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February 11, 2025
File #34283.000

Mr. Glenn Lautenbach – SR-6J
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USEPA Region 5
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Re: Summary Letter Report on the Third Trial Shutdown of EW-6 (2/23/23-9/23/24)
National Presto Industries, Inc., Eau Claire, Wisconsin
USEPA CERCLIS ID WID 006196174
WDNR BRRTS 02-09-000267 and FID 609038320

Dear Glenn:

On behalf of National Presto Industries, Inc. (NPI), Gannett Fleming, Inc. (GF) is submitting this summary letter report on the third trial shutdown of extraction well EW-6 located in the Southwest Corner (SWC) at the NPI Superfund site in Eau Claire, Wisconsin, as requested by the U.S. Environmental Protection Agency (EPA). A list of this report's figures, tables, attachments, and site-specific reference documents follows.

Figure 1	Area-Wide Groundwater Contour Map (Jun 2024) with 1993 Plume Locations
Figure 2	Main Building SVE System and June 2024 SWC Groundwater Contour Map
Figure 3	SWC North-South Cross Section A-A' (Mar 2011)
Figure 4	SWC West-East Cross Section B-B' (Mar 2011)
Figure 5	SVE System Layout at Lagoon #1 (Sep 1997 thru Aug 1998)
Figure 6	MW-34/70 Area SVE System Layout & Soil/TCE Degreaser Sludge Sample Locations
Figure 7	SWC TCA/TCE Concentrations in Groundwater (2009-2011)
Figure 8	Simulated Particle Path Lines Pumping EW-6 (Jun 2011)
Figure 9	Geoprobe Locations on East Side of Main Building (Nov 2013)
Figure 10	Main Building Jun/Jul 2014 Sub-Slab Vapor Map, etc.
Figure 11	Southwest Corner TCE Concentrations Map (Dec 2015 – Dec 2017)
Figure 12	Southwest Corner TCE Concentrations Map (Jun 2019 – Jun 2022)
Figure 13	Southwest Corner TCE Concentrations Map (Aug 2022 – Dec 2024)
Figure 14	MW-10A Groundwater Elevation Data (Apr 2013 – Dec 2024)

Table 1	Well Construction Information
Table 2	VOCs Detected in Groundwater – Main Building (Feb 2011 & Nov 2013)
Tables 3 & 4	VOC Analytical Results for Sub-Slab Vapor Samples – Main Building (Jul 2014 & Jan 2015)
Table 5	NPI VOC Analytical Results from EW-5, EW-6, & SWC Monitoring Wells Since Dec 2015
Table 6	MW-76A Water Elevation and TCE Concentration Data Correlation Checks

GF File

Attachment A NPI LUST Site Closure Request (January 19, 1999) Excerpts
Attachment B TCE Concentration vs Time Graphs (EW-5, EW-6, and Select SWC Wells & Piezometers)

A chronological listing of the EPA decision and guidance documents, EPA's most recent five-year review (FYR) report for NPI, and other site information used in preparation of this report is presented below.

- *OU 02 Record of Decision (ROD), alternate water supply* (EPA, August 1, 1990).
- *OU 01 ROD, groundwater interim action* (EPA, September 30, 1991).
- *OU 03 ROD, waste removal from source areas, soil vapor extraction and cap at the Melby Road Disposal Site, and long-term groundwater monitoring* (EPA, May 15, 1996).
- *Explanation of Significant Differences* [ESD]*, final remedy* (EPA, December 23, 2009).
- *Activities Update – Southwest Corner* (GF, November 12, 2010, and April 14, 2011).
- *Groundwater Capture Zone Analysis & Pumping Test SOW for New Extraction Well* (GF, June 28, 2011).
- *Geoprobe Sampling Results – East Side of Building* (GF, January 16, 2014).
- *Sub-Slab Air Sampling at National Presto Industries* (GF, August 19, 2014, and February 24, 2015).
- *Main Building SVE System Status Report* (GF, March 12, 2015).
- *Remedial Alternatives Analysis for the MW-34/70 Area TCE Degreaser Sludge* (GF, September 24, 2015).
- *Annual Interim Remedial Action Status Report – 2017* (GF, February 20, 2018).
- *Remedial Action Report* (GF, August 28, 2019).
- *Annual Interim Remedial Action Status Report – 2021* (GF, April 20, 2022).
- *Sixth Five-Year Review Report for NPI* (EPA, July 11, 2022).
- *Work Plan for a 12-month Trial Shutdown of Extraction Well EW-6* (GF, January 24, 2023).
- *Annual Interim Remedial Action Status Report for 2023* (GF, May 24, 2024).
- *MH-18 Priority Pollutant Sample and Analytical Results Summary for 2024* (GF, January 13, 2025).

Portions of the Wisconsin Administrative Code (WAC) referenced in this report and the site's institutional control implementation and assurance plan (ICIAP) and long-term stewardship (LTS) plan – as presented in GF's August 28, 2019, remedial action report (RAR) – are available online. In addition:

- The 14 documents by GF included above are on file with both agencies, along with routine monthly progress reports which are not included above.
- This report includes discussion of the Eau Claire Municipal Well Field (ECMWF) and its two air stripper towers historically used for VOC water treatment. Based on historical monitoring data, the EPA issued an August 1, 2012, letter to the City of Eau Claire confirming that operation of the air strippers to remove VOCs prior to distribution to its customers would no longer be required. The City of Eau Claire has subsequently chosen to continue intermittent operation of the strippers at its own cost. If the City of Eau Claire ever decides to take the strippers completely offline, the EPA letter requires that they be kept in operating condition until the EPA either deletes the NPI site from the Superfund National Priorities List (NPL) or until EPA's review of future NPI site groundwater monitoring data

allows it to determine that the strippers can be permanently dismantled prior to the deletion of the NPI site from the NPL. In April 2013, EPA issued a Final Closeout Report (FCOR) for the ECMWF site, and the ECMWF site was deleted from the NPL on May 27, 2014.

- A list of acronyms and abbreviations and certification page for this submittal are also attached.

Dissolved-phase volatile organic compounds of concern at the site are limited to trichloroethylene (TCE), 1,1,1-trichloroethane (TCA), tetrachloroethylene (PCE), 1,1-dichloroethane (DCA), and 1,1-dichloroethylene (DCE). For this report, they will hereafter be referred to as NPI volatile organic compounds (NPI VOCs). Since 2015, there were no exceedances of the NR 140 Enforcement Standards (ESs)/Maximum Contaminant Levels (MCLs) for the NPI VOCs in any monitoring well or piezometer either on site or off site. Please refer to GF's May 24, 2024, status report for details.

This report summarizes:

- Why NPI and GF believe that 1) the observed rebound of TCE in and downgradient of EW-6 during its third trial shutdown was primarily due to back diffusion of TCE from residual organic material in and around the EW-6 well bore and 2) a portion of the organic material was residual fuel/#6 heating oil contamination upgradient of EW-6.

- Multiple lines of evidence in support this hypothesis, as opposed to a source area upgradient of EW-6 and under the main building, for example.

In addition, sections with pertinent background information on the site and EW-6, requested figure sets and tabulated data, and our findings and conclusions are presented.

SITE DESCRIPTION, HYDROGEOLOGICAL SETTING, AND CONCEPTUAL SITE MODEL

The site is relatively flat and abuts a sandstone ridge to the south. Areas to the north, east, and west are also relatively level, generally sloping gradually toward the Chippewa River, which is located approximately 2 miles north and west of the site. Lake Hallie, an impounded remnant of a former channel of the Chippewa River, lies approximately 1 mile north of the site (see Figure 1). Extraction wells EW-5 and EW-6, cascade aerator #2R (aka CAS-2R) , and the associated underground piping currently comprise the component parts to an interim remedy installed to provide hydraulic control and recover impacted groundwater in the SWC, as shown on Figure 2.

Extending northward from the northwestern portion of the site to Lake Hallie and westerly from the site to the Chippewa River are buried pre-glacial valleys within which alluvial sand and gravel deposits serve as a primary drinking water aquifer in the Eau Claire area. Approximately 2 miles west of the NPI site, for example, the Eau Claire municipal well field (ECMWF) draws groundwater from more of these buried deposits and provides drinking water for the City of Eau Claire. The direction of groundwater flow is controlled by the sandstone and granite bedrock valleys beneath the sand and gravel, which carry groundwater to the northwest towards Lake Hallie and to the west towards the Chippewa River and the ECMWF. The depth to bedrock is at or near the surface at the sandstone ridge in the extreme south-central portion of the NPI site and dips to the north and west. The top of bedrock is at least 100 feet below the ground surface (ft bgs) at the north and west property boundaries. The average depth to water (DTW) under NPI's main building is about 70 ft bgs (e.g., Figures 3 and 4 provide north-south and east-west cross sections through select wells/piezometers in the SWC with DTW info shown for Mar 2011).

Past waste-handling practices related to the manufacturing activities on the NPI site have included the use of dry wells and seepage lagoons. Manufacturing wastes were also discharged to a former sand and gravel pit. The major waste stream in 1996-1980 was waste forge compound which, in its pure form, consisted of approximately equal parts asphalt, graphite, and mineral oil. NPI discharged wastewater containing significant amounts of waste forge compound to Lagoon #1, a remnant of the former sand and gravel pit. From 1966 to 1969, waste forge compound was also landfilled at the Melby Road Disposal Site (MRDS). All discharge lines to Lagoon #1 were permanently sealed in 1985.

The conceptual site model is that VOCs observed in source areas on the NPI property migrated vertically through the unconsolidated soils to the groundwater and then traveled within the aquifer following the buried valleys. These valleys, which trend westerly toward the Chippewa River and ECMWF (former Plume 1/2) and northwesterly toward Lake Hallie (former Plumes 3/4 and 5), control the direction of groundwater flow in the unconsolidated deposits in the area. The former Plume 1/2 VOC of primary concern in the SWC is TCE because it historically has been detected at concentrations above its Maximum Contaminant Level (MCL) and the NR 140 Enforcement Standard (ES) of 5.0 micrograms per liter (µg/ℓ) or parts per billion in the groundwater.

Figure 1 is a 24-inch x 36-inch area-wide map showing the approximate former locations of Plume 1/2, Plume 3/4, and Plume 5, as defined by select NPI VOCs in 1993. The outlines of the former plumes define a groundwater flow divide that bisects the NPI site along a northwesterly line. The average groundwater flow velocity in the alluvial deposits in the area is approximately 12.5 ft/day, with an average gradient of about 0.015 in former Plume 1/2 that stretches from the NPI site to the ECMWF. Figure 2 provides an 11-inch x 17-inch SWC groundwater flow map for convenience. Table 1 is a summary of the construction information for all monitoring and extraction wells associated with the NPI site. This summary table also identifies which former plume each well is/was associated with and provides the grid coordinates for each well shown on Figure 1. Site datum is mean sea level (MSL).

STATUS OF THE REMEDIAL PROGRAM, FOCUSING ON THE SWC

Most of the selected interim and final remedies for the site, as stipulated in the RODs, were implemented in the mid- to late-1990s. These included:

- The excavation and off-site disposal of >5,000 BTU/lb waste forge compound from Lagoon #1 and impacted soil from several other waste management areas of concern, including Dry Wells #2 and #5, the swale between former Lagoons #3 and #4, the southwest corner of former Lagoon #2, and the Loading Dock Area (LDA). TCA was the primary VOC associated with the waste forge compound removed from Lagoon #1. Note also that Lagoon #1 was drained/pumped dry of residual surface water runoff prior to being backfilled with clean material in December 1998.

- The installation of four groundwater extraction wells and two associated cascade aerators for groundwater capture, control, and treatment. These interim systems were designed for continuous operation when needed and to be shut down once the off-site migration of impacted groundwater is no longer of concern. Originally, the groundwater extraction and treatment system in the SWC included EW-3, EW-4, and cascade aerator #2. The two wells started continuous, full-scale operation in March 1994 and were installed to provide hydraulic control and recover VOC-impacted groundwater associated with former Lagoon #1, located south of NPI's main building. In January 2004, EW-3 was replaced by EW-5 and, in September 2011, EW-4 and cascade aerator #2 were

replaced by EW-6 and cascade aerator #2R, respectively. These changes were implemented because two other source areas of TCE were identified over time in the SWC, as outlined below, and NPI constructed an addition to its main building in 2011.

- The construction of an engineered landfill with a multi-layer cap and soil vapor extraction (SVE) system at the MRDS for the long-term management of residual waste forge compound and impacted soil. Excavated material placed at the MRDS prior to installation of the cap included waste forge compound mixed with soil from Lagoon #1 with <5,000 BTU/lb, soil contaminated with waste forge compound from Drainage Ditch #3 and impacted material from the East Extension of Lagoon #1 and East Disposal Site (EDS). The final remedy for the MRDS is the multi-layer cap and SVE system. Over time, it has become apparent that the MRDS SVE no longer needs to operate continuously since the cap has essentially eliminated the vertical migration of contaminants due to the infiltration of precipitation and proven to provide reliable protection of groundwater quality.

In 1997 and 1998, operation of an SVE system that included five vent well in the former Lagoon #1 was used to remove residual VOCs from unsaturated soils (see Figure 5). However, after the SVE system was removed and former Lagoon #1 was backfilled with clean material in December 1998, as approved by both agencies, TCE groundwater concentrations began to increase in MW-34A and MW-70A.

The MW-34/70 Area SVE system, located south of the main building and west of former Lagoon #1, was installed in three phases to address the source, a TCE degreaser sludge area identified in 2002, as shown on Figure 6. The buried sludge was found primarily from 4 to 8 ft bgs near monitoring well nests MW-34 and MW-70. Overall results indicate that, along with the cinder-type fill, a relatively dry sludge from one or more TCE degreasers was deposited in shallow excavations in this area of the property. The activities associated with the generation of these wastes preceded the production of munitions at the facility and the permitted discharge of waste forge compound to Lagoon #1 that began in 1966.

To date, the MW-34/70 Area SVE system operates only during warm weather when the ground is not frozen, and the average ambient air temperature is above freezing. When temperatures are below freezing, it is more difficult to keep the system running because the condensate that collects in the knock-out tank freezes. Furthermore, when frost is in the ground, there is virtually no vertical migration from precipitation. As a result, running the system when the ground is frozen provides little, if any, benefit. Additional details on the MW-34/70 Area SVE system and TCE degreaser sludge are summarized in GF's September 24, 2015, remedial alternative analysis report to the EPA.

In retrospect, it appears operation of the Lagoon #1 SVE system in 1997 and 1998 also effectively served as a barrier to vertical migration of VOCs from the buried degreaser sludge. After the Lagoon #1 SVE system was removed though, the near-surface TCE contamination in the buried sludge was able to migrate to the groundwater again and TCE concentrations began to increase in MW-34A and MW-70A. These spikes in TCE were subsequently addressed by the MW-34/70 SVE system, as described above.

SWC Investigation Summary (2009-2015), EW-6, and the Main Building SVE System

The second supplemental TCE source area identified in the SWC after all ROD-required remedies were implemented appears to be beneath the main building. Extensive field work was conducted by NPI using a direct push/Geoprobe rig in 2009-2011 to collect soil, soil gas, and groundwater samples, desktop modeling was conducted, and a sub-slab vapor investigation was performed in 2014-2015 to identify optimal locations for the MW-76 and MW-77 well nests and EW-6 (2009-2011) and vent well VW-1 for the

main building SVE system (2014-2015). SVE is particularly effective at NPI because the coarse-grained, native unsaturated soils (i.e., sand and gravel) are relatively permeable and the DTW is approximately 70 ft bgs in both SWC residual TCE source areas and at the MRDS.

Figure 7 presents TCA/TCE groundwater concentrations in 2009-2011 on the west side of the main building. Note that GP-25 (13.2 µg/ℓ in Jun 2009), GP-32 (21.2 µg/ℓ in Jun 2009), GP-53 (8.03J µg/ℓ in Feb 2011), GP-59 (30.0 µg/ℓ in Feb 2011), GP-61 (25.3 µg/ℓ in Feb 2011), and MW-76A (29.1 µg/ℓ in Dec 2010 and up to a maximum 87.6 µg/ℓ in Jun 2011) defined a relatively small area of TCE in groundwater at or above 5 µg/ℓ. See GF's November 12, 2010, and April 14, 2011, SWC activities update reports for details.

Table 2 summarizes the analytical results of all VOCs detected in one or more of the groundwater samples collected in Feb 2011. Note that all four Feb 2011 groundwater samples contained several petroleum-related compounds, as well as one or more of the NPI VOCs. Likewise, relatively low-level concentrations of several polycyclic aromatic hydrocarbons (PAHs) were detected in the discharge samples collected from manhole MH-18 on December 3, 2024. Detected PAHs included anthracene (0.019J µg/ℓ), fluorene (0.070 µg/ℓ), and phenanthrene (0.042J µg/ℓ). GF's January 13, 2025, *MH-18 Priority Pollutant* [PP] *Sample and Analytical Results Summary for 2024* report provides details.

Historically, eight 30,000-gal underground storage tanks containing #6 heating oil in a common tank basin, transfer lines for rail and truck off-loading, a pumphouse, and buried piping to two boiler rooms were located on the east side of the main building. There were one or more releases from that tank system. Unrelated to the NPI Superfund site, the tanks were removed, the site was remediated, and the Wisconsin Department of Natural Resources (WDNR) closed the leaking underground storage tank (LUST) site in October 1999. Because the former LUST site (WDNR BRRTS #03-09-001038) is hydraulically upgradient from MW-76A, the diesel range organic (DRO)/gasoline range organic (GRO) compounds present in the Table 2 and MH-18 PP samples are likely residual contamination from that former LUST site, as shown by the estimated extent of DRO-impacted soil (i.e., red circle immediately northwest of PW-1) and DRO/GRO range groundwater impacts (i.e., purple ellipse enclosing PW-1 and MW-77) on Figure 2. See GF's April 14, 2011, activities update report; former petroleum monitoring well PW-1, which was located approximately 180 ft east of the main building and 90 ft west of MW-11A; and Attachment A (GF was fka Eder Associates) for context/details.

Figure 8 is an example simulated capture zone analysis for EW-6. As shown by the particle paths, the simulated capture zone for EW-6 includes all the west side of the main building. GF's June 28, 2011, *Groundwater Capture Zone Analysis* report provides supplemental details.

Figure 9 shows the locations of GP-62 through GP-65 on the east side of the main building in Nov 2013, and Table 2 summarizes their NPI VOC groundwater analytical results. As shown in Table 2, NPI VOC groundwater concentrations were below the laboratory limit of detection in all four east-side locations except for a PCE concentration of 1.3 µg/ℓ in GP-62. See GF's January 16, 2014, *Geoprobe Sampling Results (East Side of Main Bldg)* report for details.

Between June 16, 2014, and January 6, 2015, NPI performed a sub-slab vapor survey to a) fulfill its obligation to investigate the vapor intrusion (VI) pathway at the facility as requested by the WDNR and b) identify any TCE hot spots. Figure 10 is a site plan showing the 12 sub-slab air sample points (DA-1 and SS-1 through SS-11), the six Sep 2010 indoor soil boring locations (IB-1 through IB-6), and the Oct 2013 groundwater contour map. Figure 10 also summarizes results from the sub-slab vapor samples field

screened and collected from DA-1 on June 16, 2014, and SS-1 through SS-11 on July 24, 2014 (warm weather sampling). Flame ionization detector (FID) readings from the field are in parts per million, volume (ppmv), and VOC concentrations from the lab are measured in micrograms per cubic meter (µg/m^3). See GF's August 19, 2014, *Sub-slab Air Sampling Results (Round #1)* report for details about the first round of main building sub-slab vapor sampling.

Most of the main building is slab-on-grade construction, except in the vicinity of SS-6 and SS-7, where a basement approximately 190 ft long by 30 ft wide is located (see Figure 10). Because of the advanced age of the structure, NPI has not been able to locate an accurate drawing set, so details on the layout of the interior of the building are approximate.

On July 24, 2014, the three sub-slab vapor pin locations with the highest TCE concentrations were SS-4 (15.2 µg/m^3), SS-11 (5.1 µg/m^3), and SS-3 (3.9 µg/m^3). On January 6, 2015, a second round of sub-slab vapor samples were collected from SS-3 through SS-5, SS-9, and SS-11 (cold weather sampling). Table 3 provides a summary of all detected VOC concentrations in µg/m^3. Table 4 presents results for TCE, TCA, and PCE; the summation of those three chlorinated VOCs (CVOC Sum); and the FID readings in ppmv.

All detected concentrations were below WDNR guidelines for sub-slab air vapor risk screening levels in large industrial buildings (SSA VRSL). While levels did fluctuate between July 2014 and January 2015, all concentrations were more than one order of magnitude below applicable SSA VRSLs, and no dominant seasonal trend was apparent. Based on these findings:

- The VI pathway for TCE and TCA is not complete, and no further sub-slab vapor sampling at NPI is necessary.

- The 5/8-inch-diameter vapor pins from SS-1 through SS-11 were removed and their drill holes were plugged with non-shrink concrete. Because the June 16, 2014, analytical results from DA-1 were lower than the July 24, 2014, results from the 11 indoor locations SS-1 through SS-11, the vapor pin for DA-1 was removed in the fall of 2014, and no follow-up sampling was conducted at that location in January 2015, as approved by both agencies.

However, because sub-slab vapor TCE concentrations were highest in SS-4 and given that SS-4 was directly upgradient of MW-76A, NPI pro-actively installed a second supplemental SVE system in the main building, as shown on Figure 2. The primary purpose of the main building SVE system is to establish a vapor barrier under the main building in the vicinity of SS-4/SS-5 and prevent <u>downward</u> migrating TCE from impacting groundwater. See GF's February 24, 2015, *Sub-slab Air Sampling Results (Round #2 of 2)* report for details about the second round of main building sub-slab vapor sampling.

No records of historical TCE degreaser location(s) in the main building have been found, although a former outdoor "degreasing area" DA-1 for waste forge compound was identified on the east side of the main building and north of the electrical substation, as shown on Figure 10. However, sub-slab vapor sampling results document that DA-1 is not a source of TCE, as described above.

The main building SVE system (i.e., vent well VW-1) operates 24/7 all year to address the undefined TCE source under the main building, as shown on Figure 2. Full-time, continuous operation of the main building SVE system began on January 6, 2015. Additional details on the construction and startup of the main building SVE system are presented in GF's March 12, 2015, letter report to the EPA.

In summary, two supplemental SVE systems (i.e., the MW-34/70 Area and main building SVE systems) have been installed and are currently operating in the SWC to a) remove VOCs in the soil and b) provide a barrier to downward migration of these chemicals to groundwater, like the SVE system with 12 vent wells at the MRDS. All active remediation systems on site are effective in protecting human health and the environment. Three of the four groundwater extraction wells (EW-1R, EW-2, and EW-5) and one of the cascade aerators (CAS-1) are no longer in use because of the effectiveness of the remedial actions that have been implemented.

PERTINENT BACKGROUND INFORMATION ON EW-6

Extraction well EW-6 was installed in August 2011 to replace EW-4 as previously described. Since starting full-time operation on September 22, 2011, EW-6 has:

- Pumped approximately 1.029 billion gallons of groundwater through December 31, 2024. In 2024, the total volume of treated groundwater, pumped from EW-6 through CAS-2R and discharged to the storm sewer, was approximately 21.1 million gallons. The volume removed from all six of the NPI extraction wells since March 1994 totaled over 4.849 billion gallons through December 31, 2024.

- Been redeveloped eight times by Midwest Well Drilling (MWD) of Cornell, Wisconsin. Following standard practice for the area, MWD used muriatic acid to redevelop EW-6 in May 2015, Apr 2017, Dec 2018, Mar 2020, Apr 2021, Dec 2021-Jan 2022, and Dec 2022. GF/MWD/NPI field staff observed that EW-6 discharge has a slight odor like residual fuel oil and that biofouling in the well has increased over time. Consequently, MWD redeveloped EW-6 in two stages using 1) a chemical oxidant [i.e., Chlor-Safe Nu-Well 420 (NW-420), a chlorine alternative distributed by Johnson Screens of New Brighton, Minnesota] from 12/17/24 to 1/2/25 and 2) muriatic acid from 1/2/24 to 1/13/25. If the hypothesis proposed by GF/NPI is correct, then the NW-420 will decrease the a) residual organics in and around the well bore and b) back diffusion of VOCs that we believe is the primary contributing factor to the observed TCE rebound when EW-6 is offline.

- Been offline three times for agency-approved trial shutdowns as summarized below.

EXTRACTION WELL EW-6 AND ITS THREE TRIAL SHUTDOWNS

The location of the TCE source area beneath the main building has not been completely defined. However, the MW-76 well nest is directly downgradient of the source area based on 2009-2011 investigation data summarized above, and TCE concentrations have historically been elevated in water table monitoring well MW-76A. Operation of the main building SVE system to remove VOCs from the vadose zone beneath the building and improve groundwater quality in that area of the site since January 2015 has been primarily successful. TCE concentrations in MW-76A:

- Decreased an order of magnitude in 2015 and were below the PAL of 0.5 µg/ℓ in 2016.

- Increased from <0.33 to 4.6 µg/ℓ in March 2017, during the first trial shutdown of EW-6 from January 16 through April 17, 2017. However, with EW-6 back online, TCE concentrations in MW-76A decreased from 4.6 to <0.33 µg/ℓ in June 2017, remained below detection limits for the remainder of 2017, and ranged from 0.26U to 0.36J µg/ℓ in 2018. Virtually coincidental with the January through April 2017 trial shutdown of EW-6, it appears the March 2017 TCE spike occurred because historically high-water levels in the second half of 2016 "flushed out" residual TCE previously trapped in or just

above the capillary fringe and below/beyond the main building SVE system's vapor barrier. GF's February 2018 *Annual Interim Remedial Action Status Report – 2017* provides supplemental detail.

- TCE rebounded again in November 2021 during the second trial shutdown of EW-6 from September 1, 2021, to January 17, 2022. However, this time:
  - TCE concentrations increased from <0.32 to 0.89 and 0.98 to 2.25 µg/ℓ in MW-76A and EW-6, respectively. Hence, maximum measured TCE rebound concentrations were 4.6 (MW-76A) and 2.25 (EW-6) µg/ℓ in March 2017 and November 2021, respectively. NPI and GF believe the over 50 percent decrease in maximum measured rebound concentrations from March 2017 to November 2021 is indicative of 1) less residual TCE mass in the source area under the main building and 2) the continued improvement in overall groundwater quality.
  - Out of an abundance of caution, EW-6 resumed full-time operation to provide hydraulic control and prevent the off-site migration of dissolved-phase TCE and other VOCs on January 17, 2022, as agreed. GF's April 2022 *Annual Interim Remedial Action Status Report – 2021* provides supplemental detail.

Third Trial Shutdown of EW-6 (2/23/23-9/23/24)

On February 23, 2023, the pump in EW-6 was turned off to start its third trial shutdown, as approved by both agencies. The electric submersible pump in EW-6 was temporarily restarted for NPI VOC grab sampling on a quarterly basis. Related quarterly operating and groundwater sampling information is summarized in the following table.

Date	TCE Concentration (µg/ℓ)	Description/Comments
8/30/22	0.99 JA	Routine third quarter (Q3) monitoring in 2022 with EW-6 running 24/7/365.
12/5/22	Not applicable	No sample collected during Q4 2022 monitoring; EW-6 was being redeveloped.
2/23/23	"	Start 12-month trial shutdown of EW-6, as agreed; no sample collected.
3/21/23	<0.32 A	1st sample on Day 26 of trial shutdown, after 5-min/900-gal purge (Q1 monitoring).
6/13/23	2.7 A	2nd sample on Day 110, after 5-min/900-gal purge (Q2 monitoring).
8/29/23	2.55 A	Q3 2023 monitoring (1 of 2) on Day 187, after 5-min/900-gal purge
8/30/23	1.5	Q3 2023 monitoring (2 of 2) on Day 188, after 22-hr & 20-min/241,200-gal purge.
11/30/23	2.6 A	Q4 2023 monitoring (1 of 2) on Day 280, after 10-min/1,800-gal purge.
12/1/23	1.3	Q4 2023 monitoring (2 of 2) on Day 281, after 22-hr & 35-min/243,900-gal purge.
3/27/24	2.0 A	Q1 2024 monitoring (1 of 2) on Day 398, after 10-min/1,800-gal purge.
3/28/24	1.1	Q1 2024 monitoring (2 of 2) on Day 399, after 24-hr & 15-min/261,900-gal purge.
6/3/24	2.3 A	Q2 2024 monitoring (1 of 2) on Day 466, after 5-min/900-gal purge.
6/4/24	1.1	Q2 2024 monitoring (2 of 2) on Day 467, after 23-hr & 50-min/257,400-gal purge.
8/27/24	3.05 A	Q3 2024 monitoring (1 of 2) on Day 551, after 5-min/900-gal purge.
8/28/24	1.7	Q3 2024 monitoring (2 of 2) on Day 552, after 23-hr & 55-min/258,300-gal purge.
12/3/24	1.02 A	Routine Q4 monitoring with EW-6 back online (it resumed full-time operation on 9/23/24).

NOTES:
Concentrations are in micrograms per liter (µg/ℓ)/parts per billion (ppb).
Detected concentrations at or above 2.5 µg/ℓ are in blue font.
EW-6 is 6-inch diameter & had a static water column of 30 ft in 2023-2024, on average. Hence, its casing volume=approx. 44 gal.
A = Average of original sample and duplicate. Began this approach in 2014.
J = Estimated concentration below laboratory quantitation level.

Per Page 5 of GF's January 2023 *Work Plan for a 12-Month Trial Shutdown of Extraction Well EW-6*, groundwater trigger thresholds for the restarting of EW-6 were described. If TCE rebound occurs at or above a proposed threshold concentration of 2.5 µg/ℓ (i.e., 50 percent of TCE's MCL/ES of 5.0 µg/ℓ) in EW-6 and/or MW-76A for two consecutive quarters or 5.0 µg/ℓ in one quarter and/or the MW-77 well nest. At the annual site visit on July 12, 2024, though, the agencies and NPI verbally agreed that the trial shutdown of EW-6 could be extended through the Q1 of 2025, unless the rebound of TCE groundwater concentrations in an NPI monitoring well or piezometer occurs at or above TCE's MCL/ES of 5.0 µg/ℓ.

Through 8/28/24, EW-6 and MW-77B were the only two SWC sample locations during the third trial shutdown with temporary TCE rebound above the 2.5 µg/ℓ threshold for two consecutive quarters:

- TCE concentrations of 2.7A, 2.55A, 2.6A, and 3.05A µg/ℓ in EW-6 on 6/13/23, 8/29/23, 11/30/23, and 8/27/24, respectively, were above the 2.5 µg/ℓ threshold but below its MCL/ES of 5.0 µg/ℓ. In addition, the TCE concentration decreased to 1.5, 1.3, and 1.7 µg/ℓ on 8/30/23, 12/1/23, and 8/28/24, respectively, indicated that perhaps the observed rebound is due in part to back diffusion of TCE from residual organic material in and around the EW-6 well bore.

- TCE concentrations in samples collected from MW-76A and MW-77A/B/C were:
    - <0.32A, 0.52J, 2.1, and 1.0J µg/ℓ, respectively, on 3/21/23.
    - 0.56JA, 0.87J, 1.9A, and 0.55J µg/ℓ, respectively, on 6/13/23.
    - 1.2A, 0.63J, 1.5, and 0.45J µg/ℓ, respectively, on 8/29/23.
    - 1.75A, 0.47J, 1.4, and 0.58J µg/ℓ, respectively, on 11/30/23.
    - 1.7A, <0.32, 1.5, and 0.56J µg/ℓ, respectively, on 3/27/24.
    - 1.4A, <0.32, 2.8, and 0.645JA µg/ℓ, respectively, on 6/4/24.
    - 1.05A, 0.49J, 4.0, and 0.87J µg/ℓ, respectively, on 8/28/24.

TCE results for Q3 of 2024 were mixed. In:

- MW-76A, TCE concentrations continued to decrease from a maximum of 1.75A µg/ℓ on 11/30/23.

- MW-77B, RW-2B, and RW-2C, TCE concentrations increased from Q1 to Q3 in 2024 (e.g., TCE concentrations in MW-77B were 1.5/2.8/4.0 µg/ℓ on 3/27/24, 6/4/24, and 8/28/24, respectively).

The Q3 2024 maximum measured concentration of 4.0 µg/ℓ (i.e., in MW-77B on 8/28/24) was below TCE's MCL/ES of 5.0 µg/ℓ, so the trial shutdown of EW-6 could have continued. However, the increasing trend of TCE concentrations in the downgradient piezometers MW-77B, RW-2B, and RW-2C was not favorable. Consequently, NPI elected to restart EW-6 on 9/23/24 out of an abundance of caution and to reduce the odds of having TCE exceed its MCL/ES of 5 µg/ℓ at the NPI site for the first time since 2015.

Table 5 includes NPI VOC analytical results from EW-5, EW-6, and the SWC monitoring wells/piezometers since Dec 2015. Three key monitoring wells nests include all historical NPI VOC analytical results (i.e., MW-76A/B, MW-77A/B/C, RW-2A/B/C). Figures 11-13 present December 2015-December 2017, June 2019-June 2022, and Aug 2022-Dec 2024 SWC TCE groundwater data summaries, respectively. January 2018-May 2019 TCE analytical results are comparable to the June 2019-June 2022 data but are not included here for brevity. Attachment B provides TCE concentration versus time graphs for EW-5, EW-6, and select SWC wells/piezometers for reference. Given that NPI elected to restart EW-6, no additional statistical analysis of the TCE data is included in this report. To date, GF has used visual trends at NPI

instead (e.g., Appendices D and E to the 2023 annual report) based on past practice. Please see GF's May 24, 2024, annual report and the Excel workbooks submitted to both agencies for complete historical analytical data for all key wells prior to 2024, including graphs of the concentrations of TCE over time.

Water Levels in MW-10A and MW-76A Water Elevation/TCE Data Correlation Checks

Water table monitoring well MW-10A, located by the loading dock at the south end of the main building, serves as a conservative benchmark for water levels in the TCE source area under the main building because:

- MW-10A is approximately 720 ft upgradient of EW-6 and outside its cone of depression.
- The TCE source area under the main building is located between MW-10A and EW-6.

Figure 14 is a time-series plot of groundwater elevation data for MW-10A since Apr 2013. Note that water levels in Dec 2019 were at historic highs and approximately 6 ft above the yearly lows measured in Apr 2013, as shown on Figure 14. The dynamics of such historically large fluctuations in water levels combined with groundwater pumping in the SWC since 1994 can complicate trend analysis. However, Table 6 provides MW-76A water elevation and TCE concentration data correlation checks. Recall that, as described online:

- The correlation coefficient is a value between -1 and 1.
- A value of 0 indicates no correlation between variables.
- A value of 1 indicates a perfect positive correlation (i.e., as one variable increases, so does the other).
- A value of -1 indicates a perfect negative correlation (i.e., as one variable increases, the other decreases).

FINDINGS AND CONCLUSIONS SUMMARY

Along with information about EW-6 and its three trial shutdowns, this report presents a chronology of relevant remedial activity and supplemental site investigation work in the SWC for context. The successful trial shutdowns of EW-1R/EW-2 and EW-5 raised expectations because there was little, if any, rebound in TCE groundwater concentrations. In contrast, observed TCE rebound of note occurred during the:

- First trial shutdown of EW-6 (1/16/17-4/27/17) at MW-76A, when TCE was flushed out of the capillary fringe under the main building presumably due to rising levels.
- Second trial shutdown of EW-6 (9/1/21-1/17/22) at EW-6.
- Third trial shutdown of EW-6 (2/23/23-9/23/24) at EW-6 and MW-77B.

GF/NPI believe this is because:

- The subsurface conditions at EW-6 and the main building SVE are different from those at EW-1R/EW-2 and the MRDS SVE and EW-5 and the MW-34/70 Area SVE. Adding another vent well to the main building SVE system is currently deemed impractical due to limited access.

- The observed rebound of TCE concentrations in EW-6 and MW-77B was primarily due to back diffusion of TCE from residual organic material in and around the EW-6 well bore and a portion of the organic material is residual fuel/#6 heating oil contamination related to a former NPI LUST site upgradient of EW-6 and east of the main building. Multiple lines of evidence support this hypothesis.

From December 12, 2024, to January 2, 2025, MWD shocked EW-6 with chlorine (i.e., NW-420) as a chemical oxidant to decrease the a) residual organics in and around the well bore and b) back diffusion of VOCs. Groundwater monitoring results in 2025 should 1) tell if this new treatment approach at EW-6 works and 2) further assess the plausibility of the back-diffusion hypothesis proposed by GF/NPI.

In addition, based on decades of data from thousands of sites, properly designed pump-and-treat remedial technology provides hydraulic control and capture to prevent the off-site migration of dissolved contaminants. However, once contaminant concentrations in a pump-and-treat system like EW-6 at NPI are at or near asymptotic (i.e., relatively low flatline) levels and provided any observed rebound behavior can be controlled/is of limited/local impact and understood, then continued pumping offers little, if any, long-term improvement in local groundwater water quality relative to the monitored natural attenuation of recalcitrant compounds like TCE.

Feel free to contact Chelsea (608/286-8491) or me (608/695-3651) if you have any questions or need additional information related to NPI.

Sincerely,
GANNETT FLEMING, INC.

Clifford C. Wright, P.E., P.G.
Project Engineer

CCW/Enc.

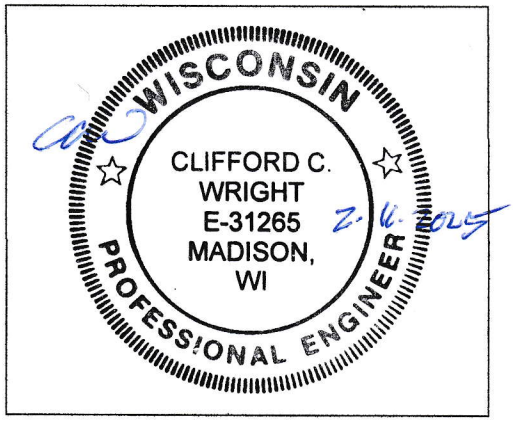
ecc: Matt Vitale (WDNR/Eau Claire) and Erin Endsley (WDNR/Superior)
Derrick Paul (NPI)
Chelsea Payne (GF)

ENGINEERING AND HYDROGEOLOGIST CERTIFICATIONS

I hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Print Name Clifford C. Wright	Title Project Engineer/Geologist
Signature Clifford C. Wright	Date 2.11.2025

P.E. Seal for E-31265:



I hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03(1), Wis. Adm. Code, am registered in accordance with the requirements of ch. GHSS 2, Wis. Adm. Code, or licensed in accordance with the requirements of ch. GHSS 3, Wis. Adm. Code, and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

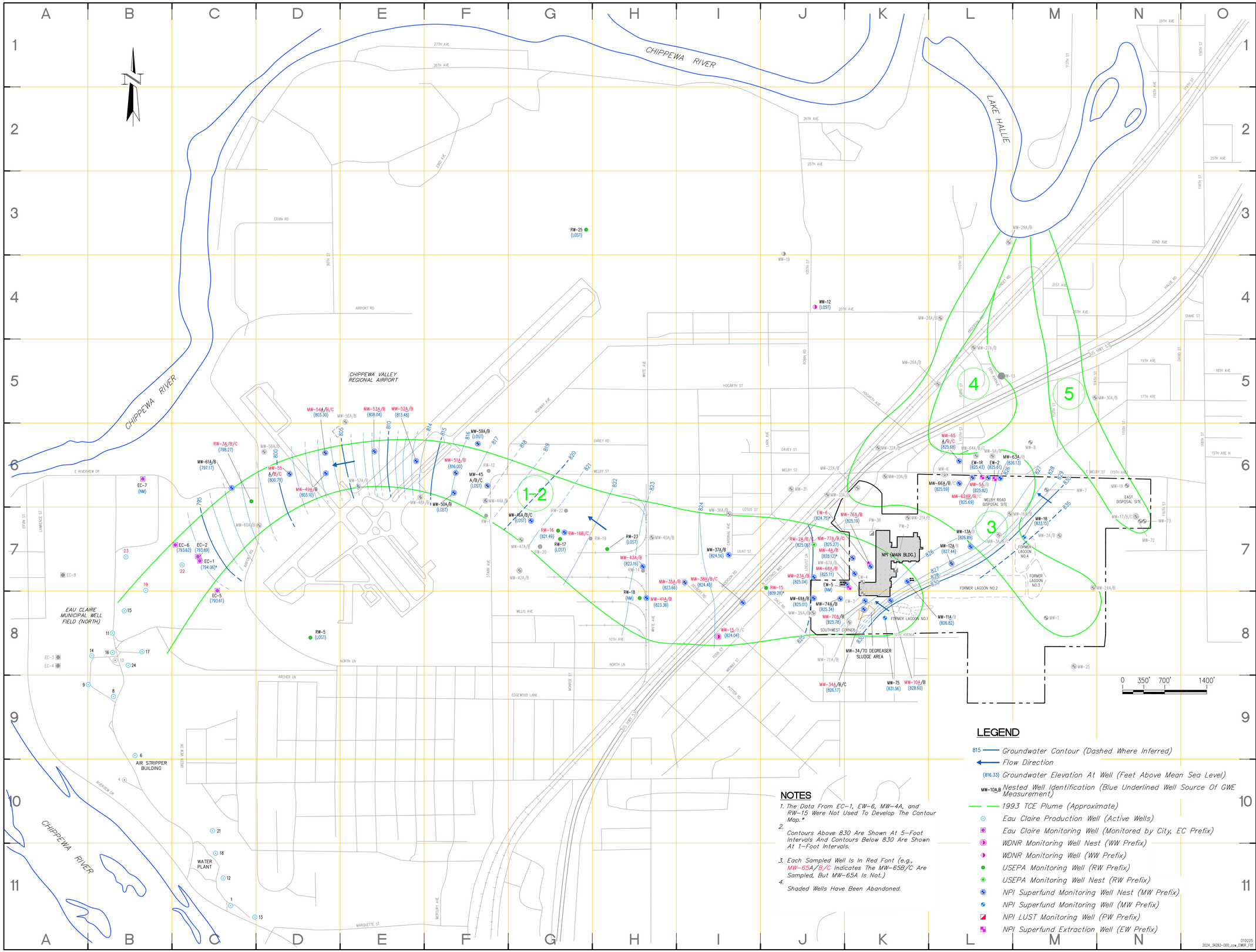
Print Name Clifford C. Wright	Title Project Engineer/Geologist
Signature Clifford C. Wright	Date 2.11.2025

GANNETT FLEMING

LIST OF ACRONYMS AND ABBREVIATIONS

bgs	below ground surface
BRRTS	Bureau of Remediation and Redevelopment Tracking System (Wisconsin)
CAS	cascade aerator system
DCA	1,1-dichloroethane
DCE	1,1-dichloroethylene
DTW	depth to water
ECMWF	Eau Claire Municipal Well Field
EDS	East Disposal Site
ES	Enforcement Standard (WAC NR 140)
ESD	explanation of significant difference
EW	extraction well
FCOR	final closeout report
FID	Facility ID (Wisconsin)
fka	formerly known as
ft	feet
GF	Gannett Fleming, Inc./Gannett Fleming TranSystems
IC	institutional controls
ICIAP	institutional control implementation and assurance plan
LDA	Loading Dock Area
LTS	long-term stewardship
MCL	Maximum Contaminant Level (federal)
MRDS	Melby Road Disposal Site
MW	monitoring well
MWD	Midwest Well Drilling
ppmv	parts per million, volume
µg/ℓ	micrograms per liter
NPI	National Presto Industries, Inc.
NPL	National Priorities List
O&M	operation and maintenance
OU	operating unit
PAL	Preventative Action Limit (WAC NR 140)
PCE	tetrachloroethylene
RAR	Remedial Action Report
ROD	Record of Decision
SSA VRSL	sub-slab air vapor risk screening levels
SVE	soil vapor extraction
SWC	Southwest Corner
TCA	1,1,1-trichloroethane
TCE	trichloroethylene
USEPA	U.S. Environmental Protection Agency
VI	vapor intrusion
VOCs	volatile organic compounds
WAC	Wisconsin Administrative Code
WDNR	Wisconsin Department of Natural Resources

FIGURES



NOTES

1. The Data From EC-1, EW-6, MW-4A, and RW-15 Were Not Used To Develop The Contour Map.*
2. Contours Above 830 Are Shown At 5-Foot Intervals And Contours Below 830 Are Shown At 1-Foot Intervals.
3. Each Sampled Well Is In Red Font (e.g., MW-65A/B/C Indicates The MW-65B/C Are Sampled, But MW-65A Is Not.)
4. Shaded Wells Have Been Abandoned.

No.	REVISIONS	DATE	BY
0	PRELIMINARY DRAFT.	12/16/24	JSD

AREA SITE PLAN WITH WELL AND 1993 PLUME LOCATIONS

NATIONAL PRESTO INDUSTRIES, INC. AND
EAU CLAIRE MUNICIPAL WELL FIELD
EAU CLAIRE, WISCONSIN

GANNETT FLEMING
HARRISBURG, PENNSYLVANIA MADISON, WISCONSIN

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PROJECT
NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

TITLE
WATER TABLE GROUNDWATER CONTOUR MAP (JUNE 2024) WITH 1993 PLUME LOCATIONS

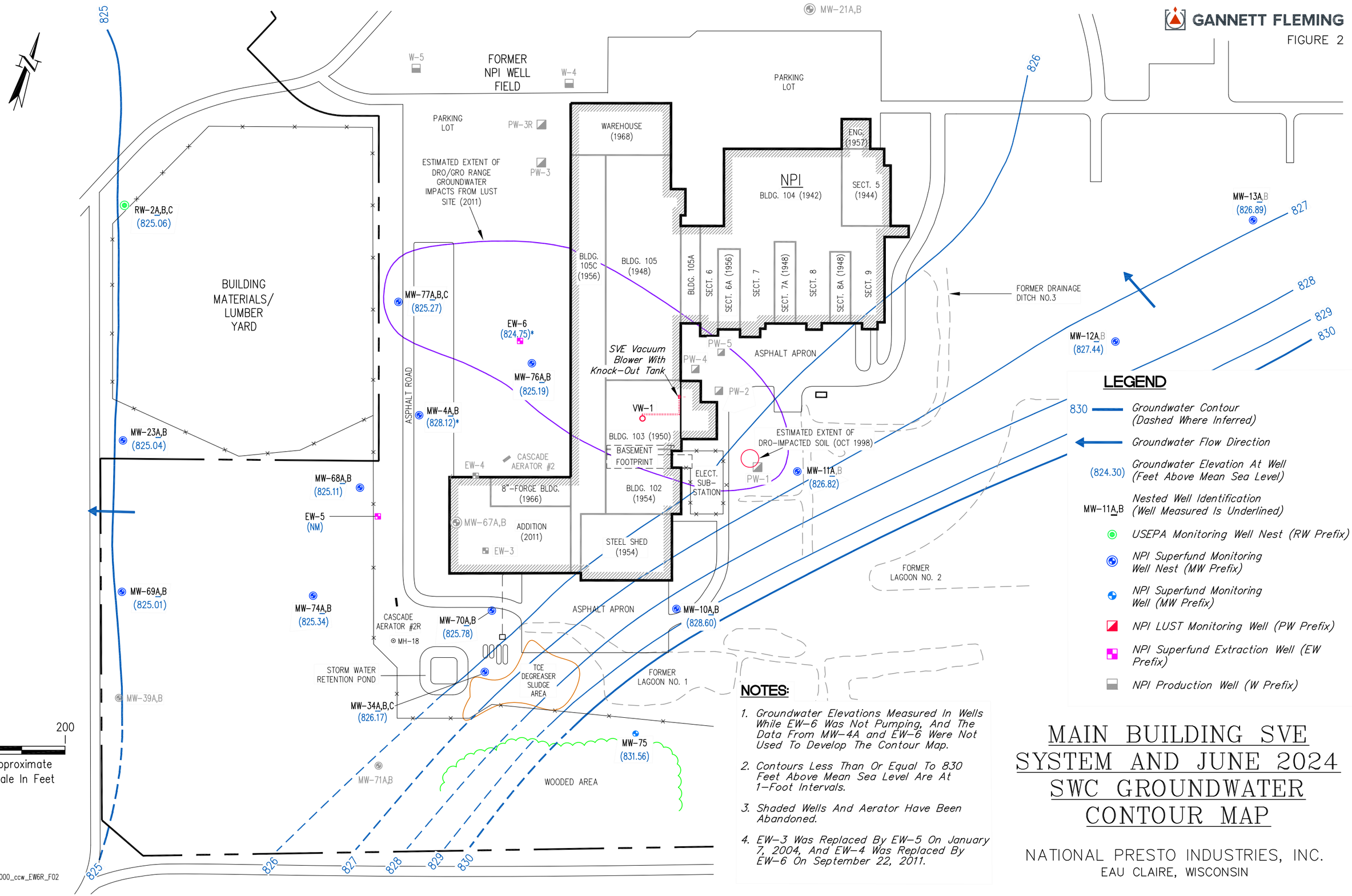
GANNETT FLEMING
HARRISBURG, PENNSYLVANIA MADISON, WISCONSIN

DRAWN BY JSD	SCALE 1" = 700'
DESIGNED BY CJP	PROJECT No. 34283.000
APPROVED BY CCW	DRAWING NO. FIGURE 1
DATE JANUARY 2025	

010225
2024_34283-000_ccw_EWGR_F01

GANNETT FLEMING

FIGURE 2



NOTES:

1. Groundwater Elevations Measured In Wells While EW-6 Was Not Pumping, And The Data From MW-4A and EW-6 Were Not Used To Develop The Contour Map.
2. Contours Less Than Or Equal To 830 Feet Above Mean Sea Level Are At 1-Foot Intervals.
3. Shaded Wells And Aerator Have Been Abandoned.
4. EW-3 Was Replaced By EW-5 On January 7, 2004, And EW-4 Was Replaced By EW-6 On September 22, 2011.

MAIN BUILDING SVE SYSTEM AND JUNE 2024 SWC GROUNDWATER CONTOUR MAP

NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

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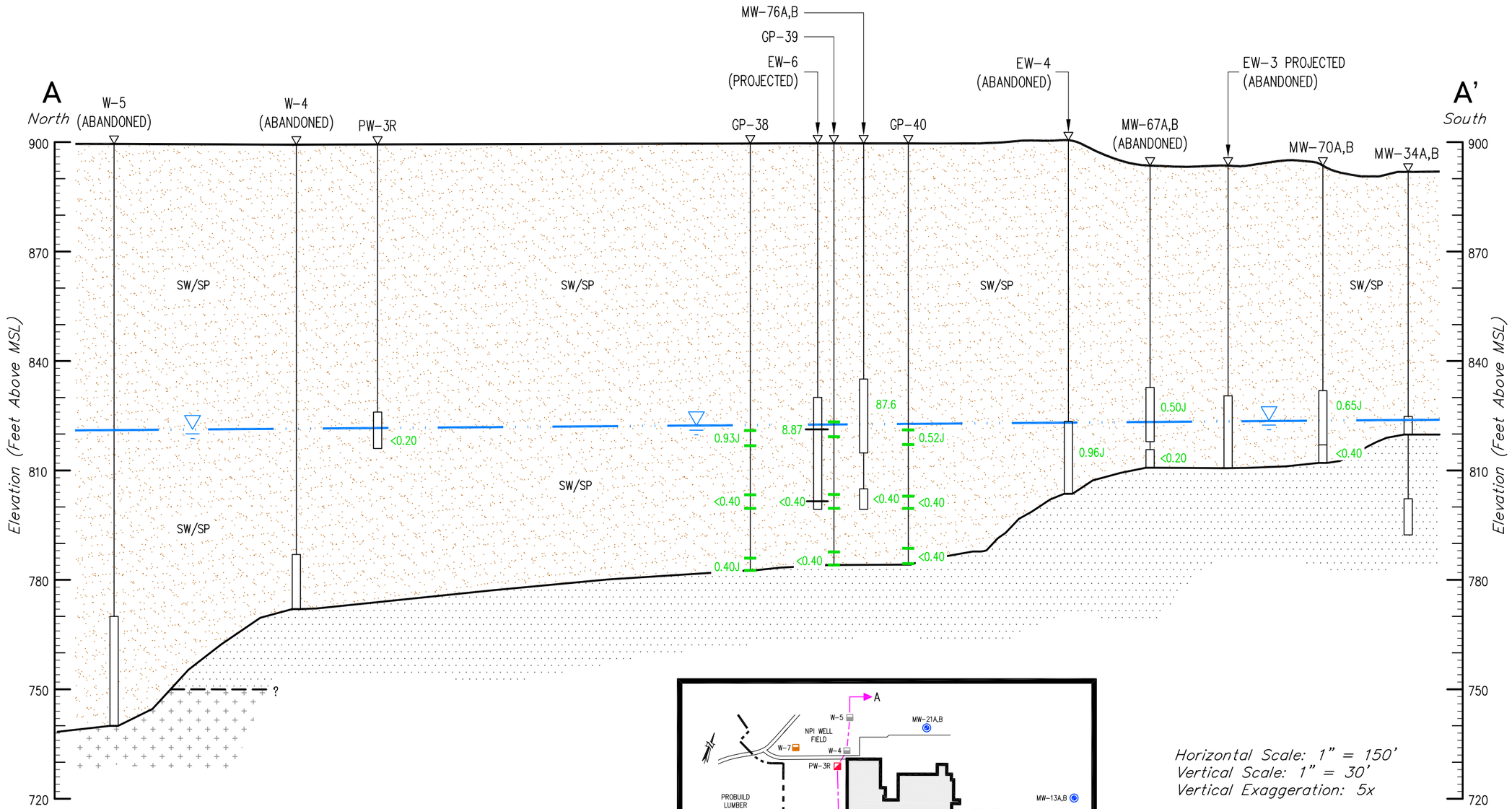
GANNETT FLEMING

FIGURE 3



Horizontal Scale: 1" = 150'
Vertical Scale: 1" = 30'
Vertical Exaggeration: 5x

LEGEND

Geologic Units

- SW/SP — *Poor And Well Graded Sand, Trace Gravel*
- *Fine To Medium Grained Sandstone*
- *Granite*
- *Geologic Contact (Dashed Where Inferred)*
- *Water Table (March 28–30, 2011)*
- 8.87 — *TCE Groundwater Concentration (ug/l)*

Well Construction

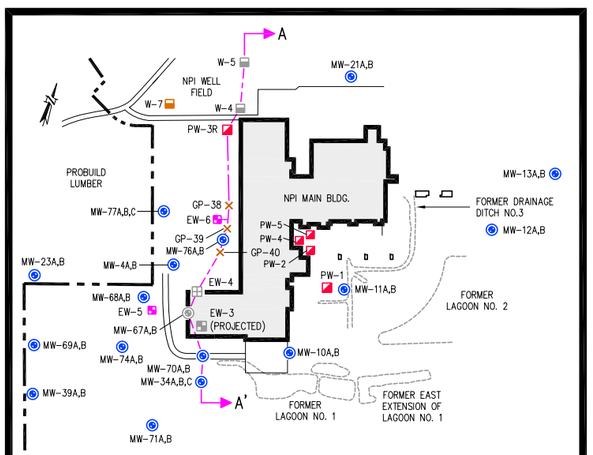
- PW-3R — *Well I.D.*
- *Well Casing*
- *Screened Interval*

Geoprobe Boring

- GP-38 — *Boring I.D.*
- *Boring Path*
- *Groundwater Grab Sample Intervals*

NOTES

1. *GP–38, 39, And 40 Samples Collected On Oct. 5–6, 2009.*
2. *MW–67A And 67B Samples Collected on Nov. 30, 2009.*
3. *PW–3R Sample Collected On June 29, 2010.*
4. *EW–4 Sample Collected on Oct. 4, 2010.*
5. *MW–76A And 76B Samples Collected On June 6, 2011.*
6. *MW–70A And 70B Samples Collected On June 8, 2011.*



SOUTHWEST CORNER SITE LAYOUT

Scale: 1" ~ 800'

SWC NORTH–SOUTH CROSS SECTION A–A' (MARCH 2011)

NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

TCE LAYER ON
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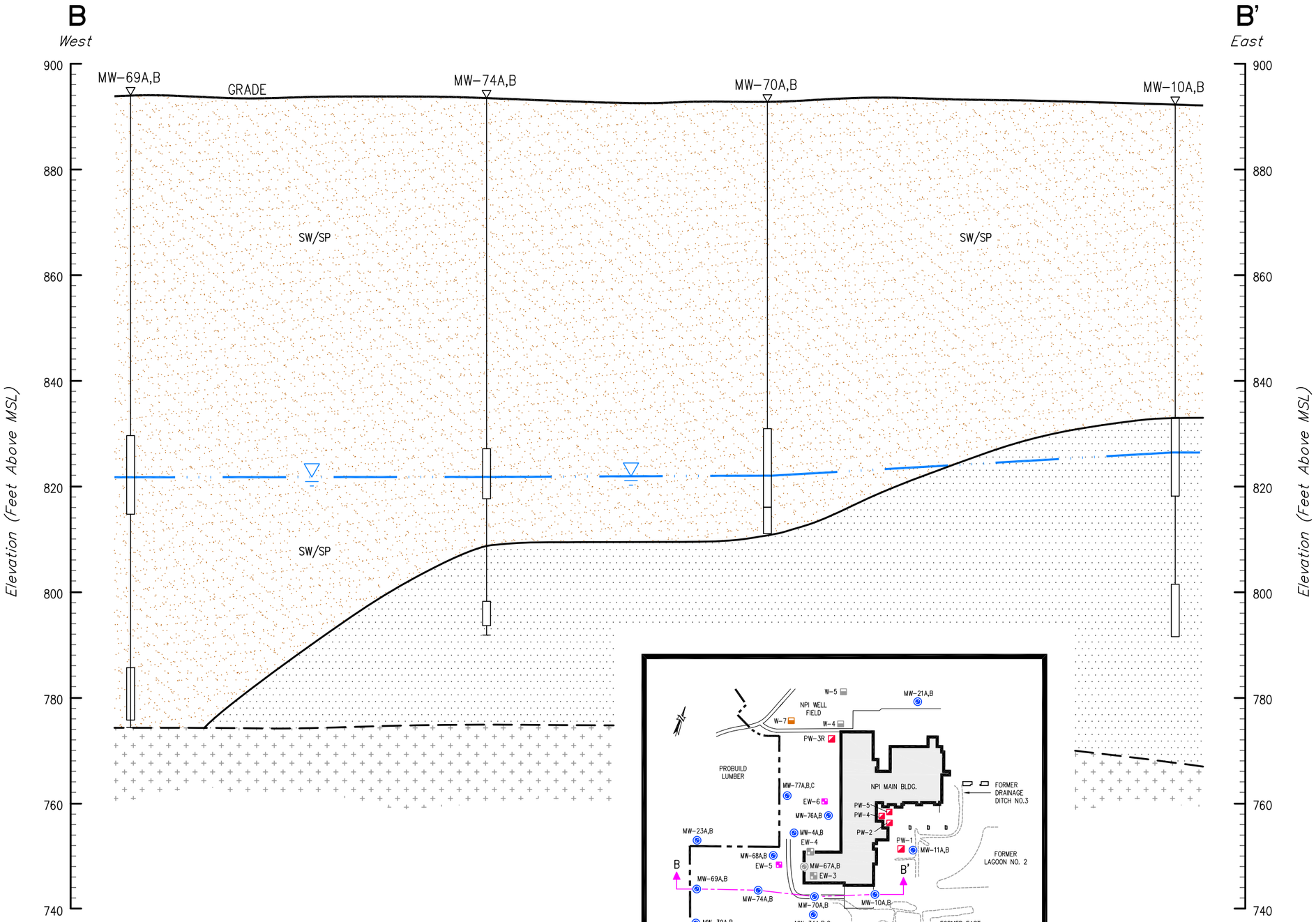
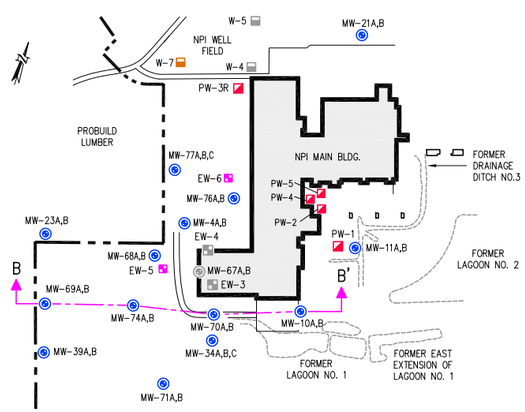
GANNETT FLEMING

FIGURE 4





SOUTHWEST CORNER SITE LAYOUT

Scale: 1" ~ 800'

LEGEND

Geologic Units

- SW/SP — *Poor And Well Graded Sand, Trace Gravel*
- *Fine To Medium Grained Sandstone*
- *Granite*
- *Geologic Contact (Dashed Where Inferred)*
- *Water Table (March 28–30, 2011)*

Well Construction

- MW-70A — *Well I.D.*
- *Well Casing*
- *Screened Interval*

Horizontal Scale: 1" = 130'
Vertical Scale: 1" = 20'
Vertical Exaggeration: 6.5x

SWC WEST–EAST CROSS SECTION B–B' (MARCH 2011)

NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

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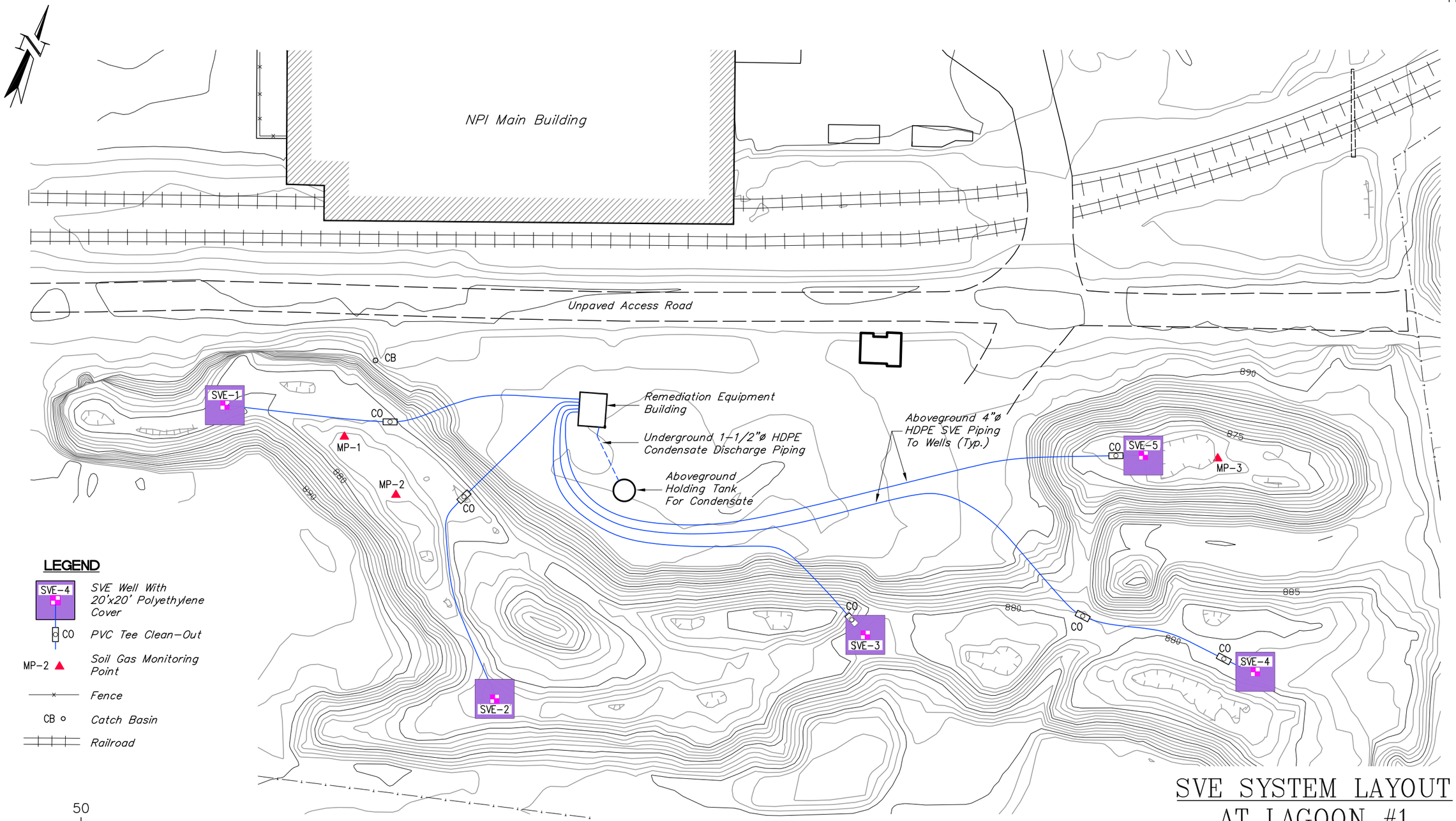
GANNETT FLEMING

FIGURE 5



NOTES

1. Each SVE Well Has A 20'x20' Polyethylene Cover To Reduce Short-Circuiting.
2. PVC Clean-Out Tees Are Located At Low Points In Piping Runs.
3. Site Datum: Mean Sea Level (MSL).
4. Contour Interval=1Ft.

SVE SYSTEM LAYOUT AT LAGOON #1 (SEPTEMBER 1997 THROUGH AUGUST 1998)

NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

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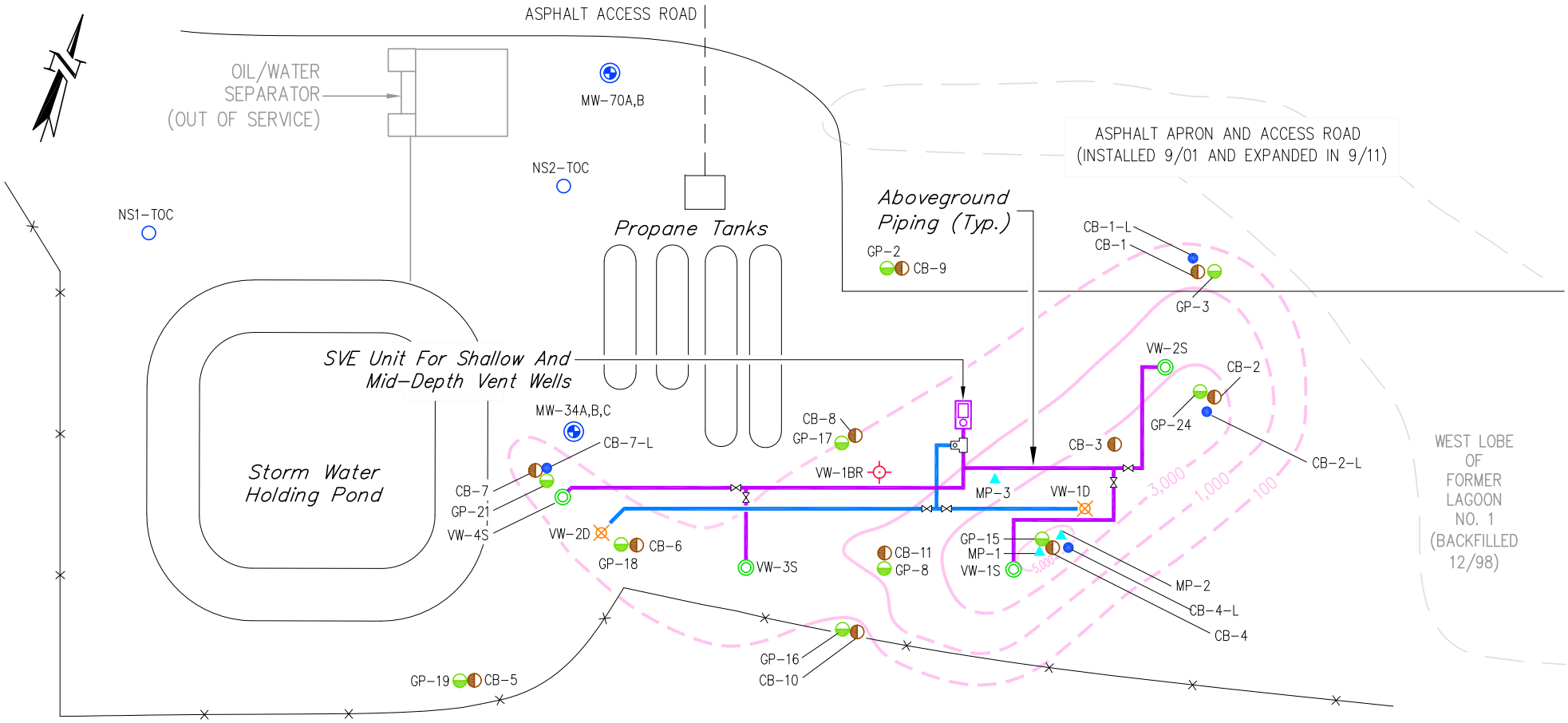

LEGEND

- Soil Boring Location (11-12/02)
- Soil Boring Location (9/10)
- Soil Sample For SPLP/TOC Analysis (11/10)
- Soil Sample For TOC Analysis (11/10)
- Shallow SVE Vent Well (VW Prefix)
- Mid-Depth SVE Vent Well (VW Prefix)
- Bedrock SVE Vent Well (VW Prefix)
- Soil Gas Monitoring Point (MP Prefix)
- NPI Monitoring Well Nest (MW Prefix)
- 2002 TCE Soil Isoconcentration Contour ug/kg 0-4' (Dashed Where Inferred)
- Gate Valve
- Tee With Ball Valve
- Chain-Link Fence

0 50
Approximate Scale In Feet

MW-34/70 AREA SVE SYSTEM LAYOUT (JUNE 2024) AND SOIL/TCE DEGREASER SLUDGE SAMPLE LOCATIONS

NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

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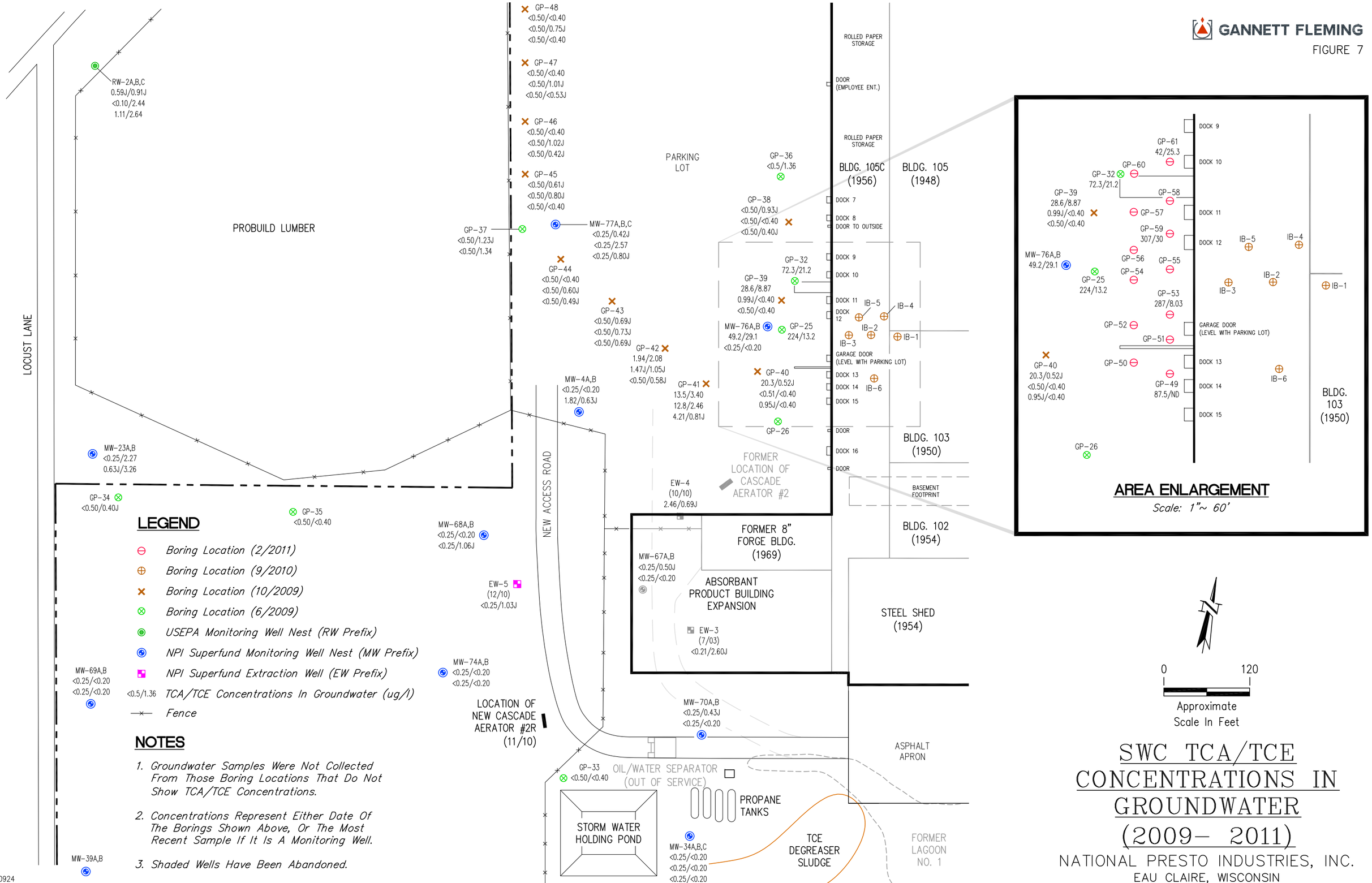
GANNETT FLEMING
FIGURE 6

GANNETT FLEMING

FIGURE 7



LEGEND

- ⊖ *Boring Location (2/2011)*
- ⊕ *Boring Location (9/2010)*
- × *Boring Location (10/2009)*
- ⊗ *Boring Location (6/2009)*
- *USEPA Monitoring Well Nest (RW Prefix)*
- *NPI Superfund Monitoring Well Nest (MW Prefix)*
- *NPI Superfund Extraction Well (EW Prefix)*
- <0.5/1.36 *TCA/TCE Concentrations In Groundwater (ug/l)*
- —×— *Fence*

NOTES

1. *Groundwater Samples Were Not Collected From Those Boring Locations That Do Not Show TCA/TCE Concentrations.*
2. *Concentrations Represent Either Date Of The Borings Shown Above, Or The Most Recent Sample If It Is A Monitoring Well.*
3. *Shaded Wells Have Been Abandoned.*
4. *See GF's April 14, 2011, Activities Update –Southwest Corner report for details.*

SWC TCA/TCE CONCENTRATIONS IN GROUNDWATER (2009– 2011)

NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

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2024_34283-000_ccw_EW6R_F07

N
W E
S

Legend

- Well Location
- Geoprobe Sample Location
- Particle Pathline

0 60 120 240 360 480
Feet

Simulated Particle Pathlines Pumping EW-6 Hydraulic Conductivity 250 ft/d and Hydraulic Gradient 0.003

NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

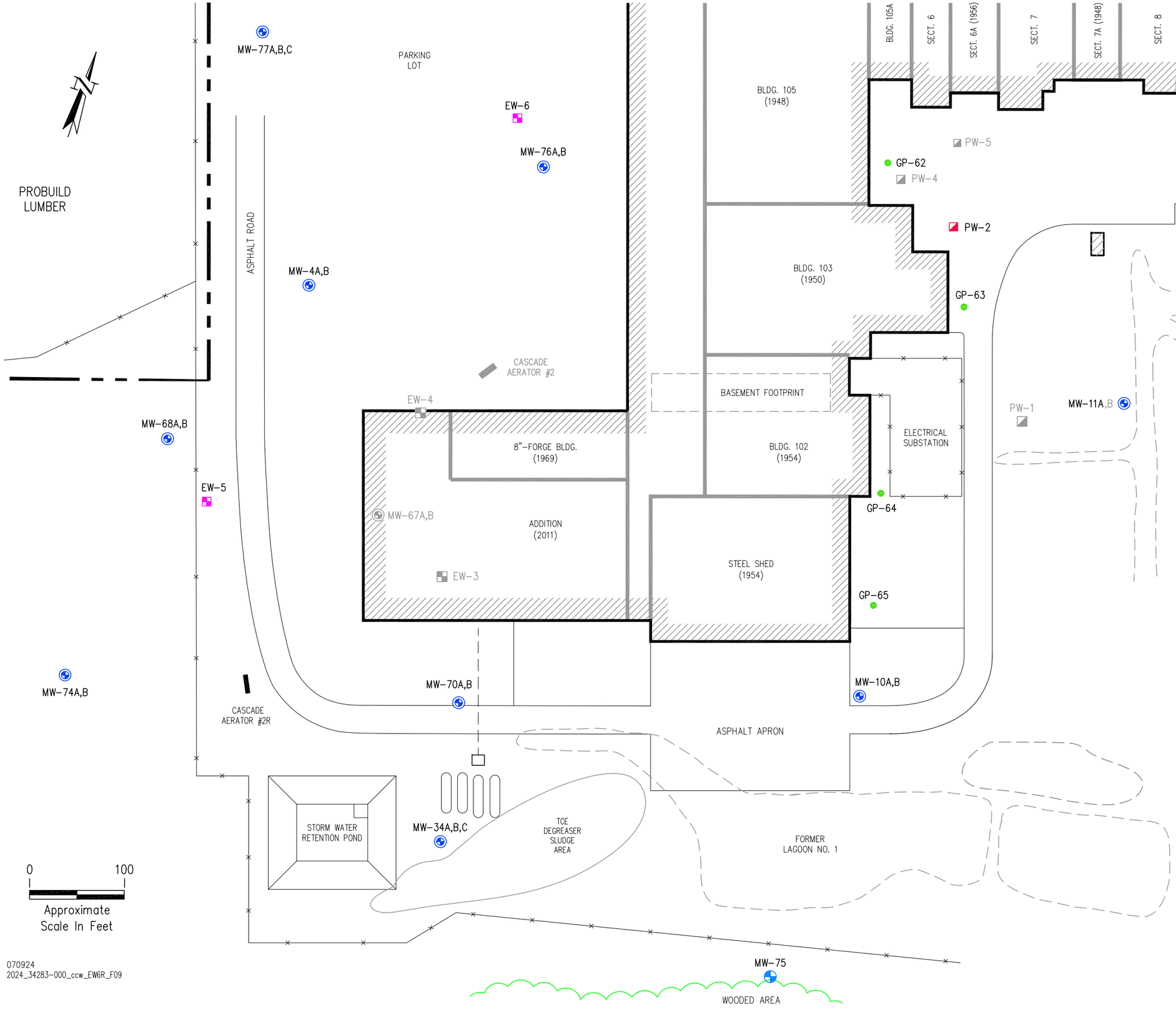
Gannett Fleming

Gannett Fleming, Inc.
8025 Excelsior Drive
Madison WI 83717-1900
(608) 836-1500
www.gannettfleming.com

Project	34283.000	Date	06/23/2011	Figure	8

GANNETT FLEMING

FIGURE 9



LEGEND

- Geoprobe Boring Location (11/13)
- MW-10A,B Nested Well Identification
- NPI Superfund Monitoring Well Nest (MW Prefix)
- NPI Superfund Monitoring Well (MW Prefix)
- NPI Superfund Extraction Well (EW Prefix)
- NPI LUST Monitoring Well (PW Prefix)

NOTE:

Shaded Wells And Other Structures Have Been Abandoned.

GEOPROBE LOCATIONS ON EAST SIDE OF MAIN BUILDING (NOVEMBER 2013)

NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

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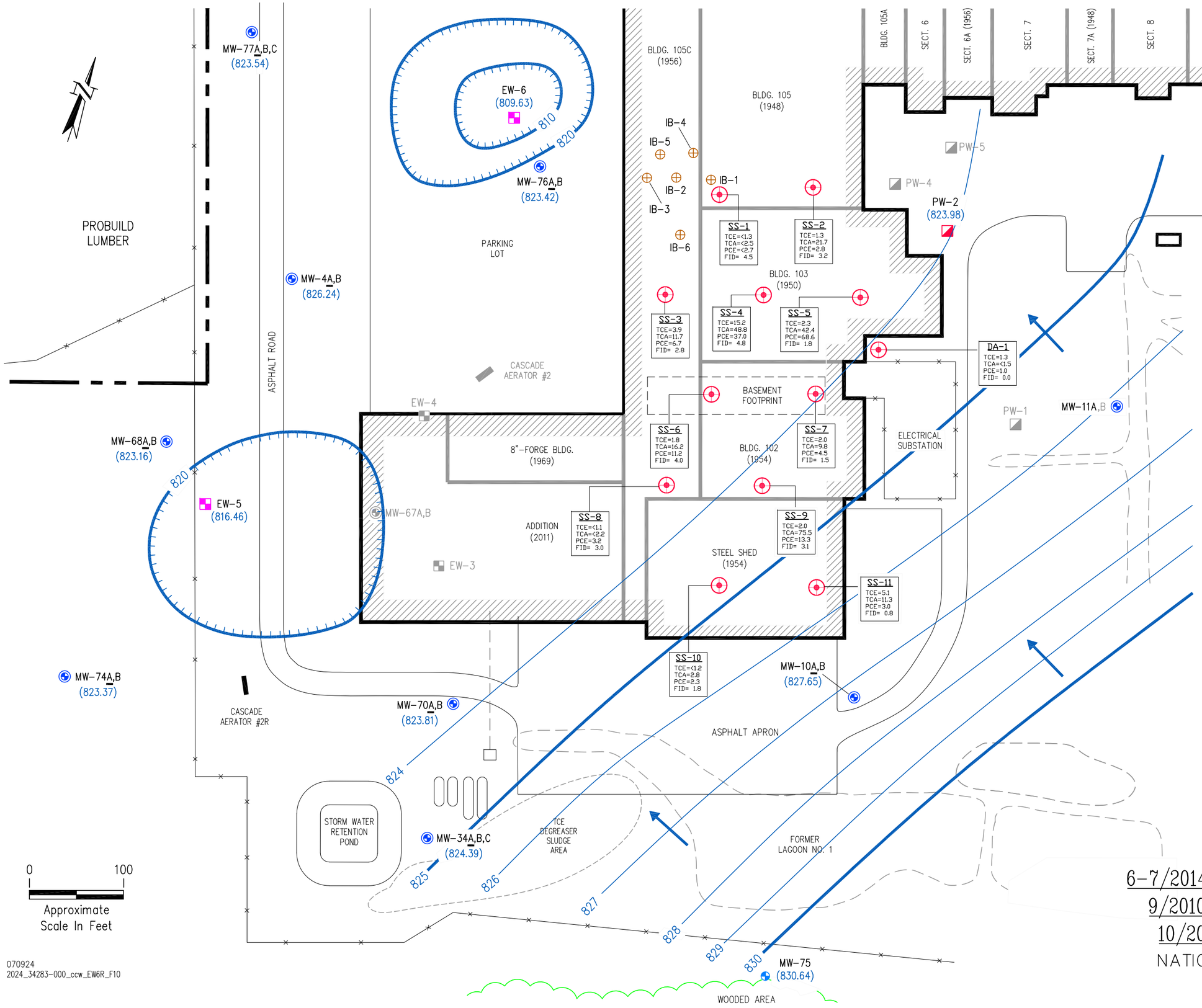
GANNETT FLEMING

FIGURE 10



LEGEND

- Sub-Slab Air Sample Location (6-7/2014)
- Indoor Boring Location (9/2010)
- 825 Groundwater Contour
- Groundwater Flow Direction
- (823.81) Groundwater Elevation At Well (Feet Above Mean Sea Level)
- MW-70A,B Nested Well Identification (Well Measured Is Underlined)
- NPI Superfund Monitoring Well Nest (MW Prefix)
- NPI Superfund Monitoring Well (MW Prefix)
- NPI LUST Monitoring Well (PW Prefix)
- NPI Superfund Extraction Well (EW Prefix)

SS-1—Location ID
TCE=Trichloroethene conc.
TCA=1,1,1-Trichloroethane conc.
PCE=Tetrachloroethene conc.
FID= Flame Ionization Detector reading

NOTES:

1. TCE, TCA, and PCE concentrations are in micrograms per cubic meter.
2. FID readings are in parts per million, volume.
3. Site Datum=Feet Above Mean Sea Level (ft MSL).
4. Shaded Wells And Other Structures Have Been Abandoned.
5. Groundwater Elevations Measured In EW-5 And EW-6 While Pumping.

6-7/2014 SUB-SLAB AIR SAMPLE LOCATIONS, 9/2010 INDOOR BORING LOCATIONS, AND 10/2013 GROUNDWATER CONTOUR MAP

NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

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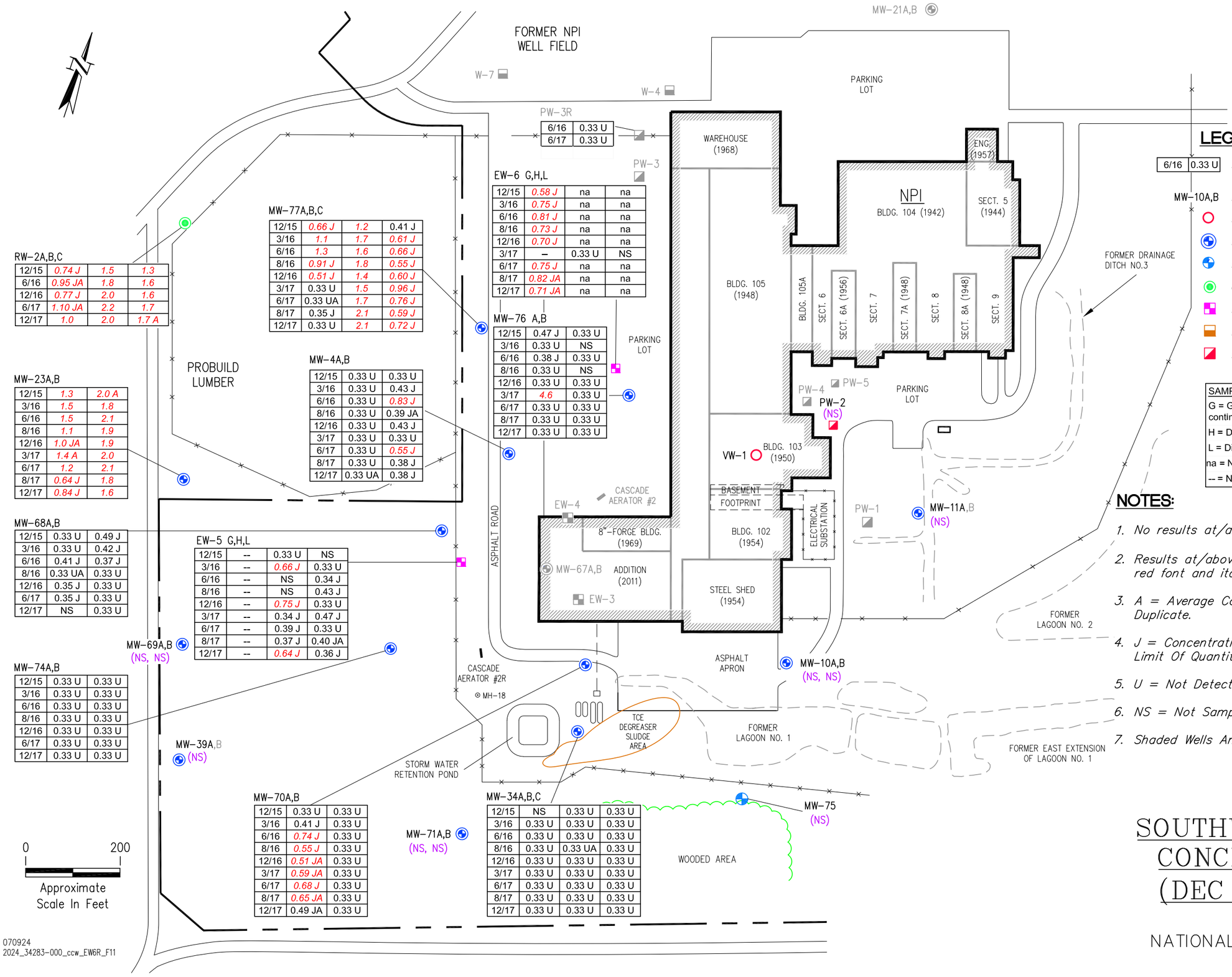
2024_34283-000_ccw_EW6R_F10

GANNETT FLEMING

FIGURE 11



LEGEND

6/16 0.33 U	*Sample Month/Year & TCE Concentration (ppb)*
MW-10A,B	*Nested Well Identification*
○	*Main Building SVE Vent Well*
⊕	*NPI Superfund Monitoring Well Nest (MW Prefix)*
⊕	*NPI Superfund Monitoring Well (MW Prefix)*
●	*USEPA Monitoring Well Nest (RW Prefix)*
■	*NPI Superfund Extraction Well (EW Prefix)*
■	*NPI Production Well (W Prefix)*
◪	*NPI LUST Monitoring Well (PW Prefix)*

SAMPLE METHOD/LEVEL KEY FOR EW-5 AND EW-6:

G = Grab sample collected while extraction well was pumping continuously.

H = Diffusion bag, upper portion of saturated screened interval.

L = Diffusion bag, lower portion of saturated screened interval.

na = Not applicable, well pumping.

-- = Not applicable, well not pumping continuously.

NOTES:

1. *No results at/above the 5.0 ppb MCL/NR 140 ES for TCE.*
2. *Results at/above the 0.5 ppb NR 140 PAL for TCE are in red font and italicized.*
3. *A = Average Concentration Of Original Sample And Duplicate.*
4. *J = Concentration Is Between The Limit Of Detection And Limit Of Quantitiation. The Value Is Estimated.*
5. *U = Not Detected At That Concentration.*
6. *NS = Not Sampled for TCE.*
7. *Shaded Wells And Other Structures Have Been Abandoned.*

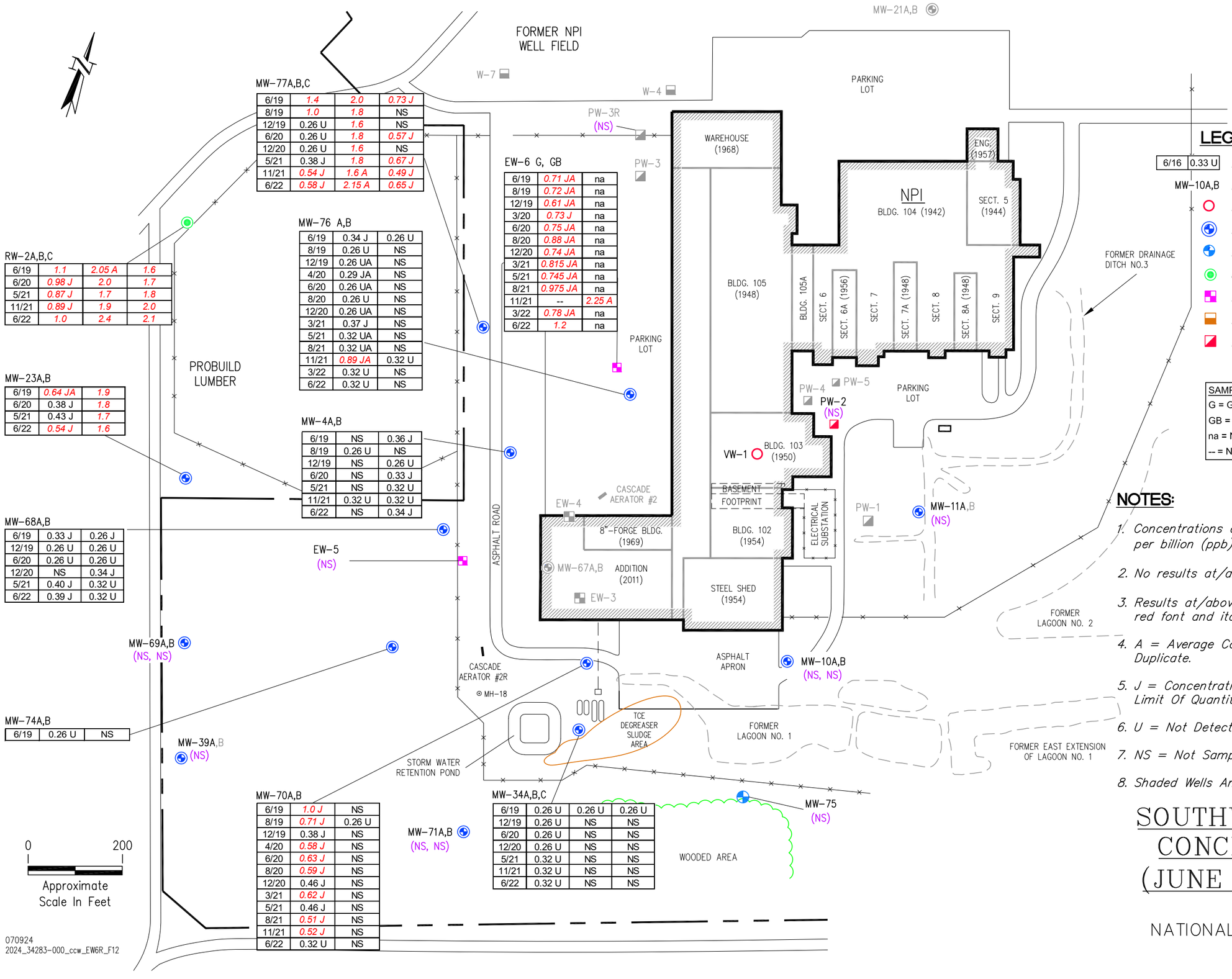
SOUTHWEST CORNER TCE CONCENTRATIONS MAP (DEC 2015–DEC 2017)

NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

070924
2024_34283-000_ccw_EW6R_F11

GANNETT FLEMING

FIGURE 12



MW-77A,B,C

6/19	1.4	2.0	0.73 J
8/19	1.0	1.8	NS
12/19	0.26 U	1.6	NS
6/20	0.26 U	1.8	0.57 J
12/20	0.26 U	1.6	NS
5/21	0.38 J	1.8	0.67 J
11/21	0.54 J	1.6 A	0.49 J
6/22	0.58 J	2.15 A	0.65 J

EW-6 G, GB

6/19	0.71 JA	na
8/19	0.72 JA	na
12/19	0.61 JA	na
3/20	0.73 J	na
6/20	0.75 JA	na
8/20	0.88 JA	na
12/20	0.74 JA	na
3/21	0.815 JA	na
5/21	0.745 JA	na
8/21	0.975 JA	na
11/21	--	2.25 A
3/22	0.78 JA	na
6/22	1.2	na

MW-76 A,B

6/19	0.34 J	0.26 U
8/19	0.26 U	NS
12/19	0.26 UA	NS
4/20	0.29 JA	NS
6/20	0.26 UA	NS
8/20	0.26 U	NS
12/20	0.26 UA	NS
3/21	0.37 J	NS
5/21	0.32 UA	NS
8/21	0.32 UA	NS
11/21	0.89 JA	0.32 U
3/22	0.32 U	NS
6/22	0.32 U	NS

RW-2A,B,C

6/19	1.1	2.05 A	1.6
6/20	0.98 J	2.0	1.7
5/21	0.87 J	1.7	1.8
11/21	0.89 J	1.9	2.0
6/22	1.0	2.4	2.1

MW-23A,B

6/19	0.64 JA	1.9
6/20	0.38 J	1.8
5/21	0.43 J	1.7
6/22	0.54 J	1.6

MW-4A,B

6/19	NS	0.36 J
8/19	0.26 U	NS
12/19	NS	0.26 U
6/20	NS	0.33 J
5/21	NS	0.32 U
11/21	0.32 U	0.32 U
6/22	NS	0.34 J

MW-68A,B

6/19	0.33 J	0.26 J
12/19	0.26 U	0.26 U
6/20	0.26 U	0.26 U
12/20	NS	0.34 J
5/21	0.40 J	0.32 U
6/22	0.39 J	0.32 U

MW-74A,B

6/19	0.26 U	NS

MW-70A,B

6/19	1.0 J	NS
8/19	0.71 J	0.26 U
12/19	0.38 J	NS
4/20	0.58 J	NS
6/20	0.63 J	NS
8/20	0.59 J	NS
12/20	0.46 J	NS
3/21	0.62 J	NS
5/21	0.46 J	NS
8/21	0.51 J	NS
11/21	0.52 J	NS
6/22	0.32 U	NS

MW-34A,B,C

6/19	0.26 U	0.26 U	0.26 U
12/19	0.26 U	NS	NS
6/20	0.26 U	NS	NS
12/20	0.26 U	NS	NS
5/21	0.32 U	NS	NS
11/21	0.32 U	NS	NS
6/22	0.32 U	NS	NS

LEGEND

- 6/16 | 0.33 U — Sample Month/Year & TCE Concentration (ppb)
- MW-10A,B — Nested Well Identification
- Main Building SVE Vent Well
- NPI Superfund Monitoring Well Nest (MW Prefix)
- NPI Superfund Monitoring Well (MW Prefix)
- USEPA Monitoring Well Nest (RW Prefix)
- NPI Superfund Extraction Well (EW Prefix)
- NPI Production Well (W Prefix)
- NPI LUST Monitoring Well (PW Prefix)

SAMPLE METHOD KEY FOR EXTRACTION WELL EW-6:

G = Grab sample collected while well was pumping continuously.

GB = Collected from sample tap after purging well for 5-10 min.

na = Not applicable, well pumping continuously.

-- = Not applicable, well not pumping continuously.

NOTES:

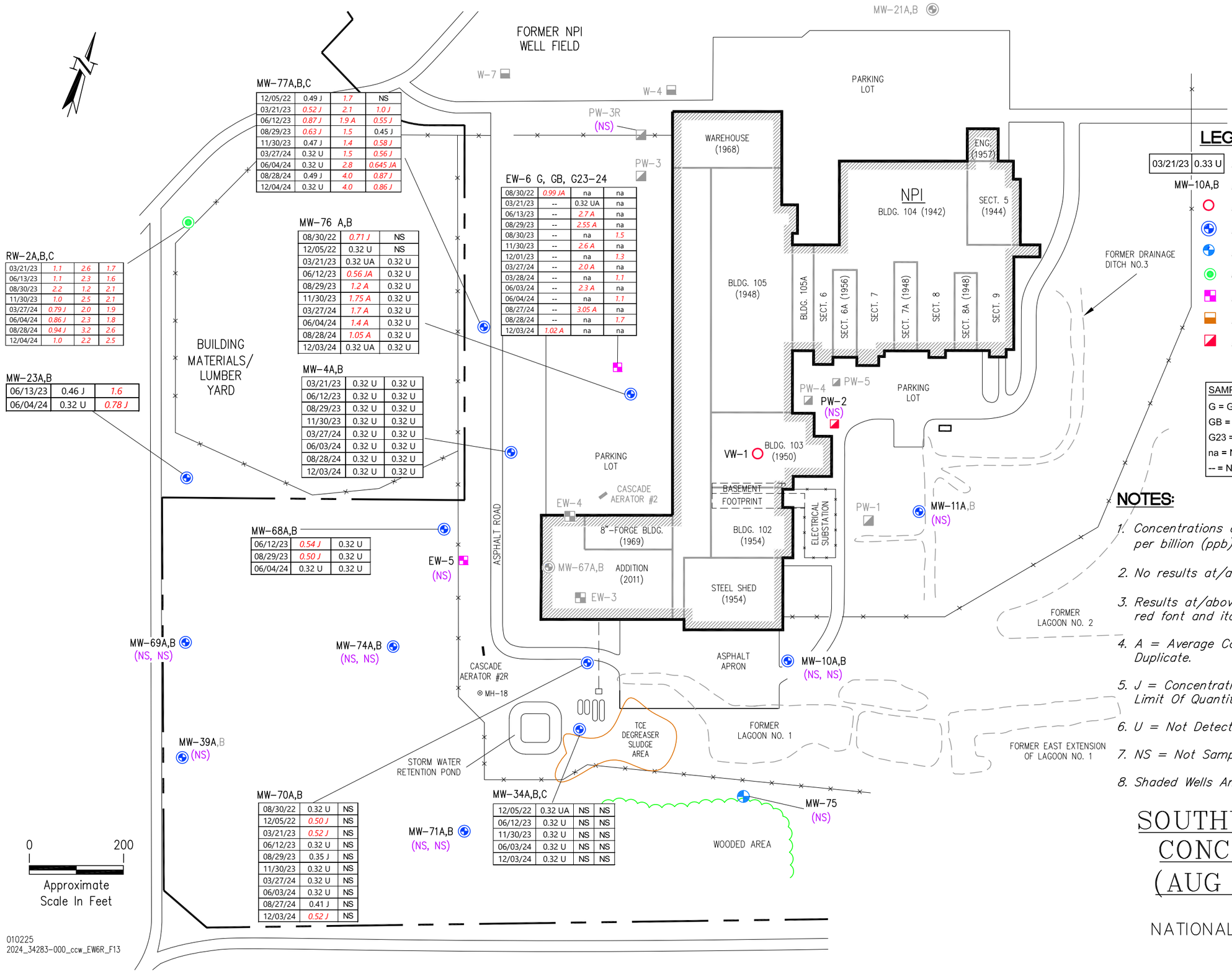
1. Concentrations are in micrograms per liter (ug/L) or parts per billion (ppb).
2. No results at/above the 5.0 ppb MCL/NR 140 ES for TCE.
3. Results at/above the 0.5 ppb NR 140 PAL for TCE are in red font and italicized.
4. A = Average Concentration Of Original Sample And Duplicate.
5. J = Concentration Is Between The Limit Of Detection And Limit Of Quantitiation. The Value Is Estimated.
6. U = Not Detected At That Concentration.
7. NS = Not Sampled for TCE.
8. Shaded Wells And Other Structures Have Been Abandoned.

SOUTHWEST CORNER TCE CONCENTRATIONS MAP (JUNE 2019–JUNE 2022)

NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

GANNETT FLEMING

FIGURE 13



LEGEND

03/21/23 0.33 U	Sample Date & TCE Concentration (ppb)
MW-10A,B	Nested Well Identification
	Main Building SVE Vent Well
	NPI Superfund Monitoring Well Nest (MW Prefix)
	NPI Superfund Monitoring Well (MW Prefix)
	USEPA Monitoring Well Nest (RW Prefix)
	NPI Superfund Extraction Well (EW Prefix)
	NPI Production Well (W Prefix)
	NPI LUST Monitoring Well (PW Prefix)

SAMPLE METHOD KEY FOR EXTRACTION WELL EW-6:

G = Grab sample collected while well was pumping continuously.
GB = Collected from sample tap after purging well for 5-10 min.
G23 = Collected after well pumped overnight (e.g., for 23 hr, etc.)
na = Not applicable, well pumping continuously or other.
-- = Not applicable, well not pumping continuously.

NOTES:

1. Concentrations are in micrograms per liter (ug/L) or parts per billion (ppb).
2. No results at/above the 5.0 ppb MCL/NR 140 ES for TCE.
3. Results at/above the 0.5 ppb NR 140 PAL for TCE are in red font and italicized.
4. A = Average Concentration Of Original Sample And Duplicate.
5. J = Concentration Is Between The Limit Of Detection And Limit Of Quantitiation. The Value Is Estimated.
6. U = Not Detected At That Concentration.
7. NS = Not Sampled for TCE.
8. Shaded Wells And Other Structures Have Been Abandoned.

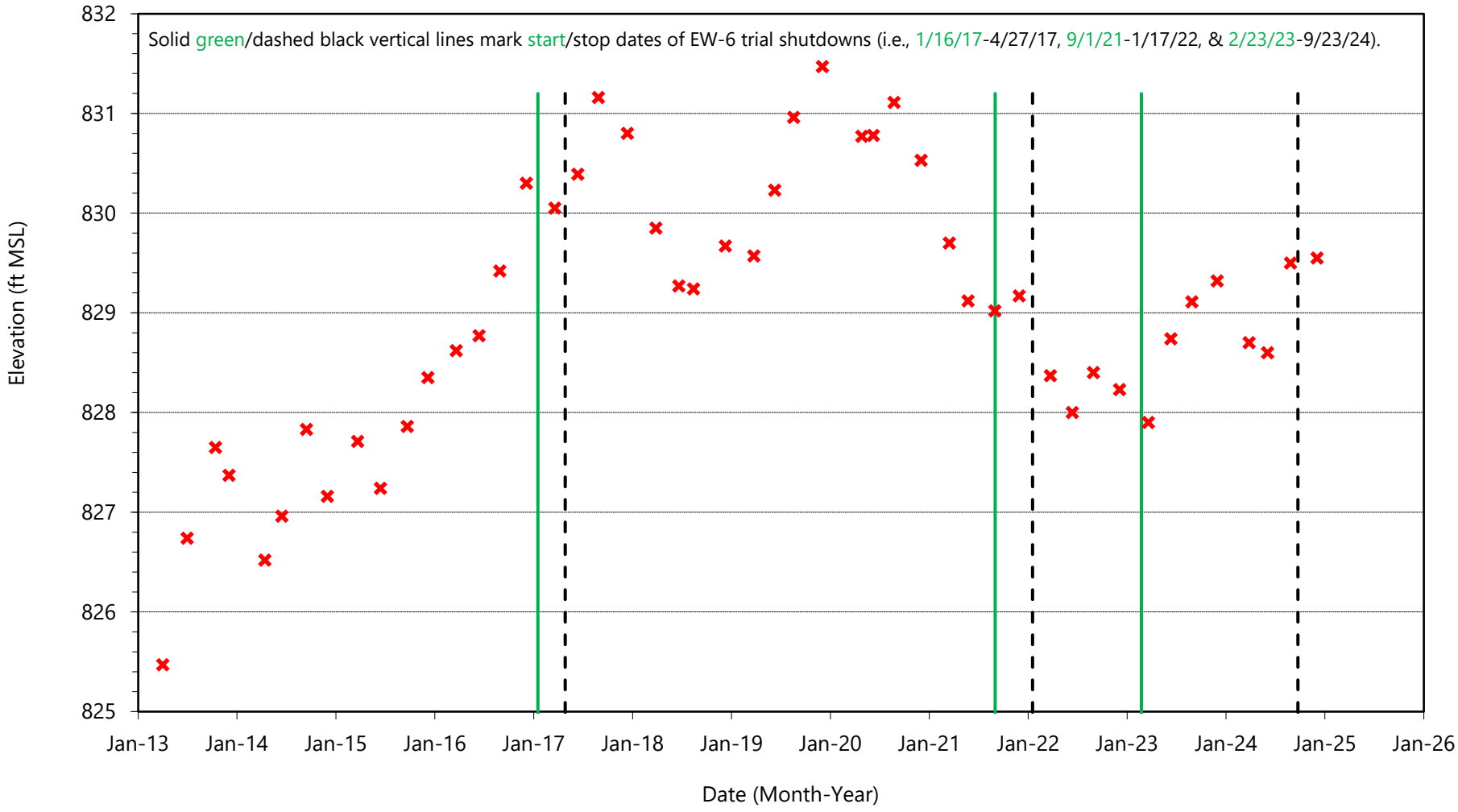
SOUTHWEST CORNER TCE CONCENTRATIONS MAP (AUG 2022–DEC 2024)

NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

010225
2024_34283-000_ccw_EW6R_F13

GANNETT FLEMING

FIGURE 14



MW-10A GROUNDWATER ELEVATION DATA (APR 2013-DEC 2024)

NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WI

TABLES

GANNETT FLEMING

NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

TABLE 1

WELL CONSTRUCTION INFORMATION

Well/Piezometer ID (description/comment)	Plume	Grid Coord.	FN	Drilling Method	Completion Date or Year	Screened Interval (ft bgs)	Screened In (description of material)	Screen Diameter (inches)	Well Top Type	Casing/ Screen Material	Top of Casing Elevation (ft MSL)	Date of Abandon-ment
CW-6 (City Well/water supply)	--	B9		CT	03/17/37	39-76.7	Gravel packed	20	--	AI	812.68	NA
CW-8	--	B9		--	--	49-89	--	16	--	SS	808.79	NA
CW-9	--	B9		CT	01/16/47	65-95	crs S & G	16	--	AI	811.18	NA
CW-10	1/2	B8		CT	01/19/47	65-95	crs S & G	16	--	AI	--	04/22/20
CW-11	1/2	B8		CT	01/17/47	60-90	crs S & G	16	--	AI	812.77	NA
CW-12	--	C11		CT	01/25/55	50-85	Sand & Gravel	--	--	--	805.52	NA
CW-13	--	C11		CT	05/21/62	65-95	Sand & Gravel	16	--	SS	807.65	NA
CW-14	1/2	B8		CT	03/08/68	60-98	crs G & rocks	16	--	SS	810.81	NA
CW-15	1/2	B8		CT	04/12/68	62-87	crs S & G	16	--	SS	812.20	NA
CW-16	1/2	B8		CT	04/08/75	75-110	Sand & Gravel	20	--	SS	810.12	NA
CW-17	1/2	B8		CT	12/09/75	65-100	Sand & Gravel	20	--	SS	808.18	NA
CW-18	--	C11		CT	12/22/77	70-105	Gravel	20	--	SS	810.11	NA
CW-19	1/2	B7		CT	1992	72-97	Gravel	20	--	SS	813.54	NA
CW-21	--	C10		--	--	68-103	--	20	--	SS	806.63	NA
CW-22	1/2	C7		CT	2017	54-100	crs S & G	20	--	SS	811.75	NA
CW-23	1/2	B7		CT	2017	55-80	Sand & Gravel	20	--	SS	813.24	NA
CW-24	1/2	B8		RR	05/22/19	65-100	Sand & Gravel	20	--	SS	807.13	NA
EC-1 (City monitoring well)	1/2	C7		--	12/16/82	90-100	--	4	P	Steel	813.95	NA
EC-2	1/2	C7		--	12/20/82	18-28	--	4	P	Steel	814.44	NA
EC-3	1/2	A8		--	12/23/82	53-75	--	6	P	Steel	799.58	09/04/08
EC-4	1/2	A8		--	01/31/83	9-19	--	4	P	Steel	800.84	09/04/08
EC-5	1/2	C7		--	12/23/82	17-27	--	4	P	Steel	813.56	NA
EC-6	1/2	C7		--	01/04/83	15-25	--	4	P	Steel	813.19	NA
EC-7 (approved for ABND)	1/2	B6	(1)	--	01/05/83	19-29	--	4	P	Steel	816.22	NA
EC-8	1/2	A7		--	01/07/83	20-30	--	4	--	Steel	812.93	09/04/08
EW-1 (fka MW-14)	3/4	L6	(2)	AR	03/05/87	62.5-97.5	Alluvium	5	--	Steel	896.00	08/25/95
EW-1R (replaced EW-1)	3/4	L6		HSA/CT	08/25/95	75-100	Alluvium	6	F	SS	900.08	NA
EW-2 (fka MW-15)	3/4	L6		AR	02/26/87	69-104	Alluvium	8	F	Steel	901.45	NA
EW-3 (Last sampled 7/22/03)	1/2	K8		MR	09/01/92	65.2-85.2	Alluvium	6	Vault	Steel	897.22	06/24/10
EW-4	1/2	K7		MR	09/03/92	72-92	Alluvium	6	Vault	Steel	898.23	10/14/10
EW-5	1/2	K7		MR	07/10/03	70-90	Alluvium	6	Vault	Steel/SS	889.90	NA
EW-6	1/2	K7		Sonic	08/06/11	70.3-100.3	Alluvium	6	Vault	Steel/SS	894.89	NA
MW-1	3/4	M8	(3)	HSA	10/26/76	39.5-49.5	Alluvium	2	P	PVC	910.26	08/15/23
MW-2A	3/4	M7	(3,4)	HSA	10/27/76	45-55	Bedrock	2	--	PVC	905.19	07/15/88
MW-2B	3/4	M7	(3)	HSA	10/27/76	6-16	Alluvium	2	--	PVC	905.19	07/15/88
MW-3A	3/4	L7	(3,4)	HSA	10/28/76	69-72	Bedrock	2	--	PVC	899.95	07/15/88
MW-3B	3/4	L7	(3,4)	HSA	10/28/76	73-76	Bedrock	2	--	PVC	899.95	07/15/88
MW-3C	3/4	L7	(3,4)	HSA	10/28/76	77-80	Bedrock	2	--	PVC	899.95	07/15/88
MW-4A	1/2	K7	(3)	HSA	11/12/76	70-80	Alluvium	2	P	PVC	897.25	NA
MW-4B	1/2	K7		MR	05/24/90	95-105	Alluvium	2	P	PVC	896.65	NA
MW-5A	3/4	L6	(3)	HSA	02/27/84	64-81	Alluvium	2	P	PVC	902.60	NA
MW-5B	3/4	L6	(3)	MR	12/05/86	87-97	Alluvium	2	P	PVC	902.39	04/21/20
MW-6	3/4	L6	(3)	HSA	01/10/85	73.8-88.8	Alluvium	2	P	PVC	904.70	02/24/22
MW-7	3/4	M6	(3,4)	MR	01/08/85	62-77	Bedrock	2	P	PVC	897.73	08/15/23
MW-8	3/4	M6	(3)	HSA	01/11/85	75-90	Alluvium	2	P	PVC	904.24	05/07/18

GANNETT FLEMING

TABLE 1

WELL CONSTRUCTION INFORMATION

Well/Piezometer ID (description/comment)	Plume	Grid Coord.	FN	Drilling Method	Completion Date or Year	Screened Interval (ft bgs)	Screened In (description of material)	Screen Diameter (inches)	Well Top Type	Casing/ Screen Material	Top of Casing Elevation (ft MSL)	Date of Abandon-ment
MW-9A	3/4	L6	(3)	MR	03/28/85	80-90	Alluvium	2	P	PVC	905.30	04/24/18
MW-9B	3/4	L6	(3,4)	HSA	03/28/85	98-113	Bedrock	2	P	PVC	905.30	04/24/18
MW-10A	1/2	K8	(4)	HSA	11/14/86	56-71	Both	2	P	PVC	894.84	NA
MW-10B	1/2	K8	(4)	MR	11/14/86	90.5-100.5	Bedrock	2	P	PVC	894.91	NA
MW-11A	1/2	K7		HSA	11/15/86	58-73	Alluvium	2	P	PVC	896.03	NA
MW-11B	1/2	K7	(4)	MR	11/17/86	77-87	Bedrock	2	P	PVC	896.27	11/23/11
MW-12A	3/4	L7		HSA	11/18/86	58-73	Alluvium	2	P	PVC	897.09	NA
MW-12B	1/2	L7	(4)	MR	11/18/86	77.5-87.5	Bedrock	2	P	PVC	897.20	11/23/11
MW-13A	3/4	L7		HSA	11/21/86	58.5-73.5	Alluvium	2	P	PVC	896.86	NA
MW-13B	3/4	L7	(4)	HAS	11/21/86	81-91	Bedrock	2	P	PVC	?	11/23/11
MW-14 (nka EW-1)	3/4	L6	(2)	AR	03/05/87	62.5-97.5	Alluvium	2	--	Steel	896.00	03/05/87
MW-15 (nka EW-2)	3/4	L6		AR	02/26/87	69-104	Alluvium	2	--	Steel	895.81	02/26/87
MW-16A	3/4	M7	(4)	HSA	11/25/86	58-73	Bedrock	2	--	PVC	896.62	08/21/98
MW-16B	3/4	M7	(4)	MR	11/24/86	83.5-93.5	Bedrock	2	--	PVC	896.51	08/21/98
MW-17	5	N7	(4)	HSA	12/03/86	25-40	Both	2	P	PVC	898.91	11/23/11
MW-17B	5	N7	(4)	HSA	12/04/86	50-60	Bedrock	2	P	PVC	899.12	11/23/11
MW-17C	5	N7	(4)	MR	05/20/88	70-80	Bedrock	2	P	PVC	899.50	11/23/11
MW-18	3/4	M7	(4)	HSA	05/19/88	58-73	Bedrock	2	P	PVC	898.38	NA
MW-19	5	N6	(4)	HSA	05/17/88	58-73	Bedrock	2	P	PVC	898.89	11/30/11
MW-20A	3/4	K6		HSA	05/25/88	65.5-80.5	Alluvium	2	--	PVC	897.82	04/15/95
MW-20B	3/4	K6		HSA	06/01/88	92-102	Alluvium	2	--	PVC	896.74	04/15/95
MW-21A	3/4	K7		HSA	05/23/88	67-82	Alluvium	2	--	PVC	899.27	04/07/10
MW-21B	3/4	K7		MR	05/20/88	92-102	Alluvium	2	--	PVC	898.95	04/07/10
MW-22A	3/4	K6		HSA	06/03/88	66.5-81.5	Alluvium	2	P	PVC	900.79	05/07/18
MW-22B	3/4	K6		HSA	06/01/88	91.5-101.5	Alluvium	2	P	PVC	900.75	05/07/18
MW-23A	1/2	J7		HSA	06/04/88	65-80	--	2	P	PVC	895.99	NA
MW-23B	1/2	J7		HSA	06/03/88	90-100	--	2	P	PVC	895.95	NA
MW-24A	3/4	M7	(4)	MR	05/25/88	45-60	Bedrock	2	--	PVC	915.66	09/05/08
MW-24B	3/4	M7	(4)	MR	05/23/88	70-80	Bedrock	2	--	PVC	915.57	09/05/08
MW-25	3/4	M8	(4)	HSA	05/17/88	39-54	Both	2	--	PVC	930.35	09/05/08
MW-26A	3/4	L5		HSA	06/22/89	63-78	Alluvium	2	F	PVC	890.17	05/04/18
MW-26B	3/4	L5		MR	06/20/89	109-119	Alluvium	2	F	PVC	890.03	05/04/18
MW-27A	3/4	L5		HSA	06/21/89	62-77	Alluvium	2	F	PVC	890.20	05/04/18
MW-27B	3/4	L5		MR	06/20/89	85.3-95.3	Alluvium	2	F	PVC	890.15	05/04/18
MW-28A	3/4	L4		HSA	06/08/89	65-80	Alluvium	2	--	PVC	892.86	06/15/99
MW-28B	3/4	L4		MR	06/08/89	113-123	Alluvium	2	--	PVC	893.16	06/15/99
MW-29A	3/4	L3		HSA	05/25/89	69-84	Alluvium	2	P	PVC	892.72	05/08/18
MW-29B	3/4	L3		MR	05/31/89	124-134	Alluvium	2	P	PVC	892.49	05/08/18
MW-30A	5	M5		HSA	06/12/89	66-81	Alluvium	2	--	PVC	898.69	09/08/08
MW-30B	5	M5		MR	06/10/89	115-125	Alluvium	2	--	PVC	898.49	09/08/08
MW-31	1/2	J6		HSA	06/02/89	56-71	Alluvium	2	--	PVC	887.65	09/09/08
MW-32A	3/4	K6		HSA	06/23/89	59-74	Alluvium	2	--	PVC	887.83	04/08/95
MW-32B	3/4	K6		MR	06/21/89	90-100	Alluvium	2	--	PVC	887.77	04/08/95
MW-33A	1/2	J6		HSA	07/07/89	55-70	Alluvium	2	--	PVC	885.30	04/07/10
MW-33B	1/2	J6		MR	07/07/89	100-110	Alluvium	2	--	PVC	885.25	04/07/10
MW-34A (data per boring log)	1/2	K8		HSA	06/08/90	67-72	Alluvium	2	P	PVC	895.36	NA
MW-34B (data per boring log)	1/2	K8	(4)	MR	05/31/90	90-100	Both	2	P	PVC	895.28	NA

GANNETT FLEMING

TABLE 1

WELL CONSTRUCTION INFORMATION

Well/Piezometer ID (description/comment)	Plume	Grid Coord.	FN	Drilling Method	Completion Date or Year	Screened Interval (ft bgs)	Screened In (description of material)	Screen Diameter (inches)	Well Top Type	Casing/ Screen Material	Top of Casing Elevation (ft MSL)	Date of Abandon-ment
MW-34C	1/2	K8	(4)	--	--	?-102	Bedrock	2	P	PVC	895.25	NA
MW-35A	1/2	I7		HSA	05/31/90	59-74	Alluvium	2	P	PVC	888.28	NA
MW-35B	1/2	I7		MR	06/06/90	84-94	Alluvium	2	P	PVC	888.02	NA
MW-36A	1/2	I7		HSA	06/06/90	63.5-78.5	Alluvium	2	F	PVC	889.87	11/23/11
MW-36B	1/2	I7		MR	06/07/90	88.5-98.5	Alluvium	2	F	PVC	889.89	11/23/11
MW-37A	1/2	I7		HSA	12/18/90	55.7-70.7	Alluvium	2	F	PVC	885.55	NA
MW-37B	1/2	I7		HSA	02/12/91	68.5-73.5	Alluvium	2	F	PVC	885.27	NA
MW-38A	1/2	I8		HSA	12/16/90	54.5-69.5	Alluvium	2	F	PVC	884.89	NA
MW-38B	1/2	I8		HSA	02/05/91	97.5-107.5	Alluvium	2	F	PVC	884.82	NA
MW-38C	1/2	I8		MR	01/13/91	139.2-149.2	Alluvium	2	F	PVC	884.83	NA
MW-39A	1/2	J8		HSA	12/11/90	62.5-77.5	Alluvium	2	P	PVC	896.17	11/11/19
MW-39B	1/2	J8		MR	01/26/91	114.8-124.8	Alluvium	2	P	PVC	896.38	11/29/11
MW-40A	1/2	H7		HSA	12/20/90	58-73	Alluvium	2	--	PVC	886.57	08/24/09
MW-40B	1/2	H7		MR	01/16/91	79-89	Alluvium	2	--	PVC	886.34	08/24/09
MW-41A	1/2	H8		HSA	12/19/90	56-71	Alluvium	2	F	PVC	884.04	NA
MW-41B	1/2	H8		MR	01/23/91	102.5-112.5	Alluvium	2	F	PVC	883.84	NA
MW-42A	1/2	G7		HSA	01/31/91	65.5-75.5	Alluvium	2	P	PVC	891.83	11/29/11
MW-42B	1/2	G7		MR	01/17/91	74.5-84.5	Alluvium	2	P	PVC	891.32	11/29/11
MW-43A	1/2	H7		HSA	02/12/91	61-76	Alluvium	2	F	PVC	885.34	NA
MW-43B	1/2	H7		MR	02/11/91	107.5-117.5	Alluvium	2	F	PVC	885.35	NA
MW-44A	1/2	F6		HSA	08/20/91	62-67	Alluvium	2	F	PVC	885.35	08/25/15
MW-44B	1/2	F6		HSA	08/24/91	114-124	Alluvium	2	F	PVC	885.34	08/25/15
MW-45A	1/2	F6	(5)	HSA	08/21/91	63-78	Alluvium	2	F	PVC	886.20	Destroyed
MW-45B	1/2	F6	(5)	MR	09/11/91	101-111	Alluvium	2	F	PVC	886.26	Destroyed
MW-45C	1/2	F6	(5)	MR	08/26/91	134-144	Alluvium	2	F	PVC	886.05	Destroyed
MW-46A (not found)	1/2	G7		HSA	08/22/91	60-75	Alluvium	2	P	PVC	885.46	NA
MW-46B (not found)	1/2	G7		MR	09/12/91	99.5-109.5	Alluvium	2	P	PVC	885.42	NA
MW-46C (not found)	1/2	G7		MR	08/28/91	134.3-144.3	Alluvium	2	P	PVC	885.38	NA
MW-47A	1/2	G7		HSA	08/23/91	60-75	Alluvium	2	P	PVC	888.39	05/08/18
MW-47B	1/2	G7		MR	09/04/91	100-110	Alluvium	2	P	PVC	888.24	05/08/18
MW-48A	1/2	E6		HSA	09/07/91	66.5-81.5	Alluvium	2	F	PVC	885.15	12/01/11
MW-48B	1/2	E6		MR	09/06/91	93-103	Alluvium	2	F	PVC	885.40	12/01/11
MW-49A	1/2	D6		HSA	09/10/91	78.5-91.5	Alluvium	2	F	PVC	883.04	NA
MW-49B	1/2	D6		MR	09/09/91	107-117	Alluvium	2	F	PVC	883.02	NA
MW-50A (not found)	1/2	F6		HSA	09/16/91	63.4-78.4	Alluvium	2	F	PVC	883.61	NA
MW-50B (not found)	1/2	F6		MR	09/15/91	95-105	Alluvium	2	F	PVC	883.57	NA
MW-51A	1/2	F6		HSA	09/17/91	63.5-78.5	Alluvium	2	F	PVC	884.02	NA
MW-51B	1/2	F6		MR	09/17/91	102-112	Alluvium	2	F	PVC	883.99	NA
MW-52A	1/2	F6		HSA	10/02/91	67.4-82.4	Alluvium	2	F	PVC	884.13	NA
MW-52B	1/2	F6		MR	10/02/91	113-123	Alluvium	2	F	PVC	884.12	NA
MW-53A	1/2	E6		HSA	10/05/91	76-91	Alluvium	2	F	PVC	887.93	NA
MW-53B	1/2	E6		MR	10/05/91	112-123	Alluvium	2	F	PVC	888.25	NA
MW-54A	1/2	D6		HSA	10/10/91	77-92	Alluvium	2	F	PVC	883.78	NA
MW-54B	1/2	D6		MR	10/11/91	112-122	Alluvium	2	F	PVC	883.87	NA
MW-54C	1/2	D6		MR	10/09/91	142-152	Alluvium	2	F	PVC	883.66	NA
MW-55A	1/2	D6		HSA	11/05/91	78-93	Alluvium	2	F	PVC	881.75	NA
MW-55B	1/2	D6		MR	11/26/91	118.5-128.5	Alluvium	2	F	PVC	882.08	NA

GANNETT FLEMING

TABLE 1

WELL CONSTRUCTION INFORMATION

Well/Piezometer ID (description/comment)	Plume	Grid Coord.	FN	Drilling Method	Completion Date or Year	Screened Interval (ft bgs)	Screened In (description of material)	Screen Diameter (inches)	Well Top Type	Casing/ Screen Material	Top of Casing Elevation (ft MSL)	Date of Abandon-ment
MW-55C	1/2	D6		MR	11/04/91	154-164	Alluvium	2	F	PVC	881.91	NA
MW-56A	1/2	E5		HSA	11/06/91	75.5-90.5	Alluvium	2	--	PVC	885.67	09/04/08
MW-56B	1/2	E5		MR	11/11/91	150-160	Alluvium	2	--	PVC	885.89	09/04/08
MW-57A	1/2	E6		HSA	11/23/91	76-91	Alluvium	2	F	PVC	886.31	05/08/18
MW-57B	1/2	E6		MR	11/21/91	108-118	Alluvium	2	F	PVC	886.13	05/08/18
MW-58A	1/2	D6		HSA	11/07/91	76-91	Alluvium	2	F	PVC	880.88	?
MW-58B	1/2	D6		MR	11/13/91	112-122	Alluvium	2	F	PVC	880.96	12/01/11
MW-59A (approved for ABND)	1/2	F6		HSA	11/08/91	62-77	Alluvium	2	--	PVC	882.00	NA
MW-59B (approved for ABND)	1/2	F6		MR	11/19/91	129-139	Alluvium	2	--	PVC	882.07	NA
MW-60A	1/2	D7		HSA	12/04/91	78.5-93.5	Alluvium	2	F	PVC	879.19	05/07/18
MW-60B	1/2	D7		MR	12/08/91	104-114	Alluvium	2	F	PVC	879.09	05/07/18
MW-61A	1/2	C6		HSA	12/05/91	78.5-93.5	Alluvium	2	F	PVC	879.37	NA
MW-61B	1/2	C6		MR	12/11/91	124-134	Alluvium	2	F	PVC	879.58	NA
MW-62A	3/4	L6		HSA	06/25/92	61-76	Alluvium	2	--	PVC	893.69	12/22/98
MW-62AR	3/4	L6		HSA	12/22/98	71-86	Alluvium	2	P	PVC	901.75	NA
MW-62B	3/4	L6		MR	06/30/92	96-106	Alluvium	2	P	PVC	901.79	NA
MW-62C	3/4	L6		MR	06/24/92	126.5-136.5	Alluvium	2	P	PVC	901.15	04/21/20
MW-63A	3/4	M6		HSA	06/28/92	65-80	Alluvium	2	P	PVC	899.05	NA
MW-63B	3/4	M6		MR	06/27/92	95-105	Alluvium	2	P	PVC	899.13	04/21/20
MW-64A	3/4	L6		HSA	07/08/92	63.5-78.5	Alluvium	2	P	PVC	894.89	05/08/14
MW-64B	3/4	L6		MR	07/08/92	103.8-113.8	Alluvium	2	P	PVC	895.24	05/08/14
MW-64C	3/4	L6		MR	07/01/92	139-149	Alluvium	2	P	PVC	894.75	05/08/14
MW-65A	3/4	L6		HSA	07/02/92	60.4-75.4	Alluvium	2	P	PVC	891.68	NA
MW-65B	3/4	L6		MR	07/08/92	100-110	Alluvium	2	P	PVC	891.62	NA
MW-65C	3/4	L6		MR	07/07/92	133.9-143.9	Alluvium	2	P	PVC	891.77	NA
MW-66A	3/4	L6	(6)	HSA	06/27/92	66.5-81.5	Alluvium	2	F	PVC	897.70	NA
MW-66B	3/4	L6	(6)	MR	07/01/92	111-121	Alluvium	2	F	PVC	897.26	NA
MW-66C	3/4	L6	(6)	MR	06/27/92	150-160	Alluvium	2	F	PVC	897.35	04/21/20
MW-67A	1/2	K7		HSA	06/22/92	61-76	Alluvium	2	--	PVC	895.96	09/22/10
MW-67B	1/2	K7		MR	07/09/92	77.8-82.8	Alluvium	2	--	PVC	895.79	09/22/10
MW-68A	1/2	K7		HSA	07/08/92	63.5-78.5	Alluvium	2	P	PVC	896.47	NA
MW-68B	1/2	K7		MR	06/19/92	97-107	Alluvium	2	P	PVC	896.77	NA
MW-69A	1/2	J8		HSA	07/09/92	65-80	Alluvium	2	P	PVC	898.02	NA
MW-69B	1/2	J8		MR	06/21/92	108.8-118.8	Alluvium	2	P	PVC	898.23	NA
MW-70A	1/2	K8	(7)	HSA	06/22/92	62-77	Alluvium	2	F	PVC	893.49	NA
MW-70B	1/2	K8	(7)	HSA	07/10/92	77-82	Alluvium	2	F	PVC	893.62	NA
MW-71A	1/2	K8		MR	06/17/92	57-72	Alluvium	2	P	PVC	894.70	11/11/19
MW-71B	1/2	K8	(4)	MR	07/09/92	79-89	Both	2	P	PVC	894.89	11/23/11
MW-72	5	N7		HSA	09/09/98	34-49	Both	2	P	PVC	899.26	11/23/11
MW-73	5	N7		HSA	09/09/98	32-47	Both	2	P	PVC	899.71	11/23/11
MW-74A	1/2	J8		HSA	07/08/03	66-76	Alluvium	2	P	PVC	896.08	NA
MW-74B	1/2	J8	(4)	MR	07/09/03	95-100	Bedrock	2	P	PVC	895.88	NA
MW-75	1/2	K8	(4)	HSA	07/11/03	56-66	Bedrock	2	P	PVC	890.61	NA
MW-76A	1/2	K7		Sonic	09/22/10	65-80	Alluvium	2	F	PVC	894.80	NA
MW-76B	1/2	K7		Sonic	09/22/10	95-100	Alluvium	2	F	PVC	895.12	NA
MW-77A	1/2	K7		Sonic	09/22/10	65-80	Alluvium	2	F	PVC	895.22	NA
MW-77B	1/2	K7		Sonic	09/21/10	95-100	Alluvium	2	F	PVC	895.21	NA

GANNETT FLEMING

TABLE 1

WELL CONSTRUCTION INFORMATION

Well/Piezometer ID (description/comment)	Plume	Grid Coord.	FN	Drilling Method	Completion Date or Year	Screened Interval (ft bgs)	Screened In (description of material)	Screen Diameter (inches)	Well Top Type	Casing/ Screen Material	Top of Casing Elevation (ft MSL)	Date of Abandon-ment
MW-77C	1/2	K7		Sonic	09/21/10	115-120	Alluvium	2	F	PVC	895.18	NA
PW-1	1/2	K7		HSA	01/05/94	65-75	Alluvium	2		PVC	898.28	09/08/08
PW-2	1/2	K7		HSA	01/03/94	66-76	Alluvium	2	--	PVC	894.71	08/15/23
PW-3	1/2	K7		HSA	07/12/94	69-79	Alluvium	2	--	PVC	898.83	06/15/96
PW-3R	1/2	K7		HSA	11/22/96	69-79	Alluvium	2	F	PVC	896.21	08/18/17
PW-4	1/2	K7		HSA	07/12/97	68-78	Alluvium	2	--	PVC	895.59	09/08/08
PW-5	1/2	K7		HSA	07/13/94	67-77	Alluvium	2	--	PVC	886.93	01/15/04
PW-67 (Owner: Joles)	5	M4		--	--	--	--	--	--	--	--	NA
PW-218 (Owner: Martens)	5	M4		--	--	--	--	--	--	--	--	NA
PW-230 (Owner: Ihlenfeld)	5	M4		--	--	--	--	--	--	--	--	NA
RW-1	1/2	F7		HSA	12/12/85	60.5-112.5	Alluvium	2	--	PVC	887.19	07/27/09
RW-2A	1/2	J7		HSA	01/03/86	69-79	Alluvium	2	P	PVC	897.18	NA
RW-2B	1/2	J7		HSA	01/04/86	91-101	Alluvium	2	P	PVC	896.78	NA
RW-2C	1/2	J7		HSA	12/15/85	108-118	Alluvium	2	P	PVC	897.57	NA
RW-3A	1/2	C6		HSA	12/19/85	79-89	Alluvium	2	P	PVC	881.78	NA
RW-3B	1/2	C6		HSA	01/07/86	96-106	Alluvium	2	P	PVC	881.48	NA
RW-3C	1/2	C6		HSA	01/05/86	108.5-118.5	Alluvium	2	P	PVC	881.30	NA
RW-4	1/2	H9	(4)	HSA	02/04/86	53-78	Both	2	--	PVC	884.65	09/10/08
RW-5 (approved for ABND)	1/2	D8	(8)	HSA	01/18/86	82-112	Alluvium	2	P	PVC	882.19	NA
RW-6	1/2	D7	(4)	HSA	02/11/86	78.5-103.5	Both	2	--	PVC	883.89	09/03/08
RW-7	1/2	H6		HSA	01/29/86	68-118	Alluvium	2	--	PVC	890.71	09/10/08
RW-8	1/2	G5		HSA	02/05/86	64-109	Alluvium	2	--	PVC	889.12	09/09/08
RW-9	1/2	D4		HSA	01/20/86	75.5-105.5	Alluvium	2	--	PVC	886.62	09/10/08
RW-10	1/2	D6		HSA	07/21/87	70-120	Alluvium	2	--	PVC	888.28	09/04/08
RW-11	1/2	E5		HSA	07/21/87	65-120	Alluvium	2	--	PVC	890.45	09/03/08
RW-12	1/2	F6		HSA	07/22/87	60-120	Alluvium	2	--	PVC	891.01	07/27/09
RW-13	1/2	F8	(4)	HSA	08/11/87	65-75	Bedrock	2	--	PVC	885.57	09/03/08
RW-14	1/2	H7		HSA	07/24/87	54-114	Alluvium	2	--	PVC	888.06	07/27/09
RW-15	1/2	J7		HSA	07/24/87	52-92	Alluvium	2	P	PVC	874.76	NA
RW-16	1/2	G7		HSA	07/28/87	63-73	Alluvium	2	P	SS	888.87	NA
RW-16B	1/2	G7		HSA	02/06/91	103-113	Alluvium	2	P	PVC	889.66	NA
RW-16C	1/2	G7		MR	01/31/91	142.5-152.5	Alluvium	2	P	PVC	890.01	NA
RW-17 (approved for ABND)	1/2	G7		HSA	07/29/87	60-70	Alluvium	2	--	SS	890.24	NA
RW-18 (not found)	1/2	H8	(9)	HSA	07/29/87	62-72	Alluvium	2	--	SS	890.62	NA
RW-19	1/2	G7		HSA	07/30/87	60-70	Alluvium	2	P	SS	888.57	12/01/11
RW-20	1/2	G7		HSA	07/30/87	64-74	Alluvium	2	--	SS	889.43	05/15/95
RW-21	1/2	G6		HSA	07/31/87	63-73	Alluvium	2	--	SS	890.39	02/15/95
RW-22	1/2	G7		HSA	07/31/87	62-72	Alluvium	2	P	SS	887.42	12/01/11
RW-23 (not found)	1/2	H7		HSA	07/31/87	61-71	Alluvium	2	--	SS	890.30	NA
RW-24	1/2	E6		HSA	08/01/87	66-76	Alluvium	2	--	SS	886.52	09/04/08
RW-25 (approved for ABND)	1/2	G3	(4)	HSA	08/13/87	55-65	Bedrock	2	--	PVC	926.22	NA
WW-1	--	--		HSA	08/08/85	30-40	--	2	--	PVC	945.05	10/16/01
WW-2	--	--		HSA	08/10/85	57.5-67.5	--	2	--	PVC	900.53	NA
WW-3	3/4	K5		HSA	07/27/85	63.2-73.2	--	2	--	PVC	891.45	12/12/91
WW-3B	3/4	K5		MR	06/19/89	138.5-148.5	Alluvium	2	--	PVC	888.98	12/12/91
WW-4	--	--		HSA	08/07/85	70-80	--	2	--	PVC	904.18	07/26/06
WW-5	3/4	K4		HSA	08/01/85	69-79	--	2	--	PVC	892.55	09/09/08

GANNETT FLEMING

TABLE 1

WELL CONSTRUCTION INFORMATION

Well/Piezometer ID (description/comment)	Plume	Grid Coord.	FN	Drilling Method	Completion Date or Year	Screened Interval (ft bgs)	Screened In (description of material)	Screen Diameter (inches)	Well Top Type	Casing/ Screen Material	Top of Casing Elevation (ft MSL)	Date of Abandon-ment
WW-5P	3/4	K4		HSA	10/01/85	104-109	--	2	--	PVC	892.69	09/09/08
WW-6	1/2	I6		HSA	07/31/85	57.8-67.8	--	2	--	PVC	889.46	09/09/08
WW-7	1/2	I4		HSA	08/08/85	15-25	--	2	--	PVC	893.19	09/08/08
WW-8	3/4	J2		HSA	08/01/85	16.75-26.75	--	2	--	PVC	846.94	09/08/08
WW-9	3/4	N3		HSA	08/06/85	74.9-84.9	--	2	--	PVC	901.71	08/19/99
WW-9P	3/4	N3		HSA	07/25/85	105-115	--	2	--	PVC	901.63	08/19/99
WW-10	3/4	J6		HSA	10/02/85	60-70	--	2	--	PVC	889.10	05/07/99
WW-10P	3/4	J6		HSA	10/02/85	91.3-96.3	--	2	--	PVC	889.19	05/07/99
WW-11	5	N6		HSA	09/26/85	36.5-46.5	--	2	--	PVC	901.36	09/05/08
WW-11P	5	N6		HSA	09/30/85	72-77	--	2	--	PVC	901.16	09/05/08
WW-12 (not found)	3/4	J4		HSA	09/27/85	17-27	--	2	--	PVC	892.25	NA
WW-13	4	L5		HSA	10/01/85	67-77	--	2	P	PVC	905.45	11/29/11
WW-14	5	O4		HSA	05/07/85	70-80	--	2	--	PVC	899.72	09/10/08
WW-15	1/2	I8		HSA	10/03/85	53-63	Alluvium	2	P	PVC	882.61	NA
WW-15B	1/2	I8		HSA	02/06/91	95.6-105.6	Alluvium	2	F	PVC	879.97	11/23/11
WW-15C	1/2	I8		MR	02/01/91	137-147	Alluvium	2	F	PVC	879.76	11/23/11
WW-16	1/2	H8		HSA	10/02/86	57-67	--	2	--	PVC	885.63	09/10/08
WW-17	1/2	H5		HSA	10/01/85	13-23	--	2	--	PVC	887.21	09/08/08
WW-18	1/2	I5		HSA	10/01/85	16-26	--	2	--	PVC	890.84	09/08/08
WW-19	3/4	J3		HSA	09/28/85	20-30	--	2	--	PVC	894.02	11/30/11
Hallie Golf Course	--	110th Avenue		--	--	TD = 86	--	6.5	--	--	--	09/05/08
Don & Bonnie Berg	5	11265 16th Ave		--	--	TD = 73.4	--	4	--	--	--	09/09/08

GANNETT FLEMING

TABLE 1

WELL CONSTRUCTION INFORMATION

NOTES:
Red font in the "Well/Piezometer ID" column indicates the well/piezometer is abandoned or lost/destroyed (139).
Purple font in the "Well/Piezometer ID" column indicates well/piezometer is approved for ABND (six).
Blue font in the "Grid Coord." column indicates well/piezometer not found (12).
Melby Rd. wells MW-62B/C and MW-5A/B and East Disposal Site wells MW-17A, MW-72, and MW-73 were resurveyed by Ayres in December 1998.
Site datum = Mean sea level (MSL).
ABND = Abandonment.
AI = Armco Iron (screen).
AR = Air rotary.
crs S & G = Coarse sand and gravel.
CT = Cable tool.
CW = City production well.
EC = City monitoring well.
EW = NPI extraction well.
F = Flush-mount well.
FN = Footnote (see below).
HSA = Hollow stem auger.
LUST = Leaking underground storage tank.
MR = Mud rotary.
MW = NPI monitoring well.
NA = Not abandoned.
P = Pro top well.
PVC = Polyvinyl chloride.
PW = former NPI petroleum LUST wells PW-1 thru PW-5 on site & for "private well" at the listed residential/commercial locations.
RR = Reverse rotary.
RW = EPA monitoring well.
Screened Interval = Depth in feet below ground surface (ft bgs) of screened interval.
SS = Stainless steel.
TD = Total depth.
WW = WDNR monitoring well.
-- = Not available/not applicable/unknown.

FOOTNOTES:
(1) Approved for ABND but kept by the City of Eau Claire.
(2) Converted to/replaced by EW-1R in August 1995.
(3) Pre-remedial investigation monitoring well.
(4) Denotes a well screened in sandstone bedrock or both bedrock and alluvium (i.e., sand and gravel glacial outwash).
(5) MW-45A/B/C were inadvertently destroyed in the second half of 2019 by an excavation contractor while site grading.
(6) MW-66A/B/C were changed from stickup to flush-mount wells in Oct. 2017; their measuring point elevations decreased as a result.
(7) MW-70A/B were changed from stickup to flush mount wells in May 2019; their measuring point elevations decreased as a result.
(8) Approved for ABND but the Chippewa Valley Regional Airport may keep. Measured total depth = 108.0 ft on 8/27/2024.
(9) Could be private well PW-6 on the Indianhead property. Hence, PW-6 is not included in Table 1 or shown on Figure 1.

GANNETT FLEMING

NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

TABLE 2

VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER - MAIN BUILDING (FEB 2011 & NOV 2013)

Analyte	Sample/Boring ID and Month-Year								Trip Blank	NR 140	
	GP-49	GP-53	GP-59	GP-61	GP-62	GP-63	GP-64	GP-65			
	Feb-2011	Feb-2011	Feb-2011	Feb-2011	Nov-2013	Nov-2013	Nov-2013	Nov-2013	Feb-2011	PAL	ES
Trichloroethylene (TCE)	<4.00	**8.03 J**	**30.0**	**25.3**	<0.50	<0.50	<0.50	<0.50	<0.40	0.5	5.0
1,1,1-Trichloroethane (TCA)	*87.5*	**287**	**307**	*42.0*	<0.50	<0.50	<0.50	<0.50	<0.50	40	200
1,1-Dichloroethane (DCA)	<4.00	<4.00	19.6	<4.00	<0.50	<0.50	<0.50	<0.50	<0.40	85	850
1,1-Dichloroethylene (DCE)	<4.00	<4.00	<4.00	<4.00	<0.50	<0.50	<0.50	<0.50	<0.40	0.7	7.0
Tetrachloroethylene (PCE)	<3.00	<3.00	<3.00	<3.00	*1.3*	<0.50	<0.50	<0.50	<0.30	0.5	5.0
Trimethylbenzenes (total)	58.1	78.5	64.0	30.58	--	--	--	--	<0.40	96	480
Ethylbenzene	2.17 J	4.87 J	3.17 J	<2.00	--	--	--	--	<0.20	140	700
Xylenes (total)	28.75 J	51.62 J	68.9 J	<28.5	--	--	--	--	<0.60	1,000	10,000
Naphthalene	*29.1 J*	*68.0*	*65.4*	*26.3 J*	--	--	--	--	<1.00	10	100
Methylene chloride	<4.00	<4.00	<4.00	<4.00	--	--	--	--	*1.02 J*	0.5	5.0
4-Isopropyltoluene	13.2 J	9.75 J	7.17 J	5.28 J	--	--	--	--	<0.40	NS	NS
sec-Butylbenzene	10.4	12.8	7.64 J	6.62 J	--	--	--	--	<0.30	NS	NS

NOTES:
Concentrations are in micrograms per liter (µg/L)/parts per billion (ppb).
Detected concentrations at or above an applicable NR 140 PAL are in red font and italicized.
Detected concentrations at or above an applicable MCL/NR 140 ES are in red font and bold. 1,1-DCA does not have a federal MCL.
J = Concentration is above the LOD, but below the LOQ. The result is an estimation.
MCL = Maximum Contaminant Level.
LOD/LOQ = Limit of detection/limit of quantification.
NS = No standard.
-- = Not analyzed.

GANNETT FLEMING

NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

TABLE 3

SUMMARY OF VOC ANALYTICAL RESULTS FOR SUB-SLAB VAPOR SAMPLES -- MAIN BUILDING (JUL 2014 & JAN 2015)

Location ID	Detected Volatile Organic Compound (VOC) Concentrations																			
Date	Acetone	Benzene	Bromodichloromethane	2- Butanone (MEK)	Carbon disulfide	Chlorobenzene	Chloroform	Chloromethane	1,1-Dichloroethane	1,1-Dichloroethene	Ethylbenzene	2-Hexanone	Methylene chloride	4-Methyl-2-pentanone	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	m&p-Xylene	o-Xylene
EPA RSL	**1.4E+05**	**16**	**3.3**	**2.2E+04**	**3100**	**220**	**5.3**	**390**	**77**	**880**	**49**	**130**	**2600**	**1.3E+04**	**180**	**2.2E+04**	**2.2E+04**	**8.8**	**440**	**440**
SSA VRSL	**1.4E+07**	**1600**	**330**	**2.2E+06**	**3.1E+05**	**2.2E+04**	**530**	**3.9E+04**	**7700**	**8.8E+04**	**4900**	**1.3E+04**	**2.6E+05**	**1.3E+06**	**1.8E+04**	**2.2E+06**	**2.2E+06**	**880**	**4.4E+04**	**4.4E+04**
SS-1																				
07/24/14	<5.5	1.3	<3.1	24.3	2.5	4.8	<1.1	<0.96	<1.9	<1.9	<2.0	5.8	<8.1	<1.9	2.7	11.0	<2.5	<1.3	6.4	<5.1
SS-2																				
07/24/14	<5.3	2.8	<3.0	152	<1.4	4.8	<1.1	<0.92	3.5	38.0	2.1	17.6	<7.7	42.7	2.8	12.9	21.7	1.3	7.6	<4.8
SS-3																				
07/24/14	<5.1	0.73	<2.9	13.9	<1.3	3.4	<1.0	<0.88	<1.7	<1.7	<1.8	4.6	<7.4	23.9	6.7	8.5	11.7	3.9	5.8	<4.6
01/06/15	8.9	<0.24	<0.37	1.6	5.1	<0.21	<0.36	<0.39	<0.28	<0.21	<0.36	<0.43	10.5 J	<0.35	1.8	2.1	2.7	<0.36	3.1 J	<0.89
SS-4																				
07/24/14	<5.5	1.9	<3.1	19.9	2.2	4.0	<1.1	<0.96	<1.9	<1.9	<2.0	7.4	<8.1	28.9	37.0	16.1	48.8	15.2	5.7	<5.1
01/06/15	20.1	<0.22	<0.34	5.2	1.4	<0.20	<0.33	<0.36	<0.26	<0.19	<0.33	1.2 J	<0.43	<0.32	46.6	3.2	40.1	12.6	3.3 J	<0.82
SS-5																				
07/24/14	<5.3	1.1	<3.0	47.6	2.9	3.1	<1.1	<0.92	<1.8	<1.8	<1.9	5.5	<7.7	13.7	68.6	7.0	42.4	2.3	5.3	<4.8
01/06/15	22.2	<0.24	<0.37	6.6	<0.15	<0.21	<0.36	<0.39	<0.28	<0.21	<0.36	2.6	<0.47	<0.35	101	2.5	56.5	1.1	3.3 J	1.1 J
SS-6																				
07/24/14	<5.5	0.79	<3.1	24.2	<1.4	3.1	<1.1	<0.96	<1.9	<1.9	<2.0	6.0	<8.1	<1.9	11.2	7.8	16.2	1.8	4.7	<5.1
SS-7																				
07/24/14	<5.1	0.96	3.0	47.4	<1.3	2.2	46.2	<0.88	<1.7	<1.7	1.9	3.6	<7.4	18.6	4.5	125	9.8	2.0	5.7	<4.6
SS-8																				
07/24/14	<4.7	<0.63	<2.6	29.0	<1.2	2.7	<0.96	<0.81	<1.6	<1.6	39.3	3.8	<6.8	1230	3.2	10.6	<2.2	<1.1	195	65.7
SS-9																				
07/24/14	<5.1	2.2	<2.9	116	2.8	4.0	<1.0	<0.88	<1.7	<1.7	2.2	8.0	8.2	<1.7	13.3	11.9	75.5	2.0	6.9	5.4
01/06/15	17.4	<0.27	<0.42	4.0	2.5	<0.24	<0.41	<0.44	1.6 J	<0.24	<0.41	1.1 J	<0.53	<0.39	35.6	7.4	66.1	2.6	3.4 J	1.3 J
SS-10																				
07/24/14	<5.1	0.77	<2.9	22.9	<1.3	3.9	<1.0	<0.88	<1.7	<1.7	<1.8	3.6	<7.4	21.6	2.3	8.0	2.8	<1.2	5.6	<4.6

GANNETT FLEMING

TABLE 3

SUMMARY OF VOC ANALYTICAL RESULTS FOR SUB-SLAB VAPOR SAMPLES -- MAIN BUILDING (JUL 2014 & JAN 2015)

Location ID	Detected Volatile Organic Compound (VOC) Concentrations																			
Date	Acetone	Benzene	Bromodichloromethane	2- Butanone (MEK)	Carbon disulfide	Chlorobenzene	Chloroform	Chloromethane	1,1-Dichloroethane	1,1-Dichloroethene	Ethylbenzene	2-Hexanone	Methylene chloride	4-Methyl-2-pentanone	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	m&p-Xylene	o-Xylene
EPA RSL	**1.4E+05**	**16**	**3.3**	**2.2E+04**	**3100**	**220**	**5.3**	**390**	**77**	**880**	**49**	**130**	**2600**	**1.3E+04**	**180**	**2.2E+04**	**2.2E+04**	**8.8**	**440**	**440**
SSA VRSL	**1.4E+07**	**1600**	**330**	**2.2E+06**	**3.1E+05**	**2.2E+04**	**530**	**3.9E+04**	**7700**	**8.8E+04**	**4900**	**1.3E+04**	**2.6E+05**	**1.3E+06**	**1.8E+04**	**2.2E+06**	**2.2E+06**	**880**	**4.4E+04**	**4.4E+04**
SS-11																				
07/24/14	<4.9	0.92	<2.7	15.9	7.5	<1.9	<1.0	<0.85	<1.7	<1.6	<1.8	4.4	<7.1	<1.7	3.0	7.3	11.3	5.1	4.9	<4.5
01/06/15	10.5	<0.22	<0.34	1.9	11.7	<0.20	<0.33	<0.36	<0.26	<0.19	<0.33	<0.40	<0.43	<0.32	10.4	2.6	107	<0.33	3.1 J	<0.82
DA-1																				
06/16/14	25.9	<0.45	<1.9	4.0	<0.88	<1.3	<1.4	1.2	<1.1	<1.1	<1.2	2.8	<4.9	<1.2	1.0	<1.1	<1.5	1.3	<2.4	<1.2

NOTES:

Concentrations are in micrograms per cubic meter (µg/m^3).

No results at or above a WDNR sub-slab air vapor risk screening level for large industrial buildings (SS VRSL).

EPA RSL = Lowest USEPA Region 3 Regional Screening Level for Industrial Air (at target risk=1E-5 for carcinogens or hazard quotient=1) November 2014.

SSA VRSL = Sub-slab air vapor risk screening level for large industrial buildings (100 times the EPA RSL, per WDNR guidance).

4-Methyl-2-pentanone = MIBK = Methyl isobutyl ketone.

GANNETT FLEMING

NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

TABLE 4

SUB-SLAB VAPOR SAMPLE RESULTS FOR SELECT VOCs & FID DATA -- MAIN BLDG (JUL 2014 & JAN 2015)

Location ID	VOC Concentrations (µg/m^3) and Field Screening Results (ppmv)				
Sample Date	TCE	TCA	PCE	CVOC Sum	FID
EPA RSL	8.8	2.2E+04	180	NS	NS
SSA VRSL	880 RQ	2.2E+06 RQ	18000	NS	NS
SS-1					
07/24/14	1.3 U	2.5 U	2.7	6.5	4.5
SS-2					
07/24/14	1.3	21.7	2.8	25.8	3.2
SS-3					
07/24/14	3.9	11.7	6.7	22.3	2.8
01/06/15	0.36 U	2.7	1.8	4.86	0
SS-4					
07/24/14	15.2	48.8	37.0	101.0	4.8
01/06/15	12.6	40.1	46.6	99.3	0
SS-5					
07/24/14	2.3	42.4	68.6	113.3	1.8
01/06/15	1.1	56.5	101	158.6	0
SS-6					
07/24/14	1.8	16.2	11.2	29.2	4.0
SS-7					
07/24/14	2.0	9.8	4.5	16.3	1.5
SS-8					
07/24/14	1.1 U	2.2 U	3.2	6.5	3.0
SS-9					
07/24/14	2.0	75.5	13.3	90.8	3.1
01/06/15	2.6	66.1	35.6	104.3	0
SS-10					
07/24/14	1.2 U	2.8	2.3	6.3	1.8
SS-11					
07/24/14	5.1	11.3	3.0	19.4	0.8
01/06/15	0.33 U	107	10.4	117.73	0
DA-1					
06/16/14	1.3	1.5 U	1.0	3.8	0

NOTES:

Concentrations are in micrograms per cubic meter (µg/m^3).
No results at or above a WDNR sub-slab air vapor risk screening level for large industrial buildings (SS VRSL).
EPA RSL = Lowest USEPA Region 3 Regional Screening Level for Industrial Air (at target risk=1E-5 for carcinogens or hazard quotient=1) November 2014.
SSA VRSL = Sub-slab air vapor risk screening level for large industrial bldgs (100x EPA RSL, per WDNR guidance).
CVOC Sum = summation of TCE, TCA, and PCE (at detection limit, if not detected).
FID = Flame-ionization detector readings in parts per million, volume (ppmv), measured in the field.
NS = No standard.
RQ = Results qualifier.
U = Indicates the compound was analyzer for, but not detected at the concentration shown.

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NATIONAL PRESTO INDUSTRIES,INC.
EAU CLAIRE,WISCONSIN

TABLE 5

NPI VOC ANALYTICAL RESULTS FROM EW-5, EW-6, AND THE SWC MONITORING WELLS & PIEZOMETERS SINCE 2015[1]

Well ID	Sample	NPI Volatile Organic Compound (VOC) Concentration (µg/ℓ) and Results Qualifier(s)									
Sample Date	Method/	1,1-DCA		1,1-DCE		PCE		1,1,1-TCA		TCE	
MCL/ES/PAL	Level	None/850/85		7/7/0.7		5/5/0.5		200/200/40		5/5/0.5	
EW-5 (extraction well at Grid Coordinate K7)[2]											
03/24/15	G	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/16/15	G	0.24	U	0.41	U	0.50	U	0.50	U	0.41	J
09/22/15	H[2]	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
12/07/15	H	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
03/21/16	H	0.24	U	0.41	U	0.50	U	0.50	U	*0.66*	J
03/21/16	L	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/13/16	L	0.24	U	0.41	U	0.50	U	0.50	U	0.34	J
08/30/16	L	0.24	U	0.41	U	0.50	U	0.50	U	0.43	J
12/06/16	H	0.24	U	0.41	U	0.50	U	0.50	U	*0.75*	J
12/06/16	L	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
03/21/17	H	0.24	U	0.41	U	0.50	U	0.50	U	0.34	J
03/21/17	L	0.24	U	0.41	U	0.50	U	0.50	U	0.47	J
06/13/17	H	0.24	U	0.41	U	0.50	U	0.50	U	0.39	J
06/13/17	L	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
08/28/17	H	0.24	U	0.41	U	0.50	U	0.50	U	0.37	J
08/28/17	L	0.24	UA	0.41	UA	0.50	UA	0.50	UA	0.40	JA
12/13/17	H	0.24	U	0.41	U	0.50	U	0.50	U	*0.64*	J
12/13/17	L	0.24	U	0.41	U	0.50	U	0.50	U	0.36	J
EW-6 (extraction well at Grid Coordinate K7)[3]											
03/24/15	G	0.24	U	0.41	U	0.50	U	1.2		*0.99*	J
06/16/15	G	0.24	U	0.41	U	0.50	U	1.4		*0.71*	J
09/22/15	G	0.24	U	0.41	U	0.50	U	1.4		*0.79*	J
12/08/15	G	0.24	U	0.41	U	0.50	U	0.86	J	*0.58*	J
03/21/16	G	0.24	U	0.41	U	0.50	U	1.3		*0.75*	J
06/13/16	G	0.24	U	0.41	U	0.50	U	1.5		*0.81*	J
08/30/16	G	0.24	U	0.41	U	0.50	U	1.1		*0.73*	J
12/06/16	G	0.24	U	0.41	U	0.50	U	1.2		*0.70*	J
03/21/17	H[3]	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/13/17	G	0.24	U	0.41	U	0.50	U	1.4		*0.75*	J
08/28/17	G	0.24	UA	0.41	UA	0.50	UA	1.3	A	*0.82*	JA
12/13/17	G	0.24	UA	0.41	UA	0.50	UA	1.3	A	*0.71*	JA
03/27/18	G	0.24	U	0.41	U	0.50	U	1.5		*0.87*	J
06/19/18	G	0.24	U	0.41	U	0.50	U	1.2		*0.75*	J
08/14/18	G	0.27	UA	0.24	UA	0.33	UA	1.0	JA	*0.75*	JA
12/10/18	G	0.27	U	0.24	U	0.33	U	0.93	J	*0.89*	J
03/25/19	G	0.27	UA	0.24	UA	0.33	UA	0.97	JA	*0.83*	JA
06/12/19	G	0.27	UA	0.24	UA	0.33	UA	0.99	JA	*0.71*	JA
08/19/19	G	0.27	UA	0.24	UA	0.33	UA	1.05	A	*0.72*	JA
12/03/19	G	0.27	UA	0.24	UA	0.33	UA	0.99	JA	*0.61*	JA

GANNETT FLEMING

TABLE 5

NPI VOC ANALYTICAL RESULTS FROM EW-5, EW-6, AND THE SWC MONITORING WELLS & PIEZOMETERS SINCE 2015[1]

Well ID	Sample	NPI Volatile Organic Compound (VOC) Concentration (µg/ℓ) and Results Qualifier(s)									
Sample Date	Method/	1,1-DCA		1,1-DCE		PCE		1,1,1-TCA		TCE	
MCL/ES/PAL	Level	None/850/85		7/7/0.7		5/5/0.5		200/200/40		5/5/0.5	
03/26/20	G	0.27	U	0.24	U	0.33	U	1.3		*0.73*	J
06/08/20	G	0.27	UA	0.24	UA	0.33	UA	1.03	JA	*0.75*	JA
08/24/20	G	0.27	UA	0.24	UA	0.33	UA	1.1	A	*0.88*	JA
12/02/20	G	0.27	UA	0.24	UA	0.33	UA	0.81	JA	*0.74*	JA
03/16/21	G	0.27	UJA	0.24	UA	0.33	UA	1.2	JA	*0.82*	JA
05/25/21	G	0.30	UA	0.58	UA	0.41	UA	1.3	A	*0.75*	JA
08/31/21	G	0.30	UA	0.58	UA	0.41	UA	0.86	JA	*0.98*	JA
11/29/21	GB[3]	1.55	A	0.58	UA	0.84	JA	1.9	A	*2.3*	A
03/24/22	G	0.30	UA	0.58	UA	0.41	UA	0.705	JA	*0.78*	JA
06/14/22	G	0.30	U	0.58	U	0.41	U	0.88	J	*1.2*	
08/30/22	G[4]	0.30	UA	0.58	UA	0.41	UA	0.60	JA	*0.99*	JA
03/21/23	GB[3]	0.30	UA	0.58	UA	0.41	UA	0.30	UA	0.32	UA
06/13/23	GB	2.0	A	0.58	UA	*1.05*	A	2.25	A	*2.7*	A
08/29/23	GB	1.8	A	0.58	UA	*1.1*	A	3.3	A	*2.55*	A
08/30/23	G23	1.0		0.58	U	*0.69*	J	4.6		*1.5*	
11/30/23	GB	2.9	A	0.58	UA	*1.05*	A	6.5	A	*2.6*	A
12/01/23	G23	1.3		0.58	U	0.41	U	2.8		*1.3*	
03/27/24	GB	3.25	A	0.58	UA	*1.1*	A	6.3	A	*2.0*	A
03/28/24	G24	1.3		0.58	U	0.41	U	2.6		*1.1*	
06/03/24	GB	3.2	A	0.58	UA	*0.98*	AJ	7.4	A	*2.3*	A
06/04/24	G24	1.5		0.58	U	0.46	J	2.9		*1.1*	
08/27/24	GB	4.15	A	0.58	UA	*0.98*	AJ	10.2	A	*3.05*	A
08/28/24	G24	1.9		0.58	U	*0.59*	J	4.0		*1.7*	
12/03/24	G	0.30	UA	0.58	UA	0.41	UA	0.77	JA	*1.02*	A
MW-4A (monitoring well at Grid Coordinate K7 no longer scheduled for routine sampling)											
06/16/15	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
12/07/15	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
03/21/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/13/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
08/31/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
12/05/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
03/21/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/13/17	M	0.24	U	0.41	U	0.50	U	0.50	UJ	0.33	U
08/28/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
12/12/17	M	0.24	UA	0.41	UA	0.50	UA	0.50	UA	0.33	UA
08/14/18	M	0.27	U	0.24	U	0.33	U	0.24	U	0.26	U
08/19/19	M	0.27	U	0.24	U	0.33	U	0.24	U	0.26	U
11/29/21	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
03/21/23	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
06/12/23	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
08/29/23	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
11/30/23	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
03/27/24	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U

GANNETT FLEMING

TABLE 5

NPI VOC ANALYTICAL RESULTS FROM EW-5, EW-6, AND THE SWC MONITORING WELLS & PIEZOMETERS SINCE 2015[1]

Well ID	Sample	NPI Volatile Organic Compound (VOC) Concentration (µg/ℓ) and Results Qualifier(s)									
Sample Date	Method/	1,1-DCA		1,1-DCE		PCE		1,1,1-TCA		TCE	
MCL/ES/PAL	Level	None/850/85		7/7/0.7		5/5/0.5		200/200/40		5/5/0.5	
06/03/24	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
08/28/24	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
12/03/24	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
MW-4B (piezometer at Grid Coordinate K7)											
03/23/15	M	0.24	U	0.41	U	0.50	U	0.50	U	*0.79*	J
06/16/15	M	0.24	U	0.41	U	0.50	U	0.50	J	*0.75*	J
09/22/15	M	0.24	U	0.41	U	0.50	U	0.50	J	*1.1*	
12/07/15	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
03/21/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.43	J
06/13/16	M	0.24	U	0.41	U	0.50	U	0.50	U	*0.83*	J
08/31/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.39	JA
12/05/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.43	J
03/21/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/13/17	M	0.24	U	0.41	U	0.50	U	0.50	U	*0.55*	J
08/28/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.38	J
12/12/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.38	J
03/27/18	M	0.33	J	0.41	U	0.50	U	0.50	U	0.42	J
06/18/18	M	0.24	U	0.41	U	0.50	U	0.50	U	0.34	J
08/14/18	M	0.27	U	0.24	U	0.33	U	0.24	U	0.34	J
12/10/18	M	0.27	U	0.24	U	0.33	U	0.24	U	0.26	J
03/25/19	M	0.27	U	0.24	U	0.33	U	0.24	U	0.29	J
06/10/19	M	0.27	U	0.24	U	0.33	U	0.24	U	0.36	J
12/03/19	M	0.27	U	0.24	U	0.33	U	0.24	U	0.26	U
6/8/20	M	0.48	J	0.24	U	0.33	U	0.34	J	0.33	J
5/24/21	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
11/29/21	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
6/13/22	M	0.30	U	0.58	U	0.41	U	0.30	U	0.34	J
03/21/23	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
06/12/23	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
08/29/23	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
11/30/23	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
03/27/24	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
06/03/24	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
08/28/24	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
12/03/24	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
MW-23A (monitoring well at Grid Coordinate J7)											
06/15/15	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.6*	
12/08/15	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.3*	
03/24/16	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.5*	
06/15/16	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.5*	
08/30/16	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.1*	
12/06/16	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.04*	JA
03/21/17	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.35*	A

GANNETT FLEMING

TABLE 5

NPI VOC ANALYTICAL RESULTS FROM EW-5, EW-6, AND THE SWC MONITORING WELLS & PIEZOMETERS SINCE 2015[1]

Well ID	Sample	NPI Volatile Organic Compound (VOC) Concentration (µg/ℓ) and Results Qualifier(s)									
Sample Date	Method/	1,1-DCA		1,1-DCE		PCE		1,1,1-TCA		TCE	
MCL/ES/PAL	Level	None/850/85		7/7/0.7		5/5/0.5		200/200/40		5/5/0.5	
06/13/17	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.2*	
08/29/17	M	0.24	U	0.41	U	0.50	U	0.50	U	*0.64*	J
12/14/17	M	0.24	U	0.41	U	0.50	U	0.50	U	*0.84*	J
06/19/18	M	0.24	U	0.41	U	0.50	U	0.50	U	*0.58*	J
06/12/19	M	0.27	UA	0.24	UA	0.33	UA	0.24	UA	*0.64*	JA
6/10/20	M	0.27	U	0.24	U	0.33	U	0.24	U	0.38	J
5/25/21	M	0.30	U	0.58	U	0.41	U	0.30	U	0.43	J
6/14/22	M	0.30	U	0.58	U	0.41	U	0.30	U	*0.54*	J
06/13/23	M	0.30	U	0.58	U	0.41	U	0.30	U	0.46	J
06/04/24	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
MW-23B (piezometer at Grid Coordinate J7)											
06/16/15	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.1*	
12/08/15	M	0.24	U	0.41	U	0.50	U	0.50	U	*2.0*	A
03/22/16	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.8*	
06/15/16	M	0.24	U	0.41	U	0.50	U	0.50	U	*2.1*	
08/30/16	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.9*	
12/06/16	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.9*	
03/21/17	M	0.24	U	0.41	U	0.50	U	0.50	U	*2.0*	
06/13/17	M	0.24	U	0.41	U	0.50	U	0.50	U	*2.1*	
08/29/17	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.8*	
12/14/17	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.6*	
06/19/18	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.9*	
06/12/19	M	0.27	U	0.24	U	0.33	U	0.34	J	*1.9*	
6/10/20	M	0.27	U	0.24	U	0.33	U	0.24	U	*1.8*	
5/25/21	M	0.30	U	0.58	U	0.41	U	0.30	U	*1.7*	
6/14/22	M	0.30	U	0.58	U	0.41	U	0.32	J	*1.6*	
06/13/23	M	0.30	U	0.58	U	0.41	U	0.30	U	*1.6*	
06/04/24	M	0.30	U	0.58	U	0.41	U	0.30	U	*0.78*	J
MW-34A (monitoring well at Grid Coordinate K8)											
06/15/15	M	0.71	J	0.41	U	0.50	U	0.50	U	0.33	U
03/21/16	M	0.53	J	0.41	U	0.50	U	0.50	U	0.33	U
06/13/16	HS	0.59	J	0.41	U	0.50	U	0.50	U	0.33	U
08/29/16	M	0.5	J	0.41	U	0.50	U	0.50	U	0.33	U
12/05/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
03/20/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/12/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
08/28/17	M	0.28	J	0.41	U	0.50	U	0.50	U	0.33	U
12/12/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
03/28/18	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/21/18	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
08/14/18	M	0.27	U	0.24	U	0.33	U	0.24	U	0.26	U
12/10/18	M	0.27	U	0.24	U	0.33	U	0.24	U	0.26	U
03/25/19	M	0.27	U	0.24	U	0.33	U	0.24	U	0.26	U

GANNETT FLEMING

TABLE 5

NPI VOC ANALYTICAL RESULTS FROM EW-5, EW-6, AND THE SWC MONITORING WELLS & PIEZOMETERS SINCE 2015[1]

Well ID	Sample	NPI Volatile Organic Compound (VOC) Concentration (µg/ℓ) and Results Qualifier(s)									
Sample Date	Method/	1,1-DCA		1,1-DCE		PCE		1,1,1-TCA		TCE	
MCL/ES/PAL	Level	None/850/85		7/7/0.7		5/5/0.5		200/200/40		5/5/0.5	
06/10/19	M	0.27	U	0.24	U	0.33	U	0.24	U	0.26	U
12/03/19	M	0.31	J	0.24	U	0.33	U	0.24	U	0.26	U
6/8/20	M	0.31	J	0.24	U	0.33	U	0.24	U	0.26	U
12/2/20	M	0.33	J	0.24	U	0.33	U	0.24	U	0.26	U
5/25/21	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
11/29/21	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
6/13/22	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
12/5/22	M	0.30	UA	0.58	UA	0.41	UA	0.30	UA	0.32	UA
06/12/23	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
11/30/23	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
06/03/24	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
12/03/24	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
MW-34B (piezometer at Grid Coordinate K8 no longer scheduled for routine NPI VOC sampling)											
12/07/15	HS	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
03/24/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/13/16	HS	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
08/29/16	M	0.24	UA	0.41	UA	0.50	UA	0.50	UA	0.33	UA
12/05/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
03/20/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/12/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
08/28/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
12/12/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/20/18	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/10/19	M	0.27	U	0.24	U	0.33	U	0.24	U	0.26	U
MW-34C (piezometer at Grid Coordinate K8 no longer scheduled for routine sampling)											
12/07/15	HS	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
03/21/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/13/16	HS	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
08/29/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
12/05/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
03/20/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/12/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
08/28/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
12/12/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/20/18	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/10/19	M	0.27	U	0.24	U	0.33	U	0.24	U	0.26	U
MW-68A (monitoring well at Grid Coordinate K7)											
12/07/15	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
03/21/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/13/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.41	J
08/29/16	M	0.24	UA	0.41	UA	0.50	UA	0.50	UA	0.33	UA
12/05/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.35	J
06/12/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.35	J

GANNETT FLEMING

TABLE 5

NPI VOC ANALYTICAL RESULTS FROM EW-5, EW-6, AND THE SWC MONITORING WELLS & PIEZOMETERS SINCE 2015[1]

Well ID	Sample	NPI Volatile Organic Compound (VOC) Concentration (µg/ℓ) and Results Qualifier(s)									
Sample Date	Method/	1,1-DCA		1,1-DCE		PCE		1,1,1-TCA		TCE	
MCL/ES/PAL	Level	None/850/85		7/7/0.7		5/5/0.5		200/200/40		5/5/0.5	
03/27/18	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	J
06/18/18	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
08/14/18	M	0.27	U	0.24	U	0.33	U	0.24	U	0.40	J
12/10/18	M	0.27	U	0.24	U	0.33	U	0.24	U	0.30	J
03/25/19	M	0.27	U	0.24	U	0.33	U	0.24	U	0.39	J
06/10/19	M	0.27	U	0.24	U	0.33	U	0.24	U	0.33	J
12/03/19	M	0.27	U	0.24	U	0.33	U	0.24	U	0.26	U
6/8/20	M	0.27	U	0.24	U	0.33	U	0.24	U	0.26	U
5/24/21	M	0.30	U	0.58	U	0.41	U	0.30	U	0.40	J
6/13/22	M	0.30	U	0.58	U	0.41	U	0.30	U	0.39	J
06/12/23	M	0.30	U	0.58	U	0.41	U	0.30	U	*0.54*	J
08/29/23	M	0.30	U	0.58	U	0.41	U	0.30	U	*0.50*	J
06/04/24	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
MW-68B (piezometer at Grid Coordinate K7)											
06/16/15	M	0.24	U	0.41	U	0.50	U	0.50	U	*0.66*	J
12/07/15	M	0.24	U	0.41	U	0.50	U	0.50	U	0.49	J
03/24/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.42	J
06/13/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.37	J
08/29/16	M	0.25	J	0.41	U	0.50	U	0.50	U	0.33	U
12/05/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/12/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
12/13/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
03/27/18	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/18/18	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
08/14/18	M	0.27	U	0.24	U	0.33	U	0.24	U	0.27	J
12/10/18	M	0.27	U	0.24	U	0.33	U	0.24	U	0.26	U
03/25/19	M	0.27	U	0.24	U	0.33	U	0.24	U	0.26	U
06/10/19	M	0.27	U	0.24	U	0.33	U	0.24	U	0.26	J
12/03/19	M	0.27	U	0.24	U	0.33	U	0.24	U	0.26	U
6/8/20	M	0.27	U	0.24	U	0.33	U	0.24	U	0.26	U
12/2/20	M	0.27	U	0.24	U	0.33	U	0.24	U	0.34	J
5/24/21	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
6/13/22	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
06/12/23	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
06/04/24	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
MW-70A (monitoring well at Grid Coordinate K8)											
06/15/15	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
12/07/15	HS	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
03/24/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.41	J
06/13/16	HS	0.40	J	0.41	U	0.50	U	0.50	U	*0.74*	J
08/29/16	M	0.45	J	0.41	U	0.50	U	0.50	U	*0.55*	J
12/05/16	M	0.25	JA	0.41	UA	0.50	UA	0.50	UA	*0.51*	JA
03/20/17	M	0.37	JA	0.41	UA	0.50	UA	0.50	UA	*0.59*	JA

GANNETT FLEMING

TABLE 5

NPI VOC ANALYTICAL RESULTS FROM EW-5, EW-6, AND THE SWC MONITORING WELLS & PIEZOMETERS SINCE 2015[1]

Well ID	Sample	NPI Volatile Organic Compound (VOC) Concentration (µg/ℓ) and Results Qualifier(s)									
Sample Date	Method/	1,1-DCA		1,1-DCE		PCE		1,1,1-TCA		TCE	
MCL/ES/PAL	Level	None/850/85		7/7/0.7		5/5/0.5		200/200/40		5/5/0.5	
06/12/17	M	0.73	J	0.41	J	0.50	U	0.50	U	*0.68*	J
08/28/17	M	0.38	JA	0.41	UA	0.50	UA	0.50	UA	*0.65*	JA
12/12/17	M	0.31	JA	0.41	UA	0.50	UA	0.50	UA	0.49	JA
03/28/18	M	0.27	J	0.41	U	0.50	U	0.50	U	*0.54*	J
06/21/18	M	0.44	J	0.41	U	0.50	U	0.50	U	*0.51*	J
08/14/18	M	0.27	U	0.24	U	0.33	U	0.24	U	*0.52*	J
12/10/18	M	0.35	J	0.24	U	0.33	U	0.24	U	0.29	J
03/25/19	M	0.27	U	0.24	U	0.33	U	0.24	U	*0.88*	J
06/10/19	M	0.27	U	0.24	U	0.33	U	0.24	U	*1.0*	J
08/19/19	M	0.27	U	0.24	U	0.33	U	0.24	U	*0.71*	J
12/03/19	M	0.27	U	0.24	U	0.33	U	0.24	U	0.38	J
4/27/20	M	0.36	J	0.24	U	0.33	U	0.24	U	*0.58*	J
6/8/20	M	0.40	J	0.24	U	0.33	U	0.24	U	*0.63*	J
8/24/20	M	0.27	U	0.24	U	0.33	U	0.24	U	*0.59*	J
12/2/20	M	0.27	U	0.24	U	0.33	U	0.24	U	0.46	J
3/16/21	M	0.27	UJ	0.24	U	0.33	U	0.24	U	*0.62*	J
5/24/21	M	0.30	U	0.58	U	0.41	U	0.30	U	0.46	J
8/31/21	M	0.30	U	0.58	U	0.41	U	0.30	U	*0.51*	J
11/29/21	M	0.32	J	0.58	U	0.41	U	0.30	U	*0.52*	J
6/13/22	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
8/30/22	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
12/5/22	M	0.30	J	0.58	U	0.41	U	0.30	U	*0.50*	J
03/21/23	M	0.30	J	0.58	U	0.41	U	0.30	U	*0.52*	J
06/12/23	M	0.55	J	0.58	U	0.41	U	0.30	U	0.32	U
08/29/23	M	0.36	J	0.58	U	0.41	U	0.30	U	0.35	J
11/30/23	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
03/27/24	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
06/03/24	M	0.44	J	0.58	U	0.41	U	0.30	U	0.32	U
08/27/24	M	0.30	U	0.58	U	0.41	U	0.30	U	0.41	J
12/03/24	M	0.30	U	0.58	U	0.41	U	0.30	U	*0.52*	J
MW-70B (piezometer at Grid Coordinate K8 no longer scheduled for routine NPI VOC sampling)											
06/15/15	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
12/07/15	HS	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
03/21/16	HS	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/13/16	HS	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
08/29/16	HS	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
12/05/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
03/20/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/12/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
08/28/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
12/12/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
08/14/18	M	0.27	U	0.24	U	0.33	U	0.24	U	0.26	U
08/19/19	M	0.27	U	0.24	U	0.33	U	0.24	U	0.26	U

GANNETT FLEMING

TABLE 5

NPI VOC ANALYTICAL RESULTS FROM EW-5, EW-6, AND THE SWC MONITORING WELLS & PIEZOMETERS SINCE 2015[1]

Well ID	Sample	NPI Volatile Organic Compound (VOC) Concentration (µg/ℓ) and Results Qualifier(s)									
Sample Date	Method/	1,1-DCA		1,1-DCE		PCE		1,1,1-TCA		TCE	
MCL/ES/PAL	Level	None/850/85		7/7/0.7		5/5/0.5		200/200/40		5/5/0.5	
MW-74A (monitoring well at Grid Coordinate J8 no longer scheduled for routine sampling)											
06/15/15	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
12/07/15	HS	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
03/24/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/13/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
08/29/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
12/05/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/12/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
12/13/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/18/18	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/10/19	M	0.27	U	0.24	U	0.33	U	0.24	U	0.26	U
MW-76A (monitoring well at Grid Coordinate K7)											
10/04/10	M	0.40	U	0.40	U	0.30	U	15.1		**9.28**	
12/15/10	M	0.90	J	0.40	U	*1.56*		*49.2*		**29.1**	
03/29/11	M	3.12		0.40	U	*1.62*		*75.9*		**41.5**	
06/06/11	M	8.14		*0.71*	J	*2.35*		*129*		**87.6**	
10/20/11	M	27.3		*1.04*	J	*2.23*		*172*		**16.1**	
12/22/11	M	11.1		*1.01*	J	*1.7*		*197*		**15.4**	
03/13/12	M	3.06		*0.93*	J	*1.53*		*166*		**13.1**	
06/26/12	M	1.5		0.57	U	*1.3*		*166*		**8.4**	
10/09/12	M	1.2		0.63	J	*1.2*		*141*		**9.1**	
12/04/12	M	1.0		0.61	J	*0.73*	J	*186*		**8.6**	
04/09/13	M	0.85	J	0.57	U	*1.5*		*151*		**9.4**	
10/15/13	M	0.90	J	0.85	J	*1*		**209**		**14.1**	
12/04/13	M	0.50	J	0.64	J	*1.3*		*192*		**11.9**	
04/15/14	M	0.69	J	0.43	J	*1.3*		*155*		**8.8**	
06/17/14	M	0.61	J	0.53	J	*1.3*		*145*		**9.3**	
09/15/14	M	0.38	J	0.41	U	*0.79*	J	*91.2*		**5.2**	
12/02/14	M	0.63	J	0.41	U	*1.1*		*138*		**8.5**	
03/24/15	M	0.61	J	0.41	U	*1.3*		*137*		**8.1**	
06/16/15	M	0.50	J	0.46	J	*0.93*	J	*106*		**6.3**	
09/23/15	M	0.24	U	0.41	U	0.50	U	2.5		0.33	U
12/07/15	M	0.24	U	0.41	U	0.50	U	4.9		0.47	J
3/21/16	M	0.24	U	0.41	U	0.50	U	2.2		0.33	U
6/13/16	M	0.24	U	0.41	U	0.50	U	0.61	J	0.38	J
8/30/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
12/6/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
3/21/17	M	1.9		0.41	U	*1.0*		*42.8*		*4.6*	
6/13/17	M	0.24	U	0.41	U	0.50	U	1.7		0.33	U
8/28/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
12/13/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
3/27/18	M	0.24	UA	0.41	UA	0.50	UA	0.50	JUA	0.33	UA
6/19/18	M	0.24	U	0.41	U	*0.56*	J	0.62	J	0.33	U

GANNETT FLEMING

TABLE 5

NPI VOC ANALYTICAL RESULTS FROM EW-5, EW-6, AND THE SWC MONITORING WELLS & PIEZOMETERS SINCE 2015[1]

Well ID	Sample	NPI Volatile Organic Compound (VOC) Concentration (µg/ℓ) and Results Qualifier(s)									
Sample Date	Method/	1,1-DCA		1,1-DCE		PCE		1,1,1-TCA		TCE	
MCL/ES/PAL	Level	None/850/85		7/7/0.7		5/5/0.5		200/200/40		5/5/0.5	
8/14/18	M	0.27	U	0.24	U	*0.60*	J	2.2		0.36	J
12/10/18	M	0.27	U	0.24	U	0.33	U	0.24	U	0.26	U
3/25/19	M	0.27	U	0.24	U	0.33	U	0.24	U	0.28	J
6/10/19	M	0.27	U	0.24	U	0.33	U	0.34	J	0.34	J
8/19/19	M	0.27	U	0.24	U	0.33	U	0.40	J	0.26	U
12/3/19	M	0.27	UA	0.24	UA	0.33	UA	0.27	JUA	0.26	UA
4/27/20	M	0.27	UA	0.24	UA	0.40	JA	0.33	JA	0.29	JA
6/8/20	M	0.27	UA	0.24	UA	0.33	UA	0.24	UA	0.26	UA
8/24/20	M	0.27	U	0.24	U	0.33	U	0.24	U	0.26	U
12/2/20	M	0.27	UA	0.24	UA	0.33	UA	0.93	JA	0.26	UA
3/16/21	M	0.27	UJ	0.24	U	0.49	J	2.9		0.37	J
5/24/21	M	0.30	UA	0.58	UA	0.45	JUA	2.3	JA	0.32	UJA
8/31/21	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
11/29/21	M	0.32	JUA	0.58	UA	*1.15*	A	5.5	A	*0.89*	JA
3/24/22	M	0.30	U	0.58	U	0.41	U	1.4		0.32	U
6/13/22	M	0.30	U	0.58	U	0.41	U	0.45	J	0.32	U
8/30/22	M	0.30	U	0.58	U	0.41	U	13.4		*0.71*	J
12/5/22	M	0.30	U	0.58	U	0.41	U	2.9		0.32	U
03/21/23	M	0.30	UA	0.58	UA	0.41	UA	0.57	JA	0.32	UA
06/12/23	M	0.30	UA	0.58	UA	*0.55*	JA	1.1	A	*0.56*	JA
08/29/23	M	1.35	A	0.58	UA	*0.795*	JA	9.1	A	*1.2*	A
11/30/23	M	1.95	A	0.58	UA	*0.515*	JA	12.7	A	*1.75*	A
03/27/24	M	1.6	A	0.58	UA	0.41	U	11.25	A	*1.7*	A
06/04/24	M	1.35	A	0.58	UA	*0.535*	JA	8.6	A	*1.4*	A
08/28/24	M	0.70	UA	0.58	UA	*0.56*	JA	6.75	A	*1.05*	A
12/03/24	M	0.30	UA	0.58	UA	0.41	UA	0.56	JA	0.32	UA
MW-76B (piezometer at Grid Coordinate K7 no longer scheduled for routine sampling)											
10/04/10	M	0.40	U	0.40	U	0.30	U	0.50	U	*1.54*	
12/15/10	M	0.40	U	0.40	U	0.30	U	0.50	U	0.40	U
03/29/11	M	0.40	U	0.40	U	0.30	U	0.50	U	0.40	U
06/06/11	M	0.40	U	0.40	U	0.30	U	0.50	U	0.40	U
10/20/11	M	0.40	U	0.40	U	0.30	U	0.50	U	0.40	U
12/22/11	M	0.40	U	0.40	U	0.30	U	0.50	U	0.40	U
03/13/12	M	0.40	U	0.40	U	0.30	U	0.50	U	0.40	U
06/26/12	M	0.75	U	0.57	U	0.45	U	0.90	U	0.48	U
10/09/12	M	0.75	U	0.57	U	0.45	U	0.90	U	0.48	U
12/04/12	M	0.75	U	0.57	U	0.45	U	0.90	U	0.48	U
04/04/13	M	0.75	U	0.57	U	0.45	U	0.90	U	0.48	U
10/15/13	M	0.28	U	0.43	U	0.47	U	0.44	U	0.36	U
12/04/13	M	0.28	U	0.43	U	0.47	U	0.44	U	0.36	U
06/17/14	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	UA
12/04/14	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/16/15	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U

GANNETT FLEMING

TABLE 5

NPI VOC ANALYTICAL RESULTS FROM EW-5, EW-6, AND THE SWC MONITORING WELLS & PIEZOMETERS SINCE 2015[1]

Well ID	Sample	NPI Volatile Organic Compound (VOC) Concentration (µg/ℓ) and Results Qualifier(s)									
Sample Date	Method/	1,1-DCA		1,1-DCE		PCE		1,1,1-TCA		TCE	
MCL/ES/PAL	Level	None/850/85		7/7/0.7		5/5/0.5		200/200/40		5/5/0.5	
12/07/15	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/13/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
12/06/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
03/21/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/13/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
08/28/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
12/13/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/19/18	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/10/19	M	0.27	U	0.24	U	0.33	U	0.24	U	0.26	U
11/29/21	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
03/21/23	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
06/12/23	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
08/29/23	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
11/30/23	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
03/27/24	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
06/04/24	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
08/28/24	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
12/03/24	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
MW-77A (monitoring well at Grid Coordinate K7)											
10/04/10	M	0.40	U	0.40	U	0.30	U	0.50	U	0.40	U
12/15/10	M	0.40	U	0.40	U	0.30	U	0.50	U	0.42	J
04/06/11	M	0.40	U	0.40	U	0.30	U	0.54	J	*0.96*	J
06/06/11	M	0.40	U	0.40	U	0.30	U	0.60	J	*2.38*	
10/20/11	M	0.40	U	0.40	U	0.30	U	0.50	U	*1.80*	
12/21/11	M	0.40	U	0.40	U	0.30	U	0.63	J	*1.80*	
03/13/12	M	0.40	U	0.40	U	0.30	U	0.50	U	*1.02*	J
06/26/12	M	0.75	U	0.57	U	0.45	U	0.90	U	*0.94*	J
10/09/12	M	0.75	U	0.57	U	0.45	U	0.90	U	*1.2*	
12/04/12	M	0.75	U	0.57	U	0.45	U	0.90	U	*0.93*	J
04/04/13	M	0.75	U	0.57	U	0.45	U	0.90	U	*1.4*	
07/02/13	M	0.28	U	0.43	U	0.47	U	0.44	U	*1.5*	
10/15/13	M	0.28	U	0.43	U	0.47	U	0.44	U	*1.7*	DUP
12/04/13	M	0.28	U	0.43	U	0.47	U	0.44	U	*1.4*	
04/15/14	M	0.16	U	0.41	U	0.50	U	0.50	U	*1.1*	
06/16/14	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.3*	
09/15/14	M	0.24	U	0.41	U	0.50	U	0.50	U	*0.72*	J
12/01/14	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.2*	
03/23/15	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.4*	
06/15/15	M	0.24	U	0.41	U	0.50	U	0.50	U	*0.89*	J
09/22/15	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.1*	
12/07/15	M	0.24	U	0.41	U	0.50	U	0.50	U	*0.66*	J
03/21/16	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.1*	
06/13/16	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.3*	

GANNETT FLEMING

TABLE 5

NPI VOC ANALYTICAL RESULTS FROM EW-5, EW-6, AND THE SWC MONITORING WELLS & PIEZOMETERS SINCE 2015[1]

Well ID	Sample	NPI Volatile Organic Compound (VOC) Concentration (µg/ℓ) and Results Qualifier(s)									
Sample Date	Method/	1,1-DCA		1,1-DCE		PCE		1,1,1-TCA		TCE	
MCL/ES/PAL	Level	None/850/85		7/7/0.7		5/5/0.5		200/200/40		5/5/0.5	
08/31/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.91	J
12/06/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.51	J
03/21/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/13/17	M	0.24	UA	0.41	UA	0.50	UA	0.50	UA	0.33	UA
08/28/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.35	J
12/13/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
03/27/18	M	0.24	U	0.41	U	0.50	U	0.50	U	0.33	U
06/19/18	M	0.24	UA	0.41	UA	0.50	UA	0.50	UA	0.66	JA
08/14/18	M	0.27	UA	0.24	UA	0.33	UA	0.27	JA	0.66	JA
12/10/18	M	0.27	UA	0.24	UA	0.33	UA	0.25	JA	1.53	JA
03/25/19	M	0.27	U	0.24	U	0.33	U	0.25	J	1.2	
06/10/19	M	0.27	U	0.24	U	0.33	U	0.33	J	1.4	
08/19/19	M	0.27	U	0.24	U	0.33	U	0.25	J	1.0	
12/03/19	M	0.27	U	0.24	U	0.33	U	0.24	U	0.26	U
6/8/20	M	0.27	U	0.24	U	0.33	U	0.24	U	0.26	U
12/2/20	M	0.27	U	0.24	U	0.33	U	0.24	U	0.26	U
5/24/21	M	0.30	U	0.58	U	0.41	U	0.30	U	0.38	J
11/29/21	M	0.30	U	0.58	U	0.41	U	0.30	U	0.54	J
6/13/22	M	0.30	U	0.58	U	0.41	U	0.30	U	0.58	J
12/5/22	M	0.30	U	0.58	U	0.41	U	0.30	U	0.49	J
03/21/23	M	0.30	U	0.58	U	0.41	U	0.30	U	0.52	J
06/12/23	M	0.30	U	0.58	U	0.41	U	0.30	U	0.87	J
08/29/23	M	0.30	U	0.58	U	0.41	U	0.30	U	0.63	J
11/30/23	M	0.30	U	0.58	U	0.41	U	0.30	U	0.47	J
03/27/24	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
06/04/24	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
08/28/24	M	0.30	U	0.58	U	0.41	U	0.30	U	0.49	J
12/04/24	M	0.30	U	0.58	U	0.41	U	0.30	U	0.32	U
MW-77B (piezometer at Grid Coordinate K7)											
10/04/10	M	0.40	U	0.40	U	0.30	U	0.50	U	1.53	
12/15/10	M	0.40	U	0.40	U	0.30	U	0.50	U	2.57	
04/06/11	M	0.40	U	0.40	U	0.30	U	0.50	U	2.48	
06/06/11	M	0.40	U	0.40	U	0.30	U	0.50	U	2.67	
10/20/11	M	0.40	U	0.40	U	0.30	U	0.66	J	2.58	
12/21/11	M	0.40	U	0.40	U	0.30	U	0.66	J	2.90	
03/13/12	M	0.40	U	0.40	U	0.30	U	0.50	U	2.20	
06/26/12	M	0.75	U	0.57	U	0.45	U	0.90	U	1.4	
10/09/12	M	0.75	U	0.57	U	0.45	U	0.90	U	1.9	
12/04/12	M	0.75	U	0.57	U	0.45	U	0.90	U	1.3	
04/04/13	M	0.75	U	0.57	U	0.45	U	0.90	U	1.5	
07/02/13	M	0.28	U	0.43	U	0.47	U	0.44	U	1.5	
10/15/13	M	0.28	U	0.43	U	0.47	U	0.44	U	1.4	
12/04/13	M	0.28	U	0.43	U	0.47	U	0.44	U	0.95	J

GANNETT FLEMING

TABLE 5

NPI VOC ANALYTICAL RESULTS FROM EW-5, EW-6, AND THE SWC MONITORING WELLS & PIEZOMETERS SINCE 2015[1]

Well ID	Sample	NPI Volatile Organic Compound (VOC) Concentration (µg/ℓ) and Results Qualifier(s)									
Sample Date	Method/	1,1-DCA		1,1-DCE		PCE		1,1,1-TCA		TCE	
MCL/ES/PAL	Level	None/850/85		7/7/0.7		5/5/0.5		200/200/40		5/5/0.5	
04/15/14	M	0.16	U	0.41	U	0.50	U	0.50	U	*1.2*	
06/16/14	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.4*	
09/15/14	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.4*	
12/01/14	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.5*	
03/23/15	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.3*	
06/15/15	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.7*	
09/22/15	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.6*	
12/07/15	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.2*	
03/21/16	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.7*	
06/13/16	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.6*	
08/31/16	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.8*	
12/06/16	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.4*	
03/21/17	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.5*	
06/13/17	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.7*	
08/28/17	M	0.24	U	0.41	U	0.50	U	0.50	U	*2.1*	
12/13/17	M	0.24	U	0.41	U	0.50	U	0.50	U	*2.1*	
03/27/18	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.4*	
06/19/18	M	0.24	U	0.41	U	0.50	U	0.50	U	*2.3*	
08/14/18	M	0.27	U	0.24	U	0.33	U	0.38	J	*2.1*	
12/10/18	M	0.27	U	0.24	U	0.33	U	0.24	U	*2.2*	
03/25/19	M	0.27	U	0.24	U	0.33	U	0.27	J	*1.9*	
06/10/19	M	0.27	U	0.24	U	0.33	U	0.28	J	*2.0*	
08/19/19	M	0.27	U	0.24	U	0.33	U	0.26	J	*1.8*	
12/03/19	M	0.27	U	0.24	U	0.33	U	0.24	U	*1.6*	
6/8/20	M	0.27	U	0.24	U	0.33	U	0.24	U	*1.8*	
12/2/20	M	0.27	U	0.24	U	0.33	U	0.24	U	*1.6*	
5/24/21	M	0.30	U	0.58	U	0.41	U	0.30	U	*1.8*	
11/29/21	M	0.30	UA	0.58	UA	0.41	UA	0.30	UA	*1.6*	A
6/13/22	M	0.30	UA	0.58	UA	0.41	UA	0.37	JA	*2.15*	A
12/5/22	M	0.30	U	0.58	U	0.41	U	0.30	U	*1.7*	
03/21/23	M	0.30	U	0.58	U	0.41	U	0.30	U	*2.1*	
06/12/23	M	0.30	UA	0.58	UA	0.41	UA	0.30	UA	*1.9*	A
08/29/23	M	0.30	U	0.58	U	0.41	U	0.30	U	*1.5*	
11/30/23	M	0.30	U	0.58	U	0.41	U	0.30	U	*1.4*	
03/27/24	M	0.30	U	0.58	U	0.41	U	0.30	U	*1.5*	
06/04/24	M	0.30	U	0.58	U	0.41	U	0.30	U	*2.8*	
08/28/24	M	0.30	U	0.58	U	0.41	U	0.48	J	*4.0*	
12/04/24	M	0.30	U	0.58	U	0.41	U	0.39	J	*4.0*	
MW-77C (piezometer at Grid Coordinate K7)											
10/04/10	M	0.40	U	0.40	U	0.30	U	0.50	U	*0.53*	J
12/15/10	M	0.40	U	0.40	U	0.30	U	0.50	U	*0.80*	J
04/06/11	M	0.40	U	0.40	U	0.30	U	0.50	U	*0.97*	J
06/06/11	M	0.40	U	0.40	U	0.30	U	0.50	U	*1.13*	J

GANNETT FLEMING

TABLE 5

NPI VOC ANALYTICAL RESULTS FROM EW-5, EW-6, AND THE SWC MONITORING WELLS & PIEZOMETERS SINCE 2015[1]

Well ID	Sample	NPI Volatile Organic Compound (VOC) Concentration (µg/ℓ) and Results Qualifier(s)									
Sample Date	Method/	1,1-DCA		1,1-DCE		PCE		1,1,1-TCA		TCE	
MCL/ES/PAL	Level	None/850/85		7/7/0.7		5/5/0.5		200/200/40		5/5/0.5	
10/20/11	M	0.40	U	0.40	U	0.30	U	0.50	U	0.82	J
12/21/11	M	0.40	U	0.40	U	0.30	U	0.50	U	0.87	J
03/13/12	M	0.40	U	0.40	U	0.30	U	0.50	U	0.80	J
06/26/12	M	0.75	U	0.57	U	0.45	U	0.90	U	0.53	J
10/09/12	M	0.75	U	0.57	U	0.45	U	0.90	U	0.74	J
12/04/12	M	0.75	U	0.57	U	0.45	U	0.90	U	0.59	J
04/04/13	M	0.75	U	0.57	U	0.45	U	0.90	U	0.66	J
07/02/13	M	0.28	U	0.43	U	0.47	U	0.44	U	0.66	J
10/15/13	M	0.28	U	0.43	U	0.47	U	0.44	U	0.56	J
12/04/13	M	0.28	U	0.43	U	0.47	U	0.44	U	0.36	U
04/15/14	M	0.16	U	0.41	U	0.50	U	0.50	U	0.48	J
06/16/14	M	0.24	U	0.41	U	0.50	U	0.50	U	0.58	J
09/15/14	M	0.24	U	0.41	U	0.50	U	0.50	U	0.47	J
12/01/14	M	0.24	U	0.41	U	0.50	U	0.50	U	0.48	J
03/23/15	M	0.24	U	0.41	U	0.50	U	0.50	U	0.54	J
06/15/15	M	0.24	U	0.41	U	0.50	U	0.50	U	0.59	J
09/22/15	M	0.24	U	0.41	U	0.50	U	0.50	U	0.74	J
12/07/15	M	0.24	U	0.41	U	0.50	U	0.50	U	0.41	J
03/21/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.61	J
06/16/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.66	J
08/31/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.55	J
12/06/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.60	J
03/21/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.96	J
06/13/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.76	J
08/28/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.59	J
12/13/17	M	0.24	U	0.41	U	0.50	U	0.50	U	0.72	J
06/19/18	M	0.24	U	0.41	U	0.50	U	0.50	U	0.68	J
06/10/19	M	0.27	U	0.24	U	0.33	U	0.24	U	0.73	J
6/8/20	M	0.27	U	0.24	U	0.33	U	0.24	U	0.57	J
5/24/21	M	0.30	U	0.58	U	0.41	U	0.30	U	0.67	J
11/29/21	M	0.30	U	0.58	U	0.41	U	0.30	U	0.49	J
6/13/22	M	0.30	U	0.58	U	0.41	U	0.30	U	0.65	J
03/21/23	M	0.30	U	0.58	U	0.41	U	0.30	U	1.0	J
06/12/23	M	0.30	U	0.58	U	0.41	U	0.30	U	0.55	J
08/29/23	M	0.30	U	0.58	U	0.41	U	0.30	U	0.45	J
11/30/23	M	0.30	U	0.58	U	0.41	U	0.30	U	0.58	J
03/27/24	M	0.30	U	0.58	U	0.41	U	0.30	U	0.56	J
06/04/24	M	0.30	UA	0.58	UA	0.41	UA	0.30	UA	0.645	JA
08/28/24	M	0.30	U	0.58	U	0.41	U	0.30	U	0.87	J
12/04/24	M	0.30	U	0.58	U	0.41	U	0.30	U	0.86	J
RW-2A (monitoring well at Grid Coordinate J7)											
07/01/89	NR	0.2	U	0.2	U	0.08	J	1		3	
05/01/90	NR	0.2	U	0.2	U	0.2	U	0.8		2	

GANNETT FLEMING

TABLE 5

NPI VOC ANALYTICAL RESULTS FROM EW-5, EW-6, AND THE SWC MONITORING WELLS & PIEZOMETERS SINCE 2015[1]

Well ID	Sample	NPI Volatile Organic Compound (VOC) Concentration (µg/ℓ) and Results Qualifier(s)									
Sample Date	Method/	1,1-DCA		1,1-DCE		PCE		1,1,1-TCA		TCE	
MCL/ES/PAL	Level	None/850/85		7/7/0.7		5/5/0.5		200/200/40		5/5/0.5	
04/01/91	NR	0.2	U	0.3	U	2	J	0.9		3	JB
01/01/95	NR	1	U	2	U	1	U	1	U	1.9	
04/01/95	NR	1	U	2	U	1	U	1	U	1.9	
09/25/07	NR	0.2	U	0.4	U	0.3	U	0.37	J	1.21	
11/13/07	NR	0.2	U	0.4	U	0.3	U	0.45	J	1.17	
03/31/08	NR	0.2	U	0.4	U	0.3	U	0.59	J	0.91	J
01/18/11	M	0.4	U	0.4	U	0.3	U	0.5	U	1.03	J
03/29/11	M	0.4	U	0.4	U	0.3	U	0.5	U	1.08	J
06/06/11	M	0.4	U	0.4	U	0.3	U	0.5	U	1.08	J
10/18/11	M	0.4	U	0.4	U	0.3	U	0.5	U	1.22	J
12/22/11	M	0.4	U	0.4	U	0.3	U	0.89	J	2.40	
03/12/12	M	0.4	U	0.4	U	0.3	U	0.5	U	1.09	J
06/26/12	M	0.75	U	0.57	U	0.45	U	0.90	U	0.98	J
10/09/12	M	0.75	U	0.57	U	0.45	U	0.90	U	0.93	J
12/04/12	M	0.75	U	0.57	U	0.45	U	0.90	U	0.78	J
04/03/13	M	0.75	U	0.57	U	0.45	U	0.90	U	0.95	J
10/15/13	M	0.28	U	0.43	U	0.47	U	0.58	J	1.10	
12/04/13	M	0.28	U	0.43	U	0.47	U	0.44	U	0.79	J
06/17/14	M	0.24	U	0.41	U	0.50	U	0.50	U	0.95	J
12/04/14	M	0.24	U	0.41	U	0.50	U	0.50	U	0.75	J
06/15/15	M	0.24	U	0.41	U	0.50	U	0.50	U	0.71	J
12/08/15	M	0.24	U	0.41	U	0.50	U	0.50	U	0.74	J
06/13/16	M	0.24	UA	0.41	UA	0.50	UA	0.50	UA	0.95	JA
12/06/16	M	0.24	U	0.41	U	0.50	U	0.50	U	0.77	J
06/13/17	M	0.24	UA	0.41	UA	0.50	UA	0.50	UA	1.10	JA
12/14/17	M	0.24	U	0.41	U	0.50	U	0.50	U	1.0	
06/19/18	M	0.24	U	0.41	U	0.50	U	0.50	U	0.91	J
06/12/19	M	0.27	U	0.24	U	0.33	U	0.24	U	1.1	
6/10/20	M	0.27	U	0.24	U	0.33	U	0.24	U	0.98	J
5/25/21	M	0.30	U	0.58	U	0.41	U	0.30	U	0.87	J
11/30/21	M	0.30	U	0.58	U	0.41	U	0.30	U	0.89	J
6/14/22	M	0.30	U	0.58	U	0.41	U	0.30	U	1.0	
03/21/23	M	0.30	U	0.58	U	0.41	U	0.30	U	1.1	
06/13/23	M	0.30	U	0.58	U	0.41	U	0.30	U	1.1	
08/30/23	M	0.30	U	0.58	U	0.41	U	0.32	J	2.2	
11/30/23	M	0.30	U	0.58	U	0.41	U	0.30	U	1.0	
03/27/24	M	0.30	U	0.58	U	0.41	U	0.30	U	0.79	J
06/04/24	M	0.30	U	0.58	U	0.41	U	0.30	U	0.86	J
08/28/24	M	0.30	U	0.58	U	0.41	U	0.30	U	0.94	J
12/04/24	M	0.30	U	0.58	U	0.41	U	0.30	U	1.0	
RW-2B (piezometer at Grid Coordinate J7)											
7/89	NR	0.3	J	0.2	U	0.2	U	1		**5**	
5/90	NR	0.2	J	0.2	U	0.2	U	1		4	

GANNETT FLEMING

TABLE 5

NPI VOC ANALYTICAL RESULTS FROM EW-5, EW-6, AND THE SWC MONITORING WELLS & PIEZOMETERS SINCE 2015[1]

Well ID	Sample	NPI Volatile Organic Compound (VOC) Concentration (µg/ℓ) and Results Qualifier(s)									
Sample Date	Method/	1,1-DCA		1,1-DCE		PCE		1,1,1-TCA		TCE	
MCL/ES/PAL	Level	None/850/85		7/7/0.7		5/5/0.5		200/200/40		5/5/0.5	
4/91	NR	0.2	U	0.3	U	2	J	1		4	
01/01/95	NR	1	U	2	U	1	U	1		3.5	
04/01/95	NR	1	U	2	U	1	U	1.2		**5.4**	
09/25/07	NR	0.2	U	0.4	U	0.3	U	1.03		2.57	
11/13/07	NR	0.2	U	0.4	U	0.3	U	1.1		2.47	
03/31/08	NR	0.24	J	0.4	U	0.3	U	0.2	U	2.44	
01/18/11	M	0.4	U	0.4	U	0.3	U	0.64	J	1.86	
03/29/11	M	0.4	U	0.4	U	0.3	U	0.74	J	2.41	
06/06/11	M	0.4	U	0.4	U	0.3	U	0.85	J	2.69	
10/18/11	M	0.4	U	0.4	U	0.3	U	0.84	J	2.57	
12/22/11	M	0.4	U	0.4	U	0.3	U	0.5	U	1.18	J
03/12/12	M	0.4	U	0.4	U	0.3	U	0.77	J	2.21	
06/26/12	M	0.75	U	0.57	U	0.45	U	0.90	U	2.0	
10/09/12	M	0.75	U	0.57	U	0.45	U	0.90	U	2.4	
12/04/12	M	0.75	U	0.57	U	0.45	U	0.90	U	2.0	
04/03/13	M	0.75	U	0.57	U	0.45	U	0.90	U	1.9	
10/15/13	M	0.28	U	0.43	U	0.47	U	0.82	J	2.0	
12/04/13	M	0.28	U	0.43	U	0.47	U	0.79	J	1.8	
06/17/14	M	0.24	U	0.41	U	0.50	U	0.92	J	2.0	
12/02/14	M	0.24	U	0.41	U	0.50	U	0.93	J	1.9	
06/15/15	M	0.24	U	0.41	U	0.50	U	0.59	J	1.7	
12/08/15	M	0.24	U	0.41	U	0.50	U	0.50	U	1.5	
06/13/16	M	0.24	U	0.41	U	0.50	U	0.66	J	1.8	
12/06/16	M	0.24	U	0.41	U	0.50	U	0.64	J	2.0	
06/13/17	M	0.24	U	0.41	U	0.50	U	0.50	U	2.2	
12/14/17	M	0.24	U	0.41	U	0.50	U	0.50	U	2.0	
06/19/18	M	0.24	UA	0.41	UA	0.50	UA	0.50	UA	2.05	A
06/12/19	M	0.27	UA	0.24	UA	0.33	UA	0.41	JA	2.05	A
6/10/20	M	0.27	U	0.24	U	0.33	U	0.30	J	2.0	
5/25/21	M	0.30	U	0.58	U	0.41	U	0.30	U	1.7	
11/30/21	M	0.30	U	0.58	U	0.41	U	0.35	J	1.9	
6/14/22	M	0.30	U	0.58	U	0.41	U	0.43	J	2.4	
03/21/23	M	0.30	U	0.58	U	0.41	U	0.32	J	2.6	
06/13/23	M	0.30	U	0.58	U	0.41	U	0.30	U	2.3	
08/30/23	M	0.30	U	0.58	U	0.41	U	0.30	U	1.2	
11/30/23	M	0.30	U	0.58	U	0.41	U	0.30	U	2.5	
03/27/24	M	0.30	U	0.58	U	0.41	U	0.30	U	2.0	
06/04/24	M	0.30	U	0.58	U	0.41	U	0.30	U	2.3	
08/28/24	M	0.30	U	0.58	U	0.41	U	0.30	U	3.2	
12/04/24	M	0.30	U	0.58	U	0.41	U	0.30	U	2.2	
RW-2C (piezometer at Grid Coordinate J7)											
7/1/1989	NR	0.5	J	0.06	J	0.2	J	2		**6**	
5/1/1990	NR	0.5		0.1	J	0.2	J	2		**6**	

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TABLE 5

NPI VOC ANALYTICAL RESULTS FROM EW-5, EW-6, AND THE SWC MONITORING WELLS & PIEZOMETERS SINCE 2015[1]

Well ID	Sample	NPI Volatile Organic Compound (VOC) Concentration (µg/ℓ) and Results Qualifier(s)									
Sample Date	Method/	1,1-DCA		1,1-DCE		PCE		1,1,1-TCA		TCE	
MCL/ES/PAL	Level	None/850/85		7/7/0.7		5/5/0.5		200/200/40		5/5/0.5	
04/01/91	NR	0.5		0.3	U	0.3		2		**6**	
01/01/95	NR	1	U	2	U	1	U	1.6		**5.1**	
04/01/95	NR	1	U	2	U	1	U	1.6		**6.1**	
09/25/07	NR	0.25	J	0.4	U	0.3	U	1.23		*3.04*	
11/13/07	NR	0.24	J	0.4	U	0.3	U	1.15		*2.57*	
03/31/08	NR	0.2	U	0.4	U	0.3	U	1.11		*2.64*	
01/18/11	M	0.4	U	0.4	U	0.3	U	0.79	J	*2.26*	
03/29/11	M	0.4	U	0.4	U	0.3	U	0.66	J	*2.14*	
06/06/11	M	0.4	U	0.4	U	0.3	U	0.9	J	*2.78*	
10/18/11	M	0.4	U	0.4	U	0.3	U	0.67	J	*2.24*	
12/22/11	M	0.4	U	0.4	U	0.3	U	0.5	U	*1.17*	J
03/12/12	M	0.4	U	0.4	U	0.3	U	0.78	J	*2.00*	
03/12/12	M	0.4	U	0.4	U	0.3	U	0.81	J	*2.02*	
06/26/12	M	0.75	U	0.57	U	0.45	U	0.90	U	*1.7*	
10/09/12	M	0.75	U	0.57	U	0.45	U	0.90	U	*2.0*	
12/04/12	M	0.75	U	0.57	U	0.45	U	0.90	U	*1.4*	
12/04/12	M	0.75	U	0.57	U	0.45	U	0.90	U	*1.6*	
10/15/13	M	0.28	U	0.43	U	0.47	U	0.82	J	*1.4*	
12/04/13	M	0.28	U	0.43	U	0.47	U	0.58	J	*1.2*	
06/17/14	M	0.24	UA	0.41	UA	0.50	UA	0.79	JA	*1.7*	A
12/02/14	M	0.24	U	0.41	U	0.50	U	0.73	J	*1.5*	
06/15/15	M	0.24	U	0.41	U	0.50	U	0.59	J	*1.2*	
12/08/15	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.3*	
06/13/16	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.6*	
12/06/16	M	0.24	U	0.41	U	0.50	U	0.52	J	*1.6*	
06/13/17	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.7*	
12/14/17	M	0.24	UA	0.41	UA	0.50	UA	0.50	UA	*1.7*	A
06/19/18	M	0.24	U	0.41	U	0.50	U	0.50	U	*1.8*	
06/12/19	M	0.27	U	0.24	U	0.33	U	0.28	J	*1.6*	
6/10/20	M	0.27	U	0.24	U	0.33	U	0.24	U	*1.7*	
5/25/21	M	0.30	U	0.58	U	0.41	U	0.30	U	*1.8*	
11/30/21	M	0.30	U	0.58	U	0.41	U	0.30	U	*2.0*	
6/14/22	M	0.30	U	0.58	U	0.41	U	0.32	J	*2.1*	
03/21/23	M	0.30	U	0.58	U	0.41	U	0.30	U	*1.7*	
06/13/23	M	0.30	U	0.58	U	0.41	U	0.30	U	*1.6*	
08/30/23	M	0.30	U	0.58	U	0.41	U	0.30	U	*2.1*	
11/30/23	M	0.30	U	0.58	U	0.41	U	0.30	U	*2.1*	
03/27/24	M	0.30	U	0.58	U	0.41	U	0.30	U	*1.9*	
06/04/24	M	0.30	U	0.58	U	0.41	U	0.30	U	*1.8*	
08/28/24	M	0.30	U	0.58	U	0.41	U	0.30	U	*2.6*	
12/04/24	M	0.30	U	0.58	U	0.41	U	0.30	U	*2.5*	

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TABLE 5

NPI VOC ANALYTICAL RESULTS FROM EW-5, EW-6, AND THE SWC MONITORING WELLS & PIEZOMETERS SINCE 2015 (1)

NOTES:
Concentrations are in micrograms per liter (µg/L)/parts per billion (ppb).
Detected concentrations at or above an applicable NR 140 PAL are in red font and italicized.
Detected concentrations at or above an applicable MCL/NR 140 ES are in red font and bold.
A = Average of original sample and duplicate. Began this approach in 2014.
B = Compound detected in blank.
CSH = Check standard for this analyte exhibited a high bias. Sample results may also be biased high.
CSL = Check standard for this analyte exhibited a low bias. Sample results may also be biased low.
D = Indicates initial analysis exceeded the calibration range, was diluted and re-analyzed.
Dup = Result of duplicate analysis in this quality assurance batch exceeds the limits for precision.
E = Concentration exceeds calibration range of instrument.
ISH = Internal standard recovery exceeds normal limits. Sample results may be biased low.
J = Estimated concentration below laboratory quantitation level.
MSH = Matrix spike recovery within analytical batch was high. Sample matrix appears similar to your sample; result may be biased high.
MSL = Matrix spike recovery within analytical batch was low. Sample matrix appears similar to your sample; result may be biased low.
NA = Not analyzed.
NS = Not sampled.
R = Unusable.
S1H = First sample matrix spike recovery was high.
S2H = Second sample matrix spike recovery was high.
SPH = Matrix spike recovery within analytical batch was high. Sample matrix appears similar to your sample; result may be biased high.
SPL = Matrix spike recovery within analytical batch was low. Sample matrix appears similar to your sample; result may be biased low.
U = Compound not detected at or above the detection limit, which is the value shown.

SAMPLE METHOD/LEVEL KEY:
B = Bailer.
G = Grab sample collected from sample tap while the extraction well was pumping groundwater.
GB = Grab sample collected from sample tap after purging the extraction well for 5-10 minutes.
G23 = Grab sample collected from sample tap after the extraction well was pumped overnight (e.g., for 23 hr).
HS = HydraSleeve.
LF = Low flow.
PDB = Passive diffusion bag.
H = PDB or HS in upper portion of saturated screened interval.
M = PDB or HS in middle portion of saturated screened interval.
L = PDB or HS in lower portion of saturated screened interval.

FOOTNOTES:
(1) Select monitoring wells/piezometers include all historical NPI VOC analytical data for reference. See text of report for details.
(2) EW-5 has been shut down since Sep 2015, & NPI stopped sampling the well in 2018, as approved by both agencies.
(3) EW-6 was temporarily shut down 1/16/17-4/27/17, 9/1/21-1/17/22, and 2/23/23-9/23/24, as approved by both agencies.
(4) EW-6 was offline for re-development 11/29/22-12/20/22, as approved by both agencies, so the well was not sampled in Q4 2022.

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NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

TABLE 6

MONITORING WELL MW-76A WATER ELEVATION AND TCE CONCENTRATION DATA CORRELATION CHECKS

Sample Date	Water Elevation (ft MSL)				TCE Conc. (µg/ℓ) & Results Qualifier(s)		Comments (trial shutdown notes are in reference to extraction well EW-6)
MCL/ES/PAL	All[1]	Static[2]	No Pump[3]	3/21/23-8/28/24[4]	5/5/0.5		
10/4/10	820.17	820.17	--	--	**9.28**		EW-5 began operating on 1/7/04
12/15/10	821.83	821.83	--	--	**29.1**		
3/29/11	822.10	822.10	--	--	**41.5**		
6/6/11	822.76	822.76	--	--	**87.6**		
10/20/11	824.30	--	--	--	**16.1**		EW-6 began operating on 9/22/11
12/22/11	823.64	--	--	--	**15.4**		
3/13/12	822.98	--	--	--	**13.1**		
6/26/12	822.27	--	--	--	**8.4**		
10/9/12	821.56	--	--	--	**9.1**		
12/4/12	820.96	--	--	--	**8.6**		
4/9/13	820.51	--	--	--	**9.4**		
10/15/13	823.42	--	--	--	**14.1**		
12/4/13	823.20	--	--	--	**11.9**		
4/15/14	822.16	--	--	--	**8.8**		
6/17/14	822.04	--	--	--	**9.3**		
9/15/14	823.70	--	--	--	**5.2**		
12/2/14	824.29	--	--	--	**8.5**		
3/24/15	823.87	--	--	--	**8.1**		VW-1 began operating on 1/6/15[5]
6/16/15	823.16	--	--	--	**6.3**		
9/23/15	823.68	--	--	--	0.33	U	
12/7/15	824.32	--	--	--	0.47	J	
3/21/16	824.72	--	--	--	0.33	U	EW-5 has been offline since 9/12/15
6/13/16	824.97	--	--	--	0.38	J	
8/30/16	825.74	--	--	--	0.33	U	
12/6/16	826.87	--	--	--	0.33	U	
3/21/17	826.90	826.90	826.90	--	*4.6*		First trial shutdown 1/16/17-4/27/17
6/13/17	826.88	--	--	--	0.33	U	
8/28/17	827.87	--	--	--	0.33	U	
12/13/17	827.62	--	--	--	0.33	U	
3/27/18	826.52	--	--	--	0.33	UA	
6/19/18	825.94	--	--	--	0.33	U	
8/14/18	825.65	--	--	--	0.36	J	
12/10/18	826.19	--	--	--	0.26	U	
3/25/19	826.10	--	--	--	0.28	J	
6/10/19	826.77	--	--	--	0.34	J	
8/19/19	827.65	--	--	--	0.26	U	
12/3/19	828.30	--	--	--	0.26	UA	
4/27/20	827.53	--	--	--	0.29	JA	

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TABLE 6

MONITORING WELL MW-76A WATER ELEVATION AND TCE CONCENTRATION DATA CORRELATION CHECKS

Sample Date	Water Elevation (ft MSL)				TCE Conc. (µg/ℓ) & Results Qualifier(s)		Comments (trial shutdown notes are in reference to extraction well EW-6)
MCL/ES/PAL	All(1)	Static(2)	No Pump(3)	3/21/23-8/28/24(4)	5/5/0.5		
6/8/20	827.52	--	--	--	0.26	UA	
8/24/20	827.90	--	--	--	0.26	U	
12/2/20	827.37	--	--	--	0.26	UA	
3/16/21	826.46	--	--	--	0.37	J	
5/24/21	825.69	--	--	--	0.32	UJA	
8/31/21	825.46	--	--	--	0.32	U	
11/29/21	825.91	825.91	825.91	--	*0.89*	JA	2nd trial shutdown 9/1/21-2/16/22
3/24/22	824.80	--	--	--	0.32	U	
6/13/22	824.55	--	--	--	0.32	U	
8/30/22	824.78	--	--	--	*0.71*	J	
12/5/22	824.87	--	--	--	0.32	U	
3/21/23	824.50	824.50	824.50	824.50	0.32	UA	3rd trial shutdown 2/23/23-9/23/24
6/12/23	825.30	825.30	825.30	825.30	*0.56*	JA	"
8/29/23	825.87	825.87	825.87	825.87	*1.2*	A	"
11/30/23	825.95	825.95	825.95	825.95	*1.75*	A	"
3/27/24	825.09	825.09	825.09	825.09	*1.7*	A	"
6/4/24	825.19	825.19	825.19	825.19	*1.4*	A	"
8/28/24	826.15	826.15	826.15	826.15	*1.05*	A	"
12/3/24	826.26	--	--	--	0.32	UA	
Excel correlation coefficient between each MW-76A water elevation and TCE data set summarized above							
--	-0.47	-0.54	0.72	0.45	--	--	See report text for details

NOTES:

Water elevations are in feet above mean sea level (ft MSL).
Concentrations are in micrograms per liter (µg/ℓ)/parts per billion (ppb).
Detected concentrations at or above an applicable NR 140 PAL are in red font and italicized.
Detected concentrations at or above an applicable MCL/NR 140 ES are in red font and bold.
Duplicate sample results are averaged for statistical analysis/plotting, per Dec 2013 ITRC guidance.
A = Average of original sample and duplicate. Began this approach in 2014.
J = Estimated concentration below laboratory quantitation level.
U = Compound not detected at or above the detection limit, which is the value shown.
-- = Not applicable.

FOOTNOTES:

(1) *All* includes dates since 10/04/10 with water elevation and/or TCE data.
(2) *Static* includes data since 10/04/10 under static, non-pumping conditions for EW-6. EW-5 has been offline since 9/12/15.
(3) *No Pump* includes data since 9/12/15 under static, non-pumping conditions for EW-5 and EW-6.
(4) *3/21/23-8/28/24* includes data during the third trial shutdown of EW-6 (i.e., 2/23/23-9/23/24) only.
(5) Full-time, continuous operation of the main building soil vapor extraction system (i.e., vent well VW-1) began on 1/6/15.

ATTACHMENT A

NPI LUST SITE CLOSURE REQUEST (JANUARY 19, 1999) EXCERPTS

GANNETT FLEMING

eder associates
a division of Gannett Fleming

GANNETT FLEMING, INC.
8025 Excelsior Drive
Madison, WI 53717-1900
Office: (608) 836-1500
Fax: (608) 831-3337

January 19, 1999
File #34285.004 / 497-17.4

Mr. John Grump
Wisconsin Department of Natural Resources
P.O. Box 4001
Eau Claire, WI 54702-4001

Re: Closure Request
NPI LUST Site, Eau Claire, Wisconsin
WDNR BRRTS Case #: 03-09-001038
WDNR File Ref: 4440, Chippewa County

Dear John:

On behalf of National Presto Industries (NPI), Gannett Fleming, Inc. (fka Eder Associates) is submitting this request for closure of the NPI LUST site at 3925 North Hastings Way in Eau Claire, Wisconsin. A separate Wisconsin Department of Natural Resources (WDNR) *Case Summary and Close Out Form* (Form 4400-202), with its required attachments and a check for $750.00 to cover the cost of the WDNR review, is enclosed.

Site Background

Eight 30,000-gallon underground No. 2 and No. 6 fuel oil storage tanks, with their associated piping, were removed from the site in 1993. A multi-phase site investigation, completed in 1994, documented both soil and groundwater contamination. Figure 1 is a site plan showing the former locations of the eight tanks and associated piping, the layout of the groundwater monitoring and remediation system, and other site features. The property where the tanks were located is relatively flat.

Contaminants of concern are diesel range organics (DRO) and polycyclic aromatic hydrocarbons (PAHs). Potential downgradient receptors within 1,200 feet of the LUST site include NPI's two production wells, W-5 and W-7, which are located approximately 900 feet to the northwest. The water from W-5 and W-7 is used in NPI's main building for fire protection service, in the bathrooms for sanitary purposes, and in the cafeteria for cleaning and dishwashing purposes. Bottled water is supplied throughout the building for drinking.

Continued . . .

Subsurface conditions consist of medium-grain sands with gravel to approximately 15 feet below ground surface (bgs). From 15 to 80 or more feet bgs, the soils are poorly graded sands of varying grain size with occasional intervals of sand and gravel. The depth to sandstone bedrock ranges from 80 to over 90 feet bgs.

Between 1994 and 1998, the depth to groundwater ranged between about 65 and 73 feet bgs. Groundwater beneath the site flows to the northwest, and the hydraulic gradient is typically about 0.002 ft/ft. Based on pump tests, the hydraulic conductivity is estimated to be about 270 ft/day, and the calculated average groundwater flow velocity is approximately 2.2 ft/day, assuming an effective porosity of 25 percent.

History of Active Remediation

As described in the case history included with Form 4400-202, the fuel oil-contaminated unsaturated soils and the groundwater at the site were actively remediated in situ using a biosparging/bioventing system between March 19, 1996, and September 16, 1998. The system consisted of 10 biosparging air injection wells, AI-1 through AI-10, and 3 bioventing wells, VW-1 through VW-3, as shown on Figure 1. The air injection/venting blowers for the operation were located in an equipment room in the main NPI building adjacent to the LUST site.

Air was injected into the biosparging wells at a flow rate of approximately 10 scfm per well, following a four-step on/off operating cycle. The blower automatically 1) turned on and injected air into the five odd-numbered wells for 15 minutes, 2) shut down for 15 minutes, 3) restarted and injected air into the five even-numbered wells for 15 minutes, and 4) shut down for another 15 minutes before beginning the cycle over again. With only five of the biosparging wells taking air at any one time, the total air injection flow rate was about 50 scfm. The bioventing blower operated continuously, extracting soil gas from all three of the bioventing wells simultaneously at a total flow rate of about 200 scfm.

The biosparging system injected air into the groundwater to expedite the remediation of the PAH/DRO contamination. The bioventing system captured the vapors generated by biosparging and

Continued . . .

promoted the vertical movement of injected air up through the capillary fringe zone and throughout the affected unsaturated soil column.

Exhaust gas from the bioventing blower was discharged directly into the atmosphere. Air emissions of concern from the system, according to the Wisconsin Administrative Code, include total volatile organic compounds (VOCs) and benzene. The bioventing stack was sampled following WDNR guidelines for monitoring emissions.

Before biosparging/bioventing began, PW-4 was bailed manually in late 1995 to remove a small amount (less than one inch) of free product that periodically accumulated in the well. Subsequent intermittent bailing and pumping of groundwater from PW-4 between April 1, 1998, and September 2, 1998, revealed no free product.

Justification for Case Closure

As described in our previous correspondence to you, data used to monitor the effectiveness of the bioventing system at this site have indicated that borings to confirm remediation of the soil could have been drilled within six months after the bioventing started up in March 1996. For example, the WDNR guidelines, provided on Page IS-1 of Form 4400-194, recommend drilling confirmation borings once the average rate of contaminant removal, based on total VOC emissions in the bioventing exhaust gas, is less than one pound per day (1 lb/day) and the biodegradation rate, based on in situ respiration tests, is less than two milligrams per kilogram per day (2 mg/kg per day). In comparison, historical data from the NPI LUST site document that total VOC emissions ranged from 0.05 to 0.2 lb/day and biodegradation rates ranged from 0.1 to 1.5 mg/kg per day.

Nevertheless, because PAH concentrations in the groundwater initially remained above NR 140 enforcement standards at three of the five on-site monitoring wells and, because the Form 4400-194 guidelines generally apply to sites with gasoline-contaminated, rather than fuel oil-contaminated unsaturated soil, they were not considered appropriate for this site, where the soils and groundwater were contaminated with fuel oil. Volatilization and biodegradation rates for fuel oil are typically lower than for gasoline, because the compounds that make up fuel oil are generally heavier than the constituents in gasoline.

Continued . . .

Consequently, the biosparging/bioventing remediation system was operated until groundwater monitoring results documented that PAH concentrations had dropped below NR 140 preventive action limits (PALs) in all on-site wells. Table 1 summarizes the DRO/PAH groundwater monitoring results for samples collected since October 1994. Attachment A provides copies of the laboratory analytical reports and chain of custody records for the groundwater samples collected in 1998.

Follow-up sampling of unsaturated soil in October 1998 show that the concentration of DRO remains above the NR 720 cleanup standard of 100 ppm in one area, near monitoring well PW-1. However, the zone of unsaturated soil with DRO concentrations above 100 ppm is limited to a small area between 15 and 35 feet bgs, leaving a buffer of clean sand at least 30 feet thick above the water table, and the groundwater at PW-1 is no longer contaminated. In addition, PAH concentrations in the unsaturated soil samples that were collected in October 1998 were all below the WDNR's suggested generic residual contaminant levels (RCLs) for the groundwater pathway. Tables summarizing the analytical results and figures showing the post-remedial soil sampling locations are included with Form 4400-202, as required.

Attachment B to this letter provides copies of the laboratory analytical report and chain of custody record for the follow-up soil samples collected in October 1998. Attachment C provides copies of the soil boring logs for the three locations (B-20, B-21, and B-22) where the samples were collected. Attachment D provides copies of the abandonment forms for B-20, B-21, and B-22 and for air injection well AI-10 and monitoring well PW-5, all of which were recently abandoned according to NR 141.25, Wisconsin Administrative Code, with your permission, after the groundwater in PW-5 was sampled on September 30, 1998.

Based on the biosparging/bioventing and related remedial action that has been completed and the groundwater monitoring and follow-up soil sampling results reported here, and given the low mobility of DRO, Gannett Fleming, on behalf of NPI, requests that the WDNR issue a "no further action required" closure letter indicating that the active remediation undertaken to date coupled with natural attenuation is an acceptable final remedy for the residual DRO soil contamination at this site, as allowed under NR 720.10, Wisconsin Administrative Code.

Continued . . .

Mr. John Grump
Wisconsin Department of Natural Resources
January 19, 1999

Please call if you have any questions or need additional information about this closure request.

Sincerely,

GANNETT FLEMING, INC.

Clifford C. Wright, P.E., P.G.
Project Engineer

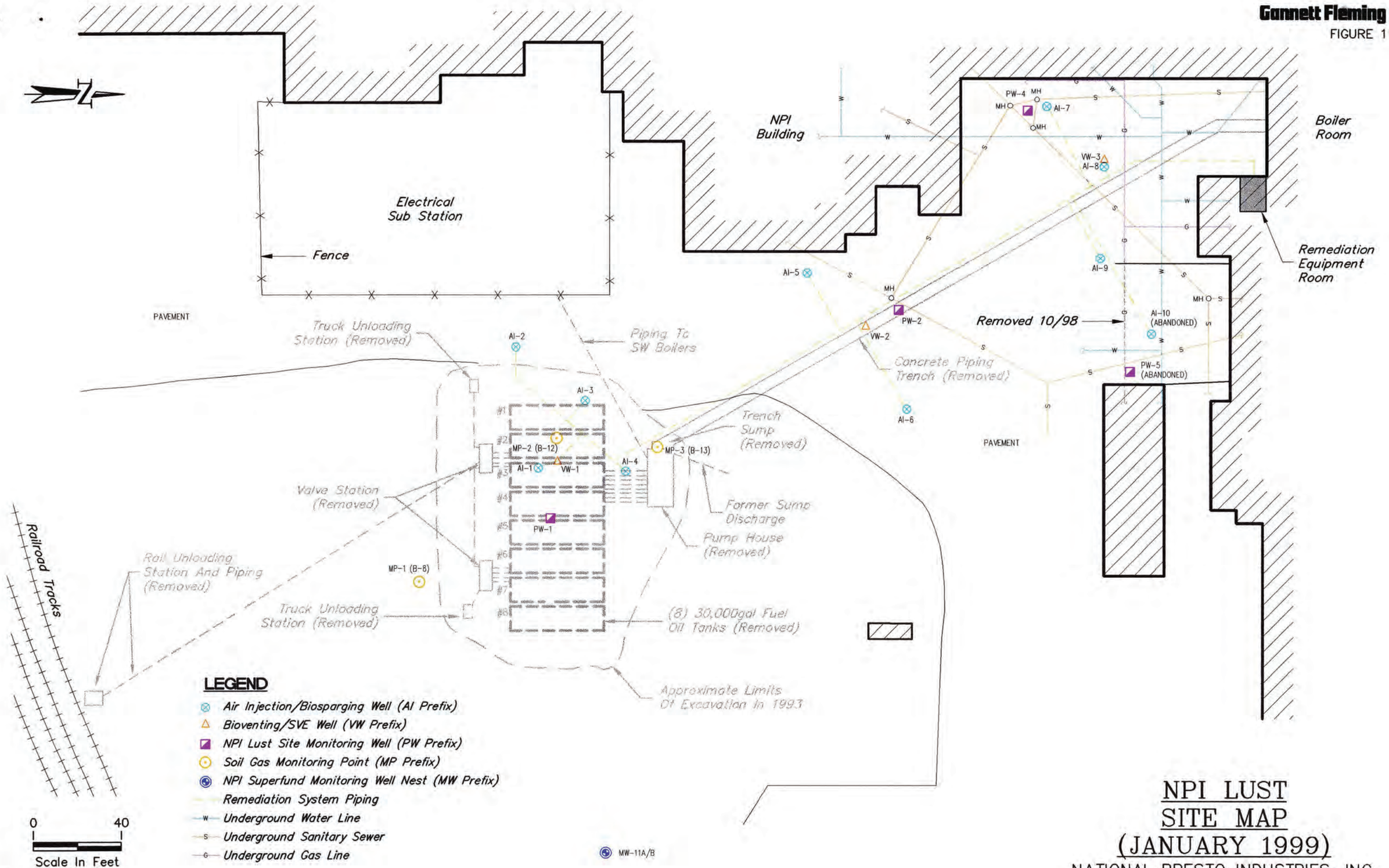
James B. Lund, P.E.
Senior Project Manager

CCW/jec
Enc.

cc: Derrick Paul (NPI)
Rich Nauman (NPI)

Gannett Fleming

FIGURE 1



NPI LUST SITE MAP (JANUARY 1999)

NATIONAL PRESTO INDUSTRIES, INC.

EAU CLAIRE, WISCONSIN

010899
34285WA

NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

TABLE 1

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Parameter	Benzo(a)pyrene	Naphthalene	Fluorene	Diesel Range Organics
NR 140 Enforcement Standard (ES)	**0.2**	**40**	**400**	**NS**
NR 140 Preventative Action Limit (PAL)	**0.02**	**8**	**80**	**NS**
PW-1				
10/01/94	**0.919**	<0.22	<0.12	138
01/18/95	<0.12	<0.22	<0.12	178
04/19/95	<0.2	<0.18	<0.16	<100
07/19/95	<0.1	<0.09	<0.08	242
10/10/95	**0.187**	<0.09	<0.08	335
01/11/96	**0.135**	<0.09	<0.08	164
04/17/96	<0.07	<0.03	<0.06	175
07/10/96	<0.07	<0.03	<0.06	256
09/30/96	<0.07	<0.03	<0.06	194
05/21/97	<0.07	<0.03	<0.06	261
10/23/97	<0.12	<0.1	<0.08	126
PW-2				
10/01/94	**1.08**	<0.11	<0.06	784
01/18/95	<0.06	<0.11	<0.06	671
04/19/95	<0.1	<0.09	<0.08	131
07/19/95	<0.1	<0.09	<0.08	159
10/10/95	<0.1	<0.09	<0.08	651
01/11/96	<0.1	<0.09	<0.08	400
04/17/96	<0.07	<0.03	<0.06	288
07/10/96	<0.07	<0.03	<0.06	236
09/30/96	<0.14	<0.06	<0.12	222
05/21/97	<0.07	<0.03	<0.06	176
10/23/97	<0.06	<0.05	<0.04	<100
PW-3				
10/01/94	**0.582**	<0.11	<0.06	175
01/18/95	**0.434**	<0.11	<0.06	218
04/19/95	**0.265**	<0.09	<0.08	<100
07/19/95	**0.332**	<0.09	<0.08	159
10/10/95	**0.555**	<0.09	<0.08	158
01/11/96	**0.402**	<0.09	<0.08	177
04/17/96	**0.198**	<0.03	<0.06	108
PW-3R				
05/21/97	<0.07	<0.03	<0.06	<100
10/23/97	<0.07	<0.06	<0.05	<100
PW-4				
10/01/94	**1.1**	**440**	<0.6	52,600
01/18/95	<0.06	**195**	59.1	135,000
07/19/95	<0.7	**64.8**	<0.6	151,000
10/10/95	FP	FP	FP	FP
01/11/96	FP	FP	FP	FP
04/17/96	FP sheen	FP sheen	FP sheen	FP sheen
07/10/96	FP sheen	FP sheen	FP sheen	FP sheen
09/30/96	<0.07	**46.3**	<0.06	89,200
05/21/97	<0.7	**85.1**	<0.06	275,000
10/23/97	<0.07	<0.06	<0.05	69,905
01/28/98	<0.06	**57.8**	<0.04	120,000
04/23/98	<0.06	<0.05	**91.3**	61,500
07/21/98	<0.12	7.48	<0.08	9,200
09/30/98	<0.12	7.02	<0.08	9,910
12/01/98				
PW-5				
10/01/94	**0.245**	1.00	<0.06	320
01/18/95	**0.527**	<0.11	<0.06	326
04/19/95	**0.379**	<0.09	<0.08	147
07/19/95	**0.235**	<0.09	<0.08	305
10/10/95	**0.377**	<0.18	<0.16	395
01/11/96	**0.246**	<0.09	<0.08	353
04/17/96	**0.243**	<0.03	<0.06	279
07/10/96	**0.124**	<0.03	<0.06	215
09/30/96	<0.07	<0.03	<0.06	206
05/21/97	<0.07	<0.03	<0.06	175
10/23/97	<0.06	<0.05	<0.04	<100
09/30/98	<0.06	<0.05	<0.04	198

NOTES:

Analytical results are in micrograms per liter (ug/L).

Concentrations exceeding the NR 140 ES are shaded. Concentrations exceeding the NR 140 PAL are bold.

NS = No standard exists.

FP = Free product.

In situ air sparging was conducted between 3/19/96 and 9/16/98.

PW-3 was abandoned in June 1996 and replaced with PW-3R in December 1996.

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
CASE SUMMARY AND CLOSE OUT FORM

Form 4400-202
5-98

NOTE: Use of this form is required by the Department for any case close out application filed pursuant to ch. 292, Wis. Stats. and ch. NR 726, Wis. Adm. Code. Completion of this form is mandatory for applications for case closure. The Department will not consider or act upon your application unless you complete and submit this application form. It is not the Department's intention to use any personally identifiable information from this form for any purpose other than reviewing close out requests and determining the need for additional response action.

I certify that, to the best of my knowledge, the information presented on and attached to this form is true and accurate. This recommendation for case closure is based upon all available data as of October 2, 1998 (date). I have read the Case Summary and Close Out Form Instructions and all required information has been included.

Form Completed By: Clifford C. Wright 1/18/99

(Signature) (Date)

Printed Name: Clifford C. Wright Company Name: Gannett Fleming, Inc.

If not site owner, relationship to site owner: Project Engineer/Environmental Consultant

Address: 8025 Excelsior Drive, Madison, Wisconsin 53717-1900

Telephone Number: (608) 836-1500 FAX Number: (608) 831-3337

Environmental Consultant (if different than above): same

Address: _____

Telephone Number: ( ) FAX Number: ( )

FOR DEPARTMENT USE ONLY

Type of Case: LUST Spill ER Land Recycling Other _____ WDNR Reviewer: _____

WDNR Site Name: National Presto Industries, Inc. LUST Site

Complete Site Address: 3925 North Hastings Way, Eau Claire, WI 54703

WDNR BRRTS Case #: 0 3 - 0 9 - 0 0 1 0 3 8 FID #: _____

PECFA Claim #: Not applicable __ __ - __ __ __ __ - __ __

Responsible Party Name: National Presto Industries, Inc.

Complete Responsible Party Address: same address as above

Site Legal Description: NW 1/4, SE 1/4, SE 1/4, Sec 34, T 28 N, R 9 W Town: Eau Claire

County: Chippewa Latitude: 44 ° 50 ' __ __ . __ " Longitude: 91 ° 27 ' __ 15 . __ "

Type of Closure Requested:

Soil	Groundwater
__ <NR 720.09/720.11 Generic RCLs	X <NR 140.10 Table 1 & Table 2 Values
__ NR 720.19(2) Soil Performance Stds.	__ NR 140.28(2) PAL Exemption
X NR 720.19(3) Site Specific Stds.	__ NR 726.05(2)(b) Natural Attenuation

Contaminant Type(s): Fuel Oil Quantity Released: Unknown

Date of Incident/Discovery: September 1993 Zoning of Property: Industrial

Enforcement Actions Closed Out? __Yes __No X NA Permits Closed Out? __Yes __No X NA

Form 4 Pending? __Yes __No X NA Date Closure Submitted to WDNR: NA

WDNR BRRTS Case#: 0 3 - 0 9 - 0 0 1 0 3 8 WDNR Site Name: NPI LUST Site

1. CASE HISTORY AND JUSTIFICATION FOR CLOSURE ATTACHED? X Yes __No

2. SOIL PRE-REMEDIATION OR INVESTIGATION ANALYTICAL RESULTS

Extent Defined? X Yes __No Soil Type(s): Sand and gravel Depth to Bedrock: 80 - 90 feet

Potential Receptors for Direct Contact (i.e., vapor migration, contaminated soil left in place): NA

Tables of Pre-remedial Analytical Results Attached? X Yes __No Maps of Pre-remedial Sample Locations Attached? X Yes __No

3. SOIL POST REMEDIATION ANALYTICAL RESULTS

Remedial Action Completed? X Yes __No 720.19 Analysis? X Yes __No (If yes, attach supporting documentation)

Were Soils Excavated? __Yes X No Quantity: NA Disposal Method: NA

Final Confirmation Sampling Methods: Three soil borings drilled and sampled to water table on 10/1 and 10/2/98.

Soil Disposal Form Attached? __Yes X No __NA Final Disposal Location: NA

Estimated Volume of Insitu Soils Exceeding NR 720 RCLs: Less than 1,000 cubic yards with DRO >100 ppm.

Tables for Post Remedial Analytical Results Attached? X Yes __No Maps of Post Remedial Sample Locations Attached? X Yes __No

Brief Description of Remedial Action Taken: Active in situ remediation of impacted soil and groundwater using a biosparging/bioventing system between 3/19/96 and 9/16/98.

4. GROUNDWATER ANALYTICAL RESULTS

Potential Receptors for Groundwater Migration Pathway: Eau Claire municipal well field approximately 2 miles west

Extent of Contamination Defined? X Yes __No __NA Remedial Action Completed? X Yes __No __NA

# of Sample Rounds: 14 Depth(s) to Groundwater/Flow Direction(s): 70 feet / northwest

Field Analyses? __Yes X No Lab Analyses? X Yes __No # of Sampling Points: 5

NR 141 Monitoring Wells Sampled: 5 # Temporary Groundwater Sampling Points Sampled: None

Recovery Sumps Sampled: None # Municipal Wells Sampled: None # Private Wells Sampled: None

Has WDNR Been Notified of Substances in Groundwater w/o Standards? X Yes __No

Any Potable Wells Within 1200 Feet of Site? X Yes __No If Yes, How Many? 2 (see Attachments A and B)

Have They Been Sampled? X Yes __No Have Well Owners/Occupants Been Notified of Results? X Yes __No

Preventive Action Limit Exceeded? __Yes X No If Yes, identify location(s) ____

Enforcement Standard Exceeded? __Yes X No If Yes, identify location(s) ____

Tables of Analytical Results Attached? X Yes __No Map of Groundwater Sample Locations Attached? X Yes __No

Brief Description of Remedial Action Taken: See above.

WDNR BRRTS CASE #: 0 3 - 0 9 - 0 0 1 0 3 8 WDNR Site Name: NPI LUST Site

FOR DEPARTMENT USE ONLY

FIRST REVIEW DATE: 2-18-99 [✓] **Approved** [ ] **Denied**

(Signature) (Signature) (Signature) (Signature)

SECOND REVIEW DATE: _____ [ ] **Approved** [ ] **Denied**

(Signature) (Signature) (Signature) (Signature)

COMMITTEE RECOMMENDATION:

✓ **Closure Approved Per:**

- ____ No Restrictions
- ____ Groundwater Use Restriction
- ____ Zoning Verification
- ____ Deed Restriction
- ____ Deed Affidavit
- ✓ Site Specific Close Out Letter Necessary
- ____ Well Abandonment Documentation
- ____ Soil Disposal Documentation
- ____ Public Notice Needed
- ____ NR 140 Exemption For: _____
- ____ Specific Comments: _____

____ **Closure Denied, Needs More:**

- ____ Investigation
- ____ Groundwater Monitoring
- ____ Soil Remediation
- ____ Groundwater Remediation
- ____ Documentation of Soil Landspreading or Biopile Destiny
- ____ Specific Comments: _____

Site specific language - MW's transferred to SF site?

FIGURES AND TABLES ARE ARRANGED ALPHA-NUMERICCALLY.

FIGURE B-1 (FIRST FIGURE) ILLUSTRATES THE LOCATION AND EXTENT OF THE LUST SITE.

THIS SITE IS ALSO A SUPERFUND SITE BUT THE CONTAMINANT TYPE AND GROUNDWATER PLUME ~~ARE~~ were SEPARATE AND DISTINCT.

1993 REMOVED 8-30,000 GALLON NO.2 AND NO.6 FUEL OIL TANKS FROM A COMMON BASIN. FIGURE B-2 SHOWS THE TANK SYSTEM LAYOUT. IN ADDITION TO THE TANKS THERE WERE TRANSFER LINES TO THE TANKS FOR RAIL AND TRUCK OFF-LOADING , A PUMPHOUSE AND BURIED PIPING TO BOTH BOILER ROOMS.

THE ORIGINAL EXCAVATION YIELDED 2,000 YARDS OF CONTAMINATED SOIL WHICH WAS REPLACED IN THE WESTERN END OF THE BASIN. DEPTH OF THE FINAL EXCAVATION WAS 15 TO 20 FEET DEEP. AFTER BACKFILLING THE BASIN AREA WAS COVERED WITH A GEO-MEMBRANE TO PREVENT INFILTRATION.

1994 SI COMPLETED.

1996 BIOSPARGE/BIOVENT REMEDIATION SYSTEM INSTALLED. SYSTEM OPERATED FROM 3-19-96 TO 9-16-98. SYSTEM CONTAINED 10 BIOSPARGE WELLS AND 3 BIOVENT WELLS.

PULL OUT TABLES C-1 , C-2 AND FIGURES D-1 , E-1.

FIGURE D-1'S LEGEND INDICATES THE EXCAVATION SAMPLES, MONITORING WELL AND SOIL BORING IDENTIFICATION. THE BOLDED LOCATIONS SHOW EXCEEDENCES OF NR 720 SOIL STANDARDS. THESE DATA ARE FOUND IN TABLE C-1 AND C-2.

FIGURE E-1 ILLUSTATES THE PRE- REMEDIAL SOIL CONTAMINATION PROFILE - FIELD PAH REFERS TO BIOASSAY FOR PAH TOTALS.

PULL OUT FIGURE G-1 AND H-1.

FIGURE G-1 GIVES THE LOCATIONS FOR THE CONFIRMATION BORINGS B-20, 21, AND 22. Table F-1 give the Post-Remediation analytical results.

COMPARE FIGURE H-1 WITH FIGURE E-1 FOR PRE AND POST REMEDIATION CROSS SECTIONS.

TABLE I-1 IS THE GROUNDWATER ANALYTICAL SUMMARY.

TABLE K-1 IS THE GROUNDWATER ELEVATION DATA.

FIGURE K-1 SHOWS THE GROUNDWATER CONTOUR THAT HAVE BEEN VERY CONSISTENT THROUGHOUT THE PROJECT.

CASE HISTORY FOR NPI LUST SITE

Background Information and Description of Remedial Action Taken

Eight 30,000-gallon underground No. 2 and No. 6 fuel oil storage tanks and associated piping were removed from the National Presto Industries, Inc. (NPI) leaking underground storage tank (LUST) site in 1993. A multi-phase site investigation, completed in 1994, documented both soil and groundwater contamination at the site. Contaminants of concern were diesel range organics (DRO) and polycyclic aromatic hydrocarbons (PAHs). Attachment B provides both a location map (Figure B-1) and a site map (Figure B-2) showing the former locations of the tanks, associated piping, and other site features. Attachments C, D, and E include more details on the pre-remedial soil sampling results. Attachments I, J, and K summarize the groundwater monitoring data.

A system consisting of 10 biosparging air injection wells, AI-1 through AI-10, and 3 bioventing wells, VW-1 through VW-3, was installed to remediate the soil and groundwater contamination, as shown on Figure B-2. The biosparging/bioventing system operated between March 19, 1996, and September 16, 1998. The air injection/venting blowers for the operation were located in an equipment room in the main NPI building adjacent to the LUST site.

Air was injected into the biosparging wells at a flow rate of approximately 10 scfm per well, following a four-step on/off operating cycle. The blower automatically 1) turned on and injected air into the five odd-numbered wells for 15 minutes, 2) shut down for 15 minutes, 3) restarted and injected air into the five even-numbered wells for 15 minutes, and 4) shut down for another 15 minutes before beginning the cycle over again. With only five of the biosparging wells taking air at any one time, the total air injection flow rate was approximately 50 scfm. The bioventing blower operated continuously, extracting soil gas from all three of the bioventing wells simultaneously at a total flow rate of approximately 200 scfm.

Groundwater monitoring wells used to evaluate how effective the biosparging/bioventing system was at cleaning up the aquifer include PW-1, PW-2, PW-3R, PW-4, and PW-5. As shown on Figures B-1 and B-2, PW-1 was installed in the former tank pit area; PW-2 was installed along the former concrete piping run, about midway between the tanks and the boiler room in the main building; PW-3R was installed at the northwest corner of the main building, approximately 600 feet downgradient of the LUST site; and PW-4 and PW-5 were installed closer to the boiler room than PW-1 and just west and east of the former concrete piping run, respectively. Before the biosparging/bioventing system began operating, PW-4 was manually bailed in late 1995 to remove a small amount (less than 1 inch) of free product that periodically accumulated in the well. Subsequent intermittent bailing and pumping of groundwater from PW-4 between April 1, 1998, and September 2, 1998, revealed no free product.

NPI has four wells (EW-3, E-4, W-5, and W-7) that pump groundwater within 1,200 feet of the LUST site, as shown on Figure B-1. Superfund groundwater extraction wells EW-3 and EW-4 are located about 650 feet west of and sidegradient to PW-1. Groundwater is being pumped from these two wells to capture and control residual volatile organic compounds (VOCs) that have migrated downward from Lagoon No. 1, which is approximately 500 feet south of PW-1, and have affected the aquifer in the past. Active remediation including extensive soil excavation and soil vapor extraction (SVE) appears to have eliminated Lagoon No. 1 as a source area. In September 1998, the WDNR and U.S. Environmental Protection Agency approved NPI's request to abandon the SVE system and backfill the lagoon with clean soils. That work was completed in December 1998. EW-3 and EW-4 are still being pumped because low-level VOC concentrations are still being detected in the NPI Superfund monitoring wells (e.g., MW-34A and MW-70A) near the lagoon. Effluent from the two extraction wells is treated by a cascade aerator before it is discharged to the storm sewer, which empties into the Chippewa River.

Groundwater is also currently being pumped from two production wells just northwest of NPI's main building. These wells are W-5 and W-7, which are located about 900 feet northwest and downgradient of the LUST site. Production wells W-4 and W-6 have been plugged and abandoned.

The water from W-5 and W-7 is used in NPI's main building for fire protection service, in the bathrooms for sanitary purposes, and in the cafeteria for cleaning and dishwashing purposes. Bottled drinking water is supplied throughout the building.

Pumped groundwater from NPI's well field is sampled annually for VOCs. Analytical results document that VOCs have not been detected.

Justification for Case Closure

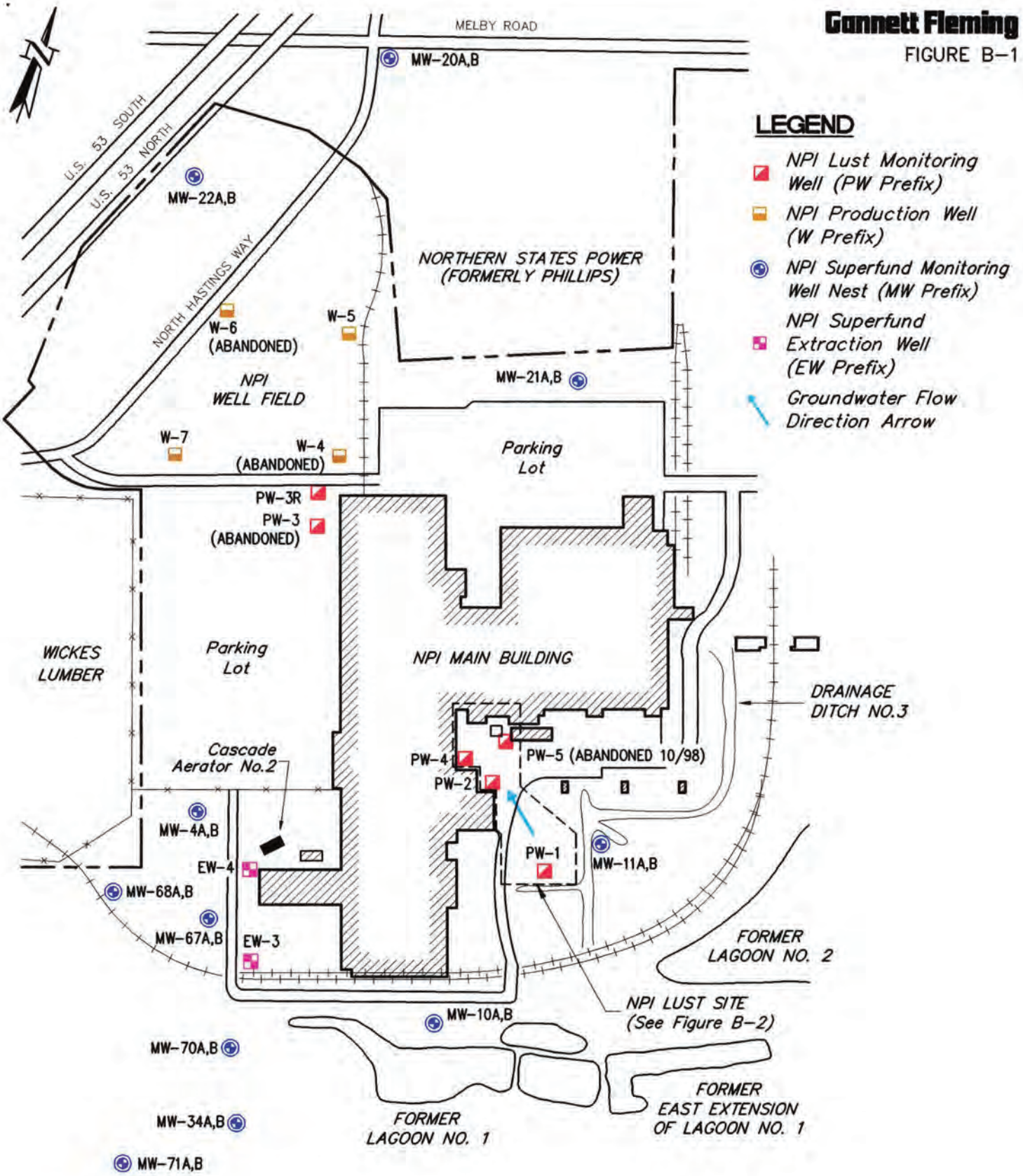
As described in our previous correspondence to you, data used to monitor the effectiveness of the bioventing system at this site have indicated that borings to confirm remediation of the soil could have been drilled within six months after bioventing started up in March 1996. For example, the WDNR guidelines, provided on Page IS-1 of Form 4400-194, recommend drilling confirmation borings once the average rate of contaminant removal, based on total VOC emissions in the bioventing exhaust gas, is less than one pound per day (1 lb/day) and the biodegradation rate, based on in situ respiration tests, is less than two milligrams per kilogram per day (2 mg/kg per day). In comparison, historical data from the NPI LUST site document that total VOC emissions ranged from 0.05 to 0.2 lb/day and biodegradation rates ranged from 0.1 to 1.5 mg/kg per day.

Nevertheless, because PAH concentrations in the groundwater initially remained above NR 140 enforcement standards at three of the five on-site monitoring wells and because the Form 4400-194 guidelines generally apply to sites with gasoline-contaminated, rather than fuel oil-contaminated, unsaturated soil, they were not considered appropriate for this site, where the soils and groundwater were contaminated with fuel oil. Volatilization and biodegradation rates for fuel oil are typically lower than for gasoline, because the compounds that make up fuel oil are generally heavier than the constituents in gasoline. Consequently, the biosparging/bioventing remediation system was operated until groundwater monitoring results documented that PAH concentrations had dropped below NR 140 preventive action limits (PALs) in all on-site wells.

Follow-up unsaturated soil sampling conducted in October 1998 shows that there is one area where the concentration of DRO remains above the NR 720 clean up standard of 100 ppm near monitoring well PW-1. However, the zone of unsaturated soil with DRO concentrations above 100 ppm is limited to a small area between 15 and 35 feet bgs. This prevents direct contact at the ground surface, leaves a buffer of clean sand at least 30 feet thick above the water table, and reduces the possibility of further impacts to the aquifer (e.g., the groundwater at PW-1, in the former tank pit area and screened across the water table directly below the zone of unsaturated soil with DRO concentrations above 100 ppm, is now clean). In addition, PAH concentrations in the unsaturated soil samples that were collected in October 1998 were all below the WDNR's suggested generic residual contaminant levels (RCLs) for the groundwater pathway. Attachments F, G, and H include details on the post-remedial soil sampling results.

Only a rough estimate of the total volume of unsaturated soil with residual DRO concentrations above 100 ppm can be made. As a worst-case scenario, assuming all soils between 15 and 35 feet bgs within a 20-foot radius of B-22 are similarly affected, the total volume would be approximately 930 cubic yards. Given the proximity of B-22 to VW-1, it is more likely the affected radius is between 5 and 10 feet, corresponding to total volumes of between 60 and 230 cubic yards, respectively.

Based on these findings and given the low mobility of DRO, Gannett Fleming, on behalf of NPI, requests that the WDNR issue a "no further action required" closure letter indicating that the active remediation undertaken to date coupled with natural attenuation is an acceptable final remedy for the residual DRO soil contamination at this site, as allowed under NR 720.19, Wisconsin Administrative Code.



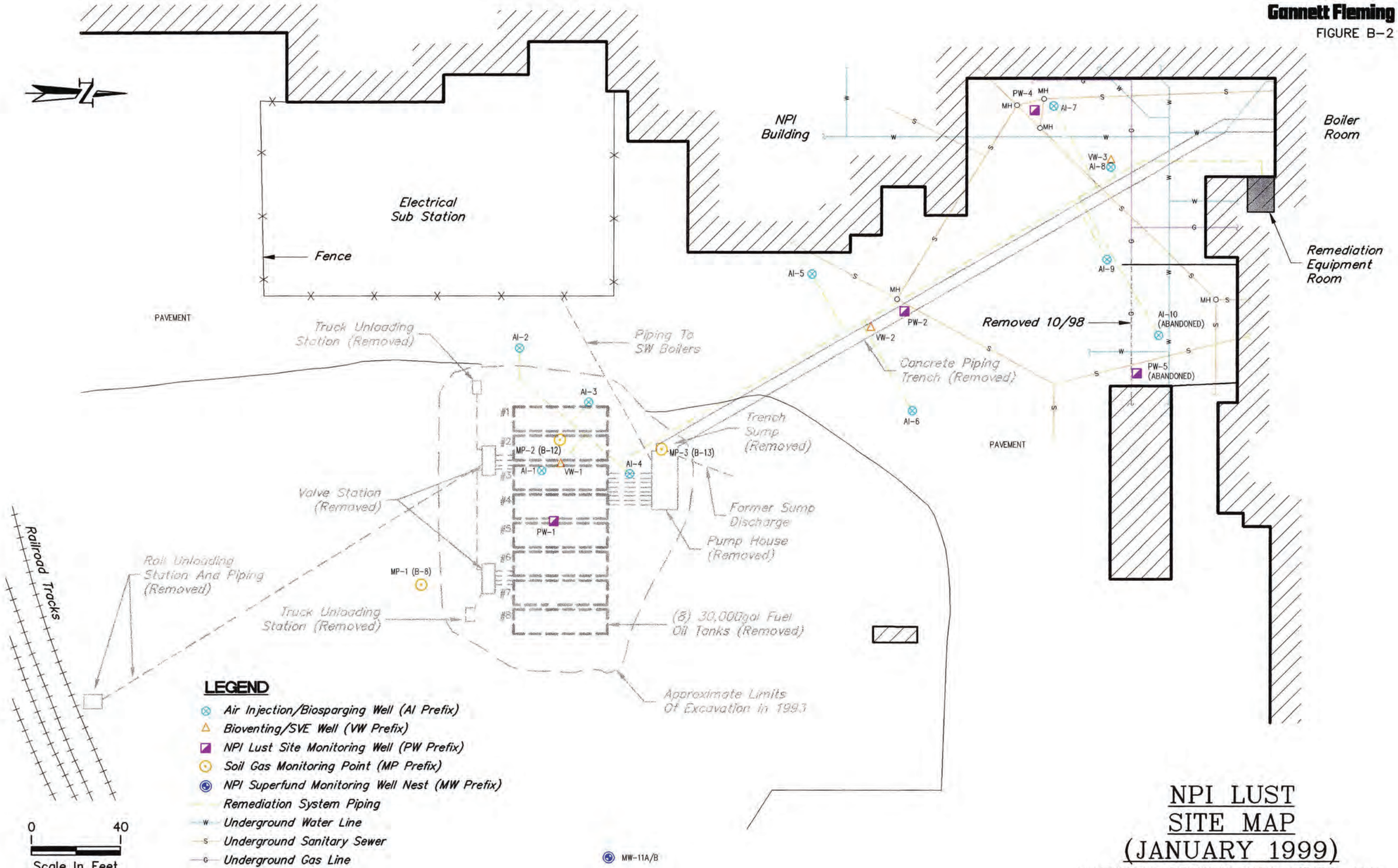
LOCATION MAP
(JANUARY 1999)

NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

011199
34285WG

Gannett Fleming

FIGURE B-2



NPI LUST SITE MAP (JANUARY 1999)

NATIONAL PRESTO INDUSTRIES, INC.

EAU CLAIRE, WISCONSIN

010899
34285WA

NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

TABLE C-1

RESULTS FOR PRE-REMEDIAL SOIL SAMPLES COLLECTED
IN JULY AND AUGUST 1993

Sample No.	Sample Depth (ft)	PID/FID[2] (ppmv)	DRO [3] (mg/kg)
S-1	18[1]	10.3	--
S-2	18[1]	0	NA
S-3	18[1]	0	NA
S-4	18[1]	1.3	8.7
S-5	18[1]	2.0	NA
S-6	18[1]	1.2	NA
S-7	17	0	--
S-8	17	0	--
S-9	17	0	--
S-10	3	0	17
S-11	6	1.0	76
S-12	17	17.0	--
S-13	17	70.0	**670**
S-14	17	0	--
S-15	5.5	105	**3,500**
S-16	4	0	76
S-17	4	2.8	**240**
S-18	4	0.2	**430**
S-19	4	0.6	**300**
S-20	17	4.3	35
S-21	17	54.0	**630**

Table C-1 Continued ...

Sample No.	Sample Depth (ft)	PID/FID[2] (ppmv)	DRO [3] (mg/kg)
S-22	17	0	--
S-23	6	0.4	**930**
S-24	5	54.0	**16,000**
S-25	4	220	**6,300**
S-26	18	0.1	22
S-27	18	1.1	**280**
S-28	18	0	--
S-29	18	0.5	66
S-30	18	215	**14,000**
S-31	18	35.0	**2,300**
S-32	7	190	**18,000**
S-33	18	1.2	**400**
S-34	18	310	**6,500**
S-35	18	100	**3,400**
NR 720 Soil Cleanup Standard			100

NOTES:
Field screening done and results furnished by Ayres Associates.

-- = Not detected at or above the detection limit.

NA = Not analyzed.

FOOTNOTES:
(1) Sample collected beneath tank, approximate depth is 18 feet.
(2) Samples S-1 through S-6 were field-screened with a photoionization detector (PID). All other samples were screened with a flame-ionization detector (FID).
(3) Diesel range organic (DRO) results are in milligrams per kilogram (mg/kg) on a dry-weight basis. Concentrations exceeding the NR 720 soil cleanup standard are in bold text and shaded.

NATIONAL PRESTO INDUSTRIES
EAU CLAIRE, WISCONSIN

TABLE C-2

ANALYTICAL RESULTS FOR SOIL SAMPLES COLLECTED BETWEEN JANUARY 3 AND 12, 1994 (mg/kg)

Analyte	Sample I.D.												Residual Contaminant Level		
	B-2 5.0	B-2 20.0	B-3 5.0	B-3 20.0	B-6 30.0	B-6 40.0	B-7 5.0	B-7 20.0	B-8 10.0	B-8 40.0	B-9 20.0	B-9 35.0	Groundwater Pathway	Direct Contact Pathway	
														Non-Industrial	Industrial
Diesel Range Organics	9.21	<5.0	<5.0	<5.0	29.1	<5.0	**140**	<5.0	<5.0	<5.0	<5.0	<5.0	100	100	100
Acenaphthene	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0036	<0.0035	<0.0035	<0.0037	<0.0035	<0.0035	38	900	60,000
Acenaphthylene	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.150	<0.014	<0.015	<0.015	<0.014	<0.014	0.7	18	360
Anthracene	<0.0028	<0.0028	<0.0028	<0.0028	<0.0028	<0.0028	<0.028	<0.0028	0.00797	0.0029	<0.0028	<0.0028	3,000	5,000	300,000
Benzo(a)Anthracene	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.015	<0.0014	<0.0015	<0.0015	<0.0014	<0.0014	17	0.088	3.9
Benzo(a)Pyrene	<0.0020	<0.0020	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	48	0.0088	0.39
Benzo(b)Fluoranthene	<0.0010	<0.0010	<0.0010	<0.0040	<0.0010	<0.0010	<0.010	<0.0010	<0.0011	<0.0011	<0.0010	<0.0010	360	0.088	3.9
Benzo(k)Fluoranthene	<0.0028	<0.0028	<0.0028	<0.0028	<0.0028	<0.0028	<0.028	<0.0028	<0.0029	<0.0029	<0.0028	<0.0028	6,800	1.8	39
Benzo(ghi)Perylene	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0036	<0.0035	<0.0036	<0.0037	<0.0035	<0.0035	870	0.88	39
Chrysene	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0036	<0.0035	<0.0036	<0.0037	<0.0035	<0.0035	37	8.8	390
Dibenzo(a,h)Anthracene	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0039	<0.0038	<0.0039	<0.0040	<0.0038	<0.0038	38	0.0088	0.39
Fluoranthene	<0.0076	<0.0076	<0.0076	<0.0076	<0.0077	<0.0077	0.413	<0.0077	<0.0078	<0.0081	<0.0077	<0.0077	500	600	40,000
Fluorene	<0.0020	<0.0020	<0.0021	<0.0021	<0.0021	<0.0021	<0.021	<0.0021	<0.0082	<0.0022	<0.0021	<0.0021	100	600	40,000
Indeno(1,2,3-cd)Pyrene	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.036	<0.0035	<0.0036	<0.0037	<0.0035	<0.0035	680	0.088	3.9
1-Methyl Naphthalene	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.150	<0.014	<0.015	<0.015	<0.014	<0.014	23	1,100	70,000
2-Methyl Naphthalene	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.150	<0.014	<0.015	<0.015	<0.014	<0.014	20	600	40,000
Naphthalene	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.039	<0.0038	<0.0039	<0.0040	<0.0038	<0.0038	0.4	20	110
Phenanthrene	0.0264	<0.0017	<0.0018	<0.0018	<0.0018	<0.0018	<0.0170	<0.0018	<0.0542	<0.0019	<0.0018	<0.0018	1.8	18	390
Pyrene	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.036	<0.0035	<0.0036	<0.0037	<0.0035	<0.0035	8,700	500	30,000

NOTES:

The laboratory analytical results and residual contaminant levels (RCLs) are in milligrams/kilogram (mg/kg) on a dry-weight basis. Concentrations exceeding the NR 720 generic RCL for diesel range organics (DRO) or one or more of the three WDNR suggested RCLs for polycyclic aromatic hydrocarbons (PAHs) are in bold text and shaded.
Depth to water at the time of drilling was about 68 feet below ground surface (bgs).
Sample ID = Borehole location (e.g., B-2) and sample depth (e.g., 5.0 feet bgs).

Table C-2 Continued . . .

Analyte	Sample I.D.								Residual Contaminant Level		
	B-10 5.0	B-10 40.0	B-11 10.0	B-11 25.0	B-12 20.0	B-12 65.0	B-13 5.0	B-13 35.0	Groundwater Pathway	Direct Contact Pathway	
										Non-Industrial	Industrial
Diesel Range Organics	<5.0	<5.8	<5.0	<5.0	**967**	**2,770**	**7,060**	<5.8	100	100	100
Acenaphthene	<0.0037	<0.0035	<0.0035	<0.0035	<0.074	0.555	0.465	<0.0035	38	900	60,000
Acenaphthylene	<0.015	<0.015	<0.014	<0.014	<0.310	<0.310	<0.300	<0.015	0.7	18	360
Anthracene	<0.0029	<0.0028	<0.0028	<0.0028	0.218	<0.056	<0.058	<0.0028	3,000	5,000	300,000
Benzo(a)Anthracene	<0.0015	<0.0015	<0.0014	<0.0014	<0.029	<0.029	<0.030	<0.0015	17	0.088	3.9
Benzo(a)Pyrene	<0.0022	<0.0021	<0.0021	<0.0020	<0.042	<0.042	<0.043	<0.0021	48	0.0088	0.39
Benzo(b)Fluoranthene	<0.0011	<0.0010	<0.0010	<0.0010	<0.021	<0.021	<0.022	<0.0010	360	0.088	3.9
Benzo(k)Fluoranthene	<0.0029	<0.0028	<0.0028	<0.0028	<0.056	<0.056	<0.058	<0.0028	6,800	1.8	39
Benzo(ghi)Perylene	<0.0037	<0.0035	<0.0035	<0.0035	<0.071	<0.071	<0.073	<0.0035	870	0.88	39
Chrysene	<0.0037	<0.0035	<0.0035	<0.0035	<0.071	<0.071	<0.073	<0.0035	37	8.8	390
Dibenzo(a,h)Anthracene	<0.0040	<0.0039	<0.0038	<0.0038	<0.077	<0.077	<0.080	<0.0039	38	0.0088	0.39
Fluoranthene	<0.0081	<0.0077	<0.0077	<0.0076	<0.160	<0.160	<0.162	<0.0077	500	600	40,000
Fluorene	<0.0022	<0.0021	<0.0021	<0.0020	<0.044	1.290	0.354	<0.0021	100	600	40,000
Indeno(1,2,3-cd)Pyrene	<0.0037	<0.0035	<0.0035	<0.0035	<0.071	<0.071	<0.073	<0.0035	680	0.088	3.9
1-Methyl Naphthalene	<0.015	<0.015	<0.014	<0.014	<0.310	20.300	<0.300	<0.015	23	1,100	70,000
2-Methyl Naphthalene	<0.015	<0.015	<0.014	<0.014	<0.310	16.800	<0.300	<0.015	20	600	40,000
Naphthalene	<0.0040	<0.0039	<0.0038	<0.0038	<0.0081	**4.070**	**3.770**	<0.0039	0.4	20	110
Phenanthrene	<0.0019	<0.0018	<0.0018	<0.0017	0.726	**6.540**	**3.800**	<0.0018	1.8	18	390
Pyrene	<0.0037	<0.0035	<0.0035	<0.0035	<0.071	<0.071	<0.073	<0.0035	8,700	500	30,000

NOTES:

The laboratory analytical results and residual contaminant levels (RCLs) are in milligrams/kilogram (mg/kg) on a dry-weight basis. Concentrations exceeding the NR 720 generic RCL for diesel range organics (DRO) or one or more of the three WDNR suggested RCLs for polycyclic aromatic hydrocarbons (PAHs) are in bold text and shaded.
Depth to water at the time of drilling was about 68 feet below ground surface (bgs).
Sample ID = Borehole location (e.g., B-10) and sample depth (e.g., 5.0 feet bgs).

Table C-2 Continued . . .

Analyte	Sample I.D.												Residual Contaminant Level		
	B-14 5.0	B-14 20.0	B-14 30.0	B-14 40.0	B-15 15.0	B-15 20.0	B-16 5.0	B-16 55.0	B-17 20.0	B-17 35.0	B-17 40.0	B-17 65.0	Groundwater Pathway	Direct Contact Pathway	
														Non-Industrial	Industrial
Diesel Range Organics	**1,430**	<5.0	**4,370**	<5.0	<5.8	<5.8	**5,840**	<5.0	**3,820**	7.28	**2,840**	<5.0	100	100	100
Acenaphthene	0.341	<0.0035	0.804	<0.0035	<0.0036	<0.0036	0.563	<0.0035	0.788	<0.0035	1.040	<0.0035	38	900	60,000
Acenaphthylene	<0.150	<0.014	**3.930**	<0.014	<0.015	<0.015	<0.370	<0.014	<0.150	<0.014	<0.150	<0.014	0.7	18	360
Anthracene	<0.028	<0.0028	<0.028	<0.028	<0.0028	<0.0028	<0.071	<0.0028	<0.028	<0.0028	<0.028	<0.0028	3,000	5,000	300,000
Benzo(a)Anthracene	<0.014	<0.0014	<0.014	<0.0014	<0.0015	<0.0015	<0.037	<0.0014	<0.014	<0.0014	<0.014	<0.0014	17	0.088	3.9
Benzo(a)Pyrene	<0.021	<0.0020	<0.021	<0.0021	<0.0021	<0.0021	<0.052	<0.0020	<0.020	<0.0021	<0.020	<0.0021	48	0.0088	0.39
Benzo(b)Fluoranthene	<0.010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.026	<0.0010	<0.010	<0.0010	<0.010	<0.0010	360	0.088	3.9
Benzo(k)Fluoranthene	<0.028	<0.0028	<0.028	<0.0028	<0.0028	<0.0028	<0.071	<0.0028	<0.028	<0.0028	<0.028	<0.0028	6,800	1.8	39
Benzo(ghi)Perylene	<0.035	<0.0035	<0.035	<0.0035	<0.0036	<0.0036	<0.089	<0.0035	<0.035	<0.0035	<0.035	<0.0035	870	0.88	39
Chrysene	<0.035	<0.0035	<0.035	<0.0035	<0.0036	<0.0036	<0.089	<0.0035	<0.035	<0.0035	<0.035	<0.0035	37	8.8	390
Dibenzo(a,h)Anthracene	<0.038	<0.0038	<0.038	<0.0038	<0.0036	<0.0036	<0.096	<0.0038	<0.038	<0.0038	<0.038	<0.0038	38	0.0088	0.39
Fluoranthene	<0.076	<0.0076	<0.076	<0.0077	<0.0078	<0.0078	0.676	<0.0076	<0.077	<0.0076	0.505	<0.0076	500	600	40,000
Fluorene	0.370	<0.0020	1.480	<0.0021	<0.0021	<0.0021	<0.052	<0.0020	<0.020	<0.0021	<0.020	<0.0021	100	600	40,000
Indeno(1,2,3-cd)Pyrene	<0.035	<0.0035	<0.035	<0.0035	<0.0036	<0.0036	<0.089	<0.0035	<0.035	<0.0035	<0.035	<0.0035	680	0.088	3.9
1-Methyl Naphthalene	1.260	<0.014	5.920	<0.014	<0.015	<0.015	<0.370	<0.014	<0.150	<0.014	<0.150	<0.014	23	1,100	70,000
2-Methyl Naphthalene	1.160	<0.014	8.540	<0.014	<0.015	<0.015	<0.370	<0.014	<0.150	<0.014	<0.150	<0.014	20	600	40,000
Naphthalene	<0.040	<0.0038	**3.500**	<0.0038	<0.0039	<0.0039	<0.096	<0.0038	<0.038	<0.0038	<0.038	<0.0038	0.4	20	110
Phenanthrene	**2.650**	<0.0017	**5.620**	<0.0018	<0.0018	<0.0018	<0.044	<0.0017	<0.018	<0.0018	**2.690**	<0.0018	1.8	18	390
Pyrene	<0.035	<0.0035	<0.035	<0.0035	<0.0036	<0.0036	<0.089	<0.0035	<0.035	<0.0035	<0.035	<0.0035	8,700	500	30,000

NOTES:

The laboratory analytical results and residual contaminant levels (RCLs) are in milligrams/kilogram (mg/kg) on a dry-weight basis. Concentrations exceeding the NR 720 generic RCL for diesel range organics (DRO) or one or more of the three WDNR suggested RCLs for polycyclic aromatic hydrocarbons (PAHs) are in bold text and shaded.
Depth to water at the time of drilling was about 68 feet below ground surface (bgs).
Sample ID = Borehole location (e.g., B-14) and sample depth (e.g., 5.0 feet bgs).

Table C-2 Continued . . .

Analyte	Sample I.D.										Residual Contaminant Level		
	B-18 40.0	B-18 45.0	B-18 55.0	B-18 65.0	PW-1 30.0	PW-1 60.0	PW-1 65.0	PW-2 20.0	PW-2 60.0	PW-2 65.0	Groundwater Pathway	Direct Contact Pathway	
												Non-Industrial	Industrial
Diesel Range Organics	32.4	**5,010**	11.2	**1,470**	<5.0	<5.0	<5.0	**11,000**	<5.0	<5.0	100	100	100
Acenaphthene	<0.0035	2.740	<0.0035	1.380	<0.0035	<0.0035	<0.0036	<0.035	<0.0035	<0.0035	38	900	60,000
Acenaphthylene	<0.014	<0.150	<0.015	<0.290	<0.015	<0.015	<0.015	<0.150	<0.014	<0.014	0.7	18	360
Anthracene	<0.0027	<0.028	<0.0028	<0.055	<0.028	<0.0028	<0.0029	<0.028	<0.028	<0.0028	3,000	5,000	300,000
Benzo(a)Anthracene	<0.0014	<0.014	<0.0015	<0.029	<0.0015	<0.0015	<0.0015	<0.015	<0.014	<0.0014	17	0.088	3.9
Benzo(a)Pyrene	<0.0020	<0.021	<0.0021	<0.041	<0.0021	<0.0021	<0.0021	<0.021	<0.0021	<0.0021	48	0.0088	0.39
Benzo(b)Fluoranthene	<0.0010	<0.010	<0.0010	<0.021	<0.0010	<0.0010	<0.0011	<0.010	<0.0010	<0.0010	360	0.088	3.9
Benzo(k)Fluoranthene	<0.0027	<0.028	<0.0028	<0.055	<0.0028	<0.0028	<0.0029	<0.028	<0...28	<0.0028	6,800	1.8	39
Benzo(ghi)Perylene	<0.0035	<0.035	<0.0035	<0.070	<0.0035	<0.0035	<0.0036	<0.035	<0.0035	<0.0035	870	0.88	39
Chrysene	<0.0035	<0.035	<0.0035	<0.070	<0.0035	<0.0035	<0.0036	<0.035	<0.0035	<0.0035	37	8.8	390
Dibenzo(a,h)Anthracene	<0.0038	<0.038	<0.0039	<0.076	<0.0039	<0.0039	<0.0039	<0.039	<0.0038	<0.0038	38	0.0088	0.39
Fluoranthene	<0.0075	<0.077	<0.0077	<0.060	<0.0077	<0.0077	<0.0078	<0.077	<0.0077	<0.0076	500	600	40,000
Fluorene	<0.0020	4.240	<0.0021	2.610	<0.0021	<0.0021	<0.0022	<0.021	<0.0021	<0.0021	100	600	40,000
Indeno(1,2,3-cd)Pyrene	<0.0035	<0.035	<0.0035	<0.070	<0.0035	<0.0035	<0.0036	<0.035	<0.0035	<0.0035	680	0.088	3.9
1-Methyl Naphthalene	<0.014	**29.300**	<0.015	12.600	<0.015	<0.015	<0.015	<0.150	<0.014	<0.014	23	1,100	70,000
2-Methyl Naphthalene	<0.014	**55.200**	<0.015	**23.300**	<0.015	<0.015	<0.015	<0.150	<0.014	<0.014	20	600	40,000
Naphthalene	<0.0038	**7.300**	<0.0039	**1.580**	<0.0039	<0.0039	<0.0039	<0.039	<0.0038	<0.0038	0.4	20	110
Phenanthrene	<0.017	**14.700**	0.0267	**9.030**	<0.0018	<0.0018	<0.0018	<0.018	<0.0018	<0.0018	1.8	18	390
Pyrene	<0.0035	<0.035	<00035	<0.070	<0.0035	<0.0035	<0.0036	<0.035	<0.0035	<0.0035	8,700	500	30,000

NOTES:

The laboratory analytical results and residual contaminant levels (RCLs) are in milligrams/kilogram (mg/kg) on a dry-weight basis. Concentrations exceeding the NR 720 generic RCL for diesel range organics (DRO) or one or more of the three WDNR suggested RCLs for polycyclic aromatic hydrocarbons (PAHs) are in bold text and shaded.
Depth to water at the time of drilling was about 68 feet below ground surface (bgs).
Sample ID = Borehole location (e.g., B-18) and sample depth (e.g., 5.0 feet bgs).

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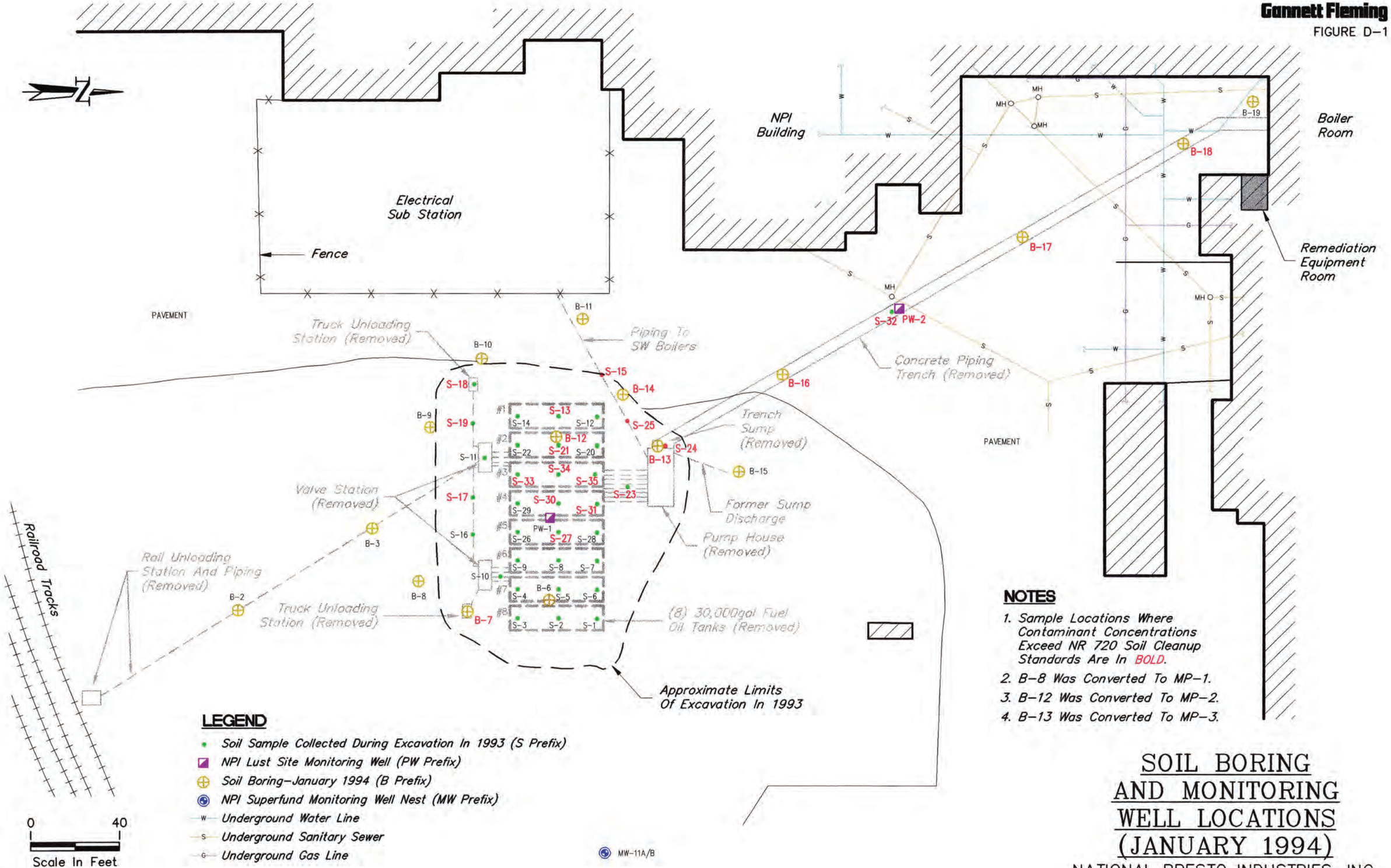
FIGURE D-1



LEGEND

- Soil Sample Collected During Excavation In 1993 (S Prefix)
- NPI Lust Site Monitoring Well (PW Prefix)
- Soil Boring–January 1994 (B Prefix)
- NPI Superfund Monitoring Well Nest (MW Prefix)
- Underground Water Line
- Underground Sanitary Sewer
- Underground Gas Line

MW-11A/B

NOTES

1. Sample Locations Where Contaminant Concentrations Exceed NR 720 Soil Cleanup Standards Are In BOLD.
2. B-8 Was Converted To MP-1.
3. B-12 Was Converted To MP-2.
4. B-13 Was Converted To MP-3.

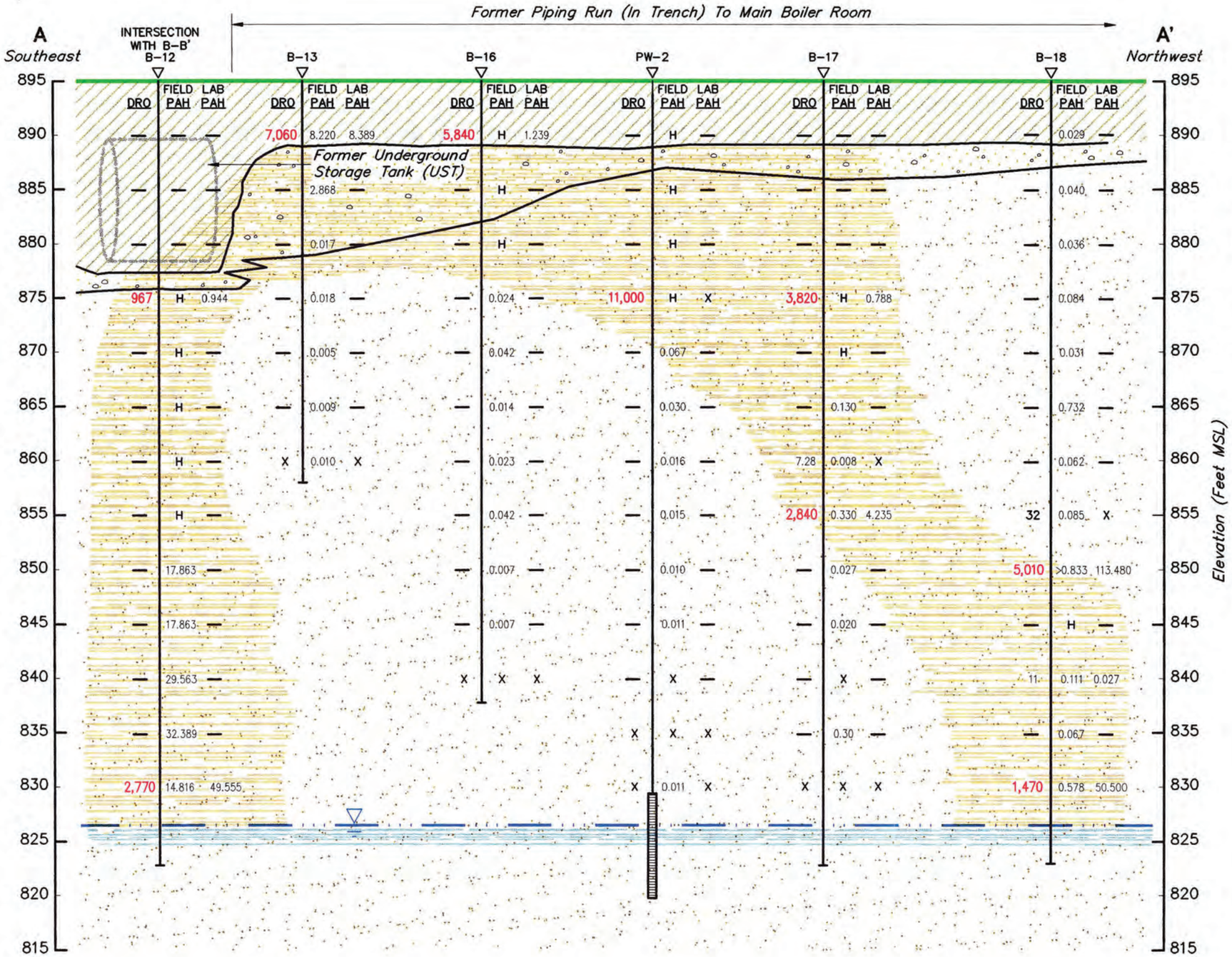
SOIL BORING AND MONITORING WELL LOCATIONS (JANUARY 1994)

NATIONAL PRESTO INDUSTRIES, INC.

EAU CLAIRE, WISCONSIN

Gannett Fleming

FIGURE E-1



LEGEND

Well Construction

- MW-1 — Well/Borehole Identification
- Well Casing
- Screened Interval

Soil Sampling Results (ppm)

DRO Concentations Which Exceed The NR 700 Generic Residual Contaminant Level Of 100 ppm Are In BOLD.

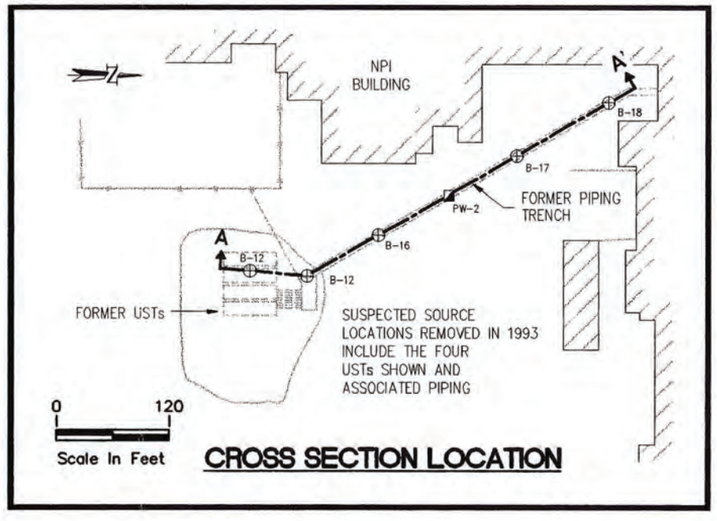
— =Not Analyzed

H =Heavily Impacted Based On Olfactory And Visual Evidence. Not Analyzed

X =Below Detection Limit

Geologic Units

- Fill
- Medium Grained Sand With Gravel
- Poorly Graded Sand With Gravel
- Estimated Extent Of Impacted Soil
- Estimated Extent Of Impacted Groundwater
- Geologic Contact
- Water Table (1/12/94)



Horizontal Scale: 1" = 20'
Vertical Scale: 1" = 10'
Vertical Exaggeration: 2x
Site Datum=Mean Sea Level (MSL)

PRE-REMEDIAL GEOLOGIC CROSS SECTION A-A'

NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

011799
34285WD

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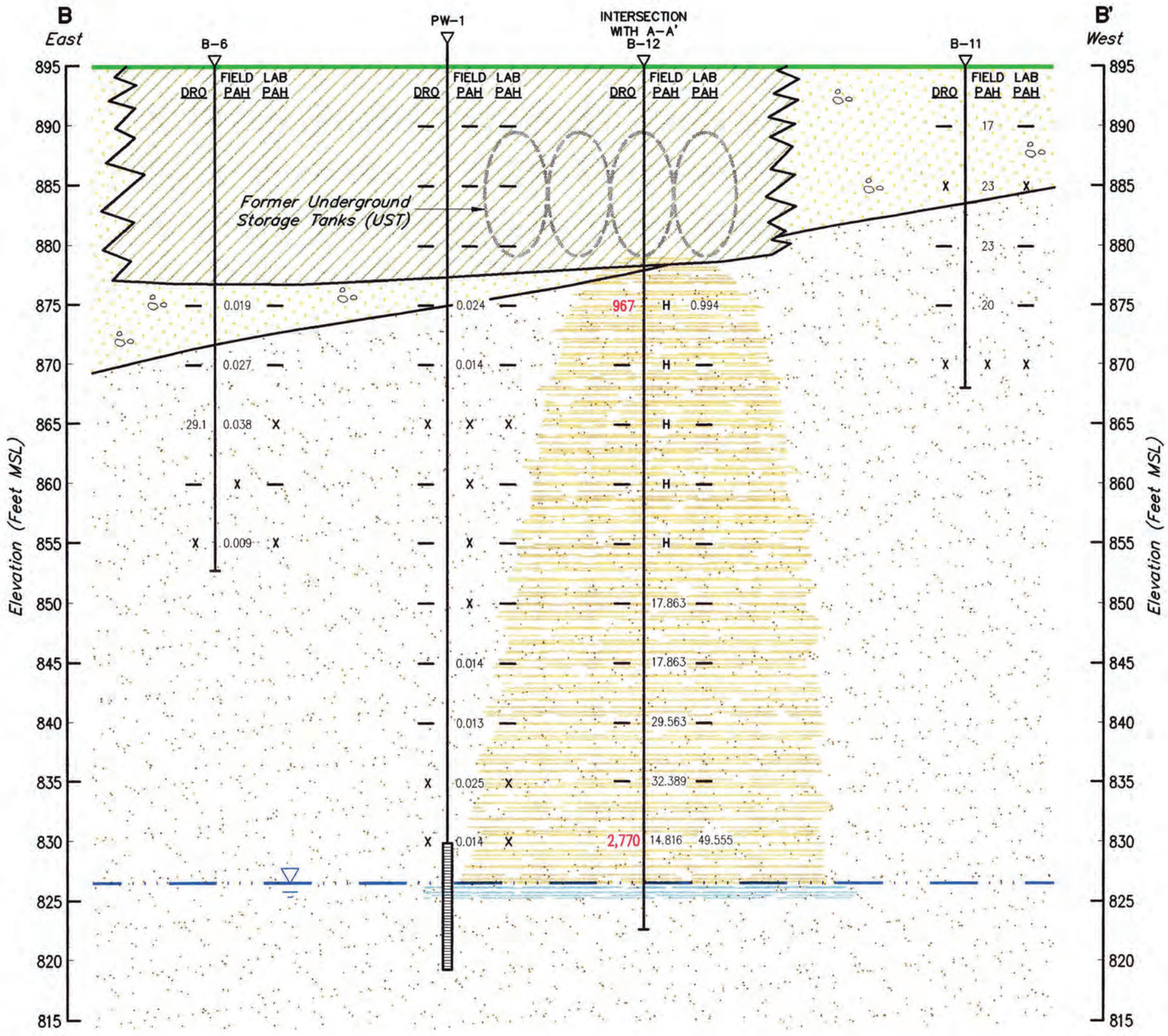
FIGURE E-2



LEGEND

Well Construction

- MW-1 — Well/Borehole Identification
- Well Casing
- Screened Interval

Soil Sampling Results (ppm)

DRO Concentations Which Exceed The NR 700 Generic Residual Contaminant Level Of 100 ppm Are In BOLD.

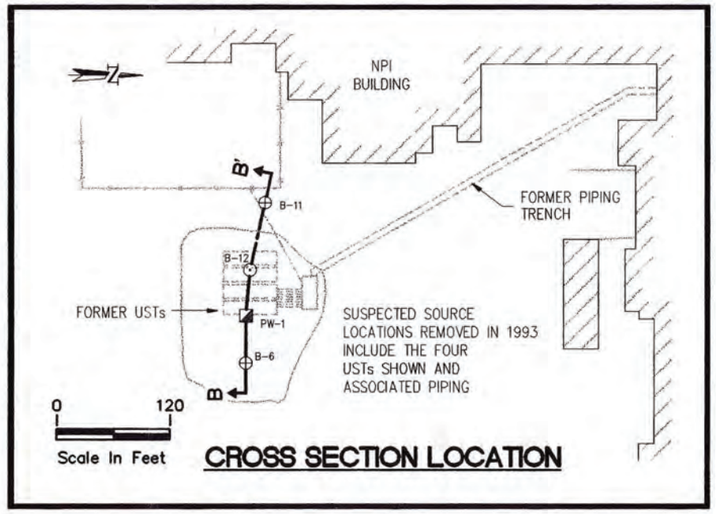
— =Not Analyzed

H =Heavily Impacted Based On Olfactory And Visual Evidence. Not Analyzed

X =Below Detection Limit

Geologic Units

- Fill
- Medium Grained Sand With Gravel
- Poorly Graded Sand With Gravel
- Estimated Extent Of Impacted Soil
- Estimated Extent Of Impacted Groundwater
- Geologic Contact
- Water Table (1/12/94)



Horizontal Scale: 1" = 20'
Vertical Scale: 1" = 10'
Vertical Exaggeration: 2x
Site Datum=Mean Sea Level (MSL)

PRE-REMEDIAL GEOLOGIC CROSS SECTION B-B'

NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

0108898
34285WE

NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

TABLE F-1

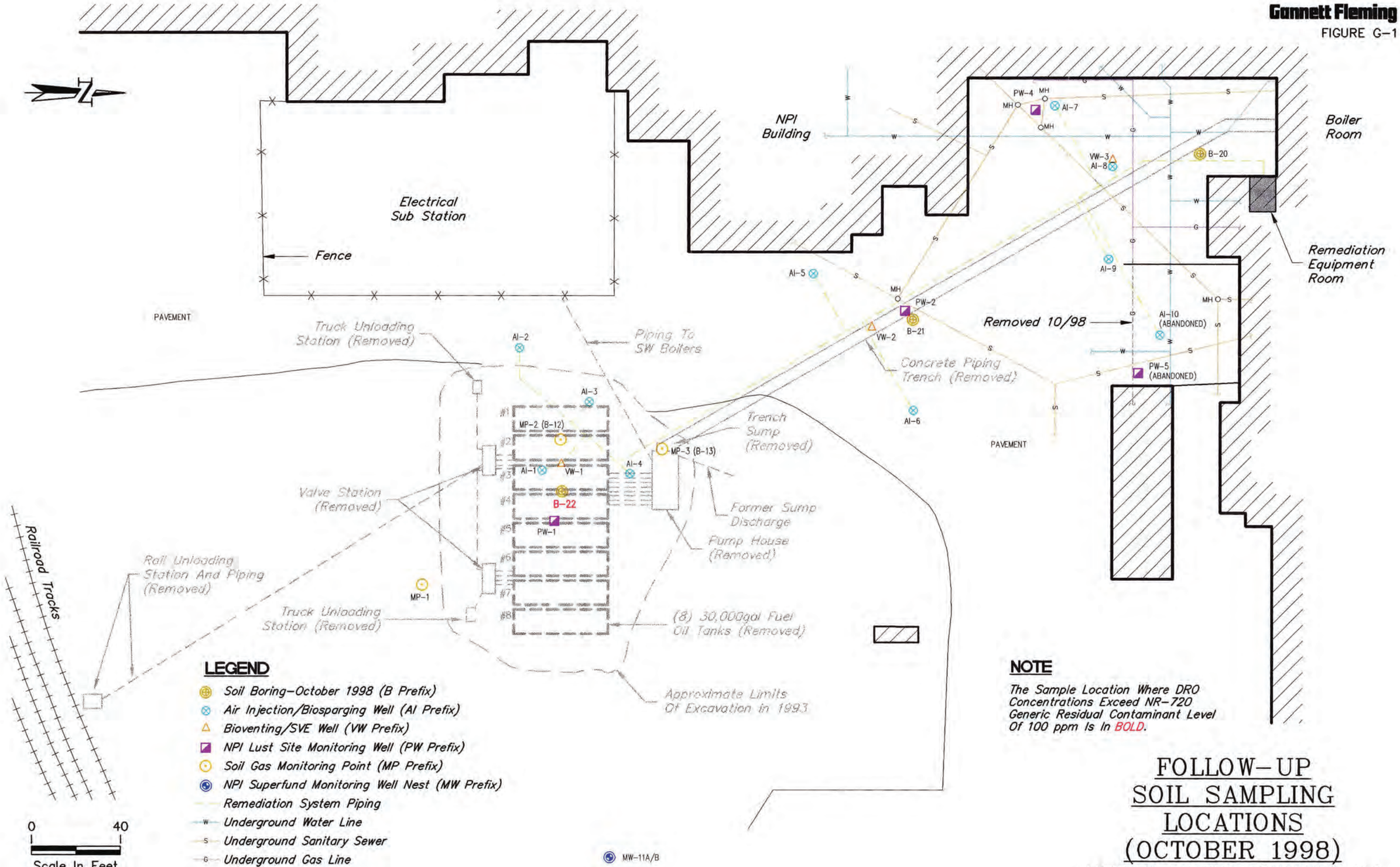
ANALYTICAL RESULTS FOR POST-REMEDIAL SOIL SAMPLES (mg/kg)

	Sample ID								Residual Contaminant Level		
	B-20		B-21		B-22				Groundwater	Direct Contact Pathway	
Analyte	50-52	65-67	50-52	65-67	5-7	25-27	30-32	65-67	Pathway	Non-Industrial	Industrial
DRO	59.3	<5.1	95.3	<5.1	13.0	**8,120**	**4,330**	<5.5	100	100	100
Acenaphthene	<0.038	<0.0038	<0.0038	<0.0038	<0.0039	<0.039	0.500	<0.004	38	900	60,000
Acenaphthylene	<0.028	<0.0028	<0.0028	<0.0028	<0.0029	<0.028	<0.0028	<0.003	0.7	18	360
Anthracene	<0.001	<0.001	0.0076	<0.001	<0.0011	<0.01	<0.001	<0.0011	3,000	5,000	300,000
Benzo(a)Anthracene	<0.0021	<0.0021	0.0239	<0.0021	<0.0021	<0.021	<0.0021	<0.0022	17	0.088	3.9
Benzo(a)Pyrene	<0.0021	<0.0021	0.0461	<0.0021	<0.0021	<0.021	<0.0021	<0.0022	48	0.0088	0.39
Benzo(b)Fluoranthene	<0.001	<0.001	0.0280	<0.001	<0.0011	<0.01	<0.001	<0.0011	360	0.088	3.9
Benzo(k)Fluoranthene	<0.001	<0.001	0.0231	<0.001	<0.0011	<0.01	<0.001	<0.0011	6,800	1.8	39
Benzo(ghi)Perylene	<0.0018	<0.0017	0.0274	<0.0018	0.0586	<0.018	<0.0018	<0.0019	870	0.88	39
Chrysene	<0.0013	<0.0013	0.0159	<0.0013	<0.0014	<0.014	<0.0013	<0.0014	37	8.8	390
Dibenzo(a,h)Anthracene	<0.0021	<0.0021	<0.0021	<0.0021	0.00424	<0.021	<0.0021	<0.0022	38	0.0088	0.39
Fluoranthene	<0.0013	<0.0013	0.099	0.00229	0.0351	0.0537	0.0112	<0.0014	500	600	40,000
Fluorene	0.00559	<0.0013	<0.0014	<0.0013	<0.0014	<0.014	<0.0013	<0.0014	100	600	40,000
Indeno(1,2,3-cd)Pyrene	<0.0013	<0.0013	0.0349	<0.0013	0.00188	<0.014	0.00314	<0.0014	680	0.088	3.9
1-Methyl Naphthalene	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.021	<0.0021	<0.0022	23	1,100	70,000
2-Methyl Naphthalene	<0.0024	<0.0024	<0.0024	<0.0024	<0.0025	<0.024	<0.0024	<0.0025	20	600	40,000
Naphthalene	<0.0018	<0.0017	<0.0018	<0.0018	<0.0018	<0.018	<0.0018	<0.0019	0.4	20	110
Phenanthrene	0.00438	<0.0028	0.0573	<0.0028	0.0105	1.01	0.257	<0.003	1.8	18	390
Pyrene	<0.0059	<0.0059	0.0710	<0.0059	<0.0061	<0.06	<0.0059	<0.0062	8,700	500	30,000

NOTES:
The laboratory analytical results and residual contaminant levels (RCLs) are in milligrams per kilogram (mg/kg) on a dry weight basis. Concentrations exceeding the NR 720 generic RCL for diesel range organics (DRO) or the WDNR suggested RCL for polycyclic aromatic hydrocarbons (PAHs) are in bold text and shaded.
Samples were collected on at B-20 and B-21 October 1 and at B-22 on October 2,1998, when the depth to water was about 70 feet below ground surface (bgs).
Sample ID = Borehole location (e.g., B-20) and sample depth (e.g., 50-52 feet bgs).

Gannett Fleming

FIGURE G-1



NOTE

The Sample Location Where DRO Concentrations Exceed NR-720 Generic Residual Contaminant Level Of 100 ppm Is In BOLD.

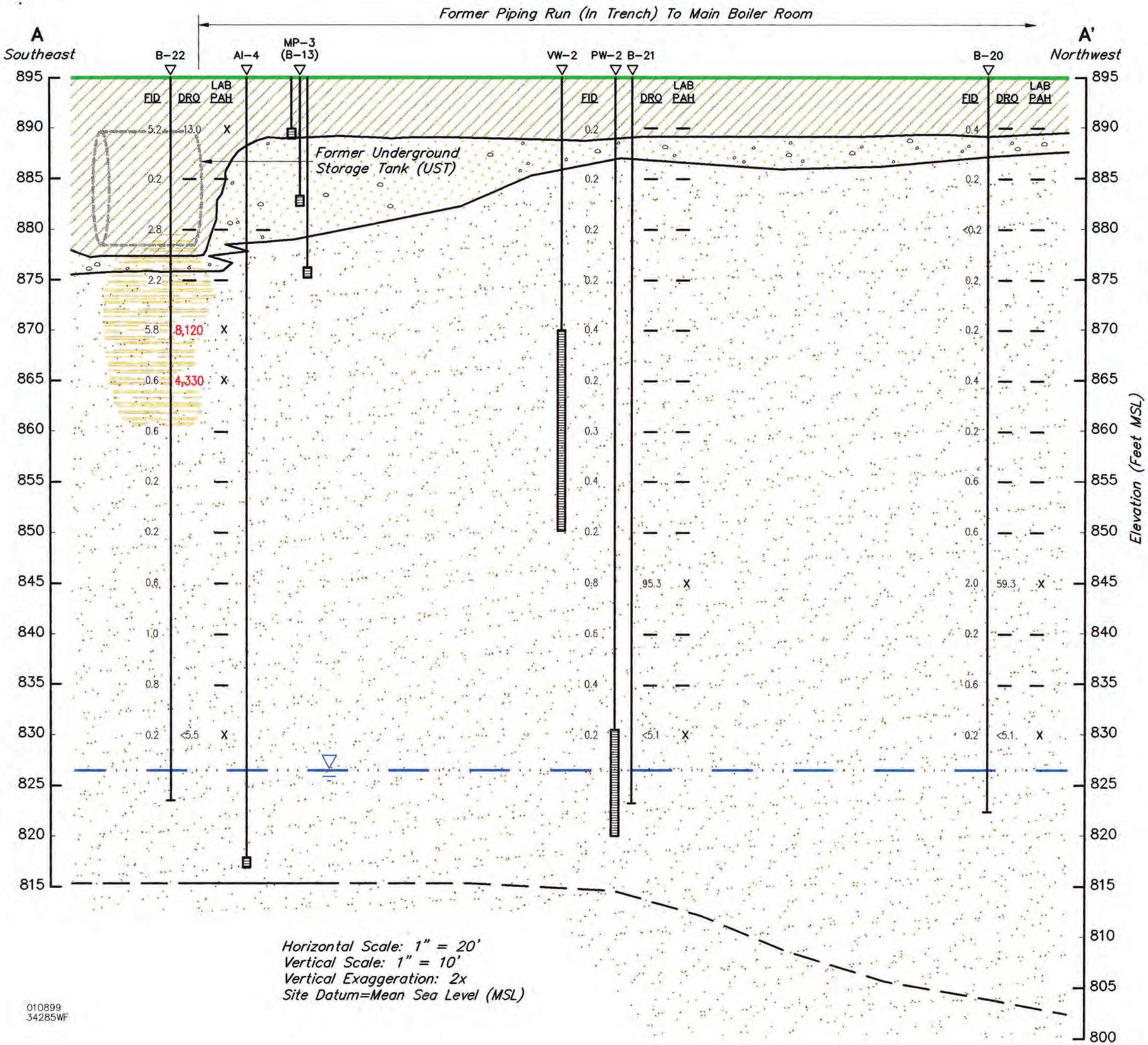
FOLLOW-UP SOIL SAMPLING LOCATIONS (OCTOBER 1998)

NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

011999
34285WC

Gannett Fleming

FIGURE H-1



010899
34285WF

LEGEND

Well Construction

- Well/Borehole Identification (MW-1)
- Well Casing
- Screened Interval

Soil Sampling Results (ppm)

DRO Concentations Which Exceed The NR 700 Generic Residual Contaminant Level Of 100 ppm Are In BOLD.

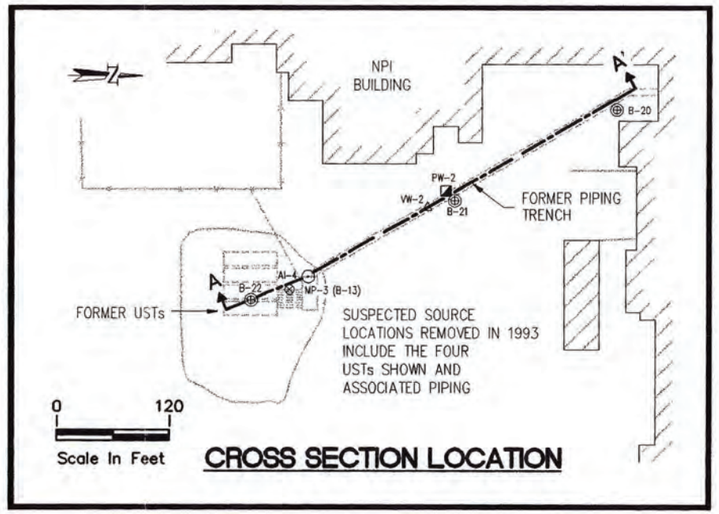
— =Not Analyzed

H =Heavily Impacted Based On Olfactory And Visual Evidence. Not Analyzed

X =Below Detection Limit

Geologic Units

- Fill
- Medium Grained Sand With Gravel
- Poorly Graded Sand With Gravel
- Estimated Extent Of Impacted Soil
- Geologic Contact
- Water Table (10/1/98)



POST-REMEDIAL GEOLOGIC CROSS SECTION A-A'

NATIONAL PRESTO INDUSTRIES, INC.

EAU CLAIRE, WISCONSIN

NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

TABLE I-1

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Parameter	Benzo(a)pyrene	Naphthalene	Fluorene	Diesel Range Organics
NR 140 Enforcement Standard (ES)	**0.2**	**40**	**400**	**NS**
NR 140 Preventative Action Limit (PAL)	**0.02**	**8**	**80**	**NS**
PW-1				
10/01/94	**0.919**	<0.22	<0.12	138
01/18/95	<0.12	<0.22	<0.12	178
04/19/95	<0.2	<0.18	<0.16	<100
07/19/95	<0.1	<0.09	<0.08	242
10/10/95	**0.187**	<0.09	<0.08	335
01/11/96	**0.135**	<0.09	<0.08	164
04/17/96	<0.07	<0.03	<0.06	175
07/10/96	<0.07	<0.03	<0.06	256
09/30/96	<0.07	<0.03	<0.06	194
05/21/97	<0.07	<0.03	<0.06	261
10/23/97	<0.12	<0.1	<0.08	126
PW-2				
10/01/94	**1.08**	<0.11	<0.06	784
01/18/95	<0.06	<0.11	<0.06	671
04/19/95	<0.1	<0.09	<0.08	131
07/19/95	<0.1	<0.09	<0.08	159
10/10/95	<0.1	<0.09	<0.08	651
01/11/96	<0.1	<0.09	<0.08	400
04/17/96	<0.07	<0.03	<0.06	288
07/10/96	<0.07	<0.03	<0.06	236
09/30/96	<0.14	<0.06	<0.12	222
05/21/97	<0.07	<0.03	<0.06	176
10/23/97	<0.06	<0.05	<0.04	<100
PW-3				
10/01/94	**0.582**	<0.11	<0.06	175
01/18/95	**0.434**	<0.11	<0.06	218
04/19/95	**0.265**	<0.09	<0.08	<100
07/19/95	**0.332**	<0.09	<0.08	159
10/10/95	**0.555**	<0.09	<0.08	158
01/11/96	**0.402**	<0.09	<0.08	177
04/17/96	**0.198**	<0.03	<0.06	108
PW-3R				
05/21/97	<0.07	<0.03	<0.06	<100
10/23/97	<0.07	<0.06	<0.05	<100
PW-4				
10/01/94	**1.1**	**440**	<0.6	52,600
01/18/95	<0.06	**195**	59.1	135,000
07/19/95	<0.7	**64.8**	<0.6	151,000
10/10/95	FP	FP	FP	FP
01/11/96	FP	FP	FP	FP
04/17/96	FP sheen	FP sheen	FP sheen	FP sheen
07/10/96	FP sheen	FP sheen	FP sheen	FP sheen
09/30/96	<0.07	**46.3**	<0.06	89,200
05/21/97	<0.7	**85.1**	<0.06	275,000
10/23/97	<0.07	<0.06	<0.05	69,905
01/28/98	<0.06	**57.8**	<0.04	120,000
04/23/98	<0.06	<0.05	**91.3**	61,500
07/21/98	<0.12	7.48	<0.08	9,200
09/30/98	<0.12	7.02	<0.08	9,910
PW-5				
10/01/94	**0.245**	1.00	<0.06	320
01/18/95	**0.527**	<0.11	<0.06	326
04/19/95	**0.379**	<0.09	<0.08	147
07/19/95	**0.235**	<0.09	<0.08	305
10/10/95	**0.377**	<0.18	<0.16	395
01/11/96	**0.246**	<0.09	<0.08	353
04/17/96	**0.243**	<0.03	<0.06	279
07/10/96	**0.124**	<0.03	<0.06	215
09/30/96	<0.07	<0.03	<0.06	206
05/21/97	<0.07	<0.03	<0.06	175
10/23/97	<0.06	<0.05	<0.04	<100
09/30/98	<0.06	<0.05	<0.04	198

NOTES:

Analytical results are in micrograms per liter (ug/L).

Concentrations exceeding the NR 140 ES are shaded. Concentrations exceeding the NR 140 PAL are bold.

NS = no standard exists.

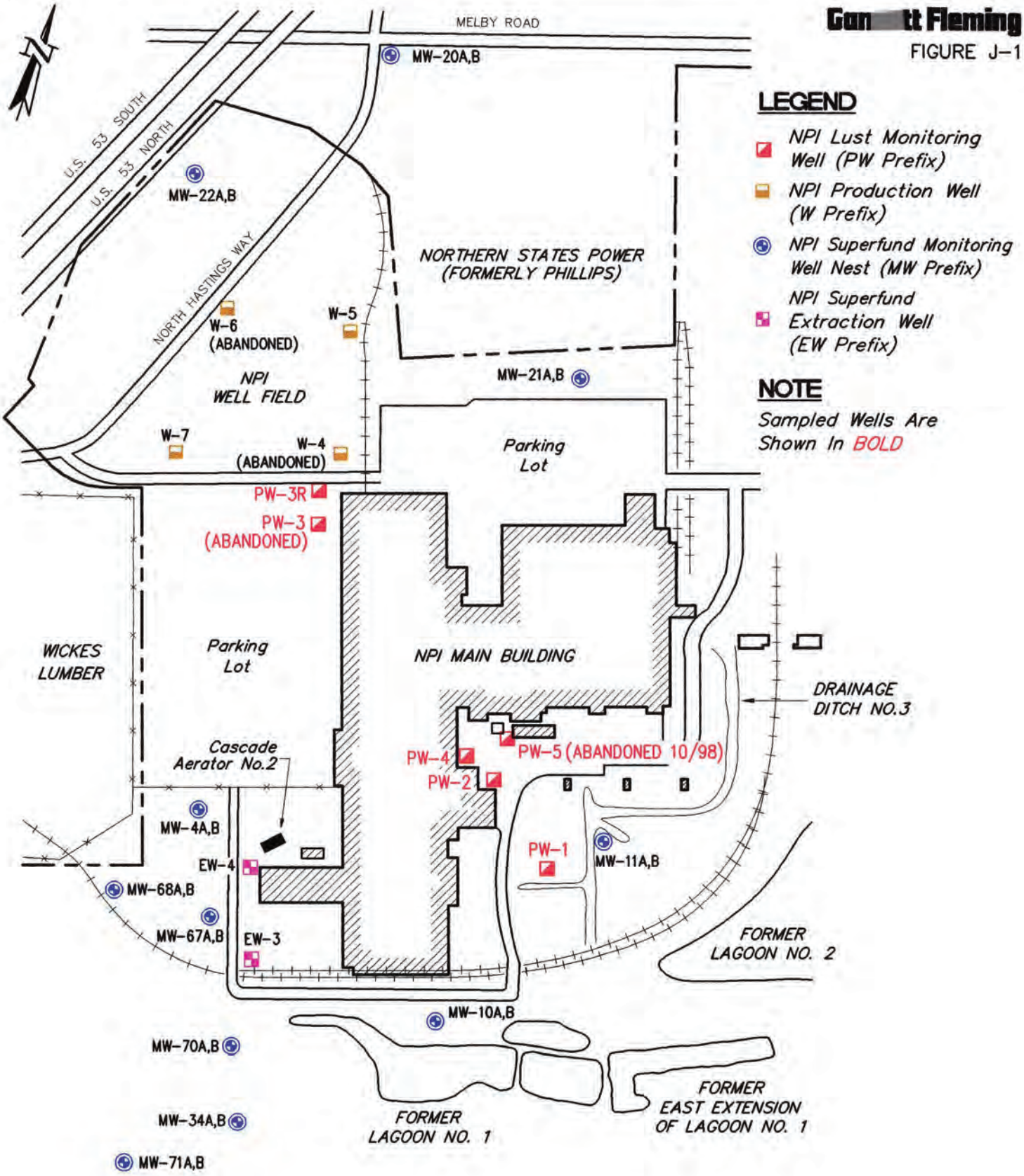
FP = free product.

In situ air sparging was conducted between 3/19/96 and 9/16/98.

PW-3 was abandoned in June 1996 and replaced with PW-3R in December 1996.

Gannett Fleming

FIGURE J-1

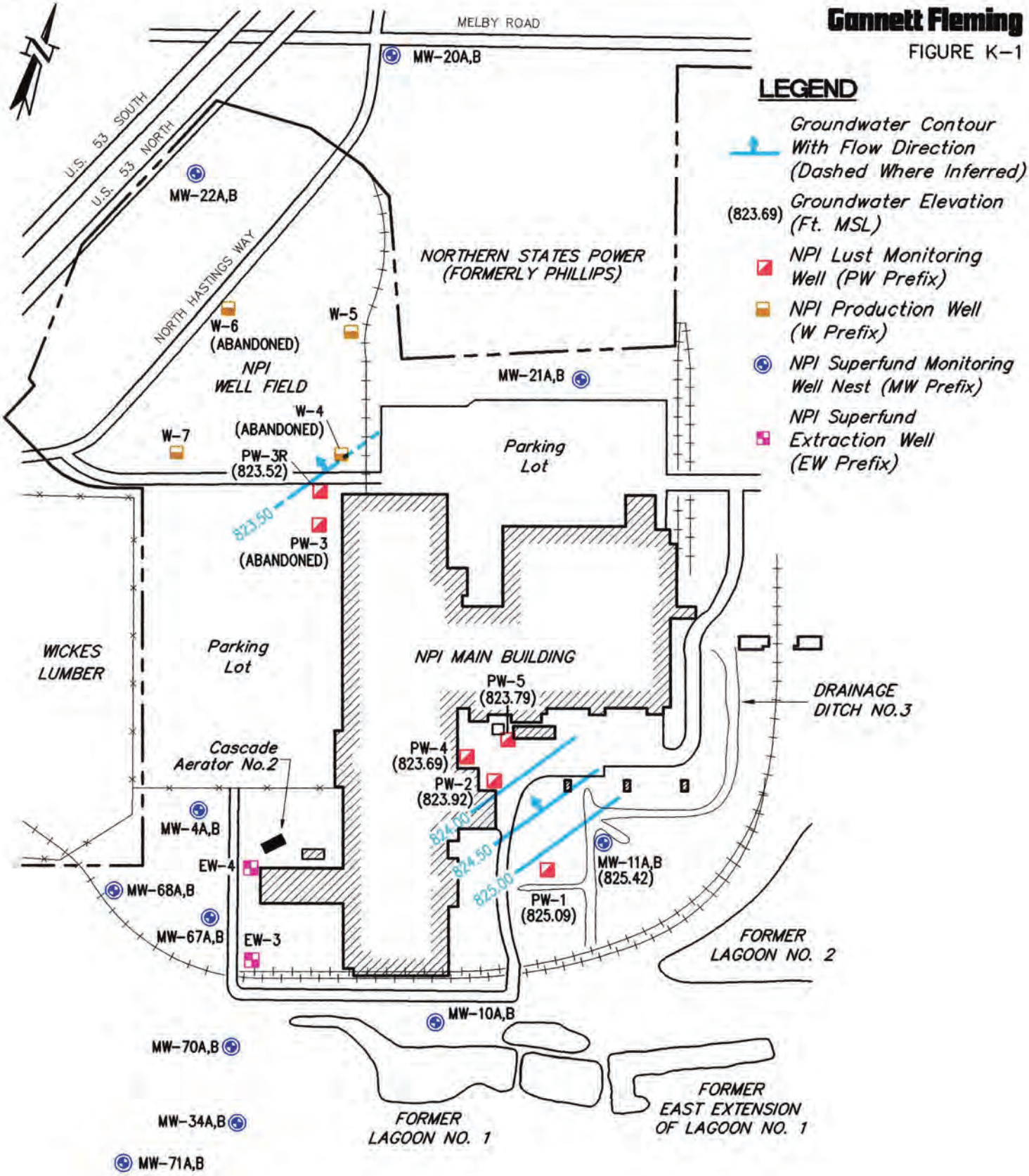


GROUNDWATER SAMPLE LOCATION MAP

NATIONAL PRESTO INDUSTRIES, INC.

EAU CLAIRE, WISCONSIN

011199
34285WH



GROUNDWATER CONTOUR MAP (7/21/98)

NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

011199
34285WI

NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

TABLE K-1

GROUNDWATER DEPTH AND ELEVATION DATA

Elevation (ft MSL) of	PW-1	PW-2	PW-3	PW-3R	PW-4	PW-5	MW-11A
Top of PVC Casing	898.28	894.71	898.83	896.21	895.59	894.53	896.03
Date	Depth to Water (feet)						
07/15/94	72.42	69.83	NM	NI	NM	69.85	NM
07/19/95	74.46	72.10	76.66	NI	70.99	72.14	NM
10/10/95	73.73	71.26	75.83	NI	NM	71.30	NM
01/11/96	73.70	71.16	75.74	NI	NM	71.20	71.13
04/17/96	74.26	71.71	76.30	NI	72.93	71.77	71.69
07/10/96	74.23	71.77	AB	NI	72.93	71.85	NM
09/30/96	74.08	71.70	AB	NI	72.78	71.66	NM
05/21/97	74.82	72.45	AB	74.38	73.54	72.40	72.50
10/23/97	74.03	71.68	AB	73.61	72.78	71.62	71.71
01/28/98	74.34	71.92	AB	73.84	72.98	70.86	72.04
04/23/98	74.20	71.88	AB	73.78	72.96	71.82	71.62
07/21/98	73.19	70.79	AB	72.69	71.90	70.74	70.61
Date	Groundwater Elevation (feet MSL)						
07/15/94	825.86	824.88	NM	NI	NM	824.68	NM
07/19/95	823.82	822.61	822.17	NI	824.60	822.39	NM
10/10/95	824.55	823.45	823.00	NI	NM	823.23	NM
01/11/96	824.58	823.55	823.09	NI	NM	823.33	824.90
04/17/96	824.02	823.00	822.53	NI	822.66	822.76	824.34
07/10/96	824.05	822.94	AB	NI	822.66	822.68	NM
09/30/96	824.20	823.01	AB	NI	822.81	822.87	NM
05/21/97	823.46	822.26	AB	821.83	822.05	822.13	823.53
10/23/97	824.25	823.03	AB	822.60	822.81	822.91	824.32
01/28/98	823.94	822.79	AB	822.37	822.61	823.67	823.99
04/23/98	824.08	822.83	AB	822.43	822.63	822.71	824.41
07/21/98	825.09	823.92	AB	823.52	823.69	823.79	825.42

NOTES:

In situ air sparging was conducted between 3/19/96 and 9/16/98.

PW-3 was abandoned in June 1996 and replaced with PW-3R in December 1996.

MW-11A is not part of the regular network of groundwater monitoring wells.

NM = Not measured.

NI = Not installed.

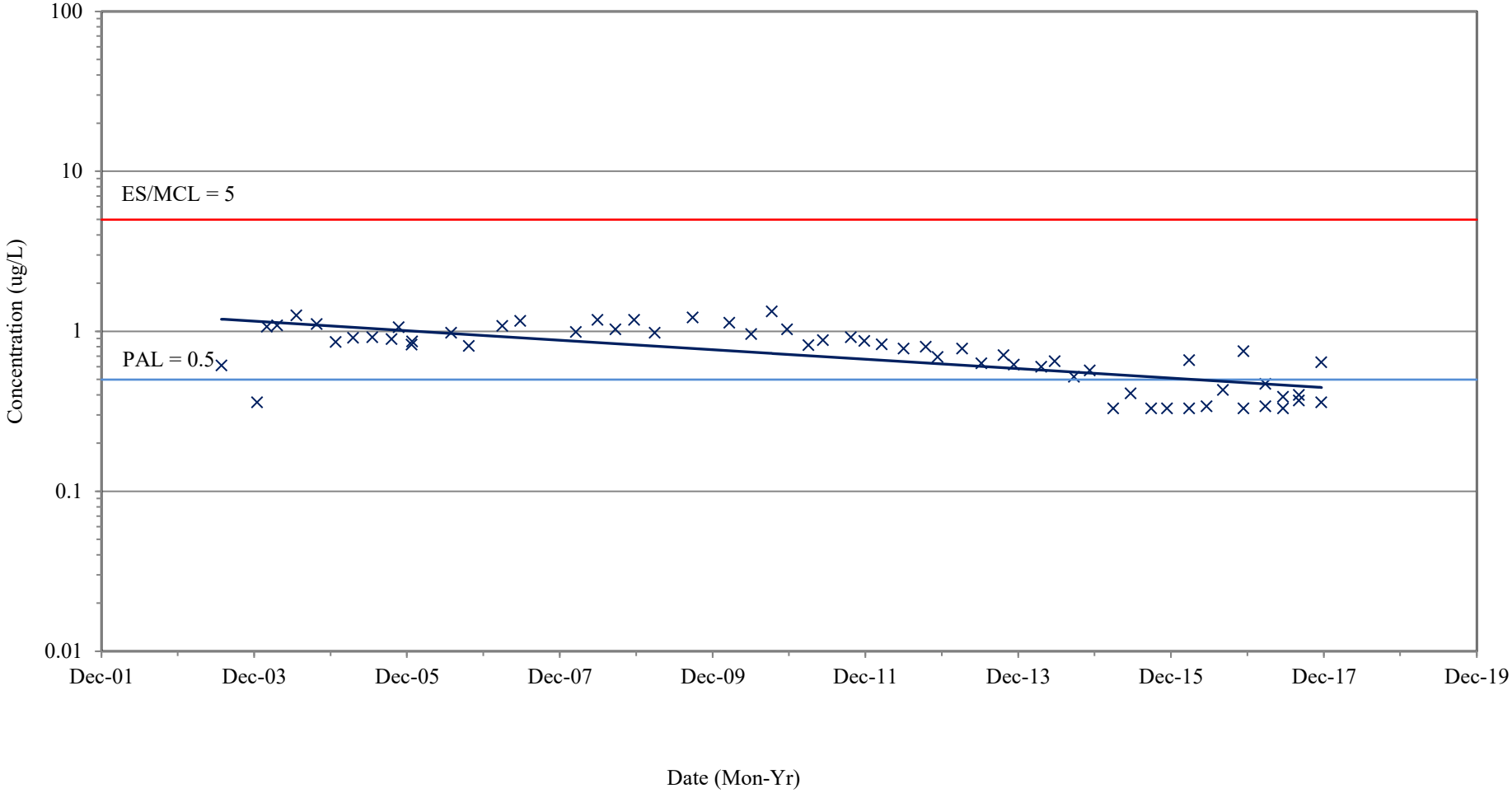
AB = Abandoned.

ATTACHMENT B

TCE CONCENTRATION VERSUS TIME GRAPHS

(EW-5, EW-6, AND SELECT SWC WELLS & PIEZOMETERS)

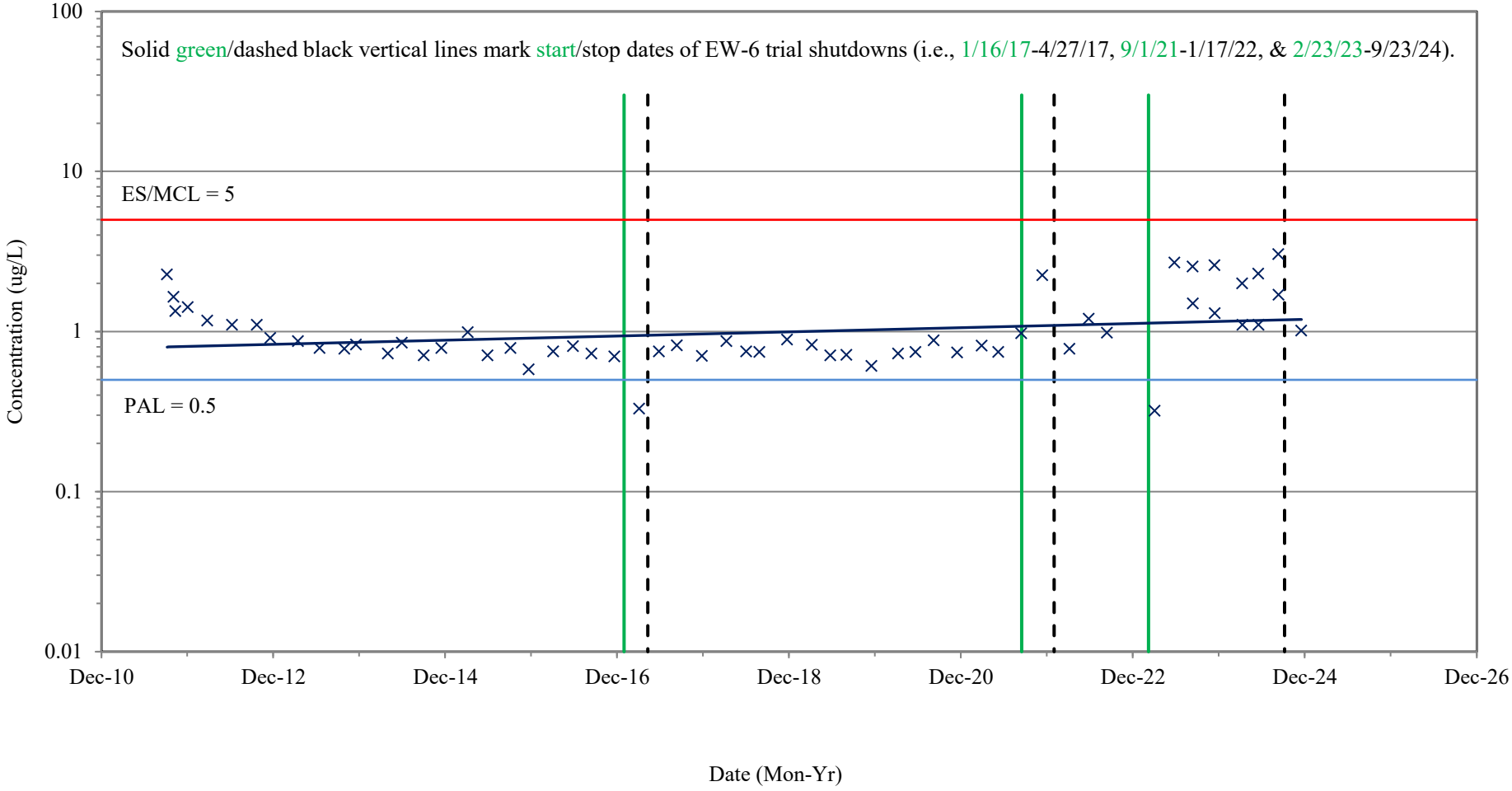
GANNETT FLEMING



Note: Non-detect concentrations (if any) are plotted at the detection limit and best-fit exponential trend line generated using Excel.

PLUME 1/2 GROUNDWATER TCE CONCENTRATIONS
EW-5 (GRID COORDINATE K7)

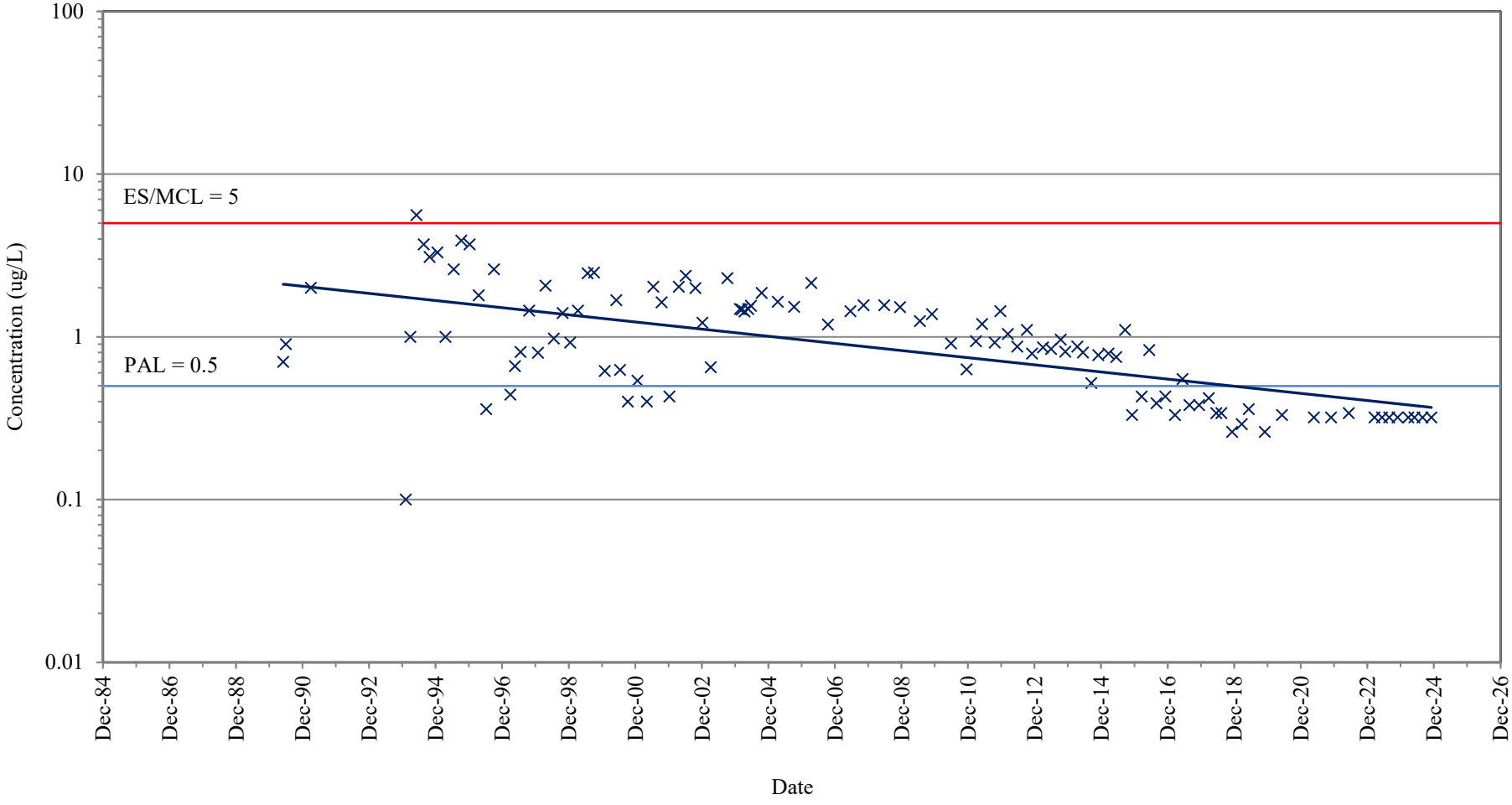
NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN



Note: Non-detect concentrations (if any) are plotted at the detection limit and best-fit exponential trend line generated using Excel.

PLUME 1/2 GROUNDWATER TCE CONCENTRATIONS
EW-6 (GRID COORDINATE K7)

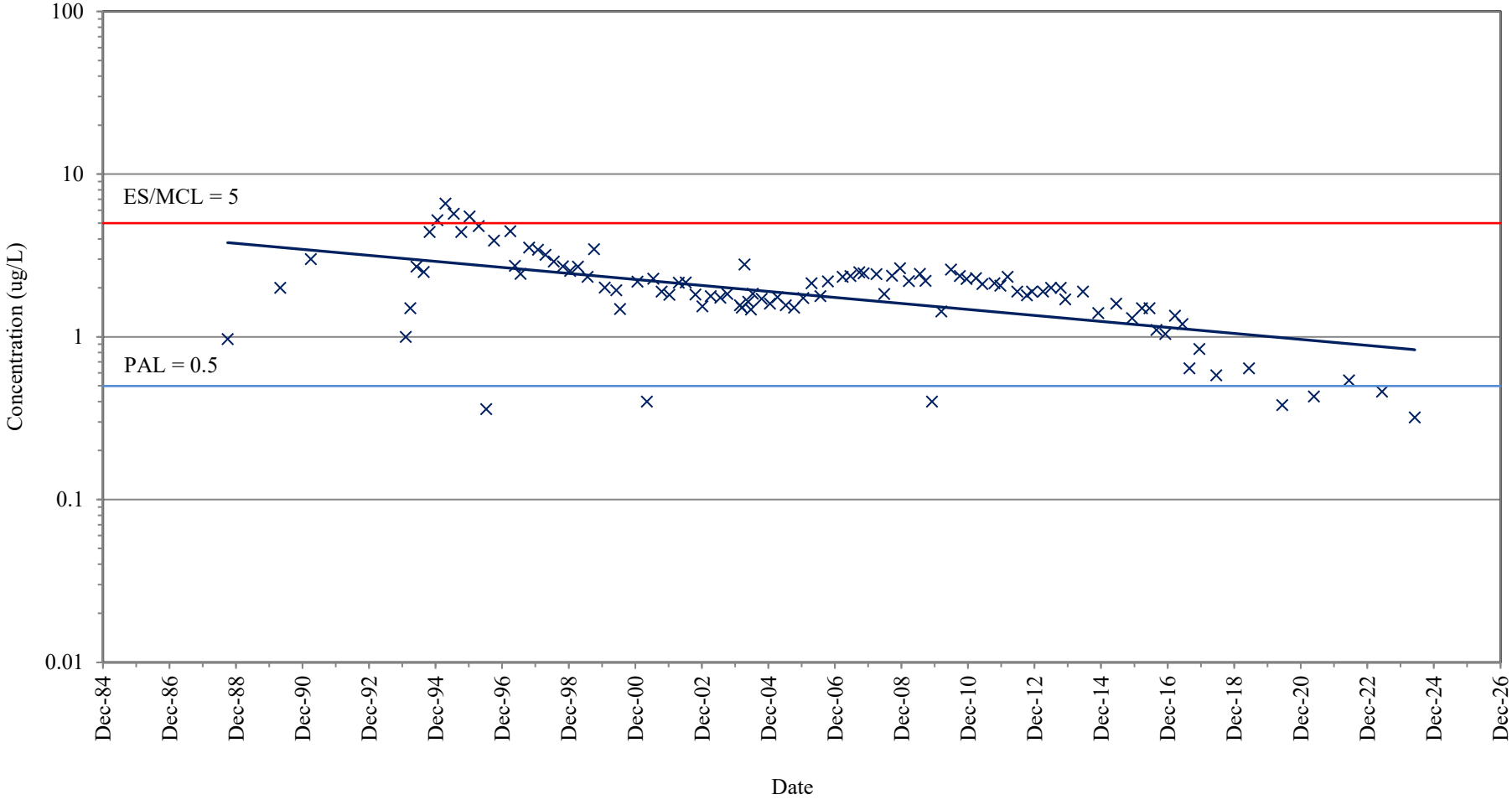
NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN



Note: Non-detect concentrations (if any) are plotted at the detection limit and best-fit exponential trend line generated using Excel.

PLUME 1/2 GROUNDWATER TCE CONCENTRATIONS
MW-4B (GRID COORDINATE K7)

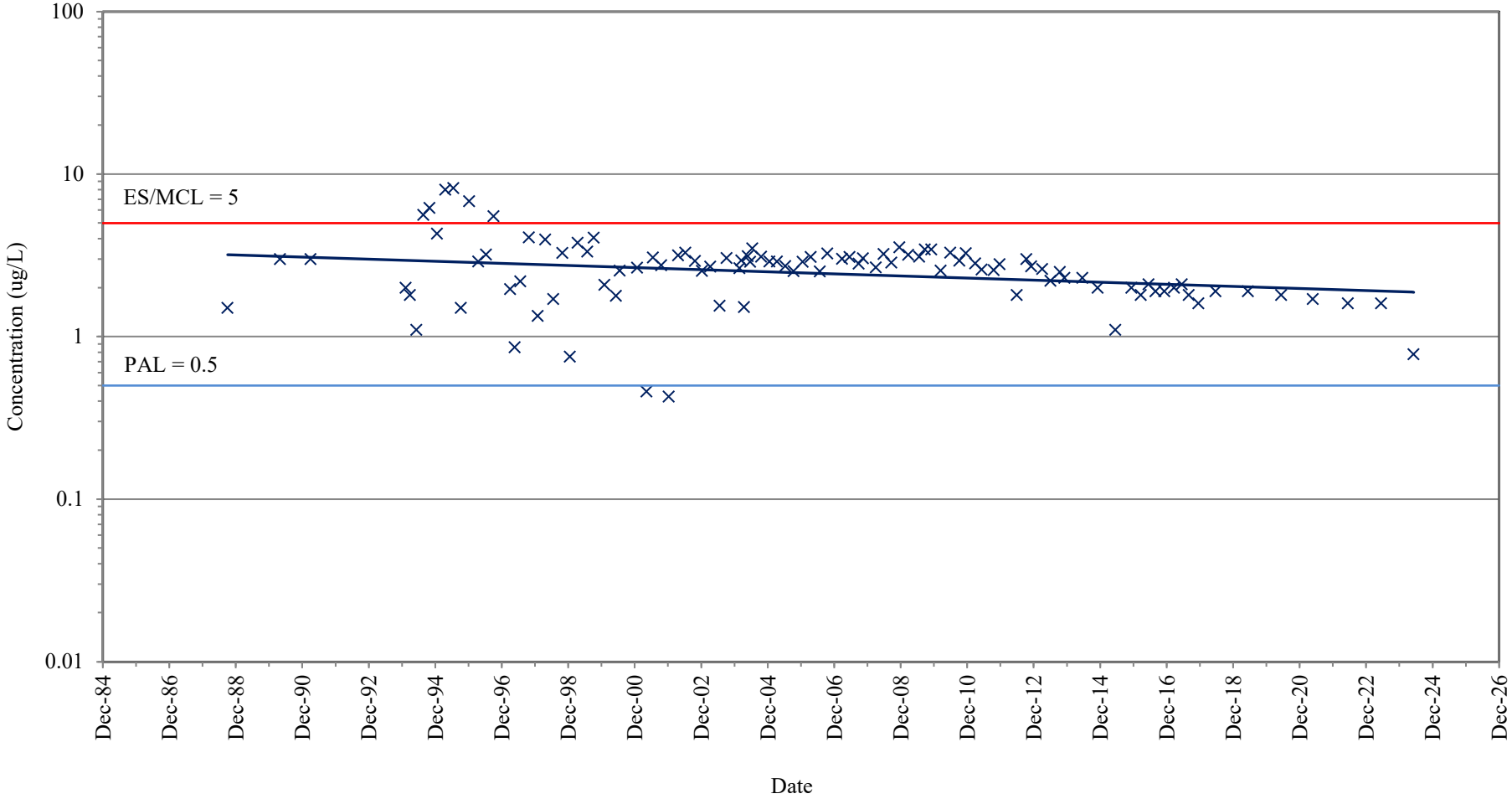
NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN



Note: Non-detect concentrations (if any) are plotted at the detection limit and best-fit exponential trend line generated using Excel.

PLUME 1/2 GROUNDWATER TCE CONCENTRATIONS
MW-23A (GRID COORDINATE J7)

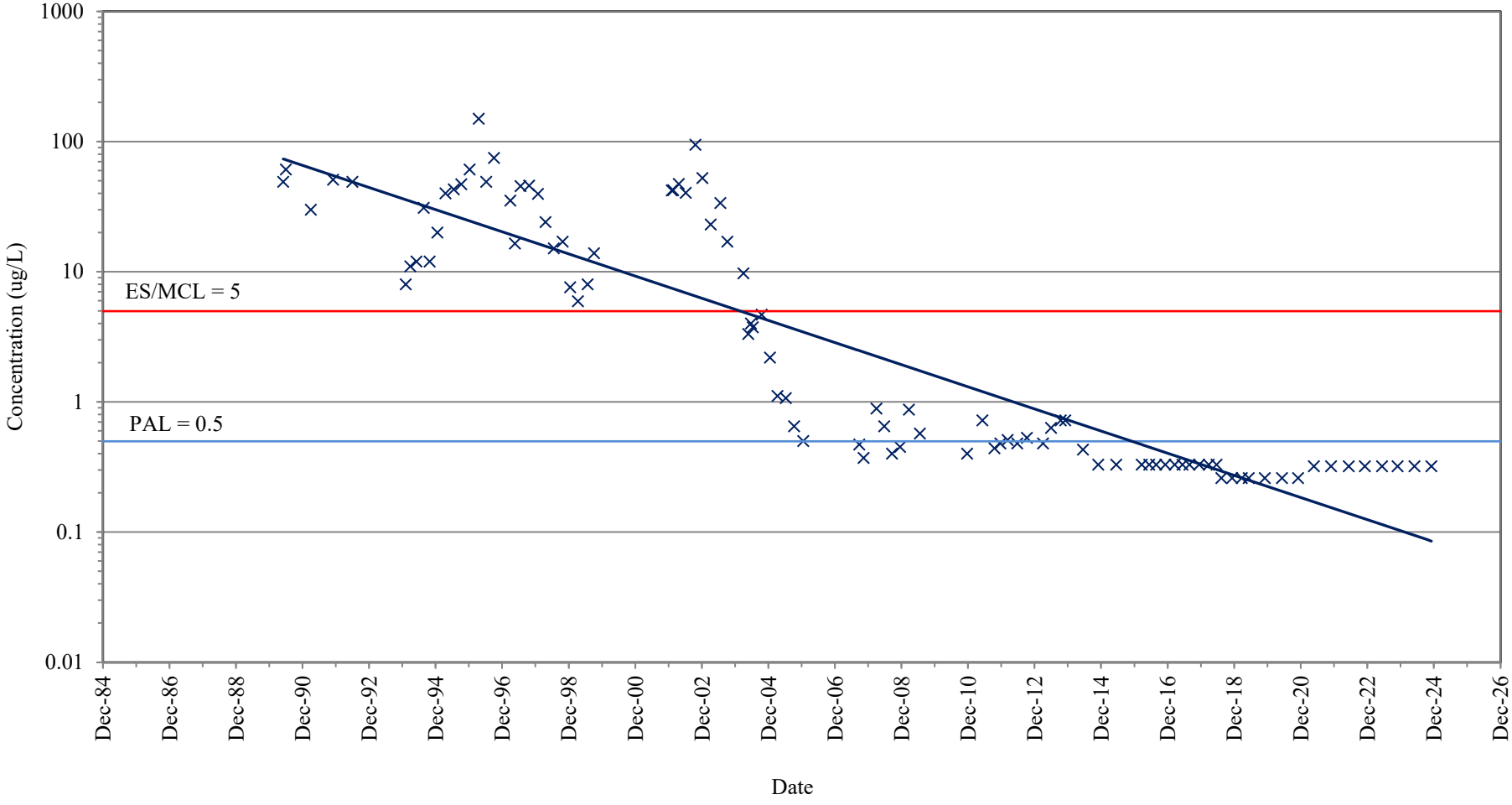
NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN



Note: Non-detect concentrations (if any) are plotted at the detection limit and best-fit exponential trend line generated using Excel.

PLUME 1/2 GROUNDWATER TCE CONCENTRATIONS
MW-23B (GRID COORDINATE J7)

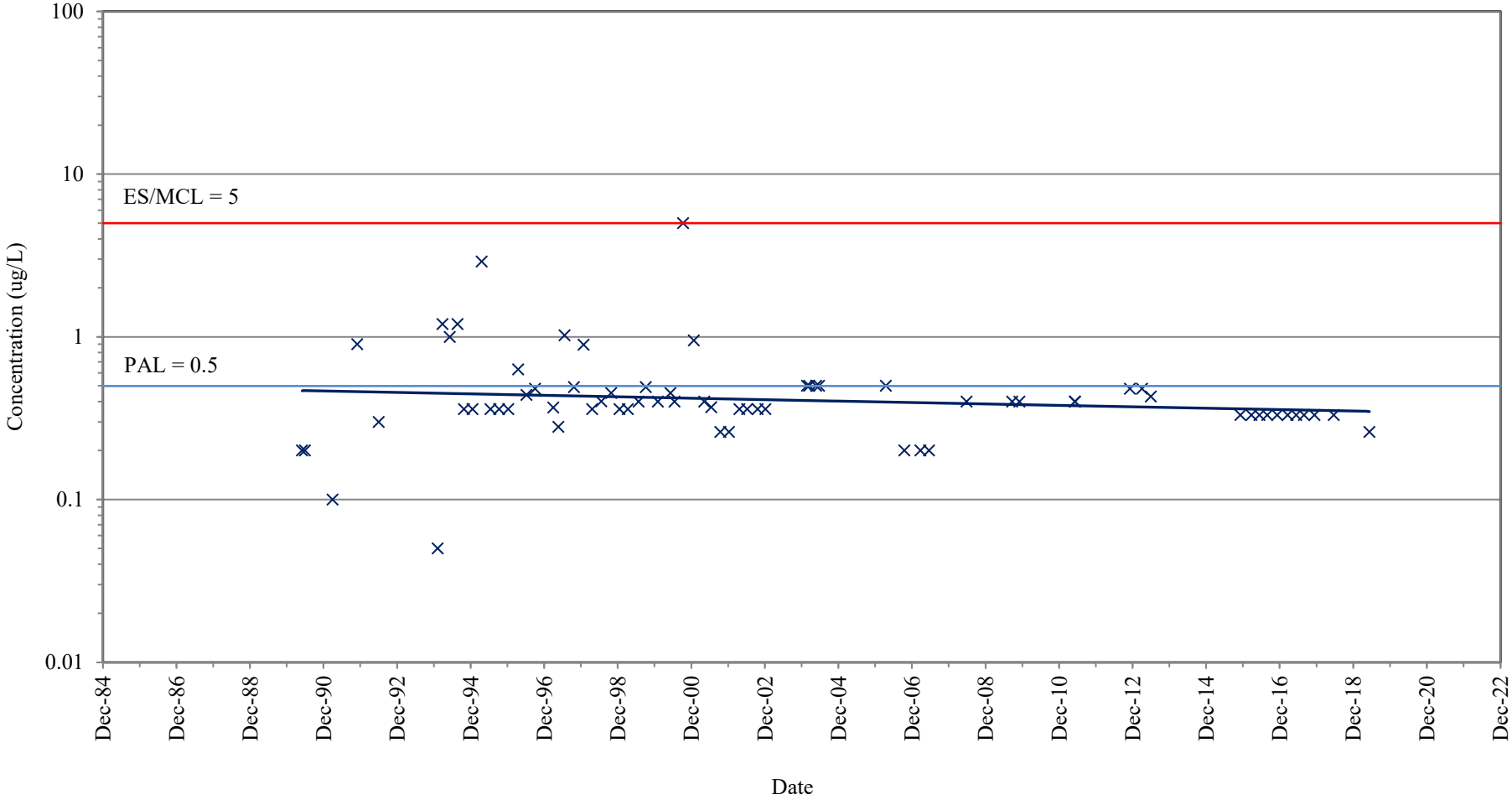
NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN



Note: Non-detect concentrations (if any) are plotted at the detection limit and best-fit exponential trend line generated using Excel.

PLUME 1/2 GROUNDWATER TCE CONCENTRATIONS
MW-34A (GRID COORDINATE K8)

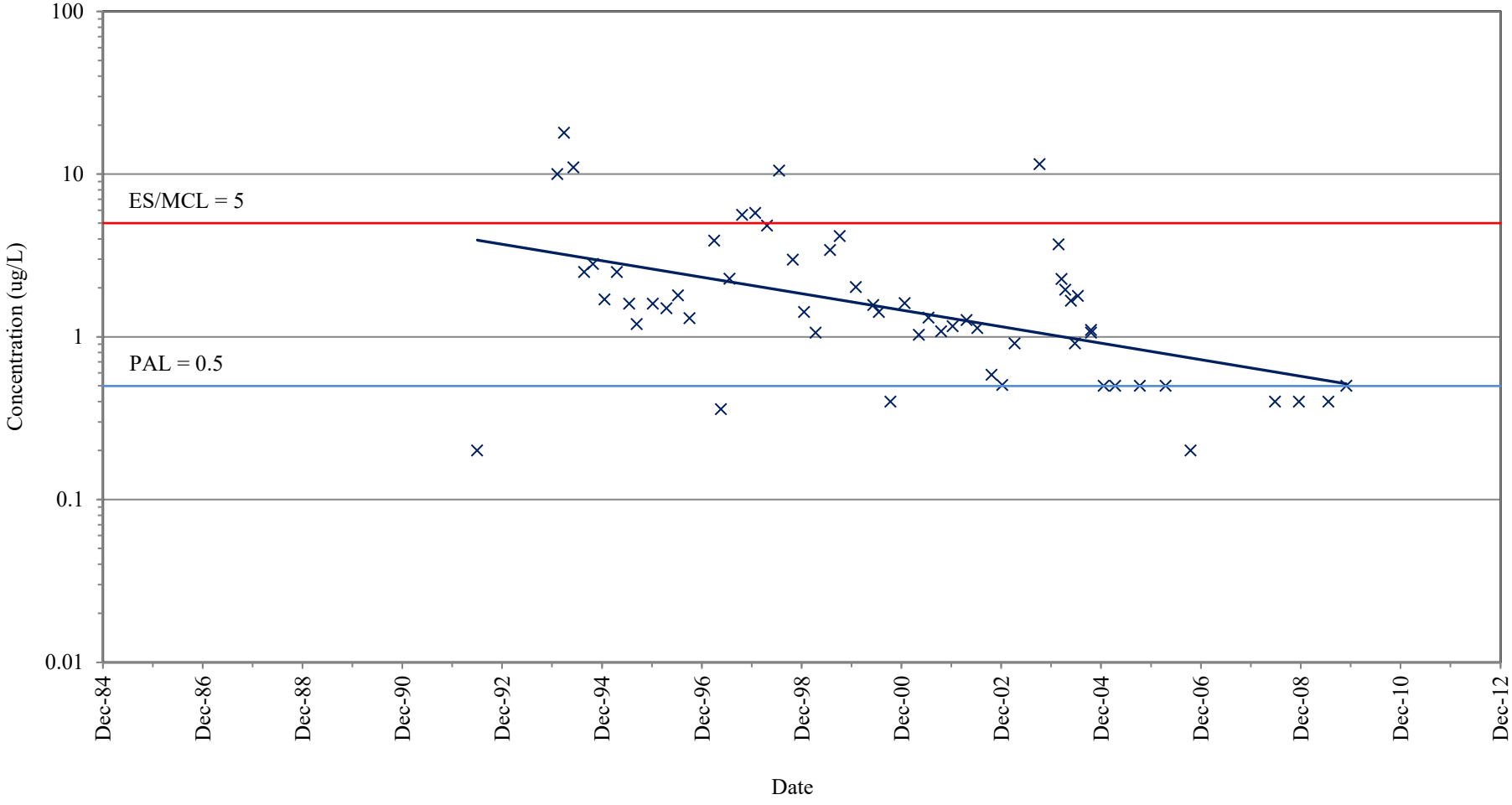
NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN



Note: Non-detect concentrations (if any) are plotted at the detection limit and best-fit exponential trend line generated using Excel.

PLUME 1/2 GROUNDWATER TCE CONCENTRATIONS
MW-34B (GRID COORDINATE K8)

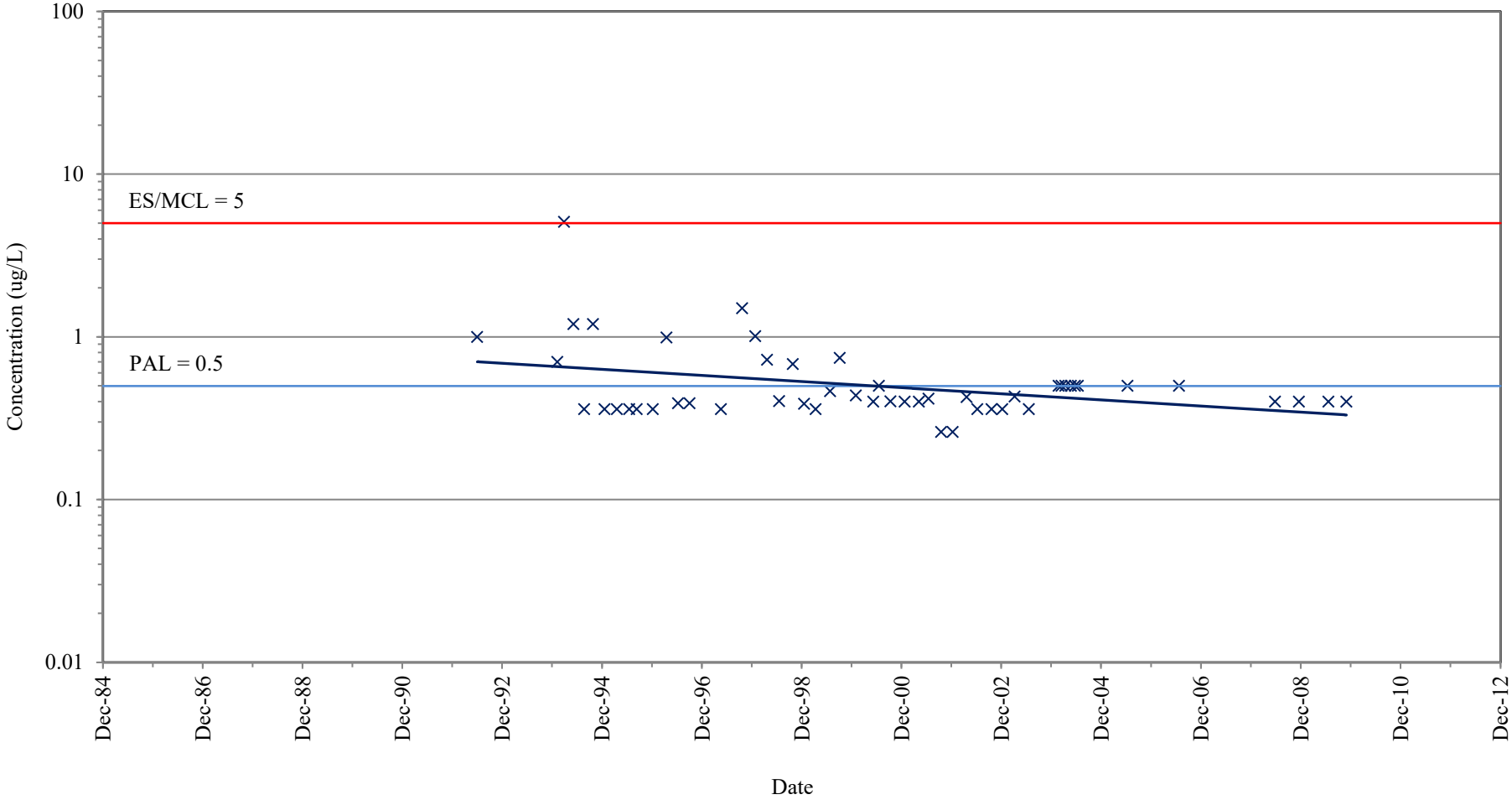
NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN



Note: Non-detect concentrations (if any) are plotted at the detection limit and best-fit exponential trend line generated using Excel.

PLUME 1/2 GROUNDWATER TCE CONCENTRATIONS
MW-67A (GRID COORDINATE K7)

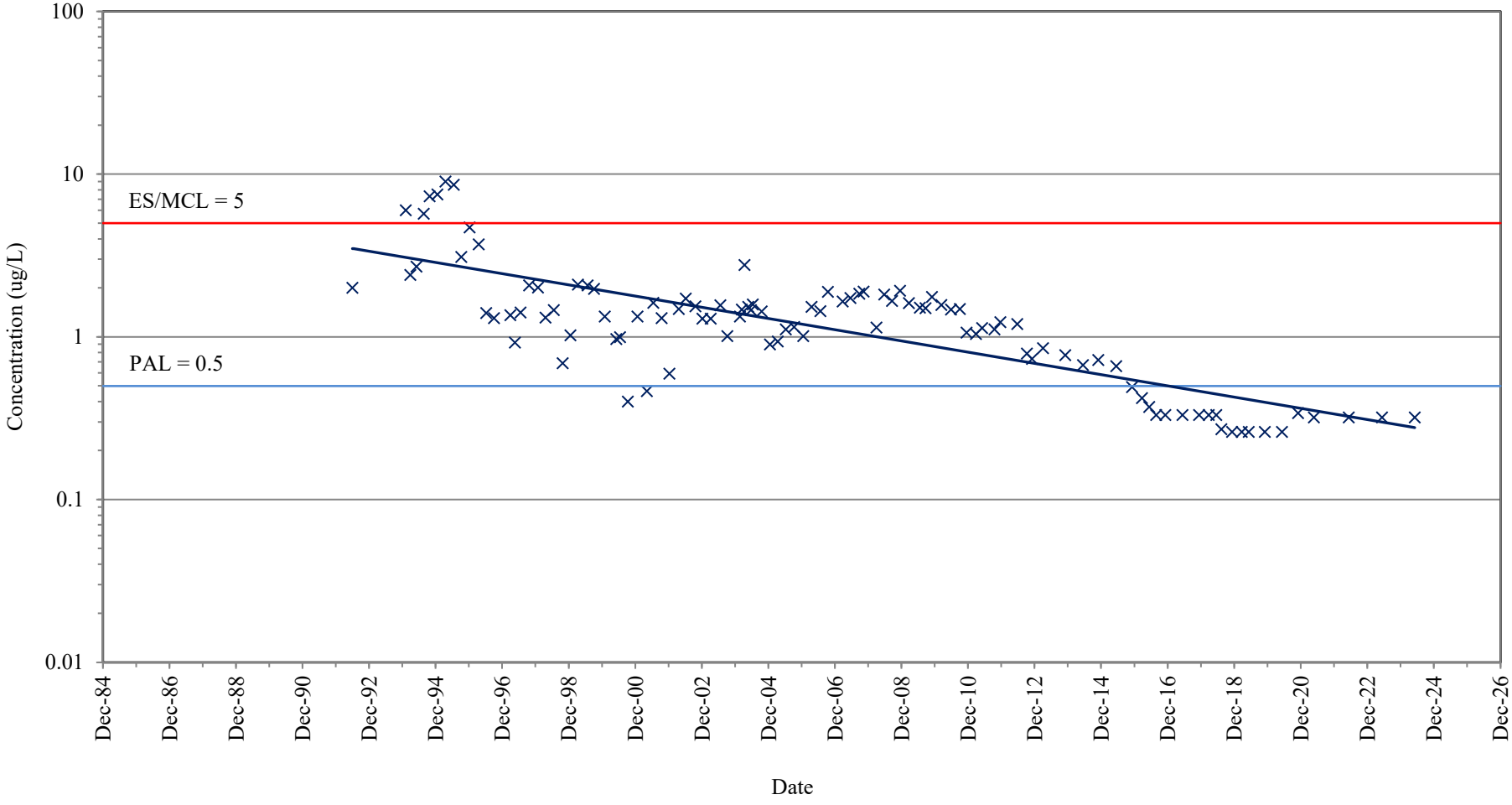
NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN



Note: Non-detect concentrations (if any) are plotted at the detection limit and best-fit exponential trend line generated using Excel.

PLUME 1/2 GROUNDWATER TCE CONCENTRATIONS
MW-67B (GRID COORDINATE K7)

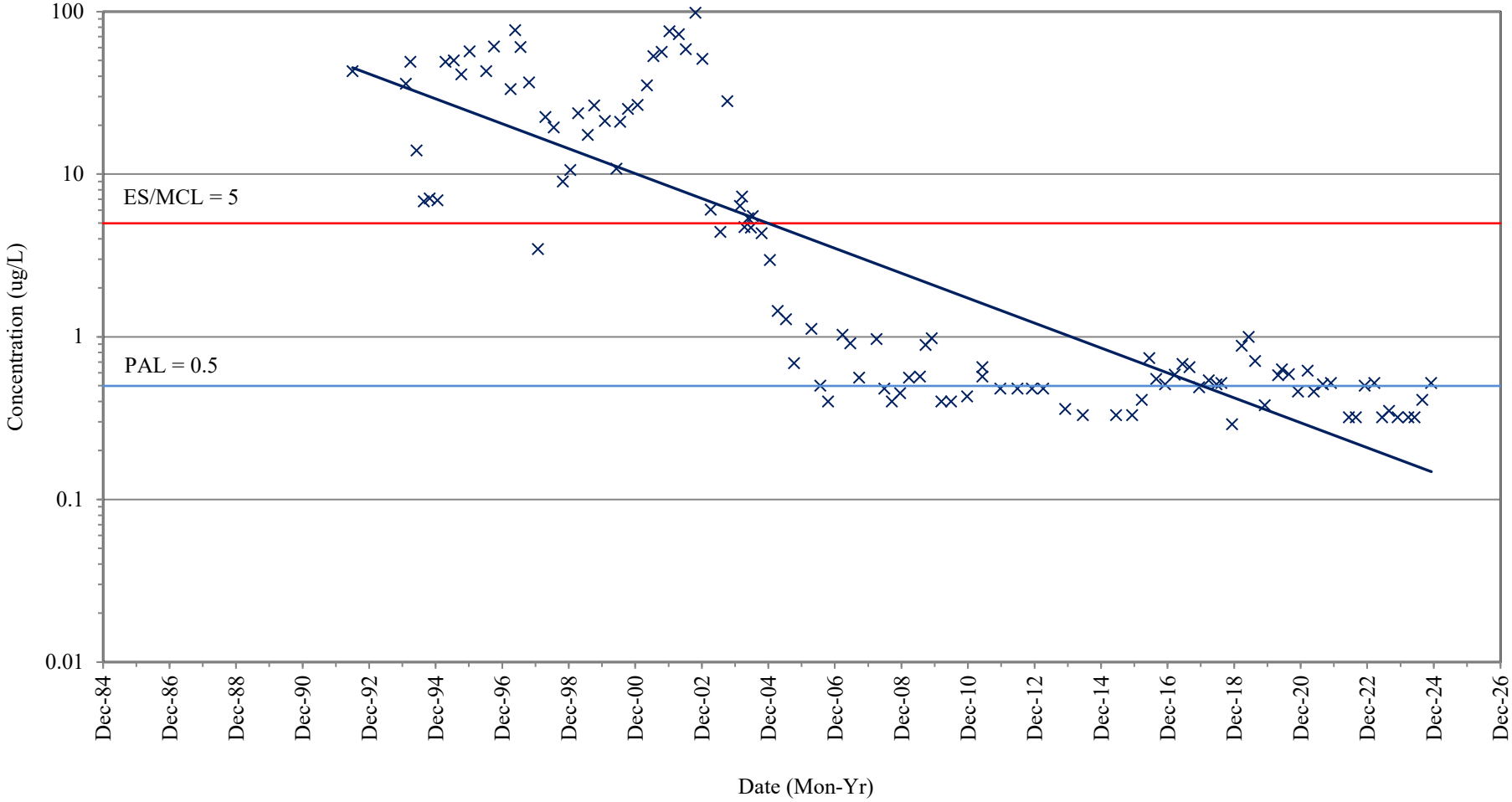
NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN



Note: Non-detect concentrations (if any) are plotted at the detection limit and best-fit exponential trend line generated using Excel.

PLUME 1/2 GROUNDWATER TCE CONCENTRATIONS
MW-68B (GRID COORDINATE K7)

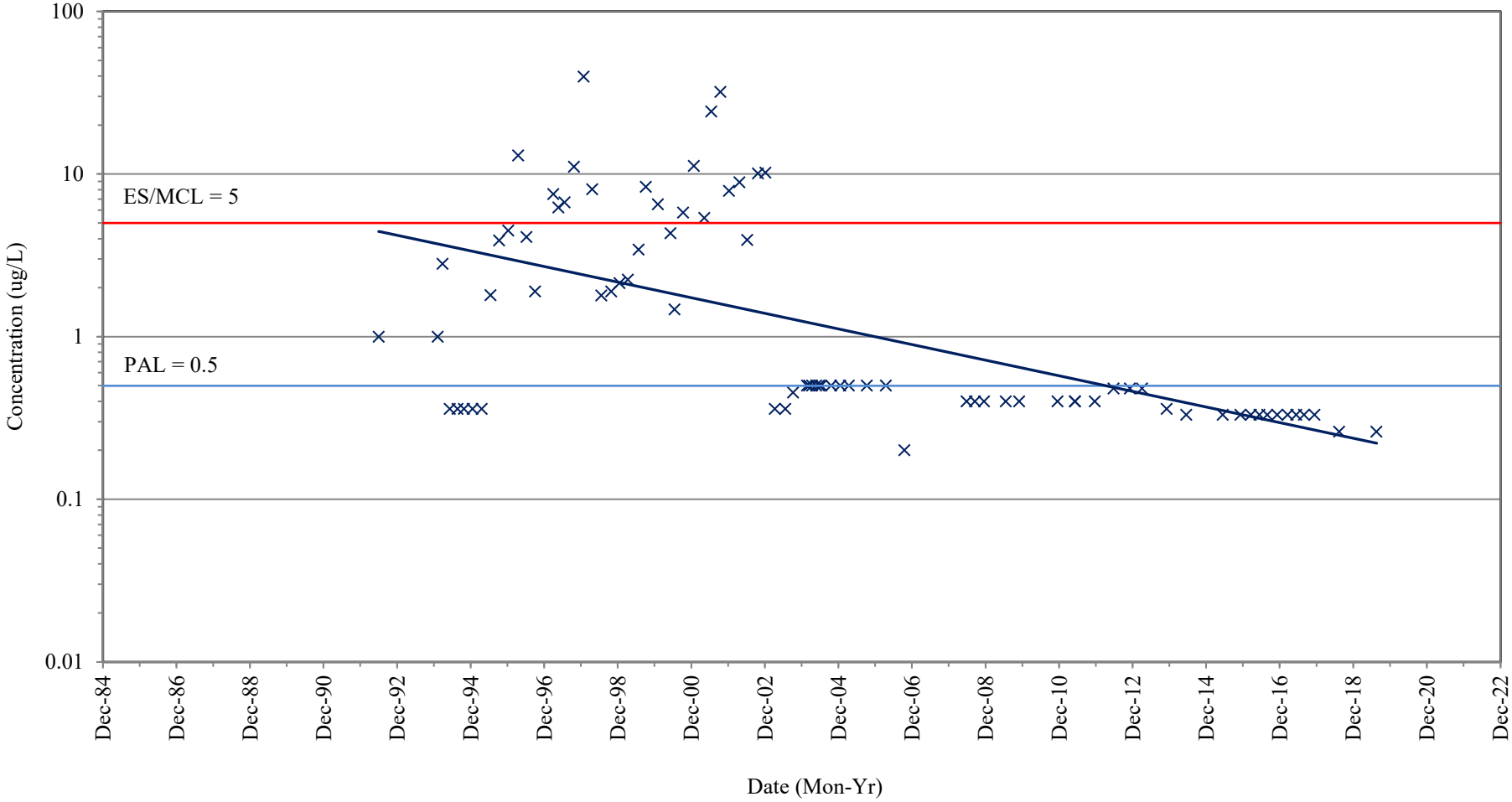
NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN



Note: Non-detect concentrations (if any) are plotted at the detection limit and best-fit exponential trend line generated using Excel.

PLUME 1/2 GROUNDWATER TCE CONCENTRATIONS
MW-70A (GRID COORDINATE K8)

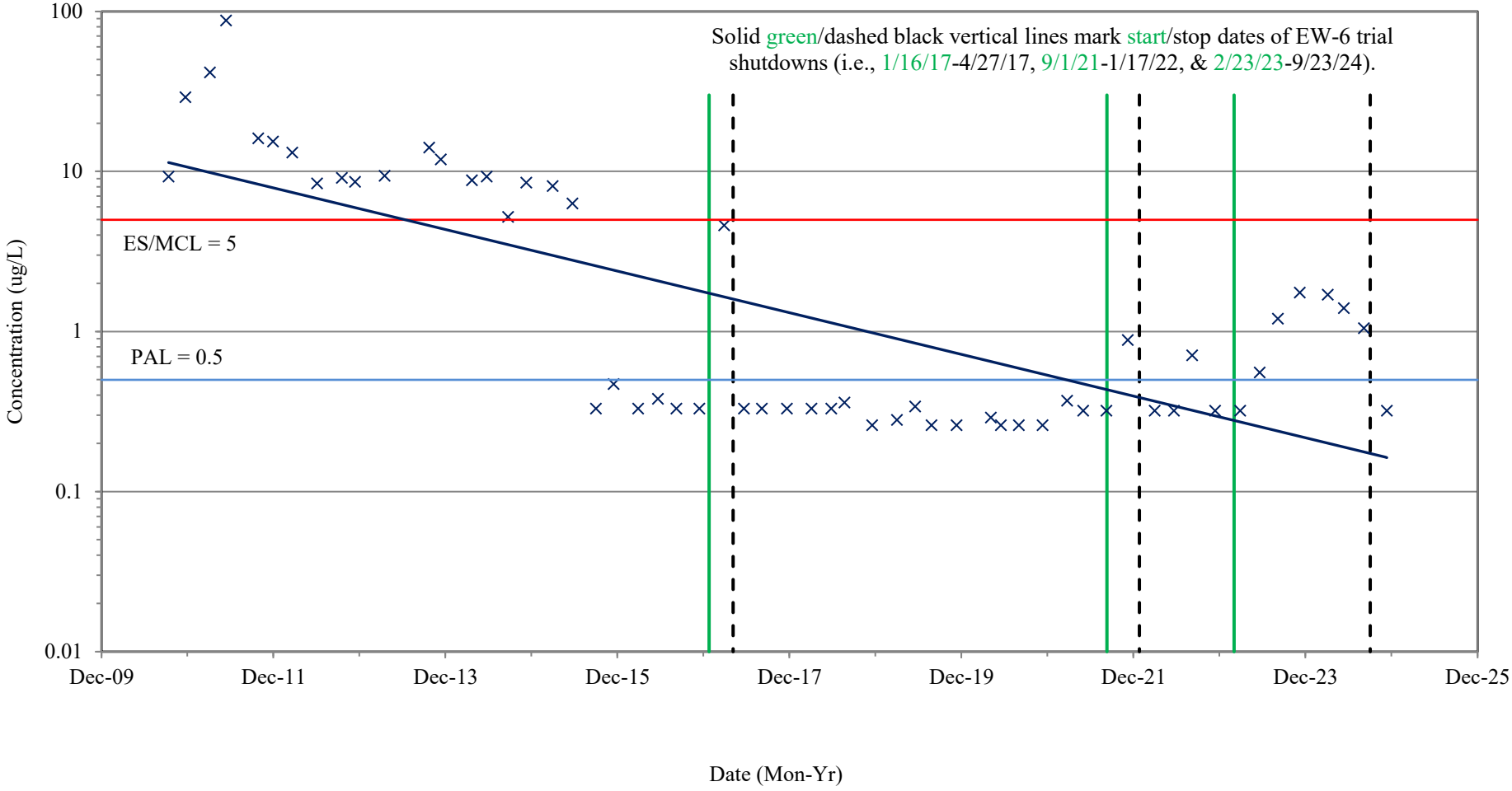
NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN



Note: Non-detect concentrations (if any) are plotted at the detection limit and best-fit exponential trend line generated using Excel.

PLUME 1/2 GROUNDWATER TCE CONCENTRATIONS
MW-70B (GRID COORDINATE K8)

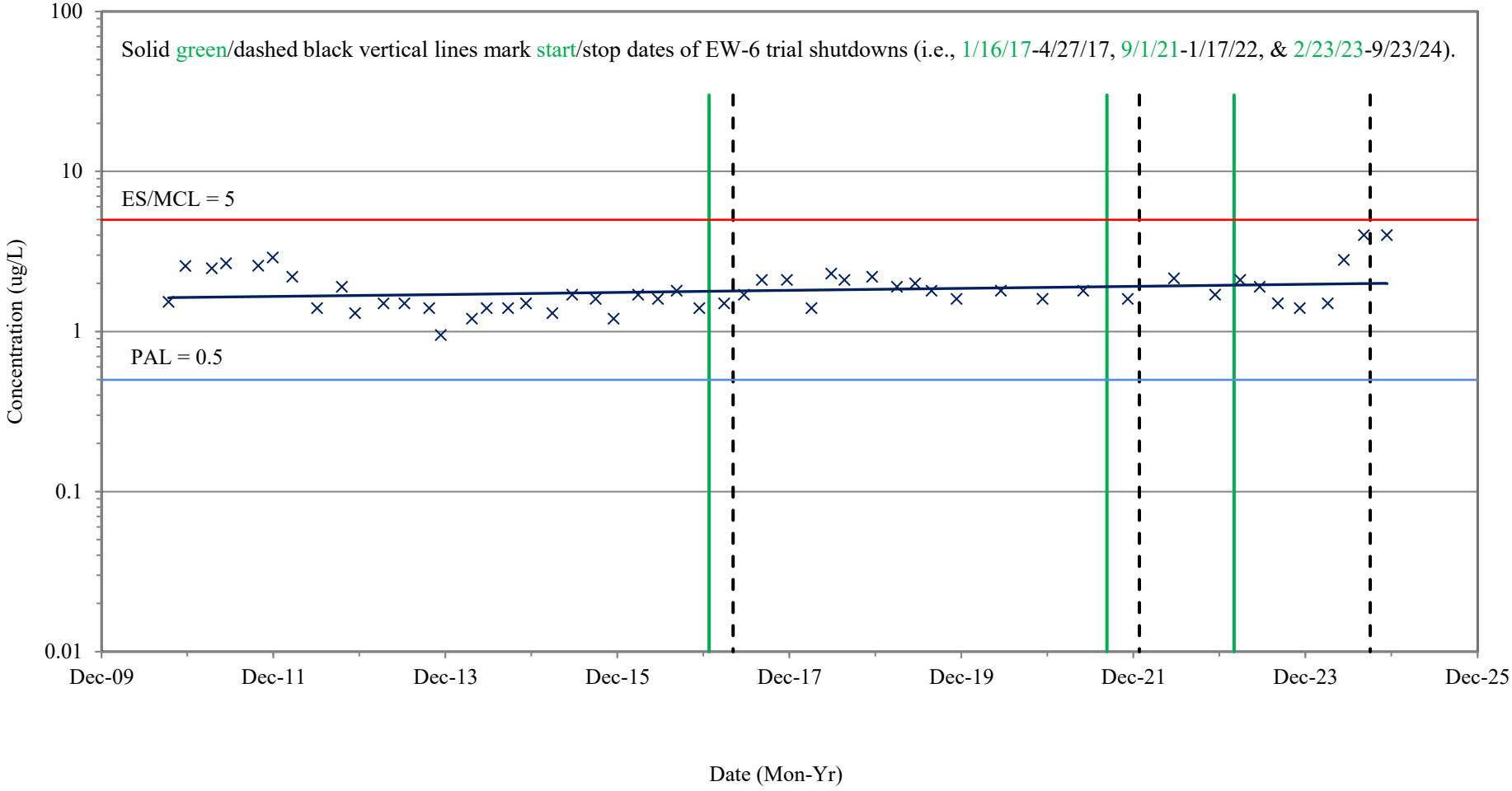
NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN



Note: Non-detect concentrations (if any) are plotted at the detection limit and best-fit exponential trend line generated using Excel.

PLUME 1/2 GROUNDWATER TCE CONCENTRATIONS
MW-76A (GRID COORDINATE K7)

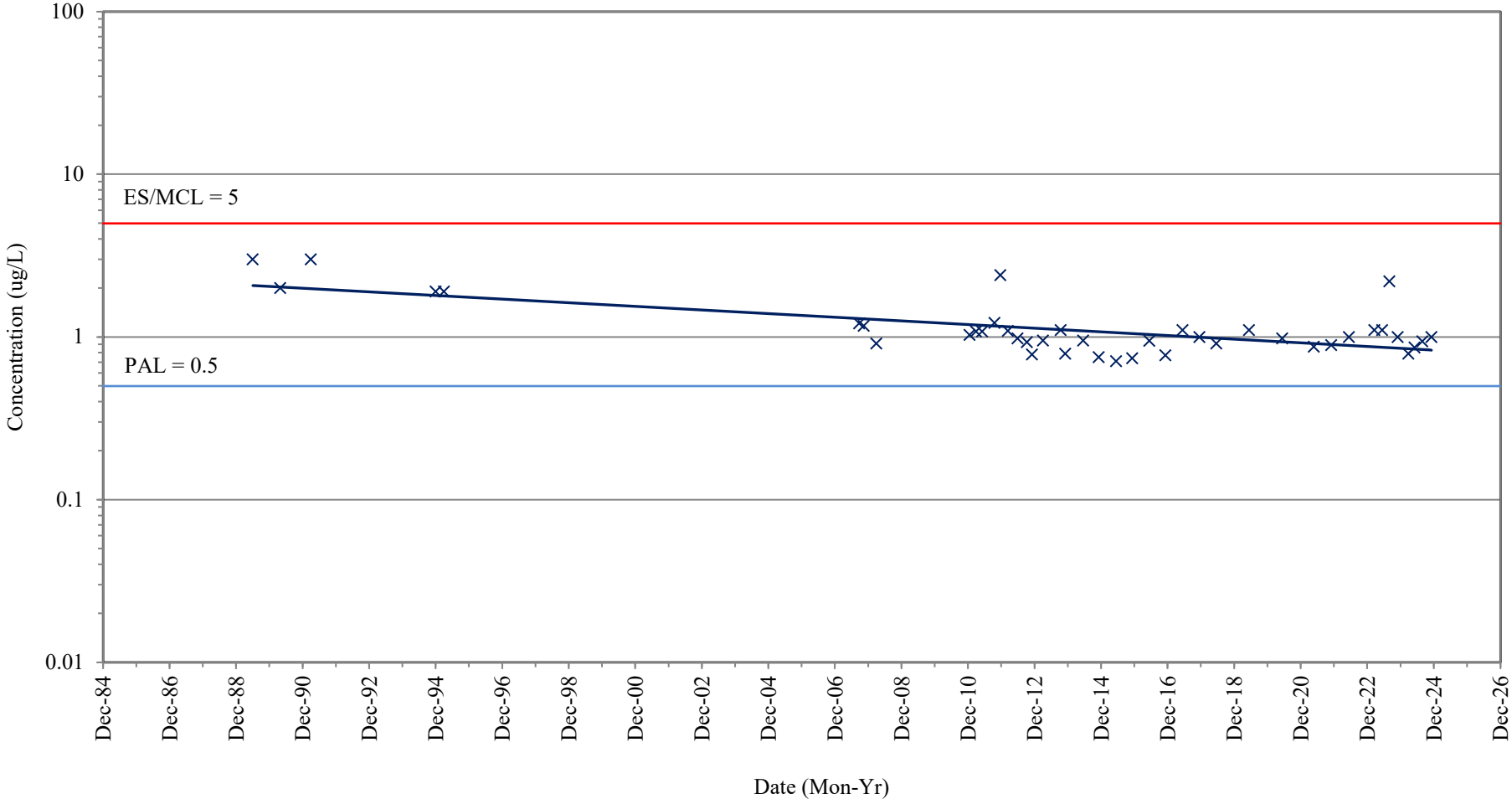
NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN



Note: Non-detect concentrations (if any) are plotted at the detection limit and best-fit exponential trend line generated using Excel.

PLUME 1/2 GROUNDWATER TCE CONCENTRATIONS
MW-77B (GRID COORDINATE K7)

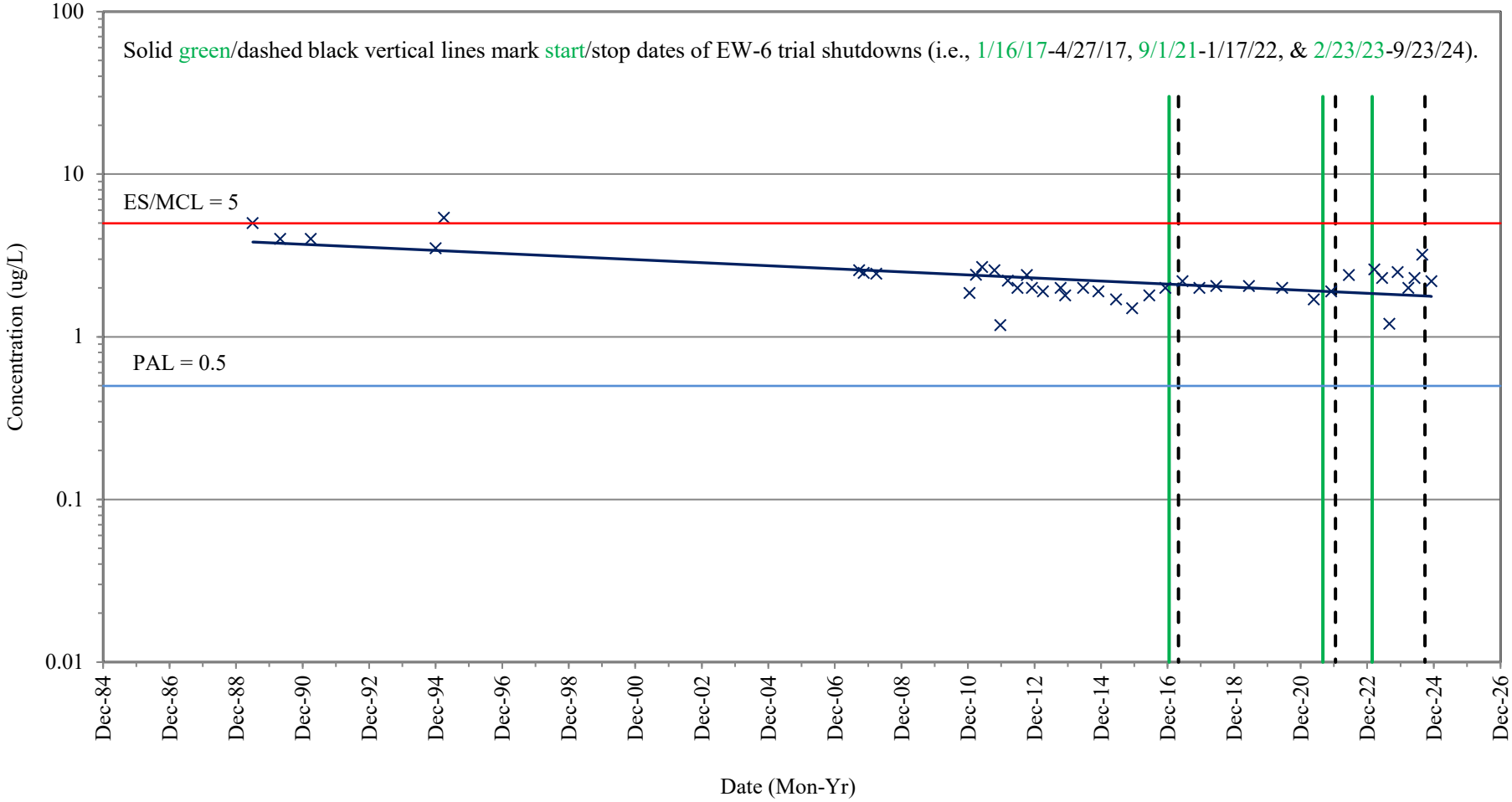
NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN



Note: Non-detect concentrations (if any) are plotted at the detection limit and best-fit exponential trend line generated using Excel.

PLUME 1/2 GROUNDWATER TCE CONCENTRATIONS
RW-2A (GRID COORDINATE J7)

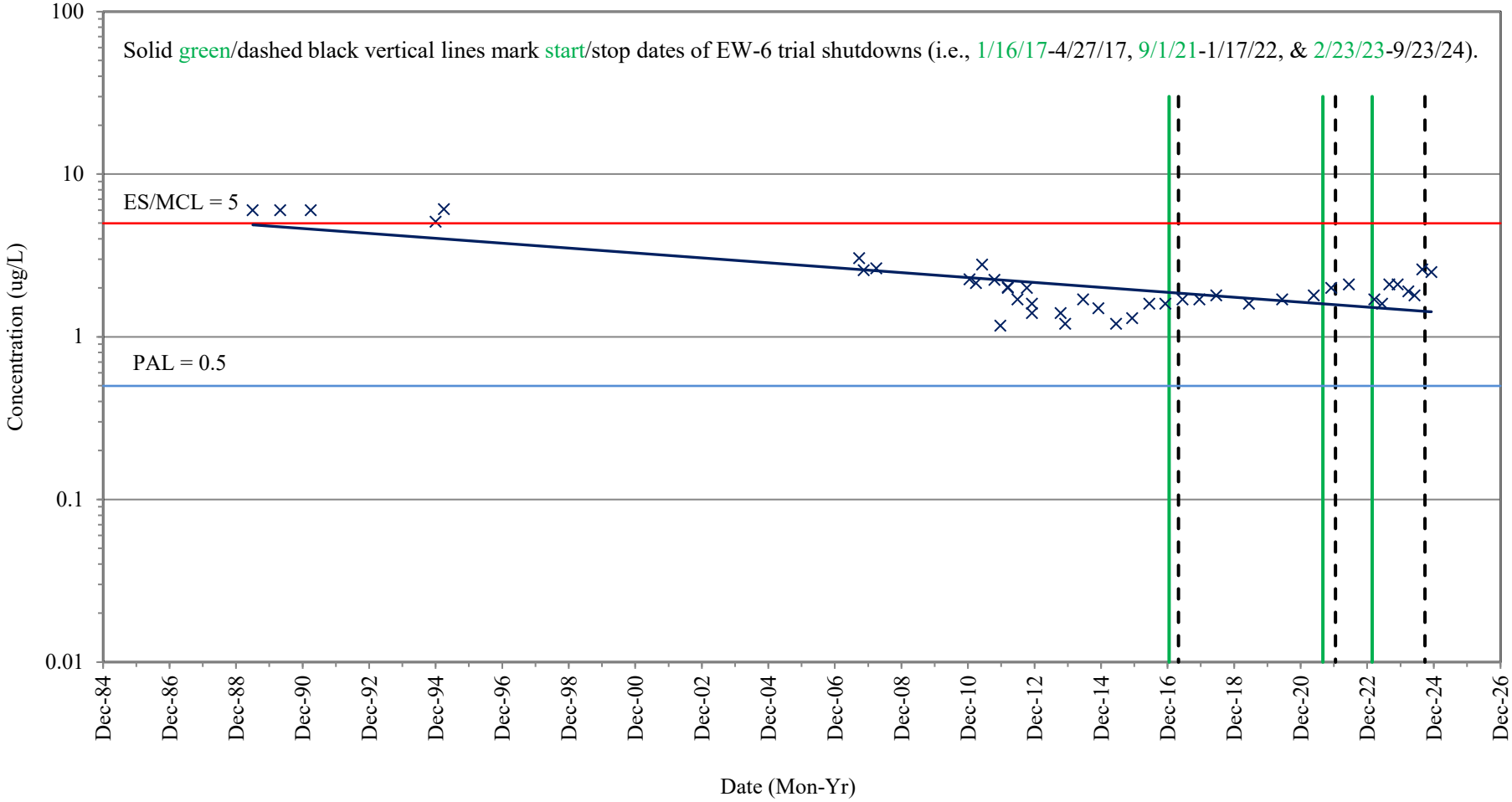
NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN



Note: Non-detect concentrations (if any) are plotted at the detection limit and best-fit exponential trend line generated using Excel.

PLUME 1/2 GROUNDWATER TCE CONCENTRATIONS
RW-2B (GRID COORDINATE J7)

NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN



Note: Non-detect concentrations (if any) are plotted at the detection limit and best-fit exponential trend line generated using Excel.

PLUME 1/2 GROUNDWATER TCE CONCENTRATIONS
RW-2C (GRID COORDINATE J7)

NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN