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Effectiveness Monitoring Report for the Monitored Natural Attenuation (MNA) at the Chemicals, Metals, and Pesticides (CMP) Pits Operable Unit (OU) (U)

April 2022 through March 2023

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LIST OF ACRONYMS AND ABBREVIATIONS

1,1,2-TCA	1,1,2-trichloroethane
1,1-DCE	1,1-dichloroethylene
bgs	below ground surface
amsl	above mean sea level
c-1,2-DCE	cis-1,2-dichloroethylene
CCl_4	carbon tetrachloride
CMCOC	contaminant migration constituent of concern
CMP	chemicals, metals, and pesticides
COC	constituent of concern
CSM	conceptual site model
CY	calendar year
DCM	dichloromethane (methylene chloride)
DEHP	bis-(2-ethylhexyl) phthalate
DNAPL	dense non-aqueous phase liquid
EMP	Effectiveness Monitoring Plan
EMR	Effectiveness Monitoring Report
ERH	electrical resistance heating
ft	feet
GA	Gordon aquifer
GCCZ	Green Clay Confining Zone
GWPS	groundwater protection standard
HDPE	high-density polyethylene
LAZ	lower aquifer zone
m	meters
µg/L	microgram per liter
µg/kg	microgram per kilogram
MAZ	middle aquifer zone
MCL	maximum contaminant level
mg/kg	milligram per kilogram
MNA	monitored natural attenuation
OU	operable unit
PCE	tetrachloroethylene
PDB	passive diffusion bag
RA	remedial action
RCRA	Resource Conservation and Recovery Act
RFI/RI	RCRA Facility Investigation/Remedial Investigation
RG	remedial goal
ROD	Record of Decision
RSL	Regional Screening Level
SCDHEC	South Carolina Department of Health and Environmental Control
SCSU	South Carolina State University
SRNS	Savannah River Nuclear Solutions LLC
SRS	Savannah River Site

LIST OF ACRONYMS AND ABBREVIATIONS (*continued, end*)

SVE	soil vapor extraction
TCCZ	Tan Clay Confining Zone
TCLC	Tan Clay Lower Clay
TCE	trichloroethylene
t-1,2-DCE	trans-1,2-dichloroethylene
TZ	transmissive zone
USEPA	U.S. Environmental Protection Agency
UTRA	Upper Three Runs aquifer
VC	vinyl chloride
VOC	volatile organic compound
WSRC	Westinghouse Savannah River Company LLC (before October 2005)
WSRC	Washington Savannah River Company LLC (October 2005- July 2008)

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1.0 INTRODUCTION

This Effectiveness Monitoring Report (EMR) addresses the Monitored Natural Attenuation (MNA) groundwater remedy at the Chemicals, Metals, and Pesticides (CMP) Pits Operable Unit (OU) for the period from April 2022 to March 2023. The monitoring requirements for the CMP Pits OU are identified in the Effectiveness Monitoring Plan (EMP) (WSRC 2006b).

1.1 Operable Unit Background

The CMP Pits OU is located in the central portion of the Savannah River Site (SRS) approximately one mile north of L Area (Figure 1). The CMP Pits were identified as a Resource Conservation and Recovery Act/Comprehensive Environmental Response, Compensation and Liability Act (RCRA/CERCLA) unit in the Savannah River Site Federal Facility Agreement (FFA) in 1989. The subunits of the CMP Pits OU were evaluated in the *RCRA Facility Investigation/Remedial Investigation Addendum with Baseline Risk Assessment for the CMP Pits (U)* (WSRC 2003). The CMP Pits OU is comprised of the following subunits: Ballast Area soils; CMP Pits and associated vadose zone (Field A); vadose zone (Field B); groundwater; and surface water and sediment (Figure 2).

The CMP Pits consist of seven former, unlined pits placed in two rows that were designed to receive non-radioactive wastes (chemicals, metals, and pesticides) and operated from August 1971 until February 1979. Once the pits stopped receiving waste, all the open pits were covered with clay and graded. Contaminated soil and debris at the CMP Pits posed a contaminant migration and human health risk and were partially excavated in 1984. A second phase of excavation was performed at Pit 080-183G to remove a portion of significantly contaminated soil that also contained dense non-aqueous phase liquid (DNAPL). As a maintenance action, the excavation was followed by backfilling of the pit area with clean soil and then capped across the whole pits area with a black plastic HDPE (high-density polyethylene) cover and overlying soil cover. Because the CMP Pits were not yet identified as a RCRA/CERCLA unit, the installation of the HDPE cover was not part of an interim or final remedial action and therefore not designed to meet any infiltration/permeability specifications at the CMP Pits. Although the highest levels of contaminated soil were removed, some contaminated soils were left in place. The previous waste in the pits and associated contaminated soils located in the CMP Pits vadose zone (Field A) were determined to be the source of groundwater contamination.

Electrical Resistance Heating (ERH) with Soil Vapor Extraction (SVE) was selected as the final remedial action (RA) for the CMP Pits vadose zone in and around Field A (Figure 2). This remedy targeted the deeper contaminated soil at Pit 080-183G that was underneath the previous soil excavations. This remedy also addressed the remaining DNAPL that was present in the clay horizons beneath the pits. The contaminant migration constituents of concern (CMCOCs) that were identified in the RCRA Facility Investigation/Remedial Investigation (RFI/RI) Addendum (WSRC 2003) are tetrachloroethylene (PCE) and dichloromethane (DCM) or methylene chloride.

Groundwater contamination has occurred as a result of contaminants leaching from the source area soils. Following remediation of the CMP Pits vadose zone (Field A) source area, MNA was selected as the RA for the contaminated groundwater.

Surface soil contamination in the Ballast Area and vadose zone contamination in Field B have been successfully remediated via interim RAs. There is no problem warranting action and no RA objective for the surface water and sediment; however, surface water sampling is included as part of the MNA sampling.

1.2 Nature and Extent of Contamination

PCE and DCM were identified as CMCOCs and as principal threat source material for mobility (i.e., transport from the source zone to the aquifer in less than 10 years) in the vadose zone beneath the CMP Pits. The volatile organic compound (VOC) contamination was highest in the northwest pit (Pit 080-183G) at depths between 20 and 60 feet (ft) (6.10 and 18.29 meters [m]) below ground surface (bgs). PCE was the most abundant contaminant at CMP Pits. No constituents of concern (COCs) were identified in the surface soils (0-1 ft [0-0.3 m] bgs) in the CMP Pits subunit.

In accordance with the Record of Decision (ROD) (WSRC 2004), an ERH/SVE remedy was selected to remove the DNAPL from the vadose zone. Based on the limited lateral and vertical extent of PCE contamination in the vadose zone and the intent of the selected remedy defined in the ROD, the ERH treatment area included the extent of PCE contamination above the DNAPL threshold concentrations (60 milligram per kilogram [mg/kg]) and comprised an area of approximately 0.05 acres (0.02 hectares) in Field A (Figure 2). Further details of the DNAPL remediation are available in the 2009 EMR (SRNS 2009).

The following VOCs and pesticides were identified as human health COCs in the groundwater for the future industrial worker and/or resident: alpha-benzene hexachloride, beta-benzene hexachloride, delta-benzene hexachloride, dieldrin, lindane, bis-(2-ethylhexyl) phthalate (DEHP), bromodichloromethane, carbon tetrachloride, chloroform, DCM, PCE, and trichloroethylene (TCE). Following the EMP for the CMP Pits, both groundwater and surface water have been sampled and analyzed for Target Compound List VOCs and/or lindane (WSRC 2006b). DEHP is a common laboratory artifact and is not believed to be present in the groundwater subunit. As of 2010, the constituent DEHP is no longer required to be sampled and/or reported. In 2013, emerging contaminant 1,4-dioxane was added to the list of monitored constituents on an annual sampling basis due to it’s presence in groundwater.

Two VOC groundwater plumes exist at the CMP Pits, designated as the main plume and the northeast distal plume. These plumes are moving northward toward Pen Branch. Groundwater modeling indicated that the CMP Pits were the source for the main plume. Particle tracking toward and from the northeast plume suggested that its source was different from that of the main plume (WSRC 2002). A drainage ditch located approximately 361 ft (110 m) north of CMP Pits is a possible previous source area (Figure 2). It is possible that this ditch was used as a dumping location prior to the use of the actual CMP Pits. Additional characterization for the source of the distal plume using soil gas surveys was presented in the RFI/RI Addendum (WSRC 2003). Results indicated that if a source was previously present in the vadose zone, it has been depleted. It is also plausible, due to the dry zone areas within the transmissive zone (TZ) and to some degree the middle aquifer zone (MAZ), that one plume separated into two distinct plumes due to the groundwater flow paths and discharge to Pen Branch. Upwelling of the MAZ as it discharges to the stream most likely brings some contamination up into the TZ. A combination of the three explanations is probable.

As discussed below, the vertical extent of the VOC plume is mostly within the Upper Three Runs aquifer (UTRA) and includes three distinct horizons: the TZ, the MAZ, and the lower aquifer zone

(LAZ). The lateral extent of the initial VOC plume was estimated at 46 acres (18.6 hectares), extending from the pit area to Pen Branch. One new Gordon aquifer (GA) well, CMP010A, was installed in 2019, and is located directly to the southeast of CMP Pits. This well has shown that the GA may be contaminated with VOCs above maximum contaminant levels (MCLs). These 2019 results were the first occurrence of GA contamination above MCLs at the CMP Pits; however, it is suspected this contamination is not representative of groundwater conditions in the GA as further investigations in March 2023 indicated well CMP010A is compromised and will need to be abandoned and replaced during fiscal year 2024 as discussed in detail in section 2.2.2.1, *PCE and TCE – Gordon Aquifer*.

Although vadose zone remediations have occurred, there has been approximately 50 years for contamination to move through the aquifers, resulting in contaminants likely partitioning onto clay particles and/or diffusing into less permeable layers, not only near the original source area at the CMP Pits, but also throughout the aquifer system acting as a secondary contaminant source to groundwater. Figure 3 shows the CMP Pits Groundwater OU Conceptual Site Model (CSM) and potential sources of contamination.

1.3 Observed Hydrostratigraphy at the CMP Pits OU

In the vicinity of the CMP Pits OU, the aquifers of interest include the UTRA and the underlying GA. Horizontal flow within the UTRA is divided into three discrete horizons that are separated by two semi-continuous confining zones, which can be comprised of sandy clays in areas and therefore potentially discontinuous and leaky (Figure 3). The horizons are: 1) the TZ – a thin aquifer feature that lies above the top portion of the tan clay, the tan clay confining zone (TCCZ), 2) the MAZ – a thin aquifer horizon between the TCCZ and the lower portion of the tan clay, the tan clay lower clay (TCLC), and 3) the LAZ - the most substantial portion of the UTRA in the area, which extends to the green clay confining zone (GCCZ) with a thickness up to 100 ft (30.48 m). The GCCZ separates the UTRA from the GA and is comprised of single or multiple layers of dark greenish grey to black clay to sandy clay. Fine- to medium-grained sands to silty/clayey sands exist in-between the clay layers. The confining zones are hummocky, vary in thickness, and can be almost non-existent or leaky in areas. In general, the TCCZ is thinner in the UTRA than the TCLC.

Using the data collected from lithology pushes done for the 2002 modeling effort and from well installation records, the confining unit surfaces of the TCCZ and TCLC were spatially mapped (Figure 4) and compared to the most current fourth quarter 2021 (4Q2021) water elevation surfaces. Areas where the TZ and MAZ are suspected to be dry were delineated and are shown on Figure 4, as well as on all TZ and MAZ figures, and can be seen in the cross sections (See Section 2.2.2). The top of the TCCZ forms a semi-circular ridge at and north of the CMP Pits (shown as white and light pink shaded elevations in Figure 4), which causes much of the TZ to be dry. This shape is mimicked in the top of the TCLC, but the subsequent dry zone is not as extensive. The dry zones at CMP Pits are not a recent occurrence. Review of water elevation data from the 1980's and 1990's from abandoned wells suggests similar dry zones have existed for decades.

Figure 5 shows the locations of the 76 monitoring wells and eight (8) surface water stations associated with the CMP Pits OU. The map also shows corresponding cross-section lines which depict the local hydrostratigraphic lithology and major contaminant plumes at the CMP Pits OU. The stratigraphy, aquifers, and plumes are all, in general, gently sloping towards Pen Branch. However, the confining units appear to slope towards the south in some areas at the main CMP Pits area (Figure 4 and cross-section B-B' [See Section 2.2.2]). Although the TCCZ and the TCLC are depicted as continuous units in the cross-sections, the aquifer behavior in this area shows various elevation heads and contaminant pathways that indicate the confining horizons are discontinuous and/or intermixed with sandy clays in many areas. The TZ, TCCZ, MAZ, TCLC, and LAZ units are eventually incised by Pen Branch itself and/or the local topography. In the CMP Pits OU area of interest (extent of the maps), the TZ is incised by Pen Branch on the east side of the stream reach, the MAZ is incised in the central portion of the stream reach, and the LAZ is partially incised by Pen Branch at the western portion of the stream. The horizontal extent of the TZ and MAZ are depicted on all TZ and MAZ maps.

1.4 Observed Hydrology at the CMP Pits OU

Regional groundwater flow for the UTRA, as depicted in Figure 6, is to the northwest towards Pen Branch from CMP Pits. Regional groundwater flow for the GA is to the south (Figure 6). The latest compiled potentiometric surfaces from the calendar year (CY) 2Q2022 are displayed for each of the aquifer zones in Figure 7 and Figure 8. These potentiometric surfaces do not show any unusual pattern of flow from previous measurements. Figure 9 depicts the monthly rainfall levels from the closest monitoring station in nearby L Area for 2019 – 2022 and the 20-year average. Rainfall during 2022 (total of 51.55 inches) measured more than the 2021 measurements and was above the 20-year average (48.88 inches). The month of August experienced the highest rainfall totals in the year. February, October, and November were the driest months. In general, monitoring wells showed similar or slightly lower water elevations compared to 2021 measurements. Hydrographs of each well are presented in Appendix A.

A small region of radial flow appears to be superimposed upon the northwestward flow beneath the hill on which the CMP Pits are located and is depicted by the groundwater flow direction arrows in Figure 7. This pattern is due to the locally high topography at CMP Pits (Figure 2) as well as the bowl-like structure of the Tan Clay, especially in the upper TCCZ (Figure 4). Based on water elevations in the MAZ not being fully saturated, it appears the TZ may consist of perched water tables in many locations. The bowl-like structure of the tan clay, as depicted in Figure 4, further supports this conclusion as the lower elevation of the TCCZ in the eastern portion of the CMP Pits may locally funnel groundwater to the south and southeast following the slope of the TCCZ before eventually flowing to the north and northwest. Water may mound up in the bowl-like structure as water is pushed towards the northwest from the overall regional groundwater flow and as water flows downslope, as shown in Figure 7 in the TZ, the wells located directly around CMP Pits (CMP 34D, CMP 13D, CMP 35D, CMP 10D, and CMP 11D) and may exhibit a radial groundwater flow path with an additional south or southwest gradient. Some years display a more pronounced southerly flow gradient than others. With lower rainfall totals in 2022, flow patterns have not changed significantly from 2021.

The flow pattern in the MAZ generally resembles that of the TZ. Flow directions in the LAZ and GA are less defined, as the horizontal gradients are less across the area, as discussed below. In the area around the CMP Pits and towards the west and north, the water elevations in the LAZ are generally very similar and vary by up to 2 ft (Figure 8). Measurements show that groundwater in the vicinity of Pen Branch flows south towards Pen Branch on the northern side of the stream, further supporting that contaminants originating from CMP Pits are not flowing underneath Pen Branch towards the north. Figure 6 depcits the regional potentiometric surface of the UTRA illustrating the groundwater flow from both sides of Pen Branch. Water elevations in the LAZ on the north side of Pen Branch are higher than elevations on the south side of Pen Branch.

Estimated horizontal groundwater linear velocities have been calculated for the following groundwater flow paths:

- Figure 7 - TZ aquifer flow paths A – A’, B – B’, and C – C’;
- Figure 7 - MAZ flow paths A – A’ and B – B’;
- Figure 8 – LAZ flow paths A – A’, B – B’, C – C’ and D-D’; and
- Figure 8 – GA flow path A – A’.

Estimated horizontal groundwater linear velocities were calculated for each of the above flow paths using the following equation:

$$Linear\ Velocity\ \left(\frac{ft}{day}\right) = \frac{Hydraulic\ Conductivity\ \left(\frac{ft}{day}\right)}{Porosity\ (unitless)}\, x\, \frac{dh\ (ft)}{dl\ (ft)}$$

The hydraulic conductivity constants (8, 50, and 30 ft/day for the TZ, MAZ, and LAZ, respectively) and porosity values (all 30%) used in the calculations are taken from the final calibrated 2017 modeling effort (SRNS 2017). For the GA, the hydraulic conductivity constant of 20 ft/day and porosity value of 30% is used based on investigations in other nearby groundwater/waste sites at SRS. The value *dh* is the difference in head; *dl* is the length of the groundwater flow paths shown on Figures 7 and 8. The ratio *dh/dl* is the horizontal gradient. The gradient, linear velocity per day, and average linear velocity per year were each determined and are provided in Table 2 and described below.

Estimated velocities vary within the TZ between 0.12 ft/day on the western side of the CMP Pits and 0.37 ft/day on the eastern side. This variation could be caused by a combination of factors including the large dry zone area and the radial groundwater flow paths at the CMP Pits knoll, as discussed above. The average for the TZ is 0.28 ft/day, or 103.73 ft/year. The MAZ is more uniform in its rates and averages at 1.71 ft/day, or 624.97 ft/year. The LAZ’s rate is much less than the MAZ near the CMP Pits with a rate of 0.21 ft/day, or 77.81 ft/year (LAZ A – A’ Flow

Path). Flow is greater near Pen Branch, especially on the north side of Pen Branch with a flow velocity of 1.42 ft/day, or 516.86 ft/year (LAZ C – C’ Flow Path); however, flow rates are still less than the MAZ. The GA potentiometric surface is extremely flat compared to the UTRA aquifer as the water elevations only vary slightly in elevation across the whole CMP Pits monitored area. Horizontal flow velocity for the GA was calculated to be an average of 0.15 ft/day, or 55.09 ft/year. Flow direction is towards the south/southeast and is consistent with the regional GA flow.

There is a significant downward component to groundwater flow throughout the UTRA. Water level measurements collected from well clusters during 2022 show an average head drop of 11.57 ft (3.53 m) across the TCCZ and an average of 14.03 ft (4.28 m) across the TCLC. There is an average of a 13.94 ft (4.25 m) drop in head across the Green Clay from the LAZ to the GA. As groundwater approaches Pen Branch, the downward gradient may decrease or even flow upward near and underneath Pen Branch as water discharges into Pen Branch. Monitoring well clusters CMP064BU and CMP064B (both screened in the LAZ) show a higher water elevation in the lower B screen than the upper BU screen (Figure 8). Additionally, wells in the wetland area near Pen Branch display water table elevations approximately 1 – 3 ft (0.3 – 0.9 m) above the stream bottom, indicating that Pen Branch is a gaining stream. Other wells, CMP 8 and CMP 8B, located upgradient of the wetland area display a much lower than average downward gradient of approximately 3.9 ft (1.2 m) across the TCLC. The TCCZ and TCLC are not considered thick competent confining clays, but rather are hummocky, vary in thickness, and can be almost non-existent or leaky in areas allowing some degree of flow between aquifers. The steep topography south of Pen Branch incises the TCCZ and TCLC, the sediment around the stream has been reworked over time as the stream has meandered, and trees and roots have penetrated the clay layers allowing more interchange between aquifers.

2.0 REMEDIAL ACTIONS

This EMR documents the performance of the MNA remedy for the groundwater. Remedial activities for the vadose zone and Ballast Area Soils subunits were performed under an interim RA in 2001 and 2005, respectively (WSRC 1999 and WSRC 2006a). ERH combined with SVE was implemented from 2007 through 2009 to remove DNAPL from the vadose zone (Figure 2). This interim RA mitigated the source within the vadose zone for the groundwater subunit which allows for the MNA remedy.

2.1 CMP Pits Vadose Zone Remedial Action

The ERH/SVE RA performed for the CMP Pits vadose zone was implemented to mitigate the CMCOCs PCE and DCM. Details of system construction are provided in the Post-Construction Report (SRNS 2008). ERH/SVE operation began on March 17, 2008. Heating via ERH continued until November 2008. Two SVE systems provided the VOC removal at the CMP Pits well field. SVE well effluent vapor concentrations and soil temperature data were analyzed to determine when the source/DNAPL had been depleted. Operating data from the ERH system was provided in the EMR submitted in June 2009 (SRNS 2009).

In accordance with the EMP, confirmation samples were collected from three core locations. All sample results were below the remedial goal (RG) for PCE (30.7 mg/kg) and DCM (0.2 mg/kg) (SRNS 2010), meeting the objective of the RA. All remedial equipment and SVE units have been removed. Even though the RA was successful and confirmation samples were below RGs, there is a possibility that residual contamination trapped within clay horizons and/or pore space in the vadose zone, in or out of the ERH/SVE zone, could act as a secondary source for groundwater contamination, albeit much smaller than the original source.

2.2 Groundwater Monitored Natural Attenuation Remedy

2.2.1 Groundwater Aquifers

As described above, groundwater analysis has been performed around the CMP Pits in four distinct aquifer zones of the UTRA and the GA. These zones in descending order are 1) the TZ of the UTRA, 2) the MAZ of the UTRA, 3) the LAZ of the UTRA, and 4) the GA.

Groundwater within these aquifers is currently monitored by the 76 wells which have been sampled on a semi-annual or annual basis (Table 1, Figure 5). The TZ includes 13 monitoring wells, the MAZ includes 27 monitoring wells, the LAZ includes 29 monitoring wells, and the GA includes seven (7) monitoring wells. All wells are used for water level measurements and the majority (67) are sampled for VOCs and/or lindane. Eight surface water stations north of the CMP

Pits located in the Pen Branch stream were used to monitor any discharge of VOCs to the stream (Figure 5). Table 1 indicates the monitoring network required sampling frequency and the constituents that are monitored. Any additional samples collected during the April 2022 through March 2023 timeframe are shaded in green and any omitted samples are shaded in orange.

Based on the evaluation of monitoring data, advection and dispersion are the main MNA processes occurring at the CMP Pits. Based on sampling analysis, some degree of biodegradation is occurring in the wetland area near Pen Branch, although it is not seen in much significance upgradient in the CMP Pits area outside the immediate wetland area. The original 2002 groundwater model only accounted for advection and dispersion and estimated the plumes would remain above MCLs for a minimum of 50 years (~2050) and as long as 130 years (~2130) even if the vadose zone source was completely remediated (WSRC 2002). An updated model conducted in 2017 added sorption and continuing VOC sources in clays and estimated the plumes will remain above MCLs for approximately 100 years (~2117). The increase in minimum time is mostly attributed to sorption but is within the range of timeframes calculated in the original 2002 model (50 – 130 years [CY 2050 – 2130]).

2.2.2 Groundwater Sampling Results

Groundwater samples are required to be collected from a total of 67 monitoring wells as listed in Table 1 (65 VOCs, 64 1,4-dioxane, and 19 lindane). Groundwater samples were collected from 71 monitoring wells at the CMP Pits mostly during CY 2Q2022 and 4Q2022. Nine of the 76 monitoring wells are generally only used for water level measurements; however, four of these wells (CMP 56D, CMP 56B, CMP 57D, and CMP 57B) were additionally sampled for VOCs during 2Q2022 to provide additional data on the north side of Pen Branch. CMP066B and CMP067B were also additionally sampled in 2Q2022 for VOCs since detections of PCE and TCE were observed during 2019; no detections were observed during 2020 or 2021. GA well CMP010A included additional sampling to provide additional data for trending purposes. CMP 12A was additionally sampled during 4Q2022 since non-estimated detections of VOCs and 1,4-dioxane were observed in 2Q2022. Additional wells including CMP011A, CMP 11D, CMP 13D, CMP 34D, and CMP 52C were sampled for VOCs, 1,4-dioxane, and/or lindane as shown in Table 1 to provide additional plume coverage. All groundwater results from April 2022 through

March 2023 are provided in Table 3. Plume maps were drawn based on the maximum concentration from the data collected between April 2022 through March 2023. Details on specific contaminants are described in the following subsections.

2.2.2.2 PCE and TCE

PCE and TCE contamination has been identified in the TZ, MAZ, and LAZ above MCLs. The PCE plumes comprise approximately 44 acres (17.8 hectares) (Figures 10 and 11), and the TCE plumes comprise approximately 41 acres (16.6 hectares) (Figures 17 and 18). The majority of the horizontal plume movement occurs in the MAZ, which is consistent with modeling estimates. Vertical movement of the plumes are occurring as shown by an overall trend of decreasing concentrations in the MAZ, and an increasing trend in portions of the LAZ (Appendix B and Figures 15, 16, and 32). This is also consistent with modeling, as concentrations in the LAZ are predicted to increase over time. Additionally, samples collected from newer GA well CMP010A installed in 2019 detected PCE and TCE above MCLs; however, this contamination is not expected to be the conditions of the GA but from leakage above from the compromised well (see the Gordon Aquifer section below). Seventy (70) monitoring wells were sampled in 2022 for VOCs. Thirty-two (32) wells had PCE concentrations above the MCL of 5.0 microgram per liter (µg/L) and 29 wells had TCE concentrations above the MCL of 5.0 µg/L.

Monitoring wells were analyzed using GSI Mann-Kendall trend analysis for data post-ERH/SVE remediation (2010-2022 data, as available). Most of the monitoring wells (88%) show a declining or steady (including consistent non-detects and no-trend) trend in PCE and TCE over the past 12 years as shown in the time-series plots for all the wells in Appendix B, Figure 32, and summarized below. Additional information is provided with the included Excel file (CMP_EMR_2022 _Table3_Figure32) located on the supplied CD with this report.

The following is a summary of the PCE and TCE contaminant trends by aquifer for the April 2022 through March 2023 reporting period.

Transmissive Zone:

The maximum concentrations of PCE and TCE found in the TZ were 2,470 µg/L for PCE (Figure 10) and 1,860 µg/L for TCE (Figure 17) both at monitoring well CMP 35D. There were eight monitoring wells (out of 11 sampled) screened in the TZ that had PCE and/or TCE concentrations above the MCL in 2022. Upgradient wells CMP062D and CMP063D were non-detect for both PCE and TCE.

Wells CMP 10D and CMP 11D have shown consistently high PCE and TCE values; however, as shown in Appendix B, the trends for these wells over the past 14 years have generally declined. Concentrations in wells CMP 10D and CMP 11D during 2022 decreased slightly from concentrations during 2021. Contamination in these two wells is a result of contaminants being transported by localized radial groundwater flow at the CMP Pits knoll, as described in Section 1.4 and shown in Figure 7, or by contaminants following the slopes of the confining units (Figure 4). Due to the shape of the TCCZ surface and the subsequent dry area that is created in the TZ, contamination may have been funneled towards the south and southeast towards CMP 10D and CMP 11D. Well clusters CMP062 and CMP063 remain below MCLs and were non-detect during 2022 indicating that contamination has not spread substantially to the south/southeast.

Well CMP 35D has generally displayed increasing concentrations over the last 11 years; however, this is as wells CMP 10D and CMP 11D have generally shown decreases in their concentrations. The inversely related trends in wells CMP 10D and CMP 35D (Figure 31), for both VOCs and lindane, suggest it could be tied to hydrogeologic processes associated with the complex radial groundwater flow patterns due to the surface shape of the TCCZ and resulting dry zones in the TZ. Water elevation increases due to above average precipitation in recent years possibly provided a mechanism for increased flow towards the northwest in the CMP 10D and CMP 35D area. This may also provide more opportunity for dispersion and diffusion from CMP 10D as there is more water volume available in the TZ. Additionally, the increased water elevations may allow release of trapped secondary sourced contamination in clay horizons or pore space into the groundwater since well CMP 35D is located downgradient of the CMP Pits. The additional soil sampling conducted in 2021 at the CMP 35D location indicated that residual VOC contamination is present in the vadose zone and upper aquifer and TCCZ (Figures 35 and 36). Since CMP 35D is located directly outside of the capped area, the low permeability HDPE cover at the CMP Pits may retard infiltration and the effect of water elevation increases may be more pronounced. Figure 31 shows a possible correlation between water elevation and contaminant levels of PCE at well CMP 35D.

Due to the increases observed at well CMP 35D, PCE and TCE have been additionally analyzed at nearby well CMP34D to the west of the CMP Pits. This well had previously shown high levels of PCE (1,460 µg/L) and TCE (417 µg/L) in 2001 but was not included in the CMP OU EMP for VOC analyses so no VOC results were available since 2009. SRS began sampling well CMP 34D for VOCs starting in 2019 and concentrations were observed at levels of 1,940 µg/L for PCE. The 2022 results decreased to a maximum result of 331 µg/L for PCE and 3.27 µg/L for TCE (Appendix B Pages B-15 and B-65). The elevated results in the TZ for wells CMP 34D and CMP 35D indicate that some amount of contaminant source is present within the vadose zone or pore space above the water table; however, it only appears to have a localized effect on the overall plume and is not causing plume expansion. It is noted that the PCE/TCE ratios are significantly different in the two wells, indicating a complex disposal history and source composition.

The TZ plume geometry is shown in Figure 10 for PCE and in Figure 17 for TCE. The main plume at and around the CMP Pits has remained roughly the same in size with concentrations near the actual pits area continuing to decrease at well CMP 10D but increasing at well CMP 35D as previously discussed. The higher concentrations have remained relatively confined near these two wells, which may indicate that the mass of contaminants is likely not extensive. PCE concentrations at well CMP 11D have generally decreased since 2010 whereas TCE concentrations at well CMP 11D have generally remained stable. Concentrations of PCE at CMP 13D exceeded the MCL during 2022 and PCE displays a slight increasing trend since the ERH/SVE remediation, although concentrations have remained steady for past six years. Concentrations at well CMP 30D were non-detect for PCE and TCE.

PCE and TCE concentrations in the distal plume in the wetlands in 2022 remained near 2021 concentrations. These wells are generally more variable in contaminant concentrations likely due to the wetland setting and recent rainfall events. PCE and TCE concentrations at CMP 36D, CMP 37D and CMP 39D were less than or near MCLs during 2Q2022 but increased during 4Q2022 showing seasonal fluctuations. Concentrations at CMP 38D are usually less variable and display steady concentrations. The distal plume was initially thought to originate than an alternative source from the CMP Pits. Particle track modeling indicated it was potentially from a previously contaminated drainage ditch north of the CMP Pits (WSRC 2002) (located on all planar figures). As previously mentioned, characterization results of this area indicated that if a source was previously present in the vadose zone, it has been depleted (WSRC 2003). Due to the dry zone areas within the TZ, it is plausible that bifurcation of the plume into two separate plumes occurred over time, or that some contaminant flow went around the dry zone to the east. Discharging of the MAZ and LAZ into the Pen Branch stream likely brings some contamination up into the TZ as the water discharges into Pen Branch. The clay horizons between the aquifers can be thin and/or leaky and the TCCZ and TCLC are at or near ground surface at the location of the distal plume. The steep topography south of Pen Branch incises the TCCZ and other clay layers, the sediment around the stream has been reworked over time as the stream meanders, and trees and roots have penetrated the clay layers allowing more interchange between aquifers. All of these factors are probable explanations for the distal plume.

A comparison of changes in PCE plume concentrations over the last 14 years (2022 values compared to 2008 values [Pre ERH/SVE]) can be seen in Figure 15 and Table 4. Additionally, a GSI Mann-Kendall trend assessment has been done for all wells using the post-ERH/SVE data (2010-2022 data, as available) and is summarized in Figure 32. In the TZ, most plume concentrations have decreased or are steady. However, the area directly north of the CMP Pits, including monitoring wells CMP 35D and CMP 13D has increased in PCE concentrations. Concentrations to the south of the CMP Pits at wells CMP 10D and CMP 11D have both decreased more than 95% from their peak levels and show a large reduction in total mass for the TZ. Concentrations to the west at CMP 30D remain non-detect. Concentrations at CMP 35D and CMP 34D will continue to be monitored. The distal plume has decreased in both size and core concentrations indicating that the total mass being transported downgradient is decreasing. TCE trends are similar to PCE and are therefore not mapped.

Middle Aquifer Zone

The maximum concentrations found in the MAZ were 950 µg/L for PCE at well CMP 47D (Figure 10), and 192 µg/L for TCE at well CMP059C (Figure 17), located north of CMP Pits. The concentration of PCE detected at CMP 47D and CMP059C increased from 2021 concentrations, likely due to vertical movement from the contamination observed in the TZ.

There are 11 monitoring wells (out of 23 sampled) screened in the MAZ that had PCE concentrations above the MCL in 2022, and 11 monitoring wells had TCE exceedances above the MCL. The monitoring wells with TCE detections corresponds to monitoring wells with PCE detections. The majority of the MAZ wells display a steady or decreasing trend in concentrations (Figure 32). Well CMB 24I displays a slight increasing trend; however, the overall plume footprint has not increased. Downgradient locations towards Pen Branch (CMP 40D, CMP 41D, and CMP 43D) were all below MCLs or either non-detect for both PCE and TCE. The remaining MAZ wells show decreasing or no significant change in PCE concentrations. Similar trends were observed for TCE in these wells.

PCE and TCE concentrations rapidly decrease once the plume reaches the wetland area near Pen Branch where VOC degradation is occurring.

A comparison of changes in PCE plume concentrations over the last 14 years (2022 values compared to 2008 values [Pre ERH/SVE]) can be seen in Figure 15 and Table 4. Additionally, a GSI Mann-Kendall trend assessment has been done for all wells using the post-ERH/SVE data (2010-2022 data, as available) and is summarized in Figure 32. In the MAZ, core plume concentrations are similar to 2008 concentrations due to some recent increases; however, the area of higher concentrations (100+ µg/L) has also decreased in size. The plume footprint appears to have expanded horizontally, but this is likely due to the new monitoring well data points collected starting in 2016, which further defined the plume to the east. Additionally, samples have more recently been able to be collected from well CMP 31C to the west, further defining the plume in that direction. Concentrations near Pen Branch in the wetland area at wells CMP 40D and CMP 39D have decreased, indicating that the flux of VOCs from the source area is decreasing and that VOC degradation in the wetland area is attenuating the plume. TCE trends are similar to PCE and are therefore not mapped.

Lower Aquifer Zone

There are twelve (12) monitoring wells (out of 29 sampled) screened in the LAZ that had PCE concentrations above the MCL in 2022. These twelve (12) wells also corresponded to the locations in the LAZ having TCE concentrations above the MCL. The LAZ maximum values for PCE slightly increased from 2021 concentrations and TCE maximum concentrations remained the same. The 2022 maximum concentrations of PCE and TCE within the LAZ were 310 µg/L at well CMP 54C for PCE and 188 µg/L at well CMP 52BU for TCE (Figure 11). The higher concentrations observed in the LAZ are at wells located in the upper LAZ, directly below the TCLC where contaminants are likely migrating from the MAZ and/or diffusing from the clays above. Concentrations at CMP 32C and CMP 52C appear to have stabilized over the last five years. Concentrations of PCE and TCE at CMP 10C display slight decreasing trends.

Concentrations at four wells (CMP 8B, CMP 32C, CMP 52BU, and CMP058B) generally display increasing trends over the last 14 years and are located in the upper or mid-LAZ aquifer (Appendix B and Figure 32). However, PCE and TCE concentrations in mid-LAZ plume wells CMP 10B and CMP 13B remained near 2021 concentrations. Contamination in the LAZ is limited to the upper half portion of the aquifer as seen in the three cross sections, A – A’, B – B’, and C-C’ (Figures 12, 13, and 14, respectively). Other wells vertically located mid-plume and deeper remain steady, below MCLs, or non-detect. Newer monitoring well CMP035B, vertically located in the upper LAZ, had a maximum PCE concentration of 20.5 µg/L and TCE concentration of 33.6 µg/L during 2Q2022; concentrations decreased for both constituents during 4Q2022. These concentrations are consistent with other plume concentrations and fit with the known plume geometry as can be seen in the plume maps (Figures 11 and 18) and cross section A-A’ (Figure 12).

Upgradient wells CMP062B and CMP063B were non-detect for PCE and TCE during 2022. Downgradient wells CMP060B and CMP061B remain non-detect or below MCLs for PCE and TCE. Concentrations exceeded the PCE MCL at downgradient well CMP 8B. During 2Q2022 and 4Q2022 PCE and TCE were not detected or below MCLs at wells CMP066B and CMP067B, which are located north of Pen Branch (Figures 11 and 12). PCE was not detected and TCE was detected at an estimated value of 0.66 µg/L, below the 5 µg/L MCL, at well CMP067B during 4Q2022.

Similar to the location of the northeast distal plume in the TZ and MAZ aquifers, VOC contaminants are present in the LAZ. Some upward vertical water elevation heads are present in the LAZ closer to Pen Branch (i.e., CMP064BU and CMP064B) which supports that the LAZ is discharging into Pen Branch (Figure 8). Contaminants are from upgradient clay layers and aquifers.

A comparison of changes in PCE plume concentrations over the last 14 years (2022 values compared to 2008 values [Pre ERH/SVE]) can be seen in Figure 16 and Table 4. Additionally, a GSI Mann-Kendall trend assessment has been done for all wells using the post-ERH/SVE data (2010-2022 data, as available) and is summarized in Figure 32. LAZ plume concentrations have generally increased in the upper half of the aquifer. Increases in the LAZ are expected, as both the previous modeling effort and the more recent 2017 modeling effort predicted increases in the LAZ over time. The area southeast of CMP Pits in the upper LAZ (well CMP 10C) is currently on a decreasing trend over the previous 11 years, suggesting the majority of source contaminants have been remediated. Concentrations on the western edge of the plume (well CMP 33D) have also decreased indicating the LAZ plume is not expanding to the west with LAZ groundwater flow. The downgradient wells (CMP060B and CMP061B) remain below MCLs. The LAZ plume is most likely reaching Pen Branch and the wetland area east and downgradient of CMP 8B, which also correlates to the TZ and MAZ contaminants near Pen Branch. TCE trends are similar to PCE and are therefore not mapped.

Gordon Aquifer

There are seven monitoring wells screened within the GA and all were sampled during 2022. CMP010A was the only GA monitoring well with PCE and TCE concentrations above MCLs, with concentrations of 71.6 µg/L for PCE and 27.2 µg/L for TCE. These concentrations have significantly decreased from 2020 concentrations. Initially, it was not fully understood how the GA at the CMP010A location became contaminated. A possible explanation was that contamination was brought down from upper layers during drilling of the well. Based on the vertical contaminant profile as seen in cross section A-A' (Figure 12), natural groundwater transfer of contamination vertically was not expected as sampling data in the lower portion of the LAZ has shown no contamination at the CMP Pits. Some of the mid LAZ screened wells have displayed PCE and TCE contamination slowly increasing above MCLs; however, this has only occurred within the last nine years and contaminant levels are not high, including well CMP 10B, which is screened vertically in the middle portion of the LAZ. Another explanation is that some contamination has migrated along a path vertically from the CMP Pits area to the GCCZ/GA. However, further VOC headspace soil sampling conducted during 2021 at boring CMP-BR-06 located in-between the CMP Pits and the CMP010A well (Figure 35) did not showVOC contamination at depth (>124 ft bgs) and was only present in the upper TCCZ and TCLC zones (Figure 36).

In the June 2022 CMP Pits EMR, Appendix C, *Additional Sampling Efforts,* describes how SRS conducted additional soil sampling to help identify if there is contamination migrating to the GA in the area of CMP010A (SRNS 2022a). Although concentration trends are decreasing at CMP010A, SRS had planned to redevelop well CMP010A to help rule out issues caused by its drilling activities. In March 2023 there were difficulties in inserting a larger diameter groundwater pump for the well redevelopment. A camera survey was conducted to observe the well casing and possible obstructions. An obstruction was encountered at around 105 ft bgs, and it was determined that the well casing was bent and would not allow the pump to pass. At the well casing joint below the bend, in-well leakage of material from the aquifer was observed entering the well. It is now believed that contamination from this zone (similar to depth of well CMP 10C) has been entering the well. Due to the findings of the camera survey, the redevelopment of well CMP010A was cancelled. In fiscal year 2024, SRS will abandon the CMP010A well and install a replacement well, CMP010AR, with the use of well casing stabilizers to prevent future construction issues. The well will be sampled afterinstallation, and the results will be reported in subsequent CMP Pits EMRs.

PCE and TCE were detected at low non-estimated levels below the 5 µg/L MCLs at GA well CMP 12A. Since the concentrations were non-estimated, well CMP 12A was also sampled during

4Q2022. PCE was detected at a maximum of 1.83 µg/L and TCE at a maximum of 1.27 µg/L. All other GA monitoring wells were non-detect for PCE and TCE.

As stated above, the contamination generally remains in the UTRA and extends down to the upper portion of the LAZ. The GA screened wells are in place to confirm contamination has not migrated farther downward than expected as described in the EMP (WSRC 2006b). Modeling did not predict contamination to reach the GA at levels above MCLs (WSRC 2002, SRNS 2017). In general, low levels of PCE and TCE below MCLs have been seen in the past in monitoring well CMP 12A and rarely at CMP 8A. Contamination at CMP010A is believed to be caused by in-well leakage of contaminated groundwater at around 105 ft bgs due to bends in the well causing the casing seal/joint to be compromised. Abandonment and replacement of compromised monitoring well CMP010A will occur in fiscal year 2024. The new replacement well CMP010AR will be sampled at least semiannually for the first year.

2.2.2.3 Cis-1,2-Dichloroethylene (c-1,2-DCE)

C-1,2-DCE was detected in eight wells in 2022 (CMB 15I, CMP 10C, CMP 11D, CMP 35D, CMP 36D, CMP 37D, CMP 39D, and CMP 40D). Concentrations were all low values, with a maximum of 4.16 µg/L at well CMP 37D, far below the 70 µg/L MCL. Half of the wells with c-1,2-DCE are located in the wetland area near Pen Branch, suggesting degradation of PCE and TCE is occurring in the Pen Branch wetlands because of an expansive wetland, high organic matter, anaerobic conditions leading to reductive dechlorination and wetland vegetation attenuation. Data collected by South Carolina State University in support of providing data for MNA conditions suggests natural attenuation is occurring (see Section 2.2.4 *Additional Data from Independent Analysis*). The preferential degradation pathway for TCE is c-1,2-DCE as both trans-1,2-dichloroethylene (t-1,2-DCE) and 1,1-DCE are non-detect as discussed below.

The lack of high detectable results in other monitoring wells confirms that VOC degradation is not widely occurring throughout the aquifers and plume and that advection and dispersion are the main MNA processes occurring. VOC degradation is mainly occurring in the wetland areas near Pen Branch.

2.2.2.4 Trans-1,2-Dichloroethylene (t-1,2-DCE)

All t-1,2-DCE results were non-detect for 2022.

2.2.2.5 1,1-Dichloroethylene (1,1-DCE)

All 1,1-DCE results were non-detect for 2022.

2.2.2.6 Vinyl Chloride (VC)

During 2022, VC was only detected at one well, CMP 15A, at an estimated value of 0.34 µg/L.

2.2.2.7 1,4-Dioxane

1,4-Dioxane is analyzed annually at CMP Pits at 64 monitoring wells. During 2022, well CMP011A was not sampled for 1,4-dioxane due to an oversight. Well CMP 34D was additionally analyzed for 1,4-dioxane making a total of 64 wells monitored for 1,4-dioxane. There is currently no MCL for 1,4-dioxane and the current United States Environmental Protection Agency (USEPA) tap water regional screening level (RSL) of0.46 µg/L is used for contouring plume maps (Figures 19 and 20) and cross-sections (Figures 21, 22, and 23). During the 2022 monitoring period, 1,4-dioxane was analyzed with two analytical methods, USEPA 8260DSIM and USEPA 522. As in past years, the USEPA 8260DSIM method detection limit and sample quantitation limits could not meet the current USEPA tap water RSL of 0.46 µg/L. However, the USEPA 522 method limits are below the USEPA tap water RSL. Annual samples were collected for 1,4-dioxane and analyzed using both methods and are compared in Table 3.

Due to the lower detection limits using the USEPA 522 method, there were more detections of 1,4-dioxane than with the USEPA 8260DSIM method. Detections of 1,4-dioxane occurred in 32 of the 64 wells sampled (50%) using the USEPA 522 method compared to 14 wells (22%) using the USEPA 8260DSIM method. Overall, there was close agreement in the results between the two methods with the USEPA 8260DSIM results usually slightly higher.

The 1,4-dioxane plume mimics the distribution of the PCE and TCE plumes in all aquifers as detections and exceedances of the USEPA tap water RSL occurred in the TZ, MAZ (Figure 19), LAZ and GA (Figure 20). The maximum concentration was 87.1 µg/L at well CMP 35D. It was not detected in any wells north of Pen Branch. As seen in Appendix B, which presents plots for the maximum 1,4-dioxane results for each sampling event, concentrations in wells that have had detections within the last seven years have remained steady or generally decreased. However, well CMP 35D has shown a general increase in 1,4-dioxane (Appendix B, page B-115) similar to other contaminant trends for this well.

There is no South Carolina certified lab that has detection limits for 1,4-dioxane that can meet the current USEPA tap water RSL. SRS will continue to look for and work with the labs to try to achieve the lowest possible detection limits. SRS will continue to utilize the USEPA 522 method that can meet the USEPA tap water RSL, in addition to the current South Carolina Department of Health and Environmental Control (SCDHEC) approved method. If a lab/method has South Carolina accreditation and can meet the USEPA tap water RSL, then that would be the preferable analysis method used.

2.2.2.8 Carbon Tetrachloride (CCl_4)

CCl_4 was detected in 19 wells during April 2022 through March 2023, but only exceeded the MCL of 5.0 µg/L in four wells: CMB 24I, CMP 10C, CMP 35D, and CMP064BU with a maximum concentration of 44 µg/L at well CMP 35D. Plume maps were not created due to the limited number of exceedances.

2.2.2.9 Chloroform

Chloroform was detected in 26 wells during sampling between April 2022 through March 2023. None of the results exceeded the MCL of 80 µg/L. The maximum result was at well CMP 35D with a value of 59.5 µg/L. The highest concentrations coincide with wells that have CCl_4 contamination as chloroform is a degradation product of CCl_4.

2.2.2.10 Dichloromethane (DCM)

During April 2022 through March 2023, all DCM results were non-detect or low estimated “J” values below the 5 µg/L MCL.

2.2.2.11 Bromodichloromethane

During April 2022 through March 2023, bromodichloromethane was detected at four wells, CMP 10C, CMP 32C, CMP 35D, and CMP064BU, at concentrations below the MCL of 100 µg/L MCL. The highest concentration was 10.9 µg/L at CMP 35D.

2.2.2.12 1,1,2-Trichloroethane (1,1,2-TCA)

During April 2022 through March 2023, 1,1,2-TCA was only detected at one well, CMP 35D, with a maximum estimated concentration of 0.67 µg/L, below the 5 µg/L MCL.

2.2.2.13 Lindane

Twenty-three (23) wells were analyzed for lindane in 2022. The MCL for lindane is 0.2 µg/L and three wells (CMP 10C, CMP 47D, and CMP 35D) had lindane concentrations that exceeded this level (Figures 24 and 25). Cross-sections with lindane plumes and concentrations are provided in Figures 26 through 28. Most wells monitored for lindane show slightly decreasing or steady trends in concentrations as shown in Appendix B and Figures 29, 30, and 32.

The highest lindane concentration for 2022 was 8.54 µg/L found in CMP 35D. This well has shown fluctuations in concentrations over the years, but displayed a general increase from 2013 through 2020.Concentrations in 2021 decreased and started to increase again in 2022 (Appendix B, page B-158). Factors contributing to the increase in concentration include the complex hydrogeology of groundwater flow paths, surface shape of the TCCZ (Section 1.3 and Figure 4), perched water table conditions, and water elevation increases (Section 1.4, Figure 7, and Figure 9). Increases at CMP 35D have occurred as concentrations at well CMP 10D have decreased. The inversely related trends in wells CMP 10D and CMP 35D for both lindane and VOCs (Figure 31) suggest the increases could be tied to hydrogeologic processes associated with the radial groundwater flow patterns due to surface shape of the TCCZ and dry zones in the TZ. Higher water table elevations have possibly provided a mechanism to release contamination trapped in the vadose zone pore space or capillary fringe, as well as for groundwater to flow towards the northwest providing more opportunity for dispersion and diffusion from CMP 10D and the CMP Pits. The low permeability cap retards infiltration so the effect of water table elevation increases may be more pronounced since CMP 35D is located directly outside the cap area. Figure 31 indicates a possible correlation between water elevation and contaminant levels of lindane at CMP 35D.

CMP 10C, in the Upper LAZ, shows concentrations have generally been decreasing over the past eight years. Well CMP 10B, which is screened in the middle of the LAZ (Figure 26), remains non-detect. Due to the shape of the TCCZ surface and the subsequent dry area that is created in the TZ (Figure 4), contamination may have been funneled towards the south and southeast towards CMP 10D from the high concentration area around CMP 35D and the CMP Pits. Fluctuating water elevations could move groundwater back and forth between CMP 10D and CMP 35D or potentially release contaminants into the water table that were trapped in pore space or clay zones.

The lindane plume is estimated at approximately 2.7 acres (1.1 hectares) in the UTRA (Figures 24 and 25) which is the same as in 2021. The majority of the plume (including the highest concentrations) resides in the TZ around well CMP 35D. The MAZ contained one well, CMP 47D slightly above the MCL with a concentration of 0.235 µg/L (Figure 24). In the LAZ, lindane was detected above the MCL (0.2 µg/L) at only one well (i.e., CMP 10C [Upper LAZ] with a maximum concentration of 0.442 µg/L]). Lindane was not detected in the underlying lower LAZ well CMP 10B. Concentrations at newer GA well CMP010A have dropped below the 0.2 µg/L MCL with a maximum concentration of 0.091 µg/L in 2022. As described in detail above, the CMP010A well is compromised, and contamination is suspected to be entering the well from the aquifer above. During fiscal year 2024, the CMP010A well will be abandoned and a replacement well CMP010AR will be installed. Lindane will be analyzed at the replacement well at least semiannually for a year.

A comparison of lindane plume concentrations over the last 14 years (2022 values compared to 2008 values) can be seen in Figures 29 and 30 and Table 5. Additionally, a GSI Mann-Kendall trend assessment has been done for all wells using the post-ERH/SVE data (2010-2022 data, as available) and is summarized in Figure 32. In the TZ, lindane concentrations above the MCL are currently limited to one well, CMP 35D. The actual TZ plume may appear larger than actual conditions on the maps due to the contour line size and scale of the maps. In the MAZ, the area to the north and northwest of the CMP Pits has experienced minor fluctuations in concentration over the past 14 years, but concentrations continue a downward trend. There was one small plume above the MCL in 2022 at well CMP 47D. Beginning in 2008, the LAZ experienced an initial increase in concentrations southeast of the CMP Pits at well CMP 10C; however, lindane concentrations at this location have decreased since 2015. The increase first seen at CMP 10C in 2008 is believed to be due to the shape of the surface of the Tan Clay, localized radial groundwater flow around the CMP Pits knoll, and leaky conditions within the TCCZ and TCLC. Contamination does not extend deeper than the upper portion of LAZ within the UTRA (Figures 26 and 28). The lindane plumes had minimally increased in previous years, if at all, in the TZ and LAZ. Although lindane does not diffuse in aquifers as quickly as VOCs, the factors mentioned above may be further hindering contaminant advection and dispersion.

2.2.3 Surface Water Sampling Results

Surface water in Pen Branch is sampled semi-annually at eight locations along the groundwater discharge boundary (Figure 5). Two of these stations are collected in a tributary leading to Pen Branch (CMP-SW-20 and CMP-SW-21).

VOCs are analyzed semi-annually and 1,4-dioxane is analyzed annually during the fourth quarter. Table 3 and Figures 10, 11, 17, and 18 show the PCE/TCE results at each station. Modeling results predicted VOC discharge to Pen Branch above MCLs. In 2022, there was one detection of VOCs (PCE) in surface water at station CMP-SW-09 at an estimated value of 0.59 µg/L. All other surface water results were non-detect for all VOCs.

1,4-Dioxane was analyzed with both the USEPA 8260DSIM method and the USEPA 522 method, as discussed above in Section 2.2.2.6, *1,4-Dioxane*. 1,4-Dioxane was detected at four surface stations, CMP-SW-06, CMP-SW-09, CMP-SW-21, and CMP-SW-22 with the USEPA 522 method. The maximum result was an estimated concentration of 0.161 µg/L at surface water station CMP-SW-09, which is below the USEPA tap water RSL of 0.46 µg/L. All other 1,4-dioxane surface water results were non-detect.

The CMP Pits VOC and 1,4-dioxane groundwater plume effects on Pen Branch surface water are negligible as they are generally not detected, with any detections remaining below regulatory levels of concern. Dispersion, advection, and wetland area VOC degradation are all contributing factors that reduce the groundwater plume impact to Pen Branch.

2.2.4 Additional Data from Independent Analysis

Sampling for VOCs has been conducted in and around Pen Branch by a South Carolina State University (SCSU) group for several years under a grant provided by the United States Department of Energy (USDOE). The focus of their studies is the MNA processes occurring in the stream and wetlands around Pen Branch as the VOC plume moves towards and discharges into Pen Branch. Many of the SCSU samples are collected from the groundwater immediately before discharge into Pen Branch and surface water within Pen Branch. Their 2022 efforts were focused on the location where more VOC discharge (upstream of SRS surface water station CMP-SW-22) was observed and also included collection of sediment samples for VOC and microbial analyses.

During 2022, SCSU sampled ten (10) groundwater stations below the Pen Branch stream. Multiple samples (duplicates) were collected for statistical purposes and samples were collected at multiple times of the year. This included 50 groundwater samples within the hyporheic sediments below the stream bed within Pen Branch. Groundwater samples were collected from temporary wells up to 80 centimeters (cm) (31.5 inches) below the stream bottom. Samples were collected by pumping and/or the use of passive diffusion bags that were installed for at least two weeks prior to sample collection. Seven (7) surface water stations were also sampled and also included duplicate samples for a total of 21 samples. The surface water samples were collected by grab method (scooping water out of the stream with another bottle).

Groundwater results indicated that the VOC plume is discharging and mixing within the hyporheic zone upgradient of the SRS CMP-SW-22 surface water station. The maximum groundwater concentration results are as follows: PCE – 40 µg/L at SCSU station 5DB80; TCE – 32.3 µg/L at 5DB80; c-1,2-DCE – 30 µg/L at 5G; and VC – 30 µg/L at 5G. 1,1-DCE and T-1,2-DCE were not detected in groundwater (Table 6). There were no detections of VOCs in any of the SCSU surface water samples. Figure 33 displays the SCSU sample locations and the maximum PCE concentrations in their groundwater and surface water stations.

SCSU has been sampling at CMP Pits Pen Branch for multiple years and have been collecting samples from some of the same sample locations to monitor potential changes in contaminant over time. Their data shows that contaminant concentrations have been decreasing over time and that VOC degradation is occurring more in their downgradient sample locations (Figure 34).

Sediment samples were collected at multiple depths up to 80 cm (31.5 inches) below the stream bottom for VOC and microbial analysis. Multiple sediment samples (duplicates) were also collected (Table 7). The maximum sediment concentration results are as follows: PCE – 1,100 micrograms per kilogram (µg/kg) at SCSU station 5DB80; TCE – 55 µg/kg at 5DB80; c-1,2-DCE – 200 µg/kg at 5DB80A; and VC – 56 µg/kg at 5DZ3. 1,1-DCE and T-1,2-DCE were not detected in sediment.

Additionally, SCSU expanded its efforts in 2022 through collaboration with Pacific Northwest National Laboratory (PNNL) with microbial analysis associated with VOC degradation on sediments collected during their temporary groundwater well installations. In 2022, SCSU sediment samples processed by PNNL identified several bacterial genera in Pen Branch plume fringe sediments associated with dehalogenation of chlorinated organic compounds like PCE. This included genera *Dehalogenimonas* from the bacterial family *Dehalococcoidaceae*. *Dehalogenimonas* was more abundant at station 5DZ3. *Dehalogenimonas* has been shown to reductively dechlorinate PCE to TCE and TCE to cis-DCE anaerobically. Results showed potential matchups with carbon-13 enrichment and higher abundance of *Dehalogenimonas* which indicate PCE degradation that seen in in hyporheic sediments around Pen Branch Stations 5DZ3 and 5DZ3A. Further microbial studies will be done in 2023 and results will be provided in subsequent CMP Pits EMRs.

3.0 ADDITIONAL SAMPLING AND EFFORTS

Anion/Cation Groundwater Sampling

As a follow-up to the August 2021 Core Team meeting, SRS proposed performing cation-anion speciation at well clusters CMP062 and CMP063 in 2022 to aid in evaluating groundwater geochemistry. Because these data were not available for the June 2022 EMR, an evaluation of the data was not provided. However, an evaluation of limited available cation-anion information from other wells near the CMP Pits was provided in that report. Information about the hydrology and geology at CMP062 and CMP063 well clusters were provided in response to comments on the

2021 EMR (SRNS 2022b). Detailed descriptions and analysis associated with the CMP062 and CMP063 well clusters are presented in Appendix C, *Additional Sampling Efforts*.

Source Contamination Evaluation

Concerns have been raised in recent years associated with increasing concentrations near the source area (CMP Pits trenches area), specifically with increasing contaminant concentrations at well CMP 35D and CMP 34D. The ERH/SVE remedial action conducted in 2008/2009 targeted the residual DNAPL and high VOC contamination remaining within the vadose zone beneath the CMP Pits. Although the remediation effort was successful (RGs were met), residual contamination was left in place. Increasing VOC and lindane concentrations have been seen over the last 10-12 years to the north of the CMP Pits. It is expected that increasing water elevations have released residual contamination from within the capillary fringe and vadose zone. It is also plausible that the ERH action created a contaminant front that emanated from the treatment zone and helped mobilize contaminants at the CMP 35D area.

The 2017 modeling effort factored in continuing sources from residual contamination/desorption from low permeable zones located beneath the CMP Pits knoll area. With the continuing source additions to the updated model, the cleanup timeframe (approximately 100 years [~CY 2117] was similar to what was developed in the original model in 2002 (50-130 years [CY 2050-2130]). The 2021 additional sampling effort collected numerous soil VOC headspace samples to quantify the current contamination around the CMP Pits knoll area (SRNS 2022a). Additional groundwater data was also collected as new LAZ monitoring well CMP035B was installed. During fiscal year 2024, SRS will use the 2021 data, as well as recent groundwater data, to update the source term (and plumes) in the 2017 model to simulate if an additional action to reduce the residual source would improve cleanup timeframes. Detailed information of the evaluation and the results will be presented in the June 2024 CMP Pits EMR.

4.0 SUMMARY

A simple graphical CSM (Figure 3) has been presented to aid in the understanding of potential sources of contamination and the subsequent groundwater transport pathways. Surface maps of the tan clay (both the TCCZ and the TCLC) have been presented to aid in the understanding of radial groundwater flow at the CMP Pits and probable contaminant transport mechanisms (Figure 4). In general, monitoring wells showed similar or slightly lower water elevations compared to 2021 measurements even though the total rainfall for 2022 was above average. The areas estimated to be dry in the TZ and MAZ are similar in size to last year. Perched water tables most likely exist in parts of the TZ and MAZ. The shape of the tan clay layer and the level of the water table restrict groundwater flow movement in the TZ and MAZ and cause complex localized groundwater flow paths. This can explain some increasing contaminant trends, as contaminants may have become re-suspended with limited lateral movement.

Advection and dispersion are the main MNA processes occurring at CMP Pits, with some anaerobic biodegradation occurring in the hyporheic zone and within the wetlands around Pen Branch. The majority of groundwater and surface water results are consistent with modeling predictions (WSRC 2002, SRNS 2017), and the effectiveness monitoring data collected through March 2023 indicates that the MNA remedy is working as predicted as the majority of wells (88%) display steady or decreasing trends or remain non-detect. However, steady increases in PCE, TCE, 1,4-dioxane, and lindane in well CMP 35D directly north of the CMP Pits have been observed since 2012. Elevated PCE was also detected in well CMP 34D in recent years; however, 2022 concentrations have significantly decreased. This contamination appears to be related to water elevation rise and recent rainfall infiltration releasing residual contamination trapped in the vadose zone.

Due to concerns about increasing contaminant trends in the source area and contamination detected in GA well CMP010A, an additional soil characterization effort was conducted in 2021 to determine if residual contamination is present within the vadose zone at the CMP Pits that is negatively impacting groundwater and to provide current vertical and horizontal contaminant trend data. Two additional monitoring wells were installed (CMP035B in the LAZ and CMP011A in the GA) to provide additional groundwater data and improve understanding of contamination profiles in the aquifers. Groundwater results from the new monitoring wells are consistent with the current knowledge of the contaminant and plumes geometry. Results from the VOC headspace sampling show that there is some residual contamination in the vadose zone associated with low permeability zones, especially at the CMP 35 well cluster, and also associated with the TCCZ and

TCLC as VOCs will associate and adhere with clay zones. Due to concerns associated with increasing groundwater concentrations near the source area (CMP Pits trenches area) during fiscal year 2024, SRS will use the 2021 data, as well as recent groundwater data, to update the source term (and plumes) in the 2017 model to simulate if an additional action to reduce the residual source would improve cleanup timeframes. Detailed information of the evaluation and the results will be presented in the June 2024 CMP Pits EMR.

Additionally, the results of the 2021 soil sampling did not support the groundwater results that have been observed in GA well CMP010A. Although concentration trends are decreasing at CMP010A, SRS had planned to redevelop well CMP010A to help rule out issues caused by its drilling activities. Before redevelopment could begin, it was discovered in March 2023 that the CMP010A well is compromised.It is believed that contaminated groundwater from the aquifer above is leaking in the CMP010A well causing the elevated TCE, PCE, and lindane levels seen in the groundwater samples. During fiscal year 2024, SRS will abandon well CMP010A and install a new replacement well, CMP010AR.

Wells located in the distal plume area towards the northeast show a possible preferential pathway for groundwater as relatively high levels of VOCs exist to the northeast. Dry zones may be slightly redirecting groundwater flow, which may explain elevated concentrations to the northeast.

The two wells north of Pen Branch, CMP066B and CMP067B, continued to be sampled semi-annually in 2Q2022 and 4Q2022 due to a detection of PCE and TCE below MCLs at well CMP067B in 2019. These detections were not believed to be representative of groundwater conditions, as underflow beneath Pen Branch from a CMP Pit source is highly unlikely. Sampling during 2022 had one estimated detection of TCE (0.66 µg/L) at well CMP067B. All other VOC and 1,4-dioxane results were non-detect. These two wells will continue semi-annual sampling.

1,4-Dioxane was analyzed at a majority of the CMP Pits wells and at surface water stations in 2022 using two analytical methods, USEPA 8260DSIM and USEPA 522. The 1,4-dioxane plume mimics the distribution of the PCE and TCE plumes in all aquifers. The maximum 1,4-dioxane concentration was 87.1 µg/L at TZ well CMP 35D. 1,4-Dioxane was detected at four surface stations, CMP-SW-06, CMP-SW-09, CMP-SW-21, and CMP-SW-22, with the USEPA 522 method at a maximum estimated concentration of 0.161 µg/L at station CMP-SW-09, which is below the USEPA tap water RSL of 0.46 µg/L.

Screening level data that was collected in 2022 by SCSU demonstrate that the VOCs are present in shallow (<2.5 ft) groundwater beneath Pen Branch in discrete areas, mainly upgradient of SRS surface water station CMP-SW-22. Their data also shows that VOC degradation is occurring as higher concentrations of cis-1,2-DCE and VC are present near Pen Branch, but surface water results are non-detect. SCSU expanded their sampling in 2022 to include additional sediment samples from the borings of the temporary monitoring well stations underneath the Pen Branch stream bed and were collected for VOCs and microbial analysis in partner with PNNL. Microbial results indicate that bacteria *Dehalogenimonas* are contributing to the MNA degradation of PCE/TCE to cis-1,2-DCE and VC. Further sampling and results on the SCSU microbial studies and future sampling data of groundwater/surface water through SCSU will be provided in subsequent CMP Pits EMRs, as available.

Lindane only exceeded the MCL (0.2 µg/L) in three wells (CMP 35D – TZ, CMP 47D – MAZ, and CMP 10C – LAZ) with a maximum concentration of 8.54 µg/L at CMP 35D. All other wells were below the MCL or non-detect.

The most important indicator that the MNA remedy is performing as predicted is an evaluation of the long-term concentration trends of many monitoring wells and an interpolation of the data showing decrease in plume size over time. Although the overall plume size has minimally changed since the completion of the source zone RA 14 years ago, many core concentrations (higher concentration areas of the plume) continue to decline, and surface water continues to be only minimally impacted as concentrations are generally non-detect. VOC biodegradation in the wetlands around Pen Branch is likely reducing the flux of VOCs into Pen Branch.

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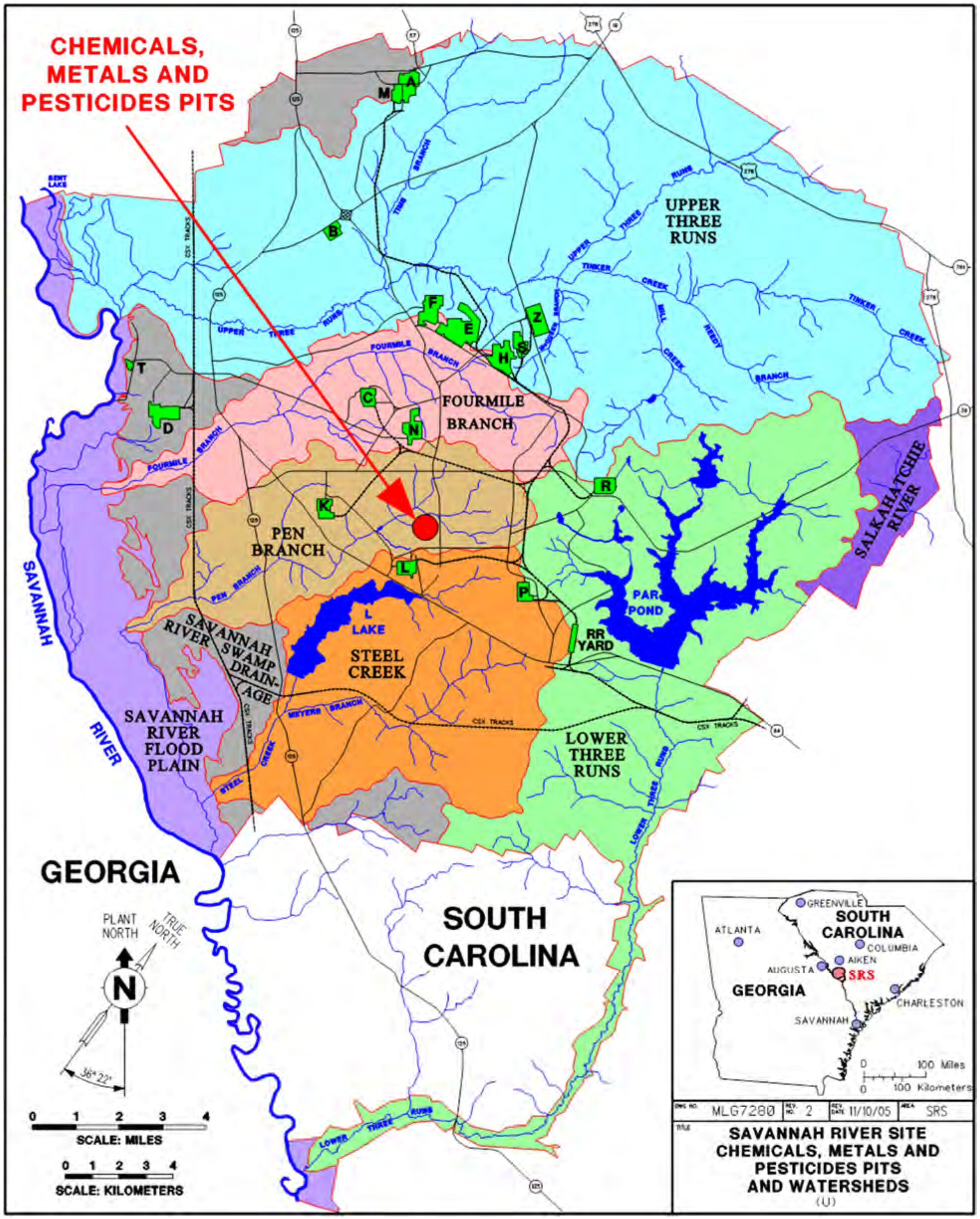

Figure 1. Location of the CMP Pits OU within the Savannah River Site

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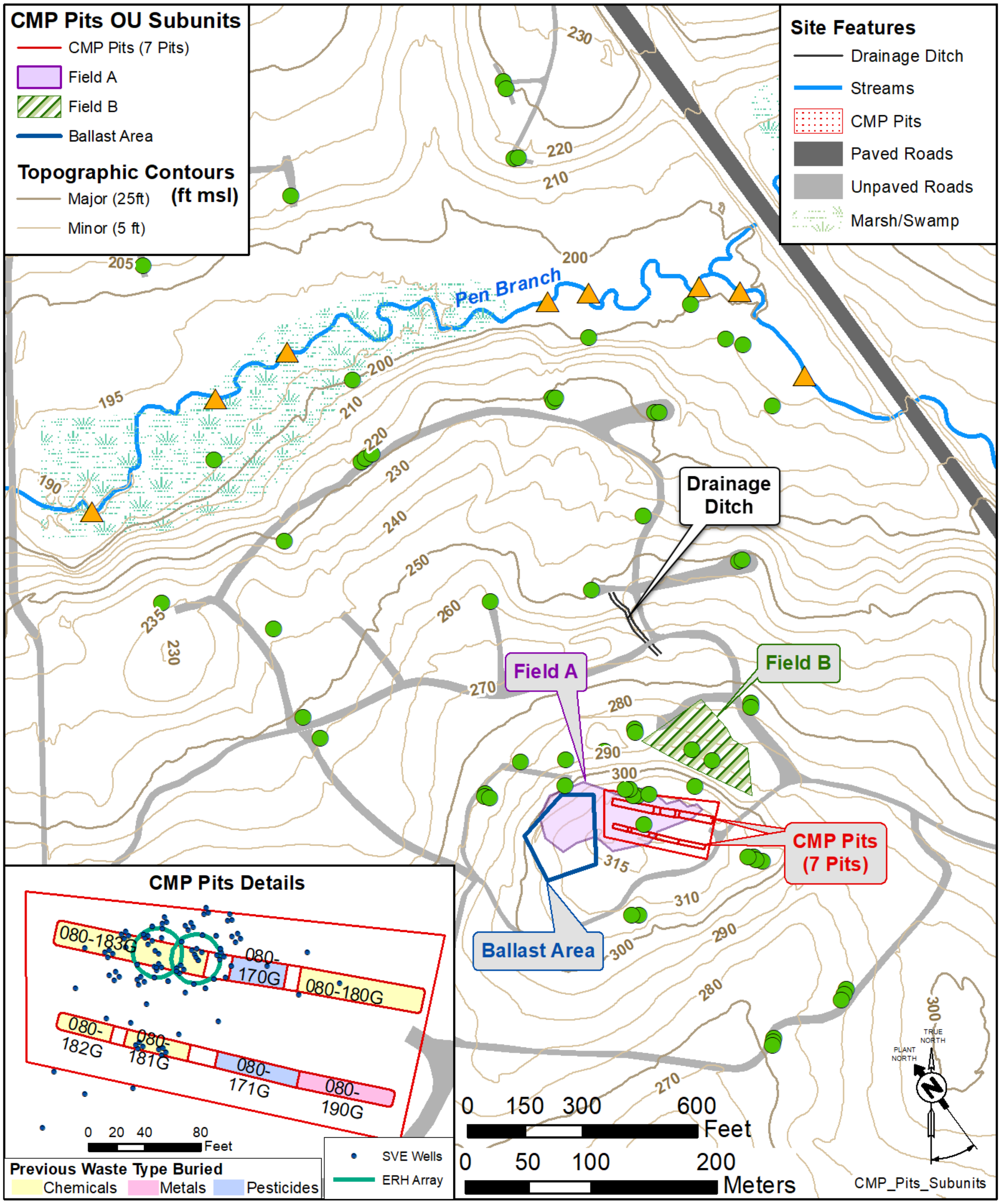

Figure 2. CMP Pits OU Subunits

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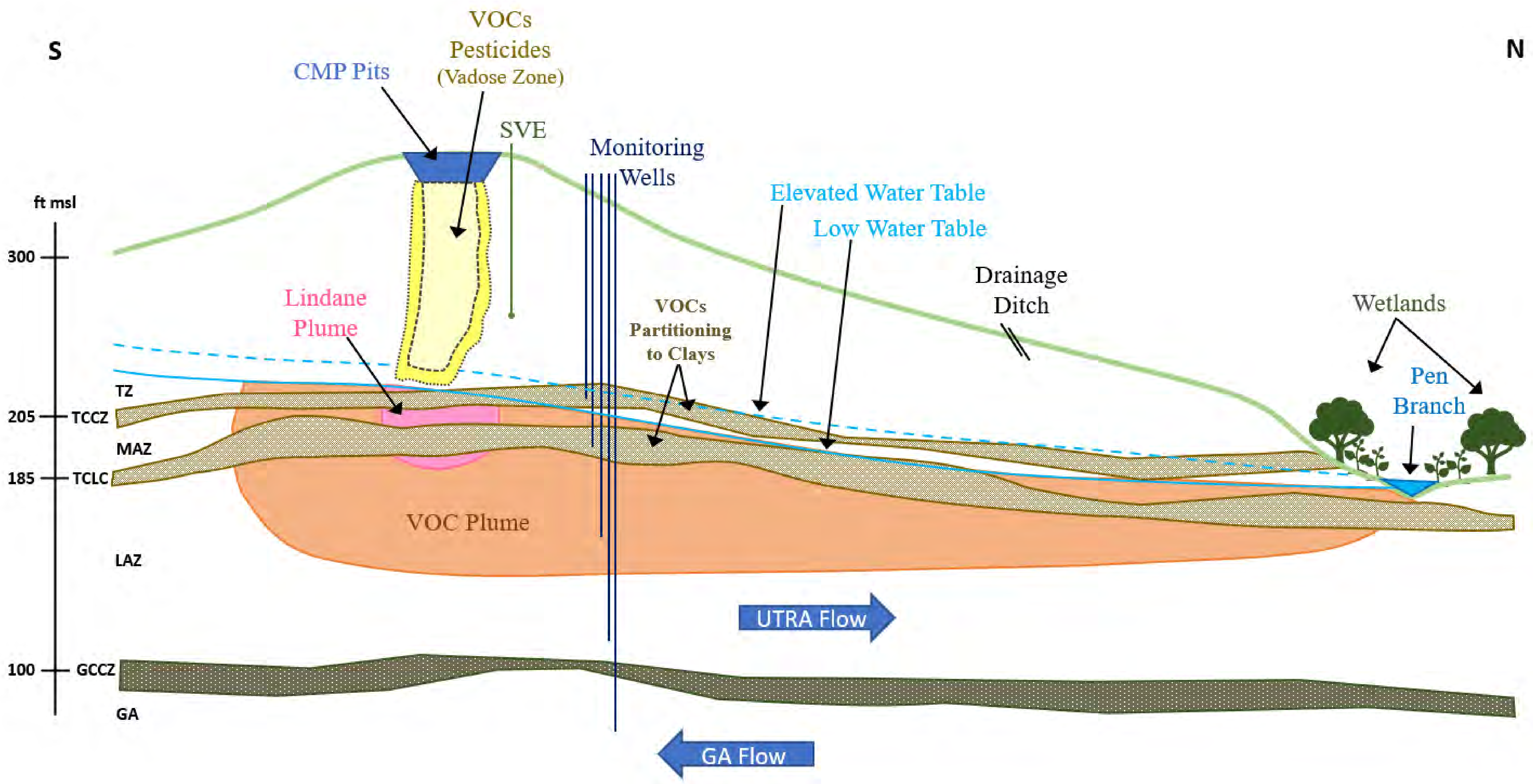

Notes: The TCCZ, TCLC, and GCCZ may not be competent clay units and may be hummocky, discontinuous, and/or leaky in some areas.
Not drawn to scale.

Figure 3. CMP Pits Groundwater OU Conceptual Site Model (CSM)

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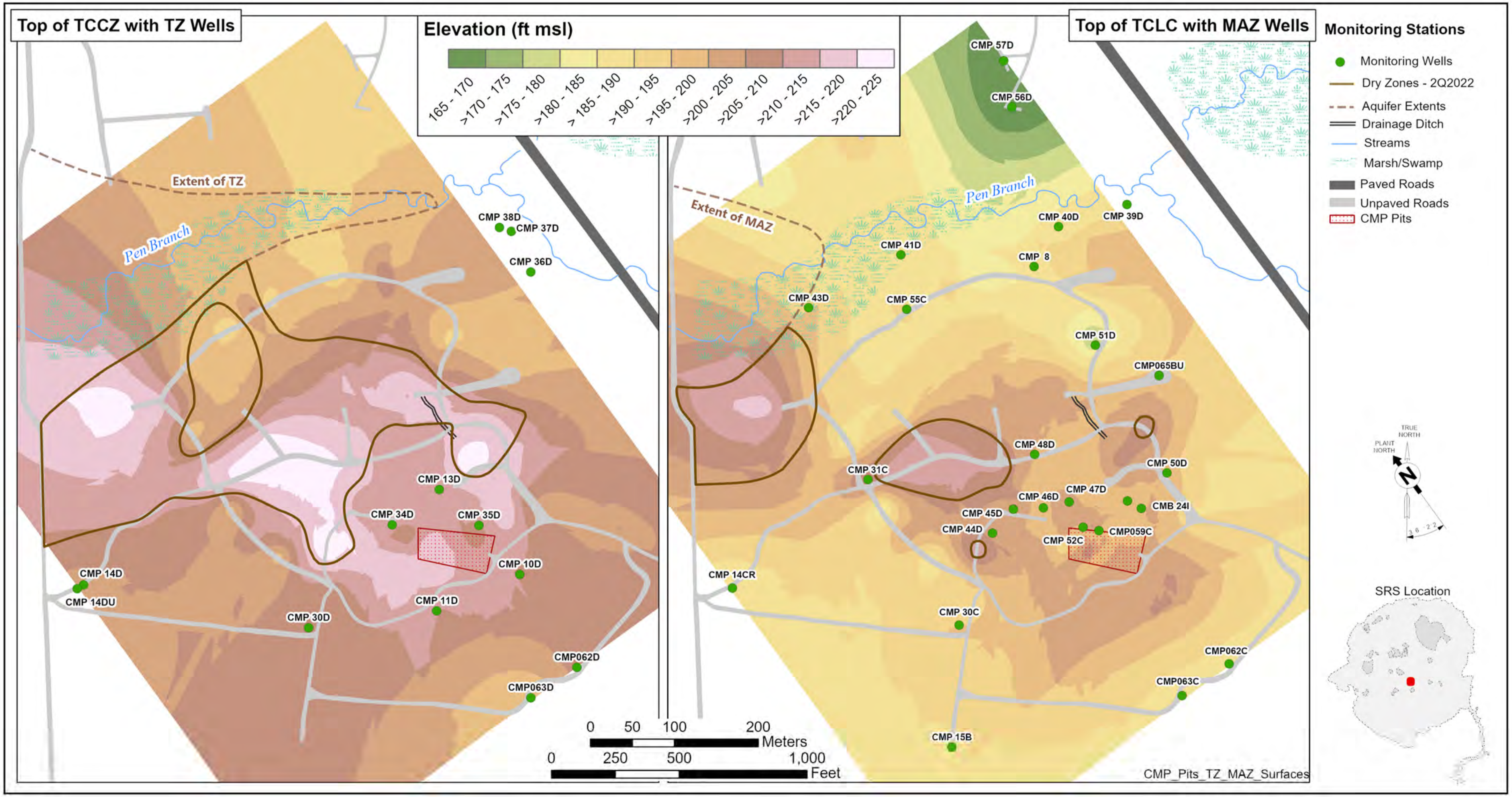

Figure 4. Stratigraphic Surfaces of the TCCZ and TCLC with 2Q2022 Dry Zones of the TZ and MAZ

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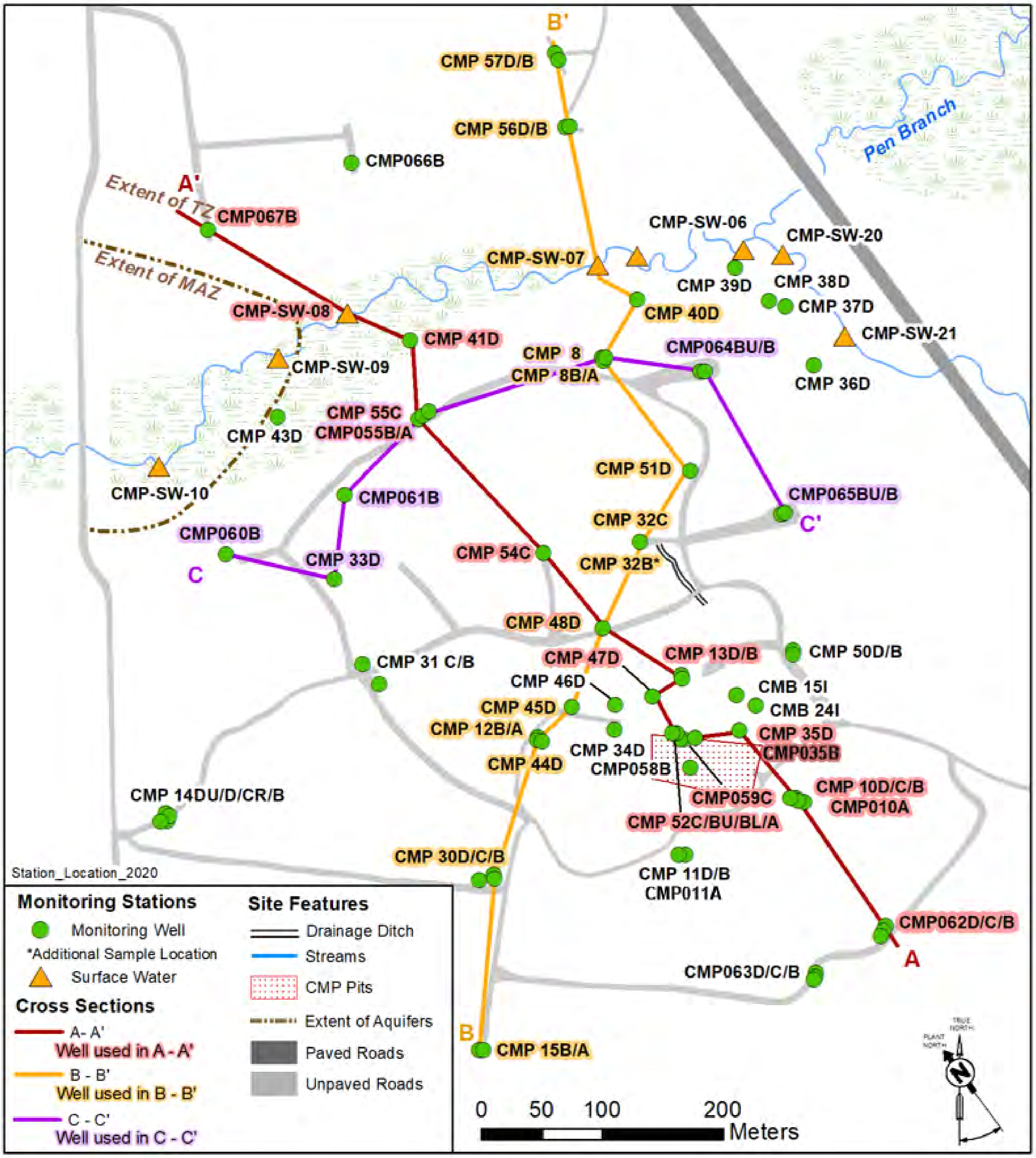

Figure 5. CMP Pits OU Monitoring Network, and Cross Section Lines

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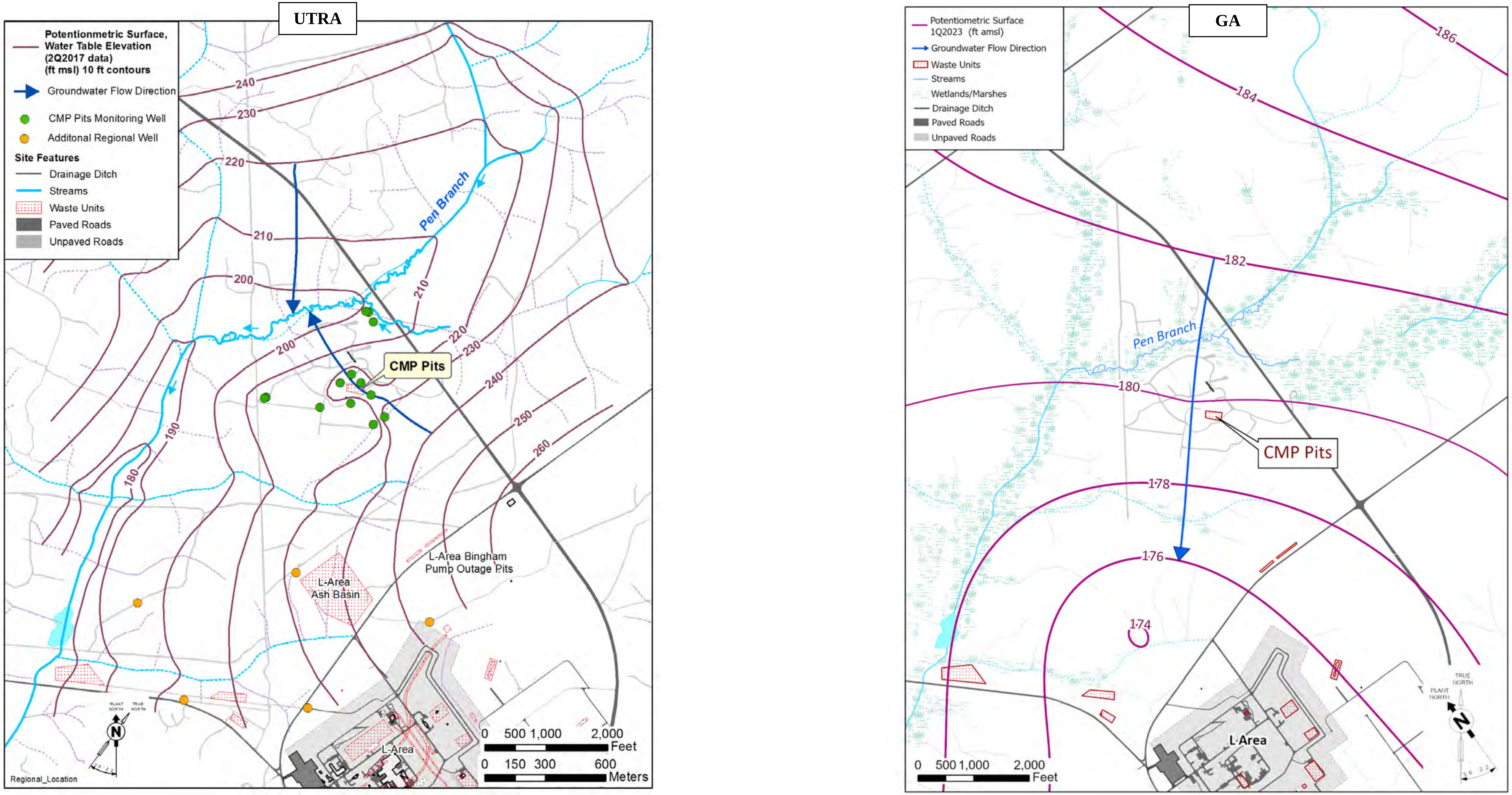

Note: Updated regional water table (UTRA) potentiometric surfaces will be compiled from data collected during 4Q2023 and will be provided in the June 2024 CMP Pits EMR.

Figure 6. Regional Water Table and GA Potentiometric Surface

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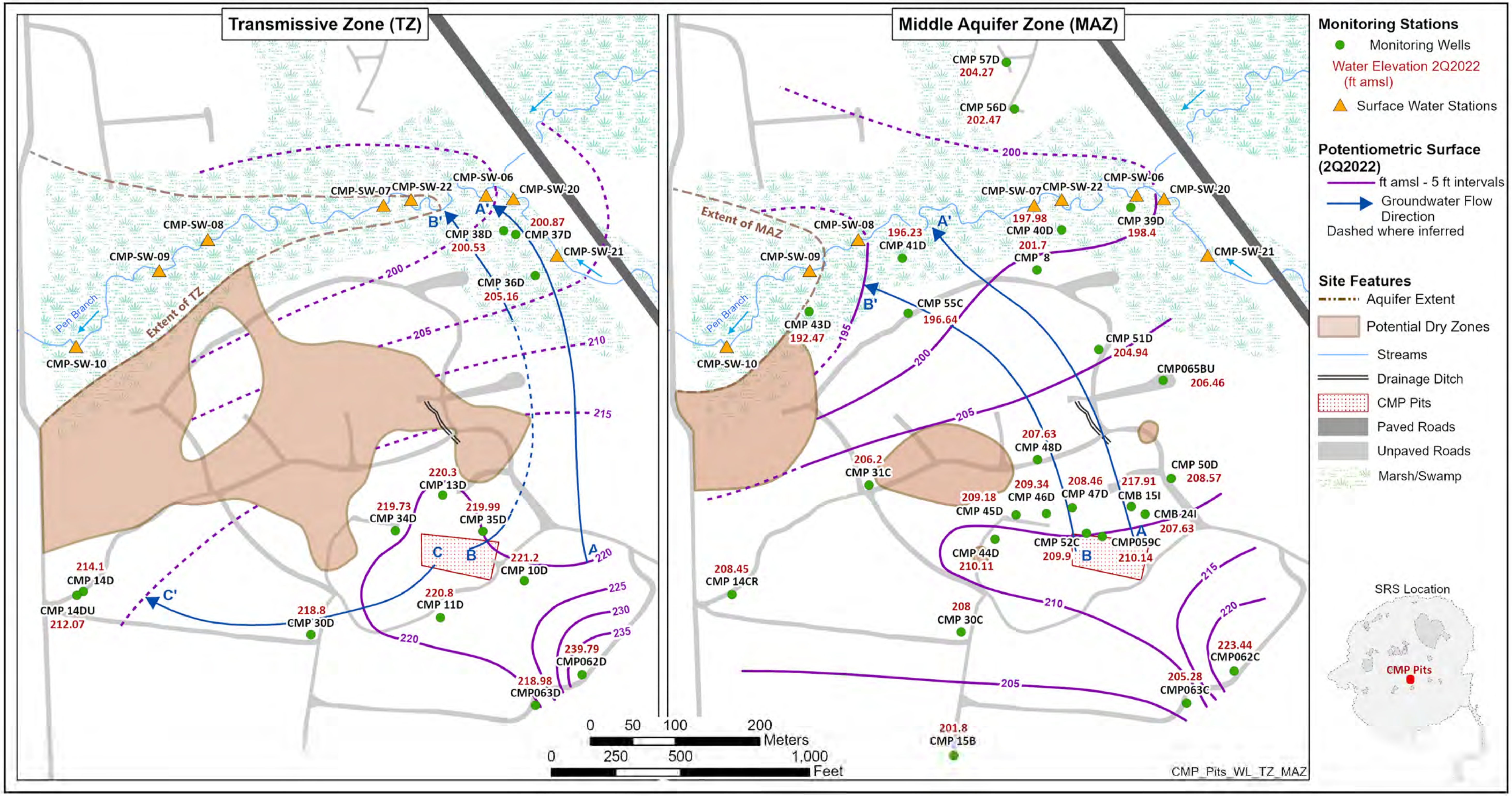

Figure 7. 2022 Potentiometric Surface for the TZ and MAZ

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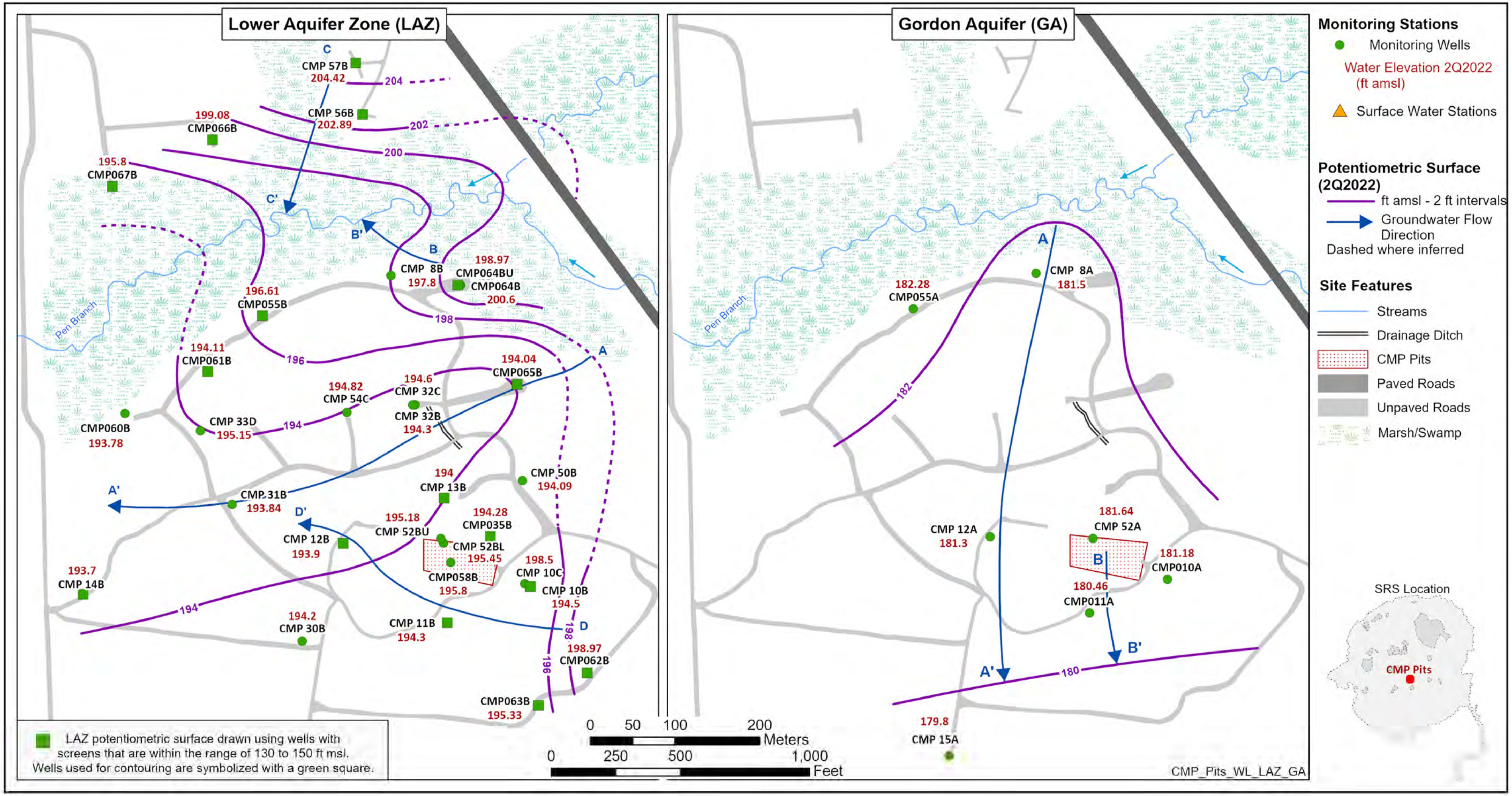

Figure 8. 2022 Potentiometric Surface for the LAZ and GA

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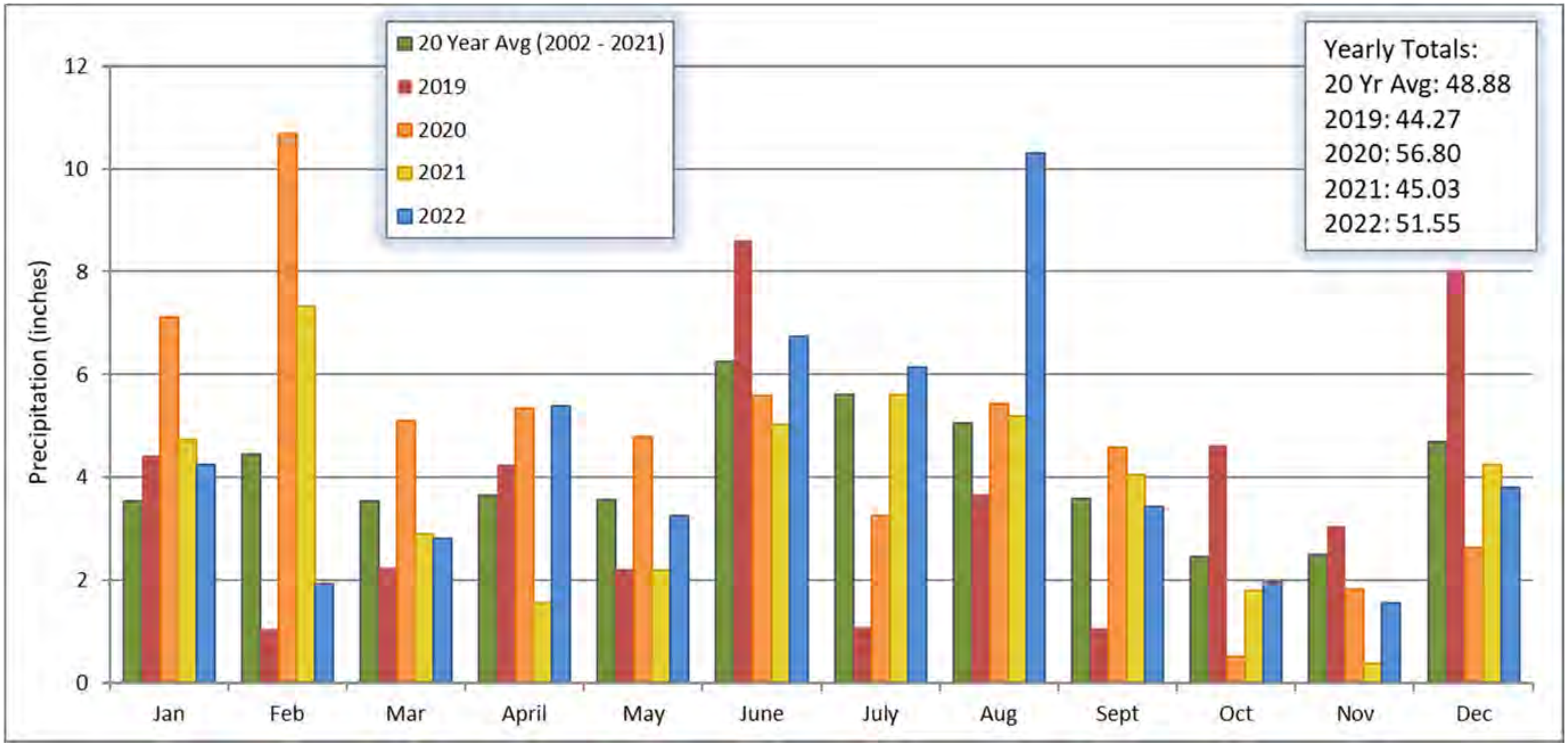

Figure 9. **Monthly Rainfall Measurements in L-Area for 2022, 2021, 2020, 2019, and the 20-Year Average**

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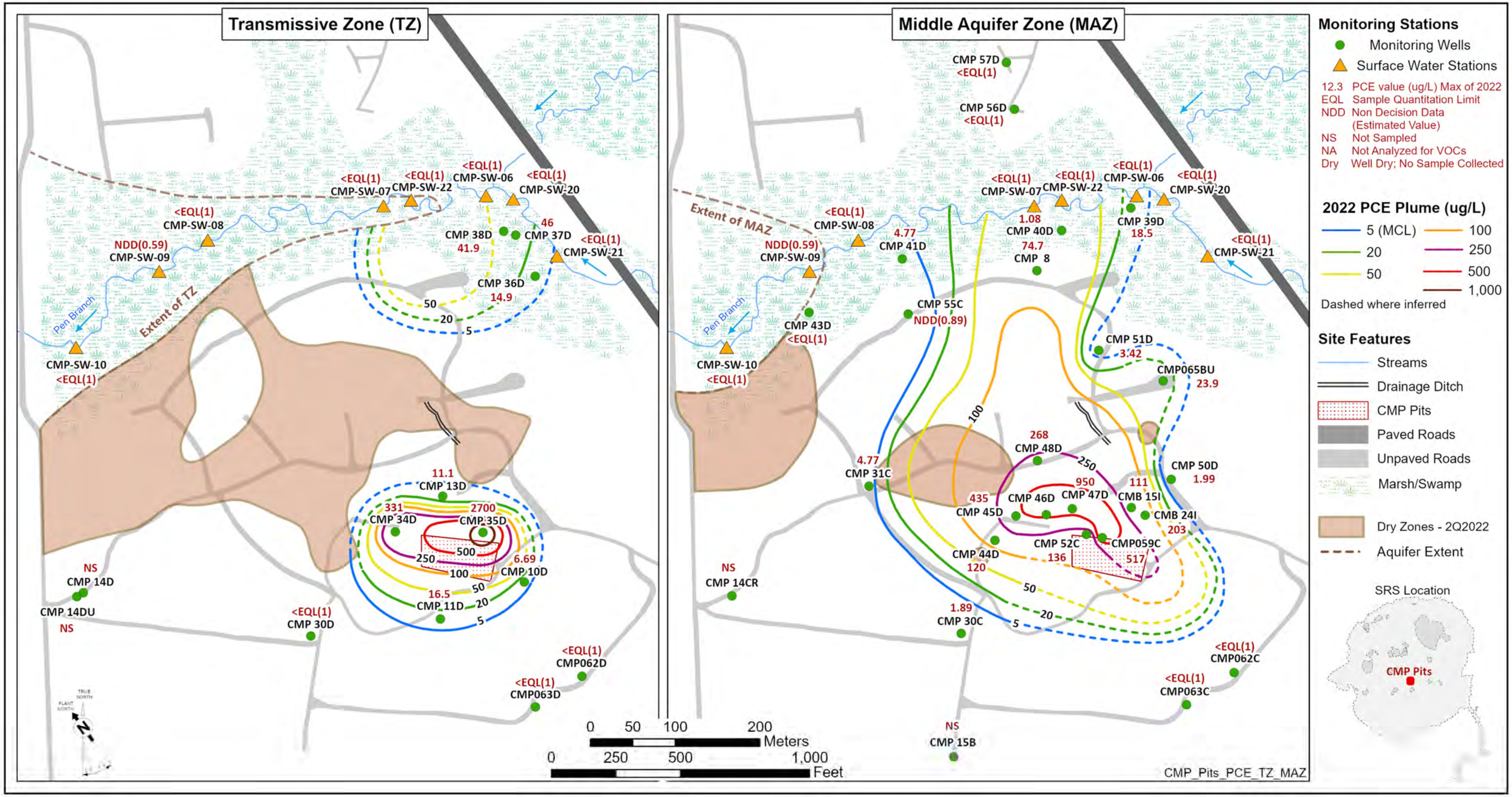

Figure 10. 2022 PCE Plume and Groundwater and Surface Water Results for the TZ and MAZ

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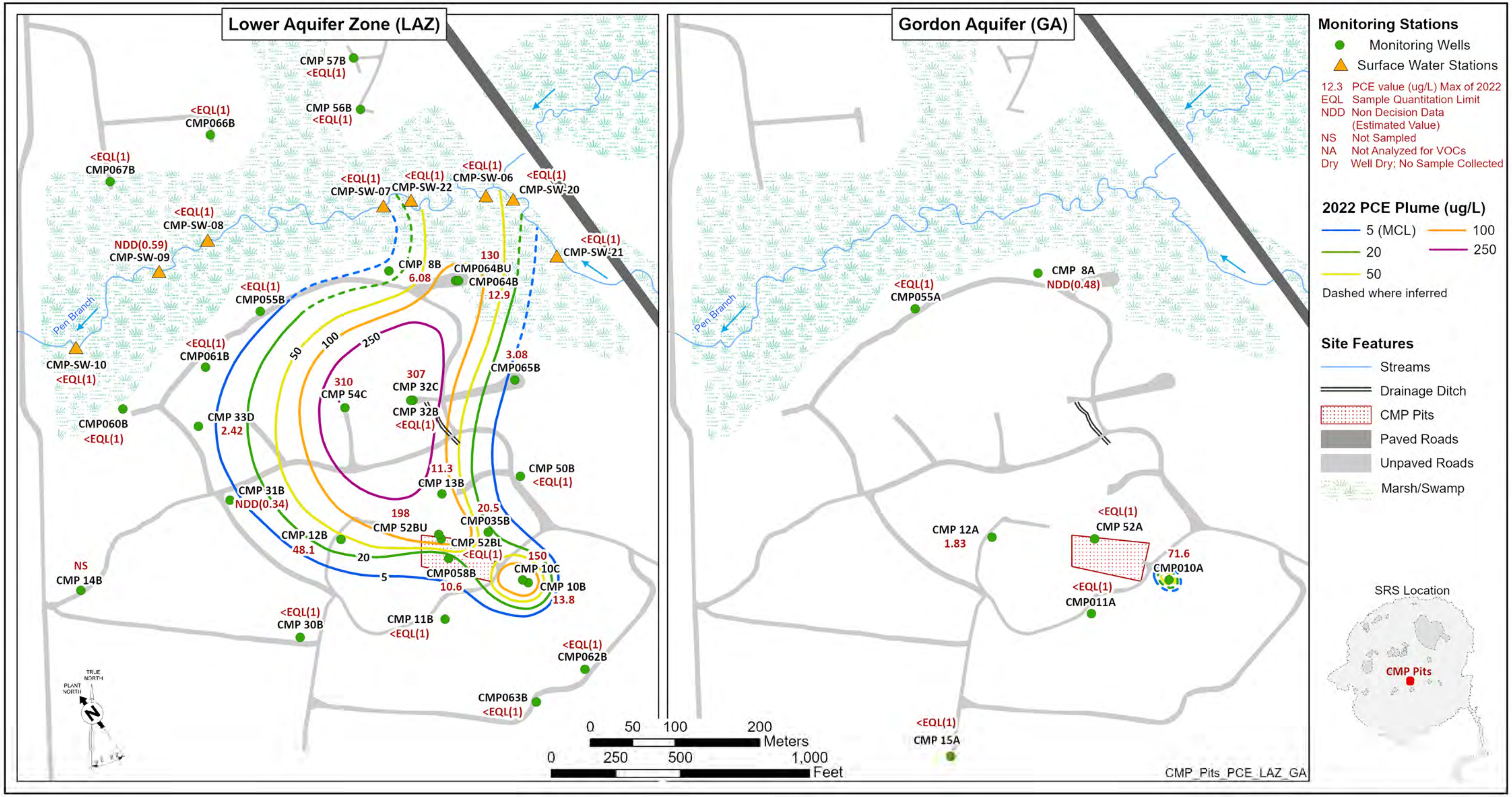

Figure 11. **2022 PCE Plume and Groundwater Results for the LAZ and GA**

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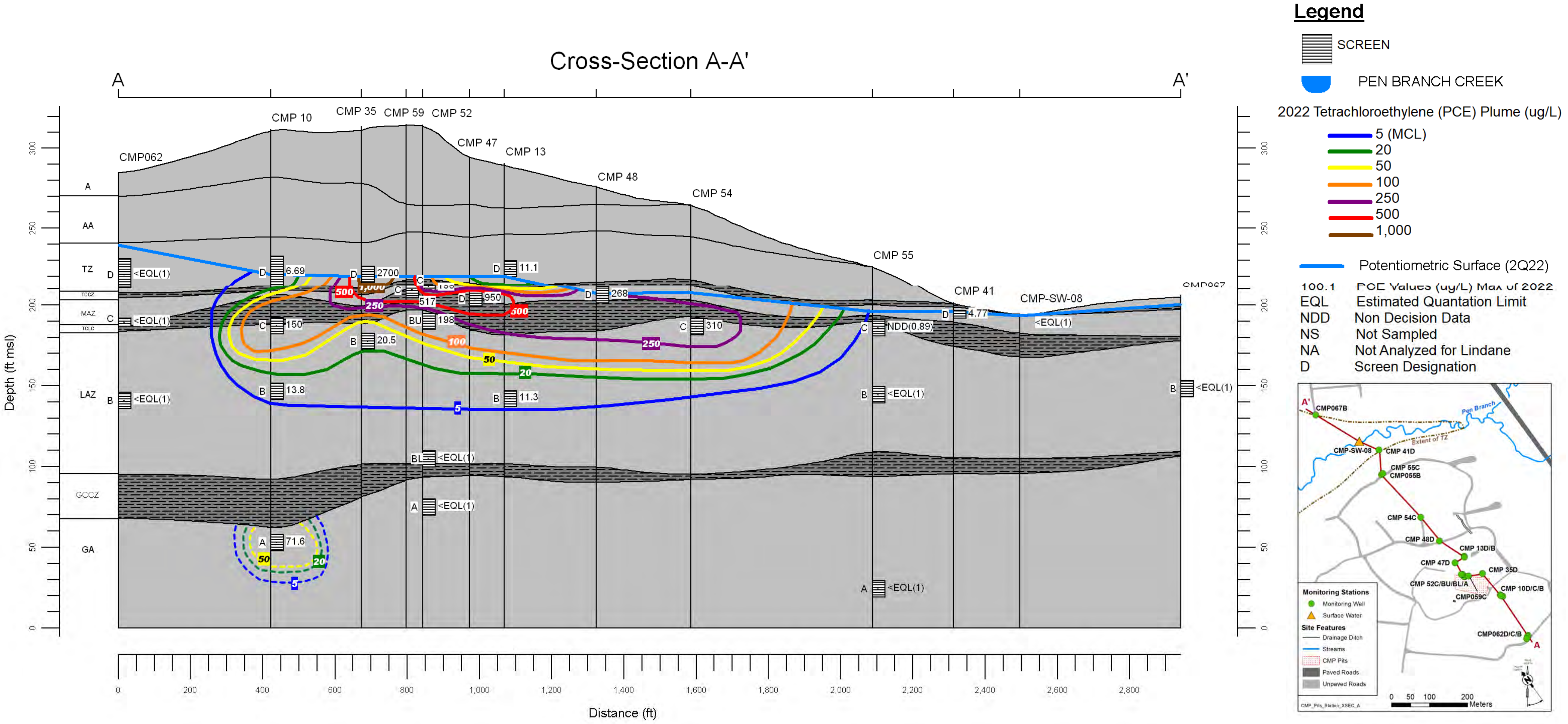

Figure 12. Cross Section A - A' at the CMP Pits OU Area with 2022 PCE Plume and Results

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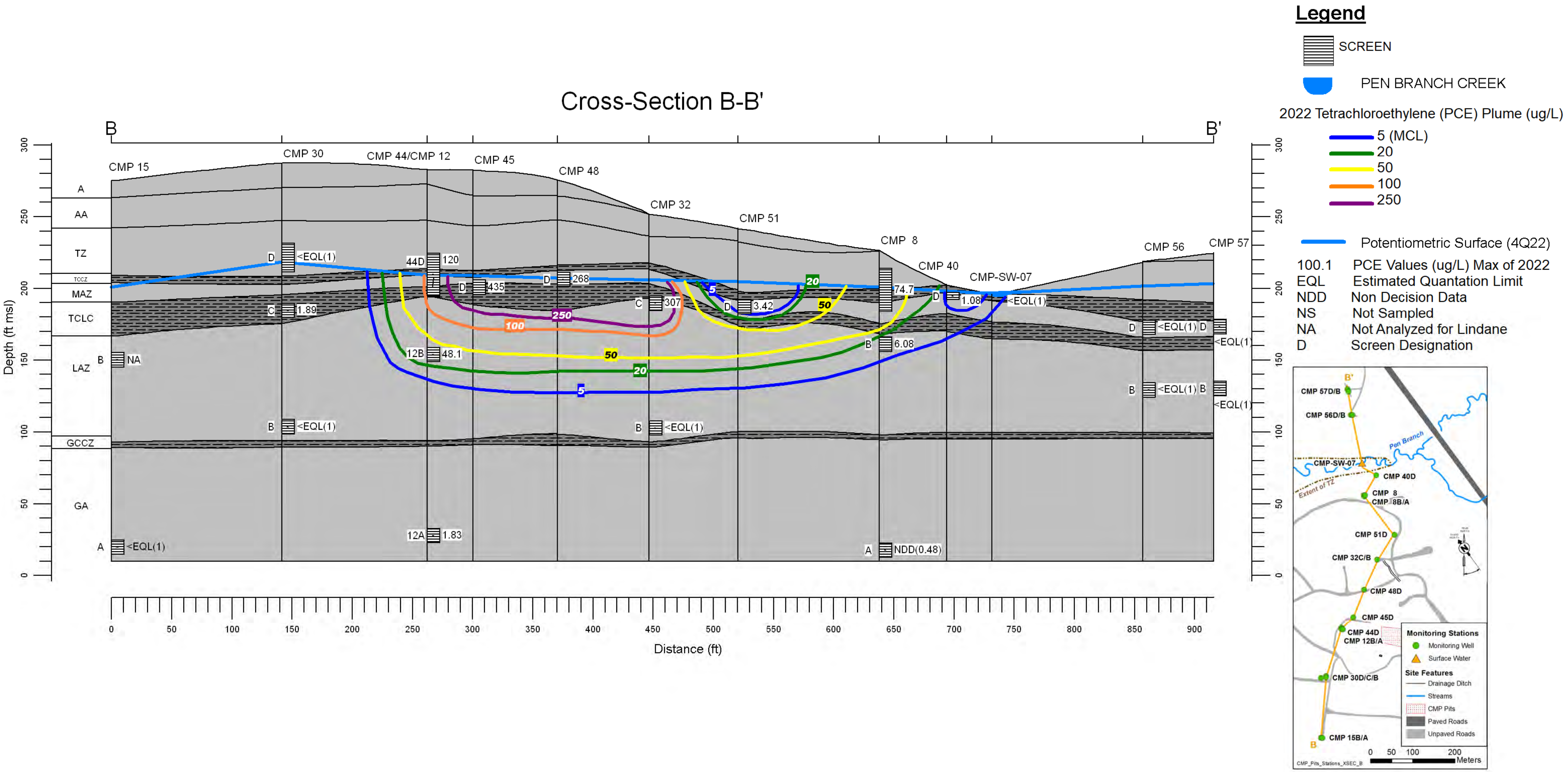

Figure 13. Cross Section B - B' at the CMP Pits OU Area with 2022 PCE Plume and Results

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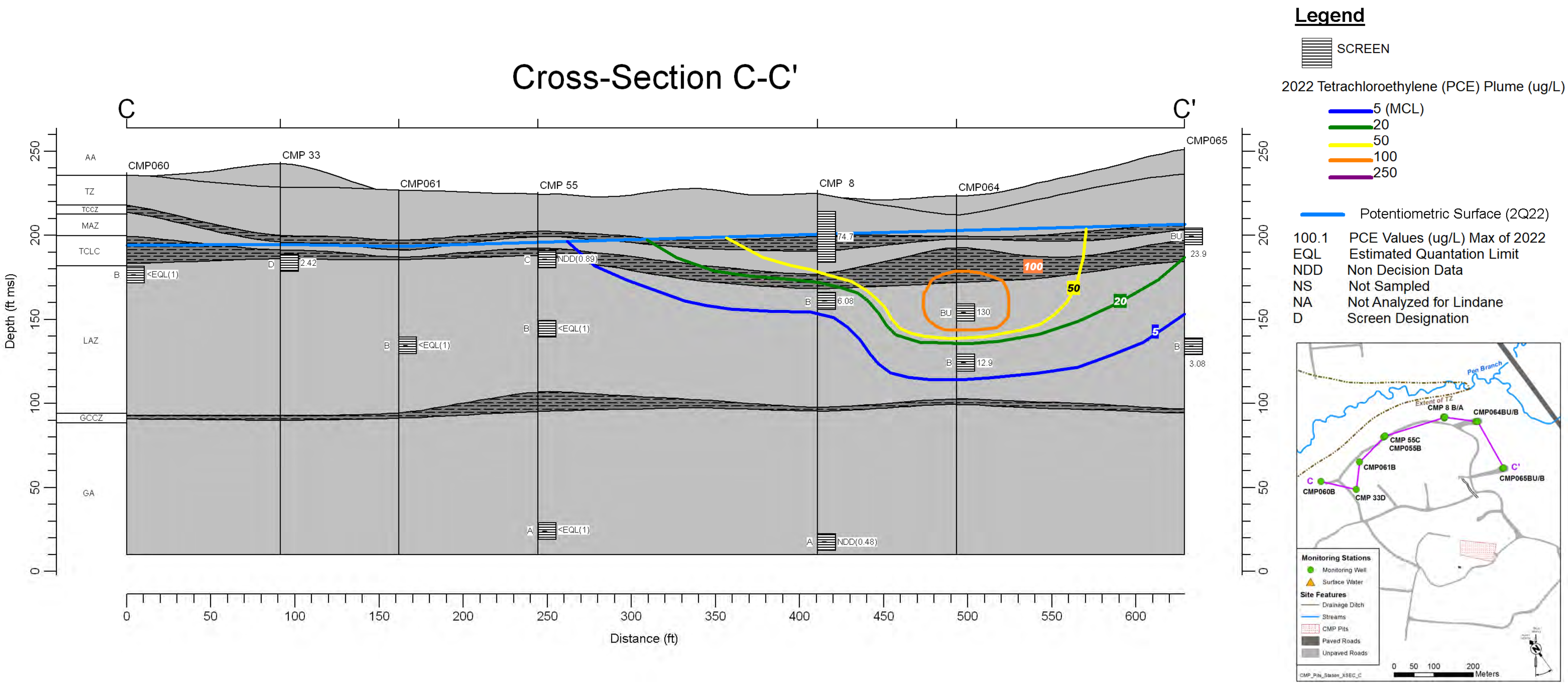

Figure 14. Cross Section C - C' at the CMP Pits OU Area with 2022 PCE Plume and Results

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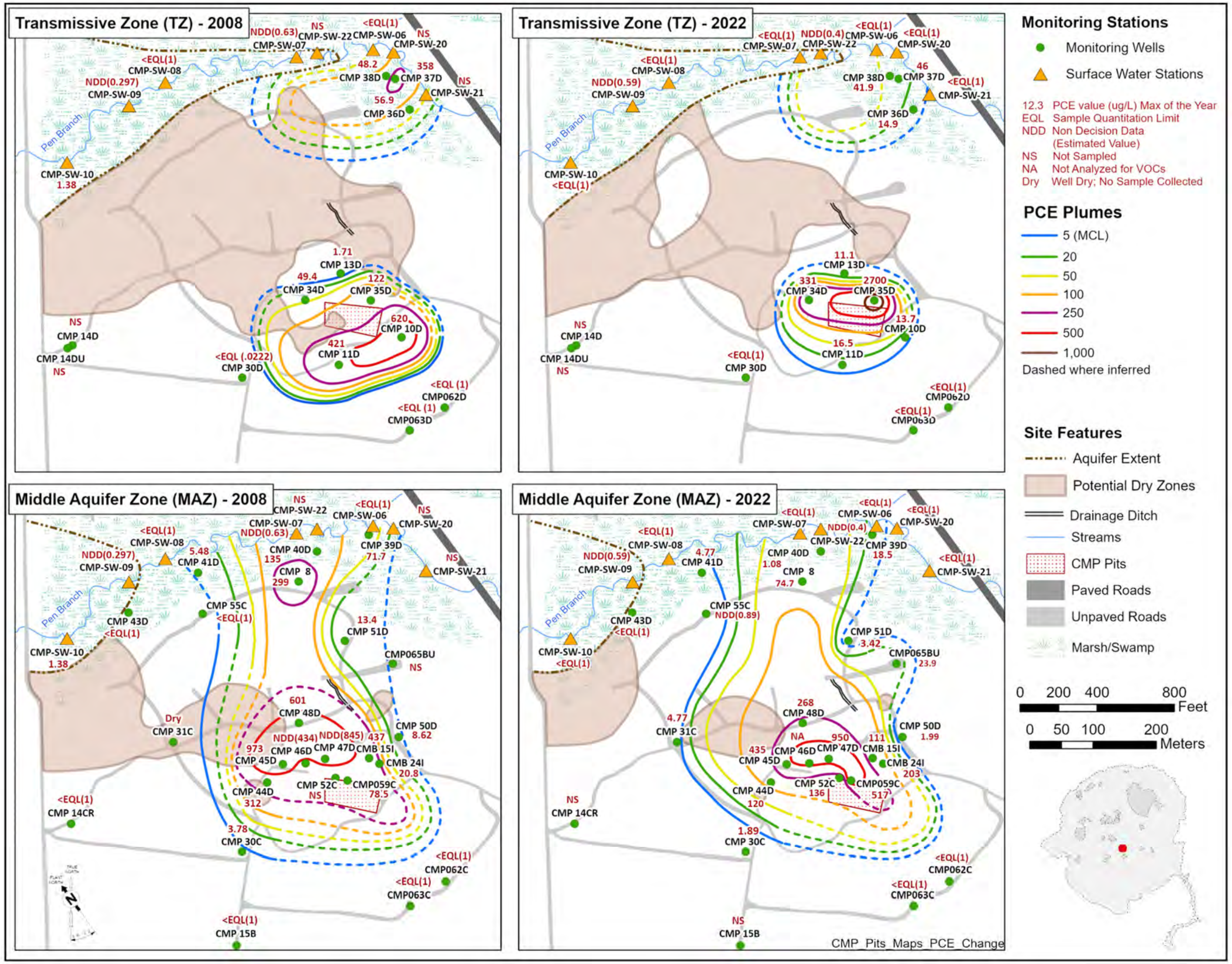

Figure 15. PCE Plume Comparison from 2008 and 2022 in the TZ and MAZ

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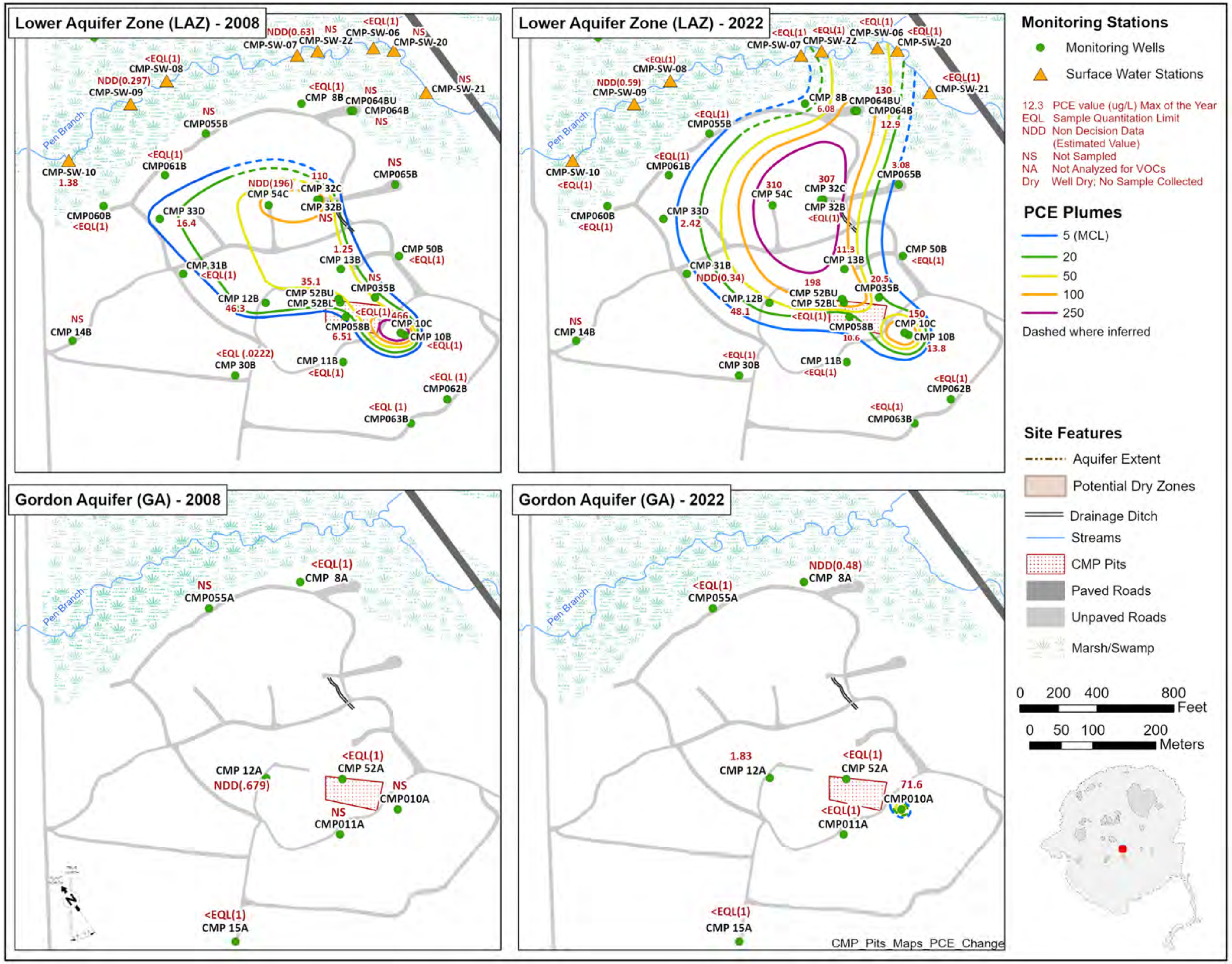

Figure 16. PCE Plume Comparison from 2008 and 2022 in the LAZ and GA

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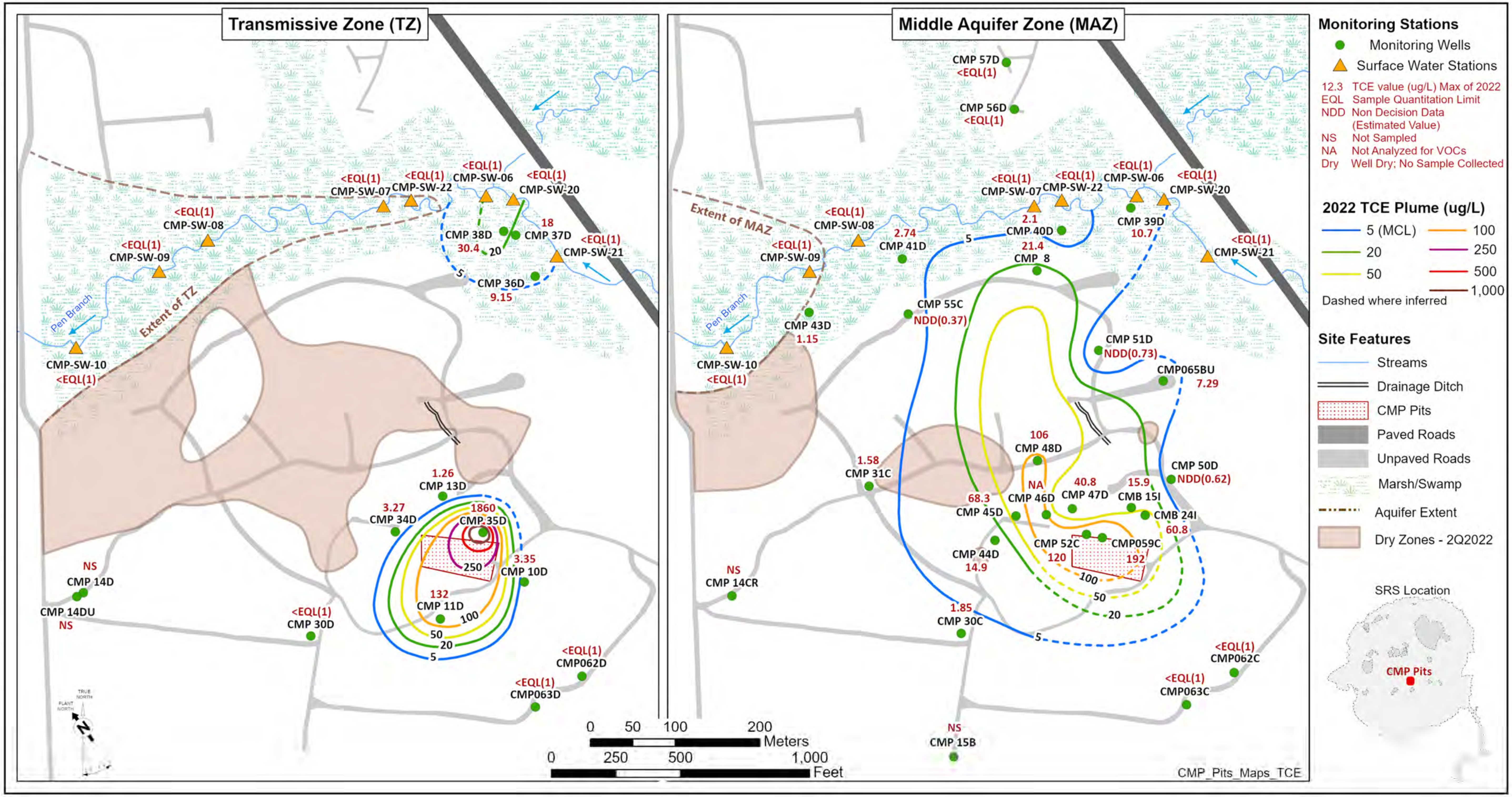

Figure 17. 2022 TCE Plume and Groundwater and Surface Water Results in the TZ and MAZ

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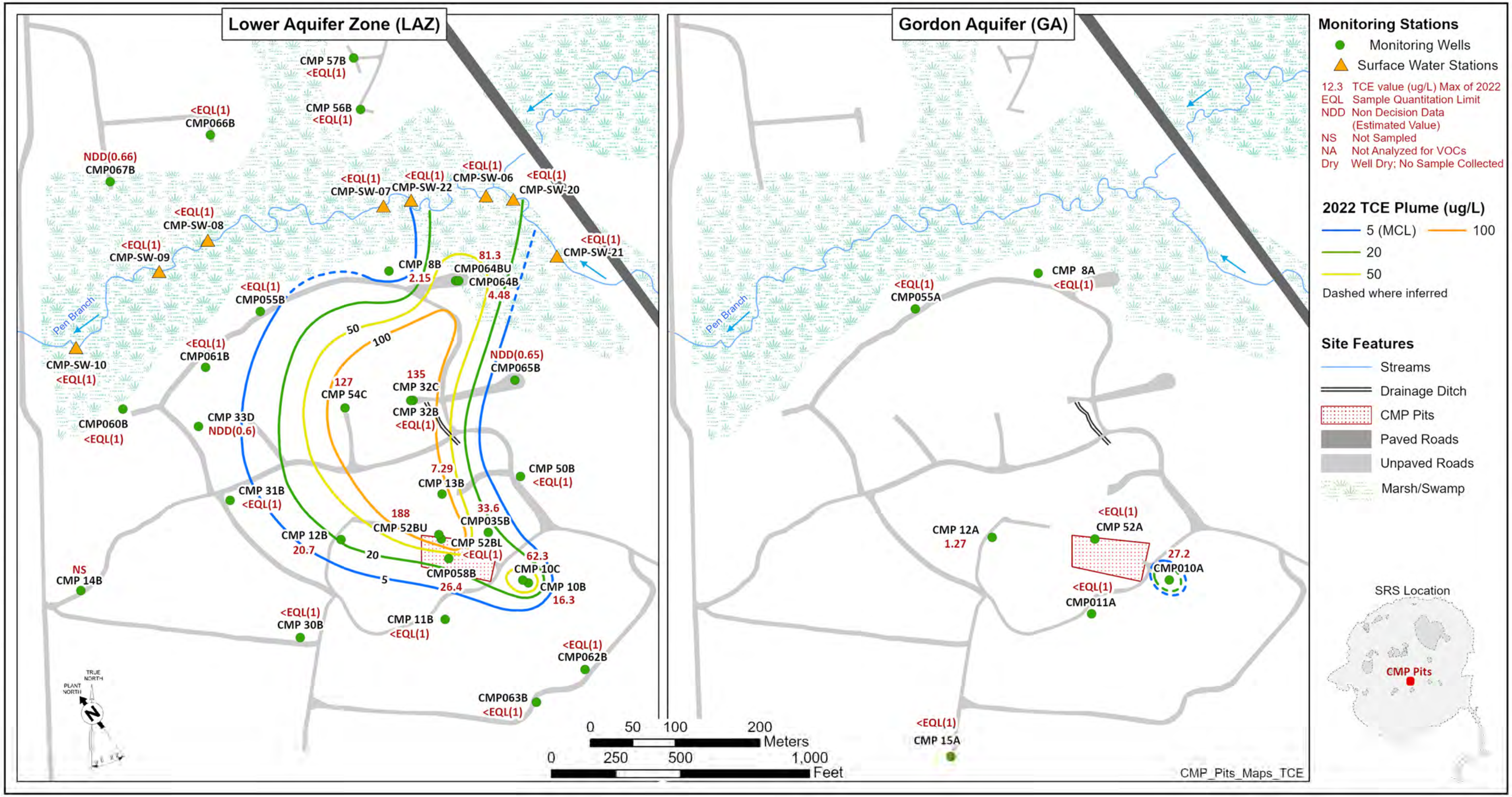

Figure 18. 2022 TCE Plume and Groundwater Results for the LAZ and GA

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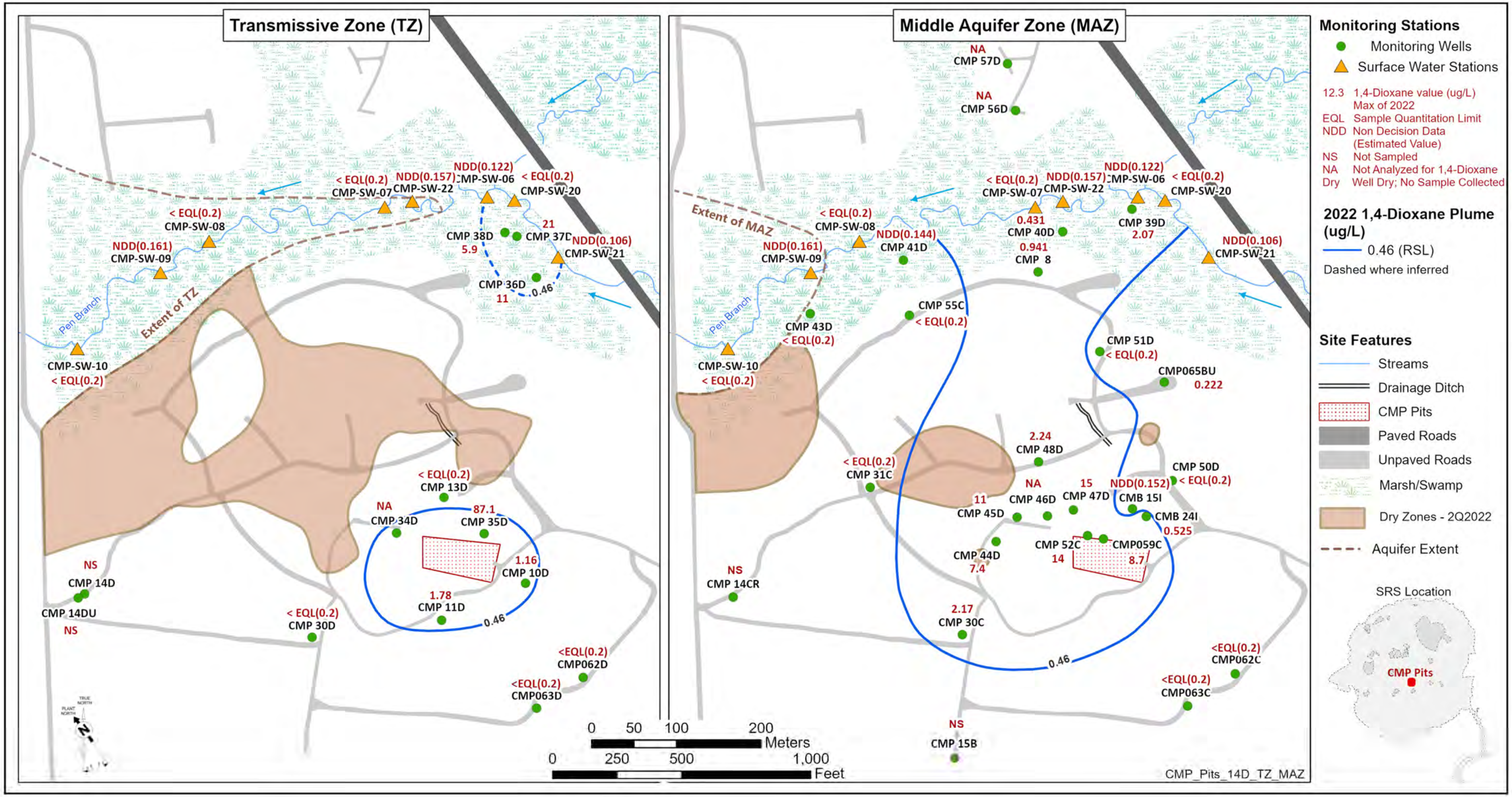

Figure 19. 2022 1,4-Dioxane Plume and Groundwater Results for the TZ and MAZ

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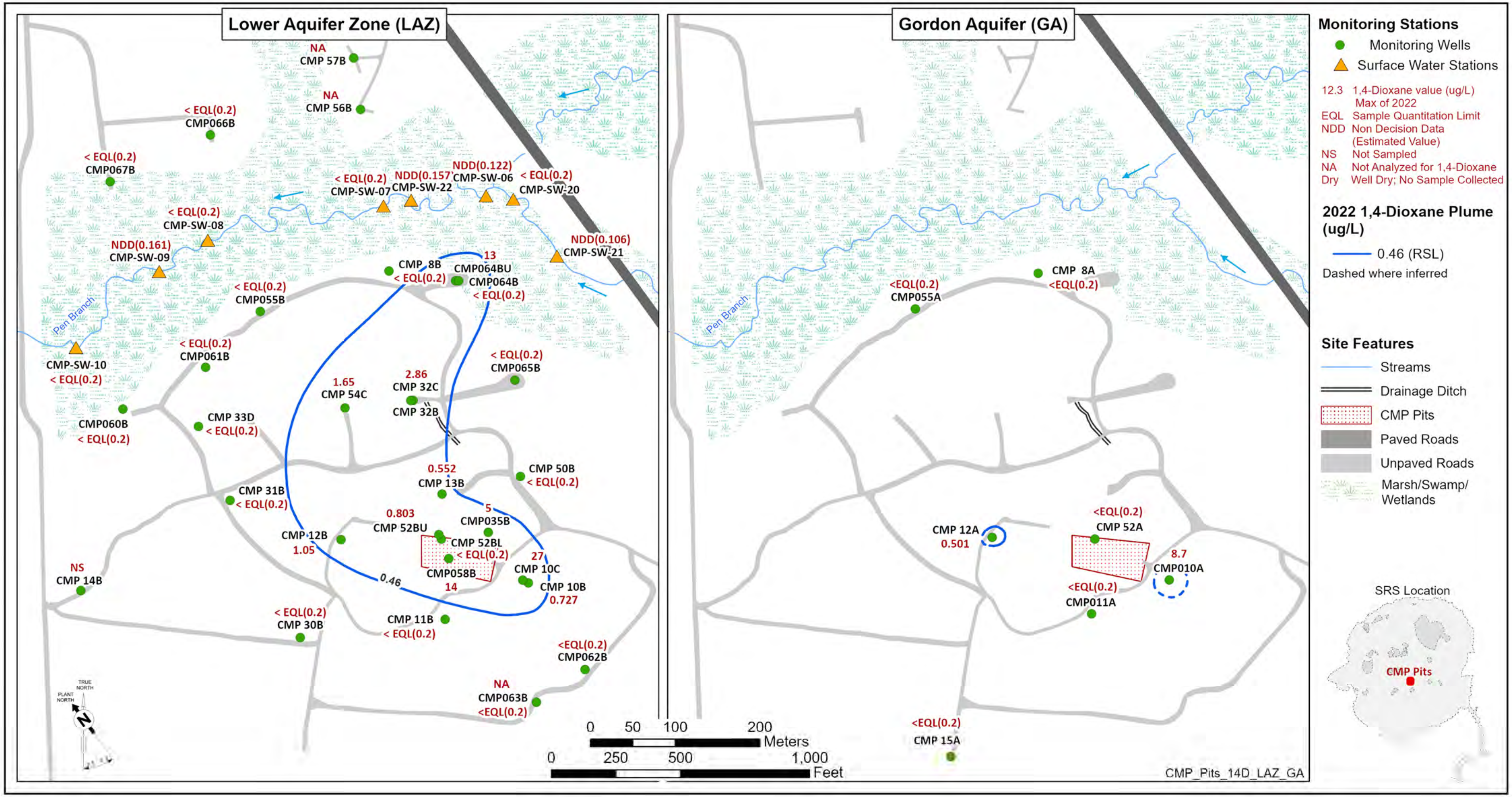

Figure 20. 2022 1,4-Dioxane Plume and Groundwater Results for the LAZ and GA

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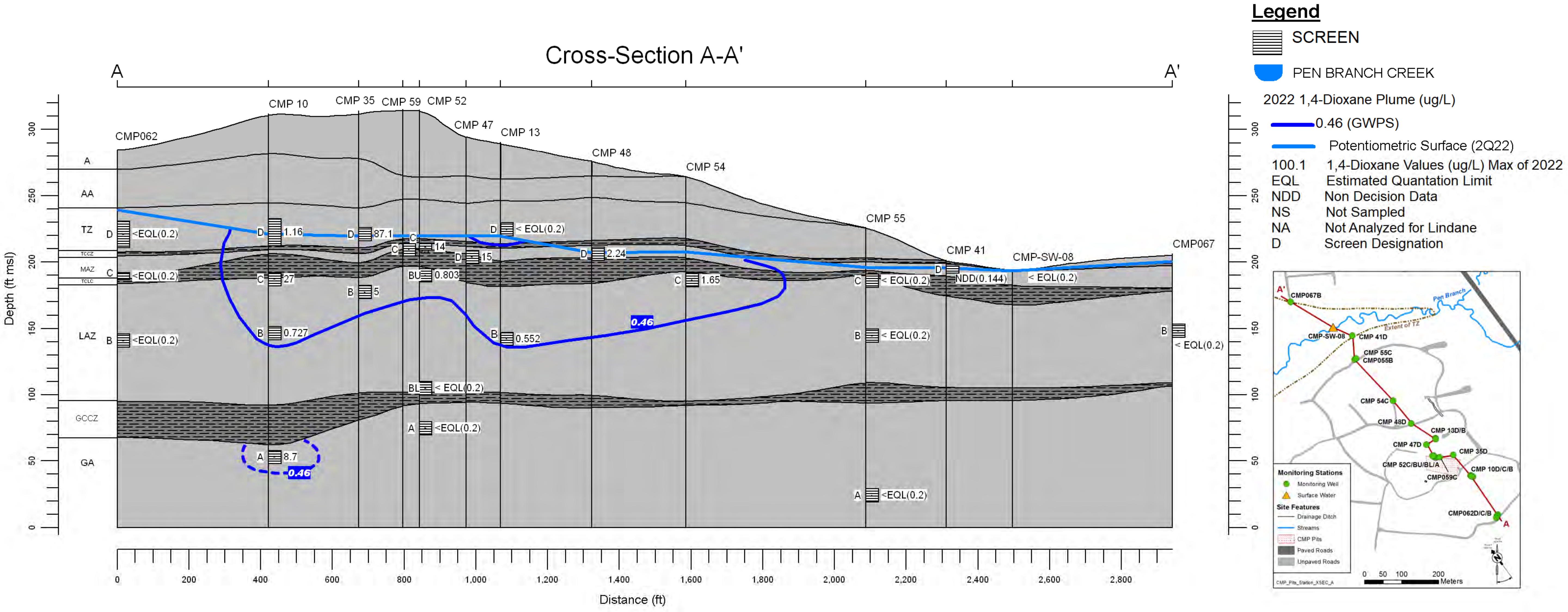

Figure 21. Cross Section A - A' at the CMP Pits OU Area with 2022 1,4-Dioxane Plume and Results

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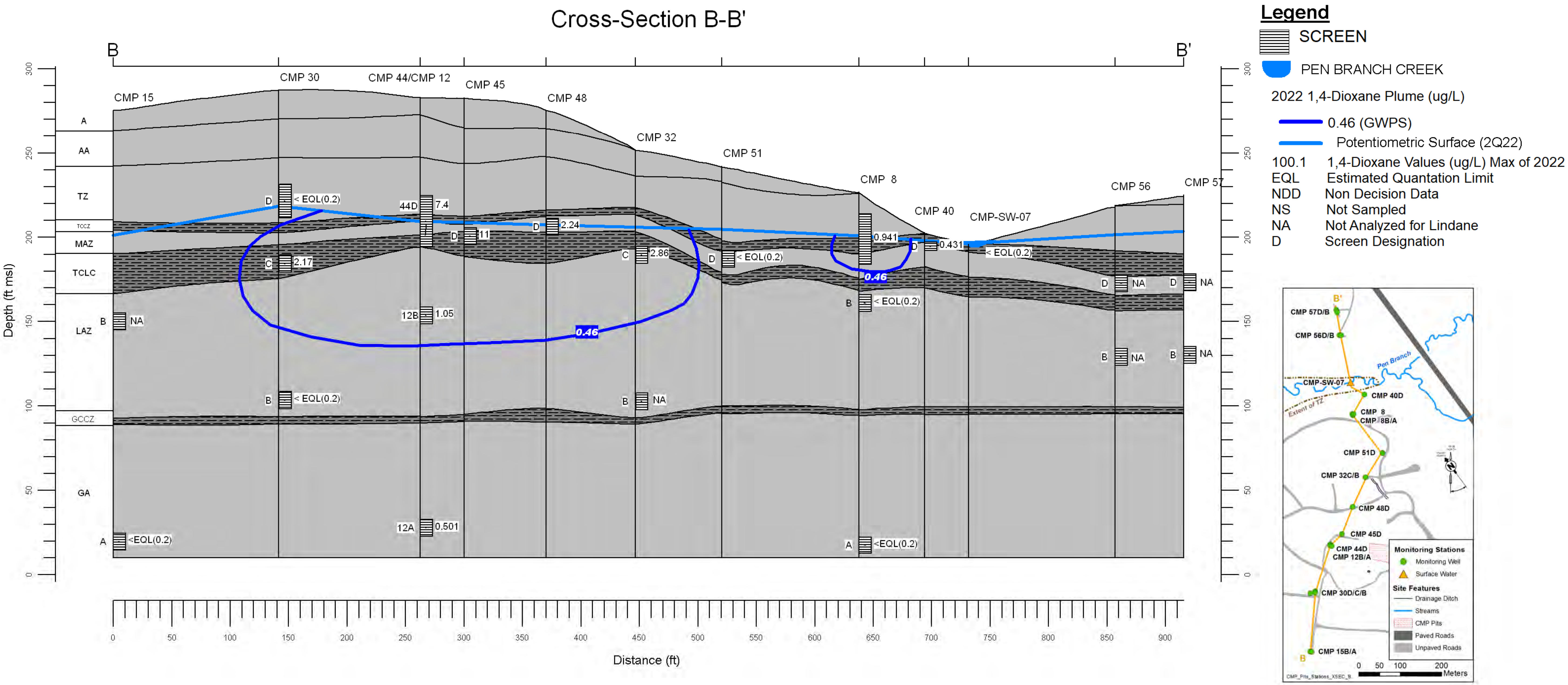

Figure 22. Cross Section B - B' at the CMP Pits OU Area with 2022 1,4-Dioxane Plume and Results

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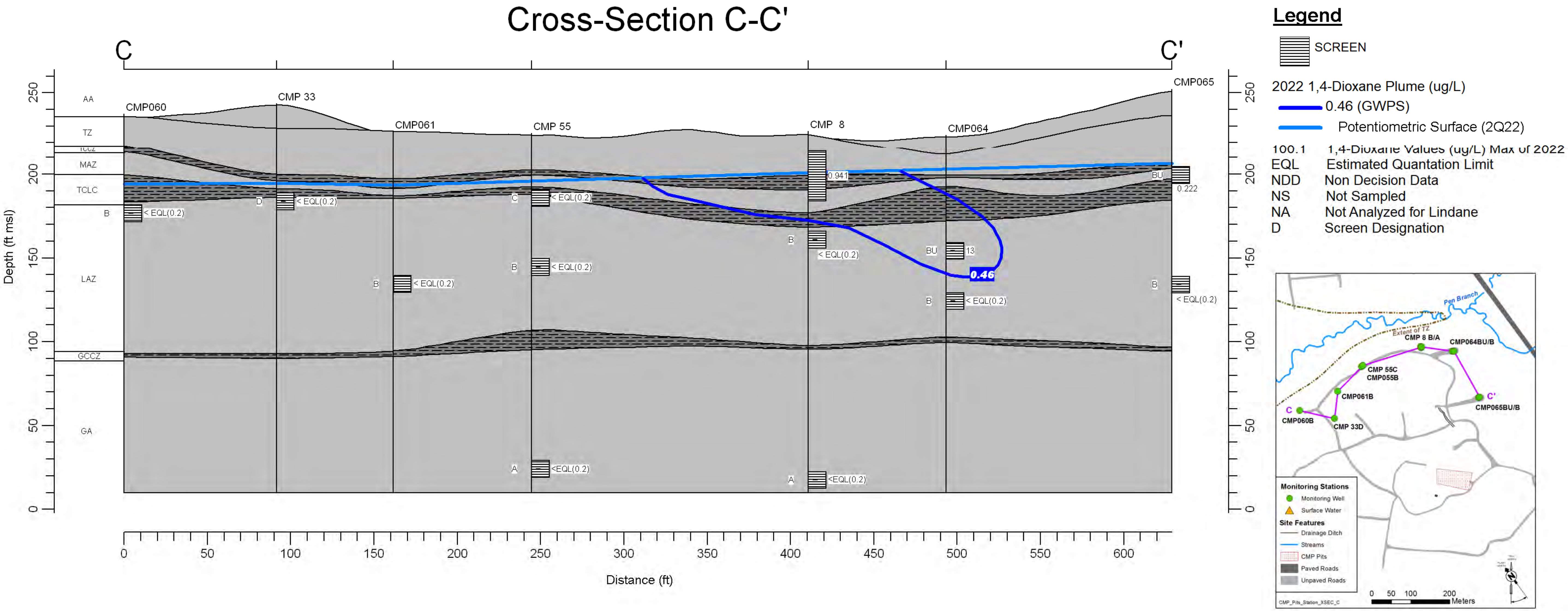

Figure 23. Cross Section C - C' at the CMP Pits OU Area with 2022 1,4-Dioxane Plume and Results

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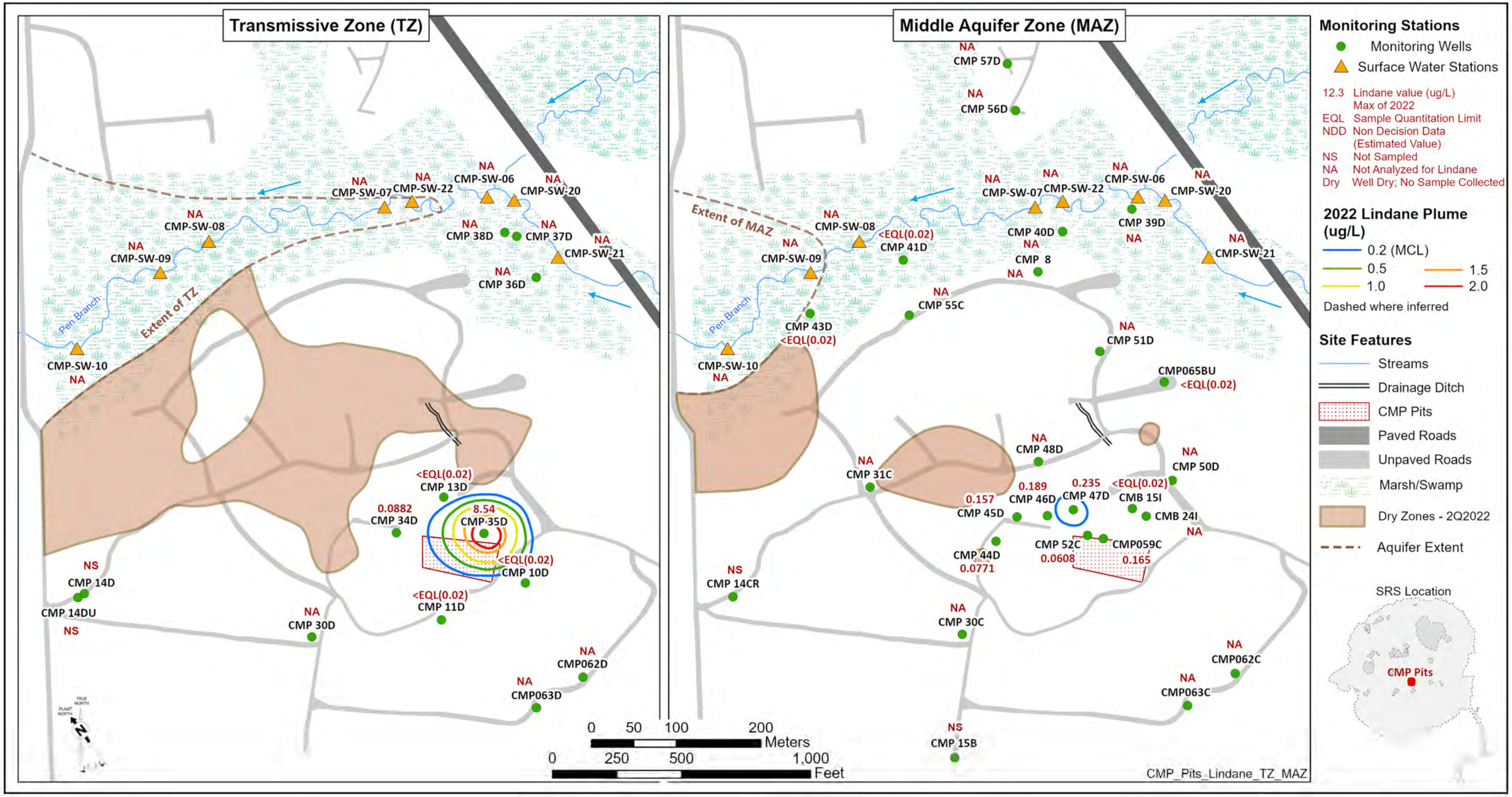

Figure 24. 2022 Lindane Plume and Groundwater Results for the TZ and MAZ

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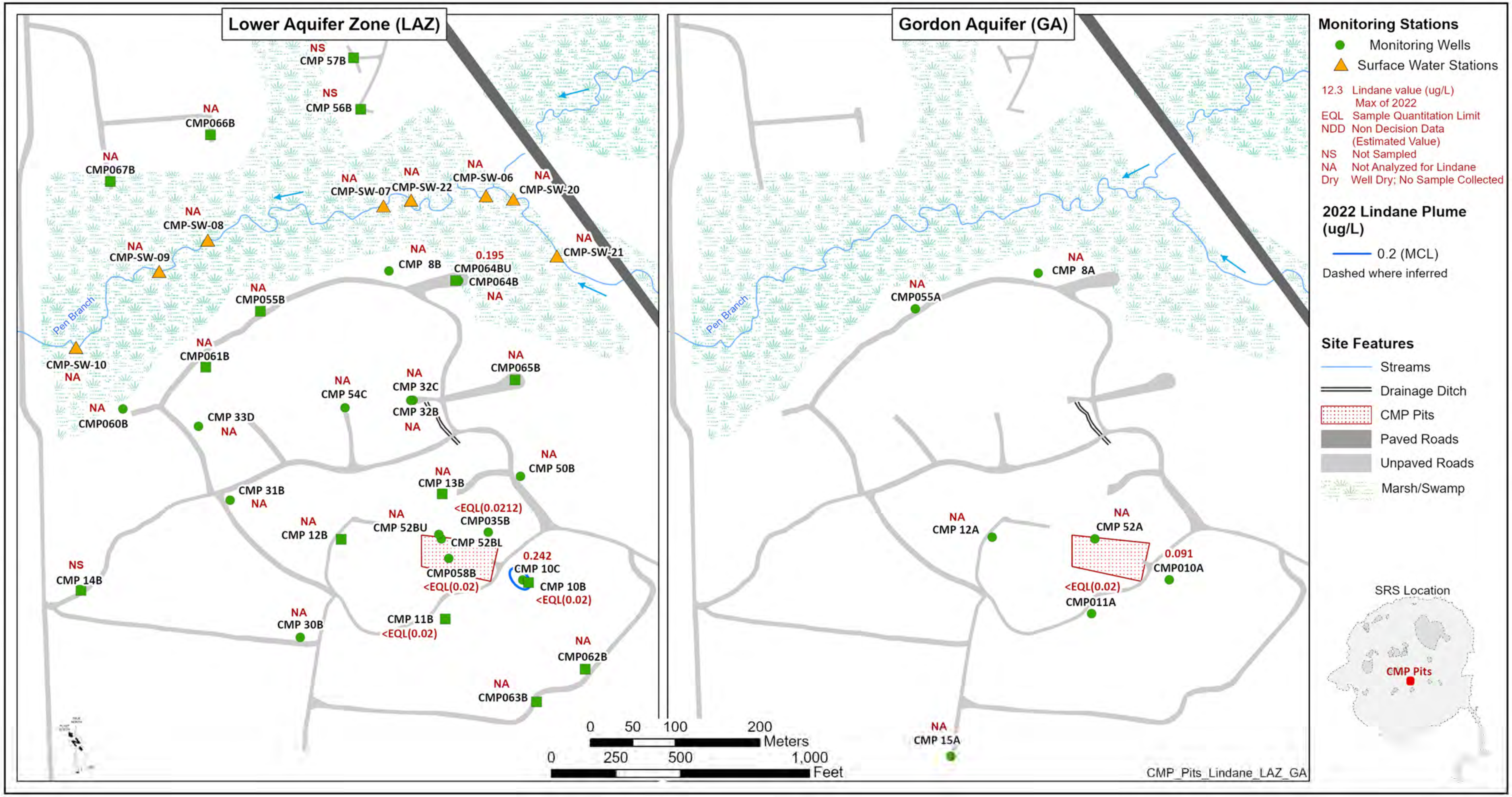

Figure 25. 2022 Lindane Plume and Groundwater Results for the LAZ and GA

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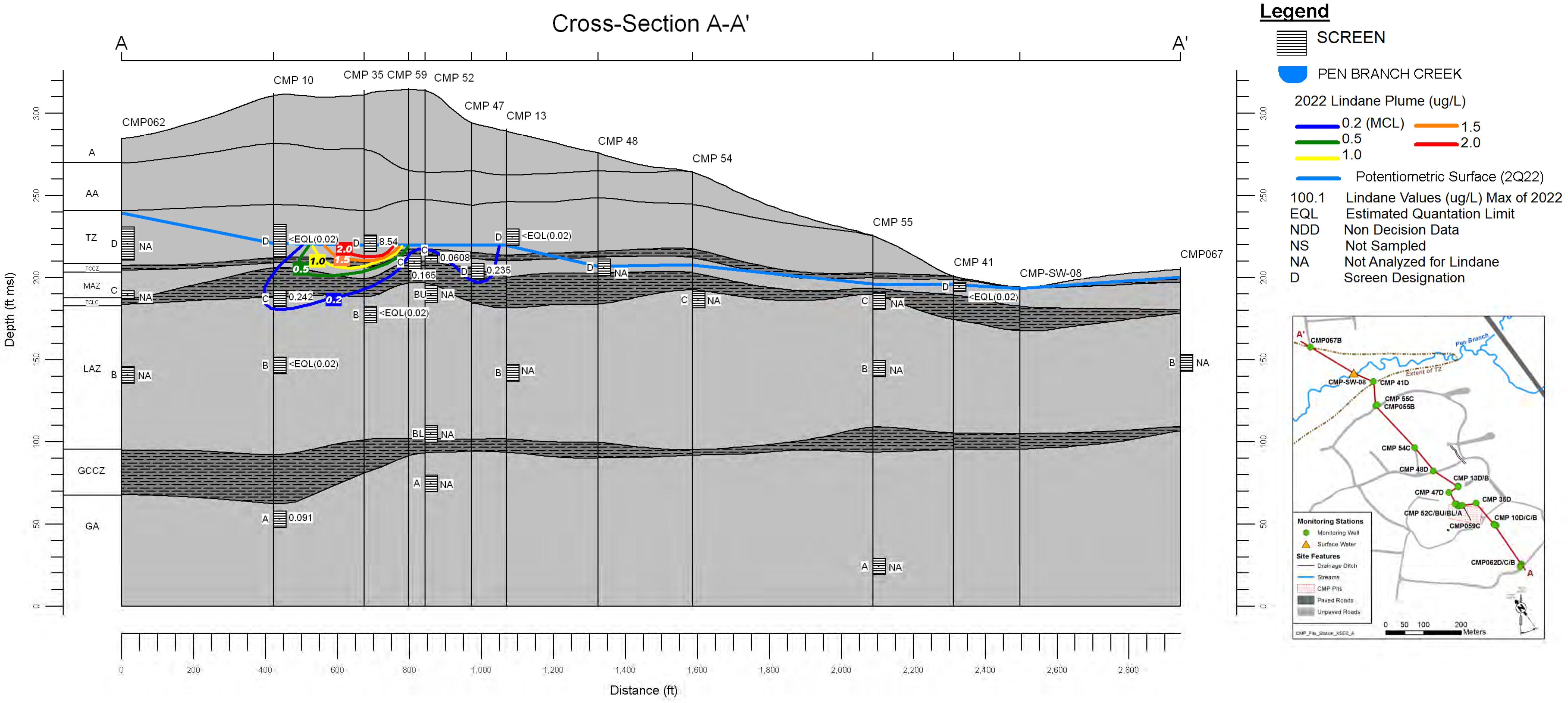

Figure 26. Cross Section A - A' at the CMP Pits OU Area with 2022 Lindane Plume and Results

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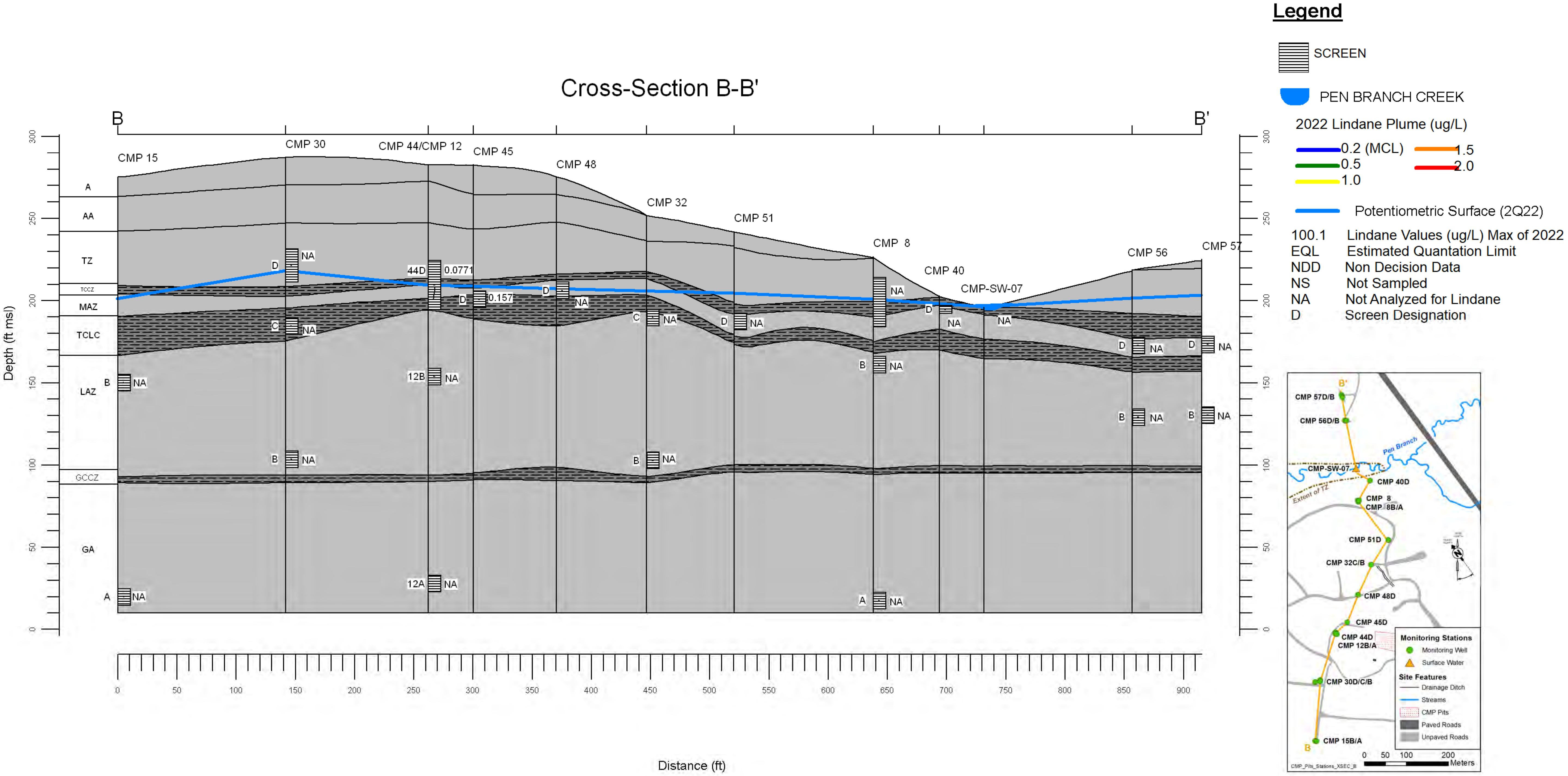

Figure 27. Cross Section B - B' at the CMP Pits OU Area with 2022 Lindane Plume and Results

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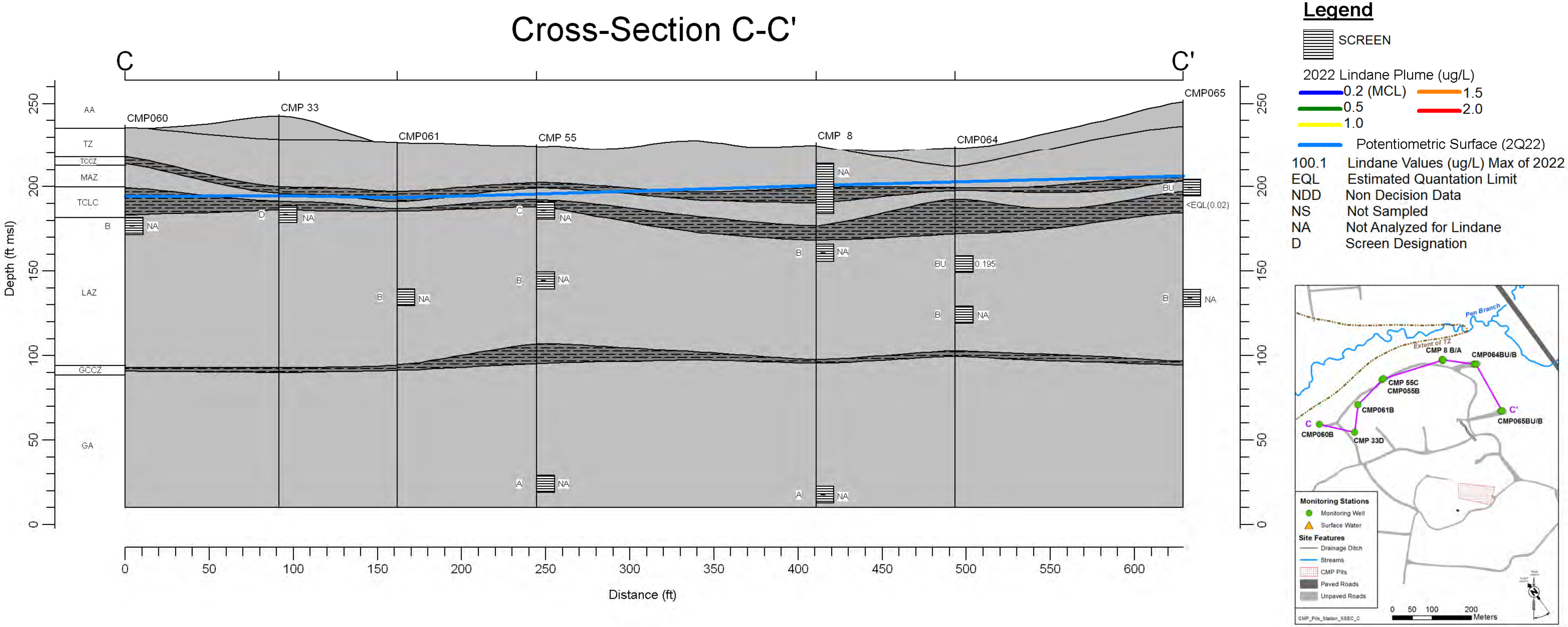

Figure 28. Cross Section C - C' at the CMP Pits OU Area with 2022 Lindane Plume and Results

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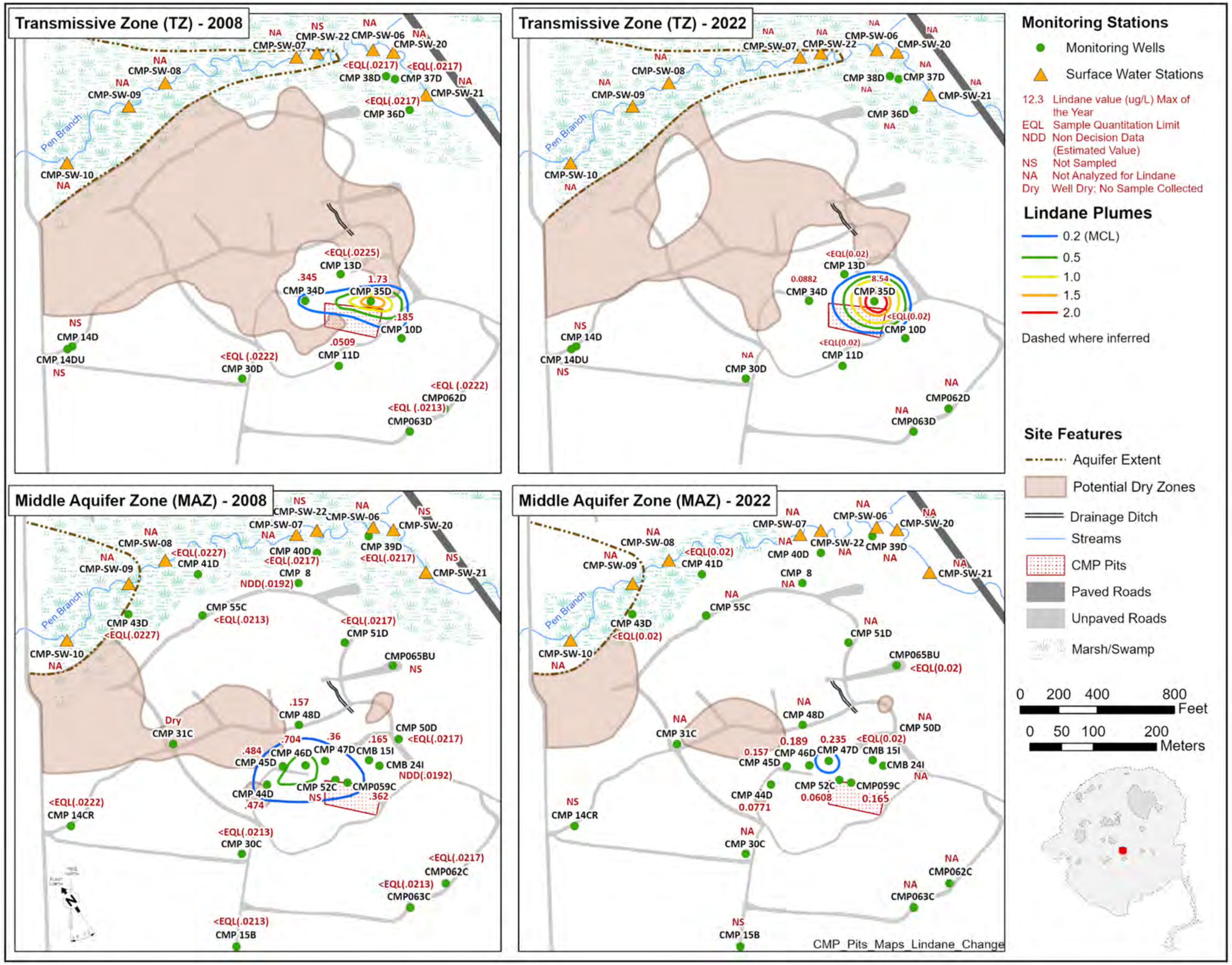

Figure 29. Lindane Plume Comparison from 2008 and 2022 in the TZ and MAZ

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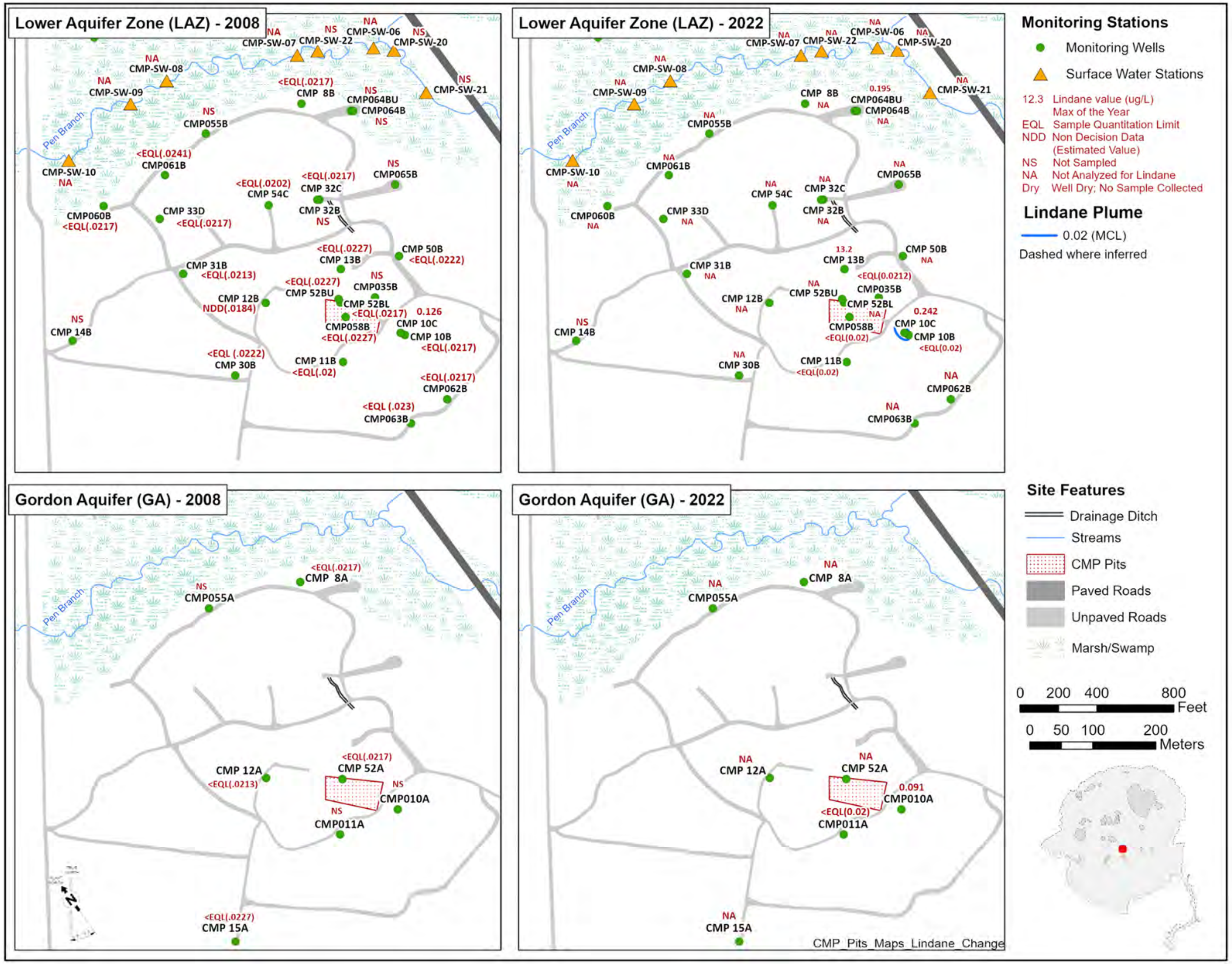

Figure 30. Lindane Plume Comparison from 2008 and 2022 in the LAZ and GA

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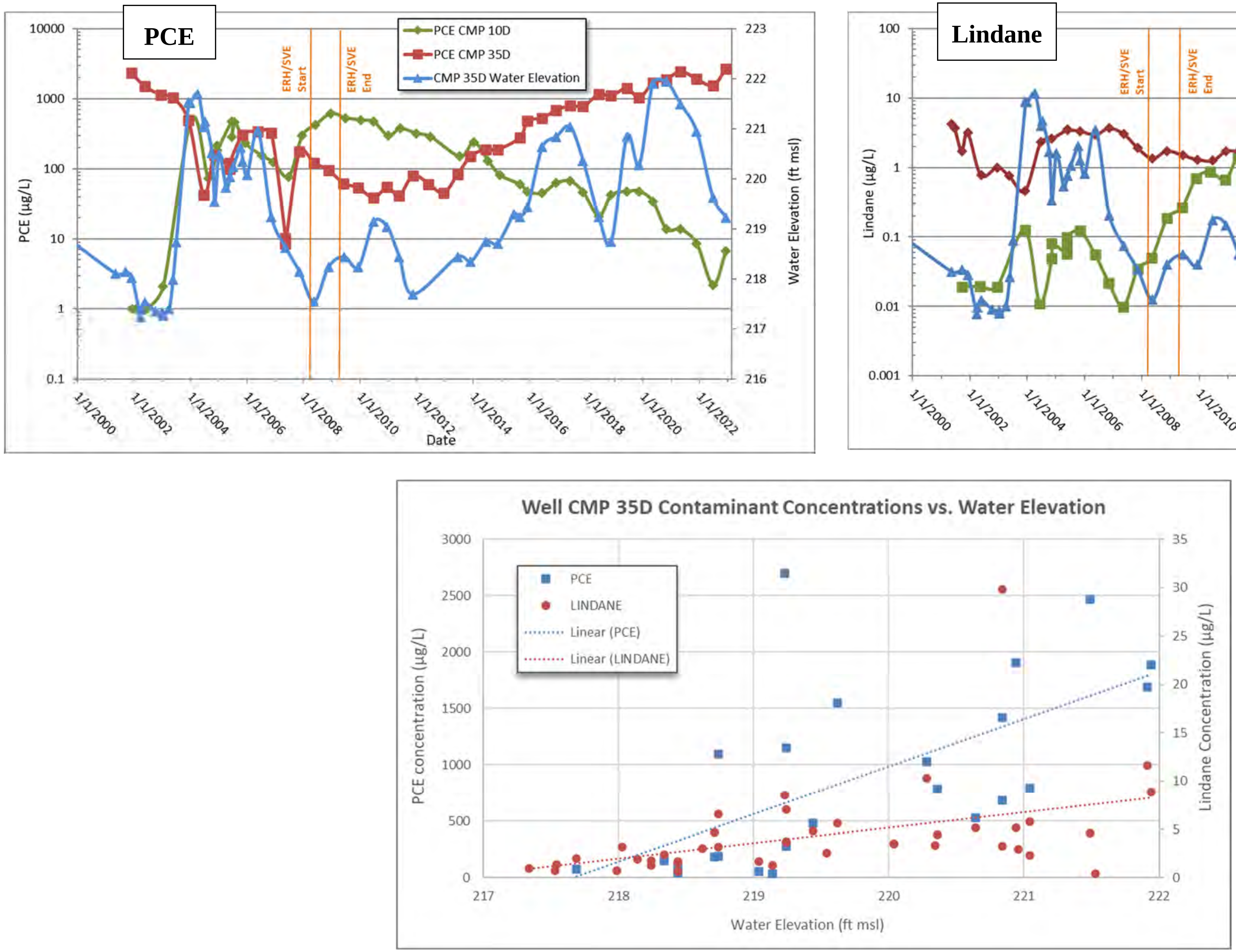

Figure 31. Comparison of PCE and Lindane Trends in CMP 10D and CMP 35D

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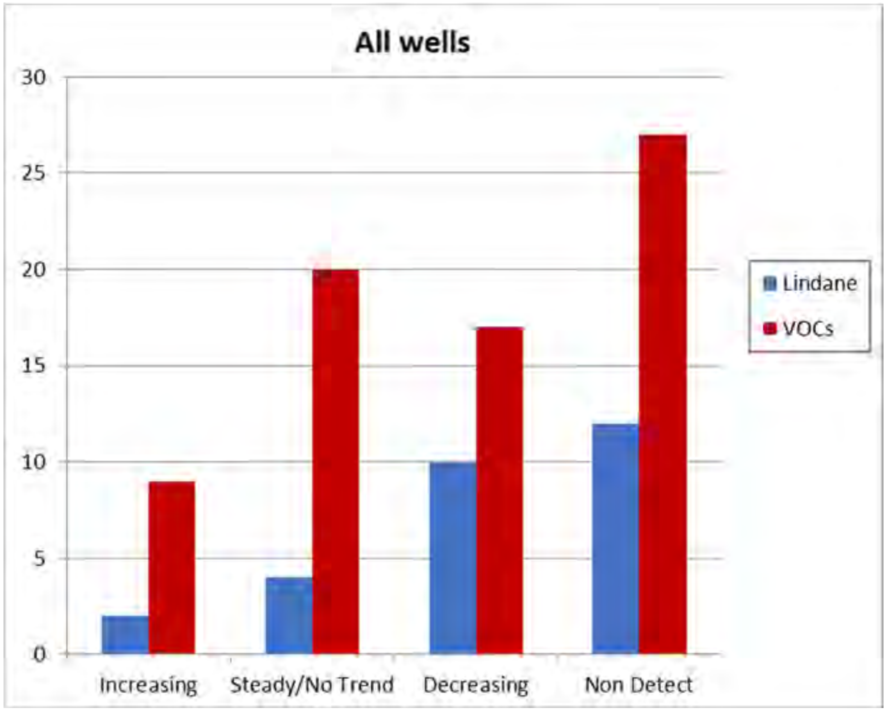

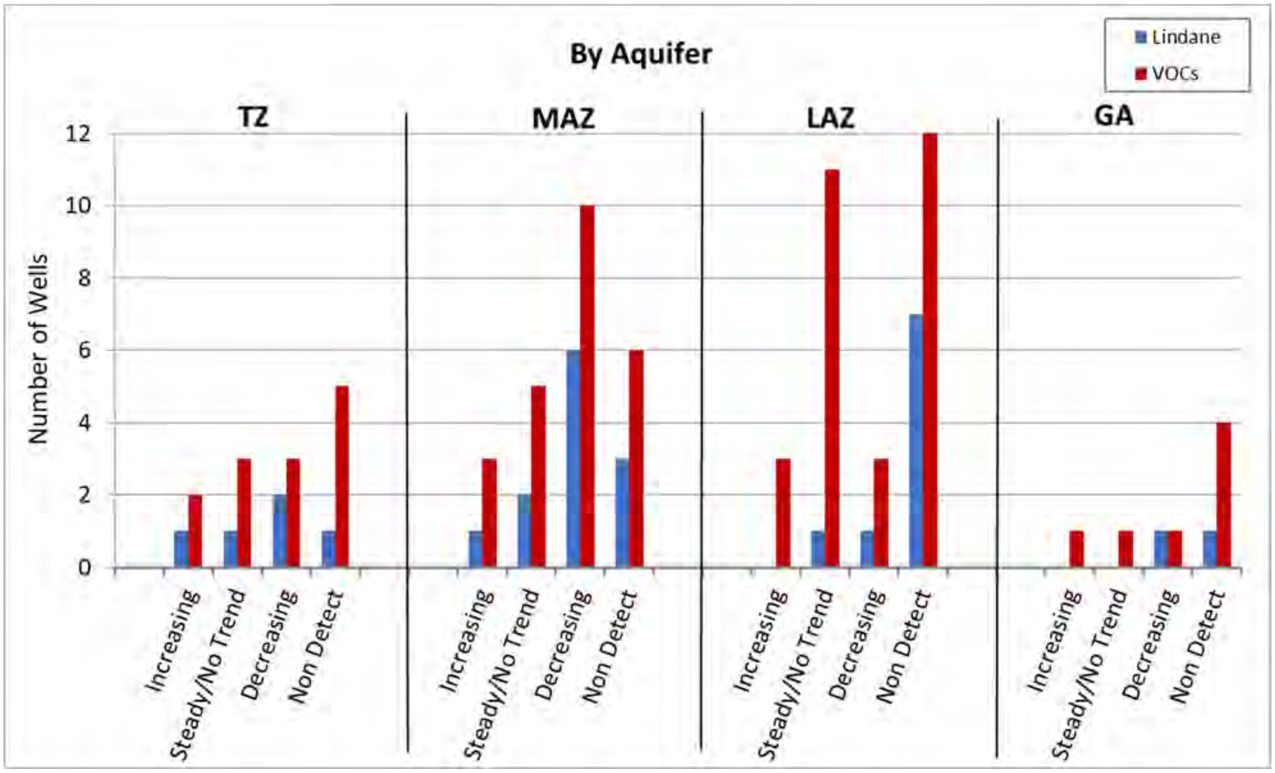

Identification of the wells trend type can be found on the "Trends" tab in the Excel file (CMP_EMR_2022 _Table3_Figure32) located on the CD supplied with this report.

Figure 32. Contaminant Concentration Well Trends and Well Trends by Aquifer

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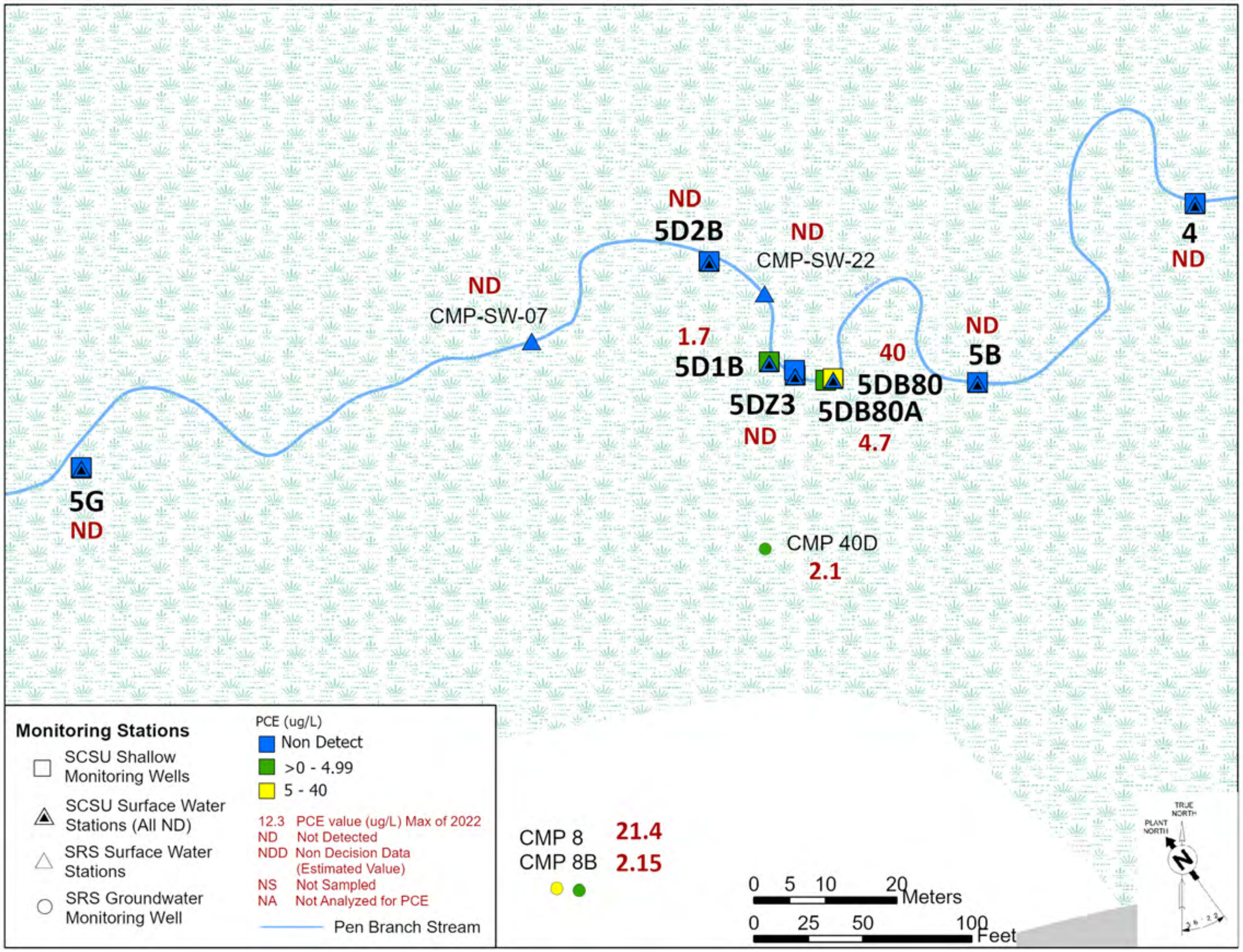

Figure 33. SCSU 2022 PCE Groundwater and Surface Water Results

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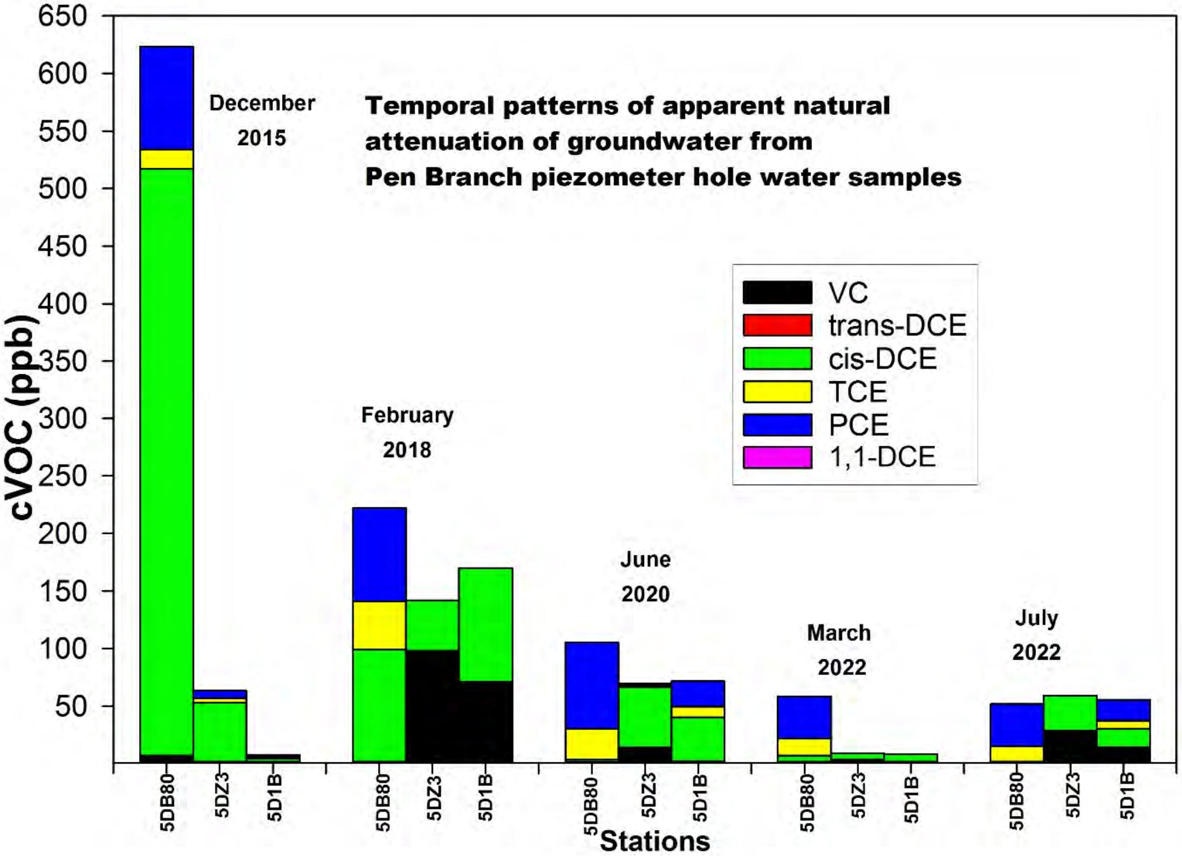

Figure 34. SCSU Long Term VOC Trends

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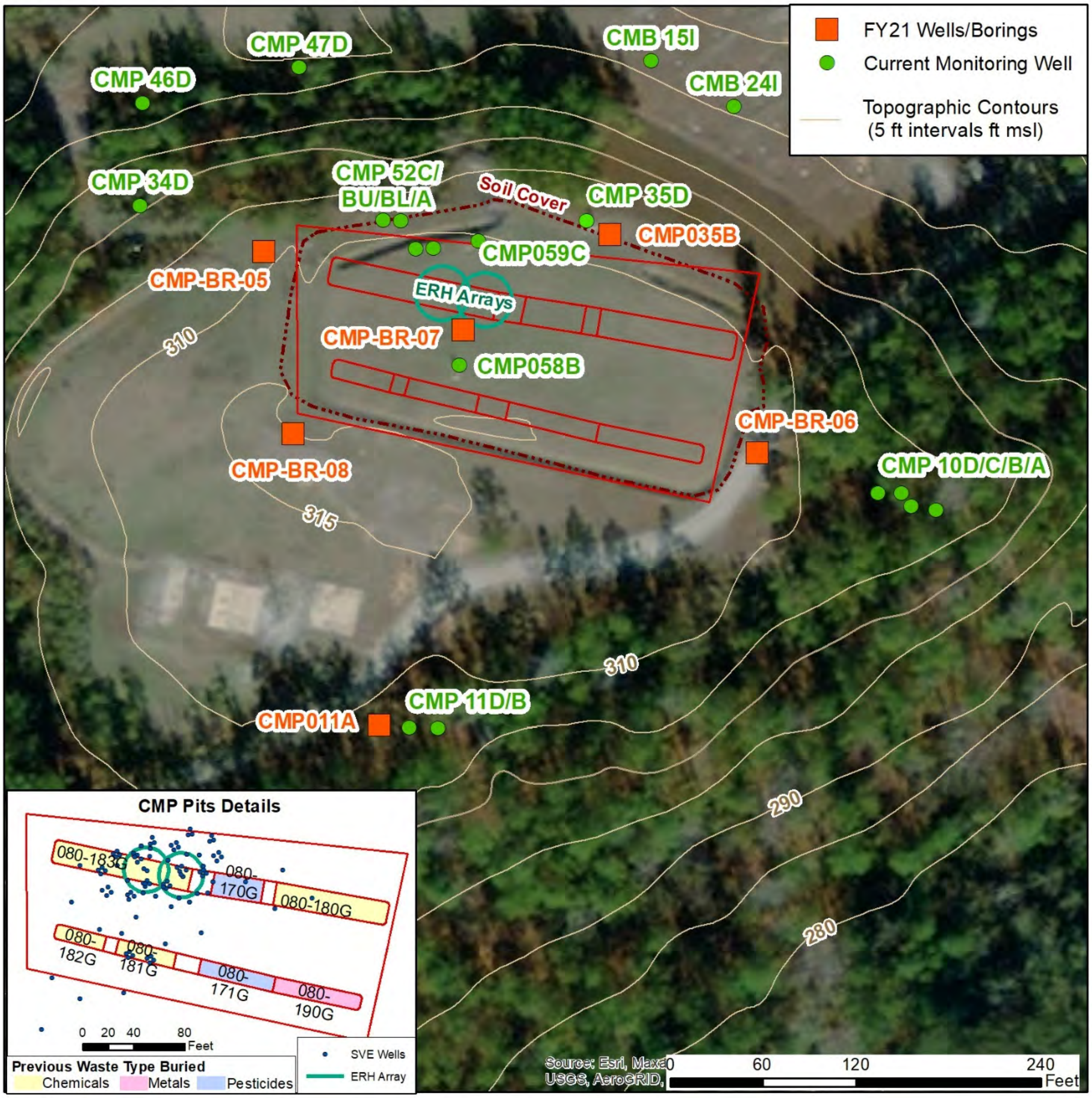

Figure 35. SRS Additional Sampling Locations in 2021

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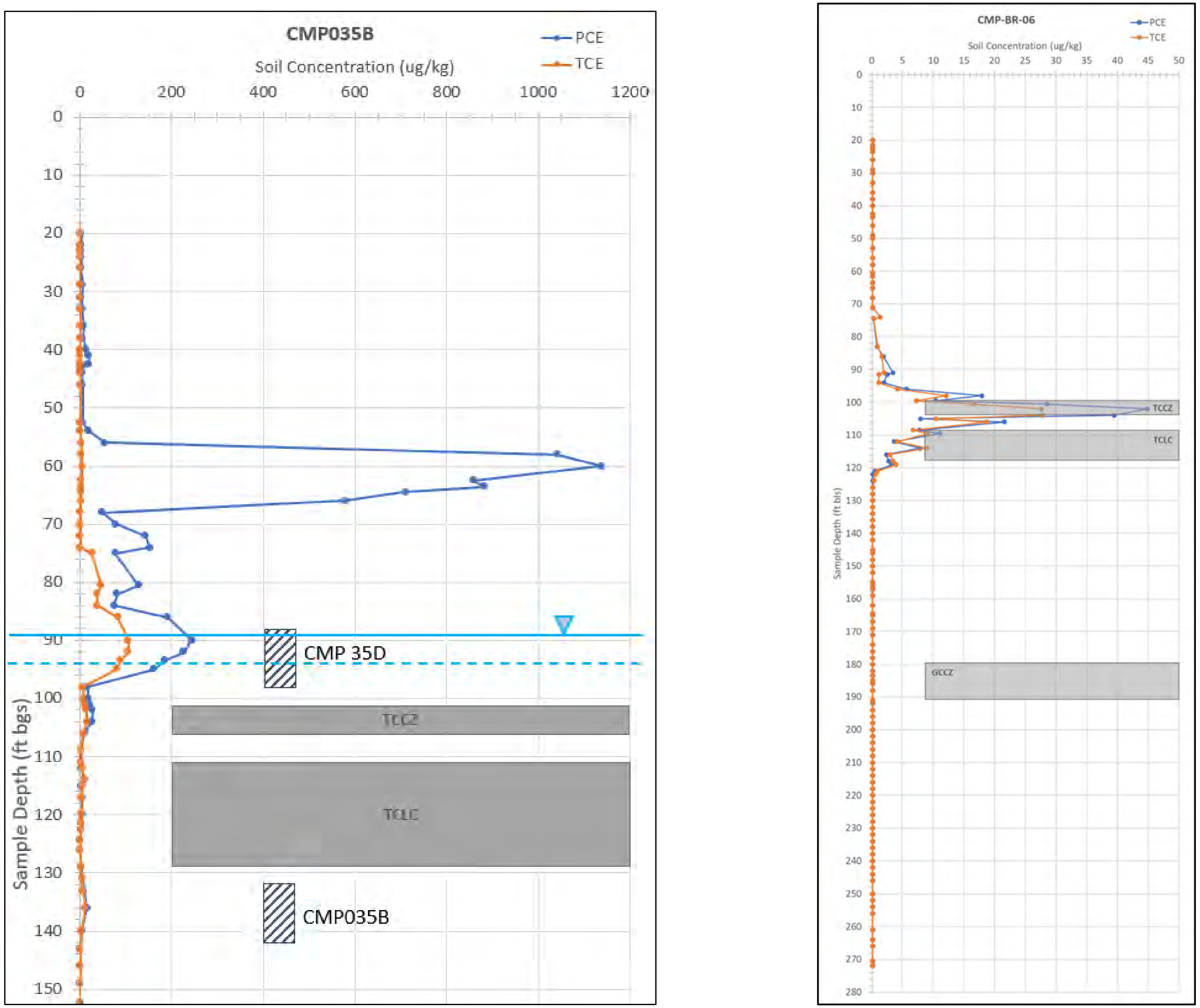

Figure 36. PCE and TCE Soil VOC Headspace Sampling Results from 2021 at CMP035B and CMP-BR-06

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Table 1. CMP Pits OU MNA Monitoring Network

Station	Aquifer Unit	Lab Analyses						Screen Zone (ft amsl)		screen length (ft)
		VOCs		1,4-Dioxane		Lindane		Bottom	Top	
CMB 15I	MAZ	2Q	4Q		4Q	2Q	4Q	210.7	212.4	1.7
CMB 24I	MAZ	2Q	4Q		4Q			201	203	2
CMP 8	MAZ	2Q	4Q		4Q			184	214	30
CMP 8A	GA	2Q		2Q				13.7	23.5	9.8
CMP 8B	LAZ (Upper)	2Q	4Q		4Q			156.6	166.6	10
CMP010A	GA	2Q	4Q	2Q	4Q	2Q	4Q	45.55	55.55	10
CMP 10B	LAZ (Mid)	2Q	4Q		4Q	2Q	4Q	137.4	147.4	10
CMP 10C	LAZ (Upper)	2Q	4Q		4Q	2Q	4Q	179.6	189.6	10
CMP 10D	TZ	2Q	4Q		4Q	2Q,	4Q	209.6	229.6	20
CMP011A	GA	2Q		2Q		2Q		46.2	56.2	10
CMP 11B	LAZ (Mid)	2Q	4Q		4Q	2Q	4Q	139.7	149.7	10
CMP 11D	TZ	2Q	4Q		4Q	2Q		209.47	229.87	20.4
CMP 12A	GA	2Q	4Q	2Q	4Q			22.1	32.1	10
CMP 12B	LAZ (Mid)	2Q	4Q		4Q			148	158	10
CMP 13B	LAZ (Mid)	2Q	4Q		4Q			134.2	144.2	10
CMP 13D	TZ	2Q	4Q		4Q	2Q		217.5	227.5	10
CMP 14B	LAZ (Mid)							130	140	10
CMP 14CR	MAZ							186.49	196.49	10
CMP 14D	TZ							204.1	224.5	20.4
CMP 14DU	TZ							202.57	212.57	10
CMP 15A	GA	2Q		2Q				14.2	24.2	10
CMP 15B	MAZ							145.1	155.1	10
CMP 30B	LAZ (Lower)	2Q,	4Q					97.4	107.5	10.1
CMP 30C	MAZ	2Q	4Q		4Q			179.5	189.5	10
CMP 30D	TZ	2Q	4Q		4Q			211.6	231.6	20
CMP 31B	LAZ (Lower)	2Q	4Q		4Q			110.03	120.03	10
CMP 31C	MAZ	2Q	4Q		4Q			197.9	207.9	10
CMP 32C	LAZ (Upper)	2Q	4Q		4Q			185.2	195.2	10
CMP 32B	LAZ (Lower)	2Q						97.7	107.7	10
CMP 33D	LAZ (Upper)	2Q	4Q		4Q			178.6	188.6	10
CMP 34D	TZ	2Q				2Q	4Q	215.6	225.6	10
CMP 35D	TZ	2Q	4Q		4Q	2Q	4Q	213.8	223.8	10
CMP035B	LAZ	2Q	4Q		4Q	2Q		169.4	179.4	10
CMP 36D	TZ	2Q	4Q		4Q			199.2	204.2	5
CMP 37D	TZ	2Q	4Q		4Q			193.3	198.3	5
CMP 38D	TZ	2Q	4Q		4Q			196.7	201.7	5
CMP 39D	MAZ	2Q	4Q		4Q			190.9	195.9	5
CMP 40D	MAZ	2Q	4Q		4Q			192.13	197.13	5
CMP 41D	MAZ	2Q	4Q		4Q	2Q		191.7	196.7	5
CMP 43D	MAZ	2Q	4Q		4Q	2Q		187.8	192.8	5
CMP 44D	MAZ	2Q	4Q		4Q	2Q	4Q	204.06	214.06	10
CMP 45D	MAZ	2Q	4Q		4Q	2Q	4Q	195.84	205.84	10
CMP 46D	MAZ					2Q	4Q	198.44	208.44	10

Table 1. CMP Pits OU MNA Monitoring Network (*continued; end*)

Station	Aquifer Unit	Lab Analyses						Screen Zone (ft amsl)		Screen Length (ft)
		VOCs		1,4-Dioxane		Lindane		Bottom	Top	
CMP 47D	MAZ	2Q,	4Q		4Q	2Q	4Q	196.37	206.37	10
CMP 48D	MAZ	2Q	4Q		4Q		4Q – 3rd year*	198.83	208.83	10
CMP 50B	LAZ (Upper)	2Q	4Q		4Q			167.33	172.33	5
CMP 50D	MAZ	2Q	4Q		4Q			202.99	212.99	10
CMP 51D	MAZ	2Q	4Q		4Q			182.27	192.27	10
CMP 52A	GA	2Q		2Q				66.65	76.65	10
CMP 52BL	LAZ (Lower)	2Q	4Q		4Q			96.59	106.59	10
CMP 52BU	LAZ (Upper)	2Q	4Q		4Q			180.91	190.91	10
CMP 52C	MAZ	2Q	4Q		4Q		2Q	204.69	209.69	5
CMP 54C	LAZ (Upper)	2Q	4Q		4Q			178.34	188.34	10
CMP055A	GA	2Q		2Q				16.92	26.92	10
CMP055B	LAZ (Mid)	2Q	4Q		4Q			136.4	146.4	10
CMP 55C	MAZ	2Q	4Q		4Q			177.62	187.62	10
CMP 56B	LAZ (Mid)	2Q						124.6	134.6	10
CMP 56D	MAZ	2Q						167.55	177.55	10
CMP 57B	LAZ (Mid)	2Q						125.25	135.25	10
CMP 57D	MAZ	2Q						168.21	178.21	10
CMP058B	LAZ (Upper)	2Q	4Q		4Q	2Q	4Q	182.7	192.6	9.9
CMP059C	MAZ	2Q	4Q		4Q	2Q	4Q	200.8	210.7	9.9
CMP060B	LAZ (Upper)	2Q	4Q		4Q			171.6	181.6	10
CMP061B	LAZ (Mid)	2Q	4Q		4Q			129.5	139.5	10
CMP062B	LAZ (Mid)	2Q		2Q				136	146	10
CMP062C	MAZ	2Q		2Q				186.8	191.8	5
CMP062D	TZ	2Q		2Q				210.6	230.6	20
CMP063B	LAZ (Mid)		4Q	2Q				126.1	136.1	10
CMP063C	MAZ		4Q	2Q				184.4	189.4	5
CMP063D	TZ		4Q	2Q				195.7	215.7	20
CMP064BU	LAZ (Upper)	2Q	4Q		4Q	2Q	4Q	149.2	159.2	10
CMP064B	LAZ (Lower)	2Q	4Q		4Q			118.8	128.8	10
CMP065BU	MAZ	2Q	4Q		4Q	2Q	4Q	194.37	204.37	10
CMP065B	LAZ (Mid)	2Q	4Q		4Q			128.94	138.94	10
CMP066B	LAZ (Mid)	2Q	4Q		4Q			138.7	148.7	10
CMP067B	LAZ (Mid)	2Q	4Q		4Q			143.1	153.1	10
CMPSW-06	SW	2Q	4Q		4Q					
CMPSW-07	SW	2Q	4Q		4Q					
CMPSW-08	SW	2Q	4Q		4Q					
CMPSW-09	SW	2Q	4Q		4Q					
CMPSW-10	SW	2Q	4Q		4Q					
CMP-SW-20	SW	2Q	4Q		4Q					
CMP-SW-21	SW	2Q	4Q		4Q					
CMP-SW-22	SW	2Q	4Q		4Q					

*Lindane is analyzed every third year (i.e., 2020, 2023, 2026, etc.); additional samples ; ommited samples

Table 2. CMP Pits OU Horizontal Groundwater Flow Velocities (2Q2022)

GW Flow Line	dh	dl	Conductivity	Porosity	Velocity (ft/day)	Velocity (ft/year)
TZ						
A - A'	20	1498	8	0.3	**0.36**	130.04
B - B'	20.8	1484	8	0.3	**0.37**	136.52
C - C'	5.5	1200	8	0.3	**0.12**	44.64
				TZ Avg.	**0.28**	**103.73**
MAZ						
A - A'	15	1516	50	0.3	**1.65**	602.33
B - B'	15	1410	50	0.3	**1.77**	647.61
				MAZ Avg.	**1.71**	**624.97**
LAZ						
A - A'	4.25	1995	30	0.3	**0.21**	77.81
B - B'	3	362	30	0.3	**0.83**	302.69
C - C'	7.5	530	30	0.3	**1.42**	516.86
D - D'	4.12	1164	30	0.3	**0.35**	129.28
				LAZ Avg.	**0.70**	**256.66**
GA						
A - A'	2	1792	20	0.3	**0.07**	**27.18**
B - B'	1.5	440	20	0.3	**0.23**	**83.01**
				GA Avg.	**0.15**	**55.09**

dh= difference in head; dl= difference in length

Table 3. CMP Pits OU Annual MNA Results, April 2022 through March 2023

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Table 3. CMP Pits OU Annual MNA Results, April 2022 through March 2023

				Field Data			
				SAMPLE COLLECTION DATE	SAMPLING EVENT WATER ELEVATION	DEPTH TO WATER	SYNCHRONOUS MEASUREMENT DATE
				day-month-year	ft	ft	day-month-year
	Station	**Well Use**	**Aquifer Zone**				
TZ	CMP 10D	Monitoring Well	TZ_UAZ_UTRAU	20-Jun-2022	219.25	92.45	26-Apr-2022
	CMP 10D	Monitoring Well	TZ_UAZ_UTRAU	06-Dec-2022	218.82	92.88	NS
	CMP 11D	Monitoring Well	TZ_UAZ_UTRAU	10-May-2022	219.09	92.11	26-Apr-2022
	CMP 11D	Monitoring Well	TZ_UAZ_UTRAU	30-Nov-2022	218.45	92.75	NS
	CMP 13D	Monitoring Well	TZ_UAZ_UTRAU	10-May-2022	219.6	71.1	26-Apr-2022
	CMP 13D	Monitoring Well	TZ_UAZ_UTRAU	30-Nov-2022	219.31	71.39	NS
	CMP 14D	Piezometer Well	TZ_UAZ_UTRAU	22-Nov-2022	212.18	53.82	26-Apr-2022
	CMP 14DU	Piezometer Well	TZ_UAZ_UTRAU	22-Nov-2022	209.94	54.73	26-Apr-2022
	CMP 30D	Monitoring Well	TZ_UAZ_UTRAU	10-May-2022	217.56	72.64	26-Apr-2022
	CMP 30D	Monitoring Well	TZ_UAZ_UTRAU	05-Dec-2022	216.8	73.4	NS
	CMP 34D	Monitoring Well	TZ_UAZ_UTRAU	20-Jun-2022	219.45	86.7	26-Apr-2022
	CMP 34D	Monitoring Well	TZ_UAZ_UTRAU	07-Dec-2022	219.02	87.13	NS
	CMP 35D	Monitoring Well	TZ_UAZ_UTRAU	20-Jun-2022	219.62	94.42	26-Apr-2022
	CMP 35D	Monitoring Well	TZ_UAZ_UTRAU	06-Dec-2022	219.23	94.81	NS
	CMP 36D	Monitoring Well	TZ_UAZ_UTRAU	10-May-2022	205.16	7.7	26-Apr-2022
	CMP 36D	Monitoring Well	TZ_UAZ_UTRAU	05-Dec-2022	203.93	8.93	NS
	CMP 37D	Monitoring Well	TZ_UAZ_UTRAU	10-May-2022	200.87	6.5	26-Apr-2022
	CMP 37D	Monitoring Well	TZ_UAZ_UTRAU	05-Dec-2022	201.36	6.01	NS
	CMP 38D	Monitoring Well	TZ_UAZ_UTRAU	10-May-2022	200.53	9.1	26-Apr-2022
	CMP 38D	Monitoring Well	TZ_UAZ_UTRAU	05-Dec-2022	200.52	9.11	NS
	CMP062D	Monitoring Well	TZ_UAZ_UTRAU	16-May-2022	239.79	47.96	26-Apr-2022
	CMP063D	Monitoring Well	TZ_UAZ_UTRAU	16-May-2022	218.98	62.1	NS
	CMP063D	Monitoring Well	TZ_UAZ_UTRAU	05-Dec-2022	218.78	62.3	NS
	CMB 15I	Monitoring Well	MAZ_UTRAU	10-May-2022	217.81	70.6	26-Apr-2022
	CMB 15I	Monitoring Well	MAZ_UTRAU	05-Dec-2022	217.61	70.8	NS
	CMB 24I	Monitoring Well	MAZ_UTRAU	10-May-2022	207.63	82.8	26-Apr-2022
	CMB 24I	Monitoring Well	MAZ_UTRAU	05-Dec-2022	205.93	84.5	NS
	CMP 8	Monitoring Well	MAZ_UTRAU	10-May-2022	201.66	27.14	26-Apr-2022
	CMP 8	Monitoring Well	MAZ_UTRAU	30-Nov-2022	200.7	28.1	NS
	CMP 14CR	Piezometer Well	MAZ_UTRAU	22-Nov-2022	205.84	61.11	26-Apr-2022
	CMP 15B	Piezometer Well	MAZ_UTRAU	22-Nov-2022	200.6	76	26-Apr-2022
	CMP 30C	Monitoring Well	MAZ_UTRAU	10-May-2022	206.4	83.6	26-Apr-2022
	CMP 30C	Monitoring Well	MAZ_UTRAU	30-Nov-2022	206.09	83.91	NS
	CMP 31C	Monitoring Well	MAZ_UTRAU	10-May-2022	201.42	53.88	26-Apr-2022

MAZ	CMP 31C	Monitoring Well	MAZ_UTRAU	30-Nov-2022	198.18	57.12	NS
	CMP 39D	Monitoring Well	MAZ_UTRAU	16-May-2022	198.34	7	26-Apr-2022
	CMP 39D	Monitoring Well	MAZ_UTRAU	05-Dec-2022	198.74	6.6	NS
	CMP 40D	Monitoring Well	MAZ_UTRAU	16-May-2022	197.98	8.95	26-Apr-2022
	CMP 40D	Monitoring Well	MAZ_UTRAU	05-Dec-2022	198.12	8.81	NS
	CMP 41D	Monitoring Well	MAZ_UTRAU	16-May-2022	196.23	7.8	26-Apr-2022
	CMP 41D	Monitoring Well	MAZ_UTRAU	05-Dec-2022	195.92	8.11	NS
	CMP 43D	Monitoring Well	MAZ_UTRAU	16-May-2022	192.47	5.88	26-Apr-2022
	CMP 43D	Monitoring Well	MAZ_UTRAU	05-Dec-2022	192.91	5.44	NS
	CMP 44D	Monitoring Well	MAZ_UTRAU	21-Jun-2022	210.11	75.1	26-Apr-2022
	CMP 44D	Monitoring Well	MAZ_UTRAU	07-Dec-2022	209.71	75.5	NS
	CMP 45D	Monitoring Well	MAZ_UTRAU	24-May-2022	209.06	76.4	26-Apr-2022
	CMP 45D	Monitoring Well	MAZ_UTRAU	07-Dec-2022	208.45	77.01	NS
	CMP 46D	Monitoring Well	MAZ_UTRAU	24-May-2022	209.34	82.4	26-Apr-2022
	CMP 46D	Monitoring Well	MAZ_UTRAU	07-Dec-2022	207.91	83.83	NS
	CMP 47D	Monitoring Well	MAZ_UTRAU	24-May-2022	208.36	84.42	26-Apr-2022
	CMP 47D	Monitoring Well	MAZ_UTRAU	07-Dec-2022	207.76	85.02	NS
	CMP 48D	Monitoring Well	MAZ_UTRAU	19-May-2022	207.55	67.5	26-Apr-2022
	CMP 48D	Monitoring Well	MAZ_UTRAU	07-Dec-2022	206.95	68.1	NS
	CMP 50D	Monitoring Well	MAZ_UTRAU	11-May-2022	208.39	74.75	26-Apr-2022
	CMP 50D	Monitoring Well	MAZ_UTRAU	05-Dec-2022	208.3	74.84	NS
	CMP 51D	Monitoring Well	MAZ_UTRAU	19-May-2022	204.77	39.78	26-Apr-2022
	CMP 51D	Monitoring Well	MAZ_UTRAU	05-Dec-2022	203.61	40.94	NS
	CMP 52C	Monitoring Well	MAZ_UTRAU	23-May-2022	209.56	104.14	26-Apr-2022
	CMP 52C	Monitoring Well	MAZ_UTRAU	05-Dec-2022	209.24	104.46	NS
	CMP 55C	Monitoring Well	MAZ_UTRAU	18-May-2022	196.21	29.24	26-Apr-2022
	CMP 55C	Monitoring Well	MAZ_UTRAU	05-Dec-2022	196.05	29.4	NS
	CMP 56D	Piezometer Well	MAZ_UTRAU	16-May-2022	202.15	19.73	26-Apr-2022
	CMP 56D	Piezometer Well	MAZ_UTRAU	22-Nov-2022	201.58	20.3	NS
	CMP 57D	Piezometer Well	MAZ_UTRAU	16-May-2022	203.93	24.05	26-Apr-2022
	CMP 57D	Piezometer Well	MAZ_UTRAU	22-Nov-2022	203.18	24.8	NS
	CMP059C	Monitoring Well	MAZ_UTRAU	23-May-2022	209.69	105.45	26-Apr-2022
	CMP059C	Monitoring Well	MAZ_UTRAU	07-Dec-2022	209.15	105.99	NS
	CMP062C	Monitoring Well	MAZ_UTRAU	16-May-2022	223.51	64.53	26-Apr-2022
	CMP063C	Monitoring Well	MAZ_UTRAU	16-May-2022	205.28	75.88	NS
	CMP063C	Monitoring Well	MAZ_UTRAU	05-Dec-2022	205.26	75.9	NS
	CMP065BU	Monitoring Well	MAZ_UTRAU	23-May-2022	206.13	48.8	26-Apr-2022
	CMP065BU	Monitoring Well	MAZ_UTRAU	07-Dec-2022	205.43	49.5	26-Apr-2022
	CMP 8B	Monitoring Well	LAZ_UTRAU	10-May-2022	197.7	32	26-Apr-2022
	CMP 8B	Monitoring Well	LAZ_UTRAU	30-Nov-2022	197.3	32.4	NS
	CMP 10B	Monitoring Well	LAZ_UTRAU	10-May-2022	193.9	117	26-Apr-2022
	CMP 10B	Monitoring Well	LAZ_UTRAU	30-Nov-2022	193.72	117.18	NS
	CMP 10C	Monitoring Well	LAZ_UTRAU	20-Jun-2022	197.1	115	26-Apr-2022
	CMP 10C	Monitoring Well	LAZ_UTRAU	06-Dec-2022	197.1	115	NS
	CMP 11B	Monitoring Well	LAZ_UTRAU	10-May-2022	192.67	117.63	26-Apr-2022
	CMP 11B	Monitoring Well	LAZ_UTRAU	05-Dec-2022	193	117.3	NS
	CMP 12B	Monitoring Well	LAZ_UTRAU	10-May-2022	193.55	90.55	26-Apr-2022
	CMP 12B	Monitoring Well	LAZ_UTRAU	30-Nov-2022	193.5	90.6	NS
	CMP 13B	Monitoring Well	LAZ_UTRAU	10-May-2022	193.74	95.56	26-Apr-2022
	CMP 13B	Monitoring Well	LAZ_UTRAU	30-Nov-2022	192.8	96.5	NS
	CMP 14B	Piezometer Well	LAZ_UTRAU	22-Nov-2022	193.28	71.32	26-Apr-2022
	CMP 30B	Monitoring Well	LAZ_UTRAU	10-May-2022	193.83	95.17	26-Apr-2022
	CMP 30B	Monitoring Well	LAZ_UTRAU	30-Nov-2022	193.75	95.25	NS
	CMP 31B	Monitoring Well	LAZ_UTRAU	10-May-2022	193.47	64.87	26-Apr-2022
	CMP 31B	Monitoring Well	LAZ_UTRAU	30-Nov-2022	193.34	65	NS
	CMP 32B	Monitoring Well	LAZ_UTRAU	10-May-2022	194.1	60	26-Apr-2022
	CMP 32C	Monitoring Well	LAZ_UTRAU	10-May-2022	194.24	60.26	26-Apr-2022
	CMP 32C	Monitoring Well	LAZ_UTRAU	05-Dec-2022	194.15	60.35	NS
	CMP 33D	Monitoring Well	LAZ_UTRAU	10-May-2022	195.15	50.95	26-Apr-2022
	CMP 33D	Monitoring Well	LAZ_UTRAU	30-Nov-2022	194.59	51.51	NS
	CMP035B	Monitoring Well	LAZ_UTRAU	24-May-2022	194.27	119.3	NS
	CMP035B	Monitoring Well	LAZ_UTRAU	30-Nov-2022	193.67	119.9	NS
	CMP 50B	Monitoring Well	LAZ_UTRAU	11-May-2022	193.74	88.5	26-Apr-2022
	CMP 50B	Monitoring Well	LAZ_UTRAU	05-Dec-2022	193.34	88.9	NS
	CMP 52BU	Monitoring Well	LAZ_UTRAU	19-May-2022	194.84	118.86	26-Apr-2022

LAZ	CMP 52BU	Monitoring Well	LAZ_UTRAU	05-Dec-2022	194.59	119.11	NS
	CMP 52BL	Monitoring Well	LAZ_UTRAU	11-May-2022	195.05	119.7	26-Apr-2022
	CMP 52BL	Monitoring Well	LAZ_UTRAU	13-Feb-2023	195.48	119.27	NS
	CMP 54C	Monitoring Well	LAZ_UTRAU	19-May-2022	194.43	69.98	26-Apr-2022
	CMP 54C	Monitoring Well	LAZ_UTRAU	05-Dec-2022	193.69	70.72	NS
	CMP055B	Monitoring Well	LAZ_UTRAU	18-May-2022	196.01	29.6	26-Apr-2022
	CMP055B	Monitoring Well	LAZ_UTRAU	05-Dec-2022	195.98	29.63	NS
	CMP 56B	Piezometer Well	LAZ_UTRAU	16-May-2022	202.51	19.57	26-Apr-2022
	CMP 56B	Piezometer Well	LAZ_UTRAU	22-Nov-2022	201.98	20.1	NS
	CMP 57B	Piezometer Well	LAZ_UTRAU	16-May-2022	204.1	23.93	26-Apr-2022
	CMP 57B	Piezometer Well	LAZ_UTRAU	22-Nov-2022	203.43	24.6	NS
	CMP058B	Monitoring Well	LAZ_UTRAU	23-May-2022	195.5	122.3	26-Apr-2022
	CMP058B	Monitoring Well	LAZ_UTRAU	05-Dec-2022	195.45	122.35	NS
	CMP060B	Monitoring Well	LAZ_UTRAU	19-May-2022	193.47	47.51	26-Apr-2022
	CMP060B	Monitoring Well	LAZ_UTRAU	07-Dec-2022	193.38	47.6	NS
	CMP061B	Monitoring Well	LAZ_UTRAU	19-May-2022	193.74	36.47	26-Apr-2022
	CMP061B	Monitoring Well	LAZ_UTRAU	05-Dec-2022	193.71	36.5	NS
	CMP062B	Monitoring Well	LAZ_UTRAU	16-May-2022	198.78	89.76	26-Apr-2022
	CMP063B	Monitoring Well	LAZ_UTRAU	16-May-2022	195.33	86.1	NS
	CMP063B	Monitoring Well	LAZ_UTRAU	05-Dec-2022	195.23	86.2	NS
	CMP064BU	Monitoring Well	LAZ_UTRAU	24-May-2022	198.66	28.62	26-Apr-2022
	CMP064BU	Monitoring Well	LAZ_UTRAU	20-Dec-2022	198.29	28.99	26-Apr-2022
	CMP064B	Monitoring Well	LAZ_UTRAU	19-May-2022	200.07	26.8	26-Apr-2022
	CMP064B	Monitoring Well	LAZ_UTRAU	07-Dec-2022	199.87	27	26-Apr-2022
	CMP065B	Monitoring Well	LAZ_UTRAU	19-May-2022	193.9	61	26-Apr-2022
	CMP065B	Monitoring Well	LAZ_UTRAU	07-Dec-2022	193.4	61.5	26-Apr-2022
	CMP066B	Monitoring Well	LAZ_UTRAU	16-May-2022	199.08	16.18	NS
	CMP066B	Monitoring Well	LAZ_UTRAU	05-Dec-2022	198.75	16.51	NS
	CMP067B	Monitoring Well	LAZ_UTRAU	16-May-2022	195.8	13.39	NS
	CMP067B	Monitoring Well	LAZ_UTRAU	05-Dec-2022	195.58	13.61	NS
GA	CMP 8A	Monitoring Well	GAU	10-May-2022	181.4	48.4	26-Apr-2022
	CMP 8A	Monitoring Well	GAU	22-Nov-2022	180.28	49.52	NS
	CMP010A	Monitoring Well	GAU	10-May-2022	181.11	131.07	26-Apr-2022
	CMP010A	Monitoring Well	GAU	05-Dec-2022	179.98	132.2	NS
	CMP011A	Monitoring Well	GAU	23-May-2022	180.46	131.6	NS
	CMP 12A	Monitoring Well	GAU	10-May-2022	181.12	103.08	26-Apr-2022
	CMP 12A	Monitoring Well	GAU	30-Nov-2022	180	104.2	NS
	CMP 15A	Monitoring Well	GAU	10-May-2022	179.7	96.9	26-Apr-2022
	CMP 15A	Monitoring Well	GAU	22-Nov-2022	177.69	98.91	NS
	CMP 52A	Monitoring Well	GAU	11-May-2022	181.52	133.3	26-Apr-2022
	CMP 52A	Monitoring Well	GAU	22-Nov-2022	179.57	135.25	NS
	CMP055A	Monitoring Well	GAU	18-May-2022	182	44.32	26-Apr-2022
Surface Water	CMP-SW-06	Surface Water		17-May-2022			
	CMP-SW-06	Surface Water		13-Dec-2022			
	CMP-SW-07	Surface Water		17-May-2022			
	CMP-SW-07	Surface Water		13-Dec-2022			
	CMP-SW-08	Surface Water		17-May-2022			
	CMP-SW-08	Surface Water		13-Dec-2022			
	CMP-SW-09	Surface Water		17-May-2022			
	CMP-SW-09	Surface Water		13-Dec-2022			
	CMP-SW-10	Surface Water		17-May-2022			
	CMP-SW-10	Surface Water		13-Dec-2022			
	CMP-SW-20	Surface Water		17-May-2022			
	CMP-SW-20	Surface Water		13-Dec-2022			
	CMP-SW-21	Surface Water		17-May-2022			
	CMP-SW-21	Surface Water		13-Dec-2022			
	CMP-SW-22	Surface Water		17-May-2022			
	CMP-SW-22	Surface Water		13-Dec-2022			

SYNCHRONOUS WATER ELEVATION	WATER TEMPERATURE	PH	SPECIFIC CONDUCTANCE	OXYGEN	OXIDATION/REDUCTION POTENTIAL	TURBIDITY	TOTAL ALKALINITY (AS CACO3)	FLOW RATE	AIR TEMPERATURE	VOLUME PURGED	**Constituent**
ft	degC	pH	uS/cm	mg/L	mV	NTU	mg/L	groundwater - gal/min surface water - cf/s	degC	gal	**Unit**
											GWPS
221.2	20.8	3.8	19	NS	NS	8.5	0	0.1	27.8	1	
NS	18.3	2.9	17	NS	208	0.1	NS	0.1	17	NS	
220.8	19.7	6.1	47	10.77	218	6.8	17	0.5	26.3	7	
NS	20.5	6.1	60	7.39	195	13.9	88	0.3	18	NS	
220.3	19.3	5.6	30	8.83	158	1	4	0.5	17.3	4	
NS	20.5	5.8	37	6.57	244	2.1	2	0.5	18	NS	
214.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
212.07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
218.8	18.6	5.8	22	4.59	178	3.5	5	0	21.7	8	
NS	17.7	6.1	22	3.17	142	10.3	9	0.5	14	NS	
219.73	21.9	3.9	20	NS	NS	0.1	0	0.1	33	1	
NS	18.8	3.4	200	NS	718	6.3	NS	0.1	19	NS	
219.99	21.8	4.8	47	NS	NS	1.6	0	0.1	33.8	1	
NS	19.8	4.1	36	NS	238	0.1	NS	0.1	18	NS	
203.43	16.8	4.6	29	3.61	256	6.8	0	0.2	20.9	3	
NS	17.1	4.7	29	1.5	143.9	23	0	0.1	12	NS	
200.83	16.7	4.8	31	2.15	196	3.8	0	0.2	20.8	3	
NS	16.6	4.8	25	0.4	89.4	29.6	0	0.2	12	NS	
200.21	16.4	4.8	21	3.08	277	0.7	0	0.2	22.1	2	
NS	17.5	4.6	20	3.5	160	9.8	0	0.1	12	NS	
239.57	21.4	5.1	16	8.5	233	1.7	0	0.5	30.2	10	
NS	19.1	5.4	22	7.9	223	5.6	2	0.2	23.7	5	
NS	18.1	5.9	20	4.2	194	4.3	18	0.2	15	NS	
217.91	19.3	5.8	19	4.2	239	8.1	8	0.1	12.3	1	
NS	19.6	5.3	19	2.86	251	3.1	2	0.2	15	NS	
207.63	19.3	5.7	18	4.5	223	0.9	8	0.1	17.1	1	
NS	19.7	5.3	18	3.9	271	1.1	2	0.2	14	NS	
201.7	20.1	5.1	22	5.83	202	0.7	0	1	22.2	27	
NS	21.2	5.1	23	7.07	259	1.1	0	1	18	NS	
208.45	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
201.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
208	21.1	5.1	17	3.68	266	1.8	2	0.5	22.8	9	
NS	19.9	5.4	18	7.76	271	1.2	1	0.5	19	NS	
206.2	20.3	5.6	16	3.93	226	65.4	2	0	26.7	1	

NS	18.7	5.2	16	4.93	177	250	4	0	19	NS	
198.4	16.9	4.4	23	2	94	2.1	0	0.1	19.2	4	
NS	17.4	4.5	24	1.2	134	23.7	0	0.2	11	NS	
197.81	16.9	4.4	30	11	142	38.9	0	0.1	18.8	1	
NS	16.8	4.8	20	3.9	139	14.6	0	0.1	11	NS	
196.09	17.5	4.5	21	67	168	7	0	0.1	21.9	3	
NS	17.2	4.4	21	3.97	155	28.7	0	0.1	10	NS	
192.97	17.8	4.7	25	65	111	14.6	0	0.1	20.6	4	
NS	16.4	4.4	27	1.27	185	3.6	0	0.2	113	NS	
210.55	19.1	3.5	20	NS	NS	0.1	0	0.1	25.3	1	
NS	18.6	3.2	180	NS	730	0.7	NS	0.1	19	NS	
209.18	NS	NS	NS	NS	NS	NS	NS	0.5	27.1	0	
NS	NS	NS	NS	NS	NS	NS	NS	0.5	18.2	NS	
208.86	NS	NS	NS	NS	NS	NS	NS	0.2	27.3	0	
NS	18.8	3.6	190	NS	718	2.4	NS	0.1	20	NS	
208.46	NS	NS	NS	NS	NS	NS	NS	0.5	25.8	0	
NS	NS	NS	NS	NS	NS	NS	NS	0.5	16	NS	
207.63	21.5	4.9	18	8.53	290	6.1	0	0.5	25.4	14	
NS	21.2	4.9	19	3.49	236	7.4	0	0.5	16	NS	
208.57	21.1	5.8	23	10.24	220	6.5	12	5	18	10	
NS	20.3	6.1	43	2.3	172	4.9	12	0.5	15.8	NS	
204.94	20	5.9	39	8.27	244	2.6	3	1	27.9	32	
NS	20.1	5.9	40	7.34	233	1.6	11	1	13	NS	
209.9	21.5	5.6	20	1.94	286	27.9	9	0	24.4	2	
NS	18	5.7	18	11.17	268	38.4	6	NS	13	NS	
196.64	20.2	5.4	29	7.07	208	0.7	7	0.5	34.5	6	
NS	19.1	5.4	28	9.96	252	2.2	6	0.5	15	NS	
202.47	18.8	7	130	2.96	218	15	58	0.2	30.1	12	
NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
204.27	19.6	7.1	150	5.8	88	0.3	64	0.5	33	12	
NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
210.14	21	5.8	25	11.91	122	3.4	13	0.2	24.3	3	
NS	20.1	5.4	25	3.73	153	6.7	4	0.2	22	NS	
223.44	20.8	5.3	26	7.25	250	0.5	0	0.2	29.1	12	
NS	19.2	5.9	39	6.7	188	1.3	3	0.2	25.6	1	
NS	17.9	6.4	41	4.5	178	1.9	20	0.2	14	NS	
206.46	18.3	5.1	20	8.17	277	4.5	0	0.1	24	2	
206.46	18.1	5.9	27	4.1	205	6.4	28	0.1	23	NS	
197.8	18.6	6.3	103	4.7	230	1.8	42	2	24.9	56	
NS	18.7	7.2	106	4.1	148	1.6	28	2	20	NS	
194.5	19.7	7.4	186	3.15	50	0.3	85	2	21.7	74	
NS	19.5	7.6	193	7.14	226	0.7	77	2	17	NS	
198.5	19.5	5.2	100	NS	NS	0.1	0	0.1	26.9	1	
NS	18.4	5.6	106	NS	179	0.1	NS	0.1	18	NS	
194.3	19.4	7.4	191	2.06	306	34.2	88	3	26.2	187	
NS	19.3	7	188	2.89	182	4	73	3	15	NS	
193.9	19.7	7.4	183	2.63	215	0.4	80	1.5	22.2	60	
NS	19.5	7.5	189	7.39	195	0.3	88	1.5	18	NS	
194	19.4	12.8	3713	1.64	-61	3.2	975	0.2	27.4	2	
NS	19.3	12	2479	5.59	55	14.8	542	0.2	17	NS	
193.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
194.2	19.5	6.6	151	2.26	181	1.3	65	1	15	32	
NS	19.5	6.8	153	4.39	240	0.6	31	1	20	NS	
193.84	19.9	6.8	173	3.94	121	1.5	82	1	26.1	27	
NS	18.4	6.7	172	4.6	151	0.6	24	1	17	NS	
194.3	20.9	5.8	85	2.86	181	6.3	11	1	26.1	34	
194.6	19.8	6.7	129	8.06	93	2	73	0.2	25.3	4	
NS	21.3	7	153	10.1	172	1.5	53	0.2	12	NS	
194.8	21.5	4.9	18	2.36	237	0.9	0	0.5	26.3	8	
NS	19.5	5.2	17	10.08	263	0.6	0	0.5	18	NS	
NS	20.1	6.6	609	1.76	88	2.1	71	0.2	22.7	2	
NS	20.2	6.1	579	4.2	191	4.4	22	0.2	17	NS	
194.09	20.8	6.7	209	11.18	194	0.9	34	0.5	17.8	11	
NS	19.5	7	205	2.83	146	1	42	0.5	15	NS	
195.18	20.9	6.8	138	8.36	202	1.6	58	0.5	30.2	4	

NS	21.2	6.9	153	6.63	178	0.8	54	0.5	15	NS	
195.45	20.5	6.2	180	13.2	224	1.9	31	1	20	38	
NS	17.7	7	181	7.55	183	1.4	49	1	3	NS	
194.82	18.9	5.9	24	7.14	229	4.9	2	0.3	32.2	4	
NS	20.6	5.6	27	8.38	222	3.9	5	0.3	16	NS	
196.61	18	7.5	208	5.58	2	0.5	103	0.2	33.7	1	
NS	17.7	7.5	206	8.01	234	1.3	66	0.2	14	NS	
202.89	22.2	6.5	101	2.56	244	1	36	0.2	28.4	26	
NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
204.42	19.2	6.2	51	8.25	125	3.5	6	1	32.1	26	
NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
195.8	23.8	6.2	25	3.18	274	3.3	18	0.2	24.9	4	
NS	17.6	5.3	48	3.08	199	5.1	3	0.2	15	NS	
193.78	20.2	7.8	187	8.51	254	0.3	83	0.5	29.5	10	
NS	17.8	6.4	189	4.3	198	0.6	42	0.5	15	NS	
194.11	18.9	6.3	116	4.52	234	0.3	50	1	25.9	24	
NS	17.8	6.6	122	4.7	192	0.6	24	1	11	NS	
198.97	21.3	5.4	24	5.71	204	0.9	5	0.5	25.7	21	
NS	19.4	7.4	217	7.51	177	0.9	92	1	21.5	23	
NS	18.4	6.7	194	4.4	191	0.8	32	1	12	NS	
198.97	NS	NS	NS	NS	NS	NS	NS	0.2	23.6	0	
198.97	NS	NS	NS	NS	NS	NS	NS	0.2	5	NS	
200.6	17.9	6.9	173	4.2	221	1.6	68	0.2	25.2	2	
200.6	17.7	6.8	175	4.4	195	1.3	38	0.2	16	NS	
194.04	18.2	7.4	200	4.8	211	218	96	0.2	28.9	6	
194.04	18	6.9	201	4.6	192	211	64	0.2	19	NS	
NS	18.6	7.1	143	83.5	91.1	1	60	0.5	21.3	1	
NS	18.1	7.4	144	8.2	116	1.4	79	0.2	14	NS	
NS	18.7	7.6	138	89.3	108.7	0.6	57	0.2	22.1	2	
NS	18.2	7.3	138	8.25	140	0.8	70	0.2	13	NS	
181.5	18.7	6	116	4.7	203	0.5	35	4	20.7	222	
NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
181.18	18.5	6.1	78	2.31	72	0.6	13	0.2	12.2	2	
NS	19.3	5.9	70	3.01	207	1	9	0.2	14	NS	
NS	19.3	7.5	147	5.23	-41	5	52	0.2	22.8	4	
181.3	18.6	11.1	187	1.69	47	1.1	58	0.2	13.1	2	
NS	18.6	7.5	74	4.4	130	1.1	42	0.2	18	NS	
179.8	19.2	6.5	95	4.2	45	1.3	25	4	26.4	220	
NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
181.64	20.5	5.9	109	3.58	192	1.1	21	1	19.1	40	
NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
182.28	19.5	6.7	159	3.28	-59	3.2	60	0.2	32.2	2	
	19	5.7	48	86	199.8	4.9	14	0.36	20.6		
	11.3	5.8	34	9.58	127	3.1	5	0.832	8.3		
	19	6	31	81	196	3.9	13	0.38	21.9		
	11.4	5.8	33	9.41	124	2.7	5	0.607	6.8		
	19	5.9	38	89	222	3.9	13	0.17	23.5		
	11	6.7	40	9.07	184	2.8	10	0.364	5.1		
	19.2	6	38	85	211	3.9	14	0.49	22.2		
	10.9	7	35	8.81	153	2.1	13	0.833	5.9		
	19.3	6.2	39	84	206	3.9	14	0.28	23.1		
	11.2	5.9	35	9.7	133	4.2	3	0.585	7.8		
	19.5	4.6	25	81.9	208	4.3	0	0.1	18.8		
	11.6	5.5	25	12.1	225	3.3	1	0.236	7.2		
	19.4	4.5	24	75	244	4.5	0	0.07	19.2		
	11.5	5.4	25	8.32	229	2.9	1	0.153	7.6		
	19.7	6	39	85.6	177	3.4	3	0.24	22		
	11.8	6.3	36	9.53	195	2.6	7	0.522	6.9		

Field Conditions

X	well went dry during purging; samples collected after well recovered; measurements obtained
MS	Mistakenly not sampled

	CMP MNA Analyte Suite								
	Pesticides	Volatiles							
FIELD CONDITIONS	LINDANE	TETRACHLOROETHYLENE (PCE)	TRICHLOROETHYLENE (TCE)	1,1-DICHLOROETHYLENE	CIS-1,2-DICHLOROETHYLENE	TRANS-1,2-DICHLOROETHYLENE	CHLOROETHENE (VINYL CHLORIDE)	CARBON TETRACHLORIDE	CHLOROFORM
	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	0.2	5	5	7	70	100	2	5	80
	<EQL (0.0209)	2.21	1.56	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	2.54	<EQL (1)
	<EQL (0.02)	6.69	3.35	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	4.9	[0.45]
X	<EQL (0.02)	16.1	114	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	1.49	3.19
	NS	16.5	132	<EQL (1)	[0.35]	<EQL (1)	<EQL (1)	1.15	3.71
	<EQL (0.02)	11.1	1.26	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	7.11	[0.97]	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	NS	NS	NS	NS	NS	NS	NS	NS
	NS	NS	NS	NS	NS	NS	NS	NS	NS
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	0.0882	331	3.27	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	0.0611	NS	NS	NS	NS	NS	NS	NS	NS
	5.61	1550	1090	<EQL (1)	2.1	<EQL (1)	<EQL (1)	23.6	41.6
	8.54	2700	1860	<EQL (1)	2.67	<EQL (1)	<EQL (1)	44	59.5
	NS	1.28	[0.52]	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	14.9	9.15	<EQL (1)	1.16	<EQL (1)	<EQL (1)	[0.41]	1.12
	NS	3.7	2.28	<EQL (1)	[0.81]	<EQL (1)	<EQL (1)	<EQL (1)	[0.41]
	NS	46	18	<EQL (1)	4.16	<EQL (1)	<EQL (1)	[0.41]	4.65
	NS	41.9	30.3	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	1.52	1.87
	NS	40.9	30.4	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	1.78	2.21
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
X	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	<EQL (0.02)	111	15.9	<EQL (1)	[0.43]	<EQL (1)	<EQL (1)	[0.6]	<EQL (1)
	<EQL (0.02)	94.2	18.2	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	[0.51]	[0.34]
	NS	203	60.8	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	5.45	2.64
	NS	63.3	37.4	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	[0.98]	2.16
	NS	74.7	21.4	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	1.63	[0.83]
	NS	77.5	20.3	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	1.38	[0.73]
	NS	NS	NS	NS	NS	NS	NS	NS	NS
	NS	NS	NS	NS	NS	NS	NS	NS	NS
	NS	1.89	1.85	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	1.78	1.8	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	4.77	1.54	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)

	NS	4.71	1.58	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	7.06	7.64	<EQL (1)	2.88	<EQL (1)	<EQL (1)	<EQL (1)	[0.84]
	NS	18.5	10.7	<EQL (1)	3.32	<EQL (1)	<EQL (1)	<EQL (1)	1
X	NS	1.08	2.1	<EQL (1)	1.12	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	1	1.22	<EQL (1)	1.37	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	<EQL (0.02)	1.91	2.74	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	4.77	2.46	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	<EQL (0.02)	<EQL (1)	1.15	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	0.0771	71.5	11.2	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	[0.38]
	0.0683	120	14.9	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	[0.43]
	0.157	267	63.9	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	[0.53]
	0.155	435	68.3	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	[0.35]	[0.67]
	0.184	NS	NS	NS	NS	NS	NS	NS	NS
	0.189	NS	NS	NS	NS	NS	NS	NS	NS
	0.191	557	25	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	[0.35]
	0.235	950	40.8	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	[0.44]	[0.67]
	NS	268	106	<EQL (5)	<EQL (5)	<EQL (5)	<EQL (5)	<EQL (5)	<EQL (5)
	NS	213	81	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	[0.48]
	NS	1.97	[0.62]	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	1.99	[0.51]	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	3.42	[0.73]	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	2.2	[0.65]	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	0.0608	136	120	<EQL (2)	<EQL (2)	<EQL (2)	<EQL (2)	[0.94]	[1.6]
	NS	80.6	76.9	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	[0.59]	1.14
	NS	[0.66]	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	[0.89]	[0.37]	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	NS	NS	NS	NS	NS	NS	NS	NS
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	NS	NS	NS	NS	NS	NS	NS	NS
	0.129	253	105	<EQL (4)	<EQL (4)	<EQL (4)	<EQL (4)	<EQL (4)	<EQL (4)
	0.165	517	192	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	[0.67]	1.08
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
X	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	<EQL (0.02)	23.9	7.29	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	[0.37]
	<EQL (0.02)	16.7	5.15	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	5.31	1.84	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	6.08	2.15	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	<EQL (0.02)	12	15.2	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	[0.37]
	<EQL (0.02)	13.8	16.3	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	[0.42]
	0.242	90.2	38.9	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	3.53	3.22
	0.232	150	62.3	<EQL (1)	[0.93]	<EQL (1)	<EQL (1)	6.13	4.13
	<EQL (0.02)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	<EQL (0.02)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	47.8	20.7	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	48.1	20.7	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	11.3	7.29	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	10	5.65	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	NS	NS	NS	NS	NS	NS	NS	NS
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	[0.34]	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	269	119	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	[0.37]	[0.64]
	NS	307	135	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	[0.42]	[0.61]
	NS	2.42	[0.6]	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	1.83	[0.54]	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	<EQL (0.02)	20.5	33.6	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	1.06
	NS	3.3	6.52	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	[0.46]
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	198	188	<EQL (4)	<EQL (4)	<EQL (4)	<EQL (4)	<EQL (4)	<EQL (4)

	NS	129	136	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	[0.77]	[0.8]
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
X	NS	310	127	<EQL (5)	<EQL (5)	<EQL (5)	<EQL (5)	<EQL (5)	<EQL (5)
	NS	175	77.4	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	[0.35]
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	NS	NS	NS	NS	NS	NS	NS	NS
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	NS	NS	NS	NS	NS	NS	NS	NS
	<EQL (0.02)	10.6	26.4	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	[0.47]	1.23
	<EQL (0.02)	22.9	24.9	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	[0.52]	1.31
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	0.195	30.8	23.5	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	3.3	3.56
	0.175	130	81.3	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	5.84	4.29
	NS	12.9	4.48	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	3.08	[0.65]	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	[0.66]	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	[0.48]	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	NS	NS	NS	NS	NS	NS	NS	NS
	0.091	71.6	27.1	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	2.06	1.7
	0.0884	67.8	27.2	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	1.68	2.06
MS	<EQL (0.02)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	1.56	[0.82]	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	1.83	1.27	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	[0.34]	<EQL (1)	<EQL (1)
	NS	NS	NS	NS	NS	NS	NS	NS	NS
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	NS	NS	NS	NS	NS	NS	NS	NS
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	[0.59]	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
	NS	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)

Explanation

[##]	EPA Functional Guideline Code of 'J' was applied to the result, indicating an estimated qua
<EQL(##)	Constituent was below detection. The sample-specific Estimated Quantitation Limit is in pa
🟥	Result exceeds applicable limit.
REJ	Result Rejected.

	Result is less than the applicable limit and without EPA Functional Guidline qualifiers.
NS	Requested to be sampled but was not. See comments as to why not.
Blue Text	Not a required sample analysis.

DICHLOROMETHANE (METHYLENE CHLORIDE)	BROMODICHLOROMETHANE	1,1,2-TRICHLOROETHANE	1,4-DIOXANE (Method EPA8260DSIM)	1,4-DIOXANE (Method EPA522)
ug/L	ug/L	ug/L	ug/L	ug/L
5	100	5	0.46	0.46
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
[0.58]	<EQL (1)	<EQL (1)	<EQL (3)	1.16
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	1.78
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
[2.19]	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
NS	NS	NS	NS	NS
NS	NS	NS	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
NS	NS	NS	NS	NS
<EQL (5)	6.53	[0.59]	NS	NS
[1.06]	10.9	[0.67]	84	87.1
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	11	9.97
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	21	18.6
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	5.9	4.3
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
[1.15]	<EQL (1)	<EQL (1)	<EQL (3)	[0.152]
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
[1.3]	<EQL (1)	<EQL (1)	<EQL (3)	0.525
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
[1.2]	<EQL (1)	<EQL (1)	<EQL (3)	0.941
NS	NS	NS	NS	NS
NS	NS	NS	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	2.17
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS

<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	2.07
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	0.431
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	[0.144]
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
[0.66]	<EQL (1)	<EQL (1)	7.4	6.9
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
[0.67]	<EQL (1)	<EQL (1)	11	9.89
NS	NS	NS	NS	NS
NS	NS	NS	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	15	14.3
<EQL (25)	<EQL (5)	<EQL (5)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	2.24
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
[1.06]	<EQL (2)	<EQL (2)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	14	12
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
NS	NS	NS	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
NS	NS	NS	NS	NS
[2.52]	<EQL (4)	<EQL (4)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	8.7	8.38
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
[0.64]	<EQL (1)	<EQL (1)	NS	NS
[0.6]	<EQL (1)	<EQL (1)	<EQL (3)	0.222
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
[1.03]	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
[1.03]	<EQL (1)	<EQL (1)	<EQL (3)	0.727
<EQL (5)	[0.49]	<EQL (1)	NS	NS
[0.94]	[0.57]	<EQL (1)	27	23.6
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
[2.36]	<EQL (1)	<EQL (1)	<EQL (3)	1.05
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
[2.16]	<EQL (1)	<EQL (1)	<EQL (3)	0.552
NS	NS	NS	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	[0.5]	<EQL (1)	NS	NS
<EQL (5)	[0.46]	<EQL (1)	<EQL (3)	2.86
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
[0.99]	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	5	4.08
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (20)	<EQL (4)	<EQL (4)	NS	NS

<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	0.803
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (25)	<EQL (5)	<EQL (5)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	1.65
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
NS	NS	NS	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
NS	NS	NS	NS	NS
[0.55]	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	14	11.7
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
[0.63]	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (5)	[0.76]	<EQL (1)	NS	NS
<EQL (5)	[0.9]	<EQL (1)	13	12.3
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
[0.59]	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
[0.57]	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
NS	NS	NS	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	8.2	6.63
[0.89]	<EQL (1)	<EQL (1)	8.7	8.05
[0.6]	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	0.472
[2.3]	<EQL (1)	<EQL (1)	<EQL (3)	0.501
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
NS	NS	NS	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
NS	NS	NS	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	[0.122]
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	[0.161]
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	<EQL (0.2)
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	[0.106]
<EQL (5)	<EQL (1)	<EQL (1)	NS	NS
<EQL (5)	<EQL (1)	<EQL (1)	<EQL (3)	[0.157]

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Table 4. CMP Pits OU PCE Max Results from 2008 and 2022 (µg/L)

Station	Aquifer	2008 Max (Pre ERH/SVE)	2022 Max
CMP 10D	TZ	620	6.69
CMP 11D	TZ	421	16.5
CMP 13D	TZ	1.71	11.1
CMP 14D	TZ	NS	NS
CMP 14DU	TZ	NS	NS
CMP 30D	TZ	<EQL(1)	<EQL(1)
CMP 34D	TZ	49.4	331
CMP 35D	TZ	122	2,700
CMP 36D	TZ	56.9	14.9
CMP 37D	TZ	358	46
CMP 38D	TZ	48.2	41.9
CMP062D	TZ	<EQL(1)	<EQL(1)
CMP063D	TZ	<EQL(1)	<EQL(1)
CMB 15I	MAZ	437	111
CMB 24I	MAZ	20.8	203
CMP 8	MAZ	299	77.5
CMP 14CR	MAZ	<EQL(1)	NS
CMP 15B	MAZ	<EQL(1)	NS
CMP 30C	MAZ	3.78	1.89
CMP 31C	MAZ	NS - Dry	4.77
CMP 39D	MAZ	71.7	18.5
CMP 40D	MAZ	135	1.08
CMP 41D	MAZ	5.48	4.77
CMP 43D	MAZ	<EQL(1)	<EQL(1)
CMP 44D	MAZ	312	120
CMP 45D	MAZ	973	435
CMP 46D	MAZ	NDD(434)	NA
CMP 47D	MAZ	NDD(845)	950
CMP 48D	MAZ	601	268
CMP 50D	MAZ	8.62	1.99
CMP 51D	MAZ	13.4	3.42
CMP 52C	MAZ	NS	136
CMP 55C	MAZ	<EQL(1)	NDD(.89)
CMP 56D	MAZ	NS	<EQL(1)
CMP 57D	MAZ	NS	<EQL(1)
CMP059C	MAZ	78.5	517
CMP062C	MAZ	<EQL(1)	<EQL(1)
CMP063C	MAZ	<EQL(1)	<EQL(1)
CMP065BU	MAZ	NS	23.9
CMP 8B	LAZ	<EQL(1)	6.08
CMP 10B	LAZ	<EQL(1)	13.8
CMP 10C	LAZ	466	150
CMP 11B	LAZ	<EQL(1)	<EQL(1)
CMP 12B	LAZ	46.3	48.1
CMP 13B	LAZ	1.25	11.3
CMP 14B	LAZ	<EQL(1)	NS
CMP 30B	LAZ	<EQL(1)	<EQL(1)
CMP 31B	LAZ	<EQL(1)	NDD(0.34)
CMP 32C	LAZ	110	307
CMP 33D	LAZ	16.4	2.42
CMP035B	LAZ	NS	20.5
CMP 50B	LAZ	<EQL(1)	<EQL(1)
CMP 52BU	LAZ	35.1	198
CMP 52BL	LAZ	<EQL(1)	<EQL(1)
CMP 54C	LAZ	NDD(196)	310
CMP055B	LAZ	NS	<EQL(1)
CMP 56B	LAZ	NS	<EQL(1)
CMP 57B	LAZ	NS	<EQL(1)
CMP058B	LAZ	6.51	22.9
CMP060B	LAZ	<EQL(1)	<EQL(1)
CMP061B	LAZ	<EQL(1)	<EQL(1)
CMP062B	LAZ	<EQL(1)	<EQL(1)
CMP063B	LAZ	<EQL(1)	<EQL(1)
CMP064BU	LAZ	NS	130
CMP064B	LAZ	NS	12.9
CMP065B	LAZ	NS	3.08
CMP066B	LAZ	NS	<EQL(1)
CMP067B	LAZ	NS	<EQL(1)
CMP 8A	GA	<EQL(1)	NDD(0.48)
CMP010A	GA	NS	71.6
CMP011A	GA	NS	<EQL(1)
CMP 12A	GA	NDD(0.679)	1.83
CMP 15A	GA	<EQL(1)	<EQL(1)
CMP 52A	GA	<EQL(1)	<EQL(1)
CMP055A	GA	NS	<EQL(1)
CMP-SW-06	SW	<EQL(1)	<EQL(1)
CMP-SW-07	SW	NDD(0.63)	<EQL(1)
CMP-SW-08	SW	<EQL(1)	<EQL(1)
CMP-SW-09	SW	<EQL(1)	NDD(0.59)
CMP-SW-10	SW	1.38	<EQL(1)
CMP-SW-20	SW	NS	<EQL(1)
CMP-SW-21	SW	NS	<EQL(1)
CMP-SW-22	SW	NS	<EQL(1)

EQL=Sample Quantitation Limit (non-detect result); NDD=Not Decision Data (estimated result); NS = Not sampled; NA= Not analyzed for VOCs

Table 5. CMP Pits OU Lindane Max Results from 2008 and 2022 (µg/L)

Station	Aquifer	2008 Max (Pre ERH/SVE)	2022 Max
CMP 10D	TZ	0.185	<EQL (0.02)
CMP 11D	TZ	0.0509	<EQL (0.02)
CMP 13D	TZ	<EQL(0.0225)	NS
CMP 14D	TZ	NS	NS
CMP 14DU	TZ	NS	NS
CMP 30D	TZ	<EQL(0.0222)	NA
CMP 34D	TZ	0.345	0.0882
CMP 35D	TZ	1.73	8.54
CMP 36D	TZ	<EQL(0.0217)	NA
CMP 37D	TZ	<EQL(0.0217)	NA
CMP 38D	TZ	<EQL(0.0217)	NA
CMP062D	TZ	<EQL(1)	NA
CMP063D	TZ	<EQL(1)	NA
CMB 15I	MAZ	0.165	<EQL (0.02)
CMB 24I	MAZ	NDD(0.0192)	NA
CMP 8	MAZ	NDD(0.0192)	NA
CMP 14CR	MAZ	<EQL(0.0222)	NS
CMP 15B	MAZ	<EQL(0.0213)	NS
CMP 30C	MAZ	<EQL(0.0213)	NA
CMP 31C	MAZ	NS - Dry	NA
CMP 39D	MAZ	<EQL(0.0217)	NA
CMP 40D	MAZ	<EQL(0.0217)	NA
CMP 41D	MAZ	<EQL(0.0227)	<EQL (0.02)
CMP 43D	MAZ	<EQL(1)	<EQL (0.02)
CMP 44D	MAZ	0.474	0.0771
CMP 45D	MAZ	0.484	0.157
CMP 46D	MAZ	0.704	0.189
CMP 47D	MAZ	0.36	0.235
CMP 48D	MAZ	0.157	NA
CMP 50D	MAZ	<EQL(0.0217)	NA
CMP 51D	MAZ	<EQL(0.0217)	NA
CMP 52C	MAZ	NS	0.0608
CMP 55C	MAZ	<EQL(0.0213)	NA
CMP 56D	MAZ	NS	NA
CMP 57D	MAZ	NS	NA
CMP059C	MAZ	0.362	0.165
CMP062C	MAZ	<EQL(0.0213)	NA
CMP063C	MAZ	<EQL(0.0217)	NA
CMP065BU	MAZ	NS	<EQL(0.02)
CMP 8B	LAZ	<EQL(0.0217)	NA
CMP 10B	LAZ	<EQL(0.0217)	<EQL(0.02)
CMP 10C	LAZ	0.126	0.242
CMP 11B	LAZ	<EQL(0.02)	<EQL(0.02)
CMP 12B	LAZ	NDD(0.0184)	NA
CMP 13B	LAZ	<EQL(0.0227)	NA
CMP 14B	LAZ	<EQL(0.0222)	NS
CMP 30B	LAZ	<EQL(0.0213)	NA
CMP 31B	LAZ	<EQL(0.0213)	NA
CMP 32C	LAZ	<EQL(0.0217)	NA
CMP 33D	LAZ	<EQL(0.0217)	NA
CMP035B	LAZ	NS	<EQL(0.02)
CMP 50B	LAZ	<EQL(0.0222)	NA
CMP 52BU	LAZ	<EQL(0.0227)	NA
CMP 52BL	LAZ	<EQL(0.0217)	NA
CMP 54C	LAZ	<EQL(0.0202)	NA
CMP055B	LAZ	NS	NA
CMP 56B	LAZ	NS	NA
CMP 57B	LAZ	NS	NA
CMP058B	LAZ	<EQL(0.0227)	<EQL(0.02)
CMP060B	LAZ	<EQL(0.0217)	NA
CMP061B	LAZ	<EQL(0.0241)	NA
CMP062B	LAZ	<EQL(0.023)	NA
CMP063B	LAZ	<EQL(0.0217)	NA
CMP064BU	LAZ	NS	0.195
CMP064B	LAZ	NS	NA
CMP065B	LAZ	NS	NA
CMP066B	LAZ	NS	NA
CMP067B	LAZ	NS	NA
CMP 8A	GA	<EQL(0.0217)	NA
CMP010A	GA	NS	0.091
CMP011A	GA	NS	<EQL(0.02)
CMP 12A	GA	<EQL(0.0213)	NA
CMP 15A	GA	<EQL(0.0227)	NA
CMP 52A	GA	<EQL(0.0217)	NA
CMP055A	GA	NS	NA
CMP-SW-06	SW	NA	NA
CMP-SW-07	SW	NA	NA
CMP-SW-08	SW	NA	NA
CMP-SW-09	SW	NA	NA
CMP-SW-10	SW	NA	NA
CMP-SW-20	SW	NS	NA
CMP-SW-21	SW	NS	NA
CMP-SW-22	SW	NS	NA

EQL=Sample Quantitation Limit (non-detect result); NDD=Not Decision Data (estimated result); NS = Not sampled; NA= Not analyzed for lindane

Table 6. SCSU Groundwater and Surface Water Results from 2022

PEN BRANCH STATION ID	COLLECTION DATE	SAMPLE TYPE	SAMPLE LOCATION	PCE (µg/L)	TCE (µg/L)	1,1-DCE (µg/L)	cis-1,2-DCE (µg/L)	trans1,2-DCE (µg/L)	VC (µg/L)
			MCL	5	5	7	70	100	2
SCSU-CMP-4	6/9/2022	SW	15 cm Below Stream Surface	ND	ND	ND	ND	ND	ND
SCSU-CMP-4	6/9/2022	SW	15 cm Below Stream Surface	ND	ND	ND	ND	ND	ND
SCSU-CMP-4	6/9/2022	SW	15 cm Below Stream Surface	ND	ND	ND	ND	ND	ND
SCSU-CMP-4	7/19/2022	GW - Pump	65 cm Below Stream Bottom	ND	ND	ND	3.6	ND	2.7
SCSU-CMP-4	7/19/2022	GW - Pump	65 cm Below Stream Bottom	ND	ND	ND	4	ND	2.9
SCSU-CMP-4	7/19/2022	GW - Pump	65 cm Below Stream Bottom	ND	ND	ND	3.7	ND	2.7
SCSU-CMP-5B	6/9/2022	SW	15 cm Below Stream Surface	ND	ND	ND	ND	ND	ND
SCSU-CMP-5B	6/9/2022	SW	15 cm Below Stream Surface	ND	ND	ND	ND	ND	ND
SCSU-CMP-5B	6/9/2022	SW	15 cm Below Stream Surface	ND	ND	ND	ND	ND	ND
SCSU-CMP-5B	7/12/2022	GW - Pump	80 cm Below Stream Bottom	ND	ND	ND	5.1	ND	2
SCSU-CMP-5B	7/12/2022	GW - Pump	80 cm Below Stream Bottom	ND	ND	ND	5	ND	1.9
SCSU-CMP-5B	7/12/2022	GW - Pump	80 cm Below Stream Bottom	ND	ND	ND	5.3	ND	2.5
SCSU-CMP-5DB80	3/1/2022	GW - Pump	80 cm Below Stream Bottom	38	15	ND	7.2	ND	ND
SCSU-CMP-5DB80	3/1/2022	GW - Pump	80 cm Below Stream Bottom	35	14	ND	6.8	ND	ND
SCSU-CMP-5DB80	3/1/2022	GW - Pump	80 cm Below Stream Bottom	35	15	ND	6.9	ND	ND
SCSU-CMP-5DB80	3/1/2022	GW - Pump	80 cm Below Stream Bottom	37.0	15.0	ND	7.0	ND	ND
SCSU-CMP-5DB80	3/1/2022	GW - Pump	80 cm Below Stream Bottom	38.0	15.0	ND	7.3	ND	ND
SCSU-CMP-5DB80	6/9/2022	SW	15 cm Below Stream Surface	ND	ND	ND	ND	ND	ND
SCSU-CMP-5DB80	6/9/2022	SW	15 cm Below Stream Surface	ND	ND	ND	ND	ND	ND
SCSU-CMP-5DB80	6/9/2022	SW	15 cm Below Stream Surface	ND	ND	ND	ND	ND	ND
SCSU-CMP-5DB80	7/12/2022	GW - Pump	80 cm Below Stream Bottom	35	13	ND	1.8	ND	ND
SCSU-CMP-5DB80	7/12/2022	GW - Pump	80 cm Below Stream Bottom	40	15	ND	1.6	ND	ND
SCSU-CMP-5DB80	7/12/2022	GW - Pump	80 cm Below Stream Bottom	34	13	ND	1.9	ND	ND
SCSU-CMP-5DB80	7/26/2022	GW - PDB	80 cm Below Stream Bottom	13	6.8	ND	15	ND	ND
SCSU-CMP-5DB80	7/26/2022	GW - Pump	80 cm Below Stream Bottom	24	11	ND	9.6	ND	ND
SCSU-CMP-5DB80	7/26/2022	GW - Pump	80 cm Below Stream Bottom	23	12	ND	9	ND	ND
SCSU-CMP-5DB80	7/26/2022	GW - Pump	80 cm Below Stream Bottom	22	11	ND	10	ND	ND
SCSU-CMP-5DB80A	3/1/2022	GW - Pump	65 cm Below Stream Bottom	4.5	12.0	ND	28.0	ND	8.5
SCSU-CMP-5DB80A	3/1/2022	GW - Pump	65 cm Below Stream Bottom	4.7	12.0	ND	29.0	ND	8.5
SCSU-CMP-5DB80A	3/1/2022	GW - Pump	65 cm Below Stream Bottom	4.0	10.0	ND	25.0	ND	7.1
SCSU-CMP-5DB80A	3/1/2022	GW - Pump	65 cm Below Stream Bottom	4.5	11.0	ND	27.0	ND	8.0
SCSU-CMP-5DB80A	3/1/2022	GW - Pump	65 cm Below Stream Bottom	4.4	11.0	ND	27.0	ND	8.2
SCSU-CMP-5DZ3	3/1/2022	GW - Pump	80 cm Below Stream Bottom	ND	ND	ND	5.9	ND	3.4
SCSU-CMP-5DZ3	3/1/2022	GW - Pump	80 cm Below Stream Bottom	ND	ND	ND	5.6	ND	3.3
SCSU-CMP-5DZ3	3/1/2022	GW - Pump	80 cm Below Stream Bottom	ND	ND	ND	5.5	ND	2.8
SCSU-CMP-5DZ3	3/1/2022	GW - Pump	80 cm Below Stream Bottom	ND	ND	ND	6	ND	3.5
SCSU-CMP-5DZ3	3/1/2022	GW - Pump	80 cm Below Stream Bottom	ND	ND	ND	5.8	ND	3.4
SCSU-CMP-5DZ3	6/9/2022	SW	15 cm Below Stream Surface	ND	ND	ND	ND	ND	ND
SCSU-CMP-5DZ3	6/9/2022	SW	15 cm Below Stream Surface	ND	ND	ND	ND	ND	ND
SCSU-CMP-5DZ3	6/9/2022	SW	15 cm Below Stream Surface	ND	ND	ND	ND	ND	ND
SCSU-CMP-5DZ3	7/19/2022	GW - Pump	80 cm Below Stream Bottom	ND	ND	ND	ND	ND	ND
SCSU-CMP-5DZ3	7/19/2022	GW - Pump	80 cm Below Stream Bottom	ND	ND	ND	ND	ND	ND
SCSU-CMP-5DZ3	7/19/2022	GW - Pump	80 cm Below Stream Bottom	ND	ND	ND	ND	ND	ND
SCSU-CMP-5DZ3A	3/1/2022	GW - Pump	65 cm Below Stream Bottom	ND	ND	ND	5.2	ND	25.0
SCSU-CMP-5DZ3A	3/1/2022	GW - Pump	65 cm Below Stream Bottom	ND	ND	ND	5.3	ND	26.0
SCSU-CMP-5DZ3A	3/1/2022	GW - Pump	65 cm Below Stream Bottom	ND	ND	ND	5.4	ND	27.0
SCSU-CMP-5DZ3A	3/1/2022	GW - Pump	65 cm Below Stream Bottom	ND	ND	ND	5.4	ND	26.0
SCSU-CMP-5DZ3A	3/1/2022	GW - Pump	65 cm Below Stream Bottom	ND	ND	ND	5.6	ND	28
SCSU-CMP-5D1B	3/1/2022	GW - Pump	65 cm Below Stream Bottom	ND	ND	ND	8.6	ND	ND
SCSU-CMP-5D1B	3/1/2022	GW - Pump	65 cm Below Stream Bottom	ND	ND	ND	8.6	ND	ND
SCSU-CMP-5D1B	3/1/2022	GW - Pump	65 cm Below Stream Bottom	ND	ND	ND	8.4	ND	ND
SCSU-CMP-5D1B	3/1/2022	GW - Pump	65 cm Below Stream Bottom	ND	ND	ND	8.2	ND	ND
SCSU-CMP-5D1B	3/1/2022	GW - Pump	65 cm Below Stream Bottom	ND	ND	ND	8.2	ND	ND
SCSU-CMP-5D1B	6/9/2022	SW	15 cm Below Stream Surface	ND	ND	ND	ND	ND	ND
SCSU-CMP-5D1B	6/9/2022	SW	15 cm Below Stream Surface	ND	ND	ND	ND	ND	ND
SCSU-CMP-5D1B	6/9/2022	SW	15 cm Below Stream Surface	ND	ND	ND	ND	ND	ND
SCSU-CMP-5D1B	7/19/2022	GW - Pump	65 cm Below Stream Bottom	1.7	1.5	ND	13	ND	1.3
SCSU-CMP-5D1B	7/19/2022	GW - Pump	65 cm Below Stream Bottom	1.5	1.5	ND	12	ND	1.2
SCSU-CMP-5D1B	7/19/2022	GW - Pump	65 cm Below Stream Bottom	1.5	1.4	ND	13	ND	1.3
SCSU-CMP-5D2B	6/9/2022	SW	15 cm Below Stream Surface	ND	ND	ND	ND	ND	ND
SCSU-CMP-5D2B	6/9/2022	SW	15 cm Below Stream Surface	ND	ND	ND	ND	ND	ND
SCSU-CMP-5D2B	6/9/2022	SW	15 cm Below Stream Surface	ND	ND	ND	ND	ND	ND
SCSU-CMP-5D2B	7/19/2022	GW - Pump	65 cm Below Stream Bottom	ND	ND	ND	ND	ND	ND
SCSU-CMP-5D2B	7/19/2022	GW - Pump	65 cm Below Stream Bottom	ND	ND	ND	ND	ND	ND
SCSU-CMP-5D2B	7/19/2022	GW - Pump	65 cm Below Stream Bottom	ND	ND	ND	ND	ND	ND
SCSU-CMP-5G	6/9/2022	SW	15 cm Below Stream Surface	ND	ND	ND	ND	ND	ND
SCSU-CMP-5G	6/9/2022	SW	15 cm Below Stream Surface	ND	ND	ND	ND	ND	ND
SCSU-CMP-5G	6/9/2022	SW	15 cm Below Stream Surface	ND	ND	ND	ND	ND	ND
SCSU-CMP-5G	7/12/2022	GW - Pump	65 cm Below Stream Bottom	ND	ND	ND	32	ND	30
SCSU-CMP-5G	7/12/2022	GW - Pump	65 cm Below Stream Bottom	ND	ND	ND	30	ND	28
SCSU-CMP-5G	7/12/2022	GW - Pump	65 cm Below Stream Bottom	ND	ND	ND	30	ND	28

ND = not detected; detection >MCL

Table 7. SCSU Sediment Results from 2022

PEN BRANCH STATION ID	COLLECTION DATE	SAMPLE TYPE	SAMPLE LOCATION	PCE (ug/kg)	TCE (ug/kg)	1,1-DCE (ug/kg)	cis-1,2-DCE (ug/kg)	trans1,2-DCE (ug/kg)	VC (ug/kg)
SCSU-CMP-4	7/12/2022	Sediment	15 cm Below Stream Bed	ND	ND	ND	ND	ND	ND
SCSU-CMP-4	7/12/2022	Sediment	15 cm Below Stream Bed	ND	ND	ND	ND	ND	ND
SCSU-CMP-4	7/12/2022	Sediment	15 cm Below Stream Bed	ND	ND	ND	ND	ND	ND
SCSU-CMP-4	7/12/2022	Sediment	65 cm Below Stream Bed	ND	ND	ND	ND	ND	ND
SCSU-CMP-4	7/12/2022	Sediment	65 cm Below Stream Bed	ND	ND	ND	ND	ND	ND
SCSU-CMP-4	7/12/2022	Sediment	65 cm Below Stream Bed	7	ND	ND	ND	ND	ND
SCSU-CMP-5DB80	6/21/2022	Sediment	15 cm Below Stream Bed	220	32	ND	46	ND	ND
SCSU-CMP-5DB80	6/21/2022	Sediment	15 cm Below Stream Bed	190	47	ND	54	ND	ND
SCSU-CMP-5DB80	6/21/2022	Sediment	40 cm Below Stream Bed	72	8.8	ND	11	ND	ND
SCSU-CMP-5DB80	6/21/2022	Sediment	40 cm Below Stream Bed	130	19	ND	26	ND	ND
SCSU-CMP-5DB80	6/21/2022	Sediment	40 cm Below Stream Bed	170	19	ND	16	ND	ND
SCSU-CMP-5DB80	6/21/2022	Sediment	65 cm Below Stream Bed	39	7.4	ND	ND	ND	ND
SCSU-CMP-5DB80	6/21/2022	Sediment	65 cm Below Stream Bed	54	9.1	ND	ND	ND	ND
SCSU-CMP-5DB80	6/21/2022	Sediment	65 cm Below Stream Bed	39	7.7	ND	ND	ND	ND
SCSU-CMP-5DB80	12/27/2022	Sediment	15 cm Below Stream Bed	400	55	ND	11	ND	ND
SCSU-CMP-5DB80	12/27/2022	Sediment	15 cm Below Stream Bed	390	36	ND	9.4	ND	ND
SCSU-CMP-5DB80	12/27/2022	Sediment	15 cm Below Stream Bed	1100	44	ND	12	ND	ND
SCSU-CMP-5DB80	12/27/2022	Sediment	40 cm Below Stream Bed	30	ND	ND	ND	ND	ND
SCSU-CMP-5DB80	12/27/2022	Sediment	40 cm Below Stream Bed	150	20	ND	6.3	ND	ND
SCSU-CMP-5DB80	12/27/2022	Sediment	40 cm Below Stream Bed	43	8.7	ND	ND	ND	ND
SCSU-CMP-5DB80	12/27/2022	Sediment	65 cm Below Stream Bed	19	ND	ND	ND	ND	ND
SCSU-CMP-5DB80	12/27/2022	Sediment	65 cm Below Stream Bed	62	8.9	ND	ND	ND	ND
SCSU-CMP-5DB80	12/27/2022	Sediment	65 cm Below Stream Bed	60	8.2	ND	ND	ND	ND
SCSU-CMP-5DB80	12/27/2022	Sediment	80 cm Below Stream Bed	13	ND	ND	ND	ND	ND
SCSU-CMP-5DB80	12/27/2022	Sediment	80 cm Below Stream Bed	19	ND	ND	ND	ND	ND
SCSU-CMP-5DB80	12/27/2022	Sediment	80 cm Below Stream Bed	20	6.5	ND	ND	ND	ND
SCSU-CMP-5DB80A	2/23/2022	Sediment	15 cm Below Stream Bed	ND	ND	ND	11	ND	29
SCSU-CMP-5DB80A	2/23/2022	Sediment	15 cm Below Stream Bed	ND	ND	ND	21	ND	36
SCSU-CMP-5DB80A	2/23/2022	Sediment	15 cm Below Stream Bed	ND	ND	ND	20	ND	28
SCSU-CMP-5DB80A	2/23/2022	Sediment	40 cm Below Stream Bed	ND	ND	ND	200	ND	39
SCSU-CMP-5DB80A	2/23/2022	Sediment	40 cm Below Stream Bed	ND	ND	ND	54	ND	15
SCSU-CMP-5DB80A	2/23/2022	Sediment	40 cm Below Stream Bed	ND	ND	ND	48	ND	14
SCSU-CMP-5DB80A	2/23/2022	Sediment	65 cm Below Stream Bed	ND	ND	ND	15	ND	17
SCSU-CMP-5DB80A	2/23/2022	Sediment	65 cm Below Stream Bed	ND	ND	ND	9	ND	14
SCSU-CMP-5DB80A	2/23/2022	Sediment	65 cm Below Stream Bed	ND	ND	ND	15	ND	15
SCSU-CMP-5DZ3	6/23/2022	Sediment	15 cm Below Stream Bed	ND	ND	ND	10	ND	41
SCSU-CMP-5DZ3	6/23/2022	Sediment	15 cm Below Stream Bed	ND	ND	ND	9	ND	29
SCSU-CMP-5DZ3	6/23/2022	Sediment	15 cm Below Stream Bed	ND	ND	ND	ND	ND	40
SCSU-CMP-5DZ3	6/23/2022	Sediment	40 cm Below Stream Bed	ND	ND	ND	22	ND	17
SCSU-CMP-5DZ3	6/23/2022	Sediment	40 cm Below Stream Bed	ND	ND	ND	10	ND	43
SCSU-CMP-5DZ3	6/23/2022	Sediment	40 cm Below Stream Bed	ND	ND	ND	19	ND	56
SCSU-CMP-5DZ3	6/23/2022	Sediment	65 cm Below Stream Bed	ND	ND	ND	ND	ND	20
SCSU-CMP-5DZ3	6/23/2022	Sediment	65 cm Below Stream Bed	ND	ND	ND	ND	ND	16
SCSU-CMP-5DZ3	6/23/2022	Sediment	65 cm Below Stream Bed	ND	ND	ND	8.5	ND	15
SCSU-CMP-5DZ3	12/28/2022	Sediment	15 cm Below Stream Bed	ND	ND	ND	ND	ND	10
SCSU-CMP-5DZ3	12/28/2022	Sediment	15 cm Below Stream Bed	ND	ND	ND	7.8	ND	8.4
SCSU-CMP-5DZ3	12/28/2022	Sediment	15 cm Below Stream Bed	ND	ND	ND	13	ND	15
SCSU-CMP-5DZ3	12/28/2022	Sediment	40 cm Below Stream Bed	ND	ND	ND	12	ND	6.2
SCSU-CMP-5DZ3	12/28/2022	Sediment	40 cm Below Stream Bed	ND	ND	ND	6.5	ND	ND
SCSU-CMP-5DZ3	12/28/2022	Sediment	40 cm Below Stream Bed	ND	ND	ND	8.4	ND	ND
SCSU-CMP-5DZ3	12/28/2022	Sediment	65 cm Below Stream Bed	ND	ND	ND	ND	ND	6.7
SCSU-CMP-5DZ3	12/28/2022	Sediment	65 cm Below Stream Bed	ND	ND	ND	ND	ND	8.1
SCSU-CMP-5DZ3	12/28/2022	Sediment	65 cm Below Stream Bed	ND	ND	ND	ND	ND	8.6
SCSU-CMP-5DZ3A	2/23/2022	Sediment	15 cm Below Stream Bed	ND	ND	ND	8	ND	15
SCSU-CMP-5DZ3A	2/23/2022	Sediment	15 cm Below Stream Bed	ND	ND	ND	ND	ND	11
SCSU-CMP-5DZ3A	2/23/2022	Sediment	15 cm Below Stream Bed	ND	ND	ND	ND	ND	ND
SCSU-CMP-5DZ3A	2/23/2022	Sediment	40 cm Below Stream Bed	ND	ND	ND	ND	ND	5.5
SCSU-CMP-5DZ3A	2/23/2022	Sediment	40 cm Below Stream Bed	ND	ND	ND	ND	ND	6
SCSU-CMP-5DZ3A	2/23/2022	Sediment	40 cm Below Stream Bed	ND	ND	ND	ND	ND	6.7
SCSU-CMP-5DZ3A	2/23/2022	Sediment	65 cm Below Stream Bed	ND	ND	ND	ND	ND	17
SCSU-CMP-5DZ3A	2/23/2022	Sediment	65 cm Below Stream Bed	ND	ND	ND	ND	ND	17
SCSU-CMP-5DZ3A	2/23/2022	Sediment	65 cm Below Stream Bed	ND	ND	ND	ND	ND	24
SCSU-CMP-5D1BA	4/5/2022	Sediment	15 cm Below Stream Bed	32	ND	ND	55	ND	27
SCSU-CMP-5D1BA	4/5/2022	Sediment	15 cm Below Stream Bed	44	7.8	ND	18	ND	7.7
SCSU-CMP-5D1BA	4/5/2022	Sediment	15 cm Below Stream Bed	68	7.5	ND	30	ND	17
SCSU-CMP-5D1B	6/21/2022	Sediment	15 cm Below Stream Bed	ND	ND	ND	ND	ND	ND
SCSU-CMP-5D1B	6/21/2022	Sediment	15 cm Below Stream Bed	ND	ND	ND	ND	ND	ND
SCSU-CMP-5D1B	6/21/2022	Sediment	15 cm Below Stream Bed	ND	ND	ND	ND	ND	ND
SCSU-CMP-5D1B	6/21/2022	Sediment	40 cm Below Stream Bed	ND	ND	ND	ND	ND	ND
SCSU-CMP-5D1B	6/21/2022	Sediment	40 cm Below Stream Bed	ND	ND	ND	ND	ND	ND
SCSU-CMP-5D1B	6/21/2022	Sediment	40 cm Below Stream Bed	ND	ND	ND	ND	ND	ND
SCSU-CMP-5D1B	6/21/2022	Sediment	65 cm Below Stream Bed	ND	ND	ND	ND	ND	ND
SCSU-CMP-5D1B	6/21/2022	Sediment	65 cm Below Stream Bed	ND	ND	ND	ND	ND	ND
SCSU-CMP-5D1B	6/21/2022	Sediment	65 cm Below Stream Bed	ND	ND	ND	ND	ND	ND
SCSU-CMP-5D2B	7/12/2022	Sediment	15 cm Below Stream Bed	ND	ND	ND	ND	ND	ND
SCSU-CMP-5D2B	7/12/2022	Sediment	15 cm Below Stream Bed	ND	ND	ND	ND	ND	ND
SCSU-CMP-5D2B	7/12/2022	Sediment	15 cm Below Stream Bed	ND	ND	ND	ND	ND	ND
SCSU-CMP-5D2B	7/12/2022	Sediment	65 cm Below Stream Bed	ND	ND	ND	ND	ND	ND
SCSU-CMP-5D2B	7/12/2022	Sediment	65 cm Below Stream Bed	ND	ND	ND	ND	ND	ND
SCSU-CMP-5D2B	7/12/2022	Sediment	65 cm Below Stream Bed	ND	ND	ND	ND	ND	ND
SCSU-CMP-5G	7/6/2022	Sediment	15 cm Below Stream Bed	ND	ND	ND	ND	ND	ND
SCSU-CMP-5G	7/6/2022	Sediment	15 cm Below Stream Bed	ND	ND	ND	ND	ND	ND
SCSU-CMP-5G	7/6/2022	Sediment	15 cm Below Stream Bed	ND	ND	ND	ND	ND	ND
SCSU-CMP-5G	7/6/2022	Sediment	65 cm Below Stream Bed	ND	ND	ND	ND	ND	ND
SCSU-CMP-5G	7/6/2022	Sediment	65 cm Below Stream Bed	ND	ND	ND	ND	ND	ND
SCSU-CMP-5G	7/6/2022	Sediment	65 cm Below Stream Bed	ND	ND	ND	ND	ND	ND

ND = not detected; detection

Appendix A

Hydrographs

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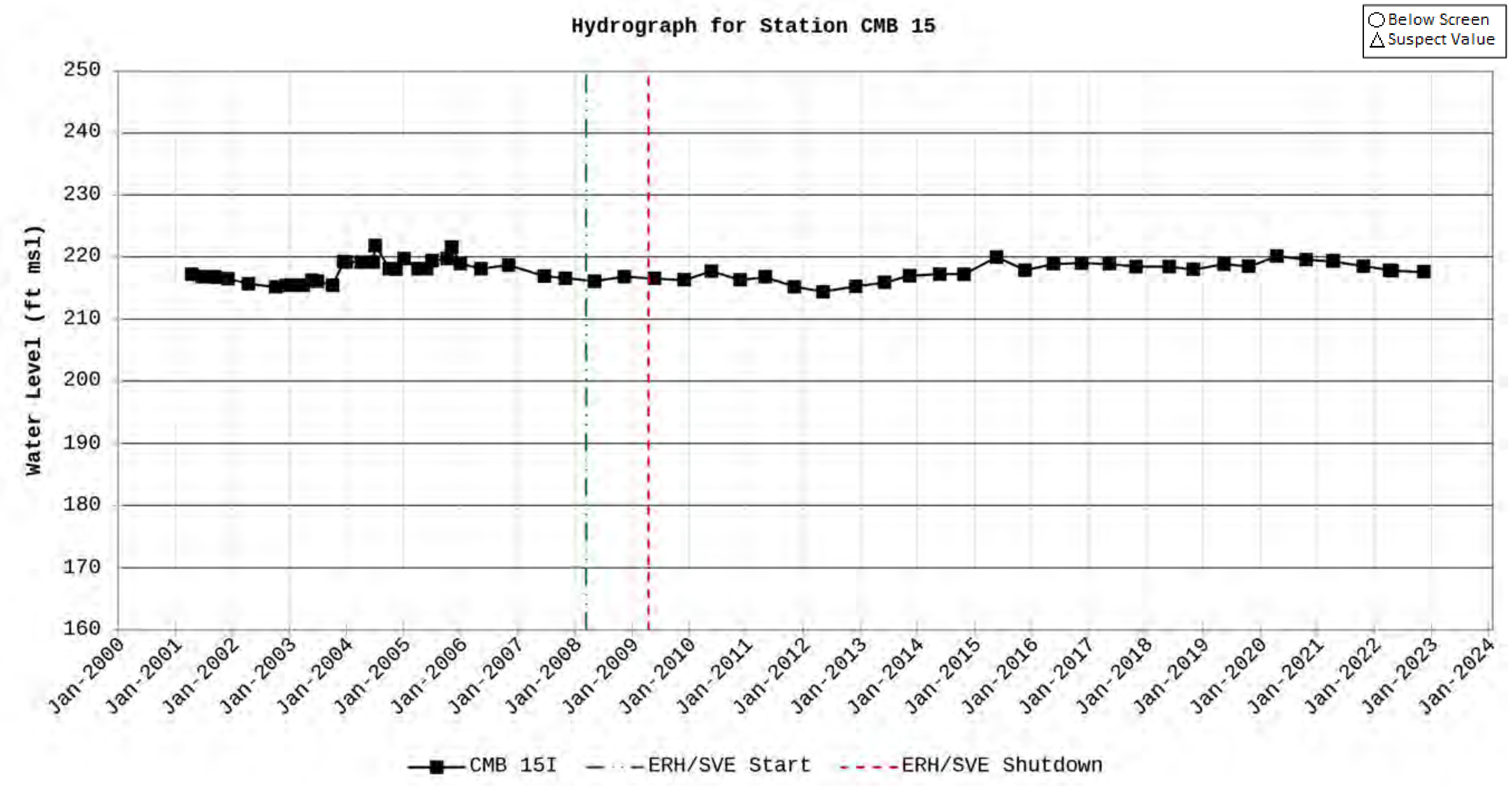
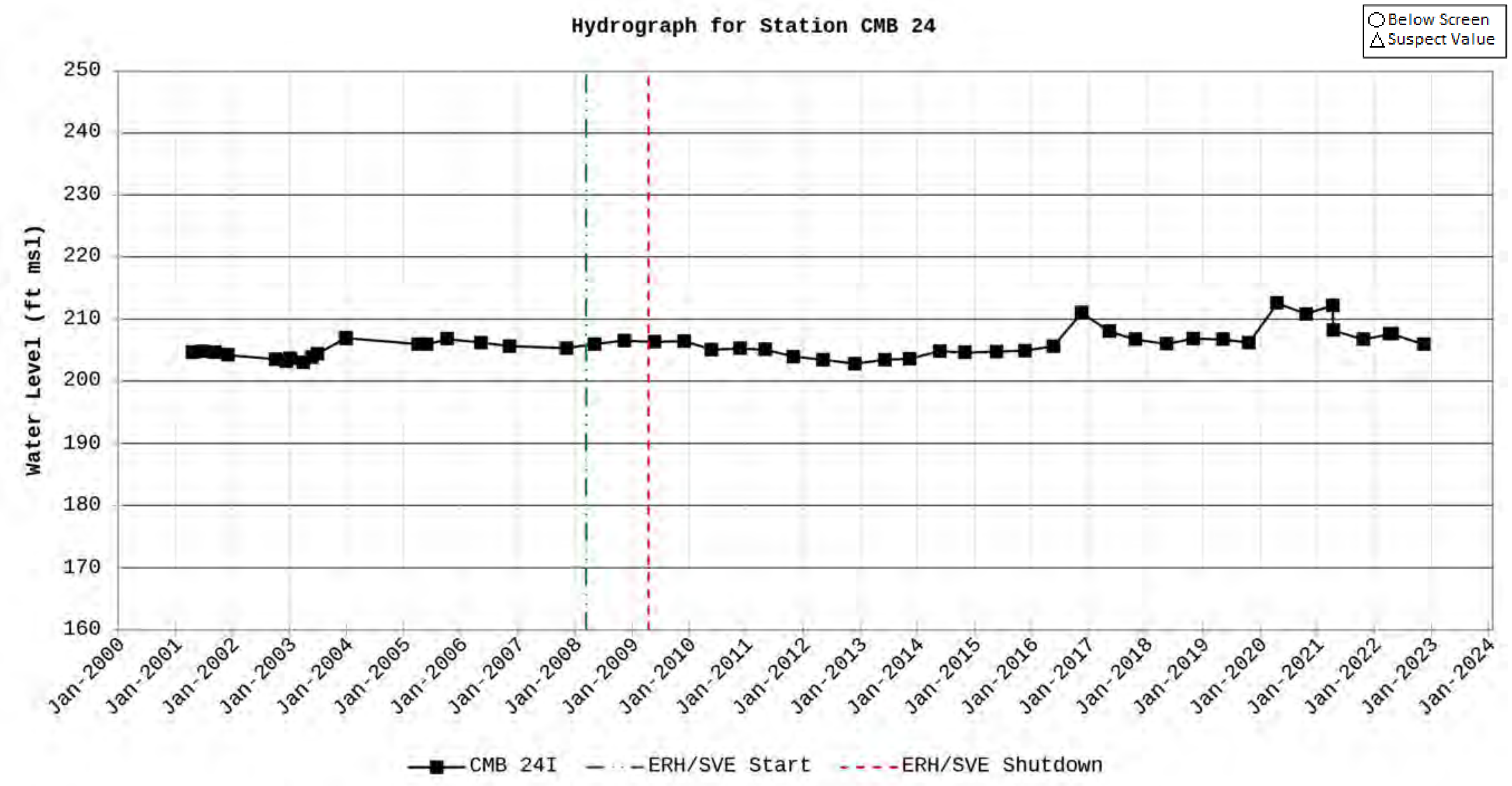
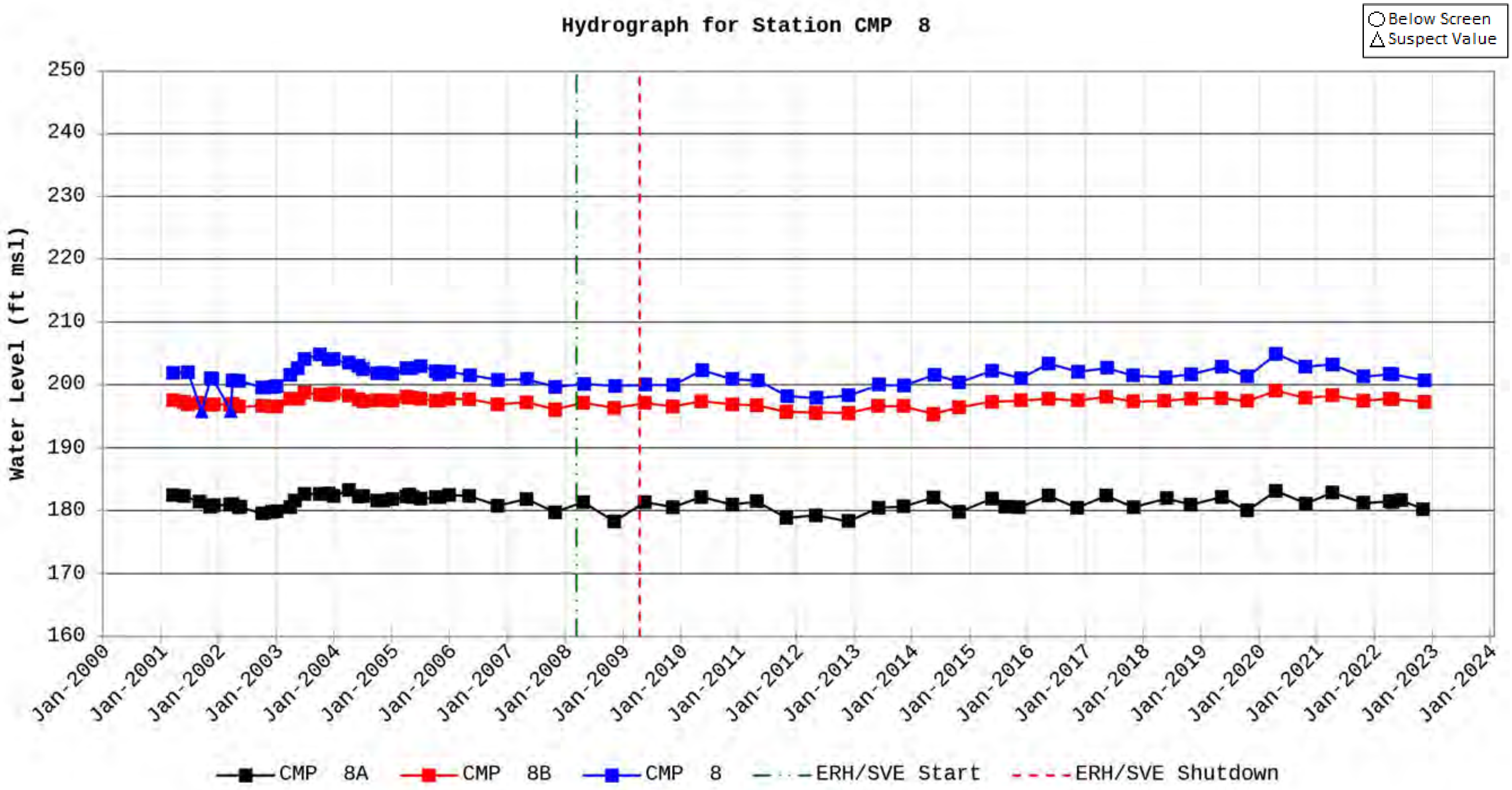
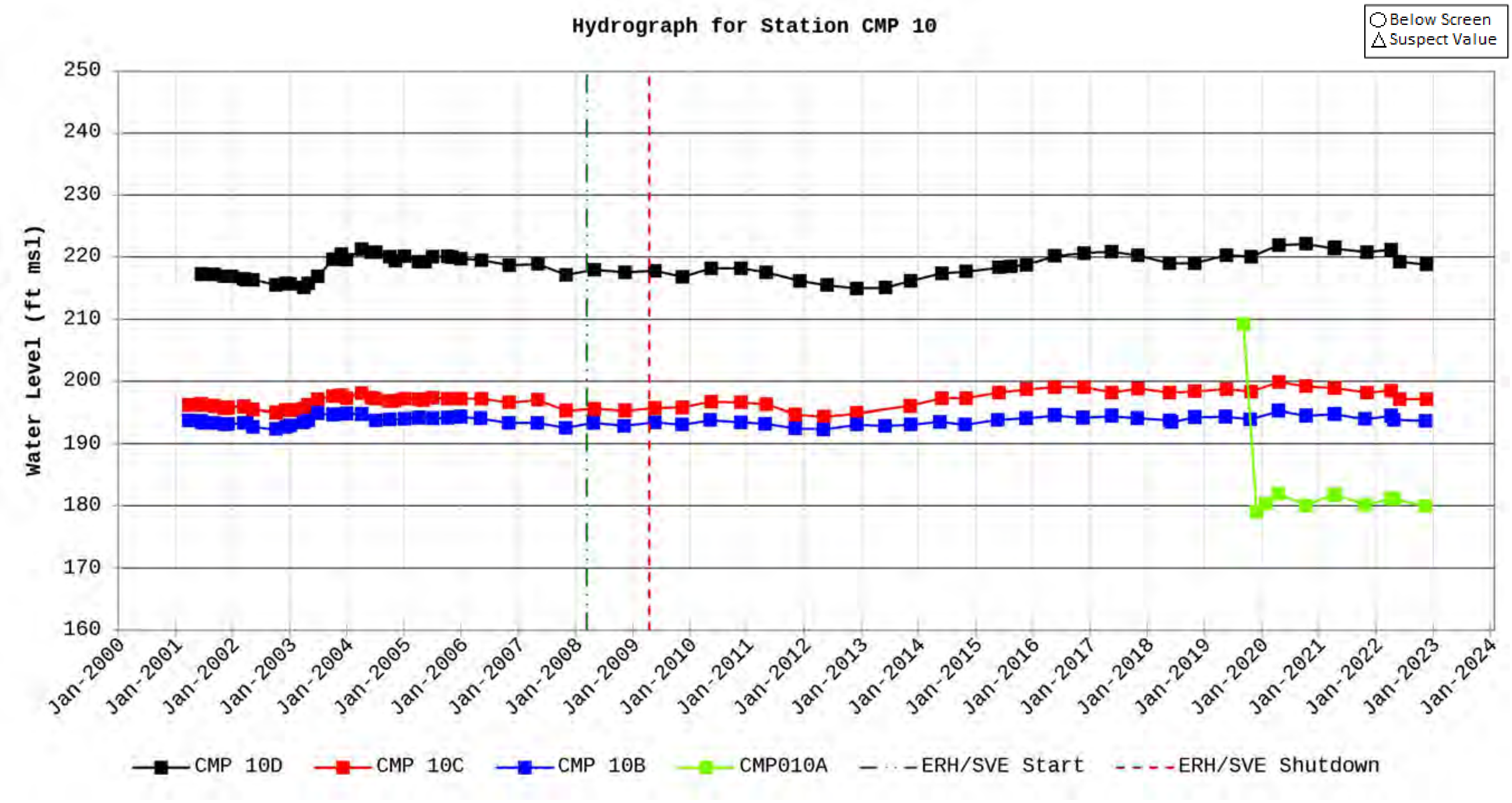
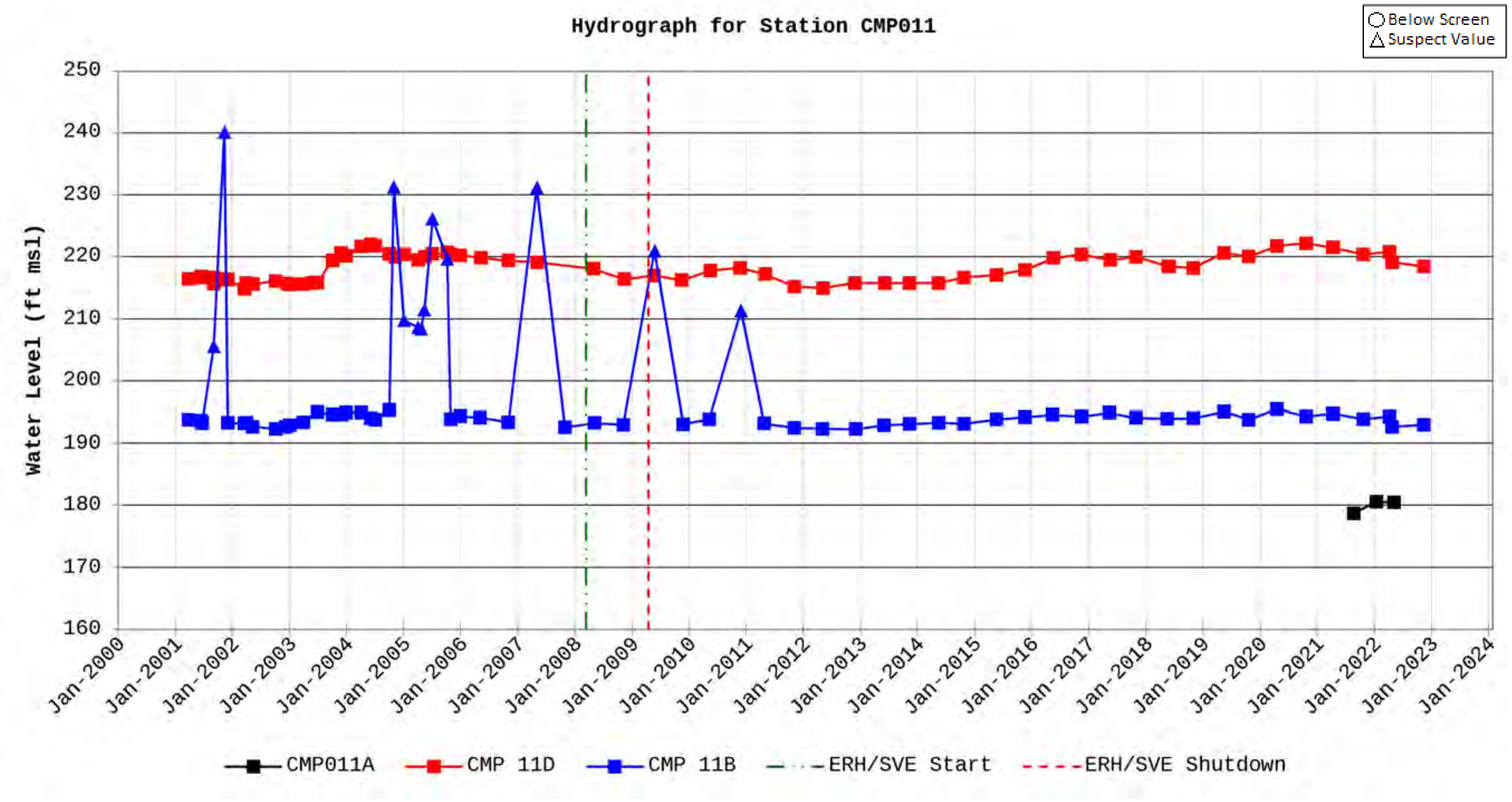
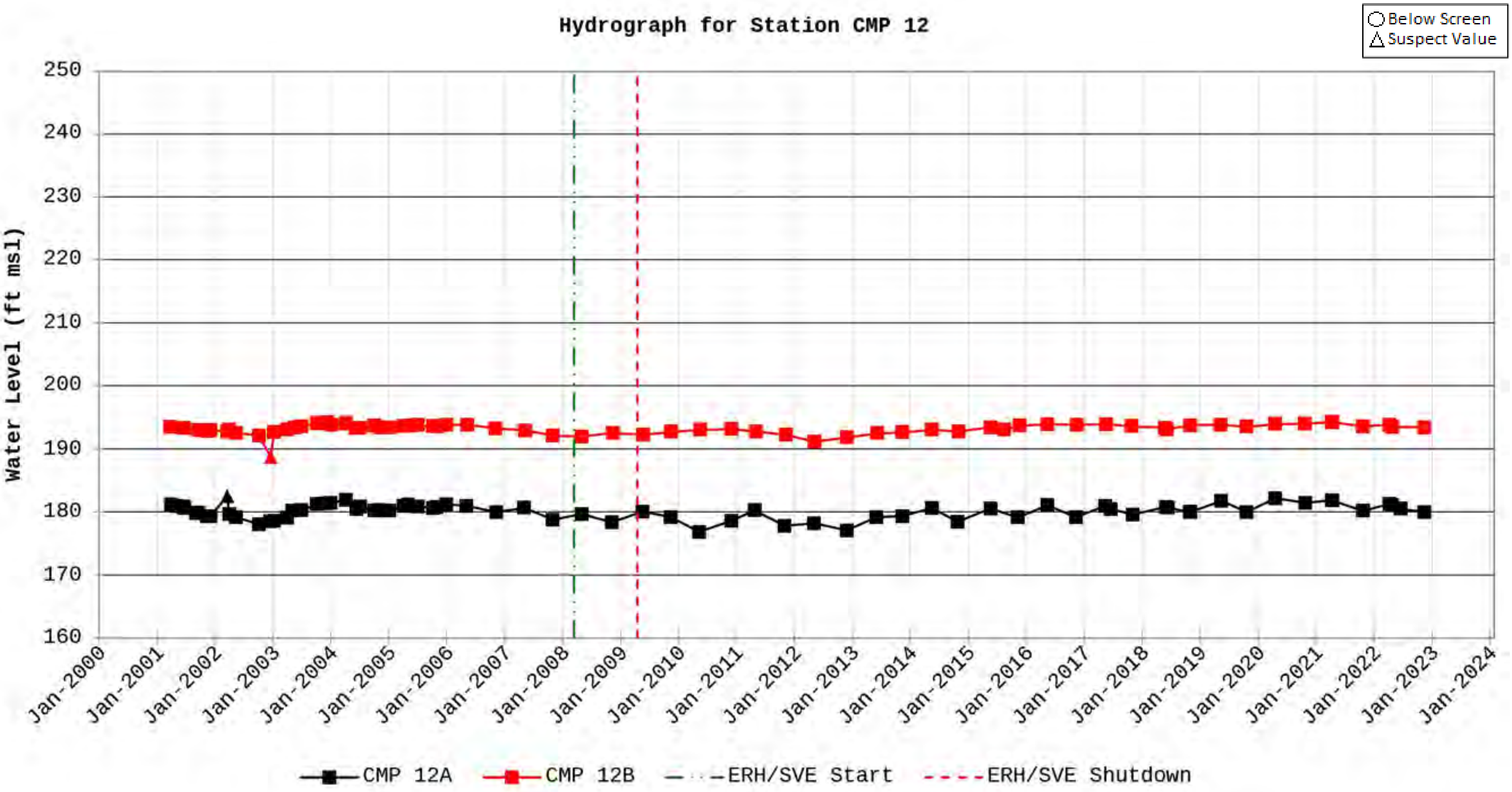

Hydrograph for Station CMB 15
○ Below Screen
△ Suspect Value
Water Level (ft msl)
250
240
230
220
210
200
190
180
170
160
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMB 15I
ERH/SVE Start
ERH/SVE Shutdown

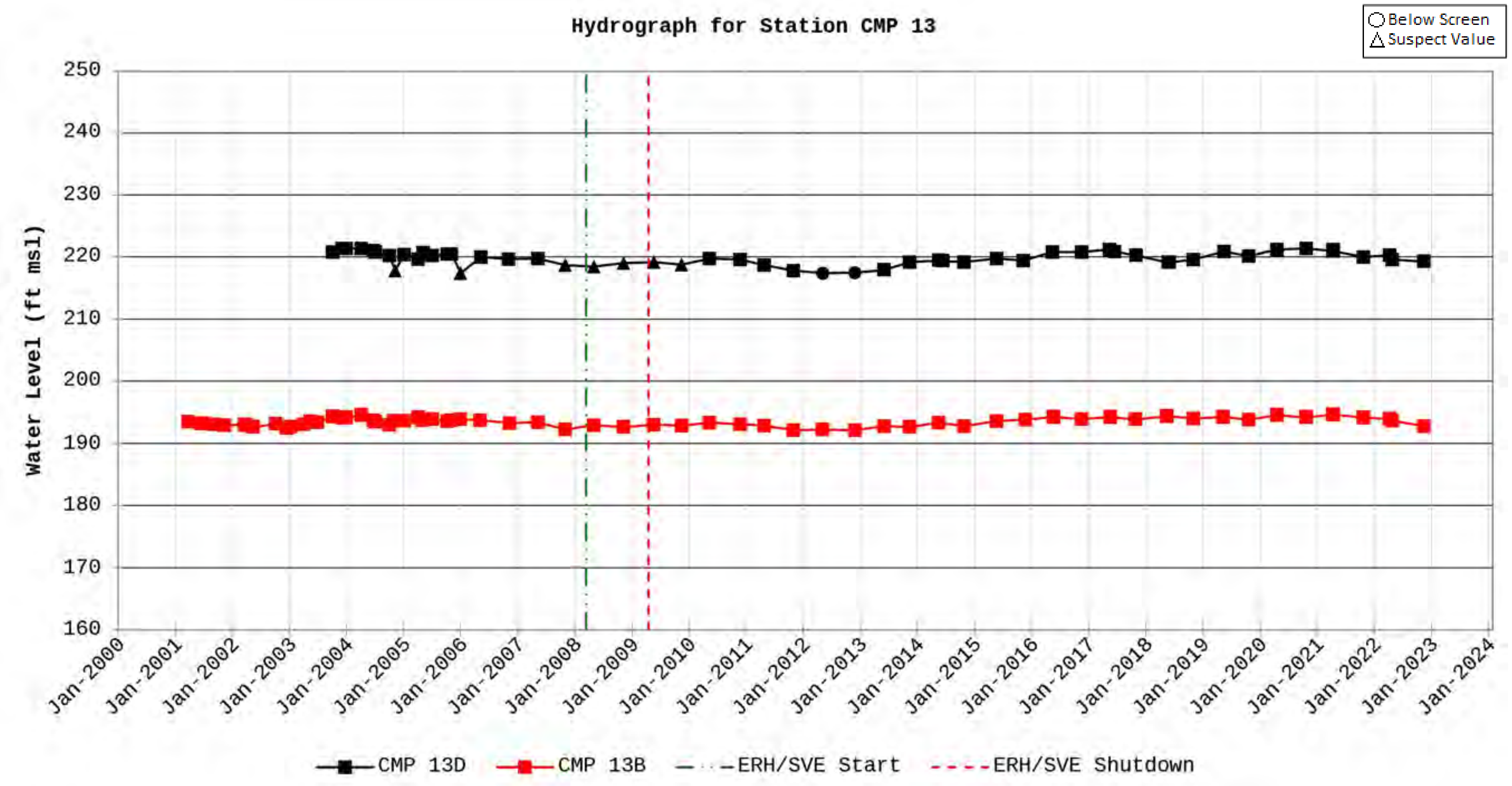

Hydrograph for Station CMB 24
○ Below Screen
△ Suspect Value
Water Level (ft msl)
250
240
230
220
210
200
190
180
170
160
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMB 24I
ERH/SVE Start
ERH/SVE Shutdown

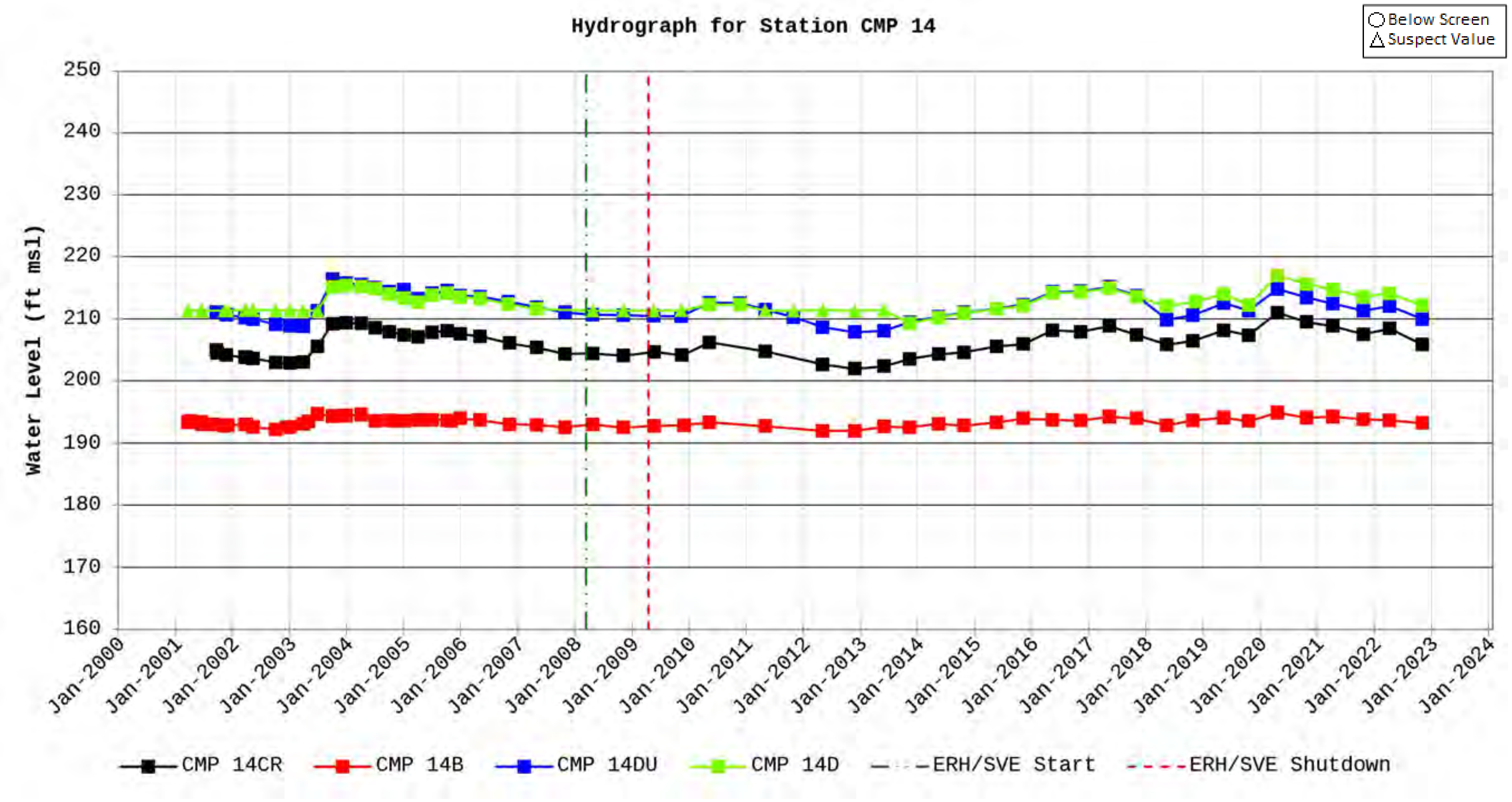

Hydrograph for Station CMP 8
○ Below Screen
△ Suspect Value
Water Level (ft msl)
250
240
230
220
210
200
190
180
170
160
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 8A
CMP 8B
CMP 8
ERH/SVE Start
ERH/SVE Shutdown

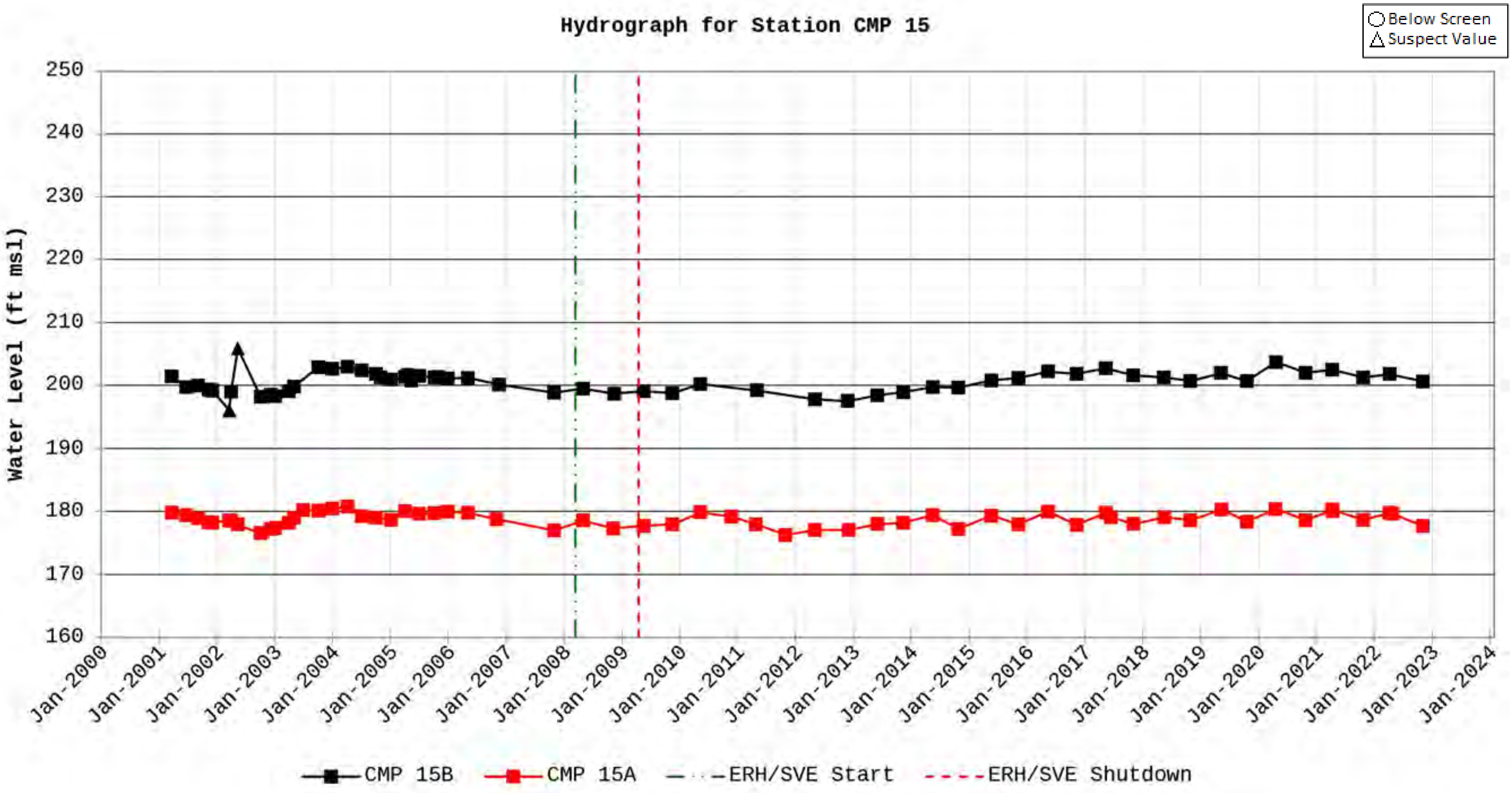

Hydrograph for Station CMP 10
○ Below Screen
△ Suspect Value
Water Level (ft msl)
250
240
230
220
210
200
190
180
170
160
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 10D
CMP 10C
CMP 10B
CMP010A
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP011
○ Below Screen
△ Suspect Value
Water Level (ft msl)
250
240
230
220
210
200
190
180
170
160
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP011A
CMP 11D
CMP 11B
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP 12
○ Below Screen
△ Suspect Value
Water Level (ft msl)
250
240
230
220
210
200
190
180
170
160
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 12A
CMP 12B
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP 13
○ Below Screen
△ Suspect Value
Water Level (ft msl)
250
240
230
220
210
200
190
180
170
160
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 13D
CMP 13B
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP 14
○ Below Screen
△ Suspect Value
Water Level (ft msl)
250
240
230
220
210
200
190
180
170
160
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 14CR
CMP 14B
CMP 14DU
CMP 14D
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP 15
○ Below Screen
△ Suspect Value
Water Level (ft msl)
250
240
230
220
210
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190
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170
160
Jan-2000
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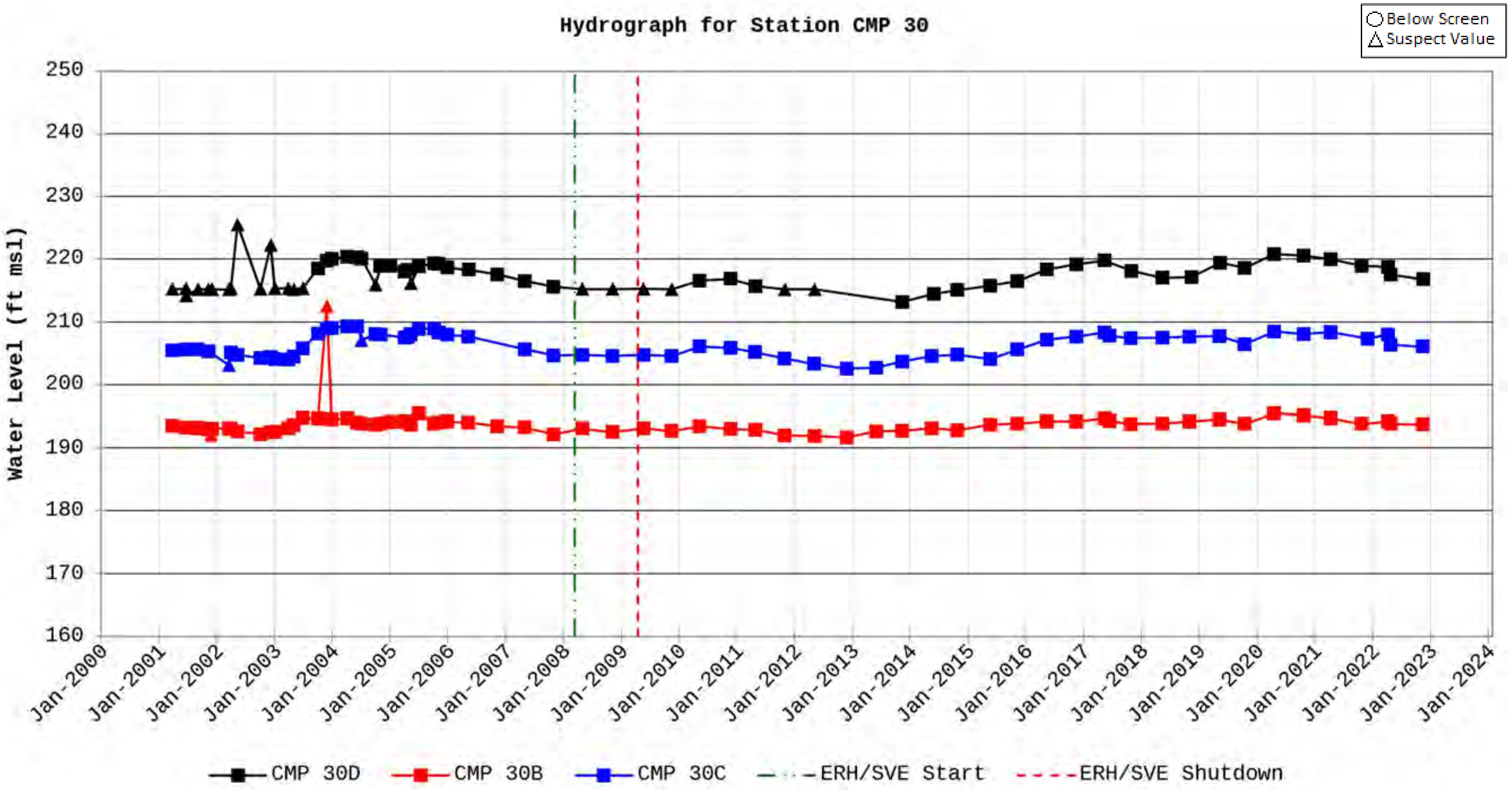
Jan-2024
CMP 15B
CMP 15A
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP 30
○ Below Screen
△ Suspect Value
Water Level (ft msl)
250
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170
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Jan-2000
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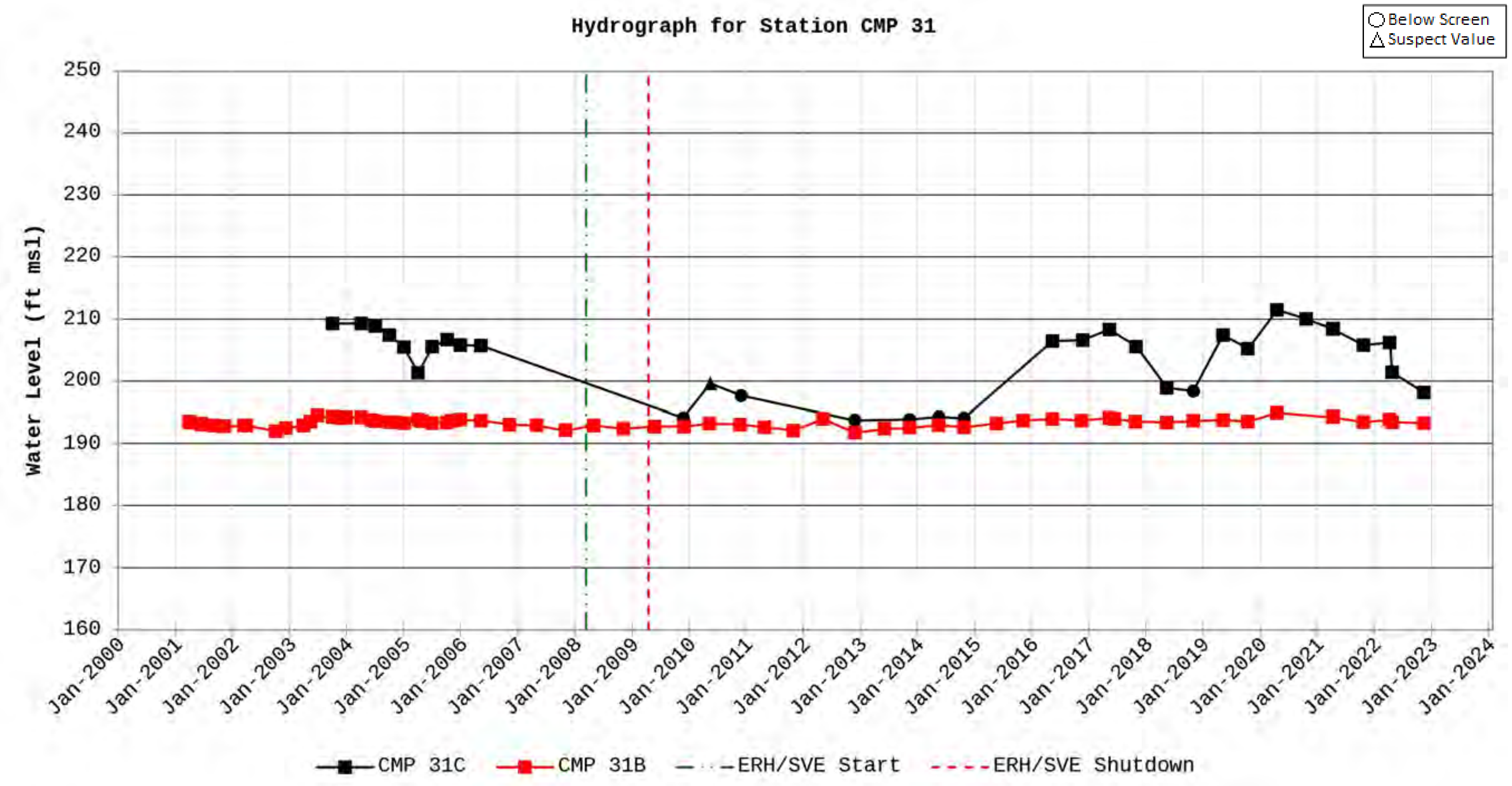
Jan-2024
CMP 30D
CMP 30B
CMP 30C
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP 31
○ Below Screen
△ Suspect Value
Water Level (ft msl)
250
240
230
220
210
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190
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170
160
Jan-2000
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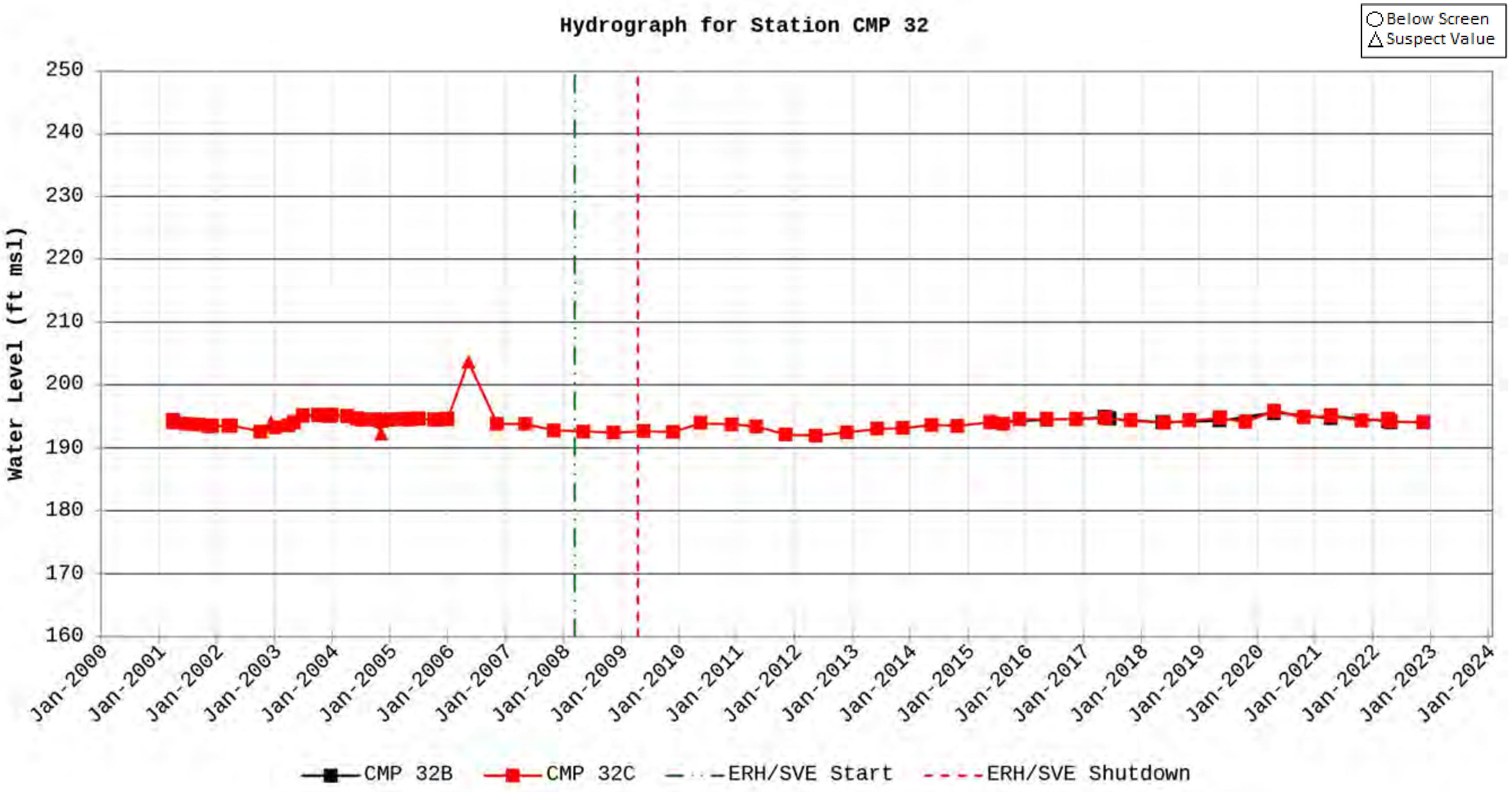
Jan-2024
CMP 31C
CMP 31B
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP 32
○ Below Screen
△ Suspect Value
Water Level (ft msl)
250
240
230
220
210
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190
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170
160
Jan-2000
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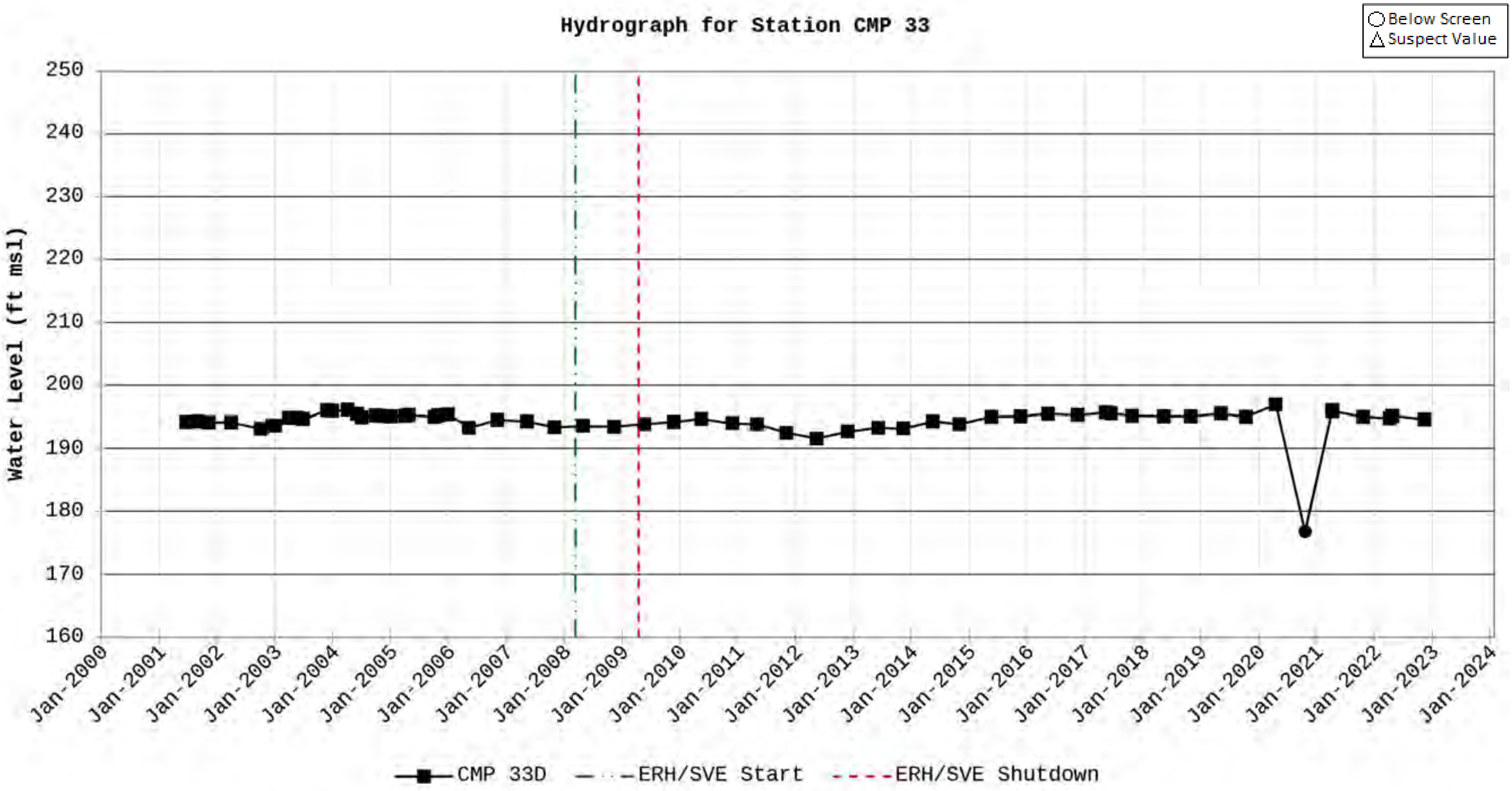
Jan-2024
CMP 32B
CMP 32C
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP 33
○ Below Screen
△ Suspect Value
Water Level (ft msl)
250
240
230
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210
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190
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170
160
Jan-2000
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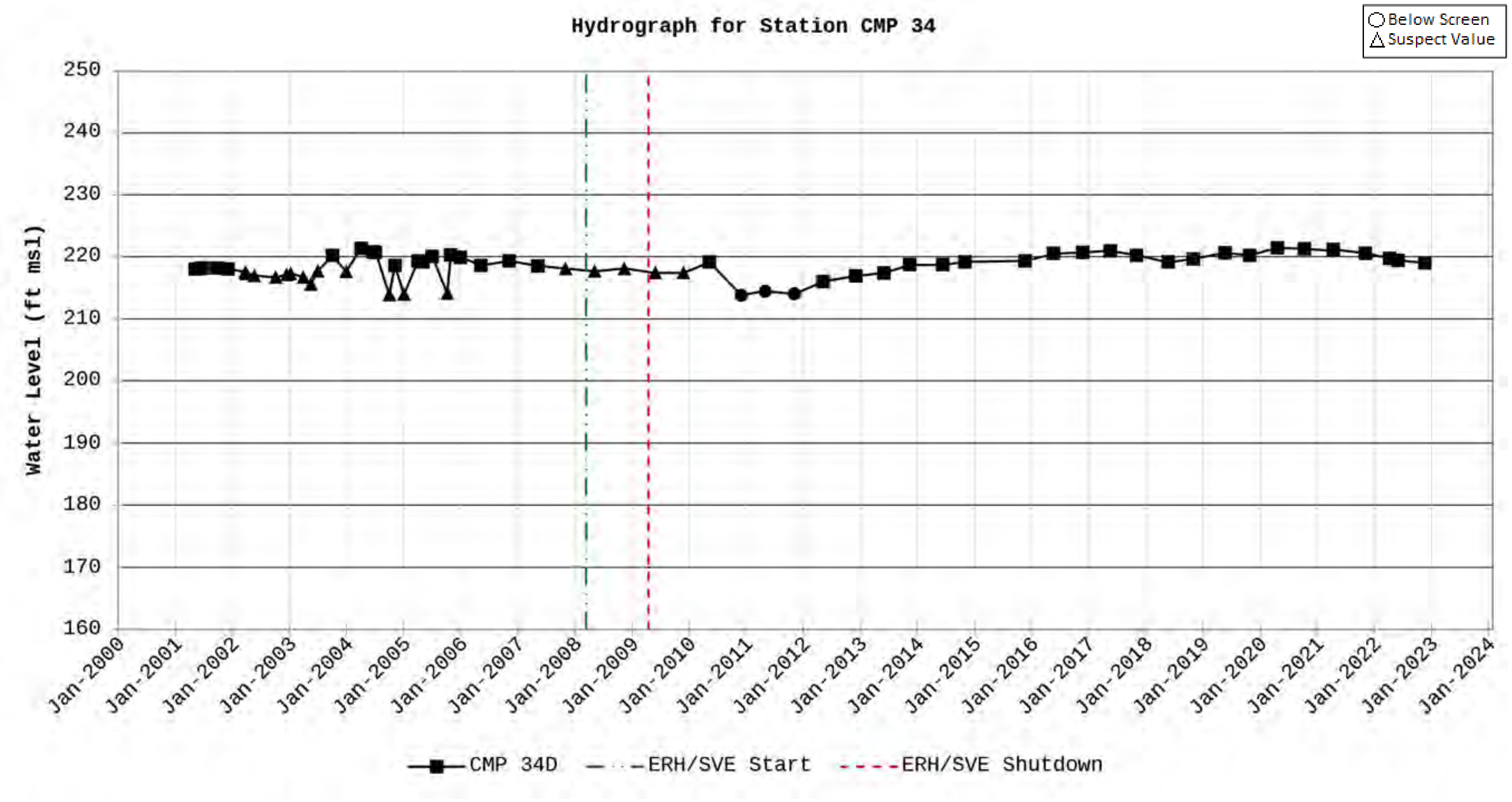
CMP 33D
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP 34
○ Below Screen
△ Suspect Value
Water Level (ft msl)
250
240
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210
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190
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160
Jan-2000
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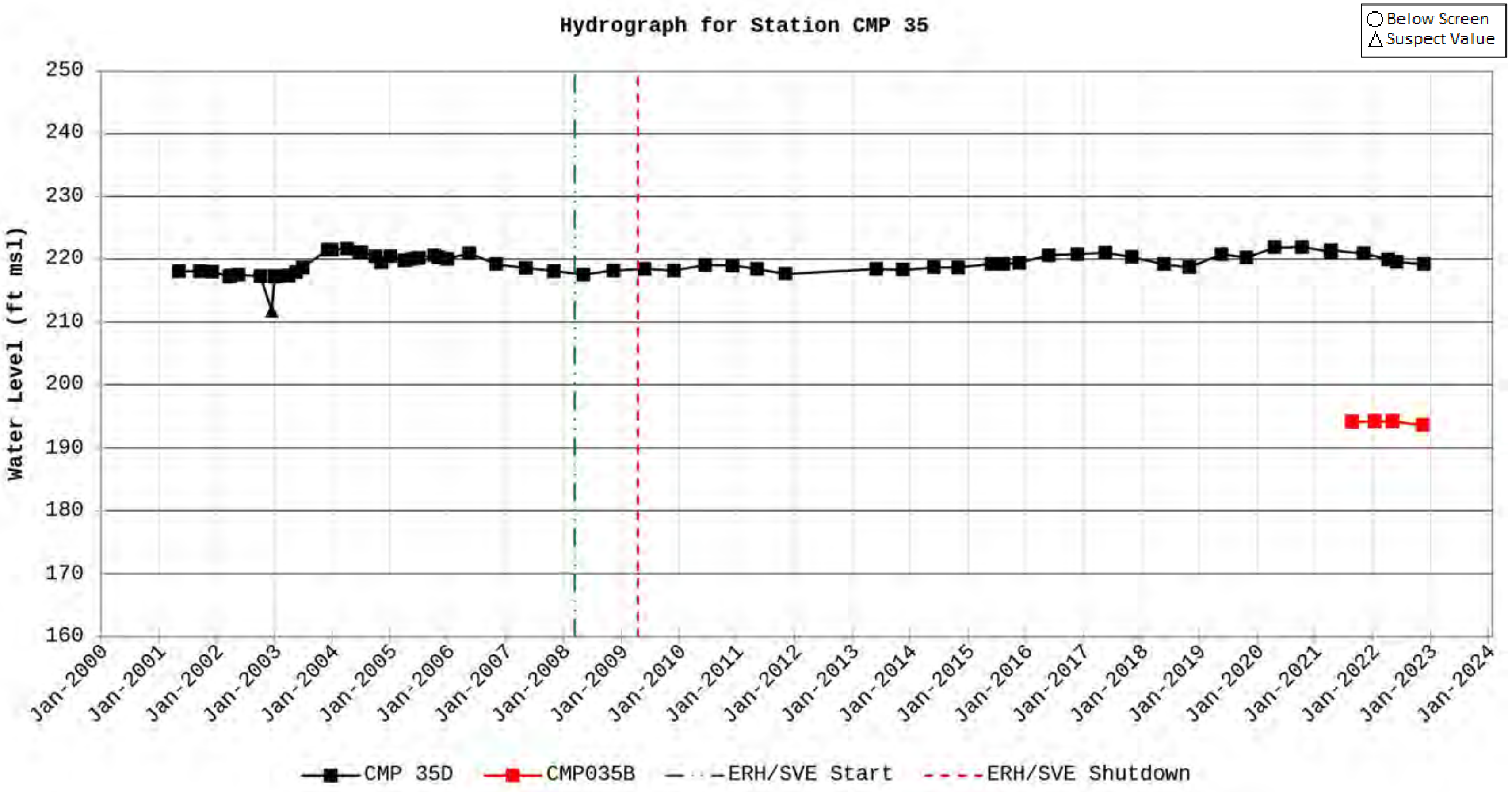
CMP 34D
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP 35
○ Below Screen
△ Suspect Value
Water Level (ft msl)
250
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Jan-2000
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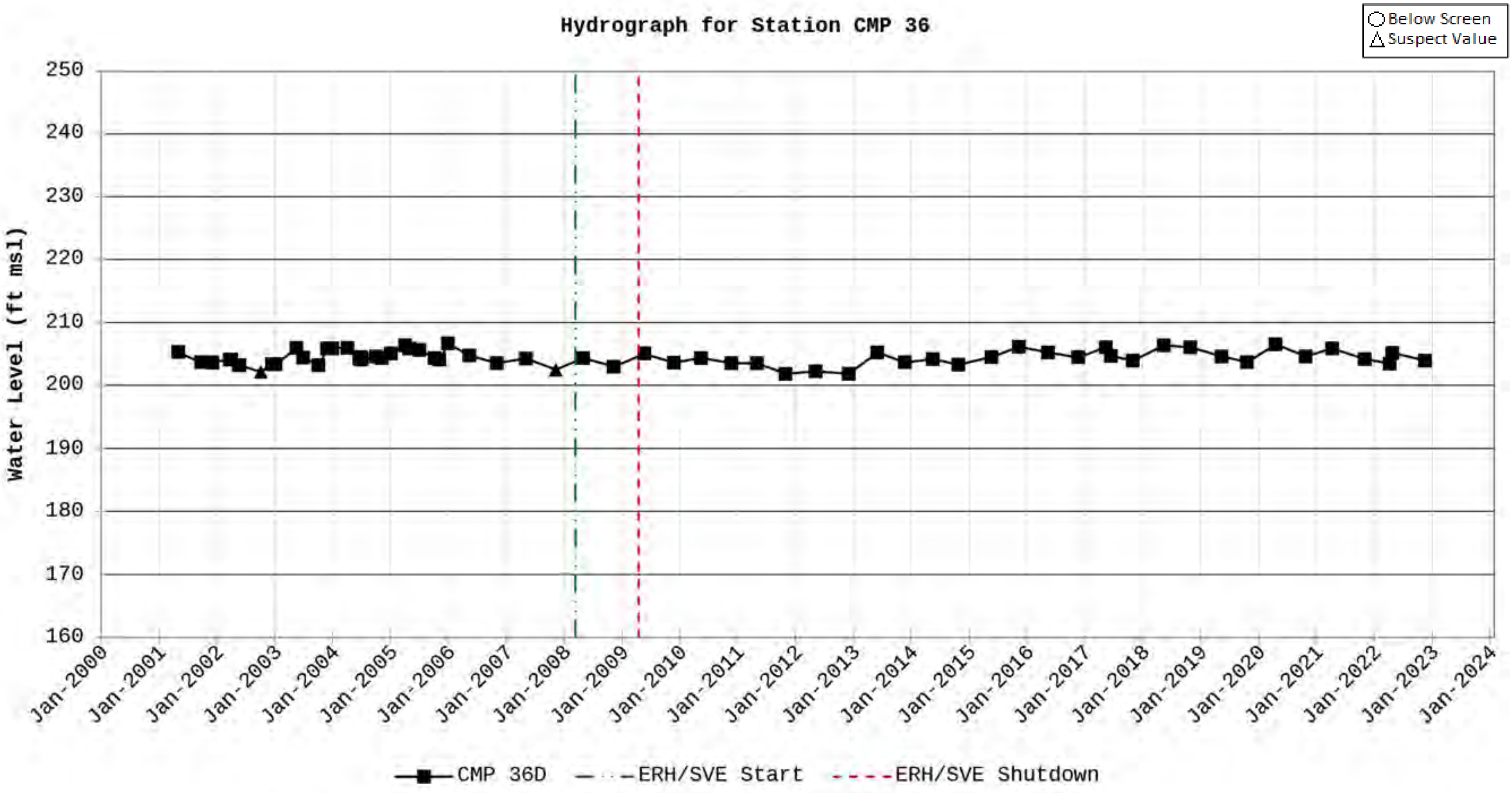
Jan-2024
CMP 35D
CMP035B
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP 36
○ Below Screen
△ Suspect Value
Water Level (ft msl)
250
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210
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160
Jan-2000
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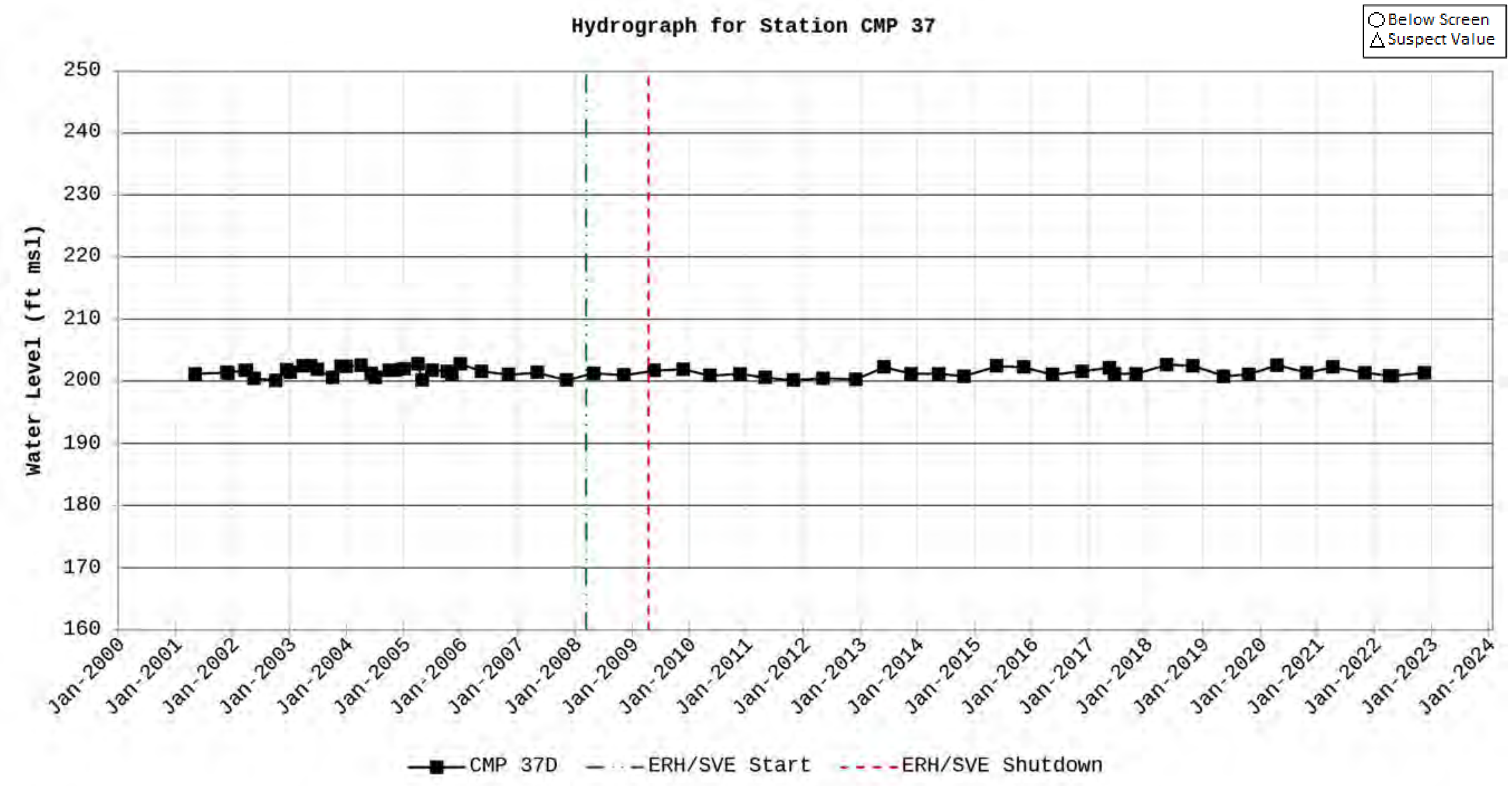
Jan-2024
CMP 36D
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP 37
○ Below Screen
△ Suspect Value
Water Level (ft msl)
250
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160
Jan-2000
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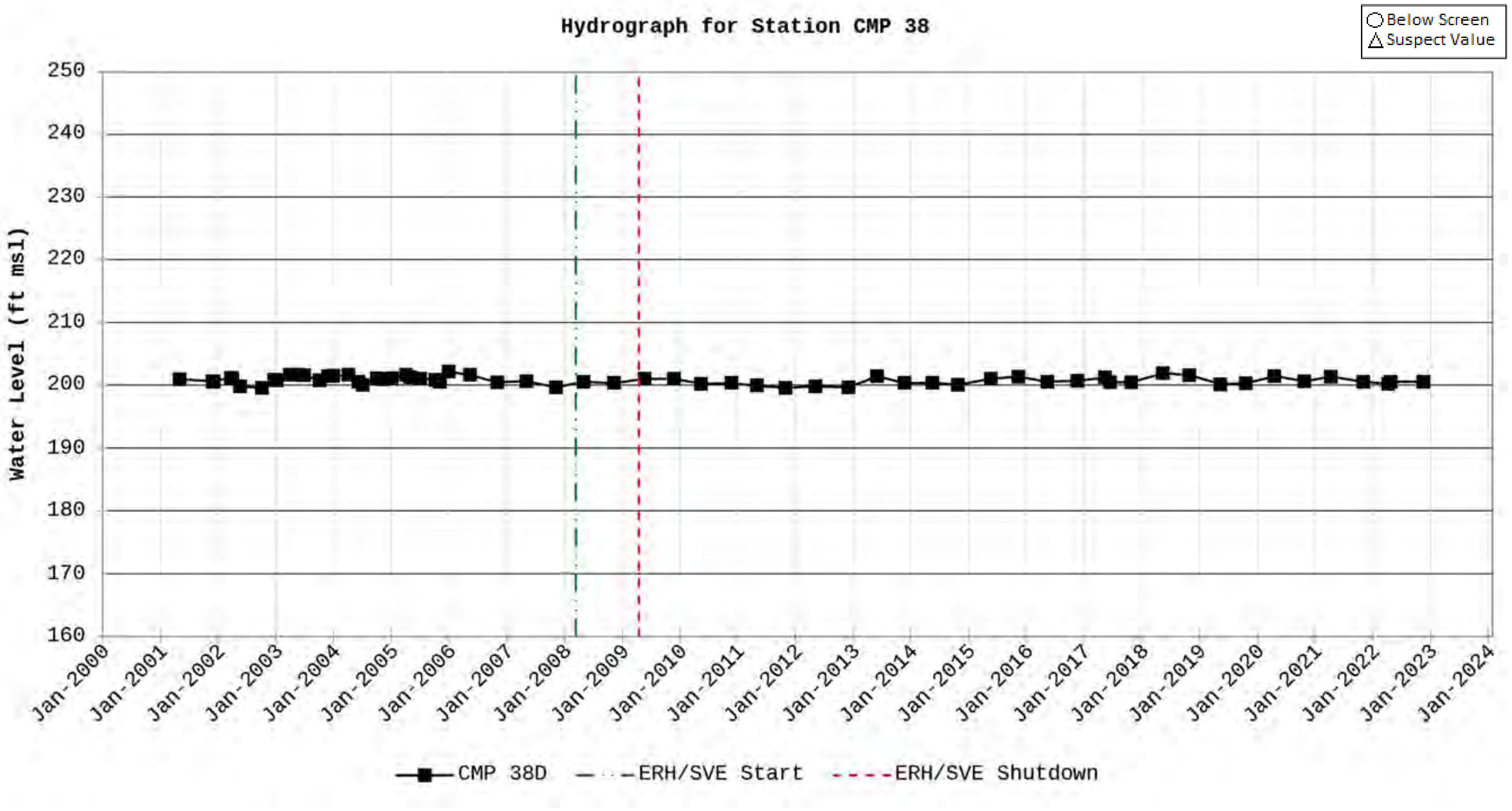
Jan-2024
CMP 37D
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP 38
○ Below Screen
△ Suspect Value
Water Level (ft msl)
250
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Jan-2000
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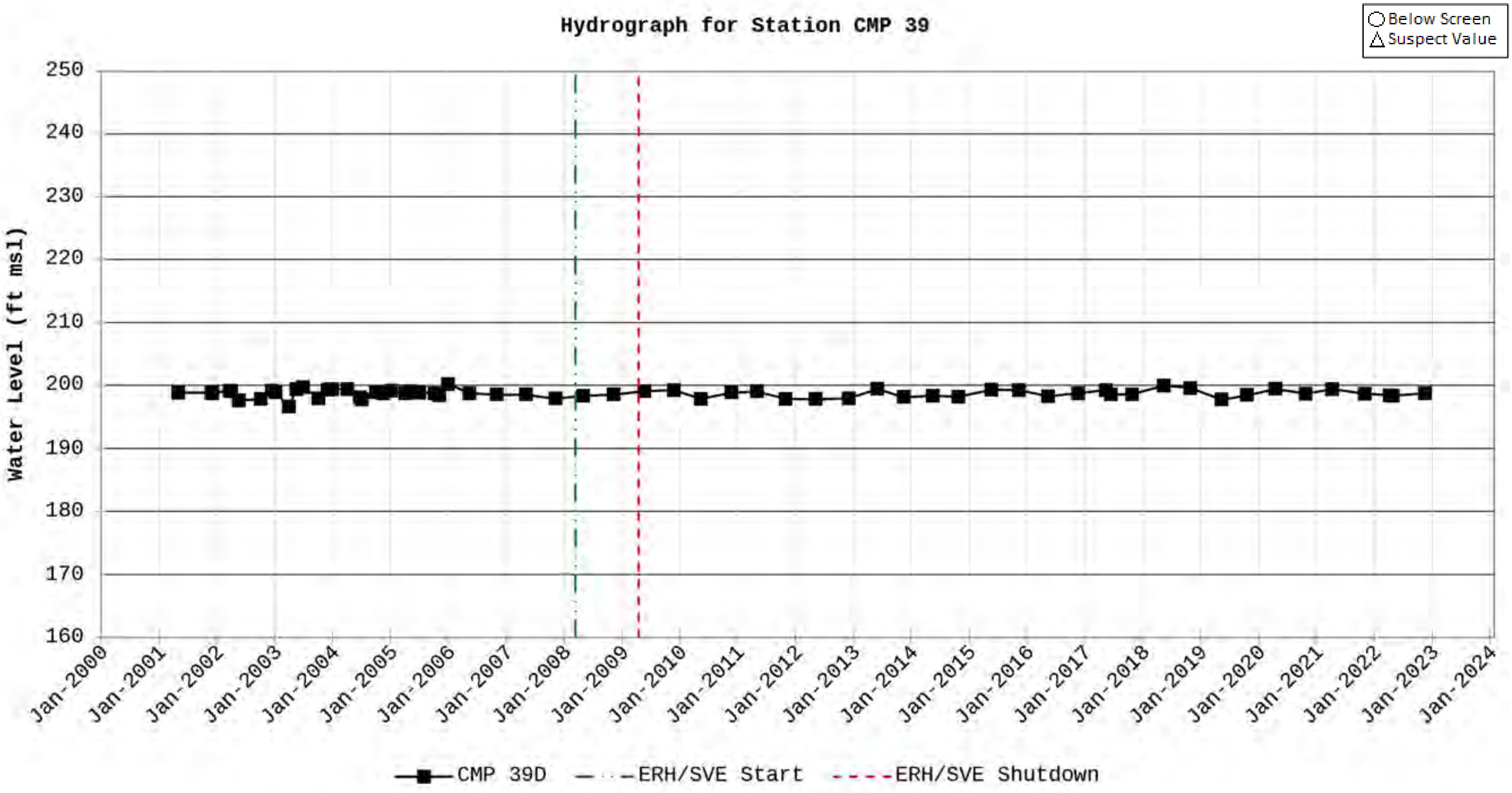
Jan-2024
CMP 38D
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP 39
○ Below Screen
△ Suspect Value
Water Level (ft msl)
250
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Jan-2000
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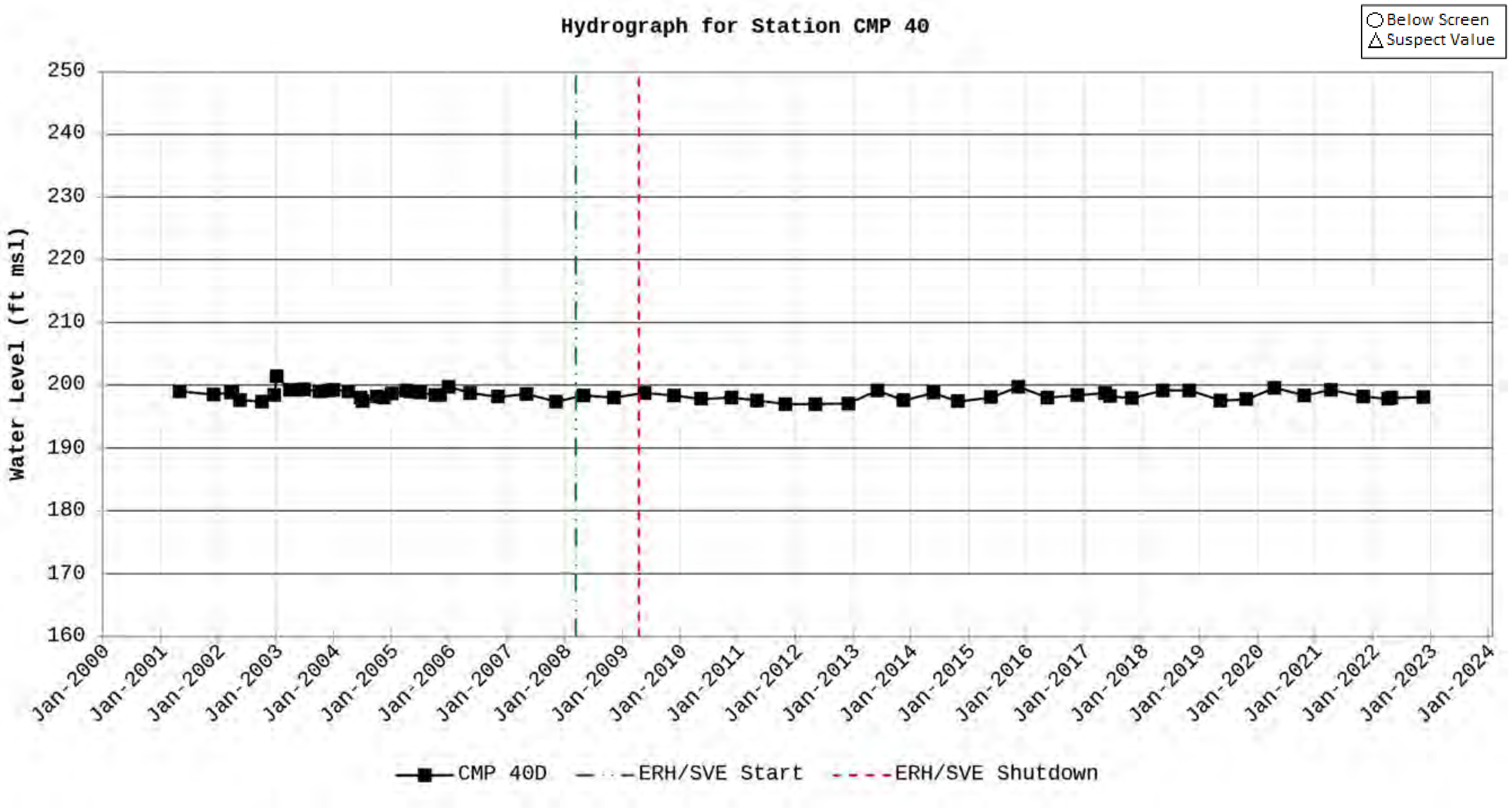
Jan-2024
CMP 39D
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP 40
○ Below Screen
△ Suspect Value
Water Level (ft msl)
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Jan-2000
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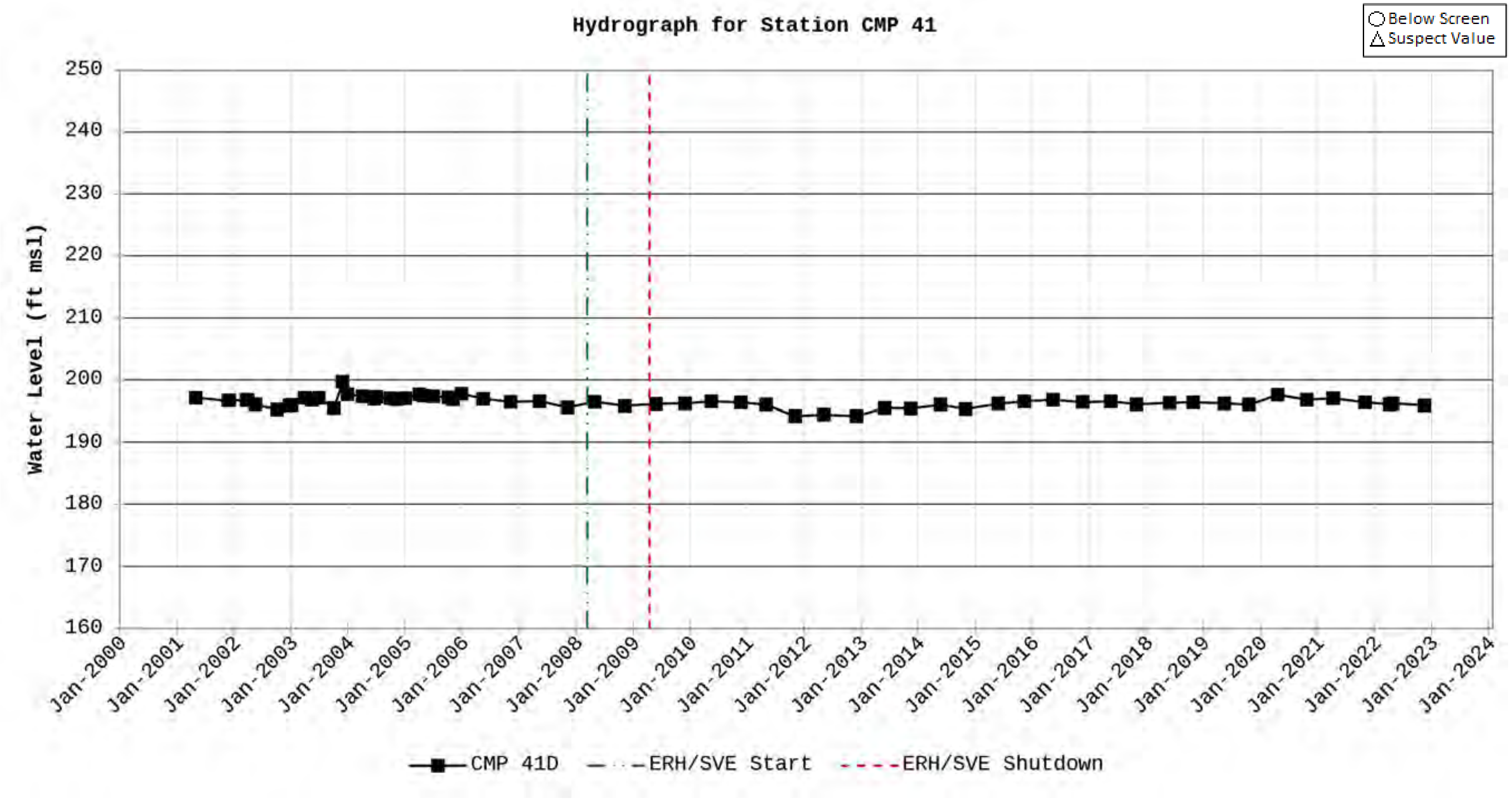
CMP 40D
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP 41
○ Below Screen
△ Suspect Value
Water Level (ft msl)
250
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Jan-2000
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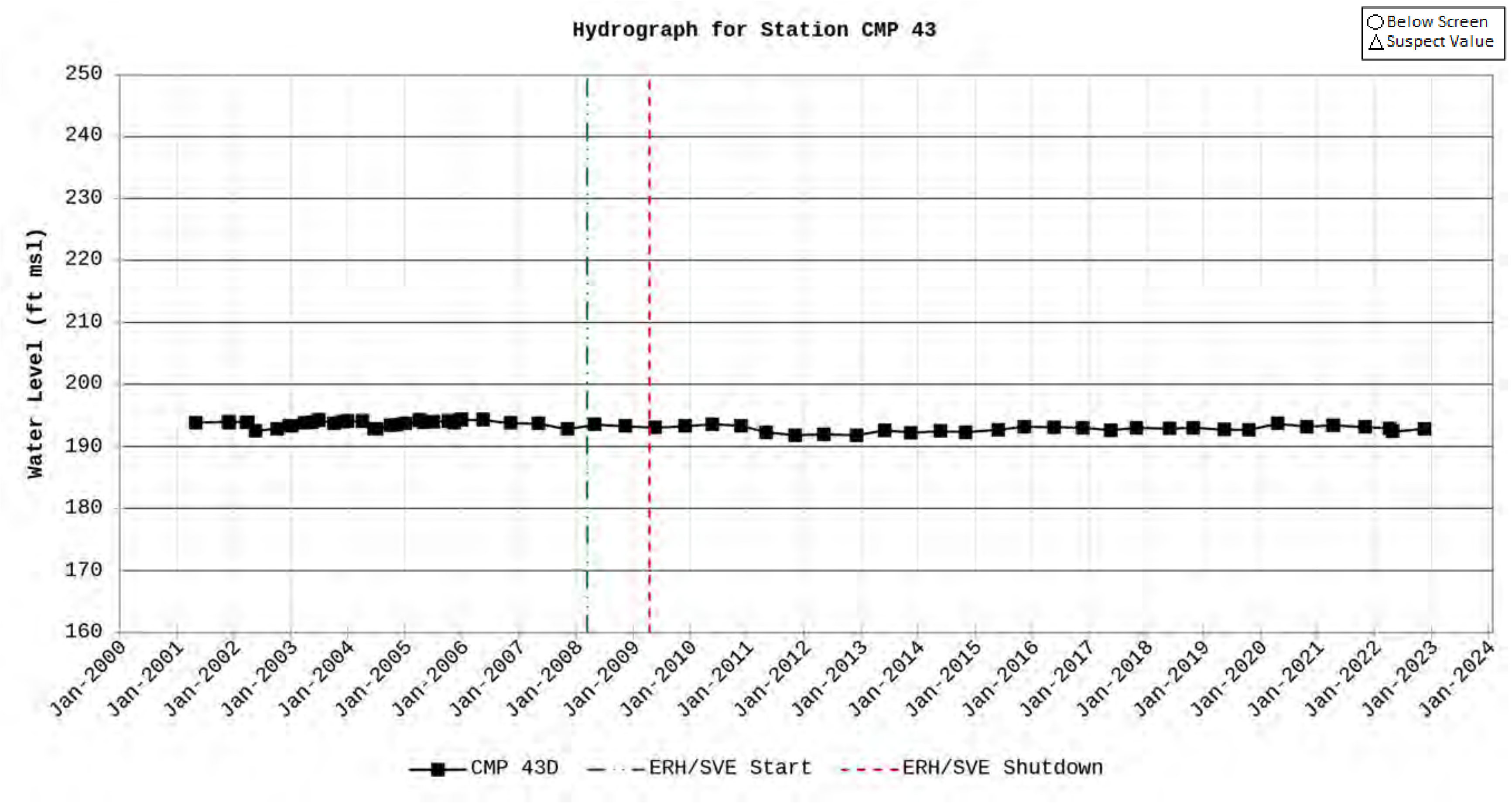
CMP 41D
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP 43
○ Below Screen
△ Suspect Value
Water Level (ft msl)
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Jan-2000
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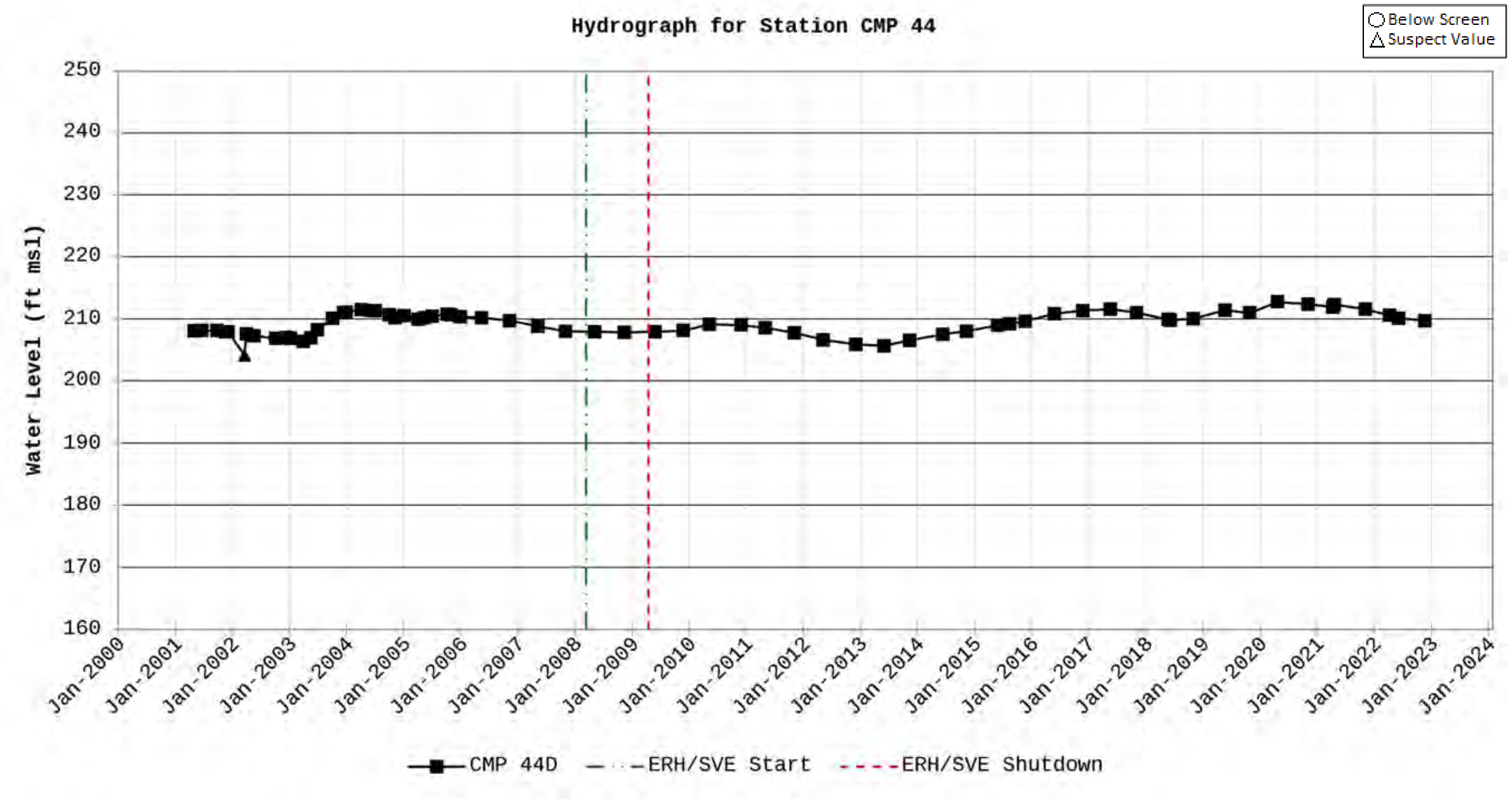
CMP 43D
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP 44
○ Below Screen
△ Suspect Value
Water Level (ft msl)
250
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Jan-2000
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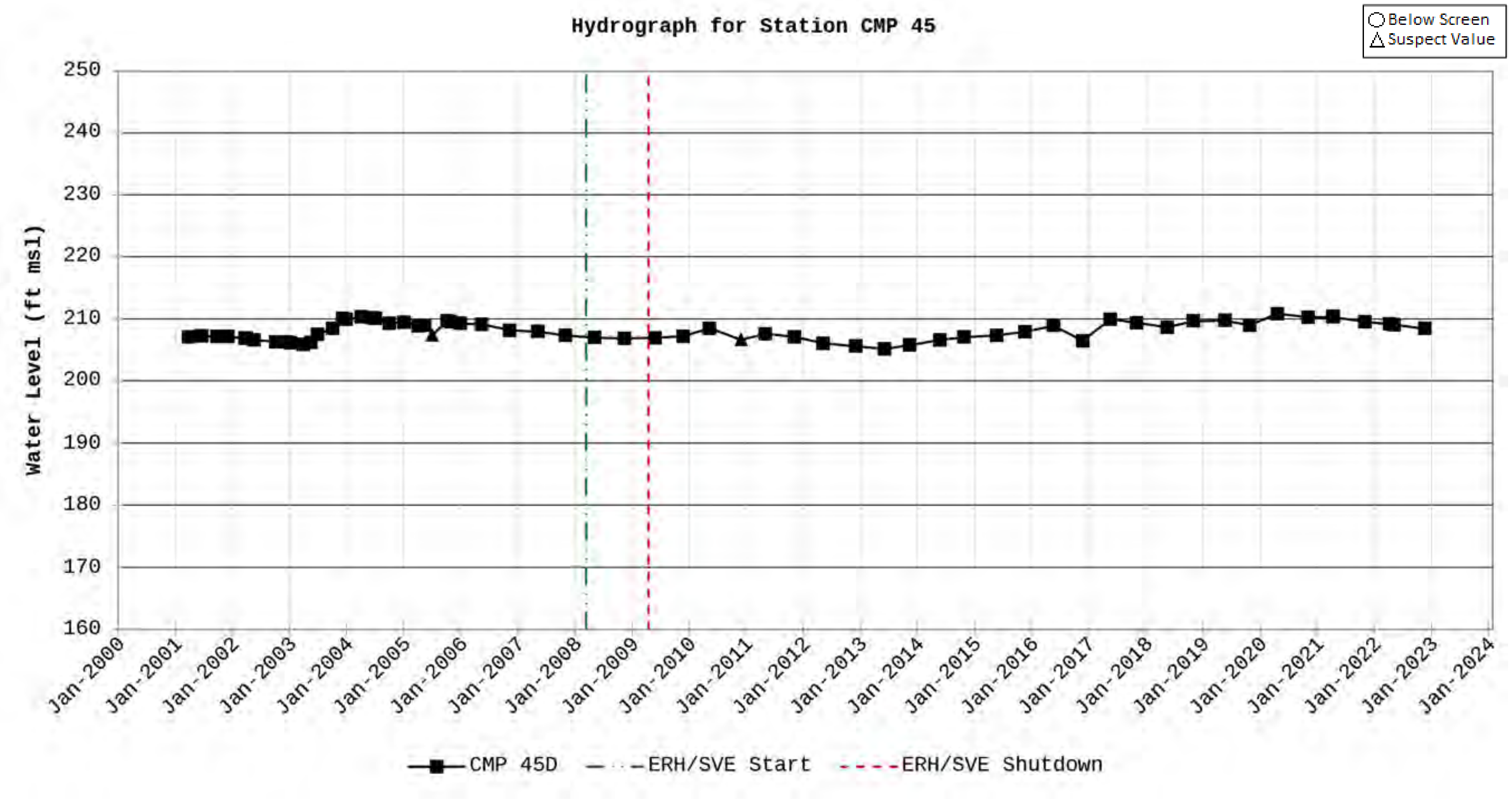
CMP 44D
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP 45
○ Below Screen
△ Suspect Value
Water Level (ft msl)
250
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Jan-2000
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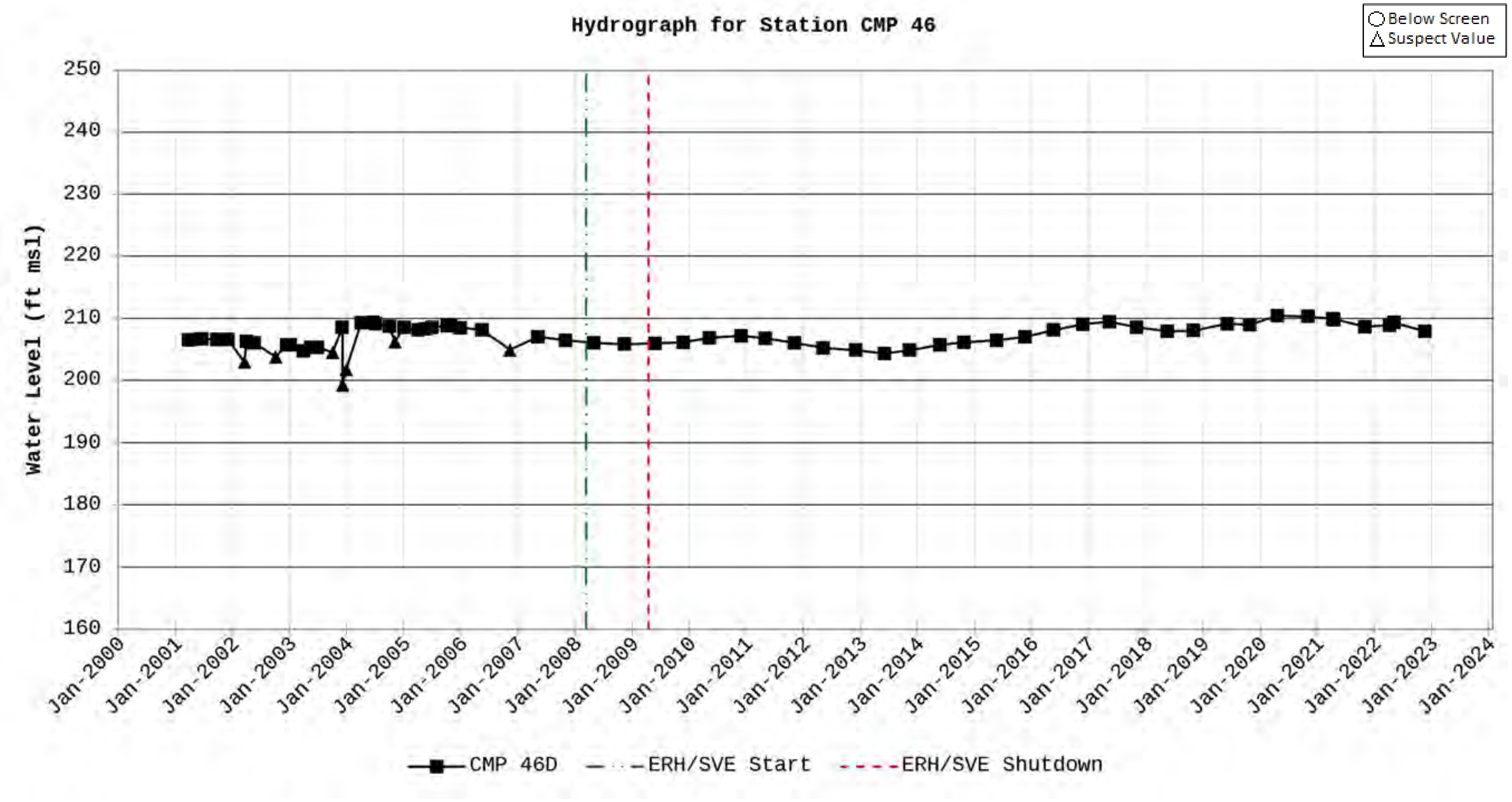
CMP 45D
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP 46
○ Below Screen
△ Suspect Value
Water Level (ft msl)
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Jan-2000
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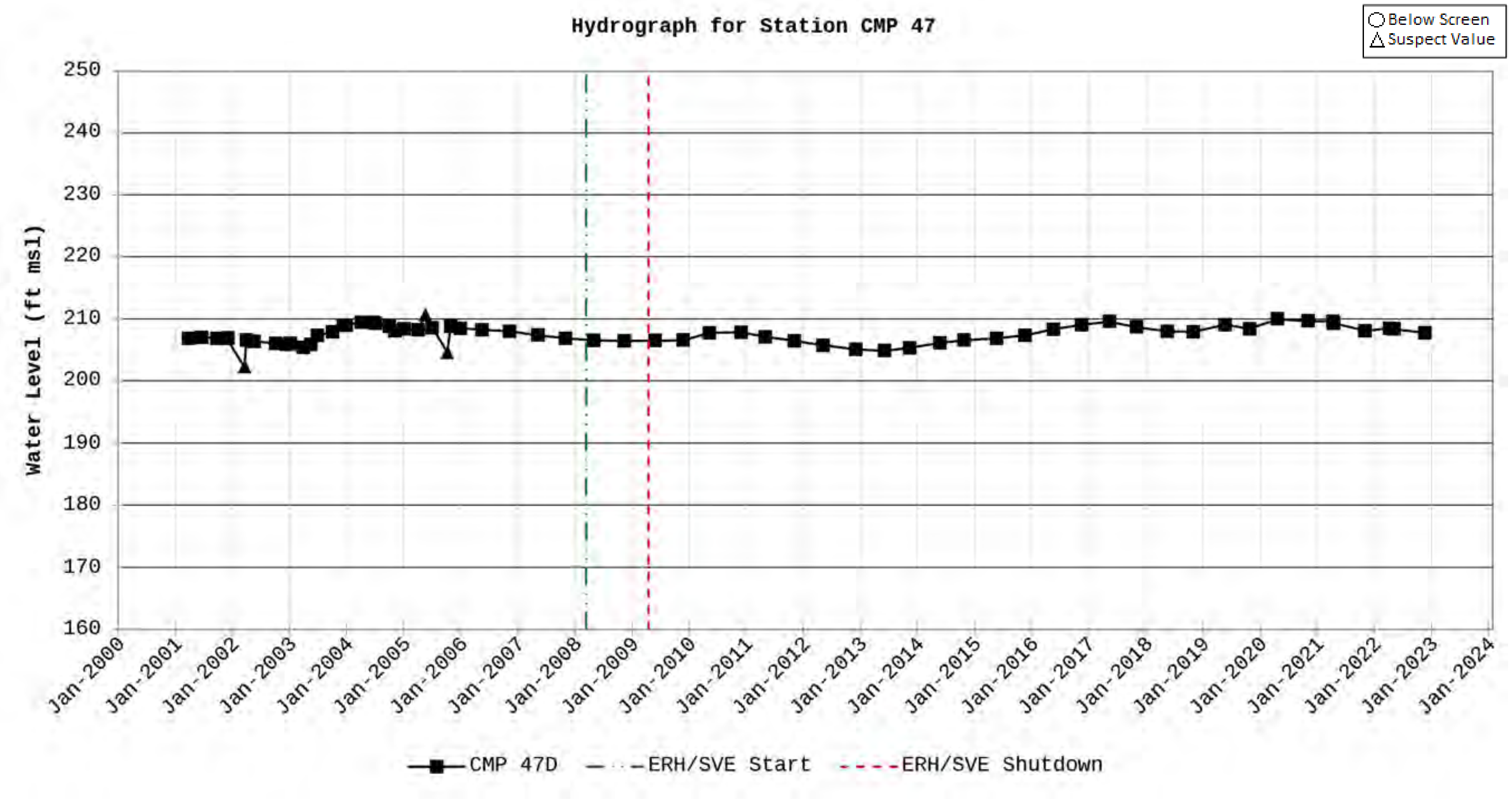
CMP 46D
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP 47
○ Below Screen
△ Suspect Value
Water Level (ft msl)
250
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Jan-2000
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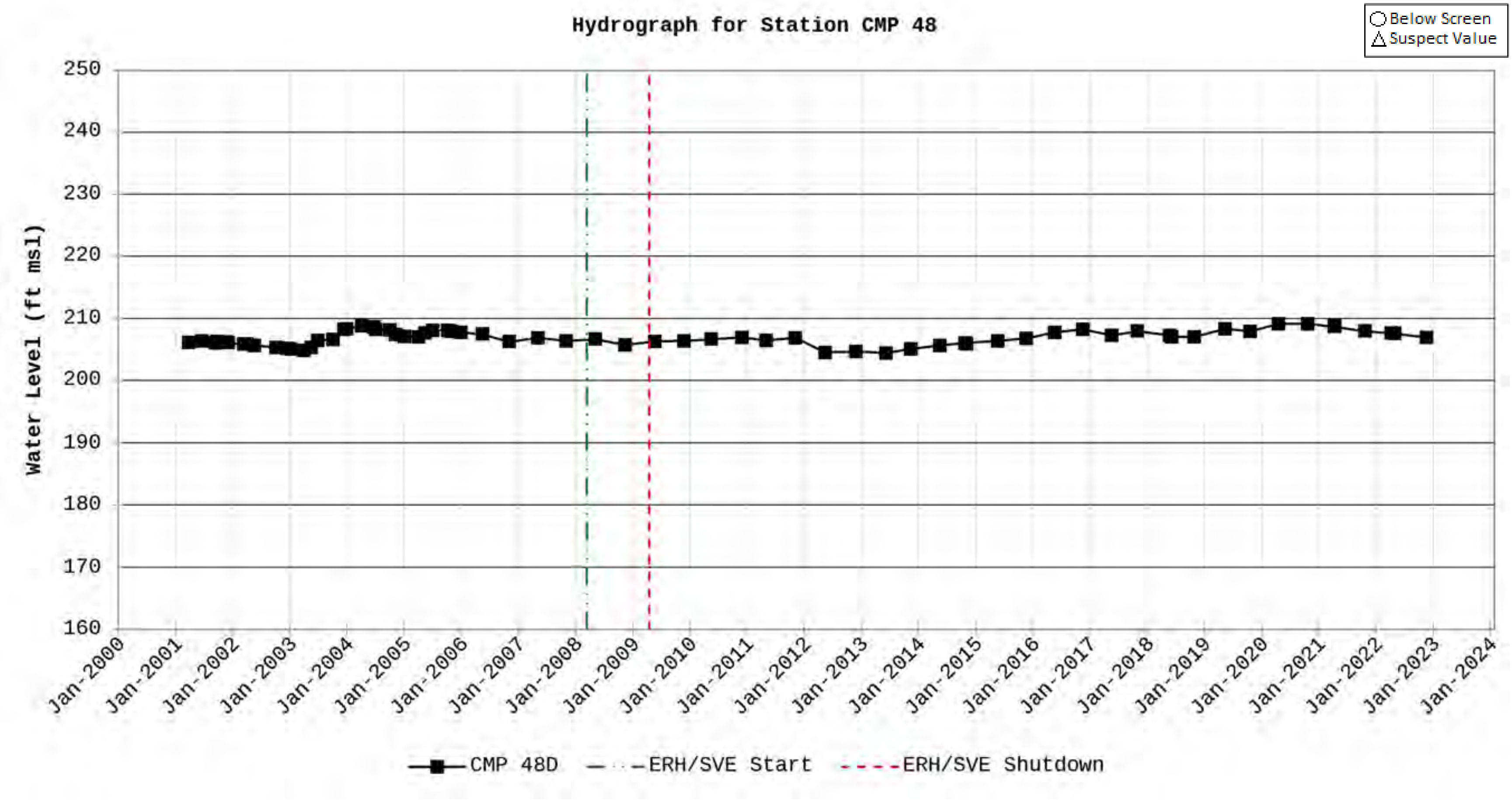
CMP 47D
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP 48
○ Below Screen
△ Suspect Value
Water Level (ft msl)
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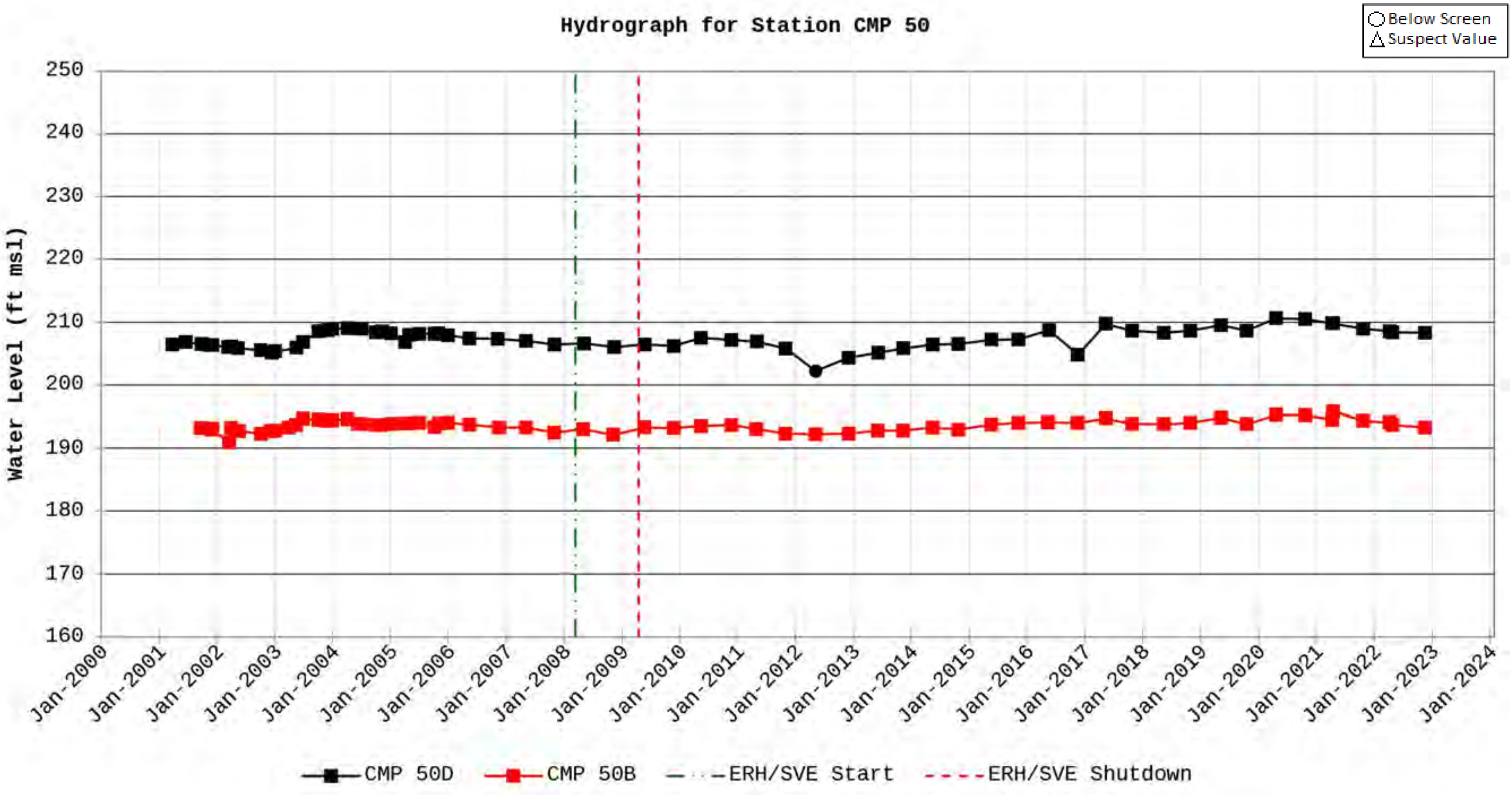
CMP 48D
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP 50
○ Below Screen
△ Suspect Value
Water Level (ft msl)
250
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Jan-2000
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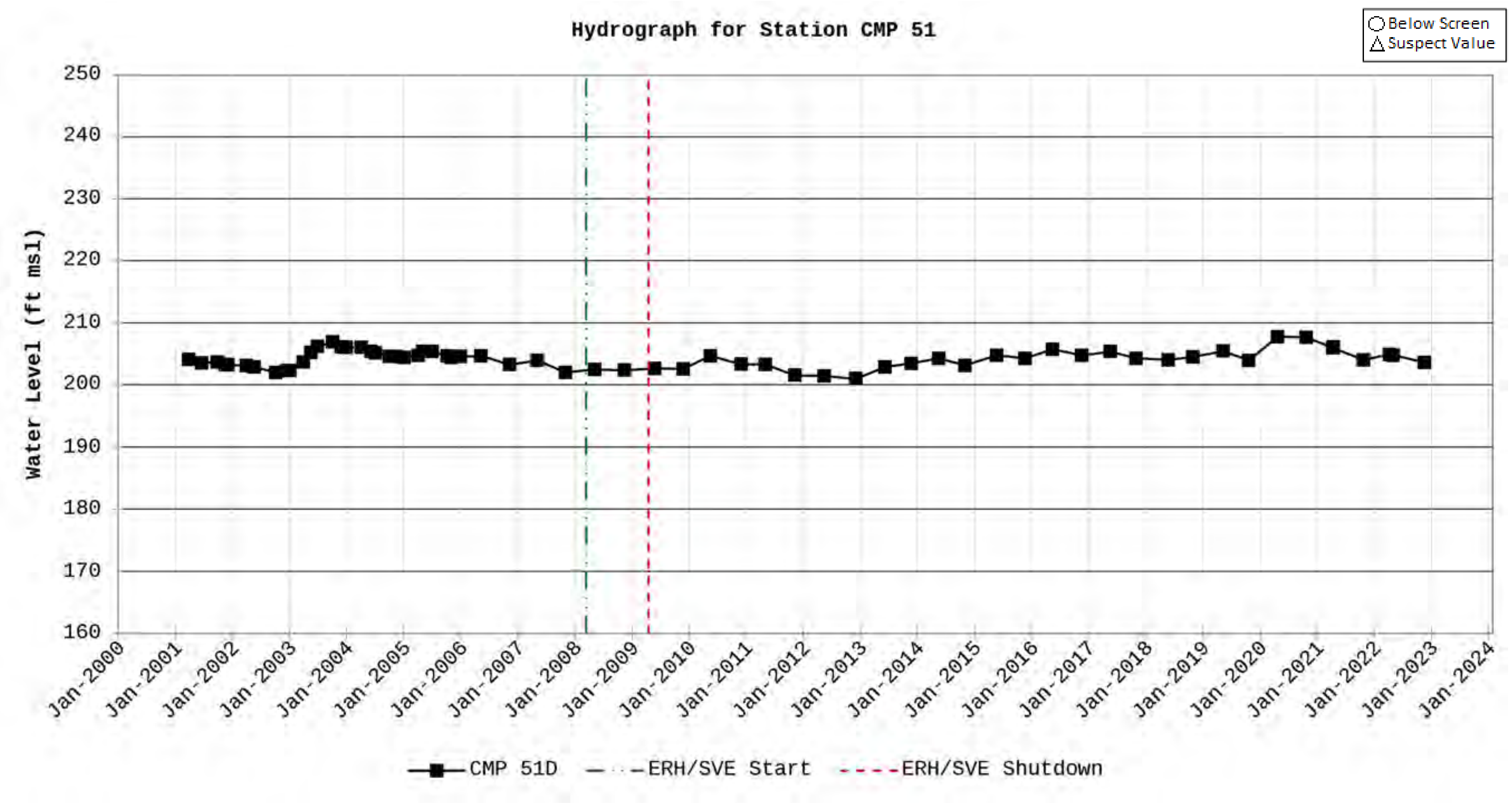
CMP 50D
CMP 50B
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP 51
○ Below Screen
△ Suspect Value
Water Level (ft msl)
250
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Jan-2000
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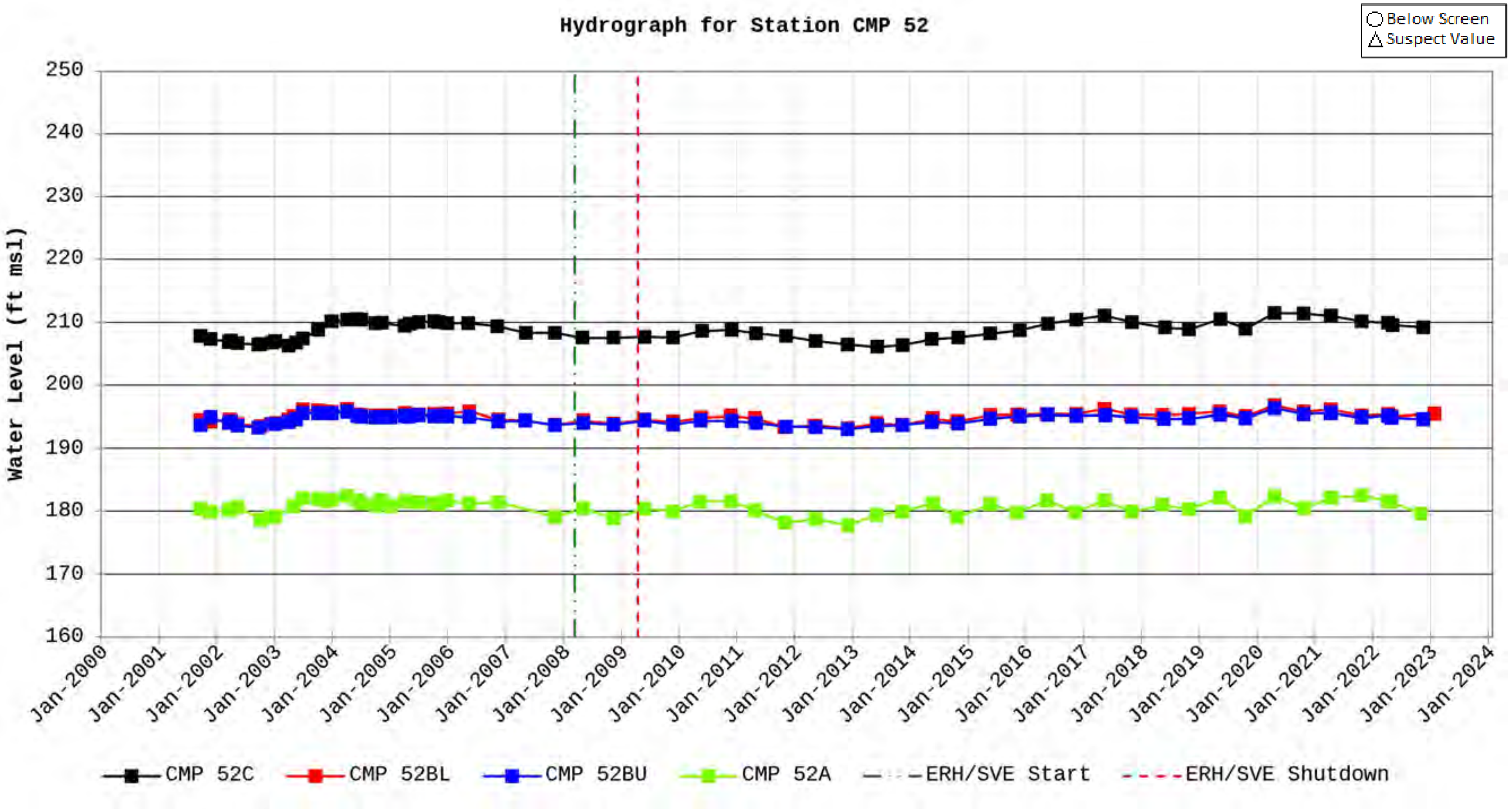
CMP 51D
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP 52
○ Below Screen
△ Suspect Value
Water Level (ft msl)
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Jan-2000
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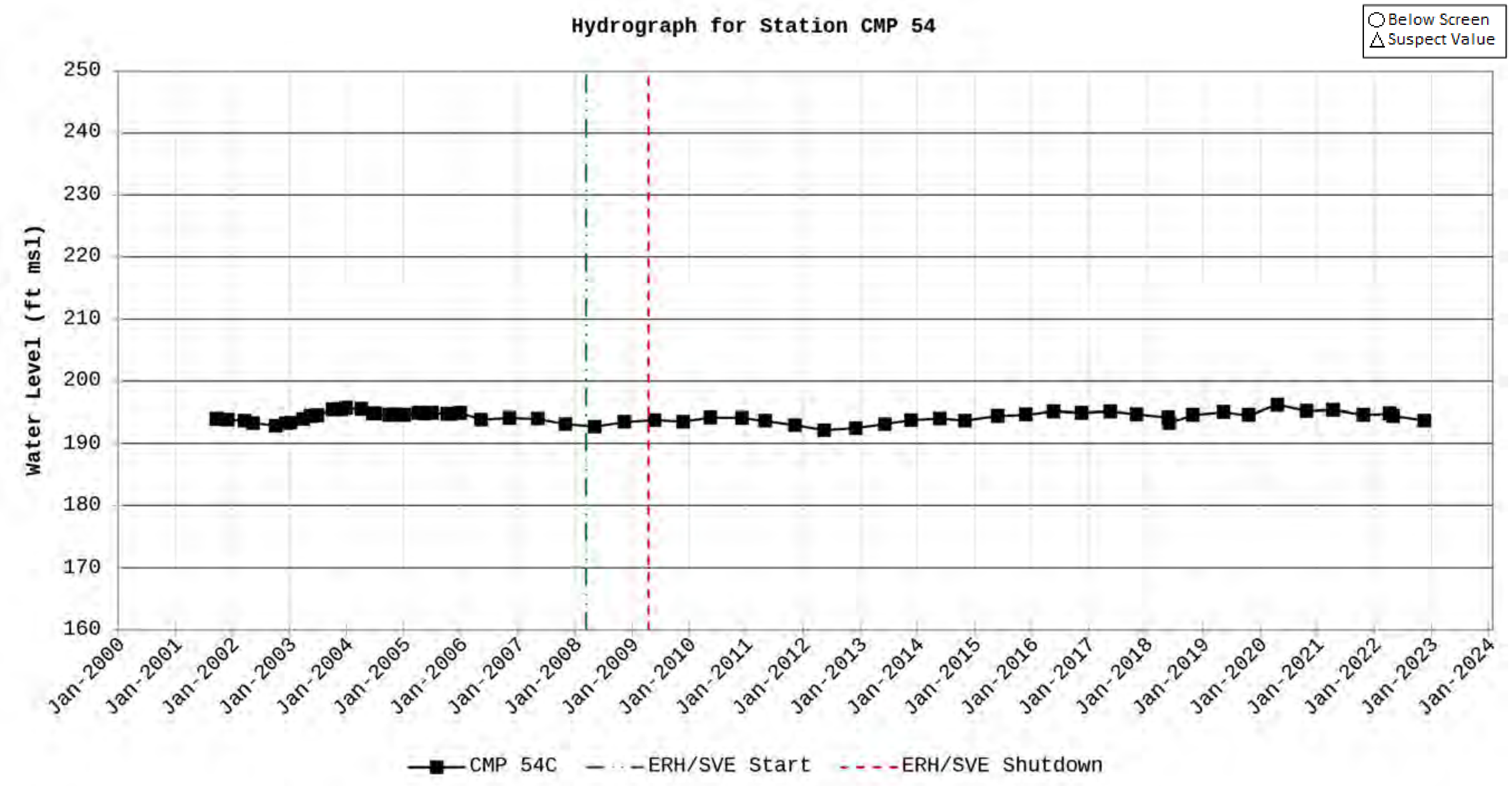
CMP 52C
CMP 52BL
CMP 52BU
CMP 52A
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP 54
○ Below Screen
△ Suspect Value
Water Level (ft msl)
250
240
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210
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160
Jan-2000
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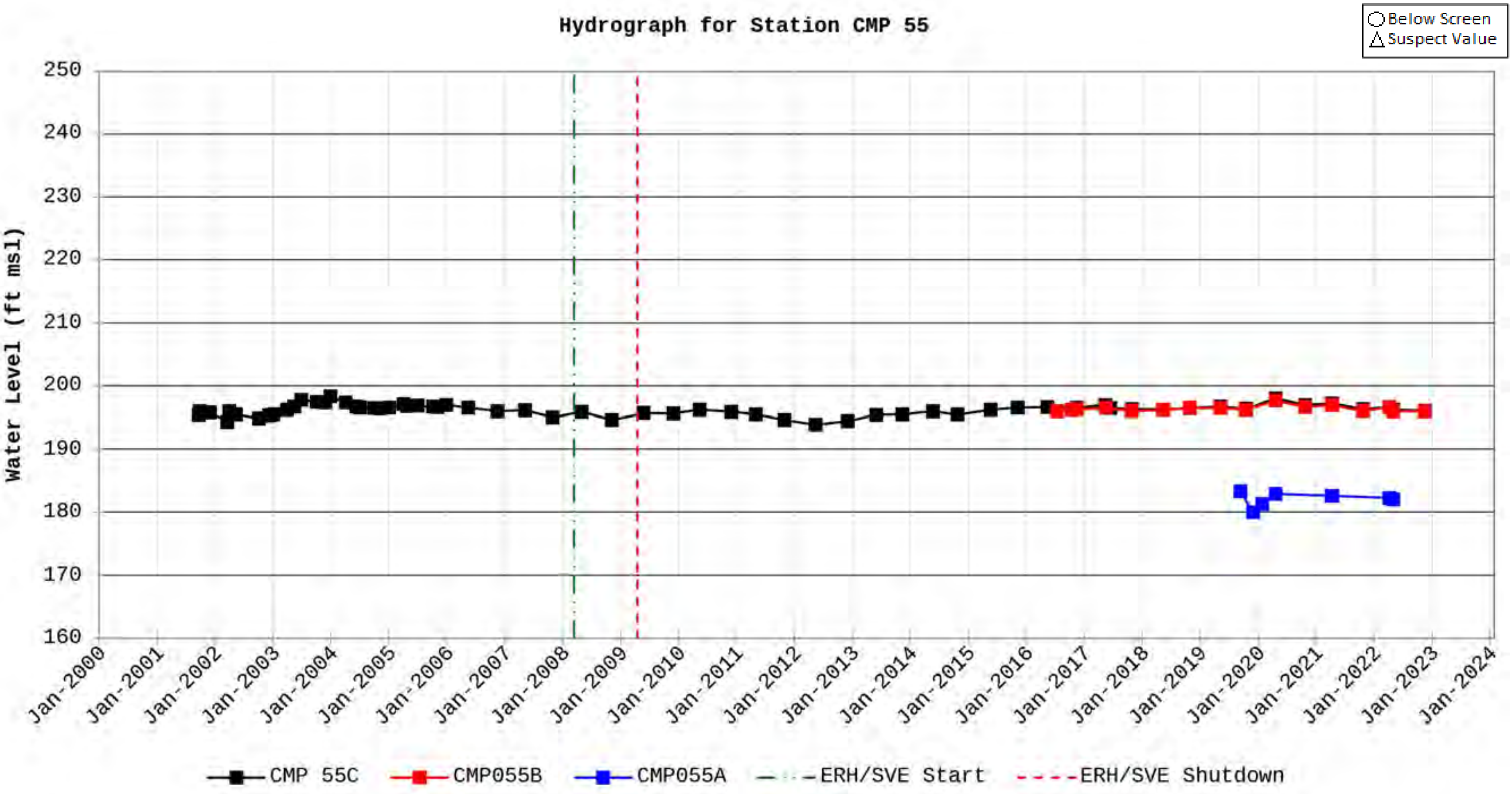
CMP 54C
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP 55
○ Below Screen
△ Suspect Value
Water Level (ft msl)
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Jan-2000
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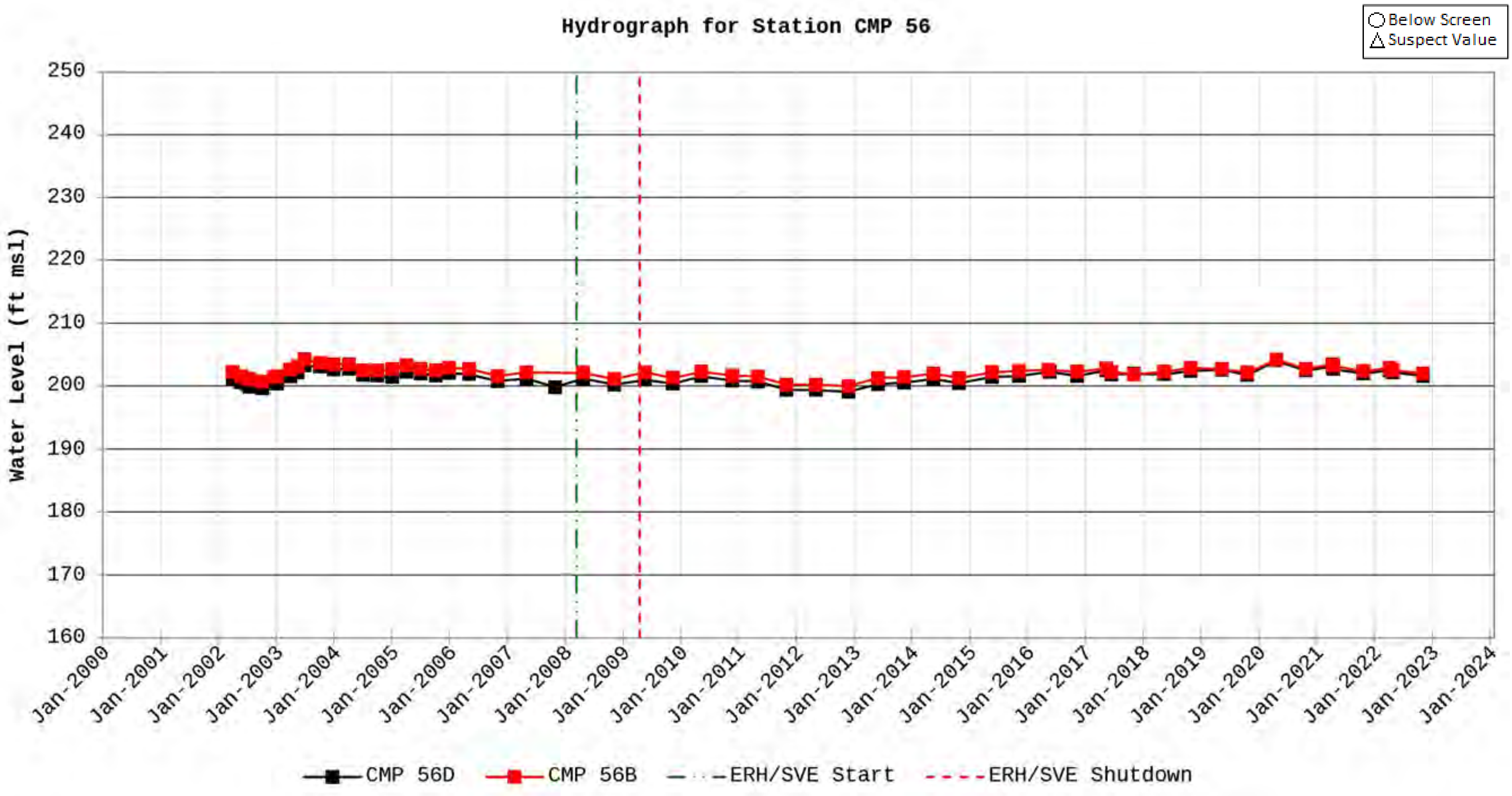
CMP 55C
CMP055B
CMP055A
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP 56
○ Below Screen
△ Suspect Value
Water Level (ft msl)
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Jan-2000
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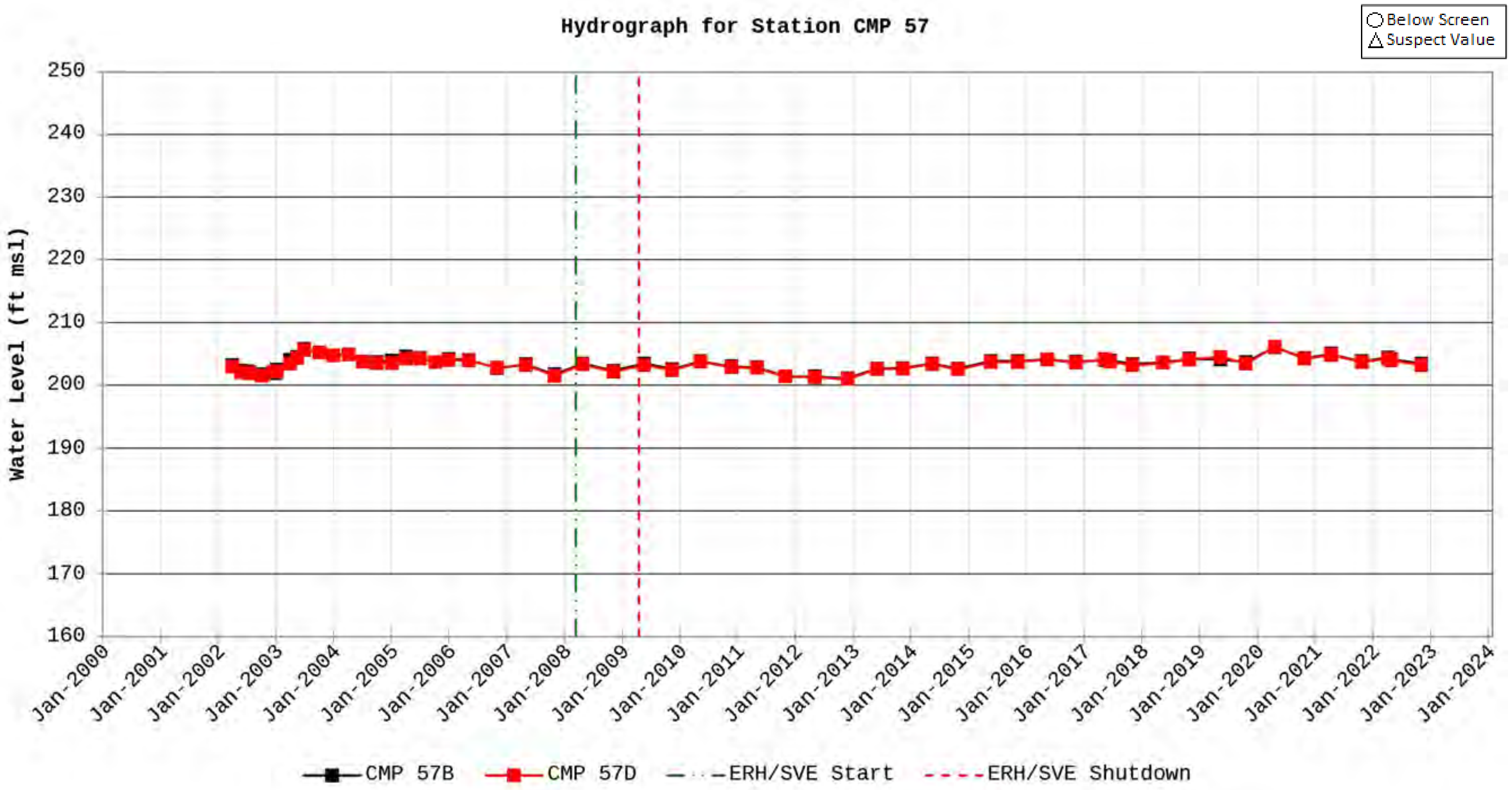
CMP 56D
CMP 56B
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP 57
○ Below Screen
△ Suspect Value
Water Level (ft msl)
250
240
230
220
210
200
190
180
170
160
Jan-2000
Jan-2001
Jan-2002
Jan-2003
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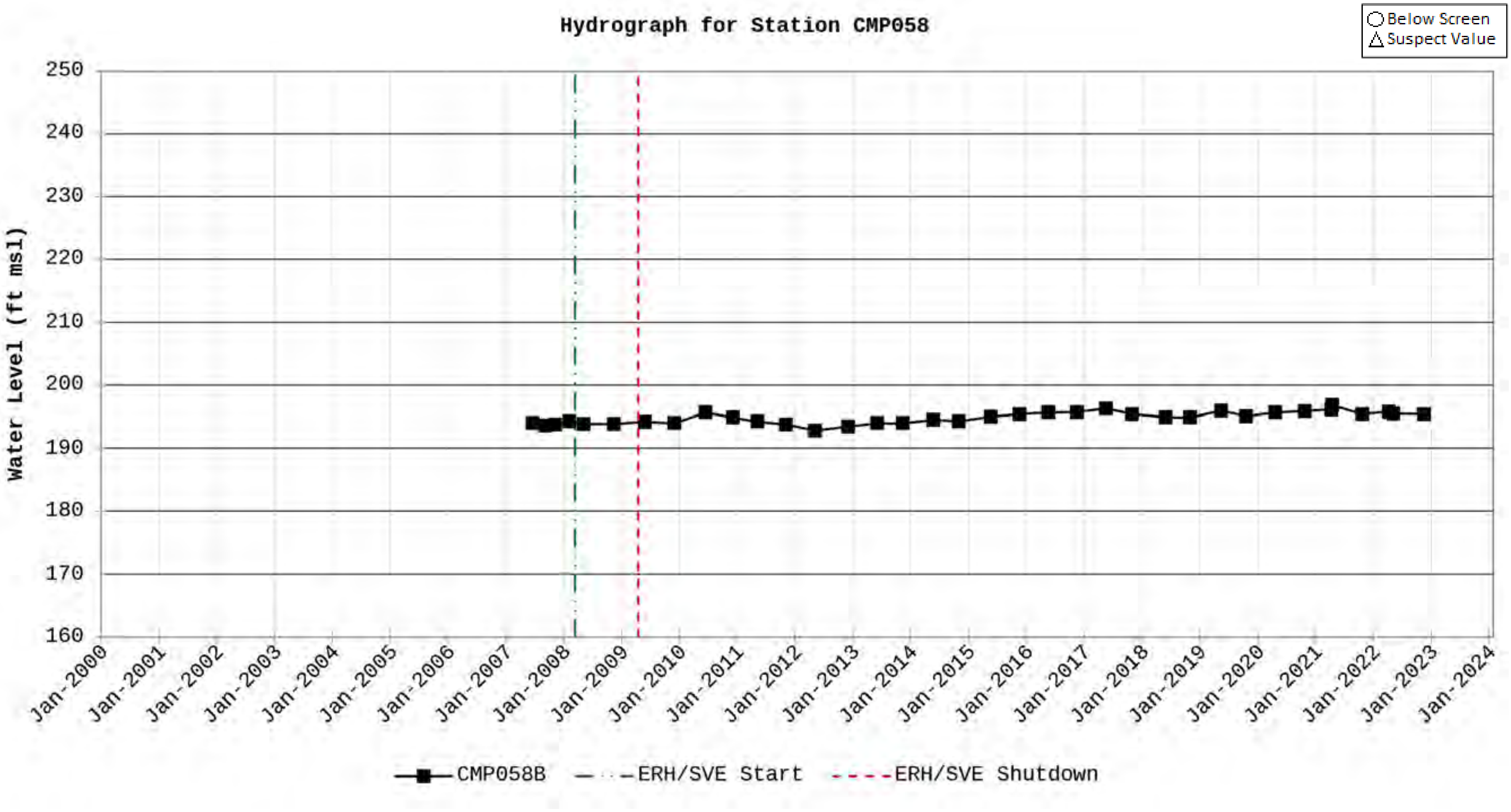
Jan-2024
CMP 57B
CMP 57D
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP058
○ Below Screen
△ Suspect Value
Water Level (ft msl)
250
240
230
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200
190
180
170
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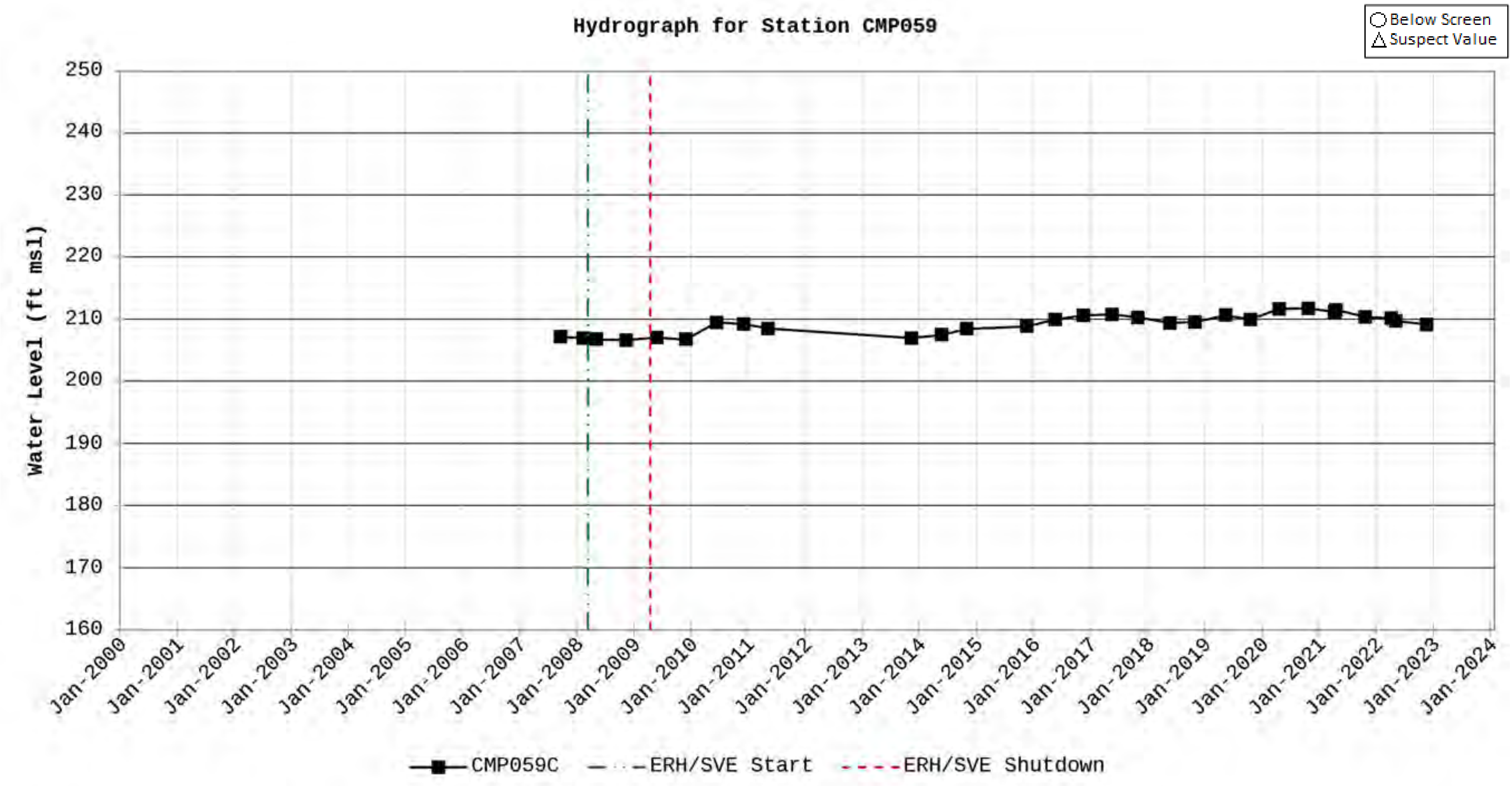
CMP058B
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP059
○ Below Screen
△ Suspect Value
Water Level (ft msl)
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240
230
220
210
200
190
180
170
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Jan-2000
Jan-2001
Jan-2002
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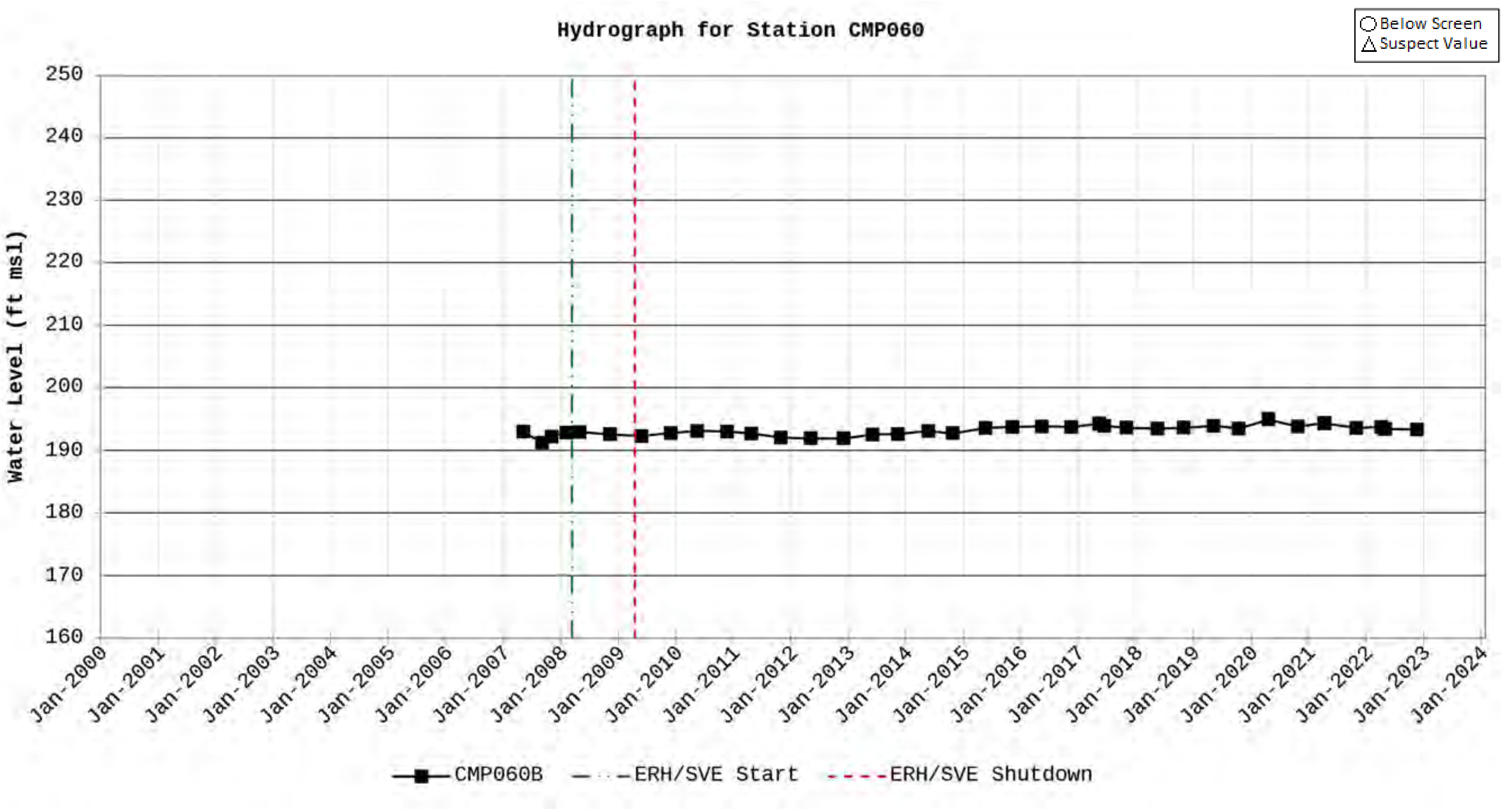
Jan-2022
Jan-2023
Jan-2024
CMP059C
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP060
○ Below Screen
△ Suspect Value
Water Level (ft msl)
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240
230
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200
190
180
170
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Jan-2000
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Jan-2002
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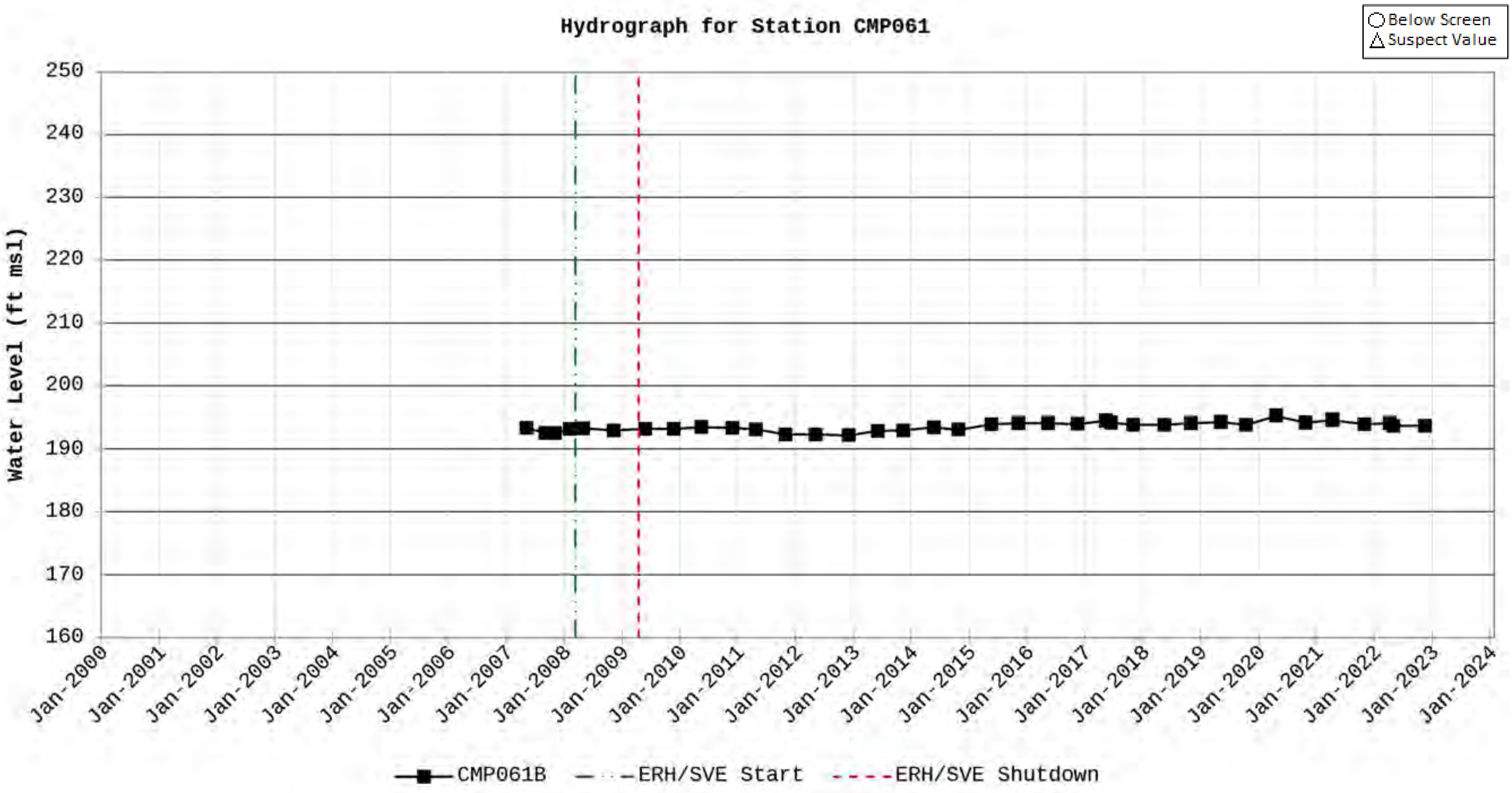
CMP060B
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP061
○ Below Screen
△ Suspect Value
Water Level (ft msl)
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Jan-2000
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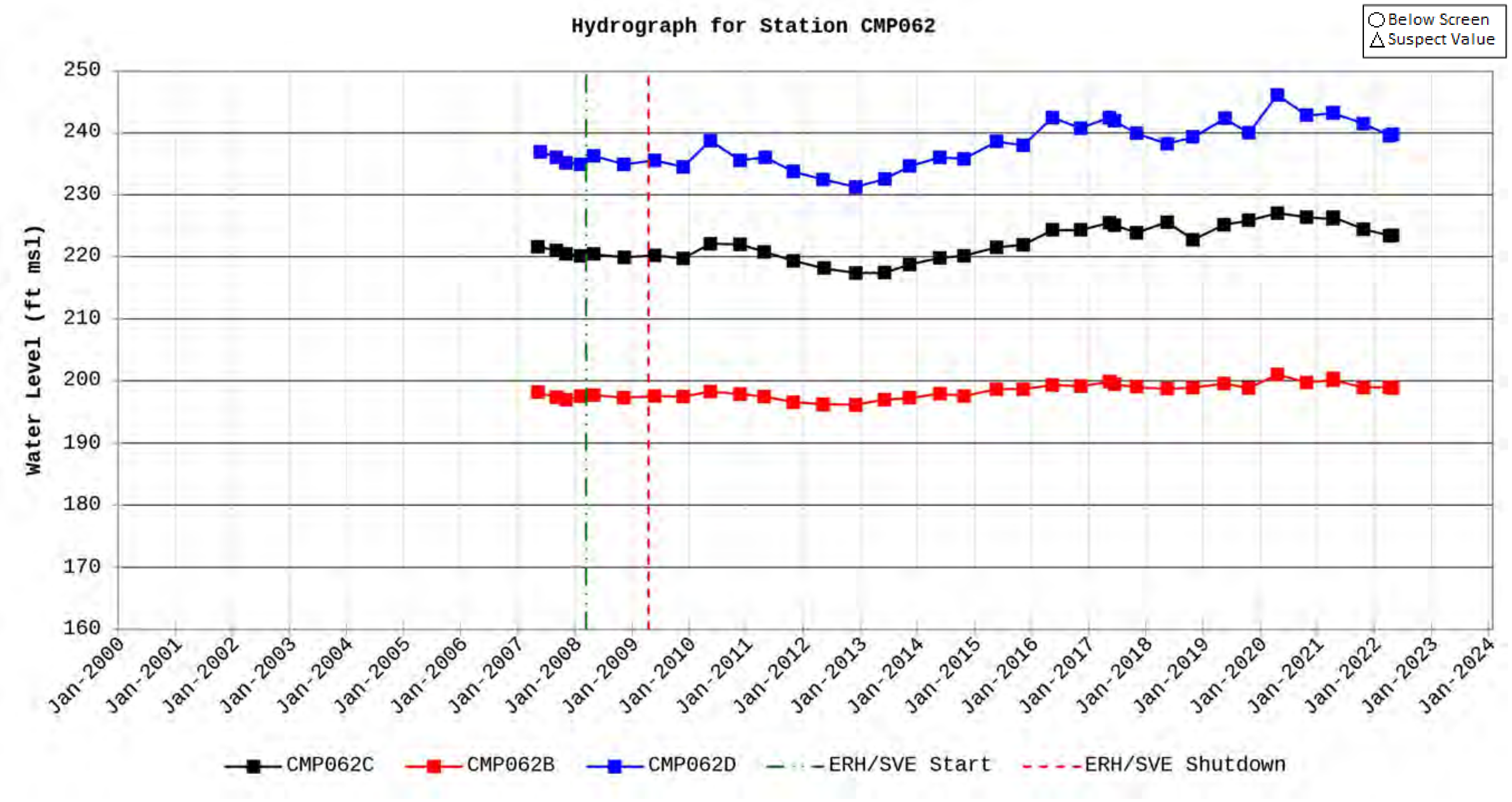
CMP061B
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP062
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△ Suspect Value
Water Level (ft msl)
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190
180
170
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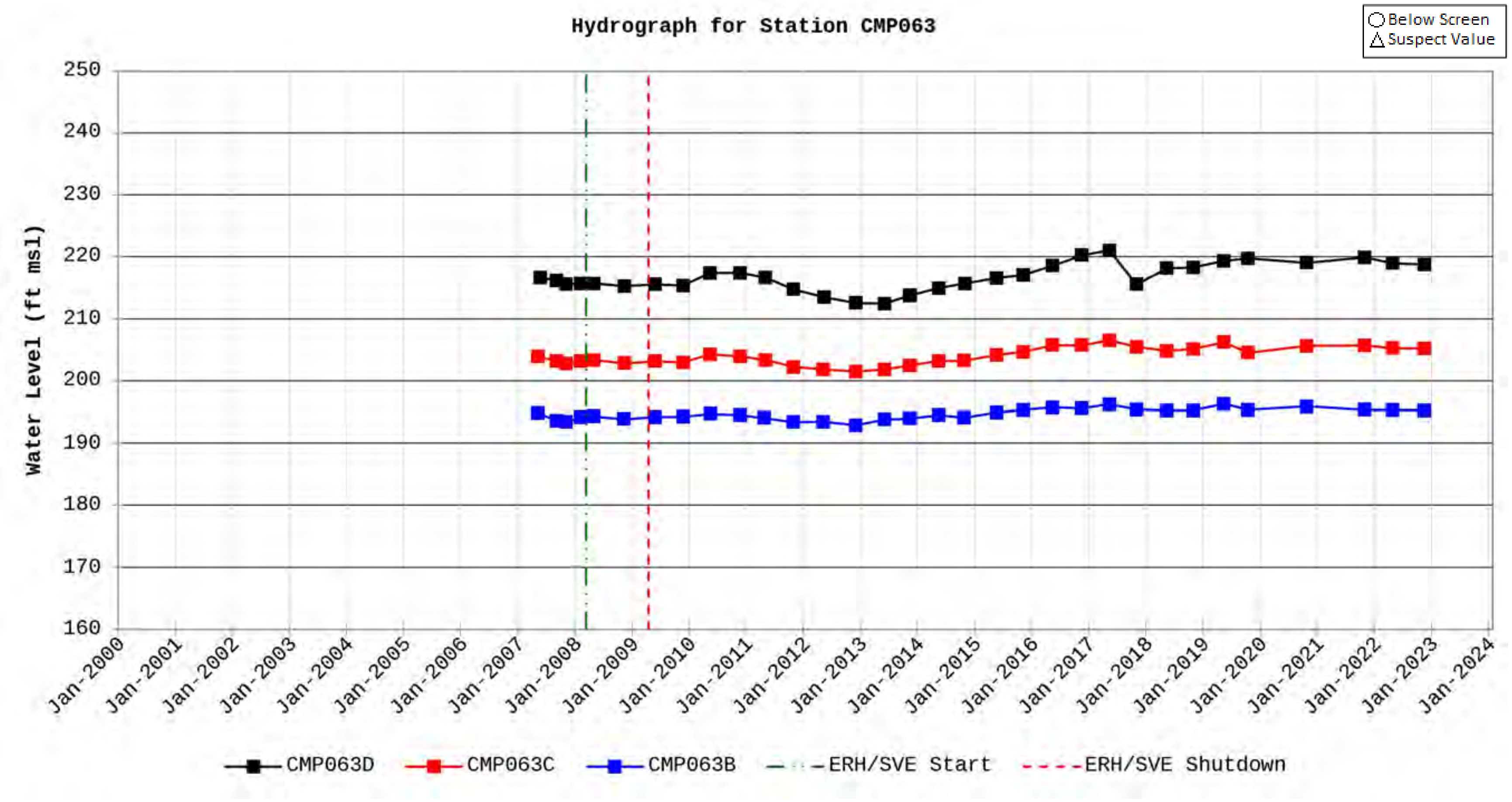
CMP062C
CMP062B
CMP062D
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP063
○ Below Screen
△ Suspect Value
Water Level (ft msl)
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240
230
220
210
200
190
180
170
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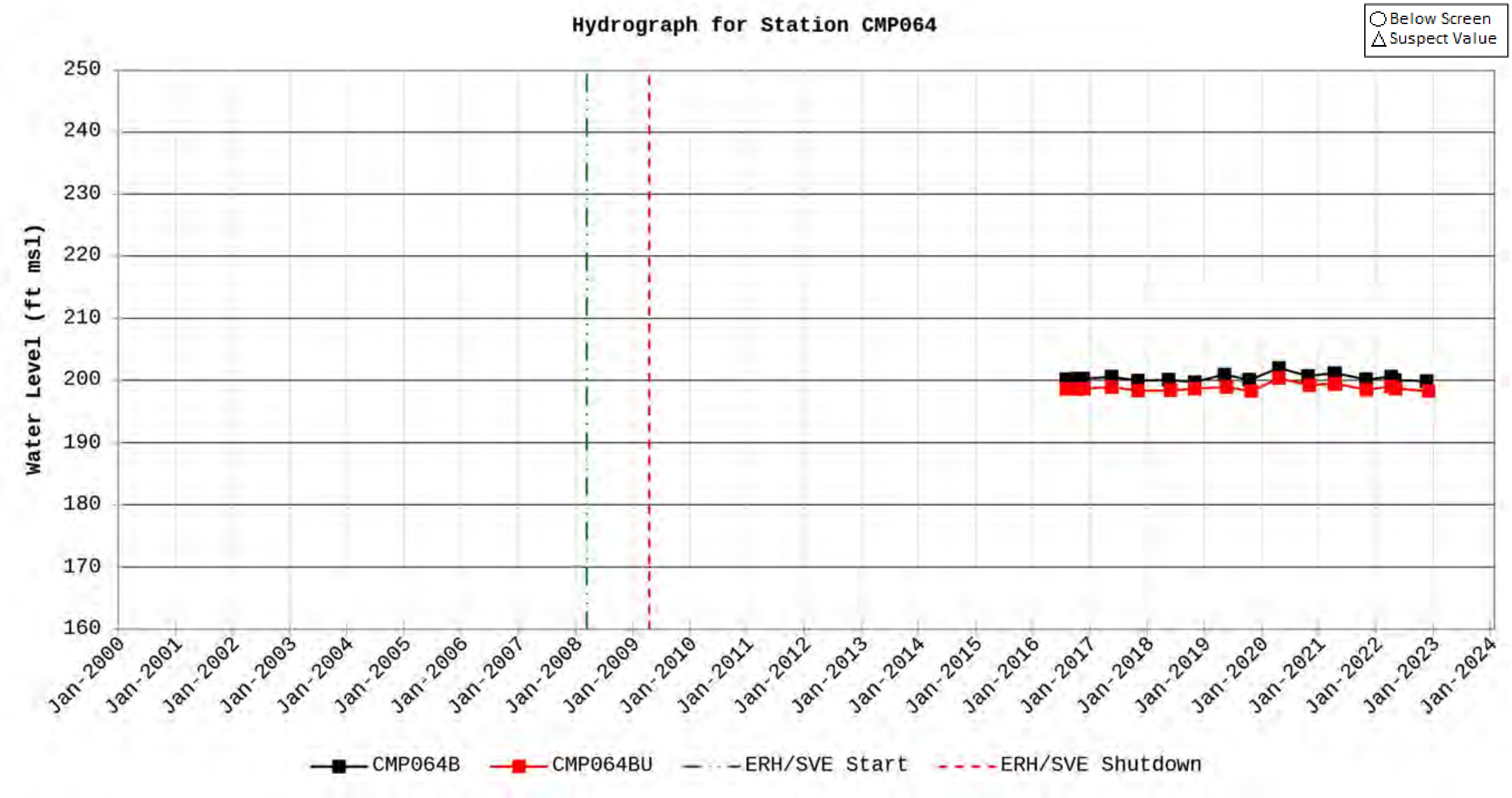
CMP063D
CMP063C
CMP063B
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP064
○ Below Screen
△ Suspect Value
Water Level (ft msl)
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240
230
220
210
200
190
180
170
160
Jan-2000
Jan-2001
Jan-2002
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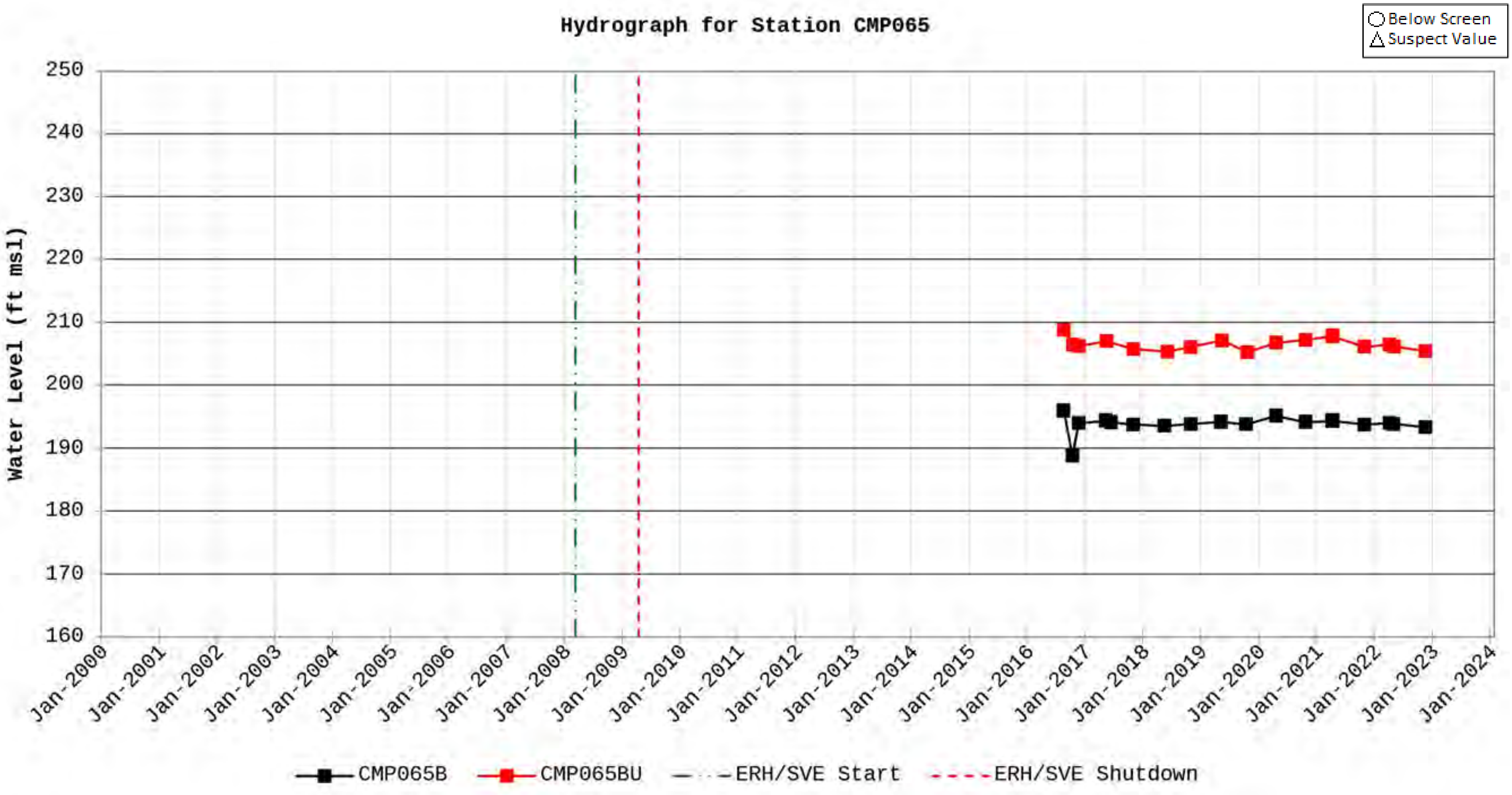
CMP064B
CMP064BU
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP065
○ Below Screen
△ Suspect Value
Water Level (ft msl)
250
240
230
220
210
200
190
180
170
160
Jan-2000
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Jan-2002
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Jan-2004
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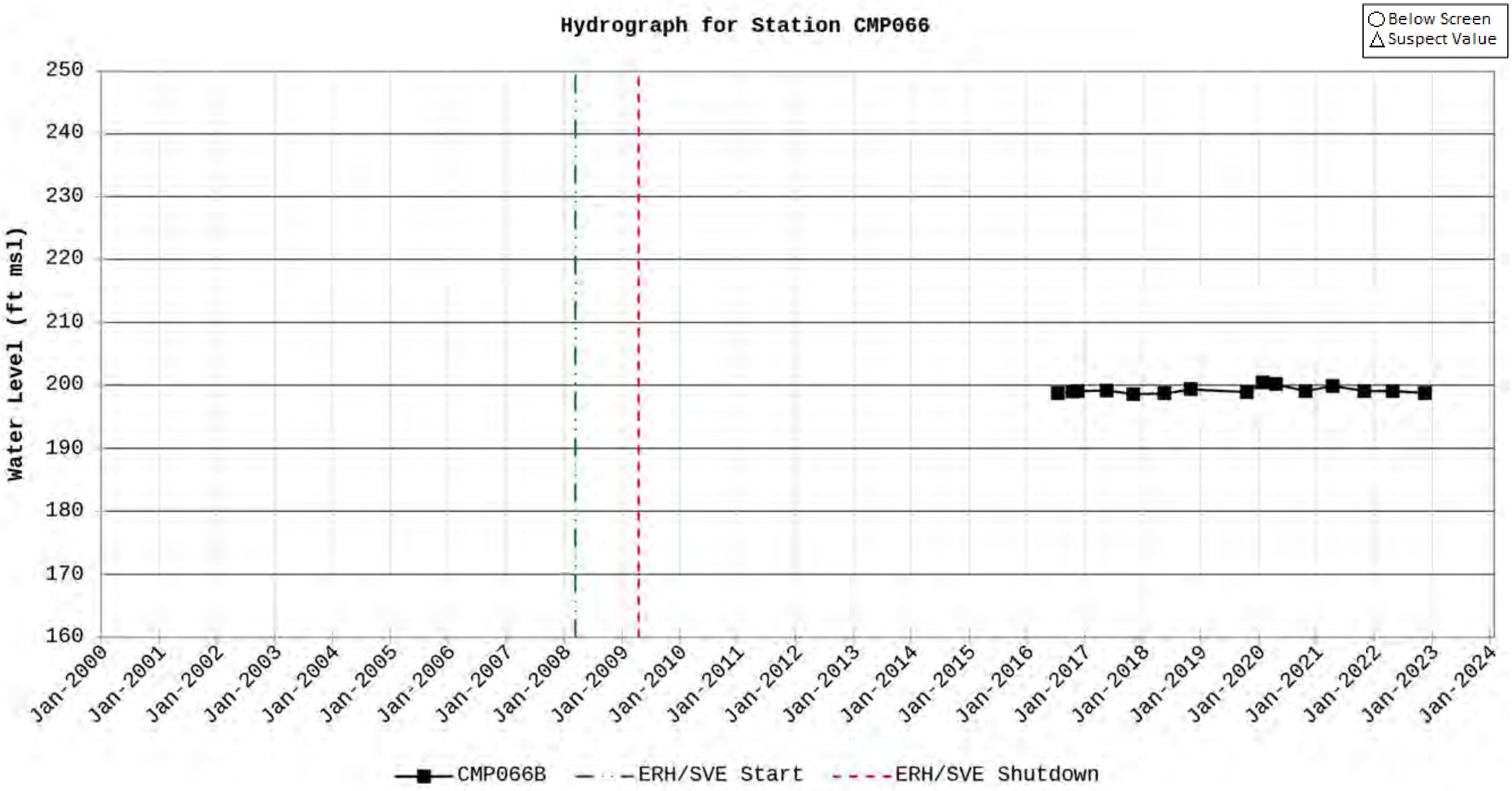
Jan-2024
CMP065B
CMP065BU
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP066
○ Below Screen
△ Suspect Value
Water Level (ft msl)
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240
230
220
210
200
190
180
170
160
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
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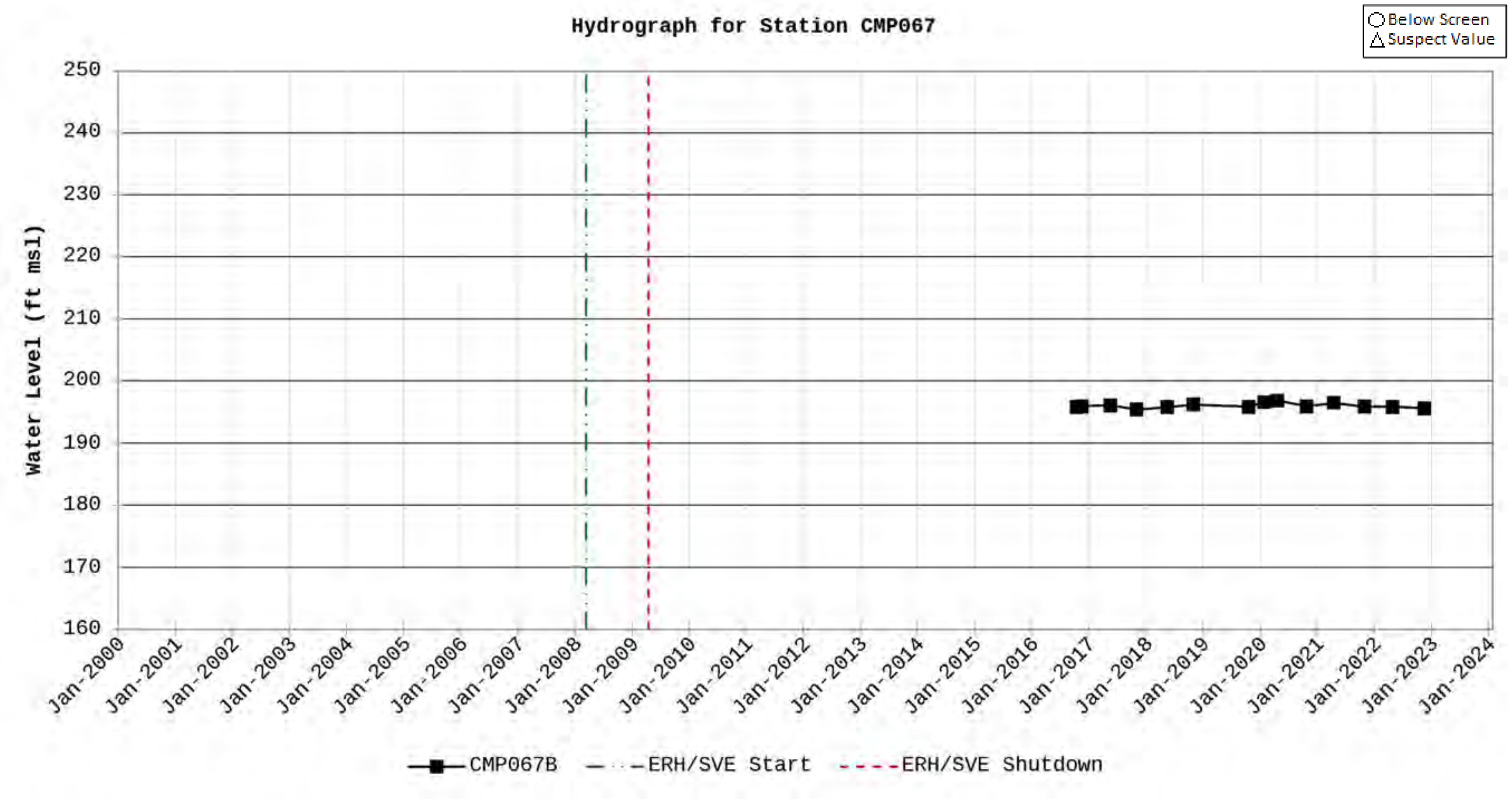
Jan-2022
Jan-2023
Jan-2024
CMP066B
ERH/SVE Start
ERH/SVE Shutdown


Hydrograph for Station CMP067
○ Below Screen
△ Suspect Value
Water Level (ft msl)
250
240
230
220
210
200
190
180
170
160
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
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Jan-2008
Jan-2009
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Jan-2022
Jan-2023
Jan-2024
CMP067B
ERH/SVE Start
ERH/SVE Shutdown

Appendix B

Time-Series Plots

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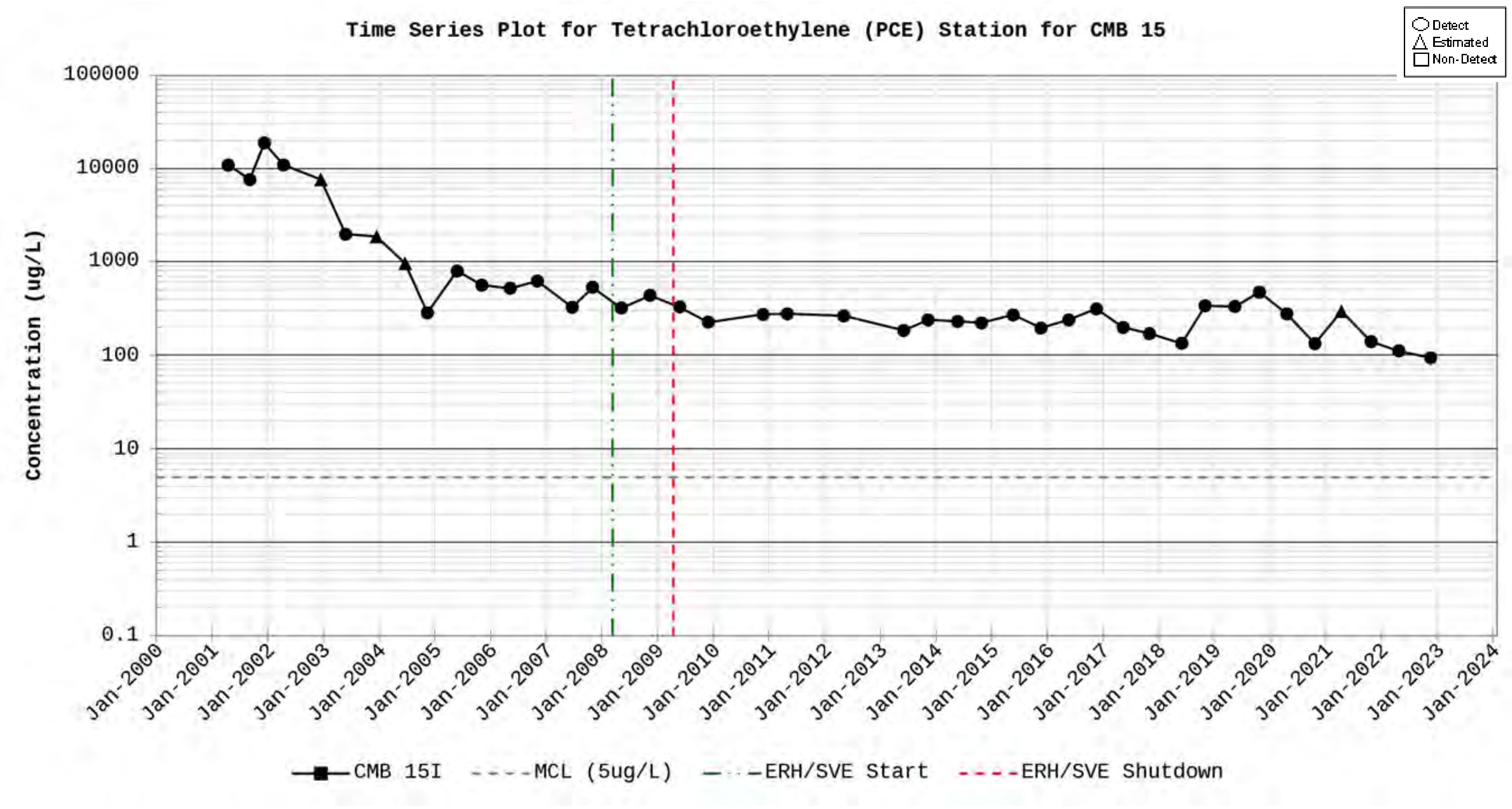
Time Series Plot for Tetrachloroethylene (PCE) Station for CMB 15
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
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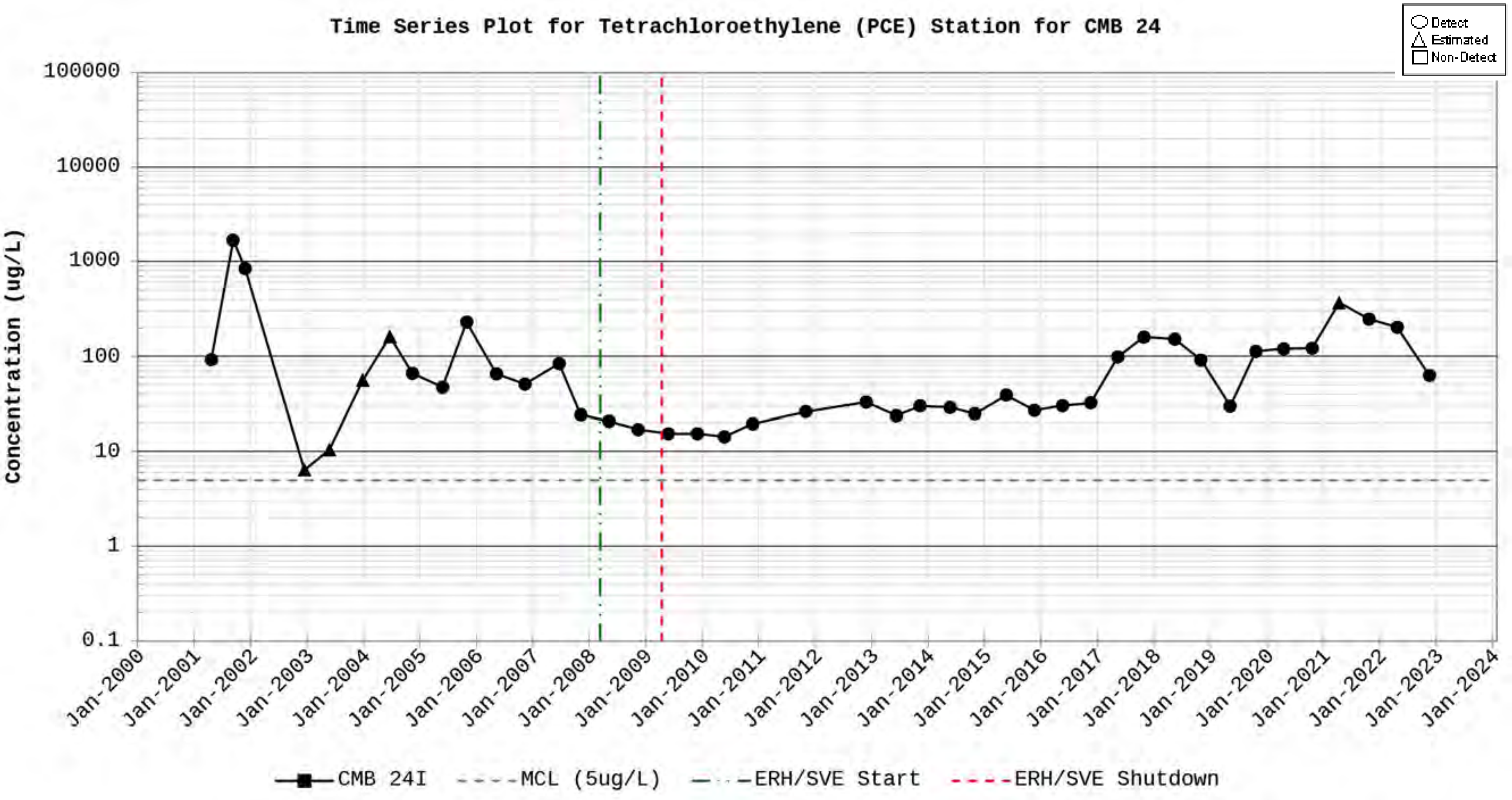
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMB 15I
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMB 24
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
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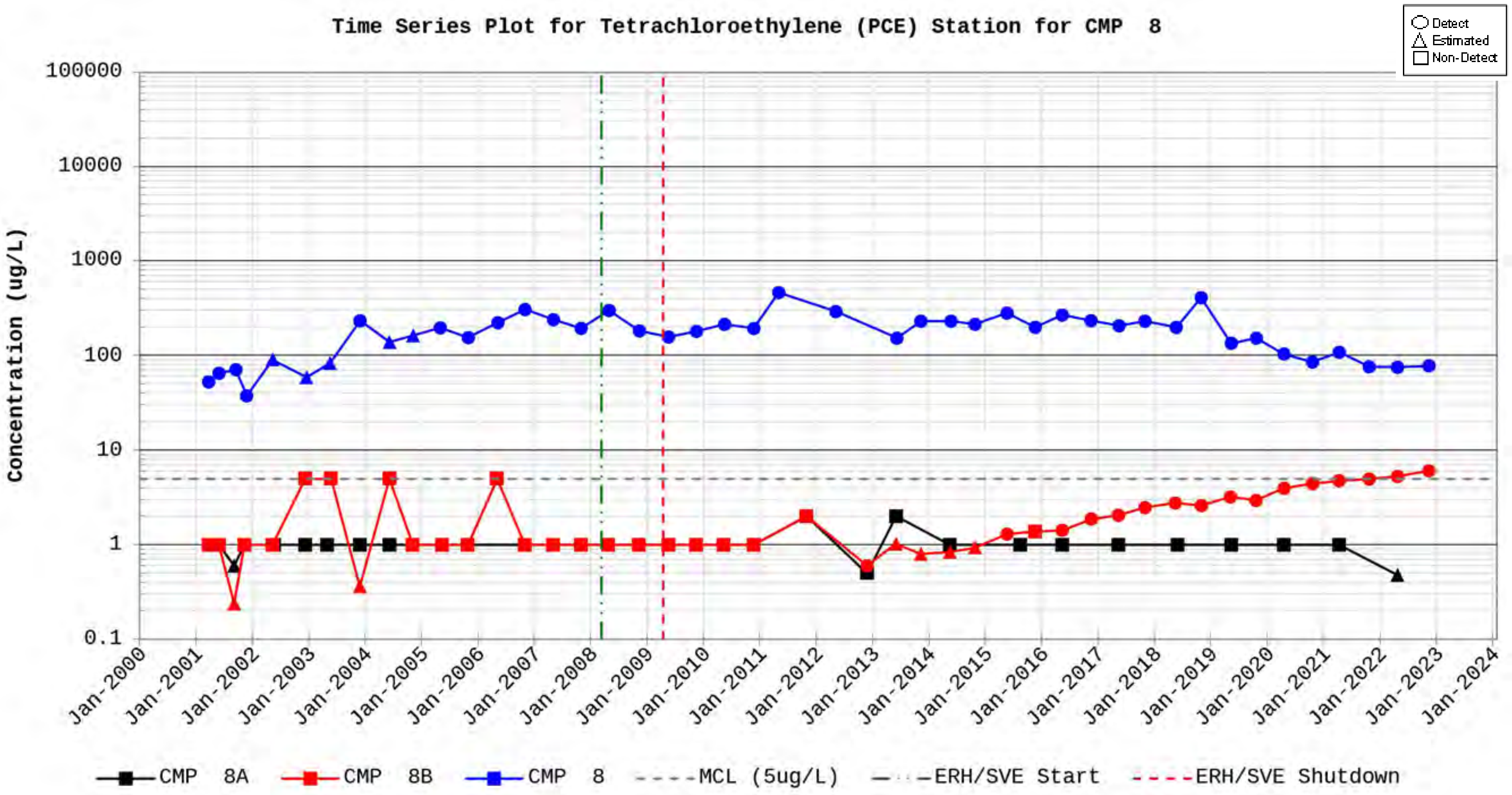
Jan-2023
Jan-2024
CMB 24I
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP 8
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
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Jan-2021
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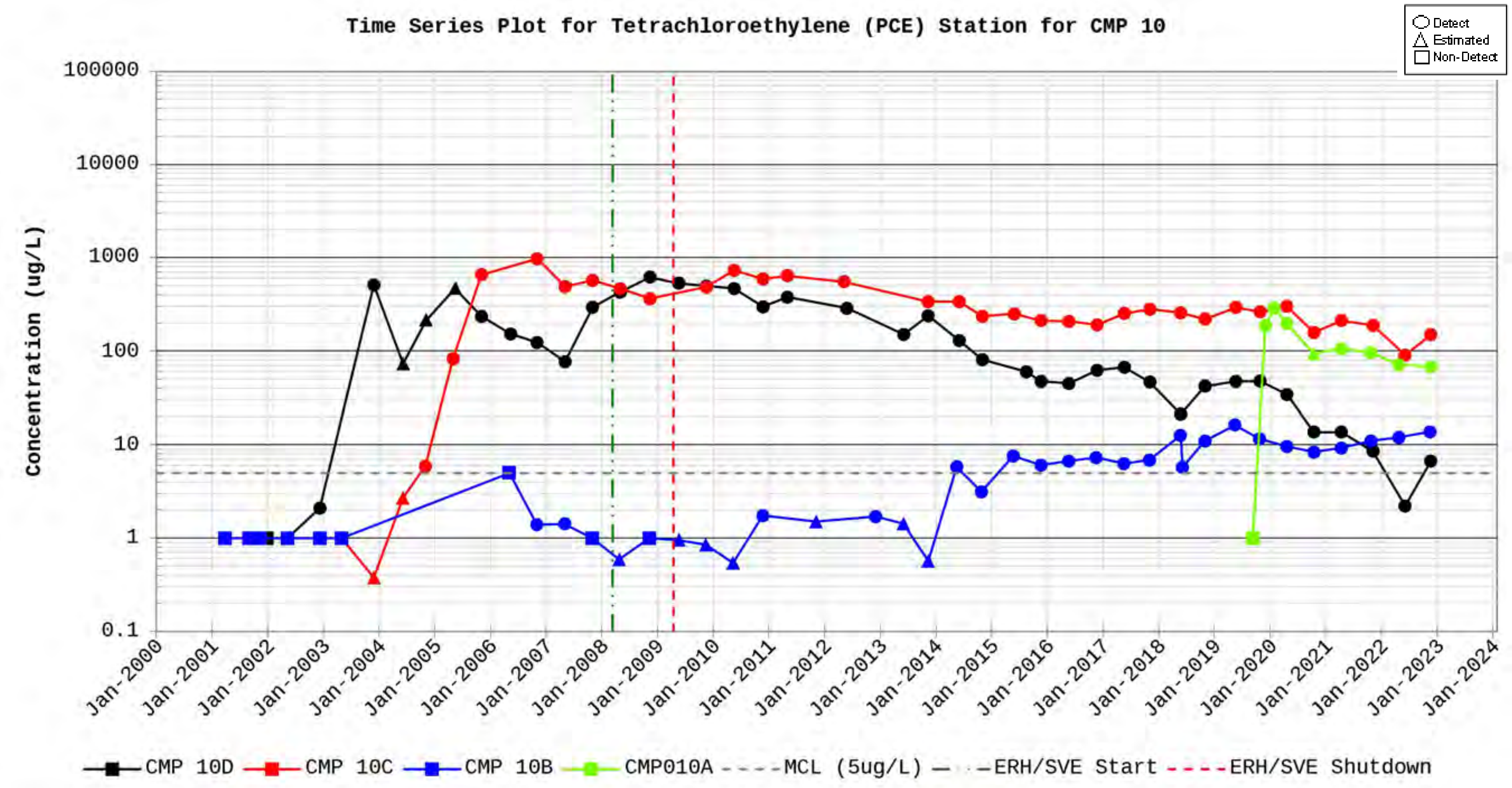
Jan-2024
CMP 8A
CMP 8B
CMP 8
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP 10
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
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Jan-2021
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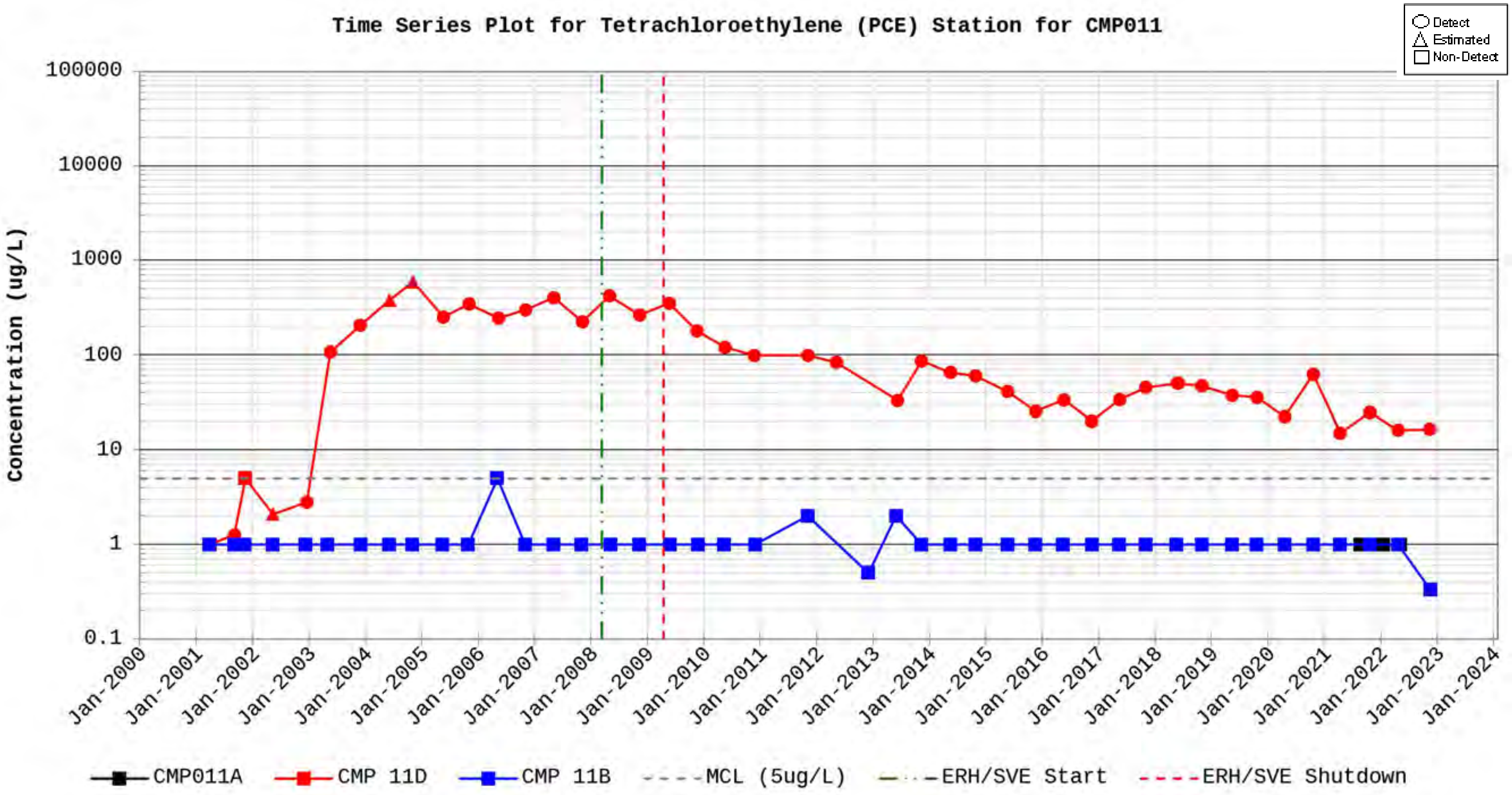
CMP 10D
CMP 10C
CMP 10B
CMP010A
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP011
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
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Jan-2021
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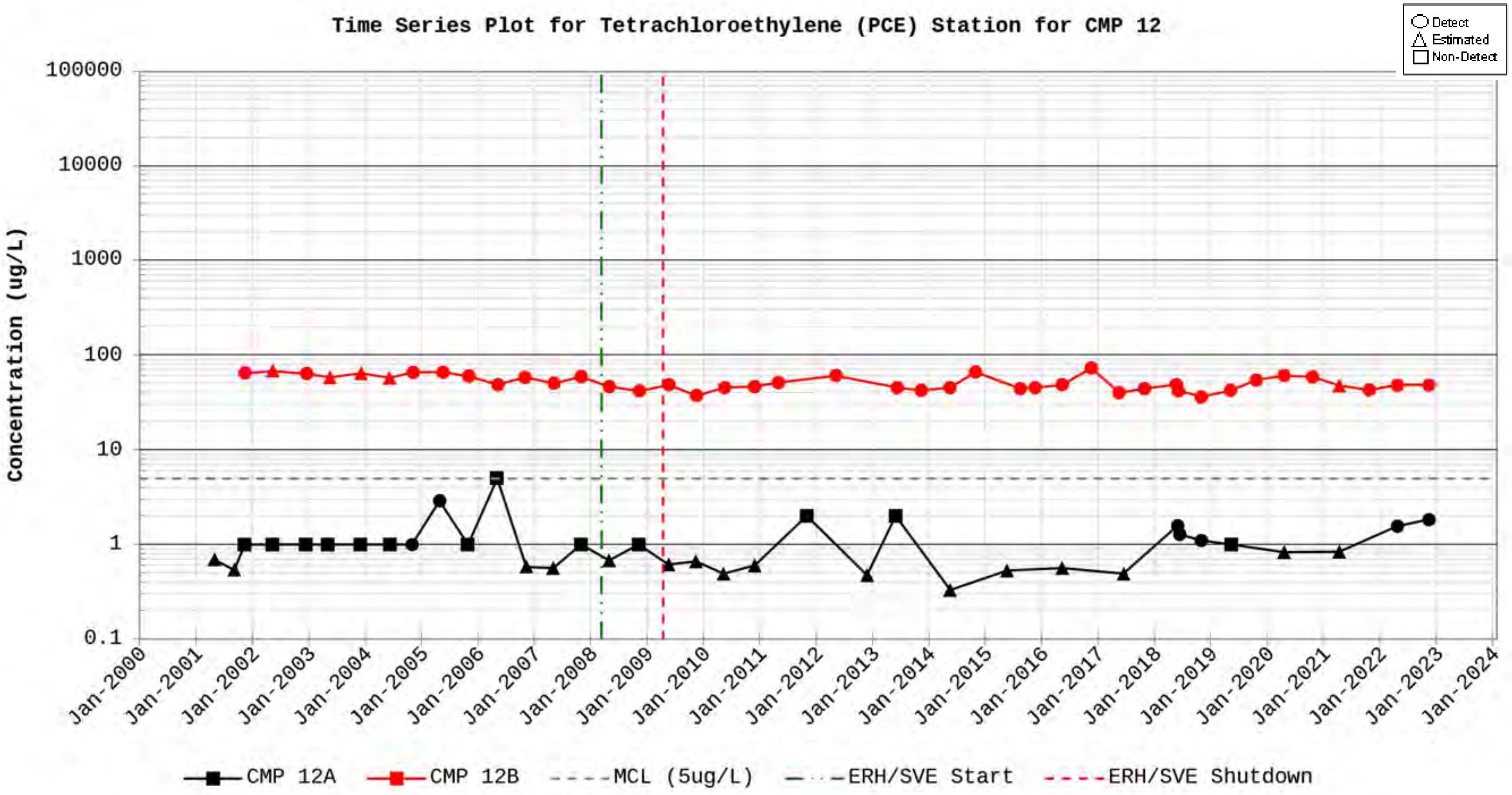
CMP011A
CMP 11D
CMP 11B
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP 12
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
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Jan-2007
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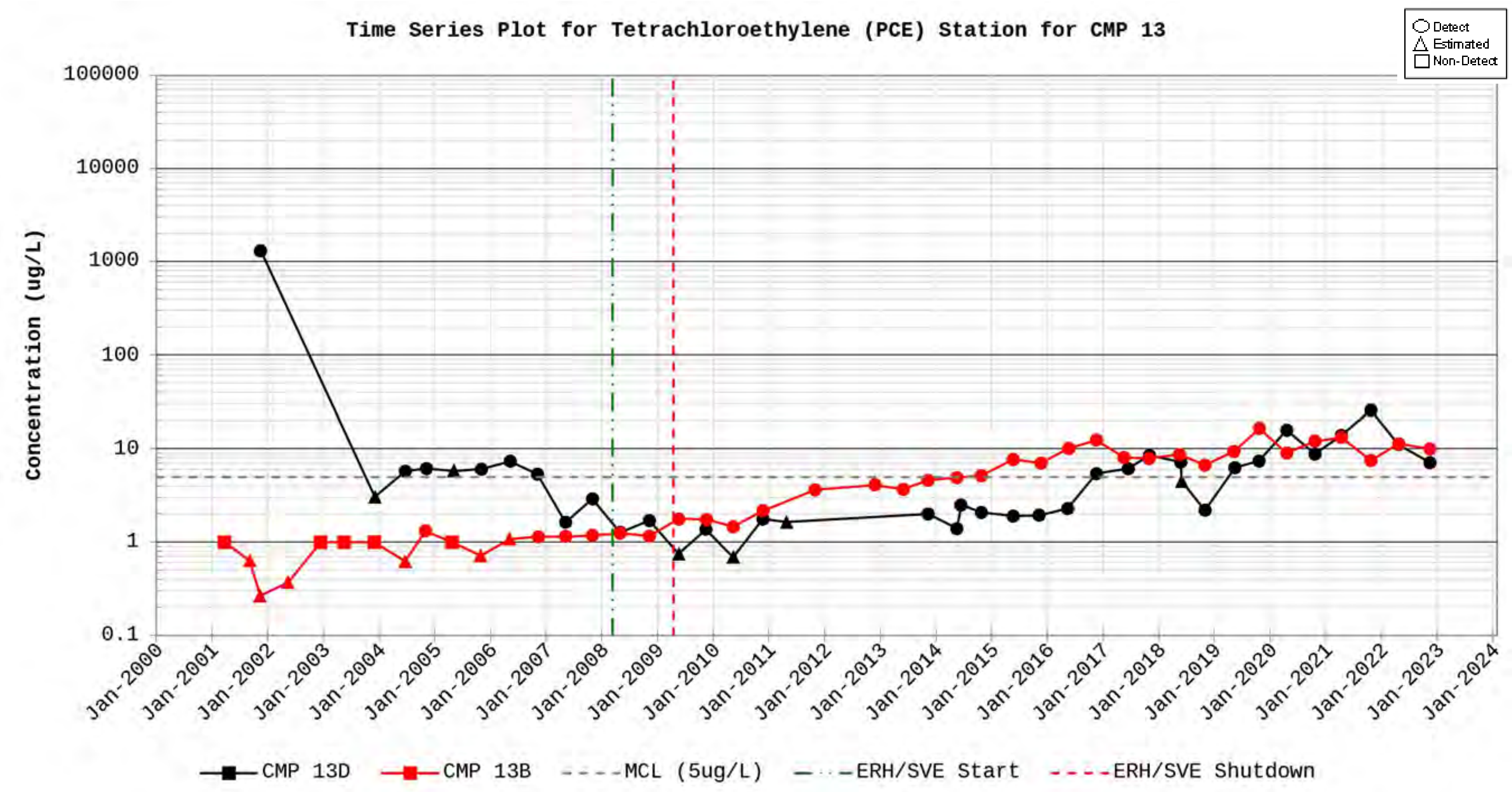
Jan-2024
CMP 12A
CMP 12B
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP 13
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
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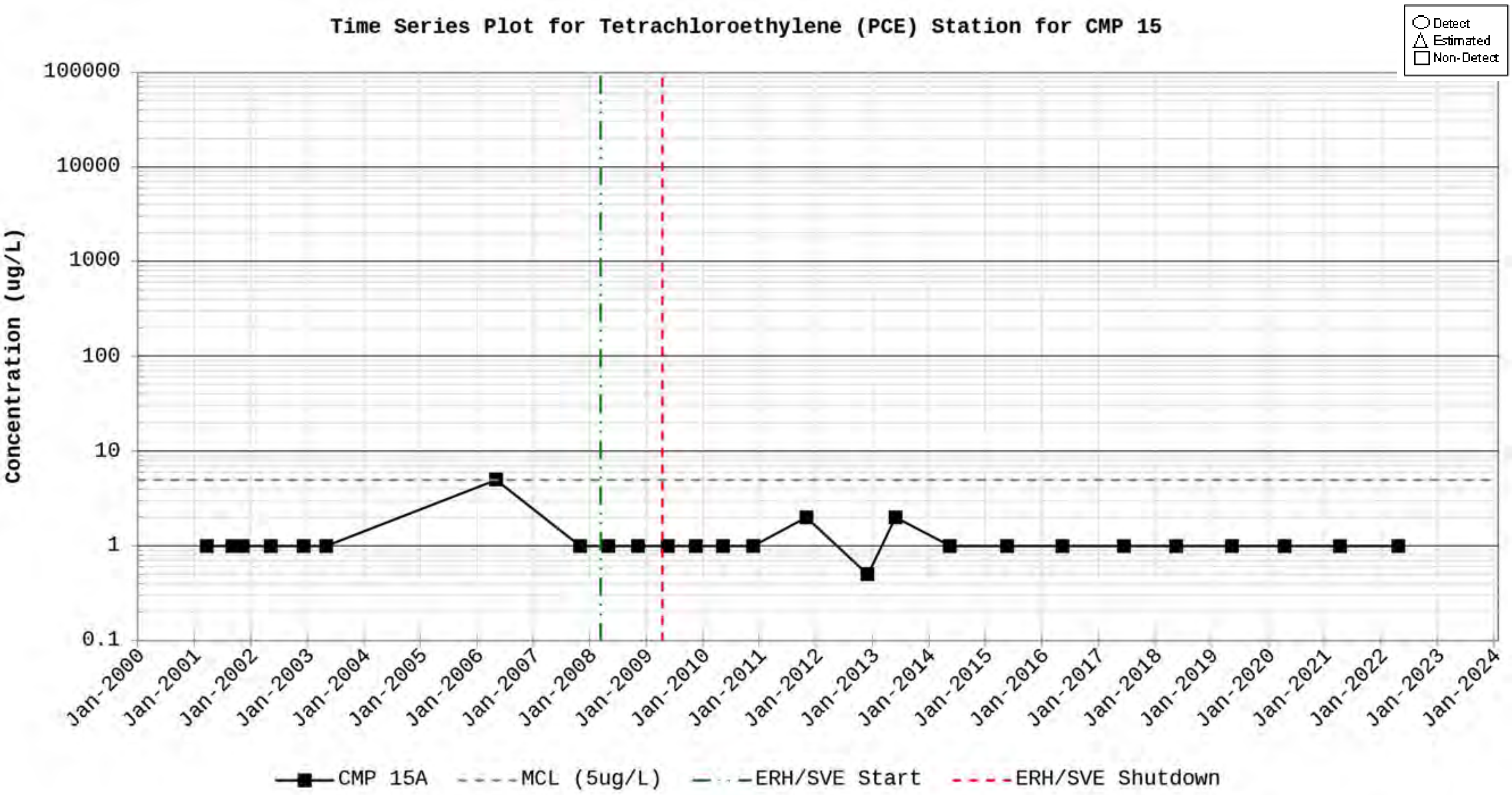
Jan-2024
CMP 13D
CMP 13B
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP 15
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
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0.1
Jan-2000
Jan-2001
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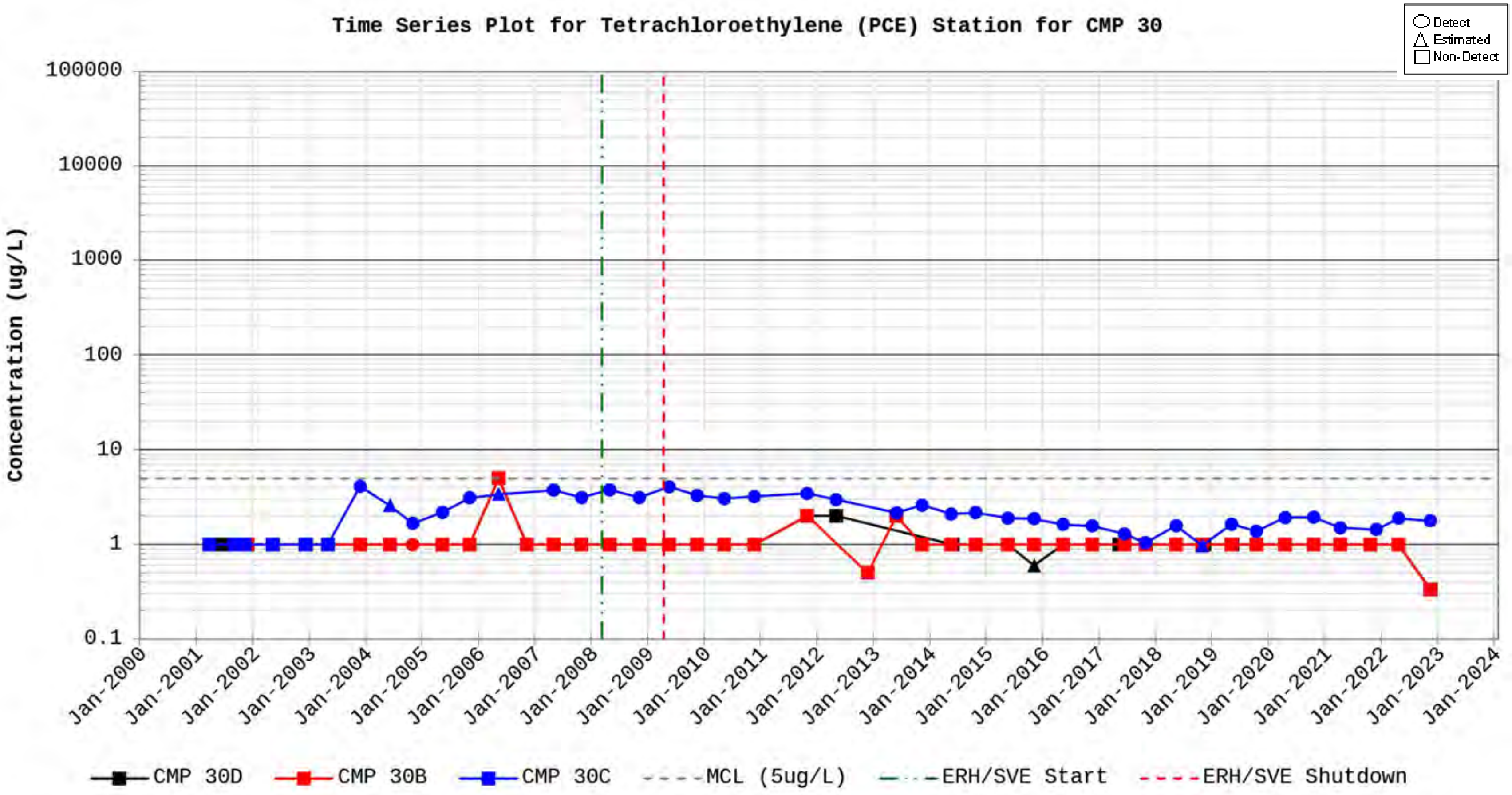
Jan-2023
Jan-2024
CMP 15A
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP 30
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
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10
1
0.1
Jan-2000
Jan-2001
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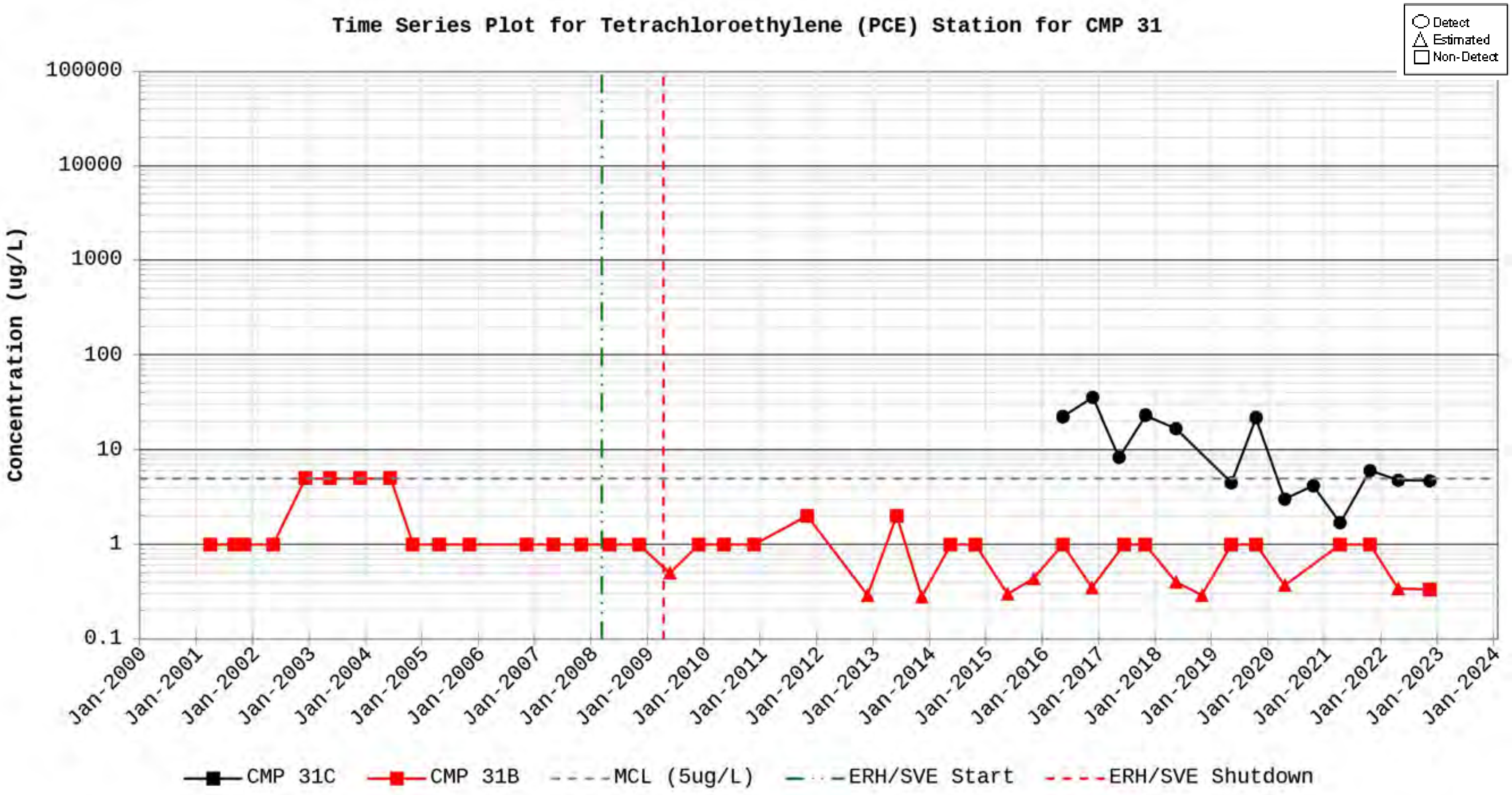
CMP 30D
CMP 30B
CMP 30C
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP 31
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
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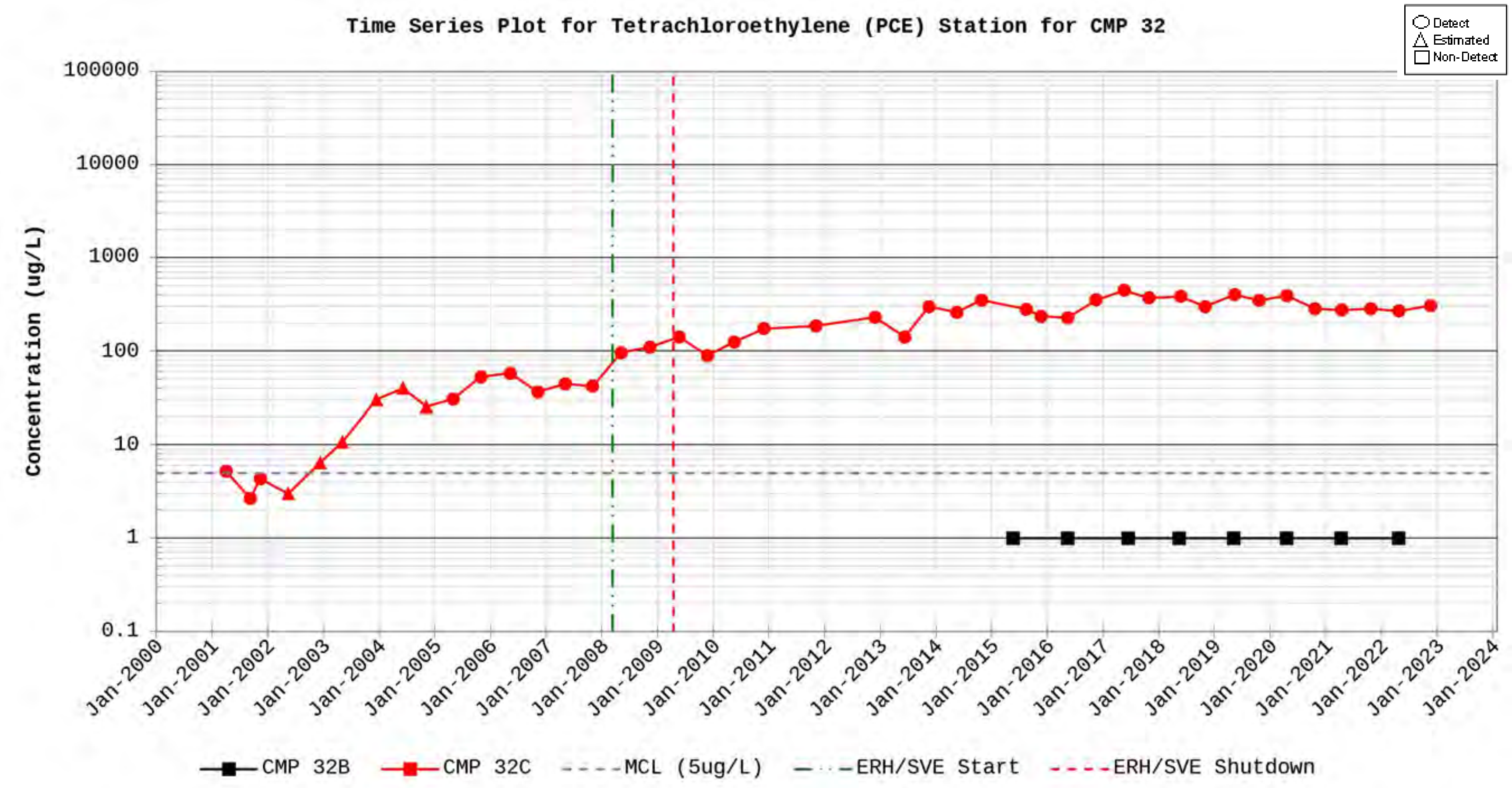
CMP 31C
CMP 31B
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP 32
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
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10
1
0.1
Jan-2000
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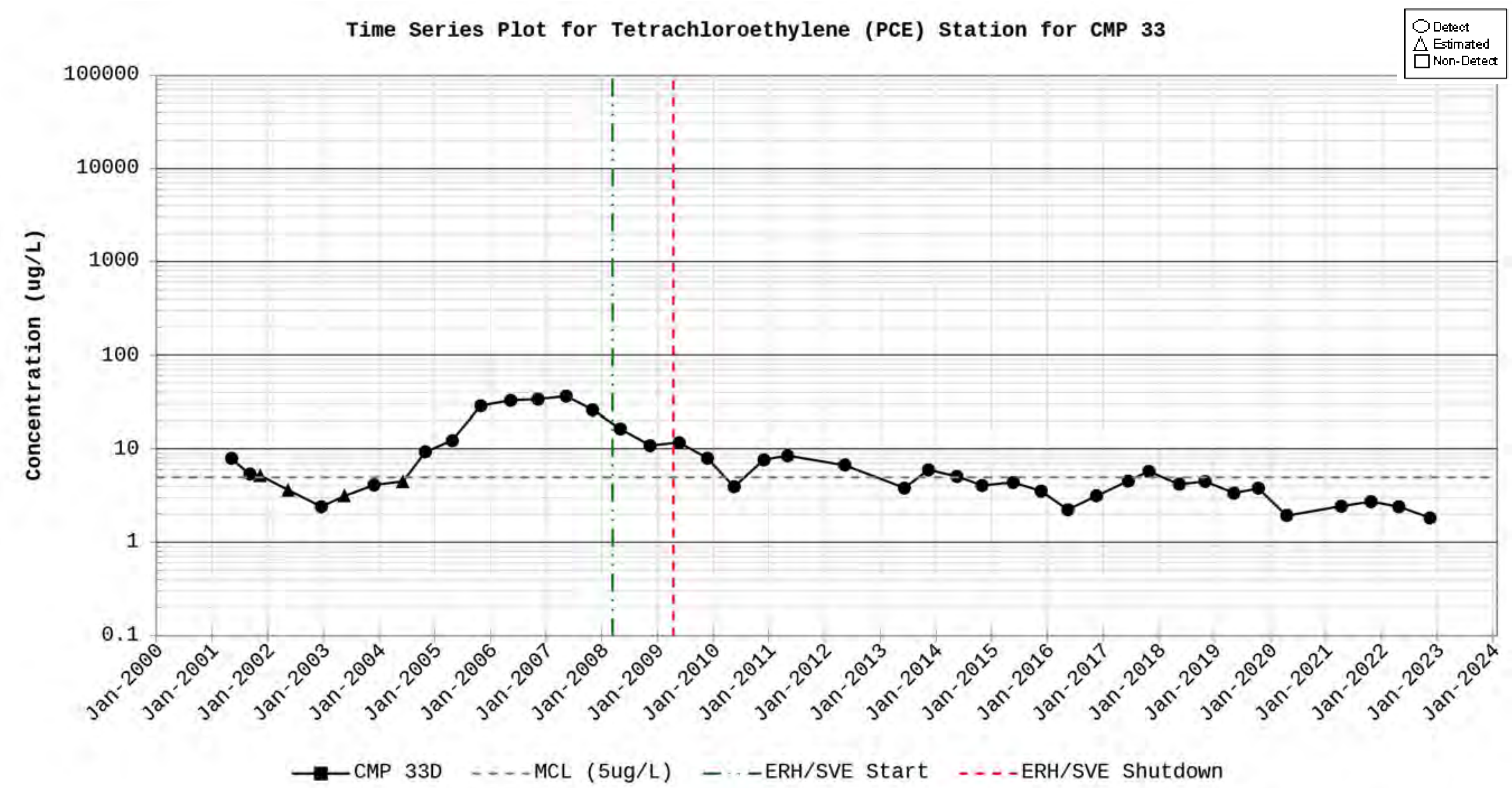
CMP 32B
CMP 32C
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP 33
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
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Jan-2000
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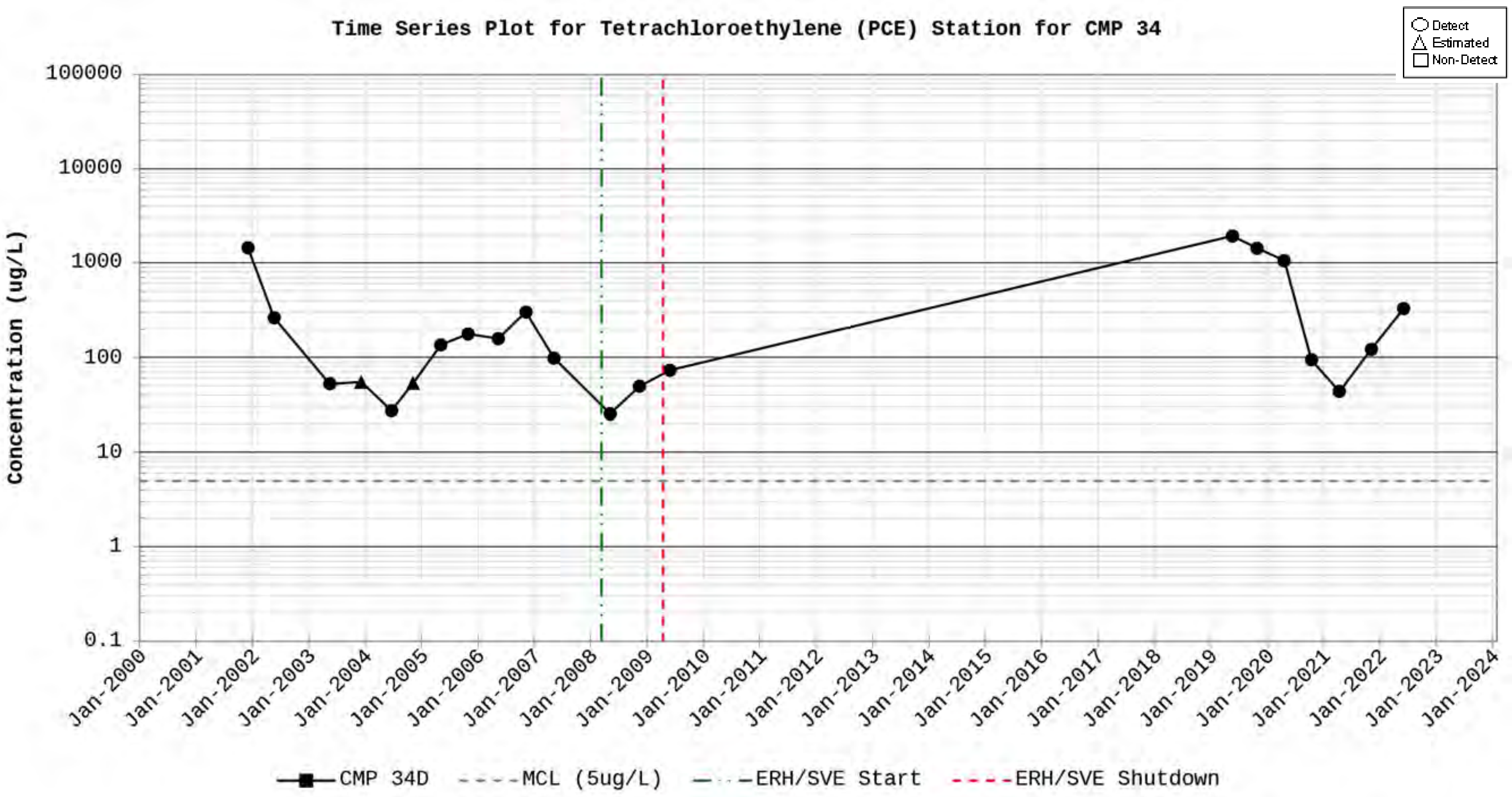
CMP 33D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP 34
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
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1000
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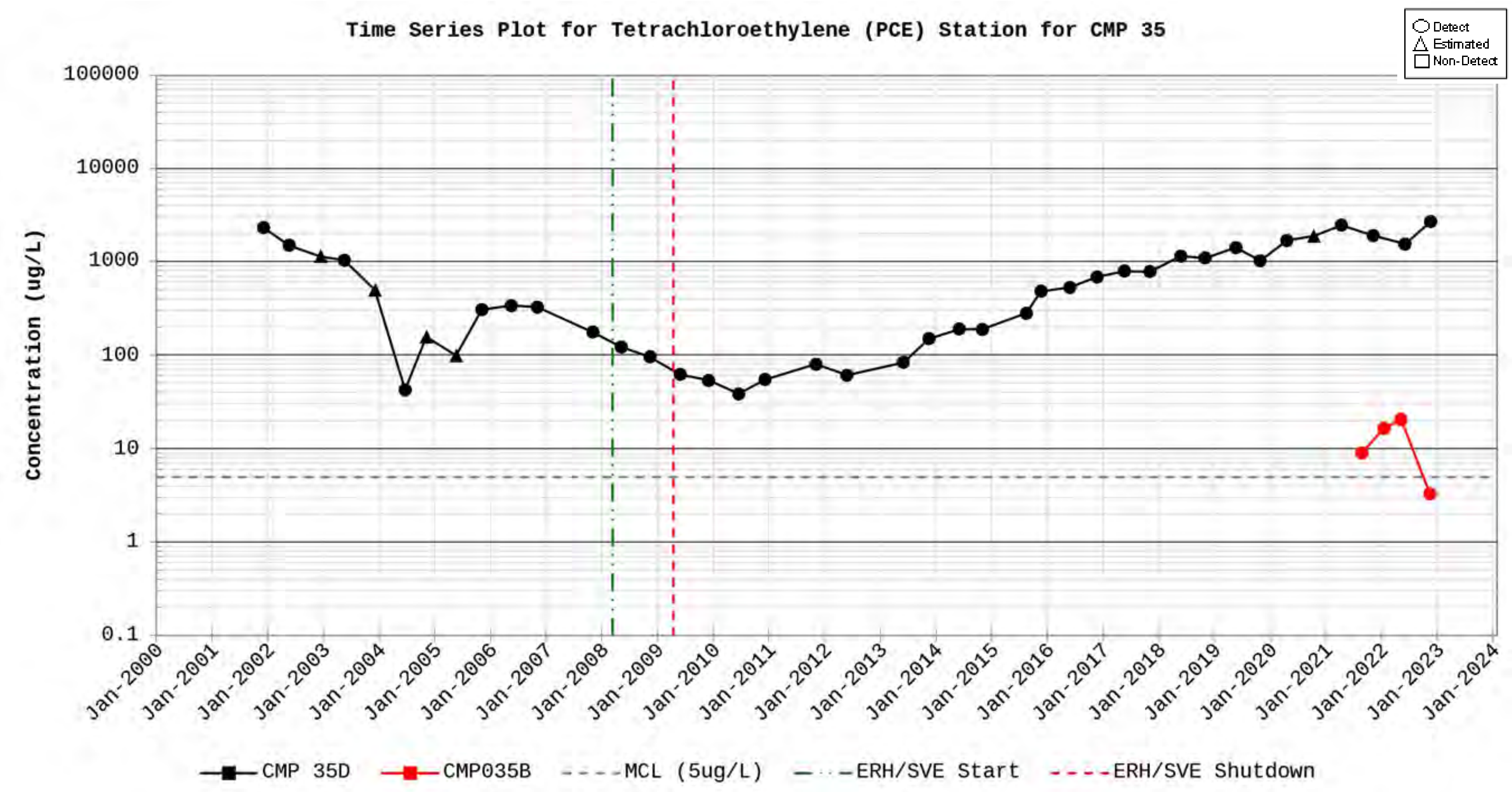
Jan-2023
Jan-2024
CMP 34D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP 35
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
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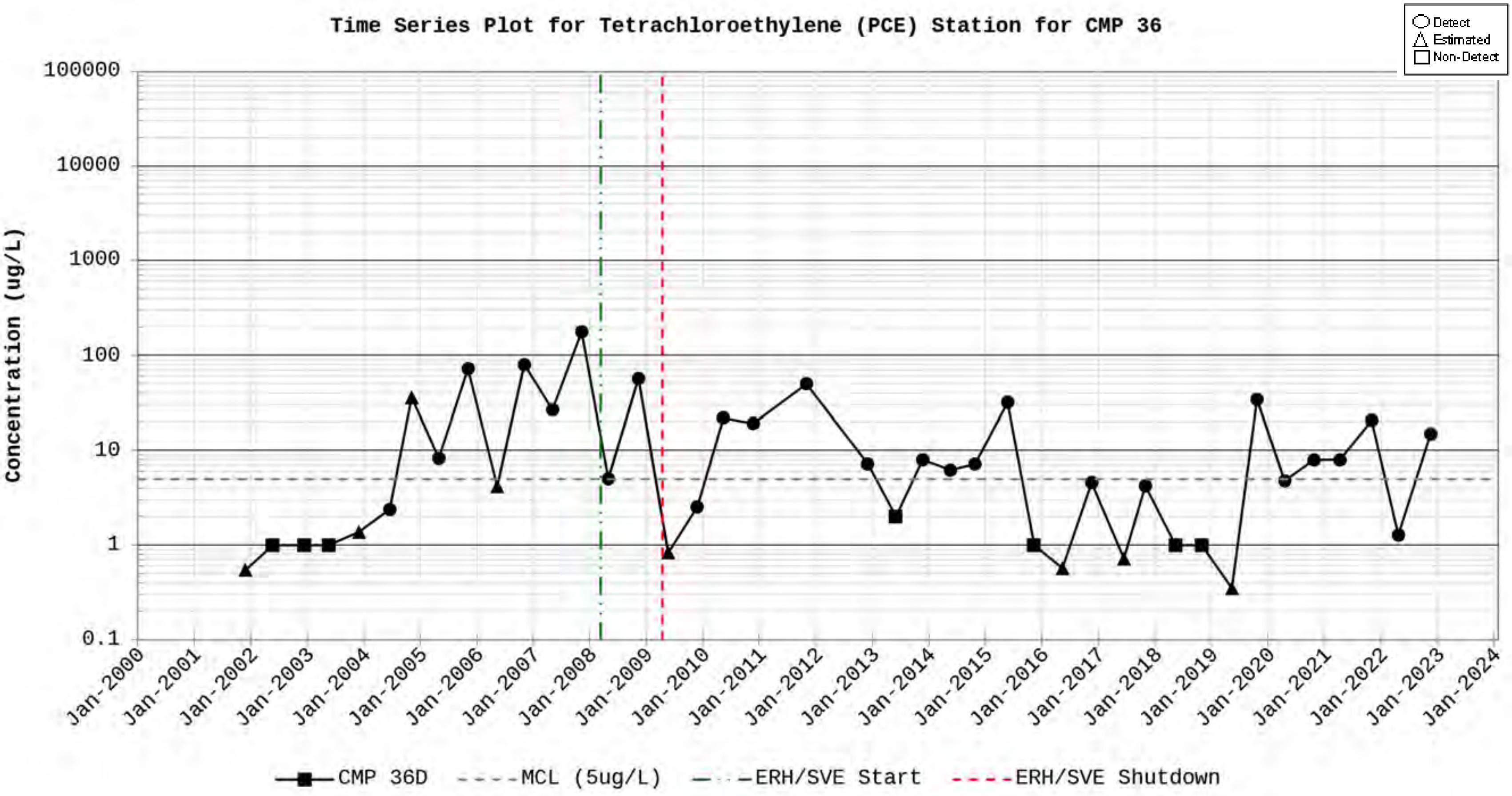
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 35D
CMP035B
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP 36
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
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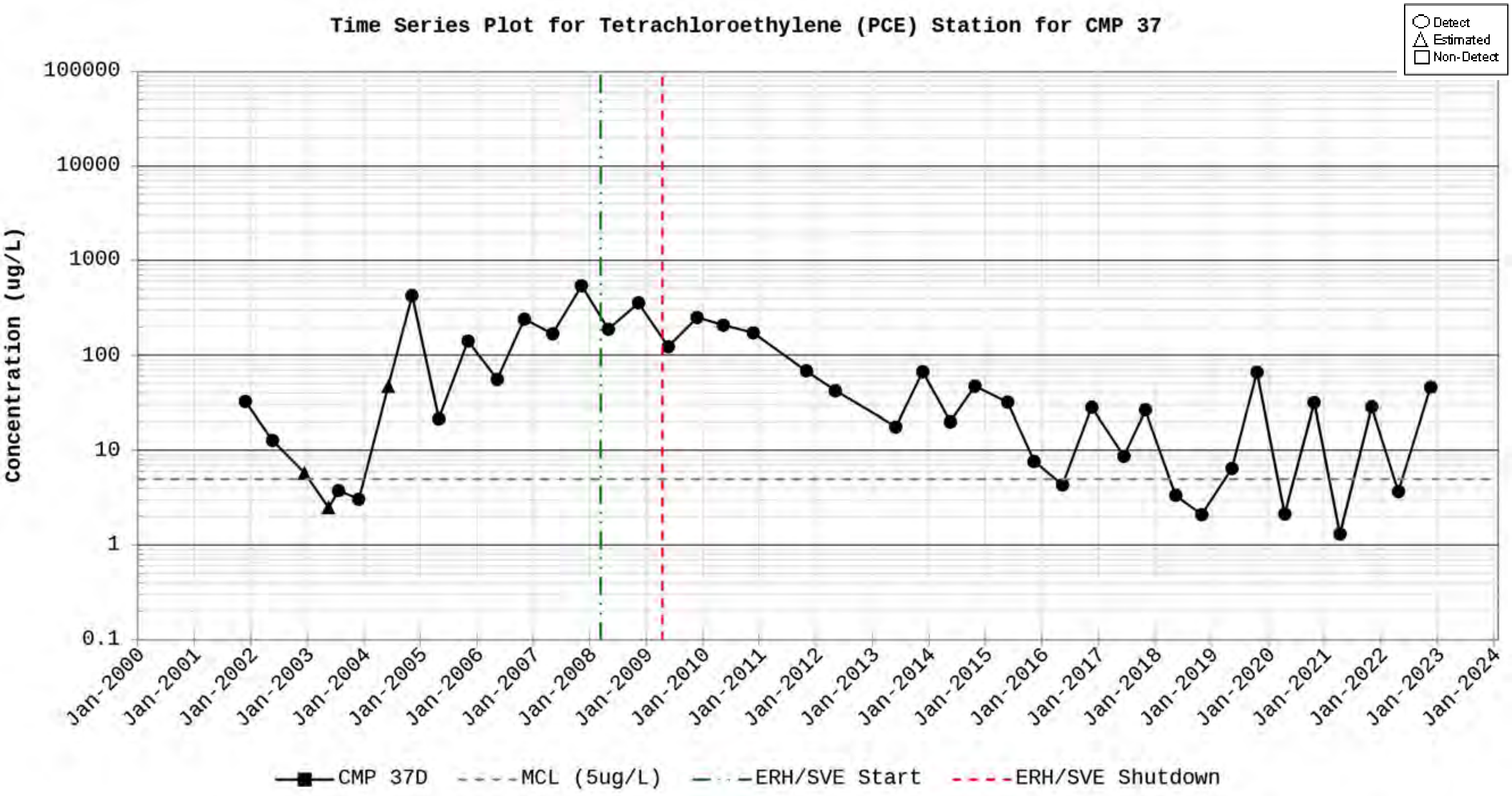
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 36D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP 37
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
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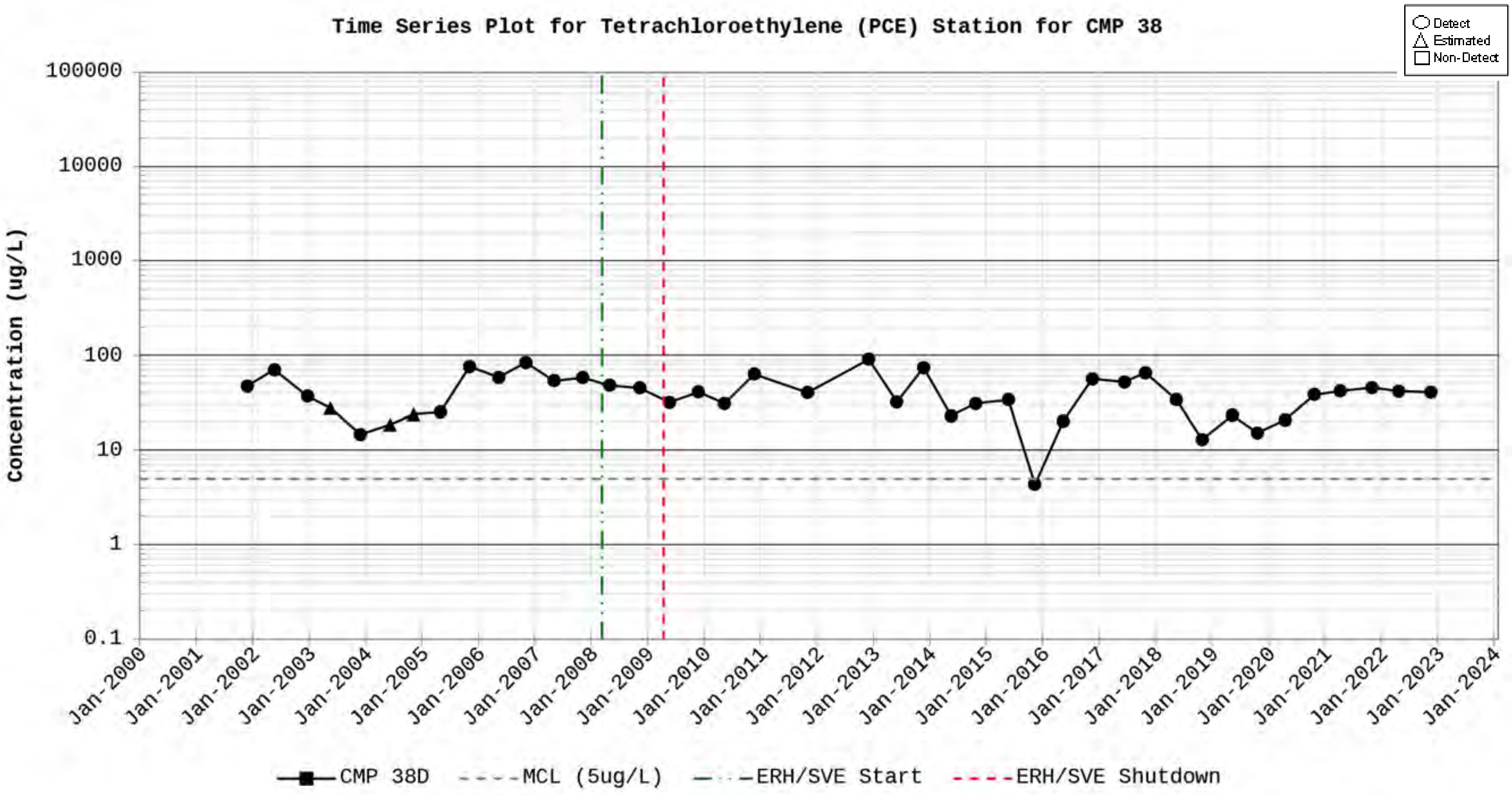
Jan-2022
Jan-2023
Jan-2024
CMP 37D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP 38
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
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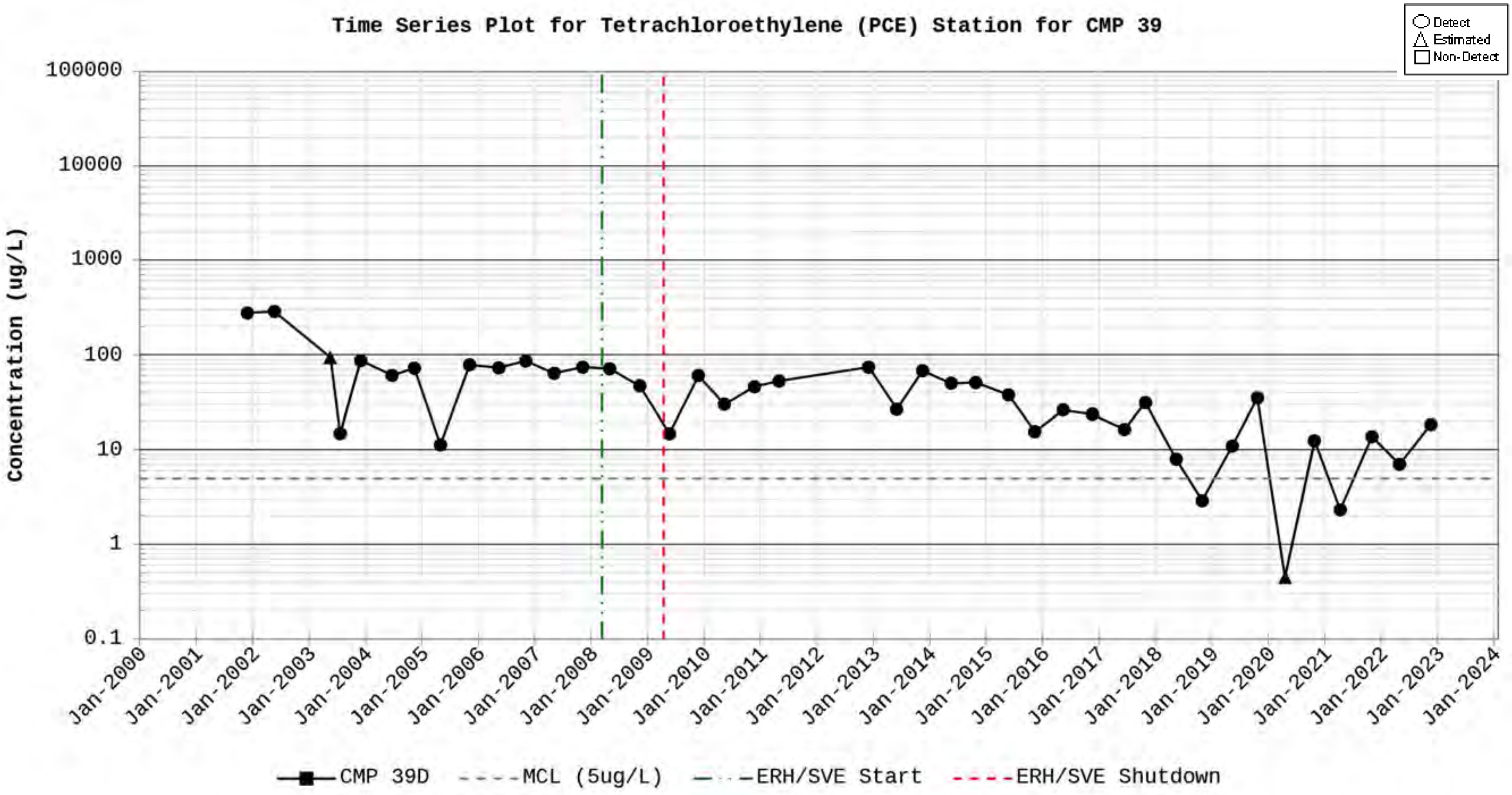
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 38D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP 39
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
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Jan-2020
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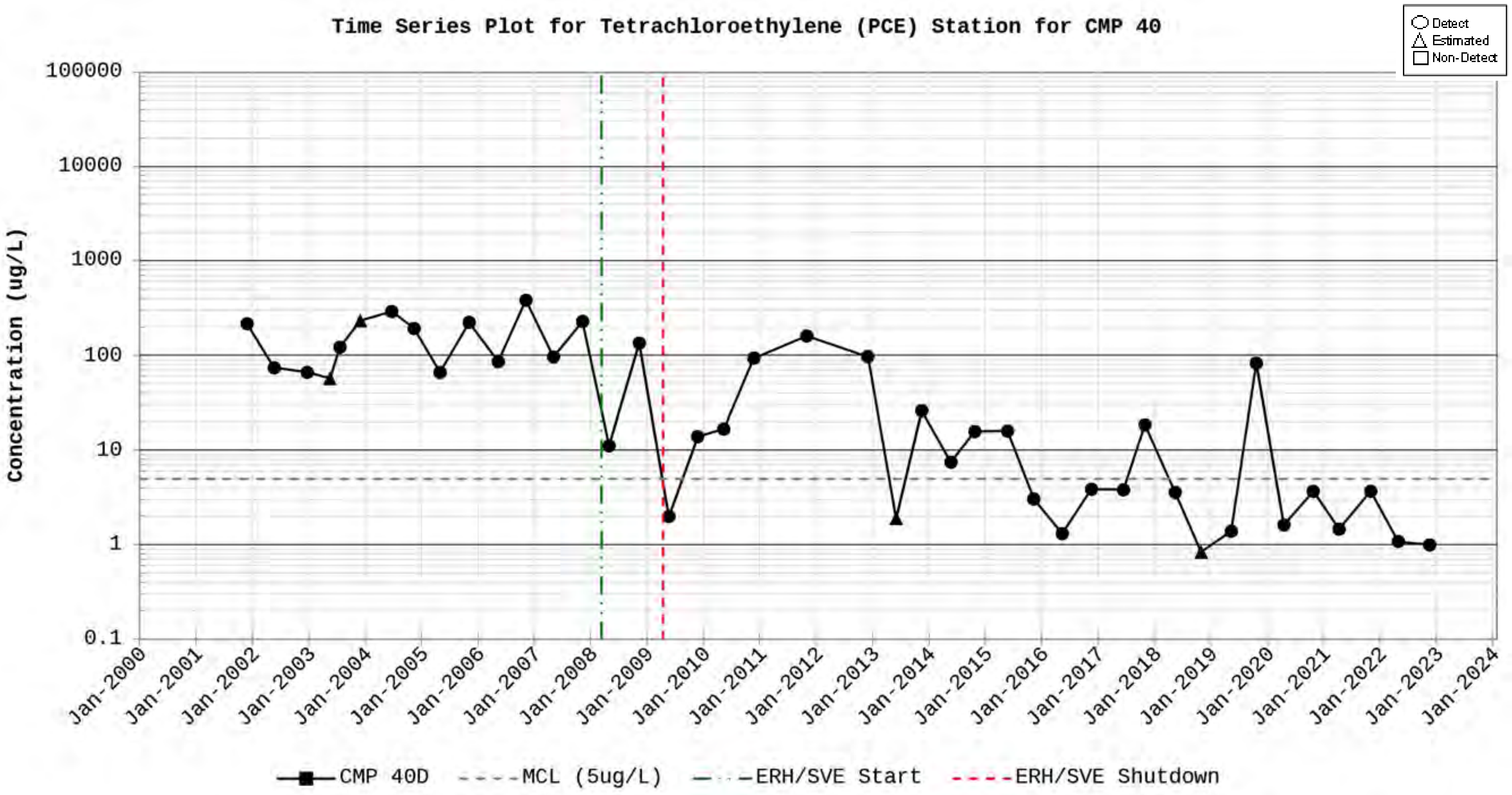
Jan-2022
Jan-2023
Jan-2024
CMP 39D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP 40
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
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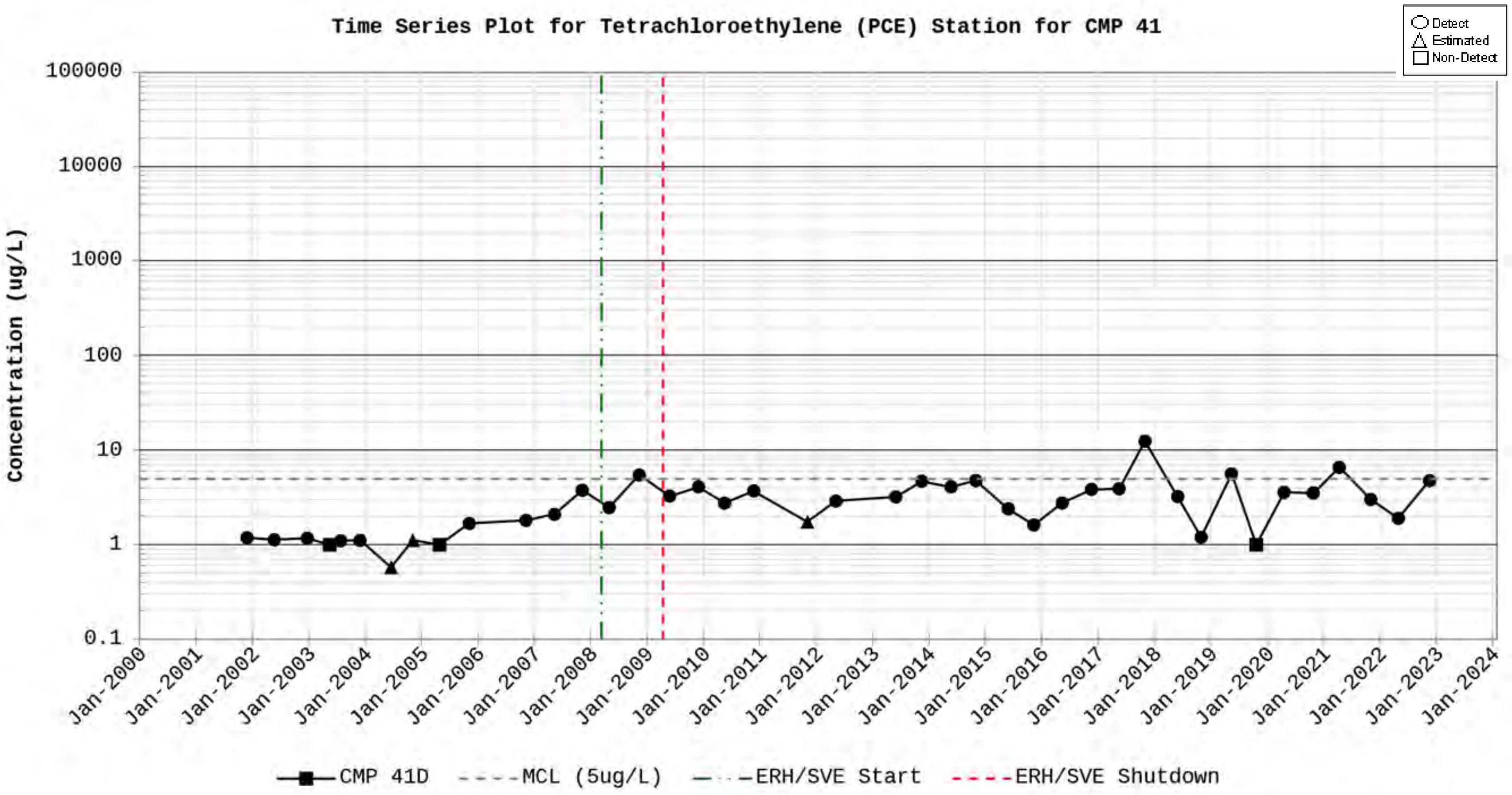
Jan-2022
Jan-2023
Jan-2024
CMP 40D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP 41
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
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Jan-2008
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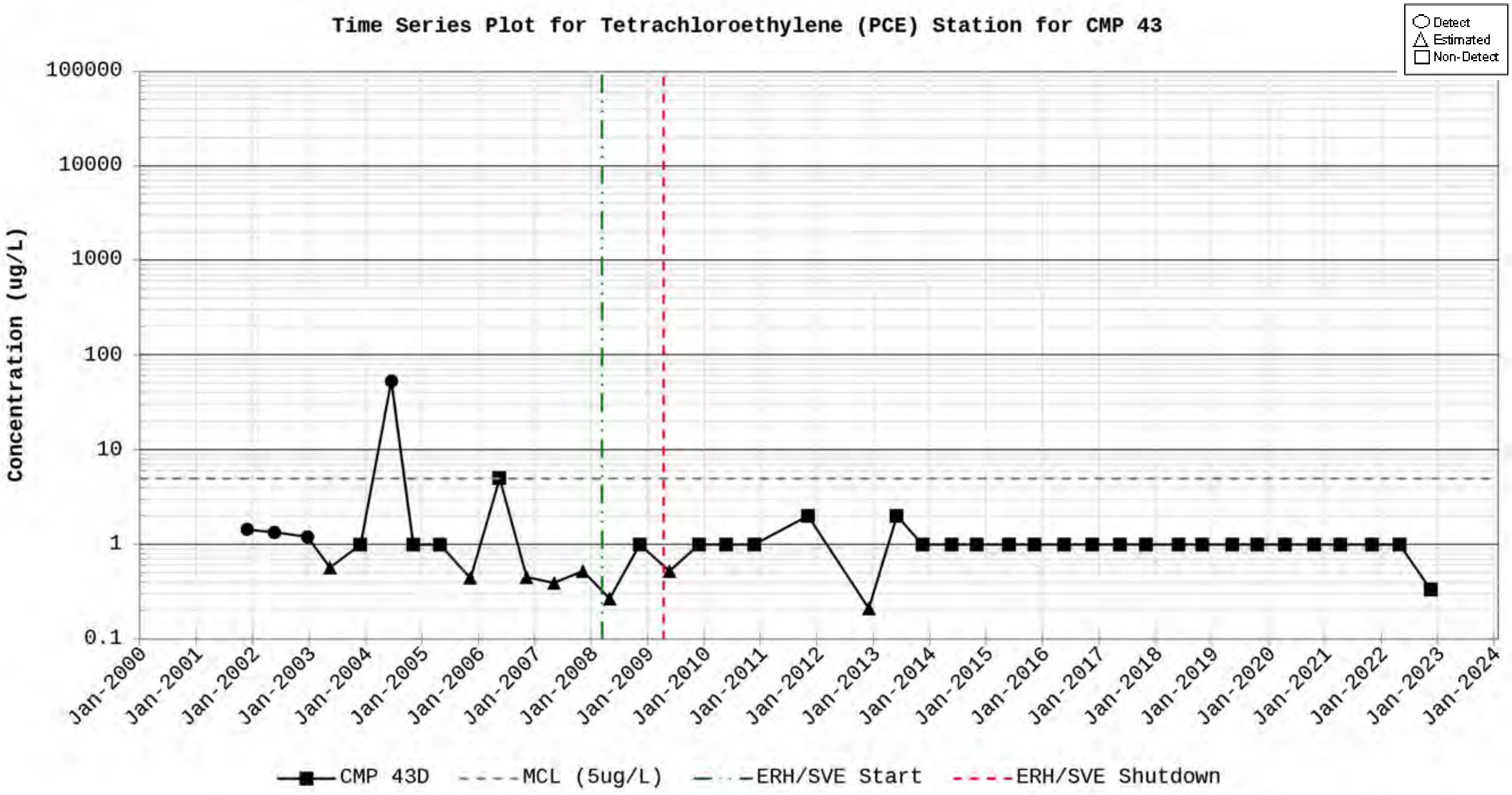
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 41D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP 43
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
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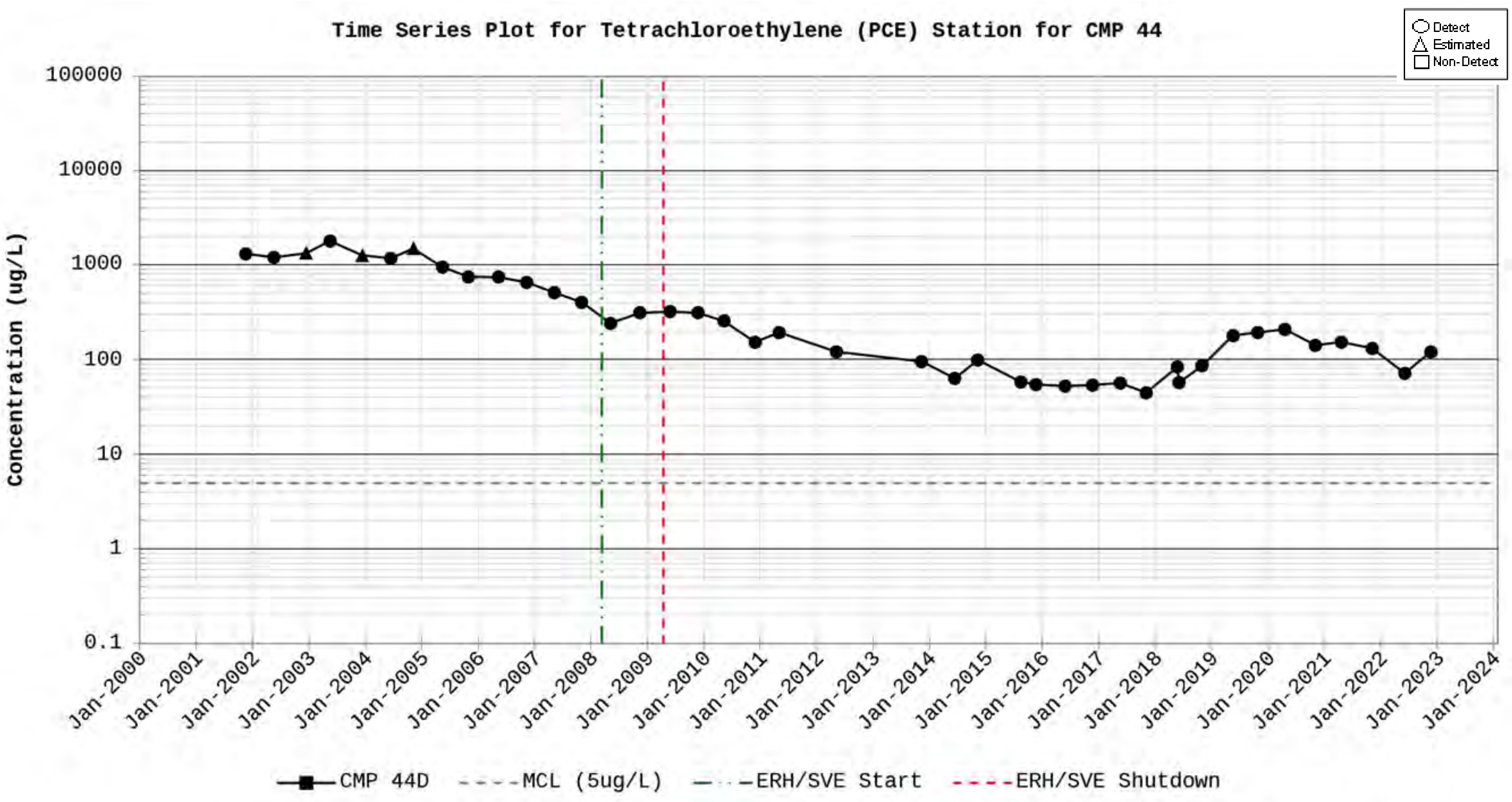
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 43D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP 44
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
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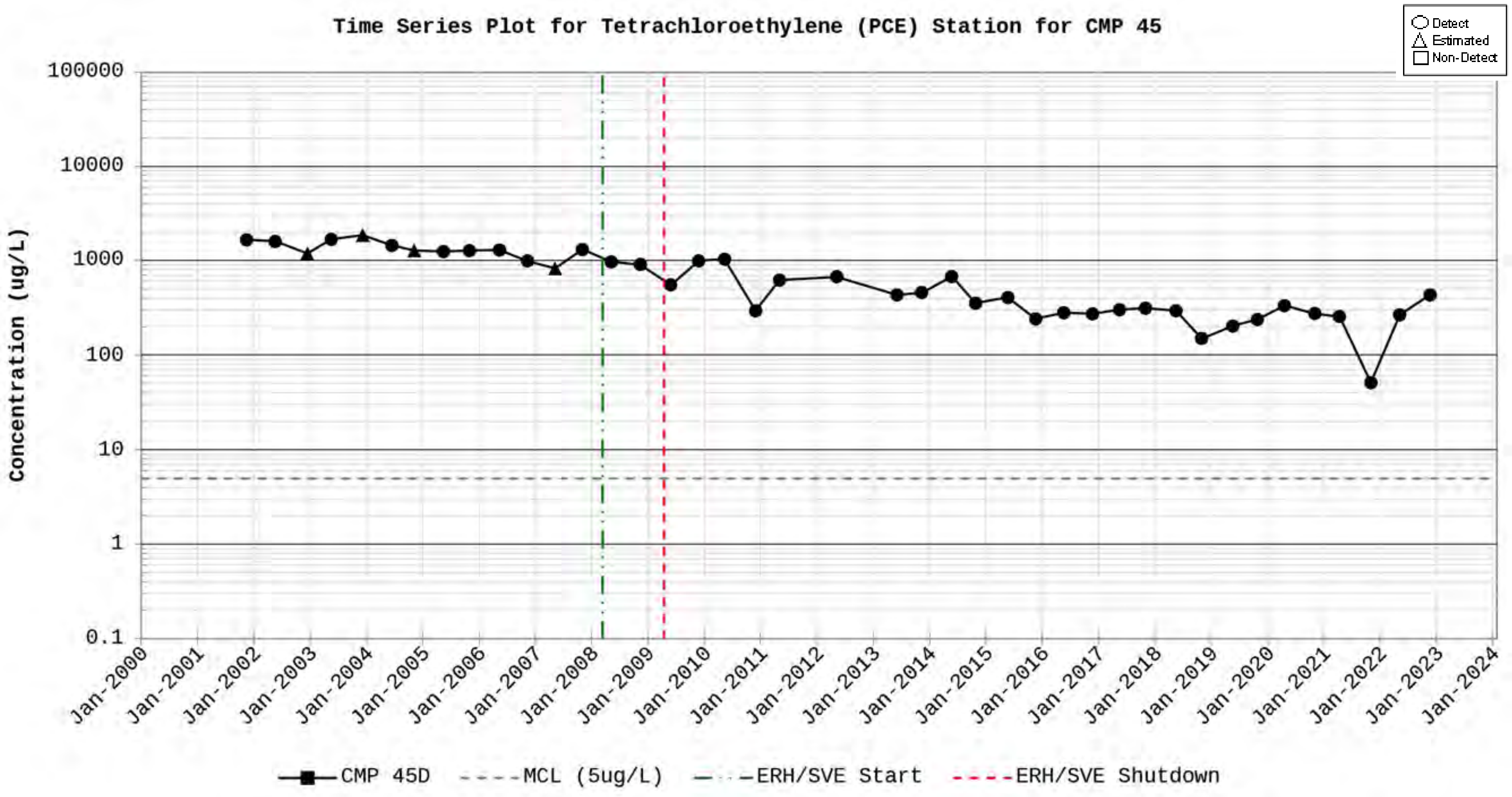
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 44D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP 45
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
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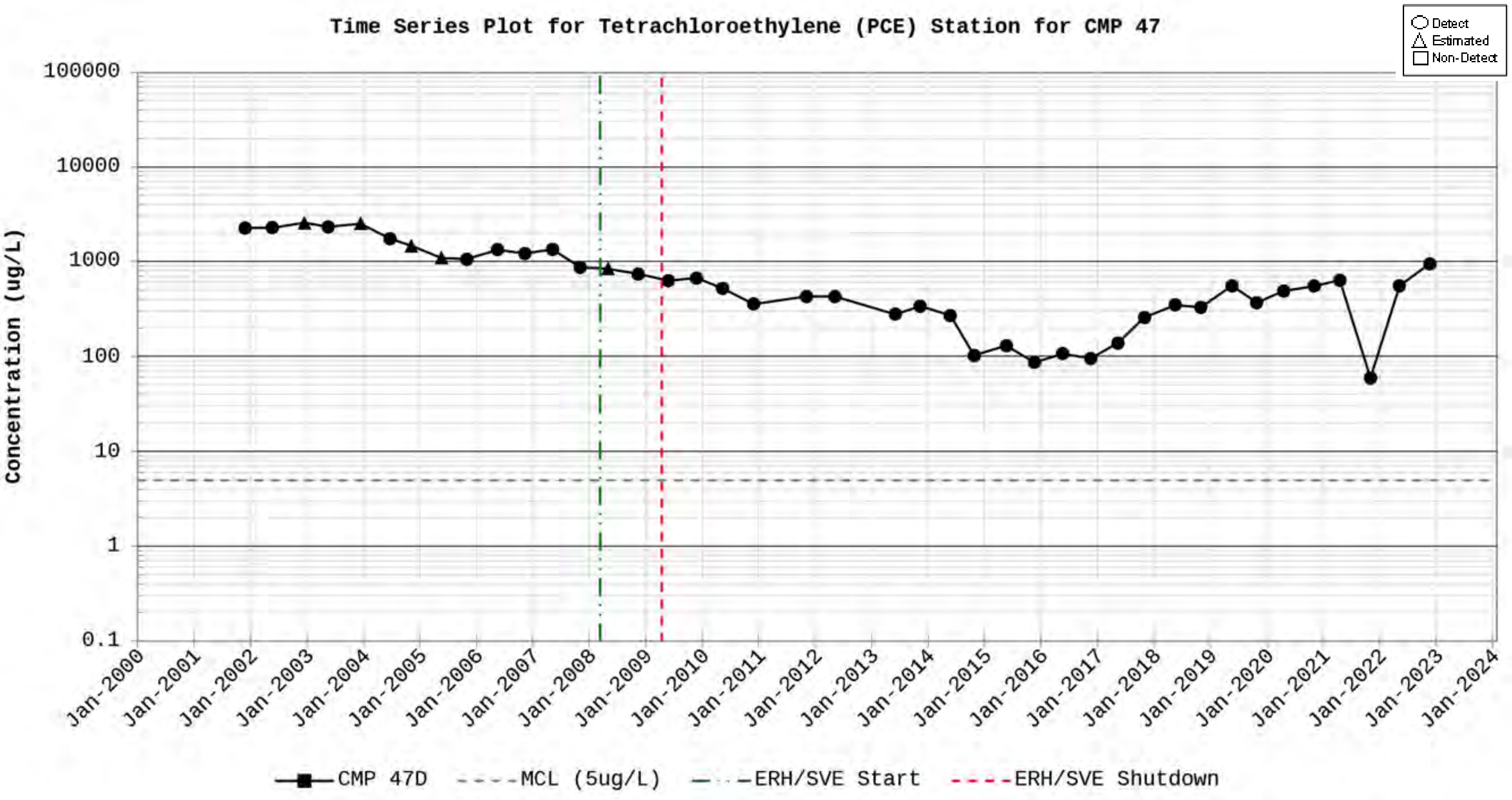
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 45D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP 47
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
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Jan-2005
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Jan-2008
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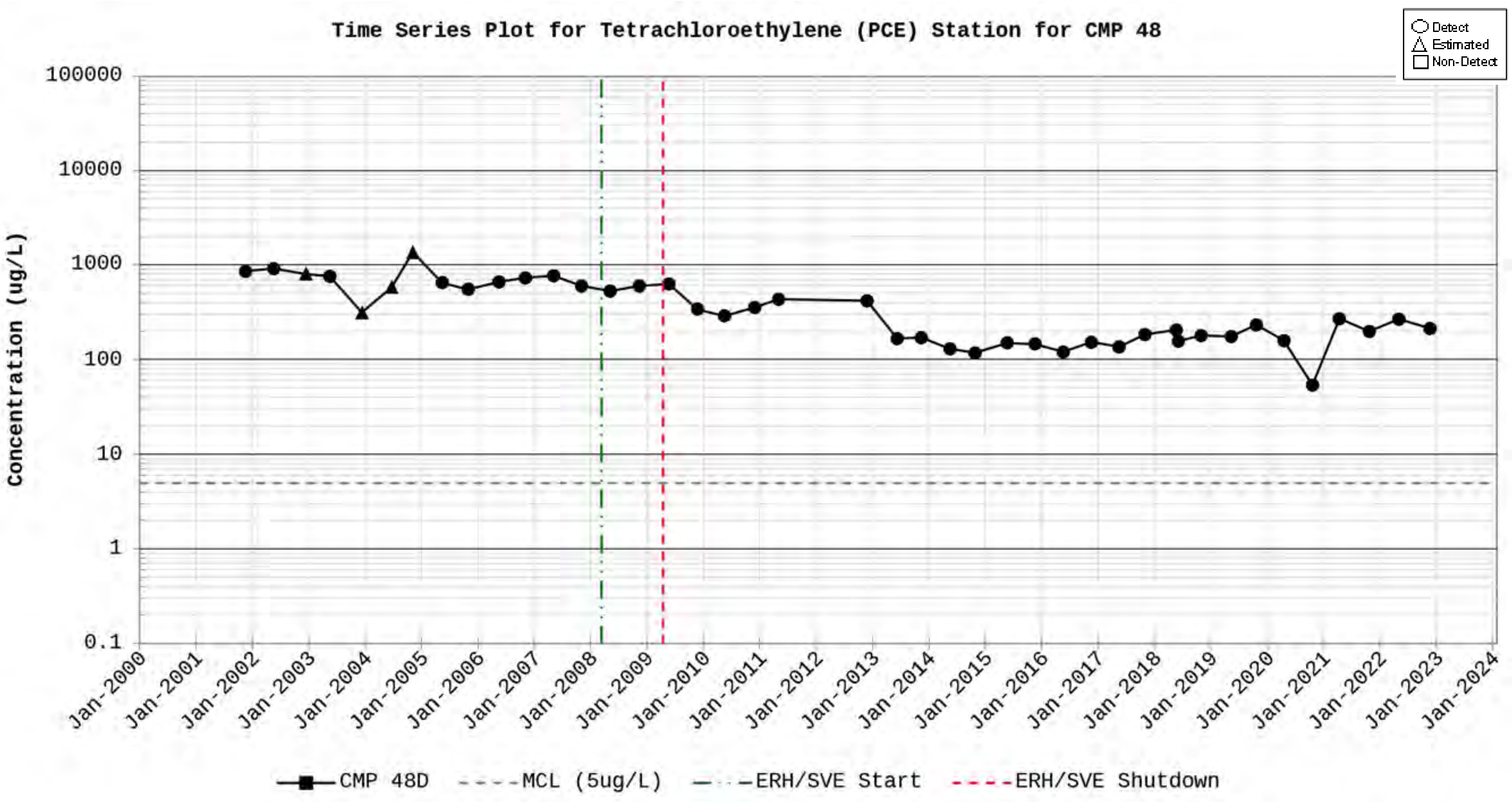
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 47D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP 48
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
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Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
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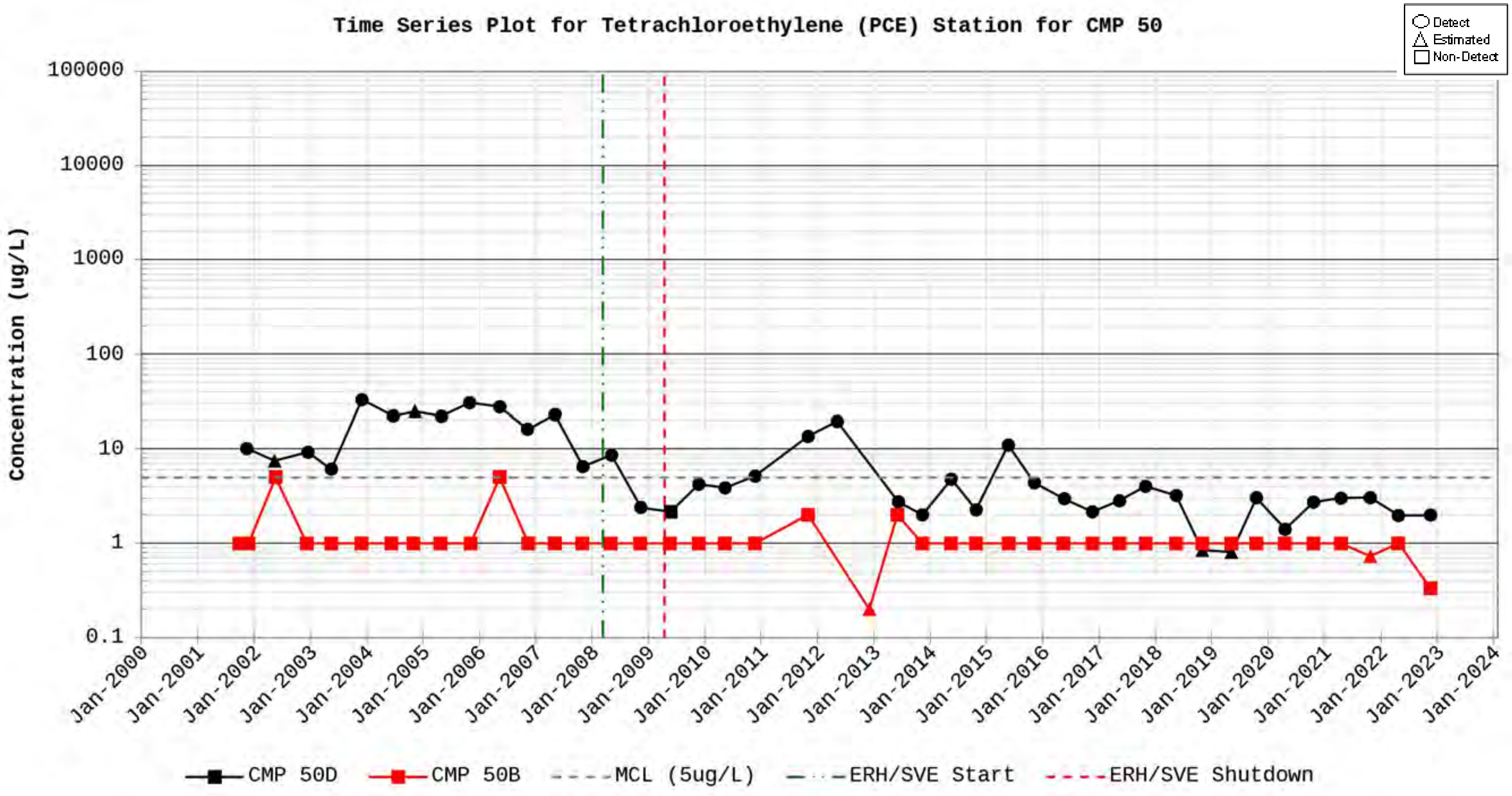
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 48D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP 50
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
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Jan-2006
Jan-2007
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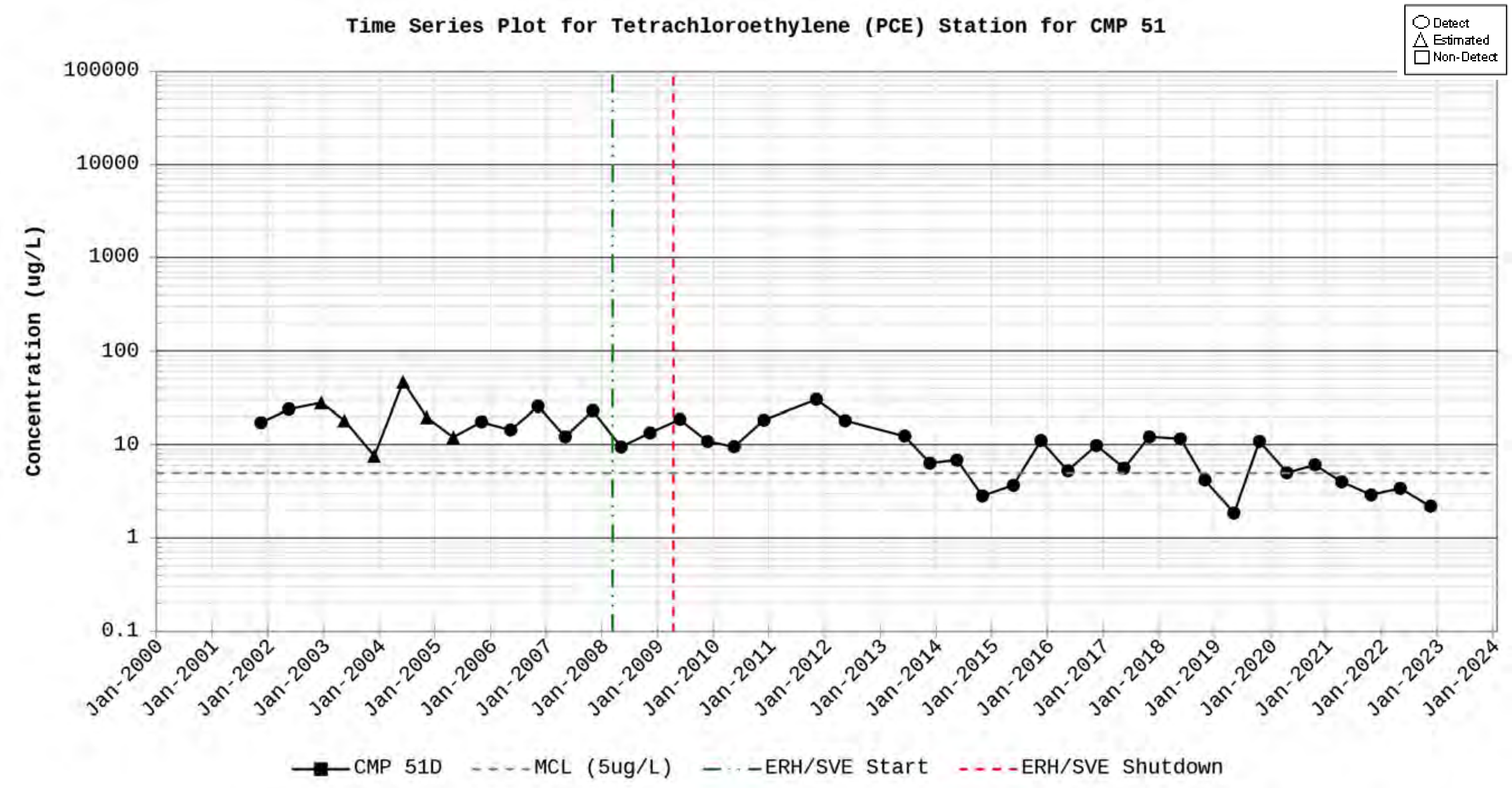
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 50D
CMP 50B
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP 51
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
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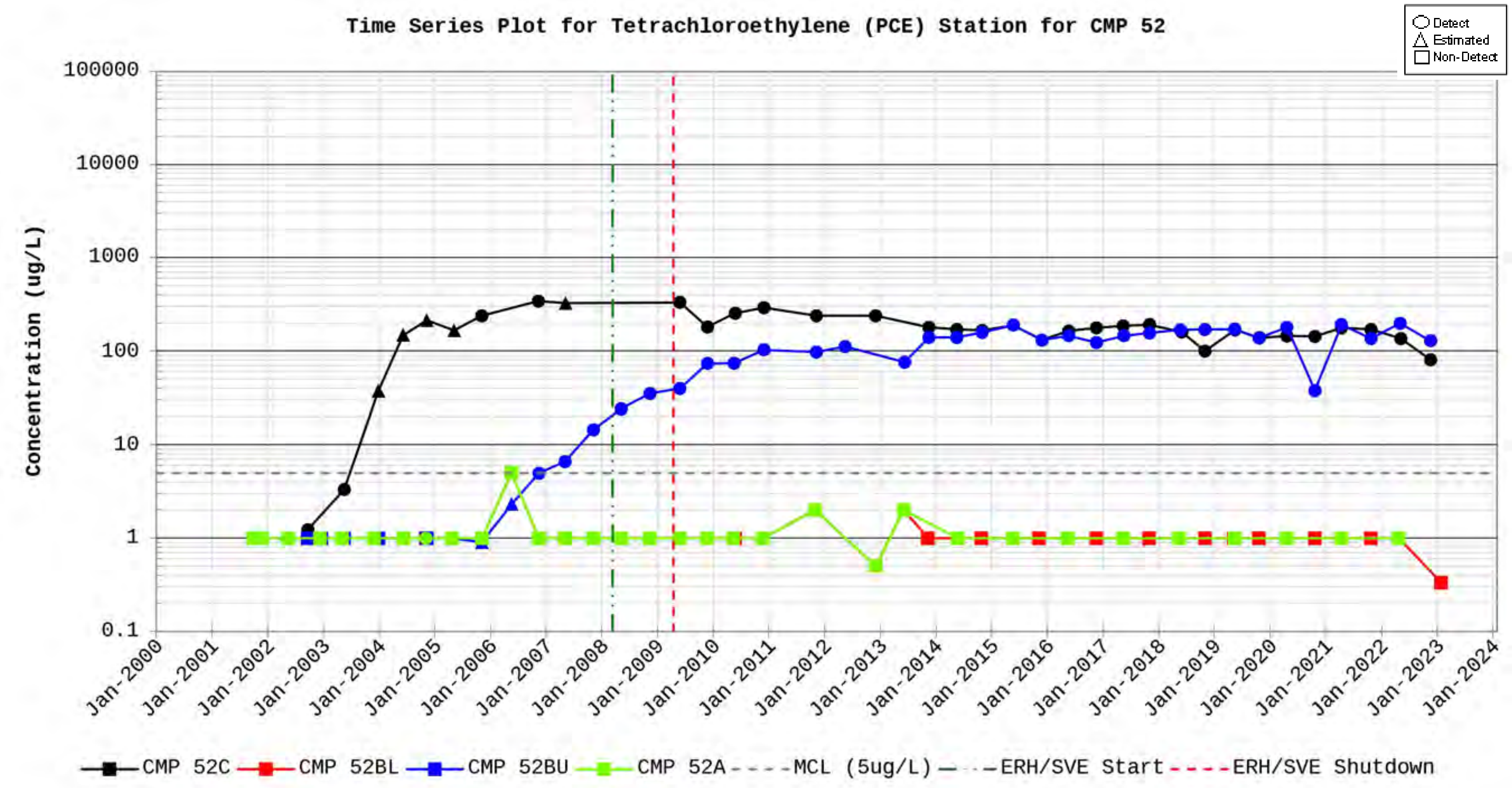
Jan-2022
Jan-2023
Jan-2024
CMP 51D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP 52
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
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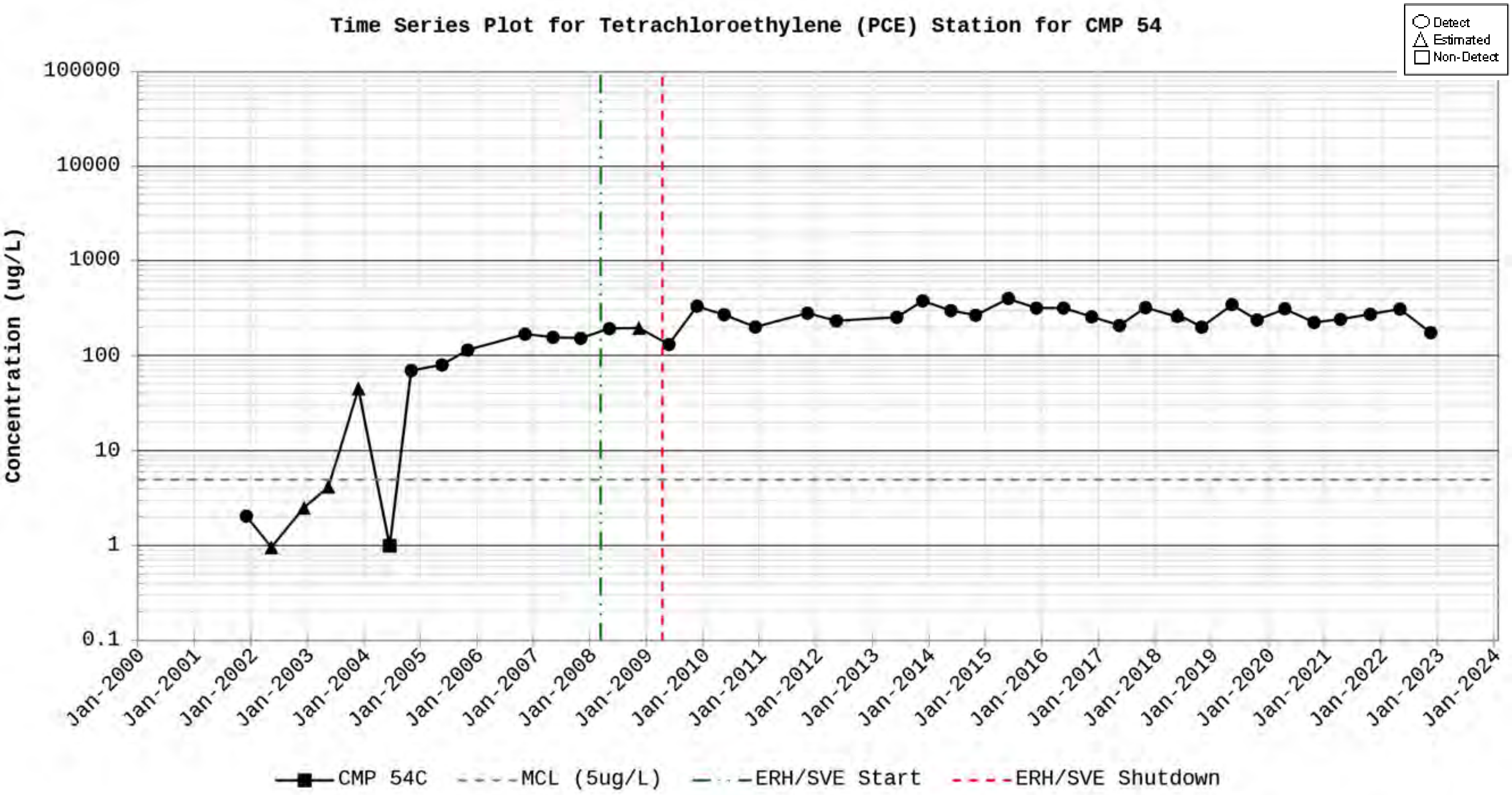
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 52C
CMP 52BL
CMP 52BU
CMP 52A
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP 54
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
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Jan-2019
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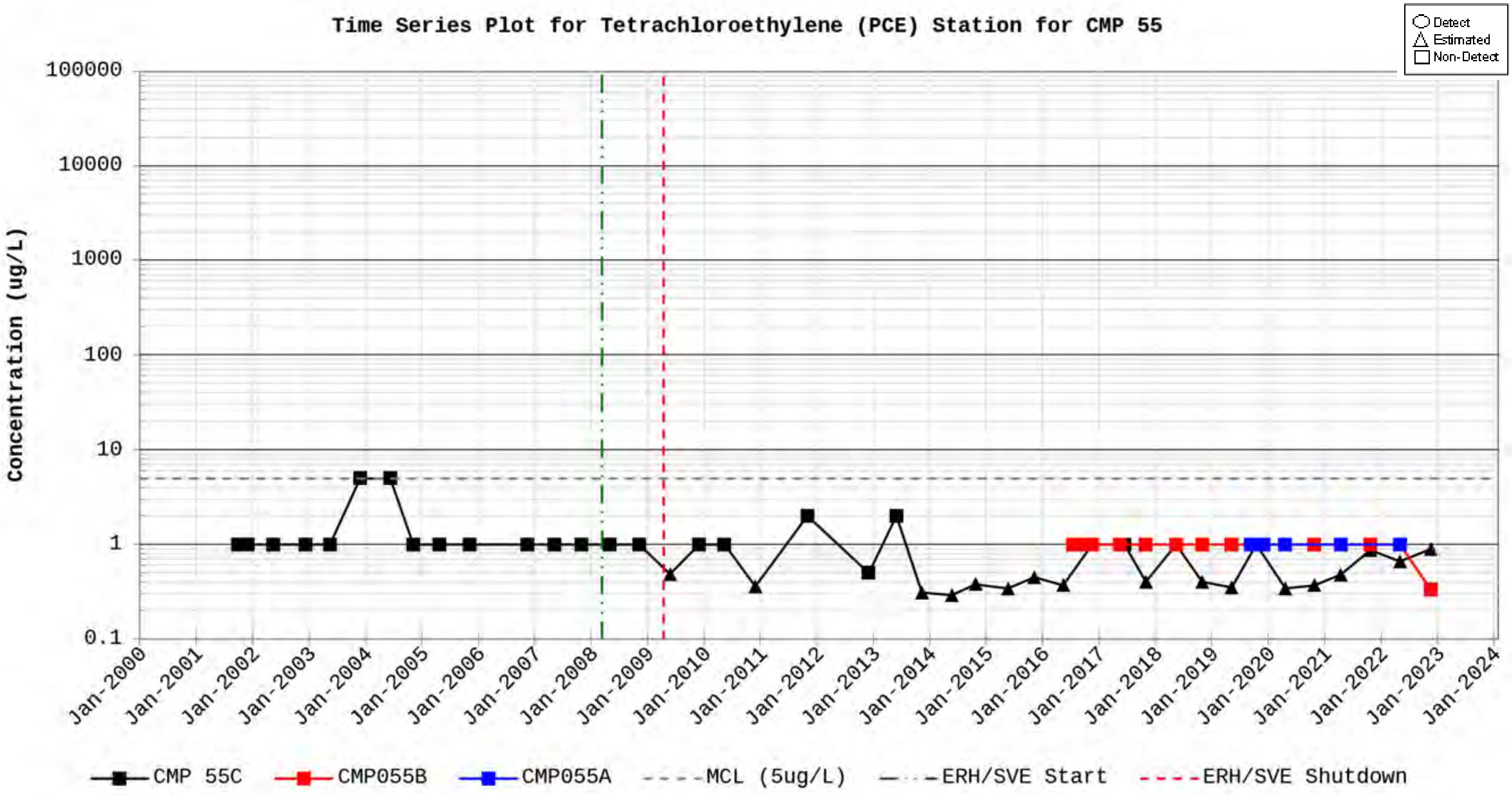
Jan-2022
Jan-2023
Jan-2024
CMP 54C
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP 55
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
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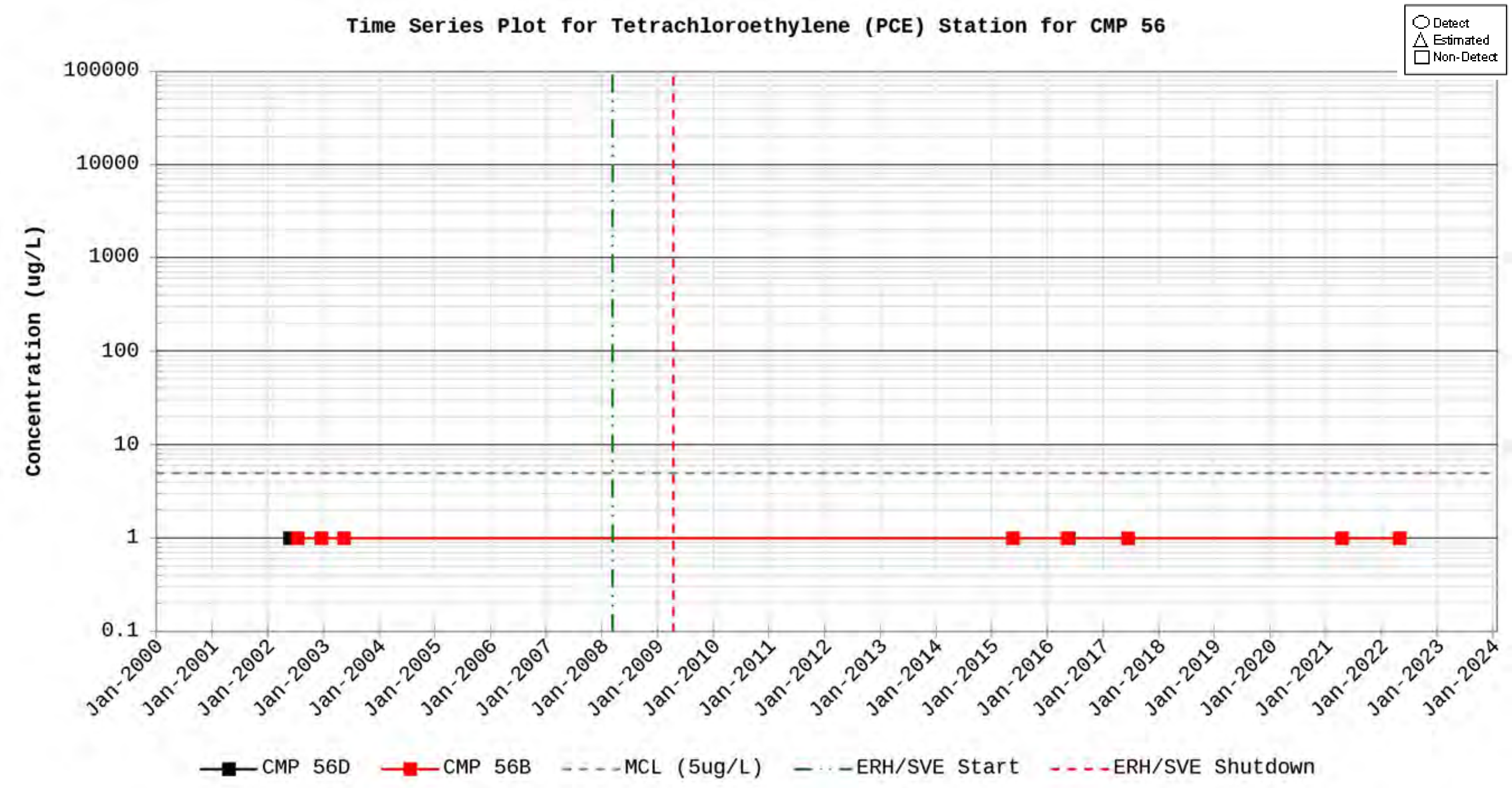
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 55C
CMP055B
CMP055A
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP 56
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
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1
0.1
Jan-2000
Jan-2001
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Jan-2004
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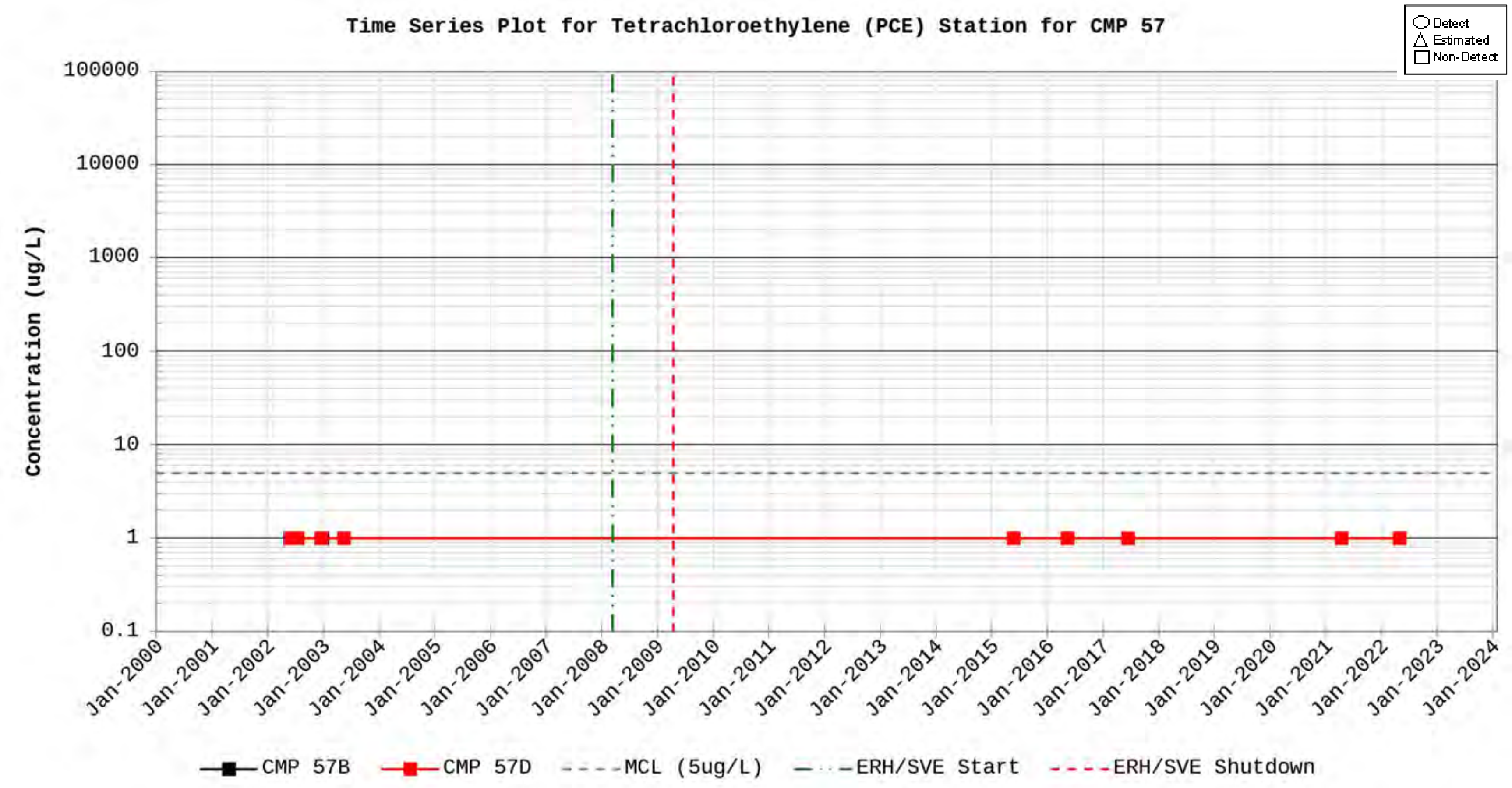
Jan-2024
CMP 56D
CMP 56B
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP 57
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
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0.1
Jan-2000
Jan-2001
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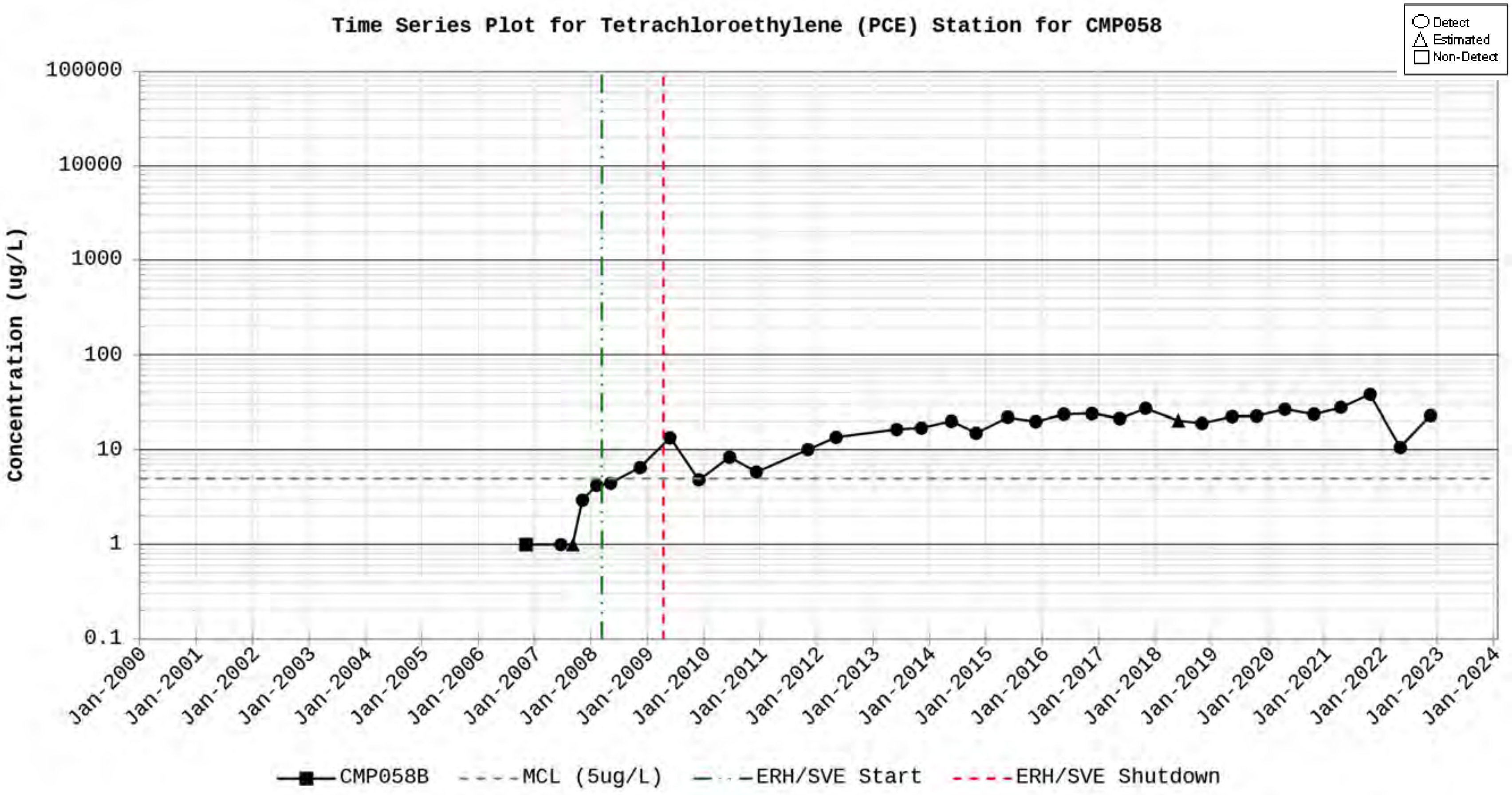
Jan-2023
Jan-2024
CMP 57B
CMP 57D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP058
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
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Jan-2003
Jan-2004
Jan-2005
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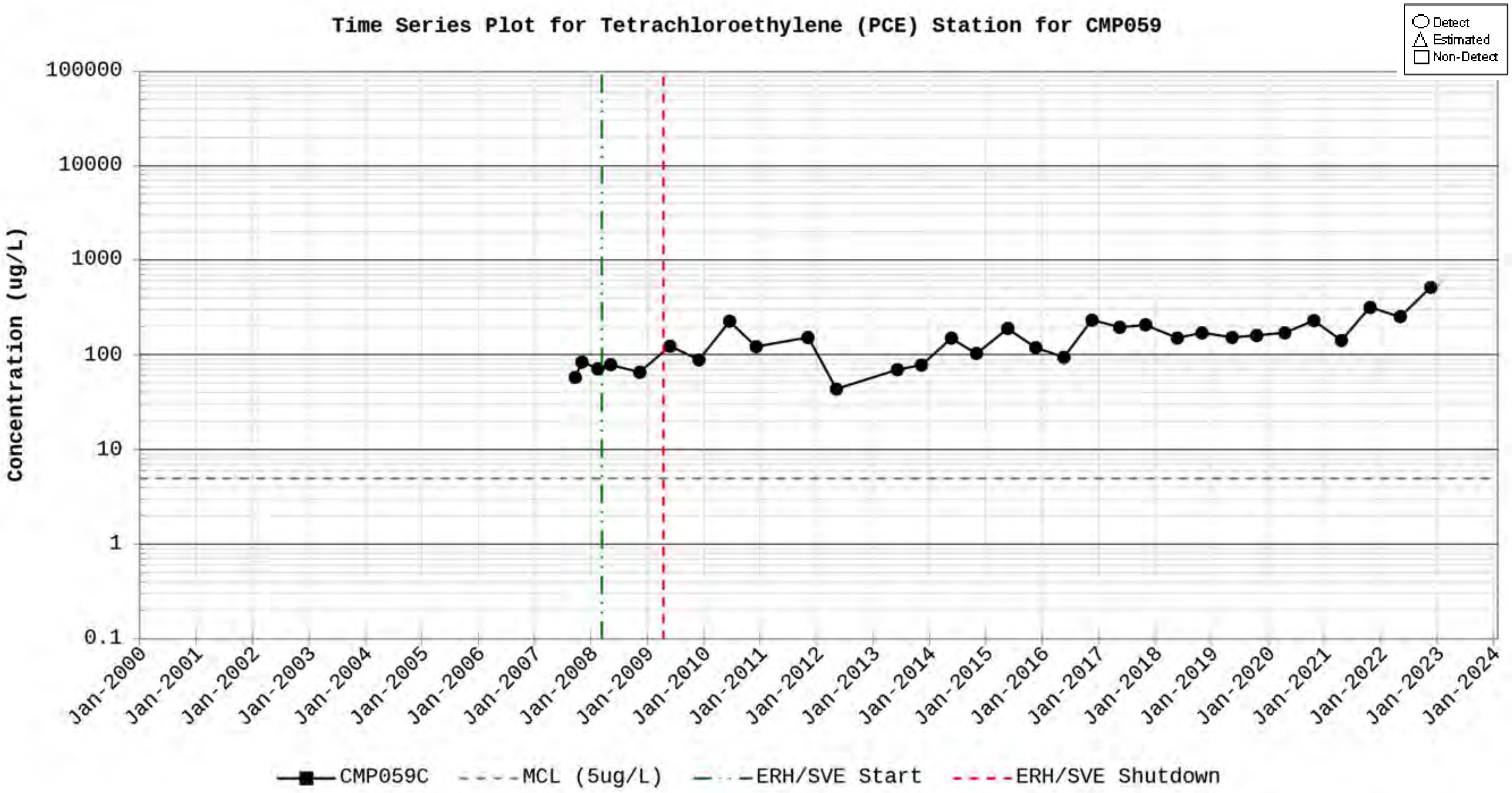
Jan-2023
Jan-2024
CMP058B
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP059
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
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Jan-2004
Jan-2005
Jan-2006
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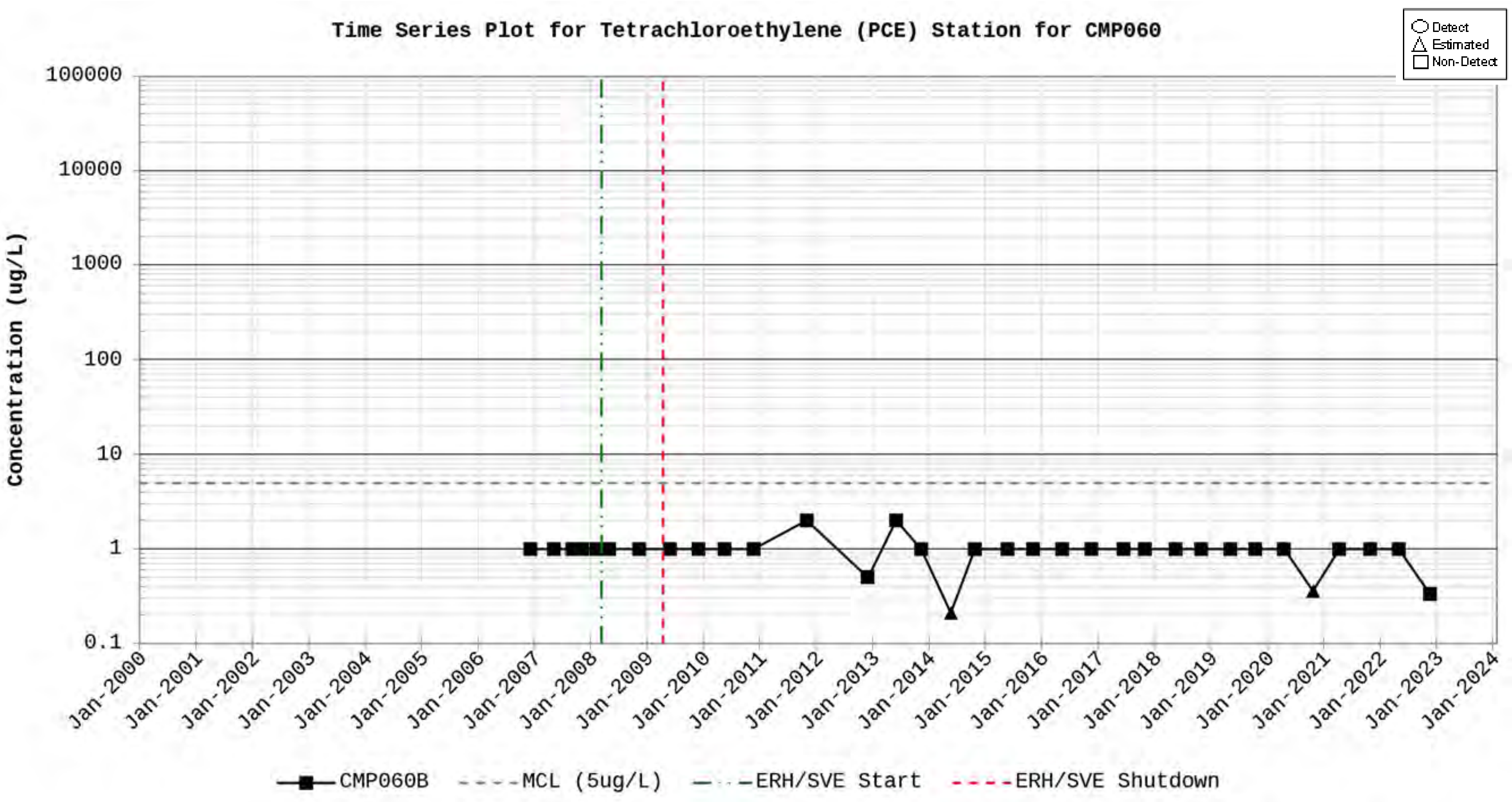
Jan-2023
Jan-2024
CMP059C
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP060
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
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Jan-2006
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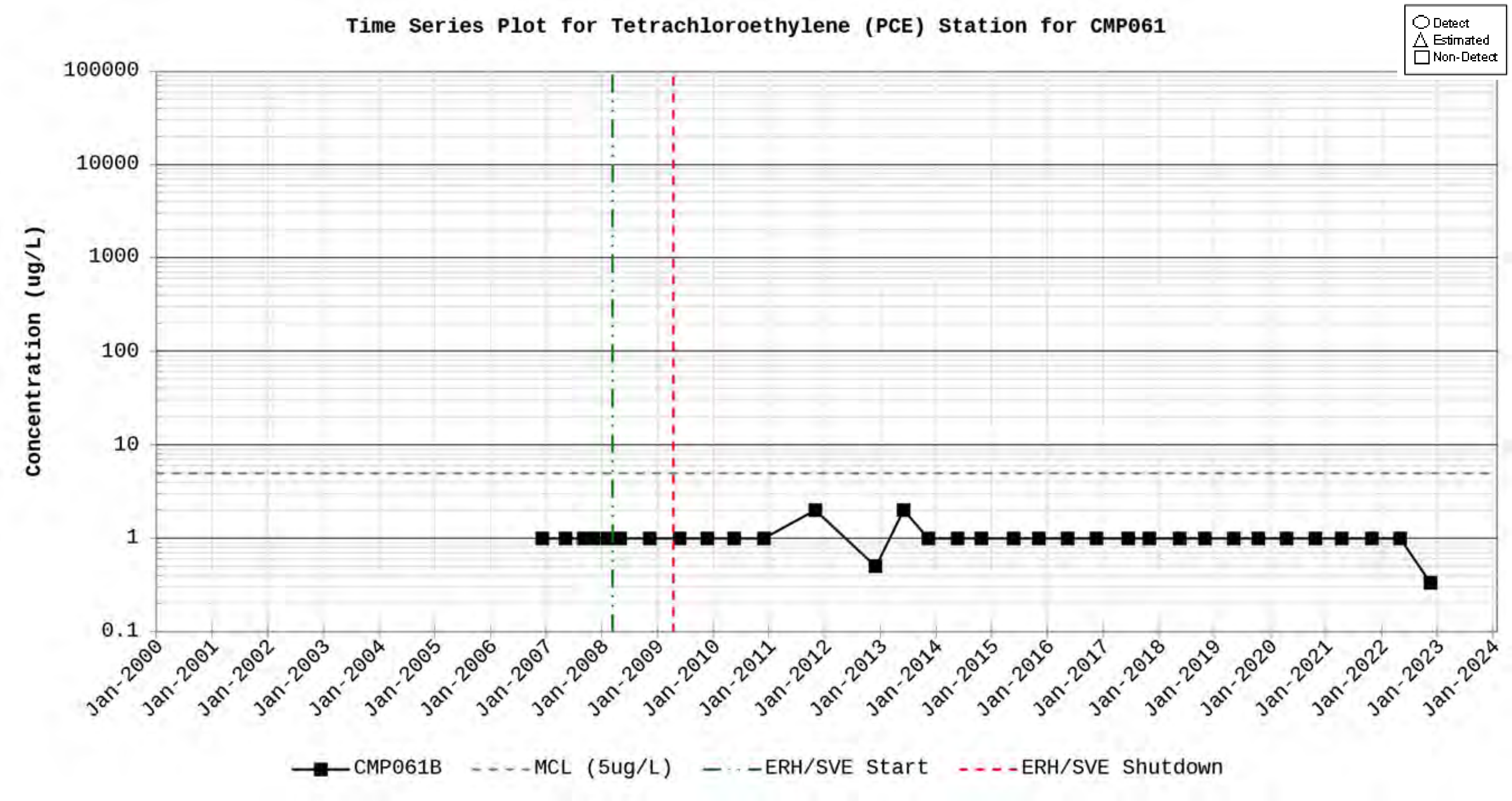
Jan-2023
Jan-2024
CMP060B
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP061
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
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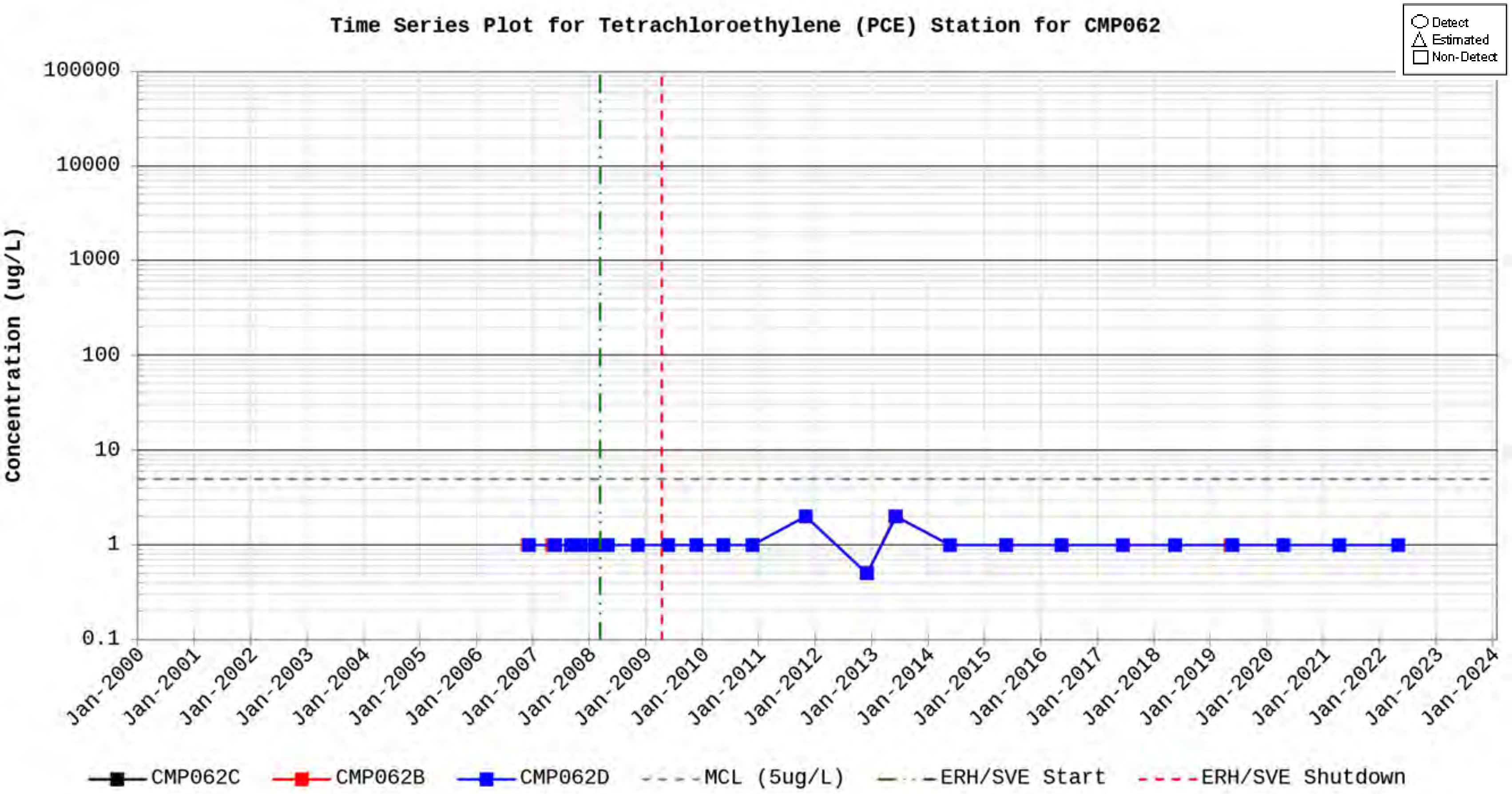
Jan-2023
Jan-2024
CMP061B
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP062
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
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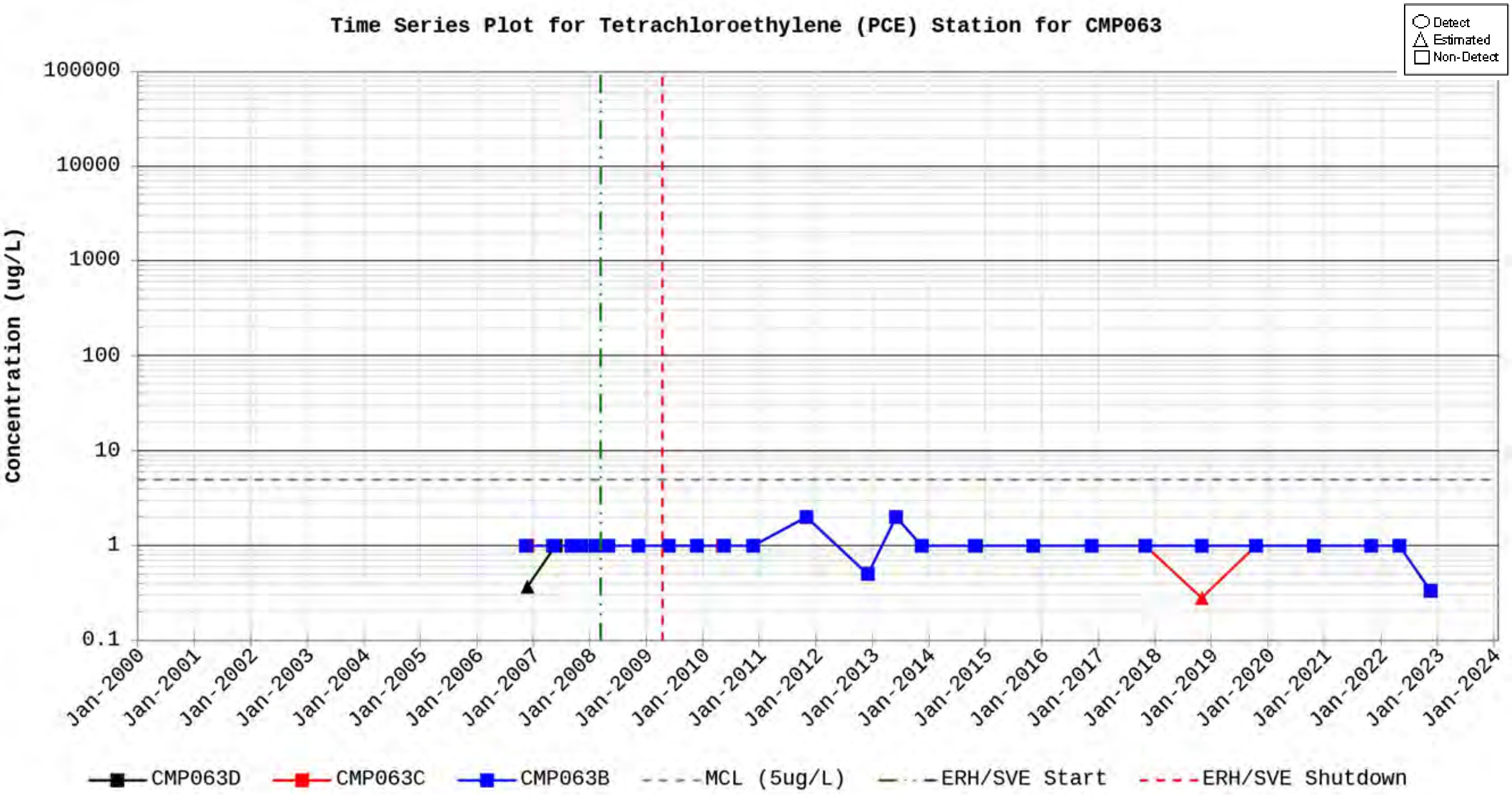
Jan-2023
Jan-2024
CMP062C
CMP062B
CMP062D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP063
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
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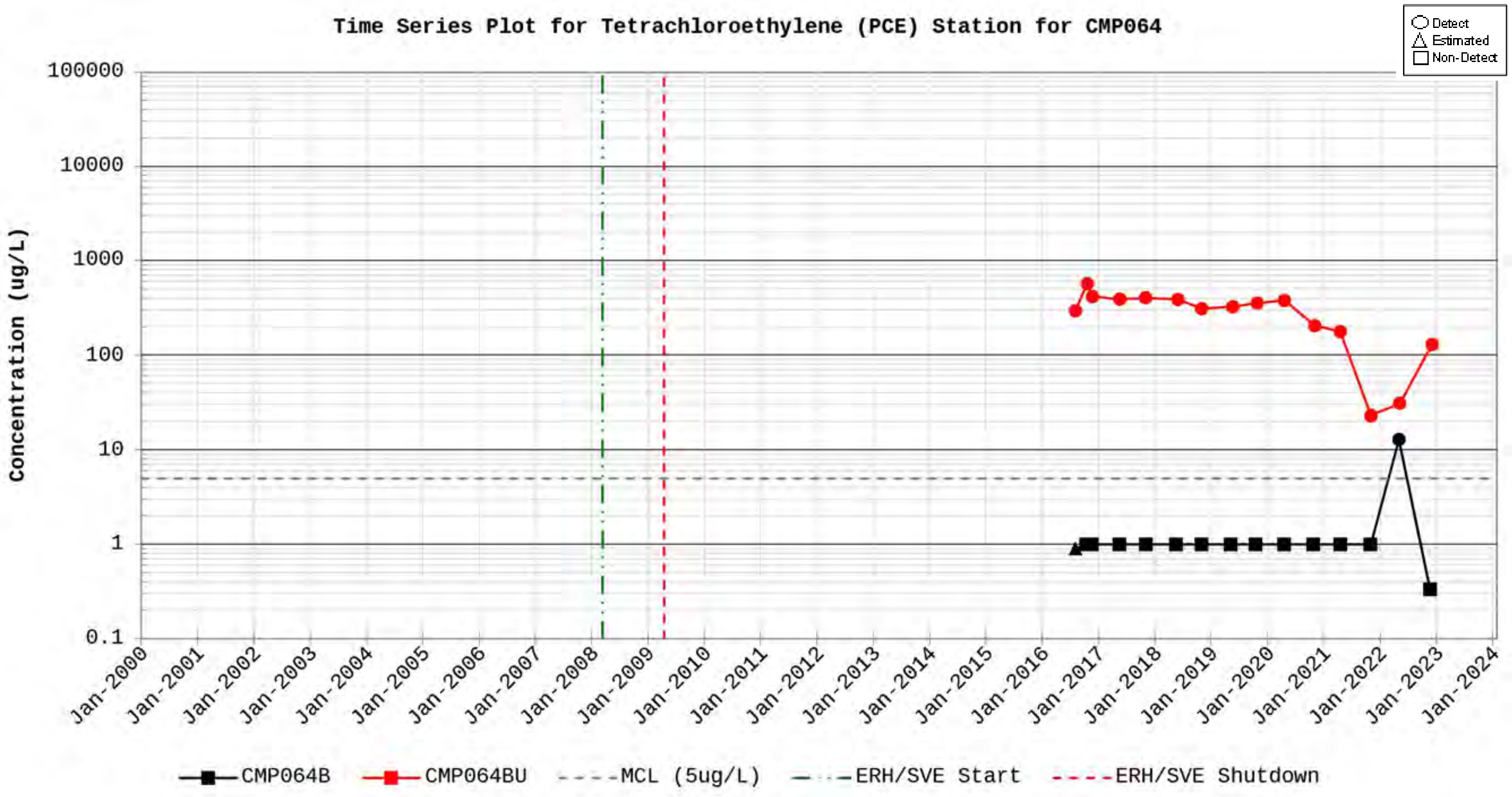
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP063D
CMP063C
CMP063B
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP064
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
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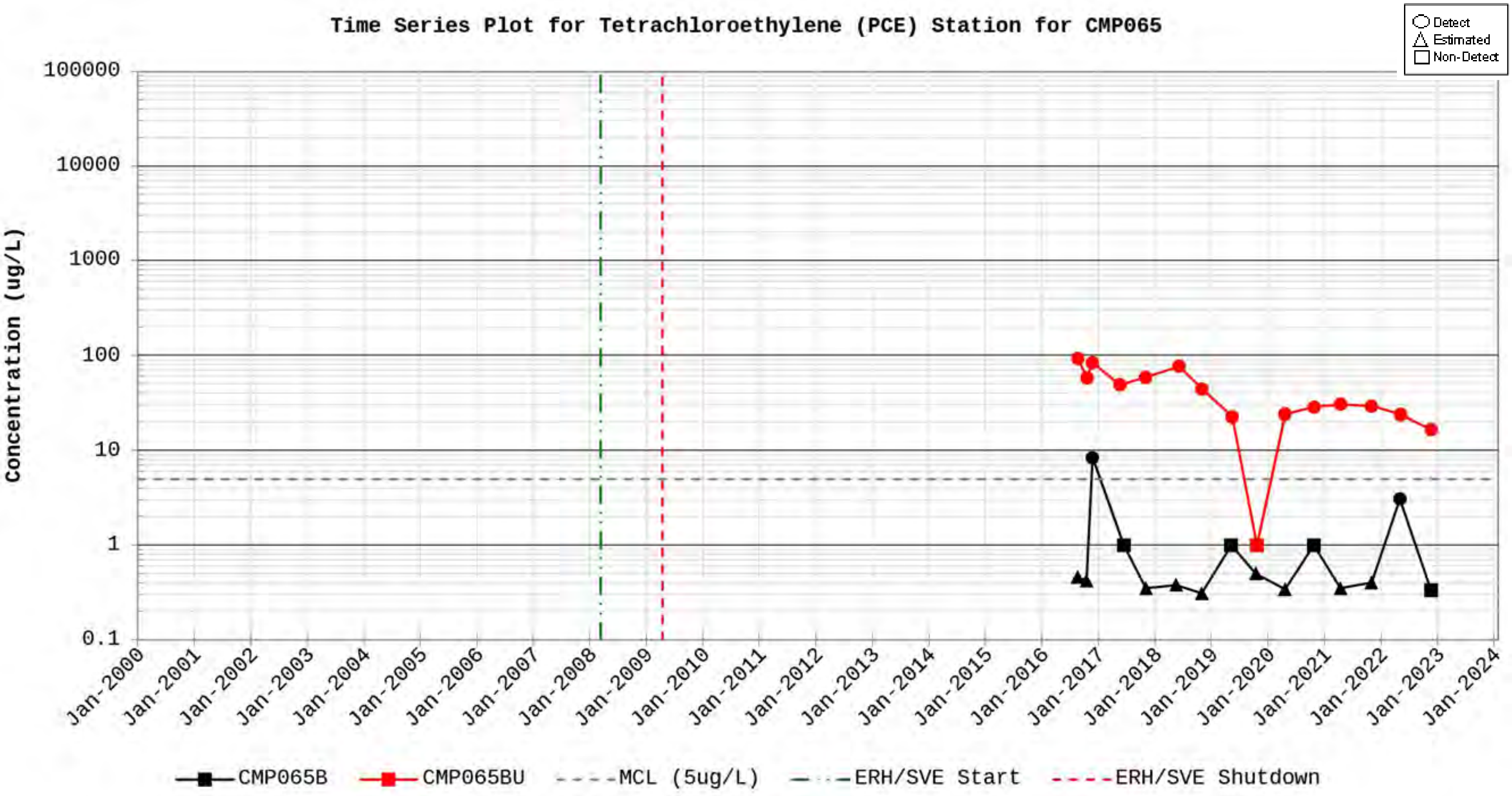
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP064B
CMP064BU
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP065
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
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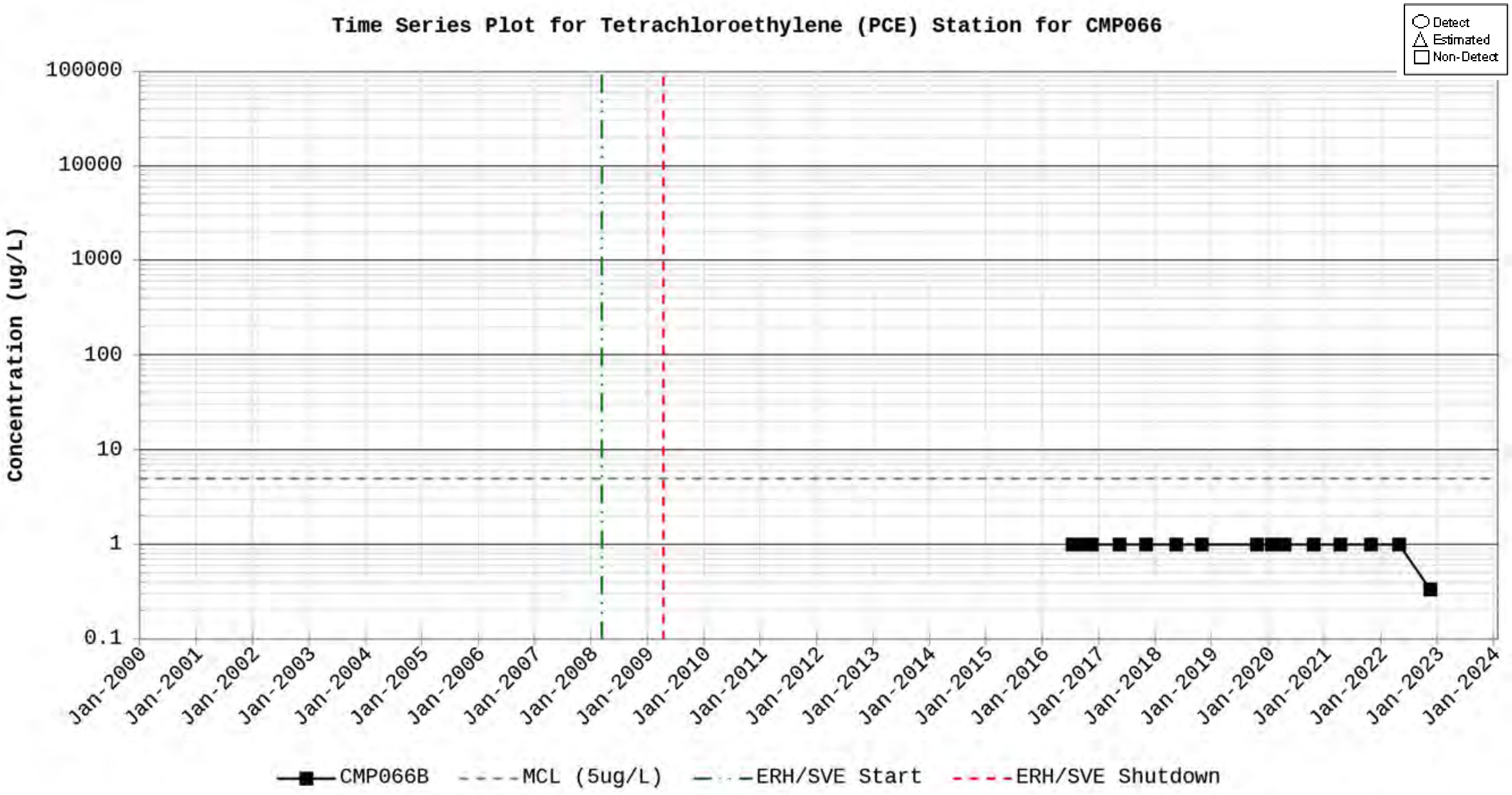
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP065B
CMP065BU
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP066
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
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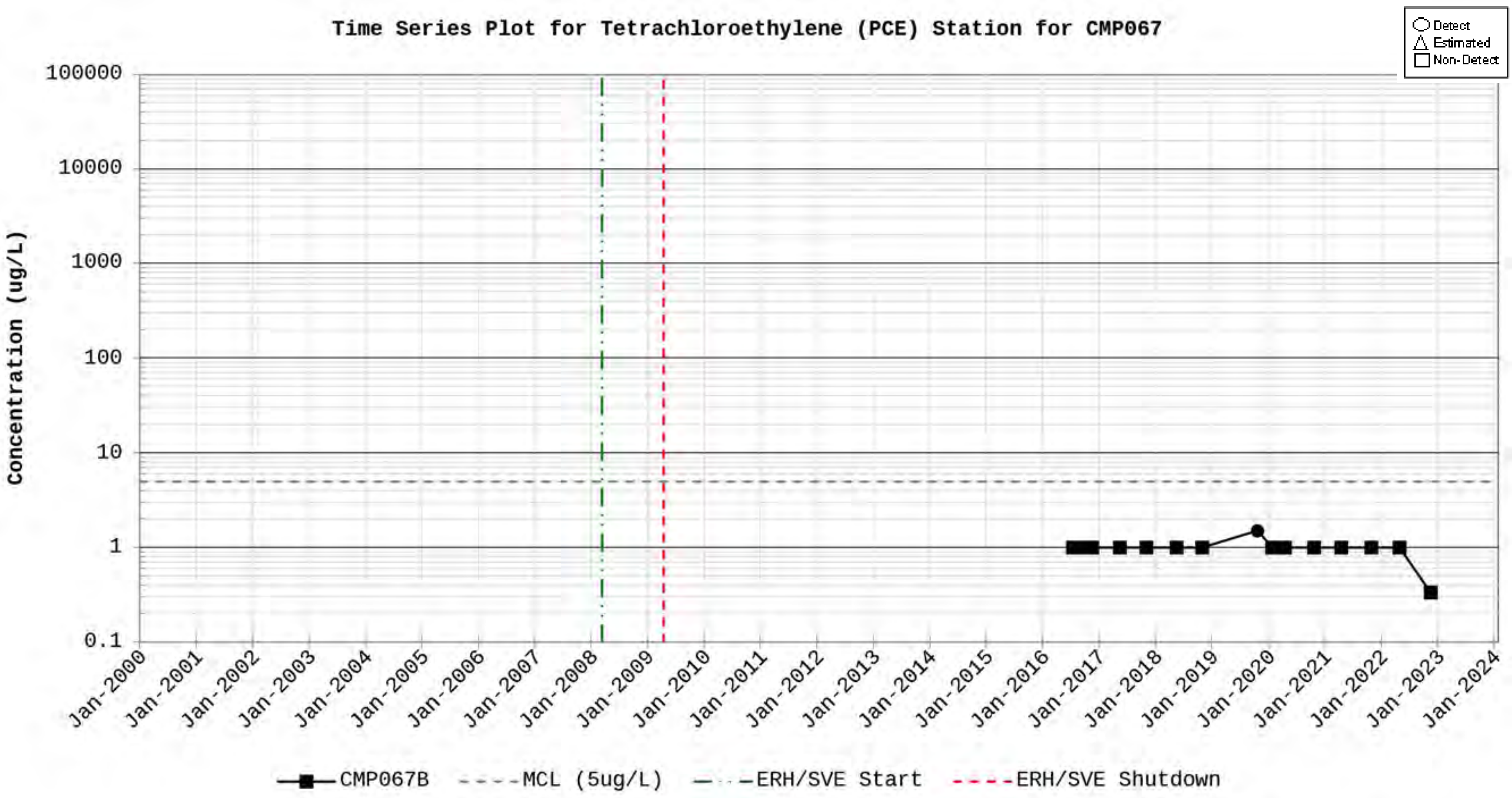
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP066B
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP067
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
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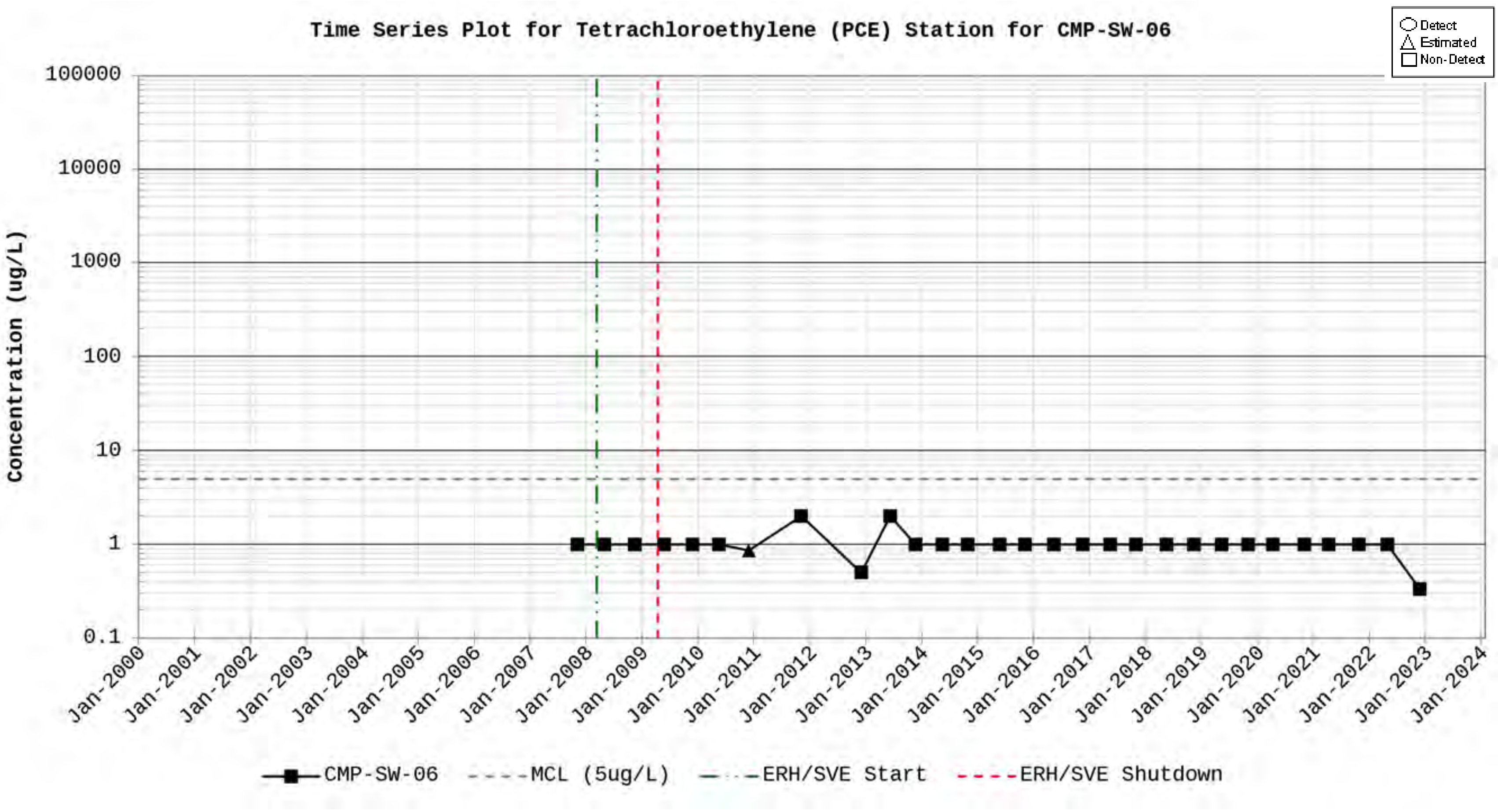
Jan-2023
Jan-2024
CMP067B
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP-SW-06
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
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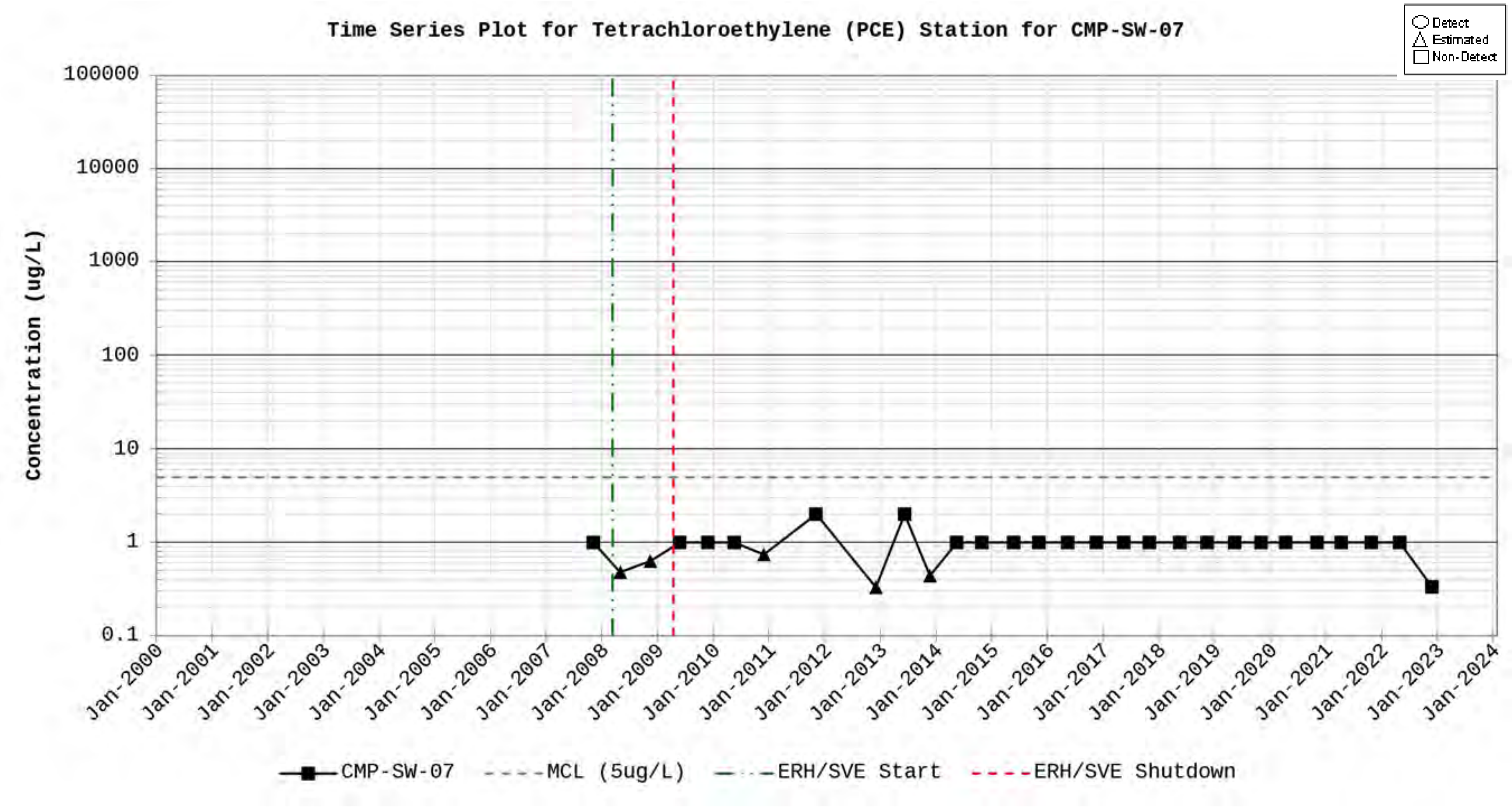
Jan-2023
Jan-2024
CMP-SW-06
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP-SW-07
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
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Jan-2006
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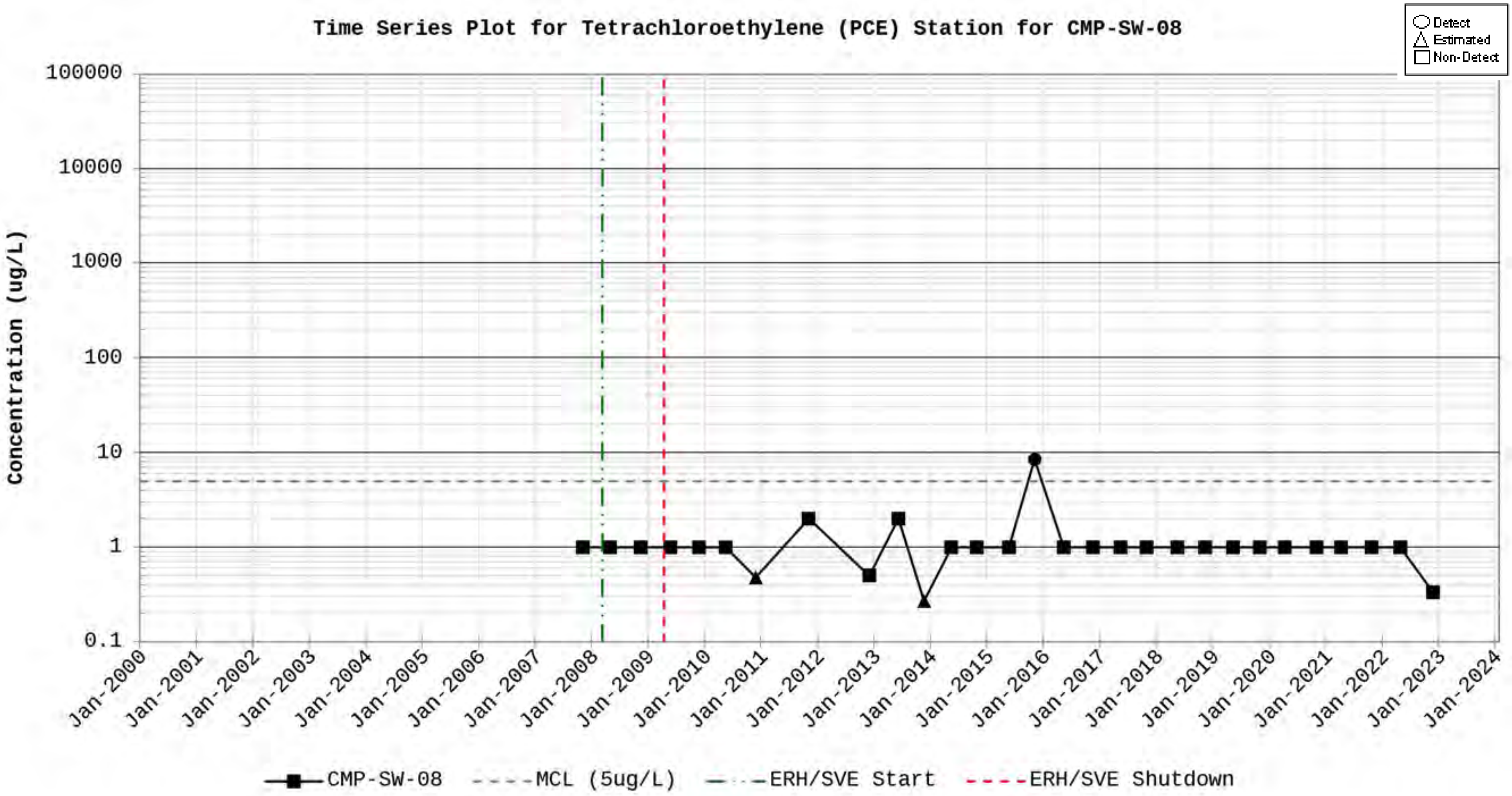
Jan-2022
Jan-2023
Jan-2024
CMP-SW-07
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP-SW-08
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
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Jan-2010
Jan-2011
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Jan-2020
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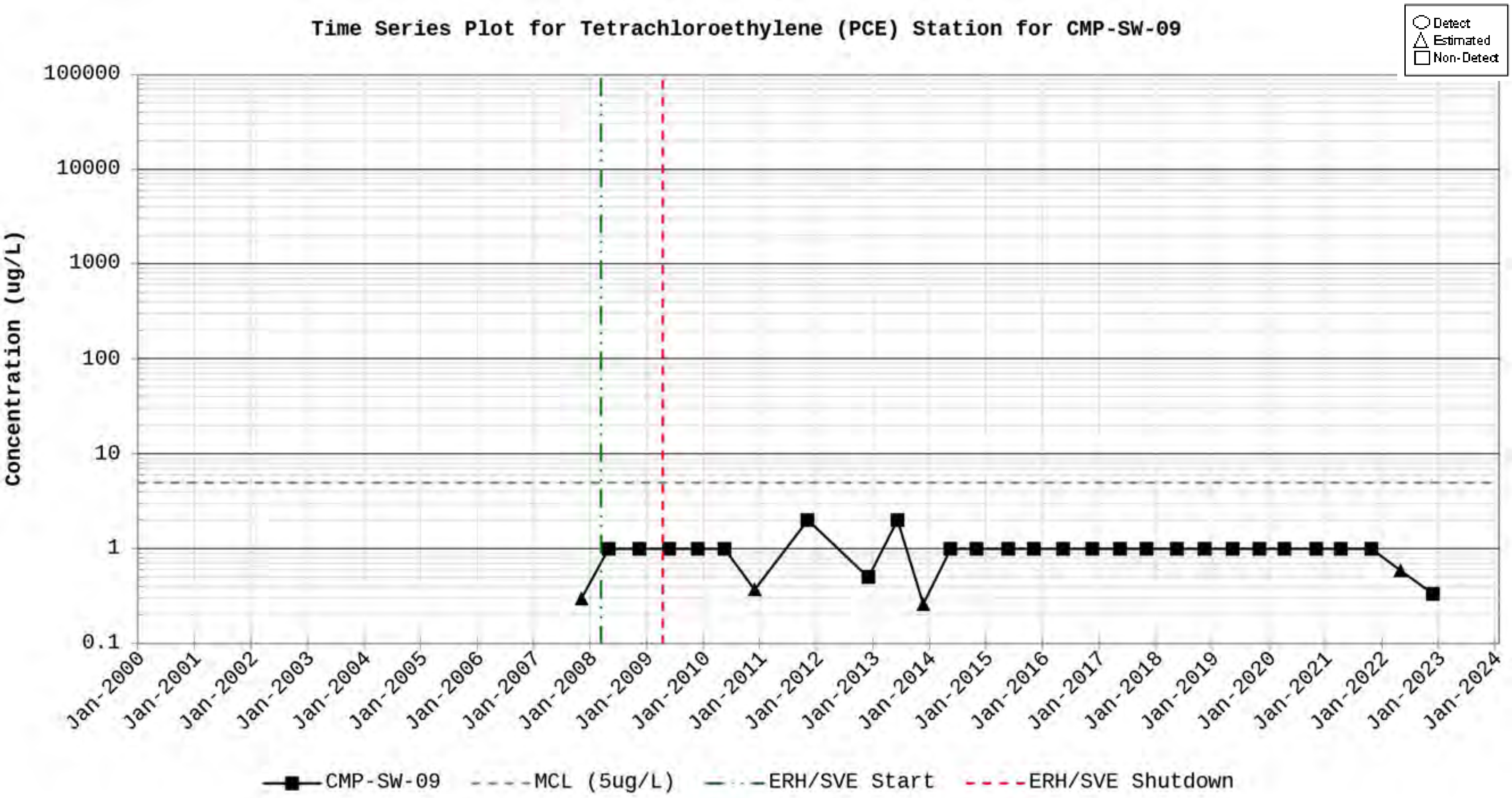
Jan-2023
Jan-2024
CMP-SW-08
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP-SW-09
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
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Jan-2020
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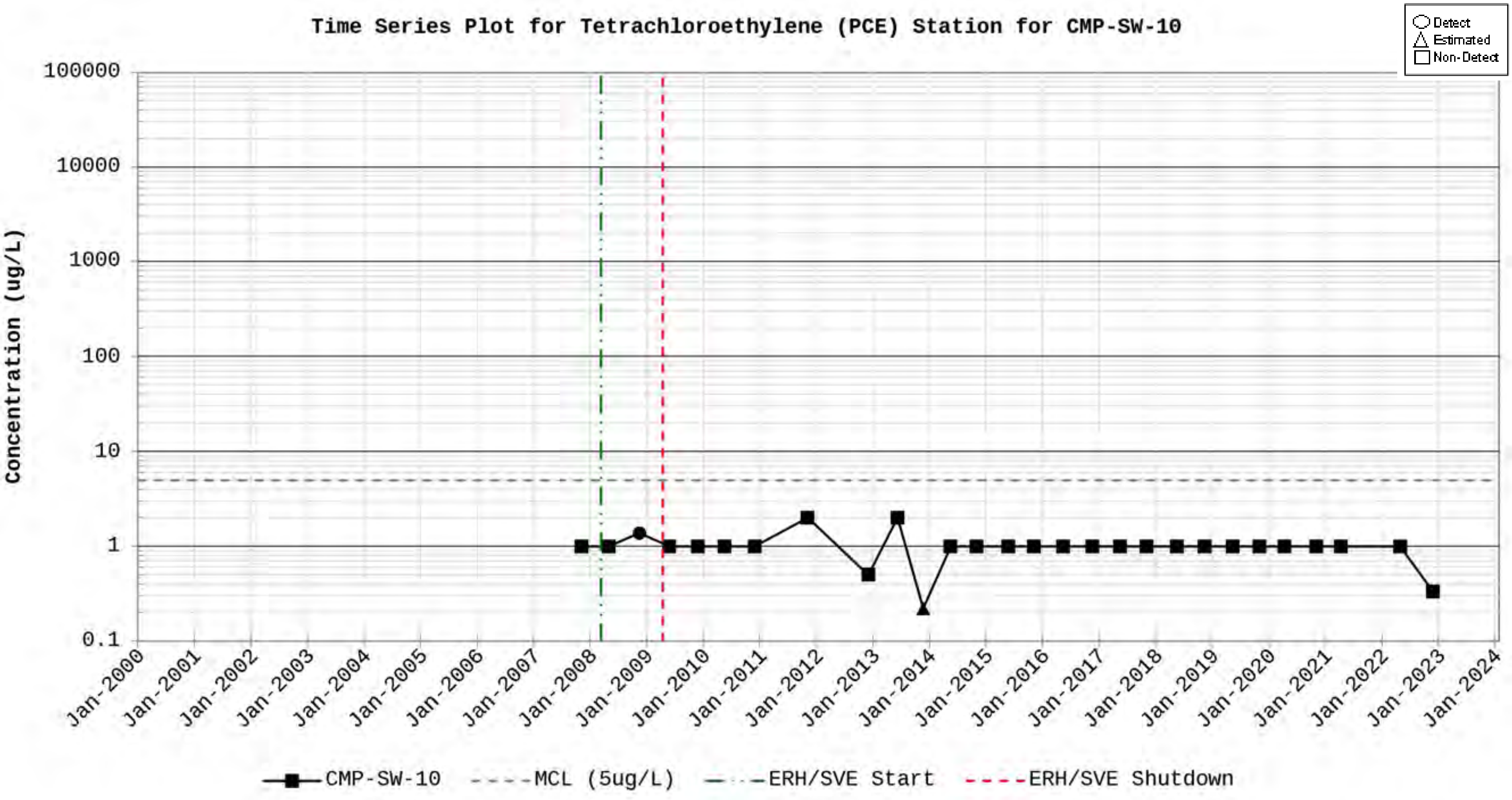
Jan-2024
CMP-SW-09
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP-SW-10
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
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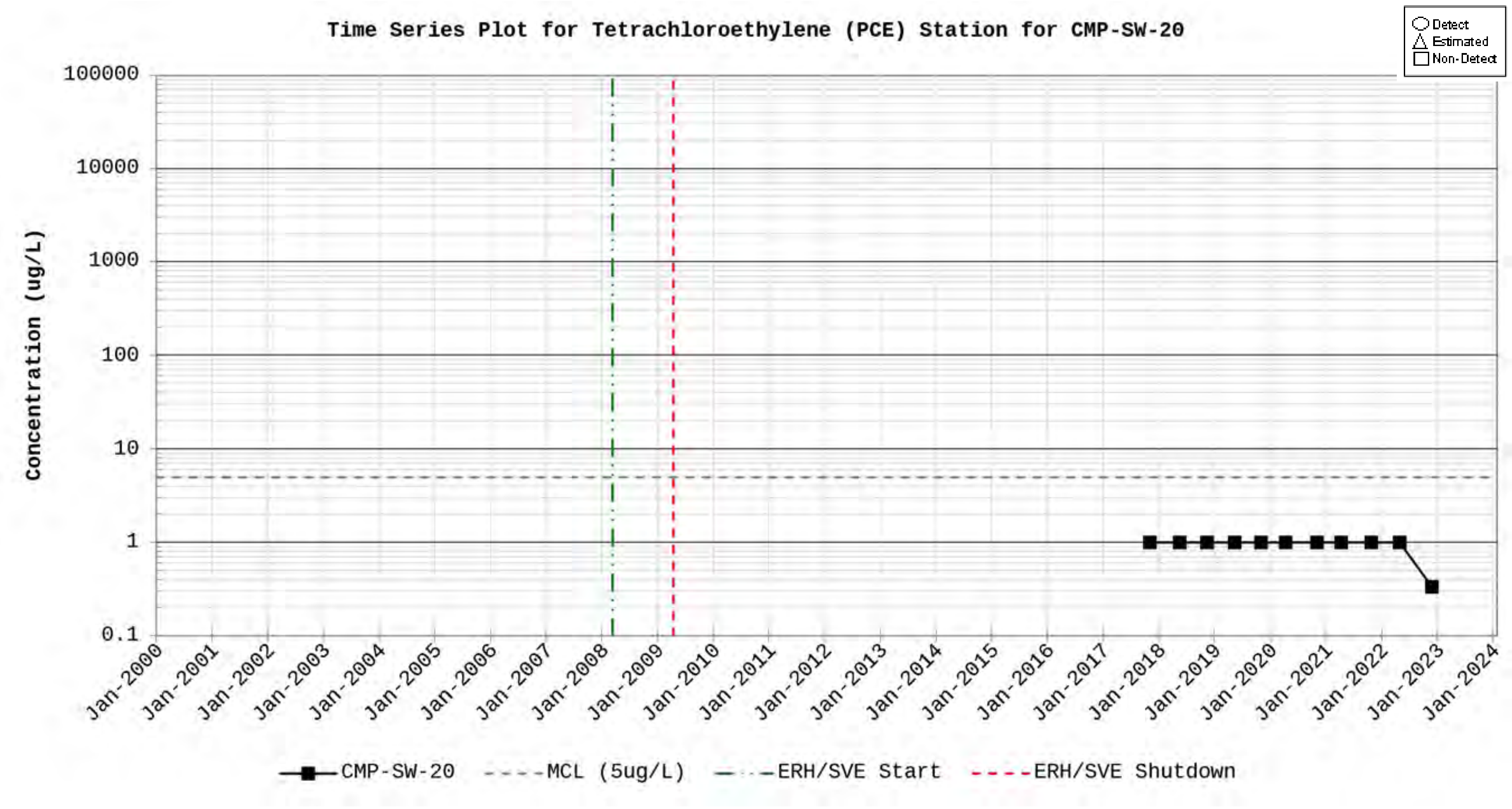
Jan-2023
Jan-2024
CMP-SW-10
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP-SW-20
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
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Jan-2020
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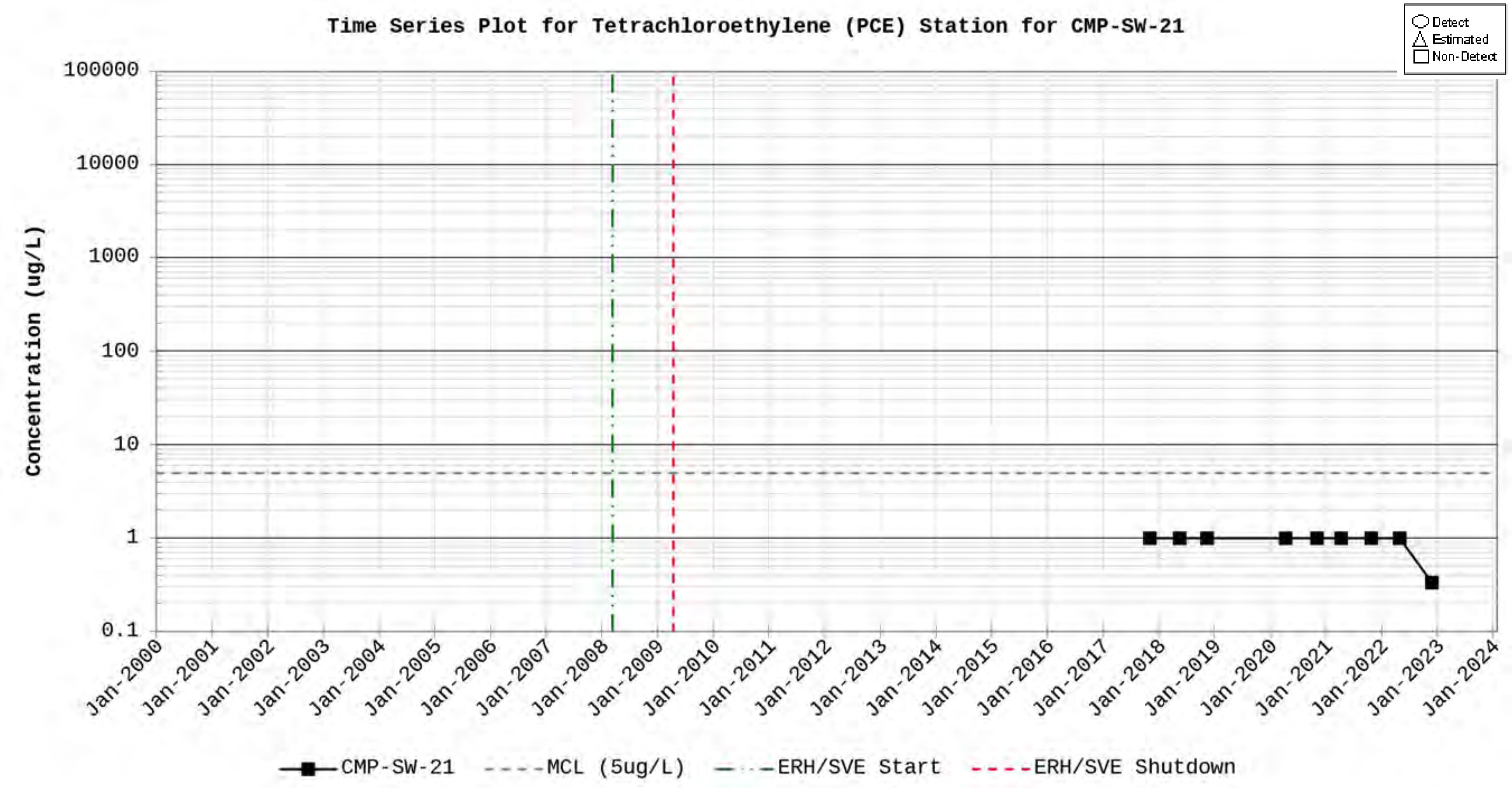
Jan-2023
Jan-2024
CMP-SW-20
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP-SW-21
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
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Jan-2006
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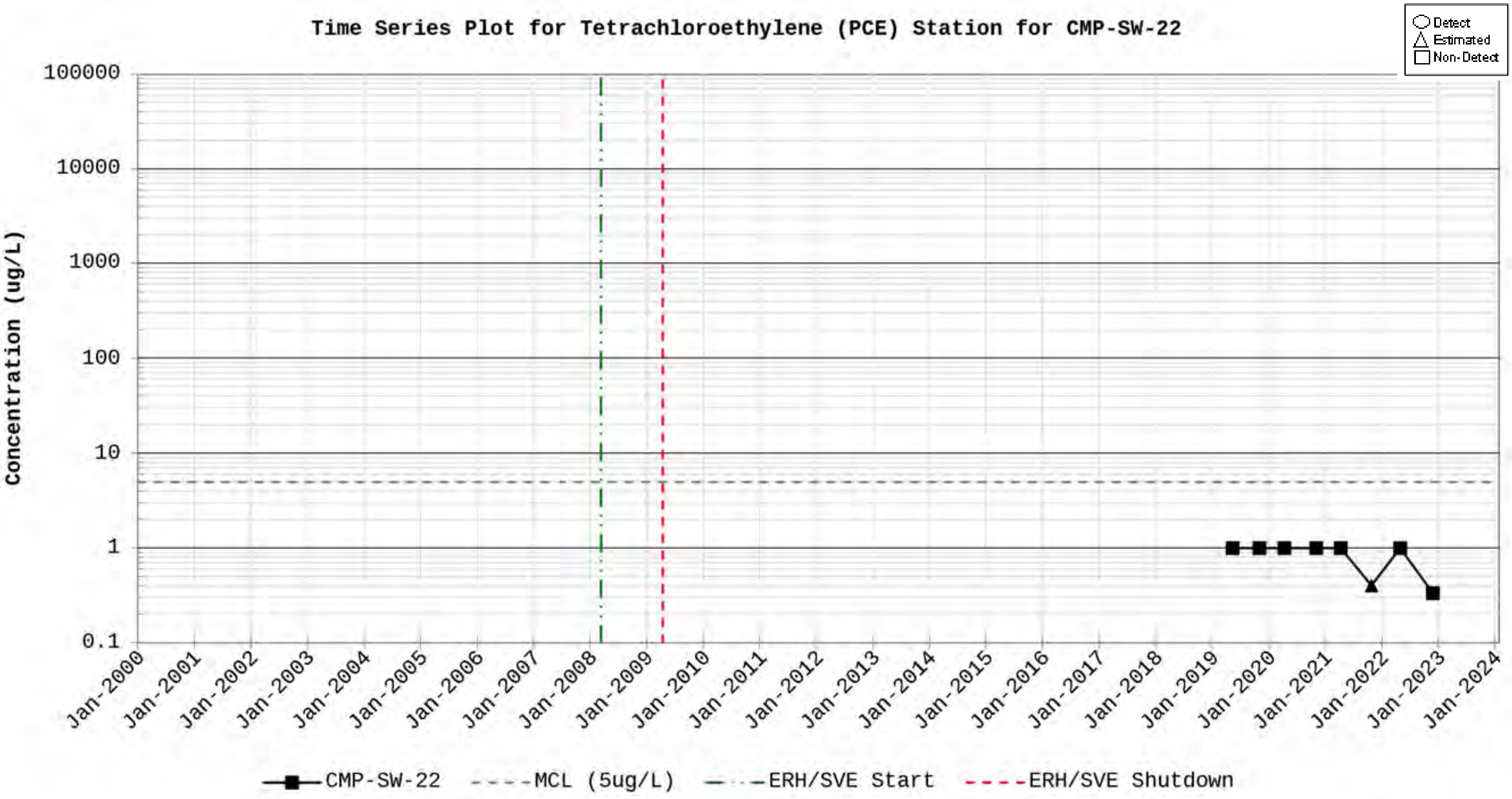
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP-SW-21
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Tetrachloroethylene (PCE) Station for CMP-SW-22
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
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Jan-2019
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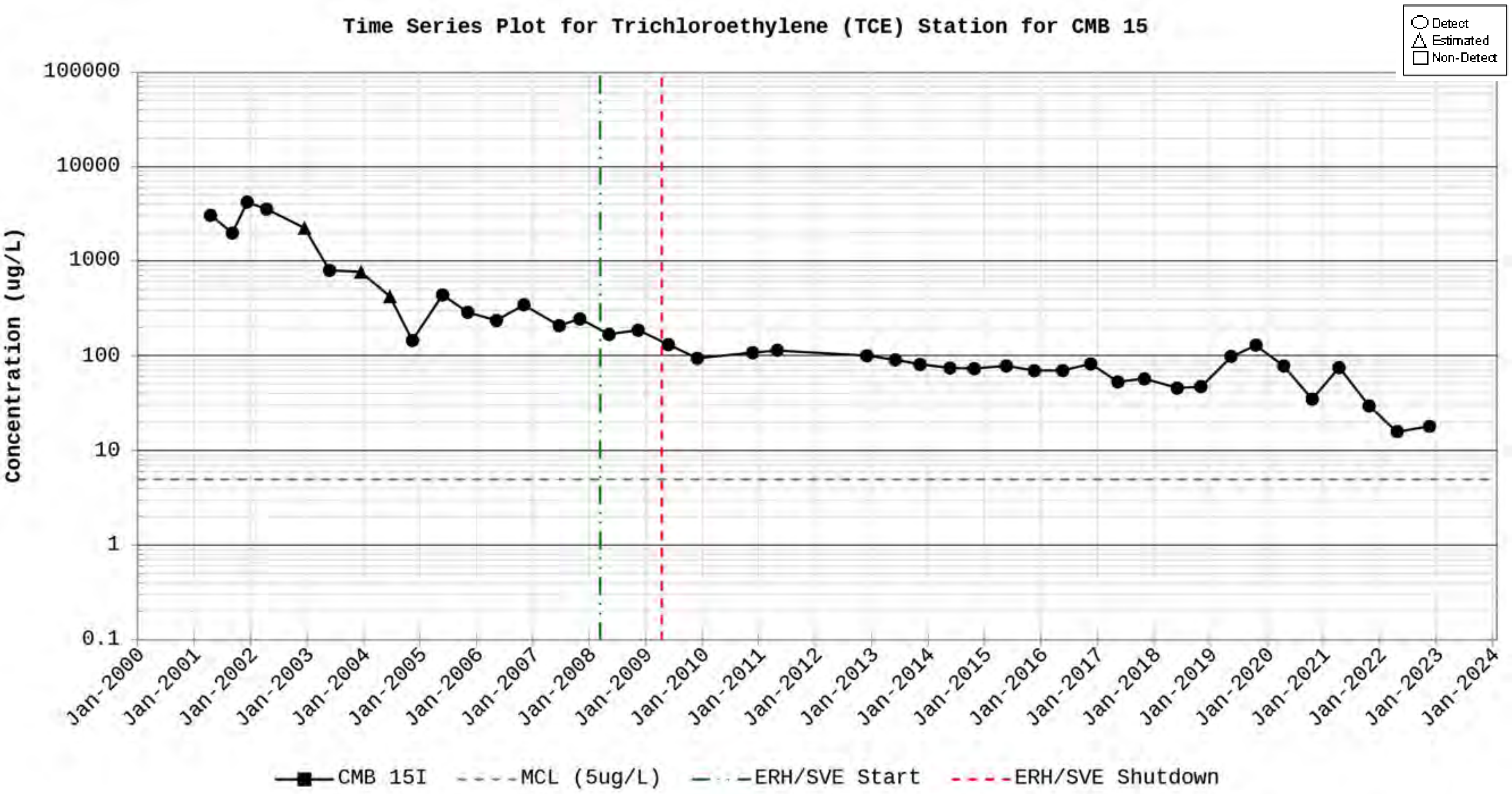
Jan-2022
Jan-2023
Jan-2024
CMP-SW-22
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMB 15
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
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Jan-2010
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Jan-2017
Jan-2018
Jan-2019
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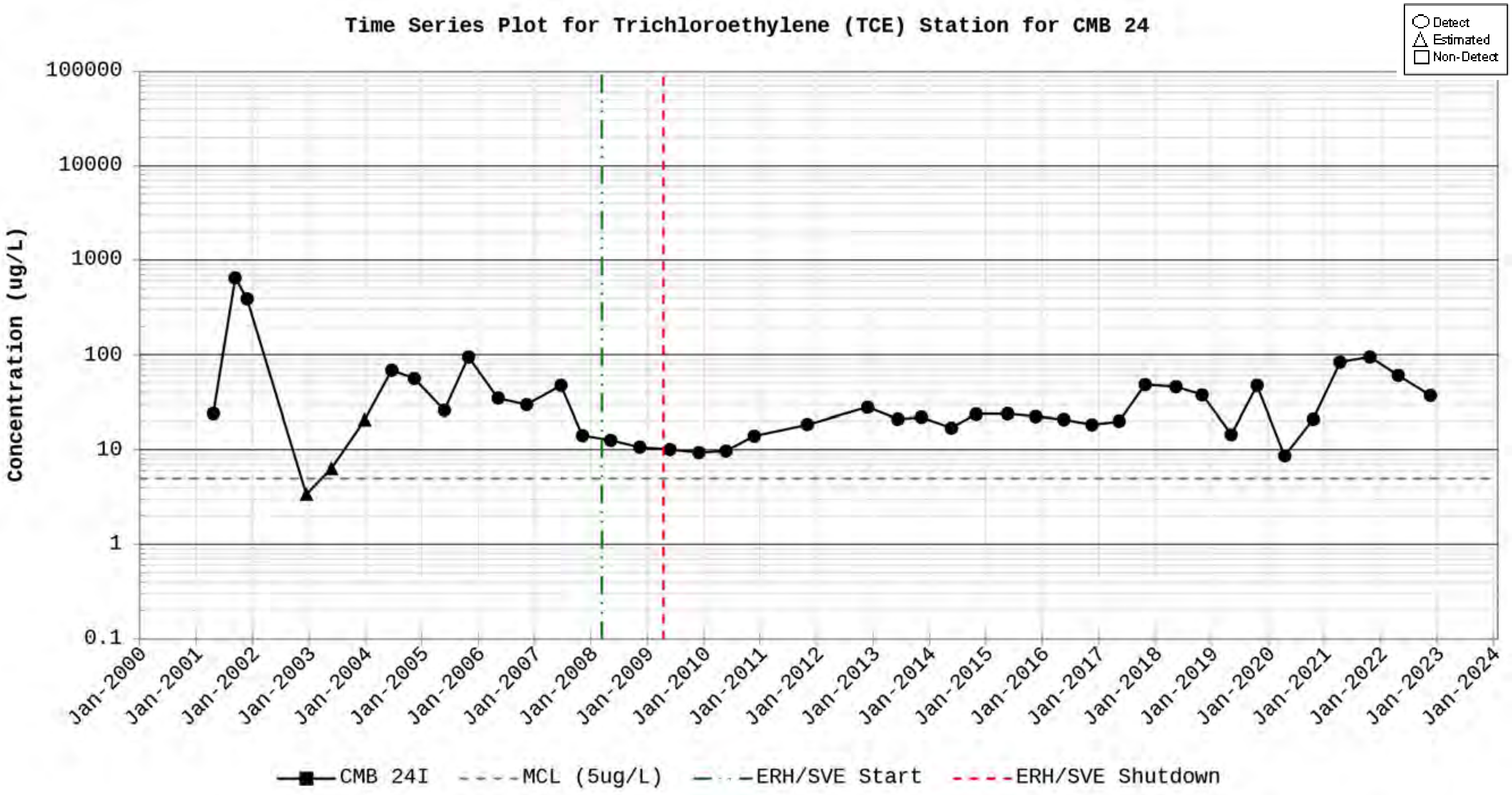
Jan-2022
Jan-2023
Jan-2024
CMB 15I
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMB 24
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
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Jan-2004
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Jan-2007
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Jan-2010
Jan-2011
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Jan-2013
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Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
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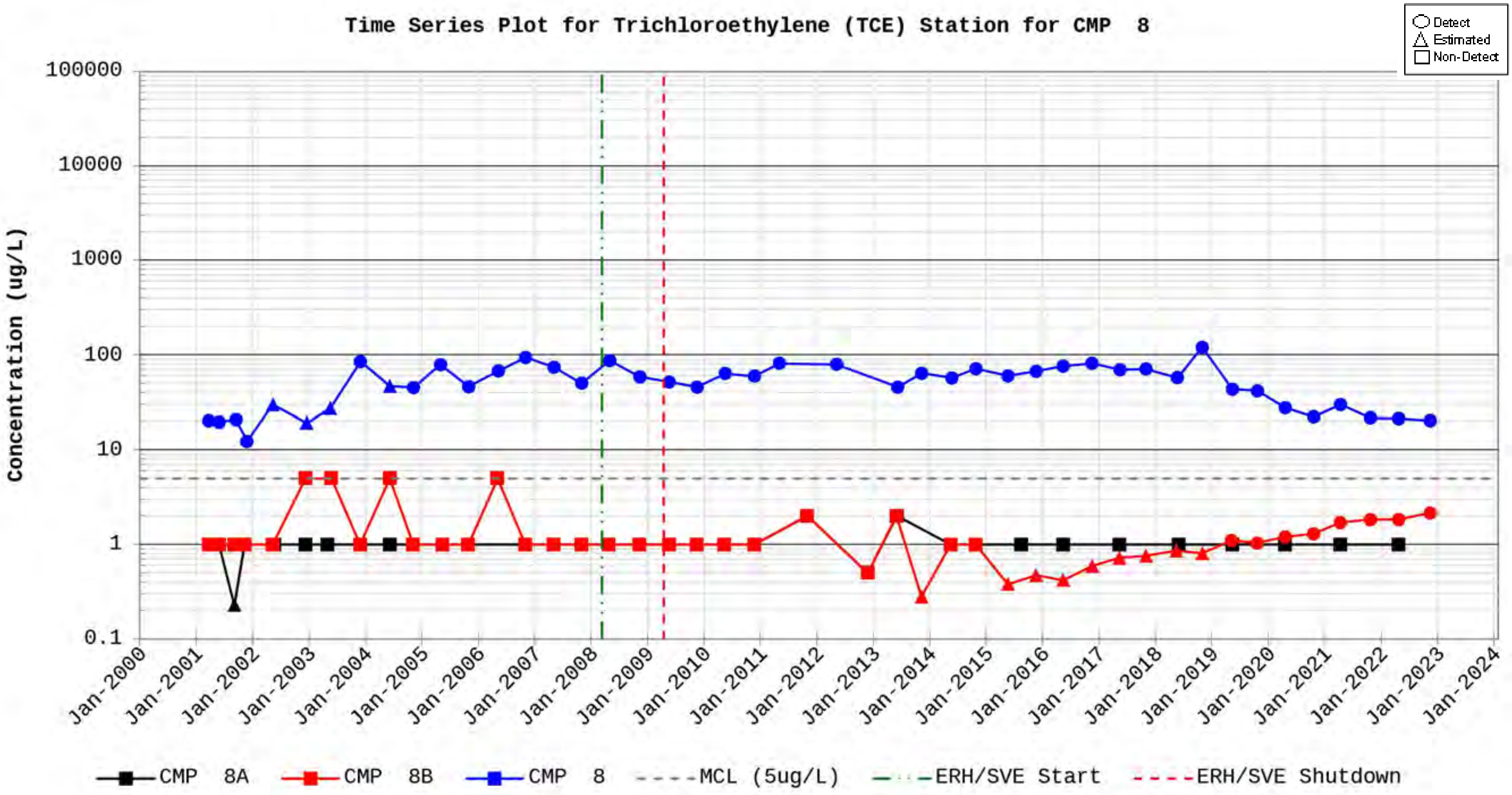
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMB 24I
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP 8
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
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Jan-2019
Jan-2020
Jan-2021
Jan-2022
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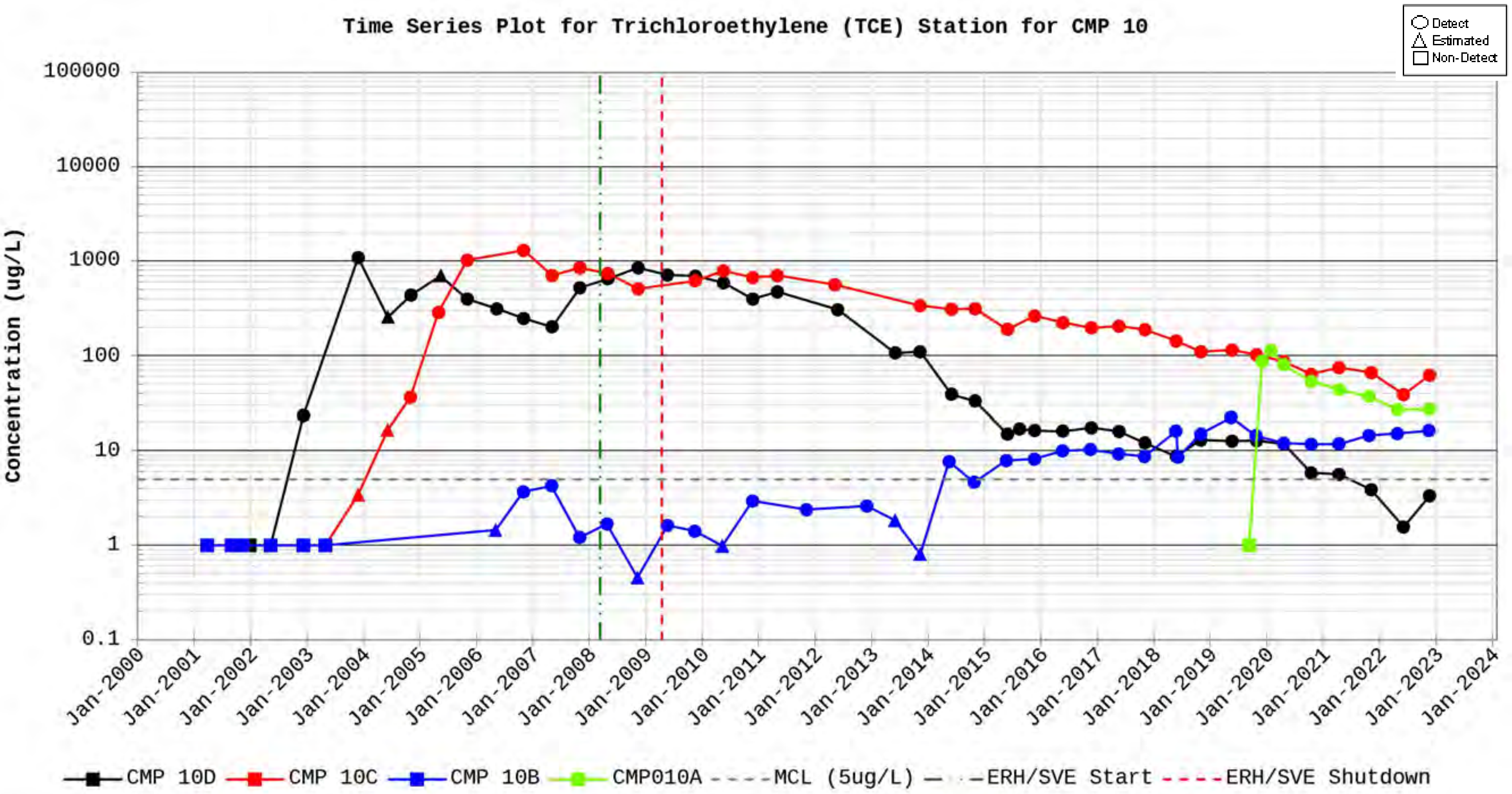
Jan-2024
CMP 8A
CMP 8B
CMP 8
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP 10
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
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Jan-2004
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Jan-2006
Jan-2007
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Jan-2010
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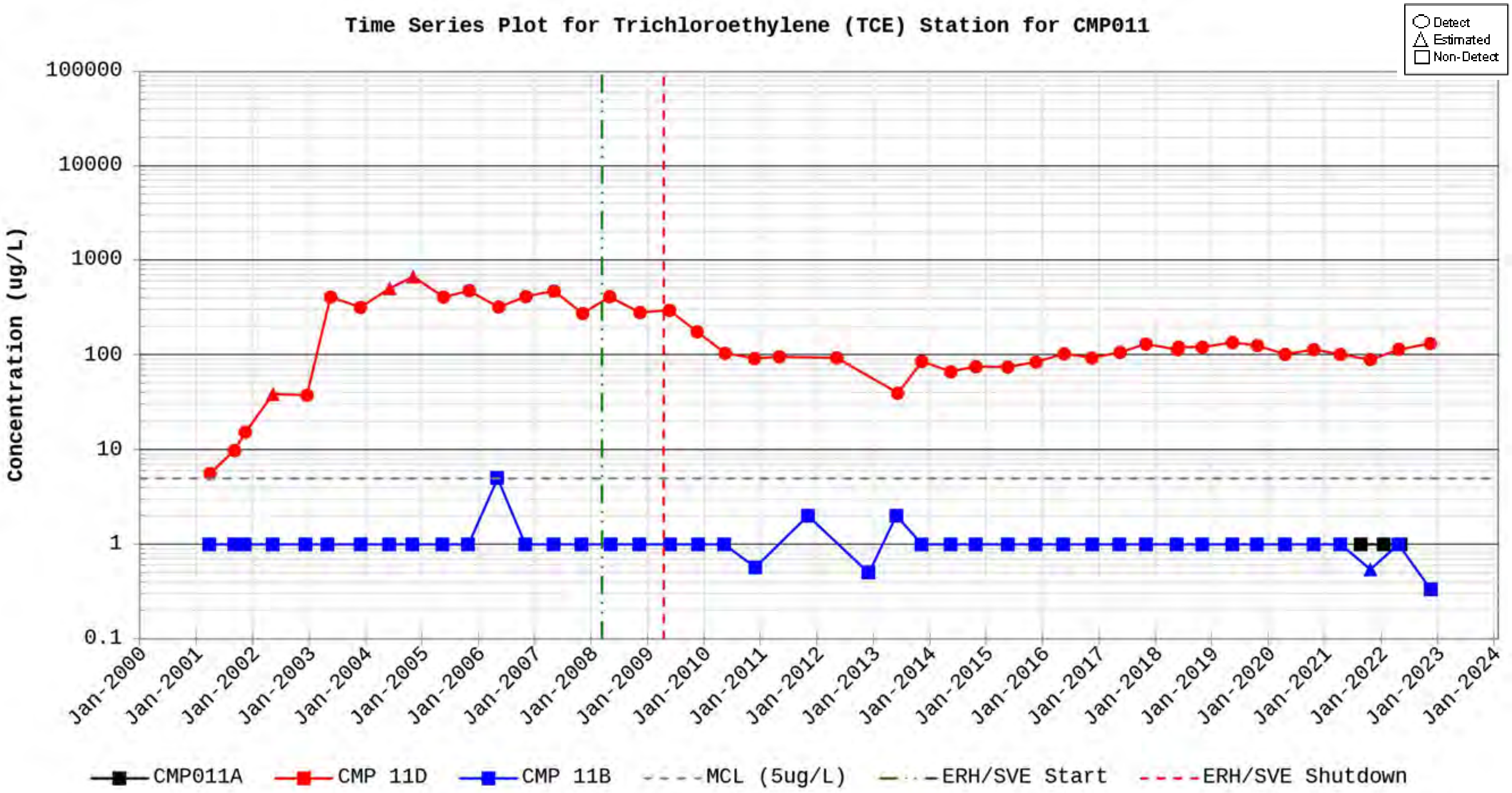
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 10D
CMP 10C
CMP 10B
CMP010A
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP011
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
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Jan-2006
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Jan-2008
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Jan-2016
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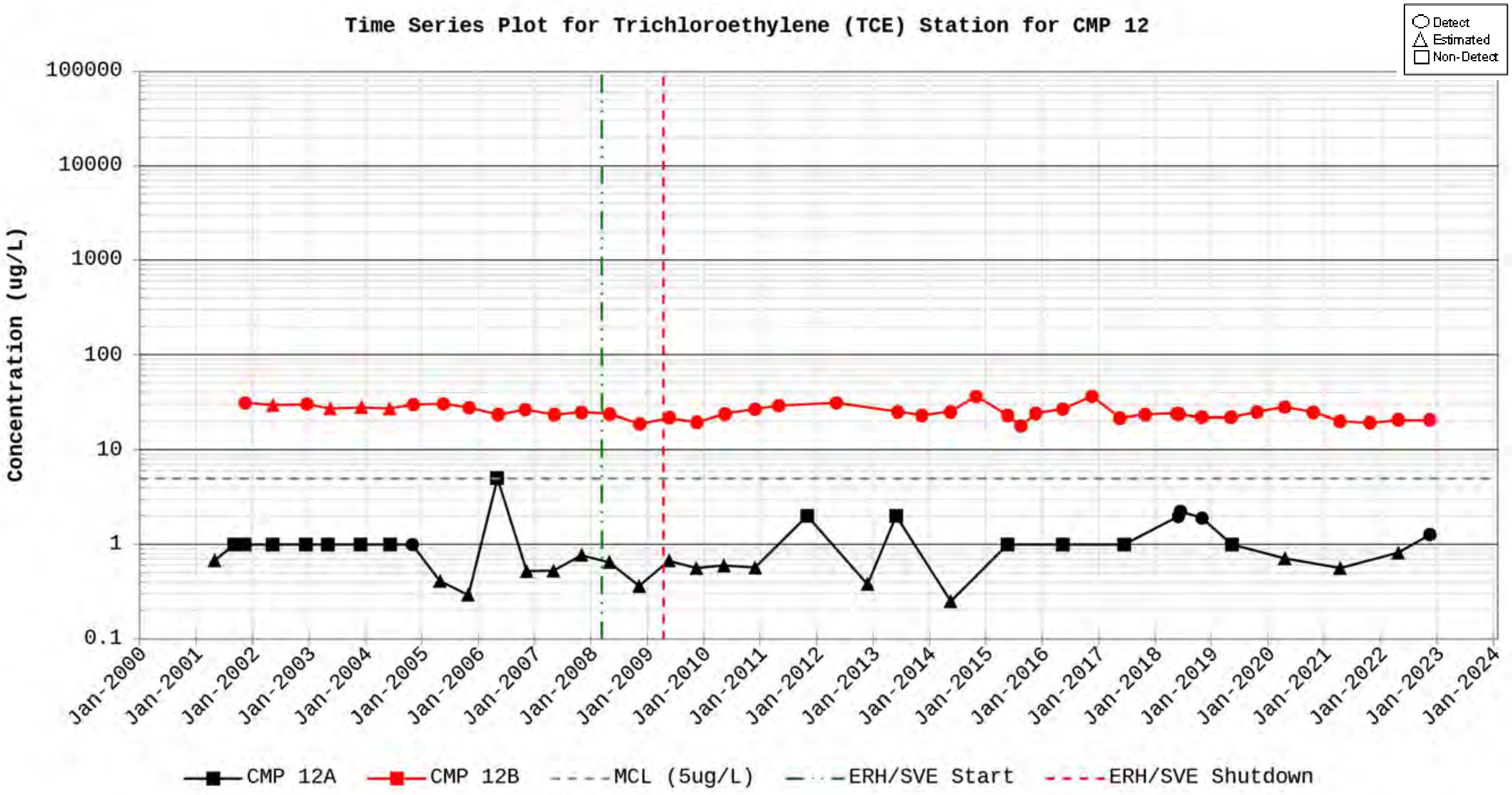
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP011A
CMP 11D
CMP 11B
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP 12
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
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Jan-2006
Jan-2007
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Jan-2022
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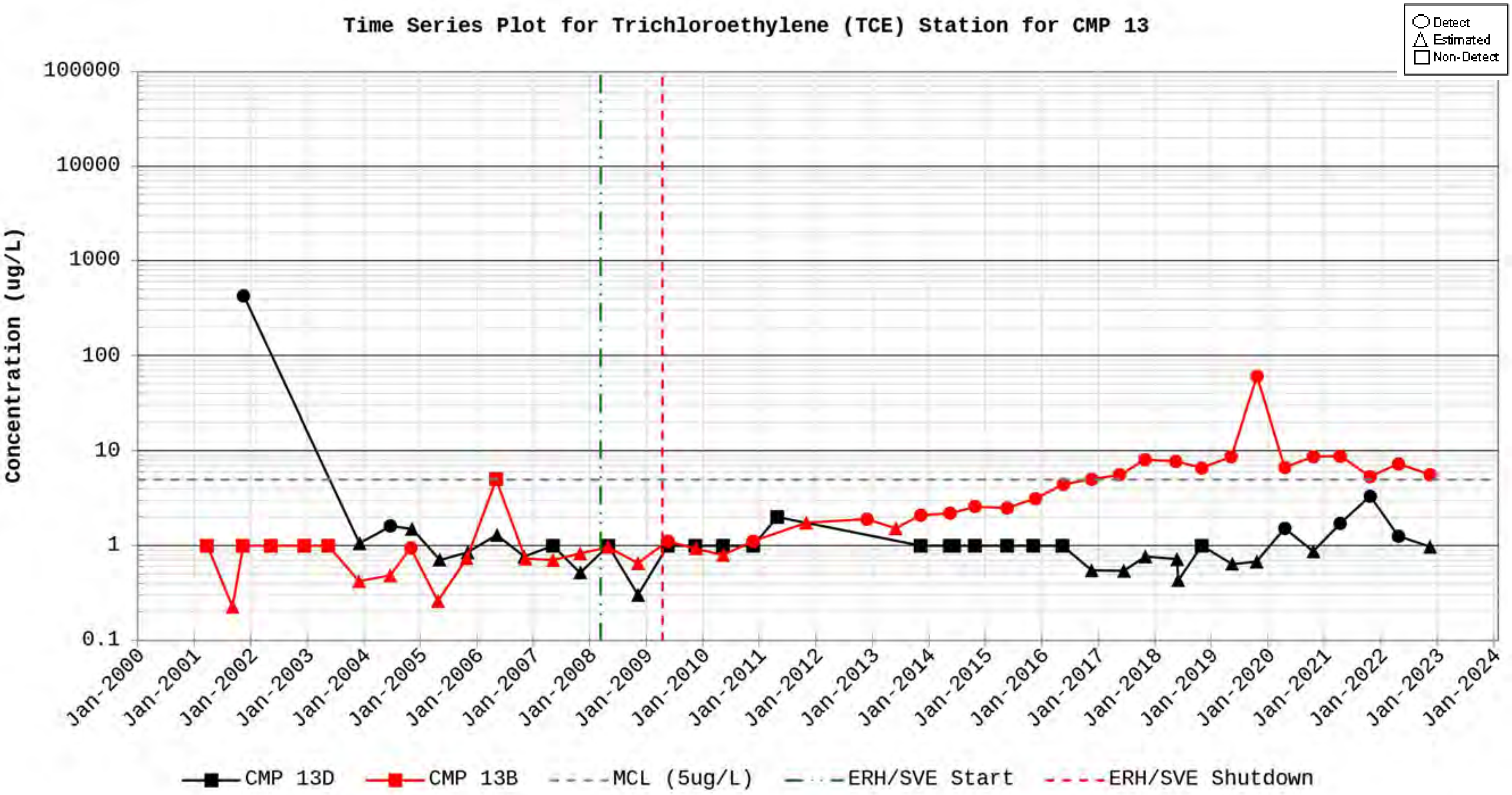
Jan-2024
CMP 12A
CMP 12B
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP 13
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
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Jan-2004
Jan-2005
Jan-2006
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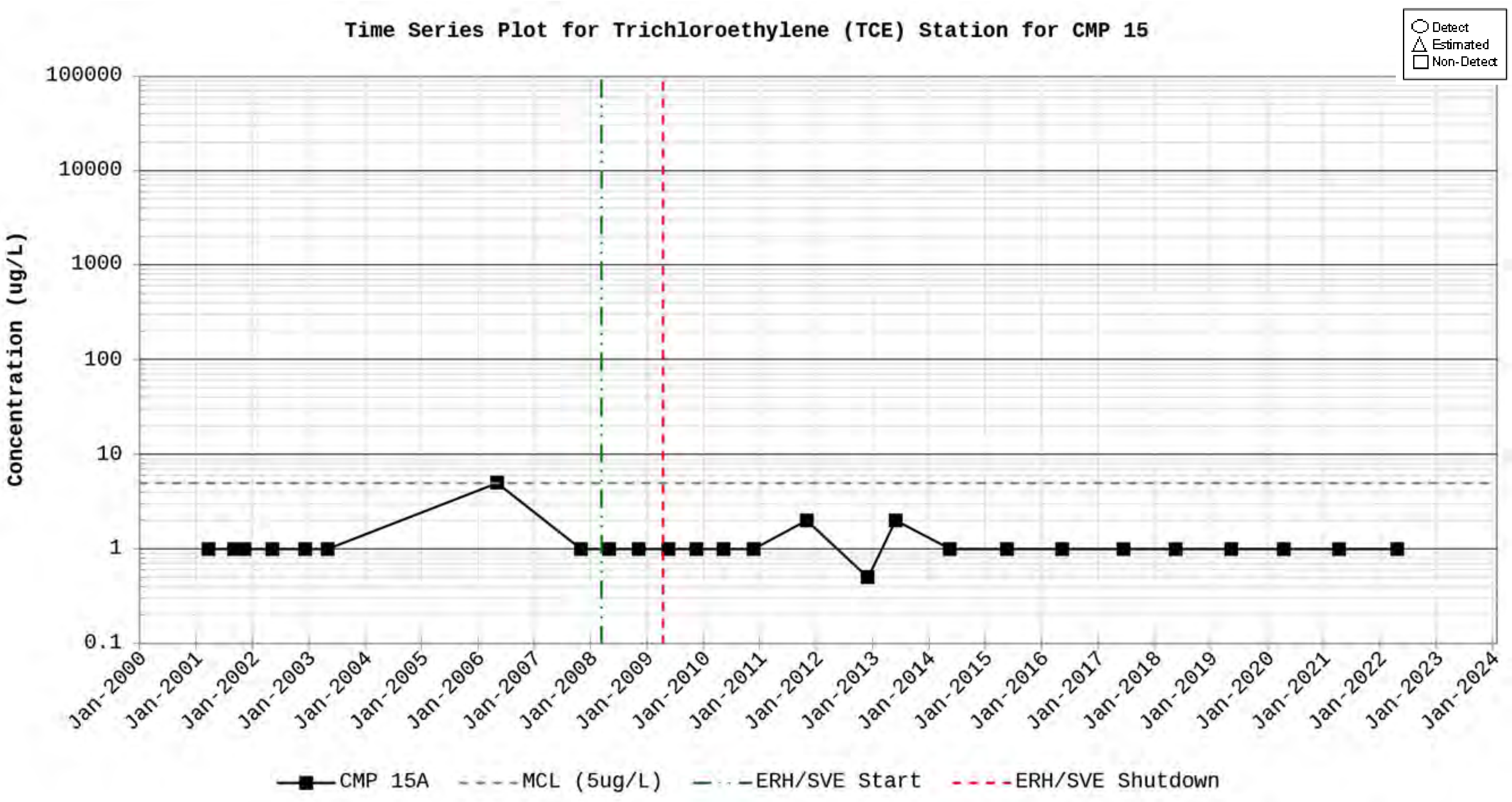
Jan-2024
CMP 13D
CMP 13B
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP 15
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
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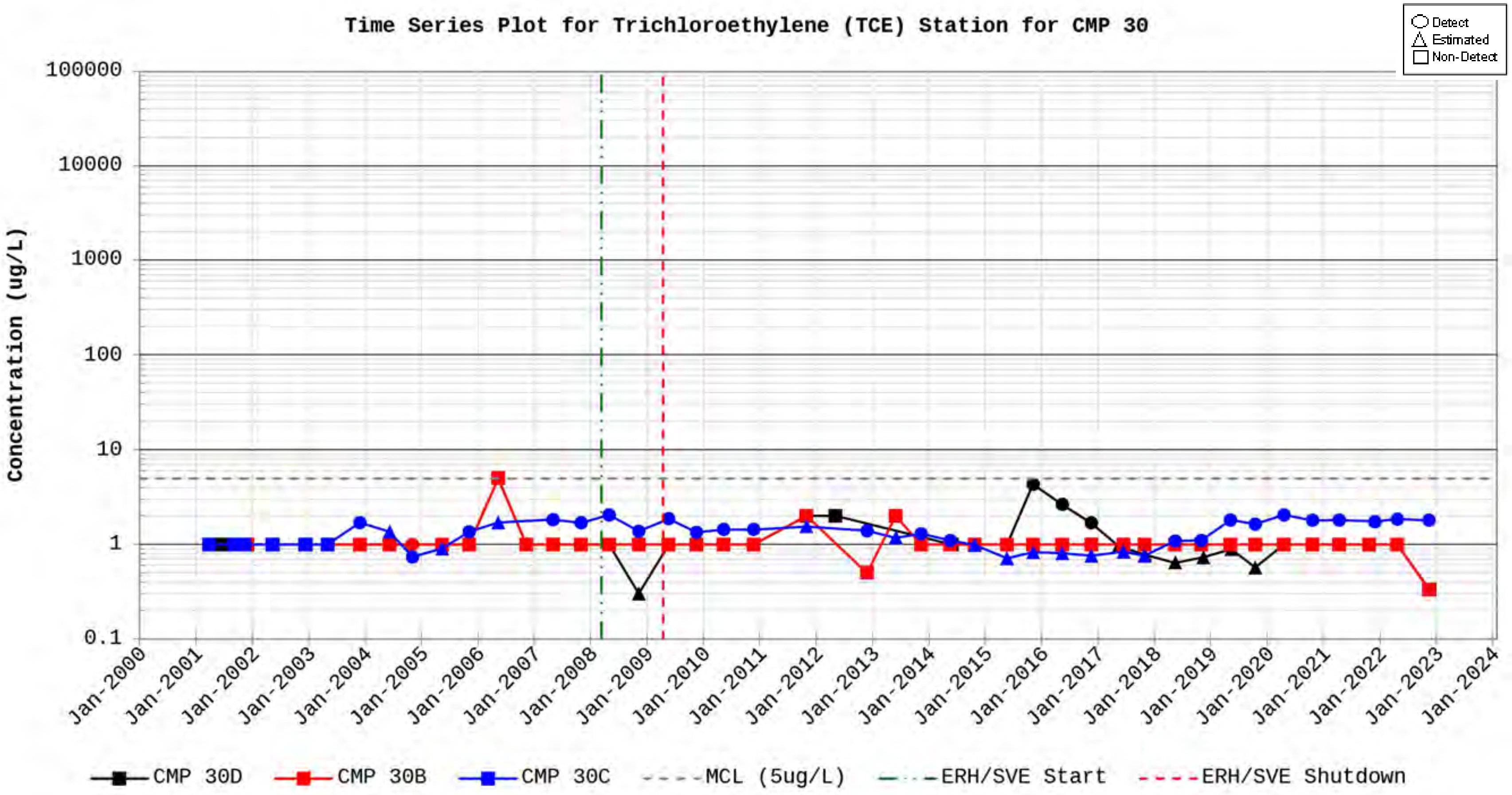
Jan-2023
Jan-2024
CMP 15A
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP 30
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
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Jan-2004
Jan-2005
Jan-2006
Jan-2007
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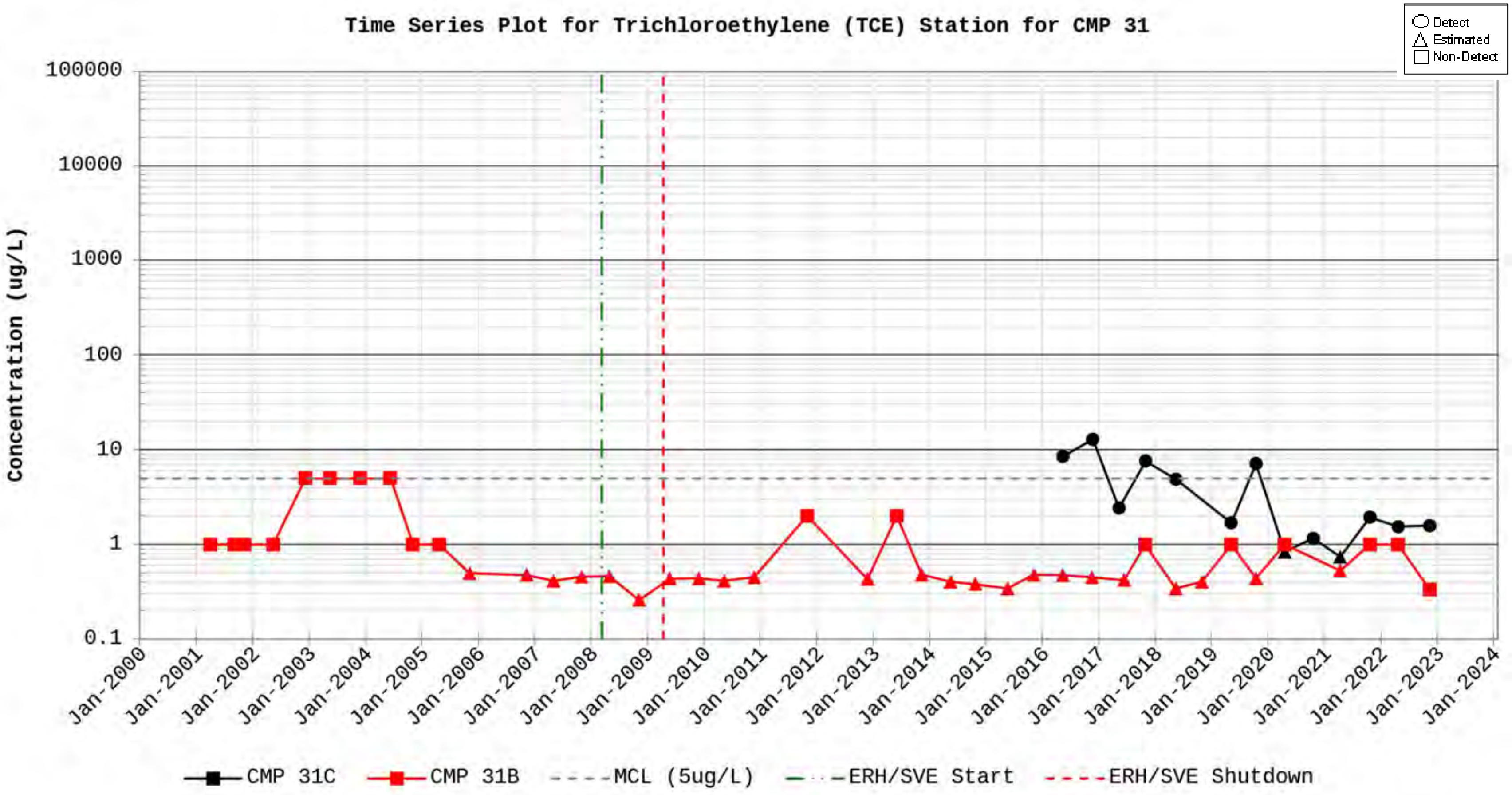
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 30D
CMP 30B
CMP 30C
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP 31
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
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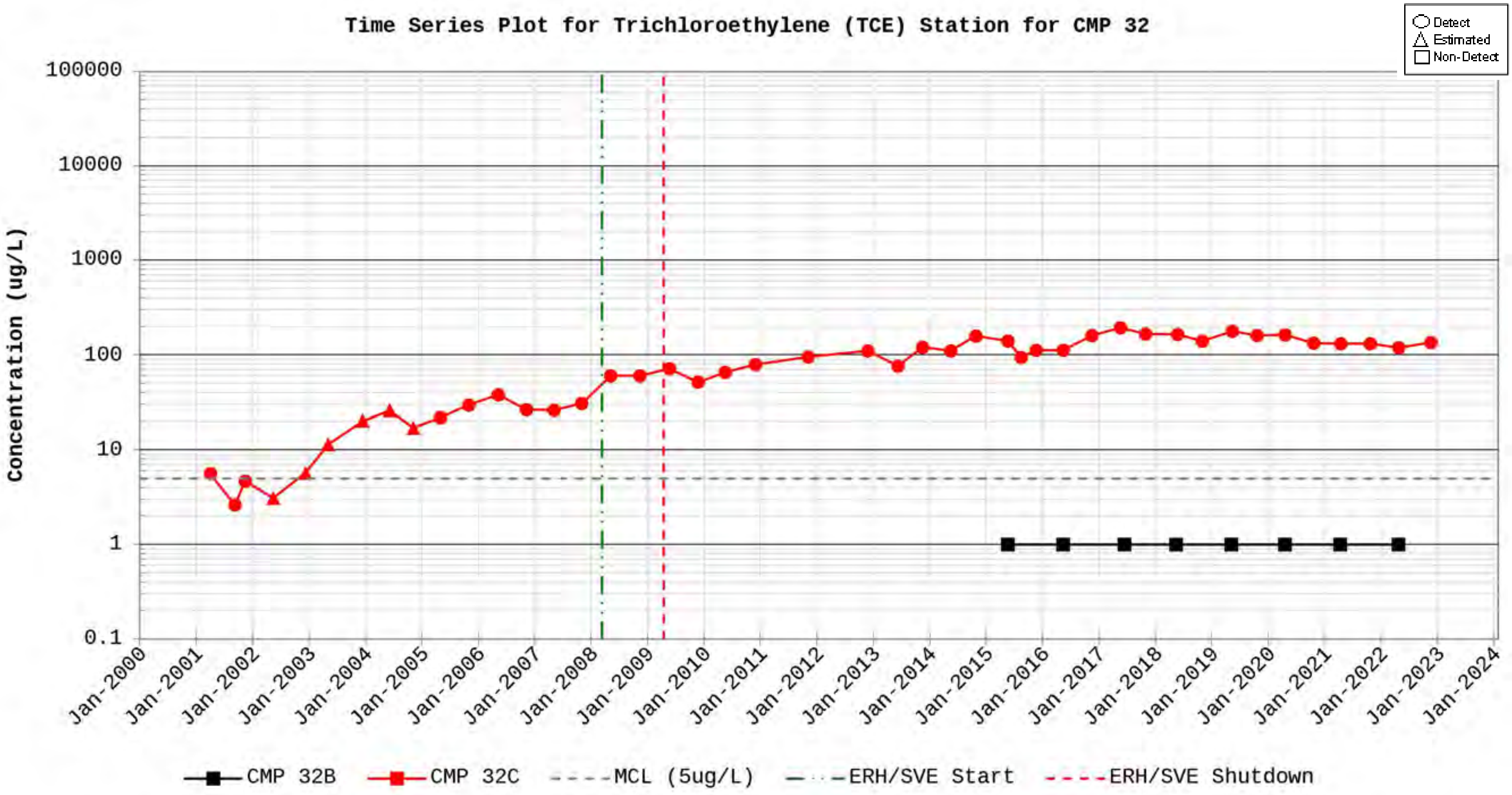
Jan-2024
CMP 31C
CMP 31B
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP 32
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
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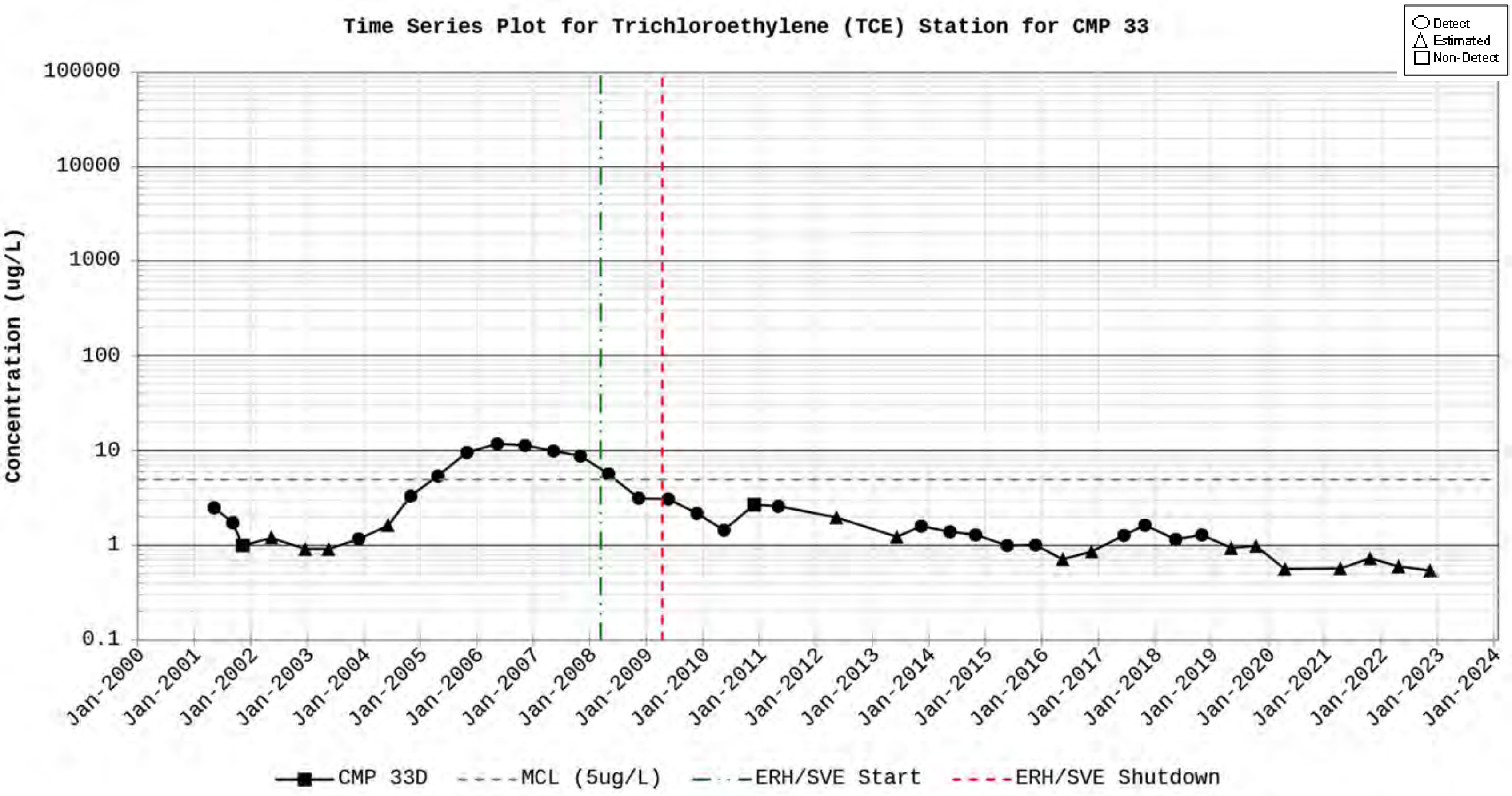
Jan-2024
CMP 32B
CMP 32C
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP 33
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
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Jan-2010
Jan-2011
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Jan-2019
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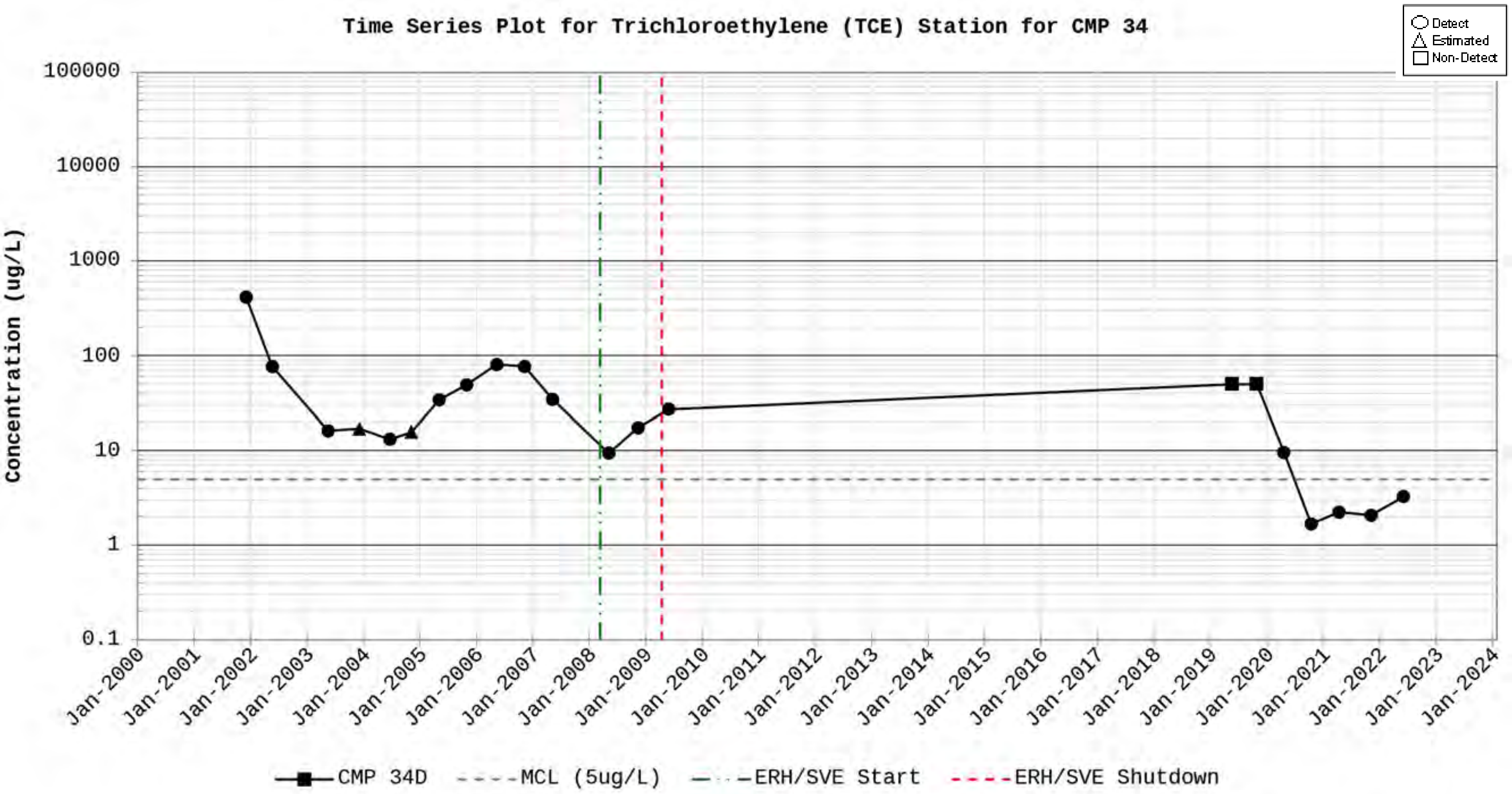
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 33D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP 34
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
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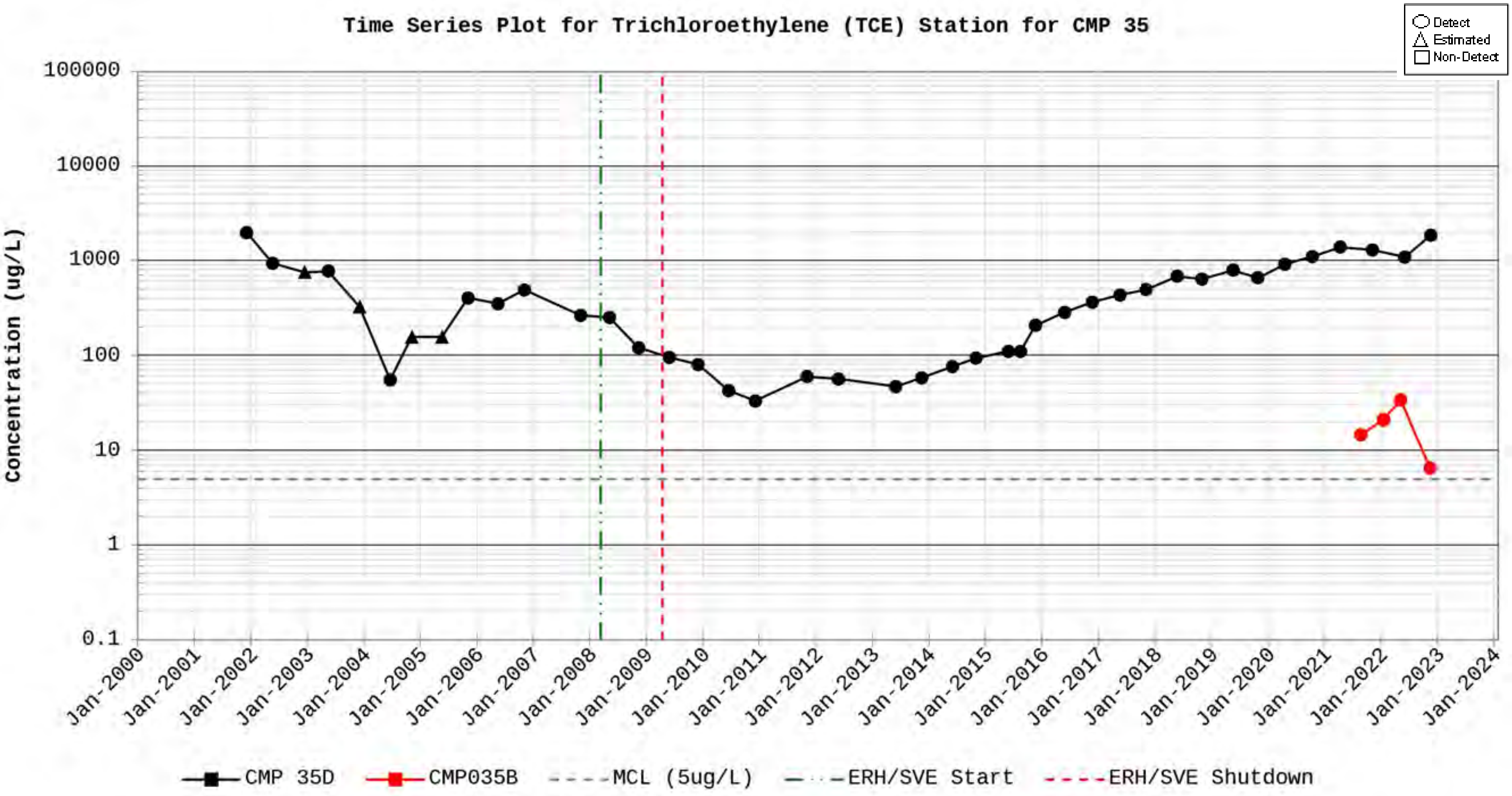
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 34D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP 35
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
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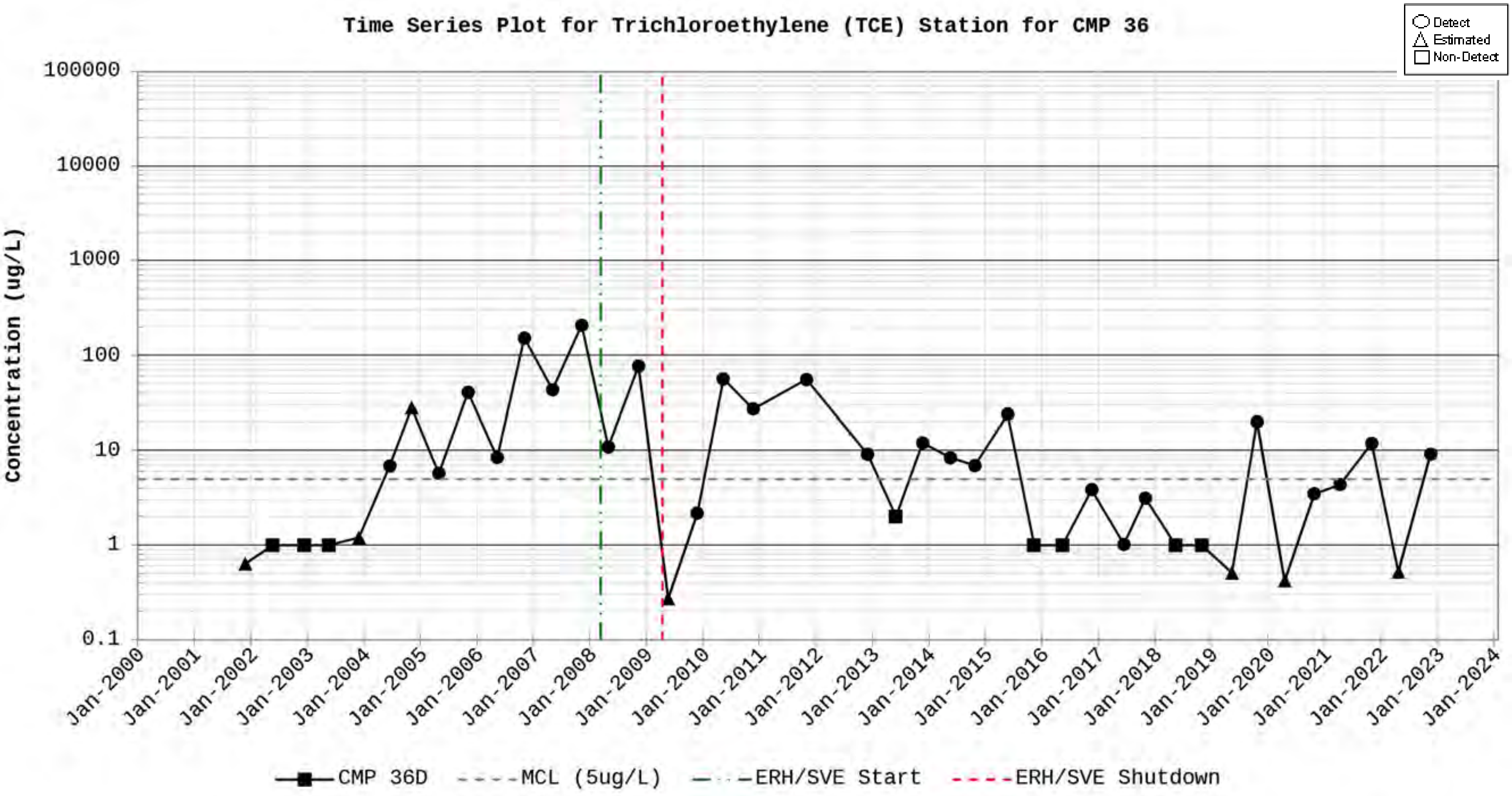
Jan-2022
Jan-2023
Jan-2024
CMP 35D
CMP035B
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP 36
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
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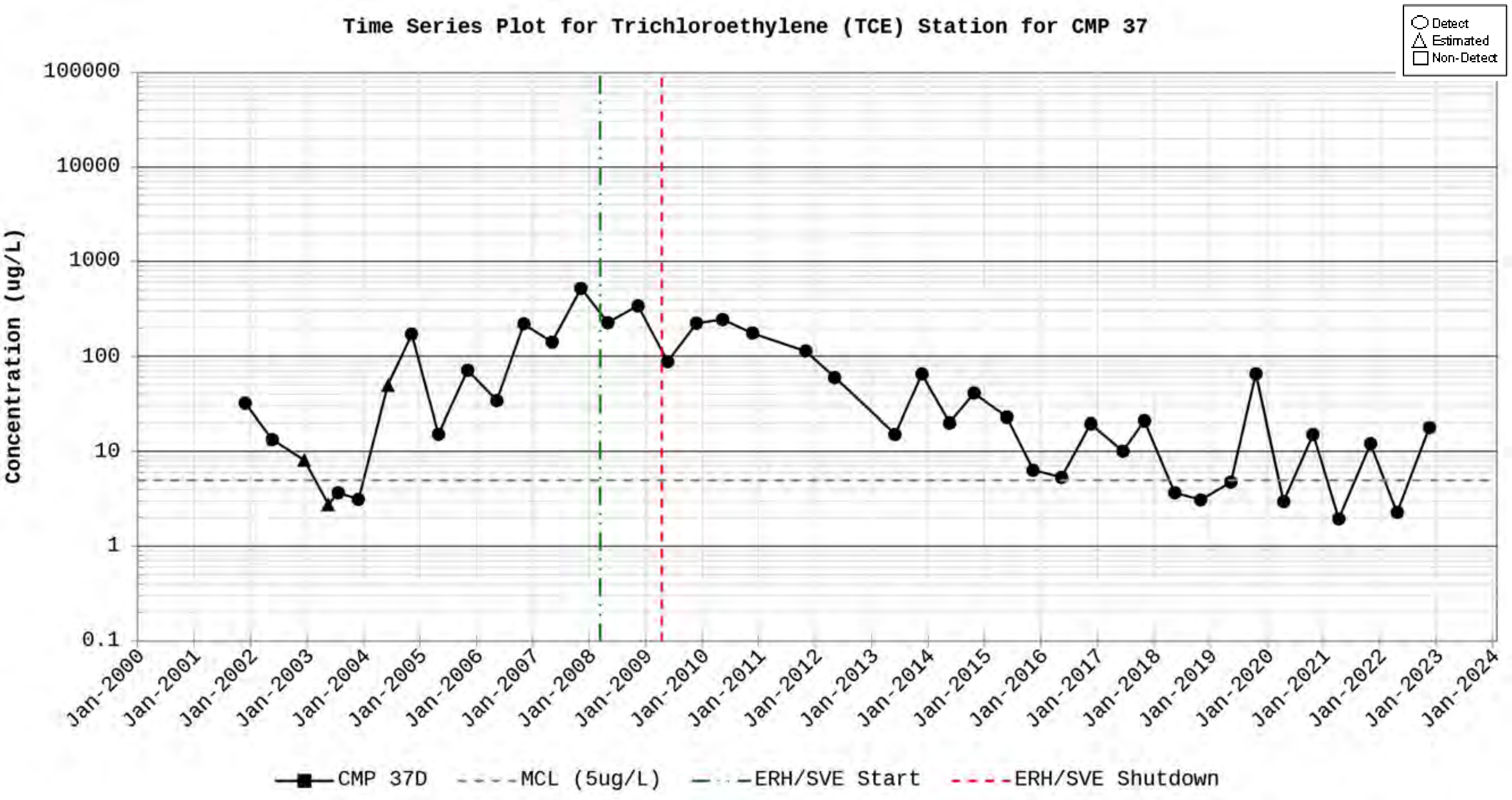
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 36D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP 37
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
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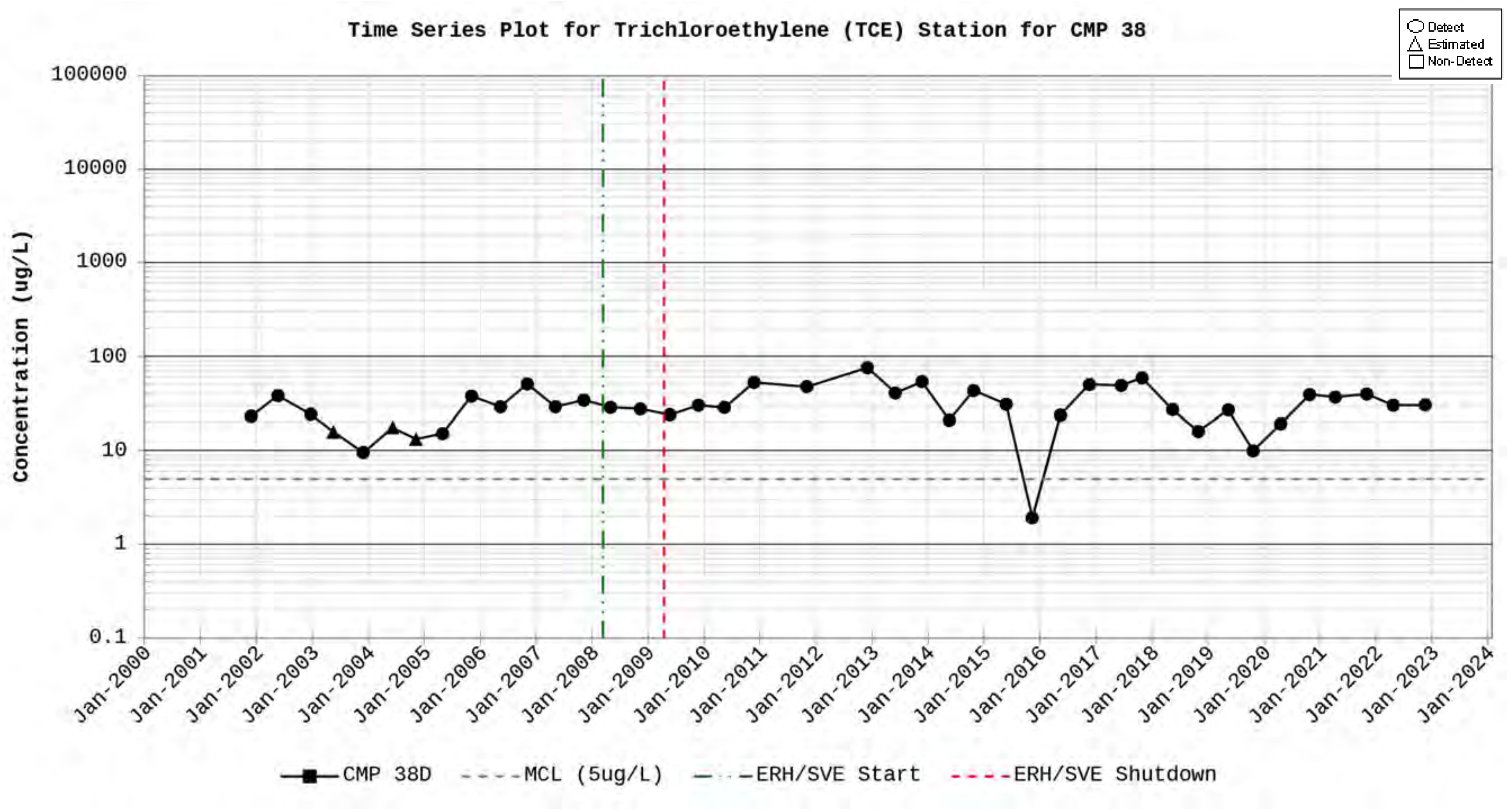
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 37D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP 38
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
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Jan-2020
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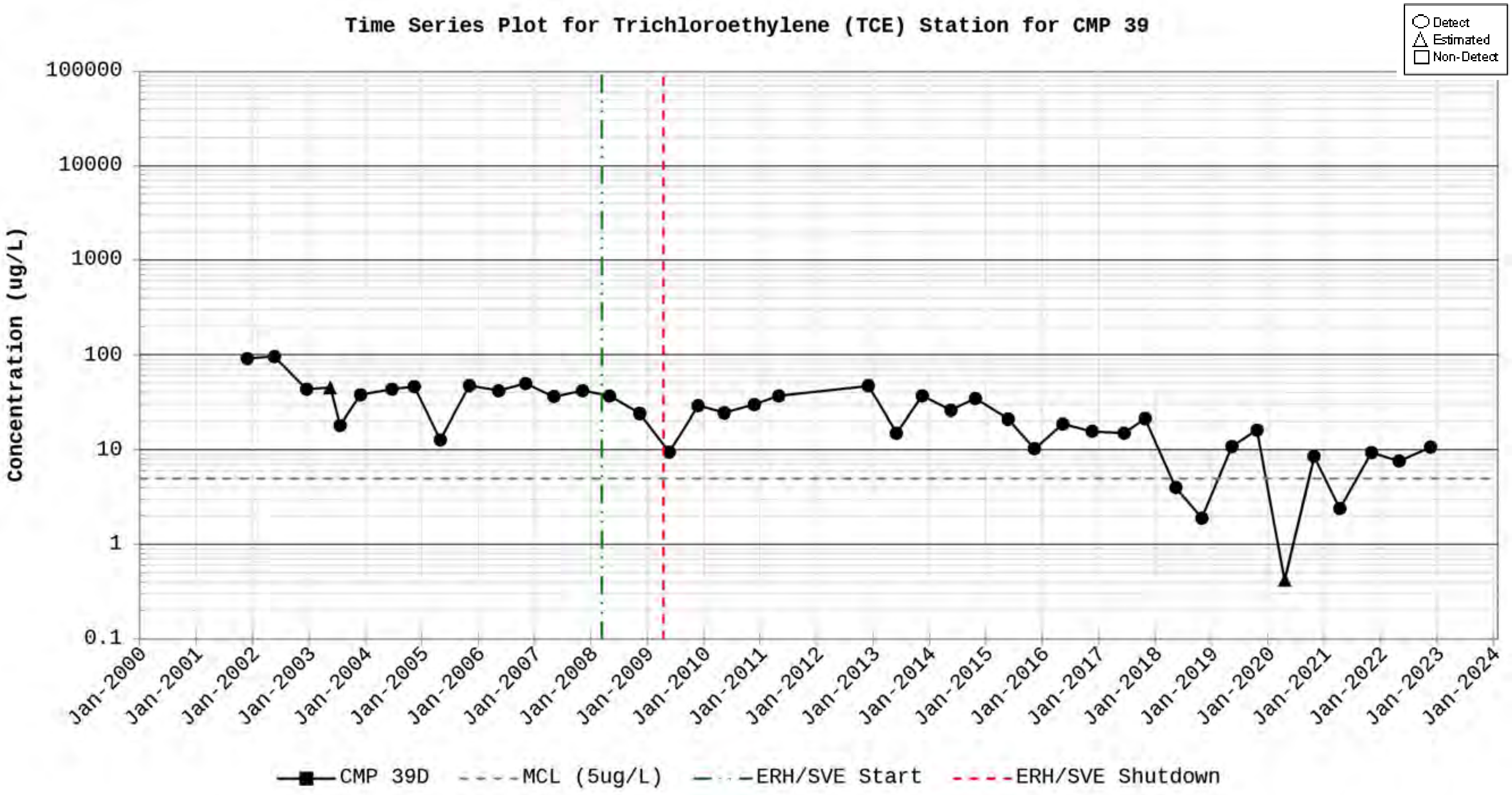
Jan-2022
Jan-2023
Jan-2024
CMP 38D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP 39
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
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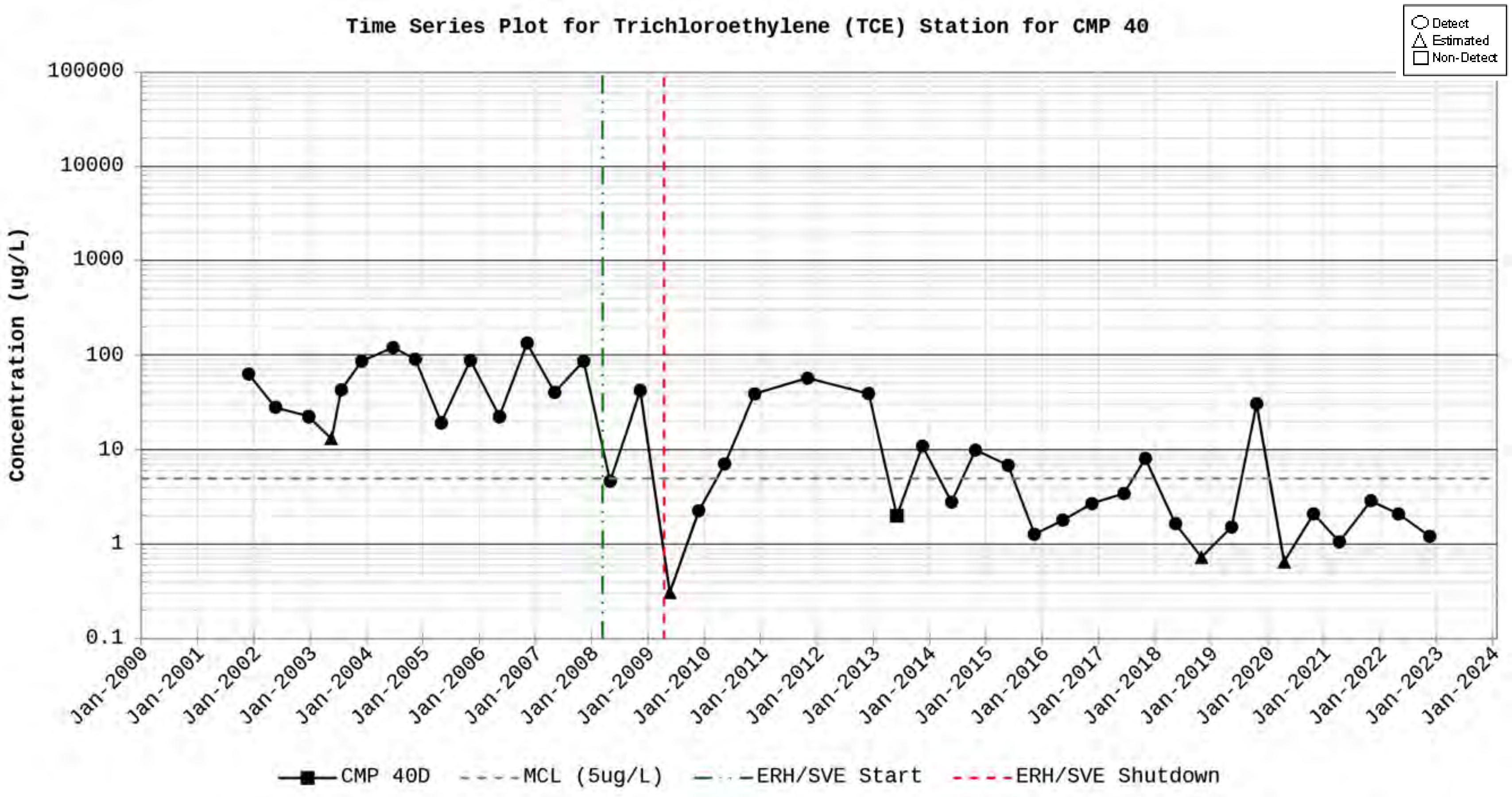
Jan-2022
Jan-2023
Jan-2024
CMP 39D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP 40
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
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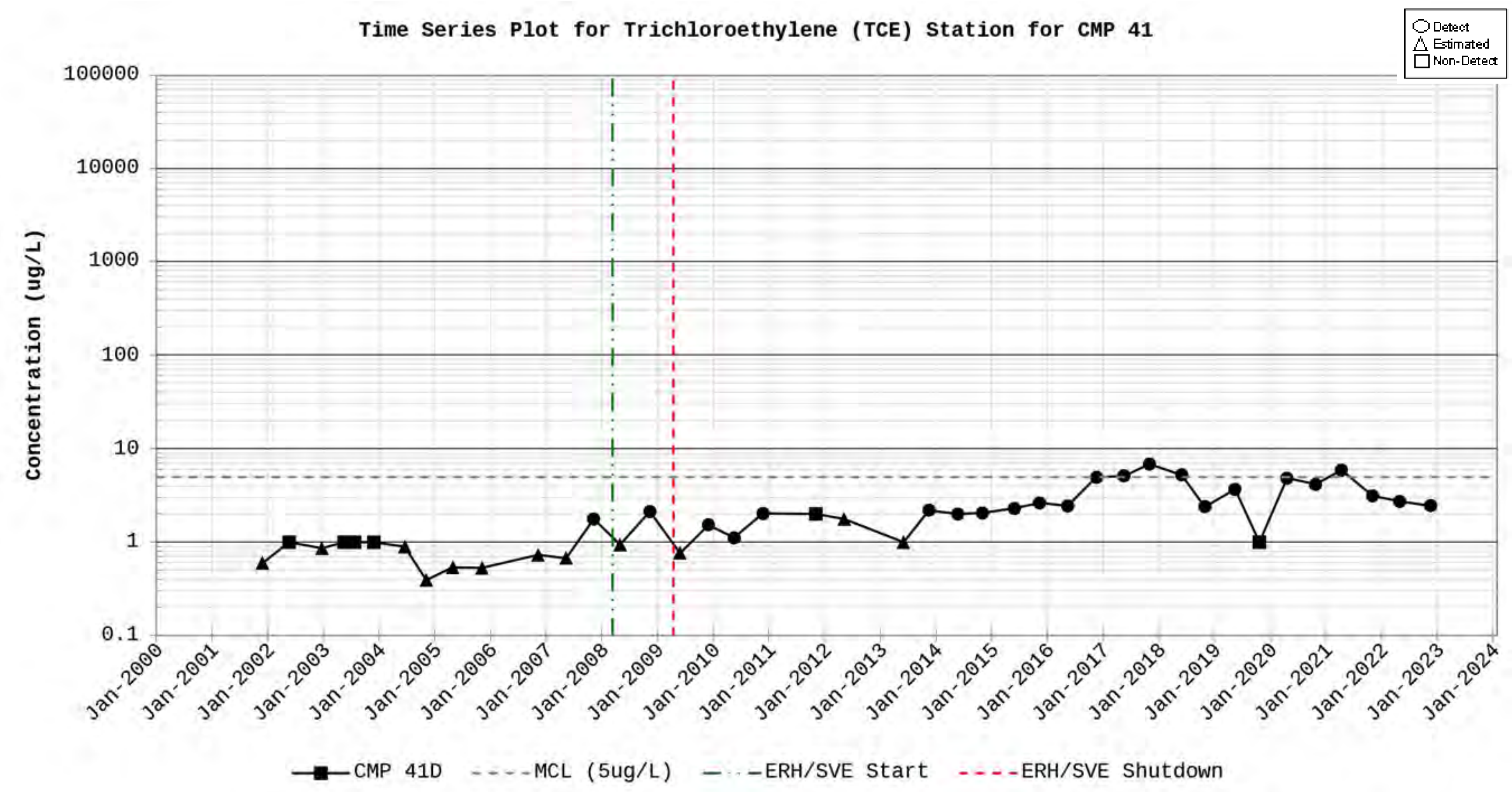
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 40D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP 41
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
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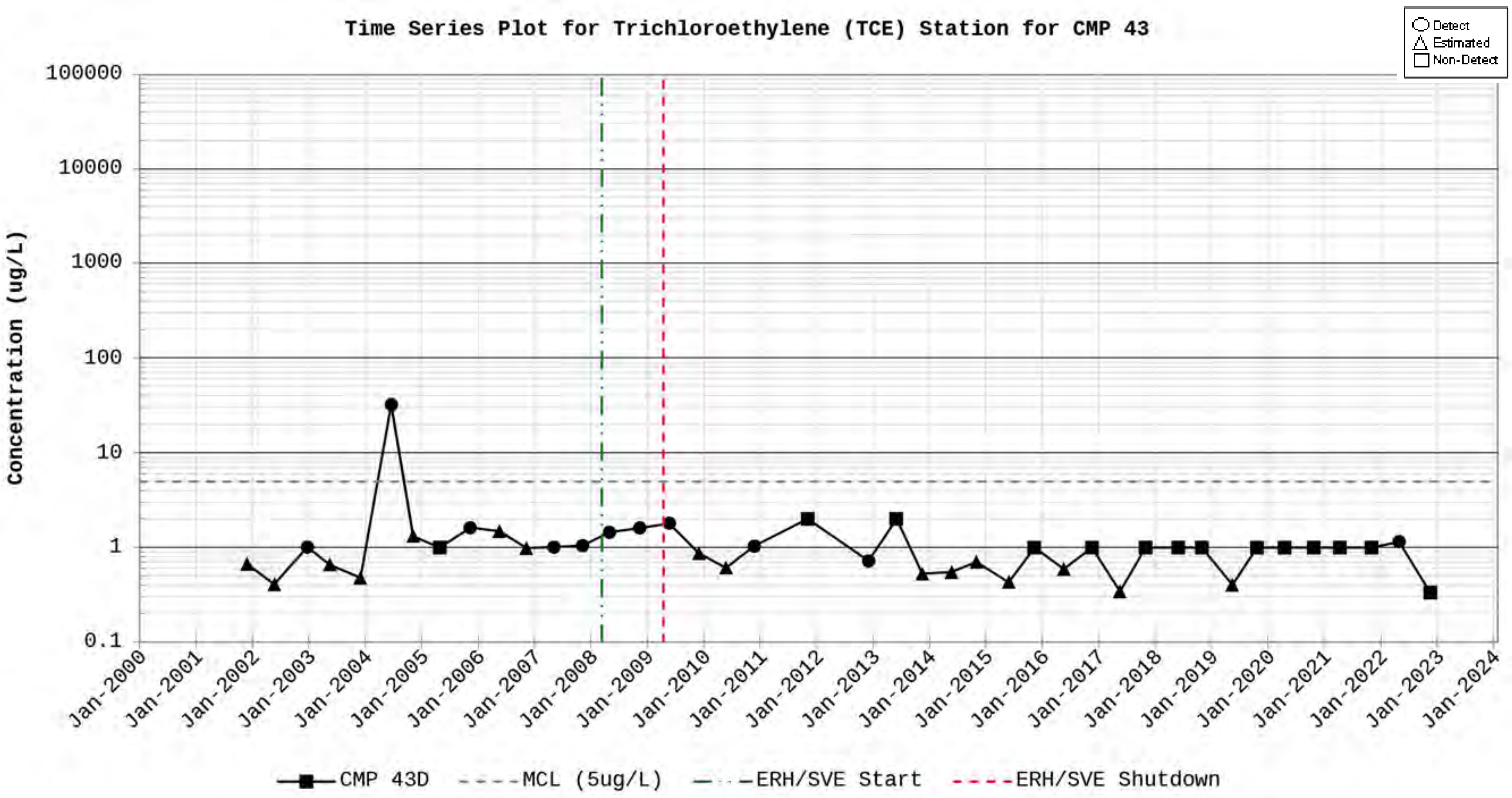
Jan-2022
Jan-2023
Jan-2024
CMP 41D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP 43
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
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Jan-2004
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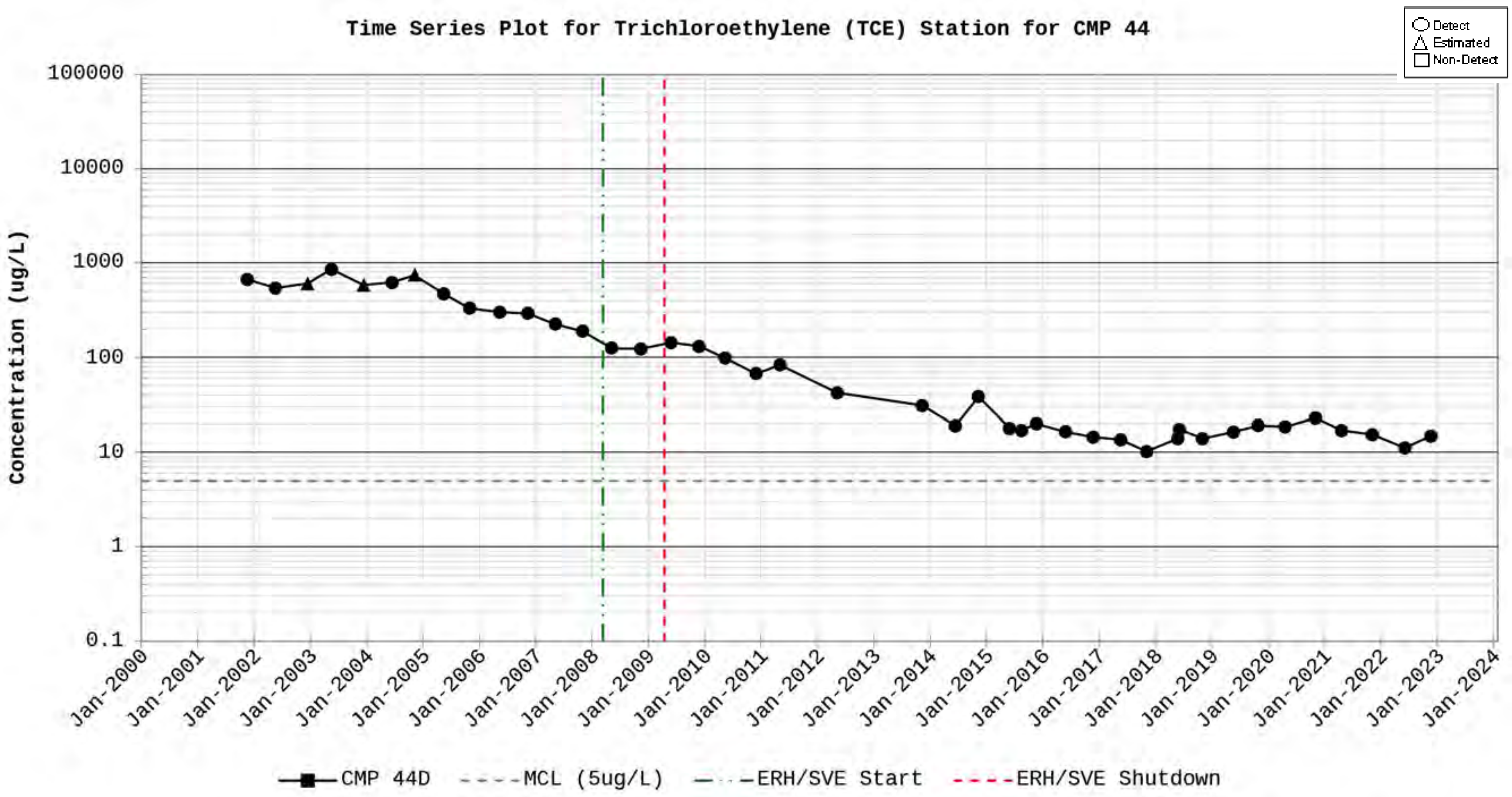
Jan-2022
Jan-2023
Jan-2024
CMP 43D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP 44
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
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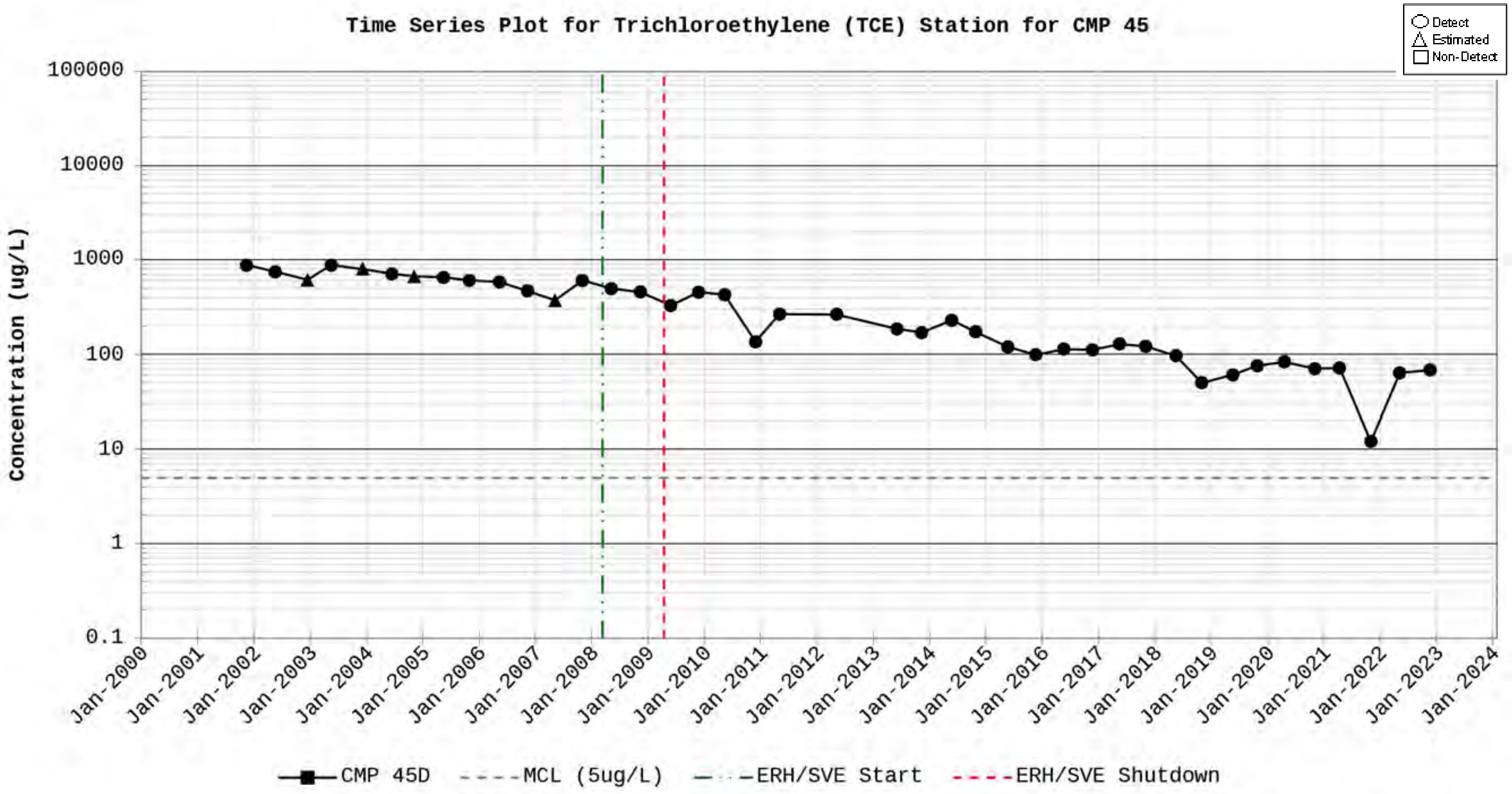
Jan-2022
Jan-2023
Jan-2024
CMP 44D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP 45
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
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Jan-2007
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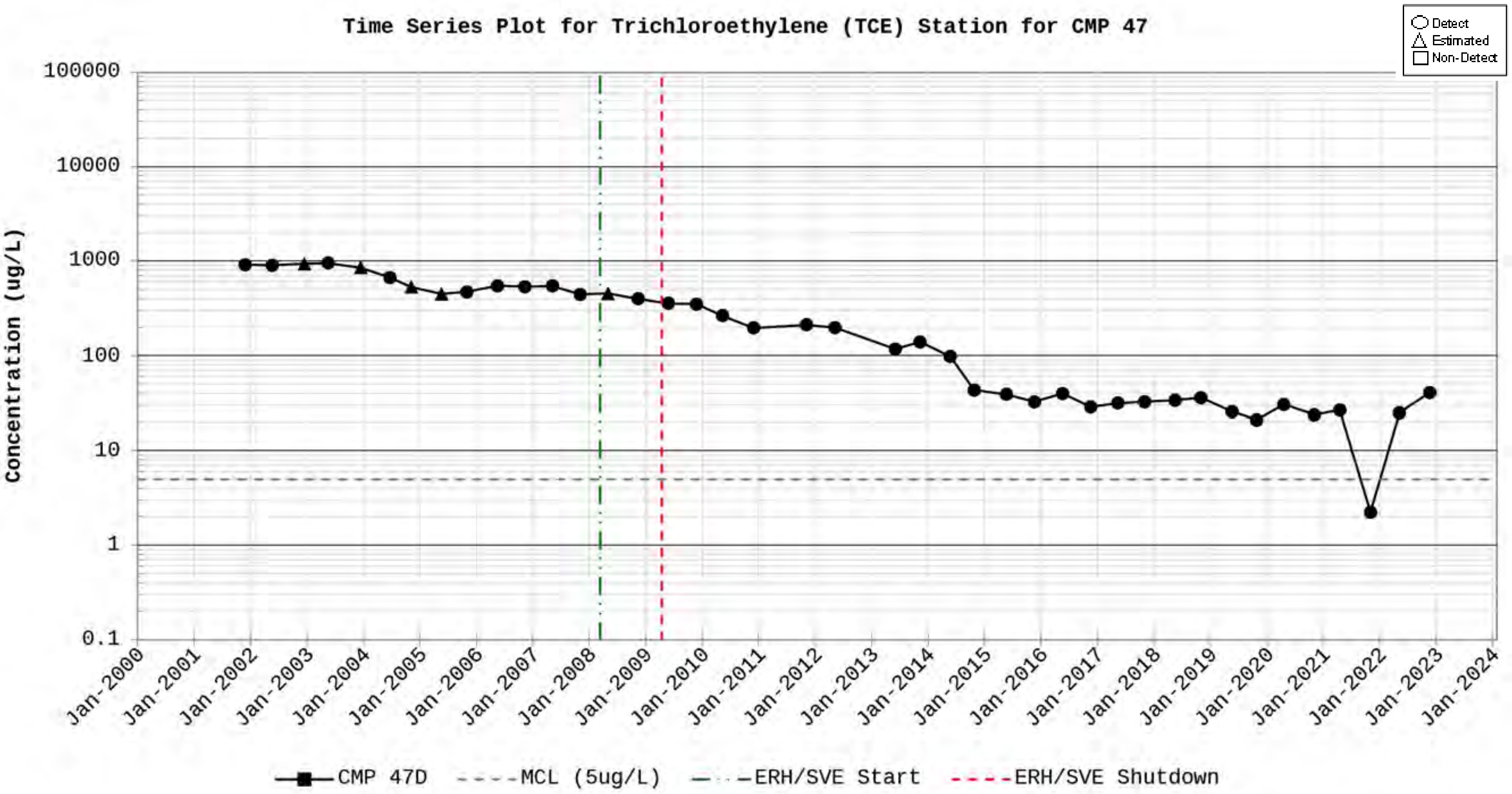
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 45D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP 47
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
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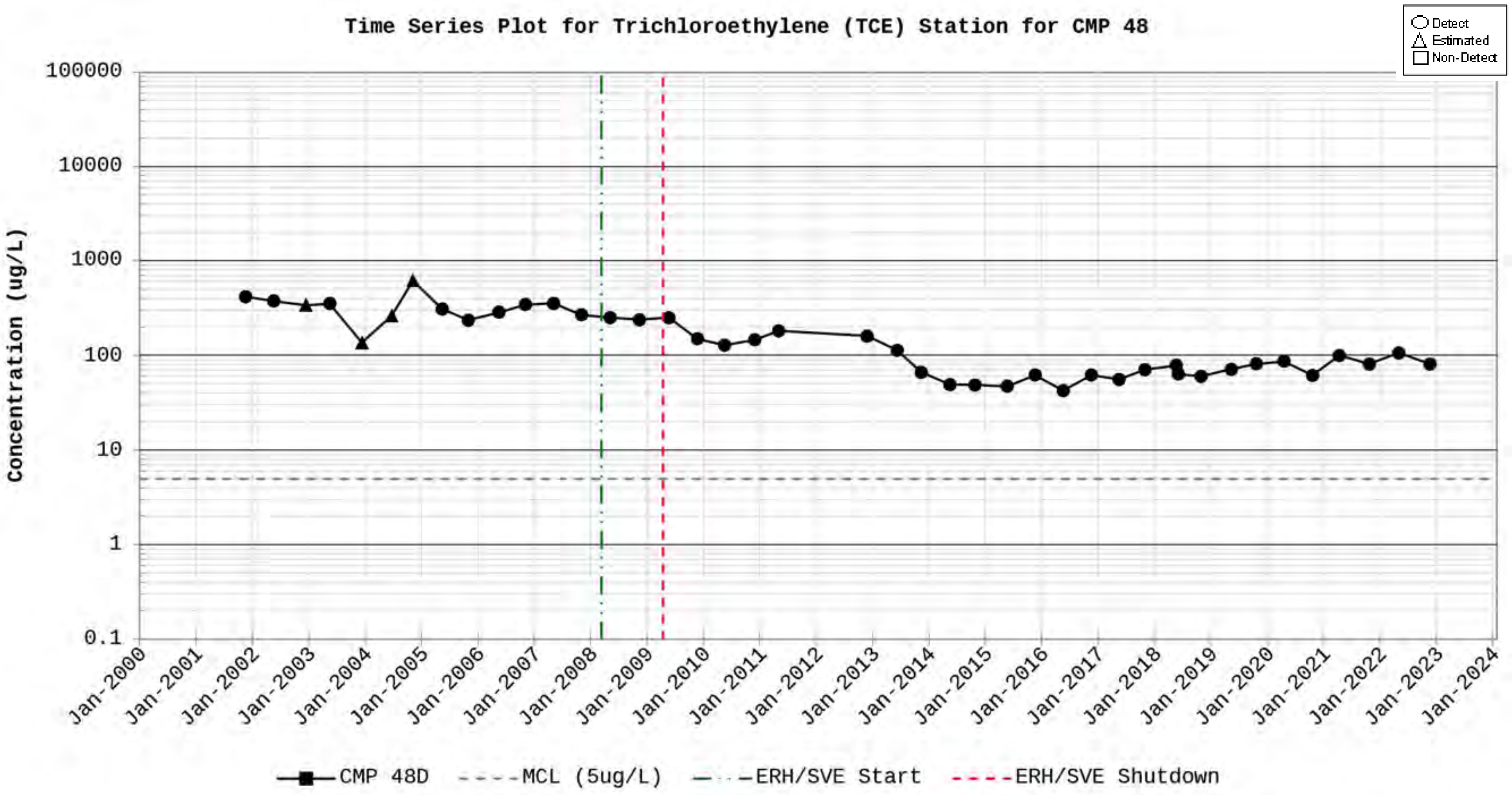
Jan-2022
Jan-2023
Jan-2024
CMP 47D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP 48
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
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Jan-2007
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Jan-2019
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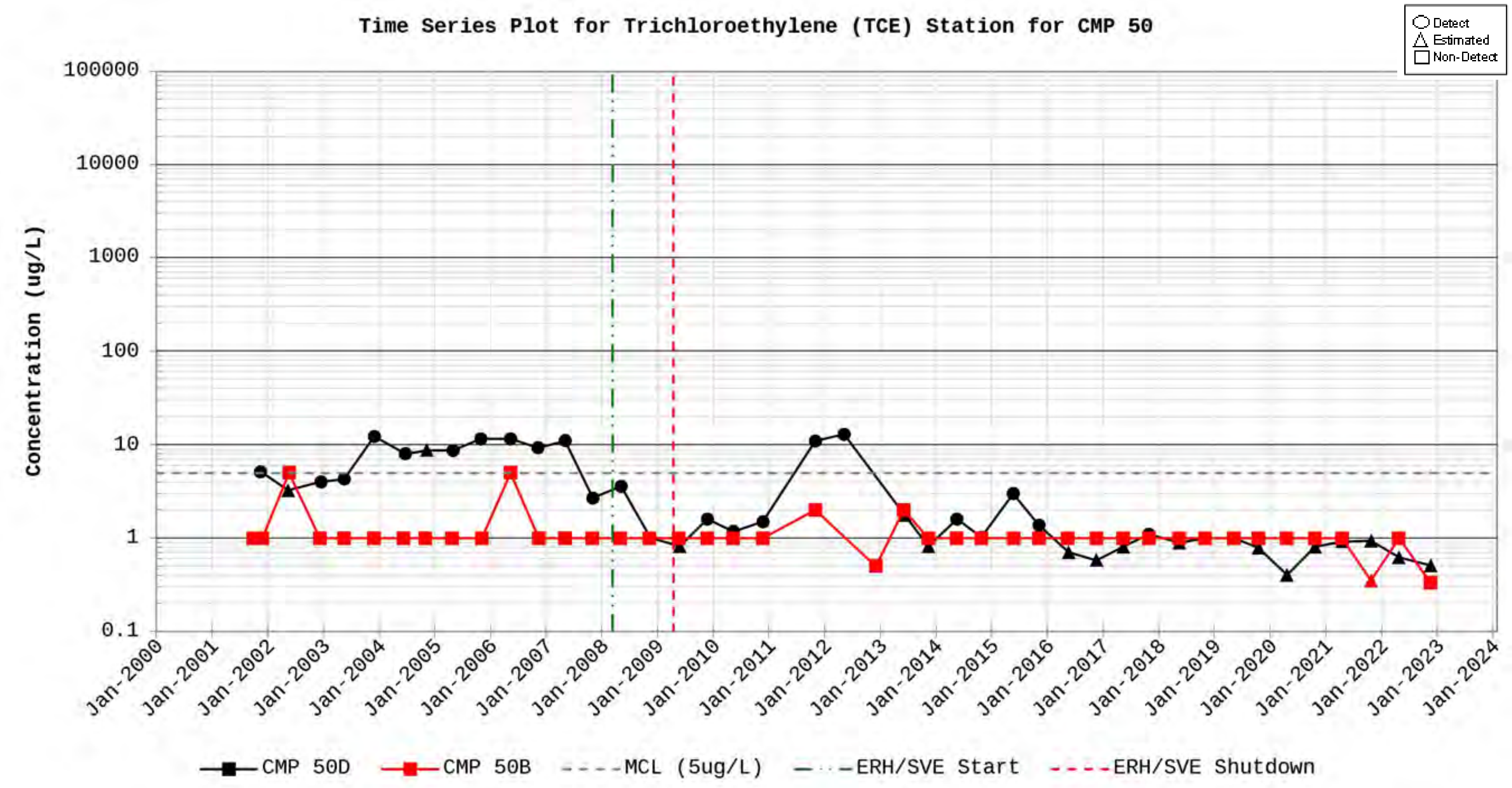
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 48D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP 50
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
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Jan-2019
Jan-2020
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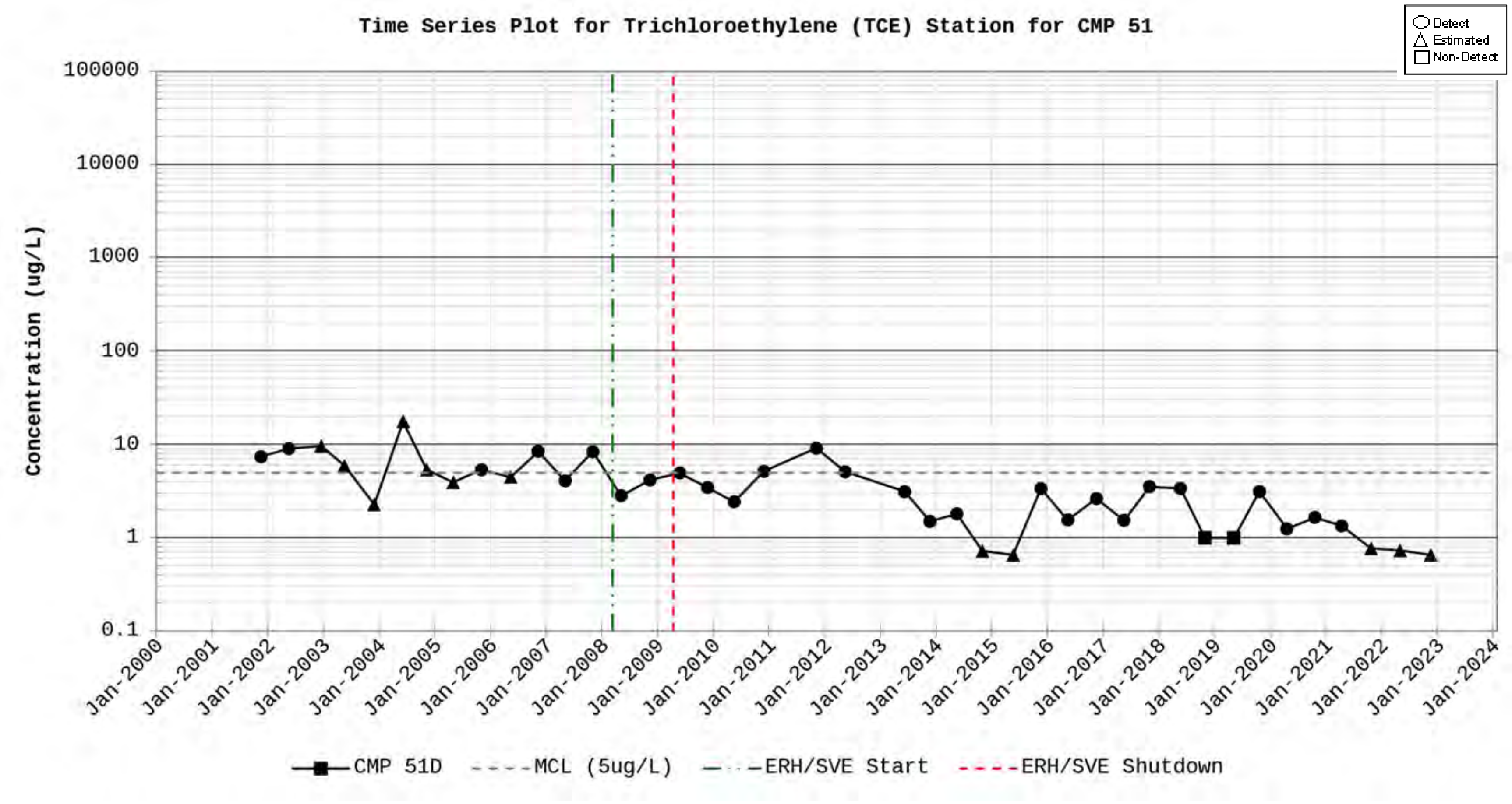
Jan-2023
Jan-2024
CMP 50D
CMP 50B
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP 51
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
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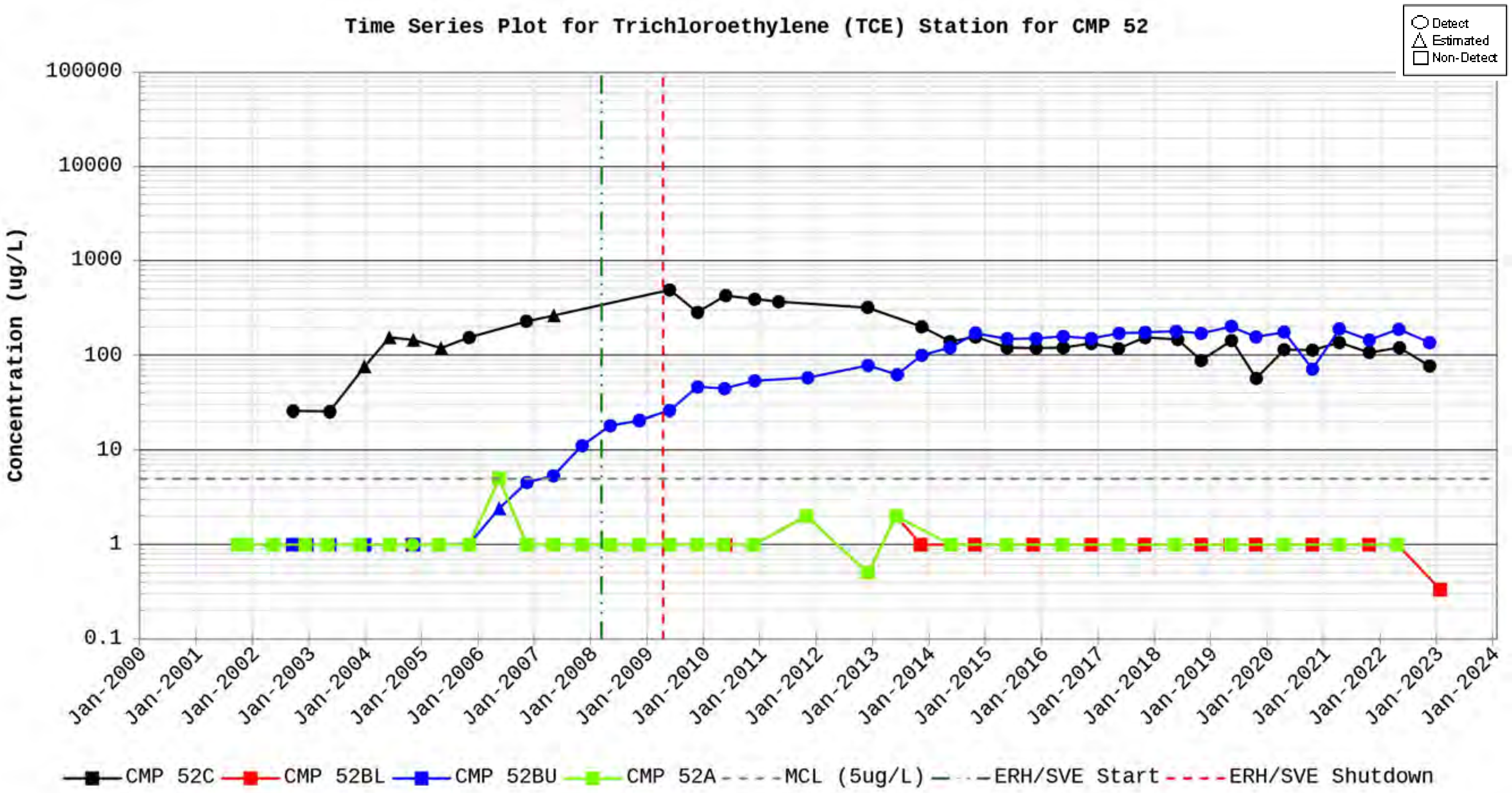
Jan-2023
Jan-2024
CMP 51D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP 52
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
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Jan-2022
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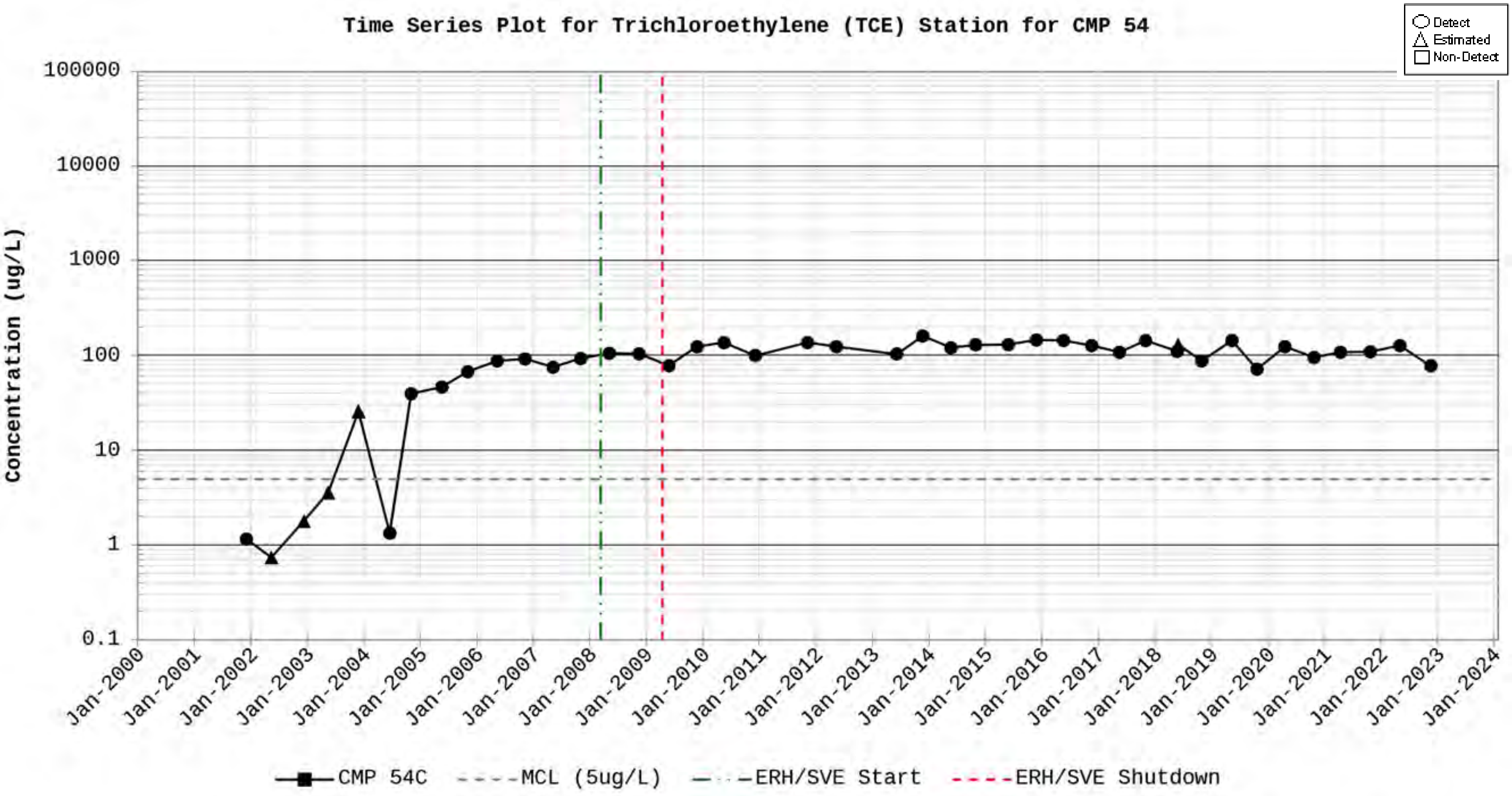
Jan-2024
CMP 52C
CMP 52BL
CMP 52BU
CMP 52A
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP 54
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
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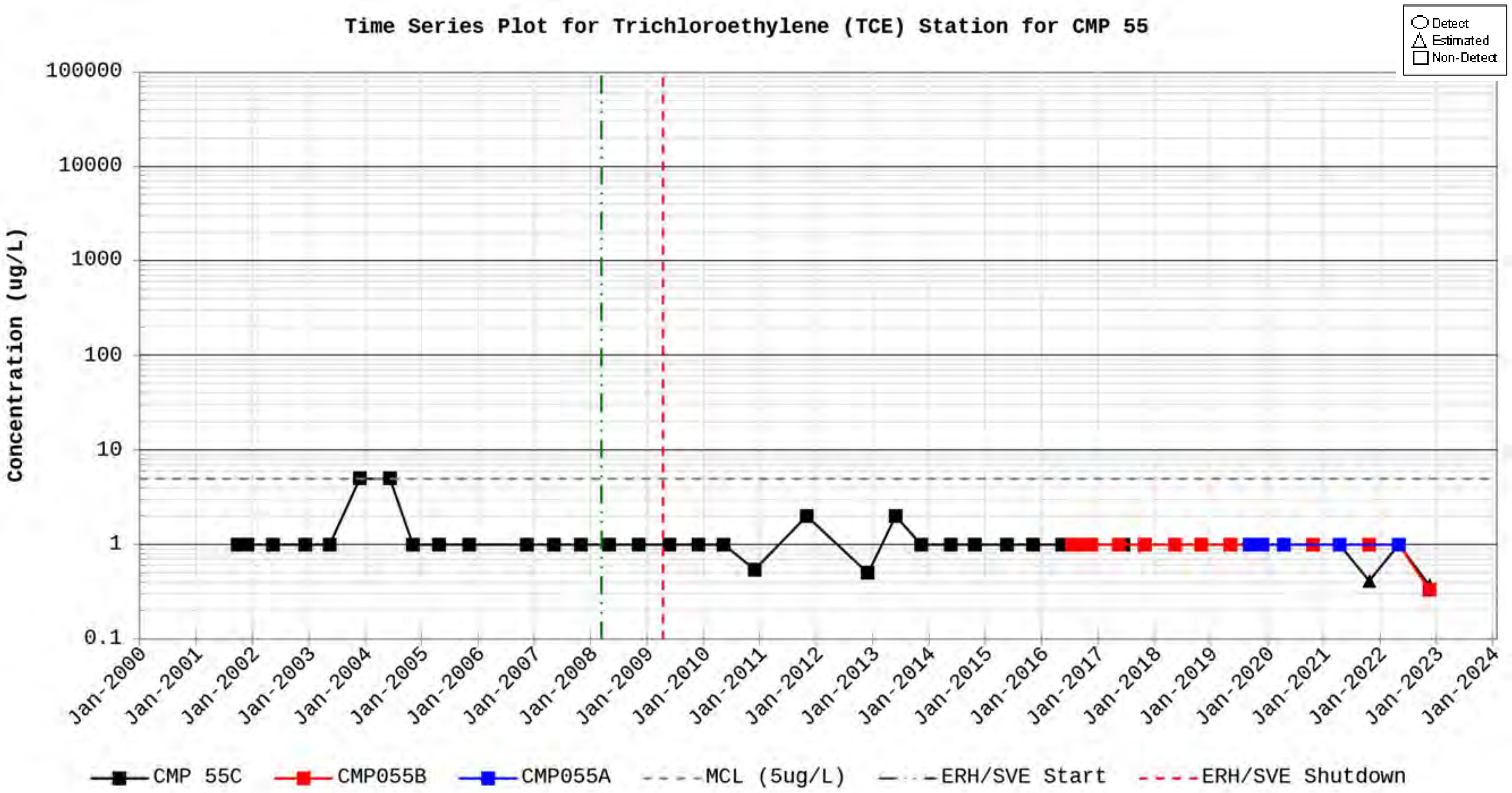
Jan-2023
Jan-2024
CMP 54C
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP 55
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
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Jan-2004
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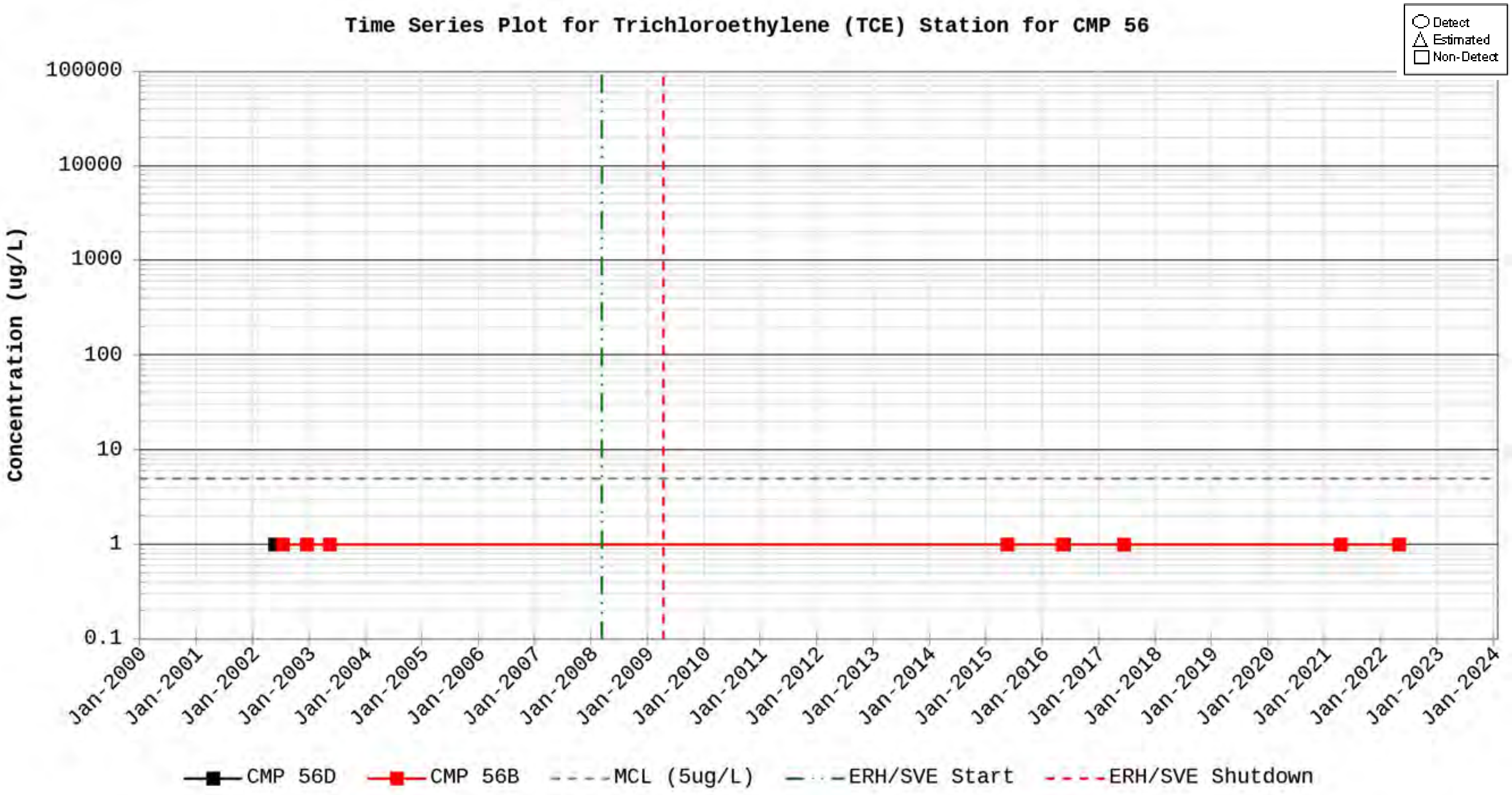
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 55C
CMP055B
CMP055A
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP 56
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
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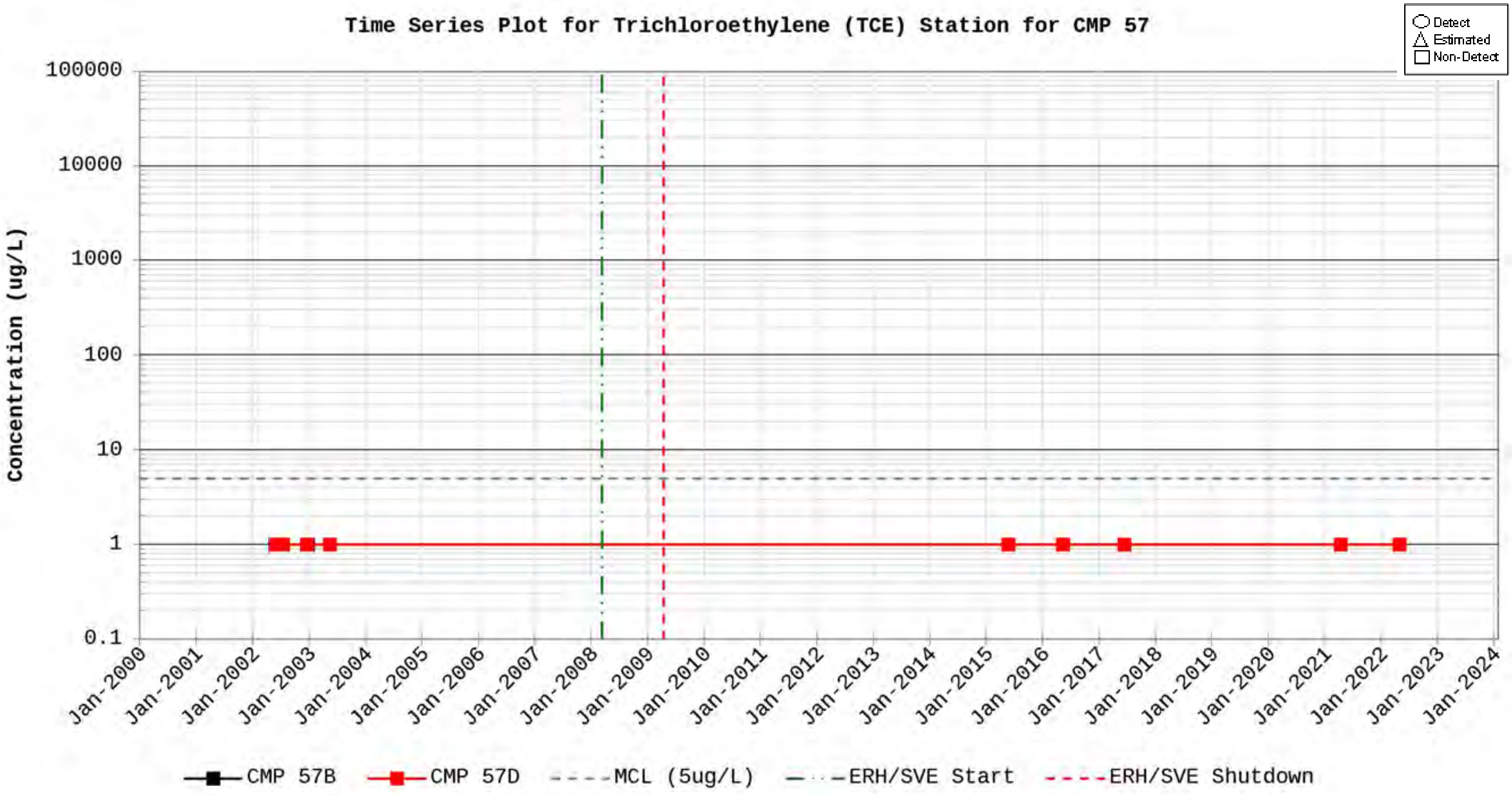
Jan-2024
CMP 56D
CMP 56B
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP 57
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
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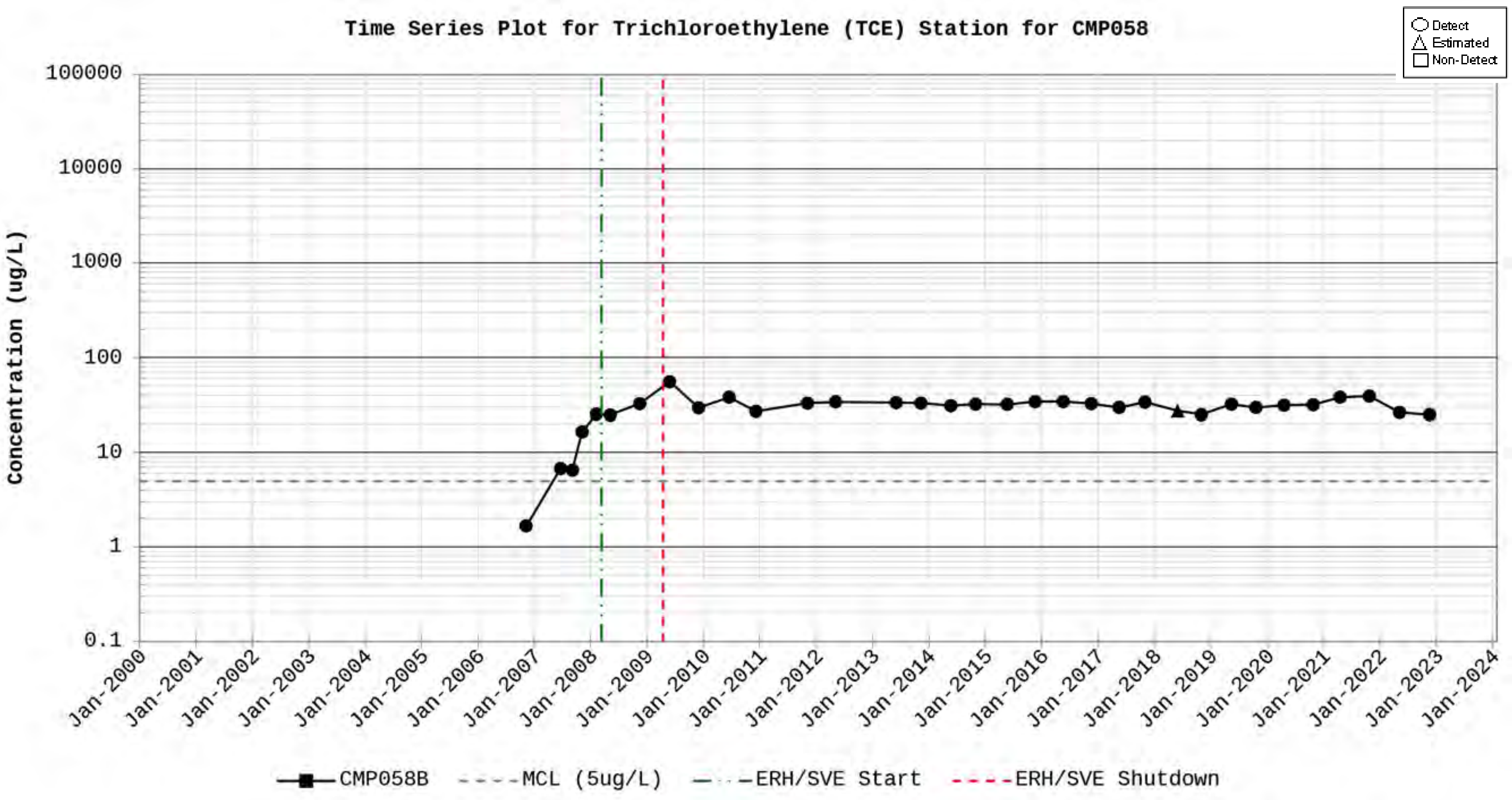
Jan-2024
CMP 57B
CMP 57D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP058
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
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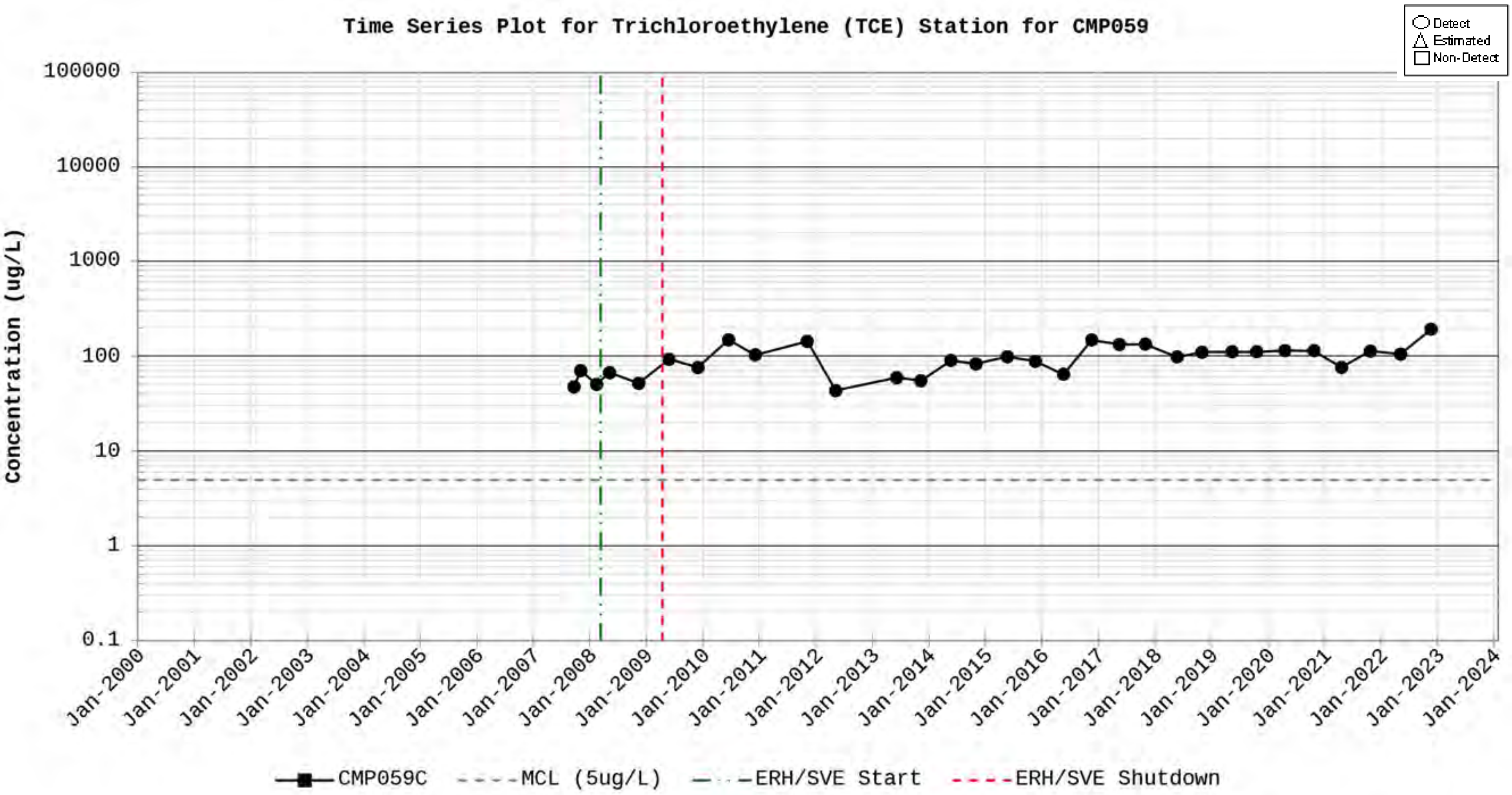
Jan-2023
Jan-2024
CMP058B
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP059
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
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Jan-2004
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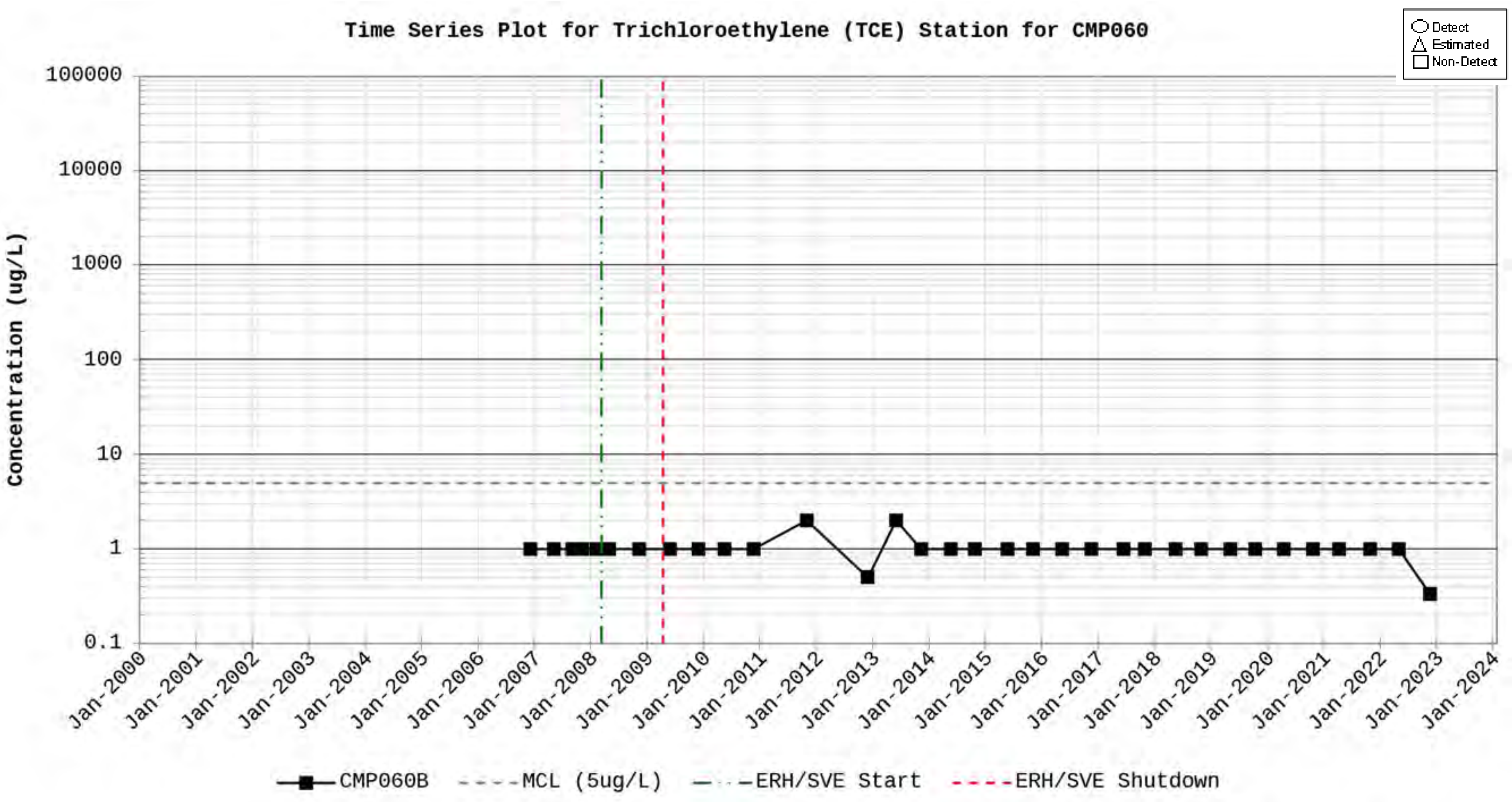
Jan-2023
Jan-2024
CMP059C
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP060
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
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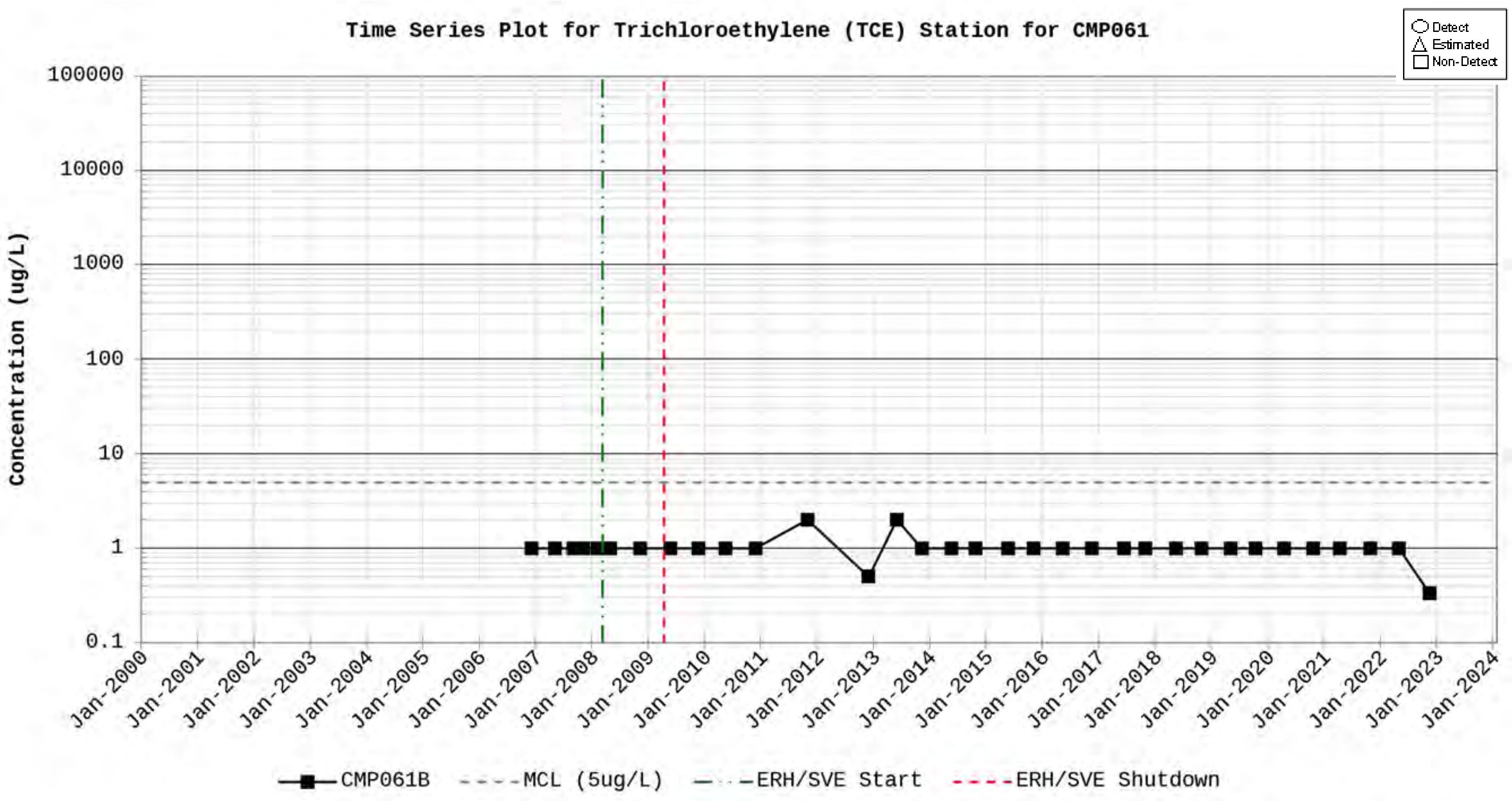
Jan-2023
Jan-2024
CMP060B
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP061
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
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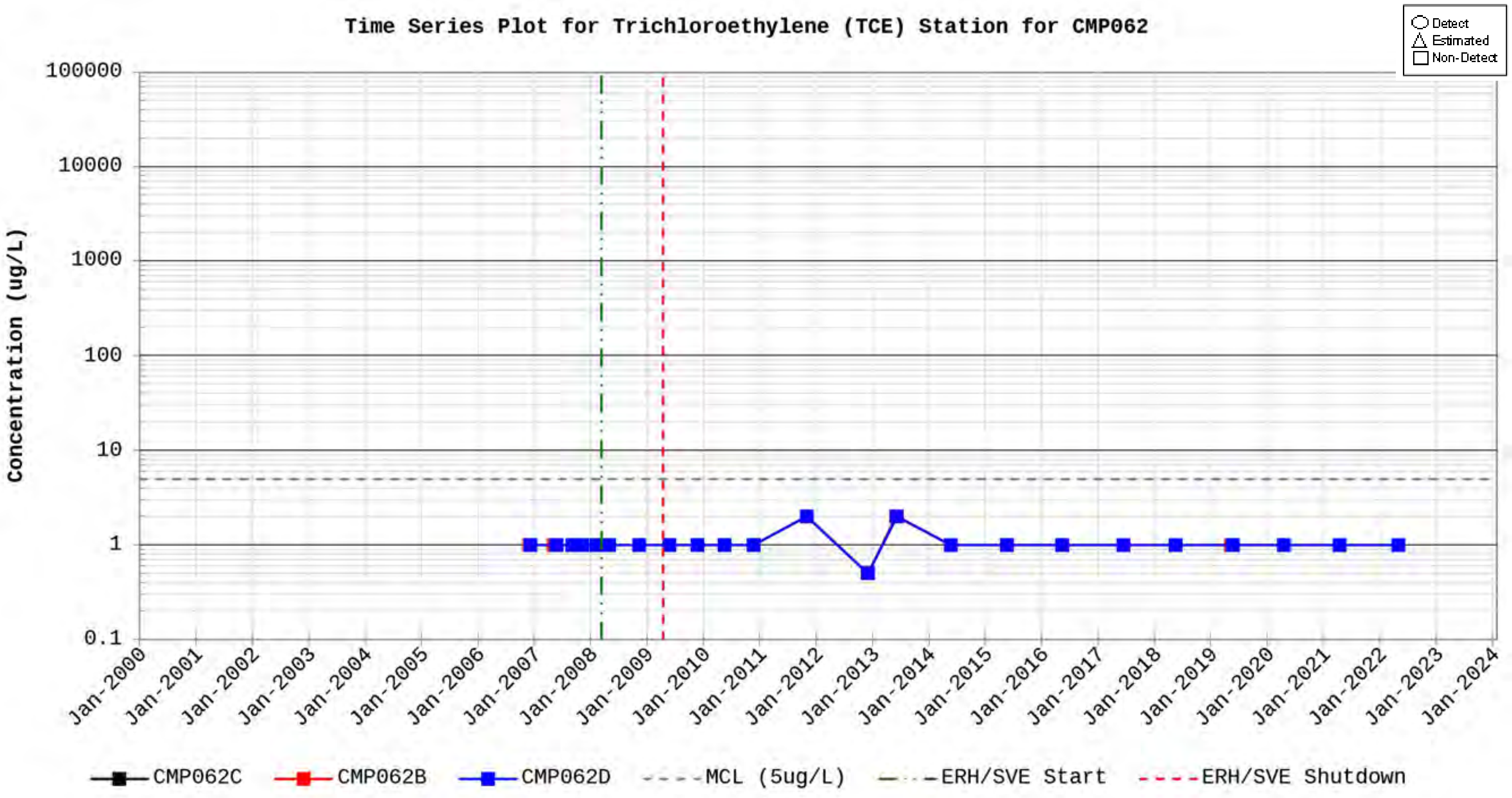
Jan-2023
Jan-2024
CMP061B
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP062
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
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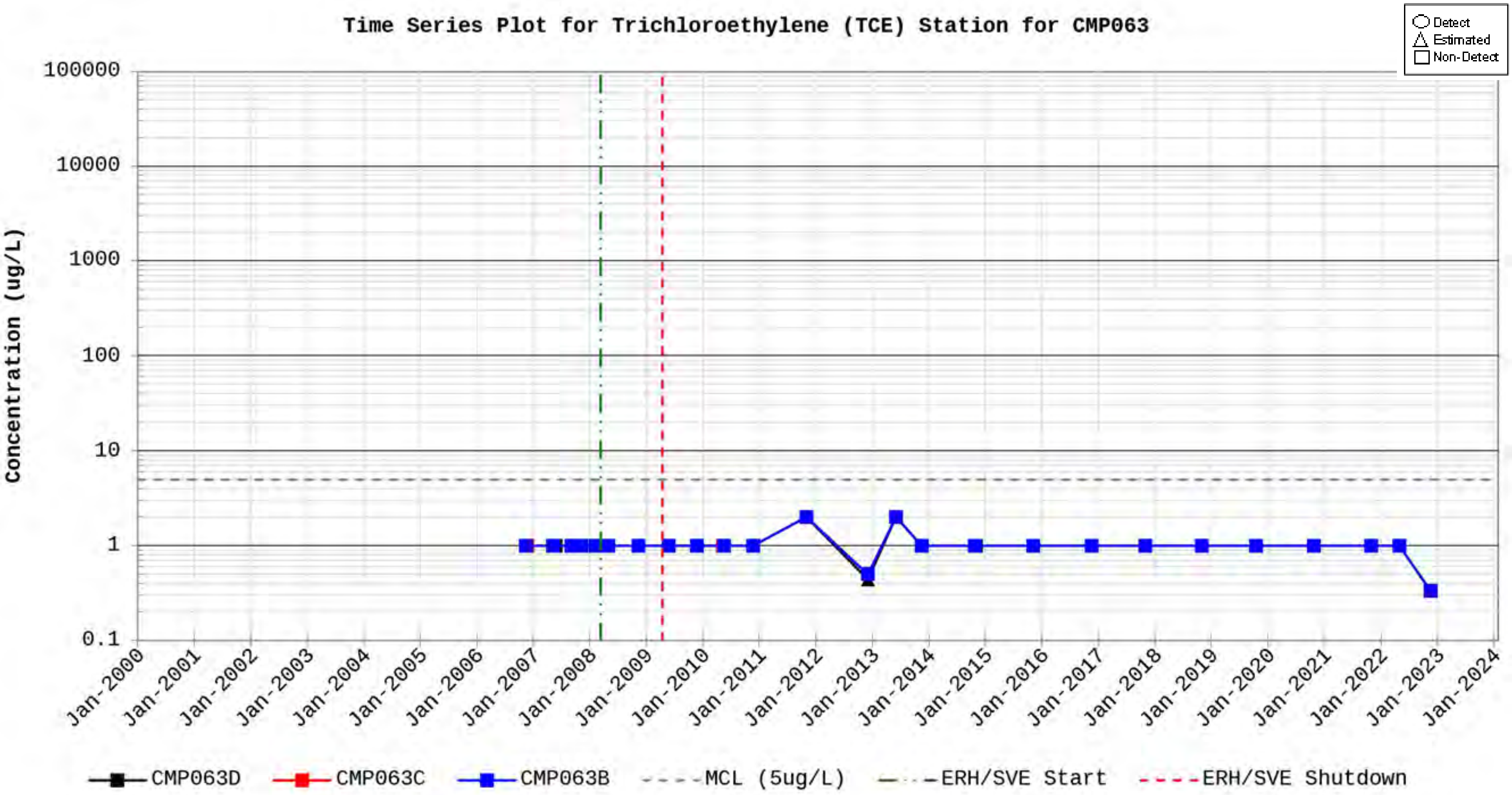
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP062C
CMP062B
CMP062D
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP063
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
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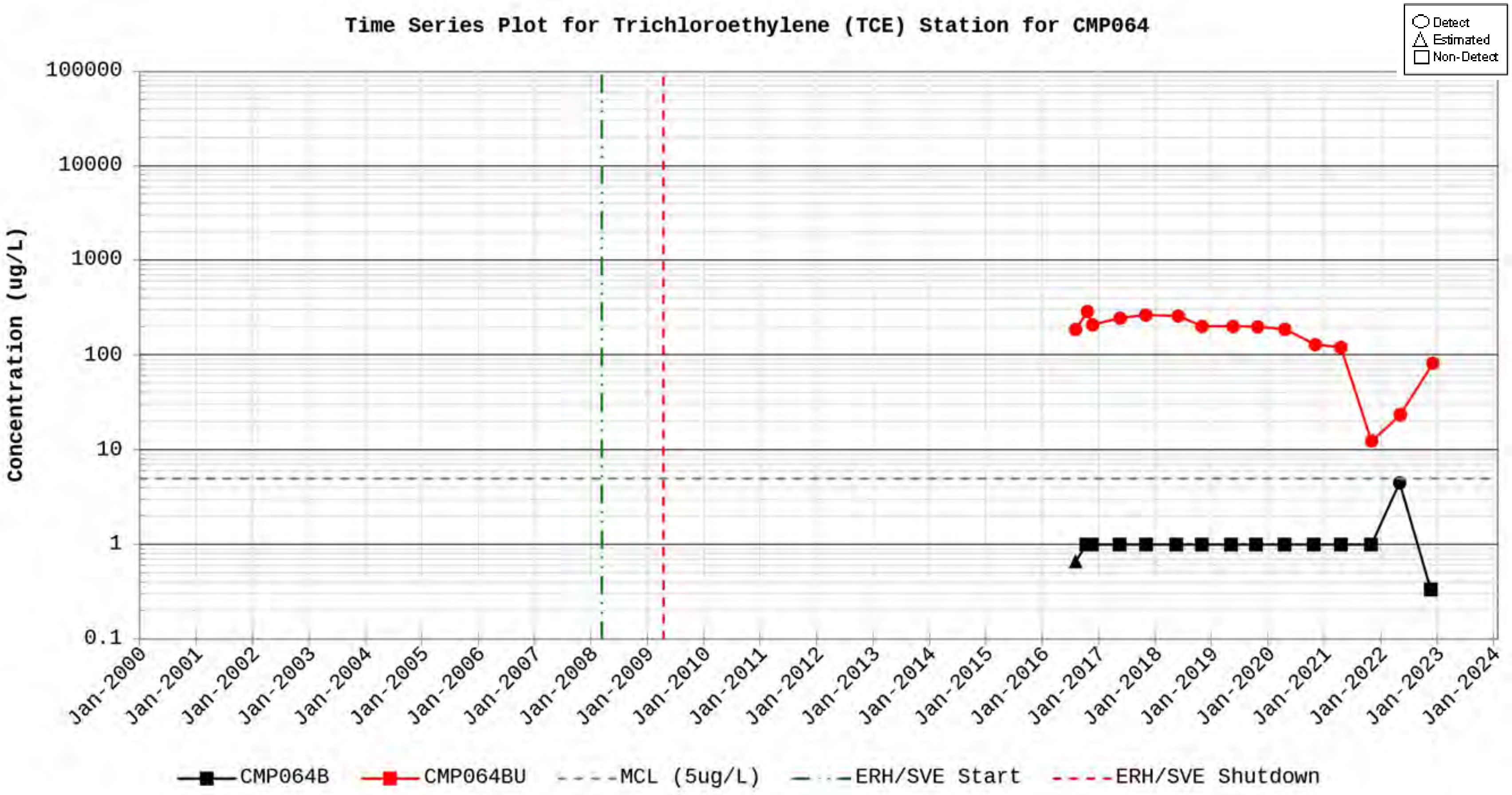
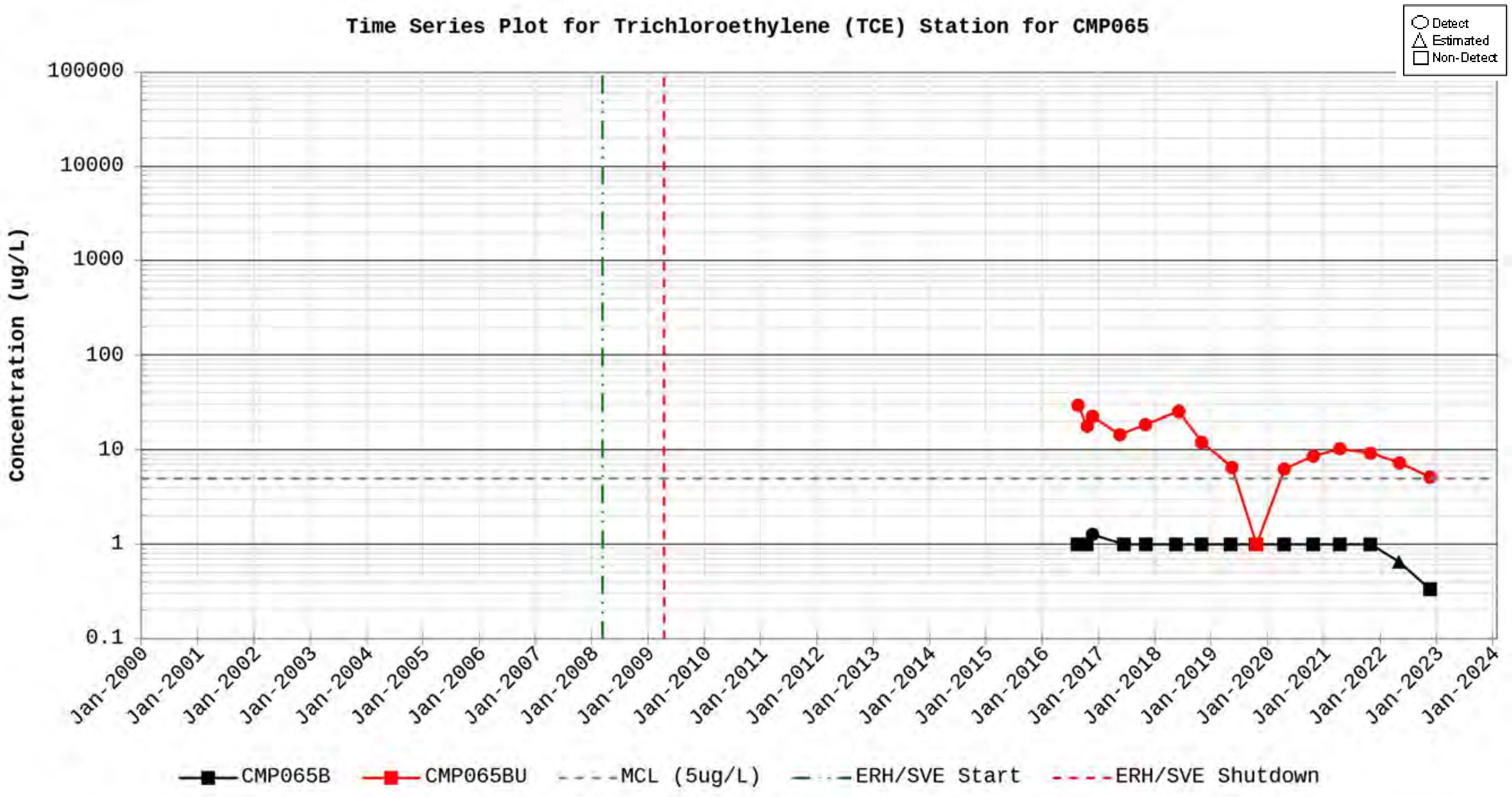
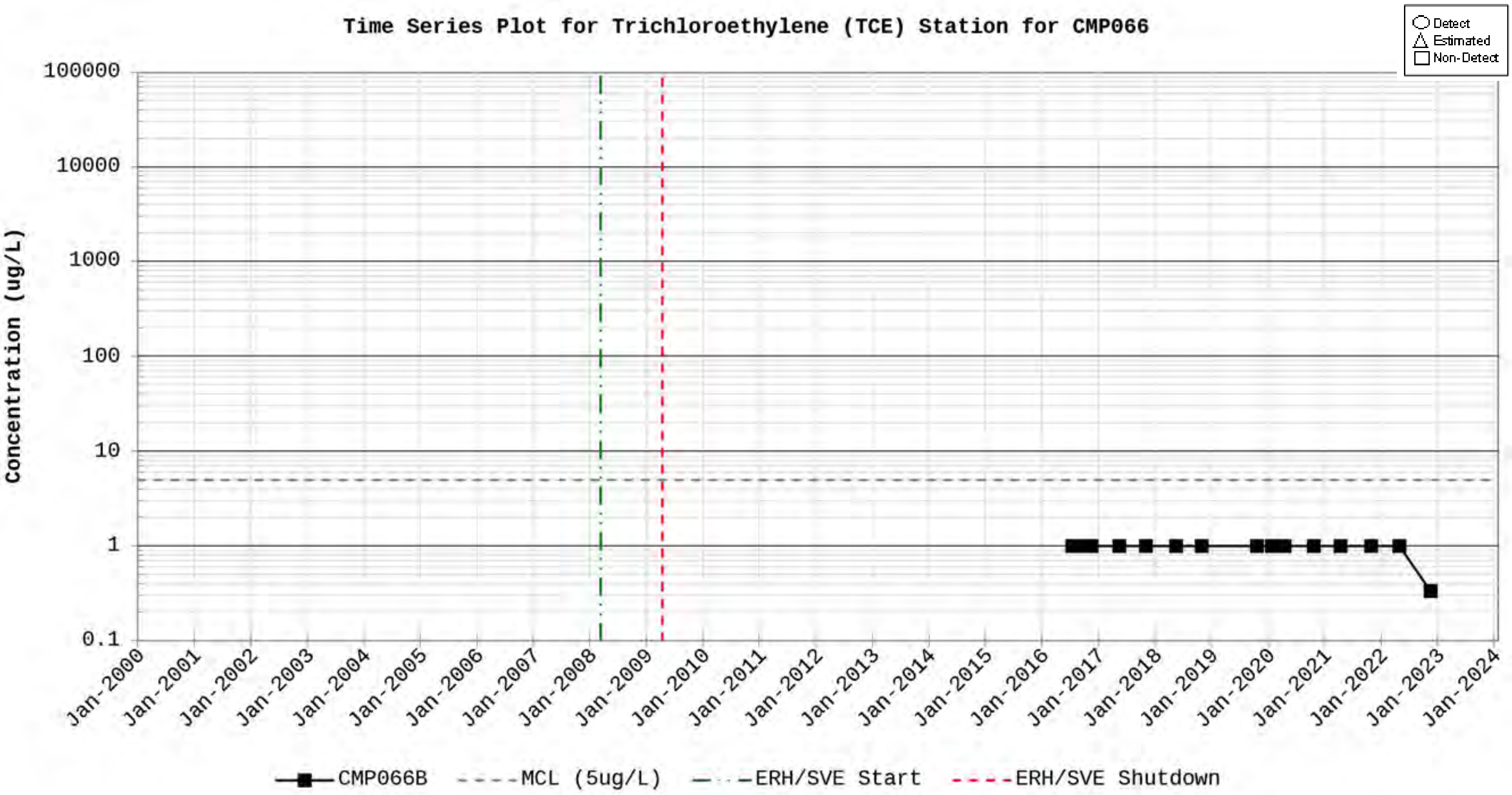
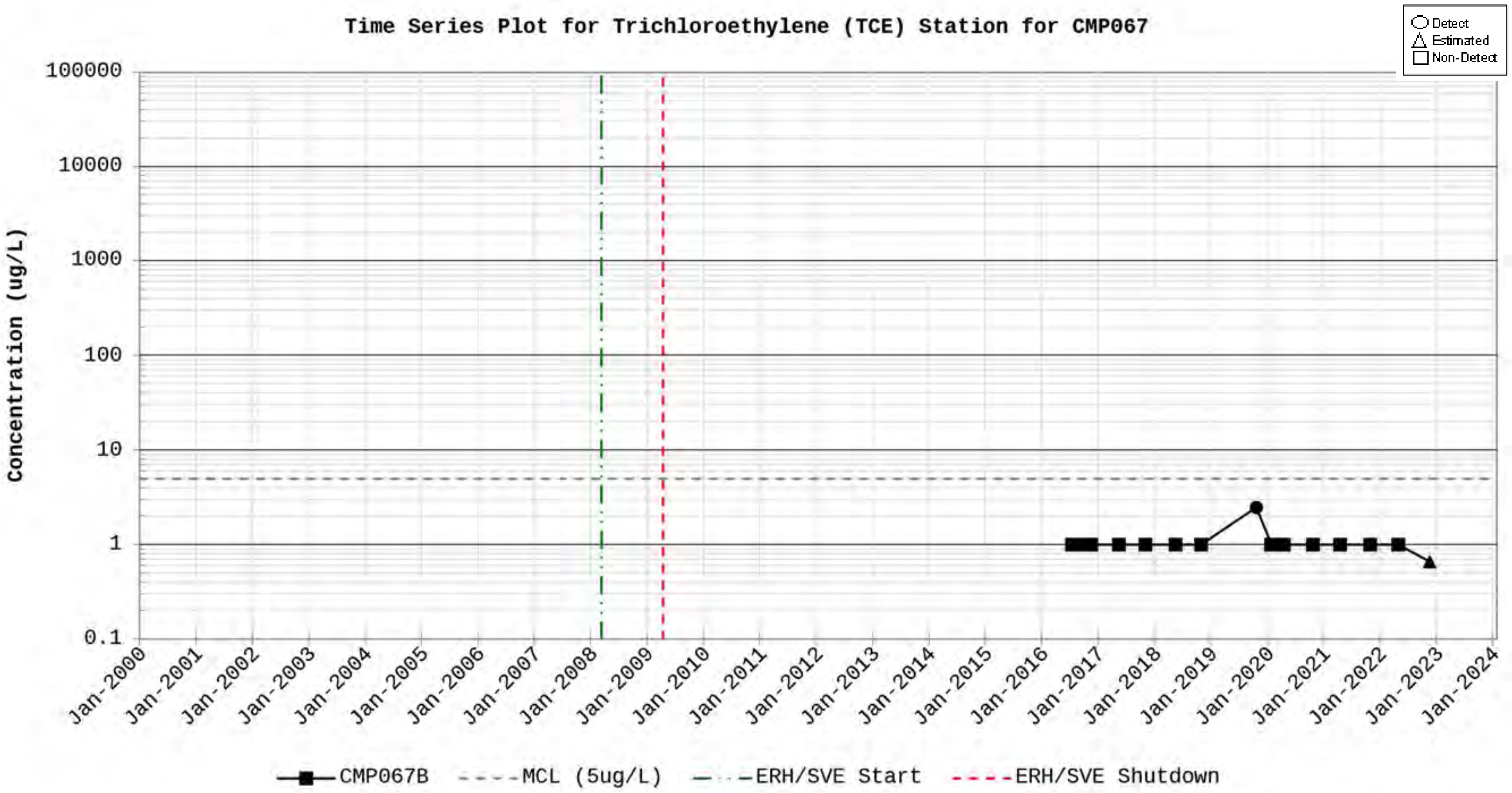
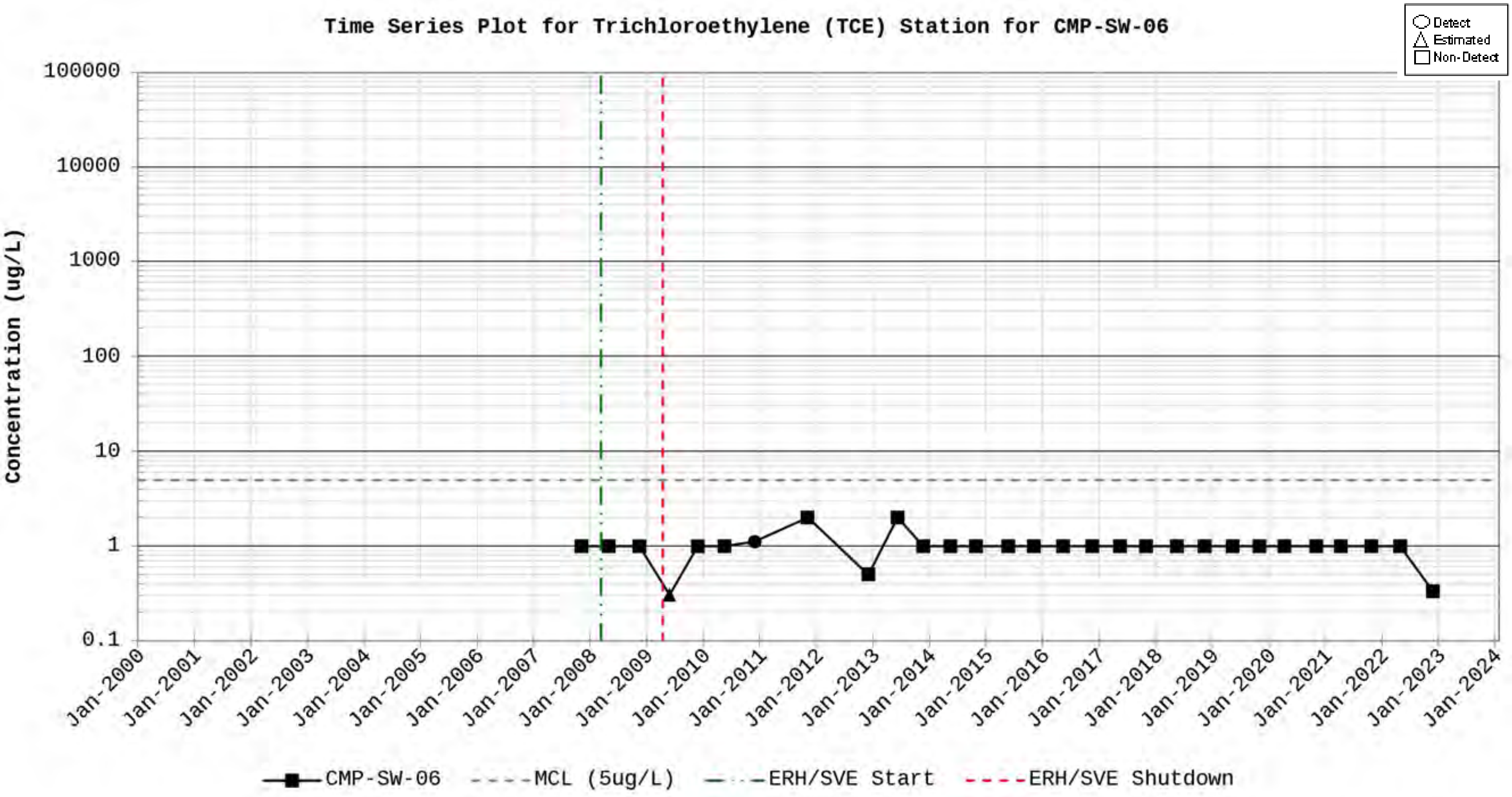
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP063D
CMP063C
CMP063B
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown

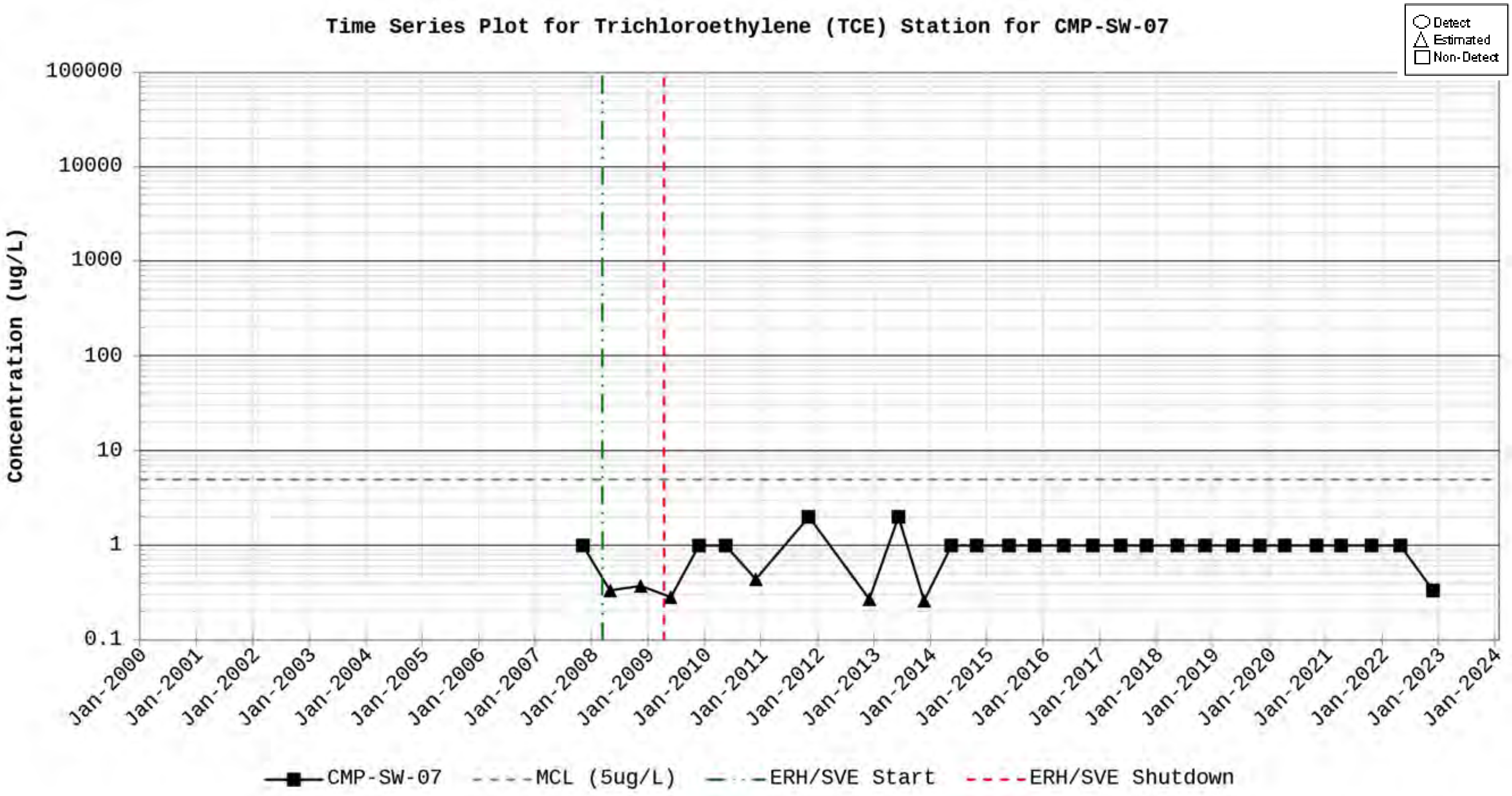

Time Series Plot for Trichloroethylene (TCE) Station for CMP064
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP064B
CMP064BU
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown

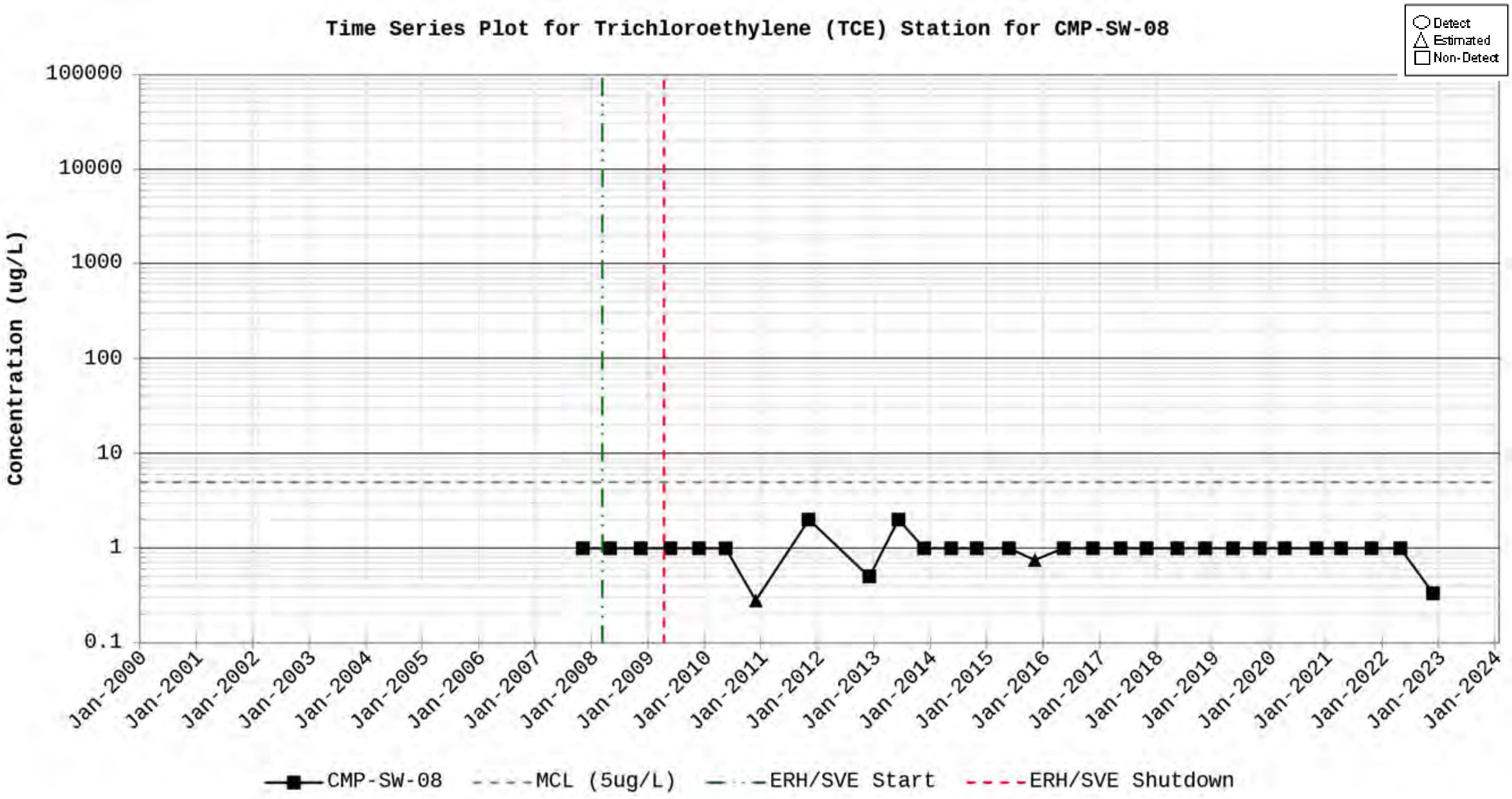

Time Series Plot for Trichloroethylene (TCE) Station for CMP065
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP065B
CMP065BU
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown

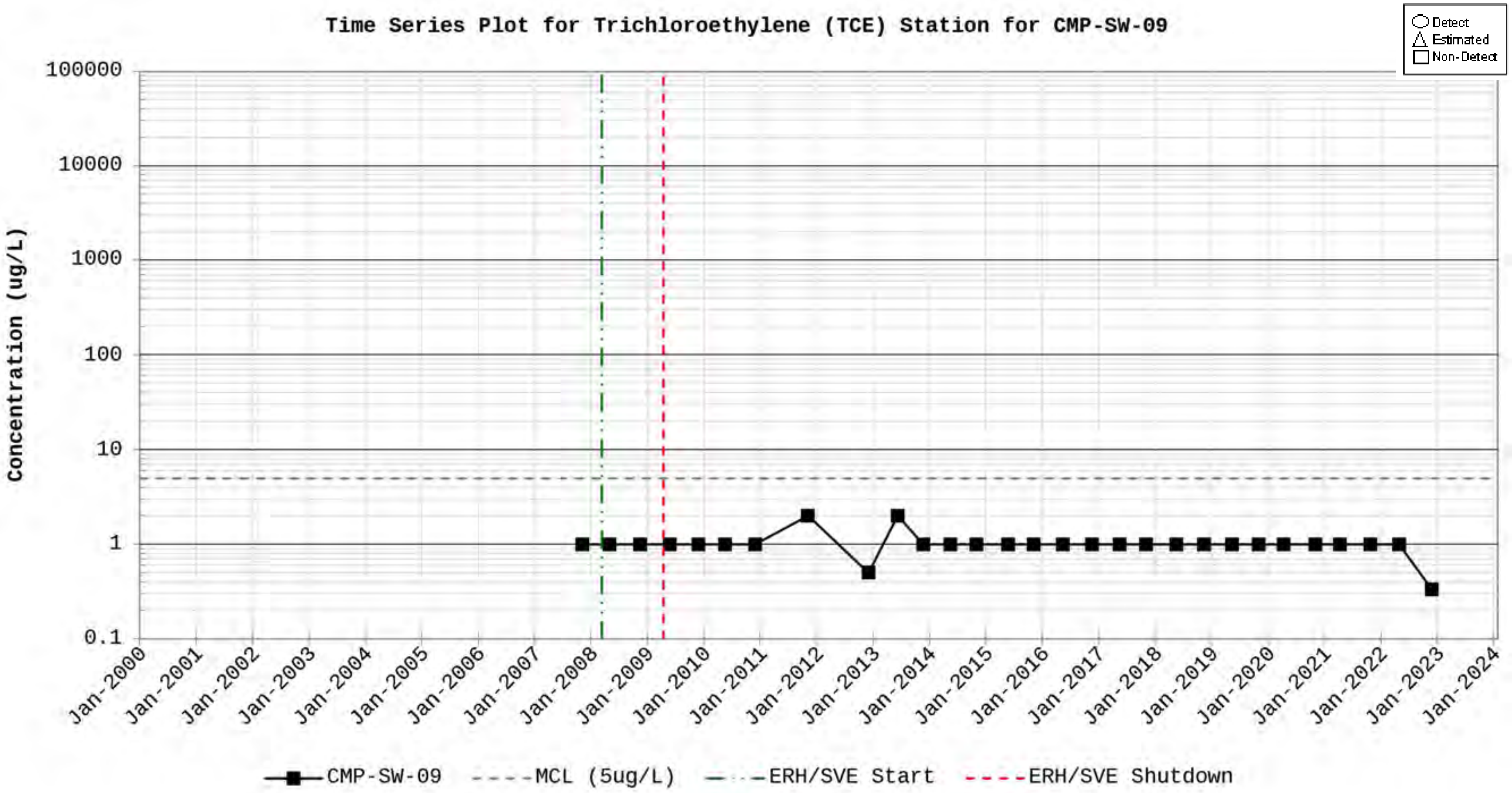

Time Series Plot for Trichloroethylene (TCE) Station for CMP066
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP066B
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown

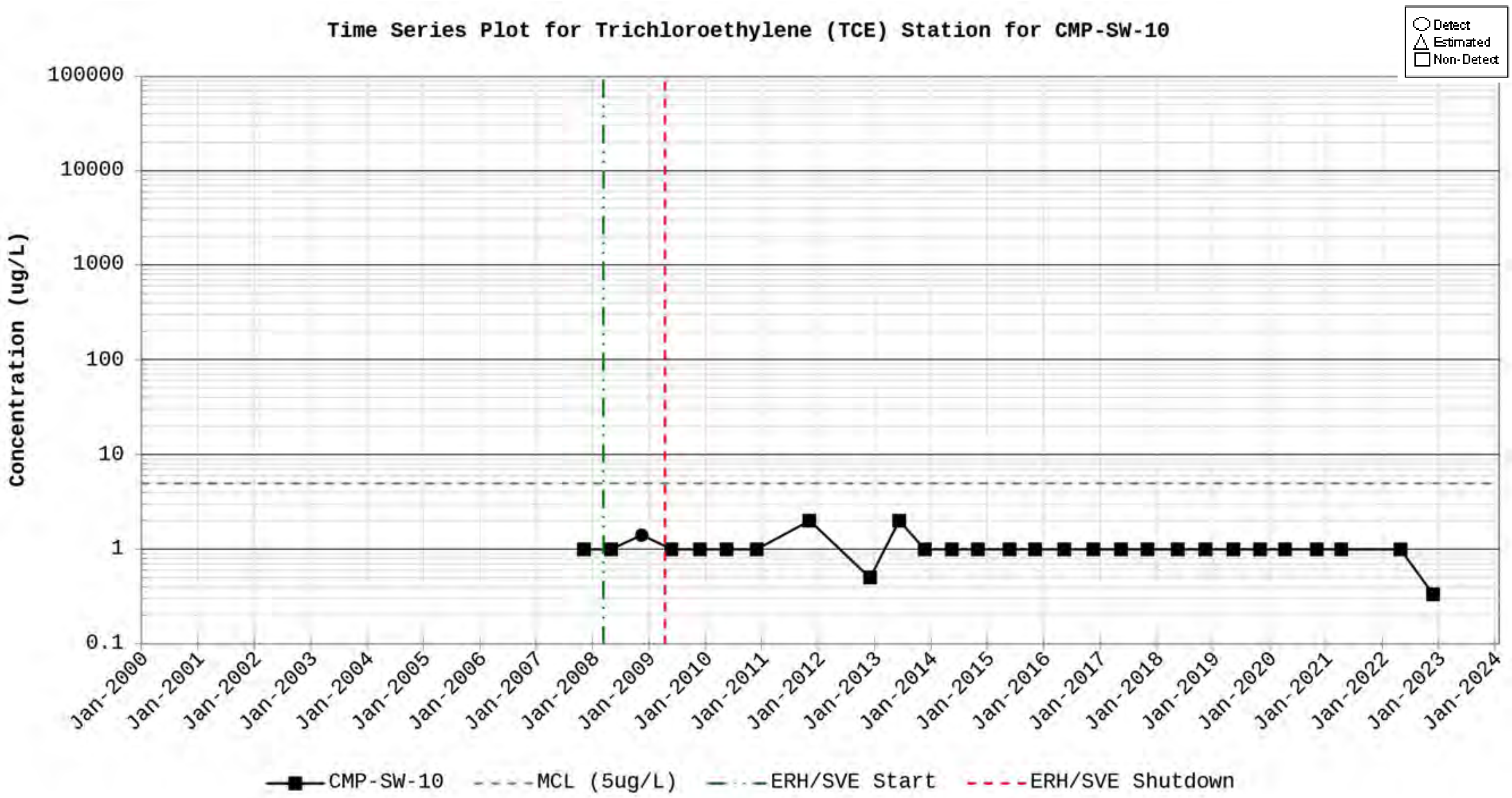

Time Series Plot for Trichloroethylene (TCE) Station for CMP067
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP067B
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown

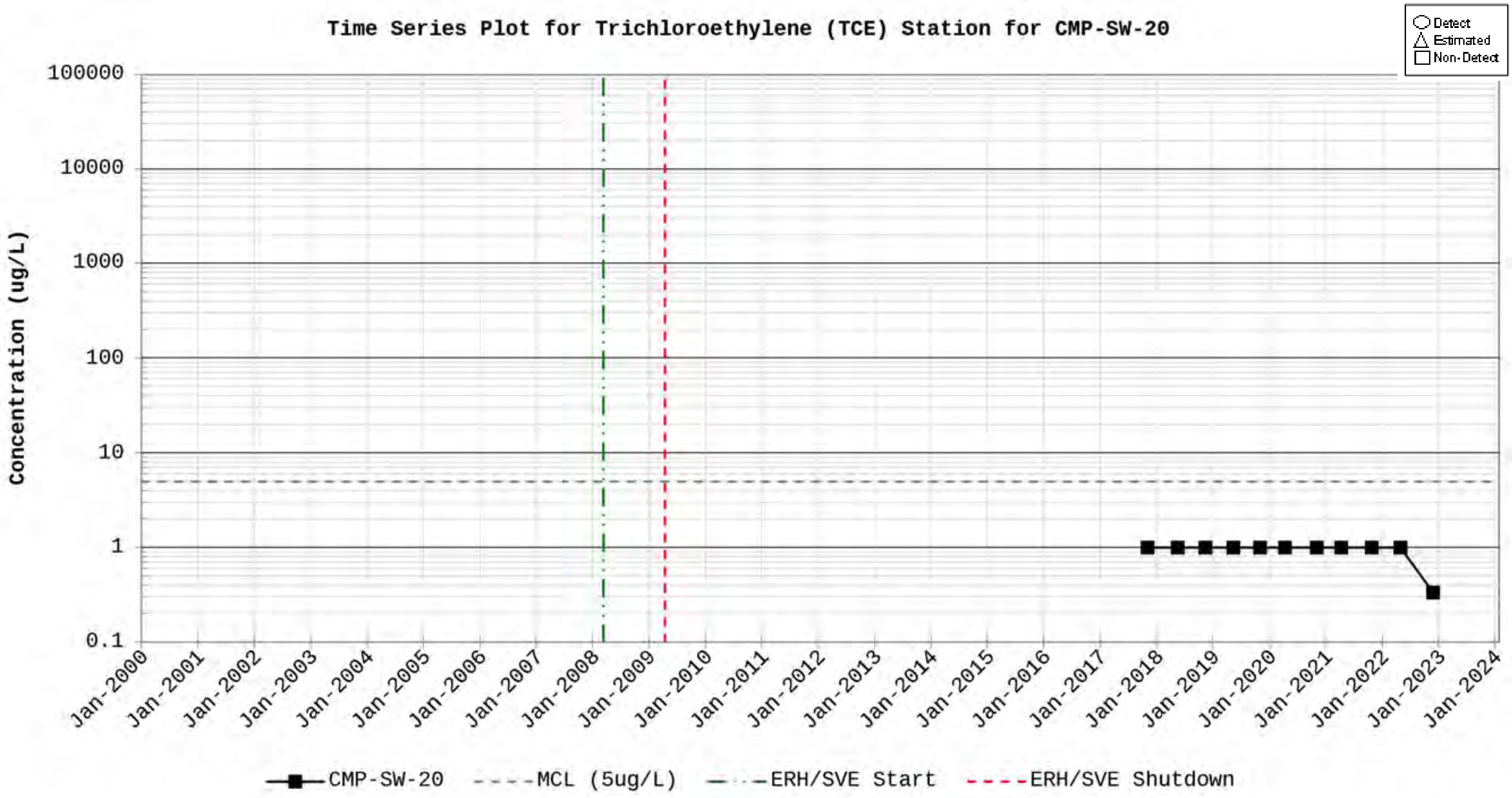

Time Series Plot for Trichloroethylene (TCE) Station for CMP-SW-06
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP-SW-06
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown

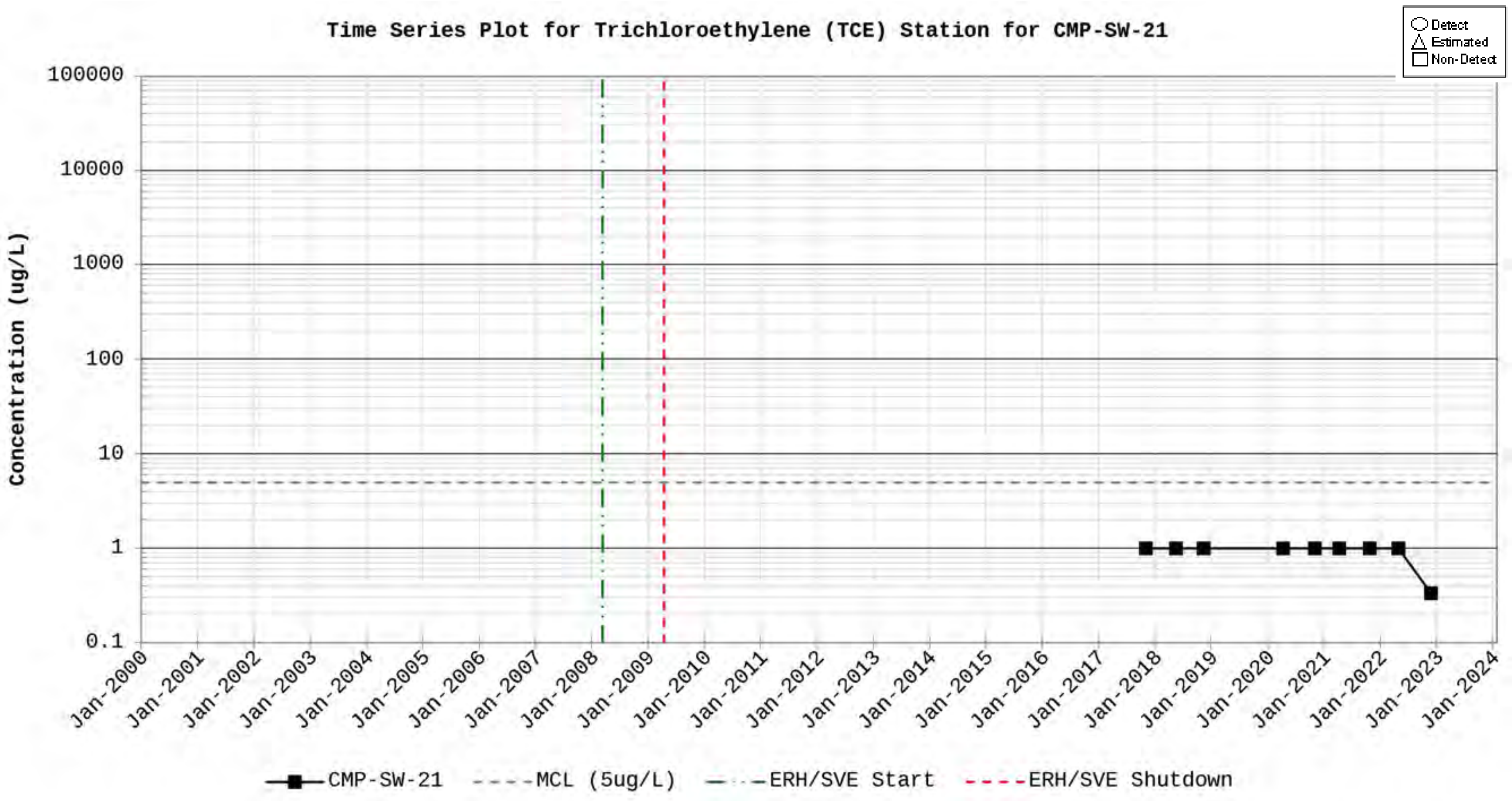

Time Series Plot for Trichloroethylene (TCE) Station for CMP-SW-07
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP-SW-07
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown

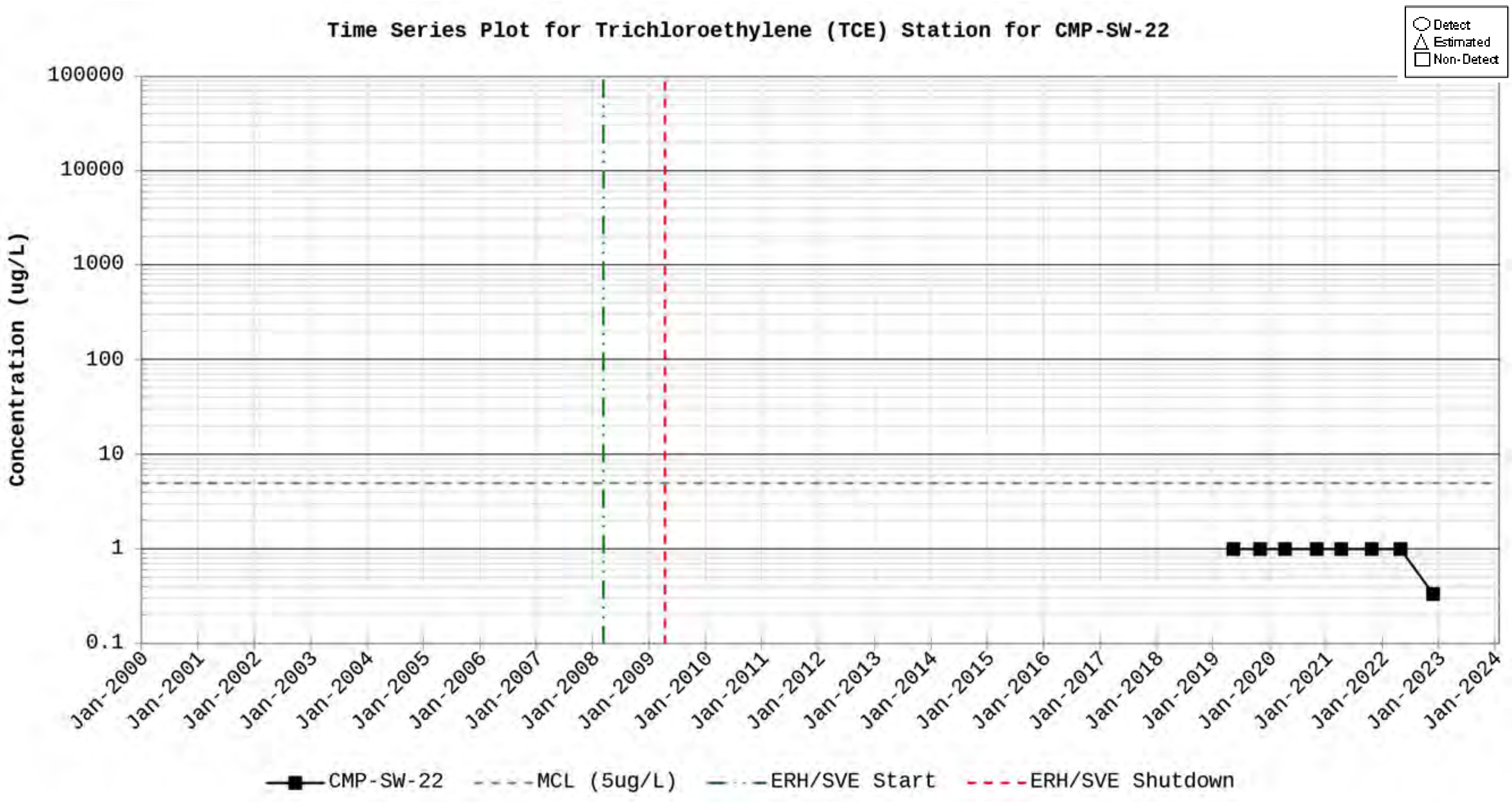

Time Series Plot for Trichloroethylene (TCE) Station for CMP-SW-08
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP-SW-08
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP-SW-09
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP-SW-09
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP-SW-10
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP-SW-10
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP-SW-20
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP-SW-20
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP-SW-21
Detect
Estimated
Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP-SW-21
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Trichloroethylene (TCE) Station for CMP-SW-22
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
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Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
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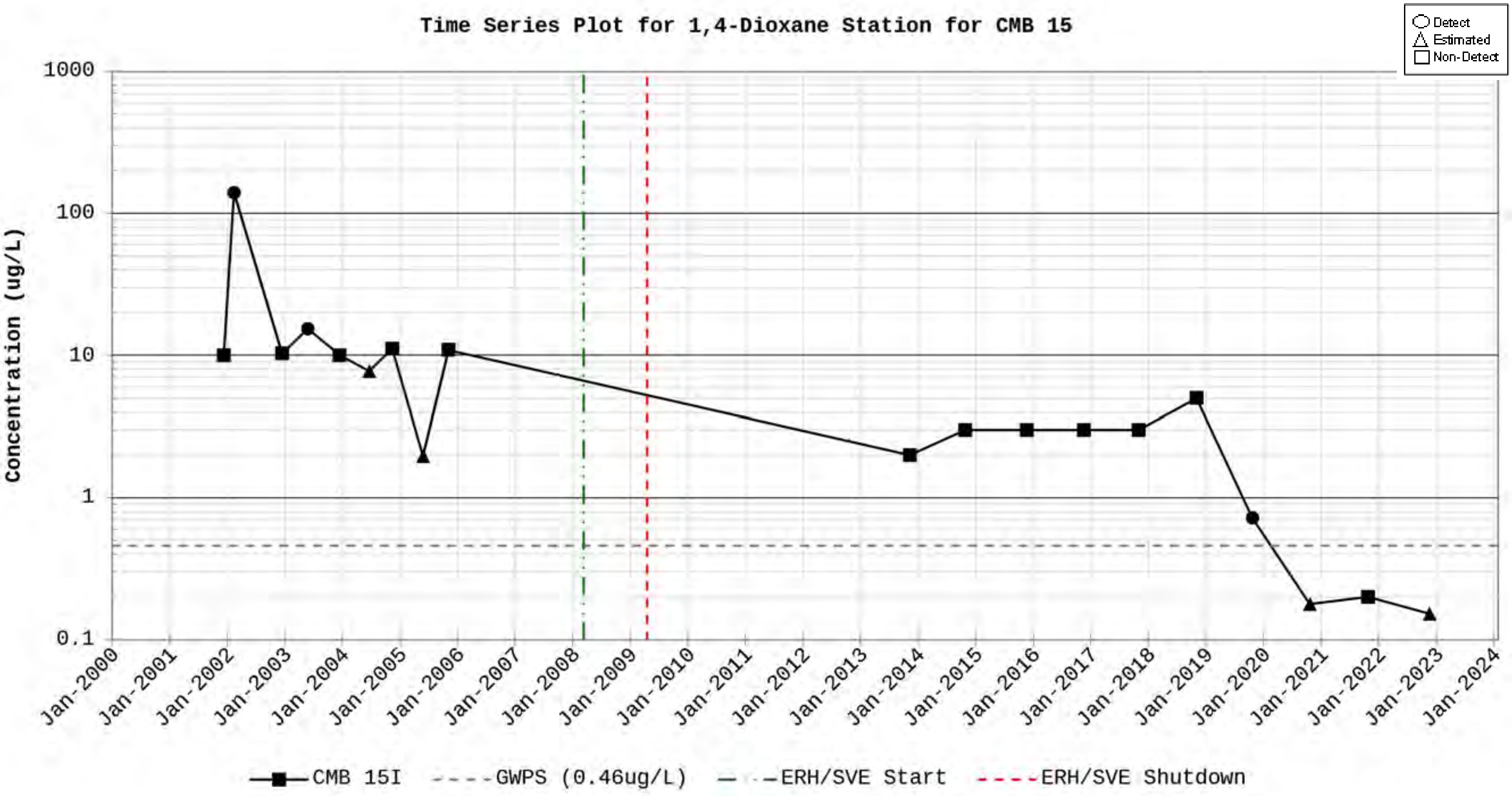
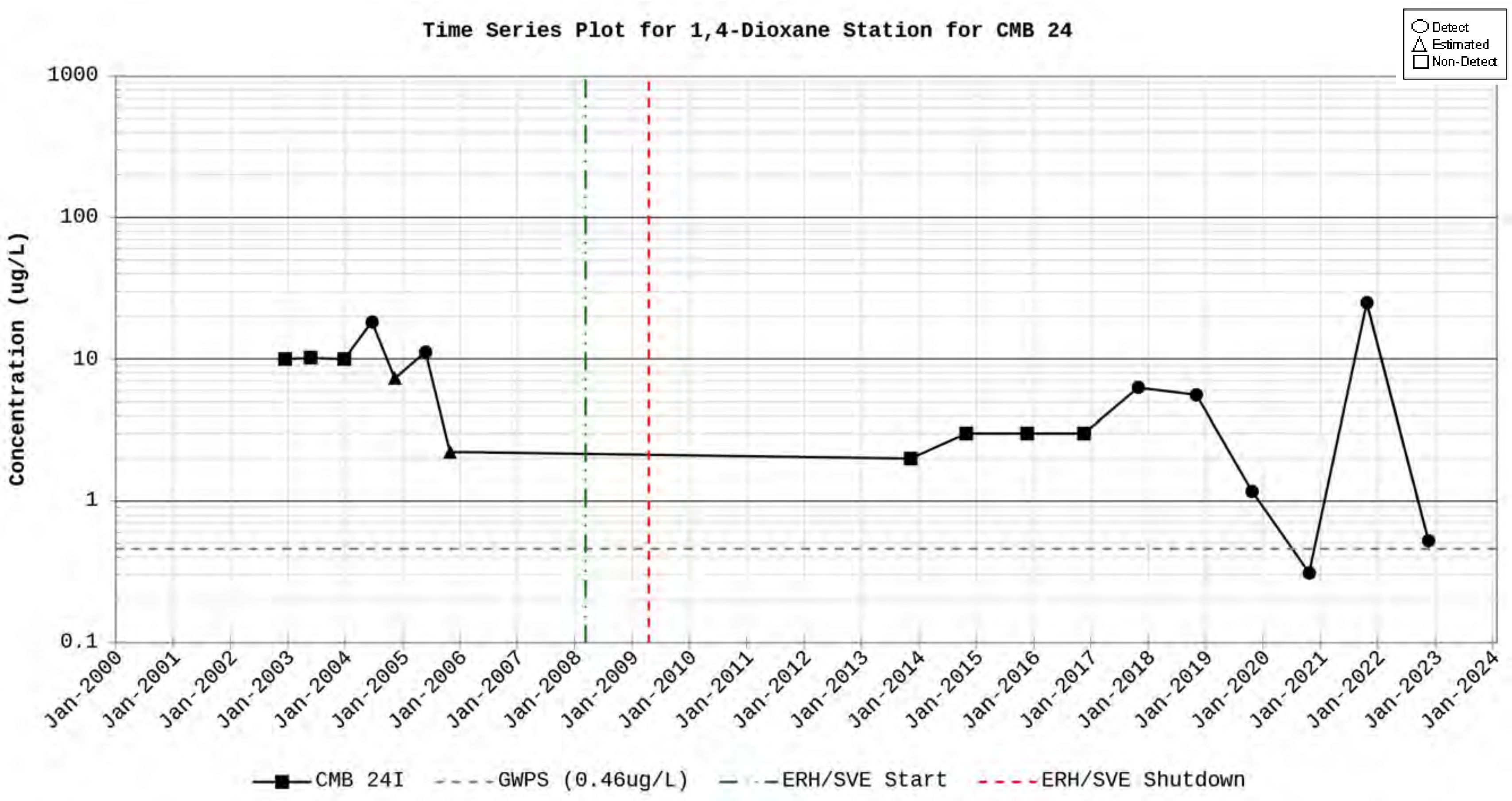
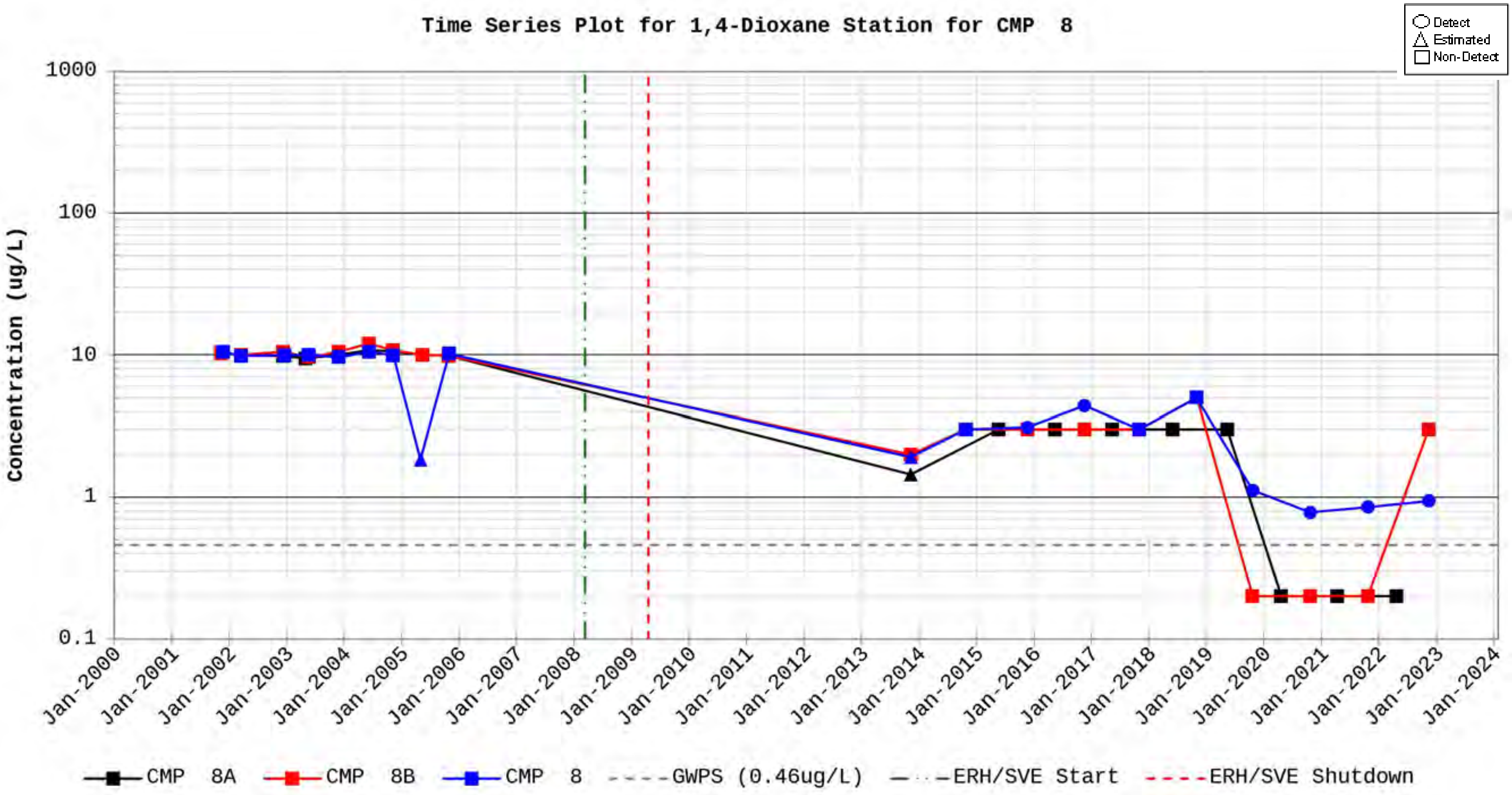
Jan-2023
Jan-2024
CMP-SW-22
MCL (5ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMB 15
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMB 15I
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMB 24
Detect
Estimated
Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMB 24I
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP 8
Detect
Estimated
Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
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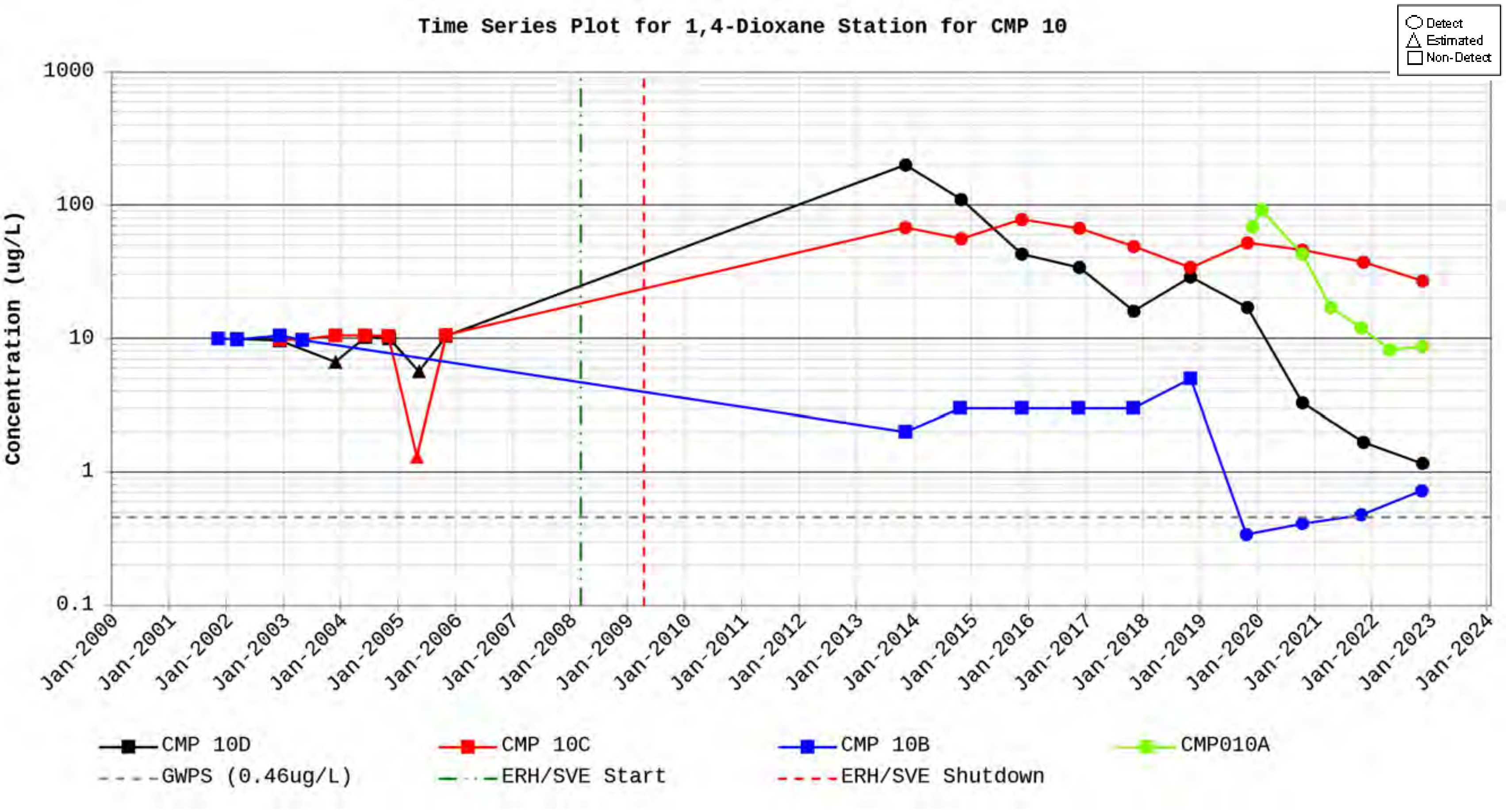
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 8A
CMP 8B
CMP 8
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP 10
Detect
Estimated
Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
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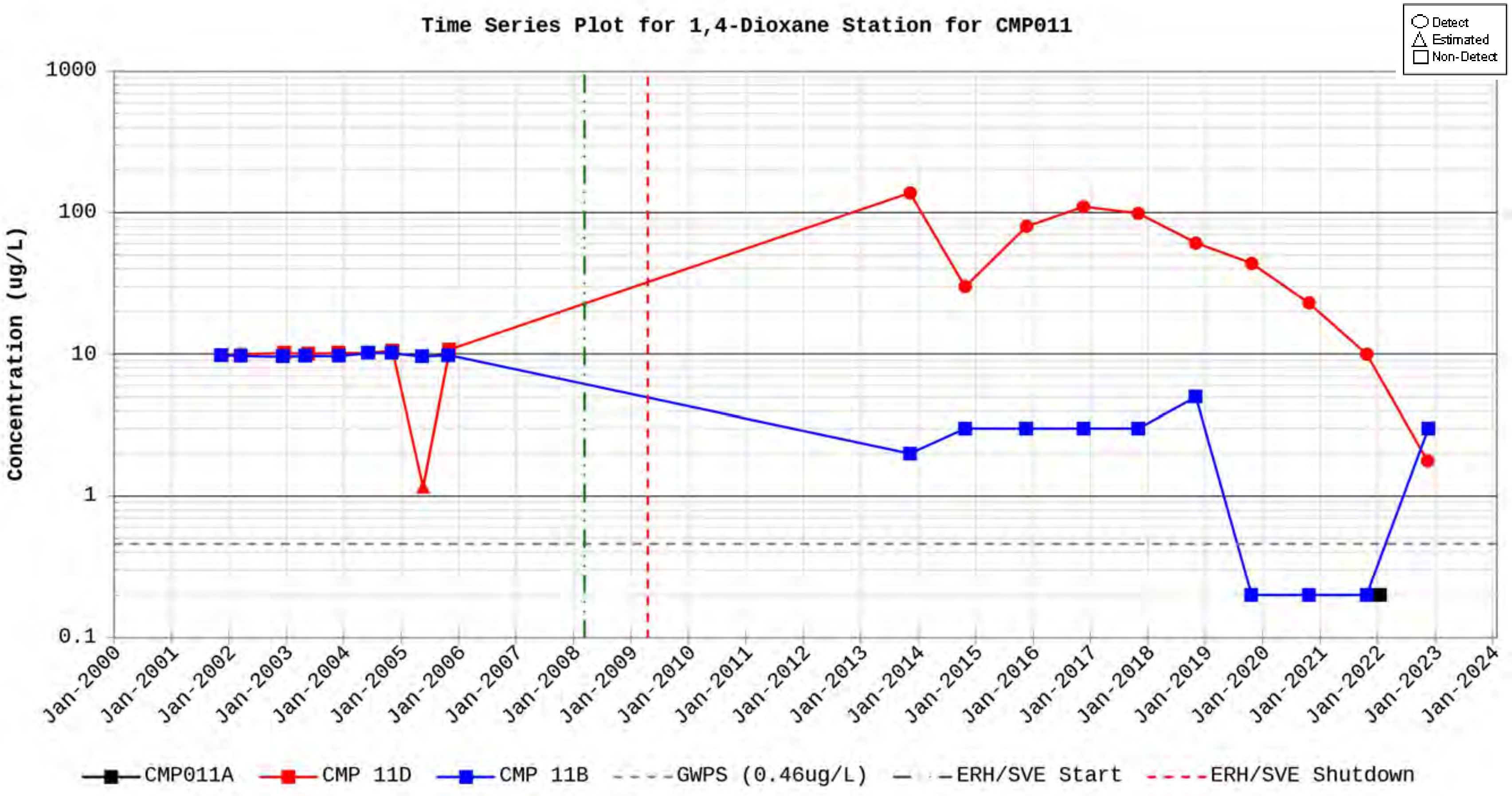
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 10D
CMP 10C
CMP 10B
CMP010A
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP011
Detect
Estimated
Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
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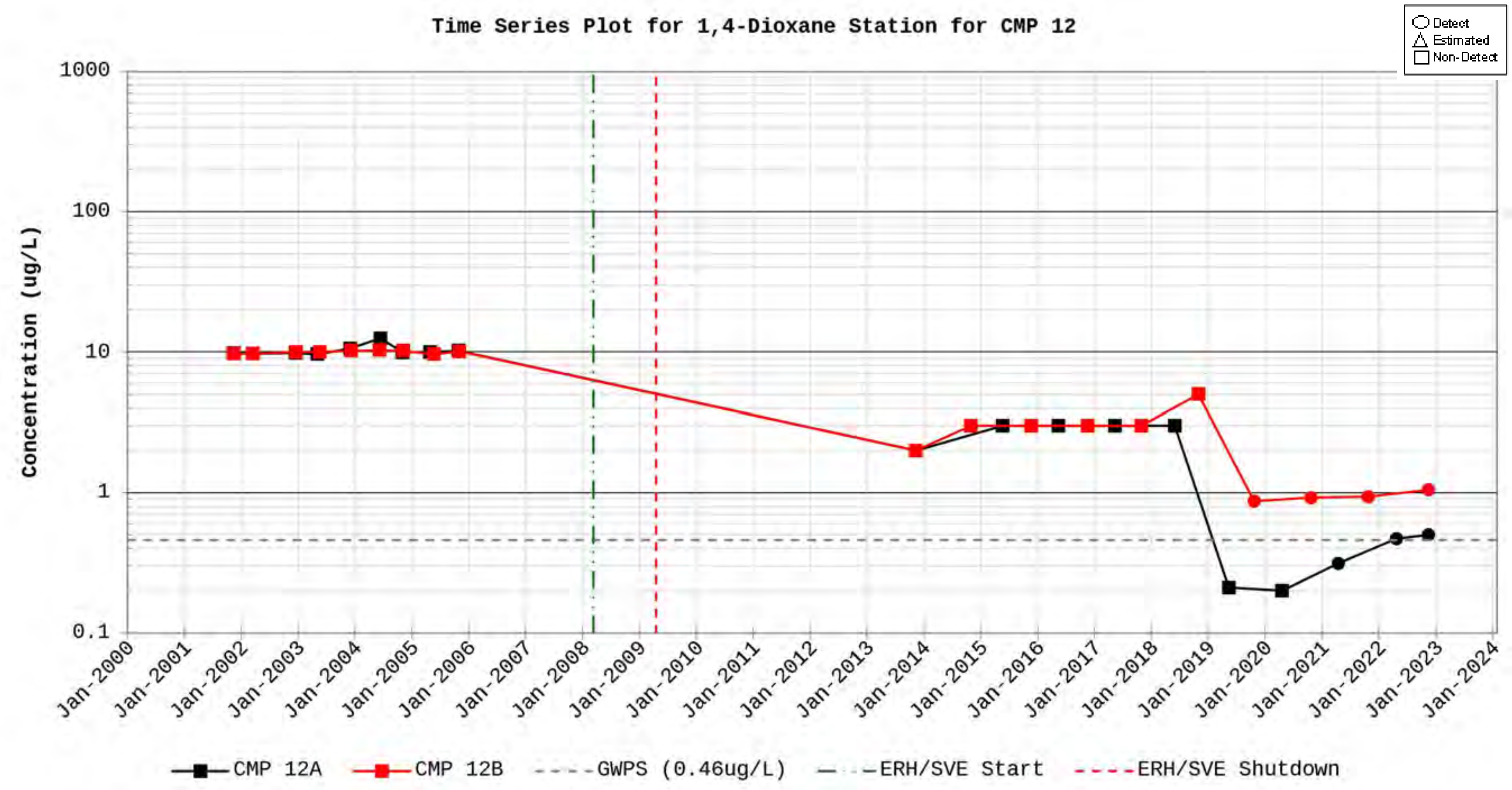
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP011A
CMP 11D
CMP 11B
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP 12
Detect
Estimated
Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
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Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
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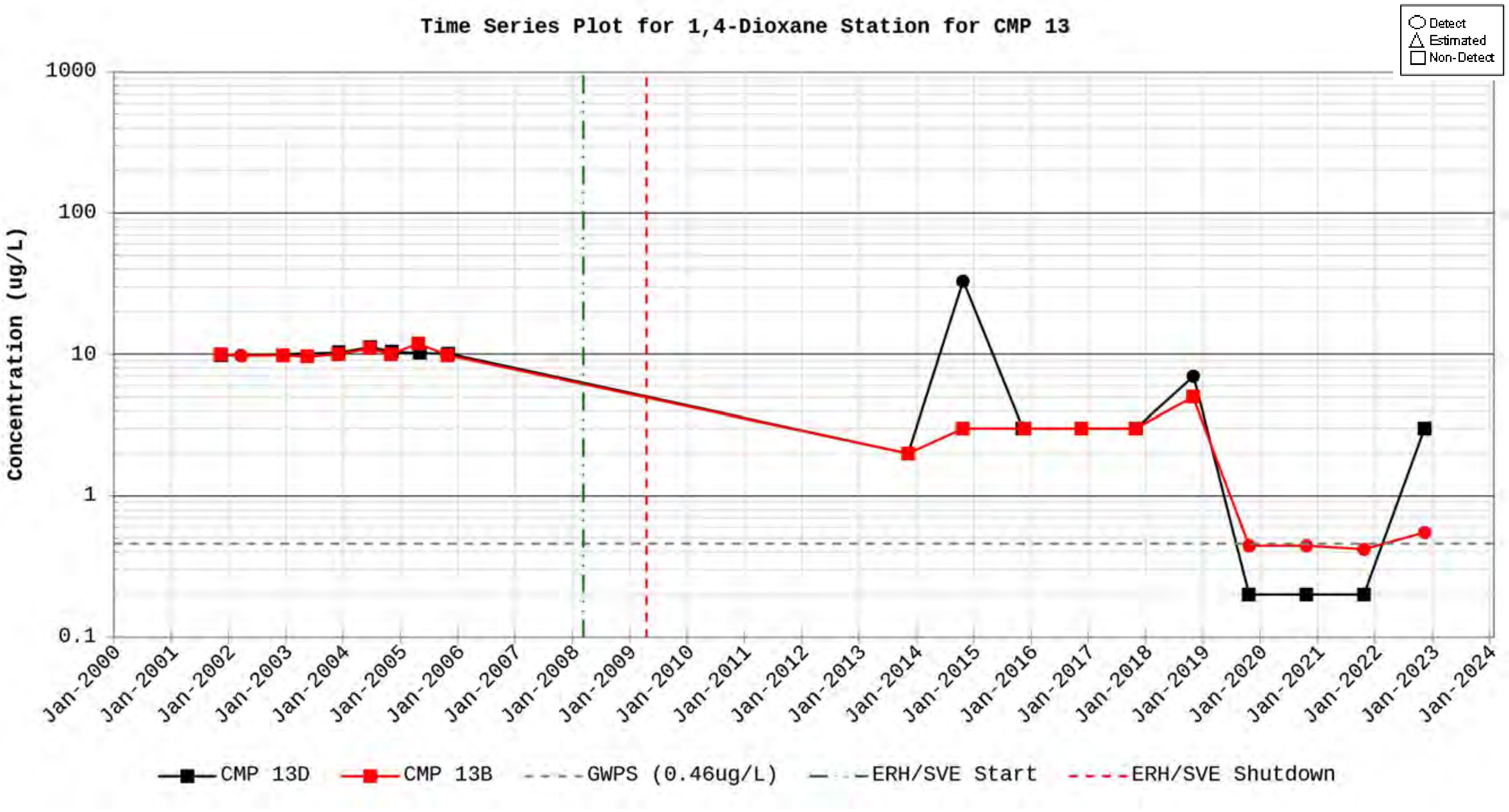
Jan-2024
CMP 12A
CMP 12B
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP 13
Detect
Estimated
Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
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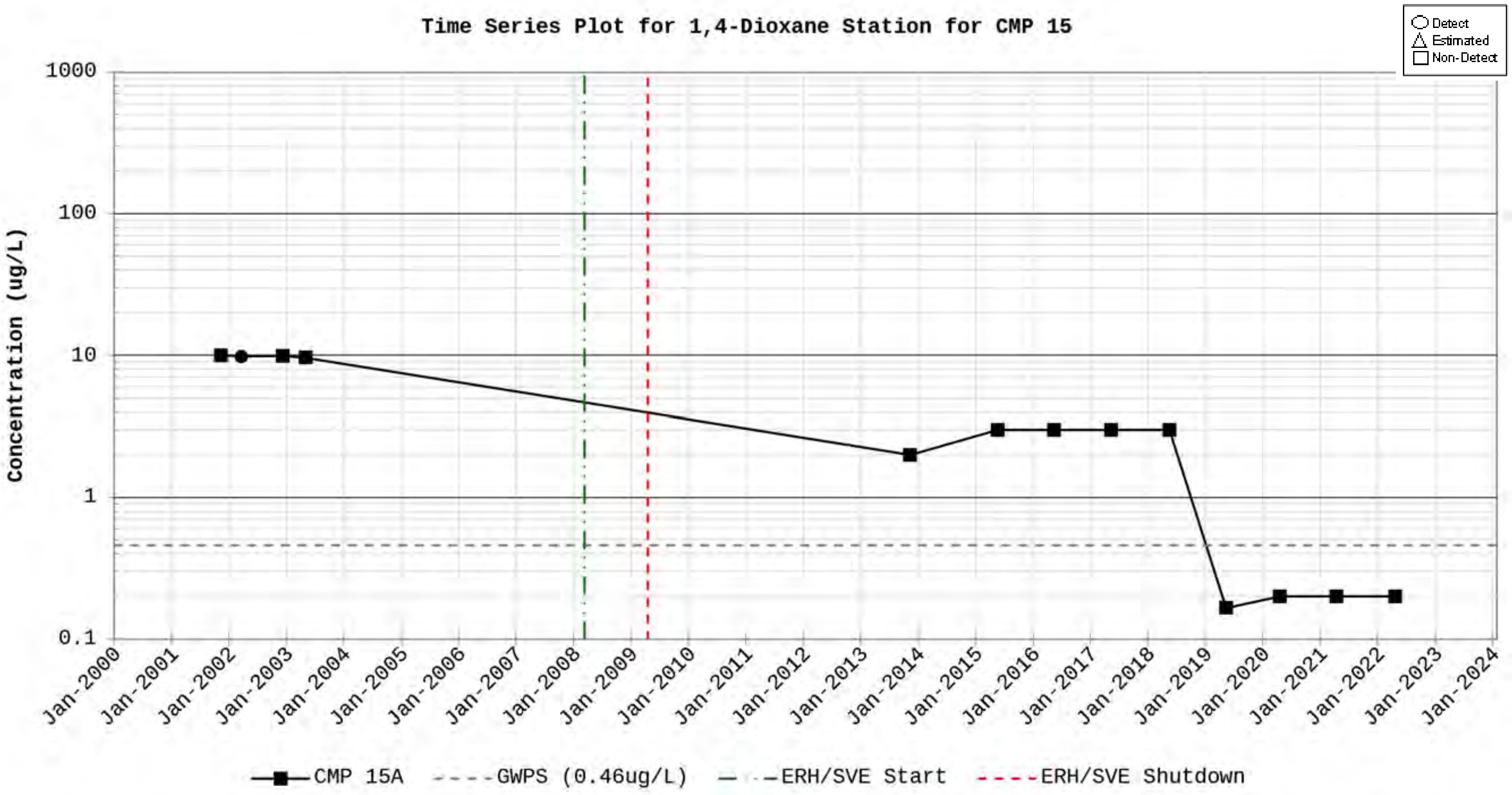
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 13D
CMP 13B
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP 15
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
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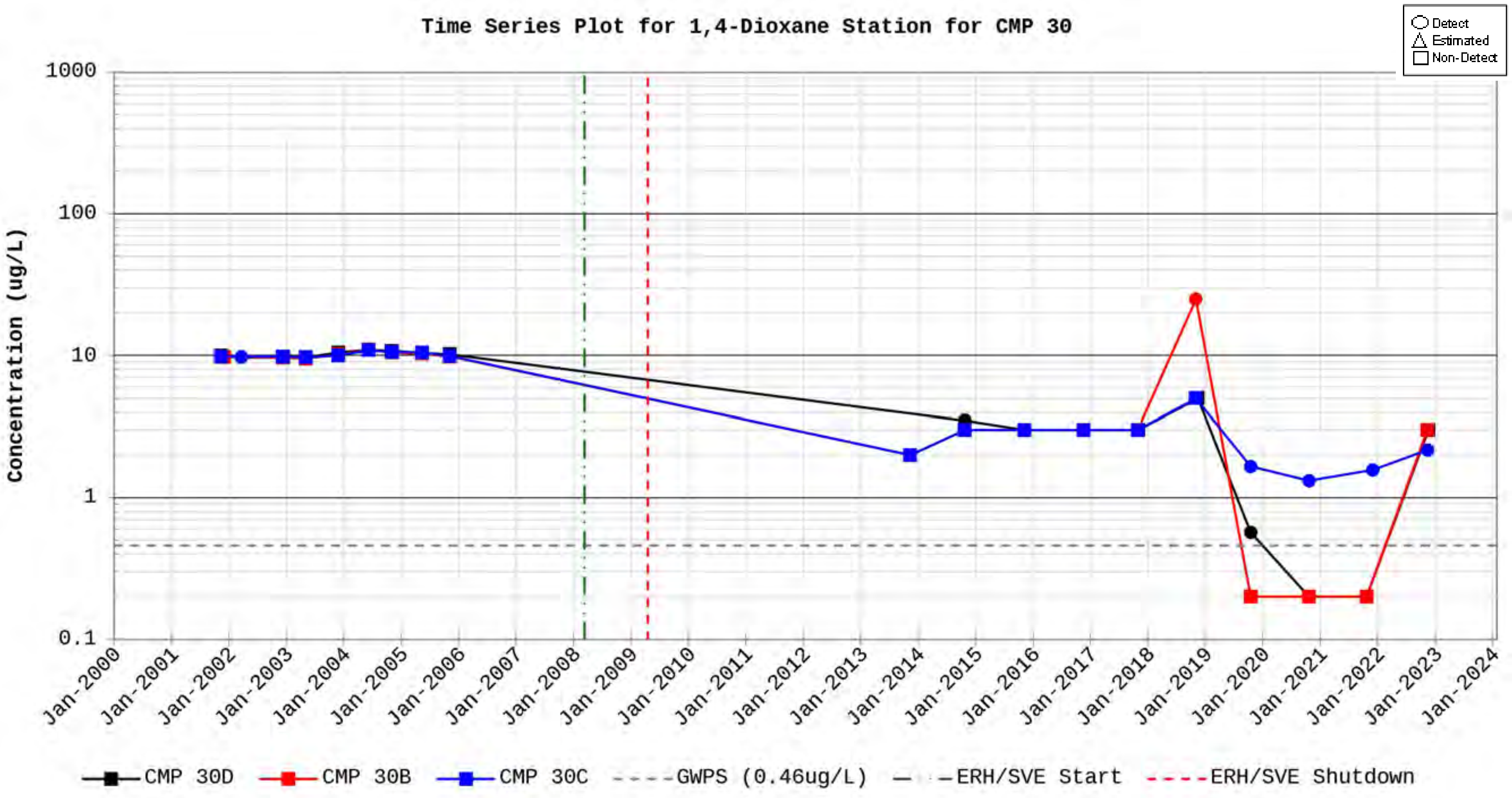
Jan-2023
Jan-2024
CMP 15A
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP 30
Detect
Estimated
Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
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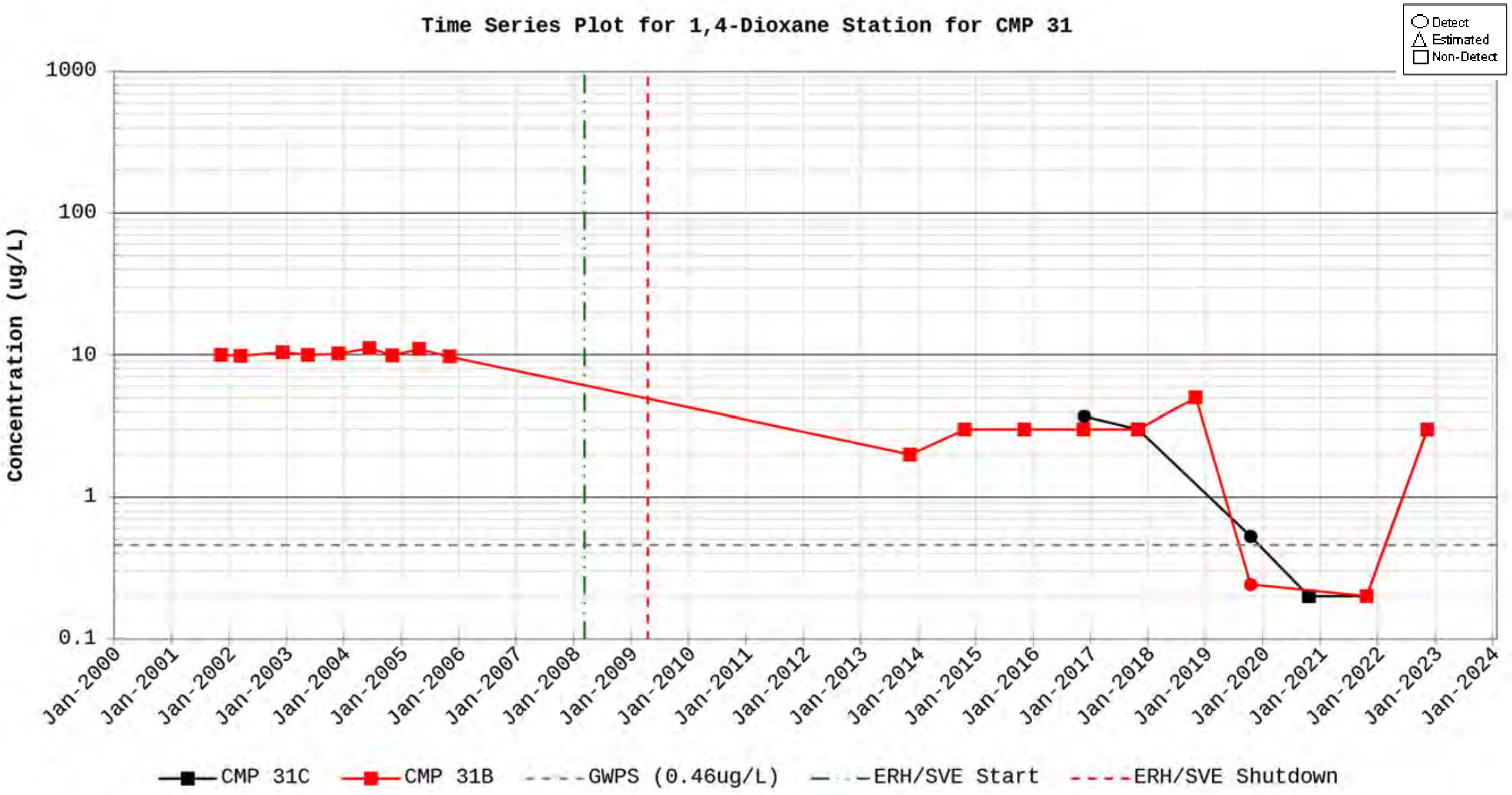
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 30D
CMP 30B
CMP 30C
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP 31
Detect
Estimated
Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
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Jan-2020
Jan-2021
Jan-2022
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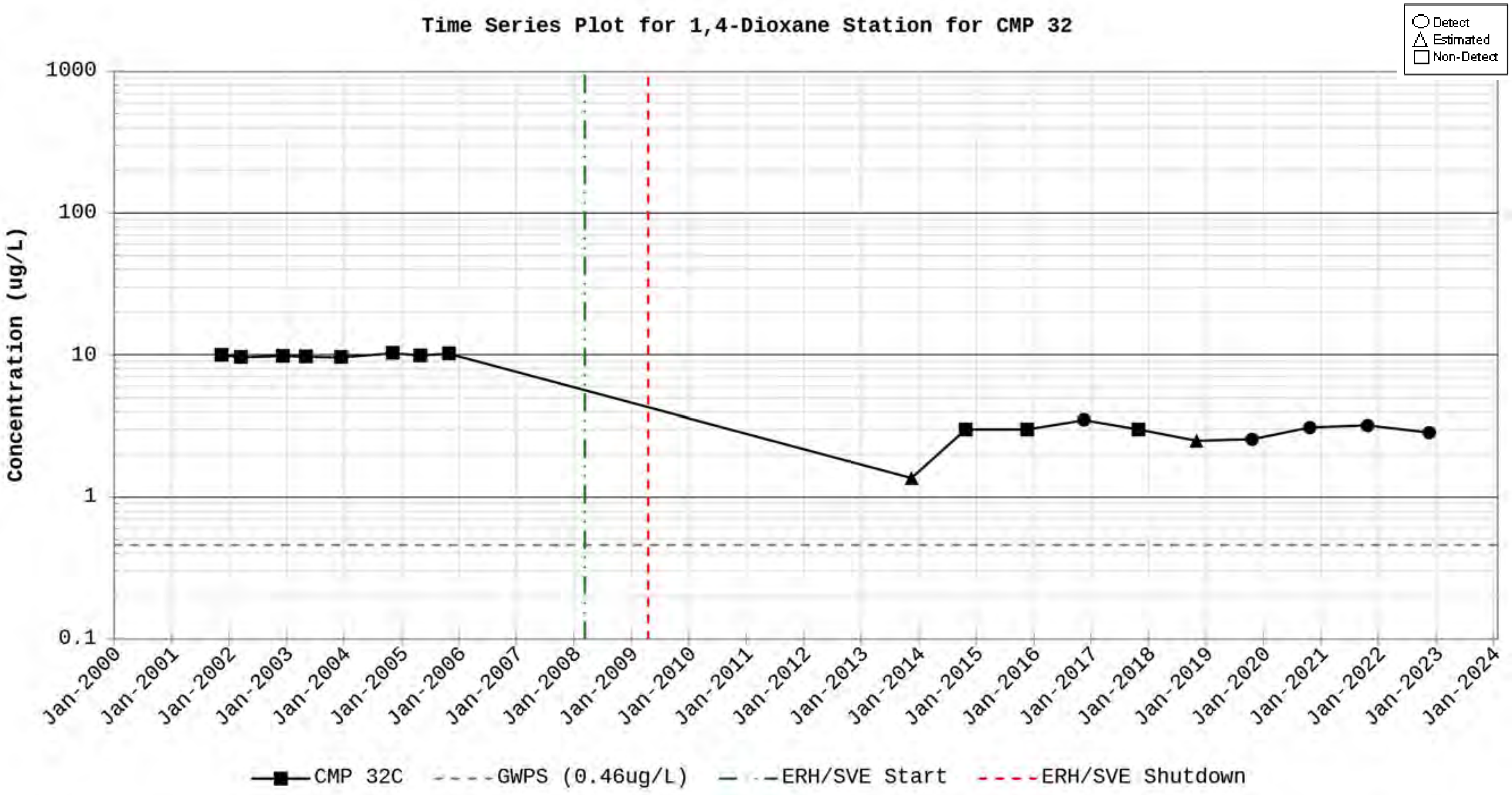
Jan-2024
CMP 31C
CMP 31B
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP 32
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
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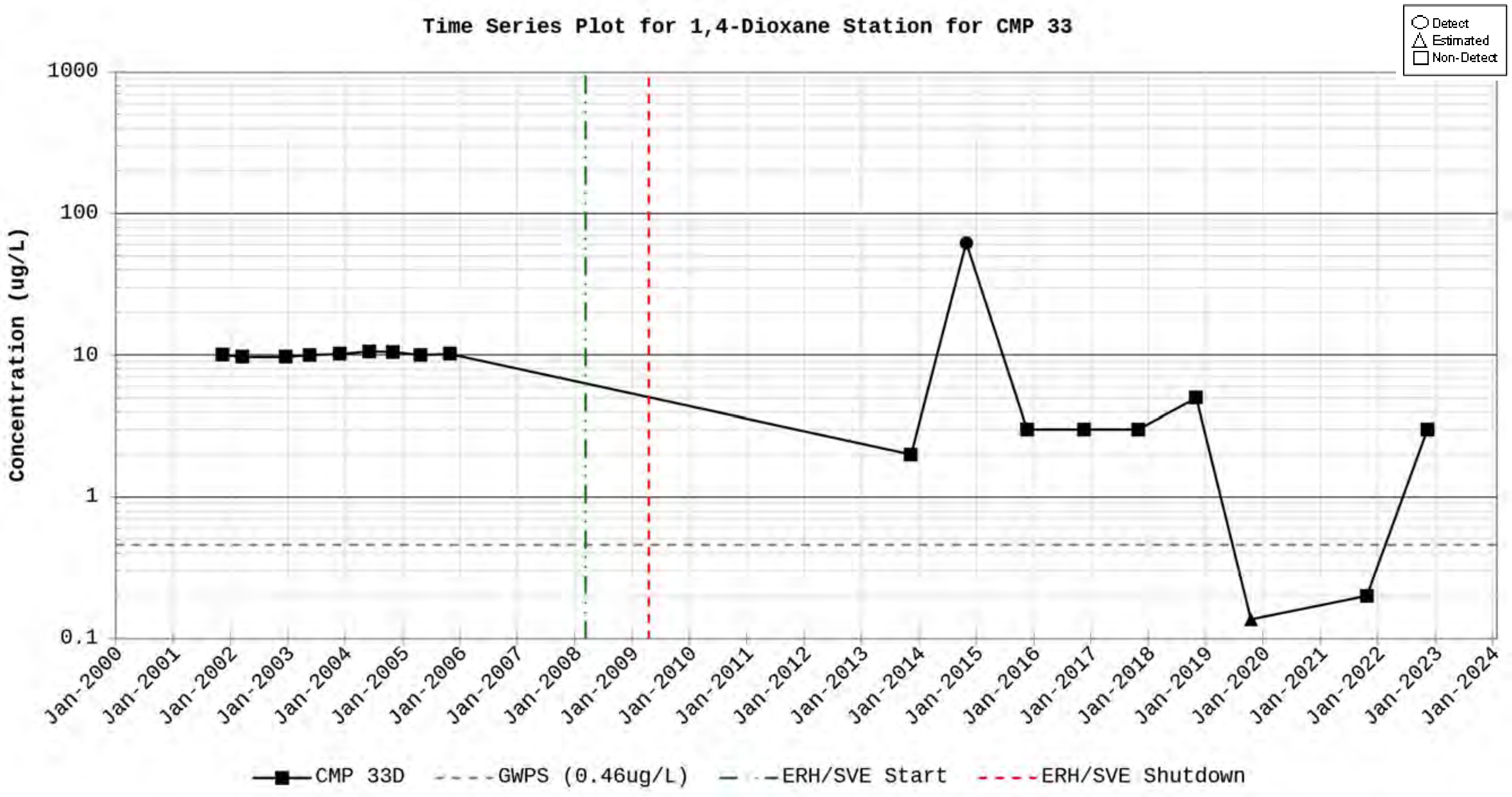
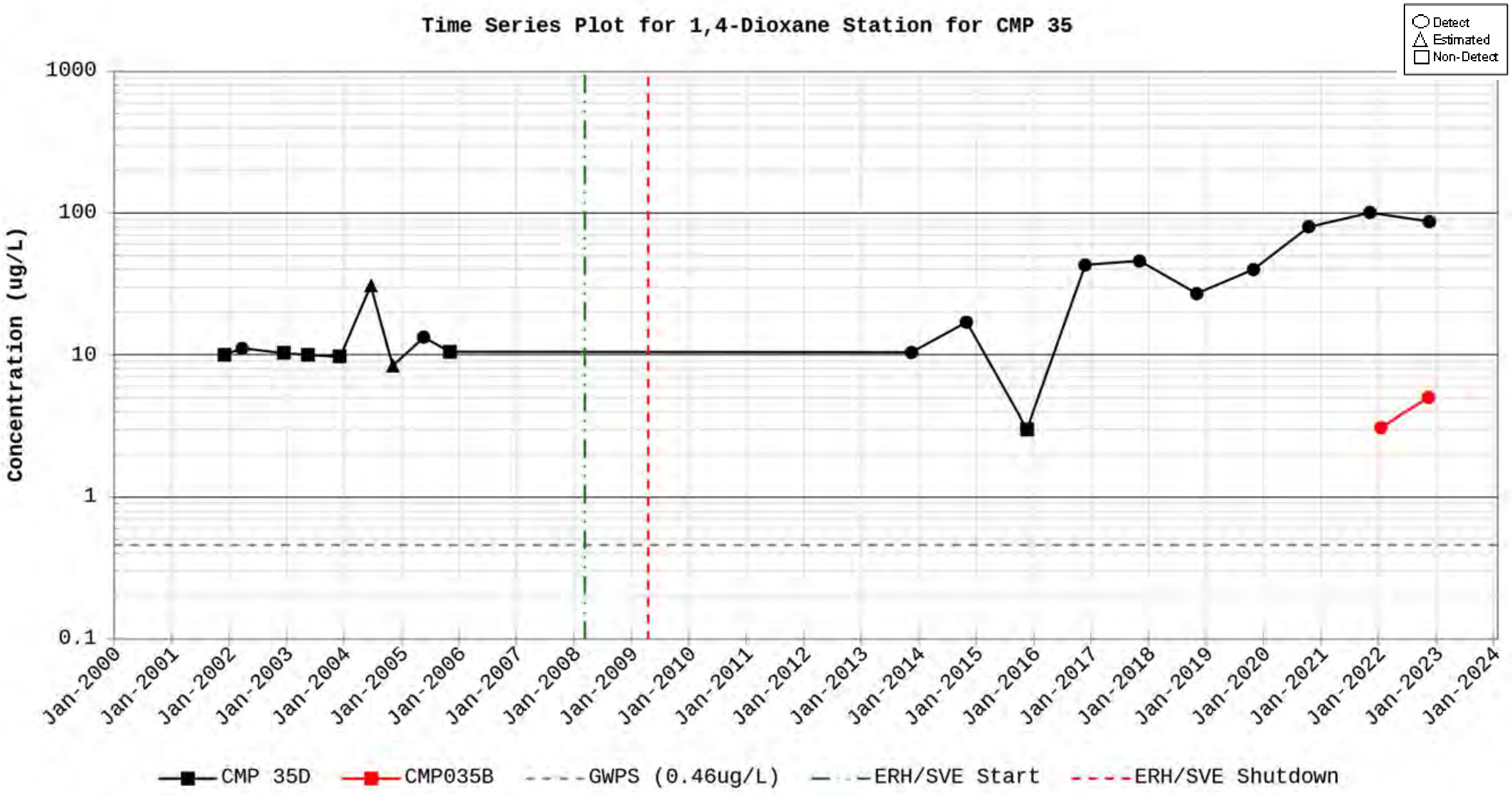
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 32C
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP 33
Detect
Estimated
Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 33D
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP 35
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
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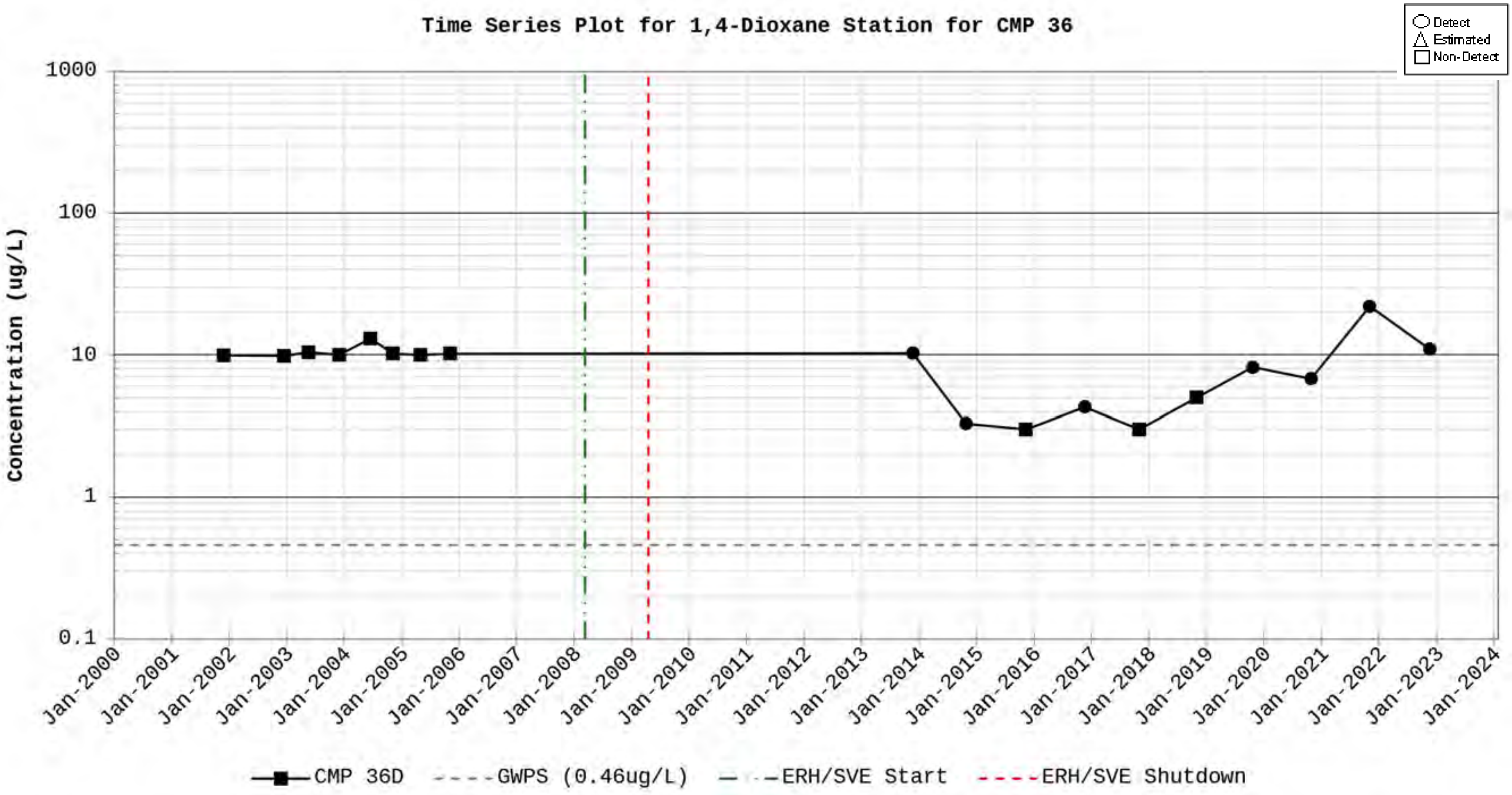
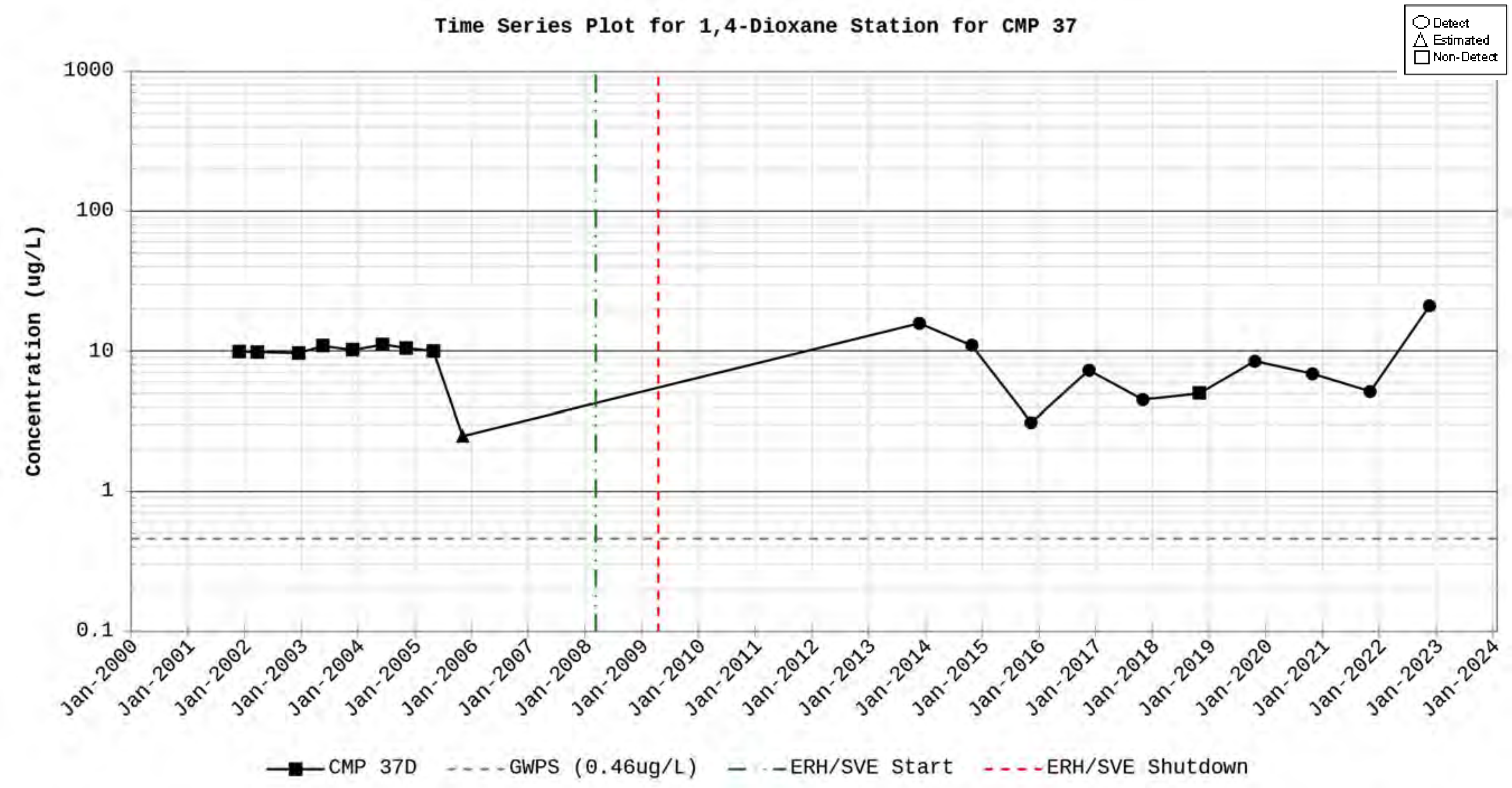
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 35D
CMP035B
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP 36
Detect
Estimated
Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 36D
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP 37
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
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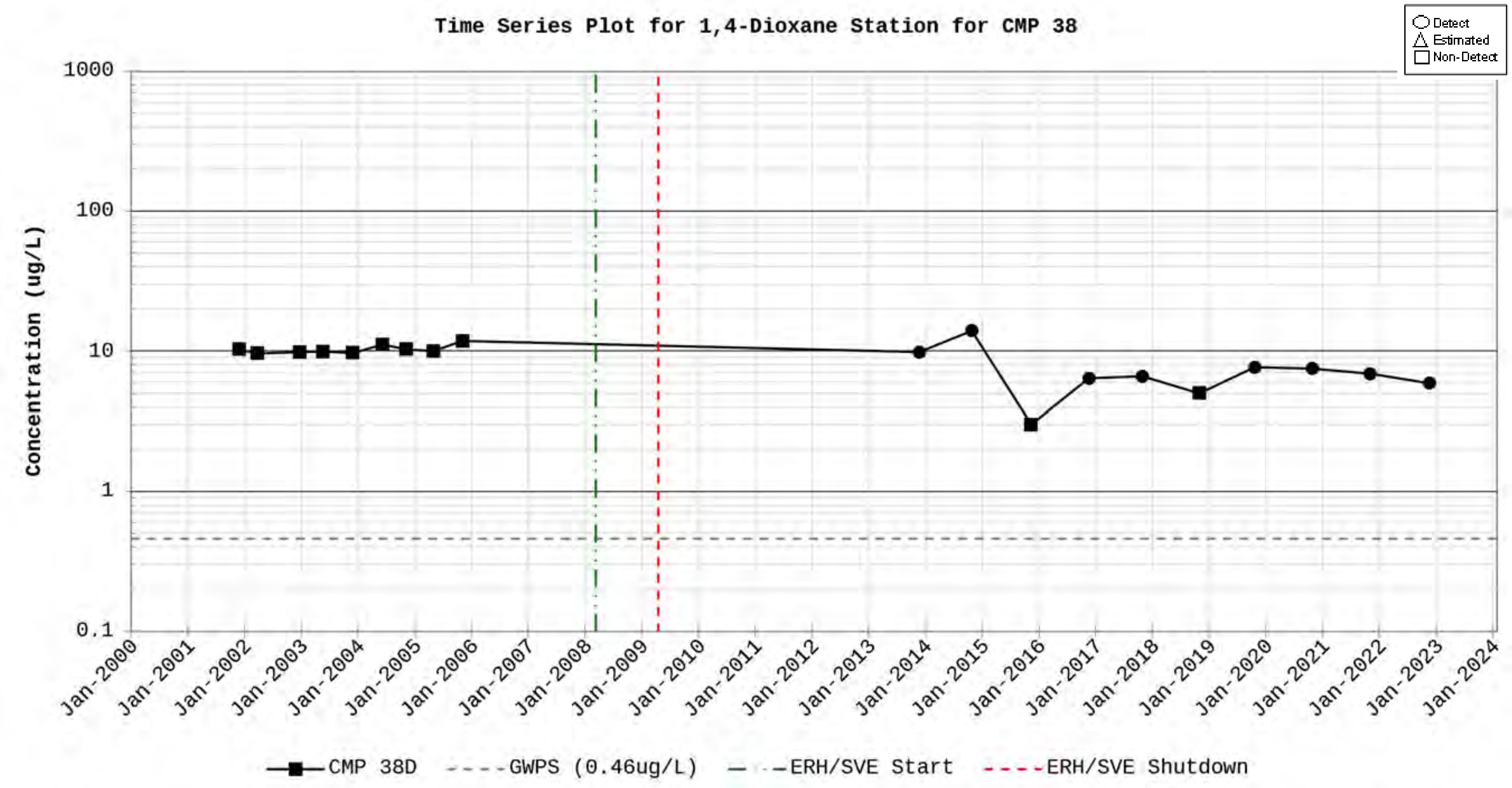
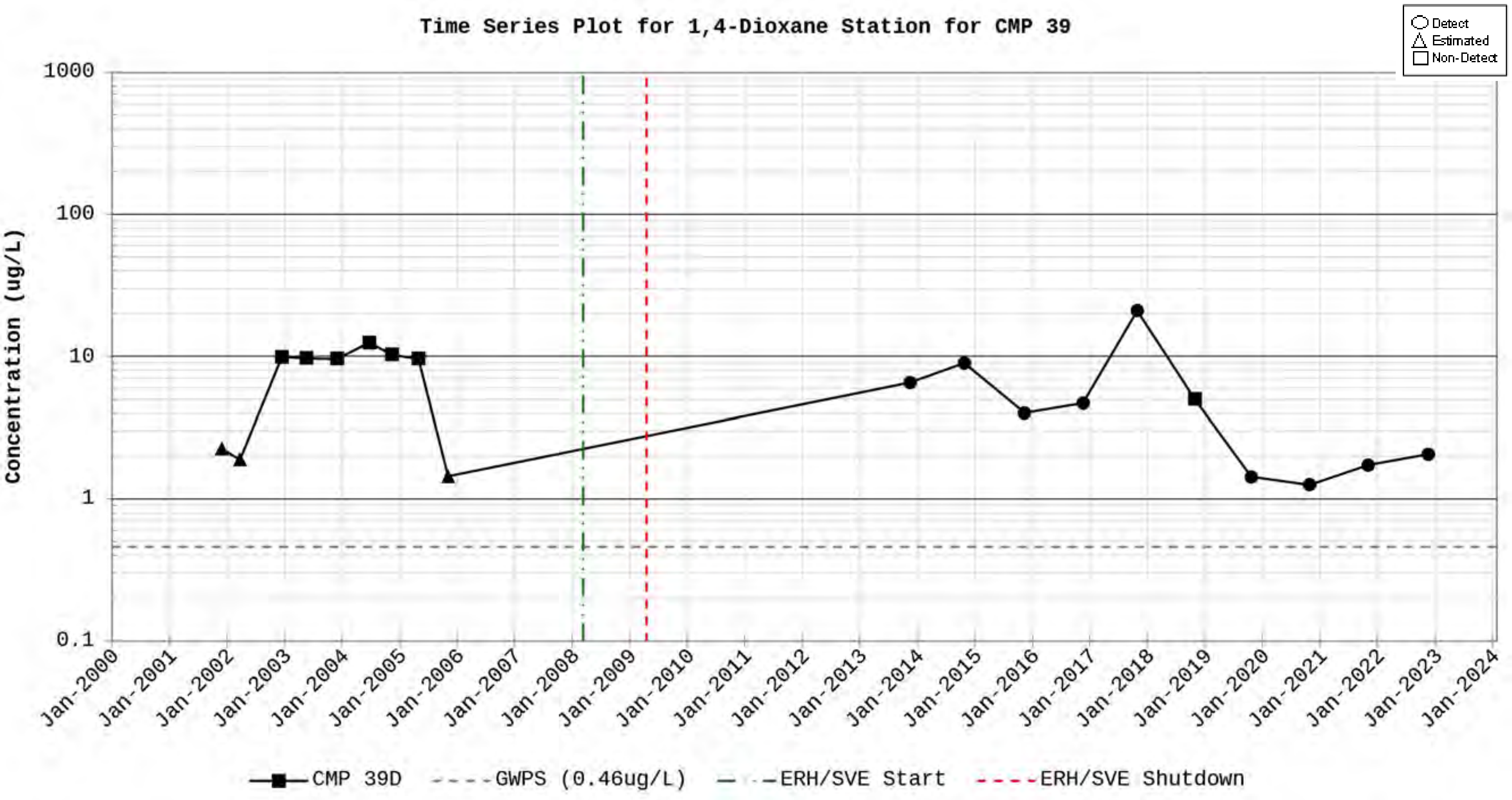
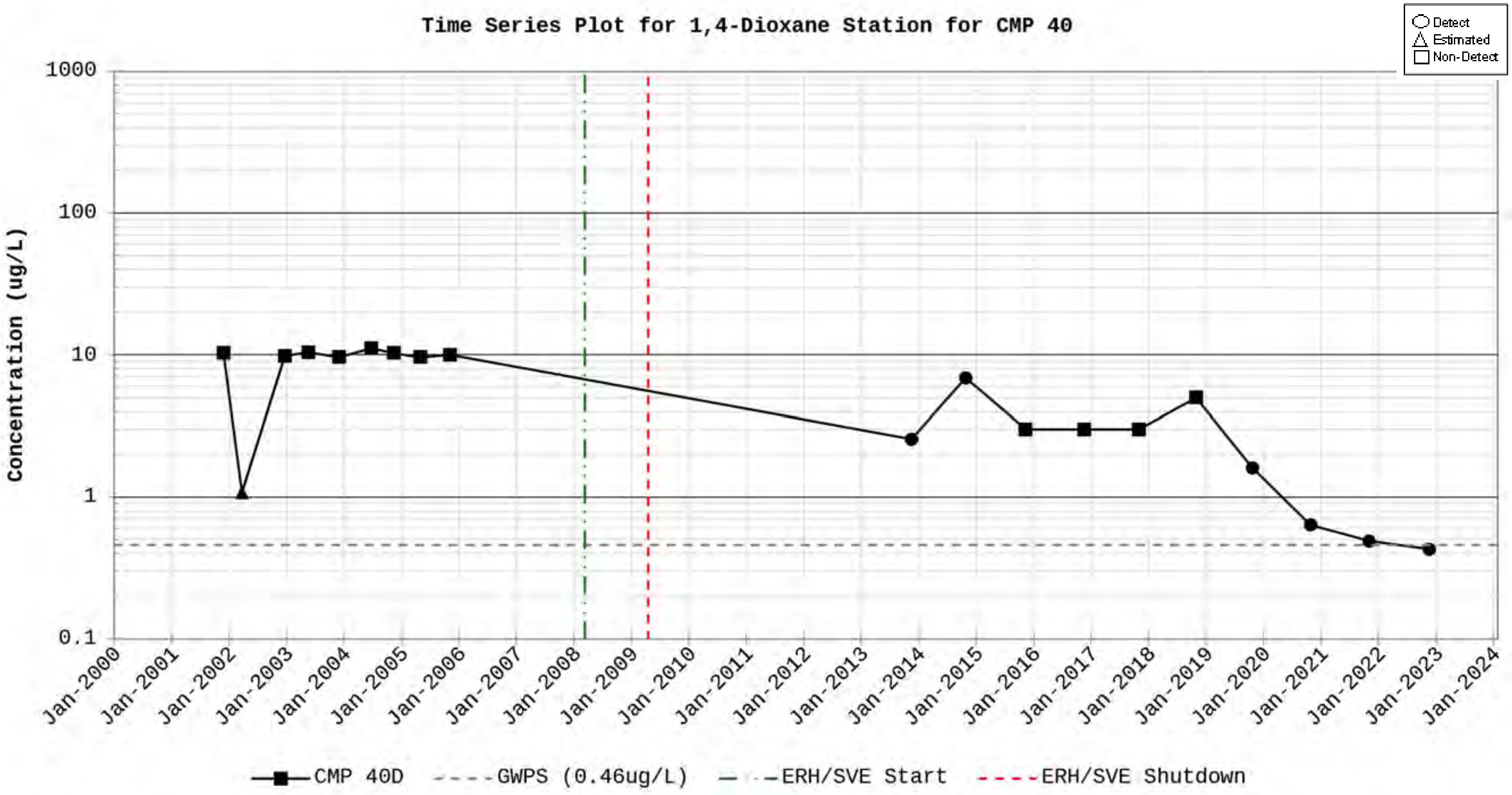
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 37D
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP 38
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 38D
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP 39
Detect
Estimated
Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 39D
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP 40
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
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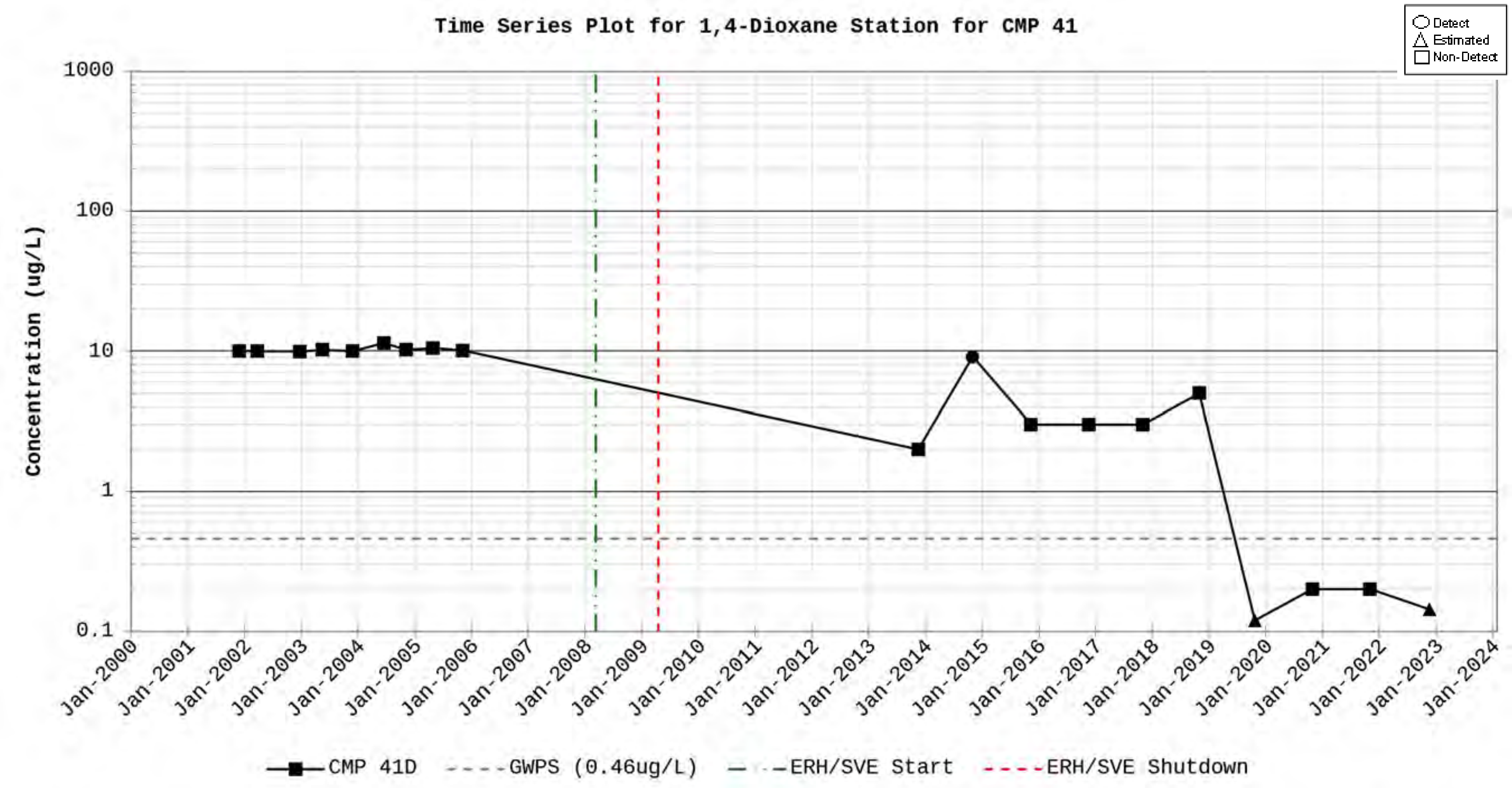
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 40D
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP 41
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
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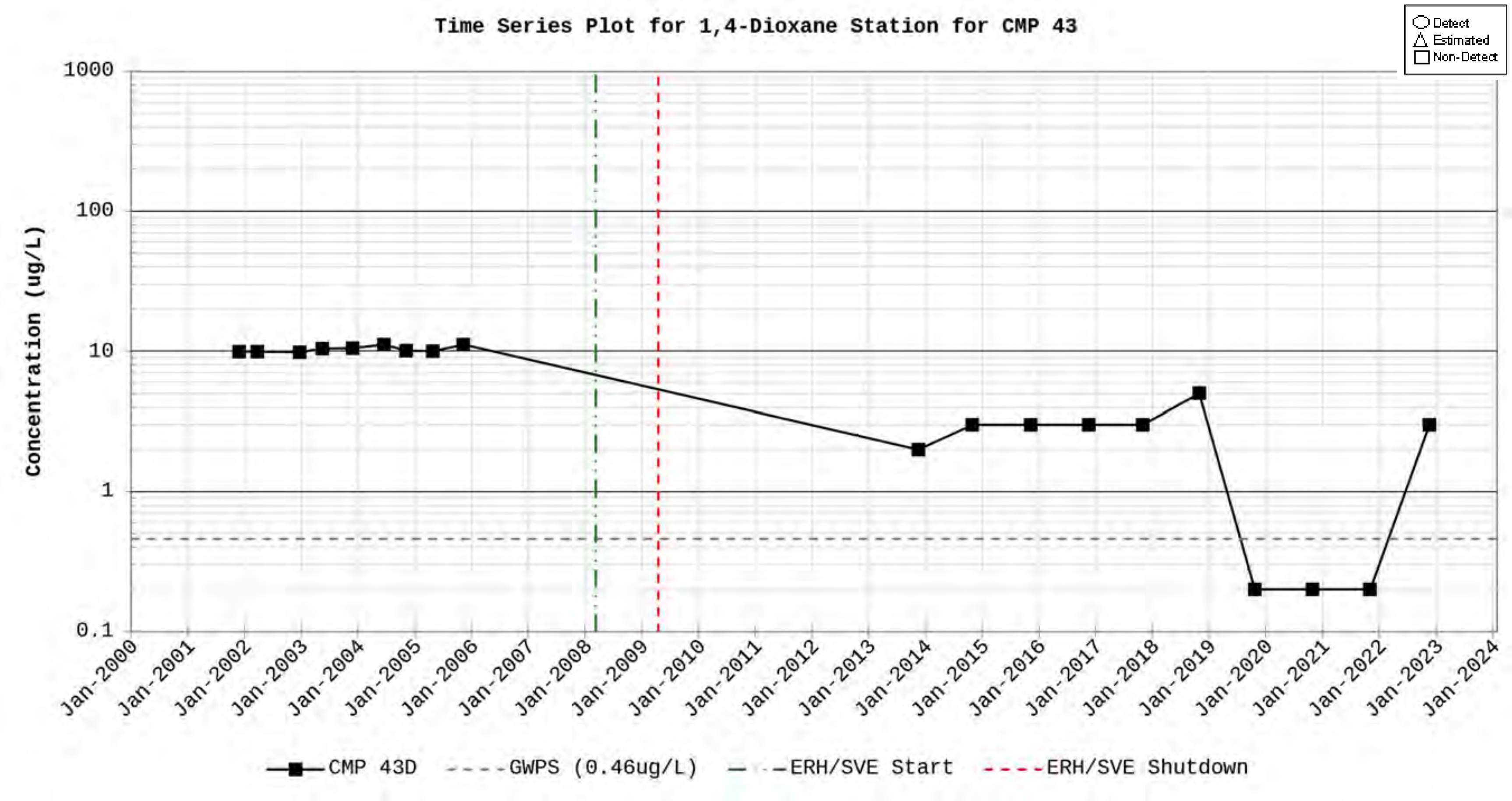
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 41D
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP 43
Detect
Estimated
Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
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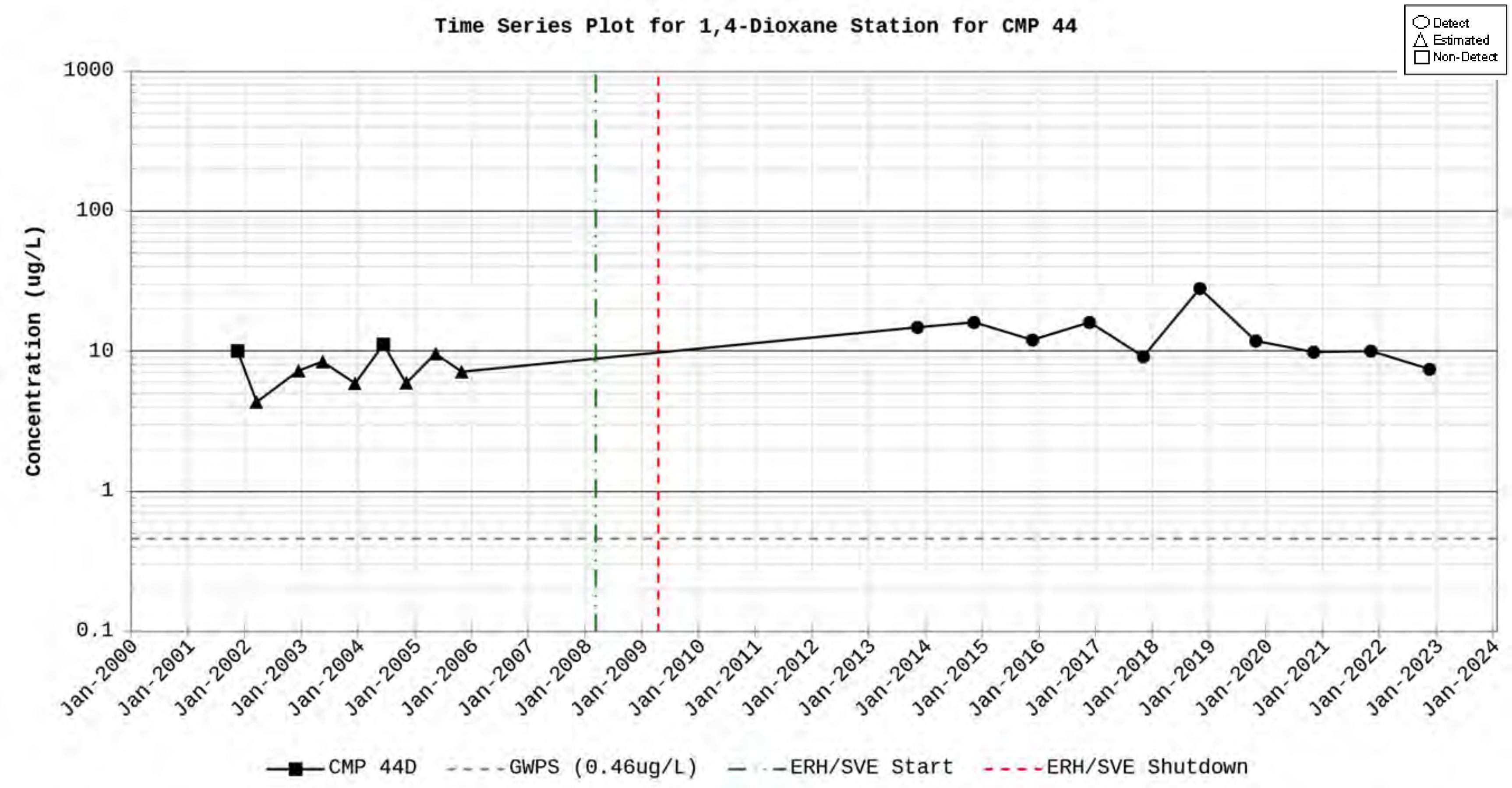
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 43D
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP 44
Detect
Estimated
Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
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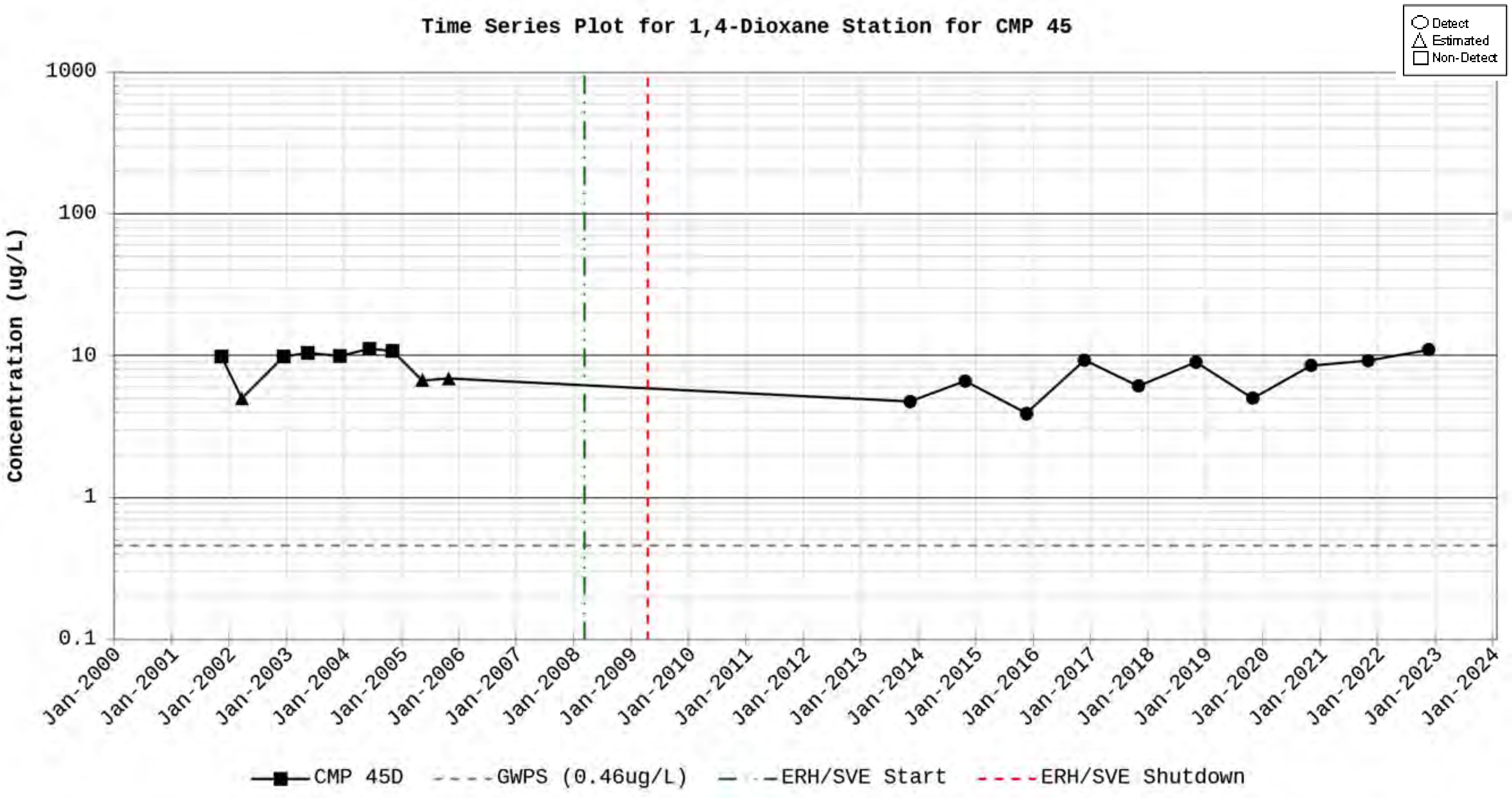
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 44D
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP 45
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
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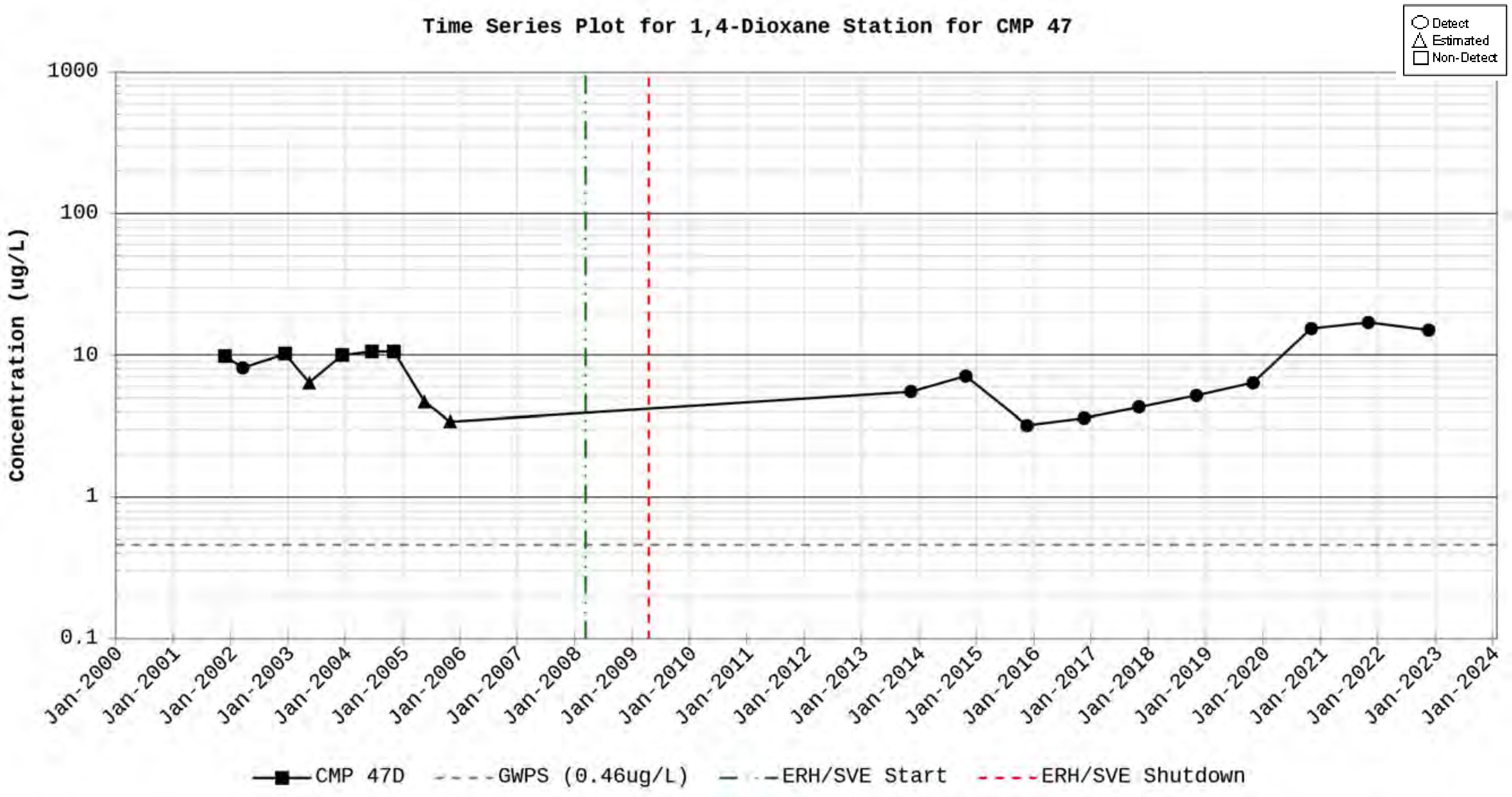
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 45D
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP 47
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
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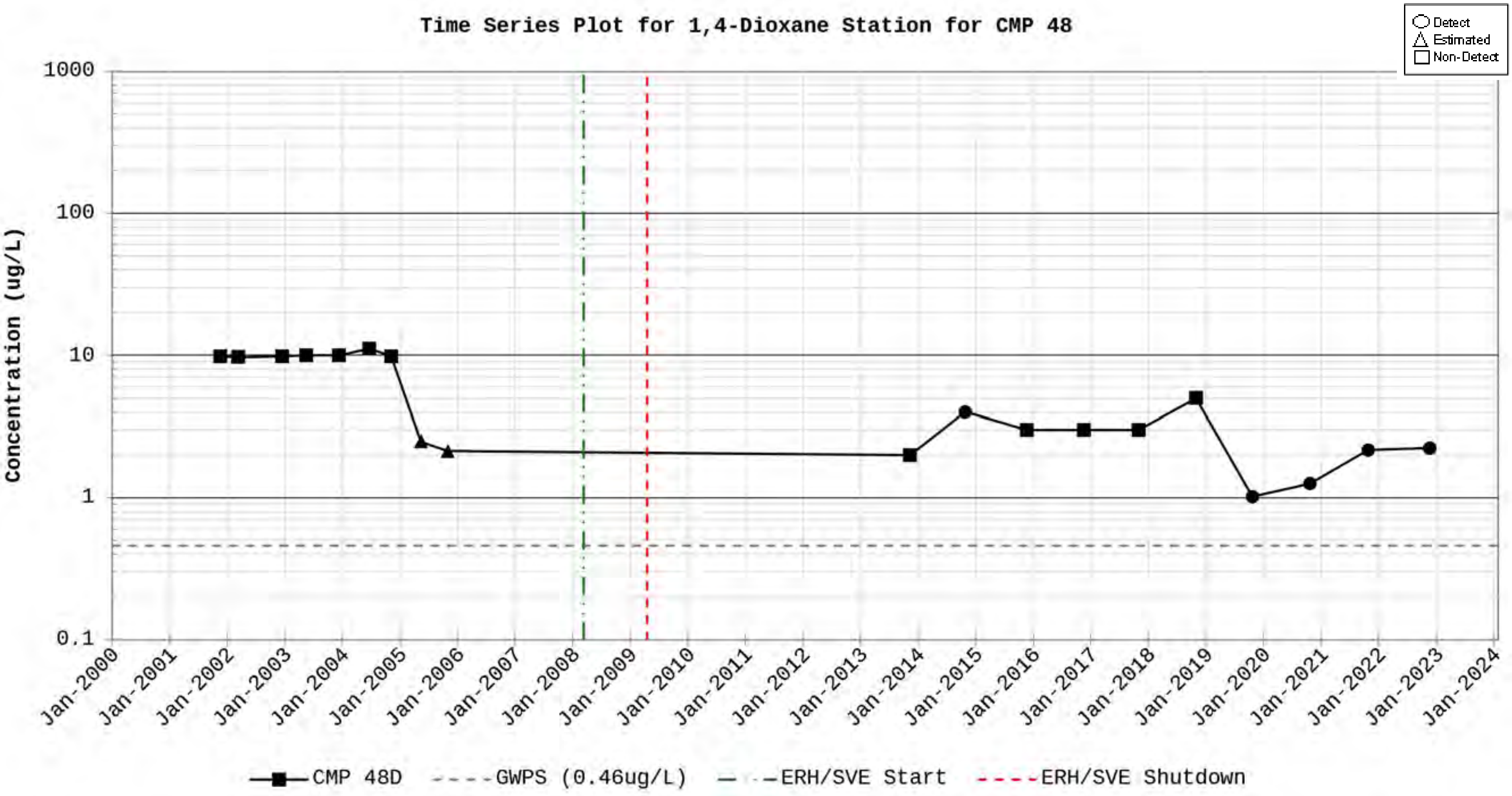
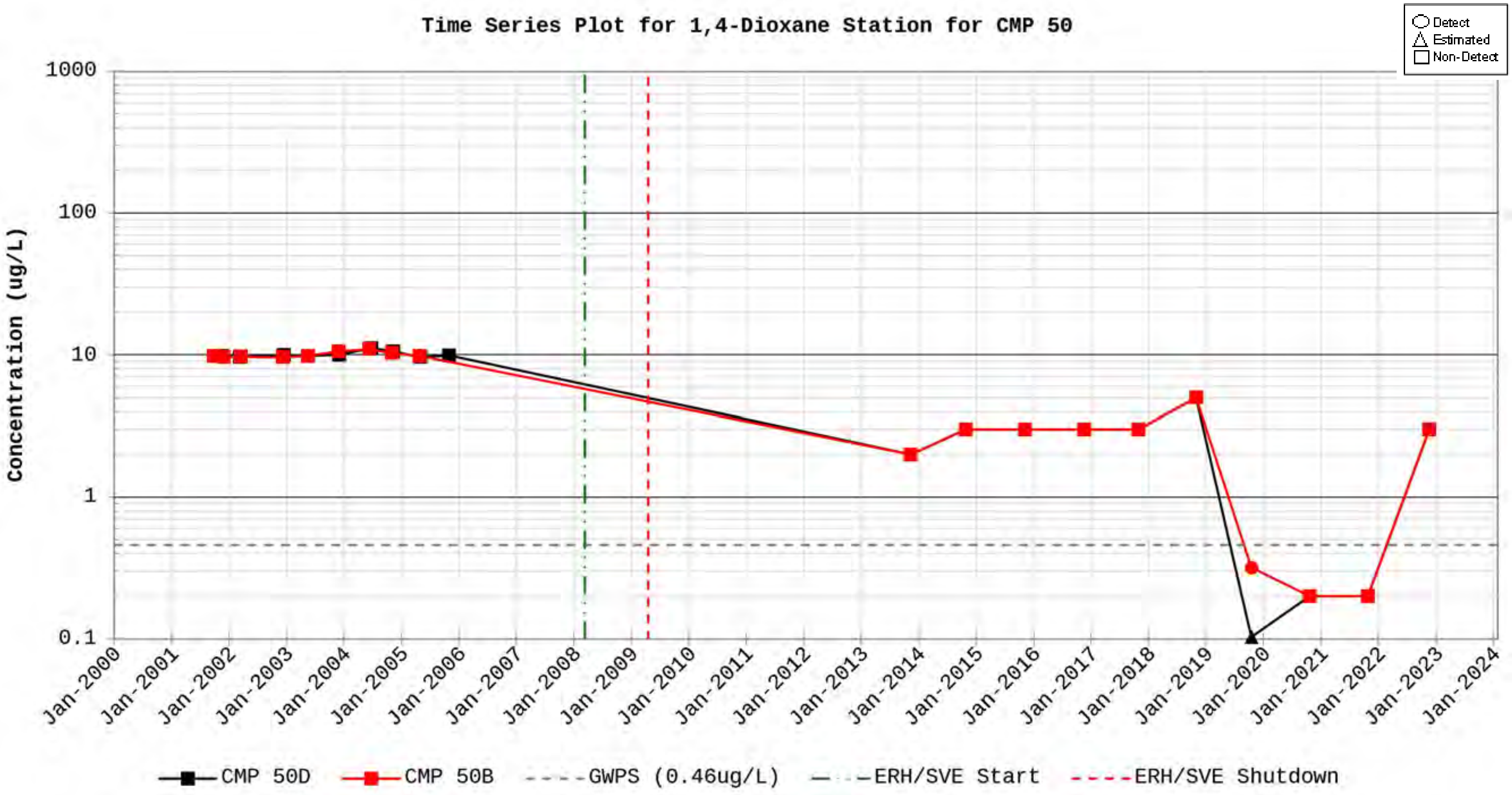
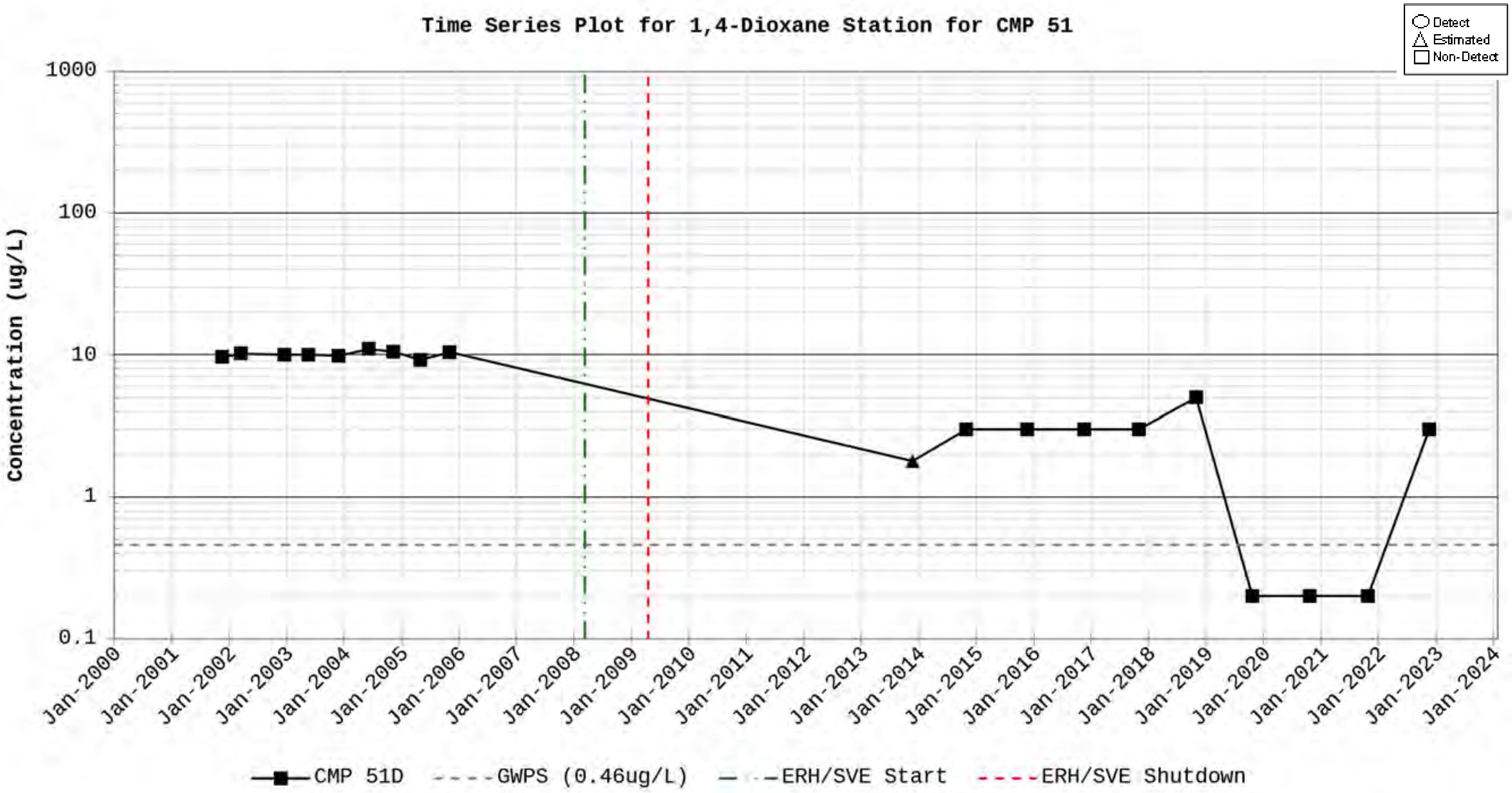
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 47D
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP 48
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 48D
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP 50
Detect
Estimated
Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 50D
CMP 50B
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP 51
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
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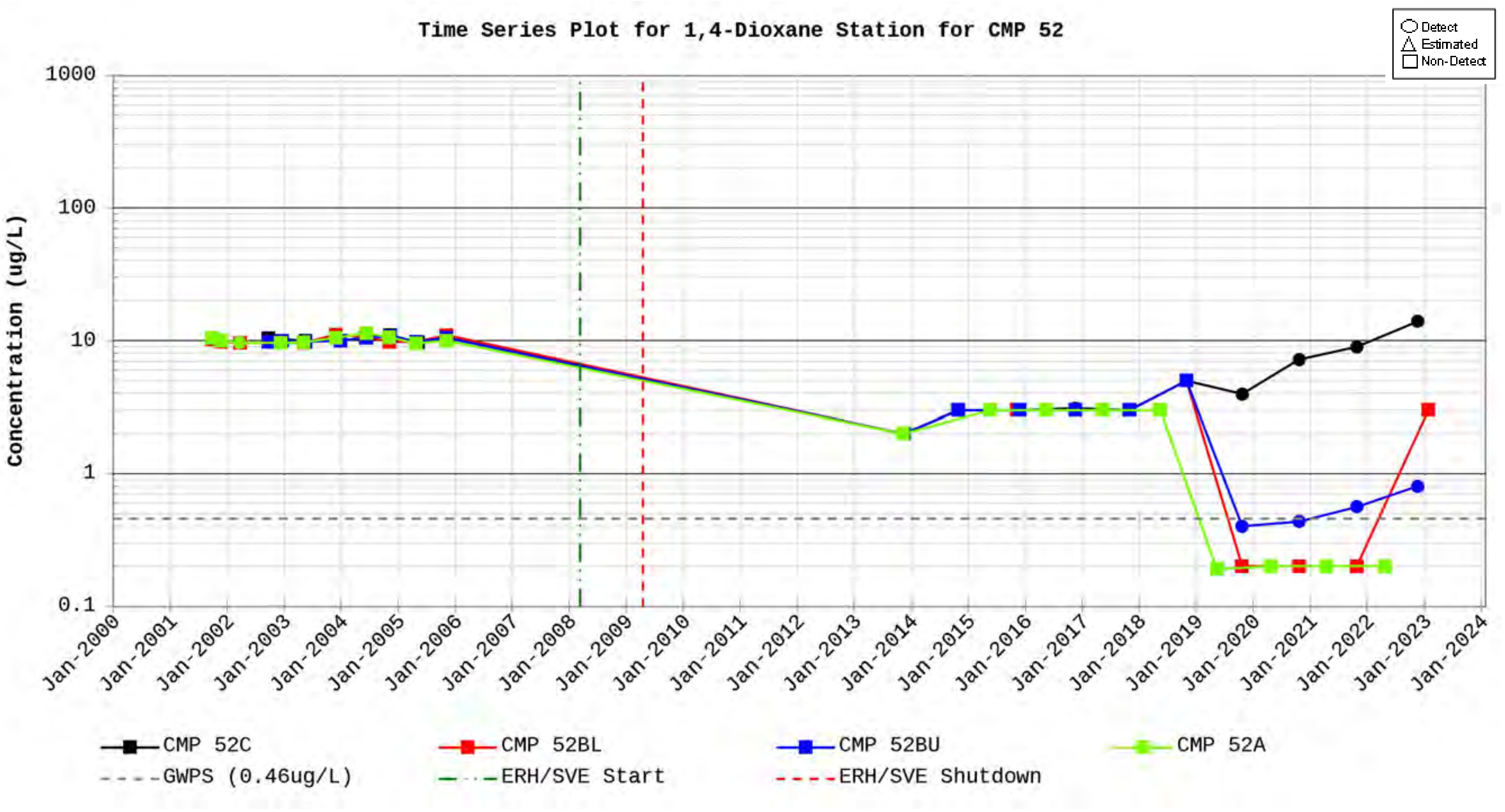
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 51D
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP 52
Detect
Estimated
Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
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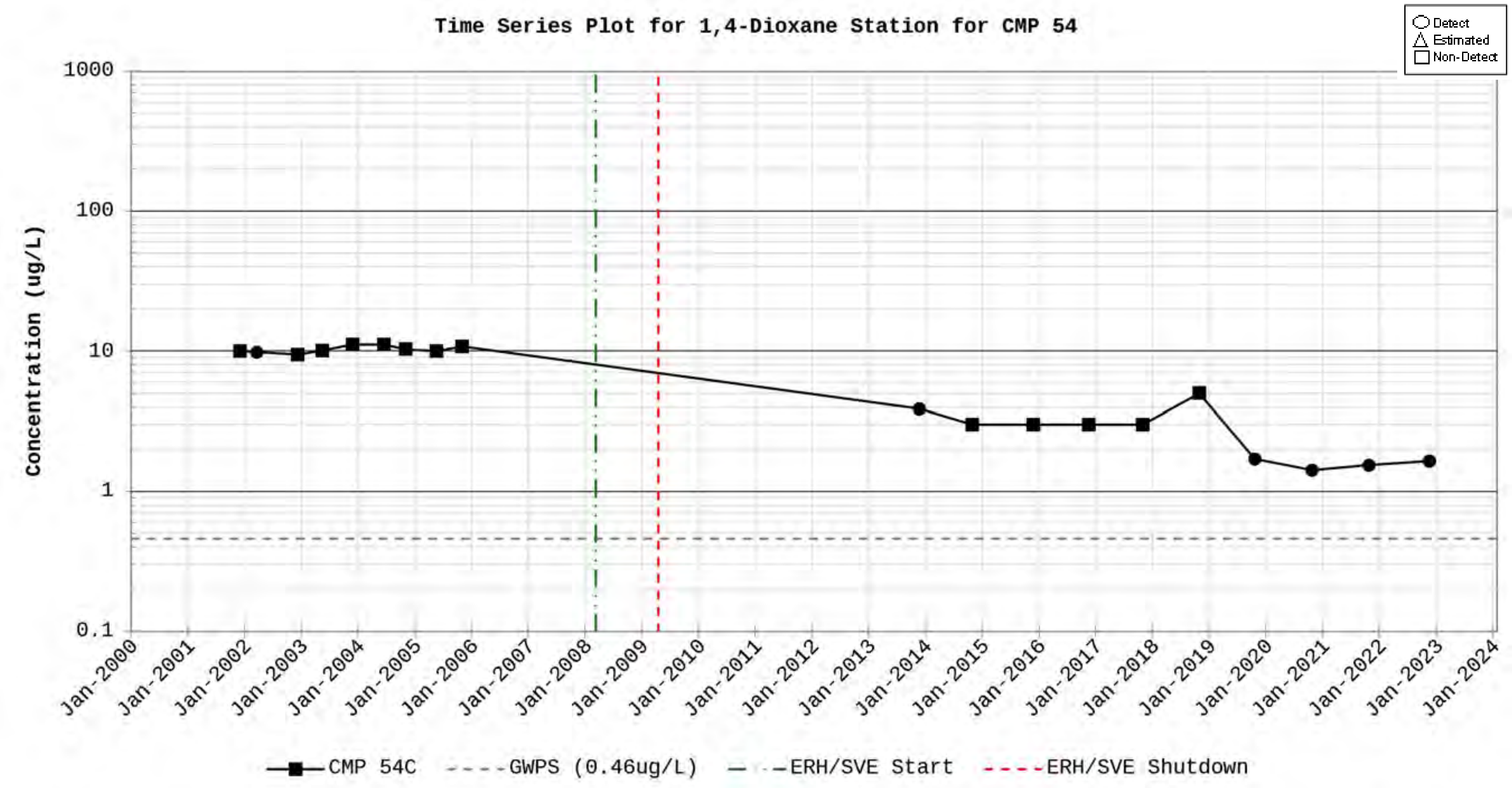
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 52C
CMP 52BL
CMP 52BU
CMP 52A
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP 54
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
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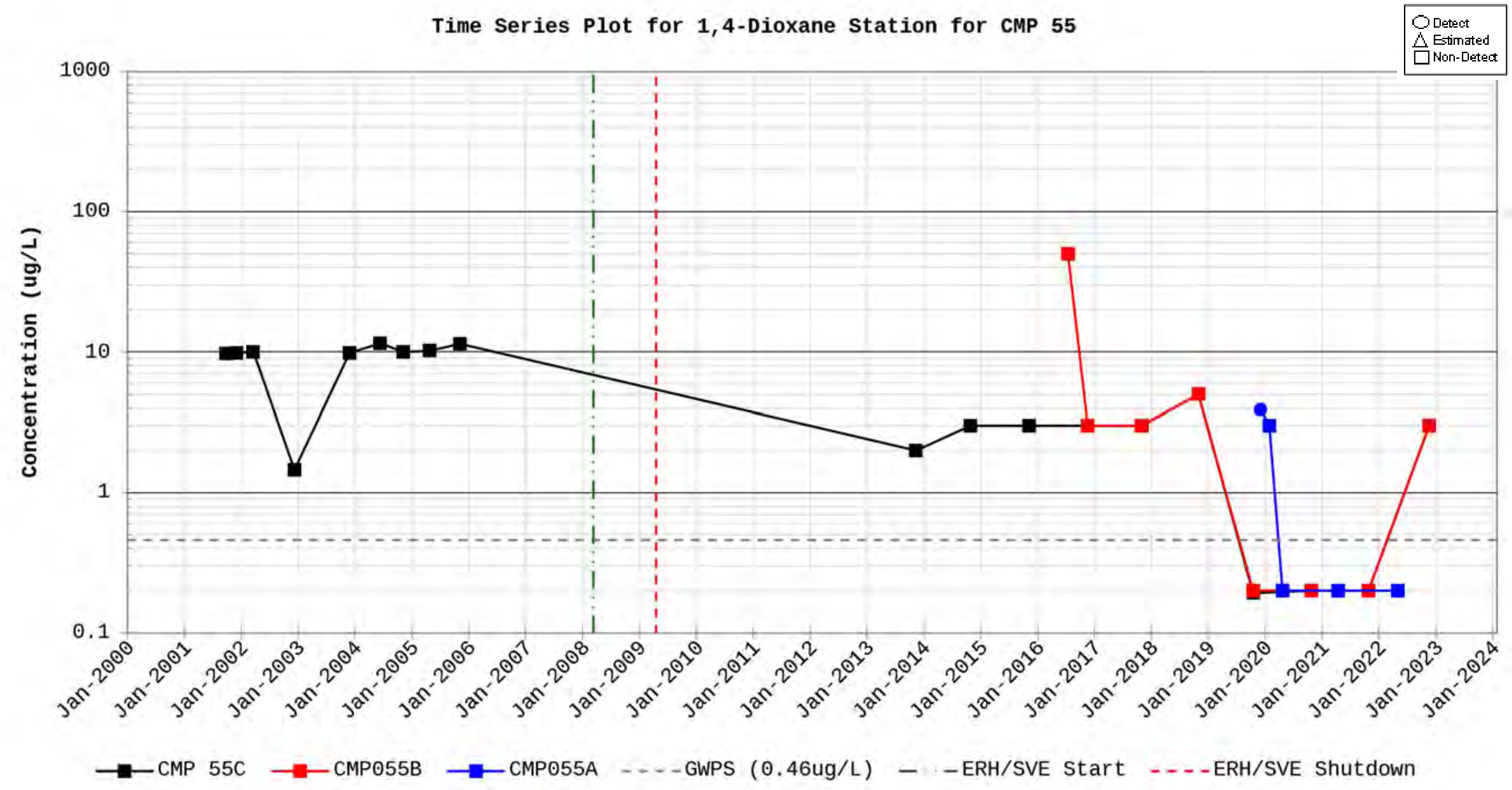
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 54C
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP 55
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
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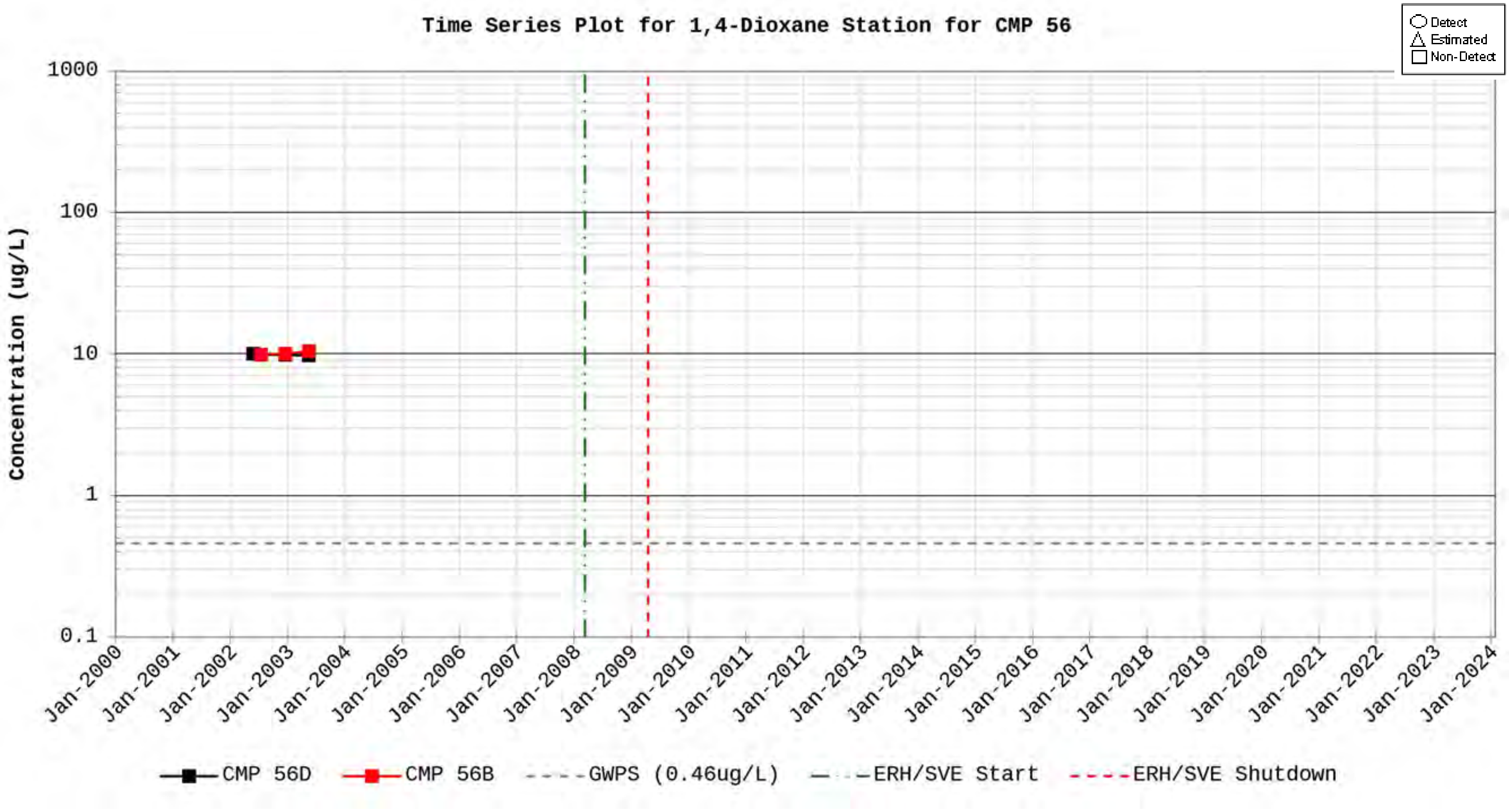
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 55C
CMP055B
CMP055A
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP 56
Detect
Estimated
Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
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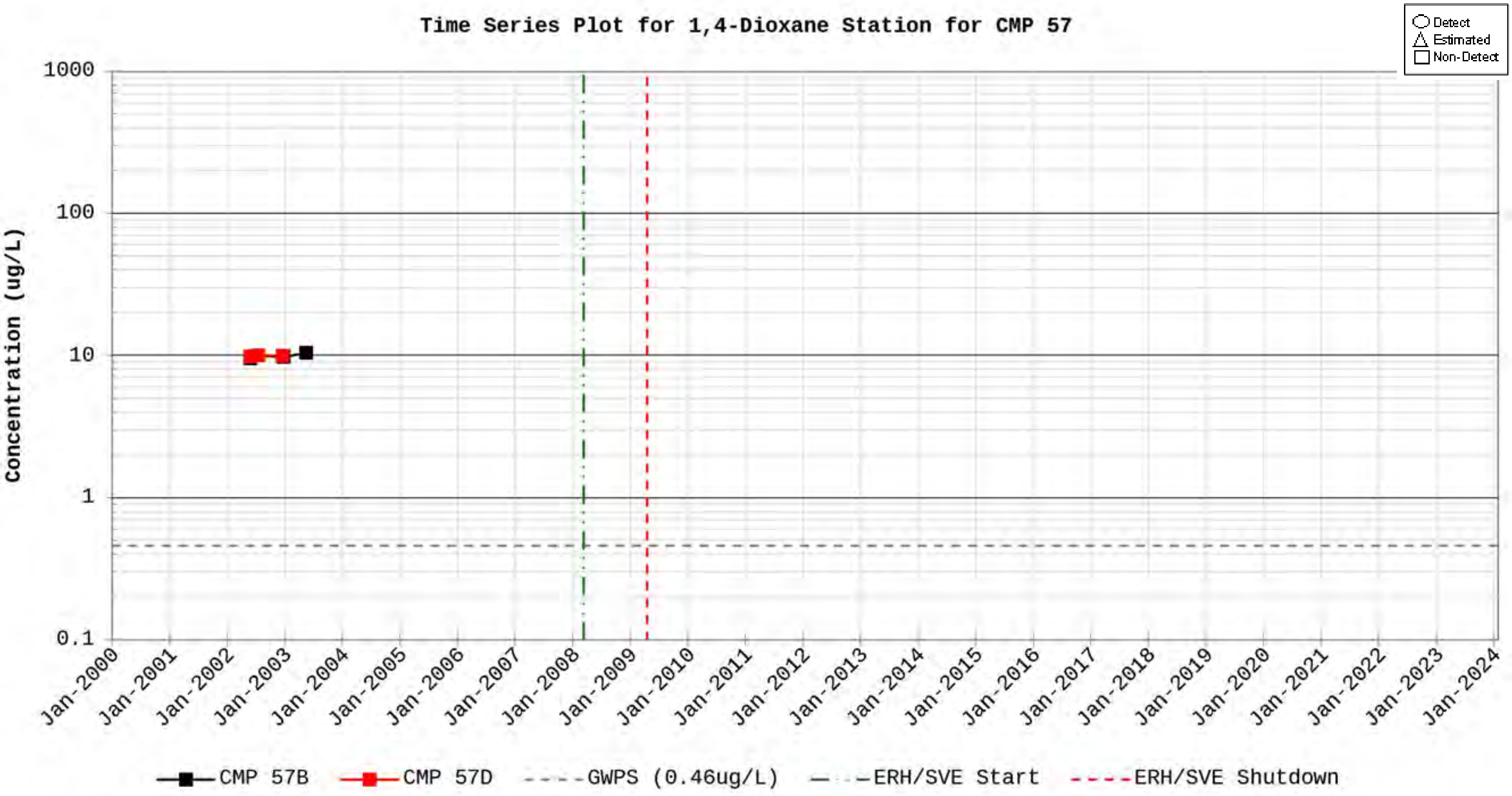
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 56D
CMP 56B
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP 57
Detect
Estimated
Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
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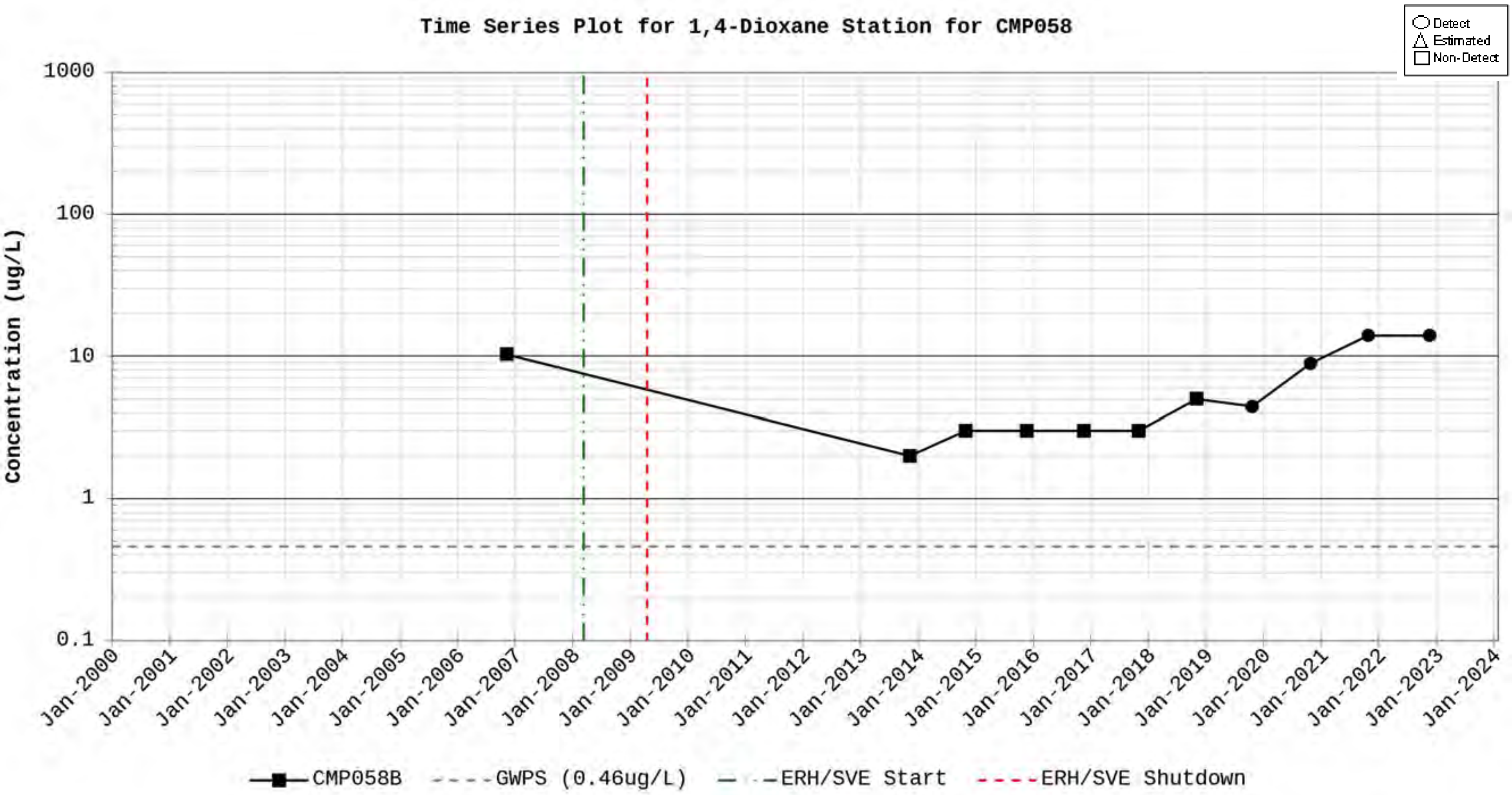
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 57B
CMP 57D
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP058
Detect
Estimated
Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
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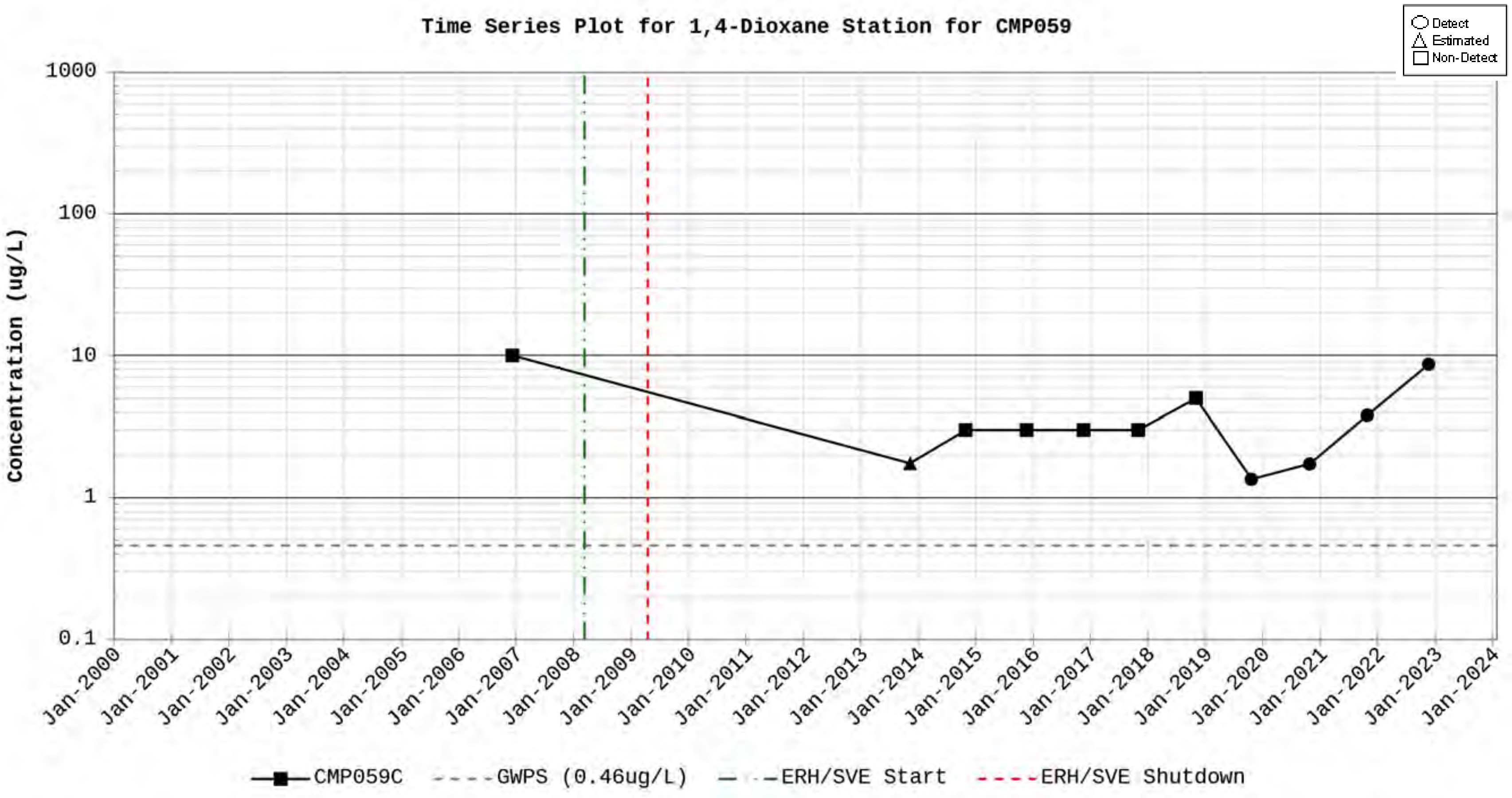
Jan-2022
Jan-2023
Jan-2024
CMP058B
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP059
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
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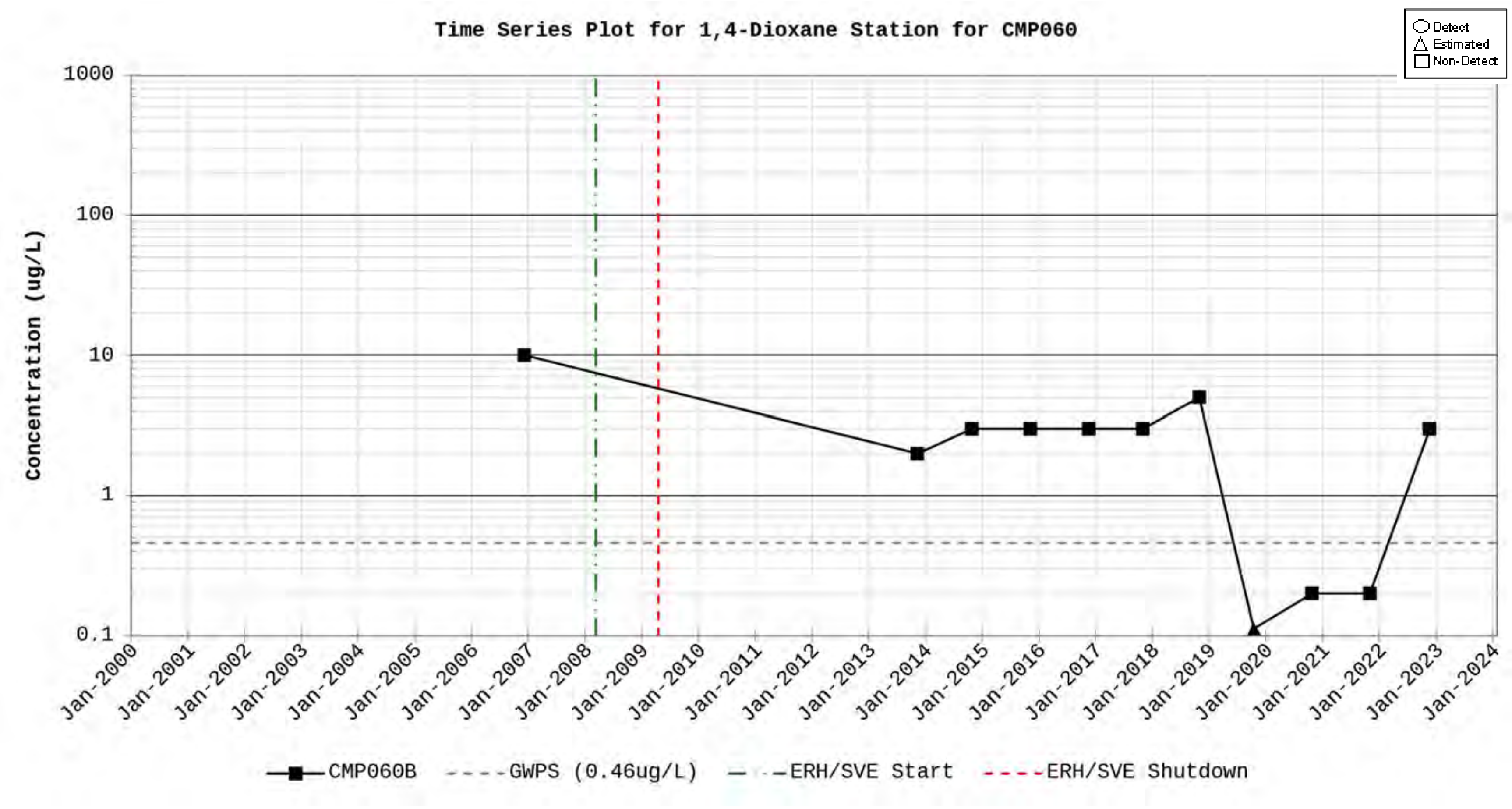
Jan-2022
Jan-2023
Jan-2024
CMP059C
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP060
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
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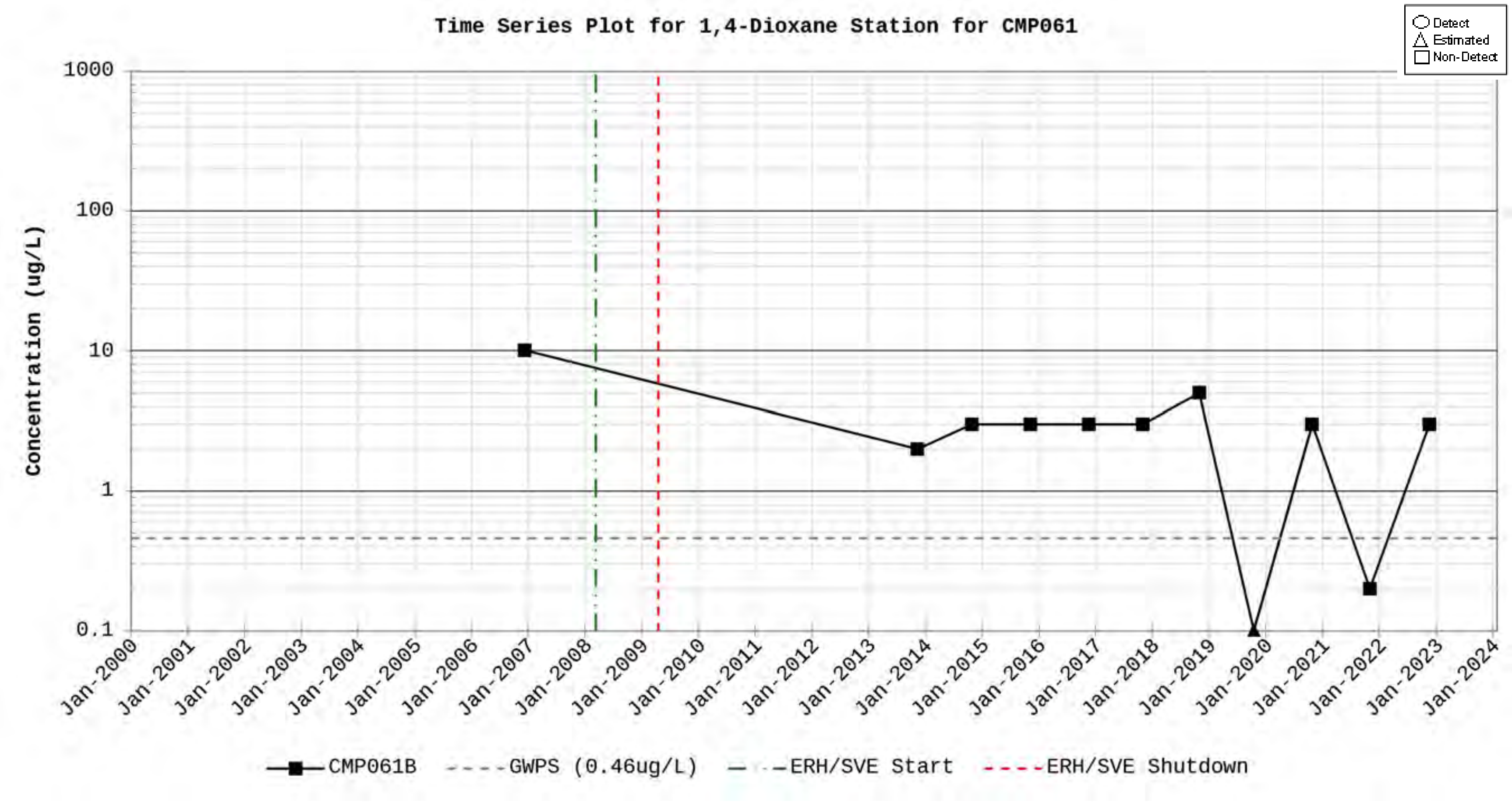
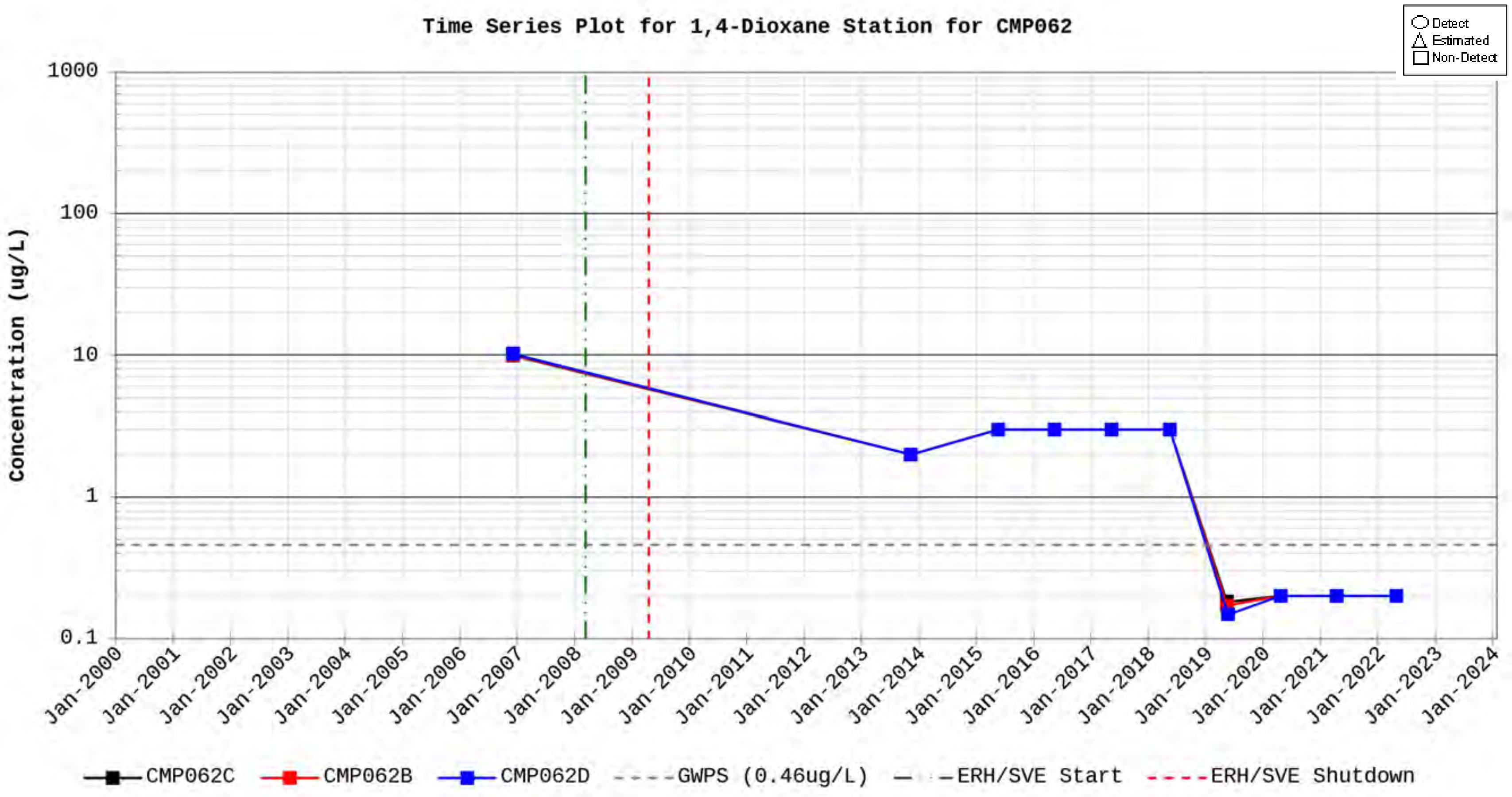
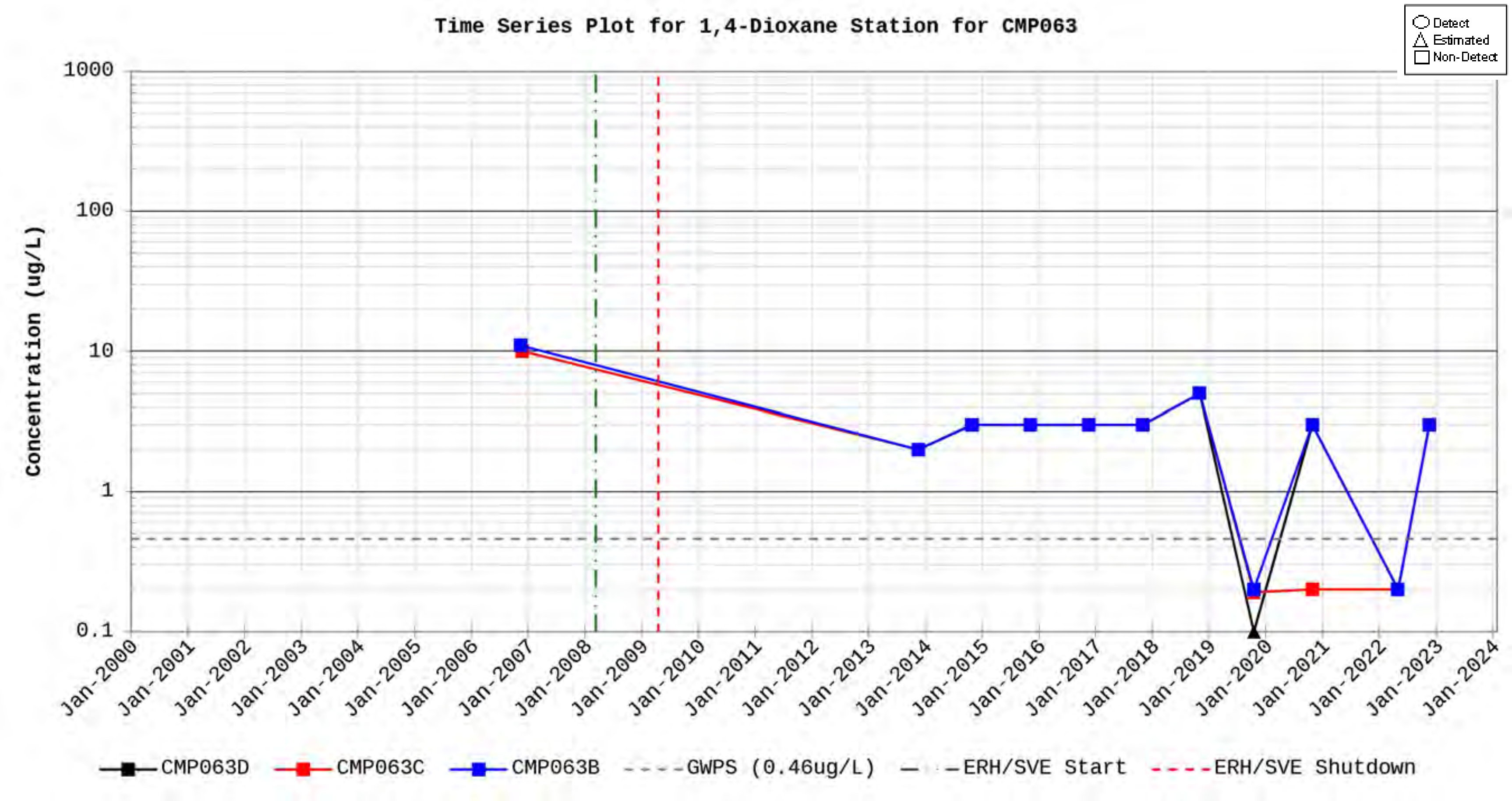
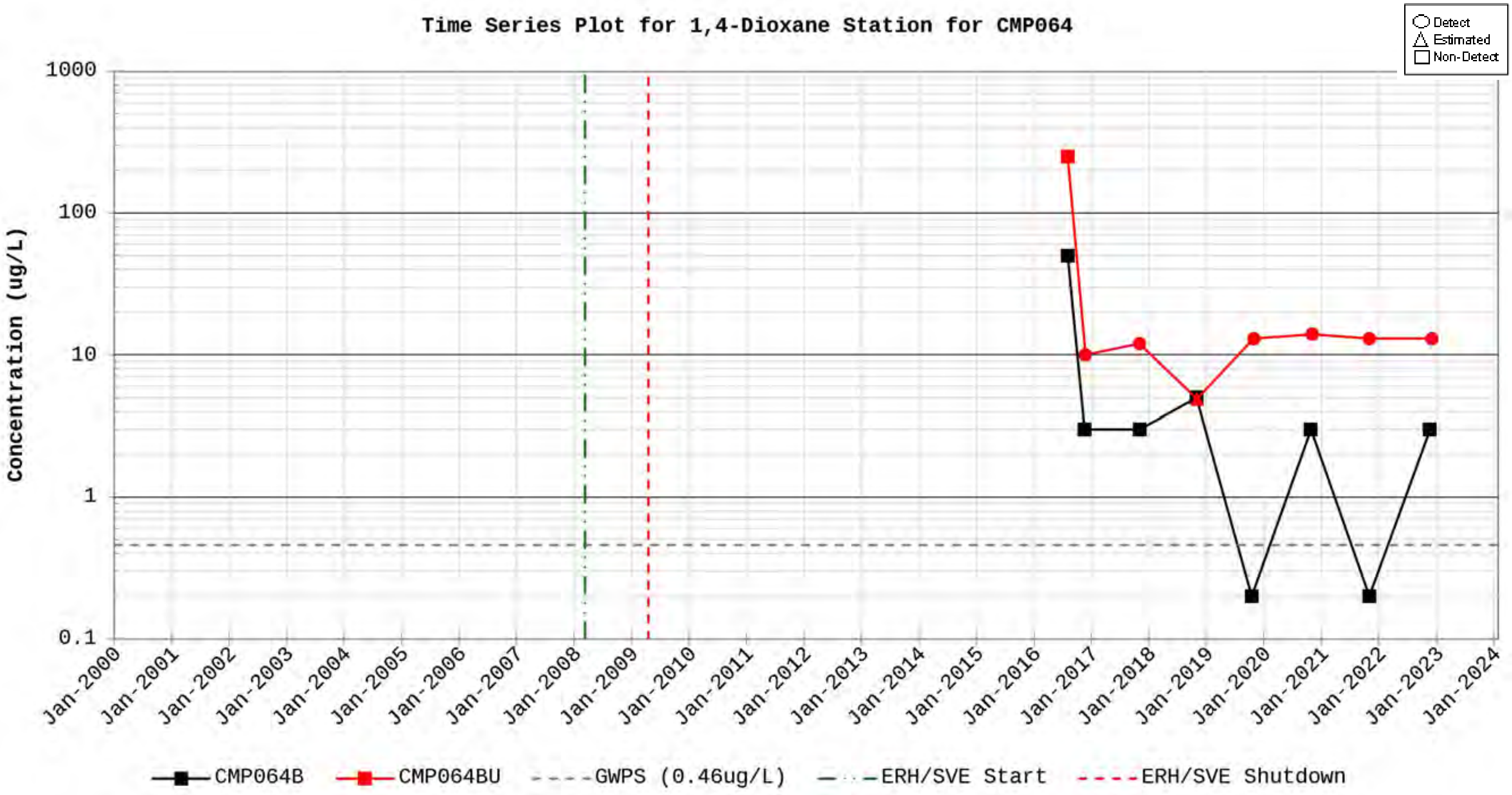
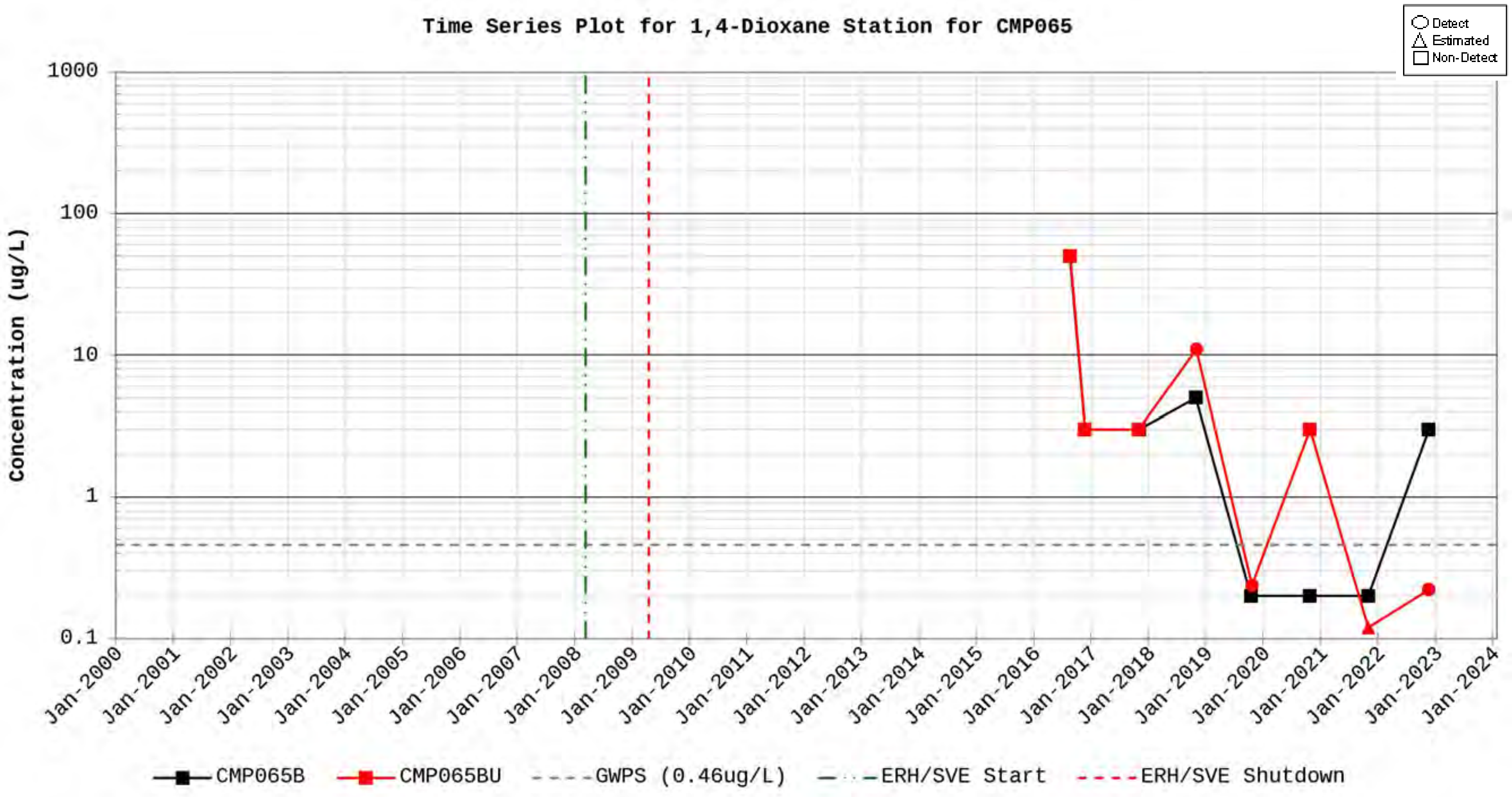
Jan-2022
Jan-2023
Jan-2024
CMP060B
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown

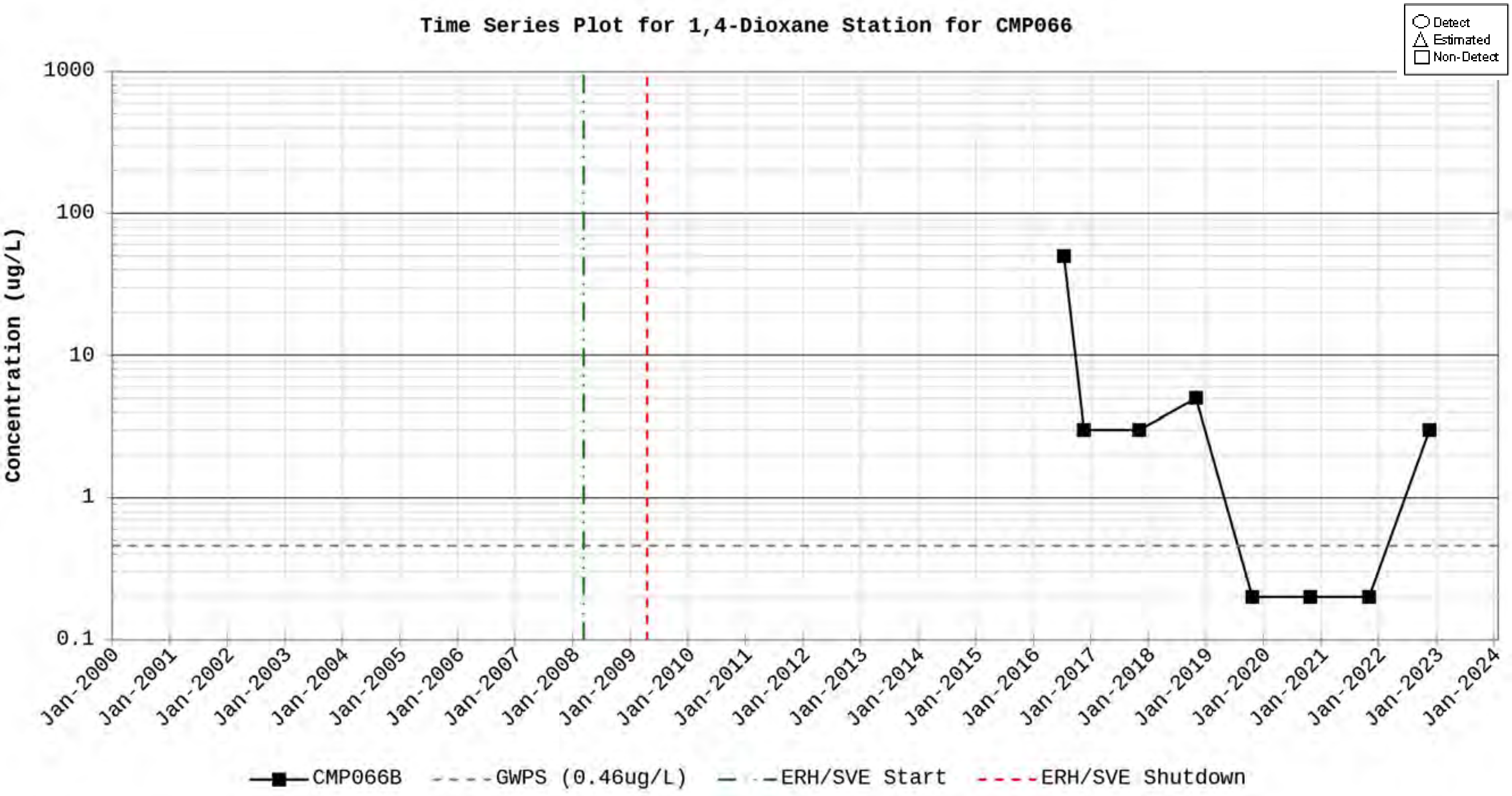

Time Series Plot for 1,4-Dioxane Station for CMP061
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP061B
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown

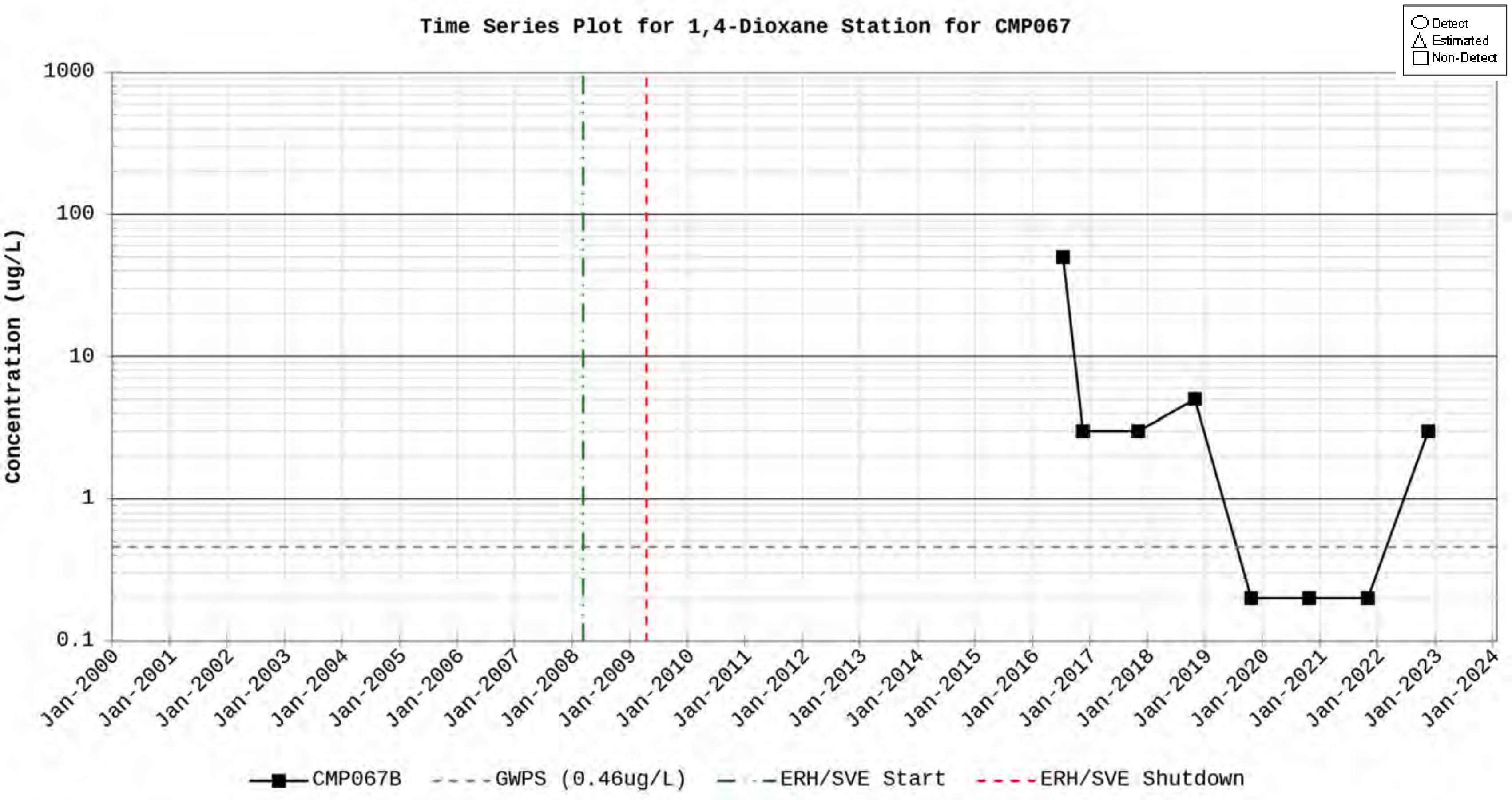

Time Series Plot for 1,4-Dioxane Station for CMP062
Detect
Estimated
Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP062C
CMP062B
CMP062D
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP063
Detect
Estimated
Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP063D
CMP063C
CMP063B
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP064
Detect
Estimated
Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP064B
CMP064BU
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP065
Detect
Estimated
Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP065B
CMP065BU
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP066
Detect
Estimated
Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP066B
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP067
Detect
Estimated
Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
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Jan-2017
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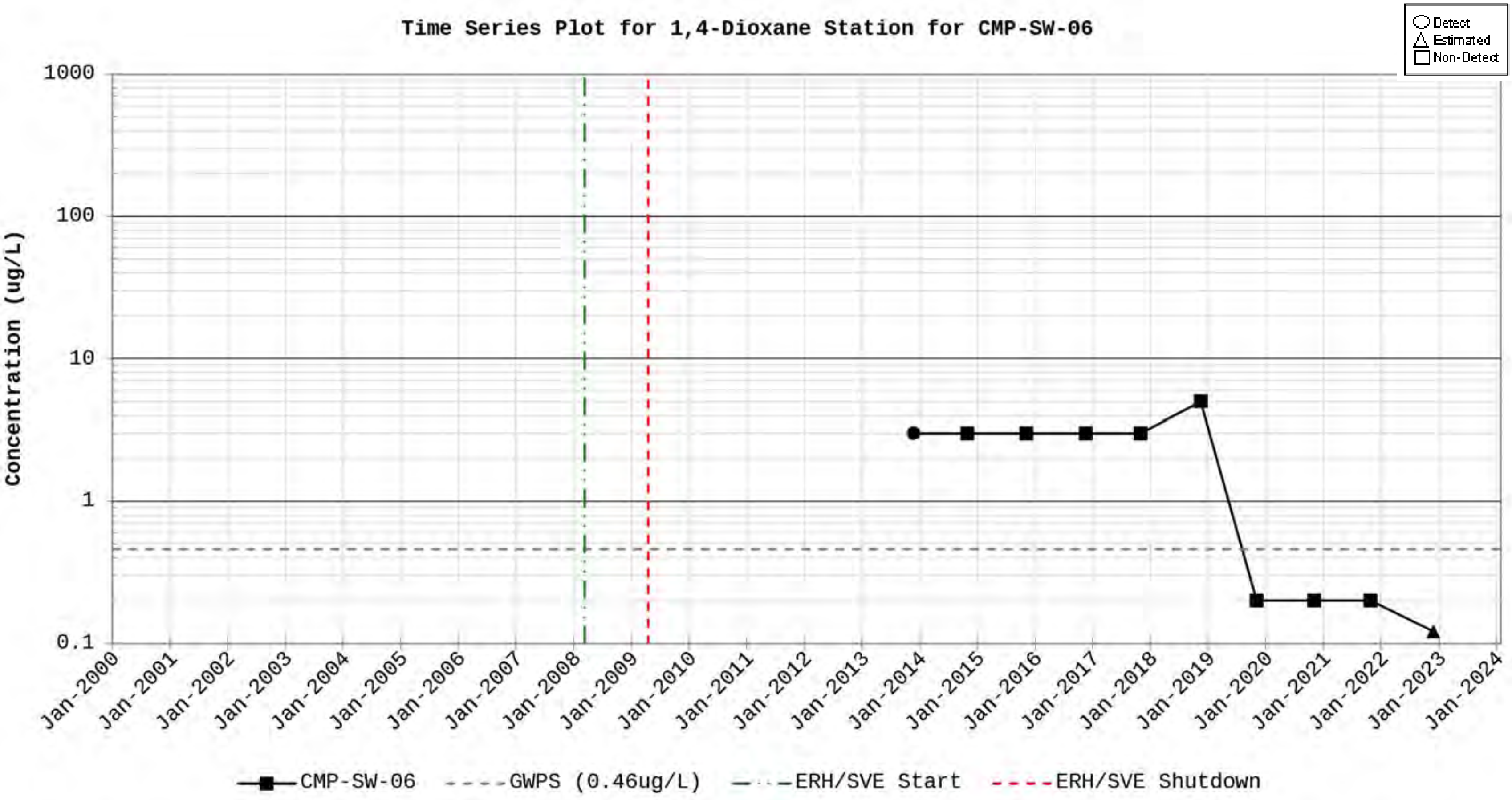
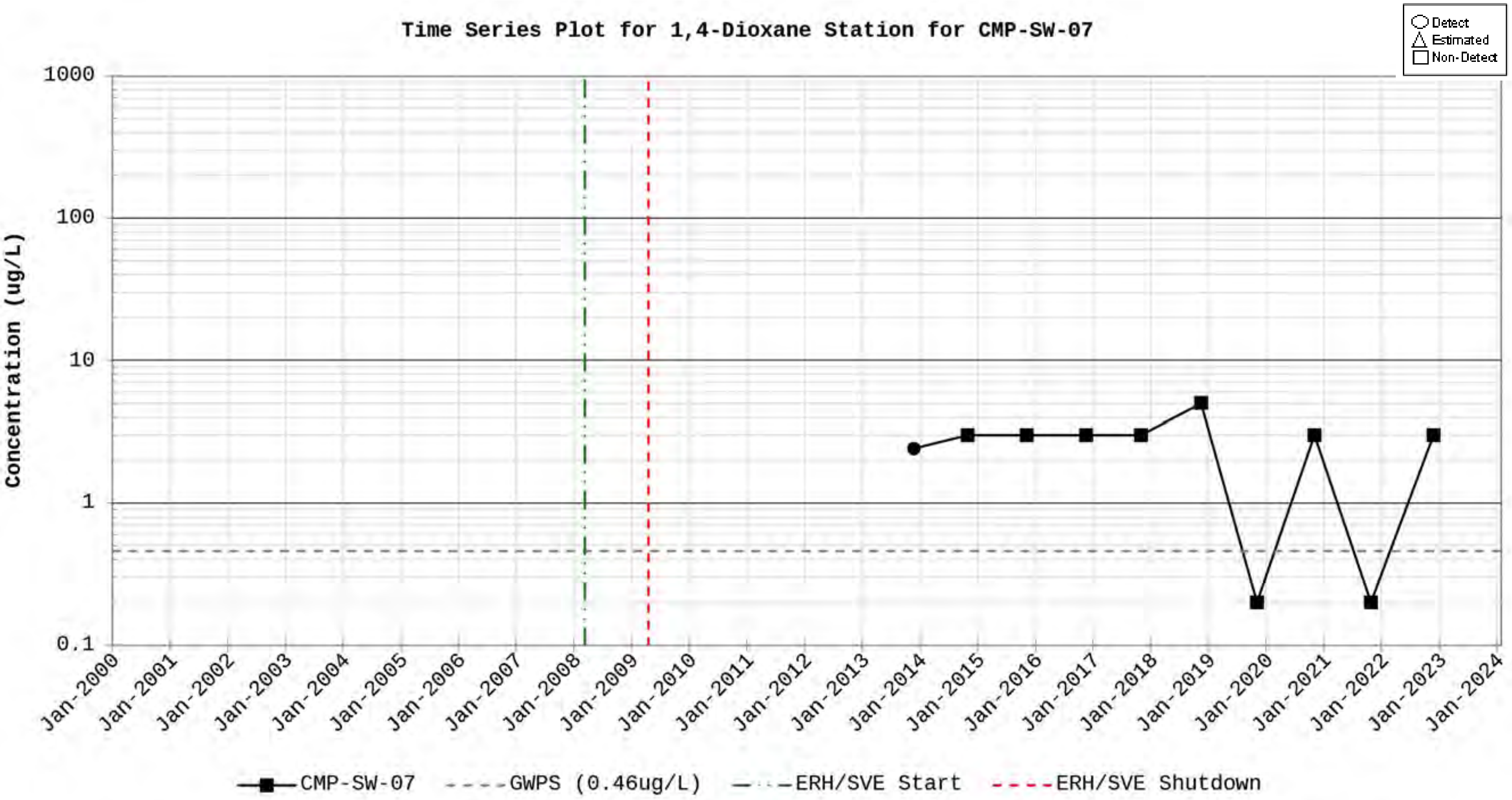
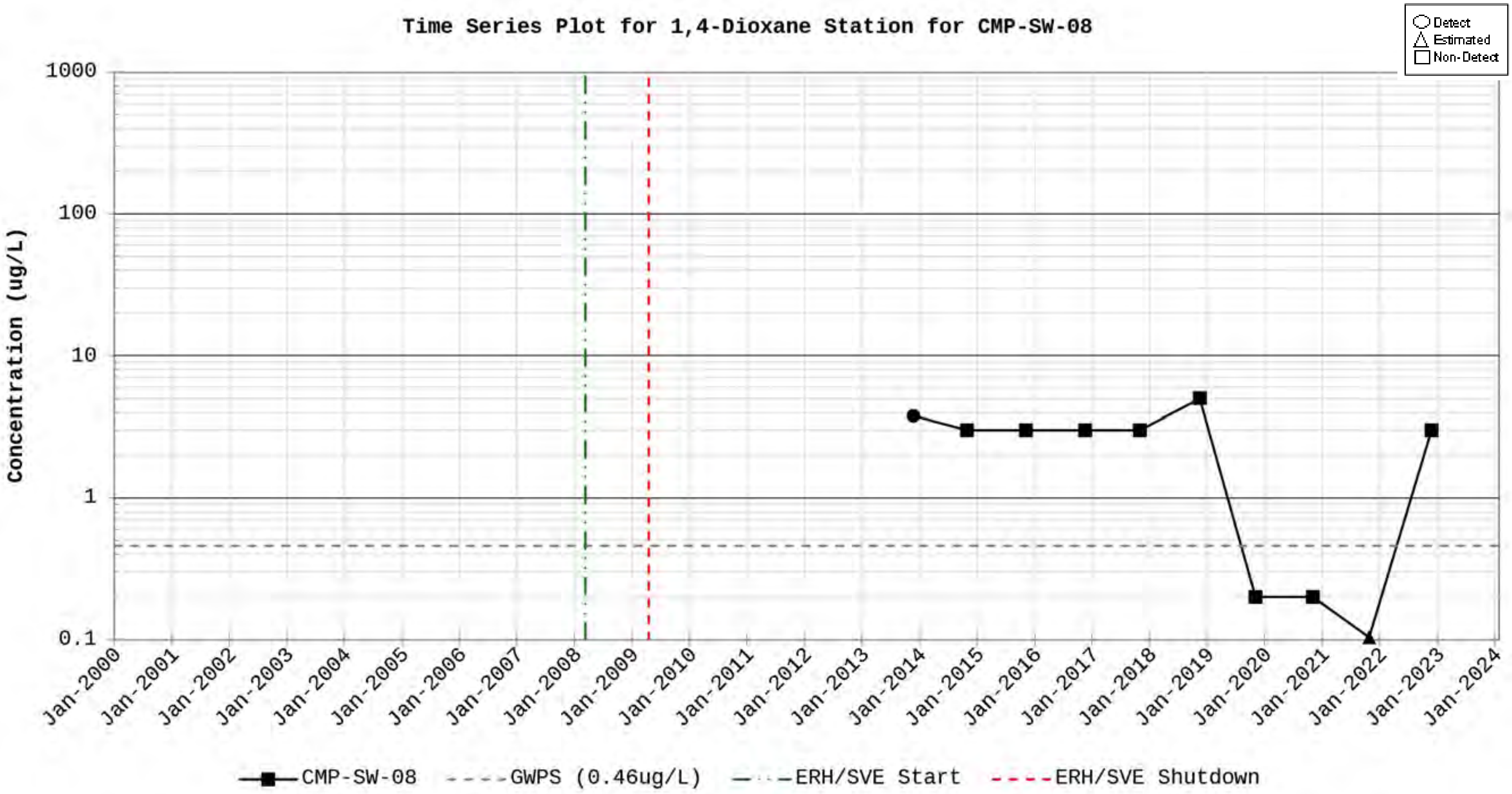
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP067B
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP-SW-06
Detect
Estimated
Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP-SW-06
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP-SW-07
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP-SW-07
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP-SW-08
Detect
Estimated
Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
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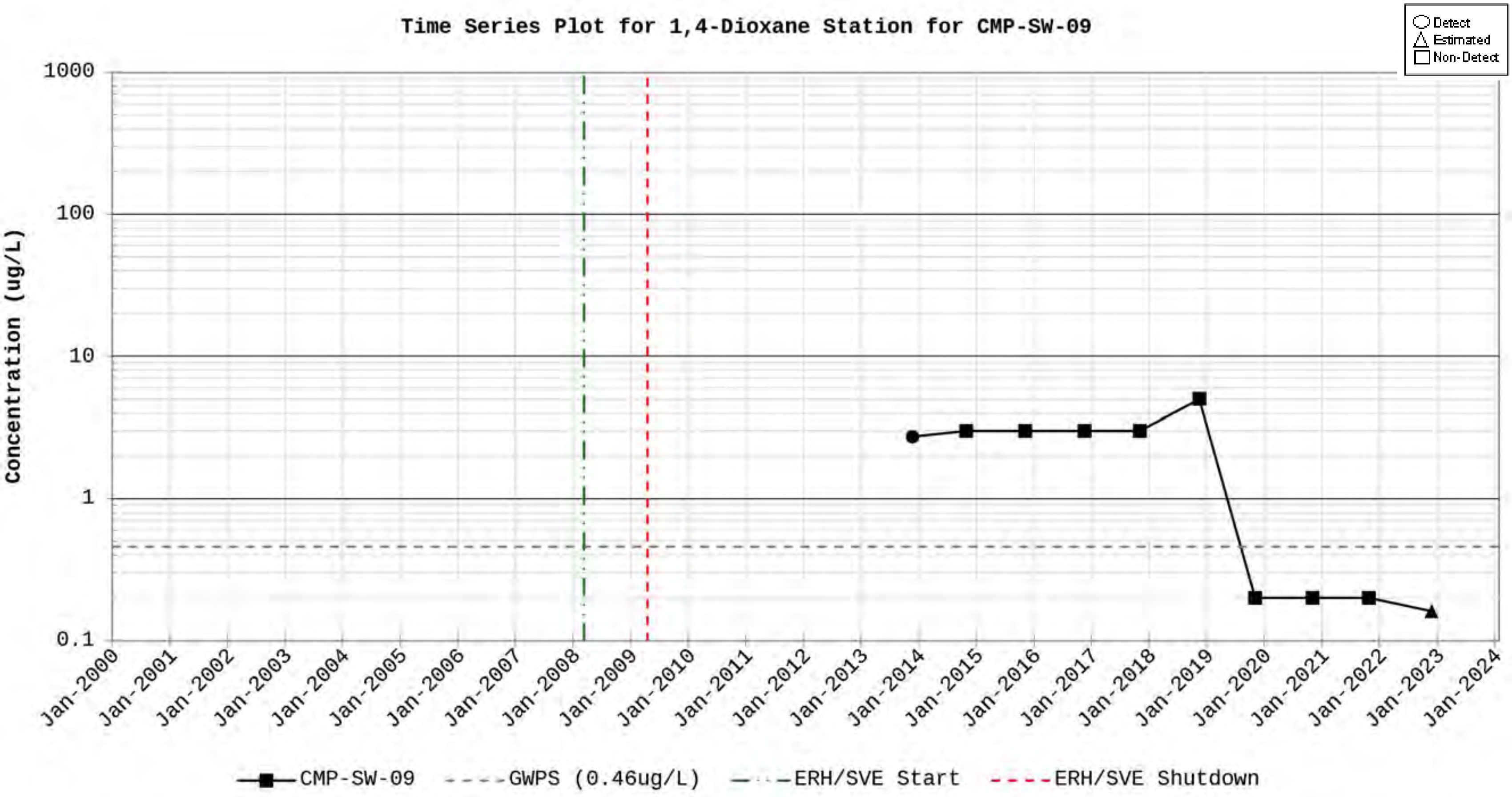
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP-SW-08
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP-SW-09
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
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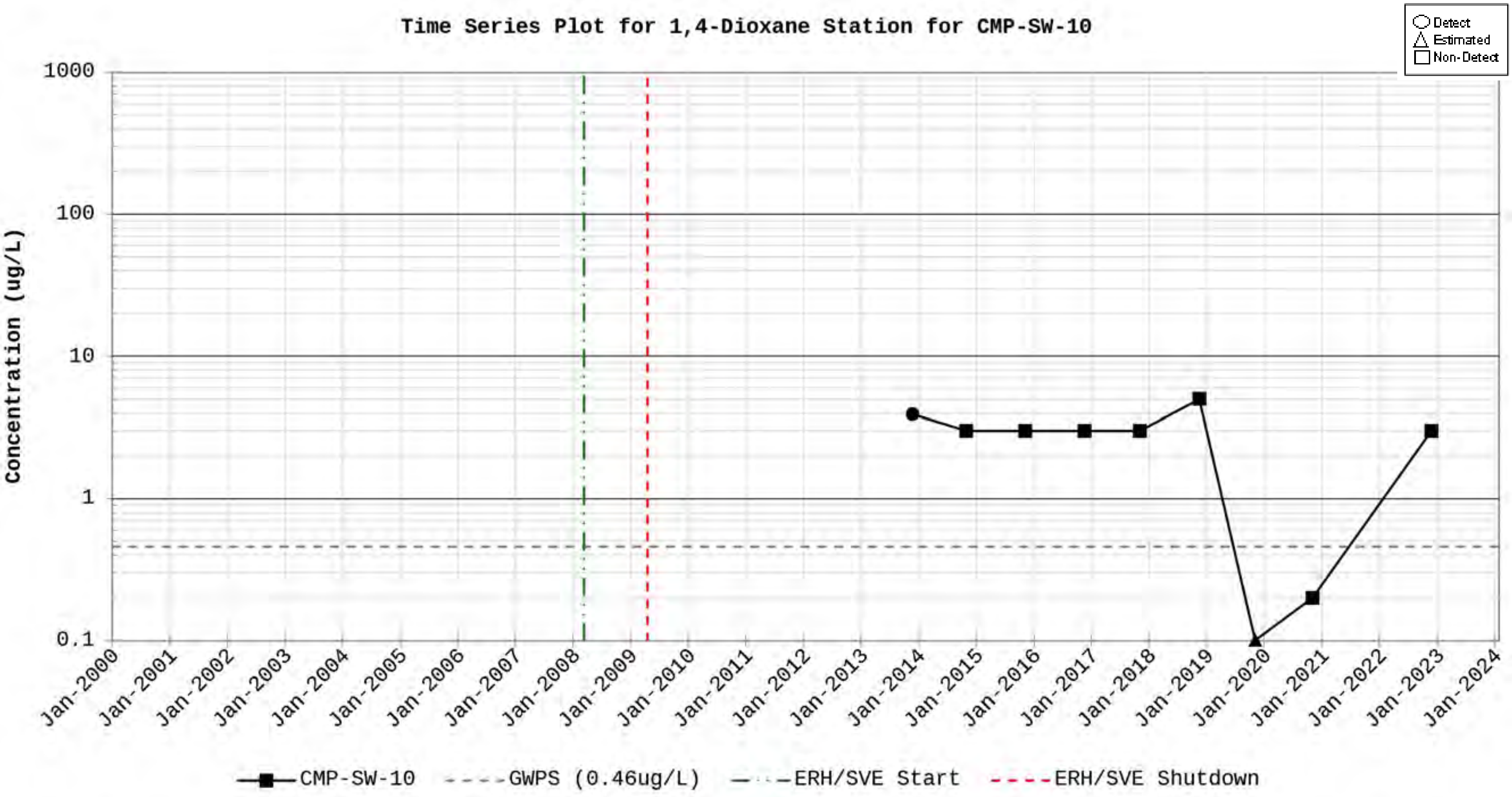
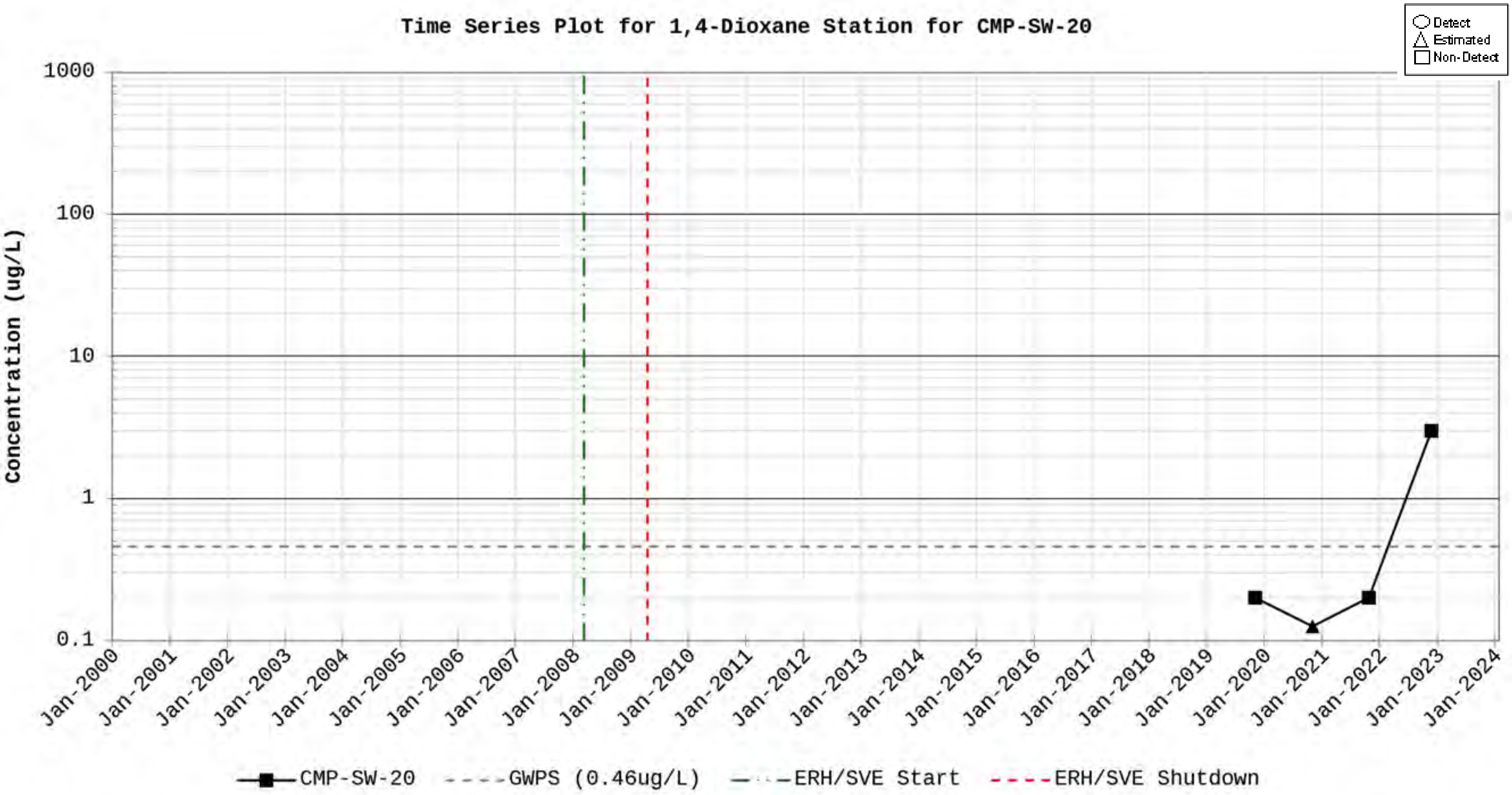
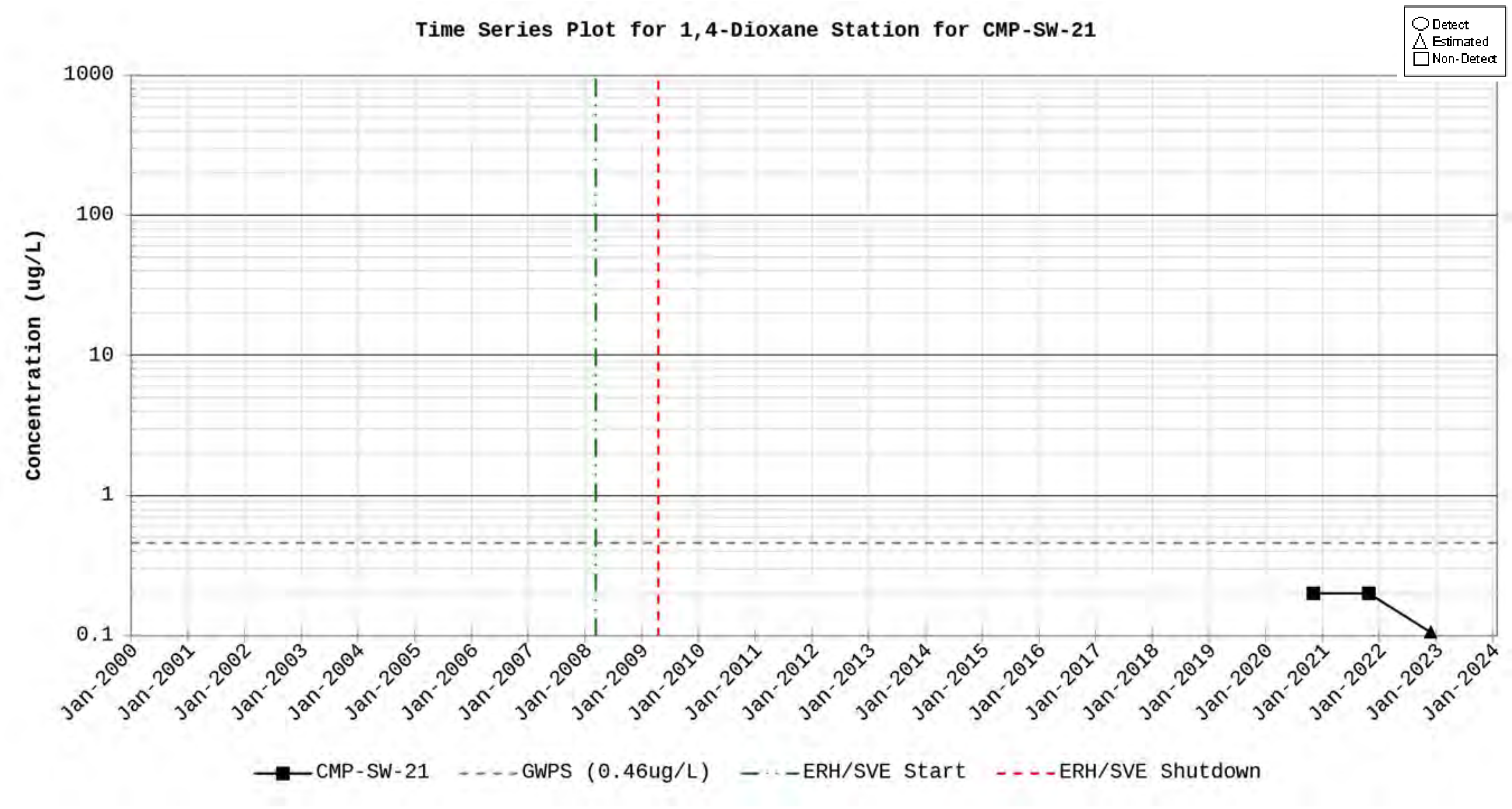
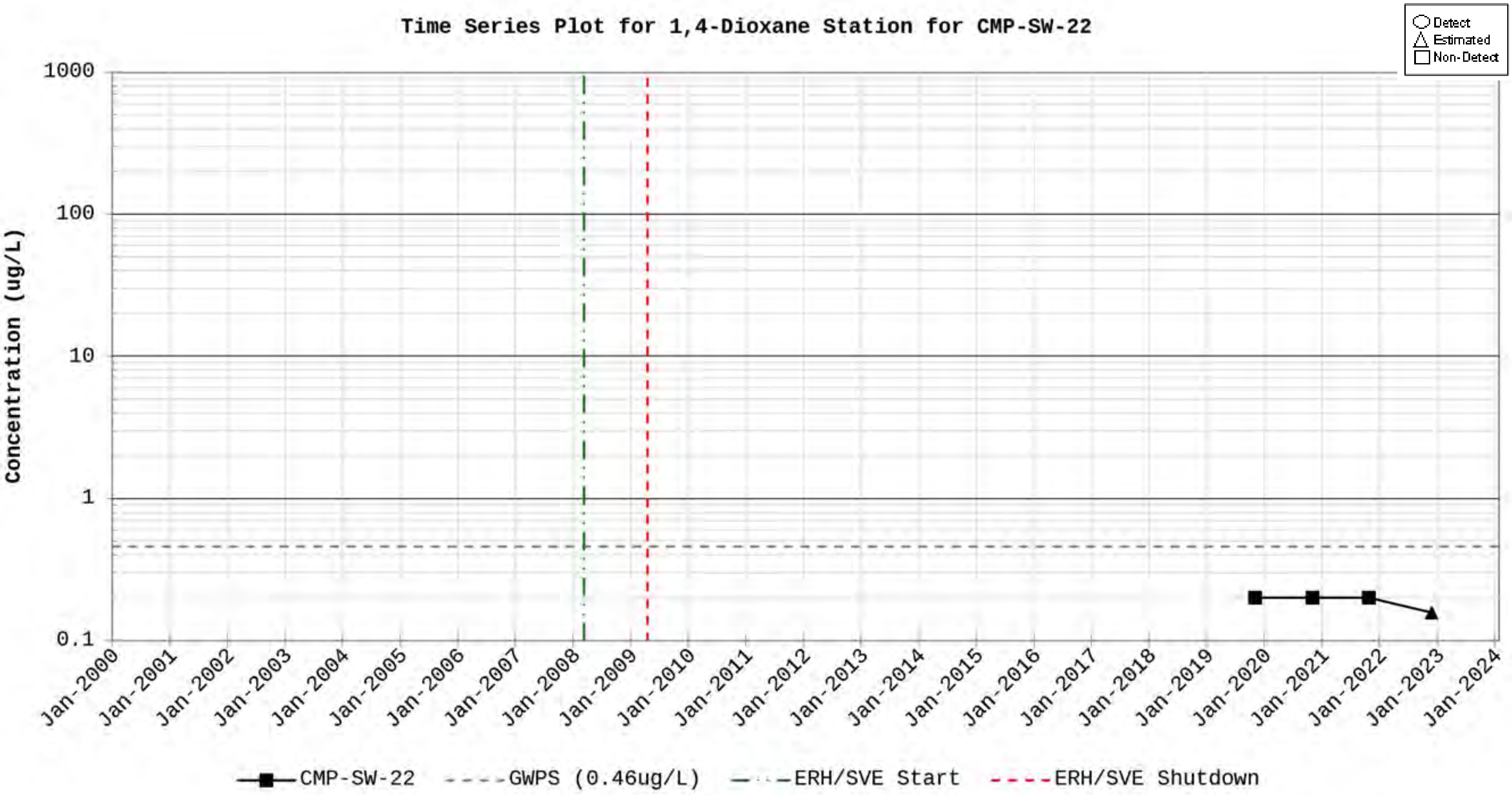
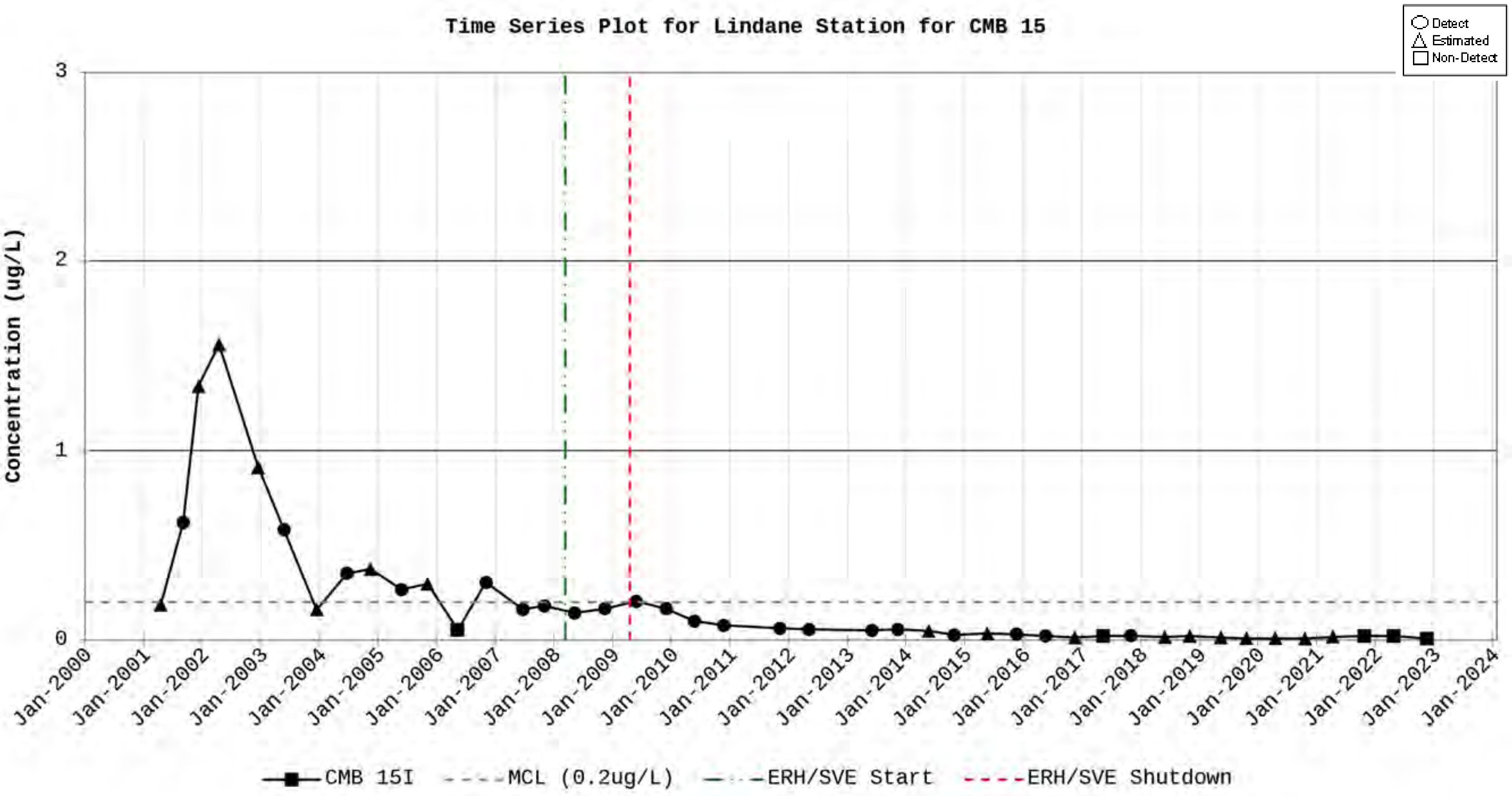
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP-SW-09
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP-SW-10
Detect
Estimated
Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP-SW-10
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP-SW-20
Detect
Estimated
Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP-SW-20
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP-SW-21
Detect
Estimated
Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP-SW-21
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for 1,4-Dioxane Station for CMP-SW-22
Detect
Estimated
Non-Detect
Concentration (ug/L)
1000
100
10
1
0.1
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP-SW-22
GWPS (0.46ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Lindane Station for CMB 15
Detect
Estimated
Non-Detect
Concentration (ug/L)
3
2
1
0
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
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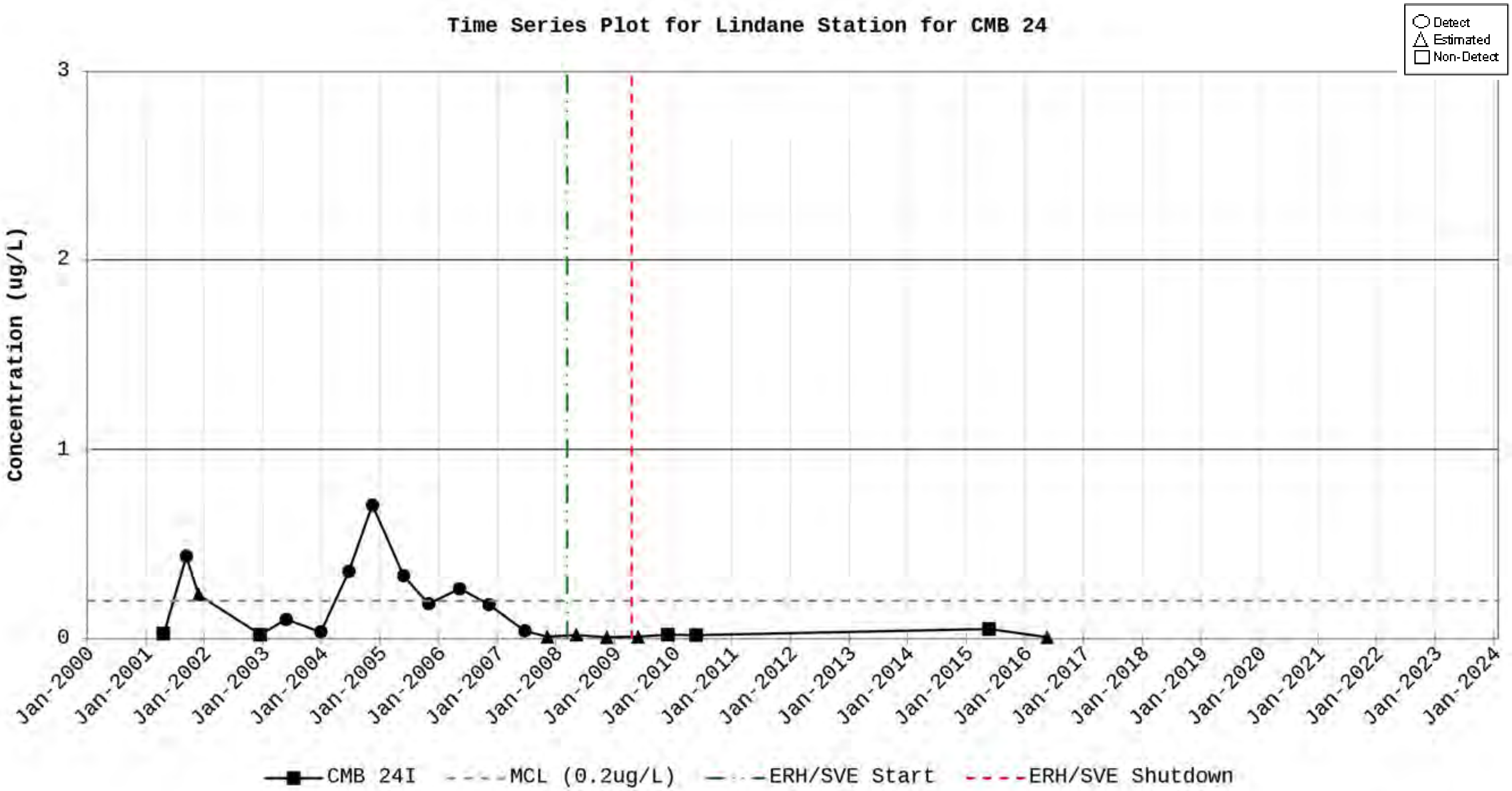
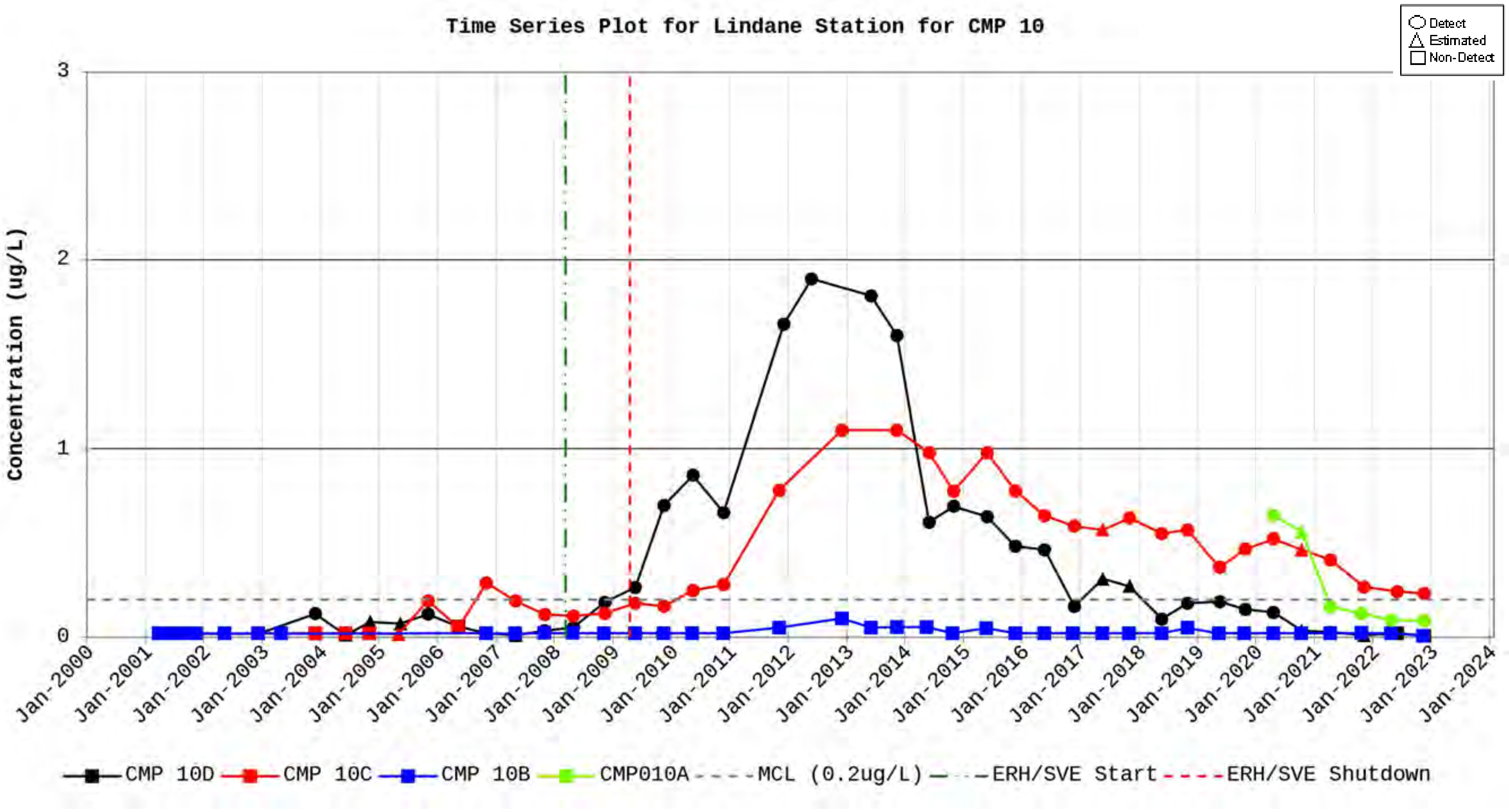
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMB 15I
MCL (0.2ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Lindane Station for CMB 24
Detect
Estimated
Non-Detect
Concentration (ug/L)
0
1
2
3
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMB 24I
MCL (0.2ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Lindane Station for CMP 10
Detect
Estimated
Non-Detect
Concentration (ug/L)
3
2
1
0
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
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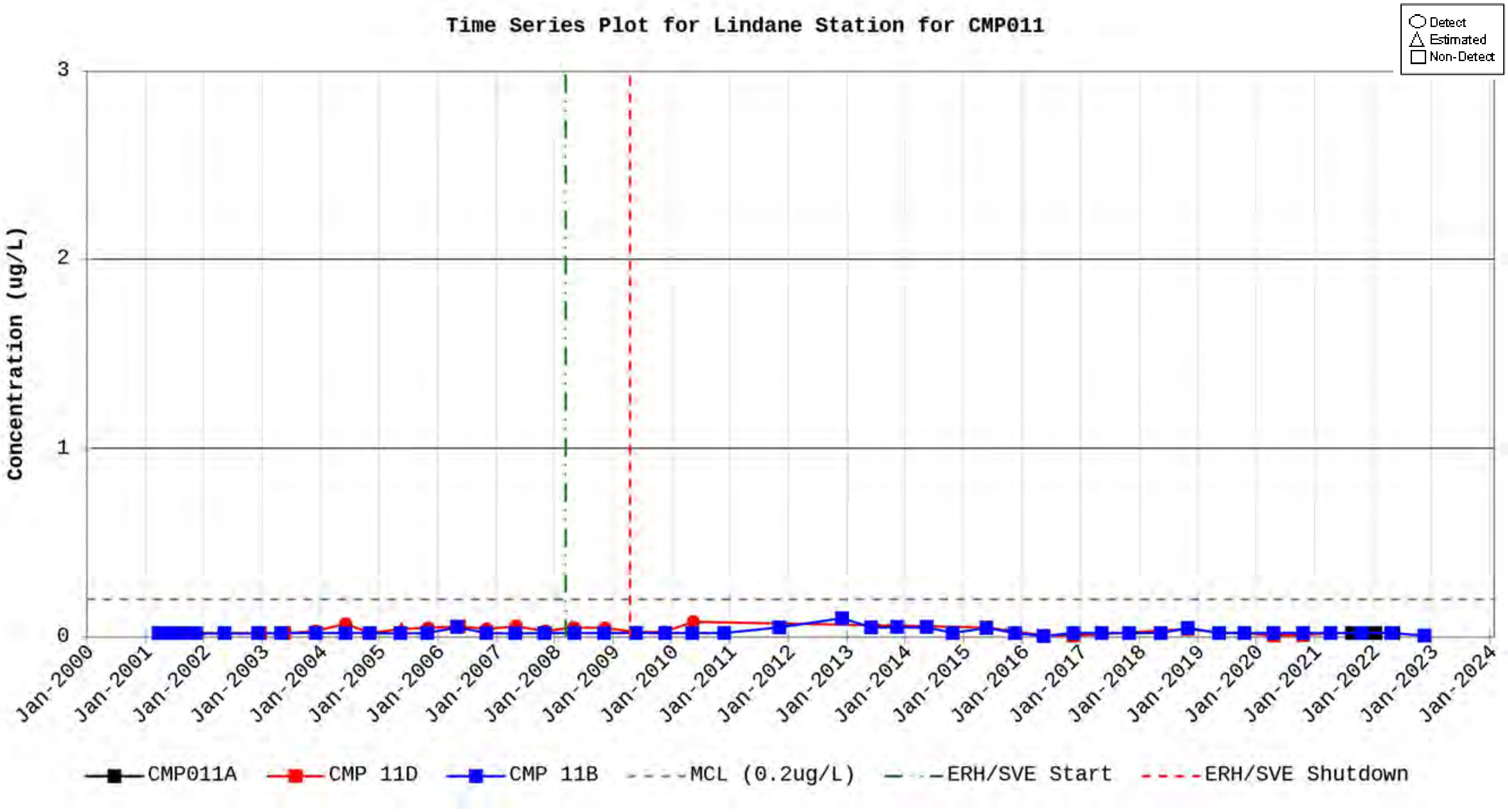
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 10D
CMP 10C
CMP 10B
CMP010A
MCL (0.2ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Lindane Station for CMP011
Detect
Estimated
Non-Detect
Concentration (ug/L)
3
2
1
0
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
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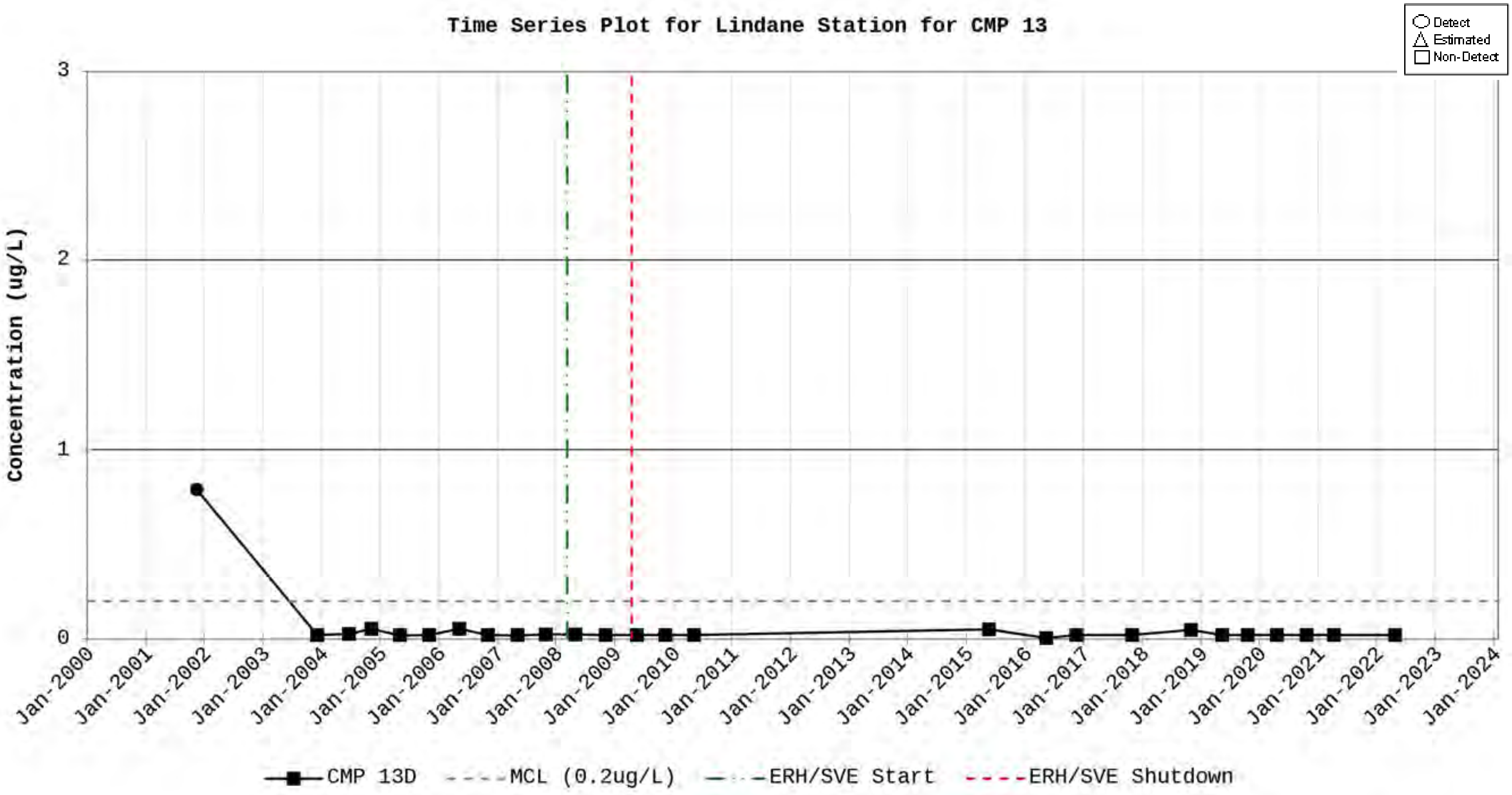
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP011A
CMP 11D
CMP 11B
MCL (0.2ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Lindane Station for CMP 13
Detect
Estimated
Non-Detect
Concentration (ug/L)
3
2
1
0
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
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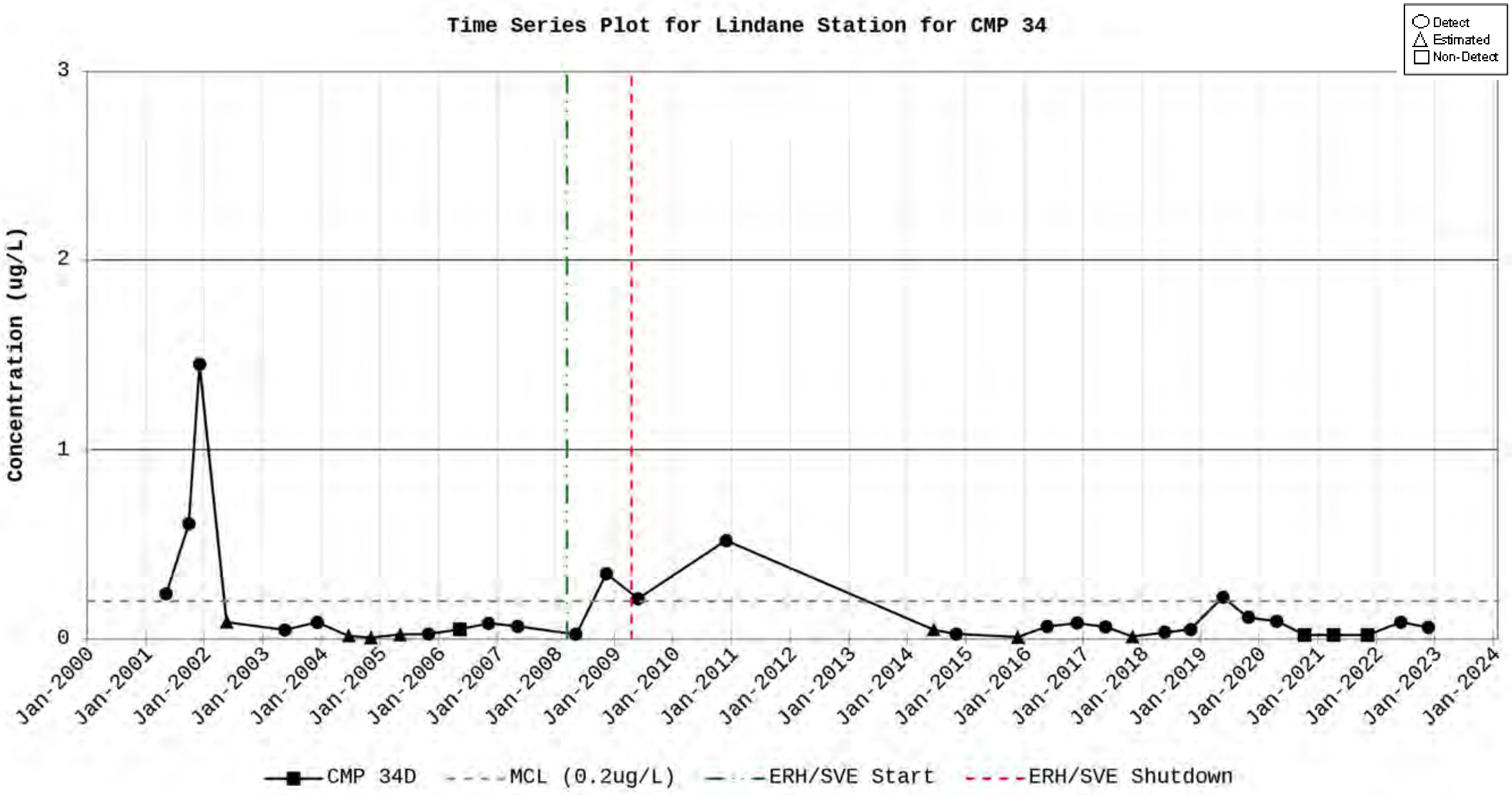
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 13D
MCL (0.2ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Lindane Station for CMP 34
Detect
Estimated
Non-Detect
Concentration (ug/L)
3
2
1
0
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
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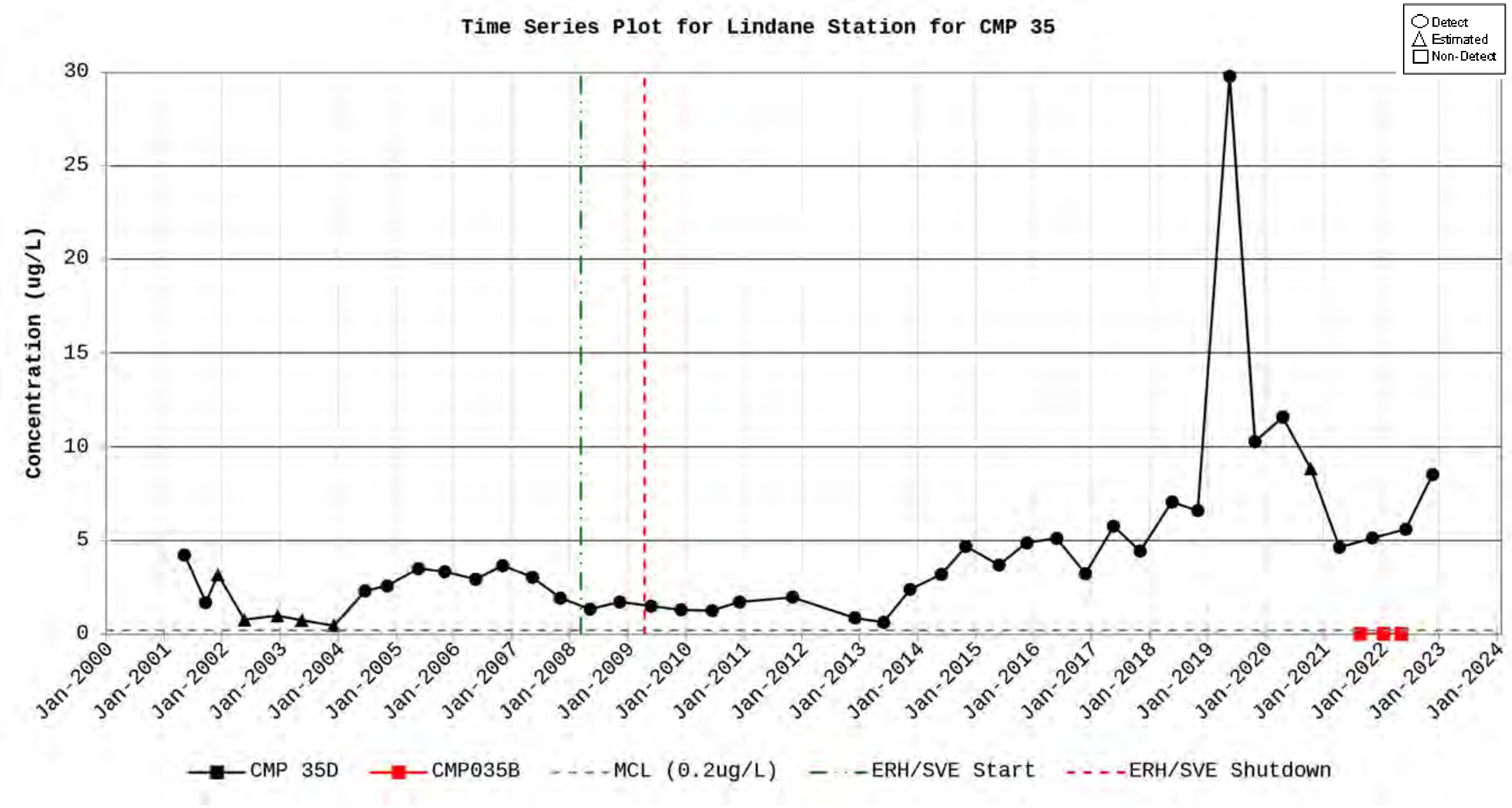
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 34D
MCL (0.2ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Lindane Station for CMP 35
Detect
Estimated
Non-Detect
Concentration (ug/L)
0
5
10
15
20
25
30
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
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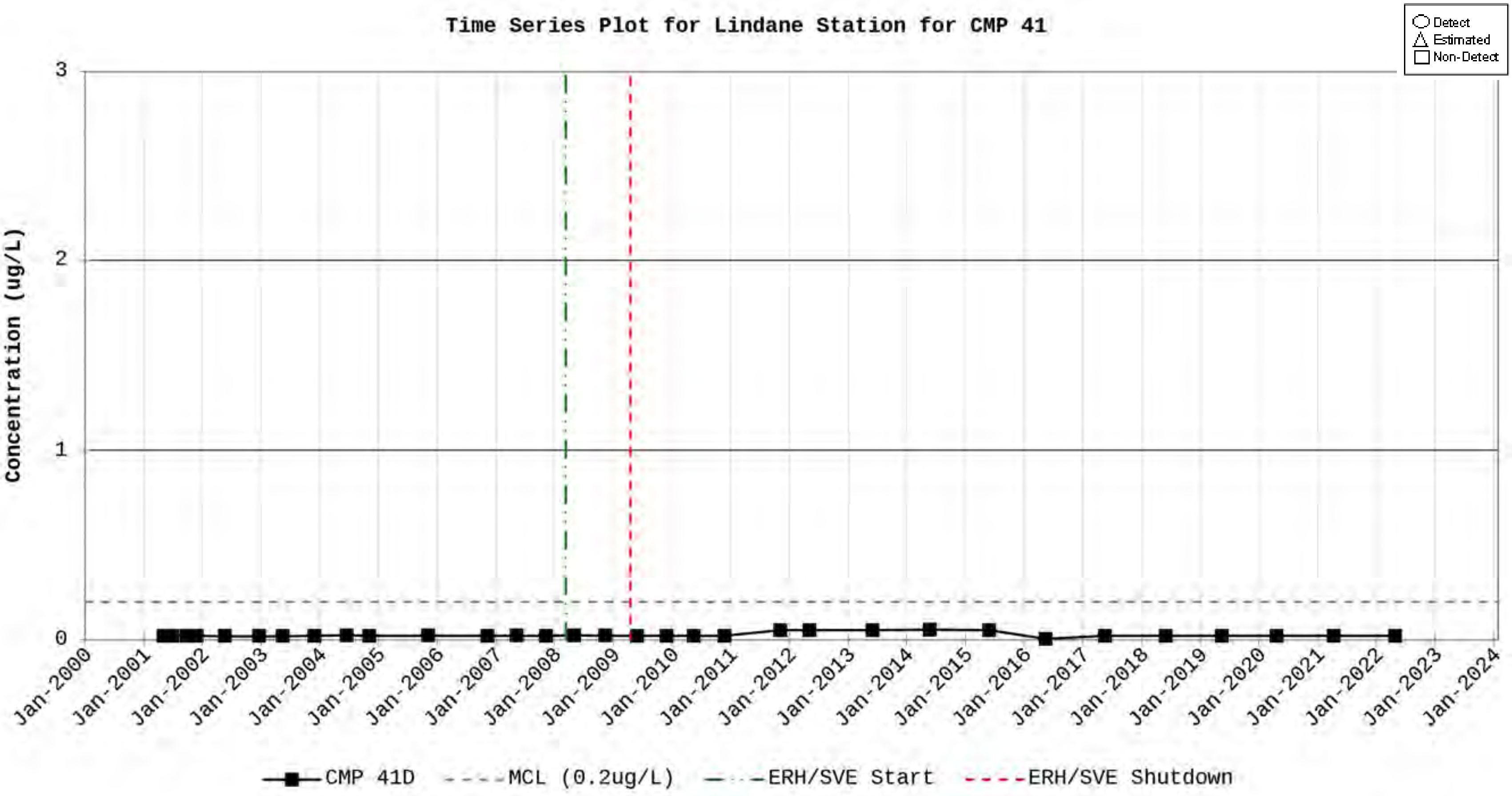
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 35D
CMP035B
MCL (0.2ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Lindane Station for CMP 41
Detect
Estimated
Non-Detect
Concentration (ug/L)
3
2
1
0
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
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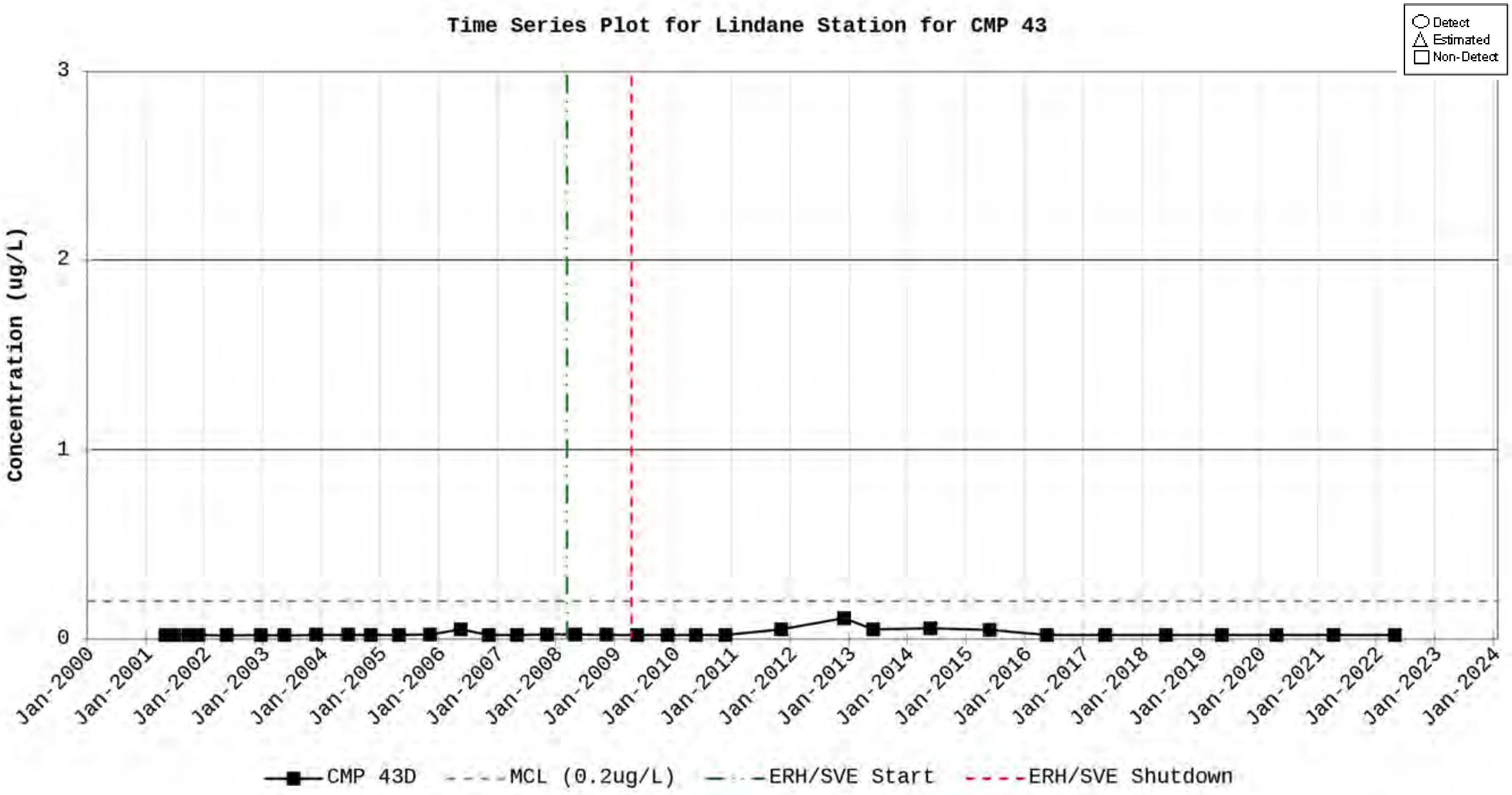
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 41D
MCL (0.2ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Lindane Station for CMP 43
Detect
Estimated
Non-Detect
Concentration (ug/L)
3
2
1
0
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
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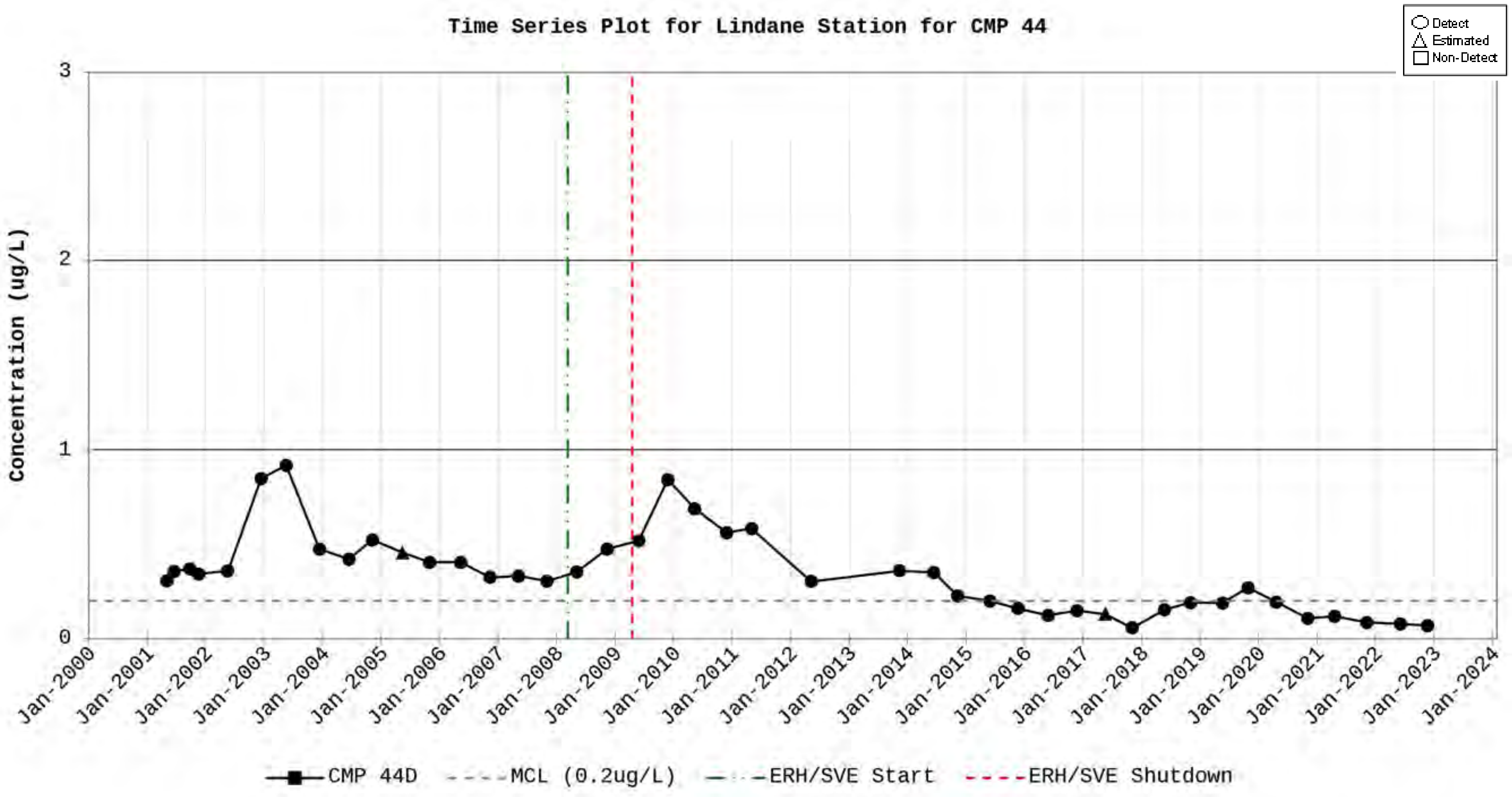
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 43D
MCL (0.2ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Lindane Station for CMP 44
Detect
Estimated
Non-Detect
Concentration (ug/L)
3
2
1
0
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
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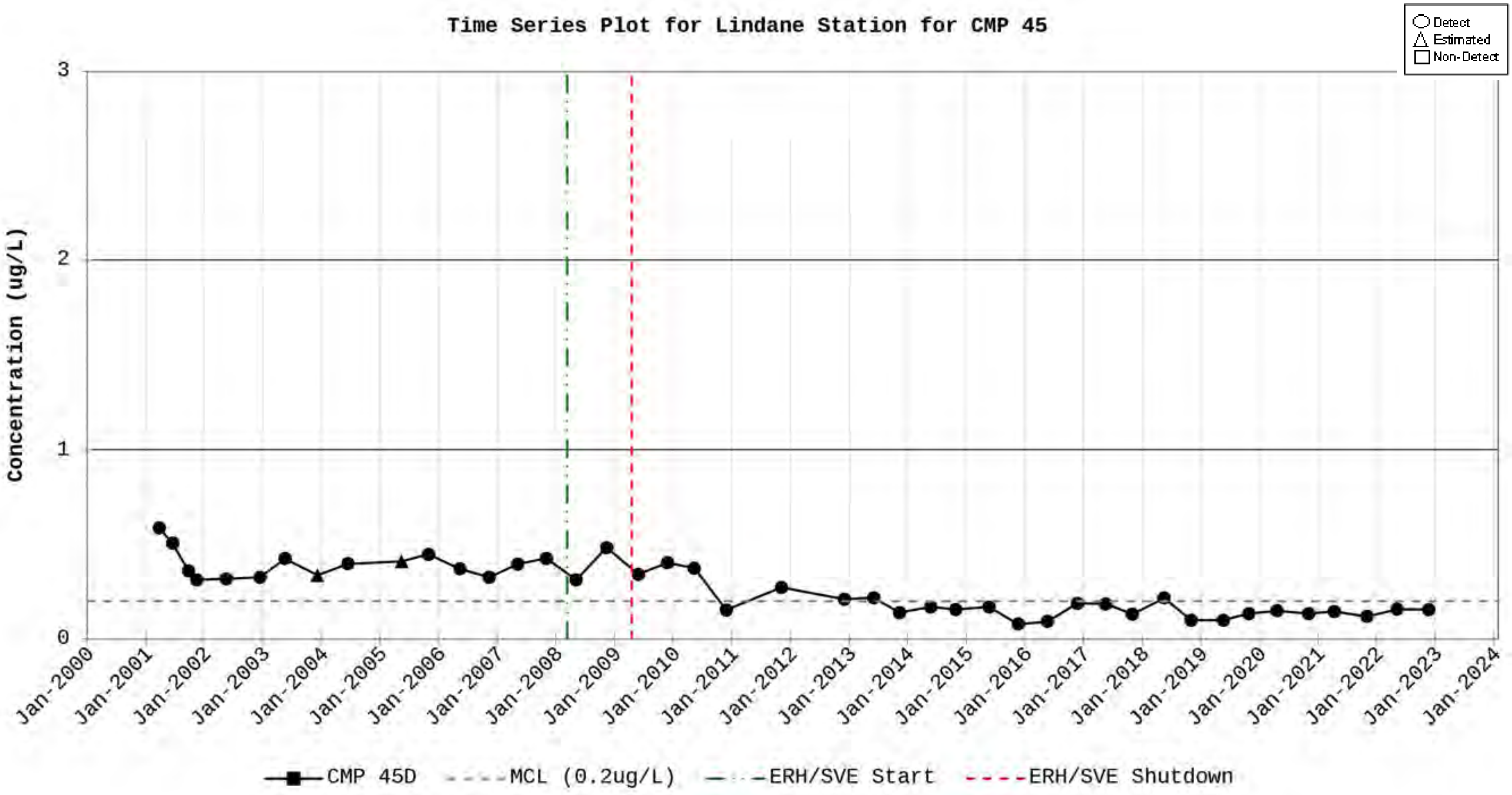
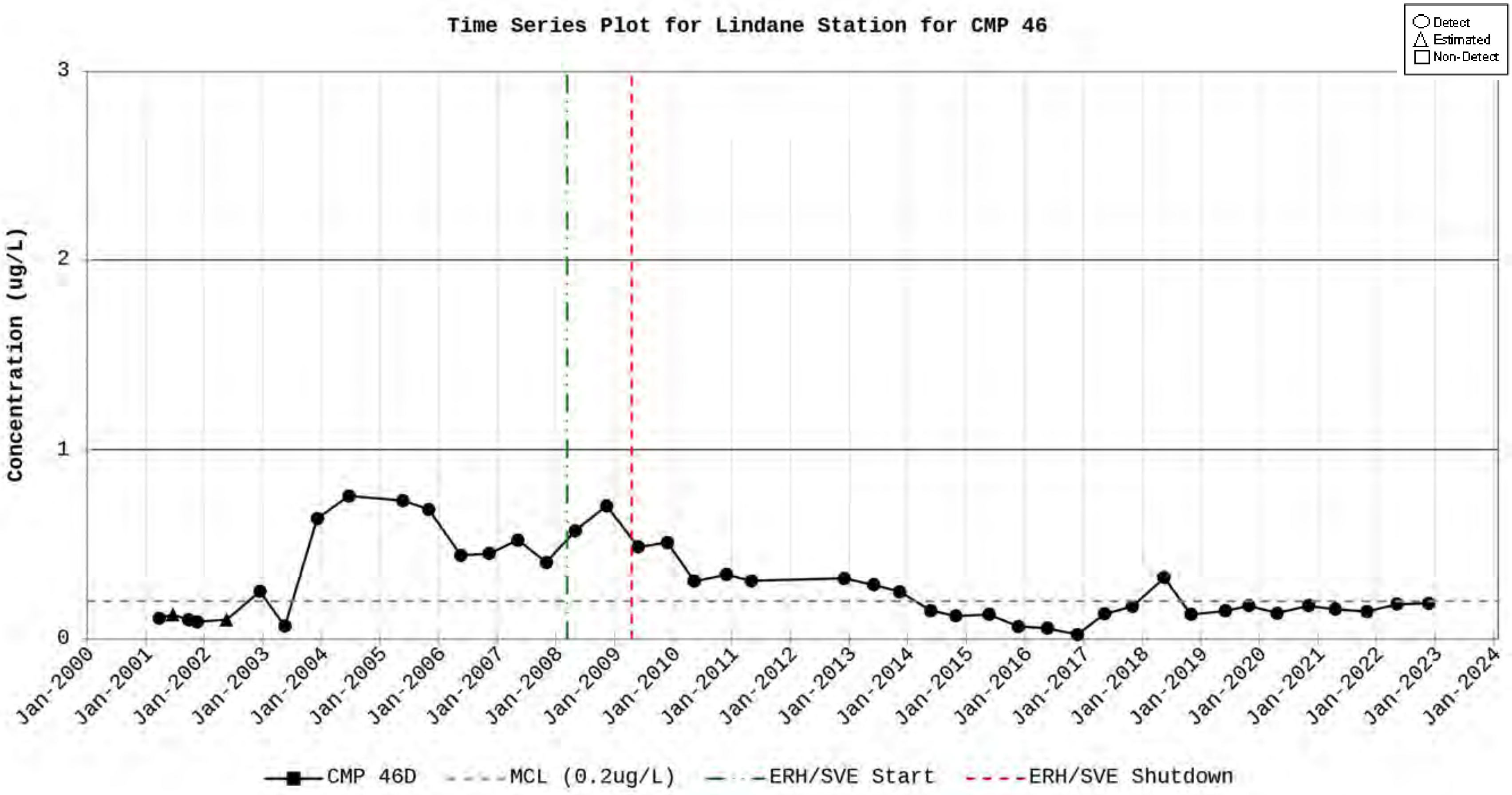
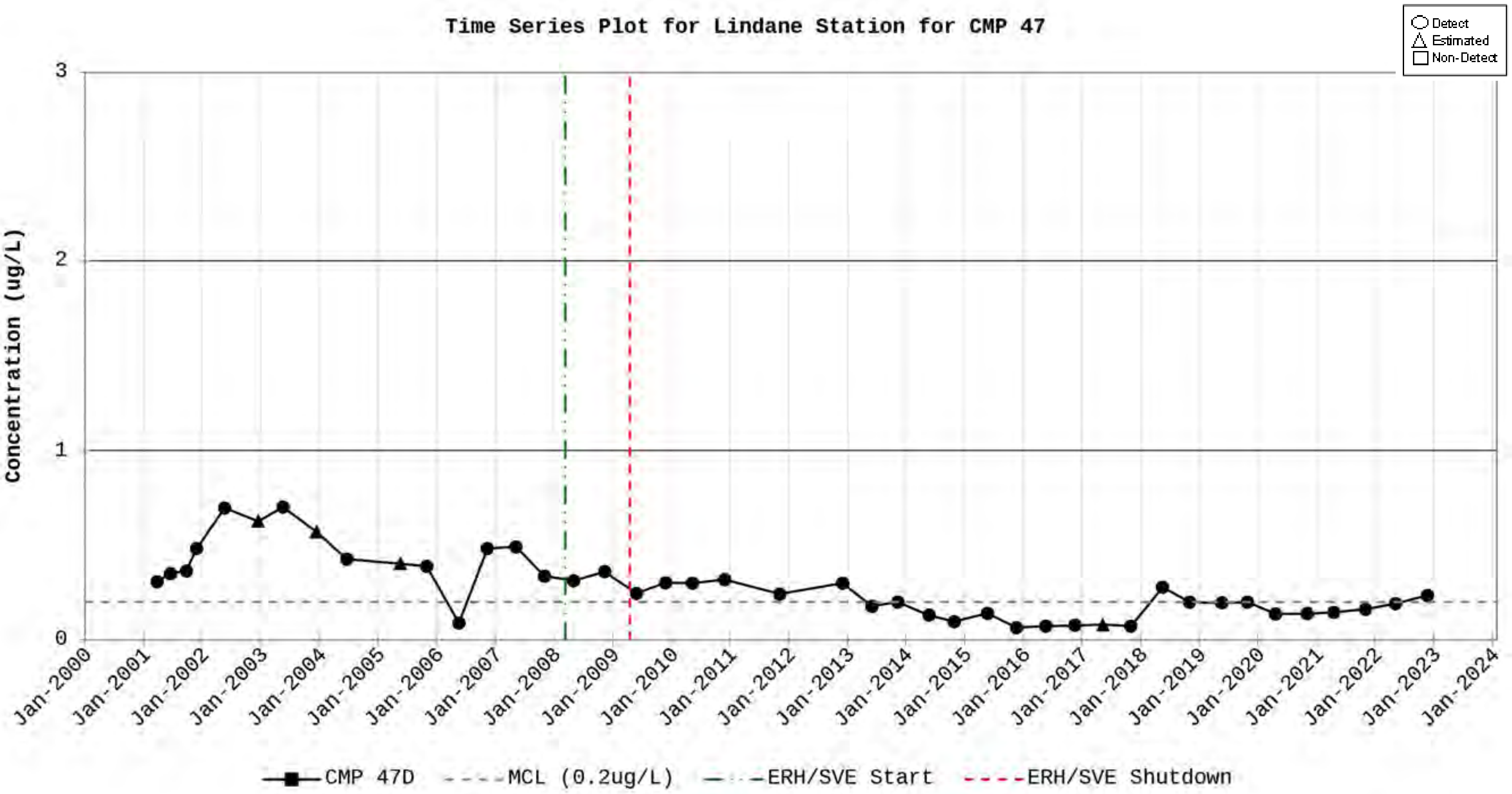
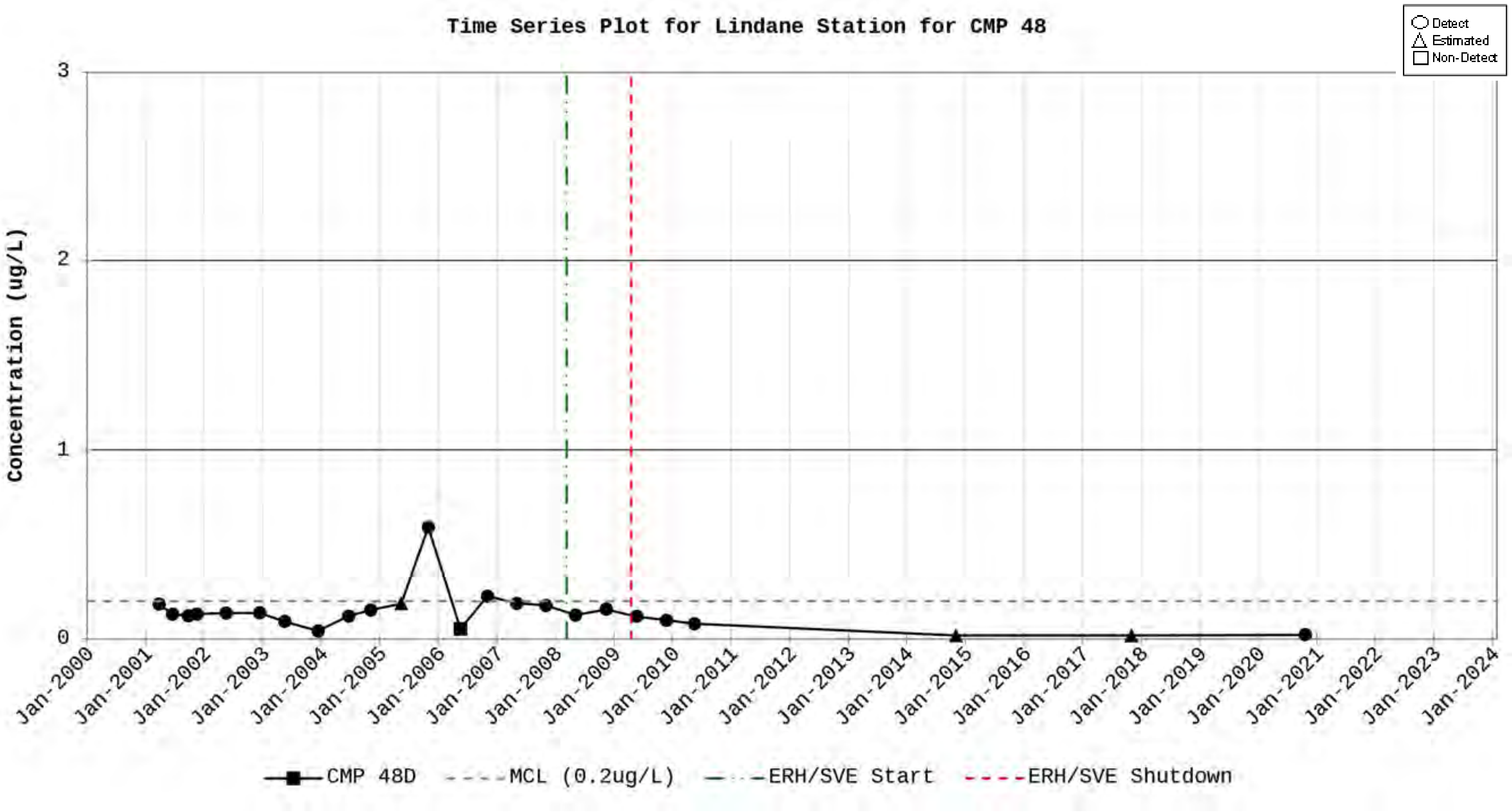
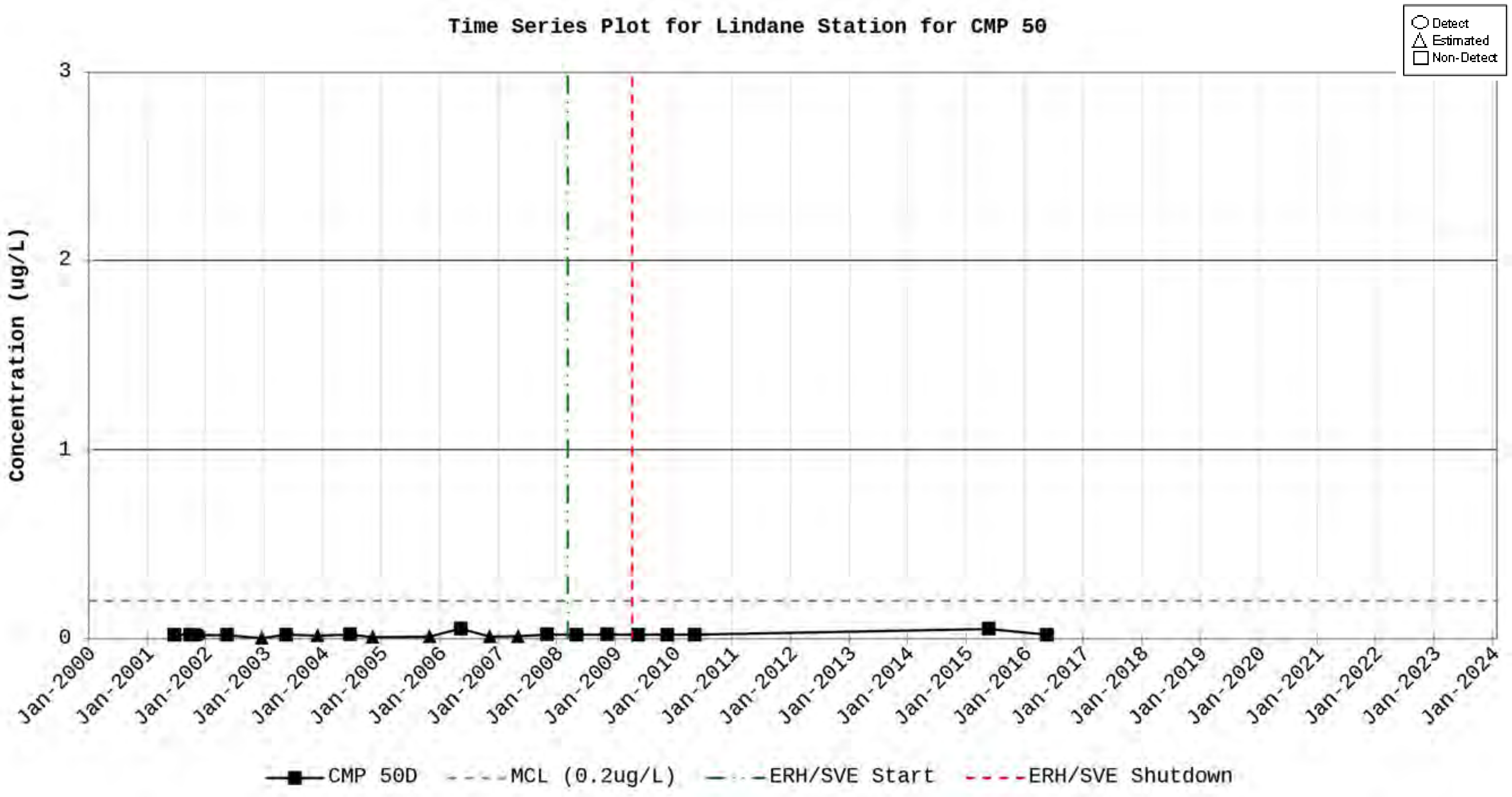
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 44D
MCL (0.2ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Lindane Station for CMP 45
Detect
Estimated
Non-Detect
Concentration (ug/L)
3
2
1
0
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 45D
MCL (0.2ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Lindane Station for CMP 46
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
0
1
2
3
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 46D
MCL (0.2ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Lindane Station for CMP 47
Detect
Estimated
Non-Detect
Concentration (ug/L)
3
2
1
0
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 47D
MCL (0.2ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Lindane Station for CMP 48
Detect
Estimated
Non-Detect
Concentration (ug/L)
3
2
1
0
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 48D
MCL (0.2ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Lindane Station for CMP 50
○ Detect
△ Estimated
☐ Non-Detect
Concentration (ug/L)
3
2
1
0
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
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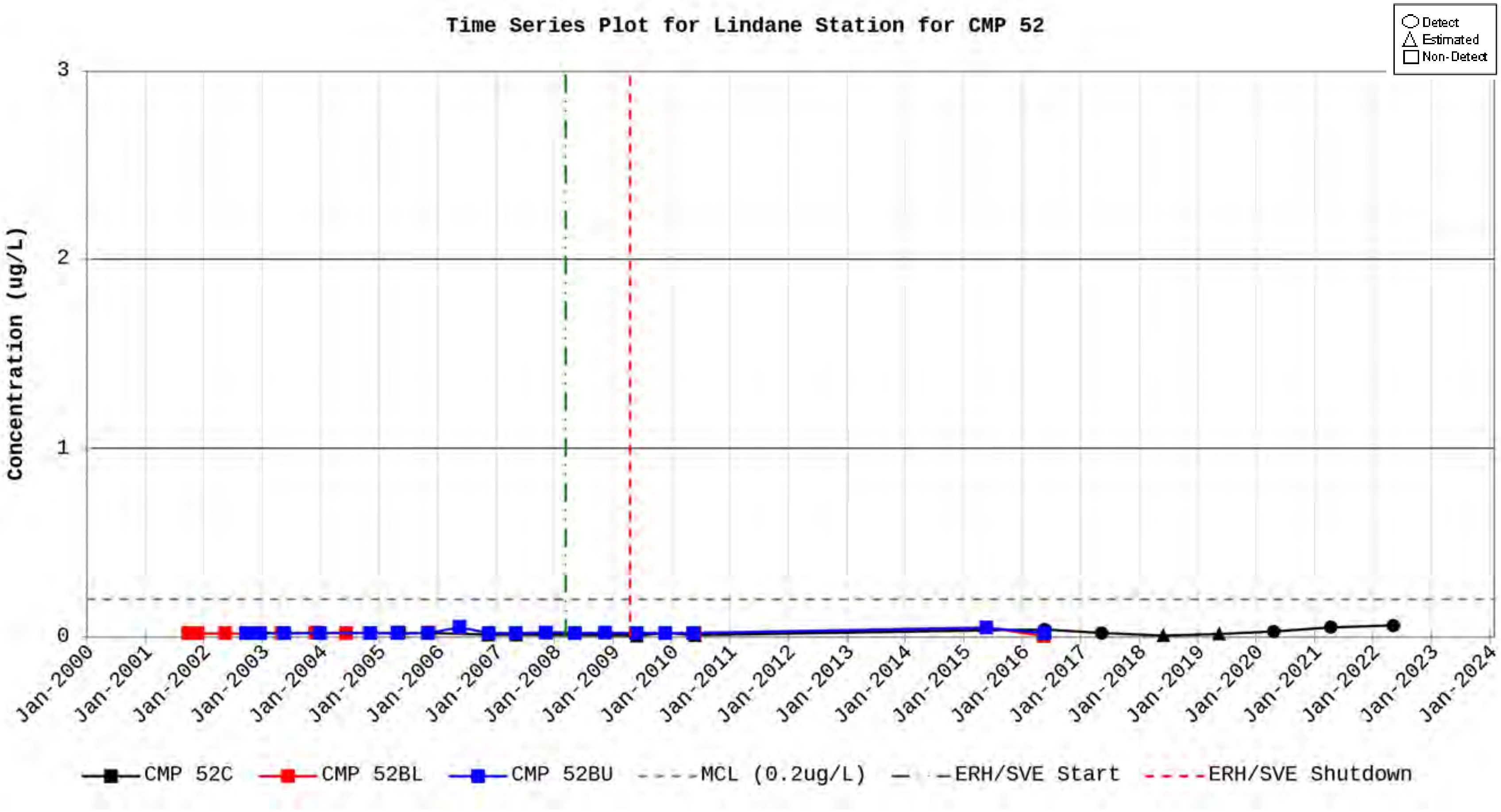
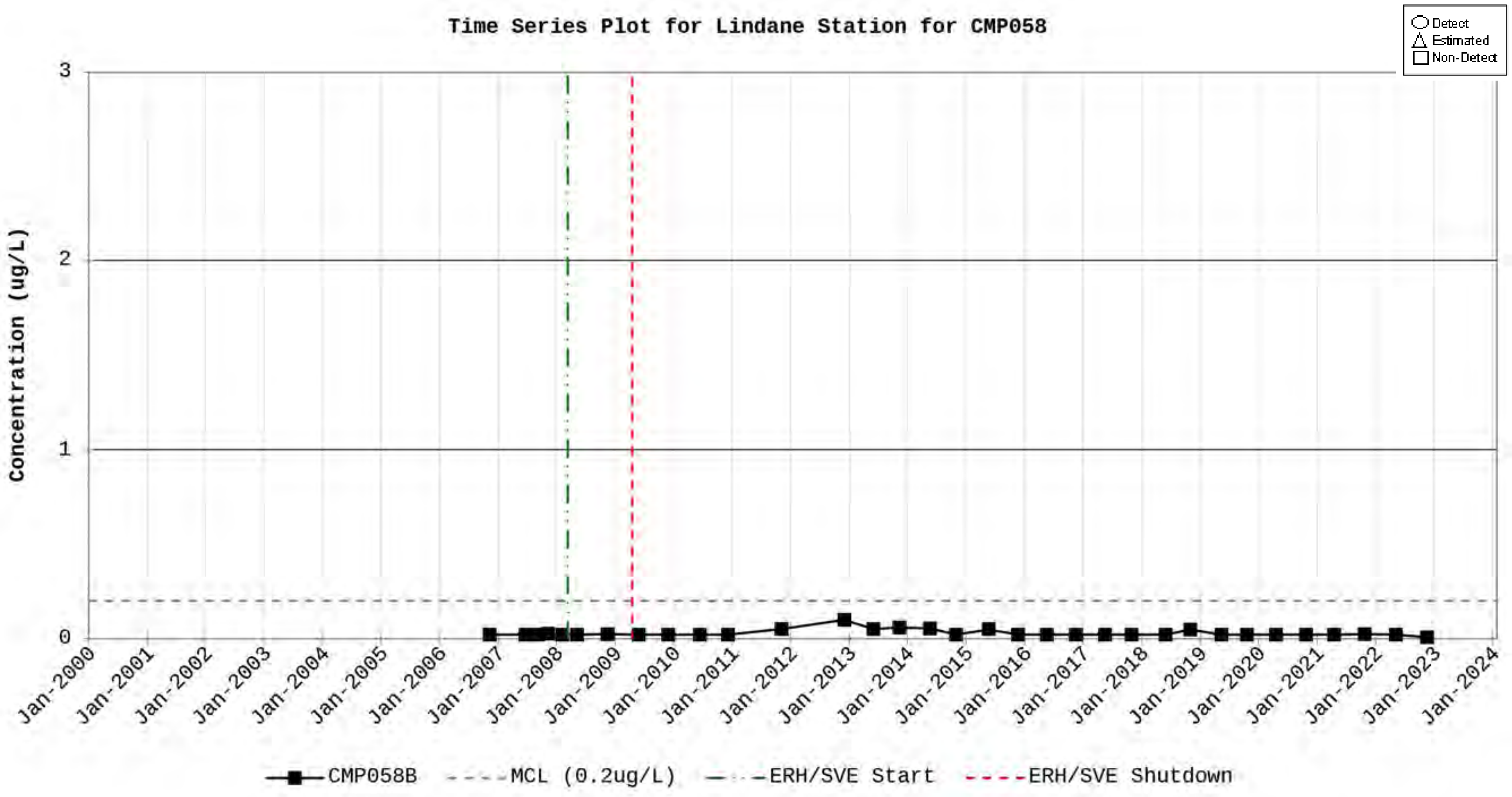
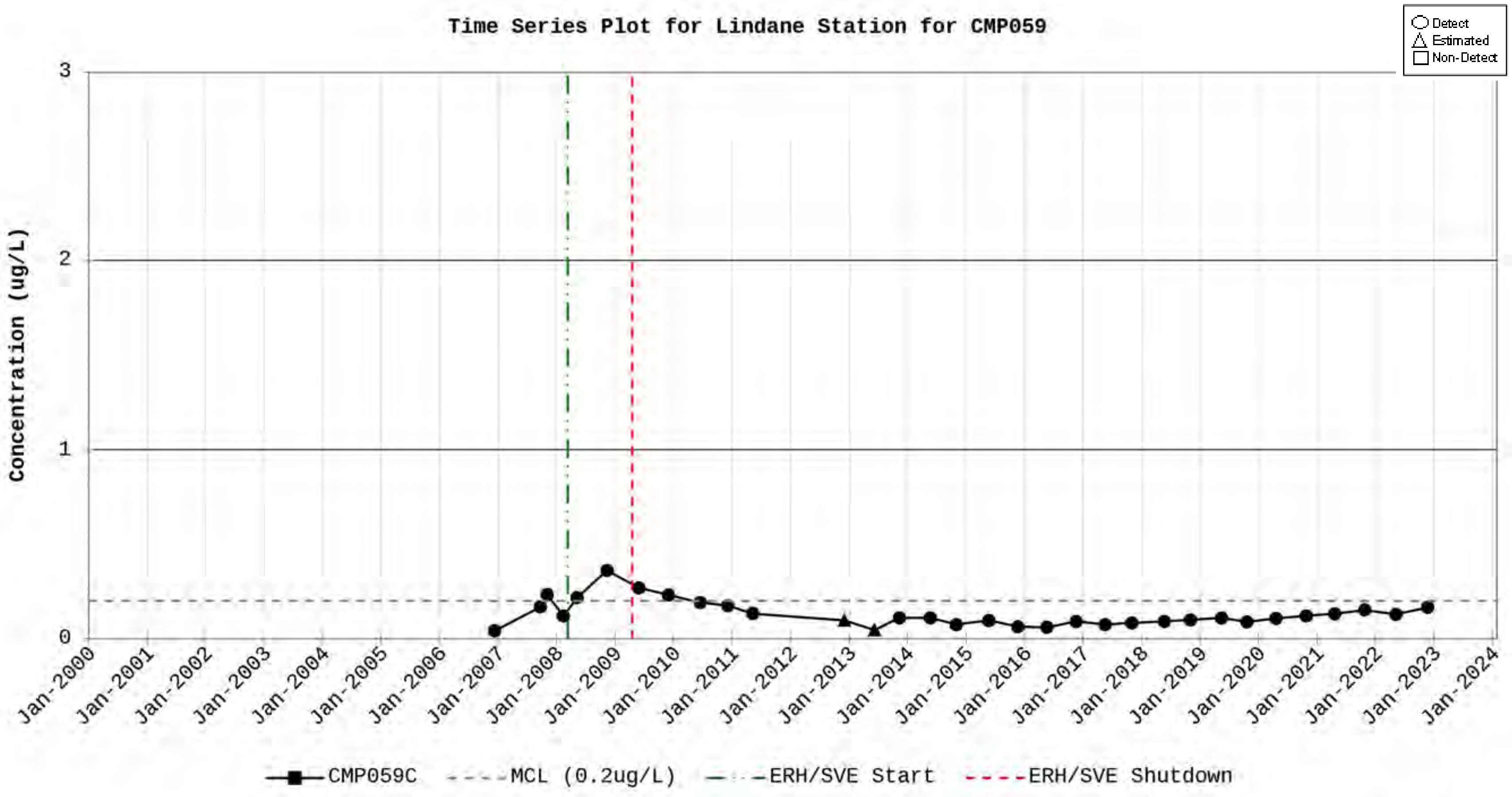
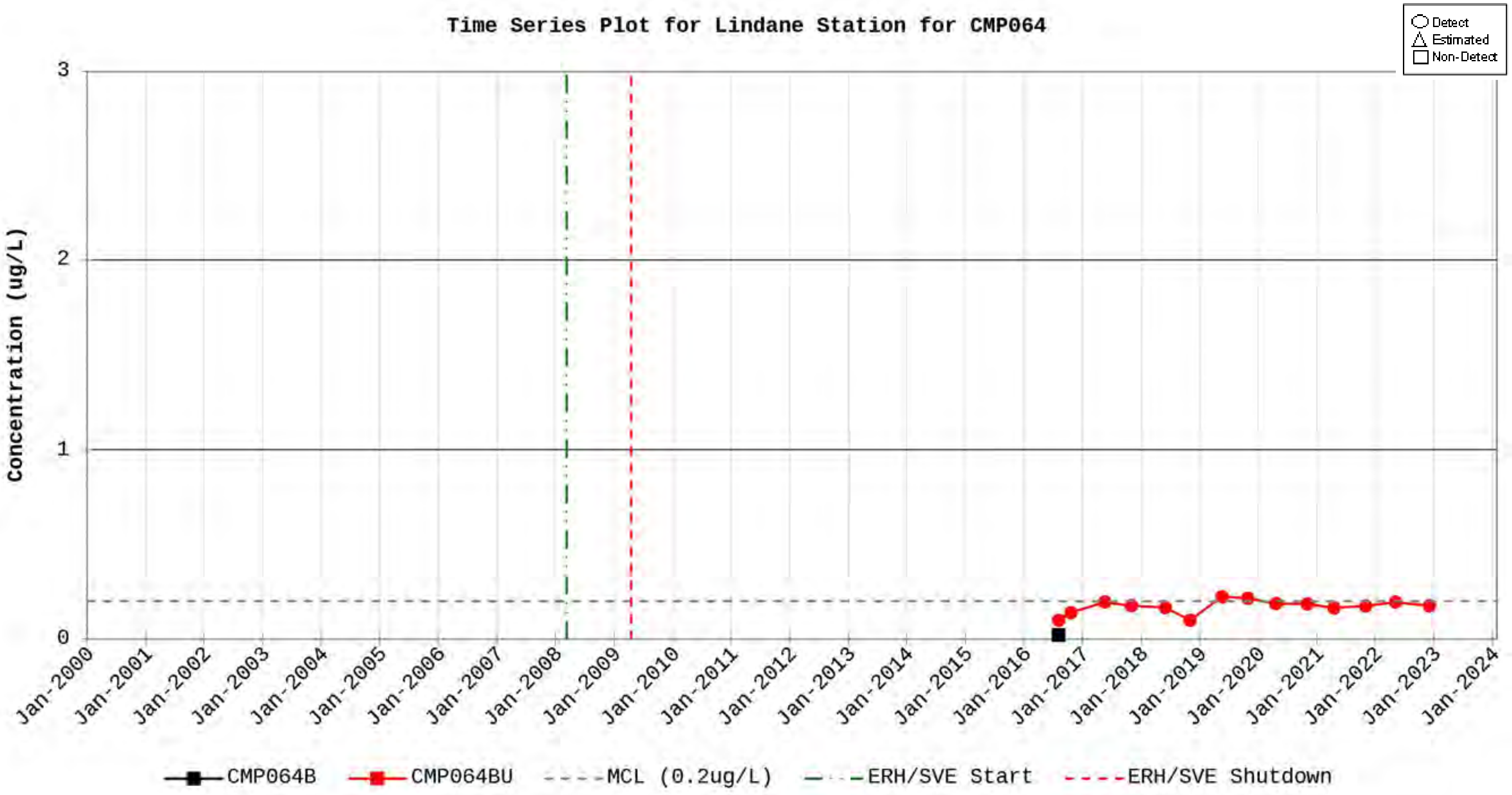
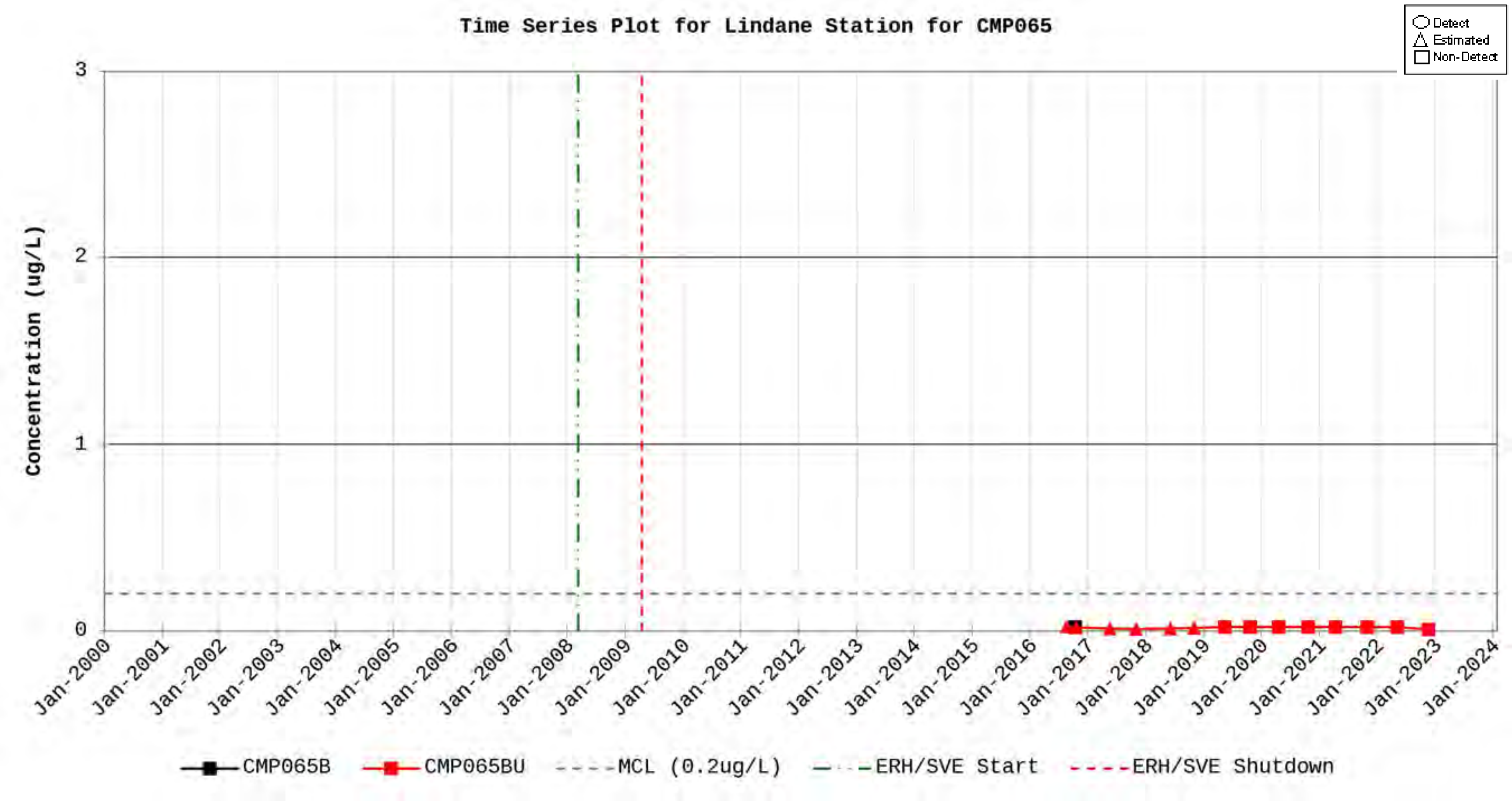
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 50D
MCL (0.2ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Lindane Station for CMP 52
Detect
Estimated
Non-Detect
Concentration (ug/L)
3
2
1
0
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP 52C
CMP 52BL
CMP 52BU
MCL (0.2ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Lindane Station for CMP058
Detect
Estimated
Non-Detect
Concentration (ug/L)
3
2
1
0
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP058B
MCL (0.2ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Lindane Station for CMP059
Detect
Estimated
Non-Detect
Concentration (ug/L)
0
1
2
3
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP059C
MCL (0.2ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Lindane Station for CMP064
Detect
Estimated
Non-Detect
Concentration (ug/L)
3
2
1
0
Jan-2000
Jan-2001
Jan-2002
Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
Jan-2012
Jan-2013
Jan-2014
Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP064B
CMP064BU
MCL (0.2ug/L)
ERH/SVE Start
ERH/SVE Shutdown


Time Series Plot for Lindane Station for CMP065
Detect
Estimated
Non-Detect
Concentration (ug/L)
3
2
1
0
Jan-2000
Jan-2001
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Jan-2003
Jan-2004
Jan-2005
Jan-2006
Jan-2007
Jan-2008
Jan-2009
Jan-2010
Jan-2011
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Jan-2013
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Jan-2015
Jan-2016
Jan-2017
Jan-2018
Jan-2019
Jan-2020
Jan-2021
Jan-2022
Jan-2023
Jan-2024
CMP065B
CMP065BU
MCL (0.2ug/L)
ERH/SVE Start
ERH/SVE Shutdown

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Appendix C

Additional Sampling Efforts

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Anion/Cation Groundwater Sampling

As a follow-up to the August 2021 Core Team meeting, SRNS proposed performing cation-anion speciation at well clusters CMP062 and CMP063 in 2022 to aid in evaluating groundwater geochemistry. Because these data were not available for the 2021 Effectiveness Monitoring Report (EMR) submitted in June 2022, an evaluation of the data was not provided. However, an evaluation of limited available cation-anion information from other wells near the Pits was provided in that report. Information about the hydrology and geology at CMP062 and 063 well clusters were provided in response to comments on the 2021 Effectiveness Monitoring Report (EMR) (SRNS-RP-2021-03832CR, dated February 14, 2022).

At the CMP062 and 063 well clusters, a total of six (6) wells, three (3) at each well cluster, with one (1) well completed in the Upper Aquifer Zone (UAZ)-Transmissive Zone (TZ), UAZ-Middle Aquifer Zone (MAZ), and Lower Aquifer Zone (LAZ) (Table C-1 and Figure C-1). A cross section is also provided in Figure C-2 that shows well screen elevations for well clusters CMP062 and 063 as well as other wells where cation-anion analyses were recently performed and provided in the 2022 EMR (SRNS-RP-2022-00342). Cation-anion data collected were evaluated for the CMP062 and 063 well clusters. These data were then compared to similar data previously collected and reported from well clusters CMP 10 and 52 and wells CMP 35D and 44D to determine differences and similarities in groundwater from the wells and across the CMP Pits area. Each of the six (6) wells from the CMP062 and 063 clusters were sampled and analyzed for cations to include aluminum, calcium, iron, potassium magnesium, manganese, and sodium. Anions include chloride, fluoride, nitrate, carbonate, and sulfate.

To aid in evaluating the cation and anion data, Stiff diagrams were developed to graphically display the data. Stiff diagrams are created by plotting the equivalent concentration of the cations to the left of the center axis and anions to the right. In determining the equivalent concentration, reported lab concentration data (e.g., mass/volume) are first converted to a standard unit of measure (e.g., mg/L) and then converted to milliequivalents per liter (meq/L). Stiff diagrams were developed using Grapher^{TM}, a commercial software from Golden Software. The posted data are connected to form a shape allowing for an evaluation on the different waters sampled. The data can be used to “fingerprint” aquifers in that there is a unique shape for the unit sampled based on the results for the basic cation and anions. Additionally, impact vertically into underlying aquifer units can also be evaluated, especially if there is a prominent vertical component with groundwater flow, allowing for mixing of groundwaters from overlying water-bearing units.

Figure C-3 depicts Stiff diagrams for each of the three (3) wells at both CMP062 and 063 well clusters. For comparison to other wells screened in similar aquifers, Stiff diagrams for wells CMP 10D, 10B, 10C, 35D, 44D, 52BU, 52BL, and 52C are also depicted for the UAZ-TZ, UAZ-MAZ, and LAZ aquifer units.

Specific to well clusters CMP062 and 063, the geochemistry in the UAZ-TZ appears similar with little geochemical differences. However, the geochemistry of the UAZ-MAZ and LAZ between the two well clusters do not appear similar suggesting differences in lithology that may be influencing geochemistry. Lithology description of the UAZ-MAZ between CMP062C and 063C indicates the presence of increased amount of silt and clay at CMP063C than as seen as CMP062C, which may explain the slightly higher calcium values due to weathering of the material. In the LAZ, the calcium values at CMP063B are significantly higher in concentration, which is indicative of the calcareous material the well is installed. No calcareous material was noted in geological description of core from the CMP062 well site.

Comparison of Stiff diagrams for the UAZ-TZ to the other wells indicate similarity to geochemistry depicted at CMP 10D. This may indicate an expected geochemical fingerprinting of the UAZ-TZ; at least upgradient of the pits. Stiff diagram from CMP 35D is not similar to the other wells and depicts higher values for sodium + potassium, chloride, and sulfate. It could be the geochemistry at this well, due to its proximity to the pits, may be impacted from leaching of waste in the past into the subsurface and possible geochemical changes that may have occurred with Electrical Resistance Heating (ERH). Without data from wells downgradient of the pits, it is unknown if the geochemistry of the UAZ-TZ is similar to other wells downgradient of the pits.

Stiff diagrams in the UAZ-MAZ show similarities between CMP 44D and CMP062C then with CMP063C and 052C. As with CMP 35D, the geochemistry at CMP052C could be impacted from past leaching of waste and possible geochemical changes that may have occurred with ERH.

Stiff diagrams in the LAZ show similarity with CMP 10B, 10C, 52BU, 52BL, and 063B. This is principally due to the wells completed in calcareous material. However, Stiff diagram from CMP062B does not and shows similarity with the overlying UAZ-MAZ and -TZ, which may be indicative of vertical mixing of groundwaters and similar lithology.

Table C-1: Wells Selected for Cation-Anion Analysis

WELL ID	AQUIFER	LITHOLOGY(1)	UAZ-TZ	UAZ-MAZ	ULAZ	LLAZ
CMP062D	UAZ-TZ	CLSD-SD	X			
CMP062C	UAZ-MAZ	SD		X		
CMP062B	LLAZ	SD				X
CMP063D	UAZ-TZ	CLSD	X			
CMP063C	UAZ-MAZ	CLSD		X		
CMP063B	LLAZ	CACLSD				X

(1) CA - CALCAREOUS
CL - CLAY
LS - LIMESTONE
SD - SAND

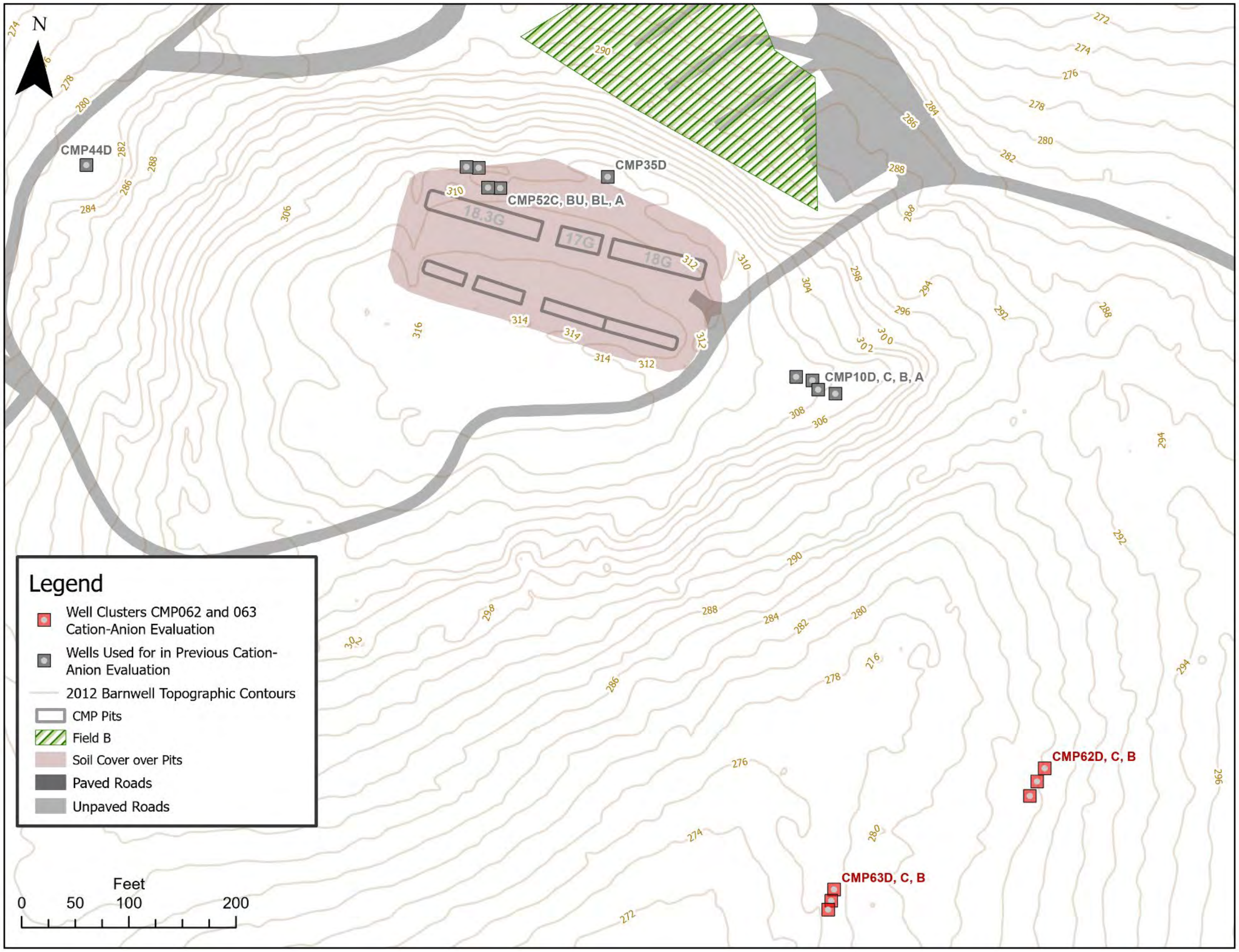

Figure C-1: Location of Wells Used in Cation-Anion Analysis

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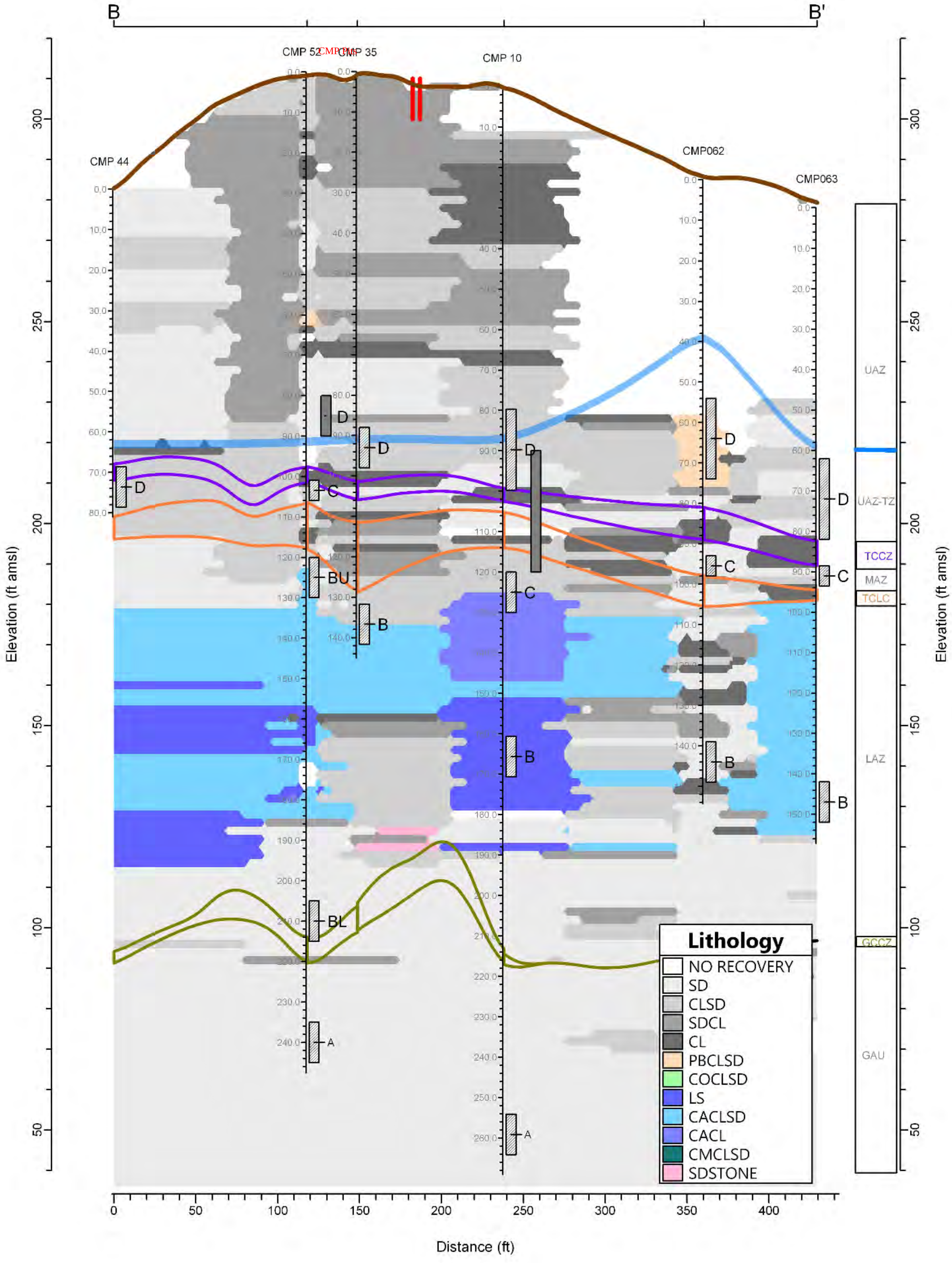

Figure C-3: Cross Section Showing Wells used in Cation-Anion Evaluation

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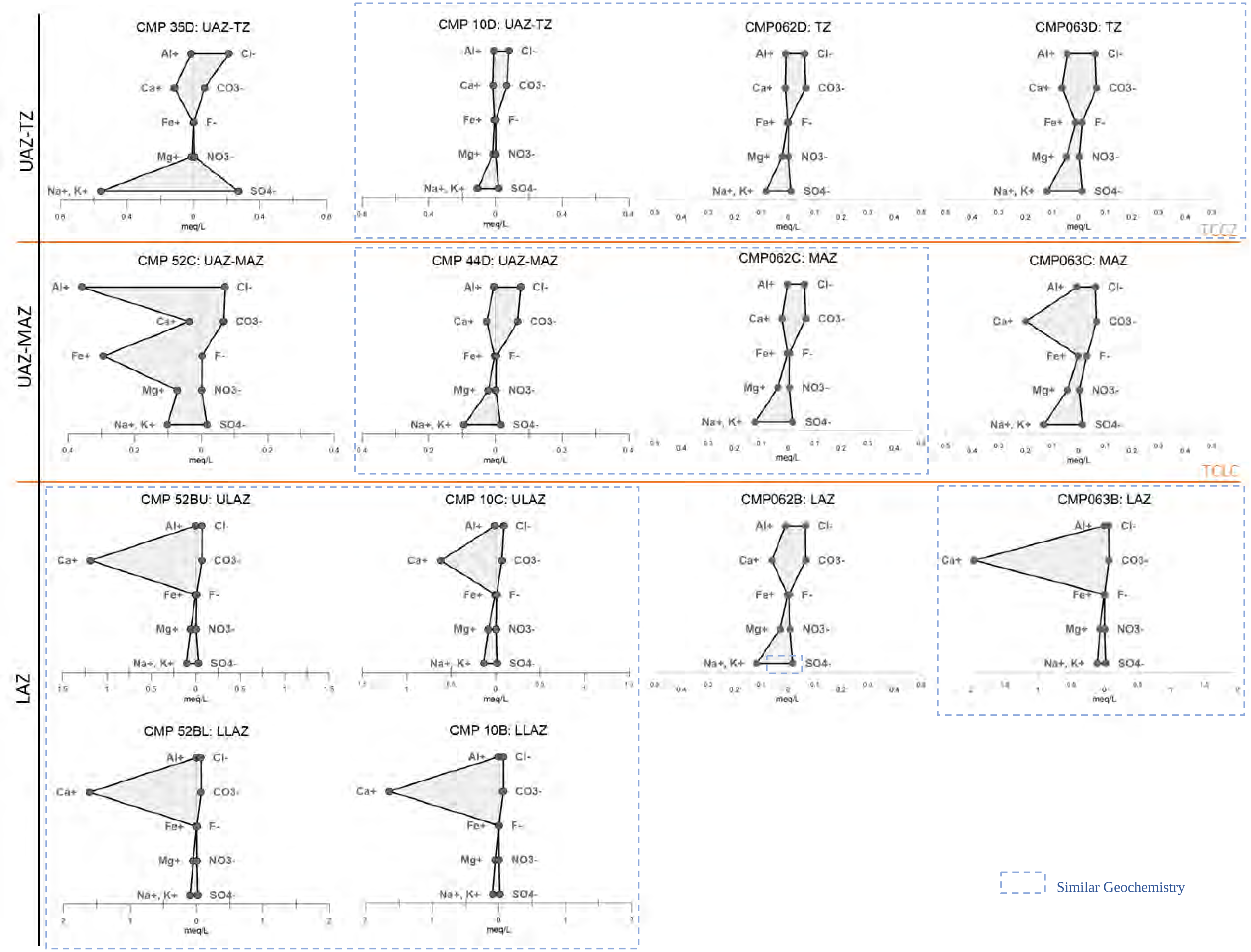

Figure C-4: Stiff Diagram Comparison

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