

TECHNICAL MEMORANDUM

To: Nevada Environmental Response Trust

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

From: Chris Hayes and Dana Grady

Date: March 20, 2024

Subject: Unit 4 Source Area In-Situ Bioremediation Treatability Study Monthly Progress Report

At the direction of the Nevada Environmental Response Trust (NERT or Trust), Tetra Tech, Inc. (Tetra Tech) has prepared this memorandum to summarize Tetra Tech's progress during January 2024 toward successfully implementing the Unit 4 Source Area In-Situ Bioremediation (ISB) Treatability Study.

Task Progress Update: January 2024

Task M21 – Unit 4 Source Area ISB Treatability Study

- Current Status –

Phase 2 of the Unit 4 Source Area ISB Treatability Study is ongoing. A layout map and construction details of all injection, monitoring, and extraction wells are provided on Figure 1 and in Table 1, respectively. Operations, maintenance, and monitoring activities completed during January 2024 are summarized below.

- Operations and Maintenance

- Area 1 – The first phase of the treatability study for Area 1 consisted of a total dissolved solids (TDS) reduction period prior to the injection of a carbon substrate due to the presence of elevated TDS concentrations in groundwater in the Area 1 deep zone. This phase included the injection of clean water (formerly known as stabilized Lake Mead water [SLMW]) in a pulsed manner and continuous groundwater extraction to reduce TDS concentrations to levels that would allow biodegradation processes to proceed (i.e., TDS concentrations to below 21,000 milligrams per liter [mg/L] prior to carbon substrate/water injections). The TDS reduction period began on September 8, 2022 in the Area 1 deep zone. Once TDS concentrations were below the TDS goal of 21,000 mg/L for three consecutive events, a baseline groundwater sampling event was performed and the second phase of the treatability study, which included the start-up of carbon substrate injections for application of ISB into Area 1 intermediate and deep zones, was initiated. The baseline groundwater sampling event was performed in March 2023 and the carbon substrate injections as part of the ISB phase began on April 6, 2023.

The ISB injection process into Area 1 consists of daily-pulsed injections of a carbon substrate solution, followed by daily injections of anaerobic distribution water (clean water amended with Vitamin C). The carbon substrate solution initially consisted of 0.5 percent molasses solution, 0.5 molar sodium bicarbonate solution, trace mineral solution, vitamin B12, and filtered biosolids collected from the on-site fluidized bed reactors (FBRs). The addition of the biosolids in the carbon substrate solution was discontinued on June 6, 2023, after the Area 1 60-day evaluation period. The macronutrient solution consisting of urea and diammonium phosphate is not currently being added to the injectate solution to minimize precipitate formation. The macronutrient solution may be added in the future if required based on effectiveness monitoring results.

In an effort to meet the large theoretical carbon demand due to the high concentrations of chemicals of potential concern present in Area 1, the molasses concentration was increased from 0.5 percent to 1.0 percent on July 12, 2023 and then further increased to 2.5 percent on October 24, 2023. The Area 1 deep extraction well U4-E-03D was also transitioned to an injection well on October 24, 2023. Extraction operations within the Area 1 deep treatment interval ceased when deep extraction well U4-E-03D was converted into an injection well. Extraction operations in the Area 1 intermediate zone ceased on November 8, 2023 based on the elevated total organic carbon (TOC) concentrations measured in the extraction effluent to prevent further development of preferential flow pathways and removal of carbon substrate from the targeted treatment interval. No extraction operations have since been performed.

On January 29, 2024, the molasses concentration was increased from 2.5 percent to 5 percent in an effort to meet the large theoretical carbon demand for Area 1. Additionally, filtered biosolids from the on-site FBRs were added back into the carbon substrate solution in an effort to increase the microbial community with perchlorate reducing bacteria to aid in the biodegradation of perchlorate.

A summary of Area 1 injections is provided in Table 2. Specific details of ongoing operations in January 2024 include the following:

- Area 1 Intermediate Zone – Active injections continued for the entire month of January, with a total of 26,300 gallons of carbon substrate solution and 20,867 gallons of distribution water injected into the two intermediate injection wells.
- Area 1 Deep Zone – Approximately 27,024 gallons of carbon substrate solution and 20,619 gallons of distribution water were injected into five deep injection wells.
- Area 2 – Because TDS concentrations in Area 2 were lower than Area 1 and averaged approximately 19,500 mg/L during baseline sampling, ISB injection/extraction activities were implemented without an initial TDS reduction step. Carbon substrate solution/water injection and groundwater extraction operations in both the intermediate and deep zones within Area 2 began on September 13, 2022 and are ongoing. The injection process consists of daily-pulsed injections of a carbon substrate solution, followed by daily injections of anaerobic distribution water (clean water amended with Vitamin C). The carbon substrate solution initially consisted of 0.5 percent molasses solution, 0.5 molar sodium bicarbonate solution, trace mineral solution, vitamin B12, and filtered biosolids collected from the on-site FBRs. The addition of the biosolids in the carbon substrate solution was discontinued on December 15, 2022 following completion of the first 90 days of system operation (in accordance with the NDEP-approved Unit 4 Source Area ISB Treatability Study Work Plan Addendum). The macronutrient solution consisting of urea and diammonium phosphate is not currently being added to the injectate solution to

minimize precipitate formation. This macronutrient solution may be added in the future if required based on effectiveness monitoring results.

The molasses concentration was increased from 0.5 percent to 1.0 percent on July 12, 2023 and further increased to 2.5 percent on October 24, 2023. In order to minimize hydraulic effects and potential for overdosing specifically in Area 2 following the increase to 2.5 percent molasses, the injection rates for Area 2 intermediate and deep injection wells were simultaneously reduced to approximately 0.5 gpm in all Area 2 intermediate and deep injection wells.

Extraction operations within the Area 2 deep treatment interval were ceased when deep extraction well U4-E-08D was converted into an injection well in July 2023. Extraction operations in the Area 2 intermediate zone ceased on November 8, 2023 based on the elevated TOC concentrations measured in the extraction effluent to prevent further development of preferential flow pathways and removal of carbon substrate from the targeted treatment interval. No extraction operations have since been performed.

On January 29, 2024, the molasses concentration was increased from 2.5 percent to 5 percent and the injection rates into all Area 2 intermediate injection wells were increased from 0.5 gpm to 1.9 gpm in an effort to improve distribution of carbon within Area 2. Additionally, filtered biosolids from on-site FBRs were added back into the carbon substrate solution in an effort to increase the microbial community with perchlorate reducing bacteria to aid in the biodegradation of perchlorate.

A summary of Area 2 injections is provided in Table 3. Specific details of ongoing operations during January 2024 include the following:

- Area 2 Intermediate Zone – Active injections continued for the entire month of January, with a total of 9,783 gallons of carbon substrate solution and 7,222 gallons of distribution water injected into two intermediate injection wells.
 - Area 2 Deep Zone – Approximately 14,730 gallons of carbon substrate solution and 10,910 gallons of distribution water were injected into four deep injection wells.
- Effectiveness Monitoring – The effectiveness monitoring program included a baseline groundwater sampling event completed in April 2022 prior to system start-up. Following start-up in early September 2022, the effectiveness monitoring program was implemented in accordance with the Work Plan Addendum. During the first month of operations in Area 2, one biweekly sampling event of Area 2 monitoring wells was conducted in September 2022. The monitoring program shifted to monthly sampling in October 2022 and is ongoing for both Areas 1 and 2. In March 2023, groundwater samples were collected from all Area 1 intermediate and deep injection, extraction, and monitoring wells to establish baseline conditions prior to the startup of carbon substrate solution injections in Area 1, which began on April 6, 2023. The April 2023 sampling event was performed approximately two weeks after ISB start-up in Area 1, and therefore serves as a biweekly sampling event for Area 1 monitoring wells and the regular monthly sampling event for Area 2. Similar to the Area 2 monitoring program, the sampling in Area 1 then shifted to a monthly basis in May 2023 and coincides with the monthly sampling performed for Area 2. Available draft groundwater analytical results from the baseline sampling event and subsequent monitoring events performed from September 2022 to December 2023 are presented in Table 4. The December 2023 groundwater results are summarized below. Groundwater analytical results from the most recent effectiveness monitoring event performed from January 22 to January 26, 2024 will be provided in future monthly progress reports as data become available from the laboratory. Final validated data will be provided in the final treatability study results report.

- **Area 1 Intermediate** – The December 2023 sampling event was conducted approximately eight months after the start of ISB injections into Area 1 and included collection of groundwater samples from two former extraction wells screened in the Area 1 intermediate zone and ten monitoring wells, including three monitoring wells located immediately within the Area 1 intermediate study area, four monitoring wells around the perimeter of the Area 1 intermediate study area, and three monitoring wells screened in the overlying shallow zone. Groundwater analytical results from the December 2023 sampling event are summarized below.
 - Results from groundwater samples collected from two of the three intermediate monitoring wells located within the immediate vicinity of the Area 1 intermediate treatment zone indicated an average perchlorate concentration reduction of 53 percent compared to pre-ISB baseline concentrations in March 2023. However, perchlorate concentrations in samples collected from all three monitoring wells slightly increased compared to samples collected during the previous November 2023 sampling event. Perchlorate concentrations in the samples collected from the two previous extraction wells (i.e., U4-E-01I and U4-E-02I) indicated concentration reductions ranging from 72 percent to 94 percent. Recent October/November 2023 system/operational changes, which included an increase in injection rates within the underlying deep zone by converting U4-E-03D into an injection well and discontinuation of overlying extraction within the Area 1 intermediate zone, likely resulted in changes to the hydraulic gradient and an increased flux of untreated groundwater into the intermediate zone. The perchlorate concentrations are expected to decrease as the system reaches homeostasis under the new injection scheme and with the subsequent increase in molasses concentration to 5 percent in January 2024.
 - Groundwater samples collected from two of the four intermediate perimeter monitoring wells, namely, U4-MW-01I and U4-MW-04I, showed concentration reductions ranging from 16 percent to 33 percent compared to the March 2023 pre-ISB baseline concentrations. In addition, groundwater samples collected from all three shallow monitoring wells (i.e., M-251-60, U4-MW-01S and U4-MW-03S) indicated the lowest perchlorate concentrations measured in groundwater at these locations since the start of ISB, with reductions of 12 percent to 31 percent compared to March 2023 pre-ISB baseline concentrations.
 - Chlorate concentration trends were similar to perchlorate concentration trends, with the highest reduction of 74 percent observed in the groundwater sample collected from monitoring well U4-MW-05I (chlorate concentration of 1,270 mg/L compared to a pre-ISB baseline concentration of 4,840 mg/L). The results from the groundwater sample collected from monitoring well U4-MW-02I indicated a 55 percent reduction in chlorate concentrations, with a December 2023 concentration of 5,460 mg/L compared to the pre-ISB baseline concentration of 12,000 mg/L. Although initially reduced, chlorate concentrations in groundwater samples collected from monitoring well U4-MW-07I have remained elevated above the pre-ISB baseline concentrations since the July 2023 system modifications. Chlorate concentrations in groundwater samples collected from other shallow and intermediate perimeter monitoring wells showed similar concentrations to the March 2023 pre-ISB baseline concentrations. Lastly, groundwater samples collected from all three shallow monitoring wells (i.e., M-251-60, U4-MW-01S and U4-MW-03S) indicated the lowest chlorate concentrations measured in groundwater at these locations since the start of ISB,

- with reductions up to 35 percent compared to March 2023 pre-ISB baseline concentrations.
- Nitrate concentration reductions were generally greater than perchlorate and chlorate, with reductions ranging from 58 percent to 98 percent observed in groundwater samples collected from all three monitoring wells within the immediate vicinity of the Area 1 intermediate treatment zone (i.e., U4-MW-02I, U4-MW-05I and U4-MW-07I). Nitrate concentrations were below the sample detection limit in groundwater samples collected from Area 1 intermediate perimeter monitoring wells U4-E-01I and U4-E-03I. In addition, nitrate concentration reductions were observed in groundwater samples collected from all three overlying shallow monitoring wells, with reductions ranging from 28 percent to 75 percent compared to pre-ISB baseline concentrations in March 2023.
 - Groundwater samples collected from two of the three monitoring wells located in the immediate vicinity of the Area 1 intermediate treatment zone (i.e., U4-MW-02I, and U4-MW-05I) continued to indicate significant hexavalent chromium reductions ranging from 65 percent to 98 percent, with concentrations as low as 607 $\mu\text{g/L}$. The hexavalent chromium concentration in the groundwater sample collected from monitoring well U4-MW-07I reduced from 4,230 $\mu\text{g/L}$ in November 2023 to 2,720 $\mu\text{g/L}$ in December 2023 but remained elevated above the March 2023 pre-ISB baseline concentration of 2,670 $\mu\text{g/L}$. Groundwater samples collected from three of the four intermediate perimeter monitoring wells, namely, U4-MW-01I, U4-MW-03I, and U4-MW-06I, showed slight concentration reductions ranging from 6 percent to 26 percent compared to the March 2023 pre-ISB baseline concentrations. In addition, groundwater samples collected from all three shallow monitoring wells (i.e., M-251-60, U4-MW-01S and U4-MW-03S) indicated the lowest hexavalent chromium concentrations measured in groundwater at these locations since the start of ISB, with concentrations ranging from 1,160 $\mu\text{g/L}$ to 1,640 $\mu\text{g/L}$.
 - TOC concentrations in groundwater samples collected from monitoring wells U4-MW-02I and U4-MW-07I, which measured 293 mg/L and 937 mg/L in December 2023, respectively, continued to indicate an increasing trend following the increase in molasses concentration from 1 percent to 2.5 percent in October 2023.
 - TOC concentrations in samples collected from perimeter monitoring well U4-MW-06I increased significantly from 73.8 mg/L mg/L in September 2023 to 150 mg/L in December 2023. TOC concentrations in groundwater samples collected from the remaining perimeter monitoring wells and overlying shallow monitoring wells remained relatively low, with concentrations less than 10 mg/L.
 - Area 1 Deep – During the December 2023 sampling event performed eight months after the start of ISB operations in Area 1, groundwater samples were collected from four deep monitoring wells within Area 1, six perimeter monitoring wells surrounding Area 1 screened in the targeted deep treatment interval and underlying deep zone (designated with “DD”), and one perimeter monitoring well screened in the underlying deep zone within Area 1 (namely, M-252). Groundwater analytical results from the December 2023 sampling event are summarized below.
 - The groundwater sample collected from one of the four Area 1 deep zone monitoring wells, namely, U4-E-05D, exhibited a decrease in perchlorate

concentration during the December 2023 sampling event compared to the previous November 2023 sampling event, with a perchlorate concentration of 386 mg/L representing a reduction of 64 percent compared to March 2023 pre-ISB baseline conditions. Perchlorate concentrations in groundwater samples collected from the remaining three deep monitoring wells located within Area 1 increased slightly in December 2023 compared to the samples collected during the November 2023 sampling event. Perchlorate concentration reductions in groundwater samples collected from three of the seven perimeter and/or underlying deep “DD” monitoring wells (namely, U4-MW-01D, U4-MW-01DD, and U4-MW-03DD) ranged from 62 percent to 67 percent compared to the March 2023 pre-ISB baseline concentrations. The recent operational changes, which included transitioning extraction well U4-E-03D to an injection well and increasing the molasses concentration from 1 percent to 2.5 percent in October 2023 and further increasing the molasses concentration to 5 percent in January 2024 were implemented in an effort to meet the high stoichiometric demand of the Area 1 Deep zone and improve distribution of carbon in the subsurface. As carbon concentrations increase in the subsurface, it is likely that perchlorate concentrations will continue to decline.

- Chlorate concentration trends were similar to perchlorate concentration trends. The lowest chlorate concentration was observed in the groundwater sample collected from U4-MW-05D in December 2023, with a concentration of 1,660 mg/L compared to the pre-ISB baseline concentration of 5,680 mg/L (concentration reduction of 71 percent). Similar to perchlorate concentrations, chlorate concentrations in samples collected from perimeter and deep “DD” monitoring wells U4-MW-01D, U4-MW-01DD and U4-MW-03DD indicated concentration reductions ranging from 30 percent to 59 percent compared to pre-ISB concentrations.
- Nitrate concentration reductions were generally greater than perchlorate and chlorate. Nitrate concentrations in groundwater collected from three Area 1 deep zone monitoring wells (i.e., U4-MW-02D, U4-MW-05D, and U4-MW-07D) were less than the March 2023 pre-ISB baseline concentrations with reductions ranging from 24 percent to greater than 99 percent. Furthermore, nitrate was not detected above the sample detection limit of 0.048 mg/L in groundwater samples collected from U4-MW-05D and U4-MW-07D. Nitrate concentrations in groundwater samples collected from four perimeter and deep “DD” monitoring wells (i.e., U4-MW-01D, U4-MW-01DD, U4-E-03D, and U4-MW-03DD) indicate reductions ranging from 19 percent to 99 percent compared to March 2023 pre-ISB baseline concentrations.
- In general, hexavalent chromium concentration trends in December 2023 followed a similar pattern to perchlorate concentrations. The greatest hexavalent chromium concentration reduction was observed in the groundwater sample collected from U4-MW-05D, with a December 2023 result of 697 µg/L (98 percent reduction compared to the March 2023 pre-ISB baseline concentration of 28,200 µg/L). In addition, hexavalent concentration reductions ranging from 10 percent to 86 percent were observed in groundwater samples collected from six of the seven perimeter/underlying deep “DD” monitoring wells.
- TOC concentrations in the groundwater sample collected from monitoring well U4-MW-05D in December 2023 was significantly elevated with a concentration of

3,170 mg/L compared to baseline TOC concentrations of less than 2 mg/L. In addition, the TOC concentration measured in the groundwater sample collected from M-251-100 measured 50.2 mg/L, which continues to indicate an increasing trend following the October 2023 operations changes and represents the highest TOC concentration measured to date in samples collected from this location. Elevated TOC concentrations were also detected in samples collected from perimeter monitoring wells U4-E-03D, U4-MW-04D, and U4-MW-06D, with concentrations ranging from 64.5 mg/L to 359 mg/L in December 2023. It is anticipated that the addition of U4-E-03D as an injection well and the increase in the molasses concentration will continue to improve the distribution of carbon in the subsurface, resulting in a continued increase in TOC concentrations within the Area 1 deep treatment interval.

- Area 2 Intermediate – In December 2023, approximately fifteen months after the start of ISB in Area 2, groundwater samples were collected from two former extraction wells screened in the Area 2 intermediate zone, three intermediate monitoring wells immediately located within Area 2 study area, and ten monitoring wells located around the perimeter of the Area 2 study area. Four of these ten perimeter monitoring wells are screened in the overlying shallow zone, while the remaining six monitoring wells are screened in the intermediate zone. Groundwater analytical results from the December 2023 sampling event are summarized below.
 - As discussed in previous monthly progress reports, perchlorate concentrations in the groundwater samples collected from all three intermediate monitoring wells (i.e., U4-MW-11I, U4-MW-12I, and U4-MW-13I) increased following the operational modifications completed in July 2023 that likely altered the vertical hydraulic gradient and caused a flux of untreated groundwater into the Area 2 intermediate treatment zone (i.e., converting extraction well U4-E-08D into an injection well and increasing injection rates). The perchlorate concentrations in groundwater samples collected from U4-MW-11I indicated a slight decrease from 525 mg/L in November 2023 to 489 mg/L in December 2023, but continued to remain above the July 2023 concentrations. The perchlorate concentration in the groundwater samples collected from U4-MW-12I was 158 mg/L in December 2023, which represents a reduction of 64 percent compared to baseline conditions. Perchlorate concentrations in samples collected from monitoring well U4-MW-13I continued to indicate an increasing trend following the July 2023 operational changes with a December 2023 perchlorate concentration of 520 mg/L. Perchlorate concentrations in groundwater samples collected from three of the overlying shallow monitoring wells indicated perchlorate concentration reductions ranging from 48 percent to greater than 99 percent, with perchlorate measuring less than the sample detection limit of 0.3 µg/L in groundwater collected from U4-MW-15S and U4-MW-16S.
 - Chlorate concentration trends were similar to perchlorate trends, with overall concentration reductions generally observed when compared to baseline but increases in concentrations observed when comparing the results from the December 2023 sampling event to results prior to the July 2023 operational changes. Despite the concentration fluctuations, a concentration reduction in chlorate concentration of 71 percent was observed in the groundwater sample collected from U4-MW-12I. In addition, significant chlorate concentration decreases of greater than 99 percent were observed in groundwater samples

collected from four perimeter monitoring wells (U4-MW-08S, U4-MW-15S, U4-MW-16S, and U4-MW-16I).

- In general, nitrate concentration reductions were greater than perchlorate and chlorate. The nitrate concentrations in groundwater samples collected from U4-MW-11I and U4-MW-12I measured less than the sample detection limit of 0.048 mg/L and 4.92 mg/L, respectively. Nitrate concentrations in samples collected from monitoring well U4-MW-13I continued to indicate an increasing trend following the July 2023 operational changes with a December 2023 nitrate concentration of 20.1 mg/L. Nitrate concentration reductions were observed in groundwater collected from eight of the ten perimeter monitoring wells, with reductions compared to baseline concentrations ranging from 67 percent to 99 percent.
- Hexavalent chromium concentration reductions were observed in samples collected in December 2023 from two of the three intermediate monitoring wells, namely, U4-MW-12I and U4-MW-13I. The hexavalent chromium concentration in the groundwater sample collected from monitoring well U4-MW-12I in December 2023 measured 143 µg/L, which represents a 99 percent reduction compared to the baseline concentration of 21,200 µg/L. The groundwater sample collected from monitoring well U4-MW-11I continued to show a decrease in December 2023 with concentrations reducing from 19,200 µg/L in November 2023 to 17,900 µg/L in December 2023. Significant hexavalent chromium reductions ranging from 43 percent to greater than 99 percent were observed in samples collected from five perimeter monitoring wells (i.e., U4-MW-08S, U4-MW-09S, U4-MW-15S, U4-MW-15I, and U4-MW-16S).
- TOC concentrations in groundwater samples collected from Area 2 intermediate monitoring wells ranged from 3.26 mg/L to 16 mg/L, which is greater than the average baseline TOC concentration of 1.25 mg/L. The groundwater sample collected from monitoring well U4-MW-12I showed a significant increase in TOC concentrations from 14.3 mg/L in September 2023 to 123 mg/L in October 2023. However, TOC concentrations dropped significantly to 13.7 mg/L in November 2023 and remained about the same in December 2023. This drop in TOC concentration correlates with the significant increase in perchlorate concentrations in the groundwater sample collected from this location between October 2023 and December 2023. As previously described, extraction operations in the Area 2 intermediate zone ceased on November 8, 2023 based on the elevated TOC concentrations measured in the extraction effluent during the October 2023 sampling event. TOC concentrations will continue to be monitored to evaluate if discontinuing extraction results in an increase in TOC concentrations throughout Area 2.

TOC concentrations in groundwater samples collected from nine of the ten perimeter monitoring wells were elevated compared to baseline levels with concentrations ranging from 3.99 mg/L to 1,050 mg/L. The highest TOC concentrations were observed in samples collected from shallow perimeter monitoring wells U4-MW-08S and U4-MW-16S.

- Area 2 Deep – During the December 2023 sampling event performed fifteen months after the start of ISB operations in Area 2, groundwater samples were collected from three deep monitoring wells within Area 2 and ten perimeter monitoring wells surrounding Area 2 and screened in the targeted deep treatment interval or the underlying deep zone

(designated with “DD”). Groundwater analytical results from the December 2023 sampling event are summarized below.

- When compared to baseline concentrations, perchlorate concentration reductions ranging from 47 percent to 83 percent were observed in groundwater samples collected from the three deep monitoring wells located within Area 2 (i.e., U4-MW-11D, U4-MW-12D, and U4-MW-13D). The most notable reduction of 83 percent was observed in the groundwater sample collected from monitoring well U4-MW-12D with a December 2023 concentration of 222 mg/L compared to a baseline concentration of 1,280 mg/L. Additionally, a decreasing trend continued to be observed in groundwater samples collected from U4-MW-11D, which measured 686 mg/L in December 2023 compared to 1,290 mg/L observed during baseline. Perchlorate concentrations in groundwater collected from U4-MW-13D has generally remained consistently reduced by approximately 75 percent since the treatability study began. In addition, perchlorate concentration reductions averaging 65 percent were observed in groundwater samples collected from eight out of ten perimeter monitoring wells. The most notable reductions in the perimeter of Area 2 deep included reductions ranging from 84 to 99 percent in groundwater samples collected from monitoring wells U4-MW-09D, U4-MW-10D, and U4-MW-15DD.
- Concentration reductions for chlorate and nitrate in the groundwater samples collected from the three deep monitoring wells within Area 2 were slightly greater than perchlorate (reductions averaging 71 percent for chlorate and 84 percent for nitrate when compared to baseline concentrations). Notable results in December 2023 include the detection of chlorate at a concentration of 2,120 mg/L in groundwater collected from monitoring well U4-MW-12D, which represents the lowest concentration observed to date in samples collected from this location. Similarly, the lowest nitrate concentration observed during the December 2023 sampling event was also detected in the groundwater sample collected from monitoring well U4-MW-12D at a concentration less than the sample detection limit of 0.048 mg/L. In addition, chlorate and/or nitrate concentration reductions were also observed in groundwater samples collected from eight of the ten perimeter wells sampled in December 2023.
- Hexavalent chromium concentration reductions ranging from 47 percent to 87 percent when compared to baseline concentrations were observed in groundwater samples collected from the three deep monitoring wells located within Area 2. The hexavalent chromium concentration in groundwater collected from U4-MW-12D in December 2023 was 8,390 µg/L, which is the lowest hexavalent chromium concentration observed to date in groundwater samples collected from this location and represents an 87 percent reduction compared to the baseline concentration of 63,700 µg/L. Hexavalent chromium concentration reductions were also observed in groundwater samples collected from nine of the ten perimeter monitoring wells sampled in December 2023, with reductions ranging from 26 percent to greater than 99 percent compared to baseline concentrations. The most notable concentration reduction was observed in the groundwater sample collected from the perimeter monitoring well U4-MW-10D, with a December 2023 concentration of 0.153 µg/L compared to a baseline concentration of 5,450 µg/L.

- TOC concentrations in groundwater samples collected from the Area 2 deep monitoring wells ranged from 2.81 mg/L to 328 mg/L (baseline concentration average of 2.17 mg/L) in December 2023. Elevated TOC concentrations of 173 mg/L and 328 mg/L were detected in samples collected from monitoring wells U4-MW-11D and U4-MW-12D. The TOC measurement of 328 mg/L in the groundwater sample collected from monitoring well U4-MW-12D is the highest TOC concentration to date within the Area 2 deep zone. These observed increases in TOC concentrations are likely a result of the system modifications performed in an effort to improve distribution of carbon substrate throughout the Area 2 deep zone, which included increasing the molasses concentration and converting extraction well U4-E-08D into an injection well. TOC concentrations elevated above baseline conditions were observed in groundwater samples collected from all four perimeter monitoring wells screened in the deep treatment interval downgradient and cross-gradient of the Area 2 deep injection wells (i.e., U4-MW-08D, U4-MW-09D, U4-MW-10D, and U4-MW-14D), with the most notable TOC concentration of 168 mg/L observed in the sample collected from perimeter monitoring well U4-MW-09D. Significant TOC concentration increases were not observed in the samples collected from the remaining six perimeter monitoring wells, which are located upgradient of Area 2 and/or are screened within the underlying deep “DD” interval.
- Schedule and Progress Updates
 - Area 1 ISB operations are anticipated to continue through early April 2024.
 - Per the Work Plan Addendum, Area 2 ISB operations were projected to be implemented for a duration of 12 to 18 months. Based on the results from the first twelve months of operations, it was decided to continue the ISB operations in Area 2 for the full 18 months to fully evaluate the effects of July 2023 operational modifications made in an effort to improve the distribution of carbon substrate throughout the Area 2 Deep zone. Therefore, Area 2 ISB operations are anticipated to continue through early April 2024 and coincide with the operational shutdown for Area 1.
- Health and Safety
 - There were no health and safety incidents related to Task M21 in January 2024.

CERTIFICATION

Unit 4 Source Area In-Situ Bioremediation Treatability 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

Not Individually, but Solely
as President of the Trustee

Signature: Jay A. Steinberg, President, 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: 3/20/24

CERTIFICATION

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: Prepared Unit 4 Source Area In-Situ Bioremediation Treatability Study Monthly Progress Report.



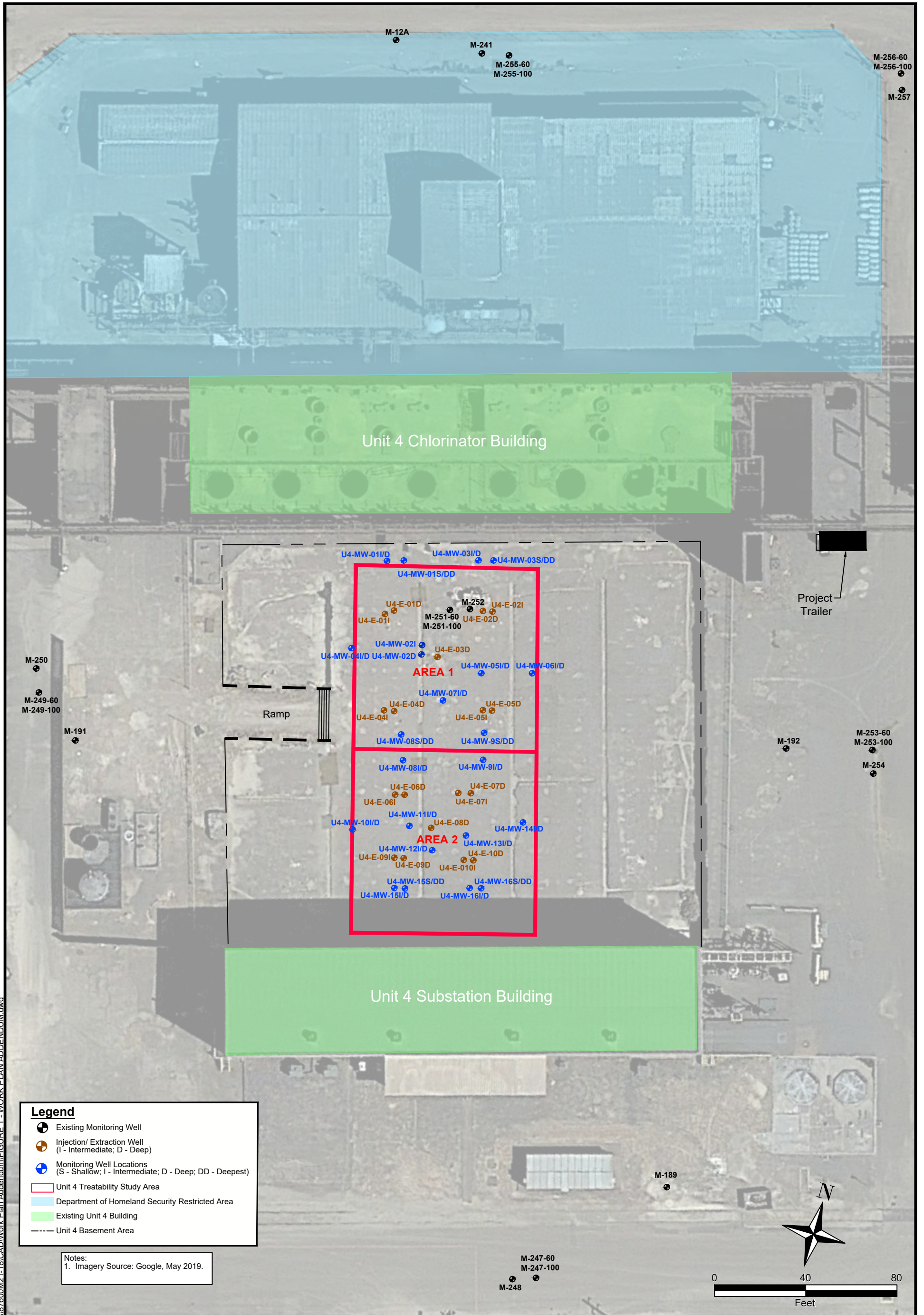
Christopher Hayes, CEM
Environmental Engineer
Tetra Tech, Inc.

March 20, 2024

Date

Nevada CEM Certificate Number: EM2499
Nevada CEM Expiration Date: December 15, 2024

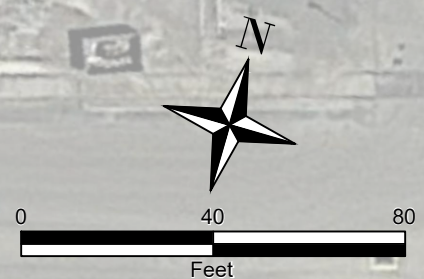
Figures



Legend

- Existing Monitoring Well
- ⊕ Injection/ Extraction Well (I - Intermediate; D - Deep)
- ⊕ Monitoring Well Locations (S - Shallow; I - Intermediate; D - Deep; DD - Deepest)
- ▭ Unit 4 Treatability Study Area
- ▭ Department of Homeland Security Restricted Area
- ▭ Existing Unit 4 Building
- Unit 4 Basement Area

Notes:
1. Imagery Source: Google, May 2019.



\\its318fs3.tl.local\CES\Projects\87600\M21-18\CAD\Work Plan Addendum\FIGURE 1 - WORK PLAN ADDENDUM.dwg

NEVADA ENVIRONMENTAL RESPONSE TRUST SITE

UNIT 4 SOURCE AREA IN-SITU BIOREMEDIATION TREATABILITY STUDY
HENDERSON, NEVADA

Project No.: 117-7502021-M21
Date: May 10, 2022
Designed By: AC

TETRA TECH

www.tetrattech.com
150 S. 4th Street, Unit A
Henderson, Nevada 89015
Phone: (702) 854-2293

INJECTION/ EXTRACTION AND MONITORING WELL LAYOUT

Figure No.
1

Tables

Table 1
Well Construction Details
 Unit 4 Source Area In-Situ Bioremediation Treatability Study

Well ID	Screened Lithology	Northing	Easting	Ground Surface Elevation ¹	Top of Casing Elevation	Construction Type	Casing Material	Screen 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				inches		inches	feet bgs ¹	inches	feet	feet bgs ¹	feet bgs ¹	feet bgs ¹
U4-E-01D	UMCf	26717332.49	828215.74	1805.50	1805.11	Single	Schedule 80 PVC	Stainless Steel	0.010	#2/16	8	115.0	4	15	110.3	94.7	109.7
U4-E-01I	UMCf	26717330.42	828212.11	1805.40	1805.15	Single	Schedule 80 PVC	Stainless Steel	0.010	#2/16	8	92.0	4	15	90.3	74.6	89.6
U4-E-02D	UMCf	26717338.47	828258.40	1805.55	1804.99	Single	Schedule 80 PVC	Stainless Steel	0.010	#2/16	8	115.0	4	15	110.3	94.4	109.4
U4-E-02I	UMCf	26717338.14	828254.24	1805.51	1804.99	Single	Schedule 80 PVC	Stainless Steel	0.010	#2/16	8	92.0	4	15	90.3	74.4	89.4
U4-E-04D	UMCf	26717288.90	828222.53	1805.49	1804.95	Single	Schedule 80 PVC	Stainless Steel	0.010	#2/16	8	115.0	4	15	110.3	95.0	110.0
U4-E-03D	UMCf	26717310.37	828241.13	1805.49	1804.94	Single	Schedule 80 PVC	Stainless Steel	0.010	#2/16	8	113.0	4	15	111.1	110.1	95.1
U4-E-04I	UMCf	26717288.51	828217.91	1805.64	1805.03	Single	Schedule 80 PVC	Stainless Steel	0.010	#2/16	8	92.0	4	15	90.3	75.0	90.0
U4-E-05D	UMCf	26717295.64	828264.86	1805.48	1804.95	Single	Schedule 80 PVC	Stainless Steel	0.010	#2/16	8	115.0	4	15	110.3	95.0	110.0
U4-E-05I	UMCf	26717295.15	828260.95	1805.58	1804.72	Single	Schedule 80 PVC	Stainless Steel	0.010	#2/16	8	92.0	4	15	90.3	75.0	90.0
U4-E-06D	UMCf	26717253.44	828232.43	1805.44	1804.74	Single	Schedule 80 PVC	Stainless Steel	0.010	#2/16	8	112.0	4	15	111.1	110.1	95.1
U4-E-06I	UMCf	26717252.90	828228.29	1805.47	1805.04	Single	Schedule 80 PVC	Stainless Steel	0.010	#2/16	8	92.5	4	15	89.2	88.2	73.2
U4-E-07D	UMCf	26717258.48	828261.02	1805.62	1805.31	Single	Schedule 80 PVC	Stainless Steel	0.010	#2/16	8	111.5	4	15	110.6	109.6	94.6
U4-E-07I	UMCf	26717257.68	828255.56	1805.62	1805.16	Single	Schedule 80 PVC	Stainless Steel	0.010	#2/16	8	92.0	4	15	90.7	89.7	74.7
U4-E-08D	UMCf	26717240.82	828246.11	1805.45	1804.91	Single	Schedule 80 PVC	Stainless Steel	0.010	#2/16	8	120.0	4	15	110.6	109.6	94.6
U4-E-09D	UMCf	26717225.92	828236.22	1805.45	1804.91	Single	Schedule 80 PVC	Stainless Steel	0.010	#2/16	8	112.0	4	15	110.5	109.5	94.5
U4-E-09I	UMCf	26717225.46	828232.18	1805.47	1805.14	Single	Schedule 80 PVC	Stainless Steel	0.010	#2/16	8	93.3	4	15	90.9	89.9	74.9
U4-E-10D	UMCf	26717229.55	828266.50	1805.66	1805.28	Single	Schedule 80 PVC	Stainless Steel	0.010	#2/16	8	112.0	4	15	110.5	109.5	94.5
U4-E-10I	UMCf	26717229.15	828262.34	1805.71	1805.37	Single	Schedule 80 PVC	Stainless Steel	0.010	#2/16	8	92.0	4	15	90.2	89.2	74.2
U4-MW-01I	UMCf	26717353.59	828209.51	1805.57	1805.14	Dual-Nested	Schedule 80 PVC	Stainless Steel	0.010	#2/16	11	108.0	2	10	86.7	86.7	76.7
U4-MW-01D	UMCf	26717353.51	828209.25	1805.57	1805.10		Schedule 80 PVC	Stainless Steel	0.010	#2/16			2	10	106.7	106.7	96.7
U4-MW-01S	UMCf	26717354.83	828216.42	1805.57	1805.02	Dual-Nested	Schedule 80 PVC	Stainless Steel	0.010	#2/16	11	131.0	2	10	64.7	64.7	54.7
U4-MW-01DD	UMCf	26717354.86	828216.87	1805.57	1805.09		Schedule 80 PVC	Stainless Steel	0.010	#2/16			2	10	129.9	129.9	119.9
U4-MW-02D	UMCf	26717315.33	828230.47	1805.50	1805.07	Single	Schedule 80 PVC	Stainless Steel	0.010	#2/16	8	115.0	4	15	110.3	95.0	110.0
U4-MW-02I	UMCf	26717319.45	828230.17	1805.47	1805.07	Single	Schedule 80 PVC	Stainless Steel	0.010	#2/16	8	92.0	4	15	90.3	75.0	90.0
U4-MW-03I	UMCf	26717359.79	828248.76	1805.61	1805.17	Dual-Nested	Schedule 80 PVC	Stainless Steel	0.010	#2/16	11	108.3	2	10	86.6	86.6	76.6
U4-MW-03D	UMCf	26717360.01	828249.20	1805.61	1805.18		Schedule 80 PVC	Stainless Steel	0.010	#2/16			2	10	106.6	106.6	96.6
U4-MW-03S	UMCf	26717360.79	828255.35	1805.56	1805.19	Dual-Nested	Schedule 80 PVC	Stainless Steel	0.010	#2/16	11	131.3	2	10	64.5	64.5	54.5
U4-MW-03DD	UMCf	26717360.84	828255.62	1805.56	1805.20		Schedule 80 PVC	Stainless Steel	0.010	#2/16			2	10	129.7	129.7	119.7
U4-MW-04I	UMCf	26717313.50	828199.89	1805.49	1805.13	Dual-Nested	Schedule 80 PVC	Stainless Steel	0.010	#2/16	11	108.5	2	10	86.8	86.8	76.8
U4-MW-04D	UMCf	26717313.36	828199.55	1805.49	1805.15		Schedule 80 PVC	Stainless Steel	0.010	#2/16			2	10	107.0	107.0	97.0
U4-MW-05I	UMCf	26717311.18	828257.53	1805.52	1805.06	Dual-Nested	Schedule 80 PVC	Stainless Steel	0.010	#2/16	11	108.0	2	10	86.6	86.6	76.6
U4-MW-05D	UMCf	26717311.18	828257.89	1805.52	1805.05		Schedule 80 PVC	Stainless Steel	0.010	#2/16			2	10	108.2	108.2	98.2
U4-MW-06I	UMCf	26717314.46	828279.53	1805.52	1805.21	Dual-Nested	Schedule 80 PVC	Stainless Steel	0.010	#2/16	11	108.3	2	10	86.5	86.5	76.5
U4-MW-06D	UMCf	26717314.51	828279.82	1805.52	1805.20		Schedule 80 PVC	Stainless Steel	0.010	#2/16			2	10	107.1	107.1	97.1
U4-MW-07I	UMCf	26717296.98	828242.85	1805.36	1805.16	Dual-Nested	Schedule 80 PVC	Stainless Steel	0.010	#2/16	11	109.2	2	10	86.8	86.8	76.8
U4-MW-07D	UMCf	26717296.68	828242.80	1805.36	1805.01		Schedule 80 PVC	Stainless Steel	0.010	#2/16			2	10	106.5	106.5	96.5
U4-MW-08I	UMCf	26717268.25	828229.36	1805.45	1804.97	Dual-Nested	Schedule 80 PVC	Stainless Steel	0.010	#2/16	11	108.0	2	10	88.0	88.0	78.0
U4-MW-08D	UMCf	26717268.30	828229.62	1805.45	1804.99		Schedule 80 PVC	Stainless Steel	0.010	#2/16			2	10	108.6	108.6	98.6
U4-MW-08S	UMCf	26717279.33	828226.78	1805.47	1804.94	Dual-Nested	Schedule 80 PVC	Stainless Steel	0.010	#2/16	11	131.2	2	10	64.9	64.9	54.9
U4-MW-08DD	UMCf	26717279.35	828227.22	1805.47	1804.95		Schedule 80 PVC	Stainless Steel	0.010	#2/16			2	10	129.8	129.8	119.8
U4-MW-09I	UMCf	26717273.70	828264.04	1805.62	1805.22	Dual-Nested	Schedule 80 PVC	Stainless Steel	0.010	#2/16	11	108.0	2	10	86.8	86.8	76.8
U4-MW-09D	UMCf	26717273.73	828264.40	1805.62	1805.20		Schedule 80 PVC	Stainless Steel	0.010	#2/16			2	10	106.9	106.9	96.9
U4-MW-09S	UMCf	26717285.44	828262.62	1805.55	1805.12	Dual-Nested	Schedule 80 PVC	Stainless Steel	0.010	#2/16	11	132.0	2	10	65.3	65.3	55.3
U4-MW-09DD	UMCf	26717285.52	828263.00	1805.55	1805.12		Schedule 80 PVC	Stainless Steel	0.010	#2/16			2	10	129.8	129.8	119.8
U4-MW-10I	UMCf	26717234.83	828212.05	1805.55	1805.10	Dual-Nested	Schedule 80 PVC	Stainless Steel	0.010	#2/16	11	109.0	2	10	87.1	87.1	77.1
U4-MW-10D	UMCf	26717235.18	828212.26	1805.55	1805.07		Schedule 80 PVC	Stainless Steel	0.010	#2/16			2	10	106.9	106.9	96.9
U4-MW-11I	UMCf	26717240.19	828236.42	1805.41	1805.03	Dual-Nested	Schedule 80 PVC	Stainless Steel	0.010	#2/16	11	109.0	2	10	87.0	87.0	77.0
U4-MW-11D	UMCf	26717240.23	828236.77	1805.41	1804.96		Schedule 80 PVC	Stainless Steel	0.010	#2/16			2	10	107.4	107.4	97.4
U4-MW-12I	UMCf	26717231.25	828247.87	1805.47	1805.11	Dual-Nested	Schedule 80 PVC	Stainless Steel	0.010	#2/16	11	108.0	2	10	86.8	86.8	76.8
U4-MW-12D	UMCf	26717231.22	828248.29	1805.47	1805.12		Schedule 80 PVC	Stainless Steel	0.010	#2/16			2	10	107.1	107.1	97.1
U4-MW-13I	UMCf	26717242.66	828261.00	1805.64	1805.28	Dual-Nested	Schedule 80 PVC	Stainless Steel	0.010	#2/16	11	109.0	2	10	87.1	87.1	77.1
U4-MW-13D	UMCf	26717242.70	828261.37	1805.64	1805.35		Schedule 80 PVC	Stainless Steel	0.010	#2/16			2	10	108.2	108.2	98.2
U4-MW-14I	UMCf	26717249.26	828285.32	1805.43	1805.13	Dual-Nested	Schedule 80 PVC	Stainless Steel	0.010	#2/16	11	109.0	2	10	87.3	87.3	77.3
U4-MW-14D	UMCf	26717249.24	828285.84	1805.43	1805.05		Schedule 80 PVC	Stainless Steel	0.010	#2/16			2	10	107.3	107.3	97.3
U4-MW-15I	UMCf	26717212.34	828233.91	1805.48	1805.03	Dual-Nested	Schedule 80 PVC	Stainless Steel	0.010	#2/16	11	109.0	2	10	86.8	86.8	76.8
U4-MW-15D	UMCf	26717212.35	828234.41	1805.48	1804.97		Schedule 80 PVC	Stainless Steel	0.010	#2/16			2	10	106.0	106.0	96.0
U4-MW-15S	UMCf	26717212.89	828238.61	1805.44	1805.05	Dual-Nested	Schedule 80 PVC	Stainless Steel	0.010	#2/16	11	132.0	2	10	64.8	64.8	54.8
U4-MW-15DD	UMCf	26717212.87	828239.01	1805.44	1804.98		Schedule 80 PVC	Stainless Steel	0.010	#2/16			2	10	130.3	130.3	120.3
U4-MW-16I	UMCf	26717217.25	828266.62	1805.68	1805.36	Dual-Nested	Schedule 80 PVC	Stainless Steel	0.010	#2/16	11	108.5	2	10	87.0	87.0	77.0
U4-MW-16D	UMCf	26717217.40	828266.90	1805.68	1805.27		Schedule 80 PVC	Stainless Steel	0.010	#2/16			2	10	106.8	106.8	96.8
U4-MW-16S	UMCf	26717217.87	828271.70	1805.59	1805.24	Dual-Nested	Schedule 80 PVC	Stainless Steel	0.010	#2/16	11	131.0	2	10	64.8	64.8	54.8
U4-MW-16DD	UMCf	26717218.04	828271.95	1805.59	1805.32		Schedule 80 PVC	Stainless Steel	0.010	#2/16			2	10	130.8	130.8	120.8

Notes

amsl - above mean sea level

bgs - below ground surface

bTOC - below top of casing

PVC - polyvinyl chloride

UMCf - Upper Muddy Creek formation

1. Ground surface refers to the concrete floor of the Unit 4 basement, which is approximately 8 feet below the surrounding grade.

2. Well names including E indicate an extraction/injection well. Well names including MW indicate a monitoring well.

Table 2
Summary of Injection Activities
Area 1 - January 2024
Unit 4 Source Area Bioremediation Treatability Study

Study Area				Area 1 Intermediate								Area 1 Deep				Area 1 Deep															
Well ID		Injection Stop Time	Duration ⁽¹⁾	U4-E-04I				U4-E-05I				U4-E-01D				U4-E-02D				U4-E-03D				U4-E-04D				U4-E-05D			
Date	Injection Start Time			Volume Carbon Solution Injected ⁽²⁾	Volume Distribution Water Solution Injected ^(3,4)	Average Flow Rate	Maximum Injection Pressure	Volume Carbon Solution Injected ⁽²⁾	Volume Distribution Water Solution Injected ^(3,4)	Average Flow Rate	Maximum Injection Pressure	Volume Carbon Solution Injected ⁽²⁾	Volume Distribution Water Solution Injected ^(3,4)	Average Flow Rate	Maximum Injection Pressure	Volume Carbon Solution Injected ⁽²⁾	Volume Distribution Water Solution Injected ^(3,4)	Average Flow Rate	Maximum Injection Pressure	Volume Carbon Solution Injected ⁽²⁾	Volume Distribution Water Solution Injected ^(3,4)	Average Flow Rate	Maximum Injection Pressure	Volume Carbon Solution Injected ⁽²⁾	Volume Distribution Water Solution Injected ^(3,4)	Average Flow Rate	Maximum Injection Pressure	Volume Carbon Solution Injected ⁽²⁾	Volume Distribution Water Solution Injected ^(3,4)	Average Flow Rate	Maximum Injection Pressure
		minutes	gallons	gallons	gpm	psi	gallons	gallons	gpm	psi	gallons	gallons	gpm	psi	gallons	gallons	gpm	psi	gallons	gallons	gpm	psi	gallons	gallons	gpm	psi	gallons	gallons	gpm	psi	
1/1/2024	6:40	14:21	416	435.22	337.04	1.9	16	439.76	323.34	1.8	13	185.99	124.43	0.7	28	154.7	130.59	0.7	32	164	126	0.7	26	188.53	125.59	0.8	27	167.10	143.21	0.7	37
1/2/2024	6:40	14:17	416	405.09	347.79	1.8	16	420.77	334.28	1.8	13	176.64	133.04	0.7	26	165.3	128.71	0.7	32	188	135	0.8	26	185.28	129.89	0.8	28	179.69	140.04	0.8	36
1/3/2024	6:40	14:28	412	431.17	344.68	1.9	15	430.64	339.78	1.9	12	193.68	134.55	0.8	27	154.7	125.86	0.7	32	173	131	0.7	26	181.08	135.73	0.8	28	172.70	135.16	0.7	38
1/4/2024	6:40	14:23	421	423.85	345.57	1.8	14	437.39	350.79	1.9	11	179.60	151.52	0.8	29	185.9	128.38	0.7	32	172	127	0.7	25	179.38	148.58	0.8	27	180.77	123.60	0.7	36
1/5/2024	6:40	13:22	479	432.32	326.12	1.6	15	418.90	330.43	1.6	12	175.80	127.96	0.6	28	173.7	129.86	0.6	32	177	148	0.7	26	166.62	134.39	0.6	26	173.45	129.71	0.6	36
1/6/2024	5:40	13:10	400	428.14	329.62	1.9	15	412.38	346.36	1.9	11	181.44	135.44	0.8	27	177.9	132.24	0.8	33	170	119	0.7	31	179.50	144.38	0.8	28	187.90	127.75	0.8	38
1/7/2024	6:40	14:26	429	434.92	334.91	1.8	15	463.29	337.31	1.9	10	176.19	152.40	0.8	26	171.6	126.69	0.7	32	157	149	0.7	28	172.54	134.15	0.7	28	180.37	134.08	0.7	38
1/8/2024	6:40	14:16	421	381.29	347.35	1.7	18	432.13	343.10	1.8	12	193.83	135.26	0.8	27	166.3	138.86	0.7	32	173	127	0.7	29	182.72	131.32	0.7	28	176.95	135.99	0.7	38
1/9/2024	6:40	14:15	417	385.92	332.20	1.7	14	418.17	335.80	1.8	12	172.97	135.09	0.7	26	173.3	133.11	0.7	32	125	136	0.6	27	186	131.61	0.8	28	184.34	128.64	0.8	37
1/10/2024	6:40	14:18	424	463.88	331.94	1.9	18	422.42	348.44	1.8	11	161.60	139.04	0.7	39	169.2	130.27	0.7	32	114	124	0.6	26	165.74	138.41	0.7	27	192.69	134.37	0.8	36
1/11/2024	6:40	14:17	417	418.89	331.07	1.8	14	414.95	326.79	1.8	10	164.90	139.79	0.7	26	173.2	127.92	0.7	32	168	131	0.7	26	192.10	128.94	0.8	27	176.11	140.52	0.8	37
1/12/2024	6:40	14:19	413	408.78	341.72	1.8	20	426.04	338.92	1.9	18	142.67	129.09	0.7	27	172.2	129.99	0.7	32	157	126	0.7	36	172.35	133.89	0.7	28	174.24	121.05	0.7	38
1/13/2024	5:40	13:11	394	435.49	316.80	1.9	13	464.17	337.48	2.0	10	202.92	123.50	0.8	26	187.4	128.24	0.8	32	206	134	0.9	24	189.00	137.27	0.8	27	190.70	128.92	0.8	37
1/14/2024	6:40	14:15	415	396.52	308.19	1.7	12	424.65	346.63	1.9	10	195.72	136.22	0.8	25	172.3	134.86	0.7	32	176	132	0.7	25	178.48	132.74	0.7	26	171.98	124.63	0.7	36
1/15/2024	6:40	14:17	419	429.47	331.31	1.8	14	428.12	337.28	1.8	11	172.47	134.79	0.7	27	163.4	129.01	0.7	32	163	144	0.7	25	185.61	129.49	0.8	27	181.43	126.47	0.7	37
1/16/2024	6:40	14:22	427	432.52	331.66	1.8	12	432.72	339.85	1.8	11	156.22	135.96	0.7	26	184.6	131.99	0.7	32	178	135	0.7	24	190.02	134.38	0.8	26	188.79	130.33	0.7	36
1/17/2024	6:40	14:17	413	423.85	359.62	1.9	12	398.08	339.55	1.8	10	175.10	137.84	0.8	25	182.2	128.44	0.8	32	179	122	0.7	25	171.61	132.09	0.7	26	174.63	122.58	0.7	36
1/18/2024	6:40	14:19	416	441.18	336.07	1.9	14	437.50	322.49	1.8	10	181.48	135.88	0.8	26	179.8	131.01	0.7	32	159	117	0.7	27	179.35	137.52	0.8	25	178.43	132.47	0.7	35
1/19/2024	6:40	14:25	415	428.63	332.06	1.8	14	431.52	349.71	1.9	10	182.66	139.79	0.8	26	156.7	128.40	0.7	32	163	127	0.7	24	163.17	131.45	0.7	27	171.00	139.81	0.7	36
1/20/2024	5:40	13:10	400	417.42	323.68	1.9	13	420.17	321.96	1.9	10	174.74	146.02	0.8	25	163.4	133.97	0.7	32	177	145	0.8	25	167.09	130.13	0.7	24	175.81	138.58	0.8	35
1/21/2024	6:40	14:16	415	405.55	338.70	1.8	12	426.28	324.04	1.8	8	183.04	139.55	0.8	27	174.5	127.31	0.7	32	178	135	0.8	26	178.33	129.71	0.7	24	162.77	132.25	0.7	36
1/22/2024	6:40	14:18	409	388.18	328.74	1.8	11	378.22	338.01	1.8	9	172.87	138.09	0.8	26	165.7	121.20	0.7	33	172	145	0.8	26	185.54	140.03	0.8	25	185.00	136.04	0.8	36
1/23/2024	6:40	14:18	417	394.22	327.83	1.7	11	463.82	346.62	1.9	9	174.37	137.02	0.7	25	155.0	121.51	0.7	32	183	135	0.8	26	184.63	135.66	0.8	26	168.23	138.82	0.7	35
1/24/2024	6:40	14:25	430	441.74	329.76	1.8	14	438.89	362.20	1.9	11	178.63	144.46	0.8	26	176.6	126.34	0.7	32	112	113	0.5	26	190.98	146.71	0.8	24	182.84	146.60	0.8	35
1/25/2024	6:40	14:15	410	434.30	327.29	1.9	12	426.04	334.37	1.9	8	173.88	143.68	0.8	26	170.9	114.42	0.7	32	160	116	0.7	26	169.26	135.12	0.7	24	178.58	124.25	0.7	34
1/26/2024	6:40	14:17	414	416.17	340.20	1.8	12	415.81	315.15	1.8	10	172.28	153.03	0.8	22	158.2	122.41	0.7	32	174	141	0.8	26	179.24	138.07	0.8	25	181.11	140.99	0.8	34
1/27/2024	5:40	13:10	398	372.25	348.39	1.8	12	396.42	312.34	1.8	9	164.04	127.72	0.7	25	163.6	119.53	0.7	32	146	131	0.7	27	176.87	124.98	0.8	25	175.50	131.33	0.8	34
1/28/2024	6:40	14:17	409	428.33	336.92	1.9	14	416.95	340.65	1.9	8	192.60	145.02	0.8	16	175.7	124.25	0.7	30	176	127	0.7	25	178.71	129.93	0.8	24	174.32	133.15	0.8	34
1/29/2024	6:10	14:17	428	447.34	343.02	1.8	12	432.20	353.61	1.8	12	173.66	157.50	0.8	14	169.6	126.28	0.7	32	158	126	0.7	26	174.02	129.34	0.7	26	182.02	134.87	0.7	34
1/30/2024	6:15	14:21	430	442.97	353.50	1.9	14	425.52	334.60	1.8	12	185.38	150.46	0.8	24	179.8	119.02	0.7	31	174	120	0.7	24	182.58	132.66	0.7	27	197.36	131.38	0.8	35
1/31/2024	6:15	14:21	422	440.81	351.20	1.9	12	439.70	340.58	1.8	10	177.68	140.41	0.8	26	175.0	134.75	0.7	32	161	132	0.7	24	179.34	138.69	0.8	26	182.47	137.90	0.8	36
January 2024 Total				13,066	10,415			13,234	10,452			5,495	4,305			5,292	3,969			5,132	4,058			5,556	4,163			5,549	4,125		
Cumulative Total				138,155	106,957			139,986	107,863			47,231	172,619			44,397	168,573			17,000	13,119			57,538	178,577			55,143	175,347		

Notes:
 gpm - gallons per minute
 psi - pounds per square inch
 1. Injection duration indicates the total minutes of active injection per day, accounting for any downtime in injections that may have occurred throughout the day. Therefore, injection duration may be less than the difference in daily injection start and stop times indicated.
 2. Carbon substrate solution is batch mixed. Batches of carbon substrate solution includes the following components in solution with water: 2.5% molasses, 6.25% 0.5 Molar Sodium Bicarbonate Solution, 0.001% trace mineral solution, and 5 milligrams per liter Vitamin B12. Beginning on January 29, 2024, batches of carbon substrate solution includes the following components in solution with water: 5% molasses, 12.5% 0.5 Molar Sodium Bicarbonate Solution, 0.001% trace mineral solution, and 5 milligrams per liter Vitamin B12.
 3. Distribution water solution is batch mixed. Batches of distribution water solution includes 0.0025 pounds of Vitamin C per gallon of water.
 4. Prior to April 6, 2023, injections into Area 1 Deep wells consisted of only water as part of the total dissolved solids (TDS)-reduction period of the treatability study water injection.

Table 3
Summary of Injection Activities
Area 2 - January 2024
Unit 4 Source Area Bioremediation Treatability Study

Study Area				Area 2 Intermediate								Area 2 Deep								Area 2 Deep								
Well ID				U4-E-09I				U4-E-10I				U4-E-06D				U4-E-08D				U4-E-09D				U4-E-010D				
Date	Injection Start Time	Injection Stop Time	Duration ⁽¹⁾	Volume Carbon Solution Injected ⁽²⁾	Volume Distribution Water Solution Injected ⁽³⁾	Average Flow Rate	Maximum Injection Pressure	Volume Carbon Solution Injected ⁽²⁾	Volume Distribution Water Solution Injected ⁽³⁾	Average Flow Rate	Maximum Injection Pressure	Volume Carbon Solution Injected ⁽²⁾	Volume Distribution Water Solution Injected ⁽³⁾	Average Flow Rate	Maximum Injection Pressure	Volume Carbon Solution Injected ⁽²⁾	Volume Distribution Water Solution Injected ⁽³⁾	Average Flow Rate	Maximum Injection Pressure	Volume Carbon Solution Injected ⁽²⁾	Volume Distribution Water Solution Injected ⁽³⁾	Average Flow Rate	Maximum Injection Pressure	Volume Carbon Solution Injected ⁽²⁾	Volume Distribution Water Solution Injected ⁽³⁾	Average Flow Rate	Maximum Injection Pressure	
			minutes	gallons	gallons	gpm	psi	gallons	gallons	gpm	psi	gallons	gallons	gpm	psi	gallons	gallons	gpm	psi	gallons	gallons	gpm	psi	gallons	gallons	gpm	psi	gallons
1/1/2024	6:40	14:21	416	109.44	85.71	0.5	14	137.83	84.24	0.5	18	126.26	98.94	0.5	22	134	106	0.6	18	121.03	92.12	0.5	24	115.02	83.75	0.5	16	
1/2/2024	6:40	14:17	416	118.42	86.98	0.5	14	114.98	100.52	0.5	18	115.17	78.92	0.5	21	130	99	0.6	20	121.01	92.92	0.5	24	112.97	77.20	0.5	17	
1/3/2024	6:40	14:28	412	137.89	97.93	0.6	15	140.69	91.36	0.6	18	121.36	54.10	0.4	22	134	91	0.5	20	105.99	87.04	0.5	24	-2.02	69.93	0.2	15	
1/4/2024	6:40	14:23	421	114.11	92.61	0.5	14	121.49	87.09	0.5	17	116.76	88.22	0.5	20	128	84	0.5	19	124.45	103.07	0.5	24	109.16	66.88	0.4	16	
1/5/2024	6:40	13:22	479	124.93	78.40	0.4	15	139.62	95.23	0.5	16	126.81	86.37	0.4	20	125	98	0.5	22	130.56	93.77	0.5	24	62.93	71.94	0.3	16	
1/6/2024	5:40	13:10	400	120.37	86.16	0.5	15	127.38	98.72	0.6	17	118.52	99.78	0.5	20	113	88	0.5	19	122.36	82.92	0.5	24	120.91	89.87	0.5	16	
1/7/2024	6:40	14:26	429	134.05	80.91	0.5	15	119.06	109.81	0.5	16	120.99	81.16	0.5	18	118	95	0.5	16	129.59	79.45	0.5	24	79.21	70.93	0.3	20	
1/8/2024	6:40	14:16	421	127.99	82.99	0.5	15	134.18	110.67	0.6	16	120.45	91.02	0.5	20	136	91	0.5	18	124.69	67.92	0.5	24	118.31	68.73	0.4	16	
1/9/2024	6:40	14:15	417	115.71	101.80	0.5	14	134.51	98.19	0.6	16	114.22	89.98	0.5	20	123	84	0.5	18	135.70	91.20	0.5	23	124.01	66.84	0.5	16	
1/10/2024	6:40	14:18	424	126.37	86.90	0.5	14	140.27	87.88	0.5	16	140.43	95.98	0.6	18	114	91	0.5	18	135.53	87.37	0.5	22	53.76	60.95	0.3	22	
1/11/2024	6:40	14:17	417	128.42	66.79	0.5	14	128.36	100.76	0.5	15	122.73	92.17	0.5	18	117	95	0.5	18	117.37	86.49	0.5	22	103.96	78.27	0.4	16	
1/12/2024	6:40	14:19	413	128.40	75.40	0.5	15	118.86	93.86	0.5	18	126.95	80.61	0.5	17	130	94	0.5	21	131.44	98.17	0.6	20	103.53	77.51	0.4	16	
1/13/2024	5:40	13:11	394	138.22	84.94	0.6	14	143.39	91.42	0.6	18	129.11	99.57	0.6	15	115	83	0.5	19	144.43	88.81	0.6	20	107.85	92.39	0.5	16	
1/14/2024	6:40	14:15	415	127.81	95.09	0.5	14	115.99	78.20	0.5	18	123.55	78.18	0.5	16	143	104	0.6	20	109.03	86.25	0.5	18	102.15	86.70	0.5	15	
1/15/2024	6:40	14:17	419	114.45	89.90	0.5	14	117.93	81.88	0.5	18	136.48	89.39	0.5	16	124	98	0.5	18	138.83	101.85	0.6	19	103.38	64.99	0.4	15	
1/16/2024	6:40	14:22	427	125.68	81.96	0.5	14	126.31	77.54	0.5	16	75.21	87.96	0.4	22	107	95	0.5	17	138.14	95.28	0.5	18	108.09	84.32	0.5	16	
1/17/2024	6:40	14:17	413	128.96	37.39	0.4	14	112.75	83.51	0.5	17	136.70	79.45	0.5	14	127	107	0.6	16	156.51	72.67	0.6	17	101.09	68.30	0.4	14	
1/18/2024	6:40	14:19	416	114.26	79.66	0.5	14	133.61	102.01	0.6	18	116.15	85.87	0.5	17	118	85	0.5	16	125.57	103.67	0.6	16	85.97	70.70	0.4	19	
1/19/2024	6:40	14:25	415	128.73	96.11	0.5	13	113.98	104.25	0.5	17	127.06	89.17	0.5	16	126	86	0.5	16	116.20	92.10	0.5	17	106.00	79.16	0.4	15	
1/20/2024	5:40	13:10	400	131.15	91.18	0.6	12	123.34	91.17	0.5	16	117.89	92.91	0.5	16	120	88	0.5	15	130.08	109.34	0.6	17	106.44	80.81	0.5	15	
1/21/2024	6:40	14:16	415	127.51	83.63	0.5	13	130.07	92.15	0.5	16	124.79	100.72	0.5	16	129	99	0.5	16	123.67	97.90	0.5	16	100.41	61.90	0.4	20	
1/22/2024	6:40	14:18	409	112.32	93.12	0.5	12	130.15	74.24	0.5	16	146.20	83.85	0.6	16	125	96	0.5	16	135.89	84.32	0.5	15	119.45	91.90	0.5	15	
1/23/2024	6:40	14:18	417	130.86	103.63	0.6	12	130.02	115.34	0.6	16	106.61	77.71	0.4	16	119	91	0.5	16	131.41	83.51	0.5	16	100.12	77.76	0.4	16	
1/24/2024	6:40	14:25	430	124.98	100.96	0.5	12	141.06	103.88	0.6	16	109.97	76.69	0.4	15	128	105	0.5	17	119.44	94.32	0.5	16	117.16	70.87	0.4	14	
1/25/2024	6:40	14:15	410	127.41	88.24	0.5	12	118.39	96.90	0.5	16	117.32	86.48	0.5	22	118	111	0.6	16	125.33	87.48	0.5	16	116.78	73.17	0.5	15	
1/26/2024	6:40	14:17	414	134.69	81.82	0.5	13	125.97	98.13	0.5	16	117.24	108.60	0.5	17	138	91	0.6	16	134.60	87.69	0.5	16	29.77	83.34	0.3	17	
1/27/2024	5:40	13:10	398	136.25	90.47	0.6	12	120.13	110.62	0.6	16	131.91	102.28	0.6	17	129	85	0.5	16	115.88	113.53	0.6	17	112.61	91.80	0.5	15	
1/28/2024	6:40	14:17	409	120.17	90.36	0.5	12	108.85	83.50	0.5	17	128.30	78.48	0.5	15	132	87	0.5	17	106.61	89.04	0.5	16	113.98	85.61	0.5	14	
1/29/2024	6:10	14:17	428	464.63	364.40	1.9	12	447.18	361.37	1.9	16	147.96	93.29	0.6	16	130	98	0.5	16	136.60	94.83	0.5	16	115.12	84.57	0.5	16	
1/30/2024	6:15	14:21	430	462.77	372.61	1.9	12	419.99	361.69	1.8	16	119.72	107.04	0.5	21	134	95	0.5	18	130.34	101.39	0.5	18	98.60	77.61	0.4	18	
1/31/2024	6:15	14:21	422	456.07	343.37	1.9	12	475.22	364.60	2.0	12	132.08	102.02	0.6	20	140	93	0.6	18	123.76	92.28	0.5	18	124.38	90.71	0.5	16	
January 2024 Total				4,891	3,491			4,892	3,731			3,815	2,757			3,902	2,915			3,942	2,839			3,071	2,399			
Cumulative Total				140,631	112,153			141,634	113,361			105,401	75,837			37,100	29,121			106,610	76,592			102,343	74,368			

Notes:

- gpm - gallons per minute
- psi - pounds per square inch
- 1. Injection duration indicates the total minutes of active injection per day, accounting for any downtime in injections that may have occurred throughout the day. Therefore, injection duration may be less than the difference in daily injection start and stop times indicated.
- 2. Carbon substrate solution is batch mixed. Batches of carbon substrate solution includes the following components in solution with water: 2.5% molasses, 6.25% 0.5 Molar Sodium Bicarbonate Solution, 0.001% trace mineral solution, and 5 milligrams per liter Vitamin B12. Beginning on January 29, 2024, batches of carbon substrate solution includes the following components in solution with water: 5% molasses, 12.5% 0.5 Molar Sodium Bicarbonate Solution, 0.001% trace mineral solution, and 5 milligrams per liter Vitamin B12.
- 3. Distribution water solution is batch mixed. Batches of distribution water solution includes 0.0025 pounds of Vitamin C per gallon of water.

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	E314.0	E300.1	E300.1	E350.1	E351.2	E365.1	Alkalinity by SM2320B	Alkalinity by SM2320B	Alkalinity by SM2320B	Alkalinity by SM2320B	Anions by E300.0/SW906 5A
						Perchlorate	Chlorate	Chlorite	Ammonia (as N)	Total Kjeldahl Nitrogen (TKN)	Phosphorus	Alkalinity as CaCO3	Bicarbonate Alkalinity as CaCO3	Carbonate Alkalinity as CaCO3	Hydroxide Alkalinity as CaCO3	Chloride
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
M-247-100	4/20/2022	N	BL02	UMCf	100.5 - 110.5	12,800	----	3,080	----	----	----	----	----	----	----	----
M-249-100	4/20/2022	N	BL02	UMCf	99.6 - 109.6	26,900,000	----	2,850,000	----	----	----	----	----	----	----	----
M-251-100	4/19/2022	N	BL02	UMCf	92.5 - 102.5	21,100,000	<240,000	3,110,000	----	----	----	----	----	----	----	5,360,000
M-251-100	10/13/2022	N	EM02	UMCf	92.5 - 102.5	11,700,000	----	2,000,000	----	----	----	----	----	----	----	----
M-251-100	11/2/2022	N	EM03	UMCf	92.5 - 102.5	679	----	1,410,000	----	----	----	----	----	----	----	----
M-251-100	12/8/2022	N	EM04	UMCf	92.5 - 102.5	7,040,000	----	1,210,000	----	----	----	----	----	----	----	----
M-251-100	1/11/2023	N	EM05	UMCf	92.5 - 102.5	7,360,000	----	1,600,000	----	----	----	----	----	----	----	----
M-251-100	2/13/2023	N	EM06	UMCf	92.5 - 102.5	4,550,000	----	886,000	----	----	----	----	----	----	----	----
M-251-100	3/17/2023	N	EM07	UMCf	92.5 - 102.5	6,010,000	<24,000	955,000	<117	<700	<33.3	109,000	109,000	<8,450	<8,450	1,480,000 J+
M-251-100	4/21/2023	N	EM08	UMCf	92.5 - 102.5	6,790,000	<240,000	1,340,000	<117	<1,400	42.7 J	----	----	----	----	2,250,000
M-251-100	5/9/2023	N	EM09	UMCf	92.5 - 102.5	10,000,000	<240,000	1,500,000	<117	<1,400	64.2 J	----	----	----	----	2,290,000
M-251-100	6/14/2023	N	EM10	UMCf	92.5 - 102.5	7,880,000	<240,000	1,280,000	<117	<1,400	51.7 J	73,000	73,000	<8,450	<8,450	2,120,000
M-251-100	7/14/2023	N	EM11	UMCf	92.5 - 102.5	9,340,000	<240,000	1,530,000	<117	<1,400	<33.3	----	----	----	----	2,390,000
M-251-100	8/10/2023	N	EM12	UMCf	92.5 - 102.5	9,400,000	<24,000	1,590,000	<117	<1,400	84.9 J	----	----	----	----	1,870,000
M-251-100	9/14/2023	N	EM13	UMCf	92.5 - 102.5	9,930,000	<24,000	1,550,000	<117	<1,400	38.4 J	79,000	79,000	<8,450	<8,450	2,410,000
M-251-100	10/19/2023	N	EM14	UMCf	92.5 - 102.5	9,780,000	<24,000	1,540,000	<117	<700	<33.3	----	----	----	----	2,490,000
M-251-100	11/16/2023	N	EM15	UMCf	92.5 - 102.5	8,730,000 J+	<24000 UJ	1,370,000 J+	<117	<1,400	<33.3	----	----	----	----	2,230,000
M-251-100	12/12/2023	N	EM16	UMCf	92.5 - 102.5	7,950,000	<240,000	1,400,000	<117	<2,800	<33.3	285,000	285,000	<8,450	<8,450	2,450,000
M-251-60	4/18/2022	N	BL02	UMCf	52.3 - 62.3	316,000	<2,400	27,900	----	----	----	----	----	----	----	234,000
M-251-60	3/15/2023	N	EM07	UMCf	52.3 - 62.3	326,000	<2,400	30,800	<117	<140	<33.3	139,000	<8,450	68,100	70,900	240,000
M-251-60	6/14/2023	N	EM10	UMCf	52.3 - 62.3	316,000	<2,400	29,700	<117	<140	50.4 J	126,000	<8,450	72,000	54,200	246,000
M-251-60	9/14/2023	N	EM13	UMCf	52.3 - 62.3	378,000	<2,400	27,600	<117	<140	<33.3	149,000	<8,450	82,400	66,800	281,000
M-251-60	12/11/2023	N	EM16	UMCf	52.3 - 62.3	322,000	<2,400	27,200	<117	<140	46.3 J	138,000	<8,450	120,000	18,200 J	293,000
M-252	4/21/2022	N	BL02	UMCf	132.3 - 142.3	381,000	<2,400	91,200	----	----	----	----	----	----	----	259,000
M-252	3/15/2023	N	EM07	UMCf	132.3 - 142.3	835,000	<2,400	180,000	<117	<140	<33.3	49,300	49,300	<8,450	<8,450	344,000
M-252	9/19/2023	N	EM13	UMCf	132.3 - 142.3	644,000	<2,400	108,000	<117	<140	<33.3	42,200	42,200	<8,450	<8,450	325,000
M-252	12/18/2023	N	EM16	UMCf	132.3 - 142.3	821,000	<2,400	156,000	<117	<140	<33.3	69,200	69,200	<8,450	<8,450	366,000
M-253-100	4/20/2022	N	BL02	UMCf	100.8 - 110.8	505,000	----	457,000	----	----	----	----	----	----	----	----
M-255-100	4/20/2022	N	BL02	UMCf	100.2 - 110.2	564,000	----	75,100	----	----	----	----	----	----	----	----
U4-E-01D	4/18/2022	N	BL02	UMCf	94.7 - 109.7	19,700,000	<240000 R	2,500,000	----	----	----	----	----	----	----	4,560,000
U4-E-01D	3/14/2023	N	EM07	UMCf	94.7 - 109.7	1,360	<24.0	41.5 J+	<117	346	<33.3	140,000	140,000	<8,450	<8,450	108,000
U4-E-011	4/19/2022	N	BL02	UMCf	74.6 - 89.6	1,670,000	<24,000	219,000	----	----	----	----	----	----	----	542,000
U4-E-011	4/19/2022	FD	BL02	UMCf	74.6 - 89.6	2,010,000	<24,000	253,000	----	----	----	----	----	----	----	706,000
U4-E-011	3/14/2023	N	EM07	UMCf	74.6 - 89.6	3,630,000	<24,000	394,000 J+	<117	<560	<33.3	109,000	109,000	<8,450	<8,450	892,000
U4-E-011	4/20/2023	N	EM08	UMCf	74.6 - 89.6	2,310,000	<24,000	262,000	----	----	----	----	----	----	----	693,000
U4-E-011	5/10/2023	N	EM09	UMCf	74.6 - 89.6	2,590,000	<24,000	262,000	----	----	----	----	----	----	----	686,000
U4-E-011	6/12/2023	N	EM10	UMCf	74.6 - 89.6	4,230,000	<24000 UJ	466,000	----	----	----	----	----	----	----	1,410,000
U4-E-011	7/11/2023	N	EM11	UMCf	74.6 - 89.6	912,000	131,000	138,000	----	----	----	----	----	----	----	528,000
U4-E-011	8/10/2023	N	EM12	UMCf	74.6 - 89.6	457,000	<24,000	66,000	----	----	----	----	----	----	----	347,000
U4-E-011	9/11/2023	N	EM13	UMCf	74.6 - 89.6	197,000	500,000	24,800	----	----	----	----	----	----	----	334,000
U4-E-011	10/16/2023	N	EM14	UMCf	74.6 - 89.6	497,000	103,000	54,700	----	----	----	----	----	----	----	375,000
U4-E-011	12/13/2023	N	EM16	UMCf	74.6 - 89.6	1,100	239,000 J-	24,800	----	----	----	----	----	----	----	160,000
U4-E-02D	4/20/2022	N	BL02	UMCf	94.4 - 109.4	5,060,000	<24,000	1,040,000	----	----	----	----	----	----	----	1,460,000
U4-E-02D	3/14/2023	N	EM07	UMCf	94.4 - 109.4	2,490 J+	<240	618 J+	<117	351	<33.3	140,000	140,000	<8,450	<8,450	109,000
U4-E-021	4/18/2022	N	BL02	UMCf	74.4 - 89.4	2,390,000	<24000 R	428,000	----	----	----	----	----	----	----	842,000
U4-E-021	3/14/2023	N	EM07	UMCf	74.4 - 89.4	393,000	<2,400	75,800 J+	<117	<140	116	143,000	143,000	<8,450	<8,450	218,000
U4-E-021	4/20/2023	N	EM08	UMCf	74.4 - 89.4	1,140,000	<24,000	274,000	----	----	----	----	----	----	----	503,000
U4-E-021	5/11/2023	N	EM09	UMCf	74.4 - 89.4	1,190,000	<24,000	309,000	----	----	----	----	----	----	----	604,000
U4-E-021	6/12/2023	N	EM10	UMCf	74.4 - 89.4	913,000	64,100 J-	194,000	----	----	----	----	----	----	----	569,000
U4-E-021	7/11/2023	N	EM11	UMCf	74.4 - 89.4	859,000	39,200 J	193,000	----	----	----	----	----	----	----	576,000
U4-E-021	8/10/2023	N	EM12	UMCf	74.4 - 89.4	572,000	80,300	133,000	----	----	----	----	----	----	----	544,000

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	E314.0	E300.1	E300.1	E350.1	E351.2	E365.1	Alkalinity by SM2320B	Alkalinity by SM2320B	Alkalinity by SM2320B	Alkalinity by SM2320B	Anions by E300.0/SW906 5A
						Perchlorate	Chlorate	Chlorite	Ammonia (as N)	Total Kjeldahl Nitrogen (TKN)	Phosphorus	Alkalinity as CaCO3	Bicarbonate Alkalinity as CaCO3	Carbonate Alkalinity as CaCO3	Hydroxide Alkalinity as CaCO3	Chloride
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-E-02I	9/11/2023	N	EM13	UMCf	74.4 - 89.4	508,000	999,000	111,000	----	----	----	----	----	----	----	523,000
U4-E-02I	10/16/2023	N	EM14	UMCf	74.4 - 89.4	237,000	149,000	63,400	----	----	----	----	----	----	----	497,000
U4-E-02I	12/14/2023	N	EM16	UMCf	74.4 - 89.4	89,400	494,000 J-	21,600	----	----	----	----	----	----	----	231,000
U4-E-03D	4/19/2022	N	BL02	UMCf	95.1 - 110.1	16,600,000	<24,000	2,170,000	----	----	----	----	----	----	----	4,310,000
U4-E-03D	10/13/2022	N	EM02	UMCf	95.1 - 110.1	8,100,000	<240,000	1,320,000	----	----	----	----	----	----	----	2,400,000
U4-E-03D	11/3/2022	N	EM03	UMCf	95.1 - 110.1	7,560,000	<240,000	1,090,000	----	----	----	----	----	----	----	1,950,000
U4-E-03D	12/6/2022	N	EM04	UMCf	95.1 - 110.1	6,630,000	<240000 UJ	1,110,000 J+	----	----	----	----	----	----	----	1,740,000
U4-E-03D	1/9/2023	N	EM05	UMCf	95.1 - 110.1	6,670,000	<240,000	937,000	----	----	----	----	----	----	----	1,730,000
U4-E-03D	2/13/2023	N	EM06	UMCf	95.1 - 110.1	6,890,000	<24,000	948,000	----	----	----	----	----	----	----	1,620,000
U4-E-03D	3/13/2023	N	EM07	UMCf	95.1 - 110.1	6,260,000	<24,000	654,000 J-	----	----	----	----	----	----	----	1,690,000
U4-E-03D	3/14/2023	N	EM07	UMCf	95.1 - 110.1	6,370,000	<24,000	833,000 J+	<117	<1,400	<33.3	131,000	131,000	<8,450	<8,450	1,700,000
U4-E-03D	4/19/2023	N	EM08	UMCf	95.1 - 110.1	6,990,000	<24,000	948,000	----	----	----	----	----	----	----	1,750,000
U4-E-03D	5/11/2023	N	EM09	UMCf	95.1 - 110.1	5,450,000	27,000 J	797,000	----	----	----	----	----	----	----	1,530,000
U4-E-03D	6/12/2023	N	EM10	UMCf	95.1 - 110.1	5,650,000	<240000 UJ	835,000	----	----	----	----	----	----	----	1,870,000
U4-E-03D	7/11/2023	N	EM11	UMCf	95.1 - 110.1	6,280,000	<240,000	963,000	----	----	----	----	----	----	----	2,180,000
U4-E-03D	8/10/2023	N	EM12	UMCf	95.1 - 110.1	6,410,000	<240,000	934,000	----	----	----	----	----	----	----	2,360,000
U4-E-03D	9/11/2023	N	EM13	UMCf	95.1 - 110.1	7,790,000	<24,000	1,030,000	----	----	----	----	----	----	----	2,280,000
U4-E-03D	10/16/2023	N	EM14	UMCf	95.1 - 110.1	7,760,000	<24,000	1,100,000	----	----	----	----	----	----	----	2,340,000
U4-E-04D	4/19/2022	N	BL02	UMCf	95.0 - 110.0	12,100,000	<24,000	1,270,000	----	----	----	----	----	----	----	2,640,000
U4-E-04D	3/14/2023	N	EM07	UMCf	95.0 - 110.0	1,200	<24.0	29.6 J+	<117	345	35.3 J	142,000	142,000	<8,450	<8,450	106,000
U4-E-04I	4/18/2022	N	BL02	UMCf	75.0 - 90.0	793,000	<2,400	47,900	----	----	----	----	----	----	----	321,000
U4-E-04I	3/14/2023	N	EM07	UMCf	75.0 - 90.0	11,600,000	<240,000	1,020,000 J+	<117	<1,400	<33.3	128,000	128,000	<8,450	<8,450	2,810,000
U4-E-05D	4/19/2022	N	BL02	UMCf	95.0 - 110.0	11,600,000	<240,000	1,900,000	----	----	----	----	----	----	----	2,770,000
U4-E-05D	3/16/2023	N	EM07	UMCf	95.0 - 110.0	1,560	<24.0	269	304	636	49.9 J	151,000	151,000	<8,450	<8,450	110,000
U4-E-05I	4/19/2022	N	BL02	UMCf	75.0 - 90.0	993,000	<24,000	164,000	----	----	----	----	----	----	----	400,000
U4-E-05I	3/15/2023	N	EM07	UMCf	75.0 - 90.0	1,030,000	<24,000	181,000	<117	<140	92.3 J	142,000	142,000	<8,450	<8,450	368,000
U4-E-06D	4/11/2022	N	BL02	UMCf	95.1 - 110.1	4,550,000	<24000 R	320,000	<117	<1,400	33.3 R	68,700	68,700	<8,450	<8,450	1,150,000
U4-E-06I	4/11/2022	N	BL02	UMCf	73.2 - 88.2	660,000	<2,400	36,400	<117	<700	33.3 R	96,800	96,800	<8,450	<8,450	355,000
U4-E-06I	4/11/2022	FD	BL02	UMCf	73.2 - 88.2	553,000	<12,000	35,900	<117	<700	33.3 R	96,100	96,100	<8,450	<8,450	345,000
U4-E-06I	10/12/2022	N	EM02	UMCf	73.2 - 88.2	4,900,000	<240,000	367,000	----	----	----	----	----	----	----	1,140,000
U4-E-06I	11/3/2022	N	EM03	UMCf	73.2 - 88.2	3,180,000	<240,000	243,000	----	----	----	----	----	----	----	895,000
U4-E-06I	12/6/2022	N	EM04	UMCf	73.2 - 88.2	1,860,000	25,700 J	133,000 J+	----	----	----	----	----	----	----	572,000
U4-E-06I	1/9/2023	N	EM05	UMCf	73.2 - 88.2	5,170,000 J-	<240,000	346,000	----	----	----	----	----	----	----	1,340,000
U4-E-06I	2/13/2023	N	EM06	UMCf	73.2 - 88.2	4,250,000	<24,000	313,000	----	----	----	----	----	----	----	1,200,000
U4-E-06I	3/13/2023	N	EM07	UMCf	73.2 - 88.2	1,550,000	63,600	145,000	----	----	----	----	----	----	----	753,000
U4-E-06I	4/17/2023	N	EM08	UMCf	73.2 - 88.2	2,300,000	<24,000	163,000	----	----	----	----	----	----	----	905,000
U4-E-06I	5/15/2023	N	EM09	UMCf	73.2 - 88.2	7,840,000	<24,000	490,000	----	----	----	----	----	----	----	1,920,000
U4-E-06I	6/12/2023	N	EM10	UMCf	73.2 - 88.2	5,570,000	<240000 UJ	431,000	----	----	----	----	----	----	----	1,670,000
U4-E-06I	7/11/2023	N	EM11	UMCf	73.2 - 88.2	6,040,000	<240,000	440,000	----	----	----	----	----	----	----	1,680,000
U4-E-06I	8/11/2023	N	EM12	UMCf	73.2 - 88.2	6,900,000	<24,000	461,000	----	----	----	----	----	----	----	1,900,000
U4-E-06I	9/11/2023	N	EM13	UMCf	73.2 - 88.2	2,810,000	31,700 J	171,000	----	----	----	----	----	----	----	949,000
U4-E-06I	10/16/2023	N	EM14	UMCf	73.2 - 88.2	2,010,000	<24,000	119,000	----	----	----	----	----	----	----	766,000
U4-E-06I	12/13/2023	N	EM16	UMCf	73.2 - 88.2	1,510,000	76,700	179,000	----	----	----	----	----	----	----	1,830,000
U4-E-07D	4/12/2022	N	BL02	UMCf	94.6 - 109.6	18,500,000	<240,000	1,700,000	<117	<7,000	<33.3	120,000	----	----	----	3,780,000
U4-E-07I	4/12/2022	N	BL02	UMCf	74.7 - 89.7	4,470,000	<24,000	301,000	<117	<7,000	194 J+	179,000	----	----	----	723,000
U4-E-07I	10/11/2022	N	EM02	UMCf	74.7 - 89.7	7,420,000	<240,000	948,000	----	----	----	----	----	----	----	1,810,000
U4-E-07I	11/3/2022	N	EM03	UMCf	74.7 - 89.7	6,410,000	<240,000	877,000	----	----	----	----	----	----	----	1,580,000
U4-E-07I	12/6/2022	N	EM04	UMCf	74.7 - 89.7	6,320,000	<240000 UJ	891,000	----	----	----	----	----	----	----	1,490,000
U4-E-07I	1/9/2023	N	EM05	UMCf	74.7 - 89.7	7,100,000	531,000	855,000	----	----	----	----	----	----	----	1,720,000
U4-E-07I	2/13/2023	N	EM06	UMCf	74.7 - 89.7	7,680,000	<24,000	858,000	----	----	----	----	----	----	----	1,690,000
U4-E-07I	3/13/2023	N	EM07	UMCf	74.7 - 89.7	7,090,000	<24,000	768,000 J-	----	----	----	----	----	----	----	1,770,000

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	E314.0	E300.1	E300.1	E350.1	E351.2	E365.1	Alkalinity by SM2320B	Alkalinity by SM2320B	Alkalinity by SM2320B	Alkalinity by SM2320B	Anions by E300.0/SW906 5A
						Perchlorate	Chlorate	Chlorite	Ammonia (as N)	Total Kjeldahl Nitrogen (TKN)	Phosphorus	Alkalinity as CaCO3	Bicarbonate Alkalinity as CaCO3	Carbonate Alkalinity as CaCO3	Hydroxide Alkalinity as CaCO3	Chloride
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-E-07I	4/19/2023	N	EM08	UMCf	74.7 - 89.7	6,690,000	<24,000	738,000	----	----	----	----	----	----	----	1,630,000
U4-E-07I	5/15/2023	N	EM09	UMCf	74.7 - 89.7	5,320,000	<24,000	561,000	----	----	----	----	----	----	----	1,600,000
U4-E-07I	6/12/2023	N	EM10	UMCf	74.7 - 89.7	5,540,000	<24000 UJ	618,000	----	----	----	----	----	----	----	1,530,000
U4-E-07I	7/11/2023	N	EM11	UMCf	74.7 - 89.7	6,050,000	<24,000	667,000	----	----	----	----	----	----	----	1,750,000
U4-E-07I	8/11/2023	N	EM12	UMCf	74.7 - 89.7	5,870,000	<24,000	672,000	----	----	----	----	----	----	----	1,860,000
U4-E-07I	9/11/2023	N	EM13	UMCf	74.7 - 89.7	7,300,000	<24,000	689,000	----	----	----	----	----	----	----	2,080,000
U4-E-07I	10/16/2023	N	EM14	UMCf	74.7 - 89.7	7,380,000	<24,000	687,000	----	----	----	----	----	----	----	2,020,000
U4-E-07I	12/13/2023	N	EM16	UMCf	74.7 - 89.7	8,270,000	<24,000	747,000	----	----	----	----	----	----	----	1,990,000
U4-E-08D	4/12/2022	N	BL02	UMCf	94.6 - 109.6	20,600,000	<240,000	1,570,000	<117	<7,000	<33.3	131,000	----	----	----	4,180,000
U4-E-08D	10/11/2022	N	EM02	UMCf	94.6 - 109.6	12,000,000	<240,000	1,330,000	----	----	----	----	----	----	----	2,780,000
U4-E-08D	11/3/2022	N	EM03	UMCf	94.6 - 109.6	15,000,000	<240,000	1,200,000	----	----	----	----	----	----	----	2,490,000
U4-E-08D	12/6/2022	N	EM04	UMCf	94.6 - 109.6	9,590,000	<240000 UJ	1,110,000 J+	----	----	----	----	----	----	----	2,210,000
U4-E-08D	1/9/2023	N	EM05	UMCf	94.6 - 109.6	10,900,000	<240,000	1,140,000	----	----	----	----	----	----	----	2,400,000
U4-E-08D	2/13/2023	N	EM06	UMCf	94.6 - 109.6	9,600,000	<240,000	1,070,000	----	----	----	----	----	----	----	2,140,000
U4-E-08D	3/13/2023	N	EM07	UMCf	94.6 - 109.6	8,690,000	<240,000	1,130,000	----	----	----	----	----	----	----	2,370,000
U4-E-08D	4/19/2023	N	EM08	UMCf	94.6 - 109.6	779,000	<24,000	930,000	----	----	----	----	----	----	----	2,140,000
U4-E-08D	5/17/2023	N	EM09	UMCf	94.6 - 109.6	8,830,000	<24,000	910,000	----	----	----	----	----	----	----	2,060,000
U4-E-08D	6/12/2023	N	EM10	UMCf	94.6 - 109.6	7,060,000	<240000 UJ	859,000	----	----	----	----	----	----	----	1,930,000
U4-E-08D	7/11/2023	N	EM11	UMCf	94.6 - 109.6	8,980,000	<24,000	921,000	----	----	----	----	----	----	----	2,010,000
U4-E-09D	4/15/2022	N	BL02	UMCf	94.5 - 109.5	7,850,000	<24,000	464,000	<117	<3,500	<33.3	76,100	76,100	<8,450	<8,450	1,710,000
U4-E-09I	4/14/2022	N	BL02	UMCf	74.9 - 89.9	2,210,000	<24,000	130,000	<117	<1,400	52.3 J	105,000	105,000	<8,450	<8,450	638,000
U4-E-10D	4/13/2022	N	BL02	UMCf	94.5 - 109.5	3,430,000	<24,000	412,000	<117	<1,400	33.3 R	59,100	51,600	<8,450	<8,450	895,000
U4-E-10I	4/13/2022	N	BL02	UMCf	74.2 - 89.2	3,550,000	<24,000	407,000	<117	<1,400	33.3 R	114,000	114,000	<8,450	<8,450	911,000
U4-MW-01D	4/19/2022	N	BL02	UMCf	96.7 - 106.7	5,180,000	<24,000	708,000	----	----	----	----	----	----	----	1,040,000
U4-MW-01D	2/16/2023	N	EM06	UMCf	96.7 - 106.7	6,010,000	----	647,000	----	----	----	----	----	----	----	----
U4-MW-01D	3/20/2023	N	EM07	UMCf	96.7 - 106.7	4,300,000	<24,000	1,140,000	<117	<560	<33.3	126,000	126,000	<8,450	<8,450	955,000
U4-MW-01D	6/13/2023	N	EM10	UMCf	96.7 - 106.7	3,100,000	<24000 UJ	469,000	<117	<280	40.0 J	78,100	78,100	<8,450	<8,450	723,000
U4-MW-01D	9/14/2023	N	EM13	UMCf	96.7 - 106.7	3,000,000	<24,000	429,000	<117	<280	<33.3	85,200	85,200	<8,450	<8,450	727,000
U4-MW-01D	12/14/2023	N	EM16	UMCf	96.7 - 106.7	3,030,000	<24,000	372,000	<117	<280	1,900	440,000	440,000	<8,450	<8,450	714,000
U4-MW-01DD	4/19/2022	N	BL02	UMCf	119.9 - 129.9	217,000	<2,400	29,800	----	----	----	----	----	----	----	191,000
U4-MW-01DD	4/19/2022	FD	BL02	UMCf	119.9 - 129.9	202,000	<2,400	28,500	----	----	----	----	----	----	----	191,000
U4-MW-01DD	3/15/2023	N	EM07	UMCf	119.9 - 129.9	2,140,000	<24,000	307,000	<117	<140	108	62,600	62,600	<8,450	<8,450	539,000
U4-MW-01DD	6/13/2023	N	EM10	UMCf	119.9 - 129.9	1,480,000	<24000 UJ	239,000	<117	<140	87.1 J	36,300	36,300	<8,450	<8,450	430,000
U4-MW-01DD	9/14/2023	N	EM13	UMCf	119.9 - 129.9	2,110,000	<24,000	267,000	<117	<140	<33.3	46,600	46,600	<8,450	<8,450	437,000
U4-MW-01DD	12/15/2023	N	EM16	UMCf	119.9 - 129.9	944,000	<24,000	118,000 J-	<117	<140	51.0 J	55,200	55,200	<8,450	<8,450	312,000
U4-MW-01I	4/19/2022	N	BL02	UMCf	76.7 - 86.7	3,510,000	<24,000	410,000	----	----	----	----	----	----	----	920,000
U4-MW-01I	3/20/2023	N	EM07	UMCf	76.7 - 86.7	5,140,000	<24,000	679,000	<117	<280	<33.3	339,000	339,000	<8,450	<8,450	1,420,000
U4-MW-01I	6/12/2023	N	EM10	UMCf	76.7 - 86.7	3,060,000	<24000 UJ	485,000	<117	<560	51.7 J	75,300	75,300	<8,450	<8,450	772,000
U4-MW-01I	9/14/2023	N	EM13	UMCf	76.7 - 86.7	3,980,000	<24,000	532,000	<117	<280	<33.3	81,500	81,500	<8,450	<8,450	850,000
U4-MW-01I	12/15/2023	N	EM16	UMCf	76.7 - 86.7	5,310,000	<24,000	569,000 J-	<117	<280	<33.3	88,400	88,400	<8,450	<8,450	1,160,000
U4-MW-01S	4/18/2022	N	BL02	UMCf	54.7 - 64.7	312,000	<2,400	37,300	----	----	----	----	----	----	----	289,000
U4-MW-01S	3/15/2023	N	EM07	UMCf	54.7 - 64.7	241,000	3,630 J	22,600	<117	<140 UJ	39.4 J	142,000	131,000	10,300 J	<8,450	261,000
U4-MW-01S	6/13/2023	N	EM10	UMCf	54.7 - 64.7	288,000	<2,400	28,100	<117	<140 UJ	37.6 J	129,000	119,000	9,840 J	<8,450	270,000
U4-MW-01S	9/15/2023	N	EM13	UMCf	54.7 - 64.7	251,000	<2,400	21,300	<117	<140 UJ	<33.3	138,000	126,000	12,100 J	<8,450	286,000
U4-MW-01S	12/13/2023	N	EM16	UMCf	54.7 - 64.7	213,000	<2,400	15,600	<117	<140	<33.3	161,000	145,000	15,900 J	<8,450	257,000
U4-MW-02D	4/14/2022	N	BL02	UMCf	95.0 - 110.0	24,800,000	<240,000	2,850,000	----	----	----	----	----	----	----	6,150,000
U4-MW-02D	10/11/2022	N	EM02	UMCf	95.0 - 110.0	28,400,000	----	3,530,000	----	----	----	----	----	----	----	----
U4-MW-02D	11/1/2022	N	EM03	UMCf	95.0 - 110.0	27,900,000	----	3,790,000	----	----	----	----	----	----	----	----
U4-MW-02D	12/7/2022	N	EM04	UMCf	95.0 - 110.0	23,500,000	----	3,590,000	----	----	----	----	----	----	----	----
U4-MW-02D	1/10/2023	N	EM05	UMCf	95.0 - 110.0	23,800,000	----	3,140,000	----	----	----	----	----	----	----	----
U4-MW-02D	2/13/2023	N	EM06	UMCf	95.0 - 110.0	21,700,000	----	3,220,000	----	----	----	----	----	----	----	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	E314.0	E300.1	E300.1	E350.1	E351.2	E365.1	Alkalinity by SM2320B	Alkalinity by SM2320B	Alkalinity by SM2320B	Alkalinity by SM2320B	Anions by E300.0/SW906 5A
						Perchlorate	Chlorate	Chlorite	Ammonia (as N)	Total Kjeldahl Nitrogen (TKN)	Phosphorus	Alkalinity as CaCO3	Bicarbonate Alkalinity as CaCO3	Carbonate Alkalinity as CaCO3	Hydroxide Alkalinity as CaCO3	Chloride
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-02D	3/17/2023	N	EM07	UMCf	95.0 - 110.0	19,700,000	<240,000	2,190,000	<117	<1,400	<33.3	126,000	126,000	<8,450	<8,450	4,810,000
U4-MW-02D	4/19/2023	N	EM08	UMCf	95.0 - 110.0	21,900,000	<240,000	3,080,000	<117	<5,600	64.6 J	----	----	----	----	5,540,000
U4-MW-02D	5/9/2023	N	EM09	UMCf	95.0 - 110.0	25,300,000	<240,000	2,720,000	<117	<2800 R	55.1 J	----	----	----	----	5,200,000
U4-MW-02D	6/13/2023	N	EM10	UMCf	95.0 - 110.0	17,800,000	<240,000	2,820,000	<117	<2,800	98.1 J	129,000	129,000	<8,450	<8,450	4,360,000
U4-MW-02D	7/18/2023	N	EM11	UMCf	95.0 - 110.0	21,200,000	<240,000	2,780,000	<117	<2800 UJ	<33.3	----	----	----	----	5,070,000
U4-MW-02D	8/14/2023	N	EM12	UMCf	95.0 - 110.0	16,900,000	<240,000	2,620,000	<117	<1,400	<33.3	----	----	----	----	4,680,000
U4-MW-02D	9/11/2023	N	EM13	UMCf	95.0 - 110.0	18,500,000	<480,000	2,210,000	<117	<2,800	148	140,000	140,000	<8,450	<8,450	4,350,000
U4-MW-02D	10/19/2023	N	EM14	UMCf	95.0 - 110.0	21,600,000	<240,000	2,450,000	<117	<2,800	<33.3	----	----	----	----	4,900,000
U4-MW-02D	11/15/2023	N	EM15	UMCf	95.0 - 110.0	17,600,000	<240000 UJ	1,240,000 J-	<117	<1,400	<33.3	----	----	----	----	4,410,000
U4-MW-02D	12/14/2023	N	EM16	UMCf	95.0 - 110.0	18,300,000	<240,000	2,170,000	<117	<7,000	58.0 J	128,000	128,000	<8,450	<8,450	3,810,000
U4-MW-02I	4/14/2022	N	BL02	UMCf	75.0 - 90.0	2,420,000	<24,000	291,000	----	----	----	----	----	----	----	808,000
U4-MW-02I	10/11/2022	N	EM02	UMCf	75.0 - 90.0	5,380,000	----	891,000	----	----	----	----	----	----	----	----
U4-MW-02I	11/2/2022	N	EM03	UMCf	75.0 - 90.0	7,270,000	----	1,190,000	----	----	----	----	----	----	----	----
U4-MW-02I	11/2/2022	FD	EM03	UMCf	75.0 - 90.0	6,610,000	----	1,200,000	----	----	----	----	----	----	----	----
U4-MW-02I	12/8/2022	N	EM04	UMCf	75.0 - 90.0	707,000	----	103,000	----	----	----	----	----	----	----	----
U4-MW-02I	12/8/2022	FD	EM04	UMCf	75.0 - 90.0	737,000	----	105,000	----	----	----	----	----	----	----	----
U4-MW-02I	1/13/2023	N	EM05	UMCf	75.0 - 90.0	4,490,000	----	619,000	----	----	----	----	----	----	----	----
U4-MW-02I	1/13/2023	FD	EM05	UMCf	75.0 - 90.0	4,410,000	----	620,000	----	----	----	----	----	----	----	----
U4-MW-02I	2/15/2023	N	EM06	UMCf	75.0 - 90.0	12,600,000	----	1,490,000 J+	----	----	----	----	----	----	----	----
U4-MW-02I	2/15/2023	FD	EM06	UMCf	75.0 - 90.0	12,000,000	----	1,410,000 J+	----	----	----	----	----	----	----	----
U4-MW-02I	3/17/2023	N	EM07	UMCf	75.0 - 90.0	12,000,000	<240,000	1,300,000	<117	<1,400	<33.3	311,000	311,000	<8,450	<8,450	3,130,000
U4-MW-02I	3/17/2023	FD	EM07	UMCf	75.0 - 90.0	12,300,000	<240,000	133,000 J	<117	<1,400	<33.3	306,000	306,000	<8,450	<8,450	3,120,000
U4-MW-02I	4/20/2023	N	EM08	UMCf	75.0 - 90.0	211,000	<2,400	33,000	<117	1,780	34.1 J	----	----	----	----	237,000
U4-MW-02I	4/20/2023	FD	EM08	UMCf	75.0 - 90.0	212,000	<2,400	32,200	<117	1,560	<33.3	----	----	----	----	240,000
U4-MW-02I	5/9/2023	N	EM09	UMCf	75.0 - 90.0	187,000	37,600	35,000	<117	894	38.4 J	----	----	----	----	521,000
U4-MW-02I	5/9/2023	FD	EM09	UMCf	75.0 - 90.0	190,000	32,800	35,800	<117	1,030	43.2 J	----	----	----	----	510,000
U4-MW-02I	6/12/2023	N	EM10	UMCf	75.0 - 90.0	174,000	8,820 J-	56,200	<117	<140	60.1 J	1,130,000	1,130,000	<8,450	<8,450	611,000
U4-MW-02I	6/12/2023	FD	EM10	UMCf	75.0 - 90.0	170,000	9,030 J-	57,500	<117	<140	43.8 J	1,160,000	1,160,000	<8,450	<8,450	611,000
U4-MW-02I	7/18/2023	N	EM11	UMCf	75.0 - 90.0	<120	33,900 J-	158	<117	1,400	<33.3 UJ	----	----	----	----	452,000
U4-MW-02I	7/18/2023	FD	EM11	UMCf	75.0 - 90.0	<240	37,300 J-	159	<117	1,400	35.4 J	----	----	----	----	457,000
U4-MW-02I	8/11/2023	N	EM12	UMCf	75.0 - 90.0	3,240,000	<24,000	435,000	<117	<1,400	56.9 J	----	----	----	----	1,480,000
U4-MW-02I	8/11/2023	FD	EM12	UMCf	75.0 - 90.0	3,120,000	<24,000	429,000	<117	<700	<33.3	----	----	----	----	1,630,000
U4-MW-02I	9/11/2023	N	EM13	UMCf	75.0 - 90.0	1,430,000	118,000 J+	239,000	<117	<140	<33.3	1,490,000	1,490,000	<8,450	<8,450	1,490,000
U4-MW-02I	9/11/2023	FD	EM13	UMCf	75.0 - 90.0	1,360,000	128,000 J+	246,000	<117	<140	34.8 J	1,490,000	1,490,000	<8,450	<8,450	1,490,000
U4-MW-02I	10/19/2023	N	EM14	UMCf	75.0 - 90.0	5,630,000	<24,000	678,000	<117	<700	<33.3	----	----	----	----	2,360,000
U4-MW-02I	10/19/2023	FD	EM14	UMCf	75.0 - 90.0	5,640,000	<24,000	692,000	<117	<700	<33.3	----	----	----	----	2,350,000
U4-MW-02I	11/15/2023	N	EM15	UMCf	75.0 - 90.0	4,390,000 J+	<24000 UJ	532,000 J-	<117	<280	<33.3	----	----	----	----	2,440,000
U4-MW-02I	11/15/2023	FD	EM15	UMCf	75.0 - 90.0	4,370,000 J+	<24000 UJ	535,000 J-	<117	<280	<33.3	----	----	----	----	2,450,000
U4-MW-02I	12/14/2023	N	EM16	UMCf	75.0 - 90.0	5,460,000	47,100 J	614,000	<117	<1,400	<33.3	1,840,000	1,840,000	<8,450	<8,450	2,360,000
U4-MW-02I	12/14/2023	FD	EM16	UMCf	75.0 - 90.0	5,490,000	35,700 J	723,000	<117	<1,400	<33.3	1,860,000	1,860,000	<8,450	<8,450	2,550,000
U4-MW-03D	4/20/2022	N	BL02	UMCf	96.6 - 106.6	9,200,000	<240,000	1,430,000	----	----	----	----	----	----	----	2,110,000
U4-MW-03D	2/16/2023	N	EM06	UMCf	96.6 - 106.6	7,490,000	----	997,000	----	----	----	----	----	----	----	----
U4-MW-03D	3/16/2023	N	EM07	UMCf	96.6 - 106.6	6,830,000	<24,000	1,070,000	<117	<1,400	<33.3	62,000	62,000	<8,450	<8,450	1,550,000
U4-MW-03D	3/16/2023	FD	EM07	UMCf	96.6 - 106.6	7,070,000	<24,000	985,000	<117	<1,400	<33.3	62,100	62,100	<8,450	<8,450	1,520,000
U4-MW-03D	6/15/2023	N	EM10	UMCf	96.6 - 106.6	5,910,000	<24,000	1,050,000	<117	<700	<33.3	62,800	62,800	<8,450	<8,450	1,330,000
U4-MW-03D	9/14/2023	N	EM13	UMCf	96.6 - 106.6	7,370,000	<24,000	1,300,000	<117	<700	<33.3	130,000	130,000	<8,450	<8,450	1,690,000
U4-MW-03D	12/13/2023	N	EM16	UMCf	96.6 - 106.6	6,360,000	<24,000	1,120,000	<117	<700	<33.3	493,000	493,000	<8,450	<8,450	2,020,000
U4-MW-03DD	4/20/2022	N	BL02	UMCf	119.7 - 129.7	735,000	<2,400	152,000	----	----	----	----	----	----	----	319,000
U4-MW-03DD	3/15/2023	N	EM07	UMCf	119.7 - 129.7	24,200	<240	5,060	<117	<140	128	88,000	88,000	<8,450	<8,450	140,000
U4-MW-03DD	6/15/2023	N	EM10	UMCf	119.7 - 129.7	7,040	<120	229	<117	<140	121	81,800	81,800	<8,450	<8,450	134,000
U4-MW-03DD	9/14/2023	N	EM13	UMCf	119.7 - 129.7	6,610	<120	1,720	<117	<140	95.7 J	87,400	83,800	<8,450	<8,450	140,000 J-

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	E314.0	E300.1	E300.1	E350.1	E351.2	E365.1	Alkalinity by SM2320B	Alkalinity by SM2320B	Alkalinity by SM2320B	Alkalinity by SM2320B	Anions by E300.0/SW906 5A
						Perchlorate	Chlorate	Chlorite	Ammonia (as N)	Total Kjeldahl Nitrogen (TKN)	Phosphorus	Alkalinity as CaCO3	Bicarbonate Alkalinity as CaCO3	Carbonate Alkalinity as CaCO3	Hydroxide Alkalinity as CaCO3	Chloride
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-03DD	12/14/2023	N	EM16	UMCf	119.7 - 129.7	10,000	<120 UJ	1,740 J-	<117	<140	135 J+	88,200	88,200	<8,450	<8,450	139,000 J-
U4-MW-03I	4/19/2022	N	BL02	UMCf	76.6 - 86.6	1,200,000	<24,000	207,000	----	----	----	----	----	----	----	391,000
U4-MW-03I	3/15/2023	N	EM07	UMCf	76.6 - 86.6	5,940,000	<24,000	930,000	<117	<700	<33.3	96,300	96,300	<8,450	<8,450	1,340,000
U4-MW-03I	6/14/2023	N	EM10	UMCf	76.6 - 86.6	5,330,000	<24,000	954,000	<117	<1,400	46.2 J	73,900	73,900	<8,450	<8,450	1,290,000
U4-MW-03I	6/14/2023	FD	EM10	UMCf	76.6 - 86.6	5,480,000	<24,000	983,000	<117	<1,400	<33.3	73,700	73,700	<8,450	<8,450	1,290,000
U4-MW-03I	9/11/2023	N	EM13	UMCf	76.6 - 86.6	6,400,000	<24,000	1,270,000	<117	<1,400	<33.3	136,000	136,000	<8,450	<8,450	1,600,000
U4-MW-03I	9/11/2023	FD	EM13	UMCf	76.6 - 86.6	6,880,000	<24,000	1,340,000	<117	<1,400	<33.3	142,000	142,000	<8,450	<8,450	1,660,000
U4-MW-03I	12/13/2023	N	EM16	UMCf	76.6 - 86.6	6,090,000	<24,000	993,000	<117	<140	<33.3	495,000	495,000	<8,450	<8,450	1,480,000
U4-MW-03I	12/13/2023	FD	EM16	UMCf	76.6 - 86.6	6,050,000	<24,000	1,010,000	<117	<140	43.3 J	492,000	492,000	<8,450	<8,450	1,600,000
U4-MW-03S	4/18/2022	N	BL02	UMCf	54.5 - 64.5	262,000	<2,400	26,500	----	----	----	----	----	----	----	222,000
U4-MW-03S	4/18/2022	FD	BL02	UMCf	54.5 - 64.5	264,000	<2,400	26,200	----	----	----	----	----	----	----	215,000
U4-MW-03S	3/15/2023	N	EM07	UMCf	54.5 - 64.5	389,000	<2,400	54,600	<117	<140	72.7 J	260,000	152,000	109,000	<8,450	241,000
U4-MW-03S	6/15/2023	N	EM10	UMCf	54.5 - 64.5	431,000	<2,400	57,800	<117	<140	71.7 J	226,000	191,000	35,000	<8,450	259,000
U4-MW-03S	9/14/2023	N	EM13	UMCf	54.5 - 64.5	359,000	<2,400	46,400	<117	<140	<33.3	358,000	319,000	38,900	<8,450	313,000
U4-MW-03S	12/13/2023	N	EM16	UMCf	54.5 - 64.5	254,000	<2,400	39,700	<117	<140 UJ	97.4 J	394,000	336,000	57,600	<8,450	308,000
U4-MW-04D	4/19/2022	N	BL02	UMCf	97.0 - 107.0	26,400,000	<240,000	3,270,000	----	----	----	----	----	----	----	5,690,000
U4-MW-04D	2/16/2023	N	EM06	UMCf	97.0 - 107.0	3,370,000	----	427,000	----	----	----	----	----	----	----	----
U4-MW-04D	3/21/2023	N	EM07	UMCf	97.0 - 107.0	2,770,000	<24,000	42,200	<117	<280	<33.3	169,000	169,000	<8,450	<8,450	680,000 J+
U4-MW-04D	6/14/2023	N	EM10	UMCf	97.0 - 107.0	1,970,000	<24,000	306,000	<117	<560	<33.3	280,000	280,000	<8,450	<8,450	612,000
U4-MW-04D	9/15/2023	N	EM13	UMCf	97.0 - 107.0	3,430,000	<24,000	527,000	<117	<280	<33.3	202,000	202,000	<8,450	<8,450	842,000
U4-MW-04D	12/12/2023	N	EM16	UMCf	97.0 - 107.0	2,650,000	<24,000	366,000	<117	<140	<33.3	514,000	514,000	<8,450	<8,450	955,000
U4-MW-04I	4/19/2022	N	BL02	UMCf	76.8 - 86.8	10,700,000	<24,000	1,100,000	----	----	----	----	----	----	----	2,460,000
U4-MW-04I	3/20/2023	N	EM07	UMCf	76.8 - 86.8	7,880,000	<240,000	1,880,000	<117	<1,400	<33.3	111,000	111,000	<8,450	<8,450	2,080,000
U4-MW-04I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	6,020,000	<24,000	735,000	<117	<1,400	37.2 J	307,000	307,000	<8,450	<8,450	1,470,000
U4-MW-04I	9/14/2023	N	EM13	UMCf	76.8 - 86.8	13,500,000	<240,000	1,540,000	<117	<1,400	41.5 J	179,000	179,000	<8,450	<8,450	3,240,000
U4-MW-04I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	12,900,000	<240,000	1,260,000	<117	<14,000	<33.3	267,000	267,000	<8,450	<8,450	3,200,000
U4-MW-05D	4/15/2022	N	BL02	UMCf	98.2 - 108.2	13,600,000	<240,000	2,240,000	----	----	----	----	----	----	----	4,020,000
U4-MW-05D	10/13/2022	N	EM02	UMCf	98.2 - 108.2	12,500,000	----	2,930,000	----	----	----	----	----	----	----	----
U4-MW-05D	11/3/2022	N	EM03	UMCf	98.2 - 108.2	8,150,000	----	1,780,000	----	----	----	----	----	----	----	----
U4-MW-05D	12/7/2022	N	EM04	UMCf	98.2 - 108.2	7,730,000	----	2,000,000 J+	----	----	----	----	----	----	----	----
U4-MW-05D	1/11/2023	N	EM05	UMCf	98.2 - 108.2	6,020,000	----	1,720,000	----	----	----	----	----	----	----	----
U4-MW-05D	2/14/2023	N	EM06	UMCf	98.2 - 108.2	5,810,000	----	1,210,000	----	----	----	----	----	----	----	----
U4-MW-05D	3/16/2023	N	EM07	UMCf	98.2 - 108.2	5,680,000	<24,000	1,070,000	<117	<1,400	73.2 J	132,000	132,000	<8,450	<8,450	1,630,000
U4-MW-05D	4/20/2023	N	EM08	UMCf	98.2 - 108.2	3,130,000	<24,000	757,000	<117	<1,400	<33.3	----	----	----	----	1,160,000
U4-MW-05D	5/10/2023	N	EM09	UMCf	98.2 - 108.2	2,040,000	<24,000	581,000	<117	<140	66.8 J	----	----	----	----	1,230,000
U4-MW-05D	6/15/2023	N	EM10	UMCf	98.2 - 108.2	1,170,000	<24,000	379,000	<117	<140	38.7 J	1,130,000	1,130,000	<8,450	<8,450	1,250,000
U4-MW-05D	7/18/2023	N	EM11	UMCf	98.2 - 108.2	2,170,000	<24,000	683,000	<117	<140	<33.3	----	----	----	----	1,750,000
U4-MW-05D	8/14/2023	N	EM12	UMCf	98.2 - 108.2	3,610,000	<24,000	940,000	<117	<560	<33.3	----	----	----	----	1,950,000
U4-MW-05D	9/12/2023	N	EM13	UMCf	98.2 - 108.2	937,000	<24,000	323,000	<117	<140	<33.3	1,590,000	1,590,000	<8,450	<8,450	1,410,000
U4-MW-05D	10/18/2023	N	EM14	UMCf	98.2 - 108.2	2,740,000	24,500 J	654,000	<117	<700	<33.3	----	----	----	----	2,020,000
U4-MW-05D	11/16/2023	N	EM15	UMCf	98.2 - 108.2	2,990,000 J+	<24000 UJ	677,000 J	<117	<280	<33.3	----	----	----	----	1,850,000
U4-MW-05D	12/14/2023	N	EM16	UMCf	98.2 - 108.2	1,660,000	340,000	386,000 J-	<117	4,980	200 J+	2,160,000	2,160,000	<8,450	<8,450	1,010,000
U4-MW-05I	4/15/2022	N	BL02	UMCf	76.6 - 86.6	8,940,000	<24,000	1,220,000	----	----	----	----	----	----	----	2,380,000
U4-MW-05I	10/13/2022	N	EM02	UMCf	76.6 - 86.6	12,200,000	----	2,760,000	----	----	----	----	----	----	----	----
U4-MW-05I	11/3/2022	N	EM03	UMCf	76.6 - 86.6	10,700,000	----	2,180,000	----	----	----	----	----	----	----	----
U4-MW-05I	12/8/2022	N	EM04	UMCf	76.6 - 86.6	8,360,000	----	1,810,000	----	----	----	----	----	----	----	----
U4-MW-05I	1/11/2023	N	EM05	UMCf	76.6 - 86.6	6,270,000	----	1,590,000	----	----	----	----	----	----	----	----
U4-MW-05I	2/14/2023	N	EM06	UMCf	76.6 - 86.6	6,080,000	----	1,240,000	----	----	----	----	----	----	----	----
U4-MW-05I	3/14/2023	N	EM07	UMCf	76.6 - 86.6	4,840,000	<24,000	1,020,000 J+	<117	<1,400	60.9 J	216,000	216,000	<8,450	<8,450	1,500,000
U4-MW-05I	4/21/2023	N	EM08	UMCf	76.6 - 86.6	434,000	41,400	174,000	<117	<140	<33.3	----	----	----	----	631,000
U4-MW-05I	5/10/2023	N	EM09	UMCf	76.6 - 86.6	104,000	204,000	73,900	<117	<140	54.4 J	----	----	----	----	598,000

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	E314.0	E300.1	E300.1	E350.1	E351.2	E365.1	Alkalinity by SM2320B	Alkalinity by SM2320B	Alkalinity by SM2320B	Alkalinity by SM2320B	Anions by E300.0/SW906 5A
						Perchlorate	Chlorate	Chlorite	Ammonia (as N)	Total Kjeldahl Nitrogen (TKN)	Phosphorus	Alkalinity as CaCO3	Bicarbonate Alkalinity as CaCO3	Carbonate Alkalinity as CaCO3	Hydroxide Alkalinity as CaCO3	Chloride
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-05I	6/15/2023	N	EM10	UMCf	76.6 - 86.6	19,700	80,600 J-	4,030	<117	2,000	46.2 J	1,820,000	1,820,000	<8,450	<8,450	710,000
U4-MW-05I	7/17/2023	N	EM11	UMCf	76.6 - 86.6	1,510,000	38,000 J	563,000	<117	<140	<33.3	----	----	----	----	1,740,000
U4-MW-05I	8/14/2023	N	EM12	UMCf	76.6 - 86.6	1,210,000	<24,000	488,000	<117	<140	100 J	----	----	----	----	1,850,000
U4-MW-05I	9/13/2023	N	EM13	UMCf	76.6 - 86.6	6,170,000	<120,000	443,000	<117	<140	<33.3	2,010,000	2,010,000	<8,450	<8,450	1,980,000
U4-MW-05I	10/18/2023	N	EM14	UMCf	76.6 - 86.6	1,020,000	<24,000	431,000	<117	<140	2,680	----	----	----	----	2,240,000
U4-MW-05I	11/15/2023	N	EM15	UMCf	76.6 - 86.6	860,000	<12000 UJ	415,000 J-	<117	<140	<33.3	----	----	----	----	2,480,000
U4-MW-05I	12/12/2023	N	EM16	UMCf	76.6 - 86.6	1,270,000	36,300 J	467,000	<117	1,500	<33.3	2,220,000	2,220,000	<8,450	<8,450	1,870,000
U4-MW-06D	4/19/2022	N	BL02	UMCf	97.1 - 107.1	17,900,000	<240,000	4,270,000	----	----	----	----	----	----	----	4,670,000
U4-MW-06D	2/15/2023	N	EM06	UMCf	97.1 - 107.1	7,290,000	----	1,130,000 J+	----	----	----	----	----	----	----	----
U4-MW-06D	3/21/2023	N	EM07	UMCf	97.1 - 107.1	7,000,000	<240,000	405,000	<117	<1,400	<33.3	101,000	101,000	<8,450	<8,450	1,890,000
U4-MW-06D	6/16/2023	N	EM10	UMCf	97.1 - 107.1	5,310,000	<240,000	1,350,000	<117	<560	45.7 J	87,100	87,100	<8,450	<8,450	1,830,000
U4-MW-06D	9/13/2023	N	EM13	UMCf	97.1 - 107.1	7,990,000	28,600 J	1,800,000	<117	<1,120	<33.3	870,000	870,000	<8,450	<8,450	2,460,000
U4-MW-06D	12/13/2023	N	EM16	UMCf	97.1 - 107.1	9,350,000	<240,000	2,280,000	<117	<2,800	36.7 J	1,170,000	1,170,000	<8,450	<8,450	3,110,000
U4-MW-06I	4/19/2022	N	BL02	UMCf	76.5 - 86.5	801,000	<24,000	201,000	----	----	----	----	----	----	----	353,000
U4-MW-06I	3/14/2023	N	EM07	UMCf	76.5 - 86.5	7,820,000	<240,000	1,810,000 J+	<117	<1,400	<33.3	138,000	138,000	<8,450	<8,450	2,130,000
U4-MW-06I	6/16/2023	N	EM10	UMCf	76.5 - 86.5	5,070,000	<240,000	1,380,000	<117	<1,400	50.1 J	237,000	237,000	<8,450	<8,450	2,100,000
U4-MW-06I	9/12/2023	N	EM13	UMCf	76.5 - 86.5	8,310,000	<24,000	1,840,000	<117	<1,120	<33.3	702,000	702,000	<8,450	<8,450	2,270,000
U4-MW-06I	12/12/2023	N	EM16	UMCf	76.5 - 86.5	6,420,000	36,200 J	2,600,000	<117	<14,000	<33.3	765,000	765,000	<8,450	<8,450	3,240,000
U4-MW-07D	4/15/2022	N	BL02	UMCf	96.8 - 106.5	5,210,000	<24,000	471,000	----	----	----	----	----	----	----	1,260,000
U4-MW-07D	10/12/2022	N	EM02	UMCf	96.8 - 106.5	413,000	----	76,400	----	----	----	----	----	----	----	----
U4-MW-07D	10/12/2022	FD	EM02	UMCf	96.8 - 106.5	383,000	----	61,100	----	----	----	----	----	----	----	----
U4-MW-07D	11/3/2022	N	EM03	UMCf	96.8 - 106.5	391,000	----	53,800	----	----	----	----	----	----	----	----
U4-MW-07D	12/7/2022	N	EM04	UMCf	96.8 - 106.5	283,000	----	53,300	----	----	----	----	----	----	----	----
U4-MW-07D	1/11/2023	N	EM05	UMCf	96.8 - 106.5	336,000	----	66,700	----	----	----	----	----	----	----	----
U4-MW-07D	2/14/2023	N	EM06	UMCf	96.8 - 106.5	263,000	----	43,000	----	----	----	----	----	----	----	----
U4-MW-07D	3/16/2023	N	EM07	UMCf	96.8 - 106.5	278,000	<2,400	400,000	<117	<140	39.5 J	119,000	119,000	<8,450	<8,450	167,000
U4-MW-07D	4/21/2023	N	EM08	UMCf	96.8 - 106.5	888,000	49,500 J	120,000	<117	<140	37.0 J	----	----	----	----	426,000
U4-MW-07D	5/11/2023	N	EM09	UMCf	96.8 - 106.5	111,000	179,000	41,700	<117	1,570	<33.3	----	----	----	----	318,000
U4-MW-07D	6/13/2023	N	EM10	UMCf	96.8 - 106.5	305,000	74,400 J-	76,400	<117	777	38.2 J	1,480,000	1,480,000	<8,450	<8,450	620,000
U4-MW-07D	7/17/2023	N	EM11	UMCf	96.8 - 106.5	5,770,000	<24,000	656,000	<117	<1,400	<33.3	----	----	----	----	1,950,000
U4-MW-07D	8/11/2023	N	EM12	UMCf	96.8 - 106.5	4,600,000	28,000 J	548,000	<117	<1,400	<33.3	----	----	----	----	1,960,000
U4-MW-07D	9/13/2023	N	EM13	UMCf	96.8 - 106.5	4,320,000	<24,000	500,000	<117	<560	<33.3	1,290,000	1,290,000	<8,450	<8,450	1,750,000
U4-MW-07D	10/18/2023	N	EM14	UMCf	96.8 - 106.5	4,580,000	75,100	481,000	<117	<700	<33.3	----	----	----	----	2,060,000
U4-MW-07D	11/16/2023	N	EM15	UMCf	96.8 - 106.5	5,110,000 J+	58,000 J-	530,000 J+	<117	<700	<33.3	----	----	----	----	1,910,000
U4-MW-07D	12/12/2023	N	EM16	UMCf	96.8 - 106.5	3,270,000	146,000	624,000	<117	<140	46.1 J	1,200,000	1,200,000	<8,450	<8,450	1,580,000
U4-MW-07I	4/15/2022	N	BL02	UMCf	76.8 - 86.8	1,150,000	<24,000	140,000	----	----	----	----	----	----	----	463,000
U4-MW-07I	10/12/2022	N	EM02	UMCf	76.8 - 86.8	426,000	----	69,100 J-	----	----	----	----	----	----	----	----
U4-MW-07I	11/3/2022	N	EM03	UMCf	76.8 - 86.8	445,000	----	63,700	----	----	----	----	----	----	----	----
U4-MW-07I	12/7/2022	N	EM04	UMCf	76.8 - 86.8	346,000	----	66,800	----	----	----	----	----	----	----	----
U4-MW-07I	1/11/2023	N	EM05	UMCf	76.8 - 86.8	428,000	----	86,700	----	----	----	----	----	----	----	----
U4-MW-07I	2/15/2023	N	EM06	UMCf	76.8 - 86.8	515,000	----	51,000 J+	----	----	----	----	----	----	----	----
U4-MW-07I	3/16/2023	N	EM07	UMCf	76.8 - 86.8	637,000	<2,400	325,000	<117	<140	<33.3	130,000	130,000	<8,450	<8,450	249,000
U4-MW-07I	4/21/2023	N	EM08	UMCf	76.8 - 86.8	746,000	3,190 J	135,000	<117	<140	35.3 J	----	----	----	----	662,000
U4-MW-07I	5/11/2023	N	EM09	UMCf	76.8 - 86.8	1,130	80,000	1,810	<117	831	48.0 J	----	----	----	----	591,000
U4-MW-07I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	2,620	<120	48.3	<117	820	118 J+	1,450,000	1,450,000	<8,450	<8,450	788,000
U4-MW-07I	7/17/2023	N	EM11	UMCf	76.8 - 86.8	2,940,000	<24,000	391,000	<117	<140	<33.3	----	----	----	----	1,570,000
U4-MW-07I	8/11/2023	N	EM12	UMCf	76.8 - 86.8	1,740,000	43,200 J	261,000	<117	<140	<33.3	----	----	----	----	1,480,000
U4-MW-07I	9/13/2023	N	EM13	UMCf	76.8 - 86.8	1,330,000	155,000 J+	287,000	<117	<140	<33.3	2,150,000	2,150,000	<8,450	<8,450	1,800,000
U4-MW-07I	10/18/2023	N	EM14	UMCf	76.8 - 86.8	1,170,000	205,000	213,000	<117	<140	<33.3	----	----	----	----	1,560,000
U4-MW-07I	11/16/2023	N	EM15	UMCf	76.8 - 86.8	1,340,000 J+	57,600 J-	194,000 J+	<117	<140	<33.3	----	----	----	----	1,730,000
U4-MW-07I	12/11/2023	N	EM16	UMCf	76.8 - 86.8	3,330,000	167,000	458,000	<117	<140	33.5 J	1,520,000	1,520,000	<8,450	<8,450	1,800,000

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	E314.0	E300.1	E300.1	E350.1	E351.2	E365.1	Alkalinity by SM2320B	Alkalinity by SM2320B	Alkalinity by SM2320B	Alkalinity by SM2320B	Anions by E300.0/SW906 5A
						Perchlorate	Chlorate	Chlorite	Ammonia (as N)	Total Kjeldahl Nitrogen (TKN)	Phosphorus	Alkalinity as CaCO3	Bicarbonate Alkalinity as CaCO3	Carbonate Alkalinity as CaCO3	Hydroxide Alkalinity as CaCO3	Chloride
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-08D	4/13/2022	N	BL02	UMCf	98.6 - 108.6	2,450,000	<24,000	1,640,000	<117	<2,800	68.2 J	184,000	184,000	<8,450	<8,450	4,960,000
U4-MW-08D	12/7/2022	N	EM04	UMCf	98.6 - 108.6	10,400,000	<240,000	889,000	<117	<1,400	63.8 J	219,000	219,000	<8,450	<8,450	2,730,000
U4-MW-08D	3/17/2023	N	EM07	UMCf	98.6 - 108.6	9,450,000	<240,000	821,000	<117	<1,400	<33.3	919,000	919,000	<8,450	<8,450	2,780,000
U4-MW-08D	6/13/2023	N	EM10	UMCf	98.6 - 108.6	11,100,000	<240,000	1,210,000	<117	<2,800	66.6 J	545,000	545,000	<8,450	<8,450	3,330,000
U4-MW-08D	9/13/2023	N	EM13	UMCf	98.6 - 108.6	16,600,000	<240,000	1,300,000	<117	<1,400	<33.3	236,000	236,000	<8,450	<8,450	4,010,000
U4-MW-08D	12/11/2023	N	EM16	UMCf	98.6 - 108.6	16,700,000	<240,000	1,160,000	<117	<2,800	37.9 J	489,000	489,000	<8,450	<8,450	3,840,000
U4-MW-08DD	4/20/2022	N	BL02	UMCf	119.8 - 129.8	281,000	<2,400	25,700	<117	<140	146 J+	89,800	89,800	<8,450	<8,450	213,000
U4-MW-08DD	4/20/2022	FD	BL02	UMCf	119.8 - 129.8	294,000	<2,400	23,800	<117	<140	133 J	84,300	84,300	<8,450	<8,450	227,000
U4-MW-08DD	12/8/2022	N	EM04	UMCf	119.8 - 129.8	55,300	<12,000	8,820	<117	<140	191 J-	111,000	111,000	<8,450	<8,450	175,000
U4-MW-08DD	3/15/2023	N	EM07	UMCf	119.8 - 129.8	966,000	<24,000	170,000	<117	<140	162	57,900	57,900	<8,450	<8,450	406,000
U4-MW-08DD	6/14/2023	N	EM10	UMCf	119.8 - 129.8	806,000	<24,000	146,000	<117	<140	102 J+	55,200	55,200	<8,450	<8,450	368,000
U4-MW-08DD	9/14/2023	N	EM13	UMCf	119.8 - 129.8	514,000	<2,400	75,000	<117	<140	89.2 J	78,200	78,200	<8,450	<8,450	262,000
U4-MW-08DD	12/14/2023	N	EM16	UMCf	119.8 - 129.8	472,000	<240 UJ	69,900 J-	<117	<140	103 J+	77,000	77,000	<8,450	<8,450	255,000
U4-MW-08I	4/13/2022	N	BL02	UMCf	78.0 - 88.0	2,550,000	<24,000	152,000	<117	<700	55.5 J	175,000	166,000	9,060 J	<8,450	768,000
U4-MW-08I	12/7/2022	N	EM04	UMCf	78.0 - 88.0	5,800,000	<240,000	609,000	<117	<700	46.0 J	164,000	164,000	<8,450	<8,450	1,660,000
U4-MW-08I	12/7/2022	FD	EM04	UMCf	78.0 - 88.0	4,980,000	<240,000	566,000	<117	<700	<33.3 UJ	----	----	----	----	1,530,000
U4-MW-08I	3/17/2023	N	EM07	UMCf	78.0 - 88.0	9,870,000	<240,000	872,000	<117	<1400 R	<33.3	243,000	243,000	<8,450	<8,450	2,290,000
U4-MW-08I	6/13/2023	N	EM10	UMCf	78.0 - 88.0	2,360,000	<24,000	243,000	<117	<140 R	41.4 J	631,000	631,000	<8,450	<8,450	968,000
U4-MW-08I	9/13/2023	N	EM13	UMCf	78.0 - 88.0	6,670,000	72,300 J+	578,000	<117	<560 R	<33.3	526,000	526,000	<8,450	<8,450	1,990,000
U4-MW-08I	12/11/2023	N	EM16	UMCf	78.0 - 88.0	8,630,000	<24,000	533,000	<117	<1400 R	<33.3	1,090,000	1,090,000	<8,450	<8,450	2,760,000
U4-MW-08S	4/15/2022	N	BL02	UMCf	54.9 - 64.9	154,000	<2,400	11,600	<117	<140	<33.3	57,500	15,500 J	42,000	<8,450	227,000
U4-MW-08S	12/7/2022	N	EM04	UMCf	54.9 - 64.9	52,300	<480	5,150	<117	755 J	77.4 J	417,000 J	417,000 J	<8,450	<8,450	222,000
U4-MW-08S	12/7/2022	FD	EM04	UMCf	54.9 - 64.9	55,200	<480	5,740	<117	226 J	74.1 J	299,000 J	299,000 J	<8,450	<8,450	217,000
U4-MW-08S	3/13/2023	N	EM07	UMCf	54.9 - 64.9	2,860 J	<24.0	98.0 J	<117	639	243	1,150,000	1,150,000	<8,450	<8,450	192,000
U4-MW-08S	3/13/2023	FD	EM07	UMCf	54.9 - 64.9	<240 UJ	<240	<0.300 UJ	<117	723	246	1,370,000	1,370,000	<8,450	<8,450	187,000
U4-MW-08S	6/13/2023	N	EM10	UMCf	54.9 - 64.9	<120	<120	<0.300	<117	1,850 J	105 J+	1,460,000	1,460,000	<8,450	<8,450	189,000
U4-MW-08S	6/13/2023	FD	EM10	UMCf	54.9 - 64.9	276	<120	<0.300	<117	1,200 J	98.0 J	1,460,000	1,460,000	<8,450	<8,450	187,000
U4-MW-08S	9/13/2023	N	EM13	UMCf	54.9 - 64.9	1,350	<24.0	<0.300	<117	1,450	53.0 J	1,680,000	1,680,000	<8,450	<8,450	195,000
U4-MW-08S	9/13/2023	FD	EM13	UMCf	54.9 - 64.9	1,370	<24.0	<0.300	<117	1,600	71.1 J	1,690,000	1,690,000	<8,450	<8,450	196,000
U4-MW-08S	12/14/2023	N	EM16	UMCf	54.9 - 64.9	1,390	99,700 J-	6,010	<1,170	4,420 J-	77.8 J	4,110,000	4,110,000	<8,450	<8,450	182,000
U4-MW-08S	12/14/2023	FD	EM16	UMCf	54.9 - 64.9	1,310	90,500	4,310	<117	3,340	30,200 J	3,880,000	3,880,000	<8,450	<8,450	183,000
U4-MW-09D	4/14/2022	N	BL02	UMCf	96.9 - 106.9	14,600,000	<240,000	1,770,000	<117	<1,400	58.0 J	179,000	179,000	<8,450	<8,450	3,270,000
U4-MW-09D	12/6/2022	N	EM04	UMCf	96.9 - 106.9	1,480,000	<24000 UJ	209,000 J+	<117 UJ	<280 UJ	<33.3 UJ	136,000	136,000	<8450 UJ	<8450 UJ	439,000
U4-MW-09D	3/16/2023	N	EM07	UMCf	96.9 - 106.9	1,240,000	24,900	189,000	<117	<140 R	<33.3	905,000	905,000	<8,450	<8,450	909,000
U4-MW-09D	6/14/2023	N	EM10	UMCf	96.9 - 106.9	698,000	4,790 J	114,000	<117	<140	<33.3	955,000	955,000	<8,450	<8,450	865,000
U4-MW-09D	9/12/2023	N	EM13	UMCf	96.9 - 106.9	1,300,000	<24,000	219,000	<117	<140	<33.3	1,160,000	1,160,000	<8,450	<8,450	1,410,000
U4-MW-09D	12/15/2023	N	EM16	UMCf	96.9 - 106.9	1,350,000	<24,000	287,000 J-	<117	<140 R	<33.3	1,810,000	1,810,000	<8,450	<8,450	1,790,000
U4-MW-09DD	4/14/2022	N	BL02	UMCf	119.8 - 129.8	110,000	<2,400	25,200	<117	<140	84.5 J	98,100	91,300	<8,450	<8,450	172,000
U4-MW-09DD	12/6/2022	N	EM04	UMCf	119.8 - 129.8	48,600	<2400 UJ	12,200 J+	<117 UJ	<140 UJ	46.8 J	83,000	83,000	<8450 UJ	<8450 UJ	159,000
U4-MW-09DD	3/21/2023	N	EM07	UMCf	119.8 - 129.8	387,000	<2,400	88,700	<117	<140	37.1 J	61,000	61,000	<8,450	<8,450	257,000
U4-MW-09DD	6/15/2023	N	EM10	UMCf	119.8 - 129.8	329,000	<2,400	89,700	<117	<140	50.2 J	66,300	66,300	<8,450	<8,450	245,000
U4-MW-09DD	9/13/2023	N	EM13	UMCf	119.8 - 129.8	464,000	3,710 J	143,000	<117	<140	<33.3	340,000	340,000	<8,450	<8,450	508,000
U4-MW-09DD	12/13/2023	N	EM16	UMCf	119.8 - 129.8	669,000	<2,400	199,000	<117	<140	53.0 J	230,000	230,000	<8,450	<8,450	500,000
U4-MW-09I	4/14/2022	N	BL02	UMCf	76.8 - 86.8	439,000	<2,400	78,700	<117	<140	120 J+	109,000	109,000	<8,450	<8,450	242,000
U4-MW-09I	12/6/2022	N	EM04	UMCf	76.8 - 86.8	2,560,000	<24000 UJ	448,000 J+	<117 UJ	<140 UJ	<33.3 UJ	133,000	133,000	<8450 UJ	<8450 UJ	715,000
U4-MW-09I	3/16/2023	N	EM07	UMCf	76.8 - 86.8	2,090,000	<24,000	340,000	<117	<140	<33.3	723,000	723,000	<8,450	<8,450	946,000
U4-MW-09I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	519,000	<2,400	198,000	<117	<140	<33.3	1,040,000	1,040,000	<8,450	<8,450	1,100,000
U4-MW-09I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	1,780,000	<24,000	316,000	<117	<140	<33.3	1,110,000	1,110,000	<8,450	<8,450	1,430,000
U4-MW-09I	12/15/2023	N	EM16	UMCf	76.8 - 86.8	1,370,000	<24,000	348,000 J-	<117	<140	<33.3	1,750,000	1,750,000	<8,450	<8,450	1,880,000
U4-MW-09S	4/14/2022	N	BL02	UMCf	55.3 - 65.3	91,400	<2,400	14,800	<117	<140	76.5 J	141,000	123,000	17,900 J	<8,450	182,000
U4-MW-09S	12/6/2022	N	EM04	UMCf	55.3 - 65.3	503,000	<24000 UJ	91,500	<117 UJ	<140 UJ	<33.3 UJ	258,000	238,000	20,400	<8450 UJ	256,000

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	E314.0	E300.1	E300.1	E350.1	E351.2	E365.1	Alkalinity by SM2320B	Alkalinity by SM2320B	Alkalinity by SM2320B	Alkalinity by SM2320B	Anions by E300.0/SW906 5A
						Perchlorate	Chlorate	Chlorite	Ammonia (as N)	Total Kjeldahl Nitrogen (TKN)	Phosphorus	Alkalinity as CaCO3	Bicarbonate Alkalinity as CaCO3	Carbonate Alkalinity as CaCO3	Hydroxide Alkalinity as CaCO3	Chloride
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-09S	3/17/2023	N	EM07	UMCf	55.3 - 65.3	474,000	<2,400	84,500	<117	<140	44.7 J	265,000	249,000	15,300 J	<8,450	373,000
U4-MW-09S	6/15/2023	N	EM10	UMCf	55.3 - 65.3	199 J	150,000 J-	<0.300	<117	1,790	129 J+	2,290,000	2,280,000	<8,450	<8,450	161,000
U4-MW-09S	9/13/2023	N	EM13	UMCf	55.3 - 65.3	1,470 J+	<120	<0.300	181 J	2,320	99.4 J	2,920,000	2,920,000	<8,450	<8,450	163,000
U4-MW-09S	12/12/2023	N	EM16	UMCf	55.3 - 65.3	986,000	304,000	206,000	<117	8,050	246	2,060,000	2,060,000	<8,450	<8,450	948,000
U4-MW-10D	4/14/2022	N	BL02	UMCf	96.9 - 106.9	2,180,000	<24,000	118,000	<117	<700	<33.3	93,000	93,000	<8,450	<8,450	706,000
U4-MW-10D	12/5/2022	N	EM04	UMCf	96.9 - 106.9	956,000	<24,000	82,300	<117	<140	<33.3 UJ	60,800	60,800	<8,450	<8,450	383,000
U4-MW-10D	3/17/2023	N	EM07	UMCf	96.9 - 106.9	74,700	101,000	10,600	<117 UJ	966 J+	<33.3	1,200,000	1,200,000	<8,450	<8,450	478,000
U4-MW-10D	6/14/2023	N	EM10	UMCf	96.9 - 106.9	4,000	<120	789	<117	776	<33.3	1,010,000	1,010,000	<8,450	<8,450	453,000
U4-MW-10D	9/13/2023	N	EM13	UMCf	96.9 - 106.9	164,000	<2,400	15,900	<117	937	<33.3	725,000	725,000	<8,450	<8,450	760,000
U4-MW-10D	12/14/2023	N	EM16	UMCf	96.9 - 106.9	186,000	<2400 UJ	13,600 J-	<117	913	36.5 J	534,000	534,000	<8,450	<8,450	565,000
U4-MW-10I	4/14/2022	N	BL02	UMCf	77.1 - 87.1	2,330,000	<24,000	141,000	<117	<1,400	65.7 J	187,000	187,000	<8,450	<8,450	936,000
U4-MW-10I	12/5/2022	N	EM04	UMCf	77.1 - 87.1	96,300	<2,400	8,680	<117	<140	<33.3 UJ	144,000	144,000	<8,450	<8,450	219,000
U4-MW-10I	3/17/2023	N	EM07	UMCf	77.1 - 87.1	138,000	<2,400	14,700 J-	<117	1,220 J+	<33.3	1,010,000	1,010,000	<8,450	<8,450	897,000
U4-MW-10I	6/14/2023	N	EM10	UMCf	77.1 - 87.1	14,200	<240	1,440	<117	1,260	39.0 J	1,410,000	1,410,000	<8,450	<8,450	262,000
U4-MW-10I	9/13/2023	N	EM13	UMCf	77.1 - 87.1	29,500	<240	4,990	314	3,060	<33.3	1,390,000	1,390,000	<8,450	<8,450	686,000
U4-MW-10I	12/14/2023	N	EM16	UMCf	77.1 - 87.1	5,090,000	<24000 UJ	236,000 J-	201 J	<1,400	<33.3	490,000	490,000	<8,450	<8,450	1,210,000
U4-MW-11D	4/15/2022	N	BL02	UMCf	97.4 - 107.4	20,100,000	<240,000	1,290,000	<117	<3,500	71.7 J	201,000	201,000	<8,450	<8,450	4,040,000
U4-MW-11D	9/26/2022	N	EM01	UMCf	97.4 - 107.4	20,700,000	<120,000	1,350,000	<117	<700	118 J-	----	----	----	----	3,720,000
U4-MW-11D	10/11/2022	N	EM02	UMCf	97.4 - 107.4	19,000,000	<240,000	1,410,000	<117	<2,800	42.1 J	----	----	----	----	4,260,000
U4-MW-11D	11/1/2022	N	EM03	UMCf	97.4 - 107.4	18,400,000	<240,000	1,380,000	153 J	<2,800	<33.3	----	----	----	----	3,850,000
U4-MW-11D	12/6/2022	N	EM04	UMCf	97.4 - 107.4	8,610,000	<240000 UJ	561,000	<117 UJ	<2800 UJ	97.7 J	279,000	279,000	<8450 UJ	<8450 UJ	1,750,000
U4-MW-11D	1/12/2023	N	EM05	UMCf	97.4 - 107.4	17,600,000	<240,000	1,190,000	<117	<2,800	<33.3	----	----	----	----	3,940,000
U4-MW-11D	2/14/2023	N	EM06	UMCf	97.4 - 107.4	14,300,000	<240,000	1,130,000	<117	<1400 UJ	<33.3	----	----	----	----	3,660,000
U4-MW-11D	3/16/2023	N	EM07	UMCf	97.4 - 107.4	13,600,000	<240,000	996,000 J-	<117	<1,400	<33.3	406,000	406,000	<8,450	<8,450	3,030,000
U4-MW-11D	4/18/2023	N	EM08	UMCf	97.4 - 107.4	9,540,000	<240,000	64,300	<117	<1400 R	64.3 J	----	----	----	----	2,330,000
U4-MW-11D	5/17/2023	N	EM09	UMCf	97.4 - 107.4	9,600,000	<240,000	617,000 J	<117	<700 R	50.8 J	----	----	----	----	2,610,000
U4-MW-11D	6/16/2023	N	EM10	UMCf	97.4 - 107.4	14,200,000	<240,000	1,080,000	<117	<1,400	46.9 J	286,000	286,000	<8,450	<8,450	3,420,000
U4-MW-11D	7/14/2023	N	EM11	UMCf	97.4 - 107.4	12,800,000	<240,000	997,000	<117	<2800 R	36.9 J	----	----	----	----	2,850,000 J+
U4-MW-11D	8/14/2023	N	EM12	UMCf	97.4 - 107.4	11,200,000	<240,000	813,000	<117	<700 R	<33.3 UJ	----	----	----	----	3,270,000
U4-MW-11D	9/13/2023	N	EM13	UMCf	97.4 - 107.4	11,500,000	<240,000	825,000 J-	<117	<1,120	<33.3	444,000	444,000	<8,450	<8,450	3,240,000
U4-MW-11D	10/18/2023	N	EM14	UMCf	97.4 - 107.4	11,800,000	<240,000	791,000	<117	<1400 R	174 J+	----	----	----	----	3,050,000
U4-MW-11D	11/16/2023	N	EM15	UMCf	97.4 - 107.4	9,640,000 J+	<240000 R	758,000 J+	<117	<1400 R	<33.3	----	----	----	----	3,050,000
U4-MW-11D	12/13/2023	N	EM16	UMCf	97.4 - 107.4	9,640,000	<240,000	686,000	<117	<2,800	44.8 J	925,000	925,000	<8,450	<8,450	3,500,000
U4-MW-11I	4/14/2022	N	BL02	UMCf	77.0 - 87.0	1,550,000	<24000 R	98,700	<117	<1,400	210 J+	96,300	92,500	<8,450	<8,450	512,000
U4-MW-11I	9/26/2022	N	EM01	UMCf	77.0 - 87.0	266,000	54,400	33,000	<117	968	739 J	----	----	----	----	328,000
U4-MW-11I	9/26/2022	FD	EM01	UMCf	77.0 - 87.0	265,000	53,300	34,400	<117	792	35.9 J	----	----	----	----	328,000
U4-MW-11I	10/10/2022	N	EM02	UMCf	77.0 - 87.0	<2,400	66,800	530	<117	970 J	<33.3 UJ	----	----	----	----	363,000
U4-MW-11I	10/10/2022	FD	EM02	UMCf	77.0 - 87.0	2,400 J	66,100	476	<117	1,230 J	102 J	----	----	----	----	362,000
U4-MW-11I	10/31/2022	N	EM03	UMCf	77.0 - 87.0	7,470 J	66,500	2,900 J	<117	1,100 J	<33.3	----	----	----	----	321,000
U4-MW-11I	10/31/2022	FD	EM03	UMCf	77.0 - 87.0	3,470 J	84,800	1,800 J	<117	1,560 J	<33.3	----	----	----	----	316,000
U4-MW-11I	12/6/2022	N	EM04	UMCf	77.0 - 87.0	<2400 UJ	<2400 UJ	<0.300 UJ	191 J	1,030 J	59.1 J	1,320,000	1,320,000	<8450 UJ	<8450 UJ	386,000
U4-MW-11I	12/6/2022	FD	EM04	UMCf	77.0 - 87.0	<2400 UJ	<2400 UJ	198 J	178 J	1,340 J	41.8 J	1,320,000	1,320,000	<8450 UJ	<8450 UJ	371,000
U4-MW-11I	1/12/2023	N	EM05	UMCf	77.0 - 87.0	2,380	81.2 J+	381	124 J	1,160	<33.3	----	----	----	----	346,000
U4-MW-11I	1/12/2023	FD	EM05	UMCf	77.0 - 87.0	2,220	<24.0	389	120 J	1,050	<33.3	----	----	----	----	338,000
U4-MW-11I	2/14/2023	N	EM06	UMCf	77.0 - 87.0	3,030,000	<24,000	213,000	572	<140	<33.3	----	----	----	----	1,000,000
U4-MW-11I	2/14/2023	FD	EM06	UMCf	77.0 - 87.0	3,530,000	<24,000	264,000	535	<140	33.4 J	----	----	----	----	1,090,000
U4-MW-11I	3/16/2023	N	EM07	UMCf	77.0 - 87.0	<2,400	<2,400	70.0	<117 UJ	1,170	50.0 J	1,720,000	1,720,000	<8,450	<8,450	298,000
U4-MW-11I	3/16/2023	FD	EM07	UMCf	77.0 - 87.0	<2,400	<2,400	87.0	<117 UJ	1,270	63.6 J	1,750,000	1,750,000	<8,450	<8,450	292,000
U4-MW-11I	4/18/2023	N	EM08	UMCf	77.0 - 87.0	10,400 J	<120	1,390	<117	1,850 J	43.3 J	----	----	----	----	267,000
U4-MW-11I	4/18/2023	FD	EM08	UMCf	77.0 - 87.0	17,100 J	<120	1,590	<117	1,130 J	36.6 J	----	----	----	----	282,000
U4-MW-11I	5/19/2023	N	EM09	UMCf	77.0 - 87.0	4,830 J	<240 UJ	423	<117	1,120	44.9 J	----	----	----	----	262,000

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	E314.0	E300.1	E300.1	E350.1	E351.2	E365.1	Alkalinity by SM2320B	Alkalinity by SM2320B	Alkalinity by SM2320B	Alkalinity by SM2320B	Anions by E300.0/SW906 5A
						Perchlorate	Chlorate	Chlorite	Ammonia (as N)	Total Kjeldahl Nitrogen (TKN)	Phosphorus	Alkalinity as CaCO3	Bicarbonate Alkalinity as CaCO3	Carbonate Alkalinity as CaCO3	Hydroxide Alkalinity as CaCO3	Chloride
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-11I	5/19/2023	FD	EM09	UMCf	77.0 - 87.0	3,070 J	<24.0	478	<117	1,150	<33.3	----	----	----	----	263,000
U4-MW-11I	6/15/2023	N	EM10	UMCf	77.0 - 87.0	<120	<120	23.4	<117	1,050 J	83.8 J	1,280,000	1,280,000	<8,450	<8,450	190,000
U4-MW-11I	6/15/2023	FD	EM10	UMCf	77.0 - 87.0	<120	<120	28.6	<117	1,460 J	118	1,290,000	1,290,000	<8,450	<8,450	190,000
U4-MW-11I	7/13/2023	N	EM11	UMCf	77.0 - 87.0	9,920	<240	1,340	<117	1,530	96.7 J	----	----	----	----	227,000
U4-MW-11I	7/13/2023	FD	EM11	UMCf	77.0 - 87.0	10,700	<240	1,310	<117	1,520	133	----	----	----	----	225,000
U4-MW-11I	8/14/2023	N	EM12	UMCf	77.0 - 87.0	3,460,000	<24,000	343,000	<117	<140	46.4 J	----	----	----	----	2,000,000
U4-MW-11I	8/14/2023	FD	EM12	UMCf	77.0 - 87.0	3,390,000	<24,000	342,000	<117	<140	<33.3	----	----	----	----	1,970,000
U4-MW-11I	9/13/2023	N	EM13	UMCf	77.0 - 87.0	5,100,000	<24,000	396,000	243 J	<560	<33.3	666,000	666,000	<8,450	<8,450	2,030,000
U4-MW-11I	9/13/2023	FD	EM13	UMCf	77.0 - 87.0	4,920,000	<24,000	391,000	223 J	<560	<33.3	672,000	672,000	<8,450	<8,450	2,110,000
U4-MW-11I	10/19/2023	N	EM14	UMCf	77.0 - 87.0	9,720,000	<24,000	597,000	<117	<280	<33.3	----	----	----	----	2,600,000
U4-MW-11I	10/19/2023	FD	EM14	UMCf	77.0 - 87.0	9,710,000	<24,000	616,000	<117	<560	<33.3	----	----	----	----	2,600,000
U4-MW-11I	11/16/2023	N	EM15	UMCf	77.0 - 87.0	7,530,000 J+	<24000 UJ	525,000 J+	<117	<140	<33.3	----	----	----	----	2,200,000 J
U4-MW-11I	11/16/2023	FD	EM15	UMCf	77.0 - 87.0	7,980,000 J+	<480 UJ	519,000 J+	<117	<140	<33.3	----	----	----	----	21,300 J
U4-MW-11I	12/13/2023	N	EM16	UMCf	77.0 - 87.0	7,310,000	<24,000	489,000	<117	<140	113	916,000	916,000	<8,450	<8,450	1,880,000
U4-MW-11I	12/13/2023	FD	EM16	UMCf	77.0 - 87.0	7,350,000	<24,000	500,000	<117	<140	91.8 J	907,000	907,000	<8,450	<8,450	2,030,000
U4-MW-12D	4/15/2022	N	BL02	UMCf	97.1 - 107.1	14,400,000	<24,000	1,280,000	<117	<3,500	67.4 J	138,000	138,000	<8,450	<8,450	3,380,000
U4-MW-12D	9/27/2022	N	EM01	UMCf	97.1 - 107.1	8,490,000	<120,000	793,000	<117	<1,400	161 J-	----	----	----	----	2,080,000
U4-MW-12D	10/12/2022	N	EM02	UMCf	97.1 - 107.1	9,510,000	<240,000	1,070,000	<117	<700	48.9 J	----	----	----	----	2,150,000
U4-MW-12D	11/2/2022	N	EM03	UMCf	97.1 - 107.1	9,430,000	<240,000	1,030,000	<117	<7,000	<33.3	----	----	----	----	2,060,000
U4-MW-12D	12/7/2022	N	EM04	UMCf	97.1 - 107.1	6,990,000	<240,000	1,060,000	<117	<700	45.3 J	218,000	218,000	<8,450	<8,450	2,010,000
U4-MW-12D	1/12/2023	N	EM05	UMCf	97.1 - 107.1	8,540,000	<240,000	918,000	<117	<2,800	<33.3	----	----	----	----	1,900,000
U4-MW-12D	2/15/2023	N	EM06	UMCf	97.1 - 107.1	8,230,000	<24,000	617,000 J+	<117	<1,400	<33.3	----	----	----	----	1,840,000
U4-MW-12D	3/14/2023	N	EM07	UMCf	97.1 - 107.1	6,130,000	<24,000	567,000 J+	<117	<700	<33.3	302,000	302,000	<8,450	<8,450	1,610,000
U4-MW-12D	4/17/2023	N	EM08	UMCf	97.1 - 107.1	8,070,000	<240,000	1,080,000	<117	<1,400	<33.3	----	----	----	----	1,970,000
U4-MW-12D	5/17/2023	N	EM09	UMCf	97.1 - 107.1	8,420,000	<240,000	1,070,000	118 J	<700	<33.3	----	----	----	----	2,110,000
U4-MW-12D	6/16/2023	N	EM10	UMCf	97.1 - 107.1	6,910,000	<240,000	814,000	<117	<700	62.1 J	148,000	148,000	<8,450	<8,450	1,840,000
U4-MW-12D	7/13/2023	N	EM11	UMCf	97.1 - 107.1	4,230,000	<24,000	366,000	<117	<560	36.7 J	----	----	----	----	1,170,000
U4-MW-12D	8/14/2023	N	EM12	UMCf	97.1 - 107.1	4,010,000	<24,000	357,000	<117	<280	<33.3	----	----	----	----	1,220,000
U4-MW-12D	9/12/2023	N	EM13	UMCf	97.1 - 107.1	3,370,000	<24,000	256,000	<117	<280	<33.3	369,000	369,000	<8,450	<8,450	1,180,000
U4-MW-12D	10/17/2023	N	EM14	UMCf	97.1 - 107.1	2,520,000	<24,000	218,000	<117	<140	<33.3 UJ	----	----	----	----	1,320,000
U4-MW-12D	11/15/2023	N	EM15	UMCf	97.1 - 107.1	2,360,000	<24000 UJ	213,000	<117	<140 R	<33.3	----	----	----	----	1,370,000
U4-MW-12D	12/12/2023	N	EM16	UMCf	97.1 - 107.1	2,120,000	29,600 J	222,000	<117	<140	<33.3	1,080,000	1,080,000	<8,450	<8,450	1,300,000
U4-MW-12I	4/14/2022	N	BL02	UMCf	76.8 - 86.8	4,000,000	<24,000	424,000	<117	<1,400	68.0 J	147,000	147,000	<8,450	<8,450	967,000
U4-MW-12I	4/14/2022	FD	BL02	UMCf	76.8 - 86.8	3,920,000	<24,000	420,000	<117	<1,400	104 J+	139,000	139,000	<8,450	<8,450	968,000
U4-MW-12I	9/27/2022	N	EM01	UMCf	76.8 - 86.8	535,000	<2,400	51,500	<117	<140	271 J-	----	----	----	----	278,000
U4-MW-12I	10/12/2022	N	EM02	UMCf	76.8 - 86.8	475,000 J	<24000 R	35,100	<117 UJ	<140 UJ	42.6 J	----	----	----	----	280,000
U4-MW-12I	11/2/2022	N	EM03	UMCf	76.8 - 86.8	170,000	<2400 UJ	28,800	<117	<140 UJ	<33.3	----	----	----	----	283,000
U4-MW-12I	12/7/2022	N	EM04	UMCf	76.8 - 86.8	26,800	<12,000	6,800	<117	629 J+	<33.3	592,000	592,000	<8,450	<8,450	----
U4-MW-12I	12/7/2022	FD	EM04	UMCf	76.8 - 86.8	28,700	<12,000	6,630	<117	739 J+	<33.3	----	----	----	----	----
U4-MW-12I	1/13/2023	N	EM05	UMCf	76.8 - 86.8	24,100	<2,400	2,450	<117	579	<33.3	----	----	----	----	197,000
U4-MW-12I	2/15/2023	N	EM06	UMCf	76.8 - 86.8	16,900	46,000	1,720 J+	<117	878	<33.3	----	----	----	----	169,000
U4-MW-12I	3/13/2023	N	EM07	UMCf	76.8 - 86.8	1,800	31,200	269	<117	1,220	<33.3	1,560,000	1,560,000	<8,450	<8,450	151,000
U4-MW-12I	4/17/2023	N	EM08	UMCf	76.8 - 86.8	<24.0	<24.0	2.13 J	<117	1,270	53.9 J	----	----	----	----	152,000
U4-MW-12I	5/17/2023	N	EM09	UMCf	76.8 - 86.8	<240	<240 UJ	36,700	<117	1,050	98.7 J	----	----	----	----	143,000
U4-MW-12I	6/16/2023	N	EM10	UMCf	76.8 - 86.8	202 J	<120	9.08 J-	<117	1,610	86.9 J	1,810,000	1,810,000	<8,450	<8,450	144,000 J-
U4-MW-12I	7/11/2023	N	EM11	UMCf	76.8 - 86.8	3,660	<240	469	<117	1,470 J-	50.4 J	----	----	----	----	157,000
U4-MW-12I	8/14/2023	N	EM12	UMCf	76.8 - 86.8	2,110,000	<24,000	238,000	<117	<140	<33.3	----	----	----	----	1,170,000
U4-MW-12I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	109,000	<2,400	31,900	<117	679	209 J-	1,150,000	1,150,000	<8,450	<8,450	610,000
U4-MW-12I	10/17/2023	N	EM14	UMCf	76.8 - 86.8	1,700	<240	321	195 J	1,530	<33.3 UJ	----	----	----	----	234,000
U4-MW-12I	11/16/2023	N	EM15	UMCf	76.8 - 86.8	1,020,000 J+	<12000 UJ	130,000 J+	595	<140 R	<33.3	----	----	----	----	1,020,000
U4-MW-12I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	1,150,000	<24,000	158,000	<117	<140 R	45.4 J	1,080,000	1,080,000	<8,450	<8,450	1,420,000

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	E314.0	E300.1	E300.1	E350.1	E351.2	E365.1	Alkalinity by SM2320B	Alkalinity by SM2320B	Alkalinity by SM2320B	Alkalinity by SM2320B	Anions by E300.0/SW906 5A
						Perchlorate	Chlorate	Chlorite	Ammonia (as N)	Total Kjeldahl Nitrogen (TKN)	Phosphorus	Alkalinity as CaCO3	Bicarbonate Alkalinity as CaCO3	Carbonate Alkalinity as CaCO3	Hydroxide Alkalinity as CaCO3	Chloride
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-13D	4/14/2022	N	BL02	UMCf	98.2 - 108.2	14,700,000	<240,000	1,330,000	<117	<1,400	115 J+	128,000	128,000	<8,450	<8,450	3,130,000
U4-MW-13D	9/28/2022	N	EM01	UMCf	98.2 - 108.2	5,370,000	<24,000	401,000	<117	<280	<33.3 UJ	----	----	----	----	1,330,000
U4-MW-13D	10/11/2022	N	EM02	UMCf	98.2 - 108.2	4,100,000	<120,000	413,000	<117	<560	<33.3	----	----	----	----	1,400,000
U4-MW-13D	11/3/2022	N	EM03	UMCf	98.2 - 108.2	4,080,000	<240,000	433,000	<117	<280	<33.3	----	----	----	----	1,300,000
U4-MW-13D	12/7/2022	N	EM04	UMCf	98.2 - 108.2	3,380,000	<240,000	411,000	257	<700	<33.3	190,000	190,000	<8,450	<8,450	1,190,000
U4-MW-13D	1/12/2023	N	EM05	UMCf	98.2 - 108.2	3,950,000	<240,000	383,000	<117	<280	<33.3	----	----	----	----	984,000
U4-MW-13D	2/15/2023	N	EM06	UMCf	98.2 - 108.2	3,490,000	<24,000	374,000 J+	<117	<560	<33.3	----	----	----	----	820,000
U4-MW-13D	3/17/2023	N	EM07	UMCf	98.2 - 108.2	3,160,000	<24,000	337,000	<117	<280	193	107,000	107,000	<8,450	<8,450	699,000 J+
U4-MW-13D	4/18/2023	N	EM08	UMCf	98.2 - 108.2	1,910,000	<24,000	224,000	<117	<140	<33.3	----	----	----	----	567,000
U4-MW-13D	5/17/2023	N	EM09	UMCf	98.2 - 108.2	1,660,000	<24,000	207,000	<117	<140	<33.3	----	----	----	----	595,000
U4-MW-13D	6/15/2023	N	EM10	UMCf	98.2 - 108.2	1,840,000	<24,000	241,000	<117	<140	33.7 J	202,000	202,000	<8,450	<8,450	747,000
U4-MW-13D	7/12/2023	N	EM11	UMCf	98.2 - 108.2	1,770,000	<24,000	224,000	<117	<140	<33.3	----	----	----	----	855,000
U4-MW-13D	8/11/2023	N	EM12	UMCf	98.2 - 108.2	2,460,000	<24,000	277,000	<117	<560	42.6 J	----	----	----	----	876,000
U4-MW-13D	9/11/2023	N	EM13	UMCf	98.2 - 108.2	3,190,000	<24,000	288,000	<117	<560	<33.3	189,000	189,000	<8,450	<8,450	1,030,000
U4-MW-13D	10/18/2023	N	EM14	UMCf	98.2 - 108.2	3,130,000	<24,000	314,000	<117	<700	<33.3	----	----	----	----	1,070,000
U4-MW-13D	11/15/2023	N	EM15	UMCf	98.2 - 108.2	3,340,000	<24000 UJ	281,000 J-	<117	<280	<33.3	----	----	----	----	1,070,000
U4-MW-13D	12/11/2023	N	EM16	UMCf	98.2 - 108.2	3,410,000	<24,000	302,000	<117	<700	<33.3	190,000	190,000	<8,450	<8,450	1,090,000
U4-MW-13I	4/14/2022	N	BL02	UMCf	77.1 - 87.1	4,180,000	<24,000	418,000	<117	<1,400	109 J+	116,000	116,000	<8,450	<8,450	943,000
U4-MW-13I	9/28/2022	N	EM01	UMCf	77.1 - 87.1	1,720,000	<12,000	233,000	<117	<280	79.5 J	----	----	----	----	487,000
U4-MW-13I	10/10/2022	N	EM02	UMCf	77.1 - 87.1	1,410,000	<24,000	212,000	<117	<140	50.5 J	----	----	----	----	441,000
U4-MW-13I	11/3/2022	N	EM03	UMCf	77.1 - 87.1	830,000	<24,000	149,000	<117	<140	<33.3	----	----	----	----	402,000
U4-MW-13I	12/6/2022	N	EM04	UMCf	77.1 - 87.1	337,000	<24000 UJ	69,200	122 J	<140 UJ	<33.3 UJ	599,000	599,000	<8450 UJ	<8450 UJ	467,000
U4-MW-13I	1/12/2023	N	EM05	UMCf	77.1 - 87.1	261,000	<24,000	59,400	<117	<140	75.6 J	----	----	----	----	447,000
U4-MW-13I	2/14/2023	N	EM06	UMCf	77.1 - 87.1	790,000	<24,000	117,000	183 J	<140	<33.3	----	----	----	----	521,000
U4-MW-13I	3/16/2023	N	EM07	UMCf	77.1 - 87.1	12,500	<240	2,680 J+	<117	959 J	66.8 J	1,100,000	1,100,000	<8,450	<8,450	341,000
U4-MW-13I	4/19/2023	N	EM08	UMCf	77.1 - 87.1	4,660	<240	1,350	<117	848	54.7 J	----	----	----	----	287,000
U4-MW-13I	5/17/2023	N	EM09	UMCf	77.1 - 87.1	52,900	<240	5,630	582	1,360	122 J+	----	----	----	----	234,000
U4-MW-13I	6/15/2023	N	EM10	UMCf	77.1 - 87.1	53,200	<2400 UJ	9,360 J-	138 J	859	47.6 J	1,160,000	1,160,000	<8,450	<8,450	225,000
U4-MW-13I	7/12/2023	N	EM11	UMCf	77.1 - 87.1	94,400	<240	13,600	122 J	1,090	50.5 J	----	----	----	----	229,000
U4-MW-13I	8/11/2023	N	EM12	UMCf	77.1 - 87.1	2,600,000	<24,000	353,000	284	<560	41.8 J	----	----	----	----	890,000
U4-MW-13I	9/11/2023	N	EM13	UMCf	77.1 - 87.1	3,300,000	<24,000	327,000	130 J	<560	38.5 J	222,000	222,000	<8,450	<8,450	1,020,000
U4-MW-13I	10/17/2023	N	EM14	UMCf	77.1 - 87.1	3,620,000	<24,000	355,000	<117	<280	<33.3 UJ	----	----	----	----	1,090,000
U4-MW-13I	11/15/2023	N	EM15	UMCf	77.1 - 87.1	3,990,000	<24000 UJ	441,000 J-	<117	<280	<33.3	----	----	----	----	1,150,000
U4-MW-13I	12/11/2023	N	EM16	UMCf	77.1 - 87.1	4,360,000	<24,000	520,000	<117	<700	65.0 J	307,000	307,000	<8,450	<8,450	1,190,000
U4-MW-14D	4/13/2022	N	BL02	UMCf	97.3 - 107.3	462,000	<12,000	140,000	<117	<140	33.3 R	101,000	101,000	<8,450	<8,450	349,000
U4-MW-14D	12/6/2022	N	EM04	UMCf	97.3 - 107.3	1,300,000	<24000 UJ	207,000 J+	<117 UJ	<140 UJ	<33.3 UJ	71,300	71,300	<8450 UJ	<8450 UJ	432,000
U4-MW-14D	3/16/2023	N	EM07	UMCf	97.3 - 107.3	1,260,000	<24,000	159,000	<117	<140	38.2 J	85,900	85,900	<8,450	<8,450	316,000
U4-MW-14D	6/15/2023	N	EM10	UMCf	97.3 - 107.3	57,700	<24,000	119,000	<117	<140	<33.3	175,000	175,000	<8,450	<8,450	379,000
U4-MW-14D	9/14/2023	N	EM13	UMCf	97.3 - 107.3	627,000	<2,400	75,100	<117	<140	<33.3	569,000	569,000	<8,450	<8,450	656,000
U4-MW-14D	12/15/2023	N	EM16	UMCf	97.3 - 107.3	733,000	<24,000	98,900 J-	<117	<140	<33.3	477,000	477,000	<8,450	<8,450	592,000
U4-MW-14I	4/14/2022	N	BL02	UMCf	77.3 - 87.3	506,000	<2,400	181,000	<117	<140	173 J+	77,600	70,500	<8,450	<8,450	274,000
U4-MW-14I	12/6/2022	N	EM04	UMCf	77.3 - 87.3	1,060,000	<24000 UJ	249,000	<117 UJ	<140 UJ	<33.3 UJ	87,400	87,400	<8450 UJ	<8450 UJ	401,000
U4-MW-14I	3/16/2023	N	EM07	UMCf	77.3 - 87.3	1,200,000	<24,000	427,000	<117	<140	56.8 J	87,300	87,300	<8,450	<8,450	346,000
U4-MW-14I	6/15/2023	N	EM10	UMCf	77.3 - 87.3	752,000	<24,000	243,000	<117	<140	69.3 J	258,000	258,000	<8,450	<8,450	404,000
U4-MW-14I	9/14/2023	N	EM13	UMCf	77.3 - 87.3	683,000	<2400 UJ	133,000	<117	<140	45.3 J	521,000	521,000	<8,450	<8,450	623,000
U4-MW-14I	12/14/2023	N	EM16	UMCf	77.3 - 87.3	942,000	<24,000	178,000 J-	<117	<140	77.4 J	588,000	588,000	<8,450	<8,450	668,000
U4-MW-15D	4/13/2022	N	BL02	UMCf	96.0 - 106.0	2,400,000	<24,000	141,000	<117	<700	63.7 J	112,000	112,000	<8,450	<8,450	749,000
U4-MW-15D	12/5/2022	N	EM04	UMCf	96.0 - 106.0	1,220,000	<24,000	75,300	<117	<140	<33.3 UJ	108,000	108,000	<8,450	<8,450	458,000
U4-MW-15D	3/20/2023	N	EM07	UMCf	96.0 - 106.0	1,070,000	<24,000	61,600	<117	<140	68.9 J	77,100	77,100	<8,450	<8,450	403,000
U4-MW-15D	6/14/2023	N	EM10	UMCf	96.0 - 106.0	1,500,000	<24,000	80,000	<117	<140	37.7 J	95,600	95,600	<8,450	<8,450	489,000
U4-MW-15D	9/13/2023	N	EM13	UMCf	96.0 - 106.0	1,100,000	<24,000	68,000	<117	<140	<33.3	75,600	75,600	<8,450	<8,450	419,000

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	E314.0	E300.1	E300.1	E350.1	E351.2	E365.1	Alkalinity by SM2320B	Alkalinity by SM2320B	Alkalinity by SM2320B	Alkalinity by SM2320B	Anions by E300.0/SW906 5A
						Perchlorate	Chlorate	Chlorite	Ammonia (as N)	Total Kjeldahl Nitrogen (TKN)	Phosphorus	Alkalinity as CaCO3	Bicarbonate Alkalinity as CaCO3	Carbonate Alkalinity as CaCO3	Hydroxide Alkalinity as CaCO3	Chloride
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-15D	12/12/2023	N	EM16	UMCf	96.0 - 106.0	1,010,000	<24,000	64,100	<117	<140	<33.3	259,000	259,000	<8,450	<8,450	409,000
U4-MW-15DD	4/13/2022	N	BL02	UMCf	120.3 - 130.3	19,700	<2,400	1,380	<117	<140	<33.3	108,000	100,000	<8,450	<8,450	152,000
U4-MW-15DD	12/5/2022	N	EM04	UMCf	120.3 - 130.3	1,580	<240	20.1	142 J	<140	36.9 J	82,600	77,800	<8,450	<8,450	144,000
U4-MW-15DD	3/15/2023	N	EM07	UMCf	120.3 - 130.3	<240	<240	14.5	<117	<140	52.3 J	81,600	79,300	<8,450	<8,450	141,000
U4-MW-15DD	6/13/2023	N	EM10	UMCf	120.3 - 130.3	<120	<120	22.0	<117	<140	45.5 J	85,500	85,500	<8,450	<8,450	138,000
U4-MW-15DD	9/14/2023	N	EM13	UMCf	120.3 - 130.3	126 J	<120	21.2	<117	<140	<33.3	82,200	82,200	<8,450	<8,450	143,000
U4-MW-15DD	12/13/2023	N	EM16	UMCf	120.3 - 130.3	2,070	<24.0	19.5	<117	<140	81.6 J	82,700	78,900	<8,450	<8,450	143,000
U4-MW-15I	4/12/2022	N	BL02	UMCf	76.8 - 86.8	1,190,000	<24,000	86,400	<117	<140	85.9 J	233,000	----	----	----	420,000
U4-MW-15I	12/5/2022	N	EM04	UMCf	76.8 - 86.8	862,000	<24,000	84,200	<117	<140	45.5 J	486,000	486,000	<8,450	<8,450	500,000
U4-MW-15I	3/17/2023	N	EM07	UMCf	76.8 - 86.8	<240	179,000	376 J	<117	2,510 J+	45.7 J	1,440,000	1,440,000	<8,450	<8,450	189,000
U4-MW-15I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<120	<120	13.4	131 J	2,050	81.8 J	1,460,000	1,460,000	<8,450	<8,450	226,000
U4-MW-15I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	1,400,000	<24,000	93,500	213 J	<140	<33.3	734,000	734,000	<8,450	<8,450	938,000
U4-MW-15I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	1,590,000	<24,000	108,000	<117	----	56.6 J	657,000	657,000	<8,450	<8,450	873,000
U4-MW-15S	4/13/2022	N	BL02	UMCf	54.8 - 64.8	36,100	<24.0	3,800	<117	<140	74.6 J	100,000	100,000	<8,450	<8,450	178,000
U4-MW-15S	12/5/2022	N	EM04	UMCf	54.8 - 64.8	<24,000	70,700	663	<117	2,030	143 J-	650,000	650,000	<8,450	<8,450	137,000
U4-MW-15S	3/13/2023	N	EM07	UMCf	54.8 - 64.8	<240	<2,400	21.6 J-	<117	810	185	1,500,000	1,500,000	<8,450	<8,450	155,000
U4-MW-15S	6/13/2023	N	EM10	UMCf	54.8 - 64.8	<120	<120	<0.300	<117	7,440	257 J+	2,360,000	2,360,000	<8,450	<8,450	121,000
U4-MW-15S	9/14/2023	N	EM13	UMCf	54.8 - 64.8	253 J	<240	<0.300	257 J-	15,700 J-	232	4,130,000	4,130,000	<8,450	<8,450	136,000
U4-MW-15S	12/11/2023	N	EM16	UMCf	54.8 - 64.8	<120	<24.0 UJ	<0.300	<11700 UJ	2,160 J-	11,800	6,570,000	6,570,000	<8,450	<8,450	126,000
U4-MW-16D	4/11/2022	N	BL02	UMCf	96.8 - 106.8	15,000,000	<240,000	1,670,000	<117	<2,800	33.3 R	119,000	119,000	<8,450	<8,450	3,030,000
U4-MW-16D	12/5/2022	N	EM04	UMCf	96.8 - 106.8	5,970,000	<240,000	974,000	<117 UJ	<700	<33.3 UJ	259,000	259,000	<8,450	<8,450	1,740,000
U4-MW-16D	3/14/2023	N	EM07	UMCf	96.8 - 106.8	4,140,000	<24,000	476,000 J+	<117	<700	37.5 J	657,000	657,000	<8,450	<8,450	1,490,000
U4-MW-16D	6/13/2023	N	EM10	UMCf	96.8 - 106.8	8,530,000	<240,000	1,170,000	208 J	<1,400	88.1 J	554,000	554,000	<8,450	<8,450	2,180,000
U4-MW-16D	9/15/2023	N	EM13	UMCf	96.8 - 106.8	5,870,000	<24,000	629,000	208 J	<700	<33.3	483,000	483,000	<8,450	<8,450	1,460,000
U4-MW-16D	12/14/2023	N	EM16	UMCf	96.8 - 106.8	6,850,000	<24,000	552,000	<117	<1,400	136	90,500	90,500	<8,450	<8,450	1,410,000
U4-MW-16DD	4/12/2022	N	BL02	UMCf	120.8 - 130.8	396,000	<240	77,900	<117	<140	87.1 J	94,500	----	----	----	229,000
U4-MW-16DD	12/5/2022	N	EM04	UMCf	120.8 - 130.8	146,000	<24,000	49,600	<117	<140	<33.3 UJ	99,100	99,100	<8,450	<8,450	188,000
U4-MW-16DD	3/15/2023	N	EM07	UMCf	120.8 - 130.8	163,000	<2,400	35,700	<117	<140	<33.3	98,200	98,200	<8,450	<8,450	171,000
U4-MW-16DD	6/13/2023	N	EM10	UMCf	120.8 - 130.8	110,000	<2,400	28,800	<117	<140 UJ	<33.3	93,500	93,500	<8,450	<8,450	162,000
U4-MW-16DD	9/14/2023	N	EM13	UMCf	120.8 - 130.8	105,000	<480	24,200	<117	<140	<33.3	97,900	97,900	<8,450	<8,450	166,000
U4-MW-16DD	12/13/2023	N	EM16	UMCf	120.8 - 130.8	78,200	<2,400	21,800	<117	<140	<33.3	99,600	99,600	<8,450	<8,450	162,000
U4-MW-16I	4/11/2022	N	BL02	UMCf	77.0 - 87.0	1,820,000	<24,000	366,000	<117	<700	33.3 R	60,000	42,800	17,200 J	<8,450	546,000
U4-MW-16I	12/5/2022	N	EM04	UMCf	77.0 - 87.0	<2,400	<24,000	205	<117	943	<33.3 UJ	1,030,000	1,030,000	<8,450	<8,450	147,000
U4-MW-16I	12/5/2022	FD	EM04	UMCf	77.0 - 87.0	<24,000	82,400	263	<117 UJ	956	<33.3 UJ	1,060,000	1,060,000	<8,450	<8,450	144,000
U4-MW-16I	3/13/2023	N	EM07	UMCf	77.0 - 87.0	<24.0	109,000	<0.300	<117	1,760 J-	35.3 J	1,770,000	1,770,000	<8,450	<8,450	120,000
U4-MW-16I	3/13/2023	FD	EM07	UMCf	77.0 - 87.0	<24.0	107,000	<0.300	<117 UJ	1,910 J-	37.5 J	1,770,000	1,770,000	<8,450	<8,450	120,000
U4-MW-16I	6/12/2023	N	EM10	UMCf	77.0 - 87.0	<120	<120 UJ	<0.300	<117	1,530	48.2 J	1,670,000	1,670,000	<8,450	<8,450	133,000
U4-MW-16I	6/12/2023	FD	EM10	UMCf	77.0 - 87.0	<120	<120 UJ	<0.300	<117	1,470	47.4 J	1,640,000	1,640,000	<8,450	<8,450	132,000
U4-MW-16I	9/11/2023	N	EM13	UMCf	77.0 - 87.0	6,830,000	<24,000	1,080,000	174 J	<1,400	49.2 J	401,000	401,000	<8,450	<8,450	1,660,000
U4-MW-16I	9/11/2023	FD	EM13	UMCf	77.0 - 87.0	6,880,000	<24,000	926,000	172 J	<1,400	<33.3	396,000	396,000	<8,450	<8,450	1,690,000
U4-MW-16I	12/11/2023	N	EM16	UMCf	77.0 - 87.0	<240	<240	978,000	160 J	<1,400	33.9 J	240,000	240,000	<8,450	<8,450	188,000
U4-MW-16I	12/11/2023	FD	EM16	UMCf	77.0 - 87.0	<240	<240	1,060,000	157 J	<1,400	<33.3	243,000	243,000	<8,450	<8,450	184,000
U4-MW-16S	4/12/2022	N	BL02	UMCf	54.8 - 64.8	64,100	<240	9,400	<117	<140	<33.3	64,800	----	----	----	173,000
U4-MW-16S	4/12/2022	FD	BL02	UMCf	54.8 - 64.8	64,100	<240	9,860	<117	<140	33.3 R	64,400	----	----	----	171,000
U4-MW-16S	12/6/2022	N	EM04	UMCf	54.8 - 64.8	<2400 UJ	<2400 R	1,030 J+	<117 UJ	522	68.4 J	174,000	174,000	<8450 UJ	<8450 UJ	173,000
U4-MW-16S	3/15/2023	N	EM07	UMCf	54.8 - 64.8	<24,000	84,200	<0.300	<117	944	253	1,770,000	1,770,000	<8,450	<8,450	107,000
U4-MW-16S	6/13/2023	N	EM10	UMCf	54.8 - 64.8	<240	<240 UJ	<0.300	<117	1,790	260 J+	1,860,000	1,860,000	<8,450	<8,450	113,000
U4-MW-16S	9/11/2023	N	EM13	UMCf	54.8 - 64.8	1,680 J	254,000	<0.300	<117	1,270	322	1,220,000	1,220,000	<8,450	<8,450	129,000
U4-MW-16S	12/11/2023	N	EM16	UMCf	54.8 - 64.8	293 J	355 J	<0.300	<117	1,730 J+	343	1,510,000	1,510,000	<8,450	<8,450	127,000
U4-SLMW	11/10/2022	N	EM03		-	4,220 J-	<240	<0.300	<117	325	46.9 J	----	----	----	----	----
U4-T3	10/13/2022	N	EM02		-	7,380,000	<240,000	928,000	----	----	----	----	----	----	----	1,890,000

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	E314.0	E300.1	E300.1	E350.1	E351.2	E365.1	Alkalinity by SM2320B	Alkalinity by SM2320B	Alkalinity by SM2320B	Alkalinity by SM2320B	Anions by E300.0/SW906 5A
						Perchlorate	Chlorate	Chlorite	Ammonia (as N)	Total Kjeldahl Nitrogen (TKN)	Phosphorus	Alkalinity as CaCO3	Bicarbonate Alkalinity as CaCO3	Carbonate Alkalinity as CaCO3	Hydroxide Alkalinity as CaCO3	Chloride
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-T3	11/3/2022	N	EM03		-	7,450,000	<240,000	887,000	----	----	----	----	----	----	----	1,780,000
U4-T3	12/6/2022	N	EM04		-	5,280,000	<240000 UJ	766,000	----	----	----	----	----	----	----	1,250,000
U4-T3	1/9/2023	N	EM05		-	7,910,000	<240,000	886,000	----	----	----	----	----	----	----	1,850,000
U4-T3	2/13/2023	N	EM06		-	7,800,000	<24,000	877,000	----	----	----	----	----	----	----	1,770,000
U4-T3	3/13/2023	N	EM07		-	7,400,000	<24,000	815,000	----	----	----	----	----	----	----	1,810,000
U4-T3	4/19/2023	N	EM08		-	2,880,000	<24,000	406,000	----	----	----	----	----	----	----	885,000
U4-T3	5/18/2023	N	EM09		-	4,200,000	<24,000	498,000	----	----	----	----	----	----	----	1,230,000
U4-T3	6/12/2023	N	EM10		-	3,720,000	<240000 UJ	488,000	----	----	----	----	----	----	----	1,240,000
U4-T3	7/11/2023	N	EM11		-	3,990,000	<24,000	451,000	----	----	----	----	----	----	----	1,260,000
U4-T3	8/10/2023	N	EM12		-	2,110,000	30,400 J	252,000	----	----	----	----	----	----	----	879,000
U4-T3	9/11/2023	N	EM13		-	1,990,000	54,900 J+	217,000	----	----	----	----	----	----	----	836,000
U4-T3	10/16/2023	N	EM14		-	1,090,000	29,300 J	149,000	----	----	----	----	----	----	----	597,000

Notes:

FD - Field duplicate

E - Field instrument error.

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 low.

J+ - The result is an estimated quantity, but the result may be biased high.

N/A - Not Applicable

mg/L - milligrams per liter

µg/L - micrograms per liter

N - Normal field 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

< - The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

-- Not tested.

M-252 damaged/obstructed when checked on June 14, 2023 and September 14, 2023.

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Anions by E300.0/SW906 5A	Anions by E300.0/SW906 5A	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020
						Nitrate (as N)	Sulfate	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
M-247-100	4/20/2022	N	BL02	UMCf	100.5 - 110.5	----	----	----	----	----	----	----	----	----	----
M-249-100	4/20/2022	N	BL02	UMCf	99.6 - 109.6	----	----	----	----	----	----	----	----	----	----
M-251-100	4/19/2022	N	BL02	UMCf	92.5 - 102.5	52,900	1,480,000	----	----	----	----	----	----	----	----
M-251-100	10/13/2022	N	EM02	UMCf	92.5 - 102.5	29,700	----	----	----	----	----	----	----	----	----
M-251-100	11/2/2022	N	EM03	UMCf	92.5 - 102.5	21,500	----	----	----	----	----	----	----	----	----
M-251-100	12/8/2022	N	EM04	UMCf	92.5 - 102.5	22,300	----	----	----	----	----	----	----	----	----
M-251-100	1/11/2023	N	EM05	UMCf	92.5 - 102.5	31,100 J+	----	----	----	----	----	----	----	----	----
M-251-100	2/13/2023	N	EM06	UMCf	92.5 - 102.5	15,000	----	----	----	----	----	----	----	----	----
M-251-100	3/17/2023	N	EM07	UMCf	92.5 - 102.5	15,000 J-	388,000 J	<56.1	<5.15	12.4	75.8	<0.330	<0.750	500,000	20,700
M-251-100	4/21/2023	N	EM08	UMCf	92.5 - 102.5	23,000	503,000	----	----	----	----	----	----	----	----
M-251-100	5/9/2023	N	EM09	UMCf	92.5 - 102.5	23,200	513,000	----	----	----	----	----	----	----	----
M-251-100	6/14/2023	N	EM10	UMCf	92.5 - 102.5	24,500 J-	469,000 J	143 J	<5.15	9.84 J	117	<0.330	<0.750	775,000	35,400
M-251-100	7/14/2023	N	EM11	UMCf	92.5 - 102.5	23,800	519,000	----	----	----	----	----	----	----	----
M-251-100	8/10/2023	N	EM12	UMCf	92.5 - 102.5	16,200 J+	361,000 J	----	----	----	----	----	----	----	----
M-251-100	9/14/2023	N	EM13	UMCf	92.5 - 102.5	26,800 J+	454,000 J	<56.1	<5.15	6.38 J	119	<0.330	<0.750	856,000	28,200
M-251-100	10/19/2023	N	EM14	UMCf	92.5 - 102.5	3,340	465,000	----	----	----	----	----	----	----	----
M-251-100	11/16/2023	N	EM15	UMCf	92.5 - 102.5	20,800	390,000 J	----	----	----	----	----	----	----	----
M-251-100	12/12/2023	N	EM16	UMCf	92.5 - 102.5	20,100 J+	465,000 J	85.4 J	<10.3	7.09 J	155	<0.330	<1.50	914,000	30,400
M-251-60	4/18/2022	N	BL02	UMCf	52.3 - 62.3	2,360	1,220,000	----	----	----	----	----	----	----	----
M-251-60	3/15/2023	N	EM07	UMCf	52.3 - 62.3	4,430	1,130,000	138 J	2.99 J	49.8	28.8	<0.330	<0.150	30,600	1,520
M-251-60	6/14/2023	N	EM10	UMCf	52.3 - 62.3	3,720 J	1,150,000	105 J	1.82 J	60.3	7.04	<0.330	<0.150	22,200	1,760
M-251-60	9/14/2023	N	EM13	UMCf	52.3 - 62.3	6,040	1,150,000	60.6 J	2.01 J	47.6	20.1	<0.330	<0.150	25,400	1,640
M-251-60	12/11/2023	N	EM16	UMCf	52.3 - 62.3	3,180 J	1,020,000	172 J	1.91 J	49.1	15.2	<0.330	<0.150	36,200	1,600
M-252	4/21/2022	N	BL02	UMCf	132.3 - 142.3	2,440	180,000	----	----	----	----	----	----	----	----
M-252	3/15/2023	N	EM07	UMCf	132.3 - 142.3	1,230	153,000	<56.1	<1.03	4.03	661	<0.330	<0.150	382,000	91.0
M-252	9/19/2023	N	EM13	UMCf	132.3 - 142.3	1,720	165,000	56.6 J	<1.03	7.37	338	<0.330	<0.150	225,000	26.2
M-252	12/18/2023	N	EM16	UMCf	132.3 - 142.3	1,390	168,000	<56.1	<1.03	4.88	376	<0.330	<0.150	281,000	10.9
M-253-100	4/20/2022	N	BL02	UMCf	100.8 - 110.8	----	----	----	----	----	----	----	----	----	----
M-255-100	4/20/2022	N	BL02	UMCf	100.2 - 110.2	----	----	----	----	----	----	----	----	----	----
U4-E-01D	4/18/2022	N	BL02	UMCf	94.7 - 109.7	45,200	1,020,000	----	----	----	----	----	----	----	----
U4-E-01D	3/14/2023	N	EM07	UMCf	94.7 - 109.7	357	229,000	<56.1	<1.03	1.52 J	133	<0.330	<0.150	84,300	3.28 J
U4-E-011	4/19/2022	N	BL02	UMCf	74.6 - 89.6	4,170	1,050,000	----	----	----	----	----	----	----	----
U4-E-011	4/19/2022	FD	BL02	UMCf	74.6 - 89.6	6,420	1,030,000	----	----	----	----	----	----	----	----
U4-E-011	3/14/2023	N	EM07	UMCf	74.6 - 89.6	8,200	389,000	<56.1	<1.03	15.1	49.5	<0.330	<0.150	370,000	16,400
U4-E-011	4/20/2023	N	EM08	UMCf	74.6 - 89.6	----	----	----	----	----	----	----	----	----	----
U4-E-011	5/10/2023	N	EM09	UMCf	74.6 - 89.6	----	----	----	----	----	----	----	----	----	----
U4-E-011	6/12/2023	N	EM10	UMCf	74.6 - 89.6	----	----	----	----	----	----	----	----	----	----
U4-E-011	7/11/2023	N	EM11	UMCf	74.6 - 89.6	----	----	----	----	----	----	----	----	----	----
U4-E-011	8/10/2023	N	EM12	UMCf	74.6 - 89.6	----	----	----	----	----	----	----	----	----	----
U4-E-011	9/11/2023	N	EM13	UMCf	74.6 - 89.6	----	250,000 J	----	----	----	----	----	----	----	----
U4-E-011	10/16/2023	N	EM14	UMCf	74.6 - 89.6	----	----	----	----	----	----	----	----	----	----
U4-E-011	12/13/2023	N	EM16	UMCf	74.6 - 89.6	<4,800	136,000 J	----	----	----	----	----	----	----	----
U4-E-02D	4/20/2022	N	BL02	UMCf	94.4 - 109.4	12,200	1,120,000	----	----	----	----	----	----	----	----
U4-E-02D	3/14/2023	N	EM07	UMCf	94.4 - 109.4	311	234,000	<56.1	<1.03	1.39 J	138	<0.330	<0.150	82,600	9.61 J
U4-E-021	4/18/2022	N	BL02	UMCf	74.4 - 89.4	7,430	1,020,000	----	----	----	----	----	----	----	----
U4-E-021	3/14/2023	N	EM07	UMCf	74.4 - 89.4	374	253,000	<56.1	<1.03	18.2	58.1	<0.330	<0.150	87,500	2,140
U4-E-021	4/20/2023	N	EM08	UMCf	74.4 - 89.4	----	----	----	----	----	----	----	----	----	----
U4-E-021	5/11/2023	N	EM09	UMCf	74.4 - 89.4	----	----	----	----	----	----	----	----	----	----
U4-E-021	6/12/2023	N	EM10	UMCf	74.4 - 89.4	----	----	----	----	----	----	----	----	----	----
U4-E-021	7/11/2023	N	EM11	UMCf	74.4 - 89.4	----	----	----	----	----	----	----	----	----	----
U4-E-021	8/10/2023	N	EM12	UMCf	74.4 - 89.4	----	----	----	----	----	----	----	----	----	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Anions by E300.0/SW906 5A	Anions by E300.0/SW906 5A	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020
						Nitrate (as N)	Sulfate	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-E-02I	9/11/2023	N	EM13	UMCf	74.4 - 89.4	----	111,000	----	----	----	----	----	----	----	----
U4-E-02I	10/16/2023	N	EM14	UMCf	74.4 - 89.4	----	----	----	----	----	----	----	----	----	----
U4-E-02I	12/14/2023	N	EM16	UMCf	74.4 - 89.4	<4,800	177,000 J	----	----	----	----	----	----	----	----
U4-E-03D	4/19/2022	N	BL02	UMCf	95.1 - 110.1	48,700	1,420,000	----	----	----	----	----	----	----	----
U4-E-03D	10/13/2022	N	EM02	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	----	----	----
U4-E-03D	11/3/2022	N	EM03	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	----	----	----
U4-E-03D	12/6/2022	N	EM04	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	----	----	----
U4-E-03D	1/9/2023	N	EM05	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	----	----	----
U4-E-03D	2/13/2023	N	EM06	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	----	----	----
U4-E-03D	3/13/2023	N	EM07	UMCf	95.1 - 110.1	16,100	----	----	----	----	----	----	----	----	----
U4-E-03D	3/14/2023	N	EM07	UMCf	95.1 - 110.1	12,100	591,000	<56.1	<5.15	21.2	65.5	<0.330	<0.750	383,000	34,800
U4-E-03D	4/19/2023	N	EM08	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	----	----	----
U4-E-03D	5/11/2023	N	EM09	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	----	----	----
U4-E-03D	6/12/2023	N	EM10	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	----	----	----
U4-E-03D	7/11/2023	N	EM11	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	----	----	----
U4-E-03D	8/10/2023	N	EM12	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	----	----	----
U4-E-03D	9/11/2023	N	EM13	UMCf	95.1 - 110.1	----	537,000	----	----	----	----	----	----	----	----
U4-E-03D	10/16/2023	N	EM14	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	----	----	----
U4-E-04D	4/19/2022	N	BL02	UMCf	95.0 - 110.0	27,800	508,000	----	----	----	----	----	----	----	----
U4-E-04D	3/14/2023	N	EM07	UMCf	95.0 - 110.0	328	235,000	<56.1	<1.03	1.61 J	138	<0.330	<0.150	82,200	<1.40
U4-E-04I	4/18/2022	N	BL02	UMCf	75.0 - 90.0	3,940	1,090,000	----	----	----	----	----	----	----	----
U4-E-04I	3/14/2023	N	EM07	UMCf	75.0 - 90.0	<480	709,000	<56.1	<5.15	18.6	82.7	<0.330	<0.750	872,000	58,500
U4-E-05D	4/19/2022	N	BL02	UMCf	95.0 - 110.0	4,770	758,000	----	----	----	----	----	----	----	----
U4-E-05D	3/16/2023	N	EM07	UMCf	95.0 - 110.0	<48.0	237,000	<56.1	<1.03	4.08	156	<0.330	<0.150	80,300	1.57 J
U4-E-05I	4/19/2022	N	BL02	UMCf	75.0 - 90.0	3,290	1,100,000	----	----	----	----	----	----	----	----
U4-E-05I	3/15/2023	N	EM07	UMCf	75.0 - 90.0	4,630	363,000	<56.1	<1.03	32.9	30.3	<0.330	<0.150	59,400	7,780
U4-E-06D	4/11/2022	N	BL02	UMCf	95.1 - 110.1	12,200	214,000	81.0 J	<1.03	5.21	187 J	<0.330	<0.150	515,000 J	11,900 J
U4-E-06I	4/11/2022	N	BL02	UMCf	73.2 - 88.2	3,550	1,220,000	87.1 J	<1.03	32.9	34.2	<0.330	<0.150	223,000	2,270
U4-E-06I	4/11/2022	FD	BL02	UMCf	73.2 - 88.2	3,660	1,300,000	68.8 J	<1.03	32.6	33.8	<0.330	<0.150	222,000	2,260
U4-E-06I	10/12/2022	N	EM02	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	----	----	----
U4-E-06I	11/3/2022	N	EM03	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	----	----	----
U4-E-06I	12/6/2022	N	EM04	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	----	----	----
U4-E-06I	1/9/2023	N	EM05	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	----	----	----
U4-E-06I	2/13/2023	N	EM06	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	----	----	----
U4-E-06I	3/13/2023	N	EM07	UMCf	73.2 - 88.2	<960 R	----	----	----	----	----	----	----	----	----
U4-E-06I	4/17/2023	N	EM08	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	----	----	----
U4-E-06I	5/15/2023	N	EM09	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	----	----	----
U4-E-06I	6/12/2023	N	EM10	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	----	----	----
U4-E-06I	7/11/2023	N	EM11	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	----	----	----
U4-E-06I	8/11/2023	N	EM12	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	----	----	----
U4-E-06I	9/11/2023	N	EM13	UMCf	73.2 - 88.2	----	379,000	----	----	----	----	----	----	----	----
U4-E-06I	10/16/2023	N	EM14	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	----	----	----
U4-E-06I	12/13/2023	N	EM16	UMCf	73.2 - 88.2	6,080 J	550,000 J+	----	----	----	----	----	----	----	----
U4-E-07D	4/12/2022	N	BL02	UMCf	94.6 - 109.6	56,100	965,000	<280	<10.3	12.2 J	135	<1.65	<1.50	1,450,000	79,000
U4-E-07I	4/12/2022	N	BL02	UMCf	74.7 - 89.7	10,200	1,120,000	117 J	1.17 J	72.5	29.6 J+	<0.330	<0.150	157,000	15,100
U4-E-07I	10/11/2022	N	EM02	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	----	----	----
U4-E-07I	11/3/2022	N	EM03	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	----	----	----
U4-E-07I	12/6/2022	N	EM04	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	----	----	----
U4-E-07I	1/9/2023	N	EM05	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	----	----	----
U4-E-07I	2/13/2023	N	EM06	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	----	----	----
U4-E-07I	3/13/2023	N	EM07	UMCf	74.7 - 89.7	14,200	----	----	----	----	----	----	----	----	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Anions by E300.0/SW906 5A	Anions by E300.0/SW906 5A	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020
						Nitrate (as N)	Sulfate	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-E-07I	4/19/2023	N	EM08	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	----	----	----
U4-E-07I	5/15/2023	N	EM09	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	----	----	----
U4-E-07I	6/12/2023	N	EM10	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	----	----	----
U4-E-07I	7/11/2023	N	EM11	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	----	----	----
U4-E-07I	8/11/2023	N	EM12	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	----	----	----
U4-E-07I	9/11/2023	N	EM13	UMCf	74.7 - 89.7	----	685,000	----	----	----	----	----	----	----	----
U4-E-07I	10/16/2023	N	EM14	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	----	----	----
U4-E-07I	12/13/2023	N	EM16	UMCf	74.7 - 89.7	14,500	555,000 J+	----	----	----	----	----	----	----	----
U4-E-08D	4/12/2022	N	BL02	UMCf	94.6 - 109.6	63,500	948,000	<280	<10.3	5.36 J	143	<1.65	<1.50	1,670,000	92,600
U4-E-08D	10/11/2022	N	EM02	UMCf	94.6 - 109.6	----	----	----	----	----	----	----	----	----	----
U4-E-08D	11/3/2022	N	EM03	UMCf	94.6 - 109.6	----	----	----	----	----	----	----	----	----	----
U4-E-08D	12/6/2022	N	EM04	UMCf	94.6 - 109.6	----	----	----	----	----	----	----	----	----	----
U4-E-08D	1/9/2023	N	EM05	UMCf	94.6 - 109.6	----	----	----	----	----	----	----	----	----	----
U4-E-08D	2/13/2023	N	EM06	UMCf	94.6 - 109.6	----	----	----	----	----	----	----	----	----	----
U4-E-08D	3/13/2023	N	EM07	UMCf	94.6 - 109.6	14,600	----	----	----	----	----	----	----	----	----
U4-E-08D	4/19/2023	N	EM08	UMCf	94.6 - 109.6	----	----	----	----	----	----	----	----	----	----
U4-E-08D	5/17/2023	N	EM09	UMCf	94.6 - 109.6	----	----	----	----	----	----	----	----	----	----
U4-E-08D	6/12/2023	N	EM10	UMCf	94.6 - 109.6	----	----	----	----	----	----	----	----	----	----
U4-E-08D	7/11/2023	N	EM11	UMCf	94.6 - 109.6	----	----	----	----	----	----	----	----	----	----
U4-E-09D	4/15/2022	N	BL02	UMCf	94.5 - 109.5	19,200	475,000	106 J	<10.3	9.35 J	106	<0.330	<1.50	832,000	27,200
U4-E-09I	4/14/2022	N	BL02	UMCf	74.9 - 89.9	9,440	1,100,000	<56.1	1.07 J	30.8	27.1	<0.330	<0.150	215,000	9,660
U4-E-10D	4/13/2022	N	BL02	UMCf	94.5 - 109.5	11,200	550,000	102 J	<1.03	6.71	112	<0.330	<0.150	436,000	9,680
U4-E-10I	4/13/2022	N	BL02	UMCf	74.2 - 89.2	10,400	711,000	115 J	<1.03	19.6	34.7	<0.330	<0.150	307,000	16,100
U4-MW-01D	4/19/2022	N	BL02	UMCf	96.7 - 106.7	5,360	437,000	----	----	----	----	----	----	----	----
U4-MW-01D	2/16/2023	N	EM06	UMCf	96.7 - 106.7	----	----	----	----	----	----	----	----	----	----
U4-MW-01D	3/20/2023	N	EM07	UMCf	96.7 - 106.7	8,720	429,000	<56.1	<1.03	7.27	40.6	<0.330	<0.150	110,000	4,860
U4-MW-01D	6/13/2023	N	EM10	UMCf	96.7 - 106.7	2,400	385,000	<56.1	<10.3	7.99 J	158	0.722 J	<1.50	421,000	19,800
U4-MW-01D	9/14/2023	N	EM13	UMCf	96.7 - 106.7	6,890	356,000	<56.1	<5.15	7.50 J	132	<0.330	<0.750	423,000	17,500
U4-MW-01D	12/14/2023	N	EM16	UMCf	96.7 - 106.7	5,860	358,000	<56.1	<5.15	7.29 J	143	<0.330	<0.750	405,000	16,000
U4-MW-01DD	4/19/2022	N	BL02	UMCf	119.9 - 129.9	230	214,000	----	----	----	----	----	----	----	----
U4-MW-01DD	4/19/2022	FD	BL02	UMCf	119.9 - 129.9	259	214,000	----	----	----	----	----	----	----	----
U4-MW-01DD	3/15/2023	N	EM07	UMCf	119.9 - 129.9	4,730	249,000	<56.1	<1.03	9.69	117	<0.330	<0.150	276,000	8,120
U4-MW-01DD	6/13/2023	N	EM10	UMCf	119.9 - 129.9	3,700	279,000	<56.1	<10.3	4.73 J	109	<0.330	<1.50	246,000	9,010
U4-MW-01DD	9/14/2023	N	EM13	UMCf	119.9 - 129.9	4,470 J+	242,000	<56.1	<1.03	5.37	119	<0.330	<0.150	290,000	9,630
U4-MW-01DD	12/15/2023	N	EM16	UMCf	119.9 - 129.9	<48.0 R	200,000	<56.1	<1.03	9.11	67.7	<0.330	<0.150	162,000	4,960
U4-MW-01I	4/19/2022	N	BL02	UMCf	76.7 - 86.7	5,610	590,000	----	----	----	----	----	----	----	----
U4-MW-01I	3/20/2023	N	EM07	UMCf	76.7 - 86.7	13,400	458,000 J	61.0 J	1.22 J	8.10	48.9	<0.330	<0.150	156,000	5,440
U4-MW-01I	6/12/2023	N	EM10	UMCf	76.7 - 86.7	6,470	383,000	270 J+	<1.03	6.24	124	<0.330	<0.150	444,000	19,200
U4-MW-01I	9/14/2023	N	EM13	UMCf	76.7 - 86.7	7,850	348,000	67.7 J	<5.15	6.96 J	131	<0.330	<0.750	548,000	18,700
U4-MW-01I	12/15/2023	N	EM16	UMCf	76.7 - 86.7	<48.0	341,000	8,760	<1.03	17.5	216	0.749 J	<1.50	756,000	19,500
U4-MW-01S	4/18/2022	N	BL02	UMCf	54.7 - 64.7	2,730	1,290,000	----	----	----	----	----	----	----	----
U4-MW-01S	3/15/2023	N	EM07	UMCf	54.7 - 64.7	5,680	1,190,000	56.8 J	<1.03	57.0	12.1	<0.330	<0.150	15,200	1,290
U4-MW-01S	6/13/2023	N	EM10	UMCf	54.7 - 64.7	1,190 J-	1,170,000	<56.1	<1.03	52.7	13.3 J+	<0.330	<0.150	17,100	1,530
U4-MW-01S	9/15/2023	N	EM13	UMCf	54.7 - 64.7	2,760 J-	1,200,000	63.4 J	<1.03	50.6	11.9	<0.330	<0.150	17,000	1,510
U4-MW-01S	12/13/2023	N	EM16	UMCf	54.7 - 64.7	2,200	1,060,000	<56.1	<1.03	60.8	9.92	<0.330	<0.150	14,100	1,150
U4-MW-02D	4/14/2022	N	BL02	UMCf	95.0 - 110.0	72,300	993,000	----	----	----	----	----	----	----	----
U4-MW-02D	10/11/2022	N	EM02	UMCf	95.0 - 110.0	84,600	----	----	----	----	----	----	----	----	----
U4-MW-02D	11/1/2022	N	EM03	UMCf	95.0 - 110.0	81,900	----	----	----	----	----	----	----	----	----
U4-MW-02D	12/7/2022	N	EM04	UMCf	95.0 - 110.0	73,900	----	----	----	----	----	----	----	----	----
U4-MW-02D	1/10/2023	N	EM05	UMCf	95.0 - 110.0	63,000	----	----	----	----	----	----	----	----	----
U4-MW-02D	2/13/2023	N	EM06	UMCf	95.0 - 110.0	70,200	----	----	----	----	----	----	----	----	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Anions by E300.0/SW906 5A	Anions by E300.0/SW906 5A	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020
						Nitrate (as N)	Sulfate	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-02D	3/17/2023	N	EM07	UMCf	95.0 - 110.0	53,100 J-	943,000	<56.1	<10.3	6.71 J	142	<0.330	<1.50	1,230,000	94,700
U4-MW-02D	4/19/2023	N	EM08	UMCf	95.0 - 110.0	68,100	1,210,000	----	----	----	----	----	----	----	----
U4-MW-02D	5/9/2023	N	EM09	UMCf	95.0 - 110.0	64,000	1,140,000	----	----	----	----	----	----	----	----
U4-MW-02D	6/13/2023	N	EM10	UMCf	95.0 - 110.0	55,000	906,000	<280	<10.3	8.58 J	115	<1.65	<1.50	1,130,000	96,900
U4-MW-02D	7/18/2023	N	EM11	UMCf	95.0 - 110.0	<480	1,140,000	----	----	----	----	----	----	----	----
U4-MW-02D	8/14/2023	N	EM12	UMCf	95.0 - 110.0	72,000	1,140,000	----	----	----	----	----	----	----	----
U4-MW-02D	9/11/2023	N	EM13	UMCf	95.0 - 110.0	54,700	1,010,000	84.2 J	<20.6	8.17 J	102	<0.330	<3.00	1,080,000	107,000
U4-MW-02D	10/19/2023	N	EM14	UMCf	95.0 - 110.0	57,900	1,150,000	----	----	----	----	----	----	----	----
U4-MW-02D	11/15/2023	N	EM15	UMCf	95.0 - 110.0	38,400	1,030,000	----	----	----	----	----	----	----	----
U4-MW-02D	12/14/2023	N	EM16	UMCf	95.0 - 110.0	40,300	676,000	<56.1	<20.6	6.58 J	118	<0.330	<3.00	1,240,000	85,600
U4-MW-02I	4/14/2022	N	BL02	UMCf	75.0 - 90.0	9,670	1,200,000	----	----	----	----	----	----	----	----
U4-MW-02I	10/11/2022	N	EM02	UMCf	75.0 - 90.0	15,300	----	----	----	----	----	----	----	----	----
U4-MW-02I	11/2/2022	N	EM03	UMCf	75.0 - 90.0	23,800	----	----	----	----	----	----	----	----	----
U4-MW-02I	11/2/2022	FD	EM03	UMCf	75.0 - 90.0	20,600	----	----	----	----	----	----	----	----	----
U4-MW-02I	12/8/2022	N	EM04	UMCf	75.0 - 90.0	<4800 R	----	----	----	----	----	----	----	----	----
U4-MW-02I	12/8/2022	FD	EM04	UMCf	75.0 - 90.0	<4800 R	----	----	----	----	----	----	----	----	----
U4-MW-02I	1/13/2023	N	EM05	UMCf	75.0 - 90.0	13,300	----	----	----	----	----	----	----	----	----
U4-MW-02I	1/13/2023	FD	EM05	UMCf	75.0 - 90.0	13,100	----	----	----	----	----	----	----	----	----
U4-MW-02I	2/15/2023	N	EM06	UMCf	75.0 - 90.0	35,000	----	----	----	----	----	----	----	----	----
U4-MW-02I	2/15/2023	FD	EM06	UMCf	75.0 - 90.0	37,500	----	----	----	----	----	----	----	----	----
U4-MW-02I	3/17/2023	N	EM07	UMCf	75.0 - 90.0	33,700 J-	981,000	<56.1	<5.15	23.8	96.6	<0.330	<0.750	581,000	61,100
U4-MW-02I	3/17/2023	FD	EM07	UMCf	75.0 - 90.0	32,300 J-	935,000	<56.1	<5.15	23.3	97.1	<0.330	<0.750	555,000	61,000
U4-MW-02I	4/20/2023	N	EM08	UMCf	75.0 - 90.0	208 J+	74,700	----	----	----	----	----	----	----	----
U4-MW-02I	4/20/2023	FD	EM08	UMCf	75.0 - 90.0	222 J+	74,900	----	----	----	----	----	----	----	----
U4-MW-02I	5/9/2023	N	EM09	UMCf	75.0 - 90.0	<48.0	374,000	----	----	----	----	----	----	----	----
U4-MW-02I	5/9/2023	FD	EM09	UMCf	75.0 - 90.0	<48.0	372,000	----	----	----	----	----	----	----	----
U4-MW-02I	6/12/2023	N	EM10	UMCf	75.0 - 90.0	1,790	267,000	<56.1	<1.03	60.7	72.6	<0.330	<0.150	129,000	515
U4-MW-02I	6/12/2023	FD	EM10	UMCf	75.0 - 90.0	1,340	265,000	<56.1	<1.03	60.1	69.8	<0.330	<0.150	124,000	491
U4-MW-02I	7/18/2023	N	EM11	UMCf	75.0 - 90.0	56.3 J	736 J	----	----	----	----	----	----	----	----
U4-MW-02I	7/18/2023	FD	EM11	UMCf	75.0 - 90.0	56.0 J	761 J	----	----	----	----	----	----	----	----
U4-MW-02I	8/11/2023	N	EM12	UMCf	75.0 - 90.0	5,410	377,000	----	----	----	----	----	----	----	----
U4-MW-02I	8/11/2023	FD	EM12	UMCf	75.0 - 90.0	5,230	406,000	----	----	----	----	----	----	----	----
U4-MW-02I	9/11/2023	N	EM13	UMCf	75.0 - 90.0	779 J	299,000	<56.1	<5.15	66.5	421	<0.330	<0.750	254,000	2,410
U4-MW-02I	9/11/2023	FD	EM13	UMCf	75.0 - 90.0	<48.0	298,000	<56.1	<5.15	65.9	416	<0.330	<0.750	250,000	2,190
U4-MW-02I	10/19/2023	N	EM14	UMCf	75.0 - 90.0	4,260	672,000	----	----	----	----	----	----	----	----
U4-MW-02I	10/19/2023	FD	EM14	UMCf	75.0 - 90.0	4,960	673,000	----	----	----	----	----	----	----	----
U4-MW-02I	11/15/2023	N	EM15	UMCf	75.0 - 90.0	8,540 J	583,000	----	----	----	----	----	----	----	----
U4-MW-02I	11/15/2023	FD	EM15	UMCf	75.0 - 90.0	8,600 J	580,000	----	----	----	----	----	----	----	----
U4-MW-02I	12/14/2023	N	EM16	UMCf	75.0 - 90.0	14,300	552,000 J+	<56.1	<10.3	74.8	220	<0.330	<1.50	255,000	23,400
U4-MW-02I	12/14/2023	FD	EM16	UMCf	75.0 - 90.0	14,300	580,000 J+	<56.1	<5.15	72.9	219	<0.330	<0.750	255,000	23,400
U4-MW-03D	4/20/2022	N	BL02	UMCf	96.6 - 106.6	22,400	534,000	----	----	----	----	----	----	----	----
U4-MW-03D	2/16/2023	N	EM06	UMCf	96.6 - 106.6	----	----	----	----	----	----	----	----	----	----
U4-MW-03D	3/16/2023	N	EM07	UMCf	96.6 - 106.6	16,100	363,000	76.8 J	<5.15	7.03 J	138	<0.330	<0.750	692,000	28,100
U4-MW-03D	3/16/2023	FD	EM07	UMCf	96.6 - 106.6	15,800	358,000	76.7 J	<5.15	7.05 J	137	<0.330	<0.750	684,000	28,200
U4-MW-03D	6/15/2023	N	EM10	UMCf	96.6 - 106.6	11,000	337,000 J	<56.1	<5.15	7.58 J	118	<0.330	<0.750	634,000	28,300
U4-MW-03D	9/14/2023	N	EM13	UMCf	96.6 - 106.6	21,700 J+	437,000 J	<56.1	<5.15	6.25 J	130	<0.330	<0.750	681,000	31,400
U4-MW-03D	12/13/2023	N	EM16	UMCf	96.6 - 106.6	12,600 J-	364,000 J	81.0 J	<5.15	8.33 J	131	<0.330	<0.750	640,000	24,500
U4-MW-03DD	4/20/2022	N	BL02	UMCf	119.7 - 129.7	1,180	255,000	----	----	----	----	----	----	----	----
U4-MW-03DD	3/15/2023	N	EM07	UMCf	119.7 - 129.7	1,290	159,000	<56.1	<1.03	12.6	24.1	<0.330	<0.150	30,700	64.2
U4-MW-03DD	6/15/2023	N	EM10	UMCf	119.7 - 129.7	447	163,000	<56.1	<1.03	12.7	25.8	<0.330	<0.150	30,700	48.5
U4-MW-03DD	9/14/2023	N	EM13	UMCf	119.7 - 129.7	1,300	170,000	<56.1	<1.03	11.0	24.1	<0.330	<0.150	30,800	27.6

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Anions by E300.0/SW906 5A	Anions by E300.0/SW906 5A	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020
						Nitrate (as N)	Sulfate	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-03DD	12/14/2023	N	EM16	UMCf	119.7 - 129.7	1,050	178,000	<56.1	<1.03	11.3	24.1	<0.330	<0.150	32,200	21.4
U4-MW-03I	4/19/2022	N	BL02	UMCf	76.6 - 86.6	3,990 J	1,080,000	----	----	----	----	----	----	----	----
U4-MW-03I	3/15/2023	N	EM07	UMCf	76.6 - 86.6	9,430	335,000	<56.1	<1.03	7.08	121	<0.330	<0.150	600,000	25,400
U4-MW-03I	6/14/2023	N	EM10	UMCf	76.6 - 86.6	13,400	373,000	144 J	<5.15	10.3	93.6	<0.330	<0.750	514,000	23,500
U4-MW-03I	6/14/2023	FD	EM10	UMCf	76.6 - 86.6	13,300	373,000	125 J	<5.15	11.3	95.9	<0.330	<0.750	529,000	24,400
U4-MW-03I	9/11/2023	N	EM13	UMCf	76.6 - 86.6	17,900 J	402,000 J	19,800	<5.15	19.9	170	1.45 J	<0.750	717,000	27,800
U4-MW-03I	9/11/2023	FD	EM13	UMCf	76.6 - 86.6	37,500 J	499,000 J	14,900	<5.15	18.2	157	1.05 J	<0.750	698,000	27,900
U4-MW-03I	12/13/2023	N	EM16	UMCf	76.6 - 86.6	<4,800	276,000 J	72.5 J	<5.15	8.78 J	133	<0.330	<0.750	638,000	22,600
U4-MW-03I	12/13/2023	FD	EM16	UMCf	76.6 - 86.6	5,080 J	305,000 J	83.4 J	<5.15	9.60 J	133	<0.330	<0.750	640,000	22,700
U4-MW-03S	4/18/2022	N	BL02	UMCf	54.5 - 64.5	1,750	1,160,000	----	----	----	----	----	----	----	----
U4-MW-03S	4/18/2022	FD	BL02	UMCf	54.5 - 64.5	1,680	1,180,000	----	----	----	----	----	----	----	----
U4-MW-03S	3/15/2023	N	EM07	UMCf	54.5 - 64.5	4,110	1,040,000	<56.1	<1.03	122	10.8	<0.330	<0.150	4,160	2,290
U4-MW-03S	6/15/2023	N	EM10	UMCf	54.5 - 64.5	3,030	1,010,000	<56.1	<1.03	99.2	13.6	<0.330	<0.150	7,570	2,620
U4-MW-03S	9/14/2023	N	EM13	UMCf	54.5 - 64.5	4,650	989,000	<56.1	<1.03	116	11.5	<0.330	<0.150	5,300	1,860
U4-MW-03S	12/13/2023	N	EM16	UMCf	54.5 - 64.5	1,030	857,000	74.6 J	<1.03	160	11.3	<0.330	<0.150	4,900	1,210
U4-MW-04D	4/19/2022	N	BL02	UMCf	97.0 - 107.0	53,500	1,160,000	----	----	----	----	----	----	----	----
U4-MW-04D	2/16/2023	N	EM06	UMCf	97.0 - 107.0	----	----	----	----	----	----	----	----	----	----
U4-MW-04D	3/21/2023	N	EM07	UMCf	97.0 - 107.0	10,400	326,000 J	<56.1	<1.03	23.4	10.5	<0.330	<0.150	43,100	2,740
U4-MW-04D	6/14/2023	N	EM10	UMCf	97.0 - 107.0	3,710 J	291,000	<56.1	<5.15	23.9	50.3	<0.330	<0.750	166,000	11,100
U4-MW-04D	9/15/2023	N	EM13	UMCf	97.0 - 107.0	6,060	266,000	<56.1	<5.15	10.8	93.1	<0.330	<0.750	314,000	17,200
U4-MW-04D	12/12/2023	N	EM16	UMCf	97.0 - 107.0	10,400 J+	229,000 J	<56.1	<5.15	46.0	127	<0.330	<0.750	244,000	11,800
U4-MW-04I	4/19/2022	N	BL02	UMCf	76.8 - 86.8	23,300	1,150,000	----	----	----	----	----	----	----	----
U4-MW-04I	3/20/2023	N	EM07	UMCf	76.8 - 86.8	25,300	591,000	<56.1	<5.15	15.1	17.4	<0.330	<0.750	141,000	7,070
U4-MW-04I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	15,000 J-	411,000 J	<56.1	<5.15	18.1	84.5	<0.330	<0.750	483,000	28,200
U4-MW-04I	9/14/2023	N	EM13	UMCf	76.8 - 86.8	40,000 J+	729,000	<56.1	<10.3	12.5 J	132	<0.330	<1.50	1,240,000	58,800
U4-MW-04I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	40,000 J+	709,000 J+	67.8 J	<20.6	15.8 J	115	<0.330	<3.00	1,170,000	61,600
U4-MW-05D	4/15/2022	N	BL02	UMCf	98.2 - 108.2	46,500	1,400,000	----	----	----	----	----	----	----	----
U4-MW-05D	10/13/2022	N	EM02	UMCf	98.2 - 108.2	42,000	----	----	----	----	----	----	----	----	----
U4-MW-05D	11/3/2022	N	EM03	UMCf	98.2 - 108.2	24,900	----	----	----	----	----	----	----	----	----
U4-MW-05D	12/7/2022	N	EM04	UMCf	98.2 - 108.2	27,600	----	----	----	----	----	----	----	----	----
U4-MW-05D	1/11/2023	N	EM05	UMCf	98.2 - 108.2	27,200 J+	----	----	----	----	----	----	----	----	----
U4-MW-05D	2/14/2023	N	EM06	UMCf	98.2 - 108.2	22,100	----	----	----	----	----	----	----	----	----
U4-MW-05D	3/16/2023	N	EM07	UMCf	98.2 - 108.2	17,200	558,000	<56.1	<5.15	34.2	60.8	<0.330	<0.750	258,000	28,700
U4-MW-05D	4/20/2023	N	EM08	UMCf	98.2 - 108.2	14,200 J+	441,000 J	----	----	----	----	----	----	----	----
U4-MW-05D	5/10/2023	N	EM09	UMCf	98.2 - 108.2	2,620	439,000	----	----	----	----	----	----	----	----
U4-MW-05D	6/15/2023	N	EM10	UMCf	98.2 - 108.2	<240	305,000	<56.1	7.74 J	78.5	110	<0.330	<0.750	156,000	6,510
U4-MW-05D	7/18/2023	N	EM11	UMCf	98.2 - 108.2	3,090	388,000	----	----	----	----	----	----	----	----
U4-MW-05D	8/14/2023	N	EM12	UMCf	98.2 - 108.2	9,660	485,000	----	----	----	----	----	----	----	----
U4-MW-05D	9/12/2023	N	EM13	UMCf	98.2 - 108.2	752 J	217,000	<56.1	8.82	82.1	129	<0.330	<0.150	154,000	3,000
U4-MW-05D	10/18/2023	N	EM14	UMCf	98.2 - 108.2	6,150	282,000	----	----	----	----	----	----	----	----
U4-MW-05D	11/16/2023	N	EM15	UMCf	98.2 - 108.2	11,300	258,000 J	----	----	----	----	----	----	----	----
U4-MW-05D	12/14/2023	N	EM16	UMCf	98.2 - 108.2	<48.0	316,000	3,530	5.28 J	83.0	254	<0.330	<0.750	318,000	10,200
U4-MW-05I	4/15/2022	N	BL02	UMCf	76.6 - 86.6	26,000	1,300,000	----	----	----	----	----	----	----	----
U4-MW-05I	10/13/2022	N	EM02	UMCf	76.6 - 86.6	40,500	----	----	----	----	----	----	----	----	----
U4-MW-05I	11/3/2022	N	EM03	UMCf	76.6 - 86.6	37,200 J-	----	----	----	----	----	----	----	----	----
U4-MW-05I	12/8/2022	N	EM04	UMCf	76.6 - 86.6	33,100	----	----	----	----	----	----	----	----	----
U4-MW-05I	1/11/2023	N	EM05	UMCf	76.6 - 86.6	25,600 J+	----	----	----	----	----	----	----	----	----
U4-MW-05I	2/14/2023	N	EM06	UMCf	76.6 - 86.6	21,000	----	----	----	----	----	----	----	----	----
U4-MW-05I	3/14/2023	N	EM07	UMCf	76.6 - 86.6	11,600	641,000	107 J	<5.15	41.1	57.4	<0.330	<0.750	234,000	30,300
U4-MW-05I	4/21/2023	N	EM08	UMCf	76.6 - 86.6	<480	386,000	----	----	----	----	----	----	----	----
U4-MW-05I	5/10/2023	N	EM09	UMCf	76.6 - 86.6	<480	283,000	----	----	----	----	----	----	----	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Anions by E300.0/SW906 5A	Anions by E300.0/SW906 5A	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020
						Nitrate (as N)	Sulfate	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-05I	6/15/2023	N	EM10	UMCf	76.6 - 86.6	<48.0	83,700	<56.1	12.9	200	367	<0.330	<0.150	116,000	468
U4-MW-05I	7/17/2023	N	EM11	UMCf	76.6 - 86.6	2,320	420,000	----	----	----	----	----	----	----	----
U4-MW-05I	8/14/2023	N	EM12	UMCf	76.6 - 86.6	1,070	410,000	----	----	----	----	----	----	----	----
U4-MW-05I	9/13/2023	N	EM13	UMCf	76.6 - 86.6	<480	366,000	<56.1	<5.15	132	171	1.32 J	<0.750	162,000	991
U4-MW-05I	10/18/2023	N	EM14	UMCf	76.6 - 86.6	840 J	358,000	----	----	----	----	----	----	----	----
U4-MW-05I	11/15/2023	N	EM15	UMCf	76.6 - 86.6	<480	367,000	----	----	----	----	----	----	----	----
U4-MW-05I	12/12/2023	N	EM16	UMCf	76.6 - 86.6	1,920 J+	400,000	<56.1	<10.3	106	175	<0.330	<1.50	181,000	3,930
U4-MW-06D	4/19/2022	N	BL02	UMCf	97.1 - 107.1	48,100	1,160,000	----	----	----	----	----	----	----	----
U4-MW-06D	2/15/2023	N	EM06	UMCf	97.1 - 107.1	----	----	----	----	----	----	----	----	----	----
U4-MW-06D	3/21/2023	N	EM07	UMCf	97.1 - 107.1	20,800	501,000	<56.1	<1.03	9.68	19.8	<0.330	<0.150	121,000	7,300
U4-MW-06D	6/16/2023	N	EM10	UMCf	97.1 - 107.1	16,600 J-	467,000 J	89.9 J	<5.15	9.97 J	97.1	<0.330	<0.750	686,000	38,400
U4-MW-06D	9/13/2023	N	EM13	UMCf	97.1 - 107.1	15,000	455,000	<56.1	<5.15	20.4	227	3.85	<0.750	748,000	30,100
U4-MW-06D	12/13/2023	N	EM16	UMCf	97.1 - 107.1	21,000	487,000 J	75.5 J	<20.6	24.2 J	214	<0.330	<3.00	926,000	38,400
U4-MW-06I	4/19/2022	N	BL02	UMCf	76.5 - 86.5	146 J+	967,000	----	----	----	----	----	----	----	----
U4-MW-06I	3/14/2023	N	EM07	UMCf	76.5 - 86.5	15,200	655,000	<56.1	<5.15	17.0	78.4	<0.330	<0.750	642,000	40,000
U4-MW-06I	6/16/2023	N	EM10	UMCf	76.5 - 86.5	14,800 J-	556,000	<56.1	<5.15	28.4	94.6	<0.330	<0.750	612,000	40,100
U4-MW-06I	9/12/2023	N	EM13	UMCf	76.5 - 86.5	14,700	456,000 J	94.4 J	<5.15	33.4	123	<0.330	<0.750	687,000	33,500
U4-MW-06I	12/12/2023	N	EM16	UMCf	76.5 - 86.5	17,900 J+	548,000 J+	91.9 J	<20.6	25.6 J	161	<0.330	<3.00	815,000	38,300
U4-MW-07D	4/15/2022	N	BL02	UMCf	96.8 - 106.5	13,500	568,000	----	----	----	----	----	----	----	----
U4-MW-07D	10/12/2022	N	EM02	UMCf	96.8 - 106.5	1,240	----	----	----	----	----	----	----	----	----
U4-MW-07D	10/12/2022	FD	EM02	UMCf	96.8 - 106.5	1,230	----	----	----	----	----	----	----	----	----
U4-MW-07D	11/3/2022	N	EM03	UMCf	96.8 - 106.5	1,220	----	----	----	----	----	----	----	----	----
U4-MW-07D	12/7/2022	N	EM04	UMCf	96.8 - 106.5	1,050	----	----	----	----	----	----	----	----	----
U4-MW-07D	1/11/2023	N	EM05	UMCf	96.8 - 106.5	1,140 J+	----	----	----	----	----	----	----	----	----
U4-MW-07D	2/14/2023	N	EM06	UMCf	96.8 - 106.5	1,030	----	----	----	----	----	----	----	----	----
U4-MW-07D	3/16/2023	N	EM07	UMCf	96.8 - 106.5	756	230,000	<56.1	<1.03	6.14	26.5	<0.330	<0.150	84,500	931
U4-MW-07D	4/21/2023	N	EM08	UMCf	96.8 - 106.5	1,300	237,000	----	----	----	----	----	----	----	----
U4-MW-07D	5/11/2023	N	EM09	UMCf	96.8 - 106.5	<48.0	67,300	----	----	----	----	----	----	----	----
U4-MW-07D	6/13/2023	N	EM10	UMCf	96.8 - 106.5	500	71,600	<56.1	<1.03	26.3	529	<0.330	<0.150	342,000	1,700
U4-MW-07D	7/17/2023	N	EM11	UMCf	96.8 - 106.5	8,830	596,000	----	----	----	----	----	----	----	----
U4-MW-07D	8/11/2023	N	EM12	UMCf	96.8 - 106.5	11,800 J+	543,000	----	----	----	----	----	----	----	----
U4-MW-07D	9/13/2023	N	EM13	UMCf	96.8 - 106.5	<240	367,000	<56.1	<5.15	32.9	140	2.31	<0.750	360,000	16,100
U4-MW-07D	10/18/2023	N	EM14	UMCf	96.8 - 106.5	5,160 J+	468,000	----	----	----	----	----	----	----	----
U4-MW-07D	11/16/2023	N	EM15	UMCf	96.8 - 106.5	11,300	407,000 J	----	----	----	----	----	----	----	----
U4-MW-07D	12/12/2023	N	EM16	UMCf	96.8 - 106.5	<48.0	330,000	130 J	<5.15	33.2	298	<0.330	<0.750	575,000	11,100
U4-MW-07I	4/15/2022	N	BL02	UMCf	76.8 - 86.8	4,200	1,190,000	----	----	----	----	----	----	----	----
U4-MW-07I	10/12/2022	N	EM02	UMCf	76.8 - 86.8	1,290	----	----	----	----	----	----	----	----	----
U4-MW-07I	11/3/2022	N	EM03	UMCf	76.8 - 86.8	1,280	----	----	----	----	----	----	----	----	----
U4-MW-07I	12/7/2022	N	EM04	UMCf	76.8 - 86.8	1,180	----	----	----	----	----	----	----	----	----
U4-MW-07I	1/11/2023	N	EM05	UMCf	76.8 - 86.8	1,140 J+	----	----	----	----	----	----	----	----	----
U4-MW-07I	2/15/2023	N	EM06	UMCf	76.8 - 86.8	1,440	----	----	----	----	----	----	----	----	----
U4-MW-07I	3/16/2023	N	EM07	UMCf	76.8 - 86.8	2,010	253,000	<56.1	<1.03	7.70	32.6	<0.330	<0.150	93,500	2,670
U4-MW-07I	4/21/2023	N	EM08	UMCf	76.8 - 86.8	<480	379,000	----	----	----	----	----	----	----	----
U4-MW-07I	5/11/2023	N	EM09	UMCf	76.8 - 86.8	74.4 J	302,000	----	----	----	----	----	----	----	----
U4-MW-07I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<48.0 UJ	212,000	<56.1	<1.03	76.2	256	<0.330	<0.150	159,000	161
U4-MW-07I	7/17/2023	N	EM11	UMCf	76.8 - 86.8	<240	537,000	----	----	----	----	----	----	----	----
U4-MW-07I	8/11/2023	N	EM12	UMCf	76.8 - 86.8	412 J	392,000	----	----	----	----	----	----	----	----
U4-MW-07I	9/13/2023	N	EM13	UMCf	76.8 - 86.8	<240	366,000	<56.1	<5.15	91.6	167	1.39 J	<0.750	188,000	4,220
U4-MW-07I	10/18/2023	N	EM14	UMCf	76.8 - 86.8	1,070 J+	293,000	----	----	----	----	----	----	----	----
U4-MW-07I	11/16/2023	N	EM15	UMCf	76.8 - 86.8	1,430	273,000	----	----	----	----	----	----	----	----
U4-MW-07I	12/11/2023	N	EM16	UMCf	76.8 - 86.8	<48.0 UJ	344,000	<56.1	<5.15	52.8	352	<0.330	<0.750	449,000	6,720

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Anions by E300.0/SW906 5A	Anions by E300.0/SW906 5A	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020
						Nitrate (as N)	Sulfate	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-08D	4/13/2022	N	BL02	UMCf	98.6 - 108.6	71,400	1,130,000	<280	<10.3	10.8 J	144	<1.65	<1.50	1,610,000	112,000
U4-MW-08D	12/7/2022	N	EM04	UMCf	98.6 - 108.6	26,500	603,000	<92.5	<5.15	8.66 J	81.9 J+	<0.950	<0.750	665,000	49,000
U4-MW-08D	3/17/2023	N	EM07	UMCf	98.6 - 108.6	27,700 J-	421,000 J	<56.1	<5.15	17.0	131	<0.330	<0.750	532,000	40,100
U4-MW-08D	6/13/2023	N	EM10	UMCf	98.6 - 108.6	21,700	486,000 J	102 J	<10.3	15.1 J	147	<0.330	<1.50	719,000	56,200
U4-MW-08D	9/13/2023	N	EM13	UMCf	98.6 - 108.6	53,800	860,000	<56.1	<10.3	10.1 J	122	5.16	<1.50	1,100,000	90,000
U4-MW-08D	12/11/2023	N	EM16	UMCf	98.6 - 108.6	46,100 J	679,000	<56.1	<10.3	12.2 J	110	<0.330	<1.50	1,070,000	73,600
U4-MW-08DD	4/20/2022	N	BL02	UMCf	119.8 - 129.8	1,520	210,000	<56.1	<1.03	10.9	19.0	<0.330	<0.150	58,200	764
U4-MW-08DD	4/20/2022	FD	BL02	UMCf	119.8 - 129.8	1,610	230,000	<56.1	<1.03	11.1	19.2	<0.330	<0.150	58,000	780
U4-MW-08DD	12/8/2022	N	EM04	UMCf	119.8 - 129.8	282	179,000	<18.5	1.33 J	10.8	21.3	<0.190	<0.150	45,600	56.7
U4-MW-08DD	3/15/2023	N	EM07	UMCf	119.8 - 129.8	1,360	163,000	<56.1	<1.03	6.32	90.8	<0.330	<0.150	167,000	1,300
U4-MW-08DD	6/14/2023	N	EM10	UMCf	119.8 - 129.8	691 J-	163,000	<56.1	<1.03	6.79	78.6	1.14 J	<0.150	139,000	1,220
U4-MW-08DD	9/14/2023	N	EM13	UMCf	119.8 - 129.8	1,390	160,000	<56.1	<1.03	6.97	43.8	<0.330	<0.150	82,400	504
U4-MW-08DD	12/14/2023	N	EM16	UMCf	119.8 - 129.8	1,540	167,000	<56.1	<1.03	7.43	46.1	<0.330	<0.150	87,900	543
U4-MW-08I	4/13/2022	N	BL02	UMCf	78.0 - 88.0	7,610	1,160,000	92.7 J	<1.03	43.1	20.6	<0.330	<0.150	107,000	8,950
U4-MW-08I	12/7/2022	N	EM04	UMCf	78.0 - 88.0	19,200	941,000	<92.5	<5.15	37.2	51.8 J+	<0.950	<0.750	355,000	31,400
U4-MW-08I	12/7/2022	FD	EM04	UMCf	78.0 - 88.0	17,000	948,000	<92.5	<5.15	37.3	49.4 J+	<0.950	<0.750	349,000	31,000
U4-MW-08I	3/17/2023	N	EM07	UMCf	78.0 - 88.0	26,700 J-	796,000	<56.1	<5.15	28.5	87.0	<0.330	<0.750	538,000	48,700
U4-MW-08I	6/13/2023	N	EM10	UMCf	78.0 - 88.0	946 J	702,000	<56.1	<10.3	39.7	26.7	<0.330	<1.50	129,000	11,200
U4-MW-08I	9/13/2023	N	EM13	UMCf	78.0 - 88.0	13,300 J-	710,000	68.2 J	<5.15	45.6	62.2	2.30	<0.750	307,000	30,500
U4-MW-08I	12/11/2023	N	EM16	UMCf	78.0 - 88.0	20,300 J	561,000	128 J	<10.3	63.3	93.0	<0.330	<1.50	406,000	30,800
U4-MW-08S	4/15/2022	N	BL02	UMCf	54.9 - 64.9	3,430	1,280,000	<56.1	<1.03	14.5	25.0	<0.330	<0.150	165,000	519
U4-MW-08S	12/7/2022	N	EM04	UMCf	54.9 - 64.9	1,410	1,050,000	<18.5	<1.03	77.3	20.0	<0.190	<0.150	68,400	284
U4-MW-08S	12/7/2022	FD	EM04	UMCf	54.9 - 64.9	1,460	1,070,000	<18.5	<1.03	76.3	19.4	<0.190	<0.150	67,600	275
U4-MW-08S	3/13/2023	N	EM07	UMCf	54.9 - 64.9	<48.0	297,000	63.0 J	<1.03	43.0	184	<0.330	<0.150	73,900	10.3
U4-MW-08S	3/13/2023	FD	EM07	UMCf	54.9 - 64.9	<48.0	250,000	<56.1	<1.03	42.3	174	<0.330	<0.150	68,900	8.64 J
U4-MW-08S	6/13/2023	N	EM10	UMCf	54.9 - 64.9	<480	18,800 J	<56.1	<1.03	68.1 J	324	<0.330	<0.150	91,400	10.0 J
U4-MW-08S	6/13/2023	FD	EM10	UMCf	54.9 - 64.9	<480	2,640 J	<56.1	<1.03	35.7 J	323	<0.330	<0.150	91,700	9.09 J
U4-MW-08S	9/13/2023	N	EM13	UMCf	54.9 - 64.9	57.9 J	1,540 J	<56.1	<1.03	31.4	335	0.836 J	<0.150	118,000	25.4 J
U4-MW-08S	9/13/2023	FD	EM13	UMCf	54.9 - 64.9	50.7 J	1,780 J	<56.1	<10.3	41.3	335	0.893 J	<1.50	117,000	15.2 J
U4-MW-08S	12/14/2023	N	EM16	UMCf	54.9 - 64.9	667 J	11,900 J	<56.1	<1.03	70.8	787	<0.330	<0.150	261,000	61.9
U4-MW-08S	12/14/2023	FD	EM16	UMCf	54.9 - 64.9	<480	8,860 J	<56.1	<1.03	70.8	793	<0.330	<0.150	265,000	63.2
U4-MW-09D	4/14/2022	N	BL02	UMCf	96.9 - 106.9	43,200	877,000	<56.1	<10.3	7.44 J	14.2	<0.330	<1.50	123,000	5,930
U4-MW-09D	12/6/2022	N	EM04	UMCf	96.9 - 106.9	<4800 UJ	274,000 J	<18.5 UJ	<1.03 UJ	33.5	50.7	<0.190 UJ	<0.150 UJ	145,000	7,460
U4-MW-09D	3/16/2023	N	EM07	UMCf	96.9 - 106.9	756 J	200,000	59.0 J	<1.03	25.6	152	<0.330	<0.150	235,000	3,650
U4-MW-09D	6/14/2023	N	EM10	UMCf	96.9 - 106.9	2,090 J-	123,000	<56.1	<1.03	69.6	151	<0.330	<0.150	204,000	1,830
U4-MW-09D	9/12/2023	N	EM13	UMCf	96.9 - 106.9	1,540	129,000	<56.1	8.48	28.8	457	<0.330	<0.150	318,000	2,950
U4-MW-09D	12/15/2023	N	EM16	UMCf	96.9 - 106.9	<48.0	187,000	<56.1	1.11 J	21.1	577	<0.330	<0.150	395,000	2,510
U4-MW-09DD	4/14/2022	N	BL02	UMCf	119.8 - 129.8	1,060	178,000	<56.1	<1.03	10.2	27.6	<0.330	<0.150	41,300	154
U4-MW-09DD	12/6/2022	N	EM04	UMCf	119.8 - 129.8	963	179,000	<18.5 UJ	<1.03 UJ	11.7	28.5	<0.190 UJ	<0.150 UJ	39,300	137
U4-MW-09DD	3/21/2023	N	EM07	UMCf	119.8 - 129.8	1,770	151,000	<56.1	<1.03	9.50	65.3	<0.330	<0.150	76,600	199
U4-MW-09DD	6/15/2023	N	EM10	UMCf	119.8 - 129.8	1,520	148,000	<56.1	<1.03	7.53	64.8	<0.330	<0.150	81,500	117
U4-MW-09DD	9/13/2023	N	EM13	UMCf	119.8 - 129.8	<48.0	106,000	<56.1	<1.03	6.26	188	1.25 J	<0.150	167,000	13.8
U4-MW-09DD	12/13/2023	N	EM16	UMCf	119.8 - 129.8	117	116,000	<56.1	<1.03	4.56	236	<0.330	<0.150	181,000	46.2
U4-MW-09I	4/14/2022	N	BL02	UMCf	76.8 - 86.8	3,120	1,100,000	<56.1	<1.03	24.8	16.6	<0.330	<0.150	114,000	2,350
U4-MW-09I	12/6/2022	N	EM04	UMCf	76.8 - 86.8	7,720 J	431,000 J	<92.5 UJ	<5.15 UJ	20.0	44.2	<0.950 UJ	<0.750 UJ	218,000	13,400
U4-MW-09I	3/16/2023	N	EM07	UMCf	76.8 - 86.8	2,140	292,000	<56.1	<1.03	25.5	89.2	<0.330	<0.150	266,000	8,400
U4-MW-09I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	1,280 J-	202,000	<56.1	1.05 J	33.0	107	<0.330	<0.150	224,000	2,550
U4-MW-09I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	1,620	183,000	<56.1	1.58 J	30.1	281	<0.330	<0.150	328,000	5,550
U4-MW-09I	12/15/2023	N	EM16	UMCf	76.8 - 86.8	<48.0	237,000	<56.1	2.89 J	33.3	336	<0.330	<1.50	366,000	3,860
U4-MW-09S	4/14/2022	N	BL02	UMCf	55.3 - 65.3	2,260	964,000	<56.1	<1.03	46.2	17.5	<0.330	<0.150	72,400	398
U4-MW-09S	12/6/2022	N	EM04	UMCf	55.3 - 65.3	3,360	1,020,000	<18.5 UJ	<1.03 UJ	56.2	10.2	<0.190 UJ	<0.150 UJ	17,700	2,780

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Anions by E300.0/SW906 5A	Anions by E300.0/SW906 5A	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020
						Nitrate (as N)	Sulfate	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-09S	3/17/2023	N	EM07	UMCf	55.3 - 65.3	1,820	822,000	<56.1	<1.03	46.3	17.1	<0.330	<0.150	15,100	2,360
U4-MW-09S	6/15/2023	N	EM10	UMCf	55.3 - 65.3	<48.0	26,900	<56.1	<1.03	113	88.3	<0.330	<0.150	18,200	45.2
U4-MW-09S	9/13/2023	N	EM13	UMCf	55.3 - 65.3	<48.0	3,600 J	<56.1	<10.3	123	402	0.397 J	<1.50	36,300	120
U4-MW-09S	12/12/2023	N	EM16	UMCf	55.3 - 65.3	<480	521,000	117 J	<5.15	114	572	<0.330	<0.750	448,000	2,710
U4-MW-10D	4/14/2022	N	BL02	UMCf	96.9 - 106.9	4,090	340,000	<56.1	<1.03	8.78	58.7	<0.330	<0.150	275,000	5,290
U4-MW-10D	12/5/2022	N	EM04	UMCf	96.9 - 106.9	1,720	180,000	<56.1	<1.03	7.91	106	<0.330	<0.150	165,000	3,310
U4-MW-10D	3/17/2023	N	EM07	UMCf	96.9 - 106.9	<48.0	74,500	<56.1	<1.03	33.0	413	<0.330	<0.150	230,000	196
U4-MW-10D	6/14/2023	N	EM10	UMCf	96.9 - 106.9	<48.0 UJ	2,780 J	<56.1	<1.03	49.8	1,010	<0.330	<0.150	187,000	45.6
U4-MW-10D	9/13/2023	N	EM13	UMCf	96.9 - 106.9	<48.0	174,000	<56.1	1.36 J	11.2	783	1.31 J	<0.150	197,000	12.7
U4-MW-10D	12/14/2023	N	EM16	UMCf	96.9 - 106.9	<48.0	97,400	2,250	<1.03	20.6	416	<0.330	<0.150	145,000	18.9
U4-MW-10I	4/14/2022	N	BL02	UMCf	77.1 - 87.1	8,520	1,300,000	<56.1	<1.03	12.6	35.2	<0.330	0.369 J	278,000	5,960
U4-MW-10I	12/5/2022	N	EM04	UMCf	77.1 - 87.1	1,200	1,180,000	<56.1	<1.03	42.8	13.3	<0.330	<0.150	180,000	490
U4-MW-10I	3/17/2023	N	EM07	UMCf	77.1 - 87.1	94.2 J	295,000	<56.1	<1.03	37.7	187	<0.330	<0.150	208,000	23.9
U4-MW-10I	6/14/2023	N	EM10	UMCf	77.1 - 87.1	352 J	5,490	<56.1	<1.03	19.4	697	<0.330	<0.150	159,000	45.1
U4-MW-10I	9/13/2023	N	EM13	UMCf	77.1 - 87.1	<48.0	273,000	<56.1	<1.03	37.4	897	1.54 J	<0.150	225,000	38.7
U4-MW-10I	12/14/2023	N	EM16	UMCf	77.1 - 87.1	9,420	285,000	67.7 J	5.94 J	21.4	438	<0.330	4.14 J	421,000	13,900
U4-MW-11D	4/15/2022	N	BL02	UMCf	97.4 - 107.4	62,300	880,000	<280	<10.3	6.16 J	151	<1.65	<1.50	1,530,000	92,800
U4-MW-11D	9/26/2022	N	EM01	UMCf	97.4 - 107.4	47,900	751,000	----	----	----	----	----	----	----	----
U4-MW-11D	10/11/2022	N	EM02	UMCf	97.4 - 107.4	55,600	886,000	----	----	----	----	----	----	----	----
U4-MW-11D	11/1/2022	N	EM03	UMCf	97.4 - 107.4	51,800	768,000	----	----	----	----	----	----	----	----
U4-MW-11D	12/6/2022	N	EM04	UMCf	97.4 - 107.4	14,700	482,000 J	<1850 UJ	<103 UJ	<18.0 UJ	107 J	<19.0 UJ	<15.0 UJ	1,200,000	75,700
U4-MW-11D	1/12/2023	N	EM05	UMCf	97.4 - 107.4	41,000	740,000	----	----	----	----	----	----	----	----
U4-MW-11D	2/14/2023	N	EM06	UMCf	97.4 - 107.4	47,200	746,000	----	----	----	----	----	----	----	----
U4-MW-11D	3/16/2023	N	EM07	UMCf	97.4 - 107.4	29,700	603,000	94.7 J	<5.15	14.6	133	<0.330	<0.750	925,000	58,900
U4-MW-11D	4/18/2023	N	EM08	UMCf	97.4 - 107.4	27,400	448,000 J	----	----	----	----	----	----	----	----
U4-MW-11D	5/17/2023	N	EM09	UMCf	97.4 - 107.4	27,200	664,000	----	----	----	----	----	----	----	----
U4-MW-11D	6/16/2023	N	EM10	UMCf	97.4 - 107.4	27,700 J-	657,000	<56.1	<5.15	11.2 J+	131	0.381 J	<0.750	1,140,000	85,700
U4-MW-11D	7/14/2023	N	EM11	UMCf	97.4 - 107.4	24,600 J-	524,000	----	----	----	----	----	----	----	----
U4-MW-11D	8/14/2023	N	EM12	UMCf	97.4 - 107.4	<480 R	662,000	----	----	----	----	----	----	----	----
U4-MW-11D	9/13/2023	N	EM13	UMCf	97.4 - 107.4	13,500	637,000	<56.1	<5.15	10.6	110	4.28	<0.750	851,000	58,400
U4-MW-11D	10/18/2023	N	EM14	UMCf	97.4 - 107.4	18,700	586,000	----	----	----	----	----	----	----	----
U4-MW-11D	11/16/2023	N	EM15	UMCf	97.4 - 107.4	17,400 J-	503,000	----	----	----	----	----	----	----	----
U4-MW-11D	12/13/2023	N	EM16	UMCf	97.4 - 107.4	17,500	635,000	62.1 J	<20.6	15.7 J	114	<0.330	<3.00	659,000	46,400
U4-MW-11I	4/14/2022	N	BL02	UMCf	77.0 - 87.0	7,100	1,080,000	<56.1	<1.03	17.5	24.6	<0.330	<0.150	161,000	6,040
U4-MW-11I	9/26/2022	N	EM01	UMCf	77.0 - 87.0	<48.0	694,000	----	----	----	----	----	----	----	----
U4-MW-11I	9/26/2022	FD	EM01	UMCf	77.0 - 87.0	<48.0	694,000	----	----	----	----	----	----	----	----
U4-MW-11I	10/10/2022	N	EM02	UMCf	77.0 - 87.0	<48.0	508,000	----	----	----	----	----	----	----	----
U4-MW-11I	10/10/2022	FD	EM02	UMCf	77.0 - 87.0	<48.0	509,000	----	----	----	----	----	----	----	----
U4-MW-11I	10/31/2022	N	EM03	UMCf	77.0 - 87.0	<48.0	273,000	----	----	----	----	----	----	----	----
U4-MW-11I	10/31/2022	FD	EM03	UMCf	77.0 - 87.0	<48.0	244,000	----	----	----	----	----	----	----	----
U4-MW-11I	12/6/2022	N	EM04	UMCf	77.0 - 87.0	<48.0 UJ	27,000 J	<18.5 UJ	5.80	112	459	<0.190 UJ	<0.150 UJ	140,000	77.4
U4-MW-11I	12/6/2022	FD	EM04	UMCf	77.0 - 87.0	<48.0 UJ	42,600 J	<18.5 UJ	3.56 J	96.5	463	<0.190 UJ	<0.150 UJ	140,000	76.1
U4-MW-11I	1/12/2023	N	EM05	UMCf	77.0 - 87.0	50.1 J	74,100	----	----	----	----	----	----	----	----
U4-MW-11I	1/12/2023	FD	EM05	UMCf	77.0 - 87.0	54.5 J	72,600	----	----	----	----	----	----	----	----
U4-MW-11I	2/14/2023	N	EM06	UMCf	77.0 - 87.0	7,230	160,000	----	----	----	----	----	----	----	----
U4-MW-11I	2/14/2023	FD	EM06	UMCf	77.0 - 87.0	8,170	185,000	----	----	----	----	----	----	----	----
U4-MW-11I	3/16/2023	N	EM07	UMCf	77.0 - 87.0	<48.0	979 J	<56.1	2.20 J	63.1	554 J	<0.330	<0.150	158,000 J	54.2 J
U4-MW-11I	3/16/2023	FD	EM07	UMCf	77.0 - 87.0	<48.0	1,060 J	91.7 J	1.97 J	59.2	375 J	<0.330	<0.150	105,000 J	37.1 J
U4-MW-11I	4/18/2023	N	EM08	UMCf	77.0 - 87.0	<48.0	17,300	----	----	----	----	----	----	----	----
U4-MW-11I	4/18/2023	FD	EM08	UMCf	77.0 - 87.0	<48.0	19,700	----	----	----	----	----	----	----	----
U4-MW-11I	5/19/2023	N	EM09	UMCf	77.0 - 87.0	<48.0	7,200	----	----	----	----	----	----	----	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Anions by E300.0/SW906 5A	Anions by E300.0/SW906 5A	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020
						Nitrate (as N)	Sulfate	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-11I	5/19/2023	FD	EM09	UMCf	77.0 - 87.0	<48.0	7,860	----	----	----	----	----	----	----	----
U4-MW-11I	6/15/2023	N	EM10	UMCf	77.0 - 87.0	<48.0	53,500	<56.1	<1.03	53.5	449	<0.330	<0.150	133,000	40.6
U4-MW-11I	6/15/2023	FD	EM10	UMCf	77.0 - 87.0	<48.0	52,200	<56.1	<1.03	51.0	445	<0.330	<0.150	134,000	40.2
U4-MW-11I	7/13/2023	N	EM11	UMCf	77.0 - 87.0	<48.0	22,600	----	----	----	----	----	----	----	----
U4-MW-11I	7/13/2023	FD	EM11	UMCf	77.0 - 87.0	<48.0	22,500	----	----	----	----	----	----	----	----
U4-MW-11I	8/14/2023	N	EM12	UMCf	77.0 - 87.0	5,850	1,290,000	----	----	----	----	----	----	----	----
U4-MW-11I	8/14/2023	FD	EM12	UMCf	77.0 - 87.0	3,190	1,280,000	----	----	----	----	----	----	----	----
U4-MW-11I	9/13/2023	N	EM13	UMCf	77.0 - 87.0	5,990	1,070,000	<56.1	<5.15	8.23 J	195	2.76	<0.750	501,000	2,820
U4-MW-11I	9/13/2023	FD	EM13	UMCf	77.0 - 87.0	6,440	1,110,000	<56.1	<5.15	7.62 J	203	2.87	<0.750	515,000	2,820
U4-MW-11I	10/19/2023	N	EM14	UMCf	77.0 - 87.0	1,500	632,000	----	----	----	----	----	----	----	----
U4-MW-11I	10/19/2023	FD	EM14	UMCf	77.0 - 87.0	1,390	633,000	----	----	----	----	----	----	----	----
U4-MW-11I	11/16/2023	N	EM15	UMCf	77.0 - 87.0	6,720 J	456,000 J	----	----	----	----	----	----	----	----
U4-MW-11I	11/16/2023	FD	EM15	UMCf	77.0 - 87.0	62.8 J	4,460 J	----	----	----	----	----	----	----	----
U4-MW-11I	12/13/2023	N	EM16	UMCf	77.0 - 87.0	4,920 J	417,000 J	<56.1	25.5 J	11.5 J	246	<0.330	<1.50	465,000	17,400
U4-MW-11I	12/13/2023	FD	EM16	UMCf	77.0 - 87.0	5,090 J	422,000 J	<56.1	22.5 J	12.1 J	247	<0.330	<1.50	467,000	17,400
U4-MW-12D	4/15/2022	N	BL02	UMCf	97.1 - 107.1	61,000	1,130,000	115 J	<10.3	6.66 J	115	<0.330	<1.50	1,230,000	72,500
U4-MW-12D	9/27/2022	N	EM01	UMCf	97.1 - 107.1	29,800	696,000	----	----	----	----	----	----	----	----
U4-MW-12D	10/12/2022	N	EM02	UMCf	97.1 - 107.1	32,400	846,000	----	----	----	----	----	----	----	----
U4-MW-12D	11/2/2022	N	EM03	UMCf	97.1 - 107.1	28,700	842,000	----	----	----	----	----	----	----	----
U4-MW-12D	12/7/2022	N	EM04	UMCf	97.1 - 107.1	22,700	818,000	<92.5	<5.15	14.8	64.9 J+	<0.950	<0.750	662,000	48,500
U4-MW-12D	1/12/2023	N	EM05	UMCf	97.1 - 107.1	21,600	624,000	----	----	----	----	----	----	----	----
U4-MW-12D	2/15/2023	N	EM06	UMCf	97.1 - 107.1	21,700	537,000	----	----	----	----	----	----	----	----
U4-MW-12D	3/14/2023	N	EM07	UMCf	97.1 - 107.1	10,100	468,000	<56.1	<5.15	15.0	98.4	<0.330	<0.750	596,000	32,900
U4-MW-12D	4/17/2023	N	EM08	UMCf	97.1 - 107.1	19,500	714,000	----	----	----	----	----	----	----	----
U4-MW-12D	5/17/2023	N	EM09	UMCf	97.1 - 107.1	30,700	907,000	----	----	----	----	----	----	----	----
U4-MW-12D	6/16/2023	N	EM10	UMCf	97.1 - 107.1	16,500 J-	506,000	93.0 J	<5.15	9.72 J	97.4	<0.330	<0.750	646,000	37,600
U4-MW-12D	7/13/2023	N	EM11	UMCf	97.1 - 107.1	8,640	276,000	----	----	----	----	----	----	----	----
U4-MW-12D	8/14/2023	N	EM12	UMCf	97.1 - 107.1	<240 UJ	279,000	----	----	----	----	----	----	----	----
U4-MW-12D	9/12/2023	N	EM13	UMCf	97.1 - 107.1	9,300 J	269,000 J	<56.1	1.14 J	8.71	96.9	<0.330	<0.150	397,000	11,900
U4-MW-12D	10/17/2023	N	EM14	UMCf	97.1 - 107.1	1,680 J-	252,000	----	----	----	----	----	----	----	----
U4-MW-12D	11/15/2023	N	EM15	UMCf	97.1 - 107.1	1,710 J-	234,000 J	----	----	----	----	----	----	----	----
U4-MW-12D	12/12/2023	N	EM16	UMCf	97.1 - 107.1	<48.0	212,000 J+	<56.1	<5.15	18.1	127	<0.330	<0.750	396,000	8,060
U4-MW-12I	4/14/2022	N	BL02	UMCf	76.8 - 86.8	7,700	1,230,000	<56.1	3.92 J	14.6	48.2	<0.330	2.51 J	317,000	17,200
U4-MW-12I	4/14/2022	FD	BL02	UMCf	76.8 - 86.8	8,310	1,220,000	61.1 J	1.29 J	12.6	47.3	<0.330	<0.150 UJ	314,000	16,700
U4-MW-12I	9/27/2022	N	EM01	UMCf	76.8 - 86.8	2,190	1,080,000	----	----	----	----	----	----	----	----
U4-MW-12I	10/12/2022	N	EM02	UMCf	76.8 - 86.8	535	1,030,000	----	----	----	----	----	----	----	----
U4-MW-12I	11/2/2022	N	EM03	UMCf	76.8 - 86.8	383	989,000	----	----	----	----	----	----	----	----
U4-MW-12I	12/7/2022	N	EM04	UMCf	76.8 - 86.8	----	----	<18.5	1.36 J	108	20.7	<0.190	<0.150	86,600	63.3
U4-MW-12I	12/7/2022	FD	EM04	UMCf	76.8 - 86.8	----	----	21.6 J	1.26 J	108	20.7	<0.190	<0.150	86,400	64.8
U4-MW-12I	1/13/2023	N	EM05	UMCf	76.8 - 86.8	83.5 J	44,500	----	----	----	----	----	----	----	----
U4-MW-12I	2/15/2023	N	EM06	UMCf	76.8 - 86.8	99.2 J	24,700	----	----	----	----	----	----	----	----
U4-MW-12I	3/13/2023	N	EM07	UMCf	76.8 - 86.8	<48.0	3,350 J	<56.1	<1.03	47.2	439	<0.330	<0.150	127,000	15.9
U4-MW-12I	4/17/2023	N	EM08	UMCf	76.8 - 86.8	48.0 J	1,600 J	----	----	----	----	----	----	----	----
U4-MW-12I	5/17/2023	N	EM09	UMCf	76.8 - 86.8	<48.0	894 J	----	----	----	----	----	----	----	----
U4-MW-12I	6/16/2023	N	EM10	UMCf	76.8 - 86.8	<48.0 UJ	1,770 J	<56.1	<1.03	46.5	564	<0.330	<0.150	141,000	25.7
U4-MW-12I	7/11/2023	N	EM11	UMCf	76.8 - 86.8	56.8 J	9,270	----	----	----	----	----	----	----	----
U4-MW-12I	8/14/2023	N	EM12	UMCf	76.8 - 86.8	4,190	616,000	----	----	----	----	----	----	----	----
U4-MW-12I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	395	348,000	<56.1	1.45 J	5.09	99.2	<0.330	<0.150	154,000	20.0
U4-MW-12I	10/17/2023	N	EM14	UMCf	76.8 - 86.8	<48.0 R	9,860	----	----	----	----	----	----	----	----
U4-MW-12I	11/16/2023	N	EM15	UMCf	76.8 - 86.8	<480	277,000	----	----	----	----	----	----	----	----
U4-MW-12I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	<48.0 UJ	280,000	<56.1	<5.15	7.98 J	383	<0.330	<0.750	281,000	267

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Anions by E300.0/SW906 5A	Anions by E300.0/SW906 5A	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020
						Nitrate (as N)	Sulfate	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-13D	4/14/2022	N	BL02	UMCf	98.2 - 108.2	60,700	662,000	375 J	<10.3	5.43 J	173	<1.65	<1.50	1,520,000	55,300
U4-MW-13D	9/28/2022	N	EM01	UMCf	98.2 - 108.2	10,900	336,000 J	----	----	----	----	----	----	----	----
U4-MW-13D	10/11/2022	N	EM02	UMCf	98.2 - 108.2	6,780 J	379,000 J	----	----	----	----	----	----	----	----
U4-MW-13D	11/3/2022	N	EM03	UMCf	98.2 - 108.2	6,960	295,000	----	----	----	----	----	----	----	----
U4-MW-13D	12/7/2022	N	EM04	UMCf	98.2 - 108.2	9,910 J	288,000 J	<92.5	<5.15	7.37 J	100	<0.950	<0.750	494,000	17,900
U4-MW-13D	1/12/2023	N	EM05	UMCf	98.2 - 108.2	10,300	289,000 J	----	----	----	----	----	----	----	----
U4-MW-13D	2/15/2023	N	EM06	UMCf	98.2 - 108.2	12,000	296,000 J	----	----	----	----	----	----	----	----
U4-MW-13D	3/17/2023	N	EM07	UMCf	98.2 - 108.2	8,410 J	280,000 J	<56.1	<1.03	5.75	76.8	<0.330	<0.150	303,000	12,900
U4-MW-13D	4/18/2023	N	EM08	UMCf	98.2 - 108.2	<4,800	241,000 J	----	----	----	----	----	----	----	----
U4-MW-13D	5/17/2023	N	EM09	UMCf	98.2 - 108.2	15,200 J-	259,000	----	----	----	----	----	----	----	----
U4-MW-13D	6/15/2023	N	EM10	UMCf	98.2 - 108.2	3,030	252,000	<56.1	<1.03	6.27	69.5	<0.330	<0.150	261,000	9,000
U4-MW-13D	7/12/2023	N	EM11	UMCf	98.2 - 108.2	2,840	244,000	----	----	----	----	----	----	----	----
U4-MW-13D	8/11/2023	N	EM12	UMCf	98.2 - 108.2	5,230	241,000	----	----	----	----	----	----	----	----
U4-MW-13D	9/11/2023	N	EM13	UMCf	98.2 - 108.2	4,860	255,000	<56.1	<1.03	6.15	92.8	<0.330	<0.150	364,000	12,500
U4-MW-13D	10/18/2023	N	EM14	UMCf	98.2 - 108.2	6,420	258,000	----	----	----	----	----	----	----	----
U4-MW-13D	11/15/2023	N	EM15	UMCf	98.2 - 108.2	6,180 J	230,000 J	----	----	----	----	----	----	----	----
U4-MW-13D	12/11/2023	N	EM16	UMCf	98.2 - 108.2	11,500 J	252,000 J	<56.1	<5.15	5.82 J	92.0	<0.330	<0.750	404,000	14,000
U4-MW-13I	4/14/2022	N	BL02	UMCf	77.1 - 87.1	7,030	1,090,000	<56.1	<1.03	12.6	43.5	<0.330	<0.150	395,000	20,300
U4-MW-13I	9/28/2022	N	EM01	UMCf	77.1 - 87.1	9,130 J	1,040,000	----	----	----	----	----	----	----	----
U4-MW-13I	10/10/2022	N	EM02	UMCf	77.1 - 87.1	5,560	1,060,000	----	----	----	----	----	----	----	----
U4-MW-13I	11/3/2022	N	EM03	UMCf	77.1 - 87.1	3,730	932,000	----	----	----	----	----	----	----	----
U4-MW-13I	12/6/2022	N	EM04	UMCf	77.1 - 87.1	<48.0 UJ	545,000	<18.5 UJ	2.00 J	79.2	19.6	<0.190 UJ	<0.150 UJ	100,000	892
U4-MW-13I	1/12/2023	N	EM05	UMCf	77.1 - 87.1	360	433,000	----	----	----	----	----	----	----	----
U4-MW-13I	2/14/2023	N	EM06	UMCf	77.1 - 87.1	1,780	399,000	----	----	----	----	----	----	----	----
U4-MW-13I	3/16/2023	N	EM07	UMCf	77.1 - 87.1	<48.0	55,400	<56.1	1.14 J	74.9	239	<0.330	0.223 J	66,300	255
U4-MW-13I	4/19/2023	N	EM08	UMCf	77.1 - 87.1	<48.0	115,000	----	----	----	----	----	----	----	----
U4-MW-13I	5/17/2023	N	EM09	UMCf	77.1 - 87.1	<48.0	77,800	----	----	----	----	----	----	----	----
U4-MW-13I	6/15/2023	N	EM10	UMCf	77.1 - 87.1	<48.0	97,300	<56.1	6.01	73.1	395	<0.330	<0.150	61,700	151
U4-MW-13I	7/12/2023	N	EM11	UMCf	77.1 - 87.1	135	90,200	----	----	----	----	----	----	----	----
U4-MW-13I	8/11/2023	N	EM12	UMCf	77.1 - 87.1	4,960 J+	340,000	----	----	----	----	----	----	----	----
U4-MW-13I	9/11/2023	N	EM13	UMCf	77.1 - 87.1	5,460	311,000	<56.1	3.62 J	20.6	127	<0.330	<0.150	341,000	12,600
U4-MW-13I	10/17/2023	N	EM14	UMCf	77.1 - 87.1	5,720 J-	317,000	----	----	----	----	----	----	----	----
U4-MW-13I	11/15/2023	N	EM15	UMCf	77.1 - 87.1	7,940 J	333,000 J	----	----	----	----	----	----	----	----
U4-MW-13I	12/11/2023	N	EM16	UMCf	77.1 - 87.1	13,600 J	353,000 J	78.2 J	<5.15	14.7	113	<0.330	<0.750	452,000	17,800
U4-MW-14D	4/13/2022	N	BL02	UMCf	97.3 - 107.3	729 J	2,560,000	<56.1	<1.03	21.3	33.5	<0.330	<0.150	561,000	308
U4-MW-14D	12/6/2022	N	EM04	UMCf	97.3 - 107.3	3,700	946,000	20.6 J	<1.03 UJ	14.6	56.2	<0.190 UJ	<0.150 UJ	395,000	6,790
U4-MW-14D	3/16/2023	N	EM07	UMCf	97.3 - 107.3	2,420	387,000	<56.1	<1.03	13.2	52.1	<0.330	<0.150	181,000	4,500
U4-MW-14D	6/15/2023	N	EM10	UMCf	97.3 - 107.3	1,230	453,000	<56.1	<1.03	14.4	49.1	<0.330	<0.150	224,000	4,270
U4-MW-14D	9/14/2023	N	EM13	UMCf	97.3 - 107.3	856	179,000	<56.1	<1.03	15.3	191	<0.330	<0.150	219,000	2,540
U4-MW-14D	12/15/2023	N	EM16	UMCf	97.3 - 107.3	855	217,000	<56.1	<1.03	13.7	178	<0.330	<0.150	230,000	2,810
U4-MW-14I	4/14/2022	N	BL02	UMCf	77.3 - 87.3	2,490	1,410,000	<56.1	<1.03	16.6	23.1	<0.330	<0.150	237,000	2,150
U4-MW-14I	12/6/2022	N	EM04	UMCf	77.3 - 87.3	2,700	1,490,000	<18.5 UJ	<1.03 UJ	17.1	49.4	<0.190 UJ	<0.150 UJ	524,000	4,710
U4-MW-14I	3/16/2023	N	EM07	UMCf	77.3 - 87.3	2,510	597,000	<56.1	<1.03	14.1	49.1	<0.330	<0.150	250,000	4,510
U4-MW-14I	6/15/2023	N	EM10	UMCf	77.3 - 87.3	970	733,000	<56.1	<1.03	17.7	129	<0.330	<0.150	263,000	700
U4-MW-14I	9/14/2023	N	EM13	UMCf	77.3 - 87.3	658	438,000	<56.1	<1.03	20.7	63.8	<0.330	<0.150	296,000	2,060
U4-MW-14I	12/14/2023	N	EM16	UMCf	77.3 - 87.3	<48.0	348,000	161 J	<1.03	15.8	92.4	<0.330	<0.150	301,000	2,150
U4-MW-15D	4/13/2022	N	BL02	UMCf	96.0 - 106.0	3,170	410,000	149 J	<1.03	9.66	56.0	<0.330	<0.150	338,000	4,940
U4-MW-15D	12/5/2022	N	EM04	UMCf	96.0 - 106.0	1,220	225,000	<56.1	<1.03	10.6	49.7	<0.330	<0.150	208,000	3,170
U4-MW-15D	3/20/2023	N	EM07	UMCf	96.0 - 106.0	2,030	196,000	<56.1	<1.03	8.49	56.3	<0.330	<0.150	156,000	3,210
U4-MW-15D	6/14/2023	N	EM10	UMCf	96.0 - 106.0	2,020 J	193,000	<56.1	<1.03	9.43	61.7	<0.330	<0.150	197,000	3,870
U4-MW-15D	9/13/2023	N	EM13	UMCf	96.0 - 106.0	1,650	196,000	<56.1	<1.03	10.0	50.3	1.26 J	<0.150	185,000	3,310

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Anions by E300.0/SW906 5A	Anions by E300.0/SW906 5A	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020
						Nitrate (as N)	Sulfate	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-15D	12/12/2023	N	EM16	UMCf	96.0 - 106.0	<48.0	183,000	<56.1	<1.03	9.07	71.8	<0.330	<0.150	214,000	3,370
U4-MW-15DD	4/13/2022	N	BL02	UMCf	120.3 - 130.3	878	214,000	<56.1	<1.03	18.8	21.3	<0.330	<0.150	34,000	64.4
U4-MW-15DD	12/5/2022	N	EM04	UMCf	120.3 - 130.3	1,260	177,000	<56.1	<1.03	16.8	25.2	<0.330	<0.150	32,300	16.3
U4-MW-15DD	3/15/2023	N	EM07	UMCf	120.3 - 130.3	1,470	165,000	62.9 J	<1.03	13.4	25.3	<0.330	<0.150	30,600	13.8
U4-MW-15DD	6/13/2023	N	EM10	UMCf	120.3 - 130.3	1,340	169,000	<56.1	<1.03	8.61	24.1	<0.330	<0.150	32,300	7.06 J
U4-MW-15DD	9/14/2023	N	EM13	UMCf	120.3 - 130.3	1,590	174,000	<56.1	<1.03	13.7	22.6	<0.330	<0.150	28,400	3.78 J
U4-MW-15DD	12/13/2023	N	EM16	UMCf	120.3 - 130.3	1,290	183,000	<56.1	<1.03	15.0	22.8	<0.330	<0.150	30,100	5.60 J
U4-MW-15I	4/12/2022	N	BL02	UMCf	76.8 - 86.8	5,590	1,070,000	<56.1	<1.03	31.1	20.5 J+	<0.330	<0.150	127,000	5,510
U4-MW-15I	12/5/2022	N	EM04	UMCf	76.8 - 86.8	827	875,000	<56.1	1.24 J	44.9	24.9	<0.330	<0.150	163,000	5,040
U4-MW-15I	3/17/2023	N	EM07	UMCf	76.8 - 86.8	<48.0	1,640 J	<56.1	<1.03	39.0	874	<0.330	<0.150	194,000	108
U4-MW-15I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<48.0 UJ	<594	<56.1	<1.03	83.2	629	<0.330	<0.150	178,000	89.2
U4-MW-15I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	<48.0	223,000	<56.1	<1.03	26.8	509	<0.330	<0.150	180,000	42.6
U4-MW-15I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	<48.0	184,000	<56.1	<5.15	28.4	469	<0.330	<0.750	190,000	1,940
U4-MW-15S	4/13/2022	N	BL02	UMCf	54.8 - 64.8	2,750	1,190,000	112 J	<1.03	35.0	21.0	<0.330	<0.150	166,000 J	268 J
U4-MW-15S	12/5/2022	N	EM04	UMCf	54.8 - 64.8	132	212,000	186 J	<1.03	49.4	419	<0.330	<0.150	197,000	16.9
U4-MW-15S	3/13/2023	N	EM07	UMCf	54.8 - 64.8	<480	14,700 J	<56.1	<1.03	44.0	217	<0.330	<0.150	94,100	9.67 J
U4-MW-15S	6/13/2023	N	EM10	UMCf	54.8 - 64.8	<48.0	12,200	<56.1	<1.03	40.4	360	<0.330	0.278 J	96,700	9.11 J
U4-MW-15S	9/14/2023	N	EM13	UMCf	54.8 - 64.8	5,550 J	<59,400	<56.1	<1.03	80.5	694	<0.330	<0.150	135,000	11.0
U4-MW-15S	12/11/2023	N	EM16	UMCf	54.8 - 64.8	<48.0 UJ	6,580	59.4 J	<1.03	135	776	<0.330	<0.150	143,000	5.70 J
U4-MW-16D	4/11/2022	N	BL02	UMCf	96.8 - 106.8	39,300	722,000	<56.1	<10.3	7.23 J	191	<0.330	<1.50	474,000	12,600
U4-MW-16D	12/5/2022	N	EM04	UMCf	96.8 - 106.8	17,100	573,000	<56.1	<1.03	1.92 J	94.1	<0.330	<0.150	149,000	27,600
U4-MW-16D	3/14/2023	N	EM07	UMCf	96.8 - 106.8	10,500	205,000	<56.1	<5.15	10.3	137	<0.330	<0.750	601,000	16,800
U4-MW-16D	6/13/2023	N	EM10	UMCf	96.8 - 106.8	25,200	377,000 J	378	<10.3	17.5 J	227	<0.330	<1.50	816,000	39,300
U4-MW-16D	9/15/2023	N	EM13	UMCf	96.8 - 106.8	15,200	217,000	<56.1	<5.15	12.7	137	<0.330	<0.750	596,000	17,700
U4-MW-16D	12/14/2023	N	EM16	UMCf	96.8 - 106.8	18,200	219,000	<56.1	<10.3	4.71 J	137	<0.330	<1.50	713,000	22,000
U4-MW-16DD	4/12/2022	N	BL02	UMCf	120.8 - 130.8	569	623,000	<56.1	<1.03	20.0	24.7 J+	<0.330	<0.150	114,000	922
U4-MW-16DD	12/5/2022	N	EM04	UMCf	120.8 - 130.8	260	444,000	<56.1	<1.03	21.7	23.1	<0.330	<0.150	77,200	203
U4-MW-16DD	3/15/2023	N	EM07	UMCf	120.8 - 130.8	512	369,000	<56.1	<1.03	23.8	23.5	<0.330	<0.150	67,600	167
U4-MW-16DD	6/13/2023	N	EM10	UMCf	120.8 - 130.8	<48.0	361,000	<56.1	<1.03	24.5	22.7	<0.330	<0.150	60,000	192
U4-MW-16DD	9/14/2023	N	EM13	UMCf	120.8 - 130.8	728	336,000	<56.1	<1.03	23.7	21.6	<0.330	<0.150	54,700	146
U4-MW-16DD	12/13/2023	N	EM16	UMCf	120.8 - 130.8	295	328,000	<56.1	<1.03	25.2	23.0	<0.330	<0.150	55,700	99.0
U4-MW-16I	4/11/2022	N	BL02	UMCf	77.0 - 87.0	6,600	979,000	<56.1	<1.03	11.2	38.6	<0.330	<0.150	231,000	8,620
U4-MW-16I	12/5/2022	N	EM04	UMCf	77.0 - 87.0	72.8 J	195,000	<56.1	<1.03	69.5	182	<0.330	<0.150	153,000	10.9
U4-MW-16I	12/5/2022	FD	EM04	UMCf	77.0 - 87.0	73.1 J	179,000	<56.1	<1.03	52.5	184	<0.330	<0.150	147,000	11.4
U4-MW-16I	3/13/2023	N	EM07	UMCf	77.0 - 87.0	<48.0	2,340 J	<56.1	<1.03	59.2	652	<0.330	<0.150	264,000	19.0
U4-MW-16I	3/13/2023	FD	EM07	UMCf	77.0 - 87.0	<48.0	1,760 J	<56.1	<1.03	58.9	650	<0.330	<0.150	264,000	18.7
U4-MW-16I	6/12/2023	N	EM10	UMCf	77.0 - 87.0	49.8 J	<594	61.2 J	<1.03	83.7	459	<0.330	<0.150	215,000	16.8
U4-MW-16I	6/12/2023	FD	EM10	UMCf	77.0 - 87.0	49.6 J	<594	<56.1	3.28 J	83.0	459	<0.330	<0.150	217,000	14.7
U4-MW-16I	9/11/2023	N	EM13	UMCf	77.0 - 87.0	4,520	498,000	<56.1	<1.03	8.62	408	<0.330	0.162 J	515,000	13,800
U4-MW-16I	9/11/2023	FD	EM13	UMCf	77.0 - 87.0	3,660	501,000	<56.1	<1.03	8.52	408	<0.330	<0.150	509,000	13,800
U4-MW-16I	12/11/2023	N	EM16	UMCf	77.0 - 87.0	2,200 J	50,400	<56.1	<5.15	12.7	275	<0.330	<0.750	628,000	28,900
U4-MW-16I	12/11/2023	FD	EM16	UMCf	77.0 - 87.0	5,450 J	71,700	<56.1	<5.15	12.6	271	<0.330	<0.750	621,000	28,700
U4-MW-16S	4/12/2022	N	BL02	UMCf	54.8 - 64.8	2,700	1,150,000	<56.1	<1.03	20.9	22.2 J+	<0.330	<0.150	169,000	427
U4-MW-16S	4/12/2022	FD	BL02	UMCf	54.8 - 64.8	2,850	1,140,000	<56.1	<1.03	21.2	22.5 J+	<0.330	<0.150	168,000	426
U4-MW-16S	12/6/2022	N	EM04	UMCf	54.8 - 64.8	<48.0 UJ	988,000	<18.5 UJ	<1.03 UJ	37.5	18.0	<0.190 UJ	<0.150 UJ	136,000	77.3
U4-MW-16S	3/15/2023	N	EM07	UMCf	54.8 - 64.8	<48.0	<594	<56.1	<1.03	61.8	260	<0.330	<0.150	203,000	6.40 J
U4-MW-16S	6/13/2023	N	EM10	UMCf	54.8 - 64.8	<48.0	861 J	<56.1	<1.03	72.6	462	<0.330	<0.150	254,000	13.3 J+
U4-MW-16S	9/11/2023	N	EM13	UMCf	54.8 - 64.8	<48.0	34,700	<56.1	<1.03	170	183	<0.330	<0.150	86,400	6.78 J
U4-MW-16S	12/11/2023	N	EM16	UMCf	54.8 - 64.8	<48.0 UJ	<594	<56.1	<1.03	194	362	<0.330	<0.150	120,000	4.64 J
U4-SLMW	11/10/2022	N	EM03		-	384	221,000	----	----	----	----	----	----	----	----
U4-T3	10/13/2022	N	EM02		-	----	----	----	----	----	----	----	----	----	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Anions by E300.0/SW906 5A	Anions by E300.0/SW906 5A	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020	Dissolved Metals by SW6010B/SW6 020
						Nitrate (as N)	Sulfate	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-T3	11/3/2022	N	EM03		-	----	----	----	----	----	----	----	----	----	----
U4-T3	12/6/2022	N	EM04		-	----	----	----	----	----	----	----	----	----	----
U4-T3	1/9/2023	N	EM05		-	----	----	----	----	----	----	----	----	----	----
U4-T3	2/13/2023	N	EM06		-	----	----	----	----	----	----	----	----	----	----
U4-T3	3/13/2023	N	EM07		-	14,500	----	----	----	----	----	----	----	----	----
U4-T3	4/19/2023	N	EM08		-	----	----	----	----	----	----	----	----	----	----
U4-T3	5/18/2023	N	EM09		-	----	----	----	----	----	----	----	----	----	----
U4-T3	6/12/2023	N	EM10		-	----	----	----	----	----	----	----	----	----	----
U4-T3	7/11/2023	N	EM11		-	----	----	----	----	----	----	----	----	----	----
U4-T3	8/10/2023	N	EM12		-	----	----	----	----	----	----	----	----	----	----
U4-T3	9/11/2023	N	EM13		-	----	292,000	----	----	----	----	----	----	----	----
U4-T3	10/16/2023	N	EM14		-	----	----	----	----	----	----	----	----	----	----

Notes:

- FD - Field duplicate
- E - Field instrument error.

- 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 low.
- J+ - The result is an estimated quantity, but the result may be biased high.
- N/A - Not Applicable
- mg/L - milligrams per liter
- µg/L - micrograms per liter
- N - Normal field 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
- < - The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
- Not tested.
- M-252 damaged/obstructed when checked on June 14, 2023 and September 14, 2023.

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020
						Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Molybdenum	Nickel	Phosphorus	Potassium
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
M-247-100	4/20/2022	N	BL02	UMCf	100.5 - 110.5	----	----	----	----	----	----	----	----	----	----
M-249-100	4/20/2022	N	BL02	UMCf	99.6 - 109.6	----	----	----	----	----	----	----	----	----	----
M-251-100	4/19/2022	N	BL02	UMCf	92.5 - 102.5	----	----	----	----	----	----	----	----	----	----
M-251-100	10/13/2022	N	EM02	UMCf	92.5 - 102.5	----	----	----	----	----	----	----	----	----	----
M-251-100	11/2/2022	N	EM03	UMCf	92.5 - 102.5	----	----	----	----	----	----	----	----	----	----
M-251-100	12/8/2022	N	EM04	UMCf	92.5 - 102.5	----	----	----	----	----	----	----	----	----	----
M-251-100	1/11/2023	N	EM05	UMCf	92.5 - 102.5	----	----	----	----	----	----	----	----	----	----
M-251-100	2/13/2023	N	EM06	UMCf	92.5 - 102.5	----	----	----	----	----	----	----	----	----	----
M-251-100	3/17/2023	N	EM07	UMCf	92.5 - 102.5	<0.840	<7.55	<18.0	<4.24	235,000	2.11 J	8.60	<4.08	----	33,800
M-251-100	4/21/2023	N	EM08	UMCf	92.5 - 102.5	----	----	----	----	----	----	----	----	----	----
M-251-100	5/9/2023	N	EM09	UMCf	92.5 - 102.5	----	----	----	----	----	----	----	----	----	----
M-251-100	6/14/2023	N	EM10	UMCf	92.5 - 102.5	<0.840	<7.55	<18.0	<4.24	380,000	3.41 J	7.87	<4.08	----	60,000
M-251-100	7/14/2023	N	EM11	UMCf	92.5 - 102.5	----	----	----	----	----	----	----	----	----	----
M-251-100	8/10/2023	N	EM12	UMCf	92.5 - 102.5	----	----	----	----	----	----	----	----	----	----
M-251-100	9/14/2023	N	EM13	UMCf	92.5 - 102.5	<0.840	25.0	<18.0	4.50 J	396,000	<0.934	10.2	<4.08	----	53,600
M-251-100	10/19/2023	N	EM14	UMCf	92.5 - 102.5	----	----	----	----	----	----	----	----	----	----
M-251-100	11/16/2023	N	EM15	UMCf	92.5 - 102.5	----	----	----	----	----	----	----	----	----	----
M-251-100	12/12/2023	N	EM16	UMCf	92.5 - 102.5	<0.840	<15.1	<18.0	<8.49	467,000	34.0	3.50 J	<8.16	----	55,600
M-251-60	4/18/2022	N	BL02	UMCf	52.3 - 62.3	----	----	----	----	----	----	----	----	----	----
M-251-60	3/15/2023	N	EM07	UMCf	52.3 - 62.3	<0.840	1.58 J	<18.0	<0.849	155 J	<0.934	24.2	<0.816	----	31,400
M-251-60	6/14/2023	N	EM10	UMCf	52.3 - 62.3	1.83 J	2.35 J	<18.0	<0.849	149 J	<0.934	23.4	<0.816	----	18,800
M-251-60	9/14/2023	N	EM13	UMCf	52.3 - 62.3	<0.840	1.75 J	<18.0	1.05 J	142 J	2.49 J	21.7	1.01 J	----	24,800
M-251-60	12/11/2023	N	EM16	UMCf	52.3 - 62.3	2.45 J	2.41 J	30.9 J	<0.849	769 J	13.2	21.9	1.54 J	----	20,200
M-252	4/21/2022	N	BL02	UMCf	132.3 - 142.3	----	----	----	----	----	----	----	----	----	----
M-252	3/15/2023	N	EM07	UMCf	132.3 - 142.3	<0.840	1.88 J	44.5 J	<0.849	21,100	21.9	7.34	<0.816	----	23,700
M-252	9/19/2023	N	EM13	UMCf	132.3 - 142.3	<0.840	<1.51	<18.0	<0.849	22,600	<0.934	5.67	6.46	----	11,600
M-252	12/18/2023	N	EM16	UMCf	132.3 - 142.3	<0.840	2.73 J	25.9 J	<0.849	32,000	41.6	7.84	0.936 J	----	12,900
M-253-100	4/20/2022	N	BL02	UMCf	100.8 - 110.8	----	----	----	----	----	----	----	----	----	----
M-255-100	4/20/2022	N	BL02	UMCf	100.2 - 110.2	----	----	----	----	----	----	----	----	----	----
U4-E-01D	4/18/2022	N	BL02	UMCf	94.7 - 109.7	----	----	----	----	----	----	----	----	----	----
U4-E-01D	3/14/2023	N	EM07	UMCf	94.7 - 109.7	<0.840	2.98 J	<18.0	<0.849	28,500	3.24 J	5.79	1.55 J	----	5,180
U4-E-011	4/19/2022	N	BL02	UMCf	74.6 - 89.6	----	----	----	----	----	----	----	----	----	----
U4-E-011	4/19/2022	FD	BL02	UMCf	74.6 - 89.6	----	----	----	----	----	----	----	----	----	----
U4-E-011	3/14/2023	N	EM07	UMCf	74.6 - 89.6	<0.840	<1.51	24.9 J	2.57	183,000	9.17 J	7.93	1.50 J	----	23,900
U4-E-011	4/20/2023	N	EM08	UMCf	74.6 - 89.6	----	----	----	----	----	----	----	----	----	----
U4-E-011	5/10/2023	N	EM09	UMCf	74.6 - 89.6	----	----	----	----	----	----	----	----	----	----
U4-E-011	6/12/2023	N	EM10	UMCf	74.6 - 89.6	----	----	----	----	----	----	----	----	----	----
U4-E-011	7/11/2023	N	EM11	UMCf	74.6 - 89.6	----	----	----	----	----	----	----	----	----	----
U4-E-011	8/10/2023	N	EM12	UMCf	74.6 - 89.6	----	----	----	----	----	----	----	----	----	----
U4-E-011	9/11/2023	N	EM13	UMCf	74.6 - 89.6	----	----	----	----	----	----	----	----	----	----
U4-E-011	10/16/2023	N	EM14	UMCf	74.6 - 89.6	----	----	----	----	----	----	----	----	----	----
U4-E-011	12/13/2023	N	EM16	UMCf	74.6 - 89.6	----	----	----	----	----	----	----	----	----	----
U4-E-02D	4/20/2022	N	BL02	UMCf	94.4 - 109.4	----	----	----	----	----	----	----	----	----	----
U4-E-02D	3/14/2023	N	EM07	UMCf	94.4 - 109.4	<0.840	2.84 J	33.4 J	<0.849	28,000	5.58 J	5.60	7.62	----	5,090
U4-E-021	4/18/2022	N	BL02	UMCf	74.4 - 89.4	----	----	----	----	----	----	----	----	----	----
U4-E-021	3/14/2023	N	EM07	UMCf	74.4 - 89.4	<0.840	<1.51	182	<0.849	34,100	25.4	6.14	<0.816	----	7,080
U4-E-021	4/20/2023	N	EM08	UMCf	74.4 - 89.4	----	----	----	----	----	----	----	----	----	----
U4-E-021	5/11/2023	N	EM09	UMCf	74.4 - 89.4	----	----	----	----	----	----	----	----	----	----
U4-E-021	6/12/2023	N	EM10	UMCf	74.4 - 89.4	----	----	----	----	----	----	----	----	----	----
U4-E-021	7/11/2023	N	EM11	UMCf	74.4 - 89.4	----	----	----	----	----	----	----	----	----	----
U4-E-021	8/10/2023	N	EM12	UMCf	74.4 - 89.4	----	----	----	----	----	----	----	----	----	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020
						Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Molybdenum	Nickel	Phosphorus	Potassium
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-E-02I	9/11/2023	N	EM13	UMCf	74.4 - 89.4	----	----	----	----	----	----	----	----	----	----
U4-E-02I	10/16/2023	N	EM14	UMCf	74.4 - 89.4	----	----	----	----	----	----	----	----	----	----
U4-E-02I	12/14/2023	N	EM16	UMCf	74.4 - 89.4	----	----	----	----	----	----	----	----	----	----
U4-E-03D	4/19/2022	N	BL02	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	----	----	----
U4-E-03D	10/13/2022	N	EM02	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	----	----	----
U4-E-03D	11/3/2022	N	EM03	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	----	----	----
U4-E-03D	12/6/2022	N	EM04	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	----	----	----
U4-E-03D	1/9/2023	N	EM05	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	----	----	----
U4-E-03D	2/13/2023	N	EM06	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	----	----	----
U4-E-03D	3/13/2023	N	EM07	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	----	----	----
U4-E-03D	3/14/2023	N	EM07	UMCf	95.1 - 110.1	<0.840	16.8 J	<18.0	<4.24	190,000	3.76 J	13.1	<4.08	----	39,600
U4-E-03D	4/19/2023	N	EM08	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	----	----	----
U4-E-03D	5/11/2023	N	EM09	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	----	----	----
U4-E-03D	6/12/2023	N	EM10	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	----	----	----
U4-E-03D	7/11/2023	N	EM11	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	----	----	----
U4-E-03D	8/10/2023	N	EM12	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	----	----	----
U4-E-03D	9/11/2023	N	EM13	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	----	----	----
U4-E-03D	10/16/2023	N	EM14	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	----	----	----
U4-E-04D	4/19/2022	N	BL02	UMCf	95.0 - 110.0	----	----	----	----	----	----	----	----	----	----
U4-E-04D	3/14/2023	N	EM07	UMCf	95.0 - 110.0	<0.840	3.27 J	342	<0.849	27,900	4.47 J	4.87 J	4.33	----	5,050
U4-E-04I	4/18/2022	N	BL02	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-E-04I	3/14/2023	N	EM07	UMCf	75.0 - 90.0	<0.840	<7.55	20.6 J	<4.24	414,000	20.2	13.6	78.0	----	65,500
U4-E-05D	4/19/2022	N	BL02	UMCf	95.0 - 110.0	----	----	----	----	----	----	----	----	----	----
U4-E-05D	3/16/2023	N	EM07	UMCf	95.0 - 110.0	0.903 J	3.65 J	23.0 J	<0.849	27,900	253	5.45	7.12	----	5,590
U4-E-05I	4/19/2022	N	BL02	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-E-05I	3/15/2023	N	EM07	UMCf	75.0 - 90.0	<0.840	5.23	<18.0	<0.849	28,600	9.92 J	9.77	58.2	----	11,800
U4-E-06D	4/11/2022	N	BL02	UMCf	95.1 - 110.1	<0.840	<1.51	<18.0	<0.849	255,000 J	19.9	3.31 J	5.53	25.3 J	32,800 J
U4-E-06I	4/11/2022	N	BL02	UMCf	73.2 - 88.2	<0.840	2.20 J	<18.0	<0.849	88,400	8.86 J	13.6	<0.816	45.1 J	23,300
U4-E-06I	4/11/2022	FD	BL02	UMCf	73.2 - 88.2	<0.840	3.02 J	<18.0	<0.849	87,900	8.46 J	13.9	<0.816	46.2 J	23,200
U4-E-06I	10/12/2022	N	EM02	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	----	----	----
U4-E-06I	11/3/2022	N	EM03	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	----	----	----
U4-E-06I	12/6/2022	N	EM04	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	----	----	----
U4-E-06I	1/9/2023	N	EM05	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	----	----	----
U4-E-06I	2/13/2023	N	EM06	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	----	----	----
U4-E-06I	3/13/2023	N	EM07	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	----	----	----
U4-E-06I	4/17/2023	N	EM08	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	----	----	----
U4-E-06I	5/15/2023	N	EM09	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	----	----	----
U4-E-06I	6/12/2023	N	EM10	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	----	----	----
U4-E-06I	7/11/2023	N	EM11	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	----	----	----
U4-E-06I	8/11/2023	N	EM12	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	----	----	----
U4-E-06I	9/11/2023	N	EM13	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	----	----	----
U4-E-06I	10/16/2023	N	EM14	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	----	----	----
U4-E-06I	12/13/2023	N	EM16	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	----	----	----
U4-E-07D	4/12/2022	N	BL02	UMCf	94.6 - 109.6	<4.20	<15.1	<90.0	<8.49	634,000	22.5 J	8.85 J	<8.16	<91.5	74,800
U4-E-07I	4/12/2022	N	BL02	UMCf	74.7 - 89.7	<0.840	2.99 J	<18.0	<0.849	66,000	8.86 J	18.0	1.14 J	194 J	23,400
U4-E-07I	10/11/2022	N	EM02	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	----	----	----
U4-E-07I	11/3/2022	N	EM03	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	----	----	----
U4-E-07I	12/6/2022	N	EM04	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	----	----	----
U4-E-07I	1/9/2023	N	EM05	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	----	----	----
U4-E-07I	2/13/2023	N	EM06	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	----	----	----
U4-E-07I	3/13/2023	N	EM07	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	----	----	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020
						Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Molybdenum	Nickel	Phosphorus	Potassium
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-E-07I	4/19/2023	N	EM08	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	----	----	----
U4-E-07I	5/15/2023	N	EM09	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	----	----	----
U4-E-07I	6/12/2023	N	EM10	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	----	----	----
U4-E-07I	7/11/2023	N	EM11	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	----	----	----
U4-E-07I	8/11/2023	N	EM12	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	----	----	----
U4-E-07I	9/11/2023	N	EM13	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	----	----	----
U4-E-07I	10/16/2023	N	EM14	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	----	----	----
U4-E-07I	12/13/2023	N	EM16	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	----	----	----
U4-E-08D	4/12/2022	N	BL02	UMCf	94.6 - 109.6	<4.20	<15.1	<90.0	<8.49	737,000	54.7	10.2 J	<8.16	<91.5	82,200
U4-E-08D	10/11/2022	N	EM02	UMCf	94.6 - 109.6	----	----	----	----	----	----	----	----	----	----
U4-E-08D	11/3/2022	N	EM03	UMCf	94.6 - 109.6	----	----	----	----	----	----	----	----	----	----
U4-E-08D	12/6/2022	N	EM04	UMCf	94.6 - 109.6	----	----	----	----	----	----	----	----	----	----
U4-E-08D	1/9/2023	N	EM05	UMCf	94.6 - 109.6	----	----	----	----	----	----	----	----	----	----
U4-E-08D	2/13/2023	N	EM06	UMCf	94.6 - 109.6	----	----	----	----	----	----	----	----	----	----
U4-E-08D	3/13/2023	N	EM07	UMCf	94.6 - 109.6	----	----	----	----	----	----	----	----	----	----
U4-E-08D	4/19/2023	N	EM08	UMCf	94.6 - 109.6	----	----	----	----	----	----	----	----	----	----
U4-E-08D	5/17/2023	N	EM09	UMCf	94.6 - 109.6	----	----	----	----	----	----	----	----	----	----
U4-E-08D	6/12/2023	N	EM10	UMCf	94.6 - 109.6	----	----	----	----	----	----	----	----	----	----
U4-E-08D	7/11/2023	N	EM11	UMCf	94.6 - 109.6	----	----	----	----	----	----	----	----	----	----
U4-E-09D	4/15/2022	N	BL02	UMCf	94.5 - 109.5	<0.840	<15.1	18.8 J	<8.49	360,000	23.2	<5.80	<8.16	172 J	46,900
U4-E-09I	4/14/2022	N	BL02	UMCf	74.9 - 89.9	<0.840	6.53	<18.0	<0.849	91,600	21.6	13.2	2.61	199 J	25,300
U4-E-10D	4/13/2022	N	BL02	UMCf	94.5 - 109.5	<0.840	<1.51	<18.0	<0.849	165,000	7.51 J	8.19	20.5	34.0 J	29,700
U4-E-10I	4/13/2022	N	BL02	UMCf	74.2 - 89.2	<0.840	4.02 J	<18.0	<0.849	133,000	7.93 J	11.6	2.29	<18.3	26,000
U4-MW-01D	4/19/2022	N	BL02	UMCf	96.7 - 106.7	----	----	----	----	----	----	----	----	----	----
U4-MW-01D	2/16/2023	N	EM06	UMCf	96.7 - 106.7	----	----	----	----	----	----	----	----	----	----
U4-MW-01D	3/20/2023	N	EM07	UMCf	96.7 - 106.7	<0.840	6.39	<18.0	<0.849	62,300	<0.934	<1.16	<0.816	----	5,630
U4-MW-01D	6/13/2023	N	EM10	UMCf	96.7 - 106.7	<0.840	<15.1	<18.0	<8.49	240,000 J+	2.25 J	5.02 J+	<8.16	----	26,500
U4-MW-01D	9/14/2023	N	EM13	UMCf	96.7 - 106.7	<0.840	8.15 J	<18.0	<4.24	230,000	3.88 J	4.70 J	<4.08	----	27,600
U4-MW-01D	12/14/2023	N	EM16	UMCf	96.7 - 106.7	<0.840	8.30 J	<18.0	<4.24	222,000	1.48 J	1.41 J	<4.08	----	27,600
U4-MW-01DD	4/19/2022	N	BL02	UMCf	119.9 - 129.9	----	----	----	----	----	----	----	----	----	----
U4-MW-01DD	4/19/2022	FD	BL02	UMCf	119.9 - 129.9	----	----	----	----	----	----	----	----	----	----
U4-MW-01DD	3/15/2023	N	EM07	UMCf	119.9 - 129.9	<0.840	3.13 J	<18.0	<0.849	125,000	11.3 J+	6.64	<0.816	----	21,800
U4-MW-01DD	6/13/2023	N	EM10	UMCf	119.9 - 129.9	<0.840	<15.1	<18.0	<8.49	108,000 J+	3.52 J	3.58 J	<8.16	----	23,300
U4-MW-01DD	9/14/2023	N	EM13	UMCf	119.9 - 129.9	<0.840	<1.51	<18.0	<0.849	126,000	8.70 J	5.18	<0.816	----	25,300
U4-MW-01DD	12/15/2023	N	EM16	UMCf	119.9 - 129.9	<0.840	<1.51	<18.0	<0.849	76,100	8.30 J	5.29	1.75 J	----	16,100
U4-MW-01I	4/19/2022	N	BL02	UMCf	76.7 - 86.7	----	----	----	----	----	----	----	----	----	----
U4-MW-01I	3/20/2023	N	EM07	UMCf	76.7 - 86.7	<0.840	7.21	<18.0	1.06 J	85,700	4.20 J	<1.16	<0.816	----	7,270
U4-MW-01I	6/12/2023	N	EM10	UMCf	76.7 - 86.7	<0.840	4.18 J	<18.0 UJ	<0.849	252,000	1.32 J	5.17	2.49	----	27,400
U4-MW-01I	9/14/2023	N	EM13	UMCf	76.7 - 86.7	2.50 J	8.54 J	32.0 J	<4.24	304,000	1.96 J	5.64	<4.08	----	31,100
U4-MW-01I	12/15/2023	N	EM16	UMCf	76.7 - 86.7	3.22 J	8.11	3,360	<8.49	426,000	178	<1.16	11.1	----	35,700
U4-MW-01S	4/18/2022	N	BL02	UMCf	54.7 - 64.7	----	----	----	----	----	----	----	----	----	----
U4-MW-01S	3/15/2023	N	EM07	UMCf	54.7 - 64.7	<0.840	5.26	66.4 J	<0.849	4,240	<0.934	24.4	<0.816	----	17,500
U4-MW-01S	6/13/2023	N	EM10	UMCf	54.7 - 64.7	<0.840	<1.51	43.8 J	<0.849	3,920 J+	82.4	24.6	172	----	18,800
U4-MW-01S	9/15/2023	N	EM13	UMCf	54.7 - 64.7	<0.840	<1.51	<18.0	<0.849	4,790	0.987 J	26.5	<0.816	----	19,300
U4-MW-01S	12/13/2023	N	EM16	UMCf	54.7 - 64.7	1.33 J	<1.51	<18.0	<0.849	3,970	<0.934	22.8	<0.816	----	16,800
U4-MW-02D	4/14/2022	N	BL02	UMCf	95.0 - 110.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02D	10/11/2022	N	EM02	UMCf	95.0 - 110.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02D	11/1/2022	N	EM03	UMCf	95.0 - 110.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02D	12/7/2022	N	EM04	UMCf	95.0 - 110.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02D	1/10/2023	N	EM05	UMCf	95.0 - 110.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02D	2/13/2023	N	EM06	UMCf	95.0 - 110.0	----	----	----	----	----	----	----	----	----	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020
						Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Molybdenum	Nickel	Phosphorus	Potassium
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-02D	3/17/2023	N	EM07	UMCf	95.0 - 110.0	<0.840	<15.1	<18.0	<8.49	636,000	5.23 J	16.0	<8.16	----	94,100
U4-MW-02D	4/19/2023	N	EM08	UMCf	95.0 - 110.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02D	5/9/2023	N	EM09	UMCf	95.0 - 110.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02D	6/13/2023	N	EM10	UMCf	95.0 - 110.0	<4.20	<15.1	<90.0	<8.49	599,000 J+	4.80 J	14.7 J	<8.16	----	82,700
U4-MW-02D	7/18/2023	N	EM11	UMCf	95.0 - 110.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02D	8/14/2023	N	EM12	UMCf	95.0 - 110.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02D	9/11/2023	N	EM13	UMCf	95.0 - 110.0	24.4 J	<30.2	27.3 J	<17.0	525,000	3.39 J	16.4	<16.3	----	110,000
U4-MW-02D	10/19/2023	N	EM14	UMCf	95.0 - 110.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02D	11/15/2023	N	EM15	UMCf	95.0 - 110.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02D	12/14/2023	N	EM16	UMCf	95.0 - 110.0	<0.840	69.6 J	<18.0	<17.0	560,000	12.7	7.97	<16.3	----	101,000
U4-MW-02I	4/14/2022	N	BL02	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	10/11/2022	N	EM02	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	11/2/2022	N	EM03	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	11/2/2022	FD	EM03	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	12/8/2022	N	EM04	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	12/8/2022	FD	EM04	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	1/13/2023	N	EM05	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	1/13/2023	FD	EM05	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	2/15/2023	N	EM06	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	2/15/2023	FD	EM06	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	3/17/2023	N	EM07	UMCf	75.0 - 90.0	<0.840	<7.55	<18.0	<4.24	294,000	221	23.4	103	----	73,000
U4-MW-02I	3/17/2023	FD	EM07	UMCf	75.0 - 90.0	<0.840	<7.55	<18.0	<4.24	289,000	229	23.8	99.2	----	71,300
U4-MW-02I	4/20/2023	N	EM08	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	4/20/2023	FD	EM08	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	5/9/2023	N	EM09	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	5/9/2023	FD	EM09	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	6/12/2023	N	EM10	UMCf	75.0 - 90.0	2.84 J	4.33 J	236 J+	<0.849 UJ	82,700	972	7.65	46.0	----	19,000
U4-MW-02I	6/12/2023	FD	EM10	UMCf	75.0 - 90.0	2.71 J	7.48	214 J+	4.08 J	79,800	943	7.12	46.1	----	18,400
U4-MW-02I	7/18/2023	N	EM11	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	7/18/2023	FD	EM11	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	8/11/2023	N	EM12	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	8/11/2023	FD	EM12	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	9/11/2023	N	EM13	UMCf	75.0 - 90.0	6.69 J	<7.55	322	<4.24	202,000	2,330	22.4	104	----	34,700
U4-MW-02I	9/11/2023	FD	EM13	UMCf	75.0 - 90.0	5.73 J	<7.55	346	4.25 J	199,000	2,310	20.9	105	----	34,000
U4-MW-02I	10/19/2023	N	EM14	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	10/19/2023	FD	EM14	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	11/15/2023	N	EM15	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	11/15/2023	FD	EM15	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	12/14/2023	N	EM16	UMCf	75.0 - 90.0	1.88 J	44.1 J	<18.0	<8.49	223,000	984	15.3	123	----	59,000
U4-MW-02I	12/14/2023	FD	EM16	UMCf	75.0 - 90.0	<0.840	41.2	<18.0	<4.24	221,000	983	14.9	116	----	58,700
U4-MW-03D	4/20/2022	N	BL02	UMCf	96.6 - 106.6	----	----	----	----	----	----	----	----	----	----
U4-MW-03D	2/16/2023	N	EM06	UMCf	96.6 - 106.6	----	----	----	----	----	----	----	----	----	----
U4-MW-03D	3/16/2023	N	EM07	UMCf	96.6 - 106.6	<0.840	<7.55	<18.0	<4.24	369,000	8.20 J	4.49 J	<4.08	----	35,900
U4-MW-03D	3/16/2023	FD	EM07	UMCf	96.6 - 106.6	<0.840	<7.55	<18.0	4.90 J	369,000	2.65 J	5.12	<4.08	----	35,900
U4-MW-03D	6/15/2023	N	EM10	UMCf	96.6 - 106.6	<0.840	<7.55	<18.0	<4.24	332,000	1.55 J	4.90 J	<4.08	----	36,600
U4-MW-03D	9/14/2023	N	EM13	UMCf	96.6 - 106.6	<0.840	17.8 J	<18.0	<4.24	354,000	<0.934	6.42	<4.08	----	39,000
U4-MW-03D	12/13/2023	N	EM16	UMCf	96.6 - 106.6	<0.840	23.1 J	18.9 J	<4.24	386,000	44.3	<1.16	<4.08	----	38,000
U4-MW-03DD	4/20/2022	N	BL02	UMCf	119.7 - 129.7	----	----	----	----	----	----	----	----	----	----
U4-MW-03DD	3/15/2023	N	EM07	UMCf	119.7 - 129.7	<0.840	<1.51	<18.0	<0.849	16,400	3.34 J	8.98	<0.816	----	6,600
U4-MW-03DD	6/15/2023	N	EM10	UMCf	119.7 - 129.7	<0.840	<1.51	<18.0	<0.849	16,600	1.74 J	8.83 J+	1.35 J	----	6,690
U4-MW-03DD	9/14/2023	N	EM13	UMCf	119.7 - 129.7	<0.840	<1.51	83.8 J	<0.849	16,000	3.27 J	8.47	1.26 J	----	6,230

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020
						Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Molybdenum	Nickel	Phosphorus	Potassium
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-03DD	12/14/2023	N	EM16	UMCf	119.7 - 129.7	0.884 J	<1.51	58.4 J	<0.849	16,500	8.00 J	8.15	<0.816	----	6,760
U4-MW-03I	4/19/2022	N	BL02	UMCf	76.6 - 86.6	----	----	----	----	----	----	----	----	----	----
U4-MW-03I	3/15/2023	N	EM07	UMCf	76.6 - 86.6	<0.840	<1.51	<18.0	<0.849	325,000	5.11 J	5.12	<0.816	----	37,100
U4-MW-03I	6/14/2023	N	EM10	UMCf	76.6 - 86.6	<0.840	<7.55	<18.0	<4.24	274,000	1.63 J	6.28	<4.08	----	36,500
U4-MW-03I	6/14/2023	FD	EM10	UMCf	76.6 - 86.6	<0.840	<7.55	<18.0	<4.24	284,000	1.57 J	7.16	<4.08	----	38,100
U4-MW-03I	9/11/2023	N	EM13	UMCf	76.6 - 86.6	7.31 J	9.56 J	5,590	9.18 J	458,000	416	3.18 J	8.15 J	----	43,500
U4-MW-03I	9/11/2023	FD	EM13	UMCf	76.6 - 86.6	6.45 J	9.01 J	4,580	10.3 J+	434,000	312	3.98 J	7.49 J	----	42,700
U4-MW-03I	12/13/2023	N	EM16	UMCf	76.6 - 86.6	<0.840	20.7 J	<18.0	<4.24	379,000	66.5	2.36 J	<4.08	----	39,300
U4-MW-03I	12/13/2023	FD	EM16	UMCf	76.6 - 86.6	<0.840	20.7 J	<18.0	<4.24	381,000	67.8	2.21 J	<4.08	----	38,600
U4-MW-03S	4/18/2022	N	BL02	UMCf	54.5 - 64.5	----	----	----	----	----	----	----	----	----	----
U4-MW-03S	4/18/2022	FD	BL02	UMCf	54.5 - 64.5	----	----	----	----	----	----	----	----	----	----
U4-MW-03S	3/15/2023	N	EM07	UMCf	54.5 - 64.5	<0.840	<1.51	<18.0	<0.849	584 J	3.04 J	20.8	<0.816	----	11,100
U4-MW-03S	6/15/2023	N	EM10	UMCf	54.5 - 64.5	<0.840	<1.51	<18.0	<0.849	16,800	<0.934	21.4	<0.816	----	12,000
U4-MW-03S	9/14/2023	N	EM13	UMCf	54.5 - 64.5	<0.840	<1.51	<18.0	1.51 J	1,230	1.29 J	26.2	1.23 J	----	10,400
U4-MW-03S	12/13/2023	N	EM16	UMCf	54.5 - 64.5	1.50 J	<1.51	51.2 J	<0.849	1,140	11.7	36.9	2.77 J+	----	10,700
U4-MW-04D	4/19/2022	N	BL02	UMCf	97.0 - 107.0	----	----	----	----	----	----	----	----	----	----
U4-MW-04D	2/16/2023	N	EM06	UMCf	97.0 - 107.0	----	----	----	----	----	----	----	----	----	----
U4-MW-04D	3/21/2023	N	EM07	UMCf	97.0 - 107.0	<0.840	<1.51	<18.0	<0.849	23,700	1.08 J	<1.16	<0.816	----	2,920
U4-MW-04D	6/14/2023	N	EM10	UMCf	97.0 - 107.0	2.01 J	<7.55	<18.0	<4.24	92,600	8.64 J	3.74 J	<4.08	----	16,200
U4-MW-04D	9/15/2023	N	EM13	UMCf	97.0 - 107.0	<0.840	8.84 J	<18.0	<4.24	164,000	73.2	5.53	<4.08	----	23,500
U4-MW-04D	12/12/2023	N	EM16	UMCf	97.0 - 107.0	1.59 J	15.1 J	56.9 J	<4.24	137,000	112	4.66 J	<4.08	----	20,200
U4-MW-04I	4/19/2022	N	BL02	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	----	----	----
U4-MW-04I	3/20/2023	N	EM07	UMCf	76.8 - 86.8	<0.840	19.3 J	<18.0	<4.24	71,500	<0.934	1.55 J	<4.08	----	6,810
U4-MW-04I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<0.840	<7.55	<18.0	<4.24	256,000	17.1	3.55 J	<4.08	----	34,800
U4-MW-04I	9/14/2023	N	EM13	UMCf	76.8 - 86.8	<0.840	37.7 J	<18.0	<8.49	607,000	10.7	9.54	<8.16	----	60,900
U4-MW-04I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	<0.840	<30.2	<18.0	<17.0	586,000	26.2	4.68 J	<16.3	----	64,900
U4-MW-05D	4/15/2022	N	BL02	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	----	----	----
U4-MW-05D	10/13/2022	N	EM02	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	----	----	----
U4-MW-05D	11/3/2022	N	EM03	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	----	----	----
U4-MW-05D	12/7/2022	N	EM04	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	----	----	----
U4-MW-05D	1/11/2023	N	EM05	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	----	----	----
U4-MW-05D	2/14/2023	N	EM06	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	----	----	----
U4-MW-05D	3/16/2023	N	EM07	UMCf	98.2 - 108.2	<0.840	<7.55	<18.0	<4.24	129,000	2.45 J	15.8	<4.08	----	34,300
U4-MW-05D	4/20/2023	N	EM08	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	----	----	----
U4-MW-05D	5/10/2023	N	EM09	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	----	----	----
U4-MW-05D	6/15/2023	N	EM10	UMCf	98.2 - 108.2	<0.840	<7.55	<18.0	<4.24	108,000	432	17.0	6.24 J	----	26,000
U4-MW-05D	7/18/2023	N	EM11	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	----	----	----
U4-MW-05D	8/14/2023	N	EM12	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	----	----	----
U4-MW-05D	9/12/2023	N	EM13	UMCf	98.2 - 108.2	1.88 J	<1.51	<18.0	<0.849	137,000	714	12.0	7.62	----	27,000
U4-MW-05D	10/18/2023	N	EM14	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	----	----	----
U4-MW-05D	11/16/2023	N	EM15	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	----	----	----
U4-MW-05D	12/14/2023	N	EM16	UMCf	98.2 - 108.2	17.3	23.2 J	805	<4.24	244,000	3,220	15.7	188	----	36,500
U4-MW-05I	4/15/2022	N	BL02	UMCf	76.6 - 86.6	----	----	----	----	----	----	----	----	----	----
U4-MW-05I	10/13/2022	N	EM02	UMCf	76.6 - 86.6	----	----	----	----	----	----	----	----	----	----
U4-MW-05I	11/3/2022	N	EM03	UMCf	76.6 - 86.6	----	----	----	----	----	----	----	----	----	----
U4-MW-05I	12/8/2022	N	EM04	UMCf	76.6 - 86.6	----	----	----	----	----	----	----	----	----	----
U4-MW-05I	1/11/2023	N	EM05	UMCf	76.6 - 86.6	----	----	----	----	----	----	----	----	----	----
U4-MW-05I	2/14/2023	N	EM06	UMCf	76.6 - 86.6	----	----	----	----	----	----	----	----	----	----
U4-MW-05I	3/14/2023	N	EM07	UMCf	76.6 - 86.6	<0.840	<7.55	490	<4.24	117,000	9.99 J	22.5	<4.08	----	36,600
U4-MW-05I	4/21/2023	N	EM08	UMCf	76.6 - 86.6	----	----	----	----	----	----	----	----	----	----
U4-MW-05I	5/10/2023	N	EM09	UMCf	76.6 - 86.6	----	----	----	----	----	----	----	----	----	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020
						Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Molybdenum	Nickel	Phosphorus	Potassium
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-05I	6/15/2023	N	EM10	UMCf	76.6 - 86.6	<0.840	<1.51	742	<0.849	81,600	609	4.70 J	11.8	----	20,900
U4-MW-05I	7/17/2023	N	EM11	UMCf	76.6 - 86.6	----	----	----	----	----	----	----	----	----	----
U4-MW-05I	8/14/2023	N	EM12	UMCf	76.6 - 86.6	----	----	----	----	----	----	----	----	----	----
U4-MW-05I	9/13/2023	N	EM13	UMCf	76.6 - 86.6	4.93 J	10.7 J	<18.0	6.99 J	166,000	470	59.2	17.3	----	33,200
U4-MW-05I	10/18/2023	N	EM14	UMCf	76.6 - 86.6	----	----	----	----	----	----	----	----	----	----
U4-MW-05I	11/15/2023	N	EM15	UMCf	76.6 - 86.6	----	----	----	----	----	----	----	----	----	----
U4-MW-05I	12/12/2023	N	EM16	UMCf	76.6 - 86.6	3.49 J	27.7 J	115	<8.49	228,000	474	13.2	30.1 J+	----	36,800
U4-MW-06D	4/19/2022	N	BL02	UMCf	97.1 - 107.1	----	----	----	----	----	----	----	----	----	----
U4-MW-06D	2/15/2023	N	EM06	UMCf	97.1 - 107.1	----	----	----	----	----	----	----	----	----	----
U4-MW-06D	3/21/2023	N	EM07	UMCf	97.1 - 107.1	<0.840	<1.51	<18.0	<0.849	62,500	1.26 J	<1.16	<0.816	----	7,760
U4-MW-06D	6/16/2023	N	EM10	UMCf	97.1 - 107.1	<0.840	18.1 J	<18.0	<4.24	370,000	10.4	6.49	<4.08	----	47,800
U4-MW-06D	9/13/2023	N	EM13	UMCf	97.1 - 107.1	3.39 J	15.7 J	20.9 J	<4.24	455,000	209	80.8	<4.08	----	48,700
U4-MW-06D	12/13/2023	N	EM16	UMCf	97.1 - 107.1	<0.840	51.3 J	25.0 J	<17.0	609,000	367	3.89 J	48.7 J+	----	63,600
U4-MW-06I	4/19/2022	N	BL02	UMCf	76.5 - 86.5	----	----	----	----	----	----	----	----	----	----
U4-MW-06I	3/14/2023	N	EM07	UMCf	76.5 - 86.5	<0.840	<7.55	<18.0	<4.24	322,000	3.27 J	13.6	<4.08	----	51,200
U4-MW-06I	6/16/2023	N	EM10	UMCf	76.5 - 86.5	<0.840	22.5 J	<18.0	<4.24	352,000	37.1	10.8	<4.08	----	52,400
U4-MW-06I	9/12/2023	N	EM13	UMCf	76.5 - 86.5	<0.840	<7.55	146	<4.24	420,000	102	9.96	<4.08	----	50,900
U4-MW-06I	12/12/2023	N	EM16	UMCf	76.5 - 86.5	<0.840	43.7 J	35.3 J	<17.0	542,000	219	7.35	<16.3	----	62,200
U4-MW-07D	4/15/2022	N	BL02	UMCf	96.8 - 106.5	----	----	----	----	----	----	----	----	----	----
U4-MW-07D	10/12/2022	N	EM02	UMCf	96.8 - 106.5	----	----	----	----	----	----	----	----	----	----
U4-MW-07D	10/12/2022	FD	EM02	UMCf	96.8 - 106.5	----	----	----	----	----	----	----	----	----	----
U4-MW-07D	11/3/2022	N	EM03	UMCf	96.8 - 106.5	----	----	----	----	----	----	----	----	----	----
U4-MW-07D	12/7/2022	N	EM04	UMCf	96.8 - 106.5	----	----	----	----	----	----	----	----	----	----
U4-MW-07D	1/11/2023	N	EM05	UMCf	96.8 - 106.5	----	----	----	----	----	----	----	----	----	----
U4-MW-07D	2/14/2023	N	EM06	UMCf	96.8 - 106.5	----	----	----	----	----	----	----	----	----	----
U4-MW-07D	3/16/2023	N	EM07	UMCf	96.8 - 106.5	<0.840	<1.51	86.5 J	<0.849	39,700	1.27 J	3.84 J	<0.816	----	5,290
U4-MW-07D	4/21/2023	N	EM08	UMCf	96.8 - 106.5	----	----	----	----	----	----	----	----	----	----
U4-MW-07D	5/11/2023	N	EM09	UMCf	96.8 - 106.5	----	----	----	----	----	----	----	----	----	----
U4-MW-07D	6/13/2023	N	EM10	UMCf	96.8 - 106.5	5.04 J	1.55 J	<18.0	<0.849	204,000 J+	2,920	3.64 J	32.4	----	15,100 J+
U4-MW-07D	7/17/2023	N	EM11	UMCf	96.8 - 106.5	----	----	----	----	----	----	----	----	----	----
U4-MW-07D	8/11/2023	N	EM12	UMCf	96.8 - 106.5	----	----	----	----	----	----	----	----	----	----
U4-MW-07D	9/13/2023	N	EM13	UMCf	96.8 - 106.5	5.81 J	14.0 J	<18.0	<4.24	249,000	614	69.3	6.87 J	----	36,300
U4-MW-07D	10/18/2023	N	EM14	UMCf	96.8 - 106.5	----	----	----	----	----	----	----	----	----	----
U4-MW-07D	11/16/2023	N	EM15	UMCf	96.8 - 106.5	----	----	----	----	----	----	----	----	----	----
U4-MW-07D	12/12/2023	N	EM16	UMCf	96.8 - 106.5	15.8	25.2 J+	1,340	<4.24	385,000	4,790	6.45	135	----	32,600
U4-MW-07I	4/15/2022	N	BL02	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	----	----	----
U4-MW-07I	10/12/2022	N	EM02	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	----	----	----
U4-MW-07I	11/3/2022	N	EM03	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	----	----	----
U4-MW-07I	12/7/2022	N	EM04	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	----	----	----
U4-MW-07I	1/11/2023	N	EM05	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	----	----	----
U4-MW-07I	2/15/2023	N	EM06	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	----	----	----
U4-MW-07I	3/16/2023	N	EM07	UMCf	76.8 - 86.8	<0.840	<1.51	29.1 J	<0.849	46,800	0.976 J	3.33 J	0.924 J	----	7,190
U4-MW-07I	4/21/2023	N	EM08	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	----	----	----
U4-MW-07I	5/11/2023	N	EM09	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	----	----	----
U4-MW-07I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	3.08 J	<1.51	638	<0.849	108,000	971	2.53 J	6.14 J+	----	16,500
U4-MW-07I	7/17/2023	N	EM11	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	----	----	----
U4-MW-07I	8/11/2023	N	EM12	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	----	----	----
U4-MW-07I	9/13/2023	N	EM13	UMCf	76.8 - 86.8	6.58 J	12.6 J	<18.0	<4.24	218,000	600	57.7	22.7	----	32,700
U4-MW-07I	10/18/2023	N	EM14	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	----	----	----
U4-MW-07I	11/16/2023	N	EM15	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	----	----	----
U4-MW-07I	12/11/2023	N	EM16	UMCf	76.8 - 86.8	7.75 J	33.3 J+	41.6 J	<4.24	351,000	2,060	7.08	19.5 J+	----	36,100

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020
						Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Molybdenum	Nickel	Phosphorus	Potassium
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-08D	4/13/2022	N	BL02	UMCf	98.6 - 108.6	<4.20	<15.1	<90.0	<8.49	707,000	37.2 J	11.9 J	<8.16	<91.5	102,000
U4-MW-08D	12/7/2022	N	EM04	UMCf	98.6 - 108.6	<0.298	<7.55	<140	<4.24	330,000	11.7 J	3.10 J	<4.08	----	43,000
U4-MW-08D	3/17/2023	N	EM07	UMCf	98.6 - 108.6	<0.840	<7.55	<18.0	<4.24	378,000	40.2 J+	4.72 J	<4.08	----	49,900
U4-MW-08D	6/13/2023	N	EM10	UMCf	98.6 - 108.6	<0.840	<15.1	<18.0	<8.49	542,000 J+	68.9	5.34 J+	<8.16	----	61,800
U4-MW-08D	9/13/2023	N	EM13	UMCf	98.6 - 108.6	9.79 J	31.5 J	<18.0	<8.49	557,000	39.7	117	<8.16	----	90,900
U4-MW-08D	12/11/2023	N	EM16	UMCf	98.6 - 108.6	<8.40	87.2 J+	<18.0	<8.49	511,000	43.3	5.94	<8.16	----	69,400
U4-MW-08DD	4/20/2022	N	BL02	UMCf	119.8 - 129.8	<0.840	<1.51	<18.0	<0.849	28,400	14.7	9.57	1.49 J	110 J	11,000
U4-MW-08DD	4/20/2022	FD	BL02	UMCf	119.8 - 129.8	<0.840	<1.51	<18.0	<0.849	28,400	14.6	9.89	1.44 J	107 J	11,100
U4-MW-08DD	12/8/2022	N	EM04	UMCf	119.8 - 129.8	0.145 J	<1.51	<28.1	<0.849	23,100	31.7	10.9	3.15	----	9,950
U4-MW-08DD	3/15/2023	N	EM07	UMCf	119.8 - 129.8	<0.840	2.67 J	<18.0	0.963 J	92,600	2.52 J	4.92 J	1.72 J	----	15,400
U4-MW-08DD	6/14/2023	N	EM10	UMCf	119.8 - 129.8	1.76 J	<1.51	18.3 J	<0.849	80,800	19.3	8.85	17.2 J+	----	15,400
U4-MW-08DD	9/14/2023	N	EM13	UMCf	119.8 - 129.8	<0.840	<1.51	40.2 J	1.42 J	45,200	2.85 J	8.49	1.61 J	----	11,300
U4-MW-08DD	12/14/2023	N	EM16	UMCf	119.8 - 129.8	0.850 J	<1.51	<18.0	<0.849	47,900	4.63 J	8.01	<0.816	----	11,700
U4-MW-08I	4/13/2022	N	BL02	UMCf	78.0 - 88.0	<0.840	1.90 J	<18.0	<0.849	44,400	5.20 J	18.7	0.820 J	25.4 J	23,000
U4-MW-08I	12/7/2022	N	EM04	UMCf	78.0 - 88.0	1.54 J	<7.55	<140	<4.24	166,000	29.6	12.8 J	113	----	36,600
U4-MW-08I	12/7/2022	FD	EM04	UMCf	78.0 - 88.0	1.41 J	<7.55	<140	<4.24	163,000	28.6	12.7 J	106	----	36,200
U4-MW-08I	3/17/2023	N	EM07	UMCf	78.0 - 88.0	<0.840	<7.55	<18.0	<4.24	288,000	13.6 J+	16.2	29.8	----	55,900
U4-MW-08I	6/13/2023	N	EM10	UMCf	78.0 - 88.0	<0.840	<15.1	<18.0	<8.49	78,400 J+	23.4	11.1 J+	9.78 J	----	25,100
U4-MW-08I	9/13/2023	N	EM13	UMCf	78.0 - 88.0	3.48 J	13.8 J	<18.0	<4.24	210,000	35.6	77.0	14.9	----	42,800
U4-MW-08I	12/11/2023	N	EM16	UMCf	78.0 - 88.0	<0.840	53.9 J+	36.4 J	<8.49	349,000	44.0	6.66	12.8 J	----	52,100
U4-MW-08S	4/15/2022	N	BL02	UMCf	54.9 - 64.9	<0.840	<1.51	26.0 J	<0.849	3,570	<0.934	20.1	<0.816	<18.3	20,400
U4-MW-08S	12/7/2022	N	EM04	UMCf	54.9 - 64.9	0.0886 J	<1.51	31.9 J	<0.849	30,800	10.2	20.4	3.02	----	18,200
U4-MW-08S	12/7/2022	FD	EM04	UMCf	54.9 - 64.9	0.0711 J	<1.51	39.7 J	<0.849	30,800	10.5	20.0	2.30	----	17,900
U4-MW-08S	3/13/2023	N	EM07	UMCf	54.9 - 64.9	<0.840	<1.51	38.3 J	<0.849	61,700	428	3.71 J	1.37 J	----	17,800
U4-MW-08S	3/13/2023	FD	EM07	UMCf	54.9 - 64.9	<0.840	<1.51	54.4 J	<0.849	55,500	406	4.57 J	1.59 J	----	16,900
U4-MW-08S	6/13/2023	N	EM10	UMCf	54.9 - 64.9	<0.840	<1.51	81.2 J	<0.849	68,300 J+	1,310	2.92 J	2.34	----	15,900
U4-MW-08S	6/13/2023	FD	EM10	UMCf	54.9 - 64.9	<0.840	<1.51	84.9 J	<0.849	66,600 J+	1,300	1.59 J	2.34	----	15,800
U4-MW-08S	9/13/2023	N	EM13	UMCf	54.9 - 64.9	2.00 J	<1.51	1,480	6.72	88,500	2,800	35.5	2.03	----	18,500
U4-MW-08S	9/13/2023	FD	EM13	UMCf	54.9 - 64.9	1.94 J	<15.1	1,360	<8.49	87,600	2,750	35.9	<8.16	----	17,400
U4-MW-08S	12/14/2023	N	EM16	UMCf	54.9 - 64.9	2.04 J	<1.51	30,100	<0.849	186,000	10,600	<1.16	3.64	----	26,100
U4-MW-08S	12/14/2023	FD	EM16	UMCf	54.9 - 64.9	1.97 J	<1.51	30,400	<0.849	187,000	10,700	<1.16	4.04	----	26,400
U4-MW-09D	4/14/2022	N	BL02	UMCf	96.9 - 106.9	<0.840	<15.1	<18.0	<8.49	532,000	4.62 J	<1.16	<8.16	<18.3	6,610
U4-MW-09D	12/6/2022	N	EM04	UMCf	96.9 - 106.9	0.202 J	<1.51 UJ	<28.1 UJ	<0.849 UJ	71,500	5.78	6.30	11.1	----	12,100
U4-MW-09D	3/16/2023	N	EM07	UMCf	96.9 - 106.9	<0.840	1.58 J	30.6 J	<0.849	136,000	71.7	1.39 J	10.6	----	17,400
U4-MW-09D	6/14/2023	N	EM10	UMCf	96.9 - 106.9	4.15 J	<1.51	<18.0	<0.849	144,000	536	8.71	13.9 J+	----	19,700
U4-MW-09D	9/12/2023	N	EM13	UMCf	96.9 - 106.9	1.21 J	<1.51	80.7 J	<0.849	241,000	979	10.0	9.23	----	24,800
U4-MW-09D	12/15/2023	N	EM16	UMCf	96.9 - 106.9	3.69 J	<1.51	92.9 J	<0.849	349,000	1,380	12.5	15.3	----	29,700
U4-MW-09DD	4/14/2022	N	BL02	UMCf	119.8 - 129.8	<0.840	3.53 J	18.0 J	<0.849	20,000	7.39 J	9.61	<0.816	221 J	7,460
U4-MW-09DD	12/6/2022	N	EM04	UMCf	119.8 - 129.8	<0.0596 UJ	<1.51 UJ	<28.1 UJ	<0.849 UJ	21,100	1.17 J	9.02	<0.816 UJ	----	7,030
U4-MW-09DD	3/21/2023	N	EM07	UMCf	119.8 - 129.8	<0.840	<1.51	<18.0	<0.849	43,200	2.54 J	5.69	7.63	----	9,310
U4-MW-09DD	6/15/2023	N	EM10	UMCf	119.8 - 129.8	<0.840	<1.51	<18.0	<0.849	45,600	6.67 J	6.80 J+	53.7	----	10,000
U4-MW-09DD	9/13/2023	N	EM13	UMCf	119.8 - 129.8	5.65 J	<1.51	107	<0.849	97,000	300	40.7	32.1	----	14,900
U4-MW-09DD	12/13/2023	N	EM16	UMCf	119.8 - 129.8	1.38 J	4.49 J	53.4 J	<0.849	94,000	246	2.97 J	5.51 J+	----	15,200
U4-MW-09I	4/14/2022	N	BL02	UMCf	76.8 - 86.8	<0.840	2.16 J	<18.0	<0.849	42,300	4.58 J	13.2	0.971 J	172 J	19,300
U4-MW-09I	12/6/2022	N	EM04	UMCf	76.8 - 86.8	0.835 J	8.06 J	<140 UJ	<4.24 UJ	100,000	21.9 J	7.84 J	83.7	----	20,600
U4-MW-09I	3/16/2023	N	EM07	UMCf	76.8 - 86.8	<0.840	<1.51	22.6 J	<0.849	153,000	44.5	3.36 J	105	----	21,400
U4-MW-09I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	2.84 J	<1.51	35.7 J	<0.849	160,000	251	4.93 J	32.4	----	23,300
U4-MW-09I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	<0.840	<1.51	<18.0	<0.849	251,000	458	8.86	23.7	----	27,100
U4-MW-09I	12/15/2023	N	EM16	UMCf	76.8 - 86.8	3.59 J	1.57 J	<18.0	<0.849	350,000	816	8.79	25.1	----	30,200
U4-MW-09S	4/14/2022	N	BL02	UMCf	55.3 - 65.3	<0.840	1.69 J	141	<0.849	30,200	5.72 J	19.0	<0.816	168 J	14,000
U4-MW-09S	12/6/2022	N	EM04	UMCf	55.3 - 65.3	<0.0596 UJ	<1.51 UJ	<28.1 UJ	<0.849 UJ	7,810	1.21 J	14.0	1.83 J	----	9,350

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020
						Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Molybdenum	Nickel	Phosphorus	Potassium
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-09S	3/17/2023	N	EM07	UMCf	55.3 - 65.3	<0.840	<1.51	25.0 J	1.12 J	7,010	4.65 J	27.9	1.63 J	----	9,940
U4-MW-09S	6/15/2023	N	EM10	UMCf	55.3 - 65.3	<0.840	<1.51	96.5 J	<0.849	11,600	186	8.50 J+	14.6	----	13,400
U4-MW-09S	9/13/2023	N	EM13	UMCf	55.3 - 65.3	2.28 J	<15.1	586	<8.49	30,500	515	36.4	<8.16	----	16,600
U4-MW-09S	12/12/2023	N	EM16	UMCf	55.3 - 65.3	2.04 J	17.1 J	21,700	<4.24	116,000	2,050	13.9	22.7 J+	----	76,800
U4-MW-10D	4/14/2022	N	BL02	UMCf	96.9 - 106.9	<0.840	<1.51	<18.0	<0.849	134,000	23.5	8.67	<0.816	32.2 J	24,200
U4-MW-10D	12/5/2022	N	EM04	UMCf	96.9 - 106.9	<0.840	<1.51	<18.0	<0.849	87,500	2.32 J	3.34 J	<0.816	----	15,500
U4-MW-10D	3/17/2023	N	EM07	UMCf	96.9 - 106.9	1.20 J	2.98 J	421	<0.849	184,000	2,160	3.54 J	11.9	----	18,100
U4-MW-10D	6/14/2023	N	EM10	UMCf	96.9 - 106.9	0.983 J	<1.51	502	<0.849	164,000	2,470	1.71 J	3.57 J+	----	18,000
U4-MW-10D	9/13/2023	N	EM13	UMCf	96.9 - 106.9	1.73 J	<1.51	2,470	<0.849	178,000	1,910	66.3	7.78	----	19,800
U4-MW-10D	12/14/2023	N	EM16	UMCf	96.9 - 106.9	1.22 J	<1.51	852	<0.849	126,000	1,190	24.8	5.58	----	17,600
U4-MW-10I	4/14/2022	N	BL02	UMCf	77.1 - 87.1	<0.840	2.97 J	27.9 J	<0.849	135,000	25.2	17.8	1.08 J	194 J	31,700
U4-MW-10I	12/5/2022	N	EM04	UMCf	77.1 - 87.1	<0.840	<1.51	<18.0	<0.849	87,800	34.4	16.9	<0.816	----	17,000
U4-MW-10I	3/17/2023	N	EM07	UMCf	77.1 - 87.1	1.35 J	<1.51	266	1.14 J	157,000	917	11.2	58.9	----	22,400
U4-MW-10I	6/14/2023	N	EM10	UMCf	77.1 - 87.1	<0.840	<1.51	1,070	<0.849	119,000	3,120	1.25 J	1.44 J	----	20,200
U4-MW-10I	9/13/2023	N	EM13	UMCf	77.1 - 87.1	2.53 J	2.78 J	15,200	<0.849	184,000	4,630	47.6	4.72	----	22,900
U4-MW-10I	12/14/2023	N	EM16	UMCf	77.1 - 87.1	2.82 J	19.7 J	34.5 J	<4.24	324,000	1,910	16.1	8.69 J	----	39,200
U4-MW-11D	4/15/2022	N	BL02	UMCf	97.4 - 107.4	<4.20	<15.1	<90.0	<8.49	652,000	68.0	17.8 J	<8.16	315 J	86,800
U4-MW-11D	9/26/2022	N	EM01	UMCf	97.4 - 107.4	----	----	----	----	----	----	----	----	----	----
U4-MW-11D	10/11/2022	N	EM02	UMCf	97.4 - 107.4	----	----	----	----	----	----	----	----	----	----
U4-MW-11D	11/1/2022	N	EM03	UMCf	97.4 - 107.4	----	----	----	----	----	----	----	----	----	----
U4-MW-11D	12/6/2022	N	EM04	UMCf	97.4 - 107.4	<5.96 UJ	35.1 J	<2810 UJ	<84.9 UJ	601,000	<70.4 UJ	<34.8 UJ	<8.16 UJ	----	60,900 J
U4-MW-11D	1/12/2023	N	EM05	UMCf	97.4 - 107.4	----	----	----	----	----	----	----	----	----	----
U4-MW-11D	2/14/2023	N	EM06	UMCf	97.4 - 107.4	----	----	----	----	----	----	----	----	----	----
U4-MW-11D	3/16/2023	N	EM07	UMCf	97.4 - 107.4	<0.840	<7.55	25.8 J	<4.24	499,000	88.2	9.80	<4.08	----	62,800
U4-MW-11D	4/18/2023	N	EM08	UMCf	97.4 - 107.4	----	----	----	----	----	----	----	----	----	----
U4-MW-11D	5/17/2023	N	EM09	UMCf	97.4 - 107.4	----	----	----	----	----	----	----	----	----	----
U4-MW-11D	6/16/2023	N	EM10	UMCf	97.4 - 107.4	<8.40	32.6	<18.0	<4.24	596,000	136	11.7	<4.08	----	80,500
U4-MW-11D	7/14/2023	N	EM11	UMCf	97.4 - 107.4	----	----	----	----	----	----	----	----	----	----
U4-MW-11D	8/14/2023	N	EM12	UMCf	97.4 - 107.4	----	----	----	----	----	----	----	----	----	----
U4-MW-11D	9/13/2023	N	EM13	UMCf	97.4 - 107.4	19.5 J	22.4 J	20.0 J	<4.24	526,000	90.1	97.3	<4.08	----	64,400
U4-MW-11D	10/18/2023	N	EM14	UMCf	97.4 - 107.4	----	----	----	----	----	----	----	----	----	----
U4-MW-11D	11/16/2023	N	EM15	UMCf	97.4 - 107.4	----	----	----	----	----	----	----	----	----	----
U4-MW-11D	12/13/2023	N	EM16	UMCf	97.4 - 107.4	<0.840	44.4 J	<18.0	<17.0	480,000	143	9.98	<16.3	----	56,500
U4-MW-11I	4/14/2022	N	BL02	UMCf	77.0 - 87.0	<0.840	1.60 J	40.5 J	<0.849	47,100	10.4	18.7	1.07 J	202 J	26,900
U4-MW-11I	9/26/2022	N	EM01	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	9/26/2022	FD	EM01	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	10/10/2022	N	EM02	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	10/10/2022	FD	EM02	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	10/31/2022	N	EM03	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	10/31/2022	FD	EM03	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	12/6/2022	N	EM04	UMCf	77.0 - 87.0	0.243 J	<1.51 UJ	134	<0.849 UJ	89,300	577	2.21 J	3.32	----	22,800
U4-MW-11I	12/6/2022	FD	EM04	UMCf	77.0 - 87.0	0.242 J	<1.51 UJ	128	<0.849 UJ	88,400	564	1.46 J	2.79	----	23,200
U4-MW-11I	1/12/2023	N	EM05	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	1/12/2023	FD	EM05	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	2/14/2023	N	EM06	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	2/14/2023	FD	EM06	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	3/16/2023	N	EM07	UMCf	77.0 - 87.0	<0.840	<1.51	271 J+	<0.849	117,000 J	1,250 J	<1.16	1.86 J	----	23,000 J
U4-MW-11I	3/16/2023	FD	EM07	UMCf	77.0 - 87.0	<0.840	<1.51	295 J+	<0.849	78,000 J	831 J	<1.16	1.87 J	----	15,200 J
U4-MW-11I	4/18/2023	N	EM08	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	4/18/2023	FD	EM08	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	5/19/2023	N	EM09	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020
						Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Molybdenum	Nickel	Phosphorus	Potassium
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-11I	5/19/2023	FD	EM09	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	6/15/2023	N	EM10	UMCf	77.0 - 87.0	<0.840	<1.51 UJ	607	<0.849	107,000	1,240	2.49 J	1.94 J	----	19,900
U4-MW-11I	6/15/2023	FD	EM10	UMCf	77.0 - 87.0	<0.840	11.4 J	629	<0.849	105,000	1,230	1.89 J	1.75 J	----	20,000
U4-MW-11I	7/13/2023	N	EM11	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	7/13/2023	FD	EM11	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	8/14/2023	N	EM12	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	8/14/2023	FD	EM12	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	9/13/2023	N	EM13	UMCf	77.0 - 87.0	17.6	17.6 J	18.0 J	<4.24	373,000	2,400	82.6	80.7	----	50,600
U4-MW-11I	9/13/2023	FD	EM13	UMCf	77.0 - 87.0	17.8	17.6 J	<18.0	<4.24	385,000	2,440	81.2	82.1	----	51,700
U4-MW-11I	10/19/2023	N	EM14	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	10/19/2023	FD	EM14	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	11/16/2023	N	EM15	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	11/16/2023	FD	EM15	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	12/13/2023	N	EM16	UMCf	77.0 - 87.0	5.18 J	34.0 J	<18.0	<8.49	377,000	1,430	36.0	23.5 J+	----	49,700
U4-MW-11I	12/13/2023	FD	EM16	UMCf	77.0 - 87.0	3.90 J	33.3 J	<18.0	<8.49	378,000	1,430	37.9	24.3 J+	----	50,300
U4-MW-12D	4/15/2022	N	BL02	UMCf	97.1 - 107.1	<4.20	<15.1	92.3 J	<8.49	501,000	59.4	15.8 J	<8.16	365 J	83,300
U4-MW-12D	9/27/2022	N	EM01	UMCf	97.1 - 107.1	----	----	----	----	----	----	----	----	----	----
U4-MW-12D	10/12/2022	N	EM02	UMCf	97.1 - 107.1	----	----	----	----	----	----	----	----	----	----
U4-MW-12D	11/2/2022	N	EM03	UMCf	97.1 - 107.1	----	----	----	----	----	----	----	----	----	----
U4-MW-12D	12/7/2022	N	EM04	UMCf	97.1 - 107.1	<0.298	<7.55	<140	<4.24	300,000	23.4 J	8.18 J	<4.08	----	43,100
U4-MW-12D	1/12/2023	N	EM05	UMCf	97.1 - 107.1	----	----	----	----	----	----	----	----	----	----
U4-MW-12D	2/15/2023	N	EM06	UMCf	97.1 - 107.1	----	----	----	----	----	----	----	----	----	----
U4-MW-12D	3/14/2023	N	EM07	UMCf	97.1 - 107.1	<0.840	<7.55	29.5 J	<4.24	286,000	37.2	7.27	<4.08	----	44,100
U4-MW-12D	4/17/2023	N	EM08	UMCf	97.1 - 107.1	----	----	----	----	----	----	----	----	----	----
U4-MW-12D	5/17/2023	N	EM09	UMCf	97.1 - 107.1	----	----	----	----	----	----	----	----	----	----
U4-MW-12D	6/16/2023	N	EM10	UMCf	97.1 - 107.1	<0.840	18.2 J	<18.0	<4.24	334,000	79.3	8.08	<4.08	----	49,400
U4-MW-12D	7/13/2023	N	EM11	UMCf	97.1 - 107.1	----	----	----	----	----	----	----	----	----	----
U4-MW-12D	8/14/2023	N	EM12	UMCf	97.1 - 107.1	----	----	----	----	----	----	----	----	----	----
U4-MW-12D	9/12/2023	N	EM13	UMCf	97.1 - 107.1	<0.840	<1.51	<18.0	<0.849	232,000	50.0 J+	5.17	1.11 J	----	27,800
U4-MW-12D	10/17/2023	N	EM14	UMCf	97.1 - 107.1	----	----	----	----	----	----	----	----	----	----
U4-MW-12D	11/15/2023	N	EM15	UMCf	97.1 - 107.1	----	----	----	----	----	----	----	----	----	----
U4-MW-12D	12/12/2023	N	EM16	UMCf	97.1 - 107.1	1.51 J	15.3 J	<18.0	<4.24	302,000	241	1.88 J	12.3 J+	----	28,900
U4-MW-12I	4/14/2022	N	BL02	UMCf	76.8 - 86.8	<0.840	3.24 J	18.3 J	2.29	126,000	44.1	17.6	4.10 J	122 J	35,700
U4-MW-12I	4/14/2022	FD	BL02	UMCf	76.8 - 86.8	<0.840	2.11 J	41.4 J	<0.849	125,000	44.4	17.7	1.90 J	265 J+	35,500
U4-MW-12I	9/27/2022	N	EM01	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	----	----	----
U4-MW-12I	10/12/2022	N	EM02	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	----	----	----
U4-MW-12I	11/2/2022	N	EM03	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	----	----	----
U4-MW-12I	12/7/2022	N	EM04	UMCf	76.8 - 86.8	0.171 J	<1.51	<28.1	<0.849	44,500	264	15.7	2.09	----	16,700
U4-MW-12I	12/7/2022	FD	EM04	UMCf	76.8 - 86.8	0.173 J	<1.51	41.2 J	<0.849	44,600	264	16.2	3.19	----	16,800
U4-MW-12I	1/13/2023	N	EM05	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	----	----	----
U4-MW-12I	2/15/2023	N	EM06	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	----	----	----
U4-MW-12I	3/13/2023	N	EM07	UMCf	76.8 - 86.8	1.39 J	<7.55	243	<0.849	89,200	1,200	1.40 J	<4.08	----	23,800
U4-MW-12I	4/17/2023	N	EM08	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	----	----	----
U4-MW-12I	5/17/2023	N	EM09	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	----	----	----
U4-MW-12I	6/16/2023	N	EM10	UMCf	76.8 - 86.8	<0.840	<1.51	1,420	<0.849	121,000	1,920	<1.16	1.81 J	----	20,400
U4-MW-12I	7/11/2023	N	EM11	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	----	----	----
U4-MW-12I	8/14/2023	N	EM12	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	----	----	----
U4-MW-12I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	<0.840	<1.51	32.3 J	<0.849	121,000	1,080	146	4.28	----	26,100
U4-MW-12I	10/17/2023	N	EM14	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	----	----	----
U4-MW-12I	11/16/2023	N	EM15	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	----	----	----
U4-MW-12I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	4.44 J	14.5 J	31.0 J	<4.24	233,000	1,100	24.1	81.0	----	29,200

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020
						Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Molybdenum	Nickel	Phosphorus	Potassium
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-13D	4/14/2022	N	BL02	UMCf	98.2 - 108.2	<4.20	<15.1	<90.0	<8.49	664,000	32.9 J	9.95 J	<8.16	140 J	71,200
U4-MW-13D	9/28/2022	N	EM01	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	----	----	----
U4-MW-13D	10/11/2022	N	EM02	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	----	----	----
U4-MW-13D	11/3/2022	N	EM03	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	----	----	----
U4-MW-13D	12/7/2022	N	EM04	UMCf	98.2 - 108.2	<0.298	<7.55	<140	<4.24	276,000	92.8	2.40 J	<4.08	----	26,600
U4-MW-13D	1/12/2023	N	EM05	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	----	----	----
U4-MW-13D	2/15/2023	N	EM06	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	----	----	----
U4-MW-13D	3/17/2023	N	EM07	UMCf	98.2 - 108.2	<0.840	<1.51	<18.0	<0.849	150,000	40.4 J+	4.44 J	0.893 J	----	22,300
U4-MW-13D	4/18/2023	N	EM08	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	----	----	----
U4-MW-13D	5/17/2023	N	EM09	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	----	----	----
U4-MW-13D	6/15/2023	N	EM10	UMCf	98.2 - 108.2	<0.840	1.84 J	<18.0	<0.849	146,000	44.0	2.60 J	0.858 J	----	21,200
U4-MW-13D	7/12/2023	N	EM11	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	----	----	----
U4-MW-13D	8/11/2023	N	EM12	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	----	----	----
U4-MW-13D	9/11/2023	N	EM13	UMCf	98.2 - 108.2	1.97 J	5.42	<18.0	3.07 J+	211,000	51.6	3.59 J	1.42 J	----	29,500
U4-MW-13D	10/18/2023	N	EM14	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	----	----	----
U4-MW-13D	11/15/2023	N	EM15	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	----	----	----
U4-MW-13D	12/11/2023	N	EM16	UMCf	98.2 - 108.2	<0.840	15.7 J	<18.0	<4.24	226,000	47.9	3.27 J	<4.08	----	27,700
U4-MW-13I	4/14/2022	N	BL02	UMCf	77.1 - 87.1	<0.840	<1.51	<18.0	<0.849	169,000	28.6	13.8	1.80 J	132 J	33,100
U4-MW-13I	9/28/2022	N	EM01	UMCf	77.1 - 87.1	----	----	----	----	----	----	----	----	----	----
U4-MW-13I	10/10/2022	N	EM02	UMCf	77.1 - 87.1	----	----	----	----	----	----	----	----	----	----
U4-MW-13I	11/3/2022	N	EM03	UMCf	77.1 - 87.1	----	----	----	----	----	----	----	----	----	----
U4-MW-13I	12/6/2022	N	EM04	UMCf	77.1 - 87.1	0.138 J	<1.51 UJ	32.3 J	<0.849 UJ	48,300	161	9.01	2.47	----	16,700
U4-MW-13I	1/12/2023	N	EM05	UMCf	77.1 - 87.1	----	----	----	----	----	----	----	----	----	----
U4-MW-13I	2/14/2023	N	EM06	UMCf	77.1 - 87.1	----	----	----	----	----	----	----	----	----	----
U4-MW-13I	3/16/2023	N	EM07	UMCf	77.1 - 87.1	<0.840	<1.51	52.5 J	<0.849	44,100	228	5.96	2.33	----	13,800
U4-MW-13I	4/19/2023	N	EM08	UMCf	77.1 - 87.1	----	----	----	----	----	----	----	----	----	----
U4-MW-13I	5/17/2023	N	EM09	UMCf	77.1 - 87.1	----	----	----	----	----	----	----	----	----	----
U4-MW-13I	6/15/2023	N	EM10	UMCf	77.1 - 87.1	<0.840	<1.51	500	<0.849	54,900	381	12.0 J+	3.27	----	15,300
U4-MW-13I	7/12/2023	N	EM11	UMCf	77.1 - 87.1	----	----	----	----	----	----	----	----	----	----
U4-MW-13I	8/11/2023	N	EM12	UMCf	77.1 - 87.1	----	----	----	----	----	----	----	----	----	----
U4-MW-13I	9/11/2023	N	EM13	UMCf	77.1 - 87.1	3.13 J	<1.51	<18.0	3.32 J+	210,000	197	4.85 J	2.18	----	30,400
U4-MW-13I	10/17/2023	N	EM14	UMCf	77.1 - 87.1	----	----	----	----	----	----	----	----	----	----
U4-MW-13I	11/15/2023	N	EM15	UMCf	77.1 - 87.1	----	----	----	----	----	----	----	----	----	----
U4-MW-13I	12/11/2023	N	EM16	UMCf	77.1 - 87.1	<0.840	19.8 J	<18.0	<4.24	256,000	134	3.90 J	<4.08	----	32,600
U4-MW-14D	4/13/2022	N	BL02	UMCf	97.3 - 107.3	<0.840	3.44 J	<18.0	<0.849	152,000	79.2	41.2	9.04	<18.3	25,400
U4-MW-14D	12/6/2022	N	EM04	UMCf	97.3 - 107.3	<0.0596 UJ	<1.51 UJ	40.3 J	1.09 J	128,000	21.5	5.90	<0.816 UJ	----	19,100
U4-MW-14D	3/16/2023	N	EM07	UMCf	97.3 - 107.3	<0.840	3.77 J	65.8 J	<0.849	71,500	14.2 J+	3.16 J	<0.816	----	14,500
U4-MW-14D	6/15/2023	N	EM10	UMCf	97.3 - 107.3	<0.840	<1.51	<18.0	<0.849	85,000	17.7	4.70 J	<0.816	----	16,800
U4-MW-14D	9/14/2023	N	EM13	UMCf	97.3 - 107.3	<0.840	5.59	<18.0	<0.849	126,000	283	7.16	3.52	----	18,000
U4-MW-14D	12/15/2023	N	EM16	UMCf	97.3 - 107.3	0.928 J	3.06 J	<18.0	<0.849	142,000	330	7.58	10.2	----	17,300
U4-MW-14I	4/14/2022	N	BL02	UMCf	77.3 - 87.3	<0.840	<1.51	<18.0	<0.849	52,400	19.0	16.2	1.09 J	191 J	25,400
U4-MW-14I	12/6/2022	N	EM04	UMCf	77.3 - 87.3	0.0650 J	<1.51 UJ	<28.1 UJ	<0.849 UJ	139,000	32.4	9.57	1.12 J	----	22,000
U4-MW-14I	3/16/2023	N	EM07	UMCf	77.3 - 87.3	<0.840	<1.51	<18.0	<0.849	79,600	11.1 J+	5.22	<0.816	----	16,700
U4-MW-14I	6/15/2023	N	EM10	UMCf	77.3 - 87.3	<0.840	1.54 J	<18.0	<0.849	115,000	214	7.41 J+	8.26	----	21,000
U4-MW-14I	9/14/2023	N	EM13	UMCf	77.3 - 87.3	<0.840	1.60 J	<18.0	<0.849	123,000	85.8	5.72	5.21	----	20,100
U4-MW-14I	12/14/2023	N	EM16	UMCf	77.3 - 87.3	1.42 J	<1.51	38.9 J	<0.849	167,000	137	8.32	31.7	----	21,800
U4-MW-15D	4/13/2022	N	BL02	UMCf	96.0 - 106.0	<0.840	<1.51	21.8 J	<0.849	157,000	26.1	9.77	0.944 J	<18.3	25,500
U4-MW-15D	12/5/2022	N	EM04	UMCf	96.0 - 106.0	<0.840	<1.51	<18.0	<0.849	92,400	10.3	6.33	<0.816	----	18,700
U4-MW-15D	3/20/2023	N	EM07	UMCf	96.0 - 106.0	<0.840	2.97 J	<18.0	<0.849	80,100	5.33 J	6.57	<0.816	----	15,400
U4-MW-15D	6/14/2023	N	EM10	UMCf	96.0 - 106.0	<0.840	<1.51	<18.0	<0.849	99,200	25.2	7.40	<0.816	----	20,900
U4-MW-15D	9/13/2023	N	EM13	UMCf	96.0 - 106.0	1.23 J	<1.51	<18.0	<0.849	89,900	10.3	45.5	5.43	----	17,400

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020
						Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Molybdenum	Nickel	Phosphorus	Potassium
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-15D	12/12/2023	N	EM16	UMCf	96.0 - 106.0	<0.840	4.29 J	49.3 J	<0.849	105,000	17.3	2.44 J	<0.816	----	17,400
U4-MW-15DD	4/13/2022	N	BL02	UMCf	120.3 - 130.3	<0.840	2.23 J	162	<0.849	15,400	2.57 J	10.4	2.78	<18.3	6,830
U4-MW-15DD	12/5/2022	N	EM04	UMCf	120.3 - 130.3	<0.840	<1.51	<18.0	<0.849	16,800	5.61 J	7.88	31.6	----	6,430
U4-MW-15DD	3/15/2023	N	EM07	UMCf	120.3 - 130.3	<0.840	1.53 J	45.7 J	4.52 J+	17,300	7.24 J	8.41	44.8	----	6,510
U4-MW-15DD	6/13/2023	N	EM10	UMCf	120.3 - 130.3	<0.840	<1.51	29.4 J	<0.849	17,000 J+	14.9 J+	12.7 J+	57.6	----	6,460 J+
U4-MW-15DD	9/14/2023	N	EM13	UMCf	120.3 - 130.3	<0.840	<1.51	40.0 J	<0.849	16,000	5.65 J	9.31	17.7	----	6,150
U4-MW-15DD	12/13/2023	N	EM16	UMCf	120.3 - 130.3	<0.840	2.13 J	85.5 J	<0.849	16,900	5.40 J	8.44	48.5	----	6,340
U4-MW-15I	4/12/2022	N	BL02	UMCf	76.8 - 86.8	<0.840	<1.51	24.4 J	<0.849	56,500	14.9	17.8	<0.816	25.2 J	22,300
U4-MW-15I	12/5/2022	N	EM04	UMCf	76.8 - 86.8	<0.840	<1.51	<18.0	<0.849	73,800	61.8	11.5	2.11	----	22,500
U4-MW-15I	3/17/2023	N	EM07	UMCf	76.8 - 86.8	<0.840	<1.51	7,360	<0.849	137,000	4,380	<1.16	2.63	----	16,200
U4-MW-15I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	1.25 J	<1.51	5,050	<0.849	136,000	3,610	<1.16	2.53 J+	----	18,700
U4-MW-15I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	1.59 J	<1.51	143	<0.849	145,000	1,240	32.2	50.1	----	25,200
U4-MW-15I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	2.81 J	11.5 J	92.8 J	<4.24	147,000	1,370	14.1	9.26 J	----	24,600
U4-MW-15S	4/13/2022	N	BL02	UMCf	54.8 - 64.8	<0.840	<1.51	95.9 J	<0.849	50,100 J	2.61 J	19.2	<0.816	50.3 J	15,200 J
U4-MW-15S	12/5/2022	N	EM04	UMCf	54.8 - 64.8	<0.840	<1.51	3,440	<0.849	61,300	465	1.18 J	2.37	----	33,300
U4-MW-15S	3/13/2023	N	EM07	UMCf	54.8 - 64.8	1.30 J	<7.55	<18.0	<0.849	56,900	267	<1.16	<4.08	----	18,700
U4-MW-15S	6/13/2023	N	EM10	UMCf	54.8 - 64.8	<0.840	<1.51	154 J+	<0.849	69,600 J+	354	<1.16	1.34 J	----	20,100
U4-MW-15S	9/14/2023	N	EM13	UMCf	54.8 - 64.8	<0.840	<1.51	1,790	1.22 J	120,000	1,190	2.44 J	3.15	----	25,800
U4-MW-15S	12/11/2023	N	EM16	UMCf	54.8 - 64.8	3.00 J	7.07 J	289	<0.849	142,000	1,680	13.1	14.9	----	24,200
U4-MW-16D	4/11/2022	N	BL02	UMCf	96.8 - 106.8	<0.840	<15.1	<18.0	<8.49	240,000	12.4	4.62 J	<8.16	<18.3	30,600
U4-MW-16D	12/5/2022	N	EM04	UMCf	96.8 - 106.8	<0.840	<1.51	<18.0	<0.849	318,000	25.7	11.8	<0.816 UJ	----	8,140
U4-MW-16D	3/14/2023	N	EM07	UMCf	96.8 - 106.8	<0.840	<7.55	<18.0	<4.24	326,000	114	5.53	<4.08	----	39,200
U4-MW-16D	6/13/2023	N	EM10	UMCf	96.8 - 106.8	<0.840	<15.1	<18.0	<8.49	502,000 J+	286	7.04 J+	<8.16	----	52,500
U4-MW-16D	9/15/2023	N	EM13	UMCf	96.8 - 106.8	<0.840	15.1 J	21.7 J	<4.24	340,000	199	8.47	7.75 J	----	37,400
U4-MW-16D	12/14/2023	N	EM16	UMCf	96.8 - 106.8	<0.840	21.5 J	<18.0	<8.49	357,000	17.4	3.94 J	<8.16	----	44,400
U4-MW-16DD	4/12/2022	N	BL02	UMCf	120.8 - 130.8	<0.840	2.29 J	25.5 J	<0.849	48,200	11.0	13.8	0.870 J	<18.3	12,500
U4-MW-16DD	12/5/2022	N	EM04	UMCf	120.8 - 130.8	<0.840	<1.51	<18.0	<0.849	36,000	7.25 J	12.6	<0.816	----	10,300
U4-MW-16DD	3/15/2023	N	EM07	UMCf	120.8 - 130.8	<0.840	2.22 J	<18.0	<0.849	33,400	4.46 J	10.4	2.13	----	9,810
U4-MW-16DD	6/13/2023	N	EM10	UMCf	120.8 - 130.8	<0.840	3.20 J	<18.0	<0.849	28,800 J+	2.70 J	12.0 J+	<0.816	----	10,000 J+
U4-MW-16DD	9/14/2023	N	EM13	UMCf	120.8 - 130.8	<0.840	1.68 J	<18.0	<0.849	25,900	3.25 J	11.0	2.56	----	8,270
U4-MW-16DD	12/13/2023	N	EM16	UMCf	120.8 - 130.8	<0.840	3.38 J	<18.0	<0.849	26,600	5.94 J	10.6	16.5	----	8,410
U4-MW-16I	4/11/2022	N	BL02	UMCf	77.0 - 87.0	<0.840	<1.51	<18.0	<0.849	76,200	2.20 J	13.7	<0.816	<18.3	30,800
U4-MW-16I	12/5/2022	N	EM04	UMCf	77.0 - 87.0	<0.840	<1.51	33.5 J	<0.849	85,400	629	5.24	7.02	----	25,600
U4-MW-16I	12/5/2022	FD	EM04	UMCf	77.0 - 87.0	<0.840	<1.51	33.8 J	<0.849	86,100	634	5.43	4.10 J	----	24,600
U4-MW-16I	3/13/2023	N	EM07	UMCf	77.0 - 87.0	1.47 J	<1.51	3,540	1.23 J	229,000	4,580	<1.16	6.94	----	25,600
U4-MW-16I	3/13/2023	FD	EM07	UMCf	77.0 - 87.0	1.01 J	<1.51	3,530	<0.849	229,000	4,600	1.59 J	6.97	----	25,500
U4-MW-16I	6/12/2023	N	EM10	UMCf	77.0 - 87.0	<0.840	1.67 J	5,740	<0.849 UJ	199,000	4,650	<1.16	8.25	----	17,500
U4-MW-16I	6/12/2023	FD	EM10	UMCf	77.0 - 87.0	<0.840	2.48 J	5,810	4.76 J	202,000	4,640	<1.16	8.37	----	17,600
U4-MW-16I	9/11/2023	N	EM13	UMCf	77.0 - 87.0	6.06 J	3.78 J	18.7 J	2.11 J+	473,000	2,590	25.9	77.3	----	51,000
U4-MW-16I	9/11/2023	FD	EM13	UMCf	77.0 - 87.0	5.81 J	3.43 J	20.4 J	<0.849	472,000	2,590	26.9	75.6	----	49,700
U4-MW-16I	12/11/2023	N	EM16	UMCf	77.0 - 87.0	<0.840	36.4 J+	<18.0	<4.24	443,000	865	10.1	9.29 J	----	52,100
U4-MW-16I	12/11/2023	FD	EM16	UMCf	77.0 - 87.0	<0.840	37.2 J+	<18.0	<4.24	438,000	857	8.91	9.01 J	----	51,100
U4-MW-16S	4/12/2022	N	BL02	UMCf	54.8 - 64.8	<0.840	<1.51	<18.0	<0.849	37,500	2.69 J	18.3	<0.816	28.9 J	18,500
U4-MW-16S	4/12/2022	FD	BL02	UMCf	54.8 - 64.8	<0.840	<1.51	<18.0	<0.849	37,700	2.07 J	18.4	<0.816	25.5 J	18,300
U4-MW-16S	12/6/2022	N	EM04	UMCf	54.8 - 64.8	0.147 J	<1.51 UJ	<28.1 UJ	<0.849 UJ	57,200	19.9	40.2	<0.816 UJ	----	16,000
U4-MW-16S	3/15/2023	N	EM07	UMCf	54.8 - 64.8	<0.840	<1.51	10,700	<0.849	151,000	1,240	<1.16	<4.08	----	21,100
U4-MW-16S	6/13/2023	N	EM10	UMCf	54.8 - 64.8	<0.840	<1.51	12,500	<0.849	203,000 J+	2,430	<1.16	3.19	----	20,200
U4-MW-16S	9/11/2023	N	EM13	UMCf	54.8 - 64.8	1.28 J	<1.51	4,050	1.26 J	93,200	720	<1.16	2.79	----	14,000
U4-MW-16S	12/11/2023	N	EM16	UMCf	54.8 - 64.8	1.99 J	5.88 J+	5,940	<0.849	118,000	944	1.63 J	2.50 J+	----	13,900
U4-SLMW	11/10/2022	N	EM03		-	----	----	----	----	----	----	----	----	----	----
U4-T3	10/13/2022	N	EM02		-	----	----	----	----	----	----	----	----	----	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020
						Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Molybdenum	Nickel	Phosphorus	Potassium
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-T3	11/3/2022	N	EM03		-	----	----	----	----	----	----	----	----	----	----
U4-T3	12/6/2022	N	EM04		-	----	----	----	----	----	----	----	----	----	----
U4-T3	1/9/2023	N	EM05		-	----	----	----	----	----	----	----	----	----	----
U4-T3	2/13/2023	N	EM06		-	----	----	----	----	----	----	----	----	----	----
U4-T3	3/13/2023	N	EM07		-	----	----	----	----	----	----	----	----	----	----
U4-T3	4/19/2023	N	EM08		-	----	----	----	----	----	----	----	----	----	----
U4-T3	5/18/2023	N	EM09		-	----	----	----	----	----	----	----	----	----	----
U4-T3	6/12/2023	N	EM10		-	----	----	----	----	----	----	----	----	----	----
U4-T3	7/11/2023	N	EM11		-	----	----	----	----	----	----	----	----	----	----
U4-T3	8/10/2023	N	EM12		-	----	----	----	----	----	----	----	----	----	----
U4-T3	9/11/2023	N	EM13		-	----	----	----	----	----	----	----	----	----	----
U4-T3	10/16/2023	N	EM14		-	----	----	----	----	----	----	----	----	----	----

Notes:

- FD - Field duplicate
- E - Field instrument error.

- 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 low.
- J+ - The result is an estimated quantity, but the result may be biased high.
- N/A - Not Applicable
- mg/L - milligrams per liter
- µg/L - micrograms per liter
- N - Normal field 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
- < - The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
- Not tested.
- M-252 damaged/obstructed when checked on June 14, 2023 and September 14, 2023.

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	FIELD TESTS	FIELD TESTS	FIELD TESTS
						Selenium	Silver	Sodium	Thallium	Uranium	Vanadium	Zinc	Conductivity	Dissolved Oxygen	Ferrous Iron
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mS/cm	mg/L	mg/L
M-247-100	4/20/2022	N	BL02	UMCf	100.5 - 110.5	----	----	----	----	----	----	----	0.956	1.80	0.0 U
M-249-100	4/20/2022	N	BL02	UMCf	99.6 - 109.6	----	----	----	----	----	----	----	34.552	0.56	0.0 U
M-251-100	4/19/2022	N	BL02	UMCf	92.5 - 102.5	----	----	----	----	----	----	----	42.112	1.63	0.0 U
M-251-100	10/13/2022	N	EM02	UMCf	92.5 - 102.5	----	----	----	----	----	----	----	16.998	4.13	----
M-251-100	11/2/2022	N	EM03	UMCf	92.5 - 102.5	----	----	----	----	----	----	----	18.268	4.61	----
M-251-100	12/8/2022	N	EM04	UMCf	92.5 - 102.5	----	----	----	----	----	----	----	19.870	4.83	----
M-251-100	1/11/2023	N	EM05	UMCf	92.5 - 102.5	----	----	----	----	----	----	----	9.502	5.52	----
M-251-100	2/13/2023	N	EM06	UMCf	92.5 - 102.5	----	----	----	----	----	----	----	10.973	6.27	----
M-251-100	3/17/2023	N	EM07	UMCf	92.5 - 102.5	4.45 J	<0.350	1,700,000	<0.605	6.02 J	11.3 J	<15.1	12.924	8.09	0.0 U
M-251-100	4/21/2023	N	EM08	UMCf	92.5 - 102.5	----	----	----	----	----	----	----	17.375	0.57	0.0 U
M-251-100	5/9/2023	N	EM09	UMCf	92.5 - 102.5	----	----	----	----	----	----	----	19.858	4.58	0.0 U
M-251-100	6/14/2023	N	EM10	UMCf	92.5 - 102.5	4.63 J	<0.350	2,690,000	<0.605	5.71	<4.99	<15.1	19.291	3.85	0.0 U
M-251-100	7/14/2023	N	EM11	UMCf	92.5 - 102.5	----	----	----	----	----	----	----	17.476	5.11	0.0 U
M-251-100	8/10/2023	N	EM12	UMCf	92.5 - 102.5	----	----	----	----	----	----	----	22.933	3.58	0 U
M-251-100	9/14/2023	N	EM13	UMCf	92.5 - 102.5	3.17 J	<0.350	2,520,000	<0.605	9.66	<4.99	<15.1	18.1	1.48	0 U
M-251-100	10/19/2023	N	EM14	UMCf	92.5 - 102.5	----	----	----	----	----	----	----	19.504	0.11	0 U
M-251-100	11/16/2023	N	EM15	UMCf	92.5 - 102.5	----	----	----	----	----	----	----	19.571	0.19	0 U
M-251-100	12/12/2023	N	EM16	UMCf	92.5 - 102.5	3.48 J	<0.700	2,820,000	<1.21	16.9	<4.99	<30.2	21.045	1.01	0.0 U
M-251-60	4/18/2022	N	BL02	UMCf	52.3 - 62.3	----	----	----	----	----	----	----	5.163	5.64	0.0 U
M-251-60	3/15/2023	N	EM07	UMCf	52.3 - 62.3	2.90	<0.0700	815,000	<0.121	0.164 J	88.6	3.06 J	3.539	2.45	0.0 U
M-251-60	6/14/2023	N	EM10	UMCf	52.3 - 62.3	3.26	<0.0700	836,000	<0.121	0.184 J	82.9	9.60 J	4.110	1.37	0.0 U
M-251-60	9/14/2023	N	EM13	UMCf	52.3 - 62.3	2.73	<0.0700	772,000	<0.121	<0.0789	75.2	<3.02	4.01	0.65	0 U
M-251-60	12/11/2023	N	EM16	UMCf	52.3 - 62.3	2.31	<0.0700	770,000	<0.121	0.379 J	84.3	<3.02	3877.000	2.70	----
M-252	4/21/2022	N	BL02	UMCf	132.3 - 142.3	----	----	----	----	----	----	----	2.053	5.66	0.0 U
M-252	3/15/2023	N	EM07	UMCf	132.3 - 142.3	1.89 J	<0.0700	307,000	<0.121	0.682 J	<4.99	<3.02	1.095	1.94	0.0 U
M-252	9/19/2023	N	EM13	UMCf	132.3 - 142.3	1.75 J	<0.0700	195,000	<0.121	1.93	9.74 J	10.5 J	3.971	-4.01	0 U
M-252	12/18/2023	N	EM16	UMCf	132.3 - 142.3	1.99 J	<0.0700	225,000	<0.121	3.34	9.22 J	<3.02	2.708	3.52	0.0 U
M-253-100	4/20/2022	N	BL02	UMCf	100.8 - 110.8	----	----	----	----	----	----	----	2.393	3.04	0.0 U
M-255-100	4/20/2022	N	BL02	UMCf	100.2 - 110.2	----	----	----	----	----	----	----	2.198	1.87	0.0 U
U4-E-01D	4/18/2022	N	BL02	UMCf	94.7 - 109.7	----	----	----	----	----	----	----	42.734	0.85	0.0 U
U4-E-01D	3/14/2023	N	EM07	UMCf	94.7 - 109.7	2.33 J+	<0.0700	109,000	<0.121	4.22	<4.99	31.6	1.180	7.21	0.0 U
U4-E-011	4/19/2022	N	BL02	UMCf	74.6 - 89.6	----	----	----	----	----	----	----	0.072	9.17	0.0 U
U4-E-011	4/19/2022	FD	BL02	UMCf	74.6 - 89.6	----	----	----	----	----	----	----	----	----	----
U4-E-011	3/14/2023	N	EM07	UMCf	74.6 - 89.6	2.79 J+	<0.0700	1,240,000	<0.121	13.1	11.1 J	6.82 J	8.100	8.18	0.0 U
U4-E-011	4/20/2023	N	EM08	UMCf	74.6 - 89.6	----	----	----	----	----	----	----	6.667	0.56	----
U4-E-011	5/10/2023	N	EM09	UMCf	74.6 - 89.6	----	----	----	----	----	----	----	19.499	-8.13	----
U4-E-011	6/12/2023	N	EM10	UMCf	74.6 - 89.6	----	----	----	----	----	----	----	5.467	6.43	----
U4-E-011	7/11/2023	N	EM11	UMCf	74.6 - 89.6	----	----	----	----	----	----	----	4.658	2.89	----
U4-E-011	8/10/2023	N	EM12	UMCf	74.6 - 89.6	----	----	----	----	----	----	----	0.158	2.53	----
U4-E-011	9/11/2023	N	EM13	UMCf	74.6 - 89.6	----	----	----	----	----	----	----	3.207	0.47	----
U4-E-011	10/16/2023	N	EM14	UMCf	74.6 - 89.6	----	----	----	----	----	----	----	3.439	2.71	----
U4-E-011	12/13/2023	N	EM16	UMCf	74.6 - 89.6	----	----	----	----	----	----	----	2.931	0.03	2.0
U4-E-02D	4/20/2022	N	BL02	UMCf	94.4 - 109.4	----	----	----	----	----	----	----	9.255	0.62	0.0 U
U4-E-02D	3/14/2023	N	EM07	UMCf	94.4 - 109.4	2.54 J+	0.250 J	107,000	<0.121	4.17	<4.99	39.1	1.040	5.47	0.0 U
U4-E-021	4/18/2022	N	BL02	UMCf	74.4 - 89.4	----	----	----	----	----	----	----	9.309	4.25	0.0 U
U4-E-021	3/14/2023	N	EM07	UMCf	74.4 - 89.4	2.28 J+	0.161 J	310,000	<0.121	8.65	11.2 J	109	1.211	5.22	0.0 U
U4-E-021	4/20/2023	N	EM08	UMCf	74.4 - 89.4	----	----	----	----	----	----	----	5.027	0.34	----
U4-E-021	5/11/2023	N	EM09	UMCf	74.4 - 89.4	----	----	----	----	----	----	----	59.186	15.52	----
U4-E-021	6/12/2023	N	EM10	UMCf	74.4 - 89.4	----	----	----	----	----	----	----	5.989	5.67	----
U4-E-021	7/11/2023	N	EM11	UMCf	74.4 - 89.4	----	----	----	----	----	----	----	5.684	5.14	----
U4-E-021	8/10/2023	N	EM12	UMCf	74.4 - 89.4	----	----	----	----	----	----	----	3.161	4.11	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	FIELD TESTS	FIELD TESTS	FIELD TESTS
						Selenium	Silver	Sodium	Thallium	Uranium	Vanadium	Zinc	Conductivity	Dissolved Oxygen	Ferrous Iron
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mS/cm	mg/L	mg/L
U4-E-02I	9/11/2023	N	EM13	UMCf	74.4 - 89.4	----	----	----	----	----	----	----	2.626	0.82	----
U4-E-02I	10/16/2023	N	EM14	UMCf	74.4 - 89.4	----	----	----	----	----	----	----	5.429	3.75	----
U4-E-02I	12/14/2023	N	EM16	UMCf	74.4 - 89.4	----	----	----	----	----	----	----	6.511	-0.06	5.5
U4-E-03D	4/19/2022	N	BL02	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	36.139	0.68	0.0 U
U4-E-03D	10/13/2022	N	EM02	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	----	----	----
U4-E-03D	11/3/2022	N	EM03	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	16.802	4.86	----
U4-E-03D	12/6/2022	N	EM04	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	11.752	6.10	----
U4-E-03D	1/9/2023	N	EM05	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	9.776	7.80	----
U4-E-03D	2/13/2023	N	EM06	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	11.469	7.00	----
U4-E-03D	3/13/2023	N	EM07	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	----	----	----
U4-E-03D	3/14/2023	N	EM07	UMCf	95.1 - 110.1	4.70 J	<0.350	2,730,000	<0.605	13.7	11.5 J	<15.1	13.740	5.37	0.0 U
U4-E-03D	4/19/2023	N	EM08	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	11.829	0.51	----
U4-E-03D	5/11/2023	N	EM09	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	121.248	17.27	----
U4-E-03D	6/12/2023	N	EM10	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	16.419	6.77	----
U4-E-03D	7/11/2023	N	EM11	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	16.930	2.16	----
U4-E-03D	8/10/2023	N	EM12	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	9.19	3.25	----
U4-E-03D	9/11/2023	N	EM13	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	17.112	1.28	----
U4-E-03D	10/16/2023	N	EM14	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	10.941	3.51	----
U4-E-04D	4/19/2022	N	BL02	UMCf	95.0 - 110.0	----	----	----	----	----	----	----	22.249	1.29	0.0 U
U4-E-04D	3/14/2023	N	EM07	UMCf	95.0 - 110.0	1.98 J	<0.0700	106,000	<0.121	4.19	<4.99	35.1	0.999	6.07	0.0 U
U4-E-04I	4/18/2022	N	BL02	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	4.524	0.84	0.0 U
U4-E-04I	3/14/2023	N	EM07	UMCf	75.0 - 90.0	6.52 J	<0.350	4,390,000	<0.605	10.1	6.22 J	<15.1	22.410	4.33	0.0 U
U4-E-05D	4/19/2022	N	BL02	UMCf	95.0 - 110.0	----	----	----	----	----	----	----	26.037	3.43	0.0 U
U4-E-05D	3/16/2023	N	EM07	UMCf	95.0 - 110.0	1.43 J	<0.0700	102,000	<0.121	3.57	<4.99	90.4	0.537	1.78	0.0 U
U4-E-05I	4/19/2022	N	BL02	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	5.209	0.59	0.0 U
U4-E-05I	3/15/2023	N	EM07	UMCf	75.0 - 90.0	1.85 J	<0.0700	698,000	<0.121	13.2	16.6 J	10.1 J	8.778	7.39	0.0 U
U4-E-06D	4/11/2022	N	BL02	UMCf	95.1 - 110.1	2.53	<0.0700	1,310,000	<0.121	5.59	<4.99	5.24 J	9.911	2.39	0.0 U
U4-E-06I	4/11/2022	N	BL02	UMCf	73.2 - 88.2	2.37	<0.0700	624,000	<0.121	7.83	17.4 J	4.73 J	4.282	2.10	0.0 U
U4-E-06I	4/11/2022	FD	BL02	UMCf	73.2 - 88.2	2.53	<0.0700	622,000	<0.121	7.85	15.5 J	5.71 J	----	----	----
U4-E-06I	10/12/2022	N	EM02	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	----	----	----
U4-E-06I	11/3/2022	N	EM03	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	----	----	----
U4-E-06I	12/6/2022	N	EM04	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	5.809	2.83	----
U4-E-06I	1/9/2023	N	EM05	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	3.965	55.80	----
U4-E-06I	2/13/2023	N	EM06	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	8.481	6.55	----
U4-E-06I	3/13/2023	N	EM07	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	1.755	2.06	----
U4-E-06I	4/17/2023	N	EM08	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	8.065	0.62	----
U4-E-06I	5/15/2023	N	EM09	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	13.700	2.61	----
U4-E-06I	6/12/2023	N	EM10	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	15.651	5.52	----
U4-E-06I	7/11/2023	N	EM11	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	14.385	2.42	----
U4-E-06I	8/11/2023	N	EM12	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	11.976	2.61	----
U4-E-06I	9/11/2023	N	EM13	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	3.76	2.52	----
U4-E-06I	10/16/2023	N	EM14	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	7.728	2.43	----
U4-E-06I	12/13/2023	N	EM16	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	10.273	0.08	1.0
U4-E-07D	4/12/2022	N	BL02	UMCf	94.6 - 109.6	9.10 J	<0.700	5,760,000	<1.21	5.33 J	<25.0	<30.2	28.599	1.02	0.0 U
U4-E-07I	4/12/2022	N	BL02	UMCf	74.7 - 89.7	3.34	<0.0700	1,610,000	<0.121	9.05	45.7	3.42 J	6.791	2.78	0.0 U
U4-E-07I	10/11/2022	N	EM02	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	----	----	----
U4-E-07I	11/3/2022	N	EM03	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	14.508	4.32	----
U4-E-07I	12/6/2022	N	EM04	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	13.019	2.90	----
U4-E-07I	1/9/2023	N	EM05	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	7.227	4.15	----
U4-E-07I	2/13/2023	N	EM06	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	12.582	6.63	----
U4-E-07I	3/13/2023	N	EM07	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	5.774	3.04	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	FIELD TESTS	FIELD TESTS	FIELD TESTS
						Selenium	Silver	Sodium	Thallium	Uranium	Vanadium	Zinc	Conductivity	Dissolved Oxygen	Ferrous Iron
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mS/cm	mg/L	mg/L
U4-E-07I	4/19/2023	N	EM08	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	12.284	0.26	----
U4-E-07I	5/15/2023	N	EM09	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	7.144	2.56	----
U4-E-07I	6/12/2023	N	EM10	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	14.175	2.72	----
U4-E-07I	7/11/2023	N	EM11	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	14.819	1.95	----
U4-E-07I	8/11/2023	N	EM12	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	24.122	1.8	----
U4-E-07I	9/11/2023	N	EM13	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	6.764	1.89	----
U4-E-07I	10/16/2023	N	EM14	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	16.492	1.98	----
U4-E-07I	12/13/2023	N	EM16	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	17.411	0.10	0.0 U
U4-E-08D	4/12/2022	N	BL02	UMCf	94.6 - 109.6	7.15 J	<0.700	6,200,000	<1.21	7.00 J	<25.0	<30.2	31.747	1.11	0.0 U
U4-E-08D	10/11/2022	N	EM02	UMCf	94.6 - 109.6	----	----	----	----	----	----	----	----	----	----
U4-E-08D	11/3/2022	N	EM03	UMCf	94.6 - 109.6	----	----	----	----	----	----	----	22.510	2.00	----
U4-E-08D	12/6/2022	N	EM04	UMCf	94.6 - 109.6	----	----	----	----	----	----	----	17.697	3.19	----
U4-E-08D	1/9/2023	N	EM05	UMCf	94.6 - 109.6	----	----	----	----	----	----	----	10.120	58.00	----
U4-E-08D	2/13/2023	N	EM06	UMCf	94.6 - 109.6	----	----	----	----	----	----	----	16.329	6.82	----
U4-E-08D	3/13/2023	N	EM07	UMCf	94.6 - 109.6	----	----	----	----	----	----	----	13.288	2.58	----
U4-E-08D	4/19/2023	N	EM08	UMCf	94.6 - 109.6	----	----	----	----	----	----	----	15747.000	0.26	----
U4-E-08D	5/17/2023	N	EM09	UMCf	94.6 - 109.6	----	----	----	----	----	----	----	13.979	3.62	----
U4-E-08D	6/12/2023	N	EM10	UMCf	94.6 - 109.6	----	----	----	----	----	----	----	18.024	2.95	----
U4-E-08D	7/11/2023	N	EM11	UMCf	94.6 - 109.6	----	----	----	----	----	----	----	16.343	1.76	----
U4-E-09D	4/15/2022	N	BL02	UMCf	94.5 - 109.5	3.01 J	<0.700	1,840,000	<1.21	5.49 J	7.06 J	<30.2	16.373	1.12	0.0 U
U4-E-09I	4/14/2022	N	BL02	UMCf	74.9 - 89.9	2.47	<0.0700	1,100,000	<0.121	9.29	16.8 J	3.75 J	6.980	5.93	0.0 U
U4-E-10D	4/13/2022	N	BL02	UMCf	94.5 - 109.5	2.51	<0.0700	1,120,000	<0.121	1.64	6.53 J	<3.02	8.624	0.77	0.0 U
U4-E-10I	4/13/2022	N	BL02	UMCf	74.2 - 89.2	2.58	<0.0700	1,410,000	<0.121	10.6	14.5 J	7.05 J	9.367	1.04	0.0 U
U4-MW-01D	4/19/2022	N	BL02	UMCf	96.7 - 106.7	----	----	----	----	----	----	----	11.556	0.72	0.0 U
U4-MW-01D	2/16/2023	N	EM06	UMCf	96.7 - 106.7	----	----	----	----	----	----	----	7.060	11.76	----
U4-MW-01D	3/20/2023	N	EM07	UMCf	96.7 - 106.7	3.03	<0.0700	165,000	<0.121	3.18	<4.99	<3.02	12.024	5.68	0.0 U
U4-MW-01D	6/13/2023	N	EM10	UMCf	96.7 - 106.7	148	<0.700	769,000	<1.21	3.51	6.20 J	<30.2	7.279	5.89	0.0 U
U4-MW-01D	9/14/2023	N	EM13	UMCf	96.7 - 106.7	1.74 J	<0.350	729,000	<0.605	4.02 J	6.62 J	<15.1	6.26	5.35	0 U
U4-MW-01D	12/14/2023	N	EM16	UMCf	96.7 - 106.7	2.49 J	<0.350	705,000	<0.605	3.45 J	5.20 J	<15.1	7.489	1.80	0.0 U
U4-MW-01DD	4/19/2022	N	BL02	UMCf	119.9 - 129.9	----	----	----	----	----	----	----	1.873	0.81	0.0 U
U4-MW-01DD	4/19/2022	FD	BL02	UMCf	119.9 - 129.9	----	----	----	----	----	----	----	----	----	----
U4-MW-01DD	3/15/2023	N	EM07	UMCf	119.9 - 129.9	1.92 J	<0.0700	377,000	<0.121	2.59	<4.99	<3.02	6.737	2.84	0.0 U
U4-MW-01DD	6/13/2023	N	EM10	UMCf	119.9 - 129.9	82.9	<0.700	421,000	<1.21	1.09	<4.99	<30.2	4.786	3.56	0.0 U
U4-MW-01DD	9/14/2023	N	EM13	UMCf	119.9 - 129.9	2.05	<0.0700	425,000	<0.121	1.65	<4.99	12.8 J	4.64	2.03	0 U
U4-MW-01DD	12/15/2023	N	EM16	UMCf	119.9 - 129.9	2.07	<0.0700	296,000	<0.121	2.61	<4.99	24.5 J	2.687	3.13	0.0 U
U4-MW-01I	4/19/2022	N	BL02	UMCf	76.7 - 86.7	----	----	----	----	----	----	----	9.209	0.67	0.0 U
U4-MW-01I	3/20/2023	N	EM07	UMCf	76.7 - 86.7	3.38	0.146 J	213,000	0.148 J	3.88	<4.99	<3.02	16.598	7.69	0.0 U
U4-MW-01I	6/12/2023	N	EM10	UMCf	76.7 - 86.7	2.52	<0.0700	779,000	<0.121	3.83	<4.99	11.4 J	7.447	5.80	0.0 U
U4-MW-01I	9/14/2023	N	EM13	UMCf	76.7 - 86.7	2.68 J	<0.350	873,000	<0.605	5.11	<4.99	<15.1	7.818	4.76	0 U
U4-MW-01I	12/15/2023	N	EM16	UMCf	76.7 - 86.7	3.03	0.562 J	972,000	<1.21	7.14 J	<25.0	46.4 J+	----	----	----
U4-MW-01S	4/18/2022	N	BL02	UMCf	54.7 - 64.7	----	----	----	----	----	----	----	4.903	4.81	0.0 U
U4-MW-01S	3/15/2023	N	EM07	UMCf	54.7 - 64.7	2.64	<0.0700	859,000	<0.121	2.66	66.7	<3.02	4.199	5.90	0.0 U
U4-MW-01S	6/13/2023	N	EM10	UMCf	54.7 - 64.7	3.01	<0.0700	854,000	<0.121	2.22	67.6	<3.02	4.283	4.21	0.0 U
U4-MW-01S	9/15/2023	N	EM13	UMCf	54.7 - 64.7	2.67	<0.0700	907,000	<0.121	3.16	68.2	<3.02	3.367	0.79	0 U
U4-MW-01S	12/13/2023	N	EM16	UMCf	54.7 - 64.7	1.85 J	<0.0700	742,000	<0.121	5.09	70.3	<3.02	3.665	0.10	0.0 U
U4-MW-02D	4/14/2022	N	BL02	UMCf	95.0 - 110.0	----	----	----	----	----	----	----	47.936	0.74	0.0 U
U4-MW-02D	10/11/2022	N	EM02	UMCf	95.0 - 110.0	----	----	----	----	----	----	----	82.713	0.99	----
U4-MW-02D	11/1/2022	N	EM03	UMCf	95.0 - 110.0	----	----	----	----	----	----	----	61.099	0.93	----
U4-MW-02D	12/7/2022	N	EM04	UMCf	95.0 - 110.0	----	----	----	----	----	----	----	41.262	1.18	----
U4-MW-02D	1/10/2023	N	EM05	UMCf	95.0 - 110.0	----	----	----	----	----	----	----	28.405	1.73	----
U4-MW-02D	2/13/2023	N	EM06	UMCf	95.0 - 110.0	----	----	----	----	----	----	----	25.274	2.04	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	FIELD TESTS	FIELD TESTS	FIELD TESTS
						Selenium	Silver	Sodium	Thallium	Uranium	Vanadium	Zinc	Conductivity	Dissolved Oxygen	Ferrous Iron
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mS/cm	mg/L	mg/L
U4-MW-02D	3/17/2023	N	EM07	UMCf	95.0 - 110.0	7.47 J	1.64 J	6,650,000	<1.21	3.50 J	<4.99	<30.2	38.385	2.05	0.0 U
U4-MW-02D	4/19/2023	N	EM08	UMCf	95.0 - 110.0	----	----	----	----	----	----	----	37.915	0.18	0.0 U
U4-MW-02D	5/9/2023	N	EM09	UMCf	95.0 - 110.0	----	----	----	----	----	----	----	35.930	2.52	0.0 U
U4-MW-02D	6/13/2023	N	EM10	UMCf	95.0 - 110.0	51.6	0.800 J	7,010,000	<1.21	53.6	<25.0	<30.2	35.233	7.26	0.0 U
U4-MW-02D	7/18/2023	N	EM11	UMCf	95.0 - 110.0	----	----	----	----	----	----	----	40.985	1.73	0.0 U
U4-MW-02D	8/14/2023	N	EM12	UMCf	95.0 - 110.0	----	----	----	----	----	----	----	38.61	2.22	0 U
U4-MW-02D	9/11/2023	N	EM13	UMCf	95.0 - 110.0	6.05 J	<1.40	7,670,000	<2.42	4.70 J	<4.99	<60.4	33.003	1.98	0 U
U4-MW-02D	10/19/2023	N	EM14	UMCf	95.0 - 110.0	----	----	----	----	----	----	----	38.108	1.6	0 U
U4-MW-02D	11/15/2023	N	EM15	UMCf	95.0 - 110.0	----	----	----	----	----	----	----	30.650	0.41	0 U
U4-MW-02D	12/14/2023	N	EM16	UMCf	95.0 - 110.0	<6.00	<1.40	6,490,000	<2.42	6.29 J	<4.99	<60.4	30.653	1.97	0.0 U
U4-MW-02I	4/14/2022	N	BL02	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	8.827	3.75	0.0 U
U4-MW-02I	10/11/2022	N	EM02	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	20.389	0.98	----
U4-MW-02I	11/2/2022	N	EM03	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	17.936	0.44	----
U4-MW-02I	11/2/2022	FD	EM03	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	12/8/2022	N	EM04	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	1.625	1.11	----
U4-MW-02I	12/8/2022	FD	EM04	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	1/13/2023	N	EM05	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	1/13/2023	FD	EM05	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	2/15/2023	N	EM06	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	22.789	1.09	----
U4-MW-02I	2/15/2023	FD	EM06	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	3/17/2023	N	EM07	UMCf	75.0 - 90.0	6.92 J	<0.350	4,660,000	<0.605	19.3	8.84 J	<15.1	27.205	0.39	0.0 U
U4-MW-02I	3/17/2023	FD	EM07	UMCf	75.0 - 90.0	4.91 J	<0.350	4,660,000	<0.605	18.7	12.3 J	<15.1	----	----	----
U4-MW-02I	4/20/2023	N	EM08	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	3.331	0.04	0.0 U
U4-MW-02I	4/20/2023	FD	EM08	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	5/9/2023	N	EM09	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	3.966	1.00	0.0 U
U4-MW-02I	5/9/2023	FD	EM09	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	6/12/2023	N	EM10	UMCf	75.0 - 90.0	0.654 J	<0.0700	836,000	<0.121	60.1	18.9 J	12.9 J	4.378	1.99	0.0 U
U4-MW-02I	6/12/2023	FD	EM10	UMCf	75.0 - 90.0	0.552 J	<0.0700	810,000	<0.121	62.5	18.3 J	15.9 J	----	----	----
U4-MW-02I	7/18/2023	N	EM11	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	4.126	0.21	1.0
U4-MW-02I	7/18/2023	FD	EM11	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	8/11/2023	N	EM12	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	12.098	1.33	0 U
U4-MW-02I	8/11/2023	FD	EM12	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	9/11/2023	N	EM13	UMCf	75.0 - 90.0	<1.50	<0.350	1,630,000	<0.605	65.1	34.5	<15.1	8.481	0.14	0 U
U4-MW-02I	9/11/2023	FD	EM13	UMCf	75.0 - 90.0	1.65 J	<0.350	1,600,000	<0.605	63.9	34.0	<15.1	----	----	----
U4-MW-02I	10/19/2023	N	EM14	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	15.953	0.24	0 U
U4-MW-02I	10/19/2023	FD	EM14	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	11/15/2023	N	EM15	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	12.991	0.08	0 U
U4-MW-02I	11/15/2023	FD	EM15	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	----	----
U4-MW-02I	12/14/2023	N	EM16	UMCf	75.0 - 90.0	3.15 J	<0.700	3,760,000	<1.21	222	38.5	<30.2	16.823	1.32	0.0 U
U4-MW-02I	12/14/2023	FD	EM16	UMCf	75.0 - 90.0	2.20 J	<0.350	3,670,000	<0.605	196	41.9	<15.1	----	----	----
U4-MW-03D	4/20/2022	N	BL02	UMCf	96.6 - 106.6	----	----	----	----	----	----	----	19.006	2.71	0.0 U
U4-MW-03D	2/16/2023	N	EM06	UMCf	96.6 - 106.6	----	----	----	----	----	----	----	7.848	5.12	----
U4-MW-03D	3/16/2023	N	EM07	UMCf	96.6 - 106.6	1.88 J	<0.350	1,840,000	<0.605	2.41 J	<4.99	<15.1	797.196	3.67	0.0 U
U4-MW-03D	3/16/2023	FD	EM07	UMCf	96.6 - 106.6	3.11 J	<0.350	1,890,000	<0.605	2.52 J	<4.99	<15.1	----	----	----
U4-MW-03D	6/15/2023	N	EM10	UMCf	96.6 - 106.6	3.02 J	<0.350	1,820,000	<0.605	2.67	<25.0	<15.1	12.408	7.77	0.0 U
U4-MW-03D	9/14/2023	N	EM13	UMCf	96.6 - 106.6	2.48 J	<0.350	2,000,000	<0.605	19.6	<4.99	<15.1	12.23	-1.53	0 U
U4-MW-03D	12/13/2023	N	EM16	UMCf	96.6 - 106.6	2.72 J	<0.350	1,980,000	<0.605	72.6	<4.99	<15.1	15.255	0.67	0.0 U
U4-MW-03DD	4/20/2022	N	BL02	UMCf	119.7 - 129.7	----	----	----	----	----	----	----	2.756	1.07	0.0 U
U4-MW-03DD	3/15/2023	N	EM07	UMCf	119.7 - 129.7	1.83 J	<0.0700	145,000	<0.121	2.55	7.92 J	<3.02	1.855	2.71	0.0 U
U4-MW-03DD	6/15/2023	N	EM10	UMCf	119.7 - 129.7	1.57 J	<0.0700	143,000	<0.121	2.35	11.0 J	<3.02	1.081	1.55	0.0 U
U4-MW-03DD	9/14/2023	N	EM13	UMCf	119.7 - 129.7	1.36 J	<0.0700	138,000	<0.121	2.53	8.13 J	3.18 J	0.855	-1.23	0 U

Table 4
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 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	FIELD TESTS	FIELD TESTS	FIELD TESTS
						Selenium	Silver	Sodium	Thallium	Uranium	Vanadium	Zinc	Conductivity	Dissolved Oxygen	Ferrous Iron
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mS/cm	mg/L	mg/L
U4-MW-03DD	12/14/2023	N	EM16	UMCf	119.7 - 129.7	1.42 J	<0.0700	141,000	<0.121	2.46	9.56 J	<3.02	0.997	1.58	0.0 U
U4-MW-03I	4/19/2022	N	BL02	UMCf	76.6 - 86.6	----	----	----	----	----	----	----	6.055	1.28	0.0 U
U4-MW-03I	3/15/2023	N	EM07	UMCf	76.6 - 86.6	2.88 J+	0.0987 J	1,590,000	0.158 J	4.09	<4.99	<3.02	22.711	4.02	0.0 U
U4-MW-03I	6/14/2023	N	EM10	UMCf	76.6 - 86.6	3.33 J	<0.350	1,540,000	<0.605	3.39 J	8.63 J	<15.1	12.632	4.07	0.0 U
U4-MW-03I	6/14/2023	FD	EM10	UMCf	76.6 - 86.6	3.25 J	<0.350	1,640,000	<0.605	3.43 J	7.62 J	<15.1	----	----	----
U4-MW-03I	9/11/2023	N	EM13	UMCf	76.6 - 86.6	2.90 J	0.501 J	1,910,000	<0.605	13.0	16.6 J	36.4 J	13.726	2.78	0 U
U4-MW-03I	9/11/2023	FD	EM13	UMCf	76.6 - 86.6	2.59 J	0.414 J	1,900,000	<0.605	11.9	14.1 J	27.8 J	----	----	----
U4-MW-03I	12/13/2023	N	EM16	UMCf	76.6 - 86.6	2.39 J	<0.350	1,850,000	<0.605	64.2	<4.99	<15.1	14.049	0.09	0.0 U
U4-MW-03I	12/13/2023	FD	EM16	UMCf	76.6 - 86.6	2.81 J	<0.350	1,840,000	<0.605	63.1	<4.99	<15.1	----	----	----
U4-MW-03S	4/18/2022	N	BL02	UMCf	54.5 - 64.5	----	----	----	----	----	----	----	4.716	9.18	0.0 U
U4-MW-03S	4/18/2022	FD	BL02	UMCf	54.5 - 64.5	----	----	----	----	----	----	----	----	----	----
U4-MW-03S	3/15/2023	N	EM07	UMCf	54.5 - 64.5	3.27 J+	<0.0700	892,000	<0.121	6.81	159	<3.02	7.108	3.63	0.0 U
U4-MW-03S	6/15/2023	N	EM10	UMCf	54.5 - 64.5	2.90	<0.0700	971,000	<0.121	5.87	105	<3.02	4.357	0.56	0.0 U
U4-MW-03S	9/14/2023	N	EM13	UMCf	54.5 - 64.5	2.07	<0.0700	881,000	<0.121	13.0	127	<3.02	3.313	-1.93	0 U
U4-MW-03S	12/13/2023	N	EM16	UMCf	54.5 - 64.5	2.28	<0.0700	878,000	<0.121	26.9	170	<3.02	4.153	0.37	0.0 U
U4-MW-04D	4/19/2022	N	BL02	UMCf	97.0 - 107.0	----	----	----	----	----	----	----	50.188	0.90	0.0 U
U4-MW-04D	2/16/2023	N	EM06	UMCf	97.0 - 107.0	----	----	----	----	----	----	----	5.802	7.81	----
U4-MW-04D	3/21/2023	N	EM07	UMCf	97.0 - 107.0	2.08	<0.0700	205,000	<0.121	9.80	<4.99	<3.02	5.697	7.32	0.0 U
U4-MW-04D	6/14/2023	N	EM10	UMCf	97.0 - 107.0	2.08 J	<0.350	965,000	<0.605	15.5	11.8 J	<15.1	5.920	0.79	0.0 U
U4-MW-04D	9/15/2023	N	EM13	UMCf	97.0 - 107.0	1.70 J	<0.350	1,330,000	<0.605	14.8	5.26 J	50.2 J	8.782	2.88	0 U
U4-MW-04D	12/12/2023	N	EM16	UMCf	97.0 - 107.0	1.89 J	<0.350	1,280,000	<0.605	24.5	<4.99	<15.1	8.464	0.52	0.0 U
U4-MW-04I	4/19/2022	N	BL02	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	22.833	0.68	0.0 U
U4-MW-04I	3/20/2023	N	EM07	UMCf	76.8 - 86.8	2.95 J	<0.350	482,000	<0.605	7.91	<4.99	<15.1	15.330	5.23	0.0 U
U4-MW-04I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	4.23 J	<0.350	2,010,000	<0.605	22.0	6.74 J	<15.1	12.208	1.12	0.0 U
U4-MW-04I	9/14/2023	N	EM13	UMCf	76.8 - 86.8	4.06 J	<0.700	4,020,000	<1.21	30.1	<4.99	<30.2	27.215	0.72	0 U
U4-MW-04I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	7.66 J	<1.40	4,460,000	<2.42	33.6	<4.99	<60.4	28.039	0.40	0.0 U
U4-MW-05D	4/15/2022	N	BL02	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	39.740	0.77	0.0 U
U4-MW-05D	10/13/2022	N	EM02	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	24.933	3.56	----
U4-MW-05D	11/3/2022	N	EM03	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	17.012	4.46	----
U4-MW-05D	12/7/2022	N	EM04	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	16.306	4.72	----
U4-MW-05D	1/11/2023	N	EM05	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	10.893	5.62	----
U4-MW-05D	2/14/2023	N	EM06	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	5.665	7.00	----
U4-MW-05D	3/16/2023	N	EM07	UMCf	98.2 - 108.2	<1.50	<0.350	2,670,000	<0.605	13.1	11.8 J	<15.1	13.970	5.77	0.0 U
U4-MW-05D	4/20/2023	N	EM08	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	8.597	0.09	0.0 U
U4-MW-05D	5/10/2023	N	EM09	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	22.381	-39.98	0.0 U
U4-MW-05D	6/15/2023	N	EM10	UMCf	98.2 - 108.2	2.13 J	<0.350	1,810,000	<0.605	93.9	<4.99	<15.1	6.646	0.78	0.0 U
U4-MW-05D	7/18/2023	N	EM11	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	11.868	0.37	0.0 U
U4-MW-05D	8/14/2023	N	EM12	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	14.812	1.44	0 U
U4-MW-05D	9/12/2023	N	EM13	UMCf	98.2 - 108.2	0.894 J	<0.0700	1,680,000	0.257 J	117	<4.99	12.8 J	9.152	0.08	0 U
U4-MW-05D	10/18/2023	N	EM14	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	10.688	0.77	0 U
U4-MW-05D	11/16/2023	N	EM15	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	11.339	0.18	0 U
U4-MW-05D	12/14/2023	N	EM16	UMCf	98.2 - 108.2	1.55 J	<0.350	2,060,000	<0.605	113	151	<15.1	10.356	0.02	0.0 U
U4-MW-05I	4/15/2022	N	BL02	UMCf	76.6 - 86.6	----	----	----	----	----	----	----	20.080	0.87	0.0 U
U4-MW-05I	10/13/2022	N	EM02	UMCf	76.6 - 86.6	----	----	----	----	----	----	----	24.065	2.94	----
U4-MW-05I	11/3/2022	N	EM03	UMCf	76.6 - 86.6	----	----	----	----	----	----	----	21.533	3.08	----
U4-MW-05I	12/8/2022	N	EM04	UMCf	76.6 - 86.6	----	----	----	----	----	----	----	0.258	6.78	----
U4-MW-05I	1/11/2023	N	EM05	UMCf	76.6 - 86.6	----	----	----	----	----	----	----	12.599	4.84	----
U4-MW-05I	2/14/2023	N	EM06	UMCf	76.6 - 86.6	----	----	----	----	----	----	----	5.446	5.76	----
U4-MW-05I	3/14/2023	N	EM07	UMCf	76.6 - 86.6	3.42 J	<0.350	2,700,000	<0.605	16.0	21.8	<15.1	23.991	6.62	0.5
U4-MW-05I	4/21/2023	N	EM08	UMCf	76.6 - 86.6	----	----	----	----	----	----	----	5.477	0.92	0.0 U
U4-MW-05I	5/10/2023	N	EM09	UMCf	76.6 - 86.6	----	----	----	----	----	----	----	13.468	-1.10	0.0 U

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						Selenium	Silver	Sodium	Thallium	Uranium	Vanadium	Zinc	Conductivity	Dissolved Oxygen	Ferrous Iron
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mS/cm	mg/L	mg/L
U4-MW-05I	6/15/2023	N	EM10	UMCf	76.6 - 86.6	0.461 J	<0.0700	1,810,000	<0.121	96.4	24.8	9.57 J	4.781	0.37	0.5
U4-MW-05I	7/17/2023	N	EM11	UMCf	76.6 - 86.6	----	----	----	----	----	----	----	10.427	0.14	0.0 U
U4-MW-05I	8/14/2023	N	EM12	UMCf	76.6 - 86.6	----	----	----	----	----	----	----	12.637	1.39	0 U
U4-MW-05I	9/13/2023	N	EM13	UMCf	76.6 - 86.6	<1.50	<0.350	2,130,000	<0.605	163	21.9	20.6 J	10.838	0.08	0 U
U4-MW-05I	10/18/2023	N	EM14	UMCf	76.6 - 86.6	----	----	----	----	----	----	----	9.508	7.01	0 U
U4-MW-05I	11/15/2023	N	EM15	UMCf	76.6 - 86.6	----	----	----	----	----	----	----	11.545	0.18	0 U
U4-MW-05I	12/12/2023	N	EM16	UMCf	76.6 - 86.6	<3.00	<0.700	2,270,000	<1.21	155	11.3 J	<30.2	12.780	0.45	0.0 U
U4-MW-06D	4/19/2022	N	BL02	UMCf	97.1 - 107.1	----	----	----	----	----	----	----	----	----	0.0 U
U4-MW-06D	2/15/2023	N	EM06	UMCf	97.1 - 107.1	----	----	----	----	----	----	----	16.354	5.93	----
U4-MW-06D	3/21/2023	N	EM07	UMCf	97.1 - 107.1	3.38	0.293 J	530,000	0.144 J	6.77	<4.99	<3.02	9.930	5.41	0.0 U
U4-MW-06D	6/16/2023	N	EM10	UMCf	97.1 - 107.1	2.38 J	<0.350	3,030,000	<0.605	7.14	<49.9	16.2 J	10.958	5.42	0.0 U
U4-MW-06D	9/13/2023	N	EM13	UMCf	97.1 - 107.1	2.50 J	<0.350	2,900,000	<0.605	74.5	<4.99	16.4 J	20.472	0.84	0 U
U4-MW-06D	12/13/2023	N	EM16	UMCf	97.1 - 107.1	<6.00	<1.40	3,930,000	<2.42	106	<4.99	<60.4	19.371	0.33	0.0 U
U4-MW-06I	4/19/2022	N	BL02	UMCf	76.5 - 86.5	----	----	----	----	----	----	----	6.356	0.75	0.0 U
U4-MW-06I	3/14/2023	N	EM07	UMCf	76.5 - 86.5	6.26 J	<0.350	3,280,000	<0.605	9.11	11.5 J	<15.1	4.941	6.89	0.0 U
U4-MW-06I	6/16/2023	N	EM10	UMCf	76.5 - 86.5	3.90 J	<0.350	3,300,000	<0.605	31.8	<49.9	15.5 J	6.217	8.13	0.0 U
U4-MW-06I	9/12/2023	N	EM13	UMCf	76.5 - 86.5	2.82 J	<0.350	3,330,000	<0.605	87.3	<25.0	24.4 J	20.743	0.68	0 U
U4-MW-06I	12/12/2023	N	EM16	UMCf	76.5 - 86.5	<6.00	<1.40	3,990,000	<2.42	85.0	<4.99	<60.4	25.356	0.33	0.0 U
U4-MW-07D	4/15/2022	N	BL02	UMCf	96.8 - 106.5	----	----	----	----	----	----	----	10.924	4.48	0.0 U
U4-MW-07D	10/12/2022	N	EM02	UMCf	96.8 - 106.5	----	----	----	----	----	----	----	2.057	6.89	----
U4-MW-07D	10/12/2022	FD	EM02	UMCf	96.8 - 106.5	----	----	----	----	----	----	----	----	----	----
U4-MW-07D	11/3/2022	N	EM03	UMCf	96.8 - 106.5	----	----	----	----	----	----	----	1.730	6.43	----
U4-MW-07D	12/7/2022	N	EM04	UMCf	96.8 - 106.5	----	----	----	----	----	----	----	1.462	8.66	----
U4-MW-07D	1/11/2023	N	EM05	UMCf	96.8 - 106.5	----	----	----	----	----	----	----	1.736	11.30	----
U4-MW-07D	2/14/2023	N	EM06	UMCf	96.8 - 106.5	----	----	----	----	----	----	----	1.217	9.30	----
U4-MW-07D	3/16/2023	N	EM07	UMCf	96.8 - 106.5	1.91 J	<0.0700	189,000	<0.121	7.45	<4.99	<3.02	0.029	7.54	0.0 U
U4-MW-07D	4/21/2023	N	EM08	UMCf	96.8 - 106.5	----	----	----	----	----	----	----	4.642	0.05	0.0 U
U4-MW-07D	5/11/2023	N	EM09	UMCf	96.8 - 106.5	----	----	----	----	----	----	----	37.585	44.89	0.0 U
U4-MW-07D	6/13/2023	N	EM10	UMCf	96.8 - 106.5	5.68	<0.0700	537,000	0.168 J	3.74 J	8.40 J	<3.02	4.893	1.10	0.0 U
U4-MW-07D	7/17/2023	N	EM11	UMCf	96.8 - 106.5	----	----	----	----	----	----	----	16.019	0.37	0.0 U
U4-MW-07D	8/11/2023	N	EM12	UMCf	96.8 - 106.5	----	----	----	----	----	----	----	14.895	2.61	0 U
U4-MW-07D	9/13/2023	N	EM13	UMCf	96.8 - 106.5	<1.50	<0.350	2,250,000	<0.605	128	8.03 J	<15.1	13.126	0.06	0 U
U4-MW-07D	10/18/2023	N	EM14	UMCf	96.8 - 106.5	----	----	----	----	----	----	----	11.854	1.09	0 U
U4-MW-07D	11/16/2023	N	EM15	UMCf	96.8 - 106.5	----	----	----	----	----	----	----	14.100	0.40	0 U
U4-MW-07D	12/12/2023	N	EM16	UMCf	96.8 - 106.5	2.24 J	<0.350	1,610,000	<0.605	94.9	21.3	24.4 J	11.893	0.10	0.0 U
U4-MW-07I	4/15/2022	N	BL02	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	5.556	0.59	0.0 U
U4-MW-07I	10/12/2022	N	EM02	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	2.078	6.24	----
U4-MW-07I	11/3/2022	N	EM03	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	1.794	6.05	----
U4-MW-07I	12/7/2022	N	EM04	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	1.562	8.32	----
U4-MW-07I	1/11/2023	N	EM05	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	1.955	9.11	----
U4-MW-07I	2/15/2023	N	EM06	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	1.786	8.45	----
U4-MW-07I	3/16/2023	N	EM07	UMCf	76.8 - 86.8	1.39 J	<0.0700	314,000	<0.121	8.83	5.92 J	5.20 J	6.144	7.27	0.0 U
U4-MW-07I	4/21/2023	N	EM08	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	4.708	0.07	0.0 U
U4-MW-07I	5/11/2023	N	EM09	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	42.407	48.03	1.0
U4-MW-07I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	0.349 J	<0.0700	946,000	<0.121	62.7	10.3 J	<3.02	4.631	0.23	1.0
U4-MW-07I	7/17/2023	N	EM11	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	10.648	0.37	0.0 U
U4-MW-07I	8/11/2023	N	EM12	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	10.453	3.21	0 U
U4-MW-07I	9/13/2023	N	EM13	UMCf	76.8 - 86.8	<1.50	<0.350	2,130,000	<0.605	218	22.2	18.6 J	11.049	0.1	0 U
U4-MW-07I	10/18/2023	N	EM14	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	8.236	0.87	0 U
U4-MW-07I	11/16/2023	N	EM15	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	10.506	0.19	0 U
U4-MW-07I	12/11/2023	N	EM16	UMCf	76.8 - 86.8	1.68 J	<0.350	1,890,000	<0.605	123	12.0 J	163	12.676	0.36	0.0 U

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	FIELD TESTS	FIELD TESTS	FIELD TESTS
						Selenium	Silver	Sodium	Thallium	Uranium	Vanadium	Zinc	Conductivity	Dissolved Oxygen	Ferrous Iron
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mS/cm	mg/L	mg/L
U4-MW-08D	4/13/2022	N	BL02	UMCf	98.6 - 108.6	7.61 J	<0.700	7,950,000	<1.21	10.1	<25.0	<30.2	43.677	1.07	0.0 U
U4-MW-08D	12/7/2022	N	EM04	UMCf	98.6 - 108.6	4.50 J	<0.350	3,880,000	<0.605	24.7	6.96 J	<15.1	15.745	1.70	0.0 U
U4-MW-08D	3/17/2023	N	EM07	UMCf	98.6 - 108.6	6.98 J	<0.350	3,810,000	<0.605	103	<4.99	<15.1	15.242	1.42	0.0 U
U4-MW-08D	6/13/2023	N	EM10	UMCf	98.6 - 108.6	4.01 J	0.863 J	4,800,000	<1.21	96.5	<4.99	<30.2	26.142	2.23	0.0 U
U4-MW-08D	9/13/2023	N	EM13	UMCf	98.6 - 108.6	3.93 J	<0.700	6,620,000	<1.21	39.1	<4.99	<30.2	50.933	-1.16	0 U
U4-MW-08D	12/11/2023	N	EM16	UMCf	98.6 - 108.6	4.36 J	<0.700	5,580,000	<1.21	52.6	<4.99	2,860	32.434	0.45	0.0 U
U4-MW-08DD	4/20/2022	N	BL02	UMCf	119.8 - 129.8	2.68	<0.0700	258,000	<0.121	3.24	10.4 J	<3.02	1.774	0.95	0.0 U
U4-MW-08DD	4/20/2022	FD	BL02	UMCf	119.8 - 129.8	2.31	<0.0700	258,000	<0.121	3.20	9.34 J	<3.02	----	----	----
U4-MW-08DD	12/8/2022	N	EM04	UMCf	119.8 - 129.8	2.00	<0.0700	179,000	<0.121	3.17	8.61	23.0 J	1.034	1.20	0.0 U
U4-MW-08DD	3/15/2023	N	EM07	UMCf	119.8 - 129.8	2.01	<0.0700	359,000	<0.121	2.28	<4.99	<3.02	7.824	2.01	0.0 U
U4-MW-08DD	6/14/2023	N	EM10	UMCf	119.8 - 129.8	1.85 J	<0.0700	330,000	0.830 J	2.36	8.83 J	<3.02	2.973	2.71	0.0 U
U4-MW-08DD	9/14/2023	N	EM13	UMCf	119.8 - 129.8	1.50 J	<0.0700	230,000	<0.121	2.91	7.29 J	<3.02	1.655	-1.71	0 U
U4-MW-08DD	12/14/2023	N	EM16	UMCf	119.8 - 129.8	1.74 J	<0.0700	244,000	<0.121	2.74	6.41 J	<3.02	2.416	0.73	0.0 U
U4-MW-08I	4/13/2022	N	BL02	UMCf	78.0 - 88.0	2.69	<0.0700	1,300,000	<0.121	6.55	23.5	3.30 J	8.786	1.97	0.0 U
U4-MW-08I	12/7/2022	N	EM04	UMCf	78.0 - 88.0	3.16 J	<0.350	2,570,000	<0.605	23.7	18.2 J	<15.1	8.950	2.32	0.0 U
U4-MW-08I	12/7/2022	FD	EM04	UMCf	78.0 - 88.0	3.40 J	<0.350	2,540,000	<0.605	23.2	18.3 J	<15.1	----	----	----
U4-MW-08I	3/17/2023	N	EM07	UMCf	78.0 - 88.0	6.53 J	<0.350	3,640,000	<0.605	41.3	11.9 J	<15.1	7.198	2.29	0.0 U
U4-MW-08I	6/13/2023	N	EM10	UMCf	78.0 - 88.0	<3.00	<0.700	1,580,000	1.43 J	75.9	16.6 J	<30.2	8.097	1.90	0.0 U
U4-MW-08I	9/13/2023	N	EM13	UMCf	78.0 - 88.0	2.03 J	<0.350	2,860,000	<0.605	109	10.5 J	<15.1	22.556	-1.3	0 U
U4-MW-08I	12/11/2023	N	EM16	UMCf	78.0 - 88.0	3.39 J	<0.700	3,770,000	<1.21	151	7.13 J	343	20.541	0.37	0.0 U
U4-MW-08S	4/15/2022	N	BL02	UMCf	54.9 - 64.9	2.19	<0.0700	580,000	<0.121	0.591 J	47.5	<3.02	3.391	3.42	0.0 U
U4-MW-08S	12/7/2022	N	EM04	UMCf	54.9 - 64.9	1.95 J	<0.0700	624,000	<0.121	13.4	49.2	<3.02	2.838	2.17	0.0 U
U4-MW-08S	12/7/2022	FD	EM04	UMCf	54.9 - 64.9	1.80 J	<0.0700	612,000	<0.121	13.2	48.5	4.34 J	----	----	----
U4-MW-08S	3/13/2023	N	EM07	UMCf	54.9 - 64.9	<0.300	<0.0700	464,000	<0.121	11.8	5.34 J	<3.02	0.027	7.40	0.0 U
U4-MW-08S	3/13/2023	FD	EM07	UMCf	54.9 - 64.9	<0.300	<0.0700	467,000	<0.121	13.7	5.55 J	<3.02	----	----	----
U4-MW-08S	6/13/2023	N	EM10	UMCf	54.9 - 64.9	<0.300	<0.0700	551,000	<0.121	18.7	8.86 J	<3.02	2.956	0.72	0.0 U
U4-MW-08S	6/13/2023	FD	EM10	UMCf	54.9 - 64.9	<0.300	<0.0700	554,000	<0.121	18.0	9.37 J	<3.02	----	----	----
U4-MW-08S	9/13/2023	N	EM13	UMCf	54.9 - 64.9	<0.300	<0.0700	527,000	<0.121	8.27	22.2	9.25 J	4.902	-1.41	0 U
U4-MW-08S	9/13/2023	FD	EM13	UMCf	54.9 - 64.9	<3.00	<0.700	517,000	<1.21	8.89 J	22.4	<30.2	----	----	----
U4-MW-08S	12/14/2023	N	EM16	UMCf	54.9 - 64.9	<0.300	<0.0700	680,000	<0.121	9.03	66.6	4.48 J	5.477	-0.18	5.5
U4-MW-08S	12/14/2023	FD	EM16	UMCf	54.9 - 64.9	<0.300	<0.0700	683,000	<0.121	8.53	66.6	4.80 J	----	----	----
U4-MW-09D	4/14/2022	N	BL02	UMCf	96.9 - 106.9	3.90 J	<0.700	475,000	<1.21	10.2	<4.99	165 J	25.834	1.79	0.0 U
U4-MW-09D	12/6/2022	N	EM04	UMCf	96.9 - 106.9	1.98 J	<0.0700 UJ	680,000	<0.121 UJ	9.26	23.1	<3.02 UJ	3.375	6.84	0.0 U
U4-MW-09D	3/16/2023	N	EM07	UMCf	96.9 - 106.9	1.73 J	<0.0700	879,000	<0.121	48.7	8.91 J	<3.02	4.632	1.55	0.0 U
U4-MW-09D	6/14/2023	N	EM10	UMCf	96.9 - 106.9	0.834 J	<0.0700	821,000	0.147 J	62.1	8.47 J	<3.02	5.788	1.36	0.0 U
U4-MW-09D	9/12/2023	N	EM13	UMCf	96.9 - 106.9	0.867 J	<0.0700	1,140,000	0.195 J	86.5	<4.99	14.3 J	7.12	1.59	0 U
U4-MW-09D	12/15/2023	N	EM16	UMCf	96.9 - 106.9	1.85 J	<0.0700	1,360,000	0.485 J	173	<4.99	11.6 J	8.668	1.12	0.0 U
U4-MW-09DD	4/14/2022	N	BL02	UMCf	119.8 - 129.8	1.98 J	<0.0700	181,000	<0.121	2.98	9.16 J	3.03 J	1.339	1.49	0.0 U
U4-MW-09DD	12/6/2022	N	EM04	UMCf	119.8 - 129.8	1.86 J	<0.0700 UJ	162,000	<0.121 UJ	3.11	10.6	<3.02 UJ	1.036	1.23	0.0 U
U4-MW-09DD	3/21/2023	N	EM07	UMCf	119.8 - 129.8	2.06	<0.0700	199,000	<0.121	2.36	9.68 J	<3.02	1.698	4.64	0.0 U
U4-MW-09DD	6/15/2023	N	EM10	UMCf	119.8 - 129.8	2.18	<0.0700	214,000	<0.121	2.86	8.61 J	<3.02	1.722	3.91	0.0 U
U4-MW-09DD	9/13/2023	N	EM13	UMCf	119.8 - 129.8	1.29 J	<0.0700	319,000	<0.121	7.89	<4.99	4.42 J	5.041	-1.2	0 U
U4-MW-09DD	12/13/2023	N	EM16	UMCf	119.8 - 129.8	1.46 J	<0.0700	304,000	0.331 J	5.08	<4.99	3.24 J	2.495	1.35	0.0 U
U4-MW-09I	4/14/2022	N	BL02	UMCf	76.8 - 86.8	2.24	<0.0700	588,000	<0.121	5.48	19.1 J	<3.02	3.354	10.37	0.0 U
U4-MW-09I	12/6/2022	N	EM04	UMCf	76.8 - 86.8	2.26 J	<0.350 UJ	1,150,000	<0.605 UJ	10.8	10.7 J	<15.1 UJ	4.939	5.28	0.0 U
U4-MW-09I	3/16/2023	N	EM07	UMCf	76.8 - 86.8	1.80 J	<0.0700	1,140,000	<0.121	60.5	9.36 J	<3.02	16.829	0.37	0.7
U4-MW-09I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	1.04 J	<0.0700	966,000	<0.121	83.1	12.0 J	<3.02	6.158	1.16	0.0 U
U4-MW-09I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	1.06 J	<0.0700	1,280,000	0.188 J	86.2	<4.99	14.9 J	7.94	0.34	0 U
U4-MW-09I	12/15/2023	N	EM16	UMCf	76.8 - 86.8	1.81 J	<0.0700	1,480,000	0.261 J	165	<4.99	71.7 J+	9.014	1.21	0.0 U
U4-MW-09S	4/14/2022	N	BL02	UMCf	55.3 - 65.3	2.13	<0.0700	461,000	<0.121	6.57	36.3	<3.02	2.893	4.00	0.0 U
U4-MW-09S	12/6/2022	N	EM04	UMCf	55.3 - 65.3	2.30	<0.0700 UJ	841,000	<0.121 UJ	4.45	67.2	<3.02 UJ	3.158	5.76	0.0 U

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	FIELD TESTS	FIELD TESTS	FIELD TESTS
						Selenium	Silver	Sodium	Thallium	Uranium	Vanadium	Zinc	Conductivity	Dissolved Oxygen	Ferrous Iron
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mS/cm	mg/L	mg/L
U4-MW-09S	3/17/2023	N	EM07	UMCf	55.3 - 65.3	2.10	<0.0700	780,000	<0.121	9.84	61.6	8.34 J	3.822	1.29	0.0 U
U4-MW-09S	6/15/2023	N	EM10	UMCf	55.3 - 65.3	<0.300	<0.0700	1,500,000	1.23 J	81.8	48.1	9.78 J	4.352	0.69	0.0 U
U4-MW-09S	9/13/2023	N	EM13	UMCf	55.3 - 65.3	<3.00	<0.700	1,530,000	<1.21	10.1	34.9	<30.2	8.97	-1.46	0.5
U4-MW-09S	12/12/2023	N	EM16	UMCf	55.3 - 65.3	1.70 J	<0.350	1,690,000	<0.605	137	85.0	<15.1	9.939	0.04	1.5
U4-MW-10D	4/14/2022	N	BL02	UMCf	96.9 - 106.9	2.14	<0.0700	626,000	<0.121	9.13	8.78 J	3.53 J	5.411	0.91	0.0 U
U4-MW-10D	12/5/2022	N	EM04	UMCf	96.9 - 106.9	2.22	<0.0700	----	<0.121	5.41	7.55 J	<3.02	2.690	3.80	0.0 U
U4-MW-10D	3/17/2023	N	EM07	UMCf	96.9 - 106.9	0.811 J	<0.0700	303,000	<0.121	95.1	<4.99	7.73 J	542.825	0.85	0.5
U4-MW-10D	6/14/2023	N	EM10	UMCf	96.9 - 106.9	0.312 J	<0.0700	300,000	<0.121	25.4	<4.99	<3.02	3.761	0.26	1.0
U4-MW-10D	9/13/2023	N	EM13	UMCf	96.9 - 106.9	0.441 J	<0.0700	362,000	0.332 J	130	5.23 J	3.27 J	3.965	1	3
U4-MW-10D	12/14/2023	N	EM16	UMCf	96.9 - 106.9	0.434 J	<0.0700	297,000	<0.121	66.0	14.2 J	<3.02	2.943	0.28	0.0 U
U4-MW-10I	4/14/2022	N	BL02	UMCf	77.1 - 87.1	2.88	<0.0700	995,000	0.490 J	6.45	9.70 J	4.88 J	7.650	0.90	0.0 U
U4-MW-10I	12/5/2022	N	EM04	UMCf	77.1 - 87.1	2.24	<0.0700	----	<0.121	11.5	16.8 J	<3.02	2.740	0.62	0.0 U
U4-MW-10I	3/17/2023	N	EM07	UMCf	77.1 - 87.1	0.803 J	<0.0700	586,000	<0.121	0.368 J	10.7 J	10.4 J	735.012	3.48	0.0 U
U4-MW-10I	6/14/2023	N	EM10	UMCf	77.1 - 87.1	<0.300	<0.0700	465,000	<0.121	5.72	23.8	<3.02	3.790	0.34	3.0
U4-MW-10I	9/13/2023	N	EM13	UMCf	77.1 - 87.1	<0.300	<0.0700	571,000	<0.121	42.9	17.0 J	4.53 J	4.813	0.57	6
U4-MW-10I	12/14/2023	N	EM16	UMCf	77.1 - 87.1	5.73 J	0.903 J	1,540,000	4.16 J	46.1	19.1 J	<15.1	10.020	8.38	0.0 U
U4-MW-11D	4/15/2022	N	BL02	UMCf	97.4 - 107.4	6.05 J	<0.700	5,920,000	<1.21	5.93 J	<25.0	<30.2	31.458	0.75	0.0 U
U4-MW-11D	9/26/2022	N	EM01	UMCf	97.4 - 107.4	----	----	----	----	----	----	----	49.507	1.26	0.0 U
U4-MW-11D	10/11/2022	N	EM02	UMCf	97.4 - 107.4	----	----	----	----	----	----	----	49.047	1.30	0.0 U
U4-MW-11D	11/1/2022	N	EM03	UMCf	97.4 - 107.4	----	----	----	----	----	----	----	25.648	1.17	0.0 U
U4-MW-11D	12/6/2022	N	EM04	UMCf	97.4 - 107.4	<30.0 UJ	<7.00 UJ	5,170,000	<12.1 UJ	32.5 J	<66.4 UJ	<302 UJ	5.464	1.37	0.0 U
U4-MW-11D	1/12/2023	N	EM05	UMCf	97.4 - 107.4	----	----	----	----	----	----	----	25.673	0.68	0.0 U
U4-MW-11D	2/14/2023	N	EM06	UMCf	97.4 - 107.4	----	----	----	----	----	----	----	20.311	1.11	0.0 U
U4-MW-11D	3/16/2023	N	EM07	UMCf	97.4 - 107.4	4.91 J	<0.350	4,620,000	<0.605	40.9	<4.99	<15.1	24.191	1.15	0.0 U
U4-MW-11D	4/18/2023	N	EM08	UMCf	97.4 - 107.4	----	----	----	----	----	----	----	18.366	0.11	0.0 U
U4-MW-11D	5/17/2023	N	EM09	UMCf	97.4 - 107.4	----	----	----	----	----	----	----	26.832	1.06	0.0 U
U4-MW-11D	6/16/2023	N	EM10	UMCf	97.4 - 107.4	5.86 J	0.357 J	5,770,000	0.739 J	37.0	<49.9	29.6 J	13.654	1.92	0.0 U
U4-MW-11D	7/14/2023	N	EM11	UMCf	97.4 - 107.4	----	----	----	----	----	----	----	19.620	0.72	0.0 U
U4-MW-11D	8/14/2023	N	EM12	UMCf	97.4 - 107.4	----	----	----	----	----	----	----	24.679	0.37	0 U
U4-MW-11D	9/13/2023	N	EM13	UMCf	97.4 - 107.4	3.40 J	<0.350	4,240,000	0.844 J	70.5	<4.99	21.4 J	22.158	1.2	0 U
U4-MW-11D	10/18/2023	N	EM14	UMCf	97.4 - 107.4	----	----	----	----	----	----	----	26.749	0.26	0 U
U4-MW-11D	11/16/2023	N	EM15	UMCf	97.4 - 107.4	----	----	----	----	----	----	----	21.842	0.96	0 U
U4-MW-11D	12/13/2023	N	EM16	UMCf	97.4 - 107.4	<6.00	<1.40	4,100,000	<2.42	112	<4.99	<60.4	20.757	1.25	0.0 U
U4-MW-11I	4/14/2022	N	BL02	UMCf	77.0 - 87.0	2.57	<0.0700	924,000	<0.121	3.18	14.2 J	<3.02	7.803	1.01	0.0 U
U4-MW-11I	9/26/2022	N	EM01	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	5.582	10.67	0.0 U
U4-MW-11I	9/26/2022	FD	EM01	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	10/10/2022	N	EM02	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	2.413	1.08	0.0 U
U4-MW-11I	10/10/2022	FD	EM02	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	10/31/2022	N	EM03	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	3.179	0.82	0.0 U
U4-MW-11I	10/31/2022	FD	EM03	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	12/6/2022	N	EM04	UMCf	77.0 - 87.0	<0.300 UJ	<0.0700 UJ	609,000	<0.121 UJ	37.6	21.7	<3.02 UJ	3.016	2.77	0.5
U4-MW-11I	12/6/2022	FD	EM04	UMCf	77.0 - 87.0	3.38	<0.0700 UJ	595,000	<0.121 UJ	38.2	21.2	<3.02 UJ	----	----	----
U4-MW-11I	1/12/2023	N	EM05	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	3.038	7.09	0.0 U
U4-MW-11I	1/12/2023	FD	EM05	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	2/14/2023	N	EM06	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	9.120	0.83	0.0 U
U4-MW-11I	2/14/2023	FD	EM06	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	3/16/2023	N	EM07	UMCf	77.0 - 87.0	0.614 J	<0.0700	602,000 J	<0.121	14.1	19.2 J	<3.02	3.476	0.45	0.0 U
U4-MW-11I	3/16/2023	FD	EM07	UMCf	77.0 - 87.0	<0.300	<0.0700	398,000 J	<0.121	13.7	10.2 J	4.87 J	----	----	----
U4-MW-11I	4/18/2023	N	EM08	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	3.218	0.53	0.0 U
U4-MW-11I	4/18/2023	FD	EM08	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	5/19/2023	N	EM09	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	3.152	0.28	0.0 U

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	FIELD TESTS	FIELD TESTS	FIELD TESTS
						Selenium	Silver	Sodium	Thallium	Uranium	Vanadium	Zinc	Conductivity	Dissolved Oxygen	Ferrous Iron
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mS/cm	mg/L	mg/L
U4-MW-11I	5/19/2023	FD	EM09	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	6/15/2023	N	EM10	UMCf	77.0 - 87.0	0.379 J	<0.0700	495,000	<0.121	9.57	23.2	<3.02	3.350	1.03	1.0
U4-MW-11I	6/15/2023	FD	EM10	UMCf	77.0 - 87.0	<0.300	<0.0700	498,000	<0.121	9.57	22.3	<3.02	----	----	----
U4-MW-11I	7/13/2023	N	EM11	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	3.282	0.19	0.2
U4-MW-11I	7/13/2023	FD	EM11	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	8/14/2023	N	EM12	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	11.584	0.33	0.6
U4-MW-11I	8/14/2023	FD	EM12	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	9/13/2023	N	EM13	UMCf	77.0 - 87.0	5.48 J	<0.350	2,050,000	<0.605	242	<4.99	213 J+	15.082	0.86	0 U
U4-MW-11I	9/13/2023	FD	EM13	UMCf	77.0 - 87.0	7.34 J	<0.350	2,090,000	<0.605	246	<4.99	212 J+	----	----	----
U4-MW-11I	10/19/2023	N	EM14	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	29.354	0.77	0 U
U4-MW-11I	10/19/2023	FD	EM14	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	11/16/2023	N	EM15	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	16.246	0.99	0 U
U4-MW-11I	11/16/2023	FD	EM15	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	----	----
U4-MW-11I	12/13/2023	N	EM16	UMCf	77.0 - 87.0	5.48 J	<0.700	2,710,000	<1.21	157	<4.99	<30.2	13.935	1.71	0.0 U
U4-MW-11I	12/13/2023	FD	EM16	UMCf	77.0 - 87.0	8.78 J	<0.700	2,710,000	<1.21	156	<4.99	<30.2	----	----	----
U4-MW-12D	4/15/2022	N	BL02	UMCf	97.1 - 107.1	6.13 J	<0.700	4,920,000	<1.21	10.8	<4.99	<30.2	32.048	0.90	0.0 U
U4-MW-12D	9/27/2022	N	EM01	UMCf	97.1 - 107.1	----	----	----	----	----	----	----	17.403	5.30	0.0 U
U4-MW-12D	10/12/2022	N	EM02	UMCf	97.1 - 107.1	----	----	----	----	----	----	----	11.998	2.16	0.0 U
U4-MW-12D	11/2/2022	N	EM03	UMCf	97.1 - 107.1	----	----	----	----	----	----	----	9.367	1.89	0.0 U
U4-MW-12D	12/7/2022	N	EM04	UMCf	97.1 - 107.1	3.67 J	<0.350	3,260,000	<0.605	23.3	9.35 J	20.1 J	15.505	2.44	0.0 U
U4-MW-12D	1/12/2023	N	EM05	UMCf	97.1 - 107.1	----	----	----	----	----	----	----	9.215	1.80	0.0 U
U4-MW-12D	2/15/2023	N	EM06	UMCf	97.1 - 107.1	----	----	----	----	----	----	----	16.607	1.11	0.0 U
U4-MW-12D	3/14/2023	N	EM07	UMCf	97.1 - 107.1	4.79 J	<0.350	2,610,000	<0.605	13.7	8.65 J	<15.1	12.160	1.14	0.0 U
U4-MW-12D	4/17/2023	N	EM08	UMCf	97.1 - 107.1	----	----	----	----	----	----	----	18.271	10.22	0.0 U
U4-MW-12D	5/17/2023	N	EM09	UMCf	97.1 - 107.1	----	----	----	----	----	----	----	27.758	1.10	0.0 U
U4-MW-12D	6/16/2023	N	EM10	UMCf	97.1 - 107.1	3.24 J	<0.350	2,850,000	<0.605	13.4	<49.9	19.1 J	14.311	0.66	0.0 U
U4-MW-12D	7/13/2023	N	EM11	UMCf	97.1 - 107.1	----	----	----	----	----	----	----	13.058	1.09	0.0 U
U4-MW-12D	8/14/2023	N	EM12	UMCf	97.1 - 107.1	----	----	----	----	----	----	----	9.089	0.87	0 U
U4-MW-12D	9/12/2023	N	EM13	UMCf	97.1 - 107.1	1.94 J	<0.0700	1,150,000	0.201 J	56.9	<25.0	15.4 J	9.274	0.83	0 U
U4-MW-12D	10/17/2023	N	EM14	UMCf	97.1 - 107.1	----	----	----	----	----	----	----	8.087	0.4	0 U
U4-MW-12D	11/15/2023	N	EM15	UMCf	97.1 - 107.1	----	----	----	----	----	----	----	8.470	1.02	0 U
U4-MW-12D	12/12/2023	N	EM16	UMCf	97.1 - 107.1	2.35 J	<0.350	1,140,000	<0.605	115	<4.99	<15.1	7.742	1.24	0.0 U
U4-MW-12I	4/14/2022	N	BL02	UMCf	76.8 - 86.8	5.65 J	0.454 J	1,720,000	2.39	9.47	9.09 J	<3.02	11.234	1.32	----
U4-MW-12I	4/14/2022	FD	BL02	UMCf	76.8 - 86.8	3.39 J	<0.0700	1,690,000	<0.121	7.29	6.67 J	<3.02	----	----	----
U4-MW-12I	9/27/2022	N	EM01	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	3.677	0.92	0.0 U
U4-MW-12I	10/12/2022	N	EM02	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	2.587	1.25	0.0 U
U4-MW-12I	11/2/2022	N	EM03	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	1.684	1.15	0.0 U
U4-MW-12I	12/7/2022	N	EM04	UMCf	76.8 - 86.8	0.587 J	<0.0700	490,000	<0.121	41.0	6.05	<3.02	2.533	1.36	0.0 U
U4-MW-12I	12/7/2022	FD	EM04	UMCf	76.8 - 86.8	0.457 J	<0.0700	499,000	<0.121	41.4	6.27	<3.02	----	----	----
U4-MW-12I	1/13/2023	N	EM05	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	----	----	0.0 U
U4-MW-12I	2/15/2023	N	EM06	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	3.485	0.76	0.0 U
U4-MW-12I	3/13/2023	N	EM07	UMCf	76.8 - 86.8	0.309 J	<0.0700	591,000	<0.121	15.5	13.0 J	<15.1	2.868	0.28	0.5
U4-MW-12I	4/17/2023	N	EM08	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	3.160	0.35	0.0 U
U4-MW-12I	5/17/2023	N	EM09	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	5.078	0.72	0.5
U4-MW-12I	6/16/2023	N	EM10	UMCf	76.8 - 86.8	<0.300	<0.0700	628,000	0.831 J	12.9	19.9 J	4.77 J	3.243	0.35	0.0 U
U4-MW-12I	7/11/2023	N	EM11	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	3.411	2.36	0.0 U
U4-MW-12I	8/14/2023	N	EM12	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	8.021	1.05	0 U
U4-MW-12I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	0.954 J	<0.0700	742,000	<0.121	257	<4.99	15.9 J	5.619	0.68	0 U
U4-MW-12I	10/17/2023	N	EM14	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	3.377	0.09	3.5
U4-MW-12I	11/16/2023	N	EM15	UMCf	76.8 - 86.8	----	----	----	----	----	----	----	6.389	0.90	0.5
U4-MW-12I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	2.49 J	<0.350	1,100,000	<0.605	143	<4.99	<15.1	7.120	1.11	0.0 U

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	FIELD TESTS	FIELD TESTS	FIELD TESTS
						Selenium	Silver	Sodium	Thallium	Uranium	Vanadium	Zinc	Conductivity	Dissolved Oxygen	Ferrous Iron
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mS/cm	mg/L	mg/L
U4-MW-13D	4/14/2022	N	BL02	UMCf	98.2 - 108.2	4.11 J	<0.700	3,990,000	<1.21	10.8	<25.0	<30.2	32.518	0.90	0.0 U
U4-MW-13D	9/28/2022	N	EM01	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	11.793	0.96	0.0 U
U4-MW-13D	10/11/2022	N	EM02	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	11.124	1.77	0.0 U
U4-MW-13D	11/3/2022	N	EM03	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	5.404	1.67	0.0 U
U4-MW-13D	12/7/2022	N	EM04	UMCf	98.2 - 108.2	2.64 J	<0.350	1,170,000	<0.605	34.4	4.77 J	<15.1	7.937	2.99	0.0 U
U4-MW-13D	1/12/2023	N	EM05	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	4.505	1.39	0.0 U
U4-MW-13D	2/15/2023	N	EM06	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	8.150	1.44	0.0 U
U4-MW-13D	3/17/2023	N	EM07	UMCf	98.2 - 108.2	2.57	0.289 J	849,000	0.310 J	13.2	6.57 J	13.0 J	5.920	2.07	0.0 U
U4-MW-13D	4/18/2023	N	EM08	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	4.930	0.14	0.0 U
U4-MW-13D	5/17/2023	N	EM09	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	7.513	1.34	0.0 U
U4-MW-13D	6/15/2023	N	EM10	UMCf	98.2 - 108.2	2.16	<0.0700	790,000	0.240 J	35.0	<4.99	<3.02	6.112	0.61	0.0 U
U4-MW-13D	7/12/2023	N	EM11	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	6.603	0.50	0.0 U
U4-MW-13D	8/11/2023	N	EM12	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	11.972	1.24	0 U
U4-MW-13D	9/11/2023	N	EM13	UMCf	98.2 - 108.2	1.80 J	<0.0700	929,000	0.342 J	30.2	5.22 J	6.85 J	7.059	1.65	0 U
U4-MW-13D	10/18/2023	N	EM14	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	9.096	0.63	0 U
U4-MW-13D	11/15/2023	N	EM15	UMCf	98.2 - 108.2	----	----	----	----	----	----	----	8.038	1.57	0 U
U4-MW-13D	12/11/2023	N	EM16	UMCf	98.2 - 108.2	2.07 J	<0.350	1,060,000	<0.605	28.0	<4.99	<15.1	8.078	1.65	0.0 U
U4-MW-13I	4/14/2022	N	BL02	UMCf	77.1 - 87.1	3.62	<0.0700	1,640,000	<0.121	7.29	9.14 J	<3.02	11.607	2.38	0.0 U
U4-MW-13I	9/28/2022	N	EM01	UMCf	77.1 - 87.1	----	----	----	----	----	----	----	5.667	2.79	0.0 U
U4-MW-13I	10/10/2022	N	EM02	UMCf	77.1 - 87.1	----	----	----	----	----	----	----	6.053	1.93	0.0 U
U4-MW-13I	11/3/2022	N	EM03	UMCf	77.1 - 87.1	----	----	----	----	----	----	----	2.675	2.64	0.0 U
U4-MW-13I	12/6/2022	N	EM04	UMCf	77.1 - 87.1	1.08 J	<0.0700 UJ	759,000	<0.121 UJ	38.3	7.72	<3.02 UJ	3.613	1.73	0.0 U
U4-MW-13I	1/12/2023	N	EM05	UMCf	77.1 - 87.1	----	----	----	----	----	----	----	2.079	1.19	0.0 U
U4-MW-13I	2/14/2023	N	EM06	UMCf	77.1 - 87.1	----	----	----	----	----	----	----	3.065	0.61	0.0 U
U4-MW-13I	3/16/2023	N	EM07	UMCf	77.1 - 87.1	<0.300	<0.0700	655,000	<0.121	19.8	<4.99	<3.02	1.654	0.98	0.0 U
U4-MW-13I	4/19/2023	N	EM08	UMCf	77.1 - 87.1	----	----	----	----	----	----	----	2.452	0.02	0.0 U
U4-MW-13I	5/17/2023	N	EM09	UMCf	77.1 - 87.1	----	----	----	----	----	----	----	4.125	0.52	0.0 U
U4-MW-13I	6/15/2023	N	EM10	UMCf	77.1 - 87.1	<0.300	<0.0700	606,000	<0.121	27.5	12.0 J	<3.02	3.300	0.32	0.0 U
U4-MW-13I	7/12/2023	N	EM11	UMCf	77.1 - 87.1	----	----	----	----	----	----	----	3.564	2.68	0.2
U4-MW-13I	8/11/2023	N	EM12	UMCf	77.1 - 87.1	----	----	----	----	----	----	----	14.898	0.97	0 U
U4-MW-13I	9/11/2023	N	EM13	UMCf	77.1 - 87.1	2.04	<0.0700	1,060,000	<0.121	30.7	<4.99	9.22 J	8.29	1.69	0 U
U4-MW-13I	10/17/2023	N	EM14	UMCf	77.1 - 87.1	----	----	----	----	----	----	----	8.605	0.64	0 U
U4-MW-13I	11/15/2023	N	EM15	UMCf	77.1 - 87.1	----	----	----	----	----	----	----	9.056	1.19	0 U
U4-MW-13I	12/11/2023	N	EM16	UMCf	77.1 - 87.1	1.55 J	<0.350	1,330,000	<0.605	30.8	<4.99	<15.1	8.638	1.59	0.0 U
U4-MW-14D	4/13/2022	N	BL02	UMCf	97.3 - 107.3	3.31	<0.0700	673,000	<0.121	18.5	22.2	<3.02	5.770	0.87	0.0 U
U4-MW-14D	12/6/2022	N	EM04	UMCf	97.3 - 107.3	2.46	<0.0700 UJ	469,000	0.156 J	8.22	14.1	<3.02 UJ	4.415	2.55	0.0 U
U4-MW-14D	3/16/2023	N	EM07	UMCf	97.3 - 107.3	1.69 J	<0.0700	373,000	<0.121	8.52	9.49 J	6.57 J	181.910	1.08	0.0 U
U4-MW-14D	6/15/2023	N	EM10	UMCf	97.3 - 107.3	1.85 J	<0.0700	420,000	<0.121	23.0	<4.99	<3.02	4.035	0.82	0.0 U
U4-MW-14D	9/14/2023	N	EM13	UMCf	97.3 - 107.3	1.93 J	<0.0700	425,000	<0.121	47.7	9.33 J	5.36 J	3.694	1.94	0 U
U4-MW-14D	12/15/2023	N	EM16	UMCf	97.3 - 107.3	1.67 J	<0.0700	456,000	0.123 J	58.0	<4.99	17.3 J	3.257	2.42	0.0 U
U4-MW-14I	4/14/2022	N	BL02	UMCf	77.3 - 87.3	2.53	<0.0700	596,000	<0.121	4.68	13.3 J	<3.02	5.720	0.77	0.0 U
U4-MW-14I	12/6/2022	N	EM04	UMCf	77.3 - 87.3	2.86	<0.0700 UJ	518,000	0.243 J	15.3	14.3	<3.02 UJ	4.279	2.18	0.0 U
U4-MW-14I	3/16/2023	N	EM07	UMCf	77.3 - 87.3	1.98 J	<0.0700	413,000	<0.121	11.3	13.6 J	<3.02	213.617	0.55	0.0 U
U4-MW-14I	6/15/2023	N	EM10	UMCf	77.3 - 87.3	1.67 J	<0.0700	553,000	<0.121	36.8	12.4 J	<3.02	4.589	0.61	0.0 U
U4-MW-14I	9/14/2023	N	EM13	UMCf	77.3 - 87.3	1.13 J	<0.0700	450,000	<0.121	55.6	10.2 J	8.92 J	4.131	0.73	0 U
U4-MW-14I	12/14/2023	N	EM16	UMCf	77.3 - 87.3	1.57 J	<0.0700	502,000	<0.121	89.2	<4.99	<3.02	4.580	0.14	0.0 U
U4-MW-15D	4/13/2022	N	BL02	UMCf	96.0 - 106.0	2.38	<0.0700	646,000	0.186 J	13.6	8.06 J	<3.02	5.015	1.02	0.0 U
U4-MW-15D	12/5/2022	N	EM04	UMCf	96.0 - 106.0	2.23	<0.0700	436,000	<0.121	11.6	7.40 J	<3.02	2.298	15.40	0.0 U
U4-MW-15D	3/20/2023	N	EM07	UMCf	96.0 - 106.0	2.33	<0.0700	318,000	<0.121	6.45	8.42 J	<3.02	2.799	0.93	0.0 U
U4-MW-15D	6/14/2023	N	EM10	UMCf	96.0 - 106.0	2.44	<0.0700	415,000	<0.121	10.1	11.3 J	<3.02	5.069	0.61	0.0 U
U4-MW-15D	9/13/2023	N	EM13	UMCf	96.0 - 106.0	1.90 J	<0.0700	358,000	<0.121	6.81	9.95 J	3.80 J	3.276	1.03	0 U

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	FIELD TESTS	FIELD TESTS	FIELD TESTS
						Selenium	Silver	Sodium	Thallium	Uranium	Vanadium	Zinc	Conductivity	Dissolved Oxygen	Ferrous Iron
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mS/cm	mg/L	mg/L
U4-MW-15D	12/12/2023	N	EM16	UMCf	96.0 - 106.0	2.06	<0.0700	343,000	<0.121	25.3	7.10 J	<3.02	3.211	1.20	0.0 U
U4-MW-15DD	4/13/2022	N	BL02	UMCf	120.3 - 130.3	2.15	<0.0700	159,000	<0.121	4.23	17.9 J	<3.02	0.999	2.14	0.0 U
U4-MW-15DD	12/5/2022	N	EM04	UMCf	120.3 - 130.3	1.91 J	<0.0700	----	<0.121	3.37	12.9 J	<3.02	0.666	2.14	0.0 U
U4-MW-15DD	3/15/2023	N	EM07	UMCf	120.3 - 130.3	1.89 J	<0.0700	137,000	<0.121	3.10	11.8 J	<3.02	0.888	1.96	0.0 U
U4-MW-15DD	6/13/2023	N	EM10	UMCf	120.3 - 130.3	2.25	<0.0700	138,000	<0.121	2.81	6.34 J	<3.02	1.027	0.94	0.0 U
U4-MW-15DD	9/14/2023	N	EM13	UMCf	120.3 - 130.3	1.70 J	<0.0700	130,000	<0.121	3.64	13.1 J	<3.02	0.905	2.24	0 U
U4-MW-15DD	12/13/2023	N	EM16	UMCf	120.3 - 130.3	1.97 J	<0.0700	135,000	<0.121	3.84	15.5 J	<3.02	0.827	3.34	0.0 U
U4-MW-15I	4/12/2022	N	BL02	UMCf	76.8 - 86.8	2.64	<0.0700	897,000	<0.121	6.59	18.7 J	<3.02	5.348	1.45	0.0 U
U4-MW-15I	12/5/2022	N	EM04	UMCf	76.8 - 86.8	2.82	0.105 J	976,000	0.663 J	52.3	14.2 J	<3.02	2.972	1.05	0.0 U
U4-MW-15I	3/17/2023	N	EM07	UMCf	76.8 - 86.8	<0.300	<0.0700	387,000	<0.121	69.9	65.7	6.91 J	473.418	0.66	0.4
U4-MW-15I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<0.300	<0.0700	448,000	<0.121	5.30	31.2	5.29 J	3.653	0.38	5.5
U4-MW-15I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	2.07	<0.0700	1,010,000	<0.121	95.8	13.3 J	16.5 J	6.172	1.16	0 U
U4-MW-15I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	2.49 J	<0.350	935,000	<0.605	49.9	29.0	<15.1	5.160	3.57	0.5
U4-MW-15S	4/13/2022	N	BL02	UMCf	54.8 - 64.8	2.71	<0.0700	387,000 J	<0.121	4.94	23.5	<3.02	2.466	5.73	0.0 U
U4-MW-15S	12/5/2022	N	EM04	UMCf	54.8 - 64.8	0.690 J	<0.0700	277,000	<0.121	6.64	21.0	<3.02	1.328	0.91	0.0 U
U4-MW-15S	3/13/2023	N	EM07	UMCf	54.8 - 64.8	<0.300	<0.0700	299,000	<0.121	1.92	14.4 J	<15.1	1.687	1.02	0.0 U
U4-MW-15S	6/13/2023	N	EM10	UMCf	54.8 - 64.8	<0.300	0.0721 J	421,000	0.259 J	2.57	8.42 J	<3.02	2.659	0.19	0.0 U
U4-MW-15S	9/14/2023	N	EM13	UMCf	54.8 - 64.8	<0.300	0.0732 J	478,000	<0.121	3.32	13.9 J	8.39 J	2.629	0.25	0 U
U4-MW-15S	12/11/2023	N	EM16	UMCf	54.8 - 64.8	<0.300	<0.0700	482,000	<0.121	10.9	5.22 J	<3.02	3.228	-0.25	0.0 U
U4-MW-16D	4/11/2022	N	BL02	UMCf	96.8 - 106.8	5.89 J	<0.700	1,210,000	<1.21	6.64 J	<4.99	44.4 J	27.119	4.03	0.0 U
U4-MW-16D	12/5/2022	N	EM04	UMCf	96.8 - 106.8	0.707 J	<0.0700	522,000	<0.121	5.45	<4.99	<3.02	14.259	2.61	0.0 U
U4-MW-16D	3/14/2023	N	EM07	UMCf	96.8 - 106.8	5.22 J	<0.350	1,750,000	<0.605	18.7	6.38 J	<15.1	9.893	2.42	0.0 U
U4-MW-16D	6/13/2023	N	EM10	UMCf	96.8 - 106.8	3.17 J	<0.700	2,970,000	<1.21	35.6	5.43 J	<30.2	23.075	1.17	0.0 U
U4-MW-16D	9/15/2023	N	EM13	UMCf	96.8 - 106.8	<1.50	<0.350	1,800,000	<0.605	24.8	7.10 J	<15.1	18.739	-7.04	0 U
U4-MW-16D	12/14/2023	N	EM16	UMCf	96.8 - 106.8	<3.00	<0.700	1,820,000	<1.21	3.83 J	<4.99	<30.2	11.484	1.99	0.0 U
U4-MW-16DD	4/12/2022	N	BL02	UMCf	120.8 - 130.8	3.05	<0.0700	390,000	<0.121	7.68	18.9 J	5.37 J	2.380	1.10	0.0 U
U4-MW-16DD	12/5/2022	N	EM04	UMCf	120.8 - 130.8	2.31	<0.0700	----	<0.121	7.92	14.0 J	<3.02	1.722	1.93	0.0 U
U4-MW-16DD	3/15/2023	N	EM07	UMCf	120.8 - 130.8	1.97 J	<0.0700	246,000	<0.121	7.16	15.9 J	3.04 J	1.622	2.67	0.0 U
U4-MW-16DD	6/13/2023	N	EM10	UMCf	120.8 - 130.8	2.26	<0.0700	227,000	<0.121	6.69	21.9	<3.02	1.625	0.95	0.0 U
U4-MW-16DD	9/14/2023	N	EM13	UMCf	120.8 - 130.8	1.76 J	<0.0700	199,000	<0.121	7.28	19.3 J	3.51 J	1.398	1.21	0 U
U4-MW-16DD	12/13/2023	N	EM16	UMCf	120.8 - 130.8	1.78 J	<0.0700	204,000	<0.121	7.66	18.5 J	3.26 J	1.424	2.44	0.0 U
U4-MW-16I	4/11/2022	N	BL02	UMCf	77.0 - 87.0	2.58	<0.0700	968,000	<0.121	2.26	<4.99	3.91 J	6.673	8.63	0.0 U
U4-MW-16I	12/5/2022	N	EM04	UMCf	77.0 - 87.0	<0.300	<0.0700	----	<0.121	65.4	7.90 J	6.02 J	2.618	1.36	0.0 U
U4-MW-16I	12/5/2022	FD	EM04	UMCf	77.0 - 87.0	<0.300	<0.0700	----	<0.121	62.1	5.85 J	<3.02	----	----	----
U4-MW-16I	3/13/2023	N	EM07	UMCf	77.0 - 87.0	<0.300	<0.0700	342,000	<0.121	20.1	18.4 J	<3.02	0.020	8.09	----
U4-MW-16I	3/13/2023	FD	EM07	UMCf	77.0 - 87.0	<0.300	<0.0700	342,000	<0.121	18.7	23.0	<3.02	----	----	----
U4-MW-16I	6/12/2023	N	EM10	UMCf	77.0 - 87.0	<0.300	<0.0700	276,000	<0.121	13.7	19.6 J	5.25 J	3.244	1.03	5.5
U4-MW-16I	6/12/2023	FD	EM10	UMCf	77.0 - 87.0	<0.300	<0.0700	280,000	0.282 J	13.0	21.3	8.93 J	----	----	----
U4-MW-16I	9/11/2023	N	EM13	UMCf	77.0 - 87.0	3.86	<0.0700	1,990,000	0.152 J	108	<4.99	10.2 J	14.244	0.85	0 U
U4-MW-16I	9/11/2023	FD	EM13	UMCf	77.0 - 87.0	3.61	<0.0700	1,980,000	0.142 J	107	<4.99	<3.02	----	----	----
U4-MW-16I	12/11/2023	N	EM16	UMCf	77.0 - 87.0	3.01 J	<0.350	2,610,000	<0.605	38.2	7.72 J	<15.1	17.713	0.05	0.0 U
U4-MW-16I	12/11/2023	FD	EM16	UMCf	77.0 - 87.0	3.49 J	<0.350	2,530,000	<0.605	36.6	7.10 J	<15.1	----	----	----
U4-MW-16S	4/12/2022	N	BL02	UMCf	54.8 - 64.8	2.47	<0.0700	409,000	<0.121	3.64	15.4 J	<3.02	2.712	4.29	0.0 U
U4-MW-16S	4/12/2022	FD	BL02	UMCf	54.8 - 64.8	2.96	<0.0700	405,000	<0.121	3.66	14.3 J	<3.02	----	----	----
U4-MW-16S	12/6/2022	N	EM04	UMCf	54.8 - 64.8	1.13 J	<0.0700 UJ	386,000	<0.121 UJ	12.5	7.59	<3.02 UJ	2.562	1.29	0.0 U
U4-MW-16S	3/15/2023	N	EM07	UMCf	54.8 - 64.8	0.408 J	0.100 J	567,000	<0.121	0.247 J	7.88 J	<15.1	3.549	0.71	6.0
U4-MW-16S	6/13/2023	N	EM10	UMCf	54.8 - 64.8	<0.300	<0.0700	455,000	<0.121	0.234 J	8.63 J	<3.02	3.772	0.40	7.0
U4-MW-16S	9/11/2023	N	EM13	UMCf	54.8 - 64.8	<0.300	<0.0700	362,000	<0.121	0.266 J	<4.99	<3.02	2.498	1.55	2
U4-MW-16S	12/11/2023	N	EM16	UMCf	54.8 - 64.8	<0.300	<0.0700	423,000	<0.121	0.0878 J	5.81 J	9.20 J	3.172	0.20	0.5
U4-SLMW	11/10/2022	N	EM03		-	----	----	----	----	----	----	----	----	----	----
U4-T3	10/13/2022	N	EM02		-	----	----	----	----	----	----	----	----	----	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	Dissolved Metals by SW6010B/SW6020	FIELD TESTS	FIELD TESTS	FIELD TESTS
						Selenium	Silver	Sodium	Thallium	Uranium	Vanadium	Zinc	Conductivity	Dissolved Oxygen	Ferrous Iron
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mS/cm	mg/L	mg/L
U4-T3	11/3/2022	N	EM03		-	----	----	----	----	----	----	----	16.618	2.05	----
U4-T3	12/6/2022	N	EM04		-	----	----	----	----	----	----	----	10.943	3.89	----
U4-T3	1/9/2023	N	EM05		-	----	----	----	----	----	----	----	10.447	5.03	----
U4-T3	2/13/2023	N	EM06		-	----	----	----	----	----	----	----	13.131	7.12	----
U4-T3	3/13/2023	N	EM07		-	----	----	----	----	----	----	----	9.552	6.11	----
U4-T3	4/19/2023	N	EM08		-	----	----	----	----	----	----	----	6.951	0.42	----
U4-T3	5/18/2023	N	EM09		-	----	----	----	----	----	----	----	17.125	3.18	----
U4-T3	6/12/2023	N	EM10		-	----	----	----	----	----	----	----	13.126	6.38	----
U4-T3	7/11/2023	N	EM11		-	----	----	----	----	----	----	----	0.029	1.56	----
U4-T3	8/10/2023	N	EM12		-	----	----	----	----	----	----	----	4.655	2.7	----
U4-T3	9/11/2023	N	EM13		-	----	----	----	----	----	----	----	6.711	1.03	----
U4-T3	10/16/2023	N	EM14		-	----	----	----	----	----	----	----	4.54	0.53	----

Notes:

- FD - Field duplicate
- E - Field instrument error.

- 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 low.
- J+ - The result is an estimated quantity, but the result may be biased high.
- N/A - Not Applicable
- mg/L - milligrams per liter
- µg/L - micrograms per liter
- N - Normal field 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
- < - The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
- Not tested.
- M-252 damaged/obstructed when checked on June 14, 2023 and September 14, 2023.

Table 4
Groundwater Analytical Results
Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	RSK175	RSK175	RSK175	SM2540C	SW7199
						Oxidation-Reduction Potential	pH	Sulfide	Temperature	Turbidity	Ethane	Ethene	Methane	Total Dissolved Solids	Chromium, Hexavalent
						mV	SU	mg/L	C	NTU	ug/L	ug/L	ug/L	ug/L	ug/L
M-247-100	4/20/2022	N	BL02	UMCf	100.5 - 110.5	22.9	8.02	0.0 U	26.9	22.0	----	----	----	712,000	<150
M-249-100	4/20/2022	N	BL02	UMCf	99.6 - 109.6	140.6	6.99	0.0 U	27.5	60.6	----	----	----	54,000,000	77,000
M-251-100	4/19/2022	N	BL02	UMCf	92.5 - 102.5	212.1	7.36	0.0 U	26.3	17.1	----	----	----	39,900,000	96,900 J-
M-251-100	10/13/2022	N	EM02	UMCf	92.5 - 102.5	172.0	7.19	----	24.9	58.8	----	----	----	25,800,000	57,600
M-251-100	11/2/2022	N	EM03	UMCf	92.5 - 102.5	118.7	7.71	----	24.1	33.2	----	----	----	18,700,000	39,500
M-251-100	12/8/2022	N	EM04	UMCf	92.5 - 102.5	123.6	7.38	----	22.0	17.3	----	----	----	15,000,000 J	32,300
M-251-100	1/11/2023	N	EM05	UMCf	92.5 - 102.5	132.4	7.49	----	23.0	50.5	----	----	----	22,400,000	43,900
M-251-100	2/13/2023	N	EM06	UMCf	92.5 - 102.5	184.3	8.08	----	23.4	21.0	----	----	----	9,740,000	42,700
M-251-100	3/17/2023	N	EM07	UMCf	92.5 - 102.5	129.4	7.57	0.0 U	23.8	21.3	<4.07	<4.26	<2.91	15,300,000	23,100
M-251-100	4/21/2023	N	EM08	UMCf	92.5 - 102.5	106.3	7.44	0.0 U	24.3	32.6	----	----	----	18,500,000	34,100
M-251-100	5/9/2023	N	EM09	UMCf	92.5 - 102.5	147.1	7.40	0.0 U	29.7	9.1	----	----	----	19,900,000	34,200
M-251-100	6/14/2023	N	EM10	UMCf	92.5 - 102.5	221.0	7.55	0.0 U	27.4	47.1	<4.07	<4.26	49.1	20,400,000	16,600
M-251-100	7/14/2023	N	EM11	UMCf	92.5 - 102.5	285.2	7.83	0.0 U	30.3	19.4	----	----	----	18,000,000	43,900 J-
M-251-100	8/10/2023	N	EM12	UMCf	92.5 - 102.5	129.1	7.53	0 U	33.6	16.5	----	----	----	21,500,000	30,800
M-251-100	9/14/2023	N	EM13	UMCf	92.5 - 102.5	-27.3	7.22	0 U	27.7	144.9	<4.07	<4.26	5,540	12,500,000	31,600
M-251-100	10/19/2023	N	EM14	UMCf	92.5 - 102.5	-7.9	6.59	0 U	27.9	55.6	----	----	----	19,800,000 J-	28,500
M-251-100	11/16/2023	N	EM15	UMCf	92.5 - 102.5	-25.9	6.57	0 U	25.9	18.6	----	----	----	16,400,000	32,300
M-251-100	12/12/2023	N	EM16	UMCf	92.5 - 102.5	135.1	6.79	0.0 U	24.2	-144082.9	<4.07	<4.26	25,700	16,400,000	31,600
M-251-60	4/18/2022	N	BL02	UMCf	52.3 - 62.3	44.4	10.69	0.0 U	30.5	18.3	----	----	----	2,330,000 J	1,510 J-
M-251-60	3/15/2023	N	EM07	UMCf	52.3 - 62.3	14.4	11.12	0.0 U	23.5	10.4	<4.07	<4.26	<2.91	2,490,000	1,590
M-251-60	6/14/2023	N	EM10	UMCf	52.3 - 62.3	112.5	10.40	0.0 U	27.1	203.3	<4.07	<4.26	233	2,690,000	1,780
M-251-60	9/14/2023	N	EM13	UMCf	52.3 - 62.3	25	10.46	0 U	28.7	84.9	<4.07	<4.26	1,410	2,330,000	1,740
M-251-60	12/11/2023	N	EM16	UMCf	52.3 - 62.3	-11.9	10.35	----	24.3	81.5	<4.07	<4.26	5,770	2,050,000	1,640
M-252	4/21/2022	N	BL02	UMCf	132.3 - 142.3	142.6	8.13	0.0 U	29.6	9.9	----	----	----	1,410,000	32.5 J
M-252	3/15/2023	N	EM07	UMCf	132.3 - 142.3	142.0	8.10	0.0 U	21.5	9.8	<4.07	<4.26	<2.91	2,590,000	45.8
M-252	9/19/2023	N	EM13	UMCf	132.3 - 142.3	363.8	7.32	0 U	36	2	<4.07	<4.26	12.8	2,110,000	23.5
M-252	12/18/2023	N	EM16	UMCf	132.3 - 142.3	305.6	7.08	0.0 U	23.9	13.7	<4.07	<4.26	139	2,850,000	6.26
M-253-100	4/20/2022	N	BL02	UMCf	100.8 - 110.8	36.4	8.03	0.0 U	25.2	21.0	----	----	----	2,130,000	598
M-255-100	4/20/2022	N	BL02	UMCf	100.2 - 110.2	175.7	7.89	0.0 U	25.1	12.0	----	----	----	1,600,000	1,350
U4-E-01D	4/18/2022	N	BL02	UMCf	94.7 - 109.7	167.3	7.78	0.0 U	26.2	8.7	----	----	----	43,600,000	87,000 J-
U4-E-01D	3/14/2023	N	EM07	UMCf	94.7 - 109.7	172.0	8.08	0.0 U	21.8	9.1	<4.07	<4.26	<2.91	606,000	1.43
U4-E-011	4/19/2022	N	BL02	UMCf	74.6 - 89.6	120.6	8.70	0.0 U	26.5	2.7	----	----	----	4,770,000 J	6,190 J-
U4-E-011	4/19/2022	FD	BL02	UMCf	74.6 - 89.6	----	----	----	----	----	----	----	----	2,770,000 J	7,860 J-
U4-E-011	3/14/2023	N	EM07	UMCf	74.6 - 89.6	138.0	7.74	0.0 U	23.0	14.8	<4.07	<4.26	<2.91	6,170,000	16,300
U4-E-011	4/20/2023	N	EM08	UMCf	74.6 - 89.6	41.1	7.06	----	23.3	3.9	----	----	----	4,720,000	9,830
U4-E-011	5/10/2023	N	EM09	UMCf	74.6 - 89.6	92.8	6.87	----	30.7	12.3	----	----	----	6,020,000	9,400 J-
U4-E-011	6/12/2023	N	EM10	UMCf	74.6 - 89.6	234.8	6.65	----	28.8	1.8	----	----	----	8,260,000	17,400
U4-E-011	7/11/2023	N	EM11	UMCf	74.6 - 89.6	-164.3	6.15	----	29.2	147.7	----	----	----	3,590,000	<30.0
U4-E-011	8/10/2023	N	EM12	UMCf	74.6 - 89.6	-105.1	6.85	----	34.9	234.5	----	----	----	2,020,000	0.992
U4-E-011	9/11/2023	N	EM13	UMCf	74.6 - 89.6	-377.9	5.96	----	29.5	1311.9	----	----	----	7,010,000	22.3
U4-E-011	10/16/2023	N	EM14	UMCf	74.6 - 89.6	-147.9	5.45	----	27.9	2139.2	----	----	----	4,630,000 J-	10.1
U4-E-011	12/13/2023	N	EM16	UMCf	74.6 - 89.6	-103.0	4.19	0.0 U	23.6	140.9	----	----	----	4,870,000	17.8
U4-E-02D	4/20/2022	N	BL02	UMCf	94.4 - 109.4	129.9	7.36	0.0 U	27.0	2.0	----	----	----	10,800,000	17,400
U4-E-02D	3/14/2023	N	EM07	UMCf	94.4 - 109.4	36.0	7.96	0.0 U	21.6	14.7	<4.07	<4.26	<2.91	625,000	7.77
U4-E-021	4/18/2022	N	BL02	UMCf	74.4 - 89.4	190.6	8.46	0.0 U	24.6	9.8	----	----	----	4,130,000	8,910 J-
U4-E-021	3/14/2023	N	EM07	UMCf	74.4 - 89.4	162.8	7.49	0.0 U	19.2	7.6	<4.07	<4.26	<2.91	1,340,000	1,980 J-
U4-E-021	4/20/2023	N	EM08	UMCf	74.4 - 89.4	-84.5	7.19	----	24.3	56.6	----	----	----	3,830,000	6,860
U4-E-021	5/11/2023	N	EM09	UMCf	74.4 - 89.4	10.9	8.30	----	32.0	28.2	----	----	----	3,440,000	5,730
U4-E-021	6/12/2023	N	EM10	UMCf	74.4 - 89.4	-127.4	6.82	----	28.1	3.8	----	----	----	3,940,000	2,190
U4-E-021	7/11/2023	N	EM11	UMCf	74.4 - 89.4	-26.8	7.10	----	28.7	12.3	----	----	----	4,560,000	3,130
U4-E-021	8/10/2023	N	EM12	UMCf	74.4 - 89.4	-1.6	7.04	----	33.7	204.8	----	----	----	3,810,000	1.16

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	RSK175	RSK175	RSK175	SM2540C	SW7199
						Oxidation-Reduction Potential	pH	Sulfide	Temperature	Turbidity	Ethane	Ethene	Methane	Total Dissolved Solids	Chromium, Hexavalent
						mV	SU	mg/L	C	NTU	ug/L	ug/L	ug/L	ug/L	ug/L
U4-E-02I	9/11/2023	N	EM13	UMCf	74.4 - 89.4	-204.4	6.43	----	32.5	175.6	----	----	----	4,850,000	11.0
U4-E-02I	10/16/2023	N	EM14	UMCf	74.4 - 89.4	-170.1	6.29	----	29.4	54.2	----	----	----	4,660,000 J-	4.10
U4-E-02I	12/14/2023	N	EM16	UMCf	74.4 - 89.4	-253.0	5.23	0.0 U	23.2	116.6	----	----	----	6,860,000	69.1
U4-E-03D	4/19/2022	N	BL02	UMCf	95.1 - 110.1	96.0	7.14	0.0 U	28.6	33.2	----	----	----	34,400,000	77,900 J-
U4-E-03D	10/13/2022	N	EM02	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	----	18,900,000 J-	48,700
U4-E-03D	11/3/2022	N	EM03	UMCf	95.1 - 110.1	109.3	7.34	----	17.8	225.3	----	----	----	15,400,000	44,000
U4-E-03D	12/6/2022	N	EM04	UMCf	95.1 - 110.1	198.2	7.40	----	22.1	1.8	----	----	----	16,000,000	37,000 J-
U4-E-03D	1/9/2023	N	EM05	UMCf	95.1 - 110.1	117.4	7.79	----	21.2	0.0	----	----	----	9,860,000	36,100
U4-E-03D	2/13/2023	N	EM06	UMCf	95.1 - 110.1	83.8	7.44	----	22.4	0.1	----	----	----	12,000,000	34,100
U4-E-03D	3/13/2023	N	EM07	UMCf	95.1 - 110.1	----	----	----	----	----	----	----	----	11,700,000	35,600
U4-E-03D	3/14/2023	N	EM07	UMCf	95.1 - 110.1	76.6	7.30	0.0 U	23.7	33.0	<4.07	<4.26	683	12,200,000	35,400
U4-E-03D	4/19/2023	N	EM08	UMCf	95.1 - 110.1	-58.5	6.55	----	21.7	62.2	----	----	----	12,600,000	35,400
U4-E-03D	5/11/2023	N	EM09	UMCf	95.1 - 110.1	51.7	6.26	----	30.3	35.2	----	----	----	8,660,000	28,600
U4-E-03D	6/12/2023	N	EM10	UMCf	95.1 - 110.1	180.8	6.40	----	28.6	9.5	----	----	----	12,000,000	35,500
U4-E-03D	7/11/2023	N	EM11	UMCf	95.1 - 110.1	154.2	6.62	----	30.3	181.7	----	----	----	15,400,000	38,500
U4-E-03D	8/10/2023	N	EM12	UMCf	95.1 - 110.1	246.9	9.01	----	34	159.1	----	----	----	15,600,000	36,200
U4-E-03D	9/11/2023	N	EM13	UMCf	95.1 - 110.1	95.6	6.58	----	33.9	371.6	----	----	----	15,500,000	35,700
U4-E-03D	10/16/2023	N	EM14	UMCf	95.1 - 110.1	81.8	6.15	----	30.4	329.6	----	----	----	17,100,000 J-	35,100
U4-E-04D	4/19/2022	N	BL02	UMCf	95.0 - 110.0	34.2	7.19	0.0 U	25.5	15.1	----	----	----	24,000,000	37,500 J-
U4-E-04D	3/14/2023	N	EM07	UMCf	95.0 - 110.0	48.3	8.06	0.0 U	21.1	13.7	<4.07	<4.26	<2.91	640,000	0.538
U4-E-04I	4/18/2022	N	BL02	UMCf	75.0 - 90.0	-18.2	8.40	0.0 U	27.4	28.9	----	----	----	3,430,000	3,380 J-
U4-E-04I	3/14/2023	N	EM07	UMCf	75.0 - 90.0	83.0	7.42	0.0 U	22.2	15.0	<4.07	<4.26	32.4	20,900,000	60,300
U4-E-05D	4/19/2022	N	BL02	UMCf	95.0 - 110.0	177.7	7.33	0.0 U	28.8	45.2	----	----	----	28,400,000	47,900 J-
U4-E-05D	3/16/2023	N	EM07	UMCf	95.0 - 110.0	116.2	7.65	0.0 U	18.5	56.5	<4.07	<4.26	45.8 J+	641,000	0.272 J
U4-E-05I	4/19/2022	N	BL02	UMCf	75.0 - 90.0	101.8	8.45	0.0 U	28.4	10.5	----	----	----	4,070,000	5,710 J-
U4-E-05I	3/15/2023	N	EM07	UMCf	75.0 - 90.0	56.3	7.92	0.0 U	23.0	31.5	<4.07	<4.26	<2.91	2,690,000	8,200
U4-E-06D	4/11/2022	N	BL02	UMCf	95.1 - 110.1	138.8	7.24	0.0 U	23.5	37.2	<4.07	<4.26	<2.91	9,590,000	10,800
U4-E-06I	4/11/2022	N	BL02	UMCf	73.2 - 88.2	128.1	7.47	0.0 U	25.8	11.6	<4.07	<4.26	<2.91	3,220,000	2,420
U4-E-06I	4/11/2022	FD	BL02	UMCf	73.2 - 88.2	----	----	----	----	----	<4.07	<4.26	<2.91	3,150,000	3,210
U4-E-06I	10/12/2022	N	EM02	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	----	9,760,000 J-	9,930
U4-E-06I	11/3/2022	N	EM03	UMCf	73.2 - 88.2	----	----	----	----	----	----	----	----	5,900,000	3,080
U4-E-06I	12/6/2022	N	EM04	UMCf	73.2 - 88.2	-204.0	6.62	----	23.2	38.3	----	----	----	6,870,000	1,860 J-
U4-E-06I	1/9/2023	N	EM05	UMCf	73.2 - 88.2	111.2	6.81	----	23.0	4.4	----	----	----	7,540,000	17,700
U4-E-06I	2/13/2023	N	EM06	UMCf	73.2 - 88.2	-78.1	6.72	----	23.0	75.8	----	----	----	7,500,000	158 J-
U4-E-06I	3/13/2023	N	EM07	UMCf	73.2 - 88.2	5.2	5.87	----	15.5	29.5	----	----	----	4,760,000	34.3 J-
U4-E-06I	4/17/2023	N	EM08	UMCf	73.2 - 88.2	137.4	6.39	----	25.4	64.2	----	----	----	4,860,000	1,190
U4-E-06I	5/15/2023	N	EM09	UMCf	73.2 - 88.2	68.3	7.63	----	33.7	59.0	----	----	----	18,800,000	37,200
U4-E-06I	6/12/2023	N	EM10	UMCf	73.2 - 88.2	259.0	6.56	----	26.4	60.6	----	----	----	11,600,000	25,300
U4-E-06I	7/11/2023	N	EM11	UMCf	73.2 - 88.2	83.3	6.39	----	30.3	244.0	----	----	----	13,200,000	22,800
U4-E-06I	8/11/2023	N	EM12	UMCf	73.2 - 88.2	77.8	5.77	----	27.5	29.3	----	----	----	11,700,000	28,200
U4-E-06I	9/11/2023	N	EM13	UMCf	73.2 - 88.2	-110.2	6.1	----	32.3	165	----	----	----	7,360,000	7.42
U4-E-06I	10/16/2023	N	EM14	UMCf	73.2 - 88.2	-129.9	6.18	----	31.4	534.4	----	----	----	6,000,000 J-	30.1
U4-E-06I	12/13/2023	N	EM16	UMCf	73.2 - 88.2	25.0	5.98	0.0 U	22.5	523.4	----	----	----	6,680,000	28.7
U4-E-07D	4/12/2022	N	BL02	UMCf	94.6 - 109.6	134.9	7.20	0.0 U	18.5	16.0	<4.07	<4.26	<2.91	37,900,000	76,300 J-
U4-E-07I	4/12/2022	N	BL02	UMCf	74.7 - 89.7	164.9	8.12	0.0 U	20.2	2.8	<4.07	<4.26	<2.91	6,860,000	12,200 J
U4-E-07I	10/11/2022	N	EM02	UMCf	74.7 - 89.7	----	----	----	----	----	----	----	----	17,000,000	48,700
U4-E-07I	11/3/2022	N	EM03	UMCf	74.7 - 89.7	191.3	7.16	----	22.3	21294.5	----	----	----	12,800,000	42,300 J-
U4-E-07I	12/6/2022	N	EM04	UMCf	74.7 - 89.7	29.1	7.20	----	24.0	3.7	----	----	----	15,000,000	38,500
U4-E-07I	1/9/2023	N	EM05	UMCf	74.7 - 89.7	90.9	7.45	----	21.9	0.2	----	----	----	11,800,000	39,800
U4-E-07I	2/13/2023	N	EM06	UMCf	74.7 - 89.7	28.0	7.84	----	21.8	1.1	----	----	----	13,100,000	43,200
U4-E-07I	3/13/2023	N	EM07	UMCf	74.7 - 89.7	90.3	7.05	----	24.2	79.0	----	----	----	12,500,000	41,600

Table 4
Groundwater Analytical Results
Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	RSK175	RSK175	RSK175	SM2540C	SW7199
						Oxidation-Reduction Potential	pH	Sulfide	Temperature	Turbidity	Ethane	Ethene	Methane	Total Dissolved Solids	Chromium, Hexavalent
						mV	SU	mg/L	C	NTU	ug/L	ug/L	ug/L	ug/L	ug/L
U4-E-07I	4/19/2023	N	EM08	UMCf	74.7 - 89.7	138.8	6.73	----	23.9	12.1	----	----	----	12,300,000	35,400
U4-E-07I	5/15/2023	N	EM09	UMCf	74.7 - 89.7	120.1	7.60	----	34.0	189.9	----	----	----	12,800,000	31,700
U4-E-07I	6/12/2023	N	EM10	UMCf	74.7 - 89.7	225.2	6.92	----	27.4	8.7	----	----	----	9,840,000	29,400
U4-E-07I	7/11/2023	N	EM11	UMCf	74.7 - 89.7	220.3	6.87	----	34.4	398.2	----	----	----	11,300,000	33,100
U4-E-07I	8/11/2023	N	EM12	UMCf	74.7 - 89.7	121.4	6.03	----	28.5	274.4	----	----	----	12,200,000	30,400
U4-E-07I	9/11/2023	N	EM13	UMCf	74.7 - 89.7	107.1	6.68	----	33.3	246.8	----	----	----	15,900,000	36,500
U4-E-07I	10/16/2023	N	EM14	UMCf	74.7 - 89.7	74.9	6.56	----	30.4	597.3	----	----	----	15,200,000 J-	37,600
U4-E-07I	12/13/2023	N	EM16	UMCf	74.7 - 89.7	139.3	6.66	0.0 U	23.7	67.1	----	----	----	15,400,000	36,600
U4-E-08D	4/12/2022	N	BL02	UMCf	94.6 - 109.6	185.4	7.17	0.0 U	20.2	3.6	<4.07	<4.26	<2.91	39,500,000	85,100 J-
U4-E-08D	10/11/2022	N	EM02	UMCf	94.6 - 109.6	----	----	----	----	----	----	----	----	24,000,000	69,700
U4-E-08D	11/3/2022	N	EM03	UMCf	94.6 - 109.6	-21.2	6.86	----	21.8	24.9	----	----	----	22,800,000	60,100 J-
U4-E-08D	12/6/2022	N	EM04	UMCf	94.6 - 109.6	140.3	7.03	----	23.8	-0.4	----	----	----	23,600,000	52,600 J-
U4-E-08D	1/9/2023	N	EM05	UMCf	94.6 - 109.6	94.3	7.21	----	21.7	0.0	----	----	----	14,100,000	52,500
U4-E-08D	2/13/2023	N	EM06	UMCf	94.6 - 109.6	139.4	7.51	----	21.7	11.6	----	----	----	15,800,000	51,000
U4-E-08D	3/13/2023	N	EM07	UMCf	94.6 - 109.6	188.9	6.86	----	24.5	72.7	----	----	----	16,100,000	47,800
U4-E-08D	4/19/2023	N	EM08	UMCf	94.6 - 109.6	52.0	6.45	----	24.2	2.4	----	----	----	17,200,000	42,700
U4-E-08D	5/17/2023	N	EM09	UMCf	94.6 - 109.6	138.5	7.13	----	33.3	149.7	----	----	----	18,900,000	37,700
U4-E-08D	6/12/2023	N	EM10	UMCf	94.6 - 109.6	271.2	6.93	----	27.4	10.9	----	----	----	16,600,000	36,800
U4-E-08D	7/11/2023	N	EM11	UMCf	94.6 - 109.6	307.9	6.95	----	31.1	3385.4	----	----	----	16,500,000	42,100
U4-E-09D	4/15/2022	N	BL02	UMCf	94.5 - 109.5	131.3	7.20	0.0 U	26.7	5.2	<4.07	<4.26	<2.91	7,500,000	26,400 J-
U4-E-09I	4/14/2022	N	BL02	UMCf	74.9 - 89.9	42.3	7.51	0.0 U	25.0	53.8	<4.07	<4.26	<2.91	5,550,000	13,000
U4-E-10D	4/13/2022	N	BL02	UMCf	94.5 - 109.5	200.4	8.07	0.0 U	23.0	13.1	<4.07	<4.26	<2.91	3,940,000	9,360
U4-E-10I	4/13/2022	N	BL02	UMCf	74.2 - 89.2	223.7	7.20	0.0 U	21.6	17.0	<4.07	<4.26	<2.91	3,690,000	17,000
U4-MW-01D	4/19/2022	N	BL02	UMCf	96.7 - 106.7	130.5	7.14	0.0 U	30.0	7.9	----	----	----	7,230,000	16,500 J-
U4-MW-01D	2/16/2023	N	EM06	UMCf	96.7 - 106.7	190.0	7.35	----	22.9	55.9	----	----	----	----	31,700
U4-MW-01D	3/20/2023	N	EM07	UMCf	96.7 - 106.7	164.9	7.53	0.0 U	22.7	543.3	<4.07	<4.26	<2.91	11,300,000	26,300
U4-MW-01D	6/13/2023	N	EM10	UMCf	96.7 - 106.7	217.9	7.51	0.0 U	26.1	437.1	<4.07	<4.26	<2.91	7,810,000	19,500
U4-MW-01D	9/14/2023	N	EM13	UMCf	96.7 - 106.7	171.4	7.5	0 U	29.3	110.3	<4.07	<4.26	<2.91	3,940,000	18,300
U4-MW-01D	12/14/2023	N	EM16	UMCf	96.7 - 106.7	192.5	7.64	0.0 U	25.9	-42779.5	<4.07	<4.26	26,800	6,680,000	16,000
U4-MW-01DD	4/19/2022	N	BL02	UMCf	119.9 - 129.9	70.8	7.75	0.0 U	33.3	27.7	----	----	----	1,040,000	477 J
U4-MW-01DD	4/19/2022	FD	BL02	UMCf	119.9 - 129.9	----	----	----	----	----	----	----	----	1,020,000	458 J
U4-MW-01DD	3/15/2023	N	EM07	UMCf	119.9 - 129.9	61.8	7.33	0.0 U	24.7	56.4	<4.07	<4.26	<2.91	3,960,000	11,400
U4-MW-01DD	6/13/2023	N	EM10	UMCf	119.9 - 129.9	171.6	7.59	0.0 U	31.4	73.2	<4.07	<4.26	<2.91	4,250,000	9,380
U4-MW-01DD	9/14/2023	N	EM13	UMCf	119.9 - 129.9	145.3	7.45	0 U	28.6	55.4	<4.07	<4.26	<2.91	3,910,000	11,000
U4-MW-01DD	12/15/2023	N	EM16	UMCf	119.9 - 129.9	160.6	7.57	0.0 U	21.0	7.4	<4.07	<4.26	<2.91	2,810,000	5,040
U4-MW-01I	4/19/2022	N	BL02	UMCf	76.7 - 86.7	103.3	7.70	0.0 U	27.3	60.1	----	----	----	3,790,000	<150 UJ
U4-MW-01I	3/20/2023	N	EM07	UMCf	76.7 - 86.7	137.9	7.59	0.0 U	23.5	2768.5	<4.07	<4.26	11.4	12,700,000	26,500
U4-MW-01I	6/12/2023	N	EM10	UMCf	76.7 - 86.7	159.7	7.60	0.0 U	27.3	515.2	<4.07	<4.26	<2.91	7,010,000	18,000
U4-MW-01I	9/14/2023	N	EM13	UMCf	76.7 - 86.7	133.7	7.49	0 U	30.9	151	<4.07	<4.26	29.9	5,630,000	19,300
U4-MW-01I	12/15/2023	N	EM16	UMCf	76.7 - 86.7	----	----	----	----	----	<4.07	<4.26	21,400	6,280,000 J-	19,600
U4-MW-01S	4/18/2022	N	BL02	UMCf	54.7 - 64.7	99.5	8.75	0.0 U	27.6	1501.7	----	----	----	3,130,000	1,770 J-
U4-MW-01S	3/15/2023	N	EM07	UMCf	54.7 - 64.7	-4.5	8.44	0.0 U	24.7	147.1	<4.07	<4.26	<2.91	2,670,000	1,330
U4-MW-01S	6/13/2023	N	EM10	UMCf	54.7 - 64.7	164.7	8.57	0.0 U	28.4	158.0	<4.07	<4.26	<2.91	2,950,000	1,440
U4-MW-01S	9/15/2023	N	EM13	UMCf	54.7 - 64.7	83.9	8.6	0 U	28.8	167.4	<4.07	<4.26	2,150	2,850,000	1,460
U4-MW-01S	12/13/2023	N	EM16	UMCf	54.7 - 64.7	-48.3	8.50	0.0 U	25.3	26.6	<4.07	<4.26	8,920	2,360,000	1,160
U4-MW-02D	4/14/2022	N	BL02	UMCf	95.0 - 110.0	206.4	7.25	0.0 U	26.4	5.4	----	----	----	63,700,000	95,800
U4-MW-02D	10/11/2022	N	EM02	UMCf	95.0 - 110.0	202.1	7.14	----	26.1	2.9	----	----	----	75,100,000 J-	148,000
U4-MW-02D	11/1/2022	N	EM03	UMCf	95.0 - 110.0	114.9	7.21	----	27.6	1.4	----	----	----	53,300,000	139,000
U4-MW-02D	12/7/2022	N	EM04	UMCf	95.0 - 110.0	139.7	7.32	----	23.6	5.1	----	----	----	29,900,000	152,000 J-
U4-MW-02D	1/10/2023	N	EM05	UMCf	95.0 - 110.0	124.2	7.31	----	23.0	3.5	----	----	----	36,600,000	110,000
U4-MW-02D	2/13/2023	N	EM06	UMCf	95.0 - 110.0	199.9	7.39	----	23.7	11.6	----	----	----	44,500,000	120,000 J-

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	RSK175	RSK175	RSK175	SM2540C	SW7199
						Oxidation-Reduction Potential	pH	Sulfide	Temperature	Turbidity	Ethane	Ethene	Methane	Total Dissolved Solids	Chromium, Hexavalent
						mV	SU	mg/L	C	NTU	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-02D	3/17/2023	N	EM07	UMCf	95.0 - 110.0	178.4	7.26	0.0 U	24.8	8.9	<4.07	<4.26	<2.91	51,200,000	106,000
U4-MW-02D	4/19/2023	N	EM08	UMCf	95.0 - 110.0	42.5	7.15	0.0 U	26.0	9.4	----	----	----	41,000,000	122,000
U4-MW-02D	5/9/2023	N	EM09	UMCf	95.0 - 110.0	94.9	7.25	0.0 U	25.5	12.2	----	----	----	26,900,000 J	107,000 J-
U4-MW-02D	6/13/2023	N	EM10	UMCf	95.0 - 110.0	154.1	7.28	0.0 U	28.1	3.4	<4.07	<4.26	<2.91	42,700,000	95,500
U4-MW-02D	7/18/2023	N	EM11	UMCf	95.0 - 110.0	117.3	7.25	0.0 U	27.7	32.3	----	----	----	55,900,000	109,000
U4-MW-02D	8/14/2023	N	EM12	UMCf	95.0 - 110.0	133.6	7.33	0 U	29.4	4	----	----	----	41,000,000	96,200
U4-MW-02D	9/11/2023	N	EM13	UMCf	95.0 - 110.0	150.9	7.38	0 U	28.9	92.1	<4.07	<4.26	67.6	39,000,000	92,700
U4-MW-02D	10/19/2023	N	EM14	UMCf	95.0 - 110.0	161.6	7.19	0 U	26.1	28.9	----	----	----	37,300,000	115,000
U4-MW-02D	11/15/2023	N	EM15	UMCf	95.0 - 110.0	233.7	7.16	0 U	24.1	1.5	----	----	----	29,400,000 J-	87,500
U4-MW-02D	12/14/2023	N	EM16	UMCf	95.0 - 110.0	325.6	6.99	0.0 U	21.8	14.1	<4.07	<4.26	29,600	38,400,000	84,100
U4-MW-02I	4/14/2022	N	BL02	UMCf	75.0 - 90.0	159.8	8.09	0.0 U	28.4	15.2	----	----	----	6,660,000	12,800
U4-MW-02I	10/11/2022	N	EM02	UMCf	75.0 - 90.0	172.7	7.07	----	25.3	56.9	----	----	----	11,000,000	33,900
U4-MW-02I	11/2/2022	N	EM03	UMCf	75.0 - 90.0	148.7	6.86	----	25.0	36.2	----	----	----	15,700,000	48,200
U4-MW-02I	11/2/2022	FD	EM03	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	20,400,000	46,600
U4-MW-02I	12/8/2022	N	EM04	UMCf	75.0 - 90.0	168.4	6.91	----	14.5	5.0	----	----	----	1,860,000 J	3,720 J-
U4-MW-02I	12/8/2022	FD	EM04	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	3,300,000 J	3,620
U4-MW-02I	1/13/2023	N	EM05	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	8,500,000	21,700
U4-MW-02I	1/13/2023	FD	EM05	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	8,640,000	21,900
U4-MW-02I	2/15/2023	N	EM06	UMCf	75.0 - 90.0	232.8	6.61	----	23.4	115.7	----	----	----	26,500,000	69,100 J-
U4-MW-02I	2/15/2023	FD	EM06	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	24,800,000	69,400 J-
U4-MW-02I	3/17/2023	N	EM07	UMCf	75.0 - 90.0	129.0	6.43	0.0 U	25.4	37.4	<4.07	<4.26	3,560	30,400,000	69,400
U4-MW-02I	3/17/2023	FD	EM07	UMCf	75.0 - 90.0	----	----	----	----	----	<4.07	<4.26	3,310	29,100,000	68,600
U4-MW-02I	4/20/2023	N	EM08	UMCf	75.0 - 90.0	8.1	6.31	0.0 U	25.3	129.2	----	----	----	2,060,000	3.98 J-
U4-MW-02I	4/20/2023	FD	EM08	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	1,990,000	4.15 J-
U4-MW-02I	5/9/2023	N	EM09	UMCf	75.0 - 90.0	135.2	6.57	0.0 U	26.8	30.3	----	----	----	2,200,000	4.96
U4-MW-02I	5/9/2023	FD	EM09	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	2,770,000	5.57
U4-MW-02I	6/12/2023	N	EM10	UMCf	75.0 - 90.0	110.4	6.57	0.0 U	30.7	13.7	<4.07	<4.26	6,720	2,860,000	1.15
U4-MW-02I	6/12/2023	FD	EM10	UMCf	75.0 - 90.0	----	----	----	----	----	<4.07	<4.26	6,540	2,990,000	1.28
U4-MW-02I	7/18/2023	N	EM11	UMCf	75.0 - 90.0	-196.8	6.37	2.0	27.0	79.4	----	----	----	2,810,000	0.301 J
U4-MW-02I	7/18/2023	FD	EM11	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	2,690,000 J-	0.573
U4-MW-02I	8/11/2023	N	EM12	UMCf	75.0 - 90.0	47.7	6.36	0 U	32.7	20.9	----	----	----	8,140,000	6,390
U4-MW-02I	8/11/2023	FD	EM12	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	9,020,000	5,680
U4-MW-02I	9/11/2023	N	EM13	UMCf	75.0 - 90.0	128.6	6.31	0 U	28	102	<4.07	<4.26	9,930	7,750,000	867
U4-MW-02I	9/11/2023	FD	EM13	UMCf	75.0 - 90.0	----	----	----	----	----	<4.07	<4.26	10,300	6,530,000	869
U4-MW-02I	10/19/2023	N	EM14	UMCf	75.0 - 90.0	136.3	6.61	0 U	26.9	43.3	----	----	----	9,840,000 J	24,700
U4-MW-02I	10/19/2023	FD	EM14	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	14,000,000 J	25,000
U4-MW-02I	11/15/2023	N	EM15	UMCf	75.0 - 90.0	-80.6	6.68	0 U	25.7	7.5	----	----	----	10,700,000	20,000
U4-MW-02I	11/15/2023	FD	EM15	UMCf	75.0 - 90.0	----	----	----	----	----	----	----	----	11,500,000	19,300
U4-MW-02I	12/14/2023	N	EM16	UMCf	75.0 - 90.0	176.3	6.32	0.0 U	24.2	15.0	<4.07	<4.26	7,170	8,420,000	24,300
U4-MW-02I	12/14/2023	FD	EM16	UMCf	75.0 - 90.0	----	----	----	----	----	<4.07	<4.26	7,010	7,660,000	24,700
U4-MW-03D	4/20/2022	N	BL02	UMCf	96.6 - 106.6	209.7	7.29	0.0 U	26.7	31.0	----	----	----	23,000,000	42,100
U4-MW-03D	2/16/2023	N	EM06	UMCf	96.6 - 106.6	168.2	7.47	----	22.6	35.4	----	----	----	----	31,800
U4-MW-03D	3/16/2023	N	EM07	UMCf	96.6 - 106.6	76.1	7.37	0.0 U	23.8	35.8	<4.07	<4.26	59.1 J	14,400,000	28,100
U4-MW-03D	3/16/2023	FD	EM07	UMCf	96.6 - 106.6	----	----	----	----	----	<4.07	<4.26	<2.91 UJ	13,400,000	27,200
U4-MW-03D	6/15/2023	N	EM10	UMCf	96.6 - 106.6	277.6	7.31	0.0 U	26.5	236.1	<4.07	<4.26	<2.91	10,000,000	28,000
U4-MW-03D	9/14/2023	N	EM13	UMCf	96.6 - 106.6	198.5	6.9	0 U	27.1	385	<4.07	<4.26	920	14,700,000	34,700 J
U4-MW-03D	12/13/2023	N	EM16	UMCf	96.6 - 106.6	-104.9	6.21	0.0 U	26.2	226.1	<4.07	<4.26	4,850	14,100,000	25,300
U4-MW-03DD	4/20/2022	N	BL02	UMCf	119.7 - 129.7	220.6	7.54	0.0 U	26.3	24.2	----	----	----	2,070,000	2,660
U4-MW-03DD	3/15/2023	N	EM07	UMCf	119.7 - 129.7	35.0	8.22	0.0 U	22.1	-57.2	<4.07	<4.26	<2.91	567,000	60.5
U4-MW-03DD	6/15/2023	N	EM10	UMCf	119.7 - 129.7	185.0	8.22	0.0 U	28.0	20.2	<4.07	<4.26	<2.91	556,000	42.9
U4-MW-03DD	9/14/2023	N	EM13	UMCf	119.7 - 129.7	189.8	8.45	0 U	30.1	28.4	<4.07	<4.26	<2.91	560,000	20.7

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	RSK175	RSK175	RSK175	SM2540C	SW7199
						Oxidation-Reduction Potential	pH	Sulfide	Temperature	Turbidity	Ethane	Ethene	Methane	Total Dissolved Solids	Chromium, Hexavalent
						mV	SU	mg/L	C	NTU	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-03DD	12/14/2023	N	EM16	UMCf	119.7 - 129.7	233.3	8.43	0.0 U	22.8	29.4	<4.07	<4.26	<2.91	576,000	33.8
U4-MW-03I	4/19/2022	N	BL02	UMCf	76.6 - 86.6	57.0	8.02	0.0 U	30.2	8489.8	----	----	----	2,350,000	<150 UJ
U4-MW-03I	3/15/2023	N	EM07	UMCf	76.6 - 86.6	95.9	7.44	0.0 U	25.2	159.7	<4.07	<4.26	<2.91	12,000,000	24,500
U4-MW-03I	6/14/2023	N	EM10	UMCf	76.6 - 86.6	230.1	7.54	0.0 U	29.9	181.6	<4.07	<4.26	35.1	12,300,000	11,400
U4-MW-03I	6/14/2023	FD	EM10	UMCf	76.6 - 86.6	----	----	----	----	----	<4.07	<4.26	33.9	12,100,000	11,500
U4-MW-03I	9/11/2023	N	EM13	UMCf	76.6 - 86.6	157.1	7.16	0 U	36.1	76.7	<4.07	<4.26	316 J	14,900,000	26,400
U4-MW-03I	9/11/2023	FD	EM13	UMCf	76.6 - 86.6	----	----	----	----	----	<4.07	<4.26	149 J	13,700,000	26,700
U4-MW-03I	12/13/2023	N	EM16	UMCf	76.6 - 86.6	-89.0	6.44	0.0 U	25.5	676.1	<4.07	<4.26	11,500	13,300,000	22,900
U4-MW-03I	12/13/2023	FD	EM16	UMCf	76.6 - 86.6	----	----	----	----	----	<4.07	<4.26	9,730	13,100,000	22,800
U4-MW-03S	4/18/2022	N	BL02	UMCf	54.5 - 64.5	105.4	9.74	0.0 U	27.3	38.0	----	----	----	2,890,000	1,390 J-
U4-MW-03S	4/18/2022	FD	BL02	UMCf	54.5 - 64.5	----	----	----	----	----	----	----	----	2,190,000 J-	1,390 J-
U4-MW-03S	3/15/2023	N	EM07	UMCf	54.5 - 64.5	-0.9	9.48	0.0 U	22.1	-21.0	<4.07	<4.26	<2.91	2,440,000 J	2,300
U4-MW-03S	6/15/2023	N	EM10	UMCf	54.5 - 64.5	171.1	8.84	0.0 U	27.3	21.3	<4.07	<4.26	799	2,880,000	2,470
U4-MW-03S	9/14/2023	N	EM13	UMCf	54.5 - 64.5	-20	8.81	0 U	27.3	7.7	<4.07	<4.26	3,620	2,470,000	1,840
U4-MW-03S	12/13/2023	N	EM16	UMCf	54.5 - 64.5	180.6	8.94	0.0 U	25.8	41.8	<4.07	<4.26	6,400	2,680,000	1,210
U4-MW-04D	4/19/2022	N	BL02	UMCf	97.0 - 107.0	76.7	7.01	0.0 U	30.1	18.0	----	----	----	56,100,000	103,000 J
U4-MW-04D	2/16/2023	N	EM06	UMCf	97.0 - 107.0	185.1	7.60	----	21.5	38.7	----	----	----	----	18,300
U4-MW-04D	3/21/2023	N	EM07	UMCf	97.0 - 107.0	43.3	7.80	0.0 U	20.3	420.1	<4.07	<4.26	<2.91	5,570,000 J	14,300
U4-MW-04D	6/14/2023	N	EM10	UMCf	97.0 - 107.0	22.8	7.20	0.0 U	37.5	7.3	<4.07	<4.26	1,030	5,170,000	5,350
U4-MW-04D	9/15/2023	N	EM13	UMCf	97.0 - 107.0	279.6	6.88	0 U	28.7	14.3	<4.07	<4.26	15,100	9,070,000	19,800
U4-MW-04D	12/12/2023	N	EM16	UMCf	97.0 - 107.0	188.3	6.51	0.0 U	23.9	231.9	<4.07	<4.26	27,900	6,330,000	12,000
U4-MW-04I	4/19/2022	N	BL02	UMCf	76.8 - 86.8	49.8	7.36	0.0 U	27.6	78.2	----	----	----	22,500,000	34,300 J-
U4-MW-04I	3/20/2023	N	EM07	UMCf	76.8 - 86.8	144.6	7.43	0.0 U	23.3	482.0	<4.07	<4.26	<2.91	19,200,000	38,600
U4-MW-04I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	96.3	6.90	0.0 U	32.3	185.0	<4.07	<4.26	148	13,200,000	34,300
U4-MW-04I	9/14/2023	N	EM13	UMCf	76.8 - 86.8	168.9	6.83	0 U	28.4	403.3	<4.07	<4.26	3,910	30,700,000	63,400
U4-MW-04I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	107.2	6.53	0.0 U	23.2	169.0	<4.07	<4.26	24,000	24,400,000	59,900
U4-MW-05D	4/15/2022	N	BL02	UMCf	98.2 - 108.2	146.1	7.03	0.0 U	28.3	39.5	----	----	----	27,800,000	73,100 J-
U4-MW-05D	10/13/2022	N	EM02	UMCf	98.2 - 108.2	190.6	7.02	----	28.3	235.7	----	----	----	30,400,000 J-	69,500
U4-MW-05D	11/3/2022	N	EM03	UMCf	98.2 - 108.2	121.3	7.64	----	23.6	92823.7	----	----	----	15,100,000	46,500
U4-MW-05D	12/7/2022	N	EM04	UMCf	98.2 - 108.2	143.6	7.59	----	23.1	106.9	----	----	----	15,100,000	44,900
U4-MW-05D	1/11/2023	N	EM05	UMCf	98.2 - 108.2	187.0	7.27	----	22.5	138.6	----	----	----	10,200,000	44,700
U4-MW-05D	2/14/2023	N	EM06	UMCf	98.2 - 108.2	190.5	7.55	----	15.4	268.7	----	----	----	9,200,000	31,800
U4-MW-05D	3/16/2023	N	EM07	UMCf	98.2 - 108.2	57.4	7.45	0.0 U	24.8	331.6	<4.07	<4.26	55.6 J+	11,400,000	28,200
U4-MW-05D	4/20/2023	N	EM08	UMCf	98.2 - 108.2	36.1	7.31	0.0 U	27.4	130.7	----	----	----	6,160,000	18,900
U4-MW-05D	5/10/2023	N	EM09	UMCf	98.2 - 108.2	133.6	5.83	0.0 U	28.4	22.4	----	----	----	3,790,000	10,400
U4-MW-05D	6/15/2023	N	EM10	UMCf	98.2 - 108.2	133.4	6.48	0.0 U	34.4	127.1	<4.07	<4.26	1,860	6,880,000	5,460
U4-MW-05D	7/18/2023	N	EM11	UMCf	98.2 - 108.2	182.4	6.42	0.0 U	31.1	127.0	----	----	----	8,820,000	7,530
U4-MW-05D	8/14/2023	N	EM12	UMCf	98.2 - 108.2	100.2	6.71	0 U	36.5	54.6	----	----	----	9,980,000	15,300
U4-MW-05D	9/12/2023	N	EM13	UMCf	98.2 - 108.2	99.9	6.21	0 U	29.4	28.3	<4.07	<4.26	23,000	4,150,000	2,260
U4-MW-05D	10/18/2023	N	EM14	UMCf	98.2 - 108.2	104.5	6.41	0 U	31.1	76.6	----	----	----	9,400,000	10,200
U4-MW-05D	11/16/2023	N	EM15	UMCf	98.2 - 108.2	-35.5	6.34	0 U	23.7	24.7	----	----	----	8,100,000	10,800
U4-MW-05D	12/14/2023	N	EM16	UMCf	98.2 - 108.2	-183.3	6.03	0.0 U	23.5	105.3	<4.07	<4.26	4,060	11,600,000	697
U4-MW-05I	4/15/2022	N	BL02	UMCf	76.6 - 86.6	140.1	7.54	0.0 U	23.2	2057.3	----	----	----	12,900,000	42,800 J-
U4-MW-05I	10/13/2022	N	EM02	UMCf	76.6 - 86.6	205.5	7.04	----	25.6	1860.6	----	----	----	29,100,000	70,800
U4-MW-05I	11/3/2022	N	EM03	UMCf	76.6 - 86.6	130.9	7.57	----	24.1	90637.6	----	----	----	22,800,000	61,900 J-
U4-MW-05I	12/8/2022	N	EM04	UMCf	76.6 - 86.6	132.0	7.34	----	23.3	1119.7	----	----	----	19,400,000 J	49,600
U4-MW-05I	1/11/2023	N	EM05	UMCf	76.6 - 86.6	192.5	7.29	----	23.1	7501.5	----	----	----	10,300,000	45,300
U4-MW-05I	2/14/2023	N	EM06	UMCf	76.6 - 86.6	179.4	7.53	----	22.3	1495.6	----	----	----	9,860,000	36,900
U4-MW-05I	3/14/2023	N	EM07	UMCf	76.6 - 86.6	77.0	7.65	0.0 U	24.0	6501.9	<4.07	<4.26	<2.91	9,700,000	30,400
U4-MW-05I	4/21/2023	N	EM08	UMCf	76.6 - 86.6	-3.0	7.08	0.0 U	26.2	62.0	----	----	----	3,810,000	5,170
U4-MW-05I	5/10/2023	N	EM09	UMCf	76.6 - 86.6	-31.5	5.71	0.0 U	26.6	61.6	----	----	----	4,590,000	1.83

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	RSK175	RSK175	RSK175	SM2540C	SW7199
						Oxidation-Reduction Potential	pH	Sulfide	Temperature	Turbidity	Ethane	Ethene	Methane	Total Dissolved Solids	Chromium, Hexavalent
						mV	SU	mg/L	C	NTU	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-05I	6/15/2023	N	EM10	UMCf	76.6 - 86.6	-156.7	6.57	0.2	34.2	28.6	<4.07	<4.26	1,350	3,650,000	4.86
U4-MW-05I	7/17/2023	N	EM11	UMCf	76.6 - 86.6	141.8	6.71	0.0 U	29.0	5574.9	----	----	----	8,240,000	5,340
U4-MW-05I	8/14/2023	N	EM12	UMCf	76.6 - 86.6	107.5	6.74	0 U	36.7	168	----	----	----	7,900,000	1,150
U4-MW-05I	9/13/2023	N	EM13	UMCf	76.6 - 86.6	126.6	6.36	0 U	28.2	5801.7	<4.07	<4.26	21,300	4,520,000	293
U4-MW-05I	10/18/2023	N	EM14	UMCf	76.6 - 86.6	99.1	6.95	0 U	28.2	1318.1	----	----	----	7,100,000	390
U4-MW-05I	11/15/2023	N	EM15	UMCf	76.6 - 86.6	-1.8	6.59	0 U	25.9	173.7	----	----	----	7,920,000	279
U4-MW-05I	12/12/2023	N	EM16	UMCf	76.6 - 86.6	-181.9	6.27	0.0 U	24.4	169.3	<4.07	<4.26	11,200	8,280,000	607
U4-MW-06D	4/19/2022	N	BL02	UMCf	97.1 - 107.1	----	----	0.0 U	----	----	----	----	----	43,400,000	73,100 J-
U4-MW-06D	2/15/2023	N	EM06	UMCf	97.1 - 107.1	198.6	7.34	----	21.3	76.0	----	----	----	----	36,900 J-
U4-MW-06D	3/21/2023	N	EM07	UMCf	97.1 - 107.1	196.2	7.10	0.0 U	21.2	55.0	<4.07	<4.26	<2.91	16,000,000	36,500
U4-MW-06D	6/16/2023	N	EM10	UMCf	97.1 - 107.1	140.6	7.26	0.0 U	20.3	-2.7	<4.07	<4.26	<2.91	12,500,000	29,300
U4-MW-06D	9/13/2023	N	EM13	UMCf	97.1 - 107.1	23.9	6.08	0 U	34.2	52.2	<4.07	<4.26	14,500	11,800,000	31,500
U4-MW-06D	12/13/2023	N	EM16	UMCf	97.1 - 107.1	280.8	5.82	0.0 U	14.9	222.9	<4.07	<4.26	16,300	22,800,000	39,100
U4-MW-06I	4/19/2022	N	BL02	UMCf	76.5 - 86.5	132.2	8.14	0.0 U	27.5	171.5	----	----	----	3,420,000	3,070 J-
U4-MW-06I	3/14/2023	N	EM07	UMCf	76.5 - 86.5	120.3	7.90	0.0 U	18.2	204.9	<4.07	<4.26	<2.91	17,100,000	42,800
U4-MW-06I	6/16/2023	N	EM10	UMCf	76.5 - 86.5	94.8	8.27	0.0 U	22.3	-4.5	<4.07	<4.26	110	12,600,000	29,000
U4-MW-06I	9/12/2023	N	EM13	UMCf	76.5 - 86.5	31.2	6.42	0 U	36.9	23.1	<4.07	<4.26	12,100	16,800,000	35,200
U4-MW-06I	12/12/2023	N	EM16	UMCf	76.5 - 86.5	-77.3	6.06	0.0 U	24.5	130.8	<4.07	<4.26	16,300	24,300,000	40,300
U4-MW-07D	4/15/2022	N	BL02	UMCf	96.8 - 106.5	182.2	7.48	0.0 U	26.7	52.5	----	----	----	5,820,000	23,900 J+
U4-MW-07D	10/12/2022	N	EM02	UMCf	96.8 - 106.5	93.5	7.79	----	28.7	9.7	----	----	----	1,310,000 J-	2,080
U4-MW-07D	10/12/2022	FD	EM02	UMCf	96.8 - 106.5	----	----	----	----	----	----	----	----	1,330,000	2,120
U4-MW-07D	11/3/2022	N	EM03	UMCf	96.8 - 106.5	111.1	7.85	----	23.9	97.4	----	----	----	1,220,000 J+	1,610 J-
U4-MW-07D	12/7/2022	N	EM04	UMCf	96.8 - 106.5	106.4	7.83	----	23.8	14.1	----	----	----	1,050,000	1,080 J-
U4-MW-07D	1/11/2023	N	EM05	UMCf	96.8 - 106.5	105.0	7.74	----	24.3	22.8	----	----	----	1,260,000	1,380 J-
U4-MW-07D	2/14/2023	N	EM06	UMCf	96.8 - 106.5	161.8	7.79	----	22.3	73.4	----	----	----	1,070,000	1,250 J-
U4-MW-07D	3/16/2023	N	EM07	UMCf	96.8 - 106.5	140.8	7.92	0.0 U	28.6	39.6	<4.07	<4.26	53.0 J+	1,070,000	922
U4-MW-07D	4/21/2023	N	EM08	UMCf	96.8 - 106.5	-393.7	6.15	0.0 U	26.2	106.9	----	----	----	3,630,000	5,020
U4-MW-07D	5/11/2023	N	EM09	UMCf	96.8 - 106.5	47.7	5.65	0.0 U	27.5	34.4	----	----	----	3,170,000	692
U4-MW-07D	6/13/2023	N	EM10	UMCf	96.8 - 106.5	108.0	6.37	0.0 U	32.9	8.8	<4.07	<4.26	18,000	3,280,000	1,160 J-
U4-MW-07D	7/17/2023	N	EM11	UMCf	96.8 - 106.5	162.4	6.70	0.0 U	30.8	156.5	----	----	----	13,200,000	29,900
U4-MW-07D	8/11/2023	N	EM12	UMCf	96.8 - 106.5	128.8	6.46	0 U	28.9	214.8	----	----	----	11,800,000	26,900
U4-MW-07D	9/13/2023	N	EM13	UMCf	96.8 - 106.5	174.6	6.3	0 U	29.2	41.7	<4.07	<4.26	17,700	7,100,000	15,700
U4-MW-07D	10/18/2023	N	EM14	UMCf	96.8 - 106.5	124.7	6.6	0 U	26.8	25.5	----	----	----	11,800,000	23,100
U4-MW-07D	11/16/2023	N	EM15	UMCf	96.8 - 106.5	-32.5	6.21	0 U	24.3	31.9	----	----	----	12,500,000	22,500
U4-MW-07D	12/12/2023	N	EM16	UMCf	96.8 - 106.5	-147.3	5.88	0.0 U	20.0	113.4	<4.07	<4.26	7,250	7,320,000	3,150
U4-MW-07I	4/15/2022	N	BL02	UMCf	76.8 - 86.8	158.2	7.86	0.0 U	25.6	10.7	----	----	----	1,670,000	4,810 J+
U4-MW-07I	10/12/2022	N	EM02	UMCf	76.8 - 86.8	135.0	7.86	----	26.9	119.0	----	----	----	1,350,000 J	2,720
U4-MW-07I	11/3/2022	N	EM03	UMCf	76.8 - 86.8	141.5	7.93	----	23.9	1667.5	----	----	----	1,340,000	1,650 J-
U4-MW-07I	12/7/2022	N	EM04	UMCf	76.8 - 86.8	96.7	7.97	----	24.0	210.3	----	----	----	1,220,000	1,360 J-
U4-MW-07I	1/11/2023	N	EM05	UMCf	76.8 - 86.8	104.4	7.82	----	24.3	73.4	----	----	----	1,440,000	1,810 J-
U4-MW-07I	2/15/2023	N	EM06	UMCf	76.8 - 86.8	124.7	7.66	----	22.3	134.0	----	----	----	1,520,000	2,640 J-
U4-MW-07I	3/16/2023	N	EM07	UMCf	76.8 - 86.8	83.7	7.72	0.2	24.3	259.7	<4.07	<4.26	54.8 J+	1,630,000 J	2,670 J-
U4-MW-07I	4/21/2023	N	EM08	UMCf	76.8 - 86.8	-161.7	6.53	0.0 U	26.1	277.9	----	----	----	2,670,000	4,860
U4-MW-07I	5/11/2023	N	EM09	UMCf	76.8 - 86.8	-80.3	6.08	0.0 U	26.1	156.9	----	----	----	2,820,000	0.158 J
U4-MW-07I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	-262.2	6.78	0.4	29.9	105.6	<4.07	<4.26	376	3,030,000	<15.0
U4-MW-07I	7/17/2023	N	EM11	UMCf	76.8 - 86.8	133.1	6.53	0.0 U	27.5	504.0	----	----	----	7,260,000	1,900
U4-MW-07I	8/11/2023	N	EM12	UMCf	76.8 - 86.8	99.4	6.44	0 U	30	218.7	----	----	----	7,180,000	7,420 J-
U4-MW-07I	9/13/2023	N	EM13	UMCf	76.8 - 86.8	156.1	6.31	0 U	29	97.1	<4.07	<4.26	14,700	5,300,000	4,220
U4-MW-07I	10/18/2023	N	EM14	UMCf	76.8 - 86.8	96.4	6.51	0 U	25.8	100.1	----	----	----	7,440,000	340
U4-MW-07I	11/16/2023	N	EM15	UMCf	76.8 - 86.8	-112.3	6.36	0 U	25.2	145.2	----	----	----	7,700,000	4,230
U4-MW-07I	12/11/2023	N	EM16	UMCf	76.8 - 86.8	-111.1	6.10	0.0 U	23.8	127.9	<4.07	<4.26	5,450	7,540,000	2,720

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	RSK175	RSK175	RSK175	SM2540C	SW7199
						Oxidation-Reduction Potential	pH	Sulfide	Temperature	Turbidity	Ethane	Ethene	Methane	Total Dissolved Solids	Chromium, Hexavalent
						mV	SU	mg/L	C	NTU	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-08D	4/13/2022	N	BL02	UMCf	98.6 - 108.6	166.4	6.92	0.0 U	24.7	98.8 E	<4.07	<4.26	<2.91	48,000,000	106,000
U4-MW-08D	12/7/2022	N	EM04	UMCf	98.6 - 108.6	52.2	6.62	0.0 U	22.4	21.7	<4.07	<4.26	166	14,700,000	52,900 J-
U4-MW-08D	3/17/2023	N	EM07	UMCf	98.6 - 108.6	174.5	6.38	0.0 U	21.6	144.4	<4.07	<4.26	22,600	22,700,000	44,800
U4-MW-08D	6/13/2023	N	EM10	UMCf	98.6 - 108.6	126.1	6.54	0.0 U	27.2	142.7	<4.07	<4.26	31,700	37,200,000	55,900
U4-MW-08D	9/13/2023	N	EM13	UMCf	98.6 - 108.6	263.7	6.48	0 U	28.6	193.8	<4.07	<4.26	21,800	31,900,000	85,600
U4-MW-08D	12/11/2023	N	EM16	UMCf	98.6 - 108.6	181.2	6.28	0.0 U	23.5	189.1	<4.07	<4.26	22,300	30,600,000 J	75,900
U4-MW-08DD	4/20/2022	N	BL02	UMCf	119.8 - 129.8	5.0	7.70	0.0 U	24.6	62.4	<4.07	<4.26	<2.91	1,240,000	694
U4-MW-08DD	4/20/2022	FD	BL02	UMCf	119.8 - 129.8	----	----	----	----	----	<4.07	<4.26	<2.91	1,220,000	723
U4-MW-08DD	12/8/2022	N	EM04	UMCf	119.8 - 129.8	138.4	7.44	0.0 U	21.4	20.3	<4.07	<4.26	<2.91	751,000 J	384
U4-MW-08DD	3/15/2023	N	EM07	UMCf	119.8 - 129.8	63.2	7.54	0.0 U	24.5	8.5	<4.07	<4.26	<2.91	2,690,000	1,280
U4-MW-08DD	6/14/2023	N	EM10	UMCf	119.8 - 129.8	46.7	6.77	0.0 U	26.6	124.9	<4.07	<4.26	<2.91	2,380,000	1,270
U4-MW-08DD	9/14/2023	N	EM13	UMCf	119.8 - 129.8	290.1	7.54	0 U	27.1	9.8	<4.07	<4.26	<2.91	1,330,000 J	504
U4-MW-08DD	12/14/2023	N	EM16	UMCf	119.8 - 129.8	-1.3	7.34	0.0 U	23.2	4.4	<4.07	<4.26	<2.91	1,540,000 J	513
U4-MW-08I	4/13/2022	N	BL02	UMCf	78.0 - 88.0	183.3	7.71	0.0 U	22.8	-5857914.0 E	<4.07	<4.26	<2.91	3,380,000	7,950
U4-MW-08I	12/7/2022	N	EM04	UMCf	78.0 - 88.0	137.7	7.48	0.0 U	22.7	304.1	<4.07	<4.26	57.2	11,000,000	33,700
U4-MW-08I	12/7/2022	FD	EM04	UMCf	78.0 - 88.0	----	----	----	----	----	<4.07	<4.26	55.5	----	34,200 J-
U4-MW-08I	3/17/2023	N	EM07	UMCf	78.0 - 88.0	157.8	6.95	0.0 U	20.5	641.8	<4.07	<4.26	17,900	22,300,000	54,200
U4-MW-08I	6/13/2023	N	EM10	UMCf	78.0 - 88.0	13.5	7.06	0.0 U	25.2	49.9	<4.07	<4.26	4,260	5,340,000	11,600
U4-MW-08I	9/13/2023	N	EM13	UMCf	78.0 - 88.0	216.1	6.72	0 U	27.1	82.9	<4.07	<4.26	10,200	9,260,000	30,800
U4-MW-08I	12/11/2023	N	EM16	UMCf	78.0 - 88.0	146.5	6.42	0.0 U	23.8	217.1	<4.07	<4.26	13,400	11,600,000	32,200 J-
U4-MW-08S	4/15/2022	N	BL02	UMCf	54.9 - 64.9	79.6	9.96	0.0 U	27.1	55.4	<4.07	<4.26	<2.91	1,970,000	506 J+
U4-MW-08S	12/7/2022	N	EM04	UMCf	54.9 - 64.9	40.0	8.08	0.0 U	22.4	182.5	<4.07	<4.26	427	1,600,000	254 J-
U4-MW-08S	12/7/2022	FD	EM04	UMCf	54.9 - 64.9	----	----	----	----	----	<4.07	<4.26	472	1,850,000	265 J-
U4-MW-08S	3/13/2023	N	EM07	UMCf	54.9 - 64.9	-138.1	7.85	0.2	31.0	2.9	<4.07	<4.26	21,300	1,570,000	<0.150
U4-MW-08S	3/13/2023	FD	EM07	UMCf	54.9 - 64.9	----	----	----	----	----	<4.07	<4.26	21,300	1,410,000	<0.750 UJ
U4-MW-08S	6/13/2023	N	EM10	UMCf	54.9 - 64.9	-258.8	7.13	2.0	26.7	192.0	<4.07	<4.26	23,300	2,530,000	<15.0
U4-MW-08S	6/13/2023	FD	EM10	UMCf	54.9 - 64.9	----	----	----	----	----	<4.07	<4.26	26,800	2,110,000	<15.0
U4-MW-08S	9/13/2023	N	EM13	UMCf	54.9 - 64.9	-184.8	6.65	0 U	29	154.1	<4.07	<4.26	23,900	1,710,000	<0.150
U4-MW-08S	9/13/2023	FD	EM13	UMCf	54.9 - 64.9	----	----	----	----	----	<4.07	<4.26	24,800	1,580,000	<0.150
U4-MW-08S	12/14/2023	N	EM16	UMCf	54.9 - 64.9	-203.2	6.34	0.0 U	24.8	10.5	<4.07	<4.26	15,900	3,210,000	1.99
U4-MW-08S	12/14/2023	FD	EM16	UMCf	54.9 - 64.9	----	----	----	----	----	<4.07	<4.26	18,800	3,190,000	1.97
U4-MW-09D	4/14/2022	N	BL02	UMCf	96.9 - 106.9	36.4	7.03	0.0 U	24.3	640.2	<4.07	<4.26	<2.91	30,000,000	67,800
U4-MW-09D	12/6/2022	N	EM04	UMCf	96.9 - 106.9	104.4	7.69	0.0 U	22.1	305.7	<4.07 UJ	<4.26 UJ	291	3,560,000	7,060 J-
U4-MW-09D	3/16/2023	N	EM07	UMCf	96.9 - 106.9	-81.6	6.58	0.0 U	22.9	678.2	<4.07	<4.26	13,400	4,200,000	3,520
U4-MW-09D	6/14/2023	N	EM10	UMCf	96.9 - 106.9	2.5	6.50	0.0 U	29.0	13.1	<4.07	<4.26	4,200	3,820,000	1,490
U4-MW-09D	9/12/2023	N	EM13	UMCf	96.9 - 106.9	-170.2	6.4	0 U	29.6	7.4	<4.07	<4.26	28,900	4,020,000	2,990
U4-MW-09D	12/15/2023	N	EM16	UMCf	96.9 - 106.9	-0.3	5.88	0.0 U	19.5	28.4	<4.07	<4.26	8,200	7,680,000	2,200
U4-MW-09DD	4/14/2022	N	BL02	UMCf	119.8 - 129.8	144.1	7.81	0.0 U	23.2	25.6	<4.07	<4.26	<2.91	759,000 J	121
U4-MW-09DD	12/6/2022	N	EM04	UMCf	119.8 - 129.8	63.9	7.85	0.0 U	22.6	11.4	<4.07 UJ	<4.26 UJ	<2.91 UJ	693,000	134
U4-MW-09DD	3/21/2023	N	EM07	UMCf	119.8 - 129.8	146.4	7.90	0.0 U	20.1	26.7	<4.07	<4.26	<2.91	1,290,000	215 J-
U4-MW-09DD	6/15/2023	N	EM10	UMCf	119.8 - 129.8	-41.8	8.18	0.0 U	32.4	26.3	<4.07	<4.26	<2.91	1,210,000 J	94.8
U4-MW-09DD	9/13/2023	N	EM13	UMCf	119.8 - 129.8	160	6.36	0 U	29.8	14.4	<4.07	<4.26	2,520	1,880,000	<0.300
U4-MW-09DD	12/13/2023	N	EM16	UMCf	119.8 - 129.8	11.8	6.36	0.0 U	14.4	5.5	<4.07	5.11 J	10,500	2,390,000	17.3
U4-MW-09I	4/14/2022	N	BL02	UMCf	76.8 - 86.8	8.8	7.57	0.0 U	24.5	322.6	<4.07	<4.26	<2.91	2,030,000	2,320
U4-MW-09I	12/6/2022	N	EM04	UMCf	76.8 - 86.8	124.5	7.49	0.0 U	22.6	1626.2	<4.07 UJ	<4.26 UJ	194	6,780,000	13,500 J-
U4-MW-09I	3/16/2023	N	EM07	UMCf	76.8 - 86.8	-149.7	6.48	0.0 U	24.5	1692.0	<4.07	<4.26	18,200	4,970,000	7,920
U4-MW-09I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	112.1	6.32	0.0 U	28.3	49.1	<40.7	<42.6	7,840	4,140,000	1,130
U4-MW-09I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	-130.8	6.44	0 U	29.4	132	<4.07	<4.26	34,600	5,690,000	5,850
U4-MW-09I	12/15/2023	N	EM16	UMCf	76.8 - 86.8	88.0	5.97	0.0 U	20.5	98.4	<4.07	<4.26	16,000	7,980,000	3,150
U4-MW-09S	4/14/2022	N	BL02	UMCf	55.3 - 65.3	179.7	8.27	0.0 U	23.4	33.5	<4.07	<4.26	<2.91	1,900,000	387
U4-MW-09S	12/6/2022	N	EM04	UMCf	55.3 - 65.3	73.5	8.69	0.0 U	21.6	60.9	<4.07 UJ	<4.26 UJ	<2.91 UJ	3,460,000 J	2,740 J-

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	RSK175	RSK175	RSK175	SM2540C	SW7199
						Oxidation-Reduction Potential	pH	Sulfide	Temperature	Turbidity	Ethane	Ethene	Methane	Total Dissolved Solids	Chromium, Hexavalent
						mV	SU	mg/L	C	NTU	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-09S	3/17/2023	N	EM07	UMCf	55.3 - 65.3	97.1	8.96	0.0 U	23.0	99.2	<4.07	<4.26	4,840	2,960,000	2,630
U4-MW-09S	6/15/2023	N	EM10	UMCf	55.3 - 65.3	-300.0	7.24	2.0	26.6	7.3	<4.07	<4.26	11,800	3,740,000	<15.0
U4-MW-09S	9/13/2023	N	EM13	UMCf	55.3 - 65.3	-170.8	6.79	0.3	27.3	57.2	<4.07	<4.26	24,500	3,690,000	<0.150 UJ
U4-MW-09S	12/12/2023	N	EM16	UMCf	55.3 - 65.3	-130.4	6.04	0.0 U	25.1	123.4	<4.07	<4.26	19,600	7,510,000	9.36
U4-MW-10D	4/14/2022	N	BL02	UMCf	96.9 - 106.9	206.3	7.33	0.0 U	22.6	52.9	<4.07	<4.26	<2.91	4,840,000	5,450
U4-MW-10D	12/5/2022	N	EM04	UMCf	96.9 - 106.9	70.0	7.73	0.0 U	22.9	43.2	<4.07	<4.26	257	2,400,000	3,640 J-
U4-MW-10D	3/17/2023	N	EM07	UMCf	96.9 - 106.9	-107.9	6.38	0.0 U	22.4	-399.7	<4.07	<4.26	29,800	3,170,000	1.22
U4-MW-10D	6/14/2023	N	EM10	UMCf	96.9 - 106.9	-202.3	6.59	0.1	27.1	14.9	<4.07	<4.26	26,700	2,340,000	0.228 J
U4-MW-10D	9/13/2023	N	EM13	UMCf	96.9 - 106.9	-29.7	6.66	0 U	31.3	49.9	<4.07	<4.26	35,300	2,200,000	<0.150
U4-MW-10D	12/14/2023	N	EM16	UMCf	96.9 - 106.9	83.2	6.67	0.0 U	21.8	37.7	<4.07	<4.26	41,400	1,900,000	0.153 J
U4-MW-10I	4/14/2022	N	BL02	UMCf	77.1 - 87.1	183.9	7.68	0.0 U	23.9	72915.5	<4.07	<4.26	<2.91	5,670,000	6,160
U4-MW-10I	12/5/2022	N	EM04	UMCf	77.1 - 87.1	9.6	7.73	0.0 U	23.2	48.5	<4.07	<4.26	50.1	1,870,000	566 J-
U4-MW-10I	3/17/2023	N	EM07	UMCf	77.1 - 87.1	25.5	6.62	0.0 U	23.1	-345.3	<4.07	<4.26	20,300	3,110,000	1.11
U4-MW-10I	6/14/2023	N	EM10	UMCf	77.1 - 87.1	-173.2	6.54	0.6	25.7	22.8	<4.07	<4.26	21,500	2,240,000	0.333 J
U4-MW-10I	9/13/2023	N	EM13	UMCf	77.1 - 87.1	-70.6	6.46	0.2	30.5	55.3	<4.07	<4.26	25,500	2,570,000	0.261 J
U4-MW-10I	12/14/2023	N	EM16	UMCf	77.1 - 87.1	165.5	7.20	0.0 U	23.1	74.2	<4.07	<4.26	7,750	11,100,000	15,200
U4-MW-11D	4/15/2022	N	BL02	UMCf	97.4 - 107.4	194.9	7.12	0.0 U	23.3	218.4	<4.07	<4.26	<2.91	34,200,000	90,100 J+
U4-MW-11D	9/26/2022	N	EM01	UMCf	97.4 - 107.4	49.2	7.38	0.0 U	31.6	74.6	----	----	----	34,600,000	93,300
U4-MW-11D	10/11/2022	N	EM02	UMCf	97.4 - 107.4	5.2	7.07	0.0 U	23.7	155.4	----	----	----	40,200,000	96,300
U4-MW-11D	11/1/2022	N	EM03	UMCf	97.4 - 107.4	-20.2	7.07	0.0 U	22.8	53.4	----	----	----	38,300,000	91,100
U4-MW-11D	12/6/2022	N	EM04	UMCf	97.4 - 107.4	156.0	6.76	0.0 U	16.9	21.4	<4.07 UJ	<4.26 UJ	215	27,000,000	32,300 J-
U4-MW-11D	1/12/2023	N	EM05	UMCf	97.4 - 107.4	87.9	6.46	0.0 U	21.5	254.4	----	----	----	24,800,000	74,400
U4-MW-11D	2/14/2023	N	EM06	UMCf	97.4 - 107.4	120.7	6.27	0.0 U	21.3	55.2	----	----	----	25,800,000	76,700
U4-MW-11D	3/16/2023	N	EM07	UMCf	97.4 - 107.4	46.8	6.50	0.0 U	20.0	303.2	<4.07	<4.26	19,400	22,900,000	55,600 J-
U4-MW-11D	4/18/2023	N	EM08	UMCf	97.4 - 107.4	42.3	6.36	0.0 U	25.2	154.0	----	----	----	23,800,000	45,700
U4-MW-11D	5/17/2023	N	EM09	UMCf	97.4 - 107.4	155.6	5.79	0.0 U	24.2	83.1	----	----	----	647,000	47,300
U4-MW-11D	6/16/2023	N	EM10	UMCf	97.4 - 107.4	54.6	6.71	0.0 U	22.1	4.2	<4.07	<4.26	29,300	25,900,000	71,900
U4-MW-11D	7/14/2023	N	EM11	UMCf	97.4 - 107.4	254.6	6.88	0.0 U	27.2	52.9	----	----	----	22,400,000	62,600 J-
U4-MW-11D	8/14/2023	N	EM12	UMCf	97.4 - 107.4	-278.7	6.41	0 U	27.6	132.3	----	----	----	24,900,000	59,700 J-
U4-MW-11D	9/13/2023	N	EM13	UMCf	97.4 - 107.4	-2.9	6.49	0 U	28.6	35	<4.07	<4.26	24,000	22,400,000	58,100
U4-MW-11D	10/18/2023	N	EM14	UMCf	97.4 - 107.4	76.7	6.22	0 U	25.6	278.7	----	----	----	19,200,000	53,700
U4-MW-11D	11/16/2023	N	EM15	UMCf	97.4 - 107.4	-59.7	6.26	0 U	24.8	664.2	----	----	----	20,100,000	47,600
U4-MW-11D	12/13/2023	N	EM16	UMCf	97.4 - 107.4	-39.3	6.07	0.0 U	22.2	1492.2	<4.07	<4.26	15,800	21,900,000	47,400
U4-MW-11I	4/14/2022	N	BL02	UMCf	77.0 - 87.0	123.8	7.72	0.0 U	26.3	99.8	<4.07	<4.26	<2.91	2,730,000	6,370
U4-MW-11I	9/26/2022	N	EM01	UMCf	77.0 - 87.0	-17.7	6.92	0.0 U	27.0	384.2	----	----	----	2,470,000	1,320 J
U4-MW-11I	9/26/2022	FD	EM01	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	2,690,000	1,330 J
U4-MW-11I	10/10/2022	N	EM02	UMCf	77.0 - 87.0	-117.1	6.58	0.0 U	24.4	170.6	----	----	----	2,200,000	0.753 J-
U4-MW-11I	10/10/2022	FD	EM02	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	2,450,000	0.886
U4-MW-11I	10/31/2022	N	EM03	UMCf	77.0 - 87.0	-266.8	6.57	0.6	23.3	36.5	----	----	----	2,390,000	1.95
U4-MW-11I	10/31/2022	FD	EM03	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	2,340,000	2.25
U4-MW-11I	12/6/2022	N	EM04	UMCf	77.0 - 87.0	-294.3	7.16	0.6	23.8	41.5	<4.07 UJ	<4.26 UJ	5,160	2,550,000	1.79 J
U4-MW-11I	12/6/2022	FD	EM04	UMCf	77.0 - 87.0	----	----	----	----	----	<4.07 UJ	<4.26 UJ	5,360	2,610,000	0.403 J
U4-MW-11I	1/12/2023	N	EM05	UMCf	77.0 - 87.0	-240.4	7.70	0.0 U	23.3	169.3	----	----	----	1,610,000	0.800
U4-MW-11I	1/12/2023	FD	EM05	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	1,750,000	0.556
U4-MW-11I	2/14/2023	N	EM06	UMCf	77.0 - 87.0	-236.7	6.75	0.0 U	20.1	50.9	----	----	----	8,560,000	<0.150
U4-MW-11I	2/14/2023	FD	EM06	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	7,900,000	0.324 J
U4-MW-11I	3/16/2023	N	EM07	UMCf	77.0 - 87.0	-241.6	6.86	0.8	20.3	130.6	<4.07	<4.26	23,600	2,020,000	<0.150 UJ
U4-MW-11I	3/16/2023	FD	EM07	UMCf	77.0 - 87.0	----	----	----	----	----	<4.07	<4.26	21,400	2,030,000	<0.150 UJ
U4-MW-11I	4/18/2023	N	EM08	UMCf	77.0 - 87.0	-141.1	6.69	0.5	24.3	377.3	----	----	----	1,950,000	<0.150
U4-MW-11I	4/18/2023	FD	EM08	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	2,070,000	0.158 J
U4-MW-11I	5/19/2023	N	EM09	UMCf	77.0 - 87.0	-267.3	6.73	0.0 U	26.7	1679.2	----	----	----	2,390,000	<0.150 R

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	RSK175	RSK175	RSK175	SM2540C	SW7199
						Oxidation-Reduction Potential	pH	Sulfide	Temperature	Turbidity	Ethane	Ethene	Methane	Total Dissolved Solids	Chromium, Hexavalent
						mV	SU	mg/L	C	NTU	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-11I	5/19/2023	FD	EM09	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	2,430,000	<0.150 R
U4-MW-11I	6/15/2023	N	EM10	UMCf	77.0 - 87.0	-79.7	6.70	2.0	32.3	63.7	<4.07	<4.26	23,000	1,960,000	<0.150
U4-MW-11I	6/15/2023	FD	EM10	UMCf	77.0 - 87.0	----	----	----	----	----	<4.07	<4.26	24,000	1,910,000	<0.150
U4-MW-11I	7/13/2023	N	EM11	UMCf	77.0 - 87.0	-243.1	6.68	2.4	27.1	39.7	----	----	----	2,070,000 J	<0.150
U4-MW-11I	7/13/2023	FD	EM11	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	2,070,000 J	<0.150
U4-MW-11I	8/14/2023	N	EM12	UMCf	77.0 - 87.0	119.4	6.13	0 U	27	69.7	----	----	----	9,340,000	556
U4-MW-11I	8/14/2023	FD	EM12	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	10,100,000	299
U4-MW-11I	9/13/2023	N	EM13	UMCf	77.0 - 87.0	261.3	6.3	0 U	33.4	15.2	<4.07	<4.26	24,100	7,240,000	2,050
U4-MW-11I	9/13/2023	FD	EM13	UMCf	77.0 - 87.0	----	----	----	----	----	<4.07	<4.26	21,000	7,060,000	2,050
U4-MW-11I	10/19/2023	N	EM14	UMCf	77.0 - 87.0	181.1	6.33	0 U	24.5	115.7	----	----	----	19,800,000 J-	29,500
U4-MW-11I	10/19/2023	FD	EM14	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	16,200,000 J-	29,500
U4-MW-11I	11/16/2023	N	EM15	UMCf	77.0 - 87.0	122.7	6.43	0 U	24.5	103.5	----	----	----	10,900,000 J	19,200
U4-MW-11I	11/16/2023	FD	EM15	UMCf	77.0 - 87.0	----	----	----	----	----	----	----	----	16,500,000 J	19,600
U4-MW-11I	12/13/2023	N	EM16	UMCf	77.0 - 87.0	235.5	6.27	0.0 U	19.0	93.0	<4.07	<4.26	18,700	13,700,000	17,900
U4-MW-11I	12/13/2023	FD	EM16	UMCf	77.0 - 87.0	----	----	----	----	----	<4.07	<4.26	20,100	11,200,000	17,800
U4-MW-12D	4/15/2022	N	BL02	UMCf	97.1 - 107.1	90.8	6.98	0.0 U	26.2	40.3	<4.07	<4.26	<2.91	29,700,000	63,700 J-
U4-MW-12D	9/27/2022	N	EM01	UMCf	97.1 - 107.1	183.7	7.31	0.0 U	27.2	97.6	----	----	----	14,900,000	41,900
U4-MW-12D	10/12/2022	N	EM02	UMCf	97.1 - 107.1	193.7	7.02	0.0 U	23.4	141.7	----	----	----	19,300,000 J-	50,700
U4-MW-12D	11/2/2022	N	EM03	UMCf	97.1 - 107.1	145.9	7.12	0.0 U	20.8	84.0	----	----	----	16,600,000	47,900
U4-MW-12D	12/7/2022	N	EM04	UMCf	97.1 - 107.1	41.1	7.21	0.0 U	17.7	89.2	<4.07	<4.26	410	13,400,000	39,900
U4-MW-12D	1/12/2023	N	EM05	UMCf	97.1 - 107.1	94.5	6.98	0.0 U	21.3	23.7	----	----	----	14,300,000	39,300
U4-MW-12D	2/15/2023	N	EM06	UMCf	97.1 - 107.1	42.6	6.93	0.0 U	22.0	44.6	----	----	----	13,800,000	37,000 J-
U4-MW-12D	3/14/2023	N	EM07	UMCf	97.1 - 107.1	72.1	7.06	0.0 U	20.5	234.2	<4.07	<4.26	26,600	12,700,000	28,700
U4-MW-12D	4/17/2023	N	EM08	UMCf	97.1 - 107.1	73.8	7.66	0.0 U	27.5	32.0	----	----	----	9,900,000	43,400
U4-MW-12D	5/17/2023	N	EM09	UMCf	97.1 - 107.1	99.8	6.14	0.0 U	28.5	33.5	----	----	----	21,200,000	46,500
U4-MW-12D	6/16/2023	N	EM10	UMCf	97.1 - 107.1	225.8	7.11	0.0 U	21.3	53.6	<4.07	<4.26	20,600	8,760,000	35,200
U4-MW-12D	7/13/2023	N	EM11	UMCf	97.1 - 107.1	149.3	6.95	0.0 U	33.1	27.3	----	----	----	8,720,000	16,800
U4-MW-12D	8/14/2023	N	EM12	UMCf	97.1 - 107.1	177.1	6.74	0 U	28	87.7	----	----	----	7,950,000	15,600
U4-MW-12D	9/12/2023	N	EM13	UMCf	97.1 - 107.1	257.9	6.63	0 U	29.7	17.6	<4.07	<4.26	24,100	6,550,000	11,900
U4-MW-12D	10/17/2023	N	EM14	UMCf	97.1 - 107.1	136.9	6.3	0 U	24.4	405.8	----	----	----	6,920,000	9,270 J-
U4-MW-12D	11/15/2023	N	EM15	UMCf	97.1 - 107.1	176.8	6.45	0 U	24.6	250.4	----	----	----	7,110,000	8,440
U4-MW-12D	12/12/2023	N	EM16	UMCf	97.1 - 107.1	193.8	6.14	0.0 U	20.3	55.6	<4.07	<4.26	26,000	6,000,000 J	8,390
U4-MW-12I	4/14/2022	N	BL02	UMCf	76.8 - 86.8	35.2	7.74	----	26.1	988.9	<4.07	<4.26	<2.91	8,680,000	21,200
U4-MW-12I	4/14/2022	FD	BL02	UMCf	76.8 - 86.8	----	----	----	----	----	<4.07	<4.26	<2.91	8,670,000	19,400
U4-MW-12I	9/27/2022	N	EM01	UMCf	76.8 - 86.8	121.6	7.60	0.0 U	27.4	70.6	----	----	----	2,360,000	2,880 J-
U4-MW-12I	10/12/2022	N	EM02	UMCf	76.8 - 86.8	190.1	7.30	0.0 U	23.5	343.0	----	----	----	2,410,000 J-	2,060
U4-MW-12I	11/2/2022	N	EM03	UMCf	76.8 - 86.8	95.4	7.23	0.0 U	22.6	123.8	----	----	----	4,360,000	1,520
U4-MW-12I	12/7/2022	N	EM04	UMCf	76.8 - 86.8	-290.6	7.38	0.6	20.5	20.9	<4.07	<4.26	1,070	1,370,000	<0.150 UJ
U4-MW-12I	12/7/2022	FD	EM04	UMCf	76.8 - 86.8	----	----	----	----	----	<4.07	<4.26	1,110	----	2.33 J
U4-MW-12I	1/13/2023	N	EM05	UMCf	76.8 - 86.8	----	----	0.0 U	----	----	----	----	----	1,580,000	0.446 J
U4-MW-12I	2/15/2023	N	EM06	UMCf	76.8 - 86.8	-291.6	6.89	0.0 U	20.6	2.3	----	----	----	3,010,000	<7.50 UJ
U4-MW-12I	3/13/2023	N	EM07	UMCf	76.8 - 86.8	-279.2	6.90	1.4	21.4	4.0	<4.07	<4.26	35,200	2,270,000	<1.50
U4-MW-12I	4/17/2023	N	EM08	UMCf	76.8 - 86.8	-233.8	7.15	0.4	26.1	18.8	----	----	----	2,040,000	<0.150
U4-MW-12I	5/17/2023	N	EM09	UMCf	76.8 - 86.8	-107.3	6.19	0.4	27.6	10.9	----	----	----	3,020,000	<0.150
U4-MW-12I	6/16/2023	N	EM10	UMCf	76.8 - 86.8	-162.1	7.01	0.0 U	22.3	53.8	<4.07	<4.26	25,600	2,180,000	<0.150
U4-MW-12I	7/11/2023	N	EM11	UMCf	76.8 - 86.8	-71.0	7.01	0.4	30.0	43.8	----	----	----	2,250,000 J	<0.150
U4-MW-12I	8/14/2023	N	EM12	UMCf	76.8 - 86.8	9.8	6.17	0 U	27.7	30.6	----	----	----	4,790,000	372
U4-MW-12I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	-81.5	6.69	0 U	34	5	<4.07	<4.26	31,400	2,660,000	1.65
U4-MW-12I	10/17/2023	N	EM14	UMCf	76.8 - 86.8	-185.5	6.79	0.4	24.6	159.1	----	----	----	2,280,000 J-	0.720 J-
U4-MW-12I	11/16/2023	N	EM15	UMCf	76.8 - 86.8	-90.0	6.46	0 U	23.4	64.4	----	----	----	4,940,000	<0.150
U4-MW-12I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	309.8	6.20	0.0 U	21.7	51.5	<4.07	<4.26	25,600	4,710,000	143 J-

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	RSK175	RSK175	RSK175	SM2540C	SW7199
						Oxidation-Reduction Potential	pH	Sulfide	Temperature	Turbidity	Ethane	Ethene	Methane	Total Dissolved Solids	Chromium, Hexavalent
						mV	SU	mg/L	C	NTU	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-13D	4/14/2022	N	BL02	UMCf	98.2 - 108.2	136.1	6.94	0.0 U	25.2	85.7	<4.07	<4.26	<2.91	30,300,000	56,200
U4-MW-13D	9/28/2022	N	EM01	UMCf	98.2 - 108.2	-329.7	6.65	0.0 U	28.9	50.9	----	----	----	6,280,000 J+	45,000
U4-MW-13D	10/11/2022	N	EM02	UMCf	98.2 - 108.2	-147.3	6.57	0.0 U	23.5	22.7	----	----	----	6,140,000	19,800
U4-MW-13D	11/3/2022	N	EM03	UMCf	98.2 - 108.2	26.5	6.45	0.0 U	21.5	138.4	----	----	----	9,360,000 J	1,860
U4-MW-13D	12/7/2022	N	EM04	UMCf	98.2 - 108.2	122.7	6.70	0.0 U	16.8	55.9	<4.07	<4.26	7,020	7,430,000	16,100
U4-MW-13D	1/12/2023	N	EM05	UMCf	98.2 - 108.2	60.0	6.88	0.0 U	21.4	76.1	----	----	----	5,460,000	15,100
U4-MW-13D	2/15/2023	N	EM06	UMCf	98.2 - 108.2	65.4	6.90	0.0 U	20.6	58.9	----	----	----	6,380,000	15,600 J-
U4-MW-13D	3/17/2023	N	EM07	UMCf	98.2 - 108.2	172.0	7.19	0.0 U	18.5	202.8	<4.07	<4.26	5,480	7,680,000	14,200
U4-MW-13D	4/18/2023	N	EM08	UMCf	98.2 - 108.2	74.2	7.35	0.0 U	26.3	119.0	----	----	----	5,400,000	9,530
U4-MW-13D	5/17/2023	N	EM09	UMCf	98.2 - 108.2	115.2	6.74	0.0 U	29.8	63.6	----	----	----	4,570,000	8,150
U4-MW-13D	6/15/2023	N	EM10	UMCf	98.2 - 108.2	101.0	7.03	0.0 U	26.8	1.8	<4.07	<4.26	3,790	4,240,000	8,680
U4-MW-13D	7/12/2023	N	EM11	UMCf	98.2 - 108.2	154.1	6.92	0.0 U	32.5	67.5	----	----	----	4,940,000	8,450
U4-MW-13D	8/11/2023	N	EM12	UMCf	98.2 - 108.2	328	6.37	0 U	27.8	225.5	----	----	----	5,220,000	10,400
U4-MW-13D	9/11/2023	N	EM13	UMCf	98.2 - 108.2	255.6	6.9	0 U	29.6	22.8	<4.07	<4.26	9,280	7,100,000	12,500
U4-MW-13D	10/18/2023	N	EM14	UMCf	98.2 - 108.2	129.4	6.72	0 U	24.8	179.3	----	----	----	6,860,000	13,600
U4-MW-13D	11/15/2023	N	EM15	UMCf	98.2 - 108.2	260.8	6.86	0 U	24.5	214.3	----	----	----	7,950,000 J-	13,400
U4-MW-13D	12/11/2023	N	EM16	UMCf	98.2 - 108.2	229.3	6.83	0.0 U	21.7	514.5	<4.07	<4.26	11,600	5,120,000	14,300
U4-MW-13I	4/14/2022	N	BL02	UMCf	77.1 - 87.1	127.9	7.42	0.0 U	23.7	2478.1	<4.07	<4.26	<2.91	8,680,000	21,900
U4-MW-13I	9/28/2022	N	EM01	UMCf	77.1 - 87.1	96.9	7.52	0.0 U	27.2	70.5	----	----	----	2,540,000 J+	17,000
U4-MW-13I	10/10/2022	N	EM02	UMCf	77.1 - 87.1	110.0	7.58	0.0 U	27.9	142.6	----	----	----	2,660,000	8,000
U4-MW-13I	11/3/2022	N	EM03	UMCf	77.1 - 87.1	141.8	7.46	0.0 U	20.1	119.3	----	----	----	3,340,000 J	5,840 J-
U4-MW-13I	12/6/2022	N	EM04	UMCf	77.1 - 87.1	-292.7	7.58	0.1	19.9	94.5	<4.07 UJ	<4.26 UJ	1,300	2,710,000	<0.150 UJ
U4-MW-13I	1/12/2023	N	EM05	UMCf	77.1 - 87.1	-245.9	7.13	0.0 U	20.1	118.8	----	----	----	1,960,000	4.48
U4-MW-13I	2/14/2023	N	EM06	UMCf	77.1 - 87.1	-309.2	7.19	0.0 U	20.7	552.4	----	----	----	3,420,000	0.250 J
U4-MW-13I	3/16/2023	N	EM07	UMCf	77.1 - 87.1	-313.7	7.44	0.0 U	19.2	114.6	<4.07	<4.26	20,300	1,550,000	1.05 J
U4-MW-13I	4/19/2023	N	EM08	UMCf	77.1 - 87.1	-303.7	7.07	0.4	23.5	23.1	----	----	----	1,690,000	0.606
U4-MW-13I	5/17/2023	N	EM09	UMCf	77.1 - 87.1	-123.7	6.73	0.4	29.7	55.5	----	----	----	1,970,000	0.178 J
U4-MW-13I	6/15/2023	N	EM10	UMCf	77.1 - 87.1	-73.9	7.04	0.0 U	27.5	10.7	<4.07	<4.26	23,600	1,680,000	0.559
U4-MW-13I	7/12/2023	N	EM11	UMCf	77.1 - 87.1	135.1	7.11	0.0 U	35.1	121.0	----	----	----	1,580,000 J	99.0
U4-MW-13I	8/11/2023	N	EM12	UMCf	77.1 - 87.1	309.3	6.8	0 U	35.2	174.7	----	----	----	5,810,000	9,230
U4-MW-13I	9/11/2023	N	EM13	UMCf	77.1 - 87.1	227	7	0 U	34.6	44	<4.07	<4.26	9,520	7,040,000	13,100
U4-MW-13I	10/17/2023	N	EM14	UMCf	77.1 - 87.1	91	6.92	0 U	25.5	136.9	----	----	----	8,440,000 J-	15,300
U4-MW-13I	11/15/2023	N	EM15	UMCf	77.1 - 87.1	262.2	7.07	0 U	24.0	5951.8	----	----	----	9,010,000 J-	16,500
U4-MW-13I	12/11/2023	N	EM16	UMCf	77.1 - 87.1	269.2	6.93	0.0 U	17.1	8253.6	<4.07	<4.26	11,300	5,700,000	18,900
U4-MW-14D	4/13/2022	N	BL02	UMCf	97.3 - 107.3	161.5	7.20	0.0 U	26.5	50.4	<4.07	<4.26	<2.91	2,550,000	239
U4-MW-14D	12/6/2022	N	EM04	UMCf	97.3 - 107.3	75.3	7.39	0.0 U	20.7	58.1	<4.07 UJ	<4.26 UJ	<2.91 UJ	4,530,000	5,860
U4-MW-14D	3/16/2023	N	EM07	UMCf	97.3 - 107.3	143.2	7.47	0.0 U	21.8	115.4	<4.07	<4.26	15.0 J+	2,650,000	4,450
U4-MW-14D	6/15/2023	N	EM10	UMCf	97.3 - 107.3	119.7	7.08	0.0 U	30.3	59.1	<4.07	<4.26	619	2,750,000	3,980
U4-MW-14D	9/14/2023	N	EM13	UMCf	97.3 - 107.3	273.2	6.53	0 U	28.2	13.8	<4.07	<4.26	15,500	2,320,000	2,670
U4-MW-14D	12/15/2023	N	EM16	UMCf	97.3 - 107.3	201.8	6.52	0.0 U	16.0	7.9	<4.07	7.68 J	12,400	3,700,000	26,300
U4-MW-14I	4/14/2022	N	BL02	UMCf	77.3 - 87.3	110.5	8.07	0.0 U	22.8	57.4	<4.07	<4.26	<2.91	3,220,000	2,270
U4-MW-14I	12/6/2022	N	EM04	UMCf	77.3 - 87.3	63.8	7.41	0.0 U	16.8	23.4	<4.07 UJ	<4.26 UJ	29.8	5,260,000	4,360 J-
U4-MW-14I	3/16/2023	N	EM07	UMCf	77.3 - 87.3	166.5	7.45	0.0 U	21.5	-48.0	<4.07	<4.26	123 J+	3,130,000	4,560
U4-MW-14I	6/15/2023	N	EM10	UMCf	77.3 - 87.3	174.8	7.01	0.0 U	26.9	11.4	<4.07	<4.26	5,640	3,260,000	782
U4-MW-14I	9/14/2023	N	EM13	UMCf	77.3 - 87.3	238.2	6.83	0 U	30.5	18.8	<4.07	<4.26	12,800	2,590,000	2,240
U4-MW-14I	12/14/2023	N	EM16	UMCf	77.3 - 87.3	96.4	6.51	0.0 U	19.9	60.0	<4.07	<4.26	14,400	3,900,000 J	2,160
U4-MW-15D	4/13/2022	N	BL02	UMCf	96.0 - 106.0	209.2	7.09	0.0 U	20.7	76.6	<4.07	<4.26	<2.91	3,490,000	5,240
U4-MW-15D	12/5/2022	N	EM04	UMCf	96.0 - 106.0	168.4	7.52	0.0 U	22.3	435.5	<4.07	<4.26	<2.91	2,880,000	3,380 J-
U4-MW-15D	3/20/2023	N	EM07	UMCf	96.0 - 106.0	127.9	7.39	0.0 U	20.8	20.3	<4.07	<4.26	324	3,030,000	3,630
U4-MW-15D	6/14/2023	N	EM10	UMCf	96.0 - 106.0	36.2	7.16	0.0 U	26.4	119.9	<4.07	<4.26	8,050	3,680,000	4,490
U4-MW-15D	9/13/2023	N	EM13	UMCf	96.0 - 106.0	31.4	7.55	0 U	26	146.2	<4.07	<4.26	47,400	2,460,000	3,270

Table 4
Groundwater Analytical Results
Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	RSK175	RSK175	RSK175	SM2540C	SW7199
						Oxidation-Reduction Potential	pH	Sulfide	Temperature	Turbidity	Ethane	Ethene	Methane	Total Dissolved Solids	Chromium, Hexavalent
						mV	SU	mg/L	C	NTU	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-15D	12/12/2023	N	EM16	UMCf	96.0 - 106.0	366.3	6.63	0.0 U	20.1	115.4	<4.07	<4.26	32,000	2,750,000	3,380
U4-MW-15DD	4/13/2022	N	BL02	UMCf	120.3 - 130.3	123.8	8.36	0.0 U	18.6	82.3	<4.07	<4.26	<2.91	677,000	67.5
U4-MW-15DD	12/5/2022	N	EM04	UMCf	120.3 - 130.3	-139.8	8.59	0.0 U	21.5	51.1	<4.07	<4.26	<2.91	553,000	14.5
U4-MW-15DD	3/15/2023	N	EM07	UMCf	120.3 - 130.3	104.0	9.13	0.0 U	22.2	99.0	<4.07	<4.26	<2.91	548,000	12.5 J-
U4-MW-15DD	6/13/2023	N	EM10	UMCf	120.3 - 130.3	20.5	8.36	0.0 U	28.2	779.0	<4.07	<4.26	<2.91	589,000	2.29 J
U4-MW-15DD	9/14/2023	N	EM13	UMCf	120.3 - 130.3	-32	8.48	0 U	28.1	479.8	<4.07	<4.26	<2.91	551,000	0.817
U4-MW-15DD	12/13/2023	N	EM16	UMCf	120.3 - 130.3	125.3	8.67	0.0 U	12.2	62.9	<4.07	<4.26	<2.91	517,000	4.37
U4-MW-15I	4/12/2022	N	BL02	UMCf	76.8 - 86.8	125.1	7.95	0.0 U	22.6	20895.7 E	<4.07	<4.26	<2.91	4,080,000	5,010
U4-MW-15I	12/5/2022	N	EM04	UMCf	76.8 - 86.8	161.9	6.87	0.0 U	23.0	137.7	<4.07	<4.26	3,490	3,130,000	4,730 J-
U4-MW-15I	3/17/2023	N	EM07	UMCf	76.8 - 86.8	-173.7	6.17	6.0	21.6	-223.4	<4.07	<4.26	10,900	3,730,000	2.22
U4-MW-15I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	-124.6	6.30	0.0 U	24.3	30.1	<40.7	<42.6	21,400	2,280,000	<0.750
U4-MW-15I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	7	6.57	0 U	27.2	308.6	<4.07	<4.26	14,600	3,370,000	6.35
U4-MW-15I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	76.2	6.88	0.0 U	21.9	181.0	<4.07	<4.26	28,400	4,190,000	768
U4-MW-15S	4/13/2022	N	BL02	UMCf	54.8 - 64.8	165.2	8.11	0.0 U	21.5	71.7	<4.07	<4.26	<2.91	1,450,000	262
U4-MW-15S	12/5/2022	N	EM04	UMCf	54.8 - 64.8	-309.1	5.99	0.0 U	22.0	32.2	<4.07	<4.26	20,200	1,850,000	0.995
U4-MW-15S	3/13/2023	N	EM07	UMCf	54.8 - 64.8	-307.8	7.07	0.0 U	20.4	38.9	<4.07	<4.26	24,500	1,250,000	<0.150
U4-MW-15S	6/13/2023	N	EM10	UMCf	54.8 - 64.8	-211.4	6.94	0.0 U	32.8	2.4	<4.07	<4.26	34,800	1,600,000	<15.0
U4-MW-15S	9/14/2023	N	EM13	UMCf	54.8 - 64.8	-165.9	6.53	0 U	25.6	8.2	<4.07	<4.26	21,000	1,450,000	<0.150
U4-MW-15S	12/11/2023	N	EM16	UMCf	54.8 - 64.8	-110.5	6.58	0.0 U	20.7	8.1	<4.07	<4.26	13,000	1,320,000	<150
U4-MW-16D	4/11/2022	N	BL02	UMCf	96.8 - 106.8	165.2	7.15	0.0 U	23.7	84.8 E	<4.07	<4.26	<2.91	30,500,000	61,300
U4-MW-16D	12/5/2022	N	EM04	UMCf	96.8 - 106.8	63.9	7.13	0.0 U	21.8	84.8	<4.07	<4.26	374	13,400,000	21,900
U4-MW-16D	3/14/2023	N	EM07	UMCf	96.8 - 106.8	134.5	6.47	0.0 U	17.8	12.1	<4.07	<4.26	6,230	10,300,000	13,800
U4-MW-16D	6/13/2023	N	EM10	UMCf	96.8 - 106.8	212.9	6.65	0.0 U	25.2	34.1	<4.07	<4.26	11,800	28,600,000	38,700
U4-MW-16D	9/15/2023	N	EM13	UMCf	96.8 - 106.8	367.1	6.59	0 U	24.7	15.7	<4.07	<4.26	7,240	7,180,000 J-	17,600
U4-MW-16D	12/14/2023	N	EM16	UMCf	96.8 - 106.8	165.4	7.16	0.0 U	18.6	35.7	<4.07	<4.26	22,800	11,200,000	17,900
U4-MW-16DD	4/12/2022	N	BL02	UMCf	120.8 - 130.8	121.7	7.62	0.0 U	18.3	35.4	<4.07	<4.26	<2.91	1,940,000	682
U4-MW-16DD	12/5/2022	N	EM04	UMCf	120.8 - 130.8	43.7	7.71	0.0 U	21.7	18.9	<4.07	<4.26	<2.91	1,220,000	215 J-
U4-MW-16DD	3/15/2023	N	EM07	UMCf	120.8 - 130.8	-32.6	7.56	0.0 U	18.6	11.4	<4.07	<4.26	<2.91	1,160,000	149 J-
U4-MW-16DD	6/13/2023	N	EM10	UMCf	120.8 - 130.8	44.0	7.78	0.0 U	27.3	12.0	<4.07	<4.26	55.6	1,130,000	183
U4-MW-16DD	9/14/2023	N	EM13	UMCf	120.8 - 130.8	-27.1	7.75	0 U	28.2	14	<4.07	<4.26	<2.91	972,000 J	153
U4-MW-16DD	12/13/2023	N	EM16	UMCf	120.8 - 130.8	150.2	7.86	0.0 U	18.1	17.9	<4.07	<4.26	<2.91	808,000	89.1
U4-MW-16I	4/11/2022	N	BL02	UMCf	77.0 - 87.0	129.8	8.36	0.0 U	23.5	-449448.0 E	<4.07	<4.26	<2.91	5,220,000	9,350
U4-MW-16I	12/5/2022	N	EM04	UMCf	77.0 - 87.0	-277.0	7.32	0.5	22.2	5.3	<4.07	<4.26	2,930	2,120,000	0.467 J
U4-MW-16I	12/5/2022	FD	EM04	UMCf	77.0 - 87.0	----	----	----	----	----	<4.07	<4.26	3,090	2,000,000	0.735
U4-MW-16I	3/13/2023	N	EM07	UMCf	77.0 - 87.0	-54.8	7.33	----	20.6	5.3	<4.07	<4.26	28,900	2,930,000	<0.750 UJ
U4-MW-16I	3/13/2023	FD	EM07	UMCf	77.0 - 87.0	----	----	----	----	----	<4.07	<4.26	26,500	2,980,000	<0.750
U4-MW-16I	6/12/2023	N	EM10	UMCf	77.0 - 87.0	-65.3	6.76	0.1	25.4	12.6	<4.07	<4.26	34,000	2,200,000 J	<1.50
U4-MW-16I	6/12/2023	FD	EM10	UMCf	77.0 - 87.0	----	----	----	----	----	<4.07	<4.26	32,700	2,130,000 J	<1.50
U4-MW-16I	9/11/2023	N	EM13	UMCf	77.0 - 87.0	120.2	6.61	0 U	26.2	38.9	<4.07	<4.26	22,900	15,900,000	14,100
U4-MW-16I	9/11/2023	FD	EM13	UMCf	77.0 - 87.0	----	----	----	----	----	<4.07	<4.26	22,500	13,200,000	14,100
U4-MW-16I	12/11/2023	N	EM16	UMCf	77.0 - 87.0	381.7	6.75	0.0 U	23.3	78.6	<4.07	<4.26	19,700	8,980,000	29,500
U4-MW-16I	12/11/2023	FD	EM16	UMCf	77.0 - 87.0	----	----	----	----	----	<4.07	<4.26	16,500	12,100,000	29,600
U4-MW-16S	4/12/2022	N	BL02	UMCf	54.8 - 64.8	136.6	8.80	0.0 U	22.3	-8.5	<4.07	8.07 J	19.8	1,990,000	365 J-
U4-MW-16S	4/12/2022	FD	BL02	UMCf	54.8 - 64.8	----	----	----	----	----	<4.07	<4.26	<2.91	2,000,000	361 J-
U4-MW-16S	12/6/2022	N	EM04	UMCf	54.8 - 64.8	24.7	8.01	0.0 U	22.5	35.4	<4.07 UJ	<4.26 UJ	134	1,630,000	50.6
U4-MW-16S	3/15/2023	N	EM07	UMCf	54.8 - 64.8	-159.7	6.65	0.4	20.5	74.4	<4.07	<4.26	26,300	3,050,000	<0.150 UJ
U4-MW-16S	6/13/2023	N	EM10	UMCf	54.8 - 64.8	-105.2	6.67	0.6	25.3	87.7	<4.07	<4.26	25,200	3,330,000	<0.150
U4-MW-16S	9/11/2023	N	EM13	UMCf	54.8 - 64.8	-84.7	7.14	2.5	27.8	60.4	<4.07	<4.26	25,400	1,400,000 J	<0.150
U4-MW-16S	12/11/2023	N	EM16	UMCf	54.8 - 64.8	-132.8	7.13	0.0 U	23.7	70.8	<4.07	<4.26	23,500	1,310,000	<0.150
U4-SLMW	11/10/2022	N	EM03		-	----	----	----	----	----	----	----	----	588,000	<0.150
U4-T3	10/13/2022	N	EM02		-	----	----	----	----	----	----	----	----	16,100,000 J-	38,400

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	RSK175	RSK175	RSK175	SM2540C	SW7199
						Oxidation-Reduction Potential	pH	Sulfide	Temperature	Turbidity	Ethane	Ethene	Methane	Total Dissolved Solids	Chromium, Hexavalent
						mV	SU	mg/L	C	NTU	ug/L	ug/L	ug/L	ug/L	ug/L
U4-T3	11/3/2022	N	EM03		-	-60.4	6.51	----	20.4	169.1	----	----	----	15,400,000	36,900
U4-T3	12/6/2022	N	EM04		-	-8.5	6.72	----	21.4	30.1	----	----	----	12,600,000	25,100 J-
U4-T3	1/9/2023	N	EM05		-	111.4	7.05	----	19.9	0.0	----	----	----	12,200,000	37,400
U4-T3	2/13/2023	N	EM06		-	159.2	7.44	----	23.6	3.3	----	----	----	13,200,000	36,600
U4-T3	3/13/2023	N	EM07		-	197.0	7.43	----	23.5	1.9	----	----	----	11,700,000	39,800
U4-T3	4/19/2023	N	EM08		-	-27.7	6.94	----	22.6	3.7	----	----	----	7,080,000	14,900
U4-T3	5/18/2023	N	EM09		-	49.6	5.71	----	30.9	5.5	----	----	----	10,800,000	20,400
U4-T3	6/12/2023	N	EM10		-	225.9	6.88	----	33.8	1.9	----	----	----	9,060,000	20,700
U4-T3	7/11/2023	N	EM11		-	-61.3	6.54	----	35.0	111.4	----	----	----	9,260,000 J-	9,780
U4-T3	8/10/2023	N	EM12		-	-73.1	6.74	----	36.3	38.6	----	----	----	3,850,000	4.61
U4-T3	9/11/2023	N	EM13		-	-247	6.23	----	29.2	95.4	----	----	----	6,800,000	57.0
U4-T3	10/16/2023	N	EM14		-	-216.9	6.05	----	36.5	45.8	----	----	----	3,840,000 J-	2.08 J-

Notes:

FD - Field duplicate

E - Field instrument error.

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 low.

J+ - The result is an estimated quantity, but the result may be biased high.

N/A - Not Applicable

mg/L - milligrams per liter

µg/L - micrograms per liter

N - Normal field 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

< - The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

-- Not tested.

M-252 damaged/obstructed when checked on June 14, 2023 and September 14, 2023.

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	SW9060A/SM5 310B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Total Organic Carbon	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,1,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
M-247-100	4/20/2022	N	BL02	UMCf	100.5 - 110.5	----	----	----	----	----	----	----	----	----
M-249-100	4/20/2022	N	BL02	UMCf	99.6 - 109.6	----	----	----	----	----	----	----	----	----
M-251-100	4/19/2022	N	BL02	UMCf	92.5 - 102.5	1,410 J+	<0.147	<0.149	<0.133	<0.158	0.204 J	0.484 J	<0.142	<0.230
M-251-100	10/13/2022	N	EM02	UMCf	92.5 - 102.5	3,660 J+	<0.147	<0.149	<0.133	<0.158	<0.100	0.398 J	0.297 J	<0.230
M-251-100	11/2/2022	N	EM03	UMCf	92.5 - 102.5	1,030 J+	<1.47	<1.49	<1.33	<1.58	<1.00	<1.88	<1.42	<2.30
M-251-100	12/8/2022	N	EM04	UMCf	92.5 - 102.5	1,720 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
M-251-100	1/11/2023	N	EM05	UMCf	92.5 - 102.5	1,240 J+	<0.147	<0.149	<0.133	<0.158	<0.100	0.206 J	<0.142	<0.230
M-251-100	2/13/2023	N	EM06	UMCf	92.5 - 102.5	1,130 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	0.158 J	<0.230
M-251-100	3/17/2023	N	EM07	UMCf	92.5 - 102.5	1,660 J+	<7.35	<7.45	<6.65	<7.90	<5.00	<9.40	<7.10	<11.5
M-251-100	4/21/2023	N	EM08	UMCf	92.5 - 102.5	1,460 J+	<0.147	<0.149	<0.133	<0.158	<0.100	0.195 J	0.194 J	<0.230
M-251-100	5/9/2023	N	EM09	UMCf	92.5 - 102.5	1,540 J+	<0.147	<0.149	<0.133	<0.158	<0.100	0.242 J	<0.142	<0.230
M-251-100	6/14/2023	N	EM10	UMCf	92.5 - 102.5	957 J	<7.35	<7.45	<6.65	<7.90	<5.00	<9.40	<7.10	<11.5
M-251-100	7/14/2023	N	EM11	UMCf	92.5 - 102.5	1,540	<0.147	<0.149	<0.133	<0.158	<0.100	0.228 J	0.251 J	<0.230
M-251-100	8/10/2023	N	EM12	UMCf	92.5 - 102.5	1,140 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
M-251-100	9/14/2023	N	EM13	UMCf	92.5 - 102.5	963 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
M-251-100	10/19/2023	N	EM14	UMCf	92.5 - 102.5	13,900	<0.147	<0.149	<0.133	<0.158	<0.100	0.276 J	<0.142	<0.230
M-251-100	11/16/2023	N	EM15	UMCf	92.5 - 102.5	37,600	<7.35	<7.45	<6.65	<7.90	<5.00	<9.40	<7.10	<11.5
M-251-100	12/12/2023	N	EM16	UMCf	92.5 - 102.5	50,800	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
M-251-60	4/18/2022	N	BL02	UMCf	52.3 - 62.3	1,590 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
M-251-60	3/15/2023	N	EM07	UMCf	52.3 - 62.3	3,420 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
M-251-60	6/14/2023	N	EM10	UMCf	52.3 - 62.3	1,290 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
M-251-60	9/14/2023	N	EM13	UMCf	52.3 - 62.3	1,430 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
M-251-60	12/11/2023	N	EM16	UMCf	52.3 - 62.3	5,240 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
M-252	4/21/2022	N	BL02	UMCf	132.3 - 142.3	520 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
M-252	3/15/2023	N	EM07	UMCf	132.3 - 142.3	1,020 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
M-252	9/19/2023	N	EM13	UMCf	132.3 - 142.3	1,480	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
M-252	12/18/2023	N	EM16	UMCf	132.3 - 142.3	996 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
M-253-100	4/20/2022	N	BL02	UMCf	100.8 - 110.8	----	----	----	----	----	----	----	----	----
M-255-100	4/20/2022	N	BL02	UMCf	100.2 - 110.2	----	----	----	----	----	----	----	----	----
U4-E-01D	4/18/2022	N	BL02	UMCf	94.7 - 109.7	1,030 J+	<0.735	<0.745	<0.665	<0.790	<0.500	<0.940	<0.710	<1.15
U4-E-01D	3/14/2023	N	EM07	UMCf	94.7 - 109.7	36,400	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-01I	4/19/2022	N	BL02	UMCf	74.6 - 89.6	2,420 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-01I	4/19/2022	FD	BL02	UMCf	74.6 - 89.6	2,670 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-01I	3/14/2023	N	EM07	UMCf	74.6 - 89.6	2,230 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-01I	4/20/2023	N	EM08	UMCf	74.6 - 89.6	12,700	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-01I	5/10/2023	N	EM09	UMCf	74.6 - 89.6	34,200	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-01I	6/12/2023	N	EM10	UMCf	74.6 - 89.6	94,200	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230 UJ
U4-E-01I	7/11/2023	N	EM11	UMCf	74.6 - 89.6	968,000	<0.735	<0.745	<0.665	<0.790	<0.500	<0.940	<0.710	<1.15
U4-E-01I	8/10/2023	N	EM12	UMCf	74.6 - 89.6	217,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-01I	9/11/2023	N	EM13	UMCf	74.6 - 89.6	3,310,000	<0.735	<0.745	<0.665	<0.790	<0.500	<0.940	<0.710	<1.15
U4-E-01I	10/16/2023	N	EM14	UMCf	74.6 - 89.6	3,350,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-01I	12/13/2023	N	EM16	UMCf	74.6 - 89.6	3,990,000	<1.47	<1.49	<1.33	<1.58	<1.00	<1.88	<1.42	<2.30
U4-E-02D	4/20/2022	N	BL02	UMCf	94.4 - 109.4	1,540 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-02D	3/14/2023	N	EM07	UMCf	94.4 - 109.4	2,720 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-02I	4/18/2022	N	BL02	UMCf	74.4 - 89.4	1,240 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-02I	3/14/2023	N	EM07	UMCf	74.4 - 89.4	3,580 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-02I	4/20/2023	N	EM08	UMCf	74.4 - 89.4	53,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-02I	5/11/2023	N	EM09	UMCf	74.4 - 89.4	125,000	<0.147 UJ	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-02I	6/12/2023	N	EM10	UMCf	74.4 - 89.4	312,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230 UJ
U4-E-02I	7/11/2023	N	EM11	UMCf	74.4 - 89.4	315,000 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-02I	8/10/2023	N	EM12	UMCf	74.4 - 89.4	626,000 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	SW9060A/SM5 310B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Total Organic Carbon	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,1,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-E-02I	9/11/2023	N	EM13	UMCf	74.4 - 89.4	845,000 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-02I	10/16/2023	N	EM14	UMCf	74.4 - 89.4	535 J	<1.47	<1.49	<1.33	<1.58	<1.00	<1.88	<1.42	<2.30
U4-E-02I	12/14/2023	N	EM16	UMCf	74.4 - 89.4	3,540,000 J-	<1.47	<1.49	<1.33	<1.58	<1.00	<1.88	<1.42	<2.30
U4-E-03D	4/19/2022	N	BL02	UMCf	95.1 - 110.1	1,660 J+	<0.147	<0.149	<0.133	<0.158	0.126 J	0.465 J	<0.142	<0.230
U4-E-03D	10/13/2022	N	EM02	UMCf	95.1 - 110.1	971 J	<29.4	<29.8	<26.6	<31.6	<20.0	<37.6	<28.4	<46.0
U4-E-03D	11/3/2022	N	EM03	UMCf	95.1 - 110.1	1,710 J+	<0.147	<0.149	<0.133	<0.158	<0.100	0.481 J	0.479 J	<0.230
U4-E-03D	12/6/2022	N	EM04	UMCf	95.1 - 110.1	1,380 J+	<2.94 UJ	<2.98 UJ	<2.66 UJ	<3.16 UJ	<2.00 UJ	<3.76 UJ	<2.84 UJ	<4.60 UJ
U4-E-03D	1/9/2023	N	EM05	UMCf	95.1 - 110.1	1,410 J+	<0.147	<0.149	<0.133	<0.158	<0.100	0.264 J	0.273 J	<0.230
U4-E-03D	2/13/2023	N	EM06	UMCf	95.1 - 110.1	1,260 J+	<14.7	<14.9	<13.3	<15.8	<10.0	<18.8	<14.2	<23.0
U4-E-03D	3/13/2023	N	EM07	UMCf	95.1 - 110.1	1,920 J+	<14.7	<14.9	<13.3	<15.8	<10.0	<18.8	<14.2	<23.0
U4-E-03D	3/14/2023	N	EM07	UMCf	95.1 - 110.1	1,520 J+	<29.4	<29.8	<26.6	<31.6	<20.0	<37.6	<28.4	<46.0
U4-E-03D	4/19/2023	N	EM08	UMCf	95.1 - 110.1	83,500	<0.735	<0.745	<0.665	<0.790	<0.500	<0.940	<0.710	<1.15
U4-E-03D	5/11/2023	N	EM09	UMCf	95.1 - 110.1	213,000	<0.147 UJ	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-03D	6/12/2023	N	EM10	UMCf	95.1 - 110.1	123,000	<0.147	<0.149	<0.133	<0.158	<0.100	0.331 J	0.346 J	<0.230 UJ
U4-E-03D	7/11/2023	N	EM11	UMCf	95.1 - 110.1	28,700	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	0.275 J	<0.230
U4-E-03D	8/10/2023	N	EM12	UMCf	95.1 - 110.1	12,200	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-03D	9/11/2023	N	EM13	UMCf	95.1 - 110.1	34,500	<0.147	<0.149	<0.133	<0.158	<0.100	0.270 J	0.373 J	<0.230
U4-E-03D	10/16/2023	N	EM14	UMCf	95.1 - 110.1	122,000	<29.4	<29.8	<26.6	<31.6	<20.0	<37.6	<28.4	<46.0
U4-E-04D	4/19/2022	N	BL02	UMCf	95.0 - 110.0	1,380 J+	<0.147	<0.149	<0.133	<0.158	<0.100	0.223 J	<0.142	<0.230
U4-E-04D	3/14/2023	N	EM07	UMCf	95.0 - 110.0	3,170 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-04I	4/18/2022	N	BL02	UMCf	75.0 - 90.0	863 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-04I	3/14/2023	N	EM07	UMCf	75.0 - 90.0	1,580 J+	<7.35	<7.45	<6.65	<7.90	<5.00	<9.40	<7.10	<11.5
U4-E-05D	4/19/2022	N	BL02	UMCf	95.0 - 110.0	1,070 J+	<0.147	<0.149	<0.133	<0.158	<0.100	0.271 J	<0.142	<0.230
U4-E-05D	3/16/2023	N	EM07	UMCf	95.0 - 110.0	2,450 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-05I	4/19/2022	N	BL02	UMCf	75.0 - 90.0	1,110 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-05I	3/15/2023	N	EM07	UMCf	75.0 - 90.0	2,960 J+	<0.147 UJ	<0.149 UJ	<0.133 UJ	<0.158 UJ	<0.100 UJ	<0.188 UJ	<0.142 UJ	<0.230 UJ
U4-E-06D	4/11/2022	N	BL02	UMCf	95.1 - 110.1	605 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-06I	4/11/2022	N	BL02	UMCf	73.2 - 88.2	863 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-06I	4/11/2022	FD	BL02	UMCf	73.2 - 88.2	909 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-06I	10/12/2022	N	EM02	UMCf	73.2 - 88.2	221,000	<0.147	<0.149	<0.133	<0.158	<0.100	0.210 J	0.258 J	<0.230
U4-E-06I	11/3/2022	N	EM03	UMCf	73.2 - 88.2	659,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	0.204 J	<0.230
U4-E-06I	12/6/2022	N	EM04	UMCf	73.2 - 88.2	69,200	<1.47 UJ	<1.49 UJ	<1.33 UJ	<1.58 UJ	<1.00 UJ	<1.88 UJ	<1.42 UJ	<2.30 UJ
U4-E-06I	1/9/2023	N	EM05	UMCf	73.2 - 88.2	117,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	0.224 J	<0.230
U4-E-06I	2/13/2023	N	EM06	UMCf	73.2 - 88.2	516,000	<14.7	<14.9	<13.3	<15.8	<10.0	<18.8	<14.2	<23.0
U4-E-06I	3/13/2023	N	EM07	UMCf	73.2 - 88.2	399,000	<2.94	<2.98	<2.66	<3.16	<2.00	<3.76	<2.84	<4.60
U4-E-06I	4/17/2023	N	EM08	UMCf	73.2 - 88.2	198,000	<2.94	<2.98	<2.66	<3.16	<2.00	<3.76	<2.84	<4.60
U4-E-06I	5/15/2023	N	EM09	UMCf	73.2 - 88.2	29,900	<3.68	<3.73	<3.33	<3.95	<2.50	<4.70	<3.55	<5.75
U4-E-06I	6/12/2023	N	EM10	UMCf	73.2 - 88.2	66,900 J-	<0.147	<0.149	<0.133	<0.158	<0.100	0.235 J	0.288 J	<0.230 UJ
U4-E-06I	7/11/2023	N	EM11	UMCf	73.2 - 88.2	10,600	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-06I	8/11/2023	N	EM12	UMCf	73.2 - 88.2	54,700	<0.735	<0.745	<0.665	<0.790	<0.500	<0.940	<0.710	<1.15
U4-E-06I	9/11/2023	N	EM13	UMCf	73.2 - 88.2	1,270,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-06I	10/16/2023	N	EM14	UMCf	73.2 - 88.2	486,000	<7.35	<7.45	<6.65	<7.90	<5.00	<9.40	<7.10	<11.5
U4-E-06I	12/13/2023	N	EM16	UMCf	73.2 - 88.2	513,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-07D	4/12/2022	N	BL02	UMCf	94.6 - 109.6	3,200 J	<0.147	<0.149	<0.133	<0.158	<0.100	0.682 J	0.594 J	<0.230
U4-E-07I	4/12/2022	N	BL02	UMCf	74.7 - 89.7	2,760 J	<0.147	<0.149	<0.133	<0.158	0.122 J	0.424 J	<0.142	<0.230
U4-E-07I	10/11/2022	N	EM02	UMCf	74.7 - 89.7	12,500	<1.47	<1.49	<1.33	<1.58	<1.00	<1.88	<1.42	<2.30
U4-E-07I	11/3/2022	N	EM03	UMCf	74.7 - 89.7	18,800	<0.147	<0.149	<0.133	<0.158	<0.100	0.225 J	0.316 J	<0.230
U4-E-07I	12/6/2022	N	EM04	UMCf	74.7 - 89.7	17,100	<3.68 UJ	<3.73 UJ	<3.33 UJ	<3.95 UJ	<2.50 UJ	<4.70 UJ	<3.55 UJ	<5.75 UJ
U4-E-07I	1/9/2023	N	EM05	UMCf	74.7 - 89.7	4,110	<0.147	<0.149	<0.133	<0.158	<0.100	0.281 J	<0.142	<0.230
U4-E-07I	2/13/2023	N	EM06	UMCf	74.7 - 89.7	10,100	<14.7	<14.9	<13.3	<15.8	<10.0	<18.8	<14.2	<23.0
U4-E-07I	3/13/2023	N	EM07	UMCf	74.7 - 89.7	6,770	<14.7	<14.9	<13.3	<15.8	<10.0	<18.8	<14.2	<23.0

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	SW9060A/SM5 310B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Total Organic Carbon	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,1,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-E-07I	4/19/2023	N	EM08	UMCf	74.7 - 89.7	8,630	<0.735	<0.745	<0.665	<0.790	<0.500	<0.940	<0.710	<1.15
U4-E-07I	5/15/2023	N	EM09	UMCf	74.7 - 89.7	6,020	<14.7	<14.9	<13.3	<15.8	<10.0	<18.8	<14.2	<23.0
U4-E-07I	6/12/2023	N	EM10	UMCf	74.7 - 89.7	7,650 J+	<0.147	<0.149	<0.133	<0.158	<0.100	0.315 J	0.338 J	<0.230 UJ
U4-E-07I	7/11/2023	N	EM11	UMCf	74.7 - 89.7	11,400	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-07I	8/11/2023	N	EM12	UMCf	74.7 - 89.7	10,700	<0.735	<0.745	<0.665	<0.790	<0.500	<0.940	<0.710	<1.15
U4-E-07I	9/11/2023	N	EM13	UMCf	74.7 - 89.7	15,700	<0.147	<0.149	<0.133	<0.158	<0.100	0.277 J	0.388 J	<0.230
U4-E-07I	10/16/2023	N	EM14	UMCf	74.7 - 89.7	13,800	<14.7	<14.9	<13.3	<15.8	<10.0	<18.8	<14.2	<23.0
U4-E-07I	12/13/2023	N	EM16	UMCf	74.7 - 89.7	8,740	<0.147	<0.149	<0.133	<0.158	<0.100	0.275 J	0.428 J	<0.230
U4-E-08D	4/12/2022	N	BL02	UMCf	94.6 - 109.6	3,170 J	<0.147	<0.149	<0.133	<0.158	<0.100	0.759 J	0.631 J	<0.230
U4-E-08D	10/11/2022	N	EM02	UMCf	94.6 - 109.6	2,450	<1.47	<1.49	<1.33	<1.58	<1.00	<1.88	<1.42	<2.30
U4-E-08D	11/3/2022	N	EM03	UMCf	94.6 - 109.6	2,770 J+	<0.147	<0.149	<0.133	<0.158	<0.100	0.501 J	0.528 J	<0.230
U4-E-08D	12/6/2022	N	EM04	UMCf	94.6 - 109.6	2,490 J+	<3.68 UJ	<3.73 UJ	<3.33 UJ	<3.95 UJ	<2.50 UJ	<4.70 UJ	<3.55 UJ	<5.75 UJ
U4-E-08D	1/9/2023	N	EM05	UMCf	94.6 - 109.6	2,610 J+	<0.147	<0.149	<0.133	<0.158	<0.100	0.285 J	0.335 J	<0.230
U4-E-08D	2/13/2023	N	EM06	UMCf	94.6 - 109.6	2,770	<14.7	<14.9	<13.3	<15.8	<10.0	<18.8	<14.2	<23.0
U4-E-08D	3/13/2023	N	EM07	UMCf	94.6 - 109.6	3,510 J+	<14.7	<14.9	<13.3	<15.8	<10.0	<18.8	<14.2	<23.0
U4-E-08D	4/19/2023	N	EM08	UMCf	94.6 - 109.6	3,960	<0.735	<0.745	<0.665	<0.790	<0.500	<0.940	<0.710	<1.15
U4-E-08D	5/17/2023	N	EM09	UMCf	94.6 - 109.6	5,820 J+	<14.7	<14.9	<13.3	<15.8	<10.0	<18.8	<14.2	<23.0
U4-E-08D	6/12/2023	N	EM10	UMCf	94.6 - 109.6	3,530	<0.147	<0.149	<0.133	<0.158	<0.100	0.250 J	0.284 J	<0.230 UJ
U4-E-08D	7/11/2023	N	EM11	UMCf	94.6 - 109.6	3,900 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-09D	4/15/2022	N	BL02	UMCf	94.5 - 109.5	875 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-E-09I	4/14/2022	N	BL02	UMCf	74.9 - 89.9	1,280 J	<0.147	<0.149	<0.133	<0.158	<0.100	0.401 J	<0.142	<0.230
U4-E-10D	4/13/2022	N	BL02	UMCf	94.5 - 109.5	766 J	<0.147	<0.149	<0.133	<0.158	<0.100	0.398 J	<0.142	<0.230
U4-E-10I	4/13/2022	N	BL02	UMCf	74.2 - 89.2	1,790 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-01D	4/19/2022	N	BL02	UMCf	96.7 - 106.7	952 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-01D	2/16/2023	N	EM06	UMCf	96.7 - 106.7	----	<1.47	<1.49	<1.33	<1.58	<1.00	<1.88	<1.42	<2.30
U4-MW-01D	3/20/2023	N	EM07	UMCf	96.7 - 106.7	768 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-01D	6/13/2023	N	EM10	UMCf	96.7 - 106.7	742 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-01D	9/14/2023	N	EM13	UMCf	96.7 - 106.7	456 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-01D	12/14/2023	N	EM16	UMCf	96.7 - 106.7	563 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-01DD	4/19/2022	N	BL02	UMCf	119.9 - 129.9	1,120 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-01DD	4/19/2022	FD	BL02	UMCf	119.9 - 129.9	1,080 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-01DD	3/15/2023	N	EM07	UMCf	119.9 - 129.9	1,100 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-01DD	6/13/2023	N	EM10	UMCf	119.9 - 129.9	1,010 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-01DD	9/14/2023	N	EM13	UMCf	119.9 - 129.9	447 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-01DD	12/15/2023	N	EM16	UMCf	119.9 - 129.9	462 J	<0.735	<0.745	<0.665	<0.790	<0.500	<0.940	<0.710	<1.15
U4-MW-01I	4/19/2022	N	BL02	UMCf	76.7 - 86.7	1,160 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-01I	3/20/2023	N	EM07	UMCf	76.7 - 86.7	751 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-01I	6/12/2023	N	EM10	UMCf	76.7 - 86.7	706 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230 UJ
U4-MW-01I	9/14/2023	N	EM13	UMCf	76.7 - 86.7	494 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-01I	12/15/2023	N	EM16	UMCf	76.7 - 86.7	570 J	<7.35	<7.45	<6.65	<7.90	<5.00	<9.40	<7.10	<11.5
U4-MW-01S	4/18/2022	N	BL02	UMCf	54.7 - 64.7	972 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-01S	3/15/2023	N	EM07	UMCf	54.7 - 64.7	1,420 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-01S	6/13/2023	N	EM10	UMCf	54.7 - 64.7	803 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-01S	9/15/2023	N	EM13	UMCf	54.7 - 64.7	963 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-01S	12/13/2023	N	EM16	UMCf	54.7 - 64.7	1,810	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-02D	4/14/2022	N	BL02	UMCf	95.0 - 110.0	1,570 J	<0.147	<0.149	<0.133	<0.158	0.135 J	0.735 J	<0.142	<0.230
U4-MW-02D	10/11/2022	N	EM02	UMCf	95.0 - 110.0	787 J	<0.147	<0.149	<0.133	<0.158	<0.100	0.517 J	<0.142	<0.230
U4-MW-02D	11/1/2022	N	EM03	UMCf	95.0 - 110.0	558 J	<7.35	<7.45	<6.65	<7.90	<5.00	<9.40	<7.10	<11.5
U4-MW-02D	12/7/2022	N	EM04	UMCf	95.0 - 110.0	924 J	<0.147	<0.149	<0.133	<0.158	0.165 J	0.832 J	0.619 J	<0.230
U4-MW-02D	1/10/2023	N	EM05	UMCf	95.0 - 110.0	1,850 J	<0.147	<0.149	<0.133	<0.158	0.118 J	0.763 J	0.566 J	<0.230 UJ
U4-MW-02D	2/13/2023	N	EM06	UMCf	95.0 - 110.0	869 J	<0.147	<0.149	<0.133	<0.158	0.124 J	0.902 J	0.663 J	<0.230

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	SW9060A/SM5 310B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Total Organic Carbon	1,1,1,2- Tetrachloroethane	1,1,1- Trichloroethane	1,1,2,2- Tetrachloroethane	1,1,2- Trichloroethane	1,1- Dichloroethane	1,1- Dichloroethene	1,1- Dichloropropene	1,2,3- Trichlorobenzene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-02D	3/17/2023	N	EM07	UMCf	95.0 - 110.0	1,830 J+	<14.7	<14.9	<13.3	<15.8	<10.0	<18.8	<14.2	<23.0
U4-MW-02D	4/19/2023	N	EM08	UMCf	95.0 - 110.0	1,620	<0.735	<0.745	<0.665	<0.790	<0.500	<0.940	<0.710	<1.15
U4-MW-02D	5/9/2023	N	EM09	UMCf	95.0 - 110.0	1,930 J+	<0.735	<0.745	<0.665	<0.790	<0.500	<0.940	<0.710	<1.15
U4-MW-02D	6/13/2023	N	EM10	UMCf	95.0 - 110.0	1,140 J+	<0.147	<0.149	<0.133	<0.158	<0.100	0.382 J	0.188 J	<0.230
U4-MW-02D	7/18/2023	N	EM11	UMCf	95.0 - 110.0	1,680 J+	<0.147	<0.149	<0.133	<0.158	0.108 J	0.768 J	<0.142	<0.230
U4-MW-02D	8/14/2023	N	EM12	UMCf	95.0 - 110.0	1,380 J+	<36.8	<37.3	<33.3	<39.5	<25.0	<47.0	<35.5	<57.5
U4-MW-02D	9/11/2023	N	EM13	UMCf	95.0 - 110.0	1,570 J+	<0.147	<0.149	<0.133	<0.158	0.113 J	0.594 J	0.313 J	<0.230
U4-MW-02D	10/19/2023	N	EM14	UMCf	95.0 - 110.0	1,070	<0.147	<0.149	<0.133	<0.158	0.161 J	0.745 J	<0.142	<0.230
U4-MW-02D	11/15/2023	N	EM15	UMCf	95.0 - 110.0	2,910	<14.7	<14.9	<13.3	<15.8	<10.0	<18.8	<14.2	<23.0
U4-MW-02D	12/14/2023	N	EM16	UMCf	95.0 - 110.0	819 J	<14.7	<14.9	<13.3	<15.8	<10.0	<18.8	<14.2	<23.0
U4-MW-02I	4/14/2022	N	BL02	UMCf	75.0 - 90.0	1,100 J+	<0.147	<0.149	<0.133	<0.158	<0.100	0.431 J	<0.142	<0.230
U4-MW-02I	10/11/2022	N	EM02	UMCf	75.0 - 90.0	8,510	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-02I	11/2/2022	N	EM03	UMCf	75.0 - 90.0	88,500	<1.47	<1.49	<1.33	<1.58	<1.00	<1.88	<1.42	<2.30
U4-MW-02I	11/2/2022	FD	EM03	UMCf	75.0 - 90.0	75,900	<1.47	<1.49	<1.33	<1.58	<1.00	<1.88	<1.42	<2.30
U4-MW-02I	12/8/2022	N	EM04	UMCf	75.0 - 90.0	31,600 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-02I	12/8/2022	FD	EM04	UMCf	75.0 - 90.0	161,000 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-02I	1/13/2023	N	EM05	UMCf	75.0 - 90.0	76,100	<1.47	<1.49	<1.33	<1.58	<1.00	<1.88	<1.42	<2.30
U4-MW-02I	1/13/2023	FD	EM05	UMCf	75.0 - 90.0	74,900 J-	<1.47	<1.49	<1.33	<1.58	<1.00	<1.88	<1.42	<2.30
U4-MW-02I	2/15/2023	N	EM06	UMCf	75.0 - 90.0	10,700	<1.47	<1.49	<1.33	<1.58	<1.00	<1.88	<1.42	<2.30 UJ
U4-MW-02I	2/15/2023	FD	EM06	UMCf	75.0 - 90.0	13,300	<1.47	<1.49	<1.33	<1.58	<1.00	<1.88	<1.42	<2.30 UJ
U4-MW-02I	3/17/2023	N	EM07	UMCf	75.0 - 90.0	12,000	<29.4	<29.8	<26.6	<31.6	<20.0	<37.6	<28.4	<46.0
U4-MW-02I	3/17/2023	FD	EM07	UMCf	75.0 - 90.0	12,700	<29.4	<29.8	<26.6	<31.6	<20.0	<37.6	<28.4	<46.0
U4-MW-02I	4/20/2023	N	EM08	UMCf	75.0 - 90.0	104,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-02I	4/20/2023	FD	EM08	UMCf	75.0 - 90.0	105,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-02I	5/9/2023	N	EM09	UMCf	75.0 - 90.0	141,000 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-02I	5/9/2023	FD	EM09	UMCf	75.0 - 90.0	35,900 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-02I	6/12/2023	N	EM10	UMCf	75.0 - 90.0	159,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230 UJ
U4-MW-02I	6/12/2023	FD	EM10	UMCf	75.0 - 90.0	157,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230 UJ
U4-MW-02I	7/18/2023	N	EM11	UMCf	75.0 - 90.0	255,000 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-02I	7/18/2023	FD	EM11	UMCf	75.0 - 90.0	291,000 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-02I	8/11/2023	N	EM12	UMCf	75.0 - 90.0	19,700	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-02I	8/11/2023	FD	EM12	UMCf	75.0 - 90.0	19,500	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-02I	9/11/2023	N	EM13	UMCf	75.0 - 90.0	253,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-02I	9/11/2023	FD	EM13	UMCf	75.0 - 90.0	253,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-02I	10/19/2023	N	EM14	UMCf	75.0 - 90.0	25,000	<0.147 UJ	<0.149 UJ	<0.133 UJ	<0.158 UJ	<0.100 UJ	0.377 J	0.286 J	<0.230 UJ
U4-MW-02I	10/19/2023	FD	EM14	UMCf	75.0 - 90.0	24,900	<0.147	<0.149	<0.133	<0.158	<0.100	0.396 J	<0.142	<0.230
U4-MW-02I	11/15/2023	N	EM15	UMCf	75.0 - 90.0	128,000	<7.35	<7.45	<6.65	<7.90	<5.00	<9.40	<7.10	<11.5
U4-MW-02I	11/15/2023	FD	EM15	UMCf	75.0 - 90.0	128,000	<7.35	<7.45	<6.65	<7.90	<5.00	<9.40	<7.10	<11.5
U4-MW-02I	12/14/2023	N	EM16	UMCf	75.0 - 90.0	293,000	<7.35	<7.45	<6.65	<7.90	<5.00	<9.40	<7.10	<11.5
U4-MW-02I	12/14/2023	FD	EM16	UMCf	75.0 - 90.0	293,000	<7.35	<7.45	<6.65	<7.90	<5.00	<9.40	<7.10	<11.5
U4-MW-03D	4/20/2022	N	BL02	UMCf	96.6 - 106.6	964 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-03D	2/16/2023	N	EM06	UMCf	96.6 - 106.6	----	<0.735	<0.745	<0.665	<0.790	<0.500	<0.940	<0.710	<1.15
U4-MW-03D	3/16/2023	N	EM07	UMCf	96.6 - 106.6	816 J	<2.94	<2.98	<2.66	<3.16	<2.00	<3.76	<2.84	<4.60
U4-MW-03D	3/16/2023	FD	EM07	UMCf	96.6 - 106.6	831 J	<0.735	<0.745	<0.665	<0.790	<0.500	<0.940	<0.710	<1.15
U4-MW-03D	6/15/2023	N	EM10	UMCf	96.6 - 106.6	538 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-03D	9/14/2023	N	EM13	UMCf	96.6 - 106.6	1,900	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-03D	12/13/2023	N	EM16	UMCf	96.6 - 106.6	64,500	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-03DD	4/20/2022	N	BL02	UMCf	119.7 - 129.7	999 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-03DD	3/15/2023	N	EM07	UMCf	119.7 - 129.7	846 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-03DD	6/15/2023	N	EM10	UMCf	119.7 - 129.7	274 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-03DD	9/14/2023	N	EM13	UMCf	119.7 - 129.7	161 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	SW9060A/SM5 310B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Total Organic Carbon	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,1,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-03DD	12/14/2023	N	EM16	UMCf	119.7 - 129.7	156 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-03I	4/19/2022	N	BL02	UMCf	76.6 - 86.6	3,300 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-03I	3/15/2023	N	EM07	UMCf	76.6 - 86.6	1,260 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-03I	6/14/2023	N	EM10	UMCf	76.6 - 86.6	607 J	<2.94	<2.98	<2.66	<3.16	<2.00	<3.76	<2.84	<4.60
U4-MW-03I	6/14/2023	FD	EM10	UMCf	76.6 - 86.6	620 J	<3.68	<3.73	<3.33	<3.95	<2.50	<4.70	<3.55	<5.75
U4-MW-03I	9/11/2023	N	EM13	UMCf	76.6 - 86.6	1,120 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	0.165 J	<0.230
U4-MW-03I	9/11/2023	FD	EM13	UMCf	76.6 - 86.6	1,190 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-03I	12/13/2023	N	EM16	UMCf	76.6 - 86.6	4,540	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-03I	12/13/2023	FD	EM16	UMCf	76.6 - 86.6	4,600	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-03S	4/18/2022	N	BL02	UMCf	54.5 - 64.5	1,200 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-03S	4/18/2022	FD	BL02	UMCf	54.5 - 64.5	1,320 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-03S	3/15/2023	N	EM07	UMCf	54.5 - 64.5	1,480 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-03S	6/15/2023	N	EM10	UMCf	54.5 - 64.5	2,310 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-03S	9/14/2023	N	EM13	UMCf	54.5 - 64.5	5,950	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-03S	12/13/2023	N	EM16	UMCf	54.5 - 64.5	3,280	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-04D	4/19/2022	N	BL02	UMCf	97.0 - 107.0	7,260 J+	<0.147	<0.149	<0.133	<0.158	<0.100	0.560 J	<0.142	<0.230
U4-MW-04D	2/16/2023	N	EM06	UMCf	97.0 - 107.0	----	<7.35	<7.45	<6.65	<7.90	<5.00	<9.40	<7.10	<11.5
U4-MW-04D	3/21/2023	N	EM07	UMCf	97.0 - 107.0	1,210 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-04D	6/14/2023	N	EM10	UMCf	97.0 - 107.0	57,600	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-04D	9/15/2023	N	EM13	UMCf	97.0 - 107.0	4,430	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-04D	12/12/2023	N	EM16	UMCf	97.0 - 107.0	127,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-04I	4/19/2022	N	BL02	UMCf	76.8 - 86.8	1,530 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-04I	3/20/2023	N	EM07	UMCf	76.8 - 86.8	1,200 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	0.158 J	<0.230
U4-MW-04I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	39,000	<0.735	<0.745	<0.665	<0.790	<0.500	<0.940	<0.710	<1.15
U4-MW-04I	9/14/2023	N	EM13	UMCf	76.8 - 86.8	1,630	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-04I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	7,380	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-05D	4/15/2022	N	BL02	UMCf	98.2 - 108.2	1,710 J	<0.147	<0.149	<0.133	<0.158	0.181 J	0.659 J	0.565 J	<0.230
U4-MW-05D	10/13/2022	N	EM02	UMCf	98.2 - 108.2	1,300 J	<14.7	<14.9	<13.3	<15.8	<10.0	<18.8	<14.2	<23.0
U4-MW-05D	11/3/2022	N	EM03	UMCf	98.2 - 108.2	1,450 J+	<0.147	<0.149	<0.133	<0.158	0.118 J	0.278 J	0.297 J	<0.230
U4-MW-05D	12/7/2022	N	EM04	UMCf	98.2 - 108.2	1,200 J+	<0.147	<0.149	<0.133	<0.158	0.116 J	0.436 J	0.544 J	<0.230
U4-MW-05D	1/11/2023	N	EM05	UMCf	98.2 - 108.2	1,200 J+	<0.147	<0.149	<0.133	<0.158	0.106 J	0.330 J	0.362 J	<0.230
U4-MW-05D	2/14/2023	N	EM06	UMCf	98.2 - 108.2	1,090	<14.7	<14.9	<13.3	<15.8	<10.0	<18.8	<14.2	<23.0
U4-MW-05D	3/16/2023	N	EM07	UMCf	98.2 - 108.2	1,370 J+	<14.7	<14.9	<13.3	<15.8	<10.0	<18.8	<14.2	<23.0
U4-MW-05D	4/20/2023	N	EM08	UMCf	98.2 - 108.2	4,520	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	0.187 J	<0.230
U4-MW-05D	5/10/2023	N	EM09	UMCf	98.2 - 108.2	94,100	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	0.197 J	<0.230
U4-MW-05D	6/15/2023	N	EM10	UMCf	98.2 - 108.2	129,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-05D	7/18/2023	N	EM11	UMCf	98.2 - 108.2	22,100	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-05D	8/14/2023	N	EM12	UMCf	98.2 - 108.2	50,700	<3.68	<3.73	<3.33	<3.95	<2.50	<4.70	<3.55	<5.75
U4-MW-05D	9/12/2023	N	EM13	UMCf	98.2 - 108.2	127,000	<3.68	<3.73	<3.33	<3.95	<2.50	<4.70	<3.55	<5.75
U4-MW-05D	10/18/2023	N	EM14	UMCf	98.2 - 108.2	185,000 J-	<3.68	<3.73	<3.33	<3.95	<2.50	<4.70	<3.55	<5.75
U4-MW-05D	11/16/2023	N	EM15	UMCf	98.2 - 108.2	215,000	<3.68	<3.73	<3.33	<3.95	<2.50	<4.70	<3.55	<5.75
U4-MW-05D	12/14/2023	N	EM16	UMCf	98.2 - 108.2	3,170,000 J-	<3.68	<3.73	<3.33	<3.95	<2.50	<4.70	<3.55	<5.75
U4-MW-05I	4/15/2022	N	BL02	UMCf	76.6 - 86.6	1,460 J+	<0.147	<0.149	<0.133	<0.158	<0.100	0.359 J	0.311 J	<0.230
U4-MW-05I	10/13/2022	N	EM02	UMCf	76.6 - 86.6	1,180 J	<14.7	<14.9	<13.3	<15.8	<10.0	<18.8	<14.2	<23.0
U4-MW-05I	11/3/2022	N	EM03	UMCf	76.6 - 86.6	1,370 J+	<0.147	<0.149	<0.133	<0.158	0.154 J	0.448 J	0.557 J	<0.230
U4-MW-05I	12/8/2022	N	EM04	UMCf	76.6 - 86.6	1,630 J+	<0.147	<0.149	<0.133	<0.158	0.135 J	0.345 J	<0.142	<0.230
U4-MW-05I	1/11/2023	N	EM05	UMCf	76.6 - 86.6	1,400 J+	<0.147	<0.149	<0.133	<0.158	<0.100	0.289 J	0.462 J	<0.230
U4-MW-05I	2/14/2023	N	EM06	UMCf	76.6 - 86.6	1,260 J+	<14.7	<14.9	<13.3	<15.8	<10.0	<18.8	<14.2	<23.0
U4-MW-05I	3/14/2023	N	EM07	UMCf	76.6 - 86.6	1,990 J+	<14.7	<14.9	<13.3	<15.8	<10.0	<18.8	<14.2	<23.0
U4-MW-05I	4/21/2023	N	EM08	UMCf	76.6 - 86.6	379,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-05I	5/10/2023	N	EM09	UMCf	76.6 - 86.6	531,000 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	SW9060A/SM5 310B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	
						Total Organic Carbon	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,1,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-05I	6/15/2023	N	EM10	UMCf	76.6 - 86.6	485,000 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-05I	7/17/2023	N	EM11	UMCf	76.6 - 86.6	54,600 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-05I	8/14/2023	N	EM12	UMCf	76.6 - 86.6	131,000	<7.35	<7.45	<6.65	<7.90	<5.00	<9.40	<7.10	<11.5
U4-MW-05I	9/13/2023	N	EM13	UMCf	76.6 - 86.6	98,100 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-05I	10/18/2023	N	EM14	UMCf	76.6 - 86.6	66,000 J-	<7.35	<7.45	<6.65	<7.90	<5.00	<9.40	<7.10	<11.5
U4-MW-05I	11/15/2023	N	EM15	UMCf	76.6 - 86.6	166,000 J-	<7.35	<7.45	<6.65	<7.90	<5.00	<9.40	<7.10	<11.5
U4-MW-05I	12/12/2023	N	EM16	UMCf	76.6 - 86.6	403 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-06D	4/19/2022	N	BL02	UMCf	97.1 - 107.1	1,350 J+	<0.147	<0.149	<0.133	<0.158	0.134 J	0.315 J	<0.142	<0.230
U4-MW-06D	2/15/2023	N	EM06	UMCf	97.1 - 107.1	----	<7.35	<7.45	<6.65	<7.90	<5.00	<9.40	<7.10	<11.5
U4-MW-06D	3/21/2023	N	EM07	UMCf	97.1 - 107.1	919 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-06D	6/16/2023	N	EM10	UMCf	97.1 - 107.1	863 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-06D	9/13/2023	N	EM13	UMCf	97.1 - 107.1	180,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-06D	12/13/2023	N	EM16	UMCf	97.1 - 107.1	359,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-06I	4/19/2022	N	BL02	UMCf	76.5 - 86.5	1,190 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-06I	3/14/2023	N	EM07	UMCf	76.5 - 86.5	1,660 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-06I	6/16/2023	N	EM10	UMCf	76.5 - 86.5	4,040	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-06I	9/12/2023	N	EM13	UMCf	76.5 - 86.5	73,800	<7.35	<7.45	<6.65	<7.90	<5.00	<9.40	<7.10	<11.5
U4-MW-06I	12/12/2023	N	EM16	UMCf	76.5 - 86.5	150,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-07D	4/15/2022	N	BL02	UMCf	96.8 - 106.5	631 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-07D	10/12/2022	N	EM02	UMCf	96.8 - 106.5	1,630 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-07D	10/12/2022	FD	EM02	UMCf	96.8 - 106.5	1,490 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-07D	11/3/2022	N	EM03	UMCf	96.8 - 106.5	1,680 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-07D	12/7/2022	N	EM04	UMCf	96.8 - 106.5	1,580 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-07D	1/11/2023	N	EM05	UMCf	96.8 - 106.5	1,480 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-07D	2/14/2023	N	EM06	UMCf	96.8 - 106.5	1,320	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-07D	3/16/2023	N	EM07	UMCf	96.8 - 106.5	1,930 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-07D	4/21/2023	N	EM08	UMCf	96.8 - 106.5	416,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-07D	5/11/2023	N	EM09	UMCf	96.8 - 106.5	1,390 J+	<0.147 UJ	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-07D	6/13/2023	N	EM10	UMCf	96.8 - 106.5	392,000 J-	<0.147 UJ	<0.149 UJ	<0.133 UJ	<0.158 UJ	<0.100 UJ	<0.188 UJ	<0.142 UJ	<0.230 UJ
U4-MW-07D	7/17/2023	N	EM11	UMCf	96.8 - 106.5	38,900	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-07D	8/11/2023	N	EM12	UMCf	96.8 - 106.5	192,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-07D	9/13/2023	N	EM13	UMCf	96.8 - 106.5	129,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-07D	10/18/2023	N	EM14	UMCf	96.8 - 106.5	282,000 J-	<14.7	<14.9	<13.3	<15.8	<10.0	<18.8	<14.2	<23.0
U4-MW-07D	11/16/2023	N	EM15	UMCf	96.8 - 106.5	592,000 J-	<14.7	<14.9	<13.3	<15.8	<10.0	<18.8	<14.2	<23.0
U4-MW-07D	12/12/2023	N	EM16	UMCf	96.8 - 106.5	1,210 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-07I	4/15/2022	N	BL02	UMCf	76.8 - 86.8	2,760 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-07I	10/12/2022	N	EM02	UMCf	76.8 - 86.8	1,370 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-07I	11/3/2022	N	EM03	UMCf	76.8 - 86.8	1,530 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-07I	12/7/2022	N	EM04	UMCf	76.8 - 86.8	1,630 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-07I	1/11/2023	N	EM05	UMCf	76.8 - 86.8	1,420 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-07I	2/15/2023	N	EM06	UMCf	76.8 - 86.8	1,250	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230 UJ
U4-MW-07I	3/16/2023	N	EM07	UMCf	76.8 - 86.8	25,900 J-	<0.735	<0.745	<0.665	<0.790	<0.500	<0.940	<0.710	<1.15
U4-MW-07I	4/21/2023	N	EM08	UMCf	76.8 - 86.8	113,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-07I	5/11/2023	N	EM09	UMCf	76.8 - 86.8	352,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-07I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	171,000	<0.735	<0.745	<0.665	<0.790	<0.500	<0.940	<0.710	<1.15
U4-MW-07I	7/17/2023	N	EM11	UMCf	76.8 - 86.8	47,900	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-07I	8/11/2023	N	EM12	UMCf	76.8 - 86.8	255,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-07I	9/13/2023	N	EM13	UMCf	76.8 - 86.8	409,000 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-07I	10/18/2023	N	EM14	UMCf	76.8 - 86.8	271 J	<7.35	<7.45	<6.65	<7.90	<5.00	<9.40	<7.10	<11.5
U4-MW-07I	11/16/2023	N	EM15	UMCf	76.8 - 86.8	613,000 J-	<7.35	<7.45	<6.65	<7.90	<5.00	<9.40	<7.10	<11.5
U4-MW-07I	12/11/2023	N	EM16	UMCf	76.8 - 86.8	937,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	SW9060A/SM5 310B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Total Organic Carbon	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,1,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-08D	4/13/2022	N	BL02	UMCf	98.6 - 108.6	3,420 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-08D	12/7/2022	N	EM04	UMCf	98.6 - 108.6	6,460	<0.147	<0.149	<0.133	<0.158	<0.100	0.391 J	<0.142	<0.230
U4-MW-08D	3/17/2023	N	EM07	UMCf	98.6 - 108.6	10,900 J-	<14.7	<14.9	<13.3	<15.8	<10.0	<18.8	<14.2	<23.0
U4-MW-08D	6/13/2023	N	EM10	UMCf	98.6 - 108.6	9,200 J+	<0.147	<0.149	<0.133	<0.158	<0.100	0.303 J	0.210 J	<0.230
U4-MW-08D	9/13/2023	N	EM13	UMCf	98.6 - 108.6	1,930 J+	<0.147	<0.149	<0.133	<0.158	<0.100	0.671 J	0.485 J	<0.230
U4-MW-08D	12/11/2023	N	EM16	UMCf	98.6 - 108.6	4,540	<0.147	<0.149	<0.133	<0.158	<0.100	0.303 J	<0.142	<0.230
U4-MW-08DD	4/20/2022	N	BL02	UMCf	119.8 - 129.8	670 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-08DD	4/20/2022	FD	BL02	UMCf	119.8 - 129.8	672 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-08DD	12/8/2022	N	EM04	UMCf	119.8 - 129.8	1,170 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-08DD	3/15/2023	N	EM07	UMCf	119.8 - 129.8	935 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-08DD	6/14/2023	N	EM10	UMCf	119.8 - 129.8	550 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-08DD	9/14/2023	N	EM13	UMCf	119.8 - 129.8	214 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-08DD	12/14/2023	N	EM16	UMCf	119.8 - 129.8	873 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-08I	4/13/2022	N	BL02	UMCf	78.0 - 88.0	1,740 J	<0.147	<0.149	<0.133	<0.158	<0.100	1.02	<0.142	<0.230
U4-MW-08I	12/7/2022	N	EM04	UMCf	78.0 - 88.0	1,790 J+	<0.147	<0.149	<0.133	<0.158	<0.100	0.223 J	<0.142	<0.230
U4-MW-08I	12/7/2022	FD	EM04	UMCf	78.0 - 88.0	1,310 J+	<0.147	<0.149	<0.133	<0.158	<0.100	0.232 J	0.238 J	<0.230
U4-MW-08I	3/17/2023	N	EM07	UMCf	78.0 - 88.0	1,640 J+	<7.35	<7.45	<6.65	<7.90	<5.00	<9.40	<7.10	<11.5
U4-MW-08I	6/13/2023	N	EM10	UMCf	78.0 - 88.0	12,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	0.152 J	<0.230
U4-MW-08I	9/13/2023	N	EM13	UMCf	78.0 - 88.0	5,260	<0.147	<0.149	<0.133	<0.158	<0.100	0.259 J	0.285 J	<0.230
U4-MW-08I	12/11/2023	N	EM16	UMCf	78.0 - 88.0	18,000	<0.147	<0.149	<0.133	<0.158	<0.100	0.233 J	<0.142	<0.230
U4-MW-08S	4/15/2022	N	BL02	UMCf	54.9 - 64.9	1,190 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-08S	12/7/2022	N	EM04	UMCf	54.9 - 64.9	3,390 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-08S	12/7/2022	FD	EM04	UMCf	54.9 - 64.9	2,830 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-08S	3/13/2023	N	EM07	UMCf	54.9 - 64.9	9,910	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-08S	3/13/2023	FD	EM07	UMCf	54.9 - 64.9	12,800 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-08S	6/13/2023	N	EM10	UMCf	54.9 - 64.9	190,000 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-08S	6/13/2023	FD	EM10	UMCf	54.9 - 64.9	201,000 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-08S	9/13/2023	N	EM13	UMCf	54.9 - 64.9	52,200 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-08S	9/13/2023	FD	EM13	UMCf	54.9 - 64.9	51,600 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-08S	12/14/2023	N	EM16	UMCf	54.9 - 64.9	1,050,000 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-08S	12/14/2023	FD	EM16	UMCf	54.9 - 64.9	1,010,000 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-09D	4/14/2022	N	BL02	UMCf	96.9 - 106.9	1,590 J	<0.147	<0.149	<0.133	<0.158	<0.100	0.455 J	<0.142	<0.230
U4-MW-09D	12/6/2022	N	EM04	UMCf	96.9 - 106.9	751 J	<1.47 UJ	<1.49 UJ	<1.33 UJ	<1.58 UJ	<1.00 UJ	<1.88 UJ	<1.42 UJ	<2.30 UJ
U4-MW-09D	3/16/2023	N	EM07	UMCf	96.9 - 106.9	146,000	<1.47	<1.49	<1.33	<1.58	<1.00	<1.88	<1.42	<2.30
U4-MW-09D	6/14/2023	N	EM10	UMCf	96.9 - 106.9	223,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-09D	9/12/2023	N	EM13	UMCf	96.9 - 106.9	87,700	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-09D	12/15/2023	N	EM16	UMCf	96.9 - 106.9	168,000	<3.68 UJ	<3.73 UJ	<3.33 UJ	<3.95 UJ	<2.50 UJ	<4.70 UJ	<3.55 UJ	<5.75 UJ
U4-MW-09DD	4/14/2022	N	BL02	UMCf	119.8 - 129.8	493 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-09DD	12/6/2022	N	EM04	UMCf	119.8 - 129.8	398 J	<0.147 UJ	<0.149 UJ	<0.133 UJ	<0.158 UJ	<0.100 UJ	<0.188 UJ	<0.142 UJ	<0.230 UJ
U4-MW-09DD	3/21/2023	N	EM07	UMCf	119.8 - 129.8	310 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-09DD	6/15/2023	N	EM10	UMCf	119.8 - 129.8	699 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-09DD	9/13/2023	N	EM13	UMCf	119.8 - 129.8	9,120	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-09DD	12/13/2023	N	EM16	UMCf	119.8 - 129.8	2,950	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-09I	4/14/2022	N	BL02	UMCf	76.8 - 86.8	1,090 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-09I	12/6/2022	N	EM04	UMCf	76.8 - 86.8	1,040 J+	<1.47 UJ	<1.49 UJ	<1.33 UJ	<1.58 UJ	<1.00 UJ	<1.88 UJ	<1.42 UJ	<2.30 UJ
U4-MW-09I	3/16/2023	N	EM07	UMCf	76.8 - 86.8	43,900	<1.47	<1.49	<1.33	<1.58	<1.00	<1.88	<1.42	<2.30
U4-MW-09I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	33,900	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-09I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	33,600	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-09I	12/15/2023	N	EM16	UMCf	76.8 - 86.8	63,000	<3.68 UJ	<3.73 UJ	<3.33 UJ	<3.95 UJ	<2.50 UJ	<4.70 UJ	<3.55 UJ	<5.75 UJ
U4-MW-09S	4/14/2022	N	BL02	UMCf	55.3 - 65.3	892 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-09S	12/6/2022	N	EM04	UMCf	55.3 - 65.3	999 J	<0.147 UJ	<0.149 UJ	<0.133 UJ	<0.158 UJ	<0.100 UJ	<0.188 UJ	<0.142 UJ	<0.230 UJ

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	SW9060A/SM5 310B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	
						Total Organic Carbon	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,1,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-09S	3/17/2023	N	EM07	UMCf	55.3 - 65.3	2,440 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-09S	6/15/2023	N	EM10	UMCf	55.3 - 65.3	724,000 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-09S	9/13/2023	N	EM13	UMCf	55.3 - 65.3	895,000 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-09S	12/12/2023	N	EM16	UMCf	55.3 - 65.3	1,190 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-10D	4/14/2022	N	BL02	UMCf	96.9 - 106.9	1,020 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-10D	12/5/2022	N	EM04	UMCf	96.9 - 106.9	868 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-10D	3/17/2023	N	EM07	UMCf	96.9 - 106.9	225,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-10D	6/14/2023	N	EM10	UMCf	96.9 - 106.9	234,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-10D	9/13/2023	N	EM13	UMCf	96.9 - 106.9	10,700	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-10D	12/14/2023	N	EM16	UMCf	96.9 - 106.9	9,960	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-10I	4/14/2022	N	BL02	UMCf	77.1 - 87.1	1,200 J+	<0.147	<0.149	<0.133	<0.158	<0.100	0.373 J	<0.142	<0.230
U4-MW-10I	12/5/2022	N	EM04	UMCf	77.1 - 87.1	3,630 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-10I	3/17/2023	N	EM07	UMCf	77.1 - 87.1	11,400	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-10I	6/14/2023	N	EM10	UMCf	77.1 - 87.1	257,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-10I	9/13/2023	N	EM13	UMCf	77.1 - 87.1	43,800	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-10I	12/14/2023	N	EM16	UMCf	77.1 - 87.1	8,050	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-11D	4/15/2022	N	BL02	UMCf	97.4 - 107.4	3,440 J+	<0.147	<0.149	<0.133	<0.158	<0.100	0.543 J	0.380 J	<0.230
U4-MW-11D	9/26/2022	N	EM01	UMCf	97.4 - 107.4	20,200 J+	<7.35	<7.45	<6.65	<7.90	<5.00	<9.40	<7.10	<11.5
U4-MW-11D	10/11/2022	N	EM02	UMCf	97.4 - 107.4	1,360 J+	<1.47	<1.49	<1.33	<1.58	<1.00	<1.88	<1.42	<2.30
U4-MW-11D	11/1/2022	N	EM03	UMCf	97.4 - 107.4	1,820 J+	<7.35	<7.45	<6.65	<7.90	<5.00	<9.40	<7.10	<11.5
U4-MW-11D	12/6/2022	N	EM04	UMCf	97.4 - 107.4	33,300	<3.68 UJ	<3.73 UJ	<3.33 UJ	<3.95 UJ	<2.50 UJ	<4.70 UJ	<3.55 UJ	<5.75 UJ
U4-MW-11D	1/12/2023	N	EM05	UMCf	97.4 - 107.4	5,100	<29.4	<29.8	<26.6	<31.6	<20.0	<37.6	<28.4	<46.0
U4-MW-11D	2/14/2023	N	EM06	UMCf	97.4 - 107.4	6,540	<29.4	<29.8	<26.6	<31.6	<20.0	<37.6	<28.4	<46.0
U4-MW-11D	3/16/2023	N	EM07	UMCf	97.4 - 107.4	5,970 J-	<29.4	<29.8	<26.6	<31.6	<20.0	<37.6	<28.4	<46.0
U4-MW-11D	4/18/2023	N	EM08	UMCf	97.4 - 107.4	8,540	<0.735	<0.745	<0.665	<0.790	<0.500	<0.940	<0.710	<1.15
U4-MW-11D	5/17/2023	N	EM09	UMCf	97.4 - 107.4	3,860	<2.94 UJ	<2.98 UJ	<2.66 UJ	<3.16 UJ	<2.00 UJ	<3.76 UJ	<2.84 UJ	<4.60 UJ
U4-MW-11D	6/16/2023	N	EM10	UMCf	97.4 - 107.4	5,300	<0.147	<0.149	<0.133	<0.158	<0.100	0.456 J	<0.142	<0.230
U4-MW-11D	7/14/2023	N	EM11	UMCf	97.4 - 107.4	6,680	<0.147	<0.149	<0.133	<0.158	<0.100	0.370 J	0.445 J	<0.230
U4-MW-11D	8/14/2023	N	EM12	UMCf	97.4 - 107.4	30,700	<29.4	<29.8	<26.6	<31.6	<20.0	<37.6	<28.4	<46.0
U4-MW-11D	9/13/2023	N	EM13	UMCf	97.4 - 107.4	13,200	<0.147	<0.149	<0.133	<0.158	<0.100	0.407 J	0.234 J	<0.230
U4-MW-11D	10/18/2023	N	EM14	UMCf	97.4 - 107.4	181,000 J	<29.4	<29.8	<26.6	<31.6	<20.0	<37.6	<28.4	<46.0
U4-MW-11D	11/16/2023	N	EM15	UMCf	97.4 - 107.4	191,000 J+	<7.35	<7.45	<6.65	<7.90	<5.00	<9.40	<7.10	<11.5
U4-MW-11D	12/13/2023	N	EM16	UMCf	97.4 - 107.4	173,000	<0.147	<0.149	<0.133	<0.158	<0.100	0.283 J	0.152 J	<0.230
U4-MW-11I	4/14/2022	N	BL02	UMCf	77.0 - 87.0	1,040 J+	<0.147	<0.149	<0.133	<0.158	<0.100	0.385 J	<0.142	<0.230
U4-MW-11I	9/26/2022	N	EM01	UMCf	77.0 - 87.0	208,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-11I	9/26/2022	FD	EM01	UMCf	77.0 - 87.0	201,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-11I	10/10/2022	N	EM02	UMCf	77.0 - 87.0	61,800 J	<1.47	<1.49	<1.33	<1.58	<1.00	<1.88	<1.42	<2.30
U4-MW-11I	10/10/2022	FD	EM02	UMCf	77.0 - 87.0	306,000 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-11I	10/31/2022	N	EM03	UMCf	77.0 - 87.0	364,000	<0.735	<0.745	<0.665	<0.790	<0.500	<0.940	<0.710	<1.15
U4-MW-11I	10/31/2022	FD	EM03	UMCf	77.0 - 87.0	370,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-11I	12/6/2022	N	EM04	UMCf	77.0 - 87.0	55,800 J	<0.147 UJ	<0.149 UJ	<0.133 UJ	<0.158 UJ	<0.100 UJ	<0.188 UJ	<0.142 UJ	<0.230 UJ
U4-MW-11I	12/6/2022	FD	EM04	UMCf	77.0 - 87.0	276,000 J	<0.147 UJ	<0.149 UJ	<0.133 UJ	<0.158 UJ	<0.100 UJ	<0.188 UJ	<0.142 UJ	<0.230 UJ
U4-MW-11I	1/12/2023	N	EM05	UMCf	77.0 - 87.0	189,000 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-11I	1/12/2023	FD	EM05	UMCf	77.0 - 87.0	195,000 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-11I	2/14/2023	N	EM06	UMCf	77.0 - 87.0	165,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-11I	2/14/2023	FD	EM06	UMCf	77.0 - 87.0	186,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-11I	3/16/2023	N	EM07	UMCf	77.0 - 87.0	188,000 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-11I	3/16/2023	FD	EM07	UMCf	77.0 - 87.0	197,000 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-11I	4/18/2023	N	EM08	UMCf	77.0 - 87.0	146,000 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-11I	4/18/2023	FD	EM08	UMCf	77.0 - 87.0	147,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-11I	5/19/2023	N	EM09	UMCf	77.0 - 87.0	89,600 J-	<0.147 UJ	<0.149 UJ	<0.133 UJ	<0.158 UJ	<0.100 UJ	<0.188 UJ	<0.142 UJ	<0.230 UJ

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	SW9060A/SM5 310B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Total Organic Carbon	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,1,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-11I	5/19/2023	FD	EM09	UMCf	77.0 - 87.0	89,600 J-	<0.147 UJ	<0.149 UJ	<0.133 UJ	<0.158 UJ	<0.100 UJ	<0.188 UJ	<0.142 UJ	<0.230 UJ
U4-MW-11I	6/15/2023	N	EM10	UMCf	77.0 - 87.0	103,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-11I	6/15/2023	FD	EM10	UMCf	77.0 - 87.0	103,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-11I	7/13/2023	N	EM11	UMCf	77.0 - 87.0	79,100 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-11I	7/13/2023	FD	EM11	UMCf	77.0 - 87.0	82,900 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-11I	8/14/2023	N	EM12	UMCf	77.0 - 87.0	11,700	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-11I	8/14/2023	FD	EM12	UMCf	77.0 - 87.0	12,800	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	0.155 J	<0.230
U4-MW-11I	9/13/2023	N	EM13	UMCf	77.0 - 87.0	12,500	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-11I	9/13/2023	FD	EM13	UMCf	77.0 - 87.0	12,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-11I	10/19/2023	N	EM14	UMCf	77.0 - 87.0	10,500	<0.147	<0.149	<0.133	<0.158	<0.100	0.400 J	0.303 J	<0.230
U4-MW-11I	10/19/2023	FD	EM14	UMCf	77.0 - 87.0	10,700	<0.147	<0.149	<0.133	<0.158	<0.100	0.394 J	<0.142	<0.230
U4-MW-11I	11/16/2023	N	EM15	UMCf	77.0 - 87.0	13,400	<7.35	<7.45	<6.65	<7.90	<5.00	<9.40	<7.10	<11.5
U4-MW-11I	11/16/2023	FD	EM15	UMCf	77.0 - 87.0	13,500	<7.35	<7.45	<6.65	<7.90	<5.00	<9.40	<7.10	<11.5
U4-MW-11I	12/13/2023	N	EM16	UMCf	77.0 - 87.0	14,100	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-11I	12/13/2023	FD	EM16	UMCf	77.0 - 87.0	14,300	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-12D	4/15/2022	N	BL02	UMCf	97.1 - 107.1	1,440 J+	<0.147	<0.149	<0.133	<0.158	<0.100	0.417 J	0.374 J	<0.230
U4-MW-12D	9/27/2022	N	EM01	UMCf	97.1 - 107.1	903 J	<2.94	<2.98	<2.66	<3.16	<2.00	<3.76	<2.84	<4.60
U4-MW-12D	10/12/2022	N	EM02	UMCf	97.1 - 107.1	1,020 J+	<0.147	<0.149	<0.133	<0.158	<0.100	0.326 J	0.350 J	<0.230
U4-MW-12D	11/2/2022	N	EM03	UMCf	97.1 - 107.1	469 J	<1.47	<1.49	<1.33	<1.58	<1.00	<1.88	<1.42	<2.30
U4-MW-12D	12/7/2022	N	EM04	UMCf	97.1 - 107.1	2,090 J+	<0.147	<0.149	<0.133	<0.158	<0.100	0.351 J	0.507 J	<0.230
U4-MW-12D	1/12/2023	N	EM05	UMCf	97.1 - 107.1	1,970 J+	<14.7	<14.9	<13.3	<15.8	<10.0	<18.8	<14.2	<23.0
U4-MW-12D	2/15/2023	N	EM06	UMCf	97.1 - 107.1	2,920	<14.7	<14.9	<13.3	<15.8	<10.0	<18.8	<14.2	<23.0
U4-MW-12D	3/14/2023	N	EM07	UMCf	97.1 - 107.1	34,300	<7.35	<7.45	<6.65	<7.90	<5.00	<9.40	<7.10	<11.5
U4-MW-12D	4/17/2023	N	EM08	UMCf	97.1 - 107.1	14,800	<0.735 UJ	<0.745 UJ	<0.665 UJ	<0.790 UJ	<0.500 UJ	<0.940 UJ	<0.710 UJ	<1.15 UJ
U4-MW-12D	5/17/2023	N	EM09	UMCf	97.1 - 107.1	5,670 J+	<14.7	<14.9	<13.3	<15.8	<10.0	<18.8	<14.2	<23.0
U4-MW-12D	6/16/2023	N	EM10	UMCf	97.1 - 107.1	2,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-12D	7/13/2023	N	EM11	UMCf	97.1 - 107.1	13,700	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-12D	8/14/2023	N	EM12	UMCf	97.1 - 107.1	3,810	<7.35	<7.45	<6.65	<7.90	<5.00	<9.40	<7.10	<11.5
U4-MW-12D	9/12/2023	N	EM13	UMCf	97.1 - 107.1	7,900	<7.35	<7.45	<6.65	<7.90	<5.00	<9.40	<7.10	<11.5
U4-MW-12D	10/17/2023	N	EM14	UMCf	97.1 - 107.1	98,800	<0.735	<0.745	<0.665	<0.790	<0.500	<0.940	<0.710	<1.15
U4-MW-12D	11/15/2023	N	EM15	UMCf	97.1 - 107.1	158,000	<0.735	<0.745	<0.665	<0.790	<0.500	<0.940	<0.710	<1.15
U4-MW-12D	12/12/2023	N	EM16	UMCf	97.1 - 107.1	328,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-12I	4/14/2022	N	BL02	UMCf	76.8 - 86.8	1,630 J	<0.147	<0.149	<0.133	<0.158	<0.100	0.465 J	<0.142	<0.230
U4-MW-12I	4/14/2022	FD	BL02	UMCf	76.8 - 86.8	1,930 J	<0.147	<0.149	<0.133	<0.158	<0.100	0.461 J	<0.142	<0.230
U4-MW-12I	9/27/2022	N	EM01	UMCf	76.8 - 86.8	1,440 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-12I	10/12/2022	N	EM02	UMCf	76.8 - 86.8	4,410 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-12I	11/2/2022	N	EM03	UMCf	76.8 - 86.8	11,100	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-12I	12/7/2022	N	EM04	UMCf	76.8 - 86.8	95,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-12I	12/7/2022	FD	EM04	UMCf	76.8 - 86.8	84,500	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-12I	1/13/2023	N	EM05	UMCf	76.8 - 86.8	229,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-12I	2/15/2023	N	EM06	UMCf	76.8 - 86.8	356,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230 UJ
U4-MW-12I	3/13/2023	N	EM07	UMCf	76.8 - 86.8	407,000 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-12I	4/17/2023	N	EM08	UMCf	76.8 - 86.8	354,000	<0.147 UJ	<0.149 UJ	<0.133 UJ	<0.158 UJ	<0.100 UJ	<0.188 UJ	<0.142 UJ	<0.230 UJ
U4-MW-12I	5/17/2023	N	EM09	UMCf	76.8 - 86.8	374,000 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-12I	6/16/2023	N	EM10	UMCf	76.8 - 86.8	189,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-12I	7/11/2023	N	EM11	UMCf	76.8 - 86.8	126,000 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-12I	8/14/2023	N	EM12	UMCf	76.8 - 86.8	6,100	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-12I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	14,300	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-12I	10/17/2023	N	EM14	UMCf	76.8 - 86.8	123,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-12I	11/16/2023	N	EM15	UMCf	76.8 - 86.8	13,700	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-12I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	16,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	SW9060A/SM5 310B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Total Organic Carbon	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,1,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-13D	4/14/2022	N	BL02	UMCf	98.2 - 108.2	1,640 J	<0.147	<0.149	<0.133	<0.158	<0.100	0.565 J	<0.142	<0.230
U4-MW-13D	9/28/2022	N	EM01	UMCf	98.2 - 108.2	58,400	<1.47	<1.49	<1.33	<1.58	<1.00	<1.88	<1.42	<2.30
U4-MW-13D	10/11/2022	N	EM02	UMCf	98.2 - 108.2	55,200	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-13D	11/3/2022	N	EM03	UMCf	98.2 - 108.2	7,010	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-13D	12/7/2022	N	EM04	UMCf	98.2 - 108.2	2,790 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-13D	1/12/2023	N	EM05	UMCf	98.2 - 108.2	2,110 J+	<2.94	<2.98	<2.66	<3.16	<2.00	<3.76	<2.84	<4.60
U4-MW-13D	2/15/2023	N	EM06	UMCf	98.2 - 108.2	2,000 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-13D	3/17/2023	N	EM07	UMCf	98.2 - 108.2	1,730 J+	<2.94	<2.98	<2.66	<3.16	<2.00	<3.76	<2.84	<4.60
U4-MW-13D	4/18/2023	N	EM08	UMCf	98.2 - 108.2	1,240	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-13D	5/17/2023	N	EM09	UMCf	98.2 - 108.2	1,670	<2.94	<2.98	<2.66	<3.16	<2.00	<3.76	<2.84	<4.60
U4-MW-13D	6/15/2023	N	EM10	UMCf	98.2 - 108.2	2,210 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-13D	7/12/2023	N	EM11	UMCf	98.2 - 108.2	3,020	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-13D	8/11/2023	N	EM12	UMCf	98.2 - 108.2	2,050 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-13D	9/11/2023	N	EM13	UMCf	98.2 - 108.2	1,750 J+	<3.68	<3.73	<3.33	<3.95	<2.50	<4.70	<3.55	<5.75
U4-MW-13D	10/18/2023	N	EM14	UMCf	98.2 - 108.2	2,510 J+	<3.68	<3.73	<3.33	<3.95	<2.50	<4.70	<3.55	<5.75
U4-MW-13D	11/15/2023	N	EM15	UMCf	98.2 - 108.2	2,810	<3.68	<3.73	<3.33	<3.95	<2.50	<4.70	<3.55	<5.75
U4-MW-13D	12/11/2023	N	EM16	UMCf	98.2 - 108.2	2,810 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-13I	4/14/2022	N	BL02	UMCf	77.1 - 87.1	1,080 J+	<0.147	<0.149	<0.133	<0.158	<0.100	0.403 J	<0.142	<0.230
U4-MW-13I	9/28/2022	N	EM01	UMCf	77.1 - 87.1	2,450 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-13I	10/10/2022	N	EM02	UMCf	77.1 - 87.1	1,900 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-13I	11/3/2022	N	EM03	UMCf	77.1 - 87.1	2,000 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-13I	12/6/2022	N	EM04	UMCf	77.1 - 87.1	37,400	<0.735 UJ	<0.745 UJ	<0.665 UJ	<0.790 UJ	<0.500 UJ	<0.940 UJ	<0.710 UJ	<1.15 UJ
U4-MW-13I	1/12/2023	N	EM05	UMCf	77.1 - 87.1	67,800	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-13I	2/14/2023	N	EM06	UMCf	77.1 - 87.1	43,400	<0.735	<0.745	<0.665	<0.790	<0.500	<0.940	<0.710	<1.15
U4-MW-13I	3/16/2023	N	EM07	UMCf	77.1 - 87.1	43,900	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-13I	4/19/2023	N	EM08	UMCf	77.1 - 87.1	25,800 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-13I	5/17/2023	N	EM09	UMCf	77.1 - 87.1	19,800	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-13I	6/15/2023	N	EM10	UMCf	77.1 - 87.1	21,100	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-13I	7/12/2023	N	EM11	UMCf	77.1 - 87.1	21,300	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-13I	8/11/2023	N	EM12	UMCf	77.1 - 87.1	2,880 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-13I	9/11/2023	N	EM13	UMCf	77.1 - 87.1	2,560 J+	<3.68	<3.73	<3.33	<3.95	<2.50	<4.70	<3.55	<5.75
U4-MW-13I	10/17/2023	N	EM14	UMCf	77.1 - 87.1	2,780	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-13I	11/15/2023	N	EM15	UMCf	77.1 - 87.1	2,840	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-13I	12/11/2023	N	EM16	UMCf	77.1 - 87.1	3,260 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-14D	4/13/2022	N	BL02	UMCf	97.3 - 107.3	1,220 J+	<0.147	<0.149	<0.133	<0.158	<0.100	0.409 J	<0.142	<0.230
U4-MW-14D	12/6/2022	N	EM04	UMCf	97.3 - 107.3	570 J	<0.735 UJ	<0.745 UJ	<0.665 UJ	<0.790 UJ	<0.500 UJ	<0.940 UJ	<0.710 UJ	<1.15 UJ
U4-MW-14D	3/16/2023	N	EM07	UMCf	97.3 - 107.3	1,010 J+	<0.735	<0.745	<0.665	<0.790	<0.500	<0.940	<0.710	<1.15
U4-MW-14D	6/15/2023	N	EM10	UMCf	97.3 - 107.3	1,710 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-14D	9/14/2023	N	EM13	UMCf	97.3 - 107.3	6,160	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-14D	12/15/2023	N	EM16	UMCf	97.3 - 107.3	5,390	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-14I	4/14/2022	N	BL02	UMCf	77.3 - 87.3	1,090 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-14I	12/6/2022	N	EM04	UMCf	77.3 - 87.3	786 J	<0.735 UJ	<0.745 UJ	<0.665 UJ	<0.790 UJ	<0.500 UJ	<0.940 UJ	<0.710 UJ	<1.15 UJ
U4-MW-14I	3/16/2023	N	EM07	UMCf	77.3 - 87.3	1,030 J+	<0.735	<0.745	<0.665	<0.790	<0.500	<0.940	<0.710	<1.15
U4-MW-14I	6/15/2023	N	EM10	UMCf	77.3 - 87.3	3,660	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-14I	9/14/2023	N	EM13	UMCf	77.3 - 87.3	4,970	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-14I	12/14/2023	N	EM16	UMCf	77.3 - 87.3	8,570	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-15D	4/13/2022	N	BL02	UMCf	96.0 - 106.0	1,240 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-15D	12/5/2022	N	EM04	UMCf	96.0 - 106.0	922 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-15D	3/20/2023	N	EM07	UMCf	96.0 - 106.0	362 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-15D	6/14/2023	N	EM10	UMCf	96.0 - 106.0	818 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-15D	9/13/2023	N	EM13	UMCf	96.0 - 106.0	447 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	SW9060A/SM5 310B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Total Organic Carbon	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,1,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-15D	12/12/2023	N	EM16	UMCf	96.0 - 106.0	1,180 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-15DD	4/13/2022	N	BL02	UMCf	120.3 - 130.3	532 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-15DD	12/5/2022	N	EM04	UMCf	120.3 - 130.3	505 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-15DD	3/15/2023	N	EM07	UMCf	120.3 - 130.3	224 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-15DD	6/13/2023	N	EM10	UMCf	120.3 - 130.3	337 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-15DD	9/14/2023	N	EM13	UMCf	120.3 - 130.3	109 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-15DD	12/13/2023	N	EM16	UMCf	120.3 - 130.3	<102	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-15I	4/12/2022	N	BL02	UMCf	76.8 - 86.8	1,440 J	<0.147	<0.149	<0.133	<0.158	<0.100	0.367 J	<0.142	<0.230
U4-MW-15I	12/5/2022	N	EM04	UMCf	76.8 - 86.8	60,700	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-15I	3/17/2023	N	EM07	UMCf	76.8 - 86.8	565,000	<2.94	<2.98	<2.66	<3.16	<2.00	<3.76	<2.84	<4.60
U4-MW-15I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	306,000 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-15I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	11,900	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-15I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	38,500	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-15S	4/13/2022	N	BL02	UMCf	54.8 - 64.8	848 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-15S	12/5/2022	N	EM04	UMCf	54.8 - 64.8	499,000	<3.68	<3.73	<3.33	<3.95	<2.50	<4.70	<3.55	<5.75
U4-MW-15S	3/13/2023	N	EM07	UMCf	54.8 - 64.8	116,000 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-15S	6/13/2023	N	EM10	UMCf	54.8 - 64.8	95,700 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-15S	9/14/2023	N	EM13	UMCf	54.8 - 64.8	41,400 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-15S	12/11/2023	N	EM16	UMCf	54.8 - 64.8	28,500 J-	<0.294	<0.298	<0.266	<0.316	<0.200	<0.376	<0.284	<0.460
U4-MW-16D	4/11/2022	N	BL02	UMCf	96.8 - 106.8	1,340 J	<0.147	<0.149	<0.133	<0.158	<0.100	0.237 J	<0.142	<0.230
U4-MW-16D	12/5/2022	N	EM04	UMCf	96.8 - 106.8	3,980 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-16D	3/14/2023	N	EM07	UMCf	96.8 - 106.8	25,100	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-16D	6/13/2023	N	EM10	UMCf	96.8 - 106.8	10,500 J+	<0.147	<0.149	<0.133	<0.158	<0.100	0.189 J	0.196 J	<0.230
U4-MW-16D	9/15/2023	N	EM13	UMCf	96.8 - 106.8	4,300	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-16D	12/14/2023	N	EM16	UMCf	96.8 - 106.8	463 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-16DD	4/12/2022	N	BL02	UMCf	120.8 - 130.8	827 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-16DD	12/5/2022	N	EM04	UMCf	120.8 - 130.8	852 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-16DD	3/15/2023	N	EM07	UMCf	120.8 - 130.8	1,350 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-16DD	6/13/2023	N	EM10	UMCf	120.8 - 130.8	825 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-16DD	9/14/2023	N	EM13	UMCf	120.8 - 130.8	151 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-16DD	12/13/2023	N	EM16	UMCf	120.8 - 130.8	128 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-16I	4/11/2022	N	BL02	UMCf	77.0 - 87.0	950 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-16I	12/5/2022	N	EM04	UMCf	77.0 - 87.0	515,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-16I	12/5/2022	FD	EM04	UMCf	77.0 - 87.0	515,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-16I	3/13/2023	N	EM07	UMCf	77.0 - 87.0	747,000 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-16I	3/13/2023	FD	EM07	UMCf	77.0 - 87.0	731,000 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-16I	6/12/2023	N	EM10	UMCf	77.0 - 87.0	363,000 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230 UJ
U4-MW-16I	6/12/2023	FD	EM10	UMCf	77.0 - 87.0	372,000 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230 UJ
U4-MW-16I	9/11/2023	N	EM13	UMCf	77.0 - 87.0	6,750	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-16I	9/11/2023	FD	EM13	UMCf	77.0 - 87.0	6,830	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-16I	12/11/2023	N	EM16	UMCf	77.0 - 87.0	3,990 J+	<0.147	<0.149	<0.133	<0.158	<0.100	0.201 J	<0.142	<0.230
U4-MW-16I	12/11/2023	FD	EM16	UMCf	77.0 - 87.0	4,090 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-16S	4/12/2022	N	BL02	UMCf	54.8 - 64.8	1,070 J+	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-16S	4/12/2022	FD	BL02	UMCf	54.8 - 64.8	931 J	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-16S	12/6/2022	N	EM04	UMCf	54.8 - 64.8	23,300	<0.147 UJ	<0.149 UJ	<0.133 UJ	<0.158 UJ	<0.100 UJ	<0.188 UJ	<0.142 UJ	<0.230 UJ
U4-MW-16S	3/15/2023	N	EM07	UMCf	54.8 - 64.8	726,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-16S	6/13/2023	N	EM10	UMCf	54.8 - 64.8	710,000 J-	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-16S	9/11/2023	N	EM13	UMCf	54.8 - 64.8	41,600	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-MW-16S	12/11/2023	N	EM16	UMCf	54.8 - 64.8	140,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-SLMW	11/10/2022	N	EM03		-	3,660 J+	<0.735	<0.745	<0.665	<0.790	<0.500	<0.940	<0.710	<1.15
U4-T3	10/13/2022	N	EM02		-	114,000	<0.147	<0.149	<0.133	<0.158	<0.100	0.284 J	0.271 J	<0.230

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	SW9060A/SM5 310B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Total Organic Carbon	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-T3	11/3/2022	N	EM03		-	61,500	<0.147	<0.149	<0.133	<0.158	<0.100	0.293 J	0.376 J	<0.230
U4-T3	12/6/2022	N	EM04		-	76,300	<2.94 UJ	<2.98 UJ	<2.66 UJ	<3.16 UJ	<2.00 UJ	<3.76 UJ	<2.84 UJ	<4.60 UJ
U4-T3	1/9/2023	N	EM05		-	17,100	<0.147	<0.149	<0.133	<0.158	<0.100	0.236 J	0.273 J	<0.230
U4-T3	2/13/2023	N	EM06		-	17,700	<14.7	<14.9	<13.3	<15.8	<10.0	<18.8	<14.2	<23.0
U4-T3	3/13/2023	N	EM07		-	2,980 J+	<3.68	<3.73	<3.33	<3.95	<2.50	<4.70	<3.55	<5.75
U4-T3	4/19/2023	N	EM08		-	31,800	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	0.143 J	<0.230
U4-T3	5/18/2023	N	EM09		-	89,500	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-T3	6/12/2023	N	EM10		-	150,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230 UJ
U4-T3	7/11/2023	N	EM11		-	388,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-T3	8/10/2023	N	EM12		-	278,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-T3	9/11/2023	N	EM13		-	1,400,000	<0.147	<0.149	<0.133	<0.158	<0.100	<0.188	<0.142	<0.230
U4-T3	10/16/2023	N	EM14		-	324,000	<3.68	<3.73	<3.33	<3.95	<2.50	<4.70	<3.55	<5.75

Notes:

FD - Field duplicate

E - Field instrument error.

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 low.

J+ - The result is an estimated quantity, but the result may be biased high.

N/A - Not Applicable

mg/L - milligrams per liter

µg/L - micrograms per liter

N - Normal field 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

< - The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

-- Not tested.

M-252 damaged/obstructed when checked on June 14, 2023 and September 14, 2023.

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-Chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene (Mesitylene)
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
M-247-100	4/20/2022	N	BL02	UMCf	100.5 - 110.5	----	----	----	----	----	----	----	----	----
M-249-100	4/20/2022	N	BL02	UMCf	99.6 - 109.6	----	----	----	----	----	----	----	----	----
M-251-100	4/19/2022	N	BL02	UMCf	92.5 - 102.5	0.428 J	<0.481	<0.322	<0.276	<0.126	<0.107	0.346 J	<0.149	<0.104
M-251-100	10/13/2022	N	EM02	UMCf	92.5 - 102.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
M-251-100	11/2/2022	N	EM03	UMCf	92.5 - 102.5	<2.37	<4.81	<3.22	<2.76	<1.26	<1.07	<0.819	<1.49	<1.04
M-251-100	12/8/2022	N	EM04	UMCf	92.5 - 102.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
M-251-100	1/11/2023	N	EM05	UMCf	92.5 - 102.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
M-251-100	2/13/2023	N	EM06	UMCf	92.5 - 102.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
M-251-100	3/17/2023	N	EM07	UMCf	92.5 - 102.5	<11.9	<24.1	<16.1	<13.8	<6.30	<5.35	<4.09	<7.45	<5.20
M-251-100	4/21/2023	N	EM08	UMCf	92.5 - 102.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.142 J	<0.149	<0.104
M-251-100	5/9/2023	N	EM09	UMCf	92.5 - 102.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.171 J	<0.149	<0.104
M-251-100	6/14/2023	N	EM10	UMCf	92.5 - 102.5	<11.9	<24.1	<16.1	<13.8	<6.30	<5.35	<4.09	<7.45	<5.20
M-251-100	7/14/2023	N	EM11	UMCf	92.5 - 102.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.126 J	<0.149	<0.104
M-251-100	8/10/2023	N	EM12	UMCf	92.5 - 102.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
M-251-100	9/14/2023	N	EM13	UMCf	92.5 - 102.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
M-251-100	10/19/2023	N	EM14	UMCf	92.5 - 102.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
M-251-100	11/16/2023	N	EM15	UMCf	92.5 - 102.5	<11.9	<24.1	<16.1	<13.8	<6.30	<5.35	<4.09	<7.45	<5.20
M-251-100	12/12/2023	N	EM16	UMCf	92.5 - 102.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
M-251-60	4/18/2022	N	BL02	UMCf	52.3 - 62.3	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
M-251-60	3/15/2023	N	EM07	UMCf	52.3 - 62.3	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
M-251-60	6/14/2023	N	EM10	UMCf	52.3 - 62.3	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
M-251-60	9/14/2023	N	EM13	UMCf	52.3 - 62.3	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
M-251-60	12/11/2023	N	EM16	UMCf	52.3 - 62.3	<0.237	<0.481	<0.322	<0.276 UJ	<0.126	<0.107	<0.0819	<0.149	<0.104
M-252	4/21/2022	N	BL02	UMCf	132.3 - 142.3	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
M-252	3/15/2023	N	EM07	UMCf	132.3 - 142.3	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
M-252	9/19/2023	N	EM13	UMCf	132.3 - 142.3	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
M-252	12/18/2023	N	EM16	UMCf	132.3 - 142.3	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
M-253-100	4/20/2022	N	BL02	UMCf	100.8 - 110.8	----	----	----	----	----	----	----	----	----
M-255-100	4/20/2022	N	BL02	UMCf	100.2 - 110.2	----	----	----	----	----	----	----	----	----
U4-E-01D	4/18/2022	N	BL02	UMCf	94.7 - 109.7	<1.19	<2.41	<1.61	<1.38	<0.630	<0.535	<0.409	<0.745	<0.520
U4-E-01D	3/14/2023	N	EM07	UMCf	94.7 - 109.7	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-01I	4/19/2022	N	BL02	UMCf	74.6 - 89.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-01I	4/19/2022	FD	BL02	UMCf	74.6 - 89.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-01I	3/14/2023	N	EM07	UMCf	74.6 - 89.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.0909 J	<0.149	<0.104
U4-E-01I	4/20/2023	N	EM08	UMCf	74.6 - 89.6	<0.237	<0.481 UJ	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-01I	5/10/2023	N	EM09	UMCf	74.6 - 89.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-01I	6/12/2023	N	EM10	UMCf	74.6 - 89.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-01I	7/11/2023	N	EM11	UMCf	74.6 - 89.6	<1.19	<2.41	<1.61	<1.38	<0.630	<0.535	<0.409	<0.745	<0.520
U4-E-01I	8/10/2023	N	EM12	UMCf	74.6 - 89.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-01I	9/11/2023	N	EM13	UMCf	74.6 - 89.6	<1.19	<2.41	<1.61	<1.38	<0.630	<0.535	<0.409	<0.745	<0.520
U4-E-01I	10/16/2023	N	EM14	UMCf	74.6 - 89.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-01I	12/13/2023	N	EM16	UMCf	74.6 - 89.6	<2.37	<4.81	<3.22	<2.76	<1.26	<1.07	<0.819	<1.49	<1.04
U4-E-02D	4/20/2022	N	BL02	UMCf	94.4 - 109.4	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-02D	3/14/2023	N	EM07	UMCf	94.4 - 109.4	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-02I	4/18/2022	N	BL02	UMCf	74.4 - 89.4	<0.237	<0.481	<0.322 UJ	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104 R
U4-E-02I	3/14/2023	N	EM07	UMCf	74.4 - 89.4	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-02I	4/20/2023	N	EM08	UMCf	74.4 - 89.4	<0.237	<0.481 UJ	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-02I	5/11/2023	N	EM09	UMCf	74.4 - 89.4	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-02I	6/12/2023	N	EM10	UMCf	74.4 - 89.4	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-02I	7/11/2023	N	EM11	UMCf	74.4 - 89.4	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-02I	8/10/2023	N	EM12	UMCf	74.4 - 89.4	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-Chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene (Mesitylene)
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-E-02I	9/11/2023	N	EM13	UMCf	74.4 - 89.4	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-02I	10/16/2023	N	EM14	UMCf	74.4 - 89.4	<2.37	<4.81	<3.22	<2.76	<1.26	<1.07	<0.819	<1.49	<1.04
U4-E-02I	12/14/2023	N	EM16	UMCf	74.4 - 89.4	<2.37	<4.81	<3.22	<2.76	<1.26	<1.07	<0.819	<1.49	<1.04
U4-E-03D	4/19/2022	N	BL02	UMCf	95.1 - 110.1	0.293 J	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-03D	10/13/2022	N	EM02	UMCf	95.1 - 110.1	<47.4	<96.2	<64.4	<55.2	<25.2	<21.4	<16.4	<29.8	<20.8
U4-E-03D	11/3/2022	N	EM03	UMCf	95.1 - 110.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-03D	12/6/2022	N	EM04	UMCf	95.1 - 110.1	<4.74 UJ	<9.62 UJ	<6.44 UJ	<5.52 UJ	<2.52 UJ	<2.14 UJ	<1.64 UJ	<2.98 UJ	<2.08 UJ
U4-E-03D	1/9/2023	N	EM05	UMCf	95.1 - 110.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-03D	2/13/2023	N	EM06	UMCf	95.1 - 110.1	<23.7	<48.1	<32.2	<27.6	<12.6	<10.7	<8.19	<14.9	<10.4
U4-E-03D	3/13/2023	N	EM07	UMCf	95.1 - 110.1	<23.7	<48.1	<32.2	<27.6	<12.6	<10.7	<8.19	<14.9	<10.4
U4-E-03D	3/14/2023	N	EM07	UMCf	95.1 - 110.1	<47.4	<96.2	<64.4	<55.2	<25.2	<21.4	<16.4	<29.8	<20.8
U4-E-03D	4/19/2023	N	EM08	UMCf	95.1 - 110.1	<1.19	<2.41	<1.61	<1.38	<0.630	<0.535	<0.409	<0.745	<0.520
U4-E-03D	5/11/2023	N	EM09	UMCf	95.1 - 110.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-03D	6/12/2023	N	EM10	UMCf	95.1 - 110.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-03D	7/11/2023	N	EM11	UMCf	95.1 - 110.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-03D	8/10/2023	N	EM12	UMCf	95.1 - 110.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-03D	9/11/2023	N	EM13	UMCf	95.1 - 110.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.131 J	0.183 J	<0.104
U4-E-03D	10/16/2023	N	EM14	UMCf	95.1 - 110.1	<47.4	<96.2	<64.4	<55.2	<25.2	<21.4	<16.4	<29.8	<20.8
U4-E-04D	4/19/2022	N	BL02	UMCf	95.0 - 110.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-04D	3/14/2023	N	EM07	UMCf	95.0 - 110.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-04I	4/18/2022	N	BL02	UMCf	75.0 - 90.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-04I	3/14/2023	N	EM07	UMCf	75.0 - 90.0	<11.9	<24.1	<16.1	<13.8	<6.30	<5.35	<4.09	<7.45	<5.20
U4-E-05D	4/19/2022	N	BL02	UMCf	95.0 - 110.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-05D	3/16/2023	N	EM07	UMCf	95.0 - 110.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-05I	4/19/2022	N	BL02	UMCf	75.0 - 90.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-05I	3/15/2023	N	EM07	UMCf	75.0 - 90.0	<0.237 UJ	<0.481 UJ	<0.322 UJ	<0.276 UJ	<0.126 UJ	<0.107 UJ	<0.0819 UJ	<0.149 UJ	<0.104 UJ
U4-E-06D	4/11/2022	N	BL02	UMCf	95.1 - 110.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-06I	4/11/2022	N	BL02	UMCf	73.2 - 88.2	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-06I	4/11/2022	FD	BL02	UMCf	73.2 - 88.2	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-06I	10/12/2022	N	EM02	UMCf	73.2 - 88.2	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-06I	11/3/2022	N	EM03	UMCf	73.2 - 88.2	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-06I	12/6/2022	N	EM04	UMCf	73.2 - 88.2	<2.37 UJ	<4.81 UJ	<3.22 UJ	<2.76 UJ	<1.26 UJ	<1.07 UJ	<0.819 UJ	<1.49 UJ	<1.04 UJ
U4-E-06I	1/9/2023	N	EM05	UMCf	73.2 - 88.2	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-06I	2/13/2023	N	EM06	UMCf	73.2 - 88.2	<23.7	<48.1	<32.2	<27.6	<12.6	<10.7	<8.19	<14.9	<10.4
U4-E-06I	3/13/2023	N	EM07	UMCf	73.2 - 88.2	<4.74	<9.62	<6.44	<5.52	<2.52	<2.14	<1.64	<2.98	<2.08
U4-E-06I	4/17/2023	N	EM08	UMCf	73.2 - 88.2	<4.74	<9.62	<6.44	<5.52	<2.52	<2.14	<1.64	<2.98	<2.08
U4-E-06I	5/15/2023	N	EM09	UMCf	73.2 - 88.2	<5.93	<12.0	<8.05	<6.90	<3.15	<2.68	<2.05	<3.73	<2.60
U4-E-06I	6/12/2023	N	EM10	UMCf	73.2 - 88.2	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-06I	7/11/2023	N	EM11	UMCf	73.2 - 88.2	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-06I	8/11/2023	N	EM12	UMCf	73.2 - 88.2	<1.19	<2.41	<1.61	<1.38	<0.630	<0.535	<0.409	<0.745	<0.520
U4-E-06I	9/11/2023	N	EM13	UMCf	73.2 - 88.2	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-06I	10/16/2023	N	EM14	UMCf	73.2 - 88.2	<11.9	<24.1	<16.1	<13.8	<6.30	<5.35	<4.09	<7.45	<5.20
U4-E-06I	12/13/2023	N	EM16	UMCf	73.2 - 88.2	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-07D	4/12/2022	N	BL02	UMCf	94.6 - 109.6	0.393 J	<0.481	<0.322	<0.276	<0.126	<0.107	0.205 J	<0.149	<0.104
U4-E-07I	4/12/2022	N	BL02	UMCf	74.7 - 89.7	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.138 J	0.191 J	<0.104
U4-E-07I	10/11/2022	N	EM02	UMCf	74.7 - 89.7	<2.37	<4.81	<3.22	<2.76	<1.26	<1.07	<0.819	<1.49	<1.04
U4-E-07I	11/3/2022	N	EM03	UMCf	74.7 - 89.7	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-07I	12/6/2022	N	EM04	UMCf	74.7 - 89.7	<5.93 UJ	<12.0 UJ	<8.05 UJ	<6.90 UJ	<3.15 UJ	<2.68 UJ	<2.05 UJ	<3.73 UJ	<2.60 UJ
U4-E-07I	1/9/2023	N	EM05	UMCf	74.7 - 89.7	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.137 J	<0.149	<0.104
U4-E-07I	2/13/2023	N	EM06	UMCf	74.7 - 89.7	<23.7	<48.1	<32.2	<27.6	<12.6	<10.7	<8.19	<14.9	<10.4
U4-E-07I	3/13/2023	N	EM07	UMCf	74.7 - 89.7	<23.7	<48.1	<32.2	<27.6	<12.6	<10.7	<8.19	<14.9	<10.4

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-Chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene (Mesitylene)
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-E-07I	4/19/2023	N	EM08	UMCf	74.7 - 89.7	<1.19	<2.41	<1.61	<1.38	<0.630	<0.535	<0.409	<0.745	<0.520
U4-E-07I	5/15/2023	N	EM09	UMCf	74.7 - 89.7	<23.7	<48.1	<32.2	<27.6	<12.6	<10.7	<8.19	<14.9	<10.4
U4-E-07I	6/12/2023	N	EM10	UMCf	74.7 - 89.7	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-07I	7/11/2023	N	EM11	UMCf	74.7 - 89.7	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-07I	8/11/2023	N	EM12	UMCf	74.7 - 89.7	<1.19	<2.41	<1.61	<1.38	<0.630	<0.535	<0.409	<0.745	<0.520
U4-E-07I	9/11/2023	N	EM13	UMCf	74.7 - 89.7	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.105 J	<0.149	<0.104
U4-E-07I	10/16/2023	N	EM14	UMCf	74.7 - 89.7	<23.7	<48.1	<32.2	<27.6	<12.6	<10.7	<8.19	<14.9	<10.4
U4-E-07I	12/13/2023	N	EM16	UMCf	74.7 - 89.7	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.104 J	<0.149	<0.104
U4-E-08D	4/12/2022	N	BL02	UMCf	94.6 - 109.6	0.429 J	<0.481	<0.322	<0.276	<0.126	<0.107	0.240 J	<0.149	<0.104
U4-E-08D	10/11/2022	N	EM02	UMCf	94.6 - 109.6	<2.37	<4.81	<3.22	<2.76	<1.26	<1.07	<0.819	<1.49	<1.04
U4-E-08D	11/3/2022	N	EM03	UMCf	94.6 - 109.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-08D	12/6/2022	N	EM04	UMCf	94.6 - 109.6	<5.93 UJ	<12.0 UJ	<8.05 UJ	<6.90 UJ	<3.15 UJ	<2.68 UJ	<2.05 UJ	<3.73 UJ	<2.60 UJ
U4-E-08D	1/9/2023	N	EM05	UMCf	94.6 - 109.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.131 J	<0.149	<0.104
U4-E-08D	2/13/2023	N	EM06	UMCf	94.6 - 109.6	<23.7	<48.1	<32.2	<27.6	<12.6	<10.7	<8.19	<14.9	<10.4
U4-E-08D	3/13/2023	N	EM07	UMCf	94.6 - 109.6	<23.7	<48.1	<32.2	<27.6	<12.6	<10.7	<8.19	<14.9	<10.4
U4-E-08D	4/19/2023	N	EM08	UMCf	94.6 - 109.6	<1.19	<2.41	<1.61	<1.38	<0.630	<0.535	<0.409	<0.745	<0.520
U4-E-08D	5/17/2023	N	EM09	UMCf	94.6 - 109.6	<23.7	<48.1	<32.2	<27.6	<12.6	<10.7	<8.19	<14.9	<10.4
U4-E-08D	6/12/2023	N	EM10	UMCf	94.6 - 109.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-08D	7/11/2023	N	EM11	UMCf	94.6 - 109.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-09D	4/15/2022	N	BL02	UMCf	94.5 - 109.5	<0.237	<0.481 UJ	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-E-09I	4/14/2022	N	BL02	UMCf	74.9 - 89.9	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.118 J	<0.149	<0.104
U4-E-10D	4/13/2022	N	BL02	UMCf	94.5 - 109.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.132 J	<0.149	<0.104
U4-E-10I	4/13/2022	N	BL02	UMCf	74.2 - 89.2	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.120 J	<0.149	<0.104
U4-MW-01D	4/19/2022	N	BL02	UMCf	96.7 - 106.7	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-01D	2/16/2023	N	EM06	UMCf	96.7 - 106.7	<2.37	<4.81	<3.22 UJ	<2.76	<1.26	<1.07	<0.819	<1.49	<1.04
U4-MW-01D	3/20/2023	N	EM07	UMCf	96.7 - 106.7	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-01D	6/13/2023	N	EM10	UMCf	96.7 - 106.7	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-01D	9/14/2023	N	EM13	UMCf	96.7 - 106.7	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-01D	12/14/2023	N	EM16	UMCf	96.7 - 106.7	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-01DD	4/19/2022	N	BL02	UMCf	119.9 - 129.9	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-01DD	4/19/2022	FD	BL02	UMCf	119.9 - 129.9	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-01DD	3/15/2023	N	EM07	UMCf	119.9 - 129.9	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-01DD	6/13/2023	N	EM10	UMCf	119.9 - 129.9	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-01DD	9/14/2023	N	EM13	UMCf	119.9 - 129.9	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-01DD	12/15/2023	N	EM16	UMCf	119.9 - 129.9	<1.19	<2.41	<1.61	<1.38	<0.630	<0.535	<0.409	<0.745	<0.520
U4-MW-01I	4/19/2022	N	BL02	UMCf	76.7 - 86.7	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-01I	3/20/2023	N	EM07	UMCf	76.7 - 86.7	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-01I	6/12/2023	N	EM10	UMCf	76.7 - 86.7	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-01I	9/14/2023	N	EM13	UMCf	76.7 - 86.7	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-01I	12/15/2023	N	EM16	UMCf	76.7 - 86.7	<11.9	<24.1	<16.1	<13.8	<6.30	<5.35	<4.09	<7.45	<5.20
U4-MW-01S	4/18/2022	N	BL02	UMCf	54.7 - 64.7	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-01S	3/15/2023	N	EM07	UMCf	54.7 - 64.7	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-01S	6/13/2023	N	EM10	UMCf	54.7 - 64.7	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-01S	9/15/2023	N	EM13	UMCf	54.7 - 64.7	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-01S	12/13/2023	N	EM16	UMCf	54.7 - 64.7	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-02D	4/14/2022	N	BL02	UMCf	95.0 - 110.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.322 J	<0.149	<0.104
U4-MW-02D	10/11/2022	N	EM02	UMCf	95.0 - 110.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-02D	11/1/2022	N	EM03	UMCf	95.0 - 110.0	<11.9	<24.1	<16.1	<13.8	<6.30	<5.35	<4.09	<7.45	<5.20
U4-MW-02D	12/7/2022	N	EM04	UMCf	95.0 - 110.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.360 J	<0.149	<0.104
U4-MW-02D	1/10/2023	N	EM05	UMCf	95.0 - 110.0	<0.237	<0.481 UJ	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-02D	2/13/2023	N	EM06	UMCf	95.0 - 110.0	0.363 J	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-Chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene (Mesitylene)
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-02D	3/17/2023	N	EM07	UMCf	95.0 - 110.0	<23.7	<48.1	<32.2	<27.6	<12.6	<10.7	<8.19	<14.9	<10.4
U4-MW-02D	4/19/2023	N	EM08	UMCf	95.0 - 110.0	<1.19	<2.41	<1.61	<1.38	<0.630	<0.535	<0.409	<0.745	<0.520
U4-MW-02D	5/9/2023	N	EM09	UMCf	95.0 - 110.0	<1.19	<2.41	<1.61	<1.38	<0.630	<0.535	0.515 J	<0.745	<0.520
U4-MW-02D	6/13/2023	N	EM10	UMCf	95.0 - 110.0	0.266 J	<0.481	<0.322	<0.276	<0.126	<0.107	0.199 J	<0.149	<0.104
U4-MW-02D	7/18/2023	N	EM11	UMCf	95.0 - 110.0	<0.237	<0.481	0.391 J	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-02D	8/14/2023	N	EM12	UMCf	95.0 - 110.0	<59.3	<120	<80.5	<69.0	<31.5	<26.8	<20.5	<37.3	<26.0
U4-MW-02D	9/11/2023	N	EM13	UMCf	95.0 - 110.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	0.155 J	<0.104
U4-MW-02D	10/19/2023	N	EM14	UMCf	95.0 - 110.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.348 J	<0.149	<0.104
U4-MW-02D	11/15/2023	N	EM15	UMCf	95.0 - 110.0	<23.7	<48.1	<32.2	<27.6	<12.6	<10.7	<8.19	<14.9	<10.4
U4-MW-02D	12/14/2023	N	EM16	UMCf	95.0 - 110.0	<23.7	<48.1	<32.2	<27.6	<12.6	<10.7	<8.19	<14.9	<10.4
U4-MW-02I	4/14/2022	N	BL02	UMCf	75.0 - 90.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.102 J	<0.149	<0.104
U4-MW-02I	10/11/2022	N	EM02	UMCf	75.0 - 90.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-02I	11/2/2022	N	EM03	UMCf	75.0 - 90.0	<2.37	<4.81	<3.22	<2.76	<1.26	<1.07	<0.819	<1.49	<1.04
U4-MW-02I	11/2/2022	FD	EM03	UMCf	75.0 - 90.0	<2.37	<4.81	<3.22	<2.76	<1.26	<1.07	<0.819	<1.49	<1.04
U4-MW-02I	12/8/2022	N	EM04	UMCf	75.0 - 90.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-02I	12/8/2022	FD	EM04	UMCf	75.0 - 90.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-02I	1/13/2023	N	EM05	UMCf	75.0 - 90.0	<2.37	<4.81	<3.22	<2.76	<1.26	<1.07	<0.819	<1.49	<1.04
U4-MW-02I	1/13/2023	FD	EM05	UMCf	75.0 - 90.0	<2.37	<4.81	<3.22	<2.76	<1.26	<1.07	<0.819	<1.49	<1.04
U4-MW-02I	2/15/2023	N	EM06	UMCf	75.0 - 90.0	<2.37	<4.81	<3.22	<2.76	<1.26	<1.07	<0.819	<1.49	<1.04
U4-MW-02I	2/15/2023	FD	EM06	UMCf	75.0 - 90.0	<2.37	<4.81	<3.22	<2.76	<1.26	<1.07	<0.819	<1.49	<1.04
U4-MW-02I	3/17/2023	N	EM07	UMCf	75.0 - 90.0	<47.4	<96.2	<64.4	<55.2	<25.2	<21.4	<16.4	<29.8	<20.8
U4-MW-02I	3/17/2023	FD	EM07	UMCf	75.0 - 90.0	<47.4	<96.2	<64.4	<55.2	<25.2	<21.4	<16.4	<29.8	<20.8
U4-MW-02I	4/20/2023	N	EM08	UMCf	75.0 - 90.0	<0.237	<0.481 UJ	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-02I	4/20/2023	FD	EM08	UMCf	75.0 - 90.0	<0.237	<0.481 UJ	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-02I	5/9/2023	N	EM09	UMCf	75.0 - 90.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-02I	5/9/2023	FD	EM09	UMCf	75.0 - 90.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-02I	6/12/2023	N	EM10	UMCf	75.0 - 90.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-02I	6/12/2023	FD	EM10	UMCf	75.0 - 90.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-02I	7/18/2023	N	EM11	UMCf	75.0 - 90.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-02I	7/18/2023	FD	EM11	UMCf	75.0 - 90.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-02I	8/11/2023	N	EM12	UMCf	75.0 - 90.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-02I	8/11/2023	FD	EM12	UMCf	75.0 - 90.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-02I	9/11/2023	N	EM13	UMCf	75.0 - 90.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-02I	9/11/2023	FD	EM13	UMCf	75.0 - 90.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-02I	10/19/2023	N	EM14	UMCf	75.0 - 90.0	<0.237 UJ	<0.481 UJ	<0.322 UJ	<0.276 UJ	<0.126 UJ	<0.107 UJ	<0.0819 UJ	<0.149 UJ	<0.104 UJ
U4-MW-02I	10/19/2023	FD	EM14	UMCf	75.0 - 90.0	0.287 J	<0.481	<0.322	<0.276	<0.126	<0.107	0.203 J	<0.149	<0.104
U4-MW-02I	11/15/2023	N	EM15	UMCf	75.0 - 90.0	<11.9	<24.1	<16.1	<13.8	<6.30	<5.35	<4.09	<7.45	<5.20
U4-MW-02I	11/15/2023	FD	EM15	UMCf	75.0 - 90.0	<11.9	<24.1	<16.1	<13.8	<6.30	<5.35	<4.09	<7.45	<5.20
U4-MW-02I	12/14/2023	N	EM16	UMCf	75.0 - 90.0	<11.9	<24.1	<16.1	<13.8	<6.30	<5.35	<4.09	<7.45	<5.20
U4-MW-02I	12/14/2023	FD	EM16	UMCf	75.0 - 90.0	<11.9	<24.1	<16.1	<13.8	<6.30	<5.35	<4.09	<7.45	<5.20
U4-MW-03D	4/20/2022	N	BL02	UMCf	96.6 - 106.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-03D	2/16/2023	N	EM06	UMCf	96.6 - 106.6	<1.19	<2.41	<1.61 UJ	<1.38	<0.630	<0.535	<0.409	<0.745	<0.520
U4-MW-03D	3/16/2023	N	EM07	UMCf	96.6 - 106.6	<4.74	<9.62	<6.44	<5.52	<2.52	<2.14	<1.64	<2.98	<2.08
U4-MW-03D	3/16/2023	FD	EM07	UMCf	96.6 - 106.6	<1.19	<2.41	<1.61	<1.38	<0.630	<0.535	<0.409	<0.745	<0.520 UJ
U4-MW-03D	6/15/2023	N	EM10	UMCf	96.6 - 106.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-03D	9/14/2023	N	EM13	UMCf	96.6 - 106.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-03D	12/13/2023	N	EM16	UMCf	96.6 - 106.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-03DD	4/20/2022	N	BL02	UMCf	119.7 - 129.7	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-03DD	3/15/2023	N	EM07	UMCf	119.7 - 129.7	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-03DD	6/15/2023	N	EM10	UMCf	119.7 - 129.7	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-03DD	9/14/2023	N	EM13	UMCf	119.7 - 129.7	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-Chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene (Mesitylene)
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-03DD	12/14/2023	N	EM16	UMCf	119.7 - 129.7	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-03I	4/19/2022	N	BL02	UMCf	76.6 - 86.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-03I	3/15/2023	N	EM07	UMCf	76.6 - 86.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-03I	6/14/2023	N	EM10	UMCf	76.6 - 86.6	<4.74	<9.62	<6.44	<5.52	<2.52	<2.14	<1.64	<2.98	<2.08
U4-MW-03I	6/14/2023	FD	EM10	UMCf	76.6 - 86.6	<5.93	<12.0	<8.05	<6.90	<3.15	<2.68	<2.05	<3.73	<2.60
U4-MW-03I	9/11/2023	N	EM13	UMCf	76.6 - 86.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-03I	9/11/2023	FD	EM13	UMCf	76.6 - 86.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-03I	12/13/2023	N	EM16	UMCf	76.6 - 86.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-03I	12/13/2023	FD	EM16	UMCf	76.6 - 86.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-03S	4/18/2022	N	BL02	UMCf	54.5 - 64.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-03S	4/18/2022	FD	BL02	UMCf	54.5 - 64.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-03S	3/15/2023	N	EM07	UMCf	54.5 - 64.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-03S	6/15/2023	N	EM10	UMCf	54.5 - 64.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-03S	9/14/2023	N	EM13	UMCf	54.5 - 64.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-03S	12/13/2023	N	EM16	UMCf	54.5 - 64.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-04D	4/19/2022	N	BL02	UMCf	97.0 - 107.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.900 J	<0.149	<0.104
U4-MW-04D	2/16/2023	N	EM06	UMCf	97.0 - 107.0	<11.9	<24.1	<16.1 UJ	<13.8	<6.30	<5.35	<4.09	<7.45	<5.20
U4-MW-04D	3/21/2023	N	EM07	UMCf	97.0 - 107.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-04D	6/14/2023	N	EM10	UMCf	97.0 - 107.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-04D	9/15/2023	N	EM13	UMCf	97.0 - 107.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-04D	12/12/2023	N	EM16	UMCf	97.0 - 107.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-04I	4/19/2022	N	BL02	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-04I	3/20/2023	N	EM07	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-04I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<1.19	<2.41	<1.61	<1.38	<0.630	<0.535	<0.409	<0.745	<0.520
U4-MW-04I	9/14/2023	N	EM13	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-04I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-05D	4/15/2022	N	BL02	UMCf	98.2 - 108.2	<0.237	<0.481 UJ	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-05D	10/13/2022	N	EM02	UMCf	98.2 - 108.2	<23.7	<48.1	<32.2	<27.6	<12.6	<10.7	<8.19	<14.9	<10.4
U4-MW-05D	11/3/2022	N	EM03	UMCf	98.2 - 108.2	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-05D	12/7/2022	N	EM04	UMCf	98.2 - 108.2	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.186 J	<0.149	<0.104
U4-MW-05D	1/11/2023	N	EM05	UMCf	98.2 - 108.2	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-05D	2/14/2023	N	EM06	UMCf	98.2 - 108.2	<23.7	<48.1	<32.2	<27.6	<12.6	<10.7	<8.19	<14.9	<10.4
U4-MW-05D	3/16/2023	N	EM07	UMCf	98.2 - 108.2	<23.7	<48.1	<32.2	<27.6	<12.6	<10.7	<8.19	<14.9	<10.4
U4-MW-05D	4/20/2023	N	EM08	UMCf	98.2 - 108.2	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-05D	5/10/2023	N	EM09	UMCf	98.2 - 108.2	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-05D	6/15/2023	N	EM10	UMCf	98.2 - 108.2	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-05D	7/18/2023	N	EM11	UMCf	98.2 - 108.2	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-05D	8/14/2023	N	EM12	UMCf	98.2 - 108.2	<5.93	<12.0	<8.05	<6.90	<3.15	<2.68	<2.05	<3.73	<2.60
U4-MW-05D	9/12/2023	N	EM13	UMCf	98.2 - 108.2	<5.93	<12.0	<8.05	<6.90	<3.15	<2.68	<2.05	<3.73	<2.60
U4-MW-05D	10/18/2023	N	EM14	UMCf	98.2 - 108.2	<5.93	<12.0	<8.05	<6.90	<3.15	<2.68	<2.05	<3.73	<2.60
U4-MW-05D	11/16/2023	N	EM15	UMCf	98.2 - 108.2	<5.93	<12.0	<8.05	<6.90	<3.15	<2.68	<2.05	<3.73	<2.60
U4-MW-05D	12/14/2023	N	EM16	UMCf	98.2 - 108.2	<5.93	<12.0	<8.05	<6.90	<3.15	<2.68	<2.05	<3.73	<2.60
U4-MW-05I	4/15/2022	N	BL02	UMCf	76.6 - 86.6	<0.237	<0.481 UJ	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-05I	10/13/2022	N	EM02	UMCf	76.6 - 86.6	<23.7	<48.1	<32.2	<27.6	<12.6	<10.7	<8.19	<14.9	<10.4
U4-MW-05I	11/3/2022	N	EM03	UMCf	76.6 - 86.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-05I	12/8/2022	N	EM04	UMCf	76.6 - 86.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.531 J	<0.149	<0.104
U4-MW-05I	1/11/2023	N	EM05	UMCf	76.6 - 86.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-05I	2/14/2023	N	EM06	UMCf	76.6 - 86.6	<23.7	<48.1	<32.2	<27.6	<12.6	<10.7	<8.19	<14.9	<10.4
U4-MW-05I	3/14/2023	N	EM07	UMCf	76.6 - 86.6	<23.7	<48.1	<32.2	<27.6	<12.6	<10.7	<8.19	<14.9	<10.4
U4-MW-05I	4/21/2023	N	EM08	UMCf	76.6 - 86.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-05I	5/10/2023	N	EM09	UMCf	76.6 - 86.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-Chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene (Mesitylene)
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-05I	6/15/2023	N	EM10	UMCf	76.6 - 86.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-05I	7/17/2023	N	EM11	UMCf	76.6 - 86.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-05I	8/14/2023	N	EM12	UMCf	76.6 - 86.6	<11.9	<24.1	<16.1	<13.8	<6.30	<5.35	<4.09	<7.45	<5.20
U4-MW-05I	9/13/2023	N	EM13	UMCf	76.6 - 86.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-05I	10/18/2023	N	EM14	UMCf	76.6 - 86.6	<11.9	<24.1	<16.1	<13.8	<6.30	<5.35	<4.09	<7.45	<5.20
U4-MW-05I	11/15/2023	N	EM15	UMCf	76.6 - 86.6	<11.9	<24.1	<16.1	<13.8	<6.30	<5.35	<4.09	<7.45	<5.20
U4-MW-05I	12/12/2023	N	EM16	UMCf	76.6 - 86.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-06D	4/19/2022	N	BL02	UMCf	97.1 - 107.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.785 J	<0.149	<0.104
U4-MW-06D	2/15/2023	N	EM06	UMCf	97.1 - 107.1	<11.9	<24.1	<16.1	<13.8	<6.30	<5.35	<4.09	<7.45	<5.20
U4-MW-06D	3/21/2023	N	EM07	UMCf	97.1 - 107.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-06D	6/16/2023	N	EM10	UMCf	97.1 - 107.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-06D	9/13/2023	N	EM13	UMCf	97.1 - 107.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-06D	12/13/2023	N	EM16	UMCf	97.1 - 107.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-06I	4/19/2022	N	BL02	UMCf	76.5 - 86.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-06I	3/14/2023	N	EM07	UMCf	76.5 - 86.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.117 J	<0.149	<0.104
U4-MW-06I	6/16/2023	N	EM10	UMCf	76.5 - 86.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-06I	9/12/2023	N	EM13	UMCf	76.5 - 86.5	<11.9	<24.1	<16.1	<13.8	<6.30	<5.35	<4.09	<7.45	<5.20
U4-MW-06I	12/12/2023	N	EM16	UMCf	76.5 - 86.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-07D	4/15/2022	N	BL02	UMCf	96.8 - 106.5	<0.237	<0.481 UJ	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-07D	10/12/2022	N	EM02	UMCf	96.8 - 106.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-07D	10/12/2022	FD	EM02	UMCf	96.8 - 106.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-07D	11/3/2022	N	EM03	UMCf	96.8 - 106.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-07D	12/7/2022	N	EM04	UMCf	96.8 - 106.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-07D	1/11/2023	N	EM05	UMCf	96.8 - 106.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-07D	2/14/2023	N	EM06	UMCf	96.8 - 106.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-07D	3/16/2023	N	EM07	UMCf	96.8 - 106.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-07D	4/21/2023	N	EM08	UMCf	96.8 - 106.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-07D	5/11/2023	N	EM09	UMCf	96.8 - 106.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-07D	6/13/2023	N	EM10	UMCf	96.8 - 106.5	<0.237 UJ	<0.481 UJ	<0.322 UJ	<0.276 UJ	<0.126 UJ	<0.107 UJ	<0.0819 UJ	<0.149 UJ	<0.104 UJ
U4-MW-07D	7/17/2023	N	EM11	UMCf	96.8 - 106.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-07D	8/11/2023	N	EM12	UMCf	96.8 - 106.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-07D	9/13/2023	N	EM13	UMCf	96.8 - 106.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-07D	10/18/2023	N	EM14	UMCf	96.8 - 106.5	<23.7	<48.1	<32.2	<27.6	<12.6	<10.7	<8.19	<14.9	<10.4
U4-MW-07D	11/16/2023	N	EM15	UMCf	96.8 - 106.5	<23.7	<48.1	<32.2	<27.6	<12.6	<10.7	<8.19	<14.9	<10.4
U4-MW-07D	12/12/2023	N	EM16	UMCf	96.8 - 106.5	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-07I	4/15/2022	N	BL02	UMCf	76.8 - 86.8	<0.237	<0.481 UJ	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-07I	10/12/2022	N	EM02	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-07I	11/3/2022	N	EM03	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-07I	12/7/2022	N	EM04	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-07I	1/11/2023	N	EM05	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-07I	2/15/2023	N	EM06	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-07I	3/16/2023	N	EM07	UMCf	76.8 - 86.8	<1.19	<2.41	<1.61	<1.38	<0.630	<0.535	<0.409	<0.745	<0.520
U4-MW-07I	4/21/2023	N	EM08	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-07I	5/11/2023	N	EM09	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-07I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<1.19	<2.41	<1.61	<1.38	<0.630	<0.535	<0.409	<0.745	<0.520
U4-MW-07I	7/17/2023	N	EM11	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-07I	8/11/2023	N	EM12	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-07I	9/13/2023	N	EM13	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-07I	10/18/2023	N	EM14	UMCf	76.8 - 86.8	<11.9	<24.1	<16.1	<13.8	<6.30	<5.35	<4.09	<7.45	<5.20
U4-MW-07I	11/16/2023	N	EM15	UMCf	76.8 - 86.8	<11.9	<24.1	<16.1	<13.8	<6.30	<5.35	<4.09	<7.45	<5.20
U4-MW-07I	12/11/2023	N	EM16	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276 UJ	<0.126	<0.107	<0.0819	<0.149	<0.104

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-Chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene (Mesitylene)
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-08D	4/13/2022	N	BL02	UMCf	98.6 - 108.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-08D	12/7/2022	N	EM04	UMCf	98.6 - 108.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-08D	3/17/2023	N	EM07	UMCf	98.6 - 108.6	<23.7	<48.1	<32.2	<27.6	<12.6	<10.7	<8.19	<14.9	<10.4
U4-MW-08D	6/13/2023	N	EM10	UMCf	98.6 - 108.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-08D	9/13/2023	N	EM13	UMCf	98.6 - 108.6	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-08D	12/11/2023	N	EM16	UMCf	98.6 - 108.6	<0.237	<0.481	<0.322	<0.276 UJ	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-08DD	4/20/2022	N	BL02	UMCf	119.8 - 129.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-08DD	4/20/2022	FD	BL02	UMCf	119.8 - 129.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-08DD	12/8/2022	N	EM04	UMCf	119.8 - 129.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-08DD	3/15/2023	N	EM07	UMCf	119.8 - 129.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-08DD	6/14/2023	N	EM10	UMCf	119.8 - 129.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-08DD	9/14/2023	N	EM13	UMCf	119.8 - 129.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-08DD	12/14/2023	N	EM16	UMCf	119.8 - 129.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-08I	4/13/2022	N	BL02	UMCf	78.0 - 88.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.345 J	<0.149	<0.104
U4-MW-08I	12/7/2022	N	EM04	UMCf	78.0 - 88.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-08I	12/7/2022	FD	EM04	UMCf	78.0 - 88.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-08I	3/17/2023	N	EM07	UMCf	78.0 - 88.0	<11.9	<24.1	<16.1	<13.8	<6.30	<5.35	<4.09	<7.45	<5.20
U4-MW-08I	6/13/2023	N	EM10	UMCf	78.0 - 88.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-08I	9/13/2023	N	EM13	UMCf	78.0 - 88.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-08I	12/11/2023	N	EM16	UMCf	78.0 - 88.0	<0.237	<0.481	<0.322	<0.276 UJ	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-08S	4/15/2022	N	BL02	UMCf	54.9 - 64.9	<0.237	<0.481 UJ	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-08S	12/7/2022	N	EM04	UMCf	54.9 - 64.9	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-08S	12/7/2022	FD	EM04	UMCf	54.9 - 64.9	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-08S	3/13/2023	N	EM07	UMCf	54.9 - 64.9	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-08S	3/13/2023	FD	EM07	UMCf	54.9 - 64.9	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-08S	6/13/2023	N	EM10	UMCf	54.9 - 64.9	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-08S	6/13/2023	FD	EM10	UMCf	54.9 - 64.9	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-08S	9/13/2023	N	EM13	UMCf	54.9 - 64.9	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-08S	9/13/2023	FD	EM13	UMCf	54.9 - 64.9	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-08S	12/14/2023	N	EM16	UMCf	54.9 - 64.9	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-08S	12/14/2023	FD	EM16	UMCf	54.9 - 64.9	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-09D	4/14/2022	N	BL02	UMCf	96.9 - 106.9	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.239 J	<0.149	<0.104
U4-MW-09D	12/6/2022	N	EM04	UMCf	96.9 - 106.9	<2.37 UJ	<4.81 UJ	<3.22 UJ	<2.76 UJ	<1.26 UJ	<1.07 UJ	<0.819 UJ	<1.49 UJ	<1.04 UJ
U4-MW-09D	3/16/2023	N	EM07	UMCf	96.9 - 106.9	<2.37	<4.81	<3.22	<2.76	<1.26	<1.07	<0.819	<1.49	<1.04
U4-MW-09D	6/14/2023	N	EM10	UMCf	96.9 - 106.9	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-09D	9/12/2023	N	EM13	UMCf	96.9 - 106.9	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-09D	12/15/2023	N	EM16	UMCf	96.9 - 106.9	<5.93 UJ	<12.0 UJ	38.8 J	<6.90 UJ	<3.15 UJ	<2.68 UJ	<2.05 UJ	<3.73 UJ	11.6 J
U4-MW-09DD	4/14/2022	N	BL02	UMCf	119.8 - 129.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-09DD	12/6/2022	N	EM04	UMCf	119.8 - 129.8	<0.237 UJ	<0.481 UJ	<0.322 UJ	<0.276 UJ	<0.126 UJ	<0.107 UJ	<0.0819 UJ	<0.149 UJ	<0.104 UJ
U4-MW-09DD	3/21/2023	N	EM07	UMCf	119.8 - 129.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-09DD	6/15/2023	N	EM10	UMCf	119.8 - 129.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-09DD	9/13/2023	N	EM13	UMCf	119.8 - 129.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-09DD	12/13/2023	N	EM16	UMCf	119.8 - 129.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-09I	4/14/2022	N	BL02	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-09I	12/6/2022	N	EM04	UMCf	76.8 - 86.8	<2.37 UJ	<4.81 UJ	<3.22 UJ	<2.76 UJ	<1.26 UJ	<1.07 UJ	<0.819 UJ	<1.49 UJ	<1.04 UJ
U4-MW-09I	3/16/2023	N	EM07	UMCf	76.8 - 86.8	<2.37	<4.81	<3.22	<2.76	<1.26	<1.07	<0.819	<1.49	<1.04
U4-MW-09I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-09I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-09I	12/15/2023	N	EM16	UMCf	76.8 - 86.8	<5.93 UJ	<12.0 UJ	<8.05 UJ	<6.90 UJ	<3.15 UJ	<2.68 UJ	<2.05 UJ	<3.73 UJ	<2.60 UJ
U4-MW-09S	4/14/2022	N	BL02	UMCf	55.3 - 65.3	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-09S	12/6/2022	N	EM04	UMCf	55.3 - 65.3	<0.237 UJ	<0.481 UJ	<0.322 UJ	<0.276 UJ	<0.126 UJ	<0.107 UJ	<0.0819 UJ	<0.149 UJ	<0.104 UJ

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-Chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene (Mesitylene)
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-09S	3/17/2023	N	EM07	UMCf	55.3 - 65.3	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-09S	6/15/2023	N	EM10	UMCf	55.3 - 65.3	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-09S	9/13/2023	N	EM13	UMCf	55.3 - 65.3	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-09S	12/12/2023	N	EM16	UMCf	55.3 - 65.3	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-10D	4/14/2022	N	BL02	UMCf	96.9 - 106.9	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-10D	12/5/2022	N	EM04	UMCf	96.9 - 106.9	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-10D	3/17/2023	N	EM07	UMCf	96.9 - 106.9	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-10D	6/14/2023	N	EM10	UMCf	96.9 - 106.9	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-10D	9/13/2023	N	EM13	UMCf	96.9 - 106.9	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-10D	12/14/2023	N	EM16	UMCf	96.9 - 106.9	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-10I	4/14/2022	N	BL02	UMCf	77.1 - 87.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.115 J	<0.149	<0.104
U4-MW-10I	12/5/2022	N	EM04	UMCf	77.1 - 87.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-10I	3/17/2023	N	EM07	UMCf	77.1 - 87.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-10I	6/14/2023	N	EM10	UMCf	77.1 - 87.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-10I	9/13/2023	N	EM13	UMCf	77.1 - 87.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-10I	12/14/2023	N	EM16	UMCf	77.1 - 87.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-11D	4/15/2022	N	BL02	UMCf	97.4 - 107.4	0.334 J	<0.481 UJ	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-11D	9/26/2022	N	EM01	UMCf	97.4 - 107.4	<11.9	<24.1	<16.1	<13.8	<6.30	<5.35	<4.09	<7.45	<5.20
U4-MW-11D	10/11/2022	N	EM02	UMCf	97.4 - 107.4	<2.37	<4.81	<3.22	<2.76	<1.26	<1.07	<0.819	<1.49	<1.04
U4-MW-11D	11/1/2022	N	EM03	UMCf	97.4 - 107.4	<11.9	<24.1	<16.1	<13.8	<6.30	<5.35	<4.09	<7.45	<5.20
U4-MW-11D	12/6/2022	N	EM04	UMCf	97.4 - 107.4	<5.93 UJ	<12.0 UJ	<8.05 UJ	<6.90 UJ	<3.15 UJ	<2.68 UJ	<2.05 UJ	<3.73 UJ	<2.60 UJ
U4-MW-11D	1/12/2023	N	EM05	UMCf	97.4 - 107.4	<47.4	<96.2	<64.4	<55.2	<25.2	<21.4	<16.4	<29.8	<20.8
U4-MW-11D	2/14/2023	N	EM06	UMCf	97.4 - 107.4	<47.4	<96.2	<64.4	<55.2	<25.2	<21.4	<16.4	<29.8	<20.8
U4-MW-11D	3/16/2023	N	EM07	UMCf	97.4 - 107.4	<47.4	<96.2	<64.4	<55.2	<25.2	<21.4	<16.4	<29.8	<20.8
U4-MW-11D	4/18/2023	N	EM08	UMCf	97.4 - 107.4	<1.19	<2.41	<1.61	<1.38	<0.630	<0.535	<0.409	<0.745	<0.520
U4-MW-11D	5/17/2023	N	EM09	UMCf	97.4 - 107.4	<4.74 UJ	<9.62 UJ	<6.44 UJ	<5.52 UJ	<2.52 UJ	<2.14 UJ	<1.64 UJ	<2.98 UJ	<2.08 UJ
U4-MW-11D	6/16/2023	N	EM10	UMCf	97.4 - 107.4	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.0940 J	<0.149	<0.104
U4-MW-11D	7/14/2023	N	EM11	UMCf	97.4 - 107.4	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.106 J	<0.149	<0.104
U4-MW-11D	8/14/2023	N	EM12	UMCf	97.4 - 107.4	<47.4	<96.2	<64.4	<55.2	<25.2	<21.4	<16.4	<29.8	<20.8
U4-MW-11D	9/13/2023	N	EM13	UMCf	97.4 - 107.4	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-11D	10/18/2023	N	EM14	UMCf	97.4 - 107.4	<47.4	<96.2	<64.4	<55.2	<25.2	<21.4	<16.4	<29.8	<20.8
U4-MW-11D	11/16/2023	N	EM15	UMCf	97.4 - 107.4	<11.9	<24.1	<16.1	<13.8	<6.30	<5.35	<4.09	<7.45	<5.20
U4-MW-11D	12/13/2023	N	EM16	UMCf	97.4 - 107.4	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-11I	4/14/2022	N	BL02	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104 UJ
U4-MW-11I	9/26/2022	N	EM01	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-11I	9/26/2022	FD	EM01	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-11I	10/10/2022	N	EM02	UMCf	77.0 - 87.0	<2.37	<4.81	<3.22	<2.76	<1.26	<1.07	<0.819	<1.49	<1.04
U4-MW-11I	10/10/2022	FD	EM02	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-11I	10/31/2022	N	EM03	UMCf	77.0 - 87.0	<1.19	<2.41 UJ	<1.61	<1.38	<0.630	<0.535	<0.409	<0.745	<0.520
U4-MW-11I	10/31/2022	FD	EM03	UMCf	77.0 - 87.0	<0.237	<0.481 UJ	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-11I	12/6/2022	N	EM04	UMCf	77.0 - 87.0	<0.237 UJ	<0.481 UJ	<0.322 UJ	<0.276 UJ	<0.126 UJ	<0.107 UJ	<0.0819 UJ	<0.149 UJ	<0.104 UJ
U4-MW-11I	12/6/2022	FD	EM04	UMCf	77.0 - 87.0	<0.237 UJ	<0.481 UJ	<0.322 UJ	<0.276 UJ	<0.126 UJ	<0.107 UJ	<0.0819 UJ	<0.149 UJ	<0.104 UJ
U4-MW-11I	1/12/2023	N	EM05	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-11I	1/12/2023	FD	EM05	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-11I	2/14/2023	N	EM06	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-11I	2/14/2023	FD	EM06	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-11I	3/16/2023	N	EM07	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-11I	3/16/2023	FD	EM07	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-11I	4/18/2023	N	EM08	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-11I	4/18/2023	FD	EM08	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-11I	5/19/2023	N	EM09	UMCf	77.0 - 87.0	<0.237 UJ	<0.481 UJ	<0.322 UJ	<0.276 UJ	<0.126 UJ	<0.107 UJ	<0.0819 UJ	<0.149 UJ	<0.104 UJ

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-Chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene (Mesitylene)
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-11I	5/19/2023	FD	EM09	UMCf	77.0 - 87.0	<0.237 UJ	<0.481 UJ	<0.322 UJ	<0.276 UJ	<0.126 UJ	<0.107 UJ	<0.0819 UJ	<0.149 UJ	<0.104 UJ
U4-MW-11I	6/15/2023	N	EM10	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-11I	6/15/2023	FD	EM10	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-11I	7/13/2023	N	EM11	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-11I	7/13/2023	FD	EM11	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-11I	8/14/2023	N	EM12	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-11I	8/14/2023	FD	EM12	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-11I	9/13/2023	N	EM13	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-11I	9/13/2023	FD	EM13	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-11I	10/19/2023	N	EM14	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-11I	10/19/2023	FD	EM14	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-11I	11/16/2023	N	EM15	UMCf	77.0 - 87.0	<11.9	<24.1	<16.1	<13.8	<6.30	<5.35	<4.09	<7.45	<5.20
U4-MW-11I	11/16/2023	FD	EM15	UMCf	77.0 - 87.0	<11.9	<24.1	<16.1	<13.8	<6.30	<5.35	31.5 J	<7.45	<5.20
U4-MW-11I	12/13/2023	N	EM16	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-11I	12/13/2023	FD	EM16	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-12D	4/15/2022	N	BL02	UMCf	97.1 - 107.1	<0.237	<0.481 UJ	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-12D	9/27/2022	N	EM01	UMCf	97.1 - 107.1	<4.74	<9.62	<6.44	<5.52	<2.52	<2.14	<1.64	<2.98	<2.08
U4-MW-12D	10/12/2022	N	EM02	UMCf	97.1 - 107.1	0.325 J	<0.481	<0.322	<0.276	<0.126	<0.107	0.157 J	<0.149	<0.104
U4-MW-12D	11/2/2022	N	EM03	UMCf	97.1 - 107.1	<2.37	<4.81	<3.22	<2.76	<1.26	<1.07	<0.819	<1.49	<1.04
U4-MW-12D	12/7/2022	N	EM04	UMCf	97.1 - 107.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.196 J	<0.149	<0.104
U4-MW-12D	1/12/2023	N	EM05	UMCf	97.1 - 107.1	<23.7	<48.1	<32.2	<27.6	<12.6	<10.7	<8.19	<14.9	<10.4
U4-MW-12D	2/15/2023	N	EM06	UMCf	97.1 - 107.1	<23.7	<48.1	<32.2	<27.6	<12.6	<10.7	<8.19	<14.9	<10.4
U4-MW-12D	3/14/2023	N	EM07	UMCf	97.1 - 107.1	<11.9	<24.1	<16.1	<13.8	<6.30	<5.35	<4.09	<7.45	<5.20
U4-MW-12D	4/17/2023	N	EM08	UMCf	97.1 - 107.1	<1.19 UJ	<2.41 UJ	<1.61 UJ	<1.38 UJ	<0.630 UJ	<0.535 UJ	<0.409 UJ	<0.745 UJ	<0.520 UJ
U4-MW-12D	5/17/2023	N	EM09	UMCf	97.1 - 107.1	<23.7	<48.1	<32.2	<27.6	<12.6	<10.7	<8.19	<14.9	<10.4
U4-MW-12D	6/16/2023	N	EM10	UMCf	97.1 - 107.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-12D	7/13/2023	N	EM11	UMCf	97.1 - 107.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-12D	8/14/2023	N	EM12	UMCf	97.1 - 107.1	<11.9	<24.1	<16.1	<13.8	<6.30	<5.35	<4.09	<7.45	<5.20
U4-MW-12D	9/12/2023	N	EM13	UMCf	97.1 - 107.1	<11.9	<24.1	<16.1	<13.8	<6.30	<5.35	<4.09	<7.45	<5.20
U4-MW-12D	10/17/2023	N	EM14	UMCf	97.1 - 107.1	<1.19	<2.41	<1.61	<1.38	<0.630	<0.535	<0.409	<0.745	<0.520
U4-MW-12D	11/15/2023	N	EM15	UMCf	97.1 - 107.1	<1.19	<2.41	<1.61	<1.38	<0.630	<0.535	<0.409	<0.745	<0.520
U4-MW-12D	12/12/2023	N	EM16	UMCf	97.1 - 107.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-12I	4/14/2022	N	BL02	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.144 J	<0.149	<0.104
U4-MW-12I	4/14/2022	FD	BL02	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.146 J	<0.149	<0.104
U4-MW-12I	9/27/2022	N	EM01	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-12I	10/12/2022	N	EM02	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.0834 J	<0.149	<0.104
U4-MW-12I	11/2/2022	N	EM03	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-12I	12/7/2022	N	EM04	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-12I	12/7/2022	FD	EM04	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-12I	1/13/2023	N	EM05	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-12I	2/15/2023	N	EM06	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-12I	3/13/2023	N	EM07	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-12I	4/17/2023	N	EM08	UMCf	76.8 - 86.8	<0.237 UJ	<0.481 UJ	<0.322 UJ	<0.276 UJ	<0.126 UJ	<0.107 UJ	<0.0819 UJ	<0.149 UJ	<0.104 UJ
U4-MW-12I	5/17/2023	N	EM09	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-12I	6/16/2023	N	EM10	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-12I	7/11/2023	N	EM11	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-12I	8/14/2023	N	EM12	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-12I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-12I	10/17/2023	N	EM14	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-12I	11/16/2023	N	EM15	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-12I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B
						1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-Chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene (Mesitylene)
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-13D	4/14/2022	N	BL02	UMCf	98.2 - 108.2	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.200 J	<0.149	<0.104
U4-MW-13D	9/28/2022	N	EM01	UMCf	98.2 - 108.2	<2.37	<4.81	<3.22	<2.76	<1.26	<1.07	<0.819	<1.49	<1.04
U4-MW-13D	10/11/2022	N	EM02	UMCf	98.2 - 108.2	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-13D	11/3/2022	N	EM03	UMCf	98.2 - 108.2	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-13D	12/7/2022	N	EM04	UMCf	98.2 - 108.2	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-13D	1/12/2023	N	EM05	UMCf	98.2 - 108.2	<4.74	<9.62	<6.44	<5.52	<2.52	<2.14	<1.64	<2.98	<2.08
U4-MW-13D	2/15/2023	N	EM06	UMCf	98.2 - 108.2	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-13D	3/17/2023	N	EM07	UMCf	98.2 - 108.2	<4.74	<9.62	<6.44	<5.52	<2.52	<2.14	<1.64	<2.98	<2.08
U4-MW-13D	4/18/2023	N	EM08	UMCf	98.2 - 108.2	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-13D	5/17/2023	N	EM09	UMCf	98.2 - 108.2	<4.74	<9.62	<6.44	<5.52	<2.52	<2.14	<1.64	<2.98	<2.08
U4-MW-13D	6/15/2023	N	EM10	UMCf	98.2 - 108.2	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-13D	7/12/2023	N	EM11	UMCf	98.2 - 108.2	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-13D	8/11/2023	N	EM12	UMCf	98.2 - 108.2	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-13D	9/11/2023	N	EM13	UMCf	98.2 - 108.2	<5.93	<12.0	<8.05	<6.90	<3.15	<2.68	<2.05	<3.73	<2.60
U4-MW-13D	10/18/2023	N	EM14	UMCf	98.2 - 108.2	<5.93	<12.0	<8.05	<6.90	<3.15	<2.68	<2.05	<3.73	<2.60
U4-MW-13D	11/15/2023	N	EM15	UMCf	98.2 - 108.2	<5.93	<12.0	<8.05	<6.90	<3.15	<2.68	<2.05	<3.73	<2.60
U4-MW-13D	12/11/2023	N	EM16	UMCf	98.2 - 108.2	<0.237	<0.481	<0.322	<0.276 UJ	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-13I	4/14/2022	N	BL02	UMCf	77.1 - 87.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.133 J	<0.149	<0.104
U4-MW-13I	9/28/2022	N	EM01	UMCf	77.1 - 87.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-13I	10/10/2022	N	EM02	UMCf	77.1 - 87.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-13I	11/3/2022	N	EM03	UMCf	77.1 - 87.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-13I	12/6/2022	N	EM04	UMCf	77.1 - 87.1	<1.19 UJ	<2.41 UJ	<1.61 UJ	<1.38 UJ	<0.630 UJ	<0.535 UJ	<0.409 UJ	<0.745 UJ	<0.520 UJ
U4-MW-13I	1/12/2023	N	EM05	UMCf	77.1 - 87.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-13I	2/14/2023	N	EM06	UMCf	77.1 - 87.1	<1.19	<2.41	<1.61	<1.38	<0.630	<0.535	<0.409	<0.745	<0.520
U4-MW-13I	3/16/2023	N	EM07	UMCf	77.1 - 87.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-13I	4/19/2023	N	EM08	UMCf	77.1 - 87.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-13I	5/17/2023	N	EM09	UMCf	77.1 - 87.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-13I	6/15/2023	N	EM10	UMCf	77.1 - 87.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-13I	7/12/2023	N	EM11	UMCf	77.1 - 87.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-13I	8/11/2023	N	EM12	UMCf	77.1 - 87.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-13I	9/11/2023	N	EM13	UMCf	77.1 - 87.1	<5.93	<12.0	<8.05	<6.90	<3.15	<2.68	<2.05	<3.73	<2.60
U4-MW-13I	10/17/2023	N	EM14	UMCf	77.1 - 87.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-13I	11/15/2023	N	EM15	UMCf	77.1 - 87.1	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-13I	12/11/2023	N	EM16	UMCf	77.1 - 87.1	<0.237	<0.481	<0.322	<0.276 UJ	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-14D	4/13/2022	N	BL02	UMCf	97.3 - 107.3	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.134 J	<0.149	<0.104
U4-MW-14D	12/6/2022	N	EM04	UMCf	97.3 - 107.3	<1.19 UJ	<2.41 UJ	<1.61 UJ	<1.38 UJ	<0.630 UJ	<0.535 UJ	<0.409 UJ	<0.745 UJ	<0.520 UJ
U4-MW-14D	3/16/2023	N	EM07	UMCf	97.3 - 107.3	<1.19	<2.41	<1.61	<1.38	<0.630	<0.535	<0.409	<0.745	<0.520 UJ
U4-MW-14D	6/15/2023	N	EM10	UMCf	97.3 - 107.3	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-14D	9/14/2023	N	EM13	UMCf	97.3 - 107.3	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-14D	12/15/2023	N	EM16	UMCf	97.3 - 107.3	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-14I	4/14/2022	N	BL02	UMCf	77.3 - 87.3	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-14I	12/6/2022	N	EM04	UMCf	77.3 - 87.3	<1.19 UJ	<2.41 UJ	<1.61 UJ	<1.38 UJ	<0.630 UJ	<0.535 UJ	<0.409 UJ	<0.745 UJ	<0.520 UJ
U4-MW-14I	3/16/2023	N	EM07	UMCf	77.3 - 87.3	<1.19	<2.41	<1.61	<1.38	<0.630	<0.535	<0.409	<0.745	<0.520 UJ
U4-MW-14I	6/15/2023	N	EM10	UMCf	77.3 - 87.3	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-14I	9/14/2023	N	EM13	UMCf	77.3 - 87.3	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-14I	12/14/2023	N	EM16	UMCf	77.3 - 87.3	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-15D	4/13/2022	N	BL02	UMCf	96.0 - 106.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-15D	12/5/2022	N	EM04	UMCf	96.0 - 106.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-15D	3/20/2023	N	EM07	UMCf	96.0 - 106.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-15D	6/14/2023	N	EM10	UMCf	96.0 - 106.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-15D	9/13/2023	N	EM13	UMCf	96.0 - 106.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-Chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene (Mesitylene)
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-15D	12/12/2023	N	EM16	UMCf	96.0 - 106.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-15DD	4/13/2022	N	BL02	UMCf	120.3 - 130.3	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-15DD	12/5/2022	N	EM04	UMCf	120.3 - 130.3	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-15DD	3/15/2023	N	EM07	UMCf	120.3 - 130.3	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-15DD	6/13/2023	N	EM10	UMCf	120.3 - 130.3	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-15DD	9/14/2023	N	EM13	UMCf	120.3 - 130.3	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-15DD	12/13/2023	N	EM16	UMCf	120.3 - 130.3	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-15I	4/12/2022	N	BL02	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-15I	12/5/2022	N	EM04	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-15I	3/17/2023	N	EM07	UMCf	76.8 - 86.8	<4.74	<9.62	<6.44	<5.52	<2.52	<2.14	<1.64	<2.98	<2.08
U4-MW-15I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-15I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-15I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-15S	4/13/2022	N	BL02	UMCf	54.8 - 64.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-15S	12/5/2022	N	EM04	UMCf	54.8 - 64.8	<5.93	<12.0	<8.05	<6.90	<3.15	<2.68	<2.05	<3.73	<2.60
U4-MW-15S	3/13/2023	N	EM07	UMCf	54.8 - 64.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-15S	6/13/2023	N	EM10	UMCf	54.8 - 64.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-15S	9/14/2023	N	EM13	UMCf	54.8 - 64.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-15S	12/11/2023	N	EM16	UMCf	54.8 - 64.8	<0.474	<0.962	<0.644	<0.552 UJ	<0.252	<0.214	<0.164	<0.298	<0.208
U4-MW-16D	4/11/2022	N	BL02	UMCf	96.8 - 106.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-16D	12/5/2022	N	EM04	UMCf	96.8 - 106.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-16D	3/14/2023	N	EM07	UMCf	96.8 - 106.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-16D	6/13/2023	N	EM10	UMCf	96.8 - 106.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-16D	9/15/2023	N	EM13	UMCf	96.8 - 106.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-16D	12/14/2023	N	EM16	UMCf	96.8 - 106.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-16DD	4/12/2022	N	BL02	UMCf	120.8 - 130.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-16DD	12/5/2022	N	EM04	UMCf	120.8 - 130.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-16DD	3/15/2023	N	EM07	UMCf	120.8 - 130.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-16DD	6/13/2023	N	EM10	UMCf	120.8 - 130.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-16DD	9/14/2023	N	EM13	UMCf	120.8 - 130.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-16DD	12/13/2023	N	EM16	UMCf	120.8 - 130.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-16I	4/11/2022	N	BL02	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-16I	12/5/2022	N	EM04	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-16I	12/5/2022	FD	EM04	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-16I	3/13/2023	N	EM07	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-16I	3/13/2023	FD	EM07	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-16I	6/12/2023	N	EM10	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-16I	6/12/2023	FD	EM10	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-16I	9/11/2023	N	EM13	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-16I	9/11/2023	FD	EM13	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-16I	12/11/2023	N	EM16	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276 UJ	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-16I	12/11/2023	FD	EM16	UMCf	77.0 - 87.0	<0.237	<0.481	<0.322	<0.276 UJ	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-16S	4/12/2022	N	BL02	UMCf	54.8 - 64.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-16S	4/12/2022	FD	BL02	UMCf	54.8 - 64.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-16S	12/6/2022	N	EM04	UMCf	54.8 - 64.8	<0.237 UJ	<0.481 UJ	<0.322 UJ	<0.276 UJ	<0.126 UJ	<0.107 UJ	<0.0819 UJ	<0.149 UJ	<0.104 UJ
U4-MW-16S	3/15/2023	N	EM07	UMCf	54.8 - 64.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-16S	6/13/2023	N	EM10	UMCf	54.8 - 64.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-16S	9/11/2023	N	EM13	UMCf	54.8 - 64.8	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-MW-16S	12/11/2023	N	EM16	UMCf	54.8 - 64.8	<0.237	<0.481	<0.322	<0.276 UJ	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-SLMW	11/10/2022	N	EM03		-	<1.19	<2.41	<1.61	<1.38	<0.630	<0.535	<0.409	<0.745	<0.520
U4-T3	10/13/2022	N	EM02		-	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-Chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene (Mesitylene)
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-T3	11/3/2022	N	EM03		-	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-T3	12/6/2022	N	EM04		-	<4.74 UJ	<9.62 UJ	<6.44 UJ	<5.52 UJ	<2.52 UJ	<2.14 UJ	<1.64 UJ	<2.98 UJ	<2.08 UJ
U4-T3	1/9/2023	N	EM05		-	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	0.0844 J	<0.149	<0.104
U4-T3	2/13/2023	N	EM06		-	<23.7	<48.1	<32.2	<27.6	<12.6	<10.7	<8.19	<14.9	<10.4
U4-T3	3/13/2023	N	EM07		-	<5.93	<12.0	<8.05	<6.90	<3.15	<2.68	<2.05	<3.73	<2.60
U4-T3	4/19/2023	N	EM08		-	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-T3	5/18/2023	N	EM09		-	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-T3	6/12/2023	N	EM10		-	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-T3	7/11/2023	N	EM11		-	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-T3	8/10/2023	N	EM12		-	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-T3	9/11/2023	N	EM13		-	<0.237	<0.481	<0.322	<0.276	<0.126	<0.107	<0.0819	<0.149	<0.104
U4-T3	10/16/2023	N	EM14		-	<5.93	<12.0	<8.05	<6.90	<3.15	<2.68	<2.05	<3.73	<2.60

Notes:

FD - Field duplicate

E - Field instrument error.

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 low.

J+ - The result is an estimated quantity, but the result may be biased high.

N/A - Not Applicable

mg/L - milligrams per liter

µg/L - micrograms per liter

N - Normal field 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

< - The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

-- Not tested.

M-252 damaged/obstructed when checked on June 14, 2023 and September 14, 2023.

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Butanone (MEK)	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene	4-Methyl-2-Pentanone	Acetone
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
M-247-100	4/20/2022	N	BL02	UMCf	100.5 - 110.5	----	----	----	----	----	----	----	----	----	----
M-249-100	4/20/2022	N	BL02	UMCf	99.6 - 109.6	----	----	----	----	----	----	----	----	----	----
M-251-100	4/19/2022	N	BL02	UMCf	92.5 - 102.5	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
M-251-100	10/13/2022	N	EM02	UMCf	92.5 - 102.5	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
M-251-100	11/2/2022	N	EM03	UMCf	92.5 - 102.5	<1.10	<1.10	<1.20	<1.61	<11.9	<1.06	<7.87	<1.14	<4.78	<113
M-251-100	12/8/2022	N	EM04	UMCf	92.5 - 102.5	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
M-251-100	1/11/2023	N	EM05	UMCf	92.5 - 102.5	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
M-251-100	2/13/2023	N	EM06	UMCf	92.5 - 102.5	<0.110	<0.110	<0.120	<0.161	1.46 J	<0.106	<0.787	<0.114	<0.478	<11.3
M-251-100	3/17/2023	N	EM07	UMCf	92.5 - 102.5	<5.50	<5.50	<6.00	<8.05	<59.5	<5.30	<39.4	<5.70	<23.9	<565
M-251-100	4/21/2023	N	EM08	UMCf	92.5 - 102.5	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
M-251-100	5/9/2023	N	EM09	UMCf	92.5 - 102.5	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
M-251-100	6/14/2023	N	EM10	UMCf	92.5 - 102.5	<5.50	<5.50	<6.00	<8.05	<59.5	<5.30	<39.4	<5.70	<23.9	<565
M-251-100	7/14/2023	N	EM11	UMCf	92.5 - 102.5	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
M-251-100	8/10/2023	N	EM12	UMCf	92.5 - 102.5	<0.110	<0.110	<0.120	<0.161	35.6	<0.106	2.52 J	<0.114	<0.478	21.9 J
M-251-100	9/14/2023	N	EM13	UMCf	92.5 - 102.5	<0.110	<0.110	<0.120	<0.161	1.97 J	<0.106	<0.787	<0.114	<0.478	<11.3
M-251-100	10/19/2023	N	EM14	UMCf	92.5 - 102.5	<0.110	<0.110	<0.120	<0.161	5.41 J	<0.106	<0.787	<0.114	<0.478	19.1 J
M-251-100	11/16/2023	N	EM15	UMCf	92.5 - 102.5	<5.50	<5.50	<6.00	<8.05	100 J	<5.30	<39.4	<5.70	<23.9	<565
M-251-100	12/12/2023	N	EM16	UMCf	92.5 - 102.5	<0.110	<0.110	<0.120	<0.161	39.7 J	<0.106	<0.787	<0.114	<0.478	135 J+
M-251-60	4/18/2022	N	BL02	UMCf	52.3 - 62.3	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
M-251-60	3/15/2023	N	EM07	UMCf	52.3 - 62.3	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
M-251-60	6/14/2023	N	EM10	UMCf	52.3 - 62.3	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
M-251-60	9/14/2023	N	EM13	UMCf	52.3 - 62.3	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
M-251-60	12/11/2023	N	EM16	UMCf	52.3 - 62.3	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787 UJ	<0.114	<0.478	<11.3
M-252	4/21/2022	N	BL02	UMCf	132.3 - 142.3	<0.110	<0.110	<0.120	<0.161	7.60 J	<0.106	<0.787	<0.114	<0.478	<11.3
M-252	3/15/2023	N	EM07	UMCf	132.3 - 142.3	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
M-252	9/19/2023	N	EM13	UMCf	132.3 - 142.3	<0.110	<0.110	<0.120	<0.161	4.31 J	<0.106	<0.787	<0.114	<0.478	<11.3
M-252	12/18/2023	N	EM16	UMCf	132.3 - 142.3	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
M-253-100	4/20/2022	N	BL02	UMCf	100.8 - 110.8	----	----	----	----	----	----	----	----	----	----
M-255-100	4/20/2022	N	BL02	UMCf	100.2 - 110.2	----	----	----	----	----	----	----	----	----	----
U4-E-01D	4/18/2022	N	BL02	UMCf	94.7 - 109.7	<0.550	<0.550	<0.600	<0.805	<5.95	<0.530	<3.94	<0.570	<2.39	<56.5
U4-E-01D	3/14/2023	N	EM07	UMCf	94.7 - 109.7	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-011	4/19/2022	N	BL02	UMCf	74.6 - 89.6	<0.110	<0.110	<0.120	<0.161	3.29 J	<0.106	<0.787	<0.114	<0.478	11.7 J
U4-E-011	4/19/2022	FD	BL02	UMCf	74.6 - 89.6	<0.110	<0.110	<0.120	<0.161	3.45 J	<0.106	0.848 J	<0.114	<0.478	11.7 J
U4-E-011	3/14/2023	N	EM07	UMCf	74.6 - 89.6	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-011	4/20/2023	N	EM08	UMCf	74.6 - 89.6	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-011	5/10/2023	N	EM09	UMCf	74.6 - 89.6	<0.110	<0.110	<0.120	<0.161	5.34 J	<0.106	<0.787	<0.114	<0.478	44.5 J
U4-E-011	6/12/2023	N	EM10	UMCf	74.6 - 89.6	<0.110	<0.110	<0.120	<0.161	19.7	<0.106	<0.787 UJ	<0.114	<0.478	84.3 J+
U4-E-011	7/11/2023	N	EM11	UMCf	74.6 - 89.6	<0.550	<0.550	<0.600	<0.805	<5.95	<0.530	<3.94	<0.570	<2.39	59.3 J
U4-E-011	8/10/2023	N	EM12	UMCf	74.6 - 89.6	<0.110	<0.110	<0.120	<0.161	7.24 J	<0.106	<0.787	<0.114	0.711 J	27.4 J
U4-E-011	9/11/2023	N	EM13	UMCf	74.6 - 89.6	<0.550	<0.550	<0.600	<0.805	<5.95	<0.530	<3.94	<0.570	<2.39	<56.5
U4-E-011	10/16/2023	N	EM14	UMCf	74.6 - 89.6	<0.110	<0.110	<0.120	<0.161	20.5	<0.106	<0.787	<0.114	<0.478	24.9 J
U4-E-011	12/13/2023	N	EM16	UMCf	74.6 - 89.6	<1.10	<1.10	<1.20	<1.61	62.0 J	<1.06	<7.87	<1.14	<4.78	<113
U4-E-02D	4/20/2022	N	BL02	UMCf	94.4 - 109.4	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-02D	3/14/2023	N	EM07	UMCf	94.4 - 109.4	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-021	4/18/2022	N	BL02	UMCf	74.4 - 89.4	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-021	3/14/2023	N	EM07	UMCf	74.4 - 89.4	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-021	4/20/2023	N	EM08	UMCf	74.4 - 89.4	<0.110	<0.110	<0.120	<0.161	5.27 J	<0.106	<0.787	<0.114	<0.478	17.6 J
U4-E-021	5/11/2023	N	EM09	UMCf	74.4 - 89.4	<0.110	<0.110	<0.120	<0.161	12.3	<0.106	<0.787	<0.114	<0.478	52.8
U4-E-021	6/12/2023	N	EM10	UMCf	74.4 - 89.4	<0.110	<0.110	<0.120	<0.161	31.6	<0.106	<0.787 UJ	<0.114	<0.478	31.2 J
U4-E-021	7/11/2023	N	EM11	UMCf	74.4 - 89.4	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	36.2 J
U4-E-021	8/10/2023	N	EM12	UMCf	74.4 - 89.4	<0.110	<0.110	<0.120	<0.161	47.5	<0.106	<0.787	<0.114	<0.478	41.5 J

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Butanone (MEK)	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene	4-Methyl-2-Pentanone	Acetone
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-E-02I	9/11/2023	N	EM13	UMCf	74.4 - 89.4	<0.110	<0.110	<0.120	<0.161	41.3	<0.106	<0.787	<0.114	<0.478	57.0
U4-E-02I	10/16/2023	N	EM14	UMCf	74.4 - 89.4	<1.10	<1.10	<1.20	<1.61	47.8 J	<1.06	<7.87	<1.14	<4.78	<113
U4-E-02I	12/14/2023	N	EM16	UMCf	74.4 - 89.4	<1.10	<1.10	<1.20	<1.61	<11.9	<1.06	<7.87	<1.14	<4.78	<113
U4-E-03D	4/19/2022	N	BL02	UMCf	95.1 - 110.1	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-03D	10/13/2022	N	EM02	UMCf	95.1 - 110.1	<22.0	<22.0	<24.0	<32.2	<238	<21.2	<157	<22.8	<95.6	<2,260
U4-E-03D	11/3/2022	N	EM03	UMCf	95.1 - 110.1	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-03D	12/6/2022	N	EM04	UMCf	95.1 - 110.1	<2.20 UJ	<2.20 UJ	<2.40 UJ	<3.22 UJ	<23.8 UJ	<2.12 UJ	<15.7 UJ	<2.28 UJ	<9.56 UJ	<226 UJ
U4-E-03D	1/9/2023	N	EM05	UMCf	95.1 - 110.1	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-03D	2/13/2023	N	EM06	UMCf	95.1 - 110.1	<11.0	<11.0	<12.0	<16.1	<119	<10.6	<78.7	<11.4	<47.8	<1,130
U4-E-03D	3/13/2023	N	EM07	UMCf	95.1 - 110.1	<11.0	<11.0	<12.0	<16.1	<119	<10.6	<78.7	<11.4	<47.8	<1,130
U4-E-03D	3/14/2023	N	EM07	UMCf	95.1 - 110.1	<22.0	<22.0	<24.0	<32.2	<238	<21.2	<157	<22.8	<95.6	<2,260
U4-E-03D	4/19/2023	N	EM08	UMCf	95.1 - 110.1	<0.550	<0.550	<0.600	<0.805	<5.95	<0.530	<3.94	<0.570	<2.39	<56.5
U4-E-03D	5/11/2023	N	EM09	UMCf	95.1 - 110.1	<0.110	<0.110	<0.120	<0.161	50.0	<0.106	<0.787	<0.114	<0.478	164
U4-E-03D	6/12/2023	N	EM10	UMCf	95.1 - 110.1	<0.110	<0.110	<0.120	<0.161	46.8	<0.106	<0.787 UJ	<0.114	<0.478	233
U4-E-03D	7/11/2023	N	EM11	UMCf	95.1 - 110.1	<0.110	<0.110	<0.120	<0.161	18.4	<0.106	<0.787	<0.114	<0.478	195
U4-E-03D	8/10/2023	N	EM12	UMCf	95.1 - 110.1	<0.110	<0.110	<0.120	<0.161	6.05 J	<0.106	<0.787	<0.114	<0.478	29.5 J
U4-E-03D	9/11/2023	N	EM13	UMCf	95.1 - 110.1	<0.110	<0.110	<0.120	<0.161	32.7	<0.106	<0.787	<0.114	<0.478	201
U4-E-03D	10/16/2023	N	EM14	UMCf	95.1 - 110.1	<22.0	<22.0	<24.0	<32.2	<238	<21.2	<157	<22.8	<95.6	<2,260
U4-E-04D	4/19/2022	N	BL02	UMCf	95.0 - 110.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-04D	3/14/2023	N	EM07	UMCf	95.0 - 110.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-04I	4/18/2022	N	BL02	UMCf	75.0 - 90.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-04I	3/14/2023	N	EM07	UMCf	75.0 - 90.0	<5.50	<5.50	<6.00	<8.05	<59.5	<5.30	<39.4	<5.70	<23.9	<565
U4-E-05D	4/19/2022	N	BL02	UMCf	95.0 - 110.0	<0.110	<0.110	<0.120	<0.161	2.86 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-05D	3/16/2023	N	EM07	UMCf	95.0 - 110.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-05I	4/19/2022	N	BL02	UMCf	75.0 - 90.0	<0.110	<0.110	<0.120	<0.161	4.61 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-05I	3/15/2023	N	EM07	UMCf	75.0 - 90.0	<0.110 UJ	<0.110 UJ	<0.120 UJ	<0.161 UJ	110 J-	<0.106 UJ	<0.787 UJ	<0.114 UJ	<0.478 UJ	98.1 J
U4-E-06D	4/11/2022	N	BL02	UMCf	95.1 - 110.1	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-06I	4/11/2022	N	BL02	UMCf	73.2 - 88.2	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-06I	4/11/2022	FD	BL02	UMCf	73.2 - 88.2	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-06I	10/12/2022	N	EM02	UMCf	73.2 - 88.2	<0.110	<0.110	<0.120	<0.161	8.89 J	<0.106	<0.787	<0.114	<0.478	33.8 J
U4-E-06I	11/3/2022	N	EM03	UMCf	73.2 - 88.2	<0.110	<0.110	<0.120	<0.161	10.5	<0.106	<0.787	<0.114	<0.478	39.8 J
U4-E-06I	12/6/2022	N	EM04	UMCf	73.2 - 88.2	<1.10 UJ	<1.10 UJ	<1.20 UJ	<1.61 UJ	36.1 J	<1.06 UJ	<7.87 UJ	<1.14 UJ	<4.78 UJ	<113 UJ
U4-E-06I	1/9/2023	N	EM05	UMCf	73.2 - 88.2	<0.110	<0.110	<0.120	<0.161	16.0 J+	<0.106	<0.787	<0.114	<0.478	32.8 J
U4-E-06I	2/13/2023	N	EM06	UMCf	73.2 - 88.2	<11.0	<11.0	<12.0	<16.1	<119	<10.6	<78.7	<11.4	<47.8	<1,130
U4-E-06I	3/13/2023	N	EM07	UMCf	73.2 - 88.2	<2.20	<2.20	<2.40	<3.22	<23.8	<2.12	<15.7	<2.28	<9.56	<226
U4-E-06I	4/17/2023	N	EM08	UMCf	73.2 - 88.2	<2.20	<2.20	<2.40	<3.22	26.1 J	<2.12	<15.7	<2.28	<9.56	<226
U4-E-06I	5/15/2023	N	EM09	UMCf	73.2 - 88.2	<2.75	<2.75	<3.00	<4.03	<29.8	<2.65	<19.7	<2.85	<12.0	<282
U4-E-06I	6/12/2023	N	EM10	UMCf	73.2 - 88.2	<0.110	<0.110	<0.120	<0.161	7.09 J	<0.106	<0.787 UJ	<0.114	<0.478	21.0 J
U4-E-06I	7/11/2023	N	EM11	UMCf	73.2 - 88.2	<0.110	<0.110	<0.120	<0.161	14.1	<0.106	<0.787	<0.114	<0.478	52.8
U4-E-06I	8/11/2023	N	EM12	UMCf	73.2 - 88.2	<0.550	<0.550	<0.600	<0.805	<5.95	<0.530	<3.94	<0.570	<2.39	<56.5
U4-E-06I	9/11/2023	N	EM13	UMCf	73.2 - 88.2	<0.110	<0.110	<0.120	<0.161	11.1	<0.106	<0.787	<0.114	<0.478	87.0
U4-E-06I	10/16/2023	N	EM14	UMCf	73.2 - 88.2	<5.50	<5.50	<6.00	<8.05	<59.5	<5.30	<39.4	<5.70	<23.9	<565
U4-E-06I	12/13/2023	N	EM16	UMCf	73.2 - 88.2	<0.110	<0.110	<0.120	<0.161	196	<0.106	7.34 J	<0.114	9.20 J	497 J
U4-E-07D	4/12/2022	N	BL02	UMCf	94.6 - 109.6	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-07I	4/12/2022	N	BL02	UMCf	74.7 - 89.7	<0.110	<0.110	<0.120	<0.161	1.25 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-07I	10/11/2022	N	EM02	UMCf	74.7 - 89.7	<1.10	<1.10	<1.20	<1.61	<11.9	<1.06	<7.87	<1.14	<4.78	<113
U4-E-07I	11/3/2022	N	EM03	UMCf	74.7 - 89.7	<0.110	<0.110	<0.120	<0.161	2.17 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-07I	12/6/2022	N	EM04	UMCf	74.7 - 89.7	<2.75 UJ	<2.75 UJ	<3.00 UJ	<4.03 UJ	<29.8 UJ	<2.65 UJ	<19.7 UJ	<2.85 UJ	<12.0 UJ	<282 UJ
U4-E-07I	1/9/2023	N	EM05	UMCf	74.7 - 89.7	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-07I	2/13/2023	N	EM06	UMCf	74.7 - 89.7	<11.0	<11.0	<12.0	<16.1	<119	<10.6	<78.7	<11.4	<47.8	<1,130
U4-E-07I	3/13/2023	N	EM07	UMCf	74.7 - 89.7	<11.0	<11.0	<12.0	<16.1	<119	<10.6	<78.7	<11.4	<47.8	<1,130

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Butanone (MEK)	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene	4-Methyl-2-Pentanone	Acetone
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-E-07I	4/19/2023	N	EM08	UMCf	74.7 - 89.7	<0.550	<0.550	<0.600	<0.805	<5.95	<0.530	<3.94	<0.570	<2.39	<56.5
U4-E-07I	5/15/2023	N	EM09	UMCf	74.7 - 89.7	<11.0	<11.0	<12.0	<16.1	<119	<10.6	<78.7	<11.4	<47.8	<1,130
U4-E-07I	6/12/2023	N	EM10	UMCf	74.7 - 89.7	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787 UJ	<0.114	<0.478	<11.3
U4-E-07I	7/11/2023	N	EM11	UMCf	74.7 - 89.7	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-07I	8/11/2023	N	EM12	UMCf	74.7 - 89.7	<0.550	<0.550	<0.600	<0.805	<5.95	<0.530	<3.94	<0.570	<2.39	<56.5
U4-E-07I	9/11/2023	N	EM13	UMCf	74.7 - 89.7	<0.110	<0.110	<0.120	<0.161	6.21 J	<0.106	<0.787	<0.114	<0.478	32.0 J
U4-E-07I	10/16/2023	N	EM14	UMCf	74.7 - 89.7	<11.0	<11.0	<12.0	<16.1	<119	<10.6	<78.7	<11.4	<47.8	<1,130
U4-E-07I	12/13/2023	N	EM16	UMCf	74.7 - 89.7	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-08D	4/12/2022	N	BL02	UMCf	94.6 - 109.6	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-08D	10/11/2022	N	EM02	UMCf	94.6 - 109.6	<1.10	<1.10	<1.20	<1.61	<11.9	<1.06	<7.87	<1.14	<4.78	<113
U4-E-08D	11/3/2022	N	EM03	UMCf	94.6 - 109.6	<0.110	<0.110	<0.120	<0.161	1.32 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-08D	12/6/2022	N	EM04	UMCf	94.6 - 109.6	<2.75 UJ	<2.75 UJ	<3.00 UJ	<4.03 UJ	<29.8 UJ	<2.65 UJ	<19.7 UJ	<2.85 UJ	<12.0 UJ	<282 UJ
U4-E-08D	1/9/2023	N	EM05	UMCf	94.6 - 109.6	<0.110	<0.110	<0.120	<0.161	2.81 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-08D	2/13/2023	N	EM06	UMCf	94.6 - 109.6	<11.0	<11.0	<12.0	<16.1	<119	<10.6	<78.7	<11.4	<47.8	<1,130
U4-E-08D	3/13/2023	N	EM07	UMCf	94.6 - 109.6	<11.0	<11.0	<12.0	<16.1	<119	<10.6	<78.7	<11.4	<47.8	<1,130
U4-E-08D	4/19/2023	N	EM08	UMCf	94.6 - 109.6	<0.550	<0.550	<0.600	<0.805	<5.95	<0.530	<3.94	<0.570	<2.39	<56.5
U4-E-08D	5/17/2023	N	EM09	UMCf	94.6 - 109.6	<11.0	<11.0	<12.0	<16.1	<119	<10.6	<78.7	<11.4	<47.8	<1,130
U4-E-08D	6/12/2023	N	EM10	UMCf	94.6 - 109.6	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787 UJ	<0.114	<0.478	<11.3
U4-E-08D	7/11/2023	N	EM11	UMCf	94.6 - 109.6	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-09D	4/15/2022	N	BL02	UMCf	94.5 - 109.5	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-09I	4/14/2022	N	BL02	UMCf	74.9 - 89.9	<0.110	<0.110	<0.120	<0.161	1.24 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-10D	4/13/2022	N	BL02	UMCf	94.5 - 109.5	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-E-10I	4/13/2022	N	BL02	UMCf	74.2 - 89.2	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-01D	4/19/2022	N	BL02	UMCf	96.7 - 106.7	<0.110	<0.110	<0.120	<0.161	3.67 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-01D	2/16/2023	N	EM06	UMCf	96.7 - 106.7	<1.10	<1.10	<1.20	<1.61	<11.9	<1.06	<7.87	<1.14	<4.78	<113
U4-MW-01D	3/20/2023	N	EM07	UMCf	96.7 - 106.7	<0.110	<0.110	<0.120	<0.161	1.37 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-01D	6/13/2023	N	EM10	UMCf	96.7 - 106.7	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-01D	9/14/2023	N	EM13	UMCf	96.7 - 106.7	<0.110	<0.110	<0.120	<0.161	1.26 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-01D	12/14/2023	N	EM16	UMCf	96.7 - 106.7	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-01DD	4/19/2022	N	BL02	UMCf	119.9 - 129.9	<0.110	<0.110	<0.120	<0.161	5.15 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-01DD	4/19/2022	FD	BL02	UMCf	119.9 - 129.9	<0.110	<0.110	<0.120	<0.161	5.81 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-01DD	3/15/2023	N	EM07	UMCf	119.9 - 129.9	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-01DD	6/13/2023	N	EM10	UMCf	119.9 - 129.9	<0.110	<0.110	<0.120	<0.161	2.36 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-01DD	9/14/2023	N	EM13	UMCf	119.9 - 129.9	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-01DD	12/15/2023	N	EM16	UMCf	119.9 - 129.9	<0.550	<0.550	<0.600	<0.805	<5.95	<0.530	<3.94	<0.570	<2.39	<56.5
U4-MW-01I	4/19/2022	N	BL02	UMCf	76.7 - 86.7	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-01I	3/20/2023	N	EM07	UMCf	76.7 - 86.7	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-01I	6/12/2023	N	EM10	UMCf	76.7 - 86.7	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787 UJ	<0.114	<0.478	<11.3
U4-MW-01I	9/14/2023	N	EM13	UMCf	76.7 - 86.7	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-01I	12/15/2023	N	EM16	UMCf	76.7 - 86.7	<5.50	<5.50	<6.00	<8.05	<59.5	<5.30	<39.4	<5.70	<23.9	<565
U4-MW-01S	4/18/2022	N	BL02	UMCf	54.7 - 64.7	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-01S	3/15/2023	N	EM07	UMCf	54.7 - 64.7	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-01S	6/13/2023	N	EM10	UMCf	54.7 - 64.7	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-01S	9/15/2023	N	EM13	UMCf	54.7 - 64.7	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-01S	12/13/2023	N	EM16	UMCf	54.7 - 64.7	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-02D	4/14/2022	N	BL02	UMCf	95.0 - 110.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-02D	10/11/2022	N	EM02	UMCf	95.0 - 110.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-02D	11/1/2022	N	EM03	UMCf	95.0 - 110.0	<5.50	<5.50	<6.00	<8.05	<59.5	<5.30	<39.4	<5.70	<23.9	<565
U4-MW-02D	12/7/2022	N	EM04	UMCf	95.0 - 110.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-02D	1/10/2023	N	EM05	UMCf	95.0 - 110.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	0.872 J	<1,130
U4-MW-02D	2/13/2023	N	EM06	UMCf	95.0 - 110.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Butanone (MEK)	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene	4-Methyl-2-Pentanone	Acetone
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-02D	3/17/2023	N	EM07	UMCf	95.0 - 110.0	<11.0	<11.0	<12.0	<16.1	<119	<10.6	<78.7	<11.4	<47.8	<1,130
U4-MW-02D	4/19/2023	N	EM08	UMCf	95.0 - 110.0	<0.550	<0.550	<0.600	<0.805	<5.95	<0.530	<3.94	<0.570	<2.39	<56.5
U4-MW-02D	5/9/2023	N	EM09	UMCf	95.0 - 110.0	<0.550	<0.550	<0.600	<0.805	<5.95	<0.530	<3.94	<0.570	<2.39	<56.5
U4-MW-02D	6/13/2023	N	EM10	UMCf	95.0 - 110.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-02D	7/18/2023	N	EM11	UMCf	95.0 - 110.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-02D	8/14/2023	N	EM12	UMCf	95.0 - 110.0	<27.5	<27.5	<30.0	<40.3	<298	<26.5	<197	<28.5	<120	<2,820
U4-MW-02D	9/11/2023	N	EM13	UMCf	95.0 - 110.0	<0.110	<0.110	<0.120	<0.161	5.69 J	<0.106	0.860 J	<0.114	<0.478	<11.3
U4-MW-02D	10/19/2023	N	EM14	UMCf	95.0 - 110.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-02D	11/15/2023	N	EM15	UMCf	95.0 - 110.0	<11.0	<11.0	<12.0	<16.1	<119	<10.6	<78.7	<11.4	<47.8	<1,130
U4-MW-02D	12/14/2023	N	EM16	UMCf	95.0 - 110.0	<11.0	<11.0	<12.0	<16.1	<119	<10.6	<78.7	<11.4	<47.8	<1,130
U4-MW-02I	4/14/2022	N	BL02	UMCf	75.0 - 90.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-02I	10/11/2022	N	EM02	UMCf	75.0 - 90.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	11.9 J
U4-MW-02I	11/2/2022	N	EM03	UMCf	75.0 - 90.0	<1.10	<1.10	<1.20	<1.61	<11.9	<1.06	<7.87	<1.14	<4.78	<113
U4-MW-02I	11/2/2022	FD	EM03	UMCf	75.0 - 90.0	<1.10	<1.10	<1.20	<1.61	<11.9	<1.06	<7.87	<1.14	<4.78	<113
U4-MW-02I	12/8/2022	N	EM04	UMCf	75.0 - 90.0	<0.110	<0.110	<0.120	<0.161	<1.19 UJ	<0.106	<0.787	<0.114	<0.478	32.3 J
U4-MW-02I	12/8/2022	FD	EM04	UMCf	75.0 - 90.0	<0.110	<0.110	<0.120	<0.161	34.2 J	<0.106	<0.787	<0.114	<0.478	61.2
U4-MW-02I	1/13/2023	N	EM05	UMCf	75.0 - 90.0	<1.10	<1.10	<1.20	<1.61	<11.9	<1.06	<7.87	<1.14	<4.78	176 J
U4-MW-02I	1/13/2023	FD	EM05	UMCf	75.0 - 90.0	<1.10	<1.10	<1.20	<1.61	<11.9	<1.06	<7.87	<1.14	<4.78	190 J
U4-MW-02I	2/15/2023	N	EM06	UMCf	75.0 - 90.0	<1.10	<1.10	<1.20	<1.61	<11.9	<1.06	<7.87	<1.14	<4.78	<113
U4-MW-02I	2/15/2023	FD	EM06	UMCf	75.0 - 90.0	<1.10	<1.10	<1.20	<1.61	<11.9	<1.06	<7.87	<1.14	<4.78	<113
U4-MW-02I	3/17/2023	N	EM07	UMCf	75.0 - 90.0	<22.0	<22.0	<24.0	<32.2	<238	<21.2	<157	<22.8	<95.6	<2,260
U4-MW-02I	3/17/2023	FD	EM07	UMCf	75.0 - 90.0	<22.0	<22.0	<24.0	<32.2	<238	<21.2	<157	<22.8	<95.6	<2,260
U4-MW-02I	4/20/2023	N	EM08	UMCf	75.0 - 90.0	<0.110	<0.110	<0.120	<0.161	26.0	<0.106	<0.787	<0.114	<0.478	39.3 J
U4-MW-02I	4/20/2023	FD	EM08	UMCf	75.0 - 90.0	<0.110	<0.110	<0.120	<0.161	28.7	<0.106	<0.787	<0.114	<0.478	46.3 J
U4-MW-02I	5/9/2023	N	EM09	UMCf	75.0 - 90.0	<0.110	<0.110	<0.120	<0.161	21.7 J+	<0.106	<0.787	<0.114	<0.478	46.0 J
U4-MW-02I	5/9/2023	FD	EM09	UMCf	75.0 - 90.0	<0.110	<0.110	<0.120	<0.161	19.6 J+	<0.106	<0.787	<0.114	<0.478	47.8 J
U4-MW-02I	6/12/2023	N	EM10	UMCf	75.0 - 90.0	<0.110	<0.110	<0.120	<0.161	6.47 J	<0.106	<0.787 UJ	<0.114	<0.478	49.2 J
U4-MW-02I	6/12/2023	FD	EM10	UMCf	75.0 - 90.0	<0.110	<0.110	<0.120	<0.161	7.53 J	<0.106	<0.787 UJ	<0.114	<0.478	48.9 J
U4-MW-02I	7/18/2023	N	EM11	UMCf	75.0 - 90.0	<0.110	<0.110	<0.120	<0.161	24.0	<0.106	<0.787	<0.114	<0.478	32.7 J
U4-MW-02I	7/18/2023	FD	EM11	UMCf	75.0 - 90.0	<0.110	<0.110	<0.120	<0.161	26.0	<0.106	<0.787	<0.114	<0.478	35.3 J
U4-MW-02I	8/11/2023	N	EM12	UMCf	75.0 - 90.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-02I	8/11/2023	FD	EM12	UMCf	75.0 - 90.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-02I	9/11/2023	N	EM13	UMCf	75.0 - 90.0	<0.110	<0.110	<0.120	<0.161	60.9 J	<0.106	1.26 J	<0.114	0.779 J	437 J
U4-MW-02I	9/11/2023	FD	EM13	UMCf	75.0 - 90.0	<0.110	<0.110	<0.120	<0.161	36.0 J	<0.106	<0.787	<0.114	<0.478	274 J
U4-MW-02I	10/19/2023	N	EM14	UMCf	75.0 - 90.0	<0.110 UJ	<0.110 UJ	<0.120 UJ	<0.161 UJ	4.80 J	<0.106 UJ	<0.787 UJ	<0.114 UJ	<0.478 UJ	39.4 J
U4-MW-02I	10/19/2023	FD	EM14	UMCf	75.0 - 90.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	76.5 J
U4-MW-02I	11/15/2023	N	EM15	UMCf	75.0 - 90.0	<5.50	<5.50	<6.00	<8.05	<59.5	<5.30	<39.4	<5.70	<23.9	<565
U4-MW-02I	11/15/2023	FD	EM15	UMCf	75.0 - 90.0	<5.50	<5.50	<6.00	<8.05	<59.5	<5.30	<39.4	<5.70	<23.9	<565
U4-MW-02I	12/14/2023	N	EM16	UMCf	75.0 - 90.0	<5.50	<5.50	<6.00	<8.05	200 J	<5.30	<39.4	<5.70	<23.9	<565
U4-MW-02I	12/14/2023	FD	EM16	UMCf	75.0 - 90.0	<5.50	<5.50	<6.00	<8.05	<59.5	<5.30	<39.4	<5.70	<23.9	<565
U4-MW-03D	4/20/2022	N	BL02	UMCf	96.6 - 106.6	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-03D	2/16/2023	N	EM06	UMCf	96.6 - 106.6	<0.550	<0.550	<0.600	<0.805	<5.95	<0.530	<3.94	<0.570	<2.39	<56.5
U4-MW-03D	3/16/2023	N	EM07	UMCf	96.6 - 106.6	<2.20	<2.20	<2.40	<3.22	<23.8	<2.12	<15.7	<2.28	<9.56	<226
U4-MW-03D	3/16/2023	FD	EM07	UMCf	96.6 - 106.6	<0.550	<0.550	<0.600	<0.805	<5.95	<0.530	<3.94	<0.570	<2.39	<56.5
U4-MW-03D	6/15/2023	N	EM10	UMCf	96.6 - 106.6	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-03D	9/14/2023	N	EM13	UMCf	96.6 - 106.6	<0.110	<0.110	<0.120	<0.161	1.43 J	<0.106	<0.787	<0.114	<0.478	13.4 J
U4-MW-03D	12/13/2023	N	EM16	UMCf	96.6 - 106.6	<0.110	<0.110	<0.120	<0.161	97.4	<0.106	<0.787	<0.114	<0.478	236 J
U4-MW-03DD	4/20/2022	N	BL02	UMCf	119.7 - 129.7	<0.110	<0.110	<0.120	<0.161	3.03 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-03DD	3/15/2023	N	EM07	UMCf	119.7 - 129.7	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-03DD	6/15/2023	N	EM10	UMCf	119.7 - 129.7	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-03DD	9/14/2023	N	EM13	UMCf	119.7 - 129.7	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Butanone (MEK)	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene	4-Methyl-2-Pentanone	Acetone
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-03DD	12/14/2023	N	EM16	UMCf	119.7 - 129.7	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-03I	4/19/2022	N	BL02	UMCf	76.6 - 86.6	<0.110	<0.110	<0.120	<0.161	17.3	<0.106	1.71 J	<0.114	<0.478	<11.3
U4-MW-03I	3/15/2023	N	EM07	UMCf	76.6 - 86.6	<0.110	<0.110	<0.120	<0.161	9.75 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-03I	6/14/2023	N	EM10	UMCf	76.6 - 86.6	<2.20	<2.20	<2.40	<3.22	<23.8	<2.12	<15.7	<2.28	<9.56	<226
U4-MW-03I	6/14/2023	FD	EM10	UMCf	76.6 - 86.6	<2.75	<2.75	<3.00	<4.03	<29.8	<2.65	<19.7	<2.85	<12.0	<282
U4-MW-03I	9/11/2023	N	EM13	UMCf	76.6 - 86.6	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-03I	9/11/2023	FD	EM13	UMCf	76.6 - 86.6	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-03I	12/13/2023	N	EM16	UMCf	76.6 - 86.6	<0.110	<0.110	<0.120	<0.161	16.8	<0.106	<0.787	<0.114	<0.478	63.3
U4-MW-03I	12/13/2023	FD	EM16	UMCf	76.6 - 86.6	<0.110	<0.110	<0.120	<0.161	15.4	<0.106	<0.787	<0.114	<0.478	59.2
U4-MW-03S	4/18/2022	N	BL02	UMCf	54.5 - 64.5	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-03S	4/18/2022	FD	BL02	UMCf	54.5 - 64.5	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-03S	3/15/2023	N	EM07	UMCf	54.5 - 64.5	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-03S	6/15/2023	N	EM10	UMCf	54.5 - 64.5	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-03S	9/14/2023	N	EM13	UMCf	54.5 - 64.5	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-03S	12/13/2023	N	EM16	UMCf	54.5 - 64.5	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-04D	4/19/2022	N	BL02	UMCf	97.0 - 107.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-04D	2/16/2023	N	EM06	UMCf	97.0 - 107.0	<5.50	<5.50	<6.00	<8.05	<59.5	<5.30	<39.4	<5.70	<23.9	<565
U4-MW-04D	3/21/2023	N	EM07	UMCf	97.0 - 107.0	<0.110	<0.110	<0.120	<0.161	2.95 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-04D	6/14/2023	N	EM10	UMCf	97.0 - 107.0	<0.110	<0.110	<0.120	<0.161	20.6	<0.106	<0.787	<0.114	<0.478	86.7 J+
U4-MW-04D	9/15/2023	N	EM13	UMCf	97.0 - 107.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	21.3 J
U4-MW-04D	12/12/2023	N	EM16	UMCf	97.0 - 107.0	<0.110	<0.110	<0.120	<0.161	54.9 J	<0.106	<0.787	<0.114	<0.478	291 J+
U4-MW-04I	4/19/2022	N	BL02	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	2.71 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-04I	3/20/2023	N	EM07	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-04I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<0.550	<0.550	<0.600	<0.805	23.3 J	<0.530	<3.94	<0.570	<2.39	87.0 J
U4-MW-04I	9/14/2023	N	EM13	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-04I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	39.6 J	<0.106	<0.787	<0.114	<0.478	272 J+
U4-MW-05D	4/15/2022	N	BL02	UMCf	98.2 - 108.2	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-05D	10/13/2022	N	EM02	UMCf	98.2 - 108.2	<11.0	<11.0	<12.0	<16.1	<119	<10.6	<78.7	<11.4	<47.8	<1,130
U4-MW-05D	11/3/2022	N	EM03	UMCf	98.2 - 108.2	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-05D	12/7/2022	N	EM04	UMCf	98.2 - 108.2	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-05D	1/11/2023	N	EM05	UMCf	98.2 - 108.2	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	16.9 J
U4-MW-05D	2/14/2023	N	EM06	UMCf	98.2 - 108.2	<11.0	<11.0	<12.0	<16.1	<119	<10.6	<78.7	<11.4	<47.8	<1,130
U4-MW-05D	3/16/2023	N	EM07	UMCf	98.2 - 108.2	<11.0	<11.0	<12.0	<16.1	<119	<10.6	<78.7	<11.4	<47.8	<1,130
U4-MW-05D	4/20/2023	N	EM08	UMCf	98.2 - 108.2	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-05D	5/10/2023	N	EM09	UMCf	98.2 - 108.2	<0.110	<0.110	<0.120	<0.161	35.3	<0.106	<0.787	<0.114	<0.478	80.9
U4-MW-05D	6/15/2023	N	EM10	UMCf	98.2 - 108.2	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	103
U4-MW-05D	7/18/2023	N	EM11	UMCf	98.2 - 108.2	<0.110	<0.110	<0.120	<0.161	1.80 J	<0.106	<0.787	<0.114	<0.478	50.4
U4-MW-05D	8/14/2023	N	EM12	UMCf	98.2 - 108.2	<2.75	<2.75	<3.00	<4.03	30.9 J	<2.65	<19.7	<2.85	<12.0	311 J
U4-MW-05D	9/12/2023	N	EM13	UMCf	98.2 - 108.2	<2.75	<2.75	<3.00	<4.03	<29.8	<2.65	<19.7	<2.85	<12.0	<282
U4-MW-05D	10/18/2023	N	EM14	UMCf	98.2 - 108.2	<2.75	<2.75	<3.00	<4.03	<29.8	<2.65	<19.7	<2.85	<12.0	<282
U4-MW-05D	11/16/2023	N	EM15	UMCf	98.2 - 108.2	<2.75	<2.75	<3.00	<4.03	<29.8	<2.65	<19.7	<2.85	<12.0	<282
U4-MW-05D	12/14/2023	N	EM16	UMCf	98.2 - 108.2	<2.75	<2.75	<3.00	<4.03	<29.8	<2.65	<19.7	<2.85	<12.0	<282
U4-MW-05I	4/15/2022	N	BL02	UMCf	76.6 - 86.6	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-05I	10/13/2022	N	EM02	UMCf	76.6 - 86.6	<11.0	<11.0	<12.0	<16.1	<119	<10.6	<78.7	<11.4	<47.8	<1,130
U4-MW-05I	11/3/2022	N	EM03	UMCf	76.6 - 86.6	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-05I	12/8/2022	N	EM04	UMCf	76.6 - 86.6	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-05I	1/11/2023	N	EM05	UMCf	76.6 - 86.6	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-05I	2/14/2023	N	EM06	UMCf	76.6 - 86.6	<11.0	<11.0	<12.0	<16.1	<119	<10.6	<78.7	<11.4	<47.8	<1,130
U4-MW-05I	3/14/2023	N	EM07	UMCf	76.6 - 86.6	<11.0	<11.0	<12.0	<16.1	<119	<10.6	<78.7	<11.4	<47.8	<1,130
U4-MW-05I	4/21/2023	N	EM08	UMCf	76.6 - 86.6	<0.110	<0.110	<0.120	<0.161	14.3	<0.106	<0.787	<0.114	<0.478	23.4 J
U4-MW-05I	5/10/2023	N	EM09	UMCf	76.6 - 86.6	<0.110	<0.110	<0.120	<0.161	89.2	<0.106	<0.787	<0.114	<0.478	44.0 J

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Butanone (MEK)	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene	4-Methyl-2-Pentanone	Acetone
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-05I	6/15/2023	N	EM10	UMCf	76.6 - 86.6	<0.110	<0.110	<0.120	<0.161	78.9	<0.106	<0.787	<0.114	<0.478	76.6
U4-MW-05I	7/17/2023	N	EM11	UMCf	76.6 - 86.6	<0.110	<0.110	<0.120	<0.161	212	<0.106	<0.787	<0.114	<0.478	51.1
U4-MW-05I	8/14/2023	N	EM12	UMCf	76.6 - 86.6	<5.50	<5.50	<6.00	<8.05	92.4 J	<5.30	<39.4	<5.70	<23.9	<565
U4-MW-05I	9/13/2023	N	EM13	UMCf	76.6 - 86.6	<0.110	<0.110	<0.120	<0.161	42.3	<0.106	4.26 J	<0.114	<0.478	103
U4-MW-05I	10/18/2023	N	EM14	UMCf	76.6 - 86.6	<5.50	<5.50	<6.00	<8.05	<59.5	<5.30	<39.4	<5.70	<23.9	<565
U4-MW-05I	11/15/2023	N	EM15	UMCf	76.6 - 86.6	<5.50	<5.50	<6.00	<8.05	<59.5	<5.30	<39.4	<5.70	<23.9	<565
U4-MW-05I	12/12/2023	N	EM16	UMCf	76.6 - 86.6	<0.110	<0.110	<0.120	<0.161	66.7 J	<0.106	<0.787	<0.114	<0.478	469 J+
U4-MW-06D	4/19/2022	N	BL02	UMCf	97.1 - 107.1	<0.110	<0.110	<0.120	<0.161	4.05 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-06D	2/15/2023	N	EM06	UMCf	97.1 - 107.1	<5.50	<5.50	<6.00	<8.05	<59.5	<5.30	<39.4	<5.70	<23.9	<565
U4-MW-06D	3/21/2023	N	EM07	UMCf	97.1 - 107.1	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-06D	6/16/2023	N	EM10	UMCf	97.1 - 107.1	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-06D	9/13/2023	N	EM13	UMCf	97.1 - 107.1	<0.110	<0.110	<0.120	<0.161	55.5	<0.106	<0.787 UJ	<0.114	<0.478	200
U4-MW-06D	12/13/2023	N	EM16	UMCf	97.1 - 107.1	<0.110	<0.110	<0.120	<0.161	52.9	<0.106	<0.787	<0.114	<0.478	231 J
U4-MW-06I	4/19/2022	N	BL02	UMCf	76.5 - 86.5	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-06I	3/14/2023	N	EM07	UMCf	76.5 - 86.5	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-06I	6/16/2023	N	EM10	UMCf	76.5 - 86.5	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-06I	9/12/2023	N	EM13	UMCf	76.5 - 86.5	<5.50	<5.50	<6.00	<8.05	<59.5	<5.30	<39.4	<5.70	<23.9	<565
U4-MW-06I	12/12/2023	N	EM16	UMCf	76.5 - 86.5	<0.110	<0.110	<0.120	<0.161	29.3 J	<0.106	<0.787	<0.114	<0.478	268 J+
U4-MW-07D	4/15/2022	N	BL02	UMCf	96.8 - 106.5	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-07D	10/12/2022	N	EM02	UMCf	96.8 - 106.5	<0.110	<0.110	<0.120	<0.161	1.20 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-07D	10/12/2022	FD	EM02	UMCf	96.8 - 106.5	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-07D	11/3/2022	N	EM03	UMCf	96.8 - 106.5	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-07D	12/7/2022	N	EM04	UMCf	96.8 - 106.5	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-07D	1/11/2023	N	EM05	UMCf	96.8 - 106.5	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-07D	2/14/2023	N	EM06	UMCf	96.8 - 106.5	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-07D	3/16/2023	N	EM07	UMCf	96.8 - 106.5	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-07D	4/21/2023	N	EM08	UMCf	96.8 - 106.5	<0.110	<0.110	<0.120	<0.161	18.5	<0.106	<0.787	<0.114	<0.478	23.4 J
U4-MW-07D	5/11/2023	N	EM09	UMCf	96.8 - 106.5	<0.110	<0.110	<0.120	<0.161	142	<0.106	<0.787	<0.114	<0.478	314
U4-MW-07D	6/13/2023	N	EM10	UMCf	96.8 - 106.5	<0.110 UJ	<0.110 UJ	<0.120 UJ	<0.161 UJ	85.0 J	<0.106 UJ	<0.787 UJ	<0.114 UJ	<0.478 UJ	176 J
U4-MW-07D	7/17/2023	N	EM11	UMCf	96.8 - 106.5	<0.110	<0.110	<0.120	<0.161	16.0	<0.106	<0.787	<0.114	<0.478	77.4
U4-MW-07D	8/11/2023	N	EM12	UMCf	96.8 - 106.5	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	203
U4-MW-07D	9/13/2023	N	EM13	UMCf	96.8 - 106.5	<0.110	<0.110	<0.120	<0.161	125	<0.106	<0.787 UJ	<0.114	<0.478	970
U4-MW-07D	10/18/2023	N	EM14	UMCf	96.8 - 106.5	<11.0	<11.0	<12.0	<16.1	161 J	<10.6	<78.7	<11.4	<47.8	1,170 J
U4-MW-07D	11/16/2023	N	EM15	UMCf	96.8 - 106.5	<11.0	<11.0	<12.0	<16.1	<119	<10.6	<78.7	<11.4	<47.8	<1,130
U4-MW-07D	12/12/2023	N	EM16	UMCf	96.8 - 106.5	<0.110	<0.110	<0.120	<0.161	74.5 J	<0.106	<0.787	<0.114	<0.478	491 J+
U4-MW-07I	4/15/2022	N	BL02	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-07I	10/12/2022	N	EM02	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-07I	11/3/2022	N	EM03	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-07I	12/7/2022	N	EM04	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-07I	1/11/2023	N	EM05	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-07I	2/15/2023	N	EM06	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-07I	3/16/2023	N	EM07	UMCf	76.8 - 86.8	<0.550	<0.550	<0.600	<0.805	<5.95	<0.530	<3.94	<0.570	<2.39	<56.5
U4-MW-07I	4/21/2023	N	EM08	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	17.3	<0.106	<0.787	<0.114	<0.478	62.0
U4-MW-07I	5/11/2023	N	EM09	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	5.24 J	<0.106	<0.787	<0.114	<0.478	12.2 J
U4-MW-07I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<0.550	<0.550	<0.600	<0.805	14.9 J	<0.530	<3.94	<0.570	<2.39	<56.5
U4-MW-07I	7/17/2023	N	EM11	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	14.7	<0.106	<0.787	<0.114	<0.478	15.2 J
U4-MW-07I	8/11/2023	N	EM12	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	201
U4-MW-07I	9/13/2023	N	EM13	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	117	<0.106	3.53 J	<0.114	<0.478	780
U4-MW-07I	10/18/2023	N	EM14	UMCf	76.8 - 86.8	<5.50	<5.50	<6.00	<8.05	150 J	<5.30	<39.4	<5.70	<23.9	894 J
U4-MW-07I	11/16/2023	N	EM15	UMCf	76.8 - 86.8	<5.50	<5.50	<6.00	<8.05	135 J	<5.30	<39.4	<5.70	<23.9	705 J
U4-MW-07I	12/11/2023	N	EM16	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	68.0	<0.106	<0.787 UJ	<0.114	<0.478	521

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Butanone (MEK)	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene	4-Methyl-2-Pentanone	Acetone
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-08D	4/13/2022	N	BL02	UMCf	98.6 - 108.6	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-08D	12/7/2022	N	EM04	UMCf	98.6 - 108.6	<0.110	<0.110	<0.120	<0.161	11.7 J+	<0.106	<0.787	<0.114	<0.478	39.5 J
U4-MW-08D	3/17/2023	N	EM07	UMCf	98.6 - 108.6	<11.0	<11.0	<12.0	<16.1	<119	<10.6	<78.7	<11.4	<47.8	<1,130
U4-MW-08D	6/13/2023	N	EM10	UMCf	98.6 - 108.6	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-08D	9/13/2023	N	EM13	UMCf	98.6 - 108.6	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787 UJ	<0.114	<0.478	<11.3
U4-MW-08D	12/11/2023	N	EM16	UMCf	98.6 - 108.6	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787 UJ	<0.114	<0.478	<11.3
U4-MW-08DD	4/20/2022	N	BL02	UMCf	119.8 - 129.8	<0.110	<0.110	<0.120	<0.161	18.7 J	<0.106	3.03 J	<0.114	<0.478	<11.3
U4-MW-08DD	4/20/2022	FD	BL02	UMCf	119.8 - 129.8	<0.110	<0.110	<0.120	<0.161	5.79 J	<0.106	1.23 J	<0.114	<0.478	<11.3
U4-MW-08DD	12/8/2022	N	EM04	UMCf	119.8 - 129.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-08DD	3/15/2023	N	EM07	UMCf	119.8 - 129.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-08DD	6/14/2023	N	EM10	UMCf	119.8 - 129.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-08DD	9/14/2023	N	EM13	UMCf	119.8 - 129.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-08DD	12/14/2023	N	EM16	UMCf	119.8 - 129.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-08I	4/13/2022	N	BL02	UMCf	78.0 - 88.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-08I	12/7/2022	N	EM04	UMCf	78.0 - 88.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-08I	12/7/2022	FD	EM04	UMCf	78.0 - 88.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-08I	3/17/2023	N	EM07	UMCf	78.0 - 88.0	<5.50	<5.50	<6.00	<8.05	<59.5	<5.30	<39.4	<5.70	<23.9	<565
U4-MW-08I	6/13/2023	N	EM10	UMCf	78.0 - 88.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-08I	9/13/2023	N	EM13	UMCf	78.0 - 88.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787 UJ	<0.114	<0.478	<11.3
U4-MW-08I	12/11/2023	N	EM16	UMCf	78.0 - 88.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787 UJ	<0.114	<0.478	18.2 J
U4-MW-08S	4/15/2022	N	BL02	UMCf	54.9 - 64.9	<0.110	<0.110	<0.120	<0.161	1.31 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-08S	12/7/2022	N	EM04	UMCf	54.9 - 64.9	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-08S	12/7/2022	FD	EM04	UMCf	54.9 - 64.9	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-08S	3/13/2023	N	EM07	UMCf	54.9 - 64.9	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-08S	3/13/2023	FD	EM07	UMCf	54.9 - 64.9	<0.110	<0.110	<0.120	<0.161	2.44 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-08S	6/13/2023	N	EM10	UMCf	54.9 - 64.9	<0.110	<0.110	<0.120	<0.161	17.6	<0.106	<0.787	<0.114	<0.478	23.2 J
U4-MW-08S	6/13/2023	FD	EM10	UMCf	54.9 - 64.9	<0.110	<0.110	<0.120	<0.161	16.5	<0.106	<0.787	<0.114	<0.478	21.4 J
U4-MW-08S	9/13/2023	N	EM13	UMCf	54.9 - 64.9	<0.110	<0.110	<0.120	<0.161	13.7	<0.106	<0.787 UJ	<0.114	<0.478	16.4 J
U4-MW-08S	9/13/2023	FD	EM13	UMCf	54.9 - 64.9	<0.110	<0.110	<0.120	<0.161	14.3	<0.106	<0.787 UJ	<0.114	<0.478	16.6 J
U4-MW-08S	12/14/2023	N	EM16	UMCf	54.9 - 64.9	<0.110	<0.110	<0.120	<0.161	44.6	<0.106	<0.787	<0.114	<0.478	31.2 J
U4-MW-08S	12/14/2023	FD	EM16	UMCf	54.9 - 64.9	<0.110	<0.110	<0.120	<0.161	44.7	<0.106	<0.787	<0.114	<0.478	32.0 J
U4-MW-09D	4/14/2022	N	BL02	UMCf	96.9 - 106.9	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-09D	12/6/2022	N	EM04	UMCf	96.9 - 106.9	<1.10 UJ	<1.10 UJ	<1.20 UJ	<1.61 UJ	<11.9 UJ	<1.06 UJ	<7.87 UJ	<1.14 UJ	<4.78 UJ	<113 UJ
U4-MW-09D	3/16/2023	N	EM07	UMCf	96.9 - 106.9	<1.10	<1.10	<1.20	<1.61	38.2 J	<1.06	<7.87	<1.14	<4.78	287 J
U4-MW-09D	6/14/2023	N	EM10	UMCf	96.9 - 106.9	<0.110	<0.110	<0.120	<0.161	39.7	<0.106	<0.787	<0.114	<0.478	126 J+
U4-MW-09D	9/12/2023	N	EM13	UMCf	96.9 - 106.9	<0.110	<0.110	<0.120	<0.161	38.2	<0.106	<0.787	<0.114	<0.478	201
U4-MW-09D	12/15/2023	N	EM16	UMCf	96.9 - 106.9	<2.75 UJ	<2.75 UJ	<3.00 UJ	<4.03 UJ	131 J	<2.65 UJ	<19.7 UJ	<2.85 UJ	<12.0 UJ	640 J
U4-MW-09DD	4/14/2022	N	BL02	UMCf	119.8 - 129.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-09DD	12/6/2022	N	EM04	UMCf	119.8 - 129.8	<0.110 UJ	<0.110 UJ	<0.120 UJ	<0.161 UJ	<1.19 UJ	<0.106 UJ	<0.787 UJ	<0.114 UJ	<0.478 UJ	<11.3 UJ
U4-MW-09DD	3/21/2023	N	EM07	UMCf	119.8 - 129.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478 UJ	<11.3
U4-MW-09DD	6/15/2023	N	EM10	UMCf	119.8 - 129.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-09DD	9/13/2023	N	EM13	UMCf	119.8 - 129.8	<0.110	<0.110	<0.120	<0.161	6.38 J	<0.106	<0.787 UJ	<0.114	<0.478	12.9 J
U4-MW-09DD	12/13/2023	N	EM16	UMCf	119.8 - 129.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-09I	4/14/2022	N	BL02	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-09I	12/6/2022	N	EM04	UMCf	76.8 - 86.8	<1.10 UJ	<1.10 UJ	<1.20 UJ	<1.61 UJ	<11.9 UJ	<1.06 UJ	<7.87 UJ	<1.14 UJ	<4.78 UJ	<113 UJ
U4-MW-09I	3/16/2023	N	EM07	UMCf	76.8 - 86.8	<1.10	<1.10	<1.20	<1.61	17.2 J	<1.06	<7.87	<1.14	<4.78	<113
U4-MW-09I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	3.02 J	<0.106	<0.787	<0.114	<0.478	22.0 J
U4-MW-09I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	4.54 J	<0.106	<0.787	<0.114	<0.478	32.8 J
U4-MW-09I	12/15/2023	N	EM16	UMCf	76.8 - 86.8	<2.75 UJ	<2.75 UJ	<3.00 UJ	<4.03 UJ	<29.8 UJ	<2.65 UJ	<19.7 UJ	<2.85 UJ	<12.0 UJ	<282 UJ
U4-MW-09S	4/14/2022	N	BL02	UMCf	55.3 - 65.3	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-09S	12/6/2022	N	EM04	UMCf	55.3 - 65.3	<0.110 UJ	<0.110 UJ	<0.120 UJ	<0.161 UJ	<1.19 UJ	<0.106 UJ	<0.787 UJ	<0.114 UJ	<0.478 UJ	<11.3 UJ

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Butanone (MEK)	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene	4-Methyl-2-Pentanone	Acetone
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-09S	3/17/2023	N	EM07	UMCf	55.3 - 65.3	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-09S	6/15/2023	N	EM10	UMCf	55.3 - 65.3	<0.110	<0.110	<0.120	<0.161	151	<0.106	<0.787	<0.114	<0.478	26.0 J
U4-MW-09S	9/13/2023	N	EM13	UMCf	55.3 - 65.3	<0.110	<0.110	<0.120	<0.161	164	<0.106	<0.787 UJ	<0.114	<0.478	85.5
U4-MW-09S	12/12/2023	N	EM16	UMCf	55.3 - 65.3	<0.110	<0.110	<0.120	<0.161	85.6 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-10D	4/14/2022	N	BL02	UMCf	96.9 - 106.9	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-10D	12/5/2022	N	EM04	UMCf	96.9 - 106.9	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-10D	3/17/2023	N	EM07	UMCf	96.9 - 106.9	<0.110	<0.110	<0.120	<0.161	27.8	<0.106	<0.787	<0.114	<0.478	45.7 J
U4-MW-10D	6/14/2023	N	EM10	UMCf	96.9 - 106.9	<0.110	<0.110	<0.120	<0.161	20.5	<0.106	<0.787	<0.114	<0.478	74.4 J+
U4-MW-10D	9/13/2023	N	EM13	UMCf	96.9 - 106.9	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787 UJ	<0.114	<0.478	<11.3
U4-MW-10D	12/14/2023	N	EM16	UMCf	96.9 - 106.9	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-10I	4/14/2022	N	BL02	UMCf	77.1 - 87.1	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-10I	12/5/2022	N	EM04	UMCf	77.1 - 87.1	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-10I	3/17/2023	N	EM07	UMCf	77.1 - 87.1	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-10I	6/14/2023	N	EM10	UMCf	77.1 - 87.1	<0.110	<0.110	<0.120	<0.161	61.6	<0.106	<0.787	<0.114	<0.478	90.1 J+
U4-MW-10I	9/13/2023	N	EM13	UMCf	77.1 - 87.1	<0.110	<0.110	<0.120	<0.161	11.4	<0.106	<0.787 UJ	<0.114	<0.478	29.0 J
U4-MW-10I	12/14/2023	N	EM16	UMCf	77.1 - 87.1	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-11D	4/15/2022	N	BL02	UMCf	97.4 - 107.4	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-11D	9/26/2022	N	EM01	UMCf	97.4 - 107.4	<5.50	<5.50	<6.00	<8.05	<59.5	<5.30	<39.4	<5.70	<23.9	<565
U4-MW-11D	10/11/2022	N	EM02	UMCf	97.4 - 107.4	<1.10	<1.10	<1.20	<1.61	<11.9	<1.06	<7.87	<1.14	<4.78	<113
U4-MW-11D	11/1/2022	N	EM03	UMCf	97.4 - 107.4	<5.50	<5.50	<6.00	<8.05	<59.5	<5.30	<39.4	<5.70	<23.9	<565
U4-MW-11D	12/6/2022	N	EM04	UMCf	97.4 - 107.4	<2.75 UJ	<2.75 UJ	<3.00 UJ	<4.03 UJ	88.4 J	<2.65 UJ	<19.7 UJ	<2.85 UJ	<12.0 UJ	<282 UJ
U4-MW-11D	1/12/2023	N	EM05	UMCf	97.4 - 107.4	<22.0	<22.0	<24.0	<32.2	<238	<21.2	<157	<22.8	<95.6	<2,260
U4-MW-11D	2/14/2023	N	EM06	UMCf	97.4 - 107.4	<22.0	<22.0	<24.0	<32.2	<238	<21.2	<157	<22.8	<95.6	<2,260
U4-MW-11D	3/16/2023	N	EM07	UMCf	97.4 - 107.4	<22.0	<22.0	<24.0	<32.2	<238	<21.2	<157	<22.8	<95.6	<2,260
U4-MW-11D	4/18/2023	N	EM08	UMCf	97.4 - 107.4	<0.550	<0.550	<0.600	<0.805	<5.95	<0.530	<3.94	<0.570	<2.39	<56.5
U4-MW-11D	5/17/2023	N	EM09	UMCf	97.4 - 107.4	<2.20 UJ	<2.20 UJ	<2.40 UJ	<3.22 UJ	<23.8 UJ	<2.12 UJ	<15.7 UJ	<2.28 UJ	<9.56 UJ	<226 UJ
U4-MW-11D	6/16/2023	N	EM10	UMCf	97.4 - 107.4	<0.110	<0.110	<0.120	<0.161	2.53 J	<0.106	<0.787	<0.114	<0.478	16.9 J
U4-MW-11D	7/14/2023	N	EM11	UMCf	97.4 - 107.4	<0.110	<0.110	<0.120	<0.161	2.58 J	<0.106	<0.787	<0.114	<0.478	11.4 J
U4-MW-11D	8/14/2023	N	EM12	UMCf	97.4 - 107.4	<22.0	<22.0	<24.0	<32.2	<238	<21.2	<157	<22.8	<95.6	<2,260
U4-MW-11D	9/13/2023	N	EM13	UMCf	97.4 - 107.4	<0.110	<0.110	<0.120	<0.161	10.4	<0.106	<0.787 UJ	<0.114	<0.478	158
U4-MW-11D	10/18/2023	N	EM14	UMCf	97.4 - 107.4	<22.0	<22.0	<24.0	<32.2	<238	<21.2	<157	<22.8	<95.6	<2,260
U4-MW-11D	11/16/2023	N	EM15	UMCf	97.4 - 107.4	<5.50	<5.50	<6.00	<8.05	92.3 J	<5.30	<39.4	<5.70	<23.9	736 J
U4-MW-11D	12/13/2023	N	EM16	UMCf	97.4 - 107.4	<0.110	<0.110	<0.120	<0.161	117	<0.106	<0.787	<0.114	<0.478	<565
U4-MW-11I	4/14/2022	N	BL02	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-11I	9/26/2022	N	EM01	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	20.1	<0.106	<0.787	<0.114	<0.478	184
U4-MW-11I	9/26/2022	FD	EM01	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	20.5	<0.106	<0.787	<0.114	<0.478	176
U4-MW-11I	10/10/2022	N	EM02	UMCf	77.0 - 87.0	<1.10	<1.10	<1.20	<1.61	16.0 J	<1.06	<7.87	<1.14	<4.78	<113
U4-MW-11I	10/10/2022	FD	EM02	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	24.1	<0.106	<0.787	<0.114	<0.478	18.3 J
U4-MW-11I	10/31/2022	N	EM03	UMCf	77.0 - 87.0	<0.550	<0.550	<0.600	<0.805	62.2	<0.530	<3.94	<0.570	<2.39	<56.5
U4-MW-11I	10/31/2022	FD	EM03	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	70.6	<0.106	<0.787	<0.114	<0.478	44.2 J
U4-MW-11I	12/6/2022	N	EM04	UMCf	77.0 - 87.0	<0.110 UJ	<0.110 UJ	<0.120 UJ	<0.161 UJ	57.4 J+	<0.106 UJ	<0.787 UJ	<0.114 UJ	<0.478 UJ	57.7 J+
U4-MW-11I	12/6/2022	FD	EM04	UMCf	77.0 - 87.0	<0.110 UJ	<0.110 UJ	<0.120 UJ	<0.161 UJ	57.2 J+	<0.106 UJ	<0.787 UJ	<0.114 UJ	<0.478 UJ	57.8 J+
U4-MW-11I	1/12/2023	N	EM05	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	44.0	<0.106	<0.787	<0.114	<0.478	54.7 J+
U4-MW-11I	1/12/2023	FD	EM05	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	43.9	<0.106	<0.787	<0.114	<0.478	52.3 J+
U4-MW-11I	2/14/2023	N	EM06	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	20.8 J+	<0.106	<0.787	<0.114	<0.478	22.1 J
U4-MW-11I	2/14/2023	FD	EM06	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	19.3 J+	<0.106	<0.787	<0.114	<0.478	20.6 J
U4-MW-11I	3/16/2023	N	EM07	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	44.6	<0.106	<0.787	<0.114	<0.478	44.6 J
U4-MW-11I	3/16/2023	FD	EM07	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	42.2	<0.106	<0.787	<0.114	<0.478	43.6 J
U4-MW-11I	4/18/2023	N	EM08	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	34.4	<0.106	<0.787	<0.114	<0.478	45.3 J
U4-MW-11I	4/18/2023	FD	EM08	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	33.9	<0.106	<0.787	<0.114	<0.478	42.6 J
U4-MW-11I	5/19/2023	N	EM09	UMCf	77.0 - 87.0	<0.110 UJ	<0.110 UJ	<0.120 UJ	<0.161 UJ	31.4 J-	<0.106 UJ	<0.787 UJ	<0.114 UJ	<0.478 UJ	43.6 J

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Butanone (MEK)	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene	4-Methyl-2-Pentanone	Acetone
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-11I	5/19/2023	FD	EM09	UMCf	77.0 - 87.0	<0.110 UJ	<0.110 UJ	<0.120 UJ	<0.161 UJ	30.9 J-	<0.106 UJ	<0.787 UJ	<0.114 UJ	<0.478 UJ	45.1 J
U4-MW-11I	6/15/2023	N	EM10	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	22.2	<0.106	<0.787	<0.114	<0.478	30.9 J
U4-MW-11I	6/15/2023	FD	EM10	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	21.8	<0.106	<0.787	<0.114	<0.478	29.7 J
U4-MW-11I	7/13/2023	N	EM11	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	13.7	<0.106	<0.787	<0.114	<0.478	24.5 J
U4-MW-11I	7/13/2023	FD	EM11	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	14.9	<0.106	<0.787	<0.114	<0.478	24.2 J
U4-MW-11I	8/14/2023	N	EM12	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-11I	8/14/2023	FD	EM12	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-11I	9/13/2023	N	EM13	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787 UJ	<0.114	<0.478	<11.3
U4-MW-11I	9/13/2023	FD	EM13	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787 UJ	<0.114	<0.478	<11.3
U4-MW-11I	10/19/2023	N	EM14	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-11I	10/19/2023	FD	EM14	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	15.8 J
U4-MW-11I	11/16/2023	N	EM15	UMCf	77.0 - 87.0	<5.50	<5.50	<6.00	<8.05	<59.5	<5.30	<39.4	<5.70	<23.9	<565
U4-MW-11I	11/16/2023	FD	EM15	UMCf	77.0 - 87.0	<5.50	<5.50	<6.00	<8.05	<59.5	<5.30	<39.4	<5.70	<23.9	<565
U4-MW-11I	12/13/2023	N	EM16	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	16.2	<0.106	<0.787	<0.114	<0.478	<226
U4-MW-11I	12/13/2023	FD	EM16	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	11.6	<0.106	<0.787	<0.114	<0.478	<226
U4-MW-12D	4/15/2022	N	BL02	UMCf	97.1 - 107.1	<0.110	<0.110	<0.120	<0.161	1.23 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-12D	9/27/2022	N	EM01	UMCf	97.1 - 107.1	<2.20	<2.20	<2.40	<3.22	<23.8	<2.12	<15.7	<2.28	<9.56	<226
U4-MW-12D	10/12/2022	N	EM02	UMCf	97.1 - 107.1	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-12D	11/2/2022	N	EM03	UMCf	97.1 - 107.1	<1.10	<1.10	<1.20	<1.61	<11.9	<1.06	<7.87	<1.14	<4.78	<113
U4-MW-12D	12/7/2022	N	EM04	UMCf	97.1 - 107.1	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-12D	1/12/2023	N	EM05	UMCf	97.1 - 107.1	<11.0	<11.0	<12.0	<16.1	<119	<10.6	<78.7	<11.4	<47.8	<1,130
U4-MW-12D	2/15/2023	N	EM06	UMCf	97.1 - 107.1	<11.0	<11.0	<12.0	<16.1	<119	<10.6	<78.7	<11.4	<47.8	<1,130
U4-MW-12D	3/14/2023	N	EM07	UMCf	97.1 - 107.1	<5.50	<5.50	<6.00	<8.05	<59.5	<5.30	<39.4	<5.70	<23.9	<565
U4-MW-12D	4/17/2023	N	EM08	UMCf	97.1 - 107.1	<0.550 UJ	<0.550 UJ	<0.600 UJ	<0.805 UJ	<5.95 UJ	<0.530 UJ	<3.94 UJ	<0.570 UJ	<2.39 UJ	<56.5 UJ
U4-MW-12D	5/17/2023	N	EM09	UMCf	97.1 - 107.1	<11.0	<11.0	<12.0	<16.1	<119	<10.6	<78.7	<11.4	<47.8	<1,130
U4-MW-12D	6/16/2023	N	EM10	UMCf	97.1 - 107.1	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-12D	7/13/2023	N	EM11	UMCf	97.1 - 107.1	<0.110	<0.110	<0.120	<0.161	4.52 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-12D	8/14/2023	N	EM12	UMCf	97.1 - 107.1	<5.50	<5.50	<6.00	<8.05	<59.5	<5.30	<39.4	<5.70	<23.9	<565
U4-MW-12D	9/12/2023	N	EM13	UMCf	97.1 - 107.1	<5.50	<5.50	<6.00	<8.05	<59.5	<5.30	<39.4	<5.70	<23.9	<565
U4-MW-12D	10/17/2023	N	EM14	UMCf	97.1 - 107.1	<0.550	<0.550	<0.600	<0.805	154	<0.530	<3.94	<0.570	<2.39	718
U4-MW-12D	11/15/2023	N	EM15	UMCf	97.1 - 107.1	<0.550	<0.550	<0.600	<0.805	158	<0.530	<3.94	<0.570	<2.39	1,010
U4-MW-12D	12/12/2023	N	EM16	UMCf	97.1 - 107.1	<0.110	<0.110	<0.120	<0.161	92.3 J	<0.106	<0.787	<0.114	0.760 J	498 J+
U4-MW-12I	4/14/2022	N	BL02	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	1.87 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-12I	4/14/2022	FD	BL02	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	2.86 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-12I	9/27/2022	N	EM01	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	13.7 J
U4-MW-12I	10/12/2022	N	EM02	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-12I	11/2/2022	N	EM03	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-12I	12/7/2022	N	EM04	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	10.6 J+	<0.106	<0.787	<0.114	<0.478	16.9 J
U4-MW-12I	12/7/2022	FD	EM04	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	10.3 J+	<0.106	<0.787	<0.114	<0.478	16.1 J
U4-MW-12I	1/13/2023	N	EM05	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	9.72 J	<0.106	<0.787	<0.114	<0.478	30.3 J
U4-MW-12I	2/15/2023	N	EM06	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	24.7 J+	<0.106	<0.787	<0.114	<0.478	23.4 J
U4-MW-12I	3/13/2023	N	EM07	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	14.6	<0.106	<0.787	<0.114	<0.478	19.6 J
U4-MW-12I	4/17/2023	N	EM08	UMCf	76.8 - 86.8	<0.110 UJ	<0.110 UJ	<0.120 UJ	<0.161 UJ	22.4 J-	<0.106 UJ	<0.787 UJ	<0.114 UJ	<0.478 UJ	32.0 J
U4-MW-12I	5/17/2023	N	EM09	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	26.4	<0.106	<0.787	<0.114	<0.478	43.1 J
U4-MW-12I	6/16/2023	N	EM10	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	30.4	<0.106	<0.787	<0.114	<0.478	63.2
U4-MW-12I	7/11/2023	N	EM11	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	57.2	<0.106	5.56 J	<0.114	<0.478	63.6
U4-MW-12I	8/14/2023	N	EM12	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	2.25 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-12I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	2.56 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-12I	10/17/2023	N	EM14	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	20.5	<0.106	2.02 J	<0.114	<0.478	26.8 J
U4-MW-12I	11/16/2023	N	EM15	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	7.26 J	<0.106	<0.787	<0.114	<0.478	18.7 J
U4-MW-12I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	73.9 J

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Butanone (MEK)	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene	4-Methyl-2-Pentanone	Acetone
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-13D	4/14/2022	N	BL02	UMCf	98.2 - 108.2	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-13D	9/28/2022	N	EM01	UMCf	98.2 - 108.2	<1.10	<1.10	<1.20	<1.61	<11.9	<1.06	<7.87	<1.14	<4.78	<113
U4-MW-13D	10/11/2022	N	EM02	UMCf	98.2 - 108.2	<0.110	<0.110	<0.120	<0.161	14.7	<0.106	<0.787	<0.114	<0.478	66.9
U4-MW-13D	11/3/2022	N	EM03	UMCf	98.2 - 108.2	<0.110	<0.110	<0.120	<0.161	2.69 J	<0.106	<0.787	<0.114	<0.478	15.0 J
U4-MW-13D	12/7/2022	N	EM04	UMCf	98.2 - 108.2	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-13D	1/12/2023	N	EM05	UMCf	98.2 - 108.2	<2.20	<2.20	<2.40	<3.22	<23.8	<2.12	<15.7	<2.28	<9.56	<226
U4-MW-13D	2/15/2023	N	EM06	UMCf	98.2 - 108.2	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-13D	3/17/2023	N	EM07	UMCf	98.2 - 108.2	<2.20	<2.20	<2.40	<3.22	<23.8	<2.12	<15.7	<2.28	<9.56	<226
U4-MW-13D	4/18/2023	N	EM08	UMCf	98.2 - 108.2	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-13D	5/17/2023	N	EM09	UMCf	98.2 - 108.2	<2.20	<2.20	<2.40	<3.22	<23.8	<2.12	<15.7	<2.28	<9.56	<226
U4-MW-13D	6/15/2023	N	EM10	UMCf	98.2 - 108.2	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-13D	7/12/2023	N	EM11	UMCf	98.2 - 108.2	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-13D	8/11/2023	N	EM12	UMCf	98.2 - 108.2	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-13D	9/11/2023	N	EM13	UMCf	98.2 - 108.2	<2.75	<2.75	<3.00	<4.03	<29.8	<2.65	<19.7	<2.85	<12.0	<282
U4-MW-13D	10/18/2023	N	EM14	UMCf	98.2 - 108.2	<2.75	<2.75	<3.00	<4.03	<29.8	<2.65	<19.7	<2.85	<12.0	<282
U4-MW-13D	11/15/2023	N	EM15	UMCf	98.2 - 108.2	<2.75	<2.75	<3.00	<4.03	<29.8	<2.65	<19.7	<2.85	<12.0	<282
U4-MW-13D	12/11/2023	N	EM16	UMCf	98.2 - 108.2	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787 UJ	<0.114	<0.478	<11.3
U4-MW-13I	4/14/2022	N	BL02	UMCf	77.1 - 87.1	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-13I	9/28/2022	N	EM01	UMCf	77.1 - 87.1	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-13I	10/10/2022	N	EM02	UMCf	77.1 - 87.1	<0.110	<0.110	<0.120	<0.161	1.81 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-13I	11/3/2022	N	EM03	UMCf	77.1 - 87.1	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-13I	12/6/2022	N	EM04	UMCf	77.1 - 87.1	<0.550 UJ	<0.550 UJ	<0.600 UJ	<0.805 UJ	19.1 J	<0.530 UJ	<3.94 UJ	<0.570 UJ	<2.39 UJ	<56.5 UJ
U4-MW-13I	1/12/2023	N	EM05	UMCf	77.1 - 87.1	<0.110	<0.110	<0.120	<0.161	20.5 J+	<0.106	<0.787	<0.114	<0.478	16.9 J
U4-MW-13I	2/14/2023	N	EM06	UMCf	77.1 - 87.1	<0.550	<0.550	<0.600	<0.805	17.5 J	<0.530	<3.94	<0.570	<2.39	<56.5
U4-MW-13I	3/16/2023	N	EM07	UMCf	77.1 - 87.1	<0.110	<0.110	<0.120	<0.161	25.9	<0.106	<0.787	<0.114	<0.478	11.3 J
U4-MW-13I	4/19/2023	N	EM08	UMCf	77.1 - 87.1	<0.110	<0.110	<0.120	<0.161	25.2	<0.106	<0.787	<0.114	<0.478	16.5 J
U4-MW-13I	5/17/2023	N	EM09	UMCf	77.1 - 87.1	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	18.3 J
U4-MW-13I	6/15/2023	N	EM10	UMCf	77.1 - 87.1	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-13I	7/12/2023	N	EM11	UMCf	77.1 - 87.1	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-13I	8/11/2023	N	EM12	UMCf	77.1 - 87.1	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-13I	9/11/2023	N	EM13	UMCf	77.1 - 87.1	<2.75	<2.75	<3.00	<4.03	<29.8	<2.65	<19.7	<2.85	<12.0	<282
U4-MW-13I	10/17/2023	N	EM14	UMCf	77.1 - 87.1	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-13I	11/15/2023	N	EM15	UMCf	77.1 - 87.1	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-13I	12/11/2023	N	EM16	UMCf	77.1 - 87.1	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787 UJ	<0.114	<0.478	<11.3
U4-MW-14D	4/13/2022	N	BL02	UMCf	97.3 - 107.3	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-14D	12/6/2022	N	EM04	UMCf	97.3 - 107.3	<0.550 UJ	<0.550 UJ	<0.600 UJ	<0.805 UJ	<5.95 UJ	<0.530 UJ	<3.94 UJ	<0.570 UJ	<2.39 UJ	<56.5 UJ
U4-MW-14D	3/16/2023	N	EM07	UMCf	97.3 - 107.3	<0.550	<0.550	<0.600	<0.805	<5.95	<0.530	<3.94	<0.570	<2.39	<56.5
U4-MW-14D	6/15/2023	N	EM10	UMCf	97.3 - 107.3	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-14D	9/14/2023	N	EM13	UMCf	97.3 - 107.3	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-14D	12/15/2023	N	EM16	UMCf	97.3 - 107.3	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-14I	4/14/2022	N	BL02	UMCf	77.3 - 87.3	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-14I	12/6/2022	N	EM04	UMCf	77.3 - 87.3	<0.550 UJ	<0.550 UJ	<0.600 UJ	<0.805 UJ	<5.95 UJ	<0.530 UJ	<3.94 UJ	<0.570 UJ	<2.39 UJ	<56.5 UJ
U4-MW-14I	3/16/2023	N	EM07	UMCf	77.3 - 87.3	<0.550	<0.550	<0.600	<0.805	<5.95	<0.530	<3.94	<0.570	<2.39	<56.5
U4-MW-14I	6/15/2023	N	EM10	UMCf	77.3 - 87.3	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-14I	9/14/2023	N	EM13	UMCf	77.3 - 87.3	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-14I	12/14/2023	N	EM16	UMCf	77.3 - 87.3	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-15D	4/13/2022	N	BL02	UMCf	96.0 - 106.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-15D	12/5/2022	N	EM04	UMCf	96.0 - 106.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-15D	3/20/2023	N	EM07	UMCf	96.0 - 106.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-15D	6/14/2023	N	EM10	UMCf	96.0 - 106.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-15D	9/13/2023	N	EM13	UMCf	96.0 - 106.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787 UJ	<0.114	<0.478	<11.3

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Butanone (MEK)	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene	4-Methyl-2-Pentanone	Acetone
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-15D	12/12/2023	N	EM16	UMCf	96.0 - 106.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-15DD	4/13/2022	N	BL02	UMCf	120.3 - 130.3	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-15DD	12/5/2022	N	EM04	UMCf	120.3 - 130.3	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	14.4 J
U4-MW-15DD	3/15/2023	N	EM07	UMCf	120.3 - 130.3	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-15DD	6/13/2023	N	EM10	UMCf	120.3 - 130.3	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-15DD	9/14/2023	N	EM13	UMCf	120.3 - 130.3	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-15DD	12/13/2023	N	EM16	UMCf	120.3 - 130.3	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-15I	4/12/2022	N	BL02	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-15I	12/5/2022	N	EM04	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	20.3 J+	<0.106	<0.787	<0.114	<0.478	37.2 J
U4-MW-15I	3/17/2023	N	EM07	UMCf	76.8 - 86.8	<2.20	<2.20	<2.40	<3.22	<23.8	<2.12	<15.7	<2.28	<9.56	<226
U4-MW-15I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	51.5	<0.106	<0.787	<0.114	<0.478	103 J+
U4-MW-15I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	2.14 J	<0.106	<0.787	<0.114	<0.478	13.1 J
U4-MW-15I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	<0.110	<0.110	<0.120	<0.161	5.52 J	<0.106	<0.787	<0.114	<0.478	22.9 J
U4-MW-15S	4/13/2022	N	BL02	UMCf	54.8 - 64.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-15S	12/5/2022	N	EM04	UMCf	54.8 - 64.8	<2.75	<2.75	<3.00	<4.03	<29.8	<2.65	<19.7	<2.85	<12.0	<282
U4-MW-15S	3/13/2023	N	EM07	UMCf	54.8 - 64.8	<0.110	<0.110	<0.120	<0.161	14.5	<0.106	<0.787	<0.114	<0.478	22.3 J
U4-MW-15S	6/13/2023	N	EM10	UMCf	54.8 - 64.8	<0.110	<0.110	<0.120	<0.161	19.5	<0.106	<0.787	<0.114	<0.478	32.1 J
U4-MW-15S	9/14/2023	N	EM13	UMCf	54.8 - 64.8	<0.110	<0.110	<0.120	<0.161	6.88 J	<0.106	<0.787	<0.114	<0.478	15.5 J
U4-MW-15S	12/11/2023	N	EM16	UMCf	54.8 - 64.8	<0.220	<0.220	<0.240	<0.322	<2.38	<0.212	<1.57 UJ	<0.228	<0.956	<22.6
U4-MW-16D	4/11/2022	N	BL02	UMCf	96.8 - 106.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-16D	12/5/2022	N	EM04	UMCf	96.8 - 106.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-16D	3/14/2023	N	EM07	UMCf	96.8 - 106.8	<0.110	<0.110	<0.120	<0.161	31.3	<0.106	<0.787	<0.114	<0.478	644
U4-MW-16D	6/13/2023	N	EM10	UMCf	96.8 - 106.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-16D	9/15/2023	N	EM13	UMCf	96.8 - 106.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-16D	12/14/2023	N	EM16	UMCf	96.8 - 106.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-16DD	4/12/2022	N	BL02	UMCf	120.8 - 130.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-16DD	12/5/2022	N	EM04	UMCf	120.8 - 130.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-16DD	3/15/2023	N	EM07	UMCf	120.8 - 130.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-16DD	6/13/2023	N	EM10	UMCf	120.8 - 130.8	<0.110	<0.110	<0.120	<0.161	1.54 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-16DD	9/14/2023	N	EM13	UMCf	120.8 - 130.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-16DD	12/13/2023	N	EM16	UMCf	120.8 - 130.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-16I	4/11/2022	N	BL02	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-16I	12/5/2022	N	EM04	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	36.1 J+	<0.106	<0.787	<0.114	<0.478	20.0 J
U4-MW-16I	12/5/2022	FD	EM04	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	34.3 J+	<0.106	<0.787	<0.114	<0.478	18.7 J
U4-MW-16I	3/13/2023	N	EM07	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	23.8	<0.106	<0.787	<0.114	<0.478	37.6 J
U4-MW-16I	3/13/2023	FD	EM07	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	22.0	<0.106	<0.787	<0.114	<0.478	34.6 J
U4-MW-16I	6/12/2023	N	EM10	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	39.0	<0.106	<0.787 UJ	<0.114	<0.478	46.3 J
U4-MW-16I	6/12/2023	FD	EM10	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	37.3	<0.106	<0.787 UJ	<0.114	<0.478	44.5 J
U4-MW-16I	9/11/2023	N	EM13	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-16I	9/11/2023	FD	EM13	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-16I	12/11/2023	N	EM16	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787 UJ	<0.114	<0.478	<11.3
U4-MW-16I	12/11/2023	FD	EM16	UMCf	77.0 - 87.0	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787 UJ	<0.114	<0.478	<11.3
U4-MW-16S	4/12/2022	N	BL02	UMCf	54.8 - 64.8	<0.110	<0.110	<0.120	<0.161	1.22 J	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-16S	4/12/2022	FD	BL02	UMCf	54.8 - 64.8	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	<11.3
U4-MW-16S	12/6/2022	N	EM04	UMCf	54.8 - 64.8	<0.110 UJ	<0.110 UJ	<0.120 UJ	<0.161 UJ	<1.19 UJ	<0.106 UJ	<0.787 UJ	<0.114 UJ	<0.478 UJ	<11.3 UJ
U4-MW-16S	3/15/2023	N	EM07	UMCf	54.8 - 64.8	<0.110	<0.110	<0.120	<0.161	42.6	<0.106	<0.787	<0.114	<0.478	38.0 J
U4-MW-16S	6/13/2023	N	EM10	UMCf	54.8 - 64.8	<0.110	<0.110	<0.120	<0.161	47.0	<0.106	<0.787	<0.114	<0.478	54.0
U4-MW-16S	9/11/2023	N	EM13	UMCf	54.8 - 64.8	<0.110	<0.110	<0.120	<0.161	16.4	<0.106	<0.787	<0.114	<0.478	32.1 J
U4-MW-16S	12/11/2023	N	EM16	UMCf	54.8 - 64.8	<0.110	<0.110	<0.120	<0.161	11.8	<0.106	<0.787 UJ	<0.114	<0.478	27.2 J
U4-SLMW	11/10/2022	N	EM03		-	<0.550	<0.550	<0.600	<0.805	<5.95	<0.530	<3.94	<0.570	<2.39	<56.5
U4-T3	10/13/2022	N	EM02		-	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	22.8 J

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Butanone (MEK)	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene	4-Methyl-2-Pentanone	Acetone
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-T3	11/3/2022	N	EM03		-	<0.110	<0.110	<0.120	<0.161	3.43 J	<0.106	<0.787	<0.114	<0.478	12.3 J
U4-T3	12/6/2022	N	EM04		-	<2.20 UJ	<2.20 UJ	<2.40 UJ	<3.22 UJ	<23.8 UJ	<2.12 UJ	<15.7 UJ	<2.28 UJ	<9.56 UJ	<226 UJ
U4-T3	1/9/2023	N	EM05		-	<0.110	<0.110	<0.120	<0.161	2.47 J	<0.106	<0.787	<0.114	<0.478	11.4 J
U4-T3	2/13/2023	N	EM06		-	<11.0	<11.0	<12.0	<16.1	<119	<10.6	<78.7	<11.4	<47.8	<1,130
U4-T3	3/13/2023	N	EM07		-	<2.75	<2.75	<3.00	<4.03	<29.8	<2.65	<19.7	<2.85	<12.0	<282
U4-T3	4/19/2023	N	EM08		-	<0.110	<0.110	<0.120	<0.161	2.01 J	<0.106	<0.787	<0.114	<0.478	12.8 J
U4-T3	5/18/2023	N	EM09		-	<0.110	<0.110	<0.120	<0.161	26.1 J+	<0.106	<0.787	<0.114	<0.478	121
U4-T3	6/12/2023	N	EM10		-	<0.110	<0.110	<0.120	<0.161	25.8	<0.106	<0.787 UJ	<0.114	<0.478	96.7 J+
U4-T3	7/11/2023	N	EM11		-	<0.110	<0.110	<0.120	<0.161	<1.19	<0.106	<0.787	<0.114	<0.478	90.2
U4-T3	8/10/2023	N	EM12		-	<0.110	<0.110	<0.120	<0.161	17.1	<0.106	<0.787	<0.114	0.823 J	39.1 J
U4-T3	9/11/2023	N	EM13		-	<0.110	<0.110	<0.120	<0.161	22.7	<0.106	<0.787	<0.114	<0.478	69.8
U4-T3	10/16/2023	N	EM14		-	<2.75	<2.75	<3.00	<4.03	<29.8	<2.65	<19.7	<2.85	<12.0	<282

Notes:

FD - Field duplicate

E - Field instrument error.

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 low.

J+ - The result is an estimated quantity, but the result may be biased high.

N/A - Not Applicable

mg/L - milligrams per liter

µg/L - micrograms per liter

N - Normal field 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

< - The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

-- Not tested.

M-252 damaged/obstructed when checked on June 14, 2023 and September 14, 2023.

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B
						Benzene	Bromobenzene	Bromochloro-methane	Bromodichloro-methane	Bromoform	Bromomethane	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
M-247-100	4/20/2022	N	BL02	UMCf	100.5 - 110.5	----	----	----	----	----	----	----	----	----	----
M-249-100	4/20/2022	N	BL02	UMCf	99.6 - 109.6	----	----	----	----	----	----	----	----	----	----
M-251-100	4/19/2022	N	BL02	UMCf	92.5 - 102.5	<0.0941	<0.118	<0.128	13.1	8.80	<0.605	<0.128	<0.116	<0.192	8,010
M-251-100	10/13/2022	N	EM02	UMCf	92.5 - 102.5	<0.0941	<0.118	<0.128	6.92	3.40	<0.605	<0.128	<0.116	<0.192	3,950
M-251-100	11/2/2022	N	EM03	UMCf	92.5 - 102.5	<0.941	<1.18	<1.28	5.61 J	<1.29	<6.05	<1.28	<1.16	<1.92	2,420
M-251-100	12/8/2022	N	EM04	UMCf	92.5 - 102.5	<0.0941	<0.118	<0.128	4.81	1.77	<0.605	1.55	<0.116	<0.192	2,240
M-251-100	1/11/2023	N	EM05	UMCf	92.5 - 102.5	<0.0941	<0.118	<0.128	4.88	1.80	<0.605	<0.128	<0.116	<0.192	2,680
M-251-100	2/13/2023	N	EM06	UMCf	92.5 - 102.5	<0.0941	<0.118	<0.128	4.13	1.02	<0.605	1.37	<0.116	<0.192	1,480
M-251-100	3/17/2023	N	EM07	UMCf	92.5 - 102.5	<4.71	<5.90	<6.40	<6.80	<6.45	<30.3	<6.40	<5.80	<9.60	1,630
M-251-100	4/21/2023	N	EM08	UMCf	92.5 - 102.5	<0.0941	<0.118	<0.128	4.56	1.33	<0.605	1.65	<0.116	<0.192	1,950 J+
M-251-100	5/9/2023	N	EM09	UMCf	92.5 - 102.5	<0.0941	<0.118	<0.128	5.11	2.19	<0.605	1.58	<0.116	<0.192	2,200
M-251-100	6/14/2023	N	EM10	UMCf	92.5 - 102.5	<4.71	<5.90	<6.40	<6.80	<6.45	<30.3	<6.40	<5.80	<9.60	2,240
M-251-100	7/14/2023	N	EM11	UMCf	92.5 - 102.5	<0.0941	<0.118	<0.128	4.24	2.14	<0.605	1.90	<0.116	<0.192	2,600
M-251-100	8/10/2023	N	EM12	UMCf	92.5 - 102.5	<0.0941	<0.118	<0.128	2.50	0.978 J	<0.605	<0.128	<0.116	<0.192	2,010
M-251-100	9/14/2023	N	EM13	UMCf	92.5 - 102.5	<0.0941	<0.118	<0.128	3.13	1.23	<0.605	<0.128	<0.116	<0.192	2,340
M-251-100	10/19/2023	N	EM14	UMCf	92.5 - 102.5	<0.0941	<0.118	<0.128	3.31	1.17	<0.605	<0.128	<0.116	<0.192	2,400
M-251-100	11/16/2023	N	EM15	UMCf	92.5 - 102.5	<4.71	<5.90	<6.40	<6.80	<6.45	<30.3	<6.40	<5.80	<9.60	1,900
M-251-100	12/12/2023	N	EM16	UMCf	92.5 - 102.5	<0.0941	<0.118	<0.128	3.09	1.28	<0.605	<0.128	<0.116	<0.192	2,380 J+
M-251-60	4/18/2022	N	BL02	UMCf	52.3 - 62.3	0.132 J	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	13.5
M-251-60	3/15/2023	N	EM07	UMCf	52.3 - 62.3	<0.0941	<0.118	<0.128	<0.136	0.212 J	<0.605	<0.128	<0.116	<0.192	14.5 J+
M-251-60	6/14/2023	N	EM10	UMCf	52.3 - 62.3	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	19.9
M-251-60	9/14/2023	N	EM13	UMCf	52.3 - 62.3	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	22.2
M-251-60	12/11/2023	N	EM16	UMCf	52.3 - 62.3	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	27.1
M-252	4/21/2022	N	BL02	UMCf	132.3 - 142.3	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	0.192 J
M-252	3/15/2023	N	EM07	UMCf	132.3 - 142.3	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	17.8 J+
M-252	9/19/2023	N	EM13	UMCf	132.3 - 142.3	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	<0.111
M-252	12/18/2023	N	EM16	UMCf	132.3 - 142.3	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	5.55
M-253-100	4/20/2022	N	BL02	UMCf	100.8 - 110.8	----	----	----	----	----	----	----	----	----	----
M-255-100	4/20/2022	N	BL02	UMCf	100.2 - 110.2	----	----	----	----	----	----	----	----	----	----
U4-E-01D	4/18/2022	N	BL02	UMCf	94.7 - 109.7	<0.471	<0.590	<0.640	5.46	9.81 J-	<3.03	<0.640	<0.580	<0.960	6,650
U4-E-01D	3/14/2023	N	EM07	UMCf	94.7 - 109.7	<0.0941	<0.118	<0.128	3.04	0.458 J	<0.605	<0.128	<0.116	<0.192	5.08
U4-E-011	4/19/2022	N	BL02	UMCf	74.6 - 89.6	<0.0941	<0.118	<0.128	0.521 J	0.388 J	<0.605	<0.128	<0.116	<0.192	186 J
U4-E-011	4/19/2022	FD	BL02	UMCf	74.6 - 89.6	<0.0941	<0.118	<0.128	0.509 J	<0.129	<0.605	<0.128	<0.116	<0.192	280 J
U4-E-011	3/14/2023	N	EM07	UMCf	74.6 - 89.6	<0.0941	<0.118	<0.128	2.27	0.446 J	<0.605	0.646 J	<0.116	<0.192	1,300
U4-E-011	4/20/2023	N	EM08	UMCf	74.6 - 89.6	<0.0941	<0.118	<0.128	0.887 J	<0.129	<0.605	0.439 J	<0.116	<0.192	477 J+
U4-E-011	5/10/2023	N	EM09	UMCf	74.6 - 89.6	<0.0941	<0.118	<0.128	0.980 J	0.189 J	<0.605	<0.128	<0.116	<0.192	553
U4-E-011	6/12/2023	N	EM10	UMCf	74.6 - 89.6	<0.0941	<0.118	<0.128	1.63	0.383 J	<0.605	0.814 J	<0.116	<0.192	1,530
U4-E-011	7/11/2023	N	EM11	UMCf	74.6 - 89.6	<0.471	<0.590	<0.640	0.904 J	<0.645	<3.03	<0.640	<0.580	<0.960	381
U4-E-011	8/10/2023	N	EM12	UMCf	74.6 - 89.6	<0.0941	<0.118	<0.128	0.955 J	<0.129	<0.605	<0.128	<0.116	<0.192	153
U4-E-011	9/11/2023	N	EM13	UMCf	74.6 - 89.6	<0.471	<0.590	<0.640	<0.680	<0.645	<3.03	<0.640	<0.580	<0.960	101
U4-E-011	10/16/2023	N	EM14	UMCf	74.6 - 89.6	<0.0941	<0.118	<0.128	0.388 J	<0.129	<0.605	<0.128	<0.116	<0.192	152
U4-E-011	12/13/2023	N	EM16	UMCf	74.6 - 89.6	<0.941	<1.18	<1.28	<1.36	<1.29	<6.05	<1.28	<1.16	<1.92	<1.11
U4-E-02D	4/20/2022	N	BL02	UMCf	94.4 - 109.4	<0.0941	<0.118	<0.128	3.33 J+	1.82	<0.605	<0.128	<0.116	<0.192	1,660
U4-E-02D	3/14/2023	N	EM07	UMCf	94.4 - 109.4	<0.0941	<0.118	<0.128	3.21	0.376 J	<0.605	<0.128	<0.116	<0.192	6.95
U4-E-021	4/18/2022	N	BL02	UMCf	74.4 - 89.4	<0.0941	<0.118 UJ	<0.128	1.65	1.65	<0.605	<0.128	<0.116	<0.192	727
U4-E-021	3/14/2023	N	EM07	UMCf	74.4 - 89.4	<0.0941	<0.118	<0.128	2.11	0.378 J	<0.605	0.176 J	<0.116	<0.192	165
U4-E-021	4/20/2023	N	EM08	UMCf	74.4 - 89.4	<0.0941	<0.118	<0.128	1.66	<0.129	<0.605	0.401 J	<0.116	<0.192	503 J+
U4-E-021	5/11/2023	N	EM09	UMCf	74.4 - 89.4	<0.0941	<0.118	<0.128	1.19	0.412 J	<0.605	0.376 J	<0.116	<0.192	477
U4-E-021	6/12/2023	N	EM10	UMCf	74.4 - 89.4	<0.0941	<0.118	<0.128	0.953 J	0.197 J	<0.605	0.180 J	<0.116	<0.192	398
U4-E-021	7/11/2023	N	EM11	UMCf	74.4 - 89.4	<0.0941	<0.118	<0.128	0.630 J	<0.129	<0.605	0.336 J	<0.116	<0.192	321
U4-E-021	8/10/2023	N	EM12	UMCf	74.4 - 89.4	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	214

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B
						Benzene	Bromobenzene	Bromochloro-methane	Bromodichloro-methane	Bromoform	Bromomethane	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-E-02I	9/11/2023	N	EM13	UMCf	74.4 - 89.4	<0.0941	<0.118	<0.128	0.380 J	0.224 J	<0.605	<0.128	<0.116	<0.192	198
U4-E-02I	10/16/2023	N	EM14	UMCf	74.4 - 89.4	<0.941	<1.18	<1.28	<1.36	<1.29	<6.05	<1.28	<1.16	<1.92	151
U4-E-02I	12/14/2023	N	EM16	UMCf	74.4 - 89.4	<0.941	<1.18	<1.28	<1.36	<1.29	<6.05	<1.28	<1.16	<1.92	55.6
U4-E-03D	4/19/2022	N	BL02	UMCf	95.1 - 110.1	<0.0941	<0.118	<0.128	10.9	6.45	<0.605	<0.128	<0.116	<0.192	6,390
U4-E-03D	10/13/2022	N	EM02	UMCf	95.1 - 110.1	<18.8	<23.6	<25.6	<27.2	<25.8	<121	<25.6	<23.2	<38.4	4,280
U4-E-03D	11/3/2022	N	EM03	UMCf	95.1 - 110.1	<0.0941	<0.118	<0.128	9.37	4.31	<0.605	2.75	<0.116	<0.192	4,350
U4-E-03D	12/6/2022	N	EM04	UMCf	95.1 - 110.1	<1.88 UJ	<2.36 UJ	<2.56 UJ	7.65 J	3.37 J	<12.1 UJ	6.86 J	<2.32 UJ	<3.84 UJ	3,470
U4-E-03D	1/9/2023	N	EM05	UMCf	95.1 - 110.1	<0.0941	<0.118	<0.128	7.40	2.90	<0.605	2.25	<0.116	<0.192	3,520
U4-E-03D	2/13/2023	N	EM06	UMCf	95.1 - 110.1	<9.41	<11.8	<12.8	<13.6	<12.9	<60.5	<12.8	<11.6	<19.2	3,130
U4-E-03D	3/13/2023	N	EM07	UMCf	95.1 - 110.1	<9.41	<11.8	<12.8	<13.6	<12.9	<60.5	<12.8	<11.6	<19.2	3,070
U4-E-03D	3/14/2023	N	EM07	UMCf	95.1 - 110.1	<18.8	<23.6	<25.6	<27.2	<25.8	<121	<25.6	<23.2	<38.4	12,200
U4-E-03D	4/19/2023	N	EM08	UMCf	95.1 - 110.1	<0.471	<0.590	<0.640	4.48 J	2.05 J	<3.03	1.47 J	<0.580	<0.960	3,360 J+
U4-E-03D	5/11/2023	N	EM09	UMCf	95.1 - 110.1	<0.0941	<0.118	0.159 J	4.02	1.58	<0.605	<0.128	<0.116	<0.192	2,640
U4-E-03D	6/12/2023	N	EM10	UMCf	95.1 - 110.1	<0.0941	<0.118	<0.128	5.66	2.26	<0.605	2.20	<0.116	<0.192	3,700
U4-E-03D	7/11/2023	N	EM11	UMCf	95.1 - 110.1	<0.0941	<0.118	<0.128	5.08	2.45	<0.605	1.56	<0.116	<0.192	3,470
U4-E-03D	8/10/2023	N	EM12	UMCf	95.1 - 110.1	<0.0941	<0.118	<0.128	4.55	1.84	<0.605	<0.128	<0.116	<0.192	3,320
U4-E-03D	9/11/2023	N	EM13	UMCf	95.1 - 110.1	<0.0941	<0.118	<0.128	4.84	2.48	<0.605	2.88	<0.116	<0.192	3,570
U4-E-03D	10/16/2023	N	EM14	UMCf	95.1 - 110.1	<18.8	<23.6	<25.6	<27.2	<25.8	<121	<25.6	<23.2	<38.4	3,140
U4-E-04D	4/19/2022	N	BL02	UMCf	95.0 - 110.0	<0.0941	<0.118	<0.128	2.28	0.947 J	<0.605	<0.128	<0.116	<0.192	2,980
U4-E-04D	3/14/2023	N	EM07	UMCf	95.0 - 110.0	<0.0941	<0.118	<0.128	3.30	0.484 J	<0.605	<0.128	<0.116	<0.192	4.96 J
U4-E-04I	4/18/2022	N	BL02	UMCf	75.0 - 90.0	<0.0941	<0.118	<0.128	0.591 J	<0.129	<0.605	<0.128	<0.116	<0.192	433
U4-E-04I	3/14/2023	N	EM07	UMCf	75.0 - 90.0	<4.71	<5.90	<6.40	<6.80	<6.45	<30.3	12.3 J	<5.80	<9.60	5,600
U4-E-05D	4/19/2022	N	BL02	UMCf	95.0 - 110.0	<0.0941	<0.118	<0.128	4.11	3.20	<0.605	<0.128	<0.116	<0.192	3,780
U4-E-05D	3/16/2023	N	EM07	UMCf	95.0 - 110.0	<0.0941	<0.118	<0.128	0.727 J	<0.129	<0.605	<0.128	<0.116	<0.192	5.23 J+
U4-E-05I	4/19/2022	N	BL02	UMCf	75.0 - 90.0	<0.0941	<0.118	<0.128	1.41	1.99	<0.605	<0.128	<0.116	<0.192	516
U4-E-05I	3/15/2023	N	EM07	UMCf	75.0 - 90.0	<0.0941 UJ	<0.118 UJ	<0.128 UJ	3.94 J-	1.44 J-	<0.605 UJ	0.706 J	<0.116 UJ	<0.192 UJ	459 J
U4-E-06D	4/11/2022	N	BL02	UMCf	95.1 - 110.1	0.186 J	<0.118	<0.128	0.502 J	0.185 J	<0.605	<0.128	<0.116	<0.192	819
U4-E-06I	4/11/2022	N	BL02	UMCf	73.2 - 88.2	0.166 J	<0.118	<0.128	0.679 J	<0.129	<0.605	<0.128	<0.116	<0.192	218
U4-E-06I	4/11/2022	FD	BL02	UMCf	73.2 - 88.2	0.153 J	<0.118	<0.128	0.605 J	<0.129	<0.605	<0.128	<0.116	<0.192	215
U4-E-06I	10/12/2022	N	EM02	UMCf	73.2 - 88.2	<0.0941	<0.118	0.445 J	1.58	0.258 J	<0.605	1.14	<0.116	<0.192	<0.111
U4-E-06I	11/3/2022	N	EM03	UMCf	73.2 - 88.2	<0.0941	<0.118	<0.128	1.16 J+	0.235 J	<0.605	0.654 J	<0.116	<0.192	1,740
U4-E-06I	12/6/2022	N	EM04	UMCf	73.2 - 88.2	<0.941 UJ	<1.18 UJ	<1.28 UJ	<1.36 UJ	<1.29 UJ	<6.05 UJ	2.80 J	<1.16 UJ	<1.92 UJ	1,080
U4-E-06I	1/9/2023	N	EM05	UMCf	73.2 - 88.2	<0.0941	<0.118	<0.128	1.18	0.386 J	<0.605	0.877 J	<0.116	<0.192	2,050
U4-E-06I	2/13/2023	N	EM06	UMCf	73.2 - 88.2	<9.41	<11.8	<12.8	<13.6	<12.9	<60.5	<12.8	<11.6	<19.2	1,730
U4-E-06I	3/13/2023	N	EM07	UMCf	73.2 - 88.2	<1.88	<2.36	<2.56	<2.72	<2.58	<12.1	<2.56	<2.32	<3.84	923
U4-E-06I	4/17/2023	N	EM08	UMCf	73.2 - 88.2	<1.88	<2.36	<2.56	<2.72	<2.58	<12.1	<2.56	<2.32	<3.84	1,080
U4-E-06I	5/15/2023	N	EM09	UMCf	73.2 - 88.2	<2.35	<2.95	<3.20	<3.40	<3.22	<15.1	<3.20	<2.90	<4.80	1,840
U4-E-06I	6/12/2023	N	EM10	UMCf	73.2 - 88.2	<0.0941	<0.118	<0.128	1.99	0.446 J	<0.605	1.54	<0.116	<0.192	3,080
U4-E-06I	7/11/2023	N	EM11	UMCf	73.2 - 88.2	<0.0941	<0.118	<0.128	1.55	<0.129	<0.605	1.00 J	<0.116	<0.192	2,820
U4-E-06I	8/11/2023	N	EM12	UMCf	73.2 - 88.2	<0.471	<0.590	<0.640	1.57 J	<0.645	<3.03	<0.640	<0.580	<0.960	2,630 J
U4-E-06I	9/11/2023	N	EM13	UMCf	73.2 - 88.2	<0.0941	<0.118	<0.128	0.936 J	0.305 J	<0.605	0.612 J	<0.116	<0.192	1,470
U4-E-06I	10/16/2023	N	EM14	UMCf	73.2 - 88.2	<4.71	<5.90	<6.40	<6.80	<6.45	<30.3	<6.40	<5.80	<9.60	1,120
U4-E-06I	12/13/2023	N	EM16	UMCf	73.2 - 88.2	<0.0941	<0.118	<0.128	0.440 J	<0.129	<0.605	<0.128	<0.116	<0.192	765 J+
U4-E-07D	4/12/2022	N	BL02	UMCf	94.6 - 109.6	<0.0941	<0.118	<0.128	3.05	1.20	<0.605	2.62	<0.116	<0.192	5,980
U4-E-07I	4/12/2022	N	BL02	UMCf	74.7 - 89.7	<0.0941	<0.118	<0.128	1.21	0.866 J	<0.605	1.03	<0.116	<0.192	1,140
U4-E-07I	10/11/2022	N	EM02	UMCf	74.7 - 89.7	<0.941	<1.18	<1.28	2.84 J	<1.29	<6.05	5.80 J	<1.16	<1.92	3,920
U4-E-07I	11/3/2022	N	EM03	UMCf	74.7 - 89.7	0.186 J	<0.118	<0.128	4.41	1.98 J+	<0.605	1.58	<0.116	<0.192	3,510
U4-E-07I	12/6/2022	N	EM04	UMCf	74.7 - 89.7	<2.35 UJ	<2.95 UJ	<3.20 UJ	4.68 J	<3.22 UJ	<15.1 UJ	8.58 J	<2.90 UJ	<4.80 UJ	4,200
U4-E-07I	1/9/2023	N	EM05	UMCf	74.7 - 89.7	<0.0941	<0.118	<0.128	4.48	1.88	<0.605	1.92	<0.116	<0.192	3,840
U4-E-07I	2/13/2023	N	EM06	UMCf	74.7 - 89.7	<9.41	<11.8	<12.8	<13.6	<12.9	<60.5	<12.8	<11.6	<19.2	3,670
U4-E-07I	3/13/2023	N	EM07	UMCf	74.7 - 89.7	<9.41	<11.8	<12.8	<13.6	<12.9	<60.5	<12.8	<11.6	<19.2	3,520

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B
						Benzene	Bromobenzene	Bromochloro-methane	Bromodichloro-methane	Bromoform	Bromomethane	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-E-07I	4/19/2023	N	EM08	UMCf	74.7 - 89.7	<0.471	<0.590	<0.640	4.35 J	1.69 J	<3.03	1.59 J	<0.580	<0.960	3,410 J+
U4-E-07I	5/15/2023	N	EM09	UMCf	74.7 - 89.7	<9.41	<11.8	<12.8	<13.6	<12.9	<60.5	<12.8	<11.6	<19.2	2,910
U4-E-07I	6/12/2023	N	EM10	UMCf	74.7 - 89.7	<0.0941	<0.118	<0.128	3.88	1.06	<0.605	1.69	<0.116	<0.192	2,840
U4-E-07I	7/11/2023	N	EM11	UMCf	74.7 - 89.7	<0.0941	<0.118	<0.128	2.96	1.12	<0.605	1.07	<0.116	<0.192	2,850
U4-E-07I	8/11/2023	N	EM12	UMCf	74.7 - 89.7	<0.471	<0.590	<0.640	2.46 J	<0.645	<3.03	<0.640	<0.580	<0.960	2,840 J
U4-E-07I	9/11/2023	N	EM13	UMCf	74.7 - 89.7	<0.0941	<0.118	<0.128	2.90	1.33	<0.605	2.21	<0.116	<0.192	3,620
U4-E-07I	10/16/2023	N	EM14	UMCf	74.7 - 89.7	<9.41	<11.8	<12.8	<13.6	<12.9	<60.5	<12.8	<11.6	<19.2	3,520
U4-E-07I	12/13/2023	N	EM16	UMCf	74.7 - 89.7	<0.0941	<0.118	<0.128	2.84	0.998 J	<0.605	<0.128	<0.116	<0.192	3,950
U4-E-08D	4/12/2022	N	BL02	UMCf	94.6 - 109.6	<0.0941	<0.118	0.298 J	2.74	0.954 J	<0.605	2.96	<0.116	<0.192	7,120
U4-E-08D	10/11/2022	N	EM02	UMCf	94.6 - 109.6	<0.941	<1.18	<1.28	<1.36	<1.29	<6.05	5.96 J	<1.16	<1.92	4,850
U4-E-08D	11/3/2022	N	EM03	UMCf	94.6 - 109.6	<0.0941	<0.118	<0.128	2.56 J+	0.740 J	<0.605	2.84	<0.116	<0.192	5,020
U4-E-08D	12/6/2022	N	EM04	UMCf	94.6 - 109.6	<2.35 UJ	<2.95 UJ	<3.20 UJ	<3.40 UJ	<3.22 UJ	<15.1 UJ	8.37 J	<2.90 UJ	<4.80 UJ	4,090
U4-E-08D	1/9/2023	N	EM05	UMCf	94.6 - 109.6	<0.0941	<0.118	<0.128	1.99	0.639 J	<0.605	1.73	<0.116	<0.192	4,300
U4-E-08D	2/13/2023	N	EM06	UMCf	94.6 - 109.6	<9.41	<11.8	<12.8	<13.6	<12.9	<60.5	<12.8	<11.6	<19.2	3,920
U4-E-08D	3/13/2023	N	EM07	UMCf	94.6 - 109.6	<9.41	<11.8	<12.8	<13.6	<12.9	<60.5	<12.8	<11.6	<19.2	3,480
U4-E-08D	4/19/2023	N	EM08	UMCf	94.6 - 109.6	<0.471	<0.590	<0.640	1.92 J	<0.645	<3.03	1.54 J	<0.580	<0.960	3,410 J+
U4-E-08D	5/17/2023	N	EM09	UMCf	94.6 - 109.6	<9.41	<11.8	<12.8	<13.6	<12.9	<60.5	<12.8	<11.6	<19.2	2,880
U4-E-08D	6/12/2023	N	EM10	UMCf	94.6 - 109.6	<0.0941	<0.118	<0.128	1.54	0.321 J	<0.605	1.44	<0.116	<0.192	2,820
U4-E-08D	7/11/2023	N	EM11	UMCf	94.6 - 109.6	<0.0941	<0.118	<0.128	1.61	<0.129	<0.605	1.06	<0.116	<0.192	2,620
U4-E-09D	4/15/2022	N	BL02	UMCf	94.5 - 109.5	<0.0941	<0.118	<0.128	0.642 J	0.461 J	<0.605	0.533 J	<0.116	<0.192	1,450
U4-E-09I	4/14/2022	N	BL02	UMCf	74.9 - 89.9	0.188 J	<0.118	<0.128	1.00 J	0.618 J	<0.605	0.610 J	<0.116	<0.192	1,240
U4-E-10D	4/13/2022	N	BL02	UMCf	94.5 - 109.5	<0.0941	<0.118	<0.128	1.14	0.707 J	<0.605	0.717 J	<0.116	<0.192	704 J+
U4-E-10I	4/13/2022	N	BL02	UMCf	74.2 - 89.2	<0.0941	<0.118	<0.128	0.478 J	0.509 J	<0.605	0.585 J	<0.116	<0.192	1,330
U4-MW-01D	4/19/2022	N	BL02	UMCf	96.7 - 106.7	<0.0941	<0.118	<0.128	0.564 J	0.346 J	<0.605	<0.128	<0.116	<0.192	608
U4-MW-01D	2/16/2023	N	EM06	UMCf	96.7 - 106.7	<0.941	<1.18	<1.28	<1.36	<1.29	<6.05	<1.28	<1.16	<1.92	857
U4-MW-01D	3/20/2023	N	EM07	UMCf	96.7 - 106.7	<0.0941	<0.118	<0.128	2.14	0.356 J	<0.605	0.863 J	<0.116	<0.192	1,100
U4-MW-01D	6/13/2023	N	EM10	UMCf	96.7 - 106.7	<0.0941	<0.118	<0.128	1.89	0.216 J	<0.605	0.652 J	<0.116	<0.192	871
U4-MW-01D	9/14/2023	N	EM13	UMCf	96.7 - 106.7	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	671
U4-MW-01D	12/14/2023	N	EM16	UMCf	96.7 - 106.7	<0.0941	<0.118	<0.128	1.54	0.184 J	<0.605	0.348 J	<0.116	<0.192	428
U4-MW-01DD	4/19/2022	N	BL02	UMCf	119.9 - 129.9	<0.0941	<0.118	<0.128	0.170 J	<0.129	<0.605	<0.128	<0.116	<0.192	21.2
U4-MW-01DD	4/19/2022	FD	BL02	UMCf	119.9 - 129.9	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	20.3
U4-MW-01DD	3/15/2023	N	EM07	UMCf	119.9 - 129.9	<0.0941	<0.118	<0.128	0.644 J	<0.129	<0.605	0.471 J	<0.116	<0.192	363 J+
U4-MW-01DD	6/13/2023	N	EM10	UMCf	119.9 - 129.9	<0.0941	<0.118	<0.128	1.48	0.166 J	<0.605	0.178 J	<0.116	<0.192	374
U4-MW-01DD	9/14/2023	N	EM13	UMCf	119.9 - 129.9	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	417
U4-MW-01DD	12/15/2023	N	EM16	UMCf	119.9 - 129.9	<0.471	<0.590	<0.640	<0.680	<0.645	<3.03	<0.640	<0.580	<0.960	180
U4-MW-01I	4/19/2022	N	BL02	UMCf	76.7 - 86.7	<0.0941	<0.118	<0.128	0.622 J	0.371 J	<0.605	<0.128	<0.116	<0.192	395
U4-MW-01I	3/20/2023	N	EM07	UMCf	76.7 - 86.7	<0.0941	<0.118	<0.128	1.99	0.431 J	<0.605	0.789 J	<0.116	<0.192	1,060
U4-MW-01I	6/12/2023	N	EM10	UMCf	76.7 - 86.7	<0.0941	<0.118	<0.128	2.08	0.203 J	<0.605	0.793 J	<0.116	<0.192	908
U4-MW-01I	9/14/2023	N	EM13	UMCf	76.7 - 86.7	<0.0941	<0.118	<0.128	2.22	<0.129	<0.605	<0.128	<0.116	<0.192	969
U4-MW-01I	12/15/2023	N	EM16	UMCf	76.7 - 86.7	<4.71	<5.90	<6.40	<6.80	<6.45	<30.3	<6.40	<5.80	<9.60	892
U4-MW-01S	4/18/2022	N	BL02	UMCf	54.7 - 64.7	<0.0941	<0.118	<0.128	0.375 J	0.147 J	<0.605	<0.128	<0.116	<0.192	56.8
U4-MW-01S	3/15/2023	N	EM07	UMCf	54.7 - 64.7	<0.0941	<0.118	<0.128	0.346 J	<0.129	<0.605	0.227 J	<0.116	<0.192	32.5 J+
U4-MW-01S	6/13/2023	N	EM10	UMCf	54.7 - 64.7	<0.0941	<0.118	<0.128	0.294 J	<0.129	<0.605	<0.128	<0.116	<0.192	31.2
U4-MW-01S	9/15/2023	N	EM13	UMCf	54.7 - 64.7	<0.0941	<0.118	<0.128	0.274 J	<0.129	<0.605	<0.128	<0.116	<0.192	35.0
U4-MW-01S	12/13/2023	N	EM16	UMCf	54.7 - 64.7	<0.0941	<0.118	<0.128	0.305 J	<0.129	<0.605	<0.128	<0.116	<0.192	26.7 J+
U4-MW-02D	4/14/2022	N	BL02	UMCf	95.0 - 110.0	<0.0941	<0.118	<0.128	9.08	5.28	<0.605	2.50	<0.116	<0.192	8,990
U4-MW-02D	10/11/2022	N	EM02	UMCf	95.0 - 110.0	<0.0941	<0.118	<0.128	13.2	6.19	<0.605	5.24	<0.116	<0.192	10,700
U4-MW-02D	11/1/2022	N	EM03	UMCf	95.0 - 110.0	<4.71	<5.90	<6.40	10.6 J	<6.45	<30.3	<6.40	<5.80	<9.60	4,950
U4-MW-02D	12/7/2022	N	EM04	UMCf	95.0 - 110.0	<0.0941	<0.118	<0.128	12.1	5.74	<0.605	<0.128	<0.116	<0.192	11,200
U4-MW-02D	1/10/2023	N	EM05	UMCf	95.0 - 110.0	<0.0941	<0.118	<0.128	9.38	4.64	<0.605	<0.128	<0.116	<0.192	7,970
U4-MW-02D	2/13/2023	N	EM06	UMCf	95.0 - 110.0	<9.41	<0.118	<0.128	10.7	3.75	<0.605	4.15	<0.116	<0.192	7,230

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B
						Benzene	Bromobenzene	Bromochloro-methane	Bromodichloro-methane	Bromoform	Bromomethane	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-02D	3/17/2023	N	EM07	UMCf	95.0 - 110.0	<9.41	<11.8	<12.8	<13.6	<12.9	<60.5	<12.8	<11.6	<19.2	9,500
U4-MW-02D	4/19/2023	N	EM08	UMCf	95.0 - 110.0	<0.471	<0.590	<0.640	9.38	3.77 J	<3.03	2.96 J	<0.580	<0.960	10,100 J+
U4-MW-02D	5/9/2023	N	EM09	UMCf	95.0 - 110.0	<0.471	<0.590	<0.640	9.24	3.51 J	<3.03	8.04	<0.580	<0.960	10,300
U4-MW-02D	6/13/2023	N	EM10	UMCf	95.0 - 110.0	<0.0941	<0.118	<0.128	7.28	3.82	<0.605	2.24	<0.116	<0.192	<0.111
U4-MW-02D	7/18/2023	N	EM11	UMCf	95.0 - 110.0	<0.0941	<0.118	<0.128	9.63	5.00	<0.605	<0.128	<0.116	<0.192	10,700
U4-MW-02D	8/14/2023	N	EM12	UMCf	95.0 - 110.0	<23.5	<29.5	<32.0	<34.0	<32.3	<151	<32.0	<29.0	<48.0	7,970
U4-MW-02D	9/11/2023	N	EM13	UMCf	95.0 - 110.0	<0.0941	<0.118	<0.128	7.33	3.71	<0.605	3.41	<0.116	<0.192	8,840
U4-MW-02D	10/19/2023	N	EM14	UMCf	95.0 - 110.0	<0.0941	<0.118	<0.128	10.9	4.73	<0.605	<0.128	<0.116	<0.192	10,200
U4-MW-02D	11/15/2023	N	EM15	UMCf	95.0 - 110.0	<9.41	<11.8	<12.8	<13.6	<12.9	<60.5	<12.8	<11.6	<19.2	8,080
U4-MW-02D	12/14/2023	N	EM16	UMCf	95.0 - 110.0	<9.41	<11.8	<12.8	<13.6	<12.9	<60.5	<12.8	<11.6	<19.2	6,310
U4-MW-02I	4/14/2022	N	BL02	UMCf	75.0 - 90.0	<0.0941	<0.118	<0.128	2.73	1.62	<0.605	0.809 J	<0.116	<0.192	1,380
U4-MW-02I	10/11/2022	N	EM02	UMCf	75.0 - 90.0	<0.0941	<0.118	<0.128	4.87	2.46	<0.605	2.06	<0.116	<0.192	2,860
U4-MW-02I	11/2/2022	N	EM03	UMCf	75.0 - 90.0	<0.941	<1.18	<1.28	3.93 J	<1.29	<6.05	<1.28	<1.16	<1.92	3,760
U4-MW-02I	11/2/2022	FD	EM03	UMCf	75.0 - 90.0	<0.941	<1.18	<1.28	2.76 J	<1.29	<6.05	5.26 J	<1.16	<1.92	3,760
U4-MW-02I	12/8/2022	N	EM04	UMCf	75.0 - 90.0	<0.0941	<0.118	<0.128	0.766 J	0.454 J	<0.605	0.173 J	<0.116	<0.192	474
U4-MW-02I	12/8/2022	FD	EM04	UMCf	75.0 - 90.0	<0.0941	<0.118	<0.128	0.924 J	0.569 J	<0.605	0.214 J	<0.116	<0.192	462
U4-MW-02I	1/13/2023	N	EM05	UMCf	75.0 - 90.0	<0.941	<1.18	<1.28	2.62 J	<1.29	<6.05	<1.28	<1.16	<1.92	1,910
U4-MW-02I	1/13/2023	FD	EM05	UMCf	75.0 - 90.0	<0.941	<1.18	<1.28	3.20 J	<1.29	<6.05	<1.28	<1.16	<1.92	1,890
U4-MW-02I	2/15/2023	N	EM06	UMCf	75.0 - 90.0	<0.941	<1.18	<1.28	8.86 J	5.67 J	<6.05	<1.28	<1.16	<1.92	6,040
U4-MW-02I	2/15/2023	FD	EM06	UMCf	75.0 - 90.0	<0.941	<1.18	<1.28	8.84 J	6.04 J	<6.05	<1.28	<1.16	<1.92	6,030
U4-MW-02I	3/17/2023	N	EM07	UMCf	75.0 - 90.0	<18.8	<23.6	<25.6	<27.2	<25.8	<121	<25.6	<23.2	<38.4	7,070
U4-MW-02I	3/17/2023	FD	EM07	UMCf	75.0 - 90.0	<18.8	<23.6	<25.6	<27.2	<25.8	<121	<25.6	<23.2	<38.4	7,210
U4-MW-02I	4/20/2023	N	EM08	UMCf	75.0 - 90.0	<0.0941	<0.118	<0.128	0.189 J	<0.129	<0.605	<0.128	<0.116	<0.192	128
U4-MW-02I	4/20/2023	FD	EM08	UMCf	75.0 - 90.0	<0.0941	<0.118	<0.128	0.188 J	<0.129	<0.605	<0.128	<0.116	<0.192	134
U4-MW-02I	5/9/2023	N	EM09	UMCf	75.0 - 90.0	<0.0941	<0.118	<0.128	0.204 J	<0.129	<0.605	<0.128	<0.116	<0.192	313
U4-MW-02I	5/9/2023	FD	EM09	UMCf	75.0 - 90.0	<0.0941	<0.118	<0.128	0.228 J	<0.129	<0.605	<0.128	<0.116	<0.192	301 J+
U4-MW-02I	6/12/2023	N	EM10	UMCf	75.0 - 90.0	<0.0941	<0.118	<0.128	0.371 J	<0.129	<0.605	<0.128	<0.116	<0.192	390
U4-MW-02I	6/12/2023	FD	EM10	UMCf	75.0 - 90.0	<0.0941	<0.118	<0.128	0.294 J	<0.129	<0.605	<0.128	<0.116	<0.192	385
U4-MW-02I	7/18/2023	N	EM11	UMCf	75.0 - 90.0	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	118
U4-MW-02I	7/18/2023	FD	EM11	UMCf	75.0 - 90.0	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	143
U4-MW-02I	8/11/2023	N	EM12	UMCf	75.0 - 90.0	<0.0941	<0.118	<0.128	2.03	0.743 J	<0.605	<0.128	<0.116	<0.192	1,860 J
U4-MW-02I	8/11/2023	FD	EM12	UMCf	75.0 - 90.0	<0.0941	<0.118	<0.128	2.10	0.833 J	<0.605	<0.128	<0.116	<0.192	1,910 J
U4-MW-02I	9/11/2023	N	EM13	UMCf	75.0 - 90.0	<0.0941	<0.118	<0.128	1.13	0.404 J	<0.605	0.320 J	<0.116	<0.192	1,270 J
U4-MW-02I	9/11/2023	FD	EM13	UMCf	75.0 - 90.0	<0.0941	<0.118	<0.128	1.64	0.713 J	<0.605	0.722 J	<0.116	<0.192	2,040 J
U4-MW-02I	10/19/2023	N	EM14	UMCf	75.0 - 90.0	<0.0941 UJ	<0.118 UJ	<0.128 UJ	4.68 J-	1.82 J-	<0.605 UJ	<0.128 UJ	<0.116 UJ	<0.192 UJ	3,570 J-
U4-MW-02I	10/19/2023	FD	EM14	UMCf	75.0 - 90.0	<0.0941	<0.118	<0.128	5.37	2.05	<0.605	<0.128	<0.116	<0.192	4,030
U4-MW-02I	11/15/2023	N	EM15	UMCf	75.0 - 90.0	<4.71	<5.90	<6.40	<6.80	<6.45	<30.3	<6.40	<5.80	<9.60	3,240
U4-MW-02I	11/15/2023	FD	EM15	UMCf	75.0 - 90.0	<4.71	<5.90	<6.40	<6.80	<6.45	<30.3	<6.40	<5.80	<9.60	3,230
U4-MW-02I	12/14/2023	N	EM16	UMCf	75.0 - 90.0	<4.71	<5.90	<6.40	<6.80	<6.45	<30.3	<6.40	<5.80	<9.60	3,480
U4-MW-02I	12/14/2023	FD	EM16	UMCf	75.0 - 90.0	<4.71	<5.90	<6.40	<6.80	<6.45	<30.3	<6.40	<5.80	<9.60	3,370
U4-MW-03D	4/20/2022	N	BL02	UMCf	96.6 - 106.6	<0.0941	<0.118	<0.128	1.81 J+	0.629 J	<0.605	<0.128	<0.116	<0.192	2,270
U4-MW-03D	2/16/2023	N	EM06	UMCf	96.6 - 106.6	<4.71	<5.90	<6.40	1.71 J	<0.645	<3.03	0.835 J	<0.580	<0.960	1,350
U4-MW-03D	3/16/2023	N	EM07	UMCf	96.6 - 106.6	4.74 J	<2.36	<2.56	<2.72	<2.58	<12.1	<2.56	<2.32	<3.84	1,670
U4-MW-03D	3/16/2023	FD	EM07	UMCf	96.6 - 106.6	<2.35 UJ	<0.590	<0.640	<0.680	<0.645	<3.03	<0.640	<0.580	<0.960	1,620
U4-MW-03D	6/15/2023	N	EM10	UMCf	96.6 - 106.6	<0.0941	<0.118	<0.128	1.13	<0.129	<0.605	<0.128	<0.116	<0.192	1,130 J+
U4-MW-03D	9/14/2023	N	EM13	UMCf	96.6 - 106.6	<0.0941	<0.118	<0.128	2.75	<0.129	<0.605	<0.128	<0.116	<0.192	2,150
U4-MW-03D	12/13/2023	N	EM16	UMCf	96.6 - 106.6	<0.0941	<0.118	<0.128	1.91	0.573 J	<0.605	0.987 J	<0.116	<0.192	1,600
U4-MW-03DD	4/20/2022	N	BL02	UMCf	119.7 - 129.7	<0.0941	<0.118	<0.128	0.152 J	<0.129	<0.605	<0.128	<0.116	<0.192	173
U4-MW-03DD	3/15/2023	N	EM07	UMCf	119.7 - 129.7	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	4.62 J
U4-MW-03DD	6/15/2023	N	EM10	UMCf	119.7 - 129.7	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	1.95 J
U4-MW-03DD	9/14/2023	N	EM13	UMCf	119.7 - 129.7	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	2.98 J

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B
						Benzene	Bromobenzene	Bromochloro-methane	Bromodichloro-methane	Bromoform	Bromomethane	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-03DD	12/14/2023	N	EM16	UMCf	119.7 - 129.7	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	2.42 J
U4-MW-03I	4/19/2022	N	BL02	UMCf	76.6 - 86.6	<0.0941	<0.118	<0.128	0.846 J	0.580 J	<0.605	<0.128	<0.116	<0.192	277
U4-MW-03I	3/15/2023	N	EM07	UMCf	76.6 - 86.6	<0.0941	<0.118	<0.128	2.03	0.539 J	<0.605	0.737 J	<0.116	<0.192	1,210 J+
U4-MW-03I	6/14/2023	N	EM10	UMCf	76.6 - 86.6	<1.88	UMCf	<2.56	<2.72	<2.58	<12.1	<2.56	<2.32	<3.84	884 J
U4-MW-03I	6/14/2023	FD	EM10	UMCf	76.6 - 86.6	<2.35	<2.95	<3.20	<3.40	<3.22	<15.1	<3.20	<2.90	<4.80	1,220 J
U4-MW-03I	9/11/2023	N	EM13	UMCf	76.6 - 86.6	<0.0941	<0.118	<0.128	2.32	0.674 J	<0.605	1.43	<0.116	<0.192	1,470 J
U4-MW-03I	9/11/2023	FD	EM13	UMCf	76.6 - 86.6	<0.0941	<0.118	<0.128	2.14	0.706 J	<0.605	1.17	<0.116	<0.192	912 J
U4-MW-03I	12/13/2023	N	EM16	UMCf	76.6 - 86.6	<0.0941	<0.118	<0.128	1.69	0.578 J	<0.605	<0.128	<0.116	<0.192	1,390
U4-MW-03I	12/13/2023	FD	EM16	UMCf	76.6 - 86.6	<0.0941	<0.118	<0.128	1.75	0.505 J	<0.605	0.999 J	<0.116	<0.192	1,470 J+
U4-MW-03S	4/18/2022	N	BL02	UMCf	54.5 - 64.5	<0.0941	<0.118 UJ	<0.128	0.176 J	<0.129	<0.605	<0.128	<0.116	<0.192	45.1
U4-MW-03S	4/18/2022	FD	BL02	UMCf	54.5 - 64.5	<0.0941	<0.118 UJ	<0.128	0.182 J	<0.129	<0.605	<0.128	<0.116	<0.192	44.1
U4-MW-03S	3/15/2023	N	EM07	UMCf	54.5 - 64.5	<0.0941	<0.118	<0.128	0.383 J	0.218 J	<0.605	0.312 J	<0.116	<0.192	76.3
U4-MW-03S	6/15/2023	N	EM10	UMCf	54.5 - 64.5	<0.0941	<0.118	<0.128	0.259 J	<0.129	<0.605	<0.128	<0.116	<0.192	59.9
U4-MW-03S	9/14/2023	N	EM13	UMCf	54.5 - 64.5	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	81.5
U4-MW-03S	12/13/2023	N	EM16	UMCf	54.5 - 64.5	<0.0941	<0.118	<0.128	0.261 J	<0.129	<0.605	<0.128	<0.116	<0.192	70.6
U4-MW-04D	4/19/2022	N	BL02	UMCf	97.0 - 107.0	<0.0941	<0.118	<0.128	4.27	1.46	<0.605	<0.128	<0.116	<0.192	6,140
U4-MW-04D	2/16/2023	N	EM06	UMCf	97.0 - 107.0	<4.71	<5.90	<6.40	<6.80	<6.45	<30.3	<6.40	<5.80	<9.60	1,240
U4-MW-04D	3/21/2023	N	EM07	UMCf	97.0 - 107.0	<0.0941	<0.118	<0.128	2.44	<0.129	<0.605	<0.128	<0.116	<0.192	1,160
U4-MW-04D	6/14/2023	N	EM10	UMCf	97.0 - 107.0	<0.0941	<0.118	<0.128	1.56	0.221 J	<0.605	<0.128	<0.116	<0.192	891
U4-MW-04D	9/15/2023	N	EM13	UMCf	97.0 - 107.0	<0.0941	<0.118	<0.128	1.78	<0.129	<0.605	<0.128	<0.116	<0.192	1,430
U4-MW-04D	12/12/2023	N	EM16	UMCf	97.0 - 107.0	<0.0941	<0.118	<0.128	1.26	<0.129	<0.605	<0.128	<0.116	<0.192	979 J+
U4-MW-04I	4/19/2022	N	BL02	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	1.86	0.968 J	<0.605	<0.128	<0.116	<0.192	1,830
U4-MW-04I	3/20/2023	N	EM07	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	2.91	0.558 J	<0.605	1.26	<0.116	<0.192	2,350
U4-MW-04I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<0.471	<0.590	<0.640	1.90 J	<0.645	<3.03	1.01 J	<0.580	<0.960	2,250
U4-MW-04I	9/14/2023	N	EM13	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	3.07	<0.129	<0.605	<0.128	<0.116	<0.192	3,860
U4-MW-04I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	4.31	1.09	<0.605	<0.128	<0.116	<0.192	4,550 J+
U4-MW-05D	4/15/2022	N	BL02	UMCf	98.2 - 108.2	<0.0941	<0.118	<0.128	14.8	8.45 J-	<0.605	3.80	<0.116	<0.192	6,320
U4-MW-05D	10/13/2022	N	EM02	UMCf	98.2 - 108.2	<9.41	<11.8	<12.8	<13.6	<12.9	<60.5	<12.8	<11.6	<19.2	5,350
U4-MW-05D	11/3/2022	N	EM03	UMCf	98.2 - 108.2	<0.0941	<0.118	<0.128	11.3	5.15	<0.605	1.89	<0.116	<0.192	3,790
U4-MW-05D	12/7/2022	N	EM04	UMCf	98.2 - 108.2	<0.0941	<0.118	<0.128	12.9	6.25	<0.605	<0.128	<0.116	<0.192	3,950
U4-MW-05D	1/11/2023	N	EM05	UMCf	98.2 - 108.2	<0.0941	<0.118	<0.128	11.2	5.71	<0.605	<0.128	<0.116	<0.192	3,990
U4-MW-05D	2/14/2023	N	EM06	UMCf	98.2 - 108.2	<9.41	<11.8	<12.8	<13.6	<12.9	<60.5	<12.8	<11.6	<19.2	2,590
U4-MW-05D	3/16/2023	N	EM07	UMCf	98.2 - 108.2	<9.41	<11.8	<12.8	<13.6	<12.9	<60.5	<12.8	<11.6	<19.2	2,710 J+
U4-MW-05D	4/20/2023	N	EM08	UMCf	98.2 - 108.2	<0.0941	<0.118	<0.128	5.26	1.92	<0.605	0.960 J	<0.116	<0.192	1,950
U4-MW-05D	5/10/2023	N	EM09	UMCf	98.2 - 108.2	<0.0941	<0.118	<0.128	4.76	1.58	<0.605	<0.128	<0.116	<0.192	1,630
U4-MW-05D	6/15/2023	N	EM10	UMCf	98.2 - 108.2	<0.0941	<0.118	<0.128	2.36	0.972 J	<0.605	<0.128	<0.116	<0.192	1,510 J+
U4-MW-05D	7/18/2023	N	EM11	UMCf	98.2 - 108.2	<0.0941	<0.118	<0.128	2.89	1.40	<0.605	<0.128	<0.116	<0.192	1,950
U4-MW-05D	8/14/2023	N	EM12	UMCf	98.2 - 108.2	<2.35	<2.95	<3.20	<3.40	<3.22	<15.1	<3.20	<2.90	<4.80	2,150
U4-MW-05D	9/12/2023	N	EM13	UMCf	98.2 - 108.2	<2.35	<2.95	<3.20	<3.40	<3.22	<15.1	<3.20	<2.90	<4.80	756
U4-MW-05D	10/18/2023	N	EM14	UMCf	98.2 - 108.2	<2.35	<2.95	<3.20	<3.40	<3.22	<15.1	<3.20	<2.90	<4.80	1,010
U4-MW-05D	11/16/2023	N	EM15	UMCf	98.2 - 108.2	<2.35	<2.95	<3.20	<3.40	<3.22	<15.1	<3.20	<2.90	<4.80	1,670
U4-MW-05D	12/14/2023	N	EM16	UMCf	98.2 - 108.2	<2.35	<2.95	<3.20	<3.40	<3.22	<15.1	<3.20	<2.90	<4.80	915
U4-MW-05I	4/15/2022	N	BL02	UMCf	76.6 - 86.6	<0.0941	<0.118	<0.128	9.46	5.71 J-	<0.605	2.53	<0.116	<0.192	3,530
U4-MW-05I	10/13/2022	N	EM02	UMCf	76.6 - 86.6	<9.41	<11.8	<12.8	<13.6	<12.9	<60.5	<12.8	<11.6	<19.2	5,930
U4-MW-05I	11/3/2022	N	EM03	UMCf	76.6 - 86.6	<0.0941	<0.118	<0.128	15.2	8.95	<0.605	3.70	<0.116	<0.192	5,800
U4-MW-05I	12/8/2022	N	EM04	UMCf	76.6 - 86.6	<0.0941	<0.118	<0.128	14.5	8.16	<0.605	3.07	<0.116	<0.192	3,970
U4-MW-05I	1/11/2023	N	EM05	UMCf	76.6 - 86.6	<0.0941	<0.118	<0.128	12.4	6.41	<0.605	2.70	<0.116	<0.192	4,040
U4-MW-05I	2/14/2023	N	EM06	UMCf	76.6 - 86.6	<9.41	<11.8	<12.8	<13.6	<12.9	<60.5	<12.8	<11.6	<19.2	3,270
U4-MW-05I	3/14/2023	N	EM07	UMCf	76.6 - 86.6	<9.41	<11.8	<12.8	20.3 J	<12.9	<60.5	<12.8	<11.6	<19.2	6,720
U4-MW-05I	4/21/2023	N	EM08	UMCf	76.6 - 86.6	<0.0941	<0.118	<0.128	2.29	0.809 J	<0.605	0.368 J	<0.116	<0.192	646 J+
U4-MW-05I	5/10/2023	N	EM09	UMCf	76.6 - 86.6	<0.0941	<0.118	<0.128	0.375 J	<0.129	<0.605	<0.128	<0.116	<0.192	531

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B
						Benzene	Bromobenzene	Bromochloro-methane	Bromodichloro-methane	Bromoform	Bromomethane	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-05I	6/15/2023	N	EM10	UMCf	76.6 - 86.6	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	415 J+
U4-MW-05I	7/17/2023	N	EM11	UMCf	76.6 - 86.6	<0.0941	<0.118	<0.128	3.26	1.21	<0.605	0.471 J	<0.116	<0.192	1,830
U4-MW-05I	8/14/2023	N	EM12	UMCf	76.6 - 86.6	<4.71	<5.90	<6.40	<6.80	<6.45	<30.3	<6.40	<5.80	<9.60	1,620
U4-MW-05I	9/13/2023	N	EM13	UMCf	76.6 - 86.6	<0.0941	<0.118	<0.128	1.72	0.525 J	<0.605	0.192 J	<0.116	<0.192	985
U4-MW-05I	10/18/2023	N	EM14	UMCf	76.6 - 86.6	<4.71	<5.90	<6.40	<6.80	<6.45	<30.3	<6.40	<5.80	<9.60	920
U4-MW-05I	11/15/2023	N	EM15	UMCf	76.6 - 86.6	<4.71	<5.90	<6.40	<6.80	<6.45	<30.3	<6.40	<5.80	<9.60	1,310
U4-MW-05I	12/12/2023	N	EM16	UMCf	76.6 - 86.6	<0.0941	<0.118	<0.128	2.15	0.759 J	<0.605	<0.128	<0.116	<0.192	1,800 J+
U4-MW-06D	4/19/2022	N	BL02	UMCf	97.1 - 107.1	<0.0941	<0.118	<0.128	10.0	5.10	<0.605	<0.128	<0.116	<0.192	4,840
U4-MW-06D	2/15/2023	N	EM06	UMCf	97.1 - 107.1	<4.71	<5.90	<6.40	<6.80	<6.45	<30.3	<6.40	<5.80	<9.60	2,110
U4-MW-06D	3/21/2023	N	EM07	UMCf	97.1 - 107.1	<0.0941	<0.118	<0.128	6.74	1.89	<0.605	<0.128	<0.116	<0.192	2,440 J+
U4-MW-06D	6/16/2023	N	EM10	UMCf	97.1 - 107.1	<0.0941	<0.118	<0.128	4.96	1.48	<0.605	1.13	<0.116	<0.192	1,920
U4-MW-06D	9/13/2023	N	EM13	UMCf	97.1 - 107.1	<0.0941	<0.118	<0.128	3.65	0.843 J	<0.605	<0.128	<0.116	<0.192	1,650
U4-MW-06D	12/13/2023	N	EM16	UMCf	97.1 - 107.1	<0.0941	<0.118	<0.128	4.15	1.63	<0.605	<0.128	<0.116	<0.192	1,950
U4-MW-06I	4/19/2022	N	BL02	UMCf	76.5 - 86.5	0.128 J	<0.118	<0.128	0.674 J	0.297 J	<0.605	<0.128	<0.116	<0.192	217
U4-MW-06I	3/14/2023	N	EM07	UMCf	76.5 - 86.5	<0.0941	<0.118	<0.128	7.41	4.03	<0.605	1.67	<0.116	<0.192	3,220
U4-MW-06I	6/16/2023	N	EM10	UMCf	76.5 - 86.5	<0.0941	<0.118	<0.128	6.36	2.39	<0.605	1.75	<0.116	<0.192	2,420
U4-MW-06I	9/12/2023	N	EM13	UMCf	76.5 - 86.5	<4.71	<5.90	<6.40	<6.80	<6.45	<30.3	<6.40	<5.80	<9.60	2,620
U4-MW-06I	12/12/2023	N	EM16	UMCf	76.5 - 86.5	<0.0941	<0.118	<0.128	6.15	2.38	<0.605	<0.128	<0.116	<0.192	2,770 J+
U4-MW-07D	4/15/2022	N	BL02	UMCf	96.8 - 106.5	<0.0941	<0.118	<0.128	1.13	0.515 J	<0.605	0.461 J	0.137 J	<0.192	1,330
U4-MW-07D	10/12/2022	N	EM02	UMCf	96.8 - 106.5	<0.0941	<0.118	<0.128	3.77	0.211 J	<0.605	0.373 J	<0.116	<0.192	113
U4-MW-07D	10/12/2022	FD	EM02	UMCf	96.8 - 106.5	<0.0941	<0.118	<0.128	2.98	0.201 J	<0.605	<0.128	<0.116	<0.192	95.5
U4-MW-07D	11/3/2022	N	EM03	UMCf	96.8 - 106.5	<0.0941	<0.118	<0.128	3.76	0.280 J	<0.605	<0.128	<0.116	<0.192	146
U4-MW-07D	12/7/2022	N	EM04	UMCf	96.8 - 106.5	<0.0941	<0.118	<0.128	3.77	0.338 J	<0.605	<0.128	<0.116	<0.192	101
U4-MW-07D	1/11/2023	N	EM05	UMCf	96.8 - 106.5	<0.0941	<0.118	<0.128	2.84	<0.129	<0.605	<0.128	<0.116	<0.192	119
U4-MW-07D	2/14/2023	N	EM06	UMCf	96.8 - 106.5	<0.0941	<0.118	<0.128	1.38	<0.129	<0.605	<0.128	<0.116	<0.192	92.3
U4-MW-07D	3/16/2023	N	EM07	UMCf	96.8 - 106.5	<0.0941	<0.118	<0.128	1.21	<0.129	<0.605	<0.128	<0.116	<0.192	75.1
U4-MW-07D	4/21/2023	N	EM08	UMCf	96.8 - 106.5	<0.0941	<0.118	<0.128	0.461 J	<0.129	<0.605	<0.128	<0.116	<0.192	267 J+
U4-MW-07D	5/11/2023	N	EM09	UMCf	96.8 - 106.5	<0.0941	<0.118	0.361 J	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	98.3
U4-MW-07D	6/13/2023	N	EM10	UMCf	96.8 - 106.5	<0.0941 UJ	<0.118 UJ	<0.128 UJ	0.363 J	0.563 J	<0.605 UJ	<0.128 UJ	<0.116 UJ	<0.192 UJ	205 J
U4-MW-07D	7/17/2023	N	EM11	UMCf	96.8 - 106.5	<0.0941	<0.118	<0.128	3.88	1.52	<0.605	1.31	<0.116	<0.192	2,740
U4-MW-07D	8/11/2023	N	EM12	UMCf	96.8 - 106.5	<0.0941	<0.118	<0.128	3.93	<0.129	<0.605	<0.128	<0.116	<0.192	3,100
U4-MW-07D	9/13/2023	N	EM13	UMCf	96.8 - 106.5	<0.0941	<0.118	<0.128	2.06	0.654 J	<0.605	0.698 J	<0.116	<0.192	1,940
U4-MW-07D	10/18/2023	N	EM14	UMCf	96.8 - 106.5	<9.41	<11.8	<12.8	<13.6	<12.9	<60.5	<12.8	<11.6	<19.2	2,400
U4-MW-07D	11/16/2023	N	EM15	UMCf	96.8 - 106.5	<9.41	<11.8	<12.8	<13.6	<12.9	<60.5	<12.8	<11.6	<19.2	2,840
U4-MW-07D	12/12/2023	N	EM16	UMCf	96.8 - 106.5	<0.0941	<0.118	<0.128	<0.136	0.468 J	<0.605	<0.128	<0.116	<0.192	1,590 J+
U4-MW-07I	4/15/2022	N	BL02	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	0.676 J	0.206 J	<0.605	0.313 J	<0.116	<0.192	373
U4-MW-07I	10/12/2022	N	EM02	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	5.11	0.403 J	<0.605	0.425 J	<0.116	<0.192	164
U4-MW-07I	11/3/2022	N	EM03	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	3.61	0.321 J	<0.605	<0.128	<0.116	<0.192	153
U4-MW-07I	12/7/2022	N	EM04	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	4.08	0.353 J	<0.605	<0.128	<0.116	<0.192	129
U4-MW-07I	1/11/2023	N	EM05	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	2.79	0.162 J	<0.605	<0.128	<0.116	<0.192	154
U4-MW-07I	2/15/2023	N	EM06	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	1.57	0.149 J	<0.605	<0.128	<0.116	<0.192	180
U4-MW-07I	3/16/2023	N	EM07	UMCf	76.8 - 86.8	<0.471	<0.590	<0.640	1.40 J	<0.645	<3.03	<0.640	<0.580	<0.960	250
U4-MW-07I	4/21/2023	N	EM08	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	1.82	0.262 J	<0.605	0.333 J	<0.116	<0.192	578 J+
U4-MW-07I	5/11/2023	N	EM09	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	344
U4-MW-07I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<0.471	<0.590	<0.640	<0.680	<0.645	<3.03	<0.640	<0.580	<0.960	131
U4-MW-07I	7/17/2023	N	EM11	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	2.26	0.574 J	<0.605	<0.128	<0.116	<0.192	2,180
U4-MW-07I	8/11/2023	N	EM12	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	2.01	<0.129	<0.605	<0.128	<0.116	<0.192	1,730
U4-MW-07I	9/13/2023	N	EM13	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	1.68	0.394 J	<0.605	<0.128	<0.116	<0.192	1,600
U4-MW-07I	10/18/2023	N	EM14	UMCf	76.8 - 86.8	<4.71	<5.90	<6.40	<6.80	<6.45	<30.3	<6.40	<5.80	<9.60	1,370
U4-MW-07I	11/16/2023	N	EM15	UMCf	76.8 - 86.8	<4.71	<5.90	<6.40	<6.80	<6.45	<30.3	<6.40	<5.80	<9.60	1,750
U4-MW-07I	12/11/2023	N	EM16	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	<0.136	0.663 J	<0.605	<0.128	<0.116	<0.192	1,880

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B
						Benzene	Bromobenzene	Bromochloro-methane	Bromodichloro-methane	Bromoform	Bromomethane	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-08D	4/13/2022	N	BL02	UMCf	98.6 - 108.6	<0.0941	<0.118	<0.128	<0.136	0.452 J	<0.605	<0.128	<0.116	<0.192	10,300 J+
U4-MW-08D	12/7/2022	N	EM04	UMCf	98.6 - 108.6	<0.0941	<0.118	<0.128	3.42	0.921 J	<0.605	1.85	<0.116	<0.192	4,240
U4-MW-08D	3/17/2023	N	EM07	UMCf	98.6 - 108.6	<9.41	<11.8	<12.8	<13.6	<12.9	<60.5	<12.8	<11.6	<19.2	4,220
U4-MW-08D	6/13/2023	N	EM10	UMCf	98.6 - 108.6	<0.0941	<0.118	<0.128	2.36	0.768 J	<0.605	<0.128	<0.116	<0.192	5,060
U4-MW-08D	9/13/2023	N	EM13	UMCf	98.6 - 108.6	<0.0941	<0.118	<0.128	5.95	1.99	<0.605	3.03	<0.116	<0.192	7,970
U4-MW-08D	12/11/2023	N	EM16	UMCf	98.6 - 108.6	<0.0941	<0.118	<0.128	<0.136	1.41	<0.605	<0.128	<0.116	<0.192	6,060
U4-MW-08DD	4/20/2022	N	BL02	UMCf	119.8 - 129.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	90.2
U4-MW-08DD	4/20/2022	FD	BL02	UMCf	119.8 - 129.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	85.4
U4-MW-08DD	12/8/2022	N	EM04	UMCf	119.8 - 129.8	0.870 J	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	28.1
U4-MW-08DD	3/15/2023	N	EM07	UMCf	119.8 - 129.8	<0.0941	<0.118	<0.128	0.192 J	<0.129	<0.605	0.251 J	<0.116	<0.192	126
U4-MW-08DD	6/14/2023	N	EM10	UMCf	119.8 - 129.8	<0.0941	<0.118	<0.128	0.148 J	<0.129	<0.605	<0.128	<0.116	<0.192	97.5
U4-MW-08DD	9/14/2023	N	EM13	UMCf	119.8 - 129.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	64.9
U4-MW-08DD	12/14/2023	N	EM16	UMCf	119.8 - 129.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	52.7
U4-MW-08I	4/13/2022	N	BL02	UMCf	78.0 - 88.0	<0.0941	<0.118	<0.128	5.72	2.19	<0.605	2.14	<0.116	<0.192	1,100 J+
U4-MW-08I	12/7/2022	N	EM04	UMCf	78.0 - 88.0	<0.0941	<0.118	<0.128	2.33	1.08	<0.605	1.46	<0.116	<0.192	2,660
U4-MW-08I	12/7/2022	FD	EM04	UMCf	78.0 - 88.0	<0.0941	<0.118	<0.128	2.52	1.14	<0.605	1.40	<0.116	<0.192	2,560
U4-MW-08I	3/17/2023	N	EM07	UMCf	78.0 - 88.0	<4.71	<5.90	<6.40	<6.80	<6.45	<30.3	<6.40	<5.80	<9.60	5,210
U4-MW-08I	6/13/2023	N	EM10	UMCf	78.0 - 88.0	<0.0941	<0.118	<0.128	1.34	0.411 J	<0.605	<0.128	<0.116	<0.192	1,520
U4-MW-08I	9/13/2023	N	EM13	UMCf	78.0 - 88.0	<0.0941	<0.118	<0.128	3.80	0.489 J	<0.605	1.84	<0.116	<0.192	3,410
U4-MW-08I	12/11/2023	N	EM16	UMCf	78.0 - 88.0	<0.0941	<0.118	<0.128	<0.136	1.41	<0.605	<0.128	<0.116	<0.192	4,500 J-
U4-MW-08S	4/15/2022	N	BL02	UMCf	54.9 - 64.9	<0.0941	<0.118	<0.128	0.213 J	<0.129 UJ	<0.605	<0.128	<0.116	<0.192	38.2
U4-MW-08S	12/7/2022	N	EM04	UMCf	54.9 - 64.9	<0.0941	<0.118	<0.128	0.290 J	<0.129	<0.605	<0.128	<0.116	<0.192	15.0
U4-MW-08S	12/7/2022	FD	EM04	UMCf	54.9 - 64.9	<0.0941	<0.118	<0.128	0.275 J	<0.129	<0.605	<0.128	<0.116	<0.192	15.4
U4-MW-08S	3/13/2023	N	EM07	UMCf	54.9 - 64.9	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	0.792 J
U4-MW-08S	3/13/2023	FD	EM07	UMCf	54.9 - 64.9	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	0.964 J
U4-MW-08S	6/13/2023	N	EM10	UMCf	54.9 - 64.9	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	2.78 J
U4-MW-08S	6/13/2023	FD	EM10	UMCf	54.9 - 64.9	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	3.05 J
U4-MW-08S	9/13/2023	N	EM13	UMCf	54.9 - 64.9	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	<0.111
U4-MW-08S	9/13/2023	FD	EM13	UMCf	54.9 - 64.9	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	<0.111
U4-MW-08S	12/14/2023	N	EM16	UMCf	54.9 - 64.9	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	<0.111
U4-MW-08S	12/14/2023	FD	EM16	UMCf	54.9 - 64.9	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	0.174 J
U4-MW-09D	4/14/2022	N	BL02	UMCf	96.9 - 106.9	<0.0941	<0.118	<0.128	1.86	0.936 J	<0.605	0.488 J	<0.116	<0.192	2,940
U4-MW-09D	12/6/2022	N	EM04	UMCf	96.9 - 106.9	<0.941 UJ	<1.18 UJ	<1.28 UJ	3.78 J	<1.29 UJ	<6.05 UJ	2.57 J	<1.16 UJ	<1.92 UJ	602
U4-MW-09D	3/16/2023	N	EM07	UMCf	96.9 - 106.9	<0.941	<1.18	<1.28	<1.36	<1.29	<6.05	<1.28	<1.16	<1.92	525
U4-MW-09D	6/14/2023	N	EM10	UMCf	96.9 - 106.9	<0.0941	<0.118	0.224 J	0.372 J	<0.129	<0.605	<0.128	<0.116	<0.192	360
U4-MW-09D	9/12/2023	N	EM13	UMCf	96.9 - 106.9	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	609 J
U4-MW-09D	12/15/2023	N	EM16	UMCf	96.9 - 106.9	<2.35 UJ	<2.95 UJ	<3.20 UJ	<3.40 UJ	<3.22 UJ	<15.1 UJ	<3.20 UJ	<2.90 UJ	<4.80 UJ	558 J-
U4-MW-09DD	4/14/2022	N	BL02	UMCf	119.8 - 129.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	21.9
U4-MW-09DD	12/6/2022	N	EM04	UMCf	119.8 - 129.8	<0.0941 UJ	<0.118 UJ	<0.128 UJ	<0.136 UJ	<0.129 UJ	<0.605 UJ	<0.128 UJ	<0.116 UJ	<0.192 UJ	12.5
U4-MW-09DD	3/21/2023	N	EM07	UMCf	119.8 - 129.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	15.9 J+
U4-MW-09DD	6/15/2023	N	EM10	UMCf	119.8 - 129.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	12.8
U4-MW-09DD	9/13/2023	N	EM13	UMCf	119.8 - 129.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	24.0
U4-MW-09DD	12/13/2023	N	EM16	UMCf	119.8 - 129.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	21.1 J+
U4-MW-09I	4/14/2022	N	BL02	UMCf	76.8 - 86.8	2.49	<0.118	<0.128	0.516 J	0.526 J	<0.605	0.384 J	<0.116	<0.192	130
U4-MW-09I	12/6/2022	N	EM04	UMCf	76.8 - 86.8	<0.941 UJ	<1.18 UJ	<1.28 UJ	4.46 J	<1.29 UJ	<6.05 UJ	2.97 J	<1.16 UJ	<1.92 UJ	1,150
U4-MW-09I	3/16/2023	N	EM07	UMCf	76.8 - 86.8	<0.941	<1.18	<1.28	2.16 J	<1.29	<6.05	<1.28	<1.16	<1.92	767
U4-MW-09I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<0.941	<0.118	0.185 J	0.718 J	0.136 J	<0.605	<0.128	<0.116	<0.192	501
U4-MW-09I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	849 J
U4-MW-09I	12/15/2023	N	EM16	UMCf	76.8 - 86.8	<2.35 UJ	<2.95 UJ	<3.20 UJ	<3.40 UJ	<3.22 UJ	<15.1 UJ	<3.20 UJ	<2.90 UJ	<4.80 UJ	611 J-
U4-MW-09S	4/14/2022	N	BL02	UMCf	55.3 - 65.3	<0.0941	<0.118	<0.128	0.248 J	<0.129	<0.605	<0.128	<0.116	<0.192	20.3
U4-MW-09S	12/6/2022	N	EM04	UMCf	55.3 - 65.3	<0.0941 UJ	<0.118 UJ	<0.128 UJ	0.450 J	<0.129 UJ	<0.605 UJ	0.464 J	<0.116 UJ	<0.192 UJ	135

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B
						Benzene	Bromobenzene	Bromochloro-methane	Bromodichloro-methane	Bromoform	Bromomethane	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-09S	3/17/2023	N	EM07	UMCf	55.3 - 65.3	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	148
U4-MW-09S	6/15/2023	N	EM10	UMCf	55.3 - 65.3	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	24.2
U4-MW-09S	9/13/2023	N	EM13	UMCf	55.3 - 65.3	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	47.0
U4-MW-09S	12/12/2023	N	EM16	UMCf	55.3 - 65.3	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	785 J+
U4-MW-10D	4/14/2022	N	BL02	UMCf	96.9 - 106.9	<0.0941	<0.118	<0.128	0.213 J	0.477 J	<0.605	<0.128	<0.116	<0.192	316
U4-MW-10D	12/5/2022	N	EM04	UMCf	96.9 - 106.9	<0.0941	<0.118	<0.128	0.138 J	<0.129	<0.605	<0.128	<0.116	<0.192	153
U4-MW-10D	3/17/2023	N	EM07	UMCf	96.9 - 106.9	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	46.5
U4-MW-10D	6/14/2023	N	EM10	UMCf	96.9 - 106.9	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	0.843 J
U4-MW-10D	9/13/2023	N	EM13	UMCf	96.9 - 106.9	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	52.5
U4-MW-10D	12/14/2023	N	EM16	UMCf	96.9 - 106.9	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	25.9
U4-MW-10I	4/14/2022	N	BL02	UMCf	77.1 - 87.1	<0.0941	<0.118	<0.128	0.790 J	0.558 J	<0.605	0.491 J	<0.116	<0.192	695
U4-MW-10I	12/5/2022	N	EM04	UMCf	77.1 - 87.1	<0.0941	<0.118	<0.128	0.387 J	<0.129	<0.605	<0.128	<0.116	<0.192	33.1
U4-MW-10I	3/17/2023	N	EM07	UMCf	77.1 - 87.1	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	180
U4-MW-10I	6/14/2023	N	EM10	UMCf	77.1 - 87.1	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	18.0
U4-MW-10I	9/13/2023	N	EM13	UMCf	77.1 - 87.1	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	30.1
U4-MW-10I	12/14/2023	N	EM16	UMCf	77.1 - 87.1	<0.0941	<0.118	<0.128	0.484 J	<0.129	<0.605	<0.128	<0.116	<0.192	1,400
U4-MW-11D	4/15/2022	N	BL02	UMCf	97.4 - 107.4	<0.0941	<0.118	<0.128	2.44	0.612 J	<0.605	2.22	<0.116	<0.192	5,540
U4-MW-11D	9/26/2022	N	EM01	UMCf	97.4 - 107.4	<4.71	<5.90	<6.40	<6.80	<6.45	<30.3	<6.40	<5.80	<9.60	8,910
U4-MW-11D	10/11/2022	N	EM02	UMCf	97.4 - 107.4	<0.941	<1.18	<1.28	1.68 J	<1.29	<6.05	6.48 J	<1.16	<1.92	6,480
U4-MW-11D	11/1/2022	N	EM03	UMCf	97.4 - 107.4	<4.71	<5.90	<6.40	<6.80	<6.45	<30.3	<6.40	<5.80	<9.60	8,490
U4-MW-11D	12/6/2022	N	EM04	UMCf	97.4 - 107.4	<2.35 UJ	<2.95 UJ	<3.20 UJ	<3.40 UJ	<3.22 UJ	<15.1 UJ	7.62 J	<2.90 UJ	<4.80 UJ	5,290
U4-MW-11D	1/12/2023	N	EM05	UMCf	97.4 - 107.4	<18.8	<23.6	<25.6	<27.2	<25.8	<121	<25.6	<23.2	<38.4	6,580
U4-MW-11D	2/14/2023	N	EM06	UMCf	97.4 - 107.4	<18.8	<23.6	<25.6	<27.2	<25.8	<121	<25.6	<23.2	<38.4	7,100
U4-MW-11D	3/16/2023	N	EM07	UMCf	97.4 - 107.4	<18.8	<23.6	<25.6	<27.2	<25.8	<121	<25.6	<23.2	<38.4	5,710 J+
U4-MW-11D	4/18/2023	N	EM08	UMCf	97.4 - 107.4	<0.471	<0.590	<0.640	1.39 J	<0.645	<3.03	1.30 J	<0.580	<0.960	3,870
U4-MW-11D	5/17/2023	N	EM09	UMCf	97.4 - 107.4	<1.88 UJ	<2.36 UJ	<2.56 UJ	<2.72 UJ	<2.58 UJ	<12.1 UJ	<2.56 UJ	<2.32 UJ	<3.84 UJ	4,000 J-
U4-MW-11D	6/16/2023	N	EM10	UMCf	97.4 - 107.4	<0.0941	<0.118	<0.128	2.37	0.836 J	<0.605	5.26	<0.116	<0.192	6,060
U4-MW-11D	7/14/2023	N	EM11	UMCf	97.4 - 107.4	<0.0941	<0.118	<0.128	1.68	0.712 J	<0.605	1.98	<0.116	<0.192	5,610
U4-MW-11D	8/14/2023	N	EM12	UMCf	97.4 - 107.4	<18.8	<23.6	<25.6 UJ	<27.2	<25.8	<121	<25.6	<23.2	<38.4	6,900
U4-MW-11D	9/13/2023	N	EM13	UMCf	97.4 - 107.4	<0.0941	<0.118	<0.128	1.87	0.509 J	<0.605	1.98	<0.116	<0.192	5,440
U4-MW-11D	10/18/2023	N	EM14	UMCf	97.4 - 107.4	<18.8	<23.6	<25.6	<27.2	<25.8	<121	<25.6	<23.2	<38.4	3,100
U4-MW-11D	11/16/2023	N	EM15	UMCf	97.4 - 107.4	<4.71	<5.90	<6.40	<6.80	<6.45	<30.3	<6.40	<5.80	<9.60	4,930
U4-MW-11D	12/13/2023	N	EM16	UMCf	97.4 - 107.4	<0.0941	<0.118	0.407 J	1.26	0.411 J	<0.605	1.78	<0.116	<0.192	4,440
U4-MW-11I	4/14/2022	N	BL02	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	0.588 J	0.503 J	<0.605	0.593 J	<0.116	<0.192	704
U4-MW-11I	9/26/2022	N	EM01	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	0.397 J	<0.129	<0.605	<0.128	<0.116	<0.192	287
U4-MW-11I	9/26/2022	FD	EM01	UMCf	77.0 - 87.0	<0.0941	<0.118	0.663 J	0.336 J	<0.129	<0.605	<0.128	<0.116	<0.192	273
U4-MW-11I	10/10/2022	N	EM02	UMCf	77.0 - 87.0	<0.941	<1.18	<1.28	<1.36	<1.29	<6.05	<1.28	<1.16	<1.92	203
U4-MW-11I	10/10/2022	FD	EM02	UMCf	77.0 - 87.0	<0.0941	<0.118	0.614 J	<0.136	<0.129	<0.605	2.85	<0.116	<0.192	214
U4-MW-11I	10/31/2022	N	EM03	UMCf	77.0 - 87.0	<0.471	<0.590	<0.640	<0.680	<0.645	<3.03	<0.640	<0.580	<0.960	125
U4-MW-11I	10/31/2022	FD	EM03	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	151
U4-MW-11I	12/6/2022	N	EM04	UMCf	77.0 - 87.0	<0.0941 UJ	<0.118 UJ	<0.128 UJ	<0.136 UJ	<0.129 UJ	<0.605 UJ	<0.128 UJ	<0.116 UJ	<0.192 UJ	145
U4-MW-11I	12/6/2022	FD	EM04	UMCf	77.0 - 87.0	<0.0941 UJ	<0.118 UJ	<0.128 UJ	<0.136 UJ	<0.129 UJ	<0.605 UJ	<0.128 UJ	<0.116 UJ	<0.192 UJ	150
U4-MW-11I	1/12/2023	N	EM05	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	27.9
U4-MW-11I	1/12/2023	FD	EM05	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	27.3
U4-MW-11I	2/14/2023	N	EM06	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	0.752 J	0.309 J	<0.605	0.919 J	<0.116	<0.192	1,630
U4-MW-11I	2/14/2023	FD	EM06	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	0.915 J	0.348 J	<0.605	0.717 J	<0.116	<0.192	1,850
U4-MW-11I	3/16/2023	N	EM07	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	0.831 J
U4-MW-11I	3/16/2023	FD	EM07	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	0.889 J
U4-MW-11I	4/18/2023	N	EM08	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	11.5
U4-MW-11I	4/18/2023	FD	EM08	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	11.7
U4-MW-11I	5/19/2023	N	EM09	UMCf	77.0 - 87.0	<0.0941 UJ	<0.118 UJ	<0.128 UJ	<0.136 UJ	<0.129 UJ	<0.605 UJ	<0.128 UJ	<0.116 UJ	<0.192 UJ	16.3 J-

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B
						Benzene	Bromobenzene	Bromochloro-methane	Bromodichloro-methane	Bromoform	Bromomethane	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-11I	5/19/2023	FD	EM09	UMCf	77.0 - 87.0	<0.0941 UJ	<0.118 UJ	<0.128 UJ	<0.136 UJ	<0.129 UJ	<0.605 UJ	<0.128 UJ	<0.116 UJ	<0.192 UJ	16.4 J-
U4-MW-11I	6/15/2023	N	EM10	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	2.45 J
U4-MW-11I	6/15/2023	FD	EM10	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	2.43 J
U4-MW-11I	7/13/2023	N	EM11	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	12.1
U4-MW-11I	7/13/2023	FD	EM11	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	12.2
U4-MW-11I	8/14/2023	N	EM12	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	1,480
U4-MW-11I	8/14/2023	FD	EM12	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	0.672 J	<0.129	<0.605	0.339 J	<0.116	<0.192	2,720
U4-MW-11I	9/13/2023	N	EM13	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	0.695 J	<0.129	<0.605	0.597 J	<0.116	<0.192	2,190
U4-MW-11I	9/13/2023	FD	EM13	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	0.727 J	<0.129	<0.605	0.753 J	<0.116	<0.192	2,110
U4-MW-11I	10/19/2023	N	EM14	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	1.39	0.364 J	<0.605	<0.128	<0.116	<0.192	4,050
U4-MW-11I	10/19/2023	FD	EM14	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	1.54	0.363 J	<0.605	<0.128	<0.116	<0.192	4,000
U4-MW-11I	11/16/2023	N	EM15	UMCf	77.0 - 87.0	<4.71	<5.90	<6.40	<6.80	<6.45	<30.3	<6.40	<5.80	<9.60	2,260
U4-MW-11I	11/16/2023	FD	EM15	UMCf	77.0 - 87.0	<4.71	<5.90	<6.40	<6.80	<6.45	<30.3	<6.40	<5.80	<9.60	2,500
U4-MW-11I	12/13/2023	N	EM16	UMCf	77.0 - 87.0	<0.0941	<0.118	0.183 J	0.587 J	0.160 J	<0.605	<0.128	<0.116	<0.192	2,870
U4-MW-11I	12/13/2023	FD	EM16	UMCf	77.0 - 87.0	<0.0941	<0.118	0.163 J	0.586 J	0.190 J	<0.605	0.215 J	<0.116	<0.192	2,570
U4-MW-12D	4/15/2022	N	BL02	UMCf	97.1 - 107.1	<0.0941	<0.118	<0.128	2.15	0.934 J	<0.605	1.81	<0.116	<0.192	4,690
U4-MW-12D	9/27/2022	N	EM01	UMCf	97.1 - 107.1	<1.88	<2.36	<2.56	<2.72	<2.58	<12.1	<2.56	<2.32	<3.84	4,030 J
U4-MW-12D	10/12/2022	N	EM02	UMCf	97.1 - 107.1	<0.0941	<0.118	<0.128	1.59	0.380 J	<0.605	1.63	<0.116	<0.192	<0.111
U4-MW-12D	11/2/2022	N	EM03	UMCf	97.1 - 107.1	<0.941	<1.18	<1.28	<1.36	<1.29	<6.05	<1.28	<1.16	<1.92	3,140
U4-MW-12D	12/7/2022	N	EM04	UMCf	97.1 - 107.1	<0.0941	<0.118	<0.128	1.96	0.515 J	<0.605	<0.128	<0.116	<0.192	3,560
U4-MW-12D	1/12/2023	N	EM05	UMCf	97.1 - 107.1	<9.41	<11.8	<12.8	<13.6	<12.9	<60.5	<12.8	<11.6	<19.2	3,260
U4-MW-12D	2/15/2023	N	EM06	UMCf	97.1 - 107.1	<9.41	<11.8	<12.8	<13.6	<12.9	<60.5	<12.8	<11.6	<19.2	2,520
U4-MW-12D	3/14/2023	N	EM07	UMCf	97.1 - 107.1	<4.71	<5.90	<6.40	<6.80	<6.45	<30.3	10.0 J	<5.80	<9.60	2,740
U4-MW-12D	4/17/2023	N	EM08	UMCf	97.1 - 107.1	<0.471 UJ	<0.590 UJ	<0.640 UJ	1.50 J	<0.645 UJ	<3.03 UJ	0.770 J	<0.580 UJ	<0.960 UJ	2,760 J-
U4-MW-12D	5/17/2023	N	EM09	UMCf	97.1 - 107.1	<9.41	<11.8	<12.8	<13.6	<12.9	<60.5	<12.8	<11.6	<19.2	3,780
U4-MW-12D	6/16/2023	N	EM10	UMCf	97.1 - 107.1	<0.0941	<0.118	<0.128	1.03	0.258 J	<0.605	1.15	<0.116	<0.192	2,250
U4-MW-12D	7/13/2023	N	EM11	UMCf	97.1 - 107.1	<0.0941	<0.118	<0.128	0.552 J	0.170 J	<0.605	0.522 J	<0.116	<0.192	1,210
U4-MW-12D	8/14/2023	N	EM12	UMCf	97.1 - 107.1	<4.71	<5.90	<6.40	<6.80	<6.45	<30.3	<6.40	<5.80	<9.60	973
U4-MW-12D	9/12/2023	N	EM13	UMCf	97.1 - 107.1	<4.71	<5.90	<6.40	<6.80	<6.45	<30.3	<6.40	<5.80	<9.60	888
U4-MW-12D	10/17/2023	N	EM14	UMCf	97.1 - 107.1	<0.471	<0.590	<0.640	<0.680	<0.645	<3.03	0.821 J	<0.580	<0.960	924
U4-MW-12D	11/15/2023	N	EM15	UMCf	97.1 - 107.1	<0.471	<0.590	<0.640	<0.680	<0.645	<3.03	<0.640	<0.580	<0.960	704
U4-MW-12D	12/12/2023	N	EM16	UMCf	97.1 - 107.1	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	820 J+
U4-MW-12I	4/14/2022	N	BL02	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	1.28	0.688 J	<0.605	0.961 J	<0.116	<0.192	1,670
U4-MW-12I	4/14/2022	FD	BL02	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	1.16	0.609 J	<0.605	0.812 J	<0.116	<0.192	1,640
U4-MW-12I	9/27/2022	N	EM01	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	0.456 J	<0.129	<0.605	0.351 J	<0.116	<0.192	231
U4-MW-12I	10/12/2022	N	EM02	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	0.344 J	<0.129 UJ	<0.605	0.486 J	<0.116	<0.192	194
U4-MW-12I	11/2/2022	N	EM03	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	0.236 J	<0.129	<0.605	<0.128	<0.116	<0.192	182
U4-MW-12I	12/7/2022	N	EM04	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	91.3
U4-MW-12I	12/7/2022	FD	EM04	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	90.0
U4-MW-12I	1/13/2023	N	EM05	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	36.5
U4-MW-12I	2/15/2023	N	EM06	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	36.5
U4-MW-12I	3/13/2023	N	EM07	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	8.18
U4-MW-12I	4/17/2023	N	EM08	UMCf	76.8 - 86.8	<0.0941 UJ	<0.118 UJ	<0.128 UJ	<0.136 UJ	<0.129 UJ	<0.605 UJ	<0.128 UJ	<0.116 UJ	<0.192 UJ	0.265 J
U4-MW-12I	5/17/2023	N	EM09	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	0.714 J
U4-MW-12I	6/16/2023	N	EM10	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	<0.111
U4-MW-12I	7/11/2023	N	EM11	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	0.731 J
U4-MW-12I	8/14/2023	N	EM12	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	0.190 J	<0.116	<0.192	468
U4-MW-12I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	181 J
U4-MW-12I	10/17/2023	N	EM14	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	2.19 J
U4-MW-12I	11/16/2023	N	EM15	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	495
U4-MW-12I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	688 J+

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B
						Benzene	Bromobenzene	Bromochloro-methane	Bromodichloro-methane	Bromoform	Bromomethane	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-13D	4/14/2022	N	BL02	UMCf	98.2 - 108.2	<0.0941	<0.118	<0.128	1.63	0.706 J	<0.605	1.11	<0.116	<0.192	3,460
U4-MW-13D	9/28/2022	N	EM01	UMCf	98.2 - 108.2	<0.941	<1.18	<1.28	<1.36	<1.29	<6.05	<1.28	<1.16	<1.92	1,270
U4-MW-13D	10/11/2022	N	EM02	UMCf	98.2 - 108.2	<0.0941	<0.118	<0.128	0.628 J	<0.129	<0.605	<0.128	<0.116	<0.192	983
U4-MW-13D	11/3/2022	N	EM03	UMCf	98.2 - 108.2	<0.0941	<0.118	<0.128	1.01 J+	0.198 J	<0.605	0.415 J	<0.116	<0.192	1,060
U4-MW-13D	12/7/2022	N	EM04	UMCf	98.2 - 108.2	<0.0941	<0.118	<0.128	1.83	0.233 J	<0.605	<0.128	<0.116	<0.192	874
U4-MW-13D	1/12/2023	N	EM05	UMCf	98.2 - 108.2	<1.88	<2.36	<2.56	<2.72	<2.58	<12.1	<2.56	<2.32	<3.84	837
U4-MW-13D	2/15/2023	N	EM06	UMCf	98.2 - 108.2	<0.0941	<0.118	<0.128	2.28	<0.129	<0.605	<0.128	<0.116	<0.192	729
U4-MW-13D	3/17/2023	N	EM07	UMCf	98.2 - 108.2	<1.88	<2.36	<2.56	<2.72	<2.58	<12.1	<2.56	<2.32	<3.84	687
U4-MW-13D	4/18/2023	N	EM08	UMCf	98.2 - 108.2	<0.0941	<0.118	<0.128	1.62	0.134 J	<0.605	0.223 J	<0.116	<0.192	489
U4-MW-13D	5/17/2023	N	EM09	UMCf	98.2 - 108.2	<1.88	<2.36	<2.56	<2.72	<2.58	<12.1	<2.56	<2.32	<3.84	475
U4-MW-13D	6/15/2023	N	EM10	UMCf	98.2 - 108.2	<0.0941	<0.118	<0.128	1.35	<0.129	<0.605	<0.128	<0.116	<0.192	473
U4-MW-13D	7/12/2023	N	EM11	UMCf	98.2 - 108.2	<0.0941	<0.118	<0.128	1.12	<0.129	<0.605	0.271 J	<0.116	<0.192	447
U4-MW-13D	8/11/2023	N	EM12	UMCf	98.2 - 108.2	<0.0941	<0.118	<0.128	1.19	<0.129	<0.605	0.432 J	<0.116	<0.192	412 J+
U4-MW-13D	9/11/2023	N	EM13	UMCf	98.2 - 108.2	<2.35	<2.95	<3.20	<3.40	<3.22	<15.1	<3.20	<2.90	<4.80	716
U4-MW-13D	10/18/2023	N	EM14	UMCf	98.2 - 108.2	<2.35	<2.95	<3.20	<3.40	<3.22	<15.1	<3.20	<2.90	<4.80	451
U4-MW-13D	11/15/2023	N	EM15	UMCf	98.2 - 108.2	<2.35	<2.95	<3.20	<3.40	<3.22	<15.1	<3.20	<2.90	<4.80	485
U4-MW-13D	12/11/2023	N	EM16	UMCf	98.2 - 108.2	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	761
U4-MW-13I	4/14/2022	N	BL02	UMCf	77.1 - 87.1	<0.0941	<0.118	<0.128	1.18	0.624 J	<0.605	0.865 J	<0.116	<0.192	1,350
U4-MW-13I	9/28/2022	N	EM01	UMCf	77.1 - 87.1	0.157 J	<0.118	<0.128	0.584 J	<0.129	<0.605	0.400 J	<0.116	<0.192	154 J-
U4-MW-13I	10/10/2022	N	EM02	UMCf	77.1 - 87.1	<0.0941	<0.118	<0.128	0.505 J	<0.129	<0.605	0.759 J	<0.116	<0.192	451
U4-MW-13I	11/3/2022	N	EM03	UMCf	77.1 - 87.1	<0.0941	<0.118	<0.128	0.580 J	<0.129	<0.605	0.426 J	<0.116	<0.192	441
U4-MW-13I	12/6/2022	N	EM04	UMCf	77.1 - 87.1	<0.471 UJ	<0.590 UJ	<0.640 UJ	<0.680 UJ	<0.645 UJ	<3.03 UJ	<0.640 UJ	<0.580 UJ	<0.960 UJ	305
U4-MW-13I	1/12/2023	N	EM05	UMCf	77.1 - 87.1	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	236
U4-MW-13I	2/14/2023	N	EM06	UMCf	77.1 - 87.1	0.558 J	<0.590	<0.640	<0.680	<0.645	<3.03	<0.640	<0.580	<0.960	373
U4-MW-13I	3/16/2023	N	EM07	UMCf	77.1 - 87.1	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	133
U4-MW-13I	4/19/2023	N	EM08	UMCf	77.1 - 87.1	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	34.8 J+
U4-MW-13I	5/17/2023	N	EM09	UMCf	77.1 - 87.1	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	38.0
U4-MW-13I	6/15/2023	N	EM10	UMCf	77.1 - 87.1	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	46.7
U4-MW-13I	7/12/2023	N	EM11	UMCf	77.1 - 87.1	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	44.3
U4-MW-13I	8/11/2023	N	EM12	UMCf	77.1 - 87.1	<0.0941	<0.118	<0.128	1.07	<0.129	<0.605	<0.128	<0.116	<0.192	685
U4-MW-13I	9/11/2023	N	EM13	UMCf	77.1 - 87.1	<2.35	<2.95	<3.20	<3.40	<3.22	<15.1	<3.20	<2.90	<4.80	805
U4-MW-13I	10/17/2023	N	EM14	UMCf	77.1 - 87.1	<0.0941	<0.118	<0.128	1.23	0.135 J	<0.605	0.400 J	<0.116	<0.192	904
U4-MW-13I	11/15/2023	N	EM15	UMCf	77.1 - 87.1	<0.0941	<0.118	<0.128	1.17	<0.129	<0.605	0.455 J	<0.116	<0.192	831
U4-MW-13I	12/11/2023	N	EM16	UMCf	77.1 - 87.1	<0.0941	<0.118	<0.128	<0.136	0.159 J	<0.605	<0.128	<0.116	<0.192	1,100
U4-MW-14D	4/13/2022	N	BL02	UMCf	97.3 - 107.3	<0.0941	<0.118	<0.128	0.920 J	0.628 J	<0.605	0.805 J	<0.116	<0.192	110 J
U4-MW-14D	12/6/2022	N	EM04	UMCf	97.3 - 107.3	<0.471 UJ	<0.590 UJ	<0.640 UJ	1.17 J	<0.645 UJ	<3.03 UJ	1.27 J	<0.580 UJ	<0.960 UJ	287
U4-MW-14D	3/16/2023	N	EM07	UMCf	97.3 - 107.3	<0.471	<0.590	<0.640	<0.680	<0.645	<3.03	<0.640	<0.580	<0.960	217 J+
U4-MW-14D	6/15/2023	N	EM10	UMCf	97.3 - 107.3	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	147
U4-MW-14D	9/14/2023	N	EM13	UMCf	97.3 - 107.3	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	120
U4-MW-14D	12/15/2023	N	EM16	UMCf	97.3 - 107.3	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	177
U4-MW-14I	4/14/2022	N	BL02	UMCf	77.3 - 87.3	<0.0941	<0.118	<0.128	0.557 J	0.536 J	<0.605	0.537 J	<0.116	<0.192	157
U4-MW-14I	12/6/2022	N	EM04	UMCf	77.3 - 87.3	<0.471 UJ	<0.590 UJ	<0.640 UJ	<0.680 UJ	<0.645 UJ	<3.03 UJ	1.27 J	<0.580 UJ	<0.960 UJ	212
U4-MW-14I	3/16/2023	N	EM07	UMCf	77.3 - 87.3	<0.471	<0.590	<0.640	<0.680	<0.645	<3.03	<0.640	<0.580	<0.960	229 J+
U4-MW-14I	6/15/2023	N	EM10	UMCf	77.3 - 87.3	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	133
U4-MW-14I	9/14/2023	N	EM13	UMCf	77.3 - 87.3	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	122
U4-MW-14I	12/14/2023	N	EM16	UMCf	77.3 - 87.3	<0.0941	<0.118	<0.128	0.217 J	<0.129	<0.605	<0.128	<0.116	<0.192	233
U4-MW-15D	4/13/2022	N	BL02	UMCf	96.0 - 106.0	<0.0941	<0.118	<0.128	0.402 J	<0.129	<0.605	<0.128	<0.116	<0.192	407 J+
U4-MW-15D	12/5/2022	N	EM04	UMCf	96.0 - 106.0	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	165
U4-MW-15D	3/20/2023	N	EM07	UMCf	96.0 - 106.0	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	114
U4-MW-15D	6/14/2023	N	EM10	UMCf	96.0 - 106.0	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	298
U4-MW-15D	9/13/2023	N	EM13	UMCf	96.0 - 106.0	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	0.136 J	<0.116	<0.192	144

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B
						Benzene	Bromobenzene	Bromochloro-methane	Bromodichloro-methane	Bromoform	Bromomethane	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-15D	12/12/2023	N	EM16	UMCf	96.0 - 106.0	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	92.6
U4-MW-15DD	4/13/2022	N	BL02	UMCf	120.3 - 130.3	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	13.2 J+
U4-MW-15DD	12/5/2022	N	EM04	UMCf	120.3 - 130.3	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	0.237 J
U4-MW-15DD	3/15/2023	N	EM07	UMCf	120.3 - 130.3	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	0.232 J
U4-MW-15DD	6/13/2023	N	EM10	UMCf	120.3 - 130.3	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	0.336 J
U4-MW-15DD	9/14/2023	N	EM13	UMCf	120.3 - 130.3	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	<0.111
U4-MW-15DD	12/13/2023	N	EM16	UMCf	120.3 - 130.3	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	0.329 J
U4-MW-15I	4/12/2022	N	BL02	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	0.609 J	0.428 J	<0.605	0.809 J	<0.116	<0.192	705
U4-MW-15I	12/5/2022	N	EM04	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	0.582 J	<0.129	<0.605	0.371 J	<0.116	<0.192	758
U4-MW-15I	3/17/2023	N	EM07	UMCf	76.8 - 86.8	<1.88	<2.36	<2.56	<2.72	<2.58	<12.1	<2.56	<2.32	<3.84	47.6 J
U4-MW-15I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	4.51 J
U4-MW-15I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	214 J
U4-MW-15I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	643 J+
U4-MW-15S	4/13/2022	N	BL02	UMCf	54.8 - 64.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	9.07 J+
U4-MW-15S	12/5/2022	N	EM04	UMCf	54.8 - 64.8	<2.35	<2.95	<3.20	<3.40	<3.22	<15.1	<3.20	<2.90	<4.80	8.04 J
U4-MW-15S	3/13/2023	N	EM07	UMCf	54.8 - 64.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	<0.111
U4-MW-15S	6/13/2023	N	EM10	UMCf	54.8 - 64.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	0.191 J
U4-MW-15S	9/14/2023	N	EM13	UMCf	54.8 - 64.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	<0.111
U4-MW-15S	12/11/2023	N	EM16	UMCf	54.8 - 64.8	<0.188	<0.236	<0.256	<0.272	<0.258	<1.21	<0.256	<0.232	<0.384	<0.222
U4-MW-16D	4/11/2022	N	BL02	UMCf	96.8 - 106.8	0.261 J	<0.118	<0.128	1.91	0.510 J	<0.605	<0.128	<0.116	<0.192	3,310
U4-MW-16D	12/5/2022	N	EM04	UMCf	96.8 - 106.8	<0.0941	<0.118	<0.128	0.840 J	0.281 J	<0.605	0.646 J	<0.116	<0.192	2,020
U4-MW-16D	3/14/2023	N	EM07	UMCf	96.8 - 106.8	<0.0941	<0.118	<0.128	0.443 J	<0.129	<0.605	<0.128	<0.116	<0.192	1,290
U4-MW-16D	6/13/2023	N	EM10	UMCf	96.8 - 106.8	<0.0941	<0.118	<0.128	1.36	0.366 J	<0.605	<0.128	<0.116	<0.192	3,560
U4-MW-16D	9/15/2023	N	EM13	UMCf	96.8 - 106.8	<0.0941	<0.118	<0.128	0.318 J	<0.129	<0.605	<0.128	<0.116	<0.192	1,470
U4-MW-16D	12/14/2023	N	EM16	UMCf	96.8 - 106.8	<0.0941	<0.118	<0.128	0.255 J	<0.129	<0.605	<0.128	<0.116	<0.192	1,000
U4-MW-16DD	4/12/2022	N	BL02	UMCf	120.8 - 130.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	0.369 J	<0.116	<0.192	121
U4-MW-16DD	12/5/2022	N	EM04	UMCf	120.8 - 130.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	43.7
U4-MW-16DD	3/15/2023	N	EM07	UMCf	120.8 - 130.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	34.8 J+
U4-MW-16DD	6/13/2023	N	EM10	UMCf	120.8 - 130.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	26.8
U4-MW-16DD	9/14/2023	N	EM13	UMCf	120.8 - 130.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	23.2
U4-MW-16DD	12/13/2023	N	EM16	UMCf	120.8 - 130.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	17.4 J+
U4-MW-16I	4/11/2022	N	BL02	UMCf	77.0 - 87.0	0.186 J	<0.118	<0.128	0.794 J	0.154 J	<0.605	<0.128	<0.116	<0.192	424
U4-MW-16I	12/5/2022	N	EM04	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	7.96
U4-MW-16I	12/5/2022	FD	EM04	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	8.00
U4-MW-16I	3/13/2023	N	EM07	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	<0.111
U4-MW-16I	3/13/2023	FD	EM07	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	<0.111
U4-MW-16I	6/12/2023	N	EM10	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	<0.111
U4-MW-16I	6/12/2023	FD	EM10	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	<0.111
U4-MW-16I	9/11/2023	N	EM13	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	1,440
U4-MW-16I	9/11/2023	FD	EM13	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	1,420
U4-MW-16I	12/11/2023	N	EM16	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	<0.136	0.384 J	<0.605	<0.128	<0.116	<0.192	2,280
U4-MW-16I	12/11/2023	FD	EM16	UMCf	77.0 - 87.0	<0.0941	<0.118	<0.128	<0.136	0.347 J	<0.605	<0.128	<0.116	<0.192	2,360
U4-MW-16S	4/12/2022	N	BL02	UMCf	54.8 - 64.8	<0.0941	<0.118	<0.128	0.323 J	<0.129	<0.605	0.365 J	<0.116	<0.192	12.8
U4-MW-16S	4/12/2022	FD	BL02	UMCf	54.8 - 64.8	<0.0941	<0.118	<0.128	0.308 J	<0.129	<0.605	0.346 J	<0.116	<0.192	12.3
U4-MW-16S	12/6/2022	N	EM04	UMCf	54.8 - 64.8	<0.0941 UJ	<0.118 UJ	<0.128 UJ	0.193 J	<0.129 UJ	<0.605 UJ	<0.128 UJ	<0.116 UJ	<0.192 UJ	7.61
U4-MW-16S	3/15/2023	N	EM07	UMCf	54.8 - 64.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	<0.111
U4-MW-16S	6/13/2023	N	EM10	UMCf	54.8 - 64.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	<0.111
U4-MW-16S	9/11/2023	N	EM13	UMCf	54.8 - 64.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	<0.111
U4-MW-16S	12/11/2023	N	EM16	UMCf	54.8 - 64.8	<0.0941	<0.118	<0.128	<0.136	<0.129	<0.605	<0.128	<0.116	<0.192	<0.111 UJ
U4-SLMW	11/10/2022	N	EM03		-	<0.471	<0.590	<0.640	1.60 J	<0.645	<3.03	<0.640	<0.580	<0.960	1.75 J
U4-T3	10/13/2022	N	EM02		-	<0.0941	<0.118	<0.128	4.01	1.87	<0.605	<0.128	<0.116	<0.192	3,720

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B
						Benzene	Bromobenzene	Bromochloro-methane	Bromodichloro-methane	Bromoform	Bromomethane	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-T3	11/3/2022	N	EM03		-	<0.0941	<0.118	<0.128	5.54	2.33	<0.605	2.09	<0.116	<0.192	3,460
U4-T3	12/6/2022	N	EM04		-	<1.88 UJ	<2.36 UJ	<2.56 UJ	3.81 J	<2.58 UJ	<12.1 UJ	6.19 J	<2.32 UJ	<3.84 UJ	2,520
U4-T3	1/9/2023	N	EM05		-	<0.0941	<0.118	<0.128	4.50	1.86	<0.605	1.63	<0.116	<0.192	3,390
U4-T3	2/13/2023	N	EM06		-	<9.41	<11.8	<12.8	<13.6	<12.9	<60.5	<12.8	<11.6	<19.2	3,210
U4-T3	3/13/2023	N	EM07		-	<2.35	<2.95	<3.20	<3.40	<3.22	<15.1	<3.20	<2.90	<4.80	1,410
U4-T3	4/19/2023	N	EM08		-	<0.0941	<0.118	<0.128	1.94	0.640 J	<0.605	0.658 J	<0.116	<0.192	1,150 J+
U4-T3	5/18/2023	N	EM09		-	<0.0941	<0.118	<0.128	1.87	0.557 J	<0.605	<0.128	<0.116	<0.192	1,750
U4-T3	6/12/2023	N	EM10		-	<0.0941	<0.118	<0.128	2.41	0.589 J	<0.605	1.13	<0.116	<0.192	1,720
U4-T3	7/11/2023	N	EM11		-	<0.0941	<0.118	<0.128	1.91	0.716 J	<0.605	0.657 J	<0.116	<0.192	1,490
U4-T3	8/10/2023	N	EM12		-	<0.0941	<0.118	<0.128	1.14	<0.129	<0.605	<0.128	<0.116	<0.192	815
U4-T3	9/11/2023	N	EM13		-	<0.0941	<0.118	<0.128	1.29	<0.129	<0.605	<0.128	<0.116	<0.192	911
U4-T3	10/16/2023	N	EM14		-	<2.35	<2.95	<3.20	<3.40	<3.22	<15.1	<3.20	<2.90	<4.80	618

Notes:

- FD - Field duplicate
- E - Field instrument error.
- 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 low.
- J+ - The result is an estimated quantity, but the result may be biased high.
- N/A - Not Applicable
- mg/L - milligrams per liter
- µg/L - micrograms per liter
- N - Normal field 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
- < - The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
- Not tested.
- M-252 damaged/obstructed when checked on June 14, 2023 and September 14, 2023.

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Diisopropyl Ether (DIPE)	Ethyl Tert-Butyl Ether (ETBE)	Ethylbenzene	Hexachlorobutadiene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
M-247-100	4/20/2022	N	BL02	UMCf	100.5 - 110.5	----	----	----	----	----	----	----	----	----	----
M-249-100	4/20/2022	N	BL02	UMCf	99.6 - 109.6	----	----	----	----	----	----	----	----	----	----
M-251-100	4/19/2022	N	BL02	UMCf	92.5 - 102.5	<0.960	<0.126	<0.111	6.51	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
M-251-100	10/13/2022	N	EM02	UMCf	92.5 - 102.5	<0.960	<0.126	<0.111	3.91	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
M-251-100	11/2/2022	N	EM03	UMCf	92.5 - 102.5	<9.60	<1.26	<1.11	2.27 J	<1.22	<3.74	<1.05	<1.01	<1.37	<3.37
M-251-100	12/8/2022	N	EM04	UMCf	92.5 - 102.5	<0.960	<0.126	<0.111	2.75	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
M-251-100	1/11/2023	N	EM05	UMCf	92.5 - 102.5	<0.960	<0.126	<0.111	2.88	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
M-251-100	2/13/2023	N	EM06	UMCf	92.5 - 102.5	<0.960	<0.126	<0.111	2.53	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337 UJ
M-251-100	3/17/2023	N	EM07	UMCf	92.5 - 102.5	<48.0	<6.30	<5.55	<7.00	<6.10	<18.7	<5.25	<5.05	<6.85	<16.9
M-251-100	4/21/2023	N	EM08	UMCf	92.5 - 102.5	<0.960	<0.126	<0.111	1.95	<0.122	<0.374	<0.105	<0.101	<0.137 UJ	<0.337
M-251-100	5/9/2023	N	EM09	UMCf	92.5 - 102.5	<0.960	<0.126	<0.111	2.31	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
M-251-100	6/14/2023	N	EM10	UMCf	92.5 - 102.5	<48.0	<6.30	<5.55	<7.00	<6.10	<18.7	<5.25	<5.05	<6.85	<16.9
M-251-100	7/14/2023	N	EM11	UMCf	92.5 - 102.5	<0.960	<0.126	<0.111	2.44	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
M-251-100	8/10/2023	N	EM12	UMCf	92.5 - 102.5	<0.960	<0.126	<0.111	1.11	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
M-251-100	9/14/2023	N	EM13	UMCf	92.5 - 102.5	<0.960	<0.126	<0.111	1.36	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
M-251-100	10/19/2023	N	EM14	UMCf	92.5 - 102.5	<0.960	<0.126	<0.111	1.30	<0.122	<18.7	<0.105	<0.101	<0.137	<0.337
M-251-100	11/16/2023	N	EM15	UMCf	92.5 - 102.5	<48.0	<6.30	<5.55	<7.00	<6.10	<18.7	<5.25	<5.05	<6.85	<16.9
M-251-100	12/12/2023	N	EM16	UMCf	92.5 - 102.5	<0.960	<0.126	<0.111	1.40	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
M-251-60	4/18/2022	N	BL02	UMCf	52.3 - 62.3	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
M-251-60	3/15/2023	N	EM07	UMCf	52.3 - 62.3	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
M-251-60	6/14/2023	N	EM10	UMCf	52.3 - 62.3	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
M-251-60	9/14/2023	N	EM13	UMCf	52.3 - 62.3	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
M-251-60	12/11/2023	N	EM16	UMCf	52.3 - 62.3	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
M-252	4/21/2022	N	BL02	UMCf	132.3 - 142.3	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
M-252	3/15/2023	N	EM07	UMCf	132.3 - 142.3	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
M-252	9/19/2023	N	EM13	UMCf	132.3 - 142.3	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
M-252	12/18/2023	N	EM16	UMCf	132.3 - 142.3	<0.960	<0.126	<0.111 UJ	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
M-253-100	4/20/2022	N	BL02	UMCf	100.8 - 110.8	----	----	----	----	----	----	----	----	----	----
M-255-100	4/20/2022	N	BL02	UMCf	100.2 - 110.2	----	----	----	----	----	----	----	----	----	----
U4-E-01D	4/18/2022	N	BL02	UMCf	94.7 - 109.7	<4.80	<0.630	<0.555	4.26 J	<0.610	<1.87	<0.525	<0.505	<0.685	<1.69
U4-E-01D	3/14/2023	N	EM07	UMCf	94.7 - 109.7	<0.960	<0.126	<0.111	2.59	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-011	4/19/2022	N	BL02	UMCf	74.6 - 89.6	<0.960	<0.126	<0.111	0.328 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-011	4/19/2022	FD	BL02	UMCf	74.6 - 89.6	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-011	3/14/2023	N	EM07	UMCf	74.6 - 89.6	<0.960	<0.126	<0.111	0.871 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-011	4/20/2023	N	EM08	UMCf	74.6 - 89.6	<0.960	<0.126	<0.111	0.207 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-011	5/10/2023	N	EM09	UMCf	74.6 - 89.6	<0.960	<0.126	<0.111	0.280 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-011	6/12/2023	N	EM10	UMCf	74.6 - 89.6	<0.960	<0.126	<0.111	0.341 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-011	7/11/2023	N	EM11	UMCf	74.6 - 89.6	<4.80	<0.630	<0.555	<0.700	<0.610	<1.87	<0.525	<0.505	<0.685	<1.69
U4-E-011	8/10/2023	N	EM12	UMCf	74.6 - 89.6	<0.960	<0.126	<0.111	0.907 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-011	9/11/2023	N	EM13	UMCf	74.6 - 89.6	<4.80	<0.630	<0.555	<0.700	<0.610	<1.87	<0.525	<0.505	<0.685	<1.69
U4-E-011	10/16/2023	N	EM14	UMCf	74.6 - 89.6	<0.960	<0.126	<0.111	0.307 J	0.246 J	<0.374	<0.105	<0.101	0.157 J	<0.337
U4-E-011	12/13/2023	N	EM16	UMCf	74.6 - 89.6	<9.60	<1.26	<1.11	<1.40	<1.22	<3.74	<1.05	65.4	<1.37	<3.37
U4-E-02D	4/20/2022	N	BL02	UMCf	94.4 - 109.4	<0.960	<0.126	<0.111	1.39	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-02D	3/14/2023	N	EM07	UMCf	94.4 - 109.4	<0.960	<0.126	<0.111	2.36	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-021	4/18/2022	N	BL02	UMCf	74.4 - 89.4	<0.960	<0.126	<0.111	0.956 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-021	3/14/2023	N	EM07	UMCf	74.4 - 89.4	<0.960	<0.126	<0.111	1.15	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-021	4/20/2023	N	EM08	UMCf	74.4 - 89.4	<0.960	<0.126	<0.111	0.761 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-021	5/11/2023	N	EM09	UMCf	74.4 - 89.4	<0.960	<0.126	<0.111	0.499 J	<0.122 UJ	<0.374	<0.105	3.56	<0.137	<0.337
U4-E-021	6/12/2023	N	EM10	UMCf	74.4 - 89.4	<0.960	<0.126	<0.111	0.297 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-021	7/11/2023	N	EM11	UMCf	74.4 - 89.4	<0.960	<0.126	<0.111	0.232 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-021	8/10/2023	N	EM12	UMCf	74.4 - 89.4	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Diisopropyl Ether (DIPE)	Ethyl Tert-Butyl Ether (ETBE)	Ethylbenzene	Hexachlorobutadiene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-E-02I	9/11/2023	N	EM13	UMCf	74.4 - 89.4	<0.960	<0.126	<0.111	0.179 J	<0.122	<0.374	<0.105	16.6	0.184 J	<0.337
U4-E-02I	10/16/2023	N	EM14	UMCf	74.4 - 89.4	<9.60	<1.26	<1.11	<1.40	<1.22	<3.74	<1.05	<1.01	<1.37	<3.37
U4-E-02I	12/14/2023	N	EM16	UMCf	74.4 - 89.4	<9.60	2.42 J	<1.11	<1.40	<1.22	<3.74	<1.05	115	<1.37	<3.37
U4-E-03D	4/19/2022	N	BL02	UMCf	95.1 - 110.1	<0.960	<0.126	<0.111	4.96	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-03D	10/13/2022	N	EM02	UMCf	95.1 - 110.1	<192	<25.2	<22.2	<28.0	<24.4	<74.8	<21.0	<20.2	<27.4	<67.4
U4-E-03D	11/3/2022	N	EM03	UMCf	95.1 - 110.1	<0.960	<0.126	<0.111	5.14 J+	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-03D	12/6/2022	N	EM04	UMCf	95.1 - 110.1	<19.2 UJ	<2.52 UJ	<2.22 UJ	3.45 J	<2.44 UJ	<7.48 UJ	<2.10 UJ	<2.02 UJ	<2.74 UJ	<6.74 UJ
U4-E-03D	1/9/2023	N	EM05	UMCf	95.1 - 110.1	<0.960	<0.126	<0.111	3.66	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-03D	2/13/2023	N	EM06	UMCf	95.1 - 110.1	<96.0	<12.6	<11.1	<14.0	<12.2	<37.4	<10.5	<10.1	<13.7	<33.7
U4-E-03D	3/13/2023	N	EM07	UMCf	95.1 - 110.1	<96.0	<12.6	<11.1	<14.0	<12.2	<37.4	<10.5	<10.1	<13.7	<33.7
U4-E-03D	3/14/2023	N	EM07	UMCf	95.1 - 110.1	<192	<25.2	<22.2	<28.0	<24.4	<74.8	<21.0	<20.2	<27.4	<67.4
U4-E-03D	4/19/2023	N	EM08	UMCf	95.1 - 110.1	<4.80	<0.630	<0.555	1.97 J	<0.610	<1.87	<0.525	<0.505	<0.685	<1.69
U4-E-03D	5/11/2023	N	EM09	UMCf	95.1 - 110.1	<0.960	<0.126	<0.111	1.55 J-	<0.122 UJ	<0.374	<0.105	0.730 J	<0.137	<0.337
U4-E-03D	6/12/2023	N	EM10	UMCf	95.1 - 110.1	<0.960	<0.126	<0.111	2.21	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-03D	7/11/2023	N	EM11	UMCf	95.1 - 110.1	<0.960	<0.126	<0.111	2.15	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-03D	8/10/2023	N	EM12	UMCf	95.1 - 110.1	<0.960	<0.126	<0.111	1.92	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-03D	9/11/2023	N	EM13	UMCf	95.1 - 110.1	<0.960	<0.126	<0.111	2.11	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-03D	10/16/2023	N	EM14	UMCf	95.1 - 110.1	<192	<25.2	<22.2	<28.0	<24.4	<74.8	<21.0	<20.2	<27.4	<67.4
U4-E-04D	4/19/2022	N	BL02	UMCf	95.0 - 110.0	<0.960	<0.126	<0.111	0.812 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-04D	3/14/2023	N	EM07	UMCf	95.0 - 110.0	<0.960	<0.126	<0.111	2.85	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-04I	4/18/2022	N	BL02	UMCf	75.0 - 90.0	<0.960	<0.126	<0.111	0.141 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-04I	3/14/2023	N	EM07	UMCf	75.0 - 90.0	<48.0	<6.30	<5.55	<7.00	<6.10	<18.7	<5.25	<5.05	<6.85	<16.9
U4-E-05D	4/19/2022	N	BL02	UMCf	95.0 - 110.0	<0.960	<0.126	<0.111	2.06	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-05D	3/16/2023	N	EM07	UMCf	95.0 - 110.0	<0.960	<0.126	<0.111	0.449 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-05I	4/19/2022	N	BL02	UMCf	75.0 - 90.0	<0.960	<0.126	<0.111	0.948 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-05I	3/15/2023	N	EM07	UMCf	75.0 - 90.0	<0.960 UJ	<0.126 UJ	<0.111 UJ	1.53 J-	<0.122 UJ	<0.374 UJ	<0.105 UJ	<0.101 UJ	<0.137 UJ	<0.337 UJ
U4-E-06D	4/11/2022	N	BL02	UMCf	95.1 - 110.1	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-06I	4/11/2022	N	BL02	UMCf	73.2 - 88.2	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-06I	4/11/2022	FD	BL02	UMCf	73.2 - 88.2	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-06I	10/12/2022	N	EM02	UMCf	73.2 - 88.2	<0.960	<0.126	<0.111	0.447 J	<0.122	<0.374	<0.105	4.56	<0.137	<0.337
U4-E-06I	11/3/2022	N	EM03	UMCf	73.2 - 88.2	<0.960	<0.126	<0.111	0.414 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-06I	12/6/2022	N	EM04	UMCf	73.2 - 88.2	<9.60 UJ	<1.26 UJ	<1.11 UJ	<1.40 UJ	<1.22 UJ	<3.74 UJ	<1.05 UJ	<1.01 UJ	<1.37 UJ	<3.37 UJ
U4-E-06I	1/9/2023	N	EM05	UMCf	73.2 - 88.2	<0.960	<0.126	<0.111	0.412 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-06I	2/13/2023	N	EM06	UMCf	73.2 - 88.2	<96.0	<12.6	<11.1	<14.0	<12.2	<37.4	<10.5	<10.1	<13.7	<33.7
U4-E-06I	3/13/2023	N	EM07	UMCf	73.2 - 88.2	<19.2	<2.52	<2.22	<2.80	<2.44	<7.48	<2.10	7.88 J	<2.74	<6.74
U4-E-06I	4/17/2023	N	EM08	UMCf	73.2 - 88.2	<19.2	<2.52	<2.22	<2.80	<2.44	<7.48	<2.10	<2.02	<2.74	<6.74
U4-E-06I	5/15/2023	N	EM09	UMCf	73.2 - 88.2	<24.0	<3.15	<2.78	<3.50	<3.05	<9.35	<2.63	<2.53	<3.43	<8.43
U4-E-06I	6/12/2023	N	EM10	UMCf	73.2 - 88.2	<0.960	<0.126	<0.111	0.486 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-06I	7/11/2023	N	EM11	UMCf	73.2 - 88.2	<0.960	<0.126	<0.111	0.449 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-06I	8/11/2023	N	EM12	UMCf	73.2 - 88.2	<4.80	<0.630	<0.555	<0.700	<0.610	<1.87	<0.525	<0.505	<0.685	<1.69
U4-E-06I	9/11/2023	N	EM13	UMCf	73.2 - 88.2	<0.960	<0.126	<0.111	0.340 J	<0.122	<0.374	<0.105	7.88	<0.137	<0.337
U4-E-06I	10/16/2023	N	EM14	UMCf	73.2 - 88.2	<48.0	<6.30	<5.55	<7.00	<6.10	<18.7	<5.25	<5.05	<6.85	<16.9
U4-E-06I	12/13/2023	N	EM16	UMCf	73.2 - 88.2	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	19.1	<0.137	<0.337
U4-E-07D	4/12/2022	N	BL02	UMCf	94.6 - 109.6	<0.960	<0.126	<0.111	1.08	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-07I	4/12/2022	N	BL02	UMCf	74.7 - 89.7	<0.960	<0.126	<0.111	0.715 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-07I	10/11/2022	N	EM02	UMCf	74.7 - 89.7	<9.60	<1.26	<1.11	<1.40	<1.22	<3.74	<1.05	<1.01	<1.37	<3.37
U4-E-07I	11/3/2022	N	EM03	UMCf	74.7 - 89.7	<0.960	<0.126	<0.111	2.14 J+	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-07I	12/6/2022	N	EM04	UMCf	74.7 - 89.7	<24.0 UJ	<3.15 UJ	<2.78 UJ	<3.50 UJ	<3.05 UJ	<9.35 UJ	<2.63 UJ	<2.53 UJ	<3.43 UJ	<8.43 UJ
U4-E-07I	1/9/2023	N	EM05	UMCf	74.7 - 89.7	<0.960	<0.126	<0.111	2.24	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-07I	2/13/2023	N	EM06	UMCf	74.7 - 89.7	<96.0	<12.6	<11.1	<14.0	<12.2	<37.4	<10.5	<10.1	<13.7	<33.7
U4-E-07I	3/13/2023	N	EM07	UMCf	74.7 - 89.7	<96.0	<12.6	<11.1	<14.0	<12.2	<37.4	<10.5	<10.1	<13.7	<33.7

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Diisopropyl Ether (DIPE)	Ethyl Tert-Butyl Ether (ETBE)	Ethylbenzene	Hexachlorobutadiene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-E-07I	4/19/2023	N	EM08	UMCf	74.7 - 89.7	<4.80	<0.630	<0.555	1.67 J	<0.610	<1.87	<0.525	<0.505	<0.685	<1.69
U4-E-07I	5/15/2023	N	EM09	UMCf	74.7 - 89.7	<96.0	<12.6	<11.1	<14.0	<12.2	<37.4	<10.5	<10.1	<13.7	<33.7
U4-E-07I	6/12/2023	N	EM10	UMCf	74.7 - 89.7	<0.960	<0.126	<0.111	1.15	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-07I	7/11/2023	N	EM11	UMCf	74.7 - 89.7	<0.960	<0.126	<0.111	1.07	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-07I	8/11/2023	N	EM12	UMCf	74.7 - 89.7	<4.80	<0.630	<0.555	<0.700	<0.610	<1.87	<0.525	<0.505	<0.685	<1.69
U4-E-07I	9/11/2023	N	EM13	UMCf	74.7 - 89.7	<0.960	<0.126	<0.111	1.30	<0.122	<0.374	<0.105	0.286 J	<0.137	<0.337
U4-E-07I	10/16/2023	N	EM14	UMCf	74.7 - 89.7	<96.0	<12.6	<11.1	<14.0	<12.2	<37.4	<10.5	<10.1	<13.7	<33.7
U4-E-07I	12/13/2023	N	EM16	UMCf	74.7 - 89.7	<0.960	<0.126	<0.111	1.09	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-08D	4/12/2022	N	BL02	UMCf	94.6 - 109.6	<0.960	<0.126	<0.111	1.00 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-08D	10/11/2022	N	EM02	UMCf	94.6 - 109.6	<9.60	<1.26	<1.11	<1.40	<1.22	<3.74	<1.05	<1.01	<1.37	<3.37
U4-E-08D	11/3/2022	N	EM03	UMCf	94.6 - 109.6	<0.960	<0.126	<0.111	0.768 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-08D	12/6/2022	N	EM04	UMCf	94.6 - 109.6	<24.0 UJ	<3.15 UJ	<2.78 UJ	<3.50 UJ	<3.05 UJ	<9.35 UJ	<2.63 UJ	<2.53 UJ	<3.43 UJ	<8.43 UJ
U4-E-08D	1/9/2023	N	EM05	UMCf	94.6 - 109.6	<0.960	<0.126	<0.111	0.743 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-08D	2/13/2023	N	EM06	UMCf	94.6 - 109.6	<96.0	<12.6	<11.1	<14.0	<12.2	<37.4	<10.5	<10.1	<13.7	<33.7
U4-E-08D	3/13/2023	N	EM07	UMCf	94.6 - 109.6	<96.0	<12.6	<11.1	<14.0	<12.2	<37.4	<10.5	<10.1	<13.7	<33.7
U4-E-08D	4/19/2023	N	EM08	UMCf	94.6 - 109.6	<4.80	<0.630	<0.555	<0.700	<0.610	<1.87	<0.525	<0.505	<0.685	<1.69
U4-E-08D	5/17/2023	N	EM09	UMCf	94.6 - 109.6	<96.0	<12.6	<11.1	<14.0	<12.2	<37.4	<10.5	<10.1	<13.7	<33.7
U4-E-08D	6/12/2023	N	EM10	UMCf	94.6 - 109.6	<0.960	<0.126	<0.111	0.399 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-08D	7/11/2023	N	EM11	UMCf	94.6 - 109.6	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-09D	4/15/2022	N	BL02	UMCf	94.5 - 109.5	<0.960	<0.126	<0.111	0.209 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-09I	4/14/2022	N	BL02	UMCf	74.9 - 89.9	<0.960	<0.126	<0.111	0.576 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-10D	4/13/2022	N	BL02	UMCf	94.5 - 109.5	<0.960	<0.126	<0.111	0.612 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-E-10I	4/13/2022	N	BL02	UMCf	74.2 - 89.2	<0.960	<0.126	<0.111	0.441 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-01D	4/19/2022	N	BL02	UMCf	96.7 - 106.7	<0.960	<0.126	<0.111	0.274 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-01D	2/16/2023	N	EM06	UMCf	96.7 - 106.7	<9.60	<1.26	<1.11	<1.40	<1.22	<3.74	<1.05	<1.01	<1.37	<3.37
U4-MW-01D	3/20/2023	N	EM07	UMCf	96.7 - 106.7	<0.960	<0.126	<0.111	1.08	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-01D	6/13/2023	N	EM10	UMCf	96.7 - 106.7	<0.960	<0.126	<0.111	0.948 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-01D	9/14/2023	N	EM13	UMCf	96.7 - 106.7	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-01D	12/14/2023	N	EM16	UMCf	96.7 - 106.7	<0.960	<0.126	<0.111	0.579 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-01DD	4/19/2022	N	BL02	UMCf	119.9 - 129.9	<0.960	<0.126	<0.111	0.190 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-01DD	4/19/2022	FD	BL02	UMCf	119.9 - 129.9	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-01DD	3/15/2023	N	EM07	UMCf	119.9 - 129.9	<0.960	<0.126	<0.111	0.307 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-01DD	6/13/2023	N	EM10	UMCf	119.9 - 129.9	<0.960	<0.126	<0.111	0.722 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-01DD	9/14/2023	N	EM13	UMCf	119.9 - 129.9	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-01DD	12/15/2023	N	EM16	UMCf	119.9 - 129.9	<4.80	<0.630	<0.555	<0.700	<0.610	<1.87	<0.525	<0.505	<0.685	<1.69
U4-MW-01I	4/19/2022	N	BL02	UMCf	76.7 - 86.7	<0.960	<0.126	<0.111	0.259 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-01I	3/20/2023	N	EM07	UMCf	76.7 - 86.7	<0.960	<0.126	<0.111	1.10	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-01I	6/12/2023	N	EM10	UMCf	76.7 - 86.7	<0.960	<0.126	<0.111	0.777 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-01I	9/14/2023	N	EM13	UMCf	76.7 - 86.7	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-01I	12/15/2023	N	EM16	UMCf	76.7 - 86.7	<48.0	<6.30	<5.55	<7.00	<6.10	<18.7	<5.25	<5.05	<6.85	<16.9
U4-MW-01S	4/18/2022	N	BL02	UMCf	54.7 - 64.7	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-01S	3/15/2023	N	EM07	UMCf	54.7 - 64.7	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-01S	6/13/2023	N	EM10	UMCf	54.7 - 64.7	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-01S	9/15/2023	N	EM13	UMCf	54.7 - 64.7	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-01S	12/13/2023	N	EM16	UMCf	54.7 - 64.7	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-02D	4/14/2022	N	BL02	UMCf	95.0 - 110.0	<0.960	<0.126	<0.111	3.00	0.473 J	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-02D	10/11/2022	N	EM02	UMCf	95.0 - 110.0	<0.960	<0.126	<0.111	4.51	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-02D	11/1/2022	N	EM03	UMCf	95.0 - 110.0	<48.0	16.2 J	<5.55	<7.00	<6.10	<18.7	<5.25	<5.05	<6.85	<16.9
U4-MW-02D	12/7/2022	N	EM04	UMCf	95.0 - 110.0	<0.960	<0.126	<0.111	4.53	0.149 J	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-02D	1/10/2023	N	EM05	UMCf	95.0 - 110.0	<0.960	<0.126	<0.111	3.70	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-02D	2/13/2023	N	EM06	UMCf	95.0 - 110.0	<0.960	<0.126	<0.111	3.77	0.157 J	<0.374	<0.105	<0.101	<0.137	<0.337 UJ

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Diisopropyl Ether (DIPE)	Ethyl Tert-Butyl Ether (ETBE)	Ethylbenzene	Hexachlorobutadiene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-02D	3/17/2023	N	EM07	UMCf	95.0 - 110.0	<96.0	<12.6	<11.1	<14.0	<12.2	<37.4	<10.5	<10.1	<13.7	<33.7
U4-MW-02D	4/19/2023	N	EM08	UMCf	95.0 - 110.0	<4.80	<0.630	<0.555	3.33 J	<0.610	<1.87	<0.525	<0.505	<0.685	<1.69
U4-MW-02D	5/9/2023	N	EM09	UMCf	95.0 - 110.0	<4.80	<0.630	<0.555	3.44 J	<0.610	<1.87	<0.525	<0.505	<0.685	<1.69
U4-MW-02D	6/13/2023	N	EM10	UMCf	95.0 - 110.0	<0.960	<0.126	<0.111	2.86	0.148 J	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-02D	7/18/2023	N	EM11	UMCf	95.0 - 110.0	<0.960	<0.126	<0.111	4.13	0.170 J	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-02D	8/14/2023	N	EM12	UMCf	95.0 - 110.0	<240	43.0 J	<27.8	<35.0	<30.5	<93.5	<26.3	<25.3	<34.3	<84.3
U4-MW-02D	9/11/2023	N	EM13	UMCf	95.0 - 110.0	<0.960	<0.126	<0.111	2.71	0.152 J	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-02D	10/19/2023	N	EM14	UMCf	95.0 - 110.0	<0.960	<0.126	<0.111	3.45	<0.122	<37.4	<0.105	<0.101	<0.137	<0.337
U4-MW-02D	11/15/2023	N	EM15	UMCf	95.0 - 110.0	<96.0	<12.6	<11.1	<14.0	<12.2	<37.4	<10.5	<10.1	<13.7	<33.7
U4-MW-02D	12/14/2023	N	EM16	UMCf	95.0 - 110.0	<96.0	59.6 J	<11.1	<14.0	<12.2	<37.4	<10.5	<10.1	<13.7	<33.7
U4-MW-02I	4/14/2022	N	BL02	UMCf	75.0 - 90.0	<0.960	<0.126	<0.111	1.22	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-02I	10/11/2022	N	EM02	UMCf	75.0 - 90.0	<0.960	<0.126	<0.111	1.94	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-02I	11/2/2022	N	EM03	UMCf	75.0 - 90.0	<9.60	<1.26	<1.11	<1.40	<1.22	<3.74	<1.05	<1.01	<1.37	<3.37
U4-MW-02I	11/2/2022	FD	EM03	UMCf	75.0 - 90.0	<9.60	<1.26	<1.11	<1.40	<1.22	<3.74	<1.05	<1.01	<1.37	<3.37
U4-MW-02I	12/8/2022	N	EM04	UMCf	75.0 - 90.0	<0.960	<0.126	<0.111	0.184 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-02I	12/8/2022	FD	EM04	UMCf	75.0 - 90.0	<0.960	<0.126	<0.111	0.426 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-02I	1/13/2023	N	EM05	UMCf	75.0 - 90.0	<9.60	<1.26	<1.11	<1.40	<1.22	<3.74	<1.05	<1.01	<1.37	<3.37
U4-MW-02I	1/13/2023	FD	EM05	UMCf	75.0 - 90.0	<9.60	<1.26	<1.11	<1.40	<1.22	<3.74	<1.05	<1.01	<1.37	<3.37
U4-MW-02I	2/15/2023	N	EM06	UMCf	75.0 - 90.0	<9.60	<1.26	<1.11	4.74 J	<1.22	<3.74	<1.05	<1.01	<1.37	<3.37
U4-MW-02I	2/15/2023	FD	EM06	UMCf	75.0 - 90.0	<9.60	<1.26	<1.11	4.62 J	<1.22	<3.74	<1.05	<1.01	<1.37	<3.37
U4-MW-02I	3/17/2023	N	EM07	UMCf	75.0 - 90.0	<192	<25.2	<22.2	<28.0	<24.4	<74.8	<21.0	<20.2	<27.4	<67.4
U4-MW-02I	3/17/2023	FD	EM07	UMCf	75.0 - 90.0	<192	<25.2	<22.2	<28.0	<24.4	<74.8	<21.0	<20.2	<27.4	<67.4
U4-MW-02I	4/20/2023	N	EM08	UMCf	75.0 - 90.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-02I	4/20/2023	FD	EM08	UMCf	75.0 - 90.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-02I	5/9/2023	N	EM09	UMCf	75.0 - 90.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-02I	5/9/2023	FD	EM09	UMCf	75.0 - 90.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-02I	6/12/2023	N	EM10	UMCf	75.0 - 90.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-02I	6/12/2023	FD	EM10	UMCf	75.0 - 90.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-02I	7/18/2023	N	EM11	UMCf	75.0 - 90.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-02I	7/18/2023	FD	EM11	UMCf	75.0 - 90.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-02I	8/11/2023	N	EM12	UMCf	75.0 - 90.0	<0.960	<0.126	<0.111	0.719 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-02I	8/11/2023	FD	EM12	UMCf	75.0 - 90.0	<0.960	<0.126	<0.111	0.705 J	0.123 J	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-02I	9/11/2023	N	EM13	UMCf	75.0 - 90.0	<0.960	<0.126	<0.111	0.410 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-02I	9/11/2023	FD	EM13	UMCf	75.0 - 90.0	<0.960	<0.126	<0.111	0.669 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-02I	10/19/2023	N	EM14	UMCf	75.0 - 90.0	<0.960 UJ	<0.126 UJ	<0.111 UJ	1.74 J-	<0.122 UJ	<18.7 UJ	<0.105 UJ	<0.101 UJ	<0.137 UJ	<0.337 UJ
U4-MW-02I	10/19/2023	FD	EM14	UMCf	75.0 - 90.0	<0.960	<0.126	<0.111	1.82	0.166 J	<18.7	<0.105	<0.101	<0.137	<0.337
U4-MW-02I	11/15/2023	N	EM15	UMCf	75.0 - 90.0	<48.0	<6.30	<5.55	<7.00	<6.10	<18.7	<5.25	<5.05	<6.85	<16.9
U4-MW-02I	11/15/2023	FD	EM15	UMCf	75.0 - 90.0	<48.0	<6.30	<5.55	<7.00	<6.10	<18.7	<5.25	<5.05	<6.85	<16.9
U4-MW-02I	12/14/2023	N	EM16	UMCf	75.0 - 90.0	<48.0	18.0 J	<5.55	<7.00	<6.10	<18.7	<5.25	<5.05	<6.85	<16.9
U4-MW-02I	12/14/2023	FD	EM16	UMCf	75.0 - 90.0	<48.0	11.3 J	<5.55	<7.00	<6.10	<18.7	<5.25	<5.05	<6.85	<16.9
U4-MW-03D	4/20/2022	N	BL02	UMCf	96.6 - 106.6	<0.960	<0.126	<0.111	0.605 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-03D	2/16/2023	N	EM06	UMCf	96.6 - 106.6	<4.80	<0.630	<0.555	<0.700	<0.610	<1.87	<0.525	<0.505	<0.685	<1.69
U4-MW-03D	3/16/2023	N	EM07	UMCf	96.6 - 106.6	<19.2	<2.52	<2.22	<2.80	<2.44	<7.48	<2.10	<2.02	<2.74	<6.74
U4-MW-03D	3/16/2023	FD	EM07	UMCf	96.6 - 106.6	<4.80	<0.630	<0.555	<0.700	<0.610	<1.87	<0.525	<0.505	<0.685	<1.69
U4-MW-03D	6/15/2023	N	EM10	UMCf	96.6 - 106.6	<0.960	<0.126	<0.111	<0.140	<0.122 UJ	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-03D	9/14/2023	N	EM13	UMCf	96.6 - 106.6	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-03D	12/13/2023	N	EM16	UMCf	96.6 - 106.6	<0.960	<0.126	<0.111	0.789 J	<0.122	<0.374	<0.105	1.85	<0.137	<0.337
U4-MW-03DD	4/20/2022	N	BL02	UMCf	119.7 - 129.7	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-03DD	3/15/2023	N	EM07	UMCf	119.7 - 129.7	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-03DD	6/15/2023	N	EM10	UMCf	119.7 - 129.7	<0.960	<0.126	<0.111	<0.140	<0.122 UJ	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-03DD	9/14/2023	N	EM13	UMCf	119.7 - 129.7	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Diisopropyl Ether (DIPE)	Ethyl Tert-Butyl Ether (ETBE)	Ethylbenzene	Hexachlorobutadiene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-03DD	12/14/2023	N	EM16	UMCf	119.7 - 129.7	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	1.06	<0.137	<0.337
U4-MW-03I	4/19/2022	N	BL02	UMCf	76.6 - 86.6	<0.960	<0.126	<0.111	0.457 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-03I	3/15/2023	N	EM07	UMCf	76.6 - 86.6	<0.960	<0.126	<0.111	1.01	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-03I	6/14/2023	N	EM10	UMCf	76.6 - 86.6	<19.2	<2.52	<2.22	<2.80	<2.44	<7.48	<2.10	<2.02	<2.74	<6.74
U4-MW-03I	6/14/2023	FD	EM10	UMCf	76.6 - 86.6	<24.0	<3.15	<2.78	<3.50	<3.05	<9.35	<2.63	<2.53	<3.43	<8.43
U4-MW-03I	9/11/2023	N	EM13	UMCf	76.6 - 86.6	<0.960	<0.126	<0.111	0.877 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-03I	9/11/2023	FD	EM13	UMCf	76.6 - 86.6	<0.960	<0.126	<0.111	1.00 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-03I	12/13/2023	N	EM16	UMCf	76.6 - 86.6	<0.960	<0.126	<0.111	0.739 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-03I	12/13/2023	FD	EM16	UMCf	76.6 - 86.6	<0.960	<0.126	<0.111	0.817 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-03S	4/18/2022	N	BL02	UMCf	54.5 - 64.5	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-03S	4/18/2022	FD	BL02	UMCf	54.5 - 64.5	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-03S	3/15/2023	N	EM07	UMCf	54.5 - 64.5	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-03S	6/15/2023	N	EM10	UMCf	54.5 - 64.5	<0.960	<0.126	<0.111	<0.140	<0.122 UJ	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-03S	9/14/2023	N	EM13	UMCf	54.5 - 64.5	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-03S	12/13/2023	N	EM16	UMCf	54.5 - 64.5	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-04D	4/19/2022	N	BL02	UMCf	97.0 - 107.0	<0.960	<0.126	<0.111	1.42	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-04D	2/16/2023	N	EM06	UMCf	97.0 - 107.0	<48.0	<6.30	<5.55	<7.00	<6.10	<18.7	<5.25	<5.05	<6.85	<16.9
U4-MW-04D	3/21/2023	N	EM07	UMCf	97.0 - 107.0	<0.960	<0.126	<0.111	0.946 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-04D	6/14/2023	N	EM10	UMCf	97.0 - 107.0	<0.960	<0.126	<0.111	0.643 J	<0.122	<0.374	<0.105	0.126 J	<0.137	<0.337
U4-MW-04D	9/15/2023	N	EM13	UMCf	97.0 - 107.0	<0.960	<0.126	<0.111	0.612 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-04D	12/12/2023	N	EM16	UMCf	97.0 - 107.0	<0.960	<0.126	<0.111	0.499 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-04I	4/19/2022	N	BL02	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	0.749 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-04I	3/20/2023	N	EM07	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	1.06	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-04I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<4.80	<0.630	<0.555	0.810 J	<0.610	<1.87	<0.525	<0.505	<0.685	<1.69
U4-MW-04I	9/14/2023	N	EM13	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-04I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	1.64	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-05D	4/15/2022	N	BL02	UMCf	98.2 - 108.2	<0.960	<0.126	<0.111	7.16	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-05D	10/13/2022	N	EM02	UMCf	98.2 - 108.2	<96.0	<12.6	<11.1	<14.0	<12.2	<37.4	<10.5	<10.1	<13.7	<33.7
U4-MW-05D	11/3/2022	N	EM03	UMCf	98.2 - 108.2	<0.960	<0.126	<0.111	6.10	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-05D	12/7/2022	N	EM04	UMCf	98.2 - 108.2	<0.960	<0.126	<0.111	6.85	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-05D	1/11/2023	N	EM05	UMCf	98.2 - 108.2	<0.960	<0.126	<0.111	5.60	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-05D	2/14/2023	N	EM06	UMCf	98.2 - 108.2	<96.0	<12.6	<11.1	<14.0	<12.2	<37.4	<10.5	<10.1	<13.7	<33.7
U4-MW-05D	3/16/2023	N	EM07	UMCf	98.2 - 108.2	<96.0	<12.6	<11.1	<14.0	<12.2	<37.4	<10.5	<10.1	<13.7	<33.7
U4-MW-05D	4/20/2023	N	EM08	UMCf	98.2 - 108.2	<0.960	<0.126	<0.111	2.41	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-05D	5/10/2023	N	EM09	UMCf	98.2 - 108.2	<0.960	<0.126	<0.111	1.81	0.311 J	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-05D	6/15/2023	N	EM10	UMCf	98.2 - 108.2	<0.960	<0.126	<0.111	1.13	<0.122 UJ	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-05D	7/18/2023	N	EM11	UMCf	98.2 - 108.2	<0.960	<0.126	<0.111	1.41	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-05D	8/14/2023	N	EM12	UMCf	98.2 - 108.2	<24.0	<3.15	<2.78	<3.50	<3.05	<9.35	<2.63	<2.53	<3.43	<8.43
U4-MW-05D	9/12/2023	N	EM13	UMCf	98.2 - 108.2	<24.0	<3.15	<2.78	<3.50	<3.05	<9.35	<2.63	<2.53	<3.43	<8.43
U4-MW-05D	10/18/2023	N	EM14	UMCf	98.2 - 108.2	<24.0	<3.15	<2.78	<3.50	<3.05	<9.35	<2.63	<2.53	<3.43	<8.43
U4-MW-05D	11/16/2023	N	EM15	UMCf	98.2 - 108.2	<24.0	<3.15	<2.78	<3.50	<3.05	<9.35	<2.63	<2.53	<3.43	<8.43
U4-MW-05D	12/14/2023	N	EM16	UMCf	98.2 - 108.2	<24.0	4.69 J	<2.78	<3.50	<3.05	<9.35	<2.63	51.7	<3.43	<8.43
U4-MW-05I	4/15/2022	N	BL02	UMCf	76.6 - 86.6	<0.960	<0.126	<0.111	4.75	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-05I	10/13/2022	N	EM02	UMCf	76.6 - 86.6	<96.0	<12.6	<11.1	<14.0	<12.2	<37.4	<10.5	<10.1	<13.7	<33.7
U4-MW-05I	11/3/2022	N	EM03	UMCf	76.6 - 86.6	<0.960	<0.126	<0.111	7.90	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-05I	12/8/2022	N	EM04	UMCf	76.6 - 86.6	<0.960	<0.126	<0.111	6.57	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-05I	1/11/2023	N	EM05	UMCf	76.6 - 86.6	<96.0	<0.126	<0.111	6.99	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-05I	2/14/2023	N	EM06	UMCf	76.6 - 86.6	<96.0	<12.6	<11.1	<14.0	<12.2	<37.4	<10.5	<10.1	<13.7	<33.7
U4-MW-05I	3/14/2023	N	EM07	UMCf	76.6 - 86.6	<96.0	<12.6	<11.1	<14.0	<12.2	<37.4	<10.5	<10.1	<13.7	<33.7
U4-MW-05I	4/21/2023	N	EM08	UMCf	76.6 - 86.6	<0.960	<0.126	<0.111	0.942 J	0.197 J	<0.374	<0.105	<0.101	<0.137 UJ	<0.337
U4-MW-05I	5/10/2023	N	EM09	UMCf	76.6 - 86.6	<0.960	<0.126	<0.111	<0.140	0.447 J	<0.374	<0.105	<0.101	<0.137	<0.337

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Diisopropyl Ether (DIPE)	Ethyl Tert-Butyl Ether (ETBE)	Ethylbenzene	Hexachlorobutadiene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-05I	6/15/2023	N	EM10	UMCf	76.6 - 86.6	<0.960	<0.126	<0.111	<0.140	<0.122 UJ	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-05I	7/17/2023	N	EM11	UMCf	76.6 - 86.6	<0.960	<0.126	<0.111	1.27	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-05I	8/14/2023	N	EM12	UMCf	76.6 - 86.6	<48.0	8.24 J	<5.55	<7.00	<6.10	<18.7	<5.25	<5.05	<6.85	<16.9
U4-MW-05I	9/13/2023	N	EM13	UMCf	76.6 - 86.6	<0.960	<0.126	<0.111	0.560 J	0.225 J	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-05I	10/18/2023	N	EM14	UMCf	76.6 - 86.6	<48.0	<6.30	<5.55	<7.00	<6.10	<18.7	<5.25	<5.05	<6.85	<16.9
U4-MW-05I	11/15/2023	N	EM15	UMCf	76.6 - 86.6	<48.0	<6.30	<5.55	<7.00	<6.10	<18.7	<5.25	<5.05	<6.85	<16.9
U4-MW-05I	12/12/2023	N	EM16	UMCf	76.6 - 86.6	<0.960	<0.126	<0.111	0.789 J	<0.122	<0.374	<0.105	18.1	<0.137	<0.337
U4-MW-06D	4/19/2022	N	BL02	UMCf	97.1 - 107.1	<0.960	<0.126	<0.111	3.82	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-06D	2/15/2023	N	EM06	UMCf	97.1 - 107.1	<48.0	<6.30	<5.55	<7.00	<6.10	<18.7	<5.25	<5.05	<6.85	<16.9
U4-MW-06D	3/21/2023	N	EM07	UMCf	97.1 - 107.1	<0.960	<0.126	<0.111	2.77	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-06D	6/16/2023	N	EM10	UMCf	97.1 - 107.1	<0.960	<0.126	<0.111	2.12	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-06D	9/13/2023	N	EM13	UMCf	97.1 - 107.1	<0.960	<0.126	<0.111	1.32	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-06D	12/13/2023	N	EM16	UMCf	97.1 - 107.1	<0.960	<0.126	<0.111	1.61	<0.122	<0.374	<0.105	10.3	<0.137	<0.337
U4-MW-06I	4/19/2022	N	BL02	UMCf	76.5 - 86.5	<0.960	<0.126	<0.111	0.273 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-06I	3/14/2023	N	EM07	UMCf	76.5 - 86.5	<0.960	<0.126	<0.111	3.44	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-06I	6/16/2023	N	EM10	UMCf	76.5 - 86.5	<0.960	<0.126	<0.111	2.69	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-06I	9/12/2023	N	EM13	UMCf	76.5 - 86.5	<48.0	<6.30	<5.55	<7.00	<6.10	<18.7	<5.25	<5.05	<6.85	<16.9
U4-MW-06I	12/12/2023	N	EM16	UMCf	76.5 - 86.5	<0.960	<0.126	<0.111	2.54	<0.122	<0.374	<0.105	4.31	<0.137	<0.337
U4-MW-07D	4/15/2022	N	BL02	UMCf	96.8 - 106.5	<0.960	<0.126	<0.111	0.410 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-07D	10/12/2022	N	EM02	UMCf	96.8 - 106.5	<0.960	<0.126	<0.111	2.38	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-07D	10/12/2022	FD	EM02	UMCf	96.8 - 106.5	<0.960	<0.126	<0.111	1.83	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-07D	11/3/2022	N	EM03	UMCf	96.8 - 106.5	<0.960	<0.126	<0.111	2.53 J+	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-07D	12/7/2022	N	EM04	UMCf	96.8 - 106.5	<0.960	<0.126	<0.111	2.25	0.240 J	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-07D	1/11/2023	N	EM05	UMCf	96.8 - 106.5	<0.960	<0.126	<0.111	1.21	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-07D	2/14/2023	N	EM06	UMCf	96.8 - 106.5	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-07D	3/16/2023	N	EM07	UMCf	96.8 - 106.5	<0.960	<0.126	<0.111	0.211 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-07D	4/21/2023	N	EM08	UMCf	96.8 - 106.5	<0.960	<0.126	<0.111	0.146 J	0.125 J	<0.374	<0.105	<0.101	<0.137 UJ	<0.337
U4-MW-07D	5/11/2023	N	EM09	UMCf	96.8 - 106.5	<0.960	<0.126	<0.111	<0.140 UJ	<0.122 UJ	<0.374	<0.105	1.69	<0.137	<0.337
U4-MW-07D	6/13/2023	N	EM10	UMCf	96.8 - 106.5	<0.960 UJ	<0.126 UJ	<0.111 UJ	0.295 J	<0.122 UJ	<0.374 UJ	<0.105 UJ	<0.101 UJ	<0.137 UJ	<0.337 UJ
U4-MW-07D	7/17/2023	N	EM11	UMCf	96.8 - 106.5	<0.960	<0.126	<0.111	1.57	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-07D	8/11/2023	N	EM12	UMCf	96.8 - 106.5	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-07D	9/13/2023	N	EM13	UMCf	96.8 - 106.5	<0.960	<0.126	<0.111	0.754 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-07D	10/18/2023	N	EM14	UMCf	96.8 - 106.5	<96.0	<12.6	<11.1	<14.0	<12.2	<37.4	<10.5	<10.1	<13.7	<33.7
U4-MW-07D	11/16/2023	N	EM15	UMCf	96.8 - 106.5	<96.0	<12.6	<11.1	<14.0	<12.2	<37.4	<10.5	<10.1	<13.7	<33.7
U4-MW-07D	12/12/2023	N	EM16	UMCf	96.8 - 106.5	<0.960	<0.126	<0.111	0.567 J	<0.122	<0.374	<0.105	22.0	<0.137	<0.337
U4-MW-07I	4/15/2022	N	BL02	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	0.189 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-07I	10/12/2022	N	EM02	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	3.22	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-07I	11/3/2022	N	EM03	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	2.52 J+	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-07I	12/7/2022	N	EM04	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	2.47	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-07I	1/11/2023	N	EM05	UMCf	76.8 - 86.8	<4.80	<0.126	<0.111	1.11	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-07I	2/15/2023	N	EM06	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	0.700 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-07I	3/16/2023	N	EM07	UMCf	76.8 - 86.8	<4.80	<0.630	<0.555	<0.700	<0.610	<1.87	<0.525	<0.505	<0.685	<1.69
U4-MW-07I	4/21/2023	N	EM08	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	0.559 J	<0.122	<0.374	<0.105	<0.101	<0.137 UJ	<0.337
U4-MW-07I	5/11/2023	N	EM09	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	7.26	<0.137	<0.337
U4-MW-07I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<4.80	<0.630	<0.555	<0.700	<0.610	<1.87	<0.525	<0.505	<0.685	<1.69
U4-MW-07I	7/17/2023	N	EM11	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-07I	8/11/2023	N	EM12	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-07I	9/13/2023	N	EM13	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	0.511 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-07I	10/18/2023	N	EM14	UMCf	76.8 - 86.8	<48.0	<6.30	<5.55	<7.00	<6.10	<18.7	<5.25	<5.05	<6.85	<16.9
U4-MW-07I	11/16/2023	N	EM15	UMCf	76.8 - 86.8	<48.0	<6.30	<5.55	<7.00	<6.10	<18.7	<5.25	<5.05	<6.85	<16.9
U4-MW-07I	12/11/2023	N	EM16	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	0.760 J	<0.122	<0.374	<0.105	7.52	<0.137	<0.337

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Diisopropyl Ether (DIPE)	Ethyl Tert-Butyl Ether (ETBE)	Ethylbenzene	Hexachlorobutadiene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-08D	4/13/2022	N	BL02	UMCf	98.6 - 108.6	<0.960	<0.126	<0.111	0.370 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-08D	12/7/2022	N	EM04	UMCf	98.6 - 108.6	<0.960	<0.126	<0.111	1.82	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-08D	3/17/2023	N	EM07	UMCf	98.6 - 108.6	<96.0	<12.6	<11.1	<14.0	<12.2	<37.4	<10.5	<10.1	<13.7	<33.7
U4-MW-08D	6/13/2023	N	EM10	UMCf	98.6 - 108.6	<0.960	<0.126	<0.111	0.778 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-08D	9/13/2023	N	EM13	UMCf	98.6 - 108.6	<0.960	<0.126	<0.111	1.83	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-08D	12/11/2023	N	EM16	UMCf	98.6 - 108.6	<0.960	<0.126	<0.111	1.27	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-08DD	4/20/2022	N	BL02	UMCf	119.8 - 129.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-08DD	4/20/2022	FD	BL02	UMCf	119.8 - 129.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-08DD	12/8/2022	N	EM04	UMCf	119.8 - 129.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-08DD	3/15/2023	N	EM07	UMCf	119.8 - 129.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-08DD	6/14/2023	N	EM10	UMCf	119.8 - 129.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-08DD	9/14/2023	N	EM13	UMCf	119.8 - 129.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-08DD	12/14/2023	N	EM16	UMCf	119.8 - 129.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	17.5	<0.137	<0.337
U4-MW-08I	4/13/2022	N	BL02	UMCf	78.0 - 88.0	<0.960	<0.126	<0.111	1.76	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-08I	12/7/2022	N	EM04	UMCf	78.0 - 88.0	<0.960	<0.126	<0.111	1.02	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-08I	12/7/2022	FD	EM04	UMCf	78.0 - 88.0	<0.960	<0.126	<0.111	1.05	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-08I	3/17/2023	N	EM07	UMCf	78.0 - 88.0	<48.0	<6.30	<5.55	<7.00	<6.10	<18.7	<5.25	<5.05	<6.85	<16.9
U4-MW-08I	6/13/2023	N	EM10	UMCf	78.0 - 88.0	<0.960	<0.126	<0.111	0.497 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-08I	9/13/2023	N	EM13	UMCf	78.0 - 88.0	<0.960	<0.126	<0.111	1.34	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-08I	12/11/2023	N	EM16	UMCf	78.0 - 88.0	<0.960	<0.126	<0.111	1.38	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-08S	4/15/2022	N	BL02	UMCf	54.9 - 64.9	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-08S	12/7/2022	N	EM04	UMCf	54.9 - 64.9	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-08S	12/7/2022	FD	EM04	UMCf	54.9 - 64.9	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-08S	3/13/2023	N	EM07	UMCf	54.9 - 64.9	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-08S	3/13/2023	FD	EM07	UMCf	54.9 - 64.9	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-08S	6/13/2023	N	EM10	UMCf	54.9 - 64.9	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-08S	6/13/2023	FD	EM10	UMCf	54.9 - 64.9	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-08S	9/13/2023	N	EM13	UMCf	54.9 - 64.9	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-08S	9/13/2023	FD	EM13	UMCf	54.9 - 64.9	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-08S	12/14/2023	N	EM16	UMCf	54.9 - 64.9	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	37.7	<0.137	<0.337
U4-MW-08S	12/14/2023	FD	EM16	UMCf	54.9 - 64.9	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	40.3	<0.137	<0.337
U4-MW-09D	4/14/2022	N	BL02	UMCf	96.9 - 106.9	<0.960	<0.126	<0.111	0.814 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-09D	12/6/2022	N	EM04	UMCf	96.9 - 106.9	<9.60 UJ	<1.26 UJ	<1.11 UJ	2.99 J	<1.22 UJ	<3.74 UJ	<1.05 UJ	<1.01 UJ	<1.37 UJ	<3.37 UJ
U4-MW-09D	3/16/2023	N	EM07	UMCf	96.9 - 106.9	<9.60	<1.26	<1.11	<1.40	<1.22	<3.74	<1.05	<1.01	<1.37	<3.37
U4-MW-09D	6/14/2023	N	EM10	UMCf	96.9 - 106.9	<0.960	<0.126	<0.111	0.158 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-09D	9/12/2023	N	EM13	UMCf	96.9 - 106.9	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-09D	12/15/2023	N	EM16	UMCf	96.9 - 106.9	<24.0 UJ	<3.15 UJ	<2.78 UJ	<3.50 UJ	<3.05 UJ	<9.35 UJ	<2.63 UJ	<2.53 UJ	4.83 J	<8.43 UJ
U4-MW-09DD	4/14/2022	N	BL02	UMCf	119.8 - 129.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-09DD	12/6/2022	N	EM04	UMCf	119.8 - 129.8	<0.960 UJ	<0.126 UJ	<0.111 UJ	<0.140 UJ	<0.122 UJ	<0.374 UJ	<0.105 UJ	<0.101 UJ	<0.137 UJ	<0.337 UJ
U4-MW-09DD	3/21/2023	N	EM07	UMCf	119.8 - 129.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-09DD	6/15/2023	N	EM10	UMCf	119.8 - 129.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-09DD	9/13/2023	N	EM13	UMCf	119.8 - 129.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-09DD	12/13/2023	N	EM16	UMCf	119.8 - 129.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-09I	4/14/2022	N	BL02	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	0.509 J	<0.122	<0.374	<0.105	<0.101	0.232 J	<0.337
U4-MW-09I	12/6/2022	N	EM04	UMCf	76.8 - 86.8	<9.60 UJ	<1.26 UJ	<1.11 UJ	2.89 J	<1.22 UJ	<3.74 UJ	<1.05 UJ	<1.01 UJ	<1.37 UJ	<3.37 UJ
U4-MW-09I	3/16/2023	N	EM07	UMCf	76.8 - 86.8	<9.60	<1.26	<1.11	<1.40	<1.22	<3.74	<1.05	<1.01	<1.37	<3.37
U4-MW-09I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	0.270 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-09I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-09I	12/15/2023	N	EM16	UMCf	76.8 - 86.8	<24.0 UJ	<3.15 UJ	<2.78 UJ	<3.50 UJ	<3.05 UJ	<9.35 UJ	<2.63 UJ	<2.53 UJ	<3.43 UJ	<8.43 UJ
U4-MW-09S	4/14/2022	N	BL02	UMCf	55.3 - 65.3	<0.960	<0.126	<0.111	0.374 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-09S	12/6/2022	N	EM04	UMCf	55.3 - 65.3	<0.960 UJ	<0.126 UJ	<0.111 UJ	0.224 J	<0.122 UJ	<0.374 UJ	<0.105 UJ	<0.101 UJ	<0.137 UJ	<0.337 UJ

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Diisopropyl Ether (DIPE)	Ethyl Tert-Butyl Ether (ETBE)	Ethylbenzene	Hexachlorobutadiene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-09S	3/17/2023	N	EM07	UMCf	55.3 - 65.3	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-09S	6/15/2023	N	EM10	UMCf	55.3 - 65.3	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-09S	9/13/2023	N	EM13	UMCf	55.3 - 65.3	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-09S	12/12/2023	N	EM16	UMCf	55.3 - 65.3	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	77.0	<0.137	<0.337
U4-MW-10D	4/14/2022	N	BL02	UMCf	96.9 - 106.9	<0.960	<0.126	<0.111	0.400 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-10D	12/5/2022	N	EM04	UMCf	96.9 - 106.9	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-10D	3/17/2023	N	EM07	UMCf	96.9 - 106.9	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	1.61	<0.137	<0.337
U4-MW-10D	6/14/2023	N	EM10	UMCf	96.9 - 106.9	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-10D	9/13/2023	N	EM13	UMCf	96.9 - 106.9	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-10D	12/14/2023	N	EM16	UMCf	96.9 - 106.9	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-10I	4/14/2022	N	BL02	UMCf	77.1 - 87.1	<0.960	<0.126	<0.111	0.460 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-10I	12/5/2022	N	EM04	UMCf	77.1 - 87.1	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-10I	3/17/2023	N	EM07	UMCf	77.1 - 87.1	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-10I	6/14/2023	N	EM10	UMCf	77.1 - 87.1	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-10I	9/13/2023	N	EM13	UMCf	77.1 - 87.1	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-10I	12/14/2023	N	EM16	UMCf	77.1 - 87.1	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-11D	4/15/2022	N	BL02	UMCf	97.4 - 107.4	<0.960	<0.126	<0.111	0.584 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-11D	9/26/2022	N	EM01	UMCf	97.4 - 107.4	<48.0	<6.30	<5.55	<7.00	<6.10	<18.7	<5.25	<5.05	<6.85	<16.9
U4-MW-11D	10/11/2022	N	EM02	UMCf	97.4 - 107.4	<9.60	<1.26	<1.11	<1.40	<1.22	<3.74	<1.05	<1.01	<1.37	<3.37
U4-MW-11D	11/1/2022	N	EM03	UMCf	97.4 - 107.4	<48.0	<6.30	<5.55	<7.00	<6.10	<18.7	<5.25	<5.05	<6.85	<16.9
U4-MW-11D	12/6/2022	N	EM04	UMCf	97.4 - 107.4	<24.0 UJ	<3.15 UJ	<2.78 UJ	<3.50 UJ	<3.05 UJ	<9.35 UJ	<2.63 UJ	<2.53 UJ	<3.43 UJ	<8.43 UJ
U4-MW-11D	1/12/2023	N	EM05	UMCf	97.4 - 107.4	<192	<25.2	<22.2	<28.0	<24.4	<74.8	<21.0	<20.2	<27.4	<67.4
U4-MW-11D	2/14/2023	N	EM06	UMCf	97.4 - 107.4	<192	<25.2	<22.2	<28.0	<24.4	<74.8	<21.0	<20.2	<27.4	<67.4
U4-MW-11D	3/16/2023	N	EM07	UMCf	97.4 - 107.4	<192	<25.2	<22.2	<28.0	<24.4	<74.8	<21.0	<20.2	<27.4	<67.4
U4-MW-11D	4/18/2023	N	EM08	UMCf	97.4 - 107.4	<4.80	<0.630	<0.555	<0.700	<0.610	<1.87	<0.525	<0.505	<0.685	<1.69
U4-MW-11D	5/17/2023	N	EM09	UMCf	97.4 - 107.4	<19.2 UJ	<2.52 UJ	<2.22 UJ	<2.80 UJ	<2.44 UJ	<7.48 UJ	<2.10 UJ	<2.02 UJ	<2.74 UJ	<6.74 UJ
U4-MW-11D	6/16/2023	N	EM10	UMCf	97.4 - 107.4	<0.960	<0.126	<0.111	0.685 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-11D	7/14/2023	N	EM11	UMCf	97.4 - 107.4	<0.960	<0.126	<0.111	0.558 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-11D	8/14/2023	N	EM12	UMCf	97.4 - 107.4	<192	<25.2	<22.2	<28.0	<24.4	<74.8	<21.0	<20.2	78.8 J	<67.4
U4-MW-11D	9/13/2023	N	EM13	UMCf	97.4 - 107.4	<0.960	<0.126	<0.111	0.523 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-11D	10/18/2023	N	EM14	UMCf	97.4 - 107.4	<192	<25.2	<22.2	<28.0	<24.4	<74.8	<21.0	<20.2	<27.4	<67.4
U4-MW-11D	11/16/2023	N	EM15	UMCf	97.4 - 107.4	<48.0	<6.30	<5.55	<7.00	<6.10	<18.7	<5.25	10.4 J	<6.85	<16.9
U4-MW-11D	12/13/2023	N	EM16	UMCf	97.4 - 107.4	<0.960	<0.126	<0.111	0.372 J	<0.122	<0.374	<0.105	15.7	<0.137	<0.337
U4-MW-11I	4/14/2022	N	BL02	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	0.462 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-11I	9/26/2022	N	EM01	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	4.90	<0.137	<0.337
U4-MW-11I	9/26/2022	FD	EM01	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	5.43	<0.137	<0.337
U4-MW-11I	10/10/2022	N	EM02	UMCf	77.0 - 87.0	<9.60	<1.26	<1.11	<1.40	<1.22	<3.74	<1.05	<1.01	<1.37	<3.37
U4-MW-11I	10/10/2022	FD	EM02	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	3.02	<0.137	<0.337
U4-MW-11I	10/31/2022	N	EM03	UMCf	77.0 - 87.0	<4.80	<0.630	<0.555	<0.700	<0.610	<1.87	<0.525	<0.505	<0.685	<1.69
U4-MW-11I	10/31/2022	FD	EM03	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-11I	12/6/2022	N	EM04	UMCf	77.0 - 87.0	<0.960 UJ	<0.126 UJ	<0.111 UJ	<0.140 UJ	<0.122 UJ	<0.374 UJ	<0.105 UJ	<0.101 UJ	<0.137 UJ	<0.337 UJ
U4-MW-11I	12/6/2022	FD	EM04	UMCf	77.0 - 87.0	<0.960 UJ	<0.126 UJ	<0.111 UJ	<0.140 UJ	<0.122 UJ	<0.374 UJ	<0.105 UJ	<0.101 UJ	<0.137 UJ	<0.337 UJ
U4-MW-11I	1/12/2023	N	EM05	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-11I	1/12/2023	FD	EM05	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-11I	2/14/2023	N	EM06	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	0.217 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-11I	2/14/2023	FD	EM06	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	0.214 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-11I	3/16/2023	N	EM07	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-11I	3/16/2023	FD	EM07	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-11I	4/18/2023	N	EM08	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-11I	4/18/2023	FD	EM08	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-11I	5/19/2023	N	EM09	UMCf	77.0 - 87.0	<0.960 UJ	<0.126 UJ	<0.111 UJ	<0.140 UJ	<0.122 UJ	<0.374 UJ	<0.105 UJ	<0.101 UJ	<0.137 UJ	<0.337 UJ

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Diisopropyl Ether (DIPE)	Ethyl Tert-Butyl Ether (ETBE)	Ethylbenzene	Hexachlorobutadiene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-11I	5/19/2023	FD	EM09	UMCf	77.0 - 87.0	<0.960 UJ	<0.126 UJ	<0.111 UJ	<0.140 UJ	<0.122 UJ	<0.374 UJ	<0.105 UJ	<0.101 UJ	<0.137 UJ	<0.337 UJ
U4-MW-11I	6/15/2023	N	EM10	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-11I	6/15/2023	FD	EM10	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-11I	7/13/2023	N	EM11	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-11I	7/13/2023	FD	EM11	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-11I	8/14/2023	N	EM12	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-11I	8/14/2023	FD	EM12	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-11I	9/13/2023	N	EM13	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-11I	9/13/2023	FD	EM13	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-11I	10/19/2023	N	EM14	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	0.345 J	<0.122	<18.7	<0.105	<0.101	<0.137	<0.337
U4-MW-11I	10/19/2023	FD	EM14	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	0.385 J	<0.122	<18.7	<0.105	<0.101	<0.137	<0.337
U4-MW-11I	11/16/2023	N	EM15	UMCf	77.0 - 87.0	<48.0	<6.30	<5.55	<7.00	<6.10	<18.7	<5.25	<5.05	<6.85	<16.9
U4-MW-11I	11/16/2023	FD	EM15	UMCf	77.0 - 87.0	<48.0	<6.30	<5.55	<7.00	<6.10	<18.7	<5.25	<5.05	<6.85	<16.9
U4-MW-11I	12/13/2023	N	EM16	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	0.144 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-11I	12/13/2023	FD	EM16	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	0.157 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-12D	4/15/2022	N	BL02	UMCf	97.1 - 107.1	<0.960	<0.126	<0.111	0.664 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-12D	9/27/2022	N	EM01	UMCf	97.1 - 107.1	<19.2	<2.52	<2.22	<2.80	<2.44	<7.48	<2.10	<2.02	<2.74	<6.74
U4-MW-12D	10/12/2022	N	EM02	UMCf	97.1 - 107.1	<0.960	<0.126	<0.111	0.454 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-12D	11/2/2022	N	EM03	UMCf	97.1 - 107.1	<9.60	<1.26	<1.11	<1.40	<1.22	<3.74	<1.05	<1.01	<1.37	<3.37
U4-MW-12D	12/7/2022	N	EM04	UMCf	97.1 - 107.1	<0.960	<0.126	<0.111	0.535 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-12D	1/12/2023	N	EM05	UMCf	97.1 - 107.1	<96.0	<12.6	<11.1	<14.0	<12.2	<37.4	<10.5	<10.1	<13.7	<33.7
U4-MW-12D	2/15/2023	N	EM06	UMCf	97.1 - 107.1	<96.0	<12.6	<11.1	<14.0	<12.2	<37.4	<10.5	<10.1	<13.7	<33.7
U4-MW-12D	3/14/2023	N	EM07	UMCf	97.1 - 107.1	<48.0	<6.30	<5.55	<7.00	<6.10	<18.7	<5.25	<5.05	<6.85	<16.9
U4-MW-12D	4/17/2023	N	EM08	UMCf	97.1 - 107.1	<4.80 UJ	<0.630 UJ	<0.555 UJ	<0.700 UJ	<0.610 UJ	<1.87 UJ	<0.525 UJ	<0.505 UJ	<0.685 UJ	<1.69 UJ
U4-MW-12D	5/17/2023	N	EM09	UMCf	97.1 - 107.1	<96.0	<12.6	<11.1	<14.0	<12.2	<37.4	<10.5	<10.1	<13.7	<33.7
U4-MW-12D	6/16/2023	N	EM10	UMCf	97.1 - 107.1	<0.960	<0.126	<0.111	0.297 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-12D	7/13/2023	N	EM11	UMCf	97.1 - 107.1	<0.960	<0.126	<0.111	0.176 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-12D	8/14/2023	N	EM12	UMCf	97.1 - 107.1	<48.0	22.4 J	<5.55	<7.00	<6.10	<18.7	<5.25	<5.05	<6.85	<16.9
U4-MW-12D	9/12/2023	N	EM13	UMCf	97.1 - 107.1	<48.0	<6.30	<5.55	<7.00	<6.10	<18.7	<5.25	<5.05	<6.85	<16.9
U4-MW-12D	10/17/2023	N	EM14	UMCf	97.1 - 107.1	<4.80	<0.630	<0.555	<0.700	<0.610	<1.87	<0.525	<0.505	<0.685	<1.69
U4-MW-12D	11/15/2023	N	EM15	UMCf	97.1 - 107.1	<4.80	<0.630	<0.555	<0.700	<0.610	<1.87	<0.525	<0.505	<0.685	<1.69
U4-MW-12D	12/12/2023	N	EM16	UMCf	97.1 - 107.1	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	25.3	<0.137	<0.337
U4-MW-12I	4/14/2022	N	BL02	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	0.610 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-12I	4/14/2022	FD	BL02	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	0.573 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-12I	9/27/2022	N	EM01	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-12I	10/12/2022	N	EM02	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-12I	11/2/2022	N	EM03	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-12I	12/7/2022	N	EM04	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-12I	12/7/2022	FD	EM04	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-12I	1/13/2023	N	EM05	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-12I	2/15/2023	N	EM06	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-12I	3/13/2023	N	EM07	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-12I	4/17/2023	N	EM08	UMCf	76.8 - 86.8	<0.960 UJ	<0.126 UJ	<0.111 UJ	<0.140 UJ	<0.122 UJ	<0.374 UJ	<0.105 UJ	<0.101 UJ	<0.137 UJ	<0.337 UJ
U4-MW-12I	5/17/2023	N	EM09	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-12I	6/16/2023	N	EM10	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-12I	7/11/2023	N	EM11	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-12I	8/14/2023	N	EM12	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-12I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-12I	10/17/2023	N	EM14	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-12I	11/16/2023	N	EM15	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-12I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	2.57	<0.137	<0.337

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Diisopropyl Ether (DIPE)	Ethyl Tert-Butyl Ether (ETBE)	Ethylbenzene	Hexachlorobutadiene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-13D	4/14/2022	N	BL02	UMCf	98.2 - 108.2	<0.960	<0.126	<0.111	0.639 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-13D	9/28/2022	N	EM01	UMCf	98.2 - 108.2	<9.60	<1.26	<1.11	<1.40	<1.22	<3.74	<1.05	<1.01	<1.37	<3.37
U4-MW-13D	10/11/2022	N	EM02	UMCf	98.2 - 108.2	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-13D	11/3/2022	N	EM03	UMCf	98.2 - 108.2	<0.960	<0.126	<0.111	0.551 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-13D	12/7/2022	N	EM04	UMCf	98.2 - 108.2	<0.960	<0.126	<0.111	1.04	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-13D	1/12/2023	N	EM05	UMCf	98.2 - 108.2	<19.2	<2.52	<2.22	<2.80	<2.44	<7.48	<2.10	<2.02	<2.74	<6.74
U4-MW-13D	2/15/2023	N	EM06	UMCf	98.2 - 108.2	<0.960	<0.126	<0.111	1.12	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-13D	3/17/2023	N	EM07	UMCf	98.2 - 108.2	<19.2	<2.52	<2.22	<2.80	<2.44	<7.48	<2.10	<2.02	<2.74	<6.74
U4-MW-13D	4/18/2023	N	EM08	UMCf	98.2 - 108.2	<0.960	<0.126	<0.111	0.572 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-13D	5/17/2023	N	EM09	UMCf	98.2 - 108.2	<19.2	<2.52	<2.22	<2.80	<2.44	<7.48	<2.10	<2.02	<2.74	<6.74
U4-MW-13D	6/15/2023	N	EM10	UMCf	98.2 - 108.2	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-13D	7/12/2023	N	EM11	UMCf	98.2 - 108.2	<0.960	<0.126	<0.111	0.304 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-13D	8/11/2023	N	EM12	UMCf	98.2 - 108.2	<0.960	<0.126	<0.111	0.430 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-13D	9/11/2023	N	EM13	UMCf	98.2 - 108.2	<24.0	<3.15	<2.78	<3.50	<3.05	<9.35	<2.63	<2.53	<3.43	<8.43
U4-MW-13D	10/18/2023	N	EM14	UMCf	98.2 - 108.2	<24.0	<3.15	<2.78	<3.50	<3.05	<9.35	<2.63	<2.53	<3.43	<8.43
U4-MW-13D	11/15/2023	N	EM15	UMCf	98.2 - 108.2	<24.0	<3.15	<2.78	<3.50	<3.05	<9.35	<2.63	<2.53	<3.43	<8.43
U4-MW-13D	12/11/2023	N	EM16	UMCf	98.2 - 108.2	<0.960	<0.126	<0.111	0.504 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-13I	4/14/2022	N	BL02	UMCf	77.1 - 87.1	<0.960	<0.126	<0.111	0.618 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-13I	9/28/2022	N	EM01	UMCf	77.1 - 87.1	<0.960	<0.126	<0.111	0.164 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-13I	10/10/2022	N	EM02	UMCf	77.1 - 87.1	<0.960	0.394 J	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-13I	11/3/2022	N	EM03	UMCf	77.1 - 87.1	<0.960	<0.126	<0.111	0.159 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-13I	12/6/2022	N	EM04	UMCf	77.1 - 87.1	<4.80 UJ	<0.630 UJ	<0.555 UJ	<0.700 UJ	<0.610 UJ	<1.87 UJ	<0.525 UJ	<0.505 UJ	<0.685 UJ	<1.69 UJ
U4-MW-13I	1/12/2023	N	EM05	UMCf	77.1 - 87.1	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-13I	2/14/2023	N	EM06	UMCf	77.1 - 87.1	<4.80	<0.630	<0.555	<0.700	<0.610	<1.87	<0.525	<0.505	<0.685	<1.69
U4-MW-13I	3/16/2023	N	EM07	UMCf	77.1 - 87.1	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-13I	4/19/2023	N	EM08	UMCf	77.1 - 87.1	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-13I	5/17/2023	N	EM09	UMCf	77.1 - 87.1	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-13I	6/15/2023	N	EM10	UMCf	77.1 - 87.1	<0.960	<0.126	<0.111	<0.140	<0.122 UJ	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-13I	7/12/2023	N	EM11	UMCf	77.1 - 87.1	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-13I	8/11/2023	N	EM12	UMCf	77.1 - 87.1	<0.960	<0.126	<0.111	0.361 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-13I	9/11/2023	N	EM13	UMCf	77.1 - 87.1	<24.0	<3.15	<2.78	<3.50	<3.05	<9.35	<2.63	<2.53	<3.43	<8.43
U4-MW-13I	10/17/2023	N	EM14	UMCf	77.1 - 87.1	<0.960	<0.126	<0.111	0.488 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-13I	11/15/2023	N	EM15	UMCf	77.1 - 87.1	<0.960	<0.126	<0.111	0.433 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-13I	12/11/2023	N	EM16	UMCf	77.1 - 87.1	<0.960	<0.126	<0.111	0.535 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-14D	4/13/2022	N	BL02	UMCf	97.3 - 107.3	<0.960	<0.126	<0.111	0.561 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-14D	12/6/2022	N	EM04	UMCf	97.3 - 107.3	<4.80 UJ	<0.630 UJ	<0.555 UJ	0.751 J	<0.610 UJ	<1.87 UJ	<0.525 UJ	<0.505 UJ	<0.685 UJ	<1.69 UJ
U4-MW-14D	3/16/2023	N	EM07	UMCf	97.3 - 107.3	<4.80	<0.630	<0.555	<0.700	<0.610	<1.87	<0.525	<0.505	<0.685	<1.69
U4-MW-14D	6/15/2023	N	EM10	UMCf	97.3 - 107.3	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-14D	9/14/2023	N	EM13	UMCf	97.3 - 107.3	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-14D	12/15/2023	N	EM16	UMCf	97.3 - 107.3	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-14I	4/14/2022	N	BL02	UMCf	77.3 - 87.3	<0.960	<0.126	<0.111	0.471 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-14I	12/6/2022	N	EM04	UMCf	77.3 - 87.3	<4.80 UJ	<0.630 UJ	<0.555 UJ	<0.700 UJ	<0.610 UJ	<1.87 UJ	<0.525 UJ	<0.505 UJ	<0.685 UJ	<1.69 UJ
U4-MW-14I	3/16/2023	N	EM07	UMCf	77.3 - 87.3	<4.80	<0.630	<0.555	<0.700	<0.610	<1.87	<0.525	<0.505	<0.685	<1.69
U4-MW-14I	6/15/2023	N	EM10	UMCf	77.3 - 87.3	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-14I	9/14/2023	N	EM13	UMCf	77.3 - 87.3	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-14I	12/14/2023	N	EM16	UMCf	77.3 - 87.3	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-15D	4/13/2022	N	BL02	UMCf	96.0 - 106.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-15D	12/5/2022	N	EM04	UMCf	96.0 - 106.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-15D	3/20/2023	N	EM07	UMCf	96.0 - 106.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-15D	6/14/2023	N	EM10	UMCf	96.0 - 106.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-15D	9/13/2023	N	EM13	UMCf	96.0 - 106.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Diisopropyl Ether (DIPE)	Ethyl Tert-Butyl Ether (ETBE)	Ethylbenzene	Hexachlorobutadiene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-15D	12/12/2023	N	EM16	UMCf	96.0 - 106.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-15DD	4/13/2022	N	BL02	UMCf	120.3 - 130.3	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-15DD	12/5/2022	N	EM04	UMCf	120.3 - 130.3	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-15DD	3/15/2023	N	EM07	UMCf	120.3 - 130.3	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-15DD	6/13/2023	N	EM10	UMCf	120.3 - 130.3	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-15DD	9/14/2023	N	EM13	UMCf	120.3 - 130.3	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-15DD	12/13/2023	N	EM16	UMCf	120.3 - 130.3	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-15I	4/12/2022	N	BL02	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	0.447 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-15I	12/5/2022	N	EM04	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-15I	3/17/2023	N	EM07	UMCf	76.8 - 86.8	<19.2	<2.52	<2.22	<2.80	<2.44	<7.48	<2.10	<2.02	<2.74	<6.74
U4-MW-15I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-15I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-15I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-15S	4/13/2022	N	BL02	UMCf	54.8 - 64.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-15S	12/5/2022	N	EM04	UMCf	54.8 - 64.8	<24.0	<3.15	<2.78	<3.50	<3.05	<9.35	<2.63	<2.53	<3.43	<8.43
U4-MW-15S	3/13/2023	N	EM07	UMCf	54.8 - 64.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	0.321 J	<0.337
U4-MW-15S	6/13/2023	N	EM10	UMCf	54.8 - 64.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-15S	9/14/2023	N	EM13	UMCf	54.8 - 64.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-15S	12/11/2023	N	EM16	UMCf	54.8 - 64.8	<1.92	<0.252	<0.222	<0.280	<0.244	<0.748	<0.210	<0.202	<0.274	<0.674
U4-MW-16D	4/11/2022	N	BL02	UMCf	96.8 - 106.8	<0.960	<0.126	<0.111	0.533 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-16D	12/5/2022	N	EM04	UMCf	96.8 - 106.8	<0.960	<0.126	<0.111	0.216 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-16D	3/14/2023	N	EM07	UMCf	96.8 - 106.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-16D	6/13/2023	N	EM10	UMCf	96.8 - 106.8	<0.960	<0.126	<0.111	0.315 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-16D	9/15/2023	N	EM13	UMCf	96.8 - 106.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-16D	12/14/2023	N	EM16	UMCf	96.8 - 106.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-16DD	4/12/2022	N	BL02	UMCf	120.8 - 130.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-16DD	12/5/2022	N	EM04	UMCf	120.8 - 130.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-16DD	3/15/2023	N	EM07	UMCf	120.8 - 130.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-16DD	6/13/2023	N	EM10	UMCf	120.8 - 130.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-16DD	9/14/2023	N	EM13	UMCf	120.8 - 130.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-16DD	12/13/2023	N	EM16	UMCf	120.8 - 130.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-16I	4/11/2022	N	BL02	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	0.256 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-16I	12/5/2022	N	EM04	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-16I	12/5/2022	FD	EM04	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-16I	3/13/2023	N	EM07	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-16I	3/13/2023	FD	EM07	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-16I	6/12/2023	N	EM10	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-16I	6/12/2023	FD	EM10	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-16I	9/11/2023	N	EM13	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-16I	9/11/2023	FD	EM13	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-16I	12/11/2023	N	EM16	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	0.384 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-16I	12/11/2023	FD	EM16	UMCf	77.0 - 87.0	<0.960	<0.126	<0.111	0.352 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-16S	4/12/2022	N	BL02	UMCf	54.8 - 64.8	<0.960	<0.126	<0.111	0.363 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-16S	4/12/2022	FD	BL02	UMCf	54.8 - 64.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-16S	12/6/2022	N	EM04	UMCf	54.8 - 64.8	<0.960 UJ	<0.126 UJ	<0.111 UJ	<0.140 UJ	<0.122 UJ	<0.374 UJ	<0.105 UJ	<0.101 UJ	<0.137 UJ	<0.337 UJ
U4-MW-16S	3/15/2023	N	EM07	UMCf	54.8 - 64.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-16S	6/13/2023	N	EM10	UMCf	54.8 - 64.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-16S	9/11/2023	N	EM13	UMCf	54.8 - 64.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-MW-16S	12/11/2023	N	EM16	UMCf	54.8 - 64.8	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-SLMW	11/10/2022	N	EM03		-	<4.80	<0.630	<0.555	1.52 J	<0.610	<1.87	<0.525	<0.505	<0.685	<1.69
U4-T3	10/13/2022	N	EM02		-	<0.960	<0.126	<0.111	2.05	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Diisopropyl Ether (DIPE)	Ethyl Tert-Butyl Ether (ETBE)	Ethylbenzene	Hexachlorobutadiene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-T3	11/3/2022	N	EM03		-	<0.960	<0.126	<0.111	3.01 J+	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-T3	12/6/2022	N	EM04		-	<19.2 UJ	<2.52 UJ	<2.22 UJ	<2.80 UJ	<2.44 UJ	<7.48 UJ	<2.10 UJ	<2.02 UJ	<2.74 UJ	<6.74 UJ
U4-T3	1/9/2023	N	EM05		-	<0.960	<0.126	<0.111	2.19	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-T3	2/13/2023	N	EM06		-	<96.0	<12.6	<11.1	<14.0	<12.2	<37.4	<10.5	<10.1	<13.7	<33.7
U4-T3	3/13/2023	N	EM07		-	<24.0	<3.15	<2.78	<3.50	<3.05	<9.35	<2.63	<2.53	<3.43	<8.43
U4-T3	4/19/2023	N	EM08		-	<0.960	<0.126	<0.111	0.810 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-T3	5/18/2023	N	EM09		-	<0.960	<0.126	<0.111	0.668 J	<0.122	<0.374	<0.105	0.962 J	<0.137	<0.337
U4-T3	6/12/2023	N	EM10		-	<0.960	<0.126	<0.111	0.682 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-T3	7/11/2023	N	EM11		-	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-T3	8/10/2023	N	EM12		-	<0.960	<0.126	<0.111	0.598 J	<0.122	<0.374	<0.105	<0.101	<0.137	<0.337
U4-T3	9/11/2023	N	EM13		-	<0.960	<0.126	<0.111	<0.140	<0.122	<0.374	<0.105	13.0	<0.137	<0.337
U4-T3	10/16/2023	N	EM14		-	<24.0	<3.15	<2.78	<3.50	<3.05	<9.35	<2.63	3.08 J	<3.43	<8.43

Notes:
 FD - Field duplicate
 E - Field instrument error.
 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 low.
 J+ - The result is an estimated quantity, but the result may be biased high.
 N/A - Not Applicable
 mg/L - milligrams per liter
 µg/L - micrograms per liter
 N - Normal field 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
 < - The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
 -- Not tested.
 M-252 damaged/obstructed when checked on June 14, 2023 and September 14, 2023.

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Isopropylbenzene	m,p-Xylene (Sum of Isomers)	Methylene Chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	p-Cymene (p-Isopropyltoluene)	sec-Butylbenzene	Styrene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
M-247-100	4/20/2022	N	BL02	UMCf	100.5 - 110.5	----	----	----	----	----	----	----	----	----	----
M-249-100	4/20/2022	N	BL02	UMCf	99.6 - 109.6	----	----	----	----	----	----	----	----	----	----
M-251-100	4/19/2022	N	BL02	UMCf	92.5 - 102.5	<0.105	<0.430	1.11 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
M-251-100	10/13/2022	N	EM02	UMCf	92.5 - 102.5	<0.105	<0.430	0.845 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
M-251-100	11/2/2022	N	EM03	UMCf	92.5 - 102.5	<1.05	<4.30	<4.30	<10.0	<1.57	<0.993	<1.74	<1.20	<1.25	<1.18
M-251-100	12/8/2022	N	EM04	UMCf	92.5 - 102.5	<0.105	<0.430	0.576 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
M-251-100	1/11/2023	N	EM05	UMCf	92.5 - 102.5	<0.105	<0.430	0.536 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
M-251-100	2/13/2023	N	EM06	UMCf	92.5 - 102.5	<0.105	<0.430	0.475 J	<1.00	<0.157 UJ	<0.0993	<0.174	<0.120	<0.125	<0.118
M-251-100	3/17/2023	N	EM07	UMCf	92.5 - 102.5	<5.25	<21.5	<21.5	<50.0 UJ	<7.85	<4.97	<8.70	<6.00	<6.25	<5.90
M-251-100	4/21/2023	N	EM08	UMCf	92.5 - 102.5	<0.105	<0.430	0.506 J	<1.00	<0.157	<0.0993	<0.174 UJ	<0.120	<0.125	<0.118
M-251-100	5/9/2023	N	EM09	UMCf	92.5 - 102.5	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
M-251-100	6/14/2023	N	EM10	UMCf	92.5 - 102.5	<5.25	<21.5	<21.5	<50.0	<7.85	<4.97	<8.70	<6.00	<6.25	<5.90
M-251-100	7/14/2023	N	EM11	UMCf	92.5 - 102.5	<0.105	<0.430	0.443 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
M-251-100	8/10/2023	N	EM12	UMCf	92.5 - 102.5	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
M-251-100	9/14/2023	N	EM13	UMCf	92.5 - 102.5	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
M-251-100	10/19/2023	N	EM14	UMCf	92.5 - 102.5	<0.105	<0.430	0.806 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<5.90
M-251-100	11/16/2023	N	EM15	UMCf	92.5 - 102.5	<5.25	<21.5	<21.5	<50.0 UJ	<7.85	<4.97	<8.70	<6.00	<6.25	<5.90
M-251-100	12/12/2023	N	EM16	UMCf	92.5 - 102.5	<0.105	<0.430	1.04 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
M-251-60	4/18/2022	N	BL02	UMCf	52.3 - 62.3	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
M-251-60	3/15/2023	N	EM07	UMCf	52.3 - 62.3	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
M-251-60	6/14/2023	N	EM10	UMCf	52.3 - 62.3	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
M-251-60	9/14/2023	N	EM13	UMCf	52.3 - 62.3	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
M-251-60	12/11/2023	N	EM16	UMCf	52.3 - 62.3	<0.105	<0.430	<0.430	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
M-252	4/21/2022	N	BL02	UMCf	132.3 - 142.3	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
M-252	3/15/2023	N	EM07	UMCf	132.3 - 142.3	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
M-252	9/19/2023	N	EM13	UMCf	132.3 - 142.3	<0.105	<0.430	<0.430	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
M-252	12/18/2023	N	EM16	UMCf	132.3 - 142.3	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
M-253-100	4/20/2022	N	BL02	UMCf	100.8 - 110.8	----	----	----	----	----	----	----	----	----	----
M-255-100	4/20/2022	N	BL02	UMCf	100.2 - 110.2	----	----	----	----	----	----	----	----	----	----
U4-E-01D	4/18/2022	N	BL02	UMCf	94.7 - 109.7	<0.525	<2.15	<2.15	<5.00	<0.785 UJ	<0.497	<0.870	<0.600	<0.625	<0.590 UJ
U4-E-01D	3/14/2023	N	EM07	UMCf	94.7 - 109.7	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-011	4/19/2022	N	BL02	UMCf	74.6 - 89.6	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-011	4/19/2022	FD	BL02	UMCf	74.6 - 89.6	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-011	3/14/2023	N	EM07	UMCf	74.6 - 89.6	<0.105	<0.430	0.461 J	<20.0	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-011	4/20/2023	N	EM08	UMCf	74.6 - 89.6	<0.105	<0.430	<0.430	<1.00 UJ	<0.157	<0.0993	<0.174 UJ	<0.120	<0.125	<0.118
U4-E-011	5/10/2023	N	EM09	UMCf	74.6 - 89.6	<0.105	<0.430	0.999 J	<1.00	<0.157	<0.0993	<0.174 UJ	<0.120	<0.125	<0.118
U4-E-011	6/12/2023	N	EM10	UMCf	74.6 - 89.6	<0.105	<0.430	2.63 J	<25.0	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-011	7/11/2023	N	EM11	UMCf	74.6 - 89.6	<0.525	<2.15	3.49 J	<5.00	<0.785	<0.497	<0.870	<0.600	<0.625	<0.590
U4-E-011	8/10/2023	N	EM12	UMCf	74.6 - 89.6	<0.105	<0.430	1.79 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-011	9/11/2023	N	EM13	UMCf	74.6 - 89.6	<0.525	<2.15	<2.15	<5.00	<0.785	<0.497	<0.870	<0.600	<0.625	<0.590
U4-E-011	10/16/2023	N	EM14	UMCf	74.6 - 89.6	<0.105	<0.430	2.41 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-011	12/13/2023	N	EM16	UMCf	74.6 - 89.6	<1.05	<4.30	<4.30	<10.0	<1.57	<0.993	<1.74	<1.20	<1.25	<1.18
U4-E-02D	4/20/2022	N	BL02	UMCf	94.4 - 109.4	<0.105	<0.430	0.478 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-02D	3/14/2023	N	EM07	UMCf	94.4 - 109.4	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-021	4/18/2022	N	BL02	UMCf	74.4 - 89.4	<0.105	<0.430 UJ	<0.430	<1.00 UJ	<0.157 UJ	<0.0993 UJ	<0.174 UJ	<0.120	<0.125 UJ	<0.118 R
U4-E-021	3/14/2023	N	EM07	UMCf	74.4 - 89.4	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-021	4/20/2023	N	EM08	UMCf	74.4 - 89.4	<0.105	<0.430	<0.430	<1.00 UJ	<0.157	<0.0993	<0.174 UJ	<0.120	<0.125	<0.118
U4-E-021	5/11/2023	N	EM09	UMCf	74.4 - 89.4	<0.105	<0.430	0.970 J	<1.00	<0.157	<0.0993	<0.174 UJ	<0.120	<0.125	<0.118
U4-E-021	6/12/2023	N	EM10	UMCf	74.4 - 89.4	<0.105	<0.430	6.89	<10.0	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-021	7/11/2023	N	EM11	UMCf	74.4 - 89.4	<0.105	<0.430	4.58 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-021	8/10/2023	N	EM12	UMCf	74.4 - 89.4	<0.105	<0.430	2.23 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Isopropylbenzene	m,p-Xylene (Sum of Isomers)	Methylene Chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	p-Cymene (p-Isopropyltoluene)	sec-Butylbenzene	Styrene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-E-02I	9/11/2023	N	EM13	UMCf	74.4 - 89.4	<0.105	<0.430	3.59 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-02I	10/16/2023	N	EM14	UMCf	74.4 - 89.4	<1.05	<4.30	5.64 J	<10.0 UJ	<1.57 UJ	<0.993	<1.74	<1.20	<1.25	<1.18
U4-E-02I	12/14/2023	N	EM16	UMCf	74.4 - 89.4	<1.05	<4.30	6.75 J	<10.0	<1.57	<0.993	<1.74	<1.20	<1.25	<1.18
U4-E-03D	4/19/2022	N	BL02	UMCf	95.1 - 110.1	<0.105	<0.430	0.797 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-03D	10/13/2022	N	EM02	UMCf	95.1 - 110.1	<21.0	<86.0	<86.0	<200 UJ	<31.4	<19.9	<34.8	<24.0	<25.0	<23.6
U4-E-03D	11/3/2022	N	EM03	UMCf	95.1 - 110.1	<0.105	<0.430	0.543 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-03D	12/6/2022	N	EM04	UMCf	95.1 - 110.1	<2.10 UJ	<8.60 UJ	<8.60 UJ	<20.0 UJ	<3.14 UJ	<1.99 UJ	<3.48 UJ	<2.40 UJ	<2.50 UJ	<2.36 UJ
U4-E-03D	1/9/2023	N	EM05	UMCf	95.1 - 110.1	<0.105	<0.430	0.516 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-03D	2/13/2023	N	EM06	UMCf	95.1 - 110.1	<10.5	<43.0	<43.0	<100	<15.7	<9.93	<17.4	<12.0	<12.5	<11.8
U4-E-03D	3/13/2023	N	EM07	UMCf	95.1 - 110.1	<10.5	<43.0	<43.0	<100	<15.7	<9.93	<17.4	<12.0	<12.5	<11.8
U4-E-03D	3/14/2023	N	EM07	UMCf	95.1 - 110.1	<21.0	<86.0	<86.0	<200	<31.4	<19.9	<34.8	<24.0	<25.0	<23.6
U4-E-03D	4/19/2023	N	EM08	UMCf	95.1 - 110.1	<0.525	<2.15	<2.15	<5.00	<0.785	<0.497	<0.870	<0.600	<0.625	<0.590
U4-E-03D	5/11/2023	N	EM09	UMCf	95.1 - 110.1	<0.105	<0.430	2.04 J	<1.00	<0.157	<0.0993	<0.174 UJ	<0.120	<0.125	<0.118
U4-E-03D	6/12/2023	N	EM10	UMCf	95.1 - 110.1	<0.105	<0.430	2.05 J	<100	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-03D	7/11/2023	N	EM11	UMCf	95.1 - 110.1	<0.105	<0.430	2.69 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-03D	8/10/2023	N	EM12	UMCf	95.1 - 110.1	<0.105	<0.430	3.09 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-03D	9/11/2023	N	EM13	UMCf	95.1 - 110.1	<0.105	<0.430	3.22 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-03D	10/16/2023	N	EM14	UMCf	95.1 - 110.1	<21.0	<86.0	<86.0	<200 UJ	<31.4 UJ	<19.9	<34.8	<24.0	<25.0	<23.6
U4-E-04D	4/19/2022	N	BL02	UMCf	95.0 - 110.0	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-04D	3/14/2023	N	EM07	UMCf	95.0 - 110.0	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-04I	4/18/2022	N	BL02	UMCf	75.0 - 90.0	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-04I	3/14/2023	N	EM07	UMCf	75.0 - 90.0	<5.25	<21.5	<21.5	<50.0	<7.85	<4.97	<8.70	<6.00	<6.25	<5.90
U4-E-05D	4/19/2022	N	BL02	UMCf	95.0 - 110.0	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-05D	3/16/2023	N	EM07	UMCf	95.0 - 110.0	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-05I	4/19/2022	N	BL02	UMCf	75.0 - 90.0	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-05I	3/15/2023	N	EM07	UMCf	75.0 - 90.0	<0.105 UJ	<0.430 UJ	<0.430 UJ	<1.00 UJ	<0.157 UJ	<0.0993 UJ	<0.174 UJ	<0.120 UJ	<0.125 UJ	<0.118 UJ
U4-E-06D	4/11/2022	N	BL02	UMCf	95.1 - 110.1	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118 R
U4-E-06I	4/11/2022	N	BL02	UMCf	73.2 - 88.2	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-06I	4/11/2022	FD	BL02	UMCf	73.2 - 88.2	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-06I	10/12/2022	N	EM02	UMCf	73.2 - 88.2	<0.105	<0.430	0.976 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-06I	11/3/2022	N	EM03	UMCf	73.2 - 88.2	<0.105	<0.430	2.60 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-06I	12/6/2022	N	EM04	UMCf	73.2 - 88.2	<1.05 UJ	<4.30 UJ	6.34 J	<10.0 UJ	<1.57 UJ	<0.993 UJ	<1.74 UJ	<1.20 UJ	<1.25 UJ	<1.18 UJ
U4-E-06I	1/9/2023	N	EM05	UMCf	73.2 - 88.2	<0.105	<0.430	2.99 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-06I	2/13/2023	N	EM06	UMCf	73.2 - 88.2	<10.5	<43.0	<43.0	<100	<15.7	<9.93	<17.4	<12.0	<12.5	<11.8
U4-E-06I	3/13/2023	N	EM07	UMCf	73.2 - 88.2	<2.10	<8.60	<8.60	<20.0	<3.14	<1.99	<3.48	<2.40	<2.50	<2.36
U4-E-06I	4/17/2023	N	EM08	UMCf	73.2 - 88.2	<2.10	<8.60	<8.60	<20.0	<3.14	<1.99	<3.48	<2.40	<2.50	<2.36
U4-E-06I	5/15/2023	N	EM09	UMCf	73.2 - 88.2	<2.63	<10.7	<10.7	<25.0	<3.93	<2.48	<4.35	<3.00	<3.13	<2.95
U4-E-06I	6/12/2023	N	EM10	UMCf	73.2 - 88.2	<0.105	<0.430	1.87 J	<100	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-06I	7/11/2023	N	EM11	UMCf	73.2 - 88.2	<0.105	<0.430	1.96 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-06I	8/11/2023	N	EM12	UMCf	73.2 - 88.2	<0.525	<2.15	2.47 J	<5.00	<0.785	<0.497	<0.870	<0.600	<0.625	<0.590
U4-E-06I	9/11/2023	N	EM13	UMCf	73.2 - 88.2	<0.105	<0.430	2.30 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-06I	10/16/2023	N	EM14	UMCf	73.2 - 88.2	<5.25	<21.5	<21.5	<50.0	<7.85	<4.97	<8.70	<6.00	<6.25	<5.90
U4-E-06I	12/13/2023	N	EM16	UMCf	73.2 - 88.2	<0.105	<0.430	7.03	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-07D	4/12/2022	N	BL02	UMCf	94.6 - 109.6	<0.105	<0.430	0.637 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-07I	4/12/2022	N	BL02	UMCf	74.7 - 89.7	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-07I	10/11/2022	N	EM02	UMCf	74.7 - 89.7	<1.05	<4.30	<4.30	<10.0	<1.57	<0.993	<1.74	<1.20	<1.25	<1.18
U4-E-07I	11/3/2022	N	EM03	UMCf	74.7 - 89.7	<0.105	<0.430	2.44 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-07I	12/6/2022	N	EM04	UMCf	74.7 - 89.7	<2.63 UJ	<10.7 UJ	<10.7 UJ	<25.0 UJ	<3.93 UJ	<2.48 UJ	<4.35 UJ	<3.00 UJ	<3.13 UJ	<2.95 UJ
U4-E-07I	1/9/2023	N	EM05	UMCf	74.7 - 89.7	<0.105	<0.430	0.747 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-07I	2/13/2023	N	EM06	UMCf	74.7 - 89.7	<10.5	<43.0	<43.0	<100	<15.7	<9.93	<17.4	<12.0	<12.5	<11.8
U4-E-07I	3/13/2023	N	EM07	UMCf	74.7 - 89.7	<10.5	<43.0	<43.0	<100	<15.7	<9.93	<17.4	<12.0	<12.5	<11.8

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Isopropylbenzene	m,p-Xylene (Sum of Isomers)	Methylene Chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	p-Cymene (p-Isopropyltoluene)	sec-Butylbenzene	Styrene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-E-07I	4/19/2023	N	EM08	UMCf	74.7 - 89.7	<0.525	<2.15	<2.15	<5.00	<0.785	<0.497	<0.870	<0.600	<0.625	<0.590
U4-E-07I	5/15/2023	N	EM09	UMCf	74.7 - 89.7	<10.5	<43.0	<43.0	<100	<15.7	<9.93	<17.4	<12.0	<12.5	<11.8
U4-E-07I	6/12/2023	N	EM10	UMCf	74.7 - 89.7	<0.105	<0.430	2.86 J	<100	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-07I	7/11/2023	N	EM11	UMCf	74.7 - 89.7	<0.105	<0.430	3.33 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-07I	8/11/2023	N	EM12	UMCf	74.7 - 89.7	<0.525	<2.15	3.45 J	<5.00	<0.785	<0.497	<0.870	<0.600	<0.625	<0.590
U4-E-07I	9/11/2023	N	EM13	UMCf	74.7 - 89.7	<0.105	<0.430	1.81 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-07I	10/16/2023	N	EM14	UMCf	74.7 - 89.7	<10.5	<43.0	<43.0	<100 UJ	<15.7 UJ	<9.93	<17.4	<12.0	<12.5	<11.8
U4-E-07I	12/13/2023	N	EM16	UMCf	74.7 - 89.7	<0.105	<0.430	2.00 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-08D	4/12/2022	N	BL02	UMCf	94.6 - 109.6	<0.105	<0.430	0.819 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-08D	10/11/2022	N	EM02	UMCf	94.6 - 109.6	<1.05	<4.30	<4.30	<10.0	<1.57	<0.993	<1.74	<1.20	<1.25	<1.18
U4-E-08D	11/3/2022	N	EM03	UMCf	94.6 - 109.6	<0.105	<0.430	0.540 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-08D	12/6/2022	N	EM04	UMCf	94.6 - 109.6	<2.63 UJ	<10.7 UJ	<10.7 UJ	<25.0 UJ	<3.93 UJ	<2.48 UJ	<4.35 UJ	<3.00 UJ	<3.13 UJ	<2.95 UJ
U4-E-08D	1/9/2023	N	EM05	UMCf	94.6 - 109.6	<0.105	<0.430	1.08 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-08D	2/13/2023	N	EM06	UMCf	94.6 - 109.6	<10.5	<43.0	<43.0	<100	<15.7	<9.93	<17.4	<12.0	<12.5	<11.8
U4-E-08D	3/13/2023	N	EM07	UMCf	94.6 - 109.6	<10.5	<43.0	<43.0	<100	<15.7	<9.93	<17.4	<12.0	<12.5	<11.8
U4-E-08D	4/19/2023	N	EM08	UMCf	94.6 - 109.6	<0.525	<2.15	<2.15	<5.00	<0.785	<0.497	<0.870	<0.600	<0.625	<0.590
U4-E-08D	5/17/2023	N	EM09	UMCf	94.6 - 109.6	<10.5	<43.0	<43.0	<100	<15.7	<9.93	<17.4	<12.0	<12.5	<11.8
U4-E-08D	6/12/2023	N	EM10	UMCf	94.6 - 109.6	<0.105	<0.430	1.40 J	<100	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-08D	7/11/2023	N	EM11	UMCf	94.6 - 109.6	<0.105	<0.430	1.19 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-09D	4/15/2022	N	BL02	UMCf	94.5 - 109.5	<0.105	<0.430	<0.430	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-09I	4/14/2022	N	BL02	UMCf	74.9 - 89.9	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	0.220 J	<0.120	<0.125	<0.118
U4-E-10D	4/13/2022	N	BL02	UMCf	94.5 - 109.5	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-E-10I	4/13/2022	N	BL02	UMCf	74.2 - 89.2	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-01D	4/19/2022	N	BL02	UMCf	96.7 - 106.7	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-01D	2/16/2023	N	EM06	UMCf	96.7 - 106.7	<1.05	<4.30	<4.30	<10.0	<1.57	<0.993 UJ	<1.74	<1.20	<1.25	<1.18
U4-MW-01D	3/20/2023	N	EM07	UMCf	96.7 - 106.7	<0.105	<0.430	<0.430	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-01D	6/13/2023	N	EM10	UMCf	96.7 - 106.7	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-01D	9/14/2023	N	EM13	UMCf	96.7 - 106.7	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-01D	12/14/2023	N	EM16	UMCf	96.7 - 106.7	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-01DD	4/19/2022	N	BL02	UMCf	119.9 - 129.9	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-01DD	4/19/2022	FD	BL02	UMCf	119.9 - 129.9	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-01DD	3/15/2023	N	EM07	UMCf	119.9 - 129.9	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-01DD	6/13/2023	N	EM10	UMCf	119.9 - 129.9	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-01DD	9/14/2023	N	EM13	UMCf	119.9 - 129.9	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-01DD	12/15/2023	N	EM16	UMCf	119.9 - 129.9	<0.525	<2.15	<2.15	<5.00	<0.785	<0.497	<0.870	<0.600	<0.625	<0.590
U4-MW-01I	4/19/2022	N	BL02	UMCf	76.7 - 86.7	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-01I	3/20/2023	N	EM07	UMCf	76.7 - 86.7	<0.105	<0.430	<0.430	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-01I	6/12/2023	N	EM10	UMCf	76.7 - 86.7	<0.105	<0.430	<0.430	<25.0	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-01I	9/14/2023	N	EM13	UMCf	76.7 - 86.7	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-01I	12/15/2023	N	EM16	UMCf	76.7 - 86.7	<5.25	<21.5	<21.5	<50.0	<7.85	<4.97	<8.70	<6.00	<6.25	<5.90
U4-MW-01S	4/18/2022	N	BL02	UMCf	54.7 - 64.7	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-01S	3/15/2023	N	EM07	UMCf	54.7 - 64.7	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-01S	6/13/2023	N	EM10	UMCf	54.7 - 64.7	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-01S	9/15/2023	N	EM13	UMCf	54.7 - 64.7	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118 R
U4-MW-01S	12/13/2023	N	EM16	UMCf	54.7 - 64.7	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118 R
U4-MW-02D	4/14/2022	N	BL02	UMCf	95.0 - 110.0	<0.105	<0.430	1.47 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-02D	10/11/2022	N	EM02	UMCf	95.0 - 110.0	<0.105	<0.430	1.47 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-02D	11/1/2022	N	EM03	UMCf	95.0 - 110.0	<5.25	<21.5	<21.5	<50.0	<7.85	<4.97	<8.70	<6.00	<6.25	<5.90
U4-MW-02D	12/7/2022	N	EM04	UMCf	95.0 - 110.0	<0.105	<0.430	1.73 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-02D	1/10/2023	N	EM05	UMCf	95.0 - 110.0	<0.105	<0.430	1.33 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-02D	2/13/2023	N	EM06	UMCf	95.0 - 110.0	<0.105	<0.430	1.36 J	<1.00	<0.157 UJ	<9.93	<0.174	<0.120	<0.125	<0.118

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B
						Isopropylbenzene	m,p-Xylene (Sum of Isomers)	Methylene Chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	p-Cymene (p-Isopropyltoluene)	sec-Butylbenzene	Styrene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-02D	3/17/2023	N	EM07	UMCf	95.0 - 110.0	<10.5	<43.0	<43.0	<100 UJ	<15.7	<9.93	<17.4	<12.0	<12.5	<11.8
U4-MW-02D	4/19/2023	N	EM08	UMCf	95.0 - 110.0	<0.525	<2.15	<2.15	<5.00	<0.785	<0.497	<0.870	<0.600	<0.625	<0.590
U4-MW-02D	5/9/2023	N	EM09	UMCf	95.0 - 110.0	<0.525	<2.15	<2.15	<5.00	<0.785	<0.497	<0.870	<0.600	<0.625	<0.590
U4-MW-02D	6/13/2023	N	EM10	UMCf	95.0 - 110.0	<0.105	<0.430	0.831 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-02D	7/18/2023	N	EM11	UMCf	95.0 - 110.0	<0.105	<0.430	1.16 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-02D	8/14/2023	N	EM12	UMCf	95.0 - 110.0	<26.3	<108	<108	<250	<39.3	<24.8	<43.5 UJ	<30.0	<31.3	<29.5
U4-MW-02D	9/11/2023	N	EM13	UMCf	95.0 - 110.0	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-02D	10/19/2023	N	EM14	UMCf	95.0 - 110.0	<0.105	<0.430	1.37 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-02D	11/15/2023	N	EM15	UMCf	95.0 - 110.0	<10.5	<43.0	<43.0	<100 UJ	<15.7	<9.93	<17.4	<12.0	<12.5	<11.8
U4-MW-02D	12/14/2023	N	EM16	UMCf	95.0 - 110.0	<10.5	<43.0	<43.0	<100	<15.7	<9.93	<17.4	<12.0	<12.5	<11.8
U4-MW-02I	4/14/2022	N	BL02	UMCf	75.0 - 90.0	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-02I	10/11/2022	N	EM02	UMCf	75.0 - 90.0	<0.105	<0.430	0.571 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-02I	11/2/2022	N	EM03	UMCf	75.0 - 90.0	<1.05	<4.30	4.54 J	<10.0	<1.57	<0.993	<1.74	<1.20	<1.25	<1.18
U4-MW-02I	11/2/2022	FD	EM03	UMCf	75.0 - 90.0	<1.05	<4.30	<4.30	<10.0	<1.57	<0.993	<1.74	<1.20	<1.25	<1.18
U4-MW-02I	12/8/2022	N	EM04	UMCf	75.0 - 90.0	0.335 J	<0.430	3.23 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-02I	12/8/2022	FD	EM04	UMCf	75.0 - 90.0	<0.105	<0.430	12.3 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-02I	1/13/2023	N	EM05	UMCf	75.0 - 90.0	<1.05	<4.30	<4.30	<10.0	<1.57	<0.993	<1.74	<1.20	<1.25	<1.18
U4-MW-02I	1/13/2023	FD	EM05	UMCf	75.0 - 90.0	<1.05	<4.30	<4.30	<10.0	<1.57	<0.993	<1.74	<1.20	<1.25	<1.18
U4-MW-02I	2/15/2023	N	EM06	UMCf	75.0 - 90.0	<1.05	<4.30	<4.30	<10.0	<1.57	<0.993	<1.74	<1.20	<1.25	<1.18
U4-MW-02I	2/15/2023	FD	EM06	UMCf	75.0 - 90.0	<1.05	<4.30	<4.30	<10.0	<1.57	<0.993	<1.74	<1.20	<1.25	<1.18
U4-MW-02I	3/17/2023	N	EM07	UMCf	75.0 - 90.0	<21.0	<86.0	<86.0	<200 UJ	<31.4	<19.9	<34.8	<24.0	<25.0	<23.6
U4-MW-02I	3/17/2023	FD	EM07	UMCf	75.0 - 90.0	<21.0	<86.0	<86.0	<200 UJ	<31.4	<19.9	<34.8	<24.0	<25.0	<23.6
U4-MW-02I	4/20/2023	N	EM08	UMCf	75.0 - 90.0	<0.105	<0.430	6.15	<1.00 UJ	<0.157	<0.0993	<0.174 UJ	<0.120	<0.125	<0.118
U4-MW-02I	4/20/2023	FD	EM08	UMCf	75.0 - 90.0	<0.105	<0.430	6.54	<1.00 UJ	<0.157	<0.0993	<0.174 UJ	<0.120	<0.125	<0.118
U4-MW-02I	5/9/2023	N	EM09	UMCf	75.0 - 90.0	<0.105	<0.430	9.93 J+	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-02I	5/9/2023	FD	EM09	UMCf	75.0 - 90.0	<0.105	<0.430	9.73 J+	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-02I	6/12/2023	N	EM10	UMCf	75.0 - 90.0	<0.105	<0.430	6.47	<10.0	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-02I	6/12/2023	FD	EM10	UMCf	75.0 - 90.0	<0.105	<0.430	6.42	<10.0	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-02I	7/18/2023	N	EM11	UMCf	75.0 - 90.0	<0.105	<0.430	1.55 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-02I	7/18/2023	FD	EM11	UMCf	75.0 - 90.0	<0.105	<0.430	2.01 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-02I	8/11/2023	N	EM12	UMCf	75.0 - 90.0	<0.105	<0.430	6.37	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-02I	8/11/2023	FD	EM12	UMCf	75.0 - 90.0	<0.105	<0.430	6.77	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-02I	9/11/2023	N	EM13	UMCf	75.0 - 90.0	<0.105	<0.430	5.18	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-02I	9/11/2023	FD	EM13	UMCf	75.0 - 90.0	<0.105	<0.430	5.32	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-02I	10/19/2023	N	EM14	UMCf	75.0 - 90.0	<0.105 UJ	<0.430 UJ	4.79 J	<1.00 UJ	<0.157 UJ	<0.0993 UJ	<0.174 UJ	<0.120 UJ	<0.125 UJ	<5.90 UJ
U4-MW-02I	10/19/2023	FD	EM14	UMCf	75.0 - 90.0	<0.105	<0.430	5.03	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<5.90
U4-MW-02I	11/15/2023	N	EM15	UMCf	75.0 - 90.0	<5.25	<21.5	<21.5	<50.0 UJ	<7.85	<4.97	<8.70	<6.00	<6.25	<5.90
U4-MW-02I	11/15/2023	FD	EM15	UMCf	75.0 - 90.0	<5.25	<21.5	<21.5	<50.0 UJ	<7.85	<4.97	<8.70	<6.00	<6.25	<5.90
U4-MW-02I	12/14/2023	N	EM16	UMCf	75.0 - 90.0	<5.25	<21.5	<21.5	<50.0	<7.85	<4.97	<8.70	<6.00	<6.25	<5.90
U4-MW-02I	12/14/2023	FD	EM16	UMCf	75.0 - 90.0	<5.25	<21.5	<21.5	<50.0	<7.85	<4.97	<8.70	<6.00	<6.25	<5.90
U4-MW-03D	4/20/2022	N	BL02	UMCf	96.6 - 106.6	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-03D	2/16/2023	N	EM06	UMCf	96.6 - 106.6	<0.525	<2.15	<2.15	<5.00	<0.785	<0.497 UJ	<0.870	<0.600	<0.625	<0.590
U4-MW-03D	3/16/2023	N	EM07	UMCf	96.6 - 106.6	<2.10	<8.60	<8.60	<20.0	<3.14	<1.99	<3.48	<2.40	<2.50	<2.36
U4-MW-03D	3/16/2023	FD	EM07	UMCf	96.6 - 106.6	<0.525	<2.15	<2.15	<5.00	<0.785	<0.497	<0.870	<0.600	<0.625	<0.590
U4-MW-03D	6/15/2023	N	EM10	UMCf	96.6 - 106.6	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-03D	9/14/2023	N	EM13	UMCf	96.6 - 106.6	<0.105	<0.430	2.28 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-03D	12/13/2023	N	EM16	UMCf	96.6 - 106.6	<0.105	<0.430	4.36 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-03DD	4/20/2022	N	BL02	UMCf	119.7 - 129.7	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-03DD	3/15/2023	N	EM07	UMCf	119.7 - 129.7	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-03DD	6/15/2023	N	EM10	UMCf	119.7 - 129.7	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-03DD	9/14/2023	N	EM13	UMCf	119.7 - 129.7	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Isopropylbenzene	m,p-Xylene (Sum of Isomers)	Methylene Chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	p-Cymene (p-Isopropyltoluene)	sec-Butylbenzene	Styrene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-03DD	12/14/2023	N	EM16	UMCf	119.7 - 129.7	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-03I	4/19/2022	N	BL02	UMCf	76.6 - 86.6	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-03I	3/15/2023	N	EM07	UMCf	76.6 - 86.6	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-03I	6/14/2023	N	EM10	UMCf	76.6 - 86.6	<2.10	<8.60	<8.60	<20.0	<3.14	<1.99	<3.48	<2.40	<2.50	<2.36
U4-MW-03I	6/14/2023	FD	EM10	UMCf	76.6 - 86.6	<2.63	<10.7	<10.7	<25.0	<3.93	<2.48	<4.35	<3.00	<3.13	<2.95
U4-MW-03I	9/11/2023	N	EM13	UMCf	76.6 - 86.6	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-03I	9/11/2023	FD	EM13	UMCf	76.6 - 86.6	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-03I	12/13/2023	N	EM16	UMCf	76.6 - 86.6	<0.105	<0.430	3.61 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-03I	12/13/2023	FD	EM16	UMCf	76.6 - 86.6	<0.105	<0.430	3.29 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-03S	4/18/2022	N	BL02	UMCf	54.5 - 64.5	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-03S	4/18/2022	FD	BL02	UMCf	54.5 - 64.5	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-03S	3/15/2023	N	EM07	UMCf	54.5 - 64.5	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-03S	6/15/2023	N	EM10	UMCf	54.5 - 64.5	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-03S	9/14/2023	N	EM13	UMCf	54.5 - 64.5	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-03S	12/13/2023	N	EM16	UMCf	54.5 - 64.5	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-04D	4/19/2022	N	BL02	UMCf	97.0 - 107.0	<0.105	<0.430	0.856 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-04D	2/16/2023	N	EM06	UMCf	97.0 - 107.0	<5.25	<21.5	<21.5	<50.0	<7.85	<4.97 UJ	<8.70	<6.00	<6.25	<5.90
U4-MW-04D	3/21/2023	N	EM07	UMCf	97.0 - 107.0	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-04D	6/14/2023	N	EM10	UMCf	97.0 - 107.0	<0.105	<0.430	0.479 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-04D	9/15/2023	N	EM13	UMCf	97.0 - 107.0	<0.105	<0.430	0.580 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-04D	12/12/2023	N	EM16	UMCf	97.0 - 107.0	<0.105	<0.430	1.64 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-04I	4/19/2022	N	BL02	UMCf	76.8 - 86.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-04I	3/20/2023	N	EM07	UMCf	76.8 - 86.8	<0.105	<0.430	0.491 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-04I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<0.525	<2.15	<2.15	<5.00	<0.785	<0.497	<0.870	<0.600	<0.625	<0.590
U4-MW-04I	9/14/2023	N	EM13	UMCf	76.8 - 86.8	<0.105	<0.430	0.693 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-04I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	<0.105	<0.430	1.07 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-05D	4/15/2022	N	BL02	UMCf	98.2 - 108.2	<0.105	<0.430	<0.430	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-05D	10/13/2022	N	EM02	UMCf	98.2 - 108.2	<10.5	<43.0	<43.0	<100 UJ	<15.7	<9.93	<17.4	<12.0	<12.5	<11.8
U4-MW-05D	11/3/2022	N	EM03	UMCf	98.2 - 108.2	<0.105	<0.430	98.2 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-05D	12/7/2022	N	EM04	UMCf	98.2 - 108.2	<0.105	<0.430	0.757 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-05D	1/11/2023	N	EM05	UMCf	98.2 - 108.2	<0.105	<0.430	0.566 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-05D	2/14/2023	N	EM06	UMCf	98.2 - 108.2	<10.5	<43.0	<43.0	<100	<15.7	<9.93	<17.4	<12.0	<12.5	<11.8
U4-MW-05D	3/16/2023	N	EM07	UMCf	98.2 - 108.2	<10.5	<43.0	<43.0	<100	<15.7	<9.93	<17.4	<12.0	<12.5	<11.8
U4-MW-05D	4/20/2023	N	EM08	UMCf	98.2 - 108.2	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-05D	5/10/2023	N	EM09	UMCf	98.2 - 108.2	<0.105	<0.430	4.02 J	<1.00	<0.157	<0.0993	<0.174 UJ	<0.120	<0.125	<0.118
U4-MW-05D	6/15/2023	N	EM10	UMCf	98.2 - 108.2	<0.105	<0.430	7.82	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-05D	7/18/2023	N	EM11	UMCf	98.2 - 108.2	<0.105	<0.430	6.87	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-05D	8/14/2023	N	EM12	UMCf	98.2 - 108.2	<2.63	<10.7	<10.7	<25.0	<3.93	<2.48	<4.35 UJ	<3.00	<3.13	<2.95
U4-MW-05D	9/12/2023	N	EM13	UMCf	98.2 - 108.2	<2.63	<10.7	<10.7	<25.0	<3.93	<2.48	<4.35	<3.00	<3.13	<2.95
U4-MW-05D	10/18/2023	N	EM14	UMCf	98.2 - 108.2	<2.63	<10.7	<10.7	<25.0	<3.93	<2.48	<4.35	<3.00	<3.13	<2.95
U4-MW-05D	11/16/2023	N	EM15	UMCf	98.2 - 108.2	<2.63	<10.7	<10.7	<25.0 UJ	<3.93	<2.48	<4.35	<3.00	<3.13	<2.95
U4-MW-05D	12/14/2023	N	EM16	UMCf	98.2 - 108.2	<2.63	<10.7	<10.7	<25.0	<3.93	<2.48	<4.35	<3.00	<3.13	<2.95
U4-MW-05I	4/15/2022	N	BL02	UMCf	76.6 - 86.6	<0.105	<0.430	<0.430	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-05I	10/13/2022	N	EM02	UMCf	76.6 - 86.6	<10.5	<43.0	<43.0	<100 UJ	<15.7	<9.93	<17.4	<12.0	<12.5	<11.8
U4-MW-05I	11/3/2022	N	EM03	UMCf	76.6 - 86.6	<0.105	<0.430	0.570 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-05I	12/8/2022	N	EM04	UMCf	76.6 - 86.6	<0.105	<0.430	0.635 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-05I	1/11/2023	N	EM05	UMCf	76.6 - 86.6	<0.105	<0.430	0.474 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-05I	2/14/2023	N	EM06	UMCf	76.6 - 86.6	<10.5	<43.0	<43.0	<100	<15.7	<9.93 UJ	<17.4	<12.0	<12.5	<11.8
U4-MW-05I	3/14/2023	N	EM07	UMCf	76.6 - 86.6	<10.5	<43.0	<43.0	<100	<15.7	<9.93	<17.4	<12.0	<12.5	<11.8
U4-MW-05I	4/21/2023	N	EM08	UMCf	76.6 - 86.6	<0.105	<0.430	0.722 J	<1.00	<0.157	<0.0993	<0.174 UJ	<0.120	<0.125	<0.118
U4-MW-05I	5/10/2023	N	EM09	UMCf	76.6 - 86.6	<0.105	<0.430	32.9	<1.00	<0.157	<0.0993	<0.174 UJ	<0.120	<0.125	<0.118

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Isopropylbenzene	m,p-Xylene (Sum of Isomers)	Methylene Chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	p-Cymene (p-Isopropyltoluene)	sec-Butylbenzene	Styrene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-05I	6/15/2023	N	EM10	UMCf	76.6 - 86.6	<0.105	<0.430	17.1	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-05I	7/17/2023	N	EM11	UMCf	76.6 - 86.6	<0.105	<0.430	10.5	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-05I	8/14/2023	N	EM12	UMCf	76.6 - 86.6	<5.25	<21.5	<21.5	<50.0	<7.85	<4.97	<8.70 UJ	<6.00	<6.25	<5.90
U4-MW-05I	9/13/2023	N	EM13	UMCf	76.6 - 86.6	<0.105	<0.430	9.65	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118 UJ
U4-MW-05I	10/18/2023	N	EM14	UMCf	76.6 - 86.6	<5.25	<21.5	<21.5	<50.0	<7.85	<4.97	<8.70	<6.00	<6.25	<5.90
U4-MW-05I	11/15/2023	N	EM15	UMCf	76.6 - 86.6	<5.25	<21.5	<21.5	<50.0 UJ	<7.85	<4.97	<8.70	<6.00	<6.25	<5.90
U4-MW-05I	12/12/2023	N	EM16	UMCf	76.6 - 86.6	<0.105	<0.430	8.12	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-06D	4/19/2022	N	BL02	UMCf	97.1 - 107.1	<0.105	<0.430	1.58 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-06D	2/15/2023	N	EM06	UMCf	97.1 - 107.1	<5.25	<21.5	<21.5	<50.0 UJ	<7.85	<4.97	<8.70	<6.00	<6.25	<5.90
U4-MW-06D	3/21/2023	N	EM07	UMCf	97.1 - 107.1	<0.105	<0.430	0.567 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-06D	6/16/2023	N	EM10	UMCf	97.1 - 107.1	<0.105	<0.430	0.542 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-06D	9/13/2023	N	EM13	UMCf	97.1 - 107.1	<0.105	<0.430	4.45 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118 UJ
U4-MW-06D	12/13/2023	N	EM16	UMCf	97.1 - 107.1	<0.105	<0.430	3.87 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-06I	4/19/2022	N	BL02	UMCf	76.5 - 86.5	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-06I	3/14/2023	N	EM07	UMCf	76.5 - 86.5	<0.105	<0.430	0.560 J	<50.0	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-06I	6/16/2023	N	EM10	UMCf	76.5 - 86.5	<0.105	<0.430	1.28 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-06I	9/12/2023	N	EM13	UMCf	76.5 - 86.5	<5.25	<21.5	<21.5	<50.0	<7.85	<4.97	<8.70	<6.00	<6.25	<5.90
U4-MW-06I	12/12/2023	N	EM16	UMCf	76.5 - 86.5	<0.105	<0.430	2.87 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-07D	4/15/2022	N	BL02	UMCf	96.8 - 106.5	<0.105	<0.430	<0.430	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-07D	10/12/2022	N	EM02	UMCf	96.8 - 106.5	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	0.181 J	<0.120	<0.125	<0.118
U4-MW-07D	10/12/2022	FD	EM02	UMCf	96.8 - 106.5	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-07D	11/3/2022	N	EM03	UMCf	96.8 - 106.5	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-07D	12/7/2022	N	EM04	UMCf	96.8 - 106.5	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-07D	1/11/2023	N	EM05	UMCf	96.8 - 106.5	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-07D	2/14/2023	N	EM06	UMCf	96.8 - 106.5	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-07D	3/16/2023	N	EM07	UMCf	96.8 - 106.5	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-07D	4/21/2023	N	EM08	UMCf	96.8 - 106.5	<0.105	<0.430	1.37 J	<1.00	<0.157	<0.0993	<0.174 UJ	<0.120	<0.125	<0.118
U4-MW-07D	5/11/2023	N	EM09	UMCf	96.8 - 106.5	<0.105	<0.430	11.0	<1.00	<0.157	<0.0993	<0.174 UJ	<0.120	<0.125	<0.118
U4-MW-07D	6/13/2023	N	EM10	UMCf	96.8 - 106.5	<0.105 UJ	<0.430 UJ	2.86 J	<1.00 UJ	<0.157 UJ	<0.0993 UJ	<0.174 UJ	<0.120 UJ	<0.125 UJ	<0.118 UJ
U4-MW-07D	7/17/2023	N	EM11	UMCf	96.8 - 106.5	<0.105	<0.430	3.05 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-07D	8/11/2023	N	EM12	UMCf	96.8 - 106.5	<0.105	<0.430	8.31	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-07D	9/13/2023	N	EM13	UMCf	96.8 - 106.5	<0.105	<0.430	5.26	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118 UJ
U4-MW-07D	10/18/2023	N	EM14	UMCf	96.8 - 106.5	<10.5	<43.0	<43.0	<100	<15.7	<9.93	<17.4	<12.0	<12.5	<11.8
U4-MW-07D	11/16/2023	N	EM15	UMCf	96.8 - 106.5	<10.5	<43.0	<43.0	<100 UJ	<15.7	<9.93	<17.4	<12.0	<12.5	<11.8
U4-MW-07D	12/12/2023	N	EM16	UMCf	96.8 - 106.5	0.120 J	<0.430	4.57 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-07I	4/15/2022	N	BL02	UMCf	76.8 - 86.8	<0.105	<0.430	<0.430	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-07I	10/12/2022	N	EM02	UMCf	76.8 - 86.8	<0.105	<0.430	0.478 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-07I	11/3/2022	N	EM03	UMCf	76.8 - 86.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-07I	12/7/2022	N	EM04	UMCf	76.8 - 86.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-07I	1/11/2023	N	EM05	UMCf	76.8 - 86.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-07I	2/15/2023	N	EM06	UMCf	76.8 - 86.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-07I	3/16/2023	N	EM07	UMCf	76.8 - 86.8	<0.525	<2.15	<2.15	<5.00	<0.785	<0.497	<0.870	<0.600	<0.625	<0.590
U4-MW-07I	4/21/2023	N	EM08	UMCf	76.8 - 86.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174 UJ	<0.120	<0.125	<0.118
U4-MW-07I	5/11/2023	N	EM09	UMCf	76.8 - 86.8	<0.105	<0.430	2.67 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-07I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<0.525	<2.15	8.82 J	<5.00	<0.785	<0.497	<0.870	<0.600	<0.625	<0.590
U4-MW-07I	7/17/2023	N	EM11	UMCf	76.8 - 86.8	<0.105	<0.430	4.27 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-07I	8/11/2023	N	EM12	UMCf	76.8 - 86.8	<0.105	<0.430	10.9	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-07I	9/13/2023	N	EM13	UMCf	76.8 - 86.8	<0.105	<0.430	10.5	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118 UJ
U4-MW-07I	10/18/2023	N	EM14	UMCf	76.8 - 86.8	<5.25	<21.5	<21.5	<50.0	<7.85	<4.97	<8.70	<6.00	<6.25	<5.90
U4-MW-07I	11/16/2023	N	EM15	UMCf	76.8 - 86.8	<5.25	<21.5	<21.5	<50.0 UJ	<7.85	<4.97	<8.70	<6.00	<6.25	<5.90
U4-MW-07I	12/11/2023	N	EM16	UMCf	76.8 - 86.8	<0.105	<0.430	8.19	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B
						Isopropylbenzene	m,p-Xylene (Sum of Isomers)	Methylene Chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	p-Cymene (p-Isopropyltoluene)	sec-Butylbenzene	Styrene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-08D	4/13/2022	N	BL02	UMCf	98.6 - 108.6	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-08D	12/7/2022	N	EM04	UMCf	98.6 - 108.6	<0.105	<0.430	0.846 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-08D	3/17/2023	N	EM07	UMCf	98.6 - 108.6	<10.5	<43.0	<4.91 J	<100 UJ	<15.7	<9.93	<17.4	<12.0	<12.5	<11.8
U4-MW-08D	6/13/2023	N	EM10	UMCf	98.6 - 108.6	<0.105	<0.430	4.91 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-08D	9/13/2023	N	EM13	UMCf	98.6 - 108.6	<0.105	<0.430	1.64 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118 UJ
U4-MW-08D	12/11/2023	N	EM16	UMCf	98.6 - 108.6	<0.105	<0.430	2.12 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-08DD	4/20/2022	N	BL02	UMCf	119.8 - 129.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-08DD	4/20/2022	FD	BL02	UMCf	119.8 - 129.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-08DD	12/8/2022	N	EM04	UMCf	119.8 - 129.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-08DD	3/15/2023	N	EM07	UMCf	119.8 - 129.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-08DD	6/14/2023	N	EM10	UMCf	119.8 - 129.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-08DD	9/14/2023	N	EM13	UMCf	119.8 - 129.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-08DD	12/14/2023	N	EM16	UMCf	119.8 - 129.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-08I	4/13/2022	N	BL02	UMCf	78.0 - 88.0	<0.105	<0.430	1.14 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-08I	12/7/2022	N	EM04	UMCf	78.0 - 88.0	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-08I	12/7/2022	FD	EM04	UMCf	78.0 - 88.0	<0.105	<0.430	0.436 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-08I	3/17/2023	N	EM07	UMCf	78.0 - 88.0	<5.25	<21.5	<21.5	<50.0 UJ	<7.85	<4.97	<8.70	<6.00	<6.25	<5.90
U4-MW-08I	6/13/2023	N	EM10	UMCf	78.0 - 88.0	<0.105	<0.430	1.94 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-08I	9/13/2023	N	EM13	UMCf	78.0 - 88.0	<0.105	<0.430	5.22	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118 UJ
U4-MW-08I	12/11/2023	N	EM16	UMCf	78.0 - 88.0	<0.105	<0.430	9.52 J+	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-08S	4/15/2022	N	BL02	UMCf	54.9 - 64.9	<0.105	<0.430	<0.430	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-08S	12/7/2022	N	EM04	UMCf	54.9 - 64.9	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-08S	12/7/2022	FD	EM04	UMCf	54.9 - 64.9	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-08S	3/13/2023	N	EM07	UMCf	54.9 - 64.9	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-08S	3/13/2023	FD	EM07	UMCf	54.9 - 64.9	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-08S	6/13/2023	N	EM10	UMCf	54.9 - 64.9	<0.105	<0.430	2.53 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-08S	6/13/2023	FD	EM10	UMCf	54.9 - 64.9	<0.105	<0.430	2.59 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-08S	9/13/2023	N	EM13	UMCf	54.9 - 64.9	<0.105	<0.430	<0.430	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118 UJ
U4-MW-08S	9/13/2023	FD	EM13	UMCf	54.9 - 64.9	<0.105	<0.430	<0.430	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118 UJ
U4-MW-08S	12/14/2023	N	EM16	UMCf	54.9 - 64.9	<0.105	<0.430	3.66 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-08S	12/14/2023	FD	EM16	UMCf	54.9 - 64.9	<0.105	<0.430	3.81 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-09D	4/14/2022	N	BL02	UMCf	96.9 - 106.9	<0.105	<0.430	0.520 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-09D	12/6/2022	N	EM04	UMCf	96.9 - 106.9	<1.05 UJ	<4.30 UJ	<4.30 UJ	<10.0 UJ	<1.57 UJ	<0.993 UJ	<1.74 UJ	<1.20 UJ	<1.25 UJ	<1.18 UJ
U4-MW-09D	3/16/2023	N	EM07	UMCf	96.9 - 106.9	<1.05	<4.30	<4.30	<10.0	<1.57	<0.993	<1.74	<1.20	<1.25	<1.18
U4-MW-09D	6/14/2023	N	EM10	UMCf	96.9 - 106.9	<0.105	<0.430	14.8	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-09D	9/12/2023	N	EM13	UMCf	96.9 - 106.9	<0.105	<0.430	2.81 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-09D	12/15/2023	N	EM16	UMCf	96.9 - 106.9	<2.63 UJ	12.4 J	<10.7 UJ	<25.0 UJ	<3.93 UJ	5.03 J	<4.35 UJ	<3.00 UJ	<3.13 UJ	<2.95 UJ
U4-MW-09DD	4/14/2022	N	BL02	UMCf	119.8 - 129.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-09DD	12/6/2022	N	EM04	UMCf	119.8 - 129.8	<0.105 UJ	<0.430 UJ	<0.430 UJ	<1.00 UJ	<0.157 UJ	<0.0993 UJ	<0.174 UJ	<0.120 UJ	<0.125 UJ	<0.118 UJ
U4-MW-09DD	3/21/2023	N	EM07	UMCf	119.8 - 129.8	<0.105	<0.430	<0.430	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-09DD	6/15/2023	N	EM10	UMCf	119.8 - 129.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-09DD	9/13/2023	N	EM13	UMCf	119.8 - 129.8	<0.105	<0.430	1.83 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118 UJ
U4-MW-09DD	12/13/2023	N	EM16	UMCf	119.8 - 129.8	<0.105	<0.430	0.464 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-09I	4/14/2022	N	BL02	UMCf	76.8 - 86.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	0.326 J	<0.120	<0.125	<0.118
U4-MW-09I	12/6/2022	N	EM04	UMCf	76.8 - 86.8	<1.05 UJ	<4.30 UJ	<4.30 UJ	<10.0 UJ	<1.57 UJ	<0.993 UJ	<1.74 UJ	<1.20 UJ	<1.25 UJ	<1.18 UJ
U4-MW-09I	3/16/2023	N	EM07	UMCf	76.8 - 86.8	<1.05	<4.30	<4.30	<10.0	<1.57	<0.993	<1.74	<1.20	<1.25	<1.18
U4-MW-09I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<0.105	<0.430	6.76	<10.0	<0.157	<0.993	<0.174	<0.120	<0.125	<0.118
U4-MW-09I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	<0.105	<0.430	3.08 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-09I	12/15/2023	N	EM16	UMCf	76.8 - 86.8	<2.63 UJ	<10.7 UJ	<10.7 UJ	<25.0 UJ	<3.93 UJ	<2.48 UJ	<4.35 UJ	<3.00 UJ	<3.13 UJ	<2.95 UJ
U4-MW-09S	4/14/2022	N	BL02	UMCf	55.3 - 65.3	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-09S	12/6/2022	N	EM04	UMCf	55.3 - 65.3	<0.105 UJ	<0.430 UJ	<0.430 UJ	<1.00 UJ	<0.157 UJ	<0.0993 UJ	<0.174 UJ	<0.120 UJ	<0.125 UJ	<0.118 UJ

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B
						Isopropylbenzene	m,p-Xylene (Sum of Isomers)	Methylene Chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	p-Cymene (p-Isopropyltoluene)	sec-Butylbenzene	Styrene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-09S	3/17/2023	N	EM07	UMCf	55.3 - 65.3	<0.105	<0.430	<0.430	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-09S	6/15/2023	N	EM10	UMCf	55.3 - 65.3	<0.105	<0.430	1.06 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-09S	9/13/2023	N	EM13	UMCf	55.3 - 65.3	<0.105	<0.430	2.16 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118 UJ
U4-MW-09S	12/12/2023	N	EM16	UMCf	55.3 - 65.3	<0.105	<0.430	18.5	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-10D	4/14/2022	N	BL02	UMCf	96.9 - 106.9	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-10D	12/5/2022	N	EM04	UMCf	96.9 - 106.9	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-10D	3/17/2023	N	EM07	UMCf	96.9 - 106.9	<0.105	<0.430	1.73 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-10D	6/14/2023	N	EM10	UMCf	96.9 - 106.9	<0.105	<0.430	0.683 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-10D	9/13/2023	N	EM13	UMCf	96.9 - 106.9	<0.105	<0.430	0.930 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118 UJ
U4-MW-10D	12/14/2023	N	EM16	UMCf	96.9 - 106.9	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-10I	4/14/2022	N	BL02	UMCf	77.1 - 87.1	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-10I	12/5/2022	N	EM04	UMCf	77.1 - 87.1	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-10I	3/17/2023	N	EM07	UMCf	77.1 - 87.1	<0.105	<0.430	4.66 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-10I	6/14/2023	N	EM10	UMCf	77.1 - 87.1	<0.105	<0.430	0.757 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-10I	9/13/2023	N	EM13	UMCf	77.1 - 87.1	<0.105	<0.430	1.26 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118 UJ
U4-MW-10I	12/14/2023	N	EM16	UMCf	77.1 - 87.1	<0.105	<0.430	0.922 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-11D	4/15/2022	N	BL02	UMCf	97.4 - 107.4	<0.105	<0.430	0.565 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-11D	9/26/2022	N	EM01	UMCf	97.4 - 107.4	<5.25	<21.5	<21.5	<50.0	<7.85	<4.97	<8.70	<6.00	<6.25	<5.90
U4-MW-11D	10/11/2022	N	EM02	UMCf	97.4 - 107.4	<1.05	<4.30	<4.30	<10.0	<1.57	<0.993	<1.74	<1.20	<1.25	<1.18
U4-MW-11D	11/1/2022	N	EM03	UMCf	97.4 - 107.4	<5.25	<21.5	<21.5	<50.0	<7.85	<4.97	<8.70	<6.00	<6.25	<5.90
U4-MW-11D	12/6/2022	N	EM04	UMCf	97.4 - 107.4	<2.63 UJ	<10.7 UJ	<10.7 UJ	<25.0 UJ	<3.93 UJ	<2.48 UJ	<4.35 UJ	<3.00 UJ	<3.13 UJ	<2.95 UJ
U4-MW-11D	1/12/2023	N	EM05	UMCf	97.4 - 107.4	<21.0	<86.0	<86.0	<200	<31.4	<19.9	<34.8	<24.0	<25.0	<23.6
U4-MW-11D	2/14/2023	N	EM06	UMCf	97.4 - 107.4	<21.0	<86.0	<86.0	<200	<31.4	<19.9 UJ	<34.8	<24.0	<25.0	<23.6
U4-MW-11D	3/16/2023	N	EM07	UMCf	97.4 - 107.4	<21.0	<86.0	<86.0	<200	<31.4	<19.9	<34.8	<24.0	<25.0	<23.6
U4-MW-11D	4/18/2023	N	EM08	UMCf	97.4 - 107.4	<0.525	<2.15	<2.15	<5.00	<0.785	<0.497	<0.870	<0.600	<0.625	<0.590
U4-MW-11D	5/17/2023	N	EM09	UMCf	97.4 - 107.4	<2.10 UJ	<8.60 UJ	<8.60 UJ	<20.0 UJ	<3.14 UJ	<1.99 UJ	<3.48 UJ	<2.40 UJ	<2.50 UJ	<2.36 UJ
U4-MW-11D	6/16/2023	N	EM10	UMCf	97.4 - 107.4	<0.105	<0.430	1.39 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-11D	7/14/2023	N	EM11	UMCf	97.4 - 107.4	<0.105	<0.430	1.81 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-11D	8/14/2023	N	EM12	UMCf	97.4 - 107.4	<21.0	<86.0	<86.0	<200 UJ	<31.4	<19.9	<34.8	<24.0	<25.0	<23.6
U4-MW-11D	9/13/2023	N	EM13	UMCf	97.4 - 107.4	<0.105	<0.430	2.98 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118 UJ
U4-MW-11D	10/18/2023	N	EM14	UMCf	97.4 - 107.4	<21.0	<86.0	<86.0	<200	<31.4	<19.9	<34.8	<24.0	<25.0	<23.6
U4-MW-11D	11/16/2023	N	EM15	UMCf	97.4 - 107.4	<5.25	<21.5	<21.5	<50.0	<7.85	<4.97	<8.70	<6.00	<6.25	<5.90
U4-MW-11D	12/13/2023	N	EM16	UMCf	97.4 - 107.4	<0.105	<0.430	2.67 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-11I	4/14/2022	N	BL02	UMCf	77.0 - 87.0	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118 R
U4-MW-11I	9/26/2022	N	EM01	UMCf	77.0 - 87.0	<0.105	<0.430	0.707 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-11I	9/26/2022	FD	EM01	UMCf	77.0 - 87.0	<0.105	<0.430	0.866 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-11I	10/10/2022	N	EM02	UMCf	77.0 - 87.0	<1.05	<4.30	5.54 J	<10.0	<1.57	<0.993	<1.74	<1.20	<1.25	<1.18
U4-MW-11I	10/10/2022	FD	EM02	UMCf	77.0 - 87.0	<0.105	<0.430	2.44 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-11I	10/31/2022	N	EM03	UMCf	77.0 - 87.0	<0.525	<2.15	12.9 J	<5.00	<0.785	<0.497	<0.870	<0.600	<0.625	<0.590
U4-MW-11I	10/31/2022	FD	EM03	UMCf	77.0 - 87.0	<0.105	<0.430	14.6	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-11I	12/6/2022	N	EM04	UMCf	77.0 - 87.0	<0.105 UJ	<0.430 UJ	5.79 J+	<1.00 UJ	<0.157 UJ	<0.0993 UJ	<0.174 UJ	<0.120 UJ	<0.125 UJ	<0.118 UJ
U4-MW-11I	12/6/2022	FD	EM04	UMCf	77.0 - 87.0	<0.105 UJ	<0.430 UJ	6.35	<1.00 UJ	<0.157 UJ	<0.0993 UJ	<0.174 UJ	<0.120 UJ	<0.125 UJ	<0.118 UJ
U4-MW-11I	1/12/2023	N	EM05	UMCf	77.0 - 87.0	<0.105	<0.430	0.544 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-11I	1/12/2023	FD	EM05	UMCf	77.0 - 87.0	<0.105	<0.430	0.510 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-11I	2/14/2023	N	EM06	UMCf	77.0 - 87.0	<0.105	<0.430	1.58 J	<1.00	<0.157	<0.0993 UJ	<0.174	<0.120	<0.125	<0.118
U4-MW-11I	2/14/2023	FD	EM06	UMCf	77.0 - 87.0	<0.105	<0.430	1.64 J	<1.00	<0.157	<0.0993 UJ	<0.174	<0.120	<0.125	<0.118
U4-MW-11I	3/16/2023	N	EM07	UMCf	77.0 - 87.0	<0.105	<0.430	2.13 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-11I	3/16/2023	FD	EM07	UMCf	77.0 - 87.0	<0.105	<0.430	2.47 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-11I	4/18/2023	N	EM08	UMCf	77.0 - 87.0	<0.105	<0.430	8.45	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-11I	4/18/2023	FD	EM08	UMCf	77.0 - 87.0	<0.105	<0.430	8.69	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-11I	5/19/2023	N	EM09	UMCf	77.0 - 87.0	<0.105 UJ	<0.430 UJ	3.38 J	<1.00 UJ	<0.157 UJ	<0.0993 UJ	<0.174 UJ	<0.120 UJ	<0.125 UJ	<0.118 UJ

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Isopropylbenzene	m,p-Xylene (Sum of Isomers)	Methylene Chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	p-Cymene (p-Isopropyltoluene)	sec-Butylbenzene	Styrene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-11I	5/19/2023	FD	EM09	UMCf	77.0 - 87.0	<0.105 UJ	<0.430 UJ	3.38 J	<1.00 UJ	<0.157 UJ	<0.0993 UJ	<0.174 UJ	<0.120 UJ	<0.125 UJ	<0.118 UJ
U4-MW-11I	6/15/2023	N	EM10	UMCf	77.0 - 87.0	<0.105	<0.430	1.14 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-11I	6/15/2023	FD	EM10	UMCf	77.0 - 87.0	<0.105	<0.430	1.32 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-11I	7/13/2023	N	EM11	UMCf	77.0 - 87.0	<0.105	<0.430	0.555 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-11I	7/13/2023	FD	EM11	UMCf	77.0 - 87.0	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-11I	8/14/2023	N	EM12	UMCf	77.0 - 87.0	<0.105	<0.430	2.78 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-11I	8/14/2023	FD	EM12	UMCf	77.0 - 87.0	<0.105	<0.430	2.57 J	<1.00	<0.157	<0.0993	<0.174 UJ	<0.120	<0.125	<0.118
U4-MW-11I	9/13/2023	N	EM13	UMCf	77.0 - 87.0	<0.105	<0.430	3.48 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118 UJ
U4-MW-11I	9/13/2023	FD	EM13	UMCf	77.0 - 87.0	<0.105	<0.430	3.82 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118 UJ
U4-MW-11I	10/19/2023	N	EM14	UMCf	77.0 - 87.0	<0.105	<0.430	2.71 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<5.90
U4-MW-11I	10/19/2023	FD	EM14	UMCf	77.0 - 87.0	<0.105	<0.430	2.95 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<5.90
U4-MW-11I	11/16/2023	N	EM15	UMCf	77.0 - 87.0	<5.25	<21.5	<21.5	<50.0 UJ	<7.85	<4.97	<8.70	<6.00	<6.25	<5.90
U4-MW-11I	11/16/2023	FD	EM15	UMCf	77.0 - 87.0	<5.25	<21.5	<21.5	<50.0 UJ	<7.85	<4.97	<8.70	<6.00	<6.25	<5.90
U4-MW-11I	12/13/2023	N	EM16	UMCf	77.0 - 87.0	<0.105	<0.430	2.21 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-11I	12/13/2023	FD	EM16	UMCf	77.0 - 87.0	<0.105	<0.430	2.28 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-12D	4/15/2022	N	BL02	UMCf	97.1 - 107.1	<0.105	<0.430	0.639 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-12D	9/27/2022	N	EM01	UMCf	97.1 - 107.1	<2.10	<8.60	<8.60	<20.0	<3.14	<1.99	<3.48	<2.40	<2.50	<2.36
U4-MW-12D	10/12/2022	N	EM02	UMCf	97.1 - 107.1	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-12D	11/2/2022	N	EM03	UMCf	97.1 - 107.1	<1.05	<4.30	<4.30	<10.0	<1.57	<0.993	<1.74	<1.20	<1.25	<1.18
U4-MW-12D	12/7/2022	N	EM04	UMCf	97.1 - 107.1	<0.105	<0.430	1.31 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-12D	1/12/2023	N	EM05	UMCf	97.1 - 107.1	<10.5	<43.0	<43.0	<100	<15.7	<9.93	<17.4	<12.0	<12.5	<11.8
U4-MW-12D	2/15/2023	N	EM06	UMCf	97.1 - 107.1	<10.5	<43.0	<43.0	<100 UJ	<15.7	<9.93	<17.4	<12.0	<12.5	<11.8
U4-MW-12D	3/14/2023	N	EM07	UMCf	97.1 - 107.1	<5.25	<21.5	<21.5	<50.0	<7.85	<4.97	<8.70	<6.00	<6.25	<5.90
U4-MW-12D	4/17/2023	N	EM08	UMCf	97.1 - 107.1	<0.525 UJ	<2.15 UJ	<2.15 UJ	<5.00 UJ	<0.785 UJ	<0.497 UJ	<0.870 UJ	<0.600 UJ	<0.625 UJ	<0.590 UJ
U4-MW-12D	5/17/2023	N	EM09	UMCf	97.1 - 107.1	<10.5	<43.0	<43.0	<100	<15.7	<9.93	<17.4	<12.0	<12.5	<11.8
U4-MW-12D	6/16/2023	N	EM10	UMCf	97.1 - 107.1	<0.105	<0.430	0.654 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-12D	7/13/2023	N	EM11	UMCf	97.1 - 107.1	<0.105	<0.430	0.698 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-12D	8/14/2023	N	EM12	UMCf	97.1 - 107.1	<5.25	<21.5	<21.5	<50.0	<7.85	<4.97	<8.70 UJ	<6.00	<6.25	<5.90
U4-MW-12D	9/12/2023	N	EM13	UMCf	97.1 - 107.1	<5.25	<21.5	<21.5	<50.0	<7.85	<4.97	<8.70	<6.00	<6.25	<5.90
U4-MW-12D	10/17/2023	N	EM14	UMCf	97.1 - 107.1	<0.525	<2.15	<2.15	<5.00	<0.785	<0.497	<0.870	<0.600	<0.625	<0.590
U4-MW-12D	11/15/2023	N	EM15	UMCf	97.1 - 107.1	<0.525	<2.15	<2.15	<5.00 UJ	<0.785	<0.497	<0.870	<0.600	<0.625	<0.590
U4-MW-12D	12/12/2023	N	EM16	UMCf	97.1 - 107.1	<0.105	<0.430	1.96 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-12I	4/14/2022	N	BL02	UMCf	76.8 - 86.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-12I	4/14/2022	FD	BL02	UMCf	76.8 - 86.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-12I	9/27/2022	N	EM01	UMCf	76.8 - 86.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118 UJ
U4-MW-12I	10/12/2022	N	EM02	UMCf	76.8 - 86.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-12I	11/2/2022	N	EM03	UMCf	76.8 - 86.8	<0.105	<0.430	1.52 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-12I	12/7/2022	N	EM04	UMCf	76.8 - 86.8	<0.105	<0.430	4.69 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-12I	12/7/2022	FD	EM04	UMCf	76.8 - 86.8	<0.105	<0.430	4.62 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-12I	1/13/2023	N	EM05	UMCf	76.8 - 86.8	<0.105	<0.430	1.37 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-12I	2/15/2023	N	EM06	UMCf	76.8 - 86.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-12I	3/13/2023	N	EM07	UMCf	76.8 - 86.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-12I	4/17/2023	N	EM08	UMCf	76.8 - 86.8	<0.105 UJ	<0.430 UJ	<0.430 UJ	<1.00 UJ	<0.157 UJ	<0.0993 UJ	<0.174 UJ	<0.120 UJ	<0.125 UJ	<0.118 UJ
U4-MW-12I	5/17/2023	N	EM09	UMCf	76.8 - 86.8	<0.105	<0.430	1.17 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-12I	6/16/2023	N	EM10	UMCf	76.8 - 86.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-12I	7/11/2023	N	EM11	UMCf	76.8 - 86.8	<0.105	<0.430	1.11 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-12I	8/14/2023	N	EM12	UMCf	76.8 - 86.8	<0.105	<0.430	1.55 J	<1.00	<0.157	<0.0993	<0.174 UJ	<0.120	<0.125	<0.118
U4-MW-12I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	<0.105	<0.430	3.98 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-12I	10/17/2023	N	EM14	UMCf	76.8 - 86.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-12I	11/16/2023	N	EM15	UMCf	76.8 - 86.8	<0.105	<0.430	3.92 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-12I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	<0.105	<0.430	3.23 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Isopropylbenzene	m,p-Xylene (Sum of Isomers)	Methylene Chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	p-Cymene (p-Isopropyltoluene)	sec-Butylbenzene	Styrene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-13D	4/14/2022	N	BL02	UMCf	98.2 - 108.2	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-13D	9/28/2022	N	EM01	UMCf	98.2 - 108.2	<1.05	<4.30	5.02 J	<10.0	<1.57	<0.993	<1.74	<1.20	<1.25	<1.18
U4-MW-13D	10/11/2022	N	EM02	UMCf	98.2 - 108.2	<0.105	<0.430	0.543 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-13D	11/3/2022	N	EM03	UMCf	98.2 - 108.2	<0.105	<0.430	0.508 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-13D	12/7/2022	N	EM04	UMCf	98.2 - 108.2	<0.105	<0.430	0.439 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-13D	1/12/2023	N	EM05	UMCf	98.2 - 108.2	<2.10	<8.60	<8.60	<20.0	<3.14	<1.99	<3.48	<2.40	<2.50	<2.36
U4-MW-13D	2/15/2023	N	EM06	UMCf	98.2 - 108.2	<0.105	<0.430	<0.430	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-13D	3/17/2023	N	EM07	UMCf	98.2 - 108.2	<2.10	<8.60	<8.60	<20.0 UJ	<3.14	<1.99	<3.48	<2.40	<2.50	<2.36
U4-MW-13D	4/18/2023	N	EM08	UMCf	98.2 - 108.2	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-13D	5/17/2023	N	EM09	UMCf	98.2 - 108.2	<2.10	<8.60	<8.60	<20.0	<3.14	<1.99	<3.48	<2.40	<2.50	<2.36
U4-MW-13D	6/15/2023	N	EM10	UMCf	98.2 - 108.2	<0.105	<0.430	1.22 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-13D	7/12/2023	N	EM11	UMCf	98.2 - 108.2	<0.105	<0.430	2.99 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-13D	8/11/2023	N	EM12	UMCf	98.2 - 108.2	<0.105	<0.430	3.47 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-13D	9/11/2023	N	EM13	UMCf	98.2 - 108.2	<2.63	<10.7	<10.7	<25.0	<3.93	<2.48	<4.35	<3.00	<3.13	<2.95
U4-MW-13D	10/18/2023	N	EM14	UMCf	98.2 - 108.2	<2.63	<10.7	<10.7	<25.0	<3.93	<2.48	<4.35	<3.00	<3.13	<2.95
U4-MW-13D	11/15/2023	N	EM15	UMCf	98.2 - 108.2	<2.63	<10.7	<10.7	<25.0 UJ	<3.93	<2.48	<4.35	<3.00	<3.13	<2.95
U4-MW-13D	12/11/2023	N	EM16	UMCf	98.2 - 108.2	<0.105	<0.430	3.09 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-13I	4/14/2022	N	BL02	UMCf	77.1 - 87.1	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-13I	9/28/2022	N	EM01	UMCf	77.1 - 87.1	<0.105	<0.430	<0.430	2.01 J	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-13I	10/10/2022	N	EM02	UMCf	77.1 - 87.1	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-13I	11/3/2022	N	EM03	UMCf	77.1 - 87.1	<0.105	<0.430	0.573 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-13I	12/6/2022	N	EM04	UMCf	77.1 - 87.1	<0.525 UJ	<2.15 UJ	7.70 J	<5.00 UJ	<0.785 UJ	<0.497 UJ	<0.870 UJ	<0.600 UJ	<0.625 UJ	<0.590 UJ
U4-MW-13I	1/12/2023	N	EM05	UMCf	77.1 - 87.1	<0.105	<0.430	1.03 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-13I	2/14/2023	N	EM06	UMCf	77.1 - 87.1	<0.525	<2.15	<2.15	<5.00	<0.785	<0.497 UJ	<0.870	<0.600	<0.625	<0.590
U4-MW-13I	3/16/2023	N	EM07	UMCf	77.1 - 87.1	<0.105	<0.430	0.861 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-13I	4/19/2023	N	EM08	UMCf	77.1 - 87.1	<0.105	<0.430	0.905 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-13I	5/17/2023	N	EM09	UMCf	77.1 - 87.1	<0.105	<0.430	0.645 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-13I	6/15/2023	N	EM10	UMCf	77.1 - 87.1	<0.105	<0.430	0.433 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-13I	7/12/2023	N	EM11	UMCf	77.1 - 87.1	<0.105	<0.430	0.610 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-13I	8/11/2023	N	EM12	UMCf	77.1 - 87.1	<0.105	<0.430	2.39 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-13I	9/11/2023	N	EM13	UMCf	77.1 - 87.1	<2.63	<10.7	<10.7	<25.0	<3.93	<2.48	<4.35	<3.00	<3.13	<2.95
U4-MW-13I	10/17/2023	N	EM14	UMCf	77.1 - 87.1	<0.105	<0.430	3.40 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-13I	11/15/2023	N	EM15	UMCf	77.1 - 87.1	<0.105	<0.430	3.07 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-13I	12/11/2023	N	EM16	UMCf	77.1 - 87.1	<0.105	<0.430	2.52 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-14D	4/13/2022	N	BL02	UMCf	97.3 - 107.3	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-14D	12/6/2022	N	EM04	UMCf	97.3 - 107.3	<0.525 UJ	<2.15 UJ	<2.15 UJ	<5.00 UJ	<0.785 UJ	<0.497 UJ	<0.870 UJ	<0.600 UJ	<0.625 UJ	<0.590 UJ
U4-MW-14D	3/16/2023	N	EM07	UMCf	97.3 - 107.3	<0.525	<2.15	<2.15	<5.00	<0.785	<0.497	<0.870	<0.600	<0.625	<0.590
U4-MW-14D	6/15/2023	N	EM10	UMCf	97.3 - 107.3	<0.105	<0.430	0.531 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-14D	9/14/2023	N	EM13	UMCf	97.3 - 107.3	<0.105	<0.430	0.964 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-14D	12/15/2023	N	EM16	UMCf	97.3 - 107.3	<0.105	<0.430	1.20 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-14I	4/14/2022	N	BL02	UMCf	77.3 - 87.3	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-14I	12/6/2022	N	EM04	UMCf	77.3 - 87.3	<0.525 UJ	<2.15 UJ	<2.15 UJ	<5.00 UJ	<0.785 UJ	<0.497 UJ	<0.870 UJ	<0.600 UJ	<0.625 UJ	<0.590 UJ
U4-MW-14I	3/16/2023	N	EM07	UMCf	77.3 - 87.3	<0.525	<2.15	<2.15	<5.00	<0.785	<0.497	<0.870	<0.600	<0.625	<0.590
U4-MW-14I	6/15/2023	N	EM10	UMCf	77.3 - 87.3	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-14I	9/14/2023	N	EM13	UMCf	77.3 - 87.3	<0.105	<0.430	1.40 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-14I	12/14/2023	N	EM16	UMCf	77.3 - 87.3	<0.105	<0.430	1.62 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-15D	4/13/2022	N	BL02	UMCf	96.0 - 106.0	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-15D	12/5/2022	N	EM04	UMCf	96.0 - 106.0	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-15D	3/20/2023	N	EM07	UMCf	96.0 - 106.0	<0.105	<0.430	<0.430	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-15D	6/14/2023	N	EM10	UMCf	96.0 - 106.0	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-15D	9/13/2023	N	EM13	UMCf	96.0 - 106.0	<0.105	<0.430	<0.430	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118 UJ

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Isopropylbenzene	m,p-Xylene (Sum of Isomers)	Methylene Chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	p-Cymene (p-Isopropyltoluene)	sec-Butylbenzene	Styrene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-15D	12/12/2023	N	EM16	UMCf	96.0 - 106.0	<0.105	<0.430	<0.430	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-15DD	4/13/2022	N	BL02	UMCf	120.3 - 130.3	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-15DD	12/5/2022	N	EM04	UMCf	120.3 - 130.3	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-15DD	3/15/2023	N	EM07	UMCf	120.3 - 130.3	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-15DD	6/13/2023	N	EM10	UMCf	120.3 - 130.3	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-15DD	9/14/2023	N	EM13	UMCf	120.3 - 130.3	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-15DD	12/13/2023	N	EM16	UMCf	120.3 - 130.3	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-15I	4/12/2022	N	BL02	UMCf	76.8 - 86.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-15I	12/5/2022	N	EM04	UMCf	76.8 - 86.8	<0.105	<0.430	1.81 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-15I	3/17/2023	N	EM07	UMCf	76.8 - 86.8	<2.10	<8.60	<8.60	<20.0 UJ	<3.14	<1.99	<3.48	<2.40	<2.50	<2.36
U4-MW-15I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-15I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	<0.105	<0.430	1.08 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-15I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	<0.105	<0.430	1.10 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-15S	4/13/2022	N	BL02	UMCf	54.8 - 64.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-15S	12/5/2022	N	EM04	UMCf	54.8 - 64.8	<2.63	<10.7	<10.7	<25.0	<3.93	<2.48	<4.35	<3.00	<3.13	<2.95
U4-MW-15S	3/13/2023	N	EM07	UMCf	54.8 - 64.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-15S	6/13/2023	N	EM10	UMCf	54.8 - 64.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-15S	9/14/2023	N	EM13	UMCf	54.8 - 64.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-15S	12/11/2023	N	EM16	UMCf	54.8 - 64.8	<0.210	<0.860	<0.860	<2.00 UJ	<0.314	<0.199	<0.348	<0.240	<0.250	<0.236
U4-MW-16D	4/11/2022	N	BL02	UMCf	96.8 - 106.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-16D	12/5/2022	N	EM04	UMCf	96.8 - 106.8	<0.105	<0.430	1.30 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-16D	3/14/2023	N	EM07	UMCf	96.8 - 106.8	<0.105	<0.430	0.576 J	<20.0	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-16D	6/13/2023	N	EM10	UMCf	96.8 - 106.8	<0.105	<0.430	0.627 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-16D	9/15/2023	N	EM13	UMCf	96.8 - 106.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-16D	12/14/2023	N	EM16	UMCf	96.8 - 106.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-16DD	4/12/2022	N	BL02	UMCf	120.8 - 130.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-16DD	12/5/2022	N	EM04	UMCf	120.8 - 130.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-16DD	3/15/2023	N	EM07	UMCf	120.8 - 130.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-16DD	6/13/2023	N	EM10	UMCf	120.8 - 130.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-16DD	9/14/2023	N	EM13	UMCf	120.8 - 130.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-16DD	12/13/2023	N	EM16	UMCf	120.8 - 130.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-16I	4/11/2022	N	BL02	UMCf	77.0 - 87.0	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-16I	12/5/2022	N	EM04	UMCf	77.0 - 87.0	<0.105	<0.430	5.10	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-16I	12/5/2022	FD	EM04	UMCf	77.0 - 87.0	<0.105	<0.430	5.03	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-16I	3/13/2023	N	EM07	UMCf	77.0 - 87.0	<0.105	<0.430	0.963 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-16I	3/13/2023	FD	EM07	UMCf	77.0 - 87.0	<0.105	<0.430	0.963 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-16I	6/12/2023	N	EM10	UMCf	77.0 - 87.0	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-16I	6/12/2023	FD	EM10	UMCf	77.0 - 87.0	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-16I	9/11/2023	N	EM13	UMCf	77.0 - 87.0	<0.105	<0.430	0.813 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-16I	9/11/2023	FD	EM13	UMCf	77.0 - 87.0	<0.105	<0.430	0.932 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-16I	12/11/2023	N	EM16	UMCf	77.0 - 87.0	<0.105	<0.430	0.873 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-16I	12/11/2023	FD	EM16	UMCf	77.0 - 87.0	<0.105	<0.430	0.919 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-16S	4/12/2022	N	BL02	UMCf	54.8 - 64.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-16S	4/12/2022	FD	BL02	UMCf	54.8 - 64.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-16S	12/6/2022	N	EM04	UMCf	54.8 - 64.8	<0.105 UJ	<0.430 UJ	0.573 J	<1.00 UJ	<0.157 UJ	<0.0993 UJ	<0.174 UJ	<0.120 UJ	<0.125 UJ	<0.118 UJ
U4-MW-16S	3/15/2023	N	EM07	UMCf	54.8 - 64.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-16S	6/13/2023	N	EM10	UMCf	54.8 - 64.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-16S	9/11/2023	N	EM13	UMCf	54.8 - 64.8	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-MW-16S	12/11/2023	N	EM16	UMCf	54.8 - 64.8	<0.105	<0.430	<0.430	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-SLMW	11/10/2022	N	EM03		-	<0.525	<2.15	<2.15	<5.00	<0.785	<0.497	<0.870	<0.600	<0.625	<0.590
U4-T3	10/13/2022	N	EM02		-	<0.105	<0.430	0.687 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B
						Isopropylbenzene	m,p-Xylene (Sum of Isomers)	Methylene Chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	p-Cymene (p-Isopropyltoluene)	sec-Butylbenzene	Styrene
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-T3	11/3/2022	N	EM03		-	<0.105	<0.430	0.879 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-T3	12/6/2022	N	EM04		-	<2.10 UJ	<8.60 UJ	<8.60 UJ	<20.0 UJ	<3.14 UJ	<1.99 UJ	<3.48 UJ	<2.40 UJ	<2.50 UJ	<2.36 UJ
U4-T3	1/9/2023	N	EM05		-	<0.105	<0.430	0.864 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-T3	2/13/2023	N	EM06		-	<10.5	<43.0	<43.0	<100	<15.7	<9.93	<17.4	<12.0	<12.5	<11.8
U4-T3	3/13/2023	N	EM07		-	<2.63	<10.7	<10.7	<25.0	<3.93	<2.48	<4.35	<3.00	<3.13	<2.95
U4-T3	4/19/2023	N	EM08		-	<0.105	<0.430	<0.430	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-T3	5/18/2023	N	EM09		-	<0.105	<0.430	1.96 J	<1.00 UJ	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-T3	6/12/2023	N	EM10		-	<0.105	<0.430	3.51 J	<50.0	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-T3	7/11/2023	N	EM11		-	<0.105	<0.430	2.84 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-T3	8/10/2023	N	EM12		-	<0.105	<0.430	2.09 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-T3	9/11/2023	N	EM13		-	<0.105	<0.430	2.71 J	<1.00	<0.157	<0.0993	<0.174	<0.120	<0.125	<0.118
U4-T3	10/16/2023	N	EM14		-	<2.63	<10.7	<10.7	<25.0	<3.93	<2.48	<4.35	<3.00	<3.13	<2.95

Notes:

FD - Field duplicate

E - Field instrument error.

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 low.

J+ - The result is an estimated quantity, but the result may be biased high.

N/A - Not Applicable

mg/L - milligrams per liter

µg/L - micrograms per liter

N - Normal field 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

< - The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

-- Not tested.

M-252 damaged/obstructed when checked on June 14, 2023 and September 14, 2023.

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B
						tert-Amyl Methyl Ether	tert-Butyl Alcohol	tert-Butyl Methyl Ether (MTBE)	tert-Butylbenzene	Tetrachloro-ethene (PCE)	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
M-247-100	4/20/2022	N	BL02	UMCf	100.5 - 110.5	----	----	----	----	----	----	----	----	----	----
M-249-100	4/20/2022	N	BL02	UMCf	99.6 - 109.6	----	----	----	----	----	----	----	----	----	----
M-251-100	4/19/2022	N	BL02	UMCf	92.5 - 102.5	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.907 J	<0.160
M-251-100	10/13/2022	N	EM02	UMCf	92.5 - 102.5	<0.195	12.5 J+	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.557 J	<0.160
M-251-100	11/2/2022	N	EM03	UMCf	92.5 - 102.5	<1.95	<40.6	<1.01	<1.27	<3.00	<2.78	<1.49	<1.18	<1.90	<1.60
M-251-100	12/8/2022	N	EM04	UMCf	92.5 - 102.5	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.528 J	<0.160
M-251-100	1/11/2023	N	EM05	UMCf	92.5 - 102.5	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.462 J	<0.160
M-251-100	2/13/2023	N	EM06	UMCf	92.5 - 102.5	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.241 J	<0.160
M-251-100	3/17/2023	N	EM07	UMCf	92.5 - 102.5	<9.75	<203	<5.05	<6.35	<15.0	<13.9	<7.45	<5.90	<9.50	<8.00
M-251-100	4/21/2023	N	EM08	UMCf	92.5 - 102.5	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.351 J	<0.160
M-251-100	5/9/2023	N	EM09	UMCf	92.5 - 102.5	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.356 J	<0.160
M-251-100	6/14/2023	N	EM10	UMCf	92.5 - 102.5	<9.75	<203	<5.05	<6.35	<15.0	<13.9	<7.45	<5.90	<9.50	<8.00
M-251-100	7/14/2023	N	EM11	UMCf	92.5 - 102.5	<0.195	7.40	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.526 J	<0.160 UJ
M-251-100	8/10/2023	N	EM12	UMCf	92.5 - 102.5	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
M-251-100	9/14/2023	N	EM13	UMCf	92.5 - 102.5	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
M-251-100	10/19/2023	N	EM14	UMCf	92.5 - 102.5	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.382 J	<0.160
M-251-100	11/16/2023	N	EM15	UMCf	92.5 - 102.5	<9.75	<203	<5.05	<6.35	<15.0	<13.9	<7.45	<5.90	<9.50	<8.00
M-251-100	12/12/2023	N	EM16	UMCf	92.5 - 102.5	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
M-251-60	4/18/2022	N	BL02	UMCf	52.3 - 62.3	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
M-251-60	3/15/2023	N	EM07	UMCf	52.3 - 62.3	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
M-251-60	6/14/2023	N	EM10	UMCf	52.3 - 62.3	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
M-251-60	9/14/2023	N	EM13	UMCf	52.3 - 62.3	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
M-251-60	12/11/2023	N	EM16	UMCf	52.3 - 62.3	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
M-252	4/21/2022	N	BL02	UMCf	132.3 - 142.3	<0.195	<4.06	<0.101	<0.127	<0.300	0.292 J	<0.149	<0.118	<0.190	<0.160
M-252	3/15/2023	N	EM07	UMCf	132.3 - 142.3	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
M-252	9/19/2023	N	EM13	UMCf	132.3 - 142.3	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
M-252	12/18/2023	N	EM16	UMCf	132.3 - 142.3	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
M-253-100	4/20/2022	N	BL02	UMCf	100.8 - 110.8	----	----	----	----	----	----	----	----	----	----
M-255-100	4/20/2022	N	BL02	UMCf	100.2 - 110.2	----	----	----	----	----	----	----	----	----	----
U4-E-01D	4/18/2022	N	BL02	UMCf	94.7 - 109.7	<0.975	<20.3 UJ	<0.505	<0.635	<1.50	<1.39	<0.745	<0.590	<0.950	<0.800
U4-E-01D	3/14/2023	N	EM07	UMCf	94.7 - 109.7	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-E-011	4/19/2022	N	BL02	UMCf	74.6 - 89.6	<0.195	6.58	<0.101	<0.127	<0.300	0.471 J	<0.149	<0.118	<0.190	<0.160
U4-E-011	4/19/2022	FD	BL02	UMCf	74.6 - 89.6	<0.195	5.05	<0.101	<0.127	<0.300	0.330 J	<0.149	<0.118	<0.190	<0.160
U4-E-011	3/14/2023	N	EM07	UMCf	74.6 - 89.6	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-E-011	4/20/2023	N	EM08	UMCf	74.6 - 89.6	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-E-011	5/10/2023	N	EM09	UMCf	74.6 - 89.6	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-E-011	6/12/2023	N	EM10	UMCf	74.6 - 89.6	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.307 J	<0.160
U4-E-011	7/11/2023	N	EM11	UMCf	74.6 - 89.6	<0.975	<20.3	<0.505	<0.635	10.1	<1.39	<0.745	<0.590	<0.950	<0.800
U4-E-011	8/10/2023	N	EM12	UMCf	74.6 - 89.6	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-E-011	9/11/2023	N	EM13	UMCf	74.6 - 89.6	<0.975	<20.3	<0.505	<0.635	<1.50	<1.39	<0.745	<0.590	<0.950	<0.800
U4-E-011	10/16/2023	N	EM14	UMCf	74.6 - 89.6	<0.195	<4.06	<0.101	<0.127	<0.300	0.910 J	<0.149	<0.118	<0.190	<0.160
U4-E-011	12/13/2023	N	EM16	UMCf	74.6 - 89.6	<1.95	<40.6	<1.01	<1.27	<3.00	<2.78	<1.49	<1.18	<1.90	<1.60
U4-E-02D	4/20/2022	N	BL02	UMCf	94.4 - 109.4	<0.195	<4.06	<0.101	<0.127	<0.300	0.644 J	<0.149	<0.118	<0.190	<0.160
U4-E-02D	3/14/2023	N	EM07	UMCf	94.4 - 109.4	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-E-021	4/18/2022	N	BL02	UMCf	74.4 - 89.4	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.260 J	<0.160
U4-E-021	3/14/2023	N	EM07	UMCf	74.4 - 89.4	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-E-021	4/20/2023	N	EM08	UMCf	74.4 - 89.4	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-E-021	5/11/2023	N	EM09	UMCf	74.4 - 89.4	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-E-021	6/12/2023	N	EM10	UMCf	74.4 - 89.4	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-E-021	7/11/2023	N	EM11	UMCf	74.4 - 89.4	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-E-021	8/10/2023	N	EM12	UMCf	74.4 - 89.4	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B
						tert-Amyl Methyl Ether	tert-Butyl Alcohol	tert-Butyl Methyl Ether (MTBE)	tert-Butylbenzene	Tetrachloro-ethene (PCE)	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-E-02I	9/11/2023	N	EM13	UMCf	74.4 - 89.4	<0.195	<4.06	<0.101	<0.127	<0.300	2.67	<0.149	<0.118	<0.190	<0.160
U4-E-02I	10/16/2023	N	EM14	UMCf	74.4 - 89.4	<1.95	<40.6	<1.01	<1.27	<3.00	6.65 J	<1.49	<1.18	<1.90	<1.60
U4-E-02I	12/14/2023	N	EM16	UMCf	74.4 - 89.4	<1.95	<40.6	<1.01	<1.27	4.11 J	<2.78	<1.49	<1.18	<1.90	<1.60
U4-E-03D	4/19/2022	N	BL02	UMCf	95.1 - 110.1	<0.195	6.74	<0.101	<0.127	<0.300	0.333 J	<0.149	<0.118	0.609 J	<0.160
U4-E-03D	10/13/2022	N	EM02	UMCf	95.1 - 110.1	<39.0	<812	<20.2	<25.4	<60.0	<55.6	<29.8	<23.6	<38.0	<32.0
U4-E-03D	11/3/2022	N	EM03	UMCf	95.1 - 110.1	<0.195	<4.06	<0.101	<0.127	0.494 J	<0.278	<0.149	<0.118	0.753 J	<0.160
U4-E-03D	12/6/2022	N	EM04	UMCf	95.1 - 110.1	<3.90 UJ	<81.2 UJ	<2.02 UJ	<2.54 UJ	<6.00 UJ	<5.56 UJ	<2.98 UJ	<2.36 UJ	<3.80 UJ	<3.20 UJ
U4-E-03D	1/9/2023	N	EM05	UMCf	95.1 - 110.1	<0.195	<4.06	<0.101	<0.127	0.342 J	<0.278	<0.149	<0.118	0.602 J	<0.160
U4-E-03D	2/13/2023	N	EM06	UMCf	95.1 - 110.1	<19.5	<406	<10.1	<12.7	<30.0	<27.8	<14.9	<11.8	<19.0	<16.0
U4-E-03D	3/13/2023	N	EM07	UMCf	95.1 - 110.1	<19.5	<406	<10.1	<12.7	<30.0	<27.8	<14.9	<11.8	<19.0	<16.0
U4-E-03D	3/14/2023	N	EM07	UMCf	95.1 - 110.1	<39.0	<812	<20.2	<25.4	<60.0	<55.6	<29.8	<23.6	<38.0	<32.0
U4-E-03D	4/19/2023	N	EM08	UMCf	95.1 - 110.1	<0.975	<20.3	<0.505	<0.635	<1.50	<1.39	<0.745	<0.590	<0.950	<0.800
U4-E-03D	5/11/2023	N	EM09	UMCf	95.1 - 110.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.384 J	<0.160
U4-E-03D	6/12/2023	N	EM10	UMCf	95.1 - 110.1	<0.195	4.43 J	<0.101	<0.127	0.379 J	<0.278	<0.149	<0.118	0.638 J	<0.160
U4-E-03D	7/11/2023	N	EM11	UMCf	95.1 - 110.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.607 J	<0.160
U4-E-03D	8/10/2023	N	EM12	UMCf	95.1 - 110.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.252 J	<0.160
U4-E-03D	9/11/2023	N	EM13	UMCf	95.1 - 110.1	<0.195	<4.06	<0.101	<0.127	0.471 J	2.08	<0.149	<0.118	0.623 J	<0.160
U4-E-03D	10/16/2023	N	EM14	UMCf	95.1 - 110.1	<39.0	<812	<20.2	<25.4	<60.0	<55.6	<29.8	<23.6	<38.0	<32.0
U4-E-04D	4/19/2022	N	BL02	UMCf	95.0 - 110.0	<0.195	5.71	<0.101	<0.127	<0.300	0.341 J	<0.149	<0.118	0.460 J	<0.160
U4-E-04D	3/14/2023	N	EM07	UMCf	95.0 - 110.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-E-04I	4/18/2022	N	BL02	UMCf	75.0 - 90.0	<0.195	4.31 J	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-E-04I	3/14/2023	N	EM07	UMCf	75.0 - 90.0	<9.75	<203	<5.05	<6.35	<15.0	<13.9	<7.45	<5.90	<9.50	<8.00
U4-E-05D	4/19/2022	N	BL02	UMCf	95.0 - 110.0	<0.195	<4.06	<0.101	<0.127	<0.300	0.513 J	<0.149	<0.118	0.429 J	<0.160
U4-E-05D	3/16/2023	N	EM07	UMCf	95.0 - 110.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-E-05I	4/19/2022	N	BL02	UMCf	75.0 - 90.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-E-05I	3/15/2023	N	EM07	UMCf	75.0 - 90.0	<0.195 UJ	<4.06 UJ	<0.101 UJ	<0.127 UJ	<0.300 UJ	<0.278 UJ	<0.149 UJ	<0.118 UJ	<0.190 UJ	<0.160 UJ
U4-E-06D	4/11/2022	N	BL02	UMCf	95.1 - 110.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-E-06I	4/11/2022	N	BL02	UMCf	73.2 - 88.2	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-E-06I	4/11/2022	FD	BL02	UMCf	73.2 - 88.2	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-E-06I	10/12/2022	N	EM02	UMCf	73.2 - 88.2	<0.195	<4.06	<0.101	<0.127	0.450 J	<0.278	<0.149	<0.118	0.514 J	<0.160
U4-E-06I	11/3/2022	N	EM03	UMCf	73.2 - 88.2	<0.195	<4.06	<0.101	<0.127	0.389 J	<0.278	<0.149	<0.118	0.394 J	<0.160
U4-E-06I	12/6/2022	N	EM04	UMCf	73.2 - 88.2	<1.95 UJ	<40.6 UJ	<1.01 UJ	<1.27 UJ	<3.00 UJ	<2.78 UJ	<1.49 UJ	<1.18 UJ	<1.90 UJ	<1.60 UJ
U4-E-06I	1/9/2023	N	EM05	UMCf	73.2 - 88.2	<0.195	<4.06	<0.101	<0.127	0.300 J	<0.278	<0.149	<0.118	0.429 J	<0.160
U4-E-06I	2/13/2023	N	EM06	UMCf	73.2 - 88.2	<19.5	<406	<10.1	<12.7	<30.0	<27.8	<14.9	<11.8	<19.0	<16.0
U4-E-06I	3/13/2023	N	EM07	UMCf	73.2 - 88.2	<3.90	<81.2	<2.02	<2.54	<6.00	<5.56	<2.98	<2.36	<3.80	<3.20
U4-E-06I	4/17/2023	N	EM08	UMCf	73.2 - 88.2	<3.90	<81.2	<2.02	<2.54	<6.00	<5.56	<2.98	<2.36	<3.80	<3.20
U4-E-06I	5/15/2023	N	EM09	UMCf	73.2 - 88.2	<4.88	<102	<2.53	<3.18	<7.50	<6.95	<3.73	<2.95	<4.75	<4.00
U4-E-06I	6/12/2023	N	EM10	UMCf	73.2 - 88.2	<0.195	15.6 J+	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.629 J	<0.160
U4-E-06I	7/11/2023	N	EM11	UMCf	73.2 - 88.2	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.512 J	<0.160
U4-E-06I	8/11/2023	N	EM12	UMCf	73.2 - 88.2	<0.975	<20.3	<0.505	<0.635	<1.50	<1.39	<0.745	<0.590	<0.950	<0.800
U4-E-06I	9/11/2023	N	EM13	UMCf	73.2 - 88.2	<0.195	<4.06	<0.101	<0.127	<0.300	0.863 J	<0.149	<0.118	0.263 J	<0.160
U4-E-06I	10/16/2023	N	EM14	UMCf	73.2 - 88.2	<9.75	1,440	<5.05	<6.35	<15.0	<13.9	<7.45	<5.90	<9.50	<8.00
U4-E-06I	12/13/2023	N	EM16	UMCf	73.2 - 88.2	<0.195	<4.06	<0.101	<0.127	<0.300	10.4	<0.149	<0.118	0.193 J	<0.160
U4-E-07D	4/12/2022	N	BL02	UMCf	94.6 - 109.6	<0.195	4.41 J	<0.101	<0.127	<0.300	3.53	<0.149	<0.118	0.745 J	<0.160
U4-E-07I	4/12/2022	N	BL02	UMCf	74.7 - 89.7	<0.195	13.0	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.259 J	<0.160
U4-E-07I	10/11/2022	N	EM02	UMCf	74.7 - 89.7	<1.95	<40.6	<1.01	<1.27	<3.00	<2.78	<1.49	<1.18	<1.90	<1.60
U4-E-07I	11/3/2022	N	EM03	UMCf	74.7 - 89.7	<0.195	<4.06	<0.101	<0.127	0.397 J	<0.278	<0.149	<0.118	0.652 J	<0.160
U4-E-07I	12/6/2022	N	EM04	UMCf	74.7 - 89.7	<4.88 UJ	<102 UJ	<2.53 UJ	<3.18 UJ	<7.50 UJ	<6.95 UJ	<3.73 UJ	<2.95 UJ	<4.75 UJ	<4.00 UJ
U4-E-07I	1/9/2023	N	EM05	UMCf	74.7 - 89.7	<0.195	<4.06	<0.101	<0.127	0.370 J	<0.278	<0.149	<0.118	0.819 J	<0.160
U4-E-07I	2/13/2023	N	EM06	UMCf	74.7 - 89.7	<19.5	<406	<10.1	<12.7	<30.0	<27.8	<14.9	<11.8	<19.0	<16.0
U4-E-07I	3/13/2023	N	EM07	UMCf	74.7 - 89.7	<19.5	<406	<10.1	<12.7	<30.0	<27.8	<14.9	<11.8	<19.0	<16.0

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B
						tert-Amyl Methyl Ether	tert-Butyl Alcohol	tert-Butyl Methyl Ether (MTBE)	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-E-07I	4/19/2023	N	EM08	UMCf	74.7 - 89.7	<0.975	<20.3	<0.505	<0.635	<1.50	<1.39	<0.745	<0.590	<0.950	<0.800
U4-E-07I	5/15/2023	N	EM09	UMCf	74.7 - 89.7	<19.5	<406	<10.1	<12.7	<30.0	<27.8	<14.9	<11.8	<19.0	<16.0
U4-E-07I	6/12/2023	N	EM10	UMCf	74.7 - 89.7	<0.195	26.7 J+	<0.101	<0.127	0.394 J	<0.278	<0.149	<0.118	0.666 J	<0.160
U4-E-07I	7/11/2023	N	EM11	UMCf	74.7 - 89.7	<0.195	<4.06	<0.101	<0.127	0.307 J	<0.278	<0.149	<0.118	0.512 J	<0.160
U4-E-07I	8/11/2023	N	EM12	UMCf	74.7 - 89.7	<0.975	<20.3	<0.505	<0.635	<1.50	<1.39	<0.745	<0.590	<0.950	<0.800
U4-E-07I	9/11/2023	N	EM13	UMCf	74.7 - 89.7	<0.195	<4.06	<0.101	<0.127	0.479 J	<0.278	<0.149	<0.118	0.614 J	<0.160
U4-E-07I	10/16/2023	N	EM14	UMCf	74.7 - 89.7	<19.5	<406	<10.1	<12.7	<30.0	<27.8	<14.9	<11.8	<19.0	<16.0
U4-E-07I	12/13/2023	N	EM16	UMCf	74.7 - 89.7	<0.195	<4.06	<0.101	<0.127	0.448 J	<0.278	<0.149	<0.118	0.837 J	<0.160
U4-E-08D	4/12/2022	N	BL02	UMCf	94.6 - 109.6	<0.195	5.12	<0.101	<0.127	<0.300	1.49	<0.149	<0.118	0.807 J	<0.160
U4-E-08D	10/11/2022	N	EM02	UMCf	94.6 - 109.6	<1.95	<40.6	<1.01	<1.27	<3.00	<2.78	<1.49	<1.18	<1.90	<1.60
U4-E-08D	11/3/2022	N	EM03	UMCf	94.6 - 109.6	<0.195	<4.06	<0.101	<0.127	0.399 J	<0.278	<0.149	<0.118	1.13	<0.160
U4-E-08D	12/6/2022	N	EM04	UMCf	94.6 - 109.6	<4.88 UJ	<102 UJ	<2.53 UJ	<3.18 UJ	<7.50 UJ	<6.95 UJ	<3.73 UJ	<2.95 UJ	<4.75 UJ	<4.00 UJ
U4-E-08D	1/9/2023	N	EM05	UMCf	94.6 - 109.6	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.706 J	<0.160
U4-E-08D	2/13/2023	N	EM06	UMCf	94.6 - 109.6	<19.5	<406	<10.1	<12.7	<30.0	<27.8	<14.9	<11.8	<19.0	<16.0
U4-E-08D	3/13/2023	N	EM07	UMCf	94.6 - 109.6	<19.5	<406	<10.1	<12.7	<30.0	<27.8	<14.9	<11.8	<19.0	<16.0
U4-E-08D	4/19/2023	N	EM08	UMCf	94.6 - 109.6	<0.975	<20.3	<0.505	<0.635	<1.50	<1.39	<0.745	<0.590	<0.950	<0.800
U4-E-08D	5/17/2023	N	EM09	UMCf	94.6 - 109.6	<19.5	<406	<10.1	<12.7	<30.0	<27.8	<14.9	<11.8	<19.0	<16.0
U4-E-08D	6/12/2023	N	EM10	UMCf	94.6 - 109.6	<0.195	58.3 J+	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.522 J	<0.160
U4-E-08D	7/11/2023	N	EM11	UMCf	94.6 - 109.6	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.575 J	<0.160
U4-E-09D	4/15/2022	N	BL02	UMCf	94.5 - 109.5	<0.195	<4.06	<0.101	<0.127	<0.300	0.672 J	<0.149	<0.118	0.211 J	<0.160
U4-E-09I	4/14/2022	N	BL02	UMCf	74.9 - 89.9	<0.195	12.7	<0.101	<0.127	<0.300	0.454 J	<0.149	<0.118	0.223 J	<0.160
U4-E-10D	4/13/2022	N	BL02	UMCf	94.5 - 109.5	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.235 J	<0.160
U4-E-10I	4/13/2022	N	BL02	UMCf	74.2 - 89.2	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-01D	4/19/2022	N	BL02	UMCf	96.7 - 106.7	<0.195	7.15	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-01D	2/16/2023	N	EM06	UMCf	96.7 - 106.7	<1.95	<40.6	<1.01	<1.27	<3.00	<2.78	<1.49	<1.18	<1.90	<1.60
U4-MW-01D	3/20/2023	N	EM07	UMCf	96.7 - 106.7	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.204 J	<0.160
U4-MW-01D	6/13/2023	N	EM10	UMCf	96.7 - 106.7	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-01D	9/14/2023	N	EM13	UMCf	96.7 - 106.7	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-01D	12/14/2023	N	EM16	UMCf	96.7 - 106.7	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-01DD	4/19/2022	N	BL02	UMCf	119.9 - 129.9	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-01DD	4/19/2022	FD	BL02	UMCf	119.9 - 129.9	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-01DD	3/15/2023	N	EM07	UMCf	119.9 - 129.9	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-01DD	6/13/2023	N	EM10	UMCf	119.9 - 129.9	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-01DD	9/14/2023	N	EM13	UMCf	119.9 - 129.9	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-01DD	12/15/2023	N	EM16	UMCf	119.9 - 129.9	<0.975	<20.3	<0.505	<0.635	<1.50	<1.39	<0.745	<0.590	<0.950	<0.800
U4-MW-01I	4/19/2022	N	BL02	UMCf	76.7 - 86.7	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-01I	3/20/2023	N	EM07	UMCf	76.7 - 86.7	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.192 J	<0.160
U4-MW-01I	6/12/2023	N	EM10	UMCf	76.7 - 86.7	<0.195	38.4 J+	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-01I	9/14/2023	N	EM13	UMCf	76.7 - 86.7	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-01I	12/15/2023	N	EM16	UMCf	76.7 - 86.7	<9.75	<203	<5.05	<6.35	<15.0	<13.9	<7.45	<5.90	<9.50	<8.00
U4-MW-01S	4/18/2022	N	BL02	UMCf	54.7 - 64.7	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-01S	3/15/2023	N	EM07	UMCf	54.7 - 64.7	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-01S	6/13/2023	N	EM10	UMCf	54.7 - 64.7	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-01S	9/15/2023	N	EM13	UMCf	54.7 - 64.7	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-01S	12/13/2023	N	EM16	UMCf	54.7 - 64.7	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-02D	4/14/2022	N	BL02	UMCf	95.0 - 110.0	<0.195	5.42	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.883 J	<0.160
U4-MW-02D	10/11/2022	N	EM02	UMCf	95.0 - 110.0	<0.195	<4.06	<0.101	<0.127	0.459 J	<0.278	<0.149	<0.118	1.23	<0.160
U4-MW-02D	11/1/2022	N	EM03	UMCf	95.0 - 110.0	<9.75	<203	<5.05	<6.35	<15.0	<13.9	<7.45	<5.90	<95.0	<8.00
U4-MW-02D	12/7/2022	N	EM04	UMCf	95.0 - 110.0	<0.195	14.9	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	1.28	<0.160
U4-MW-02D	1/10/2023	N	EM05	UMCf	95.0 - 110.0	<0.195	5.93	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	1.07	<0.160
U4-MW-02D	2/13/2023	N	EM06	UMCf	95.0 - 110.0	<0.195	<4.06	<0.101	<0.127	0.320 J	<0.278	<0.149	<0.118	1.30	<0.160

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B
						tert-Amyl Methyl Ether	tert-Butyl Alcohol	tert-Butyl Methyl Ether (MTBE)	tert-Butylbenzene	Tetrachloro-ethene (PCE)	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-02D	3/17/2023	N	EM07	UMCf	95.0 - 110.0	<19.5	<406	<10.1	<12.7	<30.0	<27.8	<14.9	<11.8	<19.0	<16.0
U4-MW-02D	4/19/2023	N	EM08	UMCf	95.0 - 110.0	<0.975	<20.3	<0.505	<0.635	<1.50	<1.39	<0.745	<0.590	<0.950	<0.800
U4-MW-02D	5/9/2023	N	EM09	UMCf	95.0 - 110.0	<0.975	<20.3	<0.505	<0.635	<1.50	<1.39	<0.745	<0.590	1.21 J	<0.800
U4-MW-02D	6/13/2023	N	EM10	UMCf	95.0 - 110.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.767 J	<0.160
U4-MW-02D	7/18/2023	N	EM11	UMCf	95.0 - 110.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	1.02 J	<0.160
U4-MW-02D	8/14/2023	N	EM12	UMCf	95.0 - 110.0	<48.8	<1,020	<25.3	<31.8	<75.0	<69.5	<37.3	<29.5	<47.5	<40.0
U4-MW-02D	9/11/2023	N	EM13	UMCf	95.0 - 110.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.609 J	<0.160
U4-MW-02D	10/19/2023	N	EM14	UMCf	95.0 - 110.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	1.06	<0.160
U4-MW-02D	11/15/2023	N	EM15	UMCf	95.0 - 110.0	<19.5	<406	<10.1	<12.7	<30.0	<27.8	<14.9	<11.8	<19.0	<16.0
U4-MW-02D	12/14/2023	N	EM16	UMCf	95.0 - 110.0	<19.5	<406	<10.1	<12.7	<30.0	<27.8	<14.9	<11.8	<19.0	<16.0
U4-MW-02I	4/14/2022	N	BL02	UMCf	75.0 - 90.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.222 J	<0.160
U4-MW-02I	10/11/2022	N	EM02	UMCf	75.0 - 90.0	<0.195	<4.06	<0.101	<0.127	0.429 J	<0.278	<0.149	<0.118	0.414 J	<0.160
U4-MW-02I	11/2/2022	N	EM03	UMCf	75.0 - 90.0	<1.95	<40.6	<1.01	<1.27	<3.00	<2.78	<1.49	<1.18	<1.90	<1.60
U4-MW-02I	11/2/2022	FD	EM03	UMCf	75.0 - 90.0	<1.95	<40.6	<1.01	<1.27	<3.00	<2.78	<1.49	<1.18	<1.90	<1.60
U4-MW-02I	12/8/2022	N	EM04	UMCf	75.0 - 90.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-02I	12/8/2022	FD	EM04	UMCf	75.0 - 90.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-02I	1/13/2023	N	EM05	UMCf	75.0 - 90.0	<1.95	<40.6	<1.01	<1.27	<3.00	<2.78	<1.49	<1.18	<1.90	<1.60
U4-MW-02I	1/13/2023	FD	EM05	UMCf	75.0 - 90.0	<1.95	<40.6	<1.01	<1.27	<3.00	<2.78	<1.49	<1.18	<1.90	<1.60
U4-MW-02I	2/15/2023	N	EM06	UMCf	75.0 - 90.0	<1.95	<40.6	<1.01	<1.27	<3.00	<2.78	<1.49	<1.18	<1.90	<1.60
U4-MW-02I	2/15/2023	FD	EM06	UMCf	75.0 - 90.0	<1.95	<40.6	<1.01	<1.27	<3.00	<2.78	<1.49	<1.18	<1.90	<1.60
U4-MW-02I	3/17/2023	N	EM07	UMCf	75.0 - 90.0	<39.0	<812	<20.2	<25.4	<60.0	<55.6	<29.8	<23.6	<38.0	<32.0
U4-MW-02I	3/17/2023	FD	EM07	UMCf	75.0 - 90.0	<39.0	<812	<20.2	<25.4	<60.0	<55.6	<29.8	<23.6	<38.0	<32.0
U4-MW-02I	4/20/2023	N	EM08	UMCf	75.0 - 90.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-02I	4/20/2023	FD	EM08	UMCf	75.0 - 90.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-02I	5/9/2023	N	EM09	UMCf	75.0 - 90.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-02I	5/9/2023	FD	EM09	UMCf	75.0 - 90.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-02I	6/12/2023	N	EM10	UMCf	75.0 - 90.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-02I	6/12/2023	FD	EM10	UMCf	75.0 - 90.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-02I	7/18/2023	N	EM11	UMCf	75.0 - 90.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-02I	7/18/2023	FD	EM11	UMCf	75.0 - 90.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-02I	8/11/2023	N	EM12	UMCf	75.0 - 90.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-02I	8/11/2023	FD	EM12	UMCf	75.0 - 90.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.247 J	<0.160
U4-MW-02I	9/11/2023	N	EM13	UMCf	75.0 - 90.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-02I	9/11/2023	FD	EM13	UMCf	75.0 - 90.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.223 J	<0.160
U4-MW-02I	10/19/2023	N	EM14	UMCf	75.0 - 90.0	<0.195 UJ	<4.06 UJ	<0.101 UJ	<0.127 UJ	<0.300 UJ	<0.278 UJ	<0.149 UJ	<0.118 UJ	0.432 J	<0.160 UJ
U4-MW-02I	10/19/2023	FD	EM14	UMCf	75.0 - 90.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.587 J	<0.160
U4-MW-02I	11/15/2023	N	EM15	UMCf	75.0 - 90.0	<9.75	<203	<5.05	<6.35	<15.0	<13.9	<7.45	<5.90	<9.50	<8.00
U4-MW-02I	11/15/2023	FD	EM15	UMCf	75.0 - 90.0	<9.75	<203	<5.05	<6.35	<15.0	<13.9	<7.45	<5.90	<9.50	<8.00
U4-MW-02I	12/14/2023	N	EM16	UMCf	75.0 - 90.0	<9.75	<203	<5.05	<6.35	<15.0	<13.9	<7.45	<5.90	<9.50	<8.00
U4-MW-02I	12/14/2023	FD	EM16	UMCf	75.0 - 90.0	<9.75	<203	<5.05	<6.35	<15.0	<13.9	<7.45	<5.90	<9.50	<8.00
U4-MW-03D	4/20/2022	N	BL02	UMCf	96.6 - 106.6	<0.195	5.74 J	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.208 J	<0.160
U4-MW-03D	2/16/2023	N	EM06	UMCf	96.6 - 106.6	<0.975	<20.3	<0.505	<0.635	<1.50	<1.39	<0.745	<0.590	<0.950	<0.800
U4-MW-03D	3/16/2023	N	EM07	UMCf	96.6 - 106.6	<3.90	<81.2	<2.02	<2.54	<6.00	<5.56	<2.98	<2.36	<3.80	<3.20
U4-MW-03D	3/16/2023	FD	EM07	UMCf	96.6 - 106.6	<0.975	<20.3	<0.505	<0.635	<1.50	<1.39	<0.745	<0.590	<0.950	<0.800
U4-MW-03D	6/15/2023	N	EM10	UMCf	96.6 - 106.6	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118 UJ	<0.190	<0.160
U4-MW-03D	9/14/2023	N	EM13	UMCf	96.6 - 106.6	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-03D	12/13/2023	N	EM16	UMCf	96.6 - 106.6	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.204 J	<0.160
U4-MW-03DD	4/20/2022	N	BL02	UMCf	119.7 - 129.7	<0.195	<4.06	<0.101	<0.127	<0.300	0.285 J	<0.149	<0.118	<0.190	<0.160
U4-MW-03DD	3/15/2023	N	EM07	UMCf	119.7 - 129.7	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-03DD	6/15/2023	N	EM10	UMCf	119.7 - 129.7	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118 UJ	<0.190	<0.160
U4-MW-03DD	9/14/2023	N	EM13	UMCf	119.7 - 129.7	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B
						tert-Amyl Methyl Ether	tert-Butyl Alcohol	tert-Butyl Methyl Ether (MTBE)	tert-Butylbenzene	Tetrachloro-ethene (PCE)	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-03DD	12/14/2023	N	EM16	UMCf	119.7 - 129.7	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-03I	4/19/2022	N	BL02	UMCf	76.6 - 86.6	<0.195	4.28 J	<0.101	<0.127	<0.300	0.798 J	<0.149	<0.118	<0.190	<0.160
U4-MW-03I	3/15/2023	N	EM07	UMCf	76.6 - 86.6	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-03I	6/14/2023	N	EM10	UMCf	76.6 - 86.6	<3.90	<81.2	<2.02	<2.54	<6.00	<5.56	<2.98	<2.36	<3.80	<3.20
U4-MW-03I	6/14/2023	FD	EM10	UMCf	76.6 - 86.6	<4.88	<102	<2.53	<3.18	<7.50	<6.95	<3.73	<2.95	<4.75	<4.00
U4-MW-03I	9/11/2023	N	EM13	UMCf	76.6 - 86.6	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.190 J	<0.160
U4-MW-03I	9/11/2023	FD	EM13	UMCf	76.6 - 86.6	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-03I	12/13/2023	N	EM16	UMCf	76.6 - 86.6	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.246 J	<0.160
U4-MW-03I	12/13/2023	FD	EM16	UMCf	76.6 - 86.6	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.225 J	<0.160
U4-MW-03S	4/18/2022	N	BL02	UMCf	54.5 - 64.5	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-03S	4/18/2022	FD	BL02	UMCf	54.5 - 64.5	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-03S	3/15/2023	N	EM07	UMCf	54.5 - 64.5	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-03S	6/15/2023	N	EM10	UMCf	54.5 - 64.5	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118 UJ	<0.190	<0.160
U4-MW-03S	9/14/2023	N	EM13	UMCf	54.5 - 64.5	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-03S	12/13/2023	N	EM16	UMCf	54.5 - 64.5	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-04D	4/19/2022	N	BL02	UMCf	97.0 - 107.0	<0.195	5.59	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.805 J	<0.160
U4-MW-04D	2/16/2023	N	EM06	UMCf	97.0 - 107.0	<9.75	<203	<5.05	<6.35	<15.0	<13.9	<7.45	<5.90	<9.50	<8.00
U4-MW-04D	3/21/2023	N	EM07	UMCf	97.0 - 107.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-04D	6/14/2023	N	EM10	UMCf	97.0 - 107.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-04D	9/15/2023	N	EM13	UMCf	97.0 - 107.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-04D	12/12/2023	N	EM16	UMCf	97.0 - 107.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-04I	4/19/2022	N	BL02	UMCf	76.8 - 86.8	<0.195	10.8	<0.101	<0.127	<0.300	0.375 J	<0.149	<0.118	0.225 J	<0.160
U4-MW-04I	3/20/2023	N	EM07	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.315 J	<0.160
U4-MW-04I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<0.975	<20.3	<0.505	<0.635	<1.50	<1.39	<0.745	<0.590	<0.950	<0.800
U4-MW-04I	9/14/2023	N	EM13	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-04I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.646 J	<0.160
U4-MW-05D	4/15/2022	N	BL02	UMCf	98.2 - 108.2	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.920 J	<0.160
U4-MW-05D	10/13/2022	N	EM02	UMCf	98.2 - 108.2	<19.5	<406	<10.1	<12.7	<30.0	<27.8	<14.9	<11.8	<19.0	<16.0
U4-MW-05D	11/3/2022	N	EM03	UMCf	98.2 - 108.2	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.421 J	<0.160
U4-MW-05D	12/7/2022	N	EM04	UMCf	98.2 - 108.2	<0.195	6.34	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.543 J	<0.160
U4-MW-05D	1/11/2023	N	EM05	UMCf	98.2 - 108.2	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.492 J	<0.160
U4-MW-05D	2/14/2023	N	EM06	UMCf	98.2 - 108.2	<19.5	<406	<10.1	<12.7	<30.0	<27.8	<14.9	<11.8	<19.0	<16.0
U4-MW-05D	3/16/2023	N	EM07	UMCf	98.2 - 108.2	<19.5	<406	<10.1	<12.7	<30.0	<27.8	<14.9	<11.8	<19.0	<16.0
U4-MW-05D	4/20/2023	N	EM08	UMCf	98.2 - 108.2	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.241 J	<0.160
U4-MW-05D	5/10/2023	N	EM09	UMCf	98.2 - 108.2	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.216 J	<0.160
U4-MW-05D	6/15/2023	N	EM10	UMCf	98.2 - 108.2	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118 UJ	<0.190	<0.160
U4-MW-05D	7/18/2023	N	EM11	UMCf	98.2 - 108.2	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-05D	8/14/2023	N	EM12	UMCf	98.2 - 108.2	<4.88	<102	<2.53	<3.18	<7.50	<6.95	<3.73	<2.95	<4.75	<4.00
U4-MW-05D	9/12/2023	N	EM13	UMCf	98.2 - 108.2	<4.88	<102	<2.53	<3.18	<7.50	<6.95	<3.73	<2.95	<4.75	<4.00
U4-MW-05D	10/18/2023	N	EM14	UMCf	98.2 - 108.2	<4.88	<102	<2.53	<3.18	<7.50	<6.95	<3.73	<2.95	<4.75	<4.00
U4-MW-05D	11/16/2023	N	EM15	UMCf	98.2 - 108.2	<4.88	<102	<2.53	<3.18	<7.50	<6.95	<3.73	<2.95	<4.75	<4.00
U4-MW-05D	12/14/2023	N	EM16	UMCf	98.2 - 108.2	<4.88	<102	<2.53	<3.18	<7.50	<6.95	<3.73	<2.95	<4.75	<4.00
U4-MW-05I	4/15/2022	N	BL02	UMCf	76.6 - 86.6	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.500 J	<0.160
U4-MW-05I	10/13/2022	N	EM02	UMCf	76.6 - 86.6	<19.5	<406	<10.1	<12.7	<30.0	<27.8	<14.9	<11.8	<19.0	<16.0
U4-MW-05I	11/3/2022	N	EM03	UMCf	76.6 - 86.6	<0.195	<4.06	<0.101	<0.127	0.354 J	<0.278	<0.149	<0.118	0.797 J	<0.160
U4-MW-05I	12/8/2022	N	EM04	UMCf	76.6 - 86.6	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.693 J	<0.160
U4-MW-05I	1/11/2023	N	EM05	UMCf	76.6 - 86.6	<0.195	<4.06	<0.101	<0.127	0.331 J	<0.278	<0.149	<0.118	0.592 J	<0.160
U4-MW-05I	2/14/2023	N	EM06	UMCf	76.6 - 86.6	<19.5	<406	<10.1	<12.7	<30.0	<27.8	<14.9	<11.8	<19.0	<16.0
U4-MW-05I	3/14/2023	N	EM07	UMCf	76.6 - 86.6	<19.5	<406	<10.1	<12.7	<30.0	<27.8	<14.9	<11.8	<19.0	<16.0
U4-MW-05I	4/21/2023	N	EM08	UMCf	76.6 - 86.6	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-05I	5/10/2023	N	EM09	UMCf	76.6 - 86.6	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B
						tert-Amyl Methyl Ether	tert-Butyl Alcohol	tert-Butyl Methyl Ether (MTBE)	tert-Butylbenzene	Tetrachloro-ethene (PCE)	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-05I	6/15/2023	N	EM10	UMCf	76.6 - 86.6	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118 UJ	<0.190	<0.160
U4-MW-05I	7/17/2023	N	EM11	UMCf	76.6 - 86.6	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-05I	8/14/2023	N	EM12	UMCf	76.6 - 86.6	<9.75	<203	<5.05	<6.35	<15.0	<13.9	<7.45	<5.90	<9.50	<8.00
U4-MW-05I	9/13/2023	N	EM13	UMCf	76.6 - 86.6	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-05I	10/18/2023	N	EM14	UMCf	76.6 - 86.6	<9.75	<203	<5.05	<6.35	<15.0	<13.9	<7.45	<5.90	<9.50	<8.00
U4-MW-05I	11/15/2023	N	EM15	UMCf	76.6 - 86.6	<9.75	<203	<5.05	<6.35	<15.0	<13.9	<7.45	<5.90	<9.50	<8.00
U4-MW-05I	12/12/2023	N	EM16	UMCf	76.6 - 86.6	<0.195	<4.06	<0.101	<0.127	<0.300	0.612 J	<0.149	<0.118	<0.190	<0.160
U4-MW-06D	4/19/2022	N	BL02	UMCf	97.1 - 107.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.524 J	<0.160
U4-MW-06D	2/15/2023	N	EM06	UMCf	97.1 - 107.1	<9.75 UJ	<203	<5.05	<6.35	<15.0	<13.9	<7.45	<5.90	<9.50	<8.00
U4-MW-06D	3/21/2023	N	EM07	UMCf	97.1 - 107.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-06D	6/16/2023	N	EM10	UMCf	97.1 - 107.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<9.50	<0.160
U4-MW-06D	9/13/2023	N	EM13	UMCf	97.1 - 107.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-06D	12/13/2023	N	EM16	UMCf	97.1 - 107.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-06I	4/19/2022	N	BL02	UMCf	76.5 - 86.5	<0.195	<4.06	<0.101	<0.127	<0.300	0.332 J	<0.149	<0.118	<0.190	<0.160
U4-MW-06I	3/14/2023	N	EM07	UMCf	76.5 - 86.5	<0.195	5.95 J+	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.369 J	<0.160
U4-MW-06I	6/16/2023	N	EM10	UMCf	76.5 - 86.5	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<9.50	<0.160
U4-MW-06I	9/12/2023	N	EM13	UMCf	76.5 - 86.5	<9.75	<203	<5.05	<6.35	<15.0	<13.9	<7.45	<5.90	<9.50	<8.00
U4-MW-06I	12/12/2023	N	EM16	UMCf	76.5 - 86.5	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-07D	4/15/2022	N	BL02	UMCf	96.8 - 106.5	<0.195	5.04 J	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.191 J	<0.160
U4-MW-07D	10/12/2022	N	EM02	UMCf	96.8 - 106.5	<0.195	<4.06	<0.101	<0.127	<0.300	0.557 J	<0.149	<0.118	<0.190	<0.160
U4-MW-07D	10/12/2022	FD	EM02	UMCf	96.8 - 106.5	<0.195	<4.06	<0.101	<0.127	<0.300	0.576 J	<0.149	<0.118	<0.190	<0.160
U4-MW-07D	11/3/2022	N	EM03	UMCf	96.8 - 106.5	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-07D	12/7/2022	N	EM04	UMCf	96.8 - 106.5	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-07D	1/11/2023	N	EM05	UMCf	96.8 - 106.5	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-07D	2/14/2023	N	EM06	UMCf	96.8 - 106.5	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-07D	3/16/2023	N	EM07	UMCf	96.8 - 106.5	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-07D	4/21/2023	N	EM08	UMCf	96.8 - 106.5	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-07D	5/11/2023	N	EM09	UMCf	96.8 - 106.5	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-07D	6/13/2023	N	EM10	UMCf	96.8 - 106.5	<0.195 UJ	<4.06 UJ	<0.101 UJ	<0.127 UJ	<0.300 UJ	<0.278 UJ	<0.149 UJ	<0.118 UJ	<0.190 UJ	<0.160 UJ
U4-MW-07D	7/17/2023	N	EM11	UMCf	96.8 - 106.5	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.288 J	<0.160
U4-MW-07D	8/11/2023	N	EM12	UMCf	96.8 - 106.5	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-07D	9/13/2023	N	EM13	UMCf	96.8 - 106.5	<0.195	<4.06	<0.101	<0.127	<0.300	4.23	<0.149	<0.118	0.220 J	<0.160
U4-MW-07D	10/18/2023	N	EM14	UMCf	96.8 - 106.5	<19.5	<406	<10.1	<12.7	<30.0	<27.8	<14.9	<11.8	<19.0	<16.0
U4-MW-07D	11/16/2023	N	EM15	UMCf	96.8 - 106.5	<19.5	<406	<10.1	<12.7	<30.0	<27.8	<14.9	<11.8	<19.0	<16.0
U4-MW-07D	12/12/2023	N	EM16	UMCf	96.8 - 106.5	<0.195	<4.06	<0.101	<0.127	<0.300	12.0	<0.149	<0.118	<0.190	<0.160
U4-MW-07I	4/15/2022	N	BL02	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-07I	10/12/2022	N	EM02	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	0.315 J	<0.149	<0.118	<0.190	<0.160
U4-MW-07I	11/3/2022	N	EM03	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-07I	12/7/2022	N	EM04	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-07I	1/11/2023	N	EM05	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-07I	2/15/2023	N	EM06	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-07I	3/16/2023	N	EM07	UMCf	76.8 - 86.8	<0.975	<20.3	<0.505	<0.635	<1.50	<1.39	<0.745	<0.590	<0.950	<0.800
U4-MW-07I	4/21/2023	N	EM08	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-07I	5/11/2023	N	EM09	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-07I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<0.975	<20.3	<0.505	<0.635	<1.50	<1.39	<0.745	<0.590	<0.950	<0.800
U4-MW-07I	7/17/2023	N	EM11	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-07I	8/11/2023	N	EM12	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-07I	9/13/2023	N	EM13	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-07I	10/18/2023	N	EM14	UMCf	76.8 - 86.8	<9.75	<203	<5.05	<6.35	<15.0	<13.9	<7.45	<5.90	<9.50	<8.00
U4-MW-07I	11/16/2023	N	EM15	UMCf	76.8 - 86.8	<9.75	<203	<5.05	<6.35	<15.0	<13.9	<7.45	<5.90	<9.50	<8.00
U4-MW-07I	12/11/2023	N	EM16	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	8.41	<0.149	<0.118	0.205 J	<0.160

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B
						tert-Amyl Methyl Ether	tert-Butyl Alcohol	tert-Butyl Methyl Ether (MTBE)	tert-Butylbenzene	Tetrachloro-ethene (PCE)	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluor-omethane
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-08D	4/13/2022	N	BL02	UMCf	98.6 - 108.6	<0.195	8.05	<0.101	<0.127	2.63	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-08D	12/7/2022	N	EM04	UMCf	98.6 - 108.6	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.670 J	<0.160
U4-MW-08D	3/17/2023	N	EM07	UMCf	98.6 - 108.6	<19.5	<406	<10.1	<12.7	<30.0	<27.8	<14.9	<11.8	<19.0	<16.0
U4-MW-08D	6/13/2023	N	EM10	UMCf	98.6 - 108.6	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.584 J	<0.160
U4-MW-08D	9/13/2023	N	EM13	UMCf	98.6 - 108.6	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	1.09	<0.160
U4-MW-08D	12/11/2023	N	EM16	UMCf	98.6 - 108.6	<0.195	<4.06	<0.101	<0.127	<0.300	2.35 J+	<0.149	<0.118	0.565 J	<0.160
U4-MW-08DD	4/20/2022	N	BL02	UMCf	119.8 - 129.8	<0.195	<4.06	<0.101	<0.127	<0.300	0.486 J	<0.149	<0.118	<0.190	<0.160
U4-MW-08DD	4/20/2022	FD	BL02	UMCf	119.8 - 129.8	<0.195	<4.06	<0.101	<0.127	<0.300	0.531 J	<0.149	<0.118	<0.190	<0.160
U4-MW-08DD	12/8/2022	N	EM04	UMCf	119.8 - 129.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-08DD	3/15/2023	N	EM07	UMCf	119.8 - 129.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-08DD	6/14/2023	N	EM10	UMCf	119.8 - 129.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-08DD	9/14/2023	N	EM13	UMCf	119.8 - 129.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-08DD	12/14/2023	N	EM16	UMCf	119.8 - 129.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-08I	4/13/2022	N	BL02	UMCf	78.0 - 88.0	<0.195	6.37	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.904 J	<0.160
U4-MW-08I	12/7/2022	N	EM04	UMCf	78.0 - 88.0	<0.195	5.48	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.466 J	<0.160
U4-MW-08I	12/7/2022	FD	EM04	UMCf	78.0 - 88.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.489 J	<0.160
U4-MW-08I	3/17/2023	N	EM07	UMCf	78.0 - 88.0	<9.75	<203	<5.05	<6.35	<15.0	<13.9	<7.45	<5.90	<9.50	<8.00
U4-MW-08I	6/13/2023	N	EM10	UMCf	78.0 - 88.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.329 J	<0.160
U4-MW-08I	9/13/2023	N	EM13	UMCf	78.0 - 88.0	<0.195	<4.06 UJ	<0.101	<0.127	0.405 J	<0.278	<0.149	<0.118	0.649 J	<0.160
U4-MW-08I	12/11/2023	N	EM16	UMCf	78.0 - 88.0	<0.195	<4.06	<0.101	<0.127	0.362 J	0.421 J	<0.149	<0.118	0.699 J	<0.160
U4-MW-08S	4/15/2022	N	BL02	UMCf	54.9 - 64.9	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-08S	12/7/2022	N	EM04	UMCf	54.9 - 64.9	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-08S	12/7/2022	FD	EM04	UMCf	54.9 - 64.9	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-08S	3/13/2023	N	EM07	UMCf	54.9 - 64.9	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-08S	3/13/2023	FD	EM07	UMCf	54.9 - 64.9	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-08S	6/13/2023	N	EM10	UMCf	54.9 - 64.9	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-08S	6/13/2023	FD	EM10	UMCf	54.9 - 64.9	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-08S	9/13/2023	N	EM13	UMCf	54.9 - 64.9	<0.195	<4.06	<0.101	<0.127	<0.300	1.64 J+	<0.149	<0.118	<0.190	<0.160
U4-MW-08S	9/13/2023	FD	EM13	UMCf	54.9 - 64.9	<0.195	<4.06	<0.101	<0.127	<0.300	1.60 J+	<0.149	<0.118	<0.190	<0.160
U4-MW-08S	12/14/2023	N	EM16	UMCf	54.9 - 64.9	<0.195	<4.06	<0.101	<0.127	<0.300	1.22 J+	<0.149	<0.118	<0.190	<0.160
U4-MW-08S	12/14/2023	FD	EM16	UMCf	54.9 - 64.9	<0.195	<4.06	<0.101	<0.127	<0.300	1.24 J+	<0.149	<0.118	<0.190	<0.160
U4-MW-09D	4/14/2022	N	BL02	UMCf	96.9 - 106.9	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.195 J	<0.160
U4-MW-09D	12/6/2022	N	EM04	UMCf	96.9 - 106.9	<1.95 UJ	<40.6 UJ	<1.01 UJ	<1.27 UJ	<3.00 UJ	<2.78 UJ	<1.49 UJ	<1.18 UJ	<1.90 UJ	<1.60 UJ
U4-MW-09D	3/16/2023	N	EM07	UMCf	96.9 - 106.9	<1.95	<40.6	<1.01	<1.27	<3.00	<2.78	<1.49	<1.18	<1.90	<1.60
U4-MW-09D	6/14/2023	N	EM10	UMCf	96.9 - 106.9	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-09D	9/12/2023	N	EM13	UMCf	96.9 - 106.9	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-09D	12/15/2023	N	EM16	UMCf	96.9 - 106.9	<4.88 UJ	<102 UJ	<2.53 UJ	<3.18 UJ	<7.50 UJ	<6.95 UJ	<3.73 UJ	<2.95 UJ	<4.75 UJ	<4.00 UJ
U4-MW-09DD	4/14/2022	N	BL02	UMCf	119.8 - 129.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-09DD	12/6/2022	N	EM04	UMCf	119.8 - 129.8	<0.195 UJ	<4.06 UJ	<0.101 UJ	<0.127 UJ	<0.300 UJ	<0.278 UJ	<0.149 UJ	<0.118 UJ	<0.190 UJ	<0.160 UJ
U4-MW-09DD	3/21/2023	N	EM07	UMCf	119.8 - 129.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-09DD	6/15/2023	N	EM10	UMCf	119.8 - 129.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-09DD	9/13/2023	N	EM13	UMCf	119.8 - 129.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-09DD	12/13/2023	N	EM16	UMCf	119.8 - 129.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-09I	4/14/2022	N	BL02	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	3.30	<0.149	<0.118	<0.190	<0.160
U4-MW-09I	12/6/2022	N	EM04	UMCf	76.8 - 86.8	<1.95 UJ	<40.6 UJ	<1.01 UJ	<1.27 UJ	<3.00 UJ	<2.78 UJ	<1.49 UJ	<1.18 UJ	<1.90 UJ	<1.60 UJ
U4-MW-09I	3/16/2023	N	EM07	UMCf	76.8 - 86.8	<1.95	<40.6	<1.01	<1.27	<3.00	<2.78	<1.49	<1.18	<1.90	<1.60
U4-MW-09I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-09I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-09I	12/15/2023	N	EM16	UMCf	76.8 - 86.8	<4.88 UJ	<102 UJ	<2.53 UJ	<3.18 UJ	<7.50 UJ	<6.95 UJ	<3.73 UJ	<2.95 UJ	<4.75 UJ	<4.00 UJ
U4-MW-09S	4/14/2022	N	BL02	UMCf	55.3 - 65.3	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-09S	12/6/2022	N	EM04	UMCf	55.3 - 65.3	<0.195 UJ	<4.06 UJ	<0.101 UJ	<0.127 UJ	<0.300 UJ	<0.278 UJ	<0.149 UJ	<0.118 UJ	<0.190 UJ	<0.160 UJ

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B
						tert-Amyl Methyl Ether	tert-Butyl Alcohol	tert-Butyl Methyl Ether (MTBE)	tert-Butylbenzene	Tetrachloro-ethene (PCE)	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-09S	3/17/2023	N	EM07	UMCf	55.3 - 65.3	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-09S	6/15/2023	N	EM10	UMCf	55.3 - 65.3	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-09S	9/13/2023	N	EM13	UMCf	55.3 - 65.3	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-09S	12/12/2023	N	EM16	UMCf	55.3 - 65.3	<0.195	<4.06	<0.101	<0.127	<0.300	1.37	<0.149	<0.118	<0.190	<0.160
U4-MW-10D	4/14/2022	N	BL02	UMCf	96.9 - 106.9	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-10D	12/5/2022	N	EM04	UMCf	96.9 - 106.9	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-10D	3/17/2023	N	EM07	UMCf	96.9 - 106.9	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-10D	6/14/2023	N	EM10	UMCf	96.9 - 106.9	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-10D	9/13/2023	N	EM13	UMCf	96.9 - 106.9	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-10D	12/14/2023	N	EM16	UMCf	96.9 - 106.9	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-10I	4/14/2022	N	BL02	UMCf	77.1 - 87.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-10I	12/5/2022	N	EM04	UMCf	77.1 - 87.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-10I	3/17/2023	N	EM07	UMCf	77.1 - 87.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-10I	6/14/2023	N	EM10	UMCf	77.1 - 87.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-10I	9/13/2023	N	EM13	UMCf	77.1 - 87.1	<0.195	<4.06	<0.101	<0.127	<0.300	6.13	<0.149	<0.118	<0.190	<0.160
U4-MW-10I	12/14/2023	N	EM16	UMCf	77.1 - 87.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-11D	4/15/2022	N	BL02	UMCf	97.4 - 107.4	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.873 J	<0.160
U4-MW-11D	9/26/2022	N	EM01	UMCf	97.4 - 107.4	<9.75	<203	<5.05	<6.35	<15.0	<13.9	<7.45	<5.90	<9.50	<8.00
U4-MW-11D	10/11/2022	N	EM02	UMCf	97.4 - 107.4	<1.95	<40.6	<1.01	<1.27	<3.00	<2.78	<1.49	<1.18	<1.90	<1.60
U4-MW-11D	11/1/2022	N	EM03	UMCf	97.4 - 107.4	<9.75	<203	<5.05	<6.35	<15.0	<13.9	<7.45	<5.90	<9.50	<8.00
U4-MW-11D	12/6/2022	N	EM04	UMCf	97.4 - 107.4	<4.88 UJ	<102 UJ	<2.53 UJ	<3.18 UJ	<7.50 UJ	<6.95 UJ	<3.73 UJ	<2.95 UJ	<4.75 UJ	<4.00 UJ
U4-MW-11D	1/12/2023	N	EM05	UMCf	97.4 - 107.4	<39.0	<812	<20.2	<25.4	<60.0	<55.6	<29.8	<23.6	<38.0	<32.0
U4-MW-11D	2/14/2023	N	EM06	UMCf	97.4 - 107.4	<39.0	<812	<20.2	<25.4	<60.0	<55.6	<29.8	<23.6	<38.0	<32.0
U4-MW-11D	3/16/2023	N	EM07	UMCf	97.4 - 107.4	<39.0	<812	<20.2	<25.4	<60.0	<55.6	<29.8	<23.6	<38.0	<32.0
U4-MW-11D	4/18/2023	N	EM08	UMCf	97.4 - 107.4	<0.975	<20.3	<0.505	<0.635	<1.50	<1.39	<0.745	<0.590	<0.950	<0.800
U4-MW-11D	5/17/2023	N	EM09	UMCf	97.4 - 107.4	<3.90 UJ	<81.2 UJ	<2.02 UJ	<2.54 UJ	<6.00 UJ	<5.56 UJ	<2.98 UJ	<2.36 UJ	<3.80 UJ	<3.20 UJ
U4-MW-11D	6/16/2023	N	EM10	UMCf	97.4 - 107.4	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<9.50	<0.160
U4-MW-11D	7/14/2023	N	EM11	UMCf	97.4 - 107.4	<0.195	5.22	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.875 J	<0.160 UJ
U4-MW-11D	8/14/2023	N	EM12	UMCf	97.4 - 107.4	<39.0	<812	<20.2	<25.4	<60.0	<55.6	<29.8	<23.6	<38.0	<32.0
U4-MW-11D	9/13/2023	N	EM13	UMCf	97.4 - 107.4	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.637 J	<0.160
U4-MW-11D	10/18/2023	N	EM14	UMCf	97.4 - 107.4	<39.0	<812	<20.2	<25.4	<60.0	<55.6	<29.8	<23.6	<38.0	<32.0
U4-MW-11D	11/16/2023	N	EM15	UMCf	97.4 - 107.4	<9.75	<203	<5.05	<6.35	<15.0	<13.9	<7.45	<5.90	<9.50	<8.00
U4-MW-11D	12/13/2023	N	EM16	UMCf	97.4 - 107.4	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.474 J	<0.160
U4-MW-11I	4/14/2022	N	BL02	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.194 J	<0.160
U4-MW-11I	9/26/2022	N	EM01	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-11I	9/26/2022	FD	EM01	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-11I	10/10/2022	N	EM02	UMCf	77.0 - 87.0	<1.95	<40.6	<1.01	<1.27	95.7 J	3.30 J	<1.49	<1.18	<1.90	<1.60
U4-MW-11I	10/10/2022	FD	EM02	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	1.82 J	<0.278	<0.149	<0.118	0.631 J	<0.160
U4-MW-11I	10/31/2022	N	EM03	UMCf	77.0 - 87.0	<0.975	<20.3	<0.505	<0.635	<1.50	<1.39	<0.745	<0.590	<0.950	<0.800
U4-MW-11I	10/31/2022	FD	EM03	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-11I	12/6/2022	N	EM04	UMCf	77.0 - 87.0	<0.195 UJ	<4.06 UJ	<0.101 UJ	<0.127 UJ	<0.300 UJ	<0.278 UJ	<0.149 UJ	<0.118 UJ	<0.190 UJ	<0.160 UJ
U4-MW-11I	12/6/2022	FD	EM04	UMCf	77.0 - 87.0	<0.195 UJ	<4.06 UJ	<0.101 UJ	<0.127 UJ	<0.300 UJ	<0.278 UJ	<0.149 UJ	<0.118 UJ	<0.190 UJ	<0.160 UJ
U4-MW-11I	1/12/2023	N	EM05	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-11I	1/12/2023	FD	EM05	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-11I	2/14/2023	N	EM06	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.472 J	<0.160
U4-MW-11I	2/14/2023	FD	EM06	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.478 J	<0.160
U4-MW-11I	3/16/2023	N	EM07	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-11I	3/16/2023	FD	EM07	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-11I	4/18/2023	N	EM08	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-11I	4/18/2023	FD	EM08	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-11I	5/19/2023	N	EM09	UMCf	77.0 - 87.0	<0.195 UJ	<4.06 UJ	<0.101 UJ	<0.127 UJ	<0.300 UJ	<0.278 UJ	<0.149 UJ	<0.118 UJ	<0.190 UJ	<0.160 UJ

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B
						tert-Amyl Methyl Ether	tert-Butyl Alcohol	tert-Butyl Methyl Ether (MTBE)	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-11I	5/19/2023	FD	EM09	UMCf	77.0 - 87.0	<0.195 UJ	<4.06 UJ	<0.101 UJ	<0.127 UJ	<0.300 UJ	<0.278 UJ	<0.149 UJ	<0.118 UJ	<0.190 UJ	<0.160 UJ
U4-MW-11I	6/15/2023	N	EM10	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-11I	6/15/2023	FD	EM10	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-11I	7/13/2023	N	EM11	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-11I	7/13/2023	FD	EM11	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-11I	8/14/2023	N	EM12	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-11I	8/14/2023	FD	EM12	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.275 J	<0.160
U4-MW-11I	9/13/2023	N	EM13	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.306 J	<0.160
U4-MW-11I	9/13/2023	FD	EM13	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.362 J	<0.160
U4-MW-11I	10/19/2023	N	EM14	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.618 J	<0.160
U4-MW-11I	10/19/2023	FD	EM14	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.680 J	<0.160
U4-MW-11I	11/16/2023	N	EM15	UMCf	77.0 - 87.0	<9.75	<203	<5.05	<6.35	<15.0	<13.9	<7.45	<5.90	<9.50	<8.00
U4-MW-11I	11/16/2023	FD	EM15	UMCf	77.0 - 87.0	<9.75	<203	<5.05	<6.35	<15.0	<13.9	<7.45	<5.90	<9.50	<8.00
U4-MW-11I	12/13/2023	N	EM16	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-11I	12/13/2023	FD	EM16	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.248 J	<0.160
U4-MW-12D	4/15/2022	N	BL02	UMCf	97.1 - 107.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.752 J	<0.160
U4-MW-12D	9/27/2022	N	EM01	UMCf	97.1 - 107.1	<3.90	<81.2	<2.02	<2.54	<6.00	<5.56	<2.98	<2.36	<3.80	<3.20
U4-MW-12D	10/12/2022	N	EM02	UMCf	97.1 - 107.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.684 J	<0.160
U4-MW-12D	11/2/2022	N	EM03	UMCf	97.1 - 107.1	<1.95	<40.6	<1.01	<1.27	<3.00	<2.78	<1.49	<1.18	<1.90	<1.60
U4-MW-12D	12/7/2022	N	EM04	UMCf	97.1 - 107.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.741 J	<0.160
U4-MW-12D	1/12/2023	N	EM05	UMCf	97.1 - 107.1	<19.5	<406	<10.1	<12.7	<30.0	<27.8	<14.9	<11.8	<19.0	<16.0
U4-MW-12D	2/15/2023	N	EM06	UMCf	97.1 - 107.1	<19.5 UJ	<406	<10.1	<12.7	<30.0	<27.8	<14.9	<11.8	<19.0	<16.0
U4-MW-12D	3/14/2023	N	EM07	UMCf	97.1 - 107.1	<9.75	<203	<5.05	<6.35	<15.0	<13.9	<7.45	<5.90	<9.50	<8.00
U4-MW-12D	4/17/2023	N	EM08	UMCf	97.1 - 107.1	<0.975 UJ	<20.3 UJ	<0.505 UJ	<0.635 UJ	<1.50 UJ	<1.39 UJ	<0.745 UJ	<0.590 UJ	<0.950 UJ	<0.800 UJ
U4-MW-12D	5/17/2023	N	EM09	UMCf	97.1 - 107.1	<19.5	<406	<10.1	<12.7	<30.0	<27.8	<14.9	<11.8	<19.0	<16.0
U4-MW-12D	6/16/2023	N	EM10	UMCf	97.1 - 107.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<9.50	<0.160
U4-MW-12D	7/13/2023	N	EM11	UMCf	97.1 - 107.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.192 J	<0.160
U4-MW-12D	8/14/2023	N	EM12	UMCf	97.1 - 107.1	<9.75	<203	<5.05	<6.35	<15.0	<13.9	<7.45	<5.90	<9.50	<8.00
U4-MW-12D	9/12/2023	N	EM13	UMCf	97.1 - 107.1	<9.75	<203	<5.05	<6.35	<15.0	<13.9	<7.45	<5.90	<9.50	<8.00
U4-MW-12D	10/17/2023	N	EM14	UMCf	97.1 - 107.1	<0.975	<20.3	<0.505	<0.635	<1.50	<1.39	<0.745	<0.590	<0.950	<0.800
U4-MW-12D	11/15/2023	N	EM15	UMCf	97.1 - 107.1	<0.975	<20.3	<0.505	<0.635	<1.50	<1.39	<0.745	<0.590	<0.950	<0.800
U4-MW-12D	12/12/2023	N	EM16	UMCf	97.1 - 107.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-12I	4/14/2022	N	BL02	UMCf	76.8 - 86.8	<0.195	5.31	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.363 J	<0.160
U4-MW-12I	4/14/2022	FD	BL02	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.314 J	<0.160
U4-MW-12I	9/27/2022	N	EM01	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-12I	10/12/2022	N	EM02	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-12I	11/2/2022	N	EM03	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-12I	12/7/2022	N	EM04	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-12I	12/7/2022	FD	EM04	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-12I	1/13/2023	N	EM05	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-12I	2/15/2023	N	EM06	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-12I	3/13/2023	N	EM07	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-12I	4/17/2023	N	EM08	UMCf	76.8 - 86.8	<0.195 UJ	<4.06 UJ	<0.101 UJ	<0.127 UJ	<0.300 UJ	<0.278 UJ	<0.149 UJ	<0.118 UJ	<0.190 UJ	<0.160 UJ
U4-MW-12I	5/17/2023	N	EM09	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-12I	6/16/2023	N	EM10	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-12I	7/11/2023	N	EM11	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-12I	8/14/2023	N	EM12	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-12I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-12I	10/17/2023	N	EM14	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-12I	11/16/2023	N	EM15	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-12I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B
						tert-Amyl Methyl Ether	tert-Butyl Alcohol	tert-Butyl Methyl Ether (MTBE)	tert-Butylbenzene	Tetrachloro-ethene (PCE)	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-13D	4/14/2022	N	BL02	UMCf	98.2 - 108.2	<0.195	7.16	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.456 J	<0.160
U4-MW-13D	9/28/2022	N	EM01	UMCf	98.2 - 108.2	<1.95	<40.6	<1.01	<1.27	<3.00	<2.78	<1.49	<1.18	<1.90	<1.60
U4-MW-13D	10/11/2022	N	EM02	UMCf	98.2 - 108.2	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-13D	11/3/2022	N	EM03	UMCf	98.2 - 108.2	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-13D	12/7/2022	N	EM04	UMCf	98.2 - 108.2	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-13D	1/12/2023	N	EM05	UMCf	98.2 - 108.2	<3.90	<81.2	<2.02	<2.54	<6.00	<5.56	<2.98	<2.36	<3.80	<3.20
U4-MW-13D	2/15/2023	N	EM06	UMCf	98.2 - 108.2	<0.195 UJ	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-13D	3/17/2023	N	EM07	UMCf	98.2 - 108.2	<3.90	<81.2	<2.02	<2.54	<6.00	<5.56	<2.98	<2.36	<3.80	<3.20
U4-MW-13D	4/18/2023	N	EM08	UMCf	98.2 - 108.2	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-13D	5/17/2023	N	EM09	UMCf	98.2 - 108.2	<3.90	<81.2	<2.02	<2.54	<6.00	<5.56	<2.98	<2.36	<3.80	<3.20
U4-MW-13D	6/15/2023	N	EM10	UMCf	98.2 - 108.2	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-13D	7/12/2023	N	EM11	UMCf	98.2 - 108.2	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-13D	8/11/2023	N	EM12	UMCf	98.2 - 108.2	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-13D	9/11/2023	N	EM13	UMCf	98.2 - 108.2	<4.88	<102	<2.53	<3.18	<7.50	<6.95	<3.73	<2.95	<4.75	<4.00
U4-MW-13D	10/18/2023	N	EM14	UMCf	98.2 - 108.2	<4.88	<102	<2.53	<3.18	<7.50	<6.95	<3.73	<2.95	<4.75	<4.00
U4-MW-13D	11/15/2023	N	EM15	UMCf	98.2 - 108.2	<4.88	<102	<2.53	<3.18	<7.50	<6.95	<3.73	<2.95	<4.75	<4.00
U4-MW-13D	12/11/2023	N	EM16	UMCf	98.2 - 108.2	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-13I	4/14/2022	N	BL02	UMCf	77.1 - 87.1	<0.195	4.13 J	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.291 J	<0.160
U4-MW-13I	9/28/2022	N	EM01	UMCf	77.1 - 87.1	<0.195	<4.06	<0.101	<0.127	<0.300	0.395 J	<0.149	<0.118	<0.190	<0.160
U4-MW-13I	10/10/2022	N	EM02	UMCf	77.1 - 87.1	<0.195	<4.06	<0.101	<0.127	5.02	0.914 J	<0.149	<0.118	1.49	<0.160
U4-MW-13I	11/3/2022	N	EM03	UMCf	77.1 - 87.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-13I	12/6/2022	N	EM04	UMCf	77.1 - 87.1	<0.975 UJ	<20.3 UJ	<0.505 UJ	<0.635 UJ	<1.50 UJ	<1.39 UJ	<0.745 UJ	<0.590 UJ	<0.950 UJ	<0.800 UJ
U4-MW-13I	1/12/2023	N	EM05	UMCf	77.1 - 87.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-13I	2/14/2023	N	EM06	UMCf	77.1 - 87.1	<0.975	<20.3	<0.505	<0.635	<1.50	<1.39	<0.745	<0.590	<0.950	<0.800
U4-MW-13I	3/16/2023	N	EM07	UMCf	77.1 - 87.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-13I	4/19/2023	N	EM08	UMCf	77.1 - 87.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-13I	5/17/2023	N	EM09	UMCf	77.1 - 87.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-13I	6/15/2023	N	EM10	UMCf	77.1 - 87.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118 UJ	<0.190	<0.160
U4-MW-13I	7/12/2023	N	EM11	UMCf	77.1 - 87.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-13I	8/11/2023	N	EM12	UMCf	77.1 - 87.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-13I	9/11/2023	N	EM13	UMCf	77.1 - 87.1	<4.88	<102	<2.53	<3.18	<7.50	<6.95	<3.73	<2.95	<4.75	<4.00
U4-MW-13I	10/17/2023	N	EM14	UMCf	77.1 - 87.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-13I	11/15/2023	N	EM15	UMCf	77.1 - 87.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.200 J	<0.160
U4-MW-13I	12/11/2023	N	EM16	UMCf	77.1 - 87.1	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-14D	4/13/2022	N	BL02	UMCf	97.3 - 107.3	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.295 J	<0.160
U4-MW-14D	12/6/2022	N	EM04	UMCf	97.3 - 107.3	<0.975 UJ	<20.3 UJ	<0.505 UJ	<0.635 UJ	<1.50 UJ	<1.39 UJ	<0.745 UJ	<0.590 UJ	<0.950 UJ	<0.800 UJ
U4-MW-14D	3/16/2023	N	EM07	UMCf	97.3 - 107.3	<0.975	<20.3	<0.505	<0.635	<1.50	<1.39	<0.745	<0.590	<0.950	<0.800
U4-MW-14D	6/15/2023	N	EM10	UMCf	97.3 - 107.3	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-14D	9/14/2023	N	EM13	UMCf	97.3 - 107.3	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-14D	12/15/2023	N	EM16	UMCf	97.3 - 107.3	<0.195	<4.06	<0.101	<0.127	<0.300	0.400 J	<0.149	<0.118	<0.190	<0.160
U4-MW-14I	4/14/2022	N	BL02	UMCf	77.3 - 87.3	<0.195	6.75	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-14I	12/6/2022	N	EM04	UMCf	77.3 - 87.3	<0.975 UJ	<20.3 UJ	<0.505 UJ	<0.635 UJ	<1.50 UJ	<1.39 UJ	<0.745 UJ	<0.590 UJ	<0.950 UJ	<0.800 UJ
U4-MW-14I	3/16/2023	N	EM07	UMCf	77.3 - 87.3	<0.975	<20.3	<0.505	<0.635	<1.50	<1.39	<0.745	<0.590	<0.950	<0.800
U4-MW-14I	6/15/2023	N	EM10	UMCf	77.3 - 87.3	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-14I	9/14/2023	N	EM13	UMCf	77.3 - 87.3	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-14I	12/14/2023	N	EM16	UMCf	77.3 - 87.3	<0.195	<4.06	<0.101	<0.127	<0.300	0.903 J	<0.149	<0.118	<0.190	<0.160
U4-MW-15D	4/13/2022	N	BL02	UMCf	96.0 - 106.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-15D	12/5/2022	N	EM04	UMCf	96.0 - 106.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-15D	3/20/2023	N	EM07	UMCf	96.0 - 106.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-15D	6/14/2023	N	EM10	UMCf	96.0 - 106.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-15D	9/13/2023	N	EM13	UMCf	96.0 - 106.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B
						tert-Amyl Methyl Ether	tert-Butyl Alcohol	tert-Butyl Methyl Ether (MTBE)	tert-Butylbenzene	Tetrachloro-ethene (PCE)	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-MW-15D	12/12/2023	N	EM16	UMCf	96.0 - 106.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-15DD	4/13/2022	N	BL02	UMCf	120.3 - 130.3	<0.195	4.48 J	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-15DD	12/5/2022	N	EM04	UMCf	120.3 - 130.3	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-15DD	3/15/2023	N	EM07	UMCf	120.3 - 130.3	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-15DD	6/13/2023	N	EM10	UMCf	120.3 - 130.3	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-15DD	9/14/2023	N	EM13	UMCf	120.3 - 130.3	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-15DD	12/13/2023	N	EM16	UMCf	120.3 - 130.3	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-15I	4/12/2022	N	BL02	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.215 J	<0.160
U4-MW-15I	12/5/2022	N	EM04	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-15I	3/17/2023	N	EM07	UMCf	76.8 - 86.8	<3.90	<81.2	<2.02	<2.54	<6.00	<5.56	<2.98	<2.36	<3.80	<3.20
U4-MW-15I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-15I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-15I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-15S	4/13/2022	N	BL02	UMCf	54.8 - 64.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-15S	12/5/2022	N	EM04	UMCf	54.8 - 64.8	<4.88	<102	<2.53	<3.18	<7.50	<6.95	<3.73	<2.95	<4.75	<4.00
U4-MW-15S	3/13/2023	N	EM07	UMCf	54.8 - 64.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-15S	6/13/2023	N	EM10	UMCf	54.8 - 64.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-15S	9/14/2023	N	EM13	UMCf	54.8 - 64.8	<0.195	<4.06	<0.101	<0.127	<0.300	61.9	<0.149	<0.118	<0.190	<0.160
U4-MW-15S	12/11/2023	N	EM16	UMCf	54.8 - 64.8	<0.390	<8.12	<0.202	<0.254	<0.600	13.7	<0.298	<0.236	<0.380	<0.320
U4-MW-16D	4/11/2022	N	BL02	UMCf	96.8 - 106.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.534 J	<0.160
U4-MW-16D	12/5/2022	N	EM04	UMCf	96.8 - 106.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.260 J	<0.160
U4-MW-16D	3/14/2023	N	EM07	UMCf	96.8 - 106.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-16D	6/13/2023	N	EM10	UMCf	96.8 - 106.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.418 J	<0.160
U4-MW-16D	9/15/2023	N	EM13	UMCf	96.8 - 106.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-16D	12/14/2023	N	EM16	UMCf	96.8 - 106.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-16DD	4/12/2022	N	BL02	UMCf	120.8 - 130.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-16DD	12/5/2022	N	EM04	UMCf	120.8 - 130.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-16DD	3/15/2023	N	EM07	UMCf	120.8 - 130.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-16DD	6/13/2023	N	EM10	UMCf	120.8 - 130.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-16DD	9/14/2023	N	EM13	UMCf	120.8 - 130.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-16DD	12/13/2023	N	EM16	UMCf	120.8 - 130.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-16I	4/11/2022	N	BL02	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-16I	12/5/2022	N	EM04	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-16I	12/5/2022	FD	EM04	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-16I	3/13/2023	N	EM07	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-16I	3/13/2023	FD	EM07	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-16I	6/12/2023	N	EM10	UMCf	77.0 - 87.0	<0.195	6.66 J+	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-16I	6/12/2023	FD	EM10	UMCf	77.0 - 87.0	<0.195	4.56 J	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-16I	9/11/2023	N	EM13	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-16I	9/11/2023	FD	EM13	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-16I	12/11/2023	N	EM16	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.456 J	<0.160
U4-MW-16I	12/11/2023	FD	EM16	UMCf	77.0 - 87.0	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.446 J	<0.160
U4-MW-16S	4/12/2022	N	BL02	UMCf	54.8 - 64.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-16S	4/12/2022	FD	BL02	UMCf	54.8 - 64.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-16S	12/6/2022	N	EM04	UMCf	54.8 - 64.8	<0.195 UJ	<4.06 UJ	<0.101 UJ	<0.127 UJ	<0.300 UJ	<0.278 UJ	<0.149 UJ	<0.118 UJ	<0.190 UJ	<0.160 UJ
U4-MW-16S	3/15/2023	N	EM07	UMCf	54.8 - 64.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-16S	6/13/2023	N	EM10	UMCf	54.8 - 64.8	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-MW-16S	9/11/2023	N	EM13	UMCf	54.8 - 64.8	<0.195	<4.06	<0.101	<0.127	<0.300	0.417 J	<0.149	<0.118	<0.190	<0.160
U4-MW-16S	12/11/2023	N	EM16	UMCf	54.8 - 64.8	<0.195	<4.06	<0.101	<0.127	<0.300	10.2	<0.149	<0.118	<0.190	<0.160
U4-SLMW	11/10/2022	N	EM03		-	<0.975	<20.3	<0.505	<0.635	<1.50	<1.39	<0.745	<0.590	<0.950	<0.800
U4-T3	10/13/2022	N	EM02		-	<0.195	35.0 J+	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.525 J	<0.160

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B
						tert-Amyl Methyl Ether	tert-Butyl Alcohol	tert-Butyl Methyl Ether (MTBE)	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U4-T3	11/3/2022	N	EM03		-	<0.195	<4.06	<0.101	<0.127	0.440 J	<0.278	<0.149	<0.118	0.746 J	<0.160
U4-T3	12/6/2022	N	EM04		-	<3.90 UJ	<81.2 UJ	<2.02 UJ	<2.54 UJ	<6.00 UJ	<5.56 UJ	<2.98 UJ	<2.36 UJ	<3.80 UJ	<3.20 UJ
U4-T3	1/9/2023	N	EM05		-	<0.195	<4.06	<0.101	<0.127	0.353 J	<0.278	<0.149	<0.118	0.584 J	<0.160
U4-T3	2/13/2023	N	EM06		-	<19.5	<406	<10.1	<12.7	<30.0	<27.8	<14.9	<11.8	<19.0	<16.0
U4-T3	3/13/2023	N	EM07		-	<4.88	<102	<2.53	<3.18	<7.50	<6.95	<3.73	<2.95	<4.75	<4.00
U4-T3	4/19/2023	N	EM08		-	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.210 J	<0.160
U4-T3	5/18/2023	N	EM09		-	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.339 J	<0.160
U4-T3	6/12/2023	N	EM10		-	<0.195	7.68 J+	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.289 J	<0.160
U4-T3	7/11/2023	N	EM11		-	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	0.385 J	<0.160
U4-T3	8/10/2023	N	EM12		-	<0.195	<4.06	<0.101	<0.127	<0.300	<0.278	<0.149	<0.118	<0.190	<0.160
U4-T3	9/11/2023	N	EM13		-	<0.195	<4.06	<0.101	<0.127	<0.300	1.83	<0.149	<0.118	<0.190	<0.160
U4-T3	10/16/2023	N	EM14		-	<4.88	<102	<2.53	<3.18	<7.50	<6.95	<3.73	<2.95	<4.75	<4.00

Notes:

FD - Field duplicate

E - Field instrument error.

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 low.

J+ - The result is an estimated quantity, but the result may be biased high.

N/A - Not Applicable

mg/L - milligrams per liter

µg/L - micrograms per liter

N - Normal field 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

< - The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

-- Not tested.

M-252 damaged/obstructed when checked on June 14, 2023 and September 14, 2023.

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Fatty Acids by AM20GAX/AM23 G	Volatiles Fatty Acids by AM20GAX/AM 23G	Volatiles Fatty Acids by AM20GAX/AM 23G	Volatiles Fatty Acids by AM20GAX/AM 23G	Volatiles Fatty Acids by AM20GAX/AM 23G	Volatiles Fatty Acids by AM20GAX/AM 23G	Volatiles Fatty Acids by AM20GAX/AM 23G	Volatiles Fatty Acids by AM20GAX/AM 23G
						Vinyl Chloride	Xylenes, Total	3-Methylbutanoic Acid	Acetic Acid	Butyric Acid	Formic Acid	Hexanoic Acid	i-Hexanoic Acid	Lactic Acid	Pentanoic Acid
						ug/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
M-247-100	4/20/2022	N	BL02	UMCf	100.5 - 110.5	----	----	----	----	----	----	----	----	----	----
M-249-100	4/20/2022	N	BL02	UMCf	99.6 - 109.6	----	----	----	----	----	----	----	----	----	----
M-251-100	4/19/2022	N	BL02	UMCf	92.5 - 102.5	<0.234	<0.174	----	----	----	----	----	----	----	----
M-251-100	10/13/2022	N	EM02	UMCf	92.5 - 102.5	<0.234	<0.174	----	----	----	----	----	----	----	----
M-251-100	11/2/2022	N	EM03	UMCf	92.5 - 102.5	<2.34	<1.74	----	----	----	----	----	----	----	----
M-251-100	12/8/2022	N	EM04	UMCf	92.5 - 102.5	<0.234	<0.174	----	----	----	----	----	----	----	----
M-251-100	1/11/2023	N	EM05	UMCf	92.5 - 102.5	<0.234	<0.174	----	----	----	----	----	----	----	----
M-251-100	2/13/2023	N	EM06	UMCf	92.5 - 102.5	<0.234	<0.174	----	----	----	----	----	----	----	----
M-251-100	3/17/2023	N	EM07	UMCf	92.5 - 102.5	<11.7	<8.70	<6.1 UJ	28 J	<5.8 UJ	630 J	<5.8 UJ	<5.6 UJ	<5.3 UJ	<5.6 UJ
M-251-100	4/21/2023	N	EM08	UMCf	92.5 - 102.5	<0.234	<0.174	----	----	----	----	----	----	----	----
M-251-100	5/9/2023	N	EM09	UMCf	92.5 - 102.5	<0.234	<0.174	----	----	----	----	----	----	----	----
M-251-100	6/14/2023	N	EM10	UMCf	92.5 - 102.5	<11.7	<8.70	----	----	----	----	----	----	----	----
M-251-100	7/14/2023	N	EM11	UMCf	92.5 - 102.5	<0.234	<0.174	----	----	----	----	----	----	----	----
M-251-100	8/10/2023	N	EM12	UMCf	92.5 - 102.5	<0.234	<0.174	----	----	----	----	----	----	----	----
M-251-100	9/14/2023	N	EM13	UMCf	92.5 - 102.5	<0.234	<0.174	<30.4	<61.6	<28.8	<27.4	<28.8 UJ	<27.8 UJ	29.2 J	<27.8 UJ
M-251-100	10/19/2023	N	EM14	UMCf	92.5 - 102.5	<0.234	<0.174	----	----	----	----	----	----	----	----
M-251-100	11/16/2023	N	EM15	UMCf	92.5 - 102.5	<11.7	<8.70	----	----	----	----	----	----	----	----
M-251-100	12/12/2023	N	EM16	UMCf	92.5 - 102.5	<0.234	<0.174	<0.061	75.8 J+	<0.058	<0.055	<0.058	<0.056	35.6 J+	<0.056
M-251-60	4/18/2022	N	BL02	UMCf	52.3 - 62.3	<0.234	<0.174	----	----	----	----	----	----	----	----
M-251-60	3/15/2023	N	EM07	UMCf	52.3 - 62.3	<0.234	<0.174	----	----	----	----	----	----	----	----
M-251-60	6/14/2023	N	EM10	UMCf	52.3 - 62.3	<0.234	<0.174	----	----	----	----	----	----	----	----
M-251-60	9/14/2023	N	EM13	UMCf	52.3 - 62.3	<0.234	<0.174	----	----	----	----	----	----	----	----
M-251-60	12/11/2023	N	EM16	UMCf	52.3 - 62.3	<0.234	<0.174	----	----	----	----	----	----	----	----
M-252	4/21/2022	N	BL02	UMCf	132.3 - 142.3	<0.234	<0.174	----	----	----	----	----	----	----	----
M-252	3/15/2023	N	EM07	UMCf	132.3 - 142.3	<0.234	<0.174	----	----	----	----	----	----	----	----
M-252	9/19/2023	N	EM13	UMCf	132.3 - 142.3	<0.234	<0.174	----	----	----	----	----	----	----	----
M-252	12/18/2023	N	EM16	UMCf	132.3 - 142.3	<0.234	<0.174	----	----	----	----	----	----	----	----
M-253-100	4/20/2022	N	BL02	UMCf	100.8 - 110.8	----	----	----	----	----	----	----	----	----	----
M-255-100	4/20/2022	N	BL02	UMCf	100.2 - 110.2	----	----	----	----	----	----	----	----	----	----
U4-E-01D	4/18/2022	N	BL02	UMCf	94.7 - 109.7	<1.17	<0.870	----	----	----	----	----	----	----	----
U4-E-01D	3/14/2023	N	EM07	UMCf	94.7 - 109.7	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-011	4/19/2022	N	BL02	UMCf	74.6 - 89.6	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-011	4/19/2022	FD	BL02	UMCf	74.6 - 89.6	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-011	3/14/2023	N	EM07	UMCf	74.6 - 89.6	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-011	4/20/2023	N	EM08	UMCf	74.6 - 89.6	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-011	5/10/2023	N	EM09	UMCf	74.6 - 89.6	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-011	6/12/2023	N	EM10	UMCf	74.6 - 89.6	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-011	7/11/2023	N	EM11	UMCf	74.6 - 89.6	<1.17	<0.870	----	----	----	----	----	----	----	----
U4-E-011	8/10/2023	N	EM12	UMCf	74.6 - 89.6	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-011	9/11/2023	N	EM13	UMCf	74.6 - 89.6	<1.17	<0.870	----	----	----	----	----	----	----	----
U4-E-011	10/16/2023	N	EM14	UMCf	74.6 - 89.6	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-011	12/13/2023	N	EM16	UMCf	74.6 - 89.6	<2.34	<1.74	----	----	----	----	----	----	----	----
U4-E-02D	4/20/2022	N	BL02	UMCf	94.4 - 109.4	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-02D	3/14/2023	N	EM07	UMCf	94.4 - 109.4	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-021	4/18/2022	N	BL02	UMCf	74.4 - 89.4	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-021	3/14/2023	N	EM07	UMCf	74.4 - 89.4	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-021	4/20/2023	N	EM08	UMCf	74.4 - 89.4	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-021	5/11/2023	N	EM09	UMCf	74.4 - 89.4	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-021	6/12/2023	N	EM10	UMCf	74.4 - 89.4	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-021	7/11/2023	N	EM11	UMCf	74.4 - 89.4	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-021	8/10/2023	N	EM12	UMCf	74.4 - 89.4	<0.234	<0.174	----	----	----	----	----	----	----	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Fatty Acids by AM20GAX/AM23 G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G
						Vinyl Chloride	Xylenes, Total	3-Methylbutanoic Acid	Acetic Acid	Butyric Acid	Formic Acid	Hexanoic Acid	i-Hexanoic Acid	Lactic Acid	Pentanoic Acid
						ug/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
U4-E-02I	9/11/2023	N	EM13	UMCf	74.4 - 89.4	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-02I	10/16/2023	N	EM14	UMCf	74.4 - 89.4	<2.34	<1.74	----	----	----	----	----	----	----	----
U4-E-02I	12/14/2023	N	EM16	UMCf	74.4 - 89.4	<2.34	<1.74	----	----	----	----	----	----	----	----
U4-E-03D	4/19/2022	N	BL02	UMCf	95.1 - 110.1	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-03D	10/13/2022	N	EM02	UMCf	95.1 - 110.1	<46.8	<34.8	----	----	----	----	----	----	----	----
U4-E-03D	11/3/2022	N	EM03	UMCf	95.1 - 110.1	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-03D	12/6/2022	N	EM04	UMCf	95.1 - 110.1	<4.68 UJ	<3.48 UJ	----	----	----	----	----	----	----	----
U4-E-03D	1/9/2023	N	EM05	UMCf	95.1 - 110.1	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-03D	2/13/2023	N	EM06	UMCf	95.1 - 110.1	<23.4	<17.4	----	----	----	----	----	----	----	----
U4-E-03D	3/13/2023	N	EM07	UMCf	95.1 - 110.1	<23.4	<17.4	----	----	----	----	----	----	----	----
U4-E-03D	3/14/2023	N	EM07	UMCf	95.1 - 110.1	<46.8	<34.8	----	----	----	----	----	----	----	----
U4-E-03D	4/19/2023	N	EM08	UMCf	95.1 - 110.1	<1.17	<0.870	----	----	----	----	----	----	----	----
U4-E-03D	5/11/2023	N	EM09	UMCf	95.1 - 110.1	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-03D	6/12/2023	N	EM10	UMCf	95.1 - 110.1	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-03D	7/11/2023	N	EM11	UMCf	95.1 - 110.1	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-03D	8/10/2023	N	EM12	UMCf	95.1 - 110.1	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-03D	9/11/2023	N	EM13	UMCf	95.1 - 110.1	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-03D	10/16/2023	N	EM14	UMCf	95.1 - 110.1	<46.8	<34.8	----	----	----	----	----	----	----	----
U4-E-04D	4/19/2022	N	BL02	UMCf	95.0 - 110.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-04D	3/14/2023	N	EM07	UMCf	95.0 - 110.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-04I	4/18/2022	N	BL02	UMCf	75.0 - 90.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-04I	3/14/2023	N	EM07	UMCf	75.0 - 90.0	<11.7	<8.70	----	----	----	----	----	----	----	----
U4-E-05D	4/19/2022	N	BL02	UMCf	95.0 - 110.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-05D	3/16/2023	N	EM07	UMCf	95.0 - 110.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-05I	4/19/2022	N	BL02	UMCf	75.0 - 90.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-05I	3/15/2023	N	EM07	UMCf	75.0 - 90.0	<0.234 UJ	<0.174 UJ	----	----	----	----	----	----	----	----
U4-E-06D	4/11/2022	N	BL02	UMCf	95.1 - 110.1	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-06I	4/11/2022	N	BL02	UMCf	73.2 - 88.2	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-06I	4/11/2022	FD	BL02	UMCf	73.2 - 88.2	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-06I	10/12/2022	N	EM02	UMCf	73.2 - 88.2	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-06I	11/3/2022	N	EM03	UMCf	73.2 - 88.2	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-06I	12/6/2022	N	EM04	UMCf	73.2 - 88.2	<2.34 UJ	<1.74 UJ	----	----	----	----	----	----	----	----
U4-E-06I	1/9/2023	N	EM05	UMCf	73.2 - 88.2	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-06I	2/13/2023	N	EM06	UMCf	73.2 - 88.2	<23.4	<17.4	----	----	----	----	----	----	----	----
U4-E-06I	3/13/2023	N	EM07	UMCf	73.2 - 88.2	<4.68	<3.48	----	----	----	----	----	----	----	----
U4-E-06I	4/17/2023	N	EM08	UMCf	73.2 - 88.2	<4.68	<3.48	----	----	----	----	----	----	----	----
U4-E-06I	5/15/2023	N	EM09	UMCf	73.2 - 88.2	<5.85	<4.35	----	----	----	----	----	----	----	----
U4-E-06I	6/12/2023	N	EM10	UMCf	73.2 - 88.2	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-06I	7/11/2023	N	EM11	UMCf	73.2 - 88.2	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-06I	8/11/2023	N	EM12	UMCf	73.2 - 88.2	<1.17	<0.870	----	----	----	----	----	----	----	----
U4-E-06I	9/11/2023	N	EM13	UMCf	73.2 - 88.2	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-06I	10/16/2023	N	EM14	UMCf	73.2 - 88.2	<11.7	<8.70	----	----	----	----	----	----	----	----
U4-E-06I	12/13/2023	N	EM16	UMCf	73.2 - 88.2	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-07D	4/12/2022	N	BL02	UMCf	94.6 - 109.6	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-07I	4/12/2022	N	BL02	UMCf	74.7 - 89.7	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-07I	10/11/2022	N	EM02	UMCf	74.7 - 89.7	<2.34	<1.74	----	----	----	----	----	----	----	----
U4-E-07I	11/3/2022	N	EM03	UMCf	74.7 - 89.7	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-07I	12/6/2022	N	EM04	UMCf	74.7 - 89.7	<5.85 UJ	<4.35 UJ	----	----	----	----	----	----	----	----
U4-E-07I	1/9/2023	N	EM05	UMCf	74.7 - 89.7	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-07I	2/13/2023	N	EM06	UMCf	74.7 - 89.7	<23.4	<17.4	----	----	----	----	----	----	----	----
U4-E-07I	3/13/2023	N	EM07	UMCf	74.7 - 89.7	<23.4	<17.4	----	----	----	----	----	----	----	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Fatty Acids by AM20GAX/AM23 G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G
						Vinyl Chloride	Xylenes, Total	3-Methylbutanoic Acid	Acetic Acid	Butyric Acid	Formic Acid	Hexanoic Acid	i-Hexanoic Acid	Lactic Acid	Pentanoic Acid
						ug/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
U4-E-07I	4/19/2023	N	EM08	UMCf	74.7 - 89.7	<1.17	<0.870	----	----	----	----	----	----	----	----
U4-E-07I	5/15/2023	N	EM09	UMCf	74.7 - 89.7	<23.4	<17.4	----	----	----	----	----	----	----	----
U4-E-07I	6/12/2023	N	EM10	UMCf	74.7 - 89.7	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-07I	7/11/2023	N	EM11	UMCf	74.7 - 89.7	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-07I	8/11/2023	N	EM12	UMCf	74.7 - 89.7	<1.17	<0.870	----	----	----	----	----	----	----	----
U4-E-07I	9/11/2023	N	EM13	UMCf	74.7 - 89.7	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-07I	10/16/2023	N	EM14	UMCf	74.7 - 89.7	<23.4	<17.4	----	----	----	----	----	----	----	----
U4-E-07I	12/13/2023	N	EM16	UMCf	74.7 - 89.7	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-08D	4/12/2022	N	BL02	UMCf	94.6 - 109.6	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-08D	10/11/2022	N	EM02	UMCf	94.6 - 109.6	<2.34	<1.74	----	----	----	----	----	----	----	----
U4-E-08D	11/3/2022	N	EM03	UMCf	94.6 - 109.6	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-08D	12/6/2022	N	EM04	UMCf	94.6 - 109.6	<5.85 UJ	<4.35 UJ	----	----	----	----	----	----	----	----
U4-E-08D	1/9/2023	N	EM05	UMCf	94.6 - 109.6	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-08D	2/13/2023	N	EM06	UMCf	94.6 - 109.6	<23.4	<17.4	----	----	----	----	----	----	----	----
U4-E-08D	3/13/2023	N	EM07	UMCf	94.6 - 109.6	<23.4	<17.4	----	----	----	----	----	----	----	----
U4-E-08D	4/19/2023	N	EM08	UMCf	94.6 - 109.6	<1.17	<0.870	----	----	----	----	----	----	----	----
U4-E-08D	5/17/2023	N	EM09	UMCf	94.6 - 109.6	<23.4	<17.4	----	----	----	----	----	----	----	----
U4-E-08D	6/12/2023	N	EM10	UMCf	94.6 - 109.6	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-08D	7/11/2023	N	EM11	UMCf	94.6 - 109.6	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-09D	4/15/2022	N	BL02	UMCf	94.5 - 109.5	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-09I	4/14/2022	N	BL02	UMCf	74.9 - 89.9	<0.234	0.220 J	----	----	----	----	----	----	----	----
U4-E-10D	4/13/2022	N	BL02	UMCf	94.5 - 109.5	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-E-10I	4/13/2022	N	BL02	UMCf	74.2 - 89.2	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-01D	4/19/2022	N	BL02	UMCf	96.7 - 106.7	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-01D	2/16/2023	N	EM06	UMCf	96.7 - 106.7	<2.34	<1.74	----	----	----	----	----	----	----	----
U4-MW-01D	3/20/2023	N	EM07	UMCf	96.7 - 106.7	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-01D	6/13/2023	N	EM10	UMCf	96.7 - 106.7	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-01D	9/14/2023	N	EM13	UMCf	96.7 - 106.7	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-01D	12/14/2023	N	EM16	UMCf	96.7 - 106.7	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-01DD	4/19/2022	N	BL02	UMCf	119.9 - 129.9	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-01DD	4/19/2022	FD	BL02	UMCf	119.9 - 129.9	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-01DD	3/15/2023	N	EM07	UMCf	119.9 - 129.9	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-01DD	6/13/2023	N	EM10	UMCf	119.9 - 129.9	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-01DD	9/14/2023	N	EM13	UMCf	119.9 - 129.9	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-01DD	12/15/2023	N	EM16	UMCf	119.9 - 129.9	<1.17	<0.870	----	----	----	----	----	----	----	----
U4-MW-01I	4/19/2022	N	BL02	UMCf	76.7 - 86.7	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-01I	3/20/2023	N	EM07	UMCf	76.7 - 86.7	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-01I	6/12/2023	N	EM10	UMCf	76.7 - 86.7	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-01I	9/14/2023	N	EM13	UMCf	76.7 - 86.7	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-01I	12/15/2023	N	EM16	UMCf	76.7 - 86.7	<11.7	<8.70	----	----	----	----	----	----	----	----
U4-MW-01S	4/18/2022	N	BL02	UMCf	54.7 - 64.7	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-01S	3/15/2023	N	EM07	UMCf	54.7 - 64.7	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-01S	6/13/2023	N	EM10	UMCf	54.7 - 64.7	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-01S	9/15/2023	N	EM13	UMCf	54.7 - 64.7	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-01S	12/13/2023	N	EM16	UMCf	54.7 - 64.7	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-02D	4/14/2022	N	BL02	UMCf	95.0 - 110.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-02D	10/11/2022	N	EM02	UMCf	95.0 - 110.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-02D	11/1/2022	N	EM03	UMCf	95.0 - 110.0	<11.7	<8.70	----	----	----	----	----	----	----	----
U4-MW-02D	12/7/2022	N	EM04	UMCf	95.0 - 110.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-02D	1/10/2023	N	EM05	UMCf	95.0 - 110.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-02D	2/13/2023	N	EM06	UMCf	95.0 - 110.0	<0.234	<0.174	----	----	----	----	----	----	----	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Fatty Acids by AM20GAX/AM23G	Volatiles Fatty Acids by AM20GAX/AM23G	Volatiles Fatty Acids by AM20GAX/AM23G	Volatiles Fatty Acids by AM20GAX/AM23G	Volatiles Fatty Acids by AM20GAX/AM23G	Volatiles Fatty Acids by AM20GAX/AM23G	Volatiles Fatty Acids by AM20GAX/AM23G	Volatiles Fatty Acids by AM20GAX/AM23G
						Vinyl Chloride	Xylenes, Total	3-Methylbutanoic Acid	Acetic Acid	Butyric Acid	Formic Acid	Hexanoic Acid	i-Hexanoic Acid	Lactic Acid	Pentanoic Acid
						ug/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
U4-MW-02D	3/17/2023	N	EM07	UMCf	95.0 - 110.0	<23.4	<17.4	<12 UJ	49 J	<12 UJ	1,200 J	<12 UJ	<11 UJ	<11 UJ	<11 UJ
U4-MW-02D	4/19/2023	N	EM08	UMCf	95.0 - 110.0	<1.17	<0.870	---	---	---	---	---	---	---	---
U4-MW-02D	5/9/2023	N	EM09	UMCf	95.0 - 110.0	<1.17	<0.870	---	---	---	---	---	---	---	---
U4-MW-02D	6/13/2023	N	EM10	UMCf	95.0 - 110.0	<0.234	<0.174	<12	34 J	<12	1,100 J+	<12	<11	<11	<11
U4-MW-02D	7/18/2023	N	EM11	UMCf	95.0 - 110.0	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-02D	8/14/2023	N	EM12	UMCf	95.0 - 110.0	<58.5	<43.5	---	---	---	---	---	---	---	---
U4-MW-02D	9/11/2023	N	EM13	UMCf	95.0 - 110.0	<0.234	<0.174	<12.2	28.8 J	<11.5	<11.0	<11.5 UJ	<11.1 UJ	<10.6	<11.1 UJ
U4-MW-02D	10/19/2023	N	EM14	UMCf	95.0 - 110.0	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-02D	11/15/2023	N	EM15	UMCf	95.0 - 110.0	<23.4	<17.4	---	---	---	---	---	---	---	---
U4-MW-02D	12/14/2023	N	EM16	UMCf	95.0 - 110.0	<23.4	<17.4	<0.061	30.0	<0.058	<0.055	<0.058	<0.056	37.1	<0.056
U4-MW-02I	4/14/2022	N	BL02	UMCf	75.0 - 90.0	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-02I	10/11/2022	N	EM02	UMCf	75.0 - 90.0	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-02I	11/2/2022	N	EM03	UMCf	75.0 - 90.0	<2.34	<1.74	---	---	---	---	---	---	---	---
U4-MW-02I	11/2/2022	FD	EM03	UMCf	75.0 - 90.0	<2.34	<1.74	---	---	---	---	---	---	---	---
U4-MW-02I	12/8/2022	N	EM04	UMCf	75.0 - 90.0	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-02I	12/8/2022	FD	EM04	UMCf	75.0 - 90.0	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-02I	1/13/2023	N	EM05	UMCf	75.0 - 90.0	<2.34	<1.74	---	---	---	---	---	---	---	---
U4-MW-02I	1/13/2023	FD	EM05	UMCf	75.0 - 90.0	<2.34	<1.74	---	---	---	---	---	---	---	---
U4-MW-02I	2/15/2023	N	EM06	UMCf	75.0 - 90.0	<2.34	<1.74	---	---	---	---	---	---	---	---
U4-MW-02I	2/15/2023	FD	EM06	UMCf	75.0 - 90.0	<2.34	<1.74	---	---	---	---	---	---	---	---
U4-MW-02I	3/17/2023	N	EM07	UMCf	75.0 - 90.0	<46.8	<34.8	<12 UJ	60 J	<12 UJ	1,200 J	<12 UJ	<11 UJ	<11 UJ	<11 UJ
U4-MW-02I	3/17/2023	FD	EM07	UMCf	75.0 - 90.0	<46.8	<34.8	<12 UJ	61 J	<12 UJ	1,200 J	<12 UJ	<11 UJ	<11 UJ	<11 UJ
U4-MW-02I	4/20/2023	N	EM08	UMCf	75.0 - 90.0	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-02I	4/20/2023	FD	EM08	UMCf	75.0 - 90.0	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-02I	5/9/2023	N	EM09	UMCf	75.0 - 90.0	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-02I	5/9/2023	FD	EM09	UMCf	75.0 - 90.0	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-02I	6/12/2023	N	EM10	UMCf	75.0 - 90.0	<0.234	<0.174	<1.2	200	48	94	<1.2	<1.1	8.0 J	1.3 J
U4-MW-02I	6/12/2023	FD	EM10	UMCf	75.0 - 90.0	<0.234	<0.174	<1.2	190	46	98	<1.2	<1.1	8.2 J	<1.1
U4-MW-02I	7/18/2023	N	EM11	UMCf	75.0 - 90.0	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-02I	7/18/2023	FD	EM11	UMCf	75.0 - 90.0	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-02I	8/11/2023	N	EM12	UMCf	75.0 - 90.0	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-02I	8/11/2023	FD	EM12	UMCf	75.0 - 90.0	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-02I	9/11/2023	N	EM13	UMCf	75.0 - 90.0	<0.234	<0.174	<3.0	122 J	75.4 J	<2.7	<2.9 UJ	<2.8 UJ	11.8 J	<2.8 UJ
U4-MW-02I	9/11/2023	FD	EM13	UMCf	75.0 - 90.0	<0.234	<0.174	<60.9	213 J	91.0 J	<54.9	<57.6 UJ	<55.5 UJ	<53.0	<55.5 UJ
U4-MW-02I	10/19/2023	N	EM14	UMCf	75.0 - 90.0	<0.234 UJ	<0.174 UJ	---	---	---	---	---	---	---	---
U4-MW-02I	10/19/2023	FD	EM14	UMCf	75.0 - 90.0	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-02I	11/15/2023	N	EM15	UMCf	75.0 - 90.0	<11.7	<8.70	---	---	---	---	---	---	---	---
U4-MW-02I	11/15/2023	FD	EM15	UMCf	75.0 - 90.0	<11.7	<8.70	---	---	---	---	---	---	---	---
U4-MW-02I	12/14/2023	N	EM16	UMCf	75.0 - 90.0	<11.7	<8.70	<0.061	209	97.6	<0.055	<0.058	<0.056	156	<0.056
U4-MW-02I	12/14/2023	FD	EM16	UMCf	75.0 - 90.0	<11.7	<8.70	<0.061	212	84.8	<0.055	<0.058	<0.056	162	<0.056
U4-MW-03D	4/20/2022	N	BL02	UMCf	96.6 - 106.6	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-03D	2/16/2023	N	EM06	UMCf	96.6 - 106.6	<1.17	<0.870	---	---	---	---	---	---	---	---
U4-MW-03D	3/16/2023	N	EM07	UMCf	96.6 - 106.6	<4.68	<3.48	---	---	---	---	---	---	---	---
U4-MW-03D	3/16/2023	FD	EM07	UMCf	96.6 - 106.6	<1.17	<0.870	---	---	---	---	---	---	---	---
U4-MW-03D	6/15/2023	N	EM10	UMCf	96.6 - 106.6	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-03D	9/14/2023	N	EM13	UMCf	96.6 - 106.6	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-03D	12/13/2023	N	EM16	UMCf	96.6 - 106.6	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-03DD	4/20/2022	N	BL02	UMCf	119.7 - 129.7	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-03DD	3/15/2023	N	EM07	UMCf	119.7 - 129.7	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-03DD	6/15/2023	N	EM10	UMCf	119.7 - 129.7	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-03DD	9/14/2023	N	EM13	UMCf	119.7 - 129.7	<0.234	<0.174	---	---	---	---	---	---	---	---

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Fatty Acids by AM20GAX/AM23 G	Volatiles Fatty Acids by AM20GAX/AM 23G	Volatiles Fatty Acids by AM20GAX/AM 23G	Volatiles Fatty Acids by AM20GAX/AM 23G	Volatiles Fatty Acids by AM20GAX/AM 23G	Volatiles Fatty Acids by AM20GAX/AM 23G	Volatiles Fatty Acids by AM20GAX/AM 23G	Volatiles Fatty Acids by AM20GAX/AM 23G
						Vinyl Chloride	Xylenes, Total	3-Methylbutanoic Acid	Acetic Acid	Butyric Acid	Formic Acid	Hexanoic Acid	i-Hexanoic Acid	Lactic Acid	Pentanoic Acid
						ug/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
U4-MW-03DD	12/14/2023	N	EM16	UMCf	119.7 - 129.7	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-03I	4/19/2022	N	BL02	UMCf	76.6 - 86.6	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-03I	3/15/2023	N	EM07	UMCf	76.6 - 86.6	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-03I	6/14/2023	N	EM10	UMCf	76.6 - 86.6	<4.68	<3.48	----	----	----	----	----	----	----	----
U4-MW-03I	6/14/2023	FD	EM10	UMCf	76.6 - 86.6	<5.85	<4.35	----	----	----	----	----	----	----	----
U4-MW-03I	9/11/2023	N	EM13	UMCf	76.6 - 86.6	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-03I	9/11/2023	FD	EM13	UMCf	76.6 - 86.6	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-03I	12/13/2023	N	EM16	UMCf	76.6 - 86.6	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-03I	12/13/2023	FD	EM16	UMCf	76.6 - 86.6	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-03S	4/18/2022	N	BL02	UMCf	54.5 - 64.5	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-03S	4/18/2022	FD	BL02	UMCf	54.5 - 64.5	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-03S	3/15/2023	N	EM07	UMCf	54.5 - 64.5	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-03S	6/15/2023	N	EM10	UMCf	54.5 - 64.5	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-03S	9/14/2023	N	EM13	UMCf	54.5 - 64.5	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-03S	12/13/2023	N	EM16	UMCf	54.5 - 64.5	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-04D	4/19/2022	N	BL02	UMCf	97.0 - 107.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-04D	2/16/2023	N	EM06	UMCf	97.0 - 107.0	<11.7	<8.70	----	----	----	----	----	----	----	----
U4-MW-04D	3/21/2023	N	EM07	UMCf	97.0 - 107.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-04D	6/14/2023	N	EM10	UMCf	97.0 - 107.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-04D	9/15/2023	N	EM13	UMCf	97.0 - 107.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-04D	12/12/2023	N	EM16	UMCf	97.0 - 107.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-04I	4/19/2022	N	BL02	UMCf	76.8 - 86.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-04I	3/20/2023	N	EM07	UMCf	76.8 - 86.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-04I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<1.17	<0.870	----	----	----	----	----	----	----	----
U4-MW-04I	9/14/2023	N	EM13	UMCf	76.8 - 86.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-04I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-05D	4/15/2022	N	BL02	UMCf	98.2 - 108.2	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-05D	10/13/2022	N	EM02	UMCf	98.2 - 108.2	<23.4	<17.4	----	----	----	----	----	----	----	----
U4-MW-05D	11/3/2022	N	EM03	UMCf	98.2 - 108.2	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-05D	12/7/2022	N	EM04	UMCf	98.2 - 108.2	0.238 J	<0.174	----	----	----	----	----	----	----	----
U4-MW-05D	1/11/2023	N	EM05	UMCf	98.2 - 108.2	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-05D	2/14/2023	N	EM06	UMCf	98.2 - 108.2	<23.4	<17.4	----	----	----	----	----	----	----	----
U4-MW-05D	3/16/2023	N	EM07	UMCf	98.2 - 108.2	<23.4	<17.4	<6.1	28 J	<5.8	620 J+	<5.8	<5.6	<5.3	<5.6
U4-MW-05D	4/20/2023	N	EM08	UMCf	98.2 - 108.2	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-05D	5/10/2023	N	EM09	UMCf	98.2 - 108.2	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-05D	6/15/2023	N	EM10	UMCf	98.2 - 108.2	<0.234	<0.174	<3.0	150	24 J	280	<2.9	<2.8	16 J	<2.8
U4-MW-05D	7/18/2023	N	EM11	UMCf	98.2 - 108.2	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-05D	8/14/2023	N	EM12	UMCf	98.2 - 108.2	<5.85	<4.35	----	----	----	----	----	----	----	----
U4-MW-05D	9/12/2023	N	EM13	UMCf	98.2 - 108.2	<5.85	<4.35	<3.0	111	21.9 J	<2.7	<2.9 UJ	<2.8 UJ	12.0 J	<2.8 UJ
U4-MW-05D	10/18/2023	N	EM14	UMCf	98.2 - 108.2	<5.85	<4.35	----	----	----	----	----	----	----	----
U4-MW-05D	11/16/2023	N	EM15	UMCf	98.2 - 108.2	<5.85	<4.35	----	----	----	----	----	----	----	----
U4-MW-05D	12/14/2023	N	EM16	UMCf	98.2 - 108.2	<5.85	<4.35	<0.061	575	417	124	3.8	<0.056	1,250	6.1
U4-MW-05I	4/15/2022	N	BL02	UMCf	76.6 - 86.6	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-05I	10/13/2022	N	EM02	UMCf	76.6 - 86.6	<23.4	<17.4	----	----	----	----	----	----	----	----
U4-MW-05I	11/3/2022	N	EM03	UMCf	76.6 - 86.6	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-05I	12/8/2022	N	EM04	UMCf	76.6 - 86.6	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-05I	1/11/2023	N	EM05	UMCf	76.6 - 86.6	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-05I	2/14/2023	N	EM06	UMCf	76.6 - 86.6	<23.4	<17.4	----	----	----	----	----	----	----	----
U4-MW-05I	3/14/2023	N	EM07	UMCf	76.6 - 86.6	<23.4	<17.4	<3.0	14 J	<2.9	290	2.9 J	<2.8	11 J	<2.8
U4-MW-05I	4/21/2023	N	EM08	UMCf	76.6 - 86.6	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-05I	5/10/2023	N	EM09	UMCf	76.6 - 86.6	<0.234	<0.174	----	----	----	----	----	----	----	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Fatty Acids by AM20GAX/AM23 G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G
						Vinyl Chloride	Xylenes, Total	3-Methylbutanoic Acid	Acetic Acid	Butyric Acid	Formic Acid	Hexanoic Acid	i-Hexanoic Acid	Lactic Acid	Pentanoic Acid
						ug/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
U4-MW-05I	6/15/2023	N	EM10	UMCf	76.6 - 86.6	<0.234	<0.174	<6.1	460	170	120	<5.8	<5.6	15 J	9.2 J
U4-MW-05I	7/17/2023	N	EM11	UMCf	76.6 - 86.6	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-05I	8/14/2023	N	EM12	UMCf	76.6 - 86.6	<11.7	<8.70	---	---	---	---	---	---	---	---
U4-MW-05I	9/13/2023	N	EM13	UMCf	76.6 - 86.6	<0.234	<0.174	<30.4	145 J	<28.8	<27.4	<28.8 UJ	<27.8 UJ	32.9 J	<27.8 UJ
U4-MW-05I	10/18/2023	N	EM14	UMCf	76.6 - 86.6	<11.7	<8.70	---	---	---	---	---	---	---	---
U4-MW-05I	11/15/2023	N	EM15	UMCf	76.6 - 86.6	<11.7	<8.70	---	---	---	---	---	---	---	---
U4-MW-05I	12/12/2023	N	EM16	UMCf	76.6 - 86.6	<0.234	<0.174	<0.061	264	87.8	<0.055	<0.058	<0.056	154 J+	<0.056
U4-MW-06D	4/19/2022	N	BL02	UMCf	97.1 - 107.1	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-06D	2/15/2023	N	EM06	UMCf	97.1 - 107.1	<11.7	<8.70	---	---	---	---	---	---	---	---
U4-MW-06D	3/21/2023	N	EM07	UMCf	97.1 - 107.1	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-06D	6/16/2023	N	EM10	UMCf	97.1 - 107.1	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-06D	9/13/2023	N	EM13	UMCf	97.1 - 107.1	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-06D	12/13/2023	N	EM16	UMCf	97.1 - 107.1	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-06I	4/19/2022	N	BL02	UMCf	76.5 - 86.5	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-06I	3/14/2023	N	EM07	UMCf	76.5 - 86.5	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-06I	6/16/2023	N	EM10	UMCf	76.5 - 86.5	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-06I	9/12/2023	N	EM13	UMCf	76.5 - 86.5	<11.7	<8.70	---	---	---	---	---	---	---	---
U4-MW-06I	12/12/2023	N	EM16	UMCf	76.5 - 86.5	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-07D	4/15/2022	N	BL02	UMCf	96.8 - 106.5	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-07D	10/12/2022	N	EM02	UMCf	96.8 - 106.5	<0.234	0.181 J	---	---	---	---	---	---	---	---
U4-MW-07D	10/12/2022	FD	EM02	UMCf	96.8 - 106.5	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-07D	11/3/2022	N	EM03	UMCf	96.8 - 106.5	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-07D	12/7/2022	N	EM04	UMCf	96.8 - 106.5	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-07D	1/11/2023	N	EM05	UMCf	96.8 - 106.5	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-07D	2/14/2023	N	EM06	UMCf	96.8 - 106.5	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-07D	3/16/2023	N	EM07	UMCf	96.8 - 106.5	<0.234	<0.174	<0.61	2.8 J	<0.58	61 J+	<0.58	<0.56	<0.53	<0.56
U4-MW-07D	4/21/2023	N	EM08	UMCf	96.8 - 106.5	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-07D	5/11/2023	N	EM09	UMCf	96.8 - 106.5	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-07D	6/13/2023	N	EM10	UMCf	96.8 - 106.5	<0.234 UJ	<0.174 UJ	<12	370 J+	150	120 J+	<12	<11	19 J	<11
U4-MW-07D	7/17/2023	N	EM11	UMCf	96.8 - 106.5	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-07D	8/11/2023	N	EM12	UMCf	96.8 - 106.5	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-07D	9/13/2023	N	EM13	UMCf	96.8 - 106.5	<0.234	<0.174	<30.4	174 J	54.0 J	<27.4	<28.8 UJ	<27.8 UJ	43.0 J	<27.8 UJ
U4-MW-07D	10/18/2023	N	EM14	UMCf	96.8 - 106.5	<23.4	<17.4	---	---	---	---	---	---	---	---
U4-MW-07D	11/16/2023	N	EM15	UMCf	96.8 - 106.5	<23.4	<17.4	---	---	---	---	---	---	---	---
U4-MW-07D	12/12/2023	N	EM16	UMCf	96.8 - 106.5	<0.234	<0.174	<0.061	378	267	39.0	<0.058	<0.056	913	<0.056
U4-MW-07I	4/15/2022	N	BL02	UMCf	76.8 - 86.8	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-07I	10/12/2022	N	EM02	UMCf	76.8 - 86.8	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-07I	11/3/2022	N	EM03	UMCf	76.8 - 86.8	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-07I	12/7/2022	N	EM04	UMCf	76.8 - 86.8	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-07I	1/11/2023	N	EM05	UMCf	76.8 - 86.8	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-07I	2/15/2023	N	EM06	UMCf	76.8 - 86.8	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-07I	3/16/2023	N	EM07	UMCf	76.8 - 86.8	<1.17	<0.870	<0.61	3.0 J	<0.58	66 J+	<0.58	<0.56	<0.53	<0.56
U4-MW-07I	4/21/2023	N	EM08	UMCf	76.8 - 86.8	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-07I	5/11/2023	N	EM09	UMCf	76.8 - 86.8	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-07I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<1.17	<0.870	<3.0	260	7.8 J	220	6.6 J	<2.8	12 J	<2.8
U4-MW-07I	7/17/2023	N	EM11	UMCf	76.8 - 86.8	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-07I	8/11/2023	N	EM12	UMCf	76.8 - 86.8	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-07I	9/13/2023	N	EM13	UMCf	76.8 - 86.8	<0.234	<0.174	<30.4	330	207 J	<27.4	<28.8 UJ	<27.8 UJ	38.4 J	<27.8 UJ
U4-MW-07I	10/18/2023	N	EM14	UMCf	76.8 - 86.8	<11.7	<8.70	---	---	---	---	---	---	---	---
U4-MW-07I	11/16/2023	N	EM15	UMCf	76.8 - 86.8	<11.7	<8.70	---	---	---	---	---	---	---	---
U4-MW-07I	12/11/2023	N	EM16	UMCf	76.8 - 86.8	<0.234	<0.174	<0.061	287	186	8.9	<0.058	<0.056	514 J	4.2

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Fatty Acids by AM20GAX/AM23 G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G
						Vinyl Chloride	Xylenes, Total	3-Methylbutanoic Acid	Acetic Acid	Butyric Acid	Formic Acid	Hexanoic Acid	i-Hexanoic Acid	Lactic Acid	Pentanoic Acid
						ug/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
U4-MW-08D	4/13/2022	N	BL02	UMCf	98.6 - 108.6	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-08D	12/7/2022	N	EM04	UMCf	98.6 - 108.6	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-08D	3/17/2023	N	EM07	UMCf	98.6 - 108.6	<23.4	<17.4	----	----	----	----	----	----	----	----
U4-MW-08D	6/13/2023	N	EM10	UMCf	98.6 - 108.6	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-08D	9/13/2023	N	EM13	UMCf	98.6 - 108.6	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-08D	12/11/2023	N	EM16	UMCf	98.6 - 108.6	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-08DD	4/20/2022	N	BL02	UMCf	119.8 - 129.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-08DD	4/20/2022	FD	BL02	UMCf	119.8 - 129.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-08DD	12/8/2022	N	EM04	UMCf	119.8 - 129.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-08DD	3/15/2023	N	EM07	UMCf	119.8 - 129.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-08DD	6/14/2023	N	EM10	UMCf	119.8 - 129.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-08DD	9/14/2023	N	EM13	UMCf	119.8 - 129.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-08DD	12/14/2023	N	EM16	UMCf	119.8 - 129.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-08I	4/13/2022	N	BL02	UMCf	78.0 - 88.0	0.413 J	<0.174	----	----	----	----	----	----	----	----
U4-MW-08I	12/7/2022	N	EM04	UMCf	78.0 - 88.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-08I	12/7/2022	FD	EM04	UMCf	78.0 - 88.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-08I	3/17/2023	N	EM07	UMCf	78.0 - 88.0	<11.7	<8.70	----	----	----	----	----	----	----	----
U4-MW-08I	6/13/2023	N	EM10	UMCf	78.0 - 88.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-08I	9/13/2023	N	EM13	UMCf	78.0 - 88.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-08I	12/11/2023	N	EM16	UMCf	78.0 - 88.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-08S	4/15/2022	N	BL02	UMCf	54.9 - 64.9	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-08S	12/7/2022	N	EM04	UMCf	54.9 - 64.9	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-08S	12/7/2022	FD	EM04	UMCf	54.9 - 64.9	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-08S	3/13/2023	N	EM07	UMCf	54.9 - 64.9	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-08S	3/13/2023	FD	EM07	UMCf	54.9 - 64.9	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-08S	6/13/2023	N	EM10	UMCf	54.9 - 64.9	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-08S	6/13/2023	FD	EM10	UMCf	54.9 - 64.9	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-08S	9/13/2023	N	EM13	UMCf	54.9 - 64.9	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-08S	9/13/2023	FD	EM13	UMCf	54.9 - 64.9	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-08S	12/14/2023	N	EM16	UMCf	54.9 - 64.9	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-08S	12/14/2023	FD	EM16	UMCf	54.9 - 64.9	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-09D	4/14/2022	N	BL02	UMCf	96.9 - 106.9	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-09D	12/6/2022	N	EM04	UMCf	96.9 - 106.9	<2.34 UJ	<1.74 UJ	----	----	----	----	----	----	----	----
U4-MW-09D	3/16/2023	N	EM07	UMCf	96.9 - 106.9	<2.34	<1.74	----	----	----	----	----	----	----	----
U4-MW-09D	6/14/2023	N	EM10	UMCf	96.9 - 106.9	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-09D	9/12/2023	N	EM13	UMCf	96.9 - 106.9	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-09D	12/15/2023	N	EM16	UMCf	96.9 - 106.9	<5.85 UJ	12.4 J	----	----	----	----	----	----	----	----
U4-MW-09DD	4/14/2022	N	BL02	UMCf	119.8 - 129.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-09DD	12/6/2022	N	EM04	UMCf	119.8 - 129.8	<0.234 UJ	<0.174 UJ	----	----	----	----	----	----	----	----
U4-MW-09DD	3/21/2023	N	EM07	UMCf	119.8 - 129.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-09DD	6/15/2023	N	EM10	UMCf	119.8 - 129.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-09DD	9/13/2023	N	EM13	UMCf	119.8 - 129.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-09DD	12/13/2023	N	EM16	UMCf	119.8 - 129.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-09I	4/14/2022	N	BL02	UMCf	76.8 - 86.8	<0.234	0.326 J	----	----	----	----	----	----	----	----
U4-MW-09I	12/6/2022	N	EM04	UMCf	76.8 - 86.8	<2.34 UJ	<1.74 UJ	----	----	----	----	----	----	----	----
U4-MW-09I	3/16/2023	N	EM07	UMCf	76.8 - 86.8	<2.34	<1.74	----	----	----	----	----	----	----	----
U4-MW-09I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-09I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-09I	12/15/2023	N	EM16	UMCf	76.8 - 86.8	<5.85 UJ	<4.35 UJ	----	----	----	----	----	----	----	----
U4-MW-09S	4/14/2022	N	BL02	UMCf	55.3 - 65.3	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-09S	12/6/2022	N	EM04	UMCf	55.3 - 65.3	<0.234 UJ	<0.174 UJ	----	----	----	----	----	----	----	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Fatty Acids by AM20GAX/AM23 G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G
						Vinyl Chloride	Xylenes, Total	3-Methylbutanoic Acid	Acetic Acid	Butyric Acid	Formic Acid	Hexanoic Acid	i-Hexanoic Acid	Lactic Acid	Pentanoic Acid
						ug/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
U4-MW-09S	3/17/2023	N	EM07	UMCf	55.3 - 65.3	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-09S	6/15/2023	N	EM10	UMCf	55.3 - 65.3	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-09S	9/13/2023	N	EM13	UMCf	55.3 - 65.3	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-09S	12/12/2023	N	EM16	UMCf	55.3 - 65.3	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-10D	4/14/2022	N	BL02	UMCf	96.9 - 106.9	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-10D	12/5/2022	N	EM04	UMCf	96.9 - 106.9	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-10D	3/17/2023	N	EM07	UMCf	96.9 - 106.9	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-10D	6/14/2023	N	EM10	UMCf	96.9 - 106.9	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-10D	9/13/2023	N	EM13	UMCf	96.9 - 106.9	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-10D	12/14/2023	N	EM16	UMCf	96.9 - 106.9	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-10I	4/14/2022	N	BL02	UMCf	77.1 - 87.1	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-10I	12/5/2022	N	EM04	UMCf	77.1 - 87.1	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-10I	3/17/2023	N	EM07	UMCf	77.1 - 87.1	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-10I	6/14/2023	N	EM10	UMCf	77.1 - 87.1	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-10I	9/13/2023	N	EM13	UMCf	77.1 - 87.1	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-10I	12/14/2023	N	EM16	UMCf	77.1 - 87.1	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-11D	4/15/2022	N	BL02	UMCf	97.4 - 107.4	<0.234	<0.174	<6.1	25 J	<5.8	460	<5.8	<5.6	<5.3	<5.6
U4-MW-11D	9/26/2022	N	EM01	UMCf	97.4 - 107.4	<11.7	<8.70	----	----	----	----	----	----	----	----
U4-MW-11D	10/11/2022	N	EM02	UMCf	97.4 - 107.4	<2.34	<1.74	----	----	----	----	----	----	----	----
U4-MW-11D	11/1/2022	N	EM03	UMCf	97.4 - 107.4	<11.7	<8.70	----	----	----	----	----	----	----	----
U4-MW-11D	12/6/2022	N	EM04	UMCf	97.4 - 107.4	<5.85 UJ	<4.35 UJ	<3.0	27 J+	4.1 J	320 J+	<2.9	<2.8	6.7 J	<2.8
U4-MW-11D	1/12/2023	N	EM05	UMCf	97.4 - 107.4	<46.8	<34.8	----	----	----	----	----	----	----	----
U4-MW-11D	2/14/2023	N	EM06	UMCf	97.4 - 107.4	<46.8	<34.8	----	----	----	----	----	----	----	----
U4-MW-11D	3/16/2023	N	EM07	UMCf	97.4 - 107.4	<46.8	<34.8	<12	<25	<12	670 J+	<12	<11	<11	<11
U4-MW-11D	4/18/2023	N	EM08	UMCf	97.4 - 107.4	<1.17	<0.870	----	----	----	----	----	----	----	----
U4-MW-11D	5/17/2023	N	EM09	UMCf	97.4 - 107.4	<4.68 UJ	<3.48 UJ	----	----	----	----	----	----	----	----
U4-MW-11D	6/16/2023	N	EM10	UMCf	97.4 - 107.4	<0.234	<0.174	<12	36 J	<12	1,100	<12	<11	<11	<11
U4-MW-11D	7/14/2023	N	EM11	UMCf	97.4 - 107.4	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-11D	8/14/2023	N	EM12	UMCf	97.4 - 107.4	<46.8	<34.8	----	----	----	----	----	----	----	----
U4-MW-11D	9/13/2023	N	EM13	UMCf	97.4 - 107.4	<0.234	<0.174	<30.4	<61.6	<28.8	<27.4	<28.8 UJ	<27.8 UJ	<26.5	<27.8 UJ
U4-MW-11D	10/18/2023	N	EM14	UMCf	97.4 - 107.4	<46.8	<34.8	----	----	----	----	----	----	----	----
U4-MW-11D	11/16/2023	N	EM15	UMCf	97.4 - 107.4	<11.7	<8.70	----	----	----	----	----	----	----	----
U4-MW-11D	12/13/2023	N	EM16	UMCf	97.4 - 107.4	<0.234	<0.174	<0.061	118	54.6	<0.055	<0.058	<0.056	43.7	<0.056
U4-MW-11I	4/14/2022	N	BL02	UMCf	77.0 - 87.0	<0.234	<0.174	<1.2	3.6 J	<1.2	91	<1.2	<1.1	<1.1	<1.1
U4-MW-11I	9/26/2022	N	EM01	UMCf	77.0 - 87.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-11I	9/26/2022	FD	EM01	UMCf	77.0 - 87.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-11I	10/10/2022	N	EM02	UMCf	77.0 - 87.0	<2.34	<1.74	----	----	----	----	----	----	----	----
U4-MW-11I	10/10/2022	FD	EM02	UMCf	77.0 - 87.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-11I	10/31/2022	N	EM03	UMCf	77.0 - 87.0	<1.17	<0.870	----	----	----	----	----	----	----	----
U4-MW-11I	10/31/2022	FD	EM03	UMCf	77.0 - 87.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-11I	12/6/2022	N	EM04	UMCf	77.0 - 87.0	<0.234 UJ	<0.174 UJ	<6.1 UJ	480 J-	11 J	21 J	<5.8 UJ	<5.6 UJ	8.7 J	<5.6 UJ
U4-MW-11I	12/6/2022	FD	EM04	UMCf	77.0 - 87.0	<0.234 UJ	<0.174 UJ	<6.1 UJ	490 J-	15 J	53 J	<5.8 UJ	<5.6 UJ	10 J	<5.6 UJ
U4-MW-11I	1/12/2023	N	EM05	UMCf	77.0 - 87.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-11I	1/12/2023	FD	EM05	UMCf	77.0 - 87.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-11I	2/14/2023	N	EM06	UMCf	77.0 - 87.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-11I	2/14/2023	FD	EM06	UMCf	77.0 - 87.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-11I	3/16/2023	N	EM07	UMCf	77.0 - 87.0	<0.234	<0.174	<3.0	270	<2.9	59 J+	<2.9	<2.8	4.4 J	<2.8
U4-MW-11I	3/16/2023	FD	EM07	UMCf	77.0 - 87.0	<0.234	<0.174	<3.0	290	<2.9	58 J+	<2.9	<2.8	3.7 J	<2.8
U4-MW-11I	4/18/2023	N	EM08	UMCf	77.0 - 87.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-11I	4/18/2023	FD	EM08	UMCf	77.0 - 87.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-11I	5/19/2023	N	EM09	UMCf	77.0 - 87.0	<0.234 UJ	<0.174 UJ	----	----	----	----	----	----	----	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Fatty Acids by AM20GAX/AM23 G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G
						Vinyl Chloride	Xylenes, Total	3-Methylbutanoic Acid	Acetic Acid	Butyric Acid	Formic Acid	Hexanoic Acid	i-Hexanoic Acid	Lactic Acid	Pentanoic Acid
						ug/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
U4-MW-11I	5/19/2023	FD	EM09	UMCf	77.0 - 87.0	<0.234 UJ	<0.174 UJ	----	----	----	----	----	----	----	----
U4-MW-11I	6/15/2023	N	EM10	UMCf	77.0 - 87.0	<0.234	<0.174	1.3 J	90	<0.58	63	0.63 J	<0.56	7.6	<0.56
U4-MW-11I	6/15/2023	FD	EM10	UMCf	77.0 - 87.0	<0.234	<0.174	0.96 J	95	<0.58	61	<0.58	<0.56	7.8	<0.56
U4-MW-11I	7/13/2023	N	EM11	UMCf	77.0 - 87.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-11I	7/13/2023	FD	EM11	UMCf	77.0 - 87.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-11I	8/14/2023	N	EM12	UMCf	77.0 - 87.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-11I	8/14/2023	FD	EM12	UMCf	77.0 - 87.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-11I	9/13/2023	N	EM13	UMCf	77.0 - 87.0	<0.234	<0.174	<30.4	<61.6	<28.8	<27.4	<28.8 UJ	<27.8 UJ	30.1 J	<27.8 UJ
U4-MW-11I	9/13/2023	FD	EM13	UMCf	77.0 - 87.0	<0.234	<0.174	<30.4	<61.6	<28.8	<27.4	<28.8 UJ	<27.8 UJ	44.6 J	<27.8 UJ
U4-MW-11I	10/19/2023	N	EM14	UMCf	77.0 - 87.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-11I	10/19/2023	FD	EM14	UMCf	77.0 - 87.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-11I	11/16/2023	N	EM15	UMCf	77.0 - 87.0	<11.7	<8.70	----	----	----	----	----	----	----	----
U4-MW-11I	11/16/2023	FD	EM15	UMCf	77.0 - 87.0	<11.7	<8.70	----	----	----	----	----	----	----	----
U4-MW-11I	12/13/2023	N	EM16	UMCf	77.0 - 87.0	<0.234	<0.174	<0.061	<0.12	<0.058	<0.055	<0.058	<0.056	28.3	<0.056
U4-MW-11I	12/13/2023	FD	EM16	UMCf	77.0 - 87.0	<0.234	<0.174	<0.061	<0.12	<0.058	<0.055	<0.058	<0.056	28.0	<0.056
U4-MW-12D	4/15/2022	N	BL02	UMCf	97.1 - 107.1	<0.234	<0.174	<6.1	26 J	<5.8	460	<5.8	43 J	<5.3	<5.6
U4-MW-12D	9/27/2022	N	EM01	UMCf	97.1 - 107.1	<4.68	<3.48	----	----	----	----	----	----	----	----
U4-MW-12D	10/12/2022	N	EM02	UMCf	97.1 - 107.1	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-12D	11/2/2022	N	EM03	UMCf	97.1 - 107.1	<2.34	<1.74	----	----	----	----	----	----	----	----
U4-MW-12D	12/7/2022	N	EM04	UMCf	97.1 - 107.1	<0.234	<0.174	<6.1 R	49 J	<5.8 R	<5.5 R	6.9 J	<5.6 R	9.4 J	<5.6 R
U4-MW-12D	1/12/2023	N	EM05	UMCf	97.1 - 107.1	<23.4	<17.4	----	----	----	----	----	----	----	----
U4-MW-12D	2/15/2023	N	EM06	UMCf	97.1 - 107.1	<23.4	<17.4	----	----	----	----	----	----	----	----
U4-MW-12D	3/14/2023	N	EM07	UMCf	97.1 - 107.1	<11.7	<8.70	<6.1	65	<5.8	260	<5.8	<5.6	<5.3	<5.6
U4-MW-12D	4/17/2023	N	EM08	UMCf	97.1 - 107.1	<1.17 UJ	<0.870 UJ	----	----	----	----	----	----	----	----
U4-MW-12D	5/17/2023	N	EM09	UMCf	97.1 - 107.1	<23.4	<17.4	----	----	----	----	----	----	----	----
U4-MW-12D	6/16/2023	N	EM10	UMCf	97.1 - 107.1	<0.234	<0.174	<12	28 J	<12	1,200	<12	<11	<11	<11
U4-MW-12D	7/13/2023	N	EM11	UMCf	97.1 - 107.1	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-12D	8/14/2023	N	EM12	UMCf	97.1 - 107.1	<11.7	<8.70	----	----	----	----	----	----	----	----
U4-MW-12D	9/12/2023	N	EM13	UMCf	97.1 - 107.1	<11.7	<8.70	<3.0	10.9 J	<2.9	<2.7	<2.9 UJ	<2.8 UJ	6.1 J	<2.8 UJ
U4-MW-12D	10/17/2023	N	EM14	UMCf	97.1 - 107.1	<1.17	<0.870	----	----	----	----	----	----	----	----
U4-MW-12D	11/15/2023	N	EM15	UMCf	97.1 - 107.1	<1.17	<0.870	----	----	----	----	----	----	----	----
U4-MW-12D	12/12/2023	N	EM16	UMCf	97.1 - 107.1	<0.234	<0.174	<0.061	252	93.6	<0.055	3.8	<0.056	32.2 J+	<0.056
U4-MW-12I	4/14/2022	N	BL02	UMCf	76.8 - 86.8	<0.234	<0.174	<6.1	<12	<5.8	240	<5.8	<5.6	<5.3	<5.6
U4-MW-12I	4/14/2022	FD	BL02	UMCf	76.8 - 86.8	<0.234	<0.174	<6.1	<12	<5.8	220	<5.8	<5.6	<5.3	<5.6
U4-MW-12I	9/27/2022	N	EM01	UMCf	76.8 - 86.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-12I	10/12/2022	N	EM02	UMCf	76.8 - 86.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-12I	11/2/2022	N	EM03	UMCf	76.8 - 86.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-12I	12/7/2022	N	EM04	UMCf	76.8 - 86.8	<0.234	<0.174	<1.2 R	170 J-	<1.2 R	110 J-	2.1 J	<1.1 R	6.9 J	<1.1 R
U4-MW-12I	12/7/2022	FD	EM04	UMCf	76.8 - 86.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-12I	1/13/2023	N	EM05	UMCf	76.8 - 86.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-12I	2/15/2023	N	EM06	UMCf	76.8 - 86.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-12I	3/13/2023	N	EM07	UMCf	76.8 - 86.8	<0.234	<0.174	<6.1	590	26 J	54	<5.8	<5.6	15 J	<5.6
U4-MW-12I	4/17/2023	N	EM08	UMCf	76.8 - 86.8	<0.234 UJ	<0.174 UJ	----	----	----	----	----	----	----	----
U4-MW-12I	5/17/2023	N	EM09	UMCf	76.8 - 86.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-12I	6/16/2023	N	EM10	UMCf	76.8 - 86.8	<0.234	<0.174	<3.0	170	<2.9	290	<2.9	<2.8	<2.7	<2.8
U4-MW-12I	7/11/2023	N	EM11	UMCf	76.8 - 86.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-12I	8/14/2023	N	EM12	UMCf	76.8 - 86.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-12I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	<0.234	<0.174	<1.2	3.5 J	<1.2	<1.1	<1.2 UJ	<1.1 UJ	10.6	<1.1 UJ
U4-MW-12I	10/17/2023	N	EM14	UMCf	76.8 - 86.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-12I	11/16/2023	N	EM15	UMCf	76.8 - 86.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-12I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	<0.234	<0.174	<0.061	<0.12	<0.058	<0.055	<0.058	<0.056	17.9 J+	<0.056 R

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Fatty Acids by AM20GAX/AM23 G	Volatiles Fatty Acids by AM20GAX/AM 23G	Volatiles Fatty Acids by AM20GAX/AM 23G	Volatiles Fatty Acids by AM20GAX/AM 23G	Volatiles Fatty Acids by AM20GAX/AM 23G	Volatiles Fatty Acids by AM20GAX/AM 23G	Volatiles Fatty Acids by AM20GAX/AM 23G	Volatiles Fatty Acids by AM20GAX/AM 23G
						Vinyl Chloride	Xylenes, Total	3-Methylbutanoic Acid	Acetic Acid	Butyric Acid	Formic Acid	Hexanoic Acid	i-Hexanoic Acid	Lactic Acid	Pentanoic Acid
						ug/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
U4-MW-13D	4/14/2022	N	BL02	UMCf	98.2 - 108.2	<0.234	<0.174	<12	27 J	<12	490	<12	<11	<11	<11
U4-MW-13D	9/28/2022	N	EM01	UMCf	98.2 - 108.2	<2.34	<1.74	---	---	---	---	---	---	---	---
U4-MW-13D	10/11/2022	N	EM02	UMCf	98.2 - 108.2	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-13D	11/3/2022	N	EM03	UMCf	98.2 - 108.2	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-13D	12/7/2022	N	EM04	UMCf	98.2 - 108.2	<0.234	<0.174	<3.0 R	18 J	<2.9 R	<2.7 R	<2.9 R	<2.8 R	6.6 J	<2.8 R
U4-MW-13D	1/12/2023	N	EM05	UMCf	98.2 - 108.2	<4.68	<3.48	---	---	---	---	---	---	---	---
U4-MW-13D	2/15/2023	N	EM06	UMCf	98.2 - 108.2	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-13D	3/17/2023	N	EM07	UMCf	98.2 - 108.2	<4.68	<3.48	<1.2 UJ	5.2 J	<1.2 UJ	130 J	<1.2 UJ	<1.1 UJ	<1.1 UJ	<1.1 UJ
U4-MW-13D	4/18/2023	N	EM08	UMCf	98.2 - 108.2	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-13D	5/17/2023	N	EM09	UMCf	98.2 - 108.2	<4.68	<3.48	---	---	---	---	---	---	---	---
U4-MW-13D	6/15/2023	N	EM10	UMCf	98.2 - 108.2	<0.234	<0.174	<1.2	5.7 J	<1.2	120	<1.2	<1.1	5.2 J	<1.1
U4-MW-13D	7/12/2023	N	EM11	UMCf	98.2 - 108.2	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-13D	8/11/2023	N	EM12	UMCf	98.2 - 108.2	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-13D	9/11/2023	N	EM13	UMCf	98.2 - 108.2	<5.85	<4.35	<3.0	7.4 J	<2.9	<2.7	<2.9 UJ	<2.8 UJ	4.9 J	<2.8 UJ
U4-MW-13D	10/18/2023	N	EM14	UMCf	98.2 - 108.2	<5.85	<4.35	---	---	---	---	---	---	---	---
U4-MW-13D	11/15/2023	N	EM15	UMCf	98.2 - 108.2	<5.85	<4.35	---	---	---	---	---	---	---	---
U4-MW-13D	12/11/2023	N	EM16	UMCf	98.2 - 108.2	<0.234	<0.174	<0.061	<0.12	<0.058	<0.055	<0.058	<0.056	18.1 J+	<0.056
U4-MW-13I	4/14/2022	N	BL02	UMCf	77.1 - 87.1	<0.234	<0.174	<3.0	17 J	<2.9	240	<2.9	<2.8	21 J	<2.8
U4-MW-13I	9/28/2022	N	EM01	UMCf	77.1 - 87.1	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-13I	10/10/2022	N	EM02	UMCf	77.1 - 87.1	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-13I	11/3/2022	N	EM03	UMCf	77.1 - 87.1	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-13I	12/6/2022	N	EM04	UMCf	77.1 - 87.1	<1.17 UJ	<0.870 UJ	<1.2	68	<1.2	130 J+	<1.2	<1.1	7.3 J	<1.1
U4-MW-13I	1/12/2023	N	EM05	UMCf	77.1 - 87.1	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-13I	2/14/2023	N	EM06	UMCf	77.1 - 87.1	<1.17	<0.870	---	---	---	---	---	---	---	---
U4-MW-13I	3/16/2023	N	EM07	UMCf	77.1 - 87.1	<0.234	<0.174	<0.61	56	<0.58	58 J+	<0.58	<0.56	<0.53	<0.56
U4-MW-13I	4/19/2023	N	EM08	UMCf	77.1 - 87.1	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-13I	5/17/2023	N	EM09	UMCf	77.1 - 87.1	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-13I	6/15/2023	N	EM10	UMCf	77.1 - 87.1	<0.234	<0.174	<0.61	4.2 J	<0.58	58	<0.58	<0.56	12	<0.56
U4-MW-13I	7/12/2023	N	EM11	UMCf	77.1 - 87.1	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-13I	8/11/2023	N	EM12	UMCf	77.1 - 87.1	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-13I	9/11/2023	N	EM13	UMCf	77.1 - 87.1	<5.85	<4.35	<30.4	<61.6	<28.8	<27.4	<28.8 UJ	<27.8 UJ	<26.5	<27.8 UJ
U4-MW-13I	10/17/2023	N	EM14	UMCf	77.1 - 87.1	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-13I	11/15/2023	N	EM15	UMCf	77.1 - 87.1	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-13I	12/11/2023	N	EM16	UMCf	77.1 - 87.1	<0.234	<0.174	<0.061	<0.12	<0.058	<0.055	<0.058	<0.056	20.1 J+	<0.056
U4-MW-14D	4/13/2022	N	BL02	UMCf	97.3 - 107.3	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-14D	12/6/2022	N	EM04	UMCf	97.3 - 107.3	<1.17 UJ	<0.870 UJ	---	---	---	---	---	---	---	---
U4-MW-14D	3/16/2023	N	EM07	UMCf	97.3 - 107.3	<1.17	<0.870	---	---	---	---	---	---	---	---
U4-MW-14D	6/15/2023	N	EM10	UMCf	97.3 - 107.3	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-14D	9/14/2023	N	EM13	UMCf	97.3 - 107.3	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-14D	12/15/2023	N	EM16	UMCf	97.3 - 107.3	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-14I	4/14/2022	N	BL02	UMCf	77.3 - 87.3	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-14I	12/6/2022	N	EM04	UMCf	77.3 - 87.3	<1.17 UJ	<0.870 UJ	---	---	---	---	---	---	---	---
U4-MW-14I	3/16/2023	N	EM07	UMCf	77.3 - 87.3	<1.17	<0.870	---	---	---	---	---	---	---	---
U4-MW-14I	6/15/2023	N	EM10	UMCf	77.3 - 87.3	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-14I	9/14/2023	N	EM13	UMCf	77.3 - 87.3	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-14I	12/14/2023	N	EM16	UMCf	77.3 - 87.3	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-15D	4/13/2022	N	BL02	UMCf	96.0 - 106.0	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-15D	12/5/2022	N	EM04	UMCf	96.0 - 106.0	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-15D	3/20/2023	N	EM07	UMCf	96.0 - 106.0	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-15D	6/14/2023	N	EM10	UMCf	96.0 - 106.0	<0.234	<0.174	---	---	---	---	---	---	---	---
U4-MW-15D	9/13/2023	N	EM13	UMCf	96.0 - 106.0	<0.234	<0.174	---	---	---	---	---	---	---	---

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Organic Compounds by SW8260B	Volatile Organic Compounds by SW8260B	Volatile Fatty Acids by AM20GAX/AM23 G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G
						Vinyl Chloride	Xylenes, Total	3-Methylbutanoic Acid	Acetic Acid	Butyric Acid	Formic Acid	Hexanoic Acid	i-Hexanoic Acid	Lactic Acid	Pentanoic Acid
						ug/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
U4-MW-15D	12/12/2023	N	EM16	UMCf	96.0 - 106.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-15DD	4/13/2022	N	BL02	UMCf	120.3 - 130.3	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-15DD	12/5/2022	N	EM04	UMCf	120.3 - 130.3	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-15DD	3/15/2023	N	EM07	UMCf	120.3 - 130.3	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-15DD	6/13/2023	N	EM10	UMCf	120.3 - 130.3	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-15DD	9/14/2023	N	EM13	UMCf	120.3 - 130.3	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-15DD	12/13/2023	N	EM16	UMCf	120.3 - 130.3	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-15I	4/12/2022	N	BL02	UMCf	76.8 - 86.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-15I	12/5/2022	N	EM04	UMCf	76.8 - 86.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-15I	3/17/2023	N	EM07	UMCf	76.8 - 86.8	<4.68	<3.48	----	----	----	----	----	----	----	----
U4-MW-15I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-15I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-15I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-15S	4/13/2022	N	BL02	UMCf	54.8 - 64.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-15S	12/5/2022	N	EM04	UMCf	54.8 - 64.8	<5.85	<4.35	----	----	----	----	----	----	----	----
U4-MW-15S	3/13/2023	N	EM07	UMCf	54.8 - 64.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-15S	6/13/2023	N	EM10	UMCf	54.8 - 64.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-15S	9/14/2023	N	EM13	UMCf	54.8 - 64.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-15S	12/11/2023	N	EM16	UMCf	54.8 - 64.8	<0.468	<0.348	----	----	----	----	----	----	----	----
U4-MW-16D	4/11/2022	N	BL02	UMCf	96.8 - 106.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-16D	12/5/2022	N	EM04	UMCf	96.8 - 106.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-16D	3/14/2023	N	EM07	UMCf	96.8 - 106.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-16D	6/13/2023	N	EM10	UMCf	96.8 - 106.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-16D	9/15/2023	N	EM13	UMCf	96.8 - 106.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-16D	12/14/2023	N	EM16	UMCf	96.8 - 106.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-16DD	4/12/2022	N	BL02	UMCf	120.8 - 130.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-16DD	12/5/2022	N	EM04	UMCf	120.8 - 130.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-16DD	3/15/2023	N	EM07	UMCf	120.8 - 130.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-16DD	6/13/2023	N	EM10	UMCf	120.8 - 130.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-16DD	9/14/2023	N	EM13	UMCf	120.8 - 130.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-16DD	12/13/2023	N	EM16	UMCf	120.8 - 130.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-16I	4/11/2022	N	BL02	UMCf	77.0 - 87.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-16I	12/5/2022	N	EM04	UMCf	77.0 - 87.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-16I	12/5/2022	FD	EM04	UMCf	77.0 - 87.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-16I	3/13/2023	N	EM07	UMCf	77.0 - 87.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-16I	3/13/2023	FD	EM07	UMCf	77.0 - 87.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-16I	6/12/2023	N	EM10	UMCf	77.0 - 87.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-16I	6/12/2023	FD	EM10	UMCf	77.0 - 87.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-16I	9/11/2023	N	EM13	UMCf	77.0 - 87.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-16I	9/11/2023	FD	EM13	UMCf	77.0 - 87.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-16I	12/11/2023	N	EM16	UMCf	77.0 - 87.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-16I	12/11/2023	FD	EM16	UMCf	77.0 - 87.0	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-16S	4/12/2022	N	BL02	UMCf	54.8 - 64.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-16S	4/12/2022	FD	BL02	UMCf	54.8 - 64.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-16S	12/6/2022	N	EM04	UMCf	54.8 - 64.8	<0.234 UJ	<0.174 UJ	----	----	----	----	----	----	----	----
U4-MW-16S	3/15/2023	N	EM07	UMCf	54.8 - 64.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-16S	6/13/2023	N	EM10	UMCf	54.8 - 64.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-16S	9/11/2023	N	EM13	UMCf	54.8 - 64.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-MW-16S	12/11/2023	N	EM16	UMCf	54.8 - 64.8	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-SLMW	11/10/2022	N	EM03		-	<1.17	<0.870	----	----	----	----	----	----	----	----
U4-T3	10/13/2022	N	EM02		-	<0.234	<0.174	----	----	----	----	----	----	----	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatiles Organic Compounds by SW8260B	Volatiles Organic Compounds by SW8260B	Volatiles Fatty Acids by AM20GAX/AM23G	Volatiles Fatty Acids by AM20GAX/AM23G	Volatiles Fatty Acids by AM20GAX/AM23G	Volatiles Fatty Acids by AM20GAX/AM23G	Volatiles Fatty Acids by AM20GAX/AM23G	Volatiles Fatty Acids by AM20GAX/AM23G	Volatiles Fatty Acids by AM20GAX/AM23G	Volatiles Fatty Acids by AM20GAX/AM23G
						Vinyl Chloride	Xylenes, Total	3-Methylbutanoic Acid	Acetic Acid	Butyric Acid	Formic Acid	Hexanoic Acid	i-Hexanoic Acid	Lactic Acid	Pentanoic Acid
						ug/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
U4-T3	11/3/2022	N	EM03		-	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-T3	12/6/2022	N	EM04		-	<4.68 UJ	<3.48 UJ	----	----	----	----	----	----	----	----
U4-T3	1/9/2023	N	EM05		-	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-T3	2/13/2023	N	EM06		-	<23.4	<17.4	----	----	----	----	----	----	----	----
U4-T3	3/13/2023	N	EM07		-	<5.85	<4.35	----	----	----	----	----	----	----	----
U4-T3	4/19/2023	N	EM08		-	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-T3	5/18/2023	N	EM09		-	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-T3	6/12/2023	N	EM10		-	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-T3	7/11/2023	N	EM11		-	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-T3	8/10/2023	N	EM12		-	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-T3	9/11/2023	N	EM13		-	<0.234	<0.174	----	----	----	----	----	----	----	----
U4-T3	10/16/2023	N	EM14		-	<5.85	<4.35	----	----	----	----	----	----	----	----

Notes:

- FD - Field duplicate
- E - Field instrument error.

- 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 low.
- J+ - The result is an estimated quantity, but the result may be biased high.
- N/A - Not Applicable
- mg/L - milligrams per liter
- µg/L - micrograms per liter
- N - Normal field 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
- < - The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
- Not tested.
- M-252 damaged/obstructed when checked on June 14, 2023 and September 14, 2023.

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G
						Propionic Acid	Pyruvic Acid
						mg/L	mg/L
M-247-100	4/20/2022	N	BL02	UMCf	100.5 - 110.5	----	----
M-249-100	4/20/2022	N	BL02	UMCf	99.6 - 109.6	----	----
M-251-100	4/19/2022	N	BL02	UMCf	92.5 - 102.5	----	----
M-251-100	10/13/2022	N	EM02	UMCf	92.5 - 102.5	----	----
M-251-100	11/2/2022	N	EM03	UMCf	92.5 - 102.5	----	----
M-251-100	12/8/2022	N	EM04	UMCf	92.5 - 102.5	----	----
M-251-100	1/11/2023	N	EM05	UMCf	92.5 - 102.5	----	----
M-251-100	2/13/2023	N	EM06	UMCf	92.5 - 102.5	----	----
M-251-100	3/17/2023	N	EM07	UMCf	92.5 - 102.5	5.6 J	<6.0 UJ
M-251-100	4/21/2023	N	EM08	UMCf	92.5 - 102.5	----	----
M-251-100	5/9/2023	N	EM09	UMCf	92.5 - 102.5	----	----
M-251-100	6/14/2023	N	EM10	UMCf	92.5 - 102.5	----	----
M-251-100	7/14/2023	N	EM11	UMCf	92.5 - 102.5	----	----
M-251-100	8/10/2023	N	EM12	UMCf	92.5 - 102.5	----	----
M-251-100	9/14/2023	N	EM13	UMCf	92.5 - 102.5	<26.5	<29.9
M-251-100	10/19/2023	N	EM14	UMCf	92.5 - 102.5	----	----
M-251-100	11/16/2023	N	EM15	UMCf	92.5 - 102.5	----	----
M-251-100	12/12/2023	N	EM16	UMCf	92.5 - 102.5	19.5	<0.060
M-251-60	4/18/2022	N	BL02	UMCf	52.3 - 62.3	----	----
M-251-60	3/15/2023	N	EM07	UMCf	52.3 - 62.3	----	----
M-251-60	6/14/2023	N	EM10	UMCf	52.3 - 62.3	----	----
M-251-60	9/14/2023	N	EM13	UMCf	52.3 - 62.3	----	----
M-251-60	12/11/2023	N	EM16	UMCf	52.3 - 62.3	----	----
M-252	4/21/2022	N	BL02	UMCf	132.3 - 142.3	----	----
M-252	3/15/2023	N	EM07	UMCf	132.3 - 142.3	----	----
M-252	9/19/2023	N	EM13	UMCf	132.3 - 142.3	----	----
M-252	12/18/2023	N	EM16	UMCf	132.3 - 142.3	----	----
M-253-100	4/20/2022	N	BL02	UMCf	100.8 - 110.8	----	----
M-255-100	4/20/2022	N	BL02	UMCf	100.2 - 110.2	----	----
U4-E-01D	4/18/2022	N	BL02	UMCf	94.7 - 109.7	----	----
U4-E-01D	3/14/2023	N	EM07	UMCf	94.7 - 109.7	----	----
U4-E-01I	4/19/2022	N	BL02	UMCf	74.6 - 89.6	----	----
U4-E-01I	4/19/2022	FD	BL02	UMCf	74.6 - 89.6	----	----
U4-E-01I	3/14/2023	N	EM07	UMCf	74.6 - 89.6	----	----
U4-E-01I	4/20/2023	N	EM08	UMCf	74.6 - 89.6	----	----
U4-E-01I	5/10/2023	N	EM09	UMCf	74.6 - 89.6	----	----
U4-E-01I	6/12/2023	N	EM10	UMCf	74.6 - 89.6	----	----
U4-E-01I	7/11/2023	N	EM11	UMCf	74.6 - 89.6	----	----
U4-E-01I	8/10/2023	N	EM12	UMCf	74.6 - 89.6	----	----
U4-E-01I	9/11/2023	N	EM13	UMCf	74.6 - 89.6	----	----
U4-E-01I	10/16/2023	N	EM14	UMCf	74.6 - 89.6	----	----
U4-E-01I	12/13/2023	N	EM16	UMCf	74.6 - 89.6	----	----
U4-E-02D	4/20/2022	N	BL02	UMCf	94.4 - 109.4	----	----
U4-E-02D	3/14/2023	N	EM07	UMCf	94.4 - 109.4	----	----
U4-E-02I	4/18/2022	N	BL02	UMCf	74.4 - 89.4	----	----
U4-E-02I	3/14/2023	N	EM07	UMCf	74.4 - 89.4	----	----
U4-E-02I	4/20/2023	N	EM08	UMCf	74.4 - 89.4	----	----
U4-E-02I	5/11/2023	N	EM09	UMCf	74.4 - 89.4	----	----
U4-E-02I	6/12/2023	N	EM10	UMCf	74.4 - 89.4	----	----
U4-E-02I	7/11/2023	N	EM11	UMCf	74.4 - 89.4	----	----
U4-E-02I	8/10/2023	N	EM12	UMCf	74.4 - 89.4	----	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G
						Propionic Acid	Pyruvic Acid
						mg/L	mg/L
U4-E-02I	9/11/2023	N	EM13	UMCf	74.4 - 89.4	----	----
U4-E-02I	10/16/2023	N	EM14	UMCf	74.4 - 89.4	----	----
U4-E-02I	12/14/2023	N	EM16	UMCf	74.4 - 89.4	----	----
U4-E-03D	4/19/2022	N	BL02	UMCf	95.1 - 110.1	----	----
U4-E-03D	10/13/2022	N	EM02	UMCf	95.1 - 110.1	----	----
U4-E-03D	11/3/2022	N	EM03	UMCf	95.1 - 110.1	----	----
U4-E-03D	12/6/2022	N	EM04	UMCf	95.1 - 110.1	----	----
U4-E-03D	1/9/2023	N	EM05	UMCf	95.1 - 110.1	----	----
U4-E-03D	2/13/2023	N	EM06	UMCf	95.1 - 110.1	----	----
U4-E-03D	3/13/2023	N	EM07	UMCf	95.1 - 110.1	----	----
U4-E-03D	3/14/2023	N	EM07	UMCf	95.1 - 110.1	----	----
U4-E-03D	4/19/2023	N	EM08	UMCf	95.1 - 110.1	----	----
U4-E-03D	5/11/2023	N	EM09	UMCf	95.1 - 110.1	----	----
U4-E-03D	6/12/2023	N	EM10	UMCf	95.1 - 110.1	----	----
U4-E-03D	7/11/2023	N	EM11	UMCf	95.1 - 110.1	----	----
U4-E-03D	8/10/2023	N	EM12	UMCf	95.1 - 110.1	----	----
U4-E-03D	9/11/2023	N	EM13	UMCf	95.1 - 110.1	----	----
U4-E-03D	10/16/2023	N	EM14	UMCf	95.1 - 110.1	----	----
U4-E-04D	4/19/2022	N	BL02	UMCf	95.0 - 110.0	----	----
U4-E-04D	3/14/2023	N	EM07	UMCf	95.0 - 110.0	----	----
U4-E-04I	4/18/2022	N	BL02	UMCf	75.0 - 90.0	----	----
U4-E-04I	3/14/2023	N	EM07	UMCf	75.0 - 90.0	----	----
U4-E-05D	4/19/2022	N	BL02	UMCf	95.0 - 110.0	----	----
U4-E-05D	3/16/2023	N	EM07	UMCf	95.0 - 110.0	----	----
U4-E-05I	4/19/2022	N	BL02	UMCf	75.0 - 90.0	----	----
U4-E-05I	3/15/2023	N	EM07	UMCf	75.0 - 90.0	----	----
U4-E-06D	4/11/2022	N	BL02	UMCf	95.1 - 110.1	----	----
U4-E-06I	4/11/2022	N	BL02	UMCf	73.2 - 88.2	----	----
U4-E-06I	4/11/2022	FD	BL02	UMCf	73.2 - 88.2	----	----
U4-E-06I	10/12/2022	N	EM02	UMCf	73.2 - 88.2	----	----
U4-E-06I	11/3/2022	N	EM03	UMCf	73.2 - 88.2	----	----
U4-E-06I	12/6/2022	N	EM04	UMCf	73.2 - 88.2	----	----
U4-E-06I	1/9/2023	N	EM05	UMCf	73.2 - 88.2	----	----
U4-E-06I	2/13/2023	N	EM06	UMCf	73.2 - 88.2	----	----
U4-E-06I	3/13/2023	N	EM07	UMCf	73.2 - 88.2	----	----
U4-E-06I	4/17/2023	N	EM08	UMCf	73.2 - 88.2	----	----
U4-E-06I	5/15/2023	N	EM09	UMCf	73.2 - 88.2	----	----
U4-E-06I	6/12/2023	N	EM10	UMCf	73.2 - 88.2	----	----
U4-E-06I	7/11/2023	N	EM11	UMCf	73.2 - 88.2	----	----
U4-E-06I	8/11/2023	N	EM12	UMCf	73.2 - 88.2	----	----
U4-E-06I	9/11/2023	N	EM13	UMCf	73.2 - 88.2	----	----
U4-E-06I	10/16/2023	N	EM14	UMCf	73.2 - 88.2	----	----
U4-E-06I	12/13/2023	N	EM16	UMCf	73.2 - 88.2	----	----
U4-E-07D	4/12/2022	N	BL02	UMCf	94.6 - 109.6	----	----
U4-E-07I	4/12/2022	N	BL02	UMCf	74.7 - 89.7	----	----
U4-E-07I	10/11/2022	N	EM02	UMCf	74.7 - 89.7	----	----
U4-E-07I	11/3/2022	N	EM03	UMCf	74.7 - 89.7	----	----
U4-E-07I	12/6/2022	N	EM04	UMCf	74.7 - 89.7	----	----
U4-E-07I	1/9/2023	N	EM05	UMCf	74.7 - 89.7	----	----
U4-E-07I	2/13/2023	N	EM06	UMCf	74.7 - 89.7	----	----
U4-E-07I	3/13/2023	N	EM07	UMCf	74.7 - 89.7	----	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G
						Propionic Acid	Pyruvic Acid
						mg/L	mg/L
U4-E-07I	4/19/2023	N	EM08	UMCf	74.7 - 89.7	----	----
U4-E-07I	5/15/2023	N	EM09	UMCf	74.7 - 89.7	----	----
U4-E-07I	6/12/2023	N	EM10	UMCf	74.7 - 89.7	----	----
U4-E-07I	7/11/2023	N	EM11	UMCf	74.7 - 89.7	----	----
U4-E-07I	8/11/2023	N	EM12	UMCf	74.7 - 89.7	----	----
U4-E-07I	9/11/2023	N	EM13	UMCf	74.7 - 89.7	----	----
U4-E-07I	10/16/2023	N	EM14	UMCf	74.7 - 89.7	----	----
U4-E-07I	12/13/2023	N	EM16	UMCf	74.7 - 89.7	----	----
U4-E-08D	4/12/2022	N	BL02	UMCf	94.6 - 109.6	----	----
U4-E-08D	10/11/2022	N	EM02	UMCf	94.6 - 109.6	----	----
U4-E-08D	11/3/2022	N	EM03	UMCf	94.6 - 109.6	----	----
U4-E-08D	12/6/2022	N	EM04	UMCf	94.6 - 109.6	----	----
U4-E-08D	1/9/2023	N	EM05	UMCf	94.6 - 109.6	----	----
U4-E-08D	2/13/2023	N	EM06	UMCf	94.6 - 109.6	----	----
U4-E-08D	3/13/2023	N	EM07	UMCf	94.6 - 109.6	----	----
U4-E-08D	4/19/2023	N	EM08	UMCf	94.6 - 109.6	----	----
U4-E-08D	5/17/2023	N	EM09	UMCf	94.6 - 109.6	----	----
U4-E-08D	6/12/2023	N	EM10	UMCf	94.6 - 109.6	----	----
U4-E-08D	7/11/2023	N	EM11	UMCf	94.6 - 109.6	----	----
U4-E-09D	4/15/2022	N	BL02	UMCf	94.5 - 109.5	----	----
U4-E-09I	4/14/2022	N	BL02	UMCf	74.9 - 89.9	----	----
U4-E-10D	4/13/2022	N	BL02	UMCf	94.5 - 109.5	----	----
U4-E-10I	4/13/2022	N	BL02	UMCf	74.2 - 89.2	----	----
U4-MW-01D	4/19/2022	N	BL02	UMCf	96.7 - 106.7	----	----
U4-MW-01D	2/16/2023	N	EM06	UMCf	96.7 - 106.7	----	----
U4-MW-01D	3/20/2023	N	EM07	UMCf	96.7 - 106.7	----	----
U4-MW-01D	6/13/2023	N	EM10	UMCf	96.7 - 106.7	----	----
U4-MW-01D	9/14/2023	N	EM13	UMCf	96.7 - 106.7	----	----
U4-MW-01D	12/14/2023	N	EM16	UMCf	96.7 - 106.7	----	----
U4-MW-01DD	4/19/2022	N	BL02	UMCf	119.9 - 129.9	----	----
U4-MW-01DD	4/19/2022	FD	BL02	UMCf	119.9 - 129.9	----	----
U4-MW-01DD	3/15/2023	N	EM07	UMCf	119.9 - 129.9	----	----
U4-MW-01DD	6/13/2023	N	EM10	UMCf	119.9 - 129.9	----	----
U4-MW-01DD	9/14/2023	N	EM13	UMCf	119.9 - 129.9	----	----
U4-MW-01DD	12/15/2023	N	EM16	UMCf	119.9 - 129.9	----	----
U4-MW-01I	4/19/2022	N	BL02	UMCf	76.7 - 86.7	----	----
U4-MW-01I	3/20/2023	N	EM07	UMCf	76.7 - 86.7	----	----
U4-MW-01I	6/12/2023	N	EM10	UMCf	76.7 - 86.7	----	----
U4-MW-01I	9/14/2023	N	EM13	UMCf	76.7 - 86.7	----	----
U4-MW-01I	12/15/2023	N	EM16	UMCf	76.7 - 86.7	----	----
U4-MW-01S	4/18/2022	N	BL02	UMCf	54.7 - 64.7	----	----
U4-MW-01S	3/15/2023	N	EM07	UMCf	54.7 - 64.7	----	----
U4-MW-01S	6/13/2023	N	EM10	UMCf	54.7 - 64.7	----	----
U4-MW-01S	9/15/2023	N	EM13	UMCf	54.7 - 64.7	----	----
U4-MW-01S	12/13/2023	N	EM16	UMCf	54.7 - 64.7	----	----
U4-MW-02D	4/14/2022	N	BL02	UMCf	95.0 - 110.0	----	----
U4-MW-02D	10/11/2022	N	EM02	UMCf	95.0 - 110.0	----	----
U4-MW-02D	11/1/2022	N	EM03	UMCf	95.0 - 110.0	----	----
U4-MW-02D	12/7/2022	N	EM04	UMCf	95.0 - 110.0	----	----
U4-MW-02D	1/10/2023	N	EM05	UMCf	95.0 - 110.0	----	----
U4-MW-02D	2/13/2023	N	EM06	UMCf	95.0 - 110.0	----	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G
						Propionic Acid	Pyruvic Acid
						mg/L	mg/L
U4-MW-02D	3/17/2023	N	EM07	UMCf	95.0 - 110.0	<11 UJ	<12 UJ
U4-MW-02D	4/19/2023	N	EM08	UMCf	95.0 - 110.0	----	----
U4-MW-02D	5/9/2023	N	EM09	UMCf	95.0 - 110.0	----	----
U4-MW-02D	6/13/2023	N	EM10	UMCf	95.0 - 110.0	12 J	<12
U4-MW-02D	7/18/2023	N	EM11	UMCf	95.0 - 110.0	----	----
U4-MW-02D	8/14/2023	N	EM12	UMCf	95.0 - 110.0	----	----
U4-MW-02D	9/11/2023	N	EM13	UMCf	95.0 - 110.0	<10.6	<12.0
U4-MW-02D	10/19/2023	N	EM14	UMCf	95.0 - 110.0	----	----
U4-MW-02D	11/15/2023	N	EM15	UMCf	95.0 - 110.0	----	----
U4-MW-02D	12/14/2023	N	EM16	UMCf	95.0 - 110.0	<0.053	<0.060
U4-MW-02I	4/14/2022	N	BL02	UMCf	75.0 - 90.0	----	----
U4-MW-02I	10/11/2022	N	EM02	UMCf	75.0 - 90.0	----	----
U4-MW-02I	11/2/2022	N	EM03	UMCf	75.0 - 90.0	----	----
U4-MW-02I	11/2/2022	FD	EM03	UMCf	75.0 - 90.0	----	----
U4-MW-02I	12/8/2022	N	EM04	UMCf	75.0 - 90.0	----	----
U4-MW-02I	12/8/2022	FD	EM04	UMCf	75.0 - 90.0	----	----
U4-MW-02I	1/13/2023	N	EM05	UMCf	75.0 - 90.0	----	----
U4-MW-02I	1/13/2023	FD	EM05	UMCf	75.0 - 90.0	----	----
U4-MW-02I	2/15/2023	N	EM06	UMCf	75.0 - 90.0	----	----
U4-MW-02I	2/15/2023	FD	EM06	UMCf	75.0 - 90.0	----	----
U4-MW-02I	3/17/2023	N	EM07	UMCf	75.0 - 90.0	18 J	<12 UJ
U4-MW-02I	3/17/2023	FD	EM07	UMCf	75.0 - 90.0	17 J	<12 UJ
U4-MW-02I	4/20/2023	N	EM08	UMCf	75.0 - 90.0	----	----
U4-MW-02I	4/20/2023	FD	EM08	UMCf	75.0 - 90.0	----	----
U4-MW-02I	5/9/2023	N	EM09	UMCf	75.0 - 90.0	----	----
U4-MW-02I	5/9/2023	FD	EM09	UMCf	75.0 - 90.0	----	----
U4-MW-02I	6/12/2023	N	EM10	UMCf	75.0 - 90.0	30	1.8 J
U4-MW-02I	6/12/2023	FD	EM10	UMCf	75.0 - 90.0	30	<1.2
U4-MW-02I	7/18/2023	N	EM11	UMCf	75.0 - 90.0	----	----
U4-MW-02I	7/18/2023	FD	EM11	UMCf	75.0 - 90.0	----	----
U4-MW-02I	8/11/2023	N	EM12	UMCf	75.0 - 90.0	----	----
U4-MW-02I	8/11/2023	FD	EM12	UMCf	75.0 - 90.0	----	----
U4-MW-02I	9/11/2023	N	EM13	UMCf	75.0 - 90.0	21.1 J	<3.0
U4-MW-02I	9/11/2023	FD	EM13	UMCf	75.0 - 90.0	<53.0 UJ	<59.8
U4-MW-02I	10/19/2023	N	EM14	UMCf	75.0 - 90.0	----	----
U4-MW-02I	10/19/2023	FD	EM14	UMCf	75.0 - 90.0	----	----
U4-MW-02I	11/15/2023	N	EM15	UMCf	75.0 - 90.0	----	----
U4-MW-02I	11/15/2023	FD	EM15	UMCf	75.0 - 90.0	----	----
U4-MW-02I	12/14/2023	N	EM16	UMCf	75.0 - 90.0	61.9	<0.060
U4-MW-02I	12/14/2023	FD	EM16	UMCf	75.0 - 90.0	70.3	<0.060
U4-MW-03D	4/20/2022	N	BL02	UMCf	96.6 - 106.6	----	----
U4-MW-03D	2/16/2023	N	EM06	UMCf	96.6 - 106.6	----	----
U4-MW-03D	3/16/2023	N	EM07	UMCf	96.6 - 106.6	----	----
U4-MW-03D	3/16/2023	FD	EM07	UMCf	96.6 - 106.6	----	----
U4-MW-03D	6/15/2023	N	EM10	UMCf	96.6 - 106.6	----	----
U4-MW-03D	9/14/2023	N	EM13	UMCf	96.6 - 106.6	----	----
U4-MW-03D	12/13/2023	N	EM16	UMCf	96.6 - 106.6	----	----
U4-MW-03DD	4/20/2022	N	BL02	UMCf	119.7 - 129.7	----	----
U4-MW-03DD	3/15/2023	N	EM07	UMCf	119.7 - 129.7	----	----
U4-MW-03DD	6/15/2023	N	EM10	UMCf	119.7 - 129.7	----	----
U4-MW-03DD	9/14/2023	N	EM13	UMCf	119.7 - 129.7	----	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G
						Propionic Acid	Pyruvic Acid
						mg/L	mg/L
U4-MW-03DD	12/14/2023	N	EM16	UMCf	119.7 - 129.7	----	----
U4-MW-03I	4/19/2022	N	BL02	UMCf	76.6 - 86.6	----	----
U4-MW-03I	3/15/2023	N	EM07	UMCf	76.6 - 86.6	----	----
U4-MW-03I	6/14/2023	N	EM10	UMCf	76.6 - 86.6	----	----
U4-MW-03I	6/14/2023	FD	EM10	UMCf	76.6 - 86.6	----	----
U4-MW-03I	9/11/2023	N	EM13	UMCf	76.6 - 86.6	----	----
U4-MW-03I	9/11/2023	FD	EM13	UMCf	76.6 - 86.6	----	----
U4-MW-03I	12/13/2023	N	EM16	UMCf	76.6 - 86.6	----	----
U4-MW-03I	12/13/2023	FD	EM16	UMCf	76.6 - 86.6	----	----
U4-MW-03S	4/18/2022	N	BL02	UMCf	54.5 - 64.5	----	----
U4-MW-03S	4/18/2022	FD	BL02	UMCf	54.5 - 64.5	----	----
U4-MW-03S	3/15/2023	N	EM07	UMCf	54.5 - 64.5	----	----
U4-MW-03S	6/15/2023	N	EM10	UMCf	54.5 - 64.5	----	----
U4-MW-03S	9/14/2023	N	EM13	UMCf	54.5 - 64.5	----	----
U4-MW-03S	12/13/2023	N	EM16	UMCf	54.5 - 64.5	----	----
U4-MW-04D	4/19/2022	N	BL02	UMCf	97.0 - 107.0	----	----
U4-MW-04D	2/16/2023	N	EM06	UMCf	97.0 - 107.0	----	----
U4-MW-04D	3/21/2023	N	EM07	UMCf	97.0 - 107.0	----	----
U4-MW-04D	6/14/2023	N	EM10	UMCf	97.0 - 107.0	----	----
U4-MW-04D	9/15/2023	N	EM13	UMCf	97.0 - 107.0	----	----
U4-MW-04D	12/12/2023	N	EM16	UMCf	97.0 - 107.0	----	----
U4-MW-04I	4/19/2022	N	BL02	UMCf	76.8 - 86.8	----	----
U4-MW-04I	3/20/2023	N	EM07	UMCf	76.8 - 86.8	----	----
U4-MW-04I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	----	----
U4-MW-04I	9/14/2023	N	EM13	UMCf	76.8 - 86.8	----	----
U4-MW-04I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	----	----
U4-MW-05D	4/15/2022	N	BL02	UMCf	98.2 - 108.2	----	----
U4-MW-05D	10/13/2022	N	EM02	UMCf	98.2 - 108.2	----	----
U4-MW-05D	11/3/2022	N	EM03	UMCf	98.2 - 108.2	----	----
U4-MW-05D	12/7/2022	N	EM04	UMCf	98.2 - 108.2	----	----
U4-MW-05D	1/11/2023	N	EM05	UMCf	98.2 - 108.2	----	----
U4-MW-05D	2/14/2023	N	EM06	UMCf	98.2 - 108.2	----	----
U4-MW-05D	3/16/2023	N	EM07	UMCf	98.2 - 108.2	5.5 J	<6.0
U4-MW-05D	4/20/2023	N	EM08	UMCf	98.2 - 108.2	----	----
U4-MW-05D	5/10/2023	N	EM09	UMCf	98.2 - 108.2	----	----
U4-MW-05D	6/15/2023	N	EM10	UMCf	98.2 - 108.2	21 J	<3.0
U4-MW-05D	7/18/2023	N	EM11	UMCf	98.2 - 108.2	----	----
U4-MW-05D	8/14/2023	N	EM12	UMCf	98.2 - 108.2	----	----
U4-MW-05D	9/12/2023	N	EM13	UMCf	98.2 - 108.2	18.9 J	3.2 J
U4-MW-05D	10/18/2023	N	EM14	UMCf	98.2 - 108.2	----	----
U4-MW-05D	11/16/2023	N	EM15	UMCf	98.2 - 108.2	----	----
U4-MW-05D	12/14/2023	N	EM16	UMCf	98.2 - 108.2	178	74.0
U4-MW-05I	4/15/2022	N	BL02	UMCf	76.6 - 86.6	----	----
U4-MW-05I	10/13/2022	N	EM02	UMCf	76.6 - 86.6	----	----
U4-MW-05I	11/3/2022	N	EM03	UMCf	76.6 - 86.6	----	----
U4-MW-05I	12/8/2022	N	EM04	UMCf	76.6 - 86.6	----	----
U4-MW-05I	1/11/2023	N	EM05	UMCf	76.6 - 86.6	----	----
U4-MW-05I	2/14/2023	N	EM06	UMCf	76.6 - 86.6	----	----
U4-MW-05I	3/14/2023	N	EM07	UMCf	76.6 - 86.6	2.9 J	<3.0
U4-MW-05I	4/21/2023	N	EM08	UMCf	76.6 - 86.6	----	----
U4-MW-05I	5/10/2023	N	EM09	UMCf	76.6 - 86.6	----	----

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Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G
						Propionic Acid	Pyruvic Acid
						mg/L	mg/L
U4-MW-05I	6/15/2023	N	EM10	UMCf	76.6 - 86.6	120	<6.0
U4-MW-05I	7/17/2023	N	EM11	UMCf	76.6 - 86.6	----	----
U4-MW-05I	8/14/2023	N	EM12	UMCf	76.6 - 86.6	----	----
U4-MW-05I	9/13/2023	N	EM13	UMCf	76.6 - 86.6	<26.5	<29.9
U4-MW-05I	10/18/2023	N	EM14	UMCf	76.6 - 86.6	----	----
U4-MW-05I	11/15/2023	N	EM15	UMCf	76.6 - 86.6	----	----
U4-MW-05I	12/12/2023	N	EM16	UMCf	76.6 - 86.6	61.0	35.3
U4-MW-06D	4/19/2022	N	BL02	UMCf	97.1 - 107.1	----	----
U4-MW-06D	2/15/2023	N	EM06	UMCf	97.1 - 107.1	----	----
U4-MW-06D	3/21/2023	N	EM07	UMCf	97.1 - 107.1	----	----
U4-MW-06D	6/16/2023	N	EM10	UMCf	97.1 - 107.1	----	----
U4-MW-06D	9/13/2023	N	EM13	UMCf	97.1 - 107.1	----	----
U4-MW-06D	12/13/2023	N	EM16	UMCf	97.1 - 107.1	----	----
U4-MW-06I	4/19/2022	N	BL02	UMCf	76.5 - 86.5	----	----
U4-MW-06I	3/14/2023	N	EM07	UMCf	76.5 - 86.5	----	----
U4-MW-06I	6/16/2023	N	EM10	UMCf	76.5 - 86.5	----	----
U4-MW-06I	9/12/2023	N	EM13	UMCf	76.5 - 86.5	----	----
U4-MW-06I	12/12/2023	N	EM16	UMCf	76.5 - 86.5	----	----
U4-MW-07D	4/15/2022	N	BL02	UMCf	96.8 - 106.5	----	----
U4-MW-07D	10/12/2022	N	EM02	UMCf	96.8 - 106.5	----	----
U4-MW-07D	10/12/2022	FD	EM02	UMCf	96.8 - 106.5	----	----
U4-MW-07D	11/3/2022	N	EM03	UMCf	96.8 - 106.5	----	----
U4-MW-07D	12/7/2022	N	EM04	UMCf	96.8 - 106.5	----	----
U4-MW-07D	1/11/2023	N	EM05	UMCf	96.8 - 106.5	----	----
U4-MW-07D	2/14/2023	N	EM06	UMCf	96.8 - 106.5	----	----
U4-MW-07D	3/16/2023	N	EM07	UMCf	96.8 - 106.5	0.54 J	<0.60
U4-MW-07D	4/21/2023	N	EM08	UMCf	96.8 - 106.5	----	----
U4-MW-07D	5/11/2023	N	EM09	UMCf	96.8 - 106.5	----	----
U4-MW-07D	6/13/2023	N	EM10	UMCf	96.8 - 106.5	180	<12
U4-MW-07D	7/17/2023	N	EM11	UMCf	96.8 - 106.5	----	----
U4-MW-07D	8/11/2023	N	EM12	UMCf	96.8 - 106.5	----	----
U4-MW-07D	9/13/2023	N	EM13	UMCf	96.8 - 106.5	47.2 J	<29.9
U4-MW-07D	10/18/2023	N	EM14	UMCf	96.8 - 106.5	----	----
U4-MW-07D	11/16/2023	N	EM15	UMCf	96.8 - 106.5	----	----
U4-MW-07D	12/12/2023	N	EM16	UMCf	96.8 - 106.5	131	44.5
U4-MW-07I	4/15/2022	N	BL02	UMCf	76.8 - 86.8	----	----
U4-MW-07I	10/12/2022	N	EM02	UMCf	76.8 - 86.8	----	----
U4-MW-07I	11/3/2022	N	EM03	UMCf	76.8 - 86.8	----	----
U4-MW-07I	12/7/2022	N	EM04	UMCf	76.8 - 86.8	----	----
U4-MW-07I	1/11/2023	N	EM05	UMCf	76.8 - 86.8	----	----
U4-MW-07I	2/15/2023	N	EM06	UMCf	76.8 - 86.8	----	----
U4-MW-07I	3/16/2023	N	EM07	UMCf	76.8 - 86.8	0.59 J	<0.60
U4-MW-07I	4/21/2023	N	EM08	UMCf	76.8 - 86.8	----	----
U4-MW-07I	5/11/2023	N	EM09	UMCf	76.8 - 86.8	----	----
U4-MW-07I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	23 J	<3.0
U4-MW-07I	7/17/2023	N	EM11	UMCf	76.8 - 86.8	----	----
U4-MW-07I	8/11/2023	N	EM12	UMCf	76.8 - 86.8	----	----
U4-MW-07I	9/13/2023	N	EM13	UMCf	76.8 - 86.8	157 J	<29.9
U4-MW-07I	10/18/2023	N	EM14	UMCf	76.8 - 86.8	----	----
U4-MW-07I	11/16/2023	N	EM15	UMCf	76.8 - 86.8	----	----
U4-MW-07I	12/11/2023	N	EM16	UMCf	76.8 - 86.8	92.3	27.2

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Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G
						Propionic Acid	Pyruvic Acid
						mg/L	mg/L
U4-MW-08D	4/13/2022	N	BL02	UMCf	98.6 - 108.6	----	----
U4-MW-08D	12/7/2022	N	EM04	UMCf	98.6 - 108.6	----	----
U4-MW-08D	3/17/2023	N	EM07	UMCf	98.6 - 108.6	----	----
U4-MW-08D	6/13/2023	N	EM10	UMCf	98.6 - 108.6	----	----
U4-MW-08D	9/13/2023	N	EM13	UMCf	98.6 - 108.6	----	----
U4-MW-08D	12/11/2023	N	EM16	UMCf	98.6 - 108.6	----	----
U4-MW-08DD	4/20/2022	N	BL02	UMCf	119.8 - 129.8	----	----
U4-MW-08DD	4/20/2022	FD	BL02	UMCf	119.8 - 129.8	----	----
U4-MW-08DD	12/8/2022	N	EM04	UMCf	119.8 - 129.8	----	----
U4-MW-08DD	3/15/2023	N	EM07	UMCf	119.8 - 129.8	----	----
U4-MW-08DD	6/14/2023	N	EM10	UMCf	119.8 - 129.8	----	----
U4-MW-08DD	9/14/2023	N	EM13	UMCf	119.8 - 129.8	----	----
U4-MW-08DD	12/14/2023	N	EM16	UMCf	119.8 - 129.8	----	----
U4-MW-08I	4/13/2022	N	BL02	UMCf	78.0 - 88.0	----	----
U4-MW-08I	12/7/2022	N	EM04	UMCf	78.0 - 88.0	----	----
U4-MW-08I	12/7/2022	FD	EM04	UMCf	78.0 - 88.0	----	----
U4-MW-08I	3/17/2023	N	EM07	UMCf	78.0 - 88.0	----	----
U4-MW-08I	6/13/2023	N	EM10	UMCf	78.0 - 88.0	----	----
U4-MW-08I	9/13/2023	N	EM13	UMCf	78.0 - 88.0	----	----
U4-MW-08I	12/11/2023	N	EM16	UMCf	78.0 - 88.0	----	----
U4-MW-08S	4/15/2022	N	BL02	UMCf	54.9 - 64.9	----	----
U4-MW-08S	12/7/2022	N	EM04	UMCf	54.9 - 64.9	----	----
U4-MW-08S	12/7/2022	FD	EM04	UMCf	54.9 - 64.9	----	----
U4-MW-08S	3/13/2023	N	EM07	UMCf	54.9 - 64.9	----	----
U4-MW-08S	3/13/2023	FD	EM07	UMCf	54.9 - 64.9	----	----
U4-MW-08S	6/13/2023	N	EM10	UMCf	54.9 - 64.9	----	----
U4-MW-08S	6/13/2023	FD	EM10	UMCf	54.9 - 64.9	----	----
U4-MW-08S	9/13/2023	N	EM13	UMCf	54.9 - 64.9	----	----
U4-MW-08S	9/13/2023	FD	EM13	UMCf	54.9 - 64.9	----	----
U4-MW-08S	12/14/2023	N	EM16	UMCf	54.9 - 64.9	----	----
U4-MW-08S	12/14/2023	FD	EM16	UMCf	54.9 - 64.9	----	----
U4-MW-09D	4/14/2022	N	BL02	UMCf	96.9 - 106.9	----	----
U4-MW-09D	12/6/2022	N	EM04	UMCf	96.9 - 106.9	----	----
U4-MW-09D	3/16/2023	N	EM07	UMCf	96.9 - 106.9	----	----
U4-MW-09D	6/14/2023	N	EM10	UMCf	96.9 - 106.9	----	----
U4-MW-09D	9/12/2023	N	EM13	UMCf	96.9 - 106.9	----	----
U4-MW-09D	12/15/2023	N	EM16	UMCf	96.9 - 106.9	----	----
U4-MW-09DD	4/14/2022	N	BL02	UMCf	119.8 - 129.8	----	----
U4-MW-09DD	12/6/2022	N	EM04	UMCf	119.8 - 129.8	----	----
U4-MW-09DD	3/21/2023	N	EM07	UMCf	119.8 - 129.8	----	----
U4-MW-09DD	6/15/2023	N	EM10	UMCf	119.8 - 129.8	----	----
U4-MW-09DD	9/13/2023	N	EM13	UMCf	119.8 - 129.8	----	----
U4-MW-09DD	12/13/2023	N	EM16	UMCf	119.8 - 129.8	----	----
U4-MW-09I	4/14/2022	N	BL02	UMCf	76.8 - 86.8	----	----
U4-MW-09I	12/6/2022	N	EM04	UMCf	76.8 - 86.8	----	----
U4-MW-09I	3/16/2023	N	EM07	UMCf	76.8 - 86.8	----	----
U4-MW-09I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	----	----
U4-MW-09I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	----	----
U4-MW-09I	12/15/2023	N	EM16	UMCf	76.8 - 86.8	----	----
U4-MW-09S	4/14/2022	N	BL02	UMCf	55.3 - 65.3	----	----
U4-MW-09S	12/6/2022	N	EM04	UMCf	55.3 - 65.3	----	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G
						Propionic Acid	Pyruvic Acid
						mg/L	mg/L
U4-MW-09S	3/17/2023	N	EM07	UMCf	55.3 - 65.3	----	----
U4-MW-09S	6/15/2023	N	EM10	UMCf	55.3 - 65.3	----	----
U4-MW-09S	9/13/2023	N	EM13	UMCf	55.3 - 65.3	----	----
U4-MW-09S	12/12/2023	N	EM16	UMCf	55.3 - 65.3	----	----
U4-MW-10D	4/14/2022	N	BL02	UMCf	96.9 - 106.9	----	----
U4-MW-10D	12/5/2022	N	EM04	UMCf	96.9 - 106.9	----	----
U4-MW-10D	3/17/2023	N	EM07	UMCf	96.9 - 106.9	----	----
U4-MW-10D	6/14/2023	N	EM10	UMCf	96.9 - 106.9	----	----
U4-MW-10D	9/13/2023	N	EM13	UMCf	96.9 - 106.9	----	----
U4-MW-10D	12/14/2023	N	EM16	UMCf	96.9 - 106.9	----	----
U4-MW-10I	4/14/2022	N	BL02	UMCf	77.1 - 87.1	----	----
U4-MW-10I	12/5/2022	N	EM04	UMCf	77.1 - 87.1	----	----
U4-MW-10I	3/17/2023	N	EM07	UMCf	77.1 - 87.1	----	----
U4-MW-10I	6/14/2023	N	EM10	UMCf	77.1 - 87.1	----	----
U4-MW-10I	9/13/2023	N	EM13	UMCf	77.1 - 87.1	----	----
U4-MW-10I	12/14/2023	N	EM16	UMCf	77.1 - 87.1	----	----
U4-MW-11D	4/15/2022	N	BL02	UMCf	97.4 - 107.4	<5.3	<6.0
U4-MW-11D	9/26/2022	N	EM01	UMCf	97.4 - 107.4	----	----
U4-MW-11D	10/11/2022	N	EM02	UMCf	97.4 - 107.4	----	----
U4-MW-11D	11/1/2022	N	EM03	UMCf	97.4 - 107.4	----	----
U4-MW-11D	12/6/2022	N	EM04	UMCf	97.4 - 107.4	3.4 J	<3.0
U4-MW-11D	1/12/2023	N	EM05	UMCf	97.4 - 107.4	----	----
U4-MW-11D	2/14/2023	N	EM06	UMCf	97.4 - 107.4	----	----
U4-MW-11D	3/16/2023	N	EM07	UMCf	97.4 - 107.4	<11	<12
U4-MW-11D	4/18/2023	N	EM08	UMCf	97.4 - 107.4	----	----
U4-MW-11D	5/17/2023	N	EM09	UMCf	97.4 - 107.4	----	----
U4-MW-11D	6/16/2023	N	EM10	UMCf	97.4 - 107.4	16 J	<12
U4-MW-11D	7/14/2023	N	EM11	UMCf	97.4 - 107.4	----	----
U4-MW-11D	8/14/2023	N	EM12	UMCf	97.4 - 107.4	----	----
U4-MW-11D	9/13/2023	N	EM13	UMCf	97.4 - 107.4	<26.5	<29.9
U4-MW-11D	10/18/2023	N	EM14	UMCf	97.4 - 107.4	----	----
U4-MW-11D	11/16/2023	N	EM15	UMCf	97.4 - 107.4	----	----
U4-MW-11D	12/13/2023	N	EM16	UMCf	97.4 - 107.4	46.3	<0.060
U4-MW-11I	4/14/2022	N	BL02	UMCf	77.0 - 87.0	<1.1	<1.2
U4-MW-11I	9/26/2022	N	EM01	UMCf	77.0 - 87.0	----	----
U4-MW-11I	9/26/2022	FD	EM01	UMCf	77.0 - 87.0	----	----
U4-MW-11I	10/10/2022	N	EM02	UMCf	77.0 - 87.0	----	----
U4-MW-11I	10/10/2022	FD	EM02	UMCf	77.0 - 87.0	----	----
U4-MW-11I	10/31/2022	N	EM03	UMCf	77.0 - 87.0	----	----
U4-MW-11I	10/31/2022	FD	EM03	UMCf	77.0 - 87.0	----	----
U4-MW-11I	12/6/2022	N	EM04	UMCf	77.0 - 87.0	21 J	<6.0 UJ
U4-MW-11I	12/6/2022	FD	EM04	UMCf	77.0 - 87.0	26 J	<6.0 UJ
U4-MW-11I	1/12/2023	N	EM05	UMCf	77.0 - 87.0	----	----
U4-MW-11I	1/12/2023	FD	EM05	UMCf	77.0 - 87.0	----	----
U4-MW-11I	2/14/2023	N	EM06	UMCf	77.0 - 87.0	----	----
U4-MW-11I	2/14/2023	FD	EM06	UMCf	77.0 - 87.0	----	----
U4-MW-11I	3/16/2023	N	EM07	UMCf	77.0 - 87.0	92	<3.0
U4-MW-11I	3/16/2023	FD	EM07	UMCf	77.0 - 87.0	94	<3.0
U4-MW-11I	4/18/2023	N	EM08	UMCf	77.0 - 87.0	----	----
U4-MW-11I	4/18/2023	FD	EM08	UMCf	77.0 - 87.0	----	----
U4-MW-11I	5/19/2023	N	EM09	UMCf	77.0 - 87.0	----	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G
						Propionic Acid	Pyruvic Acid
						mg/L	mg/L
U4-MW-11I	5/19/2023	FD	EM09	UMCf	77.0 - 87.0	----	----
U4-MW-11I	6/15/2023	N	EM10	UMCf	77.0 - 87.0	46	1.9 J
U4-MW-11I	6/15/2023	FD	EM10	UMCf	77.0 - 87.0	48	1.4 J
U4-MW-11I	7/13/2023	N	EM11	UMCf	77.0 - 87.0	----	----
U4-MW-11I	7/13/2023	FD	EM11	UMCf	77.0 - 87.0	----	----
U4-MW-11I	8/14/2023	N	EM12	UMCf	77.0 - 87.0	----	----
U4-MW-11I	8/14/2023	FD	EM12	UMCf	77.0 - 87.0	----	----
U4-MW-11I	9/13/2023	N	EM13	UMCf	77.0 - 87.0	<26.5	<29.9
U4-MW-11I	9/13/2023	FD	EM13	UMCf	77.0 - 87.0	<26.5	<29.9
U4-MW-11I	10/19/2023	N	EM14	UMCf	77.0 - 87.0	----	----
U4-MW-11I	10/19/2023	FD	EM14	UMCf	77.0 - 87.0	----	----
U4-MW-11I	11/16/2023	N	EM15	UMCf	77.0 - 87.0	----	----
U4-MW-11I	11/16/2023	FD	EM15	UMCf	77.0 - 87.0	----	----
U4-MW-11I	12/13/2023	N	EM16	UMCf	77.0 - 87.0	<0.053	<0.060
U4-MW-11I	12/13/2023	FD	EM16	UMCf	77.0 - 87.0	<0.053	<0.060
U4-MW-12D	4/15/2022	N	BL02	UMCf	97.1 - 107.1	<5.3	<6.0
U4-MW-12D	9/27/2022	N	EM01	UMCf	97.1 - 107.1	----	----
U4-MW-12D	10/12/2022	N	EM02	UMCf	97.1 - 107.1	----	----
U4-MW-12D	11/2/2022	N	EM03	UMCf	97.1 - 107.1	----	----
U4-MW-12D	12/7/2022	N	EM04	UMCf	97.1 - 107.1	1,500 J-	<6.0 R
U4-MW-12D	1/12/2023	N	EM05	UMCf	97.1 - 107.1	----	----
U4-MW-12D	2/15/2023	N	EM06	UMCf	97.1 - 107.1	----	----
U4-MW-12D	3/14/2023	N	EM07	UMCf	97.1 - 107.1	10 J	<6.0
U4-MW-12D	4/17/2023	N	EM08	UMCf	97.1 - 107.1	----	----
U4-MW-12D	5/17/2023	N	EM09	UMCf	97.1 - 107.1	----	----
U4-MW-12D	6/16/2023	N	EM10	UMCf	97.1 - 107.1	11 J	<12
U4-MW-12D	7/13/2023	N	EM11	UMCf	97.1 - 107.1	----	----
U4-MW-12D	8/14/2023	N	EM12	UMCf	97.1 - 107.1	----	----
U4-MW-12D	9/12/2023	N	EM13	UMCf	97.1 - 107.1	<2.6	<3.0
U4-MW-12D	10/17/2023	N	EM14	UMCf	97.1 - 107.1	----	----
U4-MW-12D	11/15/2023	N	EM15	UMCf	97.1 - 107.1	----	----
U4-MW-12D	12/12/2023	N	EM16	UMCf	97.1 - 107.1	136	<0.060
U4-MW-12I	4/14/2022	N	BL02	UMCf	76.8 - 86.8	<5.3	<6.0
U4-MW-12I	4/14/2022	FD	BL02	UMCf	76.8 - 86.8	<5.3	<6.0
U4-MW-12I	9/27/2022	N	EM01	UMCf	76.8 - 86.8	----	----
U4-MW-12I	10/12/2022	N	EM02	UMCf	76.8 - 86.8	----	----
U4-MW-12I	11/2/2022	N	EM03	UMCf	76.8 - 86.8	----	----
U4-MW-12I	12/7/2022	N	EM04	UMCf	76.8 - 86.8	6.1 J	<1.2 R
U4-MW-12I	12/7/2022	FD	EM04	UMCf	76.8 - 86.8	----	----
U4-MW-12I	1/13/2023	N	EM05	UMCf	76.8 - 86.8	----	----
U4-MW-12I	2/15/2023	N	EM06	UMCf	76.8 - 86.8	----	----
U4-MW-12I	3/13/2023	N	EM07	UMCf	76.8 - 86.8	150	<6.0
U4-MW-12I	4/17/2023	N	EM08	UMCf	76.8 - 86.8	----	----
U4-MW-12I	5/17/2023	N	EM09	UMCf	76.8 - 86.8	----	----
U4-MW-12I	6/16/2023	N	EM10	UMCf	76.8 - 86.8	82	<3.0
U4-MW-12I	7/11/2023	N	EM11	UMCf	76.8 - 86.8	----	----
U4-MW-12I	8/14/2023	N	EM12	UMCf	76.8 - 86.8	----	----
U4-MW-12I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	<1.1	<1.2
U4-MW-12I	10/17/2023	N	EM14	UMCf	76.8 - 86.8	----	----
U4-MW-12I	11/16/2023	N	EM15	UMCf	76.8 - 86.8	----	----
U4-MW-12I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	<0.053	<0.060

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G
						Propionic Acid	Pyruvic Acid
						mg/L	mg/L
U4-MW-13D	4/14/2022	N	BL02	UMCf	98.2 - 108.2	<11	<12
U4-MW-13D	9/28/2022	N	EM01	UMCf	98.2 - 108.2	----	----
U4-MW-13D	10/11/2022	N	EM02	UMCf	98.2 - 108.2	----	----
U4-MW-13D	11/3/2022	N	EM03	UMCf	98.2 - 108.2	----	----
U4-MW-13D	12/7/2022	N	EM04	UMCf	98.2 - 108.2	300 J-	<3.0 R
U4-MW-13D	1/12/2023	N	EM05	UMCf	98.2 - 108.2	----	----
U4-MW-13D	2/15/2023	N	EM06	UMCf	98.2 - 108.2	----	----
U4-MW-13D	3/17/2023	N	EM07	UMCf	98.2 - 108.2	<1.1 UJ	<1.2 UJ
U4-MW-13D	4/18/2023	N	EM08	UMCf	98.2 - 108.2	----	----
U4-MW-13D	5/17/2023	N	EM09	UMCf	98.2 - 108.2	----	----
U4-MW-13D	6/15/2023	N	EM10	UMCf	98.2 - 108.2	1.8 J	<1.2
U4-MW-13D	7/12/2023	N	EM11	UMCf	98.2 - 108.2	----	----
U4-MW-13D	8/11/2023	N	EM12	UMCf	98.2 - 108.2	----	----
U4-MW-13D	9/11/2023	N	EM13	UMCf	98.2 - 108.2	<2.6	<3.0
U4-MW-13D	10/18/2023	N	EM14	UMCf	98.2 - 108.2	----	----
U4-MW-13D	11/15/2023	N	EM15	UMCf	98.2 - 108.2	----	----
U4-MW-13D	12/11/2023	N	EM16	UMCf	98.2 - 108.2	<0.053	<0.060
U4-MW-13I	4/14/2022	N	BL02	UMCf	77.1 - 87.1	<2.6	<3.0
U4-MW-13I	9/28/2022	N	EM01	UMCf	77.1 - 87.1	----	----
U4-MW-13I	10/10/2022	N	EM02	UMCf	77.1 - 87.1	----	----
U4-MW-13I	11/3/2022	N	EM03	UMCf	77.1 - 87.1	----	----
U4-MW-13I	12/6/2022	N	EM04	UMCf	77.1 - 87.1	1.5 J	<1.2
U4-MW-13I	1/12/2023	N	EM05	UMCf	77.1 - 87.1	----	----
U4-MW-13I	2/14/2023	N	EM06	UMCf	77.1 - 87.1	----	----
U4-MW-13I	3/16/2023	N	EM07	UMCf	77.1 - 87.1	4.2 J	<0.60
U4-MW-13I	4/19/2023	N	EM08	UMCf	77.1 - 87.1	----	----
U4-MW-13I	5/17/2023	N	EM09	UMCf	77.1 - 87.1	----	----
U4-MW-13I	6/15/2023	N	EM10	UMCf	77.1 - 87.1	0.86 J	<0.60
U4-MW-13I	7/12/2023	N	EM11	UMCf	77.1 - 87.1	----	----
U4-MW-13I	8/11/2023	N	EM12	UMCf	77.1 - 87.1	----	----
U4-MW-13I	9/11/2023	N	EM13	UMCf	77.1 - 87.1	<26.5	<29.9
U4-MW-13I	10/17/2023	N	EM14	UMCf	77.1 - 87.1	----	----
U4-MW-13I	11/15/2023	N	EM15	UMCf	77.1 - 87.1	----	----
U4-MW-13I	12/11/2023	N	EM16	UMCf	77.1 - 87.1	<0.053	<0.060
U4-MW-14D	4/13/2022	N	BL02	UMCf	97.3 - 107.3	----	----
U4-MW-14D	12/6/2022	N	EM04	UMCf	97.3 - 107.3	----	----
U4-MW-14D	3/16/2023	N	EM07	UMCf	97.3 - 107.3	----	----
U4-MW-14D	6/15/2023	N	EM10	UMCf	97.3 - 107.3	----	----
U4-MW-14D	9/14/2023	N	EM13	UMCf	97.3 - 107.3	----	----
U4-MW-14D	12/15/2023	N	EM16	UMCf	97.3 - 107.3	----	----
U4-MW-14I	4/14/2022	N	BL02	UMCf	77.3 - 87.3	----	----
U4-MW-14I	12/6/2022	N	EM04	UMCf	77.3 - 87.3	----	----
U4-MW-14I	3/16/2023	N	EM07	UMCf	77.3 - 87.3	----	----
U4-MW-14I	6/15/2023	N	EM10	UMCf	77.3 - 87.3	----	----
U4-MW-14I	9/14/2023	N	EM13	UMCf	77.3 - 87.3	----	----
U4-MW-14I	12/14/2023	N	EM16	UMCf	77.3 - 87.3	----	----
U4-MW-15D	4/13/2022	N	BL02	UMCf	96.0 - 106.0	----	----
U4-MW-15D	12/5/2022	N	EM04	UMCf	96.0 - 106.0	----	----
U4-MW-15D	3/20/2023	N	EM07	UMCf	96.0 - 106.0	----	----
U4-MW-15D	6/14/2023	N	EM10	UMCf	96.0 - 106.0	----	----
U4-MW-15D	9/13/2023	N	EM13	UMCf	96.0 - 106.0	----	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G
						Propionic Acid	Pyruvic Acid
						mg/L	mg/L
U4-MW-15D	12/12/2023	N	EM16	UMCf	96.0 - 106.0	----	----
U4-MW-15DD	4/13/2022	N	BL02	UMCf	120.3 - 130.3	----	----
U4-MW-15DD	12/5/2022	N	EM04	UMCf	120.3 - 130.3	----	----
U4-MW-15DD	3/15/2023	N	EM07	UMCf	120.3 - 130.3	----	----
U4-MW-15DD	6/13/2023	N	EM10	UMCf	120.3 - 130.3	----	----
U4-MW-15DD	9/14/2023	N	EM13	UMCf	120.3 - 130.3	----	----
U4-MW-15DD	12/13/2023	N	EM16	UMCf	120.3 - 130.3	----	----
U4-MW-15I	4/12/2022	N	BL02	UMCf	76.8 - 86.8	----	----
U4-MW-15I	12/5/2022	N	EM04	UMCf	76.8 - 86.8	----	----
U4-MW-15I	3/17/2023	N	EM07	UMCf	76.8 - 86.8	----	----
U4-MW-15I	6/14/2023	N	EM10	UMCf	76.8 - 86.8	----	----
U4-MW-15I	9/12/2023	N	EM13	UMCf	76.8 - 86.8	----	----
U4-MW-15I	12/12/2023	N	EM16	UMCf	76.8 - 86.8	----	----
U4-MW-15S	4/13/2022	N	BL02	UMCf	54.8 - 64.8	----	----
U4-MW-15S	12/5/2022	N	EM04	UMCf	54.8 - 64.8	----	----
U4-MW-15S	3/13/2023	N	EM07	UMCf	54.8 - 64.8	----	----
U4-MW-15S	6/13/2023	N	EM10	UMCf	54.8 - 64.8	----	----
U4-MW-15S	9/14/2023	N	EM13	UMCf	54.8 - 64.8	----	----
U4-MW-15S	12/11/2023	N	EM16	UMCf	54.8 - 64.8	----	----
U4-MW-16D	4/11/2022	N	BL02	UMCf	96.8 - 106.8	----	----
U4-MW-16D	12/5/2022	N	EM04	UMCf	96.8 - 106.8	----	----
U4-MW-16D	3/14/2023	N	EM07	UMCf	96.8 - 106.8	----	----
U4-MW-16D	6/13/2023	N	EM10	UMCf	96.8 - 106.8	----	----
U4-MW-16D	9/15/2023	N	EM13	UMCf	96.8 - 106.8	----	----
U4-MW-16D	12/14/2023	N	EM16	UMCf	96.8 - 106.8	----	----
U4-MW-16DD	4/12/2022	N	BL02	UMCf	120.8 - 130.8	----	----
U4-MW-16DD	12/5/2022	N	EM04	UMCf	120.8 - 130.8	----	----
U4-MW-16DD	3/15/2023	N	EM07	UMCf	120.8 - 130.8	----	----
U4-MW-16DD	6/13/2023	N	EM10	UMCf	120.8 - 130.8	----	----
U4-MW-16DD	9/14/2023	N	EM13	UMCf	120.8 - 130.8	----	----
U4-MW-16DD	12/13/2023	N	EM16	UMCf	120.8 - 130.8	----	----
U4-MW-16I	4/11/2022	N	BL02	UMCf	77.0 - 87.0	----	----
U4-MW-16I	12/5/2022	N	EM04	UMCf	77.0 - 87.0	----	----
U4-MW-16I	12/5/2022	FD	EM04	UMCf	77.0 - 87.0	----	----
U4-MW-16I	3/13/2023	N	EM07	UMCf	77.0 - 87.0	----	----
U4-MW-16I	3/13/2023	FD	EM07	UMCf	77.0 - 87.0	----	----
U4-MW-16I	6/12/2023	N	EM10	UMCf	77.0 - 87.0	----	----
U4-MW-16I	6/12/2023	FD	EM10	UMCf	77.0 - 87.0	----	----
U4-MW-16I	9/11/2023	N	EM13	UMCf	77.0 - 87.0	----	----
U4-MW-16I	9/11/2023	FD	EM13	UMCf	77.0 - 87.0	----	----
U4-MW-16I	12/11/2023	N	EM16	UMCf	77.0 - 87.0	----	----
U4-MW-16I	12/11/2023	FD	EM16	UMCf	77.0 - 87.0	----	----
U4-MW-16S	4/12/2022	N	BL02	UMCf	54.8 - 64.8	----	----
U4-MW-16S	4/12/2022	FD	BL02	UMCf	54.8 - 64.8	----	----
U4-MW-16S	12/6/2022	N	EM04	UMCf	54.8 - 64.8	----	----
U4-MW-16S	3/15/2023	N	EM07	UMCf	54.8 - 64.8	----	----
U4-MW-16S	6/13/2023	N	EM10	UMCf	54.8 - 64.8	----	----
U4-MW-16S	9/11/2023	N	EM13	UMCf	54.8 - 64.8	----	----
U4-MW-16S	12/11/2023	N	EM16	UMCf	54.8 - 64.8	----	----
U4-SLMW	11/10/2022	N	EM03		-	----	----
U4-T3	10/13/2022	N	EM02		-	----	----

Table 4
Groundwater Analytical Results
 Unit 4 Source Area Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Screened Lithology	Screened Interval	Volatile Fatty Acids by AM20GAX/AM 23G	Volatile Fatty Acids by AM20GAX/AM 23G
						Propionic Acid	Pyruvic Acid
						mg/L	mg/L
U4-T3	11/3/2022	N	EM03		-	----	----
U4-T3	12/6/2022	N	EM04		-	----	----
U4-T3	1/9/2023	N	EM05		-	----	----
U4-T3	2/13/2023	N	EM06		-	----	----
U4-T3	3/13/2023	N	EM07		-	----	----
U4-T3	4/19/2023	N	EM08		-	----	----
U4-T3	5/18/2023	N	EM09		-	----	----
U4-T3	6/12/2023	N	EM10		-	----	----
U4-T3	7/11/2023	N	EM11		-	----	----
U4-T3	8/10/2023	N	EM12		-	----	----
U4-T3	9/11/2023	N	EM13		-	----	----
U4-T3	10/16/2023	N	EM14		-	----	----

Notes:

FD - Field duplicate

E - Field instrument error.

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 low.

J+ - The result is an estimated quantity, but the result may be biased high.

N/A - Not Applicable

mg/L - milligrams per liter

µg/L - micrograms per liter

N - Normal field 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

< - The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

-- Not tested.

M-252 damaged/obstructed when checked on June 14, 2023 and September 14, 2023.