



Technical Memorandum

Second Quarter 2021 Groundwater Monitoring Summary

National Aeronautics and Space Administration

Jet Propulsion Laboratory, Pasadena, California

Final

September 2021

This technical memorandum summarizes the results of the second quarter 2021 groundwater sampling event completed as part of the groundwater monitoring program at the National Aeronautics and Space Administration (NASA) Jet Propulsion Laboratory (JPL). The second quarter 2021 groundwater sampling event was conducted from May 17 through June 4, 2021.

INTRODUCTION

During the second quarter 2020 sampling event, groundwater samples were collected from 18 of 25 JPL monitoring wells (MWs), both on- and off-facility and analyzed for volatile organic compounds (VOCs), total chromium, hexavalent chromium [Cr(VI)], perchlorate, lead, arsenic, major cations and anions, alkalinity, total dissolved solids (TDS), and pH. In select wells, 1,4-dioxane, N-nitrosodimethylamine (NDMA), and orthophosphate were also analyzed. Figure 1 shows the locations of the groundwater monitoring wells. In addition, samples were collected from the Monk Hill Treatment System (MHTS) upgradient surveillance monitoring wells and analyzed in accordance with the City of Pasadena's State Water Resources Control Board (SWRCB) Division of Drinking Water (DDW) drinking water permit.

Groundwater samples were shipped to BC Laboratories, Inc., in Bakersfield, California, for chemical analysis. BC Laboratories, Inc. is certified by the SWRCB. Sample collection procedures and sample analyses were conducted in accordance with the approved *Work Plan for Performing a Remedial Investigation/Feasibility Study*¹. No reported data were rejected for non-compliance with method requirements during validation and no reported data were deemed unusable.

Table 1 summarizes analytical results for VOCs and perchlorate and Table 2 summarizes analytical results for metals from the last five sampling events. Table 3 summarizes VOC and perchlorate concentrations in production wells located near the JPL facility from the last five sampling events. No tentatively identified compounds (TICs) were detected in the samples collected during the second quarter of 2021.

Figures summarizing the results from the second quarter 2021 sampling event are included in this technical memorandum. Figure 2 shows the lateral extent of carbon tetrachloride concentrations in groundwater, and Figure 3 provides a cross-section detailing the horizontal and vertical extent of carbon tetrachloride. Figure 4 shows the lateral extent of perchlorate concentrations in groundwater, and Figure 5 provides a cross-section detailing the horizontal and vertical extent of perchlorate in groundwater. Figure 6 shows the lateral extent of tetrachloroethene (PCE) concentrations in groundwater. Figure 7 shows the lateral extent of trichloroethene (TCE) concentrations in groundwater. Figure 8 shows groundwater elevation contours from the second quarter 2021 event and groundwater flow directions.

¹ Ebasco. 1993. *Work Plan for Performing a Remedial Investigation/Feasibility Study*, National Aeronautics and Space Administration Jet Propulsion Laboratory, Pasadena, California. December.

Attachment 1 summarizes the field and laboratory quality assurance (QA), data verification and data validation procedures utilized for the JPL groundwater monitoring program. Attachment 2 contains the data validation reports performed by an independent subcontractor, Environmental Standards, Inc. Attachment 3 contains the laboratory analytical reports prepared by BC Laboratories, Inc. Attachment 4 contains the groundwater sample collection field logs for the JPL groundwater monitoring wells. Attachment 5 contains water level field measurement log sheets. Attachment 6 presents time series plots for select wells and analytes. Attachment 7 presents historical perchlorate, VOC, and metals concentrations from 1996 to present. A summary of the well construction details for the JPL groundwater monitoring wells is included in Attachment 8.

The groundwater monitoring wells have been grouped into four categories:

- On-facility source area wells (MW-7, MW-13, MW-16, and MW-24);
- Other on-facility wells (MW-6, MW-8, MW-11, MW-22, and MW-23);
- Perimeter off-facility wells (MW-1, MW-3, MW-4, MW-5, MW-9, MW-10, MW-12, MW-14, and MW-15 [MW-1 and MW-9 are only sampled during the second and fourth quarter events]); and
- Off-facility wells (MW-17, MW-18, MW-19, MW-20, MW-21, MW-25, and MW-26).

MW-2 was decommissioned in July 2018. Well MW-2 had not been sampled during the groundwater monitoring program since it was replaced with well MW-14.

ON-FACILITY SOURCE AREA WELLS

On-facility source area wells consist of wells that have historically contained the highest concentration of site-related chemicals. This group of wells is located within the JPL facility (on-facility) and consists of monitoring wells MW-7, MW-13, MW-16, and MW-24.

The source area treatment system has been operating since 2005 and addresses groundwater beneath the JPL facility, which has historically contained the highest concentrations of perchlorate and VOCs (i.e., the source area). Operation of the source area treatment system appears to have resulted in a significant reduction of chemicals of interest in wells MW-7, MW-16, and MW-24, which are located within the treatment zone. Additional details regarding chemical concentrations in the on-facility source area wells are presented below.

It should be noted that during the second quarter 2021, MW-7, MW-13, and MW-16 were dry and therefore not sampled.

PERCHLORATE ANALYTICAL RESULTS

- During the second quarter 2021, perchlorate was detected above the state MCL (6.0 µg/L) in well MW-24 (Screens 1 [260.0 µg/L] and 2 [8.5 µg/L]).
- During the second quarter 2021, perchlorate was not detected in the remaining on-facility wells that were sampled (MW-24 [Screens 3 through 5]) with a reporting limit of 4.0 µg/L.
- Perchlorate concentrations increased from their last respective sampling event to the second quarter 2021 in MW-24 (Screens 1 [32.0 µg/L to 260.0 µg/L] and 2 [6.5 µg/L to 8.5 µg/L]).
- Perchlorate concentrations remained non-detect from their last respective sampling event to the second quarter 2021 in MW-24 (Screens 3 through 5).

VOC ANALYTICAL RESULTS

- During the second quarter 2021, carbon tetrachloride was not detected in the on-facility source area wells that were sampled (MW-24 [Screens 1 through 5]) with a reporting limit of 0.5 µg/L.
- During the second quarter 2021, TCE was not detected in the on-facility source area wells that were sampled (MW-24 [Screens 1 through 5]) with a reporting limit of 0.5 µg/L.
- During the second quarter 2021, PCE was detected below the state MCL (0.5 µg/L) in MW-24 (Screen 2 [0.2J µg/L]). 'J' qualifier indicates an estimated concentration. No other PCE detections occurred in the on-facility source area wells that were sampled (MW-24 [Screens 1, 3, 4, and 5]).

OTHER NOTABLE ANALYTICAL RESULTS

- During the second quarter 2021, Cr(VI)² was detected below the state MCL (50.0 µg/L) in MW-24 (Screens 2 [2.00J µg/L] and 5 [2.60J µg/L]). All other Cr (VI) results were non-detect in the on-facility source area wells that were sampled for metals (MW-24 Screens 1, 3 and 4).
- During the second quarter 2021, total chromium was detected below the state MCL (50.0 µg/L) and federal MCL (100.0 µg/L) in MW-24 (Screens 1, 2 and 5 [0.7J µg/L, 2.3J µg/L, and 2.4J µg/L, respectively]). All other total chromium results were non-detect in the on-facility source area wells that were sampled for metals (MW-24 Screens 3 and 4).

OTHER ON-FACILITY WELLS

This well group consists of monitoring wells MW-6, MW-8, MW-11, MW-22, and MW-23. These wells are located on the JPL facility but outside the source area.

It should be noted that during the second quarter 2021, MW-6, MW-8, and MW-23 (Screen 1) were dry, and no samples were collected.

PERCHLORATE ANALYTICAL RESULTS

- During the second quarter 2021, perchlorate was detected below the state MCL (6.0 µg/L) in MW-22 (Screens 1 through 4 [3.9 µg/L, 2.7 µg/L, 3.1 µg/L, and 1.1 µg/L, respectively]), and MW-23 (Screens 2 through 4 [4.8 µg/L, 3.6J µg/L and 2.4J µg/L, respectively]).
- Perchlorate concentrations in MW-22 (Screen 1) have been detected at concentrations above the MCL in the third quarter 1998 (6.4 µg/L) and first quarter 1999 (6.4 µg/L), all four quarters of 2011 (22.9 µg/L, 40.1 µg/L, 98.7 µg/L, and 85.2 µg/L, respectively) and second quarter 2012 (6.5 µg/L). From third quarter 2012 through first quarter 2019 perchlorate concentrations ranged from non-detect to 5.6 µg/L. From second quarter 2019 to second quarter 2021, perchlorate has exceeded the MCL in six of nine quarters ranging from 64.0 µg/L to 320.0 µg/L. MW-22 is located within the capture zone of the Monk Hill Treatment System (MHTS). Concentrations of perchlorate in MW-22 (Screen 1) will continue to be monitored closely.

² On August 1, 2017, the State Water Resources Control Board (SWRCB) removed the previously adopted MCL for Cr(VI). See https://www.waterboards.ca.gov/press_room/press_releases/2017/pr080117_mcl_removal.pdf.

- During the second quarter 2021, perchlorate was not detected in MW-11 (Screens 1 through 5), MW-22 (Screen 5) and MW-23 (Screen 5) with a reporting limit of 4.0 µg/L.
- Perchlorate concentrations increased from their last respective sampling event to the second quarter 2021 in MW-22 (Screens 1 [3.4] µg/L to 3.9 µg/L and 3 [3.0] µg/L to 3.1 µg/L], and MW-23 (Screens 2 through 4 [4.3 µg/L to 4.8 µg/L, 3.4] µg/L to 3.6] µg/L, and 2.3] µg/L to 2.4] µg/L, respectively]).
- Perchlorate concentrations decreased from their last respective sampling event to the second quarter 2021 in MW-22 (Screens 2 and 4 [3.2] µg/L to 2.7 µg/L and 1.4] µg/L to 1.1 µg/L, respectively]).
- Perchlorate concentrations remained non-detect from their last respective sampling event to the second quarter 2021 in MW-11 (Screens 1 through 5), MW-22 (Screen 5), and MW-23 (Screen 5)

VOC ANALYTICAL RESULTS

- During the second quarter 2021, carbon tetrachloride was not detected in the other on-facility wells that were sampled with a reporting limit of 0.5 µg/L.
- During the second quarter 2021, TCE was detected below the state and federal MCL (5.0 µg/L) in MW-11 (Screens 3 and 4 [0.4] µg/L, each]), MW-22 (Screen 1 [0.4 µg/L]), and MW-23 (Screens 1[0.8 µg/L]). No other TCE detections occurred in the remaining other on-facility wells that were sampled during the second quarter 2021.
- During the second quarter 2021, PCE was detected below the state and federal MCL (5.0 µg/L) in MW-23 (Screens 2 [0.3] µg/L and 3 [0.2] µg/L]). No other PCE detections occurred in the remaining other on-facility wells that were sampled during the second quarter 2021.

OTHER NOTABLE ANALYTICAL RESULTS

- During the second quarter 2021, Cr(VI) was detected below the state MCL (50.0 µg/L) in MW-22 (Screens 1 through 5 [0.73 µg/L, 2.10 µg/L, 1.30 µg/L, 1.70 µg/L and 0.20 µg/L, respectively]), and MW-23 (Screens 2 through 4 [1.20] µg/L, 3.00 µg/L, and 2.60] µg/L, respectively]). Cr(VI) was not detected in the remaining other on-facility wells that were sampled during the second quarter 2021.
- During the second quarter 2021, total chromium was detected below the state MCL (50.0 µg/L) in MW-22 (Screens 1 through 4 [0.7] µg/L, 1.5] µg/L, 1.6] µg/L and 2.6] µg/L, respectively]), and MW-23 (Screens 2 through 5 [1.5] µg/L, 2.7] µg/L, 3.2 µg/L, and 1.7] µg/L, respectively]). No other total chromium detections occurred in the remaining other on-facility wells that were sampled during the second quarter 2021.

PERIMETER OFF-FACILITY WELLS

The perimeter off-facility wells are located near the JPL fence line along the perimeter of the property. This group of wells consists of MW-1, MW-3, MW-4, MW-5, MW-9, MW-10, MW-12, MW-14, and MW-15.

During the second quarter 2021, MW-4 (Screen 1), MW-5, MW-10, MW-12 (Screen 1), and MW-14 (Screen 1) were dry and not sampled.

PERCHLORATE ANALYTICAL RESULTS

- During the second quarter 2021, perchlorate was detected above the state MCL (6.0 µg/L) in well MW-4 (Screen 2 [65.0 µg/L]).
- Perchlorate was detected below the state MCL (6.0 µg/L) in MW-3 (Screens 3 through 5 [1.4 µg/L, 1.9 and 1.7 µg/L, respectively]), MW-4 (Screens 3 and 4 [2.5J µg/L, each]), MW-12 (Screens 2 through 5 [1.1J µg/L, 3.1J µg/L, 2.3J µg/L, and 1.2J µg/L, respectively]), and MW-14 (Screens 2 through 4 [3.4J µg/L, 4.3 µg/L, and 4.9 µg/L, respectively]).
- During the second quarter 2021, perchlorate was not detected in MW-1, MW-3 (Screens 1 and 2), MW-4 (Screen 5), MW-9, MW-14 (Screen 5), and MW-15 with a reporting limit of 4.0 µg/L.
- Perchlorate concentrations increased from their respective last sampling event to the second quarter 2021 in MW-4 (Screens 2 [60.0 µg/L to 65.0 µg/L], 3 [2.0J µg/L to 2.5J µg/L], and 4 [2.1J µg/L to 2.5J µg/L]), MW-12 (Screens 2 [1.0J µg/L to 1.1J µg/L], 3 [2.9J µg/L to 3.1J µg/L]), and MW-14 (Screen 4 [4.1 µg/L to 4.9 µg/L]).
- Perchlorate concentrations decreased from their respective last sampling event to the second quarter 2021 in MW-3 (Screens 3 [2.3J µg/L to 1.4 µg/L], 4 [2.7J µg/L to 1.9 µg/L], and 5 [5.0 µg/L to 1.7 µg/L]), MW-12 (Screens 4 [2.7J µg/L to 2.3J µg/L], and 5 [1.3J µg/L to 1.2J µg/L]) and MW-14 (Screens 2 [3.7J µg/L to 3.4J µg/L], and 3 [5.2 µg/L to 4.3 µg/L]).
- Perchlorate concentrations remained unchanged (non-detect) from their respective last sampling event to the second quarter 2021 sampling event in MW-1, MW-3 (Screens 1 and 2), MW-4 (Screen 5), MW-9, MW-14 (Screen 5), and MW-15.
- The perchlorate concentration of 65.0 µg/L in MW-4 (Screen 2) during the second quarter 2021 continues to be down from the high detection of 250.0 µg/L (third quarter 2013). Since the first quarter 2011, concentrations have exceeded the state MCL (6.0 µg/L) (ranging from 6.5 µg/L to 250.0 µg/L) with thirteen exceptions: first, third, and fourth quarters of 2015, all four quarters of 2016 and 2017, and first and third quarters of 2018. Perchlorate concentrations in MW-4 (Screen 2) increased from fourth quarter 2018 (9.9 µg/L) to first quarter 2020 (51.0 µg/L) and have remained relatively stable between first quarter 2020 and the second quarter 2021 ranging from 65.0 µg/L (second quarter 2021) to 38.0 µg/L (fourth quarter 2020). Perchlorate concentrations will continue to be closely monitored since MW-4 is within the capture zone of the MHTS.

VOC ANALYTICAL RESULTS

- During the second quarter 2021, carbon tetrachloride was detected above the state MCL (0.5 µg/L) in MW-12 (Screens 3 [1.0 µg/L] and 4 [1.5 µg/L]). No other carbon tetrachloride detections occurred in the perimeter off-facility wells that were sampled during the second quarter 2021.
- During the second quarter 2021, TCE was detected below the state and federal MCL (5.0 µg/L) in MW-4 (Screens 2 [0.3J µg/L], and 3 [0.2J µg/L]), MW-12 (Screen 4 [0.3J µg/L]), and MW-14 (Screens 2 [1.3 µg/L], and 3 [0.7 µg/L]). No other TCE detections occurred in the perimeter off-facility wells that were sampled during the second quarter 2021.

- During the second quarter 2021, PCE was detected below the state and federal MCL (5.0 µg/L) in MW-4 (Screen 3 [0.3 µg/L]), and MW-14 (Screens 2 [0.3 µg/L], and 3 [0.4 µg/L]). No other PCE detections occurred in the perimeter off-facility wells that were sampled during the second quarter 2021.

OTHER NOTABLE ANALYTICAL RESULTS

- During the second quarter 2021, Cr(VI) was detected below the state MCL (50.0 µg/L) in MW-3 (Screens 3 through 5 [0.68 µg/L, 0.20 µg/L, and 0.66 µg/L, respectively]), MW-4 (Screen 3 [0.51 µg/L]), MW-9 (0.46 µg/L), MW-12 (Screen 5 [1.20 µg/L]), MW-14 (Screens 2 and 4 [0.57 µg/L, and 2.00 µg/L, respectively]), and MW-15 (0.52 µg/L). No other Cr(VI) detections occurred in the perimeter off-facility wells that were sampled during the second quarter 2021.
- During the second quarter 2021, total chromium was detected below the state MCL (50.0 µg/L) in MW-3 (Screens 2 through 5 [0.8 µg/L, 1.6 µg/L, 12.0 µg/L and 44.0 µg/L, respectively]), MW-4 (Screens 2 and 3 [0.6 µg/L, and 1.3 µg/L, respectively]), MW-9 (3.0 µg/L), MW-12 (Screen 2, 4 and 5 [1.3 µg/L, 0.9 µg/L, and 1.6 µg/L, respectively]), and MW-15 (0.6 µg/L). No other total chromium detections occurred in the perimeter off-facility wells that were sampled during the second quarter 2021.
- During the second quarter 2021, Arsenic was detected above the state and federal MCL (10.0 µg/L) in MW-3 (Screen 5 [23.0 µg/L]). This is the fifth time that Arsenic was detected above the state and federal MCL of 10.0 µg/L in MW-3 (Screen 5) since the third quarter 1996. The previous four exceedances occurred during the third quarter 1996, fourth quarter 1997, second quarter of 2015, and second quarter 2020 at concentrations of 11.0 µg/L, 10.0 µg/L, 13.0 µg/L, and 77.0 respectively.

OFF-FACILITY WELLS

The off-facility wells consist of monitoring wells MW-17, MW-18, MW-19, MW-20, MW-21, MW-25, and MW-26. These wells are located near and down gradient of the two off-facility treatment plants: MHTS and Lincoln Avenue Water Company (LAWC) treatment system. Daily operation of the MHTS began in February 2011. Operation of the LAWC perchlorate treatment system began in July 2004.

It should be noted that during the second quarter 2021, MW-17 (Screen 1), MW-18 (Screen 1), MW-20 (Screen 1), MW-21 (Screen 1), and MW-26 (Screen 1) were dry and not sampled.

PERCHLORATE ANALYTICAL RESULTS

- During the second quarter 2021 sampling event, concentrations of perchlorate above the state MCL (6.0 µg/L) were reported in samples collected from wells MW-18 (Screen 4 [16.0 µg/L]), MW-19 (Screen 1 [11.0 µg/L]), MW-20 (Screen 2 [7.4 µg/L]), and MW-25 (Screens 1 through 4 [7.6 µg/L, 12.0 µg/L, 10.0 µg/L, and 8.8 µg/L, respectively]).
- During the second quarter 2021 sampling event, concentrations of perchlorate below the state MCL (6.0 µg/L) were reported in samples collected from wells MW-17 (Screens 4 [4.6 µg/L], and 5 [4.5 µg/L]), MW-18 (Screen 3 [0.9 µg/L]), MW-19 (Screens 2 through 5 [3.1 µg/L, 4.2 µg/L, 3.6 µg/L, and 2.9 µg/L, respectively]), MW-21 (Screens 2 through 5 [2.0 µg/L, 2.6 µg/L, 2.6 µg/L, and 2.6 µg/L, respectively]), and MW-26 (Screen 2 [3.0 µg/L]).

- During the second quarter 2021, perchlorate was not detected in MW-17 (Screens 2 and 3), MW-18 (Screens 2 and 5), MW-20 (Screens 3 through 5), and MW-25 (Screen 5) with a reporting limit of 4.0 µg/L.
- Perchlorate concentrations increased from their respective last sampling event to the second quarter 2021 in MW-19 (Screens 1 [non-detect to 11.0 µg/L], 3 [3.5J µg/L to 4.2 µg/L], and 4 [3.0J µg/L to 3.6J µg/L], MW-20 (Screen 2 [non-detect to 7.4 µg/L]), MW-21 (Screen 5 [2.4J µg/L to 2.6J µg/L]), MW-25 (Screens 1 [6.4 µg/L to 7.6 µg/L], 3 [9.3 µg/L to 10.0 µg/L], and 4 [7.8 µg/L to 8.8 µg/L]), and MW-26 (Screen 2 [2.6J µg/L to 3.0J µg/L]).
- Perchlorate concentrations decreased from their respective last sampling event to the second quarter 2021 in MW-17 (Screens 4 [4.9 µg/L to 4.6 µg/L] and 5 [5.2 µg/L to 4.5 µg/L]), MW-19 (Screens 2 [3.4J µg/L to 3.1J µg/L] and 5 [3.3J µg/L to 2.9J µg/L]), and MW-21 (Screens 3 [3.1J µg/L to 2.6J µg/L], and 4 [2.9J µg/L to 2.6J µg/L]).
- Perchlorate concentrations remained unchanged from their respective last sampling event to the second quarter 2021 in MW-18 (Screens 3 [0.9J µg/L], and 4 [16.0 µg/L]), MW-21 (Screen 2 [2.0J µg/L]) and MW 25 (Screen 2 [12.0 µg/L]).
- Perchlorate concentrations remained non-detect from their respective last sampling event to the second quarter 2021 in MW-17 (Screens 2 and 3), MW-18 (Screens 2 and 5), MW-20 (Screens 3, 4, and 5), and MW-25 (Screen 5).
- Perchlorate concentrations in MW-17 (Screen 3) have remained relatively stable since 2011 with concentrations ranging from non-detect to 8.5 µg/L. MW-17 is located within the capture zone of the LAWC treatment system.
- The perchlorate concentration of 4.6 µg/L in MW-17 (Screen 4) is the twenty-sixth detection below the state MCL (6.0 µg/L) since the first quarter 2015. From the third quarter 2002 to the fourth quarter 2012, the perchlorate concentrations in MW-17 (Screen 4) had been either non-detect or below the state MCL (6.0 µg/L) with only one detection that exceeded the state MCL (second quarter 2003 [6.5 µg/L]). From the first quarter 2013 through the fourth quarter 2014, the perchlorate concentrations in MW-17 (Screen 4) exceeded the state MCL in seven of the eight quarters with exceedances ranging from 6.8 µg/L to 18.0 µg/L. From the first quarter 2015 to the second quarter 2021 sampling events, perchlorate in MW-17 (Screen 4) remained below the state MCL (6.0 µg/L) with concentrations ranging from non-detect (first quarter 2017) to 5.4 µg/L (fourth quarter 2020). The changes in perchlorate concentrations at MW-17 (Screen 4) are believed to be associated with changes in groundwater flow associated with operation of NASA's mid-plume treatment system, which began operation in 2011.
- The perchlorate concentration of 0.9J µg/L in MW-18 (Screen 3) is the sixteenth consecutive detection below the state MCL (6.0 µg/L) since third quarter 2017. From the fourth quarter 2005 to second quarter 2017 perchlorate concentrations in MW-18 (Screen 3) were above the state MCL (6.0 µg/L) ranging from 6.2 µg/L (second quarter 2017) to 144.0 µg/L (third quarter 2011) with one exception (non-detect [second quarter 2007]).
- During the period from the third quarter 2008 through first quarter 2012, perchlorate was detected in MW-20 (Screen 4) at concentrations exceeding the state MCL (6.0 µg/L) during seven of fifteen sampling events. Concentrations exceeding the state MCL ranged from 15.1 µg/L to 123.0J µg/L. Perchlorate was not detected during the remaining eight sampling events between third quarter 2008 and first quarter 2012. Perchlorate has not been detected in MW-20 (Screen 4) since the first quarter 2012 (37 sampling events).

- During the period from third quarter 2008 through first quarter 2012, perchlorate was detected in MW-20 (Screen 5) at concentrations exceeding the state MCL (6.0 µg/L) during seven of sixteen sampling events. During this time, perchlorate concentrations exceeding the state MCL ranged from 11.5 µg/L to 56.5 µg/L. Perchlorate was not detected during the remaining nine sampling events during this period with one exception (4.2 µg/L [second quarter 2011]). From the first quarter 2012 to second quarter 2021 (37 sampling events) perchlorate concentrations have remained non-detect in MW-20 (Screen 5).
- The perchlorate concentrations in MW-25 (Screens 1 through 4) have remained relatively stable above the state MCL (6.0 µg/L) ranging from 6.0 µg/L (Screen 1 [fourth quarter 2012 and first quarter 2018]) to 18.0 µg/L (Screen 2 fourth quarter 2007) with one exception 5.6 µg/L (Screen 4 [fourth quarter 2012]).

VOC ANALYTICAL RESULTS

- During the second quarter 2021, carbon tetrachloride was detected above the state MCL (0.5 µg/L) in MW-18 (Screen 4 [1.3 µg/L]) and below the state MCL (0.5 µg/L) in MW-18 (Screen 3 [0.2 µg/L]). No other carbon tetrachloride detections occurred in the remaining off-facility wells that were sampled during the second quarter 2021.
- Prior to third quarter 2018, the carbon tetrachloride concentrations in MW-18 (Screen 3) had exceeded the state MCL (0.5 µg/L) since the first quarter 2005 with concentrations ranging from 0.5 µg/L to 43.0 µg/L. Since third quarter 2018, carbon tetrachloride in MW-18 (Screen 3) has ranged from non-detect to 0.4 µg/L.
- Carbon tetrachloride detections in MW-18 (Screen 4) have exceeded the state MCL since the third quarter 1996 with one exception (non-detect [fourth quarter 2010]).
- During the second quarter 2021, TCE was detected below the state and federal MCL (5.0 µg/L) in MW-17 (Screens 3, 4 and 5 [1.1 µg/L and 0.6 µg/L, and 0.8 µg/L, respectively]), MW-18 (Screen 4 [0.8 µg/L]), MW-19 (Screens 2 through 5 [0.5 µg/L, 0.4 µg/L, 0.3 µg/L, and 0.2 µg/L, respectively]), MW-20 (Screen 2 [0.2 µg/L]), MW-21 (Screens 3 and 4 [0.7 µg/L, and 0.3 µg/L, respectively]), MW-25 (Screen 1 [0.4 µg/L]), and MW-26 (Screen 2 [0.2 µg/L]). No other TCE detections occurred in the remaining off-facility wells that were sampled during the second quarter 2021.
- During the second quarter 2021, PCE was detected in MW-17 (Screens 4 [0.4 µg/L], and 5 [0.5 µg/L]), MW-18 (Screen 4 [0.7 µg/L]), MW-19 (Screens 2 through 5 [0.6 µg/L, 1.0 µg/L, 0.7 µg/L, and 0.5 µg/L, respectively]), MW-20 (Screen 3 [1.3 µg/L]), MW-21 (Screens 2 through 5 [0.5 µg/L, 0.6 µg/L, 0.6 µg/L, and 0.8 µg/L, respectively]), MW-25 (Screens 2 [0.3 µg/L], and 3 [1.5 µg/L]), and MW-26 (Screen 2 [1.6 µg/L]); however, no detections exceeded the state and federal MCL (5.0 µg/L). PCE was not detected in the remaining off-facility wells that were sampled during the second quarter 2021.

OTHER NOTABLE ANALYTICAL RESULTS

- During the second quarter 2021, Cr(VI) was detected below the state MCL (50.0 µg/L) in MW-17 (Screens 4 [0.77µg/L], and 5 [0.67µg/L]), MW-18 (Screens 3 and 4 [1.20µg/L, and 1.00µg/L, respectively]), MW-19 (Screens 2 through 5 (0.87µg/L, 0.84µg/L, 1.30µg/L, and 1.10µg/L, respectively]), MW-21 (Screens 3 through 5 [0.52µg/L, 0.76µg/L, and 0.61µg/L, respectively]), and MW-25 (Screens 2 and 3 [1.40µg/L, and 2.90µg/L, respectively]). Cr(VI) was not detected in the remaining off-facility wells that were sampled during the second quarter 2021.
- During the second quarter 2021, total chromium was detected below the state MCL (50.0 µg/L) in MW-17 (Screens 4 and 5 [1.3µg/L, and 1.5µg/L, respectively]), MW-18 (Screens 3 and 4 [2.8µg/L, and 2.9µg/L, respectively]), MW-19 (Screens 3 through 5 [2.2µg/L, 2.5µg/L, and 2.3µg/L, respectively]), MW-20 (Screens 3 and 5 [0.9µg/L, each]), MW-21 (Screen3 [1.1µg/L]), MW-25 (Screens 1 through 4 [1.6µg/L, 2.3µg/L, 2.9µg/l, and 1.7µg/L, respectively]), and MW-26 (Screen 2 [1.4µg/L]). Total chromium was not detected in the remaining off-facility wells that were sampled during the second quarter 2021.

ALL WELL CATEGORIES (OTHER RESULTS)

- Comparing the first quarter 2021 to the second quarter 2021, groundwater elevations decreased by an average of 0.79 feet.
- The shallow standpipe wells MW-5, MW-6, MW-7, MW-8, MW-10, MW-13, and MW-16 were dry and could not be sampled during the second quarter 2021. This is the second time MW-8 and MW-10 have been dry since they were first measured in 1996. This is the third consecutive quarter MW-5 and MW-7 were dry. This is the fourth consecutive quarter MW-6, MW-13, and MW-16 were dry.
- The uppermost sampling port (i.e., Screen 1) in multi-port monitoring wells MW-4, MW-12, MW-14, MW-17, MW-18, MW-20, MW-21, MW-23, and MW-26 were dry and could not be sampled during the second quarter 2021. This is the second time that MW-4 (Screen 1), MW-23 (Screen 1), and MW-26 (Screen 1) were dry since first being measured. This is the fourth consecutive quarter the uppermost screen in MW-12 was dry. This is the seventh consecutive quarter the uppermost screens in MW-14, MW-20, and MW-21 were dry.
- NASA JPL has multiple monitoring wells located within the vicinity of the MHTS production wells. The Pasadena Water and Power (PWP) drinking water permit provision #39 identified MW-3 (Screen 2), MW-4 (Screen 2), MW-5, MW-10, MW-17 (Screen 3), MW-18 (Screen 4) and MW-19 (Screen 2) as part of the MHTS upgradient surveillance monitoring program. These wells are required to be monitored annually for explosives (i.e., 2,4,6-trinitrotoluene [TNT], Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine [HMX], and Hexahydro-1,3,5-trinitro-1,3,5-triazine [RDX]), nitrosamines, fluoride, 1,4-dioxane, Methyl-tert-butyl ether (MTBE) and related oxygenates (i.e., Ethyl tertiary-butyl ether [ETBE], t-Butyl alcohol [TBA], and tert-Amyl methyl ether [TAME]), low level 1,2,3-Trichloropropane (1,2,3-TCP), total and hexavalent chromium, nitrate, and chlorate, and triennially for semi-volatile organics (including Polycyclic aromatic hydrocarbons [PAHs], phthalates, Polychlorinated biphenyls [PCBs], and phenol), total petroleum hydrocarbons, and 2,3,7,8-Tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD). These wells are sampled quarterly as part of NASA's long-term groundwater monitoring program at JPL and serve as the best available indicator of near-future concentrations that may be

observed in PWP production wells. Laboratory results from the MHTS upgradient surveillance monitoring wells are presented in the annual MHTS progress report.³

- Groundwater elevations recorded in the JPL monitoring wells showed a steady decline from the first and second quarters of 2011 through the fourth quarter of 2014 at which time the levels approached and/or exceeded historic lows last recorded in 1996 and 1997. During the period between first quarter 2015 and second quarter 2019, groundwater elevations have fluctuated on a seasonal basis. During the period between second quarter 2019 and second quarter 2020, groundwater elevations declined an average of 18 feet. During the period from second quarter 2020 to second quarter 2021, groundwater elevations declined an average of 27 feet. Taken together, average groundwater elevations have declined approximately 45 feet between second quarter 2019 and second quarter 2021. As a result, levels have reached or exceeded historic lows last recorded in 1996 and 1997. Groundwater elevations will continue to be closely monitored.
- Groundwater level measurements collected during the second quarter 2021 indicate that groundwater gradients and flow directions are generally consistent with previous observations (see Figure 8).

³ NASA. 2021. *Technical Memorandum Pasadena Water and Power Monk Hill Treatment System*. National Aeronautics and Space Administration, Jet Propulsion Laboratory, Pasadena, California. June.

ATTACHMENTS

Attachments to this technical memorandum include the following:

- Attachment 1: Quality Assurance/Quality Control Summary
 - Attachment 2: Data Validation Reports
 - Attachment 3: Laboratory Analytical Reports
 - Attachment 4: Field Logs
 - Attachment 5: Water Level Measurements
 - Attachment 6: Time-Series Concentration Plots
 - Attachment 7: Tables 1A, 2A and 3A (Historical Perchlorate, VOCs, and Metals from 1996 to present)
 - Attachment 8: Summary of Construction Details for All JPL Groundwater Monitoring Wells
-

TABLES

TABLE 1
SUMMARY OF VOLATILE ORGANIC COMPOUNDS AND PERCHLORATE DETECTED DURING THE
LAST FIVE SAMPLING EVENTS OF THE LONG-TERM QUARTERLY GROUNDWATER SAMPLING PROGRAM

(All concentrations reported in µg/L.)

(Shaded values exceed State or Federal MCL or action levels.)

Sample Location	Sampling Event	Sample Number	Carbon tetrachloride	TCE	PCE	1,1-DCA	1,2-DCA	1,1-DCE	Freon 113	Chloroform	Perchlorate	Other Volatile Organic Compounds and 1,4-Dioxane, NDMA, NDPA, 1,2,3-TCP
MW-1												
MW-1	Jun 2020	MW-1	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-1	Jun 2020	Dup-8-2Q2020	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-1	Oct/Nov 2020	MW-1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-1	Oct/Nov 2020	DUP-6-4Q20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-1	May/June 2021	MW-1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-3-Screen-1												
MW-3-Screen-1	Jun 2020	MW-3-1	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-3-Screen-1	Oct/Nov 2020	MW-3-1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-3-Screen-1	May/June 2021	MW-3-1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-3-Screen-2												
MW-3-Screen-2	Jun 2020	MW-3-2	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-3-Screen-2	Aug 2020	MW-3-2	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-3-Screen-2	Oct/Nov 2020	MW-3-2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-3-Screen-2	Mar/Apr 2021	MW-3-2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-3-Screen-2	May/June 2021	MW-3-2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-3-Screen-3												
MW-3-Screen-3	Jun 2020	MW-3-3	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.0 J	
MW-3-Screen-3	Aug 2020	MW-3-3	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.0 J	
MW-3-Screen-3	Oct/Nov 2020	MW-3-3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.4 J	
MW-3-Screen-3	Mar/Apr 2021	MW-3-3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.3 J	
MW-3-Screen-3	May/June 2021	MW-3-3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.4	
MW-3-Screen-3	May/June 2021	DUP-3-2Q21	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.3	
MW-3-Screen-4												
MW-3-Screen-4	Jun 2020	MW-3-4	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.0 J	
MW-3-Screen-4	Aug 2020	MW-3-4	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.8 J	
MW-3-Screen-4	Oct/Nov 2020	MW-3-4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5.1	
MW-3-Screen-4	Mar/Apr 2021	MW-3-4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.7 J	
MW-3-Screen-4	May/June 2021	MW-3-4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.9	
MW-3-Screen-5												
MW-3-Screen-5	Jun 2020	MW-3-5	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 J	
MW-3-Screen-5	Oct/Nov 2020	MW-3-5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5.0	

Sample Location	Sampling Event	Sample Number	Carbon tetrachloride	TCE	PCE	1,1-DCA	1,2-DCA	1,1-DCE	Freon 113	Chloroform	Perchlorate	Other Volatile Organic Compounds and 1,4-Dioxane, NDMA, NDPA, 1,2,3-TCP
MW-3-Screen-5	May/June 2021	MW-3-5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.7	
MW-4-Screen-1												
MW-4-Screen-1	Jun 2020	MW-4-1	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-4-Screen-1	Aug 2020	MW-4-1	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-4-Screen-1	Oct/Nov 2020	MW-4-1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-4-Screen-2												
MW-4-Screen-2	Jun 2020	MW-4-2	0.5 U	0.4 J	0.23 J	0.5 U	0.5 U	0.5 U	0.5 U	0.6	50.0	
MW-4-Screen-2	Aug 2020	MW-4-2	0.5 U	0.3 J	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	46.0	
MW-4-Screen-2	Oct/Nov 2020	MW-4-2	0.5 U	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	38.0	
MW-4-Screen-2	Mar/Apr 2021	MW-4-2	0.5 U	0.4 J	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.8	60.0	
MW-4-Screen-2	May/June 2021	MW-4-2	0.5 U	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8	65.0	
MW-4-Screen-3												
MW-4-Screen-3	Jun 2020	MW-4-3	0.5 U	0.3 J	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.3 J	
MW-4-Screen-3	Aug 2020	MW-4-3	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.5 J	
MW-4-Screen-3	Oct/Nov 2020	MW-4-3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 J	
MW-4-Screen-3	Mar/Apr 2021	MW-4-3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.0 J	
MW-4-Screen-3	May/June 2021	MW-4-3	0.5 U	0.2 J	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	2.5 J	
MW-4-Screen-4												
MW-4-Screen-4	Jun 2020	MW-4-4	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.0 J	
MW-4-Screen-4	Oct/Nov 2020	MW-4-4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.1 J	
MW-4-Screen-4	May/June 2021	MW-4-4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 J	2.5 J	
MW-4-Screen-5												
MW-4-Screen-5	Jun 2020	MW-4-5	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.9 J	
MW-4-Screen-5	Oct/Nov 2020	MW-4-5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-4-Screen-5	May/June 2021	MW-4-5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-5												
MW-5	Jun 2020	MW-5	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-5	Aug 2020	MW-5	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-6												
MW-6	Jun 2020	MW-6	0.5 U	2.1	0.44 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 J	1.6 J	
MW-7												
MW-7	Jun 2020	MW-7	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	6.0	49.0	Bromodichloromethane 0.2 J
MW-7	Aug 2020	MW-7	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	2.4	7.5	
MW-8												
MW-8	Jun 2020	MW-8	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	4.0 U	Trichlorofluoromethane 0.2 J
MW-8	Aug 2020	MW-8	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2	1.7 J	Bromodichloromethane 1.5 Dibromochloromethane 2.1

Sample Location	Sampling Event	Sample Number	Carbon tetrachloride	TCE	PCE	1,1-DCA	1,2-DCA	1,1-DCE	Freon 113	Chloroform	Perchlorate	Other Volatile Organic Compounds and 1,4-Dioxane, NDMA, NDPA, 1,2,3-TCP	
MW-8	Aug 2020	DUP-7-3Q20	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2	1.5 J	Bromodichloromethane Dibromochloromethane	1.5 2.1
MW-8	Oct/Nov 2020	MW-8	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.0	1.0 J	Bromodichloromethane Dibromochloromethane	2.8 1.3
MW-9													
MW-9	Jun 2020	MW-9	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-9	Oct/Nov 2020	MW-9	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-9	Oct/Nov 2020	DUP-7-4Q20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-9	May/June 2021	MW-9	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-10													
MW-10	Jun 2020	MW-10	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-10	Aug 2020	MW-10	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-10	Oct/Nov 2020	MW-10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 J		
MW-11-Screen-1													
MW-11-Screen-1	Jun 2020	MW-11-1	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 J		
MW-11-Screen-1	Aug 2020	MW-11-1	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-11-Screen-1	Oct/Nov 2020	MW-11-1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-11-Screen-1	Mar/Apr 2021	MW-11-1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-11-Screen-1	May/June 2021	MW-11-1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-11-Screen-2													
MW-11-Screen-2	Jun 2020	MW-11-2	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-11-Screen-2	Aug 2020	MW-11-2	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-11-Screen-2	Oct/Nov 2020	MW-11-2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-11-Screen-2	Mar/Apr 2021	MW-11-2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-11-Screen-2	May/June 2021	MW-11-2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-11-Screen-3													
MW-11-Screen-3	Jun 2020	MW-11-3	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	Methyl-tert-butyl ether (MTBE) Styrene	0.2 J 0.2 J
MW-11-Screen-3	Jun 2020	Dup-5-2Q2020	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	Styrene	0.2 J
MW-11-Screen-3	Aug 2020	MW-11-3	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	Carbon disulfide Methyl-tert-butyl ether (MTBE) Styrene	0.8 0.5 J 0.6
MW-11-Screen-3	Oct/Nov 2020	MW-11-3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 J	Ethylbenzene Methyl-tert-butyl ether (MTBE) Styrene Toluene	0.3 J 0.3 J 0.6 0.2 J
MW-11-Screen-3	Mar/Apr 2021	MW-11-3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	Styrene	0.2 J

Sample Location	Sampling Event	Sample Number	Carbon tetrachloride	TCE	PCE	1,1-DCA	1,2-DCA	1,1-DCE	Freon 113	Chloroform	Perchlorate	Other Volatile Organic Compounds and 1,4-Dioxane, NDMA, NDPA, 1,2,3-TCP
MW-11-Screen-3	May/June 2021	MW-11-3	0.5 U	0.4 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	Styrene 0.2 J
MW-11-Screen-3	May/June 2021	DUP-7-2Q21	0.5 U	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	Styrene 0.1 J
MW-11-Screen-4												
MW-11-Screen-4	Jun 2020	MW-11-4	0.5 U	0.3 J	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-11-Screen-4	Aug 2020	MW-11-4	0.5 U	0.3 J	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-11-Screen-4	Oct/Nov 2020	MW-11-4	0.5 U	0.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-11-Screen-4	Mar/Apr 2021	MW-11-4	0.5 U	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-11-Screen-4	May/June 2021	MW-11-4	0.5 U	0.4 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-11-Screen-5												
MW-11-Screen-5	Jun 2020	MW-11-5	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-11-Screen-5	Oct/Nov 2020	MW-11-5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-11-Screen-5	May/June 2021	MW-11-5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-12-Screen-1												
MW-12-Screen-1	Jun 2020	MW-12-1	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-12-Screen-2												
MW-12-Screen-2	Jun 2020	MW-12-2	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-12-Screen-2	Aug 2020	MW-12-2	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.7 J	
MW-12-Screen-2	Oct/Nov 2020	MW-12-2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.7 J	
MW-12-Screen-2	Mar/Apr 2021	MW-12-2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 J	
MW-12-Screen-2	May/June 2021	MW-12-2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.1 J	
MW-12-Screen-3												
MW-12-Screen-3	Jun 2020	MW-12-3	1.4	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9	4.0	
MW-12-Screen-3	Jun 2020	Dup-4-2Q2020	1.2	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8	4.4	
MW-12-Screen-3	Aug 2020	MW-12-3	0.9	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6	4.9	
MW-12-Screen-3	Oct/Nov 2020	MW-12-3	0.8	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7	4.0	
MW-12-Screen-3	Mar/Apr 2021	MW-12-3	0.7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7	2.9 J	
MW-12-Screen-3	May/June 2021	MW-12-3	1.0	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6	3.1 J	
MW-12-Screen-4												
MW-12-Screen-4	Jun 2020	MW-12-4	0.4 J	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	2.0 J	
MW-12-Screen-4	Aug 2020	MW-12-4	0.4 J	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	3.3 J	
MW-12-Screen-4	Oct/Nov 2020	MW-12-4	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 J	2.5 J	
MW-12-Screen-4	Mar/Apr 2021	MW-12-4	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	2.7 J	
MW-12-Screen-4	May/June 2021	MW-12-4	1.5	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7	2.3 J	
MW-12-Screen-5												
MW-12-Screen-5	Jun 2020	MW-12-5	0.2 J	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	1.6 J	
MW-12-Screen-5	Aug 2020	MW-12-5	0.3 J	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	1.6 J	
MW-12-Screen-5	Oct/Nov 2020	MW-12-5	0.4 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	1.5 J	

Sample Location	Sampling Event	Sample Number	Carbon tetrachloride	TCE	PCE	1,1-DCA	1,2-DCA	1,1-DCE	Freon 113	Chloroform	Perchlorate	Other Volatile Organic Compounds and 1,4-Dioxane, NDMA, NDPA, 1,2,3-TCP
MW-12-Screen-5	Mar/Apr 2021	MW-12-5	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	1.3 J	
MW-12-Screen-5	May/June 2021	MW-12-5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	1.2 J	
MW-13												
MW-13	Jun 2020	MW-13	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8	25.0	Trichlorofluoromethane
MW-14-Screen-2												
MW-14-Screen-2	Jun 2020	MW-14-2	0.5 U	1.4	0.35 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 J	3.9 J	
MW-14-Screen-2	Aug 2020	MW-14-2	0.5 U	1.2	0.31 J	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	4.4	
MW-14-Screen-2	Oct/Nov 2020	MW-14-2	0.5 U	1.2	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	3.8 J	
MW-14-Screen-2	Mar/Apr 2021	MW-14-2	0.5 U	3.0	0.8	0.3 J	0.5 U	0.5 U	0.5 U	0.9	3.7 J	
MW-14-Screen-2	May/June 2021	MW-14-2	0.5 U	1.3	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 J	3.4 J	
MW-14-Screen-3												
MW-14-Screen-3	Jun 2020	MW-14-3	0.5 U	1.9	1.10	0.7	0.5 U	0.5 U	0.5 U	0.9	6.0	1,2,3-Trichlorobenzene
MW-14-Screen-3	Aug 2020	MW-14-3	0.5 U	0.8	0.45 J	0.3 J	0.5 U	0.5 U	0.5 U	0.5 J	5.1	
MW-14-Screen-3	Oct/Nov 2020	MW-14-3	0.5 U	0.8	0.5	0.3 J	0.5 U	0.5 U	0.5 U	0.4 J	4.7	
MW-14-Screen-3	Mar/Apr 2021	MW-14-3	0.5 U	1.4 J	1.0 J	0.4 J	0.5 U	0.5 U	0.5 U	0.7	5.2	
MW-14-Screen-3	Mar/Apr 2021	DUP-2-1Q21	0.5 U	0.7 J	0.4 J	0.2 J	0.5 U	0.5 U	0.5 U	0.4 J	4.9	
MW-14-Screen-3	May/June 2021	MW-14-3	0.5 U	0.7	0.4 J	0.2 J	0.5 U	0.5 U	0.5 U	0.4 J	4.3	
MW-14-Screen-4												
MW-14-Screen-4	Jun 2020	MW-14-4	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	4.4	
MW-14-Screen-4	Aug 2020	MW-14-4	0.5 U	0.2 J	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	4.2	
MW-14-Screen-4	Oct/Nov 2020	MW-14-4	0.5 U	0.5 J	0.4 J	0.2 J	0.5 U	0.5 U	0.5 U	0.4 J	4.7	
MW-14-Screen-4	Mar/Apr 2021	MW-14-4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	4.1	
MW-14-Screen-4	May/June 2021	MW-14-4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 J	4.9	
MW-14-Screen-5												
MW-14-Screen-5	Jun 2020	MW-14-5	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	4.0 U	
MW-14-Screen-5	Aug 2020	MW-14-5	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-14-Screen-5	Oct/Nov 2020	MW-14-5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	4.0 U	
MW-14-Screen-5	Mar/Apr 2021	MW-14-5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	4.0 U	
MW-14-Screen-5	May/June 2021	MW-14-5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-15												
MW-15	Jun 2020	MW-15	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-15	Jun 2020	Dup-7-2Q2020	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-15	Oct/Nov 2020	MW-15	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-15	Oct/Nov 2020	DUP-8-4Q20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-15	May/June 2021	MW-15	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-16												
MW-16	Jun 2020	MW-16	0.4 J	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2	4.0 U	Bromodichloromethane
												0.3 J

Sample Location	Sampling Event	Sample Number	Carbon tetrachloride	TCE	PCE	1,1-DCA	1,2-DCA	1,1-DCE	Freon 113	Chloroform	Perchlorate	Other Volatile Organic Compounds and 1,4-Dioxane, NDMA, NDPA, 1,2,3-TCP
MW-17-Screen-1												
MW-17-Screen-1	Jun 2020	MW-17-1	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-17-Screen-2												
MW-17-Screen-2	Jun 2020	MW-17-2	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-17-Screen-2	Jun 2020	Dup-2-2Q2020	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-17-Screen-2	Aug 2020	MW-17-2	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-17-Screen-2	Oct/Nov 2020	MW-17-2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-17-Screen-2	Mar/Apr 2021	MW-17-2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-17-Screen-2	May/June 2021	MW-17-2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-17-Screen-2	May/June 2021	DUP-5-2Q21	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-17-Screen-3												
MW-17-Screen-3	Jun 2020	MW-17-3	0.5 U	1.3	0.26 J	0.5 U	0.5 U	0.5 U	0.3 J	3.7 J		
MW-17-Screen-3	Aug 2020	MW-17-3	0.5 U	1.6	0.30 J	0.5 U	0.5 U	0.5 U	0.3 J	3.5 J		
MW-17-Screen-3	Oct/Nov 2020	MW-17-3	0.5 U	4.1	0.8	0.2 J	0.5 U	0.5 U	0.5	3.9 J		
MW-17-Screen-3	Mar/Apr 2021	MW-17-3	0.5 U	1.1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	4.0 U	Styrene	0.1 J
MW-17-Screen-3	May/June 2021	MW-17-3	0.5 U	1.1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	4.0 U		
MW-17-Screen-4												
MW-17-Screen-4	Jun 2020	MW-17-4	0.5 U	0.5 J	0.23 J	0.5 U	0.5 U	0.5 U	0.4 J	4.1		
MW-17-Screen-4	Aug 2020	MW-17-4	0.5 U	1.3	0.68	0.5 U	0.5 U	0.5 U	0.8	5.1		
MW-17-Screen-4	Oct/Nov 2020	MW-17-4	0.2 J	1.9	1.0	0.2 J	0.5 U	0.5 U	1.1	5.4		
MW-17-Screen-4	Mar/Apr 2021	MW-17-4	0.5 U	0.6	0.3 J	0.5 U	0.5 U	0.5 U	0.5 J	4.9		
MW-17-Screen-4	May/June 2021	MW-17-4	0.5 U	0.6	0.4 J	0.5 U	0.5 U	0.5 U	0.5 J	4.6		
MW-17-Screen-5												
MW-17-Screen-5	Jun 2020	MW-17-5	0.5 U	1.4	0.72	0.5 U	0.5 U	0.5 U	0.9	4.3		
MW-17-Screen-5	Oct/Nov 2020	MW-17-5	0.5 U	0.6	0.3 J	0.5 U	0.5 U	0.5 U	0.5 J	5.2		
MW-17-Screen-5	May/June 2021	MW-17-5	0.5 U	0.8	0.5 J	0.5 U	0.5 U	0.5 U	0.6	4.5		
MW-18-Screen-1												
MW-18-Screen-1	Jun 2020	MW-18-1	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-18-Screen-2												
MW-18-Screen-2	Jun 2020	MW-18-2	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-18-Screen-2	Aug 2020	MW-18-2	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-18-Screen-2	Oct/Nov 2020	MW-18-2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-18-Screen-2	Mar/Apr 2021	MW-18-2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-18-Screen-2	May/June 2021	MW-18-2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-18-Screen-3												
MW-18-Screen-3	Jun 2020	MW-18-3	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	1.4 J		
MW-18-Screen-3	Aug 2020	MW-18-3	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	1.8 J		

Sample Location	Sampling Event	Sample Number	Carbon tetrachloride	TCE	PCE	1,1-DCA	1,2-DCA	1,1-DCE	Freon 113	Chloroform	Perchlorate	Other Volatile Organic Compounds and 1,4-Dioxane, NDMA, NDPA, 1,2,3-TCP
MW-18-Screen-3	Oct/Nov 2020	MW-18-3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 J	
MW-18-Screen-3	Mar/Apr 2021	MW-18-3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 J	
MW-18-Screen-3	May/June 2021	MW-18-3	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 J	Trichlorofluoromethane 0.2 J
MW-18-Screen-3	May/June 2021	DUP-4-2Q21	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 J	Trichlorofluoromethane 0.2 J
MW-18-Screen-4												
MW-18-Screen-4	Jun 2020	MW-18-4	1.1	0.7	0.53	0.5 U	0.5 U	0.5 U	0.5 U	0.6	16.0	
MW-18-Screen-4	Aug 2020	MW-18-4	4.6	2.2	1.60	0.5 U	0.5 U	0.5 U	0.5 U	1.3	16.0	
MW-18-Screen-4	Oct/Nov 2020	MW-18-4	4.5	2.3	1.7	0.5 U	0.5 U	0.5 U	0.5 U	1.4	16.0	
MW-18-Screen-4	Mar/Apr 2021	MW-18-4	1.3	0.7	0.6	0.5 U	0.5 U	0.5 U	0.5 U	0.7	16.0	
MW-18-Screen-4	Mar/Apr 2021	DUP-5-1Q21	2.2	1.2	0.7	0.5 U	0.5 U	0.5 U	0.5 U	1.0	15.0	
MW-18-Screen-4	May/June 2021	MW-18-4	1.3	0.8	0.7	0.5 U	0.5 U	0.5 U	0.5 U	0.7	16.0	Acetone 41.0
MW-18-Screen-5												
MW-18-Screen-5	Jun 2020	MW-18-5	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	Carbon disulfide Styrene 0.8 J 0.1 J
MW-18-Screen-5	Aug 2020	MW-18-5	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-18-Screen-5	Oct/Nov 2020	MW-18-5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	Styrene 0.1 J
MW-18-Screen-5	Mar/Apr 2021	MW-18-5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	Styrene 0.1 J
MW-18-Screen-5	May/June 2021	MW-18-5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-19-Screen-1												
MW-19-Screen-1	Jun 2020	MW-19-1	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6	4.0 U	
MW-19-Screen-1	Aug 2020	MW-19-1	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	3.2	4.0 U	Methyl-tert-butyl ether (MTBE) 0.3 J
MW-19-Screen-1	Oct/Nov 2020	MW-19-1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.3	4.0 U	Methyl-tert-butyl ether (MTBE) 0.4 J
MW-19-Screen-1	Mar/Apr 2021	MW-19-1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.2	4.0 U	Methyl-tert-butyl ether (MTBE) 0.2 J
MW-19-Screen-1	May/June 2021	MW-19-1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9	11.0	
MW-19-Screen-2												
MW-19-Screen-2	Jun 2020	MW-19-2	0.5 U	0.6	1.30	0.5 U	0.5 U	0.5 U	0.5 U	1.3	3.3 J	
MW-19-Screen-2	Aug 2020	MW-19-2	0.5 U	0.7	1.20	0.5 U	0.5 U	0.5 U	0.5 U	1.3	2.8 J	
MW-19-Screen-2	Oct/Nov 2020	MW-19-2	0.5 U	0.5 J	0.9	0.5 U	0.5 U	0.5 U	0.5 U	1.0	3.1 J	
MW-19-Screen-2	Mar/Apr 2021	MW-19-2	0.5 U	1.5	2.1	0.2 J	0.5 U	0.5 U	0.5 U	2.1	3.4 J	cis-1,2-Dichloroethene 0.3 J
MW-19-Screen-2	May/June 2021	MW-19-2	0.5 U	0.5	0.6	0.5 U	0.5 U	0.5 U	0.5 U	0.9	3.1 J	
MW-19-Screen-3												
MW-19-Screen-3	Jun 2020	MW-19-3	0.5 U	0.3 J	0.71	0.5 U	0.5 U	0.5 U	0.5 U	2.1	3.7 J	
MW-19-Screen-3	Jun 2020	DUP-1-2Q2020	0.5 U	0.2 J	0.53	0.5 U	0.5 U	0.5 U	0.5 U	1.9	3.9 J	
MW-19-Screen-3	Aug 2020	MW-19-3	0.5 U	0.9	1.90	0.2 J	0.5 U	0.5 U	0.5 U	4.4	2.9 J	cis-1,2-Dichloroethene 0.3 J
MW-19-Screen-3	Oct/Nov 2020	MW-19-3	0.5 U	0.4 J	0.9	0.5 U	0.5 U	0.5 U	0.5 U	2.3	3.6 J	
MW-19-Screen-3	Oct/Nov 2020	DUP-2-4Q20	0.5 U	0.3 J	0.6	0.5 U	0.5 U	0.5 U	0.5 U	1.6	3.8 J	
MW-19-Screen-3	Mar/Apr 2021	MW-19-3	0.5 U	0.5	1.3	0.5 U	0.5 U	0.5 U	0.5 U	2.2	3.5 J	

Sample Location	Sampling Event	Sample Number	Carbon tetrachloride	TCE	PCE	1,1-DCA	1,2-DCA	1,1-DCE	Freon 113	Chloroform	Perchlorate	Other Volatile Organic Compounds and 1,4-Dioxane, NDMA, NDPA, 1,2,3-TCP
MW-19-Screen-3	May/June 2021	MW-19-3	0.5 U	0.4 J	1.0	0.5 U	0.5 U	0.5 U	0.5 U	1.7	4.2	
MW-19-Screen-4												
MW-19-Screen-4	Jun 2020	MW-19-4	0.5 U	0.5 U	0.39 J	0.5 U	0.5 U	0.5 U	0.5 U	1.7	3.6 J	
MW-19-Screen-4	Aug 2020	MW-19-4	0.5 U	0.5 U	0.40 J	0.5 U	0.5 U	0.5 U	0.5 U	1.8	2.5 J	
MW-19-Screen-4	Oct/Nov 2020	MW-19-4	0.5 U	0.2 J	0.5	0.5 U	0.5 U	0.5 U	0.5 U	2.1	3.2 J	
MW-19-Screen-4	Mar/Apr 2021	MW-19-4	0.5 U	0.4 J	0.9	0.5 U	0.5 U	0.5 U	0.5 U	2.8	3.0 J	
MW-19-Screen-4	May/June 2021	MW-19-4	0.5 U	0.3 J	0.7	0.5 U	0.5 U	0.5 U	0.5 U	2.6	3.6 J	
MW-19-Screen-5												
MW-19-Screen-5	Jun 2020	MW-19-5	0.5 U	0.5 U	0.32 J	0.5 U	0.5 U	0.5 U	0.5 U	1.3	2.7 J	
MW-19-Screen-5	Aug 2020	MW-19-5	0.5 U	0.5 U	0.43 J	0.5 U	0.5 U	0.5 U	0.5 U	1.9	2.9 J	
MW-19-Screen-5	Oct/Nov 2020	MW-19-5	0.5 U	0.5 U	0.4 J	0.5 U	0.5 U	0.5 U	0.5 U	1.9	3.0 J	
MW-19-Screen-5	Mar/Apr 2021	MW-19-5	0.5 U	0.2 J	0.7	0.5 U	0.5 U	0.5 U	0.5 U	2.6	3.3 J	
MW-19-Screen-5	May/June 2021	MW-19-5	0.5 U	0.2 J	0.5	0.5 U	0.5 U	0.5 U	0.5 U	2.1	2.9 J	
MW-20-Screen-2												
MW-20-Screen-2	Jun 2020	MW-20-2	0.5 U	0.4 J	0.34 J	0.5 U	0.5 U	0.5 U	0.5 U	0.8	0.9 J	
MW-20-Screen-2	Aug 2020	MW-20-2	0.5 U	0.3 J	0.24 J	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	1.7 J	
MW-20-Screen-2	Oct/Nov 2020	MW-20-2	0.5 U	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	1.6 J	Carbon disulfide 0.5 J
MW-20-Screen-2	Oct/Nov 2020	DUP-1-4Q20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	9.8	Acrylonitrile 9.4 Benzene 0.8 Ethylbenzene 0.2 J Methyl-tert-butyl ether (MTBE) 1.7 o-Xylene 0.1 J Styrene 2.4 Vinyl chloride 1.5
MW-20-Screen-2	Mar/Apr 2021	MW-20-2	0.5 U	0.2 J	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	4.0 U	
MW-20-Screen-2	May/June 2021	MW-20-2	0.5 U	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	7.4	Carbon disulfide 0.6
MW-20-Screen-3												
MW-20-Screen-3	Jun 2020	MW-20-3	0.5 U	0.5 U	0.46 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	Carbon disulfide 0.6 J Ethylbenzene 0.2 J Styrene 0.4 J
MW-20-Screen-3	Aug 2020	MW-20-3	0.5 U	0.5 U	0.65	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	Styrene 0.3 J
MW-20-Screen-3	Oct/Nov 2020	MW-20-3	0.5 U	0.5 U	0.4 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	Carbon disulfide 0.7 J Styrene 0.3 J
MW-20-Screen-3	Mar/Apr 2021	MW-20-3	0.5 U	0.5 U	1.3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	Ethylbenzene 0.2 J Styrene 0.4 J
MW-20-Screen-3	May/June 2021	MW-20-3	0.5 U	0.5 U	1.3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	Styrene 0.3 J

Sample Location	Sampling Event	Sample Number	Carbon tetrachloride	TCE	PCE	1,1-DCA	1,2-DCA	1,1-DCE	Freon 113	Chloroform	Perchlorate	Other Volatile Organic Compounds and 1,4-Dioxane, NDMA, NDPA, 1,2,3-TCP	
MW-20-Screen-3	May/June 2021	DUP-8-2Q21	0.5 U	0.5 U	0.7 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	Carbon disulfide Styrene	0.8 0.3 J
MW-20-Screen-4													
MW-20-Screen-4	Jun 2020	MW-20-4	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-20-Screen-4	Aug 2020	MW-20-4	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-20-Screen-4	Aug 2020	DUP-1-3Q20	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-20-Screen-4	Oct/Nov 2020	MW-20-4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-20-Screen-4	Mar/Apr 2021	MW-20-4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-20-Screen-4	May/June 2021	MW-20-4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-20-Screen-5													
MW-20-Screen-5	Jun 2020	MW-20-5	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	Carbon disulfide Styrene	0.8 J 0.2 J
MW-20-Screen-5	Aug 2020	MW-20-5	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	Carbon disulfide Styrene	0.6 0.1 J
MW-20-Screen-5	Oct/Nov 2020	MW-20-5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	Carbon disulfide Styrene	0.7 0.1 J
MW-20-Screen-5	Mar/Apr 2021	MW-20-5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	Carbon disulfide Styrene	0.8 0.1 J
MW-20-Screen-5	May/June 2021	MW-20-5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	Carbon disulfide Styrene	0.5 0.1 J
MW-21-Screen-2													
MW-21-Screen-2	Jun 2020	MW-21-2	0.5 U	0.3 J	2.00	0.5 U	0.5 U	0.5 U	0.5 U	0.5 J	1.9 J		
MW-21-Screen-2	Jun 2020	DUP-6-2Q2020	0.5 U	0.2 J	1.80	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	1.8 J		
MW-21-Screen-2	Aug 2020	MW-21-2	0.5 U	0.5 U	0.36 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.1 J		
MW-21-Screen-2	Oct/Nov 2020	MW-21-2	0.5 U	0.2 J	1.0	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	1.7 J		
MW-21-Screen-2	Oct/Nov 2020	DUP-5-4Q20	0.5 U	0.5 U	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	1.6 J		
MW-21-Screen-2	Mar/Apr 2021	MW-21-2	0.5 U	0.5 U	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	2.0 J		
MW-21-Screen-2	May/June 2021	MW-21-2	0.5 U	0.5 U	0.4 J	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	1.8 J		
MW-21-Screen-2	May/June 2021	DUP-6-2Q21	0.5 U	0.5 U	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	2.0 J		
MW-21-Screen-3													
MW-21-Screen-3	Jun 2020	MW-21-3	0.5 U	2.0	2.30	0.5 U	0.5 U	0.5 U	0.5 U	0.7	3.2 J		
MW-21-Screen-3	Aug 2020	MW-21-3	0.5 U	0.7	0.67	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	2.5 J		
MW-21-Screen-3	Oct/Nov 2020	MW-21-3	0.5 U	2.0	2.1	0.2 J	0.5 U	0.5 U	0.5 U	0.7	2.8 J		
MW-21-Screen-3	Mar/Apr 2021	MW-21-3	0.5 U	0.4 J	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	2.6 J		
MW-21-Screen-3	Mar/Apr 2021	DUP-7-1Q21	0.5 U	1.9 J	1.8 J	0.2 J	0.5 U	0.5 U	0.5 U	0.7	3.1 J		
MW-21-Screen-3	May/June 2021	MW-21-3	0.5 U	0.7	0.6	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	2.6 J		

Sample Location	Sampling Event	Sample Number	Carbon tetrachloride	TCE	PCE	1,1-DCA	1,2-DCA	1,1-DCE	Freon 113	Chloroform	Perchlorate	Other Volatile Organic Compounds and 1,4-Dioxane, NDMA, NDPA, 1,2,3-TCP
MW-21-Screen-4												
MW-21-Screen-4	Jun 2020	MW-21-4	0.5 U	0.8	2.60	0.5 U	0.5 U	0.5 U	0.5 U	7.8	3.7 J	
MW-21-Screen-4	Aug 2020	MW-21-4	0.5 U	0.4 J	0.96	0.5 U	0.5 U	0.5 U	0.5 U	3.2	2.7 J	
MW-21-Screen-4	Aug 2020	DUP-5-3Q20	0.5 U	0.4 J	0.99	0.5 U	0.5 U	0.5 U	0.5 U	3.3	3.1 J	
MW-21-Screen-4	Oct/Nov 2020	MW-21-4	0.5 U	0.6	1.2	0.5 U	0.5 U	0.5 U	0.5 U	3.5	2.8 J	
MW-21-Screen-4	Mar/Apr 2021	MW-21-4	0.5 U	0.2 J	0.7	0.5 U	0.5 U	0.5 U	0.5 U	3.6	2.9 J	
MW-21-Screen-4	May/June 2021	MW-21-4	0.5 U	0.3 J	0.6	0.5 U	0.5 U	0.5 U	0.5 U	3.1	2.6 J	
MW-21-Screen-5												
MW-21-Screen-5	Jun 2020	MW-21-5	0.5 U	0.3 J	1.90	0.5 U	0.5 U	0.5 U	0.5 U	9.5	2.4 J	
MW-21-Screen-5	Aug 2020	MW-21-5	0.5 U	0.5 U	0.66	0.5 U	0.5 U	0.5 U	0.5 U	4.6	2.5 J	
MW-21-Screen-5	Oct/Nov 2020	MW-21-5	0.5 U	0.5 U	0.6	0.5 U	0.5 U	0.5 U	0.5 U	4.1	2.4 J	
MW-21-Screen-5	Mar/Apr 2021	MW-21-5	0.5 U	0.5 U	0.7	0.5 U	0.5 U	0.5 U	0.5 U	3.8	2.4 J	
MW-21-Screen-5	May/June 2021	MW-21-5	0.5 U	0.5 U	0.8	0.5 U	0.5 U	0.5 U	0.5 U	4.2	2.6 J	
MW-22-Screen-1												
MW-22-Screen-1	Jun 2020	MW-22-1	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	2.1	160.0	
MW-22-Screen-1	Aug 2020	MW-22-1	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0	320.0	
MW-22-Screen-1	Oct/Nov 2020	MW-22-1	0.5 U	0.6	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.7	100.0	
MW-22-Screen-1	Mar/Apr 2021	MW-22-1	0.5 U	1.2	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5	3.4 J	
MW-22-Screen-1	May/June 2021	MW-22-1	0.5	0.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3	3.9	
MW-22-Screen-2												
MW-22-Screen-2	Jun 2020	MW-22-2	0.5 U	0.3 J	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	2.8 J	
MW-22-Screen-2	Aug 2020	MW-22-2	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 J	
MW-22-Screen-2	Aug 2020	DUP-3-3Q20	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.7 J	
MW-22-Screen-2	Oct/Nov 2020	MW-22-2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.9 J	
MW-22-Screen-2	Mar/Apr 2021	MW-22-2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.2 J	
MW-22-Screen-2	May/June 2021	MW-22-2	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.7	
MW-22-Screen-3												
MW-22-Screen-3	Jun 2020	MW-22-3	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.5 J	
MW-22-Screen-3	Aug 2020	MW-22-3	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.7 J	
MW-22-Screen-3	Oct/Nov 2020	MW-22-3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.7 J	
MW-22-Screen-3	Mar/Apr 2021	MW-22-3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.0 J	
MW-22-Screen-3	Mar/Apr 2021	DUP-3-1Q21	0.5 U	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.7 J	
MW-22-Screen-3	May/June 2021	MW-22-3	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.1	
MW-22-Screen-4												
MW-22-Screen-4	Jun 2020	MW-22-4	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-22-Screen-4	Oct/Nov 2020	MW-22-4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.4 J	
MW-22-Screen-4	May/June 2021	MW-22-4	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.1	

Sample Location	Sampling Event	Sample Number	Carbon tetrachloride	TCE	PCE	1,1-DCA	1,2-DCA	1,1-DCE	Freon 113	Chloroform	Perchlorate	Other Volatile Organic Compounds and 1,4-Dioxane, NDMA, NDPA, 1,2,3-TCP
MW-22-Screen-5												
MW-22-Screen-5	Jun 2020	MW-22-5	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	Carbon disulfide 0.7 J
MW-22-Screen-5	Oct/Nov 2020	MW-22-5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	Carbon disulfide 0.6
MW-22-Screen-5	May/June 2021	MW-22-5	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0	Carbon disulfide 0.5
MW-23-Screen-1												
MW-23-Screen-1	Jun 2020	MW-23-1	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.8 J	
MW-23-Screen-1	Aug 2020	MW-23-1	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.0 J	
MW-23-Screen-1	Oct/Nov 2020	MW-23-1	0.5 U	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	14.0	
MW-23-Screen-2												
MW-23-Screen-2	Jun 2020	MW-23-2	0.5 U	1.0	0.23 J	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	3.7 J	
MW-23-Screen-2	Aug 2020	MW-23-2	0.5 U	1.1	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	5.2	
MW-23-Screen-2	Oct/Nov 2020	MW-23-2	0.5 U	2.4	0.7	0.3 J	0.5 U	0.5 U	0.5 U	0.7	4.5	
MW-23-Screen-2	Oct/Nov 2020	DUP-4-4Q20	0.5 U	2.4	0.7	0.3 J	0.5 U	0.5 U	0.5 U	0.8	4.8	
MW-23-Screen-2	Mar/Apr 2021	MW-23-2	0.5 U	0.7	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	4.3	
MW-23-Screen-2	May/June 2021	MW-23-2	0.5 U	0.8	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	4.8	
MW-23-Screen-3												
MW-23-Screen-3	Jun 2020	MW-23-3	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.5 J	
MW-23-Screen-3	Jun 2020	Dup-3-2Q2020	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.2 J	
MW-23-Screen-3	Aug 2020	MW-23-3	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.5 J	
MW-23-Screen-3	Oct/Nov 2020	MW-23-3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.4 J	
MW-23-Screen-3	Mar/Apr 2021	MW-23-3	0.5 U	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	3.4 J	
MW-23-Screen-3	May/June 2021	MW-23-3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.6 J	
MW-23-Screen-3	May/June 2021	DUP-1-2Q21	0.5 U	0.5 U	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	3.4 J	
MW-23-Screen-4												
MW-23-Screen-4	Jun 2020	MW-23-4	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.8 J	
MW-23-Screen-4	Oct/Nov 2020	MW-23-4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.3 J	
MW-23-Screen-4	May/June 2021	MW-23-4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.4 J	
MW-23-Screen-5												
MW-23-Screen-5	Jun 2020	MW-23-5	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	Styrene 0.3 J
MW-23-Screen-5	Oct/Nov 2020	MW-23-5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	Styrene 0.4 J
MW-23-Screen-5	May/June 2021	MW-23-5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	Styrene 0.2 J
MW-24-Screen-1												
MW-24-Screen-1	Jun 2020	MW-24-1	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	4.1	5.6	
MW-24-Screen-1	Aug 2020	MW-24-1	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2	5.6	
MW-24-Screen-1	Oct/Nov 2020	MW-24-1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.1	14.0	
MW-24-Screen-1	Mar/Apr 2021	MW-24-1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.4	32.0	
MW-24-Screen-1	May/June 2021	MW-24-1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.1	260.0	

Sample Location	Sampling Event	Sample Number	Carbon tetrachloride	TCE	PCE	1,1-DCA	1,2-DCA	1,1-DCE	Freon 113	Chloroform	Perchlorate	Other Volatile Organic Compounds and 1,4-Dioxane, NDMA, NDPA, 1,2,3-TCP	
MW-24-Screen-2													
MW-24-Screen-2	Jun 2020	MW-24-2	0.5 U	0.5 U	0.28 J	0.3 J	0.5 U	0.5 U	0.5 U	0.9	4.9	Bromodichloromethane	0.4 J
MW-24-Screen-2	Aug 2020	MW-24-2	0.3 J	0.5 U	0.35 J	0.3 J	0.5 U	0.5 U	0.5 U	0.7	5.7	Bromodichloromethane	0.2 J
MW-24-Screen-2	Aug 2020	DUP-4-3Q20	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	5.8		
MW-24-Screen-2	Oct/Nov 2020	MW-24-2	0.5 U	0.5 U	0.3 J	0.3 J	0.5 U	0.5 U	0.5 U	0.7	5.7	Bromodichloromethane	0.2 J
MW-24-Screen-2	Mar/Apr 2021	MW-24-2	0.5 U	0.5 U	0.3 J	0.2 J	0.2 J	0.5 U	0.5 U	0.8	6.2		
MW-24-Screen-2	Mar/Apr 2021	DUP-4-1Q21	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5	6.5		
MW-24-Screen-2	May/June 2021	MW-24-2	0.5 U	0.5 U	0.2 J	0.2 J	0.5 U	0.5 U	0.5 U	0.9	8.5		
MW-24-Screen-3													
MW-24-Screen-3	Jun 2020	MW-24-3	0.5 U	0.5 U	0.50 U	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-24-Screen-3	Aug 2020	MW-24-3	0.5 U	0.5 U	0.50 U	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	8.0 U		
MW-24-Screen-3	Oct/Nov 2020	MW-24-3	0.5 U	0.5 U	0.2 J	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-24-Screen-3	Oct/Nov 2020	DUP-3-4Q20	0.5 U	0.5 U	0.4 J	0.4 J	0.5 U	0.5 U	0.5 U	0.5 U	1.5 J		
MW-24-Screen-3	Mar/Apr 2021	MW-24-3	0.5 U	0.5 U	0.5 U	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-24-Screen-3	May/June 2021	MW-24-3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-24-Screen-4													
MW-24-Screen-4	Jun 2020	MW-24-4	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	Carbon disulfide	0.5 J
MW-24-Screen-4												Styrene	0.2 J
MW-24-Screen-4	Oct/Nov 2020	MW-24-4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	Styrene	0.1 J
MW-24-Screen-4	May/June 2021	MW-24-4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	Styrene	0.1 J
MW-24-Screen-5													
MW-24-Screen-5	Jun 2020	MW-24-5	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-24-Screen-5	Oct/Nov 2020	MW-24-5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-24-Screen-5	May/June 2021	MW-24-5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-25-Screen-1													
MW-25-Screen-1	Jun 2020	MW-25-1	0.5 U	0.7	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 J	6.5	Methyl-tert-butyl ether (MTBE)	0.5 J
MW-25-Screen-1	Aug 2020	MW-25-1	0.5 U	0.7	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	6.5	Methyl-tert-butyl ether (MTBE)	0.4 J
MW-25-Screen-1	Aug 2020	DUP-2-3Q20	0.5 U	0.7	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	6.8	Methyl-tert-butyl ether (MTBE)	0.4 J
MW-25-Screen-1	Oct/Nov 2020	MW-25-1	0.5 U	1.7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8	6.8	Methyl-tert-butyl ether (MTBE)	0.5
MW-25-Screen-1	Mar/Apr 2021	MW-25-1	0.5 U	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	6.4	Methyl-tert-butyl ether (MTBE)	0.4 J
MW-25-Screen-1	Mar/Apr 2021	DUP-1-1Q21	0.5 U	1.0 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7	6.4	Methyl-tert-butyl ether (MTBE)	0.4 J
MW-25-Screen-1	May/June 2021	MW-25-1	0.5 U	0.4 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	7.6	Methyl-tert-butyl ether (MTBE)	0.4 J
MW-25-Screen-2													
MW-25-Screen-2	Jun 2020	MW-25-2	0.5 U	0.5	0.41 J	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	12.0		
MW-25-Screen-2	Aug 2020	MW-25-2	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	12.0		
MW-25-Screen-2	Oct/Nov 2020	MW-25-2	0.5 U	0.3 J	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	12.0		
MW-25-Screen-2	Mar/Apr 2021	MW-25-2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	12.0		

Sample Location	Sampling Event	Sample Number	Carbon tetrachloride	TCE	PCE	1,1-DCA	1,2-DCA	1,1-DCE	Freon 113	Chloroform	Perchlorate	Other Volatile Organic Compounds and 1,4-Dioxane, NDMA, NDPA, 1,2,3-TCP
MW-25-Screen-2	May/June 2021	MW-25-2	0.5 U	0.5 U	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.1 J	12.0	
MW-25-Screen-3												
MW-25-Screen-3	Jun 2020	MW-25-3	0.5 U	0.5 U	0.55	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	9.3	
MW-25-Screen-3	Aug 2020	MW-25-3	0.5 U	0.5 U	0.72	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	8.4	
MW-25-Screen-3	Oct/Nov 2020	MW-25-3	0.5 U	0.5 U	0.6	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	9.8	
MW-25-Screen-3	Mar/Apr 2021	MW-25-3	0.5 U	0.5 U	3.2	0.5 U	0.5 U	0.5 U	0.5 U	0.7	9.3	
MW-25-Screen-3	May/June 2021	MW-25-3	0.5 U	0.5 U	1.5	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	10.0	
MW-25-Screen-3	May/June 2021	DUP-2-2Q21	0.5 U	0.5 U	1.4	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	10.0	
MW-25-Screen-4												
MW-25-Screen-4	Jun 2020	MW-25-4	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	8.1	
MW-25-Screen-4	Aug 2020	MW-25-4	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	8.4	
MW-25-Screen-4	Oct/Nov 2020	MW-25-4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	8.5	
MW-25-Screen-4	Mar/Apr 2021	MW-25-4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	7.8	
MW-25-Screen-4	May/June 2021	MW-25-4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	8.8	
MW-25-Screen-5												
MW-25-Screen-5	Jun 2020	MW-25-5	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-25-Screen-5	Aug 2020	MW-25-5	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-25-Screen-5	Oct/Nov 2020	MW-25-5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-25-Screen-5	Mar/Apr 2021	MW-25-5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-25-Screen-5	May/June 2021	MW-25-5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	
MW-26-Screen-1												
MW-26-Screen-1	Jun 2020	MW-26-1	0.5 U	0.5 U	0.43 J	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	2.1 J	
MW-26-Screen-1	Aug 2020	MW-26-1	0.5 U	0.5 U	0.26 J	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	2.7 J	
MW-26-Screen-1	Oct/Nov 2020	MW-26-1	0.5 U	0.5 U	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	2.2 J	
MW-26-Screen-2												
MW-26-Screen-2	Jun 2020	MW-26-2	0.5 U	0.5 U	1.70	0.5 U	0.5 U	0.5 U	0.5 U	1.5	3.5 J	
MW-26-Screen-2	Aug 2020	MW-26-2	0.5 U	0.3 J	2.70	0.5 U	0.5 U	0.5 U	0.5 U	2.5	3.0 J	
MW-26-Screen-2	Oct/Nov 2020	MW-26-2	0.5 U	0.4 J	2.9	0.5 U	0.5 U	0.5 U	0.5 U	2.7	3.1 J	cis-1,2-Dichloroethene 0.3 J

Sample Location	Sampling Event	Sample Number	Carbon tetrachloride	TCE	PCE	1,1-DCA	1,2-DCA	1,1-DCE	Freon 113	Chloroform	Perchlorate	Other Volatile Organic Compounds and 1,4-Dioxane, NDMA, NDPA, 1,2,3-TCP
MW-26-Screen-2	Mar/Apr 2021	MW-26-2	0.5 U	0.2 J	1.7 J	0.5 U	0.5 U	0.5 U	0.5 U	1.9	2.6 J	
MW-26-Screen-2	Mar/Apr 2021	DUP-6-1Q21	0.5 U	0.4 J	4.1 J	0.5 U	0.5 U	0.5 U	0.5 U	2.4	2.4 J	cis-1,2-Dichloroethene 0.3 J
MW-26-Screen-2	May/June 2021	MW-26-2	0.5 U	0.2 J	1.6	0.5 U	0.5 U	0.5 U	0.5 U	1.5	3.0 J	
Analyte concentration exceeds the standard for:												
CA MCL			0.5	5.0	5.0	5.0	0.5	6.0	1200.0	TTHM	6.0	
EPA REGION IX MCL			5.0	5.0	5.0	NE	5.0	7.0	NE	TTHM	NE	
Notes												
DUP(E)	Field Duplicate											
NA	Not analyzed											
NE	Not established											
TTHM	Chloroform is regulated under the state and federal MCL of 80 µg/L for Total Trihalomethanes (TTHMs); the MCL applies to the sum of all four THMs (Bromodichloromethane, Bromoform, Dibromochloromethane, and Chloroform) as an annual average											
J	Analyte concentration is an estimated value											
U	Analyte was analyzed for but not detected at or above the stated limit											
UJ	Analyte was analyzed for but not detected; analyte concentration is an estimated value											

TABLE 2
SUMMARY OF METALS DETECTED DURING THE LAST FIVE
SAMPLING EVENTS OF THE LONG-TERM QUARTERLY GROUNDWATER SAMPLING PROGRAM
(Shaded values exceed State or Federal MCLs or action levels.)

Sample Location	Sampling Event	Sample Number	Arsenic ($\mu\text{g/L}$)	Lead ($\mu\text{g/L}$)	Chromium, Total ($\mu\text{g/L}$)	Chromium, Hexavalent ($\mu\text{g/L}$)
MW-1						
MW-1	Jun 2020	MW-1	2.0 U	1.00 U	3.0 U	0.43 U
MW-1	Jun 2020	Dup-8-2Q2020	2.0 U	1.00 U	3.0 U	0.20 U
MW-1	Oct/Nov 2020	MW-1	NA	NA	3.0 U	0.20 U
MW-1	Oct/Nov 2020	DUP-6-4Q20	NA	NA	3.0 U	0.20 U
MW-1	May/June 2021	MW-1	2.0 U	1.00 U	3.0 U	0.04 UB
MW-3-Screen-1						
MW-3-Screen-1	Jun 2020	MW-3-1	2.0 U	1.00 U	3.0 U	0.08 J
MW-3-Screen-1	Oct/Nov 2020	MW-3-1	NA	NA	3.0 U	0.20 U
MW-3-Screen-1	May/June 2021	MW-3-1	2.0 U	1.00 U	3.0 U	0.11 UB
MW-3-Screen-2						
MW-3-Screen-2	Jun 2020	MW-3-2	0.8 J	1.00 U	3.0 U	0.36
MW-3-Screen-2	Aug 2020	MW-3-2	NA	NA	1.5 J	0.51 J
MW-3-Screen-2	Oct/Nov 2020	MW-3-2	NA	NA	3.0 U	0.62
MW-3-Screen-2	Mar/Apr 2021	MW-3-2	NA	NA	3 U	0.69 J
MW-3-Screen-2	May/June 2021	MW-3-2	2.0 U	1.00 U	0.8 J	0.38 UB
MW-3-Screen-3						
MW-3-Screen-3	Jun 2020	MW-3-3	2.4	1.00 U	4.6	0.38
MW-3-Screen-3	Aug 2020	MW-3-3	NA	NA	2.2 J	0.57
MW-3-Screen-3	Oct/Nov 2020	MW-3-3	NA	NA	1.1 J	0.73
MW-3-Screen-3	Mar/Apr 2021	MW-3-3	NA	NA	1.4 J	0.73 J
MW-3-Screen-3	May/June 2021	MW-3-3	0.9 J	1.00 U	1.6 J	0.68
MW-3-Screen-3	May/June 2021	DUP-3-2Q21	1.0 J	1.00 U	1.4 J	0.58
MW-3-Screen-4						
MW-3-Screen-4	Jun 2020	MW-3-4	26.0	1.00 U	44.0	0.31
MW-3-Screen-4	Aug 2020	MW-3-4	NA	NA	37.0	0.60
MW-3-Screen-4	Oct/Nov 2020	MW-3-4	NA	NA	21.0	0.85
MW-3-Screen-4	Mar/Apr 2021	MW-3-4	NA	NA	11.0	0.77 J
MW-3-Screen-4	May/June 2021	MW-3-4	7.5	0.21 J	12.0	0.20
MW-3-Screen-5						
MW-3-Screen-5	Jun 2020	MW-3-5	77.0	1.00 U	140.0	0.34
MW-3-Screen-5	Oct/Nov 2020	MW-3-5	NA	NA	20.0	0.73
MW-3-Screen-5	May/June 2021	MW-3-5	23.0	0.18 J	44.0	0.66
MW-4-Screen-1						
MW-4-Screen-1	Jun 2020	MW-4-1	0.9 J	1.00 U	3.0 U	0.11 J
MW-4-Screen-1	Aug 2020	MW-4-1	NA	NA	3.0 U	0.20 U
MW-4-Screen-1	Oct/Nov 2020	MW-4-1	NA	NA	3.0 U	0.10 UJ
MW-4-Screen-2						
MW-4-Screen-2	Jun 2020	MW-4-2	2.0 U	1.00 U	0.9 J	0.20 U
MW-4-Screen-2	Aug 2020	MW-4-2	NA	NA	1.5 J	0.67 J

Sample Location	Sampling Event	Sample Number	Arsenic (µg/L)	Lead (µg/L)	Chromium, Total (µg/L)	Chromium, Hexavalent (µg/L)
MW-4-Screen-2	Oct/Nov 2020	MW-4-2	NA	NA	1.6 J	0.91
MW-4-Screen-2	Mar/Apr 2021	MW-4-2	NA	NA	0.6 J	0.07 UB
MW-4-Screen-2	May/June 2021	MW-4-2	0.8 J	1.00 U	0.6 J	0.12 UB
MW-4-Screen-3						
MW-4-Screen-3	Jun 2020	MW-4-3	2.0 U	1.00 U	1.0 J	0.03 J
MW-4-Screen-3	Aug 2020	MW-4-3	NA	NA	1.3 J	0.20 U
MW-4-Screen-3	Oct/Nov 2020	MW-4-3	NA	NA	2.1 J	0.20 U
MW-4-Screen-3	Mar/Apr 2021	MW-4-3	NA	NA	0.9 J	0.26 UB
MW-4-Screen-3	May/June 2021	MW-4-3	0.9 J	1.00 U	1.3 J	0.51 J
MW-4-Screen-4						
MW-4-Screen-4	Jun 2020	MW-4-4	2.0 U	1.00 U	0.6 J	0.20 U
MW-4-Screen-4	Oct/Nov 2020	MW-4-4	NA	NA	0.8 J	0.20 U
MW-4-Screen-4	May/June 2021	MW-4-4	2.0 U	1.00 U	3.0 U	0.06 UB
MW-4-Screen-5						
MW-4-Screen-5	Jun 2020	MW-4-5	1.1 J	1.00 U	2.4 J	0.20 U
MW-4-Screen-5	Oct/Nov 2020	MW-4-5	NA	NA	3.0 U	0.20 U
MW-4-Screen-5	May/June 2021	MW-4-5	2.0 U	1.00 U	3.0 U	0.06 UB
MW-5						
MW-5	Jun 2020	MW-5	1.0 J	1.00 U	3.0 U	0.20 U
MW-5	Aug 2020	MW-5	NA	NA	1.8 J	0.20 U
MW-7						
MW-7	Jun 2020	MW-7	2.0 U	1.00 U	37.0	1.20
MW-7	Aug 2020	MW-7	NA	NA	190.0	0.57
MW-8						
MW-8	Jun 2020	MW-8	2.0 U	1.00 U	6.0	0.29
MW-8	Aug 2020	MW-8	NA	NA	3.7	0.97 J
MW-8	Aug 2020	DUP-7-3Q20	NA	NA	3.2	0.88
MW-9						
MW-9	Jun 2020	MW-9	2.0 U	1.00 U	3.0 U	0.52
MW-9	Oct/Nov 2020	MW-9	NA	NA	240.0	0.48 UJ
MW-9	Oct/Nov 2020	DUP-7-4Q20	NA	NA	230.0	0.48 UJ
MW-9	May/June 2021	MW-9	0.8 J	1.00 U	3.0	0.46 J
MW-10						
MW-10	Jun 2020	MW-10	1.0 J	1.00 U	7.4	0.79
MW-10	Aug 2020	MW-10	NA	NA	18.0	0.90
MW-11-Screen-1						
MW-11-Screen-1	Jun 2020	MW-11-1	2.0 U	1.00 U	3.0 U	0.05 J
MW-11-Screen-1	Aug 2020	MW-11-1	NA	NA	3.0 U	0.13 UJ
MW-11-Screen-1	Oct/Nov 2020	MW-11-1	NA	NA	3.0 U	0.20 U
MW-11-Screen-1	Mar/Apr 2021	MW-11-1	NA	NA	7.3	0.20 J
MW-11-Screen-1	May/June 2021	MW-11-1	2.0 U	1.00 U	3.0 U	0.21 UB
MW-11-Screen-2						
MW-11-Screen-2	Jun 2020	MW-11-2	1.0 J	1.00 U	3.0 U	0.05 J
MW-11-Screen-2	Aug 2020	MW-11-2	NA	NA	3.0 U	NA
MW-11-Screen-2	Oct/Nov 2020	MW-11-2	NA	NA	3.0 U	0.06 UJ

Sample Location	Sampling Event	Sample Number	Arsenic ($\mu\text{g/L}$)	Lead ($\mu\text{g/L}$)	Chromium, Total ($\mu\text{g/L}$)	Chromium, Hexavalent ($\mu\text{g/L}$)
MW-11-Screen-2	Mar/Apr 2021	MW-11-2	NA	NA	3.0 U	0.04 UB
MW-11-Screen-2	May/June 2021	MW-11-2	2.0 U	1.00 U	0.6 UB	0.07 UB
MW-11-Screen-3						
MW-11-Screen-3	Jun 2020	MW-11-3	1.7 J	0.22 J	6.7	0.09 J
MW-11-Screen-3	Jun 2020	Dup-5-2Q2020	1.6 J	1.00 U	3.0 U	0.04 J
MW-11-Screen-3	Aug 2020	MW-11-3	NA	NA	3.0 U	0.20 U
MW-11-Screen-3	Oct/Nov 2020	MW-11-3	NA	NA	0.6 J	0.05 UJ
MW-11-Screen-3	Mar/Apr 2021	MW-11-3	NA	NA	3.0 U	0.04 UB
MW-11-Screen-3	May/June 2021	MW-11-3	3.5	1.00 U	3.0 U	0.13 UB
MW-11-Screen-3	May/June 2021	DUP-7-2Q21	3.5	1.00 U	1.2 UB	0.09 UB
MW-11-Screen-4						
MW-11-Screen-4	Jun 2020	MW-11-4	2.0 U	1.00 U	3.0 U	0.06 J
MW-11-Screen-4	Oct/Nov 2020	MW-11-4	NA	NA	3.0 U	0.20 U
MW-11-Screen-4	May/June 2021	MW-11-4	1.4 J	1.00 U	3.0 U	0.14 UB
MW-11-Screen-5						
MW-11-Screen-5	Jun 2020	MW-11-5	5.6	1.60	7.4	0.07 J
MW-11-Screen-5	Oct/Nov 2020	MW-11-5	NA	NA	1.4 J	0.20 U
MW-11-Screen-5	May/June 2021	MW-11-5	5.4	0.13 J	0.8 UB	0.28 UB
MW-12-Screen-1						
MW-12-Screen-1	Jun 2020	MW-12-1	2.0 U	1.00 U	3.0 U	0.77
MW-12-Screen-2						
MW-12-Screen-2	Jun 2020	MW-12-2	2.0 U	1.00 U	3.0 U	0.20 U
MW-12-Screen-2	Aug 2020	MW-12-2	NA	NA	1.0 J	0.20 U
MW-12-Screen-2	Oct/Nov 2020	MW-12-2	NA	NA	1.2 J	0.20 U
MW-12-Screen-2	Mar/Apr 2021	MW-12-2	NA	NA	1.4 J	0.10 UB
MW-12-Screen-2	May/June 2021	MW-12-2	1.1 J	1.00 U	1.3 J	0.09 UB
MW-12-Screen-3						
MW-12-Screen-3	Jun 2020	MW-12-3	2.0 U	1.00 U	3.0 U	0.51
MW-12-Screen-3	Jun 2020	Dup-4-2Q2020	2.0 U	1.00 U	3.0 U	0.54
MW-12-Screen-3	Aug 2020	MW-12-3	NA	NA	0.6 J	0.45
MW-12-Screen-3	Oct/Nov 2020	MW-12-3	NA	NA	1.2 J	0.40
MW-12-Screen-3	Mar/Apr 2021	MW-12-3	NA	NA	3.0 U	0.26 UB
MW-12-Screen-3	May/June 2021	MW-12-3	1.2 J	1.00 U	3.0 U	0.29 UB
MW-12-Screen-4						
MW-12-Screen-4	Jun 2020	MW-12-4	1.8 J	1.00 U	0.6 J	0.58
MW-12-Screen-4	Oct/Nov 2020	MW-12-4	NA	NA	0.8 J	0.71
MW-12-Screen-4	May/June 2021	MW-12-4	1.3 J	1.00 U	0.9 J	0.43 UB
MW-12-Screen-5						
MW-12-Screen-5	Jun 2020	MW-12-5	2.2	0.11 J	2.4 J	1.20
MW-12-Screen-5	Oct/Nov 2020	MW-12-5	NA	NA	1.7 J	1.50
MW-12-Screen-5	May/June 2021	MW-12-5	2.0	0.14 J	1.6 J	1.20 J
MW-13						
MW-13	Jun 2020	MW-13	2.0 U	1.00 U	8.3	2.60
MW-14-Screen-2						
MW-14-Screen-2	Jun 2020	MW-14-2	2.0 U	1.00 U	1.3 J	0.11 J

Sample Location	Sampling Event	Sample Number	Arsenic (µg/L)	Lead (µg/L)	Chromium, Total (µg/L)	Chromium, Hexavalent (µg/L)
MW-14-Screen-2	Aug 2020	MW-14-2	NA	NA	3.0 U	0.51 J
MW-14-Screen-2	Oct/Nov 2020	MW-14-2	NA	NA	0.6 J	0.64 J
MW-14-Screen-2	Mar/Apr 2021	MW-14-2	NA	NA	15.0 U	0.28 J
MW-14-Screen-2	May/June 2021	MW-14-2	0.8 J	1.00 U	1.0 UB	0.57 J
MW-14-Screen-3						
MW-14-Screen-3	Jun 2020	MW-14-3	2.0 U	1.00 U	0.6 J	0.20 U
MW-14-Screen-3	Aug 2020	MW-14-3	NA	NA	3.0 U	0.28 UJ
MW-14-Screen-3	Oct/Nov 2020	MW-14-3	NA	NA	3.0 U	0.41 UJ
MW-14-Screen-3	Mar/Apr 2021	MW-14-3	NA	NA	3.0 U	0.51 J
MW-14-Screen-3	Mar/Apr 2021	DUP-2-1Q21	NA	NA	3.0 U	0.49 J
MW-14-Screen-3	May/June 2021	MW-14-3	2.0 U	1.00 U	0.6 UB	0.44 UB
MW-14-Screen-4						
MW-14-Screen-4	Jun 2020	MW-14-4	0.9 J	1.00 U	3.3	0.58
MW-14-Screen-4	Oct/Nov 2020	MW-14-4	NA	NA	2.5 J	2.60
MW-14-Screen-4	May/June 2021	MW-14-4	2.0 U	1.00 U	3.3 UB	2.00 J
MW-14-Screen-5						
MW-14-Screen-5	Jun 2020	MW-14-5	2.0 U	1.00 U	3.9	0.04 J
MW-14-Screen-5	Oct/Nov 2020	MW-14-5	NA	NA	3.0 U	0.20 U
MW-14-Screen-5	May/June 2021	MW-14-5	1.2 J	1.00 U	0.6 UB	0.30 UB
MW-15						
MW-15	Jun 2020	MW-15	0.9 J	1.00 U	3.0 U	0.58
MW-15	Jun 2020	Dup-7-2Q2020	0.9 J	1.00 U	3.0 U	0.58
MW-15	Aug 2020	MW-15	NA	NA	7.7	0.60
MW-15	Aug 2020	DUP-6-3Q20	NA	NA	5.2	0.58
MW-15	Oct/Nov 2020	MW-15	NA	NA	7.2	0.30 UJ
MW-15	Oct/Nov 2020	DUP-8-4Q20	NA	NA	21.0	0.33 UJ
MW-15	Mar/Apr 2021	MW-15	NA	NA	0.9 J	0.51 J
MW-15	May/June 2021	MW-15	0.7 J	1.00 U	0.6 J	0.52 J
MW-17-Screen-1						
MW-17-Screen-1	Jun 2020	MW-17-1	2.0 U	1.00 U	3.0 U	0.20 U
MW-17-Screen-2						
MW-17-Screen-2	Jun 2020	MW-17-2	2.0 U	1.00 U	3.0 U	0.20 U
MW-17-Screen-2	Jun 2020	Dup-2-2Q2020	2.0 U	1.00 U	3.0 U	0.20 U
MW-17-Screen-2	Aug 2020	MW-17-2	NA	NA	3.0 U	0.20 U
MW-17-Screen-2	Oct/Nov 2020	MW-17-2	NA	NA	0.7 J	0.20 U
MW-17-Screen-2	Mar/Apr 2021	MW-17-2	NA	NA	3.0 U	0.04 UB
MW-17-Screen-2	May/June 2021	MW-17-2	2.0 U	1.00 U	3.0 U	0.07 UB
MW-17-Screen-2	May/June 2021	DUP-5-2Q21	2.0 U	1.00 U	3.0 U	0.05 UB
MW-17-Screen-3						
MW-17-Screen-3	Jun 2020	MW-17-3	2.0 U	0.13 J	3.0 U	0.20 U
MW-17-Screen-3	Aug 2020	MW-17-3	NA	NA	3.0 U	0.20 U
MW-17-Screen-3	Oct/Nov 2020	MW-17-3	NA	NA	1.1 J	0.14 UJ
MW-17-Screen-3	Mar/Apr 2021	MW-17-3	NA	NA	3.0 U	0.04 UB
MW-17-Screen-3	May/June 2021	MW-17-3	2.0 U	1.00 U	3.0 U	0.05 UB

Sample Location	Sampling Event	Sample Number	Arsenic (µg/L)	Lead (µg/L)	Chromium, Total (µg/L)	Chromium, Hexavalent (µg/L)
MW-17-Screen-4						
MW-17-Screen-4	Jun 2020	MW-17-4	2.0 U	1.00 U	3.0 U	0.59
MW-17-Screen-4	Aug 2020	MW-17-4	NA	NA	1.9 J	1.90
MW-17-Screen-4	Oct/Nov 2020	MW-17-4	NA	NA	1.9 J	1.90
MW-17-Screen-4	Mar/Apr 2021	MW-17-4	NA	NA	1.9 J	1.80 J
MW-17-Screen-4	May/June 2021	MW-17-4	2.1	1.00 U	1.3 J	0.77 J
MW-17-Screen-5						
MW-17-Screen-5	Jun 2020	MW-17-5	2.0 U	1.00	5.2	1.30
MW-17-Screen-5	Oct/Nov 2020	MW-17-5	NA	NA	3.1	1.90
MW-17-Screen-5	May/June 2021	MW-17-5	1.2 J	0.21 J	1.5 J	0.67 J
MW-18-Screen-1						
MW-18-Screen-1	Jun 2020	MW-18-1	2.0 U	1.00 U	3.0 U	0.20
MW-18-Screen-2						
MW-18-Screen-2	Jun 2020	MW-18-2	2.0 U	1.00 U	3.0 U	0.08 J
MW-18-Screen-2	Aug 2020	MW-18-2	NA	NA	3.0 UJ	0.20 U
MW-18-Screen-2	Oct/Nov 2020	MW-18-2	NA	NA	0.6 J	0.20 U
MW-18-Screen-2	Mar/Apr 2021	MW-18-2	NA	NA	3.0 U	0.16 UB
MW-18-Screen-2	May/June 2021	MW-18-2	2.0 U	1.00 U	3.0 U	0.08 UB
MW-18-Screen-3						
MW-18-Screen-3	Jun 2020	MW-18-3	2.0 U	1.00 U	1.2 J	1.60
MW-18-Screen-3	Aug 2020	MW-18-3	NA	NA	1.4 J	1.70
MW-18-Screen-3	Oct/Nov 2020	MW-18-3	NA	NA	1.7 J	1.80
MW-18-Screen-3	Mar/Apr 2021	MW-18-3	NA	NA	1.6 J	1.80 J
MW-18-Screen-3	May/June 2021	MW-18-3	2.0 U	1.00 U	1.5 J	1.20 J
MW-18-Screen-3	May/June 2021	DUP-4-2Q21	0.9 J	0.63 J	2.8 J	1.20 J
MW-18-Screen-4						
MW-18-Screen-4	Jun 2020	MW-18-4	2.0 U	1.00 U	2.4 J	2.80
MW-18-Screen-4	Aug 2020	MW-18-4	NA	NA	3.3	2.60
MW-18-Screen-4	Oct/Nov 2020	MW-18-4	NA	NA	3.0	2.90
MW-18-Screen-4	Mar/Apr 2021	MW-18-4	NA	NA	3.1	2.70 J
MW-18-Screen-4	Mar/Apr 2021	DUP-5-1Q21	NA	NA	2.8 J	2.60 J
MW-18-Screen-4	May/June 2021	MW-18-4	2.0 U	0.10 J	2.9 J	1.00 J
MW-18-Screen-5						
MW-18-Screen-5	Jun 2020	MW-18-5	2.0 U	1.00 U	3.0 U	0.20 U
MW-18-Screen-5	Oct/Nov 2020	MW-18-5	NA	NA	0.7 J	0.20 U
MW-18-Screen-5	May/June 2021	MW-18-5	2.0 U	0.10 J	3.0 U	0.14 UB
MW-19-Screen-1						
MW-19-Screen-1	Jun 2020	MW-19-1	2.0 U	1.00 U	3.0 U	0.20 U
MW-19-Screen-1	Oct/Nov 2020	MW-19-1	NA	NA	3.0 U	0.20 U
MW-19-Screen-1	May/June 2021	MW-19-1	2.0 U	1.00 U	3.0 U	0.15 UB
MW-19-Screen-2						
MW-19-Screen-2	Jun 2020	MW-19-2	2.0 U	1.00 U	1.3 J	1.60
MW-19-Screen-2	Oct/Nov 2020	MW-19-2	NA	NA	3.2	0.43 J
MW-19-Screen-2	May/June 2021	MW-19-2	2.0 U	1.00 U	2.1 UB	0.87 J

Sample Location	Sampling Event	Sample Number	Arsenic ($\mu\text{g/L}$)	Lead ($\mu\text{g/L}$)	Chromium, Total ($\mu\text{g/L}$)	Chromium, Hexavalent ($\mu\text{g/L}$)
MW-19-Screen-3						
MW-19-Screen-3	Jun 2020	MW-19-3	2.0 U	1.00 U	1.9 J	0.89
MW-19-Screen-3	Jun 2020	DUP-1-2Q2020	2.0 U	1.00 U	2.0 J	1.90
MW-19-Screen-3	Oct/Nov 2020	MW-19-3	NA	NA	2.7 J	2.00
MW-19-Screen-3	Oct/Nov 2020	DUP-2-4Q20	NA	NA	2.7 J	2.20
MW-19-Screen-3	May/June 2021	MW-19-3	1.8 J	1.00 U	2.2 J	0.84 J
MW-19-Screen-4						
MW-19-Screen-4	Jun 2020	MW-19-4	1.4 J	1.00 U	2.2 J	2.60
MW-19-Screen-4	Oct/Nov 2020	MW-19-4	NA	NA	2.6 J	2.60
MW-19-Screen-4	May/June 2021	MW-19-4	1.2 J	1.00 U	2.5 J	1.30 J
MW-19-Screen-5						
MW-19-Screen-5	Jun 2020	MW-19-5	1.5 J	1.00 U	2.0 J	2.20
MW-19-Screen-5	Oct/Nov 2020	MW-19-5	NA	NA	2.3 J	2.40
MW-19-Screen-5	May/June 2021	MW-19-5	1.3 J	1.00 U	2.3 J	1.10 J
MW-20-Screen-2						
MW-20-Screen-2	Jun 2020	MW-20-2	2.0 U	1.00 U	3.0 U	0.05 J
MW-20-Screen-2	Aug 2020	MW-20-2	NA	NA	3.0 U	0.12 UJ
MW-20-Screen-2	Oct/Nov 2020	MW-20-2	NA	NA	3.0 U	0.20 U
MW-20-Screen-2	Oct/Nov 2020	DUP-1-4Q20	NA	NA	1.6 J	0.20 U
MW-20-Screen-2	Mar/Apr 2021	MW-20-2	NA	NA	3.0 U	0.20 UJ
MW-20-Screen-2	May/June 2021	MW-20-2	2.0 U	1.00 U	3.0 U	0.09 UB
MW-20-Screen-3						
MW-20-Screen-3	Jun 2020	MW-20-3	1.5 J	1.00 U	3.0 U	0.14 J
MW-20-Screen-3	Aug 2020	MW-20-3	NA	NA	3.0 U	0.20 U
MW-20-Screen-3	Oct/Nov 2020	MW-20-3	NA	NA	3.0 U	0.20 U
MW-20-Screen-3	Mar/Apr 2021	MW-20-3	NA	NA	3.0 U	0.20 UJ
MW-20-Screen-3	May/June 2021	MW-20-3	1.2 J	1.00 U	0.9 J	0.05 UB
MW-20-Screen-3	May/June 2021	DUP-8-2Q21	1.6 J	1.00 U	0.7 J	0.14 UB
MW-20-Screen-4						
MW-20-Screen-4	Jun 2020	MW-20-4	0.8 J	1.00 U	3.0 U	0.12 J
MW-20-Screen-4	Aug 2020	MW-20-4	NA	NA	3.0 U	0.14 UJ
MW-20-Screen-4	Aug 2020	DUP-1-3Q20	NA	NA	3.0 U	0.20 U
MW-20-Screen-4	Oct/Nov 2020	MW-20-4	NA	NA	3.0 U	0.20 U
MW-20-Screen-4	Mar/Apr 2021	MW-20-4	NA	NA	3.0 U	0.08 UB
MW-20-Screen-4	May/June 2021	MW-20-4	2.0 U	1.00 U	3.0 U	0.12 UB
MW-20-Screen-5						
MW-20-Screen-5	Jun 2020	MW-20-5	1.0 J	1.00 U	3.0 U	0.09 J
MW-20-Screen-5	Aug 2020	MW-20-5	NA	NA	0.5 J	0.22 UJ
MW-20-Screen-5	Oct/Nov 2020	MW-20-5	NA	NA	3.0 U	0.20 U
MW-20-Screen-5	Mar/Apr 2021	MW-20-5	NA	NA	3.0 U	0.10 UB
MW-20-Screen-5	May/June 2021	MW-20-5	1.3 J	1.00 U	0.9 J	0.23 UB
MW-21-Screen-2						
MW-21-Screen-2	Jun 2020	MW-21-2	2.0 U	1.00 U	7.0	0.20 U
MW-21-Screen-2	Jun 2020	DUP-6-2Q20	2.0 U	1.00 U	0.9 J	0.36
MW-21-Screen-2	Aug 2020	MW-21-2	NA	NA	3.0 U	0.18 UJ

Sample Location	Sampling Event	Sample Number	Arsenic (µg/L)	Lead (µg/L)	Chromium, Total (µg/L)	Chromium, Hexavalent (µg/L)
MW-21-Screen-2	Oct/Nov 2020	MW-21-2	NA	NA	0.5 J	0.20 U
MW-21-Screen-2	Oct/Nov 2020	DUP-5-4Q20	NA	NA	3.0 U	0.24 UJ
MW-21-Screen-2	Mar/Apr 2021	MW-21-2	NA	NA	3.0 U	0.22 J
MW-21-Screen-2	May/June 2021	MW-21-2	2.0 U	1.00 U	3.0 U	0.10 UB
MW-21-Screen-2	May/June 2021	DUP-6-2Q21	2.0 U	1.00 U	3.0 U	0.04 UB
MW-21-Screen-3						
MW-21-Screen-3	Jun 2020	MW-21-3	2.0 U	0.12 J	7.6	0.20 U
MW-21-Screen-3	Aug 2020	MW-21-3	NA	NA	3.0 U	0.33 J
MW-21-Screen-3	Oct/Nov 2020	MW-21-3	NA	NA	3.0 U	0.57
MW-21-Screen-3	Mar/Apr 2021	MW-21-3	NA	NA	3.0 U	0.82 J
MW-21-Screen-3	Mar/Apr 2021	DUP-7-1Q21	NA	NA	3.0 U	0.83 J
MW-21-Screen-3	May/June 2021	MW-21-3	0.9 J	1.00 U	1.1 J	0.52 J
MW-21-Screen-4						
MW-21-Screen-4	Jun 2020	MW-21-4	2.0 U	1.00 U	1.4 J	1.20
MW-21-Screen-4	Aug 2020	MW-21-4	NA	NA	0.6 J	1.50
MW-21-Screen-4	Aug 2020	DUP-5-3Q20	NA	NA	1.2 J	1.60 J
MW-21-Screen-4	Oct/Nov 2020	MW-21-4	NA	NA	1.4 J	1.60
MW-21-Screen-4	Mar/Apr 2021	MW-21-4	NA	NA	1.2 J	1.30 J
MW-21-Screen-4	May/June 2021	MW-21-4	2.0 U	0.10 J	3.0 U	0.76 J
MW-21-Screen-5						
MW-21-Screen-5	Jun 2020	MW-21-5	2.0 U	0.20 J	4.8	1.20
MW-21-Screen-5	Aug 2020	MW-21-5	NA	NA	0.8 J	1.40
MW-21-Screen-5	Oct/Nov 2020	MW-21-5	NA	NA	1.0 J	1.40
MW-21-Screen-5	Mar/Apr 2021	MW-21-5	NA	NA	0.5 J	1.30 J
MW-21-Screen-5	May/June 2021	MW-21-5	2.0 U	0.16 J	3.0 U	0.61 J
MW-22-Screen-1						
MW-22-Screen-1	Jun 2020	MW-22-1	2.0 U	1.00 U	0.9 J	0.48
MW-22-Screen-1	Aug 2020	MW-22-1	NA	NA	0.6 J	0.84 J
MW-22-Screen-1	Oct/Nov 2020	MW-22-1	NA	NA	3.0 U	0.72
MW-22-Screen-1	Mar/Apr 2021	MW-22-1	NA	NA	0.6 J	0.90 J
MW-22-Screen-1	May/June 2021	MW-22-1	2.0 U	1.00 U	0.7 J	0.73
MW-22-Screen-2						
MW-22-Screen-2	Jun 2020	MW-22-2	2.0 U	1.00 U	1.4 J	1.30
MW-22-Screen-2	Aug 2020	MW-22-2	NA	NA	1.4 J	1.90
MW-22-Screen-2	Aug 2020	DUP-3-3Q20	NA	NA	1.8 J	1.90 J
MW-22-Screen-2	Oct/Nov 2020	MW-22-2	NA	NA	1.2 J	1.80
MW-22-Screen-2	Mar/Apr 2021	MW-22-2	NA	NA	1.6 J	1.90 J
MW-22-Screen-2	May/June 2021	MW-22-2	2.0 U	1.00 U	1.5 J	2.10
MW-22-Screen-3						
MW-22-Screen-3	Jun 2020	MW-22-3	2.0 U	1.00 U	1.0 J	0.75
MW-22-Screen-3	Aug 2020	MW-22-3	NA	NA	3.0 U	0.54
MW-22-Screen-3	Oct/Nov 2020	MW-22-3	NA	NA	1.4 J	2.50
MW-22-Screen-3	Mar/Apr 2021	MW-22-3	NA	NA	1.9 J	2.30 J
MW-22-Screen-3	Mar/Apr 2021	DUP-3-1Q21	NA	NA	1.6 J	2.30 J
MW-22-Screen-3	May/June 2021	MW-22-3	2.0 U	1.00 U	1.6 J	1.30

Sample Location	Sampling Event	Sample Number	Arsenic (µg/L)	Lead (µg/L)	Chromium, Total (µg/L)	Chromium, Hexavalent (µg/L)
MW-22-Screen-4						
MW-22-Screen-4	Jun 2020	MW-22-4	2.0 U	1.00 U	2.8 J	2.50
MW-22-Screen-4	Oct/Nov 2020	MW-22-4	NA	NA	2.0 J	2.90
MW-22-Screen-4	May/June 2021	MW-22-4	0.7 J	1.00 U	2.6 J	1.70
MW-22-Screen-5						
MW-22-Screen-5	Jun 2020	MW-22-5	2.0 U	1.00 U	3.0 U	0.09 J
MW-22-Screen-5	Oct/Nov 2020	MW-22-5	NA	NA	3.0 U	0.20 U
MW-22-Screen-5	May/June 2021	MW-22-5	2.0 U	0.11 J	3.0 U	0.20
MW-23-Screen-1						
MW-23-Screen-1	Feb 2020	MW-23-1	NA	NA	0.6 J	0.18 J
MW-23-Screen-1	Jun 2020	MW-23-1	2.0 U	1.00 U	3.0 U	0.58
MW-23-Screen-1	Aug 2020	MW-23-1	NA	NA	0.6 J	1.00
MW-23-Screen-1	Oct/Nov 2020	MW-23-1	NA	NA	1.3 J	1.30
MW-23-Screen-2						
MW-23-Screen-2	Jun 2020	MW-23-2	2.0 U	1.00 U	1.2 J	0.94
MW-23-Screen-2	Aug 2020	MW-23-2	NA	NA	0.7 J	1.10 UJ
MW-23-Screen-2	Oct/Nov 2020	MW-23-2	NA	NA	1.3 J	1.10 J
MW-23-Screen-2	Oct/Nov 2020	DUP-4-4Q20	NA	NA	1.5 J	1.30 J
MW-23-Screen-2	Mar/Apr 2021	MW-23-2	NA	NA	0.7 J	2.00 J
MW-23-Screen-2	May/June 2021	MW-23-2	1.0 J	1.00 U	1.5 J	1.20 J
MW-23-Screen-3						
MW-23-Screen-3	Jun 2020	MW-23-3	2.0 U	1.00 U	3.2	2.30
MW-23-Screen-3	Jun 2020	Dup-3-2Q2020	2.0 U	1.00 U	3.5	2.90
MW-23-Screen-3	Aug 2020	MW-23-3	NA	NA	2.3 J	3.10
MW-23-Screen-3	Oct/Nov 2020	MW-23-3	NA	NA	2.7 J	2.80
MW-23-Screen-3	Mar/Apr 2021	MW-23-3	NA	NA	2.6 J	3.30 J
MW-23-Screen-3	May/June 2021	MW-23-3	1.1 J	1.00 U	2.7 J	3.00 J
MW-23-Screen-3	May/June 2021	DUP-1-2Q21	1.0 J	1.00 U	2.6 J	3.00
MW-23-Screen-4						
MW-23-Screen-4	Jun 2020	MW-23-4	1.7 J	1.00 U	3.4	2.60
MW-23-Screen-4	Aug 2020	MW-23-4	NA	NA	2.4 J	2.80
MW-23-Screen-4	Oct/Nov 2020	MW-23-4	NA	NA	3.1	3.60 J
MW-23-Screen-4	Mar/Apr 2021	MW-23-4	NA	NA	2.7 J	3.40 J
MW-23-Screen-4	May/June 2021	MW-23-4	1.1 J	0.11 J	3.2	2.60 J
MW-23-Screen-5						
MW-23-Screen-5	Jun 2020	MW-23-5	2.0	0.11 J	3.0 U	0.20 U
MW-23-Screen-5	Oct/Nov 2020	MW-23-5	NA	NA	2.3 J	0.20 U
MW-23-Screen-5	May/June 2021	MW-23-5	1.8 J	0.55 J	1.7 J	0.24 UB
MW-24-Screen-1						
MW-24-Screen-1	Jun 2020	MW-24-1	2.0 U	1.00 U	1.1 J	0.14 J
MW-24-Screen-1	Aug 2020	MW-24-1	NA	NA	3.3	0.20 U
MW-24-Screen-1	Oct/Nov 2020	MW-24-1	NA	NA	0.7 J	0.24
MW-24-Screen-1	Mar/Apr 2021	MW-24-1	NA	NA	3.0 U	0.09 UB
MW-24-Screen-1	May/June 2021	MW-24-1	2.0 U	1.00 U	0.7 J	0.16 UB

Sample Location	Sampling Event	Sample Number	Arsenic ($\mu\text{g/L}$)	Lead ($\mu\text{g/L}$)	Chromium, Total ($\mu\text{g/L}$)	Chromium, Hexavalent ($\mu\text{g/L}$)
MW-24-Screen-2						
MW-24-Screen-2	Jun 2020	MW-24-2	2.0 U	1.00 U	3.0 U	2.20
MW-24-Screen-2	Aug 2020	MW-24-2	NA	NA	2.3 J	2.50
MW-24-Screen-2	Aug 2020	DUP-4-3Q20	NA	NA	2.7 J	2.40
MW-24-Screen-2	Oct/Nov 2020	MW-24-2	NA	NA	2.0 J	0.20 U
MW-24-Screen-2	Mar/Apr 2021	MW-24-2	NA	NA	1.8 J	2.30 J
MW-24-Screen-2	Mar/Apr 2021	DUP-4-1Q21	NA	NA	1.7 J	2.30 J
MW-24-Screen-2	May/June 2021	MW-24-2	1.9 J	1.00 U	2.3 J	2.00 J
MW-24-Screen-3						
MW-24-Screen-3	Jun 2020	MW-24-3	1.3 J	1.00 U	3.0 U	0.20 U
MW-24-Screen-3	Aug 2020	MW-24-3	NA	NA	3.0 U	0.20 U
MW-24-Screen-3	Oct/Nov 2020	MW-24-3	NA	NA	3.0 U	0.09 UJ
MW-24-Screen-3	Oct/Nov 2020	DUP-3-4Q20	NA	NA	3.0 U	0.20 U
MW-24-Screen-3	Mar/Apr 2021	MW-24-3	NA	NA	3.0 U	0.07 UB
MW-24-Screen-3	May/June 2021	MW-24-3	1.4 J	1.00 U	3.0 U	0.10 UB
MW-24-Screen-4						
MW-24-Screen-4	Jun 2020	MW-24-4	2.0 U	0.10 J	0.9 J	0.20 U
MW-24-Screen-4	Aug 2020	MW-24-4	NA	NA	3.0 U	0.03 J
MW-24-Screen-4	Oct/Nov 2020	MW-24-4	NA	NA	3.0 U	0.10 UJ
MW-24-Screen-4	Mar/Apr 2021	MW-24-4	NA	NA	3.0 U	0.13 UB
MW-24-Screen-4	May/June 2021	MW-24-4	1.0 J	1.00 U	3.0 U	0.12 UB
MW-24-Screen-5						
MW-24-Screen-5	Jun 2020	MW-24-5	2.3	0.13 J	3.1	2.30
MW-24-Screen-5	Oct/Nov 2020	MW-24-5	NA	NA	1.8 J	2.60
MW-24-Screen-5	May/June 2021	MW-24-5	2.5	1.00 U	2.4 J	2.60 J
MW-25-Screen-1						
MW-25-Screen-1	Jun 2020	MW-25-1	2.0 U	1.00 U	1.6 J	0.20 U
MW-25-Screen-1	Aug 2020	MW-25-1	NA	NA	3.0 U	0.71
MW-25-Screen-1	Aug 2020	DUP-2-3Q20	NA	NA	3.0 U	0.70
MW-25-Screen-1	Oct/Nov 2020	MW-25-1	NA	NA	2.4 J	0.66
MW-25-Screen-1	Mar/Apr 2021	MW-25-1	NA	NA	0.6 J	0.47 J
MW-25-Screen-1	Mar/Apr 2021	DUP-1-1Q21	NA	NA	0.5 J	0.44 J
MW-25-Screen-1	May/June 2021	MW-25-1	0.9 J	1.00 U	1.6 J	0.39 UB
MW-25-Screen-2						
MW-25-Screen-2	Jun 2020	MW-25-2	1.1 J	1.00 U	3.2	2.80
MW-25-Screen-2	Aug 2020	MW-25-2	NA	NA	3.0 U	1.40
MW-25-Screen-2	Oct/Nov 2020	MW-25-2	NA	NA	2.6 J	1.80
MW-25-Screen-2	Mar/Apr 2021	MW-25-2	NA	NA	0.8 J	1.90 J
MW-25-Screen-2	May/June 2021	MW-25-2	0.9 J	1.00 U	2.3 J	1.40 J
MW-25-Screen-3						
MW-25-Screen-3	Jun 2020	MW-25-3	1.2 J	1.00 U	3.0	3.20
MW-25-Screen-3	Aug 2020	MW-25-3	NA	NA	3.0 U	2.50 J
MW-25-Screen-3	Oct/Nov 2020	MW-25-3	NA	NA	3.2	3.00 J
MW-25-Screen-3	Mar/Apr 2021	MW-25-3	NA	NA	2.0 J	3.20 J
MW-25-Screen-3	May/June 2021	MW-25-3	2.0 U	1.00 U	2.7 J	2.70 J

Sample Location	Sampling Event	Sample Number	Arsenic ($\mu\text{g/L}$)	Lead ($\mu\text{g/L}$)	Chromium, Total ($\mu\text{g/L}$)	Chromium, Hexavalent ($\mu\text{g/L}$)
MW-25-Screen-3	May/June 2021	DUP-2-2Q21	2.0 U	1.00 U	2.9 J	2.90 J
MW-25-Screen-4						
MW-25-Screen-4	Jun 2020	MW-25-4	1.2 J	1.00 U	3.6	0.96
MW-25-Screen-4	Aug 2020	MW-25-4	NA	NA	3.0 U	0.74
MW-25-Screen-4	Oct/Nov 2020	MW-25-4	NA	NA	1.4 J	0.72 J
MW-25-Screen-4	Mar/Apr 2021	MW-25-4	NA	NA	3.0 U	0.81 J
MW-25-Screen-4	May/June 2021	MW-25-4	1.7 J	1.00 U	1.7 J	0.38 UB
MW-25-Screen-5						
MW-25-Screen-5	Jun 2020	MW-25-5	0.8 J	1.00 U	3.0 U	0.20 U
MW-25-Screen-5	Aug 2020	MW-25-5	NA	NA	3.0 U	0.20 U
MW-25-Screen-5	Oct/Nov 2020	MW-25-5	NA	NA	0.6 J	0.20 U
MW-25-Screen-5	Mar/Apr 2021	MW-25-5	NA	NA	3.0 U	0.14 UB
MW-25-Screen-5	May/June 2021	MW-25-5	2.0 U	0.11 J	3.0 U	0.31 UB
MW-26-Screen-1						
MW-26-Screen-1	Jun 2020	MW-26-1	2.0 U	1.00 U	3.0 U	0.34
MW-26-Screen-1	Aug 2020	MW-26-1	NA	NA	3.0 UJ	0.30
MW-26-Screen-1	Oct/Nov 2020	MW-26-1	NA	NA	0.5 J	0.46 J
MW-26-Screen-2						
MW-26-Screen-2	Jun 2020	MW-26-2	2.0 U	1.00 U	3.0 U	0.20 U
MW-26-Screen-2	Aug 2020	MW-26-2	NA	NA	2.4 J	0.54
MW-26-Screen-2	Oct/Nov 2020	MW-26-2	NA	NA	2.4 J	0.69
MW-26-Screen-2	Mar/Apr 2021	MW-26-2	NA	NA	1.0 J	0.46 J
MW-26-Screen-2	Mar/Apr 2021	DUP-6-1Q21	NA	NA	0.5 J	0.44 J
MW-26-Screen-2	May/June 2021	MW-26-2	2.0 U	1.00 U	1.4 J	0.11 UB
Analyte concentration exceeds the standard for:						
CA MCL			10.0	15.0*	50.0	50.0**
EPA REGION IX MCL			10.0	15.0*	100.0	NE
Notes						
DUP(E)	Field Duplicate					
NA	Not analyzed					
NE	Not established					
*	Regulatory Action Level					
**	Due to a court ruling, the State Water Resources Control Board adopted a resolution on August 1, 2017 to remove the current maximum contaminant level (MCL[10.0 $\mu\text{g/L}$]) for CrVI. CrVI is regulated under the 50.0 $\mu\text{g/L}$ MCL for total chromium."					
J	Analyte concentration is an estimated value					
U	Analyte was analyzed for but not detected at or above the stated limit					
UB	Result should be considered "not-detected" because it was detected in a method blank or equipment blank at a similar level.					
UJ	Analyte was analyzed for but not detected; analyte concentration is an estimated value					

TABLE 3
SUMMARY OF VOLATILE ORGANIC COMPOUNDS AND PERCHLORATE REPORTED IN MUNICIPAL
PRODUCTION WELLS NEAR JPL DURING THE LAST FIVE SAMPLING EVENTS OF THE
LONG-TERM QUARTERLY GROUNDWATER SAMPLING PROGRAM
(All concentrations reported in µg/L.)
(Shaded values exceed State or Federal MCLs or action levels.)

Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
LAS FLORES WATER CO. WELL 02					
	1/6/2020	4.0 U	NA	2.8	NA
	1/13/2020	4.0	NA	1.6	NA
	1/20/2020	4.6	NA	2.2	NA
	1/27/2020	4.3	NA	2.2	NA
	2/3/2020	4.3	NA	2.4	NA
	2/10/2020	4.1	NA	2.6	NA
	2/18/2020	5.1	NA	2.6	NA
	2/24/2020	4.2	NA	2.0	NA
	3/2/2020	4.7	NA	2.3	NA
	3/9/2020	4.0 U	NA	2.1	NA
	3/16/2020	4.2	NA	2.1	NA
	3/23/2020	4.3	NA	1.6	NA
	3/30/2020	4.0 U	NA	1.9	NA
	4/6/2020	4.0 U	NA	2.3	NA
	4/13/2020	4.0 U	NA	2.4	NA
	4/20/2020	4.0 U	NA	2.0	NA
	4/27/2020	4.6	NA	2.2	NA
	5/4/2020	4.0 U	NA	1.9	NA
	5/11/2020	4.0 U	NA	2.4	NA
	5/18/2020	4.0 U	NA	2.1	NA
	5/26/2020	4.0	NA	1.8	NA
	6/1/2020	4.0 U	NA	2.0	NA
	6/8/2020	4.0 U	NA	2.4	NA
	6/22/2020	4.1	NA	2.8	NA
	6/29/2020	4.8	NA	2.2	NA
	7/6/2020	4.0	NA	2.7	NA
	7/13/2020	5.3	NA	2.0	NA
	7/20/2020	4.0 U	NA	3.0	NA
	7/27/2020	4.3	NA	1.9	NA
	8/3/2020	4.1	NA	2.7	NA
	8/10/2020	4.6	NA	2.6	NA
	8/17/2020	4.0 U	NA	2.8	NA
	8/24/2020	4.0 U	NA	2.7	NA
	8/31/2020	4.3	NA	1.8	NA
	9/8/2020	4.4	NA	2.3	NA
	9/14/2020	4.9	NA	2.5	NA
	9/21/2020	4.2	NA	1.9	NA
	9/28/2020	4.1	NA	1.5	NA

Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
	10/5/2020	5.1	NA	2.3	NA
	10/12/2020	4.0 U	NA	2.4	NA
	10/19/2020	4.0 U	NA	2.4	NA
	10/26/2020	4.0 U	NA	2.5	NA
	11/2/2020	4.0 U	NA	1.6	NA
	11/9/2020	4.0 U	NA	1.5	NA
	11/16/2020	4.1	NA	1.7	NA
	11/23/2020	4.4	NA	1.6	NA
	11/30/2020	4.0 U	NA	1.6	NA
	12/7/2020	4.3	NA	2.9	NA
	12/14/2020	5.2	NA	1.6	NA
	12/21/2020	4.2	NA	2.1	NA
	12/28/2020	4.0	NA	1.8	NA
	1/4/2021	4.1	NA	2.3	NA
	1/11/2021	4.0 U	NA	1.9	NA
	1/18/2021	4.0	NA	1.7	NA
	1/25/2021	4.0 U	NA	1.6	NA
	2/1/2021	4.0 U	NA	2.1	NA
	2/8/2021	5.1	NA	0.9	NA
	2/16/2021	4.0	NA	1.9	NA
	2/22/2021	4.0 U	NA	2.2	NA
	3/1/2021	4.0 U	NA	0.8	NA
	3/8/2021	4.2	NA	2.1	NA
	3/15/2021	4.0 U	NA	1.9	NA
	3/22/2021	4.0 U	NA	1.9	NA
	3/29/2021	4.0	NA	1.9	NA
	4/5/2021	4.0	NA	1.7	NA
	4/12/2021	5.8	NA	1.6	NA
	4/19/2021	4.0 U	NA	1.8	NA
	4/26/2021	4.0 U	NA	1.4	NA
	5/3/2021	4.0 U	NA	0.5	NA
	5/10/2021	4.3	NA	1.8	NA
	5/17/2021	4.0 U	NA	2.1	NA
	5/24/2021	4.1	NA	2.0	NA
	6/1/2021	4.1	NA	1.5	NA
	6/7/2021	4.6	NA	1.9	NA
LINCOLN AVENUE WATER CO. WELL 03					
	10/13/2020	4.0 U	NA	NA	NA
LINCOLN AVENUE WATER CO. WELL 05					
	2/12/2020	5.2	5.0	0.5 U	0.5 U
	2/18/2020	7.4	NA	NA	NA
	2/19/2020	NA	2.3	0.5	0.9
	8/19/2020	4.0	5.0	0.5 U	0.5 U
	4/27/2021	4.0 U	NA	NA	NA
	5/3/2021	NA	1.8	0.5 U	0.7
	5/4/2021	4.2	3.5	0.5 U	0.6

Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
	6/4/2021	4.0 U	3.9	0.5 U	0.5 U
	6/8/2021	4.0 U	NA	NA	NA
LINCOLN AVENUE WATER CO. WELL #6					
	1/7/2020	9.6	2.6	0.7	1.4
	1/15/2020	9.7	NA	NA	NA
	1/21/2020	9.5	NA	NA	NA
	1/28/2020	9.5	NA	NA	NA
	2/4/2020	8.9	1.8	0.6	1.2
	2/11/2020	9.5	NA	NA	NA
	2/25/2020	11.0	NA	NA	NA
	3/4/2020	9.7	1.9	0.6	1.4
	3/10/2020	9.0	NA	NA	NA
	3/17/2020	10.0	NA	NA	NA
	3/24/2020	9.0	NA	NA	NA
	3/31/2020	9.1	NA	NA	NA
	4/8/2020	8.7	1.8	0.5	1.2
	4/14/2020	9.6	NA	NA	NA
	4/21/2020	9.5	NA	NA	NA
	4/28/2020	8.4	NA	NA	NA
	5/6/2020	7.4	2.1	0.6	1.3
	5/13/2020	8.2	NA	NA	NA
	5/19/2020	7.3	NA	NA	NA
	5/26/2020	7.3	NA	NA	NA
	6/2/2020	7.2	2.1	0.6	1.3
	6/9/2020	8.3	NA	NA	NA
	6/16/2020	7.8	NA	NA	NA
	6/23/2020	8.2	NA	NA	NA
	6/30/2020	9.8	NA	NA	NA
	7/7/2020	9.2	1.6	0.6	1.3
	7/14/2020	8.3	NA	NA	NA
	7/21/2020	8.3	NA	NA	NA
	7/28/2020	8.2	NA	NA	NA
	8/4/2020	7.7	1.6	0.5	1.0
	8/11/2020	9.3	NA	NA	NA
	8/18/2020	7.8	NA	NA	NA
	8/25/2020	7.5	NA	NA	NA
	9/1/2020	7.0	0.6	0.6	1.2
	9/8/2020	7.2	NA	NA	NA
	9/15/2020	7.8	NA	NA	NA
	9/22/2020	7.1	NA	NA	NA
	9/29/2020	6.3	NA	NA	NA
	10/6/2020	7.2	1.7	0.5	1.2
	10/14/2020	6.9	NA	NA	NA
	10/20/2020	6.8	NA	NA	NA
	10/27/2020	7.6	NA	NA	NA
	11/3/2020	6.8	1.6	0.5 U	1.0

Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
	11/4/2020	NA	1.5	0.5	1.1
	11/10/2020	7.3	NA	NA	NA
	11/17/2020	6.8	NA	NA	NA
	11/24/2020	6.6	NA	NA	NA
	12/8/2020	6.4	NA	NA	NA
	12/15/2020	6.7	NA	NA	NA
	12/22/2020	5.9	NA	NA	NA
	12/29/2020	5.7	NA	NA	NA
	1/5/2021	6.4	1.7	0.5	1.0
	1/12/2021	6.1	NA	NA	NA
	1/19/2021	5.6	NA	NA	NA
	1/26/2021	5.8	NA	NA	NA
	2/2/2021	6.1	1.9	0.6	1.0
	2/9/2021	6.4	NA	NA	NA
	2/16/2021	6.1	NA	NA	NA
	2/23/2021	5.7	NA	NA	NA
	3/2/2021	5.8	1.8	0.6	1.0
	3/9/2021	5.9	NA	NA	NA
	3/16/2021	5.5	NA	NA	NA
	3/23/2021	5.9	NA	NA	NA
	3/30/2021	5.7	NA	NA	NA
	4/6/2021	5.2	1.4	0.5 U	0.8
	4/12/2021	5.2	NA	NA	NA
	4/20/2021	5.4	NA	NA	NA
	5/4/2021	9.9	0.9	0.8	1.6
	5/11/2021	7.1	NA	NA	NA
	5/18/2021	6.1	NA	NA	NA
	5/25/2021	5.6	NA	NA	NA
	6/1/2021	5.6	1.6	0.5	1.0

PASADENA-CITY, WATER DEPT. ARROYO

	1/7/2020	8.1	0.8	0.5	1.4
	1/14/2020	7.6	0.8	0.5 U	1.4
	1/21/2020	8.3	0.8	0.5	1.4
	1/28/2020	7.0	0.8	0.5 U	1.4
	2/4/2020	8.5	0.8	0.5 U	1.5
	2/11/2020	7.6	0.8	0.5 U	1.4
	2/18/2020	9.5	0.8	0.5	1.3
	2/25/2020	8.1	0.9	0.5	1.4
	3/3/2020	10.2	1.0	0.5 U	1.3
	3/10/2020	8.5	0.9	0.5 U	1.2
	3/17/2020	6.2	1.0	0.5 U	1.3
	3/24/2020	8.3	1.0	0.5	1.3
	3/31/2020	7.8	1.0	0.5	1.3
	4/8/2020	7.7	0.8	0.5 U	0.9
	4/14/2020	7.1	0.8	0.5 U	0.9
	4/21/2020	7.1	1.0	0.5 U	1.3

Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
	4/28/2020	7.7	0.9	0.5 U	1.0
	5/5/2020	7.4	1.0	0.5	1.1
	5/12/2020	7.9	1.0	0.5 U	0.5 U
	5/19/2020	7.5	0.9	0.5 U	0.9
	5/27/2020	7.4	1.0	0.5 U	1.0
	6/2/2020	7.8	1.1	0.5 U	1.1
	6/9/2020	7.8	1.1	0.5 U	1.1
	6/16/2020	8.6	1.1	0.5 U	1.1
	6/23/2020	7.3	1.1	0.5	1.1
	6/30/2020	7.6	1.1	0.5 U	1.2
	7/7/2020	8.0	1.1	0.5 U	1.0
	7/14/2020	7.9	1.2	0.5 U	1.0
	7/21/2020	8.2	1.1	0.5 U	1.0
	7/28/2020	8.5	1.2	0.5 U	1.1
	8/4/2020	8.5	1.3	0.5 U	1.0
	8/11/2020	8.9	1.1	0.5 U	1.0
	8/18/2020	8.0	1.2	0.5 U	1.1
	8/25/2020	9.6	1.2	0.5 U	1.1
	9/1/2020	7.5	1.0	0.5 U	1.0
	9/8/2020	8.2	1.0	0.5 U	1.1
	9/15/2020	8.6	1.1	0.5 U	1.0
	9/22/2020	8.0	1.1	0.5 U	1.0
	9/29/2020	8.9	1.0	0.5 U	1.0
	10/6/2020	8.5	1.0	0.5 U	0.9
	10/14/2020	9.3	1.1	0.5 U	1.0
	10/20/2020	7.9	1.3	0.5 U	1.1
	10/27/2020	9.5	1.2	0.5 U	1.1
	11/3/2020	8.0	1.3	0.5 U	1.0
	11/10/2020	8.5	1.4	0.6	1.1
	11/17/2020	8.4	1.4	0.5	1.2
	11/24/2020	7.5	NA	NA	NA
	12/8/2020	8.9	1.5	0.5	1.1
	12/15/2020	7.3	1.4	0.5	1.2
	12/22/2020	8.0	1.3	0.5	1.1
	12/29/2020	8.6	1.4	0.5	1.1
	1/6/2021	7.9	1.2	0.5 U	1.1
	1/12/2021	9.7	1.3	0.5	1.0
	1/19/2021	8.3	1.2	0.5 U	1.1
	1/26/2021	9.0	NA	NA	NA
	2/2/2021	9.0	1.0	0.5 U	0.9
	2/9/2021	7.7	1.4	0.5 U	1.2
	2/16/2021	9.3	1.3	0.5 U	1.1
	2/23/2021	7.3	1.2	0.5 U	1.1
	3/2/2021	NA	1.1	0.5 U	1.0
	3/9/2021	8.3	1.3	0.5 U	1.0
	3/16/2021	10.2	1.3	0.5	0.9

Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
PASADENA-CITY, WATER DEPT. VENTURA	3/23/2021	9.8	1.2	0.5 U	1.0
	3/30/2021	7.2	1.2	0.5 U	1.0
	4/6/2021	7.9	1.2	0.5 U	1.0
	4/14/2021	8.3	1.1	0.5 U	0.9
	4/20/2021	8.8	1.0	0.5 U	1.0
	4/27/2021	8.1	1.3	0.5 U	1.0
	5/4/2021	8.1	1.2	0.5 U	1.0
	5/11/2021	7.6	1.3	0.5 U	1.0
	5/18/2021	7.7	1.3	0.5 U	1.0
	5/25/2021	9.1	1.2	0.5 U	1.0
PASADENA-CITY, WATER DEPT. WELL 52					
PASADENA-CITY, WATER DEPT. WELL 52	1/7/2020	4.0 U	0.5 U	0.8	3.2
	1/14/2020	4.0 U	0.5 U	0.6	2.3
	1/21/2020	4.0 U	0.5 U	0.8	3.3
	2/7/2020	4.0 U	0.5 U	0.5 U	1.8
	2/11/2020	4.0 U	0.5 U	0.8	3.2
	2/18/2020	4.0 U	0.5 U	0.5	2.4
	2/25/2020	4.2	0.5 U	0.8	3.2
	3/3/2020	5.3	0.5 U	0.8	3.5
	3/10/2020	4.0 U	0.5 U	0.5	2.2
	3/17/2020	4.3	0.5 U	0.8	3.0
	3/24/2020	4.3	0.5 U	0.8	3.0
	3/31/2020	4.0 U	0.5 U	0.8	2.9
	4/8/2020	4.0 U	0.5 U	0.7	2.9
	4/14/2020	4.8	0.5 U	0.8	2.9
	4/21/2020	4.1	0.5 U	0.8	2.9
	4/28/2020	4.0 U	0.5 U	0.7	2.7
	5/5/2020	4.0 U	0.5 U	0.9	2.9
	5/12/2020	4.0 U	0.5 U	0.6	2.3
	5/19/2020	4.0 U	0.5 U	0.8	2.6
	5/27/2020	4.0 U	0.5 U	0.8	2.6
	6/2/2020	4.0 U	0.5 U	0.7	2.6
	6/9/2020	4.3	0.5 U	0.8	2.5
	6/16/2020	4.0 U	0.5 U	0.8	2.5
	6/23/2020	4.0 U	0.5 U	0.8	2.6
	6/30/2020	4.0 U	0.5 U	0.8	2.2
	7/7/2020	4.0 U	0.5 U	0.7	2.3
	7/14/2020	4.0 U	0.5 U	0.7	2.4
	7/21/2020	4.0 U	0.5 U	0.7	2.3
	7/28/2020	4.0 U	0.5 U	0.7	2.3
	8/4/2020	4.0 U	0.5 U	0.7	2.4
	8/11/2020	4.0 U	0.5 U	0.8	2.4
	8/18/2020	4.0 U	0.5 U	0.7	2.4
	8/25/2020	4.2	0.5 U	0.8	2.5
	9/1/2020	4.0 U	0.5 U	0.7	2.3

Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
	9/8/2020	4.0 U	0.5 U	0.8	2.3
	9/15/2020	4.0 U	0.5 U	0.7	2.3
	9/22/2020	4.0 U	0.5 U	0.8	2.4
	9/29/2020	4.0 U	0.5 U	0.8	2.3
	10/6/2020	4.0 U	0.5 U	0.7	2.2
	10/14/2020	4.0 U	0.5 U	0.8	2.2
	10/20/2020	4.0 U	0.5 U	0.8	2.3
	10/27/2020	4.1	0.5 U	0.8	2.3
	11/3/2020	4.0 U	0.5 U	0.8	2.1
	11/10/2020	4.0 U	0.5 U	0.9	2.3
	11/17/2020	4.0 U	0.5 U	0.9	2.3
	11/24/2020	4.0 U	NA	NA	NA
	12/8/2020	4.0 U	0.5 U	0.8	2.4
	12/15/2020	4.0 U	0.5 U	0.9	2.6
	12/22/2020	4.0 U	0.5 U	0.9	2.4
	12/29/2020	4.0 U	0.5 U	0.9	2.5
	1/6/2021	4.0 U	0.5 U	0.9	2.3
	1/12/2021	4.0 U	0.5 U	0.9	2.4
	1/19/2021	4.0 U	0.5 U	0.8	2.4
	1/26/2021	4.0 U	NA	NA	NA
	2/2/2021	4.0 U	0.5 U	0.8	2.1
	2/9/2021	4.0 U	0.5 U	0.8	2.6
	2/16/2021	4.0 U	0.5 U	0.9	2.6
	2/23/2021	4.0 U	0.5 U	0.9	2.5
	3/2/2021	NA	0.5 U	0.7	2.0
	3/9/2021	4.0 U	0.5 U	0.9	2.2
	3/16/2021	4.0 U	0.5 U	0.9	2.2
	3/23/2021	4.0 U	0.5 U	0.9	2.1
	3/30/2021	4.0 U	0.5 U	0.8	2.2
	4/6/2021	4.0 U	0.5 U	0.9	2.3
	4/14/2021	4.0 U	0.5 U	0.8	2.0
	4/20/2021	4.0 U	0.5 U	0.8	2.0
	4/27/2021	4.0 U	0.5 U	0.8	2.1
	5/4/2021	4.0 U	0.5 U	0.8	2.2
	5/11/2021	4.0 U	0.5 U	0.9	2.2
	5/18/2021	4.0 U	0.5 U	0.8	2.0
	5/25/2021	4.1	0.5 U	0.9	2.3
RUBIO CANON LAND & WATER ASSOCIATION WELL 04					
	1/6/2020	4.0 U	NA	5.0	NA
	1/13/2020	4.0 U	NA	NA	NA
	1/21/2020	4.0 U	NA	NA	NA
	1/27/2020	4.0 U	NA	NA	NA
	2/3/2020	NA	0.5 U	4.3	0.5 U
	2/4/2020	4.0 U	NA	NA	NA
	2/10/2020	4.0 U	NA	NA	NA
	2/18/2020	4.0 U	NA	NA	NA

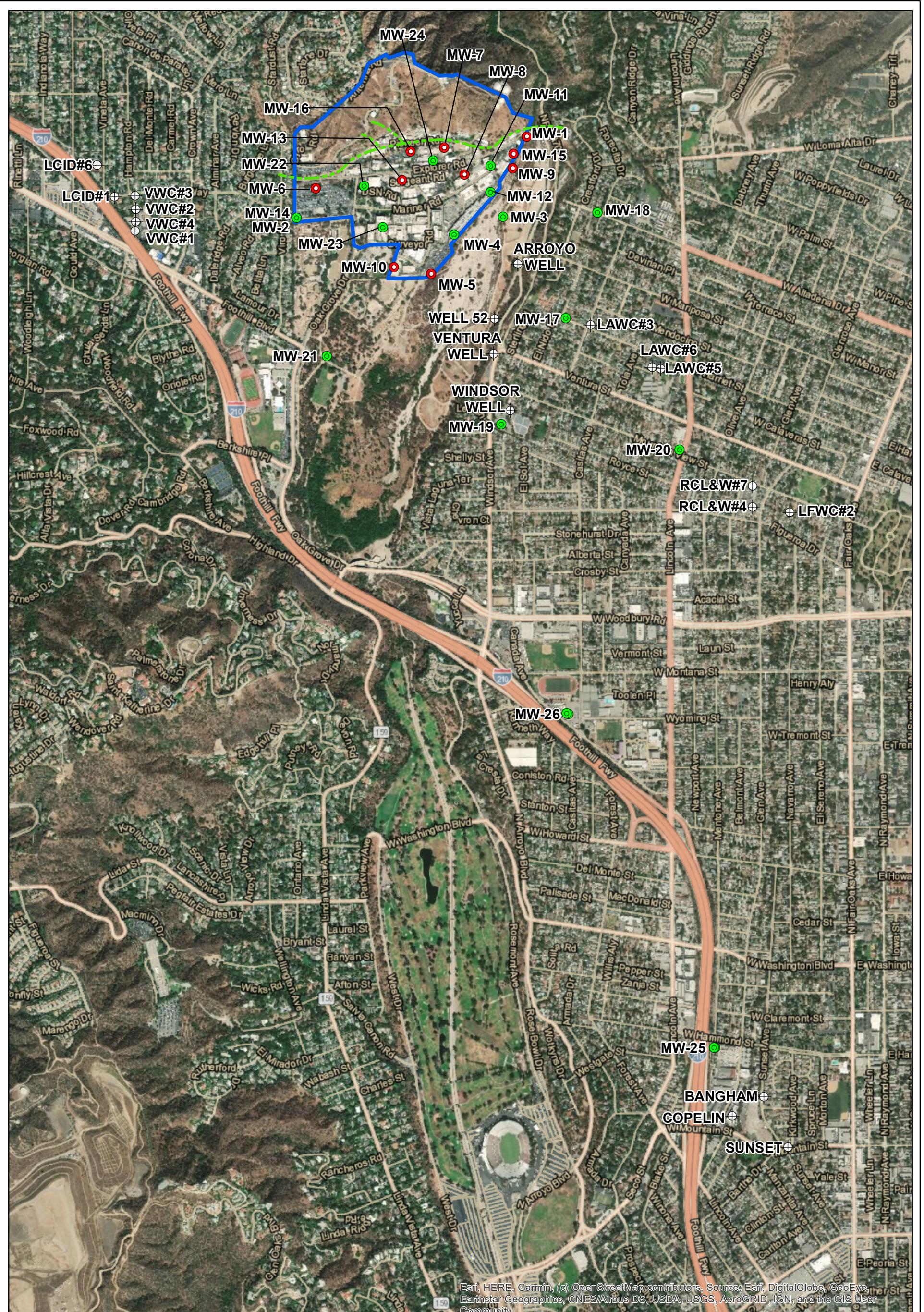
Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
	2/24/2020	4.0 U	NA	NA	NA
	3/2/2020	4.0 U	NA	NA	NA
	3/9/2020	4.0 U	NA	NA	NA
	3/16/2020	4.0 U	NA	NA	NA
	3/23/2020	4.0 U	NA	NA	NA
	3/30/2020	4.0 U	NA	NA	NA
	4/6/2020	4.0 U	NA	2.0	NA
	4/13/2020	4.0 U	NA	NA	NA
	4/20/2020	4.0 U	NA	NA	NA
	4/27/2020	4.0 U	NA	NA	NA
	5/4/2020	4.0 U	NA	NA	NA
	5/11/2020	4.0 U	NA	NA	NA
	5/18/2020	4.0 U	NA	NA	NA
	5/26/2020	4.0 U	NA	NA	NA
	6/1/2020	4.0 U	NA	NA	NA
	6/8/2020	4.0 U	NA	NA	NA
	6/15/2020	4.0 U	NA	NA	NA
	6/22/2020	4.0 U	NA	NA	NA
	6/29/2020	4.0 U	NA	NA	NA
	7/6/2020	4.0 U	NA	4.3	NA
	7/13/2020	4.0 U	NA	NA	NA
	7/20/2020	4.0 U	NA	NA	NA
	7/27/2020	4.0 U	NA	NA	NA
	8/3/2020	4.0 U	NA	NA	NA
	8/10/2020	4.0 U	NA	NA	NA
	8/17/2020	4.0 U	NA	NA	NA
	8/24/2020	4.0 U	NA	NA	NA
	8/31/2020	4.0 U	NA	NA	NA
	9/8/2020	4.0 U	NA	NA	NA
	9/14/2020	4.0 U	NA	NA	NA
	9/21/2020	4.0 U	NA	NA	NA
	9/28/2020	4.0 U	NA	NA	NA
	10/5/2020	4.0 U	NA	6.4	NA
	10/12/2020	4.0 U	NA	NA	NA
	10/19/2020	4.0 U	NA	NA	NA
	10/26/2020	4.0 U	NA	NA	NA
	11/2/2020	4.0 U	NA	NA	NA
	11/9/2020	4.0 U	NA	NA	NA
	11/16/2020	4.0 U	NA	NA	NA
	11/23/2020	4.0 U	NA	NA	NA
	11/30/2020	4.0 U	NA	NA	NA
	12/14/2020	4.0 U	NA	NA	NA
	12/21/2020	4.0 U	NA	NA	NA
	12/28/2020	4.0 U	NA	NA	NA
	1/4/2021	4.0 U	NA	7.7	NA
	1/11/2021	4.0 U	NA	NA	NA

Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
	1/19/2021	4.0 U	NA	12.0	NA
	1/25/2021	4.0 U	NA	NA	NA
	1/27/2021	NA	NA	9.3	NA
	2/1/2021	4.0 U	NA	NA	NA
	2/8/2021	4.0 U	0.5 U	6.6	0.5 U
	2/16/2021	4.0 U	NA	NA	NA
	2/22/2021	4.0 U	NA	NA	NA
	3/1/2021	4.0 U	NA	7.1	NA
	3/8/2021	4.0 U	NA	NA	NA
	3/15/2021	4.0 U	NA	NA	NA
	3/22/2021	4.0 U	NA	NA	NA
	3/29/2021	4.0 U	NA	NA	NA
	4/5/2021	4.0 U	NA	NA	NA
	4/12/2021	4.0 U	NA	4.5	NA
	4/19/2021	4.0 U	NA	NA	NA
	4/26/2021	4.0 U	NA	NA	NA
	5/3/2021	4.0 U	NA	NA	NA
	5/10/2021	4.0 U	NA	NA	NA
	5/17/2021	4.0 U	NA	NA	NA
	5/24/2021	4.0 U	NA	NA	NA
RUBIO CANON LAND & WATER ASSOCIATION WELL 07					
	1/6/2020	4.0 U	NA	0.8	NA
	1/13/2020	4.0 U	NA	NA	NA
	1/21/2020	4.0 U	NA	NA	NA
	1/27/2020	4.0 U	NA	NA	NA
	2/3/2020	NA	0.5 U	0.6	0.5 U
	2/4/2020	4.0 U	NA	NA	NA
	2/10/2020	4.0 U	NA	NA	NA
	2/18/2020	4.0 U	NA	NA	NA
	2/24/2020	4.0 U	NA	NA	NA
	3/2/2020	4.0 U	NA	NA	NA
	3/9/2020	4.0 U	NA	NA	NA
	3/16/2020	4.0 U	NA	NA	NA
	3/23/2020	4.0 U	NA	NA	NA
	3/30/2020	4.0 U	NA	NA	NA
	4/6/2020	4.0 U	NA	0.5 U	NA
	4/13/2020	4.0 U	NA	NA	NA
	4/20/2020	4.0 U	NA	NA	NA
	4/27/2020	4.0 U	NA	NA	NA
	5/4/2020	4.0 U	NA	NA	NA
	5/11/2020	4.0 U	NA	NA	NA
	5/18/2020	4.0 U	NA	NA	NA
	5/26/2020	4.0 U	NA	NA	NA
	6/1/2020	4.0 U	NA	NA	NA
	6/8/2020	4.0 U	NA	NA	NA
	6/15/2020	4.0 U	NA	NA	NA

Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
	6/22/2020	4.0 U	NA	NA	NA
	6/29/2020	4.0 U	NA	NA	NA
	7/6/2020	4.0 U	NA	0.7	NA
	7/13/2020	4.0 U	NA	NA	NA
	7/20/2020	4.0 U	NA	NA	NA
	7/27/2020	4.0 U	NA	NA	NA
	8/3/2020	4.0 U	NA	NA	NA
	8/10/2020	4.0 U	NA	NA	NA
	8/17/2020	4.0 U	NA	NA	NA
	8/24/2020	4.0 U	NA	NA	NA
	8/31/2020	4.0 U	NA	NA	NA
	9/8/2020	4.0 U	NA	NA	NA
	9/14/2020	4.0 U	NA	NA	NA
	9/21/2020	4.0 U	NA	NA	NA
	9/28/2020	4.0 U	NA	NA	NA
	10/5/2020	4.0 U	NA	0.7	NA
	10/12/2020	4.0 U	NA	NA	NA
	10/19/2020	4.0 U	NA	0.7	NA
	10/26/2020	4.0 U	NA	NA	NA
	11/2/2020	4.0 U	NA	NA	NA
	11/9/2020	4.0 U	NA	NA	NA
	11/16/2020	4.0 U	NA	NA	NA
	11/23/2020	4.0 U	NA	NA	NA
	11/30/2020	4.0 U	NA	NA	NA
	12/7/2020	4.0 U	NA	NA	NA
	12/14/2020	4.0 U	NA	NA	NA
	12/21/2020	4.0 U	NA	NA	NA
	12/28/2020	4.0 U	NA	NA	NA
	1/4/2021	4.0 U	NA	0.8	NA
	1/11/2021	4.0 U	NA	NA	NA
	1/19/2021	4.0 U	NA	NA	NA
	1/25/2021	4.0 U	NA	NA	NA
VALLEY WATER CO. WELL 01					
	6/3/2020	4.0 U	0.5 U	1.3	1.6
	7/1/2020	4.0 U	NA	NA	NA
	7/2/2020	NA	0.5 U	1.2	1.5
	8/4/2020	4.0 U	0.5 U	1.0	1.3
	9/9/2020	4.0 U	0.5 U	0.9	1.0
	10/5/2020	4.0 U	0.5 U	0.8	1.2
	5/5/2021	4.0 U	0.5 U	0.8	1.2
	6/2/2021	NA	0.5 U	0.5 U	0.7
VALLEY WATER CO. WELL 02					
	5/7/2020	4.0 U	0.5 U	0.5 U	0.5 U
	6/3/2020	4.0 U	0.5 U	0.6	0.8
	7/1/2020	4.0 U	NA	NA	NA
	7/2/2020	NA	0.5 U	0.8	0.9

Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
VALLEY WATER CO. WELL 03	8/4/2020	4.0 U	0.5 U	0.6	0.8
	9/9/2020	4.0 U	0.5 U	0.5 U	0.6
	10/5/2020	4.0	0.5 U	0.6	0.7
	5/5/2021	4.0 U	0.5 U	0.8	0.8
	6/2/2021	NA	0.5 U	0.5 U	0.6
VALLEY WATER CO. WELL 04					
VALLEY WATER CO. WELL 04	5/7/2020	4.0 U	0.5 U	2.0	1.5
	6/3/2020	4.0 U	0.5 U	2.2	1.8
	7/2/2020	4.0 U	0.5 U	2.2	1.6
	8/4/2020	4.0 U	0.5 U	1.6	1.4
	5/5/2021	4.0 U	0.5 U	1.8	1.8
	6/2/2021	NA	0.5 U	0.8	1.0
Analyte concentration exceeds the standard for:					
CA MCL		6.0	0.5	5.0	5.0
EPA REGION IX MCL		NE	5.0	5.0	5.0
Notes					
NA	Not analyzed				
NE	Not established				
Source	State Water Resources Control Board (Division of Drinking Water) Water Quality Index Database				
U	Analyte was analyzed for but not detected at or above the stated limit				

FIGURES



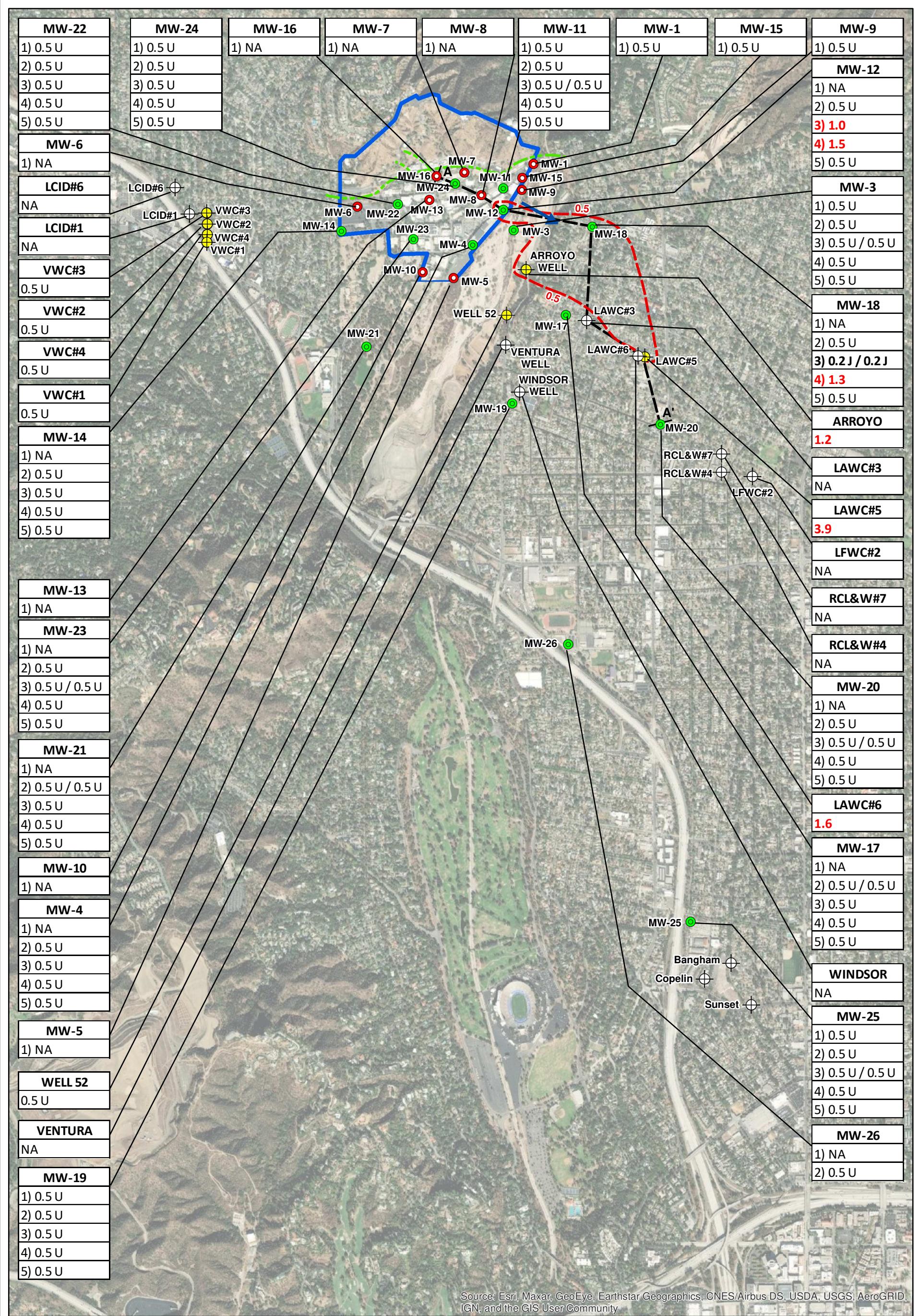
Legend

- Deep Multi-Port Monitoring Well Location
 - Shallow Monitoring Well Location
 - Municipal Production Well
 - JPL Facility Boundary
- 0 500 1,000 1,500 Feet

TIDEWATER INC
ENGINEERS / SCIENTISTS / PROGRAM MANAGERS

Locations of JPL Groundwater
Monitoring Wells and Nearby
Municipal Production Wells

DESIGNED BY	JHG	Figure
DRAWN BY	JHG	1
CHECKED BY	DC	
		Contract No:
		W912PL-13-D-0018 TO 001
		Oct 2019



Legend



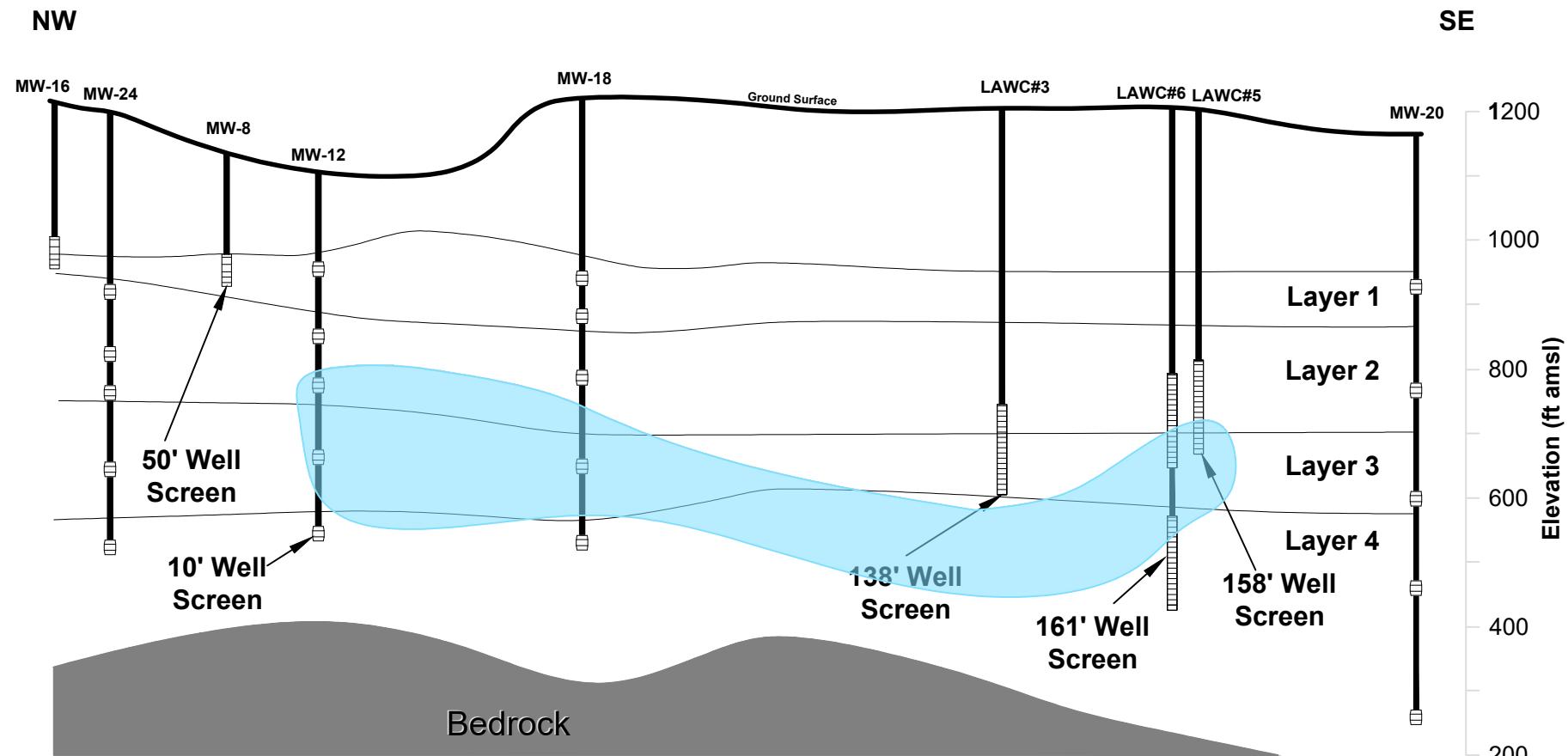
- Deep Multi-Port Monitoring Well Location
- Shallow Monitoring Well Location
- ⊕ Municipal Production Well (Data Not Available)
- ⊕ Municipal Production Well (Data From May/June 2021)
- Cross-Section Transect A-A'
- Estimated Isoconcentration Line (0.5 µg/L)
- JPL Facility Boundary
- Approximate Location of Thrust Fault
- Groundwater Flow Direction

MW-8
Well ID
1) 0.5 U
Screen
Concentration in micrograms per liter
J = Detected estimated value
U = Not detected estimated value
NA = Not Analyzed
Bold font indicates detected concentration below the State maximum contaminant level (MCL) of 0.5 micrograms per liter; red font indicates concentration exceeds MCL.

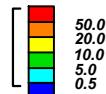
TIDEWATER INC
ENGINEERS / SCIENTISTS / PROGRAM MANAGERS

Carbon Tetrachloride in Groundwater
May/June 2021

DESIGNED BY	JHG	Figure 2
DRAWN BY		
CHECKED BY	DC	
Contract No:	FA8903-16-D-0049	Sep 2021



Note: Concentrations are Reported in $\mu\text{g}/\text{L}$
 Plume depicted above delineates concentrations
 exceeding state MLC (0.5 $\mu\text{g}/\text{L}$)

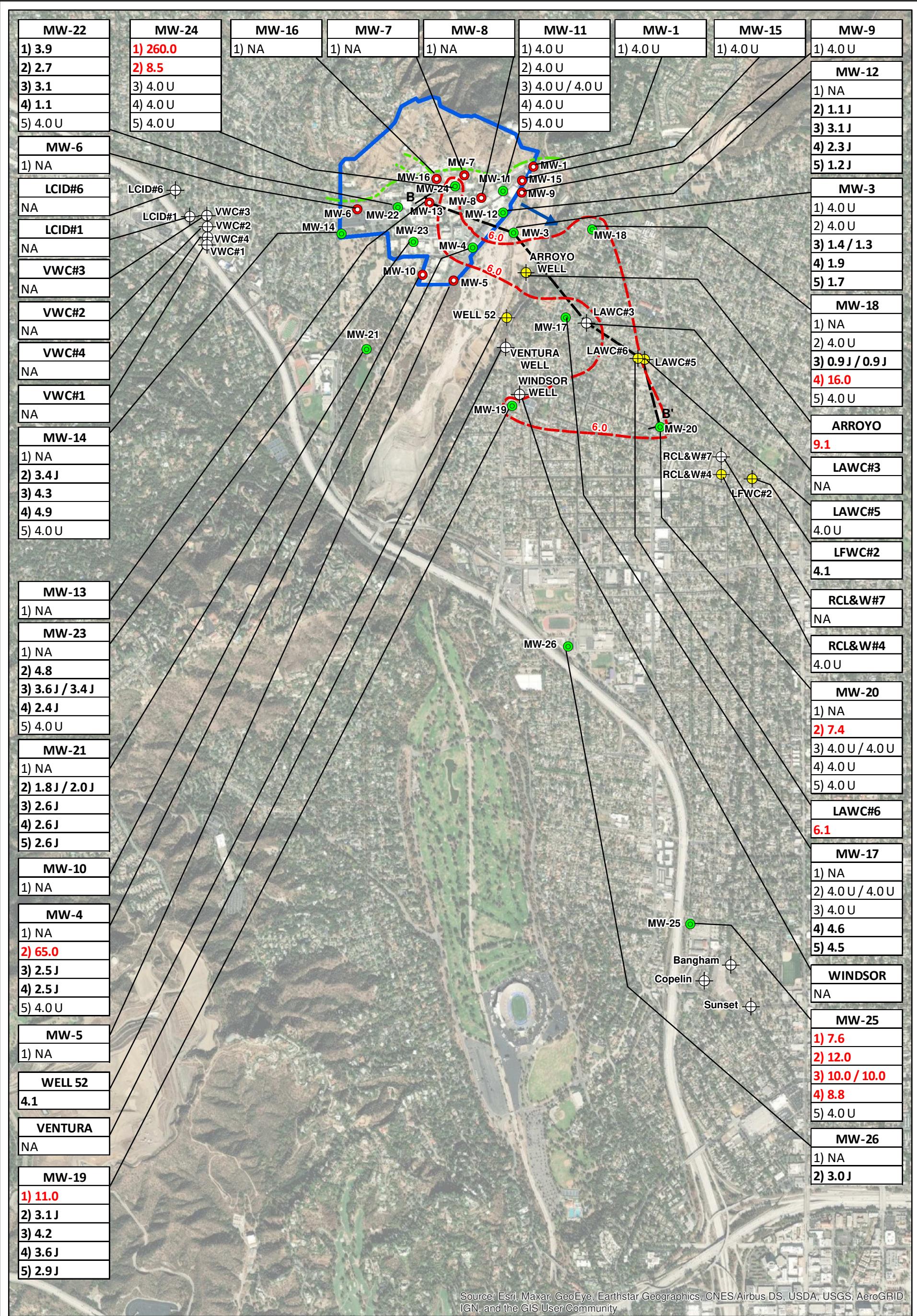


Z exag: 3.0

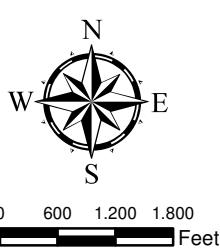
0 500 1000

HORIZONTAL SCALE
IN FEET
(Approximate)

 TIDEWATER INC <small>ENGINEERS / SCIENTISTS / PROGRAM MANAGERS</small>	
Horizontal and Vertical Extent of Carbon Tetrachloride in Groundwater May/June 2021	
DESIGNED BY	JPL - Pasadena, CA
DRAWN BY	Figure 3
CHECKED BY	Contract No: FA8903-21-F-1028
DC	Sep 2021



Legend



Well ID
Screen
Concentration in micrograms per liter
J = Detected estimated value
U = Not detected estimated value
NA = Not Analyzed

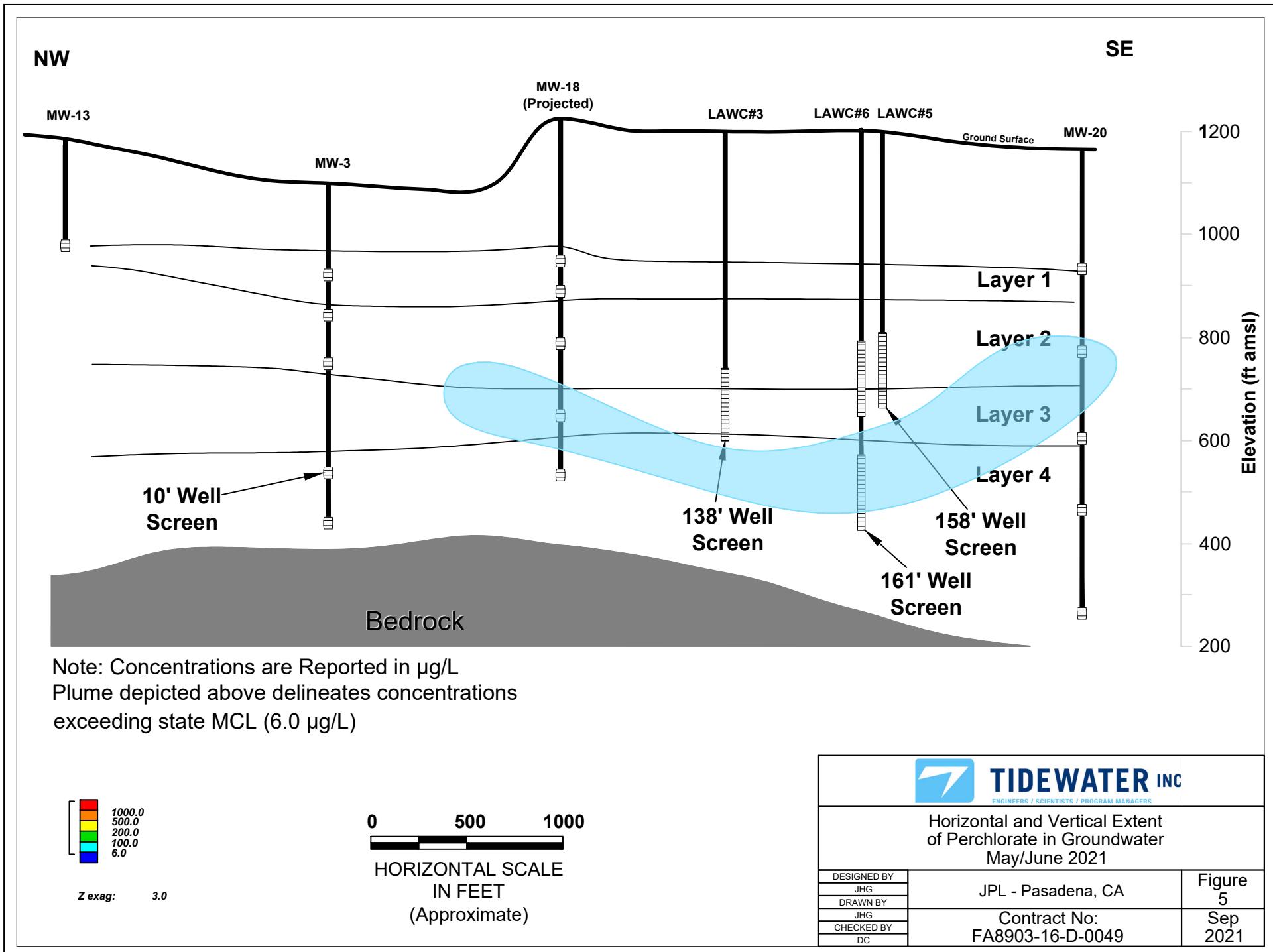
MW-8
1) 0.5 U
Cross-Section Transect B-B'
Estimated Isoconcentration Line (6 µg/L)
Approximate Location of Thrust Fault
JPL Facility Boundary
Groundwater Flow Direction

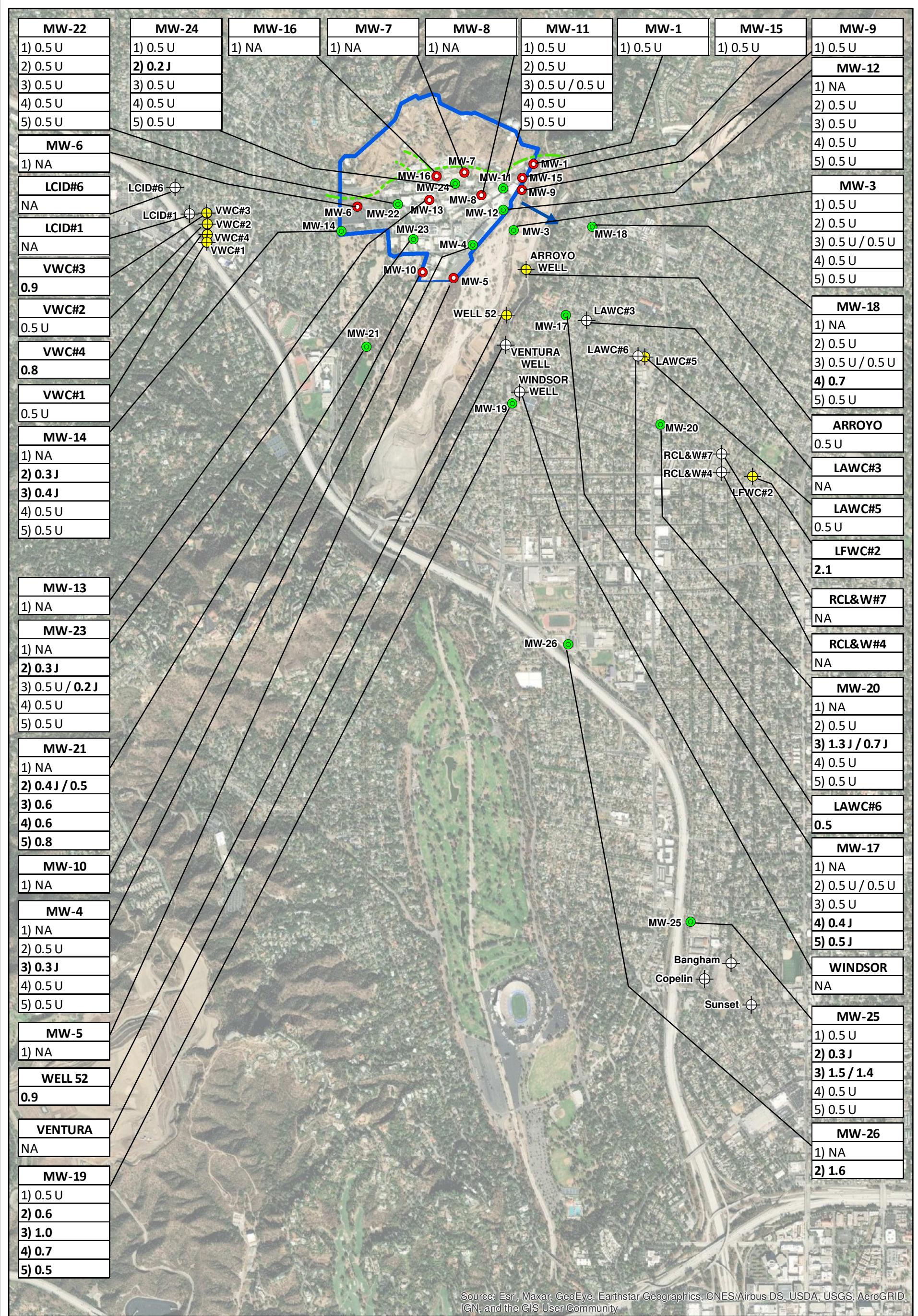
Bold font indicates detected concentration below the State maximum contaminant level (MCL) of 6 micrograms per liter; red font indicates concentration exceeds MCL.

TIDEWATER INC
ENGINEERS / SCIENTISTS / PROGRAM MANAGERS

Perchlorate in Groundwater
May/June 2021

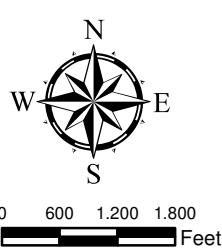
DESIGNED BY	JHG	Figure 4
DRAWN BY		
CHECKED BY	DC	
Contract No:	FA8903-16-D-0049	Sep 2021





Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Legend



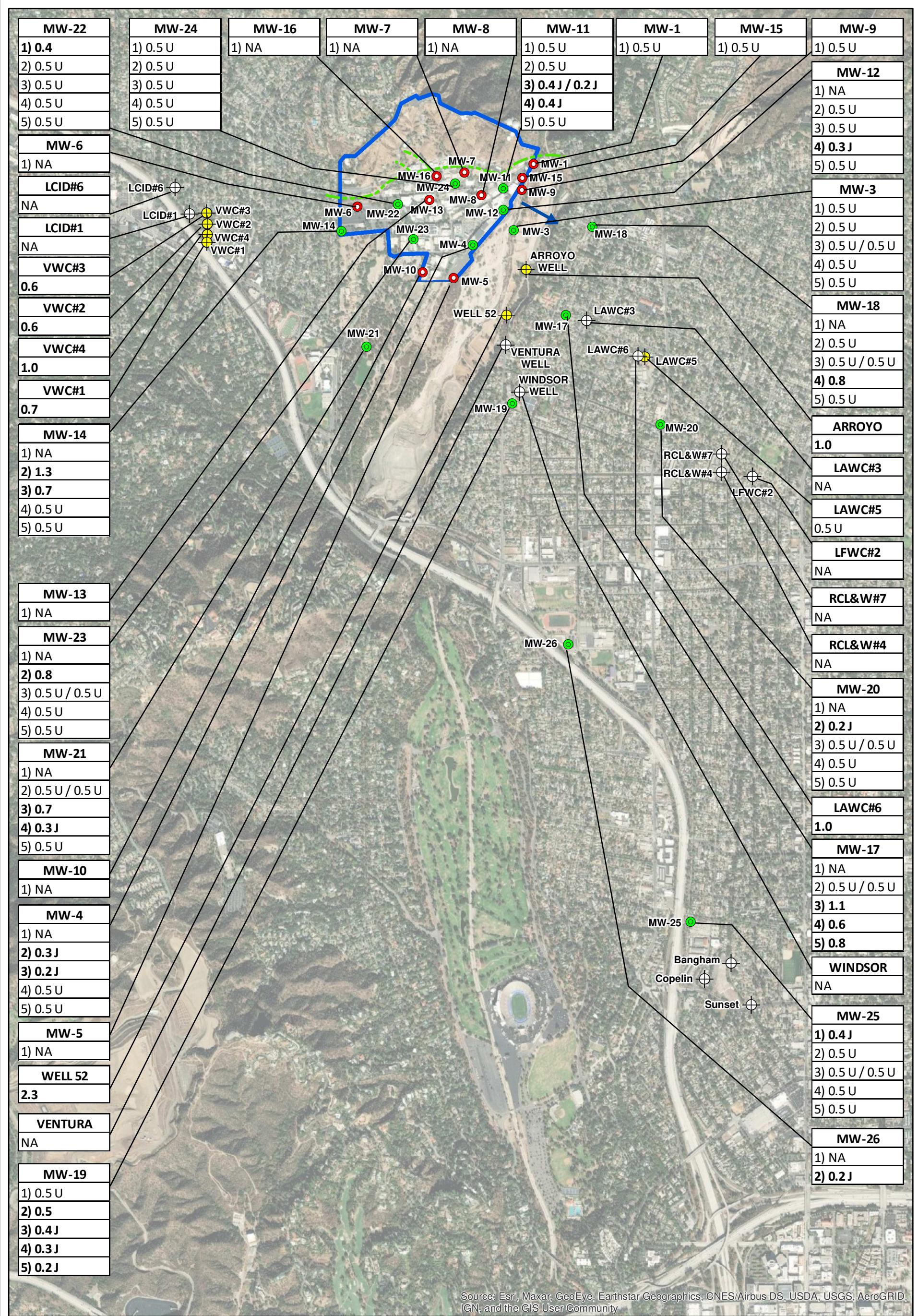
- Deep Multi-Port Monitoring Well Location
 - Shallow Monitoring Well Location
 - ⊕ Municipal Production Well (Data Not Available)
 - ⊕ Municipal Production Well (Data From May/June 2021)
- Estimated Isoconcentration Line (5 µg/L)
- JPL Facility Boundary
- Approximate Location of Thrust Fault
- Groundwater Flow Direction

MW-8
1) 0.5 U
Well ID
Screen
Concentration in micrograms per liter
J = Detected estimated value
U = Not detected estimated value
NA = Not Analyzed
Bold font indicates detected concentration below the State maximum contaminant level (MCL) of 5 micrograms per liter; red font indicates concentration exceeds MCL.

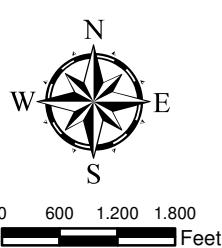
TIDEWATER INC
ENGINEERS / SCIENTISTS / PROGRAM MANAGERS

Tetrachloroethene in Groundwater
May/June 2021

DESIGNED BY	JHG	Figure 6
DRAWN BY		
CHECKED BY		
DC	Contract No: FA8903-16-D-0049	Sep 2021



Legend



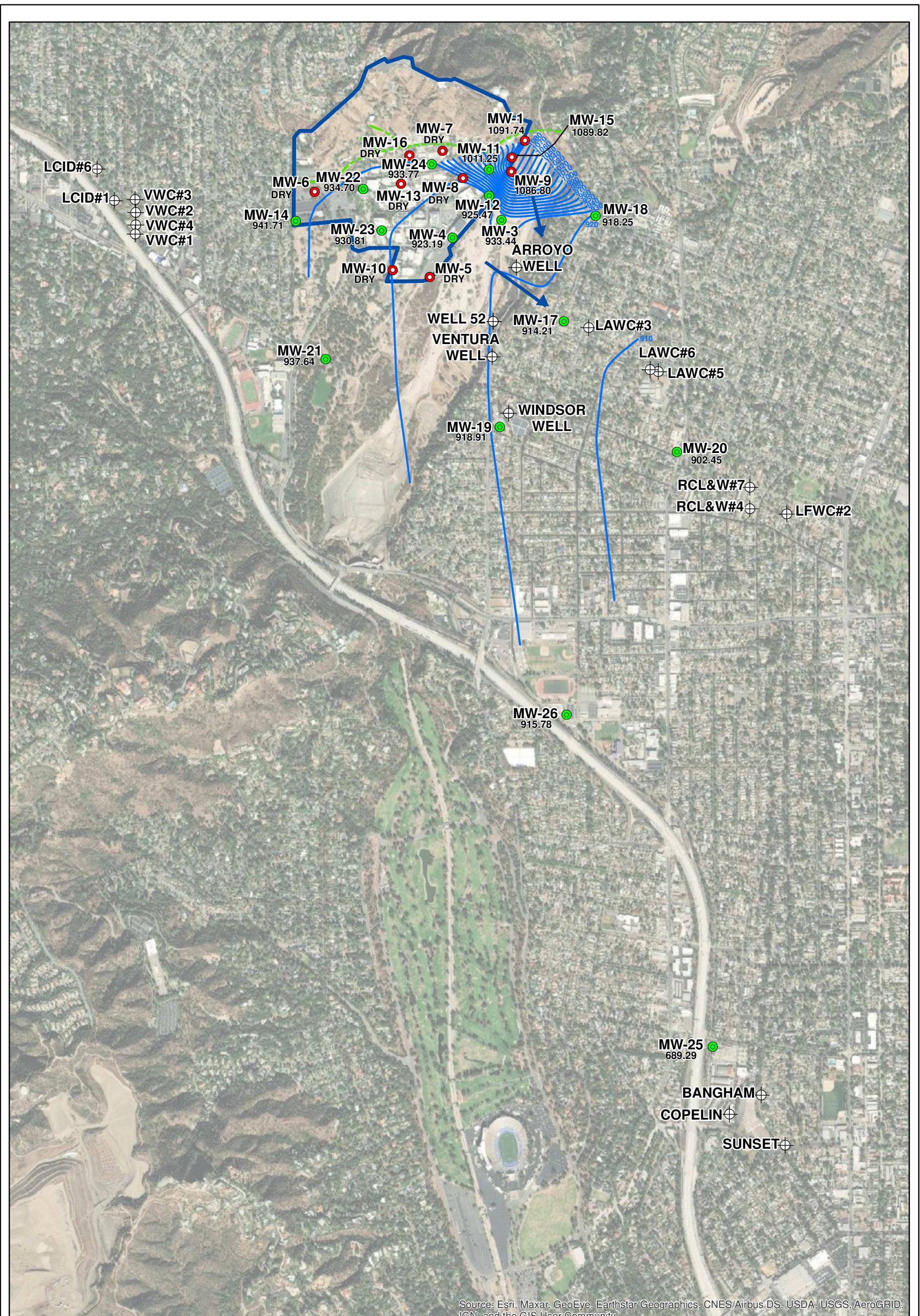
- Deep Multi-Port Monitoring Well Location
 - Shallow Monitoring Well Location
 - ⊕ Municipal Production Well (Data Not Available)
 - ⊕ Municipal Production Well (Data From May/June 2021)
- Estimated Isoconcentration Line (5 µg/L)
- JPL Facility Boundary
- Approximate Location of Thrust Fault
- Groundwater Flow Direction

MW-8
Well ID
1) 0.5 U
Screen
Concentration in micrograms per liter
J = Detected estimated value
U = Not detected estimated value
NA = Not Analyzed
Bold font indicates detected concentration below the State maximum contaminant level (MCL) of 5 micrograms per liter; red font indicates concentration exceeds MCL.

TIDEWATER INC
ENGINEERS / SCIENTISTS / PROGRAM MANAGERS

Trichloroethene in Groundwater
May/June 2021

DESIGNED BY	JHG	Figure
DRAWN BY	JHG	7
CHECKED BY	DC	
	Contract No: FA8903-16-D-0049	Sep 2021



Legend



0 500 1,000 1,500 Feet

Shallow Monitoring Well Location

JPL Facility Boundary

Deep Multi-Port Monitoring Well Location

Approximate Location of Thrust Fault

Municipal Production Well

Groundwater Flow Direction

Groundwater Elevation Contour (ft amsl)

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



TIDEWATER INC
ENGINEERS / SCIENTISTS / PROGRAM MANAGERS

Groundwater Elevation Contours
May/June 2021

DESIGNED BY	JPL - Pasadena, CA	Figure 8
DRAWN BY	JHG	
CHECKED BY	DC	Contract No: FA8903-21-F-1028
		Sep 2021