



Technical Memorandum

Third Quarter 2021 Groundwater Monitoring Summary

National Aeronautics and Space Administration

Jet Propulsion Laboratory, Pasadena, California

Final

January 2022

This technical memorandum summarizes the results of the third 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 third quarter 2021 groundwater sampling event was conducted from July 16 through July 30, 2021.

INTRODUCTION

During the third quarter 2020 sampling event, groundwater samples were collected from 16 of 25 JPL monitoring wells (MWs), both on- and off-facility and analyzed for volatile organic compounds (VOCs), total chromium, hexavalent chromium [Cr(VI)], and perchlorate. Figure 1 shows the locations of the groundwater monitoring wells.

Groundwater samples were shipped to BC Laboratories, Inc., in Bakersfield, California, for chemical analysis. BC Laboratories, Inc. is certified by the State Water Resources Control Board (SWRCB). Sample collection procedures and sample analyses were conducted in accordance with the approved *Work Plan for Performing a Remedial Investigation/Feasibility Study*¹. All samples were analyzed for VOCs, perchlorate, and metals within the analytical holding times with four exceptions; Cr(VI) in MW-17 (Screen 3), MW-24 (Screens 1 and 3), MW-25 (Screen 5) were rejected for non-compliance with method holding times. Data validation indicated that all the data from the third quarter 2021 groundwater monitoring event were acceptable for their intended use of characterizing aquifer quality except for those noted above. The data validation reports are included in Attachment 2.

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 third quarter of 2021.

Figures summarizing the results from the third 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 third 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 third quarter 2021, MW-7, MW-13, and MW-16 were dry and therefore not sampled.

PERCHLORATE ANALYTICAL RESULTS

- During the third quarter 2021, perchlorate was detected above the state MCL (6.0 µg/L) in well MW-24 (Screens 1 [140.0 µg/L] and 2 [8.7 µg/L]).
- During the third quarter 2021, perchlorate was not detected in MW-24 (Screen 3) with a reporting limit of 2.0 µg/L.
- Perchlorate concentrations increased from their last respective sampling event to the third quarter 2021 in MW-24 (Screen 2; 8.5 µg/L to 8.7 µg/L).
- Perchlorate concentrations decreased from their last respective sampling event to the third quarter 2021 in MW-24 (Screen 1; 260.0 µg/L to 140.0 µg/L).

- Perchlorate concentrations remained non-detect from their last respective sampling event to the third quarter 2021 in MW-24 (Screen 3).

VOC ANALYTICAL RESULTS

- During the third quarter 2021, carbon tetrachloride was not detected in the on-facility source area wells that were sampled (MW-24 [Screens 1 through 3]) with a reporting limit of 0.5 µg/L.
- During the third quarter 2021, TCE was not detected in the on-facility source area wells that were sampled (MW-24 [Screens 1 through 3]) with a reporting limit of 0.5 µg/L.
- During the third quarter 2021, PCE was not detected in the on-facility source area wells that were sampled (MW-24 [Screens 1 through 3]) with a reporting limit of 0.5 µg/L.

OTHER NOTABLE ANALYTICAL RESULTS

- During the third quarter 2021, Cr(VI)² was detected below the state MCL (50.0 µg/L) in MW-24 (Screen 2 [2.30] µg/L). Cr (VI) was not detected in MW-24 (Screen 4). ‘J’ qualifier indicates an estimated concentration.
- During the third 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 through 3 [1.4] µg/L, 2.0] µg/L, and 0.5] µg/L, respectively)). Total chromium was not detected in MW-24 (Screen 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 third quarter 2021, MW-6, MW-8, MW-22 (Screen 1), and MW-23 (Screen 1) were dry, and no samples were collected.

PERCHLORATE ANALYTICAL RESULTS

- During the third quarter 2021, perchlorate was detected below the state MCL (6.0 µg/L) in MW-22 (Screens 2 [2.3 µg/L] and 3 [2.8 µg/L]), and MW-23 (Screens 2 [3.6 µg/L] and 3 [3.3 µg/L]).
- During the third quarter 2021, perchlorate was not detected in MW-11 (Screens 1 through 4) with a reporting limit of 4.0 µg/L.
- Perchlorate concentrations decreased from their last respective sampling event to the third quarter 2021 in MW-22 (Screens 2 [2.7] µg/L to 2.3 µg/L] and 3 [3.1] µg/L to 2.8 µg/L]), and MW-23 (Screens 2 [4.8 µg/L to 3.6 µg/L] and 4 [3.6] µg/L to 3.3 µg/L]).
- Perchlorate concentrations remained non-detect from their last respective sampling event to the third quarter 2021 in MW-11 (Screens 1 through 4).

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.

VOC ANALYTICAL RESULTS

- During the third 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 third quarter 2021, TCE was detected below the state and federal MCL (5.0 µg/L) in MW-11 (Screen 4 [0.5] µg/L), and MW-23 (Screens 2 [0.6 µg/L] and 3 [0.2] µg/L). No other TCE detections occurred in the remaining other on-facility wells that were sampled during the third quarter 2021.
- During the third quarter 2021, PCE was detected below the state and federal MCL (5.0 µg/L) in MW-23 (Screens 2 and 3 [0.3] µg/L each). No other PCE detections occurred in the remaining other on-facility wells that were sampled during the third quarter 2021.

OTHER NOTABLE ANALYTICAL RESULTS

- During the third quarter 2021, Cr(VI) was detected below the state MCL (50.0 µg/L) in MW-22 (Screens 2 [2.20] µg/L and 3 [1.60] µg/L), and MW-23 (Screens 2 through 4 [2.10] µg/L, 3.50] µg/L, and 4.00] µg/L, respectively). Cr(VI) was not detected in the remaining other on-facility wells that were sampled during the third quarter 2021.
- During the third quarter 2021, total chromium was detected below the state MCL (50.0 µg/L) in MW-22 (Screens 2 [2.1] µg/L and 3 [1.5] µg/L) and MW-23 (Screens 3 [1.7] µg/L] and 4 [2.8] µg/L). No other total chromium detections occurred in the remaining other on-facility wells that were sampled during the third 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. (MW-1 and MW-9 were not sampled during the third quarter 2021).

During the third 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 third quarter 2021, perchlorate was detected above the state MCL (6.0 µg/L) in well MW-4 (Screen 2 [53.0 µg/L]).
- Perchlorate was detected below the state MCL (6.0 µg/L) in MW-3 (Screens 3 [1.0] and 4 [1.1] µg/L), MW-4 (Screen 3 [1.9] µg/L), MW-12 (Screens 2 through 5 [1.3] µg/L, 2.8 µg/L, 2.2 µg/L, and 1.3] µg/L, respectively)), and MW-14 (Screens 2 through 4 [2.8] µg/L, 4.2] µg/L, and 4.5] µg/L, respectively)).
- During the third quarter 2021, perchlorate was not detected in MW-3 (Screen 2) and MW-14 (Screen 5) with a reporting limit of 2.0 µg/L.
- Perchlorate concentrations increased from their respective last sampling event to the third quarter 2021 in MW-12 (Screens 2 [1.1] µg/L to 1.3] µg/L] and 5 [1.2] µg/L to 1.3] µg/L]).

- Perchlorate concentrations decreased from their respective last sampling event to the third quarter 2021 in MW-3 (Screens 3 [1.4] µg/L to 1.0] µg/L] and 4 [1.9] µg/L to 1.1] µg/L]), MW-4 (Screens 2 [65.0 µg/L to 53.0 µg/L] and 3 [2.5] µg/L to 1.9] µg/L]), MW-12 (Screens 3 [3.1] µg/L to 2.8 µg/L] and 4 [2.3] µg/L to 2.2 µg/L]) and MW-14 (Screens 2 through 4 [3.4] µg/L to 2.8] µg/L, 4.3 µg/L to 4.2] µg/L, and 4.9 µg/L to 4.5] µg/L, respectively]).
- Perchlorate concentrations remained non-detect from their respective last sampling event to the third quarter 2021 sampling event in MW-3 (Screen2), MW-14 (Screen 5), and MW-15.
- The perchlorate concentration of 53.0 µg/L in MW-4 (Screen 2) during the third quarter 2021. The highest detected perchlorate concentration in MW-4 (Screen 2) was 250.0 µg/L (third quarter 2013). Perchlorate concentrations were not detected in MW-4 (Screen 2) between the third quarter 2015 and the third quarter 2018. Perchlorate concentrations in MW-4 (Screen 2) increased from the 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 third 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 third quarter 2021, carbon tetrachloride was detected above the state MCL (0.5 µg/L) in MW-12 (Screens 3 [1.5 µg/L] and 4 [0.9 µg/L]) and below the state MCL in MW-12 (Screen 5 [0.4] µg/L]). No other carbon tetrachloride detections occurred in the perimeter off-facility wells that were sampled during the third quarter 2021.
- During the third quarter 2021, TCE was detected below the state and federal MCL (5.0 µg/L) in 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 third quarter 2021.
- During the third quarter 2021, PCE was detected below the state and federal MCL (5.0 µg/L) in 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 third quarter 2021.

OTHER NOTABLE ANALYTICAL RESULTS

- During the third quarter 2021, Cr(VI) was detected below the state MCL (50.0 µg/L) in MW-3 (Screens 2 through 4 [0.69] µg/L, 0.79] µg/L, and 0.68] µg/L, respectively]) and MW-15 (0.67] µg/L). No other Cr(VI) detections occurred in the perimeter off-facility wells that were sampled during the third quarter 2021.
- During the third quarter 2021, total chromium was detected below the state MCL (50.0 µg/L) in MW-3 (Screens 2 through 4 [0.5] µg/L, 1.6] µg/L, and 14.0 µg/L, respectively]), MW-14 (Screen 2 [0.6] µg/L]) and MW-15 (9.2] µg/L). No other total chromium detections occurred in the perimeter off-facility wells that were sampled during the third quarter 2021.

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 third 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 third 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 [14.0 µg/L]) and MW-25 (Screens 1 through 4 [6.8 µg/L, 11.0 µg/L, 9.5 µg/L, and 8.4 µg/L, respectively]).
- During the third quarter 2021 sampling event, concentrations of perchlorate below the state MCL (6.0 µg/L) were reported in samples collected from wells MW-17 (Screen 4 [4.4 µg/L]), MW-19 (Screens 2 through 5 [3.3 µg/L, 4.0 µg/L, 3.1 µg/L, and 3.0 µg/L, respectively]), MW-21 (Screens 2 through 5 [1.6] µg/L, 2.8 µg/L, 2.8 µg/L, and 2.4 µg/L, respectively]), and MW-26 (Screen 2 [2.8 µg/L]).
- During the third quarter 2021, concentrations of perchlorate were not detected in MW-17 (Screens 2 and 3), MW-18 (Screens 2, 3 and 5), MW-19 (Screen 1), MW-20 (Screens 2 through 5), and MW-25 (Screen 5) with a reporting limit of 2.0 µg/L.
- Perchlorate concentrations increased from their respective last sampling event to the third quarter 2021 in MW-19 (Screens 2 [3.1] µg/L to 3.3 µg/L) and 5 [2.9] µg/L to 3.0 µg/L) and MW-21 (Screens 3 [2.6 µg/L to 2.8 µg/L] and 4 [2.6] µg/L to 2.8 µg/L)).
- Perchlorate concentrations decreased from their respective last sampling event to the third quarter 2021 in MW-17 (Screen 4 [4.6 µg/L to 4.4 µg/L]), MW-18 (Screens 3 [0.9] µg/L to non-detect] and 4 [16.0 µg/L to 14.0 µg/L]), MW-19 (Screens 1 [11.0 µg/L to non-detect], 3 [4.2 µg/L to 4.0 µg/L], and 4 [3.6] µg/L to 3.1 µg/L]), MW-20 (Screen 1 [7.4 µg/L to non-detect]), MW-21 (Screens 2 [2.0] µg/L to 1.6] µg/L) and 5 [2.6] µg/L to 2.4 µg/L]), MW-25 (Screens 1 [7.6 µg/L to 6.8 µg/L], 2 [12.0 µg/L to 11.0 µg/L], 3 [10.0 µg/L to 9.5 µg/L], and 4 [8.8 µg/L to 8.4 µg/L]), and MW-26 (Screen2 [3.0] µg/L to 2.8 µg/L)).
- Perchlorate concentrations remained non-detect from their respective last sampling event to the third quarter 2021 in MW-17 (Screens 2 and 3), MW-18 (Screens 2 and 5), MW-20 (Screens 3 through 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.
- 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 123.0] µg/L. Perchlorate has not been detected in MW-20 (Screen 4) since the first quarter 2012 (38 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. From the first quarter 2012 to third quarter 2021 (38 sampling events) perchlorate concentrations have remained non-detect in MW-20 (Screen 5).

- Since the third quarter 2007, 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 to 18.0 µg/L with one exception 5.6 µg/L (Screen 4 [fourth quarter 2012]).

VOC ANALYTICAL RESULTS

- During the third quarter 2021, carbon tetrachloride was detected above the state MCL (0.5 µg/L) in MW-18 (Screen 4 [2.4 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 third 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 third quarter 2021, TCE was detected below the state and federal MCL (5.0 µg/L) in MW-17 (Screens 3 [1.3 µg/L] and 4 [0.8 µg/L]), MW-18 (Screen 4 [1.0 µg/L]), MW-19 (Screens 2 through 5 [0.6 µg/L, 0.4] µg/L, 0.3] µg/L, and 0.3] µg/L, respectively]), MW-20 (Screen 2 [0.2] µg/L]), MW-21 (Screens 3 [2.0] µg/L], and 4 [0.5] µg/L]), MW-25 (Screen 1 [0.5] 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 third quarter 2021.
- During the third quarter 2021, PCE was detected in MW-17 (Screen 4 [0.5 µg/L]), MW-18 (Screen 4 [0.8 µg/L]), MW-19 (Screens 2 through 5 [1.0 µg/L, 1.1 µg/L, 0.8 µg/L, and 1.0 µg/L, respectively]), MW-20 (Screens 2 [0.2] µg/L] and 3 [0.9 µg/L]), MW-21 (Screens 2 through 5 [0.4] µg/L, 2.1] µg/L, 1.0] µg/L, and 0.8] µg/L, respectively]), MW-25 (Screens 2 [0.3] µg/L], and 3 [2.2 µg/L]), and MW-26 (Screen 2 [1.5 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 third quarter 2021.

OTHER NOTABLE ANALYTICAL RESULTS

- During the third quarter 2021, Cr(VI) was detected below the state MCL (50.0 µg/L) in MW-17 (Screen 4 [2.40] µg/L]), MW-18 (Screens 3 [2.30] µg/L] and 4 [3.40] µg/L]), MW-21 (Screens 4 [1.50] µg/L] and 5 [1.40] µg/L]), and MW-25 (Screens 2 through 4 [2.00] µg/L, 3.30] µg/L, and 0.88] µg/L, respectively]). Cr(VI) was not detected in the remaining off-facility wells that were sampled during the third quarter 2021.
- During the third quarter 2021, total chromium was detected below the state MCL (50.0 µg/L) in MW-17 (Screen 4 [2.0] µg/L]), MW-18 (Screens 3 [2.1] µg/L] and 4 [3.1 µg/L]), MW-21 (Screens 4 [1.3] µg/L], and 5 [1.1] µg/L]), MW-25 (Screens 1 through 4 [1.8] µg/L, 1.8] µg/L, 2.5] µg/L, and 1.3] µg/L, respectively]), and MW-26 (Screen 2 [1.2] µg/L]). Total chromium was not detected in the remaining off-facility wells that were sampled during the third quarter 2021.

ALL WELL CATEGORIES (OTHER RESULTS)

- Comparing the second quarter 2021 to the third quarter 2021, groundwater elevations decreased by an average of 3.12 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 third quarter 2021. This is the third time MW-8 and MW-10 have been dry since they were first measured in 1996. This is the fourth consecutive quarter MW-5 and MW-7 were dry. This is the fifth 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-20, MW-21, MW-23, and MW-26 were dry and could not be sampled during the third quarter 2021. In addition, MW-17 (Screen 1) and MW-18 (Screen 1), which are only sampled during the second and fourth quarters but are measured for water levels during the first and third quarters, were also dry. This is the third time that MW-4 (Screen 1), MW-23 (Screen 1), and MW-26 (Screen 1) were dry since first being measured. This is the fifth consecutive quarter the uppermost screen in MW-12 was dry. This is the eighth consecutive quarter the uppermost screens in MW-14, MW-20, and MW-21 were dry.
- 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 fluctuated on a seasonal basis. During the period between second quarter 2019 and second quarter to third quarter 2021, groundwater elevations declined an average of 47 feet. 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 third quarter 2021 indicate that groundwater gradients and flow directions are generally consistent with previous observations (see Figure 8).

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
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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-
MW-1												
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	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	Aug 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	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-2	July 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	2.0 U	
MW-3-Screen-3												
MW-3-Screen-3	Aug 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	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 J	
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 J	
MW-3-Screen-3	July 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	1.0 J	
MW-3-Screen-4												
MW-3-Screen-4	Aug 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	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 J	
MW-3-Screen-4	July 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	1.1 J	
MW-3-Screen-5												
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	
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 J	
MW-4-Screen-1												
MW-4-Screen-1	Aug 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-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	

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-	
MW-4-Screen-2													
MW-4-Screen-2	Aug 2020	MW-4-2	0.5 U	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 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-2	July 2021	MW-4-2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6	53.0		
MW-4-Screen-3													
MW-4-Screen-3	Aug 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	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-3	July 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	1.9 J		
MW-4-Screen-4													
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	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	Aug 2020	MW-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-7													
MW-7	Aug 2020	MW-7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.4	7.5		
MW-8													
MW-8	Aug 2020	MW-8	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2	1.7 J	Bromodichloromethane Dibromochloromethane	1.5 2.1
MW-8	Aug 2020	DUP-7-3Q20	0.5 U	0.5 U	0.5 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	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	Aug 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	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	Aug 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	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		

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-	
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-1	July 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	2.0 U		
MW-11-Screen-2													
MW-11-Screen-2	Aug 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	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-2	July 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	2.0 U		
MW-11-Screen-3													
MW-11-Screen-3	Aug 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	4.0 U	Carbon disulfide	0.8
												Methyl-tert-butyl ether (MTBE)	0.5 J
												Styrene	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	0.3 J
												Methyl-tert-butyl ether (MTBE)	0.3 J
												Styrene	0.6
												Toluene	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
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-3	July 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	2.0 U	Carbon disulfide	0.6
												Styrene	0.1 J
MW-11-Screen-4													
MW-11-Screen-4	Aug 2020	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	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-4	July 2021	MW-11-4	0.5 U	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.0 U	Styrene	0.1 J
MW-11-Screen-5													
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-2													
MW-12-Screen-2	Aug 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	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-2	July 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	1.3 J		
MW-12-Screen-2	July 2021	DUP-5-3Q21	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	Trichlorofluoromethane	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-
MW-12-Screen-3												
MW-12-Screen-3	Aug 2020	MW-12-3	0.9	0.5 U	0.5 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-3	July 2021	MW-12-3	1.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8	2.8	
MW-12-Screen-4												
MW-12-Screen-4	Aug 2020	MW-12-4	0.4 J	0.5 U	0.5 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-4	July 2021	MW-12-4	0.9	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6	2.2	
MW-12-Screen-5												
MW-12-Screen-5	Aug 2020	MW-12-5	0.3 J	0.5 U	0.5 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	
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-12-Screen-5	July 2021	MW-12-5	0.4 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	1.3 J	
MW-14-Screen-2												
MW-14-Screen-2	Aug 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	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-2	July 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	2.8 J	
MW-14-Screen-3												
MW-14-Screen-3	Aug 2020	MW-14-3	0.5 U	0.8	0.5 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-3	July 2021	MW-14-3	0.5 U	0.7	0.4 J	0.3 J	0.5 U	0.5 U	0.5 U	0.5 J	4.2 J	
MW-14-Screen-4												
MW-14-Screen-4	Aug 2020	MW-14-4	0.5 U	0.2 J	0.5 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-4	July 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	4.5 J	
MW-14-Screen-5												
MW-14-Screen-5	Aug 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	0.5 U	4.0 U	

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-	
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-14-Screen-5	July 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	2.0 U		
MW-15													
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-17-Screen-2													
MW-17-Screen-2	Aug 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	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-2	July 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	2.0 U		
MW-17-Screen-3													
MW-17-Screen-3	Aug 2020	MW-17-3	0.5 U	1.6	0.3 J	0.5 U	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 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	0.5 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	0.5 U	0.2 J	4.0 U		
MW-17-Screen-3	July 2021	MW-17-3	0.5 U	1.3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	2.0 U	Styrene	0.1 J
MW-17-Screen-4													
MW-17-Screen-4	Aug 2020	MW-17-4	0.5 U	1.3	0.7	0.5 U	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	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 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 U	0.5 J	4.6		
MW-17-Screen-4	July 2021	MW-17-4	0.5 U	0.7	0.4 J	0.5 U	0.5 U	0.5 U	0.5 U	0.6	3.9		
MW-17-Screen-4	July 2021	DUP-2-3Q21	0.5 U	0.8	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.7	4.4		
MW-17-Screen-5													
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 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	0.5 U	0.6	4.5		
MW-18-Screen-2													
MW-18-Screen-2	Aug 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	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	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	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	0.5 U	4.0 U		
MW-18-Screen-2	July 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	0.5 U	2.0 U		
MW-18-Screen-3													
MW-18-Screen-3	Aug 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	1.8 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-	
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-3	July 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	2.0 U	Trichlorofluoromethane	0.2 J
MW-18-Screen-4													
MW-18-Screen-4	Aug 2020	MW-18-4	4.6	2.2	1.6	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-4	July 2021	MW-18-4	2.4	1.0	0.8	0.5 U	0.5 U	0.5 U	0.5 U	1.0	14.0		
MW-18-Screen-5													
MW-18-Screen-5	Aug 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		
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-18-Screen-5	July 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	2.0 U		
MW-19-Screen-1													
MW-19-Screen-1	Aug 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	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-1	July 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	1.0	2.0 U		
MW-19-Screen-2													
MW-19-Screen-2	Aug 2020	MW-19-2	0.5 U	0.7	1.2	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-2	July 2021	MW-19-2	0.5 U	0.6	1.0	0.5 U	0.5 U	0.5 U	0.5 U	1.2	3.3		
MW-19-Screen-3													
MW-19-Screen-3	Aug 2020	MW-19-3	0.5 U	0.9	1.9	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		
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-3	July 2021	MW-19-3	0.5 U	0.4 J	1.1	0.5 U	0.5 U	0.5 U	0.5 U	1.9	4.0		
MW-19-Screen-4													
MW-19-Screen-4	Aug 2020	MW-19-4	0.5 U	0.5 U	0.4 J	0.5 U	0.5 U	0.5 U	0.5 U	1.8	2.5 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-	
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-4	July 2021	MW-19-4	0.5 U	0.3 J	0.7	0.5 U	0.5 U	0.5 U	0.5 U	2.4	3.1		
MW-19-Screen-4	July 2021	DUP-1-3Q21	0.5 U	0.3 J	0.8	0.5 U	0.5 U	0.5 U	0.5 U	2.7	3.1		
MW-19-Screen-5													
MW-19-Screen-5	Aug 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	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-19-Screen-5	July 2021	MW-19-5	0.5 U	0.3 J	1.0	0.5 U	0.5 U	0.5 U	0.5 U	3.2	3.0		
MW-20-Screen-2													
MW-20-Screen-2	Aug 2020	MW-20-2	0.5 U	0.3 J	0.2 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-2	July 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	2.0 U		
MW-20-Screen-3													
MW-20-Screen-3	Aug 2020	MW-20-3	0.5 U	0.5 U	0.7	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
												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
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	0.8
												Styrene	0.3 J
MW-20-Screen-3	July 2021	MW-20-3	0.5 U	0.5 U	0.9	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.0 U	Styrene	0.4 J
MW-20-Screen-4													
MW-20-Screen-4	Aug 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	Aug 2020	DUP-1-3Q20	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	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		

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-	
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-4	July 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	2.0 U	Carbon disulfide	0.5
MW-20-Screen-5													
MW-20-Screen-5	Aug 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	0.6
												Styrene	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	0.7
												Styrene	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	0.8
												Styrene	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	0.5
												Styrene	0.1 J
MW-20-Screen-5	July 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	2.0 U	Carbon disulfide	0.5 J
												Styrene	0.2 J
MW-21-Screen-2													
MW-21-Screen-2	Aug 2020	MW-21-2	0.5 U	0.5 U	0.4 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 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-2	July 2021	MW-21-2	0.5 U	0.5 UJ	0.4 J	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	1.6 J		
MW-21-Screen-3													
MW-21-Screen-3	Aug 2020	MW-21-3	0.5 U	0.7	0.7	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		
MW-21-Screen-3	July 2021	MW-21-3	0.5 U	1.1 J	1.0 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 J	2.6		
MW-21-Screen-3	July 2021	DUP-6-3Q21	0.5 U	2.0 J	2.1 J	0.2 J	0.5 U	0.5 U	0.5 U	0.7	2.8		
MW-21-Screen-4													
MW-21-Screen-4	Aug 2020	MW-21-4	0.5 U	0.4 J	1.0	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	1.0	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-4	July 2021	MW-21-4	0.5 U	0.5 J	1.0 J	0.5 U	0.5 U	0.5 U	0.5 U	4.9	2.8		
MW-21-Screen-5													
MW-21-Screen-5	Aug 2020	MW-21-5	0.5 U	0.5 U	0.7	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		

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-	
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-21-Screen-5	July 2021	MW-21-5	0.5 U	0.5 UJ	0.8 J	0.5 U	0.5 U	0.5 U	0.5 U	4.5	2.4		
MW-22-Screen-1													
MW-22-Screen-1	Aug 2020	MW-22-1	0.5 U	0.5 U	0.5 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 U	0.4 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	3.9 J		
MW-22-Screen-2													
MW-22-Screen-2	Aug 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	2.6 J		
MW-22-Screen-2	Aug 2020	DUP-3-3Q20	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-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 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-22-Screen-2	July 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	2.3		
MW-22-Screen-3													
MW-22-Screen-3	Aug 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	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 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.1 J		
MW-22-Screen-3	July 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	2.8		
MW-22-Screen-4													
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 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-22-Screen-5													
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 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	0.5
MW-23-Screen-1													
MW-23-Screen-1	Aug 2020	MW-23-1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	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	Aug 2020	MW-23-2	0.5 U	1.1	0.5 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-2	July 2021	MW-23-2	0.5 U	0.6	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	3.6		

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-	
MW-23-Screen-3													
MW-23-Screen-3	Aug 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	3.5 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-3	July 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	3.1		
MW-23-Screen-3	July 2021	DUP-4-3Q21	0.5 U	0.2 J	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	3.3		
MW-23-Screen-4													
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	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	Aug 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	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		
MW-24-Screen-1	July 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	2.3	140.0	Bromodichloromethane	0.3 J
MW-24-Screen-2													
MW-24-Screen-2	Aug 2020	MW-24-2	0.3 J	0.5 U	0.4 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	0.5 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-2	July 2021	MW-24-2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6	8.7		
MW-24-Screen-3													
MW-24-Screen-3	Aug 2020	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	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-3	July 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	2.0 U		
MW-24-Screen-4													
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

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-	
MW-24-Screen-5													
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	Aug 2020	MW-25-1	0.5 U	0.7	0.5 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	0.5 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-1	July 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	0.6	6.8	Methyl-tert-butyl ether (MTBE)	0.5 J
MW-25-Screen-2													
MW-25-Screen-2	Aug 2020	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		
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		
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-2	July 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	0.2 J	11.0		
MW-25-Screen-3													
MW-25-Screen-3	Aug 2020	MW-25-3	0.5 U	0.5 U	0.7	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-3	July 2021	MW-25-3	0.5 U	0.5 U	2.2	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	9.5		
MW-25-Screen-4													
MW-25-Screen-4	Aug 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	8.4		
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-4	July 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	8.4		
MW-25-Screen-5													
MW-25-Screen-5	Aug 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	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-25-Screen-5	July 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	2.0 U		
MW-26-Screen-1													
MW-26-Screen-1	Aug 2020	MW-26-1	0.5 U	0.5 U	0.3 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		

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-	
MW-26-Screen-2													
MW-26-Screen-2	Aug 2020	MW-26-2	0.5 U	0.3 J	2.7	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
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		
MW-26-Screen-2	July 2021	MW-26-2	0.5 U	0.2 J	1.5	0.5 U	0.5 U	0.5 U	0.5 U	1.6	2.8		
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												
B	Analyte is present in method blank												
UB	Result should be considered "not-detected" because it was detected in a method blank or equipment blank at a similar level.												
E	Analyte concentration is above calibration range												
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 (µg/L)	Lead (µg/L)	Chromium, Total (µg/L)	Chromium, Hexavalent (µg/L)
MW-1						
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	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	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-2	July 2021	MW-3-2	NA	NA	0.5 J	0.69 J
MW-3-Screen-3						
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-3	July 2021	MW-3-3	NA	NA	1.6 J	0.79 J
MW-3-Screen-4						
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-4	July 2021	MW-3-4	NA	NA	14.0	0.68 J
MW-3-Screen-5						
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	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	Aug 2020	MW-4-2	NA	NA	1.5 J	0.67 J
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-2	July 2021	MW-4-2	NA	NA	3.0 UB	0.20 UB
MW-4-Screen-3						
MW-4-Screen-3	Aug 2020	MW-4-3	NA	NA	1.3 J	0.20 U

Sample Location	Sampling Event	Sample Number	Arsenic (µg/L)	Lead (µg/L)	Chromium, Total (µg/L)	Chromium, Hexavalent (µg/L)
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-3	July 2021	MW-4-3	NA	NA	3.0 UB	0.20 UB
MW-4-Screen-4						
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	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	Aug 2020	MW-5	NA	NA	1.8 J	0.20 U
MW-7						
MW-7	Aug 2020	MW-7	NA	NA	190.0	0.57
MW-8						
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	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	Aug 2020	MW-10	NA	NA	18.0	0.90
MW-11-Screen-1						
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-1	July 2021	MW-11-1	NA	NA	3.0 U	0.20 UB
MW-11-Screen-2						
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
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-2	July 2021	MW-11-2	NA	NA	3.0 U	0.20 UB
MW-11-Screen-3						
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-3	July 2021	MW-11-3	NA	NA	3.0 U	0.20 UB
MW-11-Screen-4						
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

Sample Location	Sampling Event	Sample Number	Arsenic (µg/L)	Lead (µg/L)	Chromium, Total (µg/L)	Chromium, Hexavalent (µg/L)
MW-11-Screen-5						
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-2						
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-2	July 2021	MW-12-2	NA	NA	3.0 UB	0.20 UB
MW-12-Screen-2	July 2021	DUP-5-3Q21	NA	NA	3.0 UB	0.20 UB
MW-12-Screen-3						
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-3	July 2021	MW-12-3	NA	NA	3.0 UB	0.20 UB
MW-12-Screen-4						
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	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-14-Screen-2						
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-2	July 2021	MW-14-2	NA	NA	0.6 J	0.20 UB
MW-14-Screen-3						
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-3	July 2021	MW-14-3	NA	NA	3.0 U	0.20 UB
MW-14-Screen-4						
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	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	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

Sample Location	Sampling Event	Sample Number	Arsenic (µg/L)	Lead (µg/L)	Chromium, Total (µg/L)	Chromium, Hexavalent (µg/L)
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-15	July 2021	MW-15	NA	NA	5.6 J	0.20 UB
MW-15	July 2021	DUP-7-3Q21	NA	NA	9.2 J	0.67 J
MW-17-Screen-2						
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-2	July 2021	MW-17-2	NA	NA	3.0 U	0.20 UB
MW-17-Screen-3						
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
MW-17-Screen-3	July 2021	MW-17-3	NA	NA	3.0 U	NA
MW-17-Screen-4						
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-4	July 2021	MW-17-4	NA	NA	2.0 J	2.30 J
MW-17-Screen-4	July 2021	DUP-2-3Q21	NA	NA	1.8 J	2.40 J
MW-17-Screen-5						
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-2						
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-2	July 2021	MW-18-2	NA	NA	3.0 U	0.20 UB
MW-18-Screen-3						
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-3	July 2021	MW-18-3	NA	NA	2.1 J	2.30 J
MW-18-Screen-4						
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

Sample Location	Sampling Event	Sample Number	Arsenic (µg/L)	Lead (µg/L)	Chromium, Total (µg/L)	Chromium, Hexavalent (µg/L)
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-4	July 2021	MW-18-4	NA	NA	3.1	3.40 J
MW-18-Screen-5						
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	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	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
MW-19-Screen-3						
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	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	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	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-2	July 2021	MW-20-2	NA	NA	3.0 U	0.20 UB
MW-20-Screen-3						
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-3	July 2021	MW-20-3	NA	NA	3.0 U	0.20 UB
MW-20-Screen-4						
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-4	July 2021	MW-20-4	NA	NA	3.0 U	0.20 UB
MW-20-Screen-5						
MW-20-Screen-5	Aug 2020	MW-20-5	NA	NA	0.5 J	0.22 UJ

Sample Location	Sampling Event	Sample Number	Arsenic (µg/L)	Lead (µg/L)	Chromium, Total (µg/L)	Chromium, Hexavalent (µg/L)
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-20-Screen-5	July 2021	MW-20-5	NA	NA	3.0 U	0.20 UB
MW-21-Screen-2						
MW-21-Screen-2	Aug 2020	MW-21-2	NA	NA	3.0 U	0.18 UJ
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-2	July 2021	MW-21-2	NA	NA	3.0 UJ	0.20 UB
MW-21-Screen-3						
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-3	July 2021	MW-21-3	NA	NA	3.0 U	0.20 UB
MW-21-Screen-3	July 2021	DUP-6-3Q21	NA	NA	3.0 UJ	0.20 UB
MW-21-Screen-4						
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-4	July 2021	MW-21-4	NA	NA	1.3 J	1.50 J
MW-21-Screen-5						
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-21-Screen-5	July 2021	MW-21-5	NA	NA	1.1 J	1.40 J
MW-22-Screen-1						
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	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-2	July 2021	MW-22-2	NA	NA	2.1 J	2.20 J

Sample Location	Sampling Event	Sample Number	Arsenic (µg/L)	Lead (µg/L)	Chromium, Total (µg/L)	Chromium, Hexavalent (µg/L)
MW-22-Screen-3						
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
MW-22-Screen-3	July 2021	MW-22-3	NA	NA	1.5 J	1.60 J
MW-22-Screen-4						
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	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	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	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-2	July 2021	MW-23-2	NA	NA	3.0 U	2.10 J
MW-23-Screen-3						
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-3	July 2021	MW-23-3	NA	NA	1.7 J	3.40 J
MW-23-Screen-3	July 2021	DUP-4-3Q21	NA	NA	1.6 J	3.50 J
MW-23-Screen-4						
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-4	July 2021	MW-23-4	NA	NA	2.8 J	4.00 J
MW-23-Screen-5						
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	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 (µg/L)	Lead (µg/L)	Chromium, Total (µg/L)	Chromium, Hexavalent (µg/L)
MW-24-Screen-1	July 2021	MW-24-1	NA	NA	1.4 J	NA
MW-24-Screen-2						
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-2	July 2021	MW-24-2	NA	NA	2.0 J	2.30 J
MW-24-Screen-3						
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-3	July 2021	MW-24-3	NA	NA	0.5 J	NA
MW-24-Screen-4						
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-4	July 2021	MW-24-4	NA	NA	3.0 U	0.20 UB
MW-24-Screen-4	July 2021	DUP-3-3Q21	NA	NA	3.0 U	0.20 UB
MW-24-Screen-5						
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	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-1	July 2021	MW-25-1	NA	NA	1.8 J	0.20 UB
MW-25-Screen-2						
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-2	July 2021	MW-25-2	NA	NA	1.8 J	2.00 J
MW-25-Screen-3						
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 (µg/L)	Lead (µg/L)	Chromium, Total (µg/L)	Chromium, Hexavalent (µg/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-3	July 2021	MW-25-3	NA	NA	2.5 J	3.30 J
MW-25-Screen-4						
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-4	July 2021	MW-25-4	NA	NA	1.3 J	0.88 J
MW-25-Screen-5						
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-25-Screen-5	July 2021	MW-25-5	NA	NA	3.0 U	NA
MW-26-Screen-1						
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	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
MW-26-Screen-2	July 2021	MW-26-2	NA	NA	1.2 J	0.20 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 concentration limit for hexavalent chromium in groundwater. The new maximum concentration limit for hexavalent chromium in groundwater is 100 µg/L. The current maximum concentration limit for hexavalent chromium in groundwater is 50 µg/L.					
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
LA CANADA IRRIGATION DIST. WELL 06					
	6/28/2021	3.5	0.5 U	0.5 U	0.7
LAS FLORES WATER CO. WELL 02					
	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
	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

Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
	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
	6/14/2021	4.0 U	NA	2.0	NA
	6/21/2021	4.0 U	NA	2.3	NA
	6/28/2021	4.4	NA	2.8	NA
	7/6/2021	4.1	NA	3.1	NA
	7/12/2021	3.8	NA	3.4	NA
	7/19/2021	4.2	NA	4.3	NA
	7/26/2021	3.4	NA	3.9	NA
	8/2/2021	3.4	NA	4.1	NA
	8/10/2021	2.8	NA	5.1	NA
	8/16/2021	3.7	NA	6.8	NA
	8/23/2021	2.8	NA	6.5	NA
	8/30/2021	2.0 U	NA	7.6	NA
LINCOLN AVENUE WATER CO. WELL 03					
	10/13/2020	4.0 U	NA	NA	NA
LINCOLN AVENUE WATER CO. WELL 05					
	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
	6/4/2021	4.0 U	3.9	0.5 U	0.5 U
	6/8/2021	4.0 U	NA	NA	NA

Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
	6/15/2021	4.7	NA	NA	NA
	6/22/2021	5.3	NA	NA	NA
	6/30/2021	5.6	NA	NA	NA
	7/6/2021	5.5	NA	NA	NA
	7/7/2021	NA	2.0	0.6	1.0
	7/13/2021	5.6	NA	NA	NA
	7/20/2021	6.0	NA	NA	NA
	7/27/2021	5.8	NA	NA	NA
	8/3/2021	5.9	1.7	0.5	1.0
	8/10/2021	6.8	NA	NA	NA
LINCOLN AVENUE WATER CO. WELL #6					
	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	
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	

Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
	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
	8/17/2021	5.8	0.8	0.7	1.1
	8/24/2021	5.2	NA	NA	NA
	8/31/2021	3.5	NA	NA	NA
PASADENA-CITY, WATER DEPT. ARROYO					
	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
	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

Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
	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
	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
	6/1/2021	8.0	1.0	0.5 U	1.0
	6/9/2021	8.5	1.0	0.5 U	0.5 U
	6/15/2021	9.0	1.2	0.5 U	0.9
	6/22/2021	9.7	1.1	0.5 U	1.0

Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
	6/29/2021	8.2	1.0	0.5 U	1.0
	7/6/2021	9.6	1.1	0.5 U	1.1
	7/13/2021	6.6	1.1	0.5 U	1.0
	7/20/2021	7.6	1.1	0.5 U	0.9
	7/27/2021	8.1	1.1	0.5 U	0.9
	8/3/2021	7.9	1.0	0.5 U	1.0
	8/10/2021	7.7	1.1	0.5 U	1.0
	8/17/2021	8.1	1.1	0.5 U	1.2
	8/24/2021	7.2	1.0	0.5 U	1.0
	8/31/2021	9.0	0.9	0.5 U	0.9
PASADENA-CITY, WATER DEPT. WELL 52					
	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
	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

Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
	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
	6/1/2021	4.0 U	0.5 U	0.8	1.9
	6/9/2021	4.0 U	0.5 U	0.6	1.8
	6/15/2021	4.0 U	0.5 U	0.9	2.1
	6/22/2021	4.0 U	0.5 U	0.8	2.0
	6/29/2021	4.0 U	0.5 U	0.8	2.1
	7/6/2021	3.0	0.5 U	0.9	2.1
	7/13/2021	3.3	0.5 U	0.7	1.8
	7/20/2021	2.8	0.5 U	0.8	1.7
	7/27/2021	3.1	0.5 U	0.7	1.9
	8/3/2021	3.3	0.5 U	0.8	1.9
	8/10/2021	3.1	0.5 U	0.8	2.0
	8/17/2021	3.2	0.5 U	0.9	2.1
	8/24/2021	3.0	0.5 U	0.7	1.9
	8/31/2021	3.8	0.5 U	0.7	1.8
RUBIO CANON LAND & WATER ASSOCIATION WELL 04					
	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

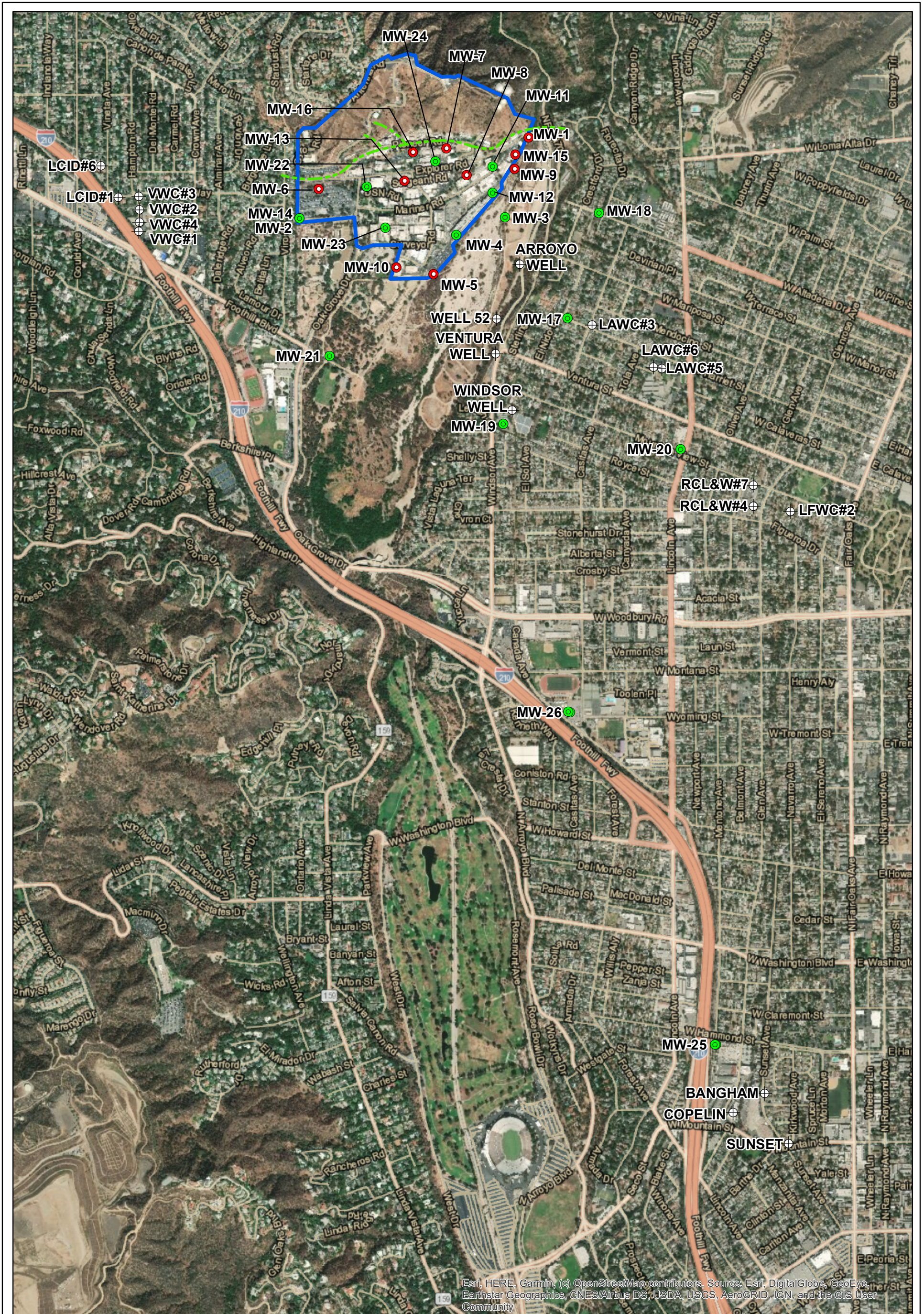
Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
	5/26/2020	4.0 U	NA	NA	NA
	6/1/2020	4.0 U	NA	NA	NA
	6/8/2020	4.0 U	NA	NA	NA
	6/15/2020	4.0 U	NA	NA	NA
	6/22/2020	4.0 U	NA	NA	NA
	6/29/2020	4.0 U	NA	NA	NA
	7/6/2020	4.0 U	NA	4.3	NA
	7/13/2020	4.0 U	NA	NA	NA
	7/20/2020	4.0 U	NA	NA	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
	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

Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
	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					
	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
	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

Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
	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
	7/7/2021	2.9	0.5 U	0.9	0.9
8/3/2021	3.4	0.5 U	0.6	0.8	
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
	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
	7/7/2021	3.1	0.5 U	0.6	0.7
	8/3/2021	3.7	0.5 U	0.5 U	0.7
VALLEY WATER CO. WELL 03					
	5/7/2020	4.0 U	0.5 U	1.2	0.6
	6/3/2020	4.0 U	0.5 U	1.0	0.5 U
	7/2/2020	4.0 U	0.5 U	0.8	0.5 U
	8/4/2020	4.0 U	0.5 U	0.9	0.5 U
	5/5/2021	4.0 U	0.5 U	1.2	0.7
	6/2/2021	NA	0.5 U	0.9	0.6
	7/7/2021	3.4	0.5 U	1.6	0.8
	8/3/2021	3.9	0.5 U	1.3	0.8
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
	7/7/2021	3.3	0.5 U	1.3	1.2
	8/3/2021	3.9	0.5 U	1.0	1.4

Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
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				

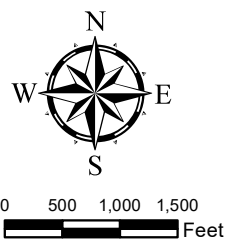
FIGURES



Esri, HERE, Garmin, (c) OpenStreetMap contributors, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

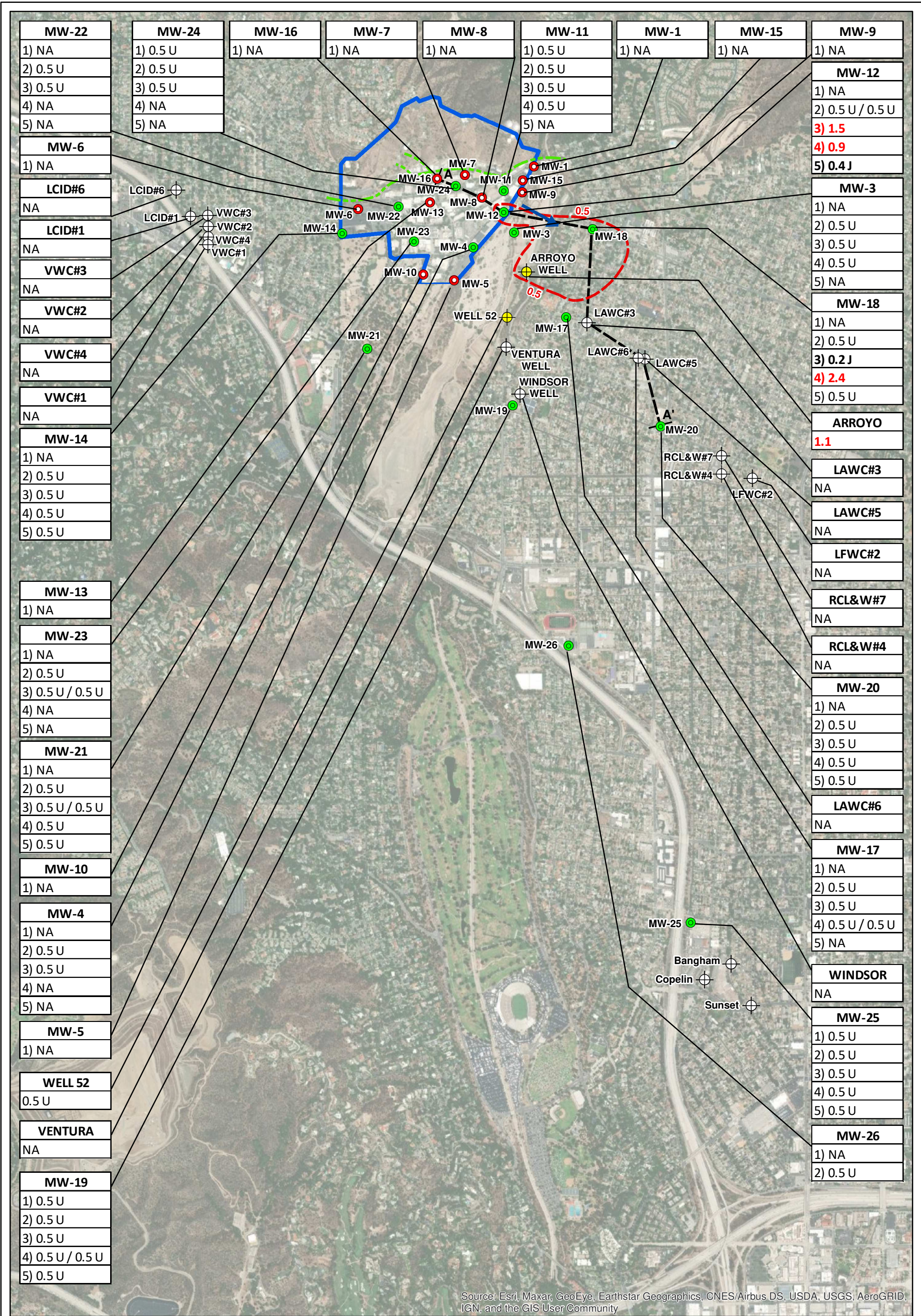
Legend

- Deep Multi-Port Monitoring Well Location
- Shallow Monitoring Well Location
- ⊕ Municipal Production Well
- Approximate Location of Thrust Fault
- JPL Facility Boundary



Locations of JPL Groundwater Monitoring Wells and Nearby Municipal Production Wells

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



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
-
-
-
-
-
-
-

MW-8
1) 0.5 U

Well ID

Screen number

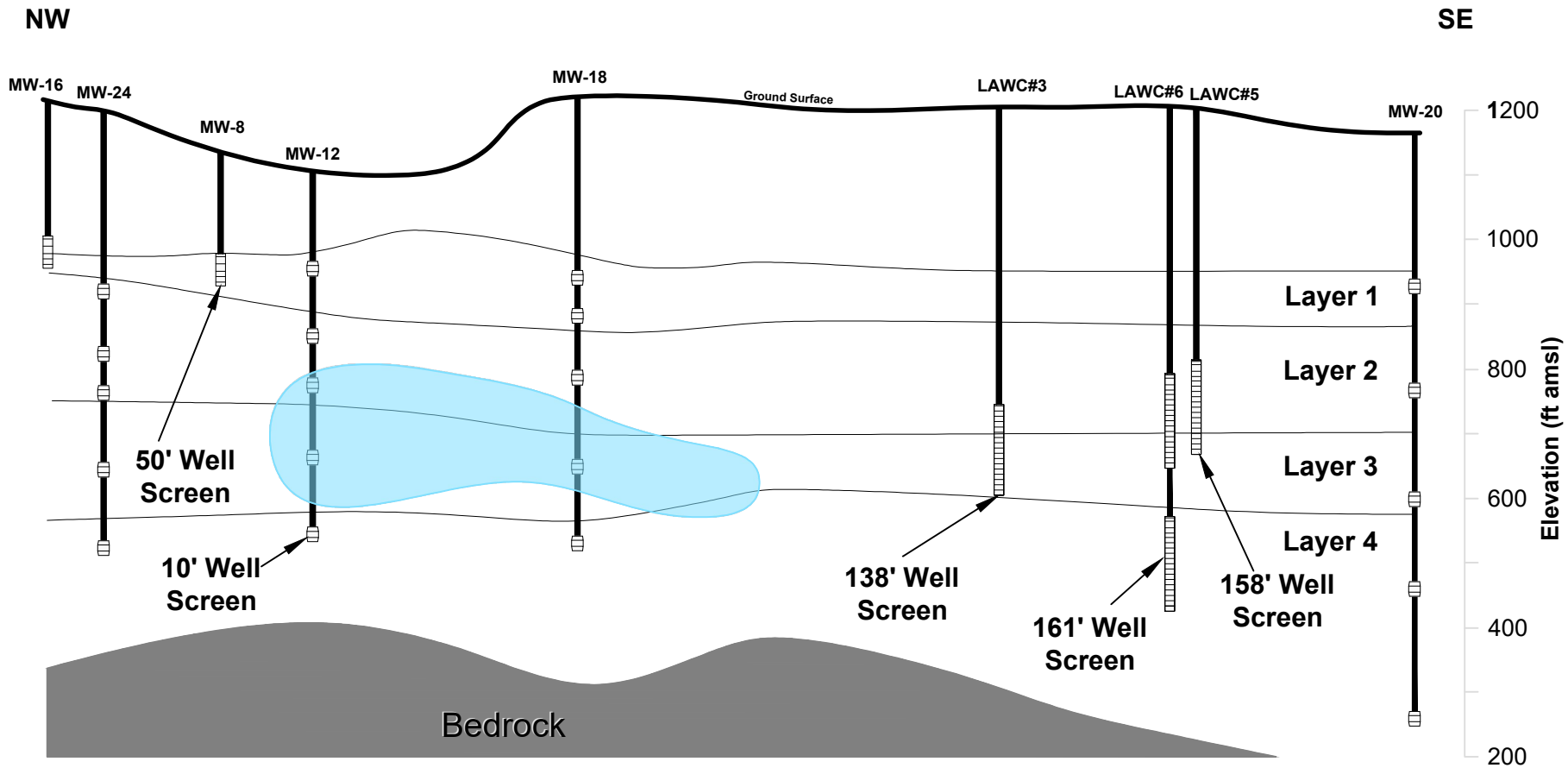
Concentration in micrograms per liter
 J = Detected estimated value
 U = Not detected estimated value
 NA = Not Analyzed

Bold font indicates detected concentration below the State maximum contaminant level (MCL) of 0.5 micrograms per liter; red font indicates concentration exceeds MCL.

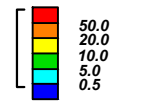


Carbon Tetrachloride in Groundwater July 2021

DESIGNED BY JHG	JPL - Pasadena, CA	Figure 2
DRAWN BY JHG		
CHECKED BY DC	Contract No: FA8903-16-D-0049	Jan 2022



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



Z exag: 3.0

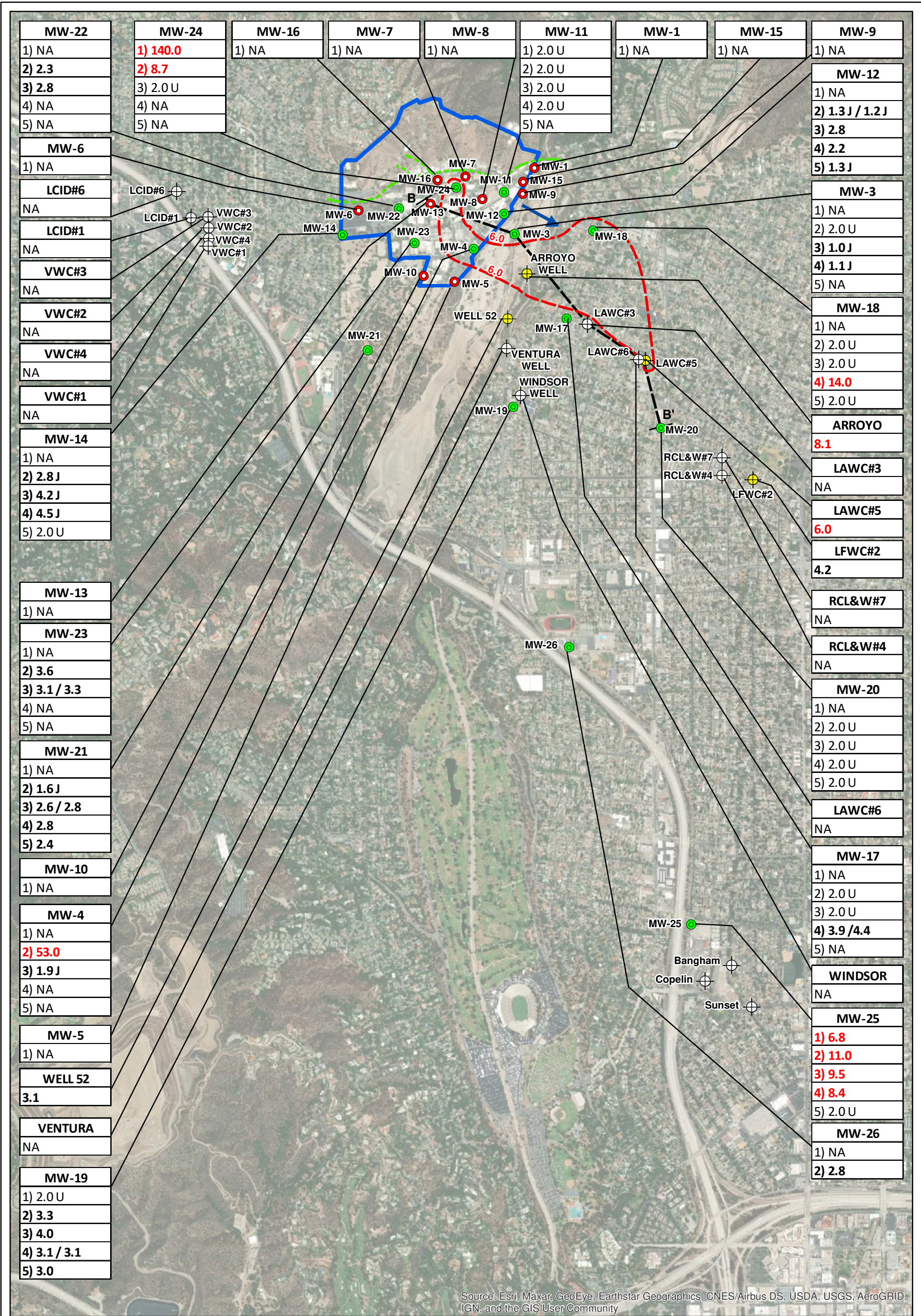


HORIZONTAL SCALE
 IN FEET
 (Approximate)

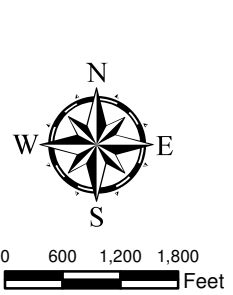


Horizontal and Vertical Extent
 of Carbon Tetrachloride in Groundwater
 July 2021

DESIGNED BY JHG	JPL - Pasadena, CA	Figure 3
DRAWN BY JHG		
CHECKED BY DC	Contract No: FA8903-21-F-1028	Jan 2022



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 July 2021)
- Cross-Section Transect B-B'
- Estimated Isoconcentration Line (6 µg/L)
- Approximate Location of Thrust Fault
- JPL Facility Boundary
- Groundwater Flow Direction

MW-8
1) 0.5 U

Well ID
Screen number
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 6 micrograms per liter; red font indicates concentration exceeds MCL.



Perchlorate in Groundwater July 2021

DESIGNED BY JHG	JPL - Pasadena, CA	Figure 4
DRAWN BY JHG		
CHECKED BY DC	Contract No: FA8903-16-D-0049	Jan 2022

MW-22
1) NA
2) 2.3
3) 2.8
4) NA
5) NA

MW-24
1) 140.0
2) 8.7
3) 2.0 U
4) NA
5) NA

MW-16
1) NA

MW-7
1) NA

MW-8
1) NA

MW-11
1) 2.0 U
2) 2.0 U
3) 2.0 U
4) 2.0 U
5) NA

MW-1
1) NA

MW-15
1) NA

MW-9
1) NA
MW-12
1) NA
2) 1.3 J / 1.2 J
3) 2.8
4) 2.2
5) 1.3 J

MW-6
1) NA

LCID#6
NA

LCID#1
NA

VWC#3
NA

VWC#2
NA

VWC#4
NA

VWC#1
NA

MW-14
1) NA
2) 2.8 J
3) 4.2 J
4) 4.5 J
5) 2.0 U

MW-13
1) NA

MW-23
1) NA
2) 3.6
3) 3.1 / 3.3
4) NA
5) NA

MW-21
1) NA
2) 1.6 J
3) 2.6 / 2.8
4) 2.8
5) 2.4

MW-10
1) NA

MW-4
1) NA
2) 53.0
3) 1.9 J
4) NA
5) NA

MW-5
1) NA

WELL 52
3.1

VENTURA
NA

MW-19
1) 2.0 U
2) 3.3
3) 4.0
4) 3.1 / 3.1
5) 3.0

MW-3
1) NA
2) 2.0 U
3) 1.0 J
4) 1.1 J
5) NA

MW-18
1) NA
2) 2.0 U
3) 2.0 U
4) 14.0
5) 2.0 U

ARROYO
8.1

LAWC#3
NA

LAWC#5
6.0

LFWC#2
4.2

RCL&W#7
NA

RCL&W#4
NA

MW-20
1) NA
2) 2.0 U
3) 2.0 U
4) 2.0 U
5) 2.0 U

LAWC#6
NA

MW-17
1) NA
2) 2.0 U
3) 2.0 U
4) 3.9 / 4.4
5) NA

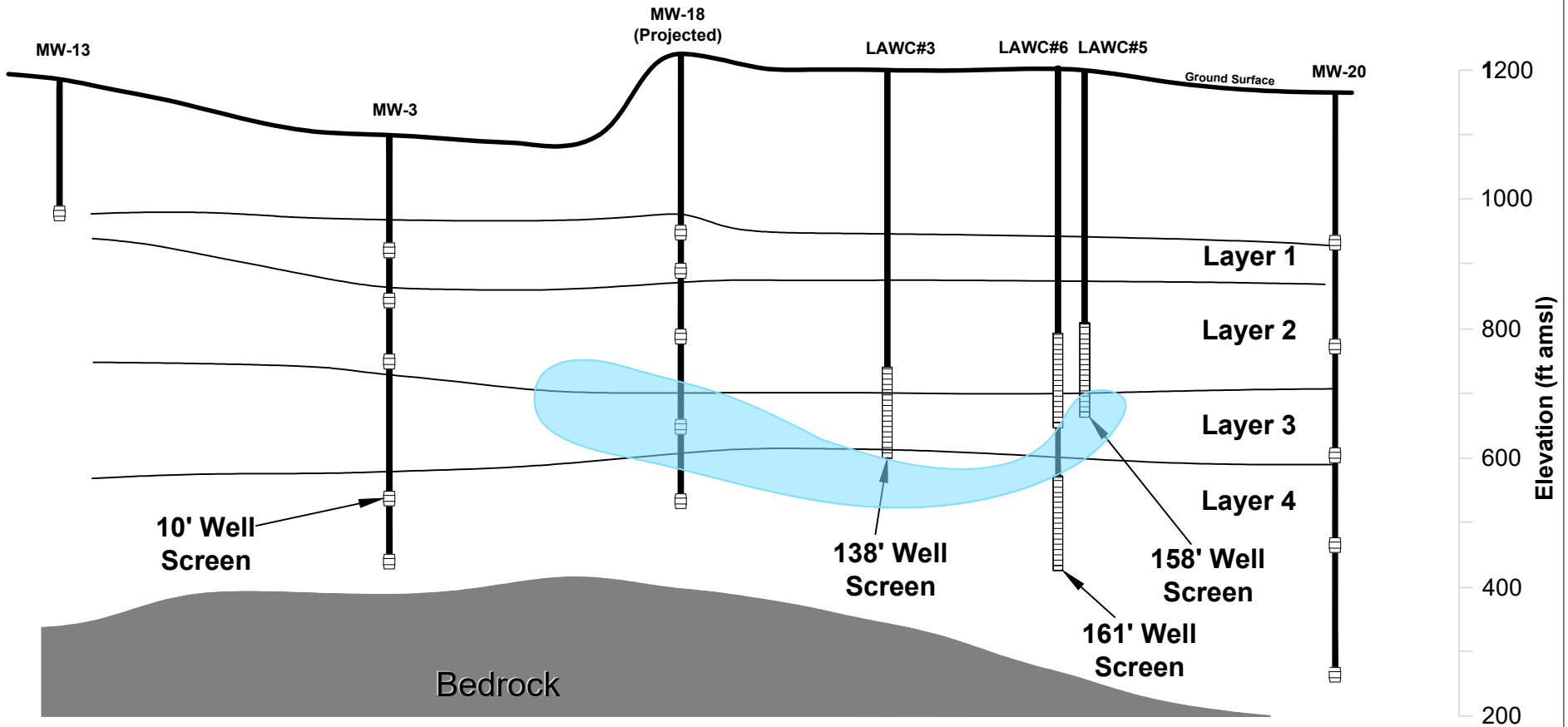
WINDSOR
NA

MW-25
1) 6.8
2) 11.0
3) 9.5
4) 8.4
5) 2.0 U

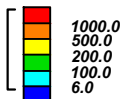
MW-26
1) NA
2) 2.8

NW

SE



Note: Concentrations are Reported in $\mu\text{g/L}$
 Plume depicted above delineates concentrations
 exceeding state MCL ($6.0 \mu\text{g/L}$)



Z exag: 3.0



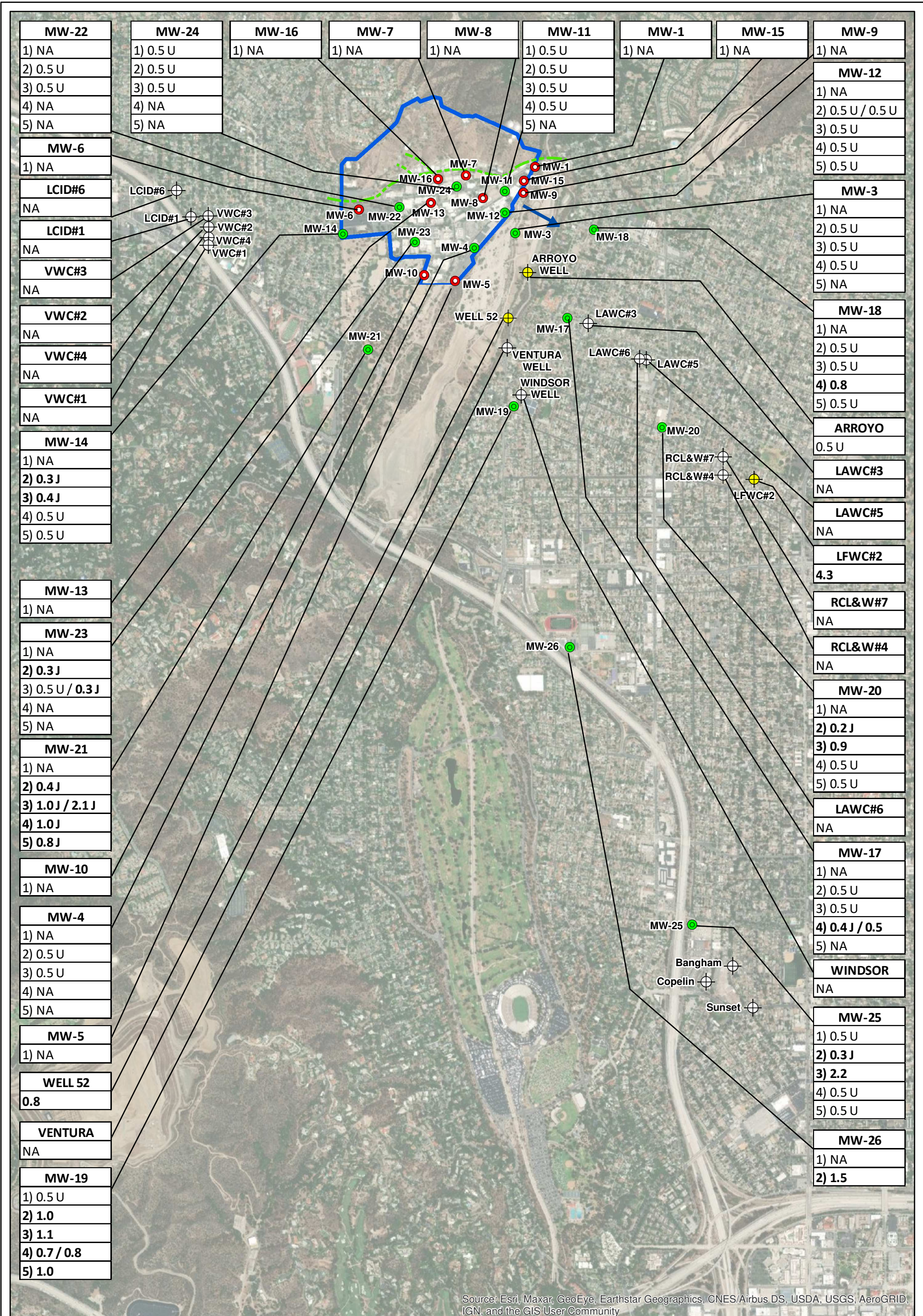
HORIZONTAL SCALE
 IN FEET
 (Approximate)



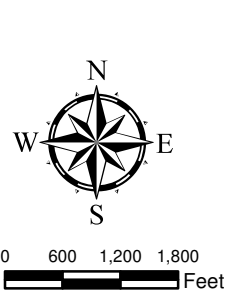
TIDEWATER INC
ENGINEERS / SCIENTISTS / PROGRAM MANAGERS

Horizontal and Vertical Extent
 of Perchlorate in Groundwater
 July 2021

DESIGNED BY JHG	JPL - Pasadena, CA	Figure 5
DRAWN BY JHG		
CHECKED BY DC	Contract No: FA8903-16-D-0049	Jan 2022



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 July 2021)
 - Estimated Isoconcentration Line (5 µg/L)
 - JPL Facility Boundary
 - Approximate Location of Thrust Fault
 - Groundwater Flow Direction

MW-8
1) 0.5 U

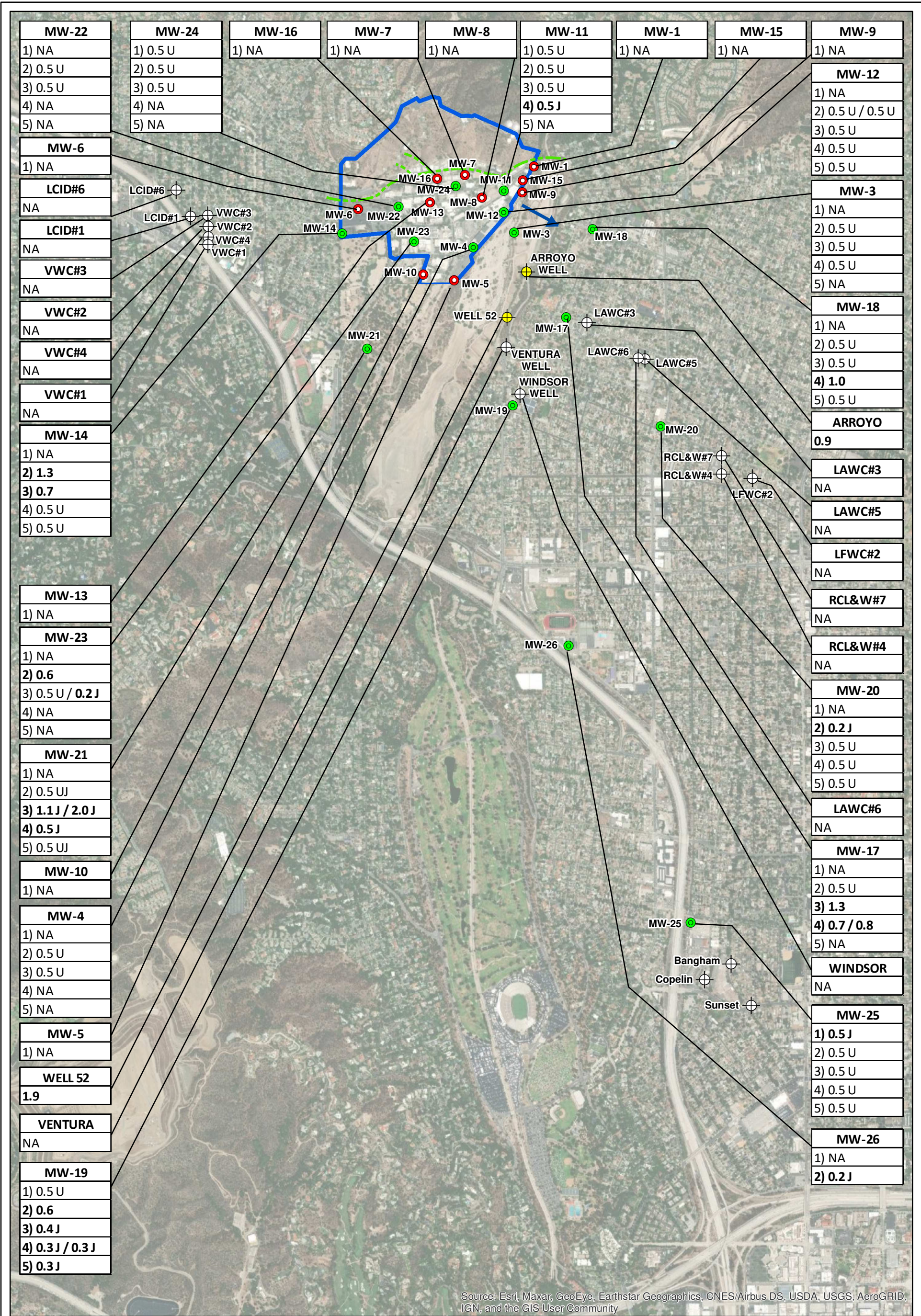
Well ID
 Screen number
 Concentration in micrograms per liter
 J = Detected estimated value
 U = Not detected estimated value
 NA = Not Analyzed

Bold font indicates detected concentration below the State maximum contaminant level (MCL) of 5 micrograms per liter; red font indicates concentration exceeds MCL.



Tetrachloroethene in Groundwater July 2021

DESIGNED BY JHG	JPL - Pasadena, CA	Figure 6
DRAWN BY JHG		
CHECKED BY DC	Contract No: FA8903-16-D-0049	Jan 2022



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 July 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 number
 Concentration in micrograms per liter
 J = Detected estimated value
 U = Not detected estimated value
 NA = Not Analyzed

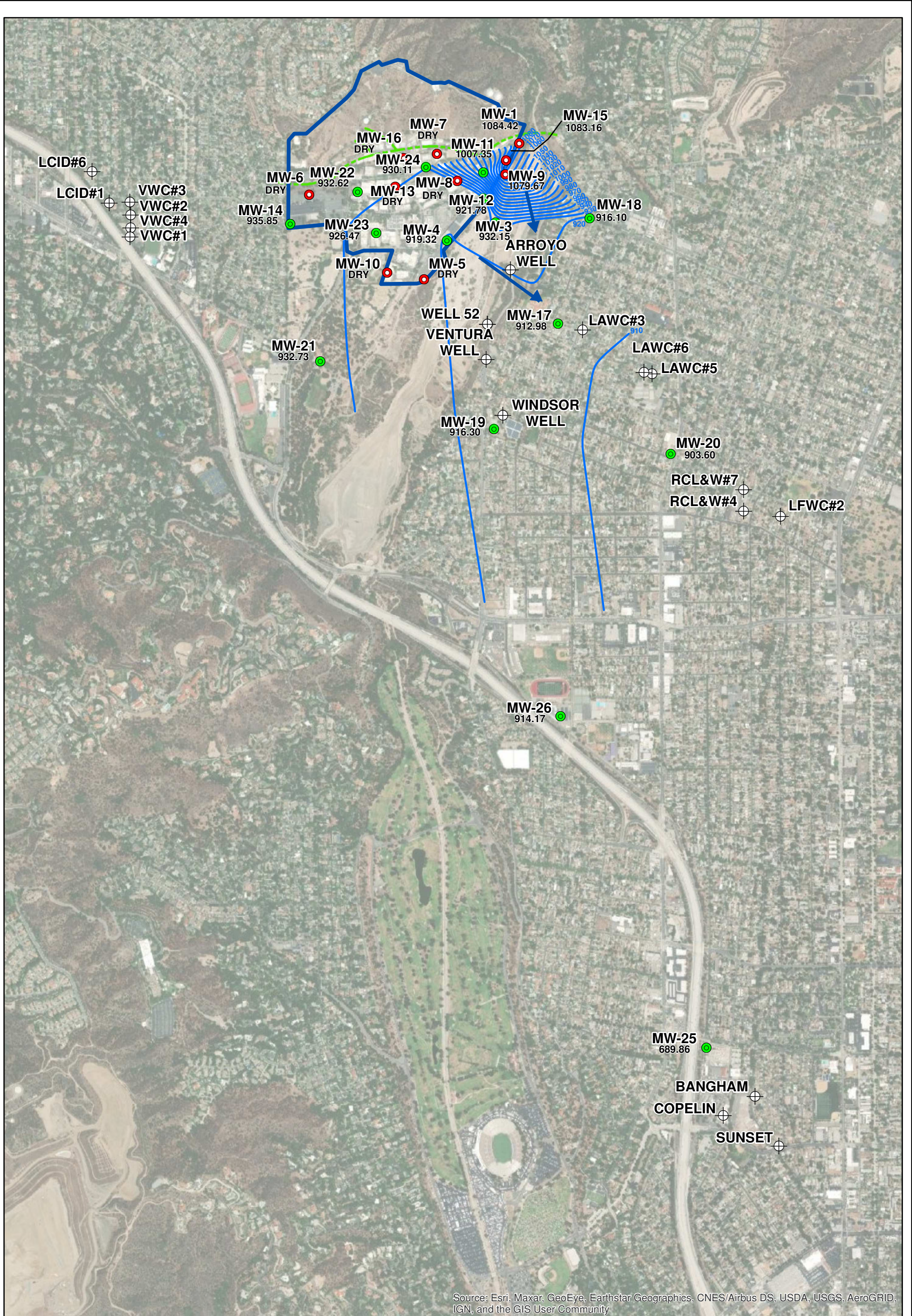
Bold font indicates detected concentration below the State maximum contaminant level (MCL) of 5 micrograms per liter; red font indicates concentration exceeds MCL.

0 600 1,200 1,800
 Feet



**Trichloroethene in Groundwater
 July 2021**

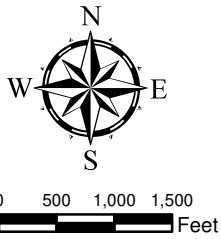
DESIGNED BY JHG	JPL - Pasadena, CA	Figure 7
DRAWN BY JHG		
CHECKED BY DC	Contract No: FA8903-16-D-0049	Jan 2022



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

Legend

- Shallow Monitoring Well Location
- Deep Multi-Port Monitoring Well Location
- ⊕ Municipal Production Well
- JPL Facility Boundary
- Approximate Location of Thrust Fault
- Groundwater Flow Direction
- Groundwater Elevation Contour (ft amsl)



**Groundwater Elevation Contours
July 2021**

DESIGNED BY JHG	JPL - Pasadena, CA	Figure 8
DRAWN BY JHG		
CHECKED BY DC	Contract No: FA8903-21-F-1028	Jan 2022