Technical Memorandum

2021 Groundwater Monitoring Summary
(Including Fourth Quarter 2021 Groundwater Sampling Event)
National Aeronautics and Space Administration
Jet Propulsion Laboratory, Pasadena, California

Final April 2022

This technical memorandum summarizes the results of the fourth 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 fourth quarter 2021 groundwater sampling event was conducted from October 22 through November 5, 2021.

INTRODUCTION

During the fourth quarter 2021 sampling event, groundwater samples were collected from 18 of 25 JPL monitoring wells (MWs), both on- and off-facility and analyzed for volatile organic compounds (VOCs), total chromium, hexavalent chromium [Cr(VI)], and perchlorate. In select wells, chloride, nitrate, sulfate, nitrite, and orthophosphate were also analyzed. Figure 1 shows the locations of the groundwater monitoring wells. In addition, samples were collected from the Monk Hill Treatment System (MHTS) upgradient surveillance monitoring wells and analyzed in accordance with the City of Pasadena's State Water Resources Control Board (SWRCB) Division of Drinking Water (DDW) drinking water permit.

Groundwater samples were shipped to BC Laboratories, Inc. (acquired by Pace Analytical in October 2021), in Bakersfield, California, for chemical analysis. BC Laboratories, Inc. is certified by the SWRCB. Sample collection procedures and sample analyses were conducted in accordance with the approved *Work Plan for Performing a Remedial Investigation/Feasibility Study*[1]. No reported data were rejected for non-compliance with method requirements during validation, and no reported data were deemed unusable.

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

Figures summarizing the results from the fourth 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 fourth 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 all four quarters of 2021, wells MW-7, MW-13, and MW-16 were dry and could not be sampled.

PERCHLORATE ANALYTICAL RESULTS

- During the fourth quarter 2021, perchlorate was detected above the state MCL (6.0 µg/L) in well MW-24 (Screens 1 [21.2 µg/L] and 2 [11.5 µg/L]).
- Perchlorate was detected below the state MCL (6.0 µg/L) in MW-24 (Screen 5 [1.5J µg/L]). 'J' qualifier indicates an estimated concentration. No other perchlorate detections occurred in MW-24 (Screens 3 and 4) during the fourth quarter 2021 with a reporting limit of 2.0 µg/L.
- Perchlorate concentration increased from the third quarter 2021 to the fourth quarter 2021 in MW-24 (Screen 2 [8.7 µg/L to 11.5 µg/L]). MW-24 (Screen 5), which was not sampled during

the third quarter 2021, went from non-detect in the second quarter 2021 to 1.5J µg/L in the fourth quarter of 2021.

- Perchlorate concentrations decreased from the third quarter 2021 to the fourth quarter 2021 in MW-24 (Screen 1 [140.0 µg/L to 21.2 µg/L).
- During the fourth quarter 2021, the perchlorate concentration remained non-detect in MW-24 (Screens 3 and 4).
- During 2021, perchlorate concentrations in MW-24 ranged from 21.2 µg/L to 260.0 µg/L in Screen 1, 6.2 µg/L to 11.5 µg/L in Screen 2, non-detect only in Screens 3 and 4, and non-detect to 1.5J µg/L in Screen 5.

VOC Analytical Results

- During the fourth quarter 2021, carbon tetrachloride was detected at the state MCL (0.5 µg/L) in MW-24 (Screen 1 [0.5J µg/L]). No other carbon tetrachloride detections occurred in well MW-24 (Screens 2 through 5) with a reporting limit of 0.5 µg/L.
- In 2021, carbon tetrachloride was detected at the state MCL (0.5 µg/L) in MW-24 (Screen 1 [0.5J µg/L]). No other carbon tetrachloride detections occurred in well MW-24 (Screens 1 through 5) with a reporting limit of 0.5 µg/L.
- During the fourth quarter 2021, TCE was not detected in well MW-24 (Screens 1 through 5) with a reporting limit of 0.5 µg/L.
- In 2021, TCE was not detected in well MW-24 (Screens 1 through 5) with a reporting limit of 0.5 µg/L.
- During the fourth quarter 2021, PCE was detected below the state and federal MCL (5.0 µg/L) in MW-24 (Screen 1 [0.3J µg/L] and Screen 2 [0.2J µg/L]).
- In 2021, PCE was detected below the state and federal MCL (5.0 µg/L) in MW-24 (Screen 1 [fourth quarter (0.3J µg/L)] and Screen 2 [first, second, and fourth quarters (0.3J µg/L, 0.2J µg/L, and 0.2J µg/L, respectively)]).

Other Notable Analytical Results

- During the fourth quarter 2021, Cr(VI)[2] was detected below the state MCL (50.0 µg/L) in well MW-24 (Screen 2 [2.10J µg/L] and Screen 5 [2.50J µg/L]). All other Cr (VI) results were non-detect in well MW-24 (Screens 1, 3, and 4).
- In 2021, Cr(VI) was detected below the state MCL (50.0 µg/L) in well MW-24 (Screen 2) during all four quarters at concentrations of 2.30J µg/L (first quarter 2021), 2.00J µg/L (second quarter 2021), 2.30J µg/L (third quarter 2021), and 2.10J µg/L (fourth quarter 2021), respectively, and Screen 5 [second and fourth quarters (2.60J µg/L and 2.50J µg/L, respectively)]).
- During the fourth quarter 2021, total chromium was detected below both the state MCL (50.0 µg/L) and federal MCL (100.0 µg/L) in well MW-24 (Screens 1, 2, and 5 [2.6J µg/L, 1.1J µg/L, and 2.5J µg/L, respectively]). All other total chromium results were non-detect in MW-24 (Screens 3 and 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.

- In 2021, total chromium was detected below both the state MCL (50.0 µg/L) and federal MCL (100.0 µg/L) in well MW-24 (Screen 1 [second through fourth quarters (0.7J µg/L, 1.4J µg/L, and 2.6J µg/L, respectively)], Screen 2 [all quarters (1.8J µg/L, 2.3J µg/L, 2.0J µg/L, and 1.1J µg/L, respectively)], Screen 3 [third quarter (0.5J µg/L)], and Screen 5 [second and fourth quarters (2.4J µg/L and 2.5J µg/L, respectively)]). Total chromium results in the on-facility source area wells will continue to be closely evaluated during subsequent sampling events.

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 all quarters of 2021, MW-6, MW-8, and MW-23 (Screen 1) lacked sufficient water volume to purge or collect a sample. In addition, during the third and fourth quarters of 2021, MW-22 (Screen 1) lacked sufficient water volume to collect a sample.

PERCHLORATE ANALYTICAL RESULTS

- During the fourth quarter 2021, perchlorate was detected above the state MCL (6.0 µg/L) in well MW-23 (Screen 2 [6.1 µg/L]).
- During the fourth quarter 2021, perchlorate was detected below the state MCL (6.0 µg/L) in MW-22 (Screens 2 through 4 [2.8 µg/L, 3.6 µg/L, and 1.4J µg/L, respectively]), and MW-23 (Screens 3 and 4 [4.8 µg/L and 3.2 µg/L, respectively]).
- During the fourth quarter 2021, perchlorate was not detected in MW-11 (Screens 1 through 5), MW-22 (Screen 5), and MW-23 (Screen 5) with a reporting limit of 2.0 µg/L.
- Perchlorate concentrations increased from their respective last sampling event to the fourth quarter 2021 in MW-22 (Screens 2 through 4 [2.3 µg/L to 2.8 µg/L, 2.8 µg/L to 3.6 µg/L, and 1.1J µg/L to 1.4J µg/L, respectively]), and MW-23 (Screens 2 through 4 [3.6 µg/L to 6.1 µg/L, 3.3 µg/L to 4.8 µg/L, and 2.4J µg/L to 3.2 µg/L, respectively]).
- Perchlorate concentrations remained non-detect in MW-11 (Screens 1 through 5), MW-22 (Screen 5) and MW-23 (Screen 5).
- During 2021, perchlorate concentrations in MW-11 were non-detect (Screens 1 through 5). MW-22 ranged from 3.4J µg/L to 3.9J µg/L in Screen 1, 2.3 µg/L to 3.2J µg/L in Screen 2, 2.8 µg/L to 3.6 µg/L in Screen 3, 1.1J µg/L to 1.4J µg/L in Screen 4, and non-detect in Screen 5. MW-23 ranged from 3.6 µg/L to 6.1 µg/L in Screen 2, 3.1 µg/L to 4.8 µg/l in Screen 3, 2.4J µg/L to 3.2 µg/L in Screen 4, and non-detect in Screen 5.
- Perchlorate was detected in MW-22 (Screen 1) at concentrations above the MCL in the third quarter 1998 (6.4 µg/L) and first quarter 1999 (6.4 µg/L), all four quarters of 2011 (22.9 µg/L, 40.1 µg/L, 98.7 µg/L, and 85.2 µg/L, respectively) and second quarter 2012 (6.5 µg/L). From third quarter 2012 through first quarter 2019 perchlorate concentrations ranged from non-detect to 5.6 µg/L. From second quarter 2019 to fourth quarter 2020, perchlorate has exceeded the MCL in six of seven quarters ranging from 64.0 µg/L to 320.0 µg/L. Perchlorate remained below the MCL in MW-22 (Screen 1) in the first and second quarters of 2021 at concentrations ranging from 3.4J µg/L to 3.9J µg/L. During the third and fourth quarters of 2021, MW-22

(Screen 1) was dry and could not be sampled. MW-22 is located within the capture zone of the Monk Hill Treatment System (MHTS). Concentrations of perchlorate in MW-22 (Screen 1) will continue to be monitored closely.

VOC ANALYTICAL RESULTS

- During the fourth quarter 2021, carbon tetrachloride was not detected in any of the other on-facility wells at a reporting limit of 0.5 µg/L.
- Carbon tetrachloride was not detected during 2021 in any of the other on-facility wells at a reporting limit of 0.5 µg/L.
- During the fourth quarter 2021, TCE was detected below the state and federal MCL (5.0 µg/L) in MW-11 (Screen 4 [0.7 µg/L]) and MW-23 (Screen 2 [0.7 µg/L]). No other TCE detections occurred in the other on-facility wells.
- In 2021, TCE was detected below the state and federal MCL (5.0 µg/L) in MW-11 (Screen 3 [second quarter (0.4J µg/L)] and Screen 4 [all four quarters (0.3J µg/L, 0.4J µg/L, 0.5J µg/L, and 0.7 µg/L, respectively)]), MW-22 (Screen 1 [first and second quarters (1.2 µg/L, and 0.4J µg/L, respectively)] and Screen 3 [second quarter (0.2J µg/L)]), and MW-23 (Screen 2 [all four quarters (0.7 µg/L, 0.8 µg/L, 0.6 µg/L, and 0.7 µg/L, respectively)] and Screen 3 [first and third quarters (0.2J µg/L, each)]). No other TCE detections occurred in the other on-facility wells.
- During the fourth quarter 2021, PCE was detected below the state and federal MCL (5.0 µg/L) in MW-23 (Screen 2 [0.3J µg/L]). No other PCE detections occurred in the other on-facility wells.
- In 2021, PCE was detected below the state and federal MCL (5.0 µg/L) in MW-22 (Screen 1 [first quarter (0.3J µg/L)]) and MW-23 (Screen 2 [all four quarters (0.2J µg/L, 0.3J µg/L, 0.3J µg/L, and 0.3J µg/L, respectively)] and Screen 3 [second and third quarters (0.2J µg/L and 0.3J µg/L, respectively)]). No other PCE detections occurred in the other on-facility wells.

OTHER NOTABLE ANALYTICAL RESULTS

- During the fourth quarter 2021, Cr(VI) was detected below the state MCL (50.0 µg/L) in MW-22 (Screens 2 through 4 [2.00J µg/L, 2.20J µg/L, and 2.50J µg/L, respectively]), and MW-23 (Screens 2 through 4 [1.90J µg/L, 3.30J µg/L, and 4.00J µg/L, respectively]).
- Cr(VI) was not detected in MW-11 (Screens 1 through 5), MW-22 (Screen 5) and MW-23 (Screen 5) during the fourth quarter 2021.
- In 2021, detections of Cr(VI) in the other on-facility wells were relatively consistent (low detections or non-detect) and all remained below the state MCL of 50.0 µg/L.
- During the fourth quarter 2021, total chromium was detected below the state MCL (50.0 µg/L) and federal MCL (100.0 µg/L) in MW-11 (Screen 5 [3.4 µg/L]), MW-22 (Screens 2 through 4 [1.5J µg/L, 1.4J µg/L and 2.2J µg/L, respectively]), and MW-23 (Screens 2 through 4 [1.7J µg/L, 2.9J µg/L and 3.8 µg/L, respectively]). No other total chromium detections occurred in the other on-facility during the fourth quarter 2021.
- In 2021, detections of total chromium in the other on-facility wells were relatively consistent (low detections or non-detect) and all remained below the state MCL (50.0 µg/L) and federal MCL (100.0 µg/L).

- Total chromium results will continue to be closely evaluated during subsequent sampling events.

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.

It should be noted that during all four quarters of 2021, wells MW-4 (Screen 1), MW-5, MW-10, MW-12 (Screen 1), and MW-14 (Screen 1) lacked sufficient water volume to purge or collect samples. In addition, during the fourth quarter 2021, MW-3 (Screen 1) lacked sufficient water volume to collect a sample.

PERCHLORATE ANALYTICAL RESULTS

- During the fourth quarter 2021, perchlorate was detected above the state MCL (6.0 µg/L) in well MW-4 (Screen 2 [59.1 µg/L]).
- During the fourth quarter 2021, perchlorate was detected below the state MCL (6.0 µg/L) in MW-3 (Screens 2 through 5 [1.4J µg/L, 3.7 µg/L, 3.7 µg/L, and 3.1 µg/L, respectively]), MW-4 (Screen 3 [3.0 µg/L]), MW-12 (Screens 2 through 5 [1.8J µg/L, 1.2J µg/L, 2.3 µg/L, and 2.0 µg/L, respectively]), and MW-14 (Screens 2 through 4 [4.3 µg/L, 5.1 µg/L, and 4.6 µg/L, respectively]).
- During the fourth quarter 2021, perchlorate was not detected in MW-1, MW-4 (Screens 4 and 5), MW-9, MW-14 (Screen 5), and MW-15 with a reporting limit of 2.0 µg/L.
- Perchlorate concentrations increased from their respective last sampling event to the fourth quarter 2021 in MW-3 (Screen 2 [non-detect to 1.4J µg/L], Screen 3 [1.0J µg/L to 3.7 µg/L], Screen 4 [1.1J µg/L to 3.7 µg/L], and Screen 5 [1.7J µg/L to 3.1 µg/L]), MW-4 (Screen 2 [53.0 µg/L to 59.1 µg/L] and Screen 3 [1.9J µg/L to 3.0 µg/L]), MW-12 (Screen 2 [1.3J µg/L to 1.8J µg/L], Screen 4 [2.2 µg/L to 2.3 µg/L], and Screen 5 [1.3J µg/L to 2.0 µg/L]), and MW-14 (Screen 2 [2.8J µg/L to 4.3 µg/L], Screen 3 [4.2J µg/L to 5.1 µg/L], and Screen 4 [4.5J µg/L to 4.6 µg/L]).
- Perchlorate concentrations decreased from their respective last sampling event to the fourth quarter 2021 in MW-4 (Screen 4 [2.5J µg/L to non-detect]), and MW-12 (Screen 3 [2.8 µg/L to 1.2J µg/L]).
- Perchlorate concentrations remained non-detect from their respective last sampling event to fourth quarter 2021 sampling event in MW-1, MW-4 (Screen 5), MW-9, MW-14 (Screen 5), MW-15.
- The perchlorate concentration of 59.1 µg/L in MW-4 (Screen 2) during the fourth quarter 2021 continues to be down from the high detection of 250.0 µg/L (third quarter 2013). Since the first quarter 2011, concentrations have exceeded the state MCL (6.0 µg/L) (ranging from 6.5 µg/L to 250.0 µg/L) with thirteen exceptions: first, third, and fourth quarters of 2015, all four quarters of 2016 and 2017, and first and third quarters of 2018. Perchlorate concentrations in MW-4 (Screen 2) increased from fourth quarter 2018 (9.9 µg/L) to first quarter 2020 (51.0 µg/L) and have remained relatively stable between fourth quarters of 2020 and 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.

- During the four quarters of 2021, perchlorate concentrations in MW-3 (Screens 2 through 5) ranged from non-detect to 3.7 µg/L, MW-12 (Screens 2 through 5) ranged from 1.0J µg/L to 3.1J µg/L, and MW-14 (Screen 2 through 4) ranged from 2.8J µg/L to 5.2 µg/L. All perchlorate detections in these wells remained below the state MCL (6.0 µg/L) for all quarters sampled during 2021.

VOC ANALYTICAL RESULTS

- During the fourth quarter 2021, carbon tetrachloride was detected below the state MCL (0.5 µg/L) in MW-12 (Screens 3 through 5 [0.4J µg/L, 0.3J µg/L, and 0.2J µg/L, respectively]). No other carbon tetrachloride detections occurred in the perimeter off-facility wells during the fourth quarter 2021.
- In 2021, carbon tetrachloride was detected at or above the state MCL (0.5 µg/L) in MW-12 (Screen 3 [first, second, and third quarters (0.7 µg/L, 1.0 µg/L, and 1.5 µg/L, respectively)] and Screen 4 [first through third quarter (0.5J µg/L, 1.5 µg/L, and 0.9 µg/L)]), and below the state MCL (0.5 µg/L) in MW-12 (Screen 3 [fourth quarter (0.4J µg/L)], Screen 4 [fourth quarter (0.3J µg/L)], and Screen 5 [first, third, and fourth quarters (0.2J µg/L, 0.4J µg/L, and 0.2J µg/L, respectively)]).
- During the fourth quarter 2021, TCE was detected below the state and federal MCL (5.0 µg/L) in MW-14 (Screens 2 and 3 [1.0 µg/L and 0.8 µg/L, respectively]). No other TCE detections occurred in the perimeter off-facility wells during the fourth quarter 2021.
- In 2021, TCE was not detected above the state and federal MCL (5.0 µg/L) in the perimeter off-facility wells. Detections of TCE in the perimeter off-facility wells remained relatively consistent ranging from non-detect to 3.0 µg/L.
- During the fourth quarter 2021, PCE was detected below the state and federal MCL (5.0 µg/L) in MW-14 (Screens 2 and 3 [0.3J µg/L and 0.6 µg/L, respectively]). No other PCE detections occurred in the perimeter off-facility wells during the fourth quarter 2021.
- In 2021, PCE was not detected above the state and federal MCL (5.0 µg/L) in the perimeter off-facility wells. Detections of PCE in the perimeter off-facility wells remained relatively consistent ranging from non-detect to 1.0J µg/L.

OTHER NOTABLE ANALYTICAL RESULTS

- During the fourth quarter 2021, Cr(VI) was detected below the state MCL (50.0 µg/L) in MW-3 (Screens 2 through 4 [0.79J µg/L, 0.66J µg/L, and 0.59J µg/L, respectively]), MW-12 (Screen 5 [1.10J µg/L]), and MW-14 (Screens 3 and 4 [0.58J µg/L and 2.10J µg/L, respectively]). No other Cr(VI) detections occurred in the perimeter off-facility wells during the fourth quarter 2021.
- In 2021, detections of Cr(VI) in the perimeter off-facility wells were relatively consistent, ranging from non-detect to 2.10J µg/L and remained below the state MCL (50.0 µg/L).
- During the fourth quarter 2021, total chromium was detected above the state MCL (50.0 µg/L) and federal MCL (100.0 µg/L) in MW-9 (140.0J µg/L), and above the state MCL (50.0 µg/L) in MW-3 (Screen 5 [53.0 µg/L]).
- During the fourth quarter 2021, total chromium was detected below the state MCL (50.0 µg/L) in MW-3 (Screens 2 through 4 [0.7J µg/L, 3.8 µg/L, and 31.0 µg/L, respectively]), MW-14

(Screens 2, 4, and 5 [0.5J µg/L, 2.4J µg/L, and 0.7J µg/L, respectively]), and MW-15 (14.0J µg/L).

- In 2021, total chromium remained relatively consistent in the perimeter off-facility wells at concentrations below the state MCL (50.0 µg/L) and federal MCL (100.0 µg/L) ranging from non-detect to 44.0 µg/L with two exceptions during the fourth quarter 2021: MW-3 (Screen 5 [53.0 µg/L]) and MW-9 (140.0 µg/L).
- The total chromium detection of 53.0 µg/L in MW-3 (Screen 5) during the fourth quarter 2021 sampling event is only the second detection at concentrations above the state MCL (50.0 µg/L) since the third quarter 1996. The other detection above the state MCL was the second quarter 2020 (140.0 µg/L).
- Since third quarter 1996, total chromium has been detected in MW-9 at a concentration above the state MCL (50.0 µg/L) on one occasion [fourth quarter 2019 (80.0J µg/L)] and at or above the federal MCL (100.0 µg/L) on five occasions [fourth quarter 2015 (110.0 µg/L), fourth quarter 2016 (100.0 µg/L), fourth quarter 2018 (130.0 µg/L), fourth quarter 2020 (240.0 µg/L), and fourth quarter 2021 (140J µg/L)].
- Arsenic, which is only sampled and analyzed during second quarter monitoring events, was detected above the state and federal MCL (10.0 µg/L) in MW-3 (Screen 5) at a concentration of 23.0 µg/L.
- During the second quarter 2021, arsenic was detected below the state and federal MCL (10.0 µg/L) in MW-3 (Screens 3 and 4 [0.95J µg/L and 7.5 µg/L, respectively]), MW-4 (Screens 2 and 3 [0.78 µg/L and 0.90 µg/L, respectively]), MW-9 (0.75J µg/L), MW-12 (Screens 2 through 5 [1.1J µg/L, 1.2J µg/L, 1.3J µg/L, and 2.0 µg/L, respectively]), MW-14 (Screen 5 [1.2J µg/L]), and MW-15 (0.70J µg/L).
- Arsenic was not detected during the second quarter 2021 in MW-1, MW-3 (Screens 1 and 2), MW-4 (Screens 4 and 5), and MW-14 (Screens 3 and 4).

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 all quarters 2021, the uppermost screens (i.e., Screen 1) in MW-17, MW-18, MW-20, MW-21, and MW-26 were dry, and no samples were collected from these screens.

PERCHLORATE ANALYTICAL RESULTS

- During the fourth 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 [15.8 µg/L]) and MW-25 (Screens 1 through 4 [7.6 µg/L, 12.0 µg/L, 10.2 µg/L, and 9.0 µg/L, respectively]).
- During the fourth quarter 2021 sampling event, concentrations of perchlorate below the state MCL (6.0 µg/L) were reported in samples collected from wells MW-17 (Screens 2 through 5 [2.1 µg/L, 1.5J µg/L, 4.3 µg/L, and 4.7 µg/L, respectively]), MW-18 (Screen 3 [1.1J µg/L]), MW-19 (Screens 2 through 5 [3.6 µg/L, 4.0 µg/L, 3.7 µg/L, and 3.5 µg/L, respectively]), MW-

21 (Screens 2 through 5 [2.6 µg/L, 3.8 µg/L, 2.9 µg/L, and 2.9 µg/L, respectively]), and MW-26 (Screen 2 [4.0 µg/L]).

- During the fourth quarter 2021, concentrations of perchlorate were not detected in MW-18 (Screens 2 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 fourth quarter 2021 in MW-17 (Screens 2, 3, and 5 [non-detect to 2.1 µg/L, non-detect to 1.5J µg/L, and 4.5 µg/L to 4.7 µg/L, respectively]), MW-18 (Screens 3 and 4 [non-detect to 1.1J µg/L and 14.0 µg/L to 15.8 µg/L, respectively]), MW-19 (Screens 2, 4, and 5 [3.3 µg/L to 3.6 µg/L, 3.1 µg/L to 3.7 µg/L, and 3.0 µg/L to 3.5 µg/L, respectively]), MW-21 (Screens 2 through 5 [1.6J µg/L to 2.6 µg/L, 2.8 µg/L to 3.8 µg/L, 2.8 µg/L to 2.9 µg/L, and 2.4 µg/L to 2.9 µg/L, respectively]), MW-25 (Screens 1 through 4 [6.8 µg/L to 7.6 µg/L, 11.0 µg/L to 12.0 µg/L, 9.5 µg/L to 10.2 µg/L, and 8.4 µg/L to 9.0 µg/L, respectively]), and MW-26 (Screen 2 [2.8 µg/L to 4.0 µg/L]).
- Perchlorate concentrations decreased from their respective last sampling event to the fourth quarter 2021 in MW-17 (Screen 4 [4.4 µg/L to 4.3 µg/L]).
- Perchlorate concentrations remained unchanged from the third to fourth quarter 2021 in MW-19 (Screen 3 [4.0 µg/L]).
- Perchlorate concentrations remained non-detect from their respective last sampling event to the fourth quarter 2021 in MW-18 (Screens 2 and 5), MW-19 (Screen 1), MW-20 (Screens 2 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.
- The perchlorate concentration of 4.3 µg/L in MW-17 (Screen 4) is the twenty-eighth detection below the state MCL (6.0 µg/L) since the first quarter 2015. From the third quarter 2002 to the fourth quarter 2012, the perchlorate concentrations in MW-17 (Screen 4) had been either non-detect or below the state MCL (6.0 µg/L) with only one detection that exceeded the state MCL (second quarter 2003 [6.5 µg/L]). From the first quarter 2013 through the fourth quarter 2014, the perchlorate concentrations in MW-17 (Screen 4) exceeded the state MCL in seven of the eight quarters with exceedances ranging from 6.8 µg/L to 18.0 µg/L. From the first quarter 2015 to the fourth quarter 2021 sampling events, perchlorate in MW-17 (Screen 4) remained below the state MCL (6.0 µg/L) with concentrations ranging from non-detect (first quarter 2017) to 5.4 µg/L (fourth quarter 2020). The changes in perchlorate concentrations at MW-17 (Screen 4) are believed to be associated with changes in groundwater flow associated with operation of NASA's mid-plume treatment system, which began operation in 2011.
- Perchlorate concentrations in MW-18 (Screen 3) have been below the state MCL (6.0 µg/L) since third quarter 2017. During the third quarter 2021 the perchlorate result was non-detect. From the fourth quarter 2005 to second quarter 2017 perchlorate concentrations in MW-18 (Screen 3) were above the state MCL (6.0 µg/L) ranging from 6.2 µg/L (second quarter 2017) to 144.0 µg/L (third quarter 2011) with one exception (non-detect [second quarter 2007]).
- During the second quarter 2021, perchlorate was detected in MW-20 (Screen 2) at a concentration of 7.4 µg/L which exceeds the state MCL (6.0 µg/L). This is the fourth detection that exceeded the state MCL (6.0 µg/L) since it was first sampled and analyzed for perchlorate beginning in the second quarter 1997. The three previous occasions were second quarter 2012

(6.4 µg/L), first quarter 2015 (7.0 µg/L), and fourth quarter 2020 (9.8 µg/L). During the period from second quarter 1997 through third quarter 2007 (forty sampling events) perchlorate was not detected. Perchlorate was first detected in MW-20 (Screen 2) during the fourth quarter 2007 with a concentration of 3.7 µg/L. From fourth quarter 2007 through third quarter 2020 (excluding second quarter 2012 [6.4 µg/L] and first quarter 2015 [7.0 µg/L]), perchlorate was detected during forty-three of fifty-two sampling events with concentrations ranging from 0.9J µg/L to 5.2 µg/L. During the ten sampling events preceding the fourth quarter 2020, perchlorate concentrations ranged from 0.9 µg/L to 2.2 µg/L. From fourth quarter 2020 to fourth quarter 2021 perchlorate was not detected during the first, third, and fourth quarters of 2021, but detected at concentrations of 9.8 µg/L (fourth quarter 2020) and 7.4 µg/L (second quarter 2021) which exceeded the state MCL (6.0 µg/L).

- During the period from the third quarter 2008 through first quarter 2012, perchlorate was detected in MW-20 (Screen 4) at concentrations exceeding the state MCL (6.0 µg/L) during seven of fifteen sampling events. Concentrations exceeding the state MCL ranged from 15.1 µg/L to 123.0J µg/L. Perchlorate was not detected during the remaining eight sampling events between third quarter 2008 and first quarter 2012. Perchlorate has not been detected in MW-20 (Screen 4) since the first quarter 2012 (39 sampling events).
- During the period from third quarter 2008 through first quarter 2012, perchlorate was detected in MW-20 (Screen 5) at concentrations exceeding the state MCL (6.0 µg/L) during seven of sixteen sampling events. During this time, perchlorate concentrations exceeding the state MCL ranged from 11.5 µg/L to 56.5 µg/L. Perchlorate was not detected during the remaining nine sampling events during this period with one exception (4.2 µg/L [second quarter 2011]). From the second quarter 2012 to fourth quarter 2021 (39 sampling events) perchlorate concentrations have remained non-detect in MW-20 (Screen 5).
- The perchlorate concentrations in MW-25 (Screens 1 through 4) have remained relatively stable above the state MCL (6.0 µg/L) ranging from 6.0 µg/L (Screen 1 [fourth quarter 2012 and first quarter 2018]) to 18.0 µg/L (Screen 2 fourth quarter 2007) with four exceptions non-detect (Screen 3 [second quarter 2006]), non-detect (Screen 4 [second and third quarters 2007]), and 5.6 µg/L (Screen 4 [fourth quarter 2012]).
- In 2021, perchlorate concentrations in the off-facility wells ranged from non-detect to 16.0 µg/L.

VOC ANALYTICAL RESULTS

- During the fourth quarter 2021, carbon tetrachloride was detected above the state MCL (0.5 µg/L) in MW-18 (Screen 4 [3.1J µg/L]) and below the state MCL (0.5 µg/L) in MW-17 (Screen 4 [0.2J µg/L]). No other carbon tetrachloride detections occurred in the off-facility wells during the fourth quarter 2021.
- In 2021, carbon tetrachloride was detected above the state MCL (0.5 µg/L) in MW-18 (Screen 4 [all quarters [2.2 µg/L, 1.3 µg/L, 2.4 µg/L, and 3.1J µg/L, respectively]). In 2021, carbon tetrachloride was detected below the state MCL (0.5 µg/L) in MW-17 (Screen 4 [fourth quarter (0.2J µg/L)]) and MW-18 (Screen 3 [second and third quarters (0.2J µg/L, each)]). No other carbon tetrachloride detections occurred in the off-facility wells during 2021.
- The carbon tetrachloride non-detect result in MW-18 (Screen 3), during the second and third quarters 2021, are the fifth and sixth non-detect result since fourth quarter 2004. 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 0.4J 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 fourth quarter 2021, TCE was detected below the state and federal MCL (5.0 µg/L) in MW-17 (Screens 3 through 5 [0.9 µg/L, 1.4 µg/L and 0.7 µg/L, respectively]), MW-18 (Screen 4 [1.6J µg/L]), MW-19 (Screens 2 through 5 [1.5J µg/L, 1.1 µg/L, 1.1 µg/L, and 0.7 µg/L, respectively]), MW-20 (Screens 2 and 3 [0.3J µg/L, and 0.2J µg/L, respectively]), MW-21 (Screens 3 and 4 [0.7 µg/L and 0.3J µg/L, respectively]), MW-25 (Screen 1[0.3J µg/L]), and MW-26 (Screen 2 [0.3J µg/L]). No other TCE detections occurred in the off-facility wells during the fourth quarter 2021.
- In 2021, TCE concentrations in MW-17 (Screens 3 through 5) remained below the state and federal MCL (5.0 µg/L) ranging from 0.6 µg/L to 1.4 µg/L; TCE concentrations in MW-18 (Screen 4) ranged from 0.7 µg/L to 1.6J µg/L; TCE concentrations in MW-19 (Screens 2 through 5) ranged from 0.2J µg/L to 1.5J µg/L; TCE concentrations in MW-20 (Screens 2 and 3) ranged from non-detect to 0.3J µg/L; TCE concentrations in MW-21 (Screens 3 and 4) ranged from 0.2J µg/L to 2.0J µg/L; TCE concentrations in MW-25 (Screen 1) ranged from 0.3J µg/L to 1.0J µg/L; and TCE concentrations in MW-26 (Screen 2) ranged from 0.2J µg/L to 0.4J µg/L. TCE was not detected in MW-17 (Screen 2), MW-18 (Screens 2, 3, and 5), MW-19 (Screen 1), MW-20 (Screens 4 and 5), MW-21 (Screens 2 and 5), and MW-25 (Screens 2 through 5) during the four quarters of 2021.
- During the fourth quarter 2021, PCE was detected in MW-17 (Screens 4 and 5 [1.1 µg/L and 0.4J µg/L, respectively]), MW-18 (Screen 4 [1.1 µg/L]), MW-19 (Screens 2 through 5 [2.4J µg/L, 3.7 µg/L, 3.1 µg/L, and 2.2 µg/L, respectively]), MW-20 (Screen 3 [1.8J µg/L]), MW-21 (Screens 2 through 5 [0.3J µg/L, 0.6 µg/L, 0.6 µg/L, and 0.7 µg/L, respectively]), MW-25 (Screens 2 and 3 [0.3J µg/L, and 1.8 µg/L, respectively]), and MW-26 (Screen 2 [1.8 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 during the fourth quarter 2021.
- In 2021, PCE concentrations in MW-17 (Screens 4 and 5) ranged from 0.3J µg/L to 1.1 µg/L; PCE concentrations in MW-18 (Screen 4) ranged from 0.6 µg/L to 1.1 µg/L; PCE concentrations in MW-19 (Screens 2 through 5) ranged from 0.5 µg/L to 3.7 µg/L; PCE concentrations in MW-20 (Screens 2 and 3) ranged from non-detect to 1.8J µg/L; PCE concentrations in MW-21 (Screens 2 through 5) ranged from 0.2J µg/L to 2.1J µg/L; PCE concentrations in MW-25 (Screens 2 and 3) ranged from non-detect to 3.2 µg/L; and PCE concentrations in MW-26 (Screen 2) ranged from 1.5 µg/L to 4.1J µg/L. PCE was not detected in MW-17 (Screens 2 and 3), MW-18 (Screens 2, 3 and 5), MW-19 (Screen 1), MW-20 (Screens 4 and 5) and MW-25 (Screens 1, 4, and 5) during the four quarters of 2021.

OTHER NOTABLE ANALYTICAL RESULTS

- During the fourth quarter 2021, Cr(VI) was detected below the state MCL (50.0 µg/L) in MW-17 (Screens 4 and 5 [2.20J µg/L and 1.50J µg/L, respectively]), MW-18 (Screens 3 and 4 [1.60J µg/L and 2.30J µg/L, respectively]), MW-19 (Screens 4 and 5 [2.60J µg/L and 2.30J µg/L, respectively]), MW-21 (Screens 4 and 5 [1.10J µg/L and 1.20J µg/L, respectively]), MW-25 (Screens 2 through 4 [1.90J µg/L, 3.10J µg/L, and 0.89J µg/L, respectively]), and MW-26 (Screen 2 [0.84J µg/L]). Cr(VI) was not detected in the remaining off-facility wells.
- In 2021, detections of Cr(VI) in the off-facility wells ranged from non-detect to 3.40J µg/L.
- During the fourth quarter 2021, total chromium was detected below the state MCL (50.0 µg/L) in MW-17 (Screens 4 and 5 [2.2J µg/L, each]), MW-18 (Screens 3 and 4 [1.3J µg/L and 2.6J µg/L, respectively]), MW-19 (Screens 2 through 5 [1.2J µg/L, 1.7J µg/L, 2.2J µg/L, and 1.8J µg/L, respectively]), MW-25 (Screens 1 through 4 [1.8J µg/L, 2.0J µg/L, 3.5 µg/L, and 1.9J µg/L, respectively]), and MW-26 (Screen 2 [1.0J µg/L]). Total chromium was not detected in the remaining off-facility wells.
- In 2021, total chromium remained below the state MCL (50.0 µg/L) in the off-facility wells, ranging from non-detect to 3.5 µg/L.

ALL WELL CATEGORIES (OTHER RESULTS)

- Comparing the third quarter 2021 to the fourth quarter 2021, groundwater elevations decreased by an average of 3.31 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 fourth quarter 2021. This is the fourth consecutive quarter in which MW-8 and MW-10 were dry. This is the fifth consecutive quarter in which wells MW-5 and MW-7 were dry. This is the sixth consecutive quarter in which wells MW-6, MW-13, and MW-16 were dry.
- The uppermost sampling port (i.e., Screen 1) in multi-port monitoring wells MW-3, MW-4, MW-12, MW-14, MW-17, MW-18, MW-20, MW-21, MW-22, MW-23, and MW-26 were dry and/or lacked sufficient water and could not be sampled during the fourth quarter 2021. This is the first quarter Screen 1 in well MW-3 was dry. This is the second consecutive quarter Screen 1 in well MW-22 was dry. This is the fourth consecutive quarter Screen 1 in well MW-4, MW-23, and MW-26 were dry. This is the fifth consecutive quarter in which Screen 1 in MW-17 was dry. This is the sixth consecutive quarter in which Screen 1 in wells MW-12 and MW-18 were dry. This is the ninth consecutive quarter in which Screen 1 in wells 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 fourth quarter 2021, groundwater elevations have fluctuated on a seasonal basis. As of fourth quarter 2021, groundwater levels remain approximately 90 feet below the second quarter 2011 elevations. Groundwater elevations will continue to be closely monitored.

- Groundwater level measurements collected during the fourth 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

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	and 1,4-Dioxane, NDMA, NDPA, 1,2,3-TCP	
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-1	Oct/Nov 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	2.0 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	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-2	Oct/Nov 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	**1.4 J**		
MW-3-Screen-2	Oct/Nov 2021	DUP-1-4Q21	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	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-3	Oct/Nov 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	**3.7**		
MW-3-Screen-4													
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-4	Oct/Nov 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	**3.7**		
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-3-Screen-5	Oct/Nov 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	**3.1**		

Sample Location	Sampling Event	Sample Number	Carbon tetrachloride	TCE	PCE	1,1-DCA	1,2-DCA	1,1-DCE	Freon 113	Chloroform	Perchlorate	and 1,4-Dioxane, NDMA, NDPA, 1,2,3-TCP	
MW-4-Screen-1													
MW-4-Screen-1	Oct/Nov 2020	MW-4-1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-4-Screen-2													
MW-4-Screen-2	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-2	Oct/Nov 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	**0.7**	**59.1**		
MW-4-Screen-2	Oct/Nov 2021	DUP-3-4Q21	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.7**	**57.2**		
MW-4-Screen-3													
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-3	Oct/Nov 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	**3.0**		
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-4	Oct/Nov 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	0.5 U	2.0 U		
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-4-Screen-5	Oct/Nov 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	2.0 U		
MW-8													
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-9	Oct/Nov 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	2.0 U		
MW-10													
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	Oct/Nov 2020	MW-11-1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-11-Screen-1	Mar/Apr 2021	MW-11-1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-11-Screen-1	May/June 2021	MW-11-1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-11-Screen-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		

Sample Location	Sampling Event	Sample Number	Carbon tetrachloride	TCE	PCE	1,1-DCA	1,2-DCA	1,1-DCE	Freon 113	Chloroform	Perchlorate	and 1,4-Dioxane, NDMA, NDPA, 1,2,3-TCP	
MW-11-Screen-1	Oct/Nov 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	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-2	Oct/Nov 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-2	Oct/Nov 2021	DUP-7-4Q21	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	Oct/Nov 2020	MW-11-3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.9 J**	**Ethylbenzene** **Methyl-tert-butyl ether (MTBE** **Styrene** **Toluene**	**0.3 J** **0.3 J** **0.6** **0.2 J**
MW-11-Screen-3	Mar/Apr 2021	MW-11-3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	**Styrene**	**0.2 J**
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** **Styrene**	**0.6** **0.1 J**
MW-11-Screen-3	Oct/Nov 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	**0.1 J**	2.0 U		
MW-11-Screen-4													
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-4	Oct/Nov 2021	MW-11-4	0.5 U	**0.7**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.0 U		
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-11-Screen-5	Oct/Nov 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	2.0 U		
MW-12-Screen-2													
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**
MW-12-Screen-2	Oct/Nov 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	**1.8 J**		
MW-12-Screen-2	Oct/Nov 2021	DUP-4-4Q21	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	and 1,4-Dioxane, NDMA, NDPA, 1,2,3-TCP	
MW-12-Screen-3													
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-3	Oct/Nov 2021	MW-12-3	**0.4 J**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**1.2**	**1.2 J**		
MW-12-Screen-4													
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-4	Oct/Nov 2021	MW-12-4	**0.3 J**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.3 J**	**2.3**		
MW-12-Screen-5													
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-12-Screen-5	Oct/Nov 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	**0.3 J**	**2.0**		
MW-14-Screen-2													
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-2	Oct/Nov 2021	MW-14-2	0.5 U	**1.0**	**0.3 J**	0.5 U	0.5 U	0.5 U	0.5 U	**0.4 J**	**4.3**		
MW-14-Screen-3													
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-3	Oct/Nov 2021	MW-14-3	0.5 U	**0.8**	**0.6**	**0.3 J**	0.5 U	0.5 U	0.5 U	**0.5 J**	**5.1**		
MW-14-Screen-4													
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-4	Oct/Nov 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	0.5 U	**4.6**		

Sample Location	Sampling Event	Sample Number	Carbon tetrachloride	TCE	PCE	1,1-DCA	1,2-DCA	1,1-DCE	Freon 113	Chloroform	Perchlorate	and 1,4-Dioxane, NDMA, NDPA, 1,2,3-TCP	
MW-14-Screen-5													
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-14-Screen-5	Oct/Nov 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-15	Oct/Nov 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	2.0 U		
MW-17-Screen-2													
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-2	Oct/Nov 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	**2.1**		
MW-17-Screen-3													
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-3	Oct/Nov 2021	MW-17-3	0.5 U	**0.9**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**1.5 J**	**Styrene**	**0.1 J**
MW-17-Screen-3	Oct/Nov 2021	DUP-2-4Q21	0.5 U	**0.9**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**1.2 J**	**Styrene**	**0.1 J**
MW-17-Screen-4													
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-4	Oct/Nov 2021	MW-17-4	**0.2 J**	**1.4**	**1.1**	**0.2 J**	0.5 U	0.5 U	0.5 U	**1.0**	**4.3**		
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-17-Screen-5	Oct/Nov 2021	MW-17-5	0.5 U	**0.7**	**0.4 J**	0.5 U	0.5 U	0.5 U	0.5 U	**0.6**	**4.7**	**Methyl-tert-butyl ether (MTBE**	**0.2 J**
MW-18-Screen-2													
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		

Sample Location	Sampling Event	Sample Number	Carbon tetrachloride	TCE	PCE	1,1-DCA	1,2-DCA	1,1-DCE	Freon 113	Chloroform	Perchlorate	and 1,4-Dioxane, NDMA, NDPA, 1,2,3-TCP	
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-2	Oct/Nov 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	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-3	Oct/Nov 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	**1.1 J**		
MW-18-Screen-4													
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-4	Oct/Nov 2021	MW-18-4	**3.1 J**	**1.6 J**	**1.1**	0.5 U	0.5 U	0.5 U	0.5 U	**1.2**	**15.0**		
MW-18-Screen-4	Oct/Nov 2021	DUP-6-4Q21	**1.8 J**	**1.0 J**	**0.8**	0.5 U	0.5 U	0.5 U	0.5 U	**0.9**	**15.8**		
MW-18-Screen-5													
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-18-Screen-5	Oct/Nov 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	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-1	Oct/Nov 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	**2.6**	2.0 U		
MW-19-Screen-2													
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-2	Oct/Nov 2021	MW-19-2	0.5 U	**0.5 J**	**0.7 J**	0.5 U	0.5 U	0.5 U	0.5 U	**0.9 J**	**3.6**		
MW-19-Screen-2	Oct/Nov 2021	DUP-8-4Q21	0.5 U	**1.5 J**	**2.4 J**	**0.2 J**	0.5 U	0.5 U	0.5 U	**2.1 J**	**3.5**	**cis-1,2-Dichloroethene**	**0.3 J**

Sample Location	Sampling Event	Sample Number	Carbon tetrachloride	TCE	PCE	1,1-DCA	1,2-DCA	1,1-DCE	Freon 113	Chloroform	Perchlorate	and 1,4-Dioxane, NDMA, NDPA, 1,2,3-TCP	
MW-19-Screen-3													
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-3	Oct/Nov 2021	MW-19-3	0.5 U	**1.1**	**3.7**	**0.3 J**	0.5 U	0.5 U	0.5 U	**3.6**	**4.0**	**cis-1,2-Dichloroethene**	**0.4 J**
MW-19-Screen-4													
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-4	Oct/Nov 2021	MW-19-4	0.5 U	**1.1**	**3.1**	**0.3 J**	0.5 U	0.5 U	0.5 U	**4.6**	**3.7**		
MW-19-Screen-5													
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-19-Screen-5	Oct/Nov 2021	MW-19-5	0.5 U	**0.7**	**2.2**	**0.2 J**	0.5 U	0.5 U	0.5 U	**4.2**	**3.5**		
MW-20-Screen-2													
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** **Benzene** **Ethylbenzene** **Methyl-tert-butyl ether (MTBE** **o-Xylene** **Styrene** **Vinyl chloride**	**9.4** **0.8** **0.2 J** **1.7** **0.1 J** **2.4** **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-2	Oct/Nov 2021	MW-20-2	0.5 U	**0.3 J**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.4 J**	2.0 U		
MW-20-Screen-3													
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** **Styrene**	**0.7** **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** **Styrene**	**0.2 J** **0.4 J**

Sample Location	Sampling Event	Sample Number	Carbon tetrachloride	TCE	PCE	1,1-DCA	1,2-DCA	1,1-DCE	Freon 113	Chloroform	Perchlorate	and 1,4-Dioxane, NDMA, NDPA, 1,2,3-TCP	
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** **Styrene**	**0.8** **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-3	Oct/Nov 2021	MW-20-3	0.5 U	0.5 U	**0.7 J**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.0 U	**Styrene**	**0.3 J**
MW-20-Screen-3	Oct/Nov 2021	DUP-5-4Q21	0.5 U	**0.2 J**	**1.8 J**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.0 U	**Ethylbenzene** **Styrene**	**0.2 J** **0.3 J**
MW-20-Screen-4													
MW-20-Screen-4	Oct/Nov 2020	MW-20-4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-20-Screen-4	Mar/Apr 2021	MW-20-4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-20-Screen-4	May/June 2021	MW-20-4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U		
MW-20-Screen-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-4	Oct/Nov 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		
MW-20-Screen-5													
MW-20-Screen-5	Oct/Nov 2020	MW-20-5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	**Carbon disulfide** **Styrene**	**0.7** **0.1 J**
MW-20-Screen-5	Mar/Apr 2021	MW-20-5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	**Carbon disulfide** **Styrene**	**0.8** **0.1 J**
MW-20-Screen-5	May/June 2021	MW-20-5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.0 U	**Carbon disulfide** **Styrene**	**0.5** **0.1 J**
MW-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** **Styrene**	**0.5 J** **0.2 J**
MW-20-Screen-5	Oct/Nov 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	**Styrene**	**0.1 J**
MW-21-Screen-2													
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-2	Oct/Nov 2021	MW-21-2	0.5 U	0.5 U	**0.3 J**	0.5 U	0.5 U	0.5 U	0.5 U	**0.2 J**	**2.6**		
MW-21-Screen-3													
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**		

Sample Location	Sampling Event	Sample Number	Carbon tetrachloride	TCE	PCE	1,1-DCA	1,2-DCA	1,1-DCE	Freon 113	Chloroform	Perchlorate	and 1,4-Dioxane, NDMA, NDPA, 1,2,3-TCP	
MW-21-Screen-3	Oct/Nov 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**	**3.8**		
MW-21-Screen-4													
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-4	Oct/Nov 2021	MW-21-4	0.5 U	**0.3 J**	**0.6**	0.5 U	0.5 U	0.5 U	0.5 U	**3.9**	**2.9**		
MW-21-Screen-5													
MW-21-Screen-5	Oct/Nov 2020	MW-21-5	0.5 U	0.5 U	**0.6**	0.5 U	0.5 U	0.5 U	0.5 U	**4.1**	**2.4 J**		
MW-21-Screen-5	Mar/Apr 2021	MW-21-5	0.5 U	0.5 U	**0.7**	0.5 U	0.5 U	0.5 U	0.5 U	**3.8**	**2.4 J**		
MW-21-Screen-5	May/June 2021	MW-21-5	0.5 U	0.5 U	**0.8**	0.5 U	0.5 U	0.5 U	0.5 U	**4.2**	**2.6 J**		
MW-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-21-Screen-5	Oct/Nov 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**	**2.9**		
MW-22-Screen-1													
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	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-2	Oct/Nov 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	**2.8**		
MW-22-Screen-3													
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-3	Oct/Nov 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	**3.6**		
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-4	Oct/Nov 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	**1.4 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-22-Screen-5	Oct/Nov 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	2.0 U		

Sample Location	Sampling Event	Sample Number	Carbon tetrachloride	TCE	PCE	1,1-DCA	1,2-DCA	1,1-DCE	Freon 113	Chloroform	Perchlorate	and 1,4-Dioxane, NDMA, NDPA, 1,2,3-TCP	
MW-23-Screen-1													
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	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**		
MW-23-Screen-2	Oct/Nov 2021	MW-23-2	0.5 U	**0.7**	**0.3 J**	**0.2 J**	0.5 U	0.5 U	0.5 U	**0.4 J**	**6.1**		
MW-23-Screen-3													
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-3	Oct/Nov 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	**4.8**		
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-4	Oct/Nov 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	**3.2**		
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-23-Screen-5	Oct/Nov 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	2.0 U	**Styrene**	**0.2 J**
MW-24-Screen-1													
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-1	Oct/Nov 2021	MW-24-1	**0.5 J**	0.5 U	**0.3 J**	0.5 U	0.5 U	0.5 U	0.5 U	**5.8**	**21.2**		
MW-24-Screen-2													
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-2	Oct/Nov 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	**1.0**	**11.5**		

Sample Location	Sampling Event	Sample Number	Carbon tetrachloride	TCE	PCE	1,1-DCA	1,2-DCA	1,1-DCE	Freon 113	Chloroform	Perchlorate	and 1,4-Dioxane, NDMA, NDPA, 1,2,3-TCP	
MW-24-Screen-3													
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-3	Oct/Nov 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	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**
MW-24-Screen-4	Oct/Nov 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	2.0 U	**Ethylbenzene** **Styrene**	**0.2 J** **0.2 J**
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-24-Screen-5	Oct/Nov 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	**1.5 J**		
MW-25-Screen-1													
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-1	Oct/Nov 2021	MW-25-1	0.5 U	**0.3 J**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.4 J**	**7.6**	**Methyl-tert-butyl ether (MTBE**	**0.4 J**
MW-25-Screen-2													
MW-25-Screen-2	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-2	Oct/Nov 2021	MW-25-2	0.5 U	0.5 U	**0.3 J**	0.5 U	0.5 U	0.5 U	0.5 U	**0.1 J**	**12.0**		
MW-25-Screen-3													
MW-25-Screen-3	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-3	Oct/Nov 2021	MW-25-3	0.5 U	0.5 U	**1.8**	0.5 U	0.5 U	0.5 U	0.5 U	**0.4 J**	**10.2**		
MW-25-Screen-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**		

Sample Location	Sampling Event	Sample Number	Carbon tetrachloride	TCE	PCE	1,1-DCA	1,2-DCA	1,1-DCE	Freon 113	Chloroform	Perchlorate	and 1,4-Dioxane, NDMA, NDPA, 1,2,3-TCP	
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-4	Oct/Nov 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	**9.0**		
MW-25-Screen-5													
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-25-Screen-5	Oct/Nov 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	Oct/Nov 2020	MW-26-1	0.5 U	0.5 U	**0.2 J**	0.5 U	0.5 U	0.5 U	0.5 U	**0.2 J**	**2.2 J**		
MW-26-Screen-2													
MW-26-Screen-2	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**		
MW-26-Screen-2	Oct/Nov 2021	MW-26-2	0.5 U	**0.3 J**	**1.8**	0.5 U	0.5 U	0.5 U	0.5 U	**1.8**	**4.0**		
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-1	Oct/Nov 2021	MW-1	NA	NA	3.00 U	0.10 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	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-2	Oct/Nov 2021	MW-3-2	NA	NA	**0.5 J**	**0.79 J**
MW-3-Screen-2	Oct/Nov 2021	DUP-1-4Q21	NA	NA	**0.7 J**	**0.74 J**
MW-3-Screen-3						
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-3	Oct/Nov 2021	MW-3-3	NA	NA	**3.8**	**0.66 J**
MW-3-Screen-4						
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-4	Oct/Nov 2021	MW-3-4	NA	NA	**31.0**	**0.59 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-3-Screen-5	Oct/Nov 2021	MW-3-5	NA	NA	**53.0**	0.43 UB
MW-4-Screen-1						
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	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-2	Oct/Nov 2021	MW-4-2	NA	NA	3.0 U	0.19 UB

Sample Location	Sampling Event	Sample Number	Arsenic (µg/L)	Lead (µg/L)	Chromium, Total (µg/L)	Chromium, Hexavalent (µg/L)
MW-4-Screen-2	Oct/Nov 2021	DUP-3-4Q21	NA	NA	3.0 U	0.19 UB
MW-4-Screen-3						
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-3	Oct/Nov 2021	MW-4-3	NA	NA	0.8 UB	0.19 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-4	Oct/Nov 2021	MW-4-4	NA	NA	3.0 U	0.07 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-4-Screen-5	Oct/Nov 2021	MW-4-5	NA	NA	1.2 UB	0.05 UB
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-9	Oct/Nov 2021	MW-9	NA	NA	**140.0 J**	0.58 UB
MW-11-Screen-1						
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-1	Oct/Nov 2021	MW-11-1	NA	NA	3.0 U	0.16 UB
MW-11-Screen-2						
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-2	Oct/Nov 2021	MW-11-2	NA	NA	3.0 U	0.08 UB
MW-11-Screen-2	Oct/Nov 2021	DUP-7-4Q21	NA	NA	3.0 U	0.12 UB
MW-11-Screen-3						
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-3	Oct/Nov 2021	MW-11-3	NA	NA	1.4 UB	0.07 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
MW-11-Screen-4	Oct/Nov 2021	MW-11-4	NA	NA	3.0 U	0.11 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-11-Screen-5	Oct/Nov 2021	MW-11-5	NA	NA	**3.4**	0.26 UB
MW-12-Screen-2						
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-2	Oct/Nov 2021	MW-12-2	NA	NA	0.8 UB	0.41 UB
MW-12-Screen-2	Oct/Nov 2021	DUP-4-4Q21	NA	NA	0.9 UB	0.41 UB
MW-12-Screen-3						
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-3	Oct/Nov 2021	MW-12-3	NA	NA	3.0 U	0.24 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-4	Oct/Nov 2021	MW-12-4	NA	NA	1.2 UB	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-12-Screen-5	Oct/Nov 2021	MW-12-5	NA	NA	2.0 UB	**1.10 J**
MW-14-Screen-2						
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-2	July 2021	MW-14-2	NA	NA	**0.6 J**	0.20 UB
MW-14-Screen-2	Oct/Nov 2021	MW-14-2	NA	NA	**0.5 J**	0.17 UB
MW-14-Screen-3						
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-3	Oct/Nov 2021	MW-14-3	NA	NA	3.0 U	**0.58 J**
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-4	Oct/Nov 2021	MW-14-4	NA	NA	**2.4 J**	**2.10 J**

Sample Location	Sampling Event	Sample Number	Arsenic (µg/L)	Lead (µg/L)	Chromium, Total (µg/L)	Chromium, Hexavalent (µg/L)
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-14-Screen-5	Oct/Nov 2021	MW-14-5	NA	NA	**0.7 J**	0.30 UB
MW-15						
MW-15	Oct/Nov 2020	MW-15	NA	NA	**7.2**	0.30 UJ
MW-15	Oct/Nov 2020	DUP-8-4Q20	NA	NA	**21.0**	0.33 UJ
MW-15	Mar/Apr 2021	MW-15	NA	NA	**0.9 J**	**0.51 J**
MW-15	May/June 2021	MW-15	**0.7 J**	1.00 U	**0.6 J**	**0.52 J**
MW-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-15	Oct/Nov 2021	MW-15	NA	NA	**14.0 J**	0.25 UB
MW-17-Screen-2						
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-2	Oct/Nov 2021	MW-17-2	NA	NA	3.0 U	0.07 UB
MW-17-Screen-3						
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-3	Oct/Nov 2021	MW-17-3	NA	NA	0.6 UB	0.06 UB
MW-17-Screen-3	Oct/Nov 2021	DUP-2-4Q21	NA	NA	3.0 U	0.07 UB
MW-17-Screen-4						
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-4	Oct/Nov 2021	MW-17-4	NA	NA	**2.2 J**	**2.20 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-17-Screen-5	Oct/Nov 2021	MW-17-5	NA	NA	**2.2 J**	**1.50 J**
MW-18-Screen-2						
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-2	Oct/Nov 2021	MW-18-2	NA	NA	3.0 U	0.10 UB
MW-18-Screen-3						
MW-18-Screen-3	Oct/Nov 2020	MW-18-3	NA	NA	**1.7 J**	**1.80**

Sample Location	Sampling Event	Sample Number	Arsenic (µg/L)	Lead (µg/L)	Chromium, Total (µg/L)	Chromium, Hexavalent (µg/L)
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-3	Oct/Nov 2021	MW-18-3	NA	NA	**1.3 J**	**1.60 J**
MW-18-Screen-4						
MW-18-Screen-4	Oct/Nov 2020	MW-18-4	NA	NA	**3.0**	**2.90**
MW-18-Screen-4	Mar/Apr 2021	MW-18-4	NA	NA	**3.1**	**2.70 J**
MW-18-Screen-4	Mar/Apr 2021	DUP-5-1Q21	NA	NA	**2.8 J**	**2.60 J**
MW-18-Screen-4	May/June 2021	MW-18-4	2.0 U	**0.10 J**	**2.9 J**	**1.00 J**
MW-18-Screen-4	July 2021	MW-18-4	NA	NA	**3.1**	**3.40 J**
MW-18-Screen-4	Oct/Nov 2021	MW-18-4	NA	NA	**2.5 J**	**2.30 J**
MW-18-Screen-4	Oct/Nov 2021	DUP-6-4Q21	NA	NA	**2.6 J**	**2.20 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-18-Screen-5	Oct/Nov 2021	MW-18-5	NA	NA	3.0 U	0.12 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-1	Oct/Nov 2021	MW-19-1	NA	NA	3.0 U	0.33 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-2	Oct/Nov 2021	MW-19-2	NA	NA	**1.2 J**	0.13 UB
MW-19-Screen-2	Oct/Nov 2021	DUP-8-4Q21	NA	NA	**0.9 J**	0.13 UB
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-3	Oct/Nov 2021	MW-19-3	NA	NA	**1.7 J**	0.40 UB
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-4	Oct/Nov 2021	MW-19-4	NA	NA	**2.2 J**	**2.60 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-19-Screen-5	Oct/Nov 2021	MW-19-5	NA	NA	**1.8 J**	**2.30 J**
MW-20-Screen-2						
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

Sample Location	Sampling Event	Sample Number	Arsenic (µg/L)	Lead (µg/L)	Chromium, Total (µg/L)	Chromium, Hexavalent (µg/L)
MW-20-Screen-2	Oct/Nov 2021	MW-20-2	NA	NA	3.0 U	0.06 UB
MW-20-Screen-3						
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-3	Oct/Nov 2021	MW-20-3	NA	NA	3.0 U	0.09 UB
MW-20-Screen-3	Oct/Nov 2021	DUP-5-4Q21	NA	NA	3.0 U	0.10 UB
MW-20-Screen-4						
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-4	Oct/Nov 2021	MW-20-4	NA	NA	3.0 U	0.20 UB
MW-20-Screen-5						
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-20-Screen-5	Oct/Nov 2021	MW-20-5	NA	NA	3.0 U	0.18 UB
MW-21-Screen-2						
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-2	Oct/Nov 2021	MW-21-2	NA	NA	0.5 UB	0.26 UB
MW-21-Screen-3						
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-3	Oct/Nov 2021	MW-21-3	NA	NA	0.6 UB	0.52 UB
MW-21-Screen-4						
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-4	Oct/Nov 2021	MW-21-4	NA	NA	1.6 UB	**1.10 J**
MW-21-Screen-5						
MW-21-Screen-5	Oct/Nov 2020	MW-21-5	NA	NA	**1.0 J**	**1.40**

Sample Location	Sampling Event	Sample Number	Arsenic (µg/L)	Lead (µg/L)	Chromium, Total (µg/L)	Chromium, Hexavalent (µg/L)
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-21-Screen-5	Oct/Nov 2021	MW-21-5	NA	NA	1.5 UB	**1.20 J**
MW-22-Screen-1						
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	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**
MW-22-Screen-2	Oct/Nov 2021	MW-22-2	NA	NA	**1.5 J**	**2.00 J**
MW-22-Screen-3						
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-3	Oct/Nov 2021	MW-22-3	NA	NA	**1.4 J**	**2.20 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-4	Oct/Nov 2021	MW-22-4	NA	NA	**2.2 J**	**2.50 J**
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-22-Screen-5	Oct/Nov 2021	MW-22-5	NA	NA	3.0 U	0.17 UB
MW-23-Screen-1						
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	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-2	Oct/Nov 2021	MW-23-2	NA	NA	**1.7 J**	**1.90 J**
MW-23-Screen-3						
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**

Sample Location	Sampling Event	Sample Number	Arsenic (µg/L)	Lead (µg/L)	Chromium, Total (µg/L)	Chromium, Hexavalent (µg/L)
MW-23-Screen-3	Oct/Nov 2021	MW-23-3	NA	NA	**2.9 J**	**3.30 J**
MW-23-Screen-4						
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-4	Oct/Nov 2021	MW-23-4	NA	NA	**3.8**	**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-23-Screen-5	Oct/Nov 2021	MW-23-5	NA	NA	3.0 U	0.13 UB
MW-24-Screen-1						
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
MW-24-Screen-1	July 2021	MW-24-1	NA	NA	**1.4 J**	NA
MW-24-Screen-1	Oct/Nov 2021	MW-24-1	NA	NA	**2.6 J**	0.22 UB
MW-24-Screen-2						
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-2	Oct/Nov 2021	MW-24-2	NA	NA	**1.1 J**	**2.10 J**
MW-24-Screen-3						
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-3	Oct/Nov 2021	MW-24-3	NA	NA	3.0 U	0.04 UB
MW-24-Screen-4						
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-4	Oct/Nov 2021	MW-24-4	NA	NA	3.0 U	0.17 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-24-Screen-5	Oct/Nov 2021	MW-24-5	NA	NA	**2.5 J**	**2.50 J**
MW-25-Screen-1						
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**

Sample Location	Sampling Event	Sample Number	Arsenic (µg/L)	Lead (µg/L)	Chromium, Total (µg/L)	Chromium, Hexavalent (µg/L)
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-1	Oct/Nov 2021	MW-25-1	NA	NA	**1.8 J**	0.24 UB
MW-25-Screen-2						
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-2	Oct/Nov 2021	MW-25-2	NA	NA	**2.0 J**	**1.90 J**
MW-25-Screen-3						
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**
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-3	Oct/Nov 2021	MW-25-3	NA	NA	**3.5**	**3.10 J**
MW-25-Screen-4						
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-4	Oct/Nov 2021	MW-25-4	NA	NA	**1.9 J**	**0.89 J**
MW-25-Screen-5						
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-25-Screen-5	Oct/Nov 2021	MW-25-5	NA	NA	3.0 U	0.15 UB
MW-26-Screen-1						
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	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

Sample Location	Sampling Event	Sample Number	Arsenic (µg/L)	Lead (µg/L)	Chromium, Total (µg/L)	Chromium, Hexavalent (µg/L)
MW-26-Screen-2	Oct/Nov 2021	MW-26-2	NA	NA	**1.0 J**	**0.84 J**
Analyte concentration exceeds the standard for:						
CA MCL			10.0	15.0*	50.0	50.0**
EPA REGION IX MCL			10.0	15.0*	100.0	NE

Notes

DUP(E)	Field Duplicate
NA	Not analyzed
NE	Not established
*	Regulatory Action Level
**	Due to a court ruling, the State Water Resources Control Board adopted a resolution on August 1, 2017 to remove the current maximum contaminant level (MCL[10.0 µg/L]) for CrVI. CrVI is regulated under the 50.0 µg/L MCL for total chromium."
J	Analyte concentration is an estimated value
U	Analyte was analyzed for but not detected at or above the stated limit
UB	Result should be considered "not-detected" because it was detected in a method blank or equipment blank at a similar level.
UJ	Analyte was analyzed for but not detected; analyte concentration is an estimated value

TABLE 3

SUMMARY OF VOLATILE ORGANIC COMPOUNDS AND PERCHLORATE REPORTED IN MUNICIPAL PRODUCTION WELLS NEAR JPL DURING THE LAST FIVE SAMPLING EVENTS OF THE LONG-TERM QUARTERLY GROUNDWATER SAMPLING PROGRAM

(All concentrations reported in µg/L.)

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

Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
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					
	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
	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

Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
	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
	9/7/2021	**3.7**	NA	**9.0**	NA
	9/13/2021	**3.8**	NA	**8.0**	NA
	9/20/2021	**4.3**	NA	**7.1**	NA
	9/27/2021	**3.4**	NA	**9.3**	NA
	10/4/2021	**3.5**	NA	**9.3**	NA
	10/11/2021	**2.4**	NA	**10.0**	NA
	10/18/2021	**3.8**	NA	**8.8**	NA
	10/25/2021	**3.4**	NA	**8.1**	NA
	11/1/2021	**3.1**	NA	**9.0**	NA
	11/8/2021	**3.9**	NA	**7.2**	NA
	11/15/2021	**3.9**	NA	**8.6**	NA
	11/22/2021	**4.2**	NA	**7.1**	NA
	11/29/2021	**3.1**	NA	**9.4**	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

Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
	6/8/2021	4.0 U	NA	NA	NA
	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					
	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
	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

Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
	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
	9/9/2021	**5.5**	NA	NA	NA
	9/10/2021	NA	**1.3**	**0.6**	**0.9**
	9/14/2021	**5.7**	NA	NA	NA
	9/21/2021	**5.4**	NA	NA	NA
	9/28/2021	**5.1**	NA	NA	NA
	10/5/2021	**4.4**	**1.5**	0.5 U	**0.8**
	10/13/2021	**4.9**	NA	NA	NA
	10/19/2021	**4.6**	NA	NA	NA
	10/26/2021	**5.1**	NA	NA	NA
	11/2/2021	**4.3**	**1.3**	**0.6**	**0.9**
	11/5/2021	NA	**1.8**	0.5 U	**0.9**
	11/9/2021	**4.5**	NA	NA	NA
	11/16/2021	**5.4**	NA	NA	NA
	11/22/2021	**5.4**	NA	NA	NA
	11/30/2021	**5.3**	NA	NA	NA
PASADENA-CITY, WATER DEPT. ARROYO					
	7/7/2020	**8.0**	**1.1**	0.5 U	**1.0**
	7/14/2020	**7.9**	**1.2**	0.5 U	**1.0**
	7/21/2020	**8.2**	**1.1**	0.5 U	**1.0**
	7/28/2020	**8.5**	**1.2**	0.5 U	**1.1**
	8/4/2020	**8.5**	**1.3**	0.5 U	**1.0**
	8/11/2020	**8.9**	**1.1**	0.5 U	**1.0**
	8/18/2020	**8.0**	**1.2**	0.5 U	**1.1**
	8/25/2020	**9.6**	**1.2**	0.5 U	**1.1**
	9/1/2020	**7.5**	**1.0**	0.5 U	**1.0**
	9/8/2020	**8.2**	**1.0**	0.5 U	**1.1**
	9/15/2020	**8.6**	**1.1**	0.5 U	**1.0**
	9/22/2020	**8.0**	**1.1**	0.5 U	**1.0**
	9/29/2020	**8.9**	**1.0**	0.5 U	**1.0**
	10/6/2020	**8.5**	**1.0**	0.5 U	**0.9**

Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
	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**
	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**

Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
	9/7/2021	**7.7**	**1.1**	0.5 U	**1.1**
	9/14/2021	**7.5**	**1.0**	0.5 U	**1.1**
	9/21/2021	**8.7**	**0.8**	0.5 U	**0.9**
	9/28/2021	**7.7**	**1.0**	0.5 U	**1.0**
	10/5/2021	**6.9**	**1.1**	0.5 U	**1.0**
	10/11/2021	**7.7**	NA	NA	NA
	10/14/2021	NA	**0.8**	0.5 U	**0.8**
	10/19/2021	**8.0**	**0.9**	0.5 U	**0.9**
	10/26/2021	**7.2**	**0.9**	0.5 U	**1.0**
	11/2/2021	**7.5**	**0.8**	0.5 U	**1.0**
	11/9/2021	**7.3**	**0.9**	0.5 U	**1.0**
	11/16/2021	**7.1**	**0.6**	0.5 U	**0.7**
	11/23/2021	**7.6**	**0.6**	0.5 U	**0.9**
	11/30/2021	**7.3**	**0.7**	0.5 U	**0.9**
PASADENA-CITY, WATER DEPT. WELL 52					
	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**
	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**

Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
	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**
	9/7/2021	**3.7**	0.5 U	**0.9**	**2.0**
	9/14/2021	**3.0**	0.5 U	**0.9**	**2.0**
	9/21/2021	**4.2**	0.5 U	**0.8**	**1.8**
RUBIO CANON LAND & WATER ASSOCIATION WELL 04					
	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

Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
	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
	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					
	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

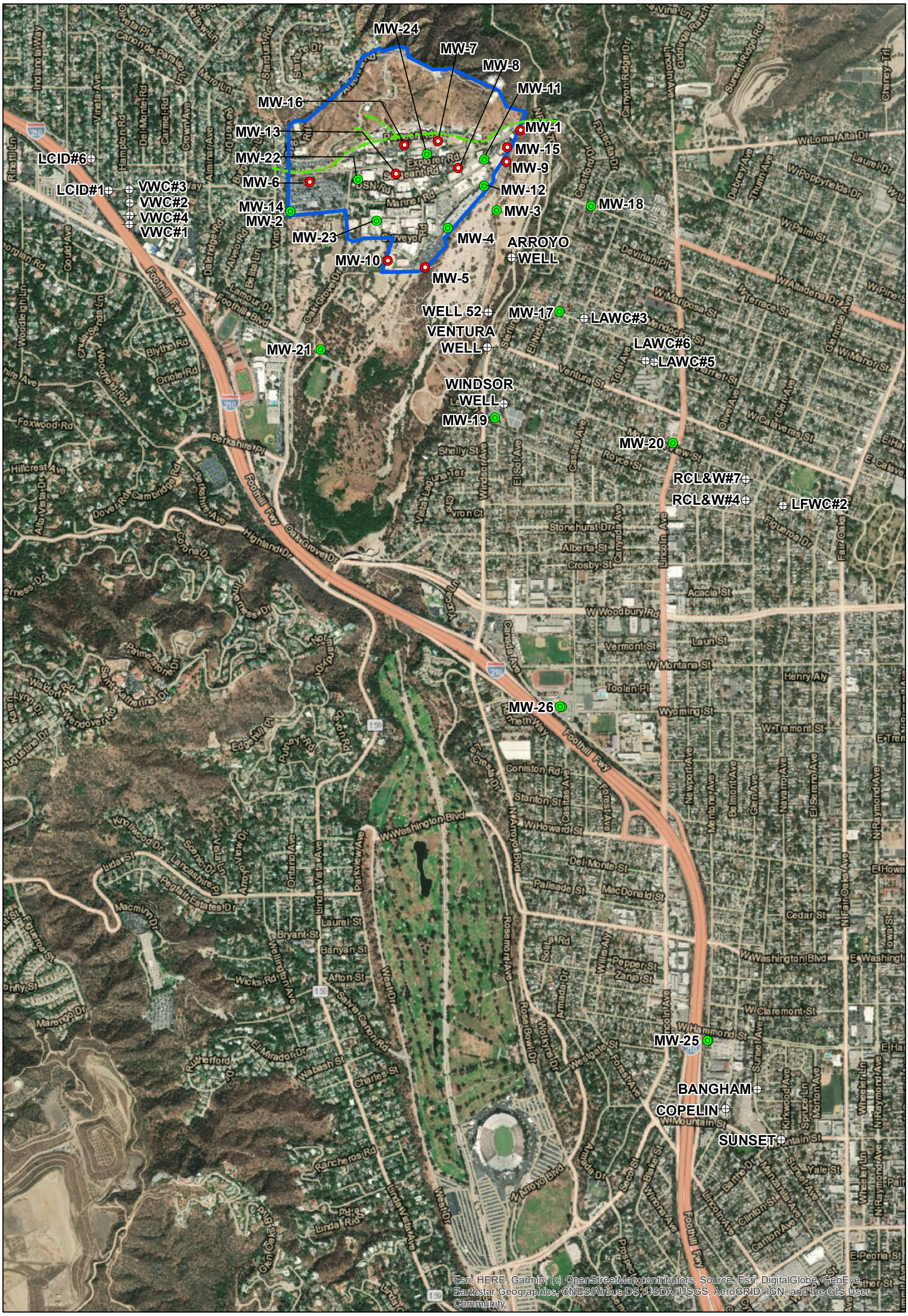
Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
	9/21/2020	4.0 U	NA	NA	NA
	9/28/2020	4.0 U	NA	NA	NA
	10/5/2020	4.0 U	NA	**0.7**	NA
	10/12/2020	4.0 U	NA	NA	NA
	10/19/2020	4.0 U	NA	**0.7**	NA
	10/26/2020	4.0 U	NA	NA	NA
	11/2/2020	4.0 U	NA	NA	NA
	11/9/2020	4.0 U	NA	NA	NA
	11/16/2020	4.0 U	NA	NA	NA
	11/23/2020	4.0 U	NA	NA	NA
	11/30/2020	4.0 U	NA	NA	NA
	12/7/2020	4.0 U	NA	NA	NA
	12/14/2020	4.0 U	NA	NA	NA
	12/21/2020	4.0 U	NA	NA	NA
	12/28/2020	4.0 U	NA	NA	NA
	1/4/2021	4.0 U	NA	**0.8**	NA
	1/11/2021	4.0 U	NA	NA	NA
	1/19/2021	4.0 U	NA	NA	NA
	1/25/2021	4.0 U	NA	NA	NA
VALLEY WATER CO. WELL 01					
	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**
	9/8/2021	**3.0**	0.5 U	**0.7**	**0.9**
	10/6/2021	**3.2**	0.5 U	**0.8**	**0.9**
VALLEY WATER CO. WELL 02					
	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**
	9/8/2021	**3.3**	0.5 U	0.5 U	**0.7**
	10/6/2021	**3.0**	0.5 U	0.5 U	**0.7**
VALLEY WATER CO. WELL 03					
	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

Purveyor, Well Name	Sample Date	Perchlorate	Carbon tetrachloride	PCE	TCE
	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					
	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**
Analyte concentration exceeds the standard for:					
CA MCL		6.0	0.5	5.0	5.0
EPA REGION IX MCL		NE	5.0	5.0	5.0

Notes

NA	Not analyzed
NE	Not established
Source	State Water Resources Control Board (Division of Drinking Water) Water Quality Index Database
U	Analyte was analyzed for but not detected at or above the stated limit

FIGURES



Legend

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

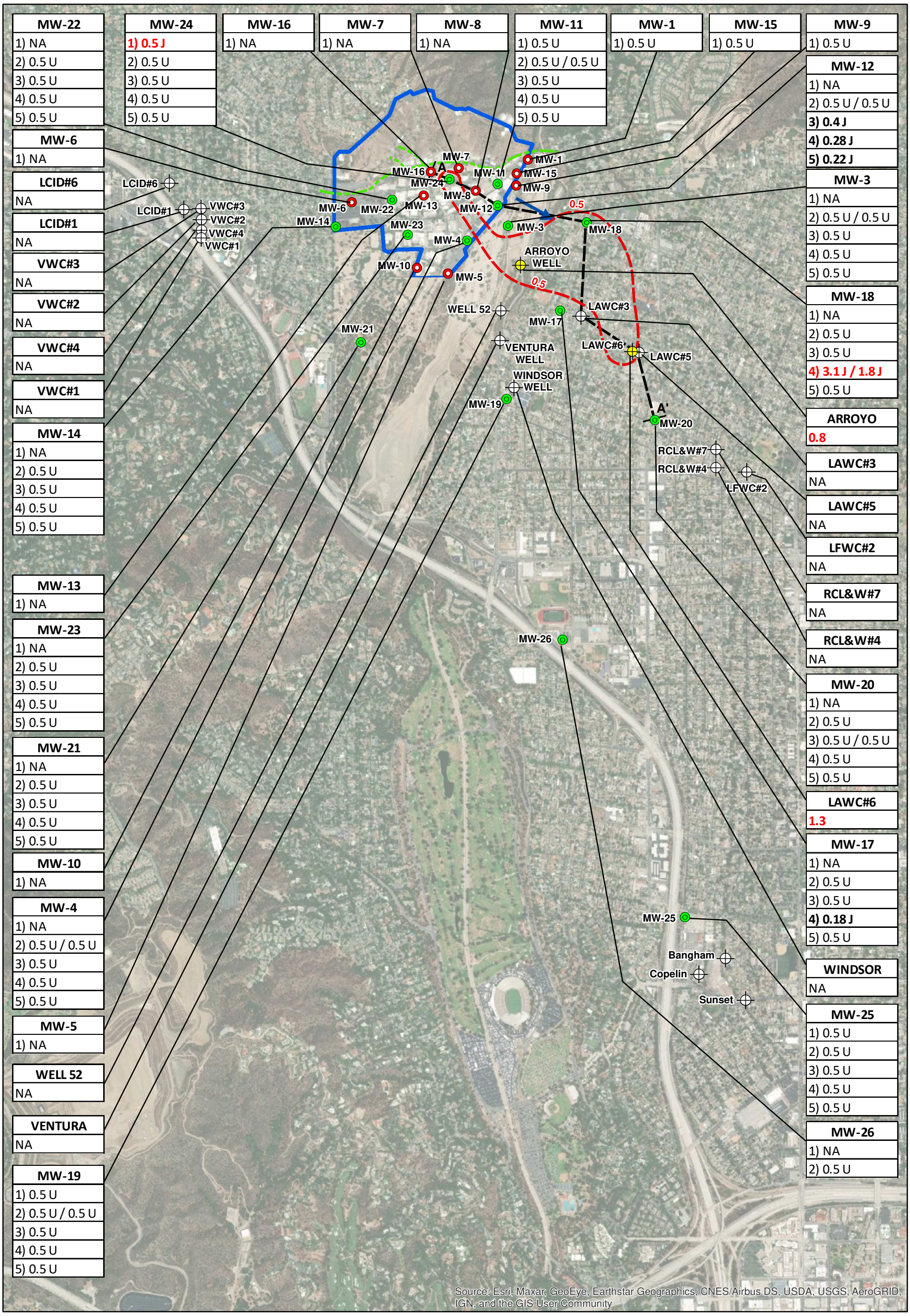
N W E S

0 500 1,000 1,500 Feet

TIDEWATER INC
ENGINEERS / SCIENTISTS / PROGRAM MANAGERS

Locations of JPL Groundwater Monitoring Wells and Nearby Municipal Production Wells

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



MW-22
1) NA
2) 0.5 U
3) 0.5 U
4) 0.5 U
5) 0.5 U

MW-24
1) 0.5 J
2) 0.5 U
3) 0.5 U
4) 0.5 U
5) 0.5 U

MW-16
1) NA

MW-7
1) NA

MW-8
1) NA

MW-11
1) 0.5 U
2) 0.5 U / 0.5 U
3) 0.5 U
4) 0.5 U
5) 0.5 U

MW-1
1) 0.5 U

MW-15
1) 0.5 U

MW-9
1) 0.5 U

MW-12
1) NA
2) 0.5 U / 0.5 U
3) 0.4 J
4) 0.28 J
5) 0.22 J

MW-6
1) NA

MW-3
1) NA
2) 0.5 U / 0.5 U
3) 0.5 U
4) 0.5 U
5) 0.5 U

LCID#6
NA

LCID#1
NA

VWC#3
NA

VWC#2
NA

VWC#4
NA

VWC#1
NA

MW-18
1) NA
2) 0.5 U
3) 0.5 U
4) 3.1 J / 1.8 J
5) 0.5 U

MW-14
1) NA
2) 0.5 U
3) 0.5 U
4) 0.5 U
5) 0.5 U

ARROYO
0.8

LAWC#3
NA

LAWC#5
NA

LFWC#2
NA

MW-13
1) NA

RCL&W#7
NA

RCL&W#4
NA

MW-23
1) NA
2) 0.5 U
3) 0.5 U
4) 0.5 U
5) 0.5 U

MW-20
1) NA
2) 0.5 U
3) 0.5 U / 0.5 U
4) 0.5 U
5) 0.5 U

MW-21
1) NA
2) 0.5 U
3) 0.5 U
4) 0.5 U
5) 0.5 U

LAWC#6
1.3

MW-17
1) NA
2) 0.5 U
3) 0.5 U
4) 0.18 J
5) 0.5 U

MW-10
1) NA

WINDSOR
NA

MW-4
1) NA
2) 0.5 U / 0.5 U
3) 0.5 U
4) 0.5 U
5) 0.5 U

MW-25
1) 0.5 U
2) 0.5 U
3) 0.5 U
4) 0.5 U
5) 0.5 U

MW-5
1) NA

MW-26
1) NA
2) 0.5 U

WELL 52
NA

VENTURA
NA

MW-19
1) 0.5 U
2) 0.5 U / 0.5 U
3) 0.5 U
4) 0.5 U
5) 0.5 U

N
W E
S
0 600 1,200 1,800
Feet

Legend

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

MW-8
1) 0.5 U

Well ID
Concentration in micrograms per liter
Screen number

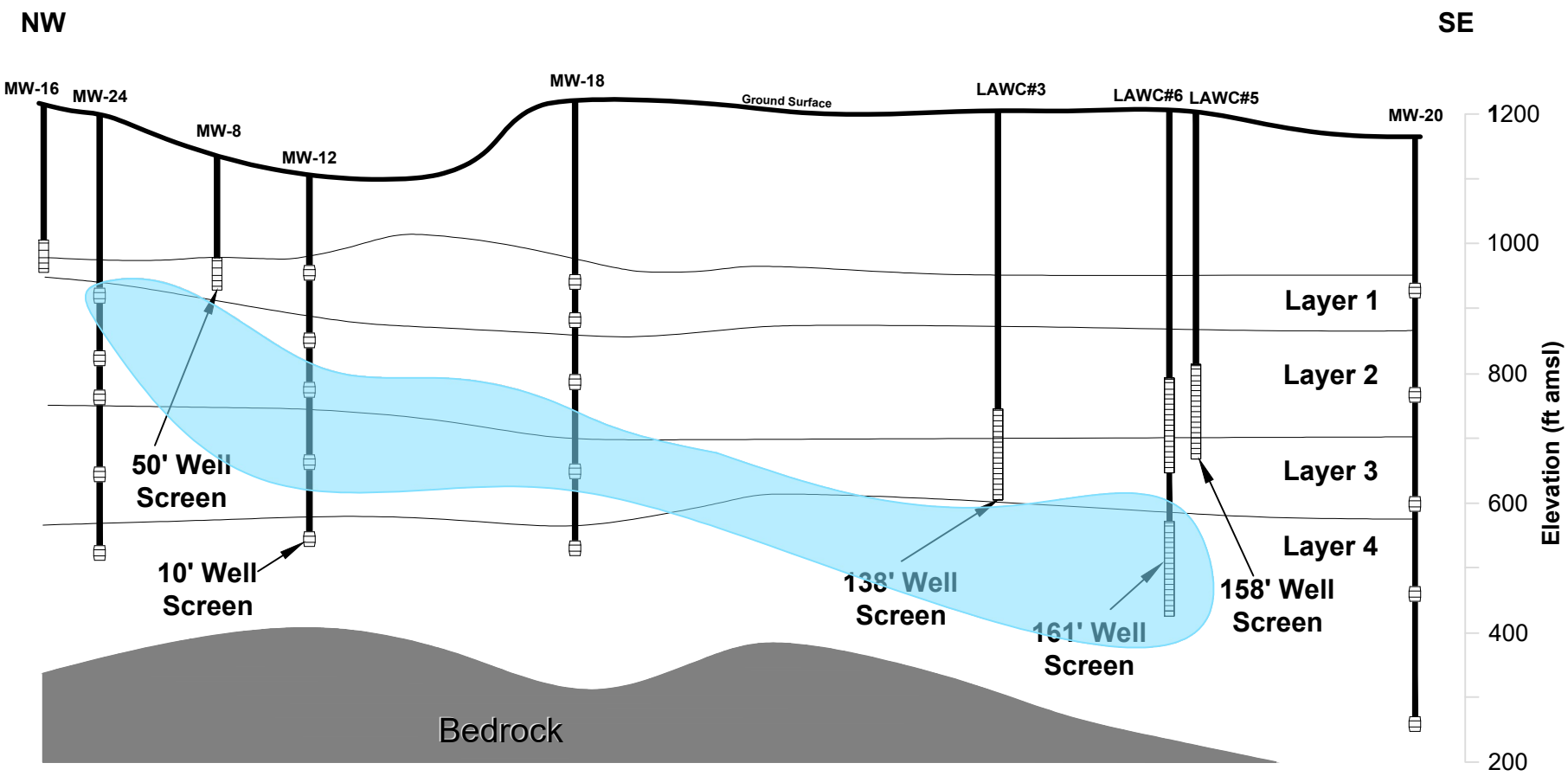
J = Detected estimated value
U = Not detected estimated value
NA = Not Analyzed

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

TIDEWATER INC
ENGINEERS / SCIENTISTS / PROGRAM MANAGERS

Carbon Tetrachloride in Groundwater October/November 2021

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



Note: Concentrations are Reported in µg/L
Plume depicted above delineates concentrations exceeding state MLC (0.5 µg/L)

50.0
20.0
10.0
5.0
0.5

Z exag: 3.0

0 500 1000

HORIZONTAL SCALE IN FEET (Approximate)

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Horizontal and Vertical Extent of Carbon Tetrachloride in Groundwater October/November 2021

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

MW-22
1) NA
2) 2.8
3) 3.6
4) 1.4 J
5) 2.0 U

MW-24
1) 21.2
2) 11.5
3) 2.0 U
4) 2.0 U
5) 1.5 J

MW-16
1) NA

MW-7
1) NA

MW-8
1) NA

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

MW-1
1) 2.0 U

MW-15
1) 2.0 U

MW-9
1) 2.0 U

MW-12
1) NA
2) 1.8 J / 1.8 J
3) 1.2 J
4) 2.3
5) 2.0

MW-6
1) NA

MW-3
1) NA
2) 1.4 J / 2.0 U
3) 3.7
4) 3.7
5) 3.1

LCID#6
NA

LCID#1
NA

VWC#3
NA

VWC#2
NA

VWC#4
NA

VWC#1
NA

MW-18
1) NA
2) 2.0 U
3) 1.1 J
4) 15.0 / 15.8
5) 2.0 U

MW-14
1) NA
2) 4.3
3) 5.1
4) 4.6
5) 2.0 U

ARROYO
7.5

LAWC#3
NA

LAWC#5
NA

LFWC#2
3.1

RCL&W#7
NA

RCL&W#4
NA

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

MW-13
1) NA

MW-23
1) NA
2) 6.1
3) 4.8
4) 3.2
5) 2.0 U

LAWC#6
4.3

MW-21
1) NA
2) 2.6
3) 3.8
4) 2.9
5) 2.9

MW-17
1) NA
2) 2.1
3) 1.5 J / 1.2 J
4) 4.3
5) 4.7

MW-10
1) NA

WINDSOR
NA

MW-4
1) NA
2) 59.1 / 57.2
3) 3.0
4) 2.0 U
5) 2.0 U

MW-25
1) 7.6
2) 12.0
3) 10.2
4) 9.0
5) 2.0 U

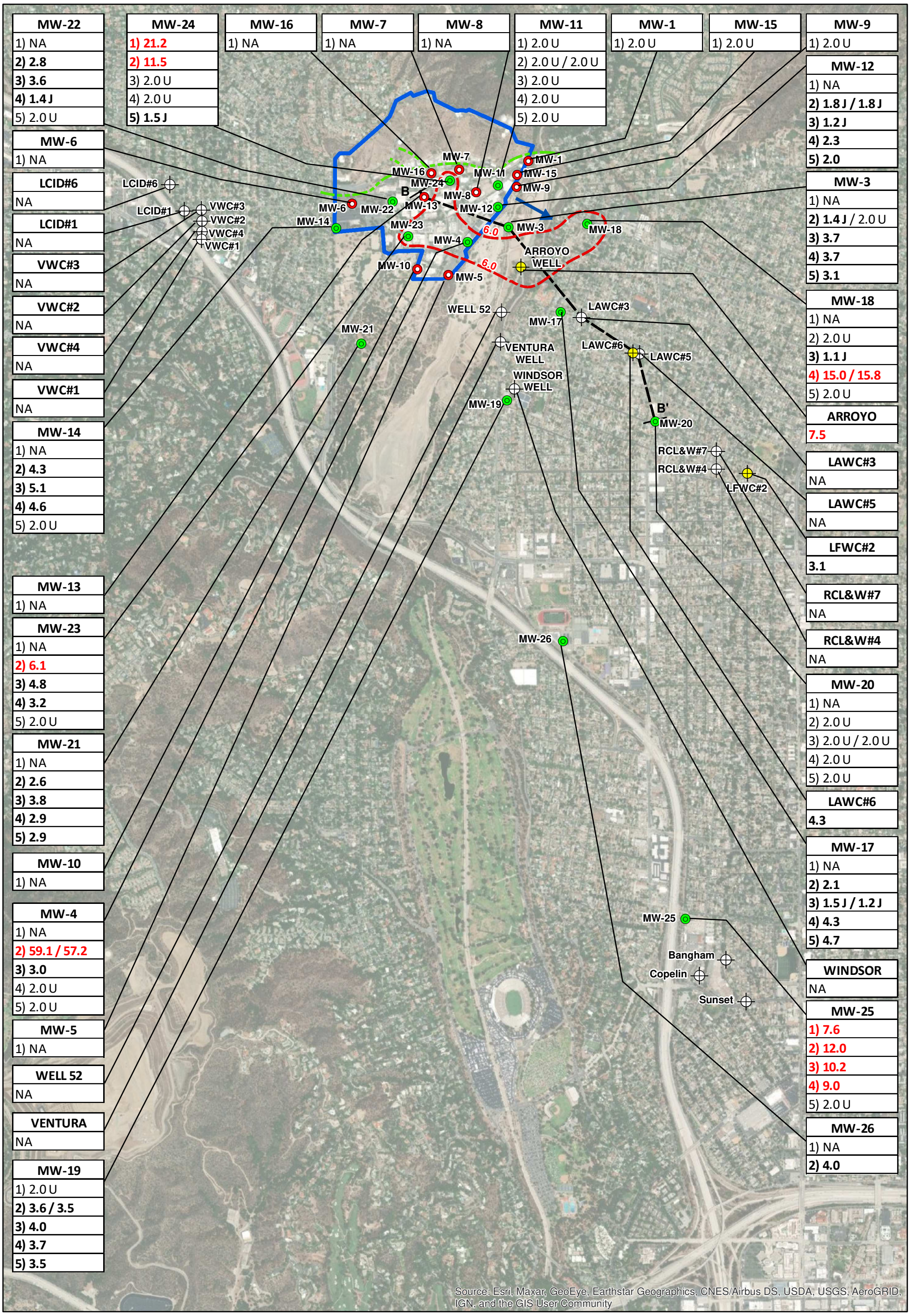
MW-5
1) NA

MW-26
1) NA
2) 4.0

WELL 52
NA

VENTURA
NA

MW-19
1) 2.0 U
2) 3.6 / 3.5
3) 4.0
4) 3.7
5) 3.5



Legend

- Deep Multi-Port Monitoring Well Location
- Shallow Monitoring Well Location
- Municipal Production Well (Data Not Available)
- Municipal Production Well (Data From Oct/Nov 2021)
- Cross-Section Transect B-B'
- Estimated Isoconcentration Line (6 µg/L)
- Approximate Location of Thrust Fault
- JPL Facility Boundary
- Groundwater Flow Direction

N, W, E, S

0 600 1,200 1,800 Feet

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.

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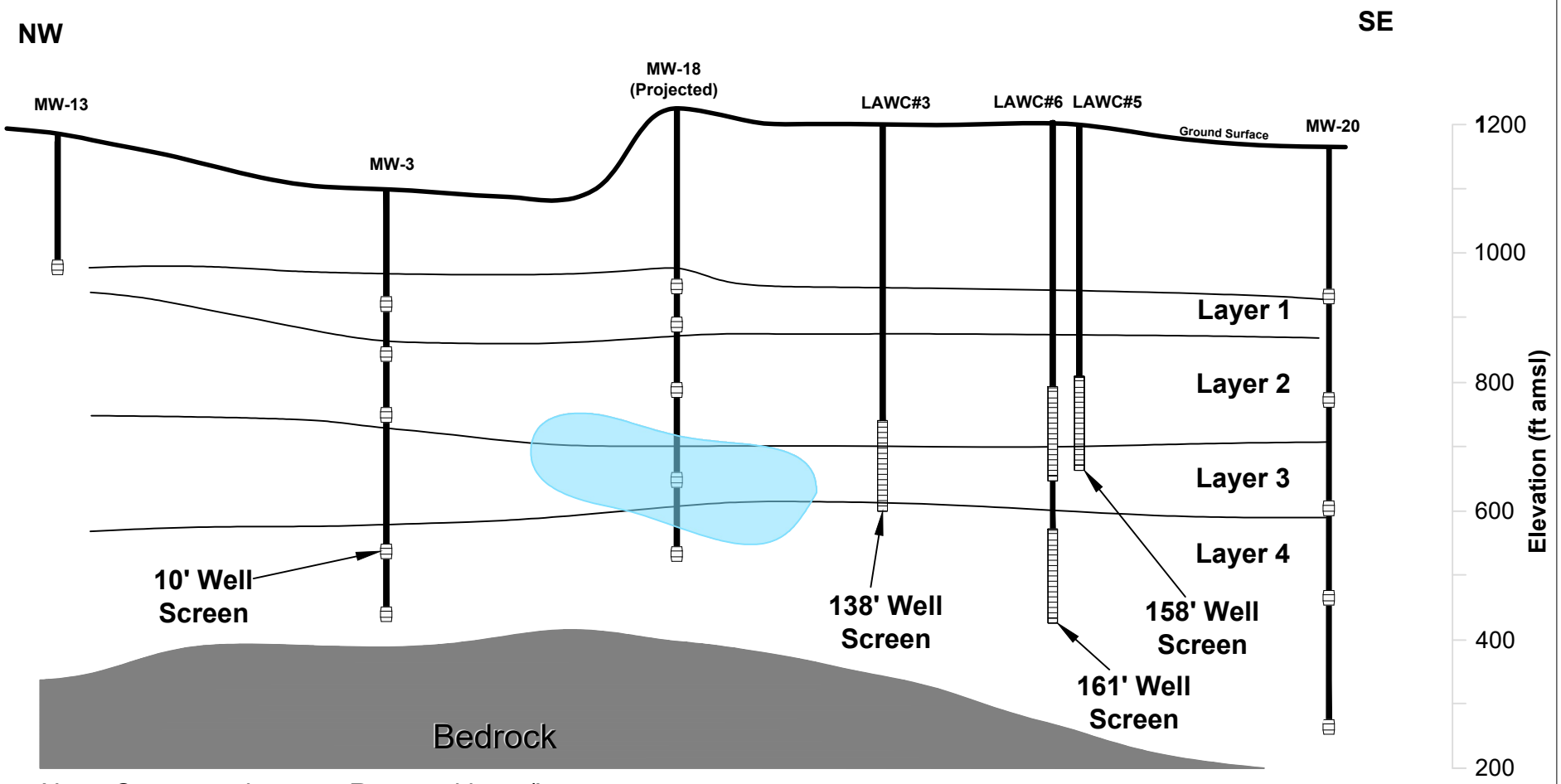
Perchlorate in Groundwater October/November 2021

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



Note: Concentrations are Reported in µg/L
Plume depicted above delineates concentrations exceeding state MCL (6.0 µg/L)

1000.0
500.0
200.0
100.0
6.0

Z exag: 3.0

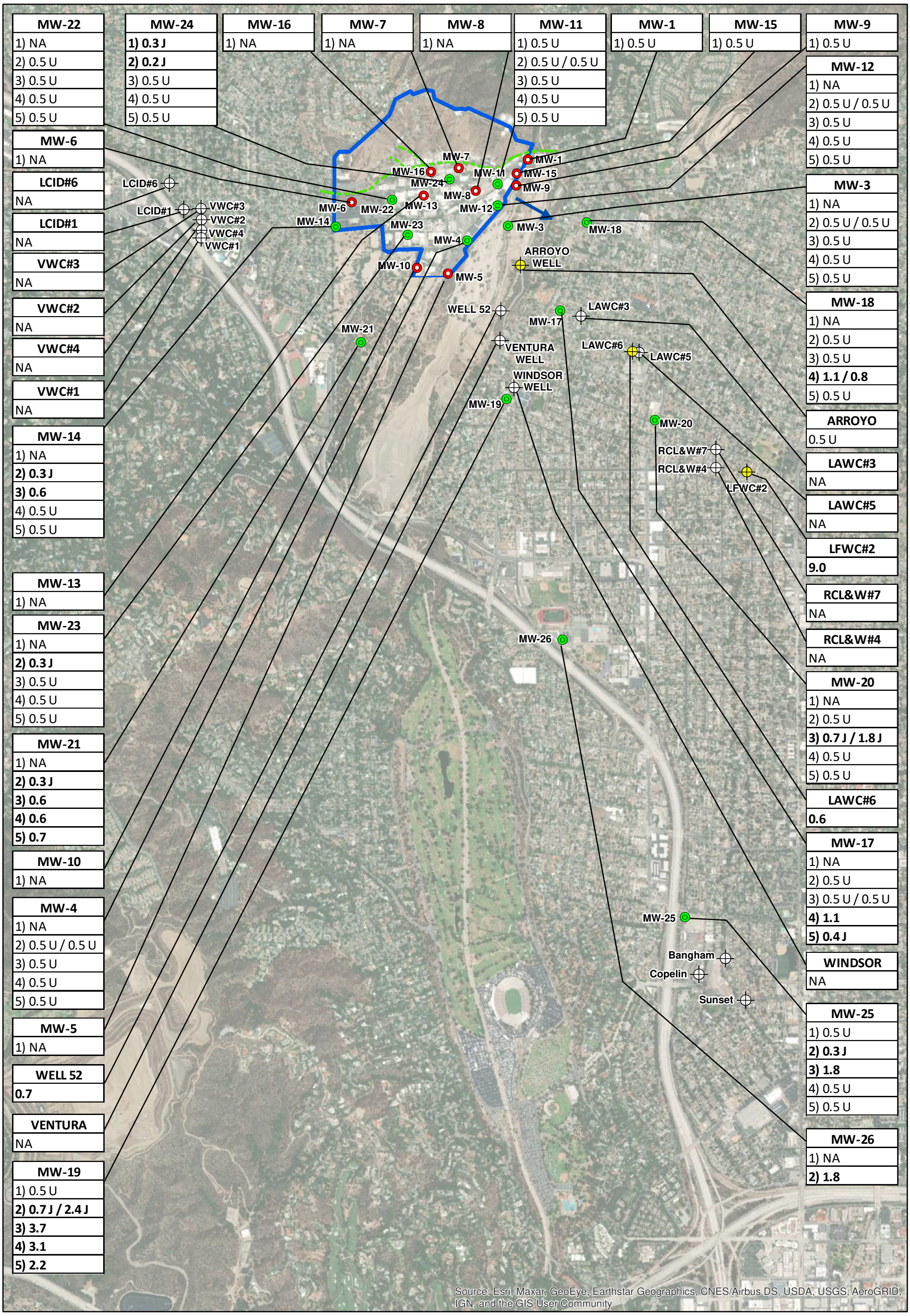
0 500 1000

HORIZONTAL SCALE
IN FEET
(Approximate)

TIDEWATER INC
ENGINEERS / SCIENTISTS / PROGRAM MANAGERS

Horizontal and Vertical Extent
of Perchlorate in Groundwater
October/November 2021

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



Legend

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

N W E S

0 600 1,200 1,800 Feet

MW-8
1) 0.5 U

Well ID
Concentration in micrograms per liter
Screen number

J = Detected estimated value
U = Not detected estimated value
NA = Not Analyzed

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

TIDEWATER INC
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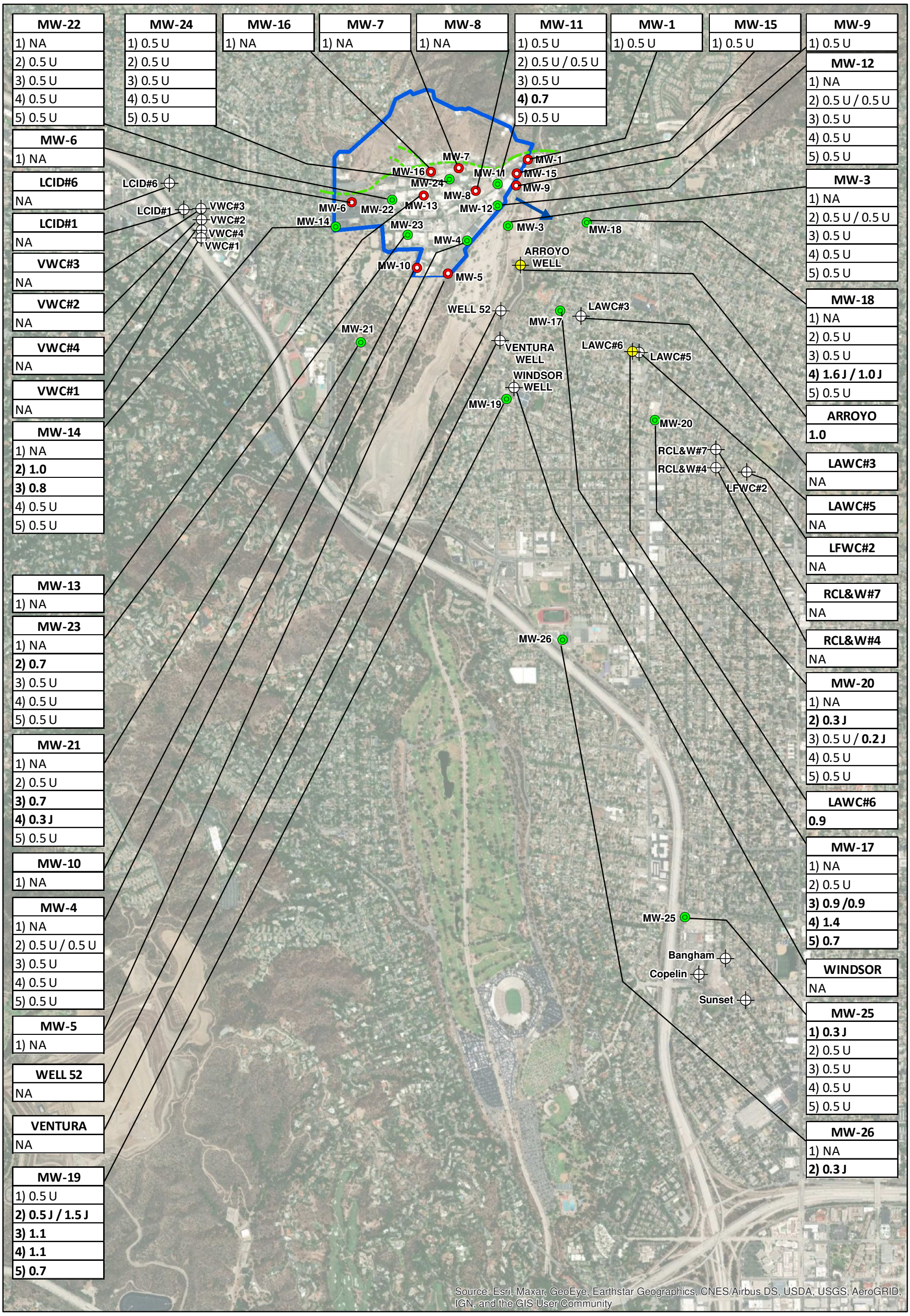
Tetrachloroethene in Groundwater October/November 2021

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



MW-22
1) NA
2) 0.5 U
3) 0.5 U
4) 0.5 U
5) 0.5 U

MW-24
1) 0.5 U
2) 0.5 U
3) 0.5 U
4) 0.5 U
5) 0.5 U

MW-16
1) NA

MW-7
1) NA

MW-8
1) NA

MW-11
1) 0.5 U
2) 0.5 U / 0.5 U
3) 0.5 U
4) 0.7
5) 0.5 U

MW-1
1) 0.5 U

MW-15
1) 0.5 U

MW-9
1) 0.5 U

MW-12
1) NA
2) 0.5 U / 0.5 U
3) 0.5 U
4) 0.5 U
5) 0.5 U

MW-3
1) NA
2) 0.5 U / 0.5 U
3) 0.5 U
4) 0.5 U
5) 0.5 U

MW-18
1) NA
2) 0.5 U
3) 0.5 U
4) 1.6 J / 1.0 J
5) 0.5 U

ARROYO
1.0

LAWC#3
NA

LAWC#5
NA

LFWC#2
NA

RCL&W#7
NA

RCL&W#4
NA

MW-20
1) NA
2) 0.3 J
3) 0.5 U / **0.2 J**
4) 0.5 U
5) 0.5 U

LAWC#6
0.9

MW-17
1) NA
2) 0.5 U
3) 0.9 /0.9
4) 1.4
5) 0.7

WINDSOR
NA

MW-25
1) 0.3 J
2) 0.5 U
3) 0.5 U
4) 0.5 U
5) 0.5 U

MW-26
1) NA
2) 0.3 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) 1.0
3) 0.8
4) 0.5 U
5) 0.5 U

MW-13
1) NA

MW-23
1) NA
2) 0.7
3) 0.5 U
4) 0.5 U
5) 0.5 U

MW-21
1) NA
2) 0.5 U
3) 0.7
4) 0.3 J
5) 0.5 U

MW-10
1) NA

MW-4
1) NA
2) 0.5 U / 0.5 U
3) 0.5 U
4) 0.5 U
5) 0.5 U

MW-5
1) NA

WELL 52
NA

VENTURA
NA

MW-19
1) 0.5 U
2) 0.5 J / 1.5 J
3) 1.1
4) 1.1
5) 0.7

Legend

- Deep Multi-Port Monitoring Well Location
- Shallow Monitoring Well Location
- Municipal Production Well (Data Not Available)
- Municipal Production Well (Data From Oct/Nov 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
Concentration in micrograms per liter
Screen number

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.

N W E S

0 600 1,200 1,800 Feet

TIDEWATER INC
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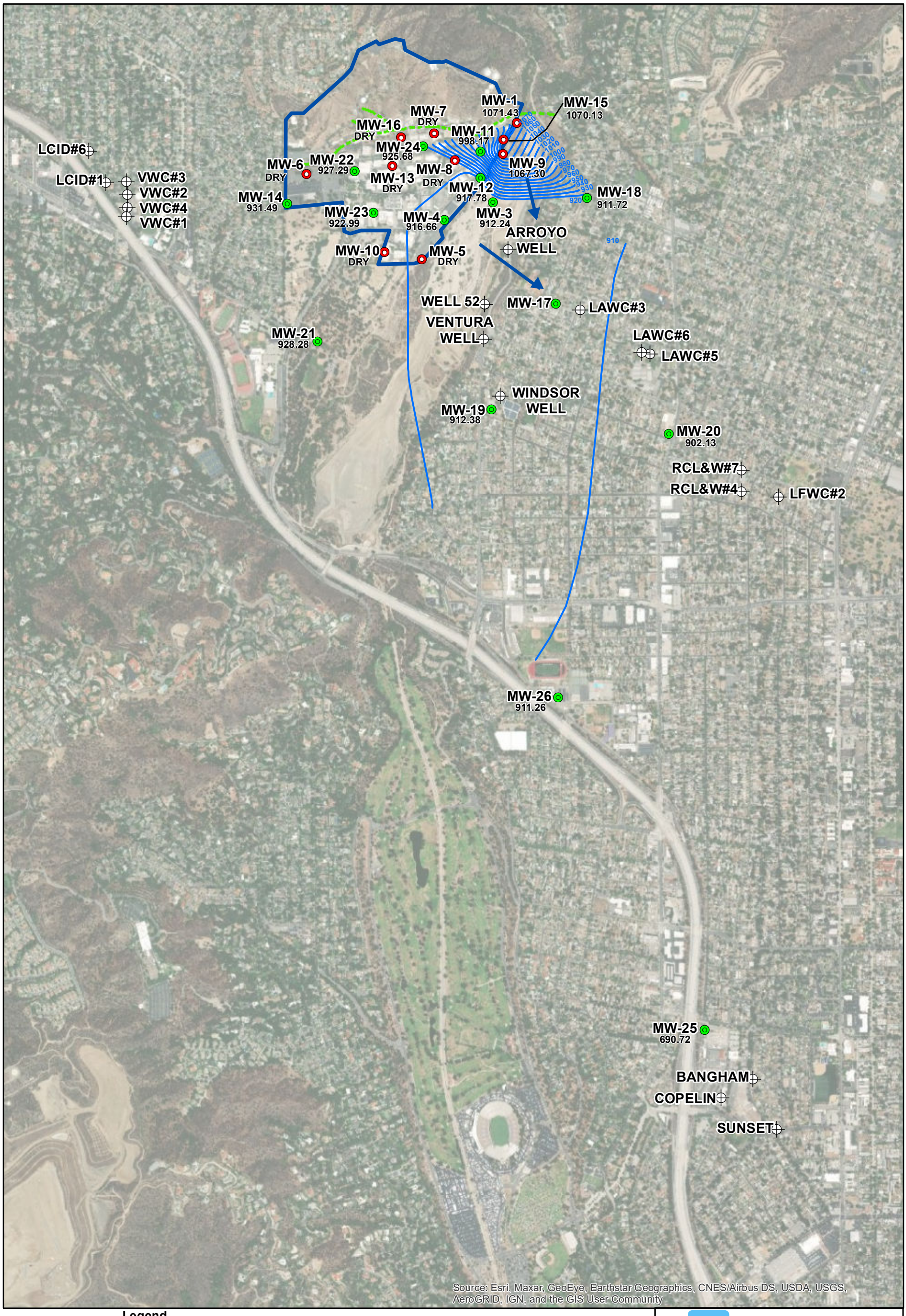
Trichloroethene in Groundwater October/November 2021

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



Legend

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

N W E S

0 500 1,000 1,500 Feet

TIDEWATER INC
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Groundwater Elevation Contours October 2021

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