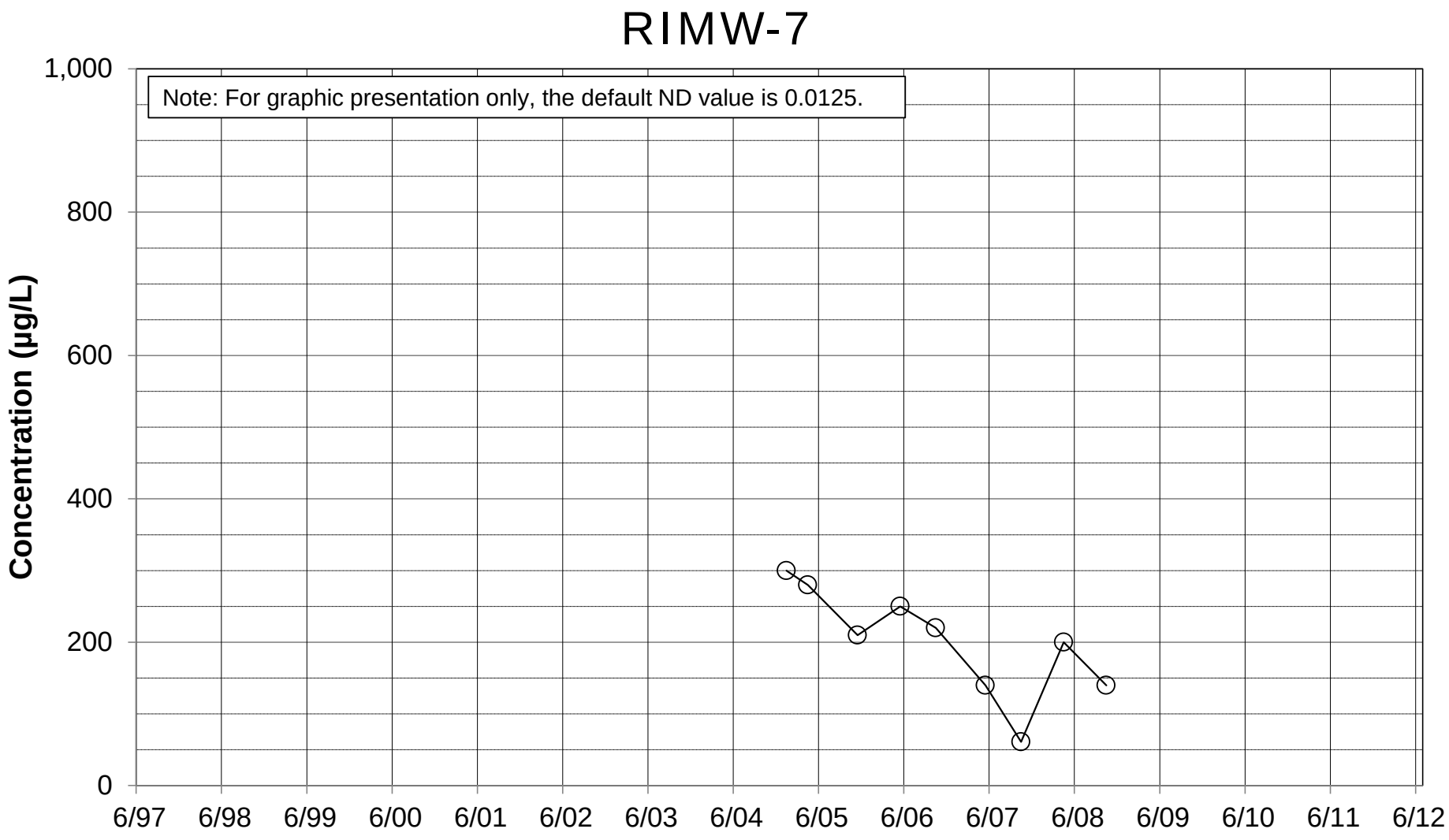
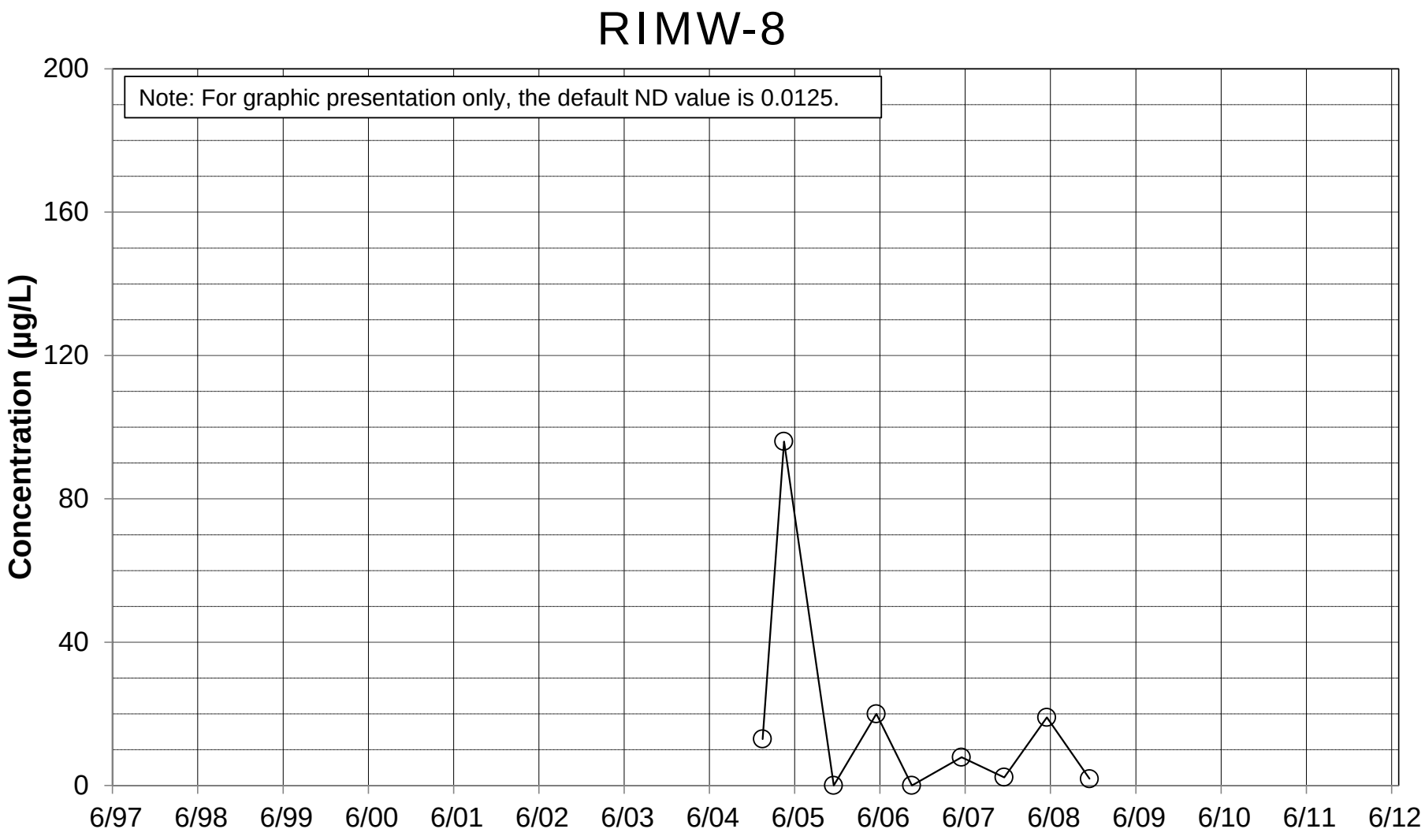
6/09
6/10
6/11
6/12

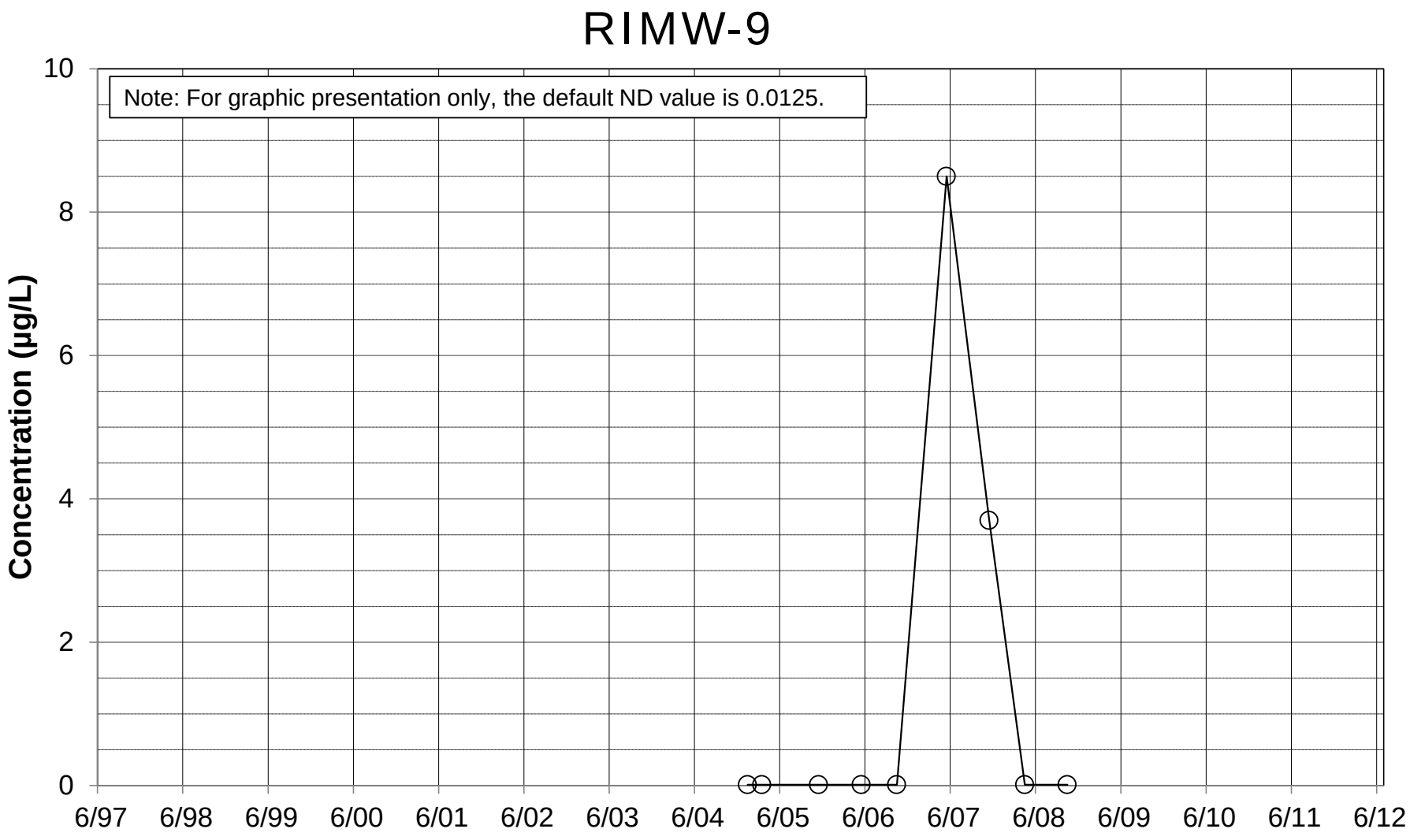

RIMW-2
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

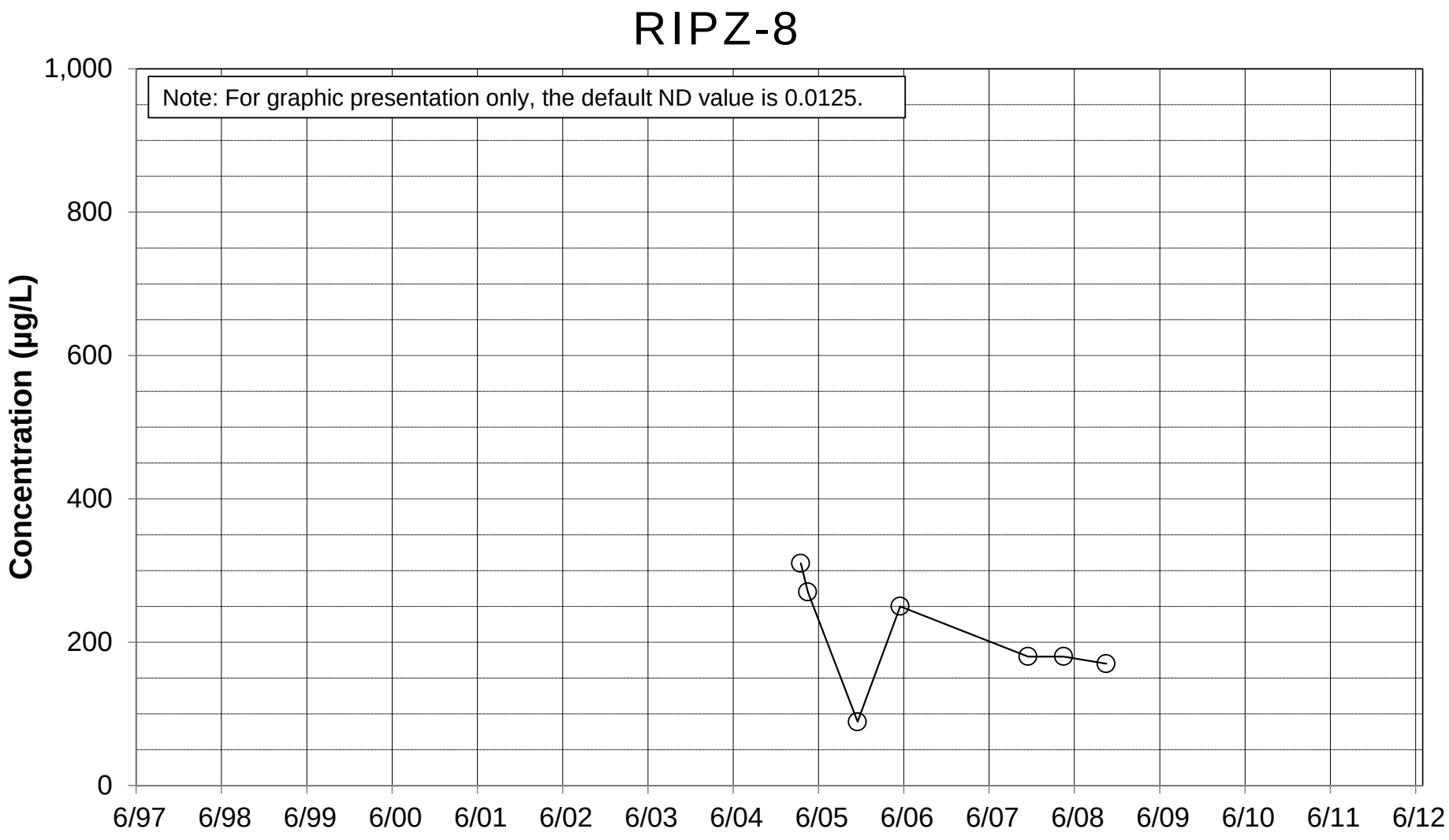

RIMW-3
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
200
160
120
80
40
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

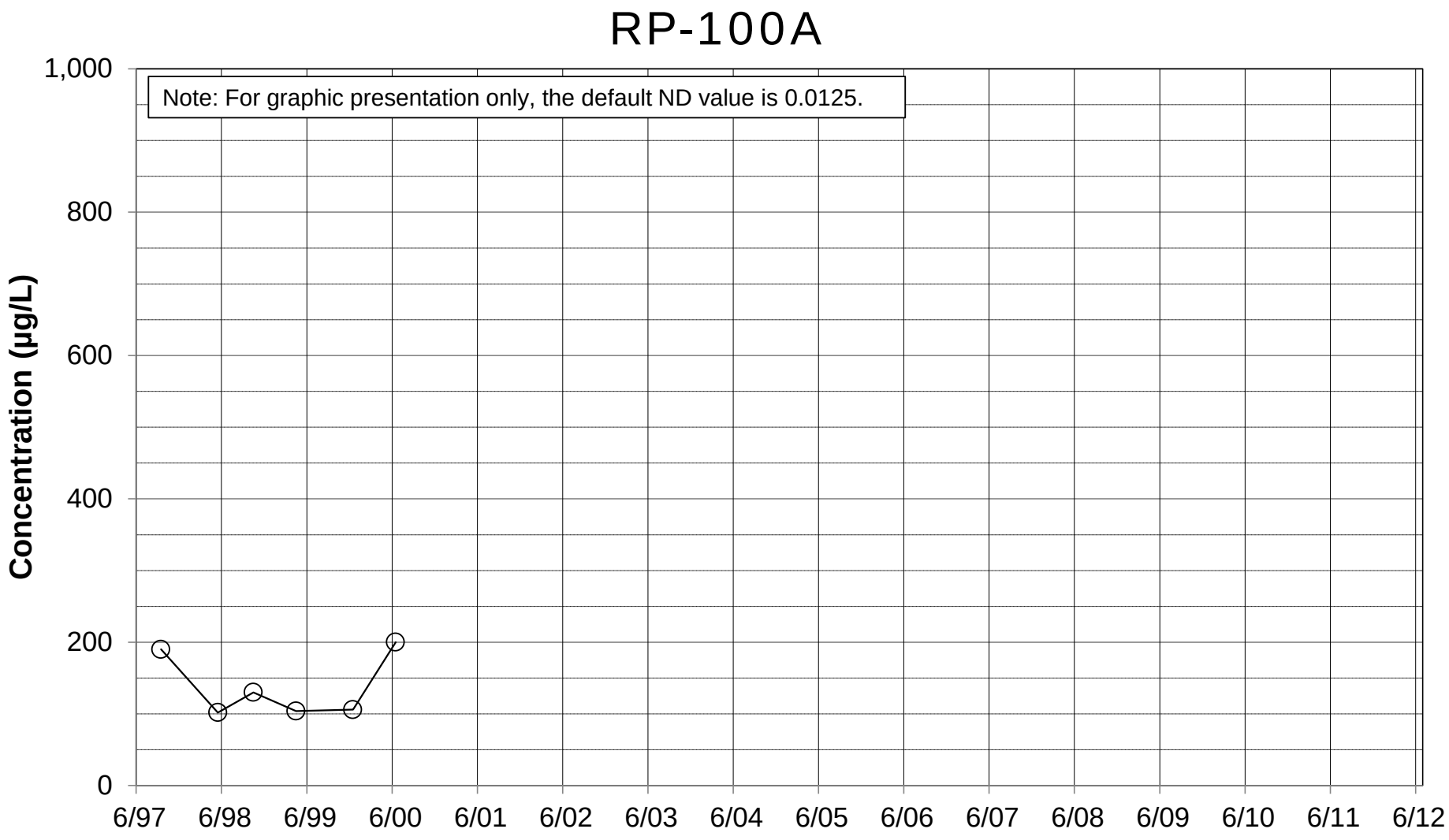

RIMW-5
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RIMW-7
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

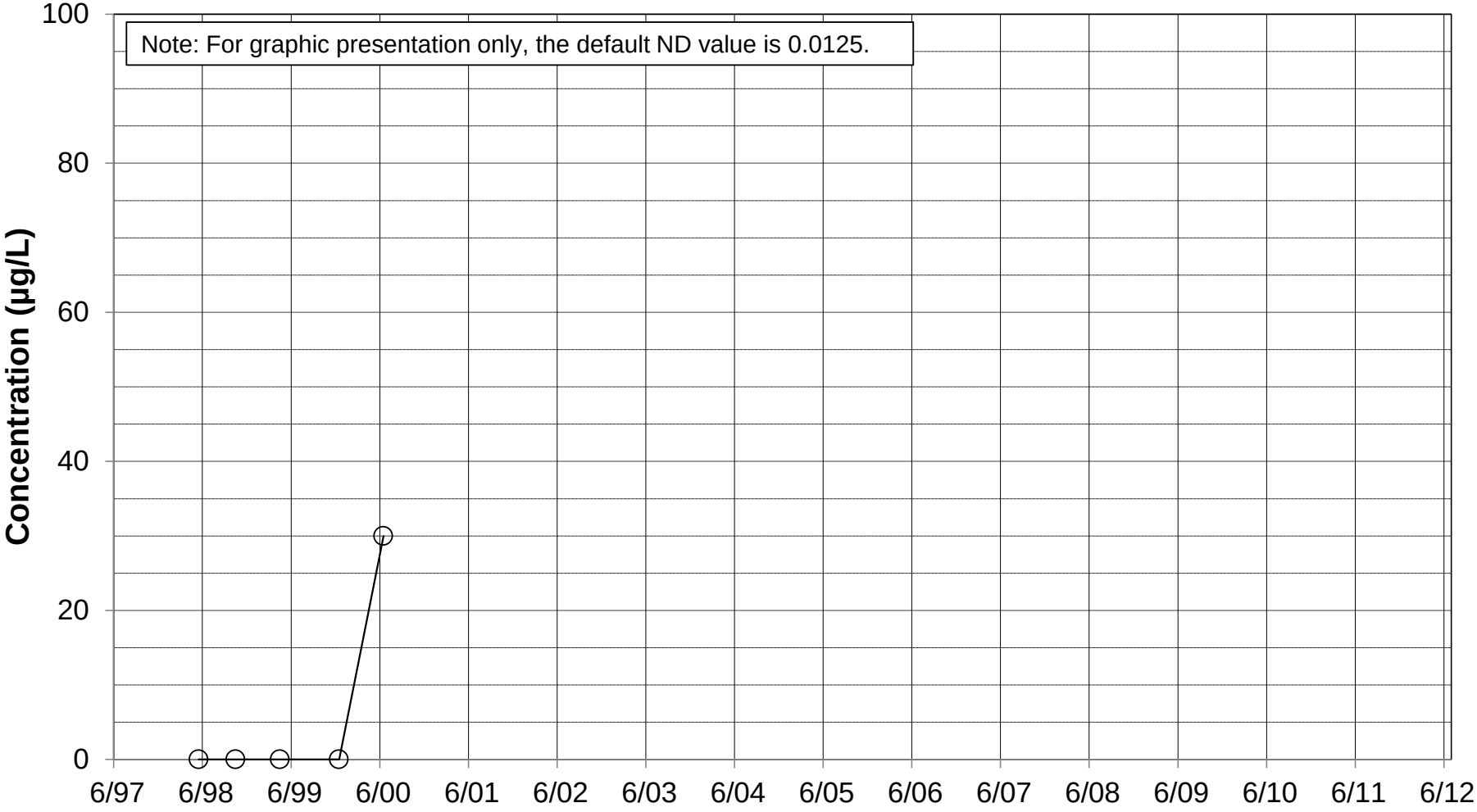

RIMW-8
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
200
160
120
80
40
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

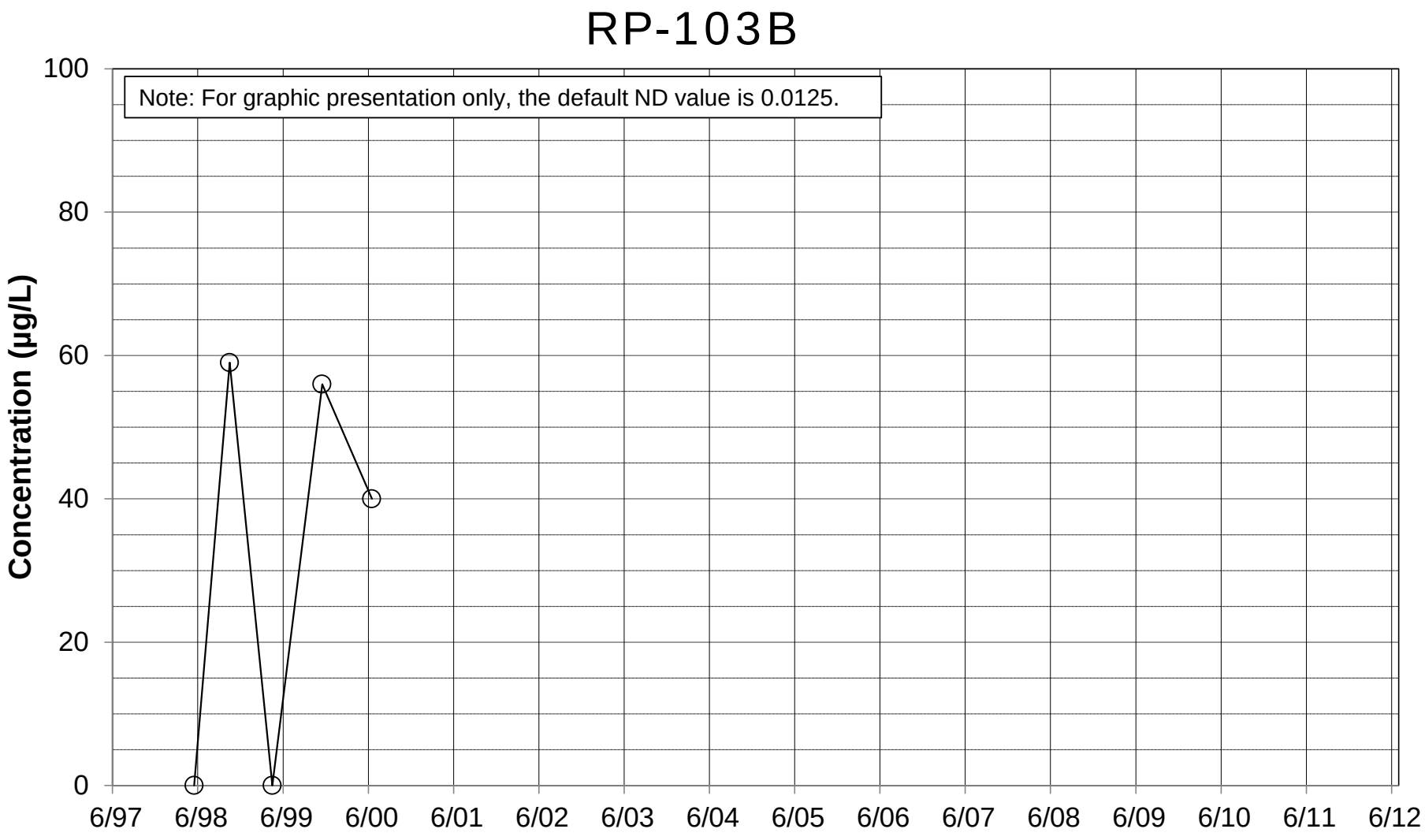

RIMW-9
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

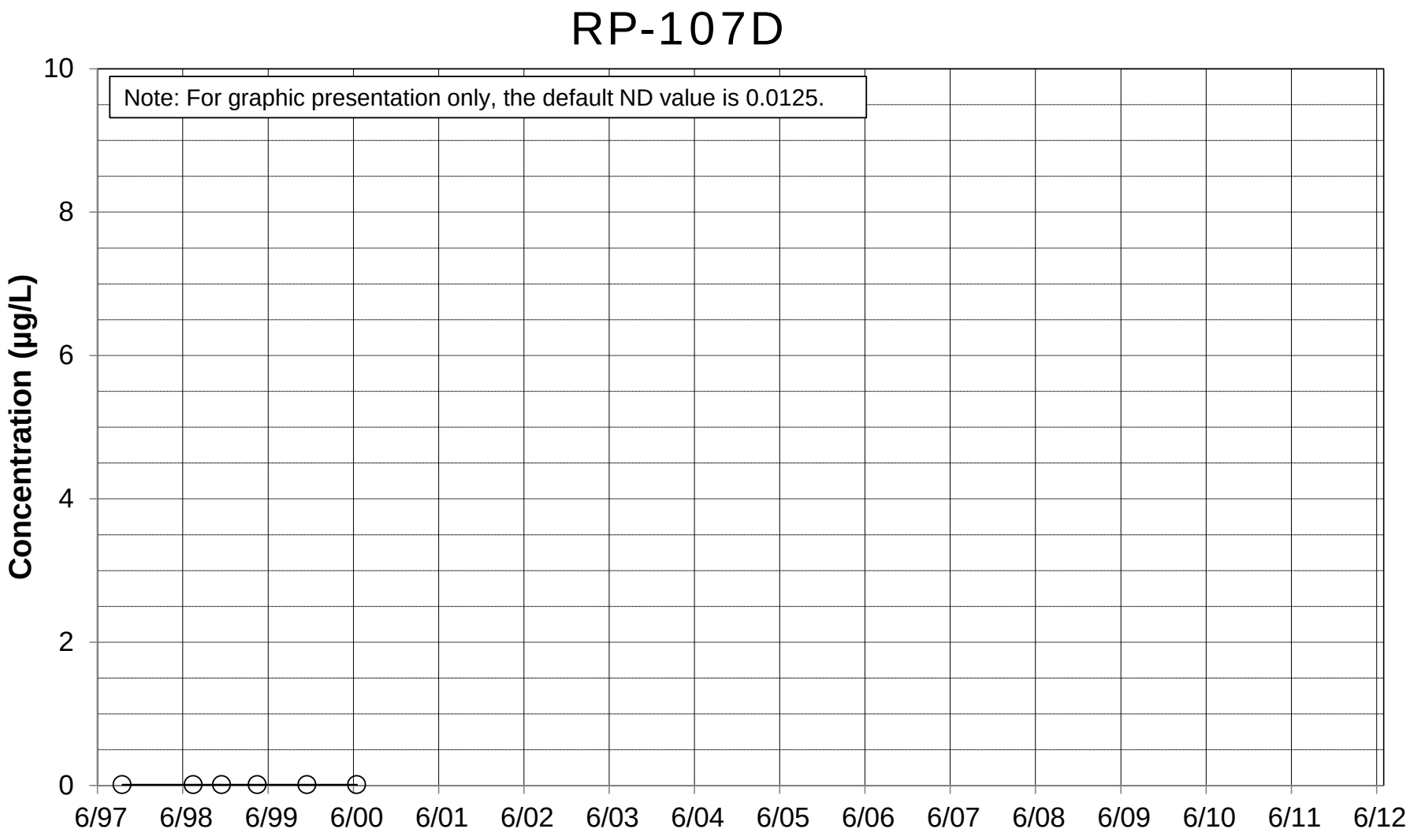

RIPZ-8
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

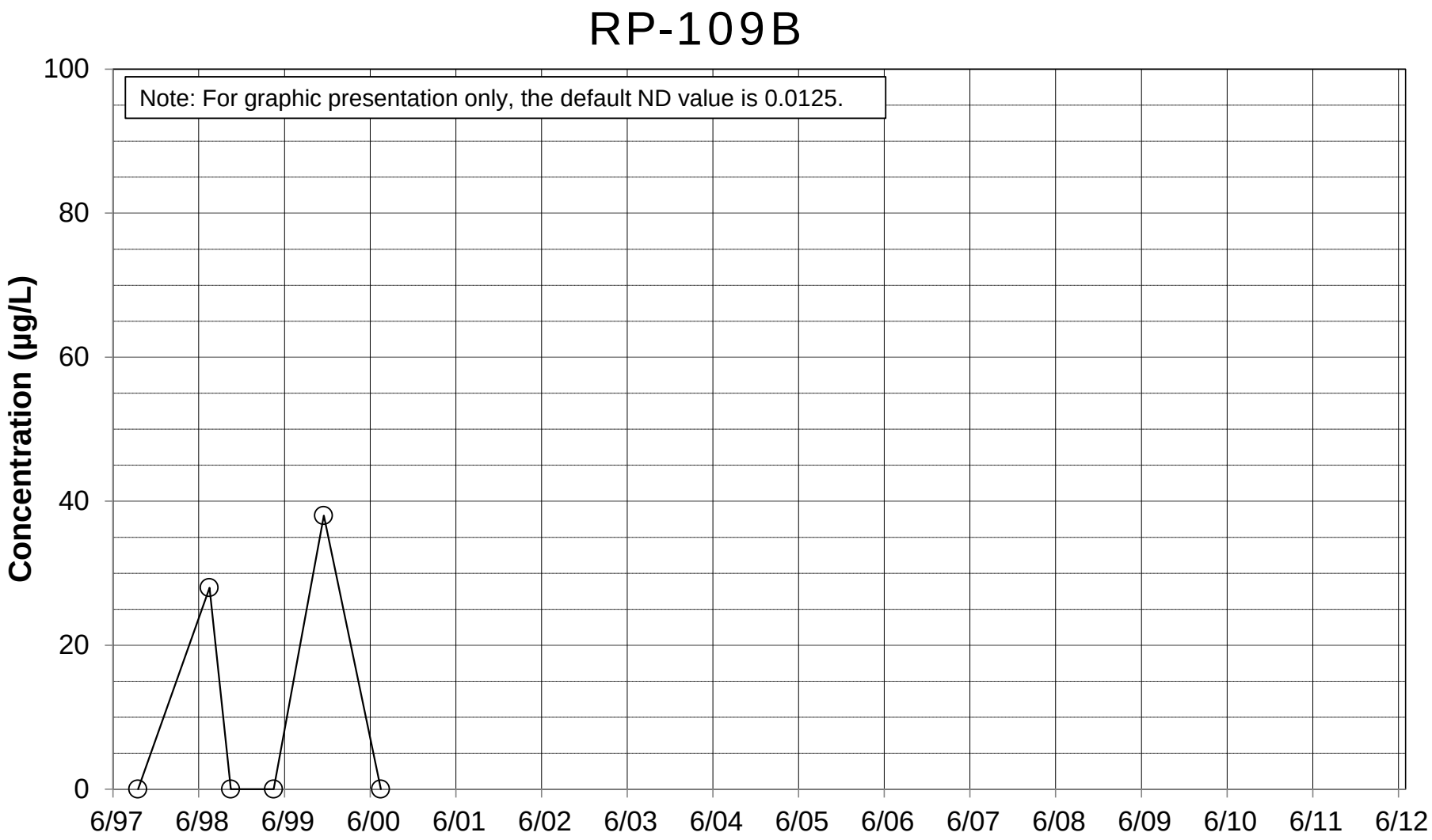

RP-100A
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

RP-101C


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RP-103B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RP-107D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RP-109B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
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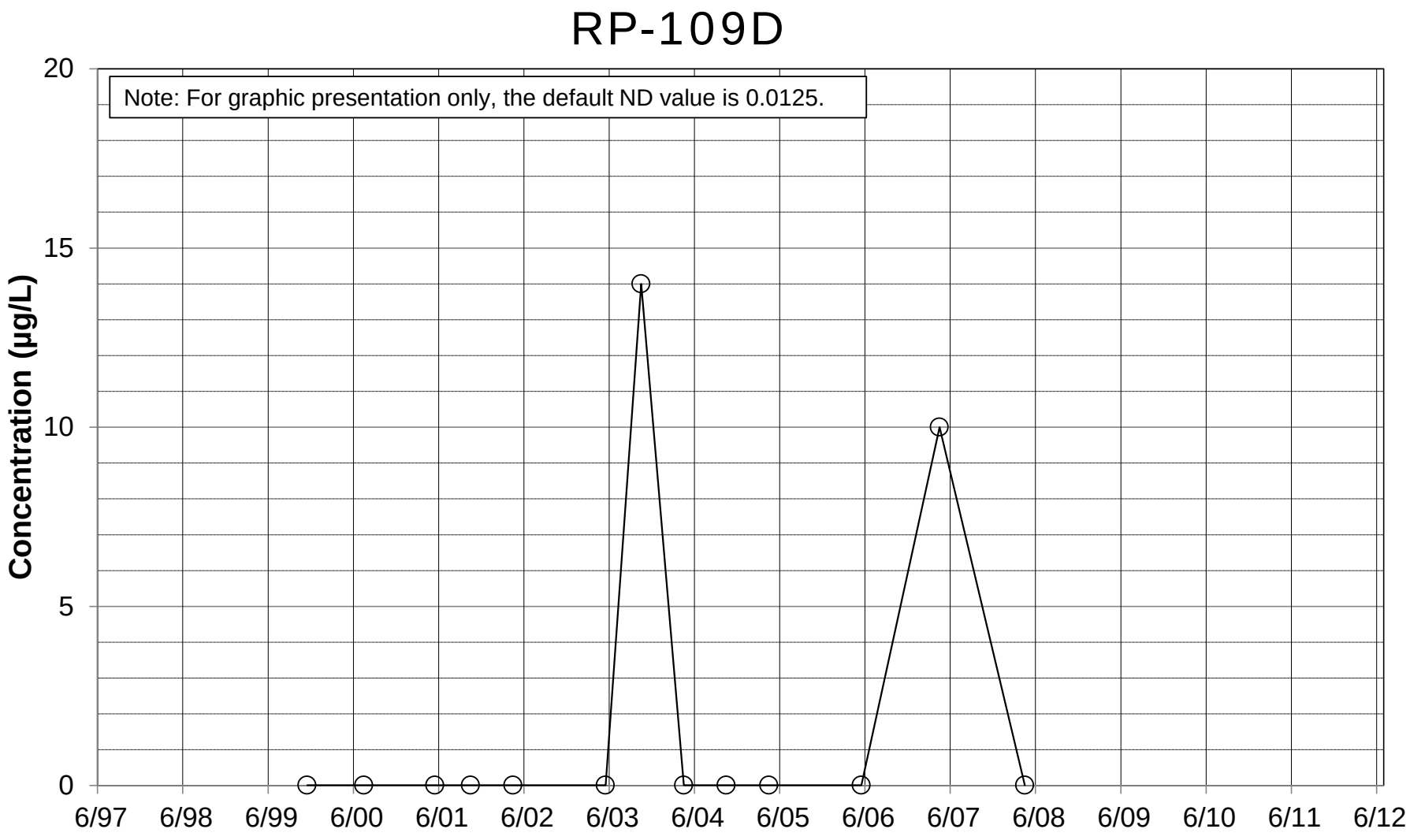
6/09
6/10
6/11
6/12


RP-109D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
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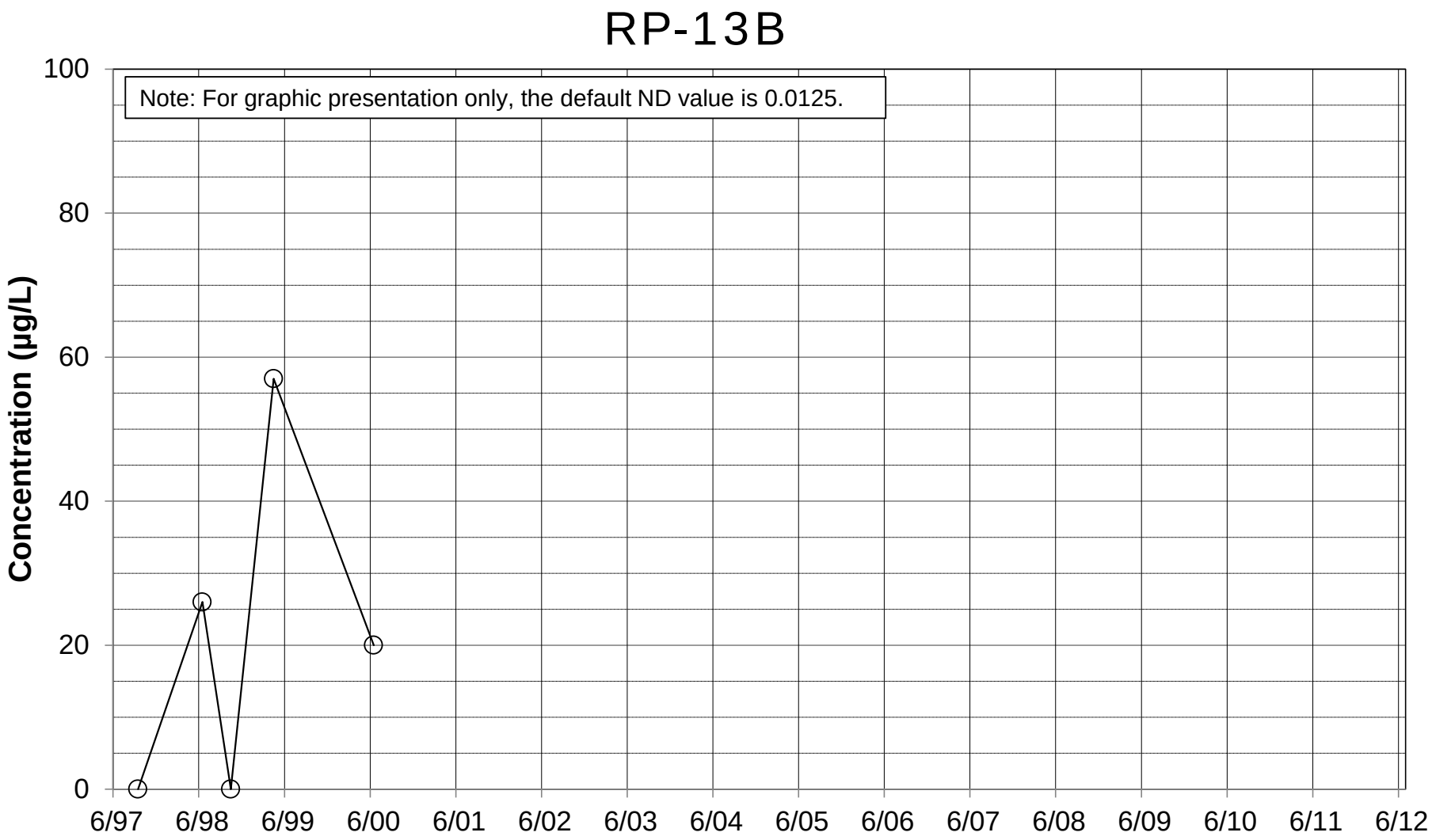
6/09
6/10
6/11
6/12


RP-13B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
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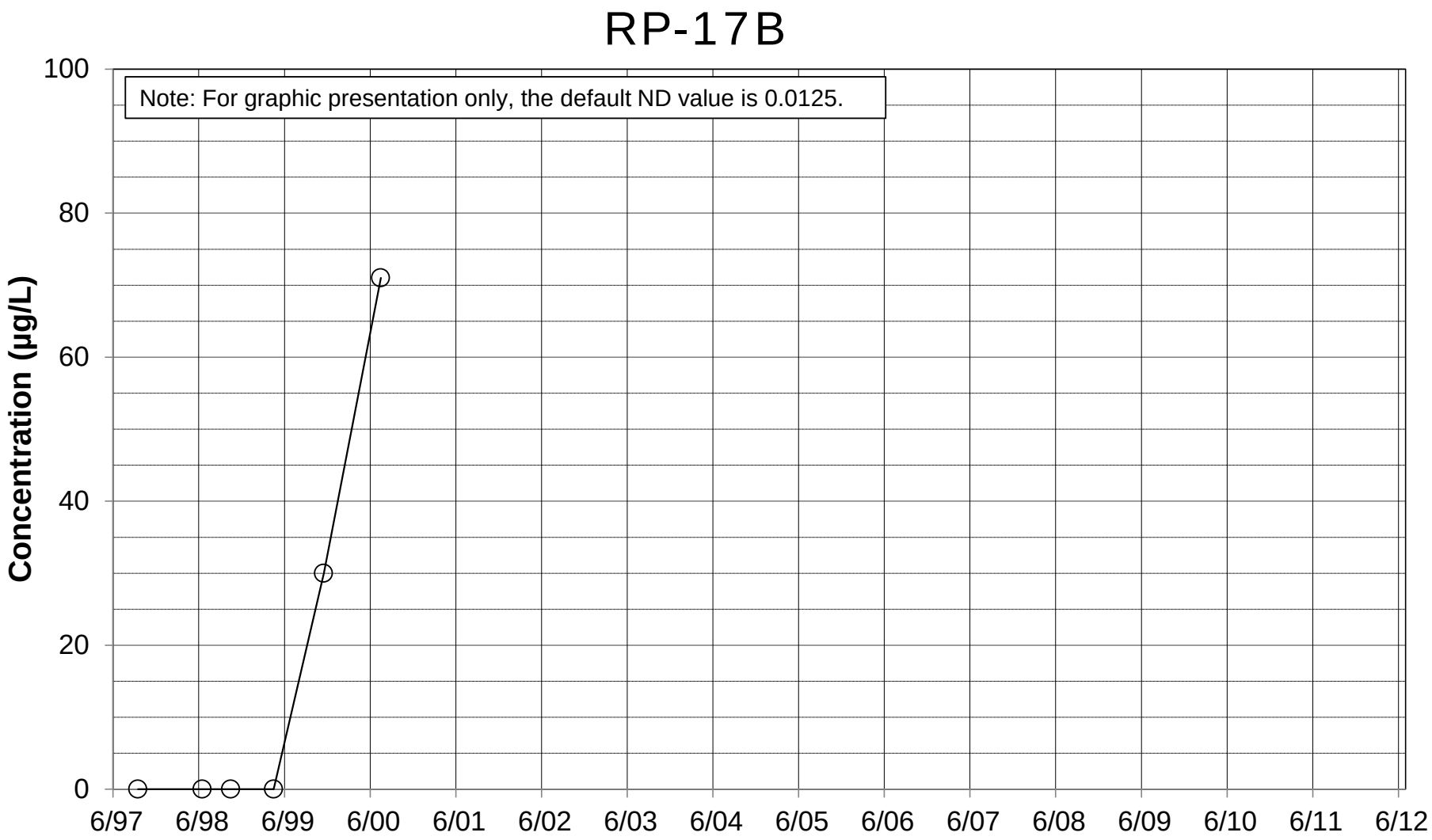
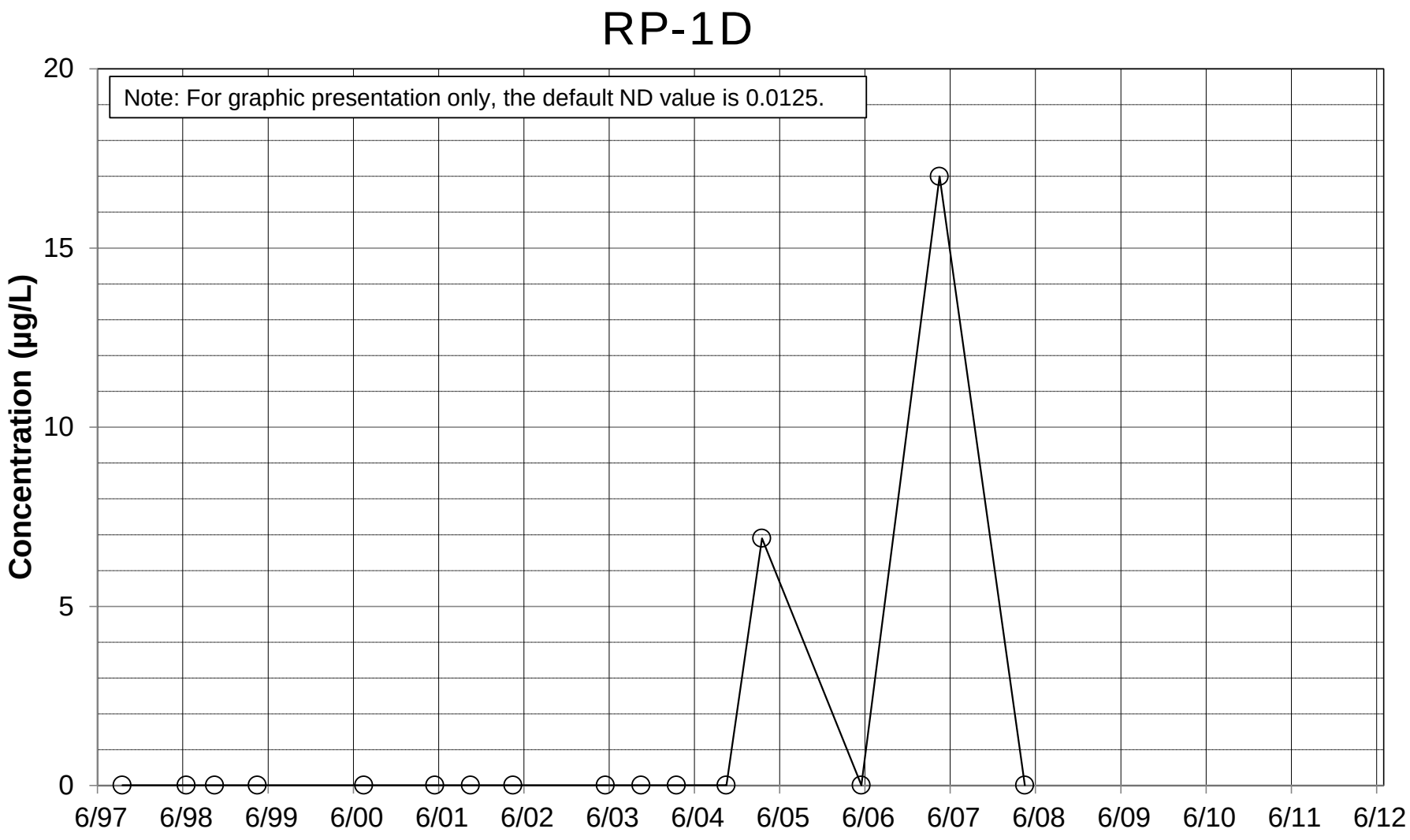
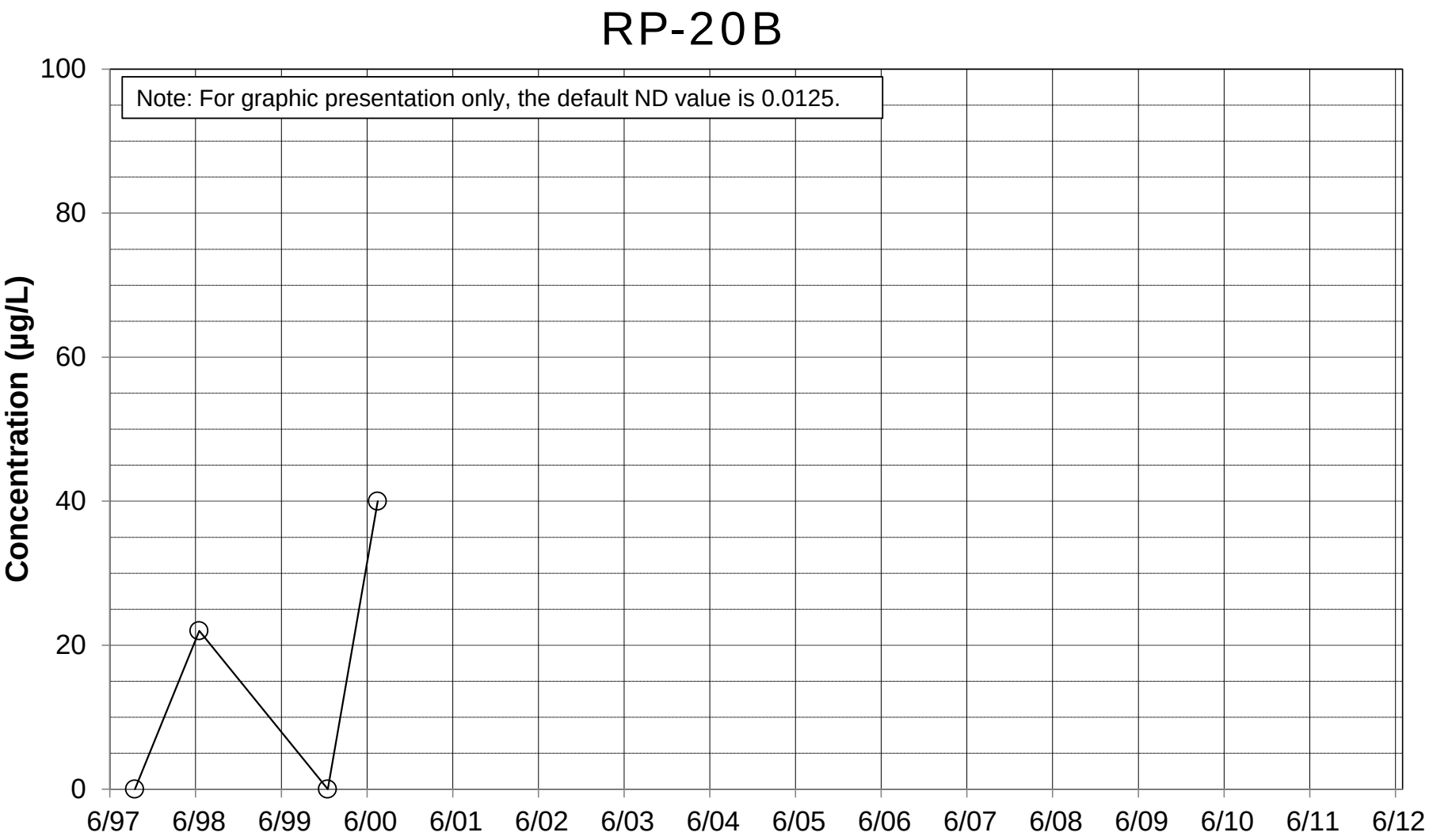
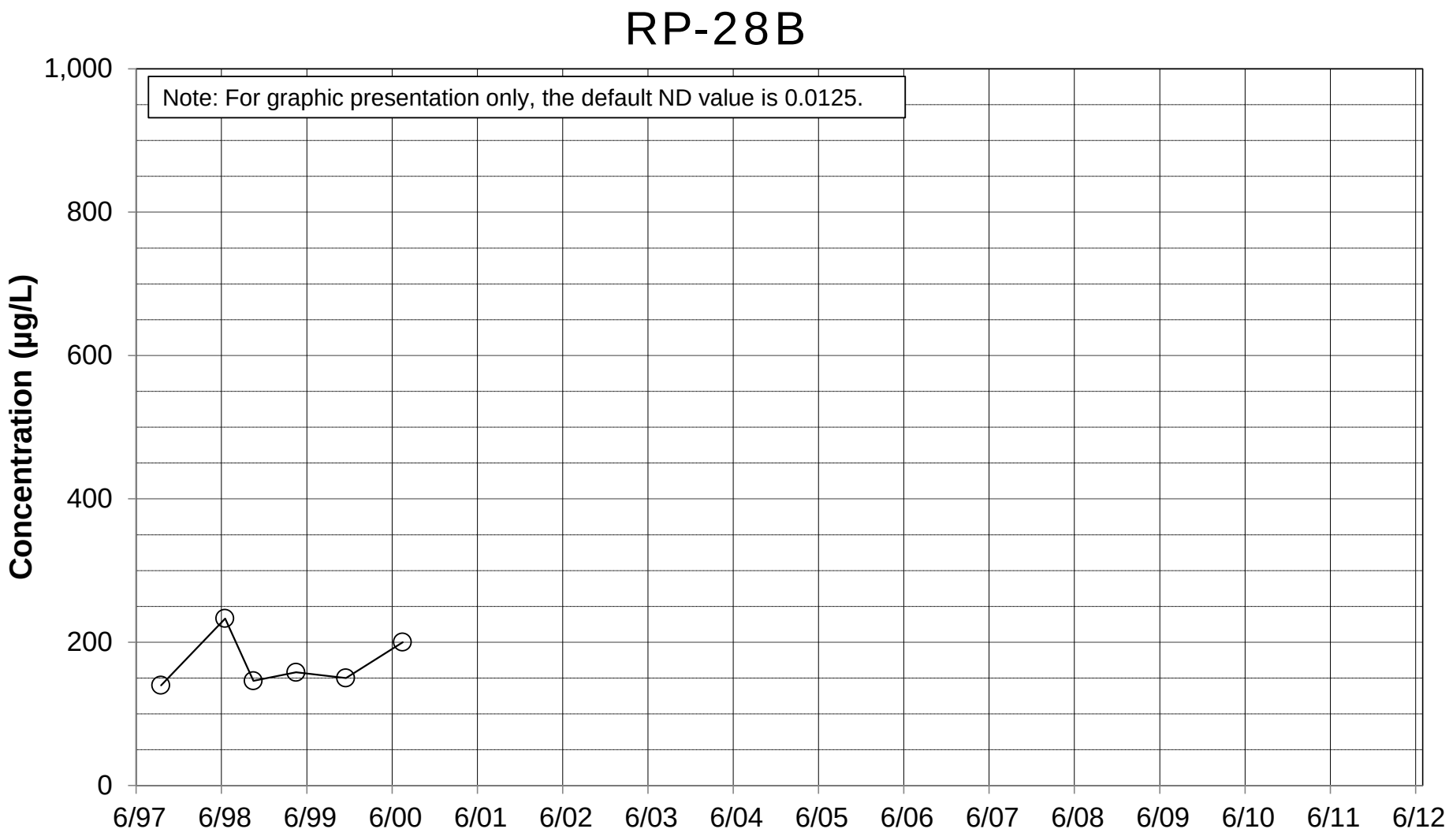
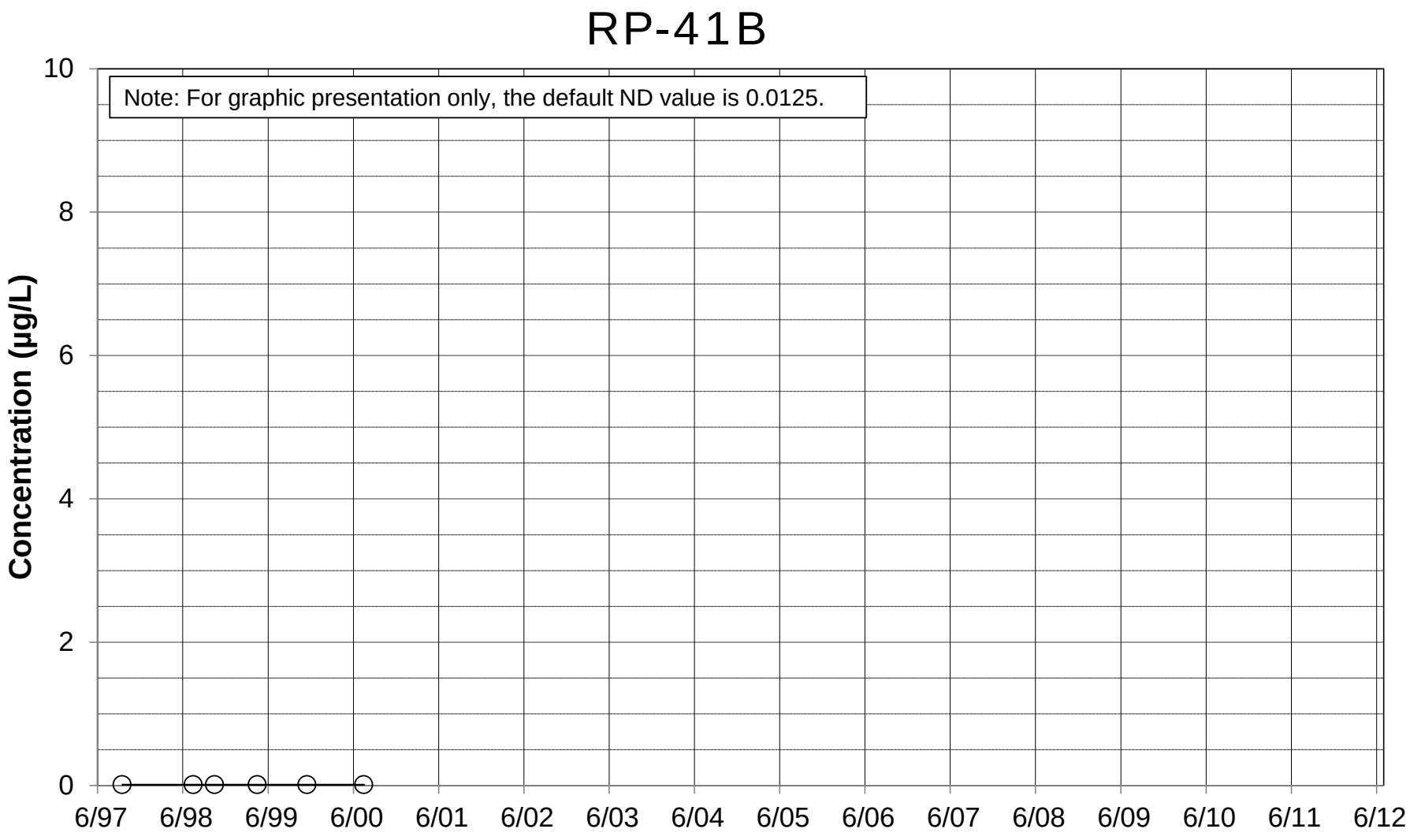
6/09
6/10
6/11
6/12

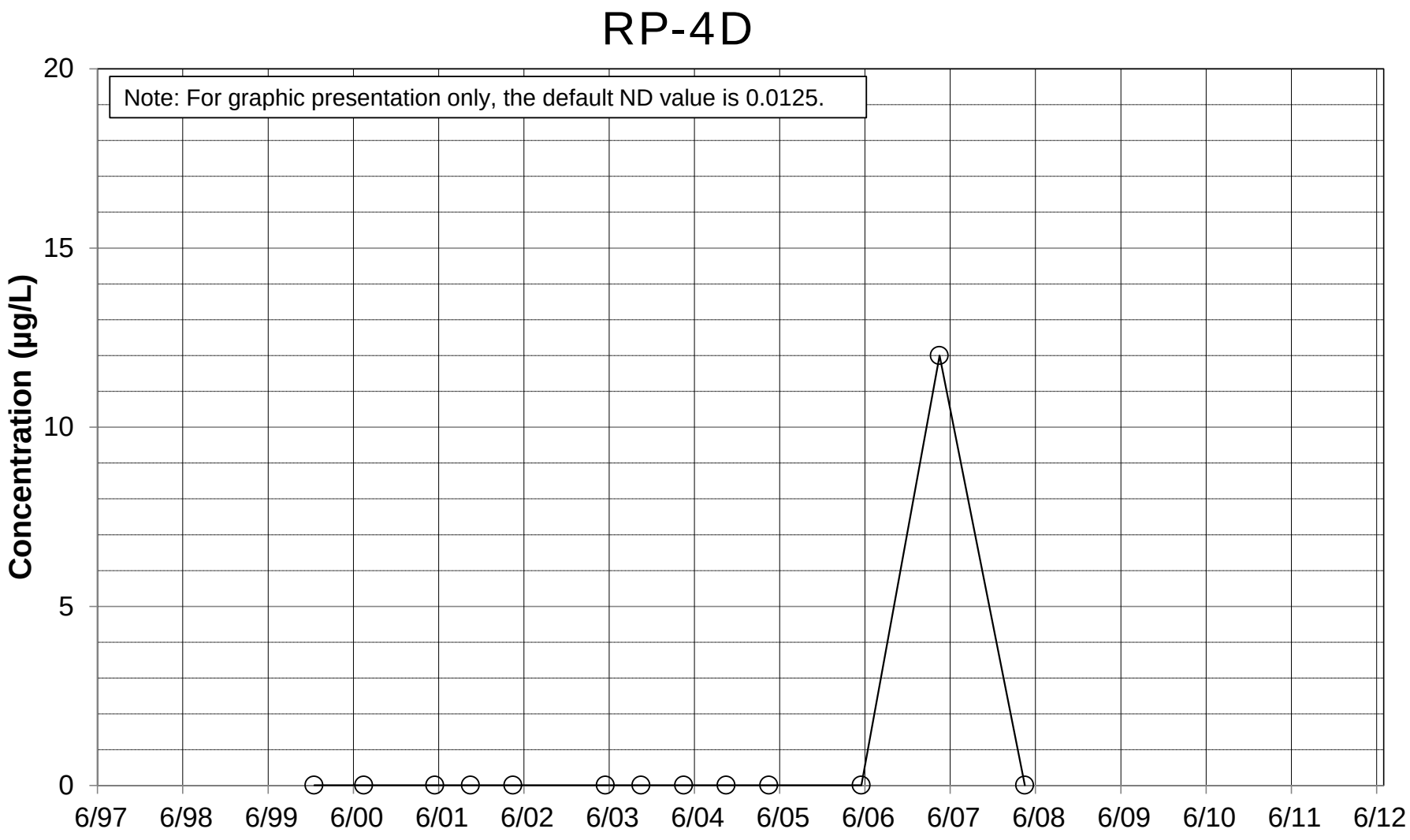

RP-17B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

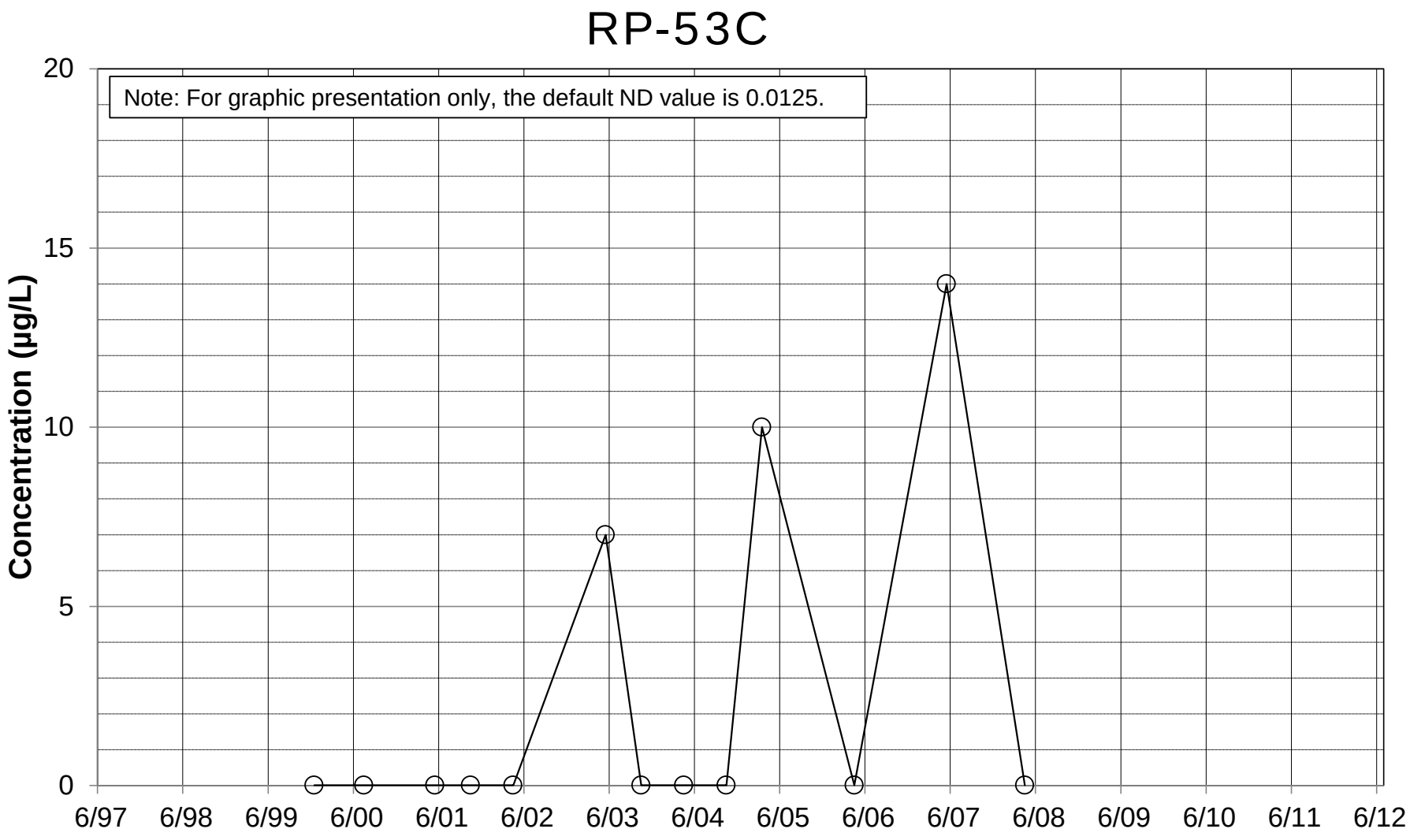

RP-1D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

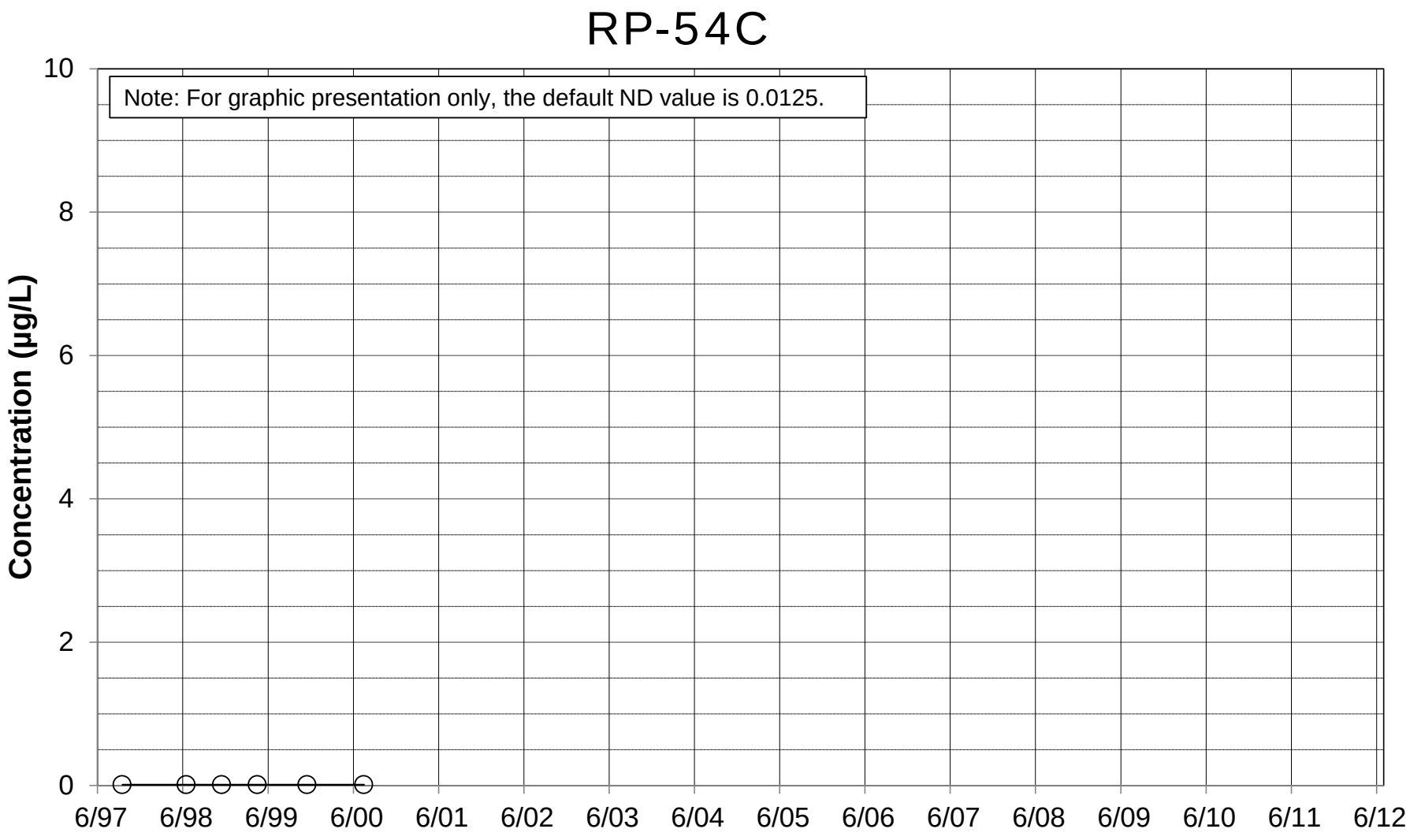

RP-20B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

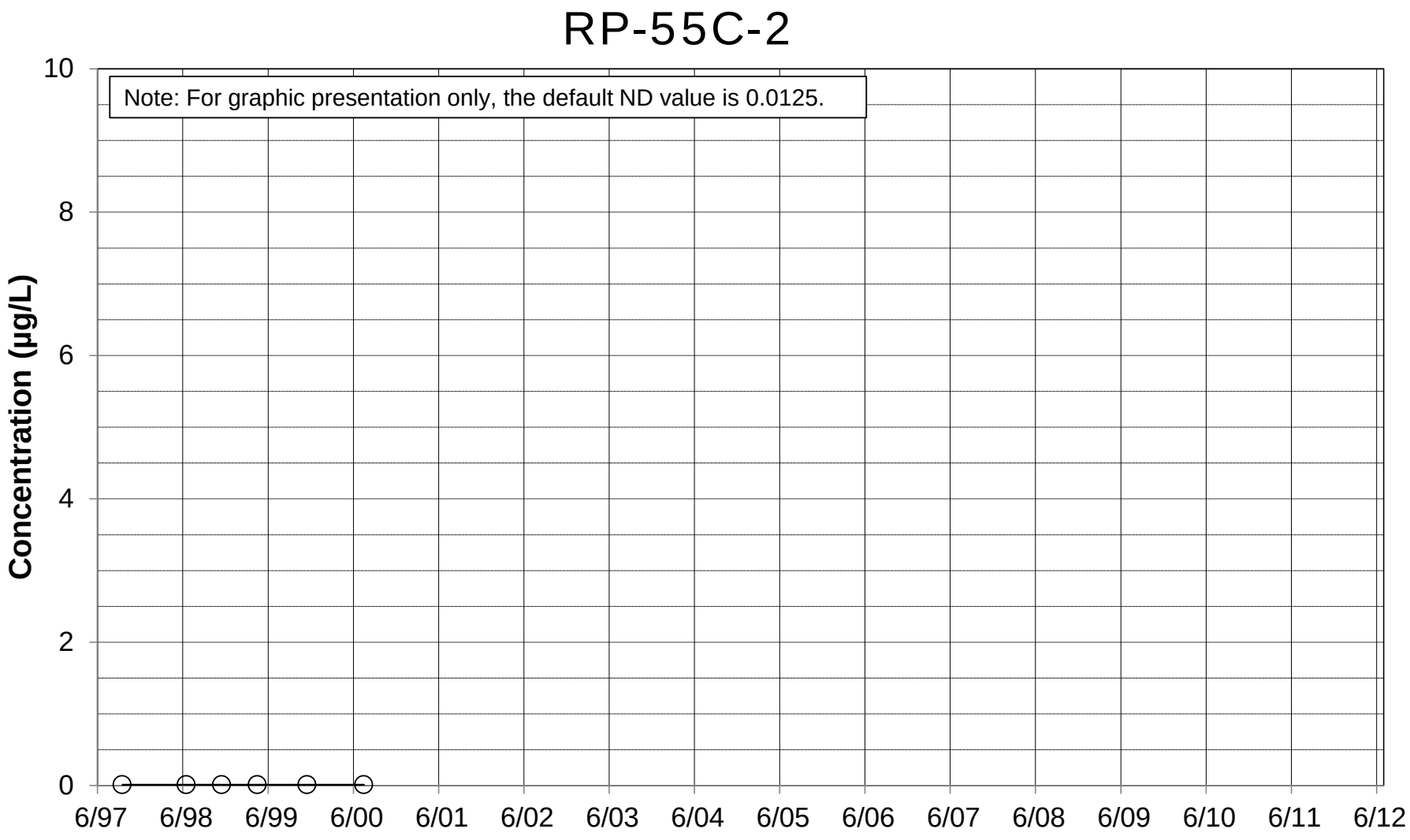

RP-28B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RP-41B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

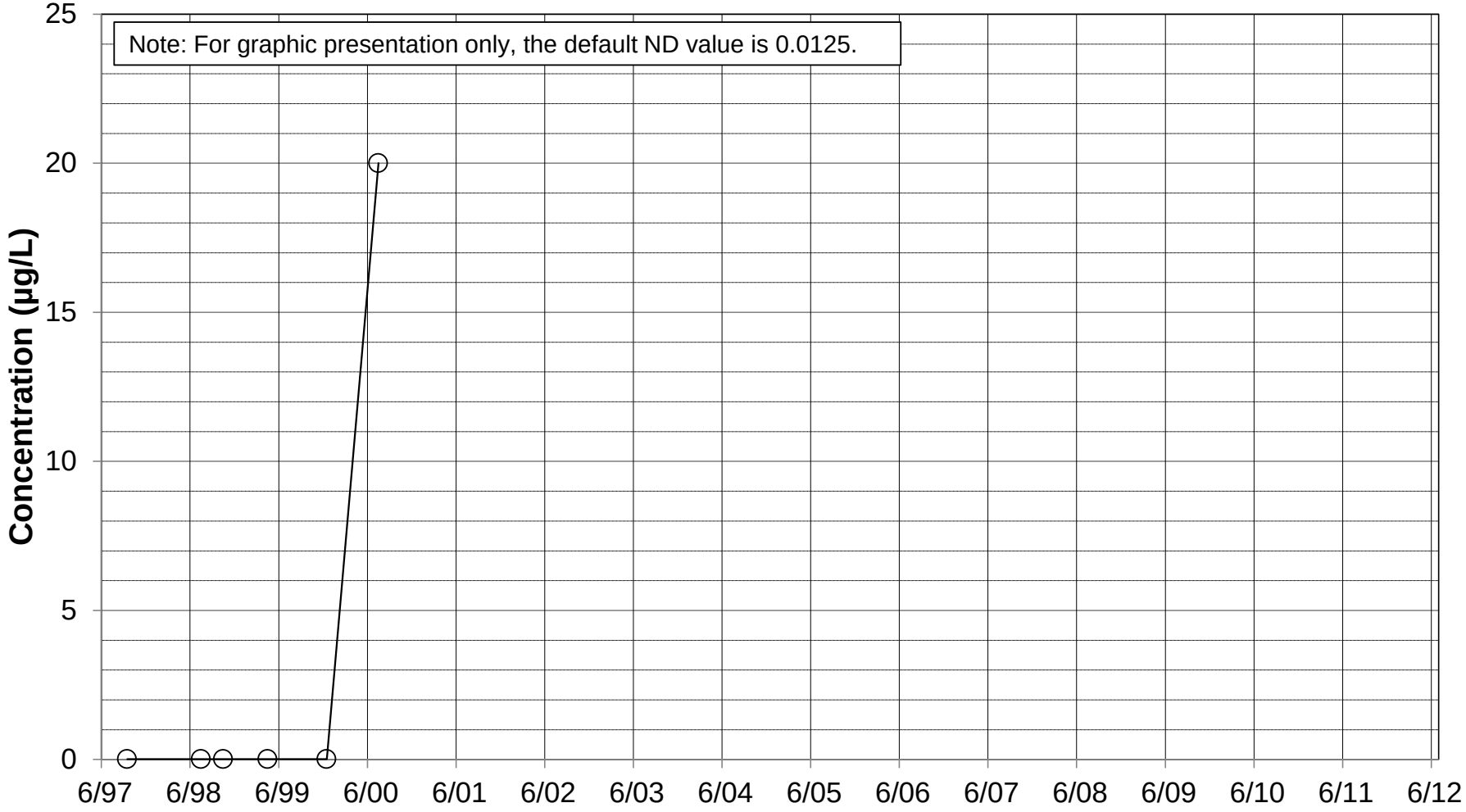

RP-4D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

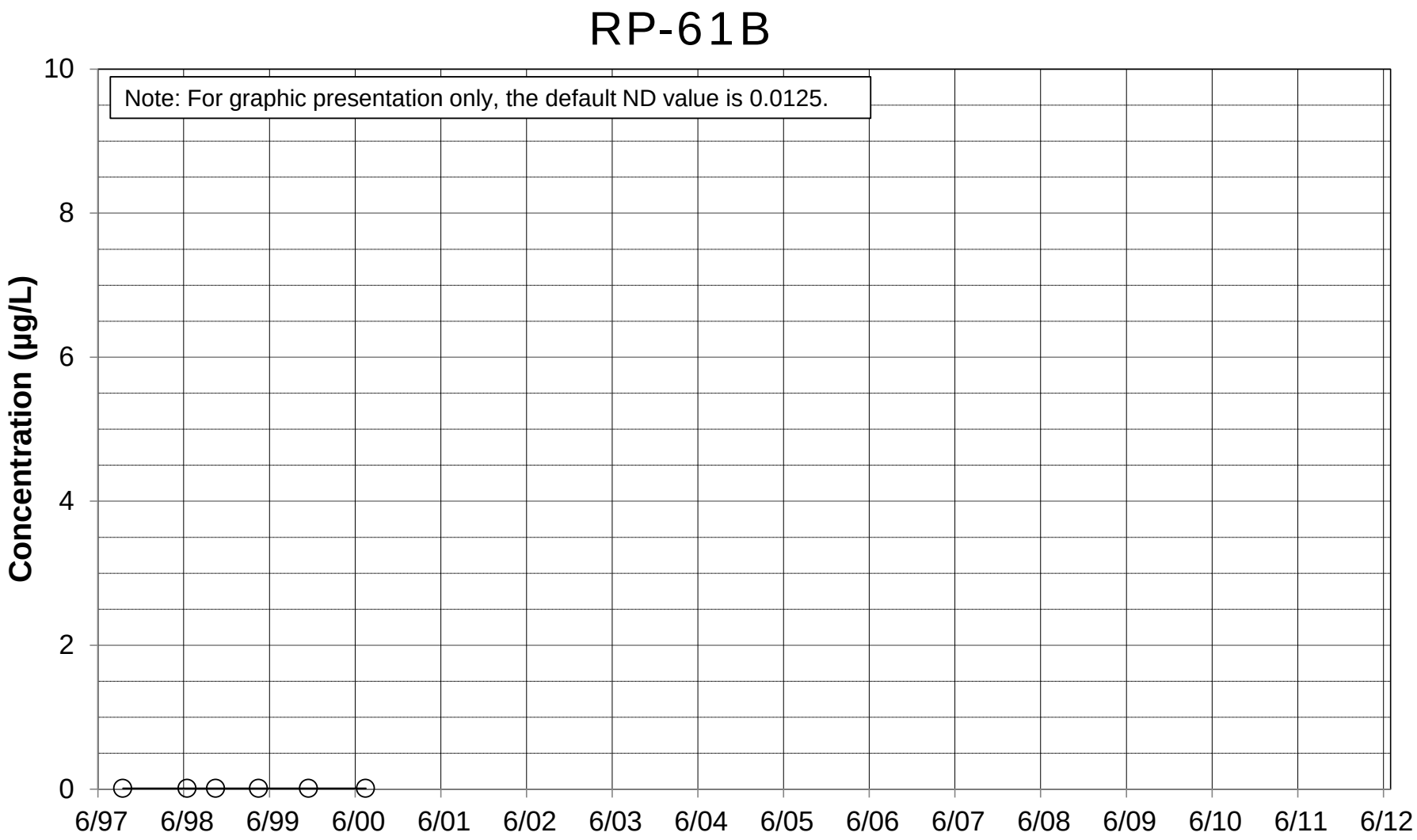

RP-53C
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

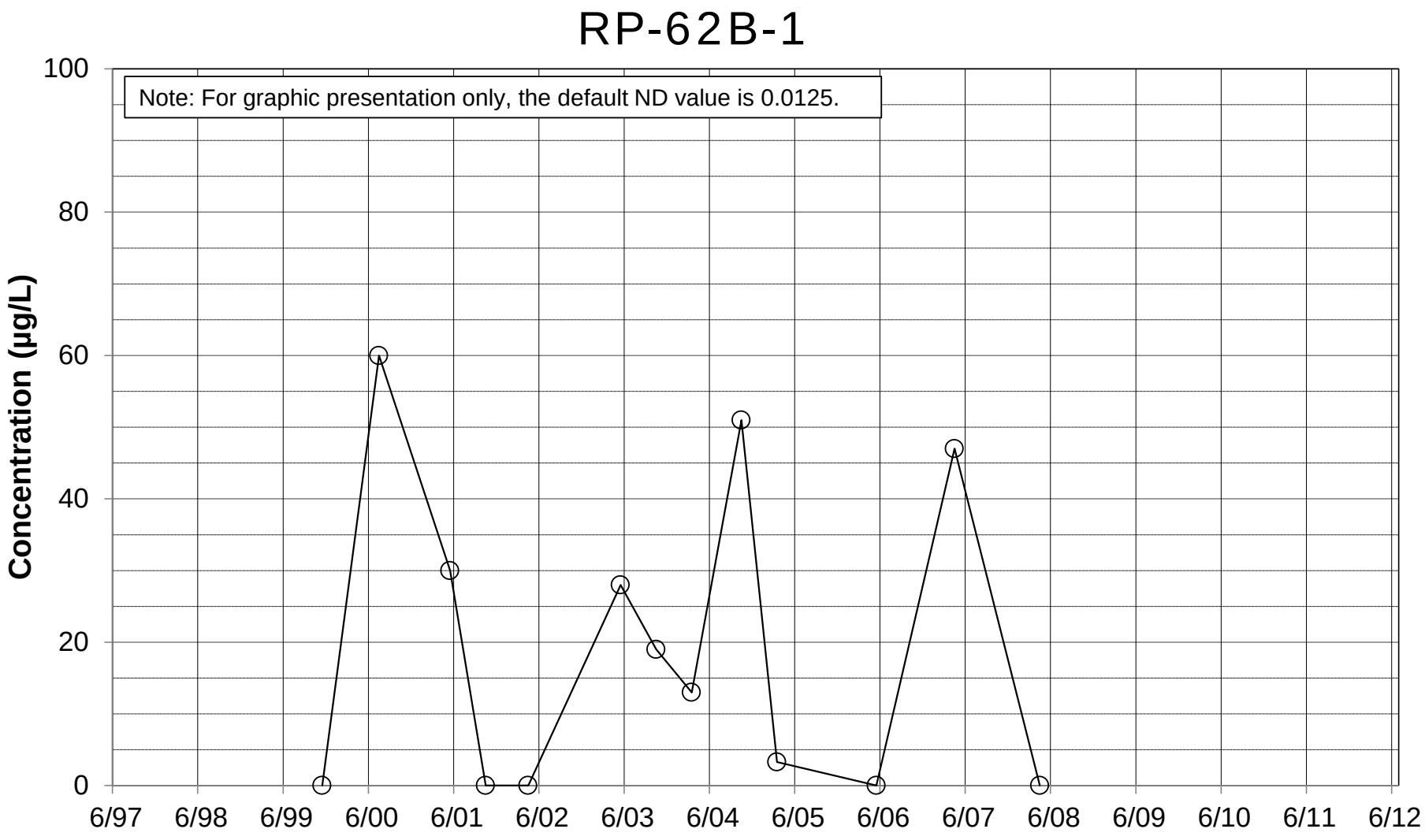

RP-54C
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

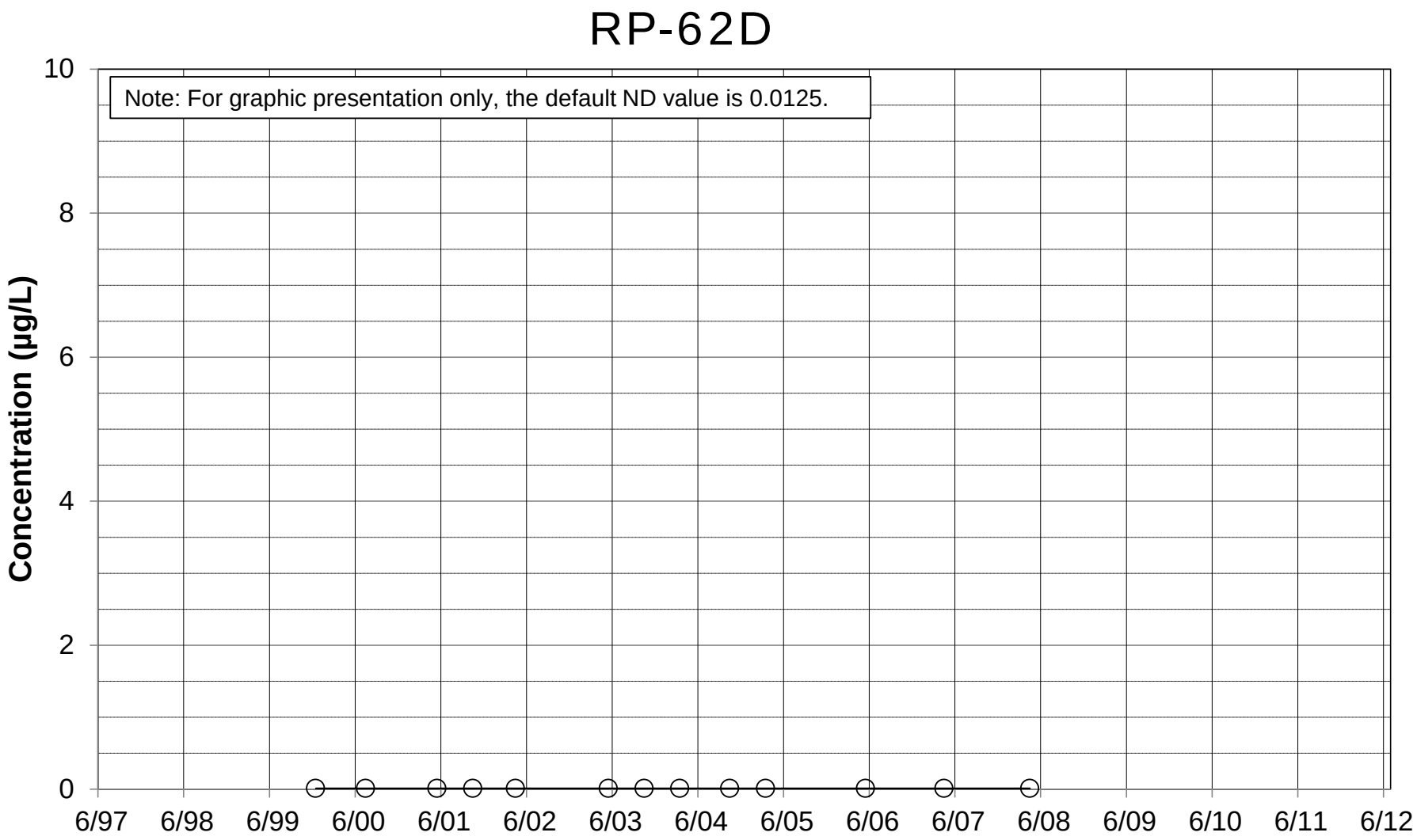

RP-55C-2
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

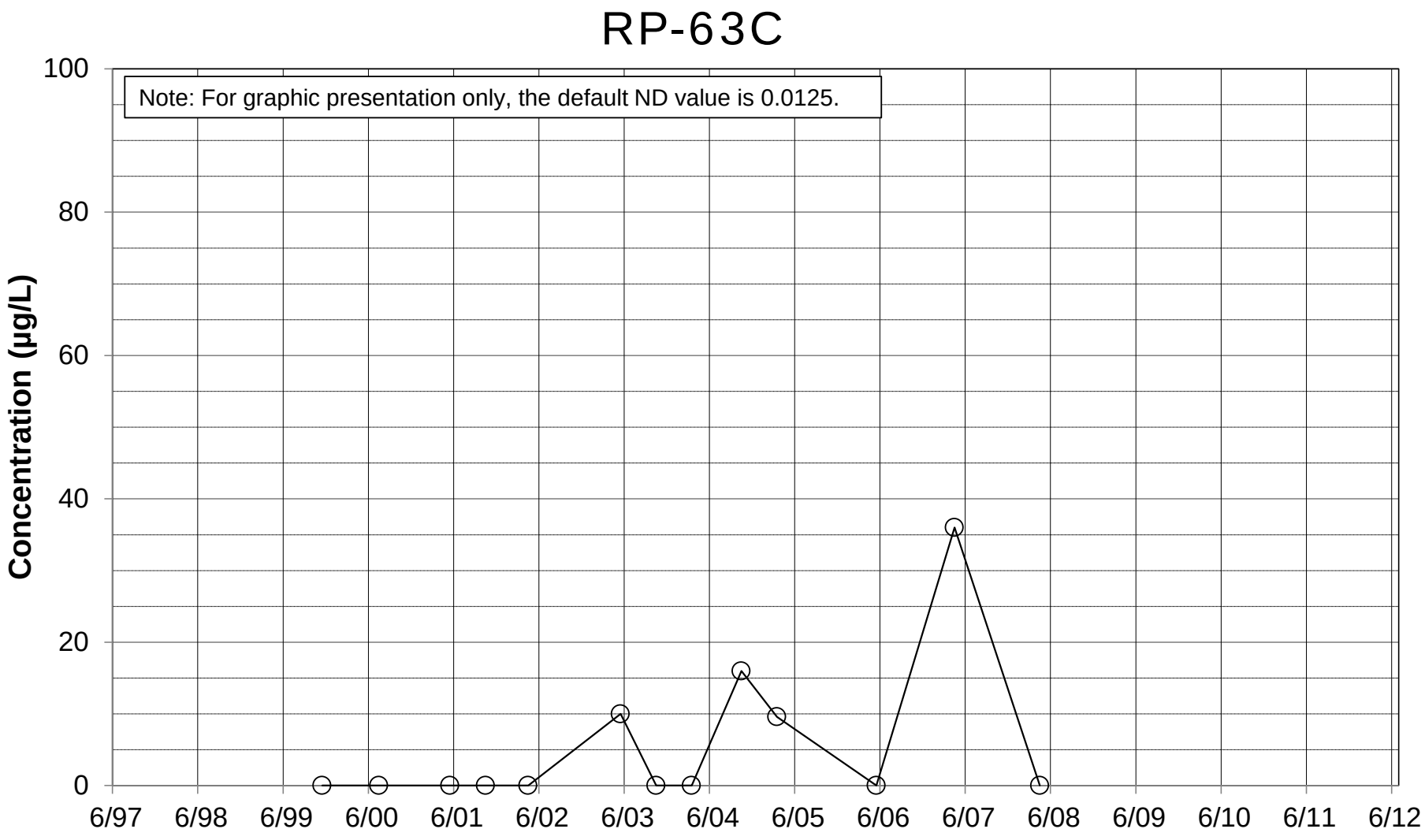
RP-59B

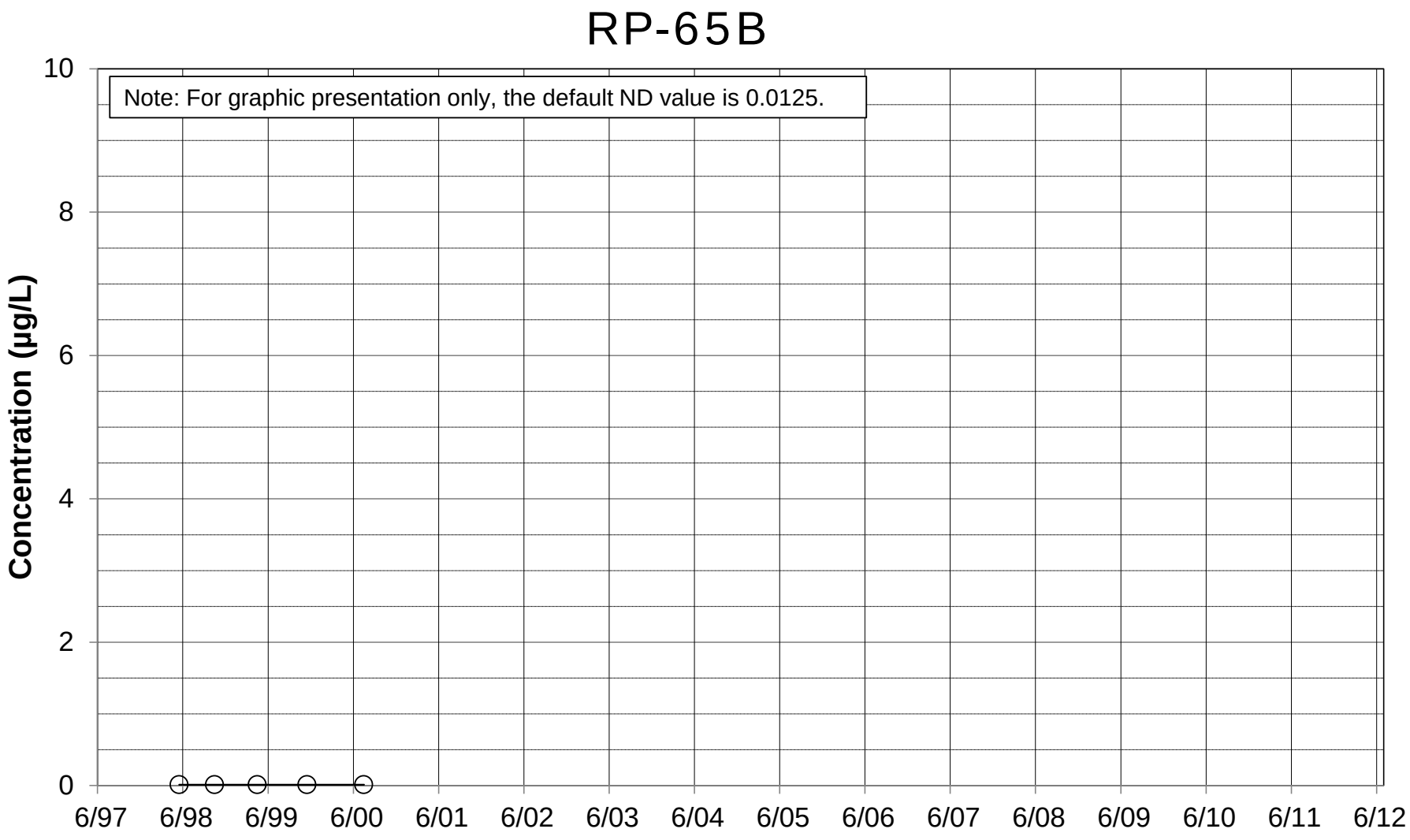

Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
25
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

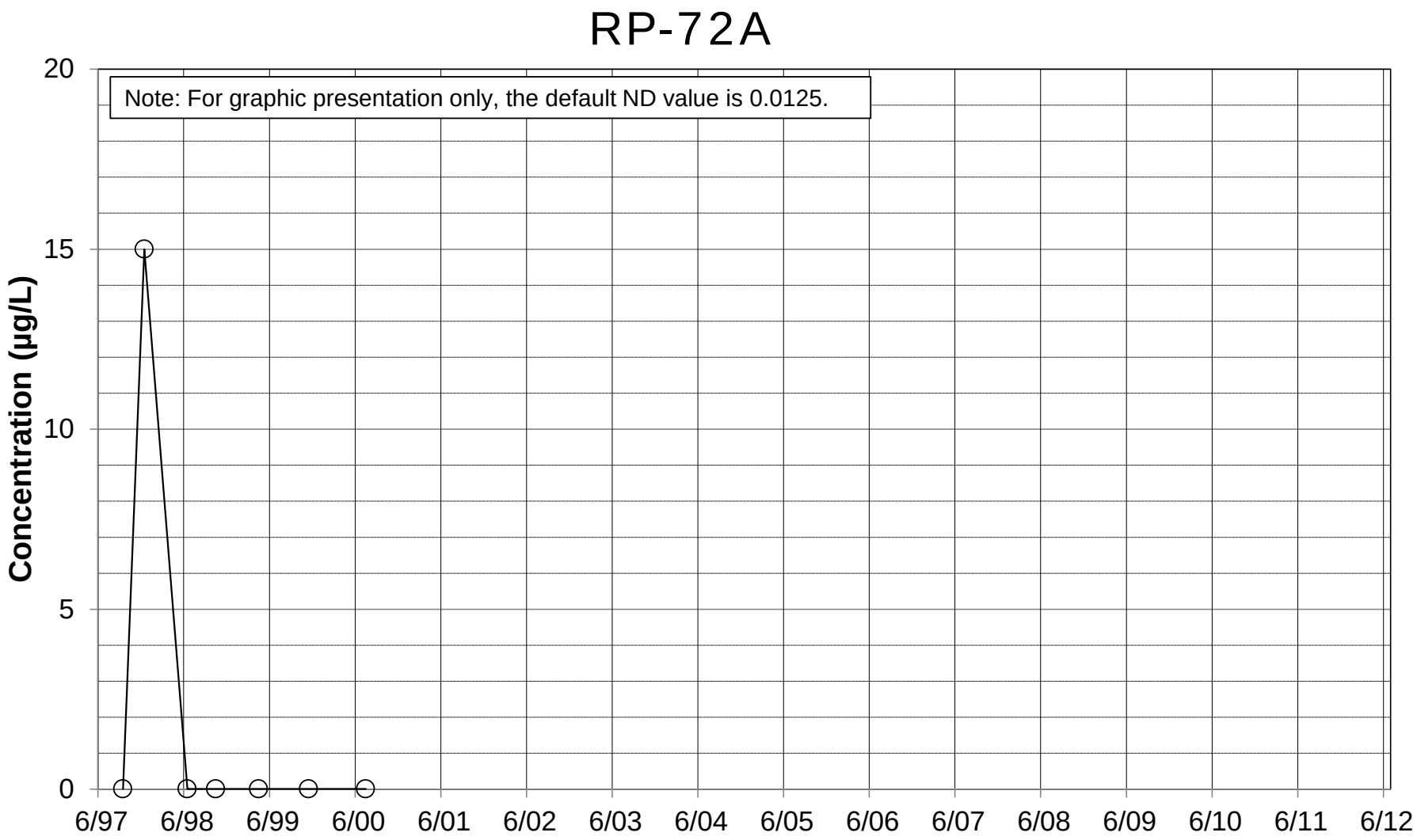

RP-61B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

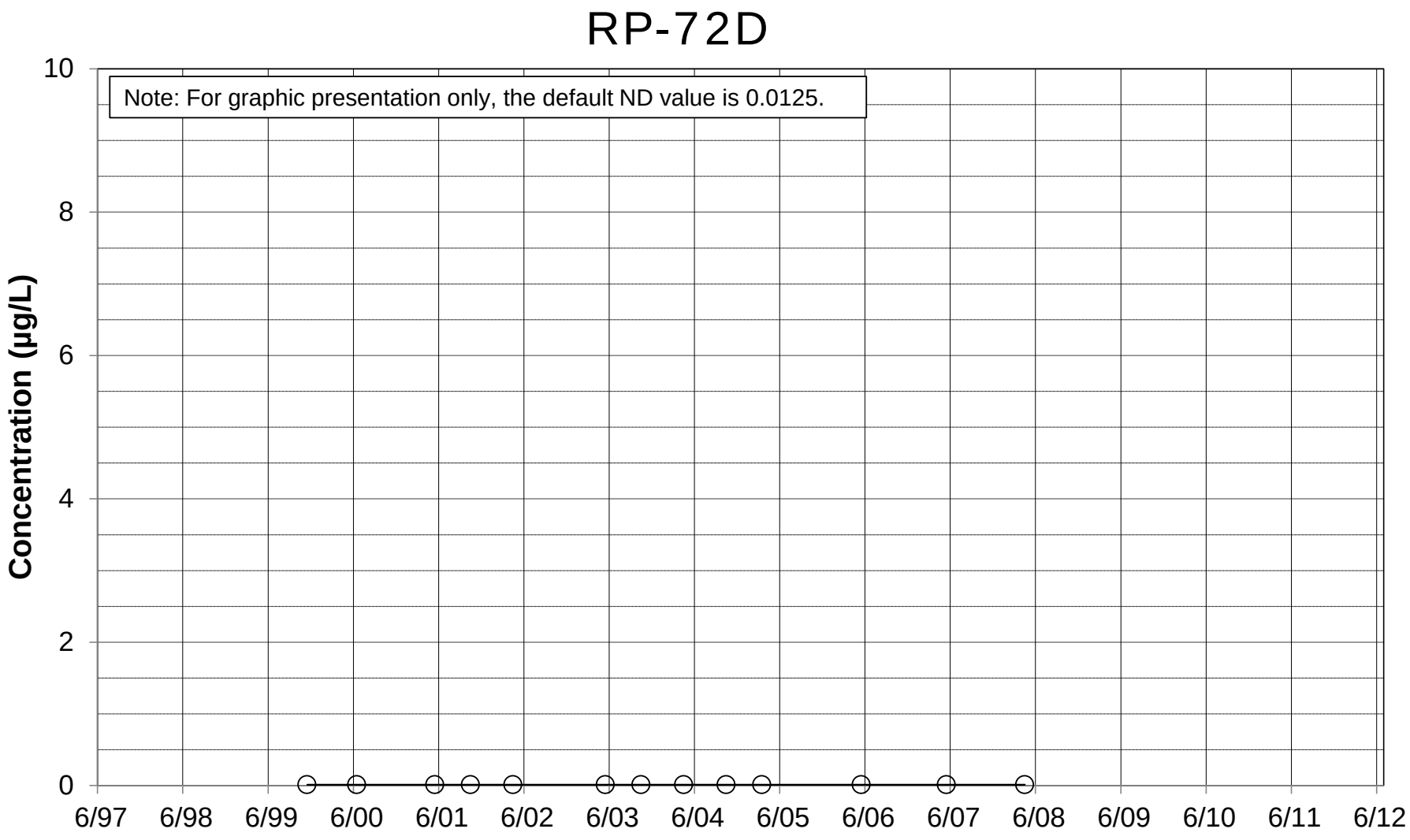

RP-62B-1
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

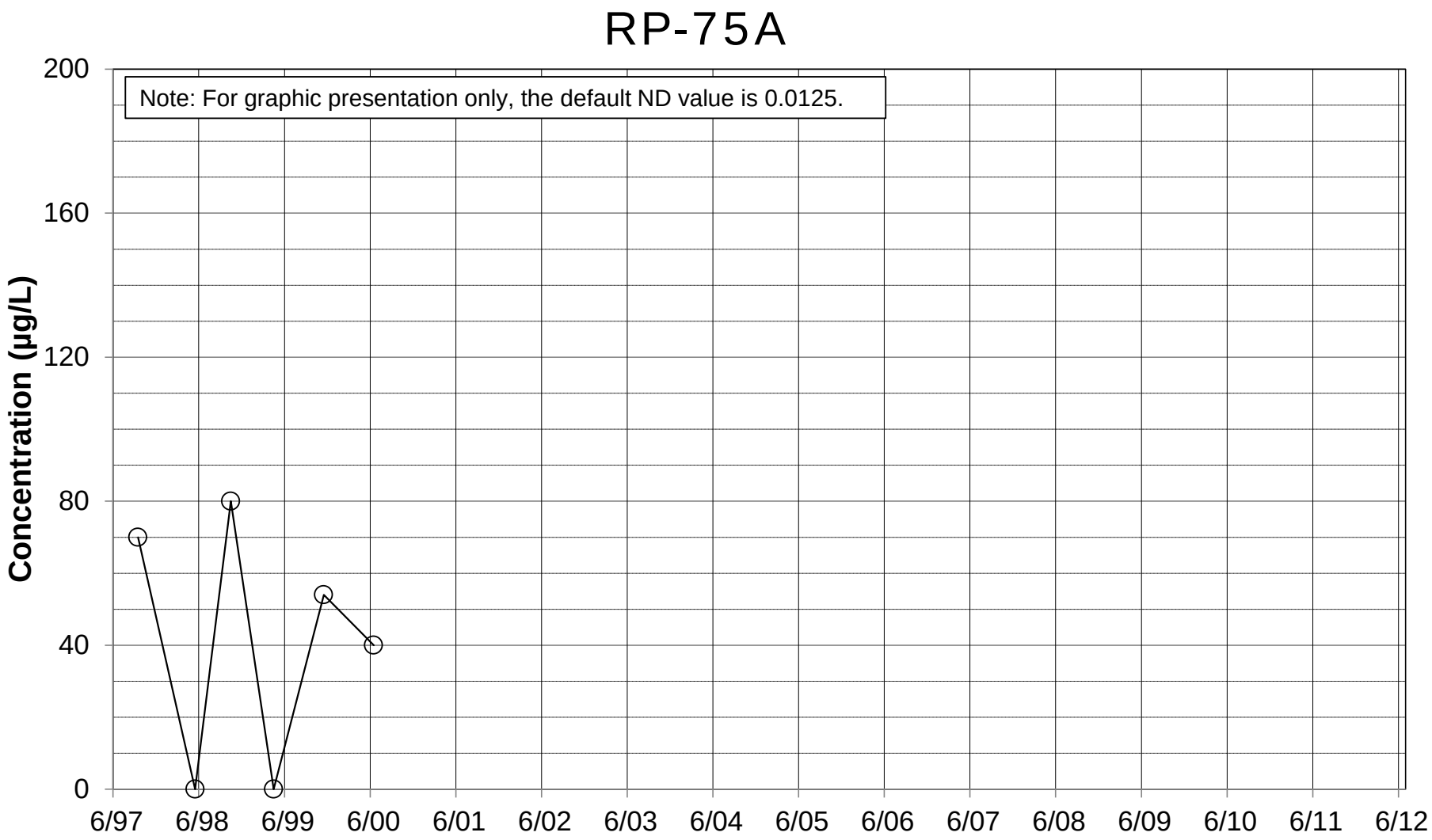

RP-62D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

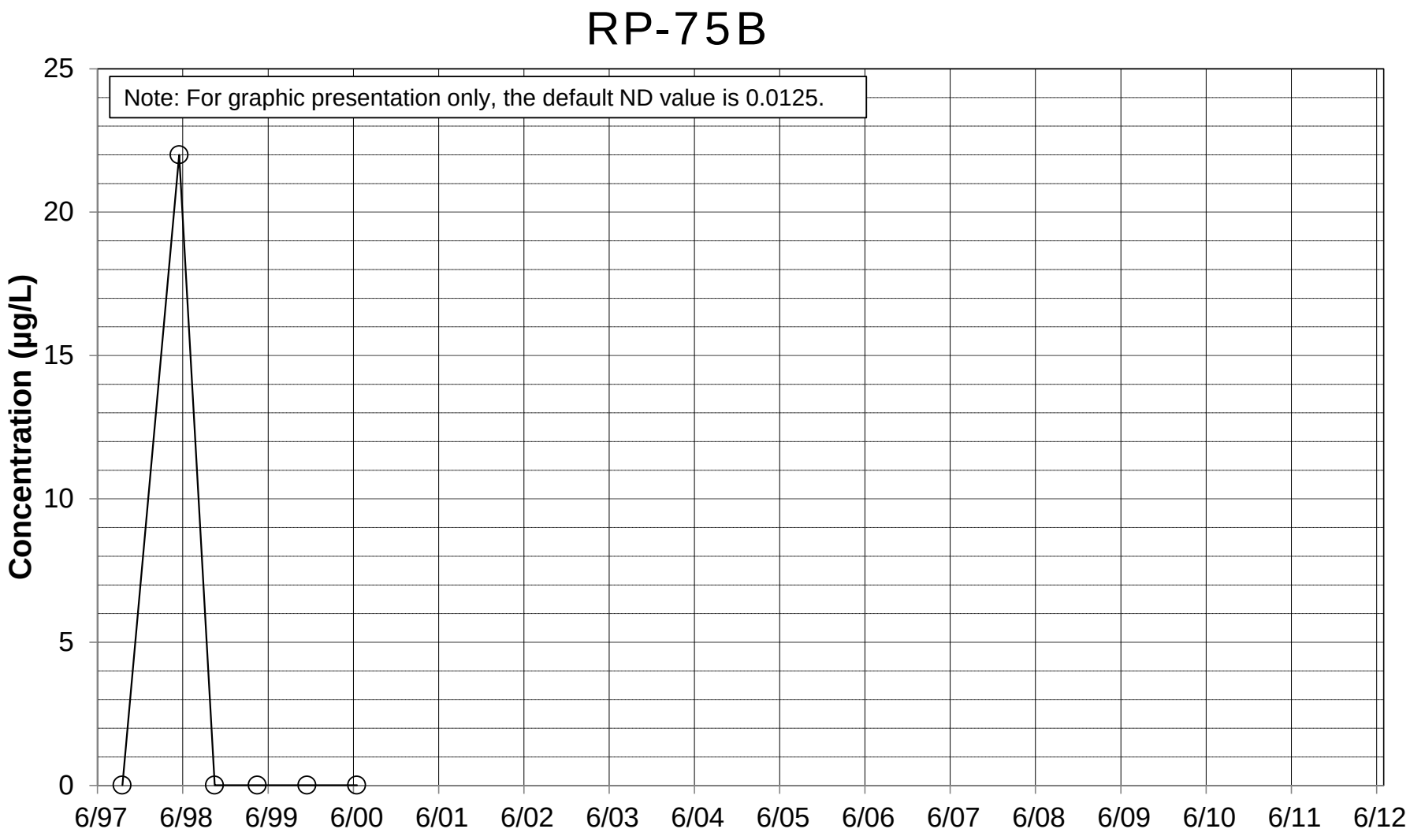

RP-63C
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

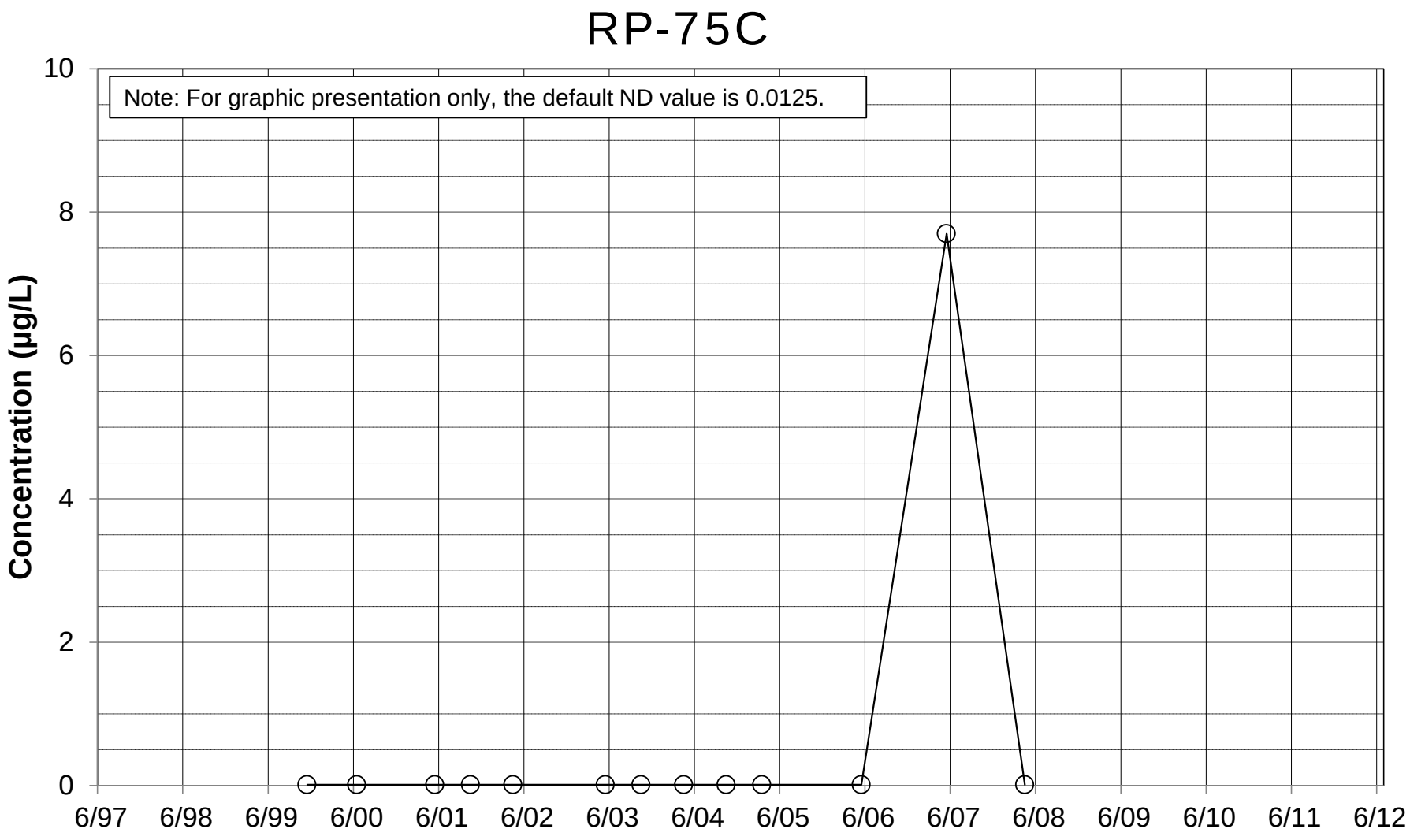

RP-65B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RP-72A
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RP-72D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RP-75A
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
200
160
120
80
40
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RP-75B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
25
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RP-75C
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
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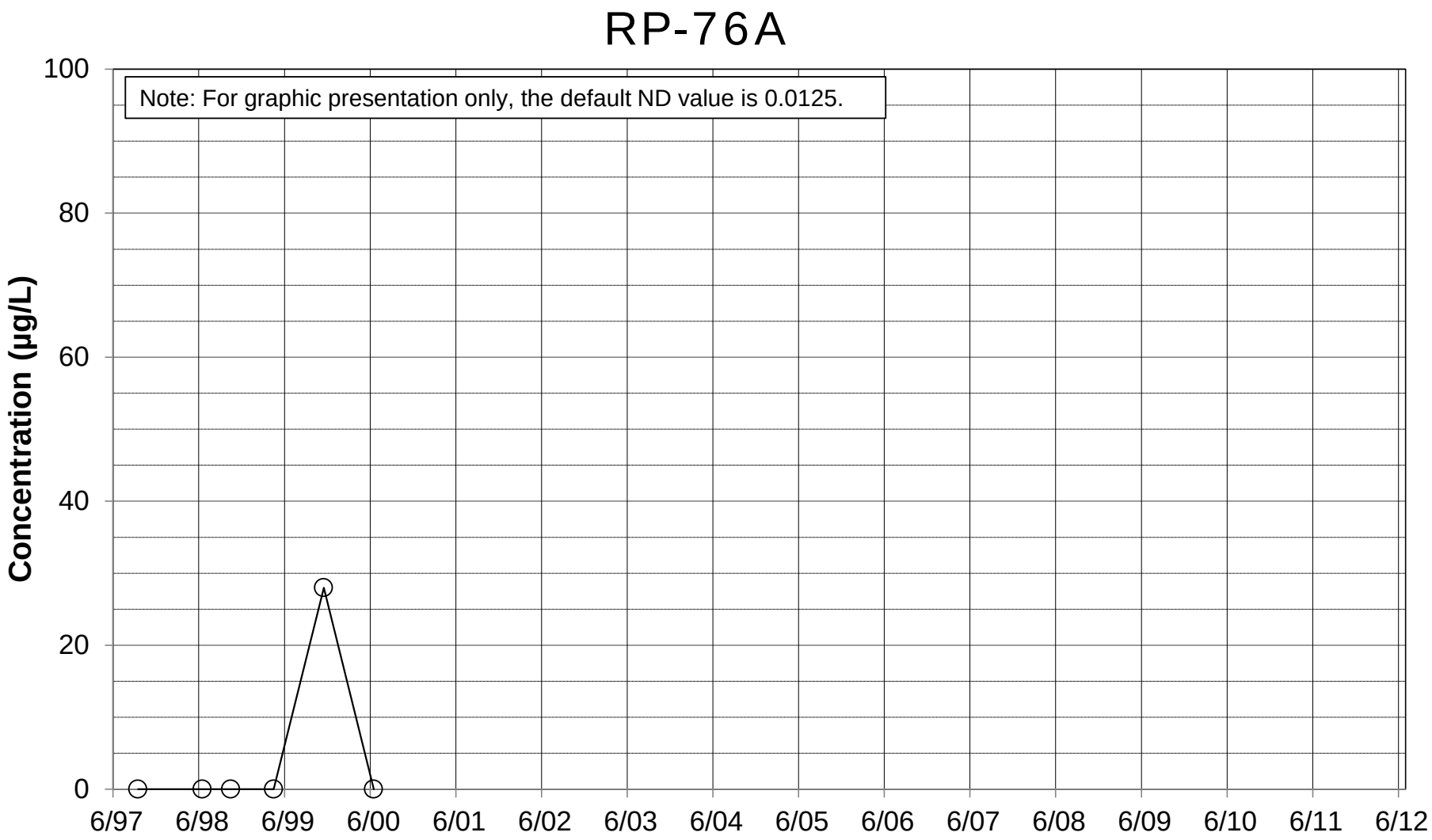
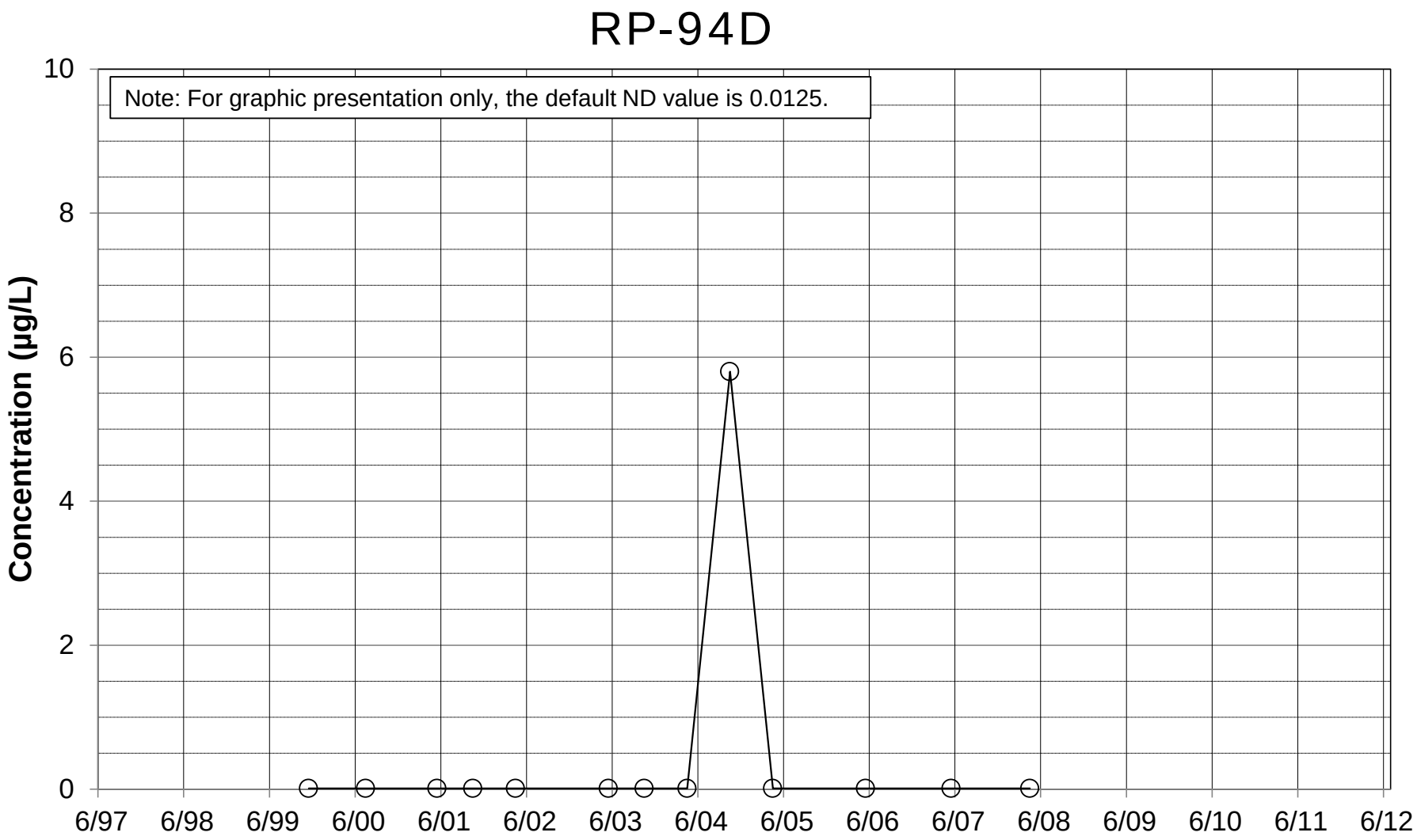
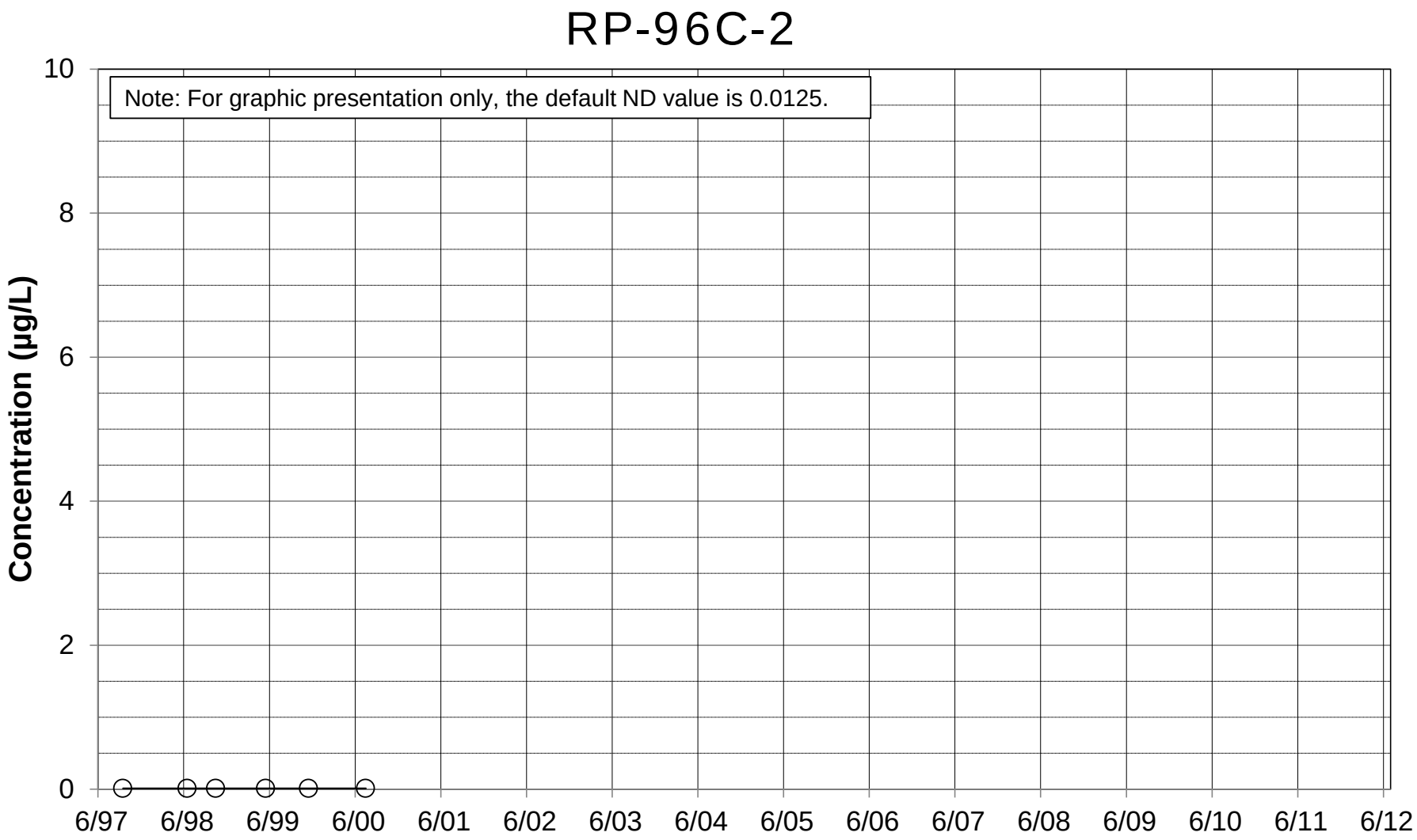
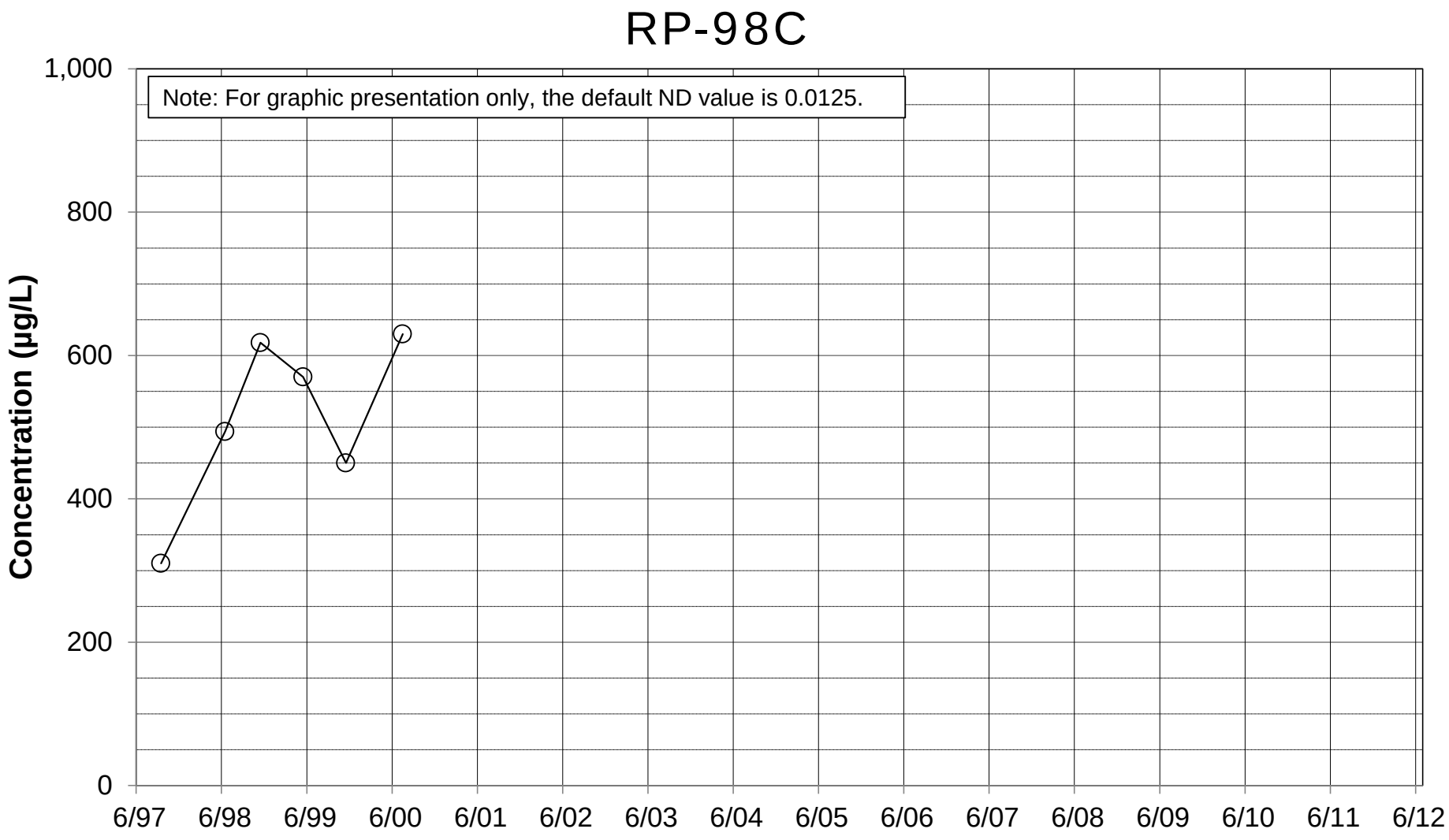
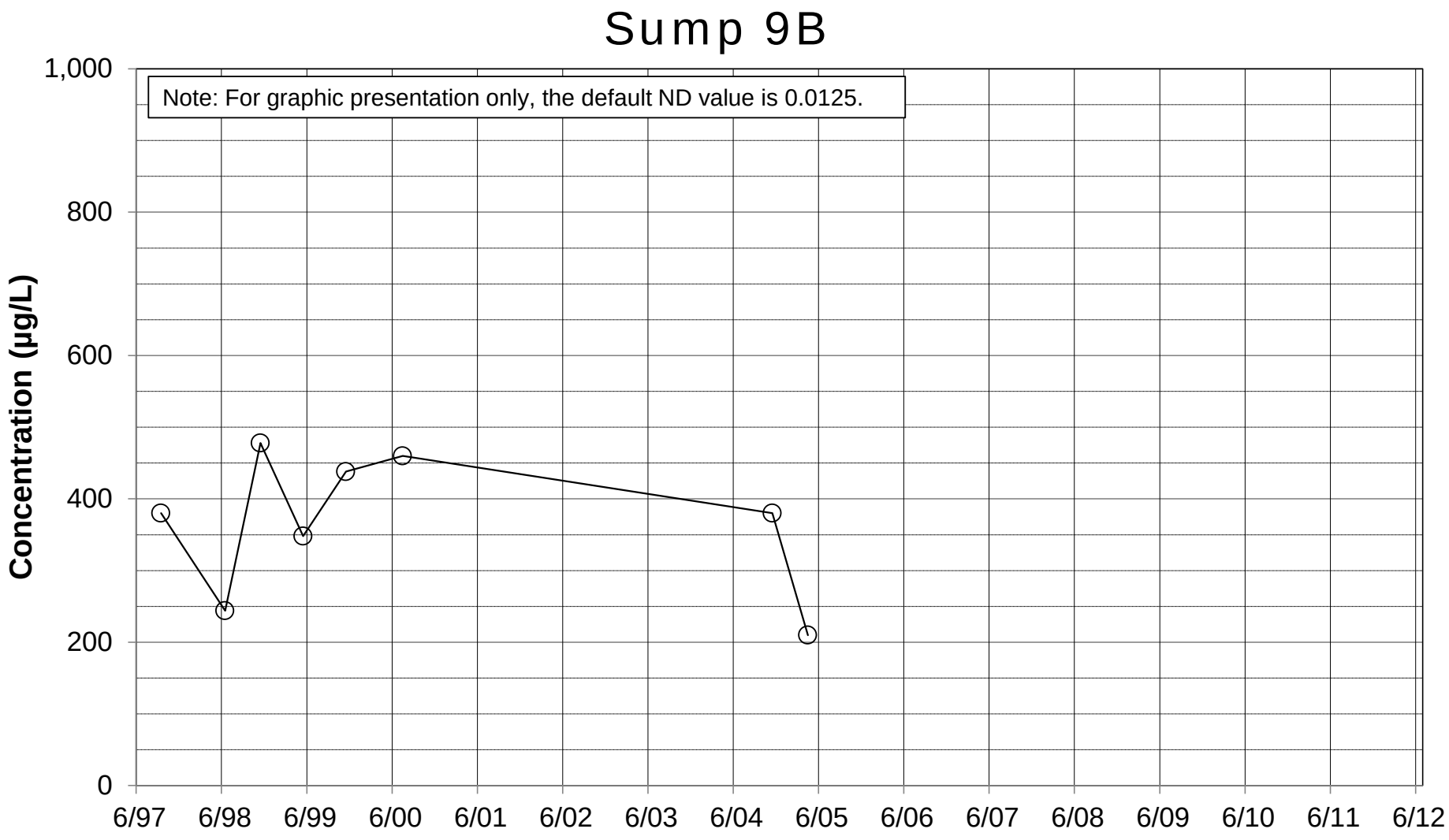
6/08
6/09
6/10
6/11
6/12

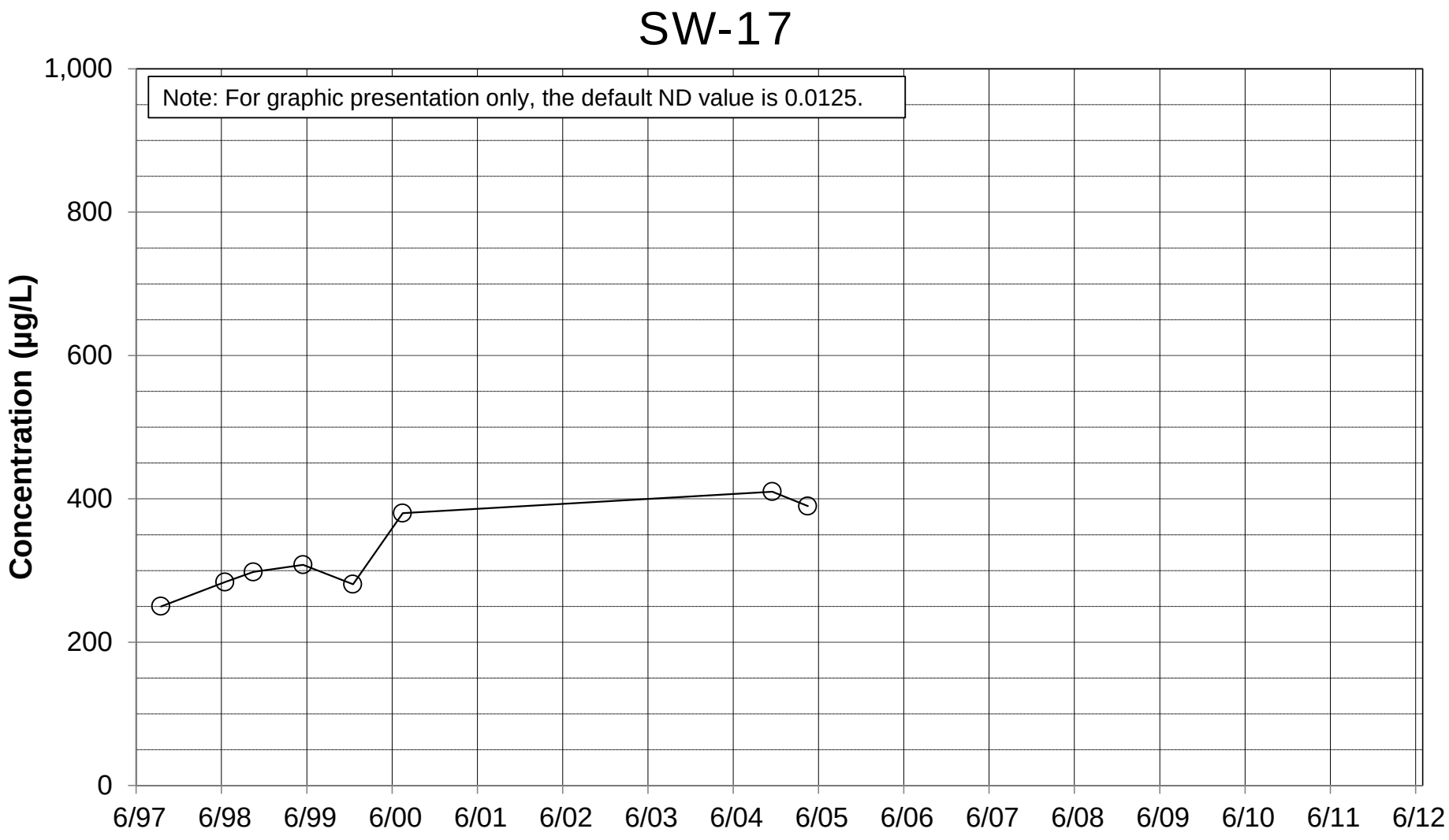

RP-76A
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

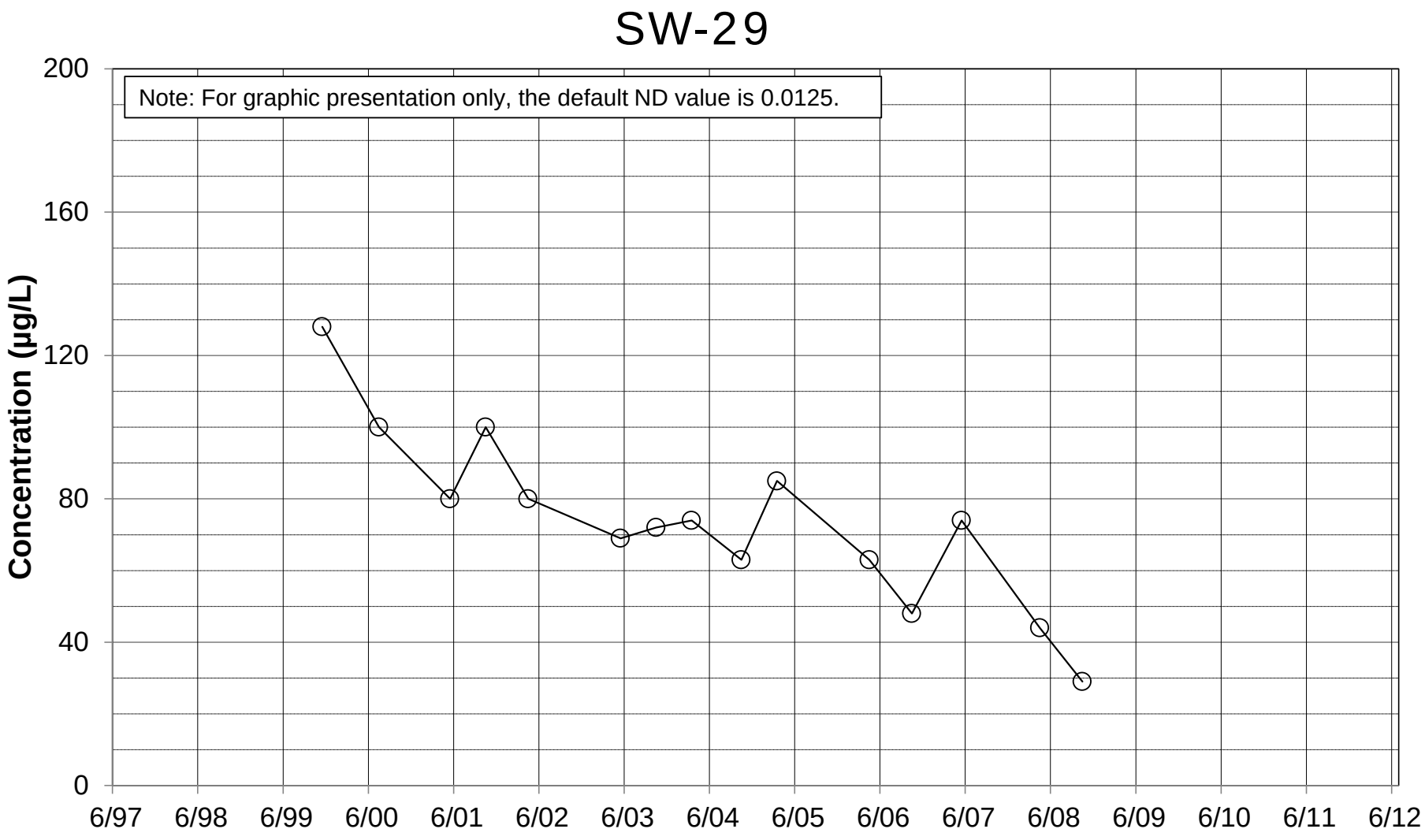

RP-94D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

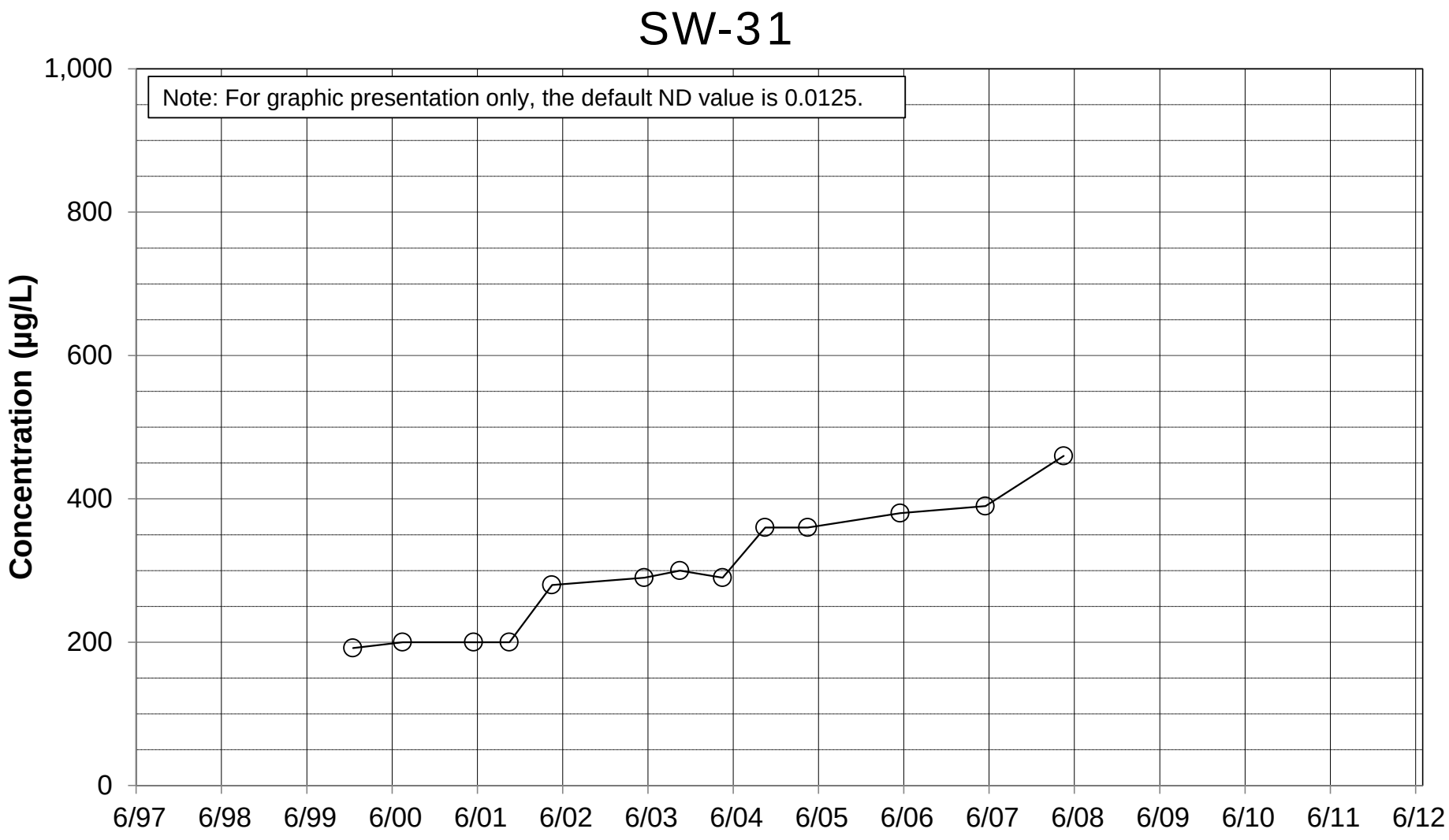

RP-96C-2
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

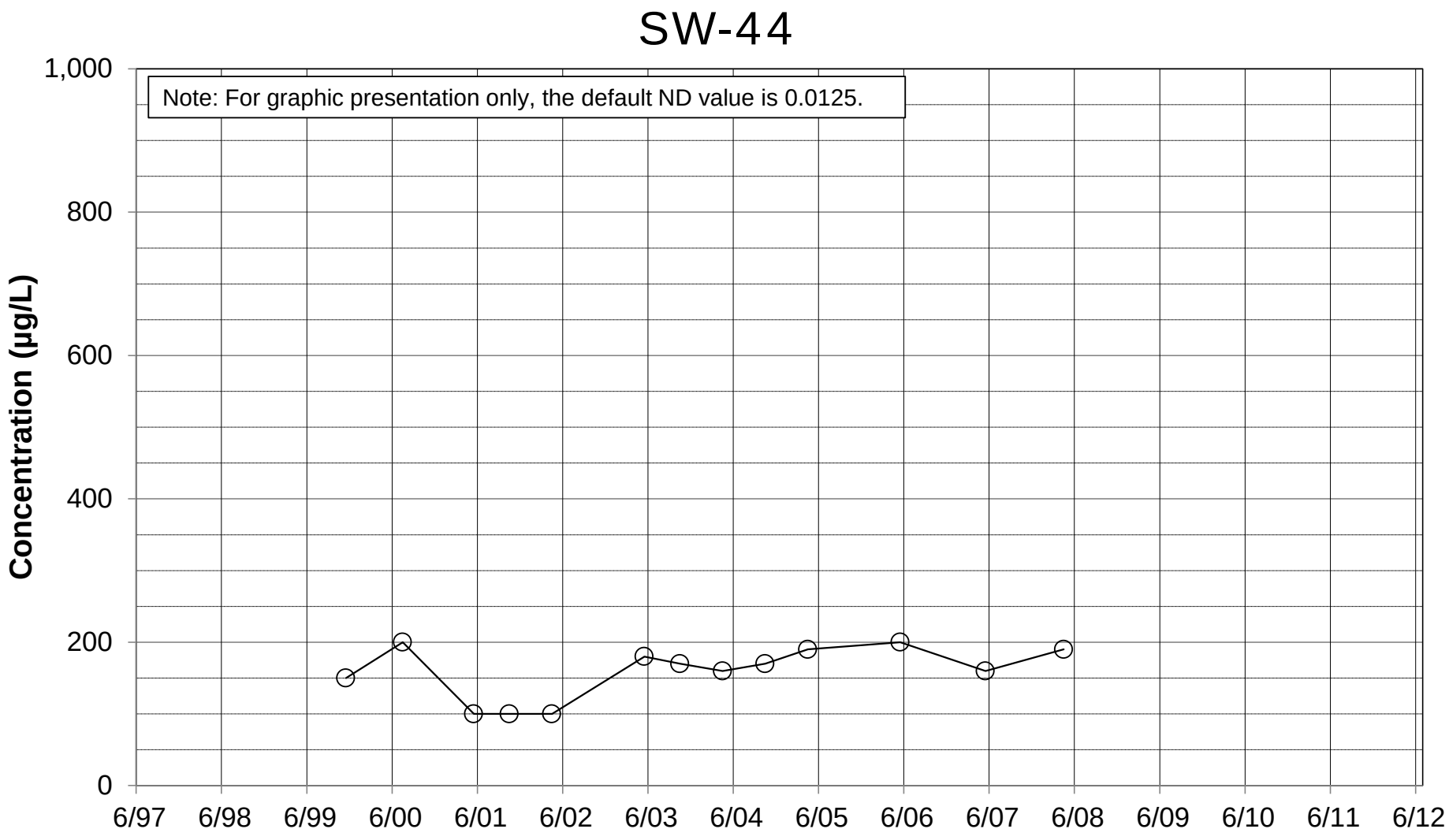

RP-98C
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

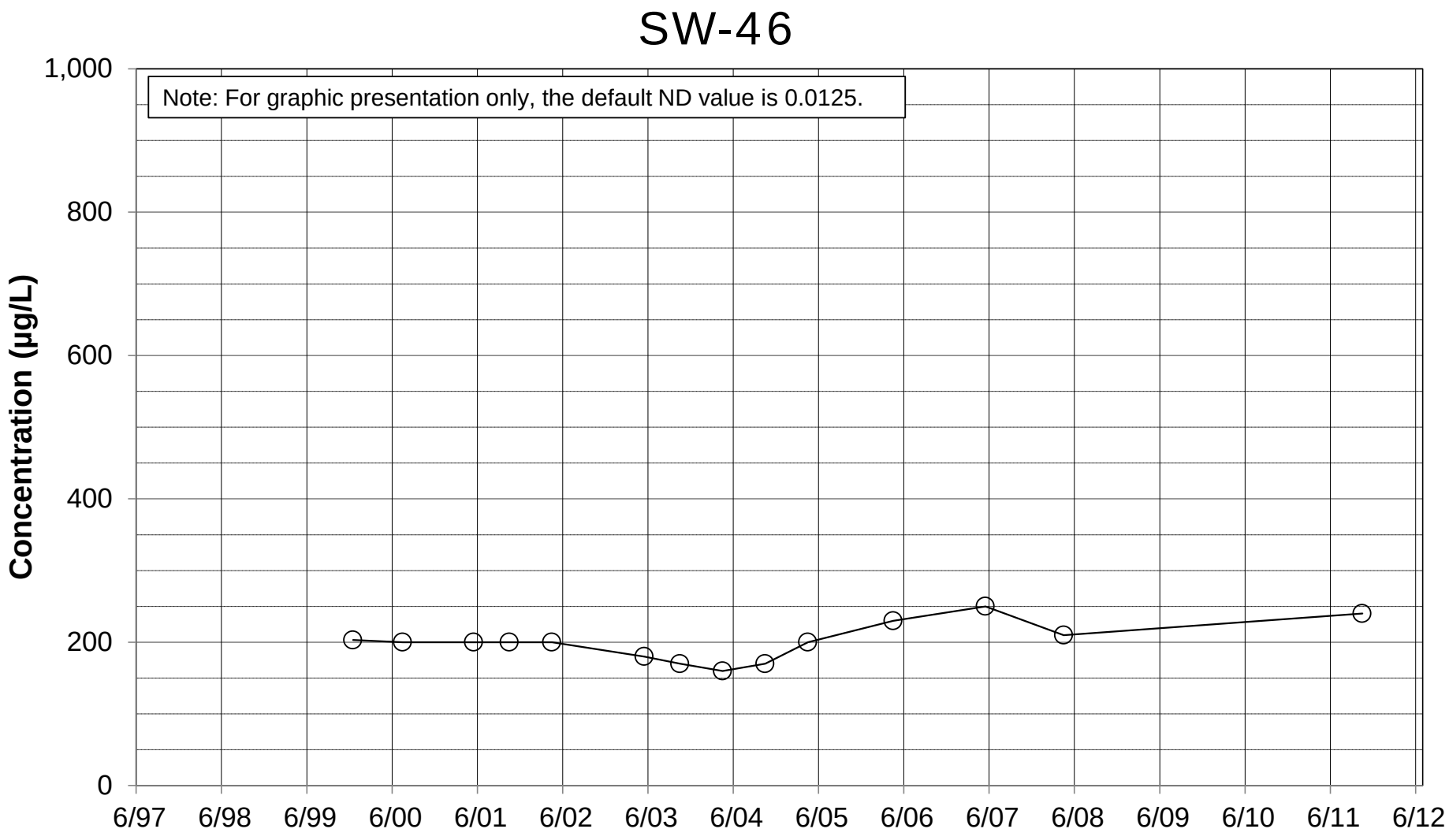

Sump 9B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

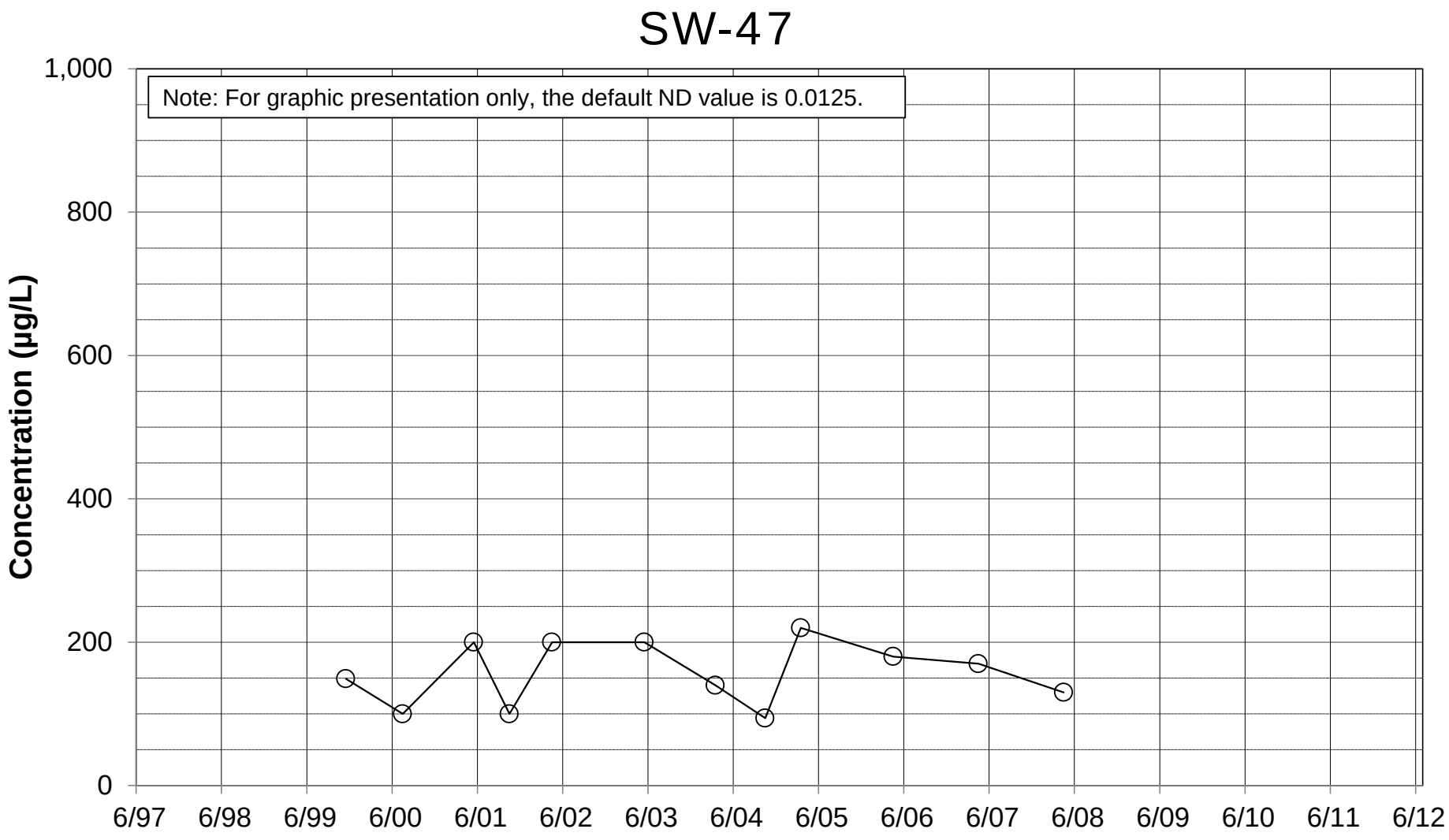

SW-17
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

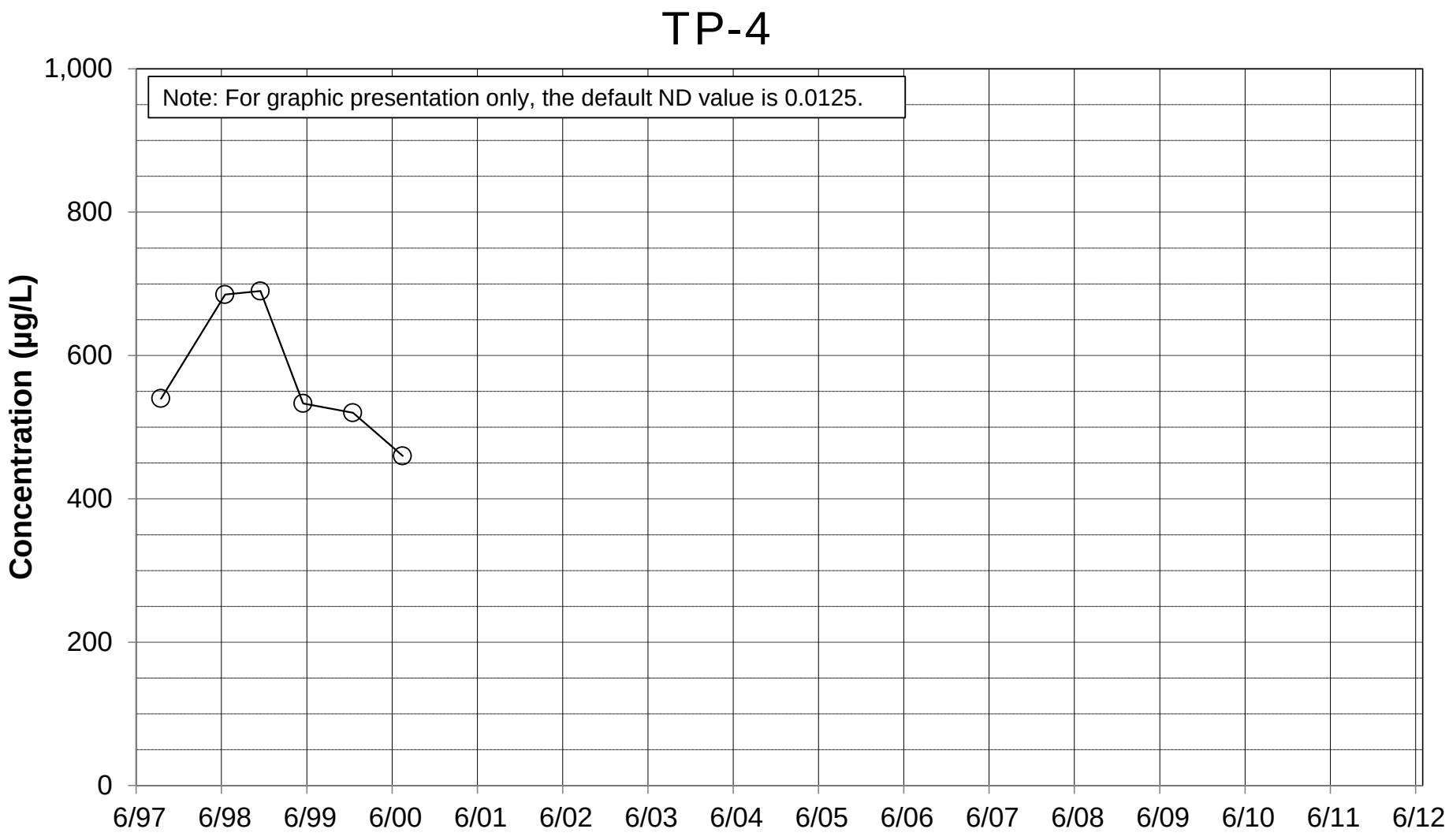

SW-29
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
200
160
120
80
40
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

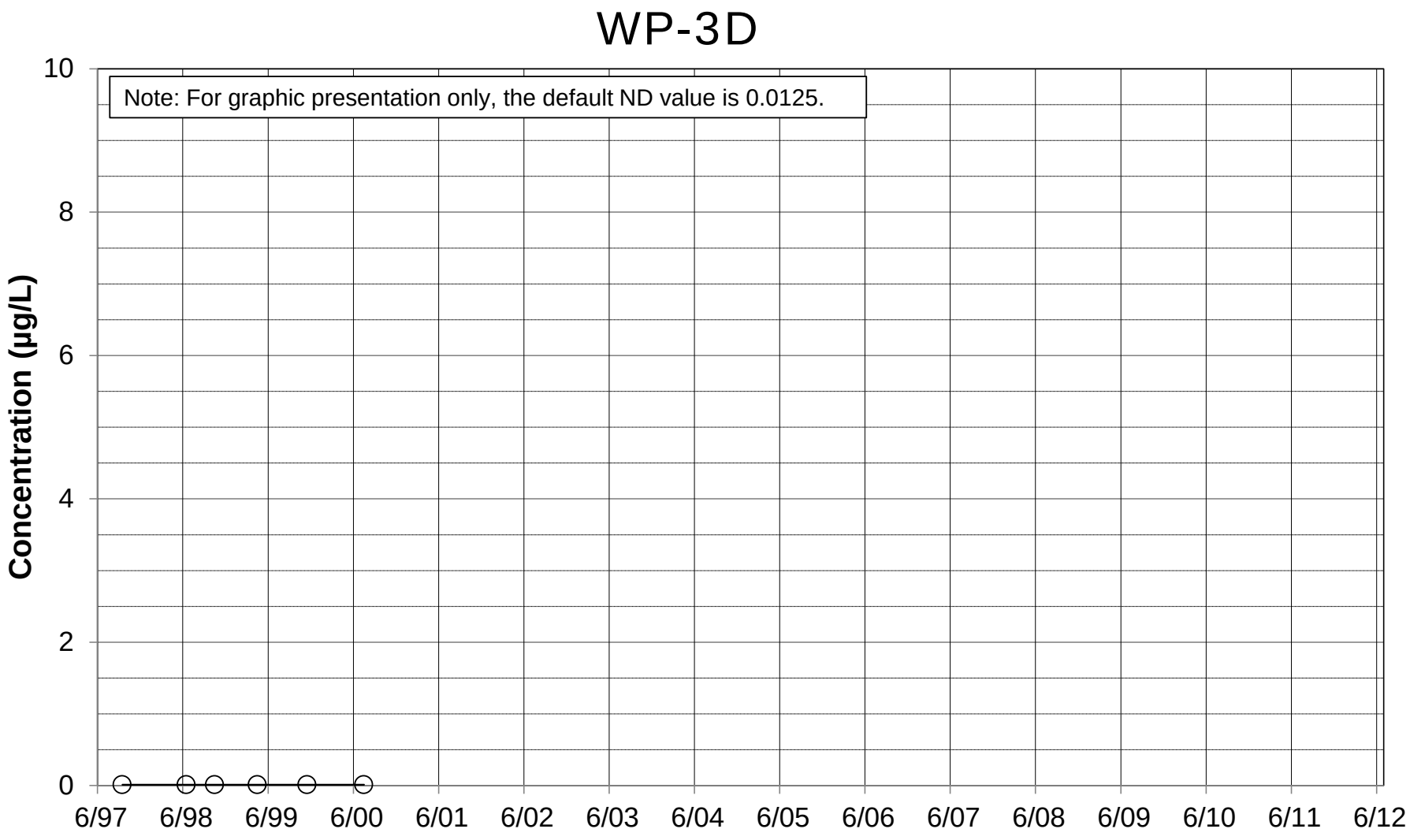

SW-31
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

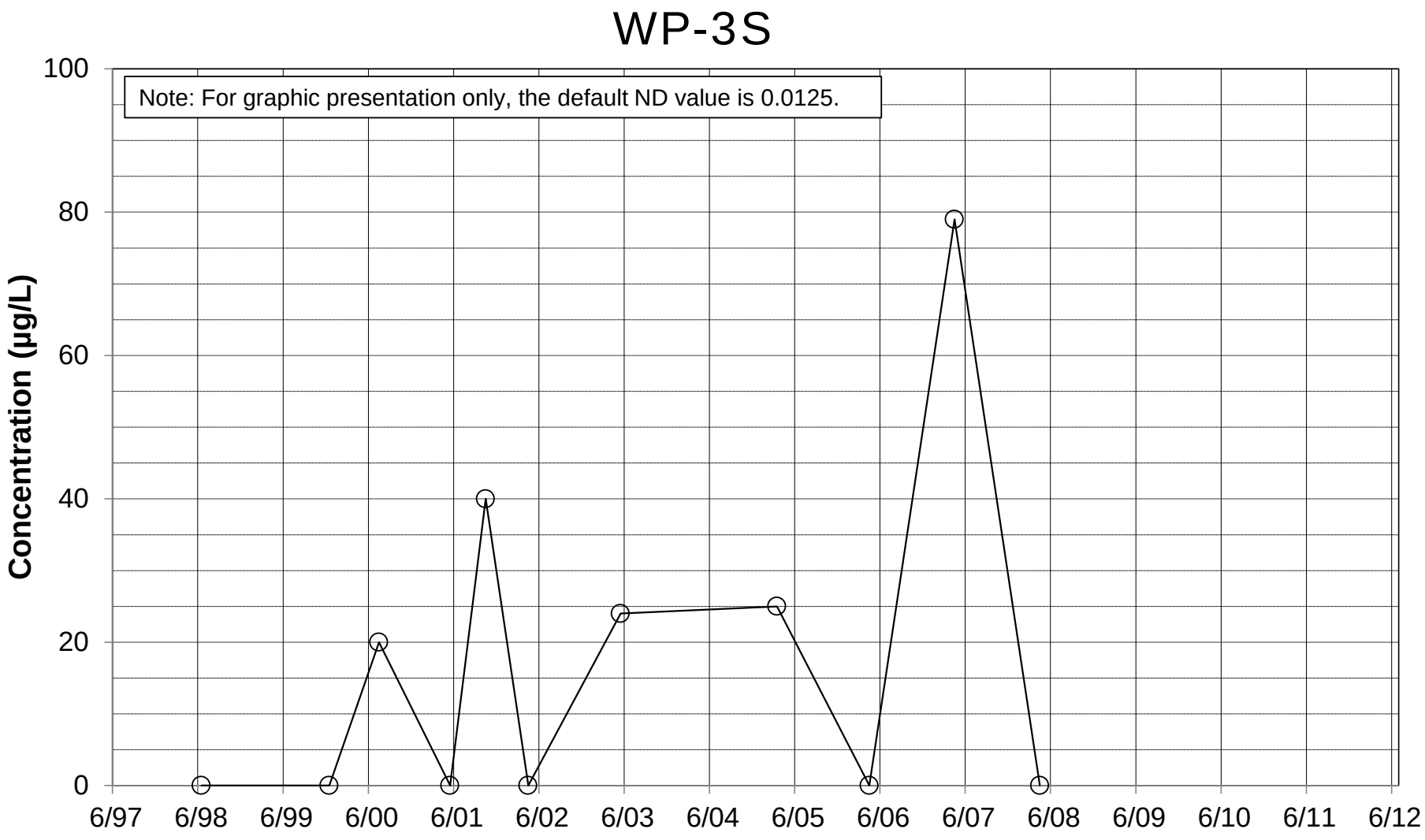

SW-44
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

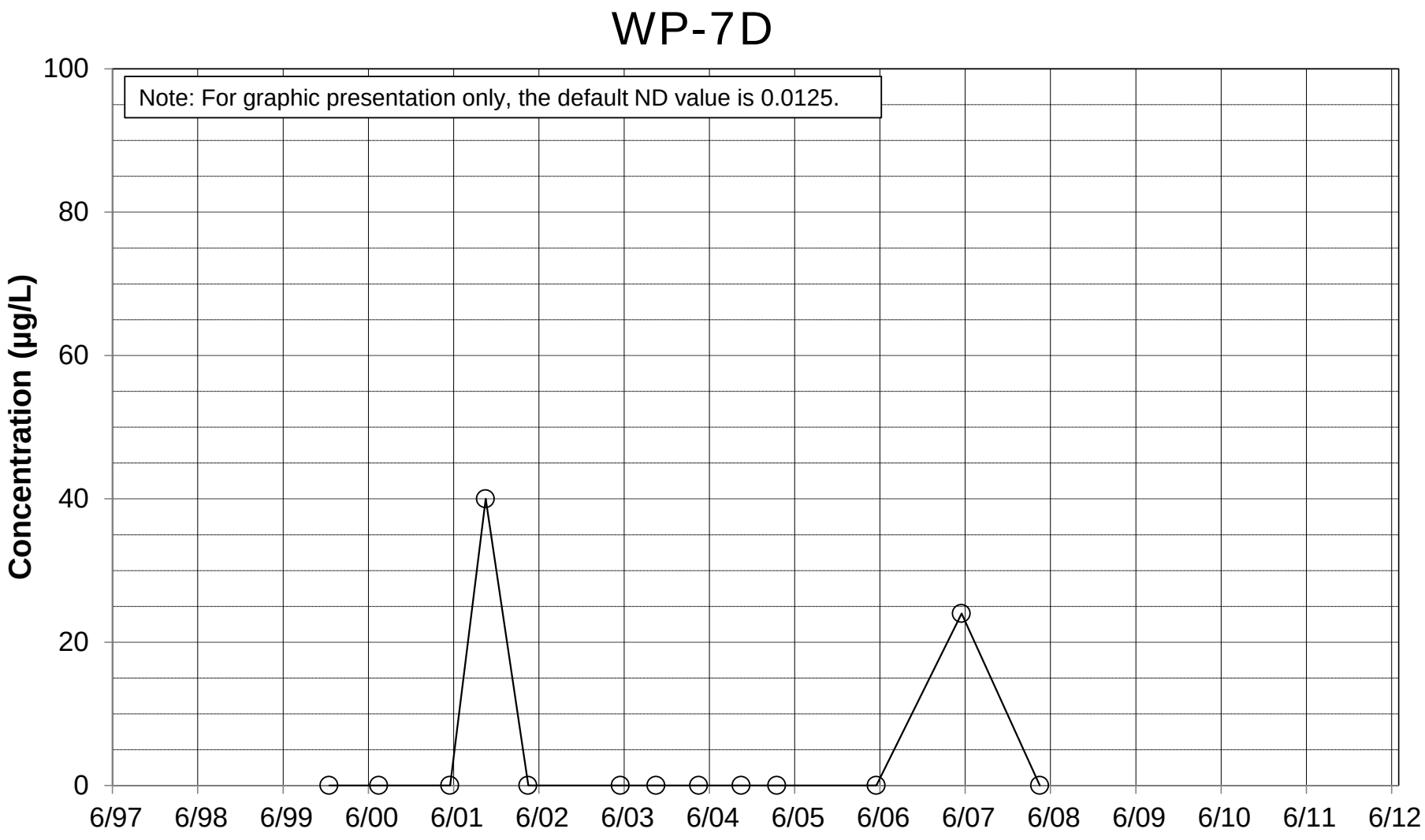

SW-46
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

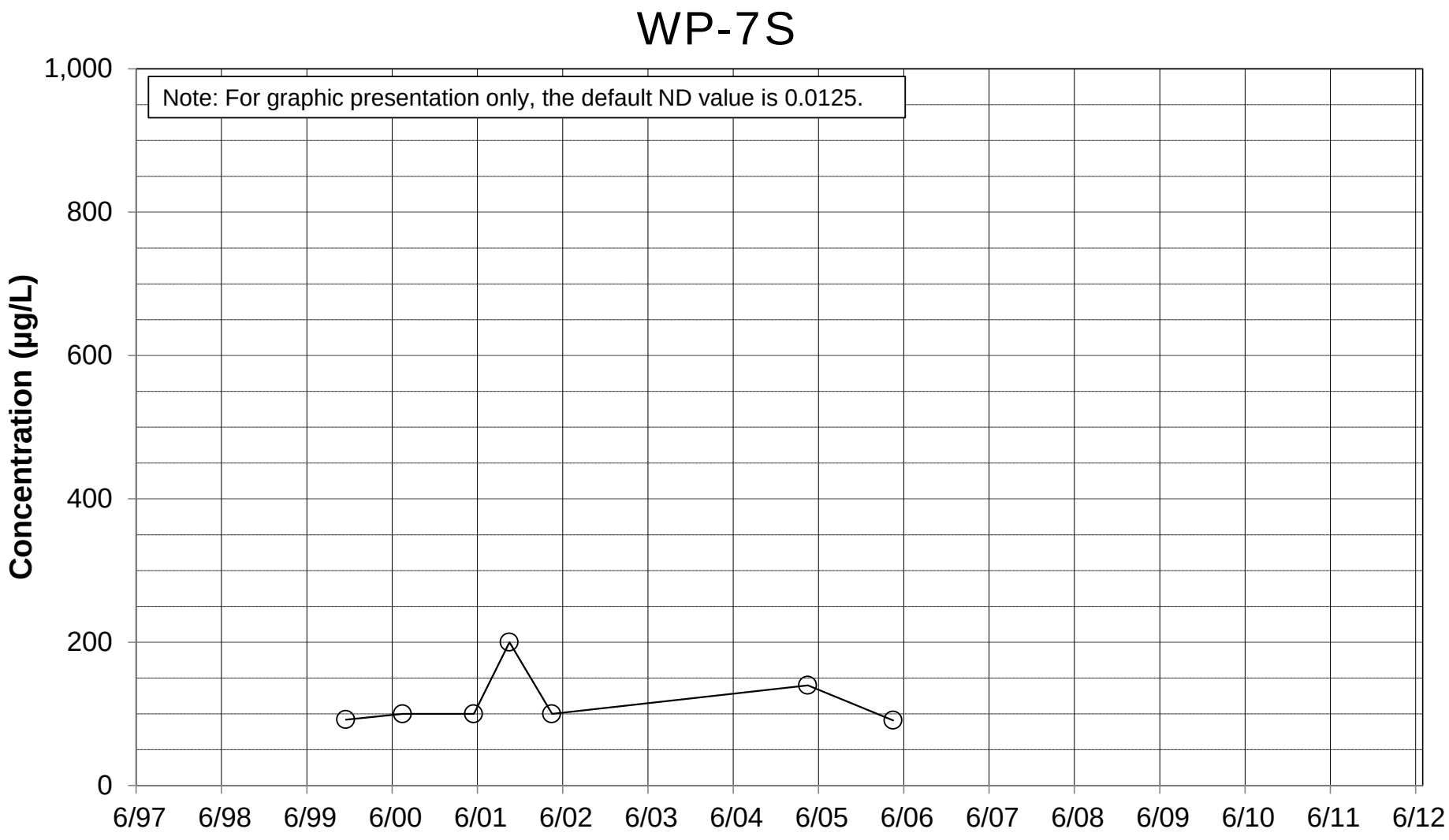

SW-47
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

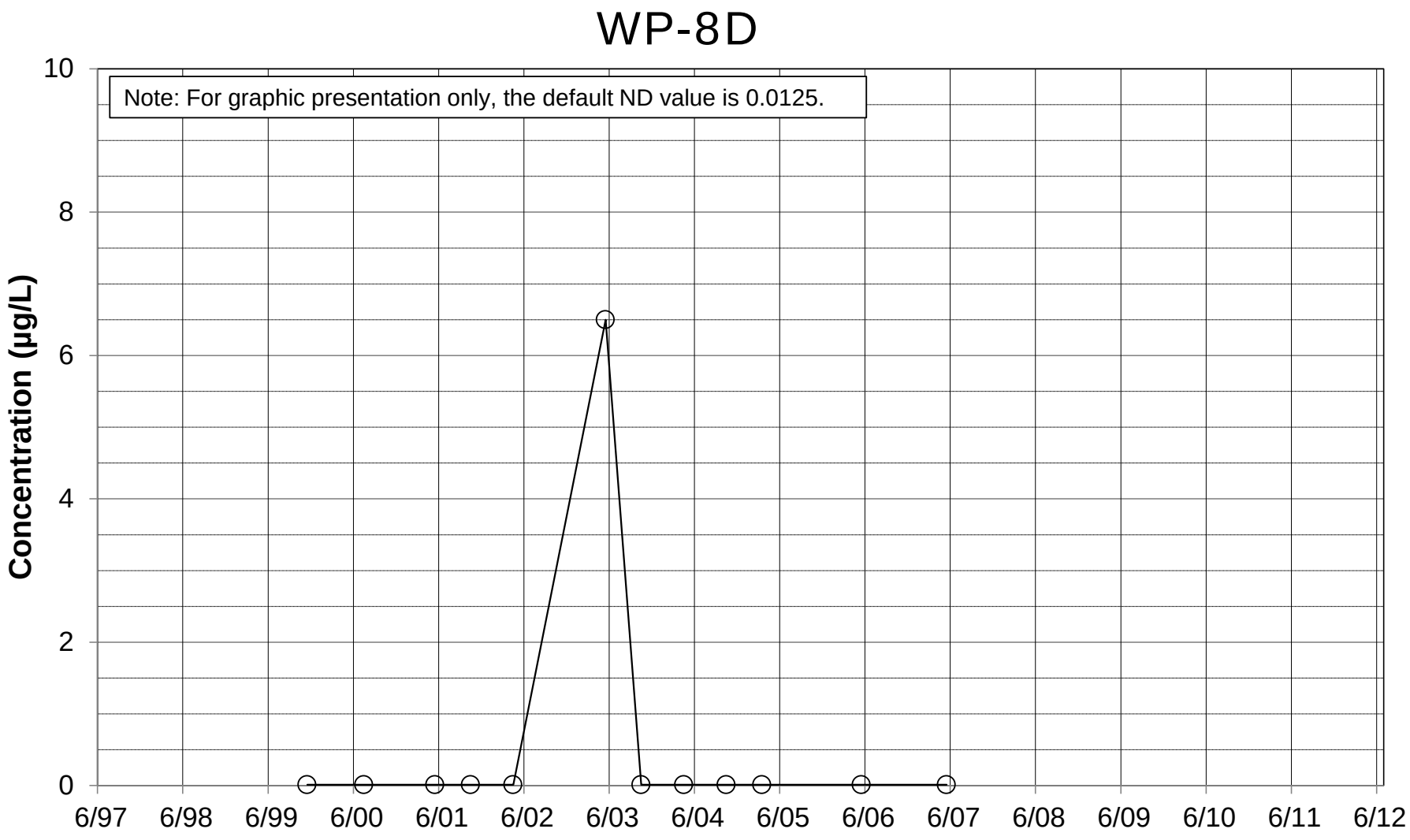

TP-4
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

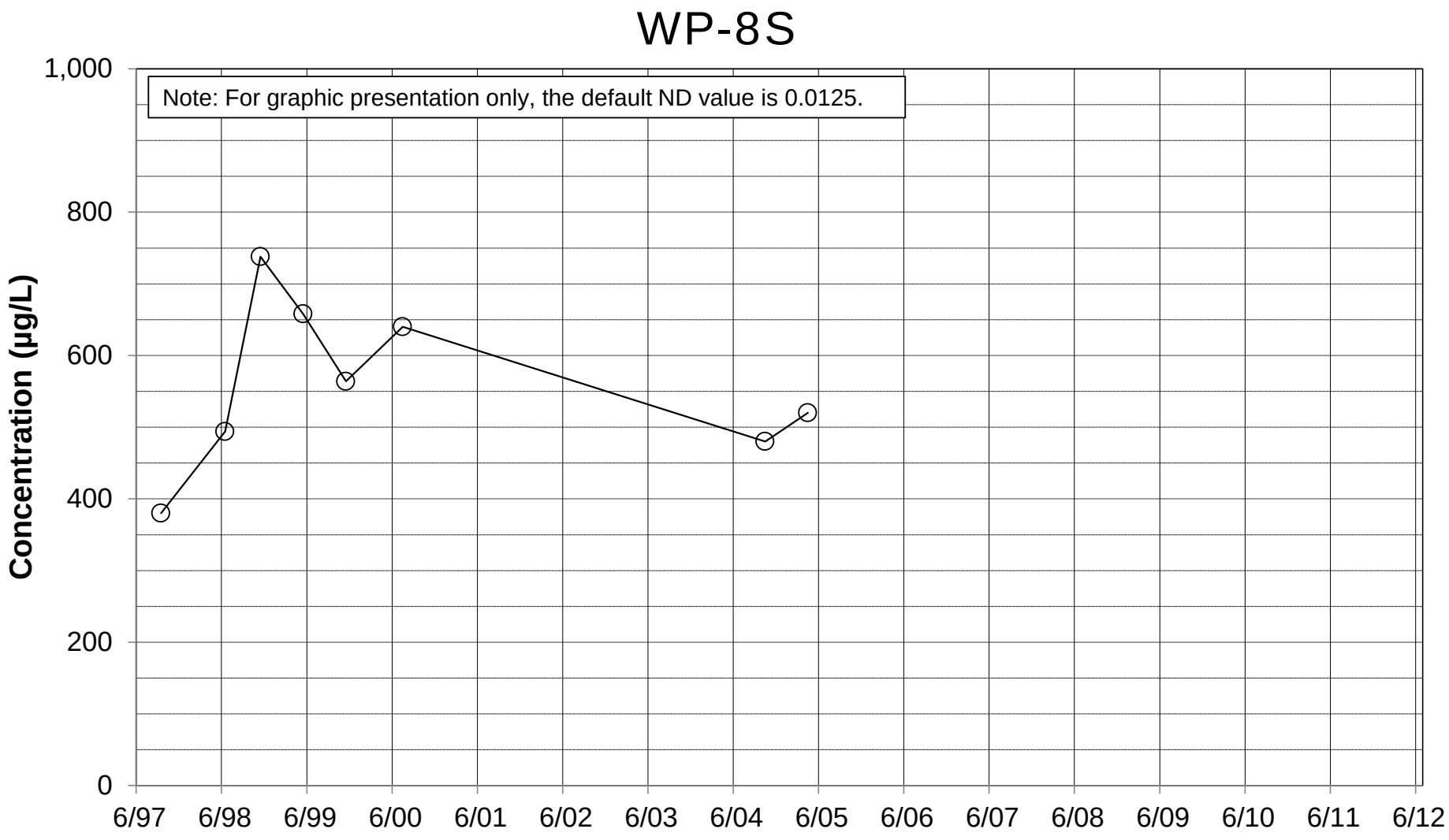

WP-3D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

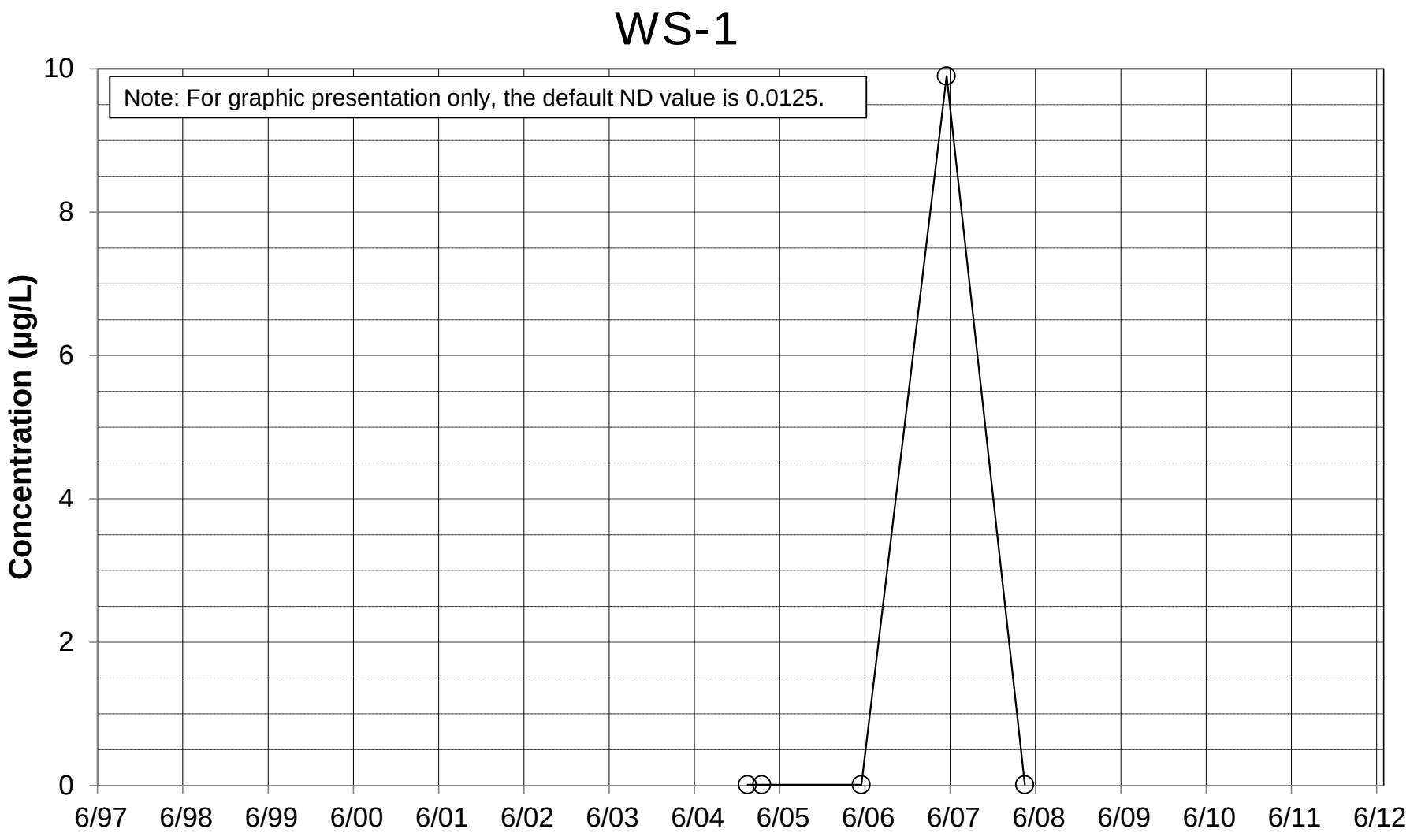

WP-3S
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

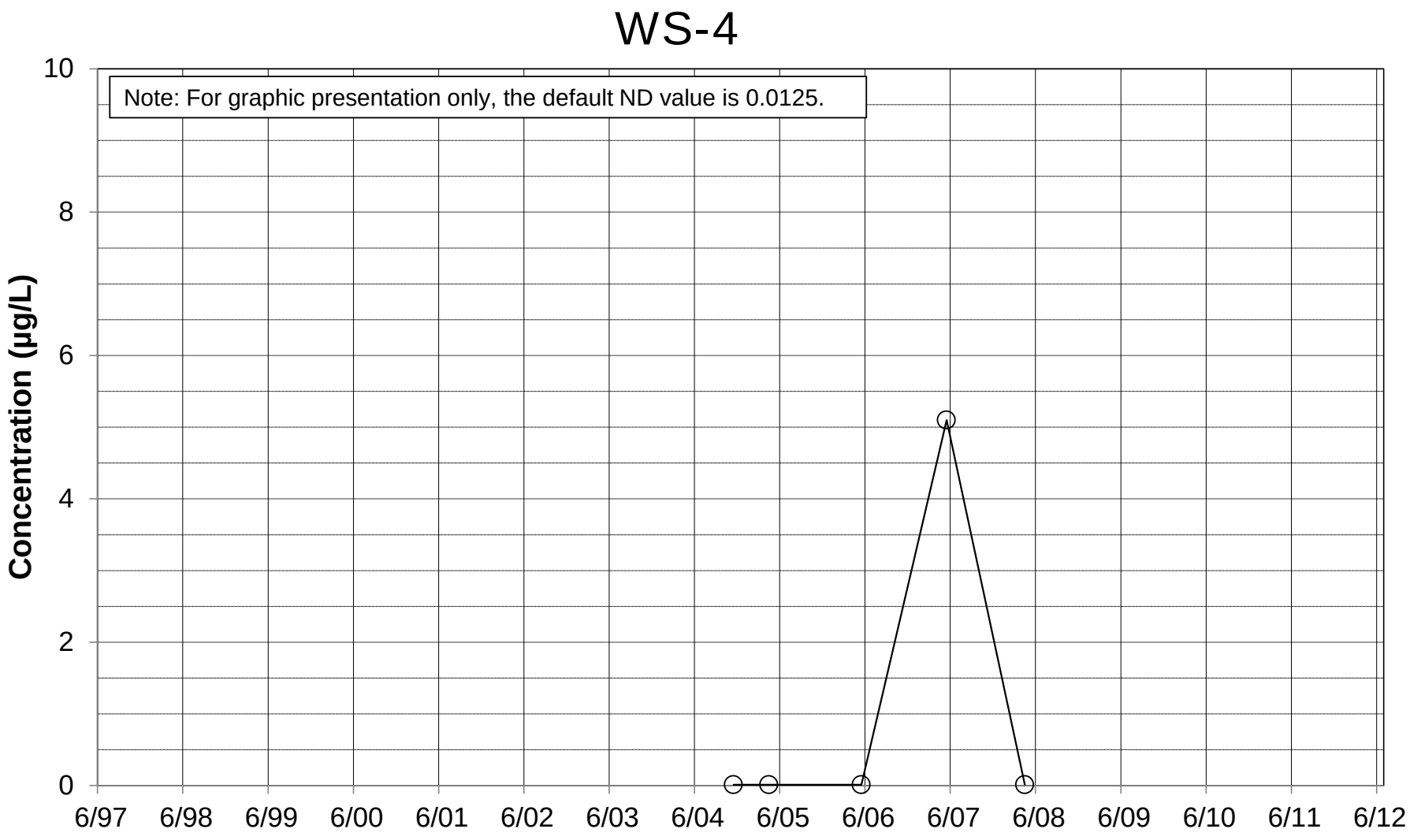

WP-7D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


WP-7S
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


WP-8D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


WP-8S
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


WS-1
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


WS-4
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

ATTACHMENT D2-4 – HISTORICAL DISSOLVED SELENIUM CONCENTRATIONS IN GROUNDWATER

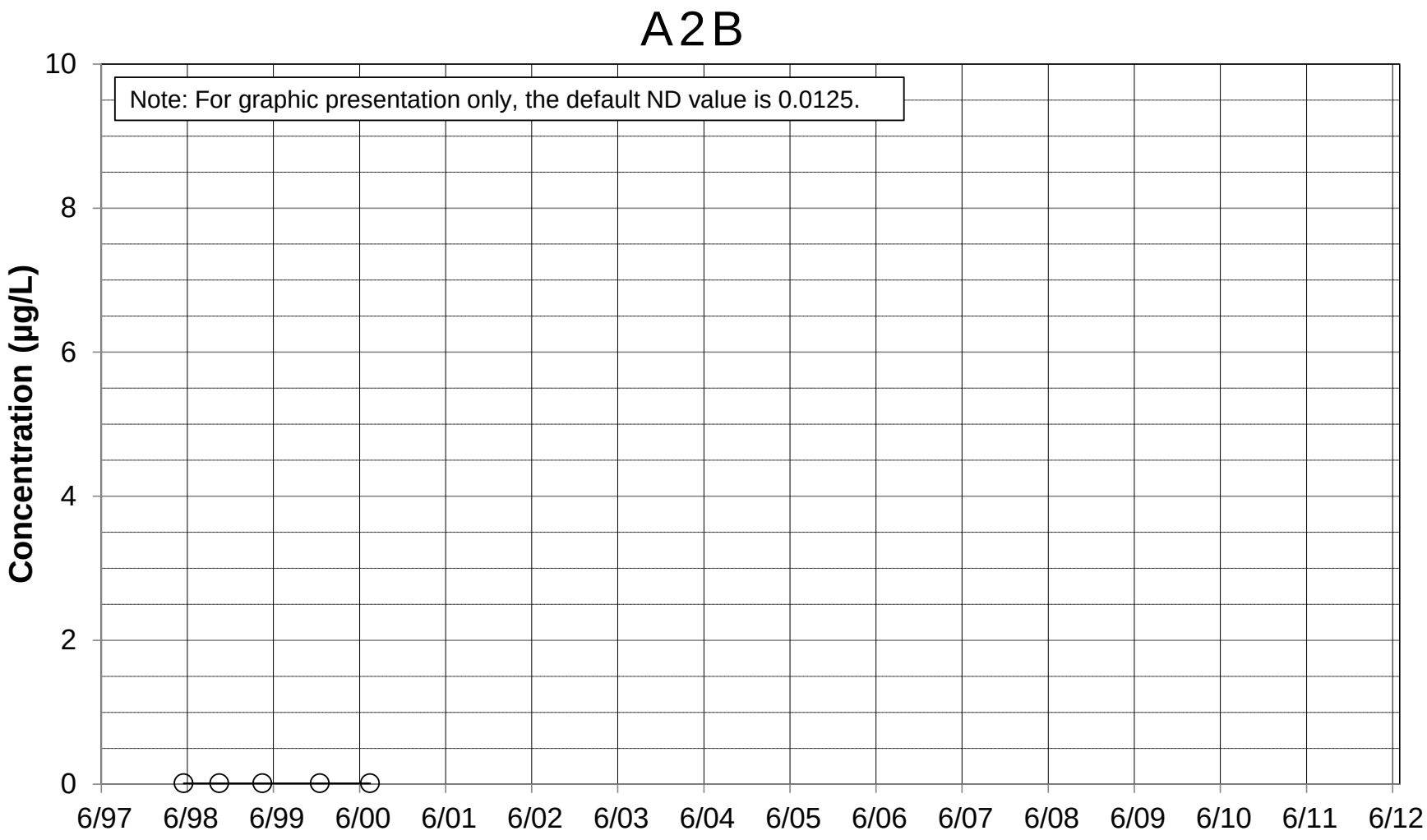
FINAL FEASIBILITY STUDY
CASMALIA RESOURCES SUPERFUND SITE
CASMALIA, CALIFORNIA

Prepared by: ERM

LIST OF CHARTS

A2B
A-Series Pond
B3B
B3M
B-5
C3M
C-5
DB-1
Gallery Well
MW-18C
MW-7BU
MW-7C
MW-7D
Pond 13
Pond 18
Pond A-5
PSCT-1
PSCT-2
PSCT-3
PSCT-4
PZ-P18-5
RAP-1A
RAP-1B
RAP-1C
RAP-3A
RCF Pond
RG-10B
RG-1B
RG-1C
RG-3B
RG-4B
RG-5B
RG-6B
RG-7B
RG-8B
RG-9B
RIMW-1
RIMW-10
RIMW-11
RIMW-2
RIMW-3
RIMW-5
RIMW-7
RIMW-8
RIMW-9

RIPZ-8
RP-100A
RP-101C
RP-103B
RP-107D
RP-109B
RP-109D
RP-13B
RP-17B
RP-1D
RP-20B
RP-28B
RP-41B
RP-4D
RP-53C
RP-54C
RP-55C-2
RP-59B
RP-61B
RP-62B-1
RP-62D
RP-63C
RP-65B
RP-72A
RP-72D
RP-75A
RP-75B
RP-75C
RP-76A
RP-94D
RP-96C-2
RP-98C
Sump 9B
SW-17
SW-29
SW-31
SW-44
SW-46
SW-47
TP-4
WP-3D
WP-3S
WP-7D
WP-7S
WP-8D
WP-8S
WS-1
WS-4


A2B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
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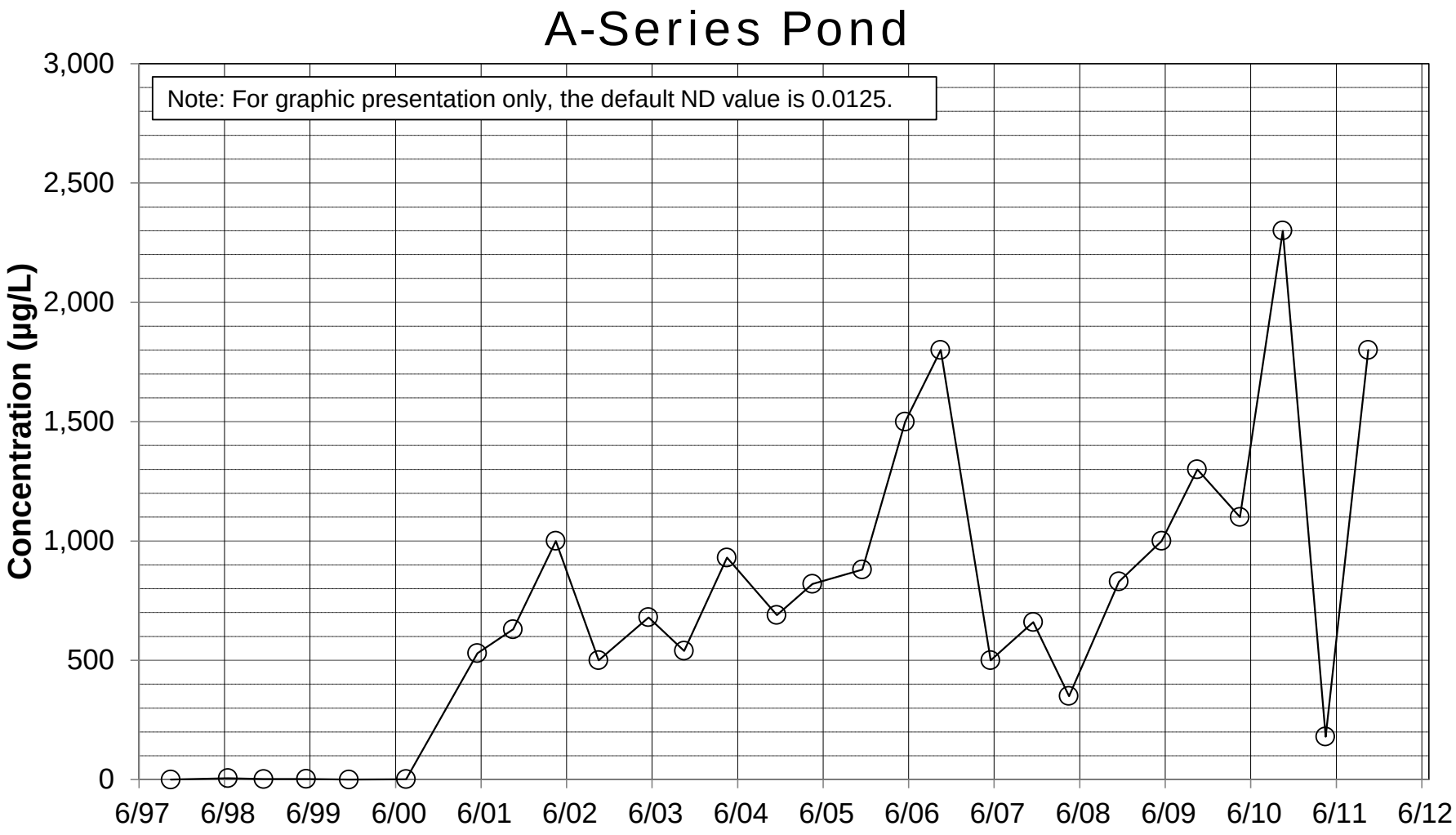
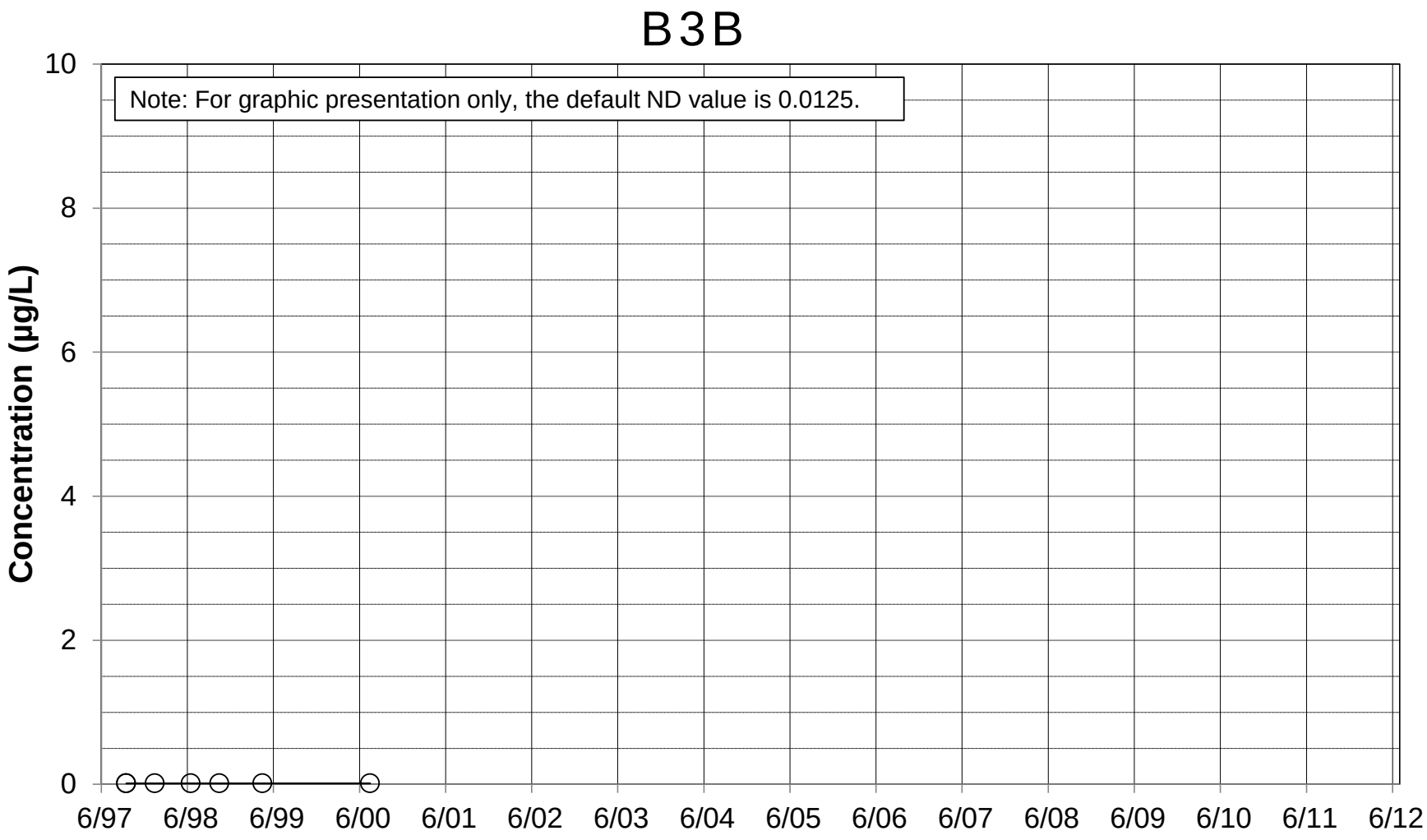
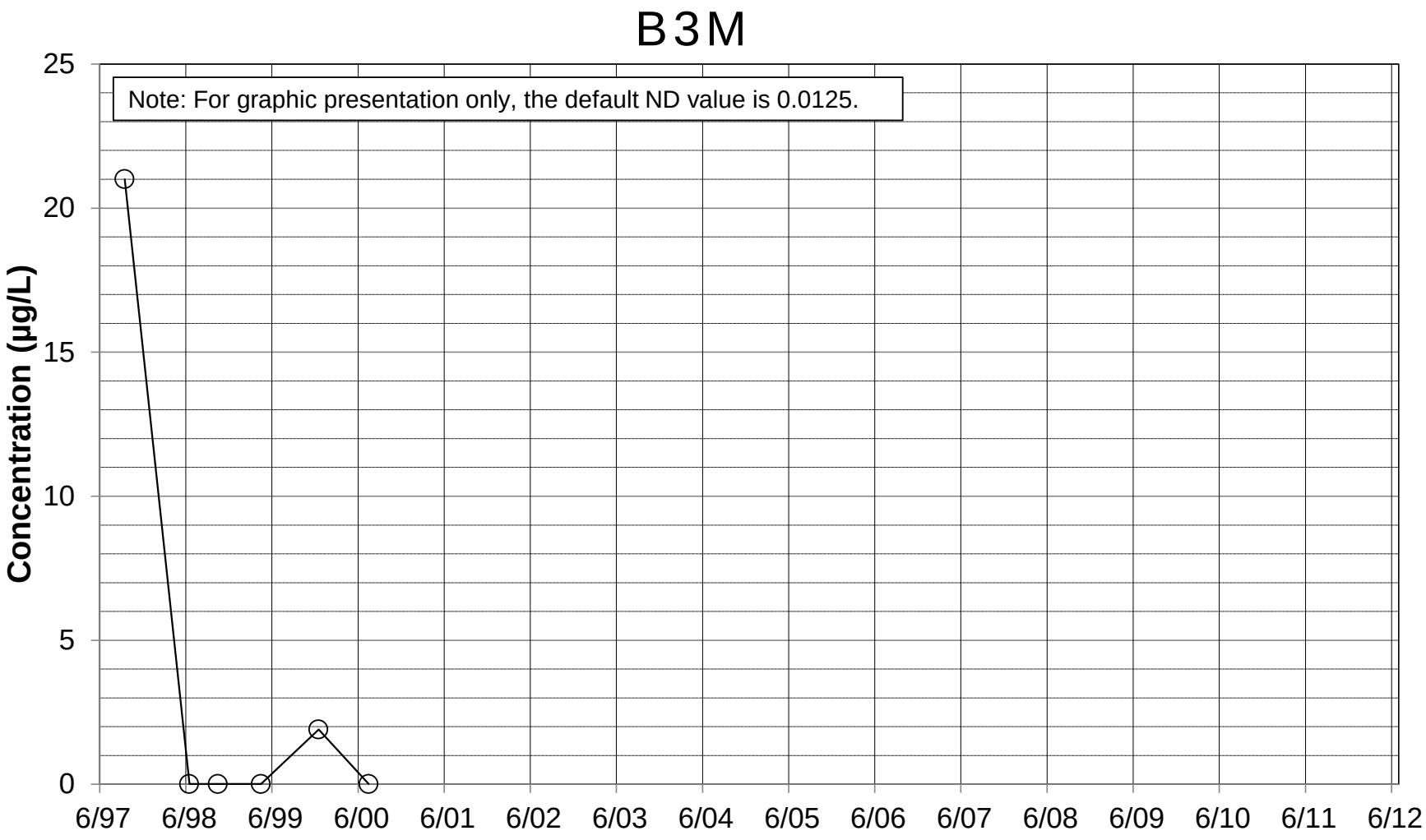
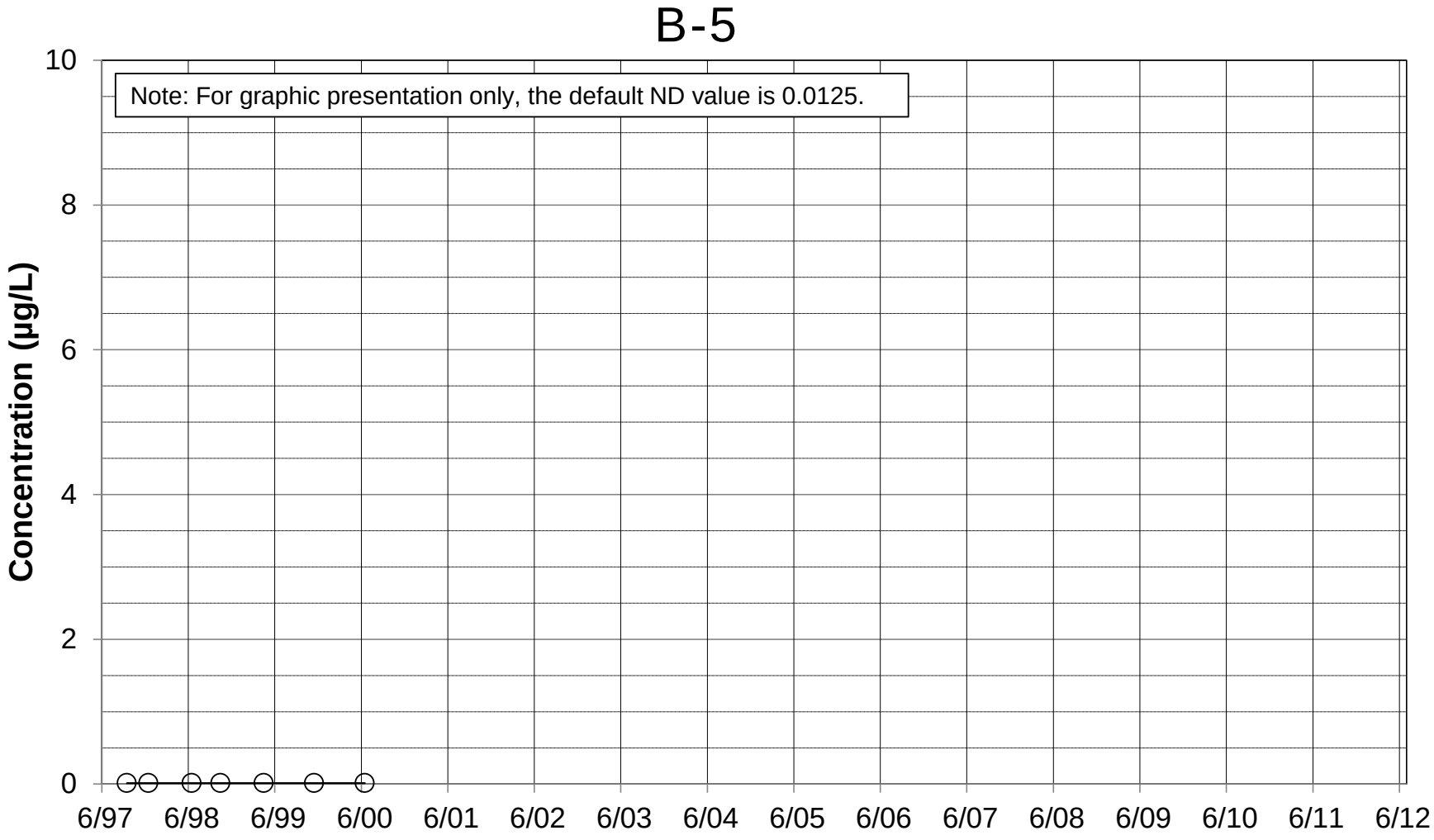
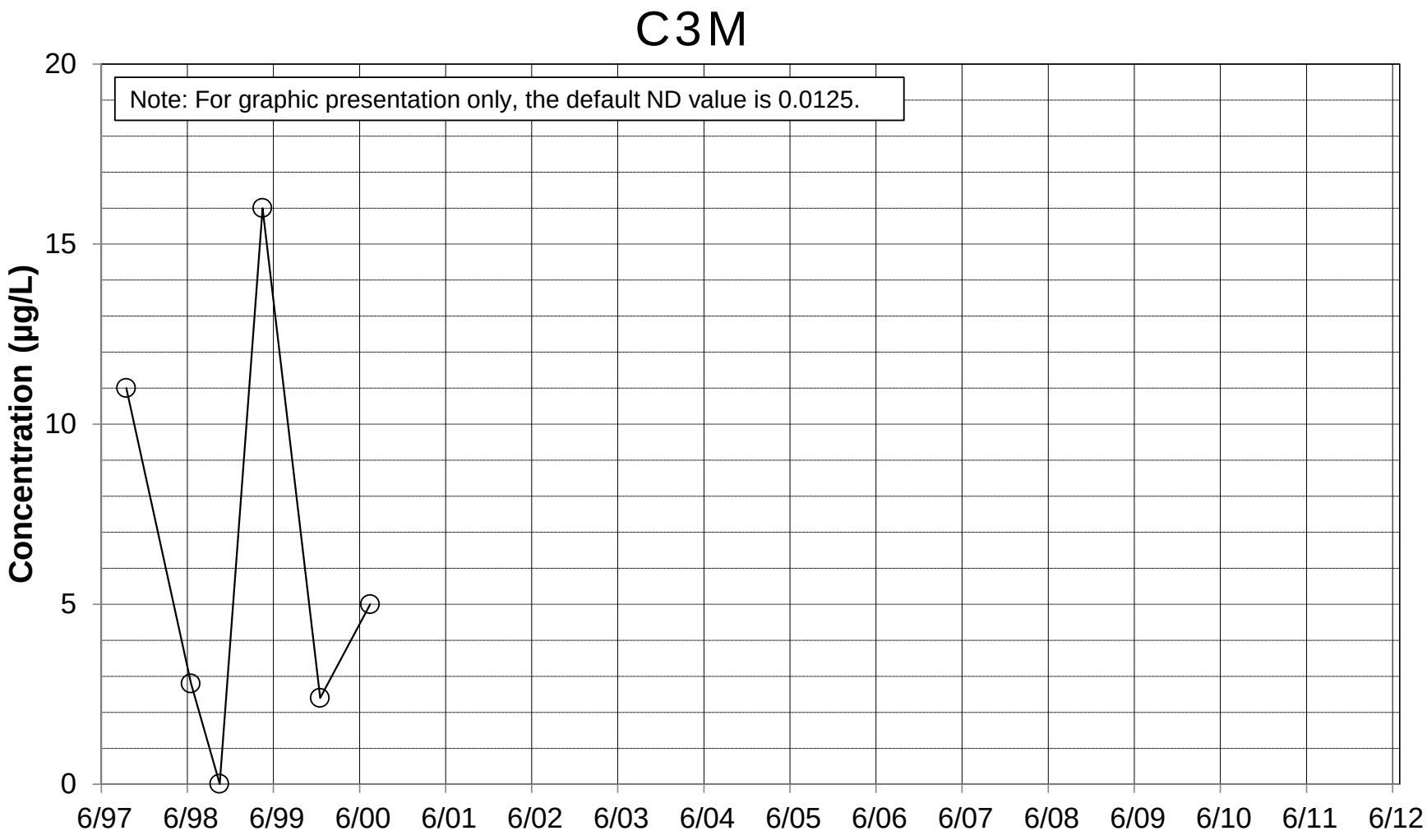
6/07
6/08
6/09
6/10
6/11
6/12

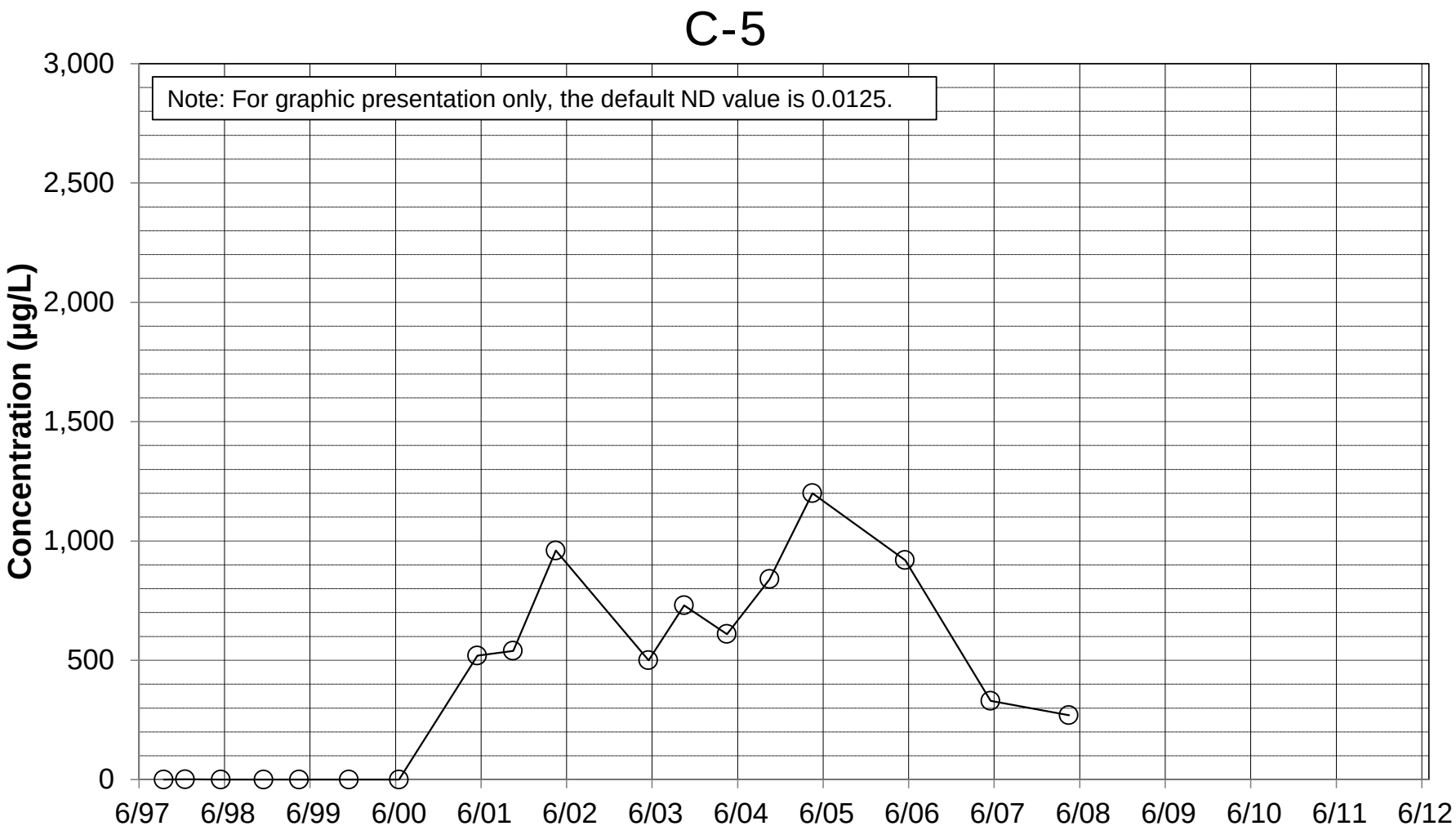

A-Series Pond
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
3,000
2,500
2,000
1,500
1,000
500
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

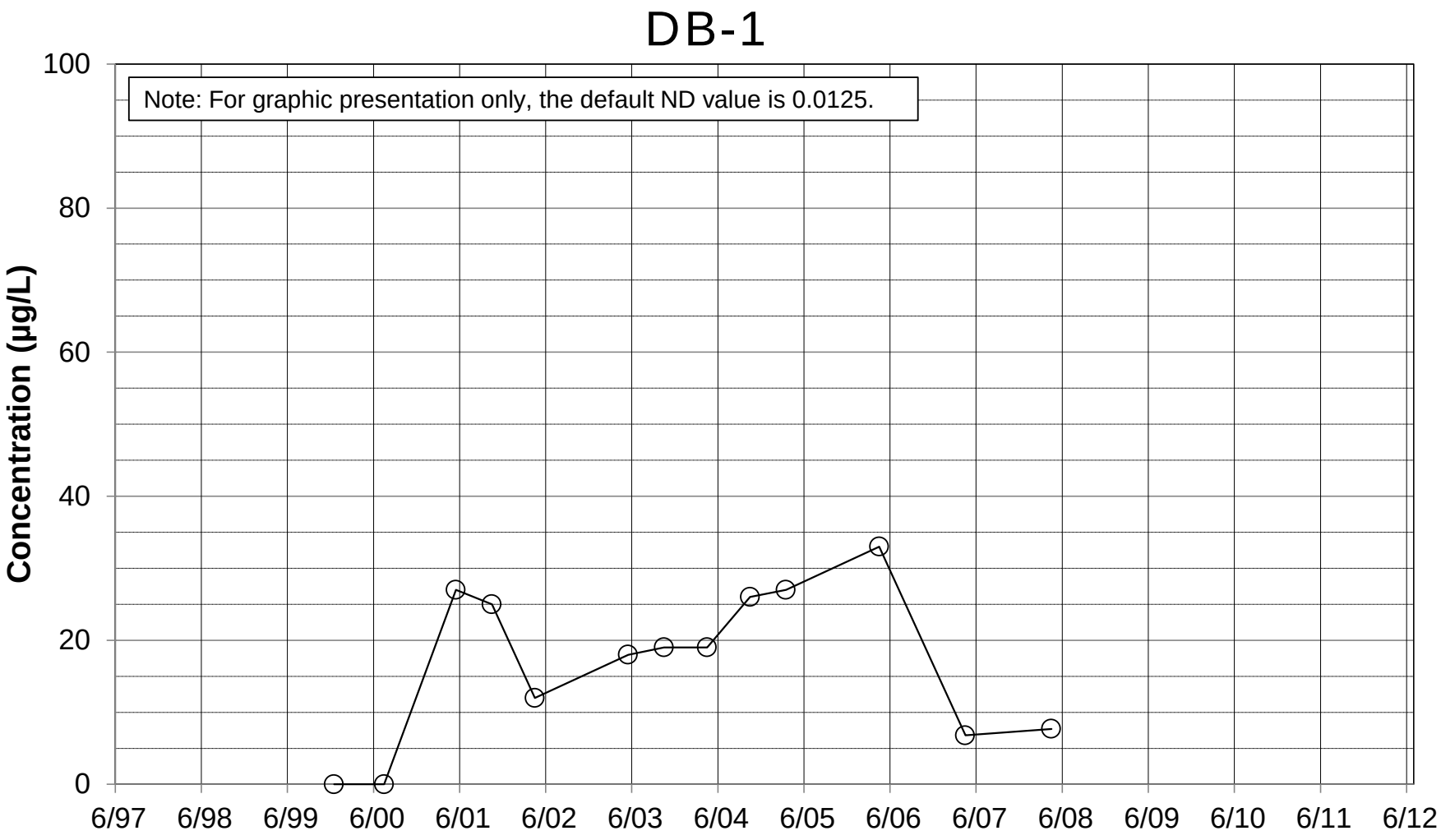

B3B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

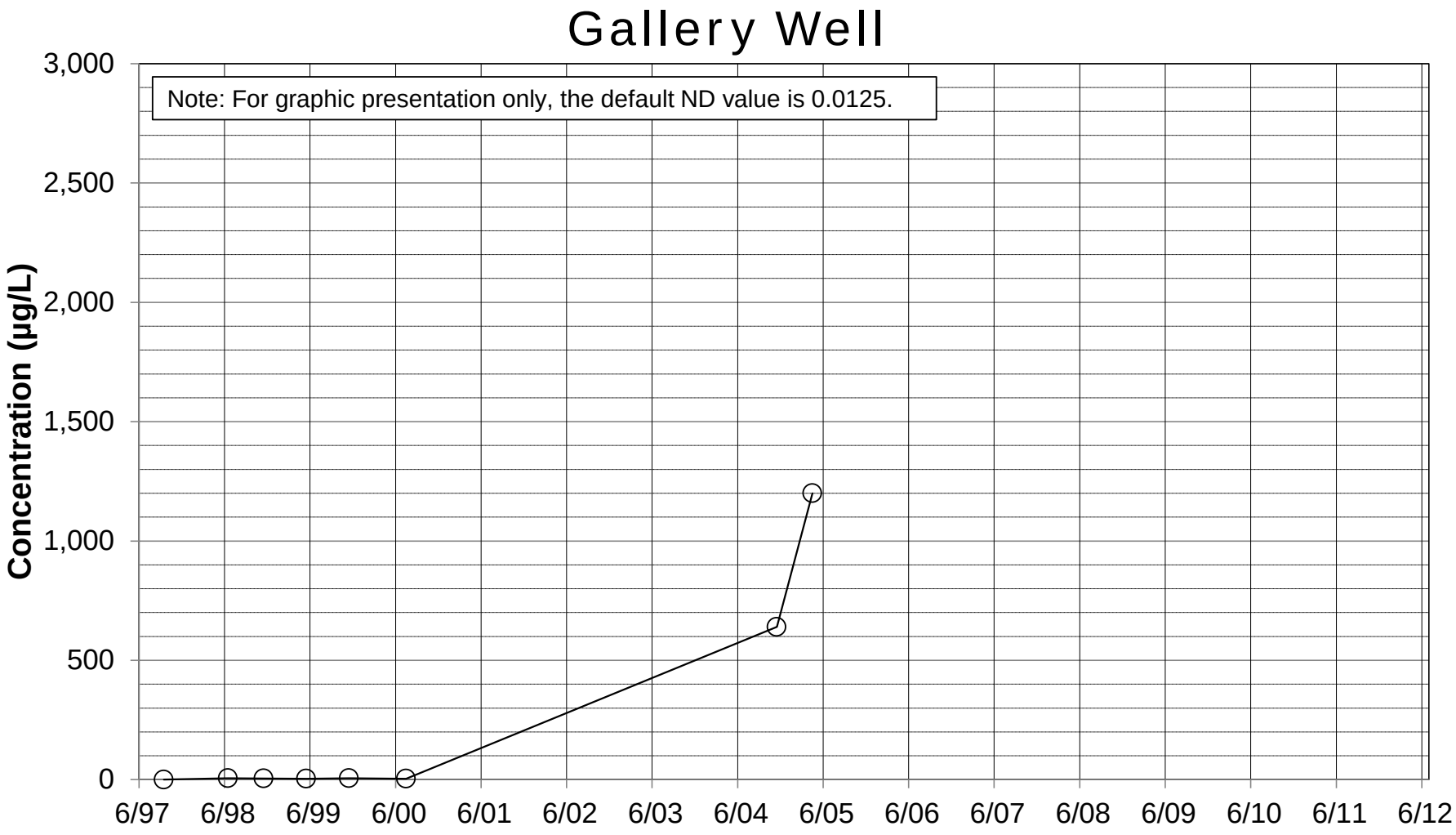

B3M
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
25
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

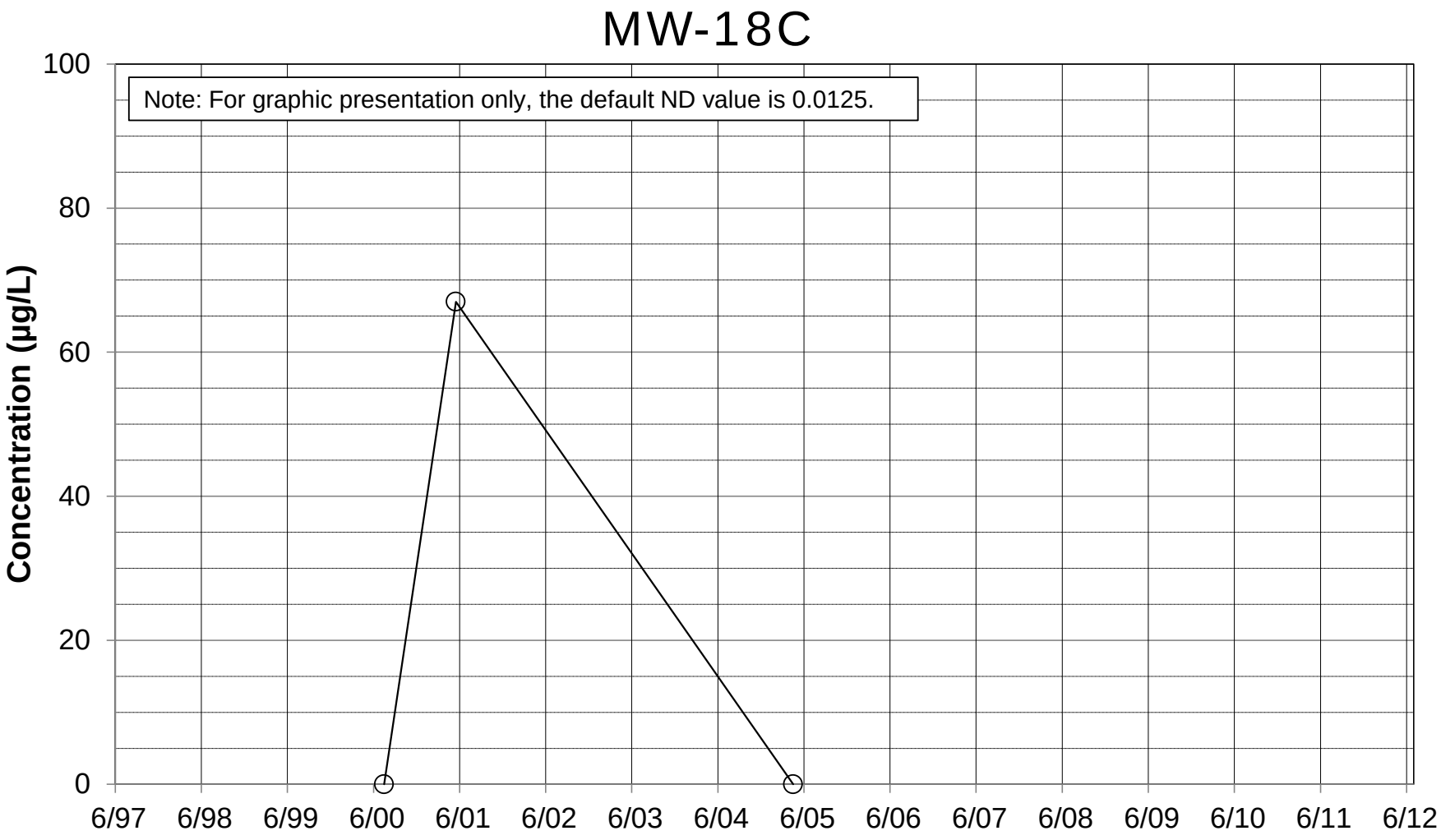

B-5
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

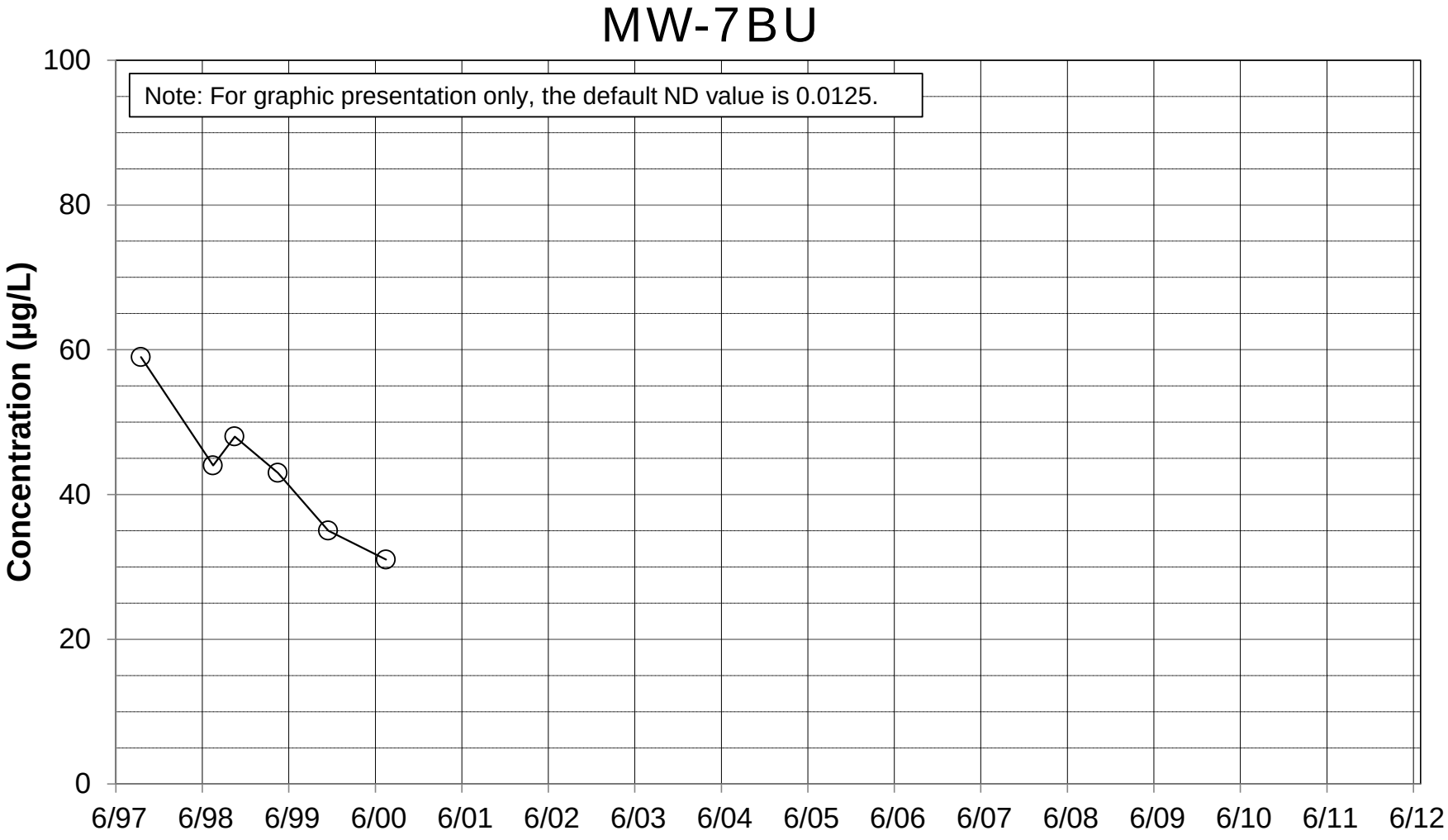

C3M
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

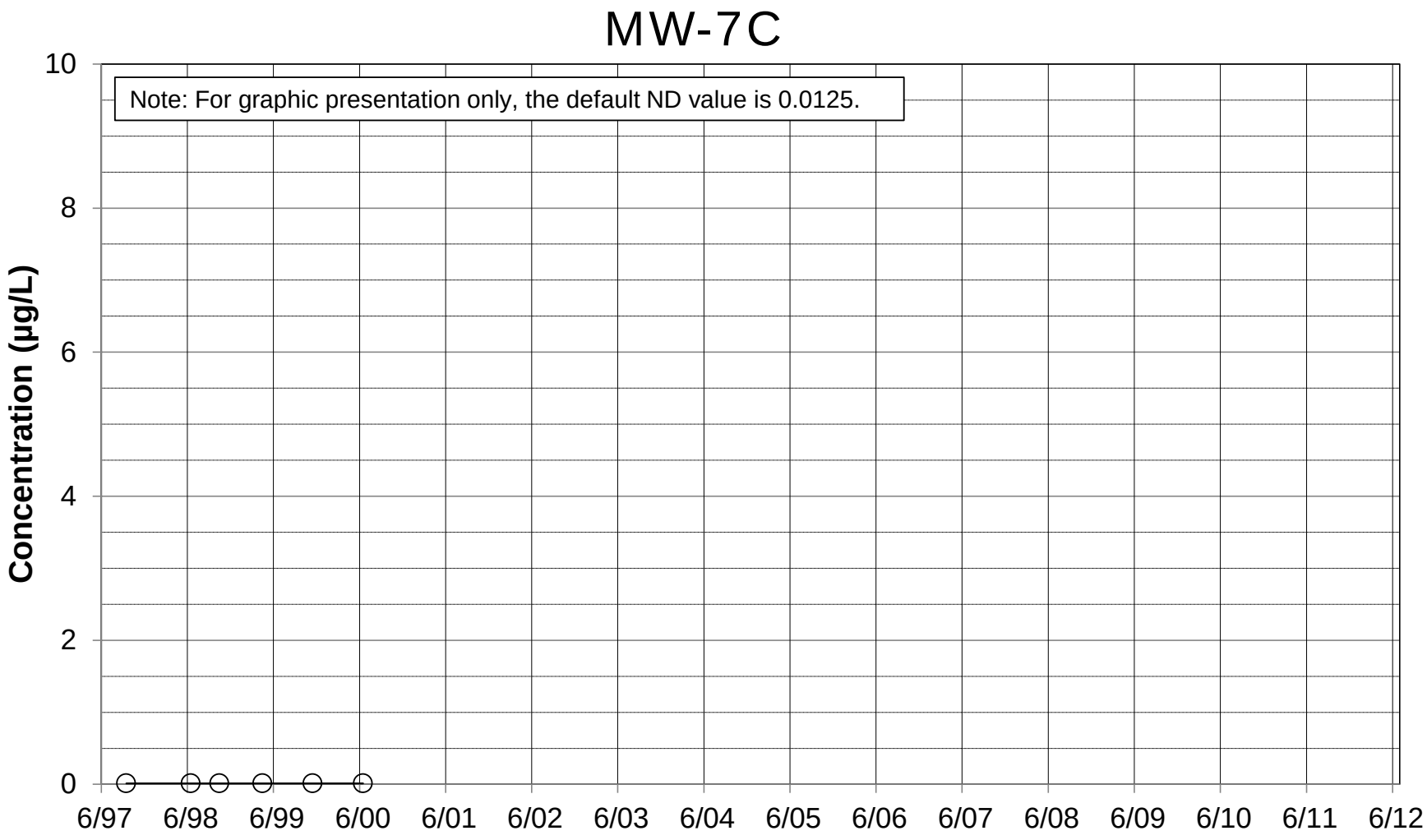

C-5
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
3,000
2,500
2,000
1,500
1,000
500
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

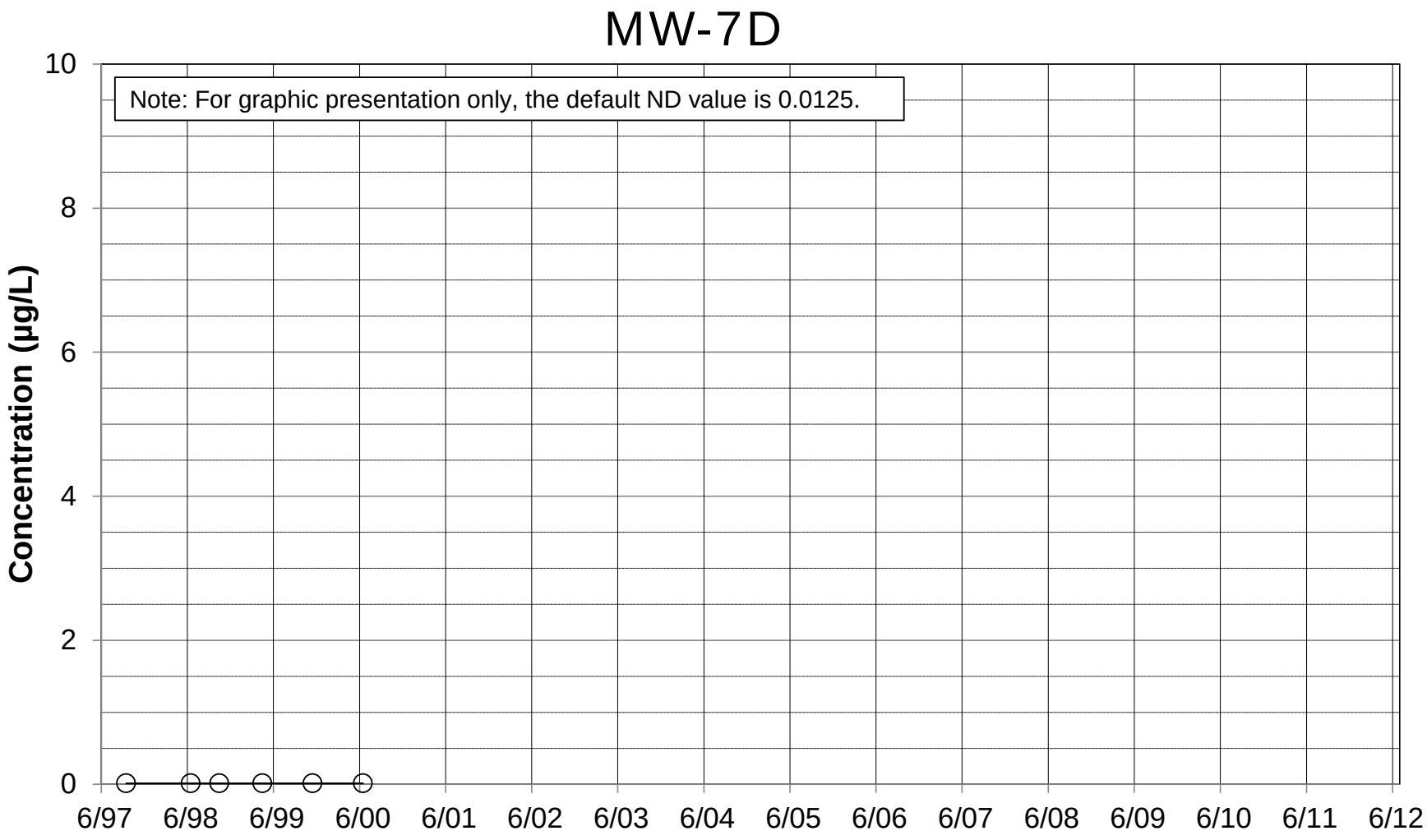

DB-1
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

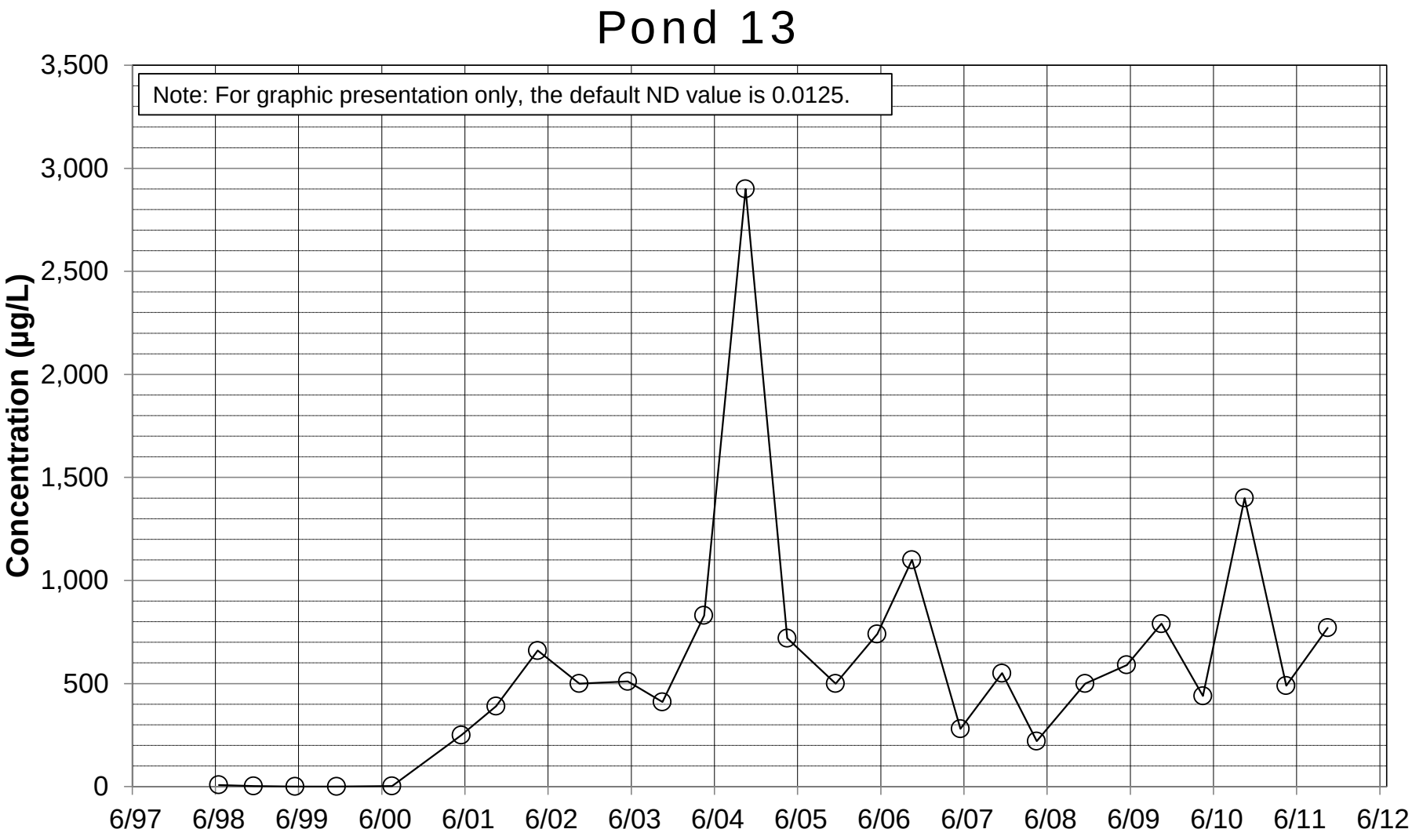

Gallery Well
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
3,000
2,500
2,000
1,500
1,000
500
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


MW-18C
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

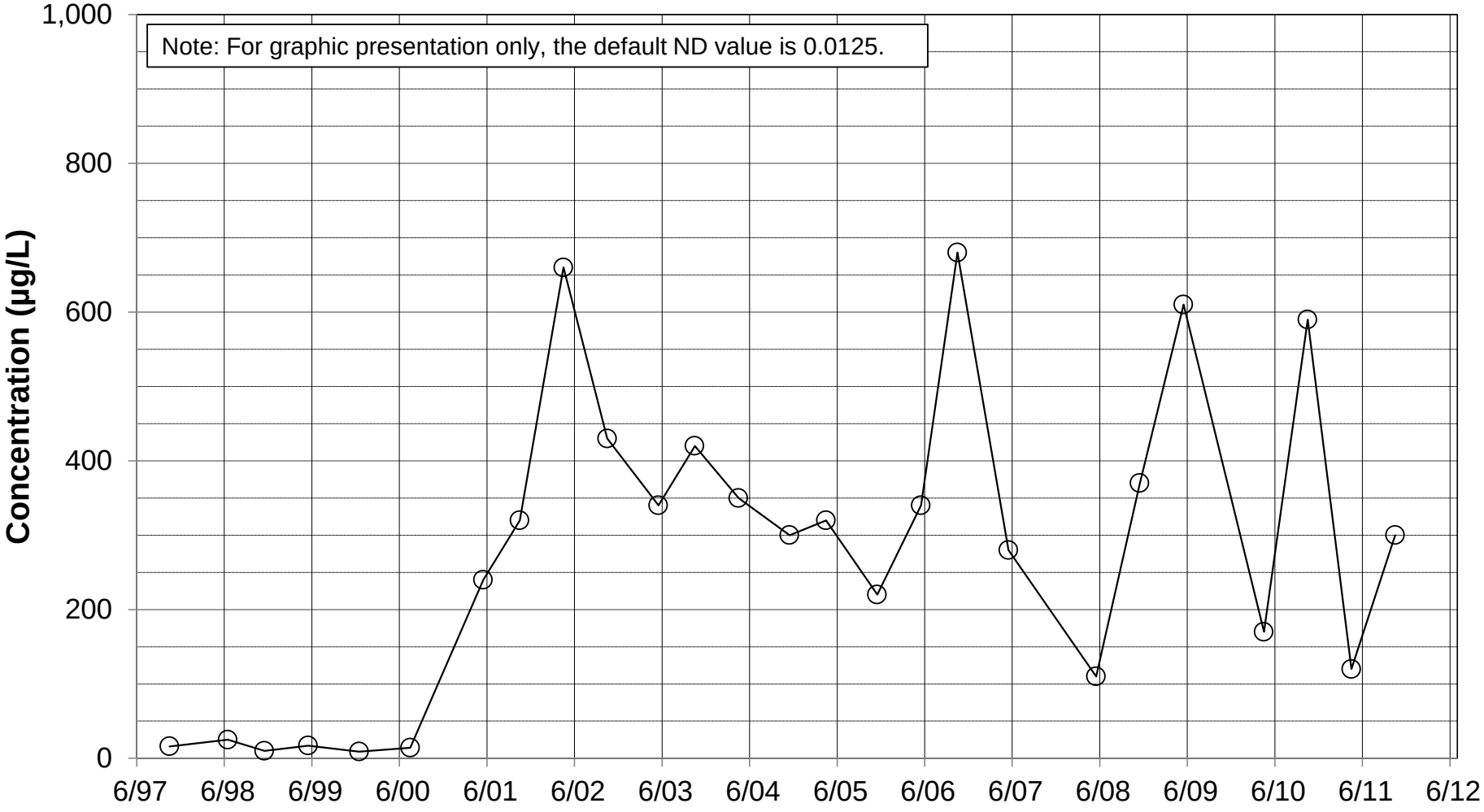

MW-7BU
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

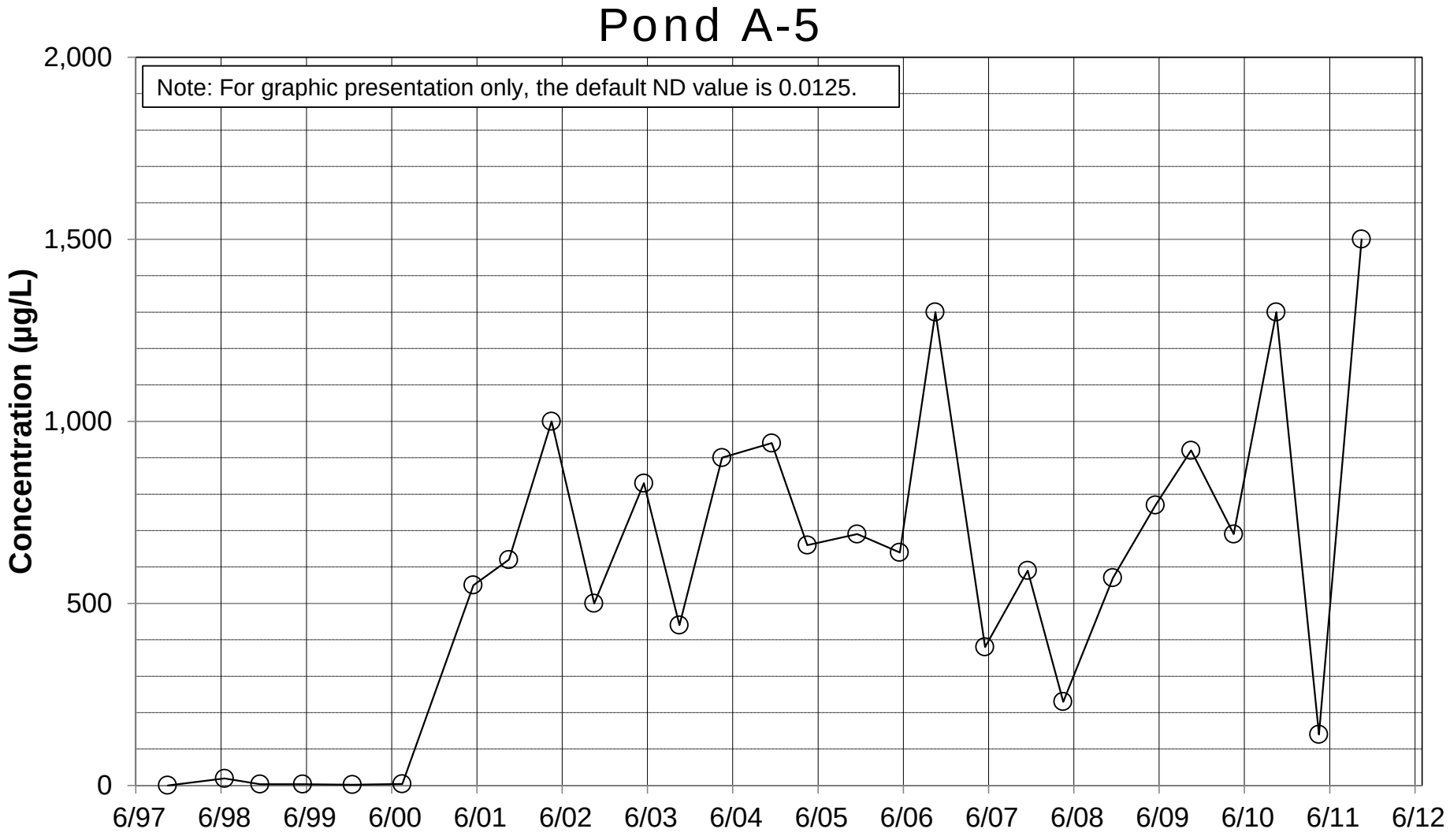

MW-7C
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

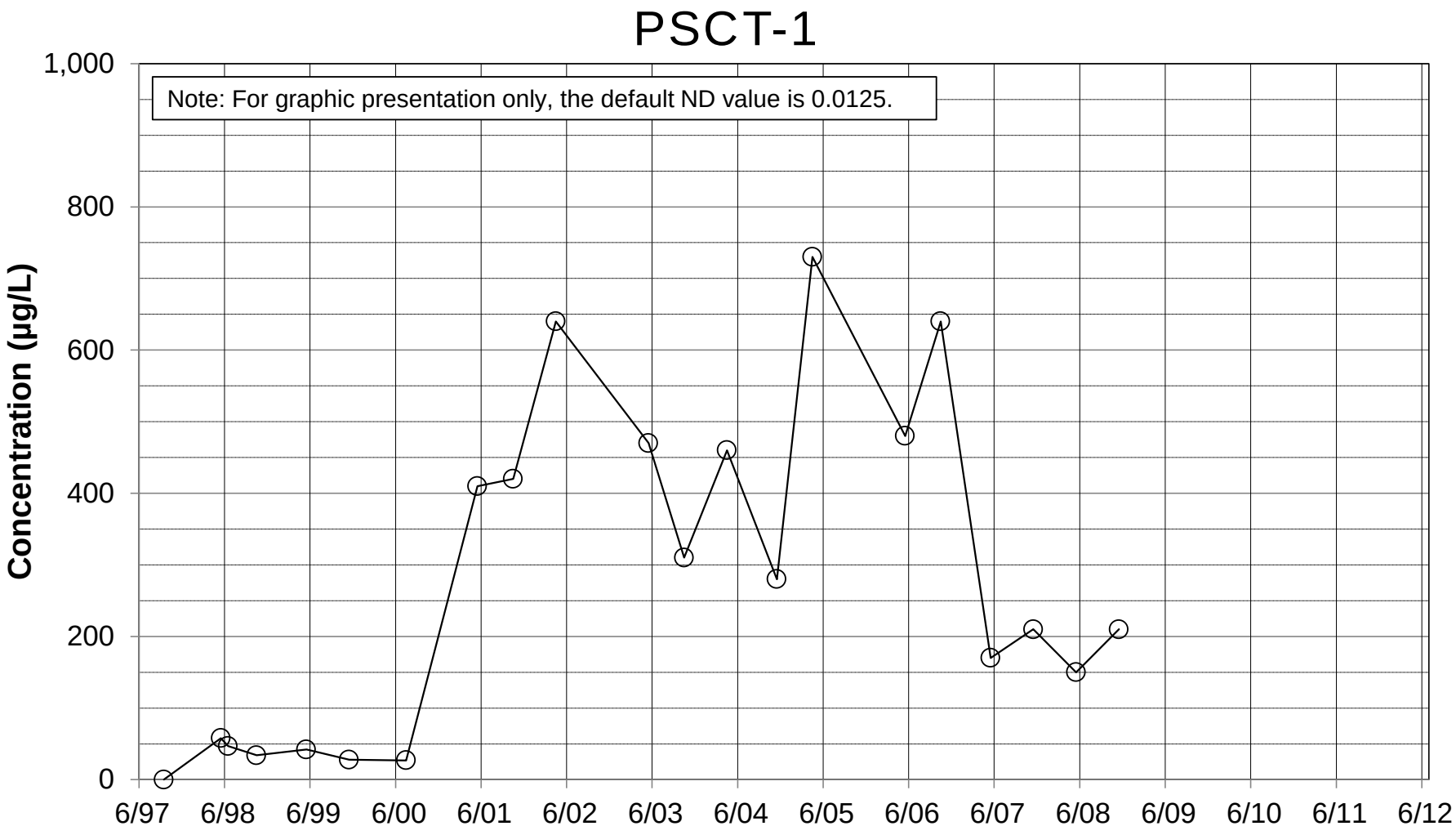

MW-7D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

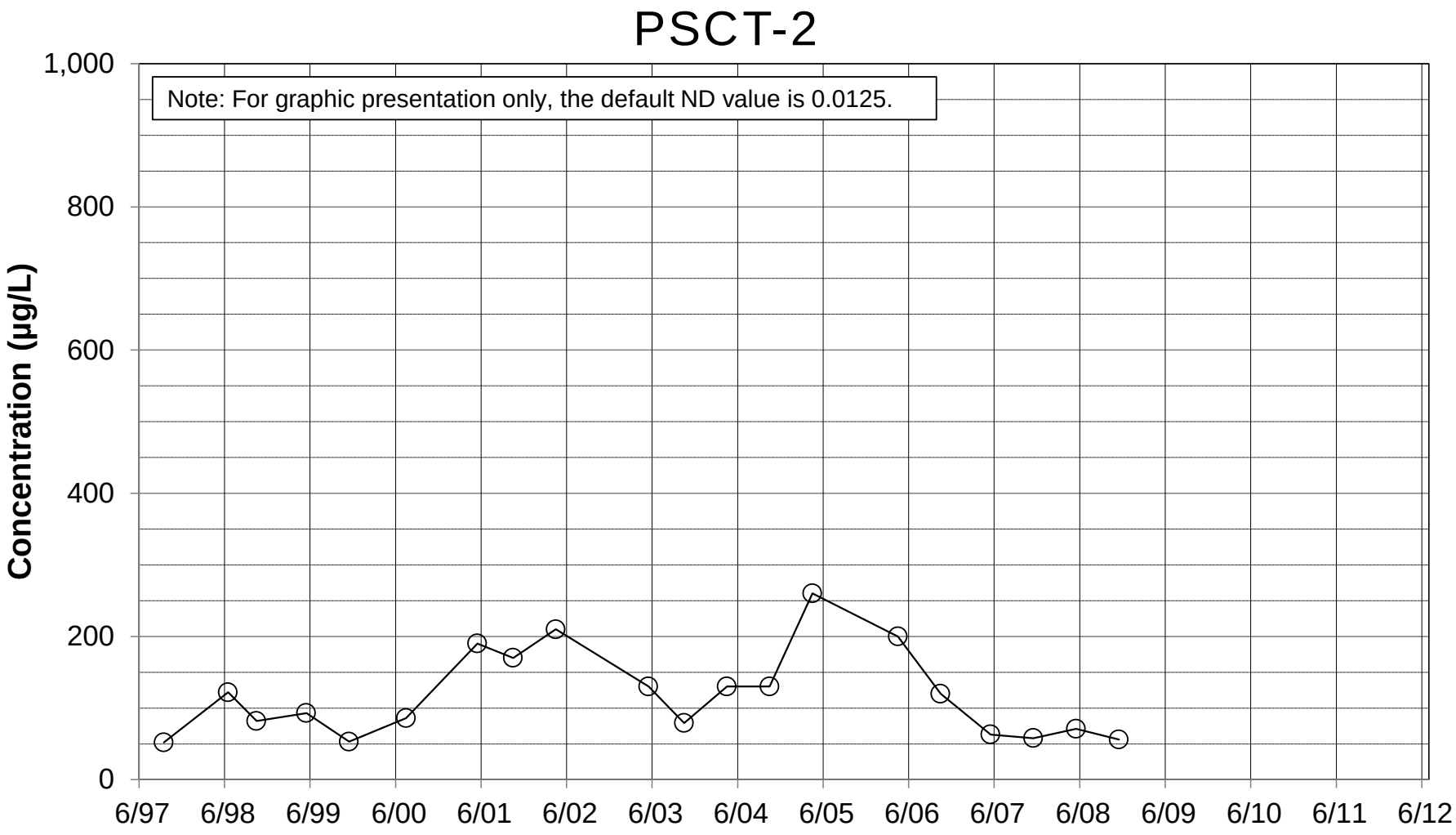

Pond 13
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
3,500
3,000
2,500
2,000
1,500
1,000
500
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

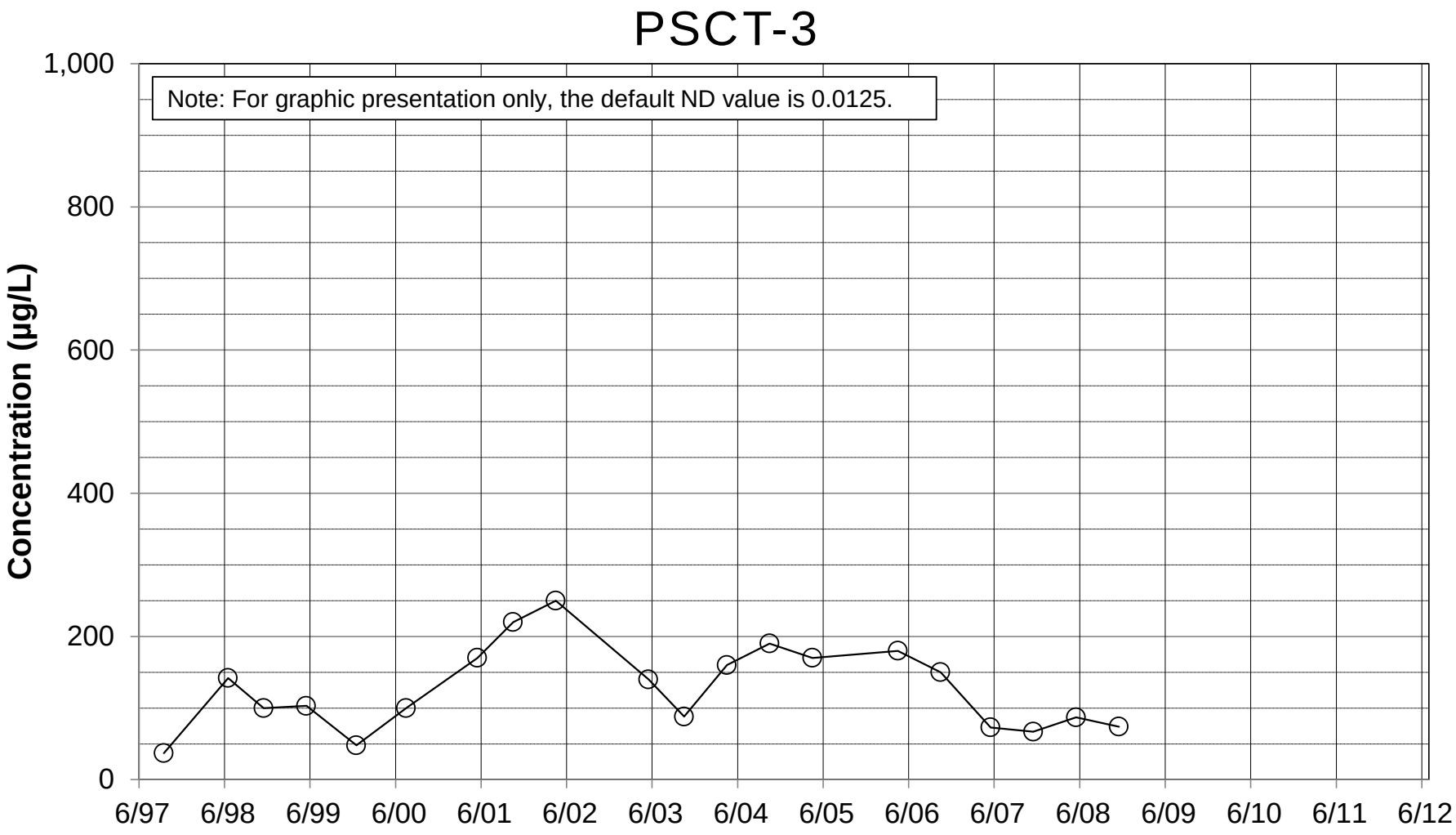
Pond 18

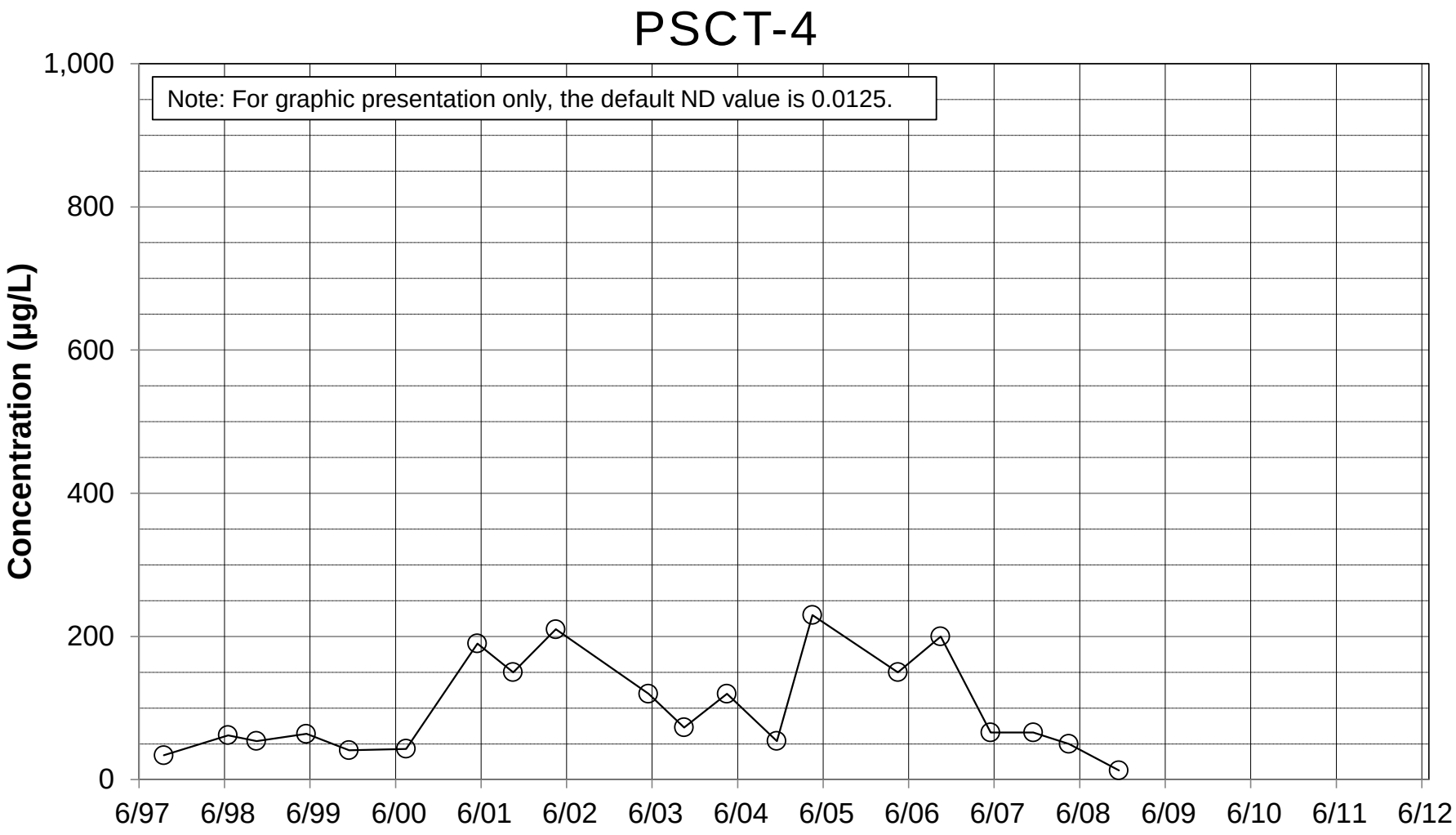

Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

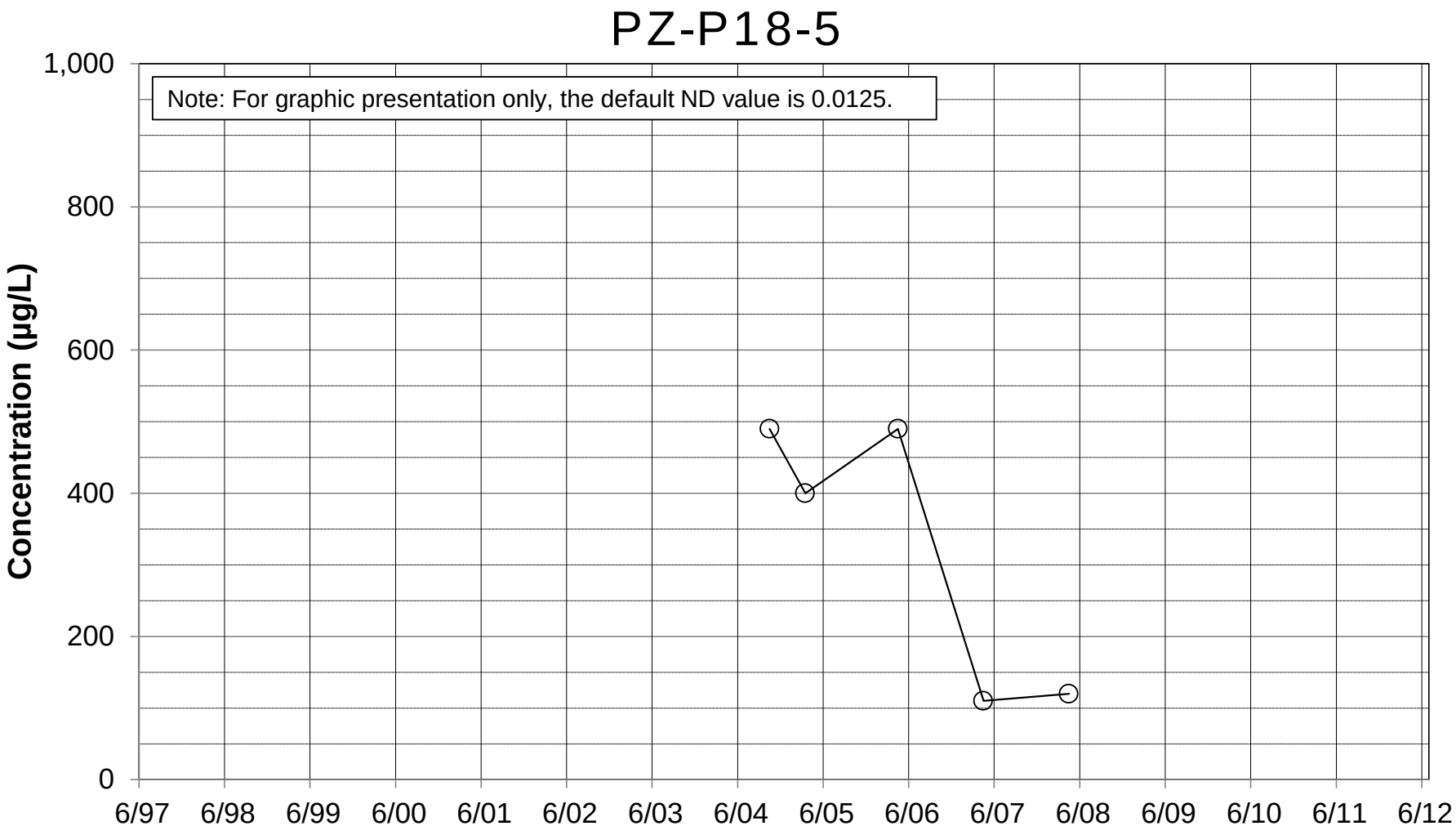

Pond A-5
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
2,000
1,500
1,000
500
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

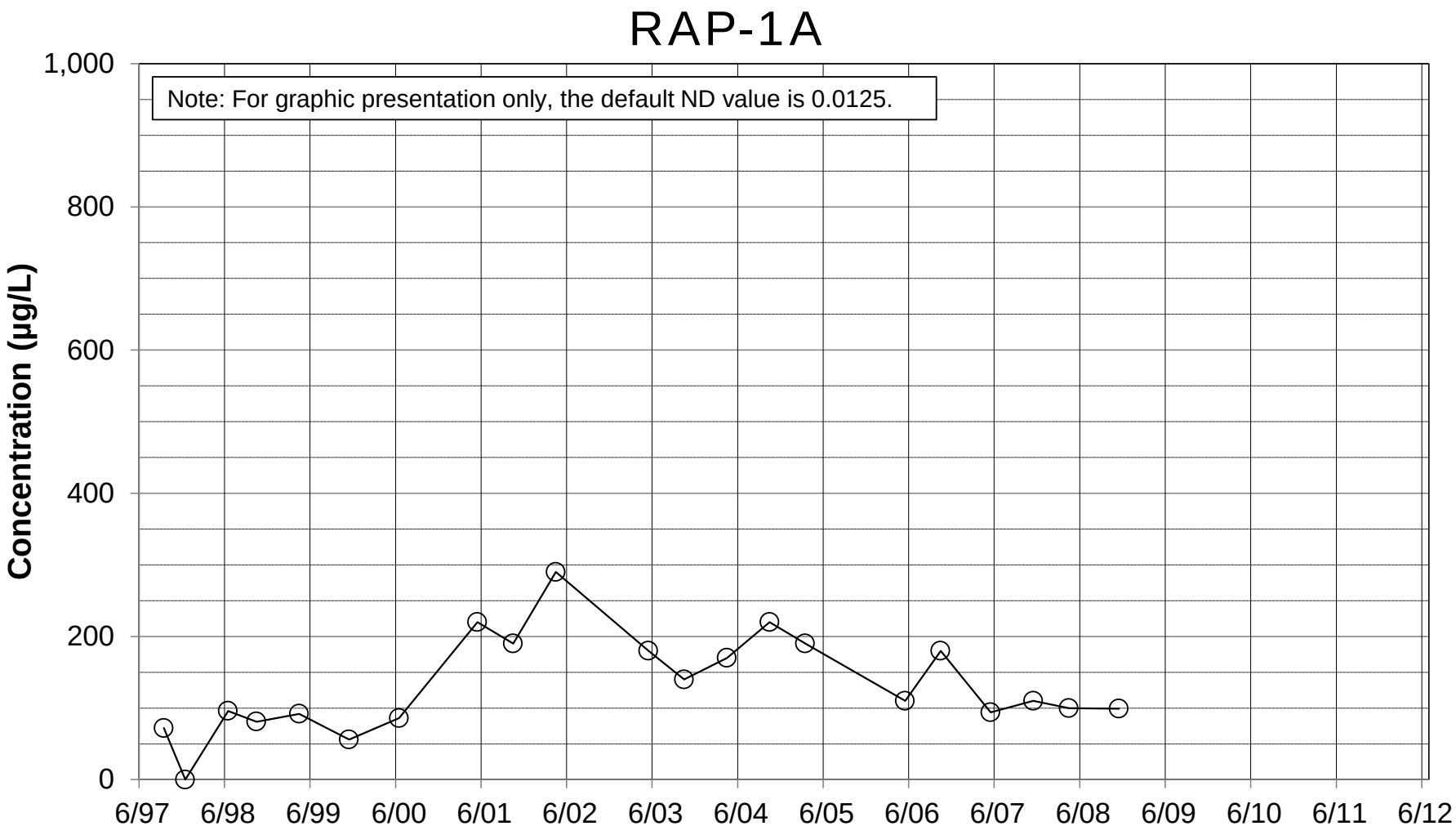

PSCT-1
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

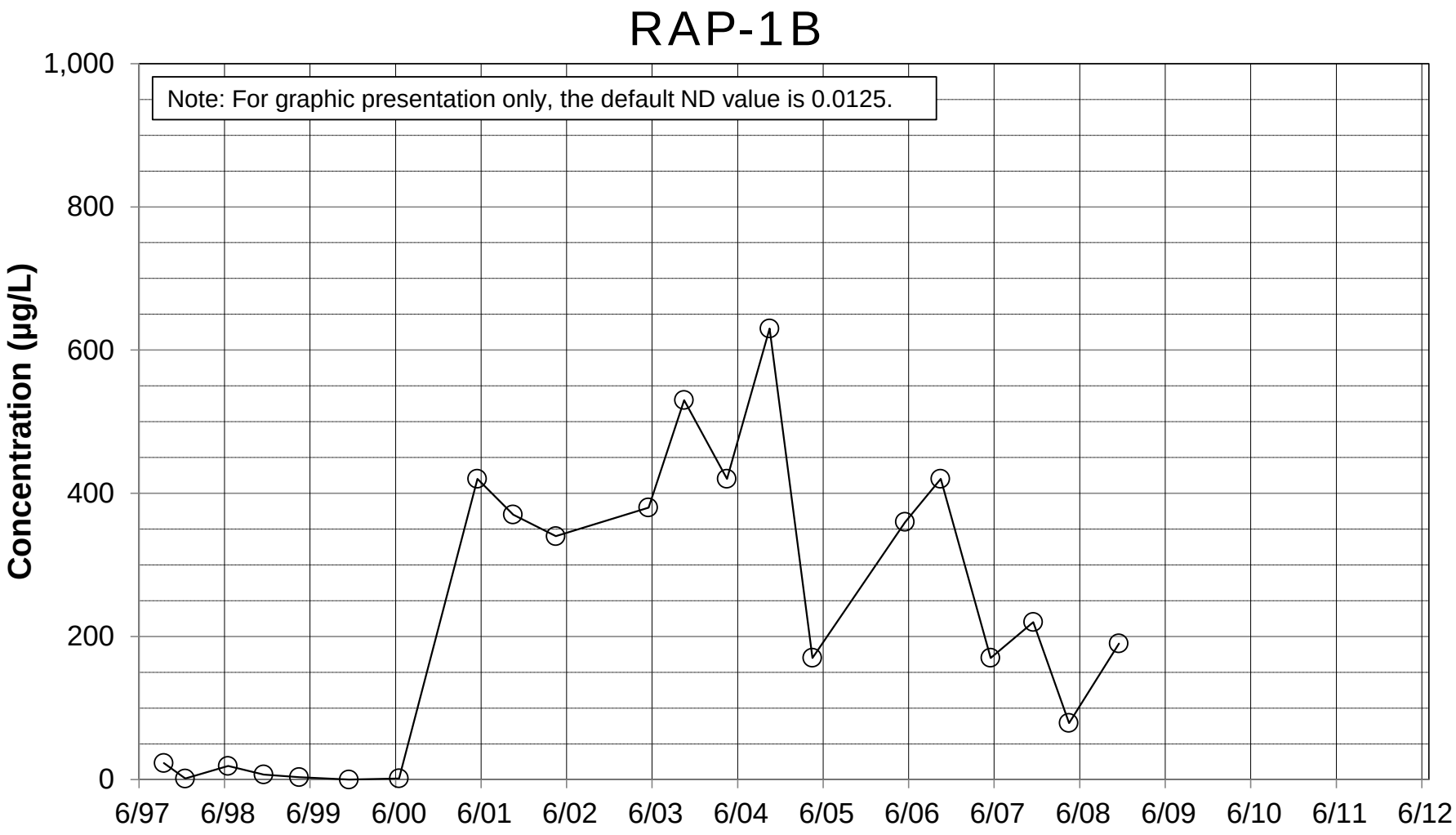

PSCT-2
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

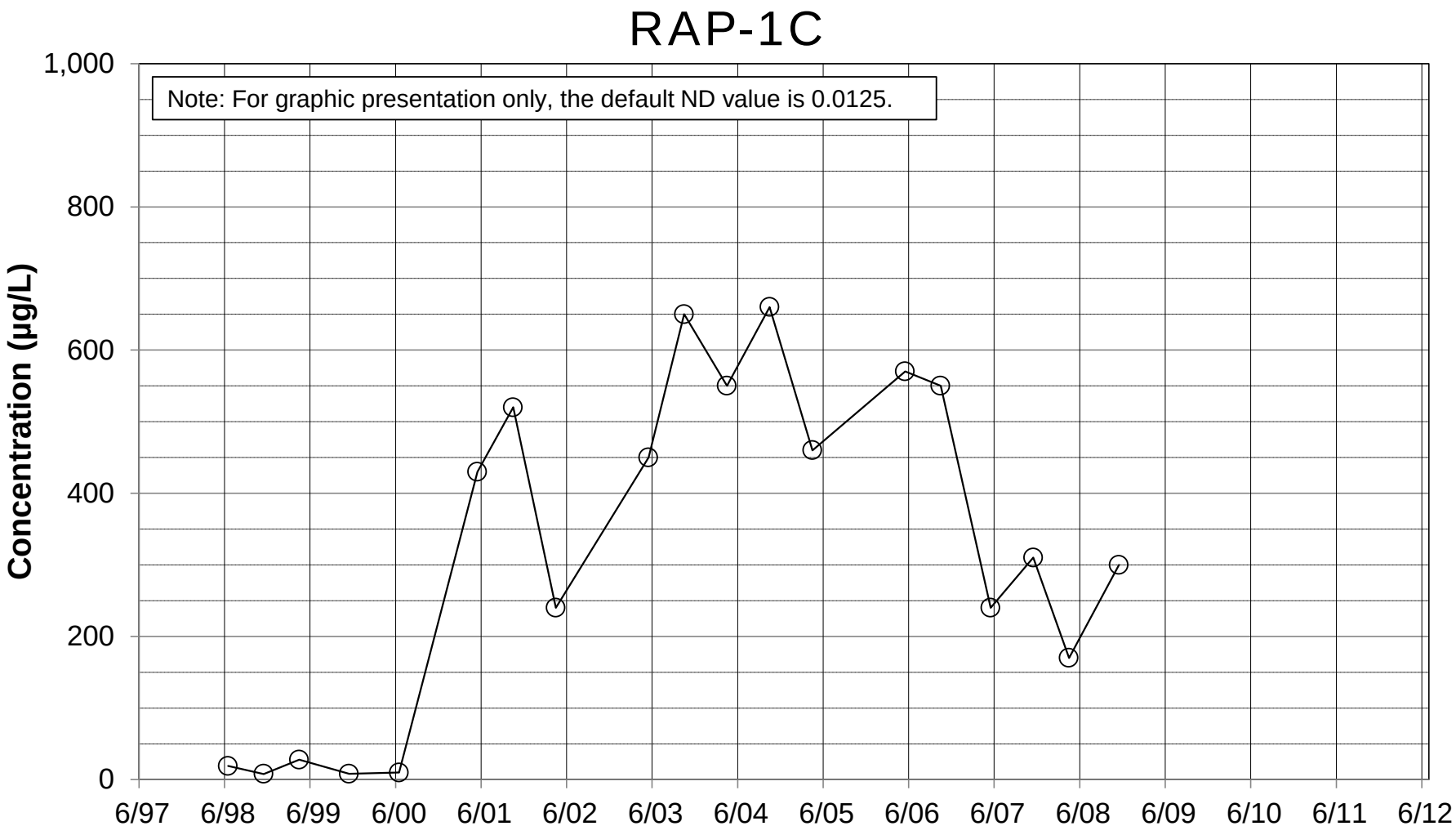

PSCT-3
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


PSCT-4
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


PZ-P18-5
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RAP-1A
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RAP-1B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RAP-1C
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
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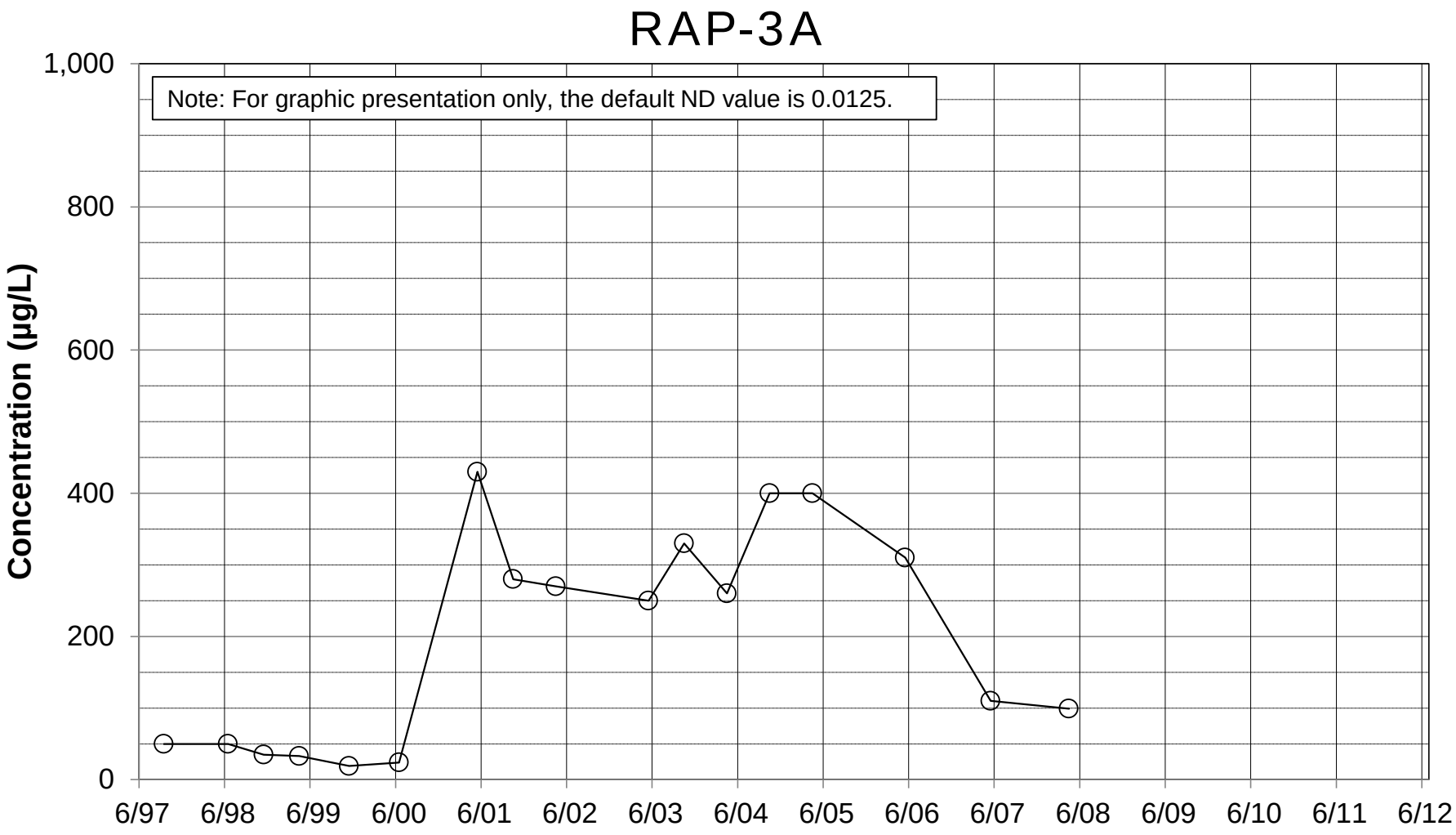
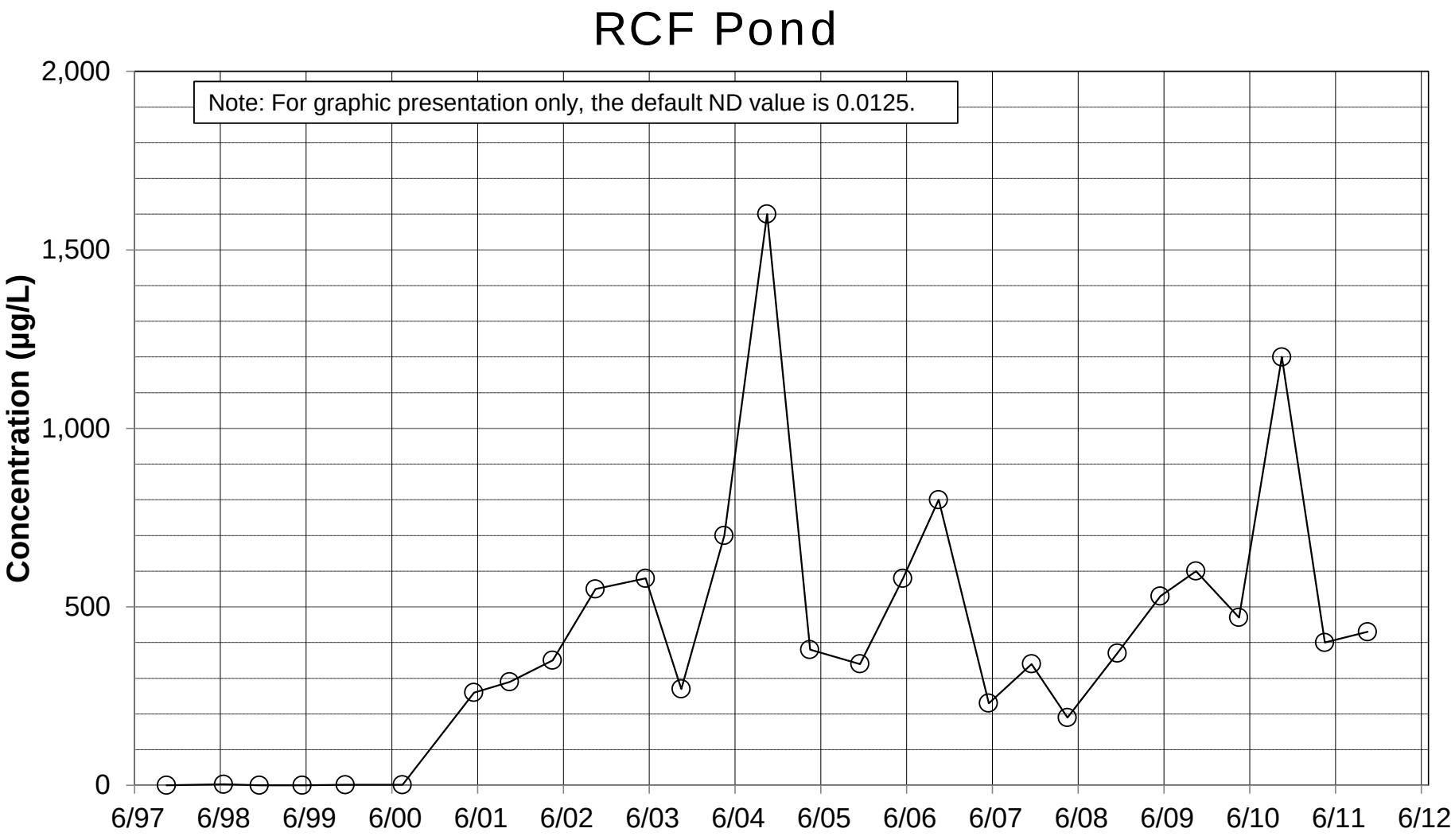
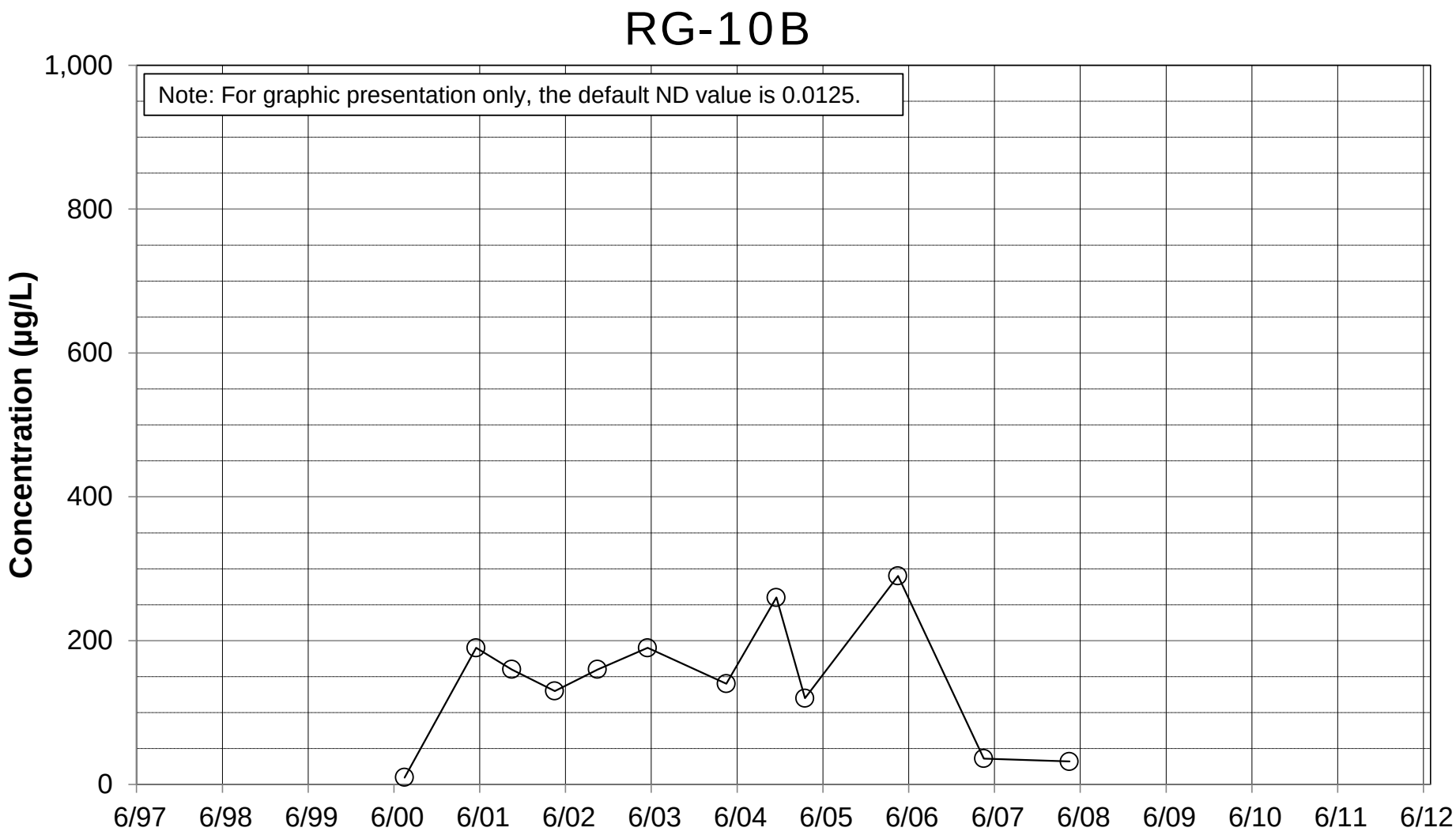
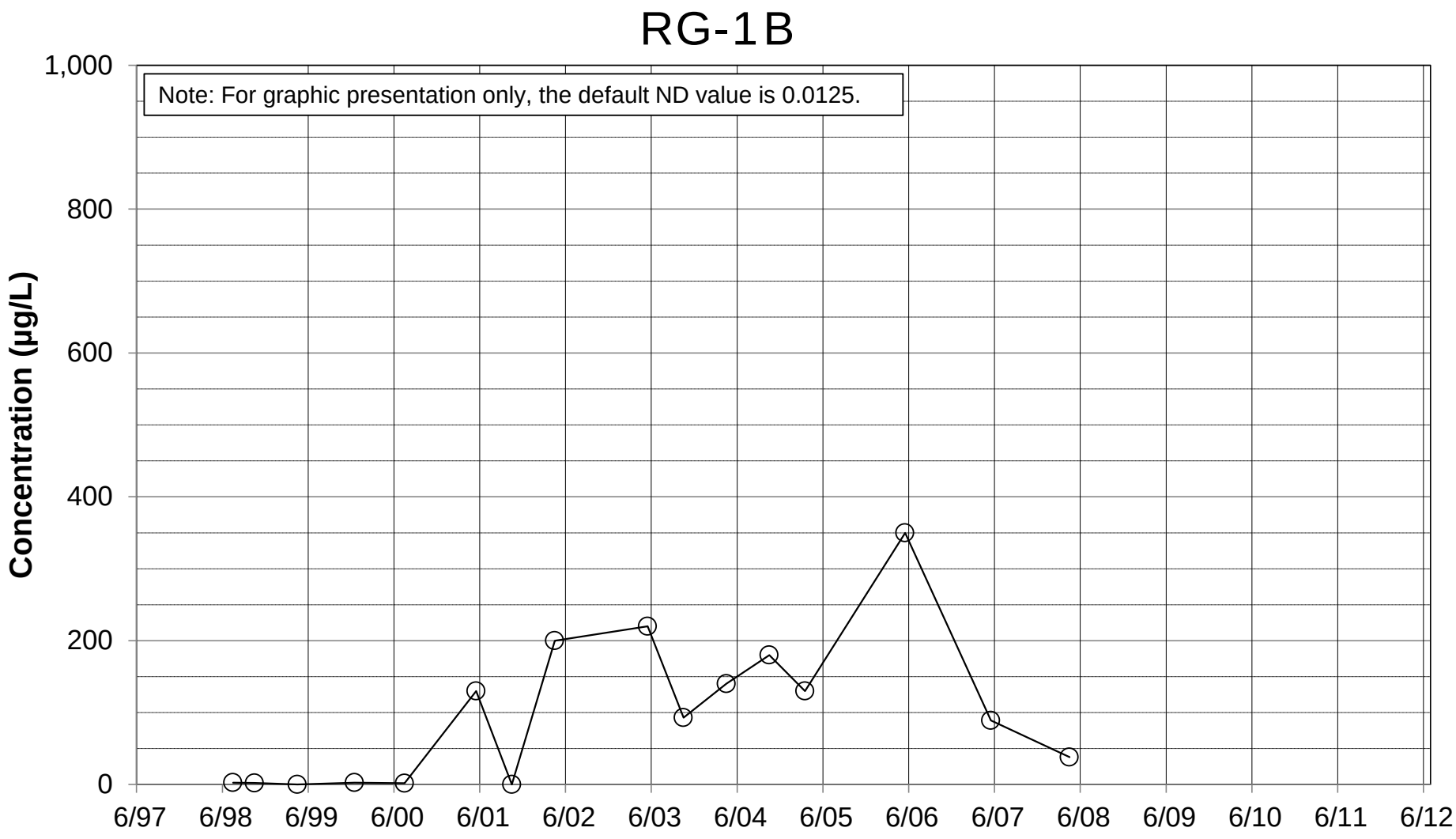
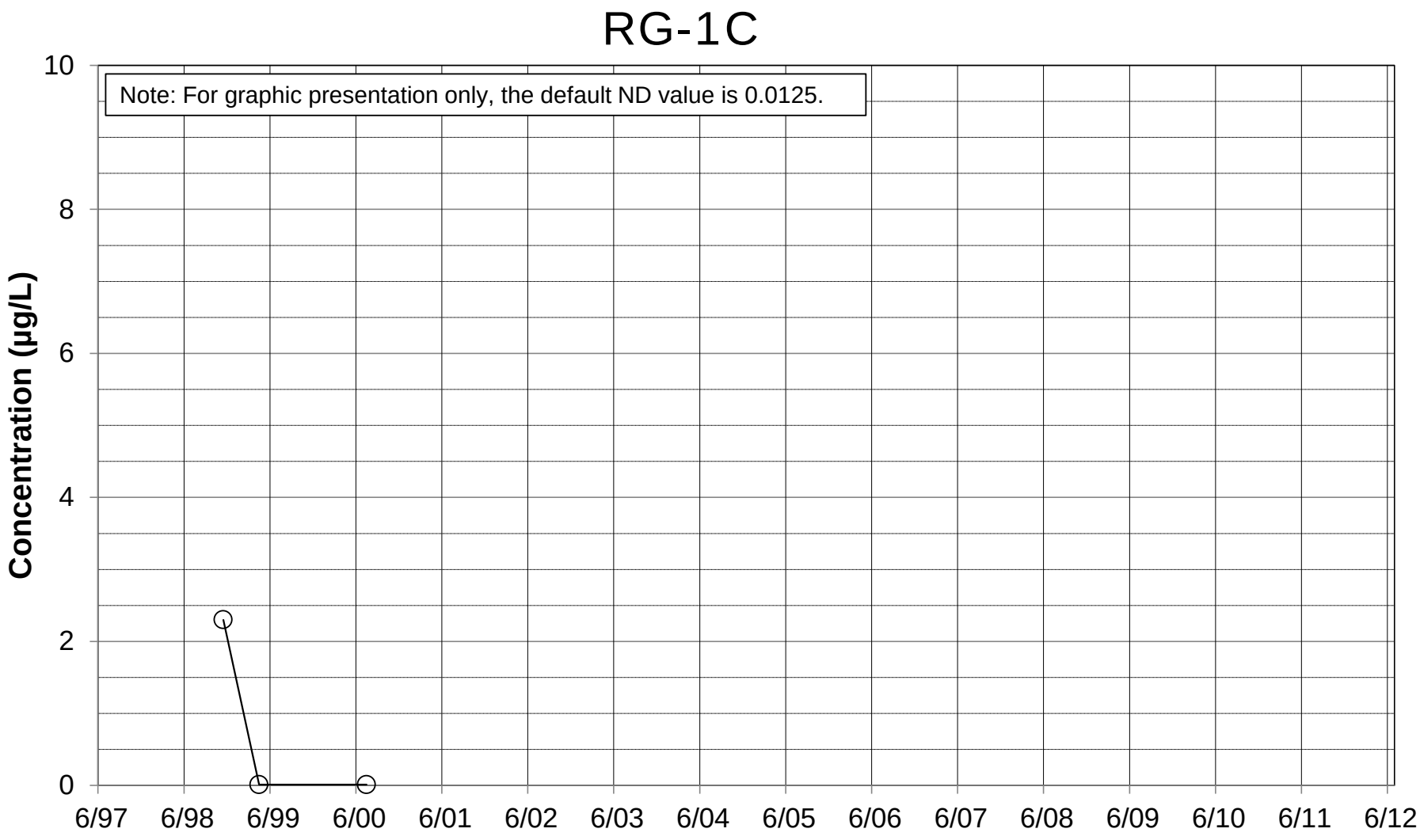
6/10
6/11
6/12

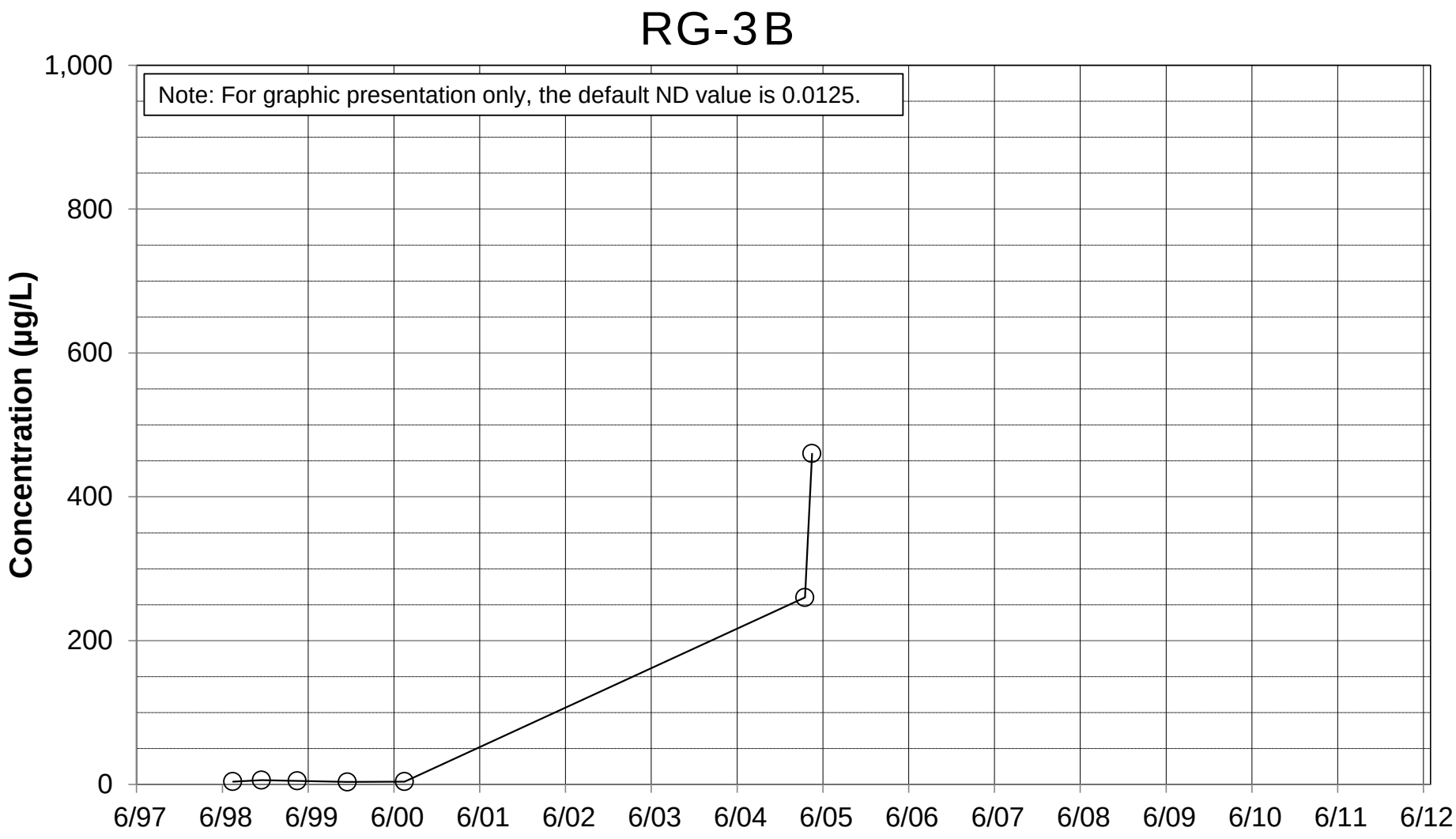

RAP-3A
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

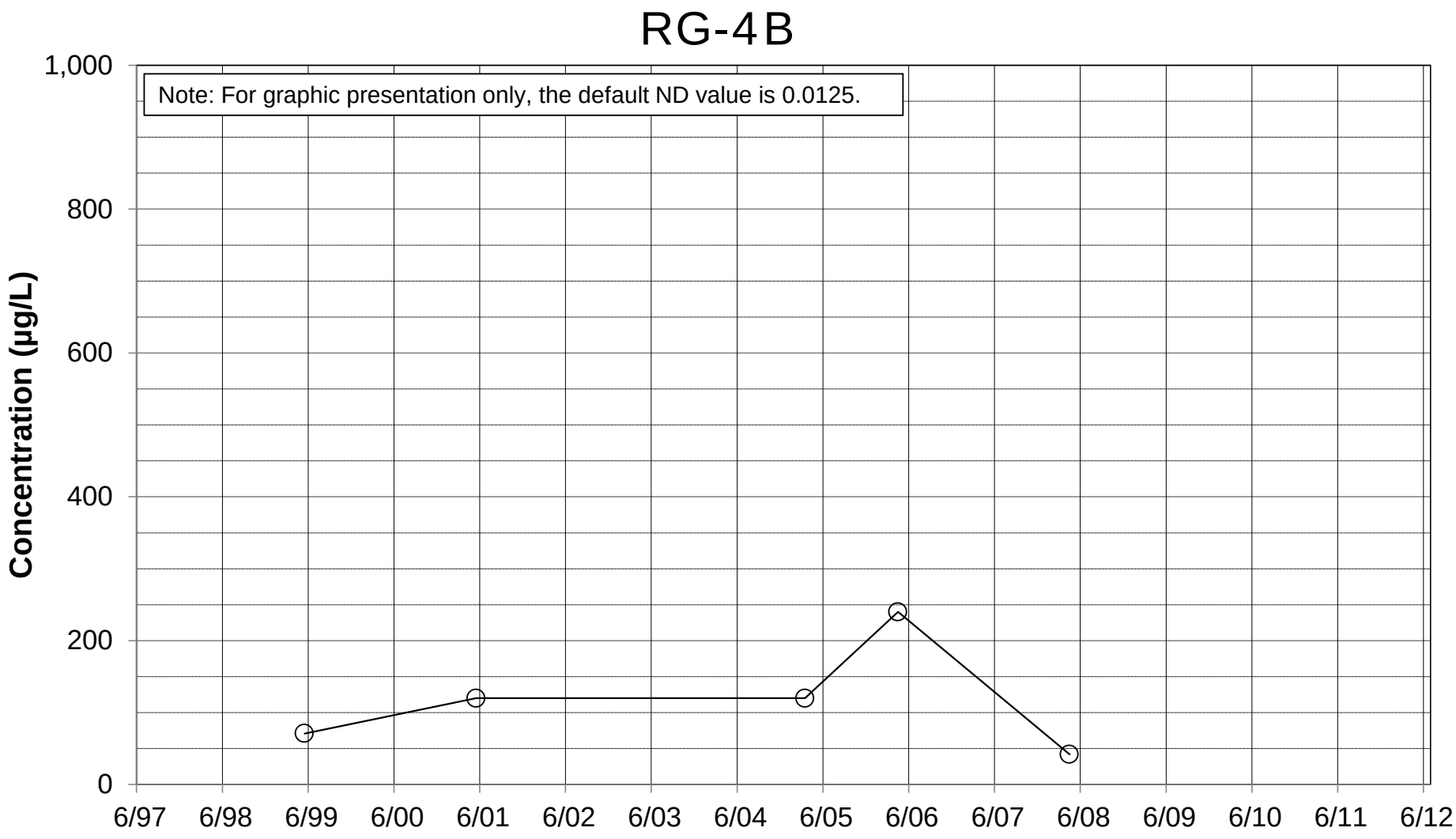

RCF Pond
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
2,000
1,500
1,000
500
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RG-10B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RG-1B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RG-1C
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RG-3B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RG-4B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
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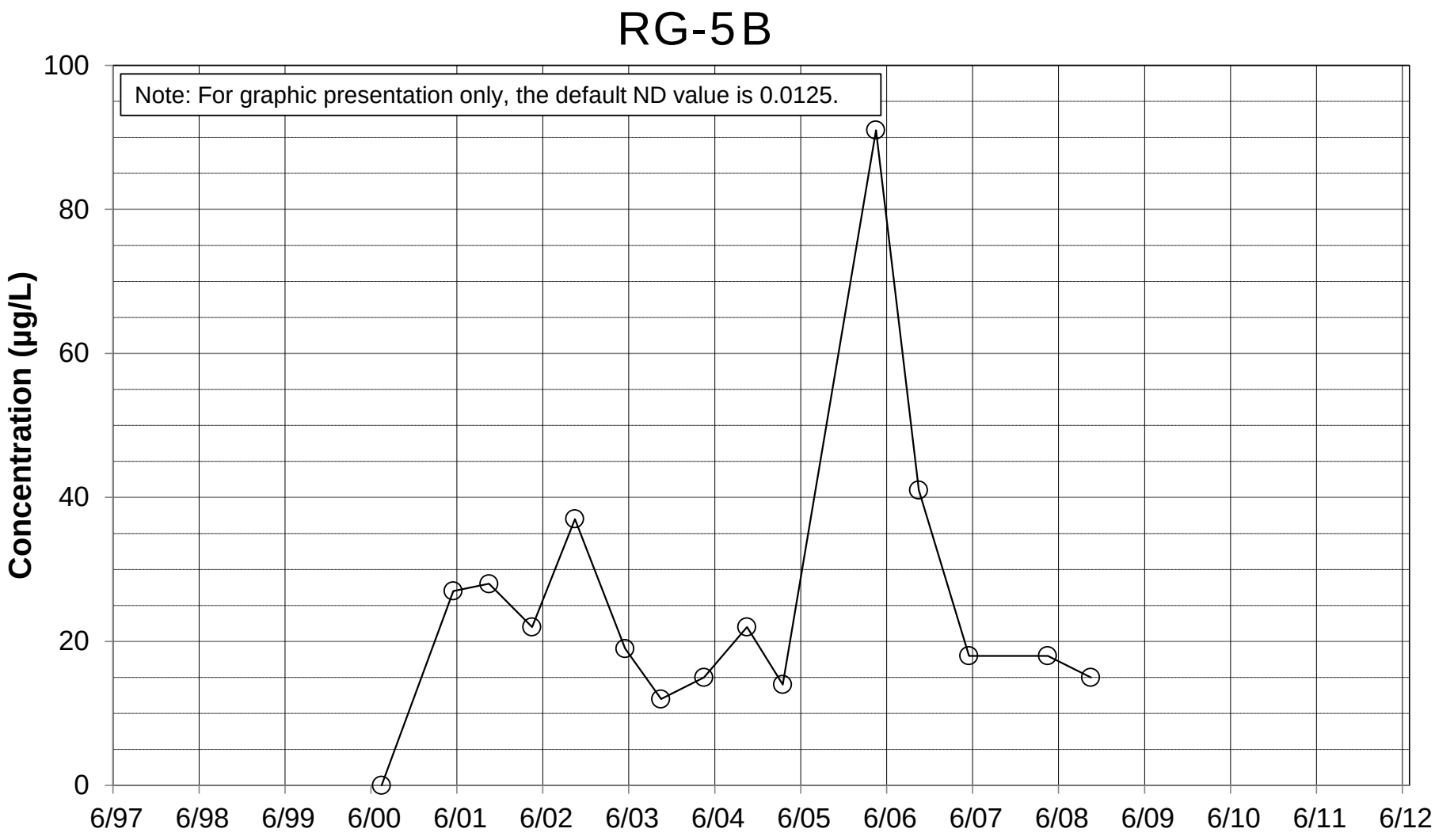
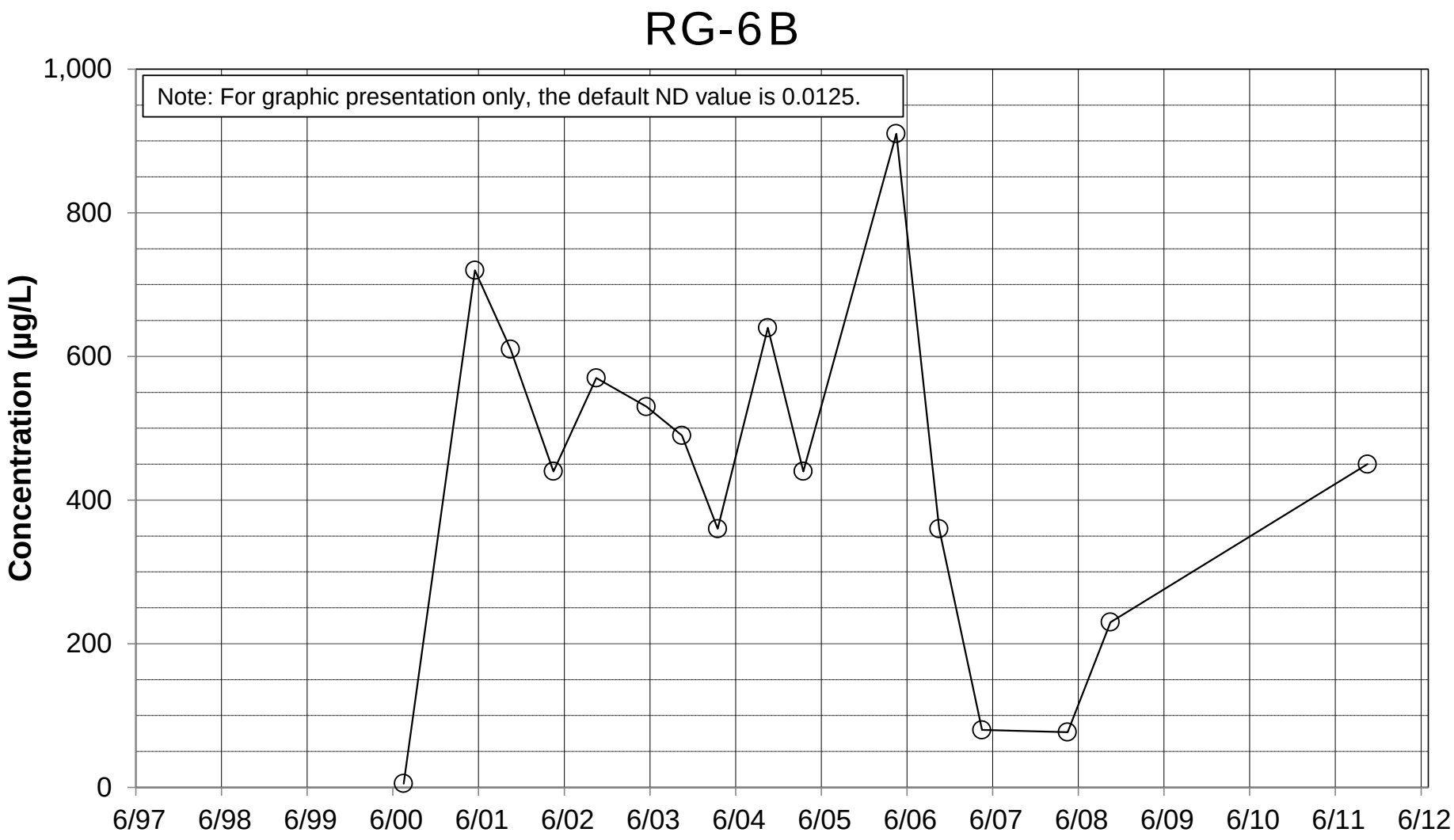
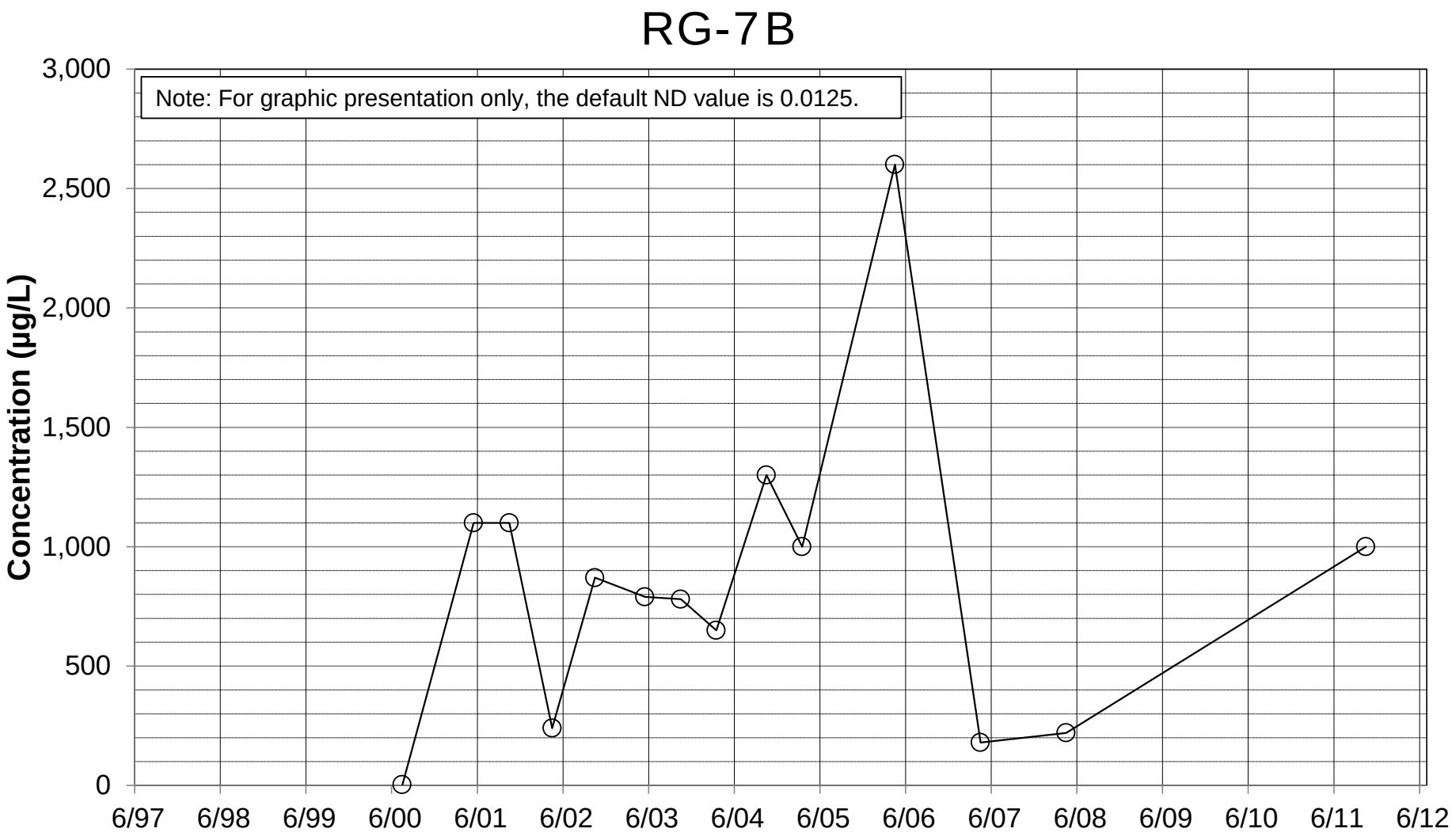
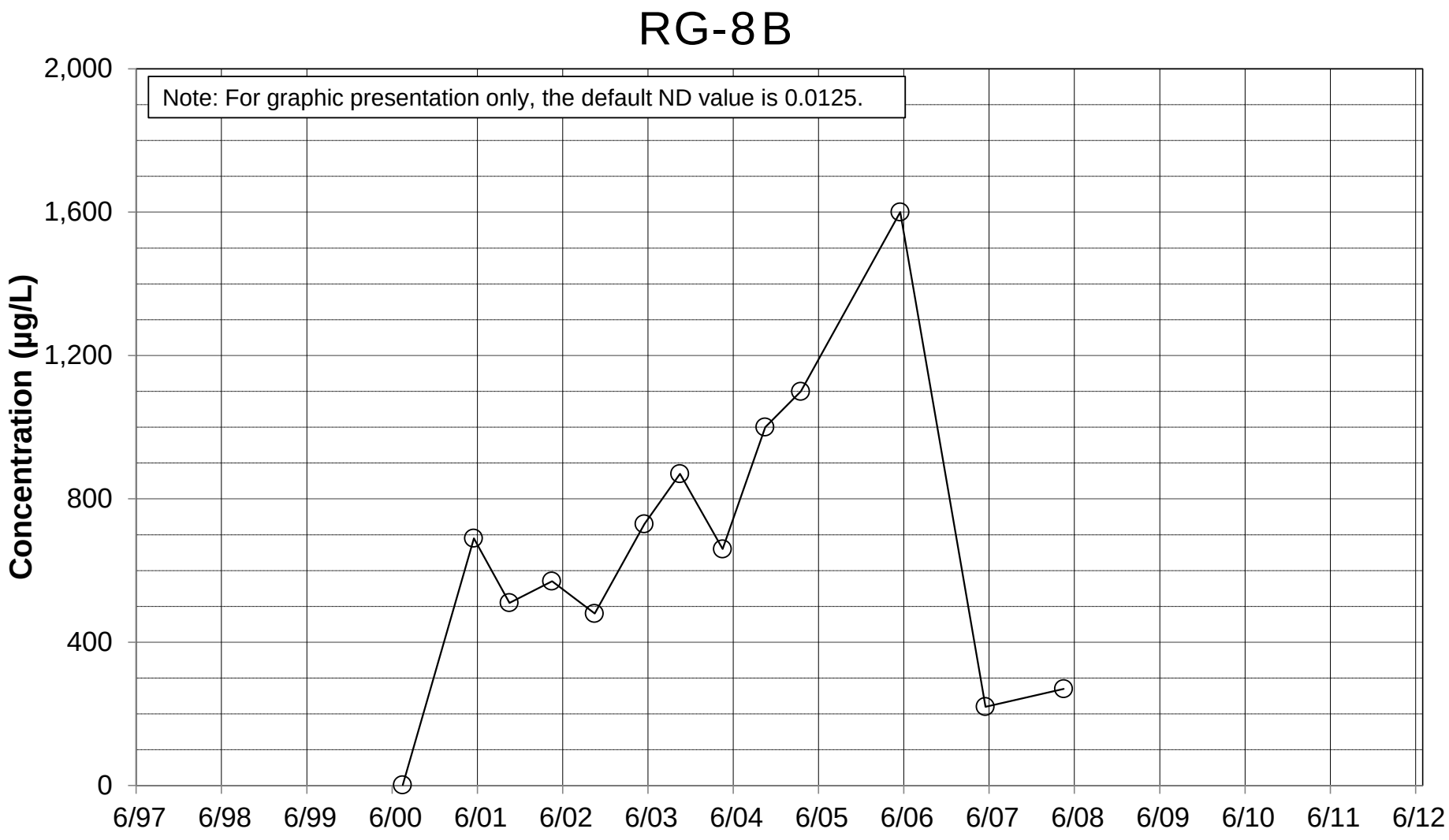
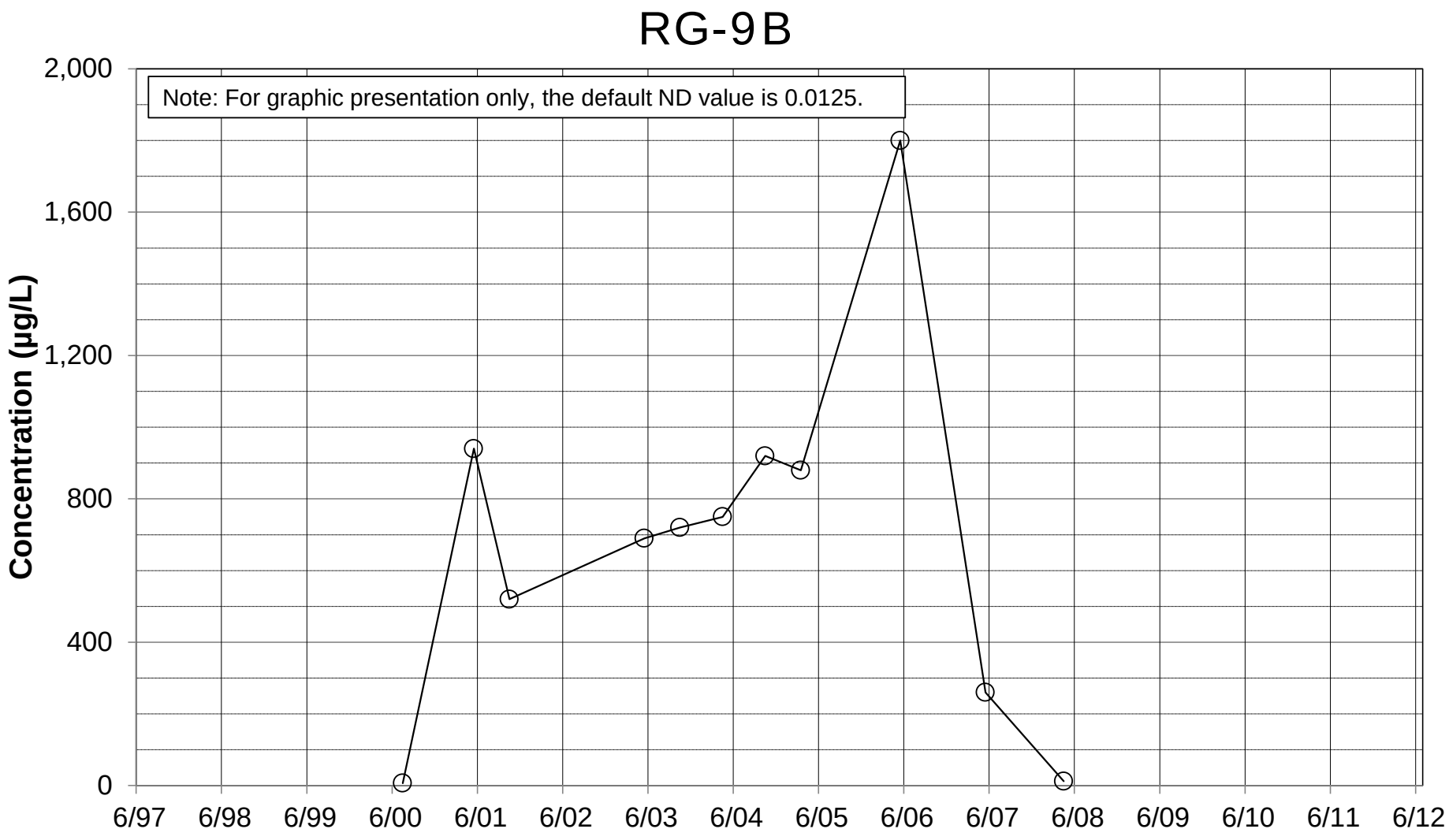
6/09
6/10
6/11
6/12

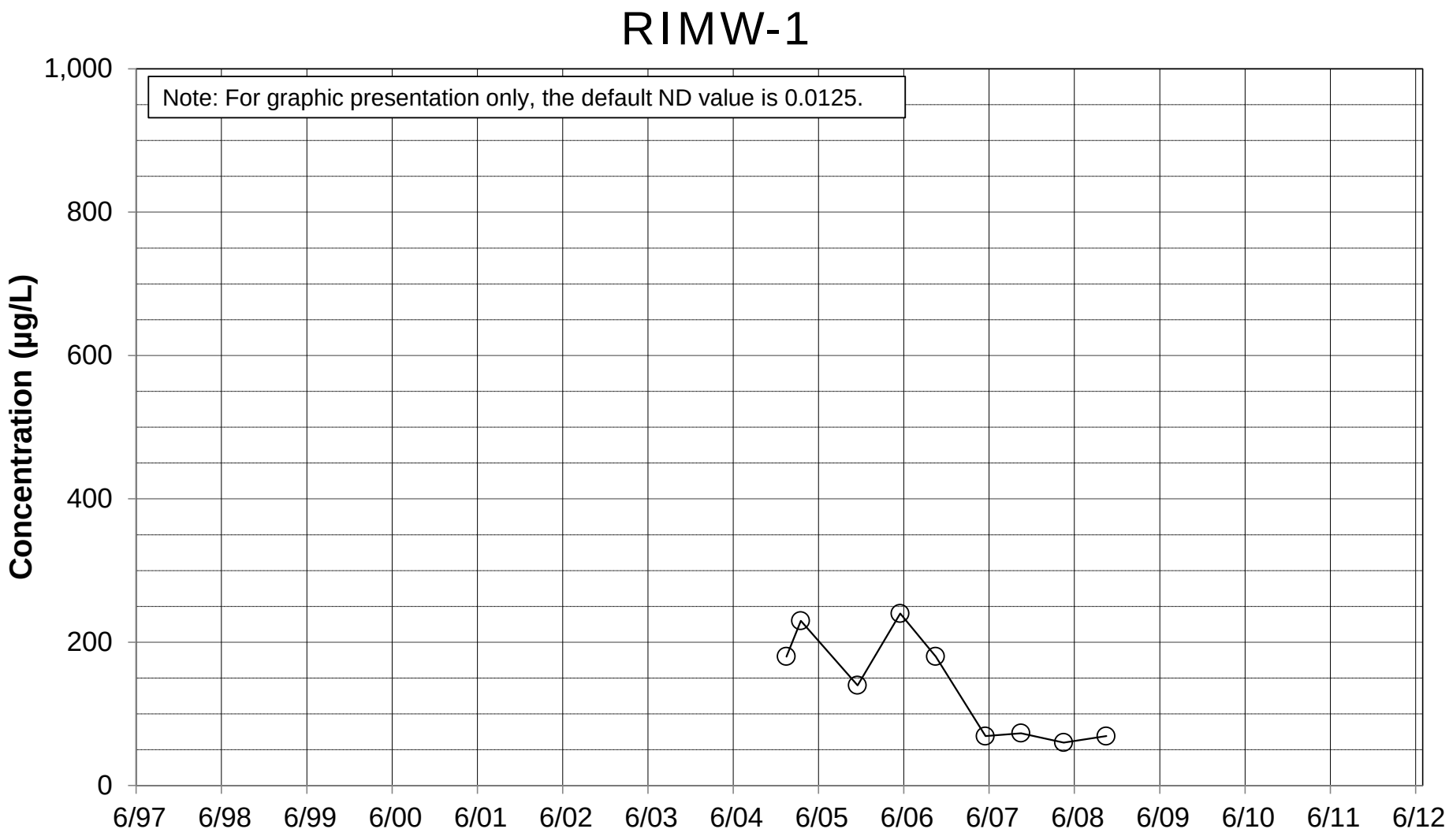

RG-5B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

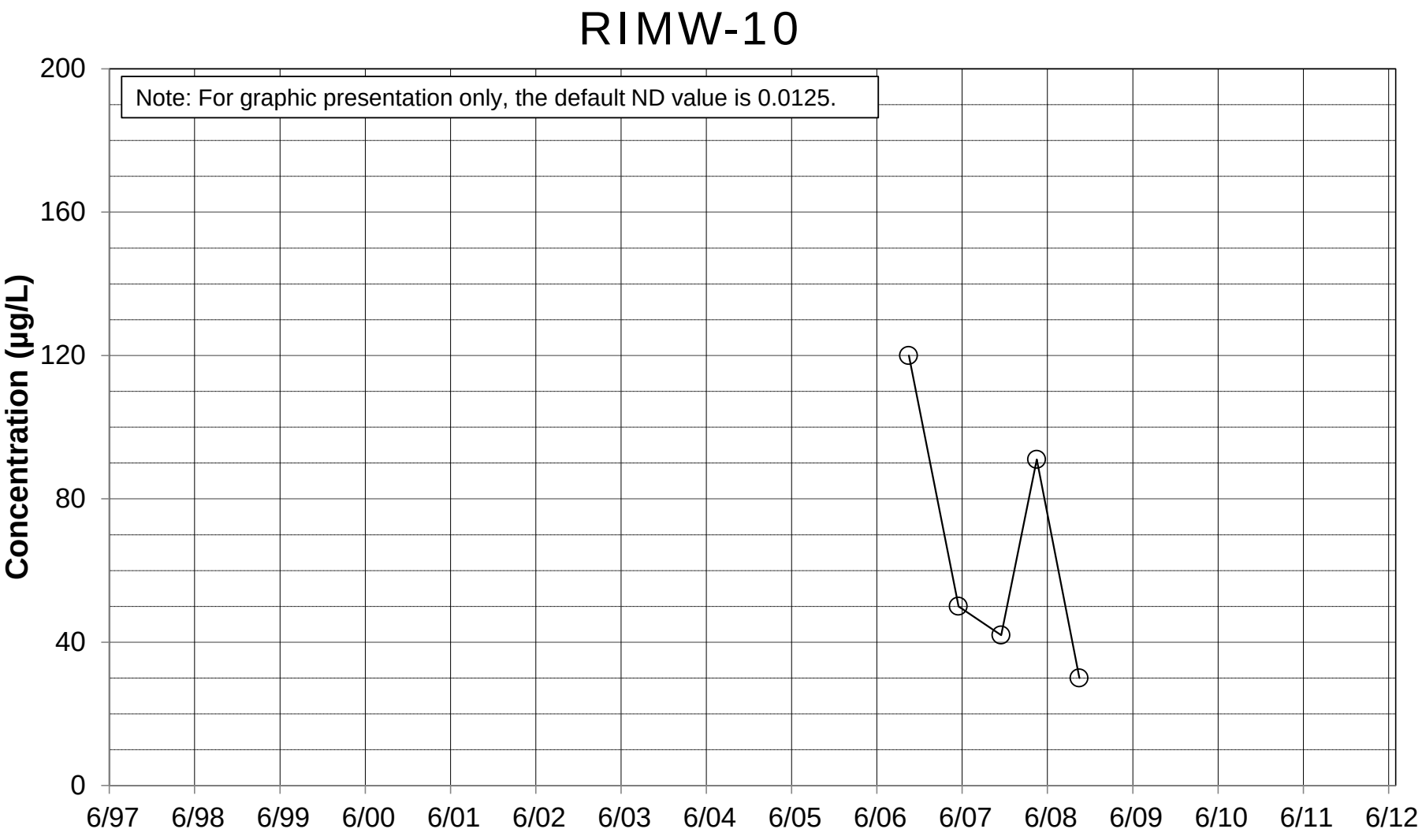

RG-6B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

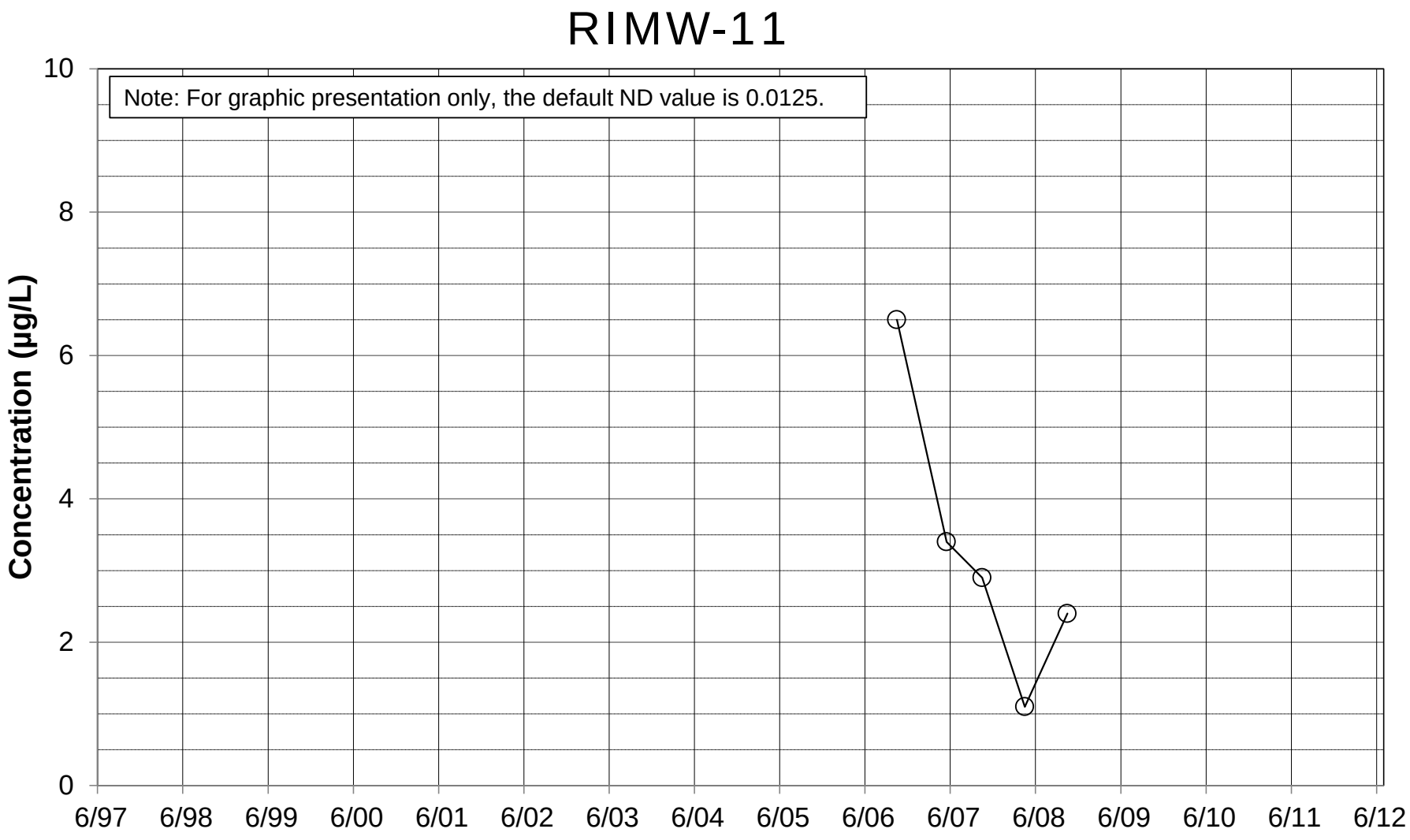

RG-7B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
3,000
2,500
2,000
1,500
1,000
500
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

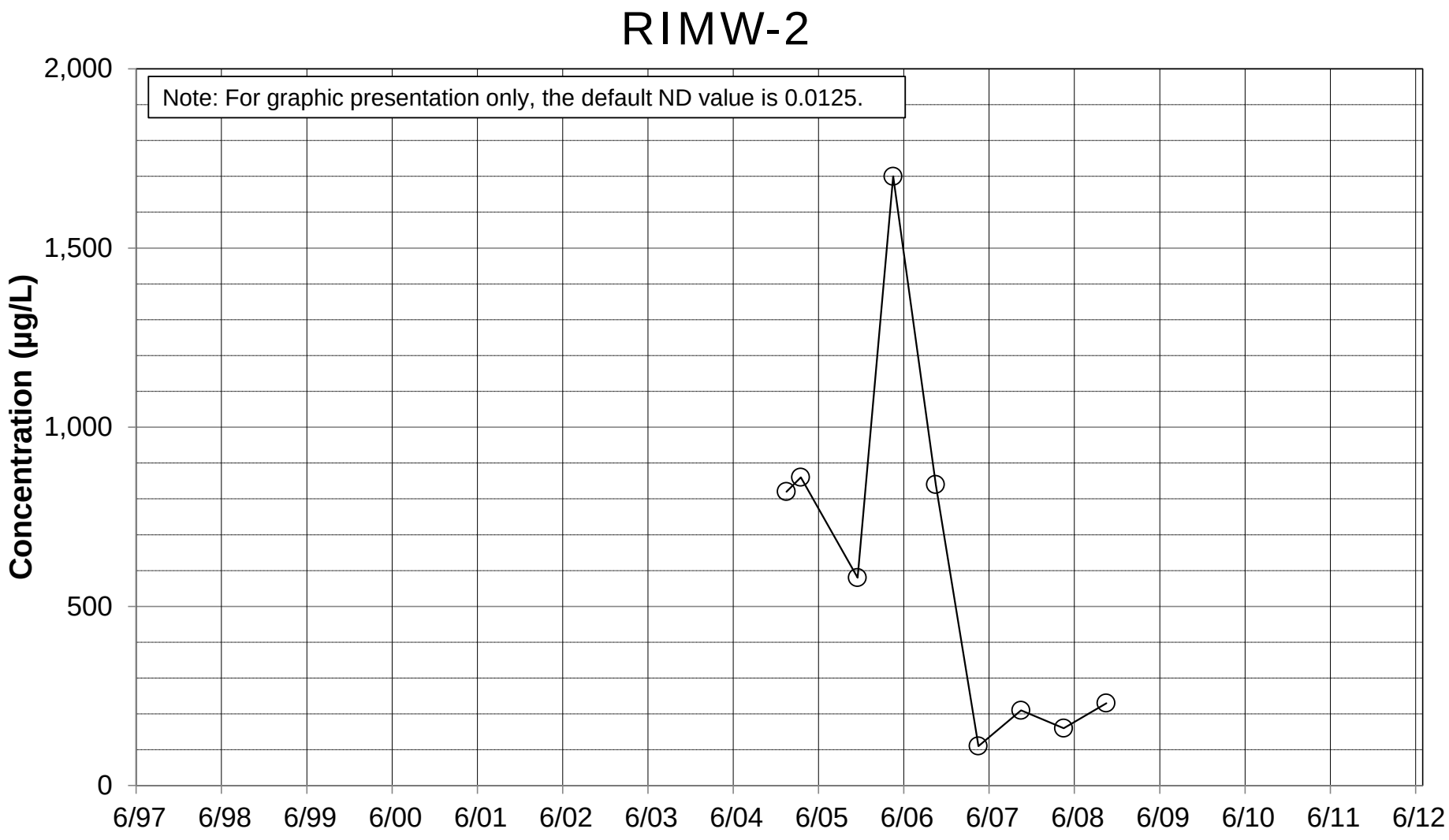

RG-8B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
2,000
1,600
1,200
800
400
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

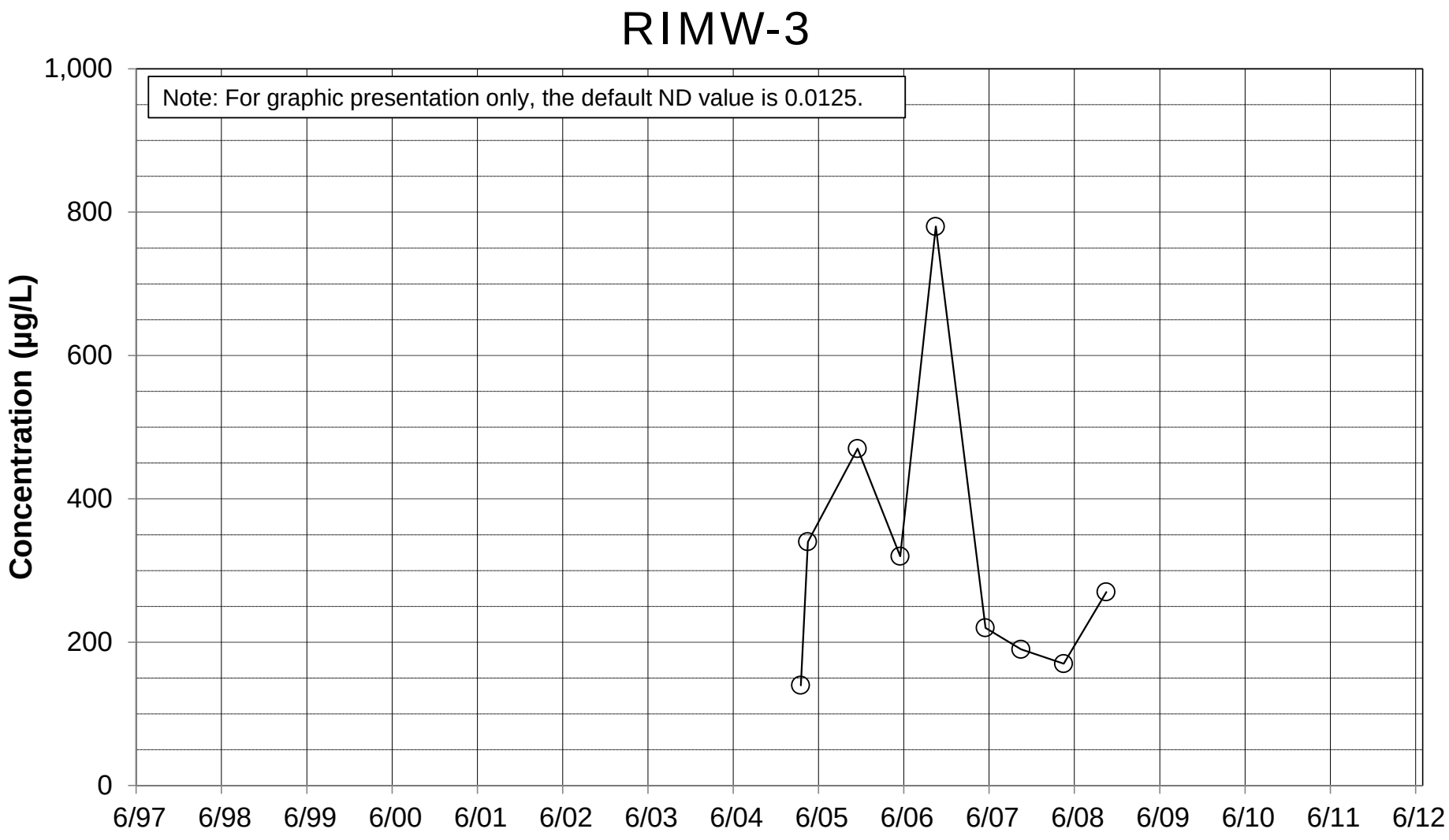

RG-9B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
2,000
1,600
1,200
800
400
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

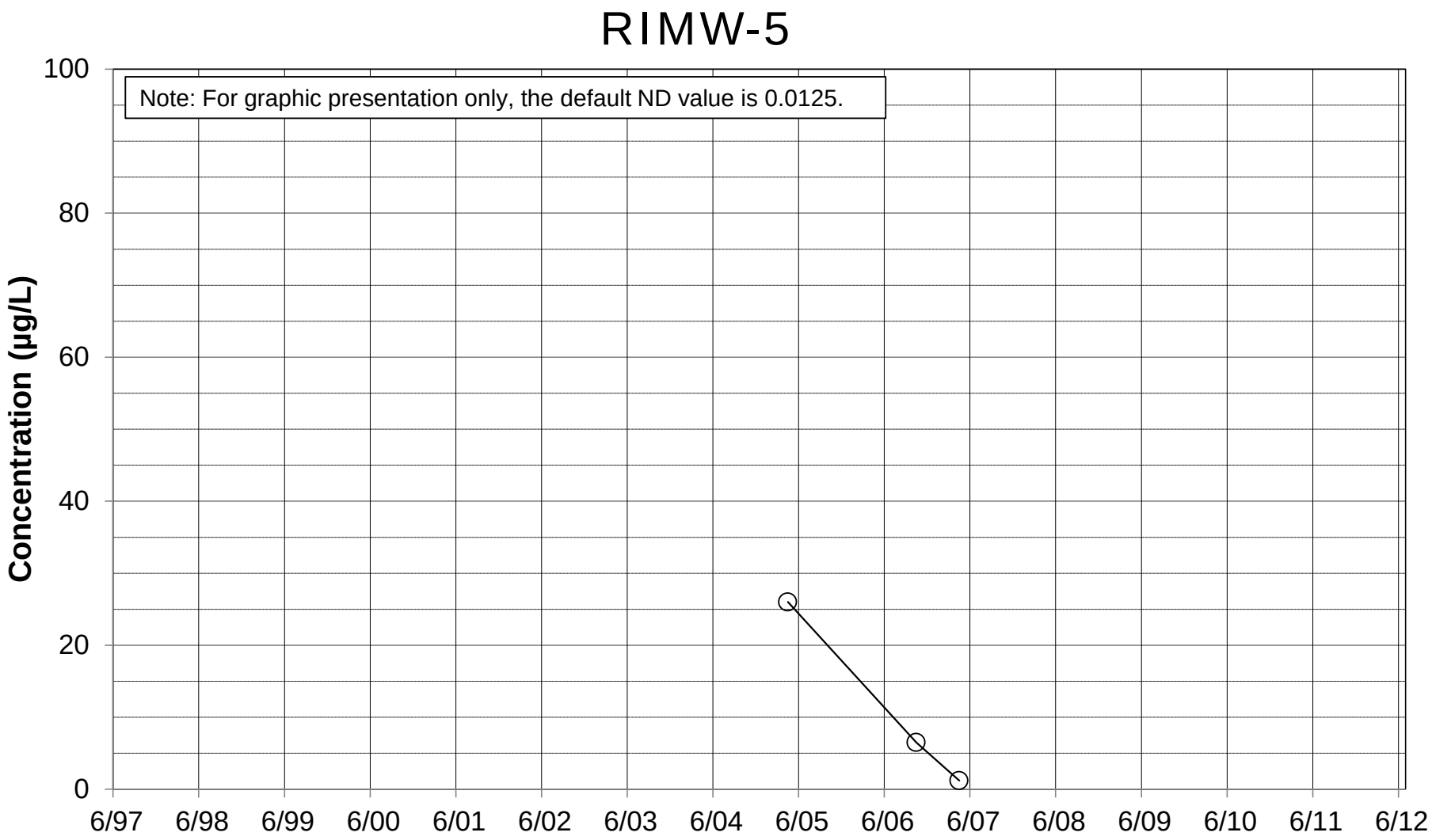

RIMW-1
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

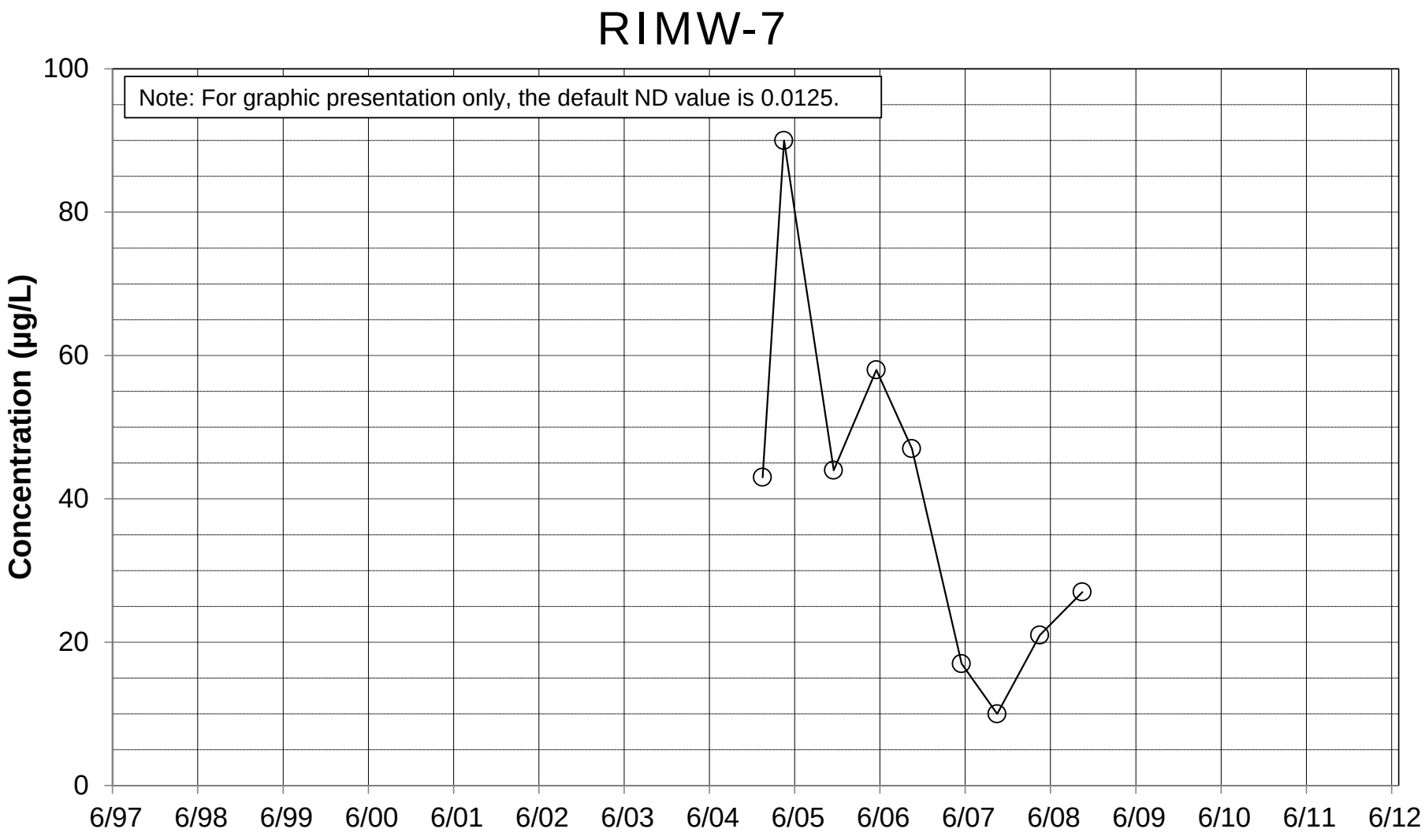

RIMW-10
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
200
160
120
80
40
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

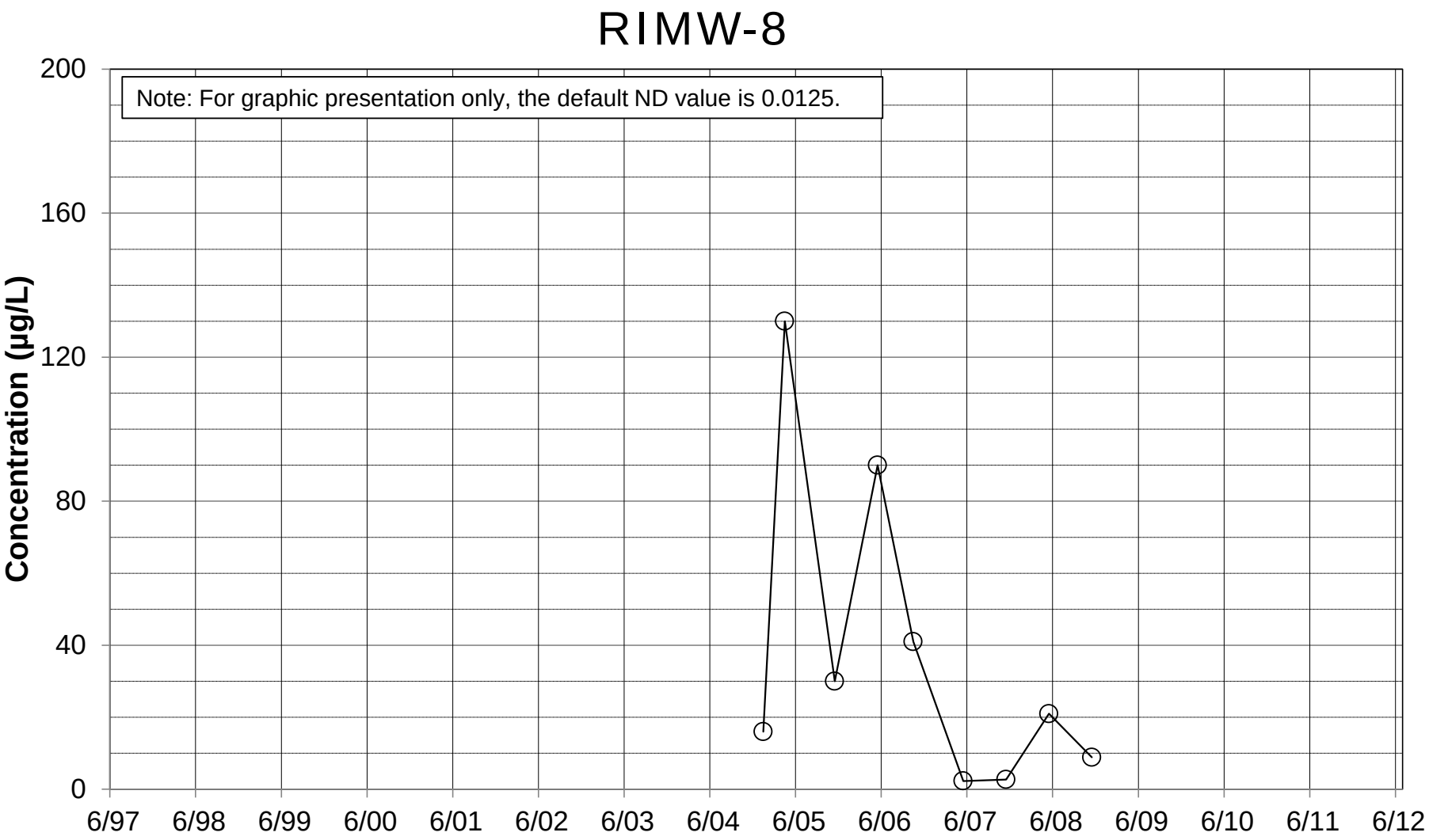

RIMW-11
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

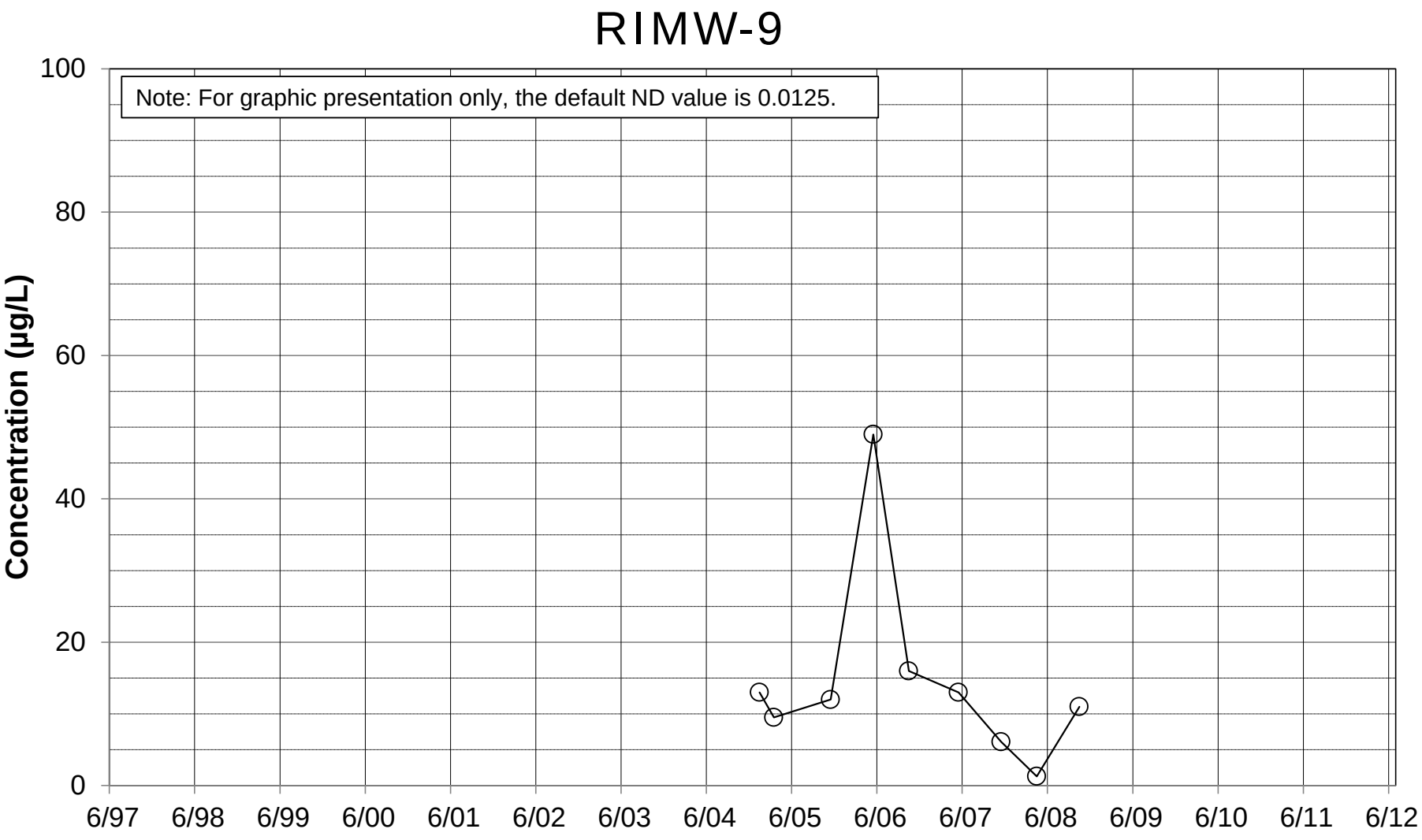

RIMW-2
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
2,000
1,500
1,000
500
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

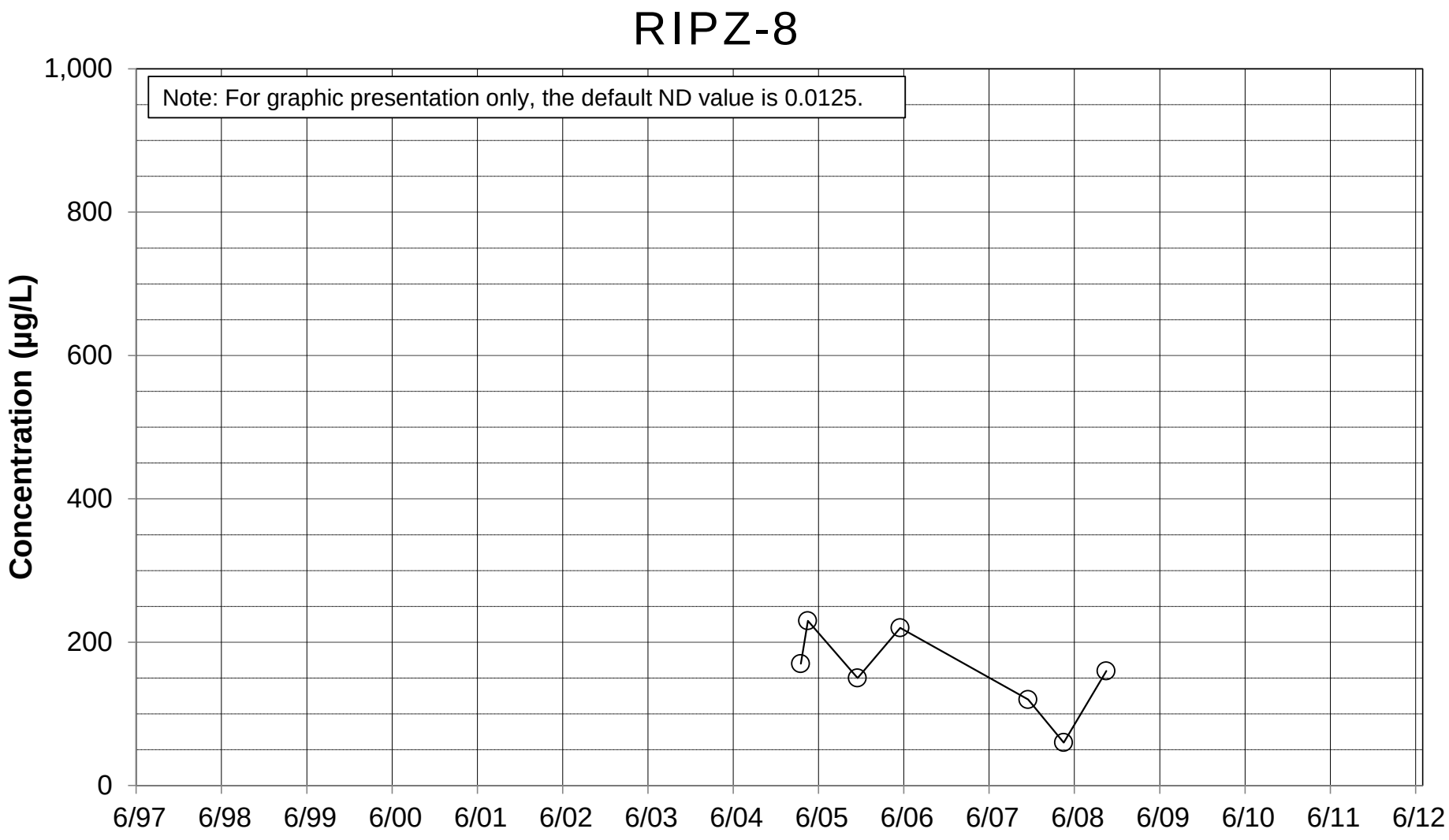

RIMW-3
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

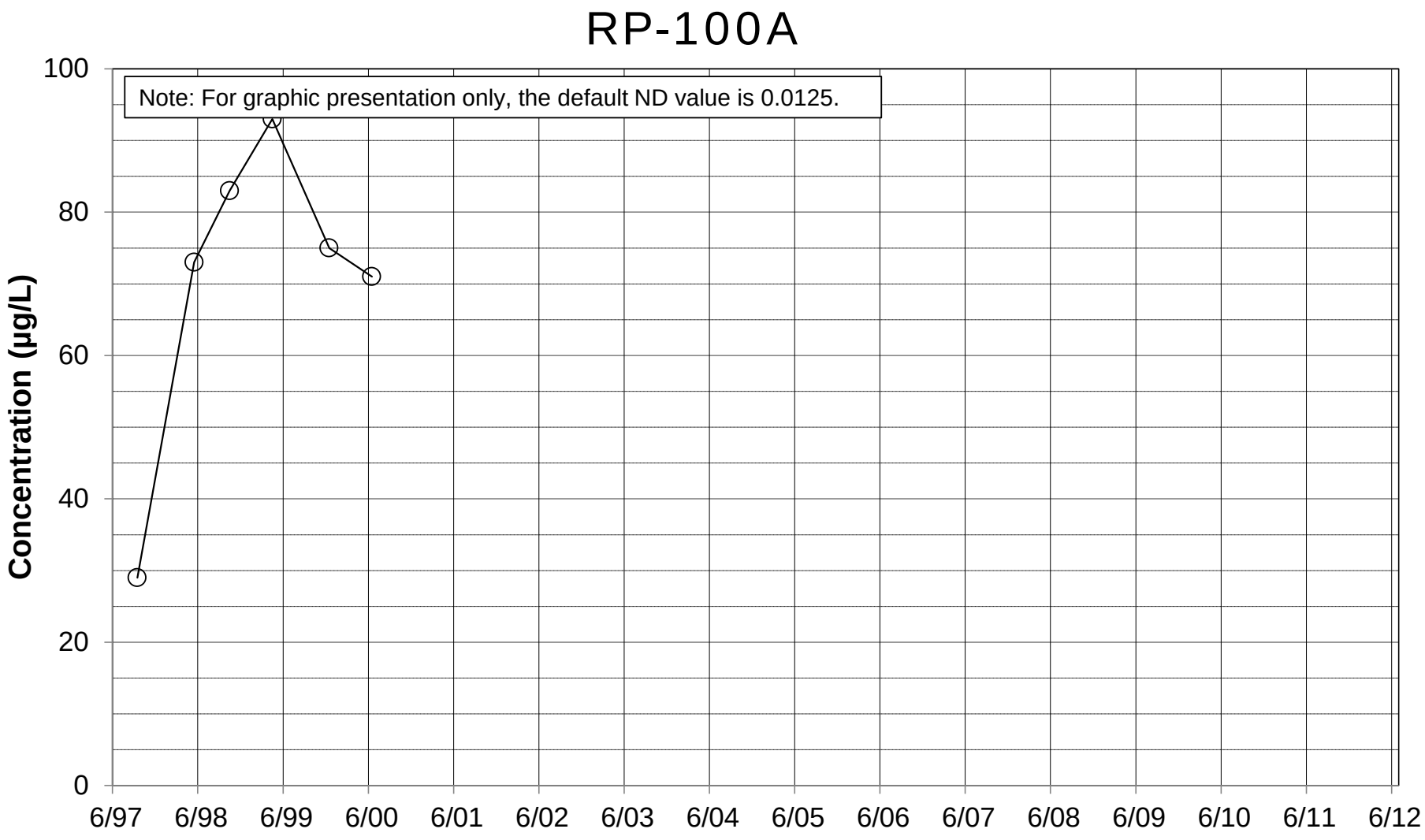

RIMW-5
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

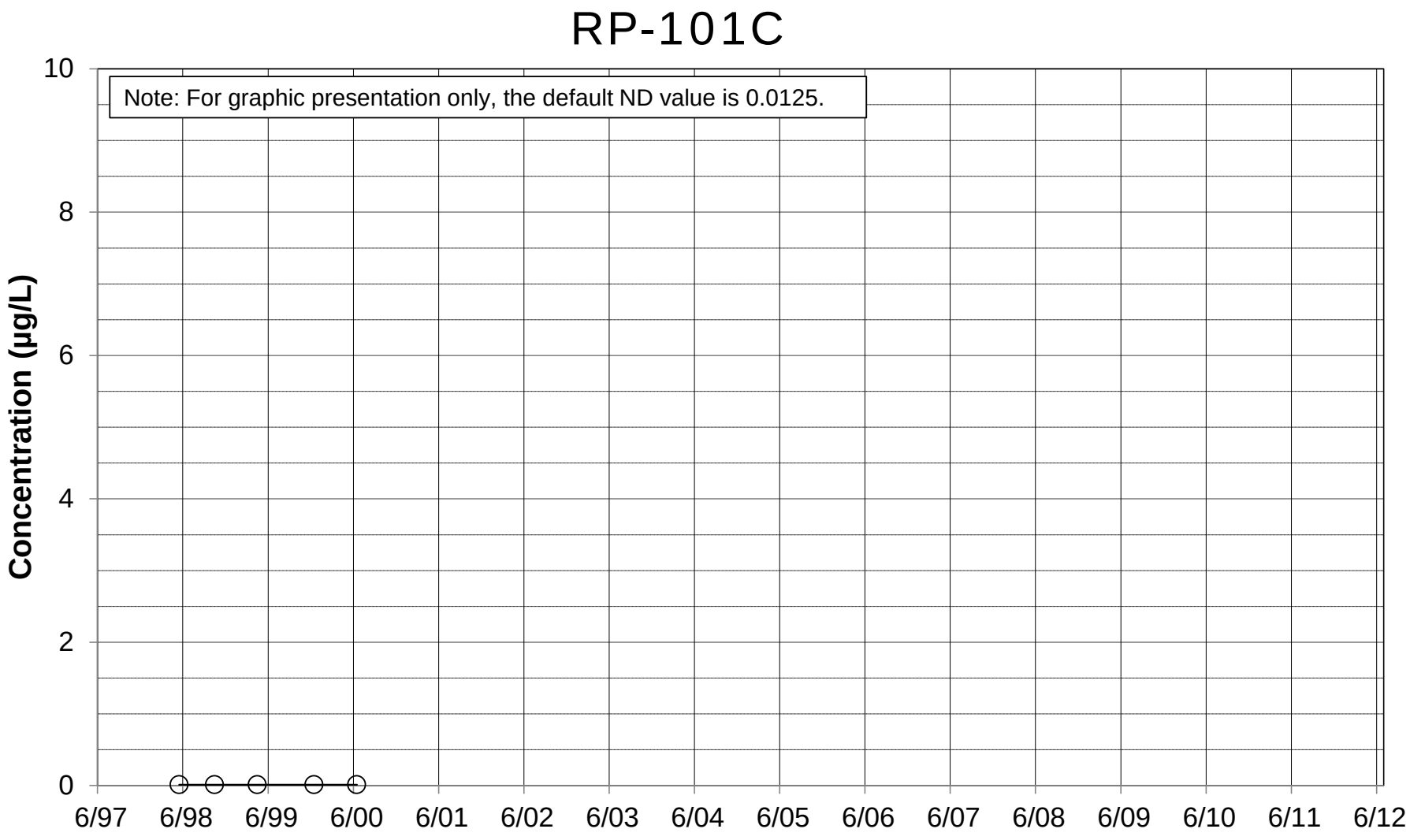

RIMW-7
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

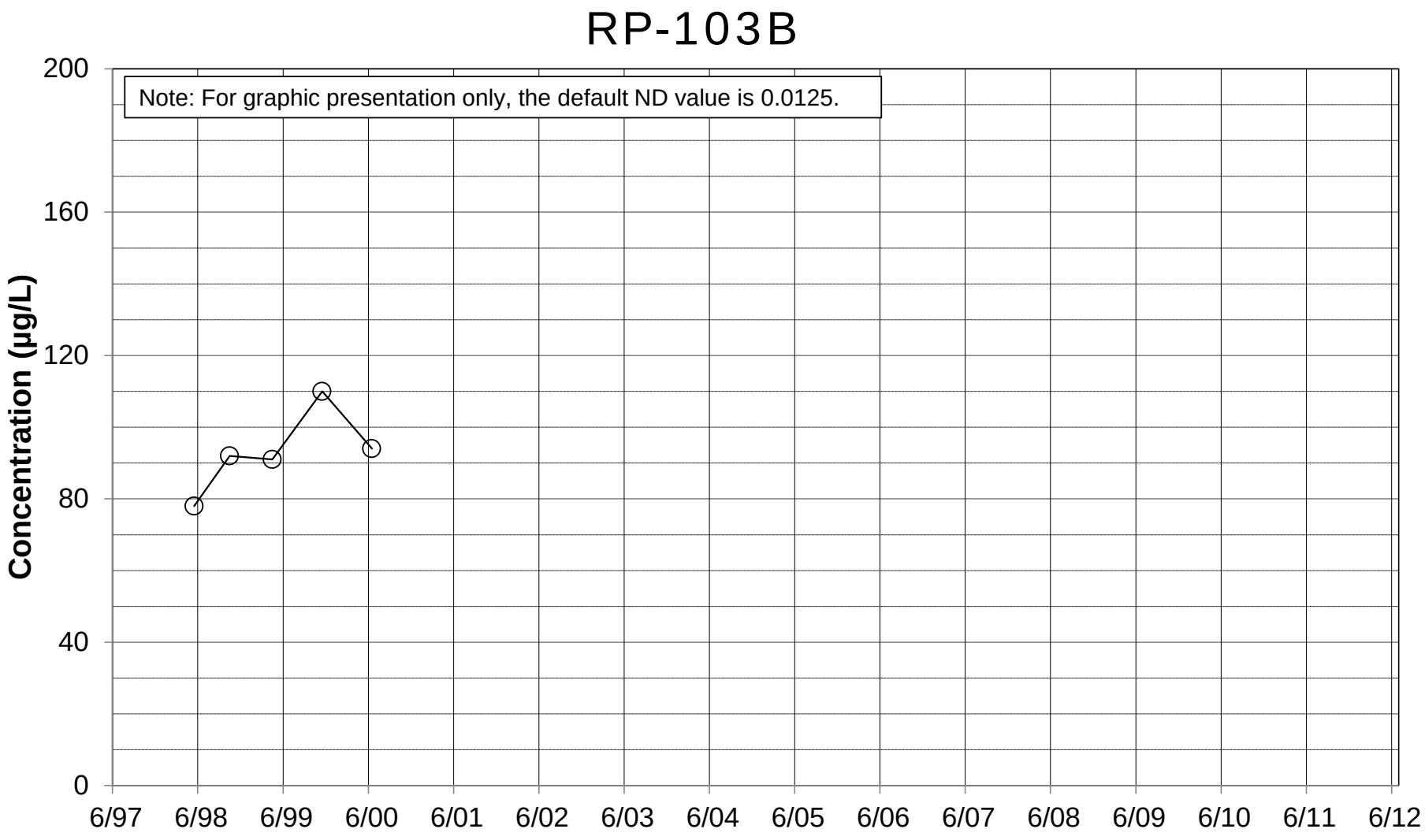

RIMW-8
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
200
160
120
80
40
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RIMW-9
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

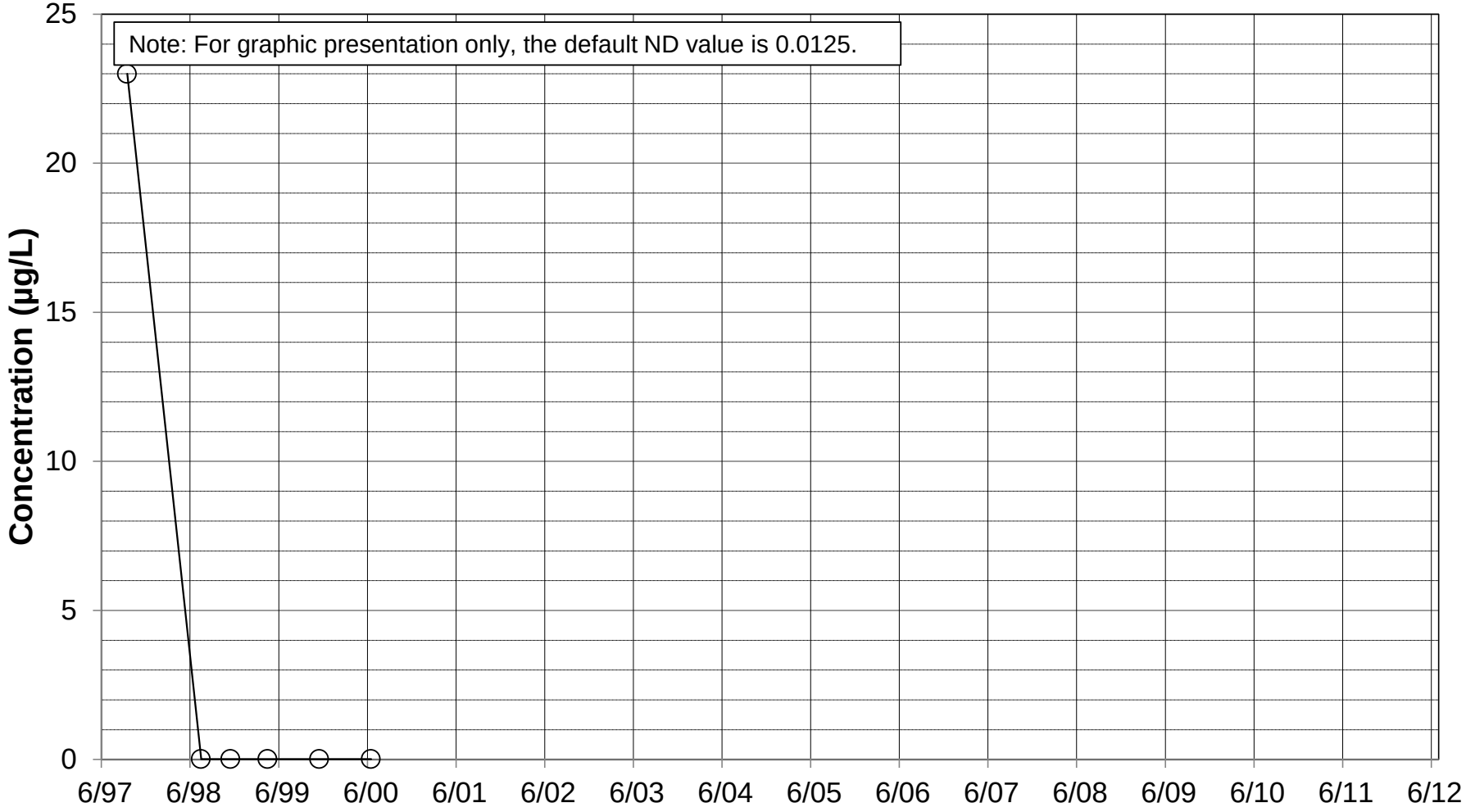

RIPZ-8
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

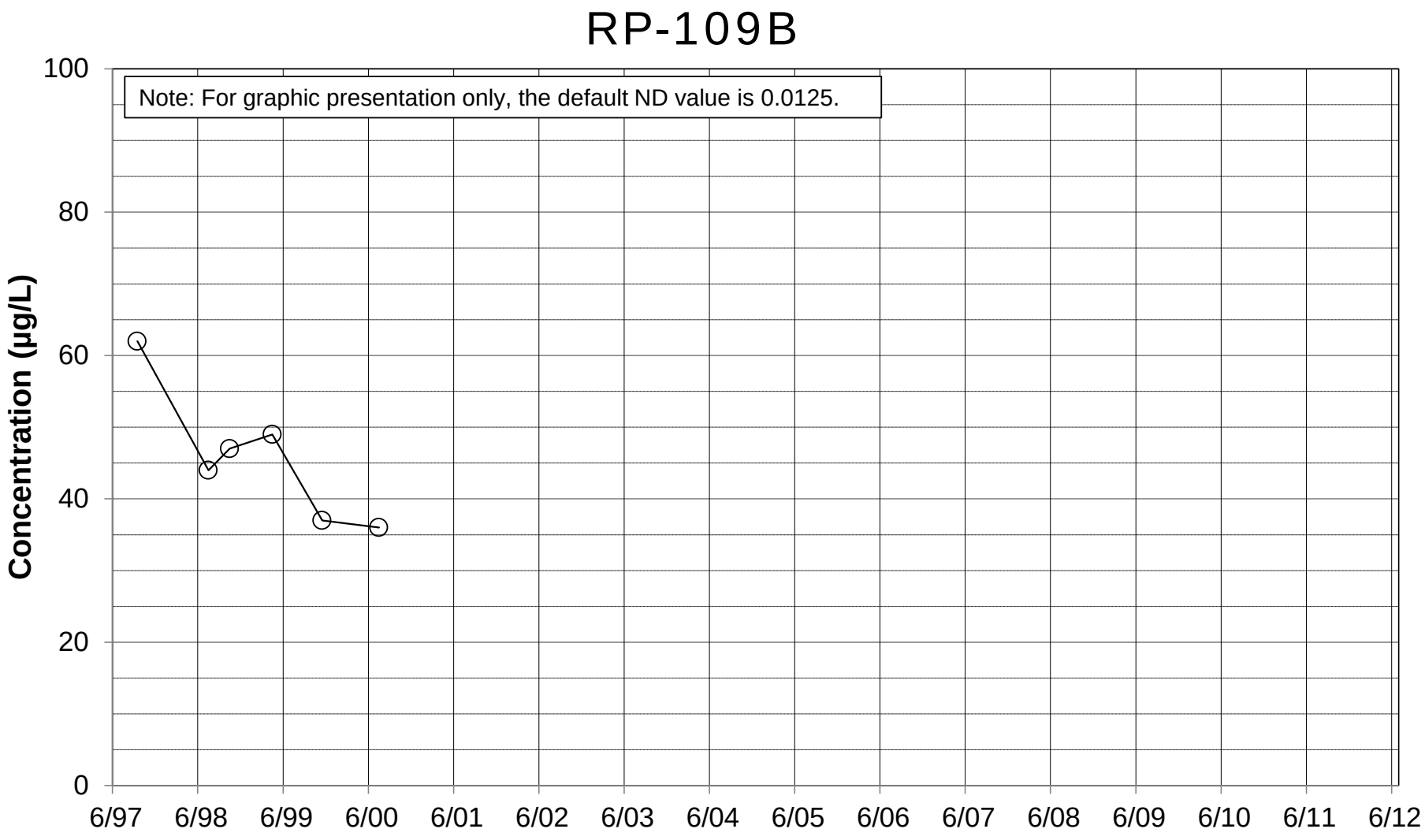

RP-100A
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RP-101C
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RP-103B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
200
160
120
80
40
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

RP-107D


Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
25
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RP-109B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
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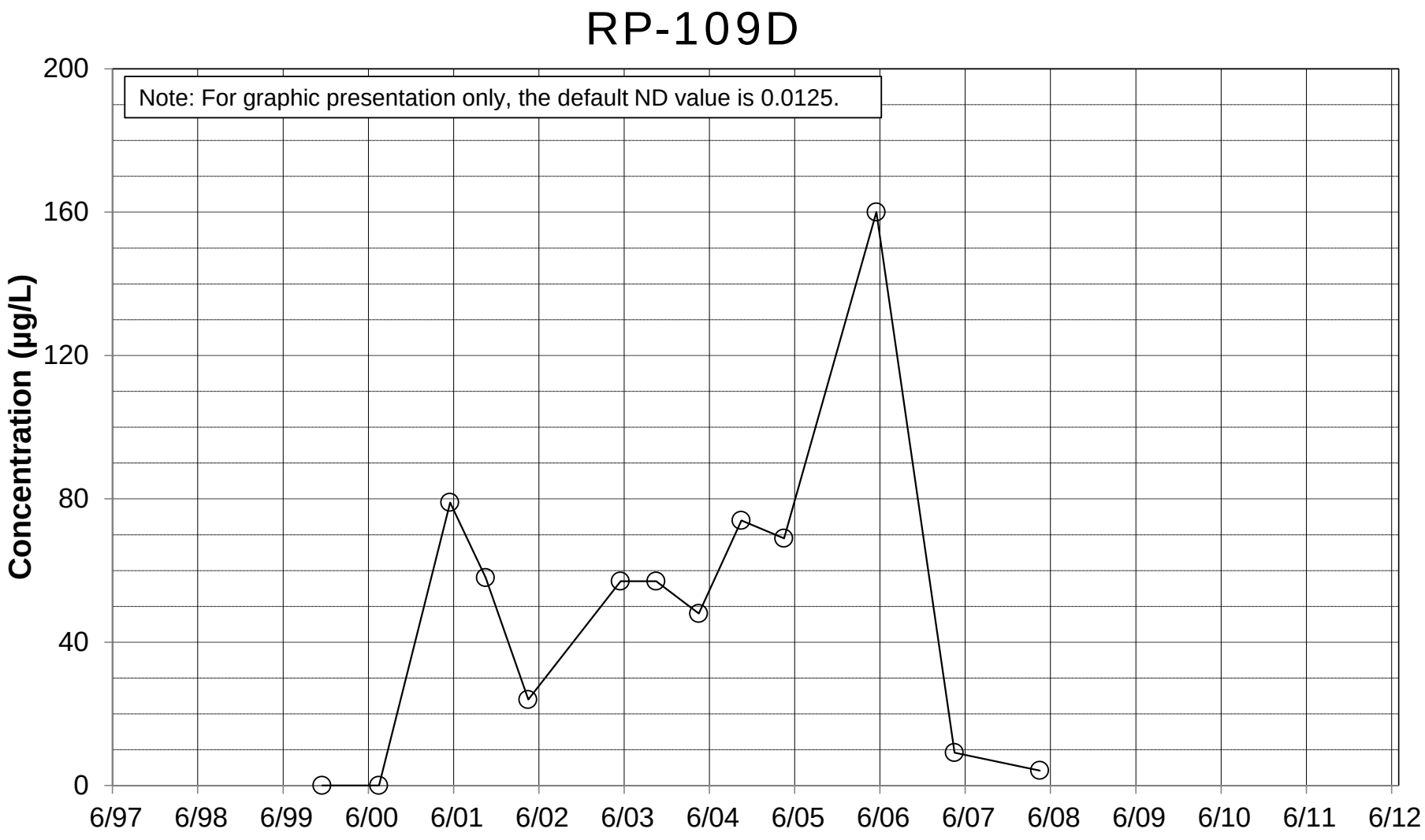
6/09
6/10
6/11
6/12


RP-109D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
200
160
120
80
40
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
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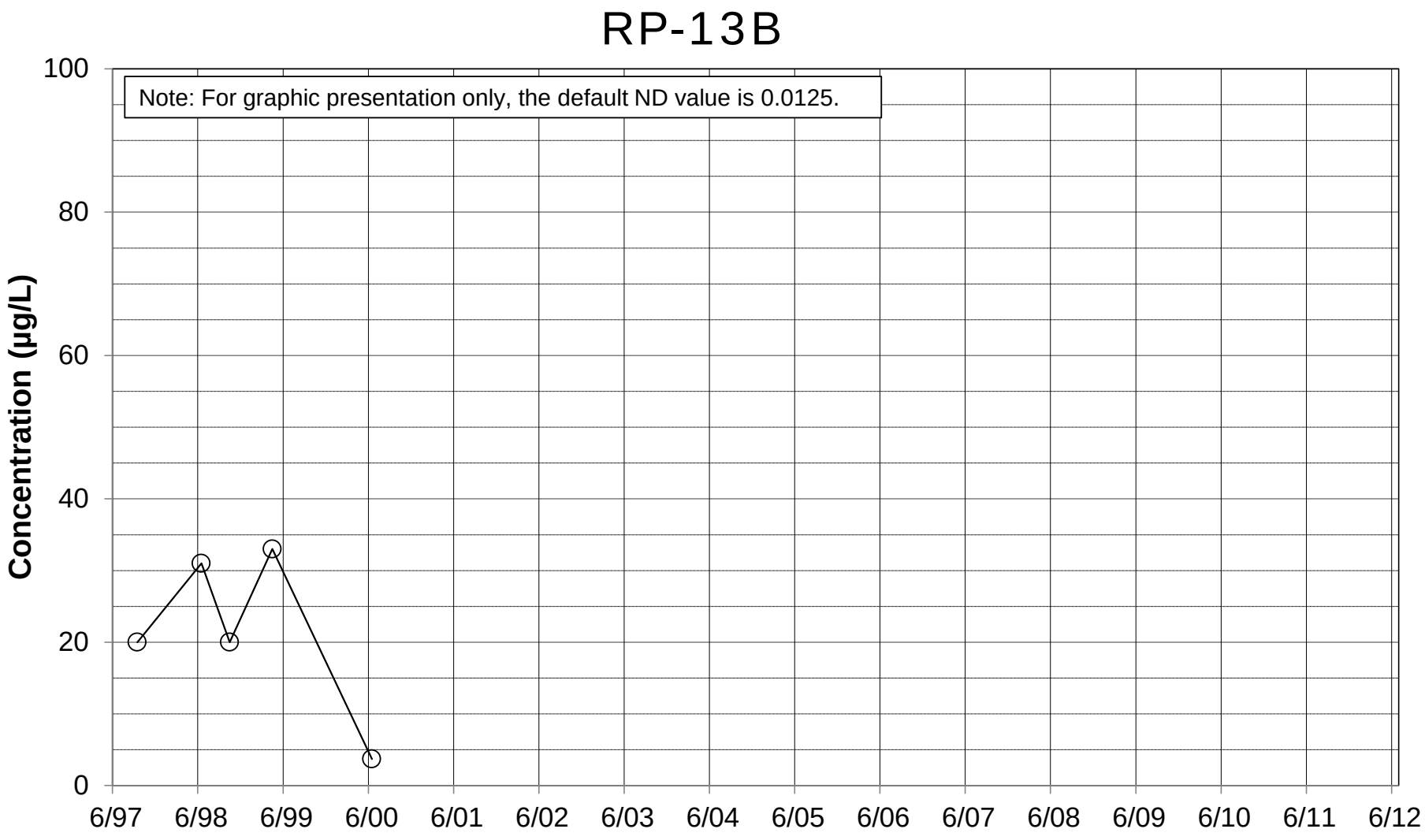
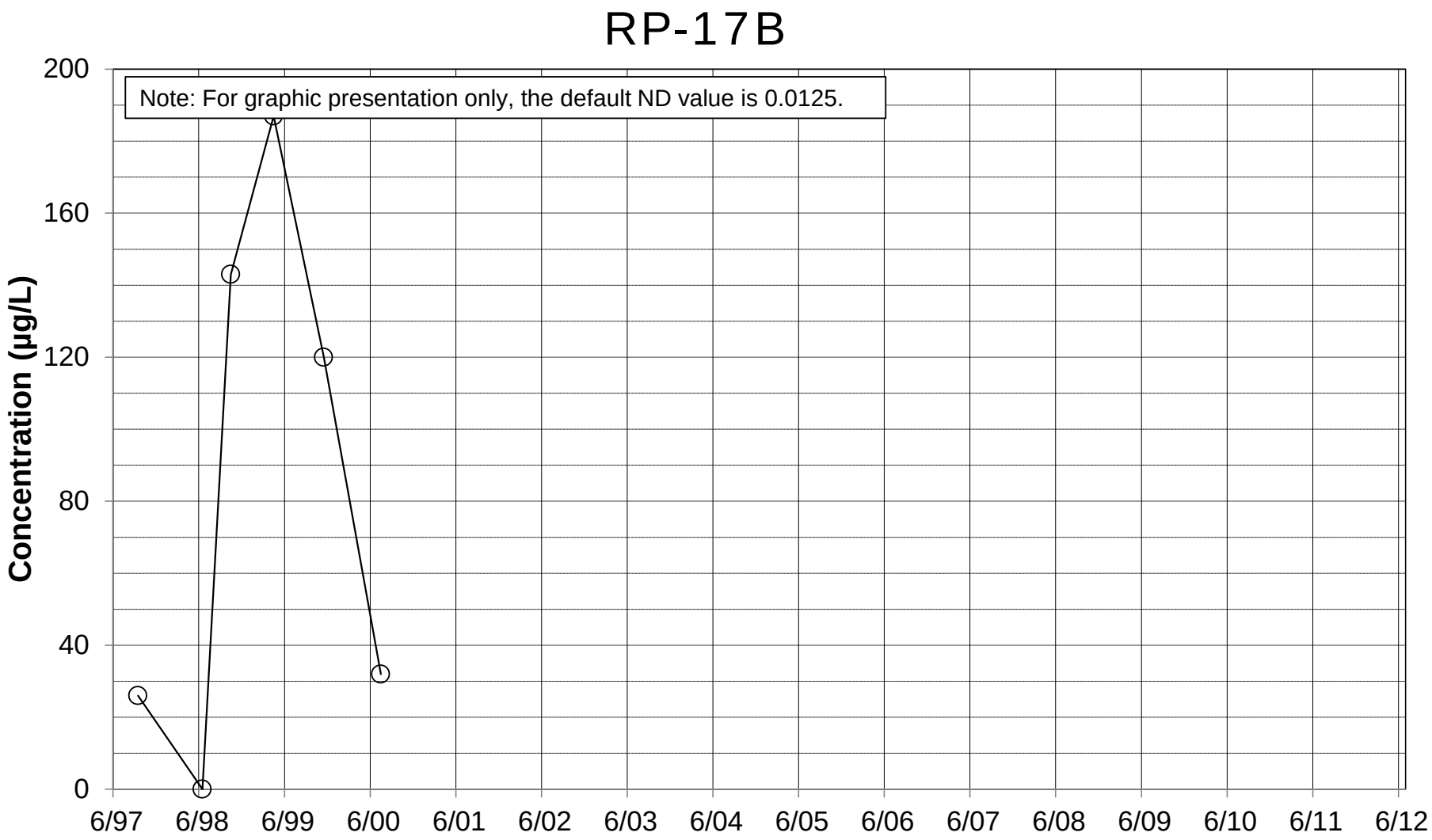
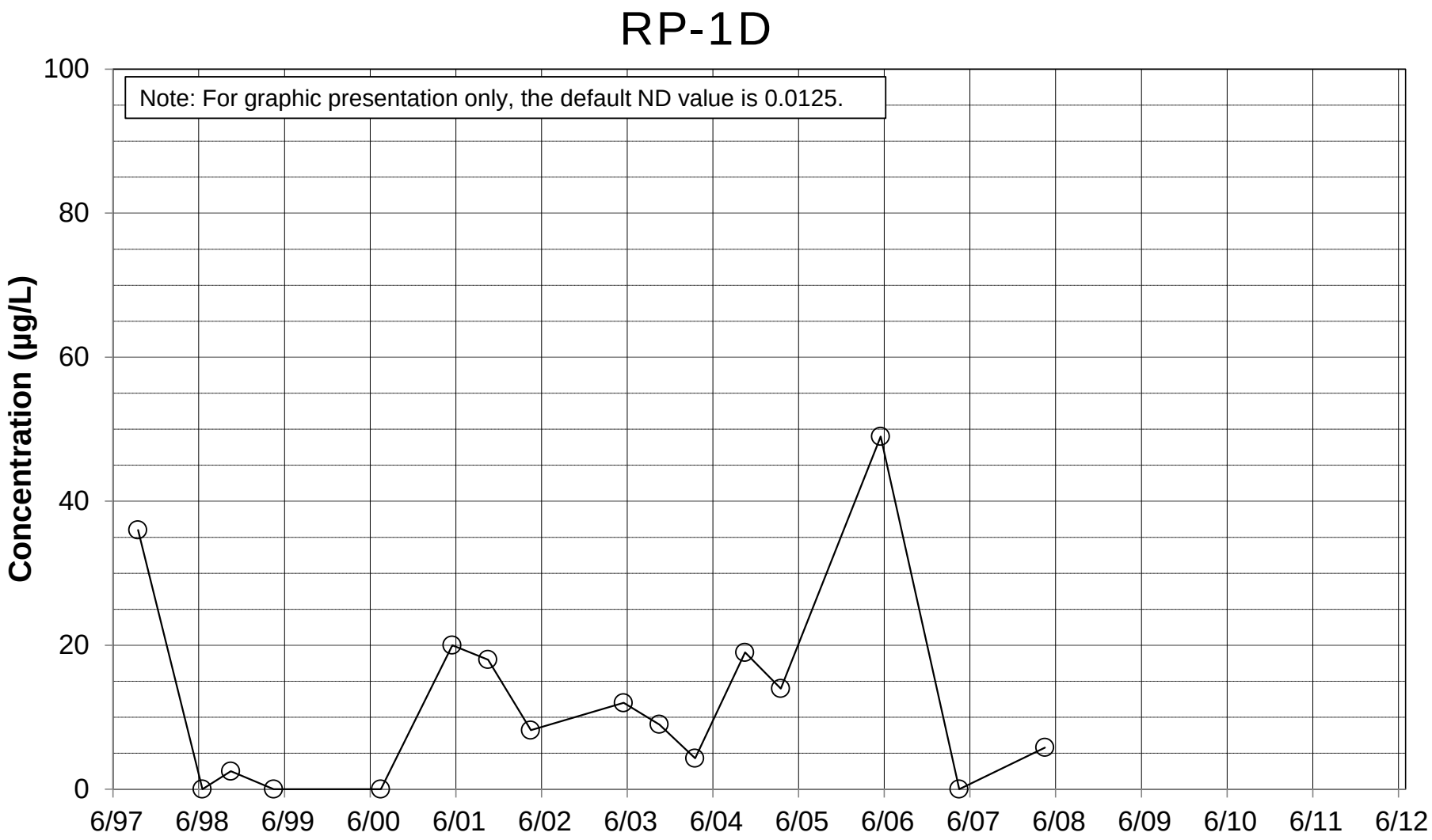
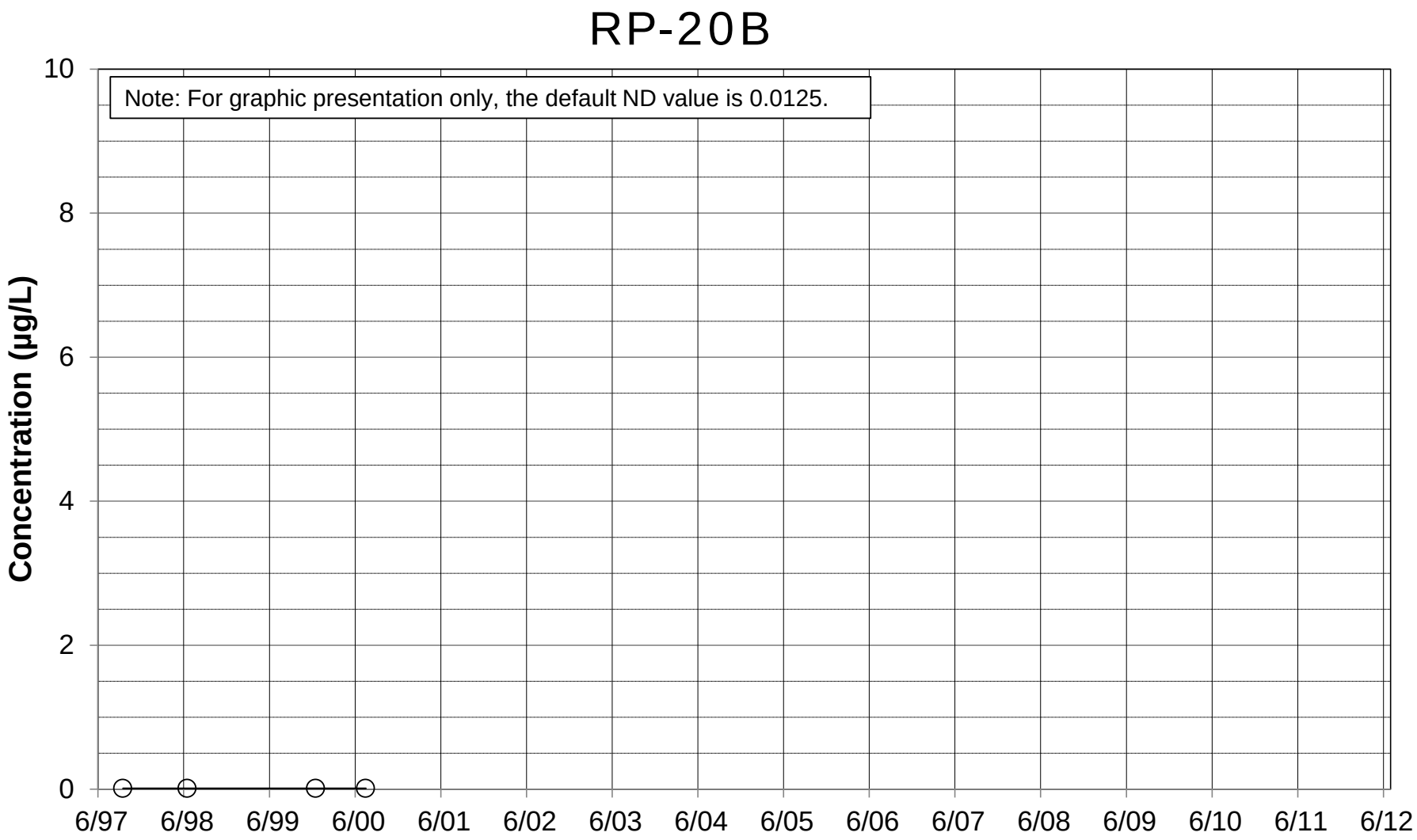
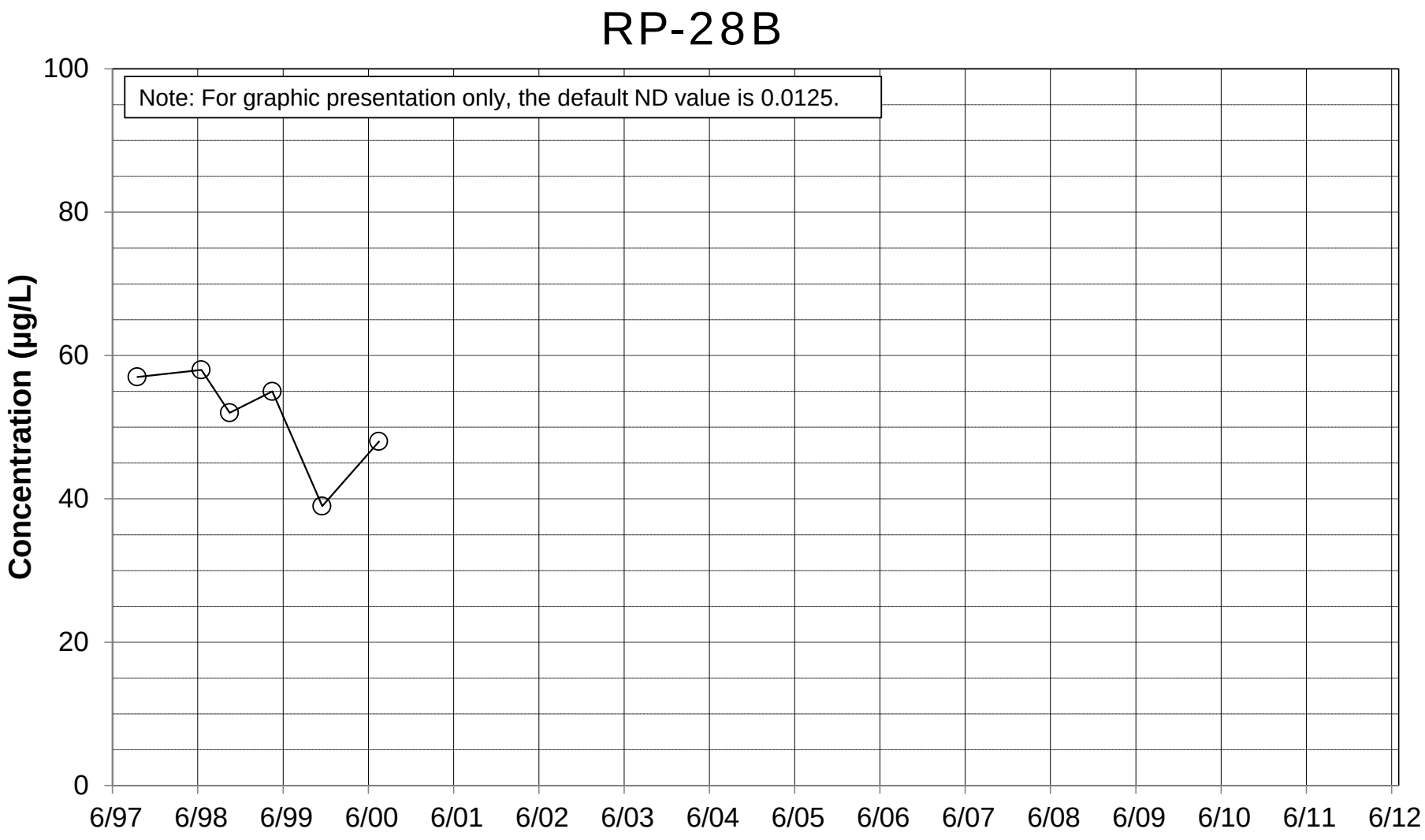
6/09
6/10
6/11
6/12

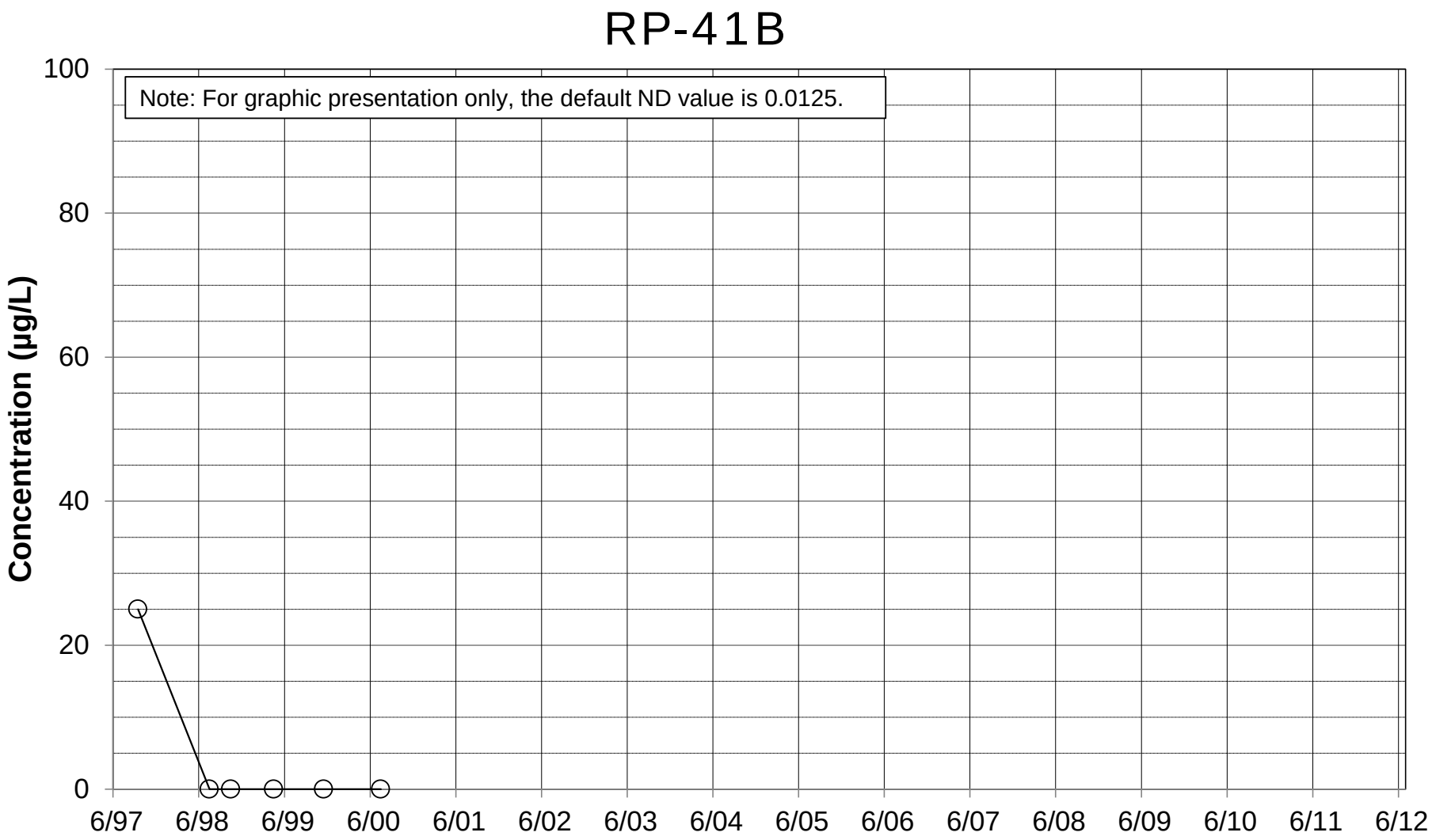

RP-13B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

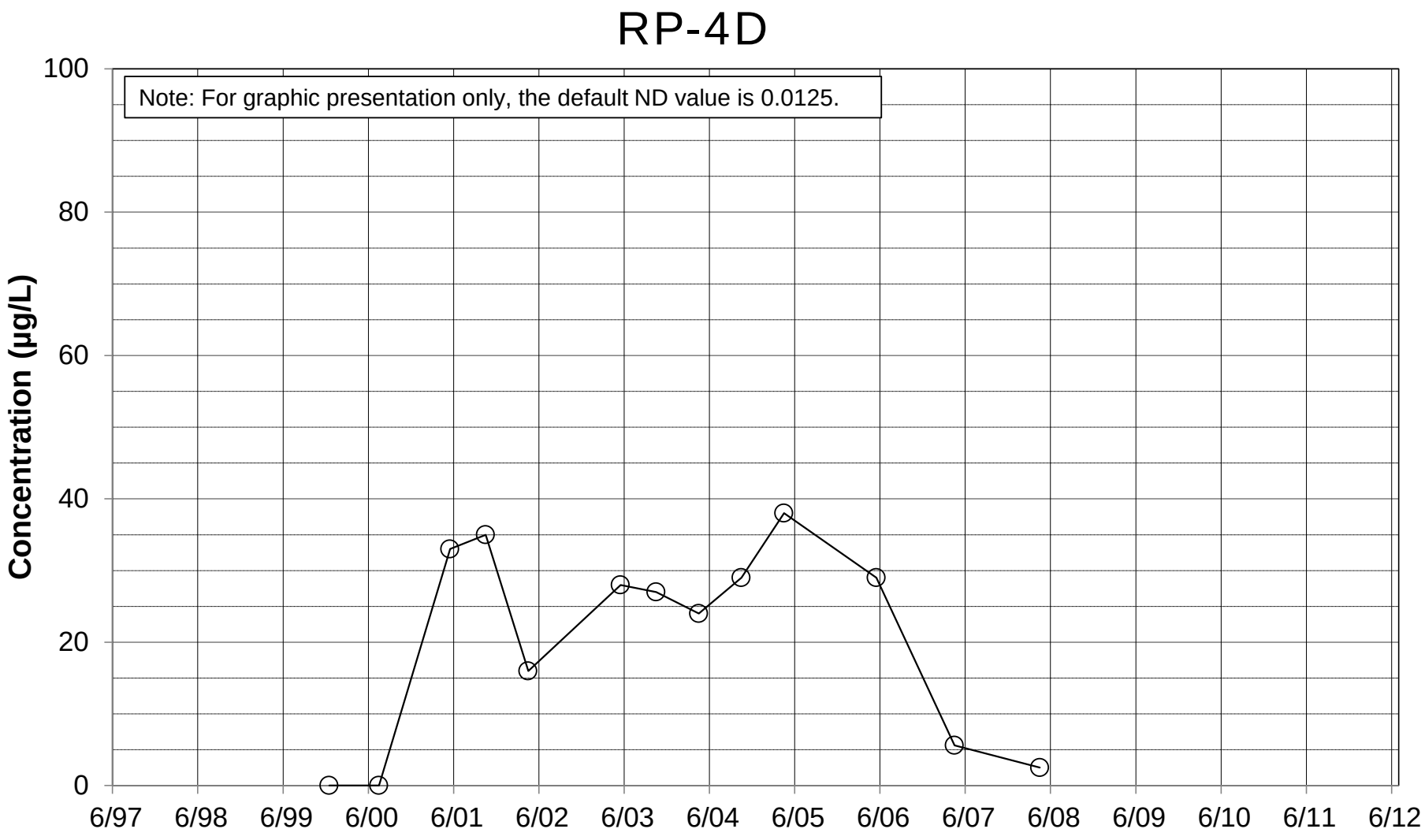

RP-17B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
200
160
120
80
40
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

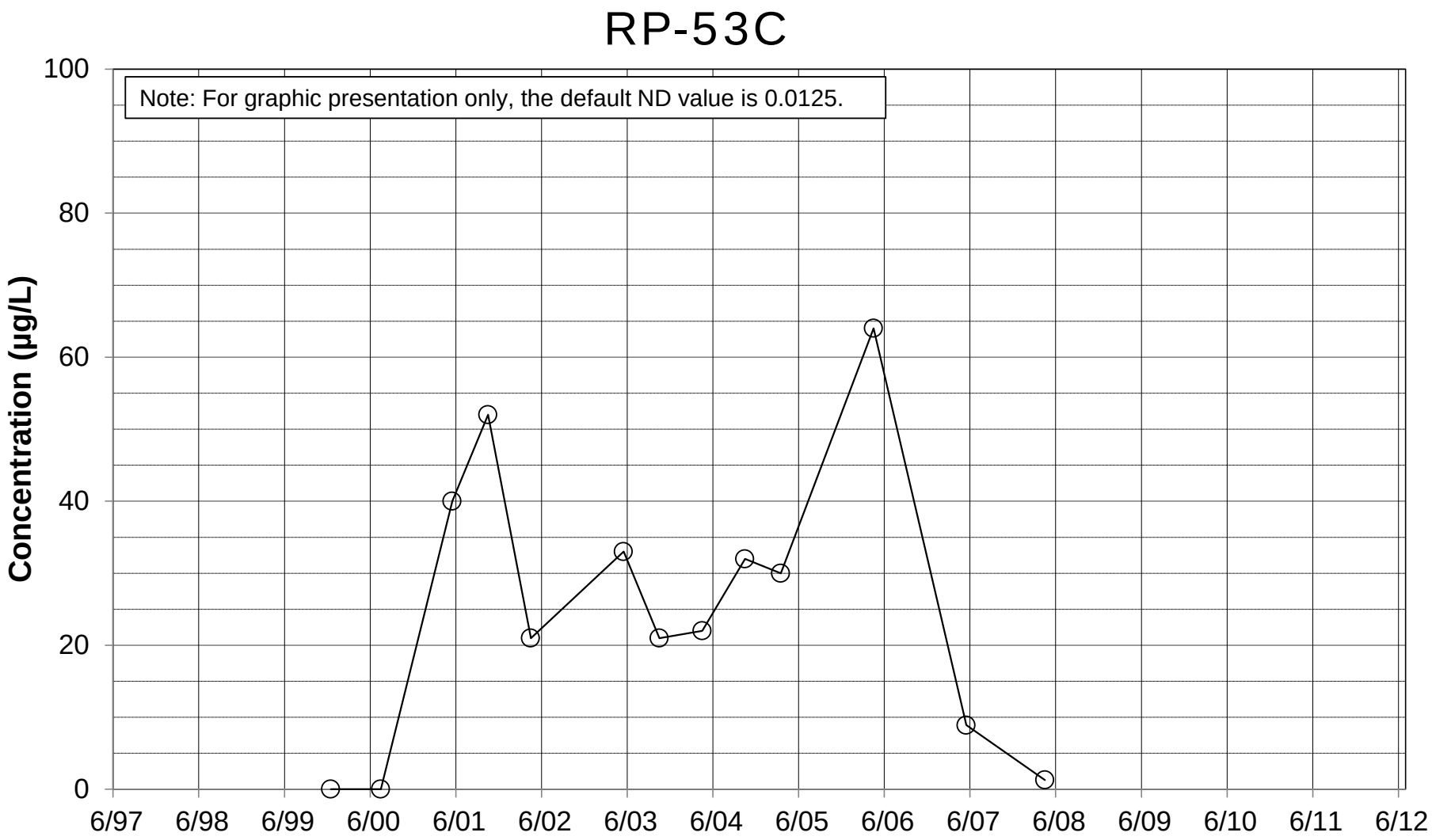

RP-1D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


RP-20B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

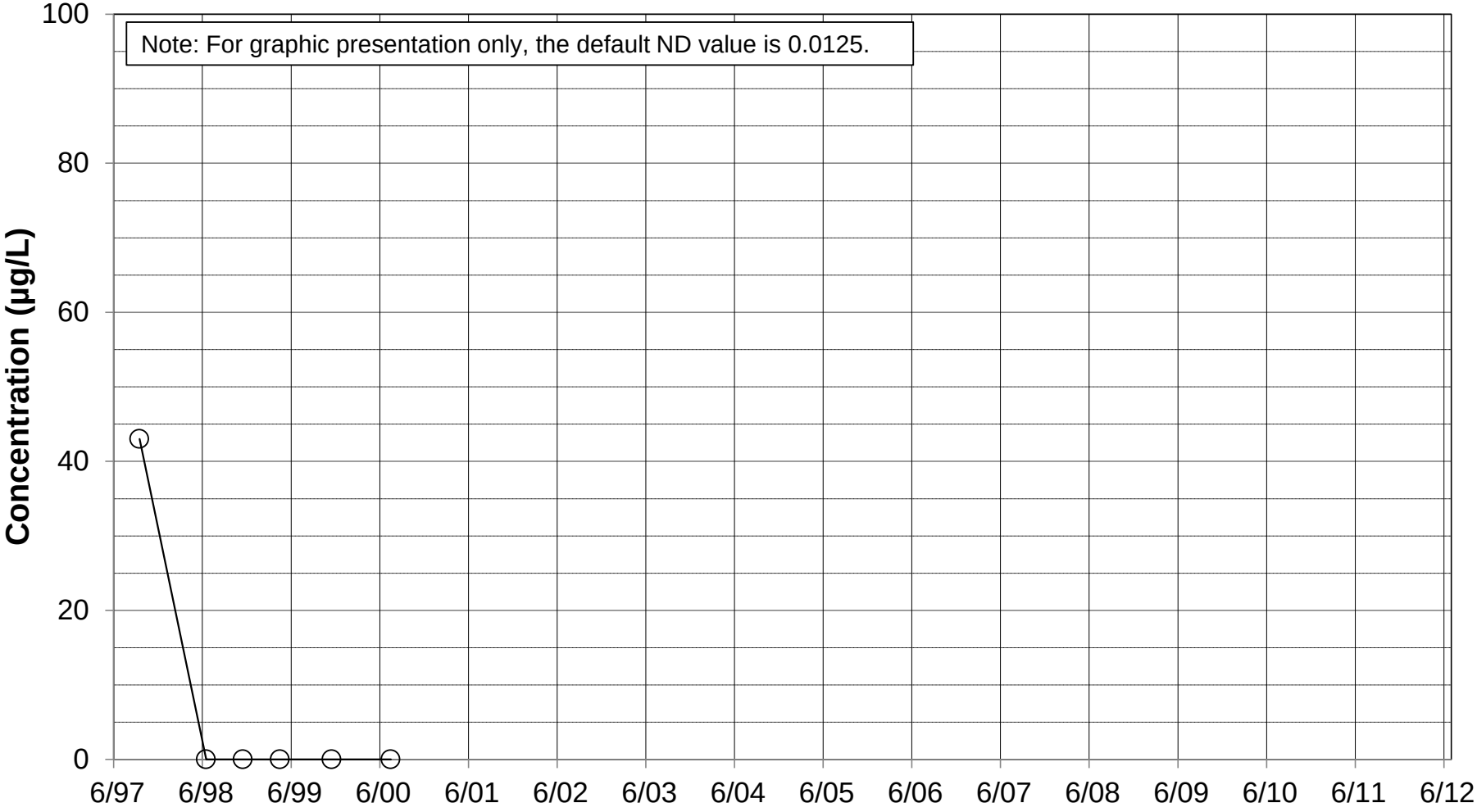

RP-28B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

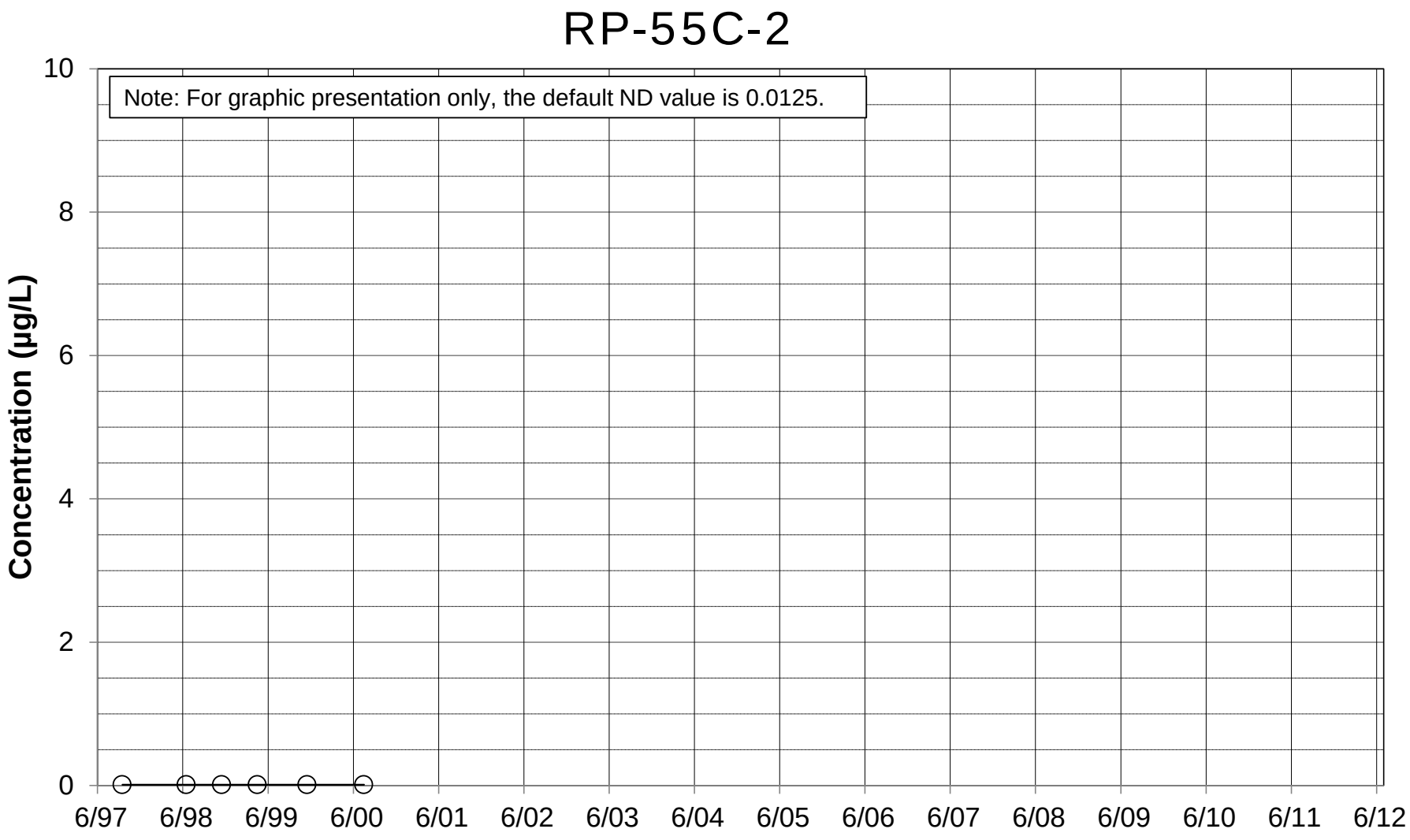

RP-41B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

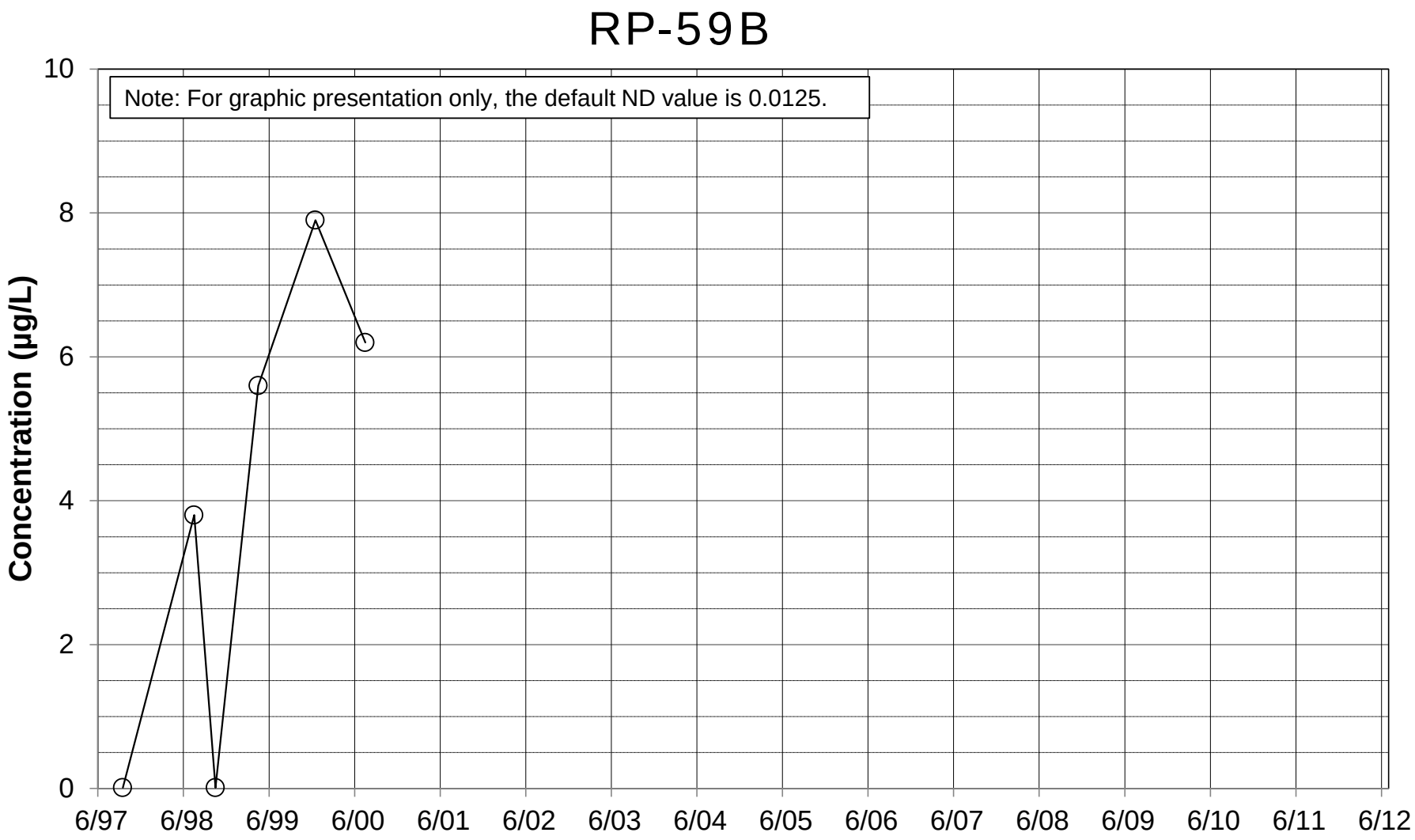

RP-4D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

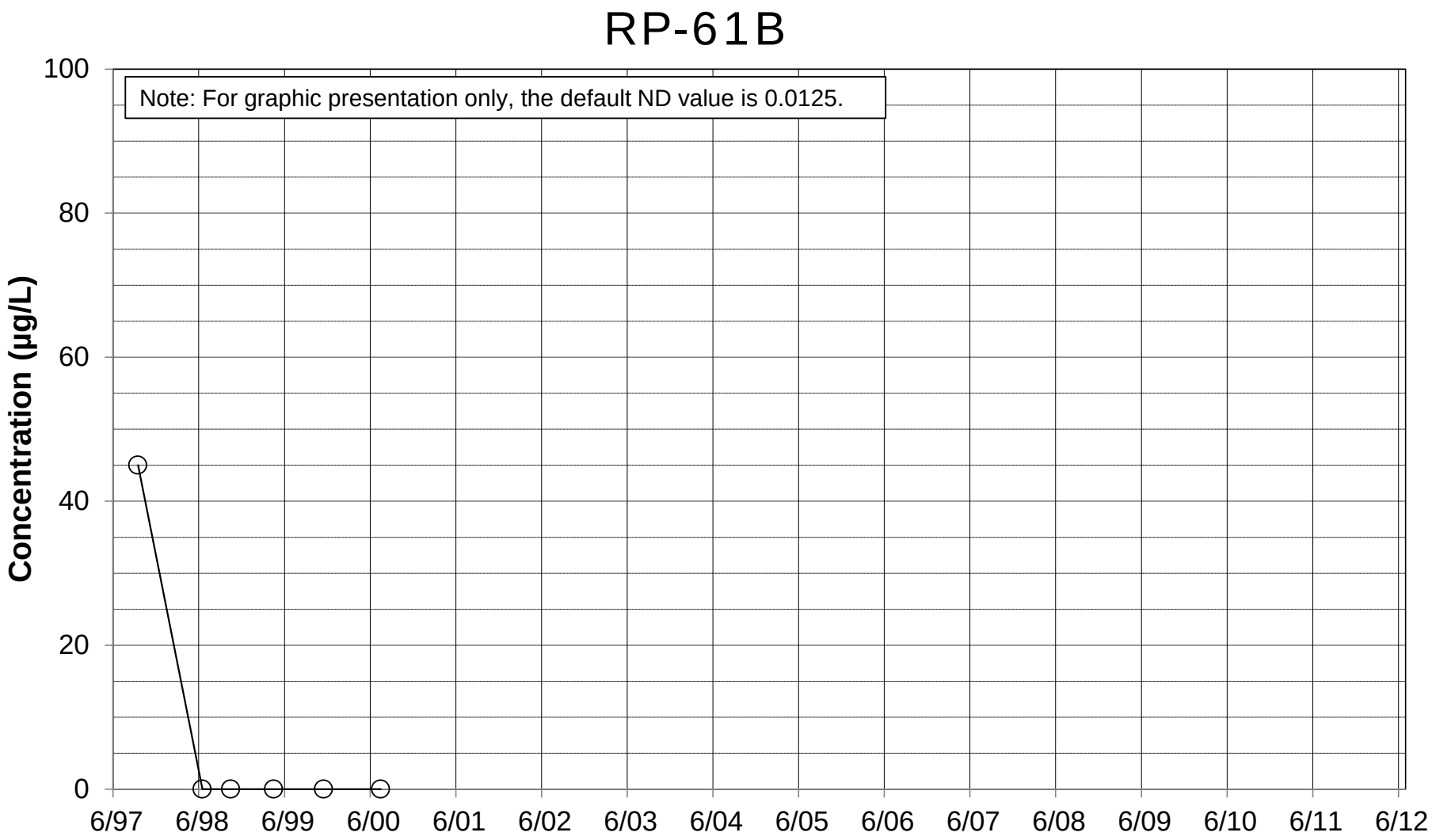

RP-53C
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

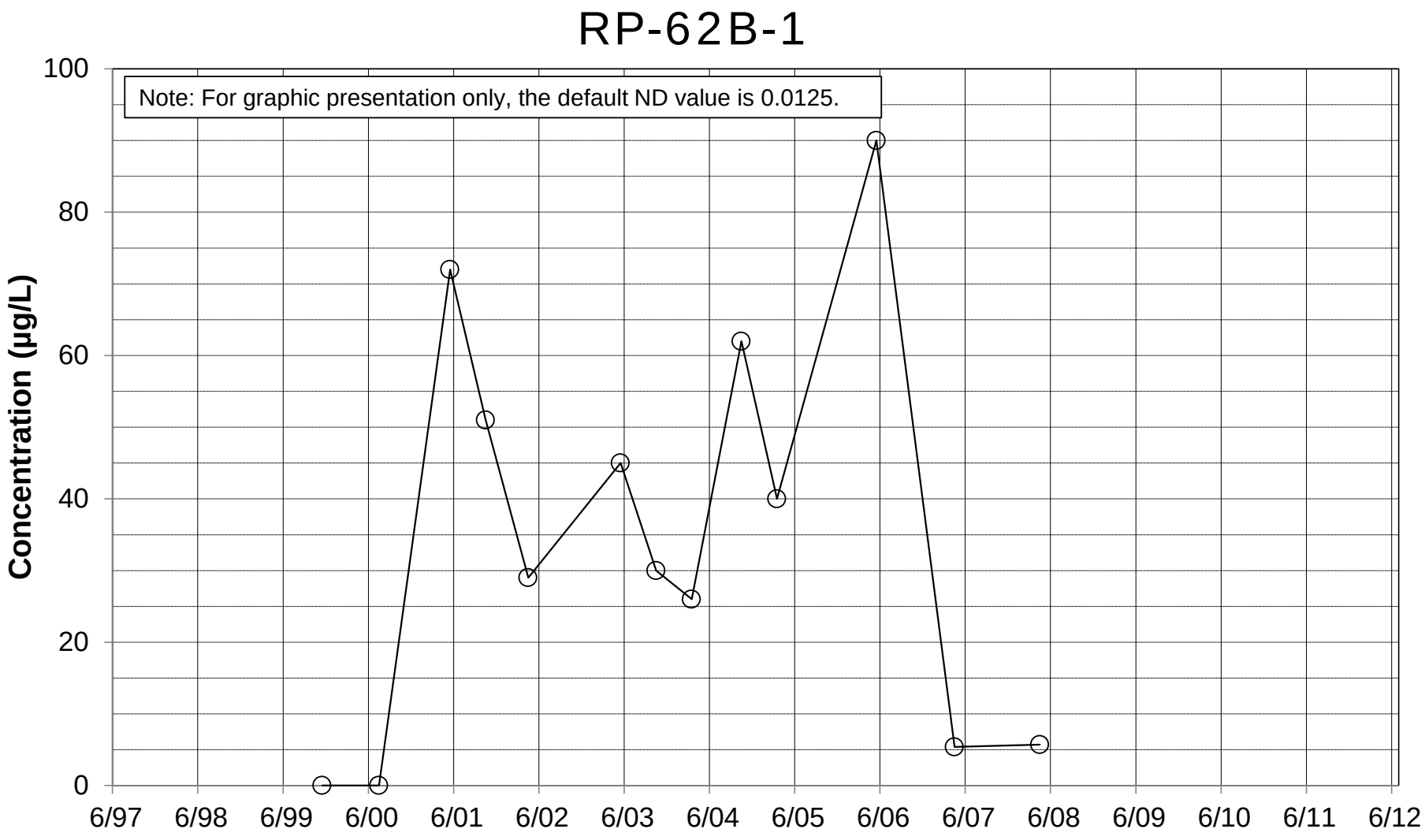
RP-54C

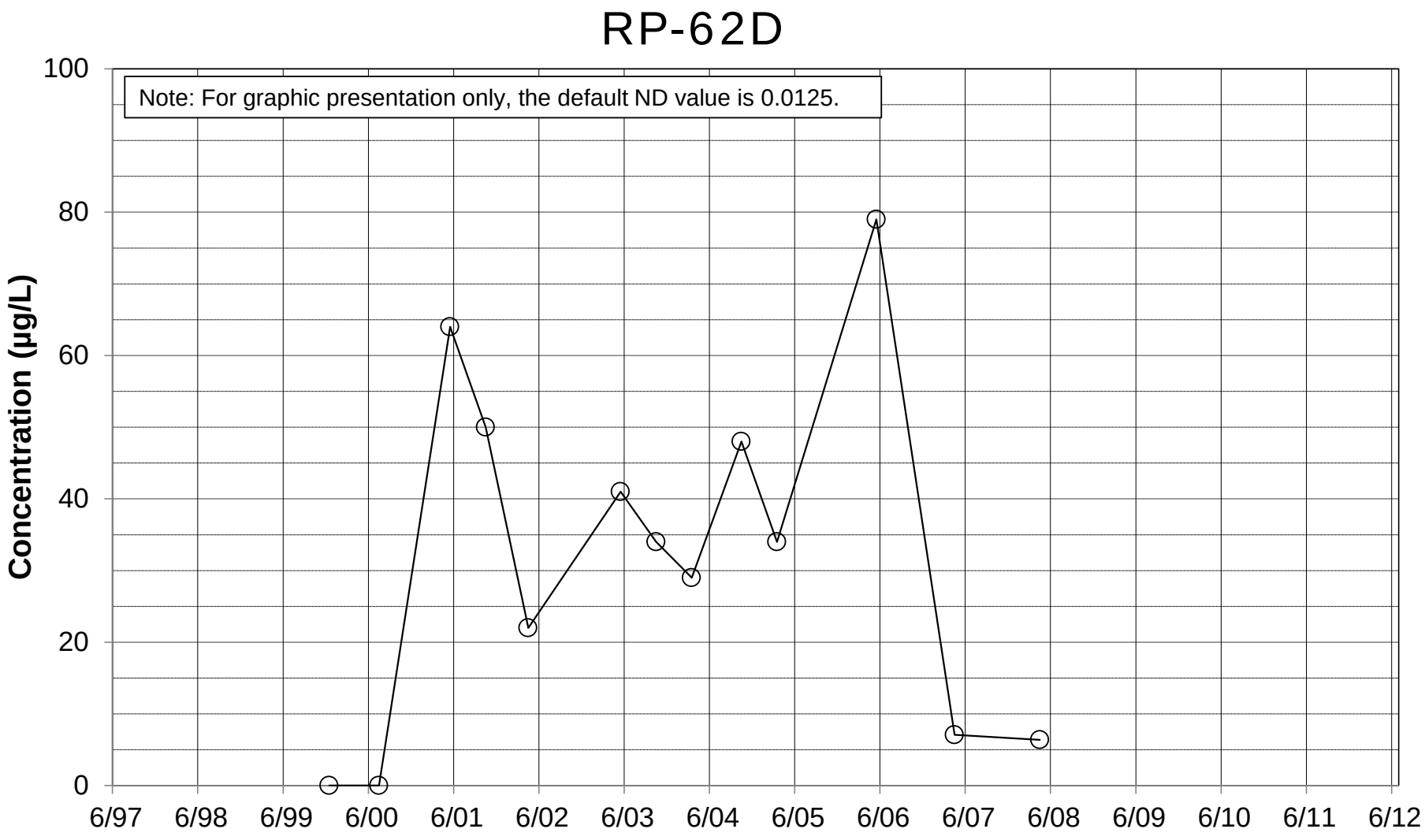

Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

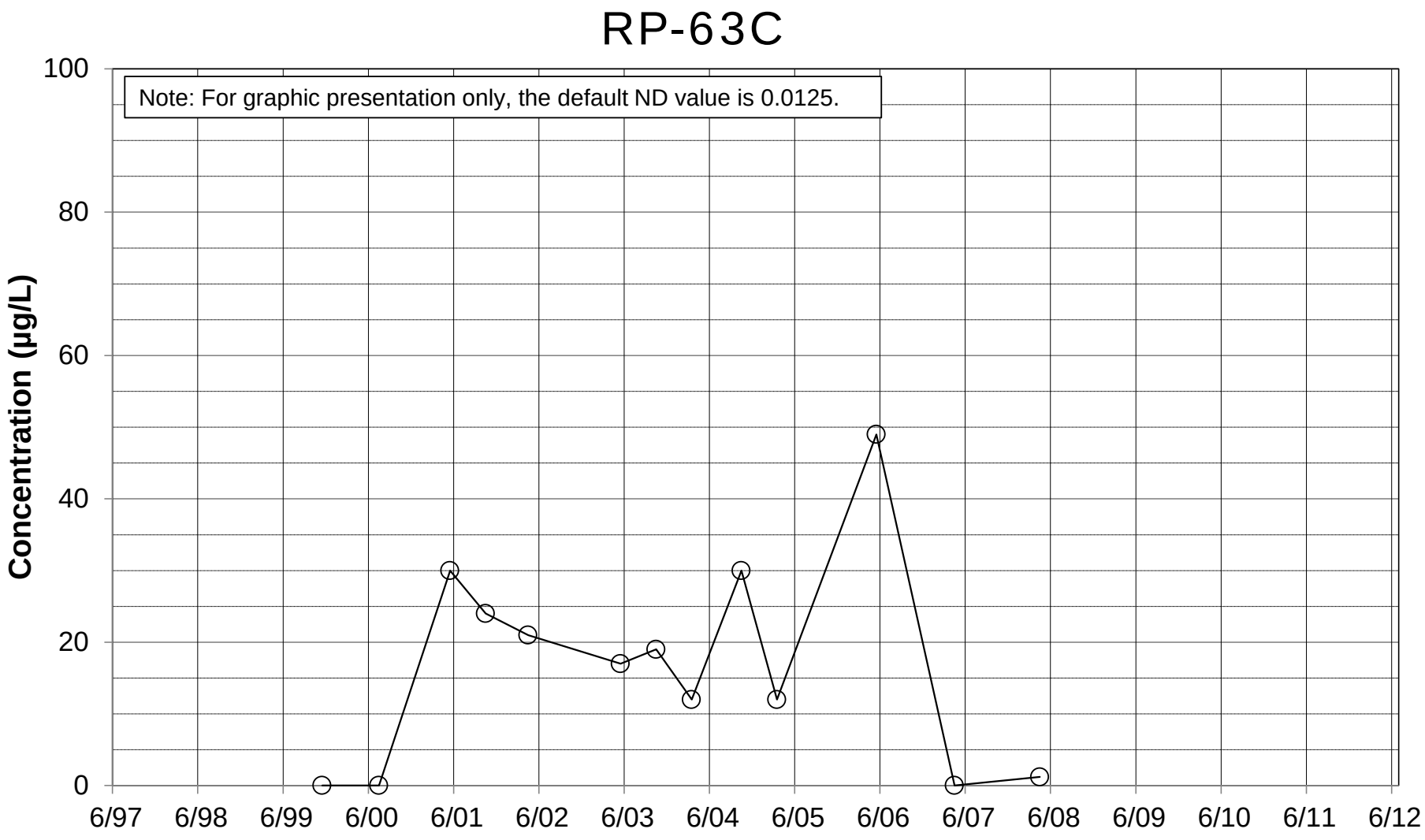

RP-55C-2
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

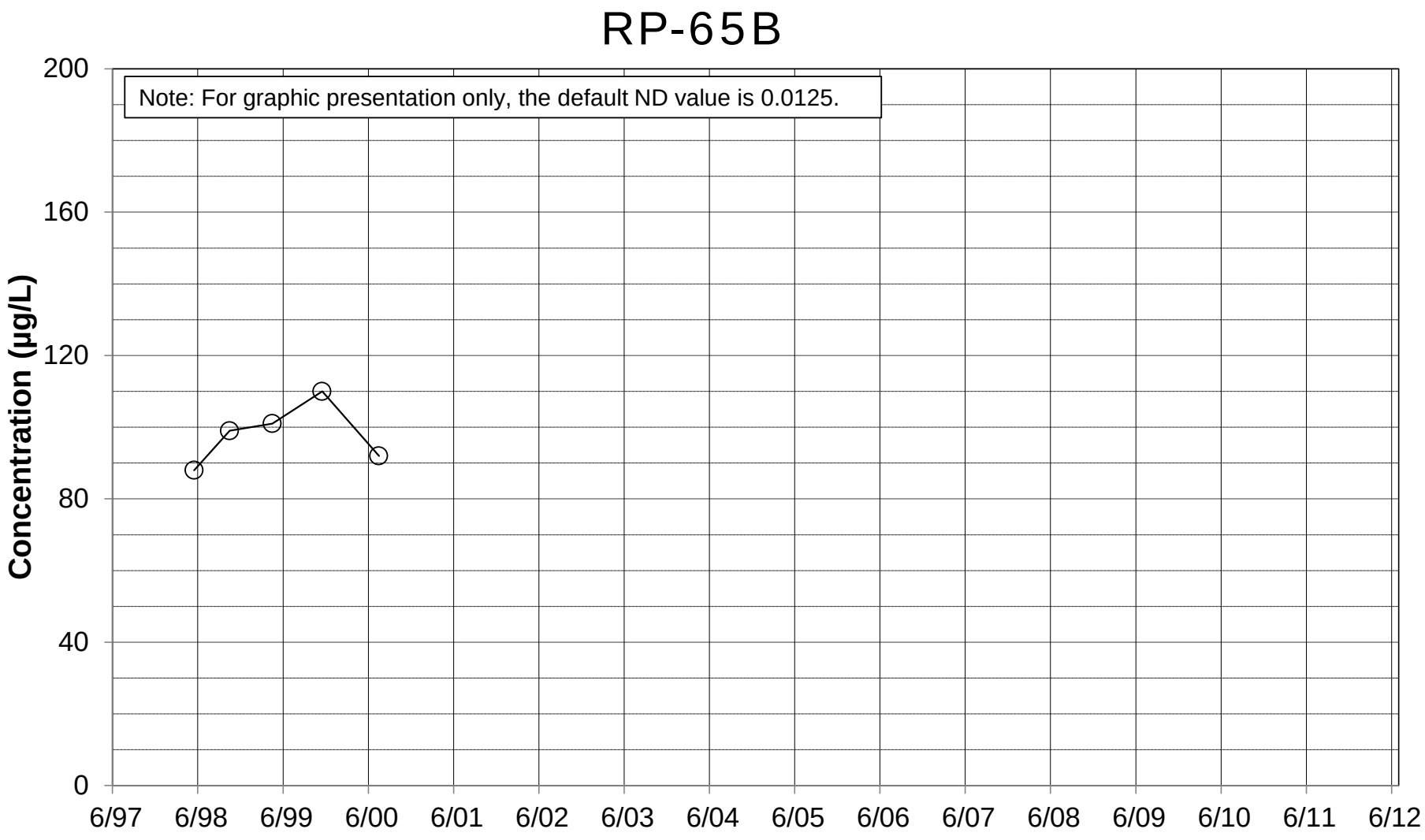

RP-59B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

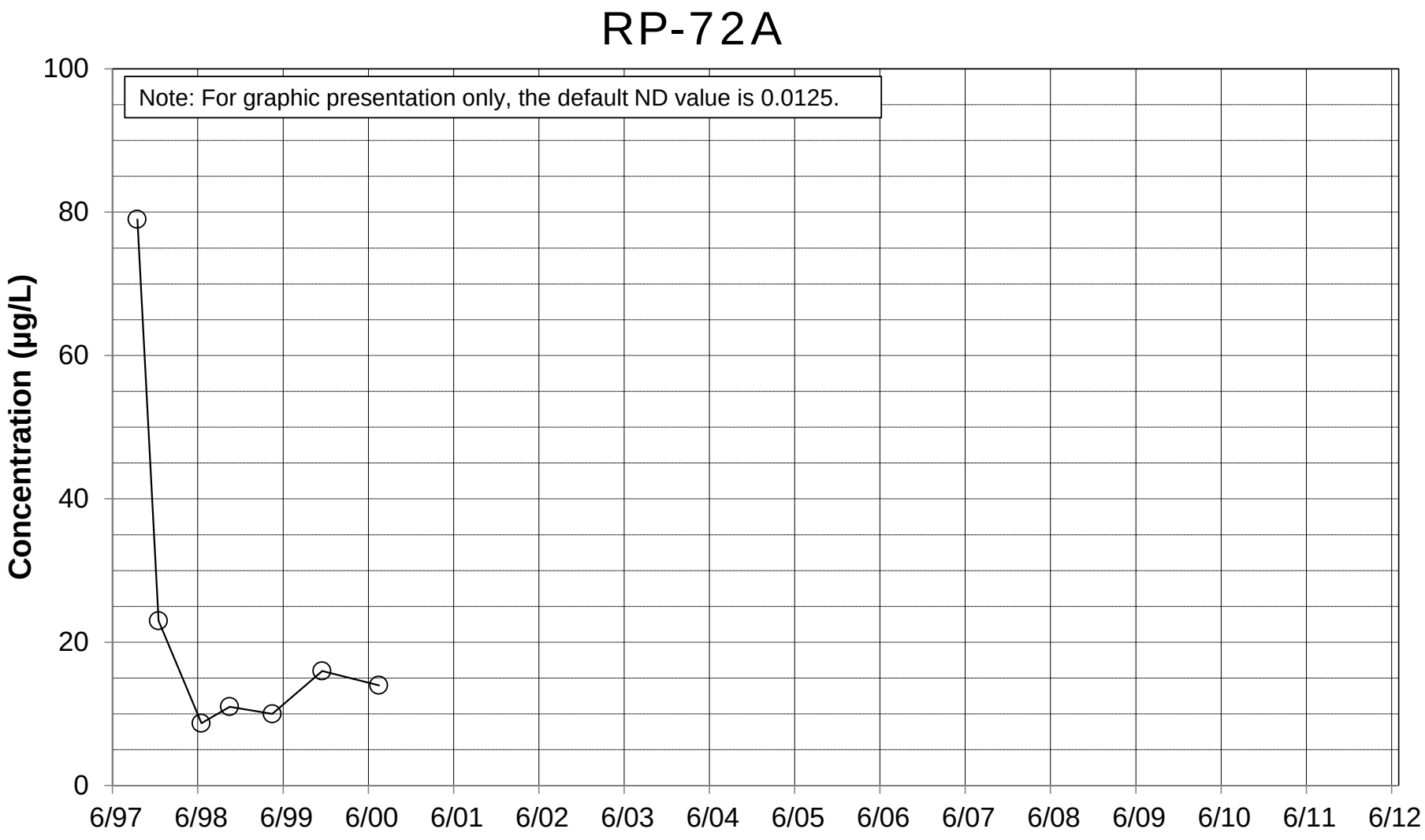

RP-61B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

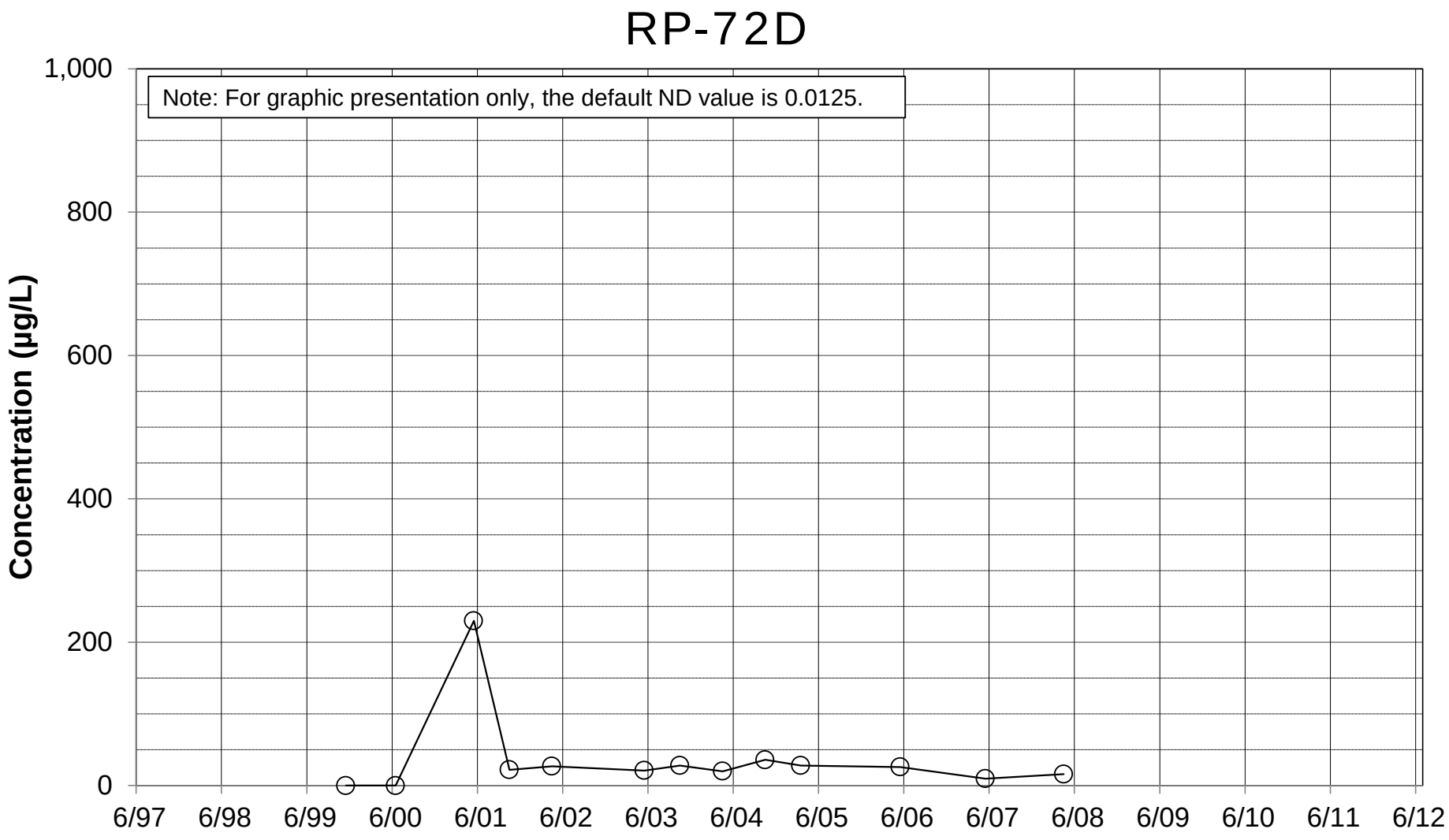

RP-62B-1
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

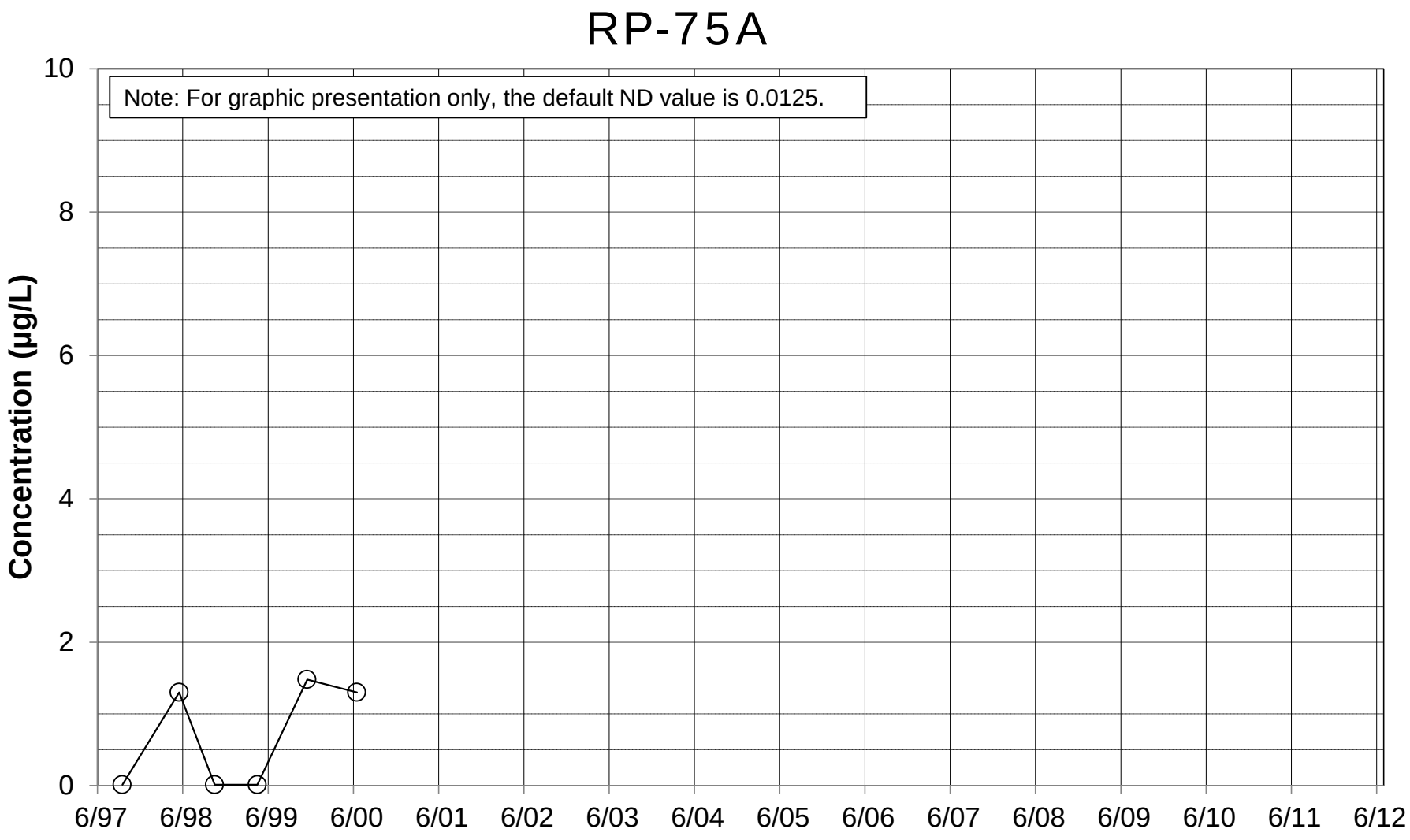

RP-62D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

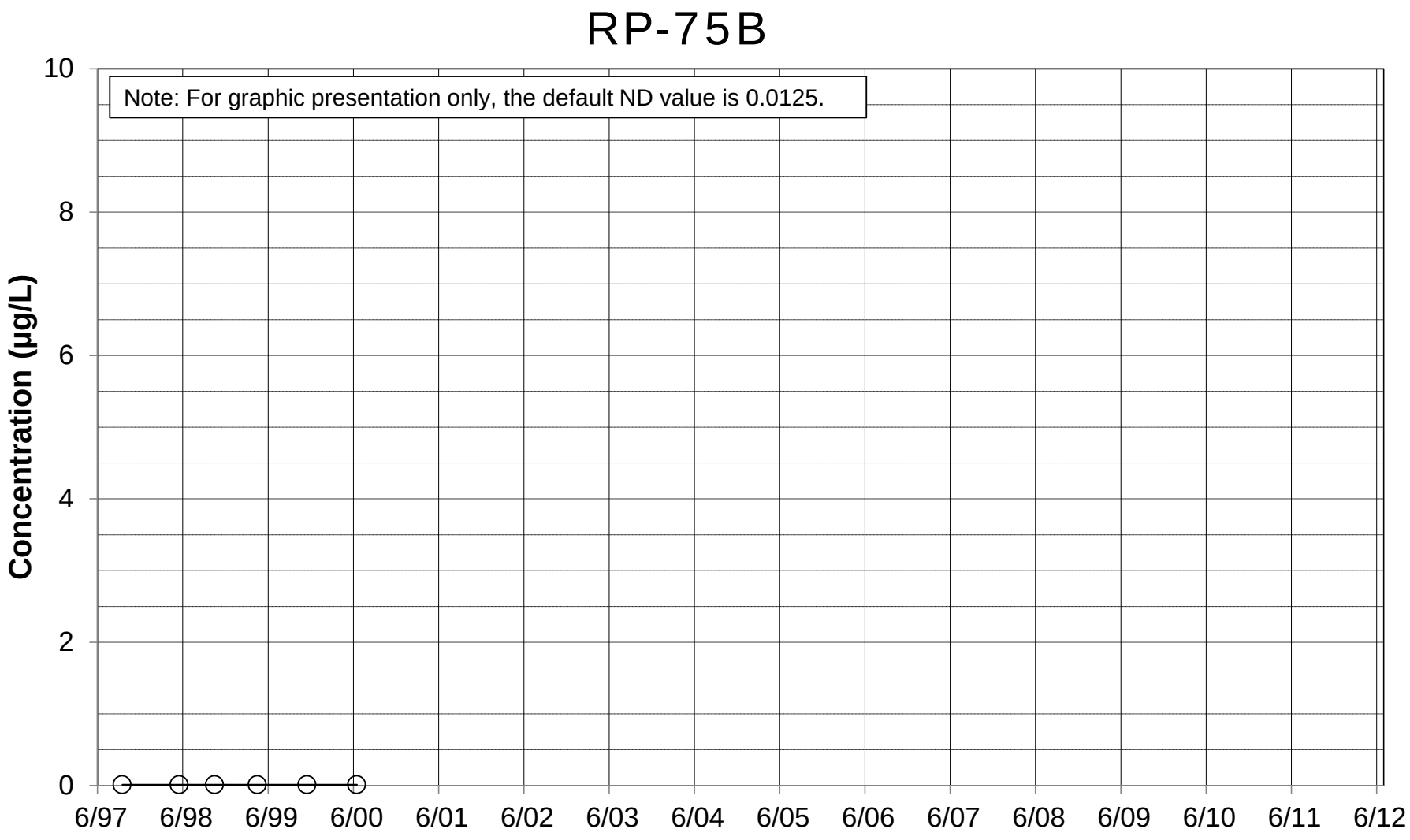

RP-63C
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

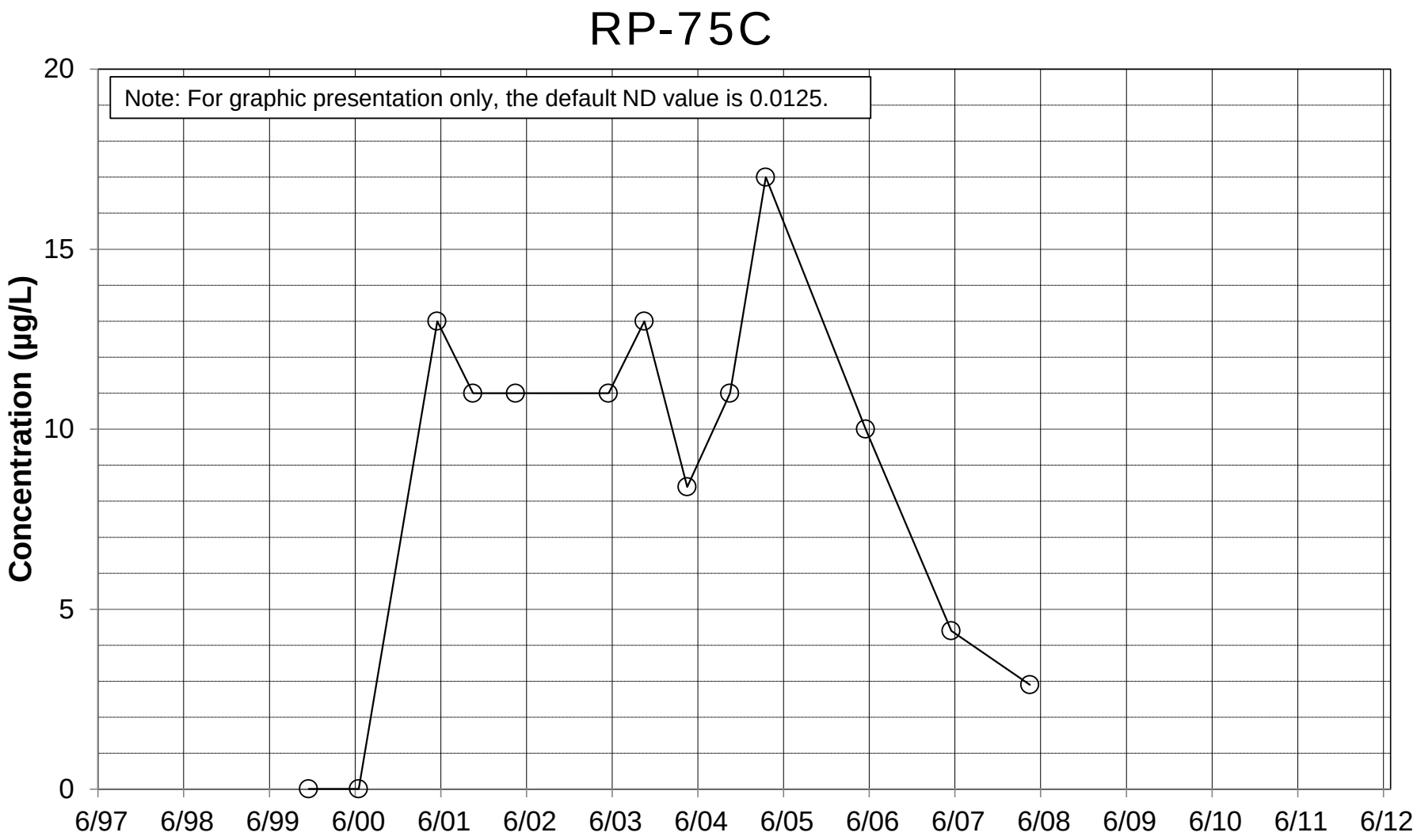

RP-65B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
200
160
120
80
40
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

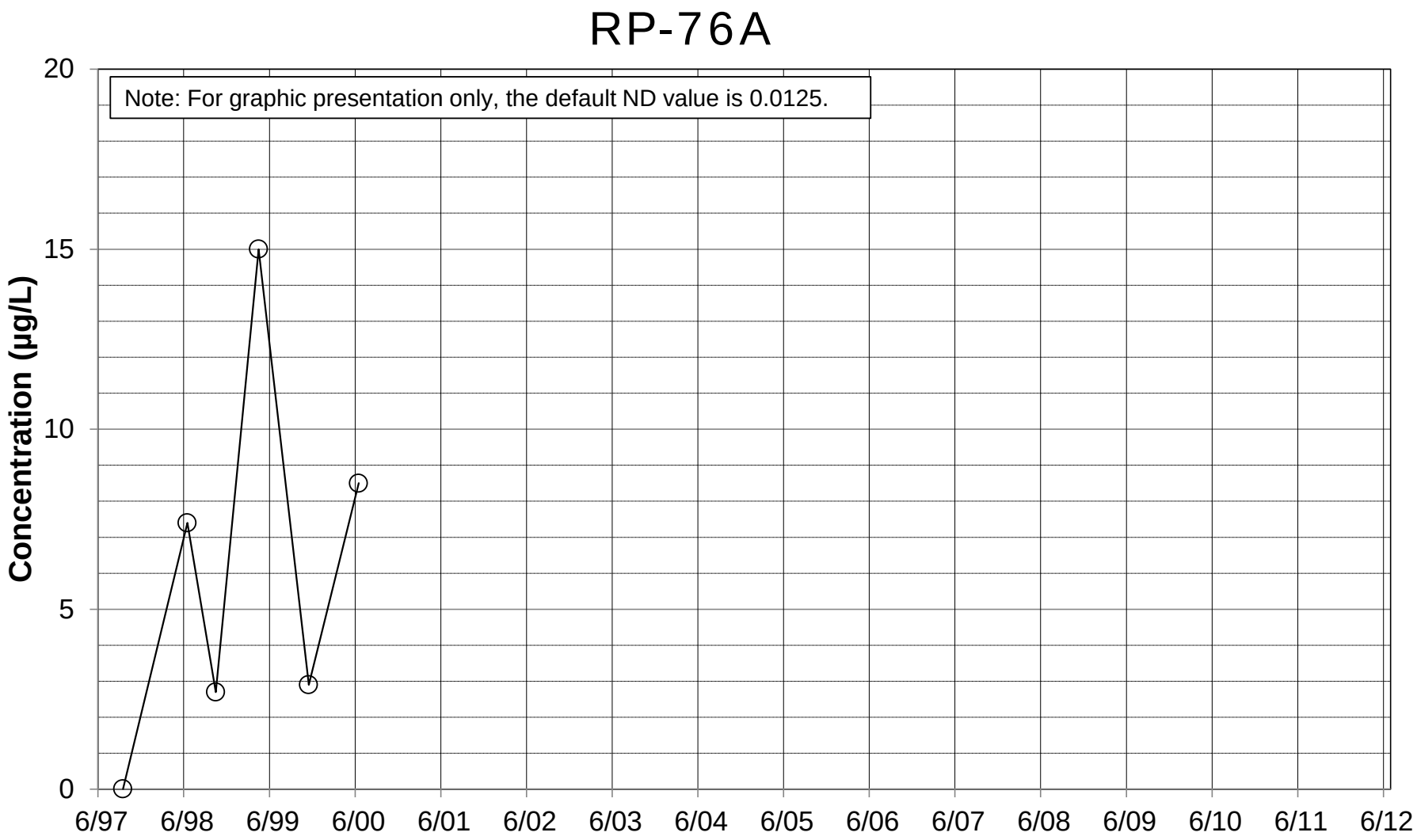

RP-72A
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

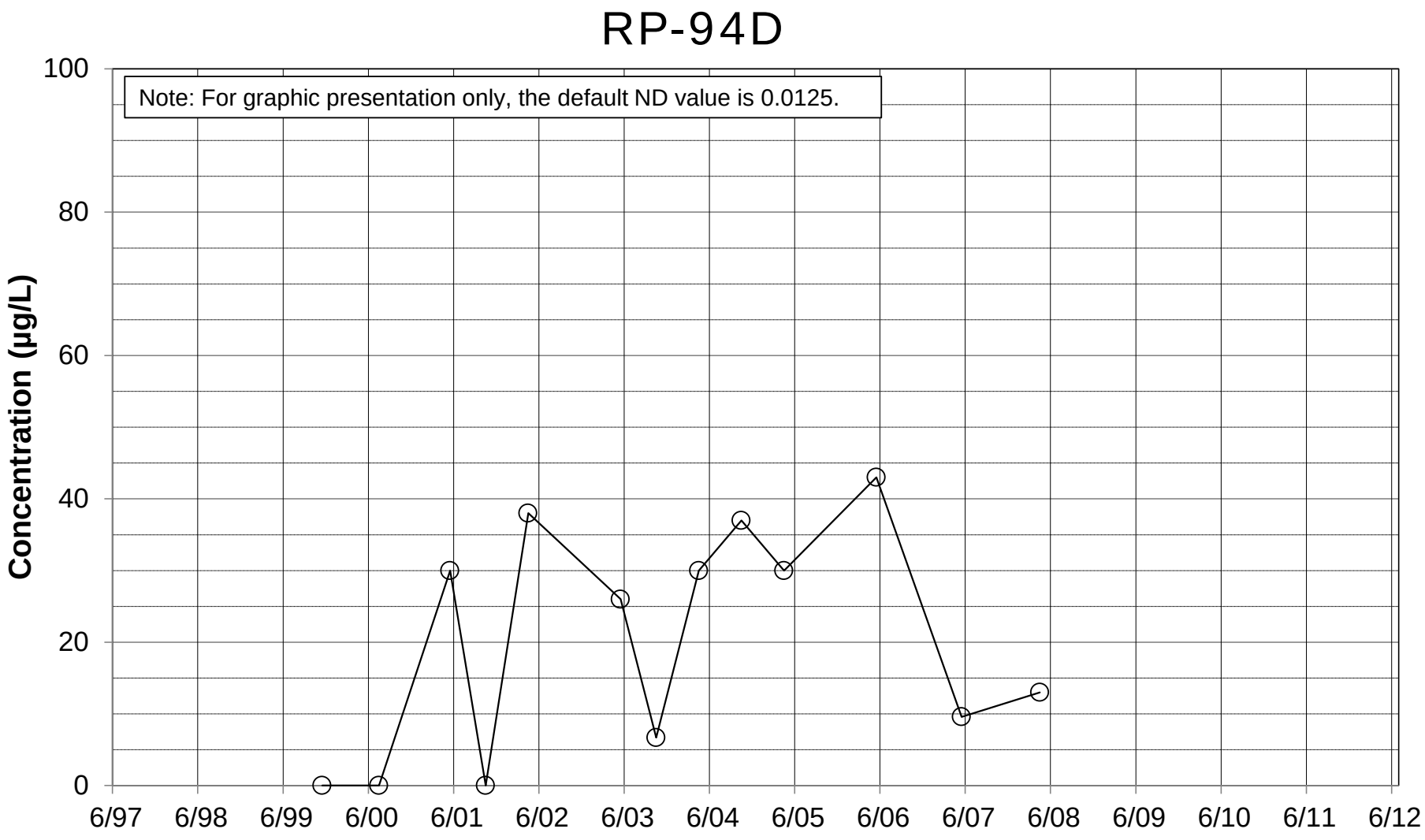

RP-72D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

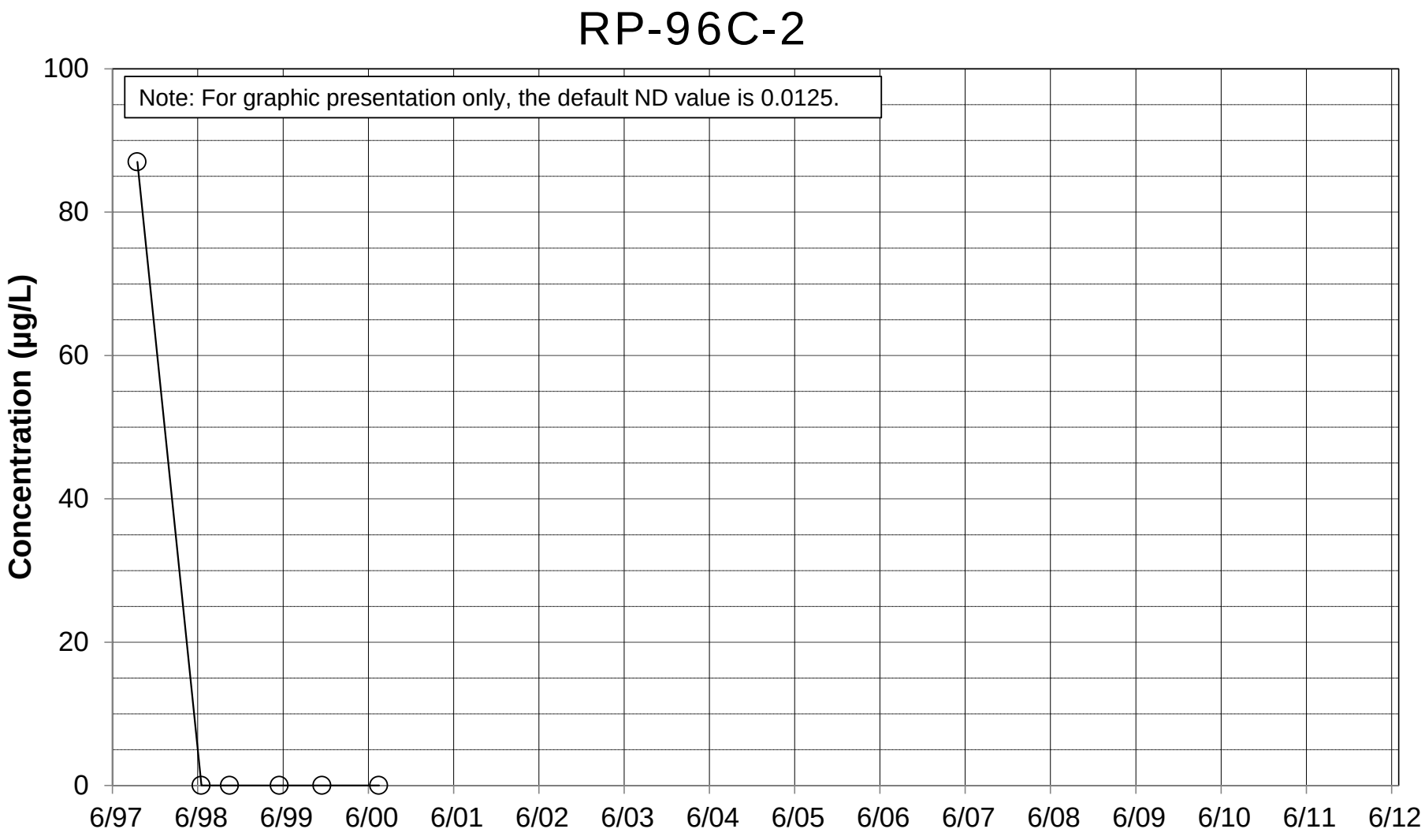

RP-75A
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

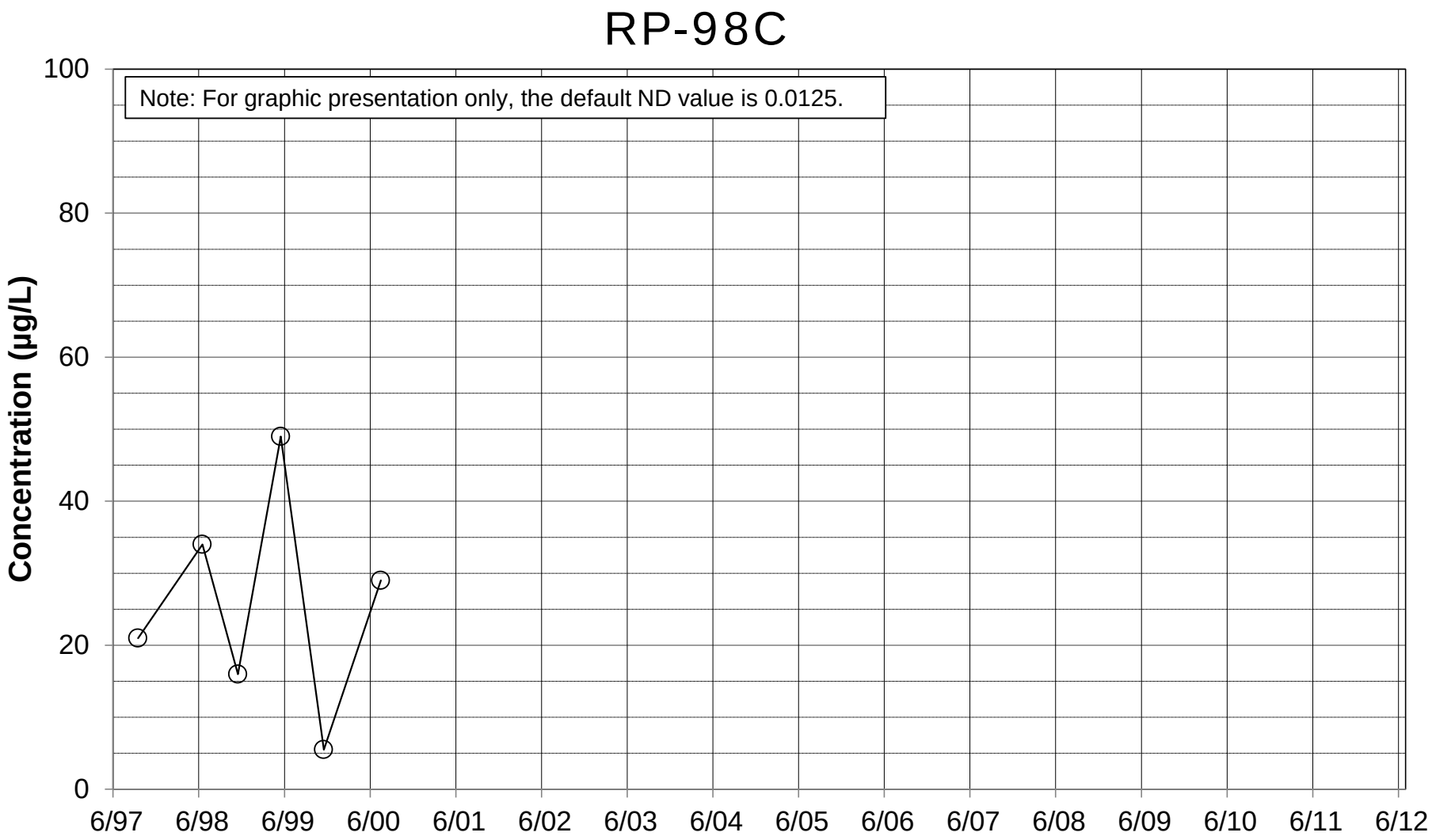

RP-75B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

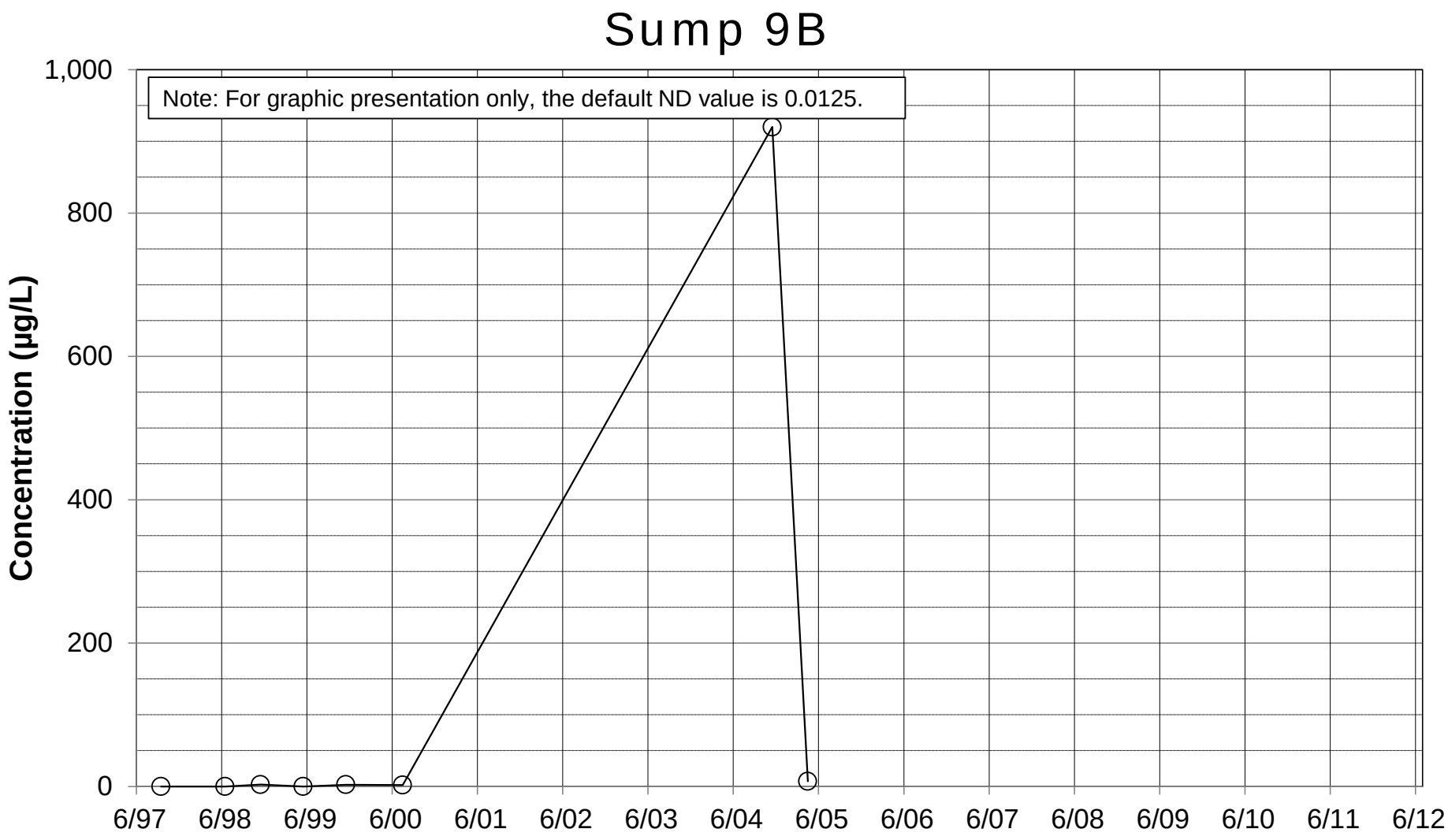

RP-75C
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

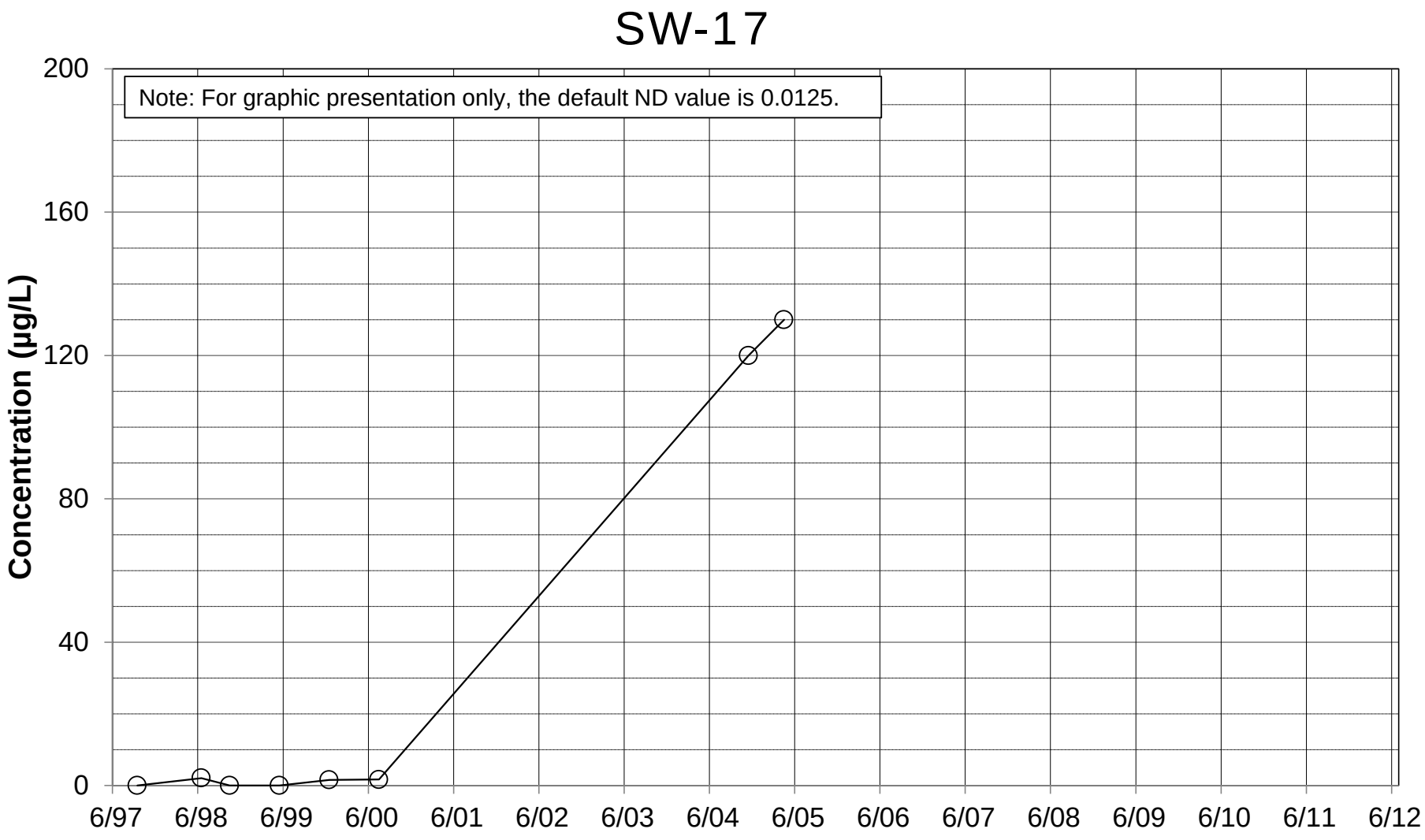

RP-76A
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

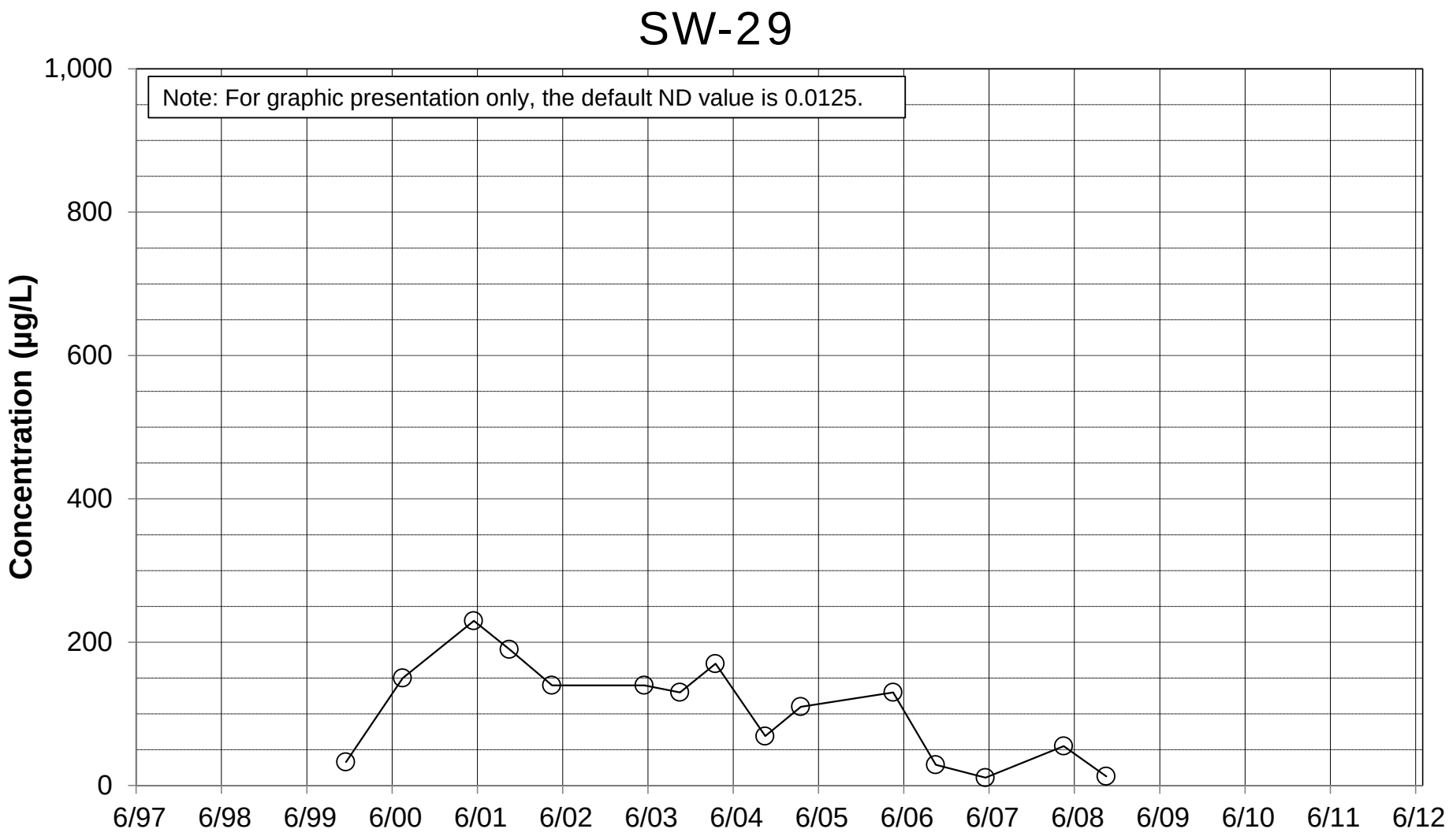

RP-94D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

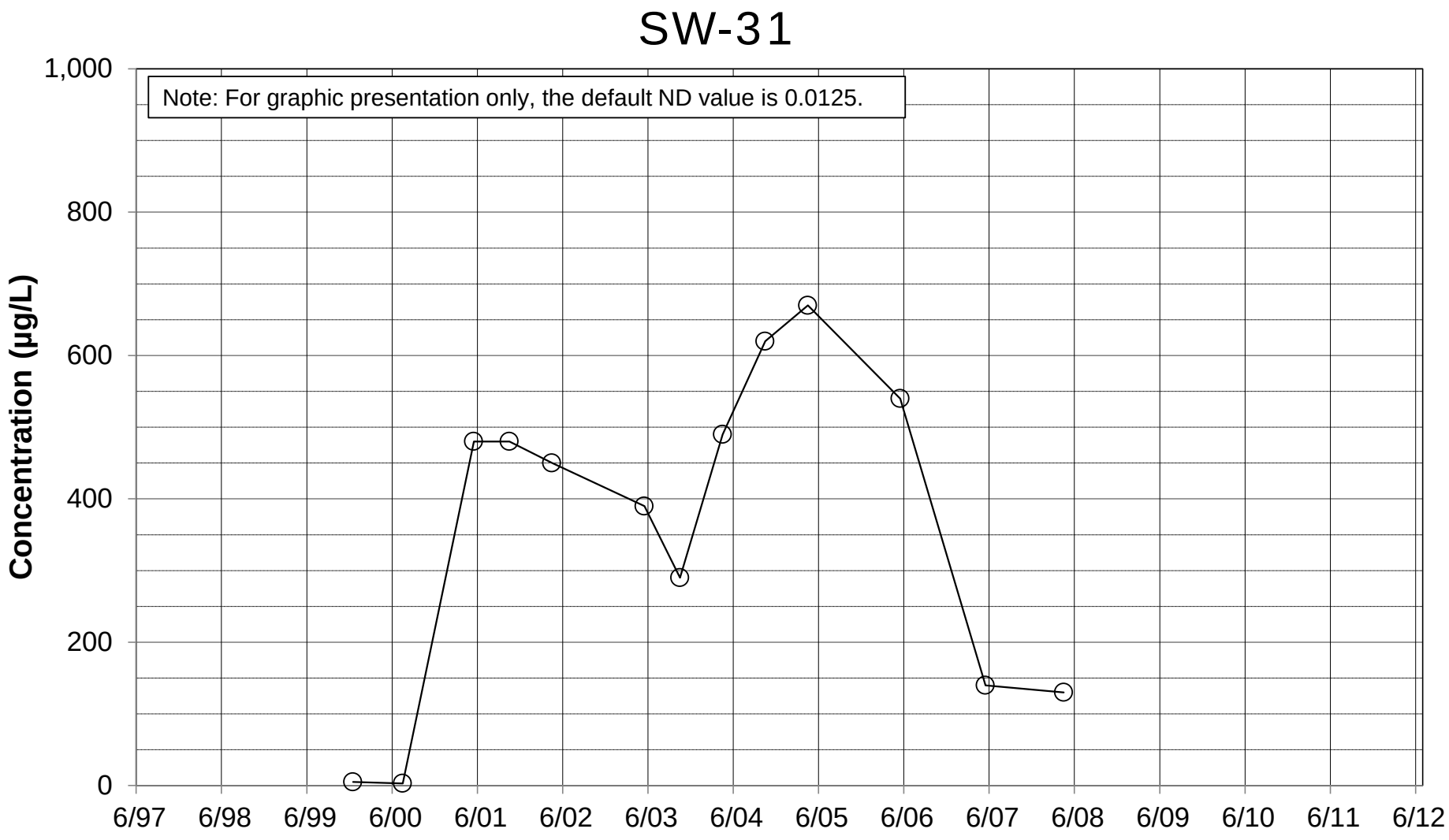

RP-96C-2
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

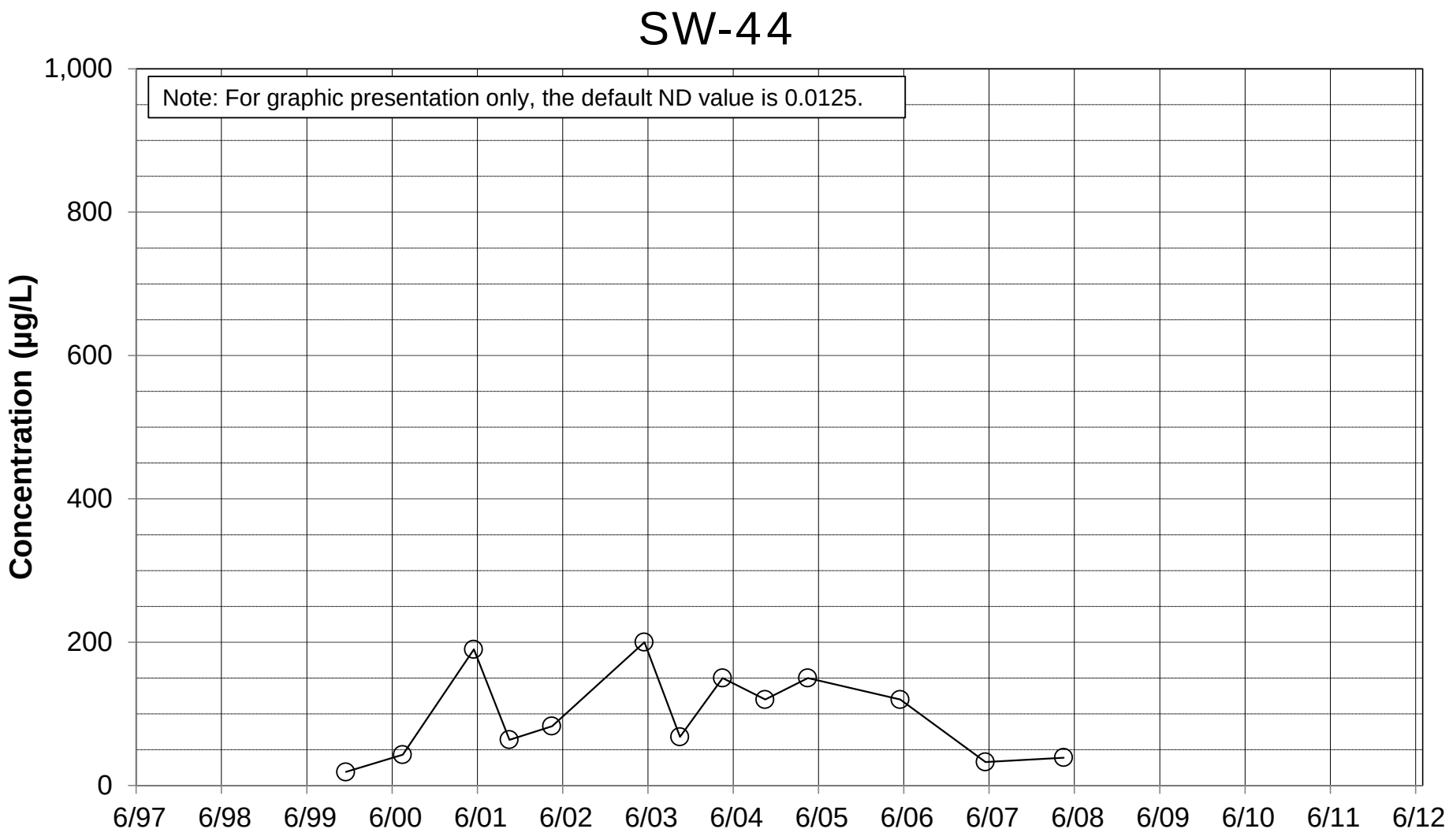

RP-98C
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

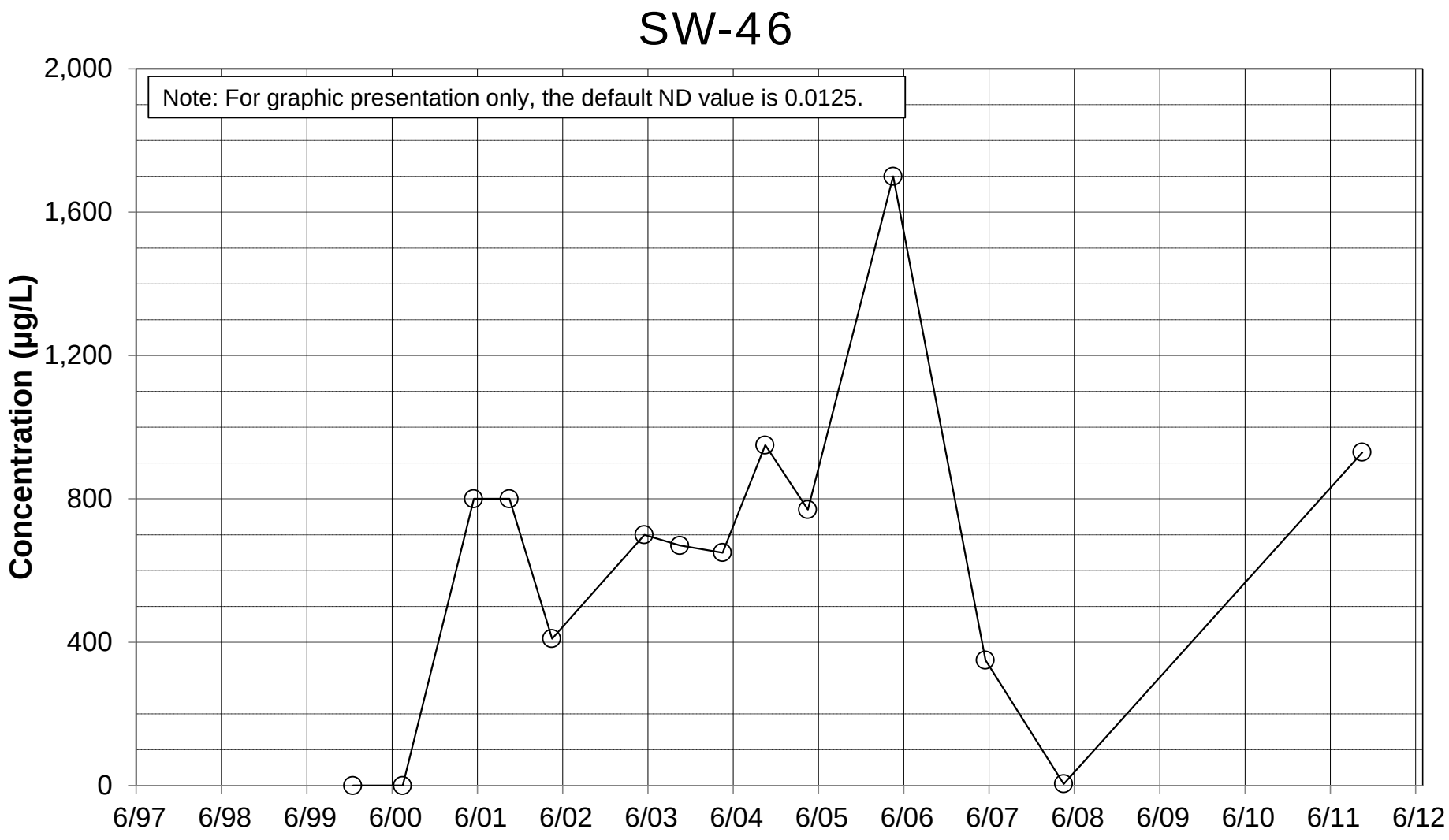

Sump 9B
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

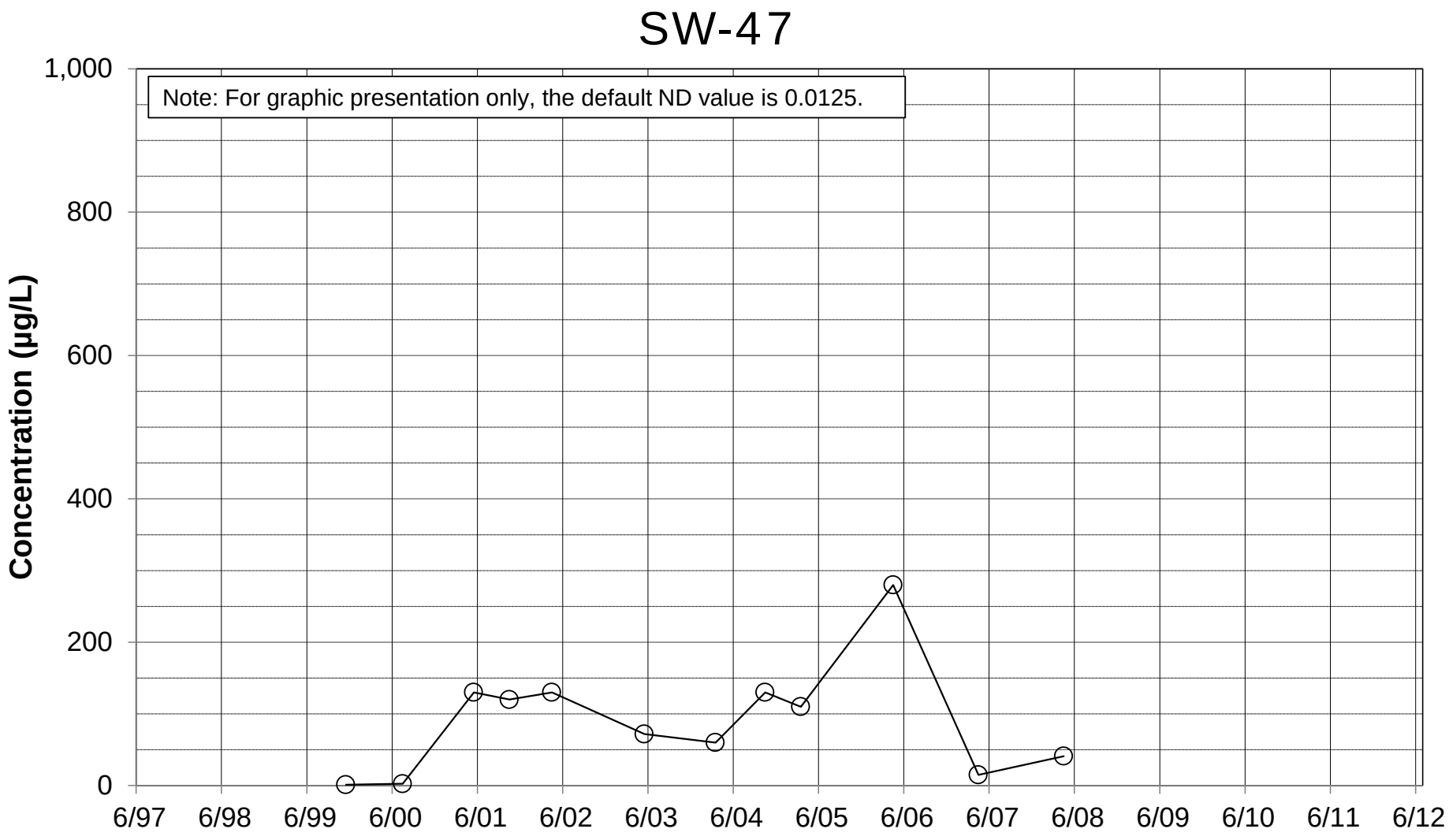

SW-17
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
200
160
120
80
40
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

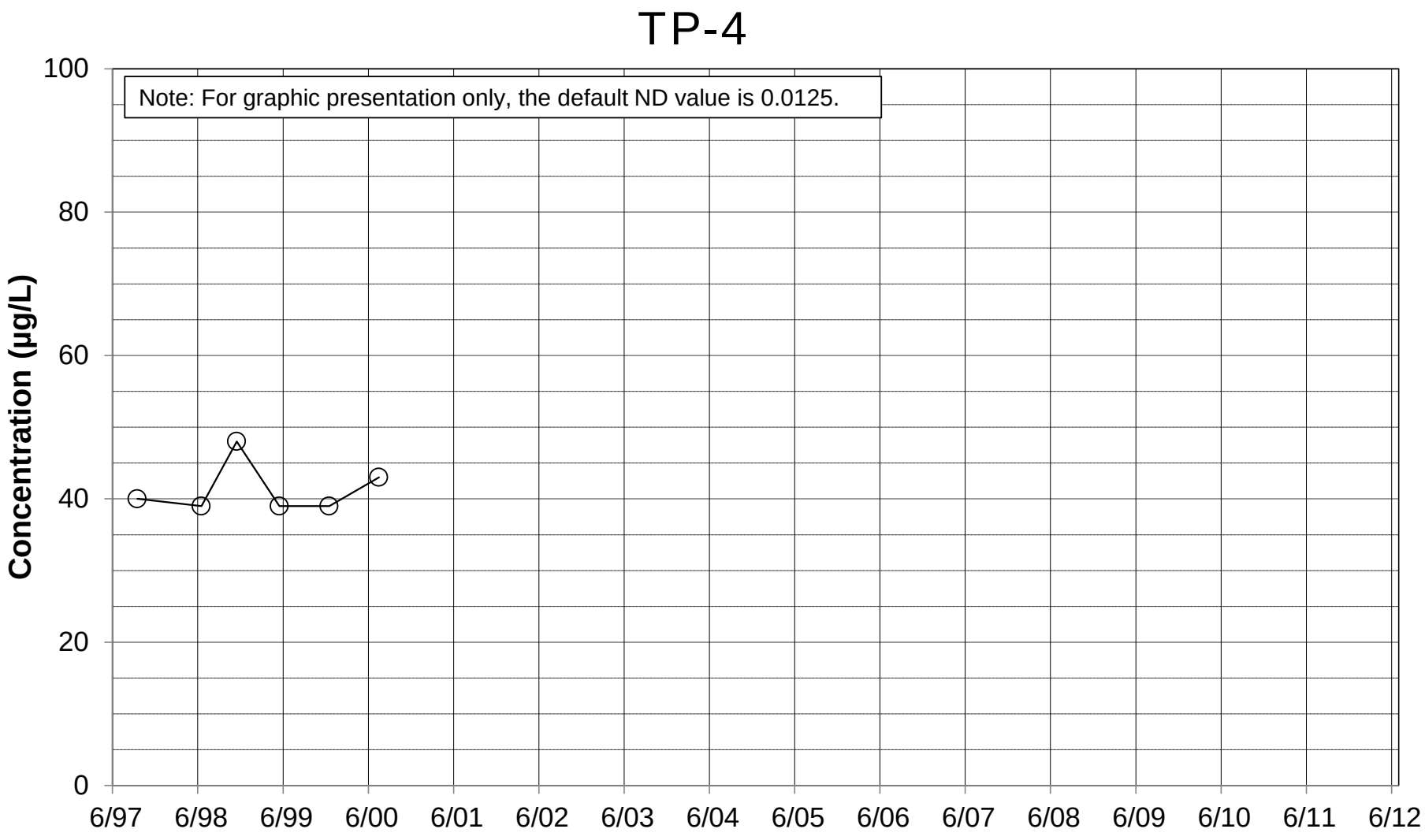

SW-29
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

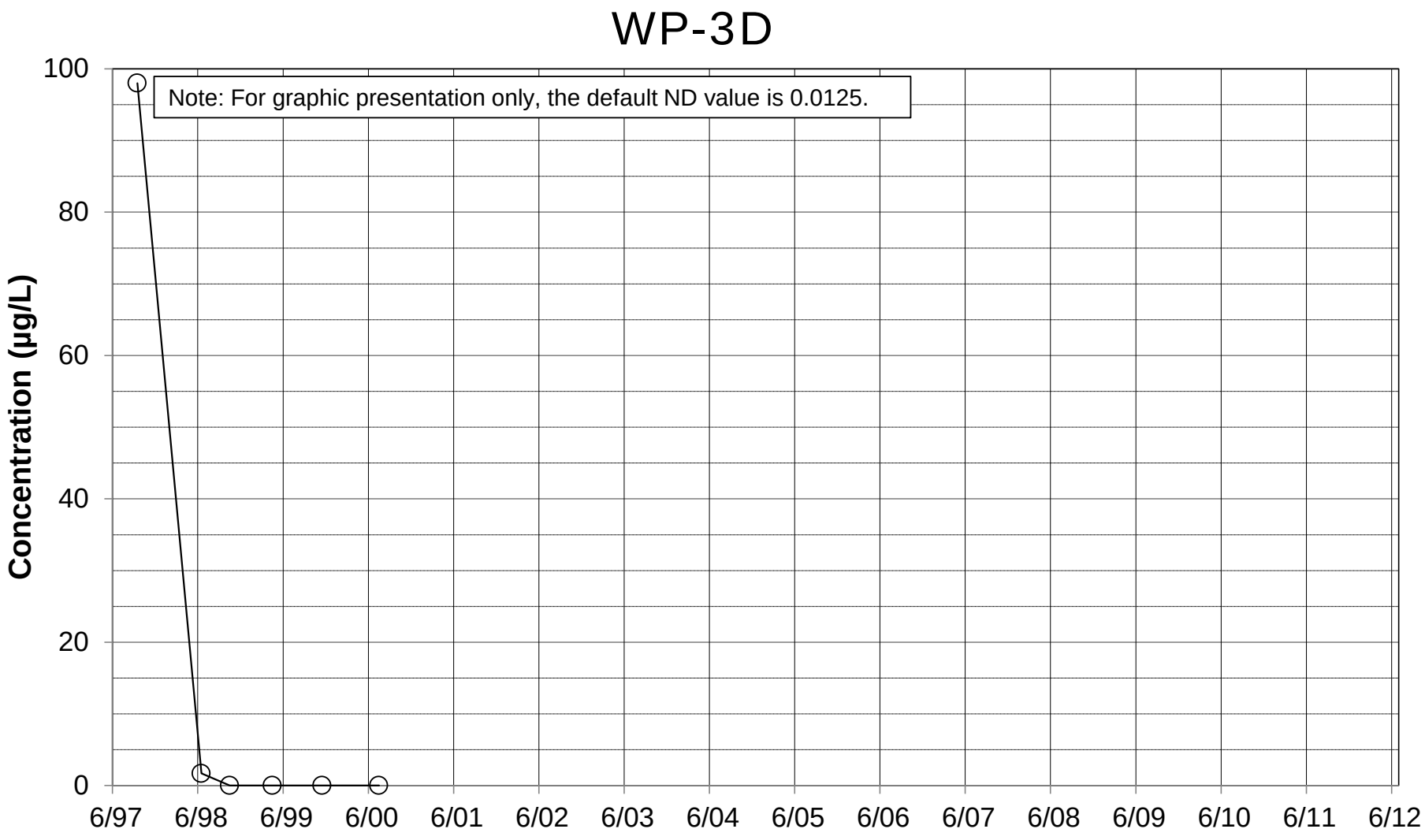

SW-31
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

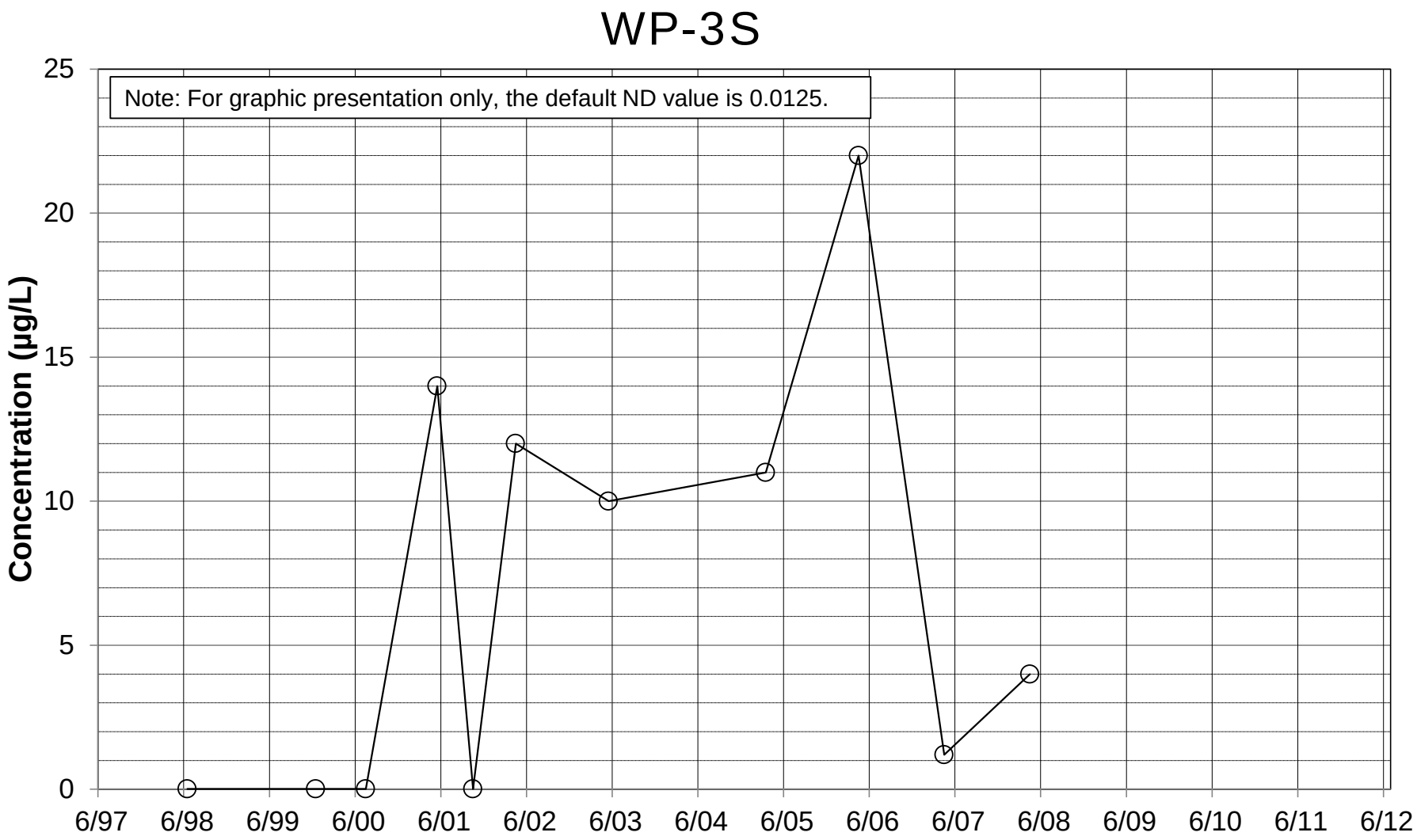

SW-44
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

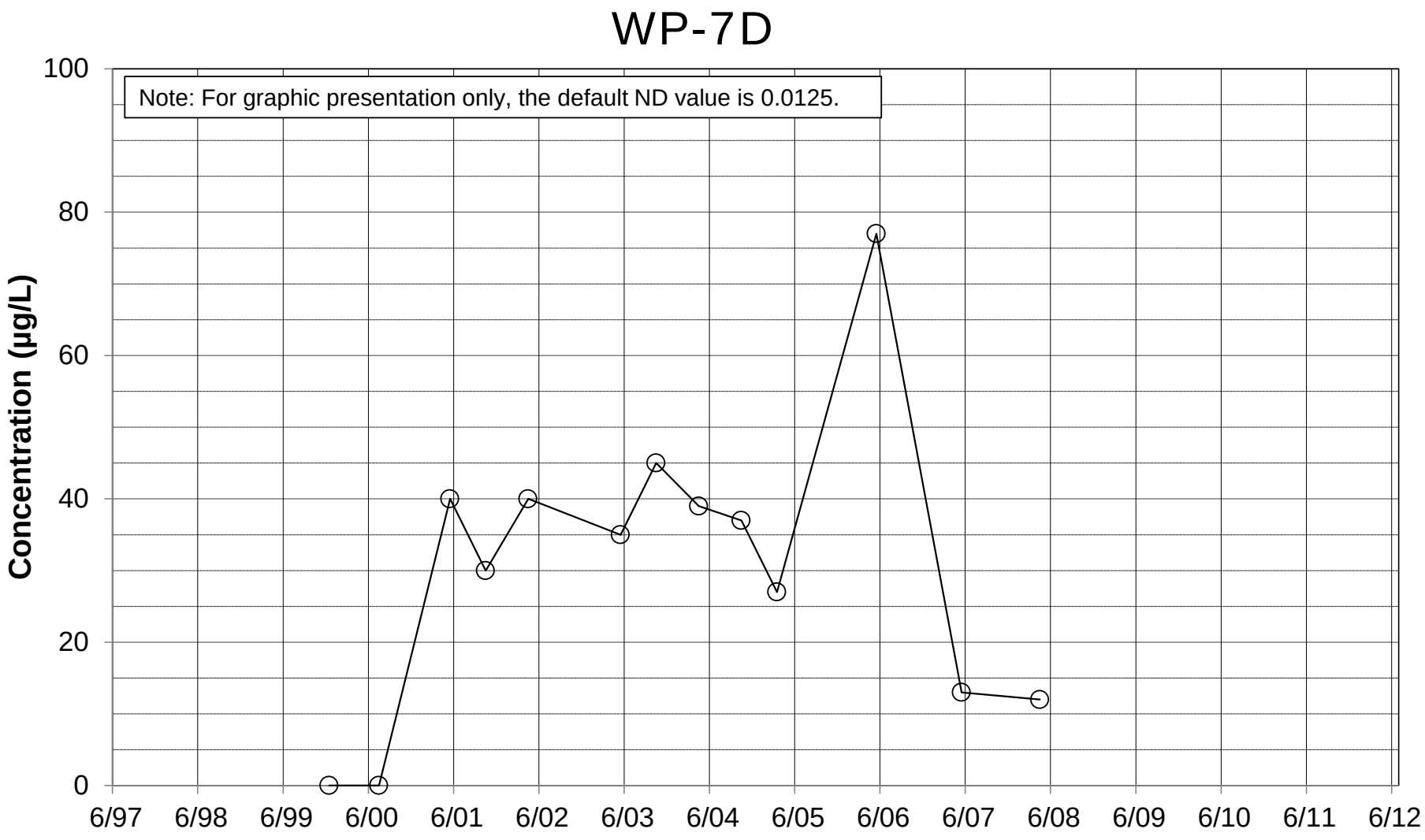

SW-46
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
2,000
1,600
1,200
800
400
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

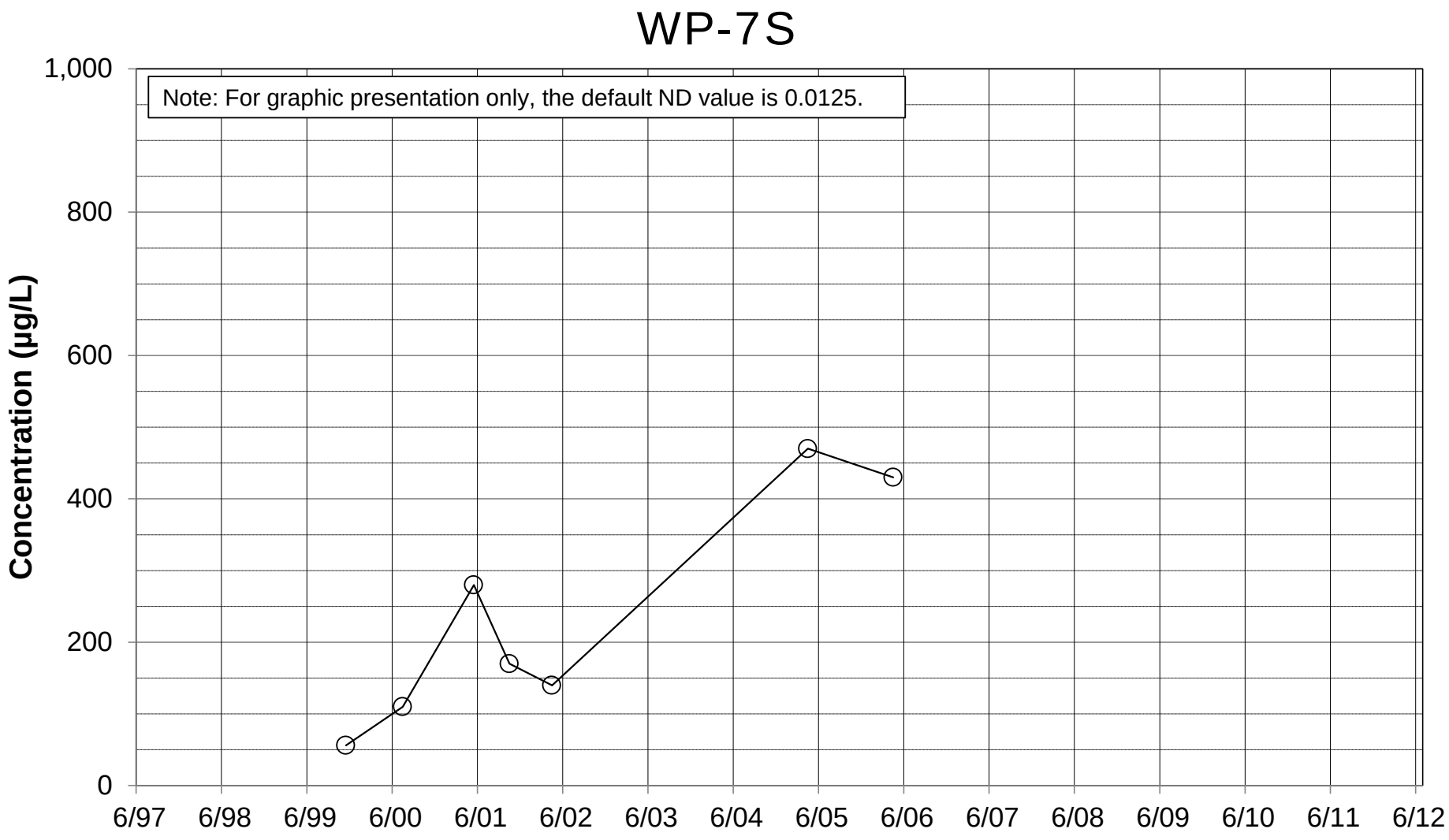

SW-47
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

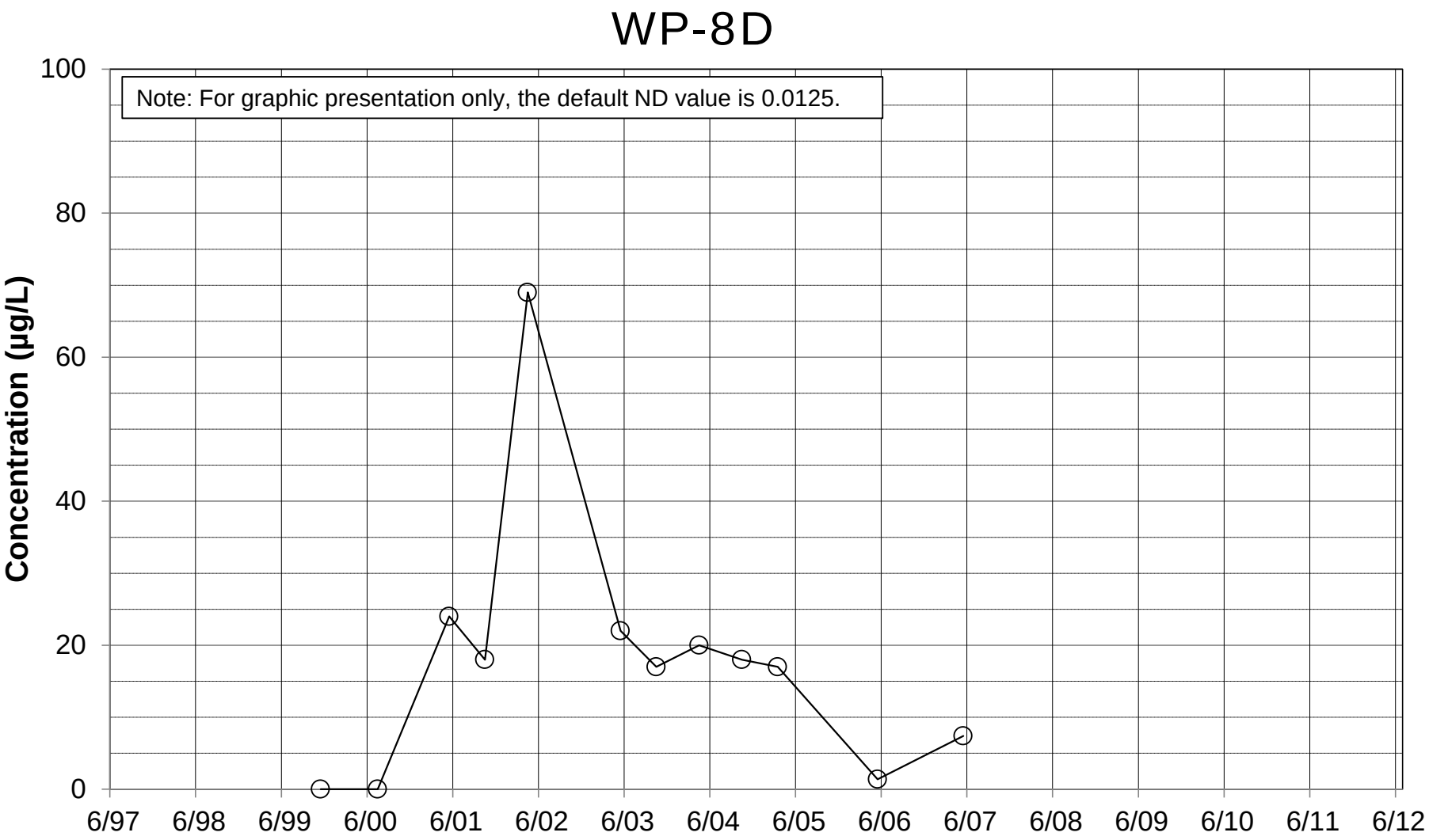

TP-4
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

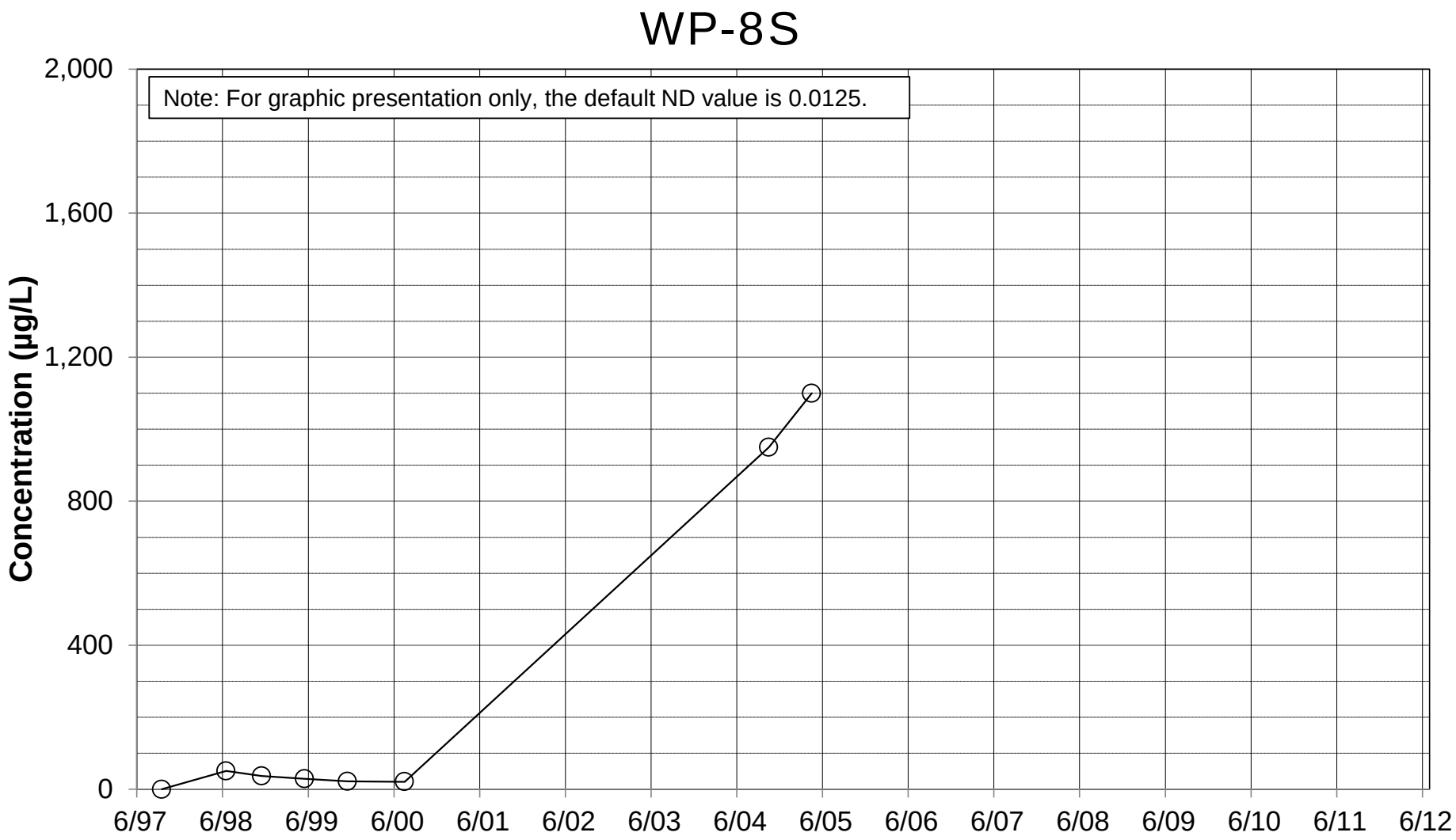

WP-3D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

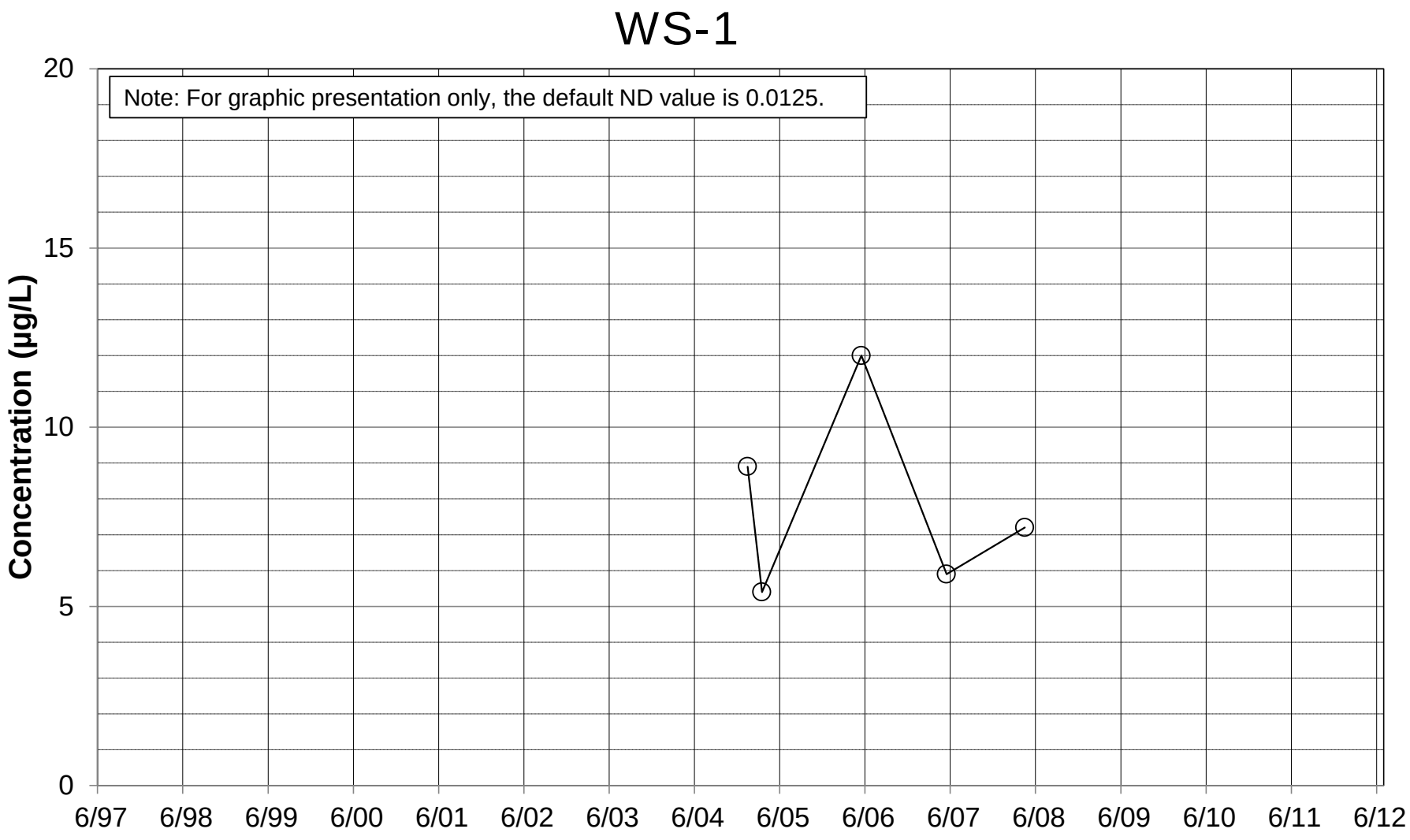

WP-3S
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
25
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12

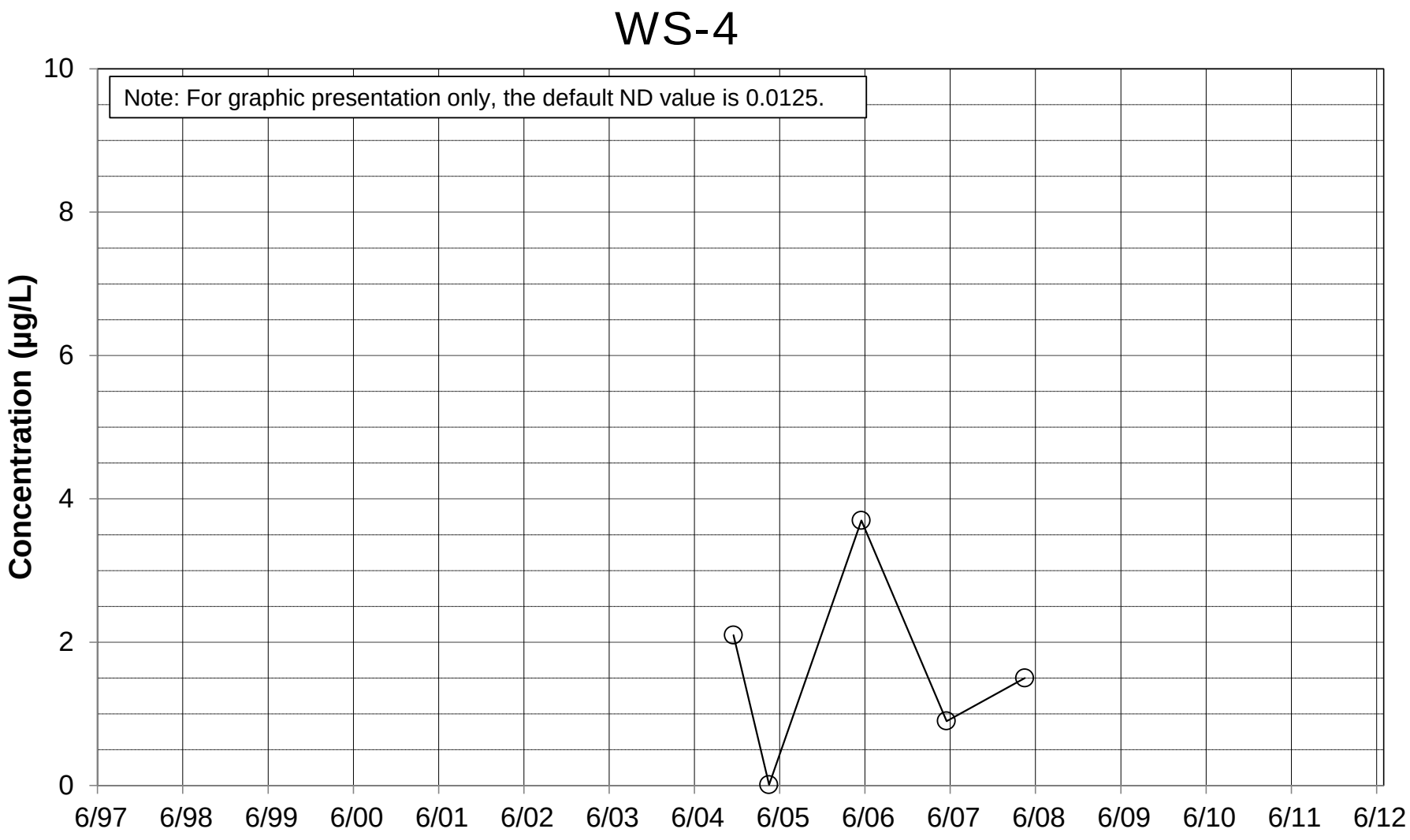

WP-7D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


WP-7S
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
1,000
800
600
400
200
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


WP-8D
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
100
80
60
40
20
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


WP-8S
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
2,000
1,600
1,200
800
400
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


WS-1
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
20
15
10
5
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12


WS-4
Note: For graphic presentation only, the default ND value is 0.0125.
Concentration (µg/L)
10
8
6
4
2
0
6/97
6/98
6/99
6/00
6/01
6/02
6/03
6/04
6/05
6/06
6/07
6/08
6/09
6/10
6/11
6/12