

# TECHNICAL MEMORANDUM

**To:** Nevada Environmental Response Trust

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

**From:** Dana Grady

**Date:** May 29, 2024

**Subject:** Las Vegas Wash ZVI-Enhanced 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 April 2024 toward successfully implementing the Las Vegas Wash Zero-Valent Iron (ZVI)-Enhanced Bioremediation Treatability Study.

## Task Progress Update: April 2024

### Task M18 – Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

- Current Status –

The Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study is being conducted to evaluate the effectiveness of ZVI-enhanced bioremediation of perchlorate-contaminated groundwater that has migrated downgradient of the NERT site toward the Las Vegas Wash. The general treatability study layout, including locations of the continuous and discontinuous ZVI walls and associated injection well and monitoring well network, is presented on **Figures 1, 2a, and 2b**. Well construction details are provided in **Table 1**. The construction phase of the treatability study was completed on April 24, 2023 and the performance monitoring phase is ongoing.

- Performance Monitoring – The performance monitoring program included a pre-construction, baseline groundwater sampling event completed in October 2022 prior to installation of the continuous and discontinuous ZVI walls and performance monitoring network. Following construction of the ZVI walls, installation of the performance monitoring network, and injection of biological inoculum and nutrient solution (completed in February through April 2023), the performance monitoring program began in May 2023 and is ongoing. The performance monitoring program is being implemented in accordance with the NDEP-approved Work Plan Addendum, which includes monthly synoptic gauging events to evaluate hydrologic changes over time and groundwater sampling events approximately one month after completion of the construction phase and quarterly thereafter for a total of 16 months. The latest monthly synoptic gauging event was conducted from April 16 to April 18, 2024. The Month 1 groundwater performance monitoring event was completed in May 2023, followed by quarterly performance

monitoring events in August 2023, November/December 2023, and February 2024. Results from the May, August, and November/December 2023 performance monitoring events were presented in previous monthly progress reports, while results of the February 2024 sampling event (performed approximately ten months after completion of the construction phase) are presented herein. Available draft groundwater analytical results from the baseline sampling event and the subsequent performance monitoring events are presented in **Table 2**.

The February 2024 performance monitoring event also included microbial analysis, which included installation of Bio-Trap® samplers in twenty-three monitoring wells on February 26, 2024 followed by retrieval of Bio-Trap® samplers and collection of groundwater samples from April 2 to April 3, 2024. Results from the February 2024 microbial sampling event will be summarized in future monthly progress reports once all laboratory data have been received.

It should be noted that in accordance with Section 7.6.4 of the NDEP-approved Work Plan Addendum, the majority of the performance monitoring network had to be installed after emplacement of the ZVI to prevent damage to well infrastructure. As a result, pre-construction baseline concentrations are not available on a well-by-well basis for all performance monitoring wells. Therefore, performance is being evaluated by comparing constituent concentrations from individual monitoring wells to the average October 2022 baseline concentration within each treatability study test area. For example, samples collected from each performance monitoring well installed in Test Area 1a are compared to the average concentration of samples collected from existing pre-construction wells within Test Area 1a during the October 2022 baseline sampling event.

Notable groundwater results from the February 2024 sampling event are provided below for each Test Area.

- Test Area 1a – Test Area 1a includes the northernmost 100 feet of the 3-foot wide, 200-foot-long continuous ZVI wall installed in the alluvium via one pass trenching, which was backfilled with 10 percent ZVI by weight.
  - Groundwater samples collected from upgradient monitoring wells screened in the alluvium in February 2024 indicated an average perchlorate concentration of 5,418 micrograms per liter ( $\mu\text{g}/\text{L}$ ), which is greater than the average October 2022 baseline perchlorate concentration for the alluvium in Test Area 1a of 4,607  $\mu\text{g}/\text{L}$ . Results of the groundwater samples collected from monitoring wells located directly within the continuous ZVI wall indicated perchlorate concentrations ranging from 2,550  $\mu\text{g}/\text{L}$  to 3,560  $\mu\text{g}/\text{L}$ , which represents reductions ranging from 23 percent to 45 percent compared to the average baseline concentration of 4,607  $\mu\text{g}/\text{L}$ . Groundwater samples collected from the 11 downgradient monitoring wells screened in the alluvium during the February 2024 sampling event did not indicate reductions compared to the average baseline perchlorate concentration and were generally in line with the average perchlorate concentration reported in groundwater samples collected from upgradient monitoring wells. These results correlate with bench-scale study results that indicated that the removal of nitrate and chloride can be rapid due to abiotic processes occurring primarily on the ZVI surface, while the reduction of perchlorate is slower and performed predominantly by autotrophic perchlorate-reducing bacteria using hydrogen generated at the ZVI surface. The injection of a biological inoculum completed in April 2023 was performed to reduce the lag time associated with acclimation and growth of the microbial community. The perchlorate concentrations within Test Area 1a will continue to be monitored.

- Concentration reductions of chlorate and nitrate were more pronounced than perchlorate reductions, which is consistent with the conclusions of the bench-scale study (as previously explained). Groundwater samples collected from the three monitoring wells located within the continuous ZVI wall indicated chlorate concentration reductions ranging from 54 percent to 99 percent and nitrate concentration reductions ranging from 26 percent to 97 percent when compared to baseline concentrations. Groundwater samples collected from the six monitoring wells located 5 to 15 feet downgradient of the continuous ZVI wall indicated chlorate concentrations similar to baseline concentrations. Groundwater samples collected from four of the six monitoring wells located 5 to 15 feet downgradient of the continuous ZVI wall indicated nitrate concentration reductions ranging from 12 percent to 41 percent.
- Lastly, dissolved hydrogen is another key indicator parameter that is being monitored during the treatability study because it is produced from the slow corrosion of ZVI and can be used as an electron donor by perchlorate reducing bacteria for degradation of perchlorate. The baseline dissolved hydrogen concentrations within the Test 1a area averaged 68 nanomolar (nM). Groundwater samples collected from monitoring well ZTS-MW164 (located directly within the continuous ZVI wall) indicated significantly elevated dissolved hydrogen concentrations of up to 2,400 nM during the May and August 2023 sampling events. The dissolved hydrogen concentration has since significantly reduced, with concentrations of 116 nM in November/ December 2023 and 184 nM in February 2024. Despite low dissolved hydrogen concentrations in groundwater samples collected from monitoring wells ZTS-MW150 and ZTS-MW154 (also located within the continuous ZVI wall), perchlorate concentrations in groundwater at these locations continued to indicate perchlorate concentration reductions of up to 45 percent compared to the average baseline concentration. Elevated dissolved hydrogen concentrations were not reported in any other monitoring wells located downgradient of the continuous ZVI wall within the Test Area 1a, likely indicating that dissolved hydrogen is being produced and consumed within this portion of the continuous ZVI wall.
- Test Area 1b –Test Area 1b includes the southernmost 100 feet of the 3-foot wide, 200-foot-long continuous ZVI wall installed in the alluvium via one pass trenching, which was backfilled with 30 percent ZVI by weight.
  - Groundwater samples collected from upgradient monitoring wells screened in the alluvium in February 2024 indicated an average perchlorate concentration of 5,978 µg/L, which is slightly lower than the average October 2022 baseline perchlorate concentration of 7,234 µg/L. Groundwater samples collected from the three monitoring wells located within the continuous ZVI wall indicated perchlorate concentrations ranging from 5,140 µg/L to 5,880 µg/L. Although these concentrations represent reductions of approximately 25 percent compared to the average baseline concentration of 7,234 µg/L in October 2022, the February 2024 concentrations in the groundwater samples collected from within the continuous ZVI wall are only approximately 10 percent lower than the current upgradient perchlorate concentrations. Samples collected during the February 2024 sampling event from the 11 downgradient monitoring wells screened in the alluvium indicated reductions in perchlorate concentrations ranging from 23 percent to 46 percent compared to the average baseline perchlorate concentration.

- Reductions in chloride and nitrate concentrations at monitoring wells within Test Area 1b were significantly more pronounced than those reported for perchlorate. Chloride concentrations in groundwater samples collected from 13 of the 14 monitoring wells within Test Area 1b (wells located both within the continuous ZVI wall and downgradient) reduced by an average of 88 percent compared to the average baseline chloride concentration. Furthermore, chloride concentrations reduced to less than the laboratory detection limit in groundwater samples collected from nine monitoring wells, including a groundwater sample collected from one monitoring well located 100 feet downgradient of the continuous ZVI wall. Similarly, groundwater samples collected from 10 of the 14 monitoring wells located within or downgradient of the continuous ZVI wall indicated nitrate concentration reductions ranging from 52 percent to 97 percent compared to baseline.
- Baseline dissolved hydrogen concentrations averaged 21 nM in the alluvium within the Test Area 1b. Groundwater samples collected during February 2024 from monitoring wells ZTS-MW166 and ZTS-MW178 (both located within the continuous ZVI wall) indicated the highest dissolved hydrogen concentrations measured to date in samples collected from these locations, with concentrations of 8,980 nM and 20,200 nM, respectively. Elevated dissolved hydrogen concentrations of 216 nM and 305 nM were also present in groundwater samples collected from ZTS-MW167 (located 5 feet downgradient) and ZTS-MW148 (located 35 feet and 5 feet downgradient), respectively. This suggests that dissolved hydrogen is available for perchlorate reduction downgradient of the ZVI wall, which is consistent with the observed spatial distribution of perchlorate reduction (i.e., slightly greater perchlorate reduction reported in groundwater samples collected from downgradient monitoring wells compared to concentrations reported immediately within the continuous ZVI wall).
- Test Area 2a –Test Area 2a is a 24-foot long, discontinuous ZVI wall that targets the alluvium and is comprised of seventeen 12-inch diameter ZVI-filled borings installed along two staggered rows, with each boring backfilled with 50% ZVI by weight.
  - Groundwater samples collected from upgradient monitoring wells screened in the alluvium in February 2024 indicated an average perchlorate concentration of 5,738 µg/L, which is less than the average October 2022 baseline perchlorate concentration for Test Area 2a of 6,798 µg/L. The most notable perchlorate concentration reduction of 30 percent when compared to baseline concentrations was reported in the groundwater sample collected from ZTS-MW191 (located immediately downgradient of the discontinuous ZVI wall), with a concentration of 4,730 µg/L during the February 2024 sampling event.
  - Chloride and nitrate concentration reductions of 55 percent and 44 percent, respectively, were reported in the groundwater sample collected from monitoring well ZTS-MW191, which is located immediately downgradient of the discontinuous ZVI wall. Chloride and nitrate concentrations reported in groundwater samples collected from the remaining monitoring wells were similar to or higher than the baseline average concentration of 88,280 µg/L and 19 mg/L, respectively.
  - The baseline dissolved hydrogen concentrations in groundwater samples collected from monitoring wells located within Test Area 2a during the October 2022 baseline sampling event averaged 15 nM. The most notable elevated

dissolved hydrogen concentration within Test Area 2a was the groundwater sample collected from monitoring well ZTS-MW191 (located immediately downgradient of the discontinuous ZVI wall), which indicated a dissolved hydrogen concentration of 245 nM.

- Test Area 2b – Test Area 2b is a 12-foot long, discontinuous ZVI wall that targets the Upper Muddy Creek formation (UMCf) and is comprised of nine 12-inch diameter ZVI-filled borings installed along two staggered rows, with each boring backfilled with 50% ZVI by weight. Due to the large, saturated thickness of the targeted UMCf treatment interval, paired performance monitoring wells were installed at two depth intervals from approximately 25-45 feet below ground surface (bgs) and from approximately 50 to 65 feet bgs.
  - The average baseline perchlorate concentration in groundwater samples collected from monitoring wells screened in the UMCf was 3,156 µg/L. Perchlorate concentration reductions were reported in groundwater samples collected from six of the eight monitoring wells located two to seven feet downgradient of the discontinuous ZVI wall, with reductions ranging from 21 percent to 99 percent compared to the average baseline concentration of 3,156 µg/L. In general, monitoring wells screened in the shallow UMCf indicated higher reductions in perchlorate. For example, perchlorate concentrations of 20 µg/L and 64 µg/L, which represent reductions of greater than 98 percent, were reported in groundwater samples collected from downgradient shallow UMCf monitoring wells ZTS-MW136 and ZTS-MW198, respectively. Although groundwater samples collected from two downgradient deep UMCf monitoring wells indicated perchlorate concentration reductions, the reductions were notably lower, ranging from 21 percent to 57 percent.
  - Chlorate concentration reductions of 99 percent were reported in groundwater samples collected from three of the eight monitoring wells located two to seven feet downgradient of the discontinuous ZVI wall. Nitrate was not detected above the method detection limit of 0.48 mg/L in groundwater samples collected from four of the eight monitoring wells located two to seven feet downgradient of the discontinuous ZVI wall.
  - Dissolved hydrogen concentrations averaged 79 nM during the October 2022 baseline event. The groundwater sample collected from downgradient monitoring well ZTS-MW200, which is located two feet downgradient of the discontinuous ZVI wall and screened in the deep UMCf, continued to exhibit elevated dissolved hydrogen concentrations, with a concentration of 1,710 nM in February 2024. Despite the concentration reductions in perchlorate, chlorate, and nitrate, no additional increases in dissolved hydrogen concentrations were reported in the February 2024 sampling event. As previously explained, this likely indicates that dissolved hydrogen is being produced and consumed within this portion of the discontinuous ZVI wall.
- Test Area 2c – Test Area 2c is a 24-foot long, discontinuous ZVI wall that targets the alluvium and is comprised of twenty-five 12-inch diameter ZVI-filled borings installed along three staggered rows, with each boring backfilled with 50% ZVI by weight.
  - Groundwater samples collected from upgradient monitoring wells screened in the alluvium in February 2024 indicated an average perchlorate concentration of 5,673 µg/L, which is less than the average October 2022 baseline perchlorate concentration for Test Area 2c of 6,993 µg/L. Perchlorate concentrations reported

in groundwater samples collected from all nine monitoring wells located within or downgradient of the discontinuous ZVI wall were similar to upgradient concentrations, with perchlorate concentrations ranging from 5,530 µg/L to 6,090 µg/L during the February 2024 sampling event.

- Slight chlorate reductions were reported in groundwater samples collected in February 2024, with the most significant chlorate concentration reduction of 13 percent reported in the groundwater sample collected from monitoring well ZTS-MW189 (located 55 feet downgradient of the Test Area 2c discontinuous ZVI wall). Similar to perchlorate, nitrate concentrations reported in groundwater samples collected from all nine monitoring wells located within or downgradient of the discontinuous ZVI wall were similar to upgradient concentrations, with nitrate concentrations ranging from 20.0 mg/L to 30.3 mg/L during the February 2024 sampling event.
- Dissolved hydrogen concentrations averaged 5.5 nM during the October 2022 baseline event. During the May 2023 sampling event (one month following construction completion), dissolved hydrogen concentrations notably increased in groundwater samples collected from four monitoring wells screened in the alluvium in Test Area 2c (ZTS-MW141, ZTS-MW142, ZTS-MW182, and ZTS-MW189), with concentrations ranging from 140 to 900 nM. However, elevated dissolved hydrogen concentrations have not been reported in groundwater samples collected from Test Area 2c monitoring wells since the initial May 2023 sampling event.
- Monthly Synoptic Monitoring – Monthly synoptic monitoring is being performed to evaluate any changes in horizontal and vertical gradients, assess for potential groundwater mounding upgradient of the ZVI reactive zone, assess hydraulic effects of seasonal precipitation, and evaluate potential non-uniform flow. Results of the April 2024 monthly synoptic monitoring event do not indicate any significant changes to groundwater elevations in monitoring wells located upgradient, within, and downgradient of ZVI reactive zones.
- Schedule and Progress Updates
  - Groundwater levels will continue to be measured on a monthly basis for the duration of the treatability study. The next monthly synoptic event is scheduled for May 16 to 17, 2024.
  - Groundwater samples will continue to be collected on a quarterly basis to generate time-series data to evaluate the treatment effectiveness of the ZVI installations with respect to the design performance criteria. The next quarterly groundwater sampling event is planned for May 20 through May 24, 2024.
- Health and Safety
  - There were no health and safety incidents related to Task M18 during April 2024.

## CERTIFICATION

### Las Vegas Wash ZVI-Enhanced 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 system(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

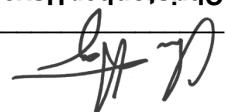
**Date:** 5/29/24

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

Christopher Hayes, CEM  
Environmental Engineer  
Tetra Tech, Inc.

Date

May 29, 2024



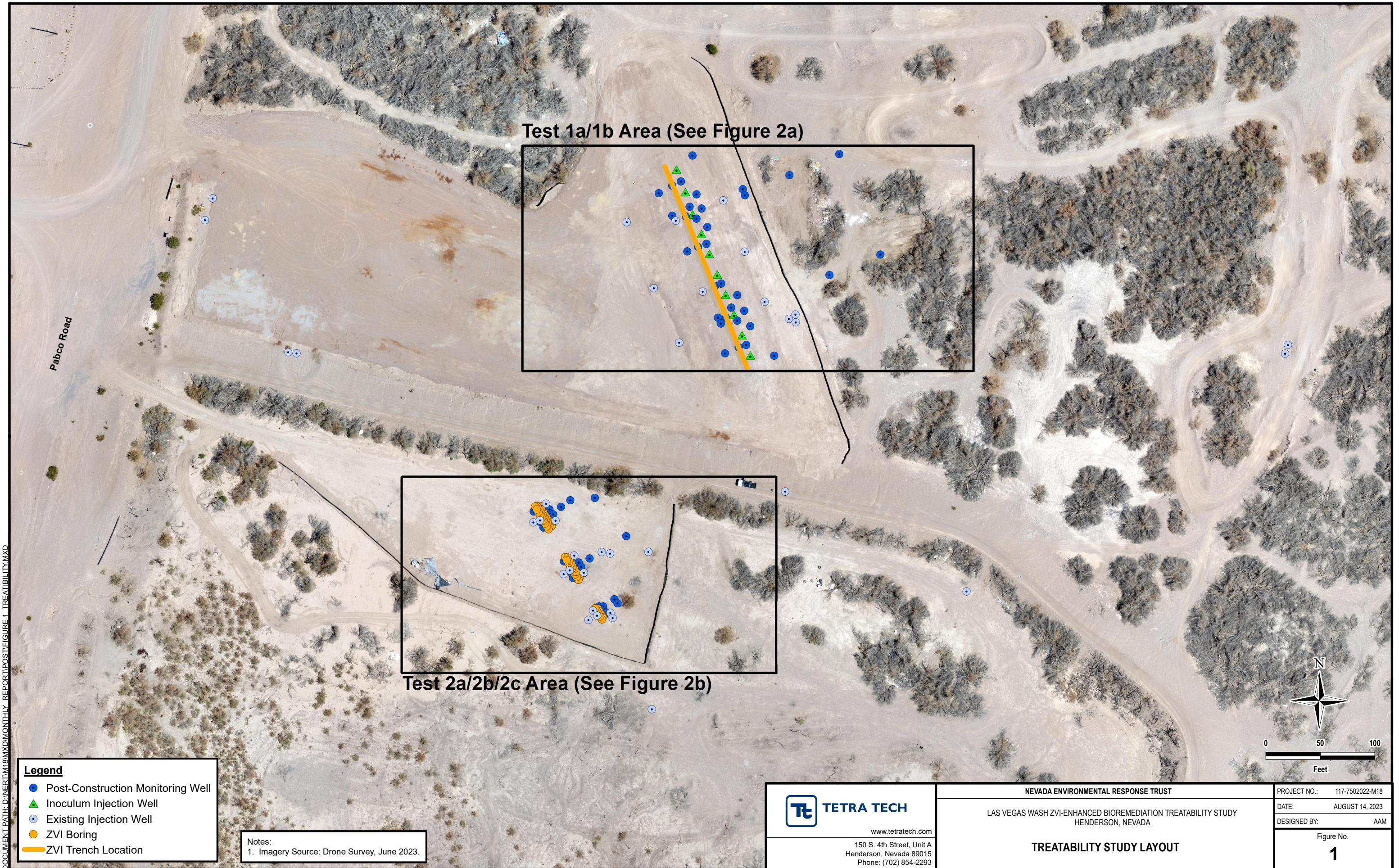
I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been prepared in a manner consistent with the current standards of the profession, and to the best of my knowledge, comply with all 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.

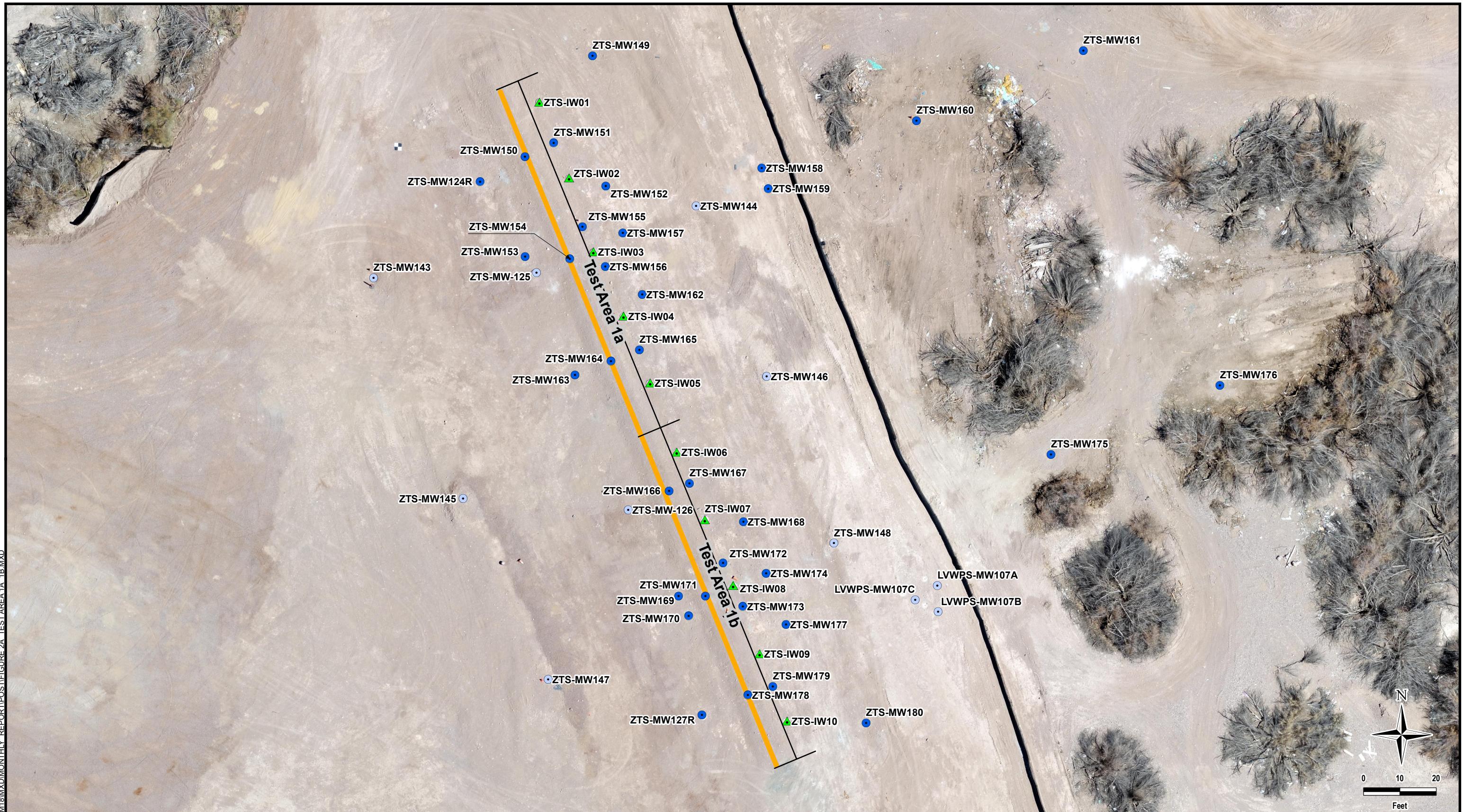
Description of Services Provided: Prepared Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study Monthly Progress Report.

## CERTIFICATION

Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study Monthly Progress Response Trust  
Nevada Environmental Progress Report

# Figures





### Legend

- Post-Construction Monitoring Well
  - ▲ Inoculum Injection Well
  - Existing Monitoring Well
  - ZVI Trench Location

**Notes:**



TETRA TECH

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NEVADA ENVIRONMENTAL RESPONSE TRUST

LAS VEGAS WASH ZVI-ENHANCED BIOREMEDIATION TREATABILITY STUDY  
HENDERSON, NEVADA

TEST AREA 1a/1b LAYOUT

PROJECT NO.: 117-7502022-M18

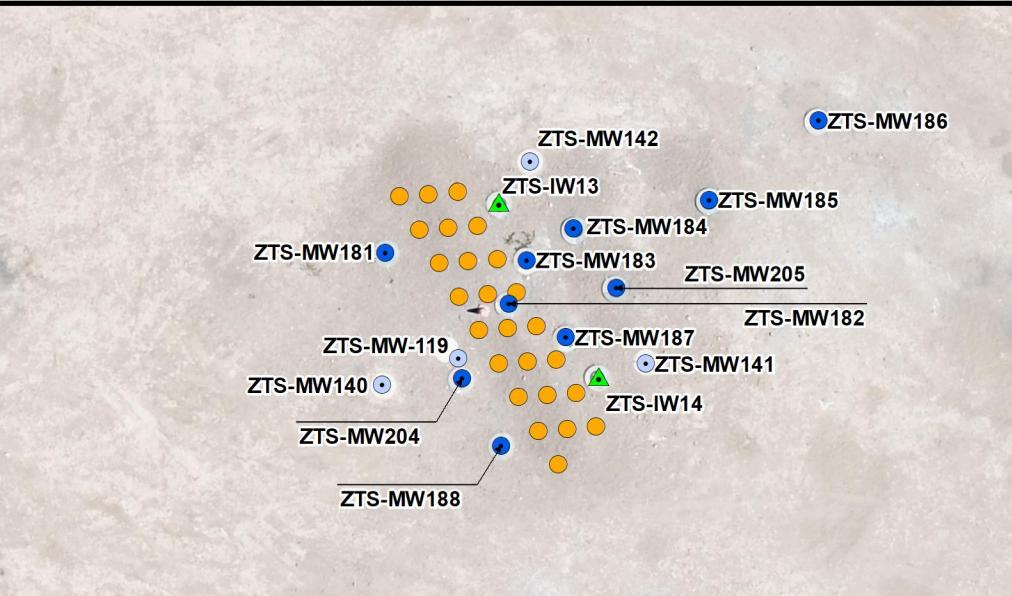
AUGUST 14, 2023

RECEIVED: 11/20/2020

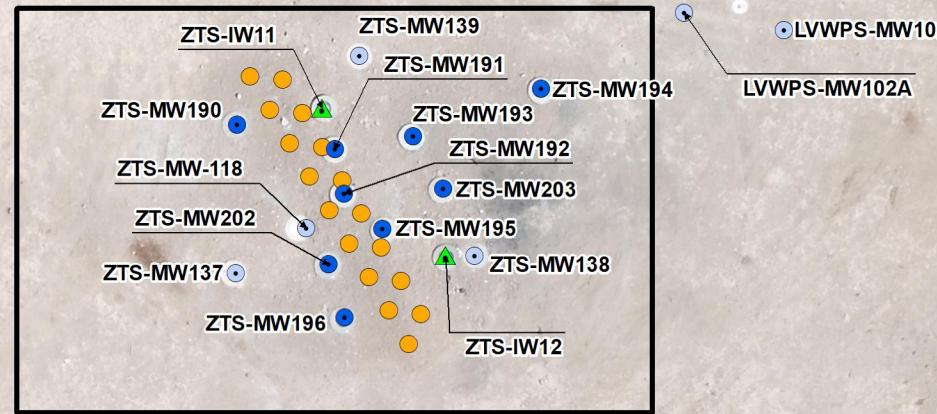
**Figure No.**

2a

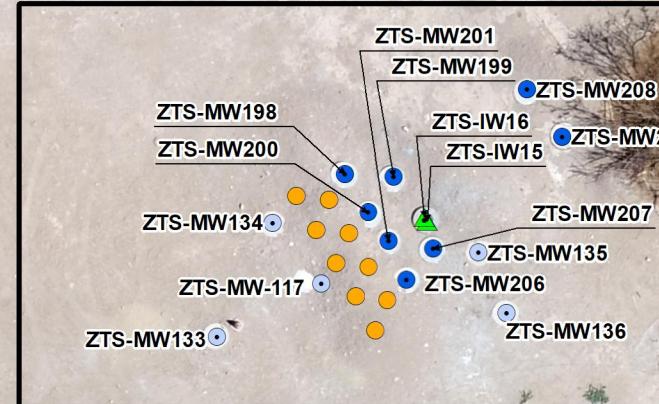
## **Test 2c Area (Borings ZTS-BH01 through ZTS-BH25)**



## **Test 2a Area (Borings ZTS-BH26 through ZTS-BH42)**



## **Test 2b Area (Borings ZTS-BH43 through ZTS-BH51)**



TETRA TECH

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NEVADA ENVIRONMENTAL RESPONSE TRUST

LAS VEGAS WASH ZVI-ENHANCED BIOREMEDIATION TREATABILITY STUDY  
HENDERSON, NEVADA

TEST AREA 2a/2b/2c LAYOUT

PROJECT NO.: 117-7502022-M18

DATE: AUGUST 14, 2023

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DESIGNED BY: AAM

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**Figure No.**

2b

- Legend

  - Post-Construction Monitoring Well
  - ▲ Inoculum Injection Well
  - ZVI Boring
  - Existing Monitoring Well

Notes:

## Tables

**Table 1**  
**Well Construction Details**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well ID	Screened Lithology	Northing	Easting	Ground Surface Elevation	Top of Casing Elevation	Depth to Water <sup>1</sup>	Groundwater Elevation	Casing Material	Slot Size	Filter Pack Gradation	Nominal Borehole Diameter	Borehole Total Depth	Well Diameter	Nominal Screen Length	Well Total Depth	Bottom of Screen	Top of Screen
				feet amsl	feet amsl	ft bTOC	amsl		inches		inches	feet bgs	inches	feet	feet bgs	feet bgs	feet bgs
<b>Test Area 1A</b>																	
ZTS-MW124R	Alluvium	26732932.91	833021.97	1545.35	1545.24	16.94	1528.30	Schedule 40 PVC	0.020	#3	8	35.0	4	10.0	34.5	34.0	24.5
ZTS-MW125	UMCf	26732907.80	833037.00	1546.94	1546.51	17.84	1528.67	Schedule 40 PVC	0.010	#2/16	8	75	4	10	50.5	50	40
ZTS-MW143	Alluvium	26732906.40	832992.60	1545.04	1544.90	16.13	1528.77	Schedule 40 PVC	0.020	#3	6	35	2	10	33.5	33	23
ZTS-MW144	Alluvium	26732926.25	833081.32	1544.47	1544.52	16.85	1527.67	Schedule 40 PVC	0.020	#3	6	40	2	10	34.5	34	24
ZTS-MW149	Alluvium	26732967.42	833052.83	1544.31	1544.20	16.38	1527.82	Schedule 40 PVC	0.020	#3	6	35.0	2	10.0	33.5	33.0	23.3
ZTS-MW150	Alluvium	26732939.76	833034.23	1546.83	1546.74	18.70	1528.04	Schedule 40 PVC	0.020	#3	6	45.0	2	10.0	34.5	34.0	24.3
ZTS-MW151	Alluvium	26732943.59	833042.18	1545.72	1545.62	17.75	1527.87	Schedule 40 PVC	0.020	#3	6	37.5	2	10.0	34.5	34.0	24.3
ZTS-MW152	Alluvium	26732931.70	833056.48	1545.63	1545.50	17.81	1527.69	Schedule 40 PVC	0.020	#3	6	35.0	2	10.0	33.5	33.0	23.3
ZTS-MW153	Alluvium	26732912.34	833034.31	1545.73	1545.61	17.38	1528.23	Schedule 40 PVC	0.020	#3	6	40.0	2	10.0	34.5	34.0	24.3
ZTS-MW154	Alluvium	26732911.74	833046.57	1546.73	1546.62	18.72	1527.90	Schedule 40 PVC	0.020	#3	6	42.5	2	10.0	32.5	32.0	22.3
ZTS-MW155	Alluvium	26732920.46	833050.08	1545.97	1545.89	18.18	1527.71	Schedule 40 PVC	0.020	#3	6	40.0	2	15.0	35.5	35.0	20.3
ZTS-MW156	UMCf	26732909.63	833056.38	1546.34	1546.30	18.52	1527.78	Schedule 40 PVC	0.010	#2/16	6	55.0	2	10.0	54.0	53.5	43.8
ZTS-MW157	Alluvium	26732918.81	833061.15	1545.95	1545.87	18.21	1527.66	Schedule 40 PVC	0.020	#3	6	35.0	2	10.0	33.5	33.0	23.3
ZTS-MW158	Alluvium	26732936.67	833099.40	1544.15	1544.09	16.70	1527.39	Schedule 40 PVC	0.020	#3	6	35.0	2	10.0	33.5	33.0	23.3
ZTS-MW159	UMCf	26732930.97	833101.22	1544.36	1544.08	16.83	1527.25	Schedule 40 PVC	0.010	#2/16	6	50.0	48	10.0	49.0	48.5	38.8
ZTS-MW160	Alluvium	26732949.66	833141.96	1544.42	1544.11	16.86	1527.25	Schedule 40 PVC	0.020	#3	6	40.0	2	10.0	33.5	33.0	23.3
ZTS-MW161	Alluvium	26732968.87	833187.88	1544.23	1543.99	17.03	1526.96	Schedule 40 PVC	0.020	#3	6	45.0	2	10.0	34.5	34.0	24.3
ZTS-MW162	Alluvium	26732901.90	833066.48	1545.76	1545.61	17.94	1527.67	Schedule 40 PVC	0.020	#3	6	40.0	2	10.0	33.5	33.0	23.3
ZTS-MW163	Alluvium	26732879.80	833048.04	1546.23	1546.18	19.05	1527.13	Schedule 40 PVC	0.020	#3	6	40.0	2	10.0	34.5	34.0	24.3
ZTS-MW164	Alluvium	26732883.65	833057.93	1547.06	1546.96	17.90	1529.06	Schedule 40 PVC	0.020	#3	6	40.0	2	10.0	32.5	32.0	22.3
ZTS-MW165	Alluvium	26732886.70	833065.74	1545.63	1545.50	17.83	1527.67	Schedule 40 PVC	0.020	#3	6	38.0	2	10	32.5	32.0	22.3
<b>Between Test Area 1A and Test Area 1B</b>																	
ZTS-MW145	UMCf	26732845.93	833017.26	1547.43	1547.13	18.20	1528.93	Schedule 40 PVC	0.010	#2/16	8	50	4	10	49.5	49	39
ZTS-MW146	UMCf	26732879.40	833100.75	1548.63	1547.33	19.60	1527.73	Schedule 40 PVC	0.010	#2/16	8	55	4	10	51.5	51	41
<b>Test Area 1B</b>																	
ZTS-MW126	Alluvium	26732842.82	833063.07	1548.61	1548.47	19.35	1529.12	Schedule 40 PVC	0.020	#3	8	40	4	10	30.5	30	20
ZTS-MW127R	Alluvium	26732786.41	833082.92	1548.26	1548.18	19.80	1528.38	Schedule 40 PVC	0.020	#3	8	24.0	4	5.0	23.5	23.0	18.5
ZTS-MW147	Alluvium	26732796.25	833040.66	1547.65	1547.18	18.28	1528.90	Schedule 40 PVC	0.020	#3	6	35	2	10	30.0	29.5	19.5
ZTS-MW148	Alluvium	26732833.56	833119.27	1548.62	1548.41	20.49	1527.92	Schedule 40 PVC	0.020	#3	6	35	2	10	32.5	32.0	22.0
ZTS-MW166	Alluvium	26732847.93	833073.86	1548.22	1548.25	20.30	1527.95	Schedule 40 PVC	0.020	#3	6	38.0	2	10	30.0	29.5	19.8
ZTS-MW167	Alluvium	26732850.05	833079.50	1547.37	1547.33	19.43	1527.90	Schedule 40 PVC	0.020	#3	6	40.0	2	10.0	33.5	33.0	23.3
ZTS-MW168	Alluvium	26732839.48	833094.36	1547.52	1547.63	19.78	1527.85	Schedule 40 PVC	0.020	#3	6	32.0	2	10.0	30.5	30.0	20.3
ZTS-MW169	Alluvium	26732819.11	833076.48	1547.70	1547.57	19.44	1528.13	Schedule 40 PVC	0.020	#3	6	27.5	2	10.0	27.5	27.0	17.1
ZTS-MW170	UMCf	26732813.68	833079.28	1547.58	1547.45	19.32	1528.13	Schedule 40 PVC	0.010	#2/16	6	46.5	2	10.0	41.5	41.0	31.1
ZTS-MW171	Alluvium	26732819.11	833083.89	1548.61	1548.53	20.33	1528.20	Schedule 40 PVC	0.020	#3	6	35.0	2	10.0	29.5	29.0	19.3
ZTS-MW172	Alluvium	26732828.15	833088.77	1547.91	1547.74	19.77	1527.97	Schedule 40 PVC	0.020	#3	6	30.0	2	10.0	27.5	27.0	17.3
ZTS-MW173	UMCf	26732816.29	833094.22	1547.95	1547.78	19.77	1528.01	Schedule 40 PVC	0.010	#2/16	6	4					

**Table 1**  
**Well Construction Details**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well ID	Screened Lithology	Northing	Easting	Ground Surface Elevation	Top of Casing Elevation	Depth to Water <sup>1</sup>	Groundwater Elevation	Casing Material	Slot Size	Filter Pack Gradation	Nominal Borehole Diameter	Borehole Total Depth	Well Diameter	Nominal Screen Length	Well Total Depth	Bottom of Screen	Top of Screen	
				feet amsl	feet amsl	ft bTOC	amsl				inches	inches	feet bgs	inches	feet	feet bgs	feet bgs	feet bgs
<b>Test Area 2A</b>																		
ZTS-MW118	Alluvium	26732588.00	832939.61	1547.64	1547.41	16.34	1531.07	Schedule 40 PVC	0.020	#3	8	40	4	10	24	23.5	13.5	
ZTS-MW137	Alluvium	26732584.41	832934.77	1547.68	1547.44	16.36	1531.08	Schedule 40 PVC	0.020	#3	6	28	2	10	24.5	24	14	
ZTS-MW138	Alluvium	26732585.74	832953.21	1547.68	1547.35	16.37	1530.98	Schedule 40 PVC	0.020	#3	6	25	2	10	24.5	24	14	
ZTS-MW139	Alluvium	26732601.13	832944.31	1547.36	1547.07	16.17	1530.90	Schedule 40 PVC	0.020	#3	6	30	2	10	23.5	23	13	
ZTS-MW190	Alluvium	26732595.87	832934.90	1547.59	1547.32	16.32	1531.00	Schedule 40 PVC	0.020	#3	6	25.0	2	10.0	25.5	24.0	14.3	
ZTS-MW191	Alluvium	26732593.97	832942.42	1548.18	1547.93	17.00	1530.93	Schedule 40 PVC	0.020	#3	6	30.0	2	10.0	25.0	24.5	14.8	
ZTS-MW192	Alluvium	26732590.54	832943.15	1548.28	1548.11	17.16	1530.95	Schedule 40 PVC	0.020	#3	6	25.0	2	10.0	24.5	24.0	14.3	
ZTS-MW193	Alluvium	26732594.97	832948.47	1547.64	1547.48	16.62	1530.86	Schedule 40 PVC	0.020	#3	6	25.0	2	10.0	23.8	23.3	13.6	
ZTS-MW194	Alluvium	26732598.62	832958.35	1547.33	1547.38	16.65	1530.73	Schedule 40 PVC	0.020	#3	6	25.0	2	5.0	23.0	22.5	17.8	
ZTS-MW195	Alluvium	26732587.81	832946.10	1548.38	1548.14	17.20	1530.94	Schedule 40 PVC	0.020	#3	6	25.0	2	10.0	24.5	24.0	14.3	
ZTS-MW196	Alluvium	26732581.00	832943.16	1547.81	1547.34	16.29	1531.05	Schedule 40 PVC	0.020	#3	6	25.0	2	10.0	24.0	23.5	13.8	
ZTS-MW197	Alluvium	26732619.07	832992.11	1547.27	1546.99	16.97	1530.02	Schedule 40 PVC	0.020	#3	6	25.0	2	10.0	23.0	22.5	12.8	
ZTS-MW202	UMCf	26732585.08	832941.97	1547.83	1547.46	16.48	1530.98	Schedule 40 PVC	0.010	#2/16	6	40.0	2	10.0	39.0	38.5	28.8	
ZTS-MW203	UMCf	26732590.95	832950.78	1547.77	1547.71	16.90	1530.81	Schedule 40 PVC	0.010	#2/16	6	45.0	2	10.0	38.5	38.0	28.3	
LVWPS-MW102A	UMCf	26732606.35	832965.93	1547.23	1546.82	10.40	1536.42	Schedule 40 PVC	0.010	#2/12	6	67.5	2	20	67.1	66.6	47.0	
LVWPS-MW102B	UMCf (Semi-Cons)	26732605.06	832973.68	1547.14	1546.78	4.77	1542.01	Schedule 40 PVC	0.010	#2/12	6	120.0	2	20	97.0	96.5	76.8	
<b>Test Area 2B</b>																		
ZTS-MW117	UMCf	26732546.84	832964.21	1547.64	1547.32	14.75	1532.57	Schedule 40 PVC	0.010	#2/16	8	75	4	15	56	55.5	40.5	
ZTS-MW133	UMCf	26732542.30	832957.28	1547.79	1547.51	11.11	1536.40	Schedule 40 PVC	0.010	#2/16	6	75	2	15	69.5	69	54	
ZTS-MW134	UMCf	26732551.09	832961.57	1547.75	1547.54	16.31	1531.23	Schedule 40 PVC	0.010	#2/16	6	37	2	10	36.5	36	26	
ZTS-MW135	UMCf	26732548.80	832977.51	1547.56	1547.42	10.76	1536.66	Schedule 40 PVC	0.010	#2/16	6	76	2	15	69.5	69	54	
ZTS-MW136	UMCf	26732544.12	832979.70	1547.67	1547.29	16.01	1531.28	Schedule 40 PVC	0.010	#2/16	6	55	2	20	47.5	47	27	
ZTS-MW198	UMCf	26732554.83	832967.16	1547.78	1547.69	16.64	1531.05	Schedule 40 PVC	0.010	#2/16	6	47.5	2	20.0	46.5	46.0	26.1	
ZTS-MW199	UMCf	26732554.62	832970.93	1547.18	1546.84	10.53	1536.31	Schedule 40 PVC	0.010	#2/16	6	68.0	2	15.0	65.5	65.0	50.1	
ZTS-MW200	UMCf	26732551.89	832968.94	1547.67	1547.57	11.41	1536.16	Schedule 40 PVC	0.010	#2/16	6	68.0	2	15.0	65.5	65.0	50.1	
ZTS-MW201	UMCf	26732549.70	832970.52	1547.59	1547.29	16.03	1531.26	Schedule 40 PVC	0.010	#2/16	6	50.0	2	20.0	47.5	47.0	27.1	
ZTS-MW206	UMCf	26732546.67	832971.91	1547.58	1547.61	11.34	1536.27	Schedule 40 PVC	0.010	#2/16	6	70.0	2	15.0	65.5	65.0	50.1	
ZTS-MW207	UMCf	26732549.09	832973.98	1547.48	1547.43	16.33	1531.10	Schedule 40 PVC	0.010	#2/16	6	48.0	2	20.0	46.5	46.0	26.1	
ZTS-MW208	UMCf	26732561.34	832981.27	1547.35	1547.21	16.41	1530.80	Schedule 40 PVC	0.010	#2/16	6	48.0	2	20.0	46.5	46.0	26.1	
ZTS-MW209	UMCf	26732557.71	832983.97	1547.62	1547.30	11.00	1536.30	Schedule 40 PVC	0.010	#2/16	6	69.0	2	15.0	66.0	65.5	50.6	
<b>Test Area 2C</b>																		
ZTS-MW119	Alluvium	26732634.25	832912.06	1547.46	1547.12	16.38	1530.74	Schedule 40 PVC	0.020	#3	8	37.5	4	10	25.5	25	15	
ZTS-MW140	Alluvium	26732631.52	832907.03	1547.30	1546.73	15.94	1530.79	Schedule 40 PVC	0.020	#3	6	30	2	10	26.0	25.5	15.5	
ZTS-MW141	Alluvium	26732633.15	832927.38	1547.65	1547.39	16.70	1530.69	Schedule 40 PVC	0.020	#3	6	30	2	10	25.0	24.5	14.5	
ZTS-MW142	Alluvium	26732648.69	832918.45	1547.42	1546.81	16.21	1530.60	Schedule 40 PVC	0.020	#3	6	27	2	10	26.5	26	16	
ZTS-MW181	Alluvium	26732641.70	832907.27	1547.62	1547.25	16.67	1530.58	Schedule 40 PVC	0.020	#3	6	27.5	2	10.0	27.5	27.0	17.3	
ZTS-MW182	Alluvium	26732637.76	832916.80	1548.07	1547.79	17.17												

**Table 1**  
**Well Construction Details**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well ID	Screened Lithology	Northing	Easting	Ground Surface Elevation	Top of Casing Elevation	Depth to Water <sup>1</sup>	Groundwater Elevation	Casing Material	Slot Size	Filter Pack Gradation	Nominal Borehole Diameter	Borehole Total Depth	Well Diameter	Nominal Screen Length	Well Total Depth	Bottom of Screen	Top of Screen
				feet amsl	feet amsl	ft bTOC	amsl		inches		inches	feet bgs	inches	feet	feet bgs	feet bgs	feet bgs
<b>Injection Wells</b>																	
ZTS-IW01	Alluvium	26732954.69	833038.19	1545.73	1545.62	NM	NM	Schedule 40 PVC	0.020	#3	6	40.0	2	15.0	36.0	35.5	20.8
ZTS-IW02	Alluvium	26732933.88	833046.37	1545.63	1545.70	NM	NM	Schedule 40 PVC	0.020	#3	6	37.5	2	15.0	35.5	35.0	20.3
ZTS-IW03	Alluvium	26732913.63	833053.06	1546.39	1546.35	NM	NM	Schedule 40 PVC	0.020	#3	6	40.0	2	15.0	36.0	35.5	20.8
ZTS-IW04	Alluvium	26732895.95	833061.35	1545.81	1545.64	NM	NM	Schedule 40 PVC	0.020	#3	6	38.0	2	15.0	36.0	35.5	20.8
ZTS-IW05	Alluvium	26732877.62	833068.66	1546.34	1546.32	NM	NM	Schedule 40 PVC	0.020	#3	6	37.5	2	15.0	36.0	35.5	20.8
ZTS-IW06	Alluvium	26732858.63	833075.96	1547.14	1546.96	NM	NM	Schedule 40 PVC	0.020	#3	6	35.0	2	15.0	35.0	34.5	19.8
ZTS-IW07	Alluvium	26732840.03	833083.70	1547.73	1547.48	NM	NM	Schedule 40 PVC	0.020	#3	6	30.0	2	5.0	27.5	27.0	22.3
ZTS-IW08	Alluvium	26732822.00	833091.44	1547.88	1547.75	NM	NM	Schedule 40 PVC	0.020	#3	6	31.0	2	5.0	27.5	27.0	22.3
ZTS-IW09	Alluvium	26732803.17	833098.78	1548.14	1548.30	NM	NM	Schedule 40 PVC	0.020	#3	6	27.0	2	5.0	26.5	26.0	21.3
ZTS-IW10	Alluvium	26732784.72	833106.32	1548.63	1548.48	NM	NM	Schedule 40 PVC	0.020	#3	6	25.0	2	5.0	25.0	24.5	19.8
ZTS-IW11	Alluvium	26732597.13	832941.47	1547.80	1547.86	NM	NM	Schedule 40 PVC	0.020	#3	6	25.0	2	5.0	23.5	23.0	18.3
ZTS-IW12	Alluvium	26732585.78	832951.00	1547.51	1547.54	NM	NM	Schedule 40 PVC	0.020	#3	6	26.0	2	5.0	25.0	24.5	19.8
ZTS-IW13	Alluvium	26732645.58	832916.08	1547.54	1547.64	NM	NM	Schedule 40 PVC	0.020	#3	6	30.0	2	10.0	29.5	29.0	19.3
ZTS-IW14	Alluvium	26732632.18	832923.75	1547.50	1547.55	NM	NM	Schedule 40 PVC	0.020	#3	6	30.0	2	10.0	27.3	26.8	17.1
ZTS-IW15	UMCf	26732551.24	832973.58	1547.33	1547.34	NM	NM	Schedule 40 PVC	0.010	#2/16	10	68.0	2	15.0	46.5	46.0	26.3
ZTS-IW16	UMCf	26732551.53	832973.34	1547.37	1547.44	NM	NM	Schedule 40 PVC	0.010	#2/16			2	20.0	67.5	67.0	52.3

## Notes

amsl - above mean sea level

bgs - below ground surface

bTOC - below top of casing

NM - not measured

PVC - polyvinyl chloride

UMCf - Upper Muddy Creek formation

Semi-Cons - Semi-Consolidated

1. Depth to water collected on May 16-17, 2023.

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	E314.0	E300.1	Anions by E300.0/SW9 065A	CALC													
									Perchlorate	Chlorate	Bromide	Chloride	Fluoride	Nitrate (as N)	Nitrite (as N)	Sulfate	Nitrogen								
									µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L								
<b>Test Area 1A</b>																									
<b>Pre-Construction Baseline Results</b>																									
ZTS-MW143	10/18/2022	N	BL02	1A	Upgradient	-50	Alluvium	23.0 - 33.0	4,300	45,000	<7,060	919,000	<1,280	16,800	<840	2,520,000	26,600								
ZTS-MW124	8/31/2022	N	BL01	1A	Upgradient	-8	Alluvium	24.0 - 34.0	3,730	36,200	----	----	----	16,500	----	2,440,000	----								
ZTS-MW124	8/31/2022	FD	BL01	1A	Upgradient	-8	Alluvium	24.0 - 34.0	3,690	36,900	----	----	----	16,300	----	2,460,000	----								
ZTS-MW124	10/18/2022	N	BL02	1A	Upgradient	-8	Alluvium	24.0 - 34.0	3,930	36,800	<7,060	872,000	<1,280	16,700	<840	2,450,000	17,900								
ZTS-MW124	10/18/2022	FD	BL02	1A	Upgradient	-8	Alluvium	24.0 - 34.0	3,970	37,200	<7,060	864,000	<1,280	16,600	<840	2,430,000	17,600								
ZTS-MW125	8/31/2022	N	BL01	1A	Upgradient	-8	UMCf	40.0 - 50.0	2,890	23,400	----	----	----	12,600	----	2,210,000	----								
ZTS-MW125	10/24/2022	N	BL02	1A	Upgradient	-8	UMCf	40.0 - 50.0	93	<2,400	<353 R	750,000	1,040	349	<42	1,210,000	<50								
ZTS-MW125	10/24/2022	FD	BL02	1A	Upgradient	-8	UMCf	40.0 - 50.0	----	----	----	----	----	----	----	----	----								
ZTS-MW144	10/18/2022	N	BL02	1A	Downgradient	35	Alluvium	24.0 - 34.0	5,590	41,300	<7,060	1,100,000	<1,280	16,100	<840	2,520,000	18,900								
<b>Post-Construction Performance Monitoring Results</b>																									
ZTS-MW143	5/26/2023	N	PM01	1A	Upgradient	-50	Alluvium	23.0 - 33.0	4,340	22,400	<7,060	982,000	<1,280	13,000 J-	<840 R	2,510,000	15,000								
ZTS-MW143	8/29/2023	N	PM02	1A	Upgradient	-50	Alluvium	23.0 - 33.0	4,000	26,600	<7,060	1,060,000	<1,280	17,400	<840	2,430,000	15,500								
ZTS-MW143	12/6/2023	N	PM03	1A	Upgradient	-50	Alluvium	23.0 - 33.0	6,090	27,700	4,050 J	1,030,000	<640	14,900	<420	2,480,000	12,200								
ZTS-MW143	2/21/2024	N	PM04	1A	Upgradient	-50	Alluvium	23.0 - 33.0	6,280	54,200	<3,530	1,010,000	885 J	15,500	2,270	2,600,000	12,900								
ZTS-MW124R	5/26/2023	N	PM01	1A	Upgradient	-8	Alluvium	24.5 - 34.0	4,460	16,600	<3,530	819,000	<640	13,100 J-	<420 R	2,280,000	17,100								
ZTS-MW124R	8/29/2023	N	PM02	1A	Upgradient	-8	Alluvium	24.5 - 34.0	3,980	20,500	<7,060	875,000	<1,280	16,600	<840	2,160,000	17,700								
ZTS-MW124R	12/5/2023	N	PM03	1A	Upgradient	-8	Alluvium	24.5 - 34.0	4,960	31,600	<3,530	1,000,000	<640	16,800	<420	2,340,000	12,700								
ZTS-MW124R	2/27/2024	N	PM04	1A	Upgradient	-8	Alluvium	24.5 - 34.0	5,120	52,200	<3,530	1,060,000	757 J	34,800	<420	2,280,000	34,800								
ZTS-MW125	5/25/2023	N	PM01	1A	Upgradient	-8	UMCf	40.0 - 50.0	173	698 J-	5,540 J	701,000	1,200 J	<480 R	<420 R	1,140,000	645								
ZTS-MW125	8/30/2023	N	PM02	1A	Upgradient	-8	UMCf	40.0 - 50.0	1,110	4,370 J	<3,530	758,000	1,090 J	7,750	<420	1,380,000	3,730								
ZTS-MW125	12/1/2023	N	PM03	1A	Upgradient	-8	UMCf	40.0 - 50.0	1,270	7,270	<3,530	705,000	<640	4,050 J	<420 R	1,250,000	3,740								
ZTS-MW125	2/26/2024	N	PM04	1A	Upgradient	-8	UMCf	40.0 - 50.0	604	12,000	<353	748,000	804	5,780	<42	1,170,000	6,020								
ZTS-MW153	5/26/2023	N	PM01	1A	Upgradient	-8	Alluvium	24.3 - 34.0	3,880	18,100	<3,530	863,000	<640	13,100 J-	<420 R	2,360,000	17,200								
ZTS-MW153	8/31/2023	N	PM02	1A	Upgradient	-8	Alluvium	24.3 - 34.0	4,030	21,400	<3,530	912,000	<640	22,000	<420	2,130,000	15,300								
ZTS-MW153	12/1/2023	N	PM03	1A	Upgradient	-8	Alluvium	24.3 - 34.0	5,540	29,100	<3,530	874,000	<640	14,400 J-	<420 R	1,860,000	14,700								
ZTS-MW153	2/27/2024	N	PM04	1A	Upgradient	-8	Alluvium	24.3 - 34.0	5,500	51,100	<3,530	1,020,000	940 J	23,900	<420	2,260,000	23,900								
ZTS-MW163	5/25/2023	N	PM01	1A	Upgradient	-8	Alluvium	24.3 - 34.0	3,320 J	19,200	<3,530	925,000	<640	16,600	<420	2,480,000	14,700								
ZTS-MW163	8/31/2023	N	PM02	1A	Upgradient	-8	Alluvium	24.3 - 34.0	4,010	23,400	<3,530	889,000	<640	21,300 J-	<420	2,070,000	15,100								
ZTS-MW163	12/1/2023	N	PM03	1A	Upgradient	-8	Alluvium	24.3 - 34.0	4,380	34,000	<3530 UJ	962,000	<640	16,000 J-	<420 R	2,410,000	14,700								
ZTS-MW163	2/27/2024	N	PM04	1A	Upgradient	-8	Alluvium	24.3 - 34.0	4,770	53,900	<3,530	1,020,000	903 J	26,000	<420	2,260,000	26,000								
ZTS-MW150	5/22/2023	N	PM01	1A	Center of Trench	0	Alluvium	24.3 - 34.0	2,580	315	<3,530	829,000	<640	1,110	<420	2,140,000	3,440								
ZTS-MW150	8/21/2023	N	PM02	1A	Center of Trench	0	Alluvium	24.3 - 34.0	1,200	<24	4,520 J	836,000	689 J	3,060 J+	<420	2,040,000	2,760								
ZTS-MW150	11/27/2023	N	PM03	1A	Center of Trench	0	Alluvium	24.3 - 34.0	1,760	26,000	<3,530	985,000	<640	2,270	<420	2,330,000	3,210								
ZTS-MW150	2/19/2																								

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	E314.0	E300.1	Anions by E300.0/SW9 065A	CALC						
									Perchlorate	Chlorate	Bromide	Chloride	Fluoride	Nitrate (as N)	Nitrite (as N)	Sulfate	Nitrogen	
									µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
ZTS-MW164	11/27/2023	N	PM03	1A	Center of Trench	0	Alluvium	22.3 - 32.0	1,700	31,500	<3,530	1,050,000	<640	4,480	<420	2,490,000	4,440	
ZTS-MW164	11/27/2023	FD	PM03	1A	Center of Trench	0	Alluvium	22.3 - 32.0	1,880	35,700	<3,530	1,020,000	<640	4,600	<420	2,410,000	3,610	
ZTS-MW164	2/20/2024	N	PM04	1A	Center of Trench	0	Alluvium	22.3 - 32.0	3,560	18,700	<3,530	1,020,000	<640	5,720 J	1,190 J-	2,280,000 J+	4,750	
ZTS-MW164	2/20/2024	FD	PM04	1A	Center of Trench	0	Alluvium	22.3 - 32.0	3,500	19,300	<3,530	994,000	<640	5,490 J	1,180 J-	2,150,000 J+	4,950	
ZTS-MW151	5/25/2023	N	PM01	1A	Downgradient	5	Alluvium	24.3 - 34.0	3,600	8,050	<3,530	958,000	<640	4,040	<420	2,490,000	4,060	
ZTS-MW151	8/21/2023	N	PM02	1A	Downgradient	5	Alluvium	24.3 - 34.0	4,230	9,630	8,700 J	897,000	<1,280	7,660 J+	<840	2,320,000	6,620	
ZTS-MW151	11/28/2023	N	PM03	1A	Downgradient	5	Alluvium	24.3 - 34.0	4,700	64,200	3,980 J	1,010,000	1,280 J	9,420	3,070	2,310,000	8,850	
ZTS-MW151	2/20/2024	N	PM04	1A	Downgradient	5	Alluvium	24.3 - 34.0	5,970	39,100	<3,530	1,000,000	<640	9,790 J-	2,280 J-	2,340,000 J+	10,900	
ZTS-MW155	5/24/2023	N	PM01	1A	Downgradient	5	Alluvium	20.3 - 35.0	3,690	3,260	<3,530	977,000	658	632 J	<420 UJ	2,480,000	3,080	
ZTS-MW155	5/24/2023	FD	PM01	1A	Downgradient	5	Alluvium	20.3 - 35.0	3,590	3,160	<3,530	982,000	644	636 J	<420 UJ	2,620,000	3,280	
ZTS-MW155	8/22/2023	N	PM02	1A	Downgradient	5	Alluvium	20.3 - 35.0	4,530	36,700	<3,530	1,030,000	<640	8,330	<420	2,300,000	7,550	
ZTS-MW155	8/22/2023	FD	PM02	1A	Downgradient	5	Alluvium	20.3 - 35.0	4,710	35,300	<3,530	1,040,000	<640	8,360	<420	2,310,000	7,750	
ZTS-MW155	11/28/2023	N	PM03	1A	Downgradient	5	Alluvium	20.3 - 35.0	5,570	11,100	3,990 J	949,000	1,280 J	6,140	2,280	2,050,000	5,910	
ZTS-MW155	11/28/2023	FD	PM03	1A	Downgradient	5	Alluvium	20.3 - 35.0	7,240	11,300	4,030 J	1,090,000	1,140 J	7,890	2,490	2,350,000	6,140	
ZTS-MW155	2/21/2024	N	PM04	1A	Downgradient	5	Alluvium	20.3 - 35.0	6,350	44,800	<3,530	1,060,000	858 J	11,200	2,870 J	2,380,000	9,200	
ZTS-MW155	2/21/2024	FD	PM04	1A	Downgradient	5	Alluvium	20.3 - 35.0	6,270	44,400	<3,530	1,050,000	915 J	11,100	1,700 J	2,340,000	9,200	
ZTS-MW156	5/24/2023	N	PM01	1A	Downgradient	5	UMCf	43.8 - 53.5	<0.3	<24 UJ	<3,530	756,000	1,000	<480 UJ	<420 UJ	1,150,000	<50	
ZTS-MW156	8/22/2023	N	PM02	1A	Downgradient	5	UMCf	43.8 - 53.5	94.4	249 J-	<3,530	792,000	<640	1,230	<420	1,190,000	<50	
ZTS-MW156	11/29/2023	N	PM03	1A	Downgradient	5	UMCf	43.8 - 53.5	34.4	<240	<353	782,000	816	<48	<42	1,390,000	706 J+	
ZTS-MW156	2/21/2024	N	PM04	1A	Downgradient	5	UMCf	43.8 - 53.5	273	11,500	<3,530	808,000	1,120 J	6,420 J+	<420	1,300,000	901 J+	
ZTS-MW165	5/31/2023	N	PM01	1A	Downgradient	5	Alluvium	22.3 - 32.0	3,900	6,340	<3,530	<3,790	<640	<480 R	<420 R	<5,940	5,930	
ZTS-MW165	8/25/2023	N	PM02	1A	Downgradient	5	Alluvium	22.3 - 32.0	4,580	57,400	4,450 J	973,000	827 J	12,000	<420	2,070,000	9,780	
ZTS-MW165	11/30/2023	N	PM03	1A	Downgradient	5	Alluvium	22.3 - 32.0	5,320	85,500	4,060 J	1,040,000	1,400 J	17,700	2,430	2,380,000	12,600	
ZTS-MW165	2/23/2024	N	PM04	1A	Downgradient	5	Alluvium	22.3 - 32.0	4,970	47,800	<3,530	998,000	1,040 J	24,400	5,950	2,310,000	30,300	
ZTS-MW152	5/25/2023	N	PM01	1A	Downgradient	15	Alluvium	23.3 - 33.0	3,980	7,050	<3,530	970,000	<640	4,020	<420	2,450,000	4,650	
ZTS-MW152	8/22/2023	N	PM02	1A	Downgradient	15	Alluvium	23.3 - 33.0	4,200	38,600	<3,530	992,000	<640	9,300	<420	2,300,000	8,400	
ZTS-MW152	11/28/2023	N	PM03	1A	Downgradient	15	Alluvium	23.3 - 33.0	5,700	17,200	3,990 J	1,090,000	1,160 J	15,400	2,350	2,360,000	8,450	
ZTS-MW152	2/20/2024	N	PM04	1A	Downgradient	15	Alluvium	23.3 - 33.0	5,080	40,500	8,060 J	1,010,000	829 J	14,500 J-	5,470 J-	2,160,000 J+	7,450	
ZTS-MW157	5/25/2023	N	PM01	1A	Downgradient	15	Alluvium	23.3 - 33.0	3,530	3,400	<3,530	1,040,000	<640	2,320	500 J	2,430,000	3,050	
ZTS-MW157	8/23/2023	N	PM02	1A	Downgradient	15	Alluvium	23.3 - 33.0	4,530	7,770	<3,530	993,000	<640	5,470	<420	1,960,000	5,770	
ZTS-MW157	11/29/2023	N	PM03	1A	Downgradient	15	Alluvium	23.3 - 33.0	3,420 J	51,700 J+	<3,530	1,030,000	<640	8,740	577 J	2,840,000	6,410	
ZTS-MW157	2/21/2024	N	PM04	1A	Downgradient	15	Alluvium	23.3 - 33.0	5,760	45,400	<3,530	1,070,000	843 J	12,300	2,280	2,430,000	10,100	
ZTS-MW162	5/25/2023	N	PM01	1A	Downgradient	15	Alluvium	23.3 - 33.0	5,160	6,700	<3,530	1,010,000	<640	2,350 J-	<420 R	2,520,000	5,140	
ZTS-MW162	8/18/2023	N	PM02	1A	Downgradient	15	Alluvium	23.3 - 33.0	4,580	12,400	<3,530	963,000	<640	18,600 J-	<420 UJ	2,380,000	8,250	
ZTS-MW162	11/30/2023	N	PM03</td															

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	E314.0	E300.1	Anions by E300.0/SW9 065A	CALC						
									Perchlorate	Chlorate	Bromide	Chloride	Fluoride	Nitrate (as N)	Nitrite (as N)	Sulfate	Nitrogen	
									µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
ZTS-MW144	2/23/2024	N	PM04	1A	Downgradient	35	Alluvium	24.0 - 34.0	5,310	46,400	<3530 UJ	1,030,000	1,100 J	20,400 J-	<420	2,330,000	24,200	
ZTS-MW158	5/24/2023	N	PM01	1A	Downgradient	50	Alluvium	23.3 - 33.0	4,450	2,110	<3,530	1,010,000	684 J	1,940 J-	<420 UJ	2,460,000	4,680	
ZTS-MW158	8/25/2023	N	PM02	1A	Downgradient	50	Alluvium	23.3 - 33.0	3,340	38,600	4,510 J	984,000	783 J	4,490	<420	2,070,000	7,350	
ZTS-MW158	12/1/2023	N	PM03	1A	Downgradient	50	Alluvium	23.3 - 33.0	4,080	15,800	<3,530	984,000	<640	8,610 J-	424 J	2,410,000	7,230	
ZTS-MW158	2/27/2024	N	PM04	1A	Downgradient	50	Alluvium	23.3 - 33.0	5,340	40,000	<3,530	1,080,000	862 J	23,800	<420	2,420,000	24,600	
ZTS-MW159	5/24/2023	N	PM01	1A	Downgradient	50	UMCf	38.8 - 48.5	391	631	<353	654,000	868	222	42.6 J	1,130,000	730	
ZTS-MW159	8/25/2023	N	PM02	1A	Downgradient	50	UMCf	38.8 - 48.5	4,290	47,800	4,450 J	900,000	825 J	11,000	<420	1,870,000	9,080	
ZTS-MW159	12/1/2023	N	PM03	1A	Downgradient	50	UMCf	38.8 - 48.5	4,230	17,500	<3,530	965,000	<640	10,600 J-	<420 R	2,140,000	8,470	
ZTS-MW159	2/27/2024	N	PM04	1A	Downgradient	50	UMCf	38.8 - 48.5	4,490	40,600	3,650 J	965,000	818 J	13,400	968 J	2,220,000	9,900	
ZTS-MW160	5/24/2023	N	PM01	1A	Downgradient	100	Alluvium	23.3 - 33.0	4,560	9,780	<3,530	924,000	<640	6,110	<420	2,390,000	8,190	
ZTS-MW160	8/28/2023	N	PM02	1A	Downgradient	100	Alluvium	23.3 - 33.0	4,810	16,100	4,460 J	937,000	809 J	12,200	<420	2,300,000	10,400	
ZTS-MW160	12/5/2023	N	PM03	1A	Downgradient	100	Alluvium	23.3 - 33.0	5,430	26,100	4,100 J	1,060,000	<640	14,500	<420	2,480,000	10,500	
ZTS-MW160	2/27/2024	N	PM04	1A	Downgradient	100	Alluvium	23.3 - 33.0	4,830	52,300	3,720 J	1,010,000	966 J	16,300 J-	1,240	2,510,000	12,900	
ZTS-MW161	5/26/2023	N	PM01	1A	Downgradient	150	Alluvium	24.3 - 34.0	3,890	6,370	<3,530	915,000	<640	2,490 J-	<420 R	2,550,000	4,640	
ZTS-MW161	8/25/2023	N	PM02	1A	Downgradient	150	Alluvium	24.3 - 34.0	4,310	49,600	<3,530	854,000	<640	9,060 J-	<420 R	1,900,000	9,690	
ZTS-MW161	8/25/2023	FD	PM02	1A	Downgradient	150	Alluvium	24.3 - 34.0	4,130	47,800	<3,530	930,000	<640	9,760 J-	<420 R	2,100,000	10,200	
ZTS-MW161	12/1/2023	N	PM03	1A	Downgradient	150	Alluvium	24.3 - 34.0	4,220	19,300 J	<3,530	1,030,000	<640	10,400 J-	<420 R	2,570,000	8,700	
ZTS-MW161	12/1/2023	FD	PM03	1A	Downgradient	150	Alluvium	24.3 - 34.0	4,290	64,200 J	<3,530	1,050,000	<640	10,500 J-	<420 R	2,580,000	8,780	
ZTS-MW161	2/23/2024	N	PM04	1A	Downgradient	150	Alluvium	24.3 - 34.0	5,410	43,900	<3,530	1,010,000	1,030 J	20,500	<420	2,320,000	20,500	
ZTS-MW161	2/23/2024	FD	PM04	1A	Downgradient	150	Alluvium	24.3 - 34.0	5,390	39,300	<3,530	1,050,000	1,080 J	21,400	<420	2,470,000	21,400	
<b>Between Test Area 1A and Test Area 1B</b>																		
<b>Pre-Construction Baseline Results</b>																		
ZTS-MW145	10/24/2022	N	BL02	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	1,630	14,900 J	<3,530	888,000	<640	4,260	<420	1,860,000	3,730	
ZTS-MW146	10/24/2022	N	BL02	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	2,820	20,600	<3,530	1,080,000	<640	6,590	<420	2,480,000	5,500	
<b>Post-Construction Performance Monitoring Results</b>																		
ZTS-MW145	5/22/2023	N	PM01	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	18 J-	<24 UJ	<353	117,000	630	540	<42	238,000	695	
ZTS-MW145	8/30/2023	N	PM02	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	58.1	189 J-	<3,530	787,000	906 J	<480	<420	1,500,000	156	
ZTS-MW145	12/6/2023	N	PM03	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	<0.3	<120	3,560 J	789,000	<640	2,070 J+	<420	1,470,000	<50	
ZTS-MW145	2/21/2024	N	PM04	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	196 J-	9,450	5,980 J	676,000	1,080 J	6,310 J	<420	1,290,000	435 J+	
ZTS-MW146	5/26/2023	N	PM01	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	1,250	2,490 J-	<7,060	886,000	<1,280	1,710 J	<840 R	2,040,000	2,780	
ZTS-MW146	8/25/2023	N	PM02	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	<0.3	<2,400	<3,530	1,170,000	<640	<480 R	<420 R	2,210,000	436 J+	
ZTS-MW146	11/30/2023	N	PM03	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	<0.3	<240	3,950 J	1,070,000	1,610 J-	16,500 J-	<420	1,950,000	163	
ZTS-MW146	2/23/2024	N	PM04	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	<0.3	<240	<3,530	1,040,000	1,240 J	<480	<420	2,070,000	243 J	
<b>Test Area 1B</b>																		
<b>Pre-Construction Baseline Results</b>																		

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	E314.0	E300.1	Anions by E300.0/SW9 065A	CALC						
									Perchlorate	Chlorate	Bromide	Chloride	Fluoride	Nitrate (as N)	Nitrite (as N)	Sulfate	Nitrogen	
									µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
LWWPS-MW107C	10/24/2022	N	BL02	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	<30	<24,000	<35,300	14,900,000	<6,400	<4,800	<4,200	42,000,000	638	
<b>Post-Construction Performance Monitoring Results</b>																		
ZTS-MW147	5/26/2023	N	PM01	1B	Upgradient	-50	Alluvium	19.5 - 29.5	7,000	49,900	<3,530	1,070,000	<640	16,500 J-	<420 R	2,570,000	28,000	
ZTS-MW147	8/30/2023	N	PM02	1B	Upgradient	-50	Alluvium	19.5 - 29.5	6,690	55,000	<3,530	1,100,000	735 J	24,900	<420	2,540,000	18,600	
ZTS-MW147	12/1/2023	N	PM03	1B	Upgradient	-50	Alluvium	19.5 - 29.5	5,180	70,400	<3,530	1,080,000	<640	21,500 J-	<420 R	2,600,000	19,300	
ZTS-MW147	2/23/2024	N	PM04	1B	Upgradient	-50	Alluvium	19.5 - 29.5	6,040	84,400	<3,530	1,030,000	924 J	30,100	<420	2,420,000	33,300	
ZTS-MW126	5/25/2023	N	PM01	1B	Upgradient	-8	Alluvium	20.0 - 30.0	5,920	17,900	<3,530	980,000	<640	13,900	<420	2,640,000	12,000	
ZTS-MW126	8/25/2023	N	PM02	1B	Upgradient	-8	Alluvium	20.0 - 30.0	5,830	58,300	4,480 J	974,000	938 J	14,500	<420	2,950,000	12,500	
ZTS-MW126	11/30/2023	N	PM03	1B	Upgradient	-8	Alluvium	20.0 - 30.0	5,420	105,000	<3,530	1,030,000	<640	16,800	<420	2,620,000	14,200	
ZTS-MW126	2/23/2024	N	PM04	1B	Upgradient	-8	Alluvium	20.0 - 30.0	6,080	76,700	<3,530	1,040,000	753 J	19,300 J-	2,320 J-	2,610,000	----	
ZTS-MW127R	5/25/2023	N	PM01	1B	Upgradient	-8	Alluvium	18.5 - 23.0	5,880	51,100	<3,530	1,110,000	<640	20,100	<420	2,610,000	17,900	
ZTS-MW127R	8/28/2023	N	PM02	1B	Upgradient	-8	Alluvium	18.5 - 23.0	6,910	57,800	4,560 J	1,040,000	927 J	19,800	<420	2,450,000	18,400	
ZTS-MW127R	11/30/2023	N	PM03	1B	Upgradient	-8	Alluvium	18.5 - 23.0	5,760	119,000	3,620 J	1,060,000	<640	21,400	<420	2,510,000	22,200	
ZTS-MW127R	2/23/2024	N	PM04	1B	Upgradient	-8	Alluvium	18.5 - 23.0	6,130	88,700	<3,530	1,100,000	974 J	21,500 J-	778 J	2,570,000	22,200	
ZTS-MW169	5/24/2023	N	PM01	1B	Upgradient	-8	Alluvium	17.1 - 27.0	6,270	54,300	<3,530	1,100,000	<640	16,500	<420	2,490,000	18,100	
ZTS-MW169	8/28/2023	N	PM02	1B	Upgradient	-8	Alluvium	17.1 - 27.0	7,360	59,300	4,540 J	1,040,000	897 J	19,600	<420	2,410,000	18,600	
ZTS-MW169	11/30/2023	N	PM03	1B	Upgradient	-8	Alluvium	17.1 - 27.0	5,960	122,000	3,600 J	1,050,000	<640	21,400	<420	2,510,000	18,400	
ZTS-MW169	2/23/2024	N	PM04	1B	Upgradient	-8	Alluvium	17.1 - 27.0	5,660	81,700	<3,530	1,030,000	717 J	20,800 J-	2,320 J-	2,830,000	23,100	
ZTS-MW170	5/24/2023	N	PM01	1B	Upgradient	-8	UMCf	31.1 - 41.0	4,570	17,500	<3,530	830,000	775 J	7,310 J-	<420 UJ	1,940,000	8,750	
ZTS-MW170	8/29/2023	N	PM02	1B	Upgradient	-8	UMCf	31.1 - 41.0	5,500	24,400	<7,060	947,000	<1,280	12,700	<840	2,090,000	15,400	
ZTS-MW170	11/30/2023	N	PM03	1B	Upgradient	-8	UMCf	31.1 - 41.0	4,690	79,300	<3,530	914,000	<640	13,200	<420	2,120,000	11,000	
ZTS-MW170	2/23/2024	N	PM04	1B	Upgradient	-8	UMCf	31.1 - 41.0	4,670	54,400	<3,530	935,000	1,120 J	13,800 J-	632 J	2,020,000	14,500	
ZTS-MW166	5/23/2023	N	PM01	1B	Center of Trench	0	Alluvium	19.8 - 29.5	5,850	<240	<3,530	1,130,000	662 J	<480	<420	2,310,000	2,680	
ZTS-MW166	8/21/2023	N	PM02	1B	Center of Trench	0	Alluvium	19.8 - 29.5	3,090	3,850 J	4,510 J	963,000	765 J	5,530 J+	1,180	2,150,000	5,110	
ZTS-MW166	11/28/2023	N	PM03	1B	Center of Trench	0	Alluvium	19.8 - 29.5	9,260	<120	4,270 J	1,130,000	1,030 J	19,500	<420	2,450,000	7,900	
ZTS-MW166	2/20/2024	N	PM04	1B	Center of Trench	0	Alluvium	19.8 - 29.5	5,880	15,800	<3,530	1,050,000	<640	5,100 J	<420 UJ	2,440,000 J+	12,300	
ZTS-MW171	5/22/2023	N	PM01	1B	Center of Trench	0	Alluvium	19.3 - 29.0	6,260	<120	<3,530	1,130,000	<640	10,200	<420	2,480,000	14,700	
ZTS-MW171	8/21/2023	N	PM02	1B	Center of Trench	0	Alluvium	19.3 - 29.0	6,080	<2,400	8,920 J	1,090,000	<1,280	7,300 J+	<840	2,480,000	6,950	
ZTS-MW171	11/27/2023	N	PM03	1B	Center of Trench	0	Alluvium	19.3 - 29.0	5,370	34,300	<3,530	1,100,000	<640	4,430	<420	2,560,000	5,120	
ZTS-MW171	2/19/2024	N	PM04	1B	Center of Trench	0	Alluvium	19.3 - 29.0	5,290	13,600	5,840 J	1,120,000	861 J	19,900	<420	2,420,000	1,760	
ZTS-MW178	5/25/2023	N	PM01	1B	Center of Trench	0	Alluvium	17.8 - 27.5	5,500	<480	<3,530	1,140,000	<640	1,200	<420	2,550,000	14,500	
ZTS-MW178	8/21/2023	N	PM02	1B	Center of Trench	0	Alluvium	17.8 - 27.5	4,870	<2,400	8,960 J	1,100,000	<1,280	<960	<840	2,510,000	6,260	
ZTS-MW178	11/28/2023	N	PM03	1B	Center of Trench	0	Alluvium	17.8 - 27.5	5,450	<240	<3,530	1,100,000	<640	2,680 J+	<420	2,450,000	9,640	
ZTS-MW178	2/20/2024	N	PM04	1B	Center of Trench	0	Alluvium	17.8 - 27.5	5,140	<120	<3,530	1,100,000	<640	<480 UJ</				

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	E314.0	E300.1	Anions by E300.0/SW9 065A	CALC					
									Perchlorate	Chlorate	Bromide	Chloride	Fluoride	Nitrate (as N)	Nitrite (as N)	Sulfate	Nitrogen
									µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
ZTS-MW172	2/22/2024	N	PM04	1B	Downgradient	5	Alluvium	17.3 - 27.0	4,940	<240	<3,530	1,070,000	965 J	4,480	3,170	2,240,000	7,870
ZTS-MW172	2/22/2024	FD	PM04	1B	Downgradient	5	Alluvium	17.3 - 27.0	4,900	<240	<3,530	1,070,000	817 J	4,730	3,520	2,390,000	7,650
ZTS-MW173	5/25/2023	N	PM01	1B	Downgradient	5	UMCf	33.3 - 43.0	1,230	2,650	<3,530	874,000	844 J	2,440	686 J	1,830,000	1,750
ZTS-MW173	8/22/2023	N	PM02	1B	Downgradient	5	UMCf	33.3 - 43.0	1,280	1,450 J-	4,450 J	728,000	1,010 J	2,710	<420	1,550,000	2,000
ZTS-MW173	11/29/2023	N	PM03	1B	Downgradient	5	UMCf	33.3 - 43.0	86.6	<240	4,850 J	859,000	1,370 J	12,400	3,560	1,800,000	729 J+
ZTS-MW173	2/21/2024	N	PM04	1B	Downgradient	5	UMCf	33.3 - 43.0	3,300	19,200	<3,530	920,000	954 J	13,200	<420	1,980,000	3,450
ZTS-MW179	5/25/2023	N	PM01	1B	Downgradient	5	Alluvium	18.3 - 23.0	4,760	<480	<3,530	1,120,000	<640	1,970	<420	2,460,000	17,700
ZTS-MW179	8/23/2023	N	PM02	1B	Downgradient	5	Alluvium	18.3 - 23.0	6,510	<48 UJ	<3,530	1,100,000	<640	3,330	<420	2,450,000	16,900
ZTS-MW179	11/30/2023	N	PM03	1B	Downgradient	5	Alluvium	18.3 - 23.0	6,040	<240	4,260 J	1,010,000	961 J	13,300	2,040	2,030,000	16,000
ZTS-MW179	2/22/2024	N	PM04	1B	Downgradient	5	Alluvium	18.3 - 23.0	5,550	<480	<3,530	1,090,000	2,060	9,000	1,660	2,180,000	13,900
ZTS-MW168	5/24/2023	N	PM01	1B	Downgradient	15	Alluvium	20.3 - 30.0	5,810	<480	<3,530	1,130,000	<640	5,940	1,350	2,590,000	11,200
ZTS-MW168	8/22/2023	N	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	5.98	95.5 J	<3,530	1,120,000	<640	7,050	<420	2,460,000	11,000
ZTS-MW168	10/11/2023	N	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	7,450	<48	----	----	----	----	----	----	----
ZTS-MW168	10/11/2023	FS	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	5,800	----	----	----	----	----	----	----	----
ZTS-MW168	10/11/2023	FD	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	5,800	----	----	----	----	----	----	----	----
ZTS-MW168	11/29/2023	N	PM03	1B	Downgradient	15	Alluvium	20.3 - 30.0	5,340	<240	<3,530	1,120,000	<640	6,780 J+	487 J	2,620,000	9,100
ZTS-MW168	2/21/2024	N	PM04	1B	Downgradient	15	Alluvium	20.3 - 30.0	4,800	<480	<3,530	1,080,000	1,800 J+	6,540 J+	2,170	2,340,000	12,900
ZTS-MW174	5/24/2023	N	PM01	1B	Downgradient	15	Alluvium	19.8 - 29.5	5,950	<480	<3,530	1,130,000	656 J	5,350 J-	4,510 J-	2,540,000	12,500
ZTS-MW174	5/26/2023	N	PM01	1B	Downgradient	15	Alluvium	19.8 - 29.5	----	----	----	----	----	----	----	----	----
ZTS-MW174	8/22/2023	N	PM02	1B	Downgradient	15	Alluvium	19.8 - 29.5	5.72	<48 UJ	4,670 J	1,070,000	739 J	5,990	<420	2,330,000	11,600
ZTS-MW174	10/11/2023	N	PM02	1B	Downgradient	15	Alluvium	19.8 - 29.5	6,680	<48	----	----	----	----	----	----	----
ZTS-MW174	10/11/2023	FS	PM02	1B	Downgradient	15	Alluvium	19.8 - 29.5	5,600	----	----	----	----	----	----	----	----
ZTS-MW174	10/11/2023	FD	PM02	1B	Downgradient	15	Alluvium	19.8 - 29.5	6,240	<48	----	----	----	----	----	----	----
ZTS-MW174	11/29/2023	N	PM03	1B	Downgradient	15	Alluvium	19.8 - 29.5	5,060	<240	<3,530	1,100,000	<640	<480	<420	2,630,000	6,550
ZTS-MW174	2/21/2024	N	PM04	1B	Downgradient	15	Alluvium	19.8 - 29.5	4,070	<480	<3,530	1,080,000	947 J	5,510 J+	2,960	2,300,000	9,290
ZTS-MW177	5/25/2023	N	PM01	1B	Downgradient	15	Alluvium	20.3 - 30.0	5,340	<480	4,450 J	1,130,000	<640	749 J	451 J	2,200,000	6,130
ZTS-MW177	8/23/2023	N	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	6,000	<48 UJ	4,700 J	1,110,000	658 J	3,620	<420	2,450,000	7,840
ZTS-MW177	11/29/2023	N	PM03	1B	Downgradient	15	Alluvium	20.3 - 30.0	3,850 J	<240	<3,530	1,160,000	<640	<480	<420	2,740,000	7,360
ZTS-MW177	2/21/2024	N	PM04	1B	Downgradient	15	Alluvium	20.3 - 30.0	4,310	<480	<3,530	1,100,000	1,010 J	4,760 J+	2,820	2,340,000	10,300
ZTS-MW180	5/24/2023	N	PM01	1B	Downgradient	25	Alluvium	17.8 - 22.5	5,990	54,100	<3,530	1,110,000	733 J	20,600	<420	2,550,000	18,500 J
ZTS-MW180	5/24/2023	FD	PM01	1B	Downgradient	25	Alluvium	17.8 - 22.5	6,230	54,300	<3,530	1,080,000	725 J	20,000	<420	2,470,000	12,300 J
ZTS-MW180	8/24/2023	N	PM02	1B	Downgradient	25	Alluvium	17.8 - 22.5	7,460	93,200	<3,530	1,070,000	<640	20,500	<420	2,310,000	18,600
ZTS-MW180	8/24/2023	FD	PM02	1B	Downgradient	25	Alluvium	17.8 - 22.5	6,880	89,600	<3,530	1,050,000	<640	20,200	<420	2,240,000	19,100
ZTS-MW180	11/30/2023	N	PM03	1B	Downgradient	25	Alluvium	17.8 - 22.5	5,810	59,700	4,130 J	1,100,000	1,160 J	23,000	<420	2,410,000	16,200
ZTS-MW180	11/30/2023	FD	PM03	1B	Downgradient	25	Alluvium	17.8 - 22.5	5,610	62,900	4,120 J	1,060,000	1,160 J	22,000	<420	2,170,000	16,100
ZTS-MW180	2/22/2024	N	PM04	1B	Downgradient	25	Alluvium	17.8 - 22.5	5,230	76,300	<3,530	1,140,000	843 J	17,700	2,110	2,220,000	15,800
ZTS-MW180	2/22/2024	FD	PM04</														

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	E314.0	E300.1	Anions by E300.0/SW9 065A	CALC						
									Perchlorate	Chlorate	Bromide	Chloride	Fluoride	Nitrate (as N)	Nitrite (as N)	Sulfate	Nitrogen	
									µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
LWPS-MW107A	11/30/2023	N	PM03	1B	Downgradient	50	Alluvium	24.8 - 34.5	4,580	<240	4,240 J	957,000	1,160 J	17,800	1,990	2,020,000	8,840	
LWPS-MW107A	2/22/2024	N	PM04	1B	Downgradient	50	Alluvium	24.8 - 34.5	4,070	12,100	<3,530	939,000	<640	<480	<420	2,070,000	9,370	
LWPS-MW107B	5/23/2023	N	PM01	1B	Downgradient	50	UMCf	46.0 - 65.8	<0.3	<480	<3,530	1,140,000	708 J	<480	<420	2,520,000	423	
LWPS-MW107B	8/24/2023	N	PM02	1B	Downgradient	50	UMCf	46.0 - 65.8	11.3	86.6 J	<3,530	671,000	<640	3,790	<420	1,620,000	1,150	
LWPS-MW107B	12/1/2023	N	PM03	1B	Downgradient	50	UMCf	46.0 - 65.8	8.28	<120	<3,530	270,000	<640	<480 R	<420 R	818,000	1,100	
LWPS-MW107B	2/23/2024	N	PM04	1B	Downgradient	50	UMCf	46.0 - 65.8	<0.3	<240	<3,530	1,140,000	1,080 J	<480	<420	2,660,000	420 J+	
LWPS-MW107C	5/23/2023	N	PM01	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	<0.3	5,320	<35,300	13,000,000	<6,400	<4,800	<4,200	33,800,000	<50	
LWPS-MW107C	8/24/2023	N	PM02	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	<0.3	<120 UJ	40,600	9,600,000	<640	<480	<420	31,500,000	<50	
LWPS-MW107C	12/1/2023	N	PM03	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	<0.3	<2,400	<3,530	13,100,000	<640	<480 R	<420 R	38,500,000	4,840	
LWPS-MW107C	2/23/2024	N	PM04	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	<0.3	<1,200	<3,530	13,700,000	<640	115,000	<420	32,600,000	115,000	
ZTS-MW175	5/26/2023	N	PM01	1B	Downgradient	100	Alluvium	19.8 - 29.5	5,930	1,790	<3,530	1,060,000	<640	6,300 J-	<420 R	2,530,000	8,920	
ZTS-MW175	8/25/2023	N	PM02	1B	Downgradient	100	Alluvium	19.8 - 29.5	6,260	<2,400	<3,530	1,050,000	<640	3,150 J-	<420 R	2,030,000	4,230	
ZTS-MW175	11/30/2023	N	PM03	1B	Downgradient	100	Alluvium	19.8 - 29.5	5,540	<240	4,200 J	943,000	1,240 J	13,700	1,970	1,930,000	4,550	
ZTS-MW175	2/28/2024	N	PM04	1B	Downgradient	100	Alluvium	19.8 - 29.5	3,910	<240	<3,530	1,100,000	999 J	36,300	<420	2,380,000	5,250	
ZTS-MW176	5/26/2023	N	PM01	1B	Downgradient	150	Alluvium	19.8 - 29.5	6,170	1,920	<3,530	1,090,000	<640	5,170 J-	<420 R	2,590,000	6,720	
ZTS-MW176	8/25/2023	N	PM02	1B	Downgradient	150	Alluvium	19.8 - 29.5	6,750	<2,400	4,650 J	1,120,000	999 J	5,520	<420	2,580,000	4,630	
ZTS-MW176	12/5/2023	N	PM03	1B	Downgradient	150	Alluvium	19.8 - 29.5	5,710	1,100	3,630 J	1,120,000	690 J	4,230	<420	2,530,000	4,690	
ZTS-MW176	2/27/2024	N	PM04	1B	Downgradient	150	Alluvium	19.8 - 29.5	4,780	26,000	3,580 J	1,070,000	843 J	7,330 J-	1,390 J-	2,340,000	6,950	
<b>Test Area 2A</b>																		
<b>Pre-Construction Baseline Results</b>																		
ZTS-MW137	10/20/2022	N	BL02	2A	Upgradient	-9	Alluvium	14.0 - 24.0	6,620	95,200	<353	1,160,000	579	18,200	101	2,720,000	18,900	
ZTS-MW118	9/1/2022	N	BL01	2A	Upgradient	-3	Alluvium	13.5 - 23.5	7,160	89,900	---	---	---	19,400	---	2,640,000	---	
ZTS-MW118	10/21/2022	N	BL02	2A	Upgradient	-3	Alluvium	13.5 - 23.5	6,710	86,600	<7,060	1,200,000	<1,280	19,200 J-	<840	2,620,000	18,900	
ZTS-MW138	10/20/2022	N	BL02	2A	Downgradient	5	Alluvium	14.0 - 24.0	6,860	85,100	<353	1,150,000	535	18,100	114	2,640,000	18,800	
ZTS-MW139	10/21/2022	N	BL02	2A	Downgradient	5	Alluvium	13.0 - 23.0	6,970	94,900	<7,060	1,170,000	<1,280	18,700	<840	2,590,000	18,600	
LWPS-MW102A	10/21/2022	N	BL02	NA	Downgradient	30	UMCf	47.0 - 66.6	3,700	35,400	<3,530	2,320,000	<640	6,230	<420	5,630,000	4,980	
LWPS-MW102B	10/21/2022	N	BL02	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	<30	<24,000	<7,060	12,000,000	<1,280	<960	<840	34,800,000	24,700	
ZTS-MW113	10/25/2022	N	BL02	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	6,830	79,600	<3,530	1,180,000	<640	18,500	<420	2,700,000	18,100	
<b>Post-Construction Performance Monitoring Results</b>																		
ZTS-MW137	5/31/2023	N	PM01	2A	Upgradient	-9	Alluvium	14.0 - 24.0	6,140	50,900	<3,530	1,070,000	<640	16,700 J-	<420 R	2,520,000	18,900	
ZTS-MW137	8/24/2023	N	PM02	2A	Upgradient	-9	Alluvium	14.0 - 24.0	6,590	86,300	<3,530	1,040,000	<640	21,900	<420	2,100,000	18,200	
ZTS-MW137	12/1/2023	N	PM03	2A	Upgradient	-9	Alluvium	14.0 - 24.0	6,000	68,000	<3,530	938,000	<640	19,000 J-	<420 R	2,170,000	19,800	
ZTS-MW137	2/23/2024	N	PM04	2A	Upgradient	-9	Alluvium	14.0 - 24.0	5,840	81,500	<3,530	1,040,000	1,070 J	31,100	<420	2,350,000	31,100	
ZTS-MW118	5/31/2023	N	PM01	2A	Upgradient	-3	Alluvium	13.5 - 23.5	6,620	53,800	<3,530	1,110,000	<640	16,500 J-	<420 R	2,480,000	18,800	
ZTS-MW118	5/31																	

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Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	E314.0	E300.1	Anions by E300.0/SW9 065A	CALC						
									Perchlorate	Chlorate	Bromide	Chloride	Fluoride	Nitrate (as N)	Nitrite (as N)	Sulfate	Nitrogen	
									µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
ZTS-MW190	2/22/2024	N	PM04	2A	Upgradient	-3	Alluvium	14.3 - 24.0	5,490	83,800	<3,530	962,000	<640	30,900	<420	2,200,000	19,400	
ZTS-MW196	5/30/2023	N	PM01	2A	Upgradient	-3	Alluvium	13.8 - 23.5	6,090	51,000	<3,530	1,070,000	<640	16,700 J-	<420 R	2,460,000	19,400	
ZTS-MW196	8/25/2023	N	PM02	2A	Upgradient	-3	Alluvium	13.8 - 23.5	7,590	96,100	<3,530	1,010,000	<640	20,100	<420 R	2,350,000	19,200	
ZTS-MW196	11/30/2023	N	PM03	2A	Upgradient	-3	Alluvium	13.8 - 23.5	5,580	123,000	3,650 J	1,040,000	<640	21,800	<420	2,470,000	19,400	
ZTS-MW196	2/26/2024	N	PM04	2A	Upgradient	-3	Alluvium	13.8 - 23.5	5,530	82,900	<3,530	994,000	848 J	28,700	<420	2,230,000	28,700	
ZTS-MW202	5/30/2023	N	PM01	2A	Upgradient	-3	UMCf	28.8 - 38.5	5,560	42,600	<3,530	995,000	727 J	12,800	<420	2,200,000	16,200	
ZTS-MW202	8/28/2023	N	PM02	2A	Upgradient	-3	UMCf	28.8 - 38.5	5,880	82,900	4,540 J	958,000	858 J	18,000	<420	2,210,000	16,700	
ZTS-MW202	12/1/2023	N	PM03	2A	Upgradient	-3	UMCf	28.8 - 38.5	91.1 J	34,000	<3,530	869,000	<640	13,600 J-	<420 R	1,950,000	13,200	
ZTS-MW202	2/27/2024	N	PM04	2A	Upgradient	-3	UMCf	28.8 - 38.5	4,170	49,600	4,850 J	848,000	1,100 J	18,700	<420	1,920,000	11,100	
ZTS-MW192	5/22/2023	N	PM01	2A	Center of Array	0	Alluvium	14.3 - 24.0	6,540	86,100	<3,530	1,090,000	<640	18,300	<420	2,380,000	16,800	
ZTS-MW192	8/21/2023	N	PM02	2A	Center of Array	0	Alluvium	14.3 - 24.0	5,920	90,800	8,820 J	1,050,000	<1,280	20,500	<840	2,480,000	19,200	
ZTS-MW192	11/28/2023	N	PM03	2A	Center of Array	0	Alluvium	14.3 - 24.0	5,980	105,000	4,160 J	1,070,000	1,310 J	21,300	1,970	2,130,000	20,200	
ZTS-MW192	2/20/2024	N	PM04	2A	Center of Array	0	Alluvium	14.3 - 24.0	5,570	92,600	5,760 J	1,010,000	910 J	30,300 J-	<420 UJ	2,250,000 J+	19,800	
ZTS-MW191	5/26/2023	N	PM01	2A	Downgradient	1	Alluvium	14.8 - 24.5	5,120	10,300	<3,530	1,140,000	<640	3,070 J-	<420 R	2,520,000	9,260	
ZTS-MW191	8/22/2023	N	PM02	2A	Downgradient	1	Alluvium	14.8 - 24.5	4,310	10,300	<3,530	1,110,000	<640	5,630	<420	2,340,000	9,750	
ZTS-MW191	11/29/2023	N	PM03	2A	Downgradient	1	Alluvium	14.8 - 24.5	4,520	64,300	<3,530	1,120,000	<640	8,100	<420	2,590,000	12,100	
ZTS-MW191	2/21/2024	N	PM04	2A	Downgradient	1	Alluvium	14.8 - 24.5	4,730	40,100	<3,530	1,060,000	1,610 J+	10,300	2,480	2,230,000	10,300	
ZTS-MW195	5/26/2023	N	PM01	2A	Downgradient	1	Alluvium	14.3 - 24.0	6,430	47,500	<3,530	1,100,000	<640	16,800 J-	<420 R	2,560,000	17,800	
ZTS-MW195	8/21/2023	N	PM02	2A	Downgradient	1	Alluvium	14.3 - 24.0	5,930	49,600	8,850 J	1,080,000	<1,280	18,500 J+	<840	2,490,000	17,600	
ZTS-MW195	11/29/2023	N	PM03	2A	Downgradient	1	Alluvium	14.3 - 24.0	5,620	117,000	5,020 J	1,100,000	1,100 J	22,900	<420	2,060,000	20,800	
ZTS-MW195	2/21/2024	N	PM04	2A	Downgradient	1	Alluvium	14.3 - 24.0	5,780	79,600	5,580 J	1,060,000	839 J	30,800	<420	2,440,000	19,000	
ZTS-MW138	5/24/2023	N	PM01	2A	Downgradient	5	Alluvium	14.0 - 24.0	6,520	53,200	<3,530	1,020,000	705 J	17,300 J-	<420 UJ	2,460,000	19,100	
ZTS-MW138	8/21/2023	N	PM02	2A	Downgradient	5	Alluvium	14.0 - 24.0	5,960	53,600	8,810 J	1,040,000	<1,280	21,200	<840	2,480,000	19,700	
ZTS-MW138	11/28/2023	N	PM03	2A	Downgradient	5	Alluvium	14.0 - 24.0	7,390	99,700	4,180 J	1,160,000	1,300 J	23,700	<420	2,350,000	20,600	
ZTS-MW138	2/21/2024	N	PM04	2A	Downgradient	5	Alluvium	14.0 - 24.0	5,870	83,800	5,600 J	1,060,000	833 J	31,300	<420	2,430,000	20,200	
ZTS-MW139	5/24/2023	N	PM01	2A	Downgradient	5	Alluvium	13.0 - 23.0	6,000	44,300	<3,530	1,090,000	<640	14,700	<420	2,600,000	16,300	
ZTS-MW139	8/21/2023	N	PM02	2A	Downgradient	5	Alluvium	13.0 - 23.0	5,570	50,200	8,830 J	1,060,000	1,360 J	19,600	<840	2,500,000	18,700	
ZTS-MW139	11/29/2023	N	PM03	2A	Downgradient	5	Alluvium	13.0 - 23.0	7,220	115,000	<3,530	1,080,000	<640	19,200	<420	2,600,000	18,300	
ZTS-MW139	2/21/2024	N	PM04	2A	Downgradient	5	Alluvium	13.0 - 23.0	5,930	81,000	<3,530	1,060,000	974 J	21,100	2,540	2,340,000	19,200	
ZTS-MW193	5/25/2023	N	PM01	2A	Downgradient	5	Alluvium	13.6 - 23.3	7,730	51,400	<3,530	1,100,000	<640	20,200	<420	2,560,000	16,900	
ZTS-MW193	5/25/2023	FD	PM01	2A	Downgradient	5	Alluvium	13.6 - 23.3	6,880	53,600	<3,530	1,110,000	<640	20,400	<420	2,570,000	18,300	
ZTS-MW193	8/22/2023	N	PM02	2A	Downgradient	5	Alluvium	13.6 - 23.3	5,570	82,100	<3,530	1,070,000	<640	20,300	<420	2,370,000	20,300	
ZTS-MW193	8/22/2023	FD	PM02	2A	Downgradient	5	Alluvium	13.6 - 23.3	4,550	82,000	<3,530	1,070,000	<640	20,200	<420	2,370,000	18,700	
ZTS-MW193	11/30/2023	N	PM03	2A	Downgradient	5	Alluvium	13.6 - 23.3	5,940	122,000	4,150 J	1,030,000	1,270 J	25,000	<420	2,0		

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	E314.0	E300.1	Anions by E300.0/SW9 065A	CALC						
									Perchlorate	Chlorate	Bromide	Chloride	Fluoride	Nitrate (as N)	Nitrite (as N)	Sulfate	Nitrogen	
									µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
ZTS-MW194	5/25/2023	N	PM01	2A	Downgradient	15	Alluvium	17.8 - 22.5	6,250	50,700	<3,530	1,090,000	<640	21,300	763 J	2,630,000	19,100	
ZTS-MW194	8/22/2023	N	PM02	2A	Downgradient	15	Alluvium	17.8 - 22.5	6,100	54,500	<3,530	1,060,000	<640	20,600	<420	2,370,000	20,500	
ZTS-MW194	11/29/2023	N	PM03	2A	Downgradient	15	Alluvium	17.8 - 22.5	4,750	120,000	4,820 J	1,050,000	1,110 J	24,600	<420	2,080,000	22,300	
ZTS-MW194	2/22/2024	N	PM04	2A	Downgradient	15	Alluvium	17.8 - 22.5	5,040	83,100	5,840 J	1,050,000	885 J	30,700	<420	2,330,000	18,300	
LWPS-MW102A	5/30/2023	N	PM01	NA	Downgradient	30	UMCf	47.0 - 66.6	4,190	7,640	<7,060	2,190,000	<1,280	2,800 J	<2100 R	5,350,000	4,950	
LWPS-MW102A	8/23/2023	N	PM02	NA	Downgradient	30	UMCf	47.0 - 66.6	4.05	7,910	29,300	2,160,000	<640	3,530	<420	5,030,000	4,980	
LWPS-MW102A	10/11/2023	N	PM02	NA	Downgradient	30	UMCf	47.0 - 66.6	5,640	15,200	----	----	----	----	----	----	----	
LWPS-MW102A	10/11/2023	FS	PM02	NA	Downgradient	30	UMCf	47.0 - 66.6	4,400	----	----	----	----	----	----	----	----	
LWPS-MW102A	12/1/2023	N	PM03	NA	Downgradient	30	UMCf	47.0 - 66.6	4,060	11,400	<3,530	1,960,000	<640	7,750 J-	<420 R	4,710,000	5,540	
LWPS-MW102A	2/27/2024	N	PM04	NA	Downgradient	30	UMCf	47.0 - 66.6	4,190	44,100	<3,530	2,120,000	773 J	<480	<420	5,110,000	5,130	
LWPS-MW102B	5/26/2023	N	PM01	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	<0.3	2,580	<35,300	11,600,000	<6,400	<4800 R	<4200 R	34,900,000	485	
LWPS-MW102B	8/23/2023	N	PM02	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	<0.3	<48 UJ	<3,530	9,630,000	<640	<480	<420	33,100,000	4,730	
LWPS-MW102B	12/1/2023	N	PM03	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	2.03 J	<2,400	<3,530	11,800,000	<640	<480 R	<420 R	44,200,000	3,670	
LWPS-MW102B	2/27/2024	N	PM04	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	9.44	<480	<35,300	10,800,000	<6,400	<4,800	11,000	31,700,000	98 J	
ZTS-MW197	5/26/2023	N	PM01	2A	Downgradient	55	Alluvium	12.8 - 22.5	4,420	52,900	<3,530	1,050,000	<640	17,400 J-	<420 R	2,550,000	18,700	
ZTS-MW197	8/22/2023	N	PM02	2A	Downgradient	55	Alluvium	12.8 - 22.5	5,810	87,500	<3,530	1,070,000	<640	20,400	<420	2,370,000	20,300	
ZTS-MW197	11/30/2023	N	PM03	2A	Downgradient	55	Alluvium	12.8 - 22.5	5,930	124,000	4,090 J	924,000	1,260 J	22,200	<420	2,150,000	19,000	
ZTS-MW197	2/22/2024	N	PM04	2A	Downgradient	55	Alluvium	12.8 - 22.5	4,970	84,300	5,830 J	1,020,000	809 J	29,400	<420	2,300,000	18,100	
ZTS-MW113	5/26/2023	N	PM01	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	6,430	53,800	<3,530	1,040,000	<640	17,200 J-	<420 R	2,510,000	19,200	
ZTS-MW113	8/24/2023	N	PM02	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	6,490	91,500	<3,530	1,080,000	<640	19,300	<420	2,310,000	18,400	
ZTS-MW113	11/30/2023	N	PM03	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	5,960	109,000	4,080 J	977,000	1,160 J	21,400	2,700	2,110,000	16,600	
ZTS-MW113	2/23/2024	N	PM04	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	5,260	79,100	<3,530	1,080,000	1,080 J	25,900	<420	2,220,000	25,900	
<b>Test Area 2B</b>																		
<b>Pre-Construction Baseline Results</b>																		
ZTS-MW133	10/20/2022	N	BL02	2B	Upgradient	-9	UMCf	54.0 - 69.0	2,150	19,800	<7,060	1,350,000	<1,280	3,030	<840	2,750,000	2,020	
ZTS-MW117	9/1/2022	N	BL01	2B	Upgradient	-2	UMCf	40.5 - 55.5	2,840	7,320	----	----	----	3,360	----	1,460,000	----	
ZTS-MW117	10/19/2022	N	BL02	2B	Upgradient	-2	UMCf	40.5 - 55.5	<0.3	<2,400	<353	698,000	994	<48	232	1,100,000	<50	
ZTS-MW117	10/19/2022	FD	BL02	2B	Upgradient	-2	UMCf	40.5 - 55.5	<0.3	<2,400	<353	636,000	988	<48	231	1,010,000	<50	
ZTS-MW134	10/19/2022	N	BL02	2B	Upgradient	-2	UMCf	26.0 - 36.0	6,980	101,000	<3,530	1,150,000	<640	20,200	<420	2,460,000	18,400	
ZTS-MW135	10/19/2022	N	BL02	2B	Downgradient	7	UMCf	54.0 - 69.0	2,690	21,700	<3,530	1,350,000	<640	3,710	<420	2,700,000	2,640	
ZTS-MW136	10/20/2022	N	BL02	2B	Cross Gradient	7	UMCf	27.0 - 47.0	805	11,900	<3,530	685,000	<640	2,130	<420	1,180,000	2,330	
<b>Post-Construction Performance Monitoring Results</b>																		
ZTS-MW133	5/23/2023	N	PM01	2B	Upgradient	-9	UMCf	54.0 - 69.0	2,690	4,280	<3,530	1,310,000	663 J	1,730	<420	2,680,000	2,660	
ZTS-MW133	8/30/2023	N	PM02	2B	Upgradient	-9	UMCf	54.0 - 69.0	2,290	4,210 J	<3,530	1,350,000	864 J	9,780 J-	<420	2,700,000	2,820	
ZTS-MW133	12/4/2023	N	PM03	2B	Upgradient	-9	UMCf	54.0 - 69.0	2,520	5,820 J+	<3530 UJ	1,3						

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	E314.0	E300.1	Anions by E300.0/SW9 065A	CALC					
									Perchlorate	Chlorate	Bromide	Chloride	Fluoride	Nitrate (as N)	Nitrite (as N)	Sulfate	Nitrogen
									µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
ZTS-MW134	2/23/2024	N	PM04	2B	Upgradient	-2	UMCf	26.0 - 36.0	2,700	42,100	<3,530	1,140,000	1,080 J	17,000	<420	2,130,000	17,000
ZTS-MW198	5/23/2023	N	PM01	2B	Downgradient	2	UMCf	26.1 - 46.0	921	5,290	<3,530	1,060,000	807 J	3,740 J-	1,170	1,840,000	2,450
ZTS-MW198	8/21/2023	N	PM02	2B	Downgradient	2	UMCf	26.1 - 46.0	1,310	3,210 J	8,770 J	1,140,000	<1,280	5,230 J+	<840	2,200,000	3,460
ZTS-MW198	11/27/2023	N	PM03	2B	Downgradient	2	UMCf	26.1 - 46.0	42.5	<240	<3,530	1,180,000	668 J	1,570	<420	2,270,000	400
ZTS-MW198	2/20/2024	N	PM04	2B	Downgradient	2	UMCf	26.1 - 46.0	63.7	<240	<3,530	1,180,000	<640	<480 UJ	1,390 J-	1,990,000 J+	197 J+
ZTS-MW200	5/23/2023	N	PM01	2B	Downgradient	2	UMCf	50.1 - 65.0	1,320	<240	<3,530	1,290,000	<640	<480	<420	2,530,000	294
ZTS-MW200	5/23/2023	FD	PM01	2B	Downgradient	2	UMCf	50.1 - 65.0	1,200	<240	<3,530	1,270,000	<640	<480	<420	2,470,000	394
ZTS-MW200	8/21/2023	N	PM02	2B	Downgradient	2	UMCf	50.1 - 65.0	1,080	<2,400	8,870 J	1,330,000	<1,280	<960	<840	2,520,000	61.6 J
ZTS-MW200	11/28/2023	N	PM03	2B	Downgradient	2	UMCf	50.1 - 65.0	1,170	<240	4,190 J	1,310,000	1,030 J	15,200	<420	2,380,000	321
ZTS-MW200	2/20/2024	N	PM04	2B	Downgradient	2	UMCf	50.1 - 65.0	1,370	<120	<3,530	1,330,000	<640	<480 UJ	1,540 J-	2,380,000 J+	408 J+
ZTS-MW201	5/24/2023	N	PM01	2B	Downgradient	2	UMCf	27.1 - 47.0	888	1,120	<3,530	1,030,000	704 J	1,160 J-	<420 UJ	2,050,000	775
ZTS-MW201	8/22/2023	N	PM02	2B	Downgradient	2	UMCf	27.1 - 47.0	1,350	20,500	<3,530	1,200,000	<640	3,090	<420	2,150,000	1,440
ZTS-MW201	11/28/2023	N	PM03	2B	Downgradient	2	UMCf	27.1 - 47.0	1,650	41,400 J+	4,050 J	1,150,000	1,200 J	13,700	<420	1,830,000	1,570
ZTS-MW201	2/22/2024	N	PM04	2B	Downgradient	2	UMCf	27.1 - 47.0	1,560	8,100	<3,530	1,350,000	915 J	4,590	<420	2,300,000	1,550
ZTS-MW206	5/24/2023	N	PM01	2B	Downgradient	2	UMCf	50.1 - 65.0	1,340	1,630 J-	<3,530	1,300,000	<640	2,900	<420	2,710,000	1,250
ZTS-MW206	8/22/2023	N	PM02	2B	Downgradient	2	UMCf	50.1 - 65.0	2,150	3,450 J	<3,530	1,330,000	<640	3,690	<420	2,550,000	2,030
ZTS-MW206	11/28/2023	N	PM03	2B	Downgradient	2	UMCf	50.1 - 65.0	2,410	48,800	4,060 J	1,320,000	1,130 J	18,400	<420	2,340,000	2,210
ZTS-MW206	2/22/2024	N	PM04	2B	Downgradient	2	UMCf	50.1 - 65.0	2,500	19,400	<3,530	1,330,000	<640	5,370	<420	2,400,000	2,100
ZTS-MW199	5/23/2023	N	PM01	2B	Downgradient	5	UMCf	50.1 - 65.0	2,900	6,390	<3,530	1,270,000	<640	1,740	<420	2,640,000	3,110
ZTS-MW199	8/22/2023	N	PM02	2B	Downgradient	5	UMCf	50.1 - 65.0	3,580	27,200	<3,530	1,400,000	<640	4,950	<420	2,620,000	4,100
ZTS-MW199	11/28/2023	N	PM03	2B	Downgradient	5	UMCf	50.1 - 65.0	3,790	51,000	4,120 J	1,520,000	1,280 J	21,300	<420	2,420,000	3,730
ZTS-MW199	2/20/2024	N	PM04	2B	Downgradient	5	UMCf	50.1 - 65.0	3,860	30,400	<3,530	1,410,000	792 J	16,200 J-	<420 UJ	2,480,000	4,030
ZTS-MW207	5/24/2023	N	PM01	2B	Downgradient	5	UMCf	26.1 - 46.0	986	2,200 J	<3,530	796,000	670 J	668 J	<420	1,550,000	1,430 J
ZTS-MW207	5/24/2023	FD	PM01	2B	Downgradient	5	UMCf	26.1 - 46.0	1,060	3,220 J	<3,530	878,000	651 J	878 J	<420	1,740,000	1,940 J
ZTS-MW207	8/23/2023	N	PM02	2B	Downgradient	5	UMCf	26.1 - 46.0	272	457 J	<3,530	814,000	<640	554 J	<420	1,530,000	863
ZTS-MW207	8/23/2023	FD	PM02	2B	Downgradient	5	UMCf	26.1 - 46.0	255	348 J	<3,530	811,000	<640	590 J	<420	1,520,000	788
ZTS-MW207	11/29/2023	N	PM03	2B	Downgradient	5	UMCf	26.1 - 46.0	530	330 J	<3,530	878,000	<640	1,830 J+	<420	1,940,000	1,030 J+
ZTS-MW207	11/29/2023	FD	PM03	2B	Downgradient	5	UMCf	26.1 - 46.0	565	371 J	<3,530	890,000	<640	1,920 J+	<420	1,910,000	1,000 J+
ZTS-MW207	2/22/2024	N	PM04	2B	Downgradient	5	UMCf	26.1 - 46.0	644	9,690	<3,530	945,000	1,140 J	<480	2,990 J	1,790,000	337
ZTS-MW207	2/22/2024	FD	PM04	2B	Downgradient	5	UMCf	26.1 - 46.0	654	8,870	<3,530	948,000	989 J	<480	<420 UJ	1,790,000	329
ZTS-MW135	5/26/2023	N	PM01	2B	Downgradient	7	UMCf	54.0 - 69.0	3,770	6,760	<3,530	1,300,000	<640	2,290 J-	<420 R	2,750,000	3,840
ZTS-MW135	8/24/2023	N	PM02	2B	Downgradient	7	UMCf	54.0 - 69.0	3,660	7,330	<3,530	1,360,000	707 J	6,980	<420	3,100,000	4,020
ZTS-MW135	11/30/2023	N	PM03	2B	Downgradient	7	UMCf	54.0 - 69.0	4,270	66,100	<3,530	1,390,000	<640	6,860 J+	<420	2,840,000	4,350
ZTS-MW135	2/22/2024	N	PM04	2B	Downgradient	7	UMCf	54.0 - 69.0	4,500	29,300	<3,530	1,380,000	<640	16,700	<420	2,580,000	16,700
ZTS-MW136	5/26/2023	N	PM01	2B	Cross Gradient	7	UMCf	27.0 - 47.0	112								

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	E314.0	E300.1	Anions by E300.0/SW9 065A	CALC						
									Perchlorate	Chlorate	Bromide	Chloride	Fluoride	Nitrate (as N)	Nitrite (as N)	Sulfate	Nitrogen	
									µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
ZTS-MW208	8/23/2023	N	PM02	2B	Downgradient	15	UMCf	26.1 - 46.0	4,270	71,700	<3,530	1,050,000	<640	12,800	<420	2,230,000	13,700	
ZTS-MW208	11/28/2023	N	PM03	2B	Downgradient	15	UMCf	26.1 - 46.0	4,110	83,600	<3,530	1,070,000	<640	12,900	<420	2,310,000	11,100	
ZTS-MW208	2/22/2024	N	PM04	2B	Downgradient	15	UMCf	26.1 - 46.0	4,250	51,300	<3,530	1,040,000	1,240 J	12,200	<420	1,840,000	12,200	
ZTS-MW209	5/25/2023	N	PM01	2B	Downgradient	15	UMCf	50.6 - 65.5	3,660	6,600	<3,530	1,410,000	<640	5,070	931 J	2,840,000	3,970	
ZTS-MW209	8/23/2023	N	PM02	2B	Downgradient	15	UMCf	50.6 - 65.5	4,790	10,100 J-	4,530 J	1,360,000	782 J	5,310	<420	2,620,000	4,540	
ZTS-MW209	11/29/2023	N	PM03	2B	Downgradient	15	UMCf	50.6 - 65.5	4,300	11,400	<3,530	1,440,000	<640	7,290 J+	<420	2,990,000	5,610	
ZTS-MW209	2/22/2024	N	PM04	2B	Downgradient	15	UMCf	50.6 - 65.5	4,640	29,600	<3,530	1,340,000	<640	15,600	<420	2,560,000	15,600	
<b>Test Area 2C</b>																		
<b>Pre-Construction Baseline Results</b>																		
ZTS-MW140	10/21/2022	N	BL02	2C	Upgradient	-9	Alluvium	15.5 - 25.5	6,650	93,400	<7,060	1,150,000	<1,280	18,500	<840	2,600,000	18,700	
ZTS-MW119	9/1/2022	N	BL01	2C	Upgradient	-3	Alluvium	15.0 - 25.0	6,150	65,500	----	----	----	18,000	----	2,530,000	----	
ZTS-MW119	10/19/2022	N	BL02	2C	Upgradient	-3	Alluvium	15.0 - 25.0	7,530	87,200	<3,530	1,220,000	<640	18,100	<420	2,820,000	17,900	
ZTS-MW119	10/19/2022	FD	BL02	2C	Upgradient	-3	Alluvium	15.0 - 25.0	7,180	93,800	<3,530	1,230,000	<640	18,100	<420	2,770,000	18,300	
ZTS-MW141	10/21/2022	N	BL02	2C	Downgradient	5	Alluvium	14.5 - 24.5	7,030	86,300	<3,530	1,180,000	<640	17,400	<420	2,720,000	17,900	
ZTS-MW142	10/21/2022	N	BL02	2C	Downgradient	5	Alluvium	16.0 - 26.0	6,760	83,600	<7,060	1,130,000	<1,280	17,400	<840	2,620,000	18,600	
<b>Post-Construction Performance Monitoring Results</b>																		
ZTS-MW140	5/25/2023	N	PM01	2C	Upgradient	-9	Alluvium	15.5 - 25.5	7,160	57,800	<3,530	1,130,000	<640	20,700	<420	2,610,000	18,700	
ZTS-MW140	5/25/2023	FD	PM01	2C	Upgradient	-9	Alluvium	15.5 - 25.5	7,260	59,000	<3,530	1,130,000	<640	20,700	<420	2,570,000	18,400	
ZTS-MW140	8/29/2023	N	PM02	2C	Upgradient	-9	Alluvium	15.5 - 25.5	8,940	58,800	<7,060	1,130,000	<1,280	20,200	<840	2,470,000	19,100	
ZTS-MW140	8/29/2023	FD	PM02	2C	Upgradient	-9	Alluvium	15.5 - 25.5	5,760	60,300	<7,060	1,150,000	<1,280	20,400	<840	2,500,000	19,200	
ZTS-MW140	12/4/2023	N	PM03	2C	Upgradient	-9	Alluvium	15.5 - 25.5	7,040	76,100	3,620 J	1,100,000	<640	18,200	<420 R	2,460,000	21,500	
ZTS-MW140	12/4/2023	FD	PM03	2C	Upgradient	-9	Alluvium	15.5 - 25.5	7,050	71,800	3,590 J	1,120,000	<640	19,000	<420 R	2,470,000	22,900	
ZTS-MW140	2/22/2024	N	PM04	2C	Upgradient	-9	Alluvium	15.5 - 25.5	5,510	85,100	4,400 J	1,100,000	727 J	22,200	2,520 J	2,230,000	24,700	
ZTS-MW140	2/22/2024	FD	PM04	2C	Upgradient	-9	Alluvium	15.5 - 25.5	6,360	85,700	<3,530	1,050,000	848 J	21,100	<420 UJ	2,280,000	21,100	
ZTS-MW119	5/24/2023	N	PM01	2C	Upgradient	-3	Alluvium	15.0 - 25.0	6,950	57,000	<3,530	1,070,000	702 J	13,400 J-	<420 UJ	2,480,000	18,200	
ZTS-MW119	8/29/2023	N	PM02	2C	Upgradient	-3	Alluvium	15.0 - 25.0	6,740	61,500	<7,060	1,120,000	<1,280	20,200	<840	2,460,000	19,100	
ZTS-MW119	12/4/2023	N	PM03	2C	Upgradient	-3	Alluvium	15.0 - 25.0	6,900	75,300	<3,530	1,110,000	<640	19,400	<420 R	2,480,000	21,600	
ZTS-MW119	2/22/2024	N	PM04	2C	Upgradient	-3	Alluvium	15.0 - 25.0	5,490	84,300	<3,530	1,040,000	1,050 J	20,900	1,250	2,280,000	22,100	
ZTS-MW181	5/25/2023	N	PM01	2C	Upgradient	-3	Alluvium	17.3 - 27.0	7,250	51,900	<3,530	1,120,000	<640	12,200	427 J	2,190,000	17,100	
ZTS-MW181	8/25/2023	N	PM02	2C	Upgradient	-3	Alluvium	17.3 - 27.0	7,140	95,600	<353	1,030,000	551	18,300	<42	2,480,000	17,600	
ZTS-MW181	12/6/2023	N	PM03	2C	Upgradient	-3	Alluvium	17.3 - 27.0	7,460	76,300	4,050 J	1,150,000	<640	19,900	<420	2,420,000	17,700	
ZTS-MW181	2/28/2024	N	PM04	2C	Upgradient	-3	Alluvium	17.3 - 27.0	5,970	89,400	<3,530	1,090,000	808 J	28,500	<420	2,370,000	17,900	
ZTS-MW188	5/26/2023	N	PM01	2C	Upgradient	-3	Alluvium	17.3 - 27.0	6,190	52,800	<3,530	1,040,000	<640	16,300 J-	<420 R	2,520,000	18,300	
ZTS-MW188	8/25/2023	N	PM02	2C	Upgradient	-3	Alluvium	17.3 - 27.0	8,140	99,800	<3,530	1,120,000	<640	19,800 J-	<420 R	2,150,000	18,100	
ZTS-MW188	12/6/2023	N	PM03	2C														

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	E314.0	E300.1	Anions by E300.0/SW9 065A	CALC						
									Perchlorate	Chlorate	Bromide	Chloride	Fluoride	Nitrate (as N)	Nitrite (as N)	Sulfate	Nitrogen	
									µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
ZTS-MW182	11/28/2023	N	PM03	2C	Center of Array	0	Alluvium	17.6 - 27.3	---	---	---	---	---	---	---	---	---	
ZTS-MW182	2/19/2024	N	PM04	2C	Center of Array	0	Alluvium	17.6 - 27.3	5,620	82,200	5,530 J	1,110,000	929 J	25,500 J-	<420	2,430,000	15,600	
ZTS-MW183	5/23/2023	N	PM01	2C	Downgradient	1	Alluvium	17.3 - 27.0	5,900	43,400	<3,530	1,080,000	656 J	9,680	435 J	2,300,000	15,700	
ZTS-MW183	8/22/2023	N	PM02	2C	Downgradient	1	Alluvium	17.3 - 27.0	6,500	51,100	<3,530	1,120,000	<640	17,900	<420	2,420,000	17,800	
ZTS-MW183	11/28/2023	N	PM03	2C	Downgradient	1	Alluvium	17.3 - 27.0	5,850	132,000	<3,530	1,120,000	<640	19,700	<420	2,510,000	18,000	
ZTS-MW183	2/20/2024	N	PM04	2C	Downgradient	1	Alluvium	17.3 - 27.0	6,090	98,200	<3,530	997,000	727 J	20,400 J-	1,260 J-	2,240,000 J+	19,100	
ZTS-MW187	5/24/2023	N	PM01	2C	Downgradient	1	Alluvium	15.3 - 25.0	5,860	44,800	<3,530	1,050,000	665 J	13,700 J-	<420 UJ	2,430,000	14,700	
ZTS-MW187	8/23/2023	N	PM02	2C	Downgradient	1	Alluvium	15.3 - 25.0	6,370	94,800	<3,530	1,110,000	<640	16,000	<420	2,480,000	16,900	
ZTS-MW187	11/29/2023	N	PM03	2C	Downgradient	1	Alluvium	15.3 - 25.0	5,670	68,600	<3,530	1,080,000	<640	20,000	<420	2,640,000	22,800	
ZTS-MW187	2/20/2024	N	PM04	2C	Downgradient	1	Alluvium	15.3 - 25.0	6,060	90,500	5,940 J	1,060,000	858 J	28,400	<420	2,420,000 J+	17,400	
ZTS-MW141	5/25/2023	N	PM01	2C	Downgradient	5	Alluvium	14.5 - 24.5	6,440	56,800	<3,530	1,100,000	<640	14,700	<420	2,600,000	19,400	
ZTS-MW141	8/23/2023	N	PM02	2C	Downgradient	5	Alluvium	14.5 - 24.5	6,890	104,000	<3,530	1,070,000	<640	19,500	<420	2,290,000	35,700	
ZTS-MW141	11/29/2023	N	PM03	2C	Downgradient	5	Alluvium	14.5 - 24.5	6,120	75,800	3,710 J	1,040,000	<640	21,000	<420	2,540,000	25,600	
ZTS-MW141	2/22/2024	N	PM04	2C	Downgradient	5	Alluvium	14.5 - 24.5	5,610	79,300	<3,530	1,020,000	745 J	20,000	2,500	2,250,000	17,800	
ZTS-MW142	5/26/2023	N	PM01	2C	Downgradient	5	Alluvium	16.0 - 26.0	7,140	44,500	<3,530	1,070,000	<640	13,900 J-	<420 R	2,590,000	15,800	
ZTS-MW142	8/24/2023	N	PM02	2C	Downgradient	5	Alluvium	16.0 - 26.0	6,580	78,100	<3,530	1,110,000	<640	17,200	<420	2,440,000	16,600	
ZTS-MW142	11/30/2023	N	PM03	2C	Downgradient	5	Alluvium	16.0 - 26.0	6,330	62,300	4,100 J	935,000	1,060 J	20,000	1,880	1,840,000	15,600	
ZTS-MW142	2/22/2024	N	PM04	2C	Downgradient	5	Alluvium	16.0 - 26.0	5,960	82,700	<3,530	994,000	<640	30,300	<420	2,270,000	18,100	
ZTS-MW184	5/24/2023	N	PM01	2C	Downgradient	5	Alluvium	16.3 - 26.0	6,440	51,400	<3,530	1,050,000	644 J	15,300 J-	<420 UJ	2,430,000	17,200	
ZTS-MW184	8/22/2023	N	PM02	2C	Downgradient	5	Alluvium	16.3 - 26.0	6,490	55,100	<3,530	1,130,000	<640	19,500	<420	2,390,000	19,300	
ZTS-MW184	11/28/2023	N	PM03	2C	Downgradient	5	Alluvium	16.3 - 26.0	5,800	134,000	3,580 J	1,120,000	<640	20,000	<420	2,510,000	18,100	
ZTS-MW184	2/20/2024	N	PM04	2C	Downgradient	5	Alluvium	16.3 - 26.0	6,140	97,900	<3,530	1,040,000	801 J	22,000 J-	1,160 J-	2,420,000 J+	19,200	
ZTS-MW205	5/24/2023	N	PM01	2C	Downgradient	5	UMCf	30.3 - 40.0	338	380 J-	<353	477,000	1,040	62.3 J	<42 UJ	696,000	249	
ZTS-MW205	8/23/2023	N	PM02	2C	Downgradient	5	UMCf	30.3 - 40.0	299	155 J-	<353 R	478,000	1,100	268	<42	691,000	490	
ZTS-MW205	11/29/2023	N	PM03	2C	Downgradient	5	UMCf	30.3 - 40.0	31.3	<240	<353	425,000	89.3 J	62.7 J	<42	625,000	450 J+	
ZTS-MW205	2/22/2024	N	PM04	2C	Downgradient	5	UMCf	30.3 - 40.0	1,660	8,480	803 J	608,000	931	3,030	807 J	1,080,000	2,140	
ZTS-MW185	5/25/2023	N	PM01	2C	Downgradient	15	Alluvium	15.3 - 25.0	5,940	55,800	<3,530	1,100,000	651 J	14,400	<420	2,470,000	18,100	
ZTS-MW185	8/24/2023	N	PM02	2C	Downgradient	15	Alluvium	15.3 - 25.0	6,890	74,400	<3,530	1,070,000	687 J	21,200	<420	2,310,000	18,900	
ZTS-MW185	11/30/2023	N	PM03	2C	Downgradient	15	Alluvium	15.3 - 25.0	6,330	72,900	4,070 J	905,000	1,050 J	20,600	<420	2,160,000	18,100	
ZTS-MW185	2/22/2024	N	PM04	2C	Downgradient	15	Alluvium	15.3 - 25.0	5,530	85,100	<3,530	1,030,000	1,330 J	21,100	1,850	2,270,000	19,100	
ZTS-MW186	5/25/2023	N	PM01	2C	Downgradient	25	Alluvium	15.3 - 25.0	5,870	55,600	<3,530	1,100,000	683 J	14,600	<420	2,530,000	18,900	
ZTS-MW186	8/24/2023	N	PM02	2C	Downgradient	25	Alluvium	15.3 - 25.0	4,930	96,300	<3,530	1,130,000	787 J	22,500	<420	3,640,000	18,900	
ZTS-MW186	11/30/2023	N	PM03	2C	Downgradient	25	Alluvium	15.3 - 25.0	6,200	128,000	4,100 J	958,000	1,230 J	22,200	<420	2,070,000	18,200	
ZTS-MW186	2/23/2024	N	PM04	2C	Downgradient	25	Alluvium	15.3 - 25.0	5,850	81,100	<3,530	1,020,000	817 J	20,600 J-	680 J	2,820,000	21,300	
ZTS-MW189	5/25/2023	N	PM01	2C	Downgradient	55	Alluvium	12.8 - 23.0	5									

**Table 2**  
**Groundwater Analytical Results**  
 Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	E314.0	E300.1	Anions by E300.0/SW9 065A	CALC						
									Perchlorate	Chlorate	Bromide	Chloride	Fluoride	Nitrate (as N)	Nitrite (as N)	Sulfate	Nitrogen	
									feet	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
<b>Post-Construction Performance Monitoring Results</b>																		
ZTS-MW116	5/24/2023	N	PM01	NA	NA	NA	UMCf	33.0 - 48.0	3,720	6,730	<3,530	816,000	765 J	4,340 J-	<420 UJ	2,490,000	5,520	
ZTS-MW116	8/29/2023	N	PM02	NA	NA	NA	UMCf	33.0 - 48.0	4,080	4,740 J	<3,530	878,000	<640	7,230	<420	2,330,000	5,740	
ZTS-MW116	12/5/2023	N	PM03	NA	NA	NA	UMCf	33.0 - 48.0	4,390	6,490	<3,530	898,000	699 J	8,760	<420	2,660,000	5,970	
ZTS-MW116	2/27/2024	N	PM04	NA	NA	NA	UMCf	33.0 - 48.0	4,460	36,100	<3,530	911,000	994 J	10,700 J-	1,030 J-	2,410,000	6,950	
ZTS-MW128	5/24/2023	N	PM01	NA	NA	NA	UMCf	42.0 - 52.0	6,110	21,600	<3,530	961,000	794 J	10,100 J-	<420 UJ	2,290,000	11,600	
ZTS-MW128	8/30/2023	N	PM02	NA	NA	NA	UMCf	42.0 - 52.0	7,360	30,100	<3,530	995,000	717 J	19,000	<420	2,320,000	13,100	
ZTS-MW128	12/5/2023	N	PM03	NA	NA	NA	UMCf	42.0 - 52.0	6,440	45,700	4,060 J	1,100,000	665 J	16,100	<420	2,510,000	12,000	
ZTS-MW128	2/28/2024	N	PM04	NA	NA	NA	UMCf	42.0 - 52.0	4,470	14,000	<3,530	883,000	942 J	17,600	<420	2,040,000	8,670	

## Notes:

1. Distances from the discontinuous or continuous walls are shown as negative values for upgradient monitoring wells, as zero for monitoring wells screened within the walls, and as positive values for monitoring wells located downgradient of the walls.

bgs - below ground surface

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

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

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

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.

UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

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

mg/L - milligram per liter

mS/cm - millisiemens per centimeter

mV - millivolts

nmol - nanomol

SU - standard units

N - normal field sample

µg/L - micrograms per liter

UMCf - Upper Muddy Creek formation

FD - field duplicate

FS - field split

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	E351.2	E353.2	E365.4	Alkalinity by SM2320B	AM20	SM2540C	SM4500-P-E	SW9060A/S M5310B	SW9060A/S M5310B								
									Total Kjeldahl Nitrogen (TKN) µg/L	Nitrogen, Nitrate-Nitrite µg/L	Phosphorus µg/L	Alkalinity as CaCO <sub>3</sub> nmol	Hydrogen µg/L	Total Dissolved Solids µg/L	Ortho-phosphorus as PO <sub>4</sub> µg/L	Dissolved Organic Carbon µg/L	Total Inorganic Carbon µg/L								
<b>Test Area 1A</b>																									
<b>Pre-Construction Baseline Results</b>																									
ZTS-MW143	10/18/2022	N	BL02	1A	Upgradient	-50	Alluvium	23.0 - 33.0	11,300	15,300	<35	103,000	110	4,570,000	<14	<106	23,700								
ZTS-MW124	8/31/2022	N	BL01	1A	Upgradient	-8	Alluvium	24.0 - 34.0	----	----	----	----	----	3,020,000	----	----	----								
ZTS-MW124	8/31/2022	FD	BL01	1A	Upgradient	-8	Alluvium	24.0 - 34.0	----	----	----	----	----	2,310,000	----	----	----								
ZTS-MW124	10/18/2022	N	BL02	1A	Upgradient	-8	Alluvium	24.0 - 34.0	<1,400	15,500	<35	102,000	2.6	4,750,000	<14	10,200 J	21,700								
ZTS-MW124	10/18/2022	FD	BL02	1A	Upgradient	-8	Alluvium	24.0 - 34.0	2,560	15,000	<35	102,000	2.9	4,220,000	<14	1,230 J	23,900								
ZTS-MW125	8/31/2022	N	BL01	1A	Upgradient	-8	UMCf	40.0 - 50.0	----	----	----	----	----	3,650,000	----	----	----								
ZTS-MW125	10/24/2022	N	BL02	1A	Upgradient	-8	UMCf	40.0 - 50.0	<140	<50	<35 UJ	132,000	7.2	2,930,000	143	<106	30,600								
ZTS-MW125	10/24/2022	FD	BL02	1A	Upgradient	-8	UMCf	40.0 - 50.0	----	----	----	----	7.2	----	----	----	----								
ZTS-MW144	10/18/2022	N	BL02	1A	Downgradient	35	Alluvium	24.0 - 34.0	3,590	15,300	<35	118,000	92	4,750,000	<14	1,270 J+	27,800								
<b>Post-Construction Performance Monitoring Results</b>																									
ZTS-MW143	5/26/2023	N	PM01	1A	Upgradient	-50	Alluvium	23.0 - 33.0	<700	15,000	89.6 J	110,000	42	5,120,000	16 J	1,200 J+	27,100								
ZTS-MW143	8/29/2023	N	PM02	1A	Upgradient	-50	Alluvium	23.0 - 33.0	<560	15,500	<35	114,000	<0.49	3,860,000	15 J	1,290 J	25,400								
ZTS-MW143	12/6/2023	N	PM03	1A	Upgradient	-50	Alluvium	23.0 - 33.0	<140	12,200	74.5 J	119,000	2.6	4,220,000 J-	35	1,170 J	27,800								
ZTS-MW143	2/21/2024	N	PM04	1A	Upgradient	-50	Alluvium	23.0 - 33.0	<1,400	12,900	98 J	123,000	<0.49	5,420,000	54	1,090	27,900								
ZTS-MW124R	5/26/2023	N	PM01	1A	Upgradient	-8	Alluvium	24.5 - 34.0	<700	17,100	<35	110,000	40	4,590,000	26 J	970 J	27,200								
ZTS-MW124R	8/29/2023	N	PM02	1A	Upgradient	-8	Alluvium	24.5 - 34.0	3,700 J	14,000	<35	112,000	14.2	4,420,000	17 J	1,200 J	25,400								
ZTS-MW124R	12/5/2023	N	PM03	1A	Upgradient	-8	Alluvium	24.5 - 34.0	<1,400	12,700	84 J	109,000	7.5	5,540,000	22 J	1,130 J	25,600								
ZTS-MW124R	2/27/2024	N	PM04	1A	Upgradient	-8	Alluvium	24.5 - 34.0	<700	13,600	69.5 J	114,000	10.9	4,150,000	30 J	10,700	25,300								
ZTS-MW125	5/25/2023	N	PM01	1A	Upgradient	-8	UMCf	40.0 - 50.0	282	363	135	126,000	32 J	2,970,000	82	392 J	31,300								
ZTS-MW125	8/30/2023	N	PM02	1A	Upgradient	-8	UMCf	40.0 - 50.0	<140	3,730	66.8 J	122,000	17.1	3,210,000	87	773 J	28,700								
ZTS-MW125	12/1/2023	N	PM03	1A	Upgradient	-8	UMCf	40.0 - 50.0	<140	3,740	248 J+	123,000	2.6	2,790,000 J	76	469 J	27,000								
ZTS-MW125	2/26/2024	N	PM04	1A	Upgradient	-8	UMCf	40.0 - 50.0	238 J	745	114	128,000	86.8 J	2,870,000	78	781 J	27,000								
ZTS-MW153	5/26/2023	N	PM01	1A	Upgradient	-8	Alluvium	24.3 - 34.0	<700	17,200	114	115,000	36	4,840,000	37	955 J	26,600								
ZTS-MW153	8/31/2023	N	PM02	1A	Upgradient	-8	Alluvium	24.3 - 34.0	<560	15,300	50.3 J	108,000	14	3,810,000	<14	1,350 J	24,100								
ZTS-MW153	12/1/2023	N	PM03	1A	Upgradient	-8	Alluvium	24.3 - 34.0	<1,400	14,700	154 J+	121,000	2.3	3,830,000	33	1,080 J	24,600								
ZTS-MW153	2/27/2024	N	PM04	1A	Upgradient	-8	Alluvium	24.3 - 34.0	<700	13,100	<35	109,000	11.1	5,490,000	25 J	1,400 J+	25,000								
ZTS-MW163	5/25/2023	N	PM01	1A	Upgradient	-8	Alluvium	24.3 - 34.0	<560	14,700	<35	106,000	49 J	5,370,000	<14	1,150 J+	26,600								
ZTS-MW163	8/31/2023	N	PM02	1A	Upgradient	-8	Alluvium	24.3 - 34.0	<560 UJ	15,100	<35	104,000	2.3	4,140,000	<14	1,010 J	23,200								
ZTS-MW163	12/1/2023	N	PM03	1A	Upgradient	-8	Alluvium	24.3 - 34.0	<1,400	14,700	79.9 J	108,000	----	3,850,000	22 J	1,040 J	23,100								
ZTS-MW163	2/27/2024	N	PM04	1A	Upgradient	-8	Alluvium	24.3 - 34.0	<700	14,800	<35	103,000	5	5,220,000	25 J	11,700	23,000								
ZTS-MW150	5/22/2023	N	PM01	1A	Center of Trench	0	Alluvium	24.3 - 34.0	3,210	234	35.6 J	28,100	<0.49	4,760,000	136	1,130 J+	6,690								
ZTS-MW150	8/21/2023	N	PM02	1A	Center of Trench	0	Alluvium	24.3 - 34.0	2,060	697	<35	30,800	29.3 J-	3,990,000	<14	1,420 J	6,510								
ZTS-MW150	11/27/2023	N	PM03	1A	Center of Trench	0	Alluvium	24.3 - 34.0	2,270 J+	937	<35	32,100	1.7	4,210,000	<14	970 J	5,650								
ZTS-MW150	2/19/2024	N	PM04	1A	Center of Trench	0	Alluvium	24.3 - 34.0	2,090	727	122 J+	28,200	5.7 J	3,440,000	<14 UJ	1,030	5,960								
ZTS-MW154	5/24/2023	N	PM01	1A	Center of Trench	0	Alluvium	22.3 - 32.0	1,580	<50	<35	29,900	30	4,750,000 J-	<14	1,									

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	E351.2	E353.2	E365.4	Alkalinity by SM2320B	AM20	SM2540C	SM4500-P-E	SW9060A/S M5310B	SW9060A/S M5310B
									Total Kjeldahl Nitrogen (TKN)	Nitrogen, Nitrate-Nitrite	Phosphorus	Alkalinity as CaCO <sub>3</sub>	Hydrogen	Total Dissolved Solids	Ortho-phosphorus as PO <sub>4</sub>	Dissolved Organic Carbon	Total Inorganic Carbon
									µg/L	µg/L	µg/L	µg/L	nmol	µg/L	µg/L	µg/L	µg/L
ZTS-MW164	11/27/2023	N	PM03	1A	Center of Trench	0	Alluvium	22.3 - 32.0	1,250	3,190	36.9 J	40,600	116	4,180,000	<14	1,110 J+	7,620
ZTS-MW164	11/27/2023	FD	PM03	1A	Center of Trench	0	Alluvium	22.3 - 32.0	1,190	2,420	38.1 J	41,500	---	4,380,000	<14	1,120 J+	7,320
ZTS-MW164	2/20/2024	N	PM04	1A	Center of Trench	0	Alluvium	22.3 - 32.0	2,460	2,290	<35	35,600	184	5,270,000	<14 UJ	832 J	5,960
ZTS-MW164	2/20/2024	FD	PM04	1A	Center of Trench	0	Alluvium	22.3 - 32.0	2,690	2,260	<35	32,200	---	5,220,000	<14 UJ	803 J	5,740
ZTS-MW151	5/25/2023	N	PM01	1A	Downgradient	5	Alluvium	24.3 - 34.0	1,280	2,780	<35	78,300	34 J	5,110,000	31	877 J	17,200
ZTS-MW151	8/21/2023	N	PM02	1A	Downgradient	5	Alluvium	24.3 - 34.0	870	5,750	93.8 J	121,000	42.6 J-	4,680,000	160	2,130 J	20,000
ZTS-MW151	11/28/2023	N	PM03	1A	Downgradient	5	Alluvium	24.3 - 34.0	<140	8,850	122 J+	130,000	1.4	5,160,000	<14	1,140 J	25,300 J-
ZTS-MW151	2/20/2024	N	PM04	1A	Downgradient	5	Alluvium	24.3 - 34.0	2,730 J+	8,210	<175	111,000	2.7 J	6,310,000	<14	906 J	24,000
ZTS-MW155	5/24/2023	N	PM01	1A	Downgradient	5	Alluvium	20.3 - 35.0	1,900 J+	1,180	<35	62,300	26	5,070,000	<14	1,110 J+	14,100
ZTS-MW155	5/24/2023	FD	PM01	1A	Downgradient	5	Alluvium	20.3 - 35.0	2,120	1,160	<35	63,200	----	4,860,000	<14	1,110 J+	14,100
ZTS-MW155	8/22/2023	N	PM02	1A	Downgradient	5	Alluvium	20.3 - 35.0	<560	7,550	<35	103,000	18.6 J+	3,060,000 J	<14	1,230 J	24,300
ZTS-MW155	8/22/2023	FD	PM02	1A	Downgradient	5	Alluvium	20.3 - 35.0	<560	7,750	54.1 J	105,000	----	4,280,000 J	<14	1,290 J	24,100
ZTS-MW155	11/28/2023	N	PM03	1A	Downgradient	5	Alluvium	20.3 - 35.0	156 J	5,750	51.5 J	104,000	1.4	5,720,000	<14	1,130 J	22,200
ZTS-MW155	11/28/2023	FD	PM03	1A	Downgradient	5	Alluvium	20.3 - 35.0	343	5,800	43.6 J	105,000	----	6,480,000	<14	1,250 J	22,400
ZTS-MW155	2/21/2024	N	PM04	1A	Downgradient	5	Alluvium	20.3 - 35.0	<1,400	9,200	<35	96,300	2.7	5,530,000	<14	1,150 J	21,900
ZTS-MW155	2/21/2024	FD	PM04	1A	Downgradient	5	Alluvium	20.3 - 35.0	<1,400	9,200	<35	101,000	----	5,550,000	<14	17,600 J	21,600
ZTS-MW156	5/24/2023	N	PM01	1A	Downgradient	5	UMCf	43.8 - 53.5	<140	<50	35.8	115,000	18	4,300,000	<14	500 J	28,200
ZTS-MW156	8/22/2023	N	PM02	1A	Downgradient	5	UMCf	43.8 - 53.5	<140	<50	<35	114,000	24.6 J+	2,710,000 J	17 J	464 J	26,400
ZTS-MW156	11/29/2023	N	PM03	1A	Downgradient	5	UMCf	43.8 - 53.5	462 J+	244	63 J	119,000	1.6	2,740,000 J	15 J	425 J	25,700
ZTS-MW156	2/21/2024	N	PM04	1A	Downgradient	5	UMCf	43.8 - 53.5	186 J	715	<35	122,000	<0.49	3,050,000	21 J	21,700	26,700
ZTS-MW165	5/31/2023	N	PM01	1A	Downgradient	5	Alluvium	22.3 - 32.0	1,410	4,520	35.5 J	73,200	40	5,360,000	<14	1,250 J+	17,000
ZTS-MW165	8/25/2023	N	PM02	1A	Downgradient	5	Alluvium	22.3 - 32.0	<560	9,780	<35	98,300	<0.49	4,170,000	<14	1,130 J	21,200
ZTS-MW165	11/30/2023	N	PM03	1A	Downgradient	5	Alluvium	22.3 - 32.0	<700	12,600	48.9 J	107,000	1.8 J	6,190,000	<14	1,170 J+	22,300
ZTS-MW165	2/23/2024	N	PM04	1A	Downgradient	5	Alluvium	22.3 - 32.0	<1,400	12,900	44.1 J	104,000	<0.49	5,440,000	29 J	12,700 J-	23,000
ZTS-MW152	5/25/2023	N	PM01	1A	Downgradient	15	Alluvium	23.3 - 33.0	1,680	2,970	184	67,000	45 J	5,470,000	159	968 J	16,500
ZTS-MW152	8/22/2023	N	PM02	1A	Downgradient	15	Alluvium	23.3 - 33.0	<560	8,400	59.6 J	94,400	11.4 J+	5,150,000	32	1,240 J	22,200
ZTS-MW152	11/28/2023	N	PM03	1A	Downgradient	15	Alluvium	23.3 - 33.0	<140	8,450	63.9 J	117,000	<0.49	5,460,000	33	1,140 J	25,000
ZTS-MW152	2/20/2024	N	PM04	1A	Downgradient	15	Alluvium	23.3 - 33.0	<700	7,450	61.4 J	103,000	2.7 J	5,970,000	19 J	931 J	22,000
ZTS-MW157	5/25/2023	N	PM01	1A	Downgradient	15	Alluvium	23.3 - 33.0	1,770 J	1,280	68 J	62,900	32 J	8,910,000	51	1,120 J+	15,300
ZTS-MW157	8/23/2023	N	PM02	1A	Downgradient	15	Alluvium	23.3 - 33.0	1,270	4,500	<35	82,300	2.1 J-	4,480,000	23 J	1,150 J	18,500
ZTS-MW157	11/29/2023	N	PM03	1A	Downgradient	15	Alluvium	23.3 - 33.0	1,890 J+	4,520	54.4 J	91,500	1.7	4,200,000	<14	1,160 J+	19,000
ZTS-MW157	2/21/2024	N	PM04	1A	Downgradient	15	Alluvium	23.3 - 33.0	<1,400	10,100	83.7 J	97,600	2.4	5,110,000	<14	1,210	21,300
ZTS-MW162	5/25/2023	N	PM01	1A	Downgradient	15	Alluvium	23.3 - 33.0	1,930	3,210	<35	94,200	32 J	5,440,000	30 J	1,020 J+	22,800
ZTS-MW162	8/18/2023	N	PM02	1A	Downgradient	15	Alluvium	23.3 - 33.0	<560	8,250	<35	105,000	24.8	5,260,000	<14 UJ	1,300 J	24,100
ZTS-MW162	11/30/2023	N	PM03	1A	Downgradient	15	Alluvium	23.3 - 33.0	<700	11,800	57 J	108,000	<0.49	6,030,000	16 J	1,130 J	23,400
ZTS-MW162	2/21/2024	N	PM04	1A	Downgradient	15	Alluvium	23.3 - 33.0	<1,400	15,200	<35	109,000	4	5,550,000	<14	1,210	24

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	E351.2	E353.2	E365.4	Alkalinity by SM2320B	AM20	SM2540C	SM4500-P-E	SW9060A/S M5310B	SW9060A/S M5310B
									Total Kjeldahl Nitrogen (TKN) µg/L	Nitrogen, Nitrate-Nitrite µg/L	Phosphorus µg/L	Alkalinity as CaCO <sub>3</sub> nmol	Hydrogen	Total Dissolved Solids µg/L	Ortho-phosphorus as PO <sub>4</sub> µg/L	Dissolved Organic Carbon µg/L	Total Inorganic Carbon µg/L
									feet								
ZTS-MW144	2/23/2024	N	PM04	1A	Downgradient	35	Alluvium	24.0 - 34.0	3,840 J+	8,510	41.8 J	82,700	4.5	5,610,000	<14	17,000 J-	17,500
ZTS-MW158	5/24/2023	N	PM01	1A	Downgradient	50	Alluvium	23.3 - 33.0	1,990	2,690	<35	69,600	18	4,860,000	<14	1,130	16,100
ZTS-MW158	8/25/2023	N	PM02	1A	Downgradient	50	Alluvium	23.3 - 33.0	4,720	2,630	<35	71,500	4	4,140,000	<14	1,070 J	15,900
ZTS-MW158	12/1/2023	N	PM03	1A	Downgradient	50	Alluvium	23.3 - 33.0	<560	7,230	72.7 J	96,400	---	4,090,000	<14	1,230 J	20,500
ZTS-MW158	2/27/2024	N	PM04	1A	Downgradient	50	Alluvium	23.3 - 33.0	840 J	7,920	53.7 J	77,500	2	5,320,000	14 J	6,430	15,800
ZTS-MW159	5/24/2023	N	PM01	1A	Downgradient	50	UMCf	38.8 - 48.5	149 J	581	91.2 J	128,000	40	2,460,000 J	28 J	1,010 J+	29,200
ZTS-MW159	8/25/2023	N	PM02	1A	Downgradient	50	UMCf	38.8 - 48.5	<560	9,080	<35	104,000	2.9	3,990,000	40	1,120 J	23,700
ZTS-MW159	12/1/2023	N	PM03	1A	Downgradient	50	UMCf	38.8 - 48.5	<560	8,470	89.8 J	106,000	2.6	3,780,000	26 J	952 J	25,100
ZTS-MW159	2/27/2024	N	PM04	1A	Downgradient	50	UMCf	38.8 - 48.5	<700	9,900	46 J	104,000	2.9	4,630,000	34	6,570	22,200
ZTS-MW160	5/24/2023	N	PM01	1A	Downgradient	100	Alluvium	23.3 - 33.0	386 J-	7,800	37.7 J	98,100	18	4,140,000	<14	1,130 J	21,500
ZTS-MW160	8/28/2023	N	PM02	1A	Downgradient	100	Alluvium	23.3 - 33.0	<560	10,400	<35	98,200	3.8 J+	3,520,000	21 J	976 J	22,500
ZTS-MW160	12/5/2023	N	PM03	1A	Downgradient	100	Alluvium	23.3 - 33.0	<1,400	10,500	78 J	101,000	1.9	4,460,000	29 J	1,110 J	22,900
ZTS-MW160	2/27/2024	N	PM04	1A	Downgradient	100	Alluvium	23.3 - 33.0	<700	12,900	<35 UJ	96,900	3.7	3,690,000	27 J	1,350 J+	21,100 J-
ZTS-MW161	5/26/2023	N	PM01	1A	Downgradient	150	Alluvium	24.3 - 34.0	1,090	3,550	74.4 J	72,700	35	4,950,000	17 J	1,120 J+	16,800 J-
ZTS-MW161	8/25/2023	N	PM02	1A	Downgradient	150	Alluvium	24.3 - 34.0	740 J	8,950	<35 UJ	90,400	2.6	5,350,000	20 J-	977 J	20,800
ZTS-MW161	8/25/2023	FD	PM02	1A	Downgradient	150	Alluvium	24.3 - 34.0	1,270 J	8,910	1,860 J	96,000	---	4,380,000	15 J-	952 J	20,700
ZTS-MW161	12/1/2023	N	PM03	1A	Downgradient	150	Alluvium	24.3 - 34.0	<280	8,700	83.3 J	98,800	2	3,810,000	<14	1,070 J	22,000
ZTS-MW161	12/1/2023	FD	PM03	1A	Downgradient	150	Alluvium	24.3 - 34.0	<560	8,780	77 J	96,500	---	4,630,000	<14	1,070 J	22,800
ZTS-MW161	2/23/2024	N	PM04	1A	Downgradient	150	Alluvium	24.3 - 34.0	<1,400	9,040	64.6 J	102,000	16.5	5,690,000	26 J	1,350 J	22,900
ZTS-MW161	2/23/2024	FD	PM04	1A	Downgradient	150	Alluvium	24.3 - 34.0	<1,400	8,890	61.9 J	100,000	---	5,590,000	31	23,600 J	22,700
<b>Between Test Area 1A and Test Area 1B</b>																	
<b>Pre-Construction Baseline Results</b>																	
ZTS-MW145	10/24/2022	N	BL02	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	<140	3,730	<35	114,000	7.3	3,710,000	<14	<106	25,800
ZTS-MW146	10/24/2022	N	BL02	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	<140	5,500	<35	127,000	10	5,180,000	<14	1,390 J+	29,800
<b>Post-Construction Performance Monitoring Results</b>																	
ZTS-MW145	5/22/2023	N	PM01	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	435 J+	260	35 J	138,000	17	700,000	<14	1,950 J-	31,500 J-
ZTS-MW145	8/30/2023	N	PM02	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	<140	156	<35	112,000	<0.49	3,480,000	44	602 J	26,400
ZTS-MW145	12/6/2023	N	PM03	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	<140	<50	55.7 J	112,000	2.1	3,180,000 J-	35	582 J	25,400
ZTS-MW145	2/21/2024	N	PM04	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	<140	435	<35 UJ	120,000	9.6	3,330,000	35	416 J	27,000
ZTS-MW146	5/26/2023	N	PM01	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	<140	2,780	59.3 J	129,000	41	3,960,000	42	1,310 J+	31,100
ZTS-MW146	8/25/2023	N	PM02	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	436 J+	<50	<35	130,000	2.4	3,660,000	31	718 J	29,700
ZTS-MW146	11/30/2023	N	PM03	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	163 J	<50	66.9 J	127,000	<0.49	5,570,000	28 J	221 J	26,300
ZTS-MW146	2/23/2024	N	PM04	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	243 J	<50	78.6 J	122,000	2.7	5,140,000	23 J	19,700 J-	27,300
<b>Test Area 1B</b>																	
<b>Pre-Construction Baseline Results</b>																	
ZTS-MW147	10/18/2022	N	BL02	1B	Upgradient	-50	Alluvium	19.5 - 29.5	3,950	17,500	<35	102,000	59	4,720,000	<14	1,270 J+	22,800
ZTS-MW126																	

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**Groundwater Analytical Results**  
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Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	E351.2	E353.2	E365.4	Alkalinity by SM2320B	AM20	SM2540C	SM4500-P-E	SW9060A/S M5310B	SW9060A/S M5310B
									Total Kjeldahl Nitrogen (TKN) µg/L	Nitrogen, Nitrate-Nitrite µg/L	Phosphorus µg/L	Alkalinity as CaCO <sub>3</sub> µg/L	Hydrogen nmol	Total Dissolved Solids µg/L	Ortho-phosphorus as PO <sub>4</sub> µg/L	Dissolved Organic Carbon µg/L	Total Inorganic Carbon µg/L
LWPS-MW107C	10/24/2022	N	BL02	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	638	<50	139	85,700	36	80,600,000	537	4,390	17,300
<b>Post-Construction Performance Monitoring Results</b>																	
ZTS-MW147	5/26/2023	N	PM01	1B	Upgradient	-50	Alluvium	19.5 - 29.5	<700	28,000	<35	103,000	49	5,380,000	20 J	1,190 J+	24,600
ZTS-MW147	8/30/2023	N	PM02	1B	Upgradient	-50	Alluvium	19.5 - 29.5	<700	18,600	<35	98,200	4.4	4,460,000 J	25 J	1,330 J	23,400
ZTS-MW147	12/1/2023	N	PM03	1B	Upgradient	-50	Alluvium	19.5 - 29.5	<1,400	19,300	85.8 J	103,000	40.5	4,740,000	20 J	1,260 J	22,600
ZTS-MW147	2/23/2024	N	PM04	1B	Upgradient	-50	Alluvium	19.5 - 29.5	3,220	18,300	37.5 J	106,000	8.8	5,820,000	14 J	1,520 J	23,400
ZTS-MW126	5/25/2023	N	PM01	1B	Upgradient	-8	Alluvium	20.0 - 30.0	<560	12,000	35.2 J	115,000	34 J	5,650,000	40	1,100 J+	28,500
ZTS-MW126	8/25/2023	N	PM02	1B	Upgradient	-8	Alluvium	20.0 - 30.0	<700	12,500	<35	118,000	4.3	6,760,000	24 J	1,210 J	27,000
ZTS-MW126	11/30/2023	N	PM03	1B	Upgradient	-8	Alluvium	20.0 - 30.0	<700	14,200	64.5 J	113,000	2 J	4,260,000	37	1,090 J+	22,700
ZTS-MW126	2/23/2024	N	PM04	1B	Upgradient	-8	Alluvium	20.0 - 30.0	<1,400	16,800	40.6 J	107,000	3.2	5,840,000	<14	19,400 J-	22,900
ZTS-MW127R	5/25/2023	N	PM01	1B	Upgradient	-8	Alluvium	18.5 - 23.0	<560	17,900	<35	108,000	45 J	5,730,000	19 J	1,510 J+	26,100
ZTS-MW127R	8/28/2023	N	PM02	1B	Upgradient	-8	Alluvium	18.5 - 23.0	<560	18,400	<35	110,000	6.4 J+	4,340,000	24 J	1,610 J	25,100
ZTS-MW127R	11/30/2023	N	PM03	1B	Upgradient	-8	Alluvium	18.5 - 23.0	4,020	18,200	<35	111,000	69.6 J	3,470,000	28 J	1,310 J	22,700
ZTS-MW127R	2/23/2024	N	PM04	1B	Upgradient	-8	Alluvium	18.5 - 23.0	<1,400	18,100	39.3 J	112,000	13.7	5,390,000	18 J	20,900 J-	24,800
ZTS-MW169	5/24/2023	N	PM01	1B	Upgradient	-8	Alluvium	17.1 - 27.0	<700	18,100	<35	107,000	45	5,270,000	<14	1,500 J+	24,600
ZTS-MW169	8/28/2023	N	PM02	1B	Upgradient	-8	Alluvium	17.1 - 27.0	<560	18,600	<35	109,000	2.9 J+	4,220,000	24 J	1,540 J	24,800
ZTS-MW169	11/30/2023	N	PM03	1B	Upgradient	-8	Alluvium	17.1 - 27.0	<700	18,400	54.4 J	103,000	26.4 J	4,700,000	26 J	1,110 J+	22,300
ZTS-MW169	2/23/2024	N	PM04	1B	Upgradient	-8	Alluvium	17.1 - 27.0	<1,400	18,300	43.6 J	106,000	2.6	5,580,000	23 J	19,900 J-	22,600
ZTS-MW170	5/24/2023	N	PM01	1B	Upgradient	-8	UMCf	31.1 - 41.0	<280	8,750	57.7 J	107,000	29	4,390,000	53	997 J	24,800
ZTS-MW170	8/29/2023	N	PM02	1B	Upgradient	-8	UMCf	31.1 - 41.0	5,140	10,300	50.4 J	110,000	31.9	4,170,000	26 J	1,130 J	24,300
ZTS-MW170	11/30/2023	N	PM03	1B	Upgradient	-8	UMCf	31.1 - 41.0	<700	11,000	56.4 J	102,000	4 J	3,760,000	32	980 J	21,600
ZTS-MW170	2/23/2024	N	PM04	1B	Upgradient	-8	UMCf	31.1 - 41.0	<1,400	11,500	55.9 J	104,000	8.3	4,460,000	20 J	16,100 J-	23,300
ZTS-MW166	5/23/2023	N	PM01	1B	Center of Trench	0	Alluvium	19.8 - 29.5	2,680 J	<50	37.5 J	22,300	2,500	4,430,000	<14	922 J	3,310
ZTS-MW166	8/21/2023	N	PM02	1B	Center of Trench	0	Alluvium	19.8 - 29.5	2,060	3,050	<35	41,800	1,480 J-	4,530,000	<14	1,620 J	8,150
ZTS-MW166	11/28/2023	N	PM03	1B	Center of Trench	0	Alluvium	19.8 - 29.5	7,100 J+	803	60.6 J	25,800	6,130 J	5,850,000	<14	1,140 J	2,110
ZTS-MW166	2/20/2024	N	PM04	1B	Center of Trench	0	Alluvium	19.8 - 29.5	10,500	1,780	<35	30,600	8,980 J	5,190,000	<14	949 J	1,440
ZTS-MW171	5/22/2023	N	PM01	1B	Center of Trench	0	Alluvium	19.3 - 29.0	5,600	9,090	39.2 J	36,200	2,400	5,630,000	53	1,460 J+	8,280
ZTS-MW171	8/21/2023	N	PM02	1B	Center of Trench	0	Alluvium	19.3 - 29.0	2,790 J+	4,160	<35	33,200	12.5 J-	4,500,000	<14	1,760 J	7,200
ZTS-MW171	11/27/2023	N	PM03	1B	Center of Trench	0	Alluvium	19.3 - 29.0	2,300	2,820	56.6 J	32,600	41	4,730,000	<14	1,200 J+	5,670
ZTS-MW171	2/19/2024	N	PM04	1B	Center of Trench	0	Alluvium	19.3 - 29.0	<560	1,760	272 J	25,400	17.6 J	3,070,000	<14	1,370	4,360
ZTS-MW178	5/25/2023	N	PM01	1B	Center of Trench	0	Alluvium	17.8 - 27.5	14,300	222	74 J	44,500	<0.49	5,400,000	<14	1,200 J+	752 J
ZTS-MW178	8/21/2023	N	PM02	1B	Center of Trench	0	Alluvium	17.8 - 27.5	6,260	<50	35.9 J	31,000	12,900 J-	5,150,000	<14	1,610 J	1,470 J+
ZTS-MW178	11/28/2023	N	PM03	1B	Center of Trench	0	Alluvium	17.8 - 27.5	9,640	<50	71.7 J	41,200	4,140 J	5,460,000	<14	1,030 J	1,000
ZTS-MW178	2/20/2024	N	PM04	1B	Center of Trench	0	Alluvium	17.8 - 27.5	13,000 J-	<50	<35 UJ	32,400	20,200 J	5,340,000	16 J	885 J	892 J
ZTS-MW167	5/24/2023	N	PM01	1B	Downgradient	5	Alluvium	23.3 - 33.0	3,120	<50	46.6 J	22,200	<0.49	6,400,000	<14	1,380 J+	4,820
ZTS-MW167	8/22/2023	N	PM02	1B	Downgradient	5	Alluvium	23.3 - 33.0	4,940</								

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	E351.2	E353.2	E365.4	Alkalinity by SM2320B	AM20	SM2540C	SM4500-P-E	SW9060A/S M5310B	SW9060A/S M5310B
									Total Kjeldahl Nitrogen (TKN)	Nitrogen, Nitrate-Nitrite	Phosphorus	Alkalinity as CaCO <sub>3</sub>	Hydrogen	Total Dissolved Solids	Ortho-phosphorus as PO <sub>4</sub>	Dissolved Organic Carbon	Total Inorganic Carbon
									µg/L	µg/L	µg/L	µg/L	nmol	µg/L	µg/L	µg/L	µg/L
ZTS-MW172	2/22/2024	N	PM04	1B	Downgradient	5	Alluvium	17.3 - 27.0	6,650	1,220	49.6 J	23,200	2.3	4,920,000	<14	1,270 J+	3,540
ZTS-MW172	2/22/2024	FD	PM04	1B	Downgradient	5	Alluvium	17.3 - 27.0	6,440	1,210	50.9 J	19,800 J	----	4,120,000	<14	1,220 J+	3,530
ZTS-MW173	5/25/2023	N	PM01	1B	Downgradient	5	UMCf	33.3 - 43.0	308	1,440	117	122,000	30	4,700,000	186	1,750 J+	29,300
ZTS-MW173	8/22/2023	N	PM02	1B	Downgradient	5	UMCf	33.3 - 43.0	526	1,470	432	119,000	19.8	2,280,000	153	2,390 J	27,000
ZTS-MW173	11/29/2023	N	PM03	1B	Downgradient	5	UMCf	33.3 - 43.0	729 J+	<50	266 J+	132,000	21.4	3,490,000	227	3,420	31,300
ZTS-MW173	2/21/2024	N	PM04	1B	Downgradient	5	UMCf	33.3 - 43.0	<140	3,450	97.4 J	106,000	3.8	4,370,000	79	543 J	24,000
ZTS-MW179	5/25/2023	N	PM01	1B	Downgradient	5	Alluvium	18.3 - 23.0	16,600	1,120	140	38,100	68	7,200,000	<14	1,250 J+	2,040
ZTS-MW179	8/23/2023	N	PM02	1B	Downgradient	5	Alluvium	18.3 - 23.0	13,100	3,840	88.2 J	22,100	2.9 J-	4,710,000	<14	1,480 J	2,720 J+
ZTS-MW179	11/30/2023	N	PM03	1B	Downgradient	5	Alluvium	18.3 - 23.0	11,100	4,950	61 J	26,200	2.6	5,920,000	<14	1,090 J	1,620
ZTS-MW179	2/22/2024	N	PM04	1B	Downgradient	5	Alluvium	18.3 - 23.0	7,800	6,080	66.5 J	30,600	3.7	5,560,000	<14	1,270 J+	5,100
ZTS-MW168	5/24/2023	N	PM01	1B	Downgradient	15	Alluvium	20.3 - 30.0	7,410	3,760	40.6 J	31,800	22	6,500,000	<14	1,350 J+	5,400
ZTS-MW168	8/22/2023	N	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	6,260	4,740	69.4 J	33,100	19.5	3,400,000	<14	1,380 J	6,330
ZTS-MW168	10/11/2023	N	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	----	----	----	30,100	----	----	----	----	----
ZTS-MW168	10/11/2023	FS	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	----	----	----	----	----	----	----	----	----
ZTS-MW168	10/11/2023	FD	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	----	----	----	----	----	----	----	----	----
ZTS-MW168	11/29/2023	N	PM03	1B	Downgradient	15	Alluvium	20.3 - 30.0	6,080	3,020	63.4 J	30,400	2.9	3,940,000	<14	1,250 J+	5,960
ZTS-MW168	2/21/2024	N	PM04	1B	Downgradient	15	Alluvium	20.3 - 30.0	8,380	4,490	<35	28,800	7.4	5,200,000	<14	1,110	4,580
ZTS-MW174	5/24/2023	N	PM01	1B	Downgradient	15	Alluvium	19.8 - 29.5	4,140	8,400	73.9 J	44,200	----	6,200,000	32	1,500 J+	9,940
ZTS-MW174	5/26/2023	N	PM01	1B	Downgradient	15	Alluvium	19.8 - 29.5	----	----	----	----	53	----	----	----	----
ZTS-MW174	8/22/2023	N	PM02	1B	Downgradient	15	Alluvium	19.8 - 29.5	8,360	3,220	36.8 J	25,200	19.9	2,950,000	<14	1,320 J+	4,560
ZTS-MW174	10/11/2023	N	PM02	1B	Downgradient	15	Alluvium	19.8 - 29.5	----	----	----	31,500	----	----	----	----	----
ZTS-MW174	10/11/2023	FS	PM02	1B	Downgradient	15	Alluvium	19.8 - 29.5	----	----	----	----	----	----	----	----	----
ZTS-MW174	10/11/2023	FD	PM02	1B	Downgradient	15	Alluvium	19.8 - 29.5	----	----	----	33,500	----	----	----	----	----
ZTS-MW174	11/29/2023	N	PM03	1B	Downgradient	15	Alluvium	19.8 - 29.5	6,460	94 J	55.6 J	18,000 J	2.9	3,740,000	<14	1,220 J+	2,700
ZTS-MW174	2/21/2024	N	PM04	1B	Downgradient	15	Alluvium	19.8 - 29.5	6,330	2,960	<35	21,400	2.3	5,410,000	<14	1,170	3,370
ZTS-MW177	5/25/2023	N	PM01	1B	Downgradient	15	Alluvium	20.3 - 30.0	4,950	1,180	129	33,800	40	6,700,000	32	1,410 J+	5,320
ZTS-MW177	8/23/2023	N	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	6,900	939	59.2 J	23,800	<0.49 UJ	3,190,000	16 J	1,470 J	3,420 J+
ZTS-MW177	11/29/2023	N	PM03	1B	Downgradient	15	Alluvium	20.3 - 30.0	6,910	449	82.1 J	21,500	2.6	4,370,000	<14	1,210 J+	3,420
ZTS-MW177	2/21/2024	N	PM04	1B	Downgradient	15	Alluvium	20.3 - 30.0	7,840	2,500	<35	20,500	5.9	5,400,000	<14	1,180	2,890
ZTS-MW180	5/24/2023	N	PM01	1B	Downgradient	25	Alluvium	17.8 - 22.5	<700	18,500 J	<35	102,000	34	6,300,000	<14	1,440 J+	25,600
ZTS-MW180	5/24/2023	FD	PM01	1B	Downgradient	25	Alluvium	17.8 - 22.5	<700	12,300 J	47.8 J	100,000	----	5,130,000 J-	<14	1,500 J+	25,900
ZTS-MW180	8/24/2023	N	PM02	1B	Downgradient	25	Alluvium	17.8 - 22.5	<700	18,600	<35	105,000	2.2	5,880,000	24 J	1,370 J-	25,600
ZTS-MW180	8/24/2023	FD	PM02	1B	Downgradient	25	Alluvium	17.8 - 22.5	<700	19,100	<35	105,000	----	5,320,000	23 J	1,630 J-	25,500
ZTS-MW180	11/30/2023	N	PM03	1B	Downgradient	25	Alluvium	17.8 - 22.5	<700	16,200	45.3 J	105,000	3.1	4,390,000 J	<14	1,200 J+	17,600
ZTS-MW180	11/30/2023	FD	PM03	1B	Downgradient	25	Alluvium	17.8 - 22.5	<700	16,100	44.8 J	105,000	----	6,310,000 J	23 J	1,240 J	22,200
ZTS-MW180	2/22/2024	N	PM04	1B	Downgradient	25	Alluvium	17.8 - 22.5	<700	15,800	48.2 J	104,000	2.7	5,960,000	<14	1,420 J+	22,100
ZTS-MW180	2/22/2024	FD	PM04	1B	Downgradient	25	Alluvium	17.8 - 22.5	<1,400	15,900	39.2 J	103,000	----	5,970,000	<14	1,340 J+	21,300
ZTS-MW148	5/25/2023	N	PM01	1B	Downgradient	35	Alluvium	22.0 - 32.0	4,480	9,100	53.8 J	45,700	39	6,600,000</td			

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**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	E351.2	E353.2	E365.4	Alkalinity by SM2320B	AM20	SM2540C	SM4500-P-E	SW9060A/S M5310B	SW9060A/S M5310B	
									Total Kjeldahl Nitrogen (TKN)	Nitrogen, Nitrate-Nitrite	Phosphorus	Alkalinity as CaCO <sub>3</sub>	Hydrogen	Total Dissolved Solids	Ortho-phosphorus as PO <sub>4</sub>	Dissolved Organic Carbon	Total Inorganic Carbon	
									µg/L	µg/L	µg/L	µg/L	nmol	µg/L	µg/L	µg/L	µg/L	
LVWPS-MW107A	11/30/2023	N	PM03	1B	Downgradient	50	Alluvium	24.8 - 34.5	7,810	1,030	77.5 J	21,800	1.7	5,320,000	16 J	1,100 J+	3,760	
LVWPS-MW107A	2/22/2024	N	PM04	1B	Downgradient	50	Alluvium	24.8 - 34.5	7,950	1,420	121	40,500	2.3	4,460,000	<14	1,230 J+	3,830	
LVWPS-MW107B	5/23/2023	N	PM01	1B	Downgradient	50	UMCf	46.0 - 65.8	423	<50	38.9 J	94,400	7.9	4,210,000	<14	576 J	24,900	
LVWPS-MW107B	8/24/2023	N	PM02	1B	Downgradient	50	UMCf	46.0 - 65.8	765	386	49.9 J	80,900	4.3	2,830,000	52	1,070 J-	16,600	
LVWPS-MW107B	12/1/2023	N	PM03	1B	Downgradient	50	UMCf	46.0 - 65.8	428	675	229 J+	67,800	2.4	1,430,000	83	1,180 J	15,000	
LVWPS-MW107B	2/23/2024	N	PM04	1B	Downgradient	50	UMCf	46.0 - 65.8	420	<50	81.2 J	111,000	5.7	5,880,000	18 J	721 J	21,100	
LVWPS-MW107C	5/23/2023	N	PM01	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	<140	<50	84 J	92,800	11	53,400,000	465	3,740	21,100	
LVWPS-MW107C	8/24/2023	N	PM02	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	<140	<50	74.2 J	118,000	10.8	92,900,000	359	4,780 J-	25,300	
LVWPS-MW107C	12/1/2023	N	PM03	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	4,840	<50	475 J+	98,800	3.9	64,500,000	451	4,240 J	19,900	
LVWPS-MW107C	2/23/2024	N	PM04	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	229 J	89 J	155 J+	96,600	2.6	80,300,000	526	4,520 J	17,900	
ZTS-MW175	5/26/2023	N	PM01	1B	Downgradient	100	Alluvium	19.8 - 29.5	678	8,240	91.5 J	57,900	<0.49	5,380,000	31	1,270 J+	11,800	
ZTS-MW175	8/25/2023	N	PM02	1B	Downgradient	100	Alluvium	19.8 - 29.5	2,720	1,510	<35	35,300	3.7	5,730,000	22 J	1,140 J	7,520	
ZTS-MW175	11/30/2023	N	PM03	1B	Downgradient	100	Alluvium	19.8 - 29.5	4,030 J+	520	94.8 J	29,900	1.9	5,640,000	20 J	1,120 J	5,260	
ZTS-MW175	2/28/2024	N	PM04	1B	Downgradient	100	Alluvium	19.8 - 29.5	4,880	373	36.9 J	27,100	13.7	5,290,000	<14	1,150 J+	4,930	
ZTS-MW176	5/26/2023	N	PM01	1B	Downgradient	150	Alluvium	19.8 - 29.5	<140	6,720	52.3 J	58,900	<0.49	5,580,000	20 J	1,200 J+	13,200	
ZTS-MW176	8/25/2023	N	PM02	1B	Downgradient	150	Alluvium	19.8 - 29.5	1,390 J+	3,240	77.8 J	46,300	4.3	5,670,000	20 J	1,190 J	10,000	
ZTS-MW176	12/5/2023	N	PM03	1B	Downgradient	150	Alluvium	19.8 - 29.5	2,870	1,820	78.7 J	38,000	2	5,880,000	19 J	1,140 J	7,460	
ZTS-MW176	2/27/2024	N	PM04	1B	Downgradient	150	Alluvium	19.8 - 29.5	3,260 J+	3,690	47.6 J	44,300	2	5,480,000	18 J	9,920	8,240	
<b>Test Area 2A</b>																		
<b>Pre-Construction Baseline Results</b>																		
ZTS-MW137	10/20/2022	N	BL02	2A	Upgradient	-9	Alluvium	14.0 - 24.0	<700	18,900	<35	106,000	21	3,540,000	90	1,690 J+	21,300	
ZTS-MW118	9/1/2022	N	BL01	2A	Upgradient	-3	Alluvium	13.5 - 23.5	---	---	---	---	---	8,540,000	---	---	---	
ZTS-MW118	10/21/2022	N	BL02	2A	Upgradient	-3	Alluvium	13.5 - 23.5	<700	18,900	<35	118,000	7 J+	5,830,000	<14	2,120 J	23,400 J-	
ZTS-MW138	10/20/2022	N	BL02	2A	Downgradient	5	Alluvium	14.0 - 24.0	<700	18,800	<35	117,000	30	4,720,000	114	1,840 J+	20,400 J-	
ZTS-MW139	10/21/2022	N	BL02	2A	Downgradient	5	Alluvium	13.0 - 23.0	<700	18,600	<35	111,000	15	6,030,000	40	1,740 J+	25,200	
LVWPS-MW102A	10/21/2022	N	BL02	NA	Downgradient	30	UMCf	47.0 - 66.6	337 J	4,640	132 J	89,000	1.8 J	10,600,000	132	1,050 J+	19,200	
LVWPS-MW102B	10/21/2022	N	BL02	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	44,600	<50	199 J	96,300	1.6 J	52,600,000	426	4,660 J+	18,900	
ZTS-MW113	10/25/2022	N	BL02	2A	Cross/Downgradient	60			20.0 - 30.0	<280	18,100	<35	101,000	0.85 J	4,650,000	<14	1,640 J-	22,700
<b>Post-Construction Performance Monitoring Results</b>																		
ZTS-MW137	5/31/2023	N	PM01	2A	Upgradient	-9	Alluvium	14.0 - 24.0	<700	18,900	43.2 J	107,000	43	5,930,000	26 J	2,010 J+	25,700	
ZTS-MW137	8/24/2023	N	PM02	2A	Upgradient	-9	Alluvium	14.0 - 24.0	<700	18,200	<35	104,000	21.3	5,740,000	25 J	1,270 J-	24,400	
ZTS-MW137	12/1/2023	N	PM03	2A	Upgradient	-9	Alluvium	14.0 - 24.0	<1,400	19,800	67.9 J	108,000	1.9	4,180,000	43	1,360 J	23,400	
ZTS-MW137	2/23/2024	N	PM04	2A	Upgradient	-9	Alluvium	14.0 - 24.0	<1,400	18,500	46.3 J	105,000	8.7	5,720,000	26 J	24,100	23,800	
ZTS-MW118	5/31/2023	N	PM01	2A	Upgradient	-3	Alluvium	13.5 - 23.5	<700	18,800	36.4 J	114,000	66 J	5,560,000	34	1,630 J+	27,800	
ZTS-MW118	5/31/2023	FD	PM01	2A	Upgradient	-3	Alluvium	13.5 - 23.5	<700	19,000	53.4 J	115,000	----	5,790,000	36	1,670 J+	27,800	
ZTS-MW118	8/24/2023	N	PM02	2A	Upgradient	-3	Alluvium	13.5 - 23.5	<700	19,600	40 J	110,000	7.5	5,480,000	22 J	1,410 J-	26	

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Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	E351.2	E353.2	E365.4	Alkalinity by SM2320B	AM20	SM2540C	SM4500-P-E	SW9060A/S M5310B	SW9060A/S M5310B
									Total Kjeldahl Nitrogen (TKN) µg/L	Nitrogen, Nitrate-Nitrite µg/L	Phosphorus µg/L	Alkalinity as CaCO <sub>3</sub> nmol	Hydrogen	Total Dissolved Solids µg/L	Ortho-phosphorus as PO <sub>4</sub> µg/L	Dissolved Organic Carbon µg/L	Total Inorganic Carbon µg/L
									feet								
ZTS-MW190	2/22/2024	N	PM04	2A	Upgradient	-3	Alluvium	14.3 - 24.0	<1,400	19,400	37.6 J	106,000	2.3	5,800,000	<14	1,330 J-	23,700
ZTS-MW196	5/30/2023	N	PM01	2A	Upgradient	-3	Alluvium	13.8 - 23.5	<560	19,400	41.4 J	106,000	26	5,410,000	14 J	1,420 J+	26,000
ZTS-MW196	8/25/2023	N	PM02	2A	Upgradient	-3	Alluvium	13.8 - 23.5	<700	19,200	42.8 J	107,000	8.2	5,380,000	39	1,440 J	24,500
ZTS-MW196	11/30/2023	N	PM03	2A	Upgradient	-3	Alluvium	13.8 - 23.5	<1,400	19,400	<35	108,000	<0.49	6,340,000	175	470 J	22,700
ZTS-MW196	2/26/2024	N	PM04	2A	Upgradient	-3	Alluvium	13.8 - 23.5	<700	19,200	45 J	108,000	4.2	5,650,000	35	1,650 J+	23,000
ZTS-MW202	5/30/2023	N	PM01	2A	Upgradient	-3	UMCf	28.8 - 38.5	<700	16,200	97.8 J	105,000	27	5,240,000	35	510 J	25,500
ZTS-MW202	8/28/2023	N	PM02	2A	Upgradient	-3	UMCf	28.8 - 38.5	<560	16,700	61.2 J	105,000	13 J+	4,240,000	45	1,240 J	24,400
ZTS-MW202	12/1/2023	N	PM03	2A	Upgradient	-3	UMCf	28.8 - 38.5	<1,400	13,200	90 J	106,000	5.3	3,260,000	40	986 J	23,400
ZTS-MW202	2/27/2024	N	PM04	2A	Upgradient	-3	UMCf	28.8 - 38.5	<700	11,100	78.8 J	108,000	2.3	3,200,000	45	24,100	22,800
ZTS-MW192	5/22/2023	N	PM01	2A	Center of Array	0	Alluvium	14.3 - 24.0	<700	16,800	63 J	93,000	8.2	5,950,000	17 J	1,620 J+	21,900
ZTS-MW192	8/21/2023	N	PM02	2A	Center of Array	0	Alluvium	14.3 - 24.0	<700	19,200	<35	101,000	24.3 J-	5,250,000	<14	2,020 J	24,200
ZTS-MW192	11/28/2023	N	PM03	2A	Center of Array	0	Alluvium	14.3 - 24.0	<1,400	20,200	65.7 J	109,000	14.8	6,040,000	<14	1,340 J	23,400
ZTS-MW192	2/20/2024	N	PM04	2A	Center of Array	0	Alluvium	14.3 - 24.0	<1,400	19,800	<350	105,000	2.6 J	5,480,000	<14	1,080 J+	24,200 J-
ZTS-MW191	5/26/2023	N	PM01	2A	Downgradient	1	Alluvium	14.8 - 24.5	5,290	3,970	144	41,900	<0.49	5,210,000	22 J	1,240 J+	6,990
ZTS-MW191	8/22/2023	N	PM02	2A	Downgradient	1	Alluvium	14.8 - 24.5	5,460	4,290	62.4 J	39,200	22,500 J+	4,270,000	28 J	1,390 J+	7,050
ZTS-MW191	11/29/2023	N	PM03	2A	Downgradient	1	Alluvium	14.8 - 24.5	5,850	6,200	87.9 J	49,000	2,400 J	3,980,000	<14	1,320 J+	8,830
ZTS-MW191	2/21/2024	N	PM04	2A	Downgradient	1	Alluvium	14.8 - 24.5	2,550 J+	7,730	44.5 J	57,200	245	5,330,000	<14	1,370	11,700
ZTS-MW195	5/26/2023	N	PM01	2A	Downgradient	1	Alluvium	14.3 - 24.0	<700	17,800	349	111,000	1,400	5,500,000	62	1,340 J+	24,400
ZTS-MW195	8/21/2023	N	PM02	2A	Downgradient	1	Alluvium	14.3 - 24.0	<700	17,600	75.6 J	96,400	205 J-	4,600,000	15 J	1,930 J	22,800
ZTS-MW195	11/29/2023	N	PM03	2A	Downgradient	1	Alluvium	14.3 - 24.0	1,280 J+	19,500	35.8 J	104,000	9.6	3,430,000	15 J	1,410 J+	23,200
ZTS-MW195	2/21/2024	N	PM04	2A	Downgradient	1	Alluvium	14.3 - 24.0	<700	19,000	<35	104,000	2	5,670,000	14 J	1,360	23,900
ZTS-MW138	5/24/2023	N	PM01	2A	Downgradient	5	Alluvium	14.0 - 24.0	<700	19,100	52.5 J	103,000	23	5,280,000	45	1,190 J+	23,800
ZTS-MW138	8/21/2023	N	PM02	2A	Downgradient	5	Alluvium	14.0 - 24.0	<700	19,700	50.1 J	100,000	34.1 J-	4,880,000	<14	1,850 J	23,500
ZTS-MW138	11/28/2023	N	PM03	2A	Downgradient	5	Alluvium	14.0 - 24.0	<1,400	20,600	42.4 J	106,000	11.1	6,050,000	32	1,320 J	22,700
ZTS-MW138	2/21/2024	N	PM04	2A	Downgradient	5	Alluvium	14.0 - 24.0	<700	20,200	<35	107,000	6.8	5,350,000	29 J	1,340	23,200
ZTS-MW139	5/24/2023	N	PM01	2A	Downgradient	5	Alluvium	13.0 - 23.0	<700	16,300	92.6 J	94,600	32	5,150,000	51	1,400 J+	21,700
ZTS-MW139	8/21/2023	N	PM02	2A	Downgradient	5	Alluvium	13.0 - 23.0	<560	18,700	65.7 J	96,100	37 J-	5,880,000	32	1,660 J	22,200 J-
ZTS-MW139	11/29/2023	N	PM03	2A	Downgradient	5	Alluvium	13.0 - 23.0	250 J	18,000	63.5 J	96,200	7	3,780,000	29 J	1,510 J+	22,200
ZTS-MW139	2/21/2024	N	PM04	2A	Downgradient	5	Alluvium	13.0 - 23.0	<1,400	19,200	38.3 J	106,000	2.1	5,630,000	28 J	1,300	24,400 J-
ZTS-MW193	5/25/2023	N	PM01	2A	Downgradient	5	Alluvium	13.6 - 23.3	<700	16,900	71.8 J	92,900	28 J	5,330,000	53	1,480 J+	23,900
ZTS-MW193	5/25/2023	FD	PM01	2A	Downgradient	5	Alluvium	13.6 - 23.3	<700	18,300	70.1 J	99,900	----	5,130,000	53	1,210 J	23,800
ZTS-MW193	8/22/2023	N	PM02	2A	Downgradient	5	Alluvium	13.6 - 23.3	<700	20,300	63.3 J	99,600	27.6 J+	4,050,000 J	42	1,550 J	24,300
ZTS-MW193	8/22/2023	FD	PM02	2A	Downgradient	5	Alluvium	13.6 - 23.3	<700	18,700	39.5 J	99,600	----	2,910,000 J	45	1,570 J	24,400
ZTS-MW193	11/30/2023	N	PM03	2A	Downgradient	5	Alluvium	13.6 - 23.3	<700	18,800	97.7 J	103,000	11.7	6,080,000	44	1,250 J+	23,500
ZTS-MW193	11/30/2023	FD	PM03	2A	Downgradient	5	Alluvium	13.6 - 23.3	<700	18,400	69 J	107,000	----	6,420,000	46	1,320 J	22,700
ZTS-MW193	2/22/2024	N	PM04	2A	Downgradient	5	Alluvium	13.6 - 23.3	<2,800	18,800	59.9 J	105,000	<0.49				

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	E351.2	E353.2	E365.4	Alkalinity by SM2320B	AM20	SM2540C	SM4500-P-E	SW9060A/S M5310B	SW9060A/S M5310B
									Total Kjeldahl Nitrogen (TKN)	Nitrogen, Nitrate-Nitrite	Phosphorus	Alkalinity as CaCO <sub>3</sub>	Hydrogen	Total Dissolved Solids	Ortho-phosphorus as PO <sub>4</sub>	Dissolved Organic Carbon	Total Inorganic Carbon
									µg/L	µg/L	µg/L	µg/L	nmol	µg/L	µg/L	µg/L	µg/L
ZTS-MW194	5/25/2023	N	PM01	2A	Downgradient	15	Alluvium	17.8 - 22.5	<700	19,100	81.6 J	109,000	33 J	5,810,000	76	1,460 J+	24,800
ZTS-MW194	8/22/2023	N	PM02	2A	Downgradient	15	Alluvium	17.8 - 22.5	<700	20,500	63.9 J	99,000	31.2 J+	4,480,000	51	1,530 J	21,500
ZTS-MW194	11/29/2023	N	PM03	2A	Downgradient	15	Alluvium	17.8 - 22.5	1,320 J+	21,000	64.7 J	109,000	3	3,650,000	36	2,260 J+	24,100
ZTS-MW194	2/22/2024	N	PM04	2A	Downgradient	15	Alluvium	17.8 - 22.5	<1,400	18,300	71.4 J	101,000	<0.49	5,050,000	40	1,440 J-	23,700
LWPS-MW102A	5/30/2023	N	PM01	NA	Downgradient	30	UMCf	47.0 - 66.6	205 J	4,740	124	92,300	47	11,300,000	53	1,250 J+	21,200
LWPS-MW102A	8/23/2023	N	PM02	NA	Downgradient	30	UMCf	47.0 - 66.6	184 J	4,800	46 J	91,800	2.4	11,200,000	102 J+	743 J	19,600
LWPS-MW102A	10/11/2023	N	PM02	NA	Downgradient	30	UMCf	47.0 - 66.6	----	----	----	99,900	----	----	----	----	----
LWPS-MW102A	10/11/2023	FS	PM02	NA	Downgradient	30	UMCf	47.0 - 66.6	----	----	----	----	----	----	----	----	----
LWPS-MW102A	12/1/2023	N	PM03	NA	Downgradient	30	UMCf	47.0 - 66.6	319	5,220	135 J+	91,200	2.2	5,240,000	42	727 J	19,800
LWPS-MW102A	2/27/2024	N	PM04	NA	Downgradient	30	UMCf	47.0 - 66.6	340 J	4,790	115	92,200	3.1	7,660,000	75	19,700	18,800
LWPS-MW102B	5/26/2023	N	PM01	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	485	<50	115	100,000	45	64,600,000	405	4,020	19,900
LWPS-MW102B	8/23/2023	N	PM02	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	4,730	<50	456	102,000	7.9	66,200,000	418	3,780 J	19,400
LWPS-MW102B	12/1/2023	N	PM03	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	3,670	<50	542 J+	103,000	2.5	58,500,000	420	3,670 J	19,600
LWPS-MW102B	2/27/2024	N	PM04	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	<140 UJ	98 J	127	101,000	2.2	----	431	23,100	18,400
ZTS-MW197	5/26/2023	N	PM01	2A	Downgradient	55	Alluvium	12.8 - 22.5	<700	18,700	80.1 J	109,000	33	5,670,000	35	1,400 J+	24,500
ZTS-MW197	8/22/2023	N	PM02	2A	Downgradient	55	Alluvium	12.8 - 22.5	<700	20,300	<35	105,000	2.1 J+	4,740,000	33	1,670 J+	25,000
ZTS-MW197	11/30/2023	N	PM03	2A	Downgradient	55	Alluvium	12.8 - 22.5	<700	19,000	83.7 J	108,000	10.7	6,240,000	39	1,290 J	23,700
ZTS-MW197	2/22/2024	N	PM04	2A	Downgradient	55	Alluvium	12.8 - 22.5	<1,400	18,100	58.7 J	104,000	<0.49	5,570,000	<14	1,230 J-	23,400
ZTS-MW113	5/26/2023	N	PM01	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	<700	19,200	43.1 J	103,000	37	5,370,000	22 J	1,540 J+	24,100
ZTS-MW113	8/24/2023	N	PM02	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	<700	18,400	<35	96,600	2.1	5,570,000	20 J	1,370 J-	23,600
ZTS-MW113	11/30/2023	N	PM03	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	<700	16,600	66.3 J	98,000	2.5	5,760,000	21 J	1,360 J+	21,700
ZTS-MW113	2/23/2024	N	PM04	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	<1,400	14,700	41.7 J	89,700	7.7	5,970,000	<14	20,200	19,800
<b>Test Area 2B</b>																	
<b>Pre-Construction Baseline Results</b>																	
ZTS-MW133	10/20/2022	N	BL02	2B	Upgradient	-9	UMCf	54.0 - 69.0	<140	2,020	<35	85,900	35	3,020,000 J-	73	1,180 J+	17,600
ZTS-MW117	9/1/2022	N	BL01	2B	Upgradient	-2	UMCf	40.5 - 55.5	----	----	----	----	----	2,730,000	----	----	----
ZTS-MW117	10/19/2022	N	BL02	2B	Upgradient	-2	UMCf	40.5 - 55.5	<140	<50	<35	109,000	230	2,420,000	64	<106	23,800
ZTS-MW117	10/19/2022	FD	BL02	2B	Upgradient	-2	UMCf	40.5 - 55.5	<140	<50	<35	108,000	230	2,460,000	63	<106	23,900
ZTS-MW134	10/19/2022	N	BL02	2B	Upgradient	-2	UMCf	26.0 - 36.0	<1,400	18,400	<35	100,000	<0.49	4,580,000 J-	<14	1,740 J+	21,200
ZTS-MW135	10/19/2022	N	BL02	2B	Downgradient	7	UMCf	54.0 - 69.0	<140	2,640	<35	90,500	100	5,970,000	62	<106	18,200
ZTS-MW136	10/20/2022	N	BL02	2B	Cross Gradient	7	UMCf	27.0 - 47.0	<140	2,160	<35	117,000	28	2,950,000	61	<106	25,000
<b>Post-Construction Performance Monitoring Results</b>																	
ZTS-MW133	5/23/2023	N	PM01	2B	Upgradient	-9	UMCf	54.0 - 69.0	<140	2,660 J-	55.5 J	89,400	160	4,270,000	24 J	517 J	20,400
ZTS-MW133	8/30/2023	N	PM02	2B	Upgradient	-9	UMCf	54.0 - 69.0	<140	2,820	<35	89,000	2	5,480,000	51	430 J	20,300
ZTS-MW133	12/4/2023	N	PM03	2B	Upgradient	-9	UMCf	54.0 - 69.0	<140	2,900	94.9 J	95,000	1.9	4,400,000	53	709 J	19,300
ZTS-MW133	2/23/2024	N	PM04	2B	Upgradient	-9	UMCf	54.0 - 69.0	<140	2,970	63.5 J	88,000	14.8	6,200,000	21 J	19,400	19,400
ZTS-MW117	5/25/2023	N	PM01	2B	Upgradient	-2	UMCf	40.5 - 55.5	403	<50	83.6 J	98,600	38 J	4,00			

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**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	E351.2	E353.2	E365.4	Alkalinity by SM2320B	AM20	SM2540C	SM4500-P-E	SW9060A/S M5310B	SW9060A/S M5310B
									Total Kjeldahl Nitrogen (TKN) µg/L	Nitrogen, Nitrate-Nitrite µg/L	Phosphorus µg/L	Alkalinity as CaCO <sub>3</sub> nmol	Hydrogen	Total Dissolved Solids µg/L	Ortho-phosphorus as PO <sub>4</sub> µg/L	Dissolved Organic Carbon µg/L	Total Inorganic Carbon µg/L
									feet								
ZTS-MW134	2/23/2024	N	PM04	2B	Upgradient	-2	UMCf	26.0 - 36.0	<1,400	6,570	71.5 J	84,700	4.3	5,400,000	42 J-	15,000 J-	17,600
ZTS-MW198	5/23/2023	N	PM01	2B	Downgradient	2	UMCf	26.1 - 46.0	410 J+	2,040	334	87,700	3.8	5,610,000	141	1,030 J+	20,600
ZTS-MW198	8/21/2023	N	PM02	2B	Downgradient	2	UMCf	26.1 - 46.0	<140	3,460	109	72,900	<0.49 UJ	5,190,000	39	1,300 J	16,800
ZTS-MW198	11/27/2023	N	PM03	2B	Downgradient	2	UMCf	26.1 - 46.0	285	115	83.4 J	64,500	1.9	4,600,000	60	591 J	13,300
ZTS-MW198	2/20/2024	N	PM04	2B	Downgradient	2	UMCf	26.1 - 46.0	197 J	<50	<35	58,500	2.2 J	4,900,000	<14 UJ	218 J	11,700
ZTS-MW200	5/23/2023	N	PM01	2B	Downgradient	2	UMCf	50.1 - 65.0	233 J	61.4 J	169	26,900	4,700	4,440,000	<14	838 J	4,160 J+
ZTS-MW200	5/23/2023	FD	PM01	2B	Downgradient	2	UMCf	50.1 - 65.0	321 J+	73.2 J	137	27,300	----	4,140,000	<14	577 J	3,990 J+
ZTS-MW200	8/21/2023	N	PM02	2B	Downgradient	2	UMCf	50.1 - 65.0	<140	61.6 J	42.3 J	16,800 J	12,200 J-	6,000,000	<14	901 J	2,510 J+
ZTS-MW200	11/28/2023	N	PM03	2B	Downgradient	2	UMCf	50.1 - 65.0	321 J+	<50	83.6 J	25,400	3,340	6,120,000	40	619 J	3,240
ZTS-MW200	2/20/2024	N	PM04	2B	Downgradient	2	UMCf	50.1 - 65.0	408 J+	<50	77.6 J	18,300 J	1,710	6,190,000	<14	302 J	1,670
ZTS-MW201	5/24/2023	N	PM01	2B	Downgradient	2	UMCf	27.1 - 47.0	488	287	322	100,000	32	5,100,000	81	833 J	25,200
ZTS-MW201	8/22/2023	N	PM02	2B	Downgradient	2	UMCf	27.1 - 47.0	190 J	1,250	155	84,800	13.7 J+	3,390,000	134	717 J	19,400
ZTS-MW201	11/28/2023	N	PM03	2B	Downgradient	2	UMCf	27.1 - 47.0	239 J	1,340	121 J+	85,700	2.8	5,220,000	256	483 J	18,800
ZTS-MW201	2/22/2024	N	PM04	2B	Downgradient	2	UMCf	27.1 - 47.0	<140	1,550	119 J+	82,900	3.7	5,300,000	82	474 J	17,900
ZTS-MW206	5/24/2023	N	PM01	2B	Downgradient	2	UMCf	50.1 - 65.0	556	698	1,480	105,000	11	4,920,000 J-	<14	735 J	26,000
ZTS-MW206	8/22/2023	N	PM02	2B	Downgradient	2	UMCf	50.1 - 65.0	<140	2,030	304	90,600	14.4 J+	4,440,000	244	658 J	20,600
ZTS-MW206	11/28/2023	N	PM03	2B	Downgradient	2	UMCf	50.1 - 65.0	141 J	2,070	248 J+	93,000	2.8	6,630,000	100	431 J	20,800
ZTS-MW206	2/22/2024	N	PM04	2B	Downgradient	2	UMCf	50.1 - 65.0	<140	2,100	141	91,100	3.2	5,980,000	139	355 J	20,000
ZTS-MW199	5/23/2023	N	PM01	2B	Downgradient	5	UMCf	50.1 - 65.0	446	2,660	1,480	94,200	37	4,620,000	1,570	1,070 J+	20,800
ZTS-MW199	8/22/2023	N	PM02	2B	Downgradient	5	UMCf	50.1 - 65.0	215 J	3,880	146	86,800	19.3 J+	4,920,000 J	146	665 J	20,000
ZTS-MW199	11/28/2023	N	PM03	2B	Downgradient	5	UMCf	50.1 - 65.0	<140	3,730	329 J+	88,800	31.8	6,380,000	<14	513 J	20,900
ZTS-MW199	2/20/2024	N	PM04	2B	Downgradient	5	UMCf	50.1 - 65.0	<140	4,030	<35	92,200	27.4 J	6,790,000	86	201 J	19,400
ZTS-MW207	5/24/2023	N	PM01	2B	Downgradient	5	UMCf	26.1 - 46.0	241 J	1,190 J	189	123,000	14	4,700,000 J	165	1,150 J+	31,900
ZTS-MW207	5/24/2023	FD	PM01	2B	Downgradient	5	UMCf	26.1 - 46.0	230 J	1,710 J	170	123,000	----	3,420,000 J	160	1,270 J+	30,800
ZTS-MW207	8/23/2023	N	PM02	2B	Downgradient	5	UMCf	26.1 - 46.0	462 J+	401	151	111,000	19.7 J-	3,400,000	92 J+	1,130 J	26,000
ZTS-MW207	8/23/2023	FD	PM02	2B	Downgradient	5	UMCf	26.1 - 46.0	405	383	106	112,000	----	3,200,000	93 J+	863 J	26,000
ZTS-MW207	11/29/2023	N	PM03	2B	Downgradient	5	UMCf	26.1 - 46.0	629 J+	400	99.8 J	113,000	1.9	2,070,000 J	74	824 J	23,700
ZTS-MW207	11/29/2023	FD	PM03	2B	Downgradient	5	UMCf	26.1 - 46.0	559 J+	443	110 J+	112,000	----	3,020,000 J	70	953 J	20,600
ZTS-MW207	2/22/2024	N	PM04	2B	Downgradient	5	UMCf	26.1 - 46.0	<140	337	63.6 J	103,000	2.2	4,130,000	44	727 J	22,600
ZTS-MW207	2/22/2024	FD	PM04	2B	Downgradient	5	UMCf	26.1 - 46.0	<140	329	57 J	102,000	----	3,780,000	43	503 J	22,800
ZTS-MW135	5/26/2023	N	PM01	2B	Downgradient	7	UMCf	54.0 - 69.0	373	3,470	670	96,500	41	6,210,000	676	647 J	22,300
ZTS-MW135	8/24/2023	N	PM02	2B	Downgradient	7	UMCf	54.0 - 69.0	<140	4,020	243 J+	88,800	3.8	5,920,000	263	480 J	20,700
ZTS-MW135	11/30/2023	N	PM03	2B	Downgradient	7	UMCf	54.0 - 69.0	<140	4,350	178 J	89,200	<0.49	6,850,000	28 J	1,300 J+	18,300
ZTS-MW135	2/22/2024	N	PM04	2B	Downgradient	7	UMCf	54.0 - 69.0	<140	4,680	175	89,200	<0.49	6,730,000	197	393 J	19,400
ZTS-MW136	5/26/2023	N	PM01	2B	Cross Gradient	7	UMCf	27.0 - 47.0	<140	257 J	76.5 J	111,000	28	2,870,000	43	369 J	26,400
ZTS-MW136	5/26/2023	FD	PM01	2B	Cross Gradient	7	UMCf	27.0 - 47.0	<140	414 J	83.3 J	110,000	----	2,930,000	49	999 J	24,600
ZTS-MW136	8/25/2023	N	PM02	2B	Cross Gradient	7	UMCf	27.0 - 47.0	<14								

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Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	E351.2	E353.2	E365.4	Alkalinity by SM2320B	AM20	SM2540C	SM4500-P-E	SW9060A/S M5310B	SW9060A/S M5310B
									Total Kjeldahl Nitrogen (TKN)	Nitrogen, Nitrate-Nitrite	Phosphorus	Alkalinity as CaCO <sub>3</sub>	Hydrogen	Total Dissolved Solids	Ortho-phosphorus as PO <sub>4</sub>	Dissolved Organic Carbon	Total Inorganic Carbon
									µg/L	µg/L	µg/L	µg/L	nmol	µg/L	µg/L	µg/L	µg/L
ZTS-MW208	8/23/2023	N	PM02	2B	Downgradient	15	UMCf	26.1 - 46.0	<560	13,700	<35	97,400	7.9 J-	3,350,000	44 J+	913 J	22,900
ZTS-MW208	11/28/2023	N	PM03	2B	Downgradient	15	UMCf	26.1 - 46.0	<140	11,100	73.8 J	102,000	3.3	5,370,000	44	952 J	23,600
ZTS-MW208	2/22/2024	N	PM04	2B	Downgradient	15	UMCf	26.1 - 46.0	<1,400	10,600	50.4 J	100,000	<0.49	4,900,000	14 J	976 J	22,200
ZTS-MW209	5/25/2023	N	PM01	2B	Downgradient	15	UMCf	50.6 - 65.5	172 J	3,800	286	94,200	51 J	6,400,000	380	646 J	20,800
ZTS-MW209	8/23/2023	N	PM02	2B	Downgradient	15	UMCf	50.6 - 65.5	<140	4,540	138	90,800	4.4 J-	6,550,000	151	464 J	20,200
ZTS-MW209	11/29/2023	N	PM03	2B	Downgradient	15	UMCf	50.6 - 65.5	450 J+	5,160	123 J+	89,400	<0.49	5,530,000	109	624 J	16,600
ZTS-MW209	2/22/2024	N	PM04	2B	Downgradient	15	UMCf	50.6 - 65.5	<140	4,800	96.9 J	90,200	2.2	6,300,000	109	389 J	19,600
<b>Test Area 2C</b>																	
<b>Pre-Construction Baseline Results</b>																	
ZTS-MW140	10/21/2022	N	BL02	2C	Upgradient	-9	Alluvium	15.5 - 25.5	<700	18,700	<35	106,000	6 J+	5,590,000	139	1,670 J+	22,300 J
ZTS-MW119	9/1/2022	N	BL01	2C	Upgradient	-3	Alluvium	15.0 - 25.0	----	----	----	----	----	9,080,000	----	----	----
ZTS-MW119	10/19/2022	N	BL02	2C	Upgradient	-3	Alluvium	15.0 - 25.0	<560	17,900	<35	109,000	1.7 J	3,650,000	<14	1,260 J+	22,900
ZTS-MW119	10/19/2022	FD	BL02	2C	Upgradient	-3	Alluvium	15.0 - 25.0	<700	18,300	<35	103,000	1.6 J	3,590,000	<14	1,760 J+	22,100
ZTS-MW141	10/21/2022	N	BL02	2C	Downgradient	5	Alluvium	14.5 - 24.5	<280	17,900	<35	111,000	8.8	4,950,000	39	1,330 J-	24,800 J-
ZTS-MW142	10/21/2022	N	BL02	2C	Downgradient	5	Alluvium	16.0 - 26.0	<700	18,600	<35	102,000	----	5,500,000	58	1,900 J+	22,100
<b>Post-Construction Performance Monitoring Results</b>																	
ZTS-MW140	5/25/2023	N	PM01	2C	Upgradient	-9	Alluvium	15.5 - 25.5	<700	18,700	98.9 J	104,000	29 J	4,390,000	24 J	1,050 J+	24,500
ZTS-MW140	5/25/2023	FD	PM01	2C	Upgradient	-9	Alluvium	15.5 - 25.5	<700	18,400	50.5 J	102,000	----	5,050,000	24 J	1,170 J+	24,400
ZTS-MW140	8/29/2023	N	PM02	2C	Upgradient	-9	Alluvium	15.5 - 25.5	<560	19,100	<35	108,000	<0.49	4,640,000	17 J	1,410 J	23,500
ZTS-MW140	8/29/2023	FD	PM02	2C	Upgradient	-9	Alluvium	15.5 - 25.5	<560	19,200	<35	105,000	----	5,020,000	16 J	1,470 J	23,000
ZTS-MW140	12/4/2023	N	PM03	2C	Upgradient	-9	Alluvium	15.5 - 25.5	2,910	18,600	67.9 J	114,000	1.6	3,910,000	24 J	1,350 J	24,100
ZTS-MW140	12/4/2023	FD	PM03	2C	Upgradient	-9	Alluvium	15.5 - 25.5	4,190	18,700	67.7 J	114,000	----	3,660,000	27 J	1,350 J	24,700
ZTS-MW140	2/22/2024	N	PM04	2C	Upgradient	-9	Alluvium	15.5 - 25.5	<1,400	18,700	<35	108,000	2.9 J	5,820,000	22 J	1,310 J-	23,000
ZTS-MW140	2/22/2024	FD	PM04	2C	Upgradient	-9	Alluvium	15.5 - 25.5	<1,400	18,600	<35	108,000	----	5,790,000	25 J	1,340 J-	22,800
ZTS-MW119	5/24/2023	N	PM01	2C	Upgradient	-3	Alluvium	15.0 - 25.0	<700	18,200	60.3 J	102,000	30	5,170,000	22 J	1,490 J+	25,000
ZTS-MW119	8/29/2023	N	PM02	2C	Upgradient	-3	Alluvium	15.0 - 25.0	<560	19,100	<35	107,000	3.1	4,590,000	15 J	1,530 J	23,300
ZTS-MW119	12/4/2023	N	PM03	2C	Upgradient	-3	Alluvium	15.0 - 25.0	2,780	18,800	74.7 J	113,000	2.3	4,310,000	25 J	1,320 J	25,100
ZTS-MW119	2/22/2024	N	PM04	2C	Upgradient	-3	Alluvium	15.0 - 25.0	<1,400	18,700	<35	107,000	6.7 J	4,700,000	24 J	1,550 J-	23,100
ZTS-MW181	5/25/2023	N	PM01	2C	Upgradient	-3	Alluvium	17.3 - 27.0	<700	17,100	96.7 J	107,000	32 J	4,250,000	47	1,320 J+	25,300
ZTS-MW181	8/25/2023	N	PM02	2C	Upgradient	-3	Alluvium	17.3 - 27.0	<700	17,600	<35	106,000	18.9	4,650,000	47	1,320 J	24,200
ZTS-MW181	12/6/2023	N	PM03	2C	Upgradient	-3	Alluvium	17.3 - 27.0	<1,400	17,700	61.7 J	118,000	1.8	4,880,000	60	1,410 J	25,000
ZTS-MW181	2/28/2024	N	PM04	2C	Upgradient	-3	Alluvium	17.3 - 27.0	<560	17,900	35.6 J	113,000	<0.49	5,720,000	36	1,360 J+	23,900
ZTS-MW188	5/26/2023	N	PM01	2C	Upgradient	-3	Alluvium	17.3 - 27.0	<700	18,300	73.5 J	104,000	73	5,470,000	33	1,500 J+	23,000
ZTS-MW188	8/25/2023	N	PM02	2C	Upgradient	-3	Alluvium	17.3 - 27.0	<700	18,100	<35	101,000	10.4	5,240,000	37 J-	1,360 J	22,900
ZTS-MW188	12/6/2023	N	PM03	2C	Upgradient	-3	Alluvium	17.3 - 27.0	<1,400	18,900	<35	108,000	3	4,910,000 J-	43	1,380 J	23,300
ZTS-MW188	2/23/2024	N	PM04	2C	Upgradient	-3	Alluvium	17.3 - 27.0	<1,400	17,900	44.9 J	106,000	3.5	5,700,000	22 J	13,000 J-	23,000
ZTS-MW204	5/25/2023	N	PM01	2C	Upgradient	-3											

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	E351.2	E353.2	E365.4	Alkalinity by SM2320B	AM20	SM2540C	SM4500-P-E	SW9060A/S M5310B	SW9060A/S M5310B
									Total Kjeldahl Nitrogen (TKN)	Nitrogen, Nitrate-Nitrite	Phosphorus	Alkalinity as CaCO <sub>3</sub>	Hydrogen	Total Dissolved Solids	Ortho-phosphorus as PO <sub>4</sub>	Dissolved Organic Carbon	Total Inorganic Carbon
									µg/L	µg/L	µg/L	µg/L	nmol	µg/L	µg/L	µg/L	µg/L
ZTS-MW182	11/28/2023	N	PM03	2C	Center of Array	0	Alluvium	17.6 - 27.3	---	---	---	---	39.4 J	---	---	---	---
ZTS-MW182	2/19/2024	N	PM04	2C	Center of Array	0	Alluvium	17.6 - 27.3	<560	15,600	257 J	105,000	16.4 J	3,490,000	92	1,380	21,000
ZTS-MW183	5/23/2023	N	PM01	2C	Downgradient	1	Alluvium	17.3 - 27.0	<700	15,700	96 J	99,800	60	3,710,000	27 J	1,300	23,000
ZTS-MW183	8/22/2023	N	PM02	2C	Downgradient	1	Alluvium	17.3 - 27.0	<700	17,800	79.7 J	94,400	<0.49	4,840,000 J	74	1,570 J	20,200
ZTS-MW183	11/28/2023	N	PM03	2C	Downgradient	1	Alluvium	17.3 - 27.0	<1,400	18,000	44.7 J	107,000	4.6 J	6,470,000	30 J	1,400 J	24,700
ZTS-MW183	2/20/2024	N	PM04	2C	Downgradient	1	Alluvium	17.3 - 27.0	<700	19,100	<175	111,000	34.4 J	5,710,000	<14 UJ	1,070 J+	24,300
ZTS-MW187	5/24/2023	N	PM01	2C	Downgradient	1	Alluvium	15.3 - 25.0	<700	14,700	97.3 J	85,100	2.7	5,120,000	51	1,360 J+	19,700
ZTS-MW187	8/23/2023	N	PM02	2C	Downgradient	1	Alluvium	15.3 - 25.0	<560	16,900	56.2 J	93,900	16.8 J-	5,710,000	52 J+	1,760 J	22,300
ZTS-MW187	11/29/2023	N	PM03	2C	Downgradient	1	Alluvium	15.3 - 25.0	4,030 J+	18,800	46.8 J	102,000	2.8	3,920,000	20 J	1,550 J+	21,300
ZTS-MW187	2/20/2024	N	PM04	2C	Downgradient	1	Alluvium	15.3 - 25.0	<700	17,400	<175	98,800	5.1 J	5,630,000	18 J	1,250 J+	22,400
ZTS-MW141	5/25/2023	N	PM01	2C	Downgradient	5	Alluvium	14.5 - 24.5	<700	19,400	87.9 J	108,000	260 J	7,300,000	479	1,500 J	25,600
ZTS-MW141	8/23/2023	N	PM02	2C	Downgradient	5	Alluvium	14.5 - 24.5	<560	35,700	60.3 J	104,000	18 J-	3,600,000	41 J+	1,670 J	24,400
ZTS-MW141	11/29/2023	N	PM03	2C	Downgradient	5	Alluvium	14.5 - 24.5	5,240 J+	20,400	53.7 J	115,000	13	3,710,000	29 J	1,650 J+	23,900
ZTS-MW141	2/22/2024	N	PM04	2C	Downgradient	5	Alluvium	14.5 - 24.5	<1,400	17,800	755	104,000	36.6	4,700,000	<14	1,850 J+	23,200
ZTS-MW142	5/26/2023	N	PM01	2C	Downgradient	5	Alluvium	16.0 - 26.0	<700	15,800	141	94,200	900	5,700,000	55	1,380 J+	22,500
ZTS-MW142	8/24/2023	N	PM02	2C	Downgradient	5	Alluvium	16.0 - 26.0	<140	16,600	37.5 J	93,600	15.4	5,430,000	60	1,310 J-	20,700
ZTS-MW142	11/30/2023	N	PM03	2C	Downgradient	5	Alluvium	16.0 - 26.0	<700	15,600	90.5 J	98,500	1.8	6,170,000	38	1,280 J	21,800
ZTS-MW142	2/22/2024	N	PM04	2C	Downgradient	5	Alluvium	16.0 - 26.0	<1,400	18,100	58.2 J	102,000	6.7	4,980,000	30 J	1,470 J+	22,700
ZTS-MW184	5/24/2023	N	PM01	2C	Downgradient	5	Alluvium	16.3 - 26.0	<700	17,200	114	99,700	13	5,280,000	37	1,420 J+	22,800
ZTS-MW184	8/22/2023	N	PM02	2C	Downgradient	5	Alluvium	16.3 - 26.0	<700	19,300	51.1 J	101,000	30.5 J+	4,020,000	59	1,600 J+	22,000
ZTS-MW184	11/28/2023	N	PM03	2C	Downgradient	5	Alluvium	16.3 - 26.0	<1,400	18,100	107 J+	113,000	4.7 J	6,280,000	27 J	1,450 J	25,600
ZTS-MW184	2/20/2024	N	PM04	2C	Downgradient	5	Alluvium	16.3 - 26.0	<1,400	19,200	<350	112,000	17.2 J	5,890,000	39 J-	1,600 J+	24,500
ZTS-MW205	5/24/2023	N	PM01	2C	Downgradient	5	UMCf	30.3 - 40.0	<140	249	116	127,000	46	1,890,000	75	546 J	30,000
ZTS-MW205	8/23/2023	N	PM02	2C	Downgradient	5	UMCf	30.3 - 40.0	162 J	328	77.6 J	124,000	13.6 J-	1,960,000	61 J+	824 J	28,300
ZTS-MW205	11/29/2023	N	PM03	2C	Downgradient	5	UMCf	30.3 - 40.0	450 J+	<50	72.3 J	127,000	4.8	1,360,000 J	28 J	596 J	27,000
ZTS-MW205	2/22/2024	N	PM04	2C	Downgradient	5	UMCf	30.3 - 40.0	<140	2,140	92 J	115,000	3.5	2,170,000	19 J	866 J	25,100
ZTS-MW185	5/25/2023	N	PM01	2C	Downgradient	15	Alluvium	15.3 - 25.0	<700	18,100	123	111,000	11 J	7,800,000	89	1,370 J	25,800
ZTS-MW185	8/24/2023	N	PM02	2C	Downgradient	15	Alluvium	15.3 - 25.0	<700	18,900	<35	104,000	7.5	5,850,000	41	1,450 J-	24,300
ZTS-MW185	11/30/2023	N	PM03	2C	Downgradient	15	Alluvium	15.3 - 25.0	<700	18,100	71.5 J	107,000	8.5	6,350,000	33	1,370 J	24,000
ZTS-MW185	2/22/2024	N	PM04	2C	Downgradient	15	Alluvium	15.3 - 25.0	<1,400	19,100	123	112,000	5.7	5,400,000	31	1,370 J-	22,900
ZTS-MW186	5/25/2023	N	PM01	2C	Downgradient	25	Alluvium	15.3 - 25.0	<700	18,900	212	116,000	47 J	6,800,000	89	1,430 J	25,700
ZTS-MW186	8/24/2023	N	PM02	2C	Downgradient	25	Alluvium	15.3 - 25.0	<700	18,900	<35	106,000	12.4	6,300,000	<14	1,450 J-	25,200
ZTS-MW186	11/30/2023	N	PM03	2C	Downgradient	25	Alluvium	15.3 - 25.0	<700	18,200	73 J	109,000	<0.49	6,370,000	28 J	1,290 J+	24,500
ZTS-MW186	2/23/2024	N	PM04	2C	Downgradient	25	Alluvium	15.3 - 25.0	<1,400	18,200	69.6 J	109,000	3.3	5,660,000	22 J	13,400 J-	24,200 J-
ZTS-MW189	5/25/2023	N	PM01	2C	Downgradient	55	Alluvium	12.8 - 23.0	<700	19,700	55.9 J	108,000	880 J	6,300,000	53	1,120 J	24,000
ZTS-MW189	8/25/2023	N	PM02	2C	Downgradient	55	Alluvium	12.8 - 23.0	<700	18,700	55.1 J	103,000	2	5,180,000	41	1,260 J	23,800
ZTS-MW189	1																

**Table 2**  
**Groundwater Analytical Results**  
 Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	E351.2	E353.2	E365.4	Alkalinity by SM2320B	AM20	SM2540C	SM4500-P-E	SW9060A/S M5310B	SW9060A/S M5310B
									Total Kjeldahl Nitrogen (TKN)	Nitrogen, Nitrate-Nitrite	Phosphorus	Alkalinity as CaCO <sub>3</sub>	Hydrogen	Total Dissolved Solids	Ortho-phosphorus as PO <sub>4</sub>	Dissolved Organic Carbon	Total Inorganic Carbon
									µg/L	µg/L	µg/L	µg/L	nmol	µg/L	µg/L	µg/L	µg/L
<b>Post-Construction Performance Monitoring Results</b>																	
ZTS-MW116	5/24/2023	N	PM01	NA	NA	NA	UMCf	33.0 - 48.0	<280	5,520	35.2 J	95,700	39	4,660,000	18 J	966 J	22,400
ZTS-MW116	8/29/2023	N	PM02	NA	NA	NA	UMCf	33.0 - 48.0	<140	5,740	64 J	101,000	9.1	406,000	28 J	991 J	21,700
ZTS-MW116	12/5/2023	N	PM03	NA	NA	NA	UMCf	33.0 - 48.0	<1,400	5,970	113	96,800	3.1	4,180,000	29 J	659 J	21,500
ZTS-MW116	2/27/2024	N	PM04	NA	NA	NA	UMCf	33.0 - 48.0	<280	6,950	52.5 J	96,700	11.3	4,360,000	21 J	20,700	20,100
ZTS-MW128	5/24/2023	N	PM01	NA	NA	NA	UMCf	42.0 - 52.0	<700	11,600	55.5 J	94,800	17	4,900,000	40	982 J	22,900
ZTS-MW128	8/30/2023	N	PM02	NA	NA	NA	UMCf	42.0 - 52.0	<700	13,100	<35	96,500	3.1	4,510,000	47	1,150 J	22,600
ZTS-MW128	12/5/2023	N	PM03	NA	NA	NA	UMCf	42.0 - 52.0	<1,400	12,000	82.1 J	102,000	6.6	3,600,000	37	1,080 J	21,700
ZTS-MW128	2/28/2024	N	PM04	NA	NA	NA	UMCf	42.0 - 52.0	<560	8,670	76.3 J	97,700	24.5	4,660,000	66	918 J	21,100 J-

## Notes:

1. Distances from the discontinuous or continuous walls are shown as negative values for upgradient monitoring wells, as zero for monitoring wells screened within the walls, and as positive values for monitoring wells located downgradient of the walls.

bgs - below ground surface

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

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

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

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.

UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

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

mg/L - milligram per liter

mS/cm - millisiemens per centimeter

mV - millivolts

nmol - nanomol

SU - standard units

N - normal field sample

µg/L - micrograms per liter

UMCf - Upper Muddy Creek formation

FD - field duplicate

FS - field split

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	SW9060A/S M5310B	Dissolved Metals by SW6010B	Dissolved Metals by SW6010B	Dissolved Metals by SW6020												
									Total Organic Carbon	Silicon	Sulfur	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron							
									µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L							
<b>Test Area 1A</b>																								
<b>Pre-Construction Baseline Results</b>																								
ZTS-MW143	10/18/2022	N	BL02	1A	Upgradient	-50	Alluvium	23.0 - 33.0	1,440 J+	33,800	755,000	<18.5	<1.03	52.7	20.6	<0.19	2,070							
ZTS-MW124	8/31/2022	N	BL01	1A	Upgradient	-8	Alluvium	24.0 - 34.0	----	----	----	----	----	44	----	----	----							
ZTS-MW124	8/31/2022	FD	BL01	1A	Upgradient	-8	Alluvium	24.0 - 34.0	----	----	----	----	----	43.7	----	----	----							
ZTS-MW124	10/18/2022	N	BL02	1A	Upgradient	-8	Alluvium	24.0 - 34.0	1,480 J+	33,200	730,000	<18.5	<1.03	47.1 J	20.7 J	<0.19	2,370 J							
ZTS-MW124	10/18/2022	FD	BL02	1A	Upgradient	-8	Alluvium	24.0 - 34.0	1,580 J+	32,200	710,000	<18.5	<1.03	<0.18 UJ	87.3 J	<0.19	59.6 J							
ZTS-MW125	8/31/2022	N	BL01	1A	Upgradient	-8	UMCf	40.0 - 50.0	----	----	----	----	----	40.1	----	----	----							
ZTS-MW125	10/24/2022	N	BL02	1A	Upgradient	-8	UMCf	40.0 - 50.0	1,020 J+	23,000	387,000	<18.5	<1.03	22.2	33.2	<0.19	1,560 J+							
ZTS-MW125	10/24/2022	FD	BL02	1A	Upgradient	-8	UMCf	40.0 - 50.0	----	----	----	----	----	----	----	----	----							
ZTS-MW144	10/18/2022	N	BL02	1A	Downgradient	35	Alluvium	24.0 - 34.0	1,560 J+	35,100	770,000	<18.5	<1.03	47.2	20.2	<0.19	2,310							
<b>Post-Construction Performance Monitoring Results</b>																								
ZTS-MW143	5/26/2023	N	PM01	1A	Upgradient	-50	Alluvium	23.0 - 33.0	1,120 J+	37,300	----	<18.5	<1.03	45.7	22	<0.19	2,490							
ZTS-MW143	8/29/2023	N	PM02	1A	Upgradient	-50	Alluvium	23.0 - 33.0	1,050	37,100	----	<18.5	<1.03	46.6	20.8	<0.19	2,320							
ZTS-MW143	12/6/2023	N	PM03	1A	Upgradient	-50	Alluvium	23.0 - 33.0	1,140	29,800	----	<18.5	<1.03	49.4	20.7	<0.19	2,640							
ZTS-MW143	2/21/2024	N	PM04	1A	Upgradient	-50	Alluvium	23.0 - 33.0	890 J	38,700	----	<18.5	<1.03	53.7	21.9	<0.19	2,790							
ZTS-MW124R	5/26/2023	N	PM01	1A	Upgradient	-8	Alluvium	24.5 - 34.0	1,350 J+	33,100	----	<18.5	<1.03	47.1	18.4	<0.19	1,920							
ZTS-MW124R	8/29/2023	N	PM02	1A	Upgradient	-8	Alluvium	24.5 - 34.0	1,070	34,900	----	<18.5	<1.03	50.4	18.1	<0.19	2,050							
ZTS-MW124R	12/5/2023	N	PM03	1A	Upgradient	-8	Alluvium	24.5 - 34.0	1,300 J+	35,300	----	<18.5	<1.03	48.7	18.7	<0.19	1,960							
ZTS-MW124R	2/27/2024	N	PM04	1A	Upgradient	-8	Alluvium	24.5 - 34.0	1,160	35,800	----	<18.5	<1.03	52.3	20.4	<0.19	2,440							
ZTS-MW125	5/25/2023	N	PM01	1A	Upgradient	-8	UMCf	40.0 - 50.0	571 J	31,200	----	<18.5	<1.03	7.45	26.8	<0.19	1,380							
ZTS-MW125	8/30/2023	N	PM02	1A	Upgradient	-8	UMCf	40.0 - 50.0	671 J	30,600	----	<18.5	<1.03	10.8	29.9	<0.19	1,490 J+							
ZTS-MW125	12/1/2023	N	PM03	1A	Upgradient	-8	UMCf	40.0 - 50.0	779 J	31,900	----	<18.5	<1.03	10.8	28	<0.19	1,570							
ZTS-MW125	2/26/2024	N	PM04	1A	Upgradient	-8	UMCf	40.0 - 50.0	145 J	28,100	----	<18.5	<1.03	5.64	27.7	<0.19	1,240							
ZTS-MW153	5/26/2023	N	PM01	1A	Upgradient	-8	Alluvium	24.3 - 34.0	1,320 J+	35,400	----	<18.5	<1.03	48.3	16.2	<0.19	2,130							
ZTS-MW153	8/31/2023	N	PM02	1A	Upgradient	-8	Alluvium	24.3 - 34.0	1,420 J+	33,800	----	<18.5	<1.03	48.1	17.7	<0.19	2,350							
ZTS-MW153	12/1/2023	N	PM03	1A	Upgradient	-8	Alluvium	24.3 - 34.0	1,170 J+	35,800	----	24.5 J	<1.03	51.7	18.9	<0.19	2,290							
ZTS-MW153	2/27/2024	N	PM04	1A	Upgradient	-8	Alluvium	24.3 - 34.0	929 J	36,600	----	<18.5	<1.03	51.4	19	<0.19	2,430							
ZTS-MW163	5/25/2023	N	PM01	1A	Upgradient	-8	Alluvium	24.3 - 34.0	889 J	35,800	----	<18.5	<1.03	51.7	18	<0.19	2,200							
ZTS-MW163	8/31/2023	N	PM02	1A	Upgradient	-8	Alluvium	24.3 - 34.0	1,240 J+	34,700	----	<18.5	<1.03	49.2	17.8	<0.19	2,380							
ZTS-MW163	12/1/2023	N	PM03	1A	Upgradient	-8	Alluvium	24.3 - 34.0	1,160 J+	35,900	----	<18.5	<1.03	53.1	18.6	<0.19	2,360							
ZTS-MW163	2/27/2024	N	PM04	1A	Upgradient	-8	Alluvium	24.3 - 34.0	1,200	36,800	----	<18.5	<1.03	53.4	20.1	<0.19	2,390							
ZTS-MW150	5/22/2023	N	PM01	1A	Center of Trench	0	Alluvium	24.3 - 34.0	2,380 J+	716	----	<18.5	<1.03	<0.18	27.1	<0.19	1,770							
ZTS-MW150	8/21/2023	N	PM02	1A	Center of Trench	0	Alluvium	24.3 - 34.0	1,160 J+	1,270	----	<18.5	<1.03	<0.18	17.4	<0.19	2,040							
ZTS-MW150	11/27/2023	N	PM03	1A	Center of Trench	0	Alluvium	24.3 - 34.0	1,050 J+	1,350	----	<18.5	<1.03	<0.18	16.5	<0.19	2,000							
ZTS-MW150	2/19/2024	N	PM04	1A	Center of Trench	0	Alluvium	24.3 - 34.0	901 J	1,010	----	<18.5	1.23 J	0.188 J	15.9	<0.19	2,480							
ZTS-MW154	5/24/2023	N	PM01	1A	Center of Trench	0	Alluvium	22.3 - 32.0	902 J	769	----	<18.5	<1.03	<0.18	25.1	<0.19	2,130							
ZTS-MW154	8/21/2023	N	PM02	1A	Center of Trench	0	Alluvium	22.3 - 32.0	1,020 J+	599	----	<18.5	<1.03	<0.18	20.6	&								

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**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	SW9060A/S M5310B	Dissolved Metals by SW6010B	Dissolved Metals by SW6010B	Dissolved Metals by SW6020						
									Total Organic Carbon µg/L	Silicon µg/L	Sulfur µg/L	Aluminum µg/L	Antimony µg/L	Arsenic µg/L	Barium µg/L	Beryllium µg/L	Boron µg/L	
ZTS-MW164	11/27/2023	N	PM03	1A	Center of Trench	0	Alluvium	22.3 - 32.0	1,100	6,580	----	<18.5	<1.03	0.666 J	26.5	<0.19	2,230	
ZTS-MW164	11/27/2023	FD	PM03	1A	Center of Trench	0	Alluvium	22.3 - 32.0	1,050 J+	6,270	----	<18.5	<1.03	0.668 J	25.4	<0.19	2,190	
ZTS-MW164	2/20/2024	N	PM04	1A	Center of Trench	0	Alluvium	22.3 - 32.0	907 J	4,320	----	<18.5	<1.03	1.04 J	22.8	<0.19	----	
ZTS-MW164	2/20/2024	FD	PM04	1A	Center of Trench	0	Alluvium	22.3 - 32.0	928 J	4,200	----	<18.5	<1.03	0.962 J	23.2	<0.19	----	
ZTS-MW151	5/25/2023	N	PM01	1A	Downgradient	5	Alluvium	24.3 - 34.0	1,040	10,000	----	<18.5	<1.03	8.53	24.3	<0.19	2,030	
ZTS-MW151	8/21/2023	N	PM02	1A	Downgradient	5	Alluvium	24.3 - 34.0	1,060 J+	12,600	----	<18.5	<1.03	8.4	21.9	<0.19	2,090	
ZTS-MW151	11/28/2023	N	PM03	1A	Downgradient	5	Alluvium	24.3 - 34.0	1,020 J+	16,000	----	<18.5	<1.03	5.69	25.2	<0.19	2,360	
ZTS-MW151	2/20/2024	N	PM04	1A	Downgradient	5	Alluvium	24.3 - 34.0	980 J	14,600	----	<18.5	2.31 J	4.62	22.5	<0.19	----	
ZTS-MW155	5/24/2023	N	PM01	1A	Downgradient	5	Alluvium	20.3 - 35.0	837 J	4,380	----	<18.5	<1.03	0.249	58.5	<0.19	2,140	
ZTS-MW155	5/24/2023	FD	PM01	1A	Downgradient	5	Alluvium	20.3 - 35.0	829 J	4,590	----	<18.5	<1.03	0.338	58	<0.19	2,300	
ZTS-MW155	8/22/2023	N	PM02	1A	Downgradient	5	Alluvium	20.3 - 35.0	1,180 J+	13,900	----	<18.5	<1.03	4.09	22.1	<0.19	2,300	
ZTS-MW155	8/22/2023	FD	PM02	1A	Downgradient	5	Alluvium	20.3 - 35.0	1,190 J+	14,300	----	<18.5	<1.03	4.57	23.2	<0.19	2,360	
ZTS-MW155	11/28/2023	N	PM03	1A	Downgradient	5	Alluvium	20.3 - 35.0	1,010 J+	14,600	----	<18.5	<1.03	2.93	21.9	<0.19	2,480	
ZTS-MW155	11/28/2023	FD	PM03	1A	Downgradient	5	Alluvium	20.3 - 35.0	1,010 J+	15,100	----	24.3 J	<1.03	3.27	22.4	<0.19	2,540	
ZTS-MW155	2/21/2024	N	PM04	1A	Downgradient	5	Alluvium	20.3 - 35.0	971 J	16,400	----	<18.5	<1.03	2.68	18.9	<0.19	2,620	
ZTS-MW155	2/21/2024	FD	PM04	1A	Downgradient	5	Alluvium	20.3 - 35.0	935 J	16,500	----	<18.5	<1.03	2.53	19.6	<0.19	2,790	
ZTS-MW156	5/24/2023	N	PM01	1A	Downgradient	5	UMCf	43.8 - 53.5	312 J	32,000	----	<18.5	<1.03	1.23	25.9	<0.19	1,380	
ZTS-MW156	8/22/2023	N	PM02	1A	Downgradient	5	UMCf	43.8 - 53.5	561 J	31,800	----	<18.5	<1.03	2.01	20	<0.19	1,330	
ZTS-MW156	11/29/2023	N	PM03	1A	Downgradient	5	UMCf	43.8 - 53.5	559 J	31,400	----	<18.5	<1.03	1.05 J	18.6	<0.19	1,400	
ZTS-MW156	2/21/2024	N	PM04	1A	Downgradient	5	UMCf	43.8 - 53.5	176 J	28,500	----	<18.5	<1.03	1.99 J	18.8	<0.19	1,420	
ZTS-MW165	5/31/2023	N	PM01	1A	Downgradient	5	Alluvium	22.3 - 32.0	1,410 J+	8,680	----	<18.5	<1.03	2.63	33.3	<0.19	2,200	
ZTS-MW165	8/25/2023	N	PM02	1A	Downgradient	5	Alluvium	22.3 - 32.0	1,060 J+	21,400	----	<18.5	<1.03	2 J	21.2	<0.19	2,340	
ZTS-MW165	11/30/2023	N	PM03	1A	Downgradient	5	Alluvium	22.3 - 32.0	1,270 J+	26,800	----	<18.5	<1.03	1.68 J	21.4 J+	<0.19	2,500	
ZTS-MW165	2/23/2024	N	PM04	1A	Downgradient	5	Alluvium	22.3 - 32.0	786 J	23,400	----	<18.5	<1.03	1.83 J	20.1	<0.19	2,300	
ZTS-MW152	5/25/2023	N	PM01	1A	Downgradient	15	Alluvium	23.3 - 33.0	976 J	13,400	----	<18.5	<1.03	29.6	18	<0.19	2,100	
ZTS-MW152	8/22/2023	N	PM02	1A	Downgradient	15	Alluvium	23.3 - 33.0	1,160 J+	17,300	----	<18.5	<1.03	11.9	16.9	<0.19	2,260	
ZTS-MW152	11/28/2023	N	PM03	1A	Downgradient	15	Alluvium	23.3 - 33.0	1,010 J+	20,100	----	<18.5	<1.03	10.9	20.5	<0.19	2,530	
ZTS-MW152	2/20/2024	N	PM04	1A	Downgradient	15	Alluvium	23.3 - 33.0	1,020 J+	17,800	----	<18.5	<1.03	8.8	19.9	<0.19	----	
ZTS-MW157	5/25/2023	N	PM01	1A	Downgradient	15	Alluvium	23.3 - 33.0	841 J	6,140	----	<18.5	<1.03	7.5	40.3	<0.19	2,170	
ZTS-MW157	8/23/2023	N	PM02	1A	Downgradient	15	Alluvium	23.3 - 33.0	1,080 J+	9,720	----	<18.5	<1.03	4.84	23.5	<0.19	2,410	
ZTS-MW157	11/29/2023	N	PM03	1A	Downgradient	15	Alluvium	23.3 - 33.0	1,170 J+	13,300	----	<18.5	<1.03	4.85	21.8	<0.19	2,270	
ZTS-MW157	2/21/2024	N	PM04	1A	Downgradient	15	Alluvium	23.3 - 33.0	969 J	17,600	----	<18.5	<1.03	5.97	18.7	<0.19	2,870	
ZTS-MW162	5/25/2023	N	PM01	1A	Downgradient	15	Alluvium	23.3 - 33.0	936 J	13,200	----	<18.5	<1.03	6.8	20.7	<0.19	2,260	
ZTS-MW162	8/18/2023	N	PM02	1A	Downgradient	15	Alluvium	23.3 - 33.0	1,130 J+	20,000	----	<18.5	<1.03	5.39	20	<0.19	2,190	
ZTS-MW162	11/30/2023	N	PM03	1A	Downgradient	15	Alluvium	23.3 - 33.0	1,100 J+	28,600	----	<18.5	<1.03	3.41	21.7 J+	<0.19	2,680	
ZTS-MW162	2/21/2024	N	PM04	1A	Downgradient	15	Alluvium	23.3 - 33.0	982 J	25,500	----	<18.5	<1.03	2.91	22.8	<0.19	2,750	
ZTS-MW149	5/31/2023	N	PM01	1A	Downgradient	25	Alluvium	23.3 - 33.0	1,450 J+	28,300	----	<18.5	<1.03					

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Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	SW9060A/S M5310B	Dissolved Metals by SW6010B	Dissolved Metals by SW6010B	Dissolved Metals by SW6020						
									Total Organic Carbon µg/L	Silicon µg/L	Sulfur µg/L	Aluminum µg/L	Antimony µg/L	Arsenic µg/L	Barium µg/L	Beryllium µg/L	Boron µg/L	
ZTS-MW144	2/23/2024	N	PM04	1A	Downgradient	35	Alluvium	24.0 - 34.0	2,990	16,900	---	<18.5	<1.03	15	19.3	<0.19	2,320	
ZTS-MW158	5/24/2023	N	PM01	1A	Downgradient	50	Alluvium	23.3 - 33.0	942 J	14,700	---	<18.5	<1.03	17.3	19.5	<0.19	2,170	
ZTS-MW158	8/25/2023	N	PM02	1A	Downgradient	50	Alluvium	23.3 - 33.0	1,060 J+	11,000	---	<18.5	<1.03	12.9	18.3	<0.19	2,220	
ZTS-MW158	12/1/2023	N	PM03	1A	Downgradient	50	Alluvium	23.3 - 33.0	1,240 J+	16,300	---	<18.5	<1.03	18.9	17.9	<0.19	2,410	
ZTS-MW158	2/27/2024	N	PM04	1A	Downgradient	50	Alluvium	23.3 - 33.0	1,090	16,800	---	<18.5	<1.03	17.6	18.3	<0.19	2,490	
ZTS-MW159	5/24/2023	N	PM01	1A	Downgradient	50	UMCf	38.8 - 48.5	1,120 J+	25,000	---	<18.5	2.04 J	8.4	37.2	<0.19	1,360	
ZTS-MW159	8/25/2023	N	PM02	1A	Downgradient	50	UMCf	38.8 - 48.5	1,020 J+	26,100	---	<18.5	<1.03	24	22.3	<0.19	2,070	
ZTS-MW159	12/1/2023	N	PM03	1A	Downgradient	50	UMCf	38.8 - 48.5	1,110 J+	28,000	---	<18.5	<1.03	26.9	21.7	<0.19	2,180	
ZTS-MW159	2/27/2024	N	PM04	1A	Downgradient	50	UMCf	38.8 - 48.5	1,060	29,400	---	<18.5	<1.03	26.4	24.3	<0.19	2,280	
ZTS-MW160	5/24/2023	N	PM01	1A	Downgradient	100	Alluvium	23.3 - 33.0	1,280 J+	21,300	---	<18.5	<1.03	32.5	15.1	<0.19	2,060	
ZTS-MW160	8/28/2023	N	PM02	1A	Downgradient	100	Alluvium	23.3 - 33.0	1,440	25,700	---	<18.5	<1.03	29.9	15.5	<0.19	2,200	
ZTS-MW160	12/5/2023	N	PM03	1A	Downgradient	100	Alluvium	23.3 - 33.0	1,310 J+	29,400	---	<18.5	<1.03	27.8	19.2	<0.19	2,410	
ZTS-MW160	2/27/2024	N	PM04	1A	Downgradient	100	Alluvium	23.3 - 33.0	1,040	29,800	---	<18.5	<1.03	27.7	18.8	<0.19	2,420	
ZTS-MW161	5/26/2023	N	PM01	1A	Downgradient	150	Alluvium	24.3 - 34.0	1,280 J+	22,800	---	<18.5	<1.03	34.2	15.9	<0.19	2,080	
ZTS-MW161	8/25/2023	N	PM02	1A	Downgradient	150	Alluvium	24.3 - 34.0	946 J	20,400	---	<18.5	<1.03	29.7	17.1	<0.19	2,190	
ZTS-MW161	8/25/2023	FD	PM02	1A	Downgradient	150	Alluvium	24.3 - 34.0	904 J	20,000	---	<18.5	<1.03	28.3	17	<0.19	2,040	
ZTS-MW161	12/1/2023	N	PM03	1A	Downgradient	150	Alluvium	24.3 - 34.0	1,160 J+	20,000	---	<18.5	<1.03	30.4	16.2	<0.19	2,180	
ZTS-MW161	12/1/2023	FD	PM03	1A	Downgradient	150	Alluvium	24.3 - 34.0	1,230 J+	20,200	---	<18.5	<1.03	30.2	16.5	<0.19	2,220	
ZTS-MW161	2/23/2024	N	PM04	1A	Downgradient	150	Alluvium	24.3 - 34.0	2,550 J	17,700	---	<18.5	<1.03	29.4	17.7	<0.19	2,300	
ZTS-MW161	2/23/2024	FD	PM04	1A	Downgradient	150	Alluvium	24.3 - 34.0	1,510 J	17,700	---	<18.5	<1.03	30.4	17.9	<0.19	2,260	
<b>Between Test Area 1A and Test Area 1B</b>																		
<b>Pre-Construction Baseline Results</b>																		
ZTS-MW145	10/24/2022	N	BL02	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	<102 UJ	25,100	559,000	<18.5	<1.03	16.3	27.3	<0.19	1,830 J+	
ZTS-MW146	10/24/2022	N	BL02	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	1,590 J+	25,000	727,000	<18.5	<1.03	23.1	33.1	<0.19	2,250 J+	
<b>Post-Construction Performance Monitoring Results</b>																		
ZTS-MW145	5/22/2023	N	PM01	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	2,150 J+	11,300	---	53.1 J	<1.03	2.25	92	<0.19	387	
ZTS-MW145	8/30/2023	N	PM02	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	453 J	31,300	---	<18.5	<1.03	2.31	19.2	<0.19	1,400 J+	
ZTS-MW145	12/6/2023	N	PM03	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	278 J	25,800	---	<18.5	<1.03	1.57 J	17.4	<0.19	1,500	
ZTS-MW145	2/21/2024	N	PM04	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	653 J	24,400	---	<18.5	<1.03	2.55	35.1	<0.19	1,280	
ZTS-MW146	5/26/2023	N	PM01	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	1,010 J+	28,900	---	<18.5	<1.03	8.3	38.7	<0.19	1,650	
ZTS-MW146	8/25/2023	N	PM02	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	609 J	32,800	---	<18.5	<1.03	0.586 J	23.5	<0.19	1,750	
ZTS-MW146	11/30/2023	N	PM03	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	779 J	32,700	---	<18.5	<1.03	0.457 J	24 J+	<0.19	1,880	
ZTS-MW146	2/23/2024	N	PM04	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	290 J	28,300	---	<18.5	<1.03	0.392 J	22.2	<0.19	1,660	
<b>Test Area 1B</b>																		
<b>Pre-Construction Baseline Results</b>																		
ZTS-MW147	10/18/2022	N	BL02	1B	Upgradient	-50	Alluvium	19.5 - 29.5	1,700 J+	39,300	765,000	<18.5	<1.03	59.9	27	<0.19	2,540	
ZTS-MW126	8/31/2022	N	BL01															

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Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	SW9060A/S M5310B	Dissolved Metals by SW6010B	Dissolved Metals by SW6010B	Dissolved Metals by SW6020					
									Total Organic Carbon	Silicon	Sulfur	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron
									µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
LWWPS-MW107C	10/24/2022	N	BL02	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	4,990 J+	4,040	11,200,000	<18.5	<103	2.48	2,760	<19	11,000 J+
<b>Post-Construction Performance Monitoring Results</b>																	
ZTS-MW147	5/26/2023	N	PM01	1B	Upgradient	-50	Alluvium	19.5 - 29.5	1,550 J+	39,800	----	<18.5	<1.03	52.2	24.8	<0.19	2,600
ZTS-MW147	8/30/2023	N	PM02	1B	Upgradient	-50	Alluvium	19.5 - 29.5	1,450 J+	37,800	----	<18.5	<1.03	49.9	26.7	<0.19	2,750
ZTS-MW147	12/1/2023	N	PM03	1B	Upgradient	-50	Alluvium	19.5 - 29.5	1,450 J+	39,400	----	<18.5	<1.03	54.9	25.9	<0.19	2,650
ZTS-MW147	2/23/2024	N	PM04	1B	Upgradient	-50	Alluvium	19.5 - 29.5	3,500	33,800	----	<18.5	<1.03	55.4	29.6	<0.19	2,660
ZTS-MW126	5/25/2023	N	PM01	1B	Upgradient	-8	Alluvium	20.0 - 30.0	986 J	43,400	----	<18.5	<1.03	64.4	24.5	<0.19	2,370
ZTS-MW126	8/25/2023	N	PM02	1B	Upgradient	-8	Alluvium	20.0 - 30.0	1,080 J+	44,800	----	<18.5	<1.03	64.4	25.4	<0.19	2,300
ZTS-MW126	11/30/2023	N	PM03	1B	Upgradient	-8	Alluvium	20.0 - 30.0	1,240 J+	42,600	----	<18.5	<1.03	64.3	24.8 J+	<0.19	2,720
ZTS-MW126	2/23/2024	N	PM04	1B	Upgradient	-8	Alluvium	20.0 - 30.0	1,190 J+	36,700	----	<18.5	<1.03	66.5	28.1	<0.19	2,580
ZTS-MW127R	5/25/2023	N	PM01	1B	Upgradient	-8	Alluvium	18.5 - 23.0	1,450	40,600	----	<18.5	<1.03	43	21	<0.19	2,610
ZTS-MW127R	8/28/2023	N	PM02	1B	Upgradient	-8	Alluvium	18.5 - 23.0	1,960	40,700	----	<18.5	<1.03	45.4	19.5	<0.19	2,840
ZTS-MW127R	11/30/2023	N	PM03	1B	Upgradient	-8	Alluvium	18.5 - 23.0	1,430 J+	40,200	----	<18.5	<1.03	43.5	19.5 J+	<0.19	2,890
ZTS-MW127R	2/23/2024	N	PM04	1B	Upgradient	-8	Alluvium	18.5 - 23.0	1,250 J+	34,900	----	<18.5	<1.03	50.9	21.9	<0.19	2,590
ZTS-MW169	5/24/2023	N	PM01	1B	Upgradient	-8	Alluvium	17.1 - 27.0	1,230	41,200	----	<18.5	<1.03	49.6	22.3	<0.19	2,770
ZTS-MW169	8/28/2023	N	PM02	1B	Upgradient	-8	Alluvium	17.1 - 27.0	1,350	41,000	----	<18.5	<1.03	52.9	23	<0.19	2,730
ZTS-MW169	11/30/2023	N	PM03	1B	Upgradient	-8	Alluvium	17.1 - 27.0	1,370 J+	39,500	----	<18.5	<1.03	48.3	22.2 J+	<0.19	2,850
ZTS-MW169	2/23/2024	N	PM04	1B	Upgradient	-8	Alluvium	17.1 - 27.0	985 J	35,100	----	<18.5	<1.03	54.4	24.4	<0.19	2,620
ZTS-MW170	5/24/2023	N	PM01	1B	Upgradient	-8	UMCf	31.1 - 41.0	851 J	37,800	----	<18.5	<1.03	31.3	19.2	<0.19	1,890
ZTS-MW170	8/29/2023	N	PM02	1B	Upgradient	-8	UMCf	31.1 - 41.0	1,300	39,500	----	<18.5	<1.03	38.5	19.1	<0.19	2,000
ZTS-MW170	11/30/2023	N	PM03	1B	Upgradient	-8	UMCf	31.1 - 41.0	1,050 J+	37,900	----	<18.5	<1.03	37.7	18.8 J+	<0.19	2,170
ZTS-MW170	2/23/2024	N	PM04	1B	Upgradient	-8	UMCf	31.1 - 41.0	647 J	33,400	----	<18.5	<1.03	40.8	20.1	<0.19	2,040
ZTS-MW166	5/23/2023	N	PM01	1B	Center of Trench	0	Alluvium	19.8 - 29.5	1,310 J+	323 J+	----	<18.5	<1.03	<0.18	32.9	<0.19	2,520
ZTS-MW166	8/21/2023	N	PM02	1B	Center of Trench	0	Alluvium	19.8 - 29.5	964 J	5,460	----	50.9 J	<1.03	0.307 J	24.7	<0.19	2,160
ZTS-MW166	11/28/2023	N	PM03	1B	Center of Trench	0	Alluvium	19.8 - 29.5	1,160 J+	371	----	<18.5	<1.03	<0.18	23.9	<0.19	2,770
ZTS-MW166	2/20/2024	N	PM04	1B	Center of Trench	0	Alluvium	19.8 - 29.5	1,070 J+	287	----	<18.5	<1.03	<0.18	24.6	<0.19	----
ZTS-MW171	5/22/2023	N	PM01	1B	Center of Trench	0	Alluvium	19.3 - 29.0	1,720 J+	720	----	<18.5	<1.03	0.214 J	24.6	<0.19	2,300
ZTS-MW171	8/21/2023	N	PM02	1B	Center of Trench	0	Alluvium	19.3 - 29.0	1,280 J+	950	----	<18.5	<1.03	0.198 J	18	<0.19	2,360
ZTS-MW171	11/27/2023	N	PM03	1B	Center of Trench	0	Alluvium	19.3 - 29.0	1,220	815	----	<18.5	<1.03	0.184 J	16.6	<0.19	2,560
ZTS-MW171	2/19/2024	N	PM04	1B	Center of Trench	0	Alluvium	19.3 - 29.0	1,050	436	----	<18.5	<1.03	29.8	26.1	<0.19	3,080
ZTS-MW178	5/25/2023	N	PM01	1B	Center of Trench	0	Alluvium	17.8 - 27.5	1,060	222	----	<18.5	<1.03	0.221 J	36	<0.19	2,460
ZTS-MW178	8/21/2023	N	PM02	1B	Center of Trench	0	Alluvium	17.8 - 27.5	1,110 J+	236 J+	----	<18.5	<1.03	<0.18	29.5	<0.19	2,310
ZTS-MW178	11/28/2023	N	PM03	1B	Center of Trench	0	Alluvium	17.8 - 27.5	1,010 J+	244	----	<18.5	<1.03	<0.18	30.5	<0.19	2,590
ZTS-MW178	2/20/2024	N	PM04	1B	Center of Trench	0	Alluvium	17.8 - 27.5	1,060 J+	227	----	<18.5	<1.03	<0.18	31.8	<0.19	----
ZTS-MW167	5/24/2023	N	PM01	1B	Downgradient	5	Alluvium	23.3 - 33.0	960 J	2,540	----	<18.5	<1.03	3.49 J+	54.9	<0.19	2,170 J+
ZTS-MW167	8/22/2023	N	PM02	1B	Downgradient	5	Alluvium	23.3 - 33.0	1,150 J+	2,700 J+	----	<18.5	<1.03	2.47	24.2	<0.19	2,540
ZTS-MW167	11/28/2023	N	PM03	1B	Downgradient	5	Alluvium	23.3 - 33.0	1,260 J+	2,510	----	<18.5	<1.03	3.2	24.8	<0.19	2,590
ZTS-MW167	2/20/2024	N	PM04	1B	Downgradient</td												

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	SW9060A/S M5310B	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
										Metals by SW6010B	Metals by SW6020						
										Total Organic Carbon µg/L	Silicon µg/L	Sulfur µg/L	Aluminum µg/L	Antimony µg/L	Arsenic µg/L	Barium µg/L	Beryllium µg/L
ZTS-MW172	2/22/2024	N	PM04	1B	Downgradient	5	Alluvium	17.3 - 27.0	1,100 J+	4,020	---	<18.5	<1.03	4.18	21.2	<0.19	2,380
ZTS-MW172	2/22/2024	FD	PM04	1B	Downgradient	5	Alluvium	17.3 - 27.0	1,090 J+	3,930	---	<18.5	1.75 J	4.21	22.9	<0.19	2,590
ZTS-MW173	5/25/2023	N	PM01	1B	Downgradient	5	UMCf	33.3 - 43.0	1,410	24,900	---	<18.5	11.5	13	54.2	<0.19	1,480
ZTS-MW173	8/22/2023	N	PM02	1B	Downgradient	5	UMCf	33.3 - 43.0	2,510 J+	23,600	---	<18.5	17	11.3	38.9	<0.19	1,850
ZTS-MW173	11/29/2023	N	PM03	1B	Downgradient	5	UMCf	33.3 - 43.0	4,060	26,600	---	<18.5	7.01	10.6	32.9	<0.19	1,420
ZTS-MW173	2/21/2024	N	PM04	1B	Downgradient	5	UMCf	33.3 - 43.0	407 J	27,800	---	<18.5	<1.03	18.7	21	<0.19	1,500
ZTS-MW179	5/25/2023	N	PM01	1B	Downgradient	5	Alluvium	18.3 - 23.0	1,120	10,100	---	<18.5	<1.03	19.1	27.6	<0.19	2,360
ZTS-MW179	8/23/2023	N	PM02	1B	Downgradient	5	Alluvium	18.3 - 23.0	1,160 J+	7,180	---	<18.5	<1.03	11.1	31	<0.19	2,690
ZTS-MW179	11/30/2023	N	PM03	1B	Downgradient	5	Alluvium	18.3 - 23.0	1,170 J+	6,090	---	<18.5	<1.03	7.35	30.2 J+	<0.19	2,720
ZTS-MW179	2/22/2024	N	PM04	1B	Downgradient	5	Alluvium	18.3 - 23.0	1,160 J+	5,440	---	<18.5	2.54 J	4.96	30.8	<0.19	2,770
ZTS-MW168	5/24/2023	N	PM01	1B	Downgradient	15	Alluvium	20.3 - 30.0	1,070 J+	6,130	---	<18.5	<1.03	13.8	21.7	<0.19	2,190 J+
ZTS-MW168	8/22/2023	N	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	1,180 J+	6,920	---	<18.5	<1.03	8.7	21.5	<0.19	2,560
ZTS-MW168	10/11/2023	N	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	---	---	---	---	---	---	---	---	---
ZTS-MW168	10/11/2023	FS	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	---	---	---	---	---	---	---	---	---
ZTS-MW168	10/11/2023	FD	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	---	---	---	---	---	---	---	---	---
ZTS-MW168	11/29/2023	N	PM03	1B	Downgradient	15	Alluvium	20.3 - 30.0	1,420 J+	6,210	---	<18.5	<1.03	6.96	19	<0.19	2,540
ZTS-MW168	2/21/2024	N	PM04	1B	Downgradient	15	Alluvium	20.3 - 30.0	973 J	5,300	---	<18.5	<1.03	6.54	20.9	<0.19	2,580
ZTS-MW174	5/24/2023	N	PM01	1B	Downgradient	15	Alluvium	19.8 - 29.5	1,370 J+	9,430	---	<18.5	<1.03	18.6	25.8	<0.19	2,270
ZTS-MW174	5/26/2023	N	PM01	1B	Downgradient	15	Alluvium	19.8 - 29.5	---	---	---	---	---	---	---	---	---
ZTS-MW174	8/22/2023	N	PM02	1B	Downgradient	15	Alluvium	19.8 - 29.5	1,200 J+	7,540	---	<18.5	<1.03	11.2	19.2	<0.19	2,590
ZTS-MW174	10/11/2023	N	PM02	1B	Downgradient	15	Alluvium	19.8 - 29.5	---	---	---	---	---	---	---	---	---
ZTS-MW174	10/11/2023	FS	PM02	1B	Downgradient	15	Alluvium	19.8 - 29.5	---	---	---	---	---	---	---	---	---
ZTS-MW174	10/11/2023	FD	PM02	1B	Downgradient	15	Alluvium	19.8 - 29.5	---	---	---	---	---	---	---	---	---
ZTS-MW174	11/29/2023	N	PM03	1B	Downgradient	15	Alluvium	19.8 - 29.5	1,180 J+	6,820	---	<18.5	<1.03	10.3	18.7	<0.19	2,330
ZTS-MW174	2/21/2024	N	PM04	1B	Downgradient	15	Alluvium	19.8 - 29.5	922 J	6,130	---	<18.5	<1.03	8.97	19	<0.19	2,640
ZTS-MW177	5/25/2023	N	PM01	1B	Downgradient	15	Alluvium	20.3 - 30.0	1,140	9,490	---	<18.5	<1.03	11.4	22.3	<0.19	2,580
ZTS-MW177	8/23/2023	N	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	1,230 J+	6,720	---	<18.5	<1.03	8.64	18.1	<0.19	2,590
ZTS-MW177	11/29/2023	N	PM03	1B	Downgradient	15	Alluvium	20.3 - 30.0	1,580 J+	8,230	---	<18.5	<1.03	9.66	16.4	<0.19	2,340
ZTS-MW177	2/21/2024	N	PM04	1B	Downgradient	15	Alluvium	20.3 - 30.0	1,010	5,750	---	<18.5	<1.03	7.17	18.3	<0.19	2,520
ZTS-MW180	5/24/2023	N	PM01	1B	Downgradient	25	Alluvium	17.8 - 22.5	1,170 J+	34,300	---	35.3 J	<1.03	48.6	18.3	<0.19	2,690
ZTS-MW180	5/24/2023	FD	PM01	1B	Downgradient	25	Alluvium	17.8 - 22.5	1,140 J+	34,600	---	<18.5	<1.03	44.9	16.8	<0.19	2,260
ZTS-MW180	8/24/2023	N	PM02	1B	Downgradient	25	Alluvium	17.8 - 22.5	1,340	43,400	---	<18.5	<1.03	52.9	17	<0.19	2,810
ZTS-MW180	8/24/2023	FD	PM02	1B	Downgradient	25	Alluvium	17.8 - 22.5	1,310	43,300	---	<18.5	<1.03	52.7	17.4	<0.19	2,700
ZTS-MW180	11/30/2023	N	PM03	1B	Downgradient	25	Alluvium	17.8 - 22.5	1,300 J+	40,600	---	<18.5	<1.03	50.5	17.8 J+	<0.19	2,740
ZTS-MW180	11/30/2023	FD	PM03	1B	Downgradient	25	Alluvium	17.8 - 22.5	1,300 J+	40,700	---	<18.5	<1.03	50.4	17.5 J+	<0.19	2,800
ZTS-MW180	2/22/2024	N	PM04	1B	Downgradient	25	Alluvium	17.8 - 22.5	1,130 J+	36,000	---	<18.5	<1.03	54.2	19	<0.19	2,700
ZTS-MW180	2/22/2024	FD	PM04	1B	Downgradient	25	Alluvium	17.8 - 22.5	1,130 J+	36,100	---	<18.5	<1.03	55.4	20.3	<0.19	2,750
ZTS-MW148	5/25/2023	N	PM01	1B	Downgradient	35	Alluvium	22.0 - 32.0	1,160	9,570	---	<18.5	<1.03	20.7	19.5	<0.19	2,510
ZTS-MW148	8/23/2023	N	PM02	1B	Downgradient	35	Alluvium	22.0 - 32.0	1,160 J+	10,600	---	<18.5	<1.03</				

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**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	SW9060A/S M5310B	Dissolved Metals by SW6010B	Dissolved Metals by SW6010B	Dissolved Metals by SW6020						
										Total Organic Carbon	Silicon	Sulfur	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron
										µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
LWPS-MW107A	11/30/2023	N	PM03	1B	Downgradient	50	Alluvium	24.8 - 34.5	1,090 J+	6,530	---	<18.5	<1.03	10.1	20.5 J+	<0.19	2,560	
LWPS-MW107A	2/22/2024	N	PM04	1B	Downgradient	50	Alluvium	24.8 - 34.5	1,110 J+	6,610	---	<18.5	<1.03	11.1	27.5	<0.19	2,140	
LWPS-MW107B	5/23/2023	N	PM01	1B	Downgradient	50	UMCf	46.0 - 65.8	797 J	23,900	---	<18.5	<1.03	1.88 J	16.2	<0.19	1,820	
LWPS-MW107B	8/24/2023	N	PM02	1B	Downgradient	50	UMCf	46.0 - 65.8	905 J	11,700	---	<18.5	7.76	6.64	56.9	<0.19	919	
LWPS-MW107B	12/1/2023	N	PM03	1B	Downgradient	50	UMCf	46.0 - 65.8	1,260 J+	6,810	---	<18.5	13.7	9.03	81.7	<0.19	479	
LWPS-MW107B	2/23/2024	N	PM04	1B	Downgradient	50	UMCf	46.0 - 65.8	3,580	21,700	---	<18.5	<1.03	1.75 J	16.5	<0.19	1,700	
LWPS-MW107C	5/23/2023	N	PM01	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	4,430	4,320	---	<18.5	<1.03	0.28 J	23.4	<0.19	11,300	
LWPS-MW107C	8/24/2023	N	PM02	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	4,730	5,190	---	<185	<10.3	5.47 J	47.5	<1.9	10,200	
LWPS-MW107C	12/1/2023	N	PM03	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	4,430 J+	4,740	---	<185	<10.3	<1.8	20.7 J+	<1.9	10,200	
LWPS-MW107C	2/23/2024	N	PM04	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	6,360	3,910	---	<370	<20.6	<3.6	22.2 J	<3.8	10,000	
ZTS-MW175	5/26/2023	N	PM01	1B	Downgradient	100	Alluvium	19.8 - 29.5	1,550 J+	29,500	---	<18.5	<1.03	46.6	19.9	<0.19	2,620	
ZTS-MW175	8/25/2023	N	PM02	1B	Downgradient	100	Alluvium	19.8 - 29.5	1,070 J+	22,500	---	<18.5	<1.03	39.6	21.3	<0.19	2,370	
ZTS-MW175	11/30/2023	N	PM03	1B	Downgradient	100	Alluvium	19.8 - 29.5	1,150 J+	17,900	---	<18.5	<1.03	32.3	19.2 J+	<0.19	2,500	
ZTS-MW175	2/28/2024	N	PM04	1B	Downgradient	100	Alluvium	19.8 - 29.5	1,640 J+	17,100	---	<18.5	<1.03	36.8	20.4	<0.19	2,190	
ZTS-MW176	5/26/2023	N	PM01	1B	Downgradient	150	Alluvium	19.8 - 29.5	2,270 J+	34,000	---	<18.5	<1.03	51.9	20	<0.19	2,490	
ZTS-MW176	8/25/2023	N	PM02	1B	Downgradient	150	Alluvium	19.8 - 29.5	1,140 J+	27,600	---	<18.5	<1.03	47.5	21.4	<0.19	2,350	
ZTS-MW176	12/5/2023	N	PM03	1B	Downgradient	150	Alluvium	19.8 - 29.5	1,290 J+	22,800	---	<18.5	1.81 J	43.7	21.3	<0.19	2,460	
ZTS-MW176	2/27/2024	N	PM04	1B	Downgradient	150	Alluvium	19.8 - 29.5	1,140	23,600	---	<18.5	1.08 J	47.8	20.9	<0.19	2,480	
<b>Test Area 2A</b>																		
<b>Pre-Construction Baseline Results</b>																		
ZTS-MW137	10/20/2022	N	BL02	2A	Upgradient	-9	Alluvium	14.0 - 24.0	2,240 J+	39,200	793,000	<18.5	<1.03	52.4	29.1	<0.19	2,710	
ZTS-MW118	9/1/2022	N	BL01	2A	Upgradient	-3	Alluvium	13.5 - 23.5	---	---	---	---	---	36.1	---	---	---	
ZTS-MW118	10/21/2022	N	BL02	2A	Upgradient	-3	Alluvium	13.5 - 23.5	2,050	41,400	818,000	<18.5	<1.03	48.8	27.1	<0.19	3,190	
ZTS-MW138	10/20/2022	N	BL02	2A	Downgradient	5	Alluvium	14.0 - 24.0	2,060 J+	36,500	770,000	<18.5	<1.03	44.5	39.1	<0.19	2,630	
ZTS-MW139	10/21/2022	N	BL02	2A	Downgradient	5	Alluvium	13.0 - 23.0	2,030	37,500	795,000	<18.5	<1.03	29.8	39	<0.19	2,970	
LWPS-MW102A	10/21/2022	N	BL02	NA	Downgradient	30	UMCf	47.0 - 66.6	<102	28,000	1,630,000	<18.5	<1.03	71.1	11.2	<0.19	2,360	
LWPS-MW102B	10/21/2022	N	BL02	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	2,650	<1,400	9,820,000	<18.5	<103	<0.18	<38.1	<0.19	12,400	
ZTS-MW113	10/25/2022	N	BL02	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	1,580 J	3,520	69,300	<18.5	<1.03	56.5	25.8	<0.19	2,660	
<b>Post-Construction Performance Monitoring Results</b>																		
ZTS-MW137	5/31/2023	N	PM01	2A	Upgradient	-9	Alluvium	14.0 - 24.0	1,820 J+	32,800	---	27.1 J	<1.03	53.1	23.7	<0.19	2,790	
ZTS-MW137	8/24/2023	N	PM02	2A	Upgradient	-9	Alluvium	14.0 - 24.0	1,290	41,800	---	<18.5	<1.03	58.5	23.9	<0.19	2,910	
ZTS-MW137	12/1/2023	N	PM03	2A	Upgradient	-9	Alluvium	14.0 - 24.0	1,500 J+	39,400	---	<18.5	<1.03	59.3	22.1	<0.19	2,770	
ZTS-MW137	2/23/2024	N	PM04	2A	Upgradient	-9	Alluvium	14.0 - 24.0	1,250 J+	33,100	---	<18.5	<1.03	59.9	23.4	<0.19	2,700	
ZTS-MW118	5/31/2023	N	PM01	2A	Upgradient	-3	Alluvium	13.5 - 23.5	1,730 J+	36,000	---	<18.5	<1.03	42.9	23.2	<0.19	2,600	
ZTS-MW118	5/31/2023	FD	PM01	2A	Upgradient	-3	Alluvium	13.5 - 23.5	1,720 J+	36,700	---	<18.5	<1.03	44	24.7	<0.19	2,870	
ZTS-MW118	8/24/2023	N	PM02	2A	Upgradient	-3	Alluvium	13.5 - 23.5	1,340	42,100	---	<18.5	<1.03	50.9	25.2	<0.19	2,860	
ZTS-MW118	8/24/2023	FD	PM02	2A	Upgradient	-3	Alluvium	13.5 - 23.5	1,320	42,400	---	<18.5	<1					

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Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	SW9060A/S M5310B	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	
										Metals by SW6010B	Metals by SW6020						
										Total Organic Carbon µg/L	Silicon µg/L	Sulfur µg/L	Aluminum µg/L	Antimony µg/L	Arsenic µg/L	Barium µg/L	Beryllium µg/L
ZTS-MW190	2/22/2024	N	PM04	2A	Upgradient	-3	Alluvium	14.3 - 24.0	1,370 J+	33,800	---	<18.5	<1.03	52.4	21.6	<0.19	3,140
ZTS-MW196	5/30/2023	N	PM01	2A	Upgradient	-3	Alluvium	13.8 - 23.5	1,670 J+	35,000	---	<18.5	<1.03	52.3	24.1	<0.19	2,770
ZTS-MW196	8/25/2023	N	PM02	2A	Upgradient	-3	Alluvium	13.8 - 23.5	1,290 J+	40,000	---	<18.5	<1.03	54.5	25	<0.19	2,530
ZTS-MW196	11/30/2023	N	PM03	2A	Upgradient	-3	Alluvium	13.8 - 23.5	1,460 J+	39,300	---	<18.5	1.41 J	54.5	23.8 J+	<0.19	2,790
ZTS-MW196	2/26/2024	N	PM04	2A	Upgradient	-3	Alluvium	13.8 - 23.5	1,420 J+	33,200	---	<18.5	<1.03	61.7	24.1	<0.19	---
ZTS-MW202	5/30/2023	N	PM01	2A	Upgradient	-3	UMCf	28.8 - 38.5	1,600 J+	34,300	---	<18.5	<1.03	41.8	21.9	<0.19	2,400
ZTS-MW202	8/28/2023	N	PM02	2A	Upgradient	-3	UMCf	28.8 - 38.5	1,440	38,900	---	<18.5	<1.03	45.2	19.5	<0.19	2,470
ZTS-MW202	12/1/2023	N	PM03	2A	Upgradient	-3	UMCf	28.8 - 38.5	1,230 J+	38,000	---	<18.5	1.09 J	35	24.9	<0.19	2,370
ZTS-MW202	2/27/2024	N	PM04	2A	Upgradient	-3	UMCf	28.8 - 38.5	906 J	38,800	---	<18.5	1.08 J	29.3	20.7	<0.19	1,980
ZTS-MW192	5/22/2023	N	PM01	2A	Center of Array	0	Alluvium	14.3 - 24.0	1,830 J+	29,600	---	<18.5	<1.03	35.2	39.3	<0.19	2,350
ZTS-MW192	8/21/2023	N	PM02	2A	Center of Array	0	Alluvium	14.3 - 24.0	1,340 J+	37,000	---	<18.5	<1.03	50.2	26.7	<0.19	2,720
ZTS-MW192	11/28/2023	N	PM03	2A	Center of Array	0	Alluvium	14.3 - 24.0	1,180 J+	35,600	---	<18.5	<1.03	59.4	25.9	<0.19	3,060
ZTS-MW192	2/20/2024	N	PM04	2A	Center of Array	0	Alluvium	14.3 - 24.0	1,350 J+	34,400	---	<18.5	<1.03	53.5	24.6	<0.19	---
ZTS-MW191	5/26/2023	N	PM01	2A	Downgradient	1	Alluvium	14.8 - 24.5	2,010 J+	7,120	---	69.1 J	<1.03	3.5	36.9	<0.19	2,320
ZTS-MW191	8/22/2023	N	PM02	2A	Downgradient	1	Alluvium	14.8 - 24.5	1,320 J+	8,050	---	<18.5	<1.03	4.83	30.4	<0.19	2,130
ZTS-MW191	11/29/2023	N	PM03	2A	Downgradient	1	Alluvium	14.8 - 24.5	1,390 J+	11,800	---	<18.5	<1.03	11.4	30.4	<0.19	2,620
ZTS-MW191	2/21/2024	N	PM04	2A	Downgradient	1	Alluvium	14.8 - 24.5	1,090	15,300	---	<18.5	<1.03	16.4	22.9	<0.19	2,640
ZTS-MW195	5/26/2023	N	PM01	2A	Downgradient	1	Alluvium	14.3 - 24.0	1,670 J+	36,100	---	<18.5	<1.03	43.9	28.2	<0.19	2,830
ZTS-MW195	8/21/2023	N	PM02	2A	Downgradient	1	Alluvium	14.3 - 24.0	1,620 J+	34,500	---	<18.5	<1.03	44.7	30.1	<0.19	2,510
ZTS-MW195	11/29/2023	N	PM03	2A	Downgradient	1	Alluvium	14.3 - 24.0	1,640 J+	35,900	---	<18.5	<1.03	53	26.8	<0.19	2,760
ZTS-MW195	2/21/2024	N	PM04	2A	Downgradient	1	Alluvium	14.3 - 24.0	1,050	33,300	---	<18.5	<1.03	50.6	23.8	<0.19	2,860
ZTS-MW138	5/24/2023	N	PM01	2A	Downgradient	5	Alluvium	14.0 - 24.0	2,430	39,100	---	<18.5	<1.03	56.4	26.3	<0.19	2,730
ZTS-MW138	8/21/2023	N	PM02	2A	Downgradient	5	Alluvium	14.0 - 24.0	1,350 J+	37,300	---	27.1 J	<1.03	56.9	24.9	<0.19	2,590
ZTS-MW138	11/28/2023	N	PM03	2A	Downgradient	5	Alluvium	14.0 - 24.0	1,220 J+	35,800	---	<18.5	<1.03	64	28.1	<0.19	3,210
ZTS-MW138	2/21/2024	N	PM04	2A	Downgradient	5	Alluvium	14.0 - 24.0	1,020	34,700	---	<18.5	<1.03	57.6	21	<0.19	2,820
ZTS-MW139	5/24/2023	N	PM01	2A	Downgradient	5	Alluvium	13.0 - 23.0	1,180 J+	35,300	---	<18.5	<1.03	45.6	26	<0.19	2,730
ZTS-MW139	8/21/2023	N	PM02	2A	Downgradient	5	Alluvium	13.0 - 23.0	1,320 J+	34,200	---	<18.5	<1.03	45	24.3	<0.19	2,670
ZTS-MW139	11/29/2023	N	PM03	2A	Downgradient	5	Alluvium	13.0 - 23.0	1,400 J+	34,100	---	<18.5	<1.03	47.3	22.4	<0.19	2,800
ZTS-MW139	2/21/2024	N	PM04	2A	Downgradient	5	Alluvium	13.0 - 23.0	1,090	31,700	---	<18.5	<1.03	47.5	23.7	<0.19	2,870
ZTS-MW193	5/25/2023	N	PM01	2A	Downgradient	5	Alluvium	13.6 - 23.3	1,200 J+	36,400	---	<18.5	<1.03	49	26.8	<0.19	2,780
ZTS-MW193	5/25/2023	FD	PM01	2A	Downgradient	5	Alluvium	13.6 - 23.3	1,450 J+	37,500	---	<18.5	<1.03	48.8	27.1	<0.19	2,700
ZTS-MW193	8/22/2023	N	PM02	2A	Downgradient	5	Alluvium	13.6 - 23.3	1,440 J+	35,500	---	<18.5	<1.03	44.7	23.4	<0.19	2,700
ZTS-MW193	8/22/2023	FD	PM02	2A	Downgradient	5	Alluvium	13.6 - 23.3	1,430 J+	35,800	---	<18.5	<1.03	47.1	25.1	<0.19	2,760
ZTS-MW193	11/30/2023	N	PM03	2A	Downgradient	5	Alluvium	13.6 - 23.3	1,310 J+	38,800	---	<18.5	<1.03	51.3	25.6 J+	<0.19	2,990
ZTS-MW193	11/30/2023	FD	PM03	2A	Downgradient	5	Alluvium	13.6 - 23.3	1,340 J+	38,200	---	<18.5	<1.03	48.3	24.7 J+	<0.19	2,890
ZTS-MW193	2/22/2024	N	PM04	2A	Downgradient	5	Alluvium	13.6 - 23.3	1,360	33,700	---	<18.5	<1.03	53	22.2	<0.19	3,000
ZTS-MW193	2/22/2024	FD	PM04	2A	Downgradient	5	Alluvium	13.6 - 23.3	1,290	34,000	---	<18.5	<1.03	53.3	22.5	<0.19	2,900
ZTS-MW203	5/30/2023	N	PM01	2A	Downgradient												

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	SW9060A/S M5310B	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	
										Metals by SW6010B	Metals by SW6020							
										Total Organic Carbon µg/L	Silicon µg/L	Sulfur µg/L	Aluminum µg/L	Antimony µg/L	Arsenic µg/L	Barium µg/L	Beryllium µg/L	Boron µg/L
ZTS-MW194	5/25/2023	N	PM01	2A	Downgradient	15	Alluvium	17.8 - 22.5	1,310 J+	38,800	---	<18.5	<1.03	58.1	23.8	<0.19	2,870	
ZTS-MW194	8/22/2023	N	PM02	2A	Downgradient	15	Alluvium	17.8 - 22.5	1,390 J+	35,600	---	<18.5	<1.03	53	23.6	<0.19	2,790	
ZTS-MW194	11/29/2023	N	PM03	2A	Downgradient	15	Alluvium	17.8 - 22.5	1,430 J+	38,700	---	<18.5	<1.03	62.3	25.3	<0.19	2,900	
ZTS-MW194	2/22/2024	N	PM04	2A	Downgradient	15	Alluvium	17.8 - 22.5	1,380	34,800	---	<18.5	<1.03	57.8	22.2	<0.19	2,980	
LWPS-MW102A	5/30/2023	N	PM01	NA	Downgradient	30	UMCf	47.0 - 66.6	1,080 J+	26,200	---	<18.5	<1.03	70.1	10.3	<0.19	2,320	
LWPS-MW102A	8/23/2023	N	PM02	NA	Downgradient	30	UMCf	47.0 - 66.6	706 J	27,900	---	<18.5	<1.03	74.1	10.1	<0.19	2,380	
LWPS-MW102A	10/11/2023	N	PM02	NA	Downgradient	30	UMCf	47.0 - 66.6	----	----	----	----	----	----	----	----	----	
LWPS-MW102A	10/11/2023	FS	PM02	NA	Downgradient	30	UMCf	47.0 - 66.6	----	----	----	----	----	----	----	----	----	
LWPS-MW102A	12/1/2023	N	PM03	NA	Downgradient	30	UMCf	47.0 - 66.6	932 J	28,300	---	<18.5	1.19 J	70.4	9.62	<0.19	2,100	
LWPS-MW102A	2/27/2024	N	PM04	NA	Downgradient	30	UMCf	47.0 - 66.6	762 J	29,200	---	<18.5	<1.03	73	11.1	<0.19	2,290	
LWPS-MW102B	5/26/2023	N	PM01	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	4,050	4,960	---	<18.5	<51.5	0.661 J	27.3 J	<0.19	11,800	
LWPS-MW102B	8/23/2023	N	PM02	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	3,240	4,430	---	<185	<10.3	<1.8	22	<1.9	11,400	
LWPS-MW102B	12/1/2023	N	PM03	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	3,860 J+	4,810	---	<185	<10.3	<1.8	20.6 J+	<1.9	10,900	
LWPS-MW102B	2/27/2024	N	PM04	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	3,390	4,690	---	<18.5	<10.3	0.548 J	22.7	<1.9	11,700	
ZTS-MW197	5/26/2023	N	PM01	2A	Downgradient	55	Alluvium	12.8 - 22.5	1,850 J+	38,900	---	<18.5	<1.03	47	24.8	<0.19	2,540	
ZTS-MW197	8/22/2023	N	PM02	2A	Downgradient	55	Alluvium	12.8 - 22.5	1,440 J+	35,700	---	<18.5	<1.03	51.3	23.7	<0.19	2,740	
ZTS-MW197	11/30/2023	N	PM03	2A	Downgradient	55	Alluvium	12.8 - 22.5	1,350 J+	40,000	---	<18.5	<1.03	53.7	26 J+	<0.19	2,910	
ZTS-MW197	2/22/2024	N	PM04	2A	Downgradient	55	Alluvium	12.8 - 22.5	1,310	34,300	---	<18.5	<1.03	56.7	22.9	<0.19	2,870	
ZTS-MW113	5/26/2023	N	PM01	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	1,920 J+	39,700	---	<18.5	<1.03	56.4	25.9	<0.19	2,810	
ZTS-MW113	8/24/2023	N	PM02	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	1,390	42,900	---	<18.5	<1.03	54.4	22.3	<0.19	2,570	
ZTS-MW113	11/30/2023	N	PM03	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	1,460 J+	38,800	---	<18.5	<1.03	49.8	21.7 J+	<0.19	2,660	
ZTS-MW113	2/23/2024	N	PM04	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	3,700	30,300	---	<18.5	<1.03	57.1	24.8	<0.19	2,130	
<b>Test Area 2B</b>																		
<b>Pre-Construction Baseline Results</b>																		
ZTS-MW133	10/20/2022	N	BL02	2B	Upgradient	-9	UMCf	54.0 - 69.0	1,050 J+	28,300	799,000	<18.5	<1.03	77.1	12.9	<0.19	1,250	
ZTS-MW117	9/1/2022	N	BL01	2B	Upgradient	-2	UMCf	40.5 - 55.5	----	----	----	----	----	77.9	----	----	----	
ZTS-MW117	10/19/2022	N	BL02	2B	Upgradient	-2	UMCf	40.5 - 55.5	<102	29,500	303,000	<18.5	<1.03	39	23.5	<0.19	1,110	
ZTS-MW117	10/19/2022	FD	BL02	2B	Upgradient	-2	UMCf	40.5 - 55.5	<102	29,000	303,000	<18.5	<1.03	37.9	23.1	<0.19	1,110	
ZTS-MW134	10/19/2022	N	BL02	2B	Upgradient	-2	UMCf	26.0 - 36.0	1,540 J+	36,000	768,000	<18.5	<1.03	50.3	28.9	<0.19	2,570	
ZTS-MW135	10/19/2022	N	BL02	2B	Downgradient	7	UMCf	54.0 - 69.0	<102	28,000	862,000	<18.5	<1.03	78.1	13.1	<0.19	1,490	
ZTS-MW136	10/20/2022	N	BL02	2B	Cross Gradient	7	UMCf	27.0 - 47.0	1,680 J+	32,400	388,000	<18.5	<1.03	8.02	38.5	<0.19	1,330	
<b>Post-Construction Performance Monitoring Results</b>																		
ZTS-MW133	5/23/2023	N	PM01	2B	Upgradient	-9	UMCf	54.0 - 69.0	740 J	30,400	----	78.2 J	<1.03	82.5	10.6	<0.19	1,650	
ZTS-MW133	8/30/2023	N	PM02	2B	Upgradient	-9	UMCf	54.0 - 69.0	451 J	27,800	----	<18.5	<1.03	82.1	9.14	<0.19	1,500 J+	
ZTS-MW133	12/4/2023	N	PM03	2B	Upgradient	-9	UMCf	54.0 - 69.0	747 J	30,200	----	<18.5	2 J	83.1	10.1	<0.19	1,640	
ZTS-MW133	2/23/2024	N	PM04	2B	Upgradient	-9	UMCf	54.0 - 69.0	548 J	24,300	----	<18.5	<1.03	87.2	9.95	<0.19	1,490	
ZTS-MW117	5/25/2023	N	PM01	2B	Upgradient	-2	UMCf	40.5 - 55.5	758 J	21,200	----	25.2 J	<1.03	7.33	52.4	<0.19	870	
ZTS-MW117	8/24/2023</td																	

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**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	SW9060A/S M5310B	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
										Metals by SW6010B	Metals by SW6020						
										Total Organic Carbon µg/L	Silicon µg/L	Sulfur µg/L	Aluminum µg/L	Antimony µg/L	Arsenic µg/L	Barium µg/L	Beryllium µg/L
ZTS-MW134	2/23/2024	N	PM04	2B	Upgradient	-2	UMCf	26.0 - 36.0	521 J	31,700	---	<18.5	<1.03	40.2	20.4	<0.19	1,580
ZTS-MW198	5/23/2023	N	PM01	2B	Downgradient	2	UMCf	26.1 - 46.0	1,500 J+	25,900	---	<18.5	<1.03	13.7	30.4	<0.19	1,240
ZTS-MW198	8/21/2023	N	PM02	2B	Downgradient	2	UMCf	26.1 - 46.0	725 J	30,600	---	<18.5	<1.03	14.4	21.4	<0.19	1,460
ZTS-MW198	11/27/2023	N	PM03	2B	Downgradient	2	UMCf	26.1 - 46.0	536 J	29,200	---	<18.5	<1.03	13.1	19.3	<0.19	1,180
ZTS-MW198	2/20/2024	N	PM04	2B	Downgradient	2	UMCf	26.1 - 46.0	248 J	24,200	---	<18.5	<1.03	11.4	15.2	<0.19	---
ZTS-MW200	5/23/2023	N	PM01	2B	Downgradient	2	UMCf	50.1 - 65.0	1,070 J+	952	---	<18.5	<1.03	0.503 J	30.9	<0.19	1,070
ZTS-MW200	5/23/2023	FD	PM01	2B	Downgradient	2	UMCf	50.1 - 65.0	1,130 J+	956	---	<18.5	<1.03	0.486 J	31.3	<0.19	1,110
ZTS-MW200	8/21/2023	N	PM02	2B	Downgradient	2	UMCf	50.1 - 65.0	502 J	1,020	---	<18.5	<1.03	1.12 J	28.2	<0.19	1,190
ZTS-MW200	11/28/2023	N	PM03	2B	Downgradient	2	UMCf	50.1 - 65.0	927 J	842	---	<18.5	1.18 J	2.82	27.6	<0.19	1,520
ZTS-MW200	2/20/2024	N	PM04	2B	Downgradient	2	UMCf	50.1 - 65.0	536 J	782	---	<18.5	1.27 J	2.63	24.4	<0.19	---
ZTS-MW201	5/24/2023	N	PM01	2B	Downgradient	2	UMCf	27.1 - 47.0	742 J	30,600	---	<18.5	1.11 J	32.6	31.8	<0.19	1,410
ZTS-MW201	8/22/2023	N	PM02	2B	Downgradient	2	UMCf	27.1 - 47.0	657 J	28,600	---	<18.5	<1.03	39.7	19.2	<0.19	1,300
ZTS-MW201	11/28/2023	N	PM03	2B	Downgradient	2	UMCf	27.1 - 47.0	458 J	27,100	---	<18.5	1.35 J	41.7	20	<0.19	1,390
ZTS-MW201	2/22/2024	N	PM04	2B	Downgradient	2	UMCf	27.1 - 47.0	355 J	25,900	---	<18.5	<1.03	33.3	18.1	<0.19	1,430
ZTS-MW206	5/24/2023	N	PM01	2B	Downgradient	2	UMCf	50.1 - 65.0	775 J	28,300	---	28.9 J	<1.03	89.4	21.9	<0.19	1,490
ZTS-MW206	8/22/2023	N	PM02	2B	Downgradient	2	UMCf	50.1 - 65.0	443 J	27,900	---	<18.5	<1.03	70.5	13.3	<0.19	1,310
ZTS-MW206	11/28/2023	N	PM03	2B	Downgradient	2	UMCf	50.1 - 65.0	356 J	25,600	---	<18.5	<1.03	85.9	13.7	<0.19	1,720
ZTS-MW206	2/22/2024	N	PM04	2B	Downgradient	2	UMCf	50.1 - 65.0	379 J	24,200	---	<18.5	<1.03	76.3	12.6	<0.19	1,630
ZTS-MW199	5/23/2023	N	PM01	2B	Downgradient	5	UMCf	50.1 - 65.0	1,240 J+	27,200	---	<18.5	<1.03	99.9	16.1	<0.19	1,560
ZTS-MW199	8/22/2023	N	PM02	2B	Downgradient	5	UMCf	50.1 - 65.0	560 J	28,200	---	<18.5	<1.03	71.1	9.71	<0.19	1,530
ZTS-MW199	11/28/2023	N	PM03	2B	Downgradient	5	UMCf	50.1 - 65.0	421 J	26,000	---	27.9 J	<1.03	80.6	11.7	<0.19	1,830
ZTS-MW199	2/20/2024	N	PM04	2B	Downgradient	5	UMCf	50.1 - 65.0	314 J	26,000	---	<18.5	<1.03	83	10.7 J+	<0.19	---
ZTS-MW207	5/24/2023	N	PM01	2B	Downgradient	5	UMCf	26.1 - 46.0	868 J	29,800	---	<18.5	<1.03	20.8	37	<0.19	1,510
ZTS-MW207	5/24/2023	FD	PM01	2B	Downgradient	5	UMCf	26.1 - 46.0	901 J	32,900	---	<18.5	<1.03	23.5	40.7	<0.19	1,610
ZTS-MW207	8/23/2023	N	PM02	2B	Downgradient	5	UMCf	26.1 - 46.0	643 J	33,000	---	<18.5	<1.03	13.6	23.2	<0.19	1,470
ZTS-MW207	8/23/2023	FD	PM02	2B	Downgradient	5	UMCf	26.1 - 46.0	792 J	33,500	---	20.7 J	<1.03	13.6	23.7	<0.19	1,520
ZTS-MW207	11/29/2023	N	PM03	2B	Downgradient	5	UMCf	26.1 - 46.0	889 J	33,200	---	<18.5	<1.03	16.1	19.4	<0.19	1,320
ZTS-MW207	11/29/2023	FD	PM03	2B	Downgradient	5	UMCf	26.1 - 46.0	979 J	33,300	---	<18.5	<1.03	15.1	20.6	<0.19	1,420 J+
ZTS-MW207	2/22/2024	N	PM04	2B	Downgradient	5	UMCf	26.1 - 46.0	397 J	29,100	---	<18.5	<1.03	20	15.3	<0.19	1,420
ZTS-MW207	2/22/2024	FD	PM04	2B	Downgradient	5	UMCf	26.1 - 46.0	424 J	29,300	---	<18.5	<1.03	19.7	16.4	<0.19	1,380
ZTS-MW135	5/26/2023	N	PM01	2B	Downgradient	7	UMCf	54.0 - 69.0	934 J	30,300	---	<18.5	<1.03	114	13.6	<0.19	1,670
ZTS-MW135	8/24/2023	N	PM02	2B	Downgradient	7	UMCf	54.0 - 69.0	652 J	32,200	---	<18.5	<1.03	96.4	12.1	<0.19	1,790
ZTS-MW135	11/30/2023	N	PM03	2B	Downgradient	7	UMCf	54.0 - 69.0	570 J	29,300	---	<18.5	<1.03	83.8	10 J+	<0.19	1,710
ZTS-MW135	2/22/2024	N	PM04	2B	Downgradient	7	UMCf	54.0 - 69.0	283 J	25,600	---	<18.5	<1.03	83.8	9.93	<0.19	1,920
ZTS-MW136	5/26/2023	N	PM01	2B	Cross Gradient	7	UMCf	27.0 - 47.0	681 J	33,200	---	<18.5	<1.03	6.79	20.1	<0.19	1,220
ZTS-MW136	5/26/2023	FD	PM01	2B	Cross Gradient	7	UMCf	27.0 - 47.0	690 J	34,300	---	<18.5	<1.03	6.76	20.5	<0.19	1,220
ZTS-MW136	8/25/2023	N	PM02	2B	Cross Gradient	7	UMCf	27.0 - 47.0	461 J	35,000	---	<18.5	<1.03	3.56	19.6	<0.19	1,240
ZTS-MW136	8/25/2023	FD	PM02	2B	Cross Gradient</td												

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	SW9060A/S M5310B	Dissolved Metals by SW6010B	Dissolved Metals by SW6010B	Dissolved Metals by SW6020						
									Total Organic Carbon µg/L	Silicon µg/L	Sulfur µg/L	Aluminum µg/L	Antimony µg/L	Arsenic µg/L	Barium µg/L	Beryllium µg/L	Boron µg/L	
ZTS-MW208	8/23/2023	N	PM02	2B	Downgradient	15	UMCf	26.1 - 46.0	1,490 J+	38,400	----	19.7 J	<1.03	54.6	20.4	<0.19	2,520	
ZTS-MW208	11/28/2023	N	PM03	2B	Downgradient	15	UMCf	26.1 - 46.0	869 J	33,600	----	<18.5	<1.03	50.7	18.5	<0.19	2,500	
ZTS-MW208	2/22/2024	N	PM04	2B	Downgradient	15	UMCf	26.1 - 46.0	757 J	32,500	----	<18.5	<1.03	33.5	19.4	<0.19	2,150	
ZTS-MW209	5/25/2023	N	PM01	2B	Downgradient	15	UMCf	50.6 - 65.5	406 J	27,400	----	<18.5	<1.03	120	10.4	<0.19	1,580	
ZTS-MW209	8/23/2023	N	PM02	2B	Downgradient	15	UMCf	50.6 - 65.5	594 J	29,800	----	<18.5	<1.03	93.8	9.92	<0.19	1,850	
ZTS-MW209	11/29/2023	N	PM03	2B	Downgradient	15	UMCf	50.6 - 65.5	527 J	29,000	----	20.1 J	<1.03	86.7	10	<0.19	1,830	
ZTS-MW209	2/22/2024	N	PM04	2B	Downgradient	15	UMCf	50.6 - 65.5	265 J	25,300	----	<18.5	<1.03	82.9	9.36	<0.19	1,930	
<b>Test Area 2C</b>																		
<b>Pre-Construction Baseline Results</b>																		
ZTS-MW140	10/21/2022	N	BL02	2C	Upgradient	-9	Alluvium	15.5 - 25.5	1,370	41,400	795,000	<18.5	<1.03	53.4	32.1	<0.19	2,710	
ZTS-MW119	9/1/2022	N	BL01	2C	Upgradient	-3	Alluvium	15.0 - 25.0	----	----	----	----	----	26.7	----	----	----	
ZTS-MW119	10/19/2022	N	BL02	2C	Upgradient	-3	Alluvium	15.0 - 25.0	1,850 J+	21,200 J	2,980 J	<18.5	<1.03	55.6	28.9	<0.19	2,440	
ZTS-MW119	10/19/2022	FD	BL02	2C	Upgradient	-3	Alluvium	15.0 - 25.0	1,620 J+	40,200 J	800,000 J	<18.5	<1.03	53.3	29.2	<0.19	3,000	
ZTS-MW141	10/21/2022	N	BL02	2C	Downgradient	5	Alluvium	14.5 - 24.5	3,430 J+	3,830	73,800	<18.5	<1.03	45.8	30.9	<0.19	2,660	
ZTS-MW142	10/21/2022	N	BL02	2C	Downgradient	5	Alluvium	16.0 - 26.0	1,150	41,000	788,000	<18.5	<1.03	56.4	29.5	<0.19	2,520	
<b>Post-Construction Performance Monitoring Results</b>																		
ZTS-MW140	5/25/2023	N	PM01	2C	Upgradient	-9	Alluvium	15.5 - 25.5	1,560	40,400	----	<18.5	<1.03	54.2	23.5	<0.19	2,570	
ZTS-MW140	5/25/2023	FD	PM01	2C	Upgradient	-9	Alluvium	15.5 - 25.5	1,130	40,300	----	<18.5	<1.03	54.5	23.9	<0.19	2,760	
ZTS-MW140	8/29/2023	N	PM02	2C	Upgradient	-9	Alluvium	15.5 - 25.5	1,530	40,800	----	<18.5	<1.03	53.9	23.7	<0.19	2,560	
ZTS-MW140	8/29/2023	FD	PM02	2C	Upgradient	-9	Alluvium	15.5 - 25.5	1,340	40,700	----	<18.5	<1.03	53.9	24.7	<0.19	2,730	
ZTS-MW140	12/4/2023	N	PM03	2C	Upgradient	-9	Alluvium	15.5 - 25.5	1,490 J+	42,000	----	<18.5	2.03 J	53.5	23.2	<0.19	3,020	
ZTS-MW140	12/4/2023	FD	PM03	2C	Upgradient	-9	Alluvium	15.5 - 25.5	1,510 J+	42,200	----	<18.5	<1.03	52.1	23.3	<0.19	3,020	
ZTS-MW140	2/22/2024	N	PM04	2C	Upgradient	-9	Alluvium	15.5 - 25.5	1,420 J+	34,400	----	<18.5	<1.03	51.9	22.9	<0.19	3,050	
ZTS-MW140	2/22/2024	FD	PM04	2C	Upgradient	-9	Alluvium	15.5 - 25.5	1,500 J+	34,100	----	<18.5	<1.03	51.7	21.6	<0.19	3,080	
ZTS-MW119	5/24/2023	N	PM01	2C	Upgradient	-3	Alluvium	15.0 - 25.0	1,200	38,800	----	<18.5	<1.03	53.5	24.8	<0.19	2,690	
ZTS-MW119	8/29/2023	N	PM02	2C	Upgradient	-3	Alluvium	15.0 - 25.0	1,370	40,600	----	<18.5	<1.03	54.3	24.6	<0.19	2,810	
ZTS-MW119	12/4/2023	N	PM03	2C	Upgradient	-3	Alluvium	15.0 - 25.0	1,410 J+	41,500	----	<18.5	<1.03	54.5	23.5	<0.19	3,020	
ZTS-MW119	2/22/2024	N	PM04	2C	Upgradient	-3	Alluvium	15.0 - 25.0	1,250 J+	34,100	----	<18.5	<1.03	53.2	21.6	<0.19	3,100	
ZTS-MW181	5/25/2023	N	PM01	2C	Upgradient	-3	Alluvium	17.3 - 27.0	1,360	40,500	----	<18.5	<1.03	42.5	28.3	<0.19	2,610	
ZTS-MW181	8/25/2023	N	PM02	2C	Upgradient	-3	Alluvium	17.3 - 27.0	1,270 J+	41,700	----	<18.5	<1.03	44.7	28.6	<0.19	2,590	
ZTS-MW181	12/6/2023	N	PM03	2C	Upgradient	-3	Alluvium	17.3 - 27.0	1,330	32,700	----	<18.5	<1.03	53.6	22.9	<0.19	2,930	
ZTS-MW181	2/28/2024	N	PM04	2C	Upgradient	-3	Alluvium	17.3 - 27.0	1,400	39,700	----	<18.5	1.85 J	43.1	24.8	<0.19	2,620	
ZTS-MW188	5/26/2023	N	PM01	2C	Upgradient	-3	Alluvium	17.3 - 27.0	1,770 J+	36,000	----	<18.5	<1.03	53.6	26	<0.19	2,630	
ZTS-MW188	8/25/2023	N	PM02	2C	Upgradient	-3	Alluvium	17.3 - 27.0	1,270 J+	40,300	----	<18.5	<1.03	53.6	25.4	<0.19	2,640	
ZTS-MW188	12/6/2023	N	PM03	2C	Upgradient	-3	Alluvium	17.3 - 27.0	1,340	31,900	----	<18.5	<1.03	43.6	25.6	<0.19	3,140	
ZTS-MW188	2/23/2024	N	PM04	2C	Upgradient	-3	Alluvium	17.3 - 27.0	1,010 J+	33,700	----	<18.5	<1.03	59.6	23.6	<0.19	2,710	
ZTS-MW204	5/25/2023	N	PM01	2C	Upgradient	-3	UMCf	30.3 - 40.0	726 J	35,200	----	<18.5	<1.03	23				

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	SW9060A/S M5310B	Dissolved Metals by SW6010B	Dissolved Metals by SW6010B	Dissolved Metals by SW6020					
									Total Organic Carbon	Silicon	Sulfur	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron
									µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ZTS-MW182	11/28/2023	N	PM03	2C	Center of Array	0	Alluvium	17.6 - 27.3	---	---	---	---	---	---	---	---	---
ZTS-MW182	2/19/2024	N	PM04	2C	Center of Array	0	Alluvium	17.6 - 27.3	1,100	28,500	---	<18.5	<1.03	30.6	26.1	<0.19	2,970
ZTS-MW183	5/23/2023	N	PM01	2C	Downgradient	1	Alluvium	17.3 - 27.0	1,280 J+	32,800	---	<18.5	<1.03	31	29.5	<0.19	2,850
ZTS-MW183	8/22/2023	N	PM02	2C	Downgradient	1	Alluvium	17.3 - 27.0	1,610 J+	33,200	---	<18.5	<1.03	37	23.9	<0.19	2,650
ZTS-MW183	11/28/2023	N	PM03	2C	Downgradient	1	Alluvium	17.3 - 27.0	1,440 J+	39,700	---	<18.5	<1.03	46.1	24	<0.19	3,070
ZTS-MW183	2/20/2024	N	PM04	2C	Downgradient	1	Alluvium	17.3 - 27.0	1,190 J+	34,800	---	34.7 J	6.87 J+	50.7	22	<0.19	---
ZTS-MW187	5/24/2023	N	PM01	2C	Downgradient	1	Alluvium	15.3 - 25.0	1,280 J+	33,400	---	<18.5	<1.03	39.8	34.1	<0.19	2,500
ZTS-MW187	8/23/2023	N	PM02	2C	Downgradient	1	Alluvium	15.3 - 25.0	1,300 J+	34,900	---	<18.5	<1.03	47.3	28.1	<0.19	2,860
ZTS-MW187	11/29/2023	N	PM03	2C	Downgradient	1	Alluvium	15.3 - 25.0	1,360 J+	36,200	---	<18.5	<1.03	47	24.3	<0.19	2,840
ZTS-MW187	2/20/2024	N	PM04	2C	Downgradient	1	Alluvium	15.3 - 25.0	1,150 J+	33,300	---	<18.5	<1.03	45.2	23.9	<0.19	---
ZTS-MW141	5/25/2023	N	PM01	2C	Downgradient	5	Alluvium	14.5 - 24.5	1,390	37,500	---	<18.5	<1.03	51.4	24.3	<0.19	2,800
ZTS-MW141	8/23/2023	N	PM02	2C	Downgradient	5	Alluvium	14.5 - 24.5	1,330 J+	38,300	---	<18.5	<1.03	51.3	26.7	<0.19	2,870
ZTS-MW141	11/29/2023	N	PM03	2C	Downgradient	5	Alluvium	14.5 - 24.5	1,340 J+	39,400	---	<18.5	<1.03	55.4	24	<0.19	2,740
ZTS-MW141	2/22/2024	N	PM04	2C	Downgradient	5	Alluvium	14.5 - 24.5	1,360 J+	34,000	---	<18.5	<1.03	52.3	21.3	<0.19	3,080
ZTS-MW142	5/26/2023	N	PM01	2C	Downgradient	5	Alluvium	16.0 - 26.0	1,690 J+	36,400	---	<18.5	<1.03	41.4	26.6	<0.19	2,650
ZTS-MW142	8/24/2023	N	PM02	2C	Downgradient	5	Alluvium	16.0 - 26.0	1,210	39,500	---	<18.5	<1.03	48.4	30.9	<0.19	2,870
ZTS-MW142	11/30/2023	N	PM03	2C	Downgradient	5	Alluvium	16.0 - 26.0	1,310 J+	36,400	---	<18.5	<1.03	43.2	28.7 J+	<0.19	2,970
ZTS-MW142	2/22/2024	N	PM04	2C	Downgradient	5	Alluvium	16.0 - 26.0	1,150 J+	33,000	---	<18.5	<1.03	48.7	23.6	<0.19	3,140
ZTS-MW184	5/24/2023	N	PM01	2C	Downgradient	5	Alluvium	16.3 - 26.0	1,170 J+	38,400	---	<18.5	<1.03	42	28.2	<0.19	2,710
ZTS-MW184	8/22/2023	N	PM02	2C	Downgradient	5	Alluvium	16.3 - 26.0	1,430 J+	36,700	---	<18.5	<1.03	37	25.2	<0.19	2,540
ZTS-MW184	11/28/2023	N	PM03	2C	Downgradient	5	Alluvium	16.3 - 26.0	1,550 J+	41,200	---	<18.5	<1.03	46.8	29	<0.19	3,080
ZTS-MW184	2/20/2024	N	PM04	2C	Downgradient	5	Alluvium	16.3 - 26.0	1,370 J+	35,500	---	<18.5	<1.03	46	22.5	<0.19	---
ZTS-MW205	5/24/2023	N	PM01	2C	Downgradient	5	UMCf	30.3 - 40.0	262 J	32,700	---	<18.5	1.43 J	8.83	29.6	<0.19	1,020
ZTS-MW205	8/23/2023	N	PM02	2C	Downgradient	5	UMCf	30.3 - 40.0	351 J	32,900	---	<18.5	<1.03	10.5	30.7	<0.19	1,170
ZTS-MW205	11/29/2023	N	PM03	2C	Downgradient	5	UMCf	30.3 - 40.0	519 J	33,300	---	<18.5	<1.03	6.07	27.7	<0.19	1,120
ZTS-MW205	2/22/2024	N	PM04	2C	Downgradient	5	UMCf	30.3 - 40.0	586 J	30,500	---	<18.5	<1.03	11	30	<0.19	1,200
ZTS-MW185	5/25/2023	N	PM01	2C	Downgradient	15	Alluvium	15.3 - 25.0	2,060	37,200	---	<18.5	<1.03	46.1	28.1	<0.19	2,720
ZTS-MW185	8/24/2023	N	PM02	2C	Downgradient	15	Alluvium	15.3 - 25.0	1,460	41,100	---	<18.5	<1.03	51.5	27.6	<0.19	2,880
ZTS-MW185	11/30/2023	N	PM03	2C	Downgradient	15	Alluvium	15.3 - 25.0	1,400 J+	39,400	---	<18.5	<1.03	48.9	23.6 J+	<0.19	2,990
ZTS-MW185	2/22/2024	N	PM04	2C	Downgradient	15	Alluvium	15.3 - 25.0	1,220 J+	33,700	---	<18.5	<1.03	54.7	21.5	<0.19	2,920
ZTS-MW186	5/25/2023	N	PM01	2C	Downgradient	25	Alluvium	15.3 - 25.0	1,170	36,200	---	<18.5	<1.03	42.5	26.1	<0.19	2,800
ZTS-MW186	8/24/2023	N	PM02	2C	Downgradient	25	Alluvium	15.3 - 25.0	1,350	42,500	---	<18.5	<1.03	48.7	26.6	<0.19	2,970
ZTS-MW186	11/30/2023	N	PM03	2C	Downgradient	25	Alluvium	15.3 - 25.0	1,330 J+	40,400	---	<18.5	<1.03	45.2	23.3 J+	<0.19	2,890
ZTS-MW186	2/23/2024	N	PM04	2C	Downgradient	25	Alluvium	15.3 - 25.0	1,070 J+	34,400	---	<18.5	<1.03	52.6	24.3	<0.19	2,680
ZTS-MW189	5/25/2023	N	PM01	2C	Downgradient	55	Alluvium	12.8 - 23.0	2,230	38,900	---	<18.5	<1.03	51.4	29.3	<0.19	2,600
ZTS-MW189	8/25/2023	N	PM02	2C	Downgradient	55	Alluvium	12.8 - 23.0	1,340 J+	39,700	---	<18.5	<1.03	56.4	29	<0.19	2,590
ZTS-MW189	12/1/2023	N	PM03	2C	Downgradient	55	Alluvium	12.8 - 23.0	1,510 J+	38,800	---	<18.5	<1.03	58.7	26.3	<0.19	2,810
ZTS-MW189	2/23/2024	N	PM04	2C	Downgradient	55	Alluvium	12.8 - 23.0	1,060 J+	33,600	---	<18.5	<1.03	57.1	27.4		

**Table 2**  
**Groundwater Analytical Results**  
 Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	SW9060A/S M5310B	Dissolved Metals by SW6010B	Dissolved Metals by SW6010B	Dissolved Metals by SW6020						
									Total Organic Carbon	Silicon	Sulfur	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	
									μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	
<b>Post-Construction Performance Monitoring Results</b>																		
ZTS-MW116	5/24/2023	N	PM01	NA	NA	NA	UMCf	33.0 - 48.0	1,090 J+	36,600	----	<18.5	<1.03	54.7	15.1	<0.19	2,500	
ZTS-MW116	8/29/2023	N	PM02	NA	NA	NA	UMCf	33.0 - 48.0	745 J	37,300	----	<18.5	<1.03	53.6	14.5	<0.19	2,280	
ZTS-MW116	12/5/2023	N	PM03	NA	NA	NA	UMCf	33.0 - 48.0	858 J	36,400	----	24.7 J	<1.03	55.3	14.3	<0.19	2,500	
ZTS-MW116	2/27/2024	N	PM04	NA	NA	NA	UMCf	33.0 - 48.0	676 J	37,200	----	<18.5	<1.03	56.3	16.1	<0.19	2,450	
ZTS-MW128	5/24/2023	N	PM01	NA	NA	NA	UMCf	42.0 - 52.0	911 J	38,100	----	<18.5	<1.03	35.2	20.5	<0.19	2,000	
ZTS-MW128	8/30/2023	N	PM02	NA	NA	NA	UMCf	42.0 - 52.0	1,100 J+	36,600	----	<18.5	<1.03	40.8	17.2	<0.19	2,110 J+	
ZTS-MW128	12/5/2023	N	PM03	NA	NA	NA	UMCf	42.0 - 52.0	1,190 J+	39,300	----	<18.5	<1.03	42.3	15.4	<0.19	2,040	
ZTS-MW128	2/28/2024	N	PM04	NA	NA	NA	UMCf	42.0 - 52.0	1,070 J+	35,900	----	<18.5	<1.03	38.4	19	<0.19	1,600	

Notes:

1. Distances from the discontinuous or continuous walls are shown as negative values for upgradient monitoring wells, as zero for monitoring wells screened within the walls, and as positive values for monitoring wells located downgradient of the walls.

bgs - below ground surface

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

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

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

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.

UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

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

mg/L - milligram per liter

mS/cm - millisiemens per centimeter

mV - millivolts

nmol - nanomol

SU - standard units

N - normal field sample

μg/L - micrograms per liter

UMCf - Upper Muddy Creek formation

FD - field duplicate

FS - field split

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	Dissolved Metals by SW6020																
									Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese								
									µg/L	µg/L															
<b>Test Area 1A</b>																									
<b>Pre-Construction Baseline Results</b>																									
ZTS-MW143	10/18/2022	N	BL02	1A	Upgradient	-50	Alluvium	23.0 - 33.0	<0.15	641,000	34.1	<0.0596	<1.51	<28.1	<0.849	246,000	6.85								
ZTS-MW124	8/31/2022	N	BL01	1A	Upgradient	-8	Alluvium	24.0 - 34.0	----	545,000	31.6	----	----	<28.1	----	----	21.1								
ZTS-MW124	8/31/2022	FD	BL01	1A	Upgradient	-8	Alluvium	24.0 - 34.0	----	544,000	30.8	----	----	<28.1	----	----	20								
ZTS-MW124	10/18/2022	N	BL02	1A	Upgradient	-8	Alluvium	24.0 - 34.0	<0.15	574,000 J	32.2 J	<0.0596	<1.51	<28.1	<0.849	205,000 J	<0.704								
ZTS-MW124	10/18/2022	FD	BL02	1A	Upgradient	-8	Alluvium	24.0 - 34.0	<0.15	47,400 J	<1.24 UJ	<0.0596	<1.51	<28.1	<0.849	11,300 J	<0.704								
ZTS-MW125	8/31/2022	N	BL01	1A	Upgradient	-8	UMCf	40.0 - 50.0	----	466,000	16.1	----	----	<28.1	----	----	105								
ZTS-MW125	10/24/2022	N	BL02	1A	Upgradient	-8	UMCf	40.0 - 50.0	<0.15	199,000	<1.24	<0.0596	<1.51	<28.1	<0.849	142,000	322								
ZTS-MW125	10/24/2022	FD	BL02	1A	Upgradient	-8	UMCf	40.0 - 50.0	----	----	----	----	----	----	----	----	----								
ZTS-MW144	10/18/2022	N	BL02	1A	Downgradient	35	Alluvium	24.0 - 34.0	<0.15	717,000	25.2	<0.0596	<1.51	<28.1	<0.849	272,000	27.9								
<b>Post-Construction Performance Monitoring Results</b>																									
ZTS-MW143	5/26/2023	N	PM01	1A	Upgradient	-50	Alluvium	23.0 - 33.0	<0.15	637,000	29.5	0.654 J	5.4	<28.1	<0.849	239,000	<0.704								
ZTS-MW143	8/29/2023	N	PM02	1A	Upgradient	-50	Alluvium	23.0 - 33.0	<0.15	605,000	34	0.624 J	<1.51	<28.1	<0.849	234,000	<0.704								
ZTS-MW143	12/6/2023	N	PM03	1A	Upgradient	-50	Alluvium	23.0 - 33.0	<0.15	613,000	29.9	0.68 J	<1.51	<28.1	<0.849	246,000	<0.704								
ZTS-MW143	2/21/2024	N	PM04	1A	Upgradient	-50	Alluvium	23.0 - 33.0	<0.15	638,000	49.2	0.73 J	1.72 J	<28.1	<0.849	275,000	0.718 J								
ZTS-MW124R	5/26/2023	N	PM01	1A	Upgradient	-8	Alluvium	24.5 - 34.0	<0.15	545,000	30.4	0.516 J	1.59 J	<28.1	<0.849	206,000	2.29 J								
ZTS-MW124R	8/29/2023	N	PM02	1A	Upgradient	-8	Alluvium	24.5 - 34.0	<0.15	538,000	30.3	0.504 J	<1.51	<28.1	<0.849	201,000	<0.704								
ZTS-MW124R	12/5/2023	N	PM03	1A	Upgradient	-8	Alluvium	24.5 - 34.0	<0.15	566,000	342	1.69 J	3.31 J	1,330 J-	<0.849	227,000	20.6 J-								
ZTS-MW124R	2/27/2024	N	PM04	1A	Upgradient	-8	Alluvium	24.5 - 34.0	<0.15	637,000	31.2	0.613 J	<1.51	30.1 J	<0.849	236,000	0.707 J								
ZTS-MW125	5/25/2023	N	PM01	1A	Upgradient	-8	UMCf	40.0 - 50.0	<0.15	174,000	<1.24	0.0621 J	1.85 J	<28.1	<0.849	147,000	149								
ZTS-MW125	8/30/2023	N	PM02	1A	Upgradient	-8	UMCf	40.0 - 50.0	<0.15	256,000	<1.24	0.214 J	<1.51	206	<0.849	162,000	150								
ZTS-MW125	12/1/2023	N	PM03	1A	Upgradient	-8	UMCf	40.0 - 50.0	<0.15	285,000	<1.24	0.196 J	<1.51	228 J+	<0.849	162,000	130								
ZTS-MW125	2/26/2024	N	PM04	1A	Upgradient	-8	UMCf	40.0 - 50.0	<0.15	209,000	<1.24	<0.0596	6.17	326	<0.849	169,000	117								
ZTS-MW153	5/26/2023	N	PM01	1A	Upgradient	-8	Alluvium	24.3 - 34.0	<0.15	556,000	31.5	0.584 J	2.38 J	38.2 J	<0.849	211,000	2.37 J								
ZTS-MW153	8/31/2023	N	PM02	1A	Upgradient	-8	Alluvium	24.3 - 34.0	<0.15	551,000	31	0.529 J	<1.51	<28.1	<0.849	216,000	<0.704								
ZTS-MW153	12/1/2023	N	PM03	1A	Upgradient	-8	Alluvium	24.3 - 34.0	<0.15	632,000	33.4	0.556 J	<1.51	38.2 J	<4.24	232,000	0.845 J								
ZTS-MW153	2/27/2024	N	PM04	1A	Upgradient	-8	Alluvium	24.3 - 34.0	<0.15	638,000	36.1	0.651 J	<1.51	<28.1	<0.849	240,000	<0.704								
ZTS-MW163	5/25/2023	N	PM01	1A	Upgradient	-8	Alluvium	24.3 - 34.0	<0.15	573,000	33.9	0.576 J	2.33 J	<28.1	<0.849	234,000	<0.704								
ZTS-MW163	8/31/2023	N	PM02	1A	Upgradient	-8	Alluvium	24.3 - 34.0	<0.15	548,000	32.2	0.548 J	4.96 J	<28.1	<0.849	215,000	<0.704								
ZTS-MW163	12/1/2023	N	PM03	1A	Upgradient	-8	Alluvium	24.3 - 34.0	<0.15	613,000	35.7	0.562 J	<1.51	<28.1	<0.849	242,000	<0.704								
ZTS-MW163	2/27/2024	N	PM04	1A	Upgradient	-8	Alluvium	24.3 - 34.0	<0.15	610,000	41.4	0.608 J	<1.51	<28.1	<0.849	238,000	<0.704								
ZTS-MW150	5/22/2023	N	PM01	1A	Center of Trench	0	Alluvium	24.3 - 34.0	<0.15	474,000	<1.24	0.206 J	<1.51	5,450	<0.849	203,000	246								
ZTS-MW150	8/21/2023	N	PM02	1A	Center of Trench	0	Alluvium	24.3 - 34.0	<0.15	482,000	<1.24	0.27 J	<1.51	2,550	<0.849	218,000	151								
ZTS-MW150	11/27/2023	N	PM03	1A	Center of Trench	0	Alluvium	24.3 - 34.0	<0.15	551,000	<1.24	0.302 J	<1.51	2,320	<0.849	237,000	136								
ZTS-MW150	2/19/2024	N	PM04	1A	Center of Trench	0	Alluvium	24.3 - 34.0	<0.15	545,000	<1.24	0.302 J	<1.51	2,190	<0.849	233,000	133								
ZTS-MW154	5/24/2023	N	PM01	1A	Center of Trench																				

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	Dissolved Metals by SW6020									
									Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	
									µg/L									
ZTS-MW164	11/27/2023	N	PM03	1A	Center of Trench	0	Alluvium	22.3 - 32.0	<0.15	578,000	<1.24	0.419 J	<1.51	546	<0.849	253,000	197	
ZTS-MW164	11/27/2023	FD	PM03	1A	Center of Trench	0	Alluvium	22.3 - 32.0	<0.15	576,000	<1.24	0.376 J	<1.51	594	<0.849	256,000	195	
ZTS-MW164	2/20/2024	N	PM04	1A	Center of Trench	0	Alluvium	22.3 - 32.0	<0.15	551,000	<1.24	0.325 J	<1.51	585	<0.849	248,000	189	
ZTS-MW164	2/20/2024	FD	PM04	1A	Center of Trench	0	Alluvium	22.3 - 32.0	<0.15	549,000	<1.24	0.34 J	6.1	651	<0.849	239,000	170	
ZTS-MW151	5/25/2023	N	PM01	1A	Downgradient	5	Alluvium	24.3 - 34.0	<0.15	558,000	<1.24	0.536 J	<1.51	<28.1	<0.849	215,000	510	
ZTS-MW151	8/21/2023	N	PM02	1A	Downgradient	5	Alluvium	24.3 - 34.0	<0.15	559,000	<1.24	0.442 J	<1.51	<28.1	<0.849	230,000	256	
ZTS-MW151	11/28/2023	N	PM03	1A	Downgradient	5	Alluvium	24.3 - 34.0	<0.15	629,000	<1.24	0.471 J	<1.51	<28.1	<0.849	239,000	178	
ZTS-MW151	2/20/2024	N	PM04	1A	Downgradient	5	Alluvium	24.3 - 34.0	<0.15	625,000	<1.24	0.534 J	2.17 J	<28.1	<0.849	247,000	161	
ZTS-MW155	5/24/2023	N	PM01	1A	Downgradient	5	Alluvium	20.3 - 35.0	<0.15	575,000	<1.24	4.51	<1.51	<28.1	<0.849	237,000	985	
ZTS-MW155	5/24/2023	FD	PM01	1A	Downgradient	5	Alluvium	20.3 - 35.0	<0.15	567,000	<1.24	4.29	<1.51	<28.1	<0.849	238,000	892	
ZTS-MW155	8/22/2023	N	PM02	1A	Downgradient	5	Alluvium	20.3 - 35.0	<0.15	555,000	<1.24	0.965 J	<1.51	<28.1	<0.849	239,000	175	
ZTS-MW155	8/22/2023	FD	PM02	1A	Downgradient	5	Alluvium	20.3 - 35.0	<0.15	590,000	<1.24	0.968 J	<1.51	<28.1	<0.849	254,000	178	
ZTS-MW155	11/28/2023	N	PM03	1A	Downgradient	5	Alluvium	20.3 - 35.0	<0.15	610,000	<1.24	0.805 J	<1.51	<28.1	<0.849	245,000	169	
ZTS-MW155	11/28/2023	FD	PM03	1A	Downgradient	5	Alluvium	20.3 - 35.0	<0.15	683,000	<1.24	0.899 J	<1.51	<28.1	<0.849	266,000	188	
ZTS-MW155	2/21/2024	N	PM04	1A	Downgradient	5	Alluvium	20.3 - 35.0	<0.15	603,000	<1.24	0.792 J	2.38 J	<28.1	<0.849	268,000	153	
ZTS-MW155	2/21/2024	FD	PM04	1A	Downgradient	5	Alluvium	20.3 - 35.0	<0.15	610,000	<1.24	0.776 J	<1.51	<28.1	<0.849	276,000	150	
ZTS-MW156	5/24/2023	N	PM01	1A	Downgradient	5	UMCf	43.8 - 53.5	<0.15	157,000	<1.24	<0.0596	<1.51	<28.1	<0.849	167,000	52.9	
ZTS-MW156	8/22/2023	N	PM02	1A	Downgradient	5	UMCf	43.8 - 53.5	<0.15	174,000	<1.24	0.0696 J	<1.51	78.3 J	<0.849	184,000	26.8	
ZTS-MW156	11/29/2023	N	PM03	1A	Downgradient	5	UMCf	43.8 - 53.5	<0.15	160,000	<1.24	<0.0596	<1.51	62.8 J	<0.849	158,000	17.3	
ZTS-MW156	2/21/2024	N	PM04	1A	Downgradient	5	UMCf	43.8 - 53.5	<0.15	186,000	<1.24	0.0682 J	<1.51	85.1 J	<0.849	197,000	20.8	
ZTS-MW165	5/31/2023	N	PM01	1A	Downgradient	5	Alluvium	22.3 - 32.0	<0.15	537,000	<1.24	1.52 J	2.92 J	44.1 J	<0.849	246,000	326	
ZTS-MW165	8/25/2023	N	PM02	1A	Downgradient	5	Alluvium	22.3 - 32.0	<0.15	571,000	<1.24	0.855 J	<1.51	<28.1	<0.849	227,000	157	
ZTS-MW165	11/30/2023	N	PM03	1A	Downgradient	5	Alluvium	22.3 - 32.0	<0.15	577,000	<1.24	0.667 J	<1.51	<28.1	<0.849	231,000	101	
ZTS-MW165	2/23/2024	N	PM04	1A	Downgradient	5	Alluvium	22.3 - 32.0	<0.15	651,000	<1.24	0.801 J	<1.51	<28.1	<0.849	256,000	111	
ZTS-MW152	5/25/2023	N	PM01	1A	Downgradient	15	Alluvium	23.3 - 33.0	0.151 J	585,000	<1.24	1.01 J	<1.51	<28.1	<0.849	222,000	899	
ZTS-MW152	8/22/2023	N	PM02	1A	Downgradient	15	Alluvium	23.3 - 33.0	<0.15	550,000	<1.24	0.496 J	<1.51	<28.1	<0.849	232,000	316	
ZTS-MW152	11/28/2023	N	PM03	1A	Downgradient	15	Alluvium	23.3 - 33.0	<0.15	625,000	<1.24	0.743 J	<1.51	<28.1	<0.849	237,000	334	
ZTS-MW152	2/20/2024	N	PM04	1A	Downgradient	15	Alluvium	23.3 - 33.0	<0.15	613,000	<1.24	0.82 J	2.16 J	<28.1	<0.849	250,000	425	
ZTS-MW157	5/25/2023	N	PM01	1A	Downgradient	15	Alluvium	23.3 - 33.0	<0.15	544,000	<1.24	2.76	1.82 J	28.9 J	<0.849	237,000	679	
ZTS-MW157	8/23/2023	N	PM02	1A	Downgradient	15	Alluvium	23.3 - 33.0	<0.15	570,000	<1.24	1.06 J	<1.51	<28.1	<0.849	259,000	243	
ZTS-MW157	11/29/2023	N	PM03	1A	Downgradient	15	Alluvium	23.3 - 33.0	<0.15	582,000	<1.24	0.755 J	<1.51	<28.1	<0.849	237,000	180	
ZTS-MW157	2/21/2024	N	PM04	1A	Downgradient	15	Alluvium	23.3 - 33.0	<0.15	607,000	1.92 J	0.623 J	2.45 J	<28.1	<0.849	277,000	156	
ZTS-MW162	5/25/2023	N	PM01	1A	Downgradient	15	Alluvium	23.3 - 33.0	<0.15	566,000	<1.24	1.02 J	<1.51	<28.1	<0.849	262,000	245	
ZTS-MW162	8/18/2023	N	PM02	1A	Downgradient	15	Alluvium	23.3 - 33.0	<0.15	581,000	<1.24	0.737 J	<1.51	<28.1	<0.849	248,000	251	
ZTS-MW162	11/30/2023	N	PM03	1A	Downgradient	15	Alluvium	23.3 - 33.0	<0.15	584,000	<1.24	0.649 J	<1.51	<28.1	<0.849	242,000	109	
ZTS-MW1																		

**Table 2**  
**Groundwater Analytical Results**

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	Dissolved Metals by SW6020									
									Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	
									feet	µg/L								
ZTS-MW144	2/23/2024	N	PM04	1A	Downgradient	35	Alluvium	24.0 - 34.0	<0.15	629,000	3.9	0.524 J	<1.51	<28.1	<0.849	268,000	129	
ZTS-MW158	5/24/2023	N	PM01	1A	Downgradient	50	Alluvium	23.3 - 33.0	<0.15	553,000	<1.24	0.401 J	<1.51	<28.1	<0.849	255,000	1.7 J	
ZTS-MW158	8/25/2023	N	PM02	1A	Downgradient	50	Alluvium	23.3 - 33.0	<0.15	535,000	<1.24	0.489 J	<1.51	<28.1	<0.849	242,000	1.12 J	
ZTS-MW158	12/1/2023	N	PM03	1A	Downgradient	50	Alluvium	23.3 - 33.0	<0.15	624,000	<1.24	0.553 J	<1.51	<28.1	<0.849	264,000	18.5	
ZTS-MW158	2/27/2024	N	PM04	1A	Downgradient	50	Alluvium	23.3 - 33.0	<0.15	605,000	<1.24	0.481 J	<1.51	<28.1	<0.849	256,000	31.5	
ZTS-MW159	5/24/2023	N	PM01	1A	Downgradient	50	UMCf	38.8 - 48.5	<0.15	241,000	1.33 J	0.934 J	2 J	<28.1	<0.849	146,000	885	
ZTS-MW159	8/25/2023	N	PM02	1A	Downgradient	50	UMCf	38.8 - 48.5	<0.15	521,000	14	0.693 J	<1.51	<28.1	<0.849	219,000	220	
ZTS-MW159	12/1/2023	N	PM03	1A	Downgradient	50	UMCf	38.8 - 48.5	<0.15	556,000	17.9	0.605 J	<1.51	<28.1	<0.849	245,000	102	
ZTS-MW159	2/27/2024	N	PM04	1A	Downgradient	50	UMCf	38.8 - 48.5	<0.15	557,000	20.4	0.504 J	<1.51	<28.1	<0.849	234,000	73.8	
ZTS-MW160	5/24/2023	N	PM01	1A	Downgradient	100	Alluvium	23.3 - 33.0	<0.15	559,000	10.9	0.509 J	2.57 J	<28.1	<0.849	240,000	3.15 J	
ZTS-MW160	8/28/2023	N	PM02	1A	Downgradient	100	Alluvium	23.3 - 33.0	<0.15	534,000	13.5	0.521 J	<1.51	<28.1	<0.849	229,000	26.2	
ZTS-MW160	12/5/2023	N	PM03	1A	Downgradient	100	Alluvium	23.3 - 33.0	<0.15	619,000	13.7	0.47 J	<1.51	<28.1	<0.849	261,000	14.4	
ZTS-MW160	2/27/2024	N	PM04	1A	Downgradient	100	Alluvium	23.3 - 33.0	<0.15	612,000	18.9	0.487 J	2.46 J	<28.1	<0.849	247,000	6.26	
ZTS-MW161	5/26/2023	N	PM01	1A	Downgradient	150	Alluvium	24.3 - 34.0	<0.15	540,000	2.47	0.331 J	1.65 J	<28.1	<0.849	214,000	5.86	
ZTS-MW161	8/25/2023	N	PM02	1A	Downgradient	150	Alluvium	24.3 - 34.0	<0.15	569,000	7.79	0.438 J	<1.51	<28.1	<0.849	223,000	2.16 J	
ZTS-MW161	8/25/2023	FD	PM02	1A	Downgradient	150	Alluvium	24.3 - 34.0	<0.15	567,000	6.39	0.445 J	<1.51	<28.1	<0.849	221,000	2.01 J	
ZTS-MW161	12/1/2023	N	PM03	1A	Downgradient	150	Alluvium	24.3 - 34.0	<0.15	626,000	6.31	0.461 J	<1.51	<28.1	<0.849	241,000	26.2	
ZTS-MW161	12/1/2023	FD	PM03	1A	Downgradient	150	Alluvium	24.3 - 34.0	<0.15	624,000	6.05	0.463 J	<1.51	<28.1	<0.849	237,000	26	
ZTS-MW161	2/23/2024	N	PM04	1A	Downgradient	150	Alluvium	24.3 - 34.0	<0.15	744,000	10.1	0.482 J	<1.51	<28.1	<0.849	257,000	49.4	
ZTS-MW161	2/23/2024	FD	PM04	1A	Downgradient	150	Alluvium	24.3 - 34.0	<0.15	733,000	10.3	0.482 J	<1.51	<28.1	<0.849	252,000	49.9	
<b>Between Test Area 1A and Test Area 1B</b>																		
<b>Pre-Construction Baseline Results</b>																		
ZTS-MW145	10/24/2022	N	BL02	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	<0.15	355,000	<1.24	<0.0596	<1.51	<28.1	<0.849	208,000	374	
ZTS-MW146	10/24/2022	N	BL02	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	<0.15	436,000	<1.24	<0.0596	<1.51	<28.1	<0.849	270,000	1,160	
<b>Post-Construction Performance Monitoring Results</b>																		
ZTS-MW145	5/22/2023	N	PM01	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	<0.15	101,000	1.5 J	<0.0596	5.59	<28.1	<0.849	62,900	12.1	
ZTS-MW145	8/30/2023	N	PM02	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	<0.15	206,000	<1.24	<0.0596	<1.51	126	<0.849	181,000	179	
ZTS-MW145	12/6/2023	N	PM03	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	<0.15	198,000	<1.24	<0.0596	<1.51	130	<0.849	193,000	142	
ZTS-MW145	2/21/2024	N	PM04	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	<0.15	187,000	<1.24	0.116 J	<1.51	36.7 J	<0.849	169,000	122	
ZTS-MW146	5/26/2023	N	PM01	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	<0.15	279,000	<1.24	0.23 J	3.93 J	140	<0.849	259,000	426	
ZTS-MW146	8/25/2023	N	PM02	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	<0.15	228,000	<1.24	<0.0596	<1.51	132	<0.849	301,000	435	
ZTS-MW146	11/30/2023	N	PM03	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	<0.15	227,000	<1.24	<0.0596	<1.51	112	<0.849	288,000	338	
ZTS-MW146	2/23/2024	N	PM04	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	<0.15	238,000	<1.24	<0.0596	<1.51	126 J+	<0.849	335,000	331	
<b>Test Area 1B</b>																		
<b>Pre-Construction Baseline Results</b>																		
ZTS-MW147	10/18/2022	N	BL02	1B	Upgradient	-50	Alluvium	19.5 - 29.5	<0.15	691,000	100	<0.0596	<1.51	<28.1	<0.849	264,000	10.6	
ZTS-MW126	8/31/2022	N	BL01	1B	Upgradient	-8	Alluvium	20.0 - 30.0	----	600,000	43.3	----	----	<28.1	----	----	388	
ZTS-MW126	10/18/2022	N	BL02	1B	Upgradient	-8	Alluvium	20.0 - 30.0	<0.15	643,000	73.4	<0.0596	<1.51	<28.1	<0.849	255,000	33.6	
ZTS-MW126	10/18/2022	FD	BL02	1B	Upgradient	-8	Alluvium	20.0 - 30.0	<0.15	696,000	77.8	<0.0596	<1.51	<28.1	<0.849	289,000	37.6	
ZTS-MW127	8/31/2022	N	BL01	1B	Upgradient	-8	Alluvium	18.0 - 23.0	----	632,000	74.4	----	----	<28.1	----	----	245	
ZTS-MW127	10/24/2022	N	BL02	1B	Upgradient	-8	Alluvium	18.0 - 23.0	<0.15	660,000	74.8	<0.0596	<1.51	<28.1	<0.849	241,000	45.6	
ZTS-MW148	10/24/2022	N	BL02	1B	Downgradient	35	Alluvium	22.0 - 32.0	<0.15	643,000	86.8	<0.0596	<1.51	<28.1	<0.849	244,000	20.9	
LWPS-MW107A	10/24/2022	N	BL02	1B	Downgradient	50	Alluvium	24.8 - 34.5	<0.15	643,000	87.6	<0.0596	<1.51	<28.1	<0.849	248,000	<0.704	
LWPS-MW107B	10/21/2022	N	BL02	1B	Downgradient	50	UMCf	46.0 - 65.8	<0.15	257,0								

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	Dissolved Metals by SW6020								
									Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese
									µg/L								
LWWPS-MW107C	10/24/2022	N	BL02	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	<0.15	531,000	<1.24	<0.0596	<1.51	<28.1	<84.9	6,410,000	314
<b>Post-Construction Performance Monitoring Results</b>																	
ZTS-MW147	5/26/2023	N	PM01	1B	Upgradient	-50	Alluvium	19.5 - 29.5	<0.15	604,000	86.5	0.683 J	2 J	<28.1	<0.849	243,000	<0.704
ZTS-MW147	8/30/2023	N	PM02	1B	Upgradient	-50	Alluvium	19.5 - 29.5	<0.15	632,000	87.3	0.636 J	<1.51	<28.1	<0.849	228,000	<0.704
ZTS-MW147	12/1/2023	N	PM03	1B	Upgradient	-50	Alluvium	19.5 - 29.5	<0.15	642,000	101	0.631 J	<1.51	<28.1	<0.849	237,000	<0.704
ZTS-MW147	2/23/2024	N	PM04	1B	Upgradient	-50	Alluvium	19.5 - 29.5	<0.15	748,000	93.1	0.579 J	<1.51	51.6 J	<0.849	231,000	<0.704
ZTS-MW126	5/25/2023	N	PM01	1B	Upgradient	-8	Alluvium	20.0 - 30.0	<0.15	591,000	37.6	0.705 J	<1.51	<28.1	<0.849	270,000	<0.704
ZTS-MW126	8/25/2023	N	PM02	1B	Upgradient	-8	Alluvium	20.0 - 30.0	<0.15	616,000	38.3	0.63 J	<1.51	<28.1	<0.849	262,000	<0.704
ZTS-MW126	11/30/2023	N	PM03	1B	Upgradient	-8	Alluvium	20.0 - 30.0	<0.15	585,000	71	0.673 J	<1.51	<28.1	<0.849	265,000	<0.704
ZTS-MW126	2/23/2024	N	PM04	1B	Upgradient	-8	Alluvium	20.0 - 30.0	<0.15	671,000	97.6	0.612 J	1.56 J	31.8 J	<0.849	264,000	<0.704
ZTS-MW127R	5/25/2023	N	PM01	1B	Upgradient	-8	Alluvium	18.5 - 23.0	<0.15	635,000	79.6	0.732 J	2.35 J	<28.1	<0.849	243,000	2.04 J
ZTS-MW127R	8/28/2023	N	PM02	1B	Upgradient	-8	Alluvium	18.5 - 23.0	<0.15	633,000	93.1	0.749 J	<1.51	47.7 J	<0.849	229,000	1.95 J
ZTS-MW127R	11/30/2023	N	PM03	1B	Upgradient	-8	Alluvium	18.5 - 23.0	<0.15	608,000	89.3	0.742 J	<1.51	<28.1	<0.849	223,000	1.25 J
ZTS-MW127R	2/23/2024	N	PM04	1B	Upgradient	-8	Alluvium	18.5 - 23.0	<0.15	680,000	97.3	0.74 J	<1.51	<28.1	<0.849	242,000	0.864 J
ZTS-MW169	5/24/2023	N	PM01	1B	Upgradient	-8	Alluvium	17.1 - 27.0	<0.15	644,000	81.6	0.631 J	<1.51	<28.1	<0.849	246,000	1.36 J
ZTS-MW169	8/28/2023	N	PM02	1B	Upgradient	-8	Alluvium	17.1 - 27.0	<0.15	620,000	95.9	0.691 J	<1.51	<28.1	<0.849	240,000	<0.704
ZTS-MW169	11/30/2023	N	PM03	1B	Upgradient	-8	Alluvium	17.1 - 27.0	<0.15	601,000	94.5	1.19 J	<1.51	77.5 J	<0.849	229,000	6.88 J+
ZTS-MW169	2/23/2024	N	PM04	1B	Upgradient	-8	Alluvium	17.1 - 27.0	<0.15	666,000	95.7	0.632 J	<1.51	36.1 J	<0.849	248,000	<0.704
ZTS-MW170	5/24/2023	N	PM01	1B	Upgradient	-8	UMCf	31.1 - 41.0	<0.15	408,000	25	0.493 J	<1.51	<28.1	<0.849	232,000	44.6
ZTS-MW170	8/29/2023	N	PM02	1B	Upgradient	-8	UMCf	31.1 - 41.0	<0.15	475,000	44.5	0.591 J	<1.51	<28.1	<0.849	232,000	9.37
ZTS-MW170	11/30/2023	N	PM03	1B	Upgradient	-8	UMCf	31.1 - 41.0	<0.15	453,000	51.3	0.466 J	1.52 J	<28.1	<0.849	233,000	2.28 J
ZTS-MW170	2/23/2024	N	PM04	1B	Upgradient	-8	UMCf	31.1 - 41.0	<0.15	526,000	57.2	0.468 J	<1.51	45.9 J	<0.849	254,000	2.1 J
ZTS-MW166	5/23/2023	N	PM01	1B	Center of Trench	0	Alluvium	19.8 - 29.5	<0.15	567,000	<1.24	0.302 J	<1.51	309	<0.849	253,000	554
ZTS-MW166	8/21/2023	N	PM02	1B	Center of Trench	0	Alluvium	19.8 - 29.5	<0.15	515,000	<1.24	0.428 J	<1.51	1,380	<0.849	237,000	202
ZTS-MW166	11/28/2023	N	PM03	1B	Center of Trench	0	Alluvium	19.8 - 29.5	<0.15	624,000	<1.24	0.311 J	<1.51	155	<0.849	257,000	280
ZTS-MW166	2/20/2024	N	PM04	1B	Center of Trench	0	Alluvium	19.8 - 29.5	<0.15	541,000	<1.24	0.228 J	<1.51	93.3 J	<0.849	240,000	234
ZTS-MW171	5/22/2023	N	PM01	1B	Center of Trench	0	Alluvium	19.3 - 29.0	<0.15	559,000	<1.24	0.675 J	<1.51	2,590	<0.849	233,000	297
ZTS-MW171	8/21/2023	N	PM02	1B	Center of Trench	0	Alluvium	19.3 - 29.0	<0.15	567,000	<1.24	0.454 J	<1.51	532	<0.849	241,000	183
ZTS-MW171	11/27/2023	N	PM03	1B	Center of Trench	0	Alluvium	19.3 - 29.0	<0.15	597,000	<1.24	0.449 J	<1.51	468	<0.849	242,000	172
ZTS-MW171	2/19/2024	N	PM04	1B	Center of Trench	0	Alluvium	19.3 - 29.0	<0.15	601,000	32.5	0.514 J	<1.51	176	<0.849	222,000	109
ZTS-MW178	5/25/2023	N	PM01	1B	Center of Trench	0	Alluvium	17.8 - 27.5	<0.15	573,000	<1.24	0.207 J	<1.51	215	<0.849	229,000	442
ZTS-MW178	8/21/2023	N	PM02	1B	Center of Trench	0	Alluvium	17.8 - 27.5	<0.15	563,000	<1.24	0.149 J	<1.51	59.7 J	<0.849	227,000	316
ZTS-MW178	11/28/2023	N	PM03	1B	Center of Trench	0	Alluvium	17.8 - 27.5	<0.15	564,000	<1.24	0.171 J	<1.51	168	<0.849	204,000	382
ZTS-MW178	2/20/2024	N	PM04	1B	Center of Trench	0	Alluvium	17.8 - 27.5	<0.15	553,000	<1.24	0.108 J	<1.51	85 J	<0.849	208,000	332
ZTS-MW167	5/24/2023	N	PM01	1B	Downgradient	5	Alluvium	23.3 - 33.0	<0.15	572,000	<1.24	2 J	<1.51	<28.1	<0.849	259,000	931
ZTS-MW167	8/22/2023	N	PM02	1B	Downgradient												

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Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	Dissolved Metals by SW6020									
									Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	
									µg/L									
ZTS-MW172	2/22/2024	N	PM04	1B	Downgradient	5	Alluvium	17.3 - 27.0	<0.15	551,000	<1.24	0.389 J	<1.51	<28.1	<0.849	235,000	99.7	
ZTS-MW172	2/22/2024	FD	PM04	1B	Downgradient	5	Alluvium	17.3 - 27.0	<0.15	538,000	<1.24	0.406 J	<1.51	<28.1	<0.849	229,000	98.3	
ZTS-MW173	5/25/2023	N	PM01	1B	Downgradient	5	UMCf	33.3 - 43.0	<0.15	316,000	6.45	0.872 J	<1.51	39.2 J	<0.849	205,000	307	
ZTS-MW173	8/22/2023	N	PM02	1B	Downgradient	5	UMCf	33.3 - 43.0	<0.15	278,000	3.36 J+	0.551 J	<1.51	40.8 J	<0.849	206,000	248	
ZTS-MW173	11/29/2023	N	PM03	1B	Downgradient	5	UMCf	33.3 - 43.0	<0.15	246,000	3.03	0.358 J	<1.51	87 J	<0.849	196,000	250	
ZTS-MW173	2/21/2024	N	PM04	1B	Downgradient	5	UMCf	33.3 - 43.0	<0.15	342,000	4.79	0.43 J	<1.51	81.6 J	<0.849	244,000	171	
ZTS-MW179	5/25/2023	N	PM01	1B	Downgradient	5	Alluvium	18.3 - 23.0	<0.15	584,000	<1.24	1.17 J	<1.51	<28.1	<0.849	218,000	614	
ZTS-MW179	8/23/2023	N	PM02	1B	Downgradient	5	Alluvium	18.3 - 23.0	<0.15	625,000	<1.24	0.638 J	<1.51	<28.1	<0.849	231,000	201	
ZTS-MW179	11/30/2023	N	PM03	1B	Downgradient	5	Alluvium	18.3 - 23.0	<0.15	551,000	<1.24	0.519 J	<1.51	<28.1	<0.849	207,000	193	
ZTS-MW179	2/22/2024	N	PM04	1B	Downgradient	5	Alluvium	18.3 - 23.0	<0.15	578,000	<1.24	0.671 J	<1.51	<28.1	<0.849	233,000	290	
ZTS-MW168	5/24/2023	N	PM01	1B	Downgradient	15	Alluvium	20.3 - 30.0	<0.15	588,000	<1.24	0.738 J	<1.51	<28.1	<0.849	234,000	284	
ZTS-MW168	8/22/2023	N	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	<0.15	575,000	<1.24	0.549 J	<1.51	<28.1	<0.849	243,000	185	
ZTS-MW168	10/11/2023	N	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	---	---	---	---	---	---	---	---	---	
ZTS-MW168	10/11/2023	FS	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	---	---	---	---	---	---	---	---	---	
ZTS-MW168	10/11/2023	FD	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	---	---	---	---	---	---	---	---	---	
ZTS-MW168	11/29/2023	N	PM03	1B	Downgradient	15	Alluvium	20.3 - 30.0	<0.15	520,000	<1.24	0.473 J	<1.51	<28.1	<0.849	199,000	214	
ZTS-MW168	2/21/2024	N	PM04	1B	Downgradient	15	Alluvium	20.3 - 30.0	<0.15	573,000	<1.24	0.407 J	<1.51	<28.1	<0.849	237,000	139	
ZTS-MW174	5/24/2023	N	PM01	1B	Downgradient	15	Alluvium	19.8 - 29.5	<0.15	611,000	<1.24	0.601 J	<1.51	<28.1	<0.849	235,000	262	
ZTS-MW174	5/26/2023	N	PM01	1B	Downgradient	15	Alluvium	19.8 - 29.5	---	---	---	---	---	---	---	---	---	
ZTS-MW174	8/22/2023	N	PM02	1B	Downgradient	15	Alluvium	19.8 - 29.5	<0.15	536,000	<1.24	0.412 J	<1.51	<28.1	<0.849	227,000	197	
ZTS-MW174	10/11/2023	N	PM02	1B	Downgradient	15	Alluvium	19.8 - 29.5	---	---	---	---	---	---	---	---	---	
ZTS-MW174	10/11/2023	FS	PM02	1B	Downgradient	15	Alluvium	19.8 - 29.5	---	---	---	---	---	---	---	---	---	
ZTS-MW174	10/11/2023	FD	PM02	1B	Downgradient	15	Alluvium	19.8 - 29.5	---	---	---	---	---	---	---	---	---	
ZTS-MW174	11/29/2023	N	PM03	1B	Downgradient	15	Alluvium	19.8 - 29.5	<0.15	521,000	<1.24	0.435 J	<1.51	<28.1	<0.849	202,000	113	
ZTS-MW174	2/21/2024	N	PM04	1B	Downgradient	15	Alluvium	19.8 - 29.5	<0.15	546,000	<1.24	0.5 J	<1.51	<28.1	<0.849	222,000	136	
ZTS-MW177	5/25/2023	N	PM01	1B	Downgradient	15	Alluvium	20.3 - 30.0	<0.15	571,000	<1.24	0.635 J	1.68 J	<28.1	<0.849	228,000	258	
ZTS-MW177	8/23/2023	N	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	<0.15	604,000	1.5 J	0.528 J	<1.51	<28.1	<0.849	243,000	141	
ZTS-MW177	11/29/2023	N	PM03	1B	Downgradient	15	Alluvium	20.3 - 30.0	<0.15	524,000	<1.24	0.385 J	<1.51	<28.1	<0.849	196,000	101	
ZTS-MW177	2/21/2024	N	PM04	1B	Downgradient	15	Alluvium	20.3 - 30.0	<0.15	603,000	<1.24	0.434 J	<1.51	<28.1	<0.849	230,000	116	
ZTS-MW180	5/24/2023	N	PM01	1B	Downgradient	25	Alluvium	17.8 - 22.5	<0.15	656,000	86.4	0.769 J	<1.51	<28.1	<0.849	233,000	1.43 J	
ZTS-MW180	5/24/2023	FD	PM01	1B	Downgradient	25	Alluvium	17.8 - 22.5	<0.15	599,000	81	0.753 J	<1.51	<28.1	<0.849	209,000	1.39 J	
ZTS-MW180	8/24/2023	N	PM02	1B	Downgradient	25	Alluvium	17.8 - 22.5	<0.15	660,000	102	0.831 J	<1.51	<28.1	<0.849	231,000	1.09 J	
ZTS-MW180	8/24/2023	FD	PM02	1B	Downgradient	25	Alluvium	17.8 - 22.5	<0.15	676,000	102	0.832 J	<1.51	<28.1	<0.849	238,000	0.744 J	
ZTS-MW180	11/30/2023	N	PM03	1B	Downgradient	25	Alluvium	17.8 - 22.5	<0.15	619,000	78.7	0.669 J	<1.51	<28.1	<0.849	212,000	<0.704	
ZTS-MW180	11/30/2023	FD	PM03	1B	Downgradient	25	Alluvium	17.8 - 22.5	<0.15	622,000	77.5	0.679 J	<1.51	<28.1	<0.849	215,000	<0.704	
ZTS-MW180	2/22/2024	N	PM04	1B	Downgradient	25	Alluvium	17.8 - 22.5	<0.15	656,000	79.2	0.853 J	<1.51	<28.1	<0.849	247,000	<0.704	
ZTS-MW180	2/22/2024	FD	PM04	1B	Downgradient	25	Alluvium	17.8 - 22.5	<0.15	663,000	81.1	0.766 J	<1.51	39.9 J	<0.849	244,000	<0	

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Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	Dissolved Metals by SW6020								
									Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese
									µg/L								
LWPS-MW107A	11/30/2023	N	PM03	1B	Downgradient	50	Alluvium	24.8 - 34.5	<0.15	542,000	1.32 J	0.333 J	<1.51	<28.1	<0.849	206,000	86.6
LWPS-MW107A	2/22/2024	N	PM04	1B	Downgradient	50	Alluvium	24.8 - 34.5	<0.15	519,000	2.09	0.346 J	<1.51	<28.1	<0.849	212,000	69.1
LWPS-MW107B	5/23/2023	N	PM01	1B	Downgradient	50	UMCf	46.0 - 65.8	<0.15	252,000	<1.24	<0.0596	<1.51	39.1 J	<0.849	369,000	12.8
LWPS-MW107B	8/24/2023	N	PM02	1B	Downgradient	50	UMCf	46.0 - 65.8	<0.15	172,000	8.44	0.135 J	<1.51	68.5 J	<0.849	161,000	14.7
LWPS-MW107B	12/1/2023	N	PM03	1B	Downgradient	50	UMCf	46.0 - 65.8	<0.15	163,000	<1.24	<0.0596	1.9 J	<28.1	<0.849	76,100	1.71 J
LWPS-MW107B	2/23/2024	N	PM04	1B	Downgradient	50	UMCf	46.0 - 65.8	<0.15	286,000	<1.24	<0.0596	<1.51	72.6 J	<0.849	361,000	14.3
LWPS-MW107C	5/23/2023	N	PM01	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	<0.15	544,000	<1.24	0.132 J	<1.51	50.8 J	<17	5,950,000	206
LWPS-MW107C	8/24/2023	N	PM02	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	<1.5	552,000	<12.4	<0.596	<15.1	<281	<8.49	6,020,000	263 J+
LWPS-MW107C	12/1/2023	N	PM03	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	<1.5	492,000	<12.4	<0.596	<15.1	<281	<8.49	5,590,000	187
LWPS-MW107C	2/23/2024	N	PM04	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	<3	556,000	<24.8	<1.19	125	<562	<17	6,450,000	232
ZTS-MW175	5/26/2023	N	PM01	1B	Downgradient	100	Alluvium	19.8 - 29.5	<0.15	579,000	1.44 J	0.43 J	<1.51	<28.1	<0.849	224,000	6.99
ZTS-MW175	8/25/2023	N	PM02	1B	Downgradient	100	Alluvium	19.8 - 29.5	<0.15	577,000	<1.24	0.385 J	<1.51	<28.1	<0.849	216,000	1.06 J
ZTS-MW175	11/30/2023	N	PM03	1B	Downgradient	100	Alluvium	19.8 - 29.5	<0.15	507,000	<1.24	0.323 J	<1.51	<28.1	<0.849	197,000	0.802 J
ZTS-MW175	2/28/2024	N	PM04	1B	Downgradient	100	Alluvium	19.8 - 29.5	<0.15	602,000	<1.24	0.356 J	2.76 J	<28.1	<0.849	223,000	0.712 J
ZTS-MW176	5/26/2023	N	PM01	1B	Downgradient	150	Alluvium	19.8 - 29.5	<0.15	582,000	4.97	0.379 J	<1.51	<28.1	<0.849	227,000	<0.704
ZTS-MW176	8/25/2023	N	PM02	1B	Downgradient	150	Alluvium	19.8 - 29.5	<0.15	611,000	4.34	0.404 J	<1.51	<28.1	<0.849	230,000	<0.704
ZTS-MW176	12/5/2023	N	PM03	1B	Downgradient	150	Alluvium	19.8 - 29.5	<0.15	602,000	3.82 J+	0.404 J	<1.51	<28.1	<0.849	249,000	1.55 J
ZTS-MW176	2/27/2024	N	PM04	1B	Downgradient	150	Alluvium	19.8 - 29.5	<0.15	606,000	17.5	0.449 J	1.9 J	<28.1	<0.849	244,000	<0.704
<b>Test Area 2A</b>																	
<b>Pre-Construction Baseline Results</b>																	
ZTS-MW137	10/20/2022	N	BL02	2A	Upgradient	-9	Alluvium	14.0 - 24.0	<0.15	633,000	95.3	<0.0596	<1.51	<28.1	<0.849	234,000	33.9
ZTS-MW118	9/1/2022	N	BL01	2A	Upgradient	-3	Alluvium	13.5 - 23.5	----	687,000	48.7	----	----	<28.1	---	---	71.2
ZTS-MW118	10/21/2022	N	BL02	2A	Upgradient	-3	Alluvium	13.5 - 23.5	<0.15	702,000	61.7	<0.0596	<1.51	<28.1	<0.849	254,000	<0.704
ZTS-MW138	10/20/2022	N	BL02	2A	Downgradient	5	Alluvium	14.0 - 24.0	<0.15	662,000	97.6	<0.0596	<1.51	<28.1	<0.849	214,000	73.3
ZTS-MW139	10/21/2022	N	BL02	2A	Downgradient	5	Alluvium	13.0 - 23.0	<0.15	732,000	56.3	<0.0596	<1.51	<28.1	<0.849	248,000	317
LWPS-MW102A	10/21/2022	N	BL02	NA	Downgradient	30	UMCf	47.0 - 66.6	<0.15	529,000	14.6	<0.0596	<1.51	<28.1	<0.849	910,000	20
LWPS-MW102B	10/21/2022	N	BL02	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	<0.15	552,000	<1.24	<0.0596	<1.51	<28.1	<84.9	5,840,000	204
ZTS-MW113	10/25/2022	N	BL02	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	<0.15	628,000	102	<0.0596	<1.51	<28.1	<0.849	210,000	<0.704
<b>Post-Construction Performance Monitoring Results</b>																	
ZTS-MW137	5/31/2023	N	PM01	2A	Upgradient	-9	Alluvium	14.0 - 24.0	<0.15	627,000	89.9	0.681 J	2.43 J	<28.1	<0.849	235,000	1.35 J
ZTS-MW137	8/24/2023	N	PM02	2A	Upgradient	-9	Alluvium	14.0 - 24.0	<0.15	635,000	103	0.705 J	<1.51	<28.1	<0.849	239,000	<0.704
ZTS-MW137	12/1/2023	N	PM03	2A	Upgradient	-9	Alluvium	14.0 - 24.0	<0.15	632,000	92.1	0.628 J	<1.51	30.6 J	<0.849	224,000	0.974 J
ZTS-MW137	2/23/2024	N	PM04	2A	Upgradient	-9	Alluvium	14.0 - 24.0	<0.15	753,000	93	0.597 J	<1.51	<28.1	<0.849	228,000	<0.704
ZTS-MW118	5/31/2023	N	PM01	2A	Upgradient	-3	Alluvium	13.5 - 23.5	<0.15	607,000	65	0.713 J	2.26 J	<28.1	<0.849	223,000	0.901 J
ZTS-MW118	5/31/2023	FD	PM01	2A	Upgradient	-3	Alluvium	13.5 - 23.5	<0.15	657,000	67	0.732 J	<1.51	<28.1	<0.849	247,000	<0.704
ZTS-MW118	8/24/2023	N	PM02														

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	Dissolved Metals by SW6020								
									Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese
									µg/L								
ZTS-MW190	2/22/2024	N	PM04	2A	Upgradient	-3	Alluvium	14.3 - 24.0	<0.15	605,000	87.3	0.61 J	2.4 J	<28.1	<0.849	230,000	0.862 J
ZTS-MW196	5/30/2023	N	PM01	2A	Upgradient	-3	Alluvium	13.8 - 23.5	<0.15	598,000	90.7	0.628 J	1.83 J	<28.1	<0.849	218,000	0.707 J
ZTS-MW196	8/25/2023	N	PM02	2A	Upgradient	-3	Alluvium	13.8 - 23.5	<0.15	640,000	94.5	0.678 J	1.52 J	<28.1	<0.849	218,000	0.831 J
ZTS-MW196	11/30/2023	N	PM03	2A	Upgradient	-3	Alluvium	13.8 - 23.5	<0.15	603,000	99.2	0.638 J	<1.51	<28.1	<0.849	212,000	<0.704
ZTS-MW196	2/26/2024	N	PM04	2A	Upgradient	-3	Alluvium	13.8 - 23.5	<0.15	686,000	105	0.686 J	2.8 J	<28.1	<0.849	248,000	1.01 J
ZTS-MW202	5/30/2023	N	PM01	2A	Upgradient	-3	UMCf	28.8 - 38.5	<0.15	558,000	87	0.635 J	1.89 J	<28.1	<0.849	219,000	20.2
ZTS-MW202	8/28/2023	N	PM02	2A	Upgradient	-3	UMCf	28.8 - 38.5	<0.15	551,000	87.9	0.636 J	<1.51	60.8 J	<0.849	203,000	7.82
ZTS-MW202	12/1/2023	N	PM03	2A	Upgradient	-3	UMCf	28.8 - 38.5	<0.15	522,000	73.8	0.493 J	1.72 J	<28.1	<0.849	219,000	11.2 J+
ZTS-MW202	2/27/2024	N	PM04	2A	Upgradient	-3	UMCf	28.8 - 38.5	<0.15	474,000	69.9	0.477 J	<1.51	<28.1	<0.849	226,000	6.2
ZTS-MW192	5/22/2023	N	PM01	2A	Center of Array	0	Alluvium	14.3 - 24.0	<0.15	618,000	56.5	0.913 J	2.26 J	<28.1	<0.849	215,000	168
ZTS-MW192	8/21/2023	N	PM02	2A	Center of Array	0	Alluvium	14.3 - 24.0	<0.15	607,000	85.7	0.662 J	<1.51	<28.1	<0.849	222,000	12
ZTS-MW192	11/28/2023	N	PM03	2A	Center of Array	0	Alluvium	14.3 - 24.0	<0.15	643,000	96.6	0.665 J	<1.51	31.3 J	<0.849	227,000	4.72 J
ZTS-MW192	2/20/2024	N	PM04	2A	Center of Array	0	Alluvium	14.3 - 24.0	<0.15	629,000	91.9	0.613 J	2 J	<28.1	<0.849	223,000	4.02 J
ZTS-MW191	5/26/2023	N	PM01	2A	Downgradient	1	Alluvium	14.8 - 24.5	<0.15	568,000	1.43 J	0.339 J	4.15 J	65.7 J	<0.849	212,000	392
ZTS-MW191	8/22/2023	N	PM02	2A	Downgradient	1	Alluvium	14.8 - 24.5	<0.15	509,000	3.77	0.284 J	<1.51	54.9 J	<0.849	196,000	269
ZTS-MW191	11/29/2023	N	PM03	2A	Downgradient	1	Alluvium	14.8 - 24.5	<0.15	592,000	8.43	0.428 J	<1.51	30.6 J	<0.849	206,000	273
ZTS-MW191	2/21/2024	N	PM04	2A	Downgradient	1	Alluvium	14.8 - 24.5	<0.15	572,000	15.5	0.483 J	<1.51	89.2 J	<0.849	192,000	139
ZTS-MW195	5/26/2023	N	PM01	2A	Downgradient	1	Alluvium	14.3 - 24.0	<0.15	606,000	72.3	0.639 J	1.77 J	<28.1	<0.849	213,000	70.3
ZTS-MW195	8/21/2023	N	PM02	2A	Downgradient	1	Alluvium	14.3 - 24.0	<0.15	617,000	76.6	0.708 J	<1.51	<28.1	<0.849	225,000	108
ZTS-MW195	11/29/2023	N	PM03	2A	Downgradient	1	Alluvium	14.3 - 24.0	<0.15	633,000	86.6	0.61 J	<1.51	<28.1	<0.849	207,000	54.9
ZTS-MW195	2/21/2024	N	PM04	2A	Downgradient	1	Alluvium	14.3 - 24.0	<0.15	624,000	89.8	0.655 J	<1.51	<28.1	<0.849	215,000	14
ZTS-MW138	5/24/2023	N	PM01	2A	Downgradient	5	Alluvium	14.0 - 24.0	<0.15	626,000	92.1	0.681 J	<1.51	<28.1	<0.849	217,000	9.67
ZTS-MW138	8/21/2023	N	PM02	2A	Downgradient	5	Alluvium	14.0 - 24.0	<0.15	625,000	102	0.678 J	3.44 J	49.8 J	<0.849	222,000	1.45 J
ZTS-MW138	11/28/2023	N	PM03	2A	Downgradient	5	Alluvium	14.0 - 24.0	<0.15	673,000	113	0.753 J	<1.51	37.1 J	<0.849	220,000	1.34 J
ZTS-MW138	2/21/2024	N	PM04	2A	Downgradient	5	Alluvium	14.0 - 24.0	<0.15	612,000	95.7	0.661 J	1.74 J	<28.1	<0.849	215,000	<0.704
ZTS-MW139	5/24/2023	N	PM01	2A	Downgradient	5	Alluvium	13.0 - 23.0	<0.15	630,000	69.8	0.641 J	<1.51	<28.1	<0.849	220,000	96.1
ZTS-MW139	8/21/2023	N	PM02	2A	Downgradient	5	Alluvium	13.0 - 23.0	<0.15	615,000	75.3	0.553 J	1.76 J	<28.1	<0.849	223,000	20.1
ZTS-MW139	11/29/2023	N	PM03	2A	Downgradient	5	Alluvium	13.0 - 23.0	<0.15	576,000	72.4	0.599 J	<1.51	29.7 J	<0.849	194,000	26.8
ZTS-MW139	2/21/2024	N	PM04	2A	Downgradient	5	Alluvium	13.0 - 23.0	<0.15	629,000	85	1.1 J	<1.51	<28.1	<0.849	228,000	6.77
ZTS-MW193	5/25/2023	N	PM01	2A	Downgradient	5	Alluvium	13.6 - 23.3	<0.15	642,000	83.4	0.697 J	6.52	38.2 J	<0.849	215,000	8.14
ZTS-MW193	5/25/2023	FD	PM01	2A	Downgradient	5	Alluvium	13.6 - 23.3	<0.15	618,000	82.2	0.7 J	6.56	58.2 J	<0.849	222,000	9.8
ZTS-MW193	8/22/2023	N	PM02	2A	Downgradient	5	Alluvium	13.6 - 23.3	<0.15	597,000	76.5	0.543 J	<1.51	<28.1	<0.849	224,000	2.25 J
ZTS-MW193	8/22/2023	FD	PM02	2A	Downgradient	5	Alluvium	13.6 - 23.3	<0.15	615,000	79	0.551 J	<1.51	<28.1	<0.849	225,000	2.42 J
ZTS-MW193	11/30/2023	N	PM03	2A	Downgradient	5	Alluvium	13.6 - 23.3	<0.15	607,000	87.9	0.595 J	<1.51	29.3 J	<0.849	210,000	2.5 J
ZTS-MW193	11/30/2023	FD	PM03	2A	Downgradient	5	Alluvium	13.6 - 23.3	<0.15	565,000	82.9	0.572 J	<1.51	33.5 J	<0.849	198,000	2 J
ZTS-MW193	2/22/2024	N	PM04	2A	Downgradient	5	Alluvium	13.6 - 23.3	<0.15	610,000							

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	Dissolved Metals by SW6020									
									Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	
									µg/L									
ZTS-MW194	5/25/2023	N	PM01	2A	Downgradient	15	Alluvium	17.8 - 22.5	<0.15	615,000	99.1	0.714 J	6.45	<28.1	<0.849	211,000	13	
ZTS-MW194	8/22/2023	N	PM02	2A	Downgradient	15	Alluvium	17.8 - 22.5	<0.15	612,000	88.1	0.6 J	<1.51	<28.1	<0.849	229,000	0.915 J	
ZTS-MW194	11/29/2023	N	PM03	2A	Downgradient	15	Alluvium	17.8 - 22.5	<0.15	608,000	100	0.64 J	<1.51	<28.1	<0.849	202,000	0.791 J	
ZTS-MW194	2/22/2024	N	PM04	2A	Downgradient	15	Alluvium	17.8 - 22.5	<0.15	587,000	102	0.68 J	<1.51	48.4 J	<0.849	215,000	0.705 J	
LWPS-MW102A	5/30/2023	N	PM01	NA	Downgradient	30	UMCf	47.0 - 66.6	<0.15	499,000	13.8	0.138 J	<1.51	<28.1	<0.849	874,000	23.9	
LWPS-MW102A	8/23/2023	N	PM02	NA	Downgradient	30	UMCf	47.0 - 66.6	<0.15	511,000	18	0.126 J	<1.51	<28.1	<0.849	876,000	23.7	
LWPS-MW102A	10/11/2023	N	PM02	NA	Downgradient	30	UMCf	47.0 - 66.6	----	----	----	----	----	----	----	----	----	
LWPS-MW102A	10/11/2023	FS	PM02	NA	Downgradient	30	UMCf	47.0 - 66.6	----	----	----	----	----	----	----	----	----	
LWPS-MW102A	12/1/2023	N	PM03	NA	Downgradient	30	UMCf	47.0 - 66.6	<0.15	516,000	17.2	0.142 J	2.84 J	28.8 J	<0.849	699,000	20.3	
LWPS-MW102A	2/27/2024	N	PM04	NA	Downgradient	30	UMCf	47.0 - 66.6	<0.15	539,000	16.6	0.136 J	1.82 J	<28.1	1.42 J	850,000	30	
LWPS-MW102B	5/26/2023	N	PM01	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	<0.15	513,000	1.37 J	0.0623 J	<1.51	89.9 J	<42.4	5,920,000	183	
LWPS-MW102B	8/23/2023	N	PM02	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	<1.5	504,000	<12.4	<0.596	<15.1	<281	<8.49	5,840,000	183	
LWPS-MW102B	12/1/2023	N	PM03	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	<1.5	503,000	<12.4	<0.596	<15.1	<281	<8.49	5,330,000	178	
LWPS-MW102B	2/27/2024	N	PM04	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	<0.15	563,000	<1.24	0.157 J	<1.51	61.8 J	<8.49	5,790,000	217	
ZTS-MW197	5/26/2023	N	PM01	2A	Downgradient	55	Alluvium	12.8 - 22.5	<0.15	604,000	85.9	0.74 J	1.62 J	<28.1	<0.849	208,000	6.28	
ZTS-MW197	8/22/2023	N	PM02	2A	Downgradient	55	Alluvium	12.8 - 22.5	<0.15	593,000	83.8	0.647 J	2.15 J	<28.1	<0.849	210,000	0.837 J	
ZTS-MW197	11/30/2023	N	PM03	2A	Downgradient	55	Alluvium	12.8 - 22.5	<0.15	585,000	89.3	0.614 J	1.65 J	<28.1	<0.849	202,000	<0.704	
ZTS-MW197	2/22/2024	N	PM04	2A	Downgradient	55	Alluvium	12.8 - 22.5	<0.15	644,000	103	0.742 J	<1.51	<28.1	<0.849	212,000	<0.704	
ZTS-MW113	5/26/2023	N	PM01	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	<0.15	628,000	95.8	0.666 J	<1.51	<28.1	<0.849	209,000	0.954 J	
ZTS-MW113	8/24/2023	N	PM02	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	<0.15	643,000	101	0.838 J	<1.51	<28.1	<0.849	240,000	0.943 J	
ZTS-MW113	11/30/2023	N	PM03	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	<0.15	610,000	79.5	0.741 J	<1.51	<28.1	<0.849	219,000	1.97 J	
ZTS-MW113	2/23/2024	N	PM04	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	<0.15	715,000	77.5	0.623 J	<1.51	<28.1	<0.849	268,000	<0.704	
<b>Test Area 2B</b>																		
<b>Pre-Construction Baseline Results</b>																		
ZTS-MW133	10/20/2022	N	BL02	2B	Upgradient	-9	UMCf	54.0 - 69.0	<0.15	464,000	5.13	<0.0596	<1.51	<28.1	<0.849	397,000	21.7	
ZTS-MW117	9/1/2022	N	BL01	2B	Upgradient	-2	UMCf	40.5 - 55.5	----	229,000	10.8	----	----	<28.1	----	----	122	
ZTS-MW117	10/19/2022	N	BL02	2B	Upgradient	-2	UMCf	40.5 - 55.5	<0.15	182,000	<24.8	<0.0596	<1.51	<28.1	<0.849	137,000	123	
ZTS-MW117	10/19/2022	FD	BL02	2B	Upgradient	-2	UMCf	40.5 - 55.5	<0.15	176,000	<12.4	<0.0596	<1.51	<28.1	<0.849	135,000	117	
ZTS-MW134	10/19/2022	N	BL02	2B	Upgradient	-2	UMCf	26.0 - 36.0	<0.15	785,000	<62	<0.0596	<1.51	<28.1	<0.849	238,000	26.6	
ZTS-MW135	10/19/2022	N	BL02	2B	Downgradient	7	UMCf	54.0 - 69.0	<0.15	579,000	<24.8	<0.0596	<1.51	<28.1	<0.849	431,000	30.7	
ZTS-MW136	10/20/2022	N	BL02	2B	Cross Gradient	7	UMCf	27.0 - 47.0	<0.15	258,000	10.2	<0.0596	<1.51	<28.1	<0.849	155,000	361	
<b>Post-Construction Performance Monitoring Results</b>																		
ZTS-MW133	5/23/2023	N	PM01	2B	Upgradient	-9	UMCf	54.0 - 69.0	<0.15	465,000	7.38	0.0868 J	2.03 J	41.1 J	<0.849	398,000	6.45	
ZTS-MW133	8/30/2023	N	PM02	2B	Upgradient	-9	UMCf	54.0 - 69.0	<0.15	457,000	6.41	0.0864 J	<1.51	<28.1	<0.849	410,000	5.68	
ZTS-MW133	12/4/2023	N	PM03	2B	Upgradient	-9	UMCf	54.0 - 69.0	<0.15	462,000	8.01	0.0998 J	<1.51	<28.1	<0.849	407,000	6.56 J+	
ZTS-MW133	2/23/2024	N	PM04	2B	Upgradient	-9	UMCf	54.0 - 69.0	<0.15	528,000								

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**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	Dissolved Metals by SW6020									
									Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	
									µg/L									
ZTS-MW134	2/23/2024	N	PM04	2B	Upgradient	-2	UMCf	26.0 - 36.0	<0.15	606,000	30.6	0.507 J	<1.51	<28.1	<0.849	281,000	79.3	
ZTS-MW198	5/23/2023	N	PM01	2B	Downgradient	2	UMCf	26.1 - 46.0	<0.15	390,000	2.49	0.704 J	<1.51	<28.1	<0.849	262,000	187	
ZTS-MW198	8/21/2023	N	PM02	2B	Downgradient	2	UMCf	26.1 - 46.0	<0.15	475,000	15.5	0.323 J	<1.51	45.7 J	<0.849	272,000	82.9	
ZTS-MW198	11/27/2023	N	PM03	2B	Downgradient	2	UMCf	26.1 - 46.0	<0.15	466,000	<1.24	0.344 J	<1.51	404	<0.849	329,000	155	
ZTS-MW198	2/20/2024	N	PM04	2B	Downgradient	2	UMCf	26.1 - 46.0	<0.15	425,000	<1.24	0.122 J	<1.51	107 J+	<0.849	326,000	99.8	
ZTS-MW200	5/23/2023	N	PM01	2B	Downgradient	2	UMCf	50.1 - 65.0	<0.15	455,000	<1.24	0.0735 J	<1.51	72.2 J	<0.849	351,000	493	
ZTS-MW200	5/23/2023	FD	PM01	2B	Downgradient	2	UMCf	50.1 - 65.0	<0.15	456,000	<1.24	0.0701 J	<1.51	72.7 J	<0.849	346,000	484	
ZTS-MW200	8/21/2023	N	PM02	2B	Downgradient	2	UMCf	50.1 - 65.0	<0.15	437,000	1.29 J	0.307 J	<1.51	200	<0.849	359,000	595	
ZTS-MW200	11/28/2023	N	PM03	2B	Downgradient	2	UMCf	50.1 - 65.0	<0.15	480,000	<1.24	<0.0596	<1.51	316	<0.849	382,000	630	
ZTS-MW200	2/20/2024	N	PM04	2B	Downgradient	2	UMCf	50.1 - 65.0	<0.15	458,000	<1.24	<0.0596	<1.51	75 J	<0.849	380,000	549	
ZTS-MW201	5/24/2023	N	PM01	2B	Downgradient	2	UMCf	27.1 - 47.0	<0.15	367,000	<1.24	0.342 J	<1.51	<28.1	<0.849	284,000	218	
ZTS-MW201	8/22/2023	N	PM02	2B	Downgradient	2	UMCf	27.1 - 47.0	<0.15	384,000	<1.24	0.83 J	<1.51	43.7 J	<0.849	311,000	312	
ZTS-MW201	11/28/2023	N	PM03	2B	Downgradient	2	UMCf	27.1 - 47.0	<0.15	435,000	<1.24	0.594 J	<1.51	29.9 J	<0.849	340,000	203	
ZTS-MW201	2/22/2024	N	PM04	2B	Downgradient	2	UMCf	27.1 - 47.0	<0.15	415,000	<1.24	0.495 J	<1.51	51.8 J	<0.849	341,000	133	
ZTS-MW206	5/24/2023	N	PM01	2B	Downgradient	2	UMCf	50.1 - 65.0	<0.15	463,000	<1.24	1.15 J	<1.51	<28.1	<0.849	381,000	527	
ZTS-MW206	8/22/2023	N	PM02	2B	Downgradient	2	UMCf	50.1 - 65.0	<0.15	433,000	<1.24	0.807 J	<1.51	<28.1	<0.849	381,000	287	
ZTS-MW206	11/28/2023	N	PM03	2B	Downgradient	2	UMCf	50.1 - 65.0	<0.15	491,000	1.96 J	0.712 J	<1.51	<28.1	<0.849	407,000	239	
ZTS-MW206	2/22/2024	N	PM04	2B	Downgradient	2	UMCf	50.1 - 65.0	<0.15	473,000	<1.24	0.563 J	<1.51	56.1 J	<0.849	397,000	194	
ZTS-MW199	5/23/2023	N	PM01	2B	Downgradient	5	UMCf	50.1 - 65.0	<0.15	492,000	2.34	1.05 J	<1.51	<28.1	<0.849	396,000	281	
ZTS-MW199	8/22/2023	N	PM02	2B	Downgradient	5	UMCf	50.1 - 65.0	<0.15	450,000	2.74	0.532 J	<1.51	<28.1	<0.849	379,000	107	
ZTS-MW199	11/28/2023	N	PM03	2B	Downgradient	5	UMCf	50.1 - 65.0	<0.15	514,000	2.83	0.425 J	<1.51	<28.1	<0.849	405,000	67.4	
ZTS-MW199	2/20/2024	N	PM04	2B	Downgradient	5	UMCf	50.1 - 65.0	<0.15	494,000	2.72	0.318 J	<1.51	<28.1	<0.849	408,000	49.9	
ZTS-MW207	5/24/2023	N	PM01	2B	Downgradient	5	UMCf	26.1 - 46.0	<0.15	292,000	1.49 J	0.696 J	<1.51	<28.1	<0.849	182,000	228	
ZTS-MW207	5/24/2023	FD	PM01	2B	Downgradient	5	UMCf	26.1 - 46.0	<0.15	337,000	2.4	0.784 J	<1.51	<28.1	<0.849	209,000	266	
ZTS-MW207	8/23/2023	N	PM02	2B	Downgradient	5	UMCf	26.1 - 46.0	<0.15	274,000	<1.24	0.298 J	<1.51	171	<0.849	222,000	109	
ZTS-MW207	8/23/2023	FD	PM02	2B	Downgradient	5	UMCf	26.1 - 46.0	<0.15	268,000	<1.24	0.308 J	<1.51	181	1.23 J	210,000	111	
ZTS-MW207	11/29/2023	N	PM03	2B	Downgradient	5	UMCf	26.1 - 46.0	<0.15	270,000	1.45 J	0.156 J	<1.51	50 J	<0.849	202,000	58.4	
ZTS-MW207	11/29/2023	FD	PM03	2B	Downgradient	5	UMCf	26.1 - 46.0	<0.15	280,000	<1.24	0.234 J	<1.51	72.6 J	<0.849	222,000	60.7	
ZTS-MW207	2/22/2024	N	PM04	2B	Downgradient	5	UMCf	26.1 - 46.0	<0.15	279,000	<1.24	0.123 J	<1.51	50.6 J	<0.849	236,000	40.3	
ZTS-MW207	2/22/2024	FD	PM04	2B	Downgradient	5	UMCf	26.1 - 46.0	<0.15	288,000	<1.24	0.136 J	<1.51	49.1 J	<0.849	234,000	41.1	
ZTS-MW135	5/26/2023	N	PM01	2B	Downgradient	7	UMCf	54.0 - 69.0	<0.15	523,000	8.72	0.914 J	<1.51	<28.1	<0.849	435,000	505	
ZTS-MW135	8/24/2023	N	PM02	2B	Downgradient	7	UMCf	54.0 - 69.0	<0.15	505,000	9.05	0.509 J	<1.51	<28.1	<0.849	434,000	261	
ZTS-MW135	11/30/2023	N	PM03	2B	Downgradient	7	UMCf	54.0 - 69.0	<0.15	479,000	10.2	0.36 J	<1.51	<28.1	2.85	400,000	153	
ZTS-MW135	2/22/2024	N	PM04	2B	Downgradient	7	UMCf	54.0 - 69.0	<0.15	494,000	9.99	0.307 J	<1.51	31.2 J	<0.849	427,000	125	
ZTS-MW136	5/26/2023	N	PM01	2B	Cross Gradient	7	UMCf	27.0 - 47.0	<0.15	179,000	<1.24	0.218 J	<1.51	147	<0.849	150,000	153	
ZTS-MW136	5/26/2023	FD																

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	Dissolved Metals by SW6020									
									Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	
									µg/L									
ZTS-MW208	8/23/2023	N	PM02	2B	Downgradient	15	UMCf	26.1 - 46.0	<0.15	590,000	78.2	0.672 J	1.81 J	44.5 J	<0.849	247,000	10.4	
ZTS-MW208	11/28/2023	N	PM03	2B	Downgradient	15	UMCf	26.1 - 46.0	<0.15	563,000	57.7	0.425 J	<1.51	<28.1	<0.849	248,000	7.95	
ZTS-MW208	2/22/2024	N	PM04	2B	Downgradient	15	UMCf	26.1 - 46.0	<0.15	508,000	56.4	0.484 J	<1.51	51.8 J	<0.849	256,000	18	
ZTS-MW209	5/25/2023	N	PM01	2B	Downgradient	15	UMCf	50.6 - 65.5	<0.15	508,000	5.18	0.295 J	<1.51	<28.1	<0.849	431,000	186	
ZTS-MW209	8/23/2023	N	PM02	2B	Downgradient	15	UMCf	50.6 - 65.5	<0.15	515,000	8.76 J+	0.255 J	<1.51	43.1 J	<0.849	436,000	127	
ZTS-MW209	11/29/2023	N	PM03	2B	Downgradient	15	UMCf	50.6 - 65.5	<0.15	520,000	6.47	0.295 J	<1.51	29.5 J	<0.849	431,000	89.4	
ZTS-MW209	2/22/2024	N	PM04	2B	Downgradient	15	UMCf	50.6 - 65.5	<0.15	520,000	4.92	0.239 J	<1.51	46.3 J	<0.849	418,000	76	
<b>Test Area 2C</b>																		
<b>Pre-Construction Baseline Results</b>																		
ZTS-MW140	10/21/2022	N	BL02	2C	Upgradient	-9	Alluvium	15.5 - 25.5	<0.15	668,000	94.9	<0.0596	<1.51	<28.1	<0.849	267,000	43.3	
ZTS-MW119	9/1/2022	N	BL01	2C	Upgradient	-3	Alluvium	15.0 - 25.0	----	663,000	44.9	----	----	<28.1	----	----	95.2	
ZTS-MW119	10/19/2022	N	BL02	2C	Upgradient	-3	Alluvium	15.0 - 25.0	<0.15	711,000	91.8	<0.0596	<1.51	<28.1	<0.849	243,000	<0.704	
ZTS-MW119	10/19/2022	FD	BL02	2C	Upgradient	-3	Alluvium	15.0 - 25.0	<0.15	750,000	<62	<0.0596	9.21	<28.1	<0.849	263,000	<0.704	
ZTS-MW141	10/21/2022	N	BL02	2C	Downgradient	5	Alluvium	14.5 - 24.5	<0.15	614,000	69.8	<0.0596	<1.51	<28.1	<0.849	241,000	28.8	
ZTS-MW142	10/21/2022	N	BL02	2C	Downgradient	5	Alluvium	16.0 - 26.0	<0.15	659,000	88.6	<0.0596	<1.51	<28.1	<0.849	268,000	5.99	
<b>Post-Construction Performance Monitoring Results</b>																		
ZTS-MW140	5/25/2023	N	PM01	2C	Upgradient	-9	Alluvium	15.5 - 25.5	<0.15	625,000	105	0.712 J	6.51	<28.1	<0.849	245,000	<0.704	
ZTS-MW140	5/25/2023	FD	PM01	2C	Upgradient	-9	Alluvium	15.5 - 25.5	<0.15	637,000	104	0.737 J	5.81	<28.1	<0.849	234,000	<0.704	
ZTS-MW140	8/29/2023	N	PM02	2C	Upgradient	-9	Alluvium	15.5 - 25.5	<0.15	621,000	102	0.671 J	<1.51	<28.1	<0.849	238,000	<0.704	
ZTS-MW140	8/29/2023	FD	PM02	2C	Upgradient	-9	Alluvium	15.5 - 25.5	<0.15	636,000	99.1	0.659 J	<1.51	<28.1	<0.849	229,000	<0.704	
ZTS-MW140	12/4/2023	N	PM03	2C	Upgradient	-9	Alluvium	15.5 - 25.5	<0.15	612,000	99.7	0.759 J	<1.51	<28.1	<0.849	258,000	0.837 J	
ZTS-MW140	12/4/2023	FD	PM03	2C	Upgradient	-9	Alluvium	15.5 - 25.5	<0.15	613,000	99.5	0.686 J	<1.51	<28.1	<0.849	246,000	<0.704	
ZTS-MW140	2/22/2024	N	PM04	2C	Upgradient	-9	Alluvium	15.5 - 25.5	<0.15	619,000	97	0.557 J	<1.51	<28.1	<0.849	241,000	<0.704	
ZTS-MW140	2/22/2024	FD	PM04	2C	Upgradient	-9	Alluvium	15.5 - 25.5	<0.15	610,000	98.2	0.598 J	<1.51	<28.1	<0.849	237,000	<0.704	
ZTS-MW119	5/24/2023	N	PM01	2C	Upgradient	-3	Alluvium	15.0 - 25.0	<0.15	603,000	99.1	0.637 J	1.94 J	<28.1	<0.849	232,000	0.704 J	
ZTS-MW119	8/29/2023	N	PM02	2C	Upgradient	-3	Alluvium	15.0 - 25.0	<0.15	637,000	101	0.634 J	1.74 J	<28.1	<0.849	231,000	<0.704	
ZTS-MW119	12/4/2023	N	PM03	2C	Upgradient	-3	Alluvium	15.0 - 25.0	<0.15	628,000	101	0.663 J	<1.51	<28.1	<0.849	242,000	<0.704	
ZTS-MW119	2/22/2024	N	PM04	2C	Upgradient	-3	Alluvium	15.0 - 25.0	<0.15	603,000	97.4	0.572 J	<1.51	<28.1	<0.849	231,000	<0.704	
ZTS-MW181	5/25/2023	N	PM01	2C	Upgradient	-3	Alluvium	17.3 - 27.0	<0.15	630,000	85.2	0.815 J	5.96	<28.1	<0.849	244,000	2 J	
ZTS-MW181	8/25/2023	N	PM02	2C	Upgradient	-3	Alluvium	17.3 - 27.0	<0.15	633,000	87.5	0.719 J	<1.51	<28.1	<0.849	237,000	<0.704	
ZTS-MW181	12/6/2023	N	PM03	2C	Upgradient	-3	Alluvium	17.3 - 27.0	<0.15	605,000	102	0.594 J	<1.51	<28.1	<0.849	236,000	0.951 J	
ZTS-MW181	2/28/2024	N	PM04	2C	Upgradient	-3	Alluvium	17.3 - 27.0	<0.15	665,000	88.8	0.798 J	<1.51	34.4 J	<0.849	230,000	0.927 J	
ZTS-MW188	5/26/2023	N	PM01	2C	Upgradient	-3	Alluvium	17.3 - 27.0	<0.15	630,000	104	0.717 J	2.13 J	34.8 J	<0.849	238,000	2.33 J	
ZTS-MW188	8/25/2023	N	PM02	2C	Upgradient	-3	Alluvium	17.3 - 27.0	<0.15	615,000	103	0.614 J	<1.51	<28.1	<0.849	228,000	<0.704	
ZTS-MW188	12/6/2023	N	PM03	2C	Upgradient	-3	Alluvium	17.3 - 27.0	<0.15	634,000	77	0.762 J	<1.51	43.9 J	<0.849	251,000	3.01 J	
ZTS-MW188	2/23/2024	N	PM04	2C	Upgradient	-3	Alluvium	17.3 - 27.0	<0.15									

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	Dissolved Metals by SW6020									
									Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	
									µg/L									
ZTS-MW182	11/28/2023	N	PM03	2C	Center of Array	0	Alluvium	17.6 - 27.3	---	---	---	---	---	---	---	---	---	---
ZTS-MW182	2/19/2024	N	PM04	2C	Center of Array	0	Alluvium	17.6 - 27.3	<0.15	577,000	35.9	0.518 J	<1.51	178	<0.849	223,000	107	
ZTS-MW183	5/23/2023	N	PM01	2C	Downgradient	1	Alluvium	17.3 - 27.0	<0.15	617,000	52.1	0.727 J	2.43 J	<28.1	<0.849	231,000	54.4	
ZTS-MW183	8/22/2023	N	PM02	2C	Downgradient	1	Alluvium	17.3 - 27.0	<0.15	607,000	63.1	0.608 J	<1.51	<28.1	<0.849	233,000	6.42	
ZTS-MW183	11/28/2023	N	PM03	2C	Downgradient	1	Alluvium	17.3 - 27.0	<0.15	674,000	75	0.625 J	<1.51	<28.1	<0.849	255,000	2.86 J	
ZTS-MW183	2/20/2024	N	PM04	2C	Downgradient	1	Alluvium	17.3 - 27.0	<0.15	618,000	78.6	0.587 J	<1.51	58.3 J	<0.849	235,000	2.75 J	
ZTS-MW187	5/24/2023	N	PM01	2C	Downgradient	1	Alluvium	15.3 - 25.0	<0.15	623,000	69	0.599 J	<1.51	<28.1	<0.849	226,000	89.4	
ZTS-MW187	8/23/2023	N	PM02	2C	Downgradient	1	Alluvium	15.3 - 25.0	<0.15	648,000	95.6	0.72 J	<1.51	51 J	<0.849	252,000	54.8	
ZTS-MW187	11/29/2023	N	PM03	2C	Downgradient	1	Alluvium	15.3 - 25.0	<0.15	570,000	80.5	0.512 J	<1.51	<28.1	<0.849	197,000	19.5	
ZTS-MW187	2/20/2024	N	PM04	2C	Downgradient	1	Alluvium	15.3 - 25.0	<0.15	611,000	84.1	0.531 J	<1.51	<28.1	<0.849	234,000	13.6	
ZTS-MW141	5/25/2023	N	PM01	2C	Downgradient	5	Alluvium	14.5 - 24.5	<0.15	627,000	88.6	0.774 J	2.54 J	33.9 J	<0.849	242,000	28.4	
ZTS-MW141	8/23/2023	N	PM02	2C	Downgradient	5	Alluvium	14.5 - 24.5	<0.15	667,000	96.2	0.747 J	<1.51	<28.1	0.875 J	250,000	0.895 J	
ZTS-MW141	11/29/2023	N	PM03	2C	Downgradient	5	Alluvium	14.5 - 24.5	<0.15	617,000	93.2	0.593 J	<1.51	<28.1	<0.849	210,000	<0.704	
ZTS-MW141	2/22/2024	N	PM04	2C	Downgradient	5	Alluvium	14.5 - 24.5	<0.15	606,000	91.8	0.623 J	1.73 J	33.2 J	<0.849	231,000	1.85 J	
ZTS-MW142	5/26/2023	N	PM01	2C	Downgradient	5	Alluvium	16.0 - 26.0	<0.15	587,000	69.2	0.764 J	2.37 J	30.8 J	<0.849	225,000	78.9	
ZTS-MW142	8/24/2023	N	PM02	2C	Downgradient	5	Alluvium	16.0 - 26.0	<0.15	636,000	84.9	0.696 J	<1.51	<28.1	<0.849	253,000	34	
ZTS-MW142	11/30/2023	N	PM03	2C	Downgradient	5	Alluvium	16.0 - 26.0	<0.15	610,000	73.5	0.577 J	<1.51	<28.1	<0.849	223,000	33 J+	
ZTS-MW142	2/22/2024	N	PM04	2C	Downgradient	5	Alluvium	16.0 - 26.0	<0.15	591,000	88.4	0.572 J	<1.51	<28.1	<0.849	222,000	4.33 J	
ZTS-MW184	5/24/2023	N	PM01	2C	Downgradient	5	Alluvium	16.3 - 26.0	<0.15	644,000	72.3	0.708 J	<1.51	<28.1	<0.849	227,000	8.31	
ZTS-MW184	8/22/2023	N	PM02	2C	Downgradient	5	Alluvium	16.3 - 26.0	<0.15	574,000	65.7	0.671 J	<1.51	<28.1	<0.849	216,000	5.39	
ZTS-MW184	11/28/2023	N	PM03	2C	Downgradient	5	Alluvium	16.3 - 26.0	<0.15	701,000	76.8	0.691 J	<1.51	<28.1	<0.849	250,000	1.03 J	
ZTS-MW184	2/20/2024	N	PM04	2C	Downgradient	5	Alluvium	16.3 - 26.0	<0.15	614,000	85	0.58 J	<1.51	<28.1	<0.849	235,000	<0.704	
ZTS-MW205	5/24/2023	N	PM01	2C	Downgradient	5	UMCf	30.3 - 40.0	<0.15	121,000	<1.24	0.316 J	<1.51	<28.1	<0.849	87,100	318	
ZTS-MW205	8/23/2023	N	PM02	2C	Downgradient	5	UMCf	30.3 - 40.0	<0.15	126,000	2.12 J+	0.323 J	<1.51	52.2 J	<0.849	99,600	446	
ZTS-MW205	11/29/2023	N	PM03	2C	Downgradient	5	UMCf	30.3 - 40.0	<0.15	105,000	<1.24	0.17 J	<1.51	97.4 J	<0.849	76,200	425	
ZTS-MW205	2/22/2024	N	PM04	2C	Downgradient	5	UMCf	30.3 - 40.0	<0.15	161,000	8.12	0.206 J	<1.51	<28.1	<0.849	123,000	314	
ZTS-MW185	5/25/2023	N	PM01	2C	Downgradient	15	Alluvium	15.3 - 25.0	<0.15	639,000	83.5	0.848 J	1.77 J	35.5 J	<0.849	240,000	8.18	
ZTS-MW185	8/24/2023	N	PM02	2C	Downgradient	15	Alluvium	15.3 - 25.0	<0.15	644,000	96.7	0.719 J	<1.51	<28.1	<0.849	254,000	1.02 J	
ZTS-MW185	11/30/2023	N	PM03	2C	Downgradient	15	Alluvium	15.3 - 25.0	<0.15	577,000	88.3	0.536 J	<1.51	<28.1	<0.849	210,000	<0.704	
ZTS-MW185	2/22/2024	N	PM04	2C	Downgradient	15	Alluvium	15.3 - 25.0	<0.15	604,000	98.8	0.553 J	<1.51	<28.1	<0.849	234,000	0.904 J	
ZTS-MW186	5/25/2023	N	PM01	2C	Downgradient	25	Alluvium	15.3 - 25.0	<0.15	629,000	82.2	0.794 J	<1.51	<28.1	<0.849	235,000	6.18	
ZTS-MW186	8/24/2023	N	PM02	2C	Downgradient	25	Alluvium	15.3 - 25.0	<0.15	645,000	92.7	0.716 J	<1.51	<28.1	<0.849	245,000	0.725 J	
ZTS-MW186	11/30/2023	N	PM03	2C	Downgradient	25	Alluvium	15.3 - 25.0	<0.15	580,000	80.7	0.586 J	<1.51	<28.1	<0.849	208,000	<0.704	
ZTS-MW186	2/23/2024	N	PM04	2C	Downgradient	25	Alluvium	15.3 - 25.0	<0.15	665,000	98.1	0.648 J	<1.51	30.8 J	<0.849	250,000	1.45 J	
ZTS-MW189	5/25/2023	N	PM01	2C	Downgradient	55	Alluvium	12.8 - 23.0	<0.15	609,000	93.1	0.698 J	1.7 J	<28.1	<0.849	227,000	8.02	
ZTS-MW189	8/25/2023	N	PM02	2C	Downgradient	55	Alluvium	12.8 - 23.0	<0.									

**Table 2**  
**Groundwater Analytical Results**  
 Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	Dissolved Metals by SW6020									
									Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	
									µg/L									
<b>Post-Construction Performance Monitoring Results</b>																		
ZTS-MW116	5/24/2023	N	PM01	NA	NA	NA	UMCf	33.0 - 48.0	<0.15	439,000	35.8	0.171 J	<1.51	<28.1	<0.849	255,000	17.8	
ZTS-MW116	8/29/2023	N	PM02	NA	NA	NA	UMCf	33.0 - 48.0	<0.15	443,000	35.2	0.183 J	<1.51	<28.1	<0.849	258,000	11.3	
ZTS-MW116	12/5/2023	N	PM03	NA	NA	NA	UMCf	33.0 - 48.0	<0.15	469,000	136	0.651 J	<1.51	424	<0.849	272,000	14.3	
ZTS-MW116	2/27/2024	N	PM04	NA	NA	NA	UMCf	33.0 - 48.0	<0.15	500,000	45.7	0.192 J	2.02 J	<28.1	<0.849	285,000	5.31	
ZTS-MW128	5/24/2023	N	PM01	NA	NA	NA	UMCf	42.0 - 52.0	<0.15	496,000	31.1	0.606 J	<1.51	<28.1	<0.849	271,000	53.6	
ZTS-MW128	8/30/2023	N	PM02	NA	NA	NA	UMCf	42.0 - 52.0	<0.15	531,000	45.4	0.616 J	<1.51	<28.1	<0.849	262,000	6.53	
ZTS-MW128	12/5/2023	N	PM03	NA	NA	NA	UMCf	42.0 - 52.0	<0.15	584,000	57.6	0.734 J	<1.51	<28.1	<0.849	284,000	3.89 J	
ZTS-MW128	2/28/2024	N	PM04	NA	NA	NA	UMCf	42.0 - 52.0	<0.15	427,000	21.9	0.295 J	2.16 J	<28.1	<0.849	245,000	49.5	

## Notes:

1. Distances from the discontinuous or continuous walls are shown as negative values for upgradient monitoring wells, as zero for monitoring wells screened within the walls, and as positive values for monitoring wells located downgradient of the walls.

bgs - below ground surface

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

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

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

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.

UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

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

mg/L - milligram per liter

mS/cm - millisiemens per centimeter

mV - millivolts

nmol - nanomol

SU - standard units

N - normal field sample

µg/L - micrograms per liter

UMCf - Upper Muddy Creek formation

FD - field duplicate

FS - field split

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	Dissolved Metals by SW6020																	
									Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Strontium	Thallium	Tin									
									µg/L																	
<b>Test Area 1A</b>																										
<b>Pre-Construction Baseline Results</b>																										
ZTS-MW143	10/18/2022	N	BL02	1A	Upgradient	-50	Alluvium	23.0 - 33.0	391	2.03	66,100	51.2	<0.07	695,000	12,100	<0.121	<0.655									
ZTS-MW124	8/31/2022	N	BL01	1A	Upgradient	-8	Alluvium	24.0 - 34.0	----	----	----	----	----	----	----	----	----									
ZTS-MW124	8/31/2022	FD	BL01	1A	Upgradient	-8	Alluvium	24.0 - 34.0	----	----	----	----	----	----	----	----	----									
ZTS-MW124	10/18/2022	N	BL02	1A	Upgradient	-8	Alluvium	24.0 - 34.0	376 J	2.19 J+	61,800 J	47.6 J	<0.07	591,000 J	12,400 J	<0.121	<0.655									
ZTS-MW124	10/18/2022	FD	BL02	1A	Upgradient	-8	Alluvium	24.0 - 34.0	<0.348 UJ	<0.816	<108 UJ	<0.3 UJ	<0.07	4,440 J	91.5 J	<0.121	<0.655									
ZTS-MW125	8/31/2022	N	BL01	1A	Upgradient	-8	UMCf	40.0 - 50.0	----	----	----	----	----	----	----	----	----									
ZTS-MW125	10/24/2022	N	BL02	1A	Upgradient	-8	UMCf	40.0 - 50.0	83.7	<0.816	145,000	4.28	<0.07	501,000	11,800	<0.121	<0.655									
ZTS-MW125	10/24/2022	FD	BL02	1A	Upgradient	-8	UMCf	40.0 - 50.0	----	----	----	----	----	----	----	----	----									
ZTS-MW144	10/18/2022	N	BL02	1A	Downgradient	35	Alluvium	24.0 - 34.0	329	2.85	69,000	51.3	<0.07	768,000	13,900	<0.121	<0.655									
<b>Post-Construction Performance Monitoring Results</b>																										
ZTS-MW143	5/26/2023	N	PM01	1A	Upgradient	-50	Alluvium	23.0 - 33.0	410	1.7 J	63,300	60.4	<0.07	671,000	12,200	<0.121	0.951 J									
ZTS-MW143	8/29/2023	N	PM02	1A	Upgradient	-50	Alluvium	23.0 - 33.0	401	1.87 J	64,700	61.2	<0.07	619,000	12,400	<0.121	1.91 J									
ZTS-MW143	12/6/2023	N	PM03	1A	Upgradient	-50	Alluvium	23.0 - 33.0	289	3.12	66,700	40.4	<0.07	675,000	13,500	<0.121	<0.655									
ZTS-MW143	2/21/2024	N	PM04	1A	Upgradient	-50	Alluvium	23.0 - 33.0	227	2.84 J+	68,800	35.5	<0.07	726,000	13,900	<0.121	<0.655									
ZTS-MW124R	5/26/2023	N	PM01	1A	Upgradient	-8	Alluvium	24.5 - 34.0	332	4.2	65,200	49.6	<0.07	598,000	10,400	<0.121	0.761 J									
ZTS-MW124R	8/29/2023	N	PM02	1A	Upgradient	-8	Alluvium	24.5 - 34.0	334	1.64 J	64,700	48.7	<0.07	548,000	10,300	<0.121	<0.655									
ZTS-MW124R	12/5/2023	N	PM03	1A	Upgradient	-8	Alluvium	24.5 - 34.0	304	142 J-	67,000	52.4	<0.07	605,000	11,700	<0.121	<0.655									
ZTS-MW124R	2/27/2024	N	PM04	1A	Upgradient	-8	Alluvium	24.5 - 34.0	302	2.39	71,100	49.8	<0.07	642,000	13,100	<0.121	<0.655									
ZTS-MW125	5/25/2023	N	PM01	1A	Upgradient	-8	UMCf	40.0 - 50.0	34.7	1.65 J	162,000	2.07	<0.07	473,000	12,100	<0.121	0.743 J									
ZTS-MW125	8/30/2023	N	PM02	1A	Upgradient	-8	UMCf	40.0 - 50.0	102	0.942 J	143,000	14.1	<0.07	488,000	12,400	<0.121	<0.655									
ZTS-MW125	12/1/2023	N	PM03	1A	Upgradient	-8	UMCf	40.0 - 50.0	98.8	1.77 J	154,000	15.8	<0.07	494,000	14,000	<0.121	<0.655									
ZTS-MW125	2/26/2024	N	PM04	1A	Upgradient	-8	UMCf	40.0 - 50.0	30.4	<0.816	182,000	3.98	<0.07	500,000	12,500	<0.121	<0.655									
ZTS-MW153	5/26/2023	N	PM01	1A	Upgradient	-8	Alluvium	24.3 - 34.0	351	3.79	64,600	51.3	<0.07	641,000	11,400	<0.121	1.15 J									
ZTS-MW153	8/31/2023	N	PM02	1A	Upgradient	-8	Alluvium	24.3 - 34.0	346	1.59 J	61,600	52.9	<0.07	574,000	12,300	<0.121	<0.655									
ZTS-MW153	12/1/2023	N	PM03	1A	Upgradient	-8	Alluvium	24.3 - 34.0	321	2.4	70,700	50.9	<0.07	637,000	12,900	<0.605	<0.655									
ZTS-MW153	2/27/2024	N	PM04	1A	Upgradient	-8	Alluvium	24.3 - 34.0	259	2.55	70,900	42.2	<0.07	651,000	13,500	<0.121	<0.655									
ZTS-MW163	5/25/2023	N	PM01	1A	Upgradient	-8	Alluvium	24.3 - 34.0	367	1.77 J	70,000	50	<0.07	643,000	12,000	0.124 J	<0.655									
ZTS-MW163	8/31/2023	N	PM02	1A	Upgradient	-8	Alluvium	24.3 - 34.0	342	1.6 J	63,800	52.7	0.0734 J	578,000	12,100	0.248 J	0.661 J									
ZTS-MW163	12/1/2023	N	PM03	1A	Upgradient	-8	Alluvium	24.3 - 34.0	338	1.82 J	69,600	53.9	<0.07	627,000	13,000	0.152 J	<0.655									
ZTS-MW163	2/27/2024	N	PM04	1A	Upgradient	-8	Alluvium	24.3 - 34.0	331	1.77 J	71,000	54.7	<0.07	648,000	12,700	0.13 J	<0.655									
ZTS-MW150	5/22/2023	N	PM01	1A	Center of Trench	0	Alluvium	24.3 - 34.0	69.6	1.94 J	65,400	1.85 J	<0.07	575,000	9,940	<0.121	<0.655									
ZTS-MW150	8/21/2023	N	PM02	1A	Center of Trench	0	Alluvium	24.3 - 34.0	144	1.55 J	64,400	6.42	<0.07	558,000	10,500	<0.121	<0.655									
ZTS-MW150	11/27/2023	N	PM03	1A	Center of Trench	0	Alluvium	24.3 - 34.0	182	1.76 J	69,700	11	<0.07	634,000	11,500	<0.121	<0.655									
ZTS-MW150	2/19/2024	N	PM04	1A	Center of Trench	0	Alluvium	24.3 - 34.0	166	2.57	70,100	6.02	<0.07	639,000	13,700	<0.121	<0.655									
ZTS-MW154	5/24/2023	N	PM01	1A	Center of Trench	0	Alluvium	22.3 - 32.0	88.7	2.28	66,900	1.61														

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	Dissolved Metals by SW6020									
									Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Strontium	Thallium	Tin	
									µg/L									
ZTS-MW164	11/27/2023	N	PM03	1A	Center of Trench	0	Alluvium	22.3 - 32.0	142	2.56	79,800	14.5	<0.07	680,000	12,100	<0.121	<0.655	
ZTS-MW164	11/27/2023	FD	PM03	1A	Center of Trench	0	Alluvium	22.3 - 32.0	136	2.57	78,100	13.6	<0.07	689,000	11,700	<0.121	<0.655	
ZTS-MW164	2/20/2024	N	PM04	1A	Center of Trench	0	Alluvium	22.3 - 32.0	121	2.12 J	71,000	8.46	<0.07	680,000	12,500	<0.121	<0.655	
ZTS-MW164	2/20/2024	FD	PM04	1A	Center of Trench	0	Alluvium	22.3 - 32.0	118	4.46 J	71,700	7.21	<0.07	662,000	12,000	<0.121	<0.655	
ZTS-MW151	5/25/2023	N	PM01	1A	Downgradient	5	Alluvium	24.3 - 34.0	254	4.76	62,500	29.6	<0.07	641,000	11,400	0.124 J	<0.655	
ZTS-MW151	8/21/2023	N	PM02	1A	Downgradient	5	Alluvium	24.3 - 34.0	316	5.09	61,300	44.6	<0.07	598,000	11,400	<0.121	<0.655	
ZTS-MW151	11/28/2023	N	PM03	1A	Downgradient	5	Alluvium	24.3 - 34.0	350	7.27	71,100	50.4	<0.07	649,000	13,300	<0.121	<0.655	
ZTS-MW151	2/20/2024	N	PM04	1A	Downgradient	5	Alluvium	24.3 - 34.0	273	8.11	66,800	35.3	<0.07	649,000	13,300	<0.121	<0.655	
ZTS-MW155	5/24/2023	N	PM01	1A	Downgradient	5	Alluvium	20.3 - 35.0	164	6.04	65,000	13.2	<0.07	651,000	11,200	0.147	<0.655	
ZTS-MW155	5/24/2023	FD	PM01	1A	Downgradient	5	Alluvium	20.3 - 35.0	166	5.89	65,000	13.4	<0.07	650,000	11,700	<0.121	<0.655	
ZTS-MW155	8/22/2023	N	PM02	1A	Downgradient	5	Alluvium	20.3 - 35.0	282	4.74	58,600	44.6	<0.07	613,000	11,900	<0.121	<0.655	
ZTS-MW155	8/22/2023	FD	PM02	1A	Downgradient	5	Alluvium	20.3 - 35.0	305	4.77	62,300	47	<0.07	664,000	12,500	<0.121	<0.655	
ZTS-MW155	11/28/2023	N	PM03	1A	Downgradient	5	Alluvium	20.3 - 35.0	269	7.58	69,600	30	<0.07	671,000	13,600	<0.121	<0.655	
ZTS-MW155	11/28/2023	FD	PM03	1A	Downgradient	5	Alluvium	20.3 - 35.0	280	8.15	72,000	32.4	<0.07	715,000	14,000	<0.121	<0.655	
ZTS-MW155	2/21/2024	N	PM04	1A	Downgradient	5	Alluvium	20.3 - 35.0	190	7.57 J+	68,200	29.4	<0.07	720,000	13,900	<0.121	<0.655	
ZTS-MW155	2/21/2024	FD	PM04	1A	Downgradient	5	Alluvium	20.3 - 35.0	191	9.3 J+	68,800	29.2	<0.07	723,000	14,000	<0.121	<0.655	
ZTS-MW156	5/24/2023	N	PM01	1A	Downgradient	5	UMCf	43.8 - 53.5	3.17	<0.816	185,000	<0.3	<0.07	476,000	6,190	<0.121	0.688	
ZTS-MW156	8/22/2023	N	PM02	1A	Downgradient	5	UMCf	43.8 - 53.5	46.7	<0.816	171,000	7.34	<0.07	464,000	6,540	<0.121	<0.655	
ZTS-MW156	11/29/2023	N	PM03	1A	Downgradient	5	UMCf	43.8 - 53.5	16.2	<0.816	178,000	2.65	<0.07	452,000	6,270	<0.121	<0.655	
ZTS-MW156	2/21/2024	N	PM04	1A	Downgradient	5	UMCf	43.8 - 53.5	30.7	<0.816	192,000	4.77	<0.07	525,000	7,290	<0.121	<0.655	
ZTS-MW165	5/31/2023	N	PM01	1A	Downgradient	5	Alluvium	22.3 - 32.0	226	4.46	73,100	25.6	<0.07	671,000	10,900	<0.121	<0.655	
ZTS-MW165	8/25/2023	N	PM02	1A	Downgradient	5	Alluvium	22.3 - 32.0	285	7.01	72,600	39.1	<0.07	640,000	12,100	<0.121	<0.655	
ZTS-MW165	11/30/2023	N	PM03	1A	Downgradient	5	Alluvium	22.3 - 32.0	227	6.7	80,900	42.9	<0.07	622,000	12,600	<0.121	<0.655	
ZTS-MW165	2/23/2024	N	PM04	1A	Downgradient	5	Alluvium	22.3 - 32.0	298	6.74	79,300	48.9	<0.07	715,000	13,200	<0.121	<0.655	
ZTS-MW152	5/25/2023	N	PM01	1A	Downgradient	15	Alluvium	23.3 - 33.0	271	6.44	66,600	31	<0.07	654,000	11,700	<0.121	0.904 J	
ZTS-MW152	8/22/2023	N	PM02	1A	Downgradient	15	Alluvium	23.3 - 33.0	280	4.21	59,000	43.1	<0.07	603,000	11,700	<0.121	<0.655	
ZTS-MW152	11/28/2023	N	PM03	1A	Downgradient	15	Alluvium	23.3 - 33.0	275	6.45	69,700	33.6	<0.07	653,000	13,500	<0.121	<0.655	
ZTS-MW152	2/20/2024	N	PM04	1A	Downgradient	15	Alluvium	23.3 - 33.0	205	7.11	66,800	26.4	<0.07	679,000	13,300	<0.121	<0.655	
ZTS-MW157	5/25/2023	N	PM01	1A	Downgradient	15	Alluvium	23.3 - 33.0	160	5.38	62,400	16.1	<0.07	692,000	11,700	0.145 J	<0.655	
ZTS-MW157	8/23/2023	N	PM02	1A	Downgradient	15	Alluvium	23.3 - 33.0	251	4.34	68,200	32.5	<0.07	738,000	12,600	<0.121	<0.655	
ZTS-MW157	11/29/2023	N	PM03	1A	Downgradient	15	Alluvium	23.3 - 33.0	198	4.89	68,900	22.9	<0.07	617,000	12,100	<0.121	<0.655	
ZTS-MW157	2/21/2024	N	PM04	1A	Downgradient	15	Alluvium	23.3 - 33.0	185	6.1 J+	68,000	31.3	<0.07	729,000	14,000	<0.121	<0.655	
ZTS-MW162	5/25/2023	N	PM01	1A	Downgradient	15	Alluvium	23.3 - 33.0	153	5.14	68,600	20.8	<0.07	668,000	12,500	<0.121	<0.655	
ZTS-MW162	8/18/2023	N	PM02	1A	Downgradient	15	Alluvium	23.3 - 33.0	207	5.92	68,200	28.2	<0.07	626,000	10,900	<0.121	0.761 J	
ZTS-MW162	11/30/2023	N	PM03	1A	Downgradient	15	Alluvium	23.3 - 33.0	212	5.98	75,700	36.2	<0.07	624,000	13,500	<0.121	<0.655	
ZTS-MW162	2/21/2024	N	PM04	1A	Downgradient	15	Alluvium	23.3 - 33.0	144	6.24 J+	91,400	34.2</td						

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	Dissolved Metals by SW6020									
									Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Strontium	Thallium	Tin	
									μg/L									
ZTS-MW144	2/23/2024	N	PM04	1A	Downgradient	35	Alluvium	24.0 - 34.0	180	4.28	76,100	25.6	<0.07	726,000	13,400	0.156 J	<0.655	
ZTS-MW158	5/24/2023	N	PM01	1A	Downgradient	50	Alluvium	23.3 - 33.0	112	2.9	65,600	14.5	<0.07	681,000	12,800	<0.121	<0.655	
ZTS-MW158	8/25/2023	N	PM02	1A	Downgradient	50	Alluvium	23.3 - 33.0	151	2.75	63,300	11.9	<0.07	653,000	12,100	<0.121	<0.655	
ZTS-MW158	12/1/2023	N	PM03	1A	Downgradient	50	Alluvium	23.3 - 33.0	185	3.36	65,900	21.5	<0.07	649,000	13,500	<0.121	<0.655	
ZTS-MW158	2/27/2024	N	PM04	1A	Downgradient	50	Alluvium	23.3 - 33.0	180	2.89	70,800	24.7	<0.07	702,000	13,900	0.121 J	<0.655	
ZTS-MW159	5/24/2023	N	PM01	1A	Downgradient	50	UMCf	38.8 - 48.5	62.4	2.85	107,000	6.64	<0.07	451,000	10,300	<0.121	<0.655	
ZTS-MW159	8/25/2023	N	PM02	1A	Downgradient	50	UMCf	38.8 - 48.5	272	2.6	77,000	37.6	<0.07	620,000	11,300	<0.121	<0.655	
ZTS-MW159	12/1/2023	N	PM03	1A	Downgradient	50	UMCf	38.8 - 48.5	271	2.78	75,300	38.7	<0.07	678,000	12,700	<0.121	<0.655	
ZTS-MW159	2/27/2024	N	PM04	1A	Downgradient	50	UMCf	38.8 - 48.5	222	2.63	82,600	35.5	<0.07	627,000	13,000	<0.121	<0.655	
ZTS-MW160	5/24/2023	N	PM01	1A	Downgradient	100	Alluvium	23.3 - 33.0	237	2.39	64,900	31.9	<0.07	613,000	12,400	0.161 J	<0.655	
ZTS-MW160	8/28/2023	N	PM02	1A	Downgradient	100	Alluvium	23.3 - 33.0	261	2.62	62,700	36.1	<0.07	614,000	12,100	0.259 J	<0.655	
ZTS-MW160	12/5/2023	N	PM03	1A	Downgradient	100	Alluvium	23.3 - 33.0	272	2.1	72,600	41.5	<0.07	681,000	13,100	0.204 J	<0.655	
ZTS-MW160	2/27/2024	N	PM04	1A	Downgradient	100	Alluvium	23.3 - 33.0	236	2.18	75,200	38.9	<0.07	672,000	12,900	0.251 J	<0.655	
ZTS-MW161	5/26/2023	N	PM01	1A	Downgradient	150	Alluvium	24.3 - 34.0	252	1.89 J	66,400	22.8	<0.07	634,000	11,100	<0.121	0.75 J	
ZTS-MW161	8/25/2023	N	PM02	1A	Downgradient	150	Alluvium	24.3 - 34.0	292	2.57	66,200	40.9	<0.07	616,000	11,600	<0.121	<0.655	
ZTS-MW161	8/25/2023	FD	PM02	1A	Downgradient	150	Alluvium	24.3 - 34.0	286	1.96 J	66,100	39.9	<0.07	614,000	11,100	<0.121	<0.655	
ZTS-MW161	12/1/2023	N	PM03	1A	Downgradient	150	Alluvium	24.3 - 34.0	307	2.4	68,500	43.7	<0.07	646,000	12,700	<0.121	<0.655	
ZTS-MW161	12/1/2023	FD	PM03	1A	Downgradient	150	Alluvium	24.3 - 34.0	305	2.52	67,000	41.9	<0.07	643,000	13,000	<0.121	<0.655	
ZTS-MW161	2/23/2024	N	PM04	1A	Downgradient	150	Alluvium	24.3 - 34.0	284	3.29	70,200	33.8	0.0793 J	671,000	13,500	0.137 J	<0.655	
ZTS-MW161	2/23/2024	FD	PM04	1A	Downgradient	150	Alluvium	24.3 - 34.0	288	3.42	72,800	34.5	<0.07	682,000	13,700	0.123 J	<0.655	
<b>Between Test Area 1A and Test Area 1B</b>																		
<b>Pre-Construction Baseline Results</b>																		
ZTS-MW145	10/24/2022	N	BL02	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	168	2.07	121,000	12.5	<0.07	549,000	6,830	<0.121	<0.655	
ZTS-MW146	10/24/2022	N	BL02	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	156	5.01	170,000	16	<0.07	669,000	11,600	<0.121	<0.655	
<b>Post-Construction Performance Monitoring Results</b>																		
ZTS-MW145	5/22/2023	N	PM01	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	9.92	3.34	41,600	1.45 J	<0.07	192,000	1,880	<0.121	0.946 J	
ZTS-MW145	8/30/2023	N	PM02	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	10.2	<0.816	156,000	0.81 J	<0.07	491,000	4,320	<0.121	<0.655	
ZTS-MW145	12/6/2023	N	PM03	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	4.34 J	<0.816	161,000	<0.3	<0.07	535,000	4,730	<0.121	<0.655	
ZTS-MW145	2/21/2024	N	PM04	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	11.2	1.08 J	131,000	1.72 J	<0.07	438,000	4,100	<0.121	<0.655	
ZTS-MW146	5/26/2023	N	PM01	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	46.8	1.11 J	238,000	8.37	<0.07	634,000	7,920	<0.121	0.778 J	
ZTS-MW146	8/25/2023	N	PM02	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	2.2 J	<0.816	328,000	<0.3	<0.07	707,000	9,820	<0.121	<0.655	
ZTS-MW146	11/30/2023	N	PM03	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	1.79 J	<0.816	329,000	<0.3	<0.07	654,000	10,000	<0.121	<0.655	
ZTS-MW146	2/23/2024	N	PM04	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	1.49 J	<0.816	358,000	<0.3	<0.07	754,000	10,200	<0.121	<0.655	
<b>Test Area 1B</b>																		
<b>Pre-Construction Baseline Results</b>																		
ZTS-MW147	10/18/2022	N	BL02	1B	Upgradient	-50												

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	Dissolved Metals by SW6020									
									Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Strontium	Thallium	Tin	
									µg/L									
LVWPS-MW107C	10/24/2022	N	BL02	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	<34.8	<0.816	5,770,000	<0.3	<7	9,210,000	7,650	<12.1	<65.5	
<b>Post-Construction Performance Monitoring Results</b>																		
ZTS-MW147	5/26/2023	N	PM01	1B	Upgradient	-50	Alluvium	19.5 - 29.5	93.4	3.36	127,000	38	<0.07	726,000	12,600	0.137 J	1.19 J	
ZTS-MW147	8/30/2023	N	PM02	1B	Upgradient	-50	Alluvium	19.5 - 29.5	96.1	1.97 J	128,000	36.5	<0.07	686,000	11,800	0.131 J	0.683 J	
ZTS-MW147	12/1/2023	N	PM03	1B	Upgradient	-50	Alluvium	19.5 - 29.5	95.4	2.35	130,000	36.7	<0.07	712,000	12,000	0.138 J	<0.655	
ZTS-MW147	2/23/2024	N	PM04	1B	Upgradient	-50	Alluvium	19.5 - 29.5	96.2	2.12	127,000	37.8	0.16 J	714,000	12,300	<0.121	<0.655	
ZTS-MW126	5/25/2023	N	PM01	1B	Upgradient	-8	Alluvium	20.0 - 30.0	151	3.44	99,900	30.7	<0.07	652,000	13,900	0.212 J	<0.655	
ZTS-MW126	8/25/2023	N	PM02	1B	Upgradient	-8	Alluvium	20.0 - 30.0	148	3.02	103,000	32	<0.07	665,000	12,200	0.141 J	<0.655	
ZTS-MW126	11/30/2023	N	PM03	1B	Upgradient	-8	Alluvium	20.0 - 30.0	136	2.46	102,000	31.7	<0.07	699,000	13,500	0.146 J	<0.655	
ZTS-MW126	2/23/2024	N	PM04	1B	Upgradient	-8	Alluvium	20.0 - 30.0	121	2.18	120,000	36	<0.07	757,000	13,400	0.145 J	<0.655	
ZTS-MW127R	5/25/2023	N	PM01	1B	Upgradient	-8	Alluvium	18.5 - 23.0	93.3	5.76	106,000	37.4	<0.07	711,000	15,300	<0.121	<0.655	
ZTS-MW127R	8/28/2023	N	PM02	1B	Upgradient	-8	Alluvium	18.5 - 23.0	88.6	2.22	110,000	37.7	<0.07	712,000	15,300	<0.121	<0.655	
ZTS-MW127R	11/30/2023	N	PM03	1B	Upgradient	-8	Alluvium	18.5 - 23.0	85.9	5.97	109,000	35.8	<0.07	717,000	14,700	<0.121	<0.655	
ZTS-MW127R	2/23/2024	N	PM04	1B	Upgradient	-8	Alluvium	18.5 - 23.0	87.6	2.5	131,000	37.8	<0.07	763,000	14,500	<0.121	<0.655	
ZTS-MW169	5/24/2023	N	PM01	1B	Upgradient	-8	Alluvium	17.1 - 27.0	95.9	6.95	132,000	40.9	<0.07	745,000	15,000	<0.121	0.762 J	
ZTS-MW169	8/28/2023	N	PM02	1B	Upgradient	-8	Alluvium	17.1 - 27.0	94.1	2.07	134,000	38.7	<0.07	736,000	13,000	<0.121	<0.655	
ZTS-MW169	11/30/2023	N	PM03	1B	Upgradient	-8	Alluvium	17.1 - 27.0	93.5	30.9	125,000	35.6	<0.07	711,000	12,800	<0.121	<0.655	
ZTS-MW169	2/23/2024	N	PM04	1B	Upgradient	-8	Alluvium	17.1 - 27.0	92.2	1.98 J	135,000	37.8	<0.07	761,000	12,300	<0.121	<0.655	
ZTS-MW170	5/24/2023	N	PM01	1B	Upgradient	-8	UMCf	31.1 - 41.0	56.4	18.3	108,000	20.7	<0.07	587,000	11,000	0.134 J	<0.655	
ZTS-MW170	8/29/2023	N	PM02	1B	Upgradient	-8	UMCf	31.1 - 41.0	74.3	2.19	102,000	25.4	0.0773 J	593,000	11,200	0.246 J	0.835 J	
ZTS-MW170	11/30/2023	N	PM03	1B	Upgradient	-8	UMCf	31.1 - 41.0	68.4	2.16	99,700	24.9	<0.07	632,000	12,100	0.137 J	<0.655	
ZTS-MW170	2/23/2024	N	PM04	1B	Upgradient	-8	UMCf	31.1 - 41.0	70.5	1.94 J	111,000	27.2	<0.07	671,000	12,000	0.148 J	<0.655	
ZTS-MW166	5/23/2023	N	PM01	1B	Center of Trench	0	Alluvium	19.8 - 29.5	35.3	2.2	91,500	<0.3	<0.07	711,000	13,500	<0.121	<0.655	
ZTS-MW166	8/21/2023	N	PM02	1B	Center of Trench	0	Alluvium	19.8 - 29.5	145	2.7	65,800	13.3	<0.07	617,000	10,900	<0.121	<0.655	
ZTS-MW166	11/28/2023	N	PM03	1B	Center of Trench	0	Alluvium	19.8 - 29.5	39	2.19	121,000	1.46 J	<0.07	752,000	13,800	<0.121	<0.655	
ZTS-MW166	2/20/2024	N	PM04	1B	Center of Trench	0	Alluvium	19.8 - 29.5	27.3	10.4	114,000	1.77 J	<0.07	718,000	12,300	<0.121	<0.655	
ZTS-MW171	5/22/2023	N	PM01	1B	Center of Trench	0	Alluvium	19.3 - 29.0	56.9	2.62	131,000	8.47	<0.07	713,000	13,300	<0.121	0.831 J	
ZTS-MW171	8/21/2023	N	PM02	1B	Center of Trench	0	Alluvium	19.3 - 29.0	55.4	2.18	130,000	13.5	<0.07	678,000	11,600	<0.121	0.703 J	
ZTS-MW171	11/27/2023	N	PM03	1B	Center of Trench	0	Alluvium	19.3 - 29.0	56.9	2.42	140,000	11.9	<0.07	749,000	11,600	<0.121	<0.655	
ZTS-MW171	2/19/2024	N	PM04	1B	Center of Trench	0	Alluvium	19.3 - 29.0	78.3	2.25	105,000	27.7	<0.07	713,000	13,500	<0.121	<0.655	
ZTS-MW178	5/25/2023	N	PM01	1B	Center of Trench	0	Alluvium	17.8 - 27.5	16.4	1.96 J	122,000	<0.3	<0.07	702,000	14,300	<0.121	<0.655	
ZTS-MW178	8/21/2023	N	PM02	1B	Center of Trench	0	Alluvium	17.8 - 27.5	15.3	1.86 J	128,000	<0.3	<0.07	677,000	12,200	<0.121	<0.655	
ZTS-MW178	11/28/2023	N	PM03	1B	Center of Trench	0	Alluvium	17.8 - 27.5	11.9	1.87 J	139,000	<0.3	<0.07	660,000	13,200	<0.121	<0.655	
ZTS-MW178	2/20/2024	N	PM04	1B	Center of Trench	0	Alluvium	17.8 - 27.5	7.01	2.08	144,000	<0.3	<0.07	679,000	12,000	<0.121	<0.655	
ZTS-MW167	5/24/2023	N	PM01	1B	Downgradient	5	Alluvium	23.3 - 33.0	40	3.38	116,000	0.468 J	<0.07	711,000	13,600	0.175 J	<0.655	
ZTS-MW167	8/22/2023	N	PM02	1B	Downgradient	5	Alluvium											

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	Dissolved Metals by SW6020									
									Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Strontium	Thallium	Tin	
									μg/L									
ZTS-MW172	2/22/2024	N	PM04	1B	Downgradient	5	Alluvium	17.3 - 27.0	37.1	3.26	126,000	1.04 J	<0.07	716,000	11,700	<0.121	<0.655	
ZTS-MW172	2/22/2024	FD	PM04	1B	Downgradient	5	Alluvium	17.3 - 27.0	37.9	3.24	125,000	0.793 J	<0.07	711,000	12,600	<0.121	<0.655	
ZTS-MW173	5/25/2023	N	PM01	1B	Downgradient	5	UMCf	33.3 - 43.0	50.8	2.18	122,000	6.02	<0.07	532,000	9,080	<0.121	0.941 J	
ZTS-MW173	8/22/2023	N	PM02	1B	Downgradient	5	UMCf	33.3 - 43.0	31	3	139,000	5.27	<0.07	526,000	9,020	<0.121	0.851 J	
ZTS-MW173	11/29/2023	N	PM03	1B	Downgradient	5	UMCf	33.3 - 43.0	9.39	5.24	158,000	2.64	<0.07	500,000	9,820	<0.121	<0.655	
ZTS-MW173	2/21/2024	N	PM04	1B	Downgradient	5	UMCf	33.3 - 43.0	26.4	1.49 J	169,000	9.78	<0.07	617,000	11,300	<0.121	<0.655	
ZTS-MW179	5/25/2023	N	PM01	1B	Downgradient	5	Alluvium	18.3 - 23.0	24.7	2.62	123,000	0.483 J	<0.07	680,000	14,600	0.306 J	<0.655	
ZTS-MW179	8/23/2023	N	PM02	1B	Downgradient	5	Alluvium	18.3 - 23.0	29.5	2.38	133,000	0.844 J	<0.07	770,000	14,500	0.235 J	<0.655	
ZTS-MW179	11/30/2023	N	PM03	1B	Downgradient	5	Alluvium	18.3 - 23.0	26.8	2.17	130,000	0.581 J	<0.07	689,000	14,100	0.169 J	<0.655	
ZTS-MW179	2/22/2024	N	PM04	1B	Downgradient	5	Alluvium	18.3 - 23.0	25.9	1.89 J	130,000	0.76 J	<0.07	717,000	13,800	0.233 J	<0.655	
ZTS-MW168	5/24/2023	N	PM01	1B	Downgradient	15	Alluvium	20.3 - 30.0	55.8	2.33	125,000	2.21 J	<0.07	728,000	13,300	0.233 J	<0.655	
ZTS-MW168	8/22/2023	N	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	49.8	2.32	119,000	5.19	<0.07	695,000	11,900	0.134 J	<0.655	
ZTS-MW168	10/11/2023	N	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	---	---	---	---	---	---	---	---	---	
ZTS-MW168	10/11/2023	FS	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	---	---	---	---	---	---	---	---	---	
ZTS-MW168	10/11/2023	FD	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	---	---	---	---	---	---	---	---	---	
ZTS-MW168	11/29/2023	N	PM03	1B	Downgradient	15	Alluvium	20.3 - 30.0	34.3	2.93	111,000	1.03 J	<0.07	648,000	12,300	0.142 J	<0.655	
ZTS-MW168	2/21/2024	N	PM04	1B	Downgradient	15	Alluvium	20.3 - 30.0	30	2.42 J+	123,000	0.365 J	<0.07	728,000	12,600	0.139 J	<0.655	
ZTS-MW174	5/24/2023	N	PM01	1B	Downgradient	15	Alluvium	19.8 - 29.5	65.8	2.99	137,000	8.8	<0.07	732,000	13,700	0.196 J	<0.655	
ZTS-MW174	5/26/2023	N	PM01	1B	Downgradient	15	Alluvium	19.8 - 29.5	---	---	---	---	---	---	---	---	---	
ZTS-MW174	8/22/2023	N	PM02	1B	Downgradient	15	Alluvium	19.8 - 29.5	40.6	2.27	120,000	1.46 J	<0.07	648,000	12,000	0.15 J	1.08 J	
ZTS-MW174	10/11/2023	N	PM02	1B	Downgradient	15	Alluvium	19.8 - 29.5	---	---	---	---	---	---	---	---	---	
ZTS-MW174	10/11/2023	FS	PM02	1B	Downgradient	15	Alluvium	19.8 - 29.5	---	---	---	---	---	---	---	---	---	
ZTS-MW174	10/11/2023	FD	PM02	1B	Downgradient	15	Alluvium	19.8 - 29.5	---	---	---	---	---	---	---	---	---	
ZTS-MW174	11/29/2023	N	PM03	1B	Downgradient	15	Alluvium	19.8 - 29.5	36.5	3.34	123,000	<0.3	<0.07	653,000	11,300	0.188 J	<0.655	
ZTS-MW174	2/21/2024	N	PM04	1B	Downgradient	15	Alluvium	19.8 - 29.5	31.2	2.85 J+	129,000	<0.3	<0.07	717,000	12,400	0.193 J	<0.655	
ZTS-MW177	5/25/2023	N	PM01	1B	Downgradient	15	Alluvium	20.3 - 30.0	59.3	3.02	118,000	4.65	<0.07	708,000	14,200	0.184 J	0.774 J	
ZTS-MW177	8/23/2023	N	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	44.8	2.92	124,000	2.44 J+	<0.07	784,000	13,900	0.174 J	<0.655	
ZTS-MW177	11/29/2023	N	PM03	1B	Downgradient	15	Alluvium	20.3 - 30.0	29.1	1.45 J	115,000	2	<0.07	631,000	13,100	<0.121	<0.655	
ZTS-MW177	2/21/2024	N	PM04	1B	Downgradient	15	Alluvium	20.3 - 30.0	30.4	2.44 J+	140,000	1.46 J	<0.07	734,000	13,500	<0.121	<0.655	
ZTS-MW180	5/24/2023	N	PM01	1B	Downgradient	25	Alluvium	17.8 - 22.5	85.2	2.44	136,000	41.1	<0.07	674,000	13,700	<0.121	<0.655	
ZTS-MW180	5/24/2023	FD	PM01	1B	Downgradient	25	Alluvium	17.8 - 22.5	78.8	1.88 J	125,000	39.9	<0.07	646,000	14,100	0.138 J	<0.655	
ZTS-MW180	8/24/2023	N	PM02	1B	Downgradient	25	Alluvium	17.8 - 22.5	84.5	3.36	133,000	41.9	<0.07	661,000	14,600	<0.121	<0.655	
ZTS-MW180	8/24/2023	FD	PM02	1B	Downgradient	25	Alluvium	17.8 - 22.5	83.4	2.37	134,000	42	<0.07	671,000	14,000	<0.121	<0.655	
ZTS-MW180	11/30/2023	N	PM03	1B	Downgradient	25	Alluvium	17.8 - 22.5	78.7	1.82 J	143,000	35	<0.07	657,000	14,000	<0.121	<0.655	
ZTS-MW180	11/30/2023	FD	PM03	1B	Downgradient	25	Alluvium	17.8 - 22.5	79.5	1.87 J	146,000	36.6	<0.07	677,000	14,400	<0.121	<0.655	
ZTS-MW180	2/22/2024	N	PM04	1B	Downgradient	25	Alluvium	17.8 - 22.5	87	1.82 J	159,000	39	<0.07	711,000	14,000	<0.121	<0.655	
ZTS-MW180	2/22/2024	FD	PM04	1B	Downgradient	25	Alluvium	17.8 - 22.5	87.3	1.41 J	159,000	37.9	<0.07	698,000	14,500	<0.121	<0.655	
ZTS-MW148	5/25/2023	N	PM01	1B	Downgradient</													

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**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	Dissolved Metals by SW6020									
									Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Strontium	Thallium	Tin	
									μg/L									
LWVPS-MW107A	11/30/2023	N	PM03	1B	Downgradient	50	Alluvium	24.8 - 34.5	31.7	2.1	131,000	1.64 J	<0.07	662,000	13,100	0.221 J	<0.655	
LWVPS-MW107A	2/22/2024	N	PM04	1B	Downgradient	50	Alluvium	24.8 - 34.5	29.8	1.44 J	124,000	1.58 J	<0.07	671,000	12,300	0.204 J	<0.655	
LWVPS-MW107B	5/23/2023	N	PM01	1B	Downgradient	50	UMCf	46.0 - 65.8	0.62 J	<0.816	492,000	<0.3	<0.07	746,000	7,710	<0.121	<0.655	
LWVPS-MW107B	8/24/2023	N	PM02	1B	Downgradient	50	UMCf	46.0 - 65.8	3.03 J	3.97	211,000	1.31 J	<0.07	308,000	4,310	<0.121	<0.655	
LWVPS-MW107B	12/1/2023	N	PM03	1B	Downgradient	50	UMCf	46.0 - 65.8	4.55 J	<0.816	113,000	2.17	<0.07	171,000	3,130	<0.121	<0.655	
LWVPS-MW107B	2/23/2024	N	PM04	1B	Downgradient	50	UMCf	46.0 - 65.8	0.476 J	<0.816	497,000	<0.3	<0.07	752,000	8,190	<0.121	<0.655	
LWVPS-MW107C	5/23/2023	N	PM01	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	<0.348	<0.816	5,590,000	<0.3	<0.07	8,170,000	8,290	<2.42	<0.655	
LWVPS-MW107C	8/24/2023	N	PM02	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	19.2 J	<8.16	5,510,000	<3	<0.7	8,350,000	9,480	<1.21	<6.55	
LWVPS-MW107C	12/1/2023	N	PM03	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	<3.48	<8.16	5,340,000	<3	<0.7	8,100,000	8,280	<1.21	<6.55	
LWVPS-MW107C	2/23/2024	N	PM04	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	<6.96	<16.3	6,000,000	<6	<1.4	7,830,000	8,540	<2.42	<13.1	
ZTS-MW175	5/26/2023	N	PM01	1B	Downgradient	100	Alluvium	19.8 - 29.5	99.9	1.99 J	120,000	12.7	<0.07	733,000	13,500	0.137 J	0.892 J	
ZTS-MW175	8/25/2023	N	PM02	1B	Downgradient	100	Alluvium	19.8 - 29.5	84.2	2.13	121,000	1.06 J	<0.07	685,000	13,400	0.132 J	<0.655	
ZTS-MW175	11/30/2023	N	PM03	1B	Downgradient	100	Alluvium	19.8 - 29.5	57	1.72 J	115,000	0.604 J	<0.07	629,000	12,700	0.131 J	<0.655	
ZTS-MW175	2/28/2024	N	PM04	1B	Downgradient	100	Alluvium	19.8 - 29.5	61.3	2.15	132,000	0.415 J	<0.07	664,000	12,300	0.149 J	<0.655	
ZTS-MW176	5/26/2023	N	PM01	1B	Downgradient	150	Alluvium	19.8 - 29.5	133	2.46	104,000	10.2	<0.07	724,000	14,200	0.212 J	1.03 J	
ZTS-MW176	8/25/2023	N	PM02	1B	Downgradient	150	Alluvium	19.8 - 29.5	111	2.26	109,000	5.13	<0.07	698,000	13,400	0.153 J	<0.655	
ZTS-MW176	12/5/2023	N	PM03	1B	Downgradient	150	Alluvium	19.8 - 29.5	92.7	2.02	119,000	9.43	<0.07	745,000	13,700	0.16 J	<0.655	
ZTS-MW176	2/27/2024	N	PM04	1B	Downgradient	150	Alluvium	19.8 - 29.5	93.1	2.08	122,000	7.2	<0.07	740,000	13,300	0.263 J	<0.655	
<b>Test Area 2A</b>																		
<b>Pre-Construction Baseline Results</b>																		
ZTS-MW137	10/20/2022	N	BL02	2A	Upgradient	-9	Alluvium	14.0 - 24.0	85.8	4.69	157,000	42.8	<0.07	718,000	12,400	<0.121	<0.655	
ZTS-MW118	9/1/2022	N	BL01	2A	Upgradient	-3	Alluvium	13.5 - 23.5	---	---	---	---	---	---	---	---	---	
ZTS-MW118	10/21/2022	N	BL02	2A	Upgradient	-3	Alluvium	13.5 - 23.5	82.4	3.14	117,000	42.3	<0.07	780,000	16,700	<0.121	<0.655	
ZTS-MW138	10/20/2022	N	BL02	2A	Downgradient	5	Alluvium	14.0 - 24.0	76.9	3.16	162,000	42.3	<0.07	717,000	11,600	<0.121	<0.655	
ZTS-MW139	10/21/2022	N	BL02	2A	Downgradient	5	Alluvium	13.0 - 23.0	80.5	6.12	129,000	41.1	<0.07	762,000	14,900	<0.121	<0.655	
LWVPS-MW102A	10/21/2022	N	BL02	NA	Downgradient	30	UMCf	47.0 - 66.6	73.1	<0.816	519,000	56.5	<0.07	1,250,000	10,600	<0.121	<0.655	
LWVPS-MW102B	10/21/2022	N	BL02	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	<34.8	<0.816	4,840,000	<0.3	<7	8,060,000	10,400	<12.1	<65.5	
ZTS-MW113	10/25/2022	N	BL02	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	73.7	2.85	155,000	46.2	<0.07	635,000	13,200	<0.121	<0.655	
<b>Post-Construction Performance Monitoring Results</b>																		
ZTS-MW137	5/31/2023	N	PM01	2A	Upgradient	-9	Alluvium	14.0 - 24.0	83.2	2.22	131,000	38.2	<0.07	726,000	11,400	<0.121	<0.655	
ZTS-MW137	8/24/2023	N	PM02	2A	Upgradient	-9	Alluvium	14.0 - 24.0	86.6	2.17	126,000	40	<0.07	677,000	11,500	<0.121	<0.655	
ZTS-MW137	12/1/2023	N	PM03	2A	Upgradient	-9	Alluvium	14.0 - 24.0	85.1	2.51	122,000	39.8	<0.07	713,000	11,000	<0.121	<0.655	
ZTS-MW137	2/23/2024	N	PM04	2A	Upgradient	-9	Alluvium	14.0 - 24.0	85.7	2.12	116,000	37.1	<0.07	695,000	11,700	<0.121	<0.655	
ZTS-MW118	5/31/2023	N	PM01	2A	Upgradient	-3	Alluvium	13.5 - 23.5	73.3	2.21	105,000	38.7	<0.07	688,000	14,300 J	2.09	<0.655	
ZTS-MW118	5/31/2023	FD	PM01	2A	Upgradient	-3	Alluvium	13.5 - 23.5	80	2.16	114,000	40.6	<0.07	752,000	14,100	1.85 J	<0.655	
ZTS-MW118	8/24/2023	N	PM02</td															

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	Dissolved Metals by SW6020								
									Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Strontium	Thallium	Tin
									μg/L								
ZTS-MW190	2/22/2024	N	PM04	2A	Upgradient	-3	Alluvium	14.3 - 24.0	81	1.64 J	123,000	37.9	<0.07	713,000	11,300	<0.121	<0.655
ZTS-MW196	5/30/2023	N	PM01	2A	Upgradient	-3	Alluvium	13.8 - 23.5	78.7	1.97 J	134,000	35.8	<0.07	686,000	11,500	<0.121	<0.655
ZTS-MW196	8/25/2023	N	PM02	2A	Upgradient	-3	Alluvium	13.8 - 23.5	82	2.27	134,000	38.5	<0.07	706,000	10,500	<0.121	<0.655
ZTS-MW196	11/30/2023	N	PM03	2A	Upgradient	-3	Alluvium	13.8 - 23.5	81	2.11	122,000	37.3	<0.07	709,000	11,500	<0.121	<0.655
ZTS-MW196	2/26/2024	N	PM04	2A	Upgradient	-3	Alluvium	13.8 - 23.5	86.4	2.6	138,000	38.6	<0.07	711,000	11,100	<0.121	<0.655
ZTS-MW202	5/30/2023	N	PM01	2A	Upgradient	-3	UMCf	28.8 - 38.5	71.6	2.16	136,000	34.8	<0.07	662,000	9,400	0.152 J	<0.655
ZTS-MW202	8/28/2023	N	PM02	2A	Upgradient	-3	UMCf	28.8 - 38.5	72.7	2.1	122,000	33.2	<0.07	637,000	9,750	0.194 J	<0.655
ZTS-MW202	12/1/2023	N	PM03	2A	Upgradient	-3	UMCf	28.8 - 38.5	56	2.26	115,000	29.6	<0.07	623,000	10,500	<0.121	<0.655
ZTS-MW202	2/27/2024	N	PM04	2A	Upgradient	-3	UMCf	28.8 - 38.5	54.4	1.93 J	116,000	25.6	<0.07	616,000	9,670	<0.121	<0.655
ZTS-MW192	5/22/2023	N	PM01	2A	Center of Array	0	Alluvium	14.3 - 24.0	77.6	3.29	133,000	36.4	<0.07	706,000	11,500	<0.121	1.15 J
ZTS-MW192	8/21/2023	N	PM02	2A	Center of Array	0	Alluvium	14.3 - 24.0	80.9	2.14	129,000	42.1	<0.07	665,000	11,400	<0.121	<0.655
ZTS-MW192	11/28/2023	N	PM03	2A	Center of Array	0	Alluvium	14.3 - 24.0	86	3.71	137,000	40	<0.07	710,000	12,100	<0.121	<0.655
ZTS-MW192	2/20/2024	N	PM04	2A	Center of Array	0	Alluvium	14.3 - 24.0	78.3	2.78	125,000	36.2	<0.07	718,000	10,800	<0.121	<0.655
ZTS-MW191	5/26/2023	N	PM01	2A	Downgradient	1	Alluvium	14.8 - 24.5	37.6	2.7	122,000	8.63	<0.07	741,000	12,300	<0.121	0.667 J
ZTS-MW191	8/22/2023	N	PM02	2A	Downgradient	1	Alluvium	14.8 - 24.5	29.1	1.96 J	103,000	10.5	<0.07	642,000	11,100	<0.121	<0.655
ZTS-MW191	11/29/2023	N	PM03	2A	Downgradient	1	Alluvium	14.8 - 24.5	45	3.23	117,000	14.4	<0.07	713,000	12,200	<0.121	<0.655
ZTS-MW191	2/21/2024	N	PM04	2A	Downgradient	1	Alluvium	14.8 - 24.5	53.2	2.88 J+	120,000	16.4	<0.07	683,000	11,800	<0.121	<0.655
ZTS-MW195	5/26/2023	N	PM01	2A	Downgradient	1	Alluvium	14.3 - 24.0	74.3	2.7	127,000	34.5	<0.07	714,000	12,400	<0.121	<0.655
ZTS-MW195	8/21/2023	N	PM02	2A	Downgradient	1	Alluvium	14.3 - 24.0	73.8	2.24	124,000	37.8	<0.07	674,000	11,800	0.193 J	<0.655
ZTS-MW195	11/29/2023	N	PM03	2A	Downgradient	1	Alluvium	14.3 - 24.0	78.4	3.41	130,000	39.6	<0.07	678,000	11,400	<0.121	<0.655
ZTS-MW195	2/21/2024	N	PM04	2A	Downgradient	1	Alluvium	14.3 - 24.0	76.7	2.05 J+	122,000	35.4	<0.07	718,000	11,800	<0.121	<0.655
ZTS-MW138	5/24/2023	N	PM01	2A	Downgradient	5	Alluvium	14.0 - 24.0	80	3.84	147,000	39.5	<0.07	684,000	10,900	0.13 J	<0.655
ZTS-MW138	8/21/2023	N	PM02	2A	Downgradient	5	Alluvium	14.0 - 24.0	78.3	2.72	134,000	40.1	<0.07	676,000	9,660	<0.121	0.802 J
ZTS-MW138	11/28/2023	N	PM03	2A	Downgradient	5	Alluvium	14.0 - 24.0	82.1	2.9	134,000	40.6	<0.07	726,000	11,800	<0.121	<0.655
ZTS-MW138	2/21/2024	N	PM04	2A	Downgradient	5	Alluvium	14.0 - 24.0	76.1	2.08 J+	109,000	35.8	<0.07	669,000	11,000	<0.121	<0.655
ZTS-MW139	5/24/2023	N	PM01	2A	Downgradient	5	Alluvium	13.0 - 23.0	85.5	2.98	136,000	32.7	<0.07	693,000	11,300	<0.121	<0.655
ZTS-MW139	8/21/2023	N	PM02	2A	Downgradient	5	Alluvium	13.0 - 23.0	81	2.28	123,000	36.1	<0.07	684,000	11,600	<0.121	<0.655
ZTS-MW139	11/29/2023	N	PM03	2A	Downgradient	5	Alluvium	13.0 - 23.0	68.9	4	113,000	36.8	<0.07	635,000	11,900	<0.121	<0.655
ZTS-MW139	2/21/2024	N	PM04	2A	Downgradient	5	Alluvium	13.0 - 23.0	72.3	2.37 J+	116,000	35.9	<0.07	724,000	12,400	<0.121	<0.655
ZTS-MW193	5/25/2023	N	PM01	2A	Downgradient	5	Alluvium	13.6 - 23.3	79.3	3	129,000	38.5	<0.07	709,000	12,500	0.124 J	0.66 J
ZTS-MW193	5/25/2023	FD	PM01	2A	Downgradient	5	Alluvium	13.6 - 23.3	79.6	2.71	124,000	39.1	<0.07	690,000	12,200	<0.121	<0.655
ZTS-MW193	8/22/2023	N	PM02	2A	Downgradient	5	Alluvium	13.6 - 23.3	75.5	1.87 J	126,000	38.5	<0.07	664,000	11,400	<0.121	<0.655
ZTS-MW193	8/22/2023	FD	PM02	2A	Downgradient	5	Alluvium	13.6 - 23.3	76.6	1.73 J	130,000	38.4	<0.07	694,000	11,700	<0.121	<0.655
ZTS-MW193	11/30/2023	N	PM03	2A	Downgradient	5	Alluvium	13.6 - 23.3	76.7	2.75	127,000	36.2	<0.07	679,000	11,700	<0.121	<0.655
ZTS-MW193	11/30/2023	FD	PM03	2A	Downgradient	5	Alluvium	13.6 - 23.3	73.4	2.75	120,000	36	<0.07	646,000	11,500	<0.121	<0.655
ZTS-MW193	2/22/2024	N	PM04	2A	Downgradient	5	Alluvium	13.6 - 23.3	76.3	2.49	127,000	36.3	<0.07	71			

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	Dissolved Metals by SW6020									
									Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Strontium	Thallium	Tin	
									μg/L									
ZTS-MW194	5/25/2023	N	PM01	2A	Downgradient	15	Alluvium	17.8 - 22.5	79.5	2.64	145,000	39.9	<0.07	683,000	11,000	0.152 J	<0.655	
ZTS-MW194	8/22/2023	N	PM02	2A	Downgradient	15	Alluvium	17.8 - 22.5	77.4	1.74 J	139,000	41.6	<0.07	681,000	10,400	0.136 J	<0.655	
ZTS-MW194	11/29/2023	N	PM03	2A	Downgradient	15	Alluvium	17.8 - 22.5	80	2.9	133,000	41.3	<0.07	651,000	10,900	0.137 J	<0.655	
ZTS-MW194	2/22/2024	N	PM04	2A	Downgradient	15	Alluvium	17.8 - 22.5	79.2	2.7	127,000	36.2	<0.07	681,000	10,600	<0.121	<0.655	
LWPS-MW102A	5/30/2023	N	PM01	NA	Downgradient	30	UMCf	47.0 - 66.6	81.8	<0.816	514,000	55.8	<0.07	1,240,000	10,900	<0.121	<0.655	
LWPS-MW102A	8/23/2023	N	PM02	NA	Downgradient	30	UMCf	47.0 - 66.6	85	0.842 J	491,000	65.5	<0.07	1,280,000	12,000	0.146 J	<0.655	
LWPS-MW102A	10/11/2023	N	PM02	NA	Downgradient	30	UMCf	47.0 - 66.6	----	----	----	----	----	----	----	----	----	
LWPS-MW102A	10/11/2023	FS	PM02	NA	Downgradient	30	UMCf	47.0 - 66.6	----	----	----	----	----	----	----	----	----	
LWPS-MW102A	12/1/2023	N	PM03	NA	Downgradient	30	UMCf	47.0 - 66.6	88.7	1.25 J	401,000	62.1	<0.07	1,160,000	11,700	<0.121	<0.655	
LWPS-MW102A	2/27/2024	N	PM04	NA	Downgradient	30	UMCf	47.0 - 66.6	103	0.937 J	499,000	63.5	<0.07	1,360,000	12,200	<0.121	<0.655	
LWPS-MW102B	5/26/2023	N	PM01	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	<17.4	<0.816	4,840,000	<0.3	<3.5	8,030,000	10,900	<6.05	<32.8	
LWPS-MW102B	8/23/2023	N	PM02	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	<3.48	<8.16	4,790,000	5.59 J	<0.7	7,900,000	11,500	<1.21	<6.55	
LWPS-MW102B	12/1/2023	N	PM03	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	<3.48	<8.16	4,590,000	<3	<0.7	7,310,000	11,200	<1.21	<6.55	
LWPS-MW102B	2/27/2024	N	PM04	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	<3.48	<0.816	4,910,000	<0.3	<0.7	7,580,000	11,700	<1.21	<6.55	
ZTS-MW197	5/26/2023	N	PM01	2A	Downgradient	55	Alluvium	12.8 - 22.5	75.9	2.01	127,000	36.6	<0.07	680,000	12,100	0.131 J	<0.655	
ZTS-MW197	8/22/2023	N	PM02	2A	Downgradient	55	Alluvium	12.8 - 22.5	72.4	1.65 J	128,000	37.9	<0.07	649,000	11,500	<0.121	<0.655	
ZTS-MW197	11/30/2023	N	PM03	2A	Downgradient	55	Alluvium	12.8 - 22.5	76	1.92 J	130,000	36	<0.07	657,000	11,600	<0.121	<0.655	
ZTS-MW197	2/22/2024	N	PM04	2A	Downgradient	55	Alluvium	12.8 - 22.5	80.7	2.29	138,000	38.2	<0.07	703,000	11,500	<0.121	<0.655	
ZTS-MW113	5/26/2023	N	PM01	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	77.9	2.54	149,000	38.8	<0.07	684,000	11,300	0.162 J	0.847 J	
ZTS-MW113	8/24/2023	N	PM02	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	78.7	2.51	120,000	39.6	<0.07	720,000	12,400	0.131 J	<0.655	
ZTS-MW113	11/30/2023	N	PM03	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	68.8	2.97	109,000	34.2	<0.07	611,000	12,400	0.147 J	<0.655	
ZTS-MW113	2/23/2024	N	PM04	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	85	1.84 J	131,000	34.5	<0.07	699,000	11,500	0.141 J	<0.655	
<b>Test Area 2B</b>																		
<b>Pre-Construction Baseline Results</b>																		
ZTS-MW133	10/20/2022	N	BL02	2B	Upgradient	-9	UMCf	54.0 - 69.0	75	<0.816	151,000	35.1	<0.07	780,000	8,890	<0.121	<0.655	
ZTS-MW117	9/1/2022	N	BL01	2B	Upgradient	-2	UMCf	40.5 - 55.5	----	----	----	----	----	----	----	----	----	
ZTS-MW117	10/19/2022	N	BL02	2B	Upgradient	-2	UMCf	40.5 - 55.5	27.4	<0.816	94,700	<0.3	<0.07	426,000	3,420	<0.121	<0.655	
ZTS-MW117	10/19/2022	FD	BL02	2B	Upgradient	-2	UMCf	40.5 - 55.5	27.5	<0.816	93,800	<0.3	<0.07	416,000	3,380	<0.121	<0.655	
ZTS-MW134	10/19/2022	N	BL02	2B	Upgradient	-2	UMCf	26.0 - 36.0	71.6	2.85	179,000	40.4	<0.07	704,000	11,400	<0.121	<0.655	
ZTS-MW135	10/19/2022	N	BL02	2B	Downgradient	7	UMCf	54.0 - 69.0	54.7	<0.816	153,000	38.8	<0.07	765,000	11,100	<0.121	<0.655	
ZTS-MW136	10/20/2022	N	BL02	2B	Cross Gradient	7	UMCf	27.0 - 47.0	31.2	<0.816	102,000	8.42	<0.07	458,000	5,240	<0.121	<0.655	
<b>Post-Construction Performance Monitoring Results</b>																		
ZTS-MW133	5/23/2023	N	PM01	2B	Upgradient	-9	UMCf	54.0 - 69.0	108	<0.816	152,000	40.1	<0.07	743,000	11,200	<0.121	7.29	
ZTS-MW133	8/30/2023	N	PM02	2B	Upgradient	-9	UMCf	54.0 - 69.0	104	<0.816	151,000	39.8	<0.07	718,000	10,100	<0.121	<0.655	
ZTS-MW133	12/4/2023	N	PM03	2B	Upgradient	-9	UMCf	54.0 - 69.0	128	<0.816	148,000	41.6	<0.07	781,000	11,200	<0.121	<0.655	
ZTS-MW133	2/23/2024	N	PM04	2B	Upgradient	-9	UMCf	54.0 - 69.0	137	<0.816	158,000	46	<0.07	787,000</				

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	Dissolved Metals by SW6020										
									Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Strontium	Thallium	Tin		
									μg/L										
ZTS-MW134	2/23/2024	N	PM04	2B	Upgradient	-2	UMCf	26.0 - 36.0	41	2.06	137,000	15.9	<0.07	710,000	12,200	<0.121	<0.655		
ZTS-MW198	5/23/2023	N	PM01	2B	Downgradient	2	UMCf	26.1 - 46.0	29.8	3	120,000	4.73	<0.07	622,000	8,550	<0.121	1.05 J		
ZTS-MW198	8/21/2023	N	PM02	2B	Downgradient	2	UMCf	26.1 - 46.0	35.2	1.22 J	124,000	11.4	<0.07	643,000	9,590	<0.121	<0.655		
ZTS-MW198	11/27/2023	N	PM03	2B	Downgradient	2	UMCf	26.1 - 46.0	16.3	0.947 J	147,000	0.888 J	<0.07	726,000	9,310	<0.121	<0.655		
ZTS-MW198	2/20/2024	N	PM04	2B	Downgradient	2	UMCf	26.1 - 46.0	12.7	<0.816	137,000	1.44 J	<0.07	704,000	9,790	<0.121	<0.655		
ZTS-MW200	5/23/2023	N	PM01	2B	Downgradient	2	UMCf	50.1 - 65.0	35	0.903 J	134,000	0.873 J	<0.07	753,000	10,200	<0.121	0.957 J		
ZTS-MW200	5/23/2023	FD	PM01	2B	Downgradient	2	UMCf	50.1 - 65.0	34.7	0.855 J	137,000	0.781 J	<0.07	739,000	10,100	<0.121	<0.655		
ZTS-MW200	8/21/2023	N	PM02	2B	Downgradient	2	UMCf	50.1 - 65.0	28.9	20.1	142,000	0.904 J	<0.07	724,000	9,620	<0.121	<0.655		
ZTS-MW200	11/28/2023	N	PM03	2B	Downgradient	2	UMCf	50.1 - 65.0	28.7	<0.816	154,000	0.733 J	<0.07	790,000	11,200	<0.121	<0.655		
ZTS-MW200	2/20/2024	N	PM04	2B	Downgradient	2	UMCf	50.1 - 65.0	29.8	3.61	147,000	0.48 J	<0.07	757,000	10,500	<0.121	<0.655		
ZTS-MW201	5/24/2023	N	PM01	2B	Downgradient	2	UMCf	27.1 - 47.0	79.2	3.15	127,000	7.21	<0.07	617,000	8,300	<0.121	<0.655		
ZTS-MW201	8/22/2023	N	PM02	2B	Downgradient	2	UMCf	27.1 - 47.0	79.3	1.6 J	120,000	21.4	<0.07	613,000	8,900	<0.121	0.766 J		
ZTS-MW201	11/28/2023	N	PM03	2B	Downgradient	2	UMCf	27.1 - 47.0	91	1.09 J	138,000	21.1	<0.07	703,000	10,400	<0.121	<0.655		
ZTS-MW201	2/22/2024	N	PM04	2B	Downgradient	2	UMCf	27.1 - 47.0	86.3	1.07 J	144,000	20.8	<0.07	726,000	9,800	<0.121	<0.655		
ZTS-MW206	5/24/2023	N	PM01	2B	Downgradient	2	UMCf	50.1 - 65.0	82.2	3.28	153,000	19.1	<0.07	733,000	9,800	<0.121	<0.655		
ZTS-MW206	8/22/2023	N	PM02	2B	Downgradient	2	UMCf	50.1 - 65.0	74.9	1.59 J	141,000	35.3	<0.07	685,000	8,940	<0.121	<0.655		
ZTS-MW206	11/28/2023	N	PM03	2B	Downgradient	2	UMCf	50.1 - 65.0	87.8	1.48 J	162,000	36.8	<0.07	760,000	11,500	<0.121	<0.655		
ZTS-MW206	2/22/2024	N	PM04	2B	Downgradient	2	UMCf	50.1 - 65.0	104	1.41 J	151,000	38	<0.07	760,000	10,900	<0.121	<0.655		
ZTS-MW199	5/23/2023	N	PM01	2B	Downgradient	5	UMCf	50.1 - 65.0	95.8	1.96 J	130,000	44.2	<0.07	758,000	11,100	<0.121	0.817 J		
ZTS-MW199	8/22/2023	N	PM02	2B	Downgradient	5	UMCf	50.1 - 65.0	82.4	0.986 J	126,000	48.6	<0.07	699,000	10,300	0.135 J	<0.655		
ZTS-MW199	11/28/2023	N	PM03	2B	Downgradient	5	UMCf	50.1 - 65.0	97	<0.816	143,000	51.8	<0.07	771,000	12,700	0.137 J	<0.655		
ZTS-MW199	2/20/2024	N	PM04	2B	Downgradient	5	UMCf	50.1 - 65.0	97.8	<0.816	141,000	52.8	<0.07	784,000	11,900	0.167 J	<0.655		
ZTS-MW207	5/24/2023	N	PM01	2B	Downgradient	5	UMCf	26.1 - 46.0	59.8	2.17	108,000	5.59	<0.07	526,000	6,520	<0.121	<0.655		
ZTS-MW207	5/24/2023	FD	PM01	2B	Downgradient	5	UMCf	26.1 - 46.0	67.7	2.45	122,000	6.02	<0.07	548,000	7,440	<0.121	<0.655		
ZTS-MW207	8/23/2023	N	PM02	2B	Downgradient	5	UMCf	26.1 - 46.0	113	1.26 J	119,000	2.96 J+	<0.07	575,000	6,490	<0.121	<0.655		
ZTS-MW207	8/23/2023	FD	PM02	2B	Downgradient	5	UMCf	26.1 - 46.0	115	1.27 J	117,000	2.86 J+	<0.07	565,000	6,400	<0.121	<0.655		
ZTS-MW207	11/29/2023	N	PM03	2B	Downgradient	5	UMCf	26.1 - 46.0	154	<0.816	115,000	3.6	<0.07	508,000	6,170	<0.121	<0.655		
ZTS-MW207	11/29/2023	FD	PM03	2B	Downgradient	5	UMCf	26.1 - 46.0	165	0.902 J	119,000	3.22	<0.07	543,000	6,700	<0.121	<0.655		
ZTS-MW207	2/22/2024	N	PM04	2B	Downgradient	5	UMCf	26.1 - 46.0	225	0.932 J	126,000	3.88	<0.07	611,000	7,050	<0.121	<0.655		
ZTS-MW207	2/22/2024	FD	PM04	2B	Downgradient	5	UMCf	26.1 - 46.0	225	0.866 J	123,000	3.85	<0.07	602,000	6,940	<0.121	<0.655		
ZTS-MW135	5/26/2023	N	PM01	2B	Downgradient	7	UMCf	54.0 - 69.0	123	3.35	138,000	54.3	<0.07	796,000	11,700	0.165 J	0.982 J		
ZTS-MW135	8/24/2023	N	PM02	2B	Downgradient	7	UMCf	54.0 - 69.0	114	1.87 J	138,000	57.7	<0.07	825,000	11,700	0.156 J	<0.655		
ZTS-MW135	11/30/2023	N	PM03	2B	Downgradient	7	UMCf	54.0 - 69.0	122	4.47	134,000	57	<0.07	773,000	11,900	0.154 J	<0.655		
ZTS-MW135	2/22/2024	N	PM04	2B	Downgradient	7	UMCf	54.0 - 69.0	131	1.3 J	149,000	60.5	<0.07	862,000	11,900	0.186 J	<0.655		
ZTS-MW136	5/26/2023	N	PM01	2B	Cross Gradient	7	UMCf	27.0 - 47.0	80.4	<0.816	99,300	0.76 J	<0.07	428,000	4,130	<0.121	<0.655		
ZTS-MW136	5/26/202																		

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	Dissolved Metals by SW6020									
									Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Strontium	Thallium	Tin	
									µg/L									
ZTS-MW208	8/23/2023	N	PM02	2B	Downgradient	15	UMCf	26.1 - 46.0	75.7	2.97	140,000	32.4	<0.07	734,000	11,300	0.197 J	<0.655	
ZTS-MW208	11/28/2023	N	PM03	2B	Downgradient	15	UMCf	26.1 - 46.0	71.2	1.51 J	140,000	29.4	<0.07	689,000	12,100	0.126 J	<0.655	
ZTS-MW208	2/22/2024	N	PM04	2B	Downgradient	15	UMCf	26.1 - 46.0	70.3	1.74 J	139,000	30.3	<0.07	684,000	11,600	<0.121	<0.655	
ZTS-MW209	5/25/2023	N	PM01	2B	Downgradient	15	UMCf	50.6 - 65.5	158	1.44 J	146,000	52.9	<0.07	807,000	12,100	<0.121	<0.655	
ZTS-MW209	8/23/2023	N	PM02	2B	Downgradient	15	UMCf	50.6 - 65.5	156	1.84 J	144,000	64.8	<0.07	881,000	12,100	<0.121	<0.655	
ZTS-MW209	11/29/2023	N	PM03	2B	Downgradient	15	UMCf	50.6 - 65.5	161	1.02 J	139,000	66.3	<0.07	804,000	12,300	0.27 J	<0.655	
ZTS-MW209	2/22/2024	N	PM04	2B	Downgradient	15	UMCf	50.6 - 65.5	159	1.14 J	148,000	65	<0.07	872,000	12,300	0.195 J	<0.655	
<b>Test Area 2C</b>																		
<b>Pre-Construction Baseline Results</b>																		
ZTS-MW140	10/21/2022	N	BL02	2C	Upgradient	-9	Alluvium	15.5 - 25.5	96.9	3.26	141,000	40.2	<0.07	782,000	12,100	<0.121	<0.655	
ZTS-MW119	9/1/2022	N	BL01	2C	Upgradient	-3	Alluvium	15.0 - 25.0	----	----	----	----	----	----	----	----	----	
ZTS-MW119	10/19/2022	N	BL02	2C	Upgradient	-3	Alluvium	15.0 - 25.0	102	2.42	131,000	39.7	<0.07	701,000	13,300	<0.121	<0.655	
ZTS-MW119	10/19/2022	FD	BL02	2C	Upgradient	-3	Alluvium	15.0 - 25.0	96.8	2.23	137,000	40.2	<0.07	755,000	13,900	<0.121	<0.655	
ZTS-MW141	10/21/2022	N	BL02	2C	Downgradient	5	Alluvium	14.5 - 24.5	96.8	2.94	116,000	43	<0.07	716,000	13,900	<0.121	<0.655	
ZTS-MW142	10/21/2022	N	BL02	2C	Downgradient	5	Alluvium	16.0 - 26.0	110	2.79	135,000	39.5	<0.07	686,000	12,100	<0.121	<0.655	
<b>Post-Construction Performance Monitoring Results</b>																		
ZTS-MW140	5/25/2023	N	PM01	2C	Upgradient	-9	Alluvium	15.5 - 25.5	98.8	2.25	118,000	39.9	<0.07	698,000	11,300	<0.121	0.726 J	
ZTS-MW140	5/25/2023	FD	PM01	2C	Upgradient	-9	Alluvium	15.5 - 25.5	101	2.28	118,000	40.9	<0.07	728,000	11,900	<0.121	<0.655	
ZTS-MW140	8/29/2023	N	PM02	2C	Upgradient	-9	Alluvium	15.5 - 25.5	101	2.05	116,000	37.7	<0.07	705,000	10,600	<0.121	<0.655	
ZTS-MW140	8/29/2023	FD	PM02	2C	Upgradient	-9	Alluvium	15.5 - 25.5	98.9	2.02	116,000	38.6	<0.07	672,000	11,500	<0.121	<0.655	
ZTS-MW140	12/4/2023	N	PM03	2C	Upgradient	-9	Alluvium	15.5 - 25.5	98.3	2.3	117,000	38.7	<0.07	793,000	12,100	0.156 J	<0.655	
ZTS-MW140	12/4/2023	FD	PM03	2C	Upgradient	-9	Alluvium	15.5 - 25.5	98.6	2.19	114,000	37.8	<0.07	784,000	11,800	<0.121	<0.655	
ZTS-MW140	2/22/2024	N	PM04	2C	Upgradient	-9	Alluvium	15.5 - 25.5	92.3	1.59 J	112,000	35.4	<0.07	723,000	12,700	<0.121	<0.655	
ZTS-MW140	2/22/2024	FD	PM04	2C	Upgradient	-9	Alluvium	15.5 - 25.5	91.5	1.49 J	110,000	35.6	<0.07	721,000	12,600	<0.121	<0.655	
ZTS-MW119	5/24/2023	N	PM01	2C	Upgradient	-3	Alluvium	15.0 - 25.0	95.5	2.4	121,000	39.1	<0.07	689,000	11,000	<0.121	<0.655	
ZTS-MW119	8/29/2023	N	PM02	2C	Upgradient	-3	Alluvium	15.0 - 25.0	101	2.2	113,000	38.6	<0.07	682,000	11,800	<0.121	<0.655	
ZTS-MW119	12/4/2023	N	PM03	2C	Upgradient	-3	Alluvium	15.0 - 25.0	97.9	2.21	118,000	37.8	<0.07	781,000	12,100	<0.121	<0.655	
ZTS-MW119	2/22/2024	N	PM04	2C	Upgradient	-3	Alluvium	15.0 - 25.0	91.3	1.57 J	110,000	34.9	<0.07	712,000	11,400	<0.121	<0.655	
ZTS-MW181	5/25/2023	N	PM01	2C	Upgradient	-3	Alluvium	17.3 - 27.0	102	2.48	96,300	40	<0.07	703,000	12,500	<0.121	<0.655	
ZTS-MW181	8/25/2023	N	PM02	2C	Upgradient	-3	Alluvium	17.3 - 27.0	100	2.29	100,000	36.9	<0.07	718,000	12,700	<0.121	<0.655	
ZTS-MW181	12/6/2023	N	PM03	2C	Upgradient	-3	Alluvium	17.3 - 27.0	92.1	2.23	115,000	36.3	<0.07	749,000	11,800	<0.121	<0.655	
ZTS-MW181	2/28/2024	N	PM04	2C	Upgradient	-3	Alluvium	17.3 - 27.0	92.6	2.57	95,000	35.9	<0.07	731,000	12,100	<0.121	<0.655	
ZTS-MW188	5/26/2023	N	PM01	2C	Upgradient	-3	Alluvium	17.3 - 27.0	95	3.82	122,000	39.5	<0.07	729,000	11,500	<0.121	0.732 J	
ZTS-MW188	8/25/2023	N	PM02	2C	Upgradient	-3	Alluvium	17.3 - 27.0	97.6	2.26	122,000	36.7	<0.07	711,000	11,300	<0.121	<0.655	
ZTS-MW188	12/6/2023	N	PM03	2C	Upgradient	-3	Alluvium	17.3 - 27.0	95.2	2.46	103,000	37.4	<0.07	777,000	13,900	<0.121	<0.655	
ZTS-MW188	2/23/2024	N	PM04	2C	Upgradient	-3	Alluvium	17.3 - 27.0	94.5	2.02	114,000	36.2	<0.07	773,000	11,700	<0.121	<0.655	
ZTS-MW204	5/25/2023	N	PM															

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	Dissolved Metals by SW6020									
									Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Strontium	Thallium	Tin	
									μg/L									
ZTS-MW182	11/28/2023	N	PM03	2C	Center of Array	0	Alluvium	17.6 - 27.3	---	---	---	---	---	---	---	---	---	---
ZTS-MW182	2/19/2024	N	PM04	2C	Center of Array	0	Alluvium	17.6 - 27.3	76.5	2.38	107,000	28.5	<0.07	714,000	13,600	<0.121	<0.655	
ZTS-MW183	5/23/2023	N	PM01	2C	Downgradient	1	Alluvium	17.3 - 27.0	91.9	3.53	112,000	31.8	<0.07	709,000	13,300	<0.121	0.799 J	
ZTS-MW183	8/22/2023	N	PM02	2C	Downgradient	1	Alluvium	17.3 - 27.0	88.7	1.94 J	108,000	34.7	0.108 J	700,000	12,200	0.186 J	<0.655	
ZTS-MW183	11/28/2023	N	PM03	2C	Downgradient	1	Alluvium	17.3 - 27.0	100	2.17	126,000	40.9	<0.07	771,000	12,800	<0.121	<0.655	
ZTS-MW183	2/20/2024	N	PM04	2C	Downgradient	1	Alluvium	17.3 - 27.0	92	2.43	111,000	35.7	0.0965 J	740,000	12,000	<0.121	27.7	
ZTS-MW187	5/24/2023	N	PM01	2C	Downgradient	1	Alluvium	15.3 - 25.0	88.2	2.25	119,000	31.1	<0.07	693,000	11,700	<0.121	<0.655	
ZTS-MW187	8/23/2023	N	PM02	2C	Downgradient	1	Alluvium	15.3 - 25.0	93.4	2.69	120,000	39.7	<0.07	797,000	12,700	<0.121	<0.655	
ZTS-MW187	11/29/2023	N	PM03	2C	Downgradient	1	Alluvium	15.3 - 25.0	82.1	1.09 J	113,000	36.5	<0.07	628,000	11,400	<0.121	<0.655	
ZTS-MW187	2/20/2024	N	PM04	2C	Downgradient	1	Alluvium	15.3 - 25.0	83.1	2.13	113,000	32.9	<0.07	740,000	11,700	<0.121	<0.655	
ZTS-MW141	5/25/2023	N	PM01	2C	Downgradient	5	Alluvium	14.5 - 24.5	92.7	10.1	119,000	37.4	<0.07	711,000	13,000	<0.121	<0.655	
ZTS-MW141	8/23/2023	N	PM02	2C	Downgradient	5	Alluvium	14.5 - 24.5	96.3	2.43	116,000	41.4	<0.07	830,000	12,900	<0.121	<0.655	
ZTS-MW141	11/29/2023	N	PM03	2C	Downgradient	5	Alluvium	14.5 - 24.5	92.2	1.46 J	116,000	40.9	<0.07	669,000	11,000	<0.121	<0.655	
ZTS-MW141	2/22/2024	N	PM04	2C	Downgradient	5	Alluvium	14.5 - 24.5	86.5	1.4 J	110,000	35.2	<0.07	707,000	11,700	<0.121	<0.655	
ZTS-MW142	5/26/2023	N	PM01	2C	Downgradient	5	Alluvium	16.0 - 26.0	97.6	7.89	113,000	32.4	<0.07	711,000	12,200	<0.121	0.679 J	
ZTS-MW142	8/24/2023	N	PM02	2C	Downgradient	5	Alluvium	16.0 - 26.0	100	2.71	117,000	36	<0.07	789,000	13,100	<0.121	<0.655	
ZTS-MW142	11/30/2023	N	PM03	2C	Downgradient	5	Alluvium	16.0 - 26.0	86.3	2.48	111,000	33.3	<0.07	697,000	13,100	<0.121	<0.655	
ZTS-MW142	2/22/2024	N	PM04	2C	Downgradient	5	Alluvium	16.0 - 26.0	89.4	1.54 J	107,000	32.9	<0.07	682,000	13,000	<0.121	<0.655	
ZTS-MW184	5/24/2023	N	PM01	2C	Downgradient	5	Alluvium	16.3 - 26.0	94.1	2.47	101,000	36.3	<0.07	699,000	14,000	<0.121	<0.655	
ZTS-MW184	8/22/2023	N	PM02	2C	Downgradient	5	Alluvium	16.3 - 26.0	79.2	1.86 J	88,600	36.1	<0.07	638,000	13,100	<0.121	<0.655	
ZTS-MW184	11/28/2023	N	PM03	2C	Downgradient	5	Alluvium	16.3 - 26.0	100	2.32	116,000	40.5	<0.07	783,000	14,400	<0.121	<0.655	
ZTS-MW184	2/20/2024	N	PM04	2C	Downgradient	5	Alluvium	16.3 - 26.0	89	7.02	113,000	36.1	<0.07	755,000	12,100	<0.121	<0.655	
ZTS-MW205	5/24/2023	N	PM01	2C	Downgradient	5	UMCf	30.3 - 40.0	6.42	1.63 J	63,500	0.524 J	<0.07	324,000	2,930	<0.121	<0.655	
ZTS-MW205	8/23/2023	N	PM02	2C	Downgradient	5	UMCf	30.3 - 40.0	8.67	1.01 J	67,700	1.29 J	<0.07	374,000	2,980	<0.121	<0.655	
ZTS-MW205	11/29/2023	N	PM03	2C	Downgradient	5	UMCf	30.3 - 40.0	3.64 J	<0.816	61,700	<0.3	<0.07	294,000	2,470	<0.121	<0.655	
ZTS-MW205	2/22/2024	N	PM04	2C	Downgradient	5	UMCf	30.3 - 40.0	9.68	0.941 J	71,600	5.74	<0.07	383,000	3,960	<0.121	<0.655	
ZTS-MW185	5/25/2023	N	PM01	2C	Downgradient	15	Alluvium	15.3 - 25.0	89.2	8.23	104,000	36.4	<0.07	719,000	14,800	0.143 J	0.718 J	
ZTS-MW185	8/24/2023	N	PM02	2C	Downgradient	15	Alluvium	15.3 - 25.0	95.1	2.18	109,000	40.4	<0.07	789,000	13,100	<0.121	<0.655	
ZTS-MW185	11/30/2023	N	PM03	2C	Downgradient	15	Alluvium	15.3 - 25.0	83.4	1.81 J	105,000	34.8	<0.07	658,000	11,600	<0.121	<0.655	
ZTS-MW185	2/22/2024	N	PM04	2C	Downgradient	15	Alluvium	15.3 - 25.0	85.2	1.44 J	111,000	35.2	<0.07	719,000	11,000	<0.121	<0.655	
ZTS-MW186	5/25/2023	N	PM01	2C	Downgradient	25	Alluvium	15.3 - 25.0	91.5	6.08	111,000	34.7	<0.07	707,000	14,400	<0.121	<0.655	
ZTS-MW186	8/24/2023	N	PM02	2C	Downgradient	25	Alluvium	15.3 - 25.0	95.2	2.13	114,000	38.9	<0.07	768,000	13,300	<0.121	<0.655	
ZTS-MW186	11/30/2023	N	PM03	2C	Downgradient	25	Alluvium	15.3 - 25.0	85.4	1.81 J	107,000	35.5	<0.07	667,000	12,600	<0.121	<0.655	
ZTS-MW186	2/23/2024	N	PM04	2C	Downgradient	25	Alluvium	15.3 - 25.0	91.5	2.24	119,000	37	<0.07	783,000	11,800	<0.121	<0.655	
ZTS-MW189	5/25/2023	N	PM01	2C	Downgradient	55	Alluvium	12.8 - 23.0	85.6	6.98	143,000	36.3	<0.07	688,000	12,500	<0.121	<0.655	
ZTS-MW189	8/25/2023	N	PM02	2C	Downgradient	55	Alluvium	12.8 - 23.0	85.8	2.04	139,000	36.2</						

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	Dissolved Metals by SW6020									
									Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Strontium	Thallium	Tin	
									µg/L									
<b>Post-Construction Performance Monitoring Results</b>																		
ZTS-MW116	5/24/2023	N	PM01	NA	NA	NA	UMCf	33.0 - 48.0	77.8	1.32 J	204,000	14.4	<0.07	667,000	10,900	0.269 J	<0.655	
ZTS-MW116	8/29/2023	N	PM02	NA	NA	NA	UMCf	33.0 - 48.0	75.7	1.3 J	197,000	14.8	<0.07	656,000	10,400	0.284 J	<0.655	
ZTS-MW116	12/5/2023	N	PM03	NA	NA	NA	UMCf	33.0 - 48.0	83	45.5	205,000	16.3	<0.07	726,000	10,900	0.272 J	<0.655	
ZTS-MW116	2/27/2024	N	PM04	NA	NA	NA	UMCf	33.0 - 48.0	84.9	1.24 J	219,000	18.7	<0.07	719,000	12,200	0.295 J	<0.655	
ZTS-MW128	5/24/2023	N	PM01	NA	NA	NA	UMCf	42.0 - 52.0	29.5	2.42	145,000	26.9	<0.07	645,000	11,600	0.215 J	<0.655	
ZTS-MW128	8/30/2023	N	PM02	NA	NA	NA	UMCf	42.0 - 52.0	31.9	2.29	129,000	28.2	<0.07	603,000	12,200	0.202 J	<0.655	
ZTS-MW128	12/5/2023	N	PM03	NA	NA	NA	UMCf	42.0 - 52.0	36.5	2.41	130,000	31	<0.07	667,000	13,000	0.202 J	<0.655	
ZTS-MW128	2/28/2024	N	PM04	NA	NA	NA	UMCf	42.0 - 52.0	24.6	2.06	148,000	19.1	<0.07	553,000	9,760	0.163 J	<0.655	

## Notes:

1. Distances from the discontinuous or continuous walls are shown as negative values for upgradient monitoring wells, as zero for monitoring wells screened within the walls, and as positive values for monitoring wells located downgradient of the walls.

bgs - below ground surface

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

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

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

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.

UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

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

mg/L - milligram per liter

mS/cm - millisiemens per centimeter

mV - millivolts

nmol - nanomol

SU - standard units

N - normal field sample

µg/L - micrograms per liter

UMCf - Upper Muddy Creek formation

FD - field duplicate

FS - field split

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	Dissolved Metals by SW6020	Dissolved Metals by SW6020	Dissolved Metals by SW6020	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS								
									Titanium	Vanadium	Zinc	Conductivity	Dissolved Oxygen	Ferrous Iron	Oxidation-Reduction Potential	pH	Sulfide								
									µg/L	µg/L	µg/L	mS/cm	mg/L	mg/L	mV	SU	mg/L								
<b>Test Area 1A</b>																									
<b>Pre-Construction Baseline Results</b>																									
ZTS-MW143	10/18/2022	N	BL02	1A	Upgradient	-50	Alluvium	23.0 - 33.0	<2.18	27	91.5	4.62	4.28	0 U	218.2	7.08	0 U								
ZTS-MW124	8/31/2022	N	BL01	1A	Upgradient	-8	Alluvium	24.0 - 34.0	---	---	---	6.3	3.9	---	134.4	7.04	---								
ZTS-MW124	8/31/2022	FD	BL01	1A	Upgradient	-8	Alluvium	24.0 - 34.0	---	---	---	---	---	---	---	---	---								
ZTS-MW124	10/18/2022	N	BL02	1A	Upgradient	-8	Alluvium	24.0 - 34.0	<2.18	25.2 J	<3.02	6.208	4.32	0 U	106.3	7.16	0 U								
ZTS-MW124	10/18/2022	FD	BL02	1A	Upgradient	-8	Alluvium	24.0 - 34.0	<2.18	<0.664 UJ	<3.02	---	---	---	---	---	---								
ZTS-MW125	8/31/2022	N	BL01	1A	Upgradient	-8	UMCf	40.0 - 50.0	---	---	---	6.736	1.97	---	117.1	7.17	---								
ZTS-MW125	10/24/2022	N	BL02	1A	Upgradient	-8	UMCf	40.0 - 50.0	<2.18	<0.664	<3.02	3.123	1.61	0 U	-17.9	7.4	0 U								
ZTS-MW125	10/24/2022	FD	BL02	1A	Upgradient	-8	UMCf	40.0 - 50.0	---	---	---	---	---	---	---	---	---								
ZTS-MW144	10/18/2022	N	BL02	1A	Downgradient	35	Alluvium	24.0 - 34.0	<2.18	23.5	125	4.384	2.79	0 U	146.8	7.05	0 U								
<b>Post-Construction Performance Monitoring Results</b>																									
ZTS-MW143	5/26/2023	N	PM01	1A	Upgradient	-50	Alluvium	23.0 - 33.0	<2.18	24.4	<3.02	7.019	3.68	0 U	124.3	7.02	0 U								
ZTS-MW143	8/29/2023	N	PM02	1A	Upgradient	-50	Alluvium	23.0 - 33.0	<2.18	24.7	<3.02	6.855	3.61	0 U	329.7	6.97	0 U								
ZTS-MW143	12/6/2023	N	PM03	1A	Upgradient	-50	Alluvium	23.0 - 33.0	<2.18	27.1	<3.02	7.23	1.79	0 U	184.1	6.92	0 U								
ZTS-MW143	2/21/2024	N	PM04	1A	Upgradient	-50	Alluvium	23.0 - 33.0	<2.18	28.8	<3.02	7.264	3.11	0 U	191.2	6.95	0 U								
ZTS-MW124R	5/26/2023	N	PM01	1A	Upgradient	-8	Alluvium	24.5 - 34.0	<2.18	25.3	<3.02	6.982	4.37	0 U	145.3	7.1	0 U								
ZTS-MW124R	8/29/2023	N	PM02	1A	Upgradient	-8	Alluvium	24.5 - 34.0	<2.18	25.3	<3.02	5.955	3.94	0 U	410.5	7.03	0 U								
ZTS-MW124R	12/5/2023	N	PM03	1A	Upgradient	-8	Alluvium	24.5 - 34.0	<2.18	25	<3.02	6.638	3.63	---	130.4	7.13	---								
ZTS-MW124R	2/27/2024	N	PM04	1A	Upgradient	-8	Alluvium	24.5 - 34.0	<2.18	25.3	3.24 J	6.087	2.93	0 U	155	7.03	0 U								
ZTS-MW125	5/25/2023	N	PM01	1A	Upgradient	-8	UMCf	40.0 - 50.0	<2.18	1.77 J	12.2 J	5.464	0.59	0 U	66.5	7.46	0.1								
ZTS-MW125	8/30/2023	N	PM02	1A	Upgradient	-8	UMCf	40.0 - 50.0	<2.18	2.21 J	<3.02	3.785	0.43	0 U	-122.7	7.34	0 U								
ZTS-MW125	12/1/2023	N	PM03	1A	Upgradient	-8	UMCf	40.0 - 50.0	<2.18	1.48 J	<3.02	3.982	0.31	0 U	-158.3	7.44	0 U								
ZTS-MW125	2/26/2024	N	PM04	1A	Upgradient	-8	UMCf	40.0 - 50.0	<2.18	<0.664	<3.02	3.624	0.26	0 U	-146.3	7.36	0 U								
ZTS-MW153	5/26/2023	N	PM01	1A	Upgradient	-8	Alluvium	24.3 - 34.0	<2.18	25.5	<3.02	6.979	4.71	0 U	134.8	7.11	0 U								
ZTS-MW153	8/31/2023	N	PM02	1A	Upgradient	-8	Alluvium	24.3 - 34.0	<2.18	24.3	3.14 J	5.612	3.55	0 U	406.7	7.01	0 U								
ZTS-MW153	12/1/2023	N	PM03	1A	Upgradient	-8	Alluvium	24.3 - 34.0	<2.18	25.4	<3.02	6.179	2.77	0 U	43.8	7.04	0 U								
ZTS-MW153	2/27/2024	N	PM04	1A	Upgradient	-8	Alluvium	24.3 - 34.0	<2.18	25.6	<3.02	6.072	3.06	0 U	158.8	7	0 U								
ZTS-MW163	5/25/2023	N	PM01	1A	Upgradient	-8	Alluvium	24.3 - 34.0	<2.18	25.8	<3.02	7.291	3.76	0 U	184.5	7.17	0 U								
ZTS-MW163	8/31/2023	N	PM02	1A	Upgradient	-8	Alluvium	24.3 - 34.0	<2.18	24.3	4.01 J	5.529	3.67	0 U	135.5	7.15	0 U								
ZTS-MW163	12/1/2023	N	PM03	1A	Upgradient	-8	Alluvium	24.3 - 34.0	<2.18	25.9	<3.02	6.299	3.08	0 U	75.2	7.06	0 U								
ZTS-MW163	2/27/2024	N	PM04	1A	Upgradient	-8	Alluvium	24.3 - 34.0	<2.18	26.8	<3.02	5.952	4.93	0 U	160.3	7.09	0 U								
ZTS-MW150	5/22/2023	N	PM01	1A	Center of Trench	0	Alluvium	24.3 - 34.0	<2.18	<0.664	<3.02	4.896	0.17	6.5	-386.4	8.09	0 U								
ZTS-MW150	8/21/2023	N	PM02	1A	Center of Trench	0	Alluvium	24.3 - 34.0	<2.18	<0.664	3.58 J	5.112	0.56	2	-260.3	8.08	0 U								
ZTS-MW150	11/27/2023	N	PM03	1A	Center of Trench	0	Alluvium	24.3 - 34.0	<2.18	<0.664	<3.02	6.322	0.03	3.5	-277.9	8.17	0 U								
ZTS-MW150	2/19/2024	N	PM04	1A	Center of Trench	0	Alluvium	24.3 - 34.0	<2.18	<0.664	<3.02	6.634	0.03	0 U	-320.6	8.06	0 U								
ZTS-MW154	5/24/2023	N	PM01	1A	Center of Trench	0	Alluvium	22.3 - 32.0	<2.18	<0.664	6.88	5.789	0.19	6.5	-346.5	8.4	0 U								
ZTS-MW154	8/21/2023	N	PM02	1A	Center of Trench	0	Alluvium	22.3 - 32.0	<2.18	<0.664	<3.02	5.508	0.34	4	-303.1	7.88	0 U								
ZTS-MW154	11/28/2023	N	PM03	1A	Center of Trench	0	Alluvium	22.3 - 32.0	<2.18	<0.664	<3.02	7.218	-0.03	3.5	-306.6	7.86	0 U								
ZTS-MW154	2/20/2024	N	PM04	1A	Center of Trench	0	Alluvium	22.3 - 32.0	<2.18	<0.664	<3.02														

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	Dissolved Metals by SW6020	Dissolved Metals by SW6020	Dissolved Metals by SW6020	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	
									Titanium	Vanadium	Zinc	Conductivity	Dissolved Oxygen	Ferrous Iron	Oxidation-Reduction Potential	pH	Sulfide
									µg/L	µg/L	µg/L	mS/cm	mg/L	mg/L	mV	SU	mg/L
feet																	
ZTS-MW164	11/27/2023	N	PM03	1A	Center of Trench	0	Alluvium	22.3 - 32.0	<2.18	<0.664	<3.02	6.568	1.38	0 U	-190.2	8.17	0 U
ZTS-MW164	11/27/2023	FD	PM03	1A	Center of Trench	0	Alluvium	22.3 - 32.0	<2.18	<0.664	<3.02	----	----	----	----	----	----
ZTS-MW164	2/20/2024	N	PM04	1A	Center of Trench	0	Alluvium	22.3 - 32.0	<2.18	<0.664	<3.02	6548	0.39	0 U	-258.2	8.55	0 U
ZTS-MW164	2/20/2024	FD	PM04	1A	Center of Trench	0	Alluvium	22.3 - 32.0	<2.18	<0.664	3.36 J	----	----	----	----	----	----
ZTS-MW151	5/25/2023	N	PM01	1A	Downgradient	5	Alluvium	24.3 - 34.0	<2.18	6.68	<3.02	8.659	0.73	0 U	11.4	6.87	0 U
ZTS-MW151	8/21/2023	N	PM02	1A	Downgradient	5	Alluvium	24.3 - 34.0	<2.18	7.15	3.52 J	5.561	6.12	0 U	79.3	7.47	0 U
ZTS-MW151	11/28/2023	N	PM03	1A	Downgradient	5	Alluvium	24.3 - 34.0	<2.18	5.91	<3.02	7.456	0.07	0.5	20	7.26	0 U
ZTS-MW151	2/20/2024	N	PM04	1A	Downgradient	5	Alluvium	24.3 - 34.0	<2.18	4.28 J	<3.02	6.505	0.3	0 U	5.2	7.22	0 U
ZTS-MW155	5/24/2023	N	PM01	1A	Downgradient	5	Alluvium	20.3 - 35.0	<2.18	<0.664	3.97	5.914	0.57	1	-37.6	7.07	0 U
ZTS-MW155	5/24/2023	FD	PM01	1A	Downgradient	5	Alluvium	20.3 - 35.0	<2.18	<0.664	5.79	----	----	----	----	----	----
ZTS-MW155	8/22/2023	N	PM02	1A	Downgradient	5	Alluvium	20.3 - 35.0	<2.18	3.89 J	3.14 J	5.914	1	0 U	29.5	7.39	0 U
ZTS-MW155	8/22/2023	FD	PM02	1A	Downgradient	5	Alluvium	20.3 - 35.0	<2.18	4.25 J	3.56 J	----	----	----	----	----	----
ZTS-MW155	11/28/2023	N	PM03	1A	Downgradient	5	Alluvium	20.3 - 35.0	<2.18	3.38 J	<3.02	7.756	0.17	1	59.6	7.34	0 U
ZTS-MW155	11/28/2023	FD	PM03	1A	Downgradient	5	Alluvium	20.3 - 35.0	<2.18	3.49 J	<3.02	----	----	----	----	----	----
ZTS-MW155	2/21/2024	N	PM04	1A	Downgradient	5	Alluvium	20.3 - 35.0	<2.18	2.95 J	<3.02	6.631	0.33	0 U	82.5	7.33	0 U
ZTS-MW155	2/21/2024	FD	PM04	1A	Downgradient	5	Alluvium	20.3 - 35.0	<2.18	2.8 J	<3.02	----	----	----	----	----	----
ZTS-MW156	5/24/2023	N	PM01	1A	Downgradient	5	UMCf	43.8 - 53.5	<2.18	<0.664	4.42	4.892	0.39	1.5	-205.4	7.55	0 U
ZTS-MW156	8/22/2023	N	PM02	1A	Downgradient	5	UMCf	43.8 - 53.5	<2.18	<0.664	<3.02	4.194	3.67	0 U	-113.3	7.55	0 U
ZTS-MW156	11/29/2023	N	PM03	1A	Downgradient	5	UMCf	43.8 - 53.5	<2.18	<0.664	<3.02	4.851	0.12	0 U	-187.4	7.44	0.6
ZTS-MW156	2/21/2024	N	PM04	1A	Downgradient	5	UMCf	43.8 - 53.5	<2.18	<0.664	<3.02	4.619	0.24	0 U	-208.3	7.34	0 U
ZTS-MW165	5/31/2023	N	PM01	1A	Downgradient	5	Alluvium	22.3 - 32.0	<2.18	2.76 J	4.21 J	8.746	0.25	0 U	5.9	7.5	0 U
ZTS-MW165	8/25/2023	N	PM02	1A	Downgradient	5	Alluvium	22.3 - 32.0	<2.18	2.53 J	<3.02	5.684	0.52	0 U	-9.3	7.42	0 U
ZTS-MW165	11/30/2023	N	PM03	1A	Downgradient	5	Alluvium	22.3 - 32.0	<2.18	2.13 J	<3.02	6.715	0.16	0 U	138.2	7.34	0 U
ZTS-MW165	2/23/2024	N	PM04	1A	Downgradient	5	Alluvium	22.3 - 32.0	<2.18	2.15 J	<3.02	6.265	0.35	0 U	-15.9	7.3	0 U
ZTS-MW152	5/25/2023	N	PM01	1A	Downgradient	15	Alluvium	23.3 - 33.0	<2.18	14.5	<3.02	8.979	0.75	0 U	66	6.5	0 U
ZTS-MW152	8/22/2023	N	PM02	1A	Downgradient	15	Alluvium	23.3 - 33.0	<2.18	10.4	3.52 J	5.78	0.5	0 U	36	7.39	0 U
ZTS-MW152	11/28/2023	N	PM03	1A	Downgradient	15	Alluvium	23.3 - 33.0	<2.18	10.8	<3.02	7.75	0.16	0.5	44.6	7.2	0 U
ZTS-MW152	2/20/2024	N	PM04	1A	Downgradient	15	Alluvium	23.3 - 33.0	<2.18	8.86	<3.02	6.509	0.36	0 U	35.2	7.16	0 U
ZTS-MW157	5/25/2023	N	PM01	1A	Downgradient	15	Alluvium	23.3 - 33.0	<2.18	5.33	<3.02	9.444	0.79	0 U	93.5	6.46	0 U
ZTS-MW157	8/23/2023	N	PM02	1A	Downgradient	15	Alluvium	23.3 - 33.0	<2.18	5.14	<3.02	5.956	0.45	0 U	89.5	7.43	0 U
ZTS-MW157	11/29/2023	N	PM03	1A	Downgradient	15	Alluvium	23.3 - 33.0	<2.18	4.56 J	<3.02	7.213	0.16	0 U	-24.2	7.42	0 U
ZTS-MW157	2/21/2024	N	PM04	1A	Downgradient	15	Alluvium	23.3 - 33.0	<2.18	6	<3.02	6.709	0.32	0 U	92.7	7.27	0 U
ZTS-MW162	5/25/2023	N	PM01	1A	Downgradient	15	Alluvium	23.3 - 33.0	<2.18	6.12	<3.02	9.658	0.8	0 U	102.3	6.86	0 U
ZTS-MW162	8/18/2023	N	PM02	1A	Downgradient	15	Alluvium	23.3 - 33.0	<2.18	5.59	20.4 J	6.662	0.35	0 U	310.8	7.22	0 U
ZTS-MW162	11/30/2023	N	PM03	1A	Downgradient	15	Alluvium	23.3 - 33.0	<2.18	3.85 J	<3.02	6.479	0.31	0 U	127	7.22	0 U
ZTS-MW162	2/21/2024	N	PM04	1A	Downgradient	15	Alluvium	23.3 - 33.0	<2.18	3.37 J	<3.02	6.807	3	0 U	98.6	7.31	0 U
ZTS-MW149	5/31/2023	N	PM01	1A	Downgradient	25	Alluvium	23.3 - 33.0	<2.18	20	<3.02	8.418	4.42	0 U	93.5	7.28	0 U
ZTS-MW149	8/24/2023	N	PM02	1A	Downgradient	25	Alluvium	23.3 - 33.0	<2.18	25	4.61 J	5.539	4.01	0 U	89.7	7.12	0 U
ZTS-MW149	11/30/2023	N	PM03	1A	Downgradient	25	Alluvium	23.3 - 33.0	<2.18	22.2	<3.02	6.467	2	0 U	157.3	7.04	0 U
ZTS-MW149	2/23/2024	N	PM04	1A	Downgradient	25	Alluvium	23.3 - 33.0									

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	Dissolved Metals by SW6020	Dissolved Metals by SW6020	Dissolved Metals by SW6020	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	
									Titanium	Vanadium	Zinc	Conductivity	Dissolved Oxygen	Ferrous Iron	Oxidation-Reduction Potential	pH	Sulfide
									feet	µg/L	µg/L	µg/L	mS/cm	mg/L	mg/L	mV	SU
ZTS-MW144	2/23/2024	N	PM04	1A	Downgradient	35	Alluvium	24.0 - 34.0	<2.18	10.8	5.32 J	6.391	0.49	0 U	75.3	7.27	0 U
ZTS-MW158	5/24/2023	N	PM01	1A	Downgradient	50	Alluvium	23.3 - 33.0	<2.18	10.3	<3.02	7.49	0.42	0 U	107.3	7.44	0 U
ZTS-MW158	8/25/2023	N	PM02	1A	Downgradient	50	Alluvium	23.3 - 33.0	<2.18	8.4	<3.02	6.138	0.45	0 U	186.7	7.09	0 U
ZTS-MW158	12/1/2023	N	PM03	1A	Downgradient	50	Alluvium	23.3 - 33.0	<2.18	12.8	<3.02	8.139	0.02	0 U	465.3	7.28	0 U
ZTS-MW158	2/27/2024	N	PM04	1A	Downgradient	50	Alluvium	23.3 - 33.0	<2.18	12.7	<3.02	6.21	0.31	0 U	133.6	7.28	0 U
ZTS-MW159	5/24/2023	N	PM01	1A	Downgradient	50	UMCf	38.8 - 48.5	<2.18	2.51 J	5.36 J	4.995	0.85	0 U	49.4	7.71	0 U
ZTS-MW159	8/25/2023	N	PM02	1A	Downgradient	50	UMCf	38.8 - 48.5	<2.18	12.4	<3.02	5.288	0.84	0 U	166.1	7.17	0 U
ZTS-MW159	12/1/2023	N	PM03	1A	Downgradient	50	UMCf	38.8 - 48.5	<2.18	14.7	3.18 J	7.407	0.64	0 U	367.9	7.21	0 U
ZTS-MW159	2/27/2024	N	PM04	1A	Downgradient	50	UMCf	38.8 - 48.5	<2.18	12.4	<3.02	5.573	0.98	0 U	117.5	7.21	0 U
ZTS-MW160	5/24/2023	N	PM01	1A	Downgradient	100	Alluvium	23.3 - 33.0	<2.18	16.8	<3.02	6.523	0.57	0 U	170.6	7.43	0 U
ZTS-MW160	8/28/2023	N	PM02	1A	Downgradient	100	Alluvium	23.3 - 33.0	<2.18	17	<3.02	6.404	0.38	0 U	409.3	7.07	0 U
ZTS-MW160	12/5/2023	N	PM03	1A	Downgradient	100	Alluvium	23.3 - 33.0	<2.18	16.6	7.45 J	6.615	1.32	0 U	155.8	7.07	0 U
ZTS-MW160	2/27/2024	N	PM04	1A	Downgradient	100	Alluvium	23.3 - 33.0	<2.18	15.6	<3.02	6.243	1	0 U	141.9	7.12	0 U
ZTS-MW161	5/26/2023	N	PM01	1A	Downgradient	150	Alluvium	24.3 - 34.0	<2.18	18.1	<3.02	3.943	1.02	0 U	189.1	7.33	0 U
ZTS-MW161	8/25/2023	N	PM02	1A	Downgradient	150	Alluvium	24.3 - 34.0	<2.18	15.8	<3.02	6.394	0.41	0 U	180.3	7.02	0 U
ZTS-MW161	8/25/2023	FD	PM02	1A	Downgradient	150	Alluvium	24.3 - 34.0	<2.18	15.7	3.07 J	----	----	----	----	----	----
ZTS-MW161	12/1/2023	N	PM03	1A	Downgradient	150	Alluvium	24.3 - 34.0	<2.18	17.4	<3.02	6878	0	0 U	63.9	7.18	0 U
ZTS-MW161	12/1/2023	FD	PM03	1A	Downgradient	150	Alluvium	24.3 - 34.0	<2.18	17	<3.02	----	----	----	----	----	----
ZTS-MW161	2/23/2024	N	PM04	1A	Downgradient	150	Alluvium	24.3 - 34.0	<2.18	16.9	<3.02	6.231	1.04	0 U	-2.9	7.17	0 U
ZTS-MW161	2/23/2024	FD	PM04	1A	Downgradient	150	Alluvium	24.3 - 34.0	<2.18	17.4	<3.02	----	----	----	----	----	----
<b>Between Test Area 1A and Test Area 1B</b>																	
<b>Pre-Construction Baseline Results</b>																	
ZTS-MW145	10/24/2022	N	BL02	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	<2.18	<0.664	<3.02	4.985	0.47	0 U	-1.5	7.38	0 U
ZTS-MW146	10/24/2022	N	BL02	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	<2.18	6.72	<3.02	3.424	2.24	0 U	36	7.26	0 U
<b>Post-Construction Performance Monitoring Results</b>																	
ZTS-MW145	5/22/2023	N	PM01	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	<2.18	1.17 J	20.7 J	1.198	6.32	0 U	142.7	8.04	0 U
ZTS-MW145	8/30/2023	N	PM02	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	<2.18	<0.664	<3.02	4.453	0.41	0 U	-91	7.32	0 U
ZTS-MW145	12/6/2023	N	PM03	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	<2.18	<0.664	<3.02	5.144	0.12	0 U	-138.7	7.36	0 U
ZTS-MW145	2/21/2024	N	PM04	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	<2.18	0.681 J	<3.02	4.574	8056	0 U	240.4	7.48	0 U
ZTS-MW146	5/26/2023	N	PM01	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	<2.18	<0.664	3.14 J	6.142	1.47	0 U	-146.5	7.49	0 U
ZTS-MW146	8/25/2023	N	PM02	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	<2.18	<0.664	5.77 J	6.447	0.81	0 U	-160.9	7.54	0.2
ZTS-MW146	11/30/2023	N	PM03	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	<2.18	<0.664	<3.02	6.64	0.26	0 U	-176	7.5	0.4
ZTS-MW146	2/23/2024	N	PM04	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	<2.18	<0.664	<3.02	6.136	0.98	0 U	-170.4	7.47	0.1
<b>Test Area 1B</b>																	
<b>Pre-Construction Baseline Results</b>																	
ZTS-MW147	10/18/2022	N	BL02	1B	Upgradient	-50	Alluvium	19.5 - 29.5	<2.18	20.8	<3.02	4.784	4.99	0 U	142.2	7.16	0 U
ZTS-MW126	8/31/2022	N	BL01	1B	Upgradient	-8	Alluvium	20.0 - 30.0	----	----	----	7.382	1.91	----	111.1	7.25	----
ZTS-MW126	10/18/2022	N	BL02	1B	Upgradient	-8	Alluvium	20.0 - 30.0	<2.18	21.2	<3.02	7.111	3.65	0 U	102.8	7.19	0 U
ZTS-MW126	10/18/2022	FD	BL02	1B	Upgradient	-8	Alluvium	20.0 - 30.0	<2.18	22.7	<3.02	----	----	----	----	----	----
ZTS-MW127	8/31/2022	N	BL01	1B	Upgradient	-8	Alluvium	18.0 - 23.0	----	----	----	7.583	2.86	----	124	7.01	----
ZTS-MW127	10/24/2022	N	BL02	1B	Upgradient	-8	Alluvium	18.0 - 23.0	<2.18	19.2	<3.02	4.654	2.58	0 U	51.2	6.95	0 U
ZTS-MW148	10/24/2022	N	BL02	1B	Downgradient	35	Alluvium	22.0 - 32.0	<2.18	19.5	<3.02	6.419	8.1	0 U	107.4	7.37	0 U
LVWPS-MW107A	10/24/2022	N	BL02	1B	Downgradient	50	Alluvium	24.8 - 34.5	<2.18	20.8	<3.02	6.222	5.9	0 U	84	7.12	0 U
LVWPS-MW107B	10/21/2022	N	BL02	1B	Downgradient	50	UMCf	46.0 - 65.8	<2.18	<0.664	<3.02	7.344	2.22	0 U	-170	7.28	0 U

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	Dissolved Metals by SW6020	Dissolved Metals by SW6020	Dissolved Metals by SW6020	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	
									Titanium	Vanadium	Zinc	Conductivity	Dissolved Oxygen	Ferrous Iron	Oxidation-Reduction Potential	pH	Sulfide
									µg/L	µg/L	µg/L	mS/cm	mg/L	mg/L	mV	SU	mg/L
LWPS-MW107C	10/24/2022	N	BL02	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	<2.18	<0.664	<3.02	63.475	3.92	0 U	-5.8	7.46	0 U
<b>Post-Construction Performance Monitoring Results</b>																	
ZTS-MW147	5/26/2023	N	PM01	1B	Upgradient	-50	Alluvium	19.5 - 29.5	<2.18	19.9	<3.02	8.526	1.07	0 U	81.9	7.1	0 U
ZTS-MW147	8/30/2023	N	PM02	1B	Upgradient	-50	Alluvium	19.5 - 29.5	<2.18	18.3	<3.02	6.851	3.09	0 U	209.7	7.01	0 U
ZTS-MW147	12/1/2023	N	PM03	1B	Upgradient	-50	Alluvium	19.5 - 29.5	<2.18	20	<3.02	6.567	4.2	0 U	179	7.07	0 U
ZTS-MW147	2/23/2024	N	PM04	1B	Upgradient	-50	Alluvium	19.5 - 29.5	<2.18	20.6	<3.02	6.348	5.03	0 U	21.2	7.16	0 U
ZTS-MW126	5/25/2023	N	PM01	1B	Upgradient	-8	Alluvium	20.0 - 30.0	<2.18	26.1	3.26 J	8.193	1.5	0 U	128.8	7.13	0 U
ZTS-MW126	8/25/2023	N	PM02	1B	Upgradient	-8	Alluvium	20.0 - 30.0	<2.18	24.1	4.03 J	6.176	2.93	0 U	237.9	7	0 U
ZTS-MW126	11/30/2023	N	PM03	1B	Upgradient	-8	Alluvium	20.0 - 30.0	<2.18	25.5	11.2 J	0.075	7.65	0 U	92.8	7.19	0 U
ZTS-MW126	2/23/2024	N	PM04	1B	Upgradient	-8	Alluvium	20.0 - 30.0	<2.18	26.3	<3.02	6.23	5.45	0 U	99.7	7.14	0 U
ZTS-MW127R	5/25/2023	N	PM01	1B	Upgradient	-8	Alluvium	18.5 - 23.0	<2.18	19.7	<3.02	7.884	4.31	0 U	141	7.13	0 U
ZTS-MW127R	8/28/2023	N	PM02	1B	Upgradient	-8	Alluvium	18.5 - 23.0	<2.18	20.8	<3.02	7.334	4.76	0 U	421.1	7.02	0 U
ZTS-MW127R	11/30/2023	N	PM03	1B	Upgradient	-8	Alluvium	18.5 - 23.0	<2.18	21	7 J	6.707	3.25	0 U	83.1	7.04	0 U
ZTS-MW127R	2/23/2024	N	PM04	1B	Upgradient	-8	Alluvium	18.5 - 23.0	<2.18	22.1	<3.02	6.325	5.35	0 U	110.5	7.09	0 U
ZTS-MW169	5/24/2023	N	PM01	1B	Upgradient	-8	Alluvium	17.1 - 27.0	<2.18	18.5	5.26 J	8.117	2.89	0 U	85.2	7.29	0 U
ZTS-MW169	8/28/2023	N	PM02	1B	Upgradient	-8	Alluvium	17.1 - 27.0	<2.18	21.1	<3.02	7.244	3.59	0 U	351.7	7	0 U
ZTS-MW169	11/30/2023	N	PM03	1B	Upgradient	-8	Alluvium	17.1 - 27.0	<2.18	19.9	10.2 J	6.582	3.85	0 U	69.9	7.06	0 U
ZTS-MW169	2/23/2024	N	PM04	1B	Upgradient	-8	Alluvium	17.1 - 27.0	<2.18	21.2	<3.02	6.304	4.74	0 U	126.5	7.11	0 U
ZTS-MW170	5/24/2023	N	PM01	1B	Upgradient	-8	UMCf	31.1 - 41.0	<2.18	15.5	6.72 J	6.764	1.22	0 U	77.7	7.47	0 U
ZTS-MW170	8/29/2023	N	PM02	1B	Upgradient	-8	UMCf	31.1 - 41.0	<2.18	19	<3.02	5.938	0.91	0 U	375.6	7.12	0 U
ZTS-MW170	11/30/2023	N	PM03	1B	Upgradient	-8	UMCf	31.1 - 41.0	<2.18	19.9	8.12 J	5.581	1.09	0 U	64	7.2	0 U
ZTS-MW170	2/23/2024	N	PM04	1B	Upgradient	-8	UMCf	31.1 - 41.0	<2.18	20.3	4.49 J	5.406	1.77	0 U	106.3	7.25	0.2
ZTS-MW166	5/23/2023	N	PM01	1B	Center of Trench	0	Alluvium	19.8 - 29.5	<2.18	<0.664	<3.02	7.856	0.25	0.5	-226.4	8.43	0 U
ZTS-MW166	8/21/2023	N	PM02	1B	Center of Trench	0	Alluvium	19.8 - 29.5	<2.18	<0.664	<3.02	5.824	0.33	1	-243.8	8.12	0 U
ZTS-MW166	11/28/2023	N	PM03	1B	Center of Trench	0	Alluvium	19.8 - 29.5	<2.18	<0.664	<3.02	6.741	1.15	0 U	-195.2	9.03	0 U
ZTS-MW166	2/20/2024	N	PM04	1B	Center of Trench	0	Alluvium	19.8 - 29.5	<2.18	<0.664	<3.02	6779	0.36	0 U	-281.3	9.27	0 U
ZTS-MW171	5/22/2023	N	PM01	1B	Center of Trench	0	Alluvium	19.3 - 29.0	<2.18	<0.664	<3.02	5.916	1.4	1.5	-163.5	7.28	0 U
ZTS-MW171	8/21/2023	N	PM02	1B	Center of Trench	0	Alluvium	19.3 - 29.0	<2.18	<0.664	3.71 J	6.72	0.48	0 U	-180	8.06	0.5
ZTS-MW171	11/27/2023	N	PM03	1B	Center of Trench	0	Alluvium	19.3 - 29.0	<2.18	<0.664	<3.02	7163	0.1	0 U	-210.1	8.14	0 U
ZTS-MW171	2/19/2024	N	PM04	1B	Center of Trench	0	Alluvium	19.3 - 29.0	<2.18	12.3	<3.02	6.709	2.26	0 U	-67.7	8.09	0 U
ZTS-MW178	5/25/2023	N	PM01	1B	Center of Trench	0	Alluvium	17.8 - 27.5	<2.18	<0.664	<3.02	6.683	0.05	1.5	-234.7	9.24	0 U
ZTS-MW178	8/21/2023	N	PM02	1B	Center of Trench	0	Alluvium	17.8 - 27.5	<2.18	<0.664	3.81 J	7.036	0.3	1	-282.5	9.27	0.4
ZTS-MW178	11/28/2023	N	PM03	1B	Center of Trench	0	Alluvium	17.8 - 27.5	<2.18	<0.664	<3.02	6804	0	0 U	-435	9.21	0 U
ZTS-MW178	2/20/2024	N	PM04	1B	Center of Trench	0	Alluvium	17.8 - 27.5	<2.18	<0.664	<3.02	6.241	0.98	0 U	-293.6	9.35	0 U
ZTS-MW167	5/24/2023	N	PM01	1B	Downgradient	5	Alluvium	23.3 - 33.0	<2.18	3.28 J	<3.02	6.449	0.23	0.5	33.3	8.17	0 U
ZTS-MW167	8/22/2023	N	PM02	1B	Downgradient	5	Alluvium	23.3 - 33.0	<2.18	2.42 J	<3.02	6.669	1.11	0 U	134.9	8.33	0 U
ZTS-MW167	11/28/2023	N	PM03	1B	Downgradient	5	Alluvium	23.3 - 33.0	<2.18	3.37 J	29.1	6997	0.1	0 U	63.3	8.48	0 U
ZTS-MW167	2/20/2024	N	PM04	1B	Downgradient	5	Alluvium	23.3 - 33.0	<2.18	2.75 J	<3.02	6.22	1.06	0 U	-28.3	8.51	0 U
ZTS-MW172	5/23/2023	N	PM01	1B	Downgradient	5	Alluvium	17.3 - 27.0	<2.18	12	<3.02	6.918	0.23	0.2	38.5	8.26	0 U
ZTS-MW172	5																

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	Dissolved Metals by SW6020	Dissolved Metals by SW6020	Dissolved Metals by SW6020	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	
									Titanium	Vanadium	Zinc	Conductivity	Dissolved Oxygen	Ferrous Iron	Oxidation-Reduction Potential	pH	Sulfide
									µg/L	µg/L	µg/L	mS/cm	mg/L	mg/L	mV	SU	mg/L
feet																	
ZTS-MW172	2/22/2024	N	PM04	1B	Downgradient	5	Alluvium	17.3 - 27.0	<2.18	3.99 J	<3.02	6.016	1.18	0 U	-32.5	8.1	0 U
ZTS-MW172	2/22/2024	FD	PM04	1B	Downgradient	5	Alluvium	17.3 - 27.0	<2.18	3.84 J	<3.02	----	----	----	----	----	----
ZTS-MW173	5/25/2023	N	PM01	1B	Downgradient	5	UMCf	33.3 - 43.0	<2.18	5.38	3.46 J	4.497	0.29	0 U	-58.2	7.29	0 U
ZTS-MW173	8/22/2023	N	PM02	1B	Downgradient	5	UMCf	33.3 - 43.0	<2.18	3.86 J	7.7 J	7.005	3.37	0 U	-82.1	7.52	0.2
ZTS-MW173	11/29/2023	N	PM03	1B	Downgradient	5	UMCf	33.3 - 43.0	<2.18	2.23 J	<3.02	5270	2.8	0 U	-143.7	7.33	0.3
ZTS-MW173	2/21/2024	N	PM04	1B	Downgradient	5	UMCf	33.3 - 43.0	<2.18	8.19	<3.02	5.356	1.14	0 U	-42.5	7.46	0 U
ZTS-MW179	5/25/2023	N	PM01	1B	Downgradient	5	Alluvium	18.3 - 23.0	<2.18	12.9	<3.02	6.227	0.25	0.2	21.7	8.34	0 U
ZTS-MW179	8/23/2023	N	PM02	1B	Downgradient	5	Alluvium	18.3 - 23.0	<2.18	9.52	<3.02	6.842	0.39	0 U	-32.3	8.25	0 U
ZTS-MW179	11/30/2023	N	PM03	1B	Downgradient	5	Alluvium	18.3 - 23.0	<2.18	6.26	<3.02	6942	0.5	0 U	165.8	8.35	0 U
ZTS-MW179	2/22/2024	N	PM04	1B	Downgradient	5	Alluvium	18.3 - 23.0	<2.18	3.91 J	<3.02	6.185	1.18	0 U	-52	8.18	0 U
ZTS-MW168	5/24/2023	N	PM01	1B	Downgradient	15	Alluvium	20.3 - 30.0	<2.18	9.61 J+	3.32 J	6.583	0.18	0 U	51.1	8.14	0 U
ZTS-MW168	8/22/2023	N	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	<2.18	6.8	<3.02	6.812	0.44	0 U	99	7.97	0 U
ZTS-MW168	10/11/2023	N	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	----	----	----	5.681	0.56	----	142.4	8.21	----
ZTS-MW168	10/11/2023	FS	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	----	----	----	----	----	----	----	----	----
ZTS-MW168	10/11/2023	FD	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	----	----	----	----	----	----	----	----	----
ZTS-MW168	11/29/2023	N	PM03	1B	Downgradient	15	Alluvium	20.3 - 30.0	<2.18	5.73	<3.02	6737	0.1	0 U	152.2	8.11	0 U
ZTS-MW168	2/21/2024	N	PM04	1B	Downgradient	15	Alluvium	20.3 - 30.0	<2.18	6.08	<3.02	6.202	1.18	0 U	63.7	8.23	0 U
ZTS-MW174	5/24/2023	N	PM01	1B	Downgradient	15	Alluvium	19.8 - 29.5	<2.18	9.17 J+	4.25 J	7.138	0.35	0.2	93.5	7.6	0 U
ZTS-MW174	5/26/2023	N	PM01	1B	Downgradient	15	Alluvium	19.8 - 29.5	----	----	----	----	----	----	----	----	----
ZTS-MW174	8/22/2023	N	PM02	1B	Downgradient	15	Alluvium	19.8 - 29.5	<2.18	6.94	10.7 J	6.894	0.36	0 U	16.1	7.75	0 U
ZTS-MW174	10/11/2023	N	PM02	1B	Downgradient	15	Alluvium	19.8 - 29.5	----	----	----	5.686	0.27	----	150.1	8.24	----
ZTS-MW174	10/11/2023	FS	PM02	1B	Downgradient	15	Alluvium	19.8 - 29.5	----	----	----	----	----	----	----	----	----
ZTS-MW174	10/11/2023	FD	PM02	1B	Downgradient	15	Alluvium	19.8 - 29.5	----	----	----	----	----	----	----	----	----
ZTS-MW174	11/29/2023	N	PM03	1B	Downgradient	15	Alluvium	19.8 - 29.5	<2.18	7.56	6.4 J	6691	0	0 U	145.3	8.19	0 U
ZTS-MW174	2/21/2024	N	PM04	1B	Downgradient	15	Alluvium	19.8 - 29.5	<2.18	7.98	<3.02	6.278	1.06	0 U	-16.8	8.16	0 U
ZTS-MW177	5/25/2023	N	PM01	1B	Downgradient	15	Alluvium	20.3 - 30.0	<2.18	8.16	<3.02	6.585	0.39	0 U	57.8	7.76	0 U
ZTS-MW177	8/23/2023	N	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	<2.18	9.29	<3.02	7.059	0.39	0 U	61.8	7.98	0 U
ZTS-MW177	11/29/2023	N	PM03	1B	Downgradient	15	Alluvium	20.3 - 30.0	<2.18	9.01	<3.02	6729	0.1	0 U	147.1	8.22	0 U
ZTS-MW177	2/21/2024	N	PM04	1B	Downgradient	15	Alluvium	20.3 - 30.0	<2.18	7.5	<3.02	6.335	1.12	0 U	8.3	8.35	0 U
ZTS-MW180	5/24/2023	N	PM01	1B	Downgradient	25	Alluvium	17.8 - 22.5	<2.18	22.2	4.21 J	6.314	2.63	0.2	104.1	7.1	0 U
ZTS-MW180	5/24/2023	FD	PM01	1B	Downgradient	25	Alluvium	17.8 - 22.5	<2.18	20.8	<3.02	----	----	----	----	----	----
ZTS-MW180	8/24/2023	N	PM02	1B	Downgradient	25	Alluvium	17.8 - 22.5	<2.18	24.2	5.27 J	7.011	3.43	0 U	213.3	6.88	0 U
ZTS-MW180	8/24/2023	FD	PM02	1B	Downgradient	25	Alluvium	17.8 - 22.5	<2.18	24.5	<3.02	----	----	----	----	----	----
ZTS-MW180	11/30/2023	N	PM03	1B	Downgradient	25	Alluvium	17.8 - 22.5	<2.18	21.2	<3.02	7125	2.1	0 U	195.7	7.11	0 U
ZTS-MW180	11/30/2023	FD	PM03	1B	Downgradient	25	Alluvium	17.8 - 22.5	<2.18	21.3	<3.02	----	----	----	----	----	----
ZTS-MW180	2/22/2024	N	PM04	1B	Downgradient	25	Alluvium	17.8 - 22.5	<2.18	21.3	<3.02	6.561	4.3	0 U	70.2	7.04	0 U
ZTS-MW180	2/22/2024	FD	PM04	1B	Downgradient	25	Alluvium	17.8 - 22.5	<2.18	22	<3.02	----	----	----	----	----	----
ZTS-MW148	5/25/2023	N	PM01	1B	Downgradient	35	Alluvium	22.0 - 32.0	<2.18	10.4	<3.02	6.532	2.2	0.2	87.6	7.59	0 U
ZTS-MW148	8/23/2023	N	PM02	1B	Downgradient	35	Alluvium	22.0 - 32.0	<2.18	10.7	4.61 J	7.1	0.41	0 U	76.5	7.6	0 U
ZTS-MW148	11/28/2023	N	PM03	1B	Downgradient	35	Alluvium	22.0 - 32.0	<2.18	11.8	<3.02	6987	0.2	0 U	52.7	7.94	0 U
ZTS-MW148	2/20/2024	N	PM04	1B	Downgradient	35	Alluvium	22.0 - 32.0	<2.18	9.73	<3.02	6.183	1.14				

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	Dissolved Metals by SW6020	Dissolved Metals by SW6020	Dissolved Metals by SW6020	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	
									Titanium	Vanadium	Zinc	Conductivity	Dissolved Oxygen	Ferrous Iron	Oxidation-Reduction Potential	pH	Sulfide
									µg/L	µg/L	µg/L	mS/cm	mg/L	mg/L	mV	SU	mg/L
feet																	
LVWPS-MW107A	11/30/2023	N	PM03	1B	Downgradient	50	Alluvium	24.8 - 34.5	<2.18	6.94	<3.02	6856	0.1	0 U	161.6	8.21	0 U
LVWPS-MW107A	2/22/2024	N	PM04	1B	Downgradient	50	Alluvium	24.8 - 34.5	<2.18	7.83	<3.02	5.585	5.54	0 U	75	8.1	0 U
LVWPS-MW107B	5/23/2023	N	PM01	1B	Downgradient	50	UMCf	46.0 - 65.8	<2.18	<0.664	<3.02	8.326	0.94	0 U	-183.7	7.4	0 U
LVWPS-MW107B	8/24/2023	N	PM02	1B	Downgradient	50	UMCf	46.0 - 65.8	<2.18	5.72	<3.02	4.333	5.77	0 U	-137.6	7.32	0.2
LVWPS-MW107B	12/1/2023	N	PM03	1B	Downgradient	50	UMCf	46.0 - 65.8	<2.18	6.49	<3.02	2666	2.4	0 U	54.4	7.64	0 U
LVWPS-MW107B	2/23/2024	N	PM04	1B	Downgradient	50	UMCf	46.0 - 65.8	<2.18	<0.664	<3.02	6.442	1.46	0 U	-188.7	7.4	0.2
LVWPS-MW107C	5/23/2023	N	PM01	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	<2.18	<0.664	<3.02	65.406	0.37	0 U	-236	7.47	0 U
LVWPS-MW107C	8/24/2023	N	PM02	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	<21.8	<6.64	<30.2	66.679	5.95	0.5	-131.4	6.98	1.2
LVWPS-MW107C	12/1/2023	N	PM03	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	<21.8	<6.64	<30.2	63026	0.2	0 U	-220.7	7.36	0.3
LVWPS-MW107C	2/23/2024	N	PM04	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	<43.6	<13.3	<60.4	60.847	1.2	0.5	-160.9	7.49	0.2
ZTS-MW175	5/26/2023	N	PM01	1B	Downgradient	100	Alluvium	19.8 - 29.5	<2.18	19.5	<3.02	5.253	1.18	0 U	171.3	7.38	0 U
ZTS-MW175	8/25/2023	N	PM02	1B	Downgradient	100	Alluvium	19.8 - 29.5	<2.18	17.1	<3.02	7.034	0.39	0 U	144.6	7.45	0 U
ZTS-MW175	11/30/2023	N	PM03	1B	Downgradient	100	Alluvium	19.8 - 29.5	<2.18	14.6	<3.02	6911	0.5	0 U	179.8	7.77	0 U
ZTS-MW175	2/28/2024	N	PM04	1B	Downgradient	100	Alluvium	19.8 - 29.5	<2.18	17.1	<3.02	6.149	0.26	0 U	41	7.73	0 U
ZTS-MW176	5/26/2023	N	PM01	1B	Downgradient	150	Alluvium	19.8 - 29.5	<2.18	21.7	<3.02	4.807	1.27	0 U	265.1	7.38	0 U
ZTS-MW176	8/25/2023	N	PM02	1B	Downgradient	150	Alluvium	19.8 - 29.5	<2.18	20.2	<3.02	7.196	0.43	0 U	120.3	7.32	0 U
ZTS-MW176	12/5/2023	N	PM03	1B	Downgradient	150	Alluvium	19.8 - 29.5	<2.18	19.5	<3.02	6.791	1.55	0 U	146.5	7.45	0 U
ZTS-MW176	2/27/2024	N	PM04	1B	Downgradient	150	Alluvium	19.8 - 29.5	<2.18	21	<3.02	6.239	0.34	0 U	134.1	7.55	0 U
<b>Test Area 2A</b>																	
<b>Pre-Construction Baseline Results</b>																	
ZTS-MW137	10/20/2022	N	BL02	2A	Upgradient	-9	Alluvium	14.0 - 24.0	<2.18	18.4	<3.02	4.917	5.37	0 U	106.5	7.07	0 U
ZTS-MW118	9/1/2022	N	BL01	2A	Upgradient	-3	Alluvium	13.5 - 23.5	---	---	---	7.639	3.07	---	105.5	7.06	---
ZTS-MW118	10/21/2022	N	BL02	2A	Upgradient	-3	Alluvium	13.5 - 23.5	<2.18	18	<3.02	4.031	3.4	0 U	94.6	6.98	0 U
ZTS-MW138	10/20/2022	N	BL02	2A	Downgradient	5	Alluvium	14.0 - 24.0	<2.18	14.7	<3.02	5.205	4.22	0 U	117.7	8.02	0 U
ZTS-MW139	10/21/2022	N	BL02	2A	Downgradient	5	Alluvium	13.0 - 23.0	<2.18	12.5	<3.02	4.133	3.25	0 U	76.8	7.05	0 U
LVWPS-MW102A	10/21/2022	N	BL02	NA	Downgradient	30	UMCf	47.0 - 66.6	<2.18	27.5	<3.02	11.664	0.55	0 U	-35	7.26	0 U
LVWPS-MW102B	10/21/2022	N	BL02	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	<2.18	<0.664	<3.02	49.317	0.48	0 U	-240.7	7.38	0 U
ZTS-MW113	10/25/2022	N	BL02	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	<2.18	19.2	<3.02	7.997	2.89	0 U	91.9	7.13	0 U
<b>Post-Construction Performance Monitoring Results</b>																	
ZTS-MW137	5/31/2023	N	PM01	2A	Upgradient	-9	Alluvium	14.0 - 24.0	<2.18	18	<3.02	7.054	4.96	0 U	76.1	7.01	0 U
ZTS-MW137	8/24/2023	N	PM02	2A	Upgradient	-9	Alluvium	14.0 - 24.0	<2.18	20.9	3.6 J	6.633	4.84	0 U	299.7	7.09	0 U
ZTS-MW137	12/1/2023	N	PM03	2A	Upgradient	-9	Alluvium	14.0 - 24.0	<2.18	20	<3.02	6.965	4.99	0 U	135.7	6.95	0 U
ZTS-MW137	2/23/2024	N	PM04	2A	Upgradient	-9	Alluvium	14.0 - 24.0	<2.18	20.3	<3.02	6837	5.52	0 U	122.3	7.22	0 U
ZTS-MW118	5/31/2023	N	PM01	2A	Upgradient	-3	Alluvium	13.5 - 23.5	<2.18	15.2	<3.02	6.733	3.67	0 U	95.4	7.01	0 U
ZTS-MW118	5/31/2023	FD	PM01	2A	Upgradient	-3	Alluvium	13.5 - 23.5	<2.18	15.9	<3.02	----	----	----	----	----	----
ZTS-MW118	8/24/2023	N	PM02	2A	Upgradient	-3	Alluvium	13.5 - 23.5	<2.18	19.1	<3.02	6.614	3.19	0 U	367.4	7.08	0 U
ZTS-MW118	8/24/2023	FD	PM02	2A	Upgradient	-3	Alluvium	13.5 - 23.5	<2.18	19.5	<3.02	----	----	----	----	----	----
ZTS-MW118	12/1/2023	N	PM03	2A	Upgradient	-3	Alluvium	13.5 - 23.5	<2.18	18.1	<3.02	7.272	3.3	0 U	90.7	6.92	0 U
ZTS-MW118	12/1/2023	FD	PM03	2A	Upgradient	-3	Alluvium	13.5 - 23.5	<2.18								

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**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	Dissolved Metals by SW6020	Dissolved Metals by SW6020	Dissolved Metals by SW6020	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	
									Titanium	Vanadium	Zinc	Conductivity	Dissolved Oxygen	Ferrous Iron	Oxidation-Reduction Potential	pH	Sulfide
									µg/L	µg/L	µg/L	mS/cm	mg/L	mg/L	mV	SU	mg/L
feet																	
ZTS-MW190	2/22/2024	N	PM04	2A	Upgradient	-3	Alluvium	14.3 - 24.0	<2.18	18.3	<3.02	6.555	4.7	0 U	71.5	7.03	0 U
ZTS-MW196	5/30/2023	N	PM01	2A	Upgradient	-3	Alluvium	13.8 - 23.5	<2.18	16.9	<3.02	7.466	4.85	0.5	123.9	7.1	0 U
ZTS-MW196	8/25/2023	N	PM02	2A	Upgradient	-3	Alluvium	13.8 - 23.5	<2.18	17.9	<3.02	6.539	4.14	0 U	72.8	7.14	0 U
ZTS-MW196	11/30/2023	N	PM03	2A	Upgradient	-3	Alluvium	13.8 - 23.5	<2.18	19.2	9.95 J	6.832	3.6	0 U	76.1	7.11	0 U
ZTS-MW196	2/26/2024	N	PM04	2A	Upgradient	-3	Alluvium	13.8 - 23.5	<2.18	19.9	<3.02	6.47	6.18	0 U	76.9	7.03	0 U
ZTS-MW202	5/30/2023	N	PM01	2A	Upgradient	-3	UMCf	28.8 - 38.5	<2.18	14.6	3.2 J	7.119	4.56	0.5	101.5	7.19	0 U
ZTS-MW202	8/28/2023	N	PM02	2A	Upgradient	-3	UMCf	28.8 - 38.5	<2.18	15.7	7.3 J	6.112	4.69	0 U	54.1	7.23	0 U
ZTS-MW202	12/1/2023	N	PM03	2A	Upgradient	-3	UMCf	28.8 - 38.5	<2.18	10.6	<3.02	4.958	1.26	0 U	100.8	7.33	0 U
ZTS-MW202	2/27/2024	N	PM04	2A	Upgradient	-3	UMCf	28.8 - 38.5	<2.18	9.44	<3.02	4.899	2.65	0 U	64.4	7.2	0 U
ZTS-MW192	5/22/2023	N	PM01	2A	Center of Array	0	Alluvium	14.3 - 24.0	<2.18	11.6	<3.02	6.886	4.71	0 U	148.3	7.58	0 U
ZTS-MW192	8/21/2023	N	PM02	2A	Center of Array	0	Alluvium	14.3 - 24.0	<2.18	16.8	5.17 J	6.556	4.38	0 U	139.7	7.2	0 U
ZTS-MW192	11/28/2023	N	PM03	2A	Center of Array	0	Alluvium	14.3 - 24.0	<2.18	19.3	<3.02	7.121	4.38	0 U	165.2	7.05	0 U
ZTS-MW192	2/20/2024	N	PM04	2A	Center of Array	0	Alluvium	14.3 - 24.0	<2.18	18.6	<3.02	6880	4.9	0 U	82.1	7.2	0 U
ZTS-MW191	5/26/2023	N	PM01	2A	Downgradient	1	Alluvium	14.8 - 24.5	<2.18	1.23 J	<3.02	6.105	1.63	0 U	-246	8.47	0 U
ZTS-MW191	8/22/2023	N	PM02	2A	Downgradient	1	Alluvium	14.8 - 24.5	<2.18	1.62 J	7.71 J	7.178	3.98	0 U	-100	8.44	0 U
ZTS-MW191	11/29/2023	N	PM03	2A	Downgradient	1	Alluvium	14.8 - 24.5	<2.18	4.2 J	<3.02	6.73	1.58	0 U	-116.2	8.04	0 U
ZTS-MW191	2/21/2024	N	PM04	2A	Downgradient	1	Alluvium	14.8 - 24.5	<2.18	6.22	<3.02	6543	1.21	0 U	-8.7	7.4	0 U
ZTS-MW195	5/26/2023	N	PM01	2A	Downgradient	1	Alluvium	14.3 - 24.0	<2.18	14.4	<3.02	5.918	3.42	0 U	73.2	7.16	0 U
ZTS-MW195	8/21/2023	N	PM02	2A	Downgradient	1	Alluvium	14.3 - 24.0	<2.18	15.2	<3.02	6.624	3.67	0 U	-81.9	7.29	0 U
ZTS-MW195	11/29/2023	N	PM03	2A	Downgradient	1	Alluvium	14.3 - 24.0	<2.18	17.3	<3.02	7.055	3.29	0 U	139.2	7.02	0 U
ZTS-MW195	2/21/2024	N	PM04	2A	Downgradient	1	Alluvium	14.3 - 24.0	<2.18	17.8	<3.02	6586	4.34	0 U	96.2	7.13	0 U
ZTS-MW138	5/24/2023	N	PM01	2A	Downgradient	5	Alluvium	14.0 - 24.0	<2.18	17.6	3.79 J	7.03	4.93	0 U	108.5	7.18	0 U
ZTS-MW138	8/21/2023	N	PM02	2A	Downgradient	5	Alluvium	14.0 - 24.0	<2.18	18	5.22 J	6.578	5.09	0 U	386.4	7.02	0 U
ZTS-MW138	11/28/2023	N	PM03	2A	Downgradient	5	Alluvium	14.0 - 24.0	<2.18	20.3	<3.02	7.104	5.39	0 U	180	7.08	0 U
ZTS-MW138	2/21/2024	N	PM04	2A	Downgradient	5	Alluvium	14.0 - 24.0	<2.18	18.9	<3.02	6553	6.05	0 U	92.4	7.2	0 U
ZTS-MW139	5/24/2023	N	PM01	2A	Downgradient	5	Alluvium	13.0 - 23.0	<2.18	16	6.02 J	7.002	1.14	0 U	36.4	7.12	0 U
ZTS-MW139	8/21/2023	N	PM02	2A	Downgradient	5	Alluvium	13.0 - 23.0	<2.18	15.5	<3.02	6.712	2.64	0 U	335.1	6.99	0 U
ZTS-MW139	11/29/2023	N	PM03	2A	Downgradient	5	Alluvium	13.0 - 23.0	<2.18	16.2	<3.02	6.829	2.75	0 U	234.8	6.98	0 U
ZTS-MW139	2/21/2024	N	PM04	2A	Downgradient	5	Alluvium	13.0 - 23.0	<2.18	18.1	<3.02	6599	3.18	0 U	86.4	7.08	0 U
ZTS-MW193	5/25/2023	N	PM01	2A	Downgradient	5	Alluvium	13.6 - 23.3	<2.18	15.4	<3.02	7.165	1.54	0 U	26.4	7.01	0 U
ZTS-MW193	5/25/2023	FD	PM01	2A	Downgradient	5	Alluvium	13.6 - 23.3	<2.18	15.9	<3.02	----	----	----	----	----	----
ZTS-MW193	8/22/2023	N	PM02	2A	Downgradient	5	Alluvium	13.6 - 23.3	<2.18	14.9	<3.02	6.559	2.56	0 U	339.9	7.03	0 U
ZTS-MW193	8/22/2023	FD	PM02	2A	Downgradient	5	Alluvium	13.6 - 23.3	<2.18	15.6	<3.02	----	----	----	----	----	----
ZTS-MW193	11/30/2023	N	PM03	2A	Downgradient	5	Alluvium	13.6 - 23.3	<2.18	16.9	<3.02	7.096	4.78	0 U	218.9	6.99	0 U
ZTS-MW193	11/30/2023	FD	PM03	2A	Downgradient	5	Alluvium	13.6 - 23.3	<2.18	15.6	<3.02	----	----	----	----	----	----
ZTS-MW193	2/22/2024	N	PM04	2A	Downgradient	5	Alluvium	13.6 - 23.3	<2.18	18.4	<3.02	6918	4.6	0 U	136.3	7.19	0 U
ZTS-MW193	2/22/2024	FD	PM04	2A	Downgradient	5	Alluvium	13.6 - 23.3	<2.18	18.6	<3.02	----	----	----	----	----	----
ZTS-MW203	5/30/2023	N	PM01	2A	Downgradient	5	UMCf	28.3 - 38.0	<2.18	15.5	3.85 J	6.503	0.85	0 U	19.5	6.98	0 U
ZTS-MW203	8/23/2023	N	PM02	2A	Downgradient	5	UMCf	28.3 - 38.0	<2.18	17.7	21.3 J	6.047	1.27	0 U	428	7.01	0 U
ZTS-MW203	10/11/2023	N	PM02	2A	Downgradient	5	UMCf	28.3 - 38.0	----								

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Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	Dissolved Metals by SW6020	Dissolved Metals by SW6020	Dissolved Metals by SW6020	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	
									Titanium	Vanadium	Zinc	Conductivity	Dissolved Oxygen	Ferrous Iron	Oxidation-Reduction Potential	pH	Sulfide
									µg/L	µg/L	µg/L	mS/cm	mg/L	mg/L	mV	SU	mg/L
feet																	
ZTS-MW194	5/25/2023	N	PM01	2A	Downgradient	15	Alluvium	17.8 - 22.5	<2.18	17.7	<3.02	6.727	3.82	0 U	71.3	6.97	0 U
ZTS-MW194	8/22/2023	N	PM02	2A	Downgradient	15	Alluvium	17.8 - 22.5	<2.18	16.4	<3.02	6.483	4.64	0 U	367.3	7.01	0 U
ZTS-MW194	11/29/2023	N	PM03	2A	Downgradient	15	Alluvium	17.8 - 22.5	<2.18	18.7	<3.02	7.008	5.14	0 U	209.4	7.02	0 U
ZTS-MW194	2/22/2024	N	PM04	2A	Downgradient	15	Alluvium	17.8 - 22.5	<2.18	19.1	<3.02	6888	5.64	0 U	161	7.18	0 U
LWPS-MW102A	5/30/2023	N	PM01	NA	Downgradient	30	UMCf	47.0 - 66.6	<2.18	27.2	<3.02	12.755	0.65	0 U	24.9	7.1	0 U
LWPS-MW102A	8/23/2023	N	PM02	NA	Downgradient	30	UMCf	47.0 - 66.6	<2.18	29.3	<3.02	11.692	0.42	0 U	262.9	7.2	0 U
LWPS-MW102A	10/11/2023	N	PM02	NA	Downgradient	30	UMCf	47.0 - 66.6	----	----	9.654	0.3	----	111.2	7.46	----	
LWPS-MW102A	10/11/2023	FS	PM02	NA	Downgradient	30	UMCf	47.0 - 66.6	----	----	----	----	----	----	----	----	----
LWPS-MW102A	12/1/2023	N	PM03	NA	Downgradient	30	UMCf	47.0 - 66.6	<2.18	27	<3.02	11.474	1.2	0 U	160	7.08	0 U
LWPS-MW102A	2/27/2024	N	PM04	NA	Downgradient	30	UMCf	47.0 - 66.6	<2.18	27.6	5.42 J	13.23	0.45	0 U	81.2	7.21	0 U
LWPS-MW102B	5/26/2023	N	PM01	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	<2.18	<0.664	<3.02	57.269	0.51	0 U	-179.9	7.35	0.6
LWPS-MW102B	8/23/2023	N	PM02	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	<21.8	<6.64	<30.2	52.223	0.3	0 U	-150	7.38	0.2
LWPS-MW102B	12/1/2023	N	PM03	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	<21.8	<6.64	<30.2	54.624	1.03	0 U	-217.3	7.34	0.2
LWPS-MW102B	2/27/2024	N	PM04	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	<2.18	<0.664	<3.02	54.219	0.37	0 U	-208.2	7.39	0.1
ZTS-MW197	5/26/2023	N	PM01	2A	Downgradient	55	Alluvium	12.8 - 22.5	<2.18	15.3	<3.02	6.438	3.92	0 U	81.7	6.99	0 U
ZTS-MW197	8/22/2023	N	PM02	2A	Downgradient	55	Alluvium	12.8 - 22.5	<2.18	16.2	<3.02	6.552	4	0 U	303.9	7.04	0 U
ZTS-MW197	11/30/2023	N	PM03	2A	Downgradient	55	Alluvium	12.8 - 22.5	<2.18	17.1	<3.02	6.737	5.74	0 U	275.5	6.92	0 U
ZTS-MW197	2/22/2024	N	PM04	2A	Downgradient	55	Alluvium	12.8 - 22.5	<2.18	18.9	<3.02	6893	5.73	0 U	134.1	7.23	0 U
ZTS-MW113	5/26/2023	N	PM01	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	<2.18	17.7	<3.02	6.666	4.65	0 U	91.2	7.07	0 U
ZTS-MW113	8/24/2023	N	PM02	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	<2.18	21.9	<3.02	6.159	3.03	0 U	336.5	7.12	0 U
ZTS-MW113	11/30/2023	N	PM03	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	<2.18	18.8	<3.02	6.75	4.54	0 U	252.7	7.02	0 U
ZTS-MW113	2/23/2024	N	PM04	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	<2.18	19	<3.02	7024	0.82	0 U	109.9	7.26	0 U
<b>Test Area 2B</b>																	
<b>Pre-Construction Baseline Results</b>																	
ZTS-MW133	10/20/2022	N	BL02	2B	Upgradient	-9	UMCf	54.0 - 69.0	<2.18	23.8	<3.02	4.71	1.35	0 U	19.7	7.25	0 U
ZTS-MW117	9/1/2022	N	BL01	2B	Upgradient	-2	UMCf	40.5 - 55.5	----	----	----	5.788	2.29	---	88.4	7.3	---
ZTS-MW117	10/19/2022	N	BL02	2B	Upgradient	-2	UMCf	40.5 - 55.5	<2.18	<0.664	<3.02	2.013	1.7	0 U	-116.3	7.43	0 U
ZTS-MW117	10/19/2022	FD	BL02	2B	Upgradient	-2	UMCf	40.5 - 55.5	<2.18	<0.664	<3.02	----	----	----	----	----	----
ZTS-MW134	10/19/2022	N	BL02	2B	Upgradient	-2	UMCf	26.0 - 36.0	<2.18	16.3	162	3.823	4.84	0 U	136	7.18	0 U
ZTS-MW135	10/19/2022	N	BL02	2B	Downgradient	7	UMCf	54.0 - 69.0	<2.18	24.9	39.8	4.194	1.41	0 U	18.2	7.31	0 U
ZTS-MW136	10/20/2022	N	BL02	2B	Cross Gradient	7	UMCf	27.0 - 47.0	<2.18	<0.664	<3.02	3.095	1.23	0 U	-128.5	7.4	0 U
<b>Post-Construction Performance Monitoring Results</b>																	
ZTS-MW133	5/23/2023	N	PM01	2B	Upgradient	-9	UMCf	54.0 - 69.0	<2.18	24.8	19.3 J	4.27	1.18	0 U	79.3	7.36	0 U
ZTS-MW133	8/30/2023	N	PM02	2B	Upgradient	-9	UMCf	54.0 - 69.0	<2.18	24.6	<3.02	6.904	0.53	0 U	-17	7.28	0 U
ZTS-MW133	12/4/2023	N	PM03	2B	Upgradient	-9	UMCf	54.0 - 69.0	<2.18	26	<3.02	7.645	1.69	0 U	6.6	7.18	0 U
ZTS-MW133	2/23/2024	N	PM04	2B	Upgradient	-9	UMCf	54.0 - 69.0	<2.18	26.4	<3.02	7873	0.4	0 U	-14.3	7.37	0 U
ZTS-MW117	5/25/2023	N	PM01	2B	Upgradient	-2	UMCf	40.5 - 55.5	<2.18	<0.664	3.16 J	4.048	2.35	0.2	-129.2	7.49	0.1
ZTS-MW117	8/24/2023	N	PM02	2B	Upgradient	-2	UMCf	40.5 - 55.5	<2.18	0.989 J	4.87 J	5.283	0.88	0 U	-149.5	6.18	0 U
ZTS-MW117	11/29/2023	N	PM03	2B	Upgradient	-2	UMCf	40.5 - 55.5	<2.18	5.8	40.9	5.959	0.32	0 U	-168.5	7.39	0 U

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	Dissolved Metals by SW6020	Dissolved Metals by SW6020	Dissolved Metals by SW6020	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	
									Titanium	Vanadium	Zinc	Conductivity	Dissolved Oxygen	Ferrous Iron	Oxidation-Reduction Potential	pH	Sulfide
									µg/L	µg/L	µg/L	mS/cm	mg/L	mg/L	mV	SU	mg/L
feet																	
ZTS-MW134	2/23/2024	N	PM04	2B	Upgradient	-2	UMCf	26.0 - 36.0	<2.18	15.2	<3.02	5.434	0.76	0 U	44	7.31	0 U
ZTS-MW198	5/23/2023	N	PM01	2B	Downgradient	2	UMCf	26.1 - 46.0	<2.18	4.53 J	3.27 J	6.361	9.99	0 U	-42.4	7.72	0 U
ZTS-MW198	8/21/2023	N	PM02	2B	Downgradient	2	UMCf	26.1 - 46.0	<2.18	5.63	8.68 J	5.124	1.55	0 U	53.7	70	0 U
ZTS-MW198	11/27/2023	N	PM03	2B	Downgradient	2	UMCf	26.1 - 46.0	<2.18	3.97 J	<3.02	6.544	2.53	0 U	-109.5	7.29	0 U
ZTS-MW198	2/20/2024	N	PM04	2B	Downgradient	2	UMCf	26.1 - 46.0	<2.18	3.32 J	<3.02	5.8	0.32	0 U	-47.2	6.96	0 U
ZTS-MW200	5/23/2023	N	PM01	2B	Downgradient	2	UMCf	50.1 - 65.0	<2.18	<0.664	<3.02	7.098	5.5	0 U	-224.7	8.46	0 U
ZTS-MW200	5/23/2023	FD	PM01	2B	Downgradient	2	UMCf	50.1 - 65.0	<2.18	<0.664	<3.02	----	----	----	----	----	----
ZTS-MW200	8/21/2023	N	PM02	2B	Downgradient	2	UMCf	50.1 - 65.0	<2.18	<0.664	7.39 J	0.058	8.08	0 U	-8.5	6.79	0 U
ZTS-MW200	11/28/2023	N	PM03	2B	Downgradient	2	UMCf	50.1 - 65.0	<2.18	<0.664	<3.02	13.345	0.23	0 U	-271.7	7.55	0.2
ZTS-MW200	2/20/2024	N	PM04	2B	Downgradient	2	UMCf	50.1 - 65.0	<2.18	<0.664	<3.02	6.067	0.13	3	-167.8	9.03	0 U
ZTS-MW201	5/24/2023	N	PM01	2B	Downgradient	2	UMCf	27.1 - 47.0	<2.18	2.17 J	8.27 J	6.689	1.43	0.2	-54.3	7.32	0 U
ZTS-MW201	8/22/2023	N	PM02	2B	Downgradient	2	UMCf	27.1 - 47.0	<2.18	6.67	3.19 J	5.686	0.91	0 U	143.4	7.41	0 U
ZTS-MW201	11/28/2023	N	PM03	2B	Downgradient	2	UMCf	27.1 - 47.0	<2.18	8.86	<3.02	13.359	0.29	0 U	-126.2	7.3	0 U
ZTS-MW201	2/22/2024	N	PM04	2B	Downgradient	2	UMCf	27.1 - 47.0	<2.18	7.97	<3.02	5.727	0.35	0 U	23.7	7.09	0 U
ZTS-MW206	5/24/2023	N	PM01	2B	Downgradient	2	UMCf	50.1 - 65.0	<2.18	15	4.15 J	8.368	0.44	0.2	-161.4	7.25	0 U
ZTS-MW206	8/22/2023	N	PM02	2B	Downgradient	2	UMCf	50.1 - 65.0	<2.18	18.4	3.03 J	0.05	7.45	0 U	122.5	7.8	0 U
ZTS-MW206	11/28/2023	N	PM03	2B	Downgradient	2	UMCf	50.1 - 65.0	<2.18	23.9	<3.02	15.213	0.25	0 U	-85.4	7.24	0 U
ZTS-MW206	2/22/2024	N	PM04	2B	Downgradient	2	UMCf	50.1 - 65.0	<2.18	23	<3.02	6.555	0.38	0 U	-10.3	7.23	0 U
ZTS-MW199	5/23/2023	N	PM01	2B	Downgradient	5	UMCf	50.1 - 65.0	<2.18	21.6	<3.02	7.899	5.73	0 U	-48.6	7.26	0 U
ZTS-MW199	8/22/2023	N	PM02	2B	Downgradient	5	UMCf	50.1 - 65.0	<2.18	22.8	<3.02	6.159	0.94	0 U	85.9	7.29	0 U
ZTS-MW199	11/28/2023	N	PM03	2B	Downgradient	5	UMCf	50.1 - 65.0	<2.18	27.2	<3.02	15.341	0.18	0 U	-161	7.11	0.2
ZTS-MW199	2/20/2024	N	PM04	2B	Downgradient	5	UMCf	50.1 - 65.0	<2.18	28.4	<3.02	6.636	0.19	0 U	-33.6	7.18	0 U
ZTS-MW207	5/24/2023	N	PM01	2B	Downgradient	5	UMCf	26.1 - 46.0	<2.18	4.77 J	8.01 J	5.178	2.32	0 U	-69.2	7.45	0 U
ZTS-MW207	5/24/2023	FD	PM01	2B	Downgradient	5	UMCf	26.1 - 46.0	<2.18	5.16	7.63 J	----	----	----	----	----	----
ZTS-MW207	8/23/2023	N	PM02	2B	Downgradient	5	UMCf	26.1 - 46.0	<2.18	1.74 J	<3.02	3.904	1.11	0 U	45.8	7.29	0 U
ZTS-MW207	8/23/2023	FD	PM02	2B	Downgradient	5	UMCf	26.1 - 46.0	<2.18	1.93 J	<3.02	----	----	----	----	----	----
ZTS-MW207	11/29/2023	N	PM03	2B	Downgradient	5	UMCf	26.1 - 46.0	<2.18	1.58 J	<3.02	4.53	0.25	0 U	-80.8	7.24	0 U
ZTS-MW207	11/29/2023	FD	PM03	2B	Downgradient	5	UMCf	26.1 - 46.0	<2.18	1.42 J	3.08 J	----	----	----	----	----	----
ZTS-MW207	2/22/2024	N	PM04	2B	Downgradient	5	UMCf	26.1 - 46.0	<2.18	1.46 J	<3.02	4.677	0.61	0 U	69	7.24	0 U
ZTS-MW207	2/22/2024	FD	PM04	2B	Downgradient	5	UMCf	26.1 - 46.0	<2.18	1.55 J	<3.02	----	----	----	----	----	----
ZTS-MW135	5/26/2023	N	PM01	2B	Downgradient	7	UMCf	54.0 - 69.0	<2.18	25.9	<3.02	7.334	0.48	0 U	-95.1	7.34	0 U
ZTS-MW135	8/24/2023	N	PM02	2B	Downgradient	7	UMCf	54.0 - 69.0	<2.18	28.6	<3.02	7.108	0.78	0 U	108.9	6.11	0 U
ZTS-MW135	11/30/2023	N	PM03	2B	Downgradient	7	UMCf	54.0 - 69.0	<2.18	27.3	9.41 J	7.452	0.22	0 U	109.5	7.21	0 U
ZTS-MW135	2/22/2024	N	PM04	2B	Downgradient	7	UMCf	54.0 - 69.0	<2.18	28.9	<3.02	7.105	0.18	0 U	-6.6	7.21	0 U
ZTS-MW136	5/26/2023	N	PM01	2B	Cross Gradient	7	UMCf	27.0 - 47.0	<2.18	<0.664	<3.02	3.703	1.01	0.5	-139	7.58	0 U
ZTS-MW136	5/26/2023	FD	PM01	2B	Cross Gradient	7	UMCf	27.0 - 47.0	<2.18	<0.664	<3.02	----	----	----	----	----	----
ZTS-MW136	8/25/2023	N	PM02	2B	Cross Gradient	7	UMCf	27.0 - 47.0	<2.18	<0.664	<3.02	0.034	7.83	0 U	14.3	7.49	0 U
ZTS-MW136	8/25/2023	FD	PM02	2B	Cross Gradient	7	UMCf	27.0 - 47.0	<2.18	<0.664	<3.02	----	----	----	----	----	----
ZTS-MW136	11/29/2023	N	PM03	2B	Cross Gradient	7	UMCf	27.0 - 47.0	<2.18	<0.664	<3.02	3.95	0.19	0 U	-159.8	7.36	0 U
ZTS-MW136	11/29/2023	FD	PM03	2B	Cross Gradient	7	UMCf										

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	Dissolved Metals by SW6020	Dissolved Metals by SW6020	Dissolved Metals by SW6020	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	
									Titanium	Vanadium	Zinc	Conductivity	Dissolved Oxygen	Ferrous Iron	Oxidation-Reduction Potential	pH	Sulfide
									µg/L	µg/L	µg/L	mS/cm	mg/L	mg/L	mV	SU	mg/L
feet																	
ZTS-MW208	8/23/2023	N	PM02	2B	Downgradient	15	UMCf	26.1 - 46.0	<2.18	17.8	3.9 J	5.642	2.93	0 U	267.9	7.38	0 U
ZTS-MW208	11/28/2023	N	PM03	2B	Downgradient	15	UMCf	26.1 - 46.0	<2.18	16	<3.02	12.933	1.61	0 U	-3	7.17	0 U
ZTS-MW208	2/22/2024	N	PM04	2B	Downgradient	15	UMCf	26.1 - 46.0	<2.18	11.1	<3.02	5.378	1.72	0 U	77.2	7.23	0 U
ZTS-MW209	5/25/2023	N	PM01	2B	Downgradient	15	UMCf	50.6 - 65.5	<2.18	23.9	<3.02	8.446	0.79	0 U	90.4	7.38	0 U
ZTS-MW209	8/23/2023	N	PM02	2B	Downgradient	15	UMCf	50.6 - 65.5	<2.18	28.7	6.68 J	6.601	0.83	0 U	247.1	7.37	0 U
ZTS-MW209	11/29/2023	N	PM03	2B	Downgradient	15	UMCf	50.6 - 65.5	<2.18	29	<3.02	7.22	0.28	0 U	2	7.21	0 U
ZTS-MW209	2/22/2024	N	PM04	2B	Downgradient	15	UMCf	50.6 - 65.5	<2.18	29.2	<3.02	7.171	0.19	0 U	66.4	7.2	0 U
<b>Test Area 2C</b>																	
<b>Pre-Construction Baseline Results</b>																	
ZTS-MW140	10/21/2022	N	BL02	2C	Upgradient	-9	Alluvium	15.5 - 25.5	<2.18	19.9	<3.02	4.139	4.97	0 U	112.3	7.08	0 U
ZTS-MW119	9/1/2022	N	BL01	2C	Upgradient	-3	Alluvium	15.0 - 25.0	----	----	----	7.085	3.05	----	115.6	7.03	----
ZTS-MW119	10/19/2022	N	BL02	2C	Upgradient	-3	Alluvium	15.0 - 25.0	<2.18	20.1	<3.02	6.421	4.57	0 U	164.2	7.04	0 U
ZTS-MW119	10/19/2022	FD	BL02	2C	Upgradient	-3	Alluvium	15.0 - 25.0	<2.18	19.7	<3.02	----	----	----	----	----	----
ZTS-MW141	10/21/2022	N	BL02	2C	Downgradient	5	Alluvium	14.5 - 24.5	<2.18	18.4	<3.02	8.367	3.42	0 U	98.6	7.1	0 U
ZTS-MW142	10/21/2022	N	BL02	2C	Downgradient	5	Alluvium	16.0 - 26.0	<2.18	22.2	<3.02	4.16	4.54	0 U	111.6	7.06	0 U
<b>Post-Construction Performance Monitoring Results</b>																	
ZTS-MW140	5/25/2023	N	PM01	2C	Upgradient	-9	Alluvium	15.5 - 25.5	<2.18	19.9	<3.02	3.4	5.48	0 U	198.2	6.91	0 U
ZTS-MW140	5/25/2023	FD	PM01	2C	Upgradient	-9	Alluvium	15.5 - 25.5	<2.18	19.6	<3.02	----	----	----	----	----	----
ZTS-MW140	8/29/2023	N	PM02	2C	Upgradient	-9	Alluvium	15.5 - 25.5	<2.18	19.8	<3.02	6.113	5.57	0 U	88.8	7.14	0 U
ZTS-MW140	8/29/2023	FD	PM02	2C	Upgradient	-9	Alluvium	15.5 - 25.5	<2.18	19.6	<3.02	----	----	----	----	----	----
ZTS-MW140	12/4/2023	N	PM03	2C	Upgradient	-9	Alluvium	15.5 - 25.5	<2.18	22.1	5.55 J	7.244	4.78	0 U	184	7.13	0 U
ZTS-MW140	12/4/2023	FD	PM03	2C	Upgradient	-9	Alluvium	15.5 - 25.5	<2.18	21.8	4.92 J	----	----	----	----	----	----
ZTS-MW140	2/22/2024	N	PM04	2C	Upgradient	-9	Alluvium	15.5 - 25.5	<2.18	19.9	<3.02	6.57	6.38	0 U	93.3	7.03	0 U
ZTS-MW140	2/22/2024	FD	PM04	2C	Upgradient	-9	Alluvium	15.5 - 25.5	<2.18	19.5	<3.02	----	----	----	----	----	----
ZTS-MW119	5/24/2023	N	PM01	2C	Upgradient	-3	Alluvium	15.0 - 25.0	<2.18	19.6	4.28 J	5.041	5.51	0 U	171.1	6.45	0 U
ZTS-MW119	8/29/2023	N	PM02	2C	Upgradient	-3	Alluvium	15.0 - 25.0	<2.18	20	<3.02	6.166	5.36	0 U	52.8	7.11	0 U
ZTS-MW119	12/4/2023	N	PM03	2C	Upgradient	-3	Alluvium	15.0 - 25.0	<2.18	21.8	5.35 J	7.193	4.99	0 U	199.6	7.09	0 U
ZTS-MW119	2/22/2024	N	PM04	2C	Upgradient	-3	Alluvium	15.0 - 25.0	<2.18	19.9	<3.02	6.521	6.6	0 U	99.9	7.07	0 U
ZTS-MW181	5/25/2023	N	PM01	2C	Upgradient	-3	Alluvium	17.3 - 27.0	<2.18	17.8	<3.02	4.69	4.79	0 U	171.3	6.9	0 U
ZTS-MW181	8/25/2023	N	PM02	2C	Upgradient	-3	Alluvium	17.3 - 27.0	<2.18	18.4	<3.02	7.204	4.54	0 U	127.1	7.13	0 U
ZTS-MW181	12/6/2023	N	PM03	2C	Upgradient	-3	Alluvium	17.3 - 27.0	<2.18	21.5	<3.02	7.776	3.65	0 U	110.8	7.04	0 U
ZTS-MW181	2/28/2024	N	PM04	2C	Upgradient	-3	Alluvium	17.3 - 27.0	<2.18	18.9	<3.02	6.172	6.02	0 U	69.9	7.03	0 U
ZTS-MW188	5/26/2023	N	PM01	2C	Upgradient	-3	Alluvium	17.3 - 27.0	<2.18	20.1	<3.02	6.728	5.46	0 U	85.9	7.28	0 U
ZTS-MW188	8/25/2023	N	PM02	2C	Upgradient	-3	Alluvium	17.3 - 27.0	<2.18	20.1	<3.02	6.991	5.64	0 U	143.6	7.12	0 U
ZTS-MW188	12/6/2023	N	PM03	2C	Upgradient	-3	Alluvium	17.3 - 27.0	<2.18	20	4.17 J	7.57	4.92	0 U	95	7.06	0 U
ZTS-MW188	2/23/2024	N	PM04	2C	Upgradient	-3	Alluvium	17.3 - 27.0	<2.18	21.7	<3.02	0.054	8.95	0 U	253.4	7.77	0 U
ZTS-MW204	5/25/2023	N	PM01	2C	Upgradient	-3	UMCf	30.3 - 40.0	<2.18	7.13	<3.02	2.65	1.3	0 U	-14.8	7.24	0 U
ZTS-MW204	8/25/2023	N	PM02	2C	Upgradient	-3	UMCf	30.3 - 40.0	<2.18	6.71	<3.02	4.587	1.49	0 U	34.3	7.22	0 U
ZTS-MW204	12/1/2023	N	PM03	2C	Upgradient	-3	UMCf	30.3 - 40.0	<2.18	6.07	<3.02	3.951	0.99	0 U	-10.3	7.39	0 U
ZTS-MW204	2/22/2024	N	PM04	2C	Upgradient	-3	UMCf	30.3 - 40.0	<2.18	4.42 J	<3.02	3.976					

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	Dissolved Metals by SW6020	Dissolved Metals by SW6020	Dissolved Metals by SW6020	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	
									Titanium	Vanadium	Zinc	Conductivity	Dissolved Oxygen	Ferrous Iron	Oxidation-Reduction Potential	pH	Sulfide
									feet	µg/L	µg/L	µg/L	mS/cm	mg/L	mg/L	mV	SU
ZTS-MW182	11/28/2023	N	PM03	2C	Center of Array	0	Alluvium	17.6 - 27.3	----	----	----	8.143	1.62	0 U	411.7	7.18	0 U
ZTS-MW182	2/19/2024	N	PM04	2C	Center of Array	0	Alluvium	17.6 - 27.3	<2.18	12.4	3.08 J	6.936	2.36	0.5	19.3	7.1	0 U
ZTS-MW183	5/23/2023	N	PM01	2C	Downgradient	1	Alluvium	17.3 - 27.0	<2.18	12.4	15 J	6.083	2.17	0 U	154.5	6.98	0 U
ZTS-MW183	8/22/2023	N	PM02	2C	Downgradient	1	Alluvium	17.3 - 27.0	<2.18	14.1	<3.02	7.209	4.1	0 U	111.9	7.17	0 U
ZTS-MW183	11/28/2023	N	PM03	2C	Downgradient	1	Alluvium	17.3 - 27.0	<2.18	18.7	<3.02	8.325	2.47	0 U	500.7	7.13	0 U
ZTS-MW183	2/20/2024	N	PM04	2C	Downgradient	1	Alluvium	17.3 - 27.0	16 J	23.5	5.79 J	0.084	8.41	0.5	160.9	7.23	0 U
ZTS-MW187	5/24/2023	N	PM01	2C	Downgradient	1	Alluvium	15.3 - 25.0	<2.18	14.7	6.17 J	5.845	4.41	0 U	170.6	7.08	0 U
ZTS-MW187	8/23/2023	N	PM02	2C	Downgradient	1	Alluvium	15.3 - 25.0	<2.18	18.2	<3.02	6.9	3.31	0 U	136.8	7.08	0 U
ZTS-MW187	11/29/2023	N	PM03	2C	Downgradient	1	Alluvium	15.3 - 25.0	<2.18	16.4	5.5 J	8.812	3.69	0 U	484.2	7.08	0 U
ZTS-MW187	2/20/2024	N	PM04	2C	Downgradient	1	Alluvium	15.3 - 25.0	<2.18	17.1	<3.02	6.784	3.18	0 U	165.5	7.15	0 U
ZTS-MW141	5/25/2023	N	PM01	2C	Downgradient	5	Alluvium	14.5 - 24.5	<2.18	18.4	<3.02	0.064	7.42	0 U	177.3	7.98	0 U
ZTS-MW141	8/23/2023	N	PM02	2C	Downgradient	5	Alluvium	14.5 - 24.5	<2.18	19.7	3.27 J	7.071	4.86	0 U	120.4	7.08	0 U
ZTS-MW141	11/29/2023	N	PM03	2C	Downgradient	5	Alluvium	14.5 - 24.5	<2.18	19.2	<3.02	9.12	4.63	0 U	368.9	7.07	0 U
ZTS-MW141	2/22/2024	N	PM04	2C	Downgradient	5	Alluvium	14.5 - 24.5	<2.18	18.5	<3.02	7.617	5.12	0 U	79.1	7.18	0 U
ZTS-MW142	5/26/2023	N	PM01	2C	Downgradient	5	Alluvium	16.0 - 26.0	<2.18	16.4	<3.02	6.48	2.78	0 U	115	7.09	0 U
ZTS-MW142	8/24/2023	N	PM02	2C	Downgradient	5	Alluvium	16.0 - 26.0	<2.18	20.7	9.45 J	6.953	3.05	0 U	133.3	7.15	0 U
ZTS-MW142	11/30/2023	N	PM03	2C	Downgradient	5	Alluvium	16.0 - 26.0	<2.18	18.1	<3.02	8.581	2.14	0 U	473.8	7.17	0 U
ZTS-MW142	2/22/2024	N	PM04	2C	Downgradient	5	Alluvium	16.0 - 26.0	<2.18	19.6	<3.02	7.666	4.5	0 U	108.6	7.17	0 U
ZTS-MW184	5/24/2023	N	PM01	2C	Downgradient	5	Alluvium	16.3 - 26.0	<2.18	17.1	4.74 J	5.921	2.7	0 U	161.6	6.9	0 U
ZTS-MW184	8/22/2023	N	PM02	2C	Downgradient	5	Alluvium	16.3 - 26.0	<2.18	15.9	<3.02	7.23	2.91	0 U	92.6	7.15	0 U
ZTS-MW184	11/28/2023	N	PM03	2C	Downgradient	5	Alluvium	16.3 - 26.0	<2.18	21	<3.02	8.408	2.21	0 U	486.8	7.12	0 U
ZTS-MW184	2/20/2024	N	PM04	2C	Downgradient	5	Alluvium	16.3 - 26.0	<2.18	18.4	<3.02	6.871	5.06	0 U	174.9	7.18	0 U
ZTS-MW205	5/24/2023	N	PM01	2C	Downgradient	5	UMCf	30.3 - 40.0	<2.18	2.65 J	5.8 J	2.703	2.04	0 U	112.4	7.31	0 U
ZTS-MW205	8/23/2023	N	PM02	2C	Downgradient	5	UMCf	30.3 - 40.0	<2.18	3.39 J	3.04 J	2.826	0.27	0 U	-111.6	7.48	0 U
ZTS-MW205	11/29/2023	N	PM03	2C	Downgradient	5	UMCf	30.3 - 40.0	<2.18	<0.664	<3.02	3.474	0.18	0 U	-20.9	7.48	0 U
ZTS-MW205	2/22/2024	N	PM04	2C	Downgradient	5	UMCf	30.3 - 40.0	<2.18	4.1 J	<3.02	3.843	0.16	0 U	-40.5	7.53	0 U
ZTS-MW185	5/25/2023	N	PM01	2C	Downgradient	15	Alluvium	15.3 - 25.0	<2.18	17.3	3.45 J	6.051	5.64	0 U	172.6	7.21	0 U
ZTS-MW185	8/24/2023	N	PM02	2C	Downgradient	15	Alluvium	15.3 - 25.0	<2.18	20.2	5.61 J	6.967	5.48	0 U	139.9	7.16	0 U
ZTS-MW185	11/30/2023	N	PM03	2C	Downgradient	15	Alluvium	15.3 - 25.0	<2.18	17.7	<3.02	8.65	4.95	0 U	466.9	7.19	0 U
ZTS-MW185	2/22/2024	N	PM04	2C	Downgradient	15	Alluvium	15.3 - 25.0	<2.18	19.7	<3.02	7.388	6.31	0 U	128.3	7.21	0 U
ZTS-MW186	5/25/2023	N	PM01	2C	Downgradient	25	Alluvium	15.3 - 25.0	<2.18	16.4	<3.02	6.186	5.54	0 U	190.7	7.23	0 U
ZTS-MW186	8/24/2023	N	PM02	2C	Downgradient	25	Alluvium	15.3 - 25.0	<2.18	19.3	3.11 J	7.107	5.23	0 U	119.1	7.15	0 U
ZTS-MW186	11/30/2023	N	PM03	2C	Downgradient	25	Alluvium	15.3 - 25.0	<2.18	16.9	<3.02	8.738	4.29	0 U	485.6	7.16	0 U
ZTS-MW186	2/23/2024	N	PM04	2C	Downgradient	25	Alluvium	15.3 - 25.0	<2.18	19.7	<3.02	0.069	8.93	0 U	242.1	7.57	0 U
ZTS-MW189	5/25/2023	N	PM01	2C	Downgradient	55	Alluvium	12.8 - 23.0	<2.18	17	3.65 J	6.172	3.91	0 U	140.5	7.2	0 U
ZTS-MW189	8/25/2023	N	PM02	2C	Downgradient	55	Alluvium	12.8 - 23.0	<2.18	18.2	3.94 J	7.064	4.98	0 U	130.6	7.1	0 U
ZTS-MW189	12/1/2023	N	PM03	2C	Downgradient	55	Alluvium	12.8 - 23.0	<2.18	18.9	<3.02	8.395	2.7	0 U	497.3	7.11	0 U
ZTS-MW189	2/23/2024	N	PM04	2C	Downgradient	55	Alluvium	12.8 - 23.0	<2.18	19	<3.02	9.343	4.48	0 U	173.9	7.17	0 U

## **General Vicinity**

## **Pre-Construction Baseline Results**

ZTS-MW116	9/1/2022	N	BL01	NA	NA	NA	UMCf	33.0 - 48.0	---	---	---	6.685	0.36	---	-0.2	7.34	---
ZTS-MW116	10/25/2022	N	BL02	NA	NA	NA	UMCf	33.0 - 48.0	<2.18	15.4	<3.02	7.049	0.46	0 U	-17.7	7.35	0 U
ZTS-MW128	9/1/2022	N	BL01	NA	NA	NA	UMCf	42.0 - 52.0	---	---	---	7.153	0.53	---	85.2	7.34	---
ZTS-MW128	10/25/2022	N	BL02	NA	NA	NA	UMCf	42.0 - 52.0	<2.18	11	<3.02	7.65	0.65	0 U	40.8	7.22	0 U

**Table 2**  
**Groundwater Analytical Results**  
 Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup> feet	Screened Lithology	Screened Interval	Dissolved Metals by SW6020	Dissolved Metals by SW6020	Dissolved Metals by SW6020	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS	FIELD TESTS
									Titanium	Vanadium	Zinc	Conductivity	Dissolved Oxygen	Ferrous Iron	Oxidation-Reduction Potential	pH	Sulfide
									µg/L	µg/L	µg/L	mS/cm	mg/L	mg/L	mV	SU	mg/L
<b>Post-Construction Performance Monitoring Results</b>																	
ZTS-MW116	5/24/2023	N	PM01	NA	NA	NA	UMCf	33.0 - 48.0	<2.18	15.9	4.24 J	3.951	1.13	0 U	68.3	6.82	0 U
ZTS-MW116	8/29/2023	N	PM02	NA	NA	NA	UMCf	33.0 - 48.0	<2.18	15.5	11.1 J	5.763	2.05	0 U	39.1	7.33	0 U
ZTS-MW116	12/5/2023	N	PM03	NA	NA	NA	UMCf	33.0 - 48.0	<2.18	16.4	<3.02	6.326	0.09	0 U	127.2	7.31	0 U
ZTS-MW116	2/27/2024	N	PM04	NA	NA	NA	UMCf	33.0 - 48.0	<2.18	16.4	<3.02	7.149	0.44	0 U	-37.6	7.28	0 U
ZTS-MW128	5/24/2023	N	PM01	NA	NA	NA	UMCf	42.0 - 52.0	<2.18	16.4	7.14 J	4.951	1.18	0 U	47.5	6.58	0 U
ZTS-MW128	8/30/2023	N	PM02	NA	NA	NA	UMCf	42.0 - 52.0	<2.18	17.7	<3.02	5.846	0.95	0 U	24.2	7.2	0 U
ZTS-MW128	12/5/2023	N	PM03	NA	NA	NA	UMCf	42.0 - 52.0	<2.18	18	<3.02	6.634	1.63	0 U	151.7	7.22	0 U
ZTS-MW128	2/28/2024	N	PM04	NA	NA	NA	UMCf	42.0 - 52.0	<2.18	16.2	<3.02	5.345	0.37	0 U	20.9	7.24	0 U

## Notes:

1. Distances from the discontinuous or continuous walls are shown as negative values for upgradient monitoring wells, as zero for monitoring wells screened within the walls, and as positive values for monitoring wells located downgradient of the walls.

bgs - below ground surface

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

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

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

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.

UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

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

mg/L - milligram per liter

mS/cm - millisiemens per centimeter

mV - millivolts

nmol - nanomol

SU - standard units

N - normal field sample

µg/L - micrograms per liter

UMCf - Upper Muddy Creek formation

FD - field duplicate

FS - field split

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	FIELD TESTS	FIELD TESTS								
									Temperature	Turbidity								
									feet	C								
<b>Test Area 1A</b>																		
<b>Pre-Construction Baseline Results</b>																		
ZTS-MW143	10/18/2022	N	BL02	1A	Upgradient	-50	Alluvium	23.0 - 33.0	24.8	7.2								
ZTS-MW124	8/31/2022	N	BL01	1A	Upgradient	-8	Alluvium	24.0 - 34.0	26.7	-3.7								
ZTS-MW124	8/31/2022	FD	BL01	1A	Upgradient	-8	Alluvium	24.0 - 34.0	----	----								
ZTS-MW124	10/18/2022	N	BL02	1A	Upgradient	-8	Alluvium	24.0 - 34.0	25.7	3.5								
ZTS-MW124	10/18/2022	FD	BL02	1A	Upgradient	-8	Alluvium	24.0 - 34.0	----	----								
ZTS-MW125	8/31/2022	N	BL01	1A	Upgradient	-8	UMCf	40.0 - 50.0	31.2	7.5								
ZTS-MW125	10/24/2022	N	BL02	1A	Upgradient	-8	UMCf	40.0 - 50.0	19.2	22.1								
ZTS-MW125	10/24/2022	FD	BL02	1A	Upgradient	-8	UMCf	40.0 - 50.0	----	----								
ZTS-MW144	10/18/2022	N	BL02	1A	Downgradient	35	Alluvium	24.0 - 34.0	22.9	8.2								
<b>Post-Construction Performance Monitoring Results</b>																		
ZTS-MW143	5/26/2023	N	PM01	1A	Upgradient	-50	Alluvium	23.0 - 33.0	24.1	7.5								
ZTS-MW143	8/29/2023	N	PM02	1A	Upgradient	-50	Alluvium	23.0 - 33.0	26.7	11.2								
ZTS-MW143	12/6/2023	N	PM03	1A	Upgradient	-50	Alluvium	23.0 - 33.0	23.5	6.2								
ZTS-MW143	2/21/2024	N	PM04	1A	Upgradient	-50	Alluvium	23.0 - 33.0	23.2	-99 E								
ZTS-MW124R	5/26/2023	N	PM01	1A	Upgradient	-8	Alluvium	24.5 - 34.0	25.8	11.1								
ZTS-MW124R	8/29/2023	N	PM02	1A	Upgradient	-8	Alluvium	24.5 - 34.0	25.4	14.6								
ZTS-MW124R	12/5/2023	N	PM03	1A	Upgradient	-8	Alluvium	24.5 - 34.0	23.9	28.4								
ZTS-MW124R	2/27/2024	N	PM04	1A	Upgradient	-8	Alluvium	24.5 - 34.0	23.9	45.2								
ZTS-MW125	5/25/2023	N	PM01	1A	Upgradient	-8	UMCf	40.0 - 50.0	30.5	7.2								
ZTS-MW125	8/30/2023	N	PM02	1A	Upgradient	-8	UMCf	40.0 - 50.0	25.1	7.3								
ZTS-MW125	12/1/2023	N	PM03	1A	Upgradient	-8	UMCf	40.0 - 50.0	23.1	3.4								
ZTS-MW125	2/26/2024	N	PM04	1A	Upgradient	-8	UMCf	40.0 - 50.0	23.8	4.8								
ZTS-MW153	5/26/2023	N	PM01	1A	Upgradient	-8	Alluvium	24.3 - 34.0	24.1	57.2								
ZTS-MW153	8/31/2023	N	PM02	1A	Upgradient	-8	Alluvium	24.3 - 34.0	24.8	153								
ZTS-MW153	12/1/2023	N	PM03	1A	Upgradient	-8	Alluvium	24.3 - 34.0	23.6	79.4								
ZTS-MW153	2/27/2024	N	PM04	1A	Upgradient	-8	Alluvium	24.3 - 34.0	23.6	13								
ZTS-MW163	5/25/2023	N	PM01	1A	Upgradient	-8	Alluvium	24.3 - 34.0	25.4	5.4								
ZTS-MW163	8/31/2023	N	PM02	1A	Upgradient	-8	Alluvium	24.3 - 34.0	25.9	14.8								
ZTS-MW163	12/1/2023	N	PM03	1A	Upgradient	-8	Alluvium	24.3 - 34.0	23.5	1.6								
ZTS-MW163	2/27/2024	N	PM04	1A	Upgradient	-8	Alluvium	24.3 - 34.0	23.3	2.7								
ZTS-MW150	5/22/2023	N	PM01	1A	Center of Trench	0	Alluvium	24.3 - 34.0	25.7	73.9								
ZTS-MW150	8/21/2023	N	PM02	1A	Center of Trench	0	Alluvium	24.3 - 34.0	24.8	91.7								
ZTS-MW150	11/27/2023	N	PM03	1A	Center of Trench	0	Alluvium	24.3 - 34.0	23.2	9.1								
ZTS-MW150	2/19/2024	N	PM04	1A	Center of Trench	0	Alluvium	24.3 - 34.0	24.5	15.7								
ZTS-MW154	5/24/2023	N	PM01	1A	Center of Trench	0	Alluvium	22.3 - 32.0	26.3	110.5								
ZTS-MW154	8/21/2023	N	PM02	1A	Center of Trench	0	Alluvium	22.3 - 32.0	25.8	75.9								
ZTS-MW154	11/28/2023	N	PM03	1A	Center of Trench	0	Alluvium	22.3 - 32.0	23.3	24.5								
ZTS-MW154	2/20/2024	N	PM04	1A	Center of Trench	0	Alluvium	22.3 - 32.0	22.1	26.5								
ZTS-MW164	5/23/2023	N	PM01	1A	Center of Trench	0	Alluvium	22.3 - 32.0	28.2	77.7								
ZTS-MW164	5/23/2023	FD	PM01	1A	Center of Trench	0	Alluvium	22.3 - 32.0	----	----								
ZTS-MW164	8/18/2023	N	PM02	1A	Center of Trench	0	Alluvium	22.3 - 32.0	26.9	74.4								
ZTS-MW164	8/18/2023	FD	PM02	1A	Center of Trench	0	Alluvium	22.3 - 32.0	----	----								

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	FIELD TESTS	
									feet	Temperature
									C	NTU
ZTS-MW164	11/27/2023	N	PM03	1A	Center of Trench	0	Alluvium	22.3 - 32.0	23.2	21.7
ZTS-MW164	11/27/2023	FD	PM03	1A	Center of Trench	0	Alluvium	22.3 - 32.0	----	----
ZTS-MW164	2/20/2024	N	PM04	1A	Center of Trench	0	Alluvium	22.3 - 32.0	22.7	24.2
ZTS-MW164	2/20/2024	FD	PM04	1A	Center of Trench	0	Alluvium	22.3 - 32.0	----	----
ZTS-MW151	5/25/2023	N	PM01	1A	Downgradient	5	Alluvium	24.3 - 34.0	24	16.7
ZTS-MW151	8/21/2023	N	PM02	1A	Downgradient	5	Alluvium	24.3 - 34.0	25.9	75.6
ZTS-MW151	11/28/2023	N	PM03	1A	Downgradient	5	Alluvium	24.3 - 34.0	24	64.2
ZTS-MW151	2/20/2024	N	PM04	1A	Downgradient	5	Alluvium	24.3 - 34.0	22.3	3.9
ZTS-MW155	5/24/2023	N	PM01	1A	Downgradient	5	Alluvium	20.3 - 35.0	24.3	169.9
ZTS-MW155	5/24/2023	FD	PM01	1A	Downgradient	5	Alluvium	20.3 - 35.0	----	----
ZTS-MW155	8/22/2023	N	PM02	1A	Downgradient	5	Alluvium	20.3 - 35.0	24.8	8.1
ZTS-MW155	8/22/2023	FD	PM02	1A	Downgradient	5	Alluvium	20.3 - 35.0	----	----
ZTS-MW155	11/28/2023	N	PM03	1A	Downgradient	5	Alluvium	20.3 - 35.0	23.9	13.8
ZTS-MW155	11/28/2023	FD	PM03	1A	Downgradient	5	Alluvium	20.3 - 35.0	----	----
ZTS-MW155	2/21/2024	N	PM04	1A	Downgradient	5	Alluvium	20.3 - 35.0	22.6	4.1
ZTS-MW155	2/21/2024	FD	PM04	1A	Downgradient	5	Alluvium	20.3 - 35.0	----	----
ZTS-MW156	5/24/2023	N	PM01	1A	Downgradient	5	UMCf	43.8 - 53.5	33	162.9
ZTS-MW156	8/22/2023	N	PM02	1A	Downgradient	5	UMCf	43.8 - 53.5	27.3	1.8
ZTS-MW156	11/29/2023	N	PM03	1A	Downgradient	5	UMCf	43.8 - 53.5	23	2.6
ZTS-MW156	2/21/2024	N	PM04	1A	Downgradient	5	UMCf	43.8 - 53.5	23.8	26.5
ZTS-MW165	5/31/2023	N	PM01	1A	Downgradient	5	Alluvium	22.3 - 32.0	23.7	-0.6
ZTS-MW165	8/25/2023	N	PM02	1A	Downgradient	5	Alluvium	22.3 - 32.0	25.2	4.1
ZTS-MW165	11/30/2023	N	PM03	1A	Downgradient	5	Alluvium	22.3 - 32.0	23.7	3.9
ZTS-MW165	2/23/2024	N	PM04	1A	Downgradient	5	Alluvium	22.3 - 32.0	23.4	3.1
ZTS-MW152	5/25/2023	N	PM01	1A	Downgradient	15	Alluvium	23.3 - 33.0	24.8	36.6
ZTS-MW152	8/22/2023	N	PM02	1A	Downgradient	15	Alluvium	23.3 - 33.0	24.6	4
ZTS-MW152	11/28/2023	N	PM03	1A	Downgradient	15	Alluvium	23.3 - 33.0	24.1	13.8
ZTS-MW152	2/20/2024	N	PM04	1A	Downgradient	15	Alluvium	23.3 - 33.0	22	3
ZTS-MW157	5/25/2023	N	PM01	1A	Downgradient	15	Alluvium	23.3 - 33.0	25.6	10.7
ZTS-MW157	8/23/2023	N	PM02	1A	Downgradient	15	Alluvium	23.3 - 33.0	26	10.9
ZTS-MW157	11/29/2023	N	PM03	1A	Downgradient	15	Alluvium	23.3 - 33.0	22.9	2
ZTS-MW157	2/21/2024	N	PM04	1A	Downgradient	15	Alluvium	23.3 - 33.0	22.9	2.4
ZTS-MW162	5/25/2023	N	PM01	1A	Downgradient	15	Alluvium	23.3 - 33.0	26.1	8.6
ZTS-MW162	8/18/2023	N	PM02	1A	Downgradient	15	Alluvium	23.3 - 33.0	27.8	58.4
ZTS-MW162	11/30/2023	N	PM03	1A	Downgradient	15	Alluvium	23.3 - 33.0	22	3.3
ZTS-MW162	2/21/2024	N	PM04	1A	Downgradient	15	Alluvium	23.3 - 33.0	23.7	3
ZTS-MW149	5/31/2023	N	PM01	1A	Downgradient	25	Alluvium	23.3 - 33.0	24.8	52.6
ZTS-MW149	8/24/2023	N	PM02	1A	Downgradient	25	Alluvium	23.3 - 33.0	26.1	15.2
ZTS-MW149	11/30/2023	N	PM03	1A	Downgradient	25	Alluvium	23.3 - 33.0	23.5	6.9
ZTS-MW149	2/23/2024	N	PM04	1A	Downgradient	25	Alluvium	23.3 - 33.0	22.7	6.1
ZTS-MW144	5/31/2023	N	PM01	1A	Downgradient	35	Alluvium	24.0 - 34.0	24.7	-1
ZTS-MW144	8/24/2023	N	PM02	1A	Downgradient	35	Alluvium	24.0 - 34.0	25.1	43.6
ZTS-MW144	11/30/2023	N	PM03	1A	Downgradient	35	Alluvium	24.0 - 34.0	23.5	10.2

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	FIELD TESTS	
									Temperature	Turbidity
									C	NTU
ZTS-MW144	2/23/2024	N	PM04	1A	Downgradient	35	Alluvium	24.0 - 34.0	23.6	5.6
ZTS-MW158	5/24/2023	N	PM01	1A	Downgradient	50	Alluvium	23.3 - 33.0	26.1	35.5
ZTS-MW158	8/25/2023	N	PM02	1A	Downgradient	50	Alluvium	23.3 - 33.0	26.7	39.7
ZTS-MW158	12/1/2023	N	PM03	1A	Downgradient	50	Alluvium	23.3 - 33.0	23.1	3.2
ZTS-MW158	2/27/2024	N	PM04	1A	Downgradient	50	Alluvium	23.3 - 33.0	23.7	4.2
ZTS-MW159	5/24/2023	N	PM01	1A	Downgradient	50	UMCf	38.8 - 48.5	33.7	4.5
ZTS-MW159	8/25/2023	N	PM02	1A	Downgradient	50	UMCf	38.8 - 48.5	26.3	11.4
ZTS-MW159	12/1/2023	N	PM03	1A	Downgradient	50	UMCf	38.8 - 48.5	23	3.6
ZTS-MW159	2/27/2024	N	PM04	1A	Downgradient	50	UMCf	38.8 - 48.5	23.6	5.7
ZTS-MW160	5/24/2023	N	PM01	1A	Downgradient	100	Alluvium	23.3 - 33.0	24.8	2.6
ZTS-MW160	8/28/2023	N	PM02	1A	Downgradient	100	Alluvium	23.3 - 33.0	25.2	20.4
ZTS-MW160	12/5/2023	N	PM03	1A	Downgradient	100	Alluvium	23.3 - 33.0	24.1	2.4
ZTS-MW160	2/27/2024	N	PM04	1A	Downgradient	100	Alluvium	23.3 - 33.0	24.6	3.3
ZTS-MW161	5/26/2023	N	PM01	1A	Downgradient	150	Alluvium	24.3 - 34.0	22.7	17.9
ZTS-MW161	8/25/2023	N	PM02	1A	Downgradient	150	Alluvium	24.3 - 34.0	24.7	11
ZTS-MW161	8/25/2023	FD	PM02	1A	Downgradient	150	Alluvium	24.3 - 34.0	----	----
ZTS-MW161	12/1/2023	N	PM03	1A	Downgradient	150	Alluvium	24.3 - 34.0	24.3	143.7
ZTS-MW161	12/1/2023	FD	PM03	1A	Downgradient	150	Alluvium	24.3 - 34.0	----	----
ZTS-MW161	2/23/2024	N	PM04	1A	Downgradient	150	Alluvium	24.3 - 34.0	24	112.4
ZTS-MW161	2/23/2024	FD	PM04	1A	Downgradient	150	Alluvium	24.3 - 34.0	----	----
<b>Between Test Area 1A and Test Area 1B</b>										
<b>Pre-Construction Baseline Results</b>										
ZTS-MW145	10/24/2022	N	BL02	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	23.3	9.5
ZTS-MW146	10/24/2022	N	BL02	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	18.1	5
<b>Post-Construction Performance Monitoring Results</b>										
ZTS-MW145	5/22/2023	N	PM01	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	29.2	2.9
ZTS-MW145	8/30/2023	N	PM02	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	24.8	2.7
ZTS-MW145	12/6/2023	N	PM03	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	22.9	3
ZTS-MW145	2/21/2024	N	PM04	1A/1B	Upgradient	-50	UMCf	39.0 - 49.0	23.3	17
ZTS-MW146	5/26/2023	N	PM01	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	24.8	5.3
ZTS-MW146	8/25/2023	N	PM02	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	28.6	2.4
ZTS-MW146	11/30/2023	N	PM03	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	23.4	3.5
ZTS-MW146	2/23/2024	N	PM04	1A/1B	Downgradient	35	UMCf	41.0 - 51.0	21.9	3.3
<b>Test Area 1B</b>										
<b>Pre-Construction Baseline Results</b>										
ZTS-MW147	10/18/2022	N	BL02	1B	Upgradient	-50	Alluvium	19.5 - 29.5	23.3	34.8
ZTS-MW126	8/31/2022	N	BL01	1B	Upgradient	-8	Alluvium	20.0 - 30.0	26.9	5
ZTS-MW126	10/18/2022	N	BL02	1B	Upgradient	-8	Alluvium	20.0 - 30.0	24.8	14.2
ZTS-MW126	10/18/2022	FD	BL02	1B	Upgradient	-8	Alluvium	20.0 - 30.0	----	----
ZTS-MW127	8/31/2022	N	BL01	1B	Upgradient	-8	Alluvium	18.0 - 23.0	28	6.3
ZTS-MW127	10/24/2022	N	BL02	1B	Upgradient	-8	Alluvium	18.0 - 23.0	22.4	12.9
ZTS-MW148	10/24/2022	N	BL02	1B	Downgradient	35	Alluvium	22.0 - 32.0	23.1	20.8
LWWPS-MW107A	10/24/2022	N	BL02	1B	Downgradient	50	Alluvium	24.8 - 34.5	21.7	5.6
LWWPS-MW107B	10/21/2022	N	BL02	1B	Downgradient	50	UMCf	46.0 - 65.8	26.6	8.9

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	FIELD TESTS	FIELD TESTS
									Temperature	Turbidity
									C	NTU
LVWPS-MW107C	10/24/2022	N	BL02	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	21.3	333.7
<b>Post-Construction Performance Monitoring Results</b>										
ZTS-MW147	5/26/2023	N	PM01	1B	Upgradient	-50	Alluvium	19.5 - 29.5	26.8	7.4
ZTS-MW147	8/30/2023	N	PM02	1B	Upgradient	-50	Alluvium	19.5 - 29.5	28.1	6.6
ZTS-MW147	12/1/2023	N	PM03	1B	Upgradient	-50	Alluvium	19.5 - 29.5	22.6	6.5
ZTS-MW147	2/23/2024	N	PM04	1B	Upgradient	-50	Alluvium	19.5 - 29.5	23.2	25
ZTS-MW126	5/25/2023	N	PM01	1B	Upgradient	-8	Alluvium	20.0 - 30.0	27.7	14.1
ZTS-MW126	8/25/2023	N	PM02	1B	Upgradient	-8	Alluvium	20.0 - 30.0	26.1	9
ZTS-MW126	11/30/2023	N	PM03	1B	Upgradient	-8	Alluvium	20.0 - 30.0	22.6	21
ZTS-MW126	2/23/2024	N	PM04	1B	Upgradient	-8	Alluvium	20.0 - 30.0	22.5	3.7
ZTS-MW127R	5/25/2023	N	PM01	1B	Upgradient	-8	Alluvium	18.5 - 23.0	23.8	13.8
ZTS-MW127R	8/28/2023	N	PM02	1B	Upgradient	-8	Alluvium	18.5 - 23.0	27.2	7.8
ZTS-MW127R	11/30/2023	N	PM03	1B	Upgradient	-8	Alluvium	18.5 - 23.0	23.6	8.3
ZTS-MW127R	2/23/2024	N	PM04	1B	Upgradient	-8	Alluvium	18.5 - 23.0	22.9	6.8
ZTS-MW169	5/24/2023	N	PM01	1B	Upgradient	-8	Alluvium	17.1 - 27.0	27	9.8
ZTS-MW169	8/28/2023	N	PM02	1B	Upgradient	-8	Alluvium	17.1 - 27.0	26.5	10.9
ZTS-MW169	11/30/2023	N	PM03	1B	Upgradient	-8	Alluvium	17.1 - 27.0	23.3	27
ZTS-MW169	2/23/2024	N	PM04	1B	Upgradient	-8	Alluvium	17.1 - 27.0	23.4	18.4
ZTS-MW170	5/24/2023	N	PM01	1B	Upgradient	-8	UMCf	31.1 - 41.0	26.7	20.5
ZTS-MW170	8/29/2023	N	PM02	1B	Upgradient	-8	UMCf	31.1 - 41.0	24.6	11.3
ZTS-MW170	11/30/2023	N	PM03	1B	Upgradient	-8	UMCf	31.1 - 41.0	23	13.2
ZTS-MW170	2/23/2024	N	PM04	1B	Upgradient	-8	UMCf	31.1 - 41.0	23.1	7.2
ZTS-MW166	5/23/2023	N	PM01	1B	Center of Trench	0	Alluvium	19.8 - 29.5	32.1	13.1
ZTS-MW166	8/21/2023	N	PM02	1B	Center of Trench	0	Alluvium	19.8 - 29.5	24.9	44.3
ZTS-MW166	11/28/2023	N	PM03	1B	Center of Trench	0	Alluvium	19.8 - 29.5	23.1	4.8
ZTS-MW166	2/20/2024	N	PM04	1B	Center of Trench	0	Alluvium	19.8 - 29.5	21.5	31
ZTS-MW171	5/22/2023	N	PM01	1B	Center of Trench	0	Alluvium	19.3 - 29.0	25.5	255
ZTS-MW171	8/21/2023	N	PM02	1B	Center of Trench	0	Alluvium	19.3 - 29.0	24.8	33.1
ZTS-MW171	11/27/2023	N	PM03	1B	Center of Trench	0	Alluvium	19.3 - 29.0	23.4	28.9
ZTS-MW171	2/19/2024	N	PM04	1B	Center of Trench	0	Alluvium	19.3 - 29.0	24.7	33.9
ZTS-MW178	5/25/2023	N	PM01	1B	Center of Trench	0	Alluvium	17.8 - 27.5	27.4	74.7
ZTS-MW178	8/21/2023	N	PM02	1B	Center of Trench	0	Alluvium	17.8 - 27.5	27.7	16.9
ZTS-MW178	11/28/2023	N	PM03	1B	Center of Trench	0	Alluvium	17.8 - 27.5	22.6	2.5
ZTS-MW178	2/20/2024	N	PM04	1B	Center of Trench	0	Alluvium	17.8 - 27.5	22.8	6.8
ZTS-MW167	5/24/2023	N	PM01	1B	Downgradient	5	Alluvium	23.3 - 33.0	25.1	8.4
ZTS-MW167	8/22/2023	N	PM02	1B	Downgradient	5	Alluvium	23.3 - 33.0	24.5	70.1
ZTS-MW167	11/28/2023	N	PM03	1B	Downgradient	5	Alluvium	23.3 - 33.0	23.7	7.8
ZTS-MW167	2/20/2024	N	PM04	1B	Downgradient	5	Alluvium	23.3 - 33.0	22.5	2.3
ZTS-MW172	5/23/2023	N	PM01	1B	Downgradient	5	Alluvium	17.3 - 27.0	24	7.7
ZTS-MW172	5/23/2023	FD	PM01	1B	Downgradient	5	Alluvium	17.3 - 27.0	----	----
ZTS-MW172	8/23/2023	N	PM02	1B	Downgradient	5	Alluvium	17.3 - 27.0	24.8	3.4
ZTS-MW172	8/23/2023	FD	PM02	1B	Downgradient	5	Alluvium	17.3 - 27.0	----	----
ZTS-MW172	11/30/2023	N	PM03	1B	Downgradient	5	Alluvium	17.3 - 27.0	23.7	7.8
ZTS-MW172	11/30/2023	FD	PM03	1B	Downgradient	5	Alluvium	17.3 - 27.0	----	----

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	FIELD TESTS	
									Temperature	Turbidity
									C	NTU
ZTS-MW172	2/22/2024	N	PM04	1B	Downgradient	5	Alluvium	17.3 - 27.0	22	3.2
ZTS-MW172	2/22/2024	FD	PM04	1B	Downgradient	5	Alluvium	17.3 - 27.0	----	----
ZTS-MW173	5/25/2023	N	PM01	1B	Downgradient	5	UMCf	33.3 - 43.0	23.6	14.5
ZTS-MW173	8/22/2023	N	PM02	1B	Downgradient	5	UMCf	33.3 - 43.0	32.4	22.7
ZTS-MW173	11/29/2023	N	PM03	1B	Downgradient	5	UMCf	33.3 - 43.0	21.8	5.7
ZTS-MW173	2/21/2024	N	PM04	1B	Downgradient	5	UMCf	33.3 - 43.0	23.7	14.5
ZTS-MW179	5/25/2023	N	PM01	1B	Downgradient	5	Alluvium	18.3 - 23.0	24	8.1
ZTS-MW179	8/23/2023	N	PM02	1B	Downgradient	5	Alluvium	18.3 - 23.0	25.3	8.2
ZTS-MW179	11/30/2023	N	PM03	1B	Downgradient	5	Alluvium	18.3 - 23.0	23.9	5.7
ZTS-MW179	2/22/2024	N	PM04	1B	Downgradient	5	Alluvium	18.3 - 23.0	22.9	3.5
ZTS-MW168	5/24/2023	N	PM01	1B	Downgradient	15	Alluvium	20.3 - 30.0	25.9	11.2
ZTS-MW168	8/22/2023	N	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	25.4	14.8
ZTS-MW168	10/11/2023	N	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	24.9	285
ZTS-MW168	10/11/2023	FS	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	----	----
ZTS-MW168	10/11/2023	FD	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	----	----
ZTS-MW168	11/29/2023	N	PM03	1B	Downgradient	15	Alluvium	20.3 - 30.0	23.4	3.8
ZTS-MW168	2/21/2024	N	PM04	1B	Downgradient	15	Alluvium	20.3 - 30.0	22.2	6.9
ZTS-MW174	5/24/2023	N	PM01	1B	Downgradient	15	Alluvium	19.8 - 29.5	23.5	55.2
ZTS-MW174	5/26/2023	N	PM01	1B	Downgradient	15	Alluvium	19.8 - 29.5	----	----
ZTS-MW174	8/22/2023	N	PM02	1B	Downgradient	15	Alluvium	19.8 - 29.5	26.2	17.9
ZTS-MW174	10/11/2023	N	PM02	1B	Downgradient	15	Alluvium	19.8 - 29.5	25.4	192.7
ZTS-MW174	10/11/2023	FS	PM02	1B	Downgradient	15	Alluvium	19.8 - 29.5	----	----
ZTS-MW174	10/11/2023	FD	PM02	1B	Downgradient	15	Alluvium	19.8 - 29.5	----	----
ZTS-MW174	11/29/2023	N	PM03	1B	Downgradient	15	Alluvium	19.8 - 29.5	23.5	7.4
ZTS-MW174	2/21/2024	N	PM04	1B	Downgradient	15	Alluvium	19.8 - 29.5	23.4	7.9
ZTS-MW177	5/25/2023	N	PM01	1B	Downgradient	15	Alluvium	20.3 - 30.0	26.3	66.5
ZTS-MW177	8/23/2023	N	PM02	1B	Downgradient	15	Alluvium	20.3 - 30.0	27	43
ZTS-MW177	11/29/2023	N	PM03	1B	Downgradient	15	Alluvium	20.3 - 30.0	24.4	15.1
ZTS-MW177	2/21/2024	N	PM04	1B	Downgradient	15	Alluvium	20.3 - 30.0	23.4	16.1
ZTS-MW180	5/24/2023	N	PM01	1B	Downgradient	25	Alluvium	17.8 - 22.5	23.8	7
ZTS-MW180	5/24/2023	FD	PM01	1B	Downgradient	25	Alluvium	17.8 - 22.5	----	----
ZTS-MW180	8/24/2023	N	PM02	1B	Downgradient	25	Alluvium	17.8 - 22.5	24.7	7
ZTS-MW180	8/24/2023	FD	PM02	1B	Downgradient	25	Alluvium	17.8 - 22.5	----	----
ZTS-MW180	11/30/2023	N	PM03	1B	Downgradient	25	Alluvium	17.8 - 22.5	23.8	5.7
ZTS-MW180	11/30/2023	FD	PM03	1B	Downgradient	25	Alluvium	17.8 - 22.5	----	----
ZTS-MW180	2/22/2024	N	PM04	1B	Downgradient	25	Alluvium	17.8 - 22.5	23.7	7.3
ZTS-MW180	2/22/2024	FD	PM04	1B	Downgradient	25	Alluvium	17.8 - 22.5	----	----
ZTS-MW148	5/25/2023	N	PM01	1B	Downgradient	35	Alluvium	22.0 - 32.0	25.3	8.9
ZTS-MW148	8/23/2023	N	PM02	1B	Downgradient	35	Alluvium	22.0 - 32.0	26.9	6.4
ZTS-MW148	11/28/2023	N	PM03	1B	Downgradient	35	Alluvium	22.0 - 32.0	24.1	5.7
ZTS-MW148	2/20/2024	N	PM04	1B	Downgradient	35	Alluvium	22.0 - 32.0	22.4	5
LWWPS-MW107A	5/23/2023	N	PM01	1B	Downgradient	50	Alluvium	24.8 - 34.5	27.1	6.2
LWWPS-MW107A	8/24/2023	N	PM02	1B	Downgradient	50	Alluvium	24.8 - 34.5	27.7	8.6

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	FIELD TESTS	
									Temperature	Turbidity
									C	NTU
LWWPS-MW107A	11/30/2023	N	PM03	1B	Downgradient	50	Alluvium	24.8 - 34.5	23.6	9.1
LWWPS-MW107A	2/22/2024	N	PM04	1B	Downgradient	50	Alluvium	24.8 - 34.5	23.6	48.4
LWWPS-MW107B	5/23/2023	N	PM01	1B	Downgradient	50	UMCf	46.0 - 65.8	28	10.9
LWWPS-MW107B	8/24/2023	N	PM02	1B	Downgradient	50	UMCf	46.0 - 65.8	27.4	45.8
LWWPS-MW107B	12/1/2023	N	PM03	1B	Downgradient	50	UMCf	46.0 - 65.8	19.5	7.8
LWWPS-MW107B	2/23/2024	N	PM04	1B	Downgradient	50	UMCf	46.0 - 65.8	18.3	10.3
LWWPS-MW107C	5/23/2023	N	PM01	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	26.8	94.3
LWWPS-MW107C	8/24/2023	N	PM02	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	34.6	8
LWWPS-MW107C	12/1/2023	N	PM03	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	15.8	7
LWWPS-MW107C	2/23/2024	N	PM04	1B	Downgradient	50	UMCf (Semi-Cons)	100.3 - 120.0	21.1	157.5
ZTS-MW175	5/26/2023	N	PM01	1B	Downgradient	100	Alluvium	19.8 - 29.5	23.4	53
ZTS-MW175	8/25/2023	N	PM02	1B	Downgradient	100	Alluvium	19.8 - 29.5	25.2	41.7
ZTS-MW175	11/30/2023	N	PM03	1B	Downgradient	100	Alluvium	19.8 - 29.5	23.9	66.2
ZTS-MW175	2/28/2024	N	PM04	1B	Downgradient	100	Alluvium	19.8 - 29.5	24.2	9.1
ZTS-MW176	5/26/2023	N	PM01	1B	Downgradient	150	Alluvium	19.8 - 29.5	22.3	8.6
ZTS-MW176	8/25/2023	N	PM02	1B	Downgradient	150	Alluvium	19.8 - 29.5	26.3	5.9
ZTS-MW176	12/5/2023	N	PM03	1B	Downgradient	150	Alluvium	19.8 - 29.5	24.3	1.4
ZTS-MW176	2/27/2024	N	PM04	1B	Downgradient	150	Alluvium	19.8 - 29.5	24.1	2.6
<b>Test Area 2A</b>										
<b>Pre-Construction Baseline Results</b>										
ZTS-MW137	10/20/2022	N	BL02	2A	Upgradient	-9	Alluvium	14.0 - 24.0	23.4	35.6
ZTS-MW118	9/1/2022	N	BL01	2A	Upgradient	-3	Alluvium	13.5 - 23.5	27.1	17
ZTS-MW118	10/21/2022	N	BL02	2A	Upgradient	-3	Alluvium	13.5 - 23.5	22.6	6.8
ZTS-MW138	10/20/2022	N	BL02	2A	Downgradient	5	Alluvium	14.0 - 24.0	23.5	68.3
ZTS-MW139	10/21/2022	N	BL02	2A	Downgradient	5	Alluvium	13.0 - 23.0	23.5	21.2
LWWPS-MW102A	10/21/2022	N	BL02	NA	Downgradient	30	UMCf	47.0 - 66.6	23	146
LWWPS-MW102B	10/21/2022	N	BL02	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	23.9	116.3
ZTS-MW113	10/25/2022	N	BL02	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	22.9	4.1
<b>Post-Construction Performance Monitoring Results</b>										
ZTS-MW137	5/31/2023	N	PM01	2A	Upgradient	-9	Alluvium	14.0 - 24.0	26.7	32.7
ZTS-MW137	8/24/2023	N	PM02	2A	Upgradient	-9	Alluvium	14.0 - 24.0	27.2	18.5
ZTS-MW137	12/1/2023	N	PM03	2A	Upgradient	-9	Alluvium	14.0 - 24.0	23.1	11.2
ZTS-MW137	2/23/2024	N	PM04	2A	Upgradient	-9	Alluvium	14.0 - 24.0	23.2	55.4
ZTS-MW118	5/31/2023	N	PM01	2A	Upgradient	-3	Alluvium	13.5 - 23.5	24.1	5.9
ZTS-MW118	5/31/2023	FD	PM01	2A	Upgradient	-3	Alluvium	13.5 - 23.5	----	----
ZTS-MW118	8/24/2023	N	PM02	2A	Upgradient	-3	Alluvium	13.5 - 23.5	26.6	8.6
ZTS-MW118	8/24/2023	FD	PM02	2A	Upgradient	-3	Alluvium	13.5 - 23.5	----	----
ZTS-MW118	12/1/2023	N	PM03	2A	Upgradient	-3	Alluvium	13.5 - 23.5	24	2
ZTS-MW118	12/1/2023	FD	PM03	2A	Upgradient	-3	Alluvium	13.5 - 23.5	----	----
ZTS-MW118	2/23/2024	N	PM04	2A	Upgradient	-3	Alluvium	13.5 - 23.5	23.7	3.8
ZTS-MW118	2/23/2024	FD	PM04	2A	Upgradient	-3	Alluvium	13.5 - 23.5	----	----
ZTS-MW190	5/31/2023	N	PM01	2A	Upgradient	-3	Alluvium	14.3 - 24.0	25.3	33
ZTS-MW190	8/25/2023	N	PM02	2A	Upgradient	-3	Alluvium	14.3 - 24.0	24.9	23.7
ZTS-MW190	12/1/2023	N	PM03	2A	Upgradient	-3	Alluvium	14.3 - 24.0	24.2	14.1

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	FIELD TESTS	
									feet	Temperature
									C	NTU
ZTS-MW190	2/22/2024	N	PM04	2A	Upgradient	-3	Alluvium	14.3 - 24.0	23.8	17.3
ZTS-MW196	5/30/2023	N	PM01	2A	Upgradient	-3	Alluvium	13.8 - 23.5	25.5	63.8
ZTS-MW196	8/25/2023	N	PM02	2A	Upgradient	-3	Alluvium	13.8 - 23.5	28	70.5
ZTS-MW196	11/30/2023	N	PM03	2A	Upgradient	-3	Alluvium	13.8 - 23.5	23.3	23.7
ZTS-MW196	2/26/2024	N	PM04	2A	Upgradient	-3	Alluvium	13.8 - 23.5	24.1	17.9
ZTS-MW202	5/30/2023	N	PM01	2A	Upgradient	-3	UMCf	28.8 - 38.5	25.9	20
ZTS-MW202	8/28/2023	N	PM02	2A	Upgradient	-3	UMCf	28.8 - 38.5	27.4	7.7
ZTS-MW202	12/1/2023	N	PM03	2A	Upgradient	-3	UMCf	28.8 - 38.5	22.9	8.1
ZTS-MW202	2/27/2024	N	PM04	2A	Upgradient	-3	UMCf	28.8 - 38.5	22.7	13.1
ZTS-MW192	5/22/2023	N	PM01	2A	Center of Array	0	Alluvium	14.3 - 24.0	26.4	22.7
ZTS-MW192	8/21/2023	N	PM02	2A	Center of Array	0	Alluvium	14.3 - 24.0	24.2	35.7
ZTS-MW192	11/28/2023	N	PM03	2A	Center of Array	0	Alluvium	14.3 - 24.0	24.2	23.8
ZTS-MW192	2/20/2024	N	PM04	2A	Center of Array	0	Alluvium	14.3 - 24.0	21.4	195
ZTS-MW191	5/26/2023	N	PM01	2A	Downgradient	1	Alluvium	14.8 - 24.5	25	70.1
ZTS-MW191	8/22/2023	N	PM02	2A	Downgradient	1	Alluvium	14.8 - 24.5	27.3	54.1
ZTS-MW191	11/29/2023	N	PM03	2A	Downgradient	1	Alluvium	14.8 - 24.5	23.1	8.3
ZTS-MW191	2/21/2024	N	PM04	2A	Downgradient	1	Alluvium	14.8 - 24.5	22.8	63.8
ZTS-MW195	5/26/2023	N	PM01	2A	Downgradient	1	Alluvium	14.3 - 24.0	23.1	346.9
ZTS-MW195	8/21/2023	N	PM02	2A	Downgradient	1	Alluvium	14.3 - 24.0	25.1	34.3
ZTS-MW195	11/29/2023	N	PM03	2A	Downgradient	1	Alluvium	14.3 - 24.0	23.9	16.7
ZTS-MW195	2/21/2024	N	PM04	2A	Downgradient	1	Alluvium	14.3 - 24.0	23.4	8.1
ZTS-MW138	5/24/2023	N	PM01	2A	Downgradient	5	Alluvium	14.0 - 24.0	26.1	18.9
ZTS-MW138	8/21/2023	N	PM02	2A	Downgradient	5	Alluvium	14.0 - 24.0	25.1	10.9
ZTS-MW138	11/28/2023	N	PM03	2A	Downgradient	5	Alluvium	14.0 - 24.0	24.5	36.5
ZTS-MW138	2/21/2024	N	PM04	2A	Downgradient	5	Alluvium	14.0 - 24.0	22.7	30.5
ZTS-MW139	5/24/2023	N	PM01	2A	Downgradient	5	Alluvium	13.0 - 23.0	25.8	25.3
ZTS-MW139	8/21/2023	N	PM02	2A	Downgradient	5	Alluvium	13.0 - 23.0	26	13.6
ZTS-MW139	11/29/2023	N	PM03	2A	Downgradient	5	Alluvium	13.0 - 23.0	22.6	6.9
ZTS-MW139	2/21/2024	N	PM04	2A	Downgradient	5	Alluvium	13.0 - 23.0	22.6	11.7
ZTS-MW193	5/25/2023	N	PM01	2A	Downgradient	5	Alluvium	13.6 - 23.3	27.2	81.5
ZTS-MW193	5/25/2023	FD	PM01	2A	Downgradient	5	Alluvium	13.6 - 23.3	----	----
ZTS-MW193	8/22/2023	N	PM02	2A	Downgradient	5	Alluvium	13.6 - 23.3	24.9	25.5
ZTS-MW193	8/22/2023	FD	PM02	2A	Downgradient	5	Alluvium	13.6 - 23.3	----	----
ZTS-MW193	11/30/2023	N	PM03	2A	Downgradient	5	Alluvium	13.6 - 23.3	24.2	69.7
ZTS-MW193	11/30/2023	FD	PM03	2A	Downgradient	5	Alluvium	13.6 - 23.3	----	----
ZTS-MW193	2/22/2024	N	PM04	2A	Downgradient	5	Alluvium	13.6 - 23.3	23.5	47.4
ZTS-MW193	2/22/2024	FD	PM04	2A	Downgradient	5	Alluvium	13.6 - 23.3	----	----
ZTS-MW203	5/30/2023	N	PM01	2A	Downgradient	5	UMCf	28.3 - 38.0	26.5	19
ZTS-MW203	8/23/2023	N	PM02	2A	Downgradient	5	UMCf	28.3 - 38.0	24.5	4.3
ZTS-MW203	10/11/2023	N	PM02	2A	Downgradient	5	UMCf	28.3 - 38.0	24.4	10.1
ZTS-MW203	10/11/2023	FS	PM02	2A	Downgradient	5	UMCf	28.3 - 38.0	----	----
ZTS-MW203	11/30/2023	N	PM03	2A	Downgradient	5	UMCf	28.3 - 38.0	23.7	16.2
ZTS-MW203	2/22/2024	N	PM04	2A	Downgradient	5	UMCf	28.3 - 38.0	23.4	35.4

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	FIELD TESTS	
									feet	Temperature
									C	NTU
ZTS-MW194	5/25/2023	N	PM01	2A	Downgradient	15	Alluvium	17.8 - 22.5	24.6	22.1
ZTS-MW194	8/22/2023	N	PM02	2A	Downgradient	15	Alluvium	17.8 - 22.5	24.4	11.8
ZTS-MW194	11/29/2023	N	PM03	2A	Downgradient	15	Alluvium	17.8 - 22.5	23.8	10.4
ZTS-MW194	2/22/2024	N	PM04	2A	Downgradient	15	Alluvium	17.8 - 22.5	21.7	40.6
LWWPS-MW102A	5/30/2023	N	PM01	NA	Downgradient	30	UMCf	47.0 - 66.6	24	199
LWWPS-MW102A	8/23/2023	N	PM02	NA	Downgradient	30	UMCf	47.0 - 66.6	24.5	172.7
LWWPS-MW102A	10/11/2023	N	PM02	NA	Downgradient	30	UMCf	47.0 - 66.6	25	767.9
LWWPS-MW102A	10/11/2023	FS	PM02	NA	Downgradient	30	UMCf	47.0 - 66.6	----	----
LWWPS-MW102A	12/1/2023	N	PM03	NA	Downgradient	30	UMCf	47.0 - 66.6	22.6	205.1
LWWPS-MW102A	2/27/2024	N	PM04	NA	Downgradient	30	UMCf	47.0 - 66.6	22.3	95.7
LWWPS-MW102B	5/26/2023	N	PM01	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	27.2	85.5
LWWPS-MW102B	8/23/2023	N	PM02	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	25.9	350.6
LWWPS-MW102B	12/1/2023	N	PM03	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	22.8	160.7
LWWPS-MW102B	2/27/2024	N	PM04	NA	Downgradient	30	UMCf (Semi-Cons)	76.8 - 96.5	21.3	42
ZTS-MW197	5/26/2023	N	PM01	2A	Downgradient	55	Alluvium	12.8 - 22.5	22.8	40.4
ZTS-MW197	8/22/2023	N	PM02	2A	Downgradient	55	Alluvium	12.8 - 22.5	24.8	11.8
ZTS-MW197	11/30/2023	N	PM03	2A	Downgradient	55	Alluvium	12.8 - 22.5	22.5	72.8
ZTS-MW197	2/22/2024	N	PM04	2A	Downgradient	55	Alluvium	12.8 - 22.5	22.6	55.8
ZTS-MW113	5/26/2023	N	PM01	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	24	2.4
ZTS-MW113	8/24/2023	N	PM02	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	24.1	2.5
ZTS-MW113	11/30/2023	N	PM03	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	23.1	2.9
ZTS-MW113	2/23/2024	N	PM04	2A	Cross/Downgradient	60	Alluvium	20.0 - 30.0	23.2	9
<b>Test Area 2B</b>										
<b>Pre-Construction Baseline Results</b>										
ZTS-MW133	10/20/2022	N	BL02	2B	Upgradient	-9	UMCf	54.0 - 69.0	21.1	115.7
ZTS-MW117	9/1/2022	N	BL01	2B	Upgradient	-2	UMCf	40.5 - 55.5	34.6	25
ZTS-MW117	10/19/2022	N	BL02	2B	Upgradient	-2	UMCf	40.5 - 55.5	21.1	8.3
ZTS-MW117	10/19/2022	FD	BL02	2B	Upgradient	-2	UMCf	40.5 - 55.5	----	----
ZTS-MW134	10/19/2022	N	BL02	2B	Upgradient	-2	UMCf	26.0 - 36.0	24.6	8.4
ZTS-MW135	10/19/2022	N	BL02	2B	Downgradient	7	UMCf	54.0 - 69.0	24.4	98.2
ZTS-MW136	10/20/2022	N	BL02	2B	Cross Gradient	7	UMCf	27.0 - 47.0	23	71.9
<b>Post-Construction Performance Monitoring Results</b>										
ZTS-MW133	5/23/2023	N	PM01	2B	Upgradient	-9	UMCf	54.0 - 69.0	23	33
ZTS-MW133	8/30/2023	N	PM02	2B	Upgradient	-9	UMCf	54.0 - 69.0	26.9	31.2
ZTS-MW133	12/4/2023	N	PM03	2B	Upgradient	-9	UMCf	54.0 - 69.0	23.4	48.2
ZTS-MW133	2/23/2024	N	PM04	2B	Upgradient	-9	UMCf	54.0 - 69.0	21.8	17.2
ZTS-MW117	5/25/2023	N	PM01	2B	Upgradient	-2	UMCf	40.5 - 55.5	30.4	2
ZTS-MW117	8/24/2023	N	PM02	2B	Upgradient	-2	UMCf	40.5 - 55.5	25.2	21.4
ZTS-MW117	11/29/2023	N	PM03	2B	Upgradient	-2	UMCf	40.5 - 55.5	22.6	5.3
ZTS-MW117	2/23/2024	N	PM04	2B	Upgradient	-2	UMCf	40.5 - 55.5	18.7	4.8
ZTS-MW134	5/25/2023	N	PM01	2B	Upgradient	-2	UMCf	26.0 - 36.0	30.1	28.7
ZTS-MW134	8/24/2023	N	PM02	2B	Upgradient	-2	UMCf	26.0 - 36.0	28.1	26.8
ZTS-MW134	11/29/2023	N	PM03	2B	Upgradient	-2	UMCf	26.0 - 36.0	23.1	7

**Table 2**  
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Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	FIELD TESTS	
									feet	Temperature
									C	NTU
ZTS-MW134	2/23/2024	N	PM04	2B	Upgradient	-2	UMCf	26.0 - 36.0	18.2	18.4
ZTS-MW198	5/23/2023	N	PM01	2B	Downgradient	2	UMCf	26.1 - 46.0	26.8	55.2
ZTS-MW198	8/21/2023	N	PM02	2B	Downgradient	2	UMCf	26.1 - 46.0	25.3	34.2
ZTS-MW198	11/27/2023	N	PM03	2B	Downgradient	2	UMCf	26.1 - 46.0	23.3	4
ZTS-MW198	2/20/2024	N	PM04	2B	Downgradient	2	UMCf	26.1 - 46.0	21	38.5
ZTS-MW200	5/23/2023	N	PM01	2B	Downgradient	2	UMCf	50.1 - 65.0	26.3	104
ZTS-MW200	5/23/2023	FD	PM01	2B	Downgradient	2	UMCf	50.1 - 65.0	----	----
ZTS-MW200	8/21/2023	N	PM02	2B	Downgradient	2	UMCf	50.1 - 65.0	28.7	11
ZTS-MW200	11/28/2023	N	PM03	2B	Downgradient	2	UMCf	50.1 - 65.0	18.9	4.9
ZTS-MW200	2/20/2024	N	PM04	2B	Downgradient	2	UMCf	50.1 - 65.0	17.6	37.5
ZTS-MW201	5/24/2023	N	PM01	2B	Downgradient	2	UMCf	27.1 - 47.0	25.3	15.1
ZTS-MW201	8/22/2023	N	PM02	2B	Downgradient	2	UMCf	27.1 - 47.0	27.8	28.2
ZTS-MW201	11/28/2023	N	PM03	2B	Downgradient	2	UMCf	27.1 - 47.0	22.9	13.3
ZTS-MW201	2/22/2024	N	PM04	2B	Downgradient	2	UMCf	27.1 - 47.0	20.8	22.2
ZTS-MW206	5/24/2023	N	PM01	2B	Downgradient	2	UMCf	50.1 - 65.0	25.4	15.9
ZTS-MW206	8/22/2023	N	PM02	2B	Downgradient	2	UMCf	50.1 - 65.0	30.1	9.5
ZTS-MW206	11/28/2023	N	PM03	2B	Downgradient	2	UMCf	50.1 - 65.0	23.3	18.5
ZTS-MW206	2/22/2024	N	PM04	2B	Downgradient	2	UMCf	50.1 - 65.0	21.2	40.1
ZTS-MW199	5/23/2023	N	PM01	2B	Downgradient	5	UMCf	50.1 - 65.0	29.4	16.7
ZTS-MW199	8/22/2023	N	PM02	2B	Downgradient	5	UMCf	50.1 - 65.0	24.6	26.5
ZTS-MW199	11/28/2023	N	PM03	2B	Downgradient	5	UMCf	50.1 - 65.0	22.2	77.7
ZTS-MW199	2/20/2024	N	PM04	2B	Downgradient	5	UMCf	50.1 - 65.0	19.9	8.1
ZTS-MW207	5/24/2023	N	PM01	2B	Downgradient	5	UMCf	26.1 - 46.0	25.2	9.6
ZTS-MW207	5/24/2023	FD	PM01	2B	Downgradient	5	UMCf	26.1 - 46.0	----	----
ZTS-MW207	8/23/2023	N	PM02	2B	Downgradient	5	UMCf	26.1 - 46.0	25.2	30.5
ZTS-MW207	8/23/2023	FD	PM02	2B	Downgradient	5	UMCf	26.1 - 46.0	----	----
ZTS-MW207	11/29/2023	N	PM03	2B	Downgradient	5	UMCf	26.1 - 46.0	21.8	19.8
ZTS-MW207	11/29/2023	FD	PM03	2B	Downgradient	5	UMCf	26.1 - 46.0	----	----
ZTS-MW207	2/22/2024	N	PM04	2B	Downgradient	5	UMCf	26.1 - 46.0	20.4	23.9
ZTS-MW207	2/22/2024	FD	PM04	2B	Downgradient	5	UMCf	26.1 - 46.0	----	----
ZTS-MW135	5/26/2023	N	PM01	2B	Downgradient	7	UMCf	54.0 - 69.0	23.1	20.7
ZTS-MW135	8/24/2023	N	PM02	2B	Downgradient	7	UMCf	54.0 - 69.0	25.7	94.8
ZTS-MW135	11/30/2023	N	PM03	2B	Downgradient	7	UMCf	54.0 - 69.0	22.2	62
ZTS-MW135	2/22/2024	N	PM04	2B	Downgradient	7	UMCf	54.0 - 69.0	22.2	37.5
ZTS-MW136	5/26/2023	N	PM01	2B	Cross Gradient	7	UMCf	27.0 - 47.0	24	13.7
ZTS-MW136	5/26/2023	FD	PM01	2B	Cross Gradient	7	UMCf	27.0 - 47.0	----	----
ZTS-MW136	8/25/2023	N	PM02	2B	Cross Gradient	7	UMCf	27.0 - 47.0	26.5	23.2
ZTS-MW136	8/25/2023	FD	PM02	2B	Cross Gradient	7	UMCf	27.0 - 47.0	----	----
ZTS-MW136	11/29/2023	N	PM03	2B	Cross Gradient	7	UMCf	27.0 - 47.0	23.2	24.2
ZTS-MW136	11/29/2023	FD	PM03	2B	Cross Gradient	7	UMCf	27.0 - 47.0	----	----
ZTS-MW136	2/22/2024	N	PM04	2B	Cross Gradient	7	UMCf	27.0 - 47.0	21.2	83.2
ZTS-MW136	2/22/2024	FD	PM04	2B	Cross Gradient	7	UMCf	27.0 - 47.0	----	----
ZTS-MW208	5/25/2023	N	PM01	2B	Downgradient	15	UMCf	26.1 - 46.0	23.6	50.4

**Table 2**  
**Groundwater Analytical Results**  
Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	FIELD TESTS	
									Temperature	Turbidity
									C	NTU
ZTS-MW208	8/23/2023	N	PM02	2B	Downgradient	15	UMCf	26.1 - 46.0	29.8	41.8
ZTS-MW208	11/28/2023	N	PM03	2B	Downgradient	15	UMCf	26.1 - 46.0	23.5	42.3
ZTS-MW208	2/22/2024	N	PM04	2B	Downgradient	15	UMCf	26.1 - 46.0	22.6	42.2
ZTS-MW209	5/25/2023	N	PM01	2B	Downgradient	15	UMCf	50.6 - 65.5	24.9	71.5
ZTS-MW209	8/23/2023	N	PM02	2B	Downgradient	15	UMCf	50.6 - 65.5	25.8	51.4
ZTS-MW209	11/29/2023	N	PM03	2B	Downgradient	15	UMCf	50.6 - 65.5	22.1	40.5
ZTS-MW209	2/22/2024	N	PM04	2B	Downgradient	15	UMCf	50.6 - 65.5	22.6	16.7
<b>Test Area 2C</b>										
<b>Pre-Construction Baseline Results</b>										
ZTS-MW140	10/21/2022	N	BL02	2C	Upgradient	-9	Alluvium	15.5 - 25.5	23.6	82.3
ZTS-MW119	9/1/2022	N	BL01	2C	Upgradient	-3	Alluvium	15.0 - 25.0	26	33.3
ZTS-MW119	10/19/2022	N	BL02	2C	Upgradient	-3	Alluvium	15.0 - 25.0	23.9	15.2
ZTS-MW119	10/19/2022	FD	BL02	2C	Upgradient	-3	Alluvium	15.0 - 25.0	----	----
ZTS-MW141	10/21/2022	N	BL02	2C	Downgradient	5	Alluvium	14.5 - 24.5	24.2	38.6
ZTS-MW142	10/21/2022	N	BL02	2C	Downgradient	5	Alluvium	16.0 - 26.0	24.3	106.7
<b>Post-Construction Performance Monitoring Results</b>										
ZTS-MW140	5/25/2023	N	PM01	2C	Upgradient	-9	Alluvium	15.5 - 25.5	21.5	59.8
ZTS-MW140	5/25/2023	FD	PM01	2C	Upgradient	-9	Alluvium	15.5 - 25.5	----	----
ZTS-MW140	8/29/2023	N	PM02	2C	Upgradient	-9	Alluvium	15.5 - 25.5	24.7	22.5
ZTS-MW140	8/29/2023	FD	PM02	2C	Upgradient	-9	Alluvium	15.5 - 25.5	----	----
ZTS-MW140	12/4/2023	N	PM03	2C	Upgradient	-9	Alluvium	15.5 - 25.5	24.1	19.4
ZTS-MW140	12/4/2023	FD	PM03	2C	Upgradient	-9	Alluvium	15.5 - 25.5	----	----
ZTS-MW140	2/22/2024	N	PM04	2C	Upgradient	-9	Alluvium	15.5 - 25.5	23.2	11.2
ZTS-MW140	2/22/2024	FD	PM04	2C	Upgradient	-9	Alluvium	15.5 - 25.5	----	----
ZTS-MW119	5/24/2023	N	PM01	2C	Upgradient	-3	Alluvium	15.0 - 25.0	24.5	22.1
ZTS-MW119	8/29/2023	N	PM02	2C	Upgradient	-3	Alluvium	15.0 - 25.0	25.1	11
ZTS-MW119	12/4/2023	N	PM03	2C	Upgradient	-3	Alluvium	15.0 - 25.0	24	6.7
ZTS-MW119	2/22/2024	N	PM04	2C	Upgradient	-3	Alluvium	15.0 - 25.0	23.3	7.5
ZTS-MW181	5/25/2023	N	PM01	2C	Upgradient	-3	Alluvium	17.3 - 27.0	22.7	127.1
ZTS-MW181	8/25/2023	N	PM02	2C	Upgradient	-3	Alluvium	17.3 - 27.0	25.1	107.3
ZTS-MW181	12/6/2023	N	PM03	2C	Upgradient	-3	Alluvium	17.3 - 27.0	24.1	20.6
ZTS-MW181	2/28/2024	N	PM04	2C	Upgradient	-3	Alluvium	17.3 - 27.0	23	23.2
ZTS-MW188	5/26/2023	N	PM01	2C	Upgradient	-3	Alluvium	17.3 - 27.0	24.5	19.3
ZTS-MW188	8/25/2023	N	PM02	2C	Upgradient	-3	Alluvium	17.3 - 27.0	24	17.5
ZTS-MW188	12/6/2023	N	PM03	2C	Upgradient	-3	Alluvium	17.3 - 27.0	24	72.3
ZTS-MW188	2/23/2024	N	PM04	2C	Upgradient	-3	Alluvium	17.3 - 27.0	21.2	93
ZTS-MW204	5/25/2023	N	PM01	2C	Upgradient	-3	UMCf	30.3 - 40.0	23.3	56
ZTS-MW204	8/25/2023	N	PM02	2C	Upgradient	-3	UMCf	30.3 - 40.0	27.4	11
ZTS-MW204	12/1/2023	N	PM03	2C	Upgradient	-3	UMCf	30.3 - 40.0	21.8	16.8
ZTS-MW204	2/22/2024	N	PM04	2C	Upgradient	-3	UMCf	30.3 - 40.0	23.7	17.9
ZTS-MW182	5/23/2023	N	PM01	2C	Center of Array	0	Alluvium	17.6 - 27.3	24.8	145.5
ZTS-MW182	8/22/2023	N	PM02	2C	Center of Array	0	Alluvium	17.6 - 27.3	24.4	42.7
ZTS-MW182	11/27/2023	N	PM03	2C	Center of Array	0	Alluvium	17.6 - 27.3	23.5	23.4

**Table 2**  
**Groundwater Analytical Results**  
 Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	FIELD TESTS	
									feet	Temperature
									C	NTU
ZTS-MW182	11/28/2023	N	PM03	2C	Center of Array	0	Alluvium	17.6 - 27.3	22.6	13.1
ZTS-MW182	2/19/2024	N	PM04	2C	Center of Array	0	Alluvium	17.6 - 27.3	23.9	116.7
ZTS-MW183	5/23/2023	N	PM01	2C	Downgradient	1	Alluvium	17.3 - 27.0	27.9	41.1
ZTS-MW183	8/22/2023	N	PM02	2C	Downgradient	1	Alluvium	17.3 - 27.0	25.3	34
ZTS-MW183	11/28/2023	N	PM03	2C	Downgradient	1	Alluvium	17.3 - 27.0	23.4	13.2
ZTS-MW183	2/20/2024	N	PM04	2C	Downgradient	1	Alluvium	17.3 - 27.0	21.8	16.2
ZTS-MW187	5/24/2023	N	PM01	2C	Downgradient	1	Alluvium	15.3 - 25.0	25.2	31.6
ZTS-MW187	8/23/2023	N	PM02	2C	Downgradient	1	Alluvium	15.3 - 25.0	24.2	29.8
ZTS-MW187	11/29/2023	N	PM03	2C	Downgradient	1	Alluvium	15.3 - 25.0	22.5	6.5
ZTS-MW187	2/20/2024	N	PM04	2C	Downgradient	1	Alluvium	15.3 - 25.0	22.3	7.7
ZTS-MW141	5/25/2023	N	PM01	2C	Downgradient	5	Alluvium	14.5 - 24.5	31.7	112.3
ZTS-MW141	8/23/2023	N	PM02	2C	Downgradient	5	Alluvium	14.5 - 24.5	25	6.1
ZTS-MW141	11/29/2023	N	PM03	2C	Downgradient	5	Alluvium	14.5 - 24.5	23.8	5.8
ZTS-MW141	2/22/2024	N	PM04	2C	Downgradient	5	Alluvium	14.5 - 24.5	23.5	15.7
ZTS-MW142	5/26/2023	N	PM01	2C	Downgradient	5	Alluvium	16.0 - 26.0	26.8	-0.8
ZTS-MW142	8/24/2023	N	PM02	2C	Downgradient	5	Alluvium	16.0 - 26.0	24.6	24
ZTS-MW142	11/30/2023	N	PM03	2C	Downgradient	5	Alluvium	16.0 - 26.0	23	8.1
ZTS-MW142	2/22/2024	N	PM04	2C	Downgradient	5	Alluvium	16.0 - 26.0	23.9	19
ZTS-MW184	5/24/2023	N	PM01	2C	Downgradient	5	Alluvium	16.3 - 26.0	25.3	68.6
ZTS-MW184	8/22/2023	N	PM02	2C	Downgradient	5	Alluvium	16.3 - 26.0	25.5	29.5
ZTS-MW184	11/28/2023	N	PM03	2C	Downgradient	5	Alluvium	16.3 - 26.0	23.8	7.5
ZTS-MW184	2/20/2024	N	PM04	2C	Downgradient	5	Alluvium	16.3 - 26.0	22.6	15.3
ZTS-MW205	5/24/2023	N	PM01	2C	Downgradient	5	UMCf	30.3 - 40.0	30.7	72.6
ZTS-MW205	8/23/2023	N	PM02	2C	Downgradient	5	UMCf	30.3 - 40.0	24.7	9.5
ZTS-MW205	11/29/2023	N	PM03	2C	Downgradient	5	UMCf	30.3 - 40.0	22.1	7.3
ZTS-MW205	2/22/2024	N	PM04	2C	Downgradient	5	UMCf	30.3 - 40.0	23.1	11.9
ZTS-MW185	5/25/2023	N	PM01	2C	Downgradient	15	Alluvium	15.3 - 25.0	23.1	107.2
ZTS-MW185	8/24/2023	N	PM02	2C	Downgradient	15	Alluvium	15.3 - 25.0	24.7	14.8
ZTS-MW185	11/30/2023	N	PM03	2C	Downgradient	15	Alluvium	15.3 - 25.0	23.7	6.7
ZTS-MW185	2/22/2024	N	PM04	2C	Downgradient	15	Alluvium	15.3 - 25.0	22.6	68.6
ZTS-MW186	5/25/2023	N	PM01	2C	Downgradient	25	Alluvium	15.3 - 25.0	24.6	152
ZTS-MW186	8/24/2023	N	PM02	2C	Downgradient	25	Alluvium	15.3 - 25.0	25.6	14.5
ZTS-MW186	11/30/2023	N	PM03	2C	Downgradient	25	Alluvium	15.3 - 25.0	23.9	12.8
ZTS-MW186	2/23/2024	N	PM04	2C	Downgradient	25	Alluvium	15.3 - 25.0	21.1	74
ZTS-MW189	5/25/2023	N	PM01	2C	Downgradient	55	Alluvium	12.8 - 23.0	24.4	9
ZTS-MW189	8/25/2023	N	PM02	2C	Downgradient	55	Alluvium	12.8 - 23.0	24.9	11.2
ZTS-MW189	12/1/2023	N	PM03	2C	Downgradient	55	Alluvium	12.8 - 23.0	23.5	11
ZTS-MW189	2/23/2024	N	PM04	2C	Downgradient	55	Alluvium	12.8 - 23.0	23.5	12.4
<b>General Vicinity</b>										
<b>Pre-Construction Baseline Results</b>										
ZTS-MW116	9/1/2022	N	BL01	NA	NA	NA	UMCf	33.0 - 48.0	27	478.2
ZTS-MW116	10/25/2022	N	BL02	NA	NA	NA	UMCf	33.0 - 48.0	21.5	36.8
ZTS-MW128	9/1/2022	N	BL01	NA	NA	NA	UMCf	42.0 - 52.0	35.2	55.2
ZTS-MW128	10/25/2022	N	BL02	NA	NA	NA	UMCf	42.0 - 52.0	23.3	41.3

**Table 2**  
**Groundwater Analytical Results**  
 Las Vegas Wash ZVI-Enhanced Bioremediation Treatability Study

Well	Sample Date	QC Type	Event	Test Area	Location	Approximate Distance from ZVI Wall <sup>(1)</sup>	Screened Lithology	Screened Interval	FIELD TESTS	FIELD TESTS
									Temperature	Turbidity
									feet	C
<b>Post-Construction Performance Monitoring Results</b>										
ZTS-MW116	5/24/2023	N	PM01	NA	NA	NA	UMCf	33.0 - 48.0	23.2	25.3
ZTS-MW116	8/29/2023	N	PM02	NA	NA	NA	UMCf	33.0 - 48.0	26.4	49.9
ZTS-MW116	12/5/2023	N	PM03	NA	NA	NA	UMCf	33.0 - 48.0	21.5	37.7
ZTS-MW116	2/27/2024	N	PM04	NA	NA	NA	UMCf	33.0 - 48.0	24.6	19.4
ZTS-MW128	5/24/2023	N	PM01	NA	NA	NA	UMCf	42.0 - 52.0	26.1	8.8
ZTS-MW128	8/30/2023	N	PM02	NA	NA	NA	UMCf	42.0 - 52.0	26.3	15.7
ZTS-MW128	12/5/2023	N	PM03	NA	NA	NA	UMCf	42.0 - 52.0	21.6	208
ZTS-MW128	2/28/2024	N	PM04	NA	NA	NA	UMCf	42.0 - 52.0	22.8	24.5

## Notes:

1. Distances from the discontinuous or continuous walls are shown as negative values for upgradient monitoring wells, as zero for monitoring wells screened within the walls, and as positive values for monitoring wells located downgradient of the walls.

bgs - below ground surface

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

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

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

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.

UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

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

mg/L - milligram per liter

mS/cm - millSiemens per centimeter

mV - millivolts

nmol - nanomol

SU - standard units

N - normal field sample

µg/L - micrograms per liter

UMCf - Upper Muddy Creek formation

FD - field duplicate

FS - field split