

# TECHNICAL MEMORANDUM

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**To:** Nevada Environmental Response Trust

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**Cc:** Nevada Division of Environmental Protection  
United States Environmental Protection Agency

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**From:** Dana Grady

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**Date:** April 26, 2021

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**Subject:** Las Vegas Wash Bioremediation Pilot Study Monthly Progress Report

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At the direction of the Nevada Environmental Response Trust (NERT or Trust), Tetra Tech, Inc. (Tetra Tech) has prepared this memorandum which summarizes Tetra Tech's progress during March 2021 toward successfully implementing the Las Vegas Wash Bioremediation Pilot Study.

## Task Progress Update: March 2021

### Task M19 – Las Vegas Wash Pilot Study

- Current Status
  - Injections – The first injection event was completed in December 2020 and the pilot study is currently in the effectiveness monitoring phase. A summary of the injections was provided in the previous January 2021 monthly progress report. The second injection event (planned only for Zone 2 alluvium) is tentatively scheduled for April 2021. The on-going effectiveness monitoring program and associated results are provided below. A layout map and construction details of all injection, monitoring, and extraction wells are provided as Figures 1 through 4 and Table 1.
  - Effectiveness Monitoring – Baseline groundwater sampling was completed in the fall of 2020 prior to the first injection event. Following the first injection event, the monitoring program described in the Work Plan Addendum was implemented to evaluate the effectiveness of in-situ bioremediation. As part of this monitoring program, groundwater sampling was conducted on a biweekly basis for the Zone 2 alluvium for the first two months post-injection and was followed by a monthly sampling program thereafter, which is ongoing. Groundwater sampling is being conducted on a monthly basis for the Upper Muddy Creek formation (UMCf) and/or UMCf-coarse grained (cg) unit associated with Zones 1, 2, and 3. The most recent monthly groundwater sampling event was conducted from March 8, 2021 through March 15, 2021.
    - Available groundwater analytical results from the baseline sampling event and subsequent effectiveness monitoring events performed from December 2020 to February 2021 (two biweekly sampling events and the first two monthly sampling events following injections) are provided in Table 2. Groundwater analytical results from the third monthly

groundwater sampling event recently completed in March 2021 will be provided in future monthly progress reports as data become available. Results from the sampling event conducted two months post-injection (February 2021) are summarized below.

- Zone 2 Alluvium:
  - Groundwater samples collected from cross-gradient monitoring wells LVWPS-A2-MW04A/B and LVWPS-A2-MW05A/B, which are located approximately 17 feet from each end of the Zone 2 injection well transect, continue to display perchlorate concentration decreases, ranging from 21 to 99 percent reduction when compared to baseline concentrations. Additionally, groundwater samples collected from both LVWPS-A2-MW04A/B exhibited the lowest perchlorate concentrations measured to date two months after the injection event during the February 2021 sampling event. Lastly, perchlorate concentrations in groundwater samples collected from LVWPS-A2-MW05B continue to exhibit perchlorate concentrations below detection limits.
  - Of the 14 monitoring wells located 50 to 100 feet downgradient of the injection well transect, groundwater samples collected from five of these monitoring wells continue to exhibit perchlorate concentration reductions of greater than 90 percent when compared to baseline. Additionally, the overall average percent decrease in groundwater perchlorate concentrations in groundwater samples collected from these 14 monitoring wells is approximately 51 percent (comparison of the February 2021 sampling results to baseline concentrations).
  - Groundwater samples collected two months after injection activities from two monitoring wells located approximately 200-250 feet downgradient of the injection well transect (namely, LVWPS-MW208B and LVWPS-MW223B), continued to exhibit perchlorate concentration decreases of greater than 90 percent when compared to baseline concentrations. This suggests that these two farther downgradient monitoring wells are on well-connected, preferential flow paths with the upgradient injection well transect.
  - Chlorate results followed a similar pattern to perchlorate results for samples collected two months post-injection. Groundwater samples collected from two of the four cross-gradient monitoring wells continued to show decreases in chlorate concentrations of greater than 75 percent compared to baseline. Groundwater samples collected from nine of the 18 monitoring wells located between 50 and 250 feet downgradient of the injection well transect exhibited reductions in chlorate concentration of greater than 70 percent. Of these nine monitoring wells, groundwater samples collected from seven of these monitoring wells exhibited concentration decreases greater than 90 percent when compared to baseline.
  - Nitrate concentrations in groundwater were also evaluated because it is often a competing and preferred electron acceptor and carbon substrate consumer. Nitrate concentrations in groundwater samples collected from Zone 2 alluvium monitoring wells averaged 17 milligrams per liter (mg/L) during the baseline sampling event. Since injections, nitrate concentrations have reduced an average of 58 percent in groundwater samples collected from cross-gradient and downgradient monitoring wells. During the second monthly sampling event, groundwater samples collected from 15 cross-gradient or downgradient monitoring wells exhibited decreases in nitrate concentrations to less than 10 mg/L. Of these 15 monitoring wells, groundwater samples collected from eight monitoring wells exhibited nitrate concentrations less than 1 mg/L.

- Zone 1, 2, and 3 UMCf/UMCf-cg:
  - Zone 1 UMCf – Approximately two months following injections into Zone 1 UMCf, groundwater samples collected from monitoring wells LVWPS-U1-MW08A/B, which are located approximately 25 feet downgradient of the injection well transect, indicated perchlorate concentrations below the laboratory detection limit in both samples. Other notable observations include groundwater samples collected from one monitoring well located 100 feet downgradient of the injection well transect (LVWPS-U1-MW09B), where concentrations continued to decrease two months after the injection event, with groundwater perchlorate concentrations representing an approximate 45 percent reduction compared to baseline conditions. Lastly, reductions were also observed in two upgradient monitoring wells, namely LVWPS-U1-MW06B and LVWPS-U1-MW07 due to the low effective porosity causing injectate solution to move farther from the injection points (both upgradient and downgradient) while injecting under pressure. Nitrate and chlorate concentrations followed a similar pattern to perchlorate.
  - Zone 2 UMCf – Approximately two months following injections into Zone 2 UMCf, groundwater samples collected from cross-gradient monitoring wells LVWPS-U2-MW04 and LVWPS-U2-MW05, which are screened in the UMCf and located approximately 12 feet from each end of the Zone 2 injection well transect, indicate perchlorate concentrations less than the laboratory detection limit in both samples. Additionally, groundwater samples collected from all monitoring wells located 25 to 50 feet downgradient of the injection well transect exhibited slight perchlorate concentration decreases, with reductions of up to 34 percent when compared to baseline concentrations. Lastly, groundwater samples collected from monitoring well LVWPS-U2-MW17, which is located approximately 100 feet downgradient of the Zone 2 injection well transect, indicate a perchlorate concentration reduction of approximately 55 percent when compared to baseline. Nitrate and chlorate concentrations followed a similar pattern to perchlorate.
  - Zone 3 UMCf-cg – Approximately two months following injections into Zone 3 UMCf-cg, groundwater samples collected from three of the six monitoring wells located approximately 25 feet downgradient exhibited a greater than 97% reduction in perchlorate concentrations compared to baseline conditions. In addition, groundwater samples collected from two of the five monitoring wells located approximately 100 feet downgradient of the Zone 3 injection well transect (namely, LVWPS-U3-MW10A/B) exhibited a greater than 99% reduction in perchlorate, chlorate, and nitrate concentrations compared to baseline conditions, which is indicative of a well-connected, preferential flow path with the upgradient injection well transect. Lastly, groundwater samples collected from LVWPS-U2-MW12B, which is located approximately 150 feet downgradient, continued to indicate decreasing perchlorate, chlorate, and nitrate concentrations two months after injections, with concentration decreases of greater than 80 percent when compared to baseline for all three analytes. These observations farther downgradient relative to observations in the UMCf in Zones 1 and 2 are likely related to the coarser-grained aquifer matrix in Zone 3 UMCf-cg and associated with faulting in the area.
- Surface water sampling was performed prior to injection activities on October 16, 2020 and October 29, 2020. Four surface water sampling events have since been performed in December 2020 (during injections) and January, February, and March 2021 (after

injections). It should be noted that although limited surface water sampling will be periodically conducted downgradient of the study area, reducing perchlorate concentrations in surface water is not an objective of this pilot study. As of the February 2021 surface water sampling event conducted approximately two months after injections, no significant change in perchlorate concentrations in surface water has been observed. Noteworthy results related to the pilot study will be summarized in future monthly progress reports as warranted.

- Dye Study – As part of injection activities, rhodamine WT and fluorescein tracer dyes were injection into the alluvium and UMCf/UMCf-cg, respectively. A summary of the sampling program and results from the December 2020 and January 2021 sampling events was presented to NDEP on March 4, 2021. Available analytical results for dye samples collected during baseline activities, injection activities, and the December 2020 through February 2021 effectiveness monitoring events are provided Table 3. It should be noted that there were several cases where charcoal samplers showed low detections of dye, but the water samples did not show dye, indicating that either the dye peak already passed before the water sample was collected, or the levels of dye in the water are so low that they are not detectable. Results from future sampling events will be evaluated to provide additional clarification of the likely scenario. Noteworthy results during this monitoring period (February 2021 sampling event) are described below:
  - Zone 2 Alluvium:
    - During injection activities, rhodamine tracer dye was measured in all four of the Zone 2 alluvium dose response wells. Two months following injection activities, rhodamine tracer dye was still being detected in all four dose response wells.
    - As previously discussed, cross-gradient monitoring wells LVWPS-A2-MW04A/B and LVWPS-A2-MW05A/B (located approximately 17 feet from either end of the Zone 2 injection well transect) had detections of rhodamine dye with the field probe in all four of these wells during injections. Two months following injections, rhodamine dye was still detected in groundwater samples collected from one monitoring well LVWPS-A2-MW05B. However, TOC concentrations (a surrogate for the carbon substrate injected) remain elevated above baseline concentrations in all four ROI wells. This is expected based on the ability of the emulsified vegetable oil to adsorb to the subsurface in the vicinity of the injection well transect, whereas the tracer dye continues to move downgradient.
    - As expected, the high groundwater flow velocity in the alluvium resulted in many downgradient wells observing the presence of dye during active injections or within a few days after injections were completed. Approximately two months after injection activities were completed, rhodamine dye was detected in Zone 2 alluvium groundwater samples collected from eleven monitoring wells located 50 to 250 feet downgradient of the injection well transect. In addition, one month after injections rhodamine dye was detected in charcoal samples collected from monitoring wells LVWPS-MW209 and LVWPS-MW210A/B, which are located approximately 625 and 850 feet downgradient, respectively. Two months after injections, rhodamine dye continued to be detected in charcoal collected from LVWPS-MW209 and LVWPS-MW210A/B, and rhodamine dye was also detected in groundwater collected from LVWPS-MW210B for the first time.
  - Zone 1, 2, and 3 UMCf/UMCf-cg:
    - Zone 1 UMCf – Two months after injections were completed in Zone 1 UMCf, fluorescein tracer dye was no longer detected in groundwater samples collected 50 feet upgradient of the injection well transect at LVWPS-U1-MW06B indicating

downgradient migration over time. Low levels of fluorescein were detected in groundwater at upgradient well LVWPS-U1-MW07. It is expected that these concentrations will continue to decrease over time, similar to those at LVWPS-U1-MW06B. Dye continued to be detected in both charcoal and groundwater samples collected from monitoring wells LVWPS-U1-MW08A/B (located 25 feet downgradient).

- Zone 2 UMCf – Approximately two months after injections, fluorescein was detected in charcoal and/or groundwater samples collected from both dose response wells (LVWPS-U2-DR01 and LVWPS-U2-DR02) and cross-gradient monitoring well LVWPS-U2-MW05, which is located approximately 12 feet from the injection well transect. Tracer dye was no longer detected at cross-gradient monitoring well LVWPS-U2-MW04 two months after injections were performed. Rhodamine and low levels of fluorescein continued to be detected in charcoal at LVWPS-U2-MW17, which is located 100 feet downgradient. The rhodamine detection is from the injections into the Zone 2 alluvium, which likely migrated into the downgradient UMCf well due to localized downward gradients present within Zone 2. Fluorescein was also detected in charcoal samples from alluvial wells located 100 to 200 feet downgradient of the Zone 2 UMCf injection well transect, likely indicating upflux from the UMCf into the alluvium in this vicinity.
  - Zone 3 UMCf-cg – Approximately two months after injections were completed in the Zone 3 UMCf-cg, fluorescein continued to be detected in either charcoal or groundwater samples collected from all dose response wells and four of the six monitoring wells located approximately 25 feet downgradient of the Zone 3 injection well transect. In addition, fluorescein tracer dye was detected in charcoal samples collected from monitoring wells LVWPS-U3-MW10A/B and LVWPS-MW12A/B, which are located approximately 100 and 150 feet downgradient, respectively.
- Access and Permitting
    - All access agreements and permits are now in place for all projected pilot study activities.
  - Schedule and Progress Updates
    - The fourth monthly effectiveness monitoring event is scheduled for the week of April 5, 2021.
    - The second injection event into the Zone 2 alluvium is scheduled to be performed in April 2021.
  - Health and Safety
    - There were no safety incidents related to Task M19 during March 2021.
    - Safety measures continue to be implemented to minimize potential exposure to COVID-19, including the use of face coverings, gloves, and hand sanitizer, as well as protocols for monitoring temperatures, minimizing the number of people on site at one time, and evaluating tasks to increase physical distance between personnel.



## CERTIFICATION

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### Las Vegas Wash Bioremediation Pilot Study Monthly Progress Report

#### Nevada Environmental Response Trust Site (Former Tronox LLC Site) Henderson, Nevada

#### Nevada Environmental Response Trust (NERT) Representative Certification

I certify that this document and all attachments submitted to the Division were prepared at the request of, or under the direction or supervision of NERT. Based on my own involvement and/or my inquiry of the person or persons who manage the systems(s) or those directly responsible for gathering the information or preparing the document, or the immediate supervisor of such person(s), the information submitted and provided herein is, to the best of my knowledge and belief, true, accurate, and complete in all material respects.

Office of the Nevada Environmental Response Trust

Le Petomane XXVII, not individually, but solely in its representative capacity as the Nevada Environmental Response Trust Trustee

**Signature:** Jay A Steinberg Not Individually, but Solely  
as President of the Trustee, not individually,  
but solely in his representative capacity as President of the Nevada Environmental Response Trust Trustee

**Name:** Jay A. Steinberg, not individually, but solely in his representative capacity as President of the Nevada Environmental Response Trust Trustee

**Title:** Solely as President and not individually

**Company:** Le Petomane XXVII, Inc., not individually, but solely in its representative capacity as the Nevada Environmental Response Trust Trustee


**Date:** 4/26/21

## CERTIFICATION

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I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been prepared in a manner consistent with the current standards of the profession, and to the best of my knowledge, comply with all applicable federal, state, and local statutes, regulations, and ordinances. I hereby certify that all laboratory analytical data was generated by a laboratory certified by the NDEP for each constituent and media presented herein.

**Description of Services Provided:** Las Vegas Wash Bioremediation Pilot Study Monthly Progress Report, Nevada Environmental Response Trust Site, Henderson, Nevada.



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**Kyle Hansen, CEM**  
Field Operations Manager/Geologist  
Tetra Tech, Inc.

April 26, 2021

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Date

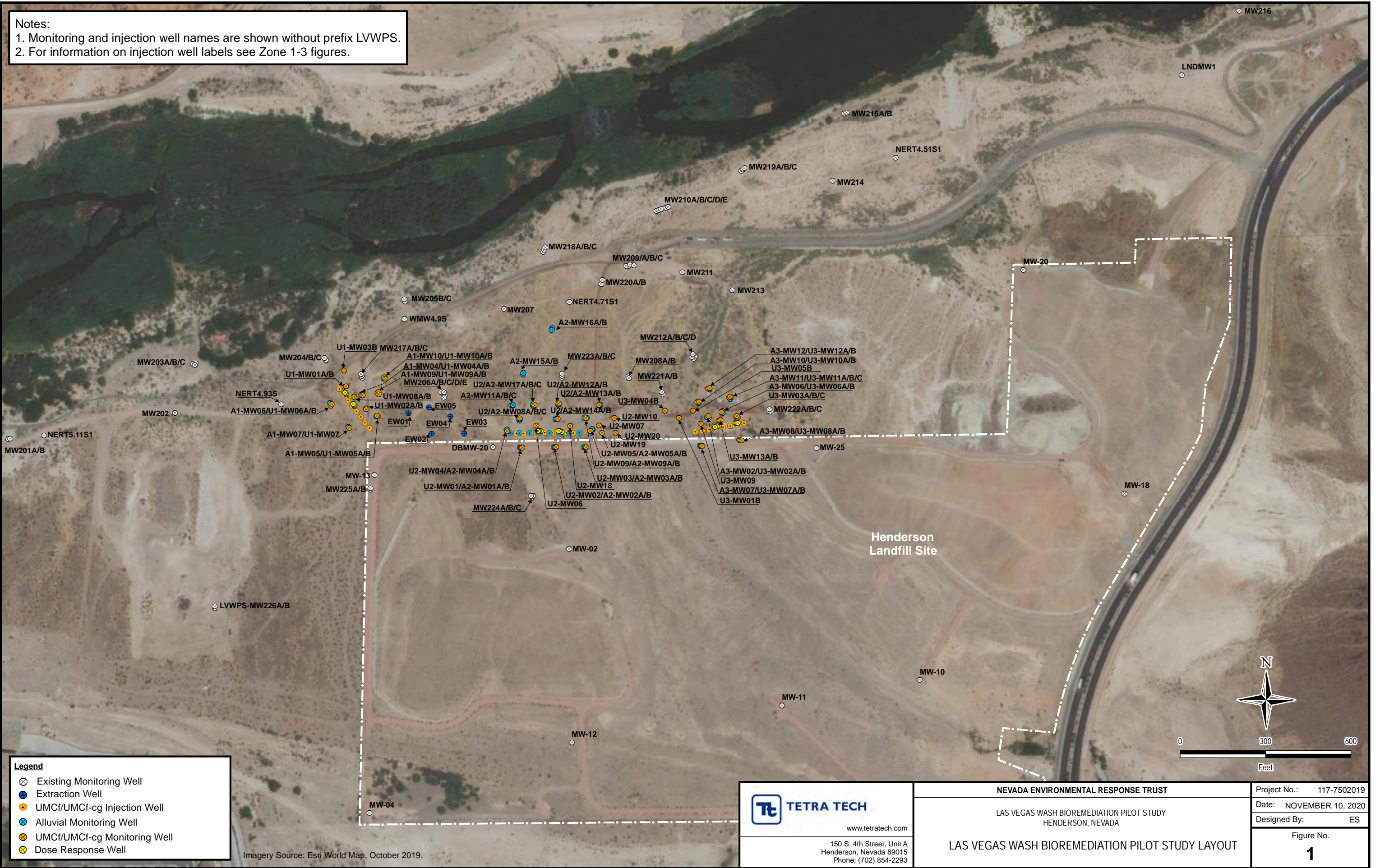
Nevada CEM Certificate Number: 2167  
Nevada CEM Expiration Date: September 18, 2022

## Figures



Notes:  
 1. Monitoring and injection well names are shown without prefix LVWPS.  
 2. For information on injection well labels see Zone 1-3 figures.

C:\USERS\ELLYN.SWENSON\LVW MONITORING WELL INSTALLATION FIGURES\B04 GROUNDWATER CONTOUR SIZE OVERVIEW\_11102020.MXD



**Legend**

- ⊗ Existing Monitoring Well
- ⊕ Extraction Well
- UMCf/UMCf-cg Injection Well
- ⊖ Alluvial Monitoring Well
- ⊙ UMCf/UMCf-cg Monitoring Well
- ⊛ Dose Response Well

Imagery Source: Esri World Map, October 2019.

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**NEVADA ENVIRONMENTAL RESPONSE TRUST**  
 LAS VEGAS WASH BIOREMEDIATION PILOT STUDY  
 HENDERSON, NEVADA  
**LAS VEGAS WASH BIOREMEDIATION PILOT STUDY LAYOUT**

Project No.: 117-7502019  
 Date: NOVEMBER 10, 2020  
 Designed By: ES  
 Figure No.  
**1**



**Legend**

- ⊕ Extraction Well
- ⊙ Dual-Nested UMCf Injection Well
- ⊗ Alluvial Monitoring Well
- ⊗ UMCf Monitoring Well
- ⊗ UMCf (Semi-consolidated) Monitoring Well
- ⊗ Dose Response Well



Note:  
Monitoring and injection well names are shown without prefix LVWPS.



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**NEVADA ENVIRONMENTAL RESPONSE TRUST**

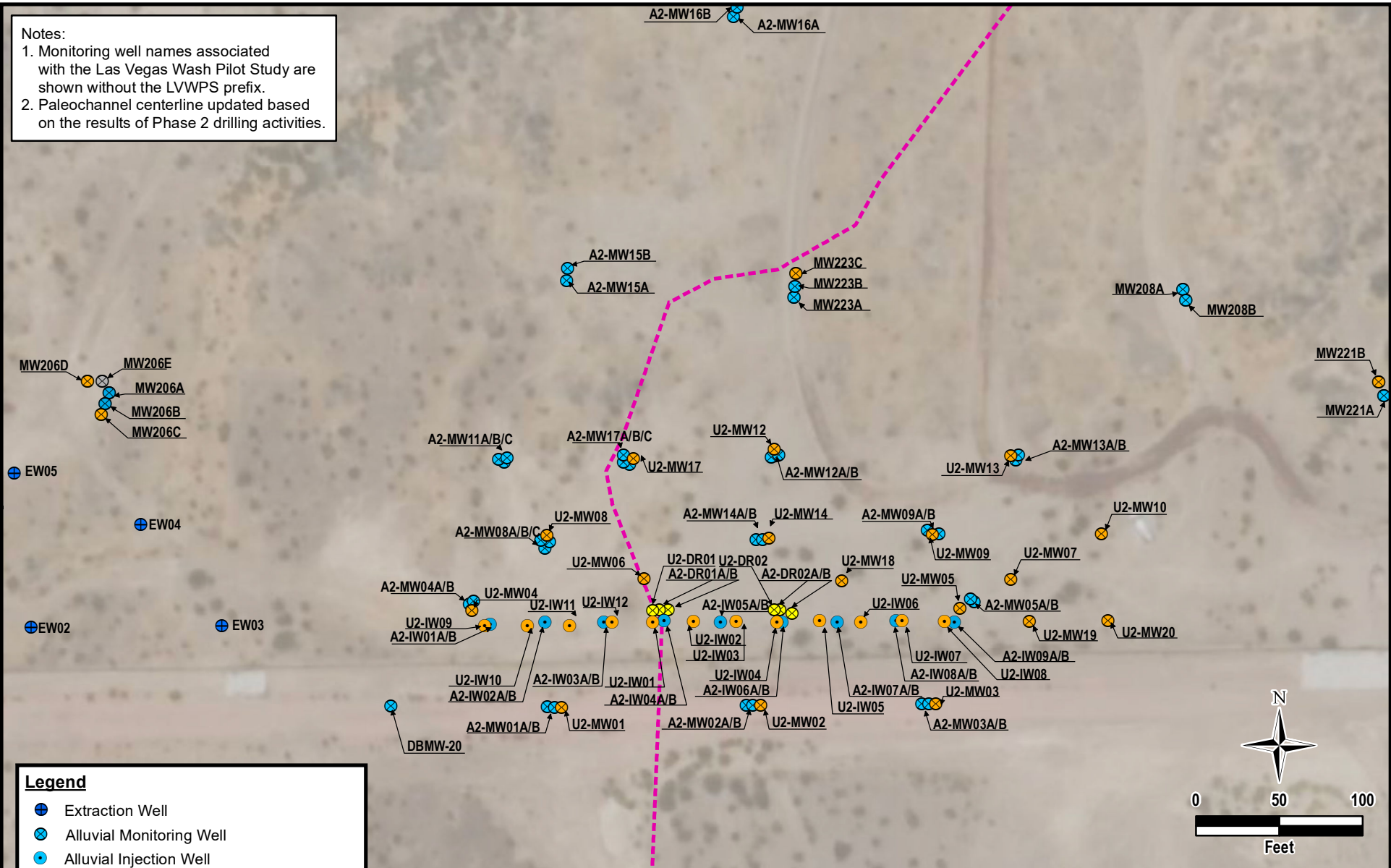
LAS VEGAS WASH BIOREMEDIATION PILOT STUDY  
HENDERSON, NEVADA

**WELL LAYOUT FOR ZONE 1 STUDY AREA**

|              |                   |
|--------------|-------------------|
| PROJECT NO.: | 117-7502019       |
| DATE:        | NOVEMBER 10, 2020 |
| DESIGNED BY: | ES                |
| Figure No.   | <b>2</b>          |

C:\Users\ELLYN.SWENSON\LVW Monitoring Well Installation\Figures\BL04 Groundwater Contours\Zone1\_UMCfContours\_1110.mxd

Notes:  
 1. Monitoring well names associated with the Las Vegas Wash Pilot Study are shown without the LVWPS prefix.  
 2. Paleochannel centerline updated based on the results of Phase 2 drilling activities.



**Legend**

- ⊕ Extraction Well
- ⊗ Alluvial Monitoring Well
- ⊙ Alluvial Injection Well
- ⊗ UMCf Monitoring Well
- ⊗ UMCf (semi-consolidated) Monitoring Well
- ⊙ UMCf Injection Well
- ⊗ Dose-Response Well
- Paleochannel Centerline

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**NEVADA ENVIRONMENTAL RESPONSE TRUST**  
 LAS VEGAS WASH BIOREMEDIATION PILOT STUDY  
 HENDERSON, NEVADA





**WELL LAYOUT FOR ZONE 2 STUDY AREA**

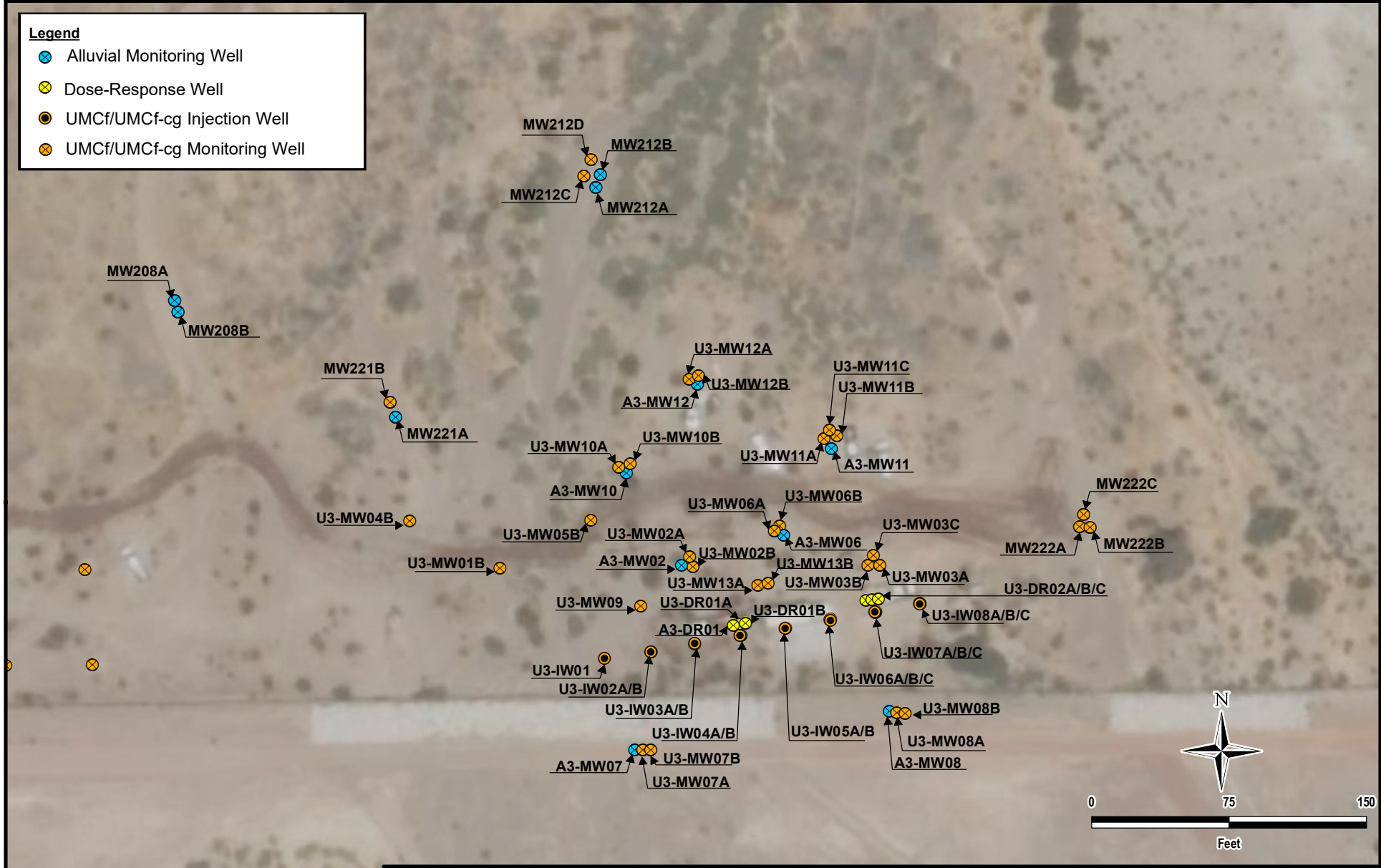
|              |               |
|--------------|---------------|
| PROJECT NO.: | 117-7502019   |
| DATE:        | APRIL 7, 2021 |
| DESIGNED BY: | ES            |
| Figure No.   | <b>3</b>      |

C:\Users\JENNIFER\JACOBS\Desktop\Zone2\_FieldSurveyLocations.mxd



**Legend**

-  Alluvial Monitoring Well
-  Dose-Response Well
-  UMCf/UMCf-cg Injection Well
-  UMCf/UMCf-cg Monitoring Well



Notes:  
 1. Monitoring and injection well names are shown without prefix LVWPS.

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LAS VEGAS WASH BIOREMEDIATION PILOT STUDY  
 HENDERSON, NEVADA

**WELL LAYOUT FOR ZONE 3 STUDY AREA**

|              |                |
|--------------|----------------|
| PROJECT NO.: | 117-7502019    |
| DATE:        | MARCH 30, 2021 |
| DESIGNED BY: | ES             |
| Figure No.   | <b>4</b>       |

## Tables

Table 1  
Phase 2 Well Construction Details  
Las Vegas Wash Bioremediation Pilot Study

| Well ID                  | Screened Lithology | Northing    | Easting   | Ground Surface Elevation | Top of Casing Elevation | Depth to Water <sup>1</sup> | Construction Type | Construction Material | Slot Size | Filter Pack Gradation | Borehole Diameter | Borehole Total Depth | Well Diameter | Nominal Screen Length | Well Total Depth | Bottom of Screen | Top of Screen |
|--------------------------|--------------------|-------------|-----------|--------------------------|-------------------------|-----------------------------|-------------------|-----------------------|-----------|-----------------------|-------------------|----------------------|---------------|-----------------------|------------------|------------------|---------------|
|                          |                    |             |           | feet amsl                | feet amsl               | feet bTOC                   |                   |                       | inches    |                       |                   |                      |               |                       |                  |                  |               |
| <b>Zone 1 Study Area</b> |                    |             |           |                          |                         |                             |                   |                       |           |                       |                   |                      |               |                       |                  |                  |               |
| LWVPS-A1-DR01            | Alluvium           | 26735024.80 | 838207.19 | 1524.18                  | 1523.98                 | 29.38                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 83.5                 | 2             | 20                    | 83               | 82.5             | 62.8          |
| LWVPS-A1-DR02            | Alluvium           | 26734983.35 | 838236.38 | 1524.57                  | 1524.20                 | 29.54                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 79.0                 | 2             | 20                    | 78.5             | 78               | 58.3          |
| LWVPS-A1-MW04            | Alluvium           | 26735022.91 | 838259.32 | 1529.32                  | 1529.30                 | 34.87                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 92.5                 | 2             | 20                    | 89.5             | 89               | 69.3          |
| LWVPS-A1-MW05            | Alluvium           | 26734946.32 | 838312.17 | 1530.88                  | 1530.55                 | 36.10                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 95.0                 | 2             | 20                    | 89.5             | 89               | 69.3          |
| LWVPS-A1-MW06            | Alluvium           | 26734994.26 | 838149.70 | 1523.90                  | 1523.76                 | 28.80                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 85.0                 | 2             | 20                    | 79.5             | 79               | 59.3          |
| LWVPS-A1-MW07            | Alluvium           | 26734911.17 | 838213.86 | 1525.06                  | 1524.99                 | 30.15                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 80.0                 | 2             | 20                    | 78.5             | 78               | 58.3          |
| LWVPS-A1-MW09            | Alluvium           | 26735029.71 | 838317.19 | 1529.61                  | 1529.43                 | 35.62                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 107.0                | 2             | 20                    | 106              | 105.5            | 85.8          |
| LWVPS-A1-MW10            | Alluvium           | 26735080.18 | 838337.96 | 1527.26                  | 1527.07                 | 33.55                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 91.5                 | 2             | 20                    | 91               | 90.5             | 70.8          |
| LWVPS-U1-DR01A           | UMCf               | 26735027.64 | 838205.37 | 1524.09                  | 1524.00                 | 29.15                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 116.5                | 2             | 25                    | 115.5            | 115              | 90.3          |
| LWVPS-U1-DR01B           | UMCf               | 26735030.53 | 838203.16 | 1524.07                  | 1523.94                 | 28.89                       | Single            | Schedule 80 PVC       | 0.010     | #2/16                 | 6                 | 152.5                | 2             | 30                    | 151.5            | 151              | 121.3         |
| LWVPS-U1-DR02A           | UMCf               | 26734986.83 | 838234.68 | 1524.02                  | 1523.92                 | 29.15                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 117.5                | 2             | 30                    | 117              | 116.5            | 86.8          |
| LWVPS-U1-DR02B           | UMCf               | 26734991.38 | 838232.08 | 1523.92                  | 1523.71                 | 28.63                       | Single            | Schedule 80 PVC       | 0.010     | #2/16                 | 6                 | 153.5                | 2             | 30                    | 153              | 152.5            | 122.8         |
| LWVPS-U1-IW01A           | UMCf               | 26735044.59 | 838183.29 | 1523.67                  | 1523.72                 | 28.91                       | Dual-Nested       | Schedule 40 PVC       | 0.010     | #2/16                 | 10                | 155.0                | 2             | 25                    | 114              | 113.5            | 88.8          |
| LWVPS-U1-IW01B           | UMCf               | 26735044.44 | 838182.98 | 1523.67                  | 1523.65                 | 28.76                       |                   | Schedule 40 PVC       | 0.010     | #2/16                 |                   |                      | 2             | 25                    | 145.5            | 145              | 120.3         |
| LWVPS-U1-IW02A           | UMCf               | 26735024.11 | 838198.37 | 1524.46                  | 1524.39                 | 29.41                       | Dual-Nested       | Schedule 40 PVC       | 0.010     | #2/16                 | 10                | 155.0                | 2             | 25                    | 115.5            | 115              | 90.3          |
| LWVPS-U1-IW02B           | UMCf               | 26735023.96 | 838198.03 | 1524.46                  | 1524.43                 | 29.42                       |                   | Schedule 40 PVC       | 0.010     | #2/16                 |                   |                      | 2             | 30                    | 151.5            | 151              | 121.3         |
| LWVPS-U1-IW03A           | UMCf               | 26735004.66 | 838213.18 | 1523.88                  | 1523.55                 | 28.59                       | Dual-Nested       | Schedule 40 PVC       | 0.010     | #2/16                 | 10                | 155.0                | 2             | 25                    | 119              | 118.5            | 93.8          |
| LWVPS-U1-IW03B           | UMCf               | 26735004.34 | 838213.12 | 1523.88                  | 1523.53                 | 28.40                       |                   | Schedule 40 PVC       | 0.010     | #2/16                 |                   |                      | 2             | 25                    | 150.5            | 150              | 125.3         |
| LWVPS-U1-IW04A           | UMCf               | 26734984.96 | 838228.48 | 1523.90                  | 1523.65                 | 28.89                       | Dual-Nested       | Schedule 40 PVC       | 0.010     | #2/16                 | 10                | 155.0                | 2             | 30                    | 117              | 116.5            | 86.8          |
| LWVPS-U1-IW04B           | UMCf               | 26734984.86 | 838228.18 | 1523.90                  | 1523.59                 | 28.49                       |                   | Schedule 40 PVC       | 0.010     | #2/16                 |                   |                      | 2             | 30                    | 153              | 152.5            | 122.8         |
| LWVPS-U1-IW05A           | UMCf               | 26734965.08 | 838243.71 | 1524.36                  | 1524.25                 | 29.45                       | Dual-Nested       | Schedule 40 PVC       | 0.010     | #2/16                 | 10                | 155.0                | 2             | 25                    | 114              | 113.5            | 88.8          |
| LWVPS-U1-IW05B           | UMCf               | 26734965.09 | 838243.38 | 1524.36                  | 1524.23                 | 29.21                       |                   | Schedule 40 PVC       | 0.010     | #2/16                 |                   |                      | 2             | 25                    | 145.5            | 145              | 120.3         |
| LWVPS-U1-IW06A           | UMCf               | 26734945.21 | 838258.76 | 1524.91                  | 1525.12                 | 30.40                       | Dual-Nested       | Schedule 40 PVC       | 0.010     | #2/16                 | 10                | 157.5                | 2             | 25                    | 113              | 112.5            | 87.8          |
| LWVPS-U1-IW06B           | UMCf               | 26734945.02 | 838258.36 | 1524.91                  | 1525.07                 | 30.06                       |                   | Schedule 40 PVC       | 0.010     | #2/16                 |                   |                      | 2             | 30                    | 149.5            | 149              | 119.3         |
| LWVPS-U1-IW07A           | UMCf               | 26734925.20 | 838273.28 | 1529.08                  | 1528.30                 | 33.50                       | Dual-Nested       | Schedule 40 PVC       | 0.010     | #2/16                 | 10                | 160.0                | 2             | 25                    | 121              | 120.5            | 95.8          |
| LWVPS-U1-IW07B           | UMCf               | 26734925.28 | 838272.95 | 1529.08                  | 1528.66                 | 33.46                       |                   | Schedule 40 PVC       | 0.010     | #2/16                 |                   |                      | 2             | 25                    | 152.5            | 152              | 127.3         |
| LWVPS-U1-IW08A           | UMCf               | 26734905.81 | 838289.00 | 1529.69                  | 1530.71                 | 35.85                       | Dual-Nested       | Schedule 40 PVC       | 0.010     | #2/16                 | 10                | 170.0                | 2             | 30                    | 125.5            | 125              | 95.3          |
| LWVPS-U1-IW08B           | UMCf               | 26734905.38 | 838288.84 | 1529.69                  | 1530.83                 | 35.70                       |                   | Schedule 40 PVC       | 0.010     | #2/16                 |                   |                      | 2             | 25                    | 157              | 156.5            | 131.8         |
| LWVPS-U1-MW01A           | UMCf               | 26735054.25 | 838206.27 | 1526.30                  | 1526.15                 | 31.60                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 116.0                | 2             | 25                    | 115.5            | 115              | 90.3          |
| LWVPS-U1-MW01B           | UMCf               | 26735052.48 | 838200.84 | 1525.78                  | 1525.85                 | 30.95                       | Single            | Schedule 80 PVC       | 0.010     | #2/16                 | 8                 | 157.5                | 4             | 20                    | 153.5            | 153              | 133.5         |
| LWVPS-U1-MW02A           | UMCf               | 26734972.90 | 838277.36 | 1529.90                  | 1529.61                 | 35.00                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 120.0                | 2             | 25                    | 119.5            | 119              | 94.3          |
| LWVPS-U1-MW02B           | UMCf               | 26734976.53 | 838276.51 | 1529.75                  | 1529.63                 | 34.81                       | Single            | Schedule 80 PVC       | 0.010     | #2/16                 | 8                 | 165.0                | 4             | 25                    | 162              | 161.5            | 136.9         |
| LWVPS-U1-MW03B           | UMCf               | 26735108.31 | 838199.29 | 1527.13                  | 1527.06                 | 32.32                       | Single            | Schedule 80 PVC       | 0.010     | #2/16                 | 8                 | 165.0                | 4             | 20                    | 154.5            | 154              | 134.5         |
| LWVPS-U1-MW04A           | UMCf               | 26735021.39 | 838264.46 | 1529.55                  | 1529.35                 | 34.82                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 126.5                | 2             | 25                    | 124.5            | 124              | 99.3          |
| LWVPS-U1-MW04B           | UMCf               | 26735026.82 | 838262.94 | 1529.47                  | 1529.33                 | 34.59                       | Single            | Schedule 80 PVC       | 0.010     | #2/16                 | 8                 | 175.0                | 4             | 25                    | 165              | 164.5            | 139.9         |
| LWVPS-U1-MW05A           | UMCf               | 26734947.22 | 838319.22 | 1530.32                  | 1529.93                 | 35.52                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 122.0                | 2             | 25                    | 121              | 120.5            | 95.8          |
| LWVPS-U1-MW05B           | UMCf               | 26734951.22 | 838315.42 | 1530.45                  | 1530.30                 | 35.40                       | Single            | Schedule 80 PVC       | 0.010     | #2/16                 | 8                 | 172.5                | 4             | 25                    | 162              | 161.5            | 136.9         |
| LWVPS-U1-MW06A           | UMCf               | 26734986.21 | 838153.16 | 1523.81                  | 1523.70                 | 28.56                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 106.5                | 2             | 20                    | 105.5            | 105              | 85.3          |
| LWVPS-U1-MW06B           | UMCf               | 26734991.82 | 838156.18 | 1524.09                  | 1523.73                 | 28.51                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 143.0                | 2             | 25                    | 134.5            | 134              | 109.3         |
| LWVPS-U1-MW07            | UMCf               | 26734907.19 | 838218.01 | 1525.17                  | 1524.96                 | 30.16                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 140.0                | 2             | 25                    | 111.5            | 111              | 86.3          |
| LWVPS-U1-MW08A           | UMCf               | 26735014.52 | 838236.36 | 1524.11                  | 1523.97                 | 29.20                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 120.0                | 2             | 25                    | 119              | 118.5            | 93.8          |
| LWVPS-U1-MW08B           | UMCf               | 26735017.13 | 838233.33 | 1523.84                  | 1523.74                 | 28.75                       | Single            | Schedule 80 PVC       | 0.010     | #2/16                 | 6                 | 151.0                | 2             | 25                    | 150.5            | 150              | 125.3         |
| LWVPS-U1-MW09A           | UMCf               | 26735032.96 | 838320.87 | 1529.36                  | 1529.11                 | 35.12                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 126.0                | 2             | 10                    | 125.5            | 125              | 115.3         |
| LWVPS-U1-MW09B           | UMCf               | 26735025.78 | 838320.98 | 1529.37                  | 1529.08                 | 34.62                       | Single            | Schedule 80 PVC       | 0.010     | #2/16                 | 6                 | 156.0                | 2             | 25                    | 155.5            | 155              | 130.3         |
| LWVPS-U1-MW10A           | UMCf               | 26735085.42 | 838340.44 | 1527.11                  | 1527.02                 | 33.20                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 125.0                | 2             | 25                    | 124.5            | 124              | 99.3          |
| LWVPS-U1-MW10B           | UMCf               | 26735081.08 | 838344.98 | 1527.40                  | 1527.21                 | 32.98                       | Single            | Schedule 80 PVC       | 0.010     | #2/16                 | 6                 | 160.0                | 2             | 25                    | 155.5            | 155              | 130.3         |
| <b>Zone 2 Study Area</b> |                    |             |           |                          |                         |                             |                   |                       |           |                       |                   |                      |               |                       |                  |                  |               |
| LWVPS-A2-DR01A           | Alluvium           | 26734896.39 | 838889.65 | 1524.78                  | 1524.77                 | 31.90                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 72.0                 | 2             | 35                    | 71.5             | 71               | 36.3          |
| LWVPS-A2-DR01B           | Alluvium           | 26734896.42 | 838884.23 | 1524.80                  | 1524.57                 | 31.75                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 113.0                | 2             | 35                    | 112.5            | 112              | 77.3          |
| LWVPS-A2-DR02A           | Alluvium           | 26734894.17 | 838964.08 | 1524.91                  | 1524.65                 | 32.00                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 52.5                 | 2             | 15                    | 52               | 51.5             | 36.8          |
| LWVPS-A2-DR02B           | Alluvium           | 26734896.56 | 838956.61 | 1524.91                  | 1524.90                 | 32.09                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 78.5                 | 2             | 20                    | 78               | 77.5             | 57.8          |
| LWVPS-A2-IW01A           | Alluvium           | 26734887.97 | 838782.98 | 1530.17                  | 1529.79                 | 36.44                       | Dual-Nested       | Schedule 40 PVC       | 0.020     | #3                    | 10                | 105.0                | 2             | 25                    | 66.5             | 66               | 41.3          |

**Table 1**  
**Phase 2 Well Construction Details**  
 Las Vegas Wash Bioremediation Pilot Study

| Well ID        | Screened Lithology | Northing    | Easting   | Ground Surface Elevation | Top of Casing Elevation | Depth to Water <sup>1</sup> | Construction Type | Construction Material | Slot Size | Filter Pack Gradation | Borehole Diameter | Borehole Total Depth | Well Diameter | Nominal Screen Length | Well Total Depth | Bottom of Screen | Top of Screen |
|----------------|--------------------|-------------|-----------|--------------------------|-------------------------|-----------------------------|-------------------|-----------------------|-----------|-----------------------|-------------------|----------------------|---------------|-----------------------|------------------|------------------|---------------|
|                |                    |             |           | feet amsl                | feet amsl               | feet bTOC                   |                   |                       | inches    |                       | inches            | feet bgs             |               | feet                  | feet bgs         | feet bgs         |               |
| LWVPS-A2-IW01B | Alluvium           | 26734888.00 | 838782.65 | 1530.17                  | 1529.78                 | 36.64                       | Dual-Nested       | Schedule 40 PVC       | 0.020     | #3                    | 10                | 100.0                | 2             | 25                    | 98               | 97.5             | 72.8          |
| LWVPS-A2-IW02A | Alluvium           | 26734888.97 | 838815.84 | 1529.49                  | 1529.01                 | 35.88                       | Dual-Nested       | Schedule 40 PVC       | 0.020     | #3                    | 10                | 110.0                | 2             | 30                    | 69               | 68.5             | 38.8          |
| LWVPS-A2-IW02B | Alluvium           | 26734889.05 | 838815.49 | 1529.49                  | 1529.03                 | 36.22                       | Dual-Nested       | Schedule 40 PVC       | 0.020     | #3                    | 10                | 115.0                | 2             | 25                    | 100.5            | 100              | 75.3          |
| LWVPS-A2-IW03A | Alluvium           | 26734888.88 | 838851.00 | 1527.28                  | 1526.93                 | 33.94                       | Dual-Nested       | Schedule 40 PVC       | 0.020     | #3                    | 10                | 115.0                | 2             | 30                    | 67.5             | 67               | 37.3          |
| LWVPS-A2-IW03B | Alluvium           | 26734889.18 | 838850.83 | 1527.28                  | 1526.93                 | 33.94                       | Dual-Nested       | Schedule 40 PVC       | 0.020     | #3                    | 10                | 115.0                | 2             | 30                    | 104              | 103.5            | 73.8          |
| LWVPS-A2-IW04A | Alluvium           | 26734889.81 | 838887.08 | 1524.70                  | 1524.57                 | 31.70                       | Dual-Nested       | Schedule 40 PVC       | 0.020     | #3                    | 10                | 115.0                | 2             | 35                    | 71.5             | 71               | 36.3          |
| LWVPS-A2-IW04B | Alluvium           | 26734890.02 | 838886.74 | 1524.70                  | 1524.61                 | 31.80                       | Dual-Nested       | Schedule 40 PVC       | 0.020     | #3                    | 10                | 115.0                | 2             | 35                    | 112.5            | 112              | 77.3          |
| LWVPS-A2-IW05A | Alluvium           | 26734889.15 | 838921.04 | 1524.89                  | 1524.86                 | 32.05                       | Dual-Nested       | Schedule 40 PVC       | 0.020     | #3                    | 10                | 105.0                | 2             | 25                    | 63               | 62.5             | 37.8          |
| LWVPS-A2-IW05B | Alluvium           | 26734889.30 | 838920.74 | 1524.89                  | 1524.83                 | 31.94                       | Dual-Nested       | Schedule 40 PVC       | 0.020     | #3                    | 10                | 105.0                | 2             | 25                    | 94               | 93.5             | 68.8          |
| LWVPS-A2-IW06A | Alluvium           | 26734888.81 | 838957.92 | 1524.94                  | 1524.91                 | 32.20                       | Dual-Nested       | Schedule 40 PVC       | 0.020     | #3                    | 10                | 80.0                 | 2             | 15                    | 52               | 51.5             | 36.8          |
| LWVPS-A2-IW06B | Alluvium           | 26734888.84 | 838957.55 | 1524.94                  | 1524.89                 | 32.10                       | Dual-Nested       | Schedule 40 PVC       | 0.020     | #3                    | 10                | 80.0                 | 2             | 20                    | 78               | 77.5             | 57.8          |
| LWVPS-A2-IW07A | Alluvium           | 26734889.27 | 838991.11 | 1524.39                  | 1524.31                 | 31.57                       | Dual-Nested       | Schedule 40 PVC       | 0.020     | #3                    | 10                | 85.0                 | 2             | 15                    | 50.5             | 50               | 35.3          |
| LWVPS-A2-IW07B | Alluvium           | 26734889.32 | 838990.81 | 1524.39                  | 1524.34                 | 31.57                       | Dual-Nested       | Schedule 40 PVC       | 0.020     | #3                    | 10                | 85.0                 | 2             | 20                    | 76.5             | 76               | 56.3          |
| LWVPS-A2-IW08A | Alluvium           | 26734889.80 | 839026.35 | 1524.85                  | 1524.74                 | 32.10                       | Dual-Nested       | Schedule 40 PVC       | 0.020     | #3                    | 10                | 90.0                 | 2             | 20                    | 56               | 55.5             | 35.8          |
| LWVPS-A2-IW08B | Alluvium           | 26734889.91 | 839026.04 | 1524.85                  | 1524.80                 | 32.15                       | Dual-Nested       | Schedule 40 PVC       | 0.020     | #3                    | 10                | 90.0                 | 2             | 20                    | 82               | 81.5             | 61.8          |
| LWVPS-A2-IW09A | Alluvium           | 26734889.16 | 839061.18 | 1525.33                  | 1525.37                 | 32.68                       | Dual-Nested       | Schedule 40 PVC       | 0.020     | #3                    | 10                | 85.0                 | 2             | 15                    | 52               | 51.5             | 36.8          |
| LWVPS-A2-IW09B | Alluvium           | 26734889.14 | 839060.89 | 1525.33                  | 1525.37                 | 32.69                       | Dual-Nested       | Schedule 40 PVC       | 0.020     | #3                    | 10                | 85.0                 | 2             | 15                    | 74               | 73.5             | 58.8          |
| LWVPS-A2-MW01A | Alluvium           | 26734838.04 | 838817.08 | 1526.61                  | 1526.29                 | 33.07                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 61                   | 2             | 20                    | 60.5             | 60               | 40.3          |
| LWVPS-A2-MW01B | Alluvium           | 26734837.91 | 838821.64 | 1526.61                  | 1526.16                 | 33.09                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 91                   | 2             | 20                    | 90.5             | 90               | 70.3          |
| LWVPS-A2-MW02A | Alluvium           | 26734839.33 | 838936.61 | 1527.83                  | 1527.49                 | 34.66                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 61                   | 2             | 20                    | 60.5             | 60               | 40.3          |
| LWVPS-A2-MW02B | Alluvium           | 26734839.33 | 838940.48 | 1527.88                  | 1527.62                 | 34.55                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 91                   | 2             | 20                    | 90.5             | 90               | 70.3          |
| LWVPS-A2-MW03A | Alluvium           | 26734839.87 | 839041.77 | 1528.00                  | 1527.72                 | 34.95                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 60                   | 2             | 20                    | 58.5             | 58               | 38.3          |
| LWVPS-A2-MW03B | Alluvium           | 26734839.96 | 839046.05 | 1528.02                  | 1527.68                 | 34.90                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 85                   | 2             | 20                    | 84.5             | 84               | 64.3          |
| LWVPS-A2-MW04A | Alluvium           | 26734900.17 | 838770.49 | 1527.54                  | 1527.55                 | 34.24                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 64.5                 | 2             | 20                    | 64               | 63.5             | 43.8          |
| LWVPS-A2-MW04B | Alluvium           | 26734901.60 | 838772.88 | 1528.17                  | 1527.86                 | 34.91                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 96.0                 | 2             | 20                    | 95.5             | 95               | 75.3          |
| LWVPS-A2-MW05A | Alluvium           | 26734901.04 | 839073.31 | 1524.49                  | 1524.18                 | 31.50                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 53.0                 | 2             | 15                    | 52               | 51.5             | 36.8          |
| LWVPS-A2-MW05B | Alluvium           | 26734903.12 | 839070.97 | 1524.49                  | 1524.29                 | 31.68                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 75.0                 | 2             | 15                    | 74               | 73.5             | 58.8          |
| LWVPS-A2-MW08A | Alluvium           | 26734933.48 | 838815.75 | 1529.44                  | 1529.35                 | 36.36                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 56.0                 | 2             | 15                    | 55.5             | 55               | 40.3          |
| LWVPS-A2-MW08B | Alluvium           | 26734937.17 | 838818.51 | 1529.20                  | 1528.84                 | 35.90                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 81.3                 | 2             | 20                    | 80               | 79.5             | 59.8          |
| LWVPS-A2-MW08C | Alluvium           | 26734938.06 | 838813.32 | 1529.24                  | 1528.93                 | 36.25                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 110.0                | 2             | 20                    | 106.5            | 106              | 86.3          |
| LWVPS-A2-MW09A | Alluvium           | 26734942.12 | 839052.25 | 1523.77                  | 1523.56                 | 30.91                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 56.0                 | 2             | 20                    | 55               | 54.5             | 34.8          |
| LWVPS-A2-MW09B | Alluvium           | 26734943.95 | 839045.22 | 1523.85                  | 1523.67                 | 31.31                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 85.0                 | 2             | 20                    | 79               | 78.5             | 58.8          |
| LWVPS-A2-MW11A | Alluvium           | 26734984.76 | 838791.31 | 1528.05                  | 1528.00                 | 35.10                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 61.5                 | 2             | 20                    | 60.5             | 60               | 40.3          |
| LWVPS-A2-MW11B | Alluvium           | 26734986.77 | 838787.83 | 1528.01                  | 1527.79                 | 35.06                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 86.0                 | 2             | 20                    | 85.5             | 85               | 65.3          |
| LWVPS-A2-MW11C | Alluvium           | 26734987.49 | 838793.00 | 1528.09                  | 1527.81                 | 35.36                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 114.0                | 2             | 20                    | 110.5            | 110              | 90.3          |
| LWVPS-A2-MW12A | Alluvium           | 26734988.20 | 838951.66 | 1523.08                  | 1522.85                 | 30.24                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 46.0                 | 2             | 10                    | 45               | 44.5             | 34.9          |
| LWVPS-A2-MW12B | Alluvium           | 26734989.46 | 838955.96 | 1523.15                  | 1522.94                 | 30.48                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 75.0                 | 2             | 20                    | 69.5             | 69               | 49.3          |
| LWVPS-A2-MW13A | Alluvium           | 26734986.06 | 839098.37 | 1523.62                  | 1523.23                 | 31.00                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 62.0                 | 2             | 20                    | 61.5             | 61               | 41.3          |
| LWVPS-A2-MW13B | Alluvium           | 26734989.09 | 839099.95 | 1523.60                  | 1523.40                 | 31.44                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 90.0                 | 2             | 20                    | 86.6             | 86.1             | 66.4          |
| LWVPS-A2-MW14A | Alluvium           | 26734938.41 | 838942.48 | 1524.15                  | 1523.84                 | 31.16                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 51.5                 | 2             | 15                    | 51               | 50.5             | 35.8          |
| LWVPS-A2-MW14B | Alluvium           | 26734938.74 | 838946.20 | 1524.51                  | 1524.32                 | 31.70                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 80.0                 | 2             | 20                    | 75               | 74.5             | 54.8          |
| LWVPS-A2-MW15A | Alluvium           | 26735094.04 | 838828.85 | 1521.20                  | 1520.95                 | 28.70                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 61.0                 | 2             | 20                    | 60               | 59.5             | 39.8          |



Table 1  
Phase 2 Well Construction Details  
Las Vegas Wash Bioremediation Pilot Study

| Well ID                  | Screened Lithology | Northing    | Easting   | Ground Surface Elevation | Top of Casing Elevation | Depth to Water <sup>1</sup> | Construction Type | Construction Material | Slot Size | Filter Pack Gradation | Borehole Diameter | Borehole Total Depth | Well Diameter | Nominal Screen Length | Well Total Depth | Bottom of Screen | Top of Screen |
|--------------------------|--------------------|-------------|-----------|--------------------------|-------------------------|-----------------------------|-------------------|-----------------------|-----------|-----------------------|-------------------|----------------------|---------------|-----------------------|------------------|------------------|---------------|
|                          |                    |             |           | feet amsl                | feet amsl               | feet bTOC                   |                   |                       | inches    |                       |                   |                      |               |                       |                  |                  |               |
| LWVPS-A2-MW15B           | Alluvium           | 26735101.30 | 838829.49 | 1521.68                  | 1521.37                 | 29.34                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 110.0                | 2             | 20                    | 90.5             | 90               | 70.3          |
| LWVPS-A2-MW16A           | Alluvium           | 26735252.27 | 838928.69 | 1520.47                  | 1520.73                 | 29.34                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 56.0                 | 2             | 20                    | 56               | 55.5             | 35.8          |
| LWVPS-A2-MW16B           | Alluvium           | 26735258.00 | 838931.03 | 1520.25                  | 1520.51                 | 29.21                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 90.0                 | 2             | 20                    | 80.5             | 80               | 60.3          |
| LWVPS-A2-MW17A           | Alluvium           | 26734983.57 | 838866.47 | 1526.43                  | 1526.35                 | 33.65                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 61.5                 | 2             | 20                    | 60.5             | 60               | 40.3          |
| LWVPS-A2-MW17B           | Alluvium           | 26734985.17 | 838863.03 | 1526.25                  | 1526.26                 | 33.65                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 86.0                 | 2             | 20                    | 85.5             | 85               | 65.3          |
| LWVPS-A2-MW17C           | Alluvium           | 26734989.37 | 838862.92 | 1526.03                  | 1525.81                 | 33.86                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 115.5                | 2             | 20                    | 110.5            | 110              | 90.3          |
| LWVPS-U2-DR01            | UMCf               | 26734896.14 | 838880.43 | 1524.84                  | 1524.74                 | 32.06                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 142.0                | 2             | 20                    | 141.5            | 141              | 121.3         |
| LWVPS-U2-DR02            | UMCf               | 26734896.48 | 838953.23 | 1524.85                  | 1524.76                 | 32.25                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 109.5                | 2             | 25                    | 109              | 108.5            | 83.8          |
| LWVPS-U2-IW01            | UMCf               | 26734889.36 | 838880.42 | 1524.71                  | 1524.63                 | 32.09                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 155.0                | 2             | 20                    | 141.5            | 141              | 121.2         |
| LWVPS-U2-IW02            | UMCf               | 26734889.50 | 838905.01 | 1525.09                  | 1525.07                 | 32.55                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 145.0                | 2             | 25                    | 141.5            | 141              | 116.2         |
| LWVPS-U2-IW03            | UMCf               | 26734889.40 | 838930.38 | 1524.99                  | 1524.91                 | 32.25                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 125.0                | 2             | 25                    | 124.5            | 124              | 99.2          |
| LWVPS-U2-IW04            | UMCf               | 26734888.87 | 838954.79 | 1524.89                  | 1524.84                 | 32.10                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 145.0                | 2             | 25                    | 109              | 108.5            | 83.7          |
| LWVPS-U2-IW05            | UMCf               | 26734889.80 | 838980.34 | 1524.54                  | 1524.54                 | 32.80                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 120.0                | 2             | 30                    | 118              | 117.5            | 87.7          |
| LWVPS-U2-IW06            | UMCf               | 26734889.08 | 839005.30 | 1524.82                  | 1524.70                 | 32.52                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 115.0                | 2             | 15                    | 104.5            | 104              | 89.2          |
| LWVPS-U2-IW07            | UMCf               | 26734889.76 | 839029.85 | 1524.95                  | 1524.98                 | 32.40                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 115.0                | 2             | 15                    | 106.5            | 106              | 91.2          |
| LWVPS-U2-IW08            | UMCf               | 26734889.41 | 839055.50 | 1525.34                  | 1525.29                 | 32.72                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 115.0                | 2             | 25                    | 109              | 108.5            | 83.7          |
| LWVPS-U2-IW09            | UMCf               | 26734886.72 | 838779.73 | 1529.53                  | 1529.26                 | 36.22                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 130.0                | 2             | 25                    | 128.5            | 128              | 103.2         |
| LWVPS-U2-IW10            | UMCf               | 26734887.07 | 838805.16 | 1529.51                  | 1529.59                 | 36.72                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 135.0                | 2             | 20                    | 129.5            | 129              | 109.3         |
| LWVPS-U2-IW11            | UMCf               | 26734886.91 | 838830.51 | 1528.30                  | 1528.02                 | 35.26                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 135.0                | 2             | 25                    | 134.2            | 133.7            | 108.9         |
| LWVPS-U2-IW12            | UMCf               | 26734889.28 | 838856.13 | 1526.66                  | 1526.14                 | 33.53                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 139.0                | 2             | 25                    | 138              | 137.5            | 112.8         |
| LWVPS-U2-MW01            | UMCf               | 26734837.77 | 838825.83 | 1526.69                  | 1526.40                 | 33.42                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 125                  | 2             | 20                    | 117.5            | 117              | 97.3          |
| LWVPS-U2-MW02            | UMCf               | 26734839.36 | 838945.11 | 1527.94                  | 1527.68                 | 35.20                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 126                  | 2             | 25                    | 125.5            | 125              | 100.3         |
| LWVPS-U2-MW03            | UMCf               | 26734839.69 | 839050.30 | 1527.99                  | 1527.66                 | 34.91                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 115                  | 2             | 20                    | 110.5            | 110              | 90.3          |
| LWVPS-U2-MW04            | UMCf               | 26734895.79 | 838771.90 | 1528.66                  | 1528.35                 | 35.35                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 130.0                | 2             | 25                    | 128.5            | 128              | 103.2         |
| LWVPS-U2-MW05            | UMCf               | 26734897.24 | 839064.72 | 1524.94                  | 1524.76                 | 32.20                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 110.0                | 2             | 25                    | 108.5            | 108              | 83.2          |
| LWVPS-U2-MW06            | UMCf               | 26734914.99 | 838875.13 | 1525.48                  | 1524.89                 | 32.40                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 142.5                | 2             | 20                    | 142              | 141.5            | 121.8         |
| LWVPS-U2-MW07            | UMCf               | 26734914.74 | 839095.07 | 1524.53                  | 1524.37                 | 31.82                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 120.0                | 2             | 20                    | 108.5            | 108              | 88.2          |
| LWVPS-U2-MW08            | UMCf               | 26734941.29 | 838816.82 | 1529.11                  | 1528.75                 | 36.21                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 135.0                | 2             | 20                    | 133.5            | 133              | 113.2         |
| LWVPS-U2-MW09            | UMCf               | 26734941.56 | 839048.32 | 1523.83                  | 1523.62                 | 31.61                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 115.0                | 2             | 20                    | 105.2            | 104.7            | 84.9          |
| LWVPS-U2-MW10            | UMCf               | 26734942.01 | 839149.60 | 1525.67                  | 1525.57                 | 34.12                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 120.0                | 2             | 20                    | 110.5            | 110              | 90.2          |
| LWVPS-U2-MW12            | UMCf               | 26734992.74 | 838953.32 | 1523.09                  | 1522.89                 | 31.20                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 110.0                | 2             | 25                    | 108.5            | 108              | 83.2          |
| LWVPS-U2-MW13            | UMCf               | 26734988.97 | 839095.12 | 1523.52                  | 1523.42                 | 31.89                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 120.0                | 2             | 15                    | 110              | 109.5            | 94.7          |
| LWVPS-U2-MW14            | UMCf               | 26734939.25 | 838950.26 | 1524.77                  | 1524.30                 | 32.70                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 110.0                | 2             | 25                    | 108.5            | 108              | 83.2          |
| LWVPS-U2-MW17            | UMCf               | 26734987.32 | 838868.87 | 1526.17                  | 1525.88                 | 34.19                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 137.7                | 2             | 20                    | 137              | 136.5            | 117           |
| LWVPS-U2-MW18            | UMCf               | 26734914.05 | 838993.79 | 1524.16                  | 1524.09                 | 32.53                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 114.0                | 2             | 25                    | 113.5            | 113              | 88.3          |
| LWVPS-U2-MW19            | UMCf               | 26734889.37 | 839106.34 | 1525.18                  | 1525.07                 | 32.71                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 115.0                | 2             | 20                    | 111.5            | 111              | 91.2          |
| LWVPS-U2-MW20            | UMCf               | 26734889.93 | 839153.61 | 1525.44                  | 1525.24                 | 32.98                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 115.0                | 2             | 20                    | 108.5            | 108              | 88.2          |
| LWVPS-BH01               | ---                | 26734872.28 | 838780.13 | 1530.46                  | ---                     | ---                         | Soil Boring       | ---                   | ---       | ---                   | 6                 | 105.0                | ---           | ---                   | ---              | ---              | ---           |
| <b>Zone 3 Study Area</b> |                    |             |           |                          |                         |                             |                   |                       |           |                       |                   |                      |               |                       |                  |                  |               |
| LWVPS-A3-DR01            | Alluvium           | 26734911.52 | 839503.33 | 1522.87                  | 1522.71                 | 30.41                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 76.5                 | 2             | 20                    | 76               | 75.5             | 55.8          |
| LWVPS-A3-MW02            | Alluvium           | 26734944.12 | 839475.20 | 1522.61                  | 1522.39                 | 30.30                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 85.0                 | 2             | 20                    | 73               | 72.5             | 52.8          |
| LWVPS-A3-MW06            | Alluvium           | 26734960.45 | 839530.77 | 1522.32                  | 1521.99                 | 30.03                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 76.0                 | 2             | 20                    | 75.5             | 75               | 55.3          |
| LWVPS-A3-MW07            | Alluvium           | 26734843.39 | 839449.63 | 1525.17                  | 1525.06                 | 32.48                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 75                   | 2             | 20                    | 75               | 74.5             | 54.8          |
| LWVPS-A3-MW08            | Alluvium           | 26734864.46 | 839588.62 | 1525.58                  | 1525.30                 | 32.90                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 110                  | 2             | 20                    | 105              | 104.5            | 84.8          |
| LWVPS-A3-MW10            | Alluvium           | 26734994.40 | 839445.10 | 1521.78                  | 1521.72                 | 30.06                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 77.0                 | 2             | 20                    | 76.5             | 76               | 56.3          |
| LWVPS-A3-MW11            | Alluvium           | 26735007.80 | 839556.93 | 1521.33                  | 1521.36                 | 29.41                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 80.0                 | 2             | 20                    | 74               | 73.5             | 53.8          |
| LWVPS-A3-MW12            | Alluvium           | 26735042.88 | 839483.87 | 1520.86                  | 1520.75                 | 29.13                       | Single            | Schedule 40 PVC       | 0.020     | #3                    | 6                 | 80.0                 | 2             | 20                    | 79.5             | 79               | 59.3          |
| LWVPS-U3-DR01A           | UMCf-cg            | 26734912.10 | 839506.61 | 1522.95                  | 1522.72                 | 30.55                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 124.5                | 2             | 30                    | 123.5            | 123              | 93.3          |
| LWVPS-U3-DR01B           | UMCf-cg            | 26734912.55 | 839510.18 | 1522.84                  | 1522.69                 | 30.71                       | Single            | Schedule 80 PVC       | 0.010     | #2/16                 | 6                 | 160.0                | 2             | 30                    | 159.5            | 159              | 129.3         |
| LWVPS-U3-DR02A           | UMCf-cg            | 26734924.88 | 839575.78 | 1523.27                  | 1523.13                 | 30.96                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 112.5                | 2             | 25                    | 111.5            | 111              | 86.3          |
| LWVPS-U3-DR02B           | UMCf-cg            | 26734925.39 | 839579.10 | 1523.15                  | 1522.98                 | 31.05                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 6                 | 144.0                | 2             | 25                    | 143              | 142.5            | 117.8         |
| LWVPS-U3-DR02C           | UMCf-cg            | 26734925.79 | 839582.56 | 1523.10                  | 1522.90                 | 31.03                       | Single            | Schedule 80 PVC       | 0.010     | #2/16                 | 6                 | 175.0                | 2             | 25                    | 174.5            | 174              | 149.3         |
| LWVPS-U3-IW01            | UMCf-cg            | 26734893.19 | 839433.14 | 1522.95                  | 1525.61                 | 34.12                       | Single            | Schedule 40 PVC       | 0.010     | #2/16                 | 10                | 118.0                | 2             | 35                    | 115.5            | 115              | 80.2          |

**Table 1**  
**Phase 2 Well Construction Details**  
 Las Vegas Wash Bioremediation Pilot Study

| Well ID                 | Screened Lithology | Northing    | Easting   | Ground Surface Elevation | Top of Casing Elevation | Depth to Water <sup>1</sup> | Construction Type | Construction Material                                 | Slot Size | Filter Pack Gradation | Borehole Diameter | Borehole Total Depth | Well Diameter | Nominal Screen Length | Well Total Depth | Bottom of Screen | Top of Screen |
|-------------------------|--------------------|-------------|-----------|--------------------------|-------------------------|-----------------------------|-------------------|---|-----------|-----------------------|-------------------|----------------------|---------------|-----------------------|------------------|------------------|---------------|
|                         |                    |             |           | feet amsl                | feet amsl               | feet bTOC                   |                   |   | inches    |                       |                   |                      |               |                       |                  |                  |               |
| LWVPS-U3-IW02A          | UMCf-cg            | 26734896.96 | 839458.60 | 1522.81                  | 1524.20                 | 33.32                       | Dual-Nested       | Schedule 40 PVC                                       | 0.010     | #2/16                 | 10                | 128.0                | 2             | 20                    | 99.5             | 99               | 79.3          |
| LWVPS-U3-IW02B          | UMCf-cg            | 26734896.77 | 839458.31 | 1522.81                  | 1524.22                 | 32.78                       |                   | Schedule 40 PVC                                       | 0.010     | #2/16                 |                   |                      |               |                       |                  |                  |               |
| LWVPS-U3-IW03A          | UMCf-cg            | 26734901.01 | 839482.33 | 1522.92                  | 1524.25                 | 32.31                       | Dual-Nested       | Schedule 40 PVC                                       | 0.010     | #2/16                 | 10                | 144.0                | 2             | 25                    | 103              | 102.5            | 77.8          |
| LWVPS-U3-IW03B          | UMCf-cg            | 26734901.38 | 839482.28 | 1522.92                  | 1524.33                 | 32.61                       |                   | Schedule 40 PVC                                       | 0.010     | #2/16                 |                   |                      |               |                       |                  |                  |               |
| LWVPS-U3-IW04A          | UMCf-cg            | 26734905.65 | 839507.50 | 1523.09                  | 1522.80                 | 30.46                       | Dual-Nested       | Schedule 40 PVC                                       | 0.010     | #2/16                 | 10                | 160.0                | 2             | 30                    | 123.5            | 123              | 93.3          |
| LWVPS-U3-IW04B          | UMCf-cg            | 26734905.89 | 839507.21 | 1523.09                  | 1522.81                 | 30.87                       |                   | Schedule 40 PVC                                       | 0.010     | #2/16                 |                   |                      |               |                       |                  |                  |               |
| LWVPS-U3-IW05A          | UMCf-cg            | 26734909.80 | 839531.81 | 1522.62                  | 1522.80                 | 31.46                       | Dual-Nested       | Schedule 40 PVC                                       | 0.010     | #2/16                 | 10                | 175.0                | 2             | 35                    | 126.5            | 126              | 91.3          |
| LWVPS-U3-IW05B          | UMCf-cg            | 26734909.78 | 839531.47 | 1522.62                  | 1522.80                 | 30.58                       |                   | Schedule 40 PVC                                       | 0.010     | #2/16                 |                   |                      |               |                       |                  |                  |               |
| LWVPS-U3-IW06A          | UMCf-cg            | 26734914.65 | 839556.40 | 1522.79                  | 1522.83                 | 30.52                       | Triple-Nested     | Schedule 40 PVC                                       | 0.010     | #2/16                 | 10                | 175.0                | 2             | 25                    | 111.5            | 111              | 86.3          |
| LWVPS-U3-IW06B          | UMCf-cg            | 26734914.56 | 839556.00 | 1522.79                  | 1522.89                 | 30.68                       |                   | Schedule 40 PVC                                       | 0.010     | #2/16                 |                   |                      |               |                       |                  |                  |               |
| LWVPS-U3-IW06C          | UMCf-cg            | 26734914.32 | 839556.27 | 1522.79                  | 1522.85                 | 31.02                       | Triple-Nested     | Schedule 40 PVC                                       | 0.010     | #2/16                 | 10                | 175.0                | 2             | 25                    | 174.5            | 174              | 149.3         |
| LWVPS-U3-IW07A          | UMCf-cg            | 26734918.75 | 839580.97 | 1523.32                  | 1523.03                 | 30.80                       |                   | Schedule 40 PVC                                       | 0.010     | #2/16                 |                   |                      |               |                       |                  |                  |               |
| LWVPS-U3-IW07B          | UMCf-cg            | 26734918.38 | 839580.95 | 1523.32                  | 1523.03                 | 31.02                       | Triple-Nested     | Schedule 40 PVC                                       | 0.010     | #2/16                 | 10                | 175.0                | 2             | 25                    | 143              | 142.5            | 117.8         |
| LWVPS-U3-IW07C          | UMCf-cg            | 26734918.60 | 839580.61 | 1523.32                  | 1523.03                 | 31.02                       |                   | Schedule 40 PVC                                       | 0.010     | #2/16                 |                   |                      |               |                       |                  |                  |               |
| LWVPS-U3-IW08A          | UMCf-cg            | 26734923.35 | 839605.13 | 1523.23                  | 1523.11                 | 30.87                       | Triple-Nested     | Schedule 40 PVC                                       | 0.010     | #2/16                 | 10                | 175.0                | 2             | 25                    | 111.5            | 111              | 86.3          |
| LWVPS-U3-IW08B          | UMCf-cg            | 26734923.06 | 839605.34 | 1523.23                  | 1523.09                 | 31.08                       |                   | Schedule 40 PVC                                       | 0.010     | #2/16                 |                   |                      |               |                       |                  |                  |               |
| LWVPS-U3-IW08C          | UMCf-cg            | 26734923.00 | 839604.97 | 1523.23                  | 1523.10                 | 31.05                       | Triple-Nested     | Schedule 40 PVC                                       | 0.010     | #2/16                 | 10                | 175.0                | 2             | 25                    | 174.5            | 174              | 149.3         |
| LWVPS-U3-MW01B          | UMCf-cg            | 26734942.69 | 839376.18 | 1522.54                  | 1522.41                 | 30.90                       | Single            | Schedule 80 PVC                                       | 0.010     | #2/16                 | 8                 | 107.5                | 4             | 20                    | 103.8            | 103.3            | 83.8          |
| LWVPS-U3-MW02A          | UMCf-cg            | 26734948.75 | 839479.60 | 1522.40                  | 1522.13                 | 30.42                       | Single            | Schedule 40 PVC                                       | 0.010     | #2/16                 | 6                 | 98.5                 | 2             | 15                    | 97.5             | 97               | 82.3          |
| LWVPS-U3-MW02B          | UMCf-cg            | 26734943.22 | 839481.31 | 1522.50                  | 1522.21                 | 30.76                       | Single            | Schedule 80 PVC                                       | 0.010     | #2/16                 | 8                 | 130.0                | 4             | 20                    | 123              | 122.5            | 103           |
| LWVPS-U3-MW03A          | UMCf-cg            | 26734944.17 | 839583.42 | 1522.80                  | 1522.68                 | 30.60                       | Single            | Schedule 40 PVC                                       | 0.010     | #2/16                 | 6                 | 112.5                | 2             | 25                    | 111.5            | 111              | 86.3          |
| LWVPS-U3-MW03B          | UMCf-cg            | 26734944.11 | 839576.72 | 1522.86                  | 1522.49                 | 30.68                       | Single            | Schedule 80 PVC                                       | 0.010     | #2/16                 | 8                 | 179.0                | 4             | 25                    | 176.2            | 175.7            | 151.1         |
| LWVPS-U3-MW03C          | UMCf-cg            | 26734949.67 | 839579.79 | 1522.47                  | 1522.21                 | 30.32                       | Single            | Schedule 40 PVC                                       | 0.010     | #2/16                 | 6                 | 143.5                | 2             | 25                    | 143              | 142.5            | 117.8         |
| LWVPS-U3-MW04B          | UMCf-cg            | 26734968.11 | 839326.96 | 1522.25                  | 1521.92                 | 30.36                       | Single            | Schedule 80 PVC                                       | 0.010     | #2/16                 | 8                 | 102.5                | 4             | 20                    | 98.2             | 97.7             | 78.2          |
| LWVPS-U3-MW05B          | UMCf-cg            | 26734968.70 | 839425.48 | 1522.17                  | 1521.98                 | 30.50                       | Single            | Schedule 80 PVC                                       | 0.010     | #2/16                 | 8                 | 112.5                | 4             | 20                    | 105.2            | 104.7            | 85.2          |
| LWVPS-U3-MW06A          | UMCf-cg            | 26734962.99 | 839525.84 | 1522.04                  | 1521.91                 | 30.10                       | Single            | Schedule 40 PVC                                       | 0.010     | #2/16                 | 6                 | 116.5                | 2             | 25                    | 115.5            | 115              | 90.3          |
| LWVPS-U3-MW06B          | UMCf-cg            | 26734965.59 | 839528.63 | 1522.18                  | 1521.92                 | 30.20                       | Single            | Schedule 80 PVC                                       | 0.010     | #2/16                 | 8                 | 152.5                | 4             | 25                    | 150.4            | 149.9            | 125.3         |
| LWVPS-U3-MW07A          | UMCf-cg            | 26734843.54 | 839454.21 | 1525.21                  | 1524.95                 | 32.40                       | Single            | Schedule 40 PVC                                       | 0.010     | #2/16                 | 6                 | 100                  | 2             | 15                    | 98               | 97.5             | 82.8          |
| LWVPS-U3-MW07B          | UMCf-cg            | 26734843.26 | 839458.27 | 1525.26                  | 1524.93                 | 32.87                       | Single            | Schedule 40 PVC                                       | 0.010     | #2/16                 | 6                 | 126                  | 2             | 20                    | 125              | 124.5            | 104.8         |
| LWVPS-U3-MW08A          | UMCf-cg            | 26734863.82 | 839592.64 | 1525.64                  | 1525.45                 | 33.40                       | Single            | Schedule 40 PVC                                       | 0.010     | #2/16                 | 6                 | 145                  | 2             | 25                    | 143              | 142.5            | 117.8         |
| LWVPS-U3-MW08B          | UMCf-cg            | 26734863.16 | 839597.03 | 1525.70                  | 1525.28                 | 33.21                       | Single            | Schedule 80 PVC                                       | 0.010     | #2/16                 | 6                 | 175                  | 2             | 25                    | 174.5            | 174              | 149.3         |
| LWVPS-U3-MW09           | UMCf-cg            | 26734922.06 | 839452.86 | 1522.74                  | 1525.38                 | 34.00                       | Single            | Schedule 40 PVC                                       | 0.010     | #2/16                 | 6                 | 115.0                | 2             | 25                    | 108              | 107.5            | 82.8          |
| LWVPS-U3-MW10A          | UMCf-cg            | 26734997.78 | 839440.95 | 1521.78                  | 1521.47                 | 30.09                       | Single            | Schedule 40 PVC                                       | 0.010     | #2/16                 | 6                 | 97.0                 | 2             | 10                    | 95.5             | 95               | 85.3          |
| LWVPS-U3-MW10B          | UMCf-cg            | 26734999.52 | 839447.11 | 1521.68                  | 1521.55                 | 30.14                       | Single            | Schedule 40 PVC                                       | 0.010     | #2/16                 | 6                 | 130.0                | 2             | 20                    | 121.5            | 121              | 101.3         |
| LWVPS-U3-MW11A          | UMCf-cg            | 26735013.48 | 839552.91 | 1521.42                  | 1521.39                 | 29.79                       | Single            | Schedule 40 PVC                                       | 0.010     | #2/16                 | 6                 | 107.5                | 2             | 20                    | 106.5            | 106              | 86.3          |
| LWVPS-U3-MW11B          | UMCf-cg            | 26735014.90 | 839559.83 | 1521.28                  | 1521.35                 | 29.91                       | Single            | Schedule 40 PVC                                       | 0.010     | #2/16                 | 6                 | 138.0                | 2             | 25                    | 137.5            | 137              | 112.3         |
| LWVPS-U3-MW11C          | UMCf-cg            | 26735017.93 | 839555.86 | 1521.33                  | 1521.20                 | 29.83                       | Single            | Schedule 80 PVC                                       | 0.010     | #2/16                 | 6                 | 170.0                | 2             | 20                    | 163.4            | 163              | 143.3         |
| LWVPS-U3-MW12A          | UMCf-cg            | 26735045.73 | 839479.41 | 1521.01                  | 1520.83                 | 29.40                       | Single            | Schedule 40 PVC                                       | 0.010     | #2/16                 | 6                 | 109.5                | 2             | 20                    | 108.5            | 108              | 88.3          |
| LWVPS-U3-MW12B          | UMCf-cg            | 26735047.74 | 839484.29 | 1520.91                  | 1520.74                 | 29.36                       | Single            | Schedule 40 PVC                                       | 0.010     | #2/16                 | 6                 | 140.0                | 2             | 25                    | 138.5            | 138              | 113.3         |
| LWVPS-U3-MW13A          | UMCf-cg            | 26734933.25 | 839516.75 | 1522.40                  | 1522.24                 | 30.21                       | Single            | Schedule 40 PVC                                       | 0.010     | #2/16                 | 6                 | 122.5                | 2             | 25                    | 121.5            | 121              | 96.3          |
| LWVPS-U3-MW13B          | UMCf-cg            | 26734934.09 | 839522.37 | 1522.01                  | 1521.91                 | 30.00                       | Single            | Schedule 40 PVC                                       | 0.010     | #2/16                 | 6                 | 155.0                | 2             | 15                    | 148              | 147.5            | 132.8         |
| <b>Extraction Wells</b> |                    |             |           |                          |                         |                             |                   |   |           |                       |                   |                      |               |                       |                  |                  |               |
| LWVPS-EW01              | Alluvium           | 26734957.94 | 838426.21 | 1530.03                  | 1529.74                 | 35.74                       | Single            | Schedule 40 PVC with Stainless Steel Wire Wrap Screen | 0.020     | 12-20                 | 10                | 95.0                 | 6             | 40                    | 85               | 84.5             | 44.8          |
| LWVPS-EW02              | Alluvium           | 26734885.98 | 838507.29 | 1523.66                  | 1523.25                 | 29.20                       | Single            | Schedule 40 PVC with Stainless Steel Wire Wrap Screen | 0.020     | 12-20                 | 10                | 61.0                 | 6             | 30                    | 58.5             | 58               | 28.3          |
| LWVPS-EW03              | Alluvium           | 26734886.94 | 838621.90 | 1523.14                  | 1522.70                 | 28.95                       | Single            | Schedule 40 PVC with Stainless Steel Wire Wrap Screen | 0.020     | 12-20                 | 10                | 81.0                 | 6             | 30                    | 70.5             | 70               | 40.3          |

**Table 1**  
**Phase 2 Well Construction Details**  
 Las Vegas Wash Bioremediation Pilot Study

| Well ID   | Screened Lithology | Northing    | Easting   | Ground Surface Elevation | Top of Casing Elevation | Depth to Water <sup>1</sup> | Construction Type | Construction Material                                 | Slot Size | Filter Pack Gradation | Borehole Diameter | Borehole Total Depth | Well Diameter | Nominal Screen Length | Well Total Depth | Bottom of Screen | Top of Screen |
|-----------|--------------------|-------------|-----------|--------------------------|-------------------------|-----------------------------|-------------------|---|-----------|-----------------------|-------------------|----------------------|---------------|-----------------------|------------------|------------------|---------------|
|           |                    |             |           | feet amsl                | feet amsl               | feet bTOC                   |                   |   | inches    |                       |                   | feet bgs             |               | feet                  | feet bgs         | feet bgs         | feet bgs      |
| LWPS-EW04 | Alluvium           | 26734947.54 | 838573.33 | 1522.40                  | 1521.92                 | 28.20                       | Single            | Schedule 40 PVC with Stainless Steel Wire Wrap Screen | 0.020     | 12-20                 | 10                | 47.0                 | 6             | 20                    | 46.5             | 46               | 26.3          |
| LWPS-EW05 | Alluvium           | 26734978.54 | 838497.51 | 1529.76                  | 1529.42                 | 35.60                       | Single            | Schedule 40 PVC with Stainless Steel Wire Wrap Screen | 0.020     | 12-20                 | 10                | 81.0                 | 6             | 30                    | 80.5             | 80               | 50.3          |

Notes

amsl - above mean sea level

bgs - below ground surface

bTOC - below top of casing

PVC - polyvinyl chloride

UMCf - Upper Muddy Creek formation

UMCf-cg - Upper Muddy Creek formation - coarse grained facies

UMCf/Horse Springs- Alternating layers of UMCf, semi-consolidated UMCf, and reworked Horse Springs formation.

UMCf (Semi-Cons) - Semi-consolidated Upper Muddy Creek formation

--- Not Applicable

1. Depth to water measurements collected in October 2020.

2. Well names including IW indicate an injection well. Well names including DR indicate a dose response well. Well names including MW indicate a monitoring well. Well names including EW indicate an extraction well.

Table 2  
Groundwater Analytical Results  
Las Vegas Wash Bioremediation Pilot Study

| Well           | Sample Date | Type | Event | Zone   | Screened Lithology | Screened Interval | Perchlorate by USEPA Method 314.0 | Chlorate by USEPA Method 300.1B | Nitrate (as N) by USEPA Method 300.0 | Sulfate by USEPA Method 300.0 | Total Organic Carbon by SM 5310B | Dissolved Oxygen Field Measurement |
|----------------|-------------|------|-------|--------|--------------------|-------------------|-----------------------------------|---------------------------------|--------------------------------------|-------------------------------|----------------------------------|------------------------------------|
|                |             |      |       |        |                    | feet bgs          | µg/L                              | µg/L                            | mg/L                                 | mg/L                          | mg/L                             | mg/L                               |
| LWWPS-A1-MW04  | 9/30/2020   | N    | BL04  | Zone 1 | Alluvium           | 69.3 - 89.0       | 2,000                             | 12,000                          | 15                                   | 1,600                         | 1.5                              | 2.26                               |
| LWWPS-A1-MW04  | 1/13/2021   | N    | EM02  | Zone 1 | Alluvium           | 69.3 - 89.0       | 2,400                             | 15,000                          | 17                                   | 1,700                         | 1.5                              | 1.38                               |
| LWWPS-A1-MW04  | 1/13/2021   | FD   | EM02  | Zone 1 | Alluvium           | 69.3 - 89.0       | 2,800                             | 15,000                          | 17                                   | 1,700                         | 1.4                              | ----                               |
| LWWPS-A1-MW04  | 2/9/2021    | N    | EM04  | Zone 1 | Alluvium           | 69.3 - 89.0       | 3,000                             | 15,000                          | 17                                   | 1,800                         | 1.4 J-                           | 1.35                               |
| LWWPS-A1-MW04  | 2/9/2021    | FD   | EM04  | Zone 1 | Alluvium           | 69.3 - 89.0       | 3,000                             | 15,000                          | 17                                   | 1,800                         | 1.4 J-                           | ----                               |
| LWWPS-A1-MW05  | 9/30/2020   | N    | BL04  | Zone 1 | Alluvium           | 69.3 - 89.0       | 2,900                             | 16,000                          | 19                                   | 2,000                         | 1.6                              | 2.90                               |
| LWWPS-A1-MW05  | 1/15/2021   | N    | EM02  | Zone 1 | Alluvium           | 69.3 - 89.0       | 3,300                             | 17,000                          | 21                                   | 2,200                         | 1.6                              | 1.54                               |
| LWWPS-A1-MW05  | 2/10/2021   | N    | EM04  | Zone 1 | Alluvium           | 69.3 - 89.0       | 3,600                             | 18,000                          | 20                                   | 2,200                         | 1.7                              | 1.20                               |
| LWWPS-A1-MW06  | 9/29/2020   | N    | BL04  | Zone 1 | Alluvium           | 59.3 - 79.0       | 1,900                             | 9,000                           | 13                                   | 1,300                         | 1.4                              | 1.16                               |
| LWWPS-A1-MW06  | 1/14/2021   | N    | EM02  | Zone 1 | Alluvium           | 59.3 - 79.0       | 3,200 J                           | 11,000                          | 15                                   | 1,500                         | 1.5                              | 1.38                               |
| LWWPS-A1-MW06  | 1/14/2021   | FD   | EM02  | Zone 1 | Alluvium           | 59.3 - 79.0       | 2,300 J                           | 11,000                          | 15                                   | 1,600                         | 1.4                              | ----                               |
| LWWPS-A1-MW06  | 2/9/2021    | N    | EM04  | Zone 1 | Alluvium           | 59.3 - 79.0       | 2,300                             | 11,000                          | 15                                   | 1,500                         | 1.5 J-                           | 1.07                               |
| LWWPS-A1-MW06  | 2/9/2021    | FD   | EM04  | Zone 1 | Alluvium           | 59.3 - 79.0       | 2,300                             | 11,000                          | 15                                   | 1,500                         | 1.3 J-                           | ----                               |
| LWWPS-A1-MW07  | 9/30/2020   | N    | BL04  | Zone 1 | Alluvium           | 58.3 - 78.0       | 2,900                             | 16,000                          | 19                                   | 1,900                         | 1.6                              | 1.43                               |
| LWWPS-A1-MW07  | 1/14/2021   | N    | EM02  | Zone 1 | Alluvium           | 58.3 - 78.0       | 3,200                             | 17,000                          | 20                                   | 2,200                         | 1.6                              | 1.22                               |
| LWWPS-A1-MW07  | 2/10/2021   | N    | EM04  | Zone 1 | Alluvium           | 58.3 - 78.0       | 3,400                             | 17,000                          | 19                                   | 2,200                         | 1.6                              | 1.08                               |
| LWWPS-A1-MW09  | 9/30/2020   | N    | BL04  | Zone 1 | Alluvium           | 85.8 - 105.5      | 2,700                             | 15,000                          | 16                                   | 1,600                         | 1.6                              | 1.17                               |
| LWWPS-A1-MW09  | 1/13/2021   | N    | EM02  | Zone 1 | Alluvium           | 85.8 - 105.5      | 2,500                             | 14,000                          | 13                                   | 1,800                         | 4.2                              | 1.06                               |
| LWWPS-A1-MW09  | 2/11/2021   | N    | EM04  | Zone 1 | Alluvium           | 85.8 - 105.5      | 3,100                             | 14,000                          | 15 J-                                | 2,000                         | 1.6                              | 0.66                               |
| LWWPS-A1-MW10  | 10/1/2020   | N    | BL04  | Zone 1 | Alluvium           | 70.8 - 90.5       | 4,400 J-                          | 14,000                          | 16                                   | 1,600                         | 1.4                              | 1.13                               |
| LWWPS-A1-MW10  | 10/1/2020   | FD   | BL04  | Zone 1 | Alluvium           | 70.8 - 90.5       | 3,700                             | 14,000                          | 16                                   | 1,700                         | 1.5                              | ----                               |
| LWWPS-A1-MW10  | 1/13/2021   | N    | EM02  | Zone 1 | Alluvium           | 70.8 - 90.5       | 3,100                             | 16,000                          | 17                                   | 1,800                         | 1.5                              | 1.11                               |
| LWWPS-A1-MW10  | 2/8/2021    | N    | EM04  | Zone 1 | Alluvium           | 70.8 - 90.5       | 3,600                             | 16,000                          | 17                                   | 1,800                         | 1.5 J-                           | 0.60                               |
| LWWPS-A2-IW01A | 10/1/2020   | N    | BL04  | Zone 2 | Alluvium           | 41.3 - 66.0       | 3,300                             | 5,100                           | 19                                   | ----                          | ----                             | 4.10                               |
| LWWPS-A2-IW01A | 10/1/2020   | FD   | BL04  | Zone 2 | Alluvium           | 41.3 - 66.0       | 3,300                             | 5,000                           | 19                                   | ----                          | ----                             | ----                               |
| LWWPS-A2-IW01B | 10/1/2020   | N    | BL04  | Zone 2 | Alluvium           | 72.8 - 97.5       | 2,300                             | 5,400                           | 20                                   | ----                          | ----                             | 4.23                               |
| LWWPS-A2-IW02A | 10/1/2020   | N    | BL04  | Zone 2 | Alluvium           | 38.8 - 68.5       | 2,900                             | 5,200                           | 18                                   | ----                          | ----                             | 4.29                               |
| LWWPS-A2-IW02B | 10/2/2020   | N    | BL04  | Zone 2 | Alluvium           | 75.3 - 100.0      | 3,800                             | 6,100                           | 20                                   | ----                          | ----                             | 4.44                               |
| LWWPS-A2-IW03A | 10/2/2020   | N    | BL04  | Zone 2 | Alluvium           | 37.3 - 67.0       | 3,300                             | 5,400                           | 20                                   | ----                          | ----                             | 4.44                               |
| LWWPS-A2-IW03B | 10/2/2020   | N    | BL04  | Zone 2 | Alluvium           | 73.8 - 103.5      | 3,400                             | 5,500                           | 18                                   | ----                          | ----                             | 4.30                               |
| LWWPS-A2-IW03B | 10/2/2020   | FD   | BL04  | Zone 2 | Alluvium           | 73.8 - 103.5      | 2,700                             | 5,400                           | 18                                   | ----                          | ----                             | ----                               |
| LWWPS-A2-IW04A | 10/2/2020   | N    | BL04  | Zone 2 | Alluvium           | 36.3 - 71.0       | 2,700                             | 5,600                           | 20                                   | ----                          | ----                             | 4.43                               |
| LWWPS-A2-IW04B | 10/2/2020   | N    | BL04  | Zone 2 | Alluvium           | 77.3 - 112.0      | 3,200                             | 5,000                           | 18                                   | ----                          | ----                             | 5.05                               |
| LWWPS-A2-IW05A | 10/2/2020   | N    | BL04  | Zone 2 | Alluvium           | 37.8 - 62.5       | 4,800                             | 6,200                           | 19                                   | ----                          | ----                             | 4.44                               |
| LWWPS-A2-IW05B | 10/2/2020   | N    | BL04  | Zone 2 | Alluvium           | 68.8 - 93.5       | 4,400                             | 5,300                           | 19                                   | ----                          | ----                             | 4.47                               |
| LWWPS-A2-IW06A | 10/5/2020   | N    | BL04  | Zone 2 | Alluvium           | 36.8 - 51.5       | 3,700                             | 5,900                           | 18                                   | ----                          | ----                             | 5.36                               |
| LWWPS-A2-IW06B | 10/5/2020   | N    | BL04  | Zone 2 | Alluvium           | 57.8 - 77.5       | 4,600                             | 4,900                           | 18                                   | ----                          | ----                             | 4.75                               |
| LWWPS-A2-IW07A | 10/5/2020   | N    | BL04  | Zone 2 | Alluvium           | 35.3 - 50.0       | 3,100                             | 5,500                           | 21                                   | ----                          | ----                             | 4.76                               |
| LWWPS-A2-IW07A | 10/5/2020   | FD   | BL04  | Zone 2 | Alluvium           | 35.3 - 50.0       | 2,800                             | 5,600                           | 20                                   | ----                          | ----                             | ----                               |
| LWWPS-A2-IW07B | 10/5/2020   | N    | BL04  | Zone 2 | Alluvium           | 56.3 - 76.0       | 2,700                             | 4,500                           | 16                                   | ----                          | ----                             | 5.14                               |
| LWWPS-A2-IW08A | 10/5/2020   | N    | BL04  | Zone 2 | Alluvium           | 35.8 - 55.5       | 3,500                             | 4,800                           | 20                                   | ----                          | ----                             | 4.79                               |
| LWWPS-A2-IW08B | 10/5/2020   | N    | BL04  | Zone 2 | Alluvium           | 61.8 - 81.5       | 2,100                             | 3,600                           | 13                                   | ----                          | ----                             | 5.54                               |
| LWWPS-A2-IW09A | 10/5/2020   | N    | BL04  | Zone 2 | Alluvium           | 36.8 - 51.5       | 2,000                             | 3,000                           | 13                                   | ----                          | ----                             | 5.36                               |
| LWWPS-A2-IW09B | 10/6/2020   | N    | BL04  | Zone 2 | Alluvium           | 58.8 - 73.5       | 1,500                             | 2,300                           | 9.1                                  | ----                          | ----                             | 6.22                               |
| LWWPS-A2-MW01A | 10/8/2020   | N    | BL04  | Zone 2 | Alluvium           | 40.3 - 60.0       | 2,900                             | 5,500                           | 20                                   | 2,200                         | 1.8                              | 4.48                               |
| LWWPS-A2-MW01A | 10/8/2020   | FD   | BL04  | Zone 2 | Alluvium           | 40.3 - 60.0       | 2,900                             | 5,600                           | 19                                   | 2,200                         | 1.8                              | ----                               |
| LWWPS-A2-MW01A | 12/23/2020  | N    | EM01  | Zone 2 | Alluvium           | 40.3 - 60.0       | 3,600                             | 5,100                           | 19                                   | 2,200                         | 2.1                              | 3.69                               |
| LWWPS-A2-MW01A | 1/13/2021   | N    | EM02  | Zone 2 | Alluvium           | 40.3 - 60.0       | 2,700                             | 6,300                           | 19                                   | 2,100                         | 1.9                              | 3.75                               |
| LWWPS-A2-MW01A | 1/25/2021   | N    | EM03  | Zone 2 | Alluvium           | 40.3 - 60.0       | 2,900                             | 5,100                           | 18                                   | 2,100                         | 1.9 J+                           | 3.46                               |
| LWWPS-A2-MW01A | 2/10/2021   | N    | EM04  | Zone 2 | Alluvium           | 40.3 - 60.0       | 2,800                             | 4,900                           | 19                                   | 2,000                         | 2.0                              | 3.68                               |
| LWWPS-A2-MW01B | 10/8/2020   | N    | BL04  | Zone 2 | Alluvium           | 70.3 - 90.0       | 3,100                             | 5,200                           | 18                                   | 2,100                         | 1.7                              | 4.49                               |
| LWWPS-A2-MW01B | 12/23/2020  | N    | EM01  | Zone 2 | Alluvium           | 70.3 - 90.0       | 3,000                             | 5,000                           | 18                                   | 2,200                         | 1.7                              | 4.16                               |
| LWWPS-A2-MW01B | 1/13/2021   | N    | EM02  | Zone 2 | Alluvium           | 70.3 - 90.0       | 2,800                             | 6,700                           | 18                                   | 2,200                         | 2.1                              | 3.97                               |
| LWWPS-A2-MW01B | 1/25/2021   | N    | EM03  | Zone 2 | Alluvium           | 70.3 - 90.0       | 3,200                             | 5,200                           | 18                                   | 2,100                         | 2.4 J+                           | 3.44                               |
| LWWPS-A2-MW01B | 2/10/2021   | N    | EM04  | Zone 2 | Alluvium           | 70.3 - 90.0       | 2,800                             | 4,800                           | 19                                   | 2,300                         | 1.8                              | 4.13                               |
| LWWPS-A2-MW02A | 10/8/2020   | N    | BL04  | Zone 2 | Alluvium           | 40.3 - 60.0       | 3,700                             | 6,500                           | 18                                   | 2,600                         | 1.3                              | 4.19                               |
| LWWPS-A2-MW02A | 10/8/2020   | FD   | BL04  | Zone 2 | Alluvium           | 40.3 - 60.0       | 3,800                             | 6,600                           | 18                                   | 2,600                         | 1.3                              | ----                               |
| LWWPS-A2-MW02A | 12/23/2020  | N    | EM01  | Zone 2 | Alluvium           | 40.3 - 60.0       | 3,800                             | 8,100                           | 18                                   | 2,700                         | 1.2                              | 5.28                               |

Table 2  
Groundwater Analytical Results  
Las Vegas Wash Bioremediation Pilot Study

| Well           | Sample Date | Type | Event | Zone   | Screened Lithology | Screened Interval | Perchlorate by USEPA Method 314.0 | Chlorate by USEPA Method 300.1B | Nitrate (as N) by USEPA Method 300.0 | Sulfate by USEPA Method 300.0 | Total Organic Carbon by SM 5310B | Dissolved Oxygen Field Measurement |
|----------------|-------------|------|-------|--------|--------------------|-------------------|-----------------------------------|---------------------------------|--------------------------------------|-------------------------------|----------------------------------|------------------------------------|
|                |             |      |       |        |                    | feet bgs          | µg/L                              | µg/L                            | mg/L                                 | mg/L                          | mg/L                             | mg/L                               |
| LVWPS-A2-MW02A | 1/12/2021   | N    | EM02  | Zone 2 | Alluvium           | 40.3 - 60.0       | 3,900                             | 6,300                           | 18                                   | 2,600                         | 1.2                              | 4.46                               |
| LVWPS-A2-MW02A | 1/25/2021   | N    | EM03  | Zone 2 | Alluvium           | 40.3 - 60.0       | 4,200                             | 7,100                           | 20                                   | 2,500                         | 1.3 J+                           | 3.93                               |
| LVWPS-A2-MW02A | 2/9/2021    | N    | EM04  | Zone 2 | Alluvium           | 40.3 - 60.0       | 3,900                             | 6,200                           | 17                                   | 1,900                         | 1.2 J-                           | 4.61                               |
| LVWPS-A2-MW02B | 10/8/2020   | N    | BL04  | Zone 2 | Alluvium           | 70.3 - 90.0       | 2,300                             | 3,900                           | 14                                   | 2,100                         | 1.2                              | 5.81                               |
| LVWPS-A2-MW02B | 12/23/2020  | N    | EM01  | Zone 2 | Alluvium           | 70.3 - 90.0       | 2,200                             | 4,900                           | 15                                   | 2,300                         | 1.3                              | 5.57                               |
| LVWPS-A2-MW02B | 1/13/2021   | N    | EM02  | Zone 2 | Alluvium           | 70.3 - 90.0       | 2,100                             | 3,600                           | 14                                   | 2,100                         | 1.2                              | 5.79                               |
| LVWPS-A2-MW02B | 1/25/2021   | N    | EM03  | Zone 2 | Alluvium           | 70.3 - 90.0       | 3,700                             | 4,000                           | 13                                   | 2,000                         | 1.3 J+                           | 5.11                               |
| LVWPS-A2-MW02B | 2/10/2021   | N    | EM04  | Zone 2 | Alluvium           | 70.3 - 90.0       | 2,300                             | 3,900                           | 15                                   | 2,200                         | 1.3                              | 5.77                               |
| LVWPS-A2-MW03A | 10/9/2020   | N    | BL04  | Zone 2 | Alluvium           | 38.3 - 58.0       | 1,300                             | 2,000                           | 9.2                                  | 1,800                         | 0.63                             | 6.82                               |
| LVWPS-A2-MW03A | 10/9/2020   | FD   | BL04  | Zone 2 | Alluvium           | 38.3 - 58.0       | 1,300                             | 2,000                           | 9.1                                  | 1,800                         | 0.70                             | ----                               |
| LVWPS-A2-MW03A | 12/23/2020  | N    | EM01  | Zone 2 | Alluvium           | 38.3 - 58.0       | 1,100                             | 7,500                           | 7.3                                  | 1,700                         | 0.47 J                           | 6.86                               |
| LVWPS-A2-MW03A | 1/14/2021   | N    | EM02  | Zone 2 | Alluvium           | 38.3 - 58.0       | 1,100                             | 1,600                           | 7.8                                  | 1,900                         | 0.54                             | 7.34                               |
| LVWPS-A2-MW03A | 1/25/2021   | N    | EM03  | Zone 2 | Alluvium           | 38.3 - 58.0       | 2,500                             | 3,300                           | 9.2                                  | 1,800                         | 0.77 J+                          | 5.88                               |
| LVWPS-A2-MW03A | 2/10/2021   | N    | EM04  | Zone 2 | Alluvium           | 38.3 - 58.0       | 1,200                             | 1,600                           | 8.3                                  | 1,900                         | 0.52                             | 7.08                               |
| LVWPS-A2-MW03B | 10/9/2020   | N    | BL04  | Zone 2 | Alluvium           | 64.3 - 84.0       | 2,000                             | 3,700                           | 12                                   | 2,000                         | 0.92                             | 6.21                               |
| LVWPS-A2-MW03B | 12/23/2020  | N    | EM01  | Zone 2 | Alluvium           | 64.3 - 84.0       | 3,600                             | 3,500                           | 12                                   | 2,100                         | 0.87 J-                          | 5.56                               |
| LVWPS-A2-MW03B | 1/14/2021   | N    | EM02  | Zone 2 | Alluvium           | 64.3 - 84.0       | 2,100                             | 3,600                           | 12                                   | 2,100                         | 0.96                             | 6.03                               |
| LVWPS-A2-MW03B | 1/26/2021   | N    | EM03  | Zone 2 | Alluvium           | 64.3 - 84.0       | 2,300                             | 3,400                           | 9.8                                  | 1,900                         | 1.0 J+                           | 5.24                               |
| LVWPS-A2-MW03B | 2/10/2021   | N    | EM04  | Zone 2 | Alluvium           | 64.3 - 84.0       | 2,200                             | 3,500                           | 13                                   | 2,200                         | 1.0                              | 5.86                               |
| LVWPS-A2-MW04A | 10/2/2020   | N    | BL04  | Zone 2 | Alluvium           | 43.8 - 63.5       | 4,100 J                           | 5,300                           | 19                                   | 2,100                         | 1.7                              | 5.60                               |
| LVWPS-A2-MW04A | 10/2/2020   | FD   | BL04  | Zone 2 | Alluvium           | 43.8 - 63.5       | 2,900 J                           | 5,200                           | 19                                   | 2,100                         | 1.7                              | ----                               |
| LVWPS-A2-MW04A | 12/22/2020  | N    | EM01  | Zone 2 | Alluvium           | 43.8 - 63.5       | 2,600                             | 5,100                           | 19                                   | 2,100                         | 2.2 J                            | 3.79                               |
| LVWPS-A2-MW04A | 12/22/2020  | FD   | EM01  | Zone 2 | Alluvium           | 43.8 - 63.5       | 2,600                             | 5,100                           | 19                                   | 2,100                         | 1.8                              | ----                               |
| LVWPS-A2-MW04A | 1/12/2021   | N    | EM02  | Zone 2 | Alluvium           | 43.8 - 63.5       | 2,700                             | 4,900                           | 20                                   | 2,200                         | 1.9                              | 3.84                               |
| LVWPS-A2-MW04A | 1/12/2021   | FD   | EM02  | Zone 2 | Alluvium           | 43.8 - 63.5       | 2,700                             | 4,900                           | 19                                   | 2,200                         | 2.1                              | ----                               |
| LVWPS-A2-MW04A | 1/26/2021   | N    | EM03  | Zone 2 | Alluvium           | 43.8 - 63.5       | 2,800                             | 4,900                           | 19                                   | 1,900                         | 2.0 J+                           | 3.67                               |
| LVWPS-A2-MW04A | 1/26/2021   | FD   | EM03  | Zone 2 | Alluvium           | 43.8 - 63.5       | 2,700                             | 4,900                           | 19                                   | 1,900                         | 1.8 J+                           | ----                               |
| LVWPS-A2-MW04A | 2/9/2021    | N    | EM04  | Zone 2 | Alluvium           | 43.8 - 63.5       | 2,100                             | 7,200                           | 21                                   | 1,900                         | 3.4 J-                           | 4.44                               |
| LVWPS-A2-MW04A | 2/9/2021    | FD   | EM04  | Zone 2 | Alluvium           | 43.8 - 63.5       | 2,200                             | 7,100                           | 21                                   | 1,800                         | 2.4 J-                           | ----                               |
| LVWPS-A2-MW04B | 10/2/2020   | N    | BL04  | Zone 2 | Alluvium           | 75.3 - 95.0       | 3,400                             | 7,300                           | 22                                   | 2,200                         | 1.7                              | 3.65                               |
| LVWPS-A2-MW04B | 12/22/2020  | N    | EM01  | Zone 2 | Alluvium           | 75.3 - 95.0       | 2,800                             | 7,300                           | 13                                   | 2,100                         | 23                               | 0.49                               |
| LVWPS-A2-MW04B | 1/12/2021   | N    | EM02  | Zone 2 | Alluvium           | 75.3 - 95.0       | 700                               | 1,300                           | 3.0                                  | 2,300                         | 52                               | 0.66                               |
| LVWPS-A2-MW04B | 1/26/2021   | N    | EM03  | Zone 2 | Alluvium           | 75.3 - 95.0       | 1,100                             | 2,400                           | 3.7                                  | 1,900                         | 34                               | 0.46                               |
| LVWPS-A2-MW04B | 2/9/2021    | N    | EM04  | Zone 2 | Alluvium           | 75.3 - 95.0       | 650                               | 1,800                           | 3.5                                  | 2,000                         | 51 J-                            | 4.06                               |
| LVWPS-A2-MW05A | 10/5/2020   | N    | BL04  | Zone 2 | Alluvium           | 36.8 - 51.5       | 2,400                             | 3,900                           | 14                                   | 2,200                         | 1.1                              | 6.22                               |
| LVWPS-A2-MW05A | 12/22/2020  | N    | EM01  | Zone 2 | Alluvium           | 36.8 - 51.5       | 310                               | 73                              | 0.91                                 | 2,200                         | 170                              | 0.91                               |
| LVWPS-A2-MW05A | 1/13/2021   | N    | EM02  | Zone 2 | Alluvium           | 36.8 - 51.5       | 330                               | 190                             | 1.5                                  | 2,000                         | 50                               | 0.28                               |
| LVWPS-A2-MW05A | 1/26/2021   | N    | EM03  | Zone 2 | Alluvium           | 36.8 - 51.5       | 720                               | 460                             | 1.8                                  | 1,600                         | 120                              | 0.44                               |
| LVWPS-A2-MW05A | 2/9/2021    | N    | EM04  | Zone 2 | Alluvium           | 36.8 - 51.5       | 1,900                             | 2,500                           | 7.4                                  | 2,000                         | 9.8 J-                           | 3.20                               |
| LVWPS-A2-MW05B | 10/5/2020   | N    | BL04  | Zone 2 | Alluvium           | 58.8 - 73.5       | 1,900                             | 2,300                           | 8.7                                  | 2,000                         | 0.66                             | 7.24                               |
| LVWPS-A2-MW05B | 12/22/2020  | N    | EM01  | Zone 2 | Alluvium           | 58.8 - 73.5       | 2.9                               | <4.0                            | <0.014                               | 1,800                         | 170 J-                           | 0.35                               |
| LVWPS-A2-MW05B | 12/22/2020  | FD   | EM01  | Zone 2 | Alluvium           | 58.8 - 73.5       | 2.9                               | <4.0                            | 0.026 J                              | 2,000                         | 170                              | ----                               |
| LVWPS-A2-MW05B | 1/13/2021   | N    | EM02  | Zone 2 | Alluvium           | 58.8 - 73.5       | <0.31                             | <10                             | <0.014                               | 1,400                         | 150                              | 0.29                               |
| LVWPS-A2-MW05B | 1/13/2021   | FD   | EM02  | Zone 2 | Alluvium           | 58.8 - 73.5       | <0.31                             | <10                             | <0.014                               | 1,400                         | 150                              | ----                               |
| LVWPS-A2-MW05B | 1/26/2021   | N    | EM03  | Zone 2 | Alluvium           | 58.8 - 73.5       | <0.31                             | <10                             | <0.014                               | 860                           | 220                              | 0.45                               |
| LVWPS-A2-MW05B | 2/9/2021    | N    | EM04  | Zone 2 | Alluvium           | 58.8 - 73.5       | <0.31                             | <10                             | <0.014                               | 590                           | 160 J-                           | 0.26                               |
| LVWPS-A2-MW05B | 2/9/2021    | FD   | EM04  | Zone 2 | Alluvium           | 58.8 - 73.5       | <0.31                             | <10                             | <0.014                               | 610                           | 140 J-                           | ----                               |
| LVWPS-A2-MW08A | 9/30/2020   | N    | BL04  | Zone 2 | Alluvium           | 40.3 - 55.0       | 2,700                             | 2,100                           | 20                                   | 2,100                         | 1.9 J+                           | 5.27                               |
| LVWPS-A2-MW08A | 12/23/2020  | N    | EM01  | Zone 2 | Alluvium           | 40.3 - 55.0       | 1,400                             | 2,000                           | 4.7                                  | 2,100                         | 7.4                              | 0.91                               |
| LVWPS-A2-MW08A | 1/15/2021   | N    | EM02  | Zone 2 | Alluvium           | 40.3 - 55.0       | 750                               | 1,300                           | 3.2                                  | 2,200                         | 25                               | 1.84                               |
| LVWPS-A2-MW08A | 1/26/2021   | N    | EM03  | Zone 2 | Alluvium           | 40.3 - 55.0       | 1,100                             | 1,800                           | 6.1                                  | 1,800                         | 6.5                              | 0.86                               |
| LVWPS-A2-MW08A | 2/10/2021   | N    | EM04  | Zone 2 | Alluvium           | 40.3 - 55.0       | 1,800                             | 3,400                           | 11                                   | 2,000                         | 2.7                              | 0.61                               |
| LVWPS-A2-MW08B | 10/1/2020   | N    | BL04  | Zone 2 | Alluvium           | 59.8 - 79.5       | 3,800                             | 6,000                           | 21                                   | 2,000                         | 1.8                              | 5.25                               |
| LVWPS-A2-MW08B | 12/23/2020  | N    | EM01  | Zone 2 | Alluvium           | 59.8 - 79.5       | 2,400                             | 4,900                           | 18                                   | 2,000                         | 2.4                              | 1.45                               |
| LVWPS-A2-MW08B | 1/15/2021   | N    | EM02  | Zone 2 | Alluvium           | 59.8 - 79.5       | 2,100                             | 4,400                           | 15                                   | 2,100                         | 2.2                              | 1.76                               |
| LVWPS-A2-MW08B | 1/26/2021   | N    | EM03  | Zone 2 | Alluvium           | 59.8 - 79.5       | 2,500                             | 4,600                           | 16                                   | 1,900                         | 2.4 J+                           | 1.54                               |
| LVWPS-A2-MW08B | 2/10/2021   | N    | EM04  | Zone 2 | Alluvium           | 59.8 - 79.5       | 2,600                             | 4,700                           | 20                                   | 2,200                         | 2.3                              | 1.96                               |
| LVWPS-A2-MW08C | 10/1/2020   | N    | BL04  | Zone 2 | Alluvium           | 86.3 - 106.0      | 4,100                             | 7,200                           | 21                                   | 2,200                         | 1.7                              | 4.92                               |



Table 2  
Groundwater Analytical Results  
Las Vegas Wash Bioremediation Pilot Study

| Well           | Sample Date | Type | Event | Zone   | Screened Lithology | Screened Interval | Perchlorate by USEPA Method 314.0 | Chlorate by USEPA Method 300.1B | Nitrate (as N) by USEPA Method 300.0 | Sulfate by USEPA Method 300.0 | Total Organic Carbon by SM 5310B | Dissolved Oxygen Field Measurement |
|----------------|-------------|------|-------|--------|--------------------|-------------------|-----------------------------------|---------------------------------|--------------------------------------|-------------------------------|----------------------------------|------------------------------------|
|                |             |      |       |        |                    | feet bgs          | µg/L                              | µg/L                            | mg/L                                 | mg/L                          | mg/L                             | mg/L                               |
| LWWPS-A2-MW08C | 12/23/2020  | N    | EM01  | Zone 2 | Alluvium           | 86.3 - 106.0      | 110                               | <10                             | <0.014                               | 2,400                         | 210                              | 0.81                               |
| LWWPS-A2-MW08C | 1/15/2021   | N    | EM02  | Zone 2 | Alluvium           | 86.3 - 106.0      | <0.31                             | <10                             | <0.014                               | 2,100                         | 130                              | 0.35                               |
| LWWPS-A2-MW08C | 1/28/2021   | N    | EM03  | Zone 2 | Alluvium           | 86.3 - 106.0      | <3.1                              | <10                             | <0.014                               | 1,400                         | 91                               | 0.42                               |
| LWWPS-A2-MW08C | 2/10/2021   | N    | EM04  | Zone 2 | Alluvium           | 86.3 - 106.0      | 140                               | 39 J                            | <0.014                               | 1,500                         | 100                              | 0.29                               |
| LWWPS-A2-MW09A | 10/9/2020   | N    | BL04  | Zone 2 | Alluvium           | 34.8 - 54.5       | 3,400                             | 5,500                           | 17                                   | 2,500                         | 1.4                              | 5.63                               |
| LWWPS-A2-MW09A | 12/22/2020  | N    | EM01  | Zone 2 | Alluvium           | 34.8 - 54.5       | 1,900                             | 2,300                           | 8.3 J-                               | 2,000                         | 1.7 J                            | 4.92                               |
| LWWPS-A2-MW09A | 1/11/2021   | N    | EM02  | Zone 2 | Alluvium           | 34.8 - 54.5       | 3,000                             | 3,200                           | 12                                   | 2,400                         | 1.5                              | 2.82                               |
| LWWPS-A2-MW09A | 1/11/2021   | FD   | EM02  | Zone 2 | Alluvium           | 34.8 - 54.5       | 3,200                             | 3,400                           | 12                                   | 2,500                         | 1.6                              | ----                               |
| LWWPS-A2-MW09A | 1/26/2021   | N    | EM03  | Zone 2 | Alluvium           | 34.8 - 54.5       | 2,200                             | 2,700                           | 8.7                                  | 2,400                         | 2.1 J+                           | 1.94                               |
| LWWPS-A2-MW09A | 2/8/2021    | N    | EM04  | Zone 2 | Alluvium           | 34.8 - 54.5       | 2,100                             | 3,000                           | 11                                   | 2,300                         | 1.4                              | 4.10                               |
| LWWPS-A2-MW09A | 2/8/2021    | FD   | EM04  | Zone 2 | Alluvium           | 34.8 - 54.5       | 2,200                             | 3,100                           | 11                                   | 2,300                         | 1.5                              | ----                               |
| LWWPS-A2-MW09B | 10/9/2020   | N    | BL04  | Zone 2 | Alluvium           | 58.8 - 78.5       | 1,600                             | 2,100                           | 8.8                                  | 2,000                         | 0.60                             | 7.44                               |
| LWWPS-A2-MW09B | 12/22/2020  | N    | EM01  | Zone 2 | Alluvium           | 58.8 - 78.5       | 1,500                             | 1,600                           | 5.5                                  | 1,800                         | 0.69                             | 3.74                               |
| LWWPS-A2-MW09B | 1/14/2021   | N    | EM02  | Zone 2 | Alluvium           | 58.8 - 78.5       | 1,300                             | 1,700                           | 6.1                                  | 1,900                         | 0.59                             | 3.90                               |
| LWWPS-A2-MW09B | 1/27/2021   | N    | EM03  | Zone 2 | Alluvium           | 58.8 - 78.5       | 1,500                             | 1,600                           | 6.5                                  | 1,700                         | 0.64                             | 3.54                               |
| LWWPS-A2-MW09B | 2/8/2021    | N    | EM04  | Zone 2 | Alluvium           | 58.8 - 78.5       | 1,500                             | 1,800                           | 7.2                                  | 1,800                         | 0.71                             | 4.12                               |
| LWWPS-A2-MW11A | 10/2/2020   | N    | BL04  | Zone 2 | Alluvium           | 40.3 - 60.0       | 3,100                             | 5,300                           | 19                                   | 2,100                         | 1.7                              | 4.72                               |
| LWWPS-A2-MW11A | 10/2/2020   | FD   | BL04  | Zone 2 | Alluvium           | 40.3 - 60.0       | 3,100                             | 5,100                           | 19                                   | 2,100                         | 1.7                              | ----                               |
| LWWPS-A2-MW11A | 12/23/2020  | N    | EM01  | Zone 2 | Alluvium           | 40.3 - 60.0       | 2,900                             | 5,000                           | 19                                   | 2,100                         | 2.0                              | 3.75                               |
| LWWPS-A2-MW11A | 1/13/2021   | N    | EM02  | Zone 2 | Alluvium           | 40.3 - 60.0       | 2,500                             | 5,600                           | 19                                   | 2,100                         | 1.9                              | 3.37                               |
| LWWPS-A2-MW11A | 1/27/2021   | N    | EM03  | Zone 2 | Alluvium           | 40.3 - 60.0       | 2,200                             | 4,700                           | 5.2                                  | 1,900                         | 1.9                              | 3.34                               |
| LWWPS-A2-MW11A | 2/9/2021    | N    | EM04  | Zone 2 | Alluvium           | 40.3 - 60.0       | 2,700                             | 4,700                           | 21                                   | 2,000 J-                      | 1.7 J-                           | 5.05                               |
| LWWPS-A2-MW11B | 10/2/2020   | N    | BL04  | Zone 2 | Alluvium           | 65.3 - 85.0       | 2,900                             | 7,200                           | 21                                   | 2,100                         | 1.7                              | 4.18                               |
| LWWPS-A2-MW11B | 12/23/2020  | N    | EM01  | Zone 2 | Alluvium           | 65.3 - 85.0       | 2,600                             | 6,100                           | 22                                   | 2,100                         | 2.3 J                            | 7.73                               |
| LWWPS-A2-MW11B | 1/13/2021   | N    | EM02  | Zone 2 | Alluvium           | 65.3 - 85.0       | 2,600                             | 6,500                           | 22                                   | 2,100                         | 2.2                              | 7.13                               |
| LWWPS-A2-MW11B | 1/27/2021   | N    | EM03  | Zone 2 | Alluvium           | 65.3 - 85.0       | 3,300                             | 6,900                           | 23                                   | 1,900                         | 1.9                              | 3.35                               |
| LWWPS-A2-MW11B | 2/8/2021    | N    | EM04  | Zone 2 | Alluvium           | 65.3 - 85.0       | 3,200                             | 8,000                           | 23                                   | 2,000                         | 1.8                              | 8.67                               |
| LWWPS-A2-MW11C | 10/2/2020   | N    | BL04  | Zone 2 | Alluvium           | 90.3 - 110.0      | 3,500                             | 11,000                          | 23                                   | 2,100                         | 1.6                              | 3.91                               |
| LWWPS-A2-MW11C | 12/23/2020  | N    | EM01  | Zone 2 | Alluvium           | 90.3 - 110.0      | 3,000                             | 9,800                           | 23                                   | 2,100                         | <0.26                            | 3.43                               |
| LWWPS-A2-MW11C | 1/14/2021   | N    | EM02  | Zone 2 | Alluvium           | 90.3 - 110.0      | 2,900                             | 9,900                           | 23                                   | 2,300                         | 1.7                              | 3.14                               |
| LWWPS-A2-MW11C | 1/27/2021   | N    | EM03  | Zone 2 | Alluvium           | 90.3 - 110.0      | 3,500                             | 11,000                          | 24                                   | 2,000                         | 2.2                              | 2.67                               |
| LWWPS-A2-MW11C | 2/9/2021    | N    | EM04  | Zone 2 | Alluvium           | 90.3 - 110.0      | 3,200                             | 11,000                          | 24                                   | 1,900                         | 1.6 J-                           | 6.27                               |
| LWWPS-A2-MW12A | 10/6/2020   | N    | BL04  | Zone 2 | Alluvium           | 34.9 - 44.5       | 4,400                             | 5,300                           | 18                                   | 2,100                         | 1.7                              | 4.83                               |
| LWWPS-A2-MW12A | 12/22/2020  | N    | EM01  | Zone 2 | Alluvium           | 34.9 - 44.5       | 32                                | 50 J                            | <0.014                               | 2,500                         | 120                              | 0.56                               |
| LWWPS-A2-MW12A | 12/22/2020  | FD   | EM01  | Zone 2 | Alluvium           | 34.9 - 44.5       | 40                                | 48 J                            | <0.014                               | 2,400                         | 120                              | ----                               |
| LWWPS-A2-MW12A | 1/11/2021   | N    | EM02  | Zone 2 | Alluvium           | 34.9 - 44.5       | <0.31                             | <4.0                            | <0.014                               | 2,100                         | 92                               | 0.74                               |
| LWWPS-A2-MW12A | 1/27/2021   | N    | EM03  | Zone 2 | Alluvium           | 34.9 - 44.5       | <0.31                             | <10                             | <0.014                               | 200                           | 8.0                              | 0.45                               |
| LWWPS-A2-MW12A | 2/8/2021    | N    | EM04  | Zone 2 | Alluvium           | 34.9 - 44.5       | <0.31                             | <10                             | 0.023 J                              | 14                            | 33                               | 1.34                               |
| LWWPS-A2-MW12B | 10/7/2020   | N    | BL04  | Zone 2 | Alluvium           | 49.3 - 69.0       | 4,000                             | 5,600                           | 19                                   | 2,300                         | 1.6                              | 4.82                               |
| LWWPS-A2-MW12B | 12/22/2020  | N    | EM01  | Zone 2 | Alluvium           | 49.3 - 69.0       | 12                                | <10                             | <0.014                               | 2,100                         | 45                               | 0.53                               |
| LWWPS-A2-MW12B | 1/12/2021   | N    | EM02  | Zone 2 | Alluvium           | 49.3 - 69.0       | 170                               | 130                             | 0.036 J                              | 2,300                         | 11                               | 0.68                               |
| LWWPS-A2-MW12B | 1/27/2021   | N    | EM03  | Zone 2 | Alluvium           | 49.3 - 69.0       | 220                               | 140                             | <0.014                               | 1,900                         | 2.8                              | 0.57                               |
| LWWPS-A2-MW12B | 1/27/2021   | FD   | EM03  | Zone 2 | Alluvium           | 49.3 - 69.0       | 220                               | 150                             | <0.014                               | 2,000                         | 2.9                              | ----                               |
| LWWPS-A2-MW12B | 2/8/2021    | N    | EM04  | Zone 2 | Alluvium           | 49.3 - 69.0       | 20                                | 28 J                            | <0.014                               | 2,100                         | 2.8                              | 1.31                               |
| LWWPS-A2-MW13A | 10/1/2020   | N    | BL04  | Zone 2 | Alluvium           | 41.3 - 61.0       | 1,200                             | 2,100                           | 10                                   | 1,800                         | 0.76                             | 6.60                               |
| LWWPS-A2-MW13A | 12/22/2020  | N    | EM01  | Zone 2 | Alluvium           | 41.3 - 61.0       | 1,100                             | 1,300                           | 7.3                                  | 1,900                         | 1.4                              | 6.32                               |
| LWWPS-A2-MW13A | 1/11/2021   | N    | EM02  | Zone 2 | Alluvium           | 41.3 - 61.0       | 1,100                             | 1,100                           | 5.9                                  | 2,300                         | 1.7                              | 0.85                               |
| LWWPS-A2-MW13A | 1/27/2021   | N    | EM03  | Zone 2 | Alluvium           | 41.3 - 61.0       | 1,700                             | 1,900                           | 8.9                                  | 2,000                         | 1.6                              | 1.12                               |
| LWWPS-A2-MW13A | 2/10/2021   | N    | EM04  | Zone 2 | Alluvium           | 41.3 - 61.0       | 2,000                             | 2,300                           | 12                                   | 2,000                         | 1.4                              | 1.87                               |
| LWWPS-A2-MW13B | 10/1/2020   | N    | BL04  | Zone 2 | Alluvium           | 66.4 - 86.1       | 2,200                             | 4,300                           | 15                                   | 2,200                         | 1.2                              | 5.76                               |
| LWWPS-A2-MW13B | 12/22/2020  | N    | EM01  | Zone 2 | Alluvium           | 66.4 - 86.1       | 610                               | 830                             | 3.5                                  | 2,200                         | 32                               | 2.43                               |
| LWWPS-A2-MW13B | 1/12/2021   | N    | EM02  | Zone 2 | Alluvium           | 66.4 - 86.1       | 38                                | 58 J                            | 0.11 J                               | 2,100                         | 21                               | 0.49                               |
| LWWPS-A2-MW13B | 1/27/2021   | N    | EM03  | Zone 2 | Alluvium           | 66.4 - 86.1       | 52                                | 26 J                            | 0.71                                 | 1,700                         | 9.6                              | 0.44                               |
| LWWPS-A2-MW13B | 2/10/2021   | N    | EM04  | Zone 2 | Alluvium           | 66.4 - 86.1       | 170                               | 240                             | 0.76                                 | 1,600                         | 3.6                              | 0.85                               |
| LWWPS-A2-MW14A | 10/6/2020   | N    | BL04  | Zone 2 | Alluvium           | 35.8 - 50.5       | 2,600                             | 5,400                           | 19                                   | 2,200                         | 1.7                              | 5.77                               |
| LWWPS-A2-MW14A | 10/6/2020   | FD   | BL04  | Zone 2 | Alluvium           | 35.8 - 50.5       | 2,700                             | 5,100                           | 19                                   | 2,200                         | 1.7                              | ----                               |
| LWWPS-A2-MW14A | 12/22/2020  | N    | EM01  | Zone 2 | Alluvium           | 35.8 - 50.5       | 130                               | 240                             | 0.58 J-                              | 2,300                         | 28                               | 0.33                               |
| LWWPS-A2-MW14A | 12/22/2020  | FD   | EM01  | Zone 2 | Alluvium           | 35.8 - 50.5       | 140                               | 210                             | 0.58 J-                              | 2,200                         | 29                               | ----                               |

Table 2  
Groundwater Analytical Results  
Las Vegas Wash Bioremediation Pilot Study

| Well           | Sample Date | Type | Event | Zone   | Screened Lithology | Screened Interval | Perchlorate by USEPA Method 314.0 | Chlorate by USEPA Method 300.1B | Nitrate (as N) by USEPA Method 300.0 | Sulfate by USEPA Method 300.0 | Total Organic Carbon by SM 5310B | Dissolved Oxygen Field Measurement |
|----------------|-------------|------|-------|--------|--------------------|-------------------|-----------------------------------|---------------------------------|--------------------------------------|-------------------------------|----------------------------------|------------------------------------|
|                |             |      |       |        |                    | feet bgs          | µg/L                              | µg/L                            | mg/L                                 | mg/L                          | mg/L                             | mg/L                               |
| LVWPS-A2-MW14A | 1/13/2021   | N    | EM02  | Zone 2 | Alluvium           | 35.8 - 50.5       | 200                               | 250                             | 0.57                                 | 1,900                         | 31                               | 0.69                               |
| LVWPS-A2-MW14A | 1/13/2021   | FD   | EM02  | Zone 2 | Alluvium           | 35.8 - 50.5       | 210                               | 220                             | 0.59                                 | 1,900                         | 32                               | ----                               |
| LVWPS-A2-MW14A | 1/28/2021   | N    | EM03  | Zone 2 | Alluvium           | 35.8 - 50.5       | 50                                | 65 J                            | 0.24                                 | 950                           | 59                               | 1.02                               |
| LVWPS-A2-MW14A | 1/28/2021   | FD   | EM03  | Zone 2 | Alluvium           | 35.8 - 50.5       | 59                                | 52 J                            | 0.25                                 | 960                           | 61                               | ----                               |
| LVWPS-A2-MW14A | 2/9/2021    | N    | EM04  | Zone 2 | Alluvium           | 35.8 - 50.5       | 23                                | <10                             | 0.053                                | 890                           | 41 J-                            | 0.72                               |
| LVWPS-A2-MW14A | 2/9/2021    | FD   | EM04  | Zone 2 | Alluvium           | 35.8 - 50.5       | 23                                | <10                             | 0.038 J                              | 890                           | 41 J-                            | ----                               |
| LVWPS-A2-MW14B | 10/6/2020   | N    | BL04  | Zone 2 | Alluvium           | 54.8 - 74.5       | 2,800                             | 5,400                           | 18                                   | 2,300                         | 1.6                              | 5.42                               |
| LVWPS-A2-MW14B | 12/22/2020  | N    | EM01  | Zone 2 | Alluvium           | 54.8 - 74.5       | 1,700                             | 2,800                           | 7.9                                  | 2,400                         | 7.4                              | 0.28                               |
| LVWPS-A2-MW14B | 1/13/2021   | N    | EM02  | Zone 2 | Alluvium           | 54.8 - 74.5       | 1,800                             | 3,800                           | 10                                   | 2,300                         | 3.1                              | 0.70                               |
| LVWPS-A2-MW14B | 1/25/2021   | N    | EM03  | Zone 2 | Alluvium           | 54.8 - 74.5       | 2,400                             | 3,000                           | 8.6                                  | 2,100                         | 2.2 J+                           | 0.98                               |
| LVWPS-A2-MW14B | 2/9/2021    | N    | EM04  | Zone 2 | Alluvium           | 54.8 - 74.5       | 1,400                             | 2,600                           | 9.5                                  | 2,000                         | 6.2 J-                           | 0.73                               |
| LVWPS-A2-MW15A | 10/7/2020   | N    | BL04  | Zone 2 | Alluvium           | 39.8 - 59.5       | 3,400                             | 5,100                           | 20                                   | 2,100                         | 1.7                              | 4.55                               |
| LVWPS-A2-MW15A | 12/21/2020  | N    | EM01  | Zone 2 | Alluvium           | 39.8 - 59.5       | 3,000                             | 5,100                           | 19                                   | 2,000                         | 1.9                              | 4.42                               |
| LVWPS-A2-MW15A | 1/11/2021   | N    | EM02  | Zone 2 | Alluvium           | 39.8 - 59.5       | 2,800                             | 5,400                           | 19                                   | 2,200                         | 1.9                              | 3.70                               |
| LVWPS-A2-MW15A | 1/25/2021   | N    | EM03  | Zone 2 | Alluvium           | 39.8 - 59.5       | 2,900                             | 5,000                           | 18                                   | 2,000                         | 2.0 J+                           | 3.59                               |
| LVWPS-A2-MW15A | 2/9/2021    | N    | EM04  | Zone 2 | Alluvium           | 39.8 - 59.5       | 2,200                             | 4,800                           | 20                                   | 1,900                         | 2.0 J-                           | 4.64                               |
| LVWPS-A2-MW15B | 10/8/2020   | N    | BL04  | Zone 2 | Alluvium           | 70.3 - 90.0       | 3,200                             | 9,000                           | 22                                   | 2,300                         | 1.7                              | 3.90                               |
| LVWPS-A2-MW15B | 12/22/2020  | N    | EM01  | Zone 2 | Alluvium           | 70.3 - 90.0       | 3,300                             | 7,600                           | 24                                   | 2,200                         | 2.0                              | 4.30                               |
| LVWPS-A2-MW15B | 1/12/2021   | N    | EM02  | Zone 2 | Alluvium           | 70.3 - 90.0       | 3,300                             | 8,400                           | 24                                   | 2,300                         | 1.8                              | 3.05                               |
| LVWPS-A2-MW15B | 1/26/2021   | N    | EM03  | Zone 2 | Alluvium           | 70.3 - 90.0       | 3,400                             | 9,000                           | 25                                   | 2,000                         | 1.8 J+                           | 9.30 E                             |
| LVWPS-A2-MW15B | 2/9/2021    | N    | EM04  | Zone 2 | Alluvium           | 70.3 - 90.0       | 2,600                             | 9,500                           | 24                                   | 1,800                         | 1.7 J-                           | 3.99                               |
| LVWPS-A2-MW16A | 10/9/2020   | N    | BL04  | Zone 2 | Alluvium           | 35.8 - 55.5       | 3,500                             | 5,800                           | 22                                   | 2,100                         | 1.6                              | 5.17                               |
| LVWPS-A2-MW16A | 12/22/2020  | N    | EM01  | Zone 2 | Alluvium           | 35.8 - 55.5       | 3,600                             | 5,600                           | 21                                   | 2,000                         | 1.8                              | 3.55                               |
| LVWPS-A2-MW16A | 1/12/2021   | N    | EM02  | Zone 2 | Alluvium           | 35.8 - 55.5       | 2,900                             | 5,300                           | 21                                   | 2,300                         | 1.7                              | 3.87                               |
| LVWPS-A2-MW16A | 1/25/2021   | N    | EM03  | Zone 2 | Alluvium           | 35.8 - 55.5       | 3,900                             | 5,300                           | 20                                   | 2,000                         | 1.8 J+                           | 3.87                               |
| LVWPS-A2-MW16A | 2/9/2021    | N    | EM04  | Zone 2 | Alluvium           | 35.8 - 55.5       | 2,600                             | 5,600                           | 22                                   | 1,900                         | 1.7 J-                           | 3.35                               |
| LVWPS-A2-MW16B | 10/9/2020   | N    | BL04  | Zone 2 | Alluvium           | 60.3 - 80.0       | 3,600                             | 9,000                           | 22                                   | 2,200                         | 1.5                              | 4.45                               |
| LVWPS-A2-MW16B | 10/9/2020   | FD   | BL04  | Zone 2 | Alluvium           | 60.3 - 80.0       | 3,400                             | 9,100                           | 22                                   | 2,200                         | 1.6                              | ----                               |
| LVWPS-A2-MW16B | 12/22/2020  | N    | EM01  | Zone 2 | Alluvium           | 60.3 - 80.0       | 4,100                             | 7,800                           | 22 J-                                | 2,100                         | 2.0                              | 3.44                               |
| LVWPS-A2-MW16B | 1/12/2021   | N    | EM02  | Zone 2 | Alluvium           | 60.3 - 80.0       | 3,000                             | 9,200                           | 22                                   | 2,300                         | 1.7                              | 3.57                               |
| LVWPS-A2-MW16B | 1/25/2021   | N    | EM03  | Zone 2 | Alluvium           | 60.3 - 80.0       | 3,500                             | 8,400                           | 20                                   | 2,000                         | 1.8 J+                           | 3.63                               |
| LVWPS-A2-MW16B | 2/9/2021    | N    | EM04  | Zone 2 | Alluvium           | 60.3 - 80.0       | 2,900                             | 8,500                           | 22                                   | 1,900                         | 1.7 J-                           | 2.68                               |
| LVWPS-A2-MW17A | 10/1/2020   | N    | BL04  | Zone 2 | Alluvium           | 40.3 - 60.0       | 2,500                             | 5,300                           | 19                                   | 2,100                         | 1.7                              | 4.90                               |
| LVWPS-A2-MW17A | 12/22/2020  | N    | EM01  | Zone 2 | Alluvium           | 40.3 - 60.0       | 2,100                             | 2,100                           | 6.4                                  | 2,200                         | 2.8                              | 0.37                               |
| LVWPS-A2-MW17A | 1/11/2021   | N    | EM02  | Zone 2 | Alluvium           | 40.3 - 60.0       | 2,100                             | 3,000                           | 8.7                                  | 2,200                         | 2.0                              | 0.67                               |
| LVWPS-A2-MW17A | 1/26/2021   | N    | EM03  | Zone 2 | Alluvium           | 40.3 - 60.0       | 2,700                             | 3,700                           | 14                                   | 1,900                         | 2.4 J+                           | 1.77 E                             |
| LVWPS-A2-MW17A | 2/8/2021    | N    | EM04  | Zone 2 | Alluvium           | 40.3 - 60.0       | 2,400                             | 3,600                           | 13                                   | 2,000                         | 1.9                              | 1.18                               |
| LVWPS-A2-MW17B | 10/1/2020   | N    | BL04  | Zone 2 | Alluvium           | 65.3 - 85.0       | 2,700                             | 5,700                           | 21                                   | 2,100                         | 1.7                              | 4.83                               |
| LVWPS-A2-MW17B | 12/22/2020  | N    | EM01  | Zone 2 | Alluvium           | 65.3 - 85.0       | 560                               | 350                             | 1.2                                  | 2,200                         | 7.6                              | 0.37                               |
| LVWPS-A2-MW17B | 1/11/2021   | N    | EM02  | Zone 2 | Alluvium           | 65.3 - 85.0       | 790                               | 1,200                           | 3.2                                  | 2,200                         | 6.8                              | 0.26                               |
| LVWPS-A2-MW17B | 1/26/2021   | N    | EM03  | Zone 2 | Alluvium           | 65.3 - 85.0       | 870                               | 1,300                           | 3.3                                  | 1,700                         | 4.5                              | 7.06 E                             |
| LVWPS-A2-MW17B | 2/8/2021    | N    | EM04  | Zone 2 | Alluvium           | 65.3 - 85.0       | 1,100                             | 1,400                           | 4.5                                  | 1,800                         | 3.5                              | 4.10                               |
| LVWPS-A2-MW17C | 10/1/2020   | N    | BL04  | Zone 2 | Alluvium           | 90.3 - 110.0      | 2,200                             | 3,700                           | 14                                   | 2,100                         | 1.1                              | 5.67                               |
| LVWPS-A2-MW17C | 12/22/2020  | N    | EM01  | Zone 2 | Alluvium           | 90.3 - 110.0      | 2,000                             | 1,700                           | 4.3                                  | 1,900                         | 4.8                              | 2.30                               |
| LVWPS-A2-MW17C | 1/11/2021   | N    | EM02  | Zone 2 | Alluvium           | 90.3 - 110.0      | 660                               | 920                             | 2.6                                  | 2,100                         | 3.6                              | 0.91                               |
| LVWPS-A2-MW17C | 1/26/2021   | N    | EM03  | Zone 2 | Alluvium           | 90.3 - 110.0      | 720                               | 1,000                           | 2.5                                  | 1,800                         | 2.9                              | 3.80 E                             |
| LVWPS-A2-MW17C | 2/8/2021    | N    | EM04  | Zone 2 | Alluvium           | 90.3 - 110.0      | 570                               | 760                             | 2.1                                  | 1,200                         | 62                               | 3.93                               |
| LVWPS-A3-MW02  | 10/5/2020   | N    | BL04  | Zone 3 | Alluvium           | 52.8 - 72.5       | 100                               | 150                             | 7.0                                  | 900                           | 0.29 J                           | 6.42                               |
| LVWPS-A3-MW02  | 1/14/2021   | N    | EM02  | Zone 3 | Alluvium           | 52.8 - 72.5       | 100                               | 140                             | 7.2                                  | 1,000                         | 0.35 J                           | 6.18                               |
| LVWPS-A3-MW02  | 2/11/2021   | N    | EM04  | Zone 3 | Alluvium           | 52.8 - 72.5       | 130                               | 130                             | 7.4 J-                               | 920                           | 0.28 J                           | 6.68                               |
| LVWPS-A3-MW06  | 10/5/2020   | N    | BL04  | Zone 3 | Alluvium           | 55.3 - 75.0       | 110                               | 150                             | 9.0                                  | 1,300                         | 0.45 J                           | 7.24                               |
| LVWPS-A3-MW06  | 1/15/2021   | N    | EM02  | Zone 3 | Alluvium           | 55.3 - 75.0       | 100                               | 160                             | 8.6                                  | 1,400                         | 0.61 J-                          | 6.47                               |
| LVWPS-A3-MW06  | 2/10/2021   | N    | EM04  | Zone 3 | Alluvium           | 55.3 - 75.0       | 120                               | 140                             | 8.9                                  | 1,300                         | 0.48 J                           | 6.27                               |
| LVWPS-A3-MW07  | 10/8/2020   | N    | BL04  | Zone 3 | Alluvium           | 54.8 - 74.5       | 100                               | 210                             | 6.4                                  | 1,100                         | 0.45 J                           | 6.98                               |
| LVWPS-A3-MW07  | 1/15/2021   | N    | EM02  | Zone 3 | Alluvium           | 54.8 - 74.5       | 130                               | 230                             | 7.1                                  | 1,200                         | <1.0                             | 6.70                               |
| LVWPS-A3-MW07  | 2/11/2021   | N    | EM04  | Zone 3 | Alluvium           | 54.8 - 74.5       | 130                               | 200                             | 7.5 J-                               | 1,100                         | 0.34 J                           | 6.71                               |
| LVWPS-A3-MW08  | 10/8/2020   | N    | BL04  | Zone 3 | Alluvium           | 84.8 - 104.5      | 120                               | 180                             | 8.5                                  | 1,600                         | 0.81                             | 4.73                               |
| LVWPS-A3-MW08  | 1/14/2021   | N    | EM02  | Zone 3 | Alluvium           | 84.8 - 104.5      | 71                                | 160                             | 8.4                                  | 1,700                         | 1.1 J                            | 6.42                               |



Table 2  
Groundwater Analytical Results  
Las Vegas Wash Bioremediation Pilot Study

| Well          | Sample Date | Type | Event | Zone             | Screened Lithology | Screened Interval | Perchlorate by USEPA Method 314.0 | Chlorate by USEPA Method 300.1B | Nitrate (as N) by USEPA Method 300.0 | Sulfate by USEPA Method 300.0 | Total Organic Carbon by SM 5310B | Dissolved Oxygen Field Measurement |
|---------------|-------------|------|-------|------------------|--------------------|-------------------|-----------------------------------|---------------------------------|--------------------------------------|-------------------------------|----------------------------------|------------------------------------|
|               |             |      |       |                  |                    | feet bgs          | µg/L                              | µg/L                            | mg/L                                 | mg/L                          | mg/L                             | mg/L                               |
| LWWPS-A3-MW08 | 2/11/2021   | N    | EM04  | Zone 3           | Alluvium           | 84.8 - 104.5      | 83                                | 170                             | 8.1 J-                               | 1,600                         | 0.80                             | 6.32                               |
| LWWPS-A3-MW10 | 10/5/2020   | N    | BL04  | Zone 3           | Alluvium           | 56.3 - 76.0       | 200                               | 200                             | 7.5                                  | 870                           | 0.26 J                           | 7.31                               |
| LWWPS-A3-MW10 | 1/14/2021   | N    | EM02  | Zone 3           | Alluvium           | 56.3 - 76.0       | 190                               | 220                             | 7.7                                  | 930                           | 0.44 J                           | 6.97                               |
| LWWPS-A3-MW10 | 2/11/2021   | N    | EM04  | Zone 3           | Alluvium           | 56.3 - 76.0       | 180                               | 180                             | 7.9 J-                               | 950                           | <0.26                            | 6.84                               |
| LWWPS-A3-MW11 | 10/7/2020   | N    | BL04  | Zone 3           | Alluvium           | 53.8 - 73.5       | 78                                | 160                             | 9.2                                  | 1,600                         | 0.96                             | 8.50                               |
| LWWPS-A3-MW11 | 1/15/2021   | N    | EM02  | Zone 3           | Alluvium           | 53.8 - 73.5       | 55 J                              | 140                             | 8.4                                  | 1,700                         | 0.72                             | 6.84                               |
| LWWPS-A3-MW11 | 2/11/2021   | N    | EM04  | Zone 3           | Alluvium           | 53.8 - 73.5       | 68                                | 150                             | 7.6                                  | 1,600                         | 0.65                             | 6.69                               |
| LWWPS-A3-MW12 | 10/5/2020   | N    | BL04  | Zone 3           | Alluvium           | 59.3 - 79.0       | 200                               | 270                             | 7.2                                  | 1,200                         | 0.40 J                           | 6.48                               |
| LWWPS-A3-MW12 | 1/13/2021   | N    | EM02  | Zone 3           | Alluvium           | 59.3 - 79.0       | 230                               | 260                             | 7.1                                  | 1,200                         | 0.35 J                           | 5.84                               |
| LWWPS-A3-MW12 | 2/12/2021   | N    | EM04  | Zone 3           | Alluvium           | 59.3 - 79.0       | 190                               | 280                             | 7.6                                  | 1,200                         | 0.41 J                           | 8.24                               |
| LWWPS-EW01    | 9/29/2020   | N    | BL04  | Extraction       | Alluvium           | 44.8 - 84.5       | 2,900                             | 13,000                          | 23                                   | 2,200                         | 1.6                              | 2.76                               |
| LWWPS-EW02    | 9/29/2020   | N    | BL04  | Extraction       | Alluvium           | 28.3 - 58.0       | 2,900                             | 5,500                           | 20                                   | 2,100                         | 1.9                              | 4.29                               |
| LWWPS-EW03    | 9/30/2020   | N    | BL04  | Extraction       | Alluvium           | 40.3 - 70.0       | 3,100                             | 5,000                           | 18                                   | 2,100                         | 1.7                              | 4.09                               |
| LWWPS-EW04    | 9/30/2020   | N    | BL04  | Extraction       | Alluvium           | 26.3 - 46.0       | 2,800                             | 5,200                           | 20                                   | 2,100                         | 2.0                              | 4.35                               |
| LWWPS-EW05    | 9/29/2020   | N    | BL04  | Extraction       | Alluvium           | 50.3 - 80.0       | 2,800                             | 11,000                          | 23                                   | 2,100                         | 1.8                              | 2.32                               |
| LWWPS-EW05    | 9/29/2020   | FD   | BL04  | Extraction       | Alluvium           | 50.3 - 80.0       | 2,800                             | 11,000                          | 23                                   | 2,100                         | 1.7                              | ----                               |
| LWWPS-MW201A  | 9/28/2020   | N    | BL04  | General Vicinity | Alluvium           | 28.2 - 47.8       | 1,800                             | 11,000                          | 13                                   | ----                          | ----                             | 0.59                               |
| LWWPS-MW201B  | 9/28/2020   | N    | BL04  | General Vicinity | UMCF               | 60.1 - 79.8       | 610                               | 560                             | 0.55                                 | ----                          | ----                             | 1.13                               |
| LWWPS-MW202   | 9/29/2020   | N    | BL04  | General Vicinity | Alluvium           | 41.8 - 61.5       | 1,100                             | 6,000                           | 12                                   | ----                          | ----                             | 0.80                               |
| LWWPS-MW203A  | 9/30/2020   | N    | BL04  | General Vicinity | Alluvium           | 34.8 - 54.5       | 120                               | <40                             | 9.3                                  | ----                          | ----                             | 0.74                               |
| LWWPS-MW203A  | 9/30/2020   | FD   | BL04  | General Vicinity | Alluvium           | 34.8 - 54.5       | 120                               | <40                             | 9.3                                  | ----                          | ----                             | ----                               |
| LWWPS-MW203B  | 9/30/2020   | N    | BL04  | General Vicinity | UMCF               | 75.1 - 94.7       | 2.6 J-                            | <40                             | <0.014                               | ----                          | ----                             | 0.88                               |
| LWWPS-MW203C  | 9/30/2020   | N    | BL04  | General Vicinity | UMCF (Semi-Cons)   | 100.3 - 120.0     | <0.31                             | <20                             | <0.014                               | ----                          | ----                             | 0.65                               |
| LWWPS-MW204   | 9/28/2020   | N    | BL04  | General Vicinity | Alluvium           | 50.3 - 70.0       | 1,600                             | 10,000                          | 14                                   | 1,300                         | 1.4                              | 1.84                               |
| LWWPS-MW204   | 9/28/2020   | FD   | BL04  | General Vicinity | Alluvium           | 50.3 - 70.0       | 1,600                             | 10,000                          | 14                                   | 1,300                         | 1.3                              | ----                               |
| LWWPS-MW204B  | 9/28/2020   | N    | BL04  | General Vicinity | UMCF               | 101.5 - 121.2     | 12,000                            | 22,000                          | 15                                   | 1,800                         | 0.75                             | 2.92                               |
| LWWPS-MW204C  | 10/7/2020   | N    | BL04  | General Vicinity | UMCF (Semi-Cons)   | 150.5 - 170.0     | 46                                | <100                            | <0.028                               | ----                          | ----                             | 2.40                               |
| LWWPS-MW205B  | 9/28/2020   | N    | BL04  | General Vicinity | Alluvium           | 64.9 - 84.6       | 1,300                             | 6,300                           | 12                                   | ----                          | ----                             | 0.50                               |
| LWWPS-MW205C  | 9/29/2020   | N    | BL04  | General Vicinity | Alluvium           | 100.3 - 120.0     | 790                               | 2,700                           | 11                                   | ----                          | ----                             | 0.87                               |
| LWWPS-MW206A  | 9/30/2020   | N    | BL04  | Extraction       | Alluvium           | 39.8 - 59.5       | 3,400 J-                          | 8,500                           | 23                                   | ----                          | ----                             | 3.77                               |
| LWWPS-MW206B  | 9/30/2020   | N    | BL04  | Extraction       | Alluvium           | 69.9 - 89.5       | 2,800                             | 16,000                          | 10                                   | ----                          | ----                             | 1.84                               |
| LWWPS-MW206C  | 9/30/2020   | N    | BL04  | Extraction       | UMCF               | 100.3 - 120.0     | 4,900 J-                          | 6,000                           | 3.4                                  | ----                          | ----                             | 2.70                               |
| LWWPS-MW206D  | 10/6/2020   | N    | BL04  | Extraction       | UMCF               | 125.3 - 145.0     | 9.5                               | <10                             | <0.014                               | ----                          | ----                             | 2.08                               |
| LWWPS-MW206E  | 10/5/2020   | N    | BL04  | Extraction       | UMCF (Semi-Cons)   | 195.5 - 205.0     | 39                                | <100                            | <0.014                               | ----                          | ----                             | 2.11                               |
| LWWPS-MW207   | 9/28/2020   | N    | BL04  | General Vicinity | Alluvium           | 68.1 - 87.8       | 2,200                             | 14,000                          | 18                                   | 1,800                         | 1.5                              | 1.55                               |
| LWWPS-MW207   | 12/22/2020  | N    | EM01  | General Vicinity | Alluvium           | 68.1 - 87.8       | 4,900                             | 13,000                          | 17                                   | 1,900                         | 1.6                              | 1.27                               |
| LWWPS-MW207   | 1/29/2021   | N    | EM03  | General Vicinity | Alluvium           | 68.1 - 87.8       | 2,500                             | 14,000                          | 14                                   | 1,800                         | 1.7                              | 1.09                               |
| LWWPS-MW208A  | 10/9/2020   | N    | BL04  | Zone 2           | Alluvium           | 39.9 - 59.5       | 1,900                             | 2,900                           | 12                                   | 2,100                         | 0.93                             | 5.77                               |
| LWWPS-MW208A  | 12/23/2020  | N    | EM01  | Zone 2           | Alluvium           | 39.9 - 59.5       | 2,200                             | 2,300                           | 9.4                                  | 1,900                         | 0.81                             | 4.14                               |
| LWWPS-MW208A  | 1/13/2021   | N    | EM02  | Zone 2           | Alluvium           | 39.9 - 59.5       | 13,000 J                          | 2,600                           | 11                                   | 2,000                         | 0.88                             | 5                                  |
| LWWPS-MW208A  | 1/27/2021   | N    | EM03  | Zone 2           | Alluvium           | 39.9 - 59.5       | 2,200                             | 2,600                           | 11                                   | 2,000                         | 0.92                             | 5.82 E                             |
| LWWPS-MW208A  | 2/10/2021   | N    | EM04  | Zone 2           | Alluvium           | 39.9 - 59.5       | 2,400                             | 2,500                           | 11                                   | 2,100                         | 0.96                             | 5.07                               |
| LWWPS-MW208B  | 10/9/2020   | N    | BL04  | Zone 2           | Alluvium           | 65.3 - 85.0       | 2,100                             | 3,200                           | 12                                   | 2,000                         | 1.0                              | 5.90                               |
| LWWPS-MW208B  | 12/23/2020  | N    | EM01  | Zone 2           | Alluvium           | 65.3 - 85.0       | 870                               | 42 J                            | 0.23                                 | 1,900                         | 11                               | 0.31                               |
| LWWPS-MW208B  | 12/23/2020  | FD   | EM01  | Zone 2           | Alluvium           | 65.3 - 85.0       | 810                               | 39 J                            | 0.23                                 | 1,900                         | 11                               | ----                               |
| LWWPS-MW208B  | 1/13/2021   | N    | EM02  | Zone 2           | Alluvium           | 65.3 - 85.0       | 63                                | 46                              | 0.33                                 | 1,800                         | 8.4                              | 0.83                               |
| LWWPS-MW208B  | 1/27/2021   | N    | EM03  | Zone 2           | Alluvium           | 65.3 - 85.0       | 74                                | 56 J                            | 0.25                                 | 1,600                         | 9.9                              | 3.35 E                             |
| LWWPS-MW208B  | 1/27/2021   | FD   | EM03  | Zone 2           | Alluvium           | 65.3 - 85.0       | 63                                | 55 J                            | 0.28                                 | 1,600                         | 10                               | ----                               |
| LWWPS-MW208B  | 2/11/2021   | N    | EM04  | Zone 2           | Alluvium           | 65.3 - 85.0       | 150                               | 180                             | 0.83 J-                              | 1,400 J-                      | 1.4                              | 1.54                               |
| LWWPS-MW209   | 10/6/2020   | N    | BL04  | General Vicinity | Alluvium           | 71.3 - 91.0       | 2,700                             | 8,500                           | 22                                   | 2,200                         | 1.6                              | 4.40                               |
| LWWPS-MW209   | 10/6/2020   | FD   | BL04  | General Vicinity | Alluvium           | 71.3 - 91.0       | 2,800                             | 9,000                           | 22                                   | 2,200                         | 1.6                              | ----                               |
| LWWPS-MW209   | 12/21/2020  | N    | EM01  | General Vicinity | Alluvium           | 71.3 - 91.0       | 3,000                             | 7,600                           | 18                                   | 2,200                         | 1.8                              | 2.38                               |
| LWWPS-MW209   | 1/27/2021   | N    | EM03  | General Vicinity | Alluvium           | 71.3 - 91.0       | 2,600                             | 7,800                           | 19                                   | 2,000                         | 1.8                              | 2.94 E                             |
| LWWPS-MW209A  | 10/6/2020   | N    | BL04  | General Vicinity | Alluvium           | 35.3 - 55.0       | 2,800                             | 6,800                           | 21                                   | 2,200                         | 1.7                              | 4.72                               |
| LWWPS-MW209A  | 12/21/2020  | N    | EM01  | General Vicinity | Alluvium           | 35.3 - 55.0       | 3,000                             | 5,300                           | 20                                   | 2,300                         | 1.6                              | 3.96                               |
| LWWPS-MW209A  | 1/27/2021   | N    | EM03  | General Vicinity | Alluvium           | 35.3 - 55.0       | 2,300                             | 3,700                           | 14                                   | 2,100                         | 2.4                              | 2.59 E                             |
| LWWPS-MW209B  | 10/6/2020   | N    | BL04  | General Vicinity | UMCF-cg            | 110.3 - 130.0     | 2,700                             | 8,300                           | 21                                   | ----                          | ----                             | 4.30                               |
| LWWPS-MW209C  | 10/7/2020   | N    | BL04  | General Vicinity | UMCF-cg            | 151.0 - 170.5     | 8,500                             | 12,000                          | 14                                   | ----                          | ----                             | 2.44                               |

Table 2  
Groundwater Analytical Results  
Las Vegas Wash Bioremediation Pilot Study

| Well         | Sample Date | Type | Event | Zone             | Screened Lithology | Screened Interval | Perchlorate by USEPA Method 314.0 | Chlorate by USEPA Method 300.1B | Nitrate (as N) by USEPA Method 300.0 | Sulfate by USEPA Method 300.0 | Total Organic Carbon by SM 5310B | Dissolved Oxygen Field Measurement |
|--------------|-------------|------|-------|------------------|--------------------|-------------------|-----------------------------------|---------------------------------|--------------------------------------|-------------------------------|----------------------------------|------------------------------------|
|              |             |      |       |                  |                    | feet bgs          | µg/L                              | µg/L                            | mg/L                                 | mg/L                          | mg/L                             | mg/L                               |
| LVWPS-MW210A | 10/6/2020   | N    | BL04  | General Vicinity | Alluvium           | 35.3 - 55.0       | 2,600                             | 12,000                          | 20                                   | 1,800                         | 1.5                              | 2.44                               |
| LVWPS-MW210A | 12/21/2020  | N    | EM01  | General Vicinity | Alluvium           | 35.3 - 55.0       | 3,100                             | 13,000                          | 21                                   | 2,000                         | 1.6                              | 2.04                               |
| LVWPS-MW210A | 1/29/2021   | N    | EM03  | General Vicinity | Alluvium           | 35.3 - 55.0       | 2,900                             | 11,000                          | 17                                   | 1,800                         | 1.6                              | 2.66                               |
| LVWPS-MW210B | 10/6/2020   | N    | BL04  | General Vicinity | Alluvium           | 70.1 - 89.8       | 2,800                             | 9,700                           | 22                                   | 2,100                         | 1.6                              | 3.60                               |
| LVWPS-MW210B | 12/21/2020  | N    | EM01  | General Vicinity | Alluvium           | 70.1 - 89.8       | 2,800                             | 8,300                           | 15                                   | 2,100                         | 1.9                              | 1.48                               |
| LVWPS-MW210B | 1/29/2021   | N    | EM03  | General Vicinity | Alluvium           | 70.1 - 89.8       | 2,400                             | 7,800                           | 14                                   | 2,000                         | 1.8                              | 1.62                               |
| LVWPS-MW210C | 10/1/2020   | N    | BL04  | General Vicinity | UMCf-cg            | 100.3 - 120.0     | 10,000 J-                         | 17,000                          | 15                                   | ----                          | ----                             | 2.59                               |
| LVWPS-MW210D | 10/7/2020   | N    | BL04  | General Vicinity | UMCf-cg            | 130.4 - 140.0     | 8,500                             | 10,000                          | 3.8                                  | ----                          | ----                             | 3.24                               |
| LVWPS-MW210E | 10/7/2020   | N    | BL04  | General Vicinity | UMCf-cg            | 145.5 - 165.0     | 4,400                             | 7,100                           | 2.2                                  | ----                          | ----                             | 2.19                               |
| LVWPS-MW211  | 9/30/2020   | N    | BL04  | General Vicinity | Alluvium           | 50.0 - 69.7       | 2,000                             | 3,200                           | 14                                   | 2,100                         | 1.1                              | 6.33                               |
| LVWPS-MW211  | 12/21/2020  | N    | EM01  | General Vicinity | Alluvium           | 50.0 - 69.7       | 2,100                             | 3,000                           | 13                                   | 1,900                         | 0.99                             | 5.52                               |
| LVWPS-MW211  | 1/29/2021   | N    | EM03  | General Vicinity | Alluvium           | 50.0 - 69.7       | 850                               | 1,300                           | 4.4                                  | 1,800                         | 1.3 J                            | 1.20                               |
| LVWPS-MW212A | 10/5/2020   | N    | BL04  | Zone 3           | Alluvium           | 34.3 - 54.0       | 390                               | 460                             | 8.5                                  | 1,200                         | 0.47 J                           | 6.73                               |
| LVWPS-MW212A | 12/21/2020  | N    | EM01  | Zone 3           | Alluvium           | 34.3 - 54.0       | 400                               | 510                             | 8.9                                  | 1,200                         | 0.43 J                           | 6.56                               |
| LVWPS-MW212A | 1/27/2021   | N    | EM03  | Zone 3           | Alluvium           | 34.3 - 54.0       | 400                               | 470                             | 8.7                                  | 1,200                         | 0.45 J                           | 8.10 E                             |
| LVWPS-MW212B | 10/5/2020   | N    | BL04  | Zone 3           | Alluvium           | 59.8 - 79.5       | 170                               | 200                             | 7.7                                  | 980                           | 0.32 J                           | 6.48                               |
| LVWPS-MW212B | 12/22/2020  | N    | EM01  | Zone 3           | Alluvium           | 59.8 - 79.5       | 150                               | 190                             | 7.8                                  | 1,100                         | 0.29 J                           | 6.57                               |
| LVWPS-MW212B | 1/27/2021   | N    | EM03  | Zone 3           | Alluvium           | 59.8 - 79.5       | 210                               | 200                             | 8.1                                  | 1,100                         | <1.0                             | 9.04 E                             |
| LVWPS-MW212C | 10/5/2020   | N    | BL04  | Zone 3           | UMCf-cg            | 100.3 - 120.0     | 7,800                             | 11,000                          | 8.4                                  | ----                          | ----                             | 4.32                               |
| LVWPS-MW212D | 10/8/2020   | N    | BL04  | Zone 3           | UMCf-cg            | 125.5 - 145.0     | 6,800                             | 11,000                          | 10                                   | ----                          | ----                             | 5.60                               |
| LVWPS-MW213  | 10/1/2020   | N    | BL04  | General Vicinity | Alluvium           | 40.1 - 59.8       | 170                               | 260                             | 3.2                                  | ----                          | ----                             | 4.96                               |
| LVWPS-MW213  | 10/1/2020   | FD   | BL04  | General Vicinity | Alluvium           | 40.1 - 59.8       | 140                               | 270                             | 3.2                                  | ----                          | ----                             | ----                               |
| LVWPS-MW214  | 10/7/2020   | N    | BL04  | General Vicinity | Alluvium           | 34.4 - 44.0       | 2,500                             | 3,700                           | 14                                   | ----                          | ----                             | 5.16                               |
| LVWPS-MW215A | 10/8/2020   | N    | BL04  | General Vicinity | Alluvium           | 13.5 - 33.2       | 2,600 J-                          | 9,700                           | 17                                   | ----                          | ----                             | 1.26                               |
| LVWPS-MW215B | 10/9/2020   | N    | BL04  | General Vicinity | Bedrock            | 40.7 - 45.3       | 2,600                             | 6,700                           | 11                                   | ----                          | ----                             | 1.46                               |
| LVWPS-MW216  | 10/7/2020   | N    | BL04  | General Vicinity | Alluvium           | 10.4 - 20.0       | 1,100                             | 930                             | 4.0                                  | ----                          | ----                             | 0.66                               |
| LVWPS-MW216  | 10/7/2020   | FD   | BL04  | General Vicinity | Alluvium           | 10.4 - 20.0       | 1,100                             | 940                             | 4.1                                  | ----                          | ----                             | ----                               |
| LVWPS-MW217A | 9/30/2020   | N    | BL04  | Zone 1           | Alluvium           | 51.3 - 71.0       | 2,200                             | 11,000                          | 15                                   | 1,500                         | 1.4                              | 2.60                               |
| LVWPS-MW217A | 1/12/2021   | N    | EM02  | Zone 1           | Alluvium           | 51.3 - 71.0       | 2,600                             | 14,000                          | 17                                   | 1,800                         | 1.5                              | 1.75                               |
| LVWPS-MW217A | 2/9/2021    | N    | EM04  | Zone 1           | Alluvium           | 51.3 - 71.0       | 2,700                             | 14,000                          | 17                                   | 1,300                         | 1.5 J-                           | 2.21                               |
| LVWPS-MW217B | 9/30/2020   | N    | BL04  | Zone 1           | UMCf               | 100.3 - 120.0     | 7,300                             | 14,000                          | 15                                   | 1,600                         | 1.0                              | 2.53                               |
| LVWPS-MW217B | 1/13/2021   | N    | EM02  | Zone 1           | UMCf               | 100.3 - 120.0     | 9,500                             | 14,000                          | 15                                   | 1,700                         | 1.3 J                            | 1.03                               |
| LVWPS-MW217B | 2/10/2021   | N    | EM04  | Zone 1           | UMCf               | 100.3 - 120.0     | 8,600                             | 14,000                          | 15                                   | 1,800                         | 1.1                              | 1.12                               |
| LVWPS-MW217C | 10/5/2020   | N    | BL04  | Zone 1           | UMCf               | 155.5 - 175.0     | 6,200                             | 10,000                          | 12                                   | 1,600                         | 1.5                              | 2.53                               |
| LVWPS-MW217C | 1/13/2021   | N    | EM02  | Zone 1           | UMCf               | 155.5 - 175.0     | 7,100                             | 11,000                          | 12                                   | 1,700                         | 1.8 J                            | 1.02                               |
| LVWPS-MW217C | 1/13/2021   | FD   | EM02  | Zone 1           | UMCf               | 155.5 - 175.0     | 7,500                             | 10,000                          | 12                                   | 1,700                         | 1.8 J                            | ----                               |
| LVWPS-MW217C | 2/10/2021   | N    | EM04  | Zone 1           | UMCf               | 155.5 - 175.0     | 6,700                             | 11,000                          | 12                                   | 1,700                         | 1.7                              | 1.19                               |
| LVWPS-MW217C | 2/10/2021   | FD   | EM04  | Zone 1           | UMCf               | 155.5 - 175.0     | 6,700                             | 11,000                          | 12                                   | 1,700                         | 1.6                              | ----                               |
| LVWPS-MW218A | 10/5/2020   | N    | BL04  | General Vicinity | Alluvium           | 35.3 - 55.0       | 5,100                             | 14,000                          | 20                                   | 1,900                         | 1.4                              | 4.72                               |
| LVWPS-MW218A | 12/21/2020  | N    | EM01  | General Vicinity | Alluvium           | 35.3 - 55.0       | 3,200                             | 14,000                          | 21                                   | 2,000                         | 1.5                              | 3.89                               |
| LVWPS-MW218A | 1/26/2021   | N    | EM03  | General Vicinity | Alluvium           | 35.3 - 55.0       | 3,400                             | 12,000                          | 19                                   | 1,800                         | 1.5 J+                           | 4.61 E                             |
| LVWPS-MW218B | 10/2/2020   | N    | BL04  | General Vicinity | UMCf/UMCf-cg       | 100.3 - 120.0     | 8,400                             | 13,000                          | 16                                   | ----                          | ----                             | 5.83                               |
| LVWPS-MW218C | 10/2/2020   | N    | BL04  | General Vicinity | UMCf/UMCf-cg       | 136.0 - 155.5     | 5,300                             | 7,200                           | 4.3                                  | ----                          | ----                             | 1.78                               |
| LVWPS-MW219A | 10/9/2020   | N    | BL04  | General Vicinity | Alluvium           | 35.1 - 49.8       | 3,500                             | 8,500                           | 19                                   | ----                          | ----                             | 5.78                               |
| LVWPS-MW219B | 10/9/2020   | N    | BL04  | General Vicinity | UMCf/Bedrock       | 75.3 - 95.0       | 2.2                               | <100                            | <0.014                               | ----                          | ----                             | 3.23                               |
| LVWPS-MW219C | 10/9/2020   | N    | BL04  | General Vicinity | UMCf/Bedrock       | 115.5 - 135.0     | 53                                | <10                             | 0.045 J                              | ----                          | ----                             | 2.43                               |
| LVWPS-MW220A | 10/5/2020   | N    | BL04  | General Vicinity | Alluvium           | 60.3 - 80.0       | 3,100                             | 9,400                           | 21                                   | 2,100                         | 1.6                              | 3.77                               |
| LVWPS-MW220A | 12/21/2020  | N    | EM01  | General Vicinity | Alluvium           | 60.3 - 80.0       | 3,100                             | 7,000                           | 20                                   | 2,200                         | 1.8                              | 3.31                               |
| LVWPS-MW220A | 1/28/2021   | N    | EM03  | General Vicinity | Alluvium           | 60.3 - 80.0       | 3,500                             | 9,000                           | 22                                   | 2,200                         | 1.6                              | 3.77 E                             |
| LVWPS-MW220B | 10/7/2020   | N    | BL04  | General Vicinity | UMCf-cg            | 134.5 - 154.0     | 4,200                             | 10,000                          | 12                                   | ----                          | ----                             | 2.66                               |
| LVWPS-MW221A | 10/6/2020   | N    | BL04  | Zone 2           | Alluvium           | 50.3 - 70.0       | 990 J-                            | 710                             | 8.4                                  | 1,500 J+                      | 0.51 J-                          | 7.60                               |
| LVWPS-MW221A | 12/22/2020  | N    | EM01  | Zone 2           | Alluvium           | 50.3 - 70.0       | 610                               | 710                             | 8.2                                  | 1,500                         | 1.7 J                            | 6.85                               |
| LVWPS-MW221A | 1/12/2021   | N    | EM02  | Zone 2           | Alluvium           | 50.3 - 70.0       | 710                               | 740                             | 8.3                                  | 1,600                         | 0.46 J                           | 6.62                               |
| LVWPS-MW221A | 1/28/2021   | N    | EM03  | Zone 2           | Alluvium           | 50.3 - 70.0       | 720                               | 750                             | 8.2                                  | 1,500                         | 0.48 J                           | 7.82 E                             |
| LVWPS-MW221A | 2/8/2021    | N    | EM04  | Zone 2           | Alluvium           | 50.3 - 70.0       | 700                               | 780                             | 8.4                                  | 1,600                         | 0.61                             | 6.41                               |
| LVWPS-MW221B | 10/6/2020   | N    | BL04  | Zone 2           | UMCf/UMCf-cg       | 83.7 - 103.2      | 6,600                             | 11,000                          | 5.8                                  | 1,500 J+                      | 0.54                             | 3.09                               |
| LVWPS-MW222A | 10/2/2020   | N    | BL04  | Zone 3           | UMCf/UMCf-cg       | 80.3 - 100.0      | 2,900                             | 3,800                           | 4.1                                  | ----                          | ----                             | 2.97                               |
| LVWPS-MW222B | 10/7/2020   | N    | BL04  | Zone 3           | UMCf-cg            | 150.3 - 170.0     | 1,500                             | 1,200                           | 1.6                                  | ----                          | ----                             | 3.10                               |

Table 2  
Groundwater Analytical Results  
Las Vegas Wash Bioremediation Pilot Study

| Well           | Sample Date | Type | Event | Zone             | Screened Lithology | Screened Interval | Perchlorate by USEPA Method 314.0 | Chlorate by USEPA Method 300.1B | Nitrate (as N) by USEPA Method 300.0 | Sulfate by USEPA Method 300.0 | Total Organic Carbon by SM 5310B | Dissolved Oxygen Field Measurement |
|----------------|-------------|------|-------|------------------|--------------------|-------------------|-----------------------------------|---------------------------------|--------------------------------------|-------------------------------|----------------------------------|------------------------------------|
|                |             |      |       |                  |                    | feet bgs          | µg/L                              | µg/L                            | mg/L                                 | mg/L                          | mg/L                             | mg/L                               |
| LWWPS-MW222C   | 10/2/2020   | N    | BL04  | Zone 3           | UMCf-cg            | 214.0 - 233.5     | 1,500                             | 1,300                           | 2.4                                  | ----                          | ----                             | 2.25                               |
| LWWPS-MW223A   | 10/6/2020   | N    | BL04  | Zone 2           | Alluvium           | 45.3 - 65.0       | 3,300                             | 5,900                           | 17                                   | 2,400                         | 1.4                              | 4.57                               |
| LWWPS-MW223A   | 10/6/2020   | FD   | BL04  | Zone 2           | Alluvium           | 45.3 - 65.0       | 3,900                             | 5,800                           | 17                                   | 2,400                         | 1.4                              | ----                               |
| LWWPS-MW223A   | 12/22/2020  | N    | EM01  | Zone 2           | Alluvium           | 45.3 - 65.0       | 4,100                             | 370                             | 0.54                                 | 2,700                         | 11                               | 0.33                               |
| LWWPS-MW223A   | 1/11/2021   | N    | EM02  | Zone 2           | Alluvium           | 45.3 - 65.0       | 730                               | 820                             | 1.4                                  | 2,600                         | <21                              | 1.14                               |
| LWWPS-MW223A   | 1/26/2021   | N    | EM03  | Zone 2           | Alluvium           | 45.3 - 65.0       | 2,700                             | 3,700                           | 9.1                                  | 2,600                         | 1.4 J+                           | 1.03 E                             |
| LWWPS-MW223A   | 2/8/2021    | N    | EM04  | Zone 2           | Alluvium           | 45.3 - 65.0       | 2,700                             | 3,500                           | 9.6                                  | 2,500                         | 1.5                              | 0.24                               |
| LWWPS-MW223B   | 10/6/2020   | N    | BL04  | Zone 2           | Alluvium           | 70.3 - 90.0       | 3,300                             | 6,100                           | 20                                   | 2,100                         | 1.8                              | 4.26                               |
| LWWPS-MW223B   | 12/22/2020  | N    | EM01  | Zone 2           | Alluvium           | 70.3 - 90.0       | 2,100                             | 2,800                           | 6.7 J-                               | 2,100                         | 3.5                              | 0.44                               |
| LWWPS-MW223B   | 1/11/2021   | N    | EM02  | Zone 2           | Alluvium           | 70.3 - 90.0       | 1,700                             | 2,100                           | 6.6                                  | 2,300                         | 30 J                             | 0.75                               |
| LWWPS-MW223B   | 1/28/2021   | N    | EM03  | Zone 2           | Alluvium           | 70.3 - 90.0       | 330                               | 470 J-                          | 1.8                                  | 1,700                         | 10                               | 7.53 E                             |
| LWWPS-MW223B   | 2/8/2021    | N    | EM04  | Zone 2           | Alluvium           | 70.3 - 90.0       | 270                               | 240                             | 0.51                                 | 1,600                         | 2.4                              | 0.38                               |
| LWWPS-MW223C   | 10/7/2020   | N    | BL04  | Zone 2           | UMCf               | 95.5 - 110.0      | 5,700                             | 7,700                           | 14                                   | 2,100                         | 1.1                              | 2.77                               |
| LWWPS-MW223C   | 1/11/2021   | N    | EM02  | Zone 2           | UMCf               | 95.5 - 110.0      | 46                                | 64                              | 0.10                                 | 270                           | <21                              | 0.92                               |
| LWWPS-MW223C   | 2/8/2021    | N    | EM04  | Zone 2           | UMCf               | 95.5 - 110.0      | 2,600                             | 4,300                           | 9.2                                  | 2,000                         | 1.1                              | 1.08                               |
| LWWPS-MW224A   | 10/7/2020   | N    | BL04  | Zone 2           | Alluvium           | 55.3 - 75.0       | 2,300                             | 2,900                           | 11                                   | 2,000                         | 0.90                             | 6.09                               |
| LWWPS-MW224A   | 12/23/2020  | N    | EM01  | Zone 2           | Alluvium           | 55.3 - 75.0       | 2,700                             | 2,800                           | 11                                   | 2,200                         | 1.4 J                            | 6.34                               |
| LWWPS-MW224A   | 1/29/2021   | N    | EM03  | Zone 2           | Alluvium           | 55.3 - 75.0       | 1,900                             | 3,000                           | 9.9                                  | 1,900                         | 1.5 J                            | 5.75                               |
| LWWPS-MW224B   | 10/7/2020   | N    | BL04  | Zone 2           | UMCf               | 106.8 - 126.5     | 200                               | 220                             | 0.63                                 | ----                          | ----                             | 1.48                               |
| LWWPS-MW224C   | 10/8/2020   | N    | BL04  | Zone 2           | UMCf (Semi-Cons)   | 174.5 - 194.0     | 30                                | <100                            | 0.068                                | ----                          | ----                             | 2.10                               |
| LWWPS-MW225A   | 10/7/2020   | N    | BL04  | General Vicinity | Alluvium           | 49.3 - 69.0       | 2,300                             | 5,200                           | 22                                   | ----                          | ----                             | 4.35                               |
| LWWPS-MW225A   | 10/7/2020   | FD   | BL04  | General Vicinity | Alluvium           | 49.3 - 69.0       | 2,300                             | 5,200                           | 22                                   | ----                          | ----                             | ----                               |
| LWWPS-MW225B   | 10/7/2020   | N    | BL04  | General Vicinity | UMCf               | 90.5 - 110.0      | 4,000                             | 5,100                           | 3.3                                  | ----                          | ----                             | 1.92                               |
| LWWPS-MW226A   | 10/1/2020   | N    | BL04  | General Vicinity | Alluvium           | 40.3 - 55.0       | 2,800                             | 5,100                           | 19                                   | ----                          | ----                             | 3.71                               |
| LWWPS-MW226A   | 10/1/2020   | FD   | BL04  | General Vicinity | Alluvium           | 40.3 - 55.0       | 2,300                             | 4,900                           | 19                                   | ----                          | ----                             | ----                               |
| LWWPS-MW226B   | 10/1/2020   | N    | BL04  | General Vicinity | UMCf (Semi-Cons)   | 77.5 - 97.0       | 37                                | <100                            | <0.014                               | ----                          | ----                             | 0.79                               |
| LWWPS-U1-IW01A | 9/29/2020   | N    | BL04  | Zone 1           | UMCf               | 88.8 - 113.5      | 9,700                             | 18,000                          | 14                                   | ----                          | ----                             | 0.86                               |
| LWWPS-U1-IW01B | 9/29/2020   | N    | BL04  | Zone 1           | UMCf               | 120.3 - 145.0     | 7,800                             | 13,000                          | 13                                   | ----                          | ----                             | 0.80                               |
| LWWPS-U1-IW02A | 9/30/2020   | N    | BL04  | Zone 1           | UMCf               | 90.3 - 115.0      | 2,200                             | 5,000                           | 11                                   | ----                          | ----                             | 0.68                               |
| LWWPS-U1-IW02B | 9/30/2020   | N    | BL04  | Zone 1           | UMCf               | 121.3 - 151.0     | 3,400                             | 6,900                           | 9.8                                  | ----                          | ----                             | 1.82                               |
| LWWPS-U1-IW03A | 9/30/2020   | N    | BL04  | Zone 1           | UMCf               | 93.8 - 118.5      | 2,500                             | 5,200                           | 13                                   | ----                          | ----                             | 0.68                               |
| LWWPS-U1-IW03B | 9/30/2020   | N    | BL04  | Zone 1           | UMCf               | 125.3 - 150.0     | 1,400                             | 3,900                           | 10                                   | ----                          | ----                             | 2.18                               |
| LWWPS-U1-IW04A | 9/28/2020   | N    | BL04  | Zone 1           | UMCf               | 86.8 - 116.5      | 3,500                             | 6,600                           | 12                                   | ----                          | ----                             | 0.53                               |
| LWWPS-U1-IW04A | 9/28/2020   | FD   | BL04  | Zone 1           | UMCf               | 86.8 - 116.5      | 3,500                             | 6,600                           | 12                                   | ----                          | ----                             | ----                               |
| LWWPS-U1-IW04B | 9/28/2020   | N    | BL04  | Zone 1           | UMCf               | 122.8 - 152.5     | 3,400                             | 4,800                           | 11                                   | ----                          | ----                             | 2.37                               |
| LWWPS-U1-IW05A | 9/29/2020   | N    | BL04  | Zone 1           | UMCf               | 88.8 - 113.5      | 2,100                             | 4,300                           | 10                                   | ----                          | ----                             | 0.51                               |
| LWWPS-U1-IW05B | 9/29/2020   | N    | BL04  | Zone 1           | UMCf               | 120.3 - 145.0     | 2,500                             | 5,100                           | 11                                   | ----                          | ----                             | 1.34                               |
| LWWPS-U1-IW06A | 9/30/2020   | N    | BL04  | Zone 1           | UMCf               | 87.8 - 112.5      | 2,400                             | 3,600                           | 8.5                                  | ----                          | ----                             | 1.60                               |
| LWWPS-U1-IW06B | 9/30/2020   | N    | BL04  | Zone 1           | UMCf               | 119.3 - 149.0     | 2,500                             | 3,900                           | 10                                   | ----                          | ----                             | 2.07                               |
| LWWPS-U1-IW07A | 10/1/2020   | N    | BL04  | Zone 1           | UMCf               | 95.8 - 120.5      | 3,100                             | 4,500                           | 9.5                                  | ----                          | ----                             | 3.39                               |
| LWWPS-U1-IW07B | 10/1/2020   | N    | BL04  | Zone 1           | UMCf               | 127.3 - 152.0     | 4,300                             | 4,900                           | 9.5                                  | ----                          | ----                             | 2.21                               |
| LWWPS-U1-IW08A | 10/1/2020   | N    | BL04  | Zone 1           | UMCf               | 95.3 - 125.0      | 4,000                             | 7,500                           | 9.7                                  | ----                          | ----                             | 1.60                               |
| LWWPS-U1-IW08B | 10/1/2020   | N    | BL04  | Zone 1           | UMCf               | 131.8 - 156.5     | 4,900                             | 6,700                           | 11                                   | ----                          | ----                             | 1.92                               |
| LWWPS-U1-MW01A | 9/28/2020   | N    | BL04  | Zone 1           | UMCf               | 90.3 - 115.0      | 6,100                             | 11,000                          | 14                                   | 1,600                         | 1.0                              | 1.98                               |
| LWWPS-U1-MW01A | 1/14/2021   | N    | EM02  | Zone 1           | UMCf               | 90.3 - 115.0      | 6,900                             | 11,000                          | 12                                   | 1,600                         | 1.2 J                            | 2.08                               |
| LWWPS-U1-MW01A | 2/10/2021   | N    | EM04  | Zone 1           | UMCf               | 90.3 - 115.0      | 7,800                             | 11,000                          | 13                                   | 1,600                         | 1.5                              | 1.93                               |
| LWWPS-U1-MW01B | 9/28/2020   | N    | BL04  | Zone 1           | UMCf               | 133.5 - 153.0     | 7,100                             | 12,000                          | 13                                   | 1,800                         | 1.2 J-                           | 1.72                               |
| LWWPS-U1-MW01B | 1/14/2021   | N    | EM02  | Zone 1           | UMCf               | 133.5 - 153.0     | 510                               | 1,100                           | 1.5                                  | 360                           | 2.1                              | 1.58                               |
| LWWPS-U1-MW01B | 2/10/2021   | N    | EM04  | Zone 1           | UMCf               | 133.5 - 153.0     | 8,200                             | 13,000                          | 12                                   | 1,900                         | 1.0                              | 0.63                               |
| LWWPS-U1-MW02A | 9/29/2020   | N    | BL04  | Zone 1           | UMCf               | 94.3 - 119.0      | 4,200                             | 7,600                           | 12                                   | 1,600                         | 1.2                              | 4.60                               |
| LWWPS-U1-MW02A | 1/14/2021   | N    | EM02  | Zone 1           | UMCf               | 94.3 - 119.0      | 5,400                             | 8,400                           | 12                                   | 1,700                         | 1.3 J                            | 0.9                                |
| LWWPS-U1-MW02A | 2/11/2021   | N    | EM04  | Zone 1           | UMCf               | 94.3 - 119.0      | 5,600                             | 8,500                           | 12                                   | 1,700                         | 1.1                              | 0.72                               |
| LWWPS-U1-MW02B | 10/7/2020   | N    | BL04  | Zone 1           | UMCf               | 136.9 - 161.5     | 2,400                             | 4,100                           | 11                                   | 8,300                         | 1.1                              | 2.35                               |
| LWWPS-U1-MW02B | 1/14/2021   | N    | EM02  | Zone 1           | UMCf               | 136.9 - 161.5     | 2,300                             | 3,500                           | 6.5                                  | 1,700                         | 1.6                              | 0.88                               |
| LWWPS-U1-MW02B | 2/11/2021   | N    | EM04  | Zone 1           | UMCf               | 136.9 - 161.5     | 2,100                             | 2,900                           | 5.9 J-                               | 1,700                         | 1.5                              | 0.77                               |
| LWWPS-U1-MW03B | 9/29/2020   | N    | BL04  | Zone 1           | UMCf               | 134.5 - 154.0     | 4,300                             | 7,800                           | 14                                   | 1,400                         | 1.5                              | 6.71                               |
| LWWPS-U1-MW03B | 1/14/2021   | N    | EM02  | Zone 1           | UMCf               | 134.5 - 154.0     | 5,500                             | 8,900                           | 13                                   | 1,400                         | 1.2                              | 0.69                               |
| LWWPS-U1-MW03B | 2/11/2021   | N    | EM04  | Zone 1           | UMCf               | 134.5 - 154.0     | 5,500                             | 8,500                           | 14 J-                                | 1,400                         | 1.2                              | 1.13                               |

Table 2  
Groundwater Analytical Results  
Las Vegas Wash Bioremediation Pilot Study

| Well           | Sample Date | Type | Event | Zone   | Screened Lithology | Screened Interval | Perchlorate by USEPA Method 314.0 | Chlorate by USEPA Method 300.1B | Nitrate (as N) by USEPA Method 300.0 | Sulfate by USEPA Method 300.0 | Total Organic Carbon by SM 5310B | Dissolved Oxygen Field Measurement |
|----------------|-------------|------|-------|--------|--------------------|-------------------|-----------------------------------|---------------------------------|--------------------------------------|-------------------------------|----------------------------------|------------------------------------|
|                |             |      |       |        |                    | feet bgs          | µg/L                              | µg/L                            | mg/L                                 | mg/L                          | mg/L                             | mg/L                               |
| LVWPS-U1-MW04A | 9/30/2020   | N    | BL04  | Zone 1 | UMCf               | 99.3 - 124.0      | 4,500                             | 9,100                           | 13                                   | 1,600                         | 1.0                              | 0.84                               |
| LVWPS-U1-MW04A | 1/13/2021   | N    | EM02  | Zone 1 | UMCf               | 99.3 - 124.0      | 6,400                             | 10,000                          | 13                                   | 1,600                         | 1.3 J                            | 1.15                               |
| LVWPS-U1-MW04A | 2/10/2021   | N    | EM04  | Zone 1 | UMCf               | 99.3 - 124.0      | 6,500                             | 11,000                          | 13                                   | 1,700                         | 1.0                              | 1.96                               |
| LVWPS-U1-MW04B | 10/1/2020   | N    | BL04  | Zone 1 | UMCf               | 139.9 - 164.5     | 4,200                             | 9,200                           | 13                                   | 1,700                         | 2.1                              | 1.75                               |
| LVWPS-U1-MW04B | 1/13/2021   | N    | EM02  | Zone 1 | UMCf               | 139.9 - 164.5     | 5,300                             | 10,000                          | 13                                   | 1,700                         | 1.8                              | 0.46                               |
| LVWPS-U1-MW04B | 2/9/2021    | N    | EM04  | Zone 1 | UMCf               | 139.9 - 164.5     | 4,900                             | 9,700                           | 14                                   | 1,700                         | 1.7 J-                           | 0.68                               |
| LVWPS-U1-MW05A | 9/29/2020   | N    | BL04  | Zone 1 | UMCf               | 95.8 - 120.5      | 10,000                            | 15,000                          | 14                                   | 1,900                         | 1.0                              | 2.23                               |
| LVWPS-U1-MW05A | 1/18/2021   | N    | EM02  | Zone 1 | UMCf               | 95.8 - 120.5      | 8,900                             | 15,000                          | 14                                   | 2,100                         | <2.1                             | 1.11                               |
| LVWPS-U1-MW05A | 2/10/2021   | N    | EM04  | Zone 1 | UMCf               | 95.8 - 120.5      | 10,000                            | 15,000                          | 14                                   | 2,100                         | 1.1                              | 0.89                               |
| LVWPS-U1-MW05B | 9/29/2020   | N    | BL04  | Zone 1 | UMCf               | 136.9 - 161.5     | 5,100                             | 8,800                           | 13                                   | 1,800                         | 1.2                              | 1.71                               |
| LVWPS-U1-MW05B | 1/13/2021   | N    | EM02  | Zone 1 | UMCf               | 136.9 - 161.5     | 9,800                             | 14,000                          | 13                                   | 1,800                         | 1.1                              | 0.5                                |
| LVWPS-U1-MW05B | 2/10/2021   | N    | EM04  | Zone 1 | UMCf               | 136.9 - 161.5     | 12,000                            | 19,000                          | 15                                   | 2,200                         | 1.2                              | 0.90                               |
| LVWPS-U1-MW06A | 9/29/2020   | N    | BL04  | Zone 1 | UMCf               | 85.3 - 105.0      | 1,100                             | 3,300                           | 11                                   | 970                           | 1.5                              | 0.98                               |
| LVWPS-U1-MW06A | 1/14/2021   | N    | EM02  | Zone 1 | UMCf               | 85.3 - 105.0      | 1,300                             | 3,300                           | 9.0                                  | 1,100                         | 2.0                              | 0.84                               |
| LVWPS-U1-MW06A | 2/9/2021    | N    | EM04  | Zone 1 | UMCf               | 85.3 - 105.0      | 1,300                             | 3,000                           | 10                                   | 990                           | 1.4 J-                           | 0.52                               |
| LVWPS-U1-MW06B | 9/29/2020   | N    | BL04  | Zone 1 | UMCf               | 109.3 - 134.0     | 1,700                             | 3,800                           | 11                                   | 1,000                         | 1.7                              | 1.03                               |
| LVWPS-U1-MW06B | 1/12/2021   | N    | EM02  | Zone 1 | UMCf               | 109.3 - 134.0     | 21                                | 8.7 J                           | 0.17 J                               | 1,100                         | 12                               | 0.27                               |
| LVWPS-U1-MW06B | 2/10/2021   | N    | EM04  | Zone 1 | UMCf               | 109.3 - 134.0     | 1,000                             | 1,400                           | 2.0                                  | 1,100                         | 1.9                              | 0.74                               |
| LVWPS-U1-MW07  | 9/30/2020   | N    | BL04  | Zone 1 | UMCf               | 86.3 - 111.0      | 4,100                             | 7,700                           | 5.6                                  | 2,000                         | 0.84                             | 3.78                               |
| LVWPS-U1-MW07  | 1/14/2021   | N    | EM02  | Zone 1 | UMCf               | 86.3 - 111.0      | 430                               | 110                             | <0.014                               | 1,700                         | 210                              | 0.73                               |
| LVWPS-U1-MW07  | 2/10/2021   | N    | EM04  | Zone 1 | UMCf               | 86.3 - 111.0      | 370                               | 180                             | 0.081                                | 1,600                         | 180                              | 0.38                               |
| LVWPS-U1-MW08A | 9/30/2020   | N    | BL04  | Zone 1 | UMCf               | 93.8 - 118.5      | 4,700                             | 7,300                           | 13                                   | 1,500                         | 1.7                              | 2.21                               |
| LVWPS-U1-MW08A | 1/12/2021   | N    | EM02  | Zone 1 | UMCf               | 93.8 - 118.5      | <0.31                             | <10                             | <0.14                                | 990                           | 300                              | 0.33                               |
| LVWPS-U1-MW08A | 2/9/2021    | N    | EM04  | Zone 1 | UMCf               | 93.8 - 118.5      | <0.31                             | <10                             | <0.014                               | 700                           | 420 J-                           | 1.21                               |
| LVWPS-U1-MW08B | 9/30/2020   | N    | BL04  | Zone 1 | UMCf               | 125.3 - 150.0     | 2,800                             | 5,500                           | 10                                   | 1,400                         | 1.3                              | 3.10                               |
| LVWPS-U1-MW08B | 1/11/2021   | N    | EM02  | Zone 1 | UMCf               | 125.3 - 150.0     | 3.9                               | <10                             | <0.014                               | 1,100                         | 230                              | 0.23                               |
| LVWPS-U1-MW08B | 1/11/2021   | FD   | EM02  | Zone 1 | UMCf               | 125.3 - 150.0     | 3.8                               | <10                             | 0.014 R                              | 1,400                         | 220                              | ----                               |
| LVWPS-U1-MW08B | 2/9/2021    | N    | EM04  | Zone 1 | UMCf               | 125.3 - 150.0     | <0.31                             | <10                             | <0.014                               | 1,100                         | 270 J-                           | 0.41                               |
| LVWPS-U1-MW08B | 2/9/2021    | FD   | EM04  | Zone 1 | UMCf               | 125.3 - 150.0     | <0.31                             | <10                             | <0.014                               | 1,100                         | 300 J-                           | ----                               |
| LVWPS-U1-MW09A | 9/30/2020   | N    | BL04  | Zone 1 | UMCf               | 115.3 - 125.0     | 7,500                             | 12,000                          | 13                                   | 1,900                         | 1.8                              | 1.62                               |
| LVWPS-U1-MW09A | 1/13/2021   | N    | EM02  | Zone 1 | UMCf               | 115.3 - 125.0     | 8,600                             | 13,000                          | 12                                   | 1,900                         | 0.88                             | 0.75                               |
| LVWPS-U1-MW09A | 2/10/2021   | N    | EM04  | Zone 1 | UMCf               | 115.3 - 125.0     | 7,800                             | 12,000                          | 12                                   | 2,000                         | 1.1                              | 1.08                               |
| LVWPS-U1-MW09B | 9/30/2020   | N    | BL04  | Zone 1 | UMCf               | 130.3 - 155.0     | 6,400                             | 11,000                          | 9.6                                  | 1,900                         | 0.89                             | 1.80                               |
| LVWPS-U1-MW09B | 1/13/2021   | N    | EM02  | Zone 1 | UMCf               | 130.3 - 155.0     | 3,800                             | 5,900                           | 12                                   | 1,700                         | <2.1                             | 0.74                               |
| LVWPS-U1-MW09B | 2/10/2021   | N    | EM04  | Zone 1 | UMCf               | 130.3 - 155.0     | 3,500                             | 5,700                           | 11                                   | 1,700                         | 1.2                              | 0.60                               |
| LVWPS-U1-MW10A | 10/2/2020   | N    | BL04  | Zone 1 | UMCf               | 99.3 - 124.0      | 9,200                             | 16,000                          | 9.9                                  | 2,000                         | 0.55                             | 3.77                               |
| LVWPS-U1-MW10A | 1/13/2021   | N    | EM02  | Zone 1 | UMCf               | 99.3 - 124.0      | 13,000 J                          | 17,000                          | 10                                   | 2,000                         | 1.2 J                            | 3.28                               |
| LVWPS-U1-MW10A | 2/9/2021    | N    | EM04  | Zone 1 | UMCf               | 99.3 - 124.0      | 10,000                            | 16,000                          | 9.8                                  | 2,000                         | 0.46 J                           | 5.98                               |
| LVWPS-U1-MW10B | 10/2/2020   | N    | BL04  | Zone 1 | UMCf               | 130.3 - 155.0     | 4,600                             | 5,100                           | 3.8                                  | 1,800                         | 0.53                             | 1.68                               |
| LVWPS-U1-MW10B | 1/12/2021   | N    | EM02  | Zone 1 | UMCf               | 130.3 - 155.0     | 4,600                             | 5,500                           | 4.6                                  | 1,900                         | <1.3                             | 1.37                               |
| LVWPS-U1-MW10B | 2/9/2021    | N    | EM04  | Zone 1 | UMCf               | 130.3 - 155.0     | 2,900                             | 6,800                           | 4.0                                  | 1,900                         | <1.0 UJ                          | 2.00                               |
| LVWPS-U2-IW01  | 10/8/2020   | N    | BL04  | Zone 2 | UMCf               | 121.2 - 141.0     | 8,100                             | 12,000                          | 9.0                                  | ----                          | ----                             | 3.48                               |
| LVWPS-U2-IW01  | 10/8/2020   | FD   | BL04  | Zone 2 | UMCf               | 121.2 - 141.0     | 6,900                             | 11,000                          | 8.6                                  | ----                          | ----                             | ----                               |
| LVWPS-U2-IW02  | 10/8/2020   | N    | BL04  | Zone 2 | UMCf               | 116.2 - 141.0     | 8,100                             | 12,000                          | 8.7                                  | ----                          | ----                             | 3.80                               |
| LVWPS-U2-IW03  | 10/8/2020   | N    | BL04  | Zone 2 | UMCf               | 99.2 - 124.0      | 7,100                             | 11,000                          | 12                                   | ----                          | ----                             | 2.66                               |
| LVWPS-U2-IW04  | 10/8/2020   | N    | BL04  | Zone 2 | UMCf               | 83.7 - 108.5      | 3,900                             | 6,500                           | 19                                   | ----                          | ----                             | 4.10                               |
| LVWPS-U2-IW05  | 10/8/2020   | N    | BL04  | Zone 2 | UMCf               | 87.7 - 117.5      | 8,500                             | 14,000                          | 12                                   | ----                          | ----                             | 4.95                               |
| LVWPS-U2-IW06  | 10/8/2020   | N    | BL04  | Zone 2 | UMCf               | 89.2 - 104.0      | 10,000                            | 17,000                          | 14                                   | ----                          | ----                             | 3.46                               |
| LVWPS-U2-IW07  | 10/6/2020   | N    | BL04  | Zone 2 | UMCf               | 91.2 - 106.0      | 6,000                             | 8,700                           | 5.7                                  | ----                          | ----                             | 1.85                               |
| LVWPS-U2-IW08  | 10/6/2020   | N    | BL04  | Zone 2 | UMCf               | 83.7 - 108.5      | 12,000                            | 20,000                          | 17                                   | ----                          | ----                             | 5.08                               |
| LVWPS-U2-IW09  | 10/6/2020   | N    | BL04  | Zone 2 | UMCf               | 103.2 - 128.0     | 35                                | 63 J                            | 0.11                                 | ----                          | ----                             | 2.85                               |
| LVWPS-U2-IW10  | 10/6/2020   | N    | BL04  | Zone 2 | UMCf               | 109.3 - 129.0     | 400                               | 150                             | <0.014                               | ----                          | ----                             | 3.48                               |
| LVWPS-U2-IW11  | 10/6/2020   | N    | BL04  | Zone 2 | UMCf               | 108.9 - 133.7     | 1,400                             | 2,400                           | 2.6                                  | ----                          | ----                             | 3.31                               |
| LVWPS-U2-IW12  | 10/8/2020   | N    | BL04  | Zone 2 | UMCf               | 112.8 - 137.5     | 5,900                             | 8,300                           | 11                                   | ----                          | ----                             | 4.65                               |
| LVWPS-U2-MW01  | 10/8/2020   | N    | BL04  | Zone 2 | UMCf               | 97.3 - 117.0      | 360                               | 450                             | 0.89                                 | 2,500                         | 0.36 J                           | 1.63                               |
| LVWPS-U2-MW01  | 1/14/2021   | N    | EM02  | Zone 2 | UMCf               | 97.3 - 117.0      | 85                                | 93 J                            | 0.11                                 | 2,600                         | <1.0                             | 2.76                               |
| LVWPS-U2-MW01  | 2/10/2021   | N    | EM04  | Zone 2 | UMCf               | 97.3 - 117.0      | 200                               | 260                             | 0.98                                 | 2,500                         | 0.46 J                           | 1.94                               |
| LVWPS-U2-MW02  | 10/8/2020   | N    | BL04  | Zone 2 | UMCf               | 100.3 - 125.0     | 5,200                             | 8,300                           | 6.2                                  | 1,800                         | 0.64                             | 8.10                               |

Table 2  
Groundwater Analytical Results  
Las Vegas Wash Bioremediation Pilot Study

| Well           | Sample Date | Type | Event | Zone   | Screened Lithology | Screened Interval | Perchlorate by USEPA Method 314.0 | Chlorate by USEPA Method 300.1B | Nitrate (as N) by USEPA Method 300.0 | Sulfate by USEPA Method 300.0 | Total Organic Carbon by SM 5310B | Dissolved Oxygen Field Measurement |
|----------------|-------------|------|-------|--------|--------------------|-------------------|-----------------------------------|---------------------------------|--------------------------------------|-------------------------------|----------------------------------|------------------------------------|
|                |             |      |       |        |                    | feet bgs          | µg/L                              | µg/L                            | mg/L                                 | mg/L                          | mg/L                             | mg/L                               |
| LVVPS-U2-MW02  | 1/12/2021   | N    | EM02  | Zone 2 | UMCf               | 100.3 - 125.0     | 7,100                             | 9,600                           | 9.1                                  | 1,900                         | <1.3                             | 2.13                               |
| LVVPS-U2-MW02  | 2/9/2021    | N    | EM04  | Zone 2 | UMCf               | 100.3 - 125.0     | 5,600                             | 13,000                          | 7.7                                  | 1,800                         | <1.0 UJ                          | 2.93                               |
| LVVPS-U2-MW03  | 10/9/2020   | N    | BL04  | Zone 2 | UMCf               | 90.3 - 110.0      | 2,100                             | 3,400                           | 11                                   | 2,000                         | 0.98                             | 3.53                               |
| LVVPS-U2-MW03  | 1/14/2021   | N    | EM02  | Zone 2 | UMCf               | 90.3 - 110.0      | 1,800                             | 3,300                           | 12                                   | 2,100                         | 1.4 J                            | 3.53                               |
| LVVPS-U2-MW03  | 2/10/2021   | N    | EM04  | Zone 2 | UMCf               | 90.3 - 110.0      | 2,200                             | 3,500                           | 13                                   | 2,100                         | 1.2                              | 5.49                               |
| LVVPS-U2-MW04  | 10/6/2020   | N    | BL04  | Zone 2 | UMCf               | 103.2 - 128.0     | 160                               | 260                             | 0.27                                 | 3,000                         | 0.27 J                           | 0.93                               |
| LVVPS-U2-MW04  | 1/11/2021   | N    | EM02  | Zone 2 | UMCf               | 103.2 - 128.0     | 2.0                               | <10                             | <0.014                               | 2,900                         | 9.5                              | 0.49                               |
| LVVPS-U2-MW04  | 2/8/2021    | N    | EM04  | Zone 2 | UMCf               | 103.2 - 128.0     | <1.6                              | <10                             | <0.014                               | 2,800                         | 38                               | 1.56                               |
| LVVPS-U2-MW05  | 10/5/2020   | N    | BL04  | Zone 2 | UMCf               | 83.2 - 108.0      | 9,300                             | 15,000                          | 8.4                                  | 1,300                         | 0.41 J                           | 4.35                               |
| LVVPS-U2-MW05  | 1/13/2021   | N    | EM02  | Zone 2 | UMCf               | 83.2 - 108.0      | 2.7                               | <10                             | <0.014                               | 1,100                         | 1,100                            | 0.24                               |
| LVVPS-U2-MW05  | 2/10/2021   | N    | EM04  | Zone 2 | UMCf               | 83.2 - 108.0      | <0.31 UJ                          | <10                             | <0.014                               | 810                           | 910                              | 0.51                               |
| LVVPS-U2-MW06  | 10/1/2020   | N    | BL04  | Zone 2 | UMCf               | 121.8 - 141.5     | 4,100                             | 7,300                           | 9.5                                  | 1,900                         | 0.94                             | 2.79                               |
| LVVPS-U2-MW06  | 1/11/2021   | N    | EM02  | Zone 2 | UMCf               | 121.8 - 141.5     | 4,200                             | 5,700                           | 7.0                                  | 2,000                         | <1.3                             | 1.01                               |
| LVVPS-U2-MW06  | 2/8/2021    | N    | EM04  | Zone 2 | UMCf               | 121.8 - 141.5     | 3,900                             | 5,500                           | 8.0                                  | 2,000                         | 1.3 J                            | 1.45                               |
| LVVPS-U2-MW07  | 10/2/2020   | N    | BL04  | Zone 2 | UMCf               | 88.2 - 108.0      | 1,600                             | 2,600                           | 10                                   | 1,900                         | 0.74                             | 5.79                               |
| LVVPS-U2-MW08  | 10/1/2020   | N    | BL04  | Zone 2 | UMCf               | 113.2 - 133.0     | 4,600                             | 8,100                           | 17                                   | 2,100                         | 1.5                              | 2.63                               |
| LVVPS-U2-MW08  | 1/11/2021   | N    | EM02  | Zone 2 | UMCf               | 113.2 - 133.0     | 3,100                             | 9,400                           | 9.1                                  | 1,900                         | <0.26                            | 0.54                               |
| LVVPS-U2-MW08  | 2/8/2021    | N    | EM04  | Zone 2 | UMCf               | 113.2 - 133.0     | 3,400                             | 9,200                           | 9.8                                  | 1,800                         | 1.1 J                            | 1.84                               |
| LVVPS-U2-MW09  | 10/9/2020   | N    | BL04  | Zone 2 | UMCf               | 84.9 - 104.7      | 12,000                            | 18,000                          | 17                                   | 2,200                         | 1.1                              | 2.06                               |
| LVVPS-U2-MW09  | 1/18/2021   | N    | EM02  | Zone 2 | UMCf               | 84.9 - 104.7      | 9,800                             | 15,000                          | 17                                   | 2,300                         | 1.4 J                            | 2.21                               |
| LVVPS-U2-MW09  | 2/8/2021    | N    | EM04  | Zone 2 | UMCf               | 84.9 - 104.7      | 10,000                            | 15,000                          | 16                                   | 1,900                         | 2.6 J                            | 3.42                               |
| LVVPS-U2-MW10  | 10/2/2020   | N    | BL04  | Zone 2 | UMCf               | 90.2 - 110.0      | 6,000                             | 8,900                           | 15                                   | 2,200                         | 1.1                              | 4.16                               |
| LVVPS-U2-MW12  | 10/7/2020   | N    | BL04  | Zone 2 | UMCf               | 83.2 - 108.0      | 8,800                             | 12,000                          | 18                                   | 2,000                         | 1.1                              | 4.13                               |
| LVVPS-U2-MW12  | 1/12/2021   | N    | EM02  | Zone 2 | UMCf               | 83.2 - 108.0      | 7,000                             | 11,000                          | 16                                   | 1,900                         | 1.4 J                            | 3.9                                |
| LVVPS-U2-MW12  | 2/8/2021    | N    | EM04  | Zone 2 | UMCf               | 83.2 - 108.0      | 7,500                             | 11,000                          | 15                                   | 2,000                         | 1.0 J-                           | 3.80                               |
| LVVPS-U2-MW13  | 10/2/2020   | N    | BL04  | Zone 2 | UMCf               | 94.7 - 109.5      | 5,400                             | 11,000                          | 17                                   | 2,100                         | 1.2                              | 3.58                               |
| LVVPS-U2-MW13  | 10/2/2020   | FD   | BL04  | Zone 2 | UMCf               | 94.7 - 109.5      | 5,800                             | 11,000                          | 17                                   | 2,300                         | 1.4                              | ----                               |
| LVVPS-U2-MW14  | 10/6/2020   | N    | BL04  | Zone 2 | UMCf               | 83.2 - 108.0      | 11,000                            | 360                             | 17                                   | 2,000                         | 0.78                             | 5.18                               |
| LVVPS-U2-MW14  | 1/13/2021   | N    | EM02  | Zone 2 | UMCf               | 83.2 - 108.0      | 9,600                             | 20,000                          | 8.9                                  | 1,900                         | 1.4 J                            | 0.82                               |
| LVVPS-U2-MW14  | 2/9/2021    | N    | EM04  | Zone 2 | UMCf               | 83.2 - 108.0      | 7,300                             | 12,000                          | 13                                   | 1,900                         | 2.1 J-                           | 1.49                               |
| LVVPS-U2-MW17  | 10/1/2020   | N    | BL04  | Zone 2 | UMCf               | 117.0 - 136.5     | 4,500                             | 10,000                          | 11                                   | 1,700                         | 0.66                             | 2.28                               |
| LVVPS-U2-MW17  | 1/12/2021   | N    | EM02  | Zone 2 | UMCf               | 117.0 - 136.5     | 1,800                             | 800                             | <0.14                                | 2,200                         | 6.1                              | 0.64                               |
| LVVPS-U2-MW17  | 1/12/2021   | FD   | EM02  | Zone 2 | UMCf               | 117.0 - 136.5     | 2,100                             | 810                             | 0.036 J                              | 2,200                         | 6.6                              | ----                               |
| LVVPS-U2-MW17  | 2/8/2021    | N    | EM04  | Zone 2 | UMCf               | 117.0 - 136.5     | 2,000                             | 3,900                           | 3.9                                  | 2,000                         | 2.0                              | 2.19                               |
| LVVPS-U2-MW17  | 2/8/2021    | FD   | EM04  | Zone 2 | UMCf               | 117.0 - 136.5     | 2,200                             | 3,800                           | 3.9                                  | 2,000                         | 1.9 J                            | ----                               |
| LVVPS-U2-MW18  | 10/5/2020   | N    | BL04  | Zone 2 | UMCf               | 88.3 - 113.0      | 8,400                             | 10,000                          | 18                                   | 2,200                         | 1.3                              | 4.49                               |
| LVVPS-U2-MW18  | 1/11/2021   | N    | EM02  | Zone 2 | UMCf               | 88.3 - 113.0      | 5,800                             | 8,800                           | 18                                   | 2,400                         | 1.8 J                            | 2.83                               |
| LVVPS-U2-MW18  | 2/8/2021    | N    | EM04  | Zone 2 | UMCf               | 88.3 - 113.0      | 6,000                             | 8,800                           | 18                                   | 2,000                         | <2.6 UJ                          | 4.08                               |
| LVVPS-U2-MW19  | 10/2/2020   | N    | BL04  | Zone 2 | UMCf               | 91.2 - 111.0      | 12,000                            | 14,000                          | 14                                   | 2,100                         | 1.0                              | 3.29                               |
| LVVPS-U2-MW20  | 10/2/2020   | N    | BL04  | Zone 2 | UMCf               | 88.2 - 108.0      | 6,000                             | 13,000                          | 12                                   | 2,200                         | 1.5                              | 1.38                               |
| LVVPS-U3-IW01  | 10/9/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 80.2 - 115.0      | 3,100                             | 4,900                           | 8.3                                  | ----                          | ----                             | 5.57                               |
| LVVPS-U3-IW02A | 10/6/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 79.3 - 99.0       | 10,000                            | 15,000                          | 14                                   | ----                          | ----                             | 4.02                               |
| LVVPS-U3-IW02B | 10/6/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 104.8 - 124.5     | 5,200                             | 9,700                           | 9.4                                  | ----                          | ----                             | 3.61                               |
| LVVPS-U3-IW03A | 10/6/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 77.8 - 102.5      | 1,800                             | 3,500                           | 8.3                                  | ----                          | ----                             | 3.56                               |
| LVVPS-U3-IW03B | 10/6/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 109.3 - 139.0     | 1,600                             | 3,200                           | 7.9                                  | ----                          | ----                             | 4.91                               |
| LVVPS-U3-IW04A | 10/7/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 93.3 - 123.0      | 210                               | 390                             | 7.7                                  | ----                          | ----                             | 5.74                               |
| LVVPS-U3-IW04B | 10/7/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 129.3 - 159.0     | 680                               | 1,100                           | 5.8                                  | ----                          | ----                             | 3.71                               |
| LVVPS-U3-IW05A | 10/7/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 91.3 - 126.0      | 230                               | 380                             | 7.8                                  | ----                          | ----                             | 5.74                               |
| LVVPS-U3-IW05B | 10/7/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 132.8 - 167.5     | 530                               | 870                             | 7.4                                  | ----                          | ----                             | 5.83                               |
| LVVPS-U3-IW06A | 10/7/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 86.3 - 111.0      | 340                               | 540                             | 7.6                                  | ----                          | ----                             | 5.89                               |
| LVVPS-U3-IW06B | 10/8/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 117.8 - 142.5     | 5,700                             | 1,800                           | 7.6                                  | ----                          | ----                             | 4.72                               |
| LVVPS-U3-IW06C | 10/8/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 149.3 - 174.0     | 3,800                             | 4,100                           | 8.1                                  | ----                          | ----                             | 5.71                               |
| LVVPS-U3-IW07A | 10/8/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 86.3 - 111.0      | 1,400                             | 2,000                           | 7.1                                  | ----                          | ----                             | 3.57                               |
| LVVPS-U3-IW07B | 10/8/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 117.8 - 142.5     | 9,400                             | 15,000                          | 9.0                                  | ----                          | ----                             | 0.80                               |
| LVVPS-U3-IW07C | 10/9/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 149.3 - 174.0     | 7,300                             | 14,000                          | 8.0                                  | ----                          | ----                             | 0.73                               |
| LVVPS-U3-IW08A | 10/8/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 86.3 - 111.0      | 1,900                             | 2,600                           | 5.8                                  | ----                          | ----                             | 0.79                               |
| LVVPS-U3-IW08A | 10/8/2020   | FD   | BL04  | Zone 3 | UMCf-cg            | 86.3 - 111.0      | 1,900                             | 2,600                           | 5.5                                  | ----                          | ----                             | ----                               |
| LVVPS-U3-IW08B | 10/8/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 117.8 - 142.5     | 15,000                            | 21,000                          | 12                                   | ----                          | ----                             | 0.94                               |



Table 2  
Groundwater Analytical Results  
Las Vegas Wash Bioremediation Pilot Study

| Well           | Sample Date | Type | Event | Zone   | Screened Lithology | Screened Interval | Perchlorate by USEPA Method 314.0 | Chlorate by USEPA Method 300.1B | Nitrate (as N) by USEPA Method 300.0 | Sulfate by USEPA Method 300.0 | Total Organic Carbon by SM 5310B | Dissolved Oxygen Field Measurement |
|----------------|-------------|------|-------|--------|--------------------|-------------------|-----------------------------------|---------------------------------|--------------------------------------|-------------------------------|----------------------------------|------------------------------------|
|                |             |      |       |        |                    | feet bgs          | µg/L                              | µg/L                            | mg/L                                 | mg/L                          | mg/L                             | mg/L                               |
| LVVPS-U3-IW08C | 10/9/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 149.3 - 174.0     | 2,400                             | 3,500                           | 2.3                                  | ----                          | ----                             | 0.66                               |
| LVVPS-U3-MW01B | 10/5/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 83.8 - 103.3      | 2,000                             | 1,800                           | 0.24                                 | 1,700                         | 6.3                              | 2.06                               |
| LVVPS-U3-MW01B | 1/15/2021   | N    | EM02  | Zone 3 | UMCf-cg            | 83.8 - 103.3      | 1,900                             | 2,700                           | 0.79                                 | 1,800                         | 3.9                              | 1.26                               |
| LVVPS-U3-MW01B | 2/11/2021   | N    | EM04  | Zone 3 | UMCf-cg            | 83.8 - 103.3      | 2,300                             | 2,500                           | 1.8                                  | 1,800                         | 3.6                              | 1.35                               |
| LVVPS-U3-MW02A | 10/5/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 82.3 - 97.0       | 3,000                             | 770                             | 5.7                                  | 1,400                         | 0.54                             | 2.01                               |
| LVVPS-U3-MW02A | 1/14/2021   | N    | EM02  | Zone 3 | UMCf-cg            | 82.3 - 97.0       | 1,900                             | 3,200                           | 6.0                                  | 1,500                         | 0.37 J                           | 3.75                               |
| LVVPS-U3-MW02A | 1/14/2021   | FD   | EM02  | Zone 3 | UMCf-cg            | 82.3 - 97.0       | 2,300                             | 3,300                           | 6.1                                  | 1,500                         | 0.41 J                           | ----                               |
| LVVPS-U3-MW02A | 2/11/2021   | N    | EM04  | Zone 3 | UMCf-cg            | 82.3 - 97.0       | 2,700                             | 4,200                           | 5.2 J-                               | 1,400                         | 0.41 J                           | 2.51                               |
| LVVPS-U3-MW02A | 2/11/2021   | FD   | EM04  | Zone 3 | UMCf-cg            | 82.3 - 97.0       | 2,900                             | 4,200                           | 5.3 J-                               | 1,300                         | 0.46 J                           | ----                               |
| LVVPS-U3-MW02B | 10/5/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 103.0 - 122.5     | 8,400                             | 12,000                          | 10                                   | 2,000                         | 2.1                              | 1.70                               |
| LVVPS-U3-MW02B | 1/14/2021   | N    | EM02  | Zone 3 | UMCf-cg            | 103.0 - 122.5     | 190                               | 370                             | 0.29                                 | 1,800                         | 14                               | 0.49                               |
| LVVPS-U3-MW02B | 2/11/2021   | N    | EM04  | Zone 3 | UMCf-cg            | 103.0 - 122.5     | 6,100                             | 9,800                           | 9.2 J-                               | 1,900                         | 2.7                              | 1.42                               |
| LVVPS-U3-MW03A | 10/2/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 86.3 - 111.0      | 3,300                             | 4,500                           | 7.5                                  | 2,800                         | 0.57 J-                          | 6.40                               |
| LVVPS-U3-MW03A | 10/2/2020   | FD   | BL04  | Zone 3 | UMCf-cg            | 86.3 - 111.0      | 3,500                             | 4,500                           | 7.5                                  | 2,800                         | 0.62 J-                          | ----                               |
| LVVPS-U3-MW03A | 1/14/2021   | N    | EM02  | Zone 3 | UMCf-cg            | 86.3 - 111.0      | 3,400                             | 5,500                           | 7.4                                  | 2,900                         | <2.1                             | 4.38                               |
| LVVPS-U3-MW03A | 2/11/2021   | N    | EM04  | Zone 3 | UMCf-cg            | 86.3 - 111.0      | 3,400                             | 4,800                           | 7.5                                  | 2,800                         | 0.37 J                           | 5.40                               |
| LVVPS-U3-MW03B | 10/2/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 151.1 - 175.7     | 3,800                             | 13,000                          | 9.1                                  | 1,900                         | 0.41 J                           | 3.23                               |
| LVVPS-U3-MW03B | 1/14/2021   | N    | EM02  | Zone 3 | UMCf-cg            | 151.1 - 175.7     | 100                               | <10                             | <0.014                               | 1,900 J-                      | 61                               | 0.23                               |
| LVVPS-U3-MW03B | 2/11/2021   | N    | EM04  | Zone 3 | UMCf-cg            | 151.1 - 175.7     | 86                                | 21 J                            | <0.014                               | 1,900                         | 38                               | 0.57                               |
| LVVPS-U3-MW03C | 10/1/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 117.8 - 142.5     | 4,900                             | 12,000                          | 7.7                                  | 1,900                         | 0.32 J                           | 2.96                               |
| LVVPS-U3-MW03C | 1/14/2021   | N    | EM02  | Zone 3 | UMCf-cg            | 117.8 - 142.5     | 4,800                             | 4,300                           | 1.6                                  | 2,000                         | 2.6                              | 0.43                               |
| LVVPS-U3-MW03C | 2/11/2021   | N    | EM04  | Zone 3 | UMCf-cg            | 117.8 - 142.5     | 5,700                             | 6,800                           | 3.4                                  | 2,000                         | 3.9                              | 0.46                               |
| LVVPS-U3-MW04B | 10/2/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 78.2 - 97.7       | 120                               | 67 J                            | <0.014                               | 1,600                         | 6.8                              | 2.03                               |
| LVVPS-U3-MW05B | 10/2/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 85.2 - 104.7      | 9.4                               | <10                             | <0.014                               | 1,900                         | 8.4                              | 2.07                               |
| LVVPS-U3-MW05B | 1/15/2021   | N    | EM02  | Zone 3 | UMCf-cg            | 85.2 - 104.7      | 96 J                              | 39 J                            | <0.014                               | 1,900                         | 7.3                              | 1.11                               |
| LVVPS-U3-MW05B | 2/11/2021   | N    | EM04  | Zone 3 | UMCf-cg            | 85.2 - 104.7      | 460                               | 130                             | <0.014                               | 1,800                         | 5.9                              | 0.42                               |
| LVVPS-U3-MW06A | 10/5/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 90.3 - 115.0      | 9,900                             | 15,000                          | 13                                   | 1,700                         | 0.48 J                           | 5.05                               |
| LVVPS-U3-MW06A | 1/15/2021   | N    | EM02  | Zone 3 | UMCf-cg            | 90.3 - 115.0      | <6,300                            | 13,000                          | 12                                   | 1,800 J-                      | <1.0                             | 4.12                               |
| LVVPS-U3-MW06A | 2/12/2021   | N    | EM04  | Zone 3 | UMCf-cg            | 90.3 - 115.0      | 9,400                             | 15,000                          | 12                                   | 1,700                         | 0.50                             | 3.39                               |
| LVVPS-U3-MW06B | 10/7/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 125.3 - 149.9     | 630                               | 1,200                           | 6.6                                  | 1,500                         | 0.43 J                           | 4.23                               |
| LVVPS-U3-MW06B | 1/14/2021   | N    | EM02  | Zone 3 | UMCf-cg            | 125.3 - 149.9     | 820                               | 1,500                           | 6.1                                  | 1,600                         | 0.58                             | 2.37                               |
| LVVPS-U3-MW06B | 2/11/2021   | N    | EM04  | Zone 3 | UMCf-cg            | 125.3 - 149.9     | 1,100                             | 1,600                           | 5.9                                  | 1,500                         | 0.58                             | 2.68                               |
| LVVPS-U3-MW07A | 10/9/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 82.8 - 97.5       | 250                               | 540                             | 5.9                                  | 1,200                         | 0.39 J                           | 5.45                               |
| LVVPS-U3-MW07A | 1/15/2021   | N    | EM02  | Zone 3 | UMCf-cg            | 82.8 - 97.5       | 260                               | 530                             | 6.1                                  | 1,200                         | 0.37 J                           | 6.37                               |
| LVVPS-U3-MW07A | 2/11/2021   | N    | EM04  | Zone 3 | UMCf-cg            | 82.8 - 97.5       | 300                               | 440                             | 6.6 J-                               | 1,100                         | 0.27 J                           | 6.50                               |
| LVVPS-U3-MW07B | 10/9/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 104.8 - 124.5     | 4,800                             | 8,500                           | 9.2                                  | 2,100                         | 0.41 J                           | 6.07                               |
| LVVPS-U3-MW07B | 1/14/2021   | N    | EM02  | Zone 3 | UMCf-cg            | 104.8 - 124.5     | 4,600                             | 7,900                           | 9.5                                  | 2,100                         | <2.1                             | 6.26                               |
| LVVPS-U3-MW07B | 2/12/2021   | N    | EM04  | Zone 3 | UMCf-cg            | 104.8 - 124.5     | 4,900                             | 7,400                           | 9.4                                  | 1,800                         | 0.41 J                           | 6.51                               |
| LVVPS-U3-MW08A | 10/8/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 117.8 - 142.5     | 15,000                            | 22,000                          | 14                                   | 2,300                         | 0.47 J                           | 5.05                               |
| LVVPS-U3-MW08A | 1/15/2021   | N    | EM02  | Zone 3 | UMCf-cg            | 117.8 - 142.5     | 14,000                            | 20,000                          | 14                                   | 2,400                         | <1.0                             | 4.22                               |
| LVVPS-U3-MW08A | 2/12/2021   | N    | EM04  | Zone 3 | UMCf-cg            | 117.8 - 142.5     | 14,000                            | 20,000                          | 13                                   | 2,300                         | 0.40 J                           | 4.55                               |
| LVVPS-U3-MW08B | 10/8/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 149.3 - 174.0     | 6,100                             | 8,100                           | 4.9                                  | 2,200                         | 2.6                              | 2.46                               |
| LVVPS-U3-MW08B | 1/15/2021   | N    | EM02  | Zone 3 | UMCf-cg            | 149.3 - 174.0     | 7,400                             | 8,100                           | 5.3                                  | 2,200                         | 1.0 J                            | 0.86                               |
| LVVPS-U3-MW08B | 2/12/2021   | N    | EM04  | Zone 3 | UMCf-cg            | 149.3 - 174.0     | 5,700                             | 8,100                           | 5.5                                  | 2,000                         | 0.68                             | 1.04                               |
| LVVPS-U3-MW09  | 10/7/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 82.8 - 107.5      | 3,500                             | 6,100                           | 4.8                                  | 1,300                         | <0.26                            | 4.35                               |
| LVVPS-U3-MW09  | 1/15/2021   | N    | EM02  | Zone 3 | UMCf-cg            | 82.8 - 107.5      | 14                                | <10                             | <0.014                               | 1,100                         | 300                              | 0.52                               |
| LVVPS-U3-MW09  | 2/10/2021   | N    | EM04  | Zone 3 | UMCf-cg            | 82.8 - 107.5      | 90                                | <10                             | <0.014                               | 1,100                         | 97                               | 0.72                               |
| LVVPS-U3-MW10A | 10/5/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 85.3 - 95.0       | 2,600                             | 3,200                           | 3.0                                  | 1,800                         | 0.77                             | 0.99                               |
| LVVPS-U3-MW10A | 1/14/2021   | N    | EM02  | Zone 3 | UMCf-cg            | 85.3 - 95.0       | 0.96 J                            | <10                             | <0.014                               | 1,200                         | 310                              | 0.76                               |
| LVVPS-U3-MW10A | 2/11/2021   | N    | EM04  | Zone 3 | UMCf-cg            | 85.3 - 95.0       | 8.4 J                             | <10                             | <0.014 UJ                            | 1,100                         | 4.6                              | 0.89                               |
| LVVPS-U3-MW10B | 10/5/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 101.3 - 121.0     | 3,200                             | 4,200                           | 6.5                                  | 1,600                         | 0.32 J                           | 6.76                               |
| LVVPS-U3-MW10B | 1/14/2021   | N    | EM02  | Zone 3 | UMCf-cg            | 101.3 - 121.0     | 0.69 J                            | <10                             | <0.014                               | 1,500                         | 280                              | 0.54                               |
| LVVPS-U3-MW10B | 2/11/2021   | N    | EM04  | Zone 3 | UMCf-cg            | 101.3 - 121.0     | <0.31                             | <10                             | <0.014 UJ                            | 98                            | 42                               | 0.76                               |
| LVVPS-U3-MW11A | 10/7/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 86.3 - 106.0      | 10,000                            | 16,000                          | 9.8                                  | 2,000                         | 0.42 J                           | 2.55                               |
| LVVPS-U3-MW11A | 1/15/2021   | N    | EM02  | Zone 3 | UMCf-cg            | 86.3 - 106.0      | 11,000                            | 18,000                          | 11                                   | 2,000                         | <1.0                             | 3.02                               |
| LVVPS-U3-MW11A | 2/12/2021   | N    | EM04  | Zone 3 | UMCf-cg            | 86.3 - 106.0      | 11,000                            | 18,000                          | 12                                   | 2,000                         | 0.30 J                           | 3.14                               |
| LVVPS-U3-MW11B | 10/7/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 112.3 - 137.0     | 4,100                             | 9,600                           | 5.2                                  | 1,900                         | 0.33 J                           | 1.23                               |
| LVVPS-U3-MW11B | 1/18/2021   | N    | EM02  | Zone 3 | UMCf-cg            | 112.3 - 137.0     | 5,400                             | 7,600                           | 4.9                                  | 2,100                         | <1.0                             | 2.13                               |

Table 2  
Groundwater Analytical Results  
Las Vegas Wash Bioremediation Pilot Study

| Well           | Sample Date | Type | Event | Zone   | Screened Lithology | Screened Interval | Perchlorate by USEPA Method 314.0 | Chlorate by USEPA Method 300.1B | Nitrate (as N) by USEPA Method 300.0 | Sulfate by USEPA Method 300.0 | Total Organic Carbon by SM 5310B | Dissolved Oxygen Field Measurement |
|----------------|-------------|------|-------|--------|--------------------|-------------------|-----------------------------------|---------------------------------|--------------------------------------|-------------------------------|----------------------------------|------------------------------------|
|                |             |      |       |        |                    | feet bgs          | µg/L                              | µg/L                            | mg/L                                 | mg/L                          | mg/L                             | mg/L                               |
| LVWPS-U3-MW11B | 2/12/2021   | N    | EM04  | Zone 3 | UMCf-cg            | 112.3 - 137.0     | 3,800                             | 7,000                           | 4.9                                  | 1,800                         | <0.26                            | 1.44                               |
| LVWPS-U3-MW11C | 10/8/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 143.3 - 163.0     | 5,300                             | 7,100                           | 8.5                                  | 2,000                         | 0.46 J                           | 4.73                               |
| LVWPS-U3-MW11C | 1/18/2021   | N    | EM02  | Zone 3 | UMCf-cg            | 143.3 - 163.0     | 6,500                             | 6,800                           | 8.1                                  | 2,000                         | <1.0                             | 4.03                               |
| LVWPS-U3-MW11C | 2/12/2021   | N    | EM04  | Zone 3 | UMCf-cg            | 143.3 - 163.0     | 3,800                             | 6,200                           | 8.3                                  | 1,700                         | 0.34 J                           | 2.92                               |
| LVWPS-U3-MW12A | 10/6/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 88.3 - 108.0      | 2,700                             | 4,200                           | 5.1                                  | 1,800                         | 0.38 J                           | 2.67                               |
| LVWPS-U3-MW12A | 1/15/2021   | N    | EM02  | Zone 3 | UMCf-cg            | 88.3 - 108.0      | 2,300                             | 3,200                           | 3.3                                  | 1,800                         | 0.60                             | 1.07                               |
| LVWPS-U3-MW12A | 2/12/2021   | N    | EM04  | Zone 3 | UMCf-cg            | 88.3 - 108.0      | 2,000                             | 2,800                           | 2.5                                  | 1,600                         | 3.7                              | 1.79                               |
| LVWPS-U3-MW12B | 10/6/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 113.3 - 138.0     | 6,000                             | 4,900                           | 6.6                                  | 1,700                         | 0.27 J                           | 5.94                               |
| LVWPS-U3-MW12B | 1/15/2021   | N    | EM02  | Zone 3 | UMCf-cg            | 113.3 - 138.0     | 1,900                             | 2,600                           | 2.7                                  | 2,000                         | 0.45 J                           | 1.79                               |
| LVWPS-U3-MW12B | 2/12/2021   | N    | EM04  | Zone 3 | UMCf-cg            | 113.3 - 138.0     | 830                               | 980                             | 0.99                                 | 1,500                         | 27                               | 0.94                               |
| LVWPS-U3-MW13A | 10/7/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 96.3 - 121.0      | 3,900                             | 7,200                           | 11                                   | 2,000                         | 0.45 J                           | 5.44                               |
| LVWPS-U3-MW13A | 1/15/2021   | N    | EM02  | Zone 3 | UMCf-cg            | 96.3 - 121.0      | 3,900                             | 7,400                           | 10                                   | 2,100                         | <1.0                             | 4.84                               |
| LVWPS-U3-MW13A | 2/11/2021   | N    | EM04  | Zone 3 | UMCf-cg            | 96.3 - 121.0      | 4,200                             | 6,300                           | 10                                   | 2,000                         | 0.45 J                           | 5.32                               |
| LVWPS-U3-MW13B | 10/7/2020   | N    | BL04  | Zone 3 | UMCf-cg            | 132.8 - 147.5     | 350                               | 550                             | 6.8                                  | 1,500                         | 0.45 J                           | 5.92                               |
| LVWPS-U3-MW13B | 1/15/2021   | N    | EM02  | Zone 3 | UMCf-cg            | 132.8 - 147.5     | <0.31                             | <10                             | <0.014                               | 910                           | 65                               | 0.2                                |
| LVWPS-U3-MW13B | 1/15/2021   | FD   | EM02  | Zone 3 | UMCf-cg            | 132.8 - 147.5     | <0.31                             | <10                             | <0.014                               | 920                           | 65                               | ----                               |
| LVWPS-U3-MW13B | 2/12/2021   | N    | EM04  | Zone 3 | UMCf-cg            | 132.8 - 147.5     | <0.31                             | <10                             | <0.014                               | 830                           | 130                              | 0.47                               |
| LVWPS-U3-MW13B | 2/12/2021   | FD   | EM04  | Zone 3 | UMCf-cg            | 132.8 - 147.5     | <0.31                             | <10                             | <0.014                               | 850                           | 130                              | ----                               |

- Notes:
- Not tested.
  - < The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
  - bgs below ground surface
  - FD field duplicate
  - J- The result is an estimated quantity, but the result may be biased low.
  - J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
  - J+ The result is an estimated quantity, but the result may be biased high.
  - µg/L micrograms per liter
  - mg/L milligrams per liter
  - N normal sample
  - R The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
  - UMCf Upper Muddy Creek formation
  - UMCf-cg Upper Muddy Creek formation - coarse grained facies
  - UMCf/Horse Springs Alternating layers of UMCf, semi-consolidated UMCf, and reworked Horse Springs formation.
  - UMCf (Semi-Cons) Semi-consolidated Upper Muddy Creek formation



**Table 3**  
**Tracer Dye Analytical Results**  
 Las Vegas Wash Bioremediation Pilot Study

| Location       | Sample Date | Depth (ft bgs) | Sample ID                 | Event | Zone   | Eosine    |            | Eosine      |             | Fluorescein |            | Fluorescein |             | Rhodamine WT (RWT) |            | Rhodamine WT (RWT) |             |
|----------------|-------------|----------------|---------------------------|-------|--------|-----------|------------|-------------|-------------|-------------|------------|-------------|-------------|--------------------|------------|--------------------|-------------|
|                |             |                |                           |       |        | Charcoal  |            | Groundwater | Groundwater | Charcoal    | Charcoal   | Groundwater | Groundwater | Charcoal           | Charcoal   | Groundwater        | Groundwater |
|                |             |                |                           |       |        | Peak (nm) | Conc (ppb) | Peak (nm)   | Conc (ppb)  | Peak (nm)   | Conc (ppb) | Peak (nm)   | Conc (ppb)  | Peak (nm)          | Conc (ppb) | Peak (nm)          | Conc (ppb)  |
| LVWPS-A1-DR01  | 9/28/2020   | 72.5           | LVWPS-A1-DR01-BL04        | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A1-DR01  | 12/13/2020  | 72.5           | LVWPS-A1-DR01-20201213-1  | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A1-DR01  | 12/14/2020  | 72.5           | LVWPS-A1-DR01-20201214    | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A1-DR01  | 12/29/2020  | 72.5           | LVWPS-A1-DR01-INJ         | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A1-DR01  | 1/12/2021   | 72.5           | LVWPS-A1-DR01-EM02        | EM02  | Zone 1 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 561.2 **           | 8.58       | ND                 | ND          |
| LVWPS-A1-DR01  | 2/11/2021   | 72.5           | LVWPS-A1-DR01-EM04        | EM04  | Zone 1 | ND        | ND         | ND          | ND          | 515.9       | 1.46       | ND          | ND          | 562.2 **           | 25.4       | ND                 | ND          |
| LVWPS-A1-DR02  | 9/28/2020   | 67.8           | LVWPS-A1-DR02-BL04        | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A1-DR02  | 12/13/2020  | 67.8           | LVWPS-A1-DR02-20201213-1  | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A1-DR02  | 12/14/2020  | 67.8           | LVWPS-A1-DR02-20201214    | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A1-DR02  | 12/29/2020  | 67.8           | LVWPS-A1-DR02-INJ         | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A1-DR02  | 1/12/2021   | 67.8           | LVWPS-A1-DR02-EM02        | EM02  | Zone 1 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 562.8 **           | 16.7       | ND                 | ND          |
| LVWPS-A1-DR02  | 2/11/2021   | 67.8           | LVWPS-A1-DR02-EM04        | EM04  | Zone 1 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 562.7 **           | 43.6       | ND                 | ND          |
| LVWPS-A1-MW04  | 9/30/2020   | 79.2           | LVWPS-A1-MW04-BL04        | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A1-MW04  | 12/29/2020  | 79.2           | LVWPS-A1-MW04-INJ         | INJ   | Zone 1 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 562.2 **           | 25.6       | ND                 | ND          |
| LVWPS-A1-MW04  | 1/13/2021   | 79.2           | LVWPS-A1-MW04-EM02        | EM02  | Zone 1 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 561.0 **           | 2.34       | ND                 | ND          |
| LVWPS-A1-MW04  | 2/9/2021    | 79.2           | LVWPS-A1-MW04-EM04        | EM04  | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A1-MW05  | 9/30/2020   | 78.9           | LVWPS-A1-MW05-BL04        | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A1-MW05  | 12/29/2020  | 78.9           | LVWPS-A1-MW05-INJ         | INJ   | Zone 1 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 562.3 **           | 39.7       | ND                 | ND          |
| LVWPS-A1-MW05  | 1/15/2021   | 78.9           | LVWPS-A1-MW05-EM02        | EM02  | Zone 1 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 562.3 **           | 14.0       | ND                 | ND          |
| LVWPS-A1-MW05  | 2/10/2021   | 78.9           | LVWPS-A1-MW05-EM04        | EM04  | Zone 1 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 562.1 **           | 36.3       | ND                 | ND          |
| LVWPS-A1-MW06  | 9/29/2020   | 69.1           | LVWPS-A1-MW06-BL04        | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A1-MW06  | 12/28/2020  | 69.1           | LVWPS-A1-MW06-INJ         | INJ   | Zone 1 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 563.2 **           | 44.5       | ND                 | ND          |
| LVWPS-A1-MW06  | 1/14/2021   | 69.1           | LVWPS-A1-MW06-EM02        | EM02  | Zone 1 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 562.6 **           | 34.2       | ND                 | ND          |
| LVWPS-A1-MW06  | 2/9/2021    | 69.1           | LVWPS-A1-MW06-EM04        | EM04  | Zone 1 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 562.2 **           | 37.5       | ND                 | ND          |
| LVWPS-A1-MW07  | 9/30/2020   | 68.1           | LVWPS-A1-MW07-BL04        | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A1-MW07  | 12/29/2020  | 68.1           | LVWPS-A1-MW07-INJ         | INJ   | Zone 1 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 562.1 **           | 32.3       | ND                 | ND          |
| LVWPS-A1-MW07  | 1/14/2021   | 68.1           | LVWPS-A1-MW07-EM02        | EM02  | Zone 1 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 561.9 **           | 21.0       | ND                 | ND          |
| LVWPS-A1-MW07  | 2/10/2021   | 68.1           | LVWPS-A1-MW07-EM04        | EM04  | Zone 1 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 561.7 **           | 22.4       | ND                 | ND          |
| LVWPS-A1-MW09  | 9/30/2020   | 95.5           | LVWPS-A1-MW09-BL04        | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A1-MW09  | 1/13/2021   | 95.5           | LVWPS-A1-MW09-EM02        | EM02  | Zone 1 | ND        | ND         | ND          | ND          | 515.4       | 10.5       | ND          | ND          | 561.7 **           | 4.93       | ND                 | ND          |
| LVWPS-A1-MW09  | 2/11/2021   | 95.5           | LVWPS-A1-MW09-EM04        | EM04  | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A1-MW10  | 10/1/2020   | 80.5           | LVWPS-A1-MW10-BL04        | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A1-MW10  | 10/1/2020   | 80.5           | LVWPS-A1-MW10-BL04-FD     | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A1-MW10  | 1/13/2021   | 80.5           | LVWPS-A1-MW10-EM02        | EM02  | Zone 1 | ND        | ND         | ND          | ND          | 515.3       | 7.16       | ND          | ND          | 562.1 **           | 34.4       | ND                 | ND          |
| LVWPS-A1-MW10  | 2/8/2021    | 80.5           | LVWPS-A1-MW10-EM04        | EM04  | Zone 1 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 560.8 **           | 4.60       | ND                 | ND          |
| LVWPS-A2-DR01A | 9/28/2020   | 53.7           | LVWPS-A2-DR01A-BL04       | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-DR01A | 12/7/2020   | 53.7           | LVWPS-A2-DR01A-20201207   | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | 566.8              | 28.4        |
| LVWPS-A2-DR01A | 12/8/2020   | 53.7           | LVWPS-A2-DR01A-20201208   | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | 565.8              | 286         |
| LVWPS-A2-DR01A | 12/9/2020   | 53.7           | LVWPS-A2-DR01A-20201209   | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | 569.0              | 5,920       |
| LVWPS-A2-DR01A | 12/12/2020  | 53.7           | LVWPS-A2-DR01A-INJ        | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | 566.5              | 104         |
| LVWPS-A2-DR01A | 12/20/2020  | 53.7           | LVWPS-A2-DR01A-20201220   | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | 574.1              | 11.6        |
| LVWPS-A2-DR01A | 12/21/2020  | 53.7           | LVWPS-A2-DR01A-20201221   | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | 574.1              | 9.77        |
| LVWPS-A2-DR01A | 1/12/2021   | 53.7           | LVWPS-A2-DR01A-EM02       | EM02  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 567.7              | 574        | 567.0 **           | 44.1        |
| LVWPS-A2-DR01A | 2/12/2021   | 53.7           | LVWPS-A2-DR01A-EM04       | EM04  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 567.1              | 84.7       | 567.0              | 23.6        |
| LVWPS-A2-DR01B | 9/28/2020   | 94.5           | LVWPS-A2-DR01B-BL04       | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-DR01B | 12/7/2020   | 94.5           | LVWPS-A2-DR01B-20201207   | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | 566.8              | 32.5        |
| LVWPS-A2-DR01B | 12/8/2020   | 94.5           | LVWPS-A2-DR01B-20201208   | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | 566.2              | 22.2        |
| LVWPS-A2-DR01B | 12/9/2020   | 94.5           | LVWPS-A2-DR01B-20201209   | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | 566.2              | 503         |
| LVWPS-A2-DR01B | 12/11/2020  | 94.5           | LVWPS-A2-DR01B-INJ        | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | 566.2 **           | 379         |
| LVWPS-A2-DR01B | 12/20/2020  | 94.5           | LVWPS-A2-DR01B-20201220-1 | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | 568.0 **           | 115         |
| LVWPS-A2-DR01B | 12/20/2020  | 94.5           | LVWPS-A2-DR01B-20201220-2 | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | 567.1 **           | 168         |
| LVWPS-A2-DR01B | 12/20/2020  | 94.5           | LVWPS-A2-DR01B-20201220-3 | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | 567.0 **           | 223         |
| LVWPS-A2-DR01B | 12/20/2020  | 94.5           | LVWPS-A2-DR01B-20201220-4 | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | 567.0 **           | 272         |
| LVWPS-A2-DR01B | 12/21/2020  | 94.5           | LVWPS-A2-DR01B-20201221-1 | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | 567.2 **           | 146         |
| LVWPS-A2-DR01B | 12/21/2020  | 94.5           | LVWPS-A2-DR01B-20201221-2 | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | 567.0 **           | 381         |
| LVWPS-A2-DR01B | 12/21/2020  | 94.5           | LVWPS-A2-DR01B-20201221-3 | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | 567.2 **           | 107         |
| LVWPS-A2-DR01B | 12/21/2020  | 94.5           | LVWPS-A2-DR01B-20201221-4 | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | 567.6 **           | 126         |
| LVWPS-A2-DR01B | 1/12/2021   | 94.5           | LVWPS-A2-DR01B-EM02       | EM02  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 568.7              | 2,170      | 567.7 **           | 95.5        |

**Table 3**  
**Tracer Dye Analytical Results**  
 Las Vegas Wash Bioremediation Pilot Study

| Location       | Sample Date | Depth (ft bgs) | Sample ID                 | Event | Zone   | Eosine    |            | Eosine      |             | Fluorescein |            | Fluorescein |             | Rhodamine WT (RWT) |            | Rhodamine WT (RWT) |             |
|----------------|-------------|----------------|---------------------------|-------|--------|-----------|------------|-------------|-------------|-------------|------------|-------------|-------------|--------------------|------------|--------------------|-------------|
|                |             |                |                           |       |        | Charcoal  |            | Groundwater | Groundwater | Charcoal    | Charcoal   | Groundwater | Groundwater | Charcoal           | Charcoal   | Groundwater        | Groundwater |
|                |             |                |                           |       |        | Peak (nm) | Conc (ppb) | Peak (nm)   | Conc (ppb)  | Peak (nm)   | Conc (ppb) | Peak (nm)   | Conc (ppb)  | Peak (nm)          | Conc (ppb) | Peak (nm)          | Conc (ppb)  |
| LVWPS-A2-DR01B | 2/12/2021   | 94.5           | LVWPS-A2-DR01B-EM04       | EM04  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 567.3              | 18.6       | 568.2 **           | 111         |
| LVWPS-A2-DR02A | 9/28/2020   | 43.9           | LVWPS-A2-DR02A-BL04       | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-DR02A | 12/7/2020   | 43.9           | LVWPS-A2-DR02A-20201207   | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | 566.1              | 326         |
| LVWPS-A2-DR02A | 12/8/2020   | 43.9           | LVWPS-A2-DR02A-20201208   | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | 566.2              | 13.5        |
| LVWPS-A2-DR02A | 12/9/2020   | 43.9           | LVWPS-A2-DR02A-20201209   | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | 567.0              | 189         |
| LVWPS-A2-DR02A | 12/9/2020   | 43.9           | LVWPS-A2-DR02A-20201209   | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | 567.0              | 216         |
| LVWPS-A2-DR02A | 12/12/2020  | 43.9           | LVWPS-A2-DR02A-INJ        | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | 567.1              | 72.7        |
| LVWPS-A2-DR02A | 12/20/2020  | 43.9           | LVWPS-A2-DR02A-20201220   | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | 573.1              | 0.323       |
| LVWPS-A2-DR02A | 12/21/2020  | 43.9           | LVWPS-A2-DR02A-20201221   | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-DR02A | 1/12/2021   | 43.9           | LVWPS-A2-DR02A-EM02       | EM02  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 567.6              | 29.9       | ND                 | ND          |
| LVWPS-A2-DR02A | 2/12/2021   | 43.9           | LVWPS-A2-DR02A-EM04       | EM04  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 566.6              | 7.09       | 574.2              | 1.95        |
| LVWPS-A2-DR02B | 9/28/2020   | 67.7           | LVWPS-A2-DR02B-BL04       | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-DR02B | 12/7/2020   | 67.7           | LVWPS-A2-DR02B-20201207   | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | 506.0       | 0.022       | ---                | ---        | 573.4              | 0.244       |
| LVWPS-A2-DR02B | 12/8/2020   | 67.7           | LVWPS-A2-DR02B-20201208   | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | 566.2              | 115         |
| LVWPS-A2-DR02B | 12/9/2020   | 67.7           | LVWPS-A2-DR02B-20201209   | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | 566.9              | 98.0        |
| LVWPS-A2-DR02B | 12/12/2020  | 67.7           | LVWPS-A2-DR02B-INJ        | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | 566.6              | 250         |
| LVWPS-A2-DR02B | 12/20/2020  | 67.7           | LVWPS-A2-DR02B-20201220-1 | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | 515.1 **    | 28.1        | ---                | ---        | 566.7 **           | 275         |
| LVWPS-A2-DR02B | 12/20/2020  | 67.7           | LVWPS-A2-DR02B-20201220-2 | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | 515.5 **    | 15.1        | ---                | ---        | 567.0 **           | 246         |
| LVWPS-A2-DR02B | 12/20/2020  | 67.7           | LVWPS-A2-DR02B-20201220-3 | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | 515.6 **    | 35.6        | ---                | ---        | 566.1 **           | 71.9        |
| LVWPS-A2-DR02B | 12/20/2020  | 67.7           | LVWPS-A2-DR02B-20201220-4 | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | 515.3 **    | 28.8        | ---                | ---        | 566.9 **           | 258         |
| LVWPS-A2-DR02B | 12/21/2020  | 67.7           | LVWPS-A2-DR02B-20201221-1 | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | 516.1 **    | 37.2        | ---                | ---        | 566.2 **           | 134         |
| LVWPS-A2-DR02B | 12/21/2020  | 67.7           | LVWPS-A2-DR02B-20201221-2 | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | 515.9 **    | 58.9        | ---                | ---        | 566.5 **           | 204         |
| LVWPS-A2-DR02B | 12/21/2020  | 67.7           | LVWPS-A2-DR02B-20201221-3 | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | 515.5 **    | 46.5        | ---                | ---        | 565.4 **           | 25.7        |
| LVWPS-A2-DR02B | 12/21/2020  | 67.7           | LVWPS-A2-DR02B-20201221-4 | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | 515.5 **    | 45.7        | ---                | ---        | 566.5 **           | 48.0        |
| LVWPS-A2-DR02B | 1/12/2021   | 67.7           | LVWPS-A2-DR02B-EM02       | EM02  | Zone 2 | ND        | ND         | ND          | ND          | 516.3       | 24.4       | 515.4 **    | 11.6        | 567.4              | 57.4       | 565.9 **           | 24.5        |
| LVWPS-A2-DR02B | 2/12/2021   | 67.7           | LVWPS-A2-DR02B-EM04       | EM04  | Zone 2 | ND        | ND         | ND          | ND          | 516.8       | 33.5       | 514.6 **    | 15.6        | 566.2              | 168        | 566.9 **           | 59.0        |
| LVWPS-A2-MW01A | 10/8/2020   | 49.8           | LVWPS-A2-MW01A-BL04       | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW01A | 12/12/2020  | 49.8           | LVWPS-A2-MW01A-INJ        | INJ   | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW01A | 12/23/2020  | 49.8           | LVWPS-A2-MW01A-EM01       | EM01  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW01A | 1/13/2021   | 49.8           | LVWPS-A2-MW01A-EM02       | EM02  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW01A | 1/25/2021   | 49.8           | LVWPS-A2-MW01A-EM03       | EM03  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW01A | 2/10/2021   | 49.8           | LVWPS-A2-MW01A-EM04       | EM04  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW01B | 10/8/2020   | 79.7           | LVWPS-A2-MW01B-BL04       | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW01B | 12/15/2020  | 79.7           | LVWPS-A2-MW01B-INJ        | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | 573.6              | 0.135       |
| LVWPS-A2-MW01B | 12/23/2020  | 79.7           | LVWPS-A2-MW01B-EM01       | EM01  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW01B | 1/13/2021   | 79.7           | LVWPS-A2-MW01B-EM02       | EM02  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW01B | 1/25/2021   | 79.7           | LVWPS-A2-MW01B-EM03       | EM03  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW01B | 2/10/2021   | 79.7           | LVWPS-A2-MW01B-EM04       | EM04  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW02A | 10/8/2020   | 49.8           | LVWPS-A2-MW02A-BL04       | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW02A | 10/8/2020   | 49.8           | LVWPS-A2-MW02A-BL04-FD    | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW02A | 12/12/2020  | 49.8           | LVWPS-A2-MW02A-INJ        | INJ   | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW02A | 12/23/2020  | 49.8           | LVWPS-A2-MW02A-EM01       | EM01  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW02A | 1/12/2021   | 49.8           | LVWPS-A2-MW02A-EM02       | EM02  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW02A | 1/25/2021   | 49.8           | LVWPS-A2-MW02A-EM03       | EM03  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW02A | 2/9/2021    | 49.8           | LVWPS-A2-MW02A-EM04       | EM04  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW02B | 10/8/2020   | 79.9           | LVWPS-A2-MW02B-BL04       | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW02B | 12/12/2020  | 79.9           | LVWPS-A2-MW02B-INJ        | INJ   | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW02B | 12/23/2020  | 79.9           | LVWPS-A2-MW02B-EM01       | EM01  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW02B | 1/13/2021   | 79.9           | LVWPS-A2-MW02B-EM02       | EM02  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW02B | 1/25/2021   | 79.9           | LVWPS-A2-MW02B-EM03       | EM03  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW02B | 2/10/2021   | 79.9           | LVWPS-A2-MW02B-EM04       | EM04  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW03A | 10/9/2020   | 47.9           | LVWPS-A2-MW03A-BL04       | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW03A | 10/9/2020   | 47.9           | LVWPS-A2-MW03A-BL04-FD    | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW03A | 12/12/2020  | 47.9           | LVWPS-A2-MW03A-INJ        | INJ   | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | 562.0 **           | 2.46       | ---                | ---         |
| LVWPS-A2-MW03A | 12/23/2020  | 47.9           | LVWPS-A2-MW03A-EM01       | EM01  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW03A | 1/14/2021   | 47.9           | LVWPS-A2-MW03A-EM02       | EM02  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 562.6 **           | 1.59       | ND                 | ND          |
| LVWPS-A2-MW03A | 1/25/2021   | 47.9           | LVWPS-A2-MW03A-EM03       | EM03  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 561.1 **           | 1.10       | ND                 | ND          |
| LVWPS-A2-MW03A | 2/10/2021   | 47.9           | LVWPS-A2-MW03A-EM04       | EM04  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 563.3 **           | 1.68       | ND                 | ND          |

Table 3  
Tracer Dye Analytical Results  
Las Vegas Wash Bioremediation Pilot Study

| Location       | Sample Date | Depth (ft bgs) | Sample ID              | Event | Zone   | Eosine    |            | Eosine      |             | Fluorescein |            | Fluorescein |             | Rhodamine WT (RWT) |            | Rhodamine WT (RWT) |             |
|----------------|-------------|----------------|------------------------|-------|--------|-----------|------------|-------------|-------------|-------------|------------|-------------|-------------|--------------------|------------|--------------------|-------------|
|                |             |                |                        |       |        | Charcoal  |            | Groundwater | Groundwater | Charcoal    | Charcoal   | Groundwater | Groundwater | Charcoal           | Charcoal   | Groundwater        | Groundwater |
|                |             |                |                        |       |        | Peak (nm) | Conc (ppb) | Peak (nm)   | Conc (ppb)  | Peak (nm)   | Conc (ppb) | Peak (nm)   | Conc (ppb)  | Peak (nm)          | Conc (ppb) | Peak (nm)          | Conc (ppb)  |
| LVWPS-A2-MW03B | 10/9/2020   | 73.8           | LVWPS-A2-MW03B-BL04    | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW03B | 12/12/2020  | 73.8           | LVWPS-A2-MW03B-INJ     | INJ   | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW03B | 12/23/2020  | 73.8           | LVWPS-A2-MW03B-EM01    | EM01  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW03B | 1/14/2021   | 73.8           | LVWPS-A2-MW03B-EM02    | EM02  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW03B | 1/26/2021   | 73.8           | LVWPS-A2-MW03B-EM03    | EM03  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW03B | 2/10/2021   | 73.8           | LVWPS-A2-MW03B-EM04    | EM04  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW04A | 10/2/2020   | 53.7           | LVWPS-A2-MW04A-BL04    | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW04A | 12/14/2020  | 53.7           | LVWPS-A2-MW04A-INJ     | INJ   | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW04A | 12/14/2020  | 53.7           | LVWPS-A2-MW04A-INJ-FD  | INJ   | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW04A | 12/22/2020  | 53.7           | LVWPS-A2-MW04A-EM01    | EM01  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW04A | 12/22/2020  | 53.7           | LVWPS-A2-MW04A-EM01-FD | EM01  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW04A | 1/12/2021   | 53.7           | LVWPS-A2-MW04A-EM02    | EM02  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW04A | 1/12/2021   | 53.7           | LVWPS-A2-MW04A-EM02-FD | EM02  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW04A | 1/26/2021   | 53.7           | LVWPS-A2-MW04A-EM03    | EM03  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW04A | 1/26/2021   | 53.7           | LVWPS-A2-MW04A-EM03-FD | EM03  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW04A | 2/9/2021    | 53.7           | LVWPS-A2-MW04A-EM04    | EM04  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW04A | 2/9/2021    | 53.7           | LVWPS-A2-MW04A-EM04-FD | EM04  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW04B | 10/2/2020   | 84.9           | LVWPS-A2-MW04B-BL04    | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW04B | 12/14/2020  | 84.9           | LVWPS-A2-MW04B-INJ     | INJ   | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW04B | 12/22/2020  | 84.9           | LVWPS-A2-MW04B-EM01    | EM01  | Zone 2 | 539.6     | 4.39       | ND          | ND          | 515.6       | 1.00       | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-A2-MW04B | 1/12/2021   | 84.9           | LVWPS-A2-MW04B-EM02    | EM02  | Zone 2 | ND        | ND         | ND          | ND          | 515.2       | 100        | 507.1       | 0.442       | 567.4              | 1.94       | ND                 | ND          |
| LVWPS-A2-MW04B | 1/26/2021   | 84.9           | LVWPS-A2-MW04B-EM03    | EM03  | Zone 2 | ND        | ND         | ND          | ND          | 514.7       | 5.70       | ND          | ND          | 566.0              | 1.10       | ND                 | ND          |
| LVWPS-A2-MW04B | 2/9/2021    | 84.9           | LVWPS-A2-MW04B-EM04    | EM04  | Zone 2 | ND        | ND         | ND          | ND          | 515.2       | 16.5       | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-A2-MW04B | 2/9/2021    | 84.9           | LVWPS-A2-MW04B-EM04-FD | EM04  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW05A | 10/5/2020   | 43.9           | LVWPS-A2-MW05A-BL04    | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW05A | 12/12/2020  | 43.9           | LVWPS-A2-MW05A-INJ     | INJ   | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 566.8              | 16,000     | 567.3              | 157         |
| LVWPS-A2-MW05A | 12/22/2020  | 43.9           | LVWPS-A2-MW05A-EM01    | EM01  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 568.4              | 5,110      | 574.9              | 43.2        |
| LVWPS-A2-MW05A | 1/13/2021   | 43.9           | LVWPS-A2-MW05A-EM02    | EM02  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 569.7              | 1,510      | 566.3 **           | 19.2        |
| LVWPS-A2-MW05A | 1/26/2021   | 43.9           | LVWPS-A2-MW05A-EM03    | EM03  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 570.1              | 79.6       | ND                 | ND          |
| LVWPS-A2-MW05A | 2/9/2021    | 43.9           | LVWPS-A2-MW05A-EM04    | EM04  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 568.8              | 5.54       | ND                 | ND          |
| LVWPS-A2-MW05B | 10/5/2020   | 66             | LVWPS-A2-MW05B-BL04    | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW05B | 12/12/2020  | 66             | LVWPS-A2-MW05B-INJ     | INJ   | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 566.6              | 3,900      | 566.7              | 271         |
| LVWPS-A2-MW05B | 12/12/2020  | 66             | LVWPS-A2-MW05B-INJ-FD  | INJ   | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 566.4              | 3,430      | 566.7              | 271         |
| LVWPS-A2-MW05B | 12/22/2020  | 66             | LVWPS-A2-MW05B-EM01    | EM01  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 567.0              | 13,800     | 566.6 **           | 98.3        |
| LVWPS-A2-MW05B | 12/22/2020  | 66             | LVWPS-A2-MW05B-EM01-FD | EM01  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 566.9              | 17,200     | 566.8 **           | 59.9        |
| LVWPS-A2-MW05B | 1/13/2021   | 66             | LVWPS-A2-MW05B-EM02    | EM02  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 568.6              | 2,250      | 567.1 **           | 51.0        |
| LVWPS-A2-MW05B | 1/13/2021   | 66             | LVWPS-A2-MW05B-EM02-FD | EM02  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 568.6              | 1,750      | 567.3 **           | 46.8        |
| LVWPS-A2-MW05B | 1/26/2021   | 66             | LVWPS-A2-MW05B-EM03    | EM03  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 569.1              | 1,750      | 567.1 **           | 26.5        |
| LVWPS-A2-MW05B | 1/26/2021   | 66             | LVWPS-A2-MW05B-EM03-FD | EM03  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 569.3              | 2,430      | 566.7 **           | 19.2        |
| LVWPS-A2-MW05B | 2/9/2021    | 66             | LVWPS-A2-MW05B-EM04    | EM04  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 567.7              | 1,680      | 574.3              | 21.4        |
| LVWPS-A2-MW05B | 2/9/2021    | 66             | LVWPS-A2-MW05B-EM04-FD | EM04  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 567.1              | 3,510      | 574.3              | 22.7        |
| LVWPS-A2-MW08A | 9/30/2020   | 47.6           | LVWPS-A2-MW08A-BL04    | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW08A | 12/14/2020  | 47.6           | LVWPS-A2-MW08A-INJ     | INJ   | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW08A | 12/23/2020  | 47.6           | LVWPS-A2-MW08A-EM01    | EM01  | Zone 2 | 539.4     | 3.49       | ND          | ND          | ND          | ND         | ND          | ND          | 565.0              | 5.00       | ND                 | ND          |
| LVWPS-A2-MW08A | 1/15/2021   | 47.6           | LVWPS-A2-MW08A-EM02    | EM02  | Zone 2 | 539.4     | 3.17       | ND          | ND          | ND          | ND         | ND          | ND          | 567.2              | 126        | 573.5              | 4.44        |
| LVWPS-A2-MW08A | 1/26/2021   | 47.6           | LVWPS-A2-MW08A-EM03    | EM03  | Zone 2 | 539.9     | 1.07       | ND          | ND          | ND          | ND         | ND          | ND          | 567.2              | 6.06       | ND                 | ND          |
| LVWPS-A2-MW08A | 2/10/2021   | 47.6           | LVWPS-A2-MW08A-EM04    | EM04  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 566.6              | 3.40       | ND                 | ND          |
| LVWPS-A2-MW08B | 10/1/2020   | 69.3           | LVWPS-A2-MW08B-BL04    | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW08B | 12/14/2020  | 69.3           | LVWPS-A2-MW08B-INJ     | INJ   | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 566.9              | 31.6       | 574.2              | 0.305       |
| LVWPS-A2-MW08B | 12/23/2020  | 69.3           | LVWPS-A2-MW08B-EM01    | EM01  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 568.0              | 56.7       | 576.7              | 0.089       |
| LVWPS-A2-MW08B | 1/15/2021   | 69.3           | LVWPS-A2-MW08B-EM02    | EM02  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 566.9              | 27.5       | ND                 | ND          |
| LVWPS-A2-MW08B | 1/26/2021   | 69.3           | LVWPS-A2-MW08B-EM03    | EM03  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW08B | 2/10/2021   | 69.3           | LVWPS-A2-MW08B-EM04    | EM04  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW08C | 10/1/2020   | 95.9           | LVWPS-A2-MW08C-BL04    | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW08C | 12/14/2020  | 95.9           | LVWPS-A2-MW08C-INJ     | INJ   | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 567.5              | 648        | 574.4              | 0.640       |
| LVWPS-A2-MW08C | 12/23/2020  | 95.9           | LVWPS-A2-MW08C-EM01    | EM01  | Zone 2 | ND        | ND         | ND          | ND          | 516.1       | 377        | 515.2 **    | 4.82        | 568.3              | 287        | ND                 | ND          |
| LVWPS-A2-MW08C | 1/15/2021   | 95.9           | LVWPS-A2-MW08C-EM02    | EM02  | Zone 2 | ND        | ND         | ND          | ND          | 515.4       | 108        | 507.7       | 1.56        | 567.5              | 50.9       | ND                 | ND          |
| LVWPS-A2-MW08C | 1/28/2021   | 95.9           | LVWPS-A2-MW08C-EM03    | EM03  | Zone 2 | ND        | ND         | ND          | ND          | 515.1       | 86.0       | 518.8 **    | 1.92        | 567.7              | 18.6       | ND                 | ND          |
| LVWPS-A2-MW08C | 2/10/2021   | 95.9           | LVWPS-A2-MW08C-EM04    | EM04  | Zone 2 | ND        | ND         | ND          | ND          | 515.3       | 98.9       | 507.6       | 0.577       | 567.5              | 52.8       | 574.8              | 1.54        |



Table 3  
Tracer Dye Analytical Results  
Las Vegas Wash Bioremediation Pilot Study

| Location       | Sample Date | Depth (ft bgs) | Sample ID              | Event | Zone   | Eosine    |            | Eosine      |             | Fluorescein |            | Fluorescein |             | Rhodamine WT (RWT) |            | Rhodamine WT (RWT) |             |
|----------------|-------------|----------------|------------------------|-------|--------|-----------|------------|-------------|-------------|-------------|------------|-------------|-------------|--------------------|------------|--------------------|-------------|
|                |             |                |                        |       |        | Charcoal  |            | Groundwater | Groundwater | Charcoal    | Charcoal   | Groundwater | Groundwater | Charcoal           | Charcoal   | Groundwater        | Groundwater |
|                |             |                |                        |       |        | Peak (nm) | Conc (ppb) | Peak (nm)   | Conc (ppb)  | Peak (nm)   | Conc (ppb) | Peak (nm)   | Conc (ppb)  | Peak (nm)          | Conc (ppb) | Peak (nm)          | Conc (ppb)  |
| LVWPS-A2-MW09A | 10/9/2020   | 44.5           | LVWPS-A2-MW09A-BL04    | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW09A | 12/12/2020  | 44.5           | LVWPS-A2-MW09A-INJ     | INJ   | Zone 2 | 539.4     | 15.2       | ND          | ND          | ND          | ND         | ND          | ND          | 566.6              | 109        | 573.8              | 0.643       |
| LVWPS-A2-MW09A | 12/22/2020  | 44.5           | LVWPS-A2-MW09A-EM01    | EM01  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 567.9              | 695        | 573.8              | 13.2        |
| LVWPS-A2-MW09A | 1/11/2021   | 44.5           | LVWPS-A2-MW09A-EM02    | EM02  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 567.5              | 262        | 572.7              | 8.11        |
| LVWPS-A2-MW09A | 1/26/2021   | 44.5           | LVWPS-A2-MW09A-EM03    | EM03  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 568.3              | 63.4       | ND                 | ND          |
| LVWPS-A2-MW09A | 2/8/2021    | 44.5           | LVWPS-A2-MW09A-EM04    | EM04  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 567.5              | 80.4       | 574.2              | 0.062       |
| LVWPS-A2-MW09B | 10/9/2020   | 68.5           | LVWPS-A2-MW09B-BL04    | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW09B | 12/12/2020  | 68.5           | LVWPS-A2-MW09B-INJ     | INJ   | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 563.6 **           | 10.6       | 575.9              | 0.243       |
| LVWPS-A2-MW09B | 12/22/2020  | 68.5           | LVWPS-A2-MW09B-EM01    | EM01  | Zone 2 | 538.9 **  | 6.99       | ND          | ND          | ND          | ND         | ND          | ND          | 564.8              | 6.62       | ND                 | ND          |
| LVWPS-A2-MW09B | 1/14/2021   | 68.5           | LVWPS-A2-MW09B-EM02    | EM02  | Zone 2 | 538.4 **  | 2.60       | ND          | ND          | ND          | ND         | ND          | ND          | 567.6              | 72.2       | ND                 | ND          |
| LVWPS-A2-MW09B | 1/27/2021   | 68.5           | LVWPS-A2-MW09B-EM03    | EM03  | Zone 2 | 538.0 **  | 1.14       | ND          | ND          | ND          | ND         | ND          | ND          | 568.1              | 99.3       | ND                 | ND          |
| LVWPS-A2-MW09B | 2/8/2021    | 68.5           | LVWPS-A2-MW09B-EM04    | EM04  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 567.7              | 80.9       | ND                 | ND          |
| LVWPS-A2-MW11A | 10/2/2020   | 50.2           | LVWPS-A2-MW11A-BL04    | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW11A | 12/14/2020  | 50.2           | LVWPS-A2-MW11A-INJ     | INJ   | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW11A | 12/23/2020  | 50.2           | LVWPS-A2-MW11A-EM01    | EM01  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW11A | 1/13/2021   | 50.2           | LVWPS-A2-MW11A-EM02    | EM02  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW11A | 1/27/2021   | 50.2           | LVWPS-A2-MW11A-EM03    | EM03  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW11A | 2/9/2021    | 50.2           | LVWPS-A2-MW11A-EM04    | EM04  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW11B | 10/2/2020   | 75             | LVWPS-A2-MW11B-BL04    | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW11B | 12/14/2020  | 75             | LVWPS-A2-MW11B-INJ     | INJ   | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW11B | 12/23/2020  | 75             | LVWPS-A2-MW11B-EM01    | EM01  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW11B | 1/13/2021   | 75             | LVWPS-A2-MW11B-EM02    | EM02  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW11B | 1/27/2021   | 75             | LVWPS-A2-MW11B-EM03    | EM03  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW11B | 2/8/2021    | 75             | LVWPS-A2-MW11B-EM04    | EM04  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW11C | 10/2/2020   | 99.9           | LVWPS-A2-MW11C-BL04    | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW11C | 12/14/2020  | 99.9           | LVWPS-A2-MW11C-INJ     | INJ   | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW11C | 12/23/2020  | 99.9           | LVWPS-A2-MW11C-EM01    | EM01  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW11C | 1/14/2021   | 99.9           | LVWPS-A2-MW11C-EM02    | EM02  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW11C | 1/27/2021   | 99.9           | LVWPS-A2-MW11C-EM03    | EM03  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW11C | 2/9/2021    | 99.9           | LVWPS-A2-MW11C-EM04    | EM04  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW12A | 10/6/2020   | 39.5           | LVWPS-A2-MW12A-BL04    | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW12A | 12/12/2020  | 39.5           | LVWPS-A2-MW12A-INJ     | INJ   | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW12A | 12/22/2020  | 39.5           | LVWPS-A2-MW12A-EM01    | EM01  | Zone 2 | 539.4     | 2.84       | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW12A | 1/11/2021   | 39.5           | LVWPS-A2-MW12A-EM02    | EM02  | Zone 2 | 538.5 **  | 7.36       | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW12A | 1/27/2021   | 39.5           | LVWPS-A2-MW12A-EM03    | EM03  | Zone 2 | ND        | ND         | ND          | ND          | 515.0       | 1.31       | ND          | ND          | 567.3              | 13.0       | ND                 | ND          |
| LVWPS-A2-MW12A | 2/8/2021    | 39.5           | LVWPS-A2-MW12A-EM04    | EM04  | Zone 2 | ND        | ND         | ND          | ND          | 514.9       | 1.73       | ND          | ND          | 567.7              | 145        | 572.8              | 15.1        |
| LVWPS-A2-MW12B | 10/7/2020   | 59             | LVWPS-A2-MW12B-BL04    | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW12B | 12/12/2020  | 59             | LVWPS-A2-MW12B-INJ     | INJ   | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW12B | 12/22/2020  | 59             | LVWPS-A2-MW12B-EM01    | EM01  | Zone 2 | 539.8     | 5.04       | ND          | ND          | ND          | ND         | ND          | ND          | 567.6              | 205        | 566.9 **           | 8.14        |
| LVWPS-A2-MW12B | 1/12/2021   | 59             | LVWPS-A2-MW12B-EM02    | EM02  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 567.5              | 789        | 572.8              | 6.01        |
| LVWPS-A2-MW12B | 1/27/2021   | 59             | LVWPS-A2-MW12B-EM03    | EM03  | Zone 2 | ND        | ND         | ND          | ND          | 514.5       | 1.04       | ND          | ND          | 567.5              | 23.1       | ND                 | ND          |
| LVWPS-A2-MW12B | 2/8/2021    | 59             | LVWPS-A2-MW12B-EM04    | EM04  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 567.7              | 78.4       | 573.3              | 1.39        |
| LVWPS-A2-MW13A | 10/1/2020   | 50.8           | LVWPS-A2-MW13A-BL04    | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW13A | 12/12/2020  | 50.8           | LVWPS-A2-MW13A-INJ     | INJ   | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW13A | 12/22/2020  | 50.8           | LVWPS-A2-MW13A-EM01    | EM01  | Zone 2 | 538.9 **  | 16.9       | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW13A | 1/11/2021   | 50.8           | LVWPS-A2-MW13A-EM02    | EM02  | Zone 2 | 539.5     | 2.98       | ND          | ND          | ND          | ND         | ND          | ND          | 567.2              | 20.8       | ND                 | ND          |
| LVWPS-A2-MW13A | 1/27/2021   | 50.8           | LVWPS-A2-MW13A-EM03    | EM03  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 568.1              | 438        | 572.2              | 5.47        |
| LVWPS-A2-MW13A | 2/10/2021   | 50.8           | LVWPS-A2-MW13A-EM04    | EM04  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 568.0              | 762        | 574.2              | 0.986       |
| LVWPS-A2-MW13B | 10/1/2020   | 76.1           | LVWPS-A2-MW13B-BL04    | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW13B | 12/12/2020  | 76.1           | LVWPS-A2-MW13B-INJ     | INJ   | Zone 2 | 538.9 **  | 12.1       | ND          | ND          | ND          | ND         | ND          | ND          | 565.7              | 31.9       | ND                 | ND          |
| LVWPS-A2-MW13B | 12/22/2020  | 76.1           | LVWPS-A2-MW13B-EM01    | EM01  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 568.0              | 906        | 572.8              | 14.9        |
| LVWPS-A2-MW13B | 1/12/2021   | 76.1           | LVWPS-A2-MW13B-EM02    | EM02  | Zone 2 | ND        | ND         | ND          | ND          | 515.0       | 11.2       | ND          | ND          | 568.0              | 549        | 573.5              | 8.29        |
| LVWPS-A2-MW13B | 1/27/2021   | 76.1           | LVWPS-A2-MW13B-EM03    | EM03  | Zone 2 | ND        | ND         | ND          | ND          | 515.1       | 8.78       | ND          | ND          | 567.6              | 456        | 562.2 **           | 24.9        |
| LVWPS-A2-MW13B | 2/10/2021   | 76.1           | LVWPS-A2-MW13B-EM04    | EM04  | Zone 2 | ND        | ND         | ND          | ND          | 515.3       | 3.45       | ND          | ND          | 567.1              | 190        | 574.2              | 7.01        |
| LVWPS-A2-MW14A | 10/6/2020   | 42.9           | LVWPS-A2-MW14A-BL04    | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW14A | 10/6/2020   | 42.9           | LVWPS-A2-MW14A-BL04-FD | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW14A | 12/12/2020  | 42.9           | LVWPS-A2-MW14A-INJ     | INJ   | Zone 2 | 538.7 **  | 14.4       | ND          | ND          | ND          | ND         | ND          | ND          | 564.0 **           | 13.9       | 574.4              | 1.26        |
| LVWPS-A2-MW14A | 12/12/2020  | 42.9           | LVWPS-A2-MW14A-INJ-FD  | INJ   | Zone 2 | 538.7 **  | 16.0       | ND          | ND          | ND          | ND         | ND          | ND          | 566.6              | 11.8       | 574.2              | 1.85        |

**Table 3**  
**Tracer Dye Analytical Results**  
 Las Vegas Wash Bioremediation Pilot Study

| Location       | Sample Date | Depth (ft bgs) | Sample ID              | Event | Zone   | Eosine    |            | Eosine      |             | Fluorescein |            | Fluorescein |             | Rhodamine WT (RWT) |            | Rhodamine WT (RWT) |             |
|----------------|-------------|----------------|------------------------|-------|--------|-----------|------------|-------------|-------------|-------------|------------|-------------|-------------|--------------------|------------|--------------------|-------------|
|                |             |                |                        |       |        | Charcoal  |            | Groundwater | Groundwater | Charcoal    | Charcoal   | Groundwater | Groundwater | Charcoal           | Charcoal   | Groundwater        | Groundwater |
|                |             |                |                        |       |        | Peak (nm) | Conc (ppb) | Peak (nm)   | Conc (ppb)  | Peak (nm)   | Conc (ppb) | Peak (nm)   | Conc (ppb)  | Peak (nm)          | Conc (ppb) | Peak (nm)          | Conc (ppb)  |
| LVWPS-A2-MW14A | 12/22/2020  | 42.9           | LVWPS-A2-MW14A-EM01    | EM01  | Zone 2 | 539.4     | 15.2       | ND          | ND          | ND          | ND         | ND          | ND          | 566.6              | 38.6       | 573.6              | 1.44        |
| LVWPS-A2-MW14A | 12/22/2020  | 42.9           | LVWPS-A2-MW14A-EM01-FD | EM01  | Zone 2 | 539.4     | 16.6       | ND          | ND          | ND          | ND         | ND          | ND          | 566.4              | 50.8       | 572.6              | 3.35        |
| LVWPS-A2-MW14A | 1/13/2021   | 42.9           | LVWPS-A2-MW14A-EM02    | EM02  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 567.2              | 450        | 573.6              | 5.00        |
| LVWPS-A2-MW14A | 1/13/2021   | 42.9           | LVWPS-A2-MW14A-EM02-FD | EM02  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 567.2              | 396        | 573.6              | 6.19        |
| LVWPS-A2-MW14A | 1/28/2021   | 42.9           | LVWPS-A2-MW14A-EM03    | EM03  | Zone 2 | ND        | ND         | ND          | ND          | 514.4       | 1.62       | ND          | ND          | 568.3              | 294        | 566.2 **           | 19.2        |
| LVWPS-A2-MW14A | 1/28/2021   | 42.9           | LVWPS-A2-MW14A-EM03-FD | EM03  | Zone 2 | ND        | ND         | ND          | ND          | 514.8       | 1.43       | ND          | ND          | 567.8              | 293        | 563.5 **           | 23.1        |
| LVWPS-A2-MW14A | 2/9/2021    | 42.9           | LVWPS-A2-MW14A-EM04    | EM04  | Zone 2 | ND        | ND         | ND          | ND          | 515.2       | 1.45       | ND          | ND          | 566.6              | 3,460      | 573.5              | 7.27        |
| LVWPS-A2-MW14A | 2/9/2021    | 42.9           | LVWPS-A2-MW14A-EM04-FD | EM04  | Zone 2 | ND        | ND         | ND          | ND          | 515.2       | 1.19       | ND          | ND          | 566.3              | 2,890      | 573.8              | 6.24        |
| LVWPS-A2-MW14B | 10/6/2020   | 64.5           | LVWPS-A2-MW14B-BL04    | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW14B | 12/12/2020  | 64.5           | LVWPS-A2-MW14B-INJ     | INJ   | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 564.0 **           | 5.37       | 573.4              | 0.222       |
| LVWPS-A2-MW14B | 12/22/2020  | 64.5           | LVWPS-A2-MW14B-EM01    | EM01  | Zone 2 | 540.1     | 1.61       | ND          | ND          | ND          | ND         | ND          | ND          | 567.8              | 29.6       | 574.6              | 1.34        |
| LVWPS-A2-MW14B | 1/13/2021   | 64.5           | LVWPS-A2-MW14B-EM02    | EM02  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 567.6              | 104        | ND                 | ND          |
| LVWPS-A2-MW14B | 1/25/2021   | 64.5           | LVWPS-A2-MW14B-EM03    | EM03  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 567.9              | 38.0       | ND                 | ND          |
| LVWPS-A2-MW14B | 2/9/2021    | 64.5           | LVWPS-A2-MW14B-EM04    | EM04  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 567.9              | 48.2       | 574.9              | 0.908       |
| LVWPS-A2-MW15A | 10/7/2020   | 49.5           | LVWPS-A2-MW15A-BL04    | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW15A | 12/14/2020  | 49.5           | LVWPS-A2-MW15A-INJ     | INJ   | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW15A | 12/21/2020  | 49.5           | LVWPS-A2-MW15A-EM01    | EM01  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW15A | 1/11/2021   | 49.5           | LVWPS-A2-MW15A-EM02    | EM02  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW15A | 1/25/2021   | 49.5           | LVWPS-A2-MW15A-EM03    | EM03  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW15A | 2/9/2021    | 49.5           | LVWPS-A2-MW15A-EM04    | EM04  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW15B | 10/8/2020   | 79.9           | LVWPS-A2-MW15B-BL04    | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW15B | 12/14/2020  | 79.9           | LVWPS-A2-MW15B-INJ     | INJ   | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW15B | 12/22/2020  | 79.9           | LVWPS-A2-MW15B-EM01    | EM01  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW15B | 1/12/2021   | 79.9           | LVWPS-A2-MW15B-EM02    | EM02  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW15B | 1/26/2021   | 79.9           | LVWPS-A2-MW15B-EM03    | EM03  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW15B | 2/9/2021    | 79.9           | LVWPS-A2-MW15B-EM04    | EM04  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW16A | 10/9/2020   | 46             | LVWPS-A2-MW16A-BL04    | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW16A | 12/14/2020  | 46             | LVWPS-A2-MW16A-INJ     | INJ   | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW16A | 12/22/2020  | 46             | LVWPS-A2-MW16A-EM01    | EM01  | Zone 2 | ND        | ND         | ND          | ND          | 514.2       | 1.83       | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-A2-MW16A | 1/12/2021   | 46             | LVWPS-A2-MW16A-EM02    | EM02  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW16A | 1/25/2021   | 46             | LVWPS-A2-MW16A-EM03    | EM03  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW16A | 2/9/2021    | 46             | LVWPS-A2-MW16A-EM04    | EM04  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW16B | 10/9/2020   | 70.5           | LVWPS-A2-MW16B-BL04    | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW16B | 12/14/2020  | 70.5           | LVWPS-A2-MW16B-INJ     | INJ   | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW16B | 12/22/2020  | 70.5           | LVWPS-A2-MW16B-EM01    | EM01  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW16B | 1/12/2021   | 70.5           | LVWPS-A2-MW16B-EM02    | EM02  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW16B | 1/25/2021   | 70.5           | LVWPS-A2-MW16B-EM03    | EM03  | Zone 2 | 540.0     | 0.973      | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW16B | 2/9/2021    | 70.5           | LVWPS-A2-MW16B-EM04    | EM04  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW17A | 10/1/2020   | 50.1           | LVWPS-A2-MW17A-BL04    | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW17A | 12/14/2020  | 50.1           | LVWPS-A2-MW17A-INJ     | INJ   | Zone 2 | 539.0 **  | 10.4       | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW17A | 12/22/2020  | 50.1           | LVWPS-A2-MW17A-EM01    | EM01  | Zone 2 | 539.4     | 2.77       | ND          | ND          | ND          | ND         | ND          | ND          | 564.0 **           | 2.94       | ND                 | ND          |
| LVWPS-A2-MW17A | 1/11/2021   | 50.1           | LVWPS-A2-MW17A-EM02    | EM02  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 567.7              | 119        | 572.2              | 2.96        |
| LVWPS-A2-MW17A | 1/26/2021   | 50.1           | LVWPS-A2-MW17A-EM03    | EM03  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 568.0              | 135        | ND                 | ND          |
| LVWPS-A2-MW17A | 2/8/2021    | 50.1           | LVWPS-A2-MW17A-EM04    | EM04  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 567.2              | 289        | 574.2              | 2.15        |
| LVWPS-A2-MW17B | 10/1/2020   | 75.2           | LVWPS-A2-MW17B-BL04    | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW17B | 12/14/2020  | 75.2           | LVWPS-A2-MW17B-INJ     | INJ   | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW17B | 12/22/2020  | 75.2           | LVWPS-A2-MW17B-EM01    | EM01  | Zone 2 | 540.0     | 1.40       | ND          | ND          | ND          | ND         | ND          | ND          | 567.2              | 15.1       | ND                 | ND          |
| LVWPS-A2-MW17B | 1/11/2021   | 75.2           | LVWPS-A2-MW17B-EM02    | EM02  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 568.0              | 110        | ND                 | ND          |
| LVWPS-A2-MW17B | 1/26/2021   | 75.2           | LVWPS-A2-MW17B-EM03    | EM03  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 567.9              | 33.9       | ND                 | ND          |
| LVWPS-A2-MW17B | 2/8/2021    | 75.2           | LVWPS-A2-MW17B-EM04    | EM04  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 567.0              | 51.1       | 572.2              | 2.91        |
| LVWPS-A2-MW17C | 10/1/2020   | 100            | LVWPS-A2-MW17C-BL04    | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A2-MW17C | 12/14/2020  | 100            | LVWPS-A2-MW17C-INJ     | INJ   | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW17C | 12/22/2020  | 100            | LVWPS-A2-MW17C-EM01    | EM01  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 567.9              | 300        | 573.6              | 23.2        |
| LVWPS-A2-MW17C | 1/11/2021   | 100            | LVWPS-A2-MW17C-EM02    | EM02  | Zone 2 | 538.8 **  | 5.42       | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A2-MW17C | 1/26/2021   | 100            | LVWPS-A2-MW17C-EM03    | EM03  | Zone 2 | 537.0 **  | 0.676      | ND          | ND          | 515.2       | 0.799      | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-A2-MW17C | 2/8/2021    | 100            | LVWPS-A2-MW17C-EM04    | EM04  | Zone 2 | ND        | ND         | ND          | ND          | 515.4       | 0.482      | 508.2       | 0.588       | ND                 | ND         | ND                 | ND          |
| LVWPS-A3-DR01  | 9/28/2020   | 65.5           | LVWPS-A3-DR01-BL04     | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A3-DR01  | 12/16/2020  | 65.5           | LVWPS-A3-DR01-20201216 | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |

Table 3  
Tracer Dye Analytical Results  
Las Vegas Wash Bioremediation Pilot Study

| Location      | Sample Date | Depth (ft bgs) | Sample ID              | Event | Zone             | Eosine    |            | Eosine      |             | Fluorescein |            | Fluorescein |             | Rhodamine WT (RWT) |            | Rhodamine WT (RWT) |             |
|---------------|-------------|----------------|------------------------|-------|------------------|-----------|------------|-------------|-------------|-------------|------------|-------------|-------------|--------------------|------------|--------------------|-------------|
|               |             |                |                        |       |                  | Charcoal  |            | Groundwater | Groundwater | Charcoal    | Charcoal   | Groundwater | Groundwater | Charcoal           | Charcoal   | Groundwater        | Groundwater |
|               |             |                |                        |       |                  | Peak (nm) | Conc (ppb) | Peak (nm)   | Conc (ppb)  | Peak (nm)   | Conc (ppb) | Peak (nm)   | Conc (ppb)  | Peak (nm)          | Conc (ppb) | Peak (nm)          | Conc (ppb)  |
| LVWPS-A3-DR01 | 12/17/2020  | 65.5           | LVWPS-A3-DR01-20201217 | INJ   | Zone 3           | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A3-DR01 | 12/29/2020  | 65.5           | LVWPS-A3-DR01-INJ      | INJ   | Zone 3           | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A3-DR01 | 1/18/2021   | 65.5           | LVWPS-A3-DR01-EM02     | EM02  | Zone 3           | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A3-DR01 | 2/12/2021   | 65.5           | LVWPS-A3-DR01-EM04     | EM04  | Zone 3           | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A3-MW02 | 10/5/2020   | 62.5           | LVWPS-A3-MW02-BL04     | BL04  | Zone 3           | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A3-MW02 | 12/30/2020  | 62.5           | LVWPS-A3-MW02-INJ      | INJ   | Zone 3           | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A3-MW02 | 1/14/2021   | 62.5           | LVWPS-A3-MW02-EM02     | EM02  | Zone 3           | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A3-MW02 | 2/11/2021   | 62.5           | LVWPS-A3-MW02-EM04     | EM04  | Zone 3           | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A3-MW06 | 10/5/2020   | 64.9           | LVWPS-A3-MW06-BL04     | BL04  | Zone 3           | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A3-MW06 | 12/30/2020  | 64.9           | LVWPS-A3-MW06-INJ      | INJ   | Zone 3           | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A3-MW06 | 1/15/2021   | 64.9           | LVWPS-A3-MW06-EM02     | EM02  | Zone 3           | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A3-MW06 | 2/10/2021   | 64.9           | LVWPS-A3-MW06-EM04     | EM04  | Zone 3           | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A3-MW07 | 10/8/2020   | 64.5           | LVWPS-A3-MW07-BL04     | BL04  | Zone 3           | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A3-MW07 | 12/30/2020  | 64.5           | LVWPS-A3-MW07-INJ      | INJ   | Zone 3           | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A3-MW07 | 1/15/2021   | 64.5           | LVWPS-A3-MW07-EM02     | EM02  | Zone 3           | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A3-MW07 | 2/11/2021   | 64.5           | LVWPS-A3-MW07-EM04     | EM04  | Zone 3           | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A3-MW08 | 10/8/2020   | 94.4           | LVWPS-A3-MW08-BL04     | BL04  | Zone 3           | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A3-MW08 | 12/30/2020  | 94.4           | LVWPS-A3-MW08-INJ      | INJ   | Zone 3           | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A3-MW08 | 1/14/2021   | 94.4           | LVWPS-A3-MW08-EM02     | EM02  | Zone 3           | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A3-MW08 | 2/11/2021   | 94.4           | LVWPS-A3-MW08-EM04     | EM04  | Zone 3           | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A3-MW10 | 10/5/2020   | 66.1           | LVWPS-A3-MW10-BL04     | BL04  | Zone 3           | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A3-MW10 | 1/14/2021   | 66.1           | LVWPS-A3-MW10-EM02     | EM02  | Zone 3           | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A3-MW10 | 2/11/2021   | 66.1           | LVWPS-A3-MW10-EM04     | EM04  | Zone 3           | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A3-MW11 | 10/7/2020   | 63.7           | LVWPS-A3-MW11-BL04     | BL04  | Zone 3           | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A3-MW11 | 1/15/2021   | 63.7           | LVWPS-A3-MW11-EM02     | EM02  | Zone 3           | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 565.9              | 11.2       | ND                 | ND          |
| LVWPS-A3-MW11 | 2/11/2021   | 63.7           | LVWPS-A3-MW11-EM04     | EM04  | Zone 3           | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 564.8              | 2.15       | ND                 | ND          |
| LVWPS-A3-MW12 | 10/5/2020   | 69.1           | LVWPS-A3-MW12-BL04     | BL04  | Zone 3           | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-A3-MW12 | 1/13/2021   | 69.1           | LVWPS-A3-MW12-EM02     | EM02  | Zone 3           | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-A3-MW12 | 2/12/2021   | 69.1           | LVWPS-A3-MW12-EM04     | EM04  | Zone 3           | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-EW01    | 9/29/2020   | 64.4           | LVWPS-EW01-BL04        | BL04  | Extraction       | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-EW02    | 9/29/2020   | 42.8           | LVWPS-EW02-BL04        | BL04  | Extraction       | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-EW03    | 9/30/2020   | 54.8           | LVWPS-EW03-BL04        | BL04  | Extraction       | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-EW04    | 9/30/2020   | 35.7           | LVWPS-EW04-BL04        | BL04  | Extraction       | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-EW05    | 9/29/2020   | 64.9           | LVWPS-EW05-BL04        | BL04  | Extraction       | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-EW05    | 9/29/2020   | 64.9           | LVWPS-EW05-BL04-FD     | BL04  | Extraction       | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-MW204   | 9/28/2020   | 60             | LVWPS-MW204-BL04       | BL04  | General Vicinity | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-MW204   | 9/28/2020   | 60             | LVWPS-MW204-BL04-FD    | BL04  | General Vicinity | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-MW204B  | 9/28/2020   | 111.2          | LVWPS-MW204B-BL04      | BL04  | General Vicinity | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-MW207   | 9/28/2020   | 77.8           | LVWPS-MW207-BL04       | BL04  | General Vicinity | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-MW207   | 12/22/2020  | 77.8           | LVWPS-MW207-EM01       | EM01  | General Vicinity | ND        | ND         | ND          | ND          | 514.3       | 1.72       | ND          | ND          | 562.3 **           | 33.3       | ND                 | ND          |
| LVWPS-MW207   | 1/18/2021   | 77.8           | LVWPS-MW207-EM02       | EM02  | General Vicinity | ND        | ND         | ND          | ND          | 515.8       | 12.0       | ND          | ND          | 562.6 **           | 18.9       | ND                 | ND          |
| LVWPS-MW207   | 1/29/2021   | 77.8           | LVWPS-MW207-EM03       | EM03  | General Vicinity | ND        | ND         | ND          | ND          | 515.5       | 8.77       | ND          | ND          | 560.5 **           | 11.6       | ND                 | ND          |
| LVWPS-MW207   | 2/12/2021   | 77.8           | LVWPS-MW207-EM04       | EM04  | General Vicinity | ND        | ND         | ND          | ND          | 516.1       | 7.72       | ND          | ND          | 561.9 **           | 13.4       | ND                 | ND          |
| LVWPS-MW208A  | 10/9/2020   | 49.6           | LVWPS-MW208A-BL04      | BL04  | Zone 2           | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-MW208A  | 12/12/2020  | 49.6           | LVWPS-MW208A-INJ       | INJ   | Zone 2           | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW208A  | 12/23/2020  | 49.6           | LVWPS-MW208A-EM01      | EM01  | Zone 2           | 539.5     | 0.792      | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW208A  | 1/13/2021   | 49.6           | LVWPS-MW208A-EM02      | EM02  | Zone 2           | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW208A  | 1/27/2021   | 49.6           | LVWPS-MW208A-EM03      | EM03  | Zone 2           | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW208A  | 2/10/2021   | 49.6           | LVWPS-MW208A-EM04      | EM04  | Zone 2           | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 564.7              | 2.16       | ND                 | ND          |
| LVWPS-MW208B  | 10/9/2020   | 75             | LVWPS-MW208B-BL04      | BL04  | Zone 2           | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-MW208B  | 12/12/2020  | 75             | LVWPS-MW208B-INJ       | INJ   | Zone 2           | 538.5 **  | 0.641      | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW208B  | 12/23/2020  | 75             | LVWPS-MW208B-EM01      | EM01  | Zone 2           | 539.7     | 10.7       | ND          | ND          | ND          | ND         | ND          | ND          | 567.6              | 139        | ND                 | ND          |
| LVWPS-MW208B  | 1/13/2021   | 75             | LVWPS-MW208B-EM02      | EM02  | Zone 2           | ND        | ND         | ND          | ND          | 515.8       | 1.65       | ND          | ND          | 568.0              | 31.3       | 572.2              | 3.26        |
| LVWPS-MW208B  | 1/27/2021   | 75             | LVWPS-MW208B-EM03      | EM03  | Zone 2           | ND        | ND         | ND          | ND          | 514.4       | 1.26       | ND          | ND          | 568.6              | 16.8       | ND                 | ND          |
| LVWPS-MW208B  | 2/11/2021   | 75             | LVWPS-MW208B-EM04      | EM04  | Zone 2           | ND        | ND         | ND          | ND          | 515.5       | 23.6       | 506.8       | 0.017       | 567.4              | 594        | 573.7              | 0.891       |
| LVWPS-MW209   | 10/6/2020   | 80.7           | LVWPS-MW209-BL04       | BL04  | General Vicinity | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-MW209   | 12/21/2020  | 80.7           | LVWPS-MW209-EM01       | EM01  | General Vicinity | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW209   | 1/18/2021   | 80.7           | LVWPS-MW209-EM02       | EM02  | General Vicinity | 541.0     | 2.14       | ND          | ND          | ND          | ND         | ND          | ND          | 565.6              | 17.4       | ND                 | ND          |



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Table 3  
Tracer Dye Analytical Results  
Las Vegas Wash Bioremediation Pilot Study

| Location     | Sample Date | Depth (ft bgs) | Sample ID            | Event | Zone             | Eosine    |            | Eosine      |                  | Fluorescein |            | Fluorescein |             | Rhodamine WT (RWT) |            | Rhodamine WT (RWT) |             |
|--------------|-------------|----------------|----------------------|-------|------------------|-----------|------------|-------------|------------------|-------------|------------|-------------|-------------|--------------------|------------|--------------------|-------------|
|              |             |                |                      |       |                  | Charcoal  |            | Groundwater | Groundwater      | Charcoal    | Charcoal   | Groundwater | Groundwater | Charcoal           | Charcoal   | Groundwater        | Groundwater |
|              |             |                |                      |       |                  | Peak (nm) | Conc (ppb) | Peak (nm)   | Conc (ppb)       | Peak (nm)   | Conc (ppb) | Peak (nm)   | Conc (ppb)  | Peak (nm)          | Conc (ppb) | Peak (nm)          | Conc (ppb)  |
| LVWPS-MW209  | 1/27/2021   | 80.7           | LVWPS-MW209-EM03     | EM03  | General Vicinity | 543.0 **  | 1.01       | ND          | ND               | ND          | ND         | ND          | ND          | 564.8              | 13.6       | ND                 | ND          |
| LVWPS-MW209  | 2/12/2021   | 80.7           | LVWPS-MW209-EM04     | EM04  | General Vicinity | ND        | ND         | ND          | ND               | 515.7       | 0.761      | ND          | ND          | 564.6 **           | 37.1       | ND                 | ND          |
| LVWPS-MW209A | 10/6/2020   | 45             | LVWPS-MW209A-BL04    | BL04  | General Vicinity | ---       | ---        | ---         | ---              | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-MW209A | 12/21/2020  | 45             | LVWPS-MW209A-EM01    | EM01  | General Vicinity | ND        | ND         | ---         | ---              | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW209A | 1/18/2021   | 45             | LVWPS-MW209A-EM02    | EM02  | General Vicinity | ND        | ND         | ---         | ---              | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW209A | 1/27/2021   | 45             | LVWPS-MW209A-EM03    | EM03  | General Vicinity | 539.6     | 0.743      | ---         | ---              | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW209A | 2/12/2021   | 45             | LVWPS-MW209A-EM04    | EM04  | General Vicinity | 541.0     | 0.744      | ---         | ---              | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW209B | 10/6/2020   | 120            | LVWPS-MW209B-BL04    | BL04  | General Vicinity | ---       | ---        | ---         | ---              | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-MW210A | 10/6/2020   | 44.8           | LVWPS-MW210A-BL04    | BL04  | General Vicinity | ---       | ---        | ---         | ---              | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-MW210A | 12/21/2020  | 44.8           | LVWPS-MW210A-EM01    | EM01  | General Vicinity | ND        | ND         | ND          | ND               | ND          | ND         | ND          | ND          | 561.7 **           | 27.6       | ND                 | ND          |
| LVWPS-MW210A | 1/18/2021   | 44.8           | LVWPS-MW210A-EM02    | EM02  | General Vicinity | ND        | ND         | ND          | ND               | ND          | ND         | ND          | ND          | 561.6 **           | 14.3       | ND                 | ND          |
| LVWPS-MW210A | 1/29/2021   | 44.8           | LVWPS-MW210A-EM03    | EM03  | General Vicinity | ND        | ND         | ND          | ND               | ND          | ND         | ND          | ND          | 560.7 **           | 5.45       | ND                 | ND          |
| LVWPS-MW210A | 2/12/2021   | 44.8           | LVWPS-MW210A-EM04    | EM04  | General Vicinity | ND        | ND         | ND          | ND               | ND          | ND         | ND          | ND          | 561.9 **           | 15.5       | ND                 | ND          |
| LVWPS-MW210B | 10/6/2020   | 79.6           | LVWPS-MW210B-BL04    | BL04  | General Vicinity | ---       | ---        | ---         | ---              | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-MW210B | 12/21/2020  | 79.6           | LVWPS-MW210B-EM01    | EM01  | General Vicinity | 541.0     | 2.19       | ND          | ND               | ND          | ND         | ND          | ND          | 563.4 **           | 19.0       | ND                 | ND          |
| LVWPS-MW210B | 1/18/2021   | 79.6           | LVWPS-MW210B-EM02    | EM02  | General Vicinity | 540.6 **  | 3.52       | ND          | ND               | 516.1       | 2.89       | ND          | ND          | 567.2              | 101        | ND                 | ND          |
| LVWPS-MW210B | 1/29/2021   | 79.6           | LVWPS-MW210B-EM03    | EM03  | General Vicinity | ND        | ND         | ND          | ND               | 515.7       | 4.72       | ND          | ND          | 567.5              | 90.8       | ND                 | ND          |
| LVWPS-MW210B | 2/12/2021   | 79.6           | LVWPS-MW210B-EM04    | EM04  | General Vicinity | ND        | ND         | ND          | ND               | 515.4       | 0.533      | ND          | ND          | 564.8              | 19.7       | 575.2              | 0.078       |
| LVWPS-MW211  | 9/30/2020   | 59.6           | LVWPS-MW211-BL04     | BL04  | General Vicinity | ---       | ---        | ---         | ---              | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-MW211  | 12/21/2020  | 59.6           | LVWPS-MW211-EM01     | EM01  | General Vicinity | ND        | ND         | ND          | ND               | 513.9 **    | 2.27       | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-MW211  | 1/18/2021   | 59.6           | LVWPS-MW211-EM02     | EM02  | General Vicinity | 538.8 **  | 3.31       | ---         | ---              | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW211  | 1/29/2021   | 59.6           | LVWPS-MW211-EM03     | EM03  | General Vicinity | 538.0 **  | 0.958      | ---         | ---              | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW211  | 2/12/2021   | 59.6           | LVWPS-MW211-EM04     | EM04  | General Vicinity | ND        | ND         | ND          | ND               | 516.8       | 1.23       | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-MW212A | 10/5/2020   | 43.9           | LVWPS-MW212A-BL04    | BL04  | Zone 3           | ---       | ---        | ---         | ---              | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-MW212A | 12/21/2020  | 43.9           | LVWPS-MW212A-EM01    | EM01  | Zone 3           | ND        | ND         | ---         | ---              | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW212A | 1/18/2021   | 43.9           | LVWPS-MW212A-EM02    | EM02  | Zone 3           | ND        | ND         | ---         | ---              | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW212A | 1/27/2021   | 43.9           | LVWPS-MW212A-EM03    | EM03  | Zone 3           | ND        | ND         | ---         | ---              | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW212A | 2/12/2021   | 43.9           | LVWPS-MW212A-EM04    | EM04  | Zone 3           | ND        | ND         | ---         | ---              | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW212B | 10/5/2020   | 69.7           | LVWPS-MW212B-BL04    | BL04  | Zone 3           | ---       | ---        | ---         | ---              | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-MW212B | 12/22/2020  | 69.7           | LVWPS-MW212B-EM01    | EM01  | Zone 3           | ND        | ND         | ---         | ---              | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW212B | 1/18/2021   | 69.7           | LVWPS-MW212B-EM02    | EM02  | Zone 3           | ND        | ND         | ---         | ---              | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW212B | 1/27/2021   | 69.7           | LVWPS-MW212B-EM03    | EM03  | Zone 3           | ND        | ND         | ---         | ---              | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW212B | 2/12/2021   | 69.7           | LVWPS-MW212B-EM04    | EM04  | Zone 3           | ND        | ND         | ---         | ---              | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW217A | 9/30/2020   | 61             | LVWPS-MW217A-BL04    | BL04  | Zone 1           | ---       | ---        | ---         | ---              | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-MW217A | 1/12/2021   | 61             | LVWPS-MW217A-EM02    | EM02  | Zone 1           | ND        | ND         | ND          | ND               | 515.2       | 6.87       | ND          | ND          | 562.9 **           | 42.0       | ND                 | ND          |
| LVWPS-MW217A | 2/9/2021    | 61             | LVWPS-MW217A-EM04    | EM04  | Zone 1           | ND        | ND         | ND          | ND               | ND          | ND         | ND          | ND          | 562.5 **           | 33.3       | ND                 | ND          |
| LVWPS-MW217B | 9/30/2020   | 110.1          | LVWPS-MW217B-BL04    | BL04  | Zone 1           | ---       | ---        | ---         | ---              | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-MW217B | 1/13/2021   | 110.1          | LVWPS-MW217B-EM02    | EM02  | Zone 1           | ND        | ND         | ---         | ---              | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW217B | 2/10/2021   | 110.1          | LVWPS-MW217B-EM04    | EM04  | Zone 1           | ND        | ND         | ---         | ---              | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW217C | 10/5/2020   | 165.1          | LVWPS-MW217C-BL04    | BL04  | Zone 1           | ---       | ---        | ---         | ---              | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-MW217C | 1/13/2021   | 165.1          | LVWPS-MW217C-EM02    | EM02  | Zone 1           | ND        | ND         | ND          | ND               | ND          | ND         | ND          | ND          | 560.3 **           | 1.90       | ND                 | ND          |
| LVWPS-MW217C | 1/13/2021   | 165.1          | LVWPS-MW217C-EM02-FD | EM02  | Zone 1           | ND        | ND         | ND          | ND               | ND          | ND         | ND          | ND          | 558.2 **           | 2.70       | ND                 | ND          |
| LVWPS-MW217C | 2/10/2021   | 165.1          | LVWPS-MW217C-EM04    | EM04  | Zone 1           | ND        | ND         | ND          | ND               | ND          | ND         | ND          | ND          | 561.6 **           | 1.30       | ND                 | ND          |
| LVWPS-MW217C | 2/10/2021   | 165.1          | LVWPS-MW217C-EM04-FD | EM04  | Zone 1           | ND        | ND         | ND          | ND               | ND          | ND         | ND          | ND          | 558.8 **           | 1.68       | ND                 | ND          |
| LVWPS-MW218A | 10/5/2020   | 44.9           | LVWPS-MW218A-BL04    | BL04  | General Vicinity | ---       | ---        | ---         | ---              | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-MW218A | 12/21/2020  | 44.9           | LVWPS-MW218A-EM01    | EM01  | General Vicinity | ND        | ND         | ND          | ND               | ND          | ND         | ND          | ND          | 561.7 **           | 13.1       | ND                 | ND          |
| LVWPS-MW218A | 1/18/2021   | 44.9           | LVWPS-MW218A-EM02    | EM02  | General Vicinity | ND        | ND         | ND          | ND               | ND          | ND         | ND          | ND          | 561.9 **           | 9.72       | ND                 | ND          |
| LVWPS-MW218A | 1/26/2021   | 44.9           | LVWPS-MW218A-EM03    | EM03  | General Vicinity | ND        | ND         | ND          | ND               | ND          | ND         | ND          | ND          | 562.3 **           | 2.38       | ND                 | ND          |
| LVWPS-MW218A | 2/12/2021   | 44.9           | LVWPS-MW218A-EM04    | EM04  | General Vicinity | ND        | ND         | ND          | ND               | ND          | ND         | ND          | ND          | 562.5 **           | 11.0       | ND                 | ND          |
| LVWPS-MW220A | 10/5/2020   | 69.8           | LVWPS-MW220A-BL04    | BL04  | General Vicinity | ---       | ---        | ---         | ---              | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-MW220A | 12/21/2020  | 69.8           | LVWPS-MW220A-EM01    | EM01  | General Vicinity | ND        | ND         | EM01        | General Vicinity | ND          | ND         | ND          | ND          | 567.2              | 1.32       | ND                 | ND          |
| LVWPS-MW220A | 1/18/2021   | 69.8           | LVWPS-MW220A-EM02    | EM02  | General Vicinity | ND        | ND         | ---         | ---              | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW220A | 1/28/2021   | 69.8           | LVWPS-MW220A-EM03    | EM03  | General Vicinity | ND        | ND         | ---         | ---              | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW220A | 2/12/2021   | 69.8           | LVWPS-MW220A-EM04    | EM04  | General Vicinity | ND        | ND         | ---         | ---              | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW221A | 10/6/2020   | 60             | LVWPS-MW221A-BL04    | BL04  | Zone 2           | ---       | ---        | ---         | ---              | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-MW221A | 12/12/2020  | 60             | LVWPS-MW221A-INJ     | INJ   | Zone 2           | ND        | ND         | ND          | ND               | ND          | ND         | ND          | ND          | 562.4 **           | 4.93       | ND                 | ND          |
| LVWPS-MW221A | 12/22/2020  | 60             | LVWPS-MW221A-EM01    | EM01  | Zone 2           | ND        | ND         | ---         | ---              | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW221A | 1/12/2021   | 60             | LVWPS-MW221A-EM02    | EM02  | Zone 2           | ND        | ND         | ---         | ---              | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |



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Table 3  
Tracer Dye Analytical Results  
Las Vegas Wash Bioremediation Pilot Study

| Location       | Sample Date | Depth (ft bgs) | Sample ID                 | Event | Zone   | Eosine    |            | Eosine      |             | Fluorescein |            | Fluorescein |             | Rhodamine WT (RWT) |            | Rhodamine WT (RWT) |             |
|----------------|-------------|----------------|---------------------------|-------|--------|-----------|------------|-------------|-------------|-------------|------------|-------------|-------------|--------------------|------------|--------------------|-------------|
|                |             |                |                           |       |        | Charcoal  |            | Groundwater | Groundwater | Charcoal    | Charcoal   | Groundwater | Groundwater | Charcoal           | Charcoal   | Groundwater        | Groundwater |
|                |             |                |                           |       |        | Peak (nm) | Conc (ppb) | Peak (nm)   | Conc (ppb)  | Peak (nm)   | Conc (ppb) | Peak (nm)   | Conc (ppb)  | Peak (nm)          | Conc (ppb) | Peak (nm)          | Conc (ppb)  |
| LVWPS-MW221A   | 1/28/2021   | 60             | LVWPS-MW221A-EM03         | EM03  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW221A   | 2/8/2021    | 60             | LVWPS-MW221A-EM04         | EM04  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW221B   | 10/6/2020   | 93.4           | LVWPS-MW221B-BL04         | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-MW223A   | 10/6/2020   | 55.1           | LVWPS-MW223A-BL04         | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-MW223A   | 10/6/2020   | 55.1           | LVWPS-MW223A-BL04-FD      | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-MW223A   | 12/14/2020  | 55.1           | LVWPS-MW223A-INJ          | INJ   | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW223A   | 12/22/2020  | 55.1           | LVWPS-MW223A-EM01         | EM01  | Zone 2 | 539.4     | 6.82       | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW223A   | 1/11/2021   | 55.1           | LVWPS-MW223A-EM02         | EM02  | Zone 2 | 538.5 **  | 22.1       | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW223A   | 1/26/2021   | 55.1           | LVWPS-MW223A-EM03         | EM03  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW223A   | 2/8/2021    | 55.1           | LVWPS-MW223A-EM04         | EM04  | Zone 2 | ND        | ND         | ND          | ND          | 513.5 **    | 0.717      | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-MW223B   | 10/6/2020   | 80.1           | LVWPS-MW223B-BL04         | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-MW223B   | 12/14/2020  | 80.1           | LVWPS-MW223B-INJ          | INJ   | Zone 2 | 539.7     | 3.39       | ND          | ND          | ND          | ND         | ND          | ND          | 566.1              | 17.6       | ND                 | ND          |
| LVWPS-MW223B   | 12/22/2020  | 80.1           | LVWPS-MW223B-EM01         | EM01  | Zone 2 | 540.2     | 2.29       | ND          | ND          | ND          | ND         | ND          | ND          | 567.6              | 28.4       | ND                 | ND          |
| LVWPS-MW223B   | 1/11/2021   | 80.1           | LVWPS-MW223B-EM02         | EM02  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 567.6              | 23.3       | ND                 | ND          |
| LVWPS-MW223B   | 1/28/2021   | 80.1           | LVWPS-MW223B-EM03         | EM03  | Zone 2 | 539.4     | 0.538      | ND          | ND          | 515.2       | 0.604      | ND          | ND          | 568.6              | 4.11       | ND                 | ND          |
| LVWPS-MW223B   | 2/8/2021    | 80.1           | LVWPS-MW223B-EM04         | EM04  | Zone 2 | ND        | ND         | ND          | ND          | 515.2       | 5.89       | 508.2       | 0.617       | ND                 | ND         | ND                 | ND          |
| LVWPS-MW223C   | 10/7/2020   | 102.6          | LVWPS-MW223C-BL04         | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-MW223C   | 1/11/2021   | 102.6          | LVWPS-MW223C-EM02         | EM02  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW223C   | 2/8/2021    | 102.6          | LVWPS-MW223C-EM04         | EM04  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW224A   | 10/7/2020   | 65             | LVWPS-MW224A-BL04         | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-MW224A   | 12/23/2020  | 65             | LVWPS-MW224A-EM01         | EM01  | Zone 2 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 562.0 **           | 3.35       | ND                 | ND          |
| LVWPS-MW224A   | 1/18/2021   | 65             | LVWPS-MW224A-EM02         | EM02  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW224A   | 1/29/2021   | 65             | LVWPS-MW224A-EM03         | EM03  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-MW224A   | 2/12/2021   | 65             | LVWPS-MW224A-EM04         | EM04  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U1-DR01A | 9/28/2020   | 102.6          | LVWPS-U1-DR01A-BL04       | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR01A | 12/13/2020  | 102.6          | LVWPS-U1-DR01A-20201213-1 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR01A | 12/13/2020  | 102.6          | LVWPS-U1-DR01A-20201213-2 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR01A | 12/13/2020  | 102.6          | LVWPS-U1-DR01A-20201213-3 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 507.1       | 0.959       | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR01A | 12/13/2020  | 102.6          | LVWPS-U1-DR01A-20201213-4 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 513.8       | 0.901       | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR01A | 12/14/2020  | 102.6          | LVWPS-U1-DR01A-20201214-5 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR01A | 12/14/2020  | 102.6          | LVWPS-U1-DR01A-20201214-6 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 515.2       | 3.35        | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR01A | 12/14/2020  | 102.6          | LVWPS-U1-DR01A-20201214-1 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 514.9       | 1.79        | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR01A | 12/14/2020  | 102.6          | LVWPS-U1-DR01A-20201214-2 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 515.2       | 18.2        | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR01A | 12/14/2020  | 102.6          | LVWPS-U1-DR01A-20201214-3 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 506.8       | 1.18        | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR01A | 12/14/2020  | 102.6          | LVWPS-U1-DR01A-20201214-4 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 515.0       | 3.03        | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR01A | 12/29/2020  | 102.6          | LVWPS-U1-DR01A-INJ        | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 507.0       | 0.700       | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR01A | 1/12/2021   | 102.6          | LVWPS-U1-DR01A-EM02       | EM02  | Zone 1 | ND        | ND         | ND          | ND          | 515.4       | 22.8       | 515.4 **    | 1.98        | ND                 | ND         | ND                 | ND          |
| LVWPS-U1-DR01A | 2/11/2021   | 102.6          | LVWPS-U1-DR01A-EM04       | EM04  | Zone 1 | ND        | ND         | ND          | ND          | 515.5       | 31.1       | 507.2       | 1.59        | ND                 | ND         | ND                 | ND          |
| LVWPS-U1-DR01B | 9/28/2020   | 136.1          | LVWPS-U1-DR01B-BL04       | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR01B | 9/28/2020   | 136.1          | LVWPS-U1-DR01B-BL04-FD    | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR01B | 12/13/2020  | 136.1          | LVWPS-U1-DR01B-20201213-1 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 515.4       | 17.1        | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR01B | 12/13/2020  | 136.1          | LVWPS-U1-DR01B-20201213-2 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 514.1       | 177         | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR01B | 12/13/2020  | 136.1          | LVWPS-U1-DR01B-20201213-3 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 513.7       | 179         | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR01B | 12/14/2020  | 136.1          | LVWPS-U1-DR01B-20201214-5 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 513.2       | 165         | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR01B | 12/14/2020  | 136.1          | LVWPS-U1-DR01B-20201214-6 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 513.5       | 96.5        | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR01B | 12/14/2020  | 136.1          | LVWPS-U1-DR01B-20201214-1 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 515.7       | 136         | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR01B | 12/14/2020  | 136.1          | LVWPS-U1-DR01B-20201214-2 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 515.7       | 167         | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR01B | 12/14/2020  | 136.1          | LVWPS-U1-DR01B-20201214-3 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 515.7       | 259         | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR01B | 12/14/2020  | 136.1          | LVWPS-U1-DR01B-20201214-4 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 513.8       | 204         | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR01B | 12/29/2020  | 136.1          | LVWPS-U1-DR01B-INJ        | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 515.4 **    | 65.6        | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR01B | 1/12/2021   | 136.1          | LVWPS-U1-DR01B-EM02       | EM02  | Zone 1 | ND        | ND         | ND          | ND          | 516.5       | 91.9       | 15.8 **     | 56.9        | ND                 | ND         | ND                 | ND          |
| LVWPS-U1-DR01B | 2/11/2021   | 136.1          | LVWPS-U1-DR01B-EM04       | EM04  | Zone 1 | ND        | ND         | ND          | ND          | 517.3       | 98.7       | 515.5 **    | 144         | ND                 | ND         | ND                 | ND          |
| LVWPS-U1-DR02A | 9/28/2020   | 101.6          | LVWPS-U1-DR02A-BL04       | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR02A | 12/13/2020  | 101.6          | LVWPS-U1-DR02A-20201213-1 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 515.3       | 23.4        | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR02A | 12/13/2020  | 101.6          | LVWPS-U1-DR02A-20201213-2 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 515.2       | 11.8        | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR02A | 12/13/2020  | 101.6          | LVWPS-U1-DR02A-20201213-3 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 514.6       | 10.0        | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR02A | 12/13/2020  | 101.6          | LVWPS-U1-DR02A-20201213-4 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 515.1       | 12.9        | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR02A | 12/14/2020  | 101.6          | LVWPS-U1-DR02A-20201214-5 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |

**Table 3**  
**Tracer Dye Analytical Results**  
 Las Vegas Wash Bioremediation Pilot Study

| Location       | Sample Date | Depth (ft bgs) | Sample ID                 | Event | Zone   | Eosine    |            | Eosine      |             | Fluorescein |            | Fluorescein |             | Rhodamine WT (RWT) |            | Rhodamine WT (RWT) |             |
|----------------|-------------|----------------|---------------------------|-------|--------|-----------|------------|-------------|-------------|-------------|------------|-------------|-------------|--------------------|------------|--------------------|-------------|
|                |             |                |                           |       |        | Charcoal  |            | Groundwater | Groundwater | Charcoal    | Charcoal   | Groundwater | Groundwater | Charcoal           | Charcoal   | Groundwater        | Groundwater |
|                |             |                |                           |       |        | Peak (nm) | Conc (ppb) | Peak (nm)   | Conc (ppb)  | Peak (nm)   | Conc (ppb) | Peak (nm)   | Conc (ppb)  | Peak (nm)          | Conc (ppb) | Peak (nm)          | Conc (ppb)  |
| LVWPS-U1-DR02A | 12/14/2020  | 101.6          | LVWPS-U1-DR02A-20201214-6 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 516.1       | 3.35        | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR02A | 12/14/2020  | 101.6          | LVWPS-U1-DR02A-20201214-1 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 515.6       | 5.08        | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR02A | 12/14/2020  | 101.6          | LVWPS-U1-DR02A-20201214-2 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 515.9       | 3.81        | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR02A | 12/14/2020  | 101.6          | LVWPS-U1-DR02A-20201214-3 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 515.3       | 22.9        | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR02A | 12/14/2020  | 101.6          | LVWPS-U1-DR02A-20201214-4 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 515.3       | 18.4        | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR02A | 12/29/2020  | 101.6          | LVWPS-U1-DR02A-INJ        | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 515.9 **    | 8.30        | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR02A | 1/12/2021   | 101.6          | LVWPS-U1-DR02A-EM02       | EM02  | Zone 1 | ND        | ND         | ND          | ND          | 515.3       | 14.7       | 516.7 **    | 14.0        | ND                 | ND         | ND                 | ND          |
| LVWPS-U1-DR02A | 2/11/2021   | 101.6          | LVWPS-U1-DR02A-EM04       | EM04  | Zone 1 | ND        | ND         | ND          | ND          | 516.1       | 54.6       | 516.2 **    | 10.1        | ND                 | ND         | ND                 | ND          |
| LVWPS-U1-DR02B | 9/28/2020   | 137.5          | LVWPS-U1-DR02B-BL04       | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR02B | 12/13/2020  | 137.5          | LVWPS-U1-DR02B-20201213-1 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 506.8       | 0.087       | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR02B | 12/13/2020  | 137.5          | LVWPS-U1-DR02B-20201213-2 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR02B | 12/13/2020  | 137.5          | LVWPS-U1-DR02B-20201213-3 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR02B | 12/14/2020  | 137.5          | LVWPS-U1-DR02B-20201214-5 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR02B | 12/14/2020  | 137.5          | LVWPS-U1-DR02B-20201214-4 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR02B | 12/14/2020  | 137.5          | LVWPS-U1-DR02B-20201214-1 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR02B | 12/14/2020  | 137.5          | LVWPS-U1-DR02B-20201214-2 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR02B | 12/14/2020  | 137.5          | LVWPS-U1-DR02B-20201214-3 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR02B | 12/29/2020  | 137.5          | LVWPS-U1-DR02B-INJ        | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 507.0       | 1.01        | ---                | ---        | ND                 | ND          |
| LVWPS-U1-DR02B | 1/12/2021   | 137.5          | LVWPS-U1-DR02B-EM02       | EM02  | Zone 1 | ND        | ND         | ND          | ND          | 515.2       | 2.99       | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-U1-DR02B | 2/11/2021   | 137.5          | LVWPS-U1-DR02B-EM04       | EM04  | Zone 1 | ND        | ND         | ND          | ND          | 515.4       | 12.4       | 507.2       | 0.173       | ND                 | ND         | ND                 | ND          |
| LVWPS-U1-MW01A | 9/28/2020   | 102.6          | LVWPS-U1-MW01A-BL04       | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-MW01A | 12/13/2020  | 102.6          | LVWPS-U1-MW01A-20201213   | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-MW01A | 12/28/2020  | 102.6          | LVWPS-U1-MW01A-INJ        | INJ   | Zone 1 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 558.0 **           | 3.15       | ND                 | ND          |
| LVWPS-U1-MW01A | 1/14/2021   | 102.6          | LVWPS-U1-MW01A-EM02       | EM02  | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U1-MW01A | 2/10/2021   | 102.6          | LVWPS-U1-MW01A-EM04       | EM04  | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U1-MW01B | 9/28/2020   | 143.4          | LVWPS-U1-MW01B-BL04       | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-MW01B | 12/28/2020  | 143.4          | LVWPS-U1-MW01B-INJ        | INJ   | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U1-MW01B | 1/14/2021   | 143.4          | LVWPS-U1-MW01B-EM02       | EM02  | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U1-MW01B | 2/10/2021   | 143.4          | LVWPS-U1-MW01B-EM04       | EM04  | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U1-MW02A | 9/29/2020   | 106.4          | LVWPS-U1-MW02A-BL04       | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-MW02A | 12/13/2020  | 106.4          | LVWPS-U1-MW02A-20201213   | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-MW02A | 12/29/2020  | 106.4          | LVWPS-U1-MW02A-INJ        | INJ   | Zone 1 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 560.6 **           | 1.92       | ND                 | ND          |
| LVWPS-U1-MW02A | 1/14/2021   | 106.4          | LVWPS-U1-MW02A-EM02       | EM02  | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U1-MW02A | 2/11/2021   | 106.4          | LVWPS-U1-MW02A-EM04       | EM04  | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U1-MW02B | 10/7/2020   | 149.1          | LVWPS-U1-MW02B-BL04       | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-MW02B | 12/13/2020  | 149.1          | LVWPS-U1-MW02B-20201213   | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-MW02B | 12/13/2020  | 149.1          | LVWPS-U1-MW02B-20201213   | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-MW02B | 12/29/2020  | 149.1          | LVWPS-U1-MW02B-INJ        | INJ   | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U1-MW02B | 1/14/2021   | 149.1          | LVWPS-U1-MW02B-EM02       | EM02  | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U1-MW02B | 2/11/2021   | 149.1          | LVWPS-U1-MW02B-EM04       | EM04  | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U1-MW03B | 9/29/2020   | 144.2          | LVWPS-U1-MW03B-BL04       | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-MW03B | 12/29/2020  | 144.2          | LVWPS-U1-MW03B-INJ        | INJ   | Zone 1 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 560.1 **           | 4.66       | ND                 | ND          |
| LVWPS-U1-MW03B | 1/14/2021   | 144.2          | LVWPS-U1-MW03B-EM02       | EM02  | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U1-MW03B | 2/11/2021   | 144.2          | LVWPS-U1-MW03B-EM04       | EM04  | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U1-MW04A | 9/30/2020   | 111.5          | LVWPS-U1-MW04A-BL04       | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-MW04A | 12/29/2020  | 111.5          | LVWPS-U1-MW04A-INJ        | INJ   | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U1-MW04A | 1/13/2021   | 111.5          | LVWPS-U1-MW04A-EM02       | EM02  | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U1-MW04A | 2/10/2021   | 111.5          | LVWPS-U1-MW04A-EM04       | EM04  | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U1-MW04B | 10/1/2020   | 152.1          | LVWPS-U1-MW04B-BL04       | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-MW04B | 12/29/2020  | 152.1          | LVWPS-U1-MW04B-INJ        | INJ   | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U1-MW04B | 1/13/2021   | 152.1          | LVWPS-U1-MW04B-EM02       | EM02  | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U1-MW04B | 2/9/2021    | 152.1          | LVWPS-U1-MW04B-EM04       | EM04  | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U1-MW05A | 9/29/2020   | 107.8          | LVWPS-U1-MW05A-BL04       | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-MW05A | 12/29/2020  | 107.8          | LVWPS-U1-MW05A-INJ        | INJ   | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U1-MW05A | 1/18/2021   | 107.8          | LVWPS-U1-MW05A-EM02       | EM02  | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U1-MW05A | 2/10/2021   | 107.8          | LVWPS-U1-MW05A-EM04       | EM04  | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U1-MW05B | 9/29/2020   | 149.1          | LVWPS-U1-MW05B-BL04       | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-MW05B | 12/29/2020  | 149.1          | LVWPS-U1-MW05B-INJ        | INJ   | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |

**Table 3**  
**Tracer Dye Analytical Results**  
 Las Vegas Wash Bioremediation Pilot Study

| Location       | Sample Date | Depth (ft bgs) | Sample ID                 | Event | Zone   | Eosine    |            | Eosine      |             | Fluorescein |            | Fluorescein |             | Rhodamine WT (RWT) |            | Rhodamine WT (RWT) |             |
|----------------|-------------|----------------|---------------------------|-------|--------|-----------|------------|-------------|-------------|-------------|------------|-------------|-------------|--------------------|------------|--------------------|-------------|
|                |             |                |                           |       |        | Charcoal  |            | Groundwater | Groundwater | Charcoal    | Charcoal   | Groundwater | Groundwater | Charcoal           | Charcoal   | Groundwater        | Groundwater |
|                |             |                |                           |       |        | Peak (nm) | Conc (ppb) | Peak (nm)   | Conc (ppb)  | Peak (nm)   | Conc (ppb) | Peak (nm)   | Conc (ppb)  | Peak (nm)          | Conc (ppb) | Peak (nm)          | Conc (ppb)  |
| LVWPS-U1-MW05B | 1/13/2021   | 149.1          | LVWPS-U1-MW05B-EM02       | EM02  | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U1-MW05B | 2/10/2021   | 149.1          | LVWPS-U1-MW05B-EM04       | EM04  | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U1-MW06A | 9/29/2020   | 95.1           | LVWPS-U1-MW06A-BL04       | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-MW06A | 12/28/2020  | 95.1           | LVWPS-U1-MW06A-INJ        | INJ   | Zone 1 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 562.2 **           | 4.66       | ND                 | ND          |
| LVWPS-U1-MW06A | 1/14/2021   | 95.1           | LVWPS-U1-MW06A-EM02       | EM02  | Zone 1 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 562.5 **           | 3.81       | ND                 | ND          |
| LVWPS-U1-MW06A | 2/9/2021    | 95.1           | LVWPS-U1-MW06A-EM04       | EM04  | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U1-MW06B | 9/29/2020   | 121.3          | LVWPS-U1-MW06B-BL04       | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-MW06B | 12/28/2020  | 121.3          | LVWPS-U1-MW06B-INJ        | INJ   | Zone 1 | ND        | ND         | ND          | ND          | 515.1       | 7.50       | 506.8       | 0.125       | 562.5 **           | 2.85       | ND                 | ND          |
| LVWPS-U1-MW06B | 1/12/2021   | 121.3          | LVWPS-U1-MW06B-EM02       | EM02  | Zone 1 | ND        | ND         | ND          | ND          | 515.1       | 2.02       | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-U1-MW06B | 2/10/2021   | 121.3          | LVWPS-U1-MW06B-EM04       | EM04  | Zone 1 | ND        | ND         | ND          | ND          | 514.4       | 0.937      | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-U1-MW07  | 9/30/2020   | 98.5           | LVWPS-U1-MW07-BL04        | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-MW07  | 12/29/2020  | 98.5           | LVWPS-U1-MW07-INJ         | INJ   | Zone 1 | ND        | ND         | ND          | ND          | 515.3       | 37.2       | 507.1       | 0.684       | ND                 | ND         | ND                 | ND          |
| LVWPS-U1-MW07  | 1/14/2021   | 98.5           | LVWPS-U1-MW07-EM02        | EM02  | Zone 1 | ND        | ND         | ND          | ND          | 514.9       | 0.690      | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-U1-MW07  | 2/10/2021   | 98.5           | LVWPS-U1-MW07-EM04        | EM04  | Zone 1 | ND        | ND         | ND          | ND          | 514.7       | 0.992      | 507.1       | 0.243       | ND                 | ND         | ND                 | ND          |
| LVWPS-U1-MW08A | 9/30/2020   | 106.1          | LVWPS-U1-MW08A-BL04       | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-MW08A | 12/29/2020  | 106.1          | LVWPS-U1-MW08A-INJ        | INJ   | Zone 1 | ND        | ND         | ND          | ND          | 516.2       | 470        | 514.7 **    | 12.2        | 567.0              | 5.61       | 561.3 **           | 1.28        |
| LVWPS-U1-MW08A | 1/12/2021   | 106.1          | LVWPS-U1-MW08A-EM02       | EM02  | Zone 1 | ND        | ND         | ND          | ND          | 515.3       | 101        | 515.6 **    | 12.6        | ND                 | ND         | ND                 | ND          |
| LVWPS-U1-MW08A | 2/9/2021    | 106.1          | LVWPS-U1-MW08A-EM04       | EM04  | Zone 1 | ND        | ND         | ND          | ND          | 515.5       | 29.9       | 507.4       | 4.74        | ND                 | ND         | ND                 | ND          |
| LVWPS-U1-MW08B | 9/30/2020   | 137.6          | LVWPS-U1-MW08B-BL04       | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-MW08B | 12/13/2020  | 137.6          | LVWPS-U1-MW08B-20201213-1 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 514.9       | 11.0        | ---                | ---        | ND                 | ND          |
| LVWPS-U1-MW08B | 12/13/2020  | 137.6          | LVWPS-U1-MW08B-20201213   | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 515.8       | 2.54        | ---                | ---        | ND                 | ND          |
| LVWPS-U1-MW08B | 12/13/2020  | 137.6          | LVWPS-U1-MW08B-20201213-2 | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 515.2       | 16.5        | ---                | ---        | ND                 | ND          |
| LVWPS-U1-MW08B | 12/14/2020  | 137.6          | LVWPS-U1-MW08B-20201214   | INJ   | Zone 1 | ---       | ---        | ND          | ND          | ---         | ---        | 515.2       | 6.92        | ---                | ---        | ND                 | ND          |
| LVWPS-U1-MW08B | 12/29/2020  | 137.6          | LVWPS-U1-MW08B-INJ        | INJ   | Zone 1 | ND        | ND         | ND          | ND          | 515.4       | 185        | 515.0 **    | 8.54        | 567.2              | 3.09       | ND                 | ND          |
| LVWPS-U1-MW08B | 12/29/2020  | 137.6          | LVWPS-U1-MW08B-INJ-FD     | INJ   | Zone 1 | ND        | ND         | ND          | ND          | 515.4       | 199        | 514.7 **    | 11.3        | 567.6              | 3.54       | ND                 | ND          |
| LVWPS-U1-MW08B | 1/11/2021   | 137.6          | LVWPS-U1-MW08B-EM02       | EM02  | Zone 1 | ND        | ND         | ND          | ND          | 515.5       | 11.2       | 515.7 **    | 4.91        | ND                 | ND         | ND                 | ND          |
| LVWPS-U1-MW08B | 1/11/2021   | 137.6          | LVWPS-U1-MW08B-EM02-FD    | EM02  | Zone 1 | ND        | ND         | ND          | ND          | 515.7       | 9.63       | 517.5 **    | 11.3        | ND                 | ND         | ND                 | ND          |
| LVWPS-U1-MW08B | 2/9/2021    | 137.6          | LVWPS-U1-MW08B-EM04       | EM04  | Zone 1 | ND        | ND         | ND          | ND          | 515.8       | 33.4       | 515.3 **    | 4.34        | ND                 | ND         | ND                 | ND          |
| LVWPS-U1-MW08B | 2/9/2021    | 137.6          | LVWPS-U1-MW08B-EM04-FD    | EM04  | Zone 1 | ND        | ND         | ND          | ND          | 515.8       | 31.7       | 515.6 **    | 3.77        | ND                 | ND         | ND                 | ND          |
| LVWPS-U1-MW09A | 9/30/2020   | 120            | LVWPS-U1-MW09A-BL04       | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-MW09A | 1/13/2021   | 120            | LVWPS-U1-MW09A-EM02       | EM02  | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U1-MW09A | 2/10/2021   | 120            | LVWPS-U1-MW09A-EM04       | EM04  | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U1-MW09B | 9/30/2020   | 142.4          | LVWPS-U1-MW09B-BL04       | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-MW09B | 1/13/2021   | 142.4          | LVWPS-U1-MW09B-EM02       | EM02  | Zone 1 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 566.9              | 11.3       | ND                 | ND          |
| LVWPS-U1-MW09B | 2/10/2021   | 142.4          | LVWPS-U1-MW09B-EM04       | EM04  | Zone 1 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 566.6              | 6.50       | ND                 | ND          |
| LVWPS-U1-MW10A | 10/2/2020   | 111.6          | LVWPS-U1-MW10A-BL04       | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-MW10A | 1/13/2021   | 111.6          | LVWPS-U1-MW10A-EM02       | EM02  | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U1-MW10A | 2/9/2021    | 111.6          | LVWPS-U1-MW10A-EM04       | EM04  | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U1-MW10B | 10/2/2020   | 142.5          | LVWPS-U1-MW10B-BL04       | BL04  | Zone 1 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U1-MW10B | 1/12/2021   | 142.5          | LVWPS-U1-MW10B-EM02       | EM02  | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U1-MW10B | 2/9/2021    | 142.5          | LVWPS-U1-MW10B-EM04       | EM04  | Zone 1 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U2-DR01  | 9/28/2020   | 131.1          | LVWPS-U2-DR01-BL04        | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U2-DR01  | 12/7/2020   | 131.1          | LVWPS-U2-DR01-20201207    | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U2-DR01  | 12/8/2020   | 131.1          | LVWPS-U2-DR01-20201208    | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U2-DR01  | 12/9/2020   | 131.1          | LVWPS-U2-DR01-20201209    | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U2-DR01  | 12/20/2020  | 131.1          | LVWPS-U2-DR01-20201220-1  | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | 506.2       | 0.016       | ---                | ---        | ND                 | ND          |
| LVWPS-U2-DR01  | 12/20/2020  | 131.1          | LVWPS-U2-DR01-20201220-2  | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U2-DR01  | 12/20/2020  | 131.1          | LVWPS-U2-DR01-20201220-3  | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U2-DR01  | 12/20/2020  | 131.1          | LVWPS-U2-DR01-20201220-4  | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U2-DR01  | 12/21/2020  | 131.1          | LVWPS-U2-DR01-20201221-1  | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U2-DR01  | 12/21/2020  | 131.1          | LVWPS-U2-DR01-20201221-2  | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U2-DR01  | 12/21/2020  | 131.1          | LVWPS-U2-DR01-20201221-3  | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U2-DR01  | 12/21/2020  | 131.1          | LVWPS-U2-DR01-20201221-4  | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U2-DR01  | 12/31/2020  | 131.1          | LVWPS-U2-DR01-INJ         | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U2-DR01  | 1/12/2021   | 131.1          | LVWPS-U2-DR01-EM02        | EM02  | Zone 2 | ND        | ND         | ND          | ND          | 514.8       | 0.938      | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-U2-DR01  | 2/12/2021   | 131.1          | LVWPS-U2-DR01-EM04        | EM04  | Zone 2 | ND        | ND         | ND          | ND          | 515.6       | 0.863      | ND          | ND          | 566.9              | 1.57       | ND                 | ND          |
| LVWPS-U2-DR02  | 9/28/2020   | 96.1           | LVWPS-U2-DR02-BL04        | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U2-DR02  | 12/7/2020   | 96.1           | LVWPS-U2-DR02-20201207    | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |



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Table 3  
Tracer Dye Analytical Results  
Las Vegas Wash Bioremediation Pilot Study

| Location      | Sample Date | Depth (ft bgs) | Sample ID                   | Event | Zone   | Eosine    |            | Eosine      |             | Fluorescein |            | Fluorescein |             | Rhodamine WT (RWT) |            | Rhodamine WT (RWT) |             |
|---------------|-------------|----------------|-----------------------------|-------|--------|-----------|------------|-------------|-------------|-------------|------------|-------------|-------------|--------------------|------------|--------------------|-------------|
|               |             |                |                             |       |        | Charcoal  |            | Groundwater | Groundwater | Charcoal    | Charcoal   | Groundwater | Groundwater | Charcoal           | Charcoal   | Groundwater        | Groundwater |
|               |             |                |                             |       |        | Peak (nm) | Conc (ppb) | Peak (nm)   | Conc (ppb)  | Peak (nm)   | Conc (ppb) | Peak (nm)   | Conc (ppb)  | Peak (nm)          | Conc (ppb) | Peak (nm)          | Conc (ppb)  |
| LVWPS-U2-DR02 | 12/8/2020   | 96.1           | LVWPS-U2-DR02-20201208      | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U2-DR02 | 12/9/2020   | 96.1           | LVWPS-U2-DR02-20201209      | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | 575.7              | 0.206       |
| LVWPS-U2-DR02 | 12/20/2020  | 96.1           | LVWPS-U2-DR02-20201220-1    | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | 515.4 **    | 160         | ---                | ---        | ND                 | ND          |
| LVWPS-U2-DR02 | 12/20/2020  | 96.1           | LVWPS-U2-DR02-20201220-2    | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | 515.7 **    | 151         | ---                | ---        | ND                 | ND          |
| LVWPS-U2-DR02 | 12/20/2020  | 96.1           | LVWPS-U2-DR02-20201220-3    | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | 515.7 **    | 87.8        | ---                | ---        | ND                 | ND          |
| LVWPS-U2-DR02 | 12/20/2020  | 96.1           | LVWPS-U2-DR02-20201220-4    | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | 515.7 **    | 97.3        | ---                | ---        | ND                 | ND          |
| LVWPS-U2-DR02 | 12/21/2020  | 96.1           | LVWPS-U2-DR02-20201221-1    | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | 515.7 **    | 185         | ---                | ---        | ND                 | ND          |
| LVWPS-U2-DR02 | 12/21/2020  | 96.1           | LVWPS-U2-DR02-20201221-2    | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | 515.4 **    | 67.3        | ---                | ---        | ND                 | ND          |
| LVWPS-U2-DR02 | 12/21/2020  | 96.1           | LVWPS-U2-DR02-20201221-3    | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | 515.8 **    | 202         | ---                | ---        | ND                 | ND          |
| LVWPS-U2-DR02 | 12/21/2020  | 96.1           | LVWPS-U2-DR02-20201221-4    | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | 515.4 **    | 652         | ---                | ---        | ND                 | ND          |
| LVWPS-U2-DR02 | 12/21/2020  | 96.1           | LVWPS-U2-DR02-20201221-4-FD | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | 515.8 **    | 464         | ---                | ---        | ND                 | ND          |
| LVWPS-U2-DR02 | 12/31/2020  | 96.1           | LVWPS-U2-DR02-INJ           | INJ   | Zone 2 | ---       | ---        | ND          | ND          | ---         | ---        | 516.2 **    | 38.3        | ---                | ---        | ND                 | ND          |
| LVWPS-U2-DR02 | 1/12/2021   | 96.1           | LVWPS-U2-DR02-EM02          | EM02  | Zone 2 | ND        | ND         | ND          | ND          | 516.1       | 1,610      | 515.6 **    | 97.1        | 567.2              | 8.72       | ND                 | ND          |
| LVWPS-U2-DR02 | 2/12/2021   | 96.1           | LVWPS-U2-DR02-EM04          | EM04  | Zone 2 | ND        | ND         | ND          | ND          | 516.7       | 256        | 514.9 **    | 58.8        | ND                 | ND         | ND                 | ND          |
| LVWPS-U2-MW01 | 10/8/2020   | 106.9          | LVWPS-U2-MW01-BL04          | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U2-MW01 | 1/4/2021    | 106.9          | LVWPS-U2-MW01-INJ           | INJ   | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U2-MW01 | 1/14/2021   | 106.9          | LVWPS-U2-MW01-EM02          | EM02  | Zone 2 | ND        | ND         | ND          | ND          | 514.9       | 1.13       | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-U2-MW01 | 2/10/2021   | 106.9          | LVWPS-U2-MW01-EM04          | EM04  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U2-MW02 | 10/8/2020   | 112.4          | LVWPS-U2-MW02-BL04          | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U2-MW02 | 1/4/2021    | 112.4          | LVWPS-U2-MW02-INJ           | INJ   | Zone 2 | ND        | ND         | ND          | ND          | 513.7 **    | 0.685      | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-U2-MW02 | 1/12/2021   | 112.4          | LVWPS-U2-MW02-EM02          | EM02  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U2-MW02 | 2/9/2021    | 112.4          | LVWPS-U2-MW02-EM04          | EM04  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U2-MW03 | 10/9/2020   | 99.8           | LVWPS-U2-MW03-BL04          | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U2-MW03 | 1/4/2021    | 99.8           | LVWPS-U2-MW03-INJ           | INJ   | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U2-MW03 | 1/14/2021   | 99.8           | LVWPS-U2-MW03-EM02          | EM02  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U2-MW03 | 2/10/2021   | 99.8           | LVWPS-U2-MW03-EM04          | EM04  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U2-MW04 | 10/6/2020   | 115.3          | LVWPS-U2-MW04-BL04          | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U2-MW04 | 12/31/2020  | 115.3          | LVWPS-U2-MW04-INJ           | INJ   | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U2-MW04 | 1/11/2021   | 115.3          | LVWPS-U2-MW04-EM02          | EM02  | Zone 2 | ND        | ND         | ND          | ND          | 513.8 **    | 0.471      | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-U2-MW04 | 2/8/2021    | 115.3          | LVWPS-U2-MW04-EM04          | EM04  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U2-MW05 | 10/5/2020   | 95.4           | LVWPS-U2-MW05-BL04          | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U2-MW05 | 12/31/2020  | 95.4           | LVWPS-U2-MW05-INJ           | INJ   | Zone 2 | ND        | ND         | ND          | ND          | 516.2       | 843        | 516.4 **    | 13.1        | 567.0 **           | 4.38       | ND                 | ND          |
| LVWPS-U2-MW05 | 1/13/2021   | 95.4           | LVWPS-U2-MW05-EM02          | EM02  | Zone 2 | ND        | ND         | ND          | ND          | 515.9       | 67.7       | 516.1 **    | 113         | ND                 | ND         | ND                 | ND          |
| LVWPS-U2-MW05 | 2/10/2021   | 95.4           | LVWPS-U2-MW05-EM04          | EM04  | Zone 2 | ND        | ND         | ND          | ND          | 516.7       | 38.0       | 507.5       | 5.53        | ND                 | ND         | ND                 | ND          |
| LVWPS-U2-MW06 | 10/1/2020   | 131.1          | LVWPS-U2-MW06-BL04          | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U2-MW06 | 12/31/2020  | 131.1          | LVWPS-U2-MW06-INJ           | INJ   | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U2-MW06 | 1/11/2021   | 131.1          | LVWPS-U2-MW06-EM02          | EM02  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U2-MW06 | 2/8/2021    | 131.1          | LVWPS-U2-MW06-EM04          | EM04  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U2-MW08 | 10/1/2020   | 122.7          | LVWPS-U2-MW08-BL04          | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U2-MW08 | 12/31/2020  | 122.7          | LVWPS-U2-MW08-INJ           | INJ   | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U2-MW08 | 1/11/2021   | 122.7          | LVWPS-U2-MW08-EM02          | EM02  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U2-MW08 | 2/8/2021    | 122.7          | LVWPS-U2-MW08-EM04          | EM04  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U2-MW09 | 10/9/2020   | 94.6           | LVWPS-U2-MW09-BL04          | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U2-MW09 | 12/31/2020  | 94.6           | LVWPS-U2-MW09-INJ           | INJ   | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U2-MW09 | 1/18/2021   | 94.6           | LVWPS-U2-MW09-EM02          | EM02  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U2-MW09 | 2/8/2021    | 94.6           | LVWPS-U2-MW09-EM04          | EM04  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U2-MW12 | 10/7/2020   | 95.4           | LVWPS-U2-MW12-BL04          | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U2-MW12 | 1/12/2021   | 95.4           | LVWPS-U2-MW12-EM02          | EM02  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U2-MW12 | 2/8/2021    | 95.4           | LVWPS-U2-MW12-EM04          | EM04  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U2-MW14 | 10/6/2020   | 95.1           | LVWPS-U2-MW14-BL04          | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U2-MW14 | 12/31/2020  | 95.1           | LVWPS-U2-MW14-INJ           | INJ   | Zone 2 | ND        | ND         | ND          | ND          | 514.9       | 1.90       | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-U2-MW14 | 1/13/2021   | 95.1           | LVWPS-U2-MW14-EM02          | EM02  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U2-MW14 | 2/9/2021    | 95.1           | LVWPS-U2-MW14-EM04          | EM04  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U2-MW17 | 10/1/2020   | 126.5          | LVWPS-U2-MW17-BL04          | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U2-MW17 | 1/12/2021   | 126.5          | LVWPS-U2-MW17-EM02          | EM02  | Zone 2 | ND        | ND         | ND          | ND          | 515.2       | 2.50       | 506.5       | 0.106       | 567.2              | 50.0       | 575.7              | 1.16        |
| LVWPS-U2-MW17 | 1/12/2021   | 126.5          | LVWPS-U2-MW17-EM02-FD       | EM02  | Zone 2 | ND        | ND         | ND          | ND          | 514.8       | 3.90       | 508.7       | 0.136       | 567.6              | 67.2       | 572.0              | 1.44        |
| LVWPS-U2-MW17 | 2/8/2021    | 126.5          | LVWPS-U2-MW17-EM04          | EM04  | Zone 2 | ND        | ND         | ND          | ND          | 515.1       | 3.17       | ND          | ND          | 567.3              | 16.9       | ND                 | ND          |
| LVWPS-U2-MW17 | 2/8/2021    | 126.5          | LVWPS-U2-MW17-EM04-FD       | EM04  | Zone 2 | ND        | ND         | ND          | ND          | 515.2       | 3.94       | ND          | ND          | 567.5              | 19.5       | ND                 | ND          |

**Table 3**  
**Tracer Dye Analytical Results**  
 Las Vegas Wash Bioremediation Pilot Study

| Location       | Sample Date | Depth (ft bgs) | Sample ID                    | Event | Zone   | Eosine    |            | Eosine      |             | Fluorescein |            | Fluorescein |             | Rhodamine WT (RWT) |            | Rhodamine WT (RWT) |             |
|----------------|-------------|----------------|------------------------------|-------|--------|-----------|------------|-------------|-------------|-------------|------------|-------------|-------------|--------------------|------------|--------------------|-------------|
|                |             |                |                              |       |        | Charcoal  |            | Groundwater | Groundwater | Charcoal    | Charcoal   | Groundwater | Groundwater | Charcoal           | Charcoal   | Groundwater        | Groundwater |
|                |             |                |                              |       |        | Peak (nm) | Conc (ppb) | Peak (nm)   | Conc (ppb)  | Peak (nm)   | Conc (ppb) | Peak (nm)   | Conc (ppb)  | Peak (nm)          | Conc (ppb) | Peak (nm)          | Conc (ppb)  |
| LVWPS-U2-MW18  | 10/5/2020   | 100.6          | LVWPS-U2-MW18-BL04           | BL04  | Zone 2 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U2-MW18  | 12/31/2020  | 100.6          | LVWPS-U2-MW18-INJ            | INJ   | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U2-MW18  | 1/11/2021   | 100.6          | LVWPS-U2-MW18-EM02           | EM02  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U2-MW18  | 2/8/2021    | 100.6          | LVWPS-U2-MW18-EM04           | EM04  | Zone 2 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-DR01A | 9/28/2020   | 108            | LVWPS-U3-DR01A-BL04          | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR01A | 12/16/2020  | 108            | LVWPS-U3-DR01A               | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 506.9       | 0.024       | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR01A | 12/16/2020  | 108            | LVWPS-U3-DR01A               | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 515.9 **    | 1.16        | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR01A | 12/16/2020  | 108            | LVWPS-U3-DR01A               | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 515.1 **    | 0.796       | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR01A | 12/16/2020  | 108            | LVWPS-U3-DR01A               | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 515.4 **    | 99.9        | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR01A | 12/17/2020  | 108            | LVWPS-U3-DR01A-20201217-1    | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 514.9 **    | 1.29        | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR01A | 12/17/2020  | 108            | LVWPS-U3-DR01A-20201217-2    | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 515.5 **    | 3.51        | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR01A | 12/17/2020  | 108            | LVWPS-U3-DR01A-20201217-3    | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 514.9 **    | 3.53        | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR01A | 12/17/2020  | 108            | LVWPS-U3-DR01A-20201217-4    | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 514.7 **    | 0.559       | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR01A | 12/29/2020  | 108            | LVWPS-U3-DR01A-INJ           | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 507.1       | 1.57        | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR01A | 1/18/2021   | 108            | LVWPS-U3-DR01A-EM02          | EM02  | Zone 3 | ND        | ND         | ND          | ND          | 515.5       | 22.9       | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-DR01A | 2/12/2021   | 108            | LVWPS-U3-DR01A-EM04          | EM04  | Zone 3 | ND        | ND         | ND          | ND          | 515.8       | 18.2       | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-DR01B | 9/28/2020   | 144.1          | LVWPS-U3-DR01B-BL04          | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR01B | 12/16/2020  | 144.1          | LVWPS-U3-DR01B-20201216-1    | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR01B | 12/16/2020  | 144.1          | LVWPS-U3-DR01B-20201216-2    | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 514.1 **    | 155         | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR01B | 12/16/2020  | 144.1          | LVWPS-U3-DR01B-20201216-3    | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 515.7 **    | 135         | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR01B | 12/16/2020  | 144.1          | LVWPS-U3-DR01B-20201216-4    | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 515.1 **    | 7.32        | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR01B | 12/17/2020  | 144.1          | LVWPS-U3-DR01B-20201217-1    | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 515.4 **    | 407         | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR01B | 12/17/2020  | 144.1          | LVWPS-U3-DR01B-20201217-2    | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 515.7 **    | 209         | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR01B | 12/17/2020  | 144.1          | LVWPS-U3-DR01B-20201217-3    | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 515.7 **    | 210         | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR01B | 12/17/2020  | 144.1          | LVWPS-U3-DR01B-20201217-4    | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 515.1 **    | 39.1        | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR01B | 12/29/2020  | 144.1          | LVWPS-U3-DR01B-INJ           | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 515.8 **    | 30.9        | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR01B | 1/18/2021   | 144.1          | LVWPS-U3-DR01B-EM02          | EM02  | Zone 3 | ND        | ND         | ND          | ND          | 516.2       | 74.8       | 516.8 **    | 136         | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-DR01B | 2/12/2021   | 144.1          | LVWPS-U3-DR01B-EM04          | EM04  | Zone 3 | ND        | ND         | ND          | ND          | 513.9 **    | 15.8       | 515.2 **    | 108         | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-DR02A | 9/28/2020   | 98.6           | LVWPS-U3-DR02A-BL04          | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02A | 12/16/2020  | 98.6           | LVWPS-U3-DR02A-20201216-1    | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 515.3 **    | 36.0        | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02A | 12/16/2020  | 98.6           | LVWPS-U3-DR02A-20201216-2    | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 513.8 **    | 114         | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02A | 12/16/2020  | 98.6           | LVWPS-U3-DR02A-20201216-3    | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 515.6 **    | 2.37        | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02A | 12/16/2020  | 98.6           | LVWPS-U3-DR02A-20201216-4    | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 515.7 **    | 125         | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02A | 12/17/2020  | 98.6           | LVWPS-U3-DR02A               | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 515.6 **    | 101         | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02A | 12/17/2020  | 98.6           | LVWPS-U3-DR02A               | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 515.5 **    | 61.9        | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02A | 12/17/2020  | 98.6           | LVWPS-U3-DR02A               | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 515.7 **    | 103         | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02A | 12/17/2020  | 98.6           | LVWPS-U3-DR02A               | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 515.7 **    | 78.5        | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02A | 12/17/2020  | 98.6           | LVWPS-U3-DR02A-20201217-4-FD | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 515.6 **    | 83.2        | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02A | 12/30/2020  | 98.6           | LVWPS-U3-DR02A-INJ           | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 515.1 **    | 73.5        | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02A | 12/30/2020  | 98.6           | LVWPS-U3-DR02A-INJ           | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 516.0 **    | 67.5        | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02A | 1/18/2021   | 98.6           | LVWPS-U3-DR02A-EM02          | EM02  | Zone 3 | ND        | ND         | ND          | ND          | 516.1       | 295        | 515.3 **    | 76.0        | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-DR02A | 2/11/2021   | 98.6           | LVWPS-U3-DR02A-EM04          | EM04  | Zone 3 | ND        | ND         | ND          | ND          | 516.5       | 78.6       | 515.4 **    | 63.6        | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-DR02B | 9/28/2020   | 130            | LVWPS-U3-DR02B-BL04          | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02B | 12/16/2020  | 130            | LVWPS-U3-DR02B-20201216-1    | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 515.7 **    | 144         | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02B | 12/16/2020  | 130            | LVWPS-U3-DR02B-20201216-2    | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 515.3 **    | 14.1        | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02B | 12/16/2020  | 130            | LVWPS-U3-DR02B-20201216-3    | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 515.7 **    | 154         | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02B | 12/16/2020  | 130            | LVWPS-U3-DR02B-20201216-4    | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 515.3 **    | 26.1        | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02B | 12/17/2020  | 130            | LVWPS-U3-DR02B-20201217-1    | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 515.8 **    | 224         | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02B | 12/17/2020  | 130            | LVWPS-U3-DR02B-20201217-2    | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 515.4 **    | 12.3        | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02B | 12/17/2020  | 130            | LVWPS-U3-DR02B-20201217-3    | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 515.2 **    | 27.3        | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02B | 12/17/2020  | 130            | LVWPS-U3-DR02B-20201217-4    | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 515.5 **    | 55.7        | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02B | 1/18/2021   | 130            | LVWPS-U3-DR02B-EM02          | EM02  | Zone 3 | ND        | ND         | ND          | ND          | 516.2       | 74.3       | 515.3 **    | 60.2        | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-DR02B | 2/11/2021   | 130            | LVWPS-U3-DR02B-EM04          | EM04  | Zone 3 | ND        | ND         | ND          | ND          | 515.5       | 4.51       | 515.4 **    | 38.0        | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-DR02C | 9/28/2020   | 161.5          | LVWPS-U3-DR02C-BL04          | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02C | 12/16/2020  | 161.5          | LVWPS-U3-DR02C-20201216-1    | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 507.1       | 0.337       | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02C | 12/16/2020  | 161.5          | LVWPS-U3-DR02C-20201216-2    | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 507.0       | 0.400       | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02C | 12/16/2020  | 161.5          | LVWPS-U3-DR02C-20201216-3    | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 507.1       | 1.10        | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02C | 12/16/2020  | 161.5          | LVWPS-U3-DR02C-20201216-3-FD | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 507.0       | 0.346       | ---                | ---        | ND                 | ND          |

Table 3  
Tracer Dye Analytical Results  
Las Vegas Wash Bioremediation Pilot Study

| Location       | Sample Date | Depth (ft bgs) | Sample ID                 | Event | Zone   | Eosine    |            | Eosine      |             | Fluorescein |            | Fluorescein |             | Rhodamine WT (RWT) |            | Rhodamine WT (RWT) |             |
|----------------|-------------|----------------|---------------------------|-------|--------|-----------|------------|-------------|-------------|-------------|------------|-------------|-------------|--------------------|------------|--------------------|-------------|
|                |             |                |                           |       |        | Charcoal  |            | Groundwater | Groundwater | Charcoal    | Charcoal   | Groundwater | Groundwater | Charcoal           | Charcoal   | Groundwater        | Groundwater |
|                |             |                |                           |       |        | Peak (nm) | Conc (ppb) | Peak (nm)   | Conc (ppb)  | Peak (nm)   | Conc (ppb) | Peak (nm)   | Conc (ppb)  | Peak (nm)          | Conc (ppb) | Peak (nm)          | Conc (ppb)  |
| LVWPS-U3-DR02C | 12/16/2020  | 161.5          | LVWPS-U3-DR02C-20201216-4 | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 507.1       | 0.943       | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02C | 12/17/2020  | 161.5          | LVWPS-U3-DR02C-20201217-1 | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 507.9       | 0.490       | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02C | 12/17/2020  | 161.5          | LVWPS-U3-DR02C-20201217-2 | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 507.2       | 0.879       | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02C | 12/17/2020  | 161.5          | LVWPS-U3-DR02C-20201217-3 | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 507.3       | 0.909       | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02C | 12/17/2020  | 161.5          | LVWPS-U3-DR02C-20201217-4 | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 515.3 **    | 6.41        | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02C | 12/30/2020  | 161.5          | LVWPS-U3-DR02C-INJ        | INJ   | Zone 3 | ---       | ---        | ND          | ND          | ---         | ---        | 516.4 **    | 51.2        | ---                | ---        | ND                 | ND          |
| LVWPS-U3-DR02C | 1/18/2021   | 161.5          | LVWPS-U3-DR02C-EM02       | EM02  | Zone 3 | ND        | ND         | ND          | ND          | 516.1       | 11.2       | 516.6 **    | 25.0        | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-DR02C | 2/12/2021   | 161.5          | LVWPS-U3-DR02C-EM04       | EM04  | Zone 3 | ND        | ND         | ND          | ND          | 516.8       | 7.45       | 506.2       | 1.36        | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-MW01B | 10/5/2020   | 93.5           | LVWPS-U3-MW01B-BL04       | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-MW01B | 1/15/2021   | 93.5           | LVWPS-U3-MW01B-EM02       | EM02  | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW01B | 2/11/2021   | 93.5           | LVWPS-U3-MW01B-EM04       | EM04  | Zone 3 | ND        | ND         | ND          | ND          | ND          | ND         | ND          | ND          | 566.8              | 1.97       | ND                 | ND          |
| LVWPS-U3-MW02A | 10/5/2020   | 89.4           | LVWPS-U3-MW02A-BL04       | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-MW02A | 12/30/2020  | 89.4           | LVWPS-U3-MW02A-INJ        | INJ   | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW02A | 1/14/2021   | 89.4           | LVWPS-U3-MW02A-EM02       | EM02  | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW02A | 2/11/2021   | 89.4           | LVWPS-U3-MW02A-EM04       | EM04  | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW02B | 10/5/2020   | 112.5          | LVWPS-U3-MW02B-BL04       | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-MW02B | 12/30/2020  | 112.5          | LVWPS-U3-MW02B-INJ        | INJ   | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW02B | 1/14/2021   | 112.5          | LVWPS-U3-MW02B-EM02       | EM02  | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW02B | 2/11/2021   | 112.5          | LVWPS-U3-MW02B-EM04       | EM04  | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW03A | 10/2/2020   | 98.6           | LVWPS-U3-MW03A-BL04       | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-MW03A | 10/2/2020   | 98.6           | LVWPS-U3-MW03A-BL04-FD    | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-MW03A | 12/30/2020  | 98.6           | LVWPS-U3-MW03A-INJ        | INJ   | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW03A | 1/14/2021   | 98.6           | LVWPS-U3-MW03A-EM02       | EM02  | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW03A | 2/11/2021   | 98.6           | LVWPS-U3-MW03A-EM04       | EM04  | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW03B | 10/2/2020   | 163            | LVWPS-U3-MW03B-BL04       | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-MW03B | 12/30/2020  | 163            | LVWPS-U3-MW03B-INJ        | INJ   | Zone 3 | ND        | ND         | ND          | ND          | 515.7       | 116        | 508.2       | 0.226       | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-MW03B | 1/14/2021   | 163            | LVWPS-U3-MW03B-EM02       | EM02  | Zone 3 | ND        | ND         | ND          | ND          | 515.9       | 9.03       | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-MW03B | 2/11/2021   | 163            | LVWPS-U3-MW03B-EM04       | EM04  | Zone 3 | ND        | ND         | ND          | ND          | 515.9       | 7.36       | 509.4       | 0.161       | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-MW03C | 10/1/2020   | 129.9          | LVWPS-U3-MW03C-BL04       | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-MW03C | 12/30/2020  | 129.9          | LVWPS-U3-MW03C-INJ        | INJ   | Zone 3 | ND        | ND         | ND          | ND          | 515.5       | 8.21       | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-MW03C | 1/14/2021   | 129.9          | LVWPS-U3-MW03C-EM02       | EM02  | Zone 3 | ND        | ND         | ND          | ND          | 515.3       | 0.815      | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-MW03C | 2/11/2021   | 129.9          | LVWPS-U3-MW03C-EM04       | EM04  | Zone 3 | ND        | ND         | ND          | ND          | 515.2       | 0.602      | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-MW04B | 10/2/2020   | 87.7           | LVWPS-U3-MW04B-BL04       | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-MW05B | 10/2/2020   | 94.8           | LVWPS-U3-MW05B-BL04       | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-MW05B | 1/15/2021   | 94.8           | LVWPS-U3-MW05B-EM02       | EM02  | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW05B | 2/11/2021   | 94.8           | LVWPS-U3-MW05B-EM04       | EM04  | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW06A | 10/5/2020   | 102.6          | LVWPS-U3-MW06A-BL04       | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-MW06A | 12/30/2020  | 102.6          | LVWPS-U3-MW06A-INJ        | INJ   | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW06A | 1/15/2021   | 102.6          | LVWPS-U3-MW06A-EM02       | EM02  | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW06A | 2/12/2021   | 102.6          | LVWPS-U3-MW06A-EM04       | EM04  | Zone 3 | ND        | ND         | ND          | ND          | 513.9 **    | 0.662      | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-MW06B | 10/7/2020   | 137.3          | LVWPS-U3-MW06B-BL04       | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-MW06B | 12/30/2020  | 137.3          | LVWPS-U3-MW06B-INJ        | INJ   | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW06B | 1/14/2021   | 137.3          | LVWPS-U3-MW06B-EM02       | EM02  | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW06B | 2/11/2021   | 137.3          | LVWPS-U3-MW06B-EM04       | EM04  | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW07A | 10/9/2020   | 89.9           | LVWPS-U3-MW07A-BL04       | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-MW07A | 12/30/2020  | 89.9           | LVWPS-U3-MW07A-INJ        | INJ   | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW07A | 1/15/2021   | 89.9           | LVWPS-U3-MW07A-EM02       | EM02  | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW07A | 2/11/2021   | 89.9           | LVWPS-U3-MW07A-EM04       | EM04  | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW07B | 10/9/2020   | 114.3          | LVWPS-U3-MW07B-BL04       | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-MW07B | 12/30/2020  | 114.3          | LVWPS-U3-MW07B-INJ        | INJ   | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW07B | 1/14/2021   | 114.3          | LVWPS-U3-MW07B-EM02       | EM02  | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW07B | 2/12/2021   | 114.3          | LVWPS-U3-MW07B-EM04       | EM04  | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW08A | 10/8/2020   | 130            | LVWPS-U3-MW08A-BL04       | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-MW08A | 12/30/2020  | 130            | LVWPS-U3-MW08A-INJ        | INJ   | Zone 3 | ND        | ND         | ND          | ND          | 514.1       | 0.439      | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-MW08A | 1/15/2021   | 130            | LVWPS-U3-MW08A-EM02       | EM02  | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW08A | 2/12/2021   | 130            | LVWPS-U3-MW08A-EM04       | EM04  | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW08B | 10/8/2020   | 161.2          | LVWPS-U3-MW08B-BL04       | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-MW08B | 12/30/2020  | 161.2          | LVWPS-U3-MW08B-INJ        | INJ   | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |



**Table 3**  
**Tracer Dye Analytical Results**  
 Las Vegas Wash Bioremediation Pilot Study

| Location       | Sample Date | Depth (ft bgs) | Sample ID              | Event | Zone   | Eosine    |            | Eosine      |             | Fluorescein |            | Fluorescein |             | Rhodamine WT (RWT) |            | Rhodamine WT (RWT) |             |
|----------------|-------------|----------------|------------------------|-------|--------|-----------|------------|-------------|-------------|-------------|------------|-------------|-------------|--------------------|------------|--------------------|-------------|
|                |             |                |                        |       |        | Charcoal  |            | Groundwater | Groundwater | Charcoal    | Charcoal   | Groundwater | Groundwater | Charcoal           | Charcoal   | Groundwater        | Groundwater |
|                |             |                |                        |       |        | Peak (nm) | Conc (ppb) | Peak (nm)   | Conc (ppb)  | Peak (nm)   | Conc (ppb) | Peak (nm)   | Conc (ppb)  | Peak (nm)          | Conc (ppb) | Peak (nm)          | Conc (ppb)  |
| LVWPS-U3-MW08B | 1/15/2021   | 161.2          | LVWPS-U3-MW08B-EM02    | EM02  | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW08B | 2/12/2021   | 161.2          | LVWPS-U3-MW08B-EM04    | EM04  | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW09  | 10/7/2020   | 97.8           | LVWPS-U3-MW09-BL04     | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-MW09  | 12/30/2020  | 97.8           | LVWPS-U3-MW09-INJ      | INJ   | Zone 3 | ND        | ND         | ND          | ND          | 515.4       | 22.8       | 515.4 **    | 2.51        | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-MW09  | 1/15/2021   | 97.8           | LVWPS-U3-MW09-EM02     | EM02  | Zone 3 | ND        | ND         | ND          | ND          | 515.7       | 1.98       | 518.8 **    | 4.52        | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-MW09  | 2/10/2021   | 97.8           | LVWPS-U3-MW09-EM04     | EM04  | Zone 3 | ND        | ND         | ND          | ND          | 514.9       | 2.63       | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-MW10A | 10/5/2020   | 89.9           | LVWPS-U3-MW10A-BL04    | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-MW10A | 1/14/2021   | 89.9           | LVWPS-U3-MW10A-EM02    | EM02  | Zone 3 | ND        | ND         | ND          | ND          | 515.9       | 6.08       | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-MW10A | 2/11/2021   | 89.9           | LVWPS-U3-MW10A-EM04    | EM04  | Zone 3 | ND        | ND         | ND          | ND          | 515.8       | 3.31       | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-MW10B | 10/5/2020   | 111.1          | LVWPS-U3-MW10B-BL04    | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-MW10B | 1/14/2021   | 111.1          | LVWPS-U3-MW10B-EM02    | EM02  | Zone 3 | ND        | ND         | ND          | ND          | 515.9       | 9.62       | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-MW10B | 2/11/2021   | 111.1          | LVWPS-U3-MW10B-EM04    | EM04  | Zone 3 | ND        | ND         | ND          | ND          | 515.8       | 35.8       | 507.7       | 1.35        | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-MW11A | 10/7/2020   | 96.2           | LVWPS-U3-MW11A-BL04    | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-MW11A | 1/15/2021   | 96.2           | LVWPS-U3-MW11A-EM02    | EM02  | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW11A | 2/12/2021   | 96.2           | LVWPS-U3-MW11A-EM04    | EM04  | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW11B | 10/7/2020   | 124.8          | LVWPS-U3-MW11B-BL04    | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-MW11B | 1/18/2021   | 124.8          | LVWPS-U3-MW11B-EM02    | EM02  | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW11B | 2/12/2021   | 124.8          | LVWPS-U3-MW11B-EM04    | EM04  | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW11C | 10/8/2020   | 153.1          | LVWPS-U3-MW11C-BL04    | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-MW11C | 1/18/2021   | 153.1          | LVWPS-U3-MW11C-EM02    | EM02  | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW11C | 2/12/2021   | 153.1          | LVWPS-U3-MW11C-EM04    | EM04  | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW12A | 10/6/2020   | 98             | LVWPS-U3-MW12A-BL04    | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-MW12A | 1/15/2021   | 98             | LVWPS-U3-MW12A-EM02    | EM02  | Zone 3 | ND        | ND         | ND          | ND          | 515.5       | 0.536      | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-MW12A | 2/12/2021   | 98             | LVWPS-U3-MW12A-EM04    | EM04  | Zone 3 | ND        | ND         | ND          | ND          | 515.9       | 1.31       | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-MW12B | 10/6/2020   | 125.5          | LVWPS-U3-MW12B-BL04    | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-MW12B | 1/15/2021   | 125.5          | LVWPS-U3-MW12B-EM02    | EM02  | Zone 3 | ND        | ND         | ND          | ND          | 516.0       | 3.88       | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-MW12B | 2/12/2021   | 125.5          | LVWPS-U3-MW12B-EM04    | EM04  | Zone 3 | ND        | ND         | ND          | ND          | 515.4       | 1.98       | 508.4       | 0.253       | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-MW13A | 10/7/2020   | 108.5          | LVWPS-U3-MW13A-BL04    | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-MW13A | 12/30/2020  | 108.5          | LVWPS-U3-MW13A-INJ     | INJ   | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW13A | 1/15/2021   | 108.5          | LVWPS-U3-MW13A-EM02    | EM02  | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW13A | 2/11/2021   | 108.5          | LVWPS-U3-MW13A-EM04    | EM04  | Zone 3 | ND        | ND         | ---         | ---         | ND          | ND         | ---         | ---         | ND                 | ND         | ---                | ---         |
| LVWPS-U3-MW13B | 10/7/2020   | 140.1          | LVWPS-U3-MW13B-BL04    | BL04  | Zone 3 | ---       | ---        | ---         | ---         | ---         | ---        | ND          | ND          | ---                | ---        | ND                 | ND          |
| LVWPS-U3-MW13B | 12/30/2020  | 140.1          | LVWPS-U3-MW13B-INJ     | INJ   | Zone 3 | ND        | ND         | ND          | ND          | 515.3       | 77.9       | 507.0       | 0.133       | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-MW13B | 12/30/2020  | 140.1          | LVWPS-U3-MW13B-INJ-FD  | INJ   | Zone 3 | ND        | ND         | ND          | ND          | 515.3       | 87.3       | 507.3       | 0.299       | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-MW13B | 1/15/2021   | 140.1          | LVWPS-U3-MW13B-EM02    | EM02  | Zone 3 | ND        | ND         | ND          | ND          | 515.3       | 5.08       | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-MW13B | 1/15/2021   | 140.1          | LVWPS-U3-MW13B-EM02-FD | EM02  | Zone 3 | ND        | ND         | ND          | ND          | 515.3       | 9.60       | ND          | ND          | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-MW13B | 2/12/2021   | 140.1          | LVWPS-U3-MW13B-EM04    | EM04  | Zone 3 | ND        | ND         | ND          | ND          | 515.2       | 10.7       | 507.7       | 0.267       | ND                 | ND         | ND                 | ND          |
| LVWPS-U3-MW13B | 2/12/2021   | 140.1          | LVWPS-U3-MW13B-EM04-FD | EM04  | Zone 3 | ND        | ND         | ND          | ND          | 515.3       | 7.91       | 508.8       | 0.246       | ND                 | ND         | ND                 | ND          |

Notes:

- nm nanometers
- conc concentration
- ppb parts per billion
- ND No dye detected
- FD field duplicate

\*\* A fluorescence peak is present that does not meet all the criteria for this dye. However, it has been calculated as a positive dye result. See note 2 below.

1. Dye concentrations are based upon standards used at the Ozark Underground Laboratory (OUL). The standard concentrations are based upon the as sold weight of the dye that the OUL uses - 20% by weight for rhodamine WT and 75% by weight for fluorescein.

2. Emission fluorescence peaks are a function of the dye and the liquid matrix of the sample. Narrow acceptable wavelength ranges usually used as a criterion for positive dye detections do not always apply to samples from this study due to the presence of varying concentrations of emulsified vegetable oil and an eluting solution mixed in with the samples.